SCISSORS



Surgical Scissors
Dissecting Scissors
Bandage and Cloth Scissors
Plaster Scissors
Wire Scissors
Suture Scissors
Ligature Scissors
Orthopaedics Scissors
Neuro Scissors
Vascular Scissors
Vessel Scissors
Eye Scissors
Tenotomy Scissors
ENT Surgery Scissors
Plastic Surgery Scissors
Gynecology Scissors
Supercut Scissors
Tungsten Carbide TC Scissors
CeraCut® Scissors



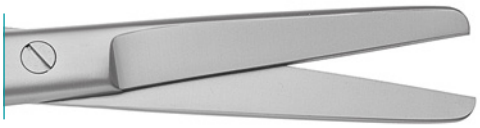


Fig. 1


Fig. 2

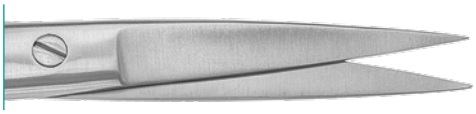


Fig. 3

STANDARD

Fig. 1 (blunt/blunt), straight

115mm, 4 1/2"	120-010-115
130mm, 5 1/8"	120-010-130
145mm, 5 3/4"	120-010-145
155mm, 6 1/8"	120-010-155
165mm, 6 1/2"	120-010-165
185mm, 7 1/4"	120-010-185
200mm, 8"	120-010-200

curved

115mm, 4 1/2"	120-011-115
130mm, 5 1/8"	120-011-130
145mm, 5 3/4"	120-011-145
155mm, 6 1/8"	120-011-155
165mm, 6 1/2"	120-011-165
185mm, 7 1/4"	120-011-185
200mm, 8"	120-011-200

Fig. 2 (sharp/blunt), straight

115mm, 4 1/2"	120-012-115
130mm, 5 1/8"	120-012-130
145mm, 5 3/4"	120-012-145
155mm, 6 1/8"	120-012-155
165mm, 6 1/2"	120-012-165
175mm, 6 7/8"	120-012-175
185mm, 7 1/4"	120-012-185
200mm, 8"	120-012-200

curved

115mm, 4 1/2"	120-013-115
130mm, 5 1/8"	120-013-130
145mm, 5 3/4"	120-013-145
155mm, 6 1/8"	120-013-155
165mm, 6 1/2"	120-013-165
185mm, 7 1/4"	120-013-185
200mm, 8"	120-013-200

Fig. 3 (sharp/sharp), straight

115mm, 4 1/2"	120-014-115
130mm, 5 1/8"	120-014-130
145mm, 5 3/4"	120-014-145
155mm, 6 1/8"	120-014-155
165mm, 6 1/2"	120-014-165
185mm, 7 1/4"	120-014-185
200mm, 8"	120-014-200

curved

115mm, 4 1/2"	120-015-115
130mm, 5 1/8"	120-015-130
145mm, 5 3/4"	120-015-145
155mm, 6 1/8"	120-015-155
165mm, 6 1/2"	120-015-165
185mm, 7 1/4"	120-015-185
200mm, 8"	120-015-200

















GRAZIL

straight, blunt/blunt

130mm, 5 1/8"	120-016-130
145mm, 5 3/4"	120-016-145

curved

130mm, 5 1/8"	120-017-130
145mm, 5 3/4"	120-017-145

straight, sharp/blunt

130mm, 5 1/8"	120-018-130
145mm, 5 3/4"	120-018-145

curved

130mm, 5 1/8"	120-019-130
145mm, 5 3/4"	120-019-145

straight, sharp/sharp

130mm, 5 1/8"	120-020-130
145mm, 5 3/4"	120-020-145

curved

130mm, 5 1/8"	120-021-130
145mm, 5 3/4"	120-021-145

Incision Scissors, straight

130mm, 5 1/8"	120-022-130
145mm, 5 3/4"	120-022-145

DEAVER

straight, 120mm 4 3/4"

blunt/blunt	120-026-120
blunt/sharp	120-024-120
sharp/sharp	120-028-120

curved, 120mm 4 3/4"

blunt/blunt	120-027-120
blunt/sharp	120-025-120
sharp/sharp	120-029-120

145mm, 5 3/4", sharp/blunt

straight	120-024-145
curved	120-025-145

145mm, 5 3/4"

straight, blunt/blunt	120-026-145
curved, blunt/blunt	120-027-145
straight, sharp/sharp	120-028-145
curved, sharp/sharp	120-029-145



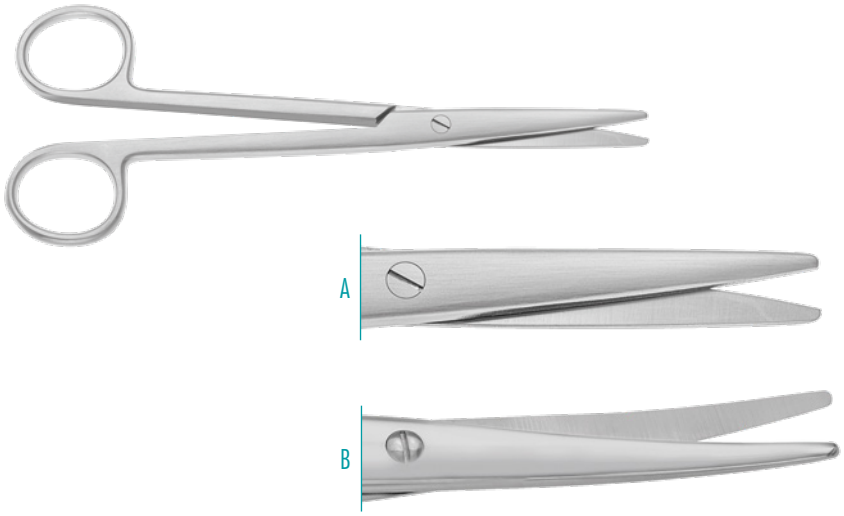
MAYO

straight

145mm, $5^{3/4}$"	120-030-145
150mm, 6"	120-030-150
170mm, $6^{2/3}$"	120-030-170

curved

145mm, $5^{3/4}$"	120-031-145
150mm, 6"	120-031-150
170mm, $6^{2/3}$"	120-031-170



MAYO STILLE

A straight

150mm, 6"	120-036-150
170mm, $6^{2/3}$"	120-036-170
195mm, $7^{3/4}$"	120-036-195
210mm, $8^{1/4}$"	120-036-210

curved

150mm, 6"	120-037-150
170mm, $6^{2/3}$"	120-037-170
195mm, $7^{3/4}$"	120-037-195
210mm, $8^{1/4}$"	120-037-210

B left handed, straight

170mm, $6^{2/3}$"	120-036-170L



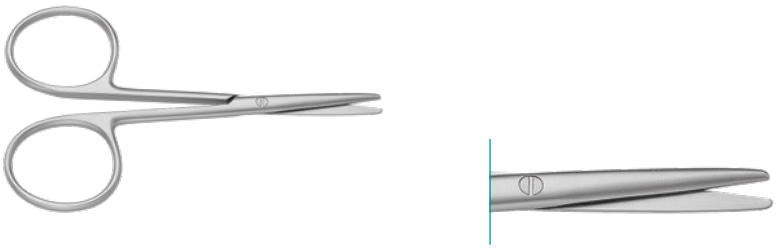
MAYO NOBLE

straight

170mm, $6^{2/3}$"	120-048-170

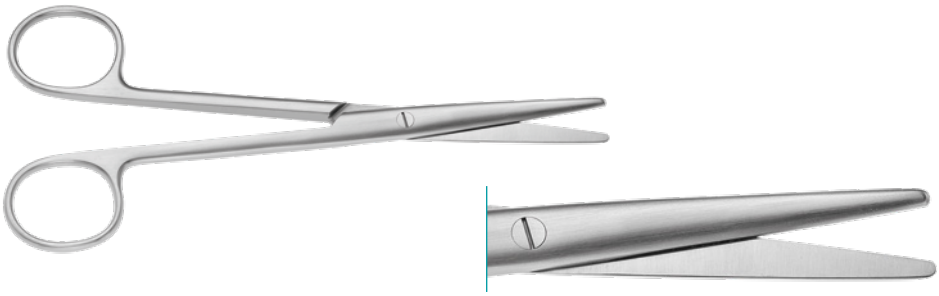
curved

170mm, $6^{2/3}$"	120-049-170
190mm, $7^{1/2}$"	120-049-190



LEXER BABY
Dissecting Scissors, blunt/blunt, 105mm, 4 1/8"

straight	120-136-100
curved	120-137-100

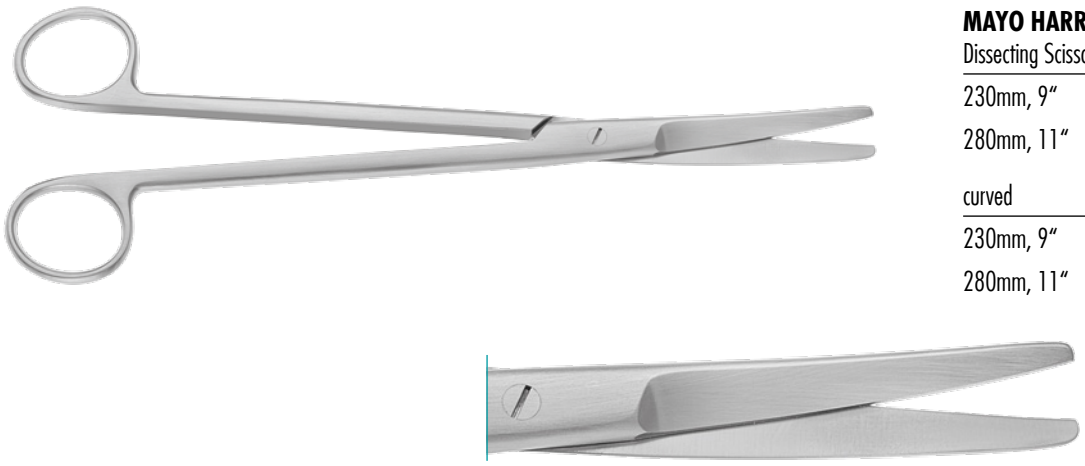


LEXER
Dissecting Scissors, 160mm, 6 1/4"

straight	120-126-160
curved	120-127-160

210mm, 8 1/4"

straight	120-126-210
curved	120-127-210

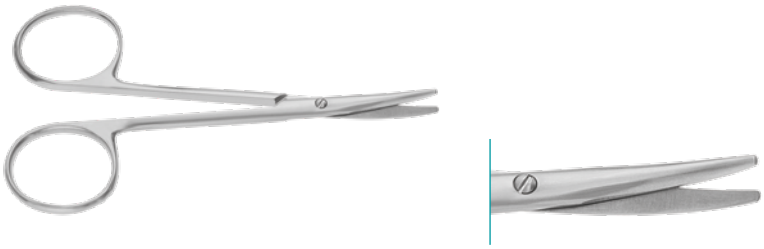


MAYO HARRINGTON
Dissecting Scissors, straight

230mm, 9"	120-030-230
280mm, 11"	120-030-280

curved

230mm, 9"	120-031-230
280mm, 11"	120-031-280



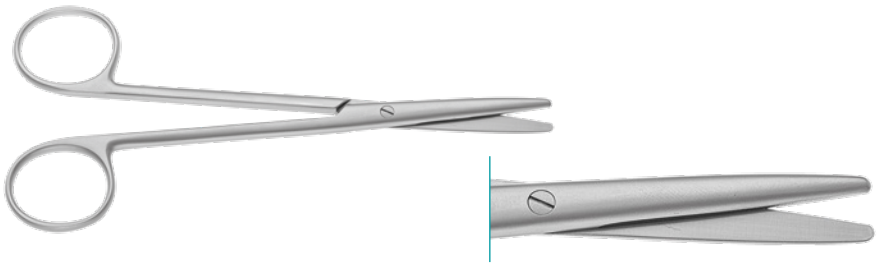
BABY METZENBAUM

straight

115mm, 4 1/2"	120-110-115

curved

115mm, 4 1/2"	120-111-115



METZENBAUM

straight

145mm, 5 3/4	120-110-145
160mm, 6 1/4"	120-110-160

curved

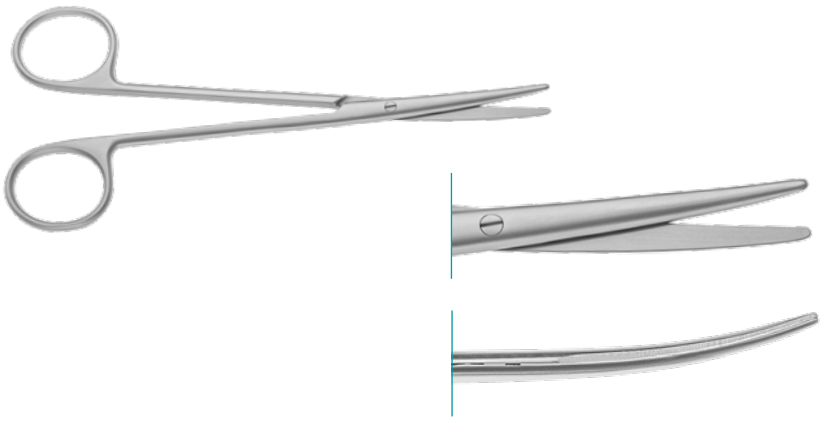
145mm, 5 3/4"	120-111-145
160mm, 6 1/4"	120-111-160



METZENBAUM LAHEY

curved

145mm, 5 3/4"	120-330-145

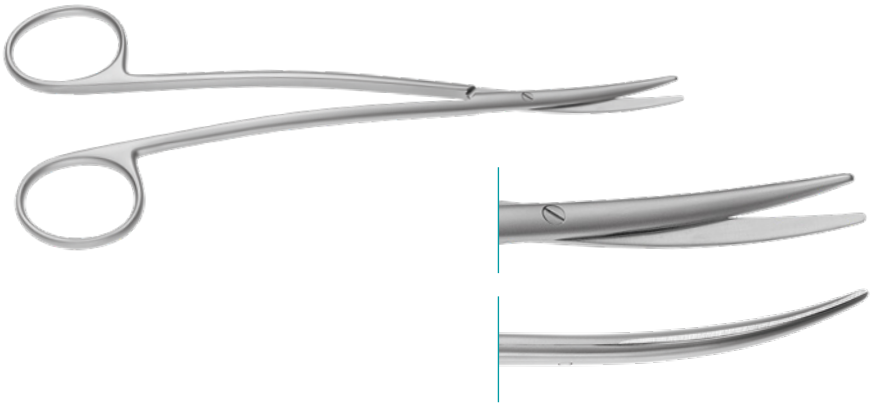


METZENBAUM FINO
straight

145mm, 5 3/4"	120-152-145
180mm, 7"	120-152-180
200mm, 8"	120-152-200
230mm, 9"	120-152-230

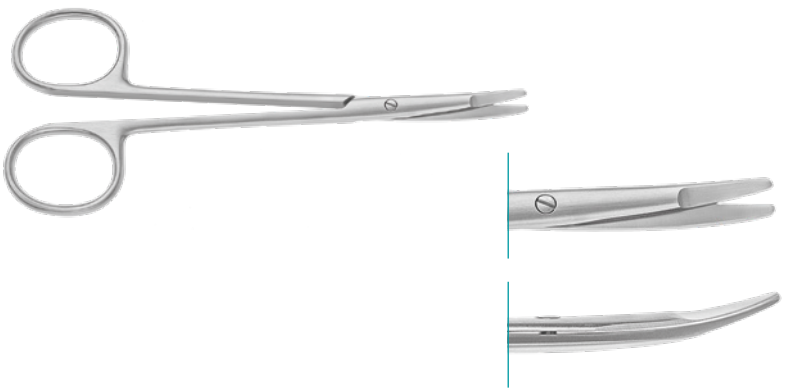
curved

145mm, 5 3/4"	120-153-145
180mm, 7"	120-153-180
200mm, 8"	120-153-200
230mm, 9"	120-153-230



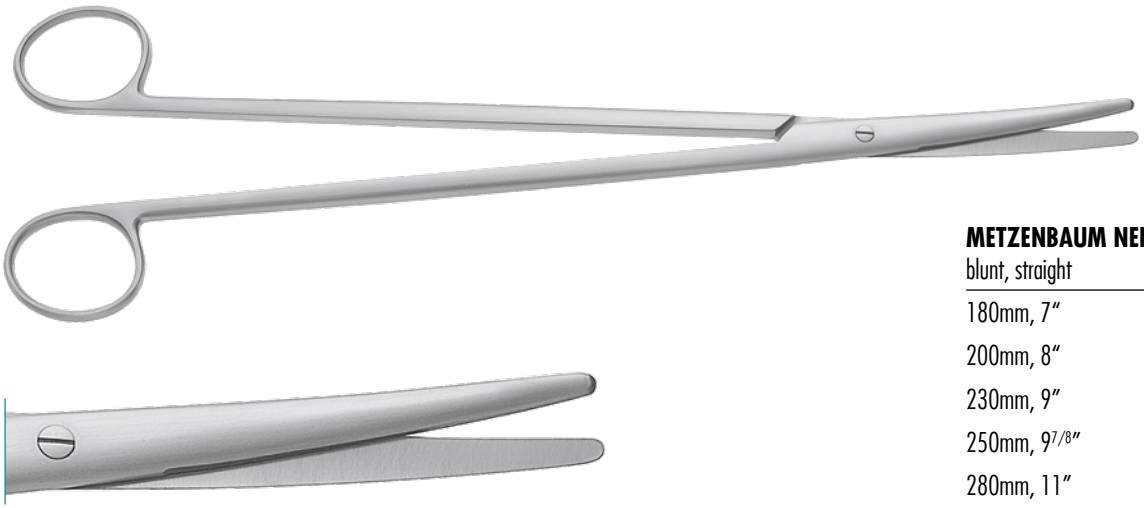
METZENBAUM FINO
s-shaped, blunt

180mm, 7"	120-157-180
200mm, 8"	120-157-200
230mm, 9"	120-157-230



KILNER RAGNELL
curved, blunt

120mm, 43/4"	120-065-120
130mm, 5 1/8"	120-065-130
150mm, 6"	120-065-150
180mm, 7"	120-065-180
200mm, 8"	120-065-200
230mm, 9"	120-065-230



METZENBAUM NELSON

blunt, straight

180mm, 7″	120-110-180
200mm, 8″	120-110-200
230mm, 9″	120-110-230
250mm, 9 7/8″	120-110-250
280mm, 11″	120-110-280
300mm, 11 7/8″	120-110-300

blunt, curved

180mm, 7″	120-111-180
200mm, 8″	120-111-200
230mm, 9″	120-111-230
250mm, 9 7/8″	120-111-250
280mm, 11″	120-111-280
300mm, 11 7/8″	120-111-300



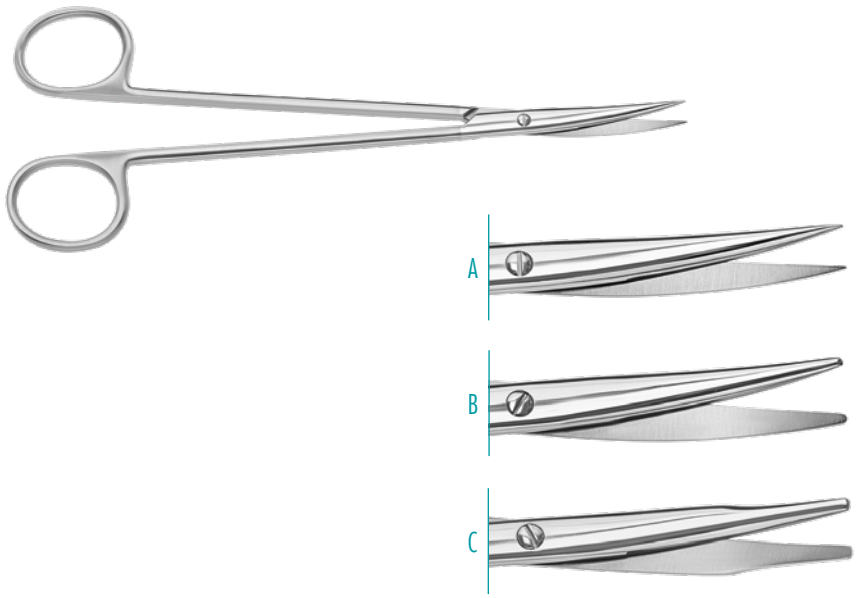
METZENBAUM NELSON

straight, sharp/sharp

145mm, 5 3/4″	120-114-145
180mm, 7″	120-114-180
200mm, 8″	120-114-200

curved, sharp/sharp

145mm, 5 3/4″	120-115-145
180mm, 7″	120-115-180
200mm, 8″	120-115-200

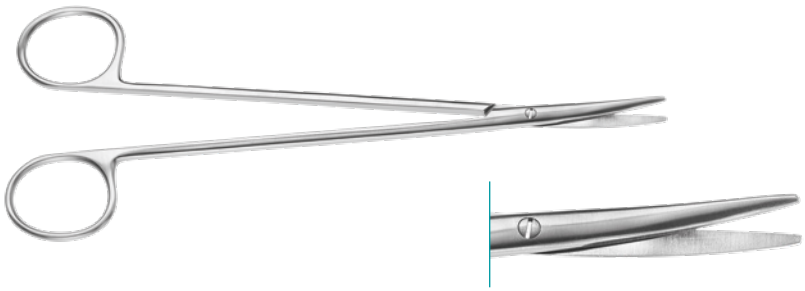


LILLEHEI POTTS
straight, 180mm, 7“

A sharp	125-322-180
B blunt	125-326-180
C blunt, tenotomy	125-328-180

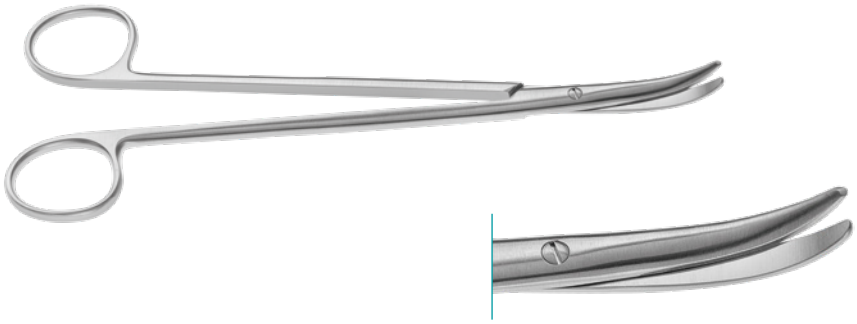
curved, 180mm, 7“

A sharp	125-323-180
B blunt	125-327-180
C blunt, tenotomy	125-329-180



DEBAKEY
Dissecting Scissors, slightly curved

175mm, $6^{7/8}$“	120-135-175
200mm, 8“	120-135-200



THOREK
Dissecting Scissors, curved

190mm, $7^{1/2}$“	120-133-190
230mm, 9“	120-133-230



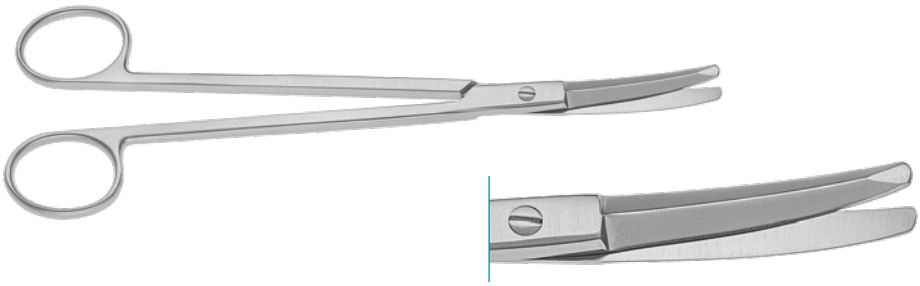
COTTLE MASING
Nasal plastic scissors, curved, 105mm, 4 1/8"

blunt	120-112-110
sharp	120-110-110



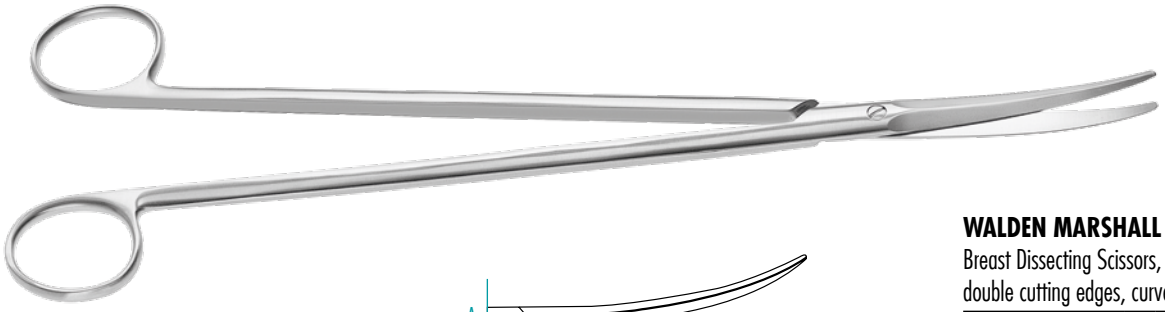
BROWN
Dissecting Scissors, curved

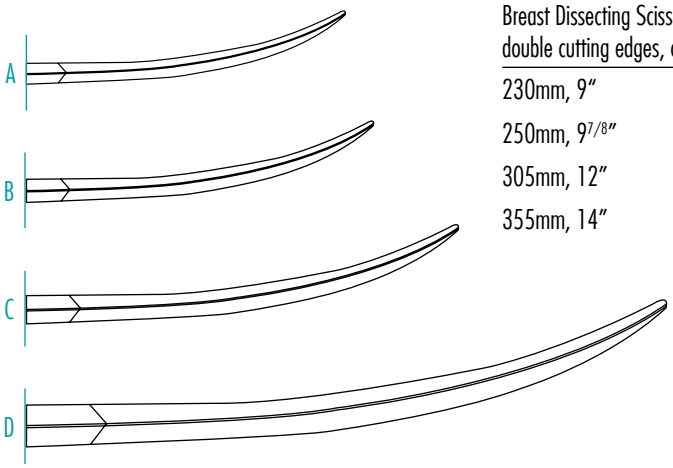
140mm, 5 1/2"	120-048-140



POTTS SMITH
Dissecting Scissors, curved

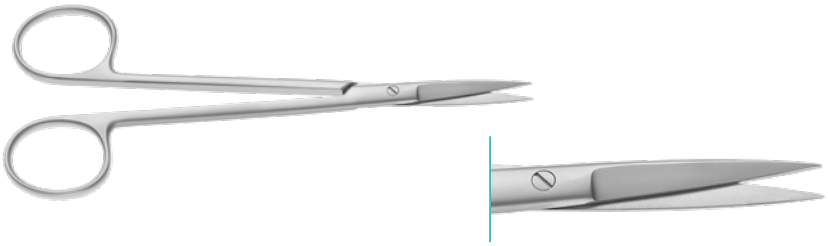
190mm, 7 1/2"	120-216-190





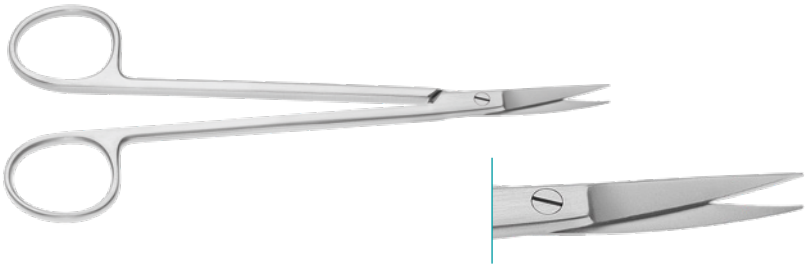
WALDEN MARSHALL
Breast Dissecting Scissors,
double cutting edges, curved

230mm, 9"	120-580-230
250mm, 9 7/8"	120-580-250
305mm, 12"	120-580-305
355mm, 14"	120-580-355



JOSEPH
sharp, 140mm, 5 1/2″

straight	120-058-140
curved	120-059-140

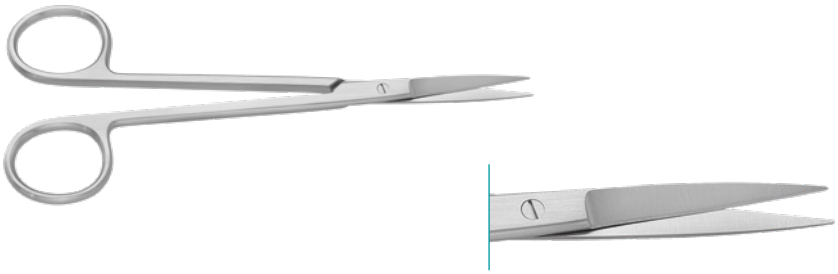


KELLY
160mm, 6 1/4″

straight	120-046-160
curved	120-047-160

200mm, 8″

straight	120-046-200



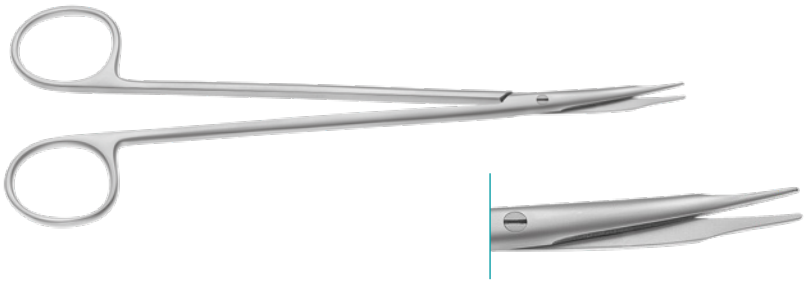
SANVENERO
sharp, 140mm, 5 1/2″

straight	120-056-140
curved	120-057-140



SEALY
sharp, curved

105mm, 4 1/8″	120-079-105



REYNOLDS
curved

150mm, 6"	120-043-150
180mm, 7"	120-043-180

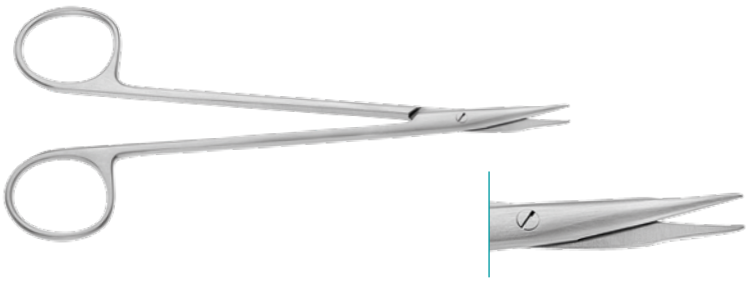
curved, toothed

150mm, 6"	120-043-151
180mm, 7"	120-043-181



JAMESON WERBER
curved

130mm, 5 1/8"	120-313-130



JAMESON
curved, blunt

150mm, 6"	120-315-150
180mm, 7"	120-315-180
200mm, 8"	120-315-200
230mm, 9"	120-315-230



SHEA
Dissecting Scissors, sharp, curved

120mm, 4 3/4"	120-141-120



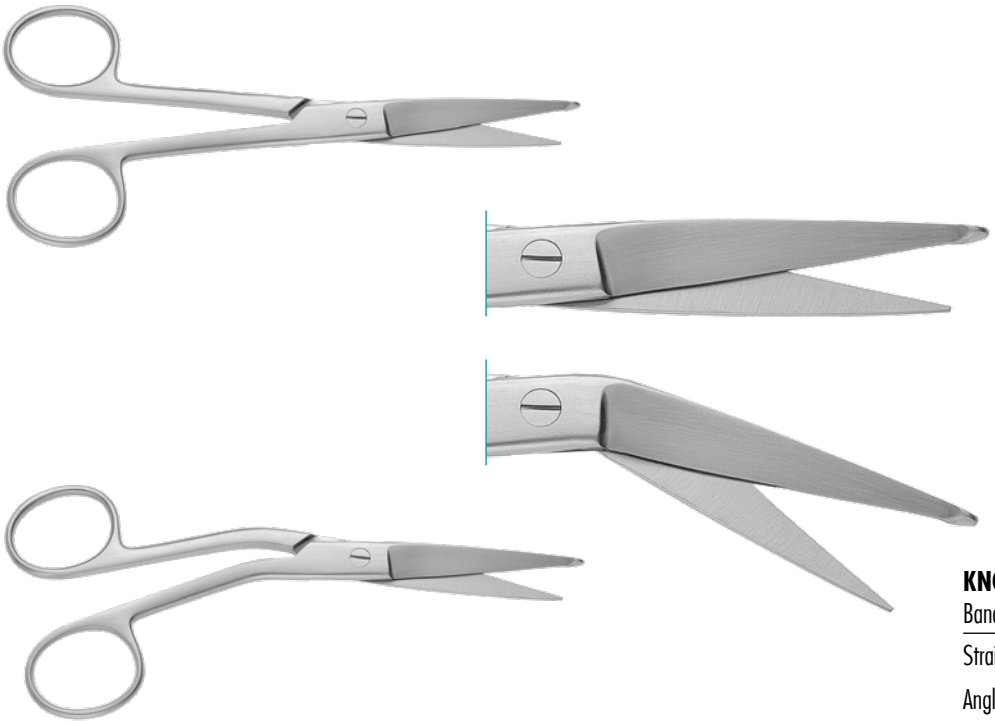
LISTER
Bandage Scissors

90mm, 3 1/2"	190-165-090
110mm, 4 1/3"	190-165-110
140mm, 5 1/2"	190-165-140
180mm, 7"	190-165-180
200mm, 8"	190-165-200



LISTER
Bandage Scissors with 1 large ring

210mm, 8 1/4"	190-170-210



KNOWLES
Bandage Scissors, 140mm, 5 1/2"

Straight	190-160-140
Angled	190-161-140
Straight, knee bent shanks	190-162-140



UNIVERSAL
small, 140mm, 5 1/2"

black	190-209-151
red	190-209-152
yellow	190-209-153
green	190-209-154



UNIVERSAL
large, 180mm, 7"

blue	190-209-180
black	190-209-181
red	190-209-182
yellow	190-209-183
green	190-209-184
orange	190-209-185









LORENZ
Bandage Scissors, curved

230mm, 9″	190-155-230



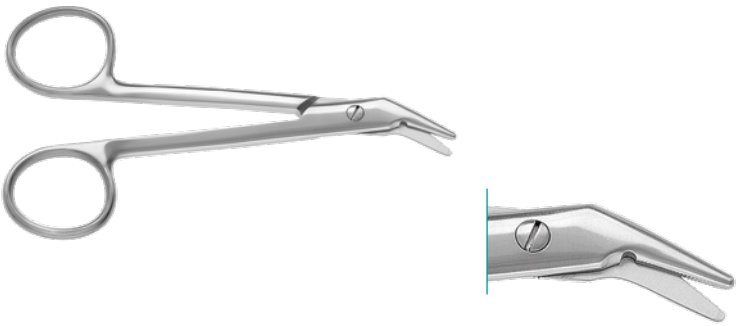
BERGMANN
Plaster Scissors

230mm, 9″	190-195-230



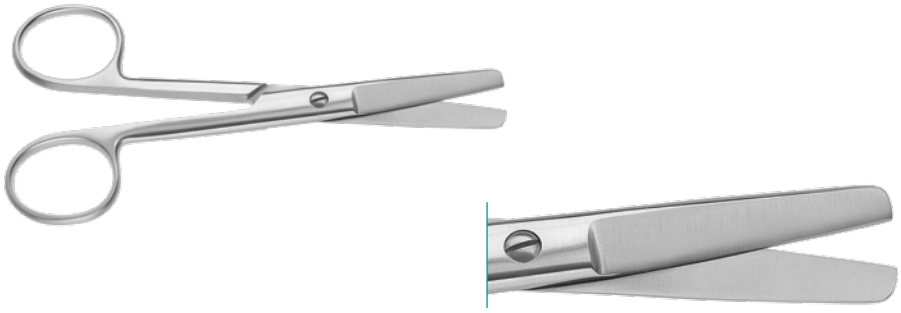
ESMARCH
Plaster Scissors

200mm, 8″	190-205-200
220mm, $8^{2/3}$″	190-205-220



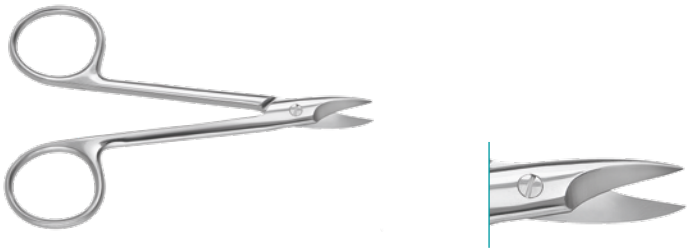
Wire Cutting Scissors, serrated

120mm, 4 3/4"	120-265-120



HARVEY
Wire Cutting Scissors, both serrated blades, straight

125mm, 5"	120-262-125



Crown & Collar Scissors, straight, serrated

100mm, 4"	120-296-100
120mm, 4 3/4"	120-296-120

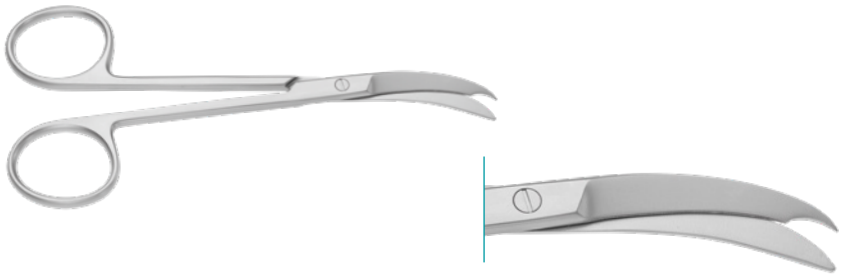
curved

100mm, 4"	120-297-100
120mm, 4 3/4"	120-297-120



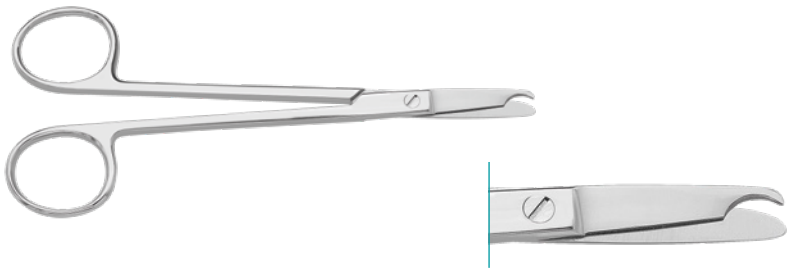
SPENCER
Suture Scissors, straight

90mm, 3 1/2"	120-220-090
130mm, 5 1/8"	120-220-130



NORTHBENT
Ligature Scissors, curved

130mm, 5 1/8"	120-222-130



LITTAUER
Ligature Scissors, straight

115mm, 4 1/2"	120-224-115
140mm, 5 1/2"	120-224-140



Stitch Removal Scissors, curved, ribbon handle

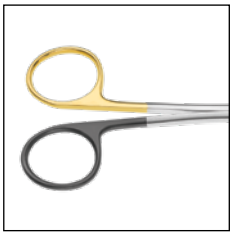
100mm, 4"	120-078-100



BUCK
Ligature Scissors, straight

145mm, 5 3/4"	120-228-145
180mm, 7"	120-228-180





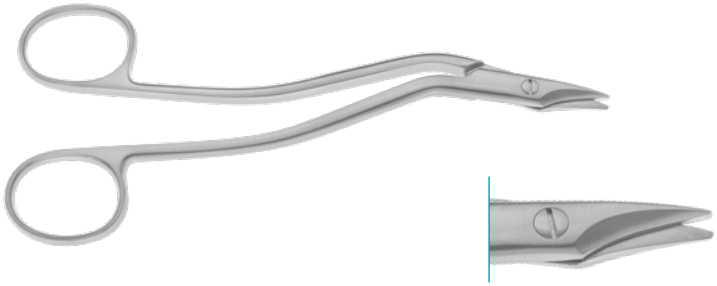
Ligature Scissors, SC, TC inserts, curved, serrated blades

115mm, 4 1/2"	120-611-115
140mm, 5 1/2"	120-611-140
180mm, 7"	120-611-180
230mm, 9"	120-611-230



EISELSBERG
Ligature Scissors

120mm, $4^{3/4}$"	120-230-120



HEATH
Ligature Scissors

160mm, $6^{1/4}$"	120-226-160



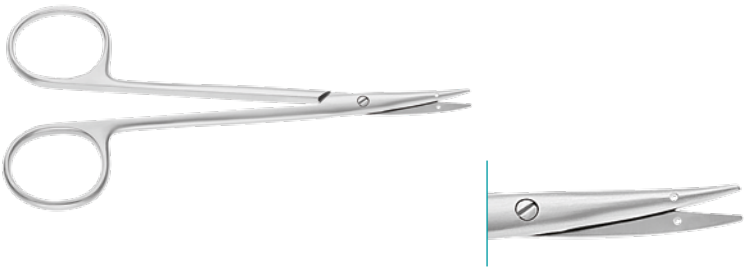
NEW'S
Suture Scissors, angled on flat

165mm, $6^{1/2}$"	120-225-165



BROPHY
Gum and Suture Scissors, 140mm, 5 1/2"

straight	120-054-140
curved	120-055-140



LITTLER
Suture Scissors, with hole, slightly curved, sharp

115mm, 4 1/2"	120-061-115



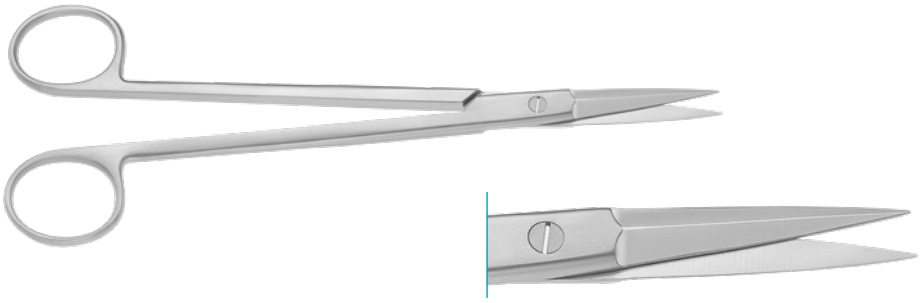
O'BRIEN
Suture Scissors

95mm, 3 3/4"	120-084-095



MARTIN
Cartilage Scissors

200mm, 8″	120-206-200



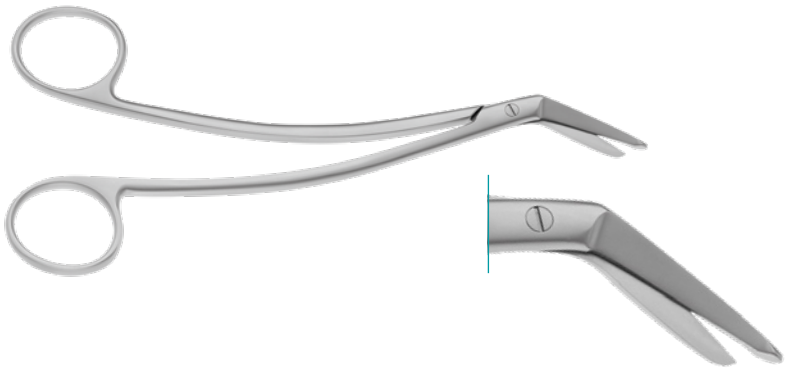
MCINDOE
Cartilage Scissors, straight, sharp/sharp serrated blade, outside cutting blades

185mm, 7 1/4″	120-190-190



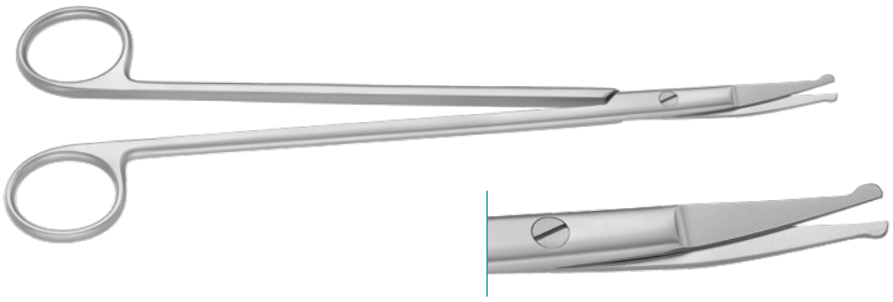
RESANO
Capsule Scissors, angled, sharp/blunt

250mm, 9 7/8″	120-241-250



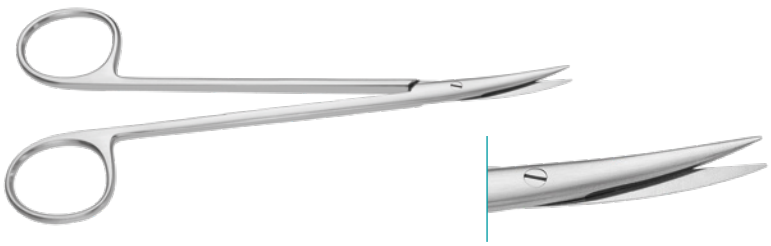
SCHMIEDEN-TAYLOR
Scissors

170mm, 6 2/3"	120-430-170



STRULLY
Neurosurgical Scissors, curved, with probe point

220mm, 8 2/3"	120-250-220



Nerve dissecting Scissors, 150mm, 6"

straight	120-120-150
curved	120-121-150



HOHENFELLER
S-Curved

210mm, 8 1/4"	120-060-210
240mm, 9 1/2"	120-060-240



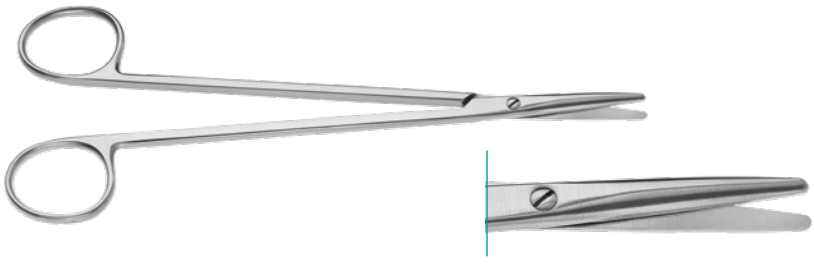
COOLEY
Vascular Scissors, curved

180mm, 7"	120-134-180
230mm, 9"	120-134-230



SATINSKY
Vascular Scissors, s- curved

245mm, 9 2/3"	120-203-245

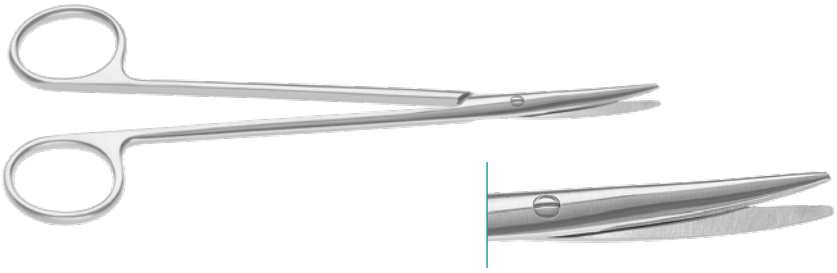


LINCOLN
Vascular Scissors, straight

170mm, 6 2/3"	120-260-170

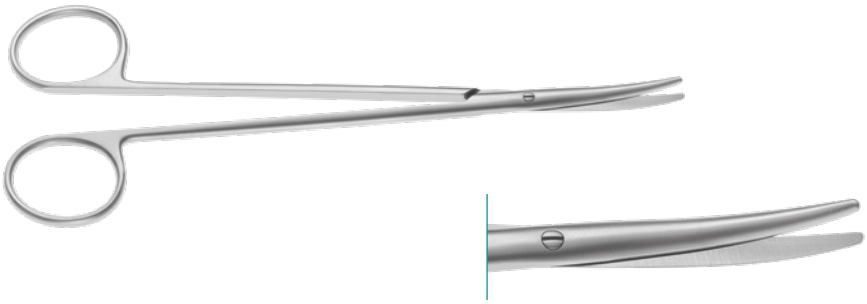
curved

170mm, 6 2/3"	120-261-170



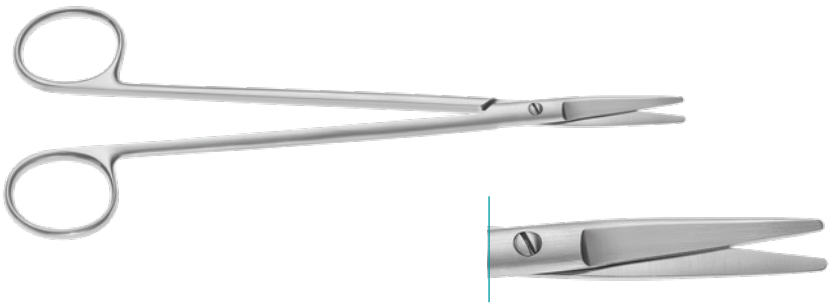
DE MARTEL
Vascular Scissors, 175mm, 6 7/8"

blunt	120-261-175
sharp	120-263-175



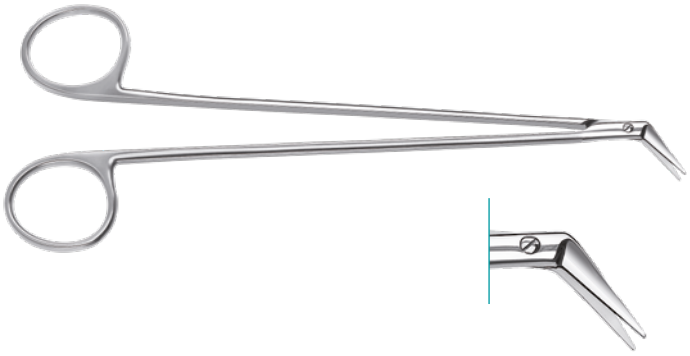
DEBAKEY
Endarterectomy Scissors, 180mm, 7"

slightly curved	120-319-180
strongly curved	120-320-180



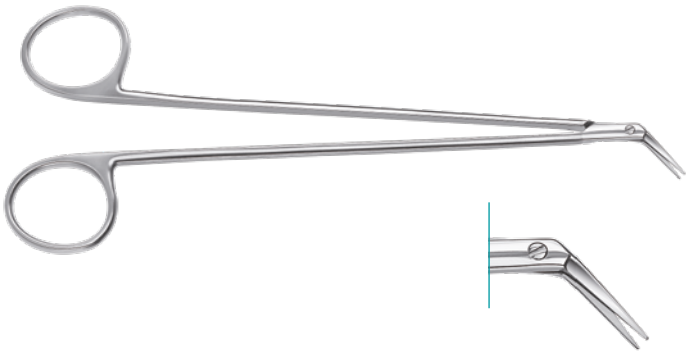
TOENNIS
Vascular Scissors, 180mm, 7"

Straight	120-254-180
Curved	120-255-180



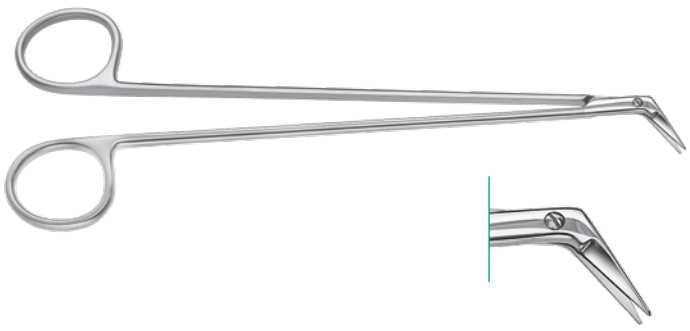
DIETHRICH
delicate, 14mm, 180mm, 7"

25°	125-175-025
45°	125-175-045
60°	125-175-060
90°	125-175-090
125°	125-175-125



DIETHRICH
extra delicate, 14mm, 180mm, 7"

25°	125-170-025
45°	125-170-045
60°	125-170-060
90°	125-170-090
125°	125-170-125



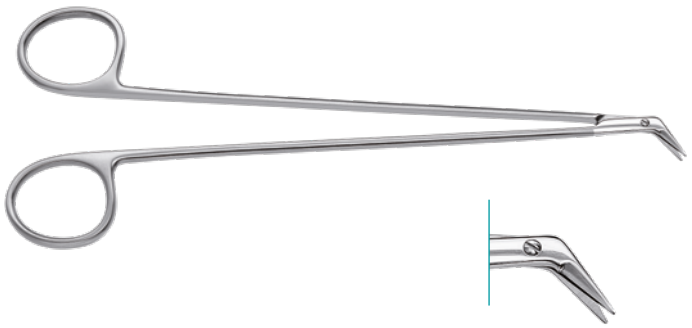
DIETHRICH HEGEMANN
13mm, 180mm, 7"

0°	125-180-000
25°	125-180-025
45°	125-180-045
60°	125-180-060
90°	125-180-090
125°	125-180-125



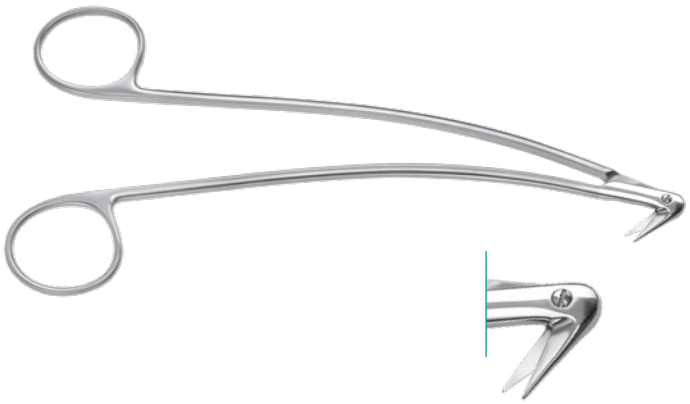
DIETHRICH
Peripheral, 13mm, 130mm, 5 1/8"

25°	125-130-025
45°	125-130-045
60°	125-130-060
90°	125-130-090
125°	125-130-125



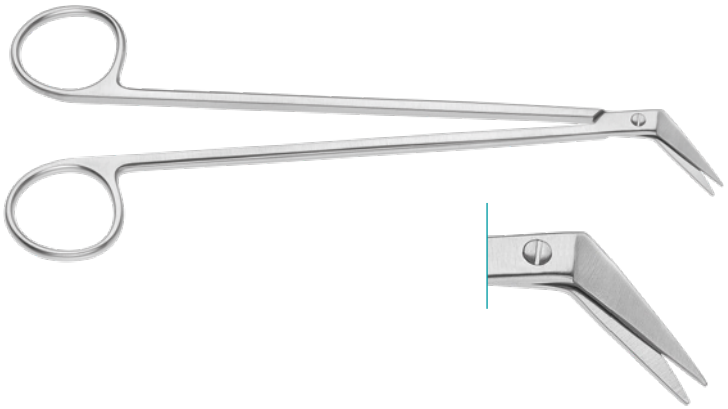
DIETHRICH
9mm, 180mm, 7"

25°	125-178-025
45°	125-178-045
60°	125-178-060
90°	125-178-090
125°	125-178-125



DIETHRICH FAVALORO
13mm, 180mm, 7"

125°	125-185-125



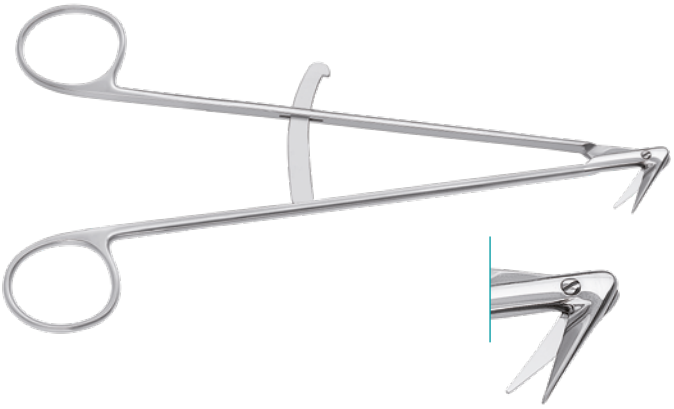
POTTS SMITH
190mm, 7 1/2"

25°	120-181-190
40°	120-182-190
60°	120-183-190



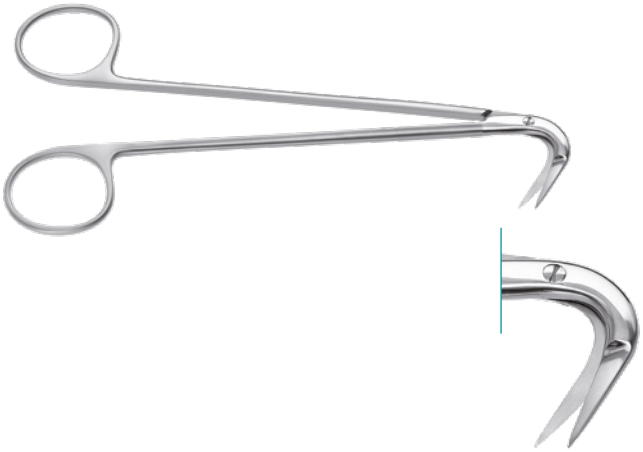
DIETHRICH FAVALORO
9mm, 170mm, 6 3/4"

125°	125-168-125



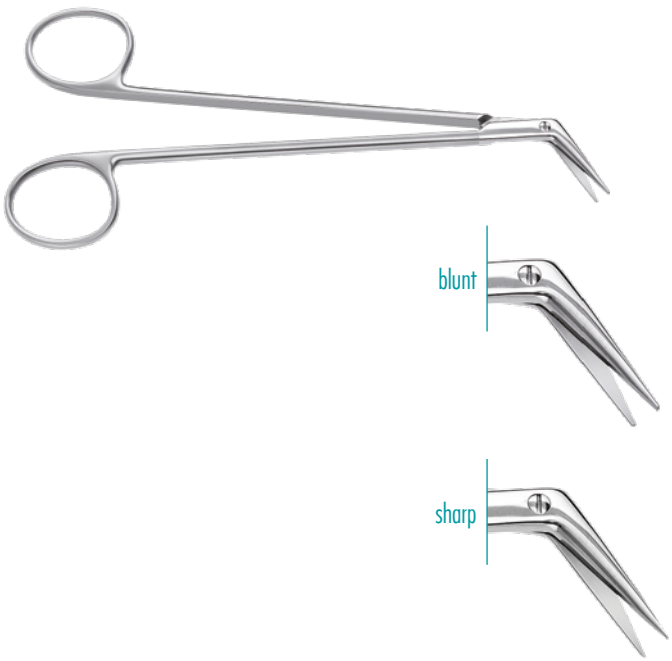
DIETHRICH ARTEY
13mm, 180mm, 7"

125°	125-200-125



BEALL
Circumflex, 150mm, 6"

115°	125-300-115



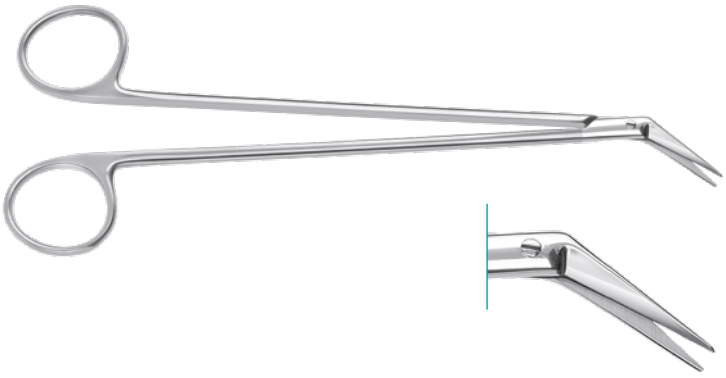
DIETHRICH

26mm, 160mm, 6 1/4"

25°, blunt tip	125-216-025
25°, sharp tip	125-217-025
45°, blunt tip	125-216-045
45°, sharp tip	125-217-045

225mm, 8 7/8"

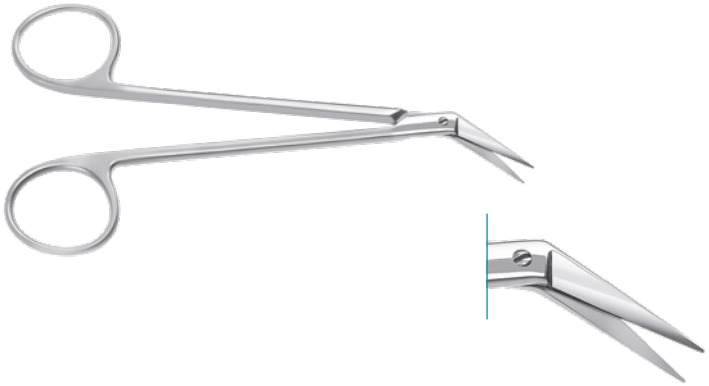
25°, blunt tip	125-220-025
25°, sharp tip	125-221-025
45°, blunt tip	125-220-045
45°, sharp tip	125-221-045
60°, blunt tip	125-220-060
60°, sharp tip	125-221-060



POTTS SMITH

22mm, 190mm, 7 1/2"

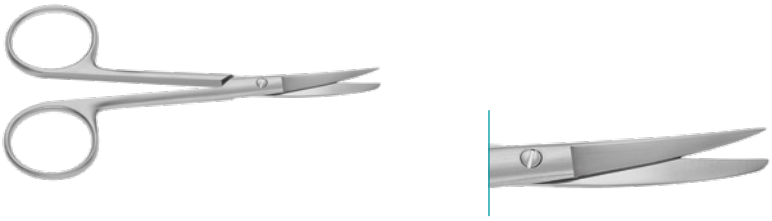
25°	125-490-025
45°	125-490-045
60°	125-490-060



POTTS SMITH

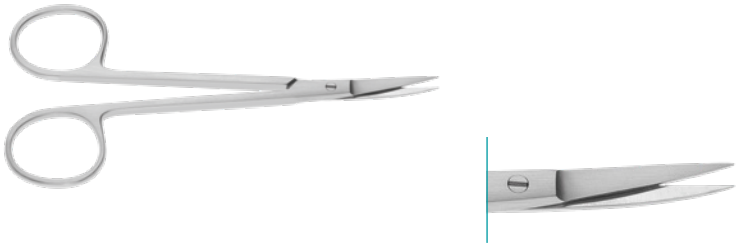
22mm, 140mm, 5 1/2"

25°	125-440-025
45°	125-440-045
60°	125-440-060

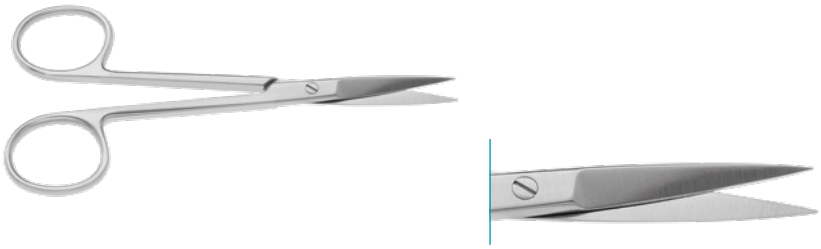


KNAPP
Iris Scissors, 105mm, 4 1/8"

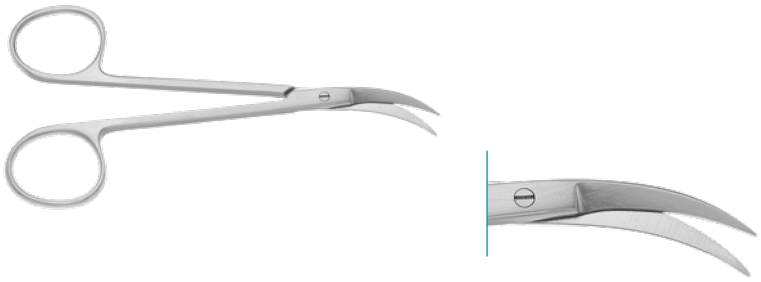
straight	
sharp/sharp	120-174-105
sharp/blunt	120-175-105
curved	
sharp/sharp	120-179-105
sharp/blunt	120-178-105
blunt/blunt	120-177-105



Iris Scissors, straight	
90mm, 3 1/2"	120-070-090
105mm, 4 1/8"	120-070-105
115mm, 4 1/2"	120-070-115
curved	
90mm, 3 1/2"	120-071-090
105mm, 4 1/8"	120-071-105
115mm, 4 1/2"	120-071-115

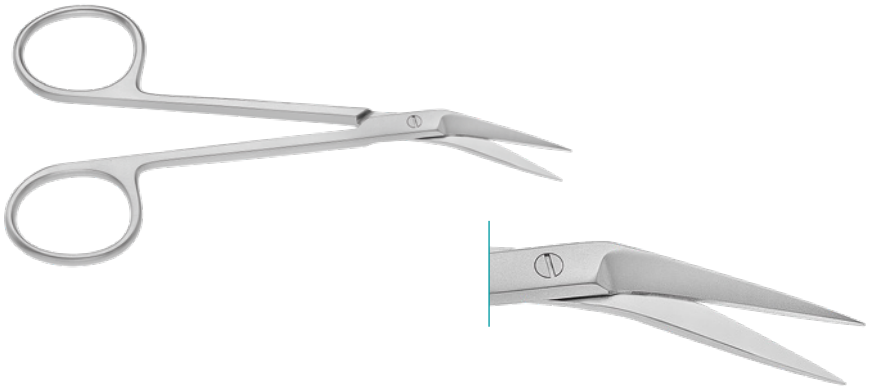


Iris Scissors, square model, 120mm, 4 3/4"	
straight	120-086-120
curved	120-087-120



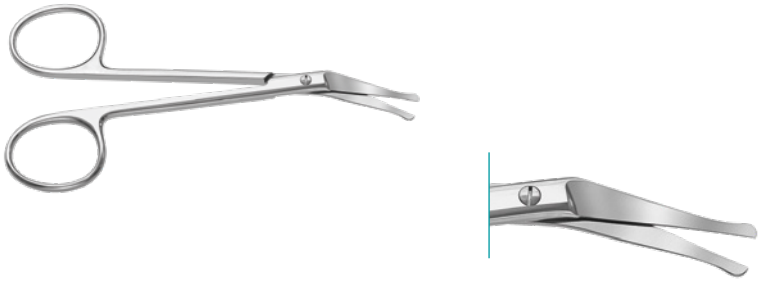
Iris Scissors, sideway curved

115mm, 4 1/2" 120-083-115



Iris Scissors, angled to side

115mm, 4 1/2" 120-085-115



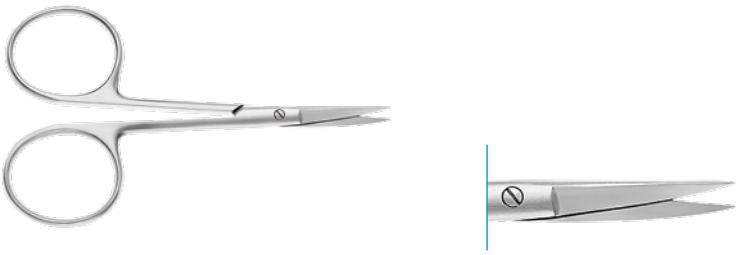
Iris Scissors, angled to side, probe point

115mm, 4 1/2" 120-360-103



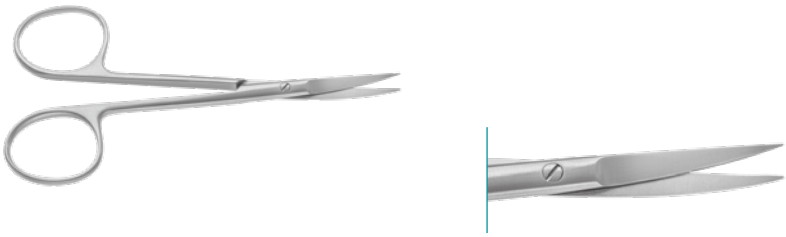
WILMER
Utility Scissors, angled on flat

100mm, 4"	120-084-100



Iris Scissors, sharp, large rings, 100mm, 4",

straight	120-082-100
curved	120-083-100



Iris Scissors, 105mm, $4^{1/8}$"

straight	120-080-105
curved	120-081-105

115mm, $4^{1/2}$"

straight	120-080-115
curved	120-081-115





BONN
Iris Scissors, very delicate, 90mm, 3 1/2"
sharp

straight	120-072-080
curved	120-073-080

blunt

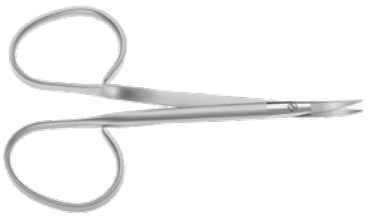
straight	120-074-080
curved	120-075-080





Iris Scissors, sharp, ribbon handle,
105mm, 4 1/8"

straight	120-078-105
curved	120-083-105





Iris Scissors, sharp, ribbon handle,
95mm, 3 3/4"

straight	120-080-095
curved	120-081-095





Strabismus Scissors, 115mm, 4 1/2"

straight	120-094-115
curved	120-095-115





KNAPP

Strabismus Scissors, blunt, 105mm, 4 1/8"

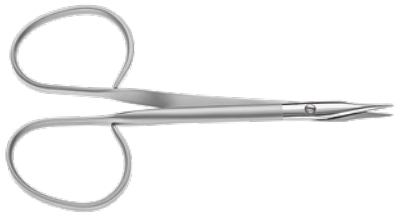
straight	400-112-105
curved	400-113-105





Strabismus Scissors, ribbon handle, 105mm, 4 1/8"

straight	120-094-105
curved	120-095-105





GRADLE WALTON
curved, sharp, ribbon handle

100mm, 4"	120-133-200





Enucleation Scissors, medium curved

110mm, 4 1/3"	120-082-110





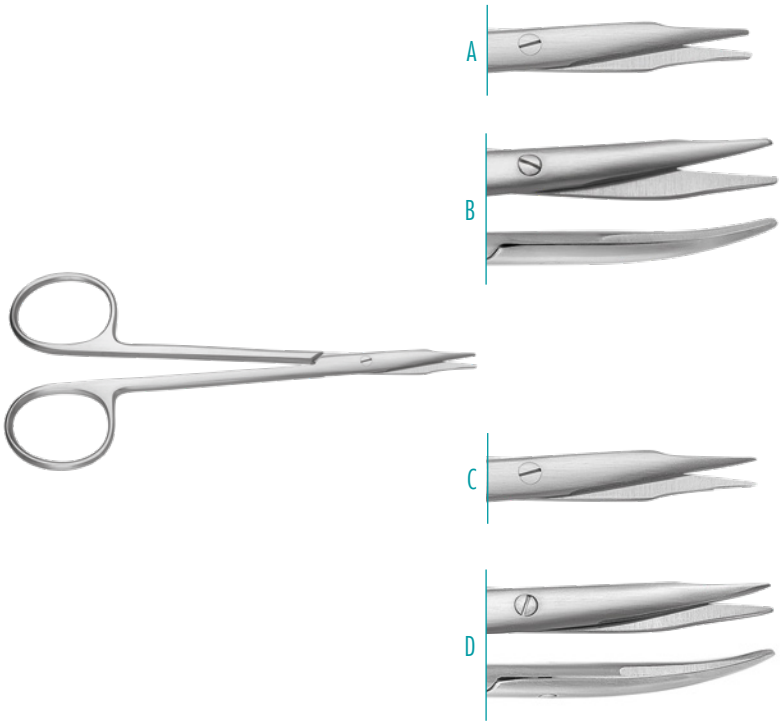


Enucleation Scissors
slightly curved, blunt

130mm, 5 1/8"	400-881-130

strongly curved

130mm, 5 1/8"	400-883-130



STEVENS

A Tenotomy Scissors, ring handle, blunt, straight

105mm, 4 1/8"	120-092-105
115mm, 4 1/2"	120-092-115
125mm, 5"	120-092-125

B blunt, curved

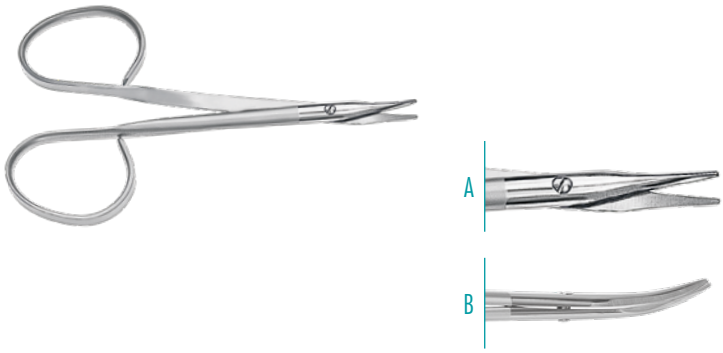
90mm, 3 1/2"	120-093-090
105mm, 4 1/8"	120-093-105
115mm, 4 1/2"	120-093-115
125mm, 5"	120-093-125

C sharp, straight

105mm, 4 1/8"	120-090-105
115mm, 4 1/2"	120-090-115
125mm, 5"	120-090-125

D sharp, curved

105mm, 4 1/8"	120-091-105
115mm, 4 1/2"	120-091-115



STEVENS RIBBON

A blunt, straight, ribbon handle

100mm, 4"	120-098-100

B blunt, curved, ribbon handle

100mm, 4"	120-099-100



WALTON

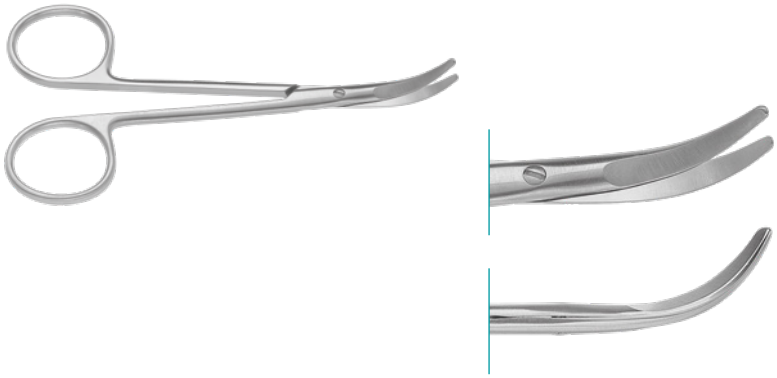
Tenotomy Scissors, curved, sharp, ribbon handle

95mm, 3 3/4"	120-091-095



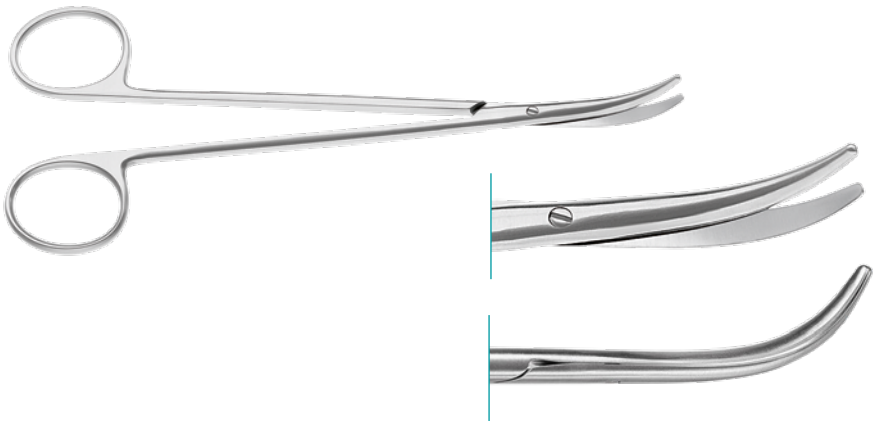
CINELLI
Lower Lateral Nasal Scissors

127mm, 5"	120-338-110



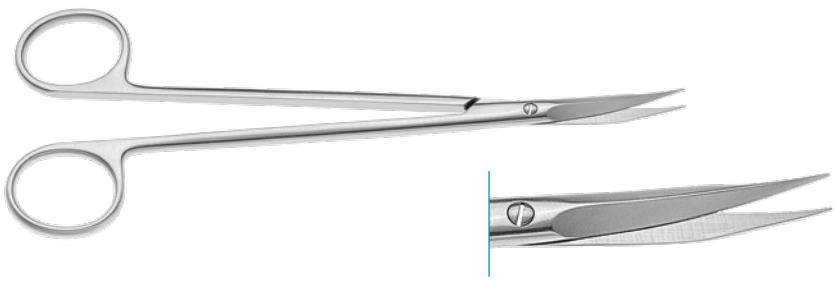
FOMON
Lower Lateral Nasal Scissors

120mm, $4^{3/4}$"	120-339-120



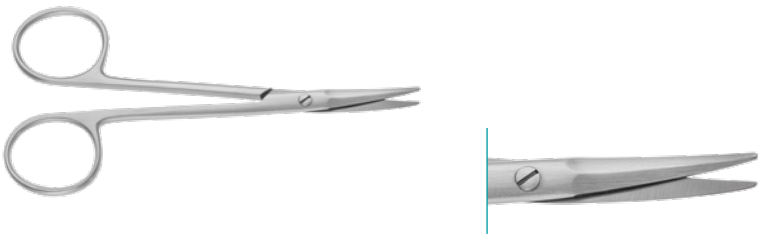
FOMON
Lateral Scissors, fully curved

170mm, $6^{2/3}$"	120-339-170



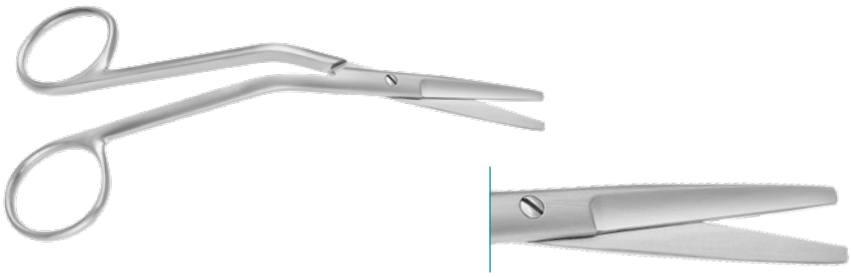
DAVIS
Facelift Scissors, curved

180mm, 7"	120-173-180



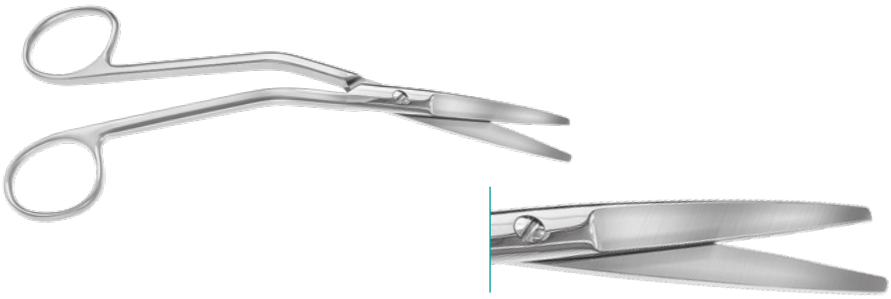
BEUSE
Nasal Scissors, slightly curved

110mm, 4 1/3"	120-281-110



FOMON
Nasal Scissors, serrated, knee bent

145mm, 5 3/4"	120-280-150



GOLDMAN
Nasal Scissors, knee bent

147mm, 6"	120-356-150



BOETTCHER
Tonsill Scissors, curved

180mm, 7"	120-209-180



COTTLE
Nasal Scissors, knee bent

160mm, 6 1/4"	120-281-160



COTTLE
Septum Scissors, serrated blade

175mm, 6 7/8"	420-119-175



HEYMAN KNIGHT
Nasal Scissors, knee bent

180mm, 7"	120-283-180

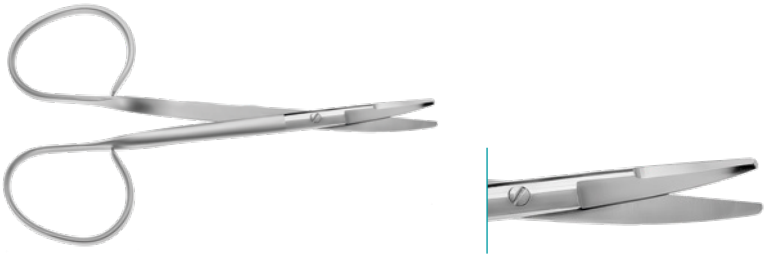


GOLDMAN FOX
Gum Scissors, 1 blade serrated,
straight

130mm, 5 1/8"	120-666-130

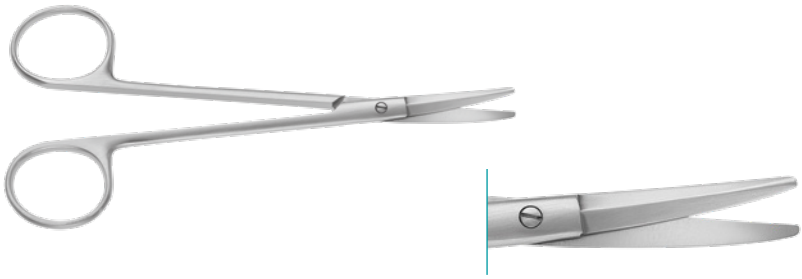
curved

130mm, 5 1/8"	120-667-130



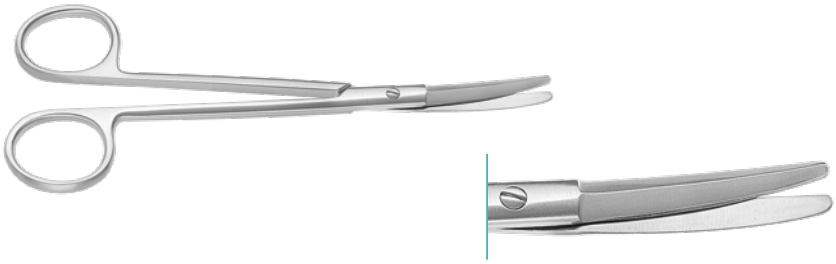
KAYE
Blepharoplasty Scissors, ribbon handle,
curved

115mm, 4 1/2"	120-135-115



FOMON
Saber Facelift Scissors, curved

135mm, 5 1/3"	120-139-135



KAHN
Facelift Scissors, curved

145mm, 5 3/4"	120-137-145
180mm, 7"	120-137-180

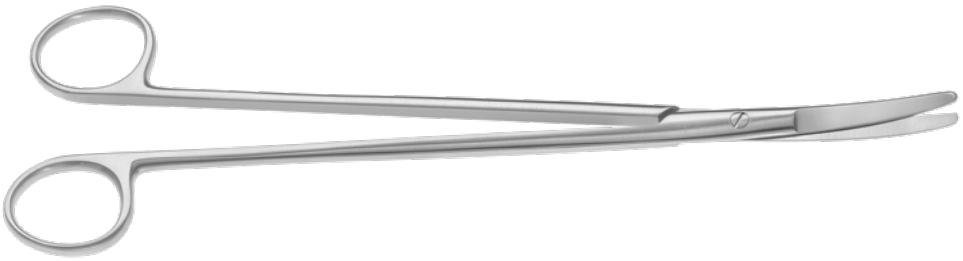


DOYEN
Scissors, 160mm, $6^{1/4}$"

straight	120-040-160
curved	120-041-160

175mm, $6^{7/8}$"

straight	120-040-175
curved	120-041-175



WILLAUER
Scissors, straight

250mm, $9^{7/8}$"	120-214-250
300mm, $11^{7/8}$"	120-214-280

curved

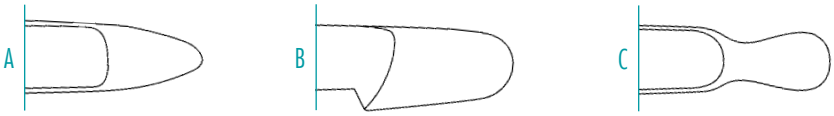
250mm, $9^{7/8}$"	120-215-250
300mm, $11^{7/8}$"	120-215-280



JORGENSEN
Scissors, curved

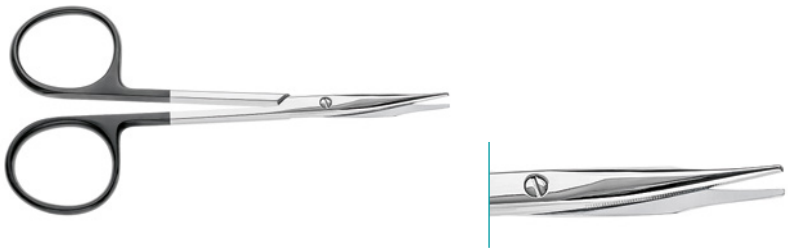
220mm, $8^{2/3}$"	120-325-220





Enterotomy Scissors
210mm, $8^{1/4}$"

A	120-233-210
B	120-234-210
C	120-235-210

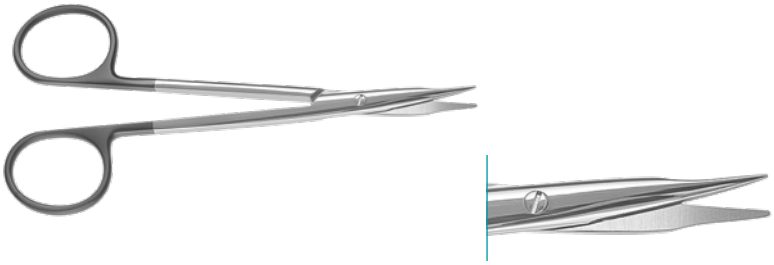


STEVENS
Tenotomy Scissors, square model,
blunt, straight

105mm, 4 1/8"	121-196-100
115mm, 4 1/2"	121-196-110
125mm, 5"	121-196-120

curved

105mm, 4 1/8"	121-197-100
115mm, 4 1/2"	121-197-110
125mm, 5"	121-197-120



STEVENS
Tenotomy Scissors, curved, blunt

125mm, 5"	121-093-125



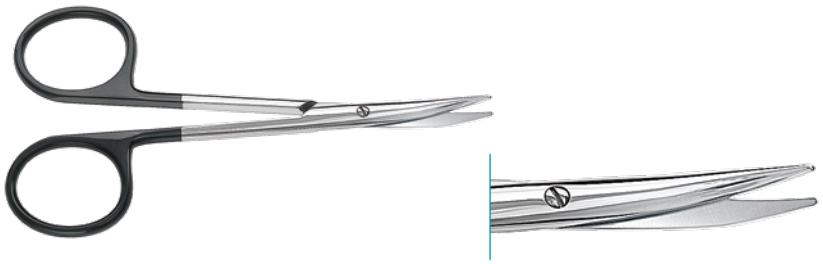
STEVENS
Tenotomy Scissors, blunt, curved

105mm, 4 1/8"	121-093-105



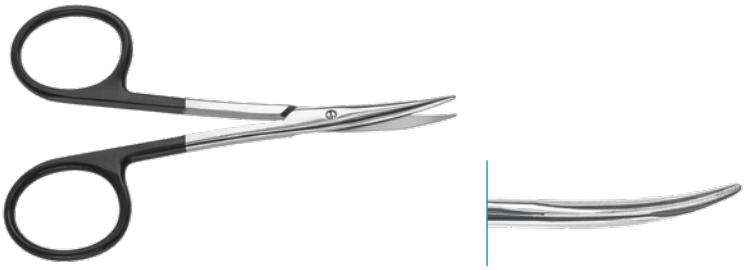
STEVENS
Tenotomy Scissors, ribbon handle, curved,
100mm, 4"

blunt	121-099-100
sharp	121-091-095



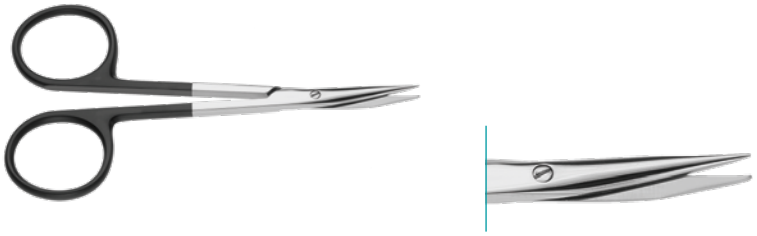
STEVENS
Tenotomy Scissors, blunt, curved

125mm, 5″	121-012-125



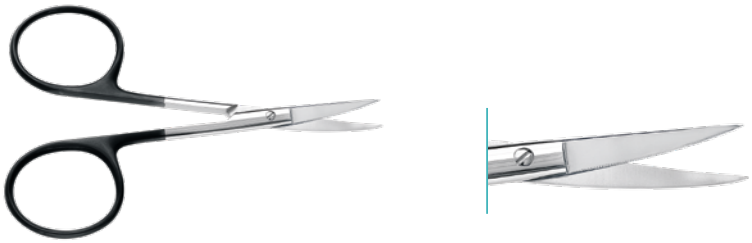
STEVENS
large rings, slayed shanks, curved, blunt

120mm, 4 3/4″	121-297-120



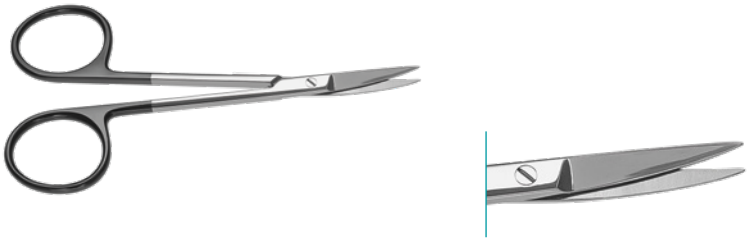
STEVENS
curved, sharp/sharp

110mm, 4 1/3″	121-089-110
150mm, 6″	121-089-150



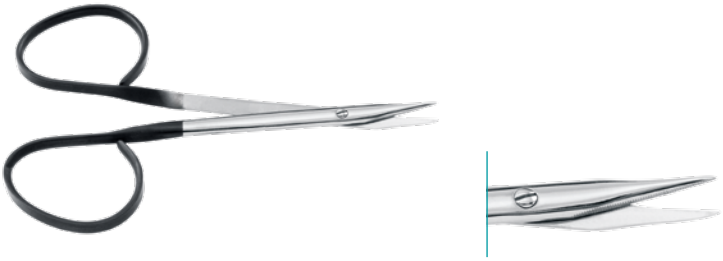
IRIS
sharp, curved

100mm, 4″	121-081-100



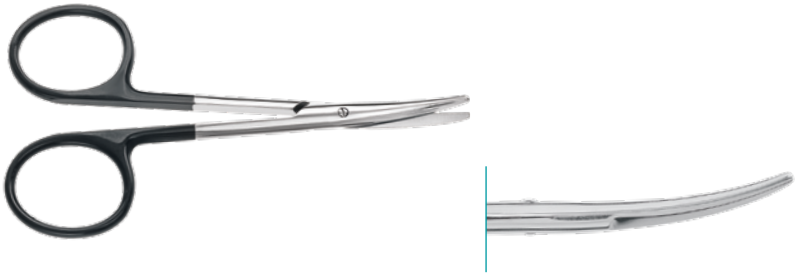
IRIS
sharp, 110mm, 4 1/3″

straight	121-070-110
curved	121-071-110



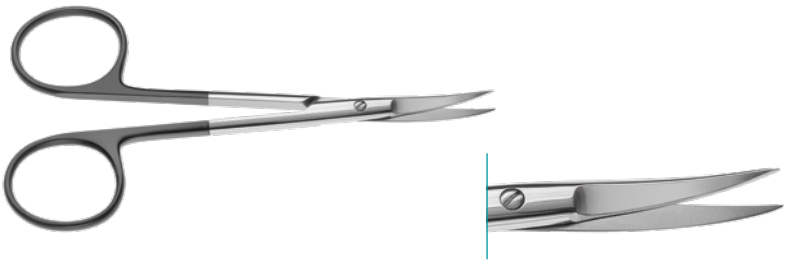
GRADLE WALTON
sharp, 115mm, 4 1/2″

straight	121-132-200
slightly curved	121-133-200



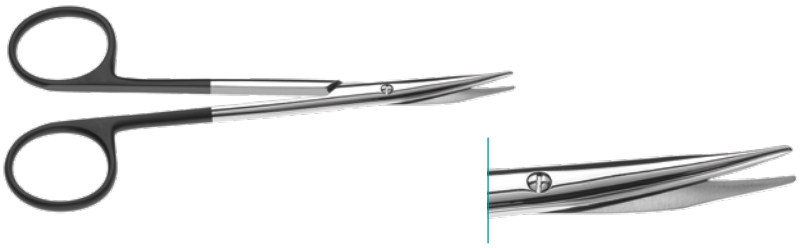
WALDRAM
blunt, curved

118mm, 4 2/3″	121-011-125



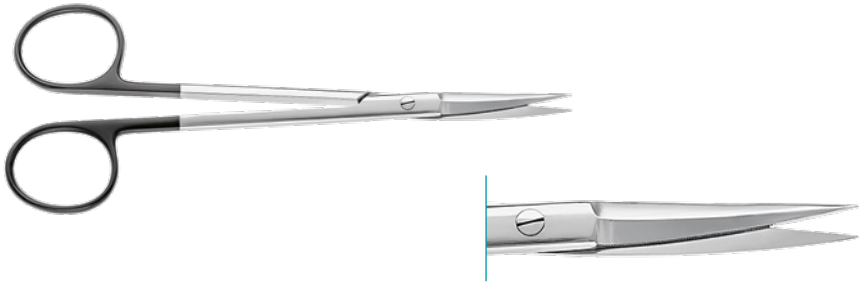
JABALEY SC
curved, with large rings

130mm, $5^{1/8}$″	121-089-130



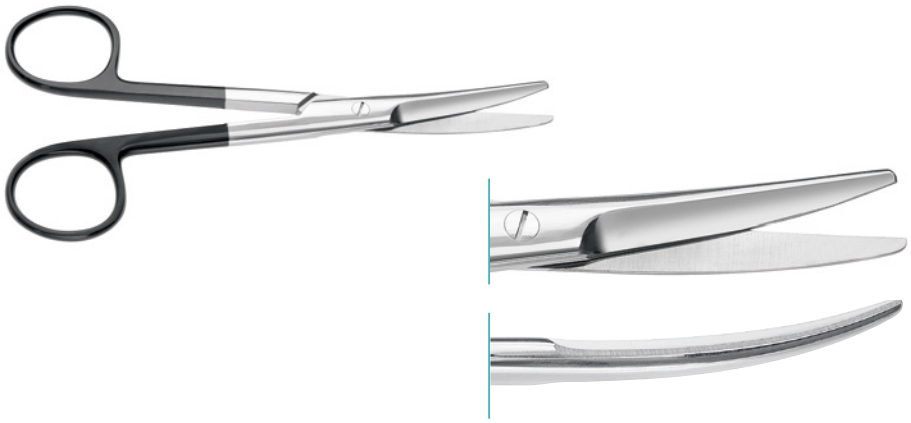
JAMESON WERBER SC
curved

135mm, $5^{1/3}$″	121-313-135



PECK-JOSEPH SC
double serrated, 140mm, $5^{1/2}$″

straight	121-060-140
curved	121-061-140

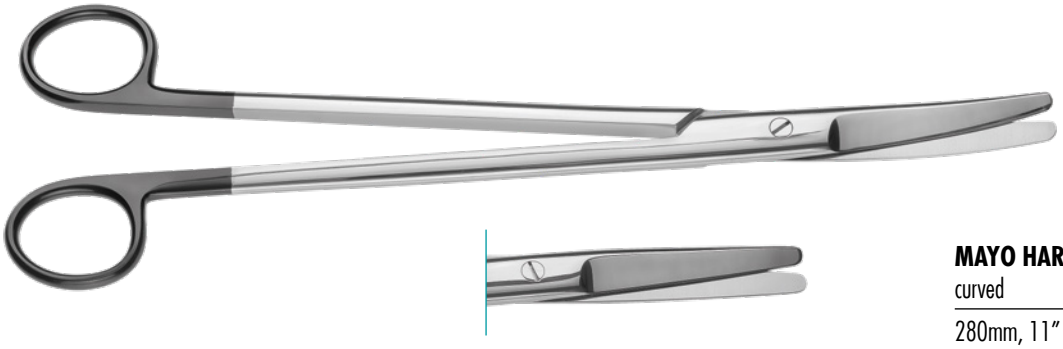


MAYO SC
Surgical Scissors, straight

145mm, 5 3/4"	121-030-145
170mm, 6 2/3"	121-030-170
230mm, 9"	121-030-230

curved

145mm, 5 3/4"	121-031-145
170mm, 6 2/3"	121-031-170
230mm, 9"	121-031-230

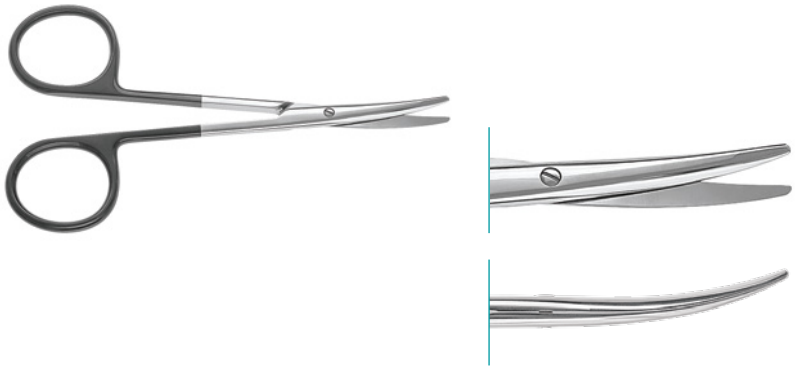


MAYO HARRINGTON SC
curved

280mm, 11"	121-033-280

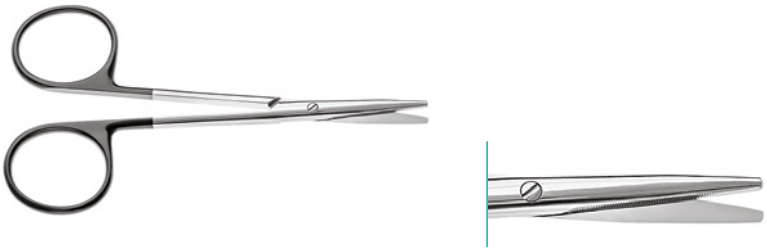
straight

300mm, 11 7/8"	121-032-300



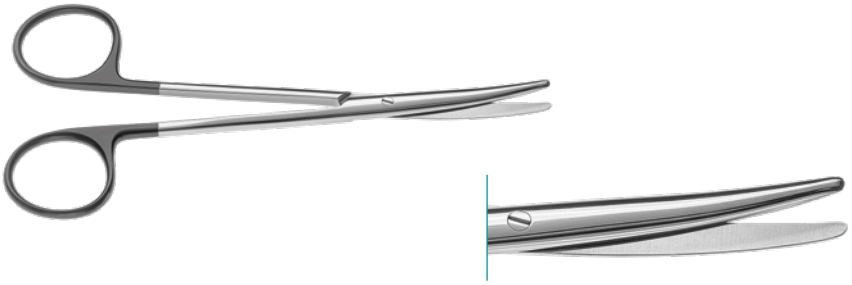
METZENBAUM BABY SC
Dissecting Scissors, curved

110mm, 4 1/3"	121-317-110
145mm, 5 3/4"	121-317-145



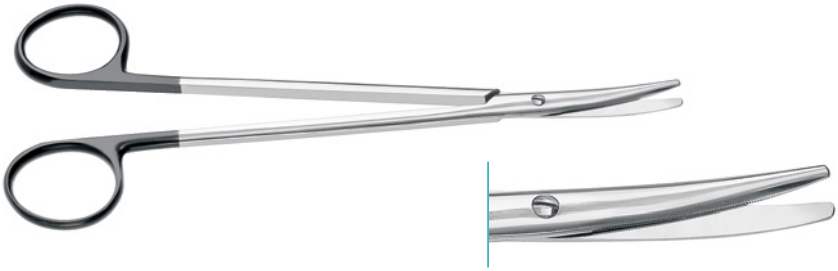
STRABISMUS SC
Dissecting Scissors, 115mm, 4 1/2″

straight	121-094-115
curved	121-095-115



METZENBAUM SC
145mm, 5 3/4″

straight	121-110-145
curved	121-111-145

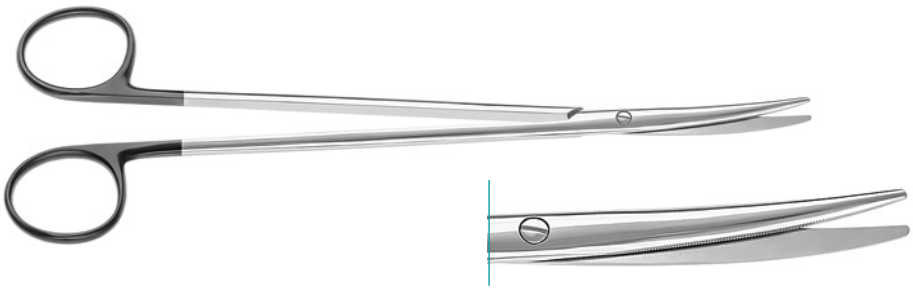


METZENBAUM NELSON SC
curved, blunt

180mm, 7″	121-111-180
200mm, 8″	121-111-200
250mm, 9 7/8″	121-111-250
230mm, 9″	121-111-230
280mm, 11″	121-111-280
300mm, 11 7/8″	121-111-300
355mm, 14″	121-111-355

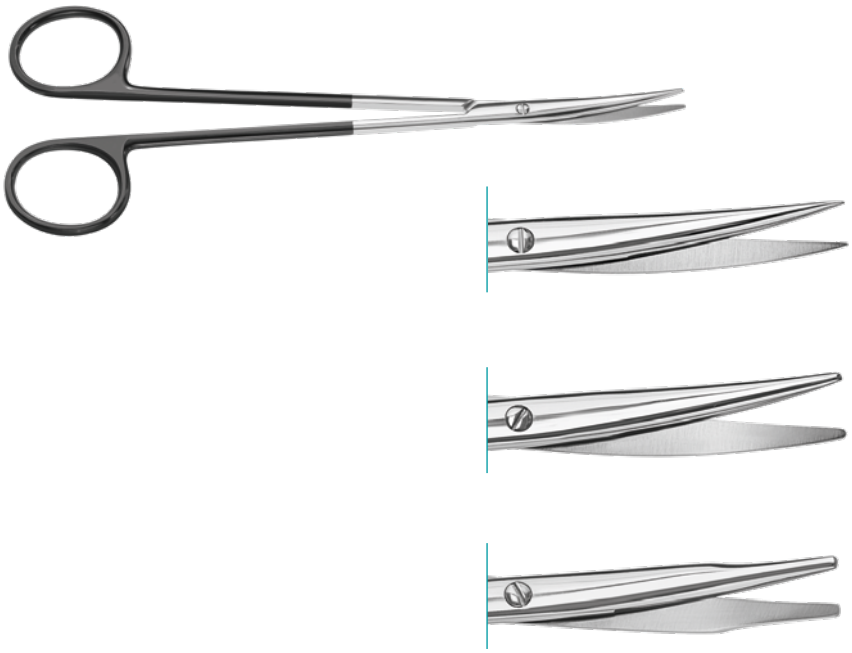
straight

180mm, 7″	121-110-180
200mm, 8″	121-110-200
260mm, 11″	121-110-260



METZENBAUM FINO SC
curved, blunt

115mm, 4 1/2"	121-153-115
145mm, 5 3/4"	121-153-145
180mm, 7"	121-153-180
200mm, 8"	121-153-200
230mm, 9"	121-153-230

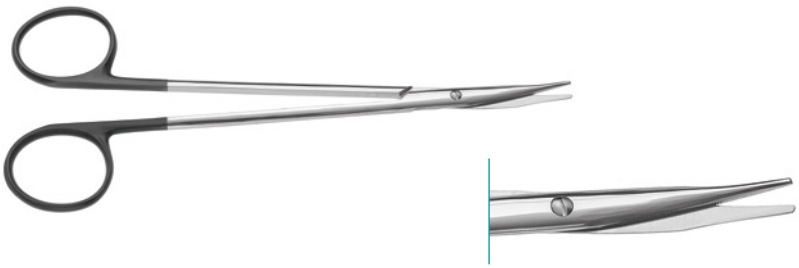


LILLEHEI POTTS SC
curved, 180mm, 7"

sharp	126-312-180
blunt	126-313-180
blunt, tenotomy	126-314-180

curved, 230mm, 9"

sharp	126-312-230
blunt	126-313-230
blunt, tenotomy	126-314-230



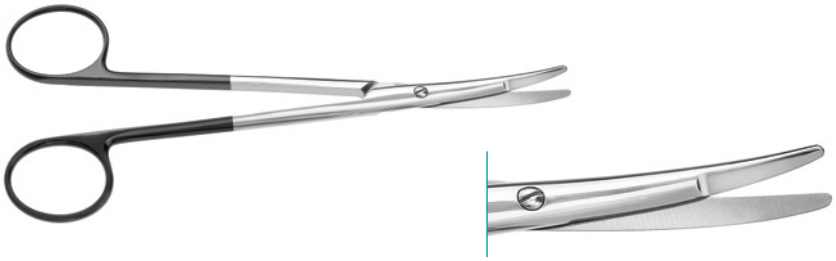
JAMESON SC
curved, blunt

150mm, 6"	121-315-150
180mm, 7"	121-315-180



RZ DAVIS SC
curved, sharp

180mm, 7″	121-313-170



RAGNELL KILNER SC
curved, flat, blunt

150mm, 6″	121-332-150
180mm, 7″	121-332-180
200mm, 8″	121-332-200

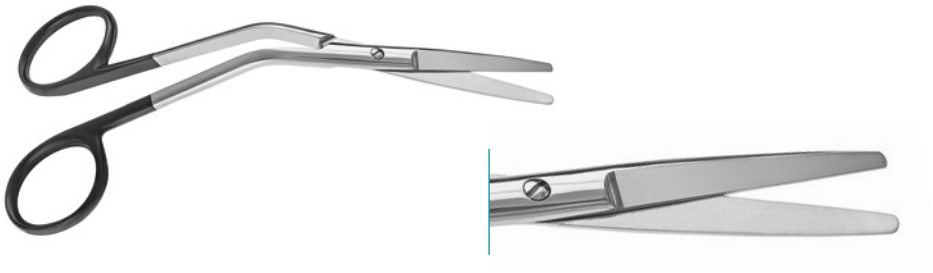
slightly curved

130mm, 5 1/8″	121-332-130



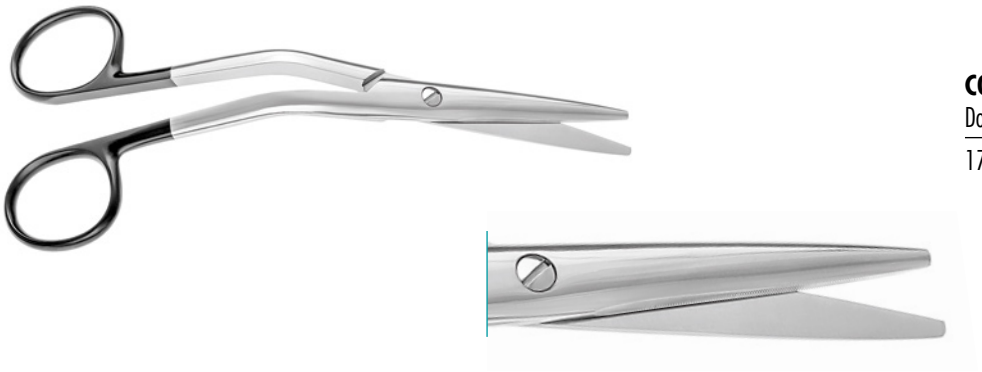
FOMON SC
Lateral Scissors, strongly curved

110mm, 4 1/3″	121-131-110



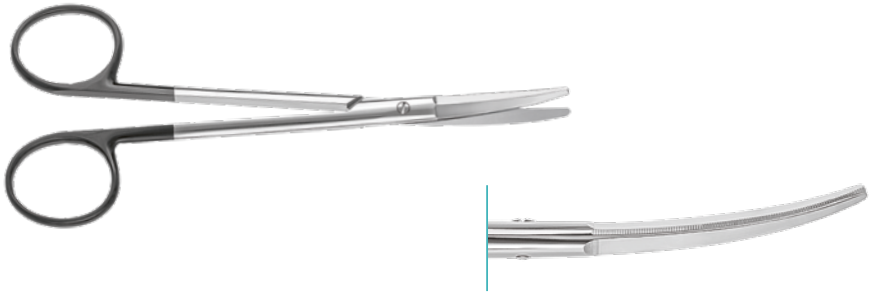
FOMON SC
Dorsal Scissors, straight, shanks knee bent

145mm, 5 3/4" 121-280-145



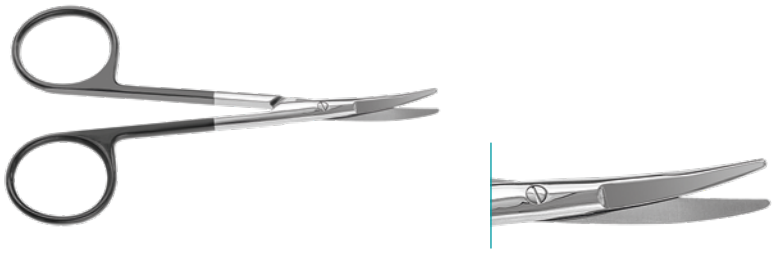
COTTLE SC
Dorsal Scissors, shanks knee bent

170mm, 6 2/3" 121-290-165



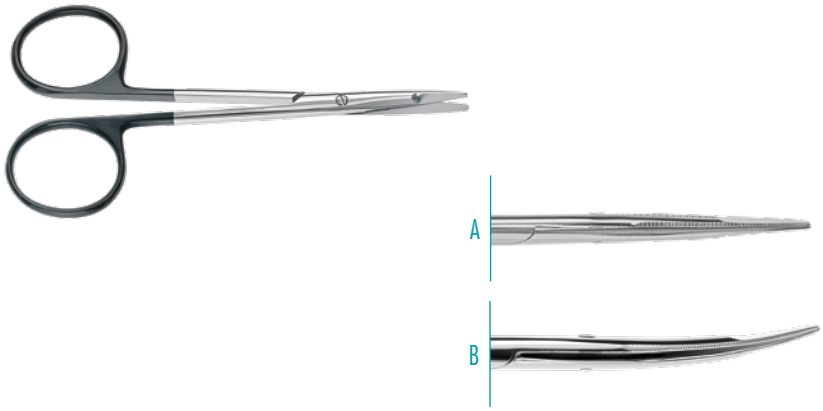
KAHN
Facelift Scissors, curved

145mm, 5 3/4" 121-137-145



KAYE
Blepharoplasty Scissors, curved

115mm, 4 1/2″	121-316-115



PAR TYPE
A straight

110mm, 4 1/3″	121-330-110

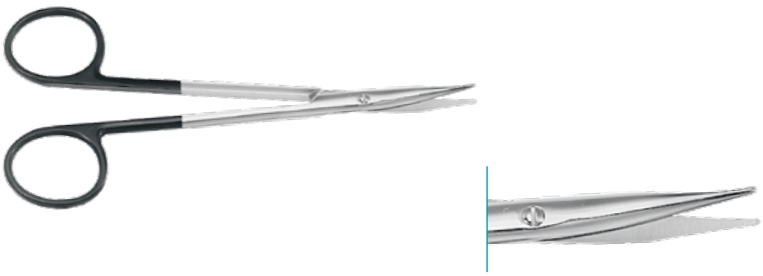
B curved

110mm, 4 1/3″	121-331-110
150mm, 6″	121-331-150



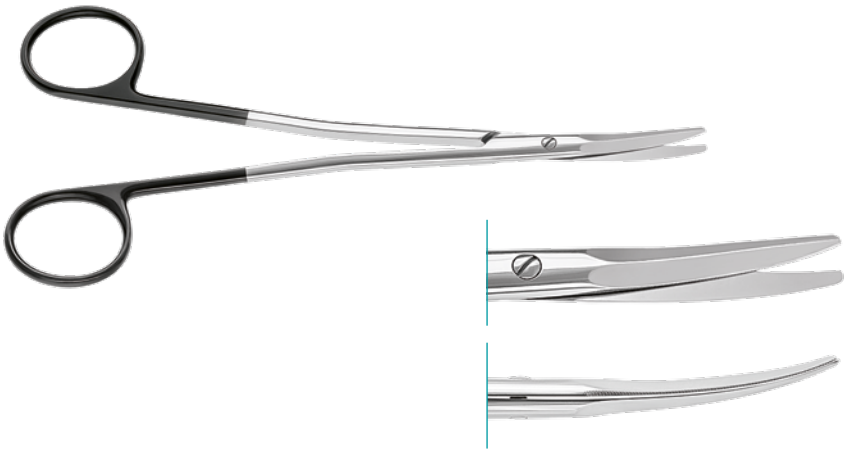
LITTLER SC
with hole, slightly curved, sharp

115mm, 4 1/2″	121-061-115



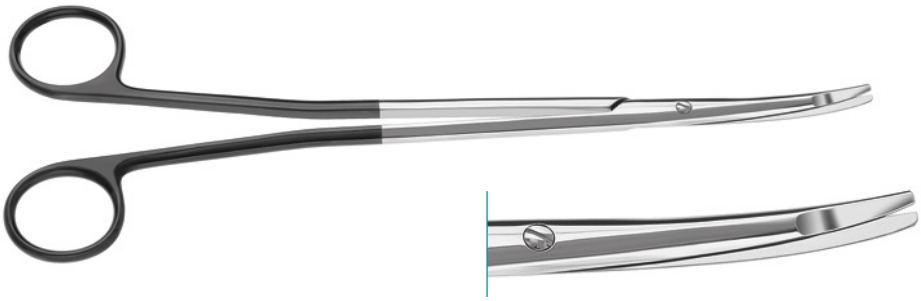
REYNOLDS SC
Tenotomy Scissors, curved

125mm, 5″	121-318-125



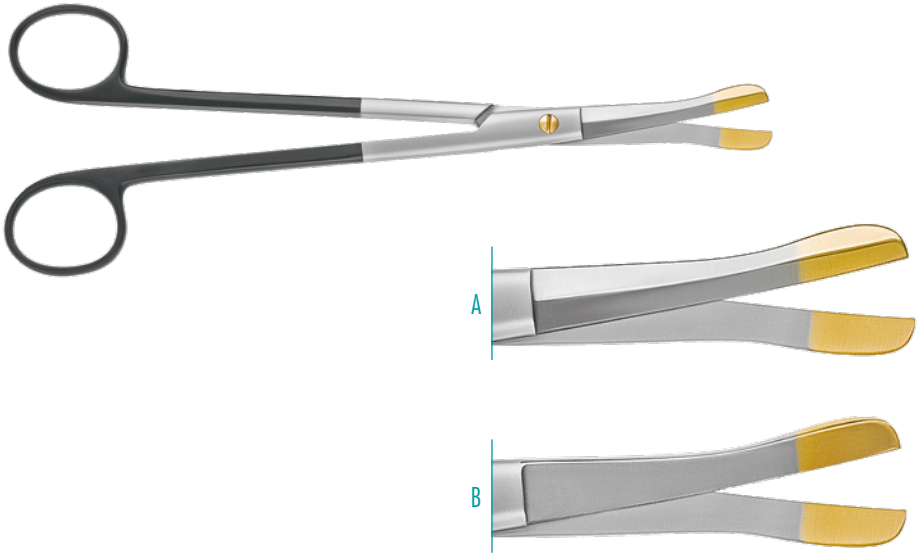
KAYE FREEMAN SC
Facelift Scissors, flat tip, splayed shanks
180mm, 7"

straight	121-328-180
curved	121-329-180



METZENBAUM FREEMAN SC
Rhytidectomy Scissors, flat tip, splayed shanks
curved

180mm, 7"	121-211-180
200mm, 8"	121-211-200
230mm, 9"	121-211-230



BOETTLER
Facelift Scissors, reinforced,
round shanks on the tip
A KAYE pattern

150mm, 6"	121-214-150
200mm, 8"	121-214-200

B SIMS pattern

200mm, 8"	121-204-200

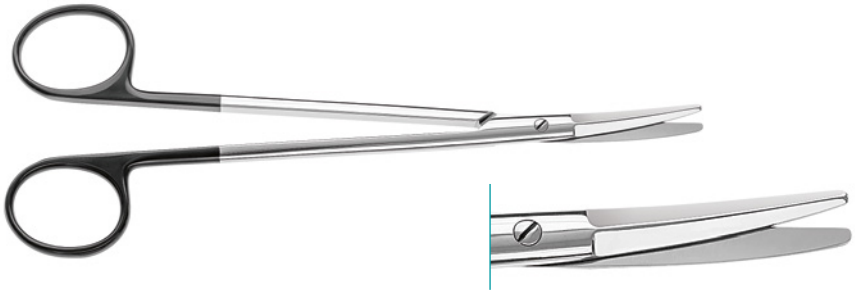


GORNEY SC
Plastic Surgery Scissors, straight

190mm, 7 1/2″	121-336-190

curved

185mm, 7 1/4″	121-337-185



KAYE SC
Facelift Scissors, curved

145mm, 5 3/4″	121-327-145
180mm, 7″	121-327-180



RZ KAYE SC
Facelift Scissors, straight

170mm, 6 2/3″	121-310-170
190mm, 7 1/2″	121-310-190
230mm, 9″	121-310-230

curved

170mm, 6 2/3″	121-311-170
190mm, 7 1/2″	121-311-190
230mm, 9″	121-311-230



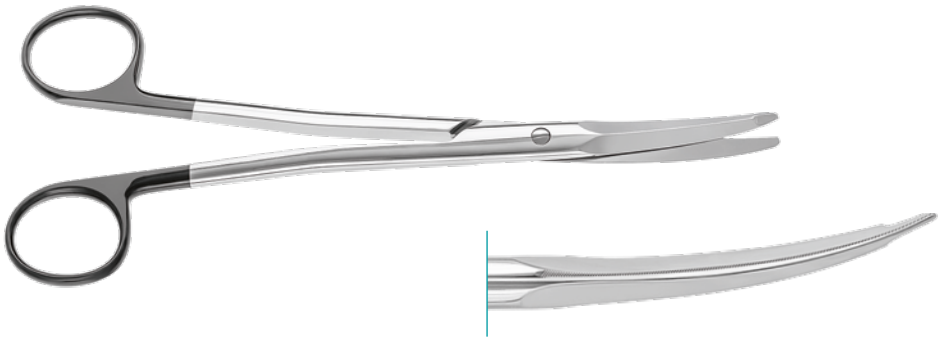
GORNEY FREEMAN SC
Facelift Scissors, flat tip, splayed shanks
190mm, 7 1/2″

curved	121-343-190



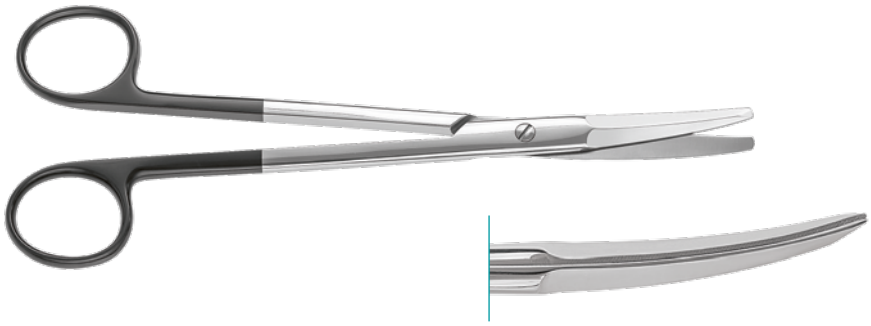
RZ GOURNEY
Facelift Scissors, bevelled blades, curved

190mm, 7 1/2″	121-335-190
230mm, 9″	121-335-230



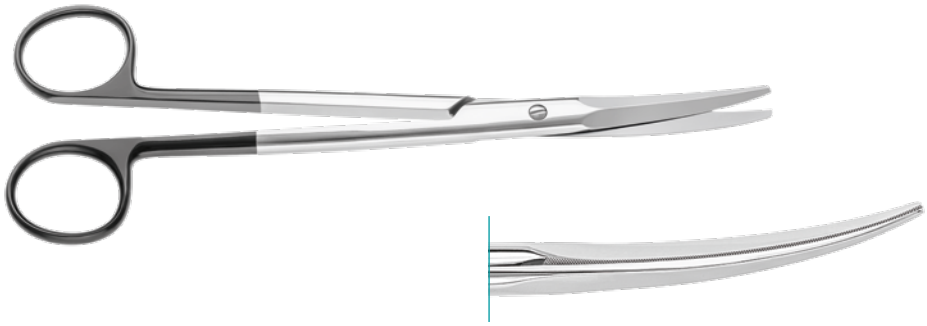
RZ GOURNEY-FREEMAN
Facelift Scissors, bevelled blades, curved

170mm, 6 2/3″	121-345-170
190mm, 7 1/2″	121-345-190
230mm, 9″	121-345-230



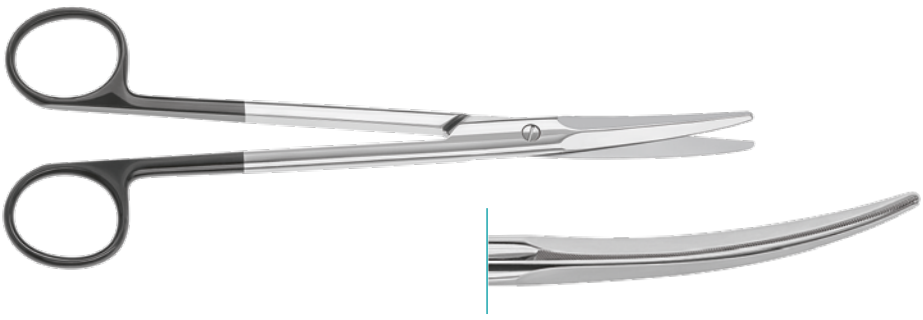
REES
Facelift Scissors, bevelled blades, curved

170mm, 6 2/3″	121-077-170
190mm, 7 1/2″	121-077-205



ASTON
Facelift Scissors, curved

170mm, 6 2/3″	121-301-170
200mm, 8″	121-301-200

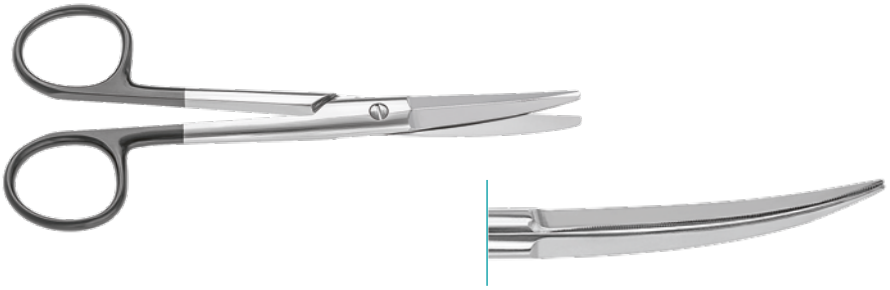


MATARASSO
Facelift Scissors, straight

170mm, 6 2/3″	121-304-170
200mm, 8″	121-304-200

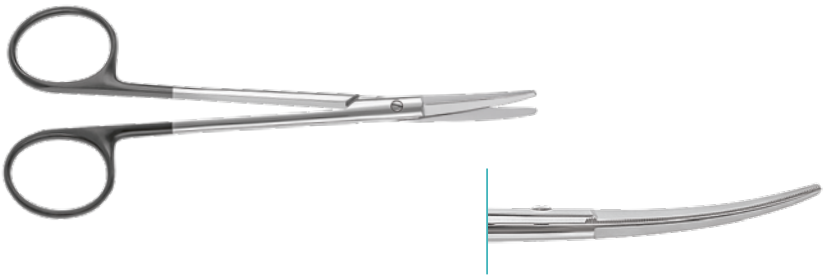
curved

170mm, 6 2/3″	121-305-170
200mm, 8″	121-305-200



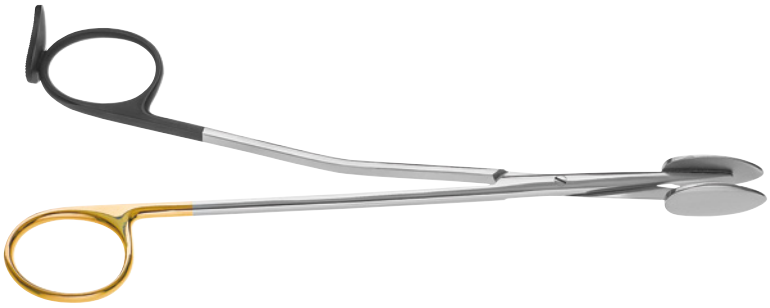
AUFRICHT
Facelift Scissors, curved

145mm, 5 3/4"	121-575-145



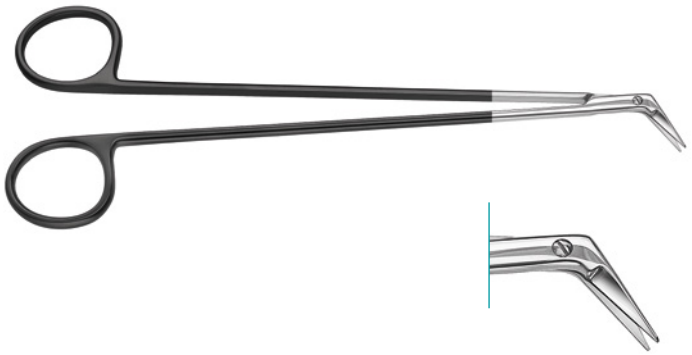
FOMON-SABER
Facelift Scissors, curved

135mm, 5 1/3"	121-139-135



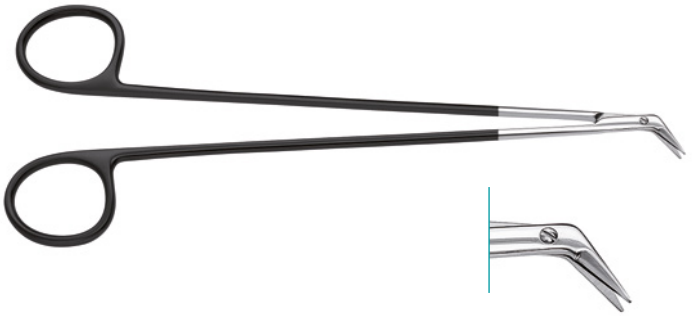
PADDLE
Facelift Scissors, one serrated blade, 180mm, 6"

5mm blade	120-091-182
15mm blade	120-092-182
25mm blade	120-093-182



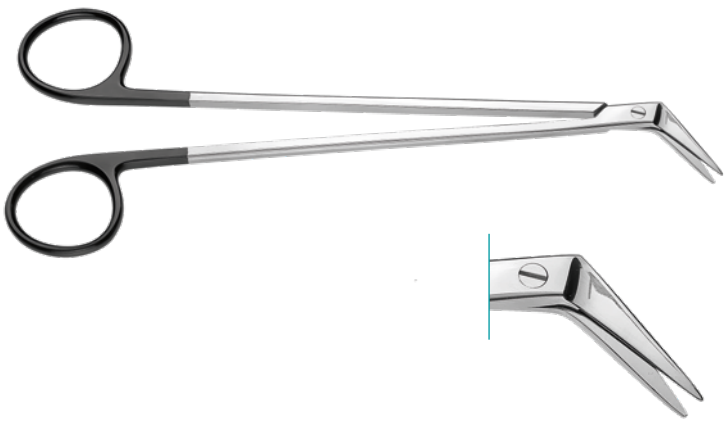
DIETHRICH HEGEMANN SC
Vascular Scissors, 13mm standard blade

130mm, 5 1/8"	
25°	126-130-025
45°	126-130-045
60°	126-130-060
90°	126-130-090
125°	126-130-125
180mm, 7"	
25°	126-180-025
45°	126-180-045
60°	126-180-060
90°	126-180-090
125°	126-180-125



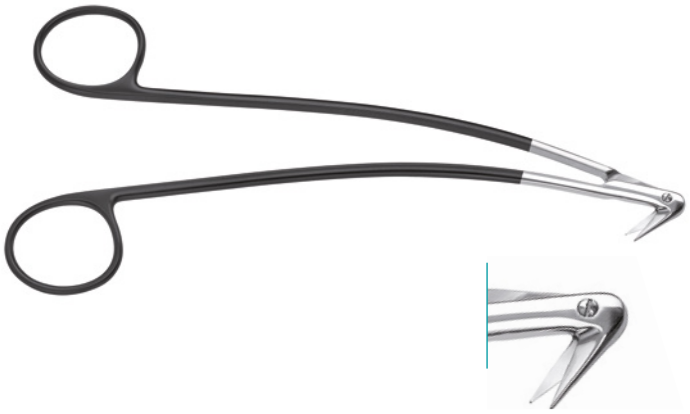
DIETHRICH SC
Vascular Scissors, delicate, 9mm short blades

180mm, 7"	
25°	126-178-025
45°	126-178-045
60°	126-178-060
90°	126-178-090
125°	126-178-125



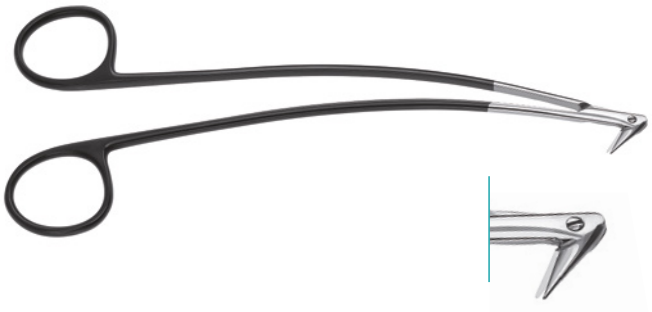
POTTS SMITH SC
Vascular Scissors, 190mm, 7 1/2"

25°	121-183-190
45°	121-182-190
60°	121-181-190



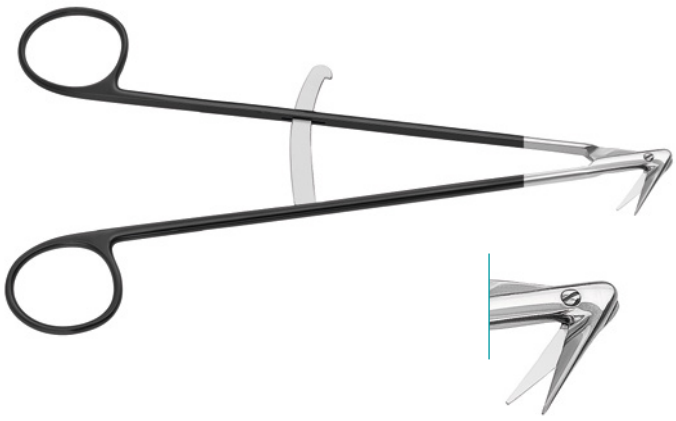
DIETHRICH FAVALORO SC
Vascular Scissors, 13mm standard blades
180mm, 7″

125°	126-185-125



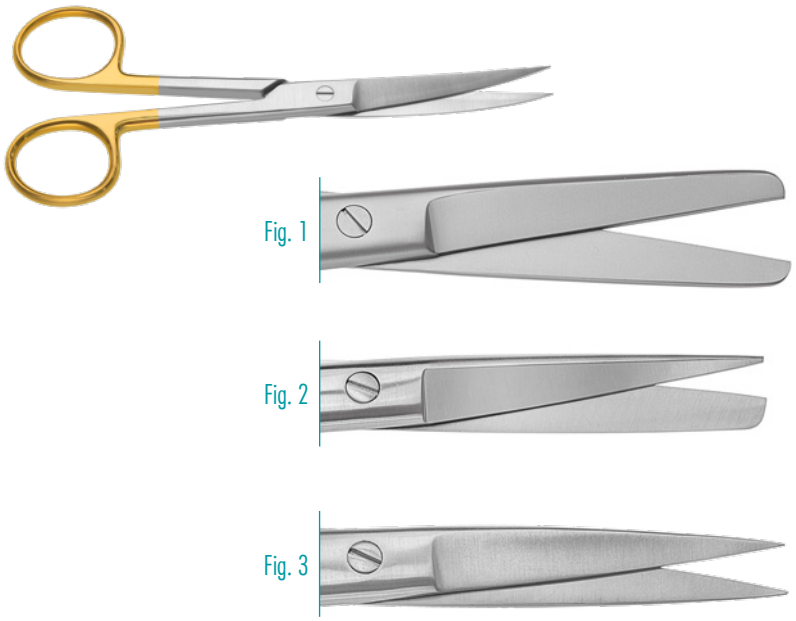
DIETHRICH FAVALORO SC
Vascular Scissors, 9mm short blades
170mm, $6^{2/3}$″

125°	126-168-125



DIETHRICH ARTERY SC
Vascular Scissors, 13mm standard blades
with guide
180mm, 7″

125°	126-200-125



STANDARD TC

straight, 145mm, 5 3/4"

Fig. 1 (blunt/blunt)	120-500-145

curved, 145mm, 5 3/4"

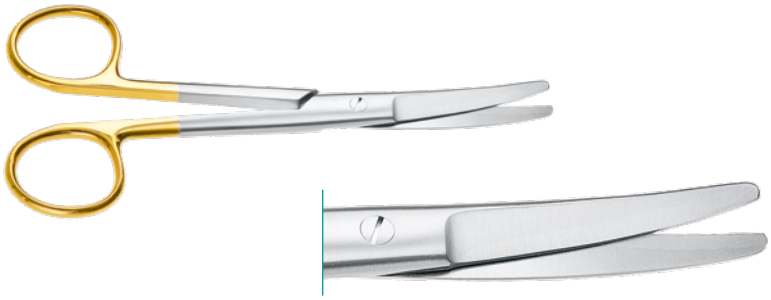
Fig. 1 (blunt/blunt)	120-501-145

straight, 145mm, 5 3/4"

Fig. 2 (sharp/blunt)	120-502-145
Fig. 3 (sharp/sharp)	120-504-145

curved, 145mm, 5 3/4"

Fig. 2 (sharp/blunt)	120-503-145
Fig. 3 (sharp/sharp)	120-505-145



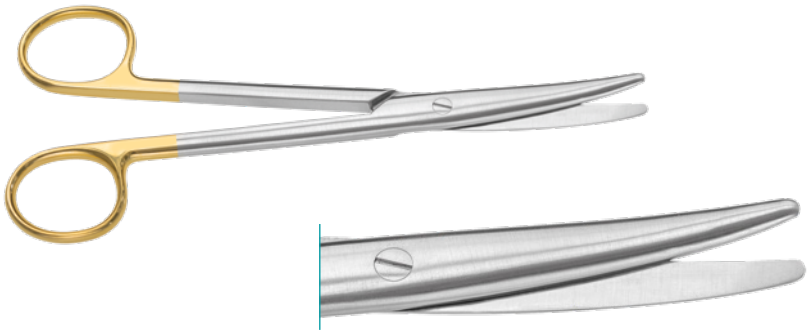
MAYO TC

straight

145mm, 5 3/4"	120-506-145
170mm, 6 2/3"	120-506-170

curved

145mm, 5 3/4"	120-507-145
170mm, 6 2/3"	120-507-170



MAYO STILLE TC

straight

150mm, 6"	120-508-150
170mm, 6 2/3"	120-508-170

curved

150mm, 6"	120-509-150
170mm, 6 2/3"	120-509-170



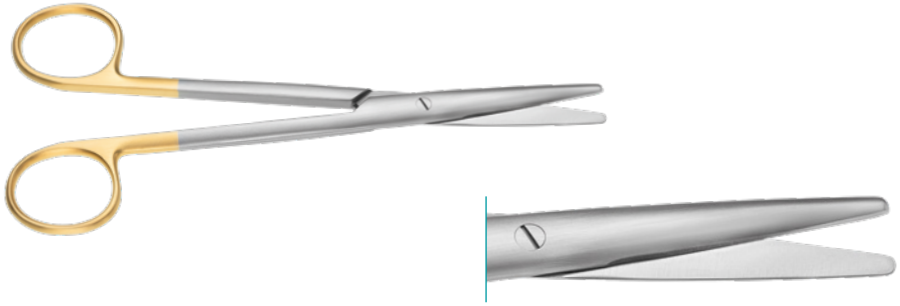
MAYO HARRINGTON TC

straight

230mm, 9"	120-506-230

curved

230mm, 9"	120-507-230



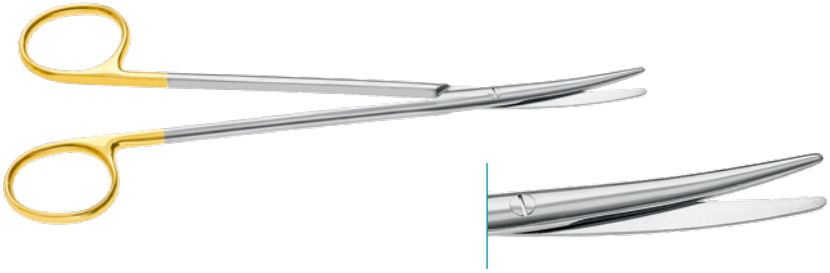
LEXER TC

straight

160mm, 6 1/4"	120-516-160
210mm, 8 1/4"	120-516-210

curved

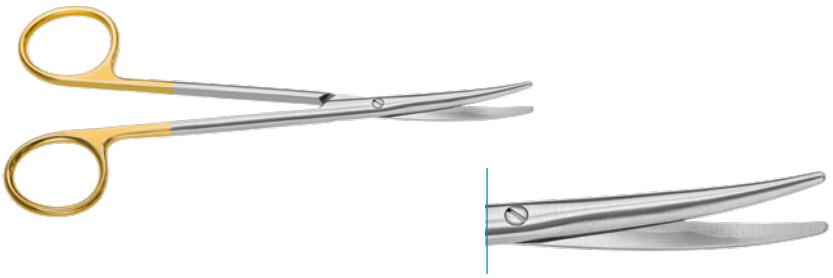
160mm, 6 1/4"	120-517-160
210mm, 8 1/4"	120-517-210



TOENNIS ADSON TC

curved

170mm, 6 2/3"	120-531-170



METZENBAUM LAHEY TC
curved, blunt

140mm, 5 1/2"	120-530-140

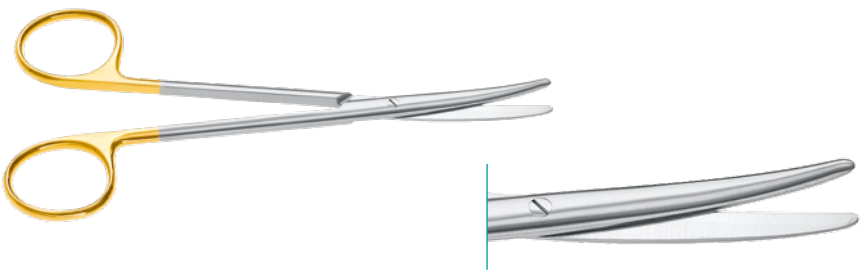


METZENBAUM BABY TC
straight, blunt

115mm, 4 1/2"	120-510-115

curved, blunt

115mm, 4 1/2"	120-511-115

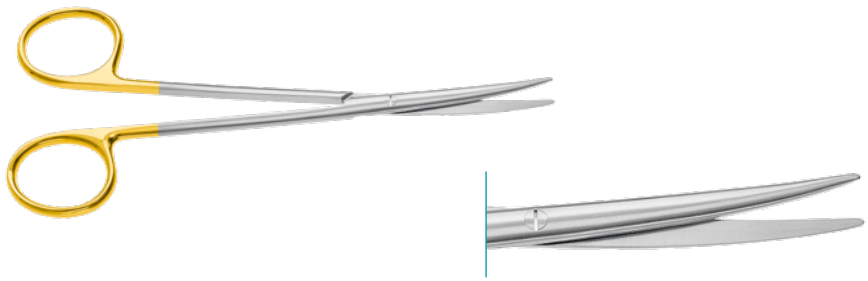


METZENBAUM TC
straight, blunt/blunt

145mm, 5 3/4"	120-510-145
180mm, 7"	120-510-180
200mm, 8"	120-510-200
230mm, 9"	120-510-230

curved

145mm, 5 3/4"	120-511-145
180mm, 7"	120-511-180
200mm, 8"	120-511-200
230mm, 9"	120-511-230



METZENBAUM FINO TC

straight, blunt/blunt

145mm, 5 3/4"	120-520-145
180mm, 7"	120-520-180
200mm, 8"	120-520-200
230mm, 9"	120-520-230

curved, blunt/blunt

145mm, 5 3/4"	120-521-145
180mm, 7"	120-521-180
200mm, 8"	120-521-200
230mm, 9"	120-521-230



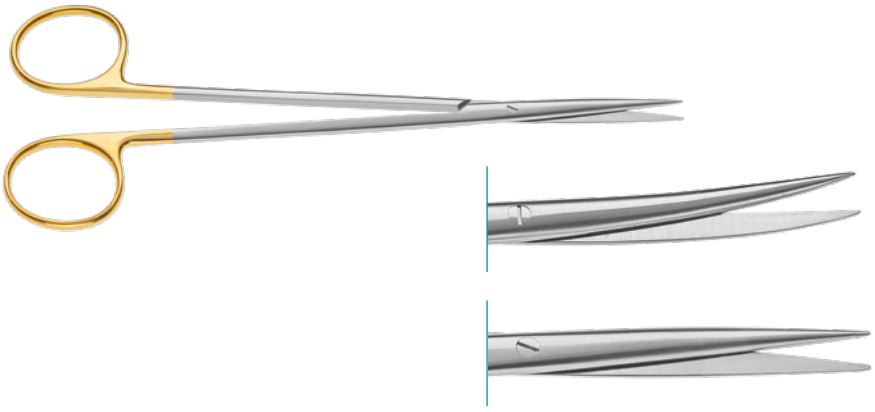
METZENBAUM TC

straight, sharp/sharp

145mm, 5 3/4"	120-514-145
180mm, 7"	120-514-180
230mm, 9"	120-514-230

curved, sharp/sharp

145mm, 5 3/4"	120-515-145
180mm, 7"	120-515-180
200mm, 8"	120-515-200



METZENBAUM FINO TC

straight, sharp/sharp

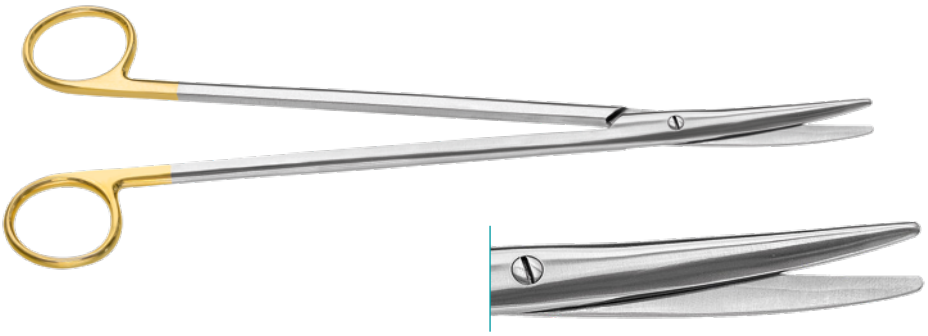
145mm, 5 3/4"	120-522-145
180mm, 7"	120-522-180
200mm, 8"	120-522-200
230mm, 9"	120-522-230

curved, sharp/sharp

145mm, 5 3/4"	120-523-145
180mm, 7"	120-523-180
200mm, 8"	120-523-200
230mm, 9"	120-523-230

s-curved, blunt

180mm, 7"	120-525-180
200mm, 8"	120-525-200



METZENBAUM NELSON TC

straight, Fig.1

250mm, 9 7/8"	120-510-250
280mm, 11"	120-510-280
300mm, 11 7/8"	120-510-300

curved, Fig.1

250mm, 9 7/8"	120-511-250
280mm, 11"	120-511-280
300mm, 11 7/8"	120-511-300
360mm, 14"	120-511-360



RAGNELL TC

Scissors

120mm, 4 3/4"	120-559-120
150mm, 6"	120-559-150
180mm, 7 1/2"	120-559-180



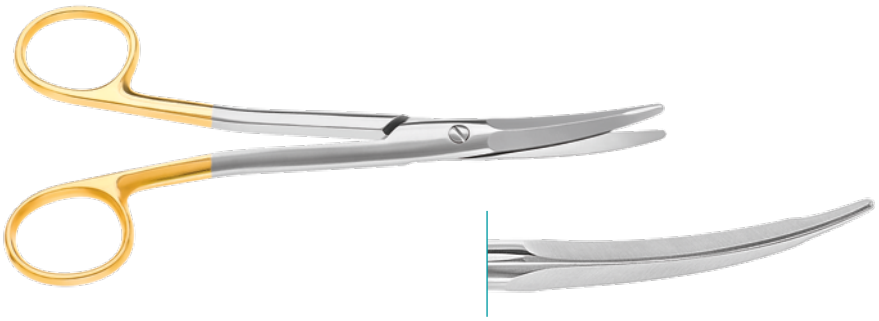
BABY METZENBAUM TC

Strabismus Scissors, straight

115mm, 4 1/2"	120-594-115

curved

115mm, 4 1/2"	120-595-115



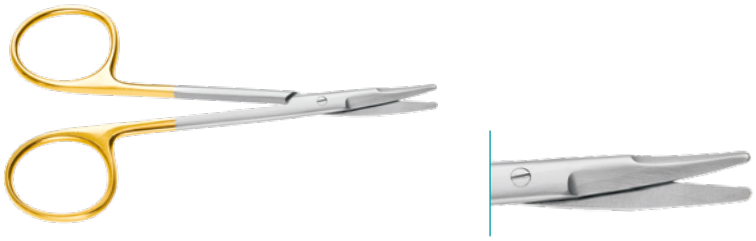
RZ GOURNEY-FREEMAN
Facelift Scissors, bevelled blades, curved

170mm, $6^{2/3}$″	120-573-170
190mm, $7^{1/2}$″	120-573-190
230mm, 9″	120-573-230



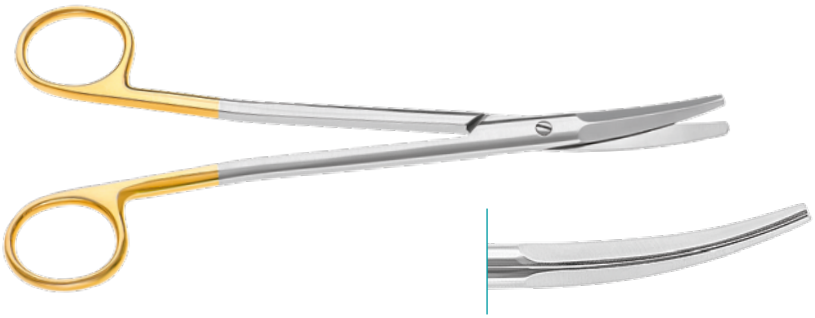
RZ KAYE TC
Facelift Scissors, curved

170mm, $6^{2/3}$″	120-529-170
190mm, $7^{1/2}$″	120-529-190
230mm, 9″	120-529-230



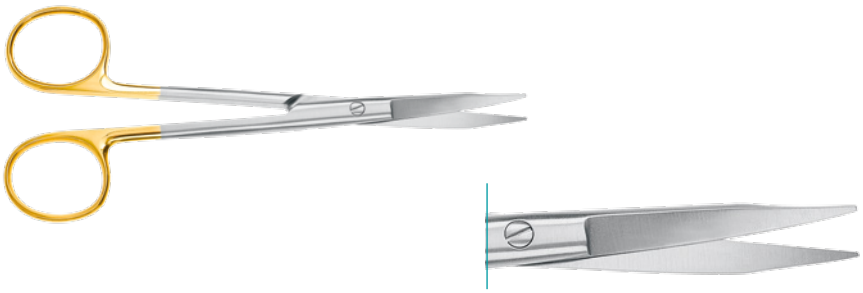
KAYE TC
Blepharoplasty Scissors, serrated,
115mm, $4^{1/2}$″

straight	120-571-115



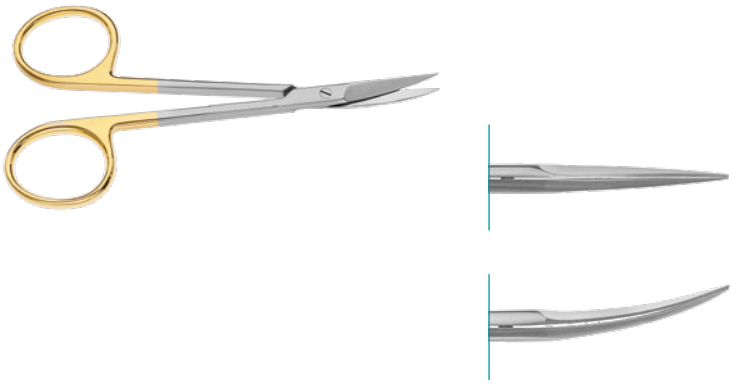
KAYE-FREEMAN TC
Facelift Scissors, curved

180mm, 4″	121-329-180



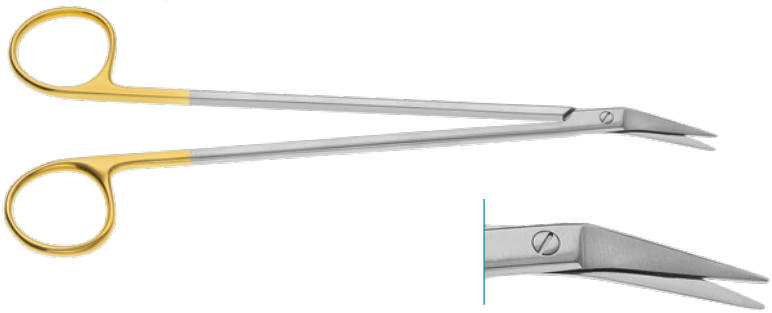
GOLDMAN FOX TC
one serrated blade, 130mm, 5 1/8"

straight	120-966-130
curved	120-967-130



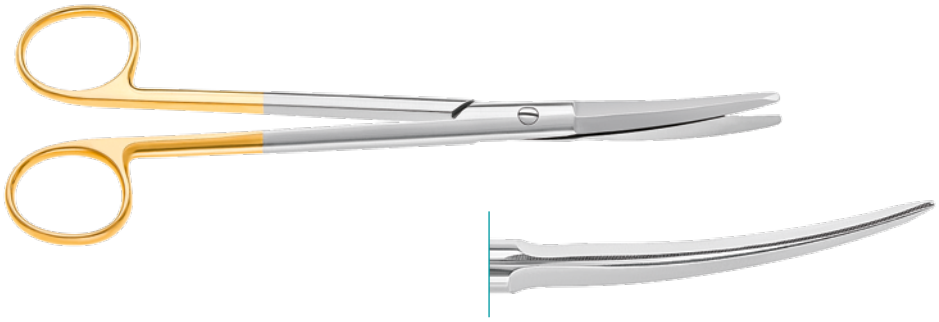
IRIS TC
115mm, 4 1/2"

straight	120-554-115
curved	120-555-115



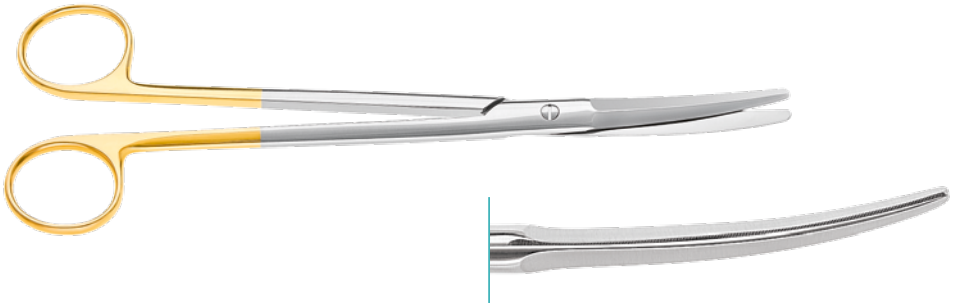
POTTS SMITH TC
Vascular Scissors, 190mm, 7 1/2"

25°	120-581-190
45°	120-582-190
60°	120-583-190
90°	120-584-190



REES
Facelift Scissors, bevelled blades, curved

170mm, 6 2/3″	120-577-170
190mm, 7 1/2″	120-577-205



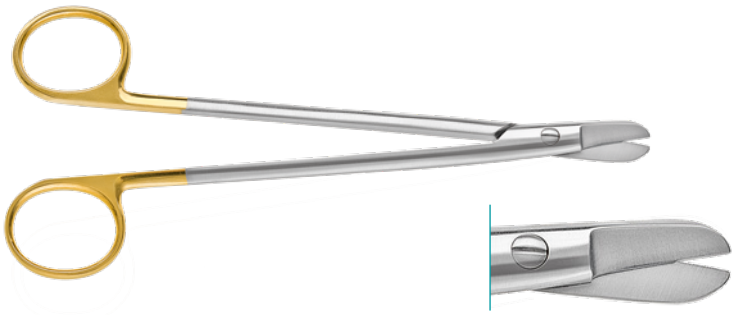
ASTON
Facelift Scissors, curved

170mm, 6 2/3″	120-501-170
200mm, 8″	120-501-200



PECK-JOSEPH
Dissecting Scissors, double serrated, curved

140mm, 5 1/2″	120-561-140



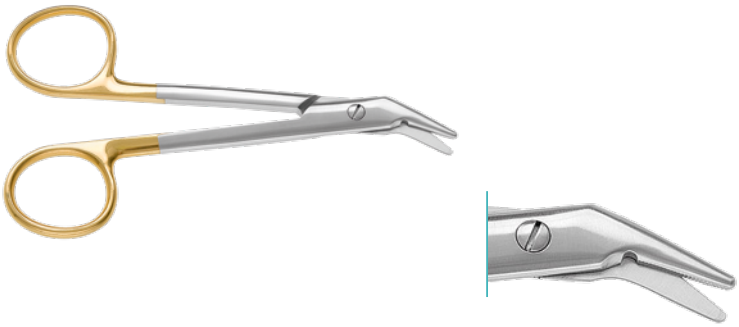
SMITH TC

Wire cutting Scissors, straight

160mm, 6 1/4"	120-570-160

curved

160mm, 6 1/4"	120-571-160



TC Universal Wire Scissors for cutting suture and wire up to 26 gauge and smaller

120mm, 4 3/4"	120-565-120



TC Parametrium Scissors, 230mm, 9"

slightly curved	120-537-002
medium curved	120-537-003
angled	120-537-004

265mm, 10 1/2"

slightly curved	120-536-002
medium curved	120-536-003
angled	120-536-004

305mm, 12"

slightly curved	120-538-002
medium curved	120-538-003
angled	120-538-004



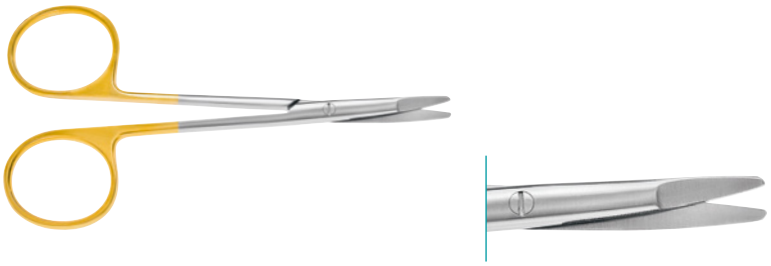
TESSIER
TC Facelift Scissors, straight

170mm, $6^{2/3}$"	120-574-170



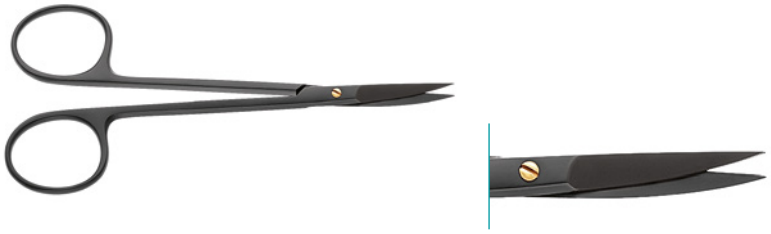
AUFRICHT
Facelift Scissors, curved

145mm, $5^{3/4}$"	120-575-145



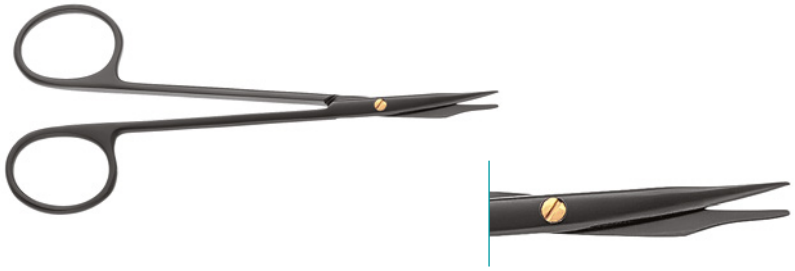
GREENBERG-PAR
serrated, curved

115mm, $4^{1/2}$"	120-593-115



IRIS CERACUT®
115mm, 4 1/2″

straight	123-070-115
curved	123-071-115



STEVENS CERACUT®
Tenotomy Scissors,
curved, blunt

100mm, 4″	123-197-100
120mm, 4 3/4″	123-197-120
150mm, 6″	123-197-150
180mm, 7″	123-092-185
sharp	
110mm, 4 1/3″	123-197-110
straight, blunt	
110mm, 4 1/3″	123-196-110



STEVENS CERACUT®
Dissecting Scissors, straight, square rings,
blunt

115mm, 4 1/2″	123-184-115



BABY METZENBAUM CERACUT®
curved

110mm, 4 1/3″	123-317-110
145mm, 5 3/4″	123-317-145



MAYO CERACUT®

straight

145mm, 5 3/4"	123-030-145
170mm, 6 2/3"	123-030-170

curved

145mm, 5 3/4"	123-031-145
170mm, 6 2/3"	123-031-170



MAYO STILLE CERACUT®

170mm, 6 2/3"

straight	123-036-170
curved	123-037-170



METZENBAUM NELSON CERACUT®

curved

145mm, 5 3/4"	123-111-145
180mm, 7"	123-111-180
200mm, 8"	123-111-200



MATARASSO TC CERACUT®
Facelift Scissors, curved

170mm, 6 2/3″	123-305-170
200mm, 8″	123-305-200



GORNEY CERACUT®
Facelift Scissors, serrated, flat tip
190mm, 7 1/2″

straight	123-584-190
curved	123-585-190



RZ KAYE CERACUT®
Facelift Scissors, curved

190mm, 7 1/2″	123-311-190



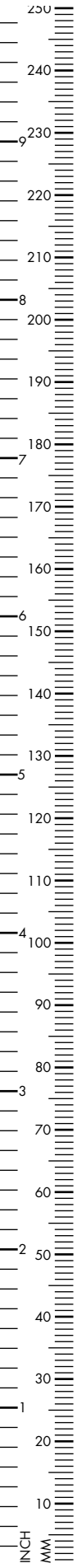
STEVENS CERACUT®
Tenotomy Scissors, sharp, curved

150mm, 6"	123-089-150

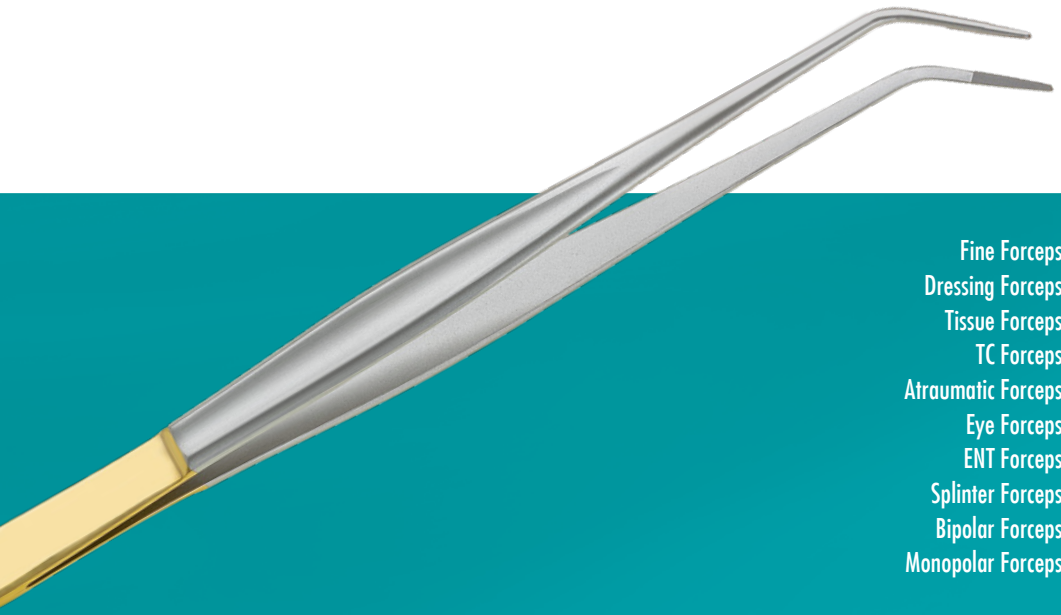


STRABISMUS CERACUT®
TC Scissors, blunt, curved

115mm, 4 1/2"	123-595-115

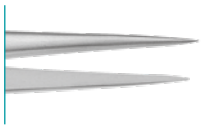

250
240
9
230
220
210
8
200
190
180
7
170
160
6
150
140
130
5
120
110
4
100
90
80
3
70
60
2
50
40
30
1
20
10
INCH
MM

DRESSING & TISSUE FORCEPS



Fine Forceps
Dressing Forceps
Tissue Forceps
TC Forceps
Atraumatic Forceps
Eye Forceps
ENT Forceps
Splinter Forceps
Bipolar Forceps
Monopolar Forceps





Delicate Forceps, smooth, straight

100mm, 4"	130-437-100





Delicate Forceps, smooth, angled

100mm, 4"	130-438-100





Micro Forceps, serrated, 7mm wide handle, straight, tip 0.3mm

130mm, 5 1/8"	251-612-130







BISHOP HARMON
Iris Forceps, 1x 2 teeth, straight,
85mm, 3 1/3"

0.3mm	400-118-003
0.4mm	400-118-004
0.5mm	400-118-005
0.8mm	400-118-008
serrated	
0.5mm	400-018-005
0.8mm, cross-serrated	400-019-008





CASTROVIEJO
Suture Forceps, 1x2 teeth, tying platform,
US handle, 110mm, 4 1/3"

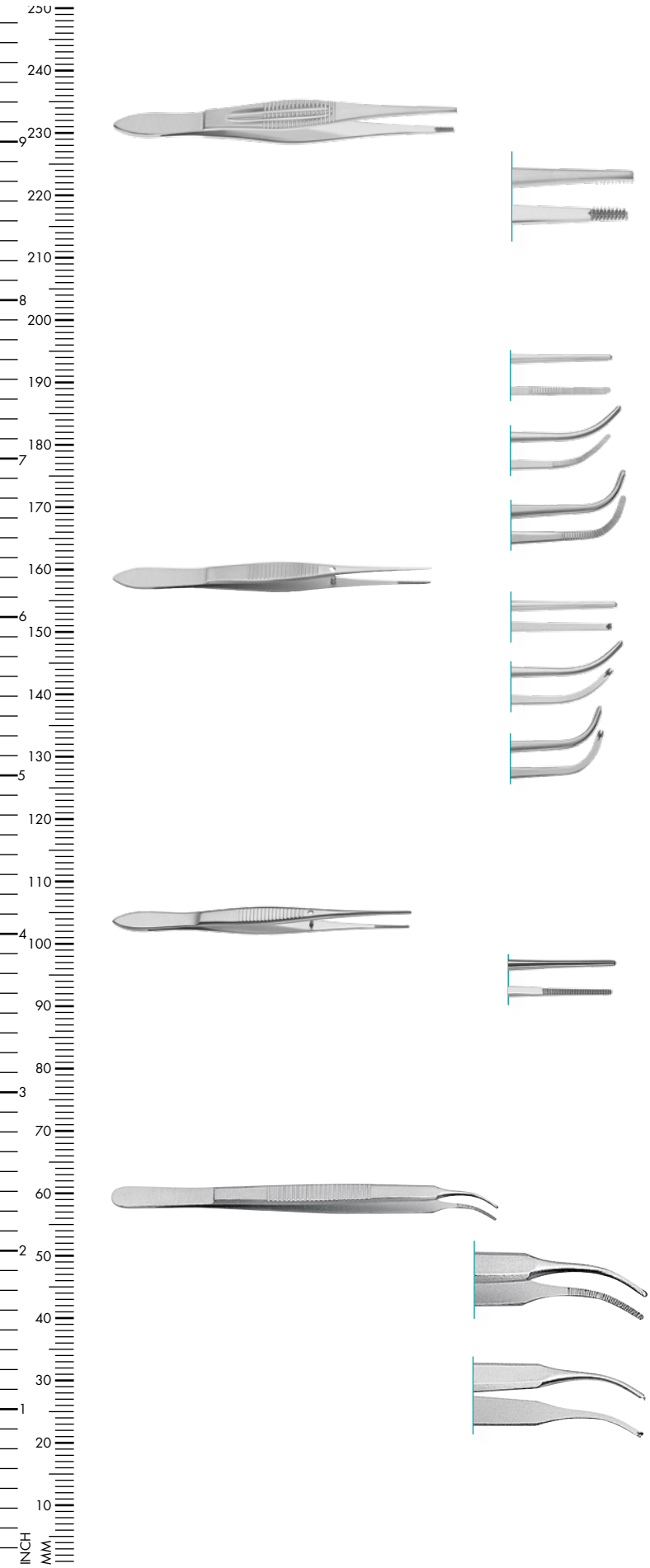
0.12mm tip	400-137-021
0.3mm tip	400-137-031
0.5mm tip	400-137-055
0.9mm tip	400-137-090





CASTROVIEJO
Suture Forceps, Diamond dusted, 1x2 teeth,
tying platform, 0.3mm tip

100mm, 4"	400-137-003



CASTROVIEJO BROWN
Tissue Forceps
9x9 teeth, without platform, US-handle

110mm, 4 1/3"	400-139-050

GRAEFE
Dressing Forceps, 100mm, 4"

straight	130-500-100
slightly curved	130-501-100
strongly curved	130-502-100

Tissue Forceps, 1x2 teeth

straight	130-503-100
slightly curved	130-504-100
strongly curved	130-505-100

GRAEFE
Dressing Forceps, serrated

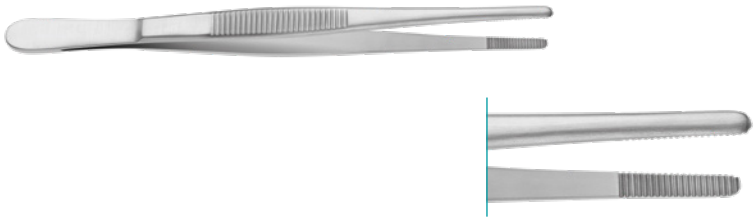
100mm, 4"	400-025-001

STEVENS
Dressing Forceps, 105mm, 4 1/8"

slightly curved	130-511-110

Tussue Forceps, 1x2 teeth, 110mm, 4 1/3"

slightly curved	130-513-110



Dressing Forceps, serrated

105mm, 4 1/8"	130-010-105
115mm, 4 1/2"	130-010-115
130mm, 5 1/8"	130-010-130
145mm, 5 3/4"	130-010-145
150mm, 6"	130-010-150
160mm, 6 1/4"	130-010-160
180mm, 7"	130-010-180
200mm, 8"	130-010-200
230mm, 9"	130-010-230
250mm, 9 7/8"	130-010-250
300mm, 11 7/8"	130-010-300



Dressing Forceps, cross-serrated

145mm, 5 3/4"	130-011-145
160mm, 6 1/4"	130-011-160



STANDARD

Dressing Forceps, slender, curved

105mm, 4 1/8"	130-013-105
115mm, 4 1/2"	130-013-115
130mm, 5 1/8"	130-013-130
145m, 5 3/4"	130-013-145



STANDARD

Dressing Forceps, serrated

120mm, 4 3/4"	130-046-120
130mm, 5 1/8"	130-046-130
145mm, 5 3/4"	130-046-145
180mm, 7"	130-046-180
200mm, 8"	130-046-200



STANDARD

Dressing Forceps, delicate tip, serrated

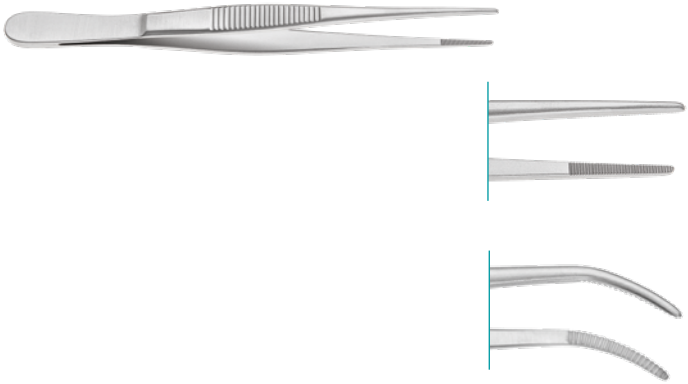
105mm, 4 1/8"	130-012-105
115mm, 4 1/2"	130-012-115
130mm, 5 1/8"	130-012-130
145mm, 5 3/4"	130-012-145
160mm, 6 1/4"	130-012-160
180mm, 7"	130-012-180
200mm, 8"	130-012-200
250mm, 9 7/8"	130-012-250
300mm, 11 7/8"	130-012-300

2x3 teeth

115mm, 4 1/2"	130-112-115
130mm, 5 1/8"	130-112-130
180mm, 7"	130-112-180
200mm, 8"	130-112-200
250mm, 9 7/8"	130-112-250

3x4 teeth

130mm, 5 1/8"	130-114-130
200mm, 8"	130-114-200



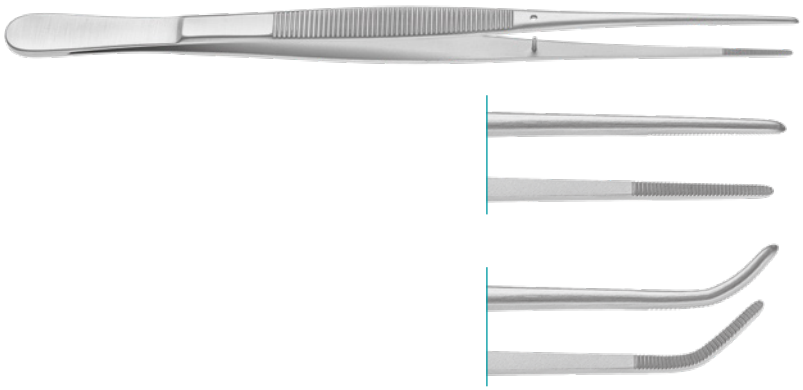
STANDARD

Dressing Forceps, delicate tip, serrated, straight

105mm, 4 1/8"	130-014-105
115mm, 4 1/2"	130-014-115
130mm, 5 1/8"	130-014-130
145mm, 5 3/4"	130-014-145
160mm, 6 1/4"	130-014-160
180mm, 7"	130-014-180
200mm, 8"	130-014-200
250mm, 9 7/8"	130-014-250
300mm, 11 7/8"	130-014-300

serrated, curved

105mm, 4 1/8"	130-015-105
130mm, 5 1/8"	130-015-130
145mm, 5 3/4"	130-015-145



POTTS SMITH
Dressing Forceps, straight

180mm, 7"	130-038-180
210mm, 8 1/4"	130-038-210
250mm, 9 7/8"	130-038-250

curved

180mm, 7"	130-037-180
210mm, 8 1/4"	130-037-210
250mm, 9 7/8"	130-037-250



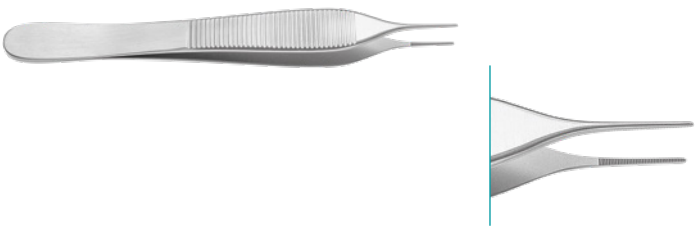
BONNEY
Dressing Forceps, serrated

180mm, 7"	130-043-180



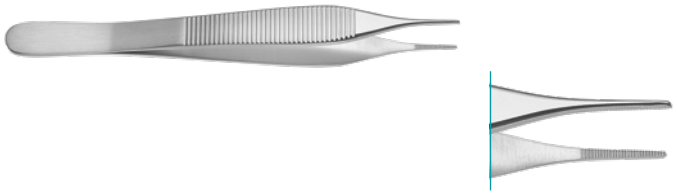
EWALD ADSON
Dressing Forceps, 1.5mm tip, serrated

120mm, 4 3/4"	130-021-120



YANG ADSON
Dressing Forceps, serrated, 0.5mm tip

120mm, 4 3/4"	130-540-120



MICRO ADSON
Dressing Forceps, serrated

120mm, 4 3/4"	130-548-120
150mm, 6"	130-548-150



ADSON
Dressing Forceps, smooth

120mm, 4 3/4"	130-025-120



ADSON
Dressing Forceps, serrated

120mm, 4 3/4"	130-026-120
150mm, 6"	130-026-150
180mm, 7"	130-026-180



ADSON
Dressing Forceps, cross-serrated

120mm, 4 3/4"	130-029-120



BROPHY
Dressing Forceps, straight, serrated

200mm, 8"	130-042-200



GERALD
Dressing Forceps, narrow,
1.2mm step-down-tip, serrated

Straight, 180mm, 7"	130-034-180
Straight, 230mm, 9"	130-034-230
Curved, 180mm, 7"	130-035-180
Curved, 230mm, 9"	130-035-230
Bayonet, 190mm, 7 1/2"	130-041-180



GERALD
Diamond Dusted Dressing Forceps, narrow,
1.0mm step-down-tip

180mm, 7"	130-022-180
200mm, 8"	130-022-200



SEMKEN
Dressing Forceps, cross-serrated

125mm, 5"	130-144-125
150mm, 6"	130-144-150



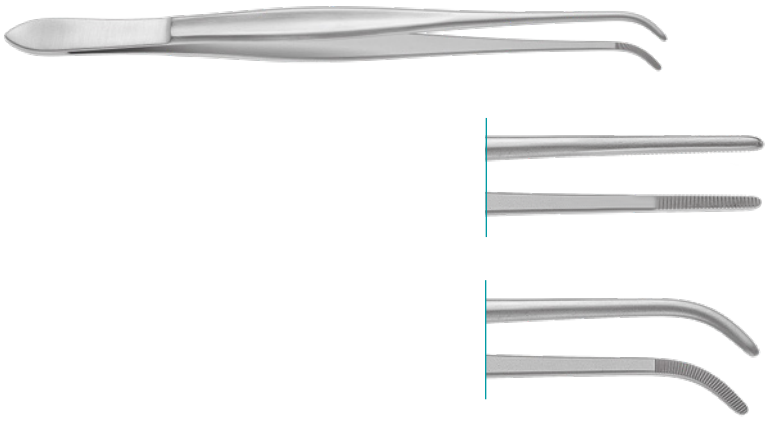
TAYLOR
Dressing Forceps, bayonet, serrated with dissector end

185mm, $7^{1/4}$"	130-035-185



TAYLOR
Dressing Forceps, serrated with dissector end

175mm, $6^{7/8}$"	130-030-175



CUSHING
Dressing Forceps, serrated, fluted handle, straight

175mm, $6^{7/8}$"	130-036-175

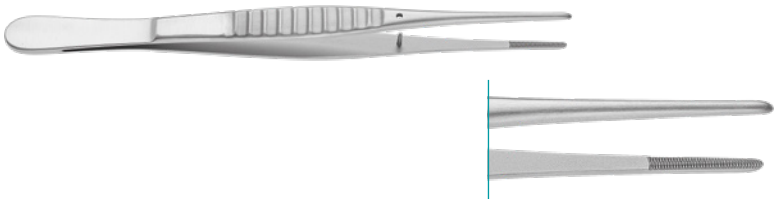
curved

175mm, $6^{7/8}$"	130-037-175



MCINDOE
Dressing Forceps, serrated, US handle

150mm, 6"	130-028-150



WAUGH
Dressing Forceps, cross-serrated

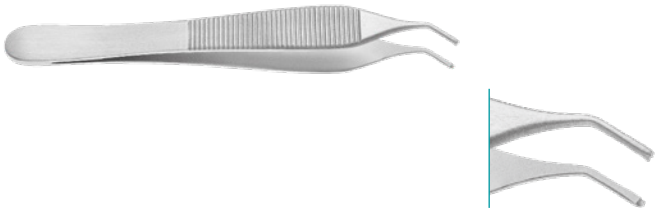
150mm, 6"	130-162-150
200mm, 8"	130-162-200



ADSON

Tissue Forceps, 1x2 teeth

120mm, 4 3/4"	130-140-120
150mm, 6"	130-140-150
180mm, 7"	130-140-180



ADSON

Tissue Forceps, 1x2 teeth, angled

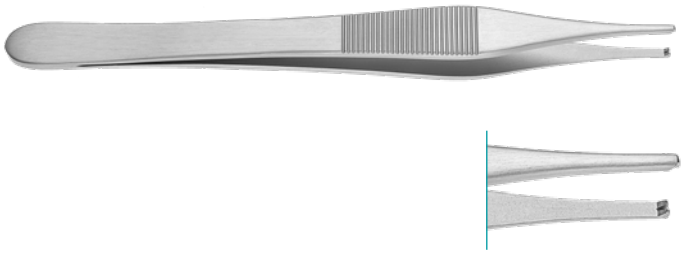
120mm, 4 3/4"	130-143-120



ADSON

Tissue Forceps, 1x2 teeth, cross-serrated

120mm, 4 3/4"	130-557-120



JEFFERSON
Tissue Forceps, 1x2 teeth, fine pattern

180mm, 7"	130-115-180



ADSON
Tissue Forceps, 1x2 teeth, with tying platform
120mm, $4^{3/4}$"

0.9mm tip	130-141-009
1.0mm tip	130-141-010
1.2mm tip	130-141-012



EWALD ADSON
Tissue Forceps, 1x2 teeth

120mm, $4^{3/4}$"	130-142-120



YANG ADSON
Tissue Forceps, straight, 90° 1x2 teeth, tip 0.3mm

120mm, 4 3/4"	130-554-120



ADSON
Tissue Forceps, 2x3 teeth

120mm, 4 3/4"	130-555-120
150mm, 6"	130-555-150



ADSON BROWN
Tissue Forceps, 7x7 teeth

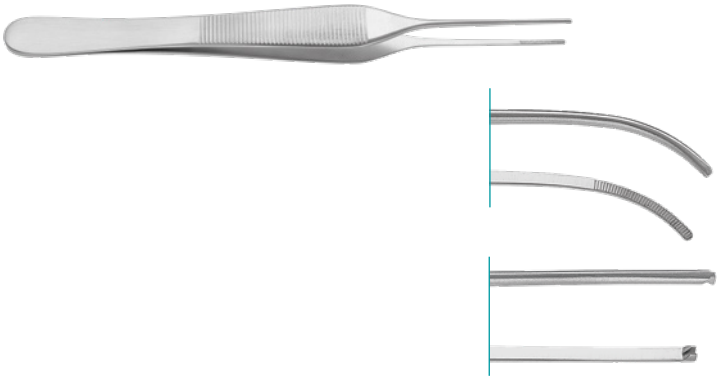
120mm, 4 3/4"	130-552-120
150mm, 6"	130-552-150



BROWN

Tissue Forceps, 7x7 teeth

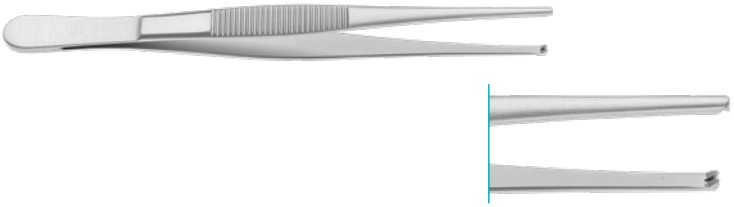
160mm, $6^{1/4}$"	130-554-160
200mm, 8"	130-554-200
250mm, $9^{7/8}$"	130-554-250



BROLI ADSON

Tissue Forceps, 1.2mm tip, 150mm, 6"

Straight, serrated tip	130-024-151
Curved, serrated tip	130-024-152
Straight, diamond dusted tip	130-024-153
Straight, 1x2 teeth	130-024-154



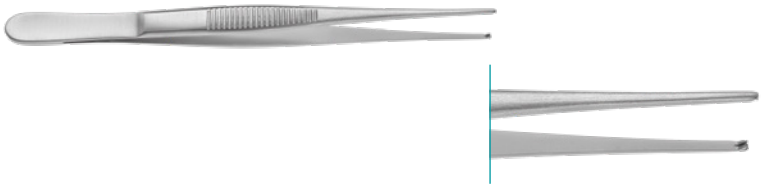
Tissue Forceps, 1x2 teeth

105mm, $4^{1/8}$"	130-110-105
115mm, $4^{1/2}$"	130-110-115
130mm, $5^{1/8}$"	130-110-130
145mm, $5^{3/4}$"	130-110-145
150mm, 6"	130-110-150
160mm, $6^{1/4}$"	130-110-160
180mm, 7"	130-110-180
200mm, 8"	130-110-200
230mm, 9"	130-110-230
250mm, $9^{7/8}$"	130-110-250
300mm, $11^{7/8}$"	130-110-300

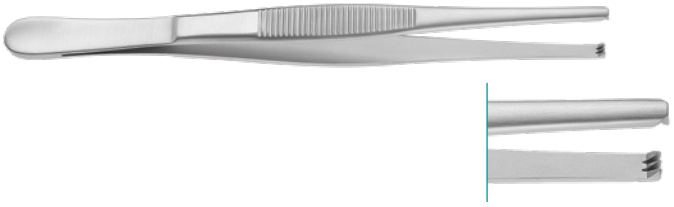


Tissue Forceps, 1x2 teeth, US model

120mm, $4^{3/4}$"	130-126-120
145mm, $5^{3/4}$"	130-126-145
150mm, 6"	130-126-155



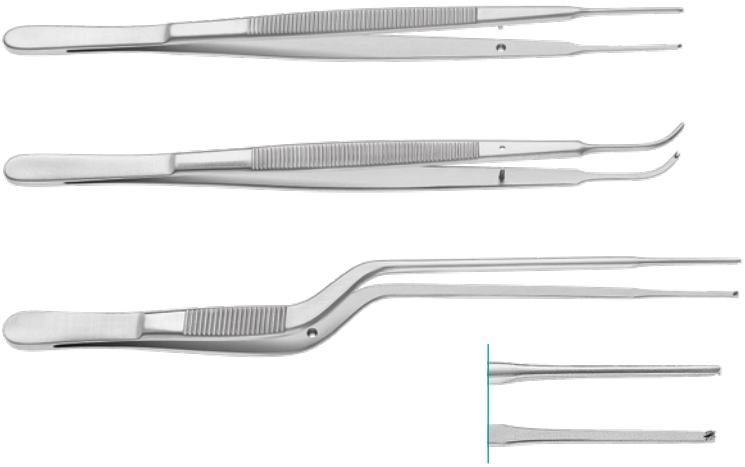
Tissue Forceps, 1x2 teeth, delicate	
115mm, 4 1/2"	130-120-115
130mm, 5 1/8"	130-120-130
145mm, 5 3/4"	130-120-145
160mm, 6 1/4"	130-120-160
180mm, 7"	130-120-180
200mm, 8"	130-120-200
250mm, 9 7/8"	130-120-250
300mm, 11 7/8"	130-120-300



Tissue Forceps	
2x3teeth, 145mm, 5 3/4"	130-112-145
2x3teeth, 160mm, 6 1/4"	130-112-160
3x4teeth, 145mm, 5 3/4"	130-114-145
3x4teeth, 160mm, 6 1/4"	130-114-160
4x5teeth, 145mm, 5 3/4"	130-116-145
4x5teeth, 160mm, 6 1/4"	130-116-160



Tissue Forceps, 1x2 teeth, delicate	
145mm, 5 3/4"	130-118-145
155mm, 6 1/8"	130-118-155
160mm, 6 1/4"	130-118-160
180mm, 7"	130-118-180



GERALD
Tissue Forceps, narrow, 1.3mm step-down tip
1x2 teeth

Straight, 180mm, 7"	130-150-180
Straight, 230mm, 9"	130-150-230
Curved, 180mm, 7"	130-151-180
Bayonet, 195mm, 7 3/4"	130-153-195



SEMKEN
Tissue Forceps

1x2teeth, 125mm, 5"	130-145-125
1x2teeth, 150mm, 6"	130-145-150
2x3teeth, 125mm, 5"	130-147-125



TAYLOR
Tissue Forceps, 1x2 teeth, dissector end

175mm, 6 7/8"	130-147-175



TAYLOR
Tissue Forceps, 1x2 teeth, bayonet,
dissector end

175mm, 6 7/8"	130-157-175



CUSHING

Tissue Forceps, 175mm, $6^{7/8}$"

straight	130-152-175
curved	130-153-175



GILLIES

Tissue Forceps, 1x2 teeth, cross-serrated

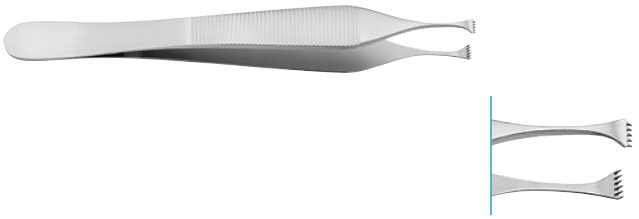
150mm, 6"	130-120-150



WAUGH

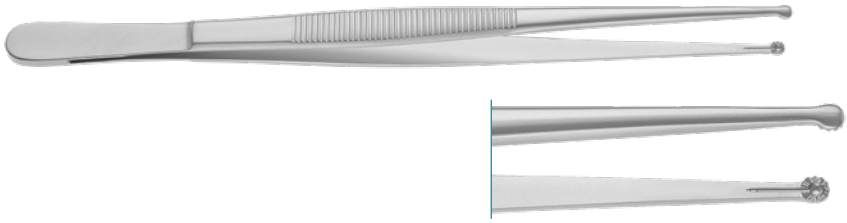
Tissue Forceps, 1x2 teeth, cross-serrated

150mm, 6"	130-160-150
200mm, 8"	130-160-200



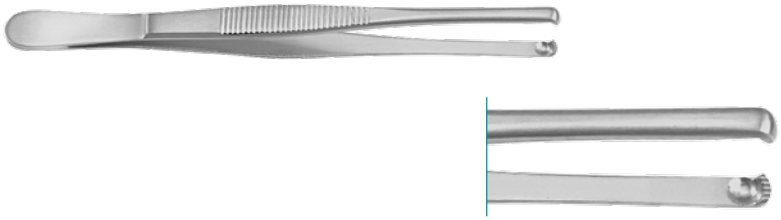
BEASLEY BABCOCK
Tissue Forceps, 5x6 teeth, straight

125mm, 5"	130-561-125



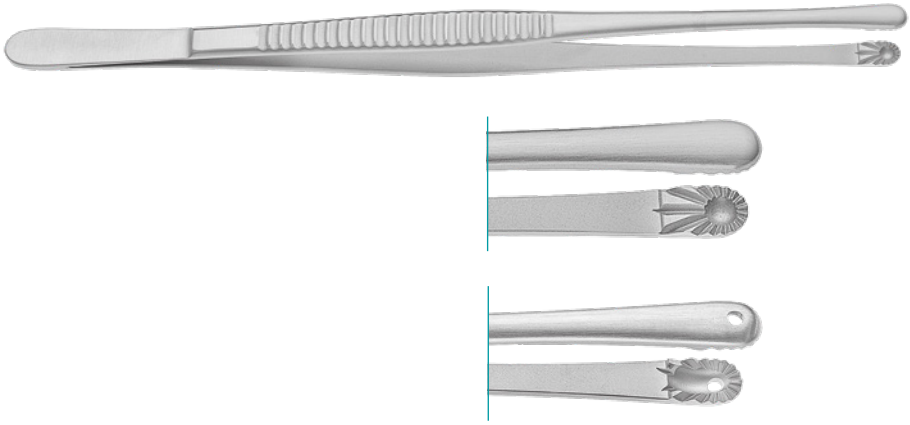
SELMAN
Tissue Forceps, 3.8mm round, serrated cup

150mm, 6"	130-644-150
200mm, 8"	130-644-200
250mm, 9 7/8"	130-644-250



DURANTE
Tissue Forceps

145mm, 5 3/4"	130-511-145
160mm, 6 1/4"	130-511-160
200mm, 8"	130-511-200

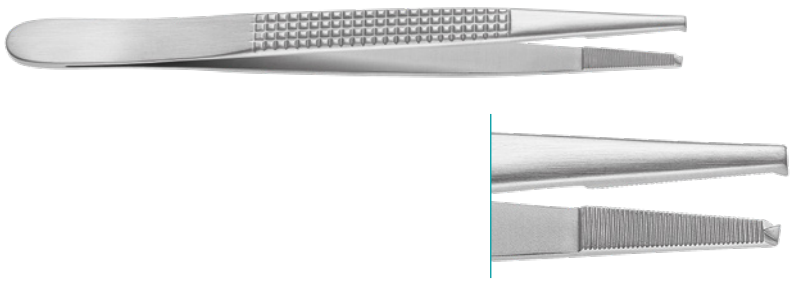


RUSSIAN
Tissue Forceps

150mm, 6"	130-510-150
200mm, 8"	130-510-200
250mm, 9 7/8"	130-510-250
300mm, 11 7/8"	130-510-300
350mm, 14"	130-510-350

MAYO RUSSIAN
Tissue Forceps

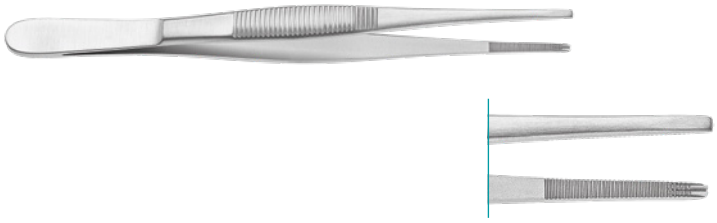
230mm, 9"	130-456-230



BONNEY

Tissue Forceps, 1x2 teeth

180mm, 7"	130-143-180



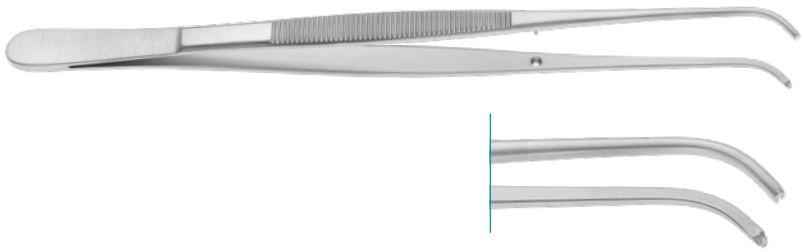
ADLERKREUTZ

Tissue Forceps, serrated, 2x3 teeth

150mm, 6"	130-137-150
200mm, 8"	130-137-200

4x5 teeth

150mm, 6"	130-138-150
200mm, 8"	130-138-200



POTTS SMITH

Tissue Forceps, 1x2 teeth, straight

180mm, 7"	130-154-180
210mm, 8 1/4"	130-154-210
250mm, 9 7/8"	130-154-250

curved

180mm, 7"	130-155-180
210mm, 8 1/4"	130-155-210
250mm, 9 7/8"	130-155-250



CUSHING BROWN

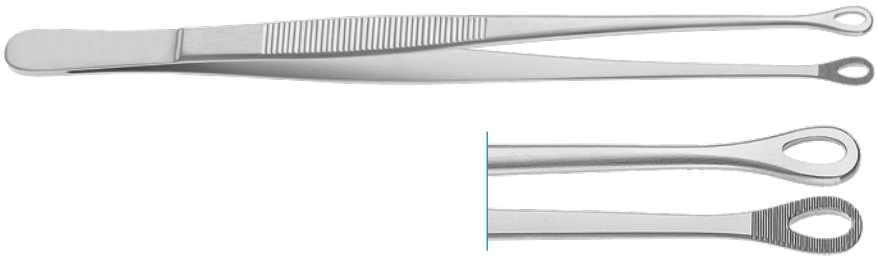
Tissue Forceps, 9x9 teeth, dissector end

175mm, 6 7/8"	130-554-175



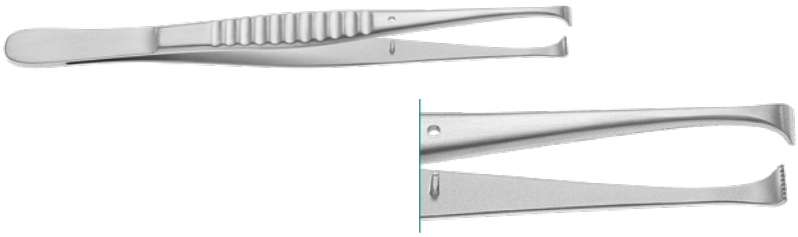
CUSHING BROWN
Tissue Forceps, 9x9 teeth, bayonet, dissector end

180mm, 7"	130-555-180



SINGLEY TUTTLE
Lung Grasping Forceps, serrated

180mm, 7"	130-560-180
230mm, 9"	130-560-230
350mm, 14"	130-560-350



NELSON
Tissue Forceps, 6x7 teeth

150mm, 6"	130-562-150
200mm, 8"	130-562-200
230mm, 9"	130-562-230



MOD. USA
Tissue Forceps, 1x2 teeth

130mm, 5 1/8"	130-126-130
180mm, 7"	130-126-180
200mm, 8"	130-126-200
250mm, 9 7/8"	130-126-250

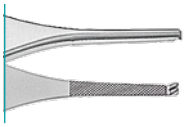


TC MICRO ADSON
Dressing Forceps, serrated

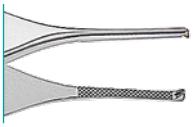
120mm, 4 3/4"	130-538-120



regular tip



delicate tip



TC ADSON
Needle and Tissue Pulling Forceps, with tying platform,1x2 teeth, cross-serrated, regular tip

120mm 4 3/4"	130-534-120
150mm, 6"	130-534-150

delicate tip

120mm 4 3/4"	130-537-120
150mm, 6"	130-537-150





TC ADSON BROWN
Tissue Forceps, 7x7 teeth, tying platform

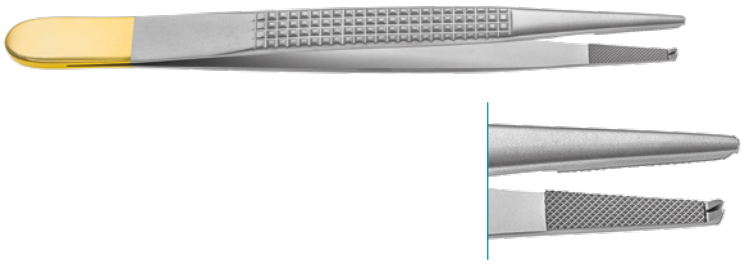
120mm, 4 3/4"	130-529-120
150mm, 6"	130-529-150





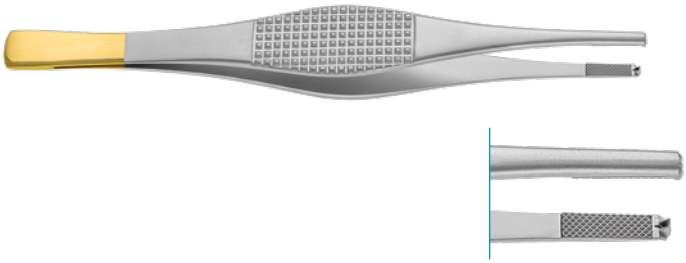
TC ADSON
Dressing Forceps, serrated

120mm, 4 3/4"	130-532-120
150mm, 6"	130-532-150



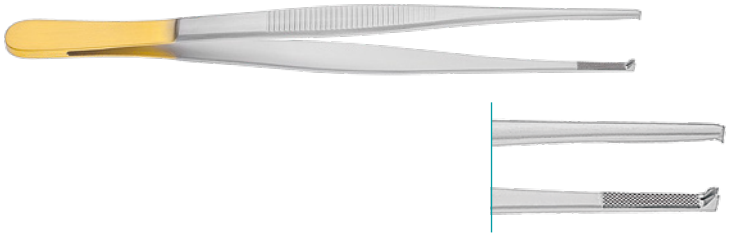
TC BONNEY
Needle and Tissue Pulling Forceps,
with tying platform, 1x2 teeth

170mm, $6^{2/3}$"	130-514-170



TC FERRIS SMITH
Needle and Tissue Pulling Forceps,
with tying platform, 1x2 teeth

170mm, $6^{2/3}$"	130-510-170



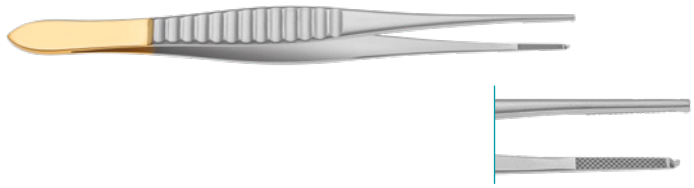
TC OEHLER
Needle and Tissue Pulling Forceps,
with tying platform, 1x2 teeth

160mm, $6^{1/4}$"	130-522-160
200mm, 8"	130-522-200
250mm, $9^{7/8}$"	130-522-250



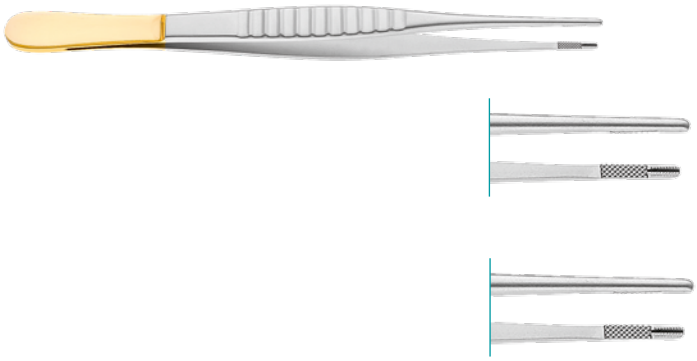
TC GERALD
Needle and Tissue Pulling Forceps,
with tying platform, 1x2 teeth

170mm, $6^{2/3}$"	130-518-170



TC GILLIES
Dissecting Forceps, with tying platform,
1x2 teeth

150mm, 6"	130-520-150

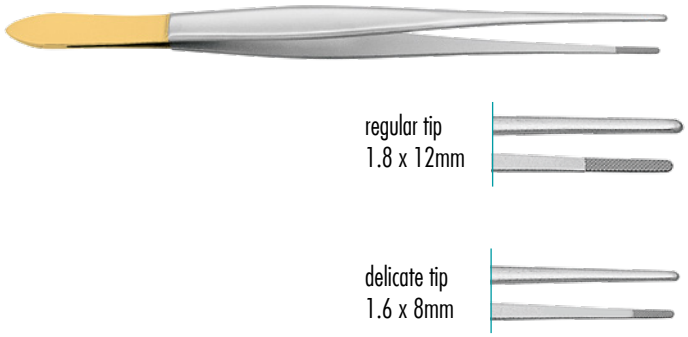


TC DEBAKEY
Needle and Tissue Pulling Forceps, atraumatic,
2.0mm tip

160mm, 6 1/4"	130-570-160
200mm, 8"	130-570-200
240mm, 9 1/2"	130-570-240

1.5mm tip

160mm, 6 1/4"	130-568-150
200mm, 8"	130-568-190
240mm, 9 1/2"	130-568-240



TC CUSHING
Needle and Tissue Pulling Forceps,
with scraper/dissector end, regular tip

175mm, 6 7/8"	130-536-175

delicate tip

175mm 6 7/8"	130-538-175



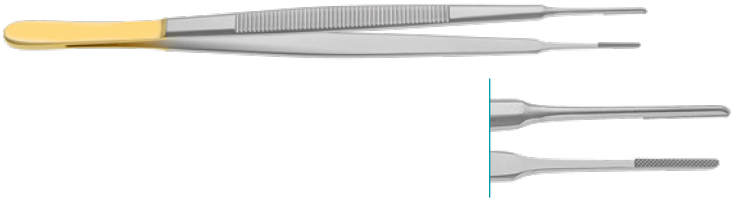
TC SEMKEN
Dressing Forceps

150mm, 6"	130-512-150



TC Dressing Forceps

145mm, $5^{3/4}$"	130-518-145
160mm, $6^{1/4}$"	130-518-160



TC GERALD

Dressing Forceps, narrow step-down-tip

170mm, $6^{2/3}$"	130-516-170



TC CUSHING

Needle and Tissue Pulling Forceps, angled

180mm, 7"	130-539-180



TC MCINDOE

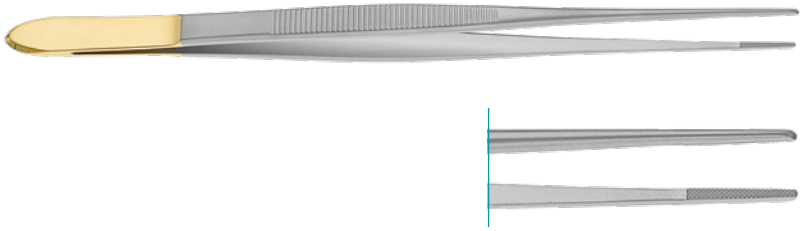
Dissecting Forceps

150mm, 6"	130-522-150



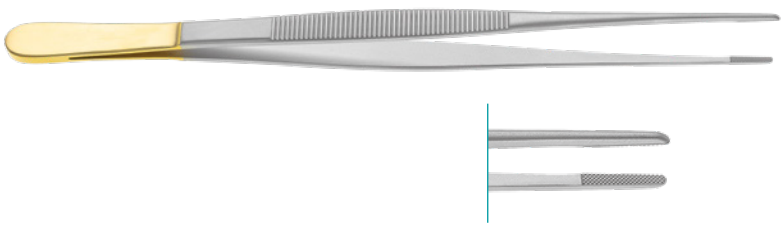
TC CUSHING TAYLOR
Dressing Forceps, bayonet, with dissector end

180mm, 7"	130-541-180



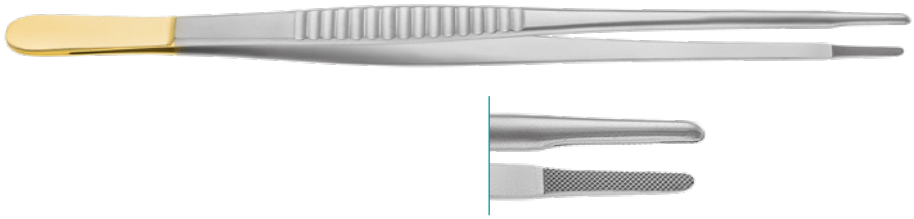
TC POTTS SMITH
Dressing Forceps, cross-serrated, with dissector end

150mm, 6"	130-542-150
180mm, 7"	130-542-180
210mm, $8^{1/4}$"	130-542-210
230mm, 9"	130-542-230
250mm, $9^{7/8}$"	130-542-250



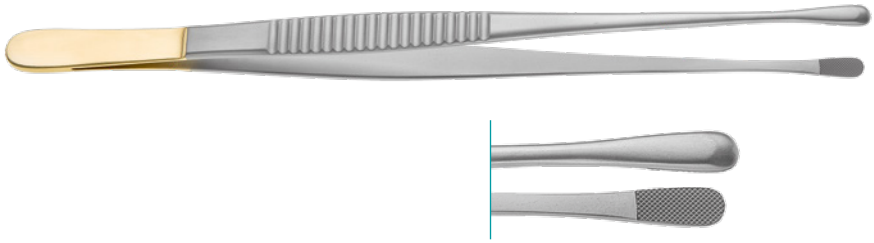
TC REUL
Dressing Forceps, 1.6mm tip

195mm, $7^{3/4}$"	130-544-195



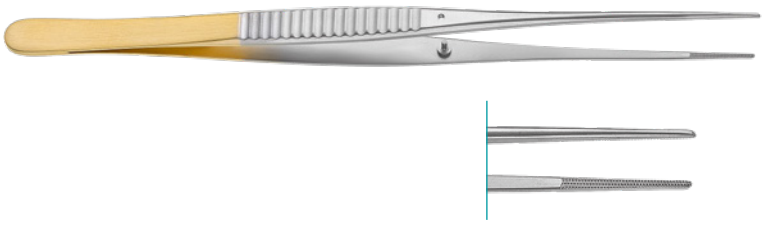
TC EVANS
Dressing Forceps, cross-serrated

250mm, 9 7/8"	130-575-250



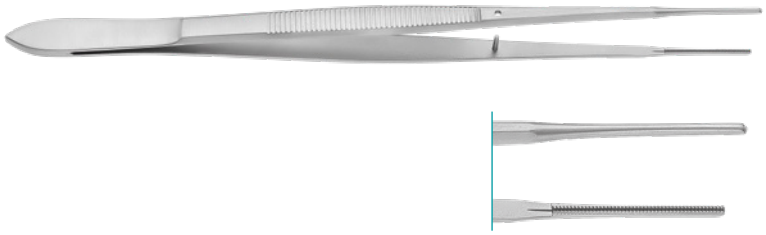
TC WANGENSTEEN
Dressing Forceps

150mm, 6"	130-566-150
230mm, 9"	130-566-230
250mm, 9 7/8"	130-566-250



COOLEY
Straight, delicate, 1.2mm tip

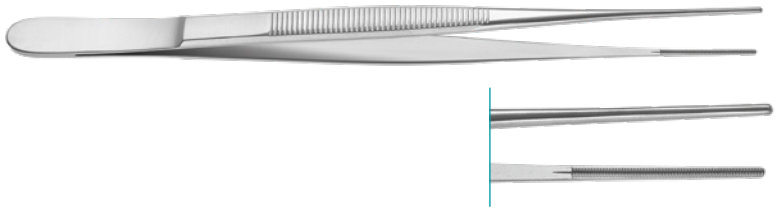
200mm, 8"	130-049-200
250mm, 9 7/8"	130-049-250



GERALD DEBAKEY

Vascular Tissue Forceps, straight, extra delicate
1.0mm tip, DeBakey serrations

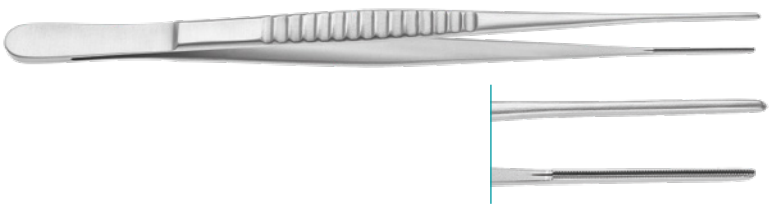
175mm, $6^{7/8}$"	130-520-175
200mm, 8"	130-520-200
240mm, $9^{1/2}$"	130-520-240



DIETHRICH DEBAKEY

Vascular Tissue Forceps, straight, extra delicate
1.5mm tip, 20mm DeBakey serrations

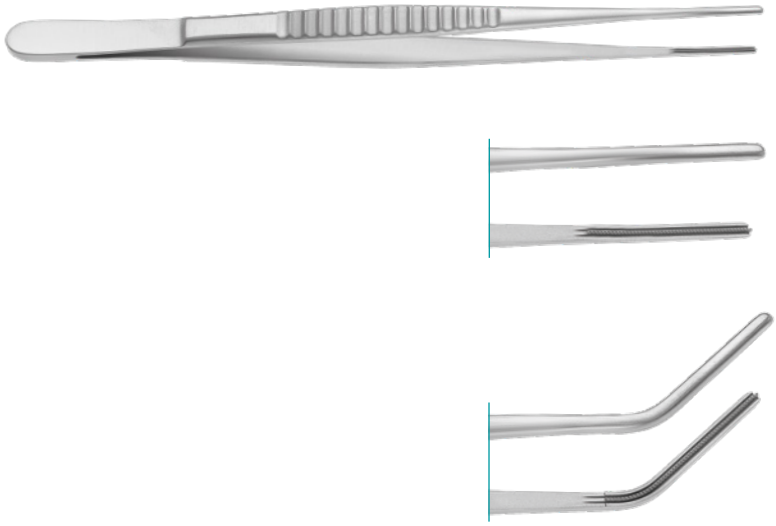
160mm, $6^{1/4}$"	130-468-150
200mm, 8"	130-468-200
240mm, $9^{1/2}$"	130-468-240



DIETHRICH DEBAKEY

Vascular Tissue Forceps, straight, extra delicate
1.5mm tip, 24mm DeBakey serrations

160mm, $6^{1/4}$"	290-550-160
200mm, 8"	290-550-200
240mm, $9^{1/2}$"	290-550-240
300mm, $11^{7/8}$"	290-550-300

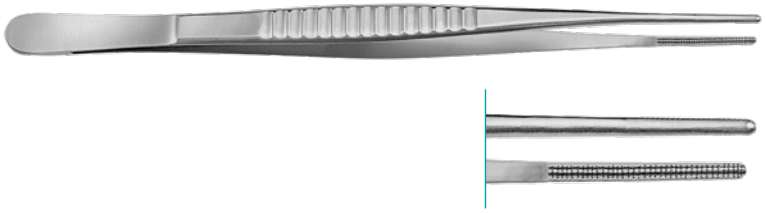


DEBAKEY
Vascular Atraumatic Forceps, straight, 2.0mm tip, 24mm DeBakey serrations

160mm, 6 1/4"	290-552-160
200mm, 8"	290-552-200
240mm, 9 1/2"	290-552-240
300mm, 11 7/8"	290-552-300

angled

160mm, 6 1/4"	290-553-160
200mm, 8"	290-553-200
240mm, 9 1/2"	290-553-240
300mm, 11 7/8"	290-553-300



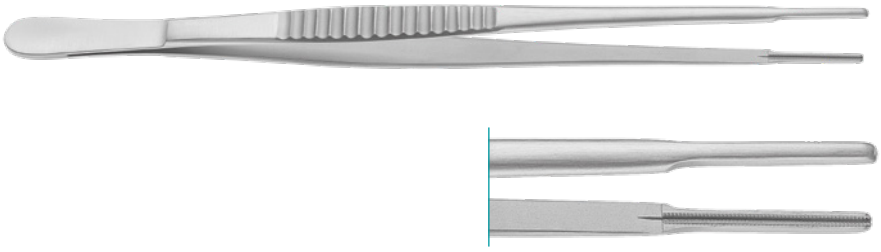
DEBAKEY
Vascular Atraumatic Forceps, straight, 2.7mm tip

160mm, 6 1/4"	290-548-160
200mm, 8"	290-548-200
240mm, 9 1/2"	290-548-240



DEBAKEY
Vascular Atraumatic Forceps, straight, 2.4mm tip, 24mm DeBakey serrations

160mm, 6 1/4"	290-557-160
200mm, 8"	290-557-200
240mm, 9 1/2"	290-557-240
300mm, 11 7/8"	290-557-300



DEBAKEY
Vascular Atraumatic Forceps, straight, 2.8mm step-down tip, 24mm DeBakey serrations

160mm, 6 1/4"	290-558-160
200mm, 8"	290-558-200
240mm, 9 1/2"	290-558-240
300mm, 11 7/8"	290-558-300



DEBAKEY
Vascular Atraumatic Forceps, straight,
3.5mm step-down tip,
24mm DeBakey serrations

160mm, 6 1/4"	290-555-160
200mm, 8"	290-555-200
240mm, 9 1/2"	290-555-240
300mm, 11 7/8"	290-555-300



COOLEY
Vascular Atraumatic Forceps, straight,
delicate 1.5mm tip,
24mm Cooley serrations

150mm, 6"	290-556-150
2.0mm tip	
160mm, 6 1/4"	290-556-160
200mm, 8"	290-556-200
240mm, 9 1/2"	290-556-240



ADSON DEBAKEY
Vascular Atraumatic Forceps,
straight, 2.0mm tip

120mm, 4 3/4"	130-527-120



Plain Splinter Forceps

90mm, 3 1/2"	130-622-090
115mm, 4 1/2"	130-622-115



FEILCHENFELD
Splinter Forceps

80mm, 3 1/8"	130-630-075
90mm, 3 1/2"	130-630-090
115mm, 4 1/2"	130-630-115



Jeweller's Forceps, 115mm, 4 1/2"
straight

Fig. 3	400-060-003
Fig. 4	400-060-004
Fig. 5	400-060-005

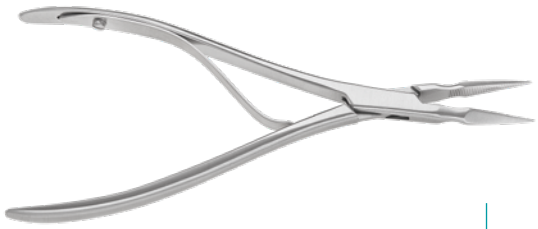
curved

Fig. 7	400-060-007



WALTER-CARMALT
Splinter Forceps, 105mm, 4 1/8"

Straight	130-632-105
Curved	130-633-105



VIRTUS (RALK)
Splinter Forceps

140mm, 5 1/2"	130-640-140





GRAEFE
Fixation Forceps, 7x8 teeth

110mm, 4 1/3"	400-025-110





GREEN
Fixation Forceps, 12mm wide jaw, fine serrations

110mm, 4 1/3"	400-029-012









RZ
Delicate Dressing forceps, straight, 100mm, 4"

straight	130-490-100
slightly curved	130-491-100
strongly curved	130-492-100



LUCAE

Dressing Aural Forceps, bayonet shape, serrated

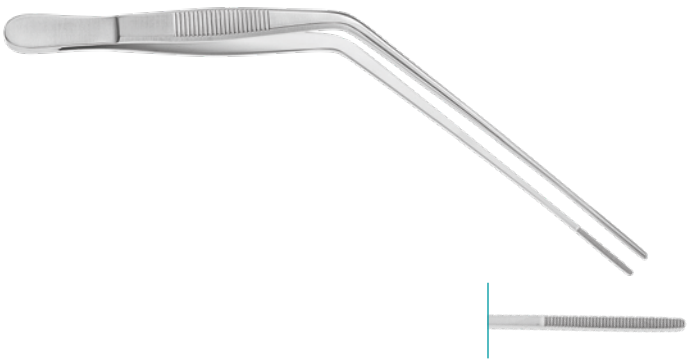
140mm, 5 1/2"	410-391-140



JANSEN

Dressing Nasal Forceps, bayonet shape,
190mm, 7 1/2"

serrated	410-395-190
1x 2 teeth	410-396-190
210mm, 8 1/4"	
serrated	410-395-210

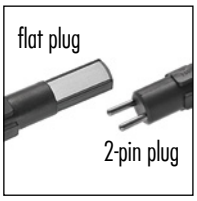


TROELTSCH (WILDE)

Dressing Nasal Forceps, knee bent

170mm, 6 2/3"	420-375-165

NON-STICK FORCEPS





Straight		150mm straight tip	150mm angled tip	180mm straight tip	180mm angled tip	200mm straight tip	220mm straight tip
0.3mm tip (point)	flat plug	700-610-150	700-611-150	700-610-180	700-611-180	700-610-200	700-610-220
	2-pin	700-612-150	700-613-150	700-612-180	700-613-180	700-612-200	700-620-220
0.6mm tip (blunt)	flat plug	700-620-150	700-621-150	700-620-180	700-621-180	700-620-200	700-620-220
	2-pin	700-622-150	700-623-150	700-622-180	700-623-180	700-622-200	700-622-220
1.0mm tip (blunt)	flat plug	700-630-150	700-631-150	700-630-180	700-631-180	700-630-200	700-630-220
	2-pin	700-632-150	700-633-150	700-632-180	700-633-180	700-632-200	700-632-220
2.0mm tip (blunt)	flat plug	700-640-150	700-641-150	700-640-180	700-641-180	700-640-200	700-640-220
	2-pin	700-642-150	700-643-150	700-642-180	700-643-180	700-642-200	700-642-220

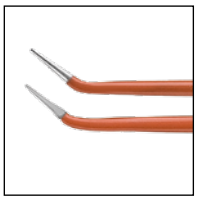


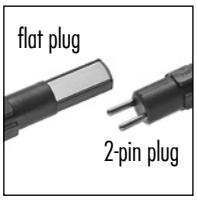
JEWELER TYPE		110mm straight tip	110mm angled tip
0.25mm tip (point)	flat plug	700-601-710	700-601-730
	2-pin	700-601-711	700-601-731
0.6mm tip (blunt)	flat plug	700-601-712	700-601-732
	2-pin	700-601-713	700-601-733
1.0mm tip (blunt)	flat plug	700-601-714	700-601-734
	2-pin	700-601-715	700-601-735


straight tip


angled tip


angled down tip


angled up tip



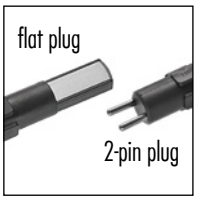


Bayonet Shape		180mm straight tip	200mm straight tip	220mm straight tip	240mm straight tip
0.3mm tip (point)	flat plug	700-650-180	700-650-200	700-650-220	700-650-240
	2-pin	700-652-180	700-652-200	700-652-220	700-652-240
0.6mm tip (blunt)	flat plug	700-660-180	700-660-200	700-660-220	700-660-240
	2-pin	700-662-180	700-662-200	700-662-220	700-662-240
1.0mm tip (blunt)	flat plug	700-670-180	700-670-200	700-670-220	700-670-240
	2-pin	700-672-180	700-672-200	700-672-220	700-672-240
2.0mm tip (blunt)	flat plug	700-680-180	700-680-200	700-680-220	700-680-240
	2-pin	700-682-180	700-682-200	700-682-220	700-682-240



Bayonet Shape, angled up/angled down		200mm angled up tip	220mm angled up tip	200mm angled down tip	220mm angled down tip
1.0mm tip (blunt)	flat plug	700-670-201	700-670-221	700-670-203	700-670-223
	2-pin	700-672-201	700-672-221	700-672-203	700-672-223

NON-STICK FORCEPS, ROUND HANDLE





Straight		150mm straight tip	150mm angled tip	180mm straight tip	180mm angled tip
0.3mm tip (point)	flat plug	700-010-150	700-011-150	700-010-180	700-011-180
	2-pin	700-012-150	700-013-150	700-012-180	700-013-180
0.6mm tip (blunt)	flat plug	700-020-150	700-021-150	700-020-180	700-021-180
	2-pin	700-022-150	700-023-150	700-022-180	700-023-180
1.0mm tip (blunt)	flat plug	700-030-150	700-031-150	700-030-180	700-031-180
	2-pin	700-032-150	700-033-150	700-032-180	700-033-180
2.0mm tip (blunt)	flat plug	700-040-150	700-041-150	700-040-180	700-041-180
	2-pin	700-042-150	700-043-150	700-042-180	700-043-180

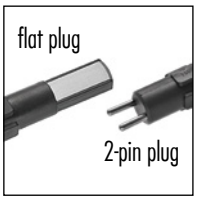


straight tip



angled down tip

Straight		200mm straight tip	200mm angled tip	225mm straight tip	225mm angled tip
0.3mm tip (point)	flat plug	700-010-200	700-011-200	700-010-220	700-011-220
	2-pin	700-012-200	700-013-200	700-012-220	700-013-220
0.6mm tip (blunt)	flat plug	700-020-200	700-021-200	700-020-220	700-021-220
	2-pin	700-022-200	700-023-200	700-022-220	700-023-220
1.0mm tip (blunt)	flat plug	700-030-200	700-031-200	700-030-220	700-031-220
	2-pin	700-032-200	700-033-200	700-032-220	700-033-220
2.0mm tip (blunt)	flat plug	700-040-200	700-041-200	700-040-220	700-041-220
	2-pin	700-042-200	700-043-200	700-042-220	700-043-220





Bayonet		180mm straight tip	200mm straight tip
0.3mm tip (point)	flat plug	700-050-180	700-050-200
	2-pin	700-052-180	700-052-200
0.6mm tip (blunt)	flat plug	700-060-180	700-060-200
	2-pin	700-062-180	700-062-200
1.0mm tip (blunt)	flat plug	700-070-180	700-072-200
	2-pin	700-072-180	700-072-200
2.0mm tip (blunt)	flat plug	700-080-180	700-082-200
	2-pin	700-082-180	700-082-200


straight tip

Bayonet		225mm straight tip	250mm straight tip
0.3mm tip (point)	flat plug	700-050-220	700-050-250
	2-pin	700-052-220	700-052-250
0.6mm tip (blunt)	flat plug	700-060-220	700-060-250
	2-pin	700-062-220	700-062-250
1.0mm tip (blunt)	flat plug	700-070-220	700-070-250
	2-pin	700-072-220	700-072-250
2.0mm tip (blunt)	flat plug	700-080-220	700-080-250
	2-pin	700-082-220	700-082-250



GILLIES

Monopolar Tissue Forceps, 1x2 teeth, 150mm, 6"

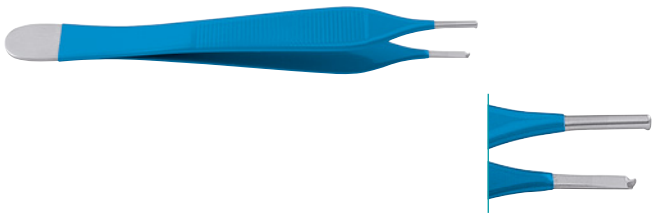
Without plug	130-720-150
4mm male plug	130-719-150



GERALD

Monopolar Tissue Forceps, 1x2 teeth

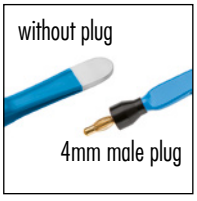
180mm, 7"	130-750-180



ADSON

Monopolar Tissue Forceps, 1x2 teeth, 2mm tip, 120mm, 4 3/4"

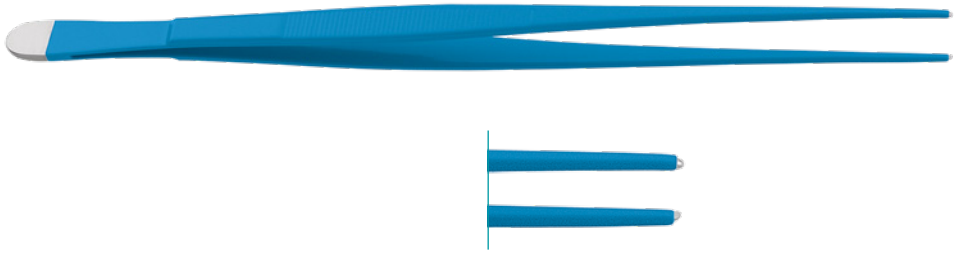
Without plug	130-740-120
4mm male plug	130-746-120





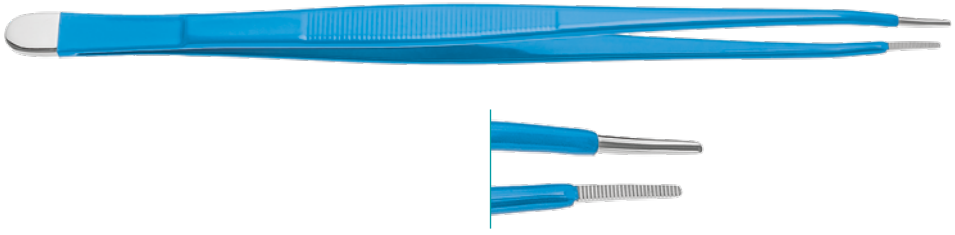
MICRO ADSON
Monopolar Tissue Forceps, 1x2 teeth, 2mm tip, flat plug

150mm, 6"	130-750-150



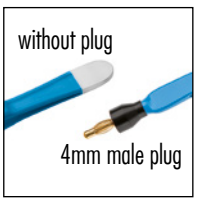
SULLIVAN
Monopolar Forceps, very delicate, smooth jaw, 1mm tip, 250mm, 9 7/8"

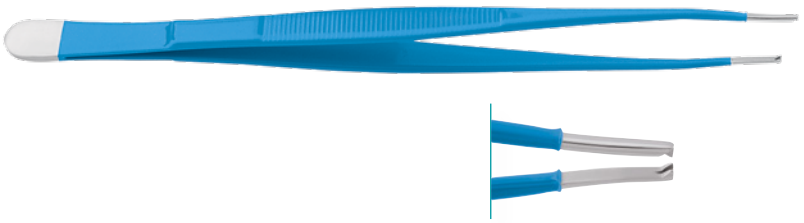
Without plug	130-743-250

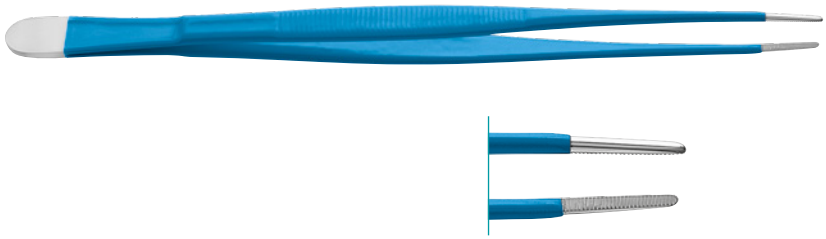


POTTS SMITH
Monopolar Dressing Forceps, serrated, elevated shanks,
without plug

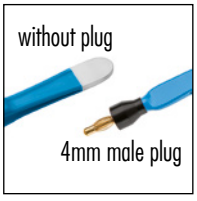
180mm, 7"	130-738-180
210mm, 8 1/4"	130-738-210
250mm, 9 7/8"	130-738-250
300mm, 11 7/8"	130-738-300
4mm male plug	
180mm, 7"	130-752-180
210mm, 8 1/4"	130-752-210
250mm, 9 7/8"	130-752-250
300mm, 11 7/8"	130-752-300











POTTS SMITH
Monopolar Tissue Forceps, 1x2 teeth, elevated shanks,without plug

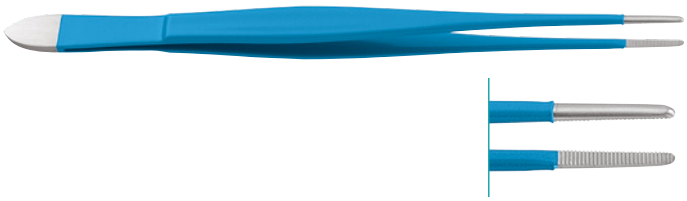
180mm, 7"	130-741-180
210mm, 8 1/4"	130-741-210
250mm, 9 7/8"	130-741-250
300mm, 11 7/8"	130-741-300
4mm male plug	
180mm, 7"	130-748-180
210mm, 8 1/4"	130-748-210
250mm, 9 7/8"	130-748-250
300mm, 11 7/8"	130-748-300

POTTS SMITH
Monopolar Dressing Forceps, serrated, without plug

145mm, 5 3/4"	130-740-145
180mm, 7"	130-740-180
210mm, 8 1/4"	130-740-210
250mm, 9 7/8"	130-740-250
300mm, 11 7/8"	130-740-300
4mm male plug	
145mm, 5 3/4"	130-747-145
180mm, 7"	130-747-180
210mm, 8 1/4"	130-747-210
250mm, 9 7/8"	130-747-250
300mm, 11 7/8"	130-747-300

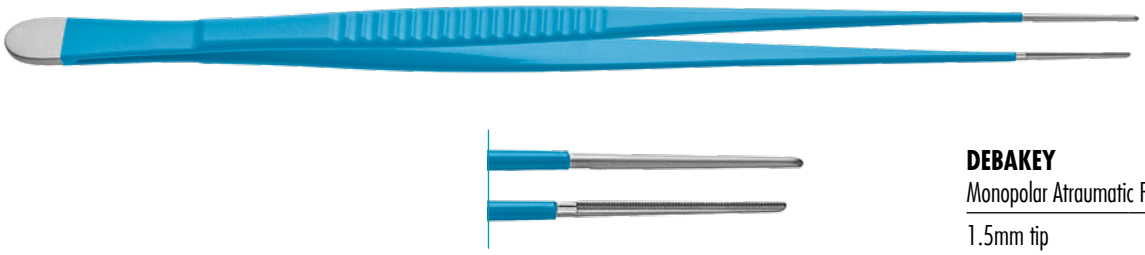
POTTS SMITH
Monopolar Tissue Forceps, 1x2 teeth, without plug

145mm, 5 3/4"	130-753-145
180mm, 7"	130-753-180
210mm, 8 1/4"	130-753-210
250mm, 9 7/8"	130-753-250
300mm, 11 7/8"	130-753-300
4mm male plug	
145mm, 5 3/4"	130-754-145
180mm, 7"	130-754-180
210mm, 8 1/4"	130-754-210
250mm, 9 7/8"	130-754-250
300mm, 11 7/8"	130-754-300



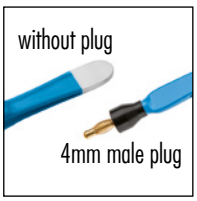
CUSHING
Monopolar Dressing Forceps, serrated, without plug

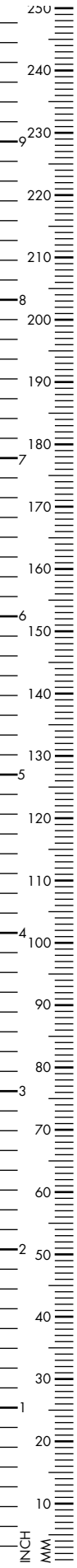
175mm, 6 7/8"	130-736-175
200mm, 8"	130-736-200



DEBAKEY
Monopolar Atraumatic Forceps, 160mm, 6 1/4"

1.5mm tip	290-850-160
2.4mm tip	290-852-160
2.7mm tip	290-853-160
3.5mm tip	290-854-160
200mm, 8"	
1.5mm tip	290-850-200
2.0mm tip	290-851-200
3.5mm tip	290-854-200
240mm, 9 1/2"	
1.5mm tip	290-850-240
2.0mm tip	290-851-240
2.4mm tip	290-852-240
300mm, 11 7/8"	
1.5mm tip	290-850-300
3.5mm tip	290-854-300

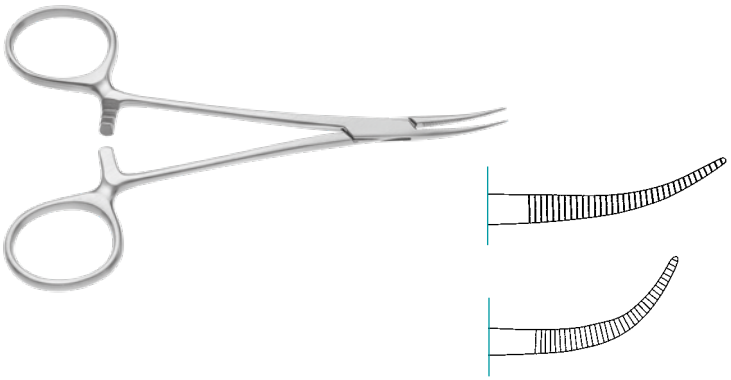



250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
9
8
7
6
5
4
3
2
1
INCH
MM

CLAMPS AND FORCEPS



Hemostatic Forceps
Dissecting Forceps
Tissue Forceps
Intestinal Forceps
Towel Forceps
Tubing Clamps
Dressing and Sponge Forceps



JACOBSON
Hemostatic Forceps, delicate, 0.3mm tip, curved

100mm, 4"	140-161-100
130mm, 5 1/8"	140-161-130
190mm, 7 1/2"	140-161-190

fully curved

130mm, 5 1/8"	140-162-130
190mm, 7 1/2"	140-162-190



MICRO HALSTEAD MOSQUITO
Hemostatic Forceps, straight

100mm, 4"	140-270-100
120mm, 4 3/4"	140-270-120

curved

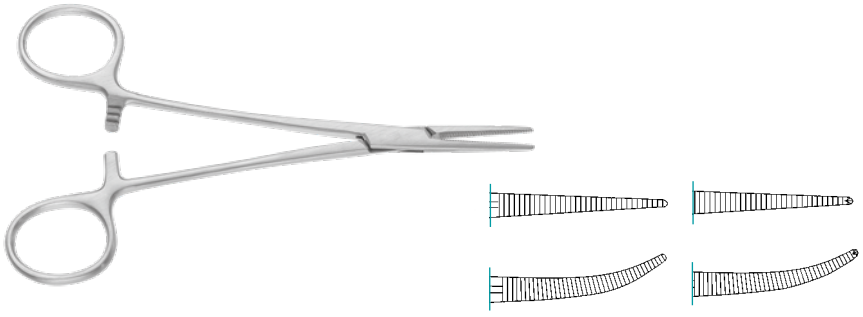
100mm, 4"	140-271-100
120mm, 4 3/4"	140-271-120
150mm, 6"	140-271-150

straight, 1x2 teeth

100mm, 4"	140-272-100
120mm, 4 3/4"	140-272-120

curved, 1x2teeth

100mm, 4"	140-273-100
120mm, 4 3/4"	140-273-120



HALSTEAD MOSQUITO
Hemostatic Forceps, serrated, straight

125mm, 5"	140-254-125
140mm, 5 1/2"	140-254-140
180mm, 7"	140-254-180
210mm, 8 1/4"	140-254-210

serrated, curved

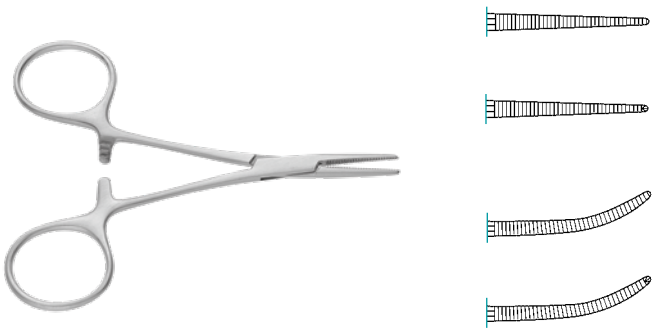
110mm, 4 1/3"	140-255-110
125mm, 5"	140-255-125
140mm, 5 1/2"	140-255-140
180mm, 7"	140-255-180
210mm, 8 1/4"	140-255-210

1x2 teeth, straight

125mm, 5"	140-256-125
140mm, 5 1/2"	140-256-140
180mm, 7"	140-256-180
210mm, 8 1/4"	140-256-210

1x2 teeth, curved

125mm, 5"	140-257-125
140mm, 5 1/2"	140-257-140
180mm, 7"	140-257-180
210mm, 8 1/4"	140-257-210



HARTMANN MOSQUITO

Hemostatic Forceps, serrated, straight

100mm, 4"	140-250-100

1x2 teeth, straight

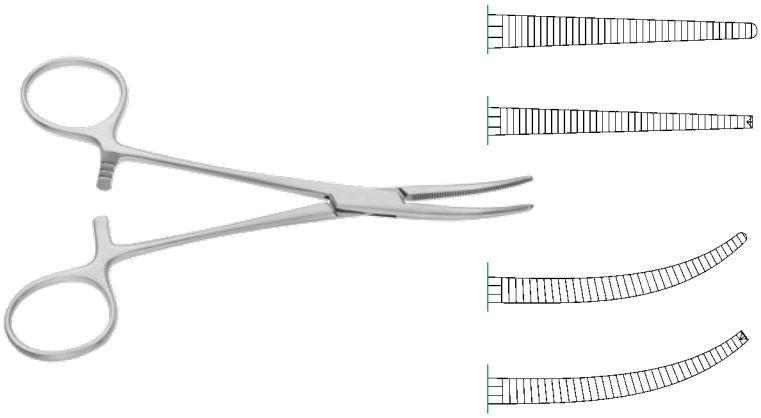
100mm, 4"	140-248-100

serrated, curved

100mm, 4"	140-251-100

1x2 teeth, curved

100mm, 4"	140-249-100



CRILE

Hemostatic Forceps, serrated, straight

140mm, 5 1/2"	140-290-140

1x2 teeth, straight

140mm, 5 1/2"	140-292-140

serrated, curved

140mm, 5 1/2"	140-291-140
180mm, 7"	140-291-180

1x2 teeth, curved

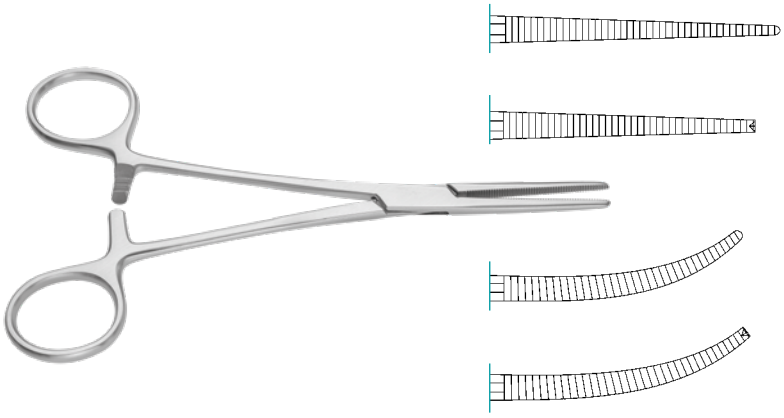
140mm, 5 1/2"	140-293-140



BABY CRILE

Hemostatic Forceps, 140mm, 5 1/2"

serrated, straight	140-334-140
serrated, curved	140-335-140
1x2 teeth, straight	140-336-140



CRILE RANKIN

Hemostatic Forceps, serrated, straight

160mm, 6 1/4"	140-294-160

1x2 teeth, straight

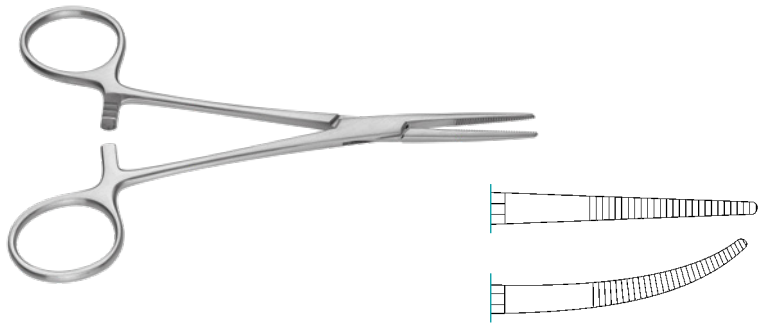
160mm, 6 1/4"	140-296-160

serrated, curved

160mm, 6 1/4"	140-295-160

1x2 teeth, curved

160mm, 6 1/4"	140-297-160



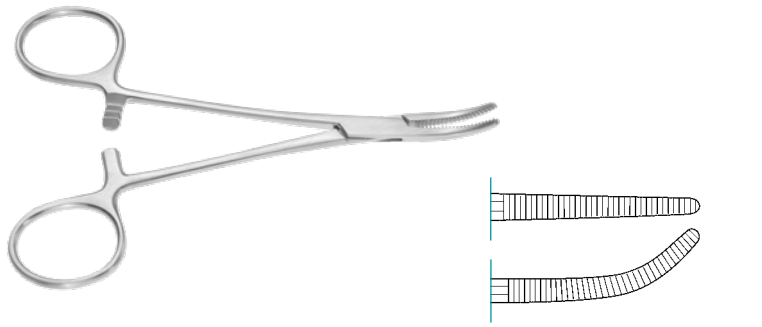
KELLY

Hemostatic Forceps, straight

140mm, 5 1/2"	140-280-140

curved

140mm, 5 1/2"	140-281-140



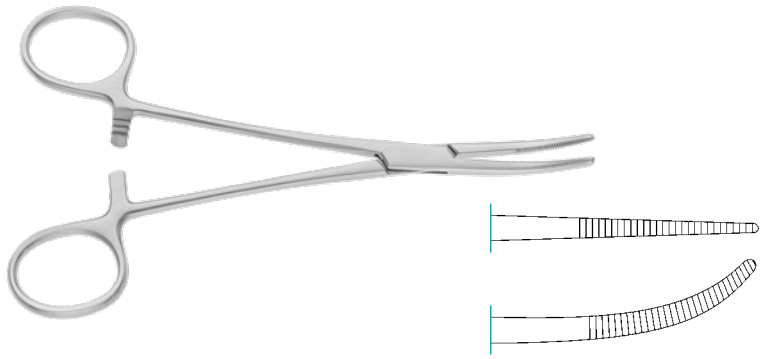
SPENCER WELLS

Hemostatic Forceps, serrated, straight

130mm, 5 1/8"	140-150-130
150mm, 6"	140-150-150
180mm, 7"	140-150-180
200mm, 8"	140-150-200

curved

130mm, 5 1/8"	140-151-130
150mm, 6"	140-151-150
180mm, 7"	140-151-180
200mm, 8"	140-151-200



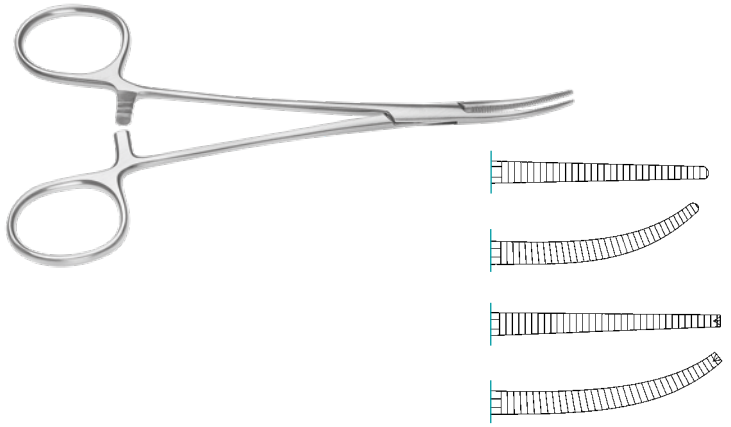
KELLY RANKIN

Hemostatic Forceps, straight

160mm, 6 1/4"	140-286-160

curved

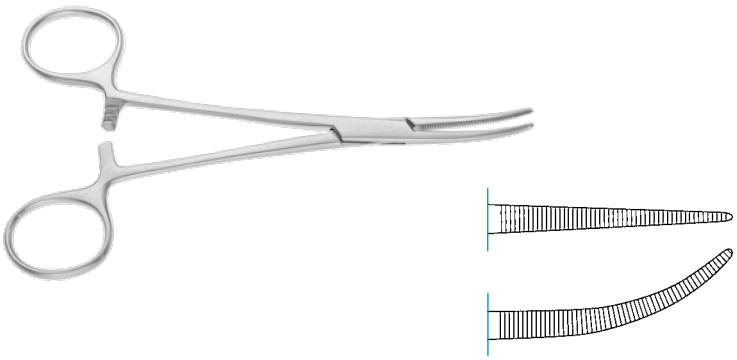
160mm, 6 1/4"	140-287-160



LERICHE

Hemostatic Forceps, 150mm, 6"

straight	140-276-150
curved	140-277-150
straight, 1x2 teeth	140-278-150
curved, 1x2 teeth	140-279-150



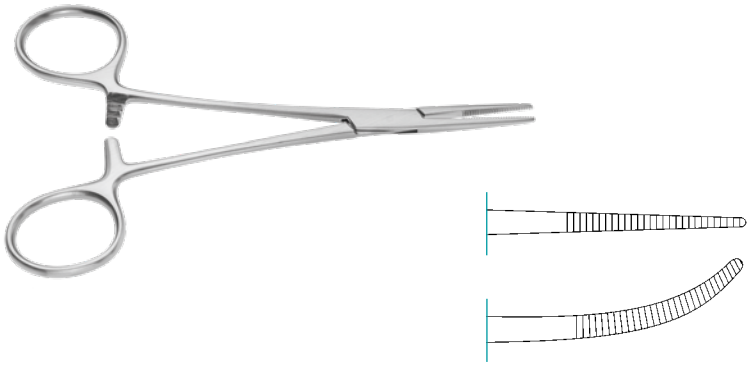
COLLER

Hemostatic Forceps, serrated, straight

140mm, 5 1/2"	140-288-140
160mm, 6 1/4"	140-288-160

curved

140mm, 5 1/2"	140-289-140
160mm, 6 1/4"	140-289-160



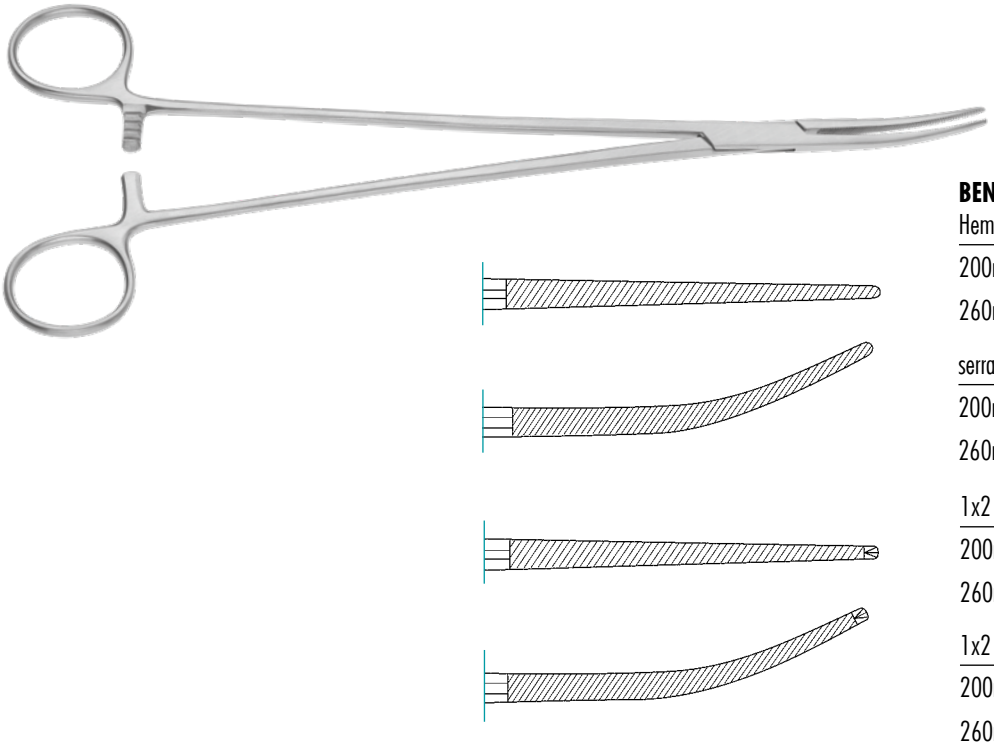
PROVIDENCE HOSPITAL

Hemostatic Forceps, serrated, straight

140mm, 5 1/2"	140-274-140

curved

140mm, 5 1/2"	140-275-140



BENGOLEA

Hemostatic Forceps, serrated, straight

200mm, 8"	140-140-200
260mm, 10 1/4"	140-140-260

serrated, curved

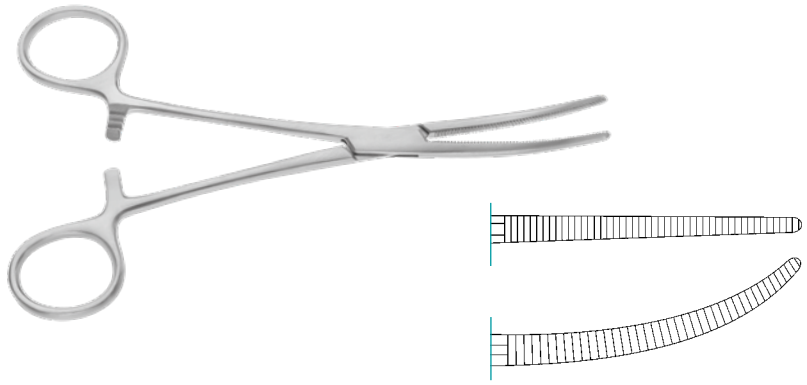
200mm, 8"	140-141-200
260mm, 10 1/4"	140-141-260

1x2 teeth, straight

200mm, 8"	140-142-200
260mm, 10 1/4"	140-142-260

1x2 teeth, curved

200mm, 8"	140-143-200
260mm, 10 1/4"	140-143-260



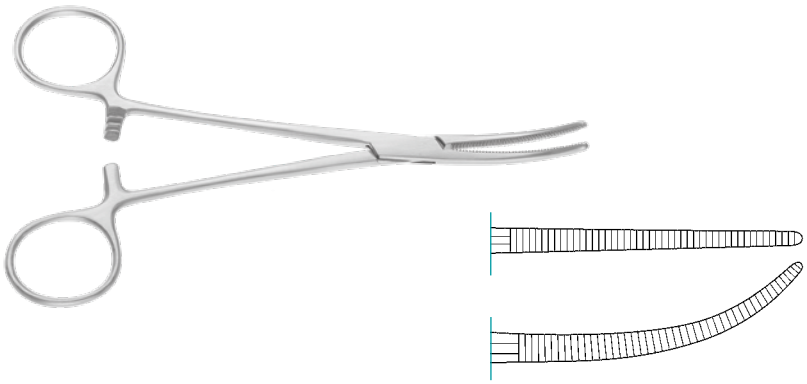
ROCHESTER PEAN

Hemostatic Forceps, serrated, straight

140mm, 5 1/2"	140-330-140
160mm, 6 1/4"	140-330-160
180mm, 7"	140-330-180
200mm, 8"	140-330-200
220mm, 8 2/3"	140-330-220
240mm, 9 1/2"	140-330-240
260mm, 10 1/4"	140-330-260
300mm, 11 7/8"	140-330-300
355mm, 14"	140-330-355

curved

140mm, 5 1/2"	140-331-140
160mm, 6 1/4"	140-331-160
180mm, 7"	140-331-180
200mm, 8"	140-331-200
220mm, 8 2/3"	140-331-220
240mm, 9 1/2"	140-331-240
260mm, 10 1/4"	140-331-260
300mm, 11 7/8"	140-331-300
355mm, 14"	140-331-355



PEAN

Hemostatic Forceps, delicate, serrated, straight

130mm, 5 1/8"	140-316-130
140mm, 5 1/2"	140-316-140
160mm, 6 1/4"	140-316-160

curved

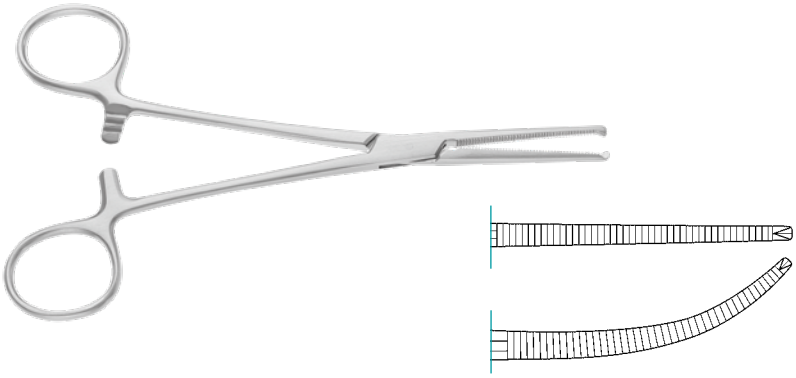
130mm, 5 1/8"	140-317-130
140mm, 5 1/2"	140-317-140
160mm, 6 1/4"	140-317-160



KOCHER OCHSNER

Hemostatic Forceps, 1x 2 teeth, straight	
140mm, 5 1/2"	140-332-140
160mm, 6 1/4"	140-332-160
180mm, 7"	140-332-180
200mm, 8"	140-332-200
220mm, 8 2/3"	140-332-220
240mm, 9 1/2"	140-332-240
260mm, 10 1/4"	140-332-260
300mm, 11 7/8"	140-332-300
355mm, 14"	140-332-355

curved	
140mm, 5 1/2"	140-333-140
160mm, 6 1/4"	140-333-160
180mm, 7"	140-333-180
200mm, 8"	140-333-200
220mm, 8 2/3"	140-333-220
240mm, 9 1/2"	140-333-240
260mm, 10 1/4"	140-333-260
300mm, 11 7/8"	140-333-300
355mm, 14"	140-333-355



KOCHER

Delicate Hemostatic Forceps, 1x2 teeth, straight	
130mm, 5 1/8"	140-318-130
140mm, 5 1/2"	140-318-140
160mm, 6 1/4"	140-318-160

curved	
130mm, 5 1/8"	140-319-130
140mm, 5 1/2"	140-319-140
160mm, 6 1/4"	140-319-160



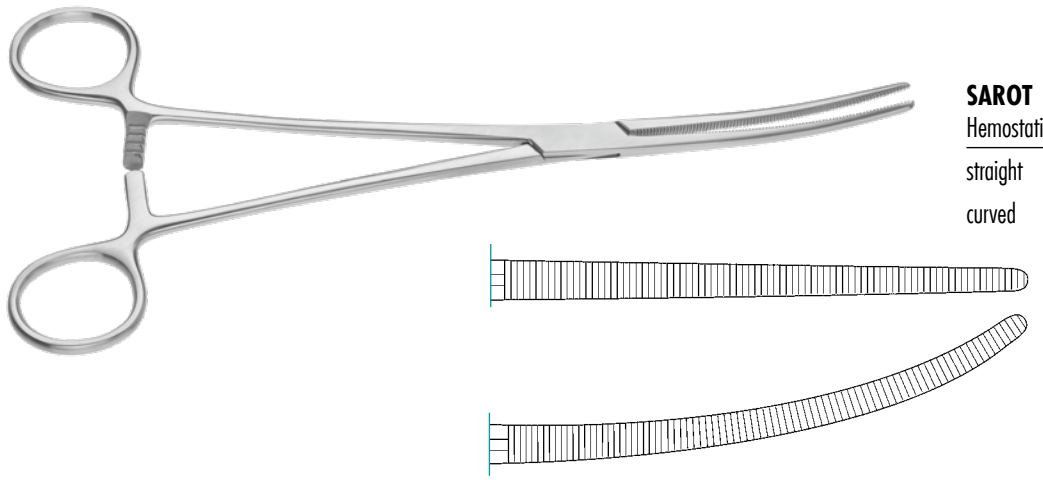
TOENNIS

Hemostatic Forceps, serrated, straight	
210mm, 8 1/4"	140-412-210
260mm, 10 1/4"	140-412-260

curved	
210mm, 8 1/4"	140-412-210
260mm, 10 1/4"	140-412-260

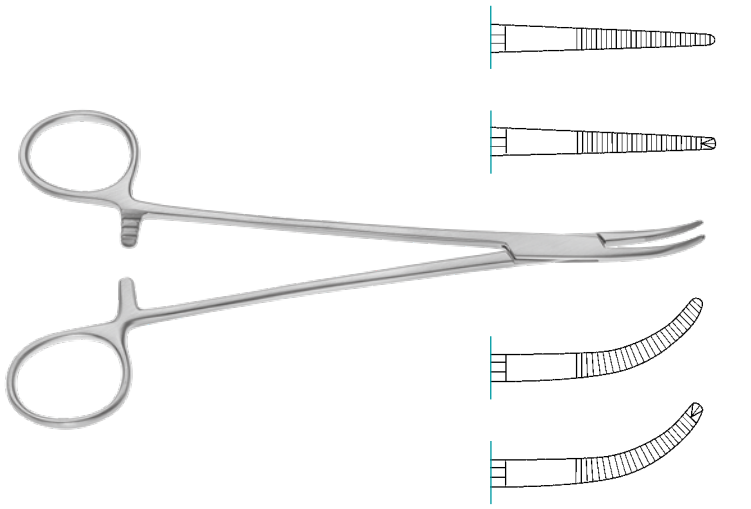
1x2 teeth, straight	
210mm, 8 1/4"	140-414-210
260mm, 10 1/4"	140-414-260

1x2 teeth, curved	
210mm, 8 1/4"	140-415-210
260mm, 10 1/4"	140-415-260



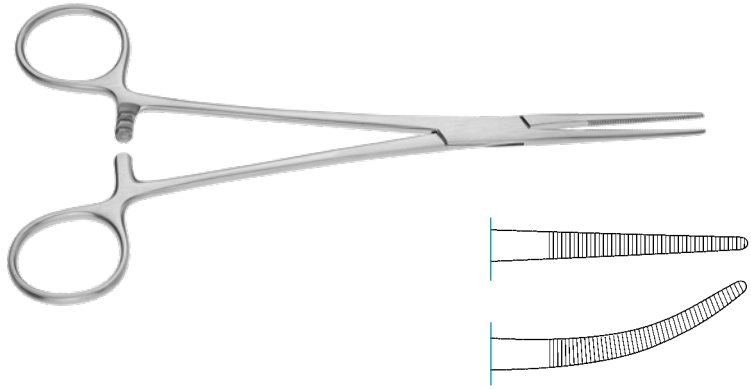
SAROT
Hemostatic Forceps, 240mm, 9 1/2"

straight	140-348-240
curved	140-349-240



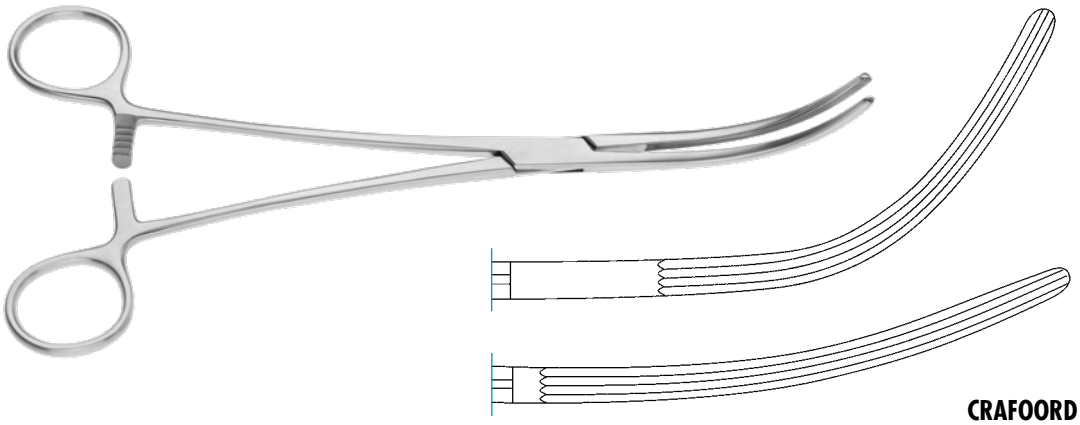
ADSON
Hemostatic Forceps, 185mm, 7 1/4"

serrated, straight	140-366-185
serrated, curved	140-367-185
straight, 1x2 teeth	140-372-185
curved, 1x2 teeth	140-373-185



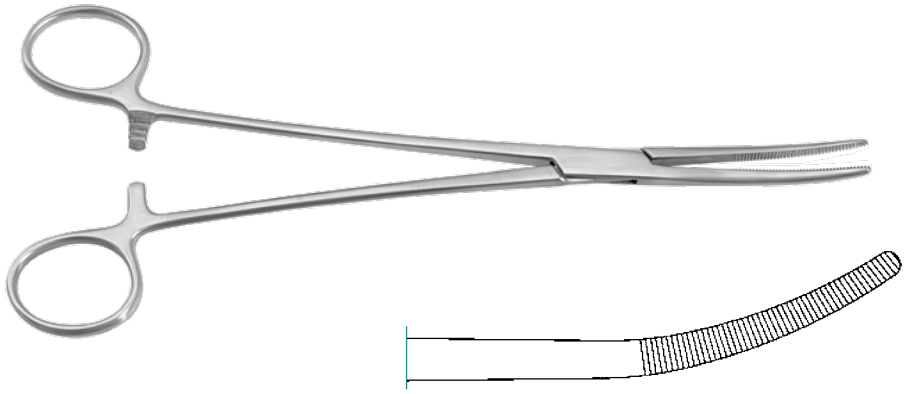
BIRKETT
Hemostatic Forceps, serrated, 185mm, 7 1/4"

straight	140-368-185
curved	140-369-185



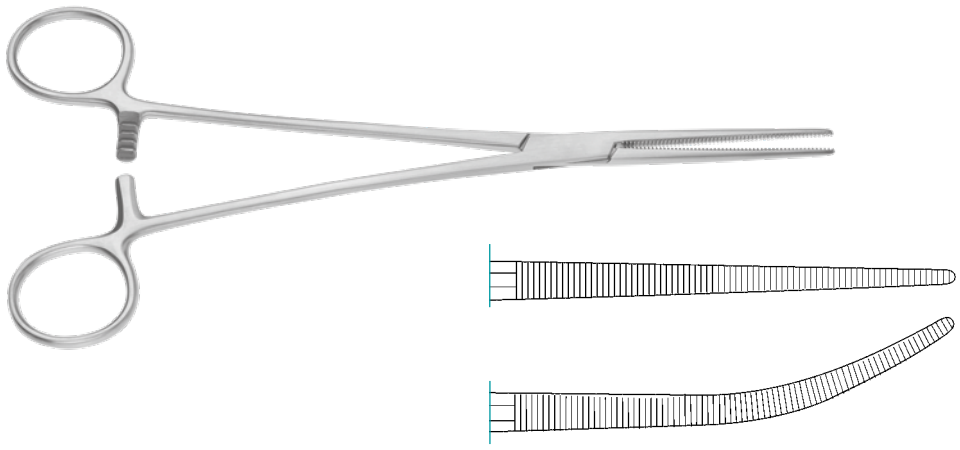
CRAFOORD
Vascular Clamp, longitudinal serration, slightly curved, elastic jaw

230mm, 9″	140-383-230
medium curved	
240mm, 9 1/2″	140-385-240



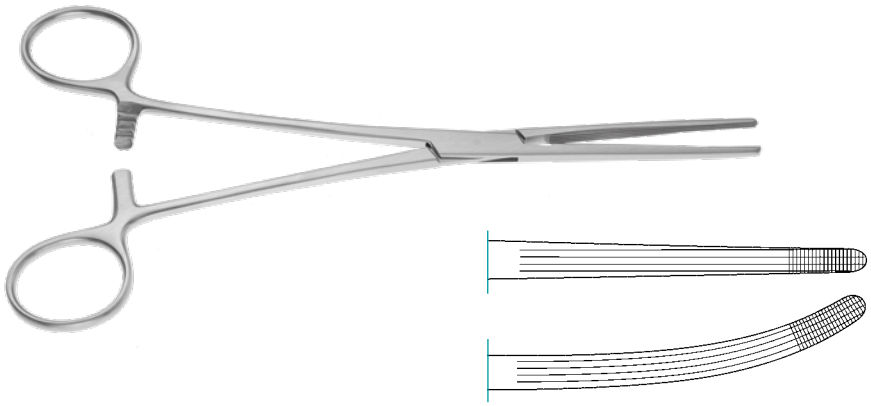
RUMEL
Thorax Forceps, 230mm, 9″

Fig. 1	140-346-001
Fig. 2	140-346-002
Fig. 3	140-346-003
Fig. 4	140-346-004



ROBERTS
Hemostatic Forceps, 220mm, 8 2/3″

straight	140-452-220
curved	140-453-220

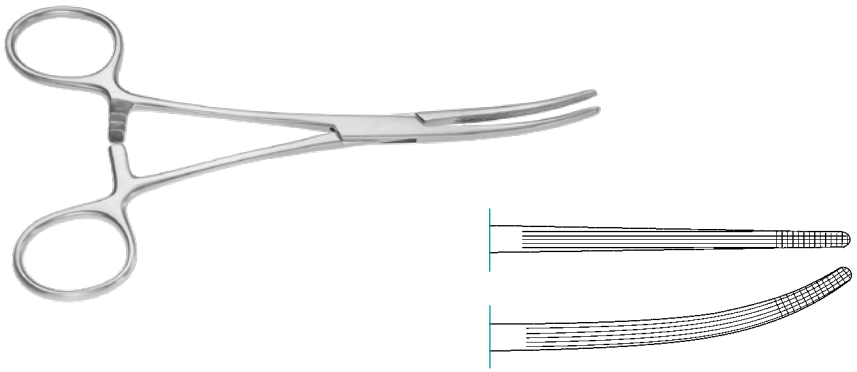


ROCHESTER CARMALT
Hemostatic Forceps, longitudinal serration, cross-serrated tip, straight

160mm, 6 1/4"	140-314-160
200mm, 8"	140-314-200

curved

160mm, 6 1/4"	140-315-160
200mm, 8"	140-315-200

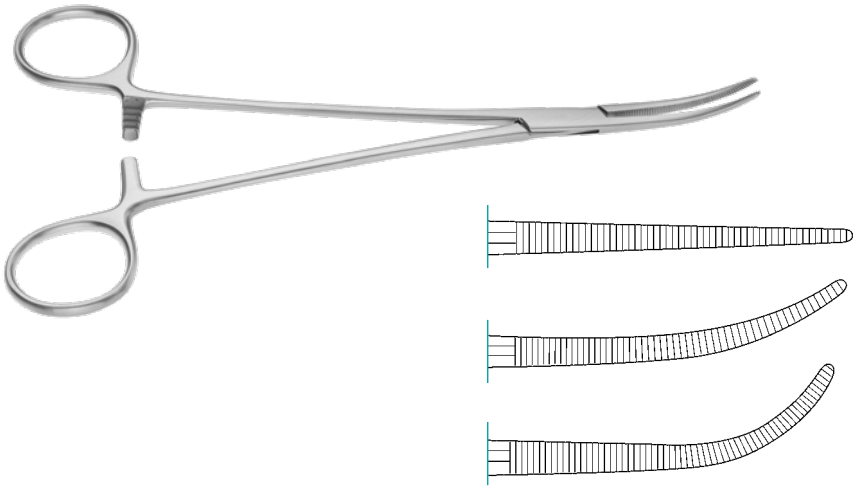


BAINBRIDGE
Intestinal Forceps, longitudinal serration, cross-serrated tip, straight

150mm, 6"	140-442-150
185mm, 7 1/4"	140-442-185

curved

150mm, 6"	140-443-150
185mm, 7 1/4"	140-443-185



HEISS
Dissecting and Ligature Forceps, straight, Fig. 1

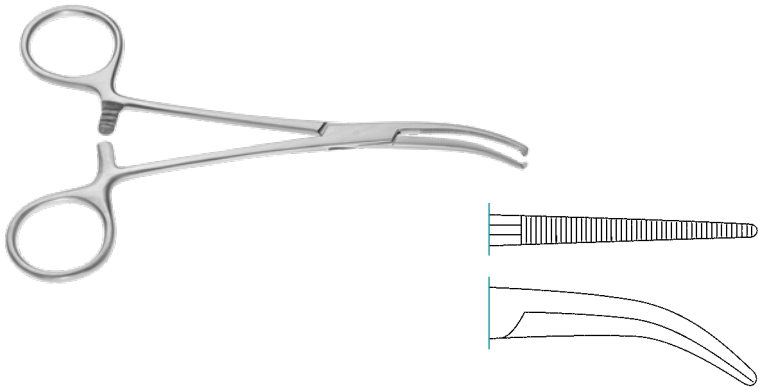
200mm, 8"	140-340-200

slightly curved, Fig. 2

200mm, 8"	140-341-200

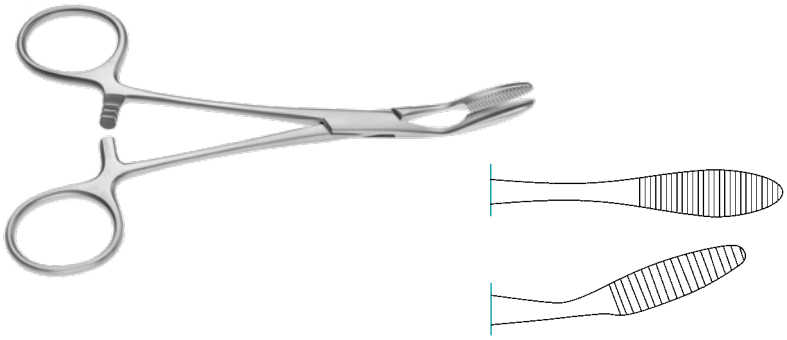
strongly curved, Fig. 3

200mm, 8"	140-343-200



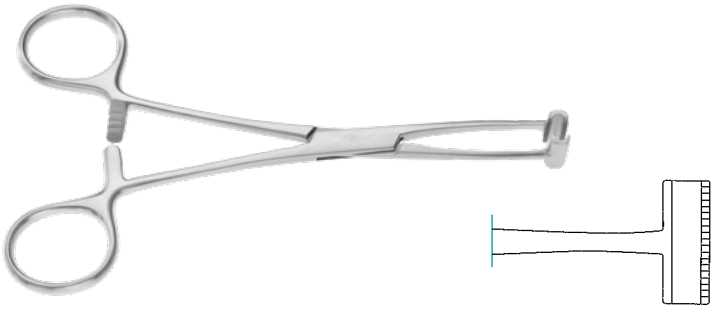
DANDY
Hemostatic Forceps, laterally curved, 140mm, 5 1/2"

serrated	140-301-140
1x2 teeth	140-303-140



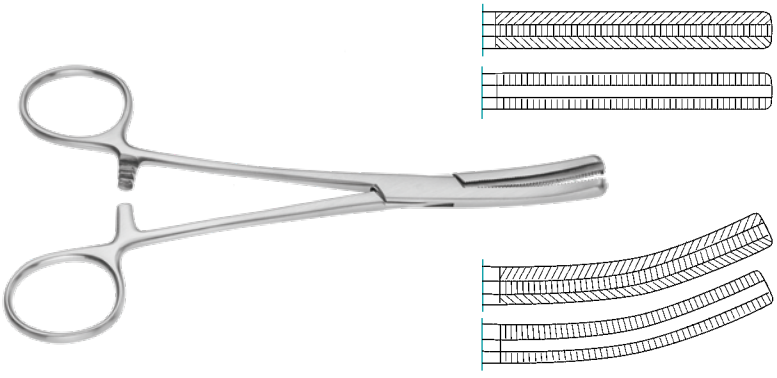
PEAN
Hemostatic Forceps, serrated, straight

125mm, 4 3/4"	140-228-125
140mm, 5 1/2"	140-228-140
160mm, 6 1/4"	140-228-160
curved	
140mm, 5 1/2"	140-229-140



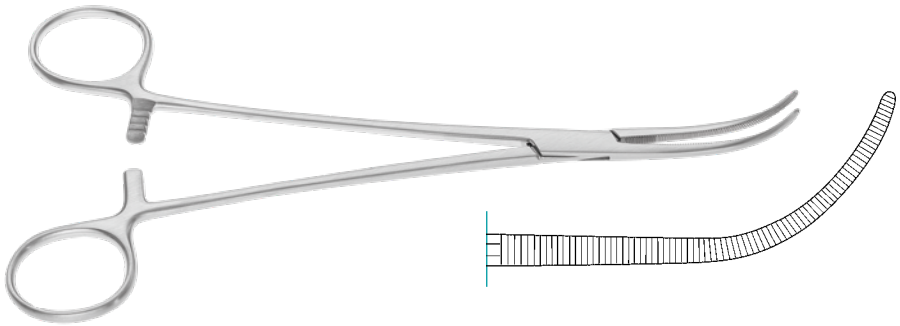
PRATT
T-Clamp, straight

150mm, 6"	140-282-150



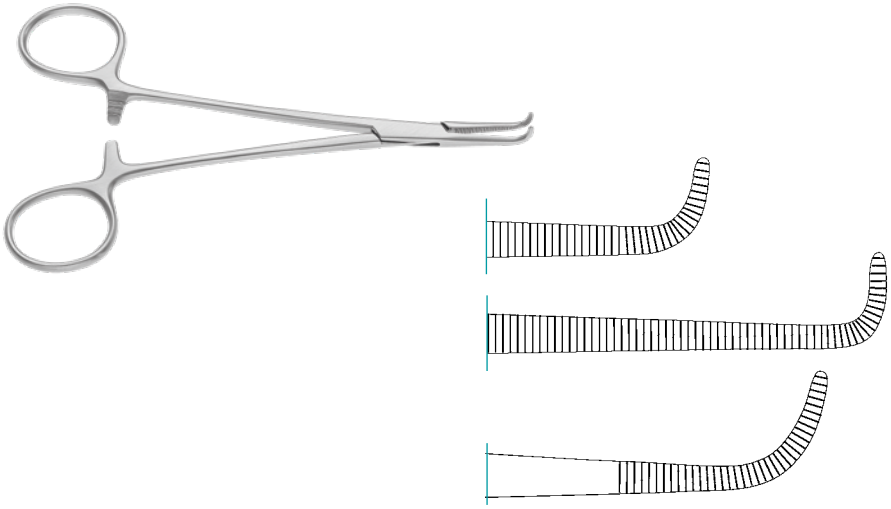
FERGUSSON
Pressure Clamp, straight

160mm, 6 1/4"	140-300-160
curved	
160mm, 6 1/4"	140-301-160



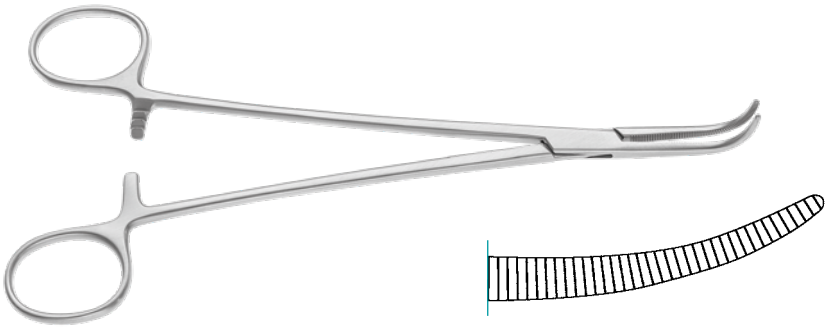
OVERHOLT MIXTER
Dissecting and Ligature Forceps, curved

210mm, 8 1/4"	140-345-210



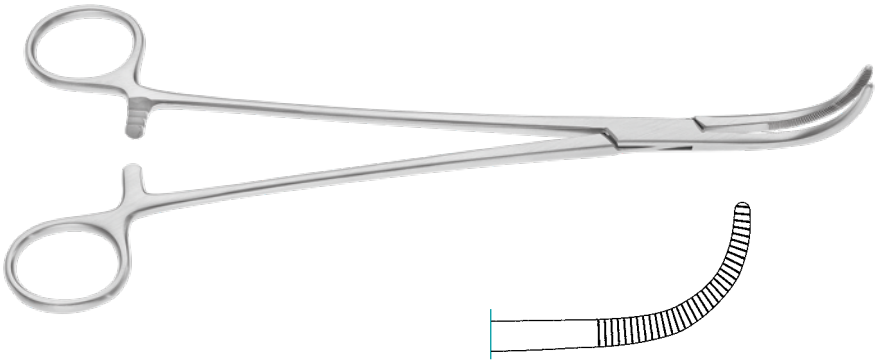
DIETHRICH
Clamp, serrated, right angled

125mm, 5"	140-401-125
140mm, 5 1/2"	140-401-140
180mm, 7"	140-401-180



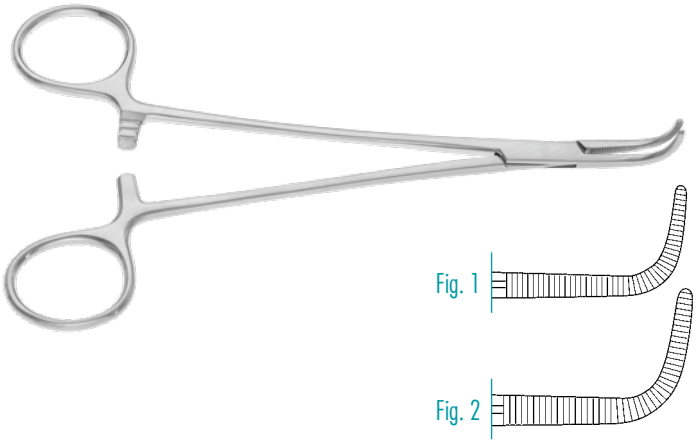
VARCO
Gallbladder Forceps, slightly curved

190mm, 7 1/2"	140-403-190



MIXTER
Dissecting and Ligature Forceps,
partially serrated

220mm, 8 2/3"	140-427-220
230mm, 9"	140-429-230

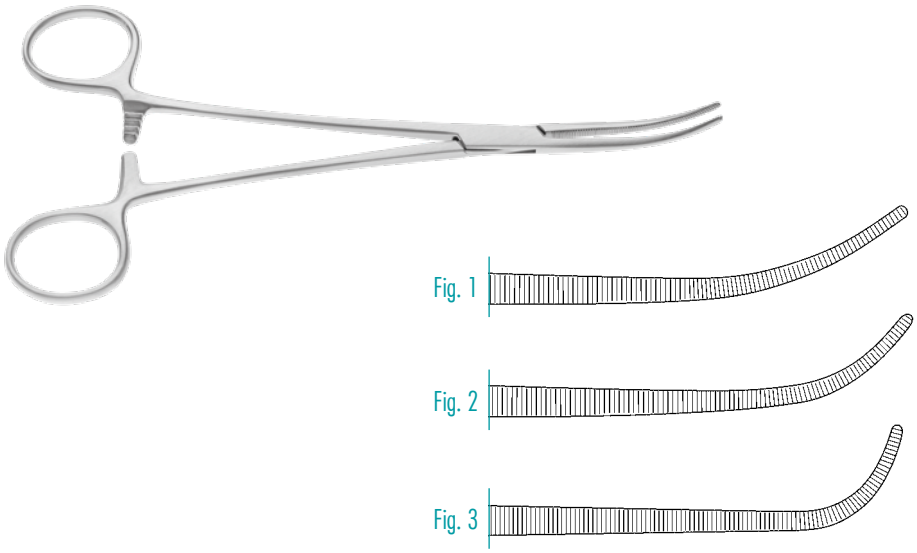


MEEKER
Kidney Pedicle Clamp, curved,
Fig. 1

180mm, 7"	140-619-180

Fig. 2

280mm,11"	140-619-275



KELLY
Dissecting Forceps, fully serratrd,
Fig. 1

190mm, 7 1/2"	140-633-190
220mm, 8 2/3"	140-633-220
240mm, 9 1/2"	140-633-240

Fig. 2

190mm, 7 1/2"	140-635-190
220mm, 8 2/3"	140-635-220
240mm, 9 1/2"	140-635-240

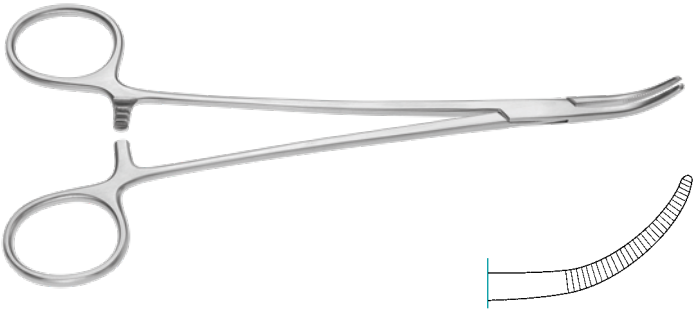
Fig. 3

190mm, 7 1/2"	140-637-190
220mm, 8 2/3"	140-637-220
240mm, 9 1/2"	140-637-240



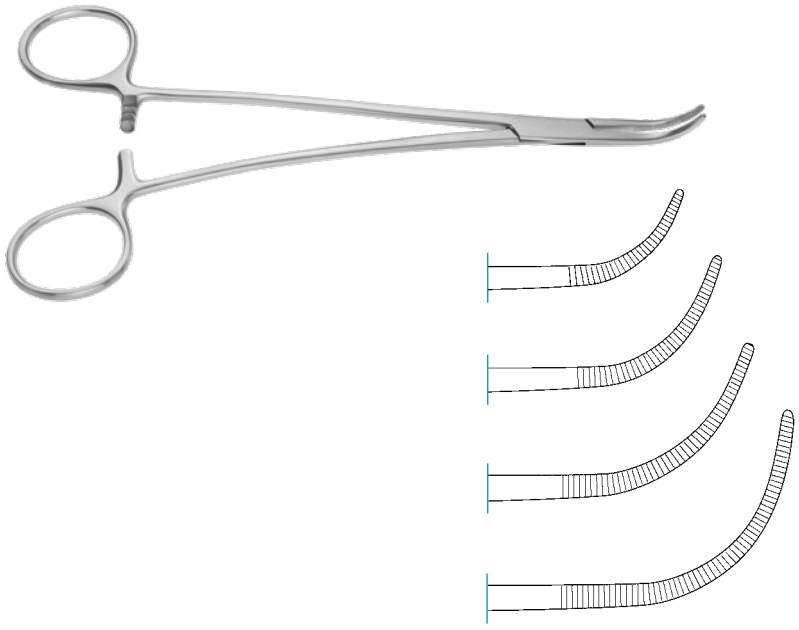
BABY MIXTER
Dissecting and Ligature Forceps,
serrated, curved

140mm, 5 1/2″	140-421-140



BABY MIXTER
Dissecting and Ligature Forceps,
serratd, curved

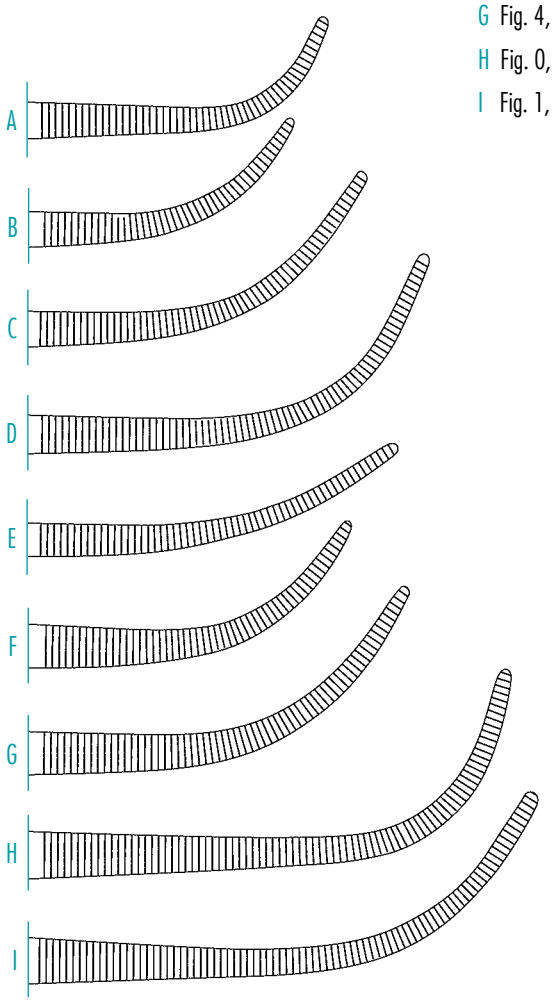
180mm, 7″	140-337-180



OVERHOLT
Dissecting and Ligature Forceps,
serrated, s-curved

185mm, 7 1/2″	140-135-185
205mm, 8″	140-135-205
210mm, 8 1/4″	140-135-210
215mm, 8 1/2″	140-135-215

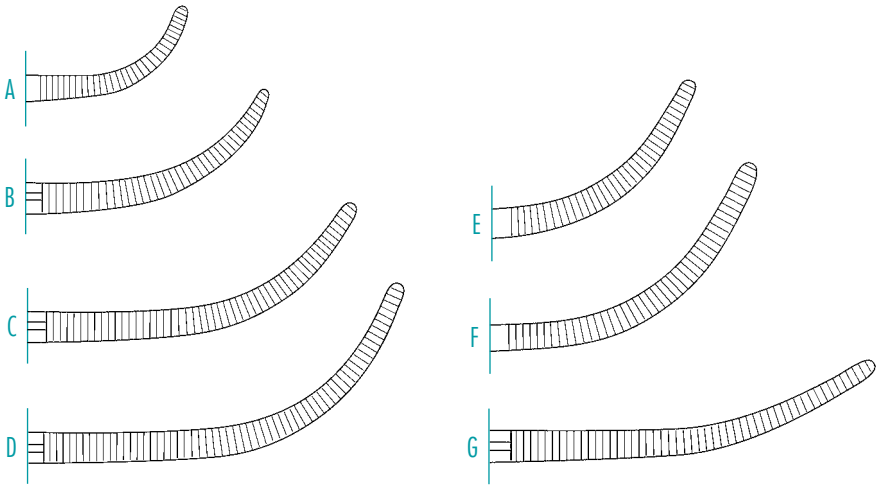




OVERHOLT
Ligature Forceps, fully serrated jaw, curved

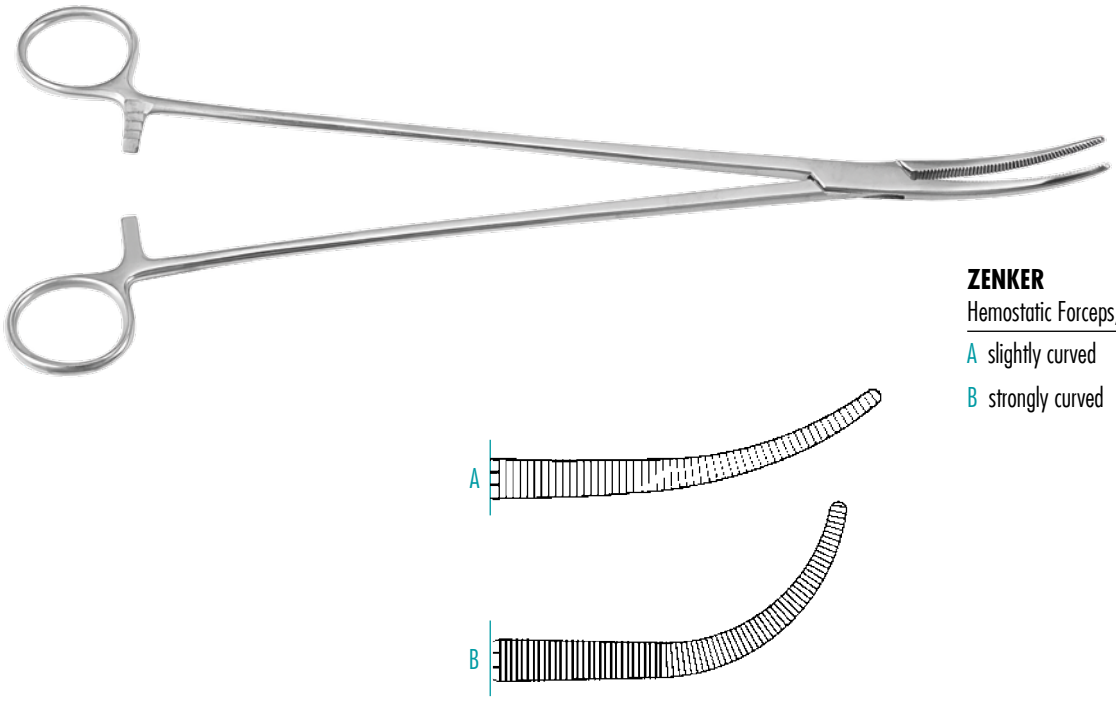
A	Fig. 0, 215mm, $8^{1/2}$″	140-137-000
B	Fig. 1, 210mm, $8^{1/4}$″	140-137-001
C	Fig. 2, 220mm, $8^{2/3}$″	140-137-002
D	Fig. 3, 225mm, $8^{7/8}$″	140-137-003
E	Fig. 6, 225mm, $8^{7/8}$″	140-137-006
F	Fig. 1, 270mm, $10^{2/3}$″	140-137-008
G	Fig. 4, 270mm, $10^{2/3}$″	140-137-014
H	Fig. 0, 295mm, $11^{2/3}$″	140-137-010
I	Fig. 1, 295mm, $11^{2/3}$″	140-137-011





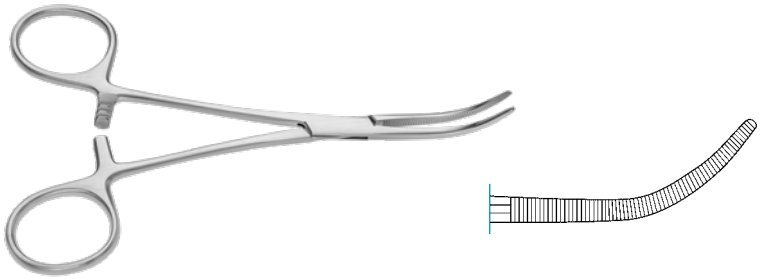
OVERHOLT
Dissecting and Ligature Forceps,
fully serrated, curved

A Fig. 0, 195mm, $7^{3/4}$″	140-443-001
B Fig. 1, 210mm, $8^{1/4}$″	140-443-002
C Fig. 2, 220mm, $8^{2/3}$″	140-443-003
D Fig. 3, 225mm, $8^{7/8}$″	140-443-004
E Fig. 4, 210mm, $8^{1/4}$″	140-443-005
F Fig. 5, 230mm, 9″	140-443-006
G Fig. 6, 225mm, $8^{7/8}$″	140-443-007



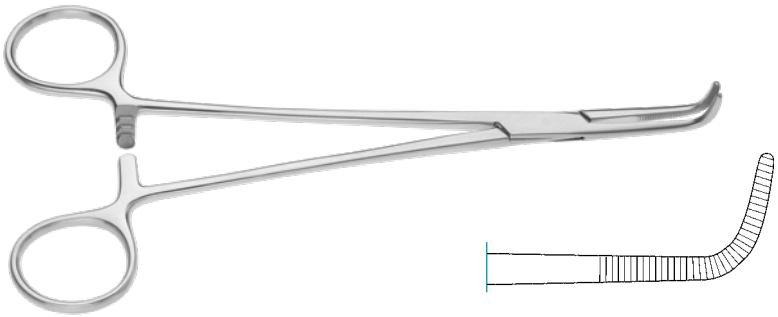
ZENKER
Hemostatic Forceps, 295mm, $11^{2/3}$″

A slightly curved	140-419-295
B strongly curved	140-420-295



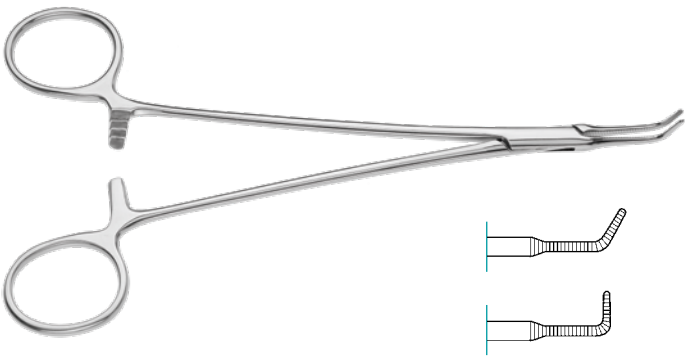
BABY OVERHOLT
Hemostatic Forceps, fully serrated, curved

130mm, 5 1/8"	140-285-135



KANTROWITZ
Thorax Forceps, serrated, curved

190mm, 7 1/2"	140-417-190
240mm, 9 1/2"	140-417-240
280mm, 11"	140-417-280



BAILEY
Hemostatic Forceps, very fine jaw, serrated, 60° angled, polished jaw

200mm, 8"	140-144-060

90° angled

180mm, 7"	140-144-090



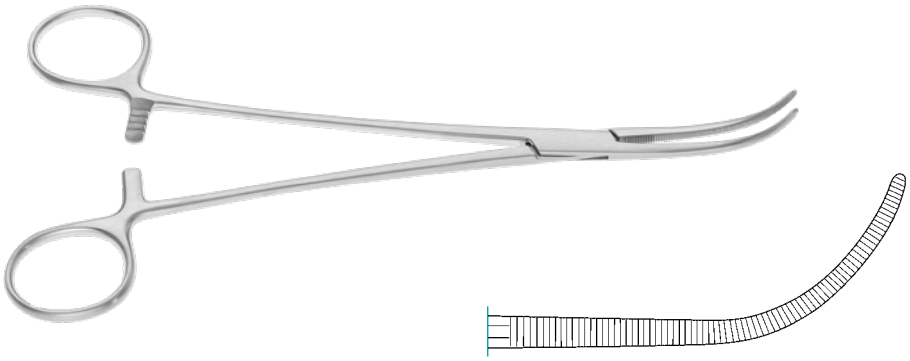
MICRO ADSON
Dissecting Forceps, curved

140mm, 5 1/2"	140-338-140



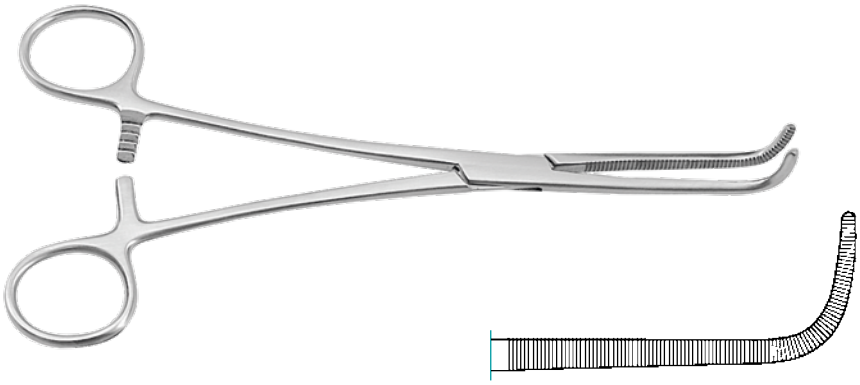
BABY ADSON
Dissecting Forceps, curved

140mm, 5 1/2"	140-339-140
180mm, 7"	140-339-180



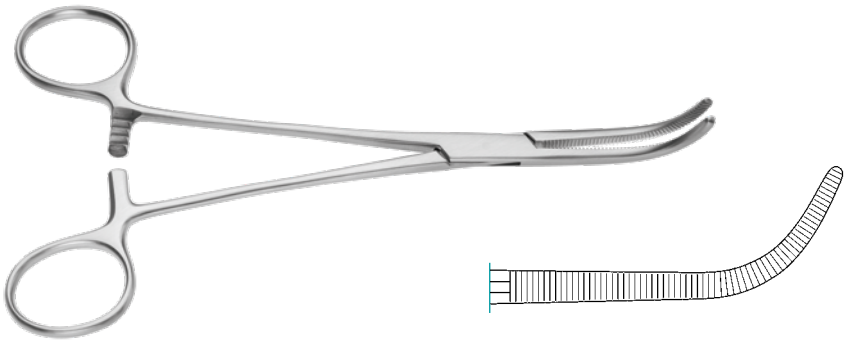
OVERHOLT MIXTER
Ligature Forceps, curved

210mm, 8 1/4"	140-345-210



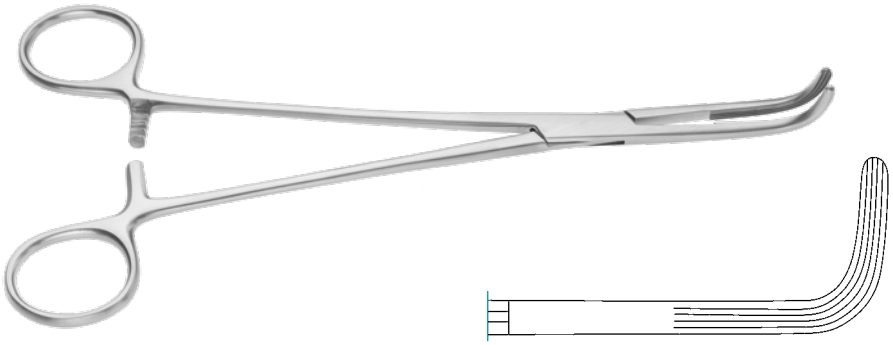
WINKSTROEM
Artery Forceps

210mm, 8 1/4"	140-431-210
240mm, 9 1/2"	140-431-240



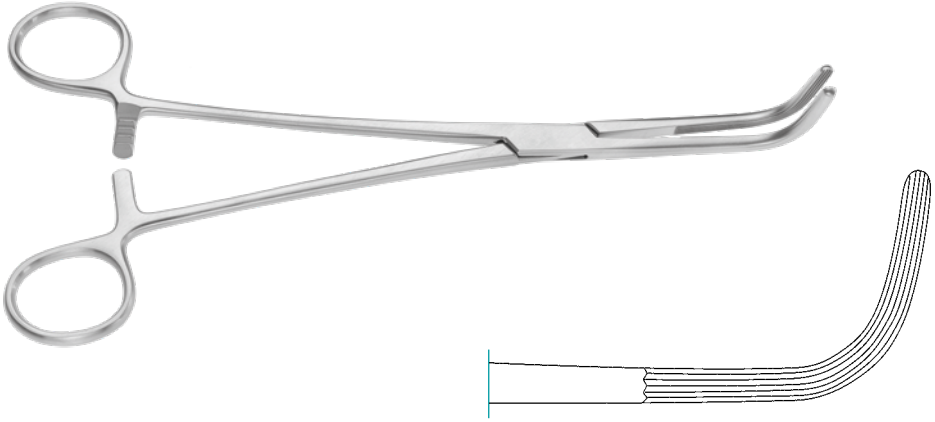
MIXTER O'SHAUGNESSY
Hemostatic Forceps, curved

155mm, 6 1/8"	140-425-155
190mm, 7 1/2"	140-425-190



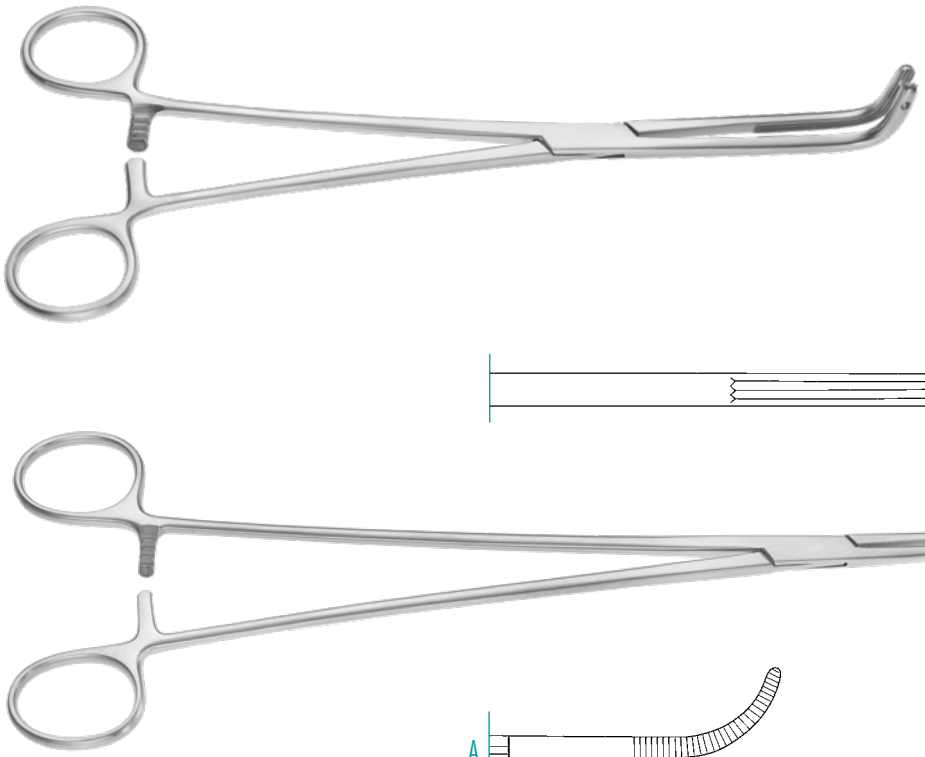
MIXTER
Gall Duct Clamp, longitudinal serrations

220mm, 8 2/3"	140-433-220
250mm, 9 7/8"	140-433-250
280mm, 11"	140-433-280



MCQUIGG MIXTER
Hemostatic Forceps, longitudinal serration

220mm, 8 2/3"	140-435-220

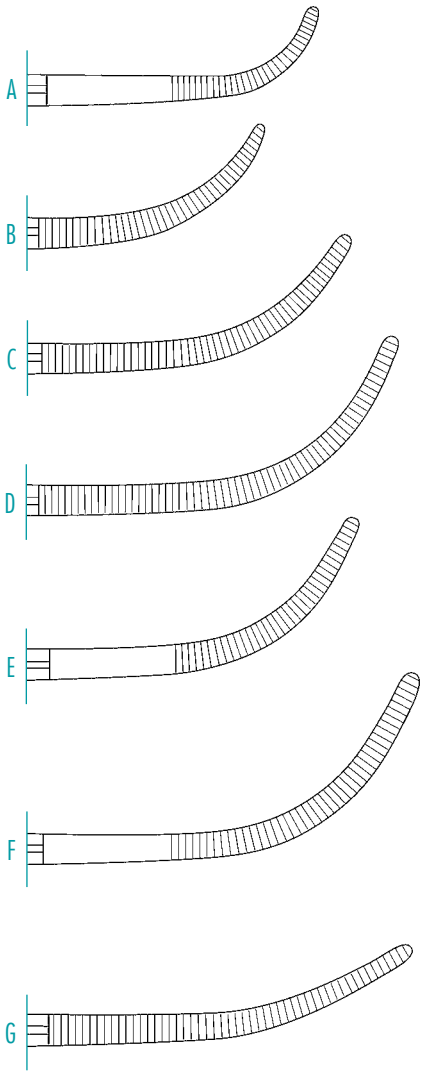


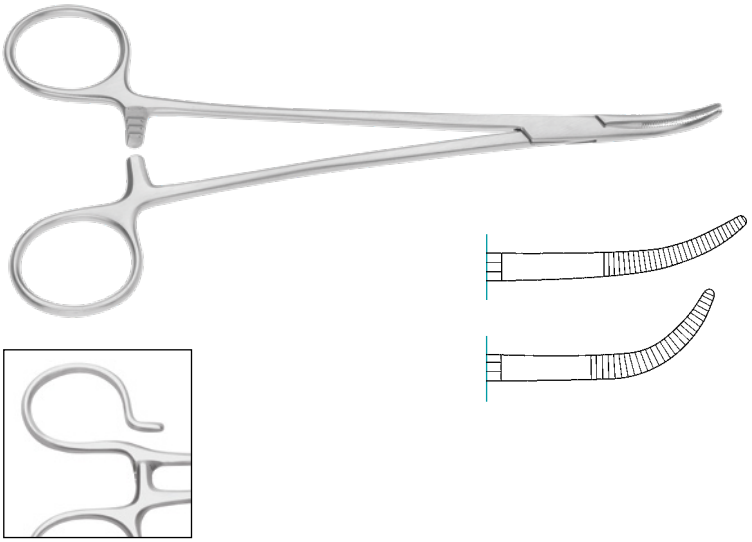
FINOCHIETTO
Ligature Forceps, longitudinal serations, with hole

240mm, 9 1/2"	140-440-240

OVERHOLT GEISSENDOERFER
Dissecting - and Ligature Forceps
270mm, 10 2/3"

A Fig. 1	140-447-001
B Fig. 2	140-447-002
C Fig. 3	140-447-003
D Fig. 4	140-447-004
E Fig. 5	140-447-005
F Fig. 6	140-447-006
G Fig. 7	140-447-007





SCHNIDT SAWTELL

Tonsil Seizing Forceps, slightly curved

190mm, 7 1/2"	140-628-190

strongly curved

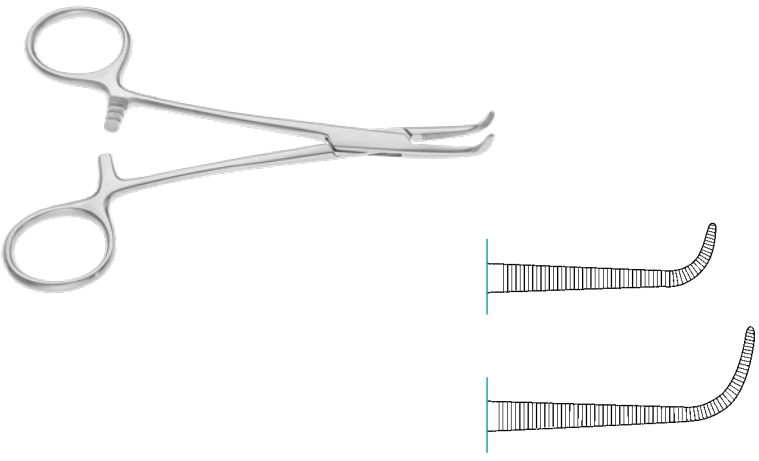
190mm, 7 1/2"	140-629-190

slightly curved, with one open ring

190mm, 7 1/2"	140-630-190

strongly curved, with one open ring

190mm, 7 1/2"	140-631-190



MINI GEMINI

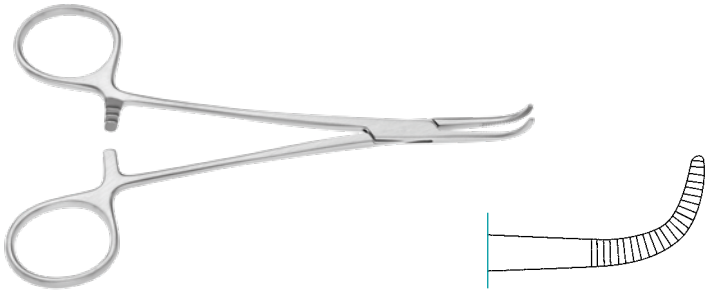
Dissecting Forceps, fully serrated, curved

130mm, 5 1/8"	140-359-130
160mm, 6 1/4"	140-359-160
180mm, 7"	140-359-180
200mm, 8"	140-359-200
220mm, 8 2/3"	140-359-220
230mm, 9"	140-359-230
250mm, 9 7/8"	140-359-250
280mm, 11"	140-359-280

GEMINI

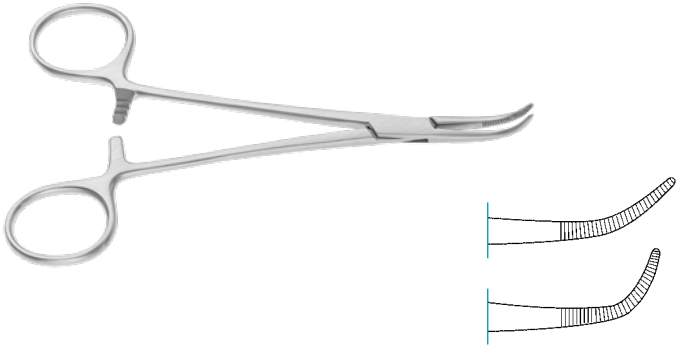
Dissecting Forceps, fully serrated, curved

130mm, 5 1/8"	140-361-130
160mm, 6 1/4"	140-361-160
180mm, 7"	140-361-180
200mm, 8"	140-361-200
220mm, 8 2/3"	140-361-220
230mm, 9"	140-361-230
250mm, 9 7/8"	140-361-250
280mm, 11"	140-361-280



PETIT POINT MIXTER
Artery Forceps, 90° angled

140mm, 5 1/2"	140-373-140
180mm, 7"	140-373-180

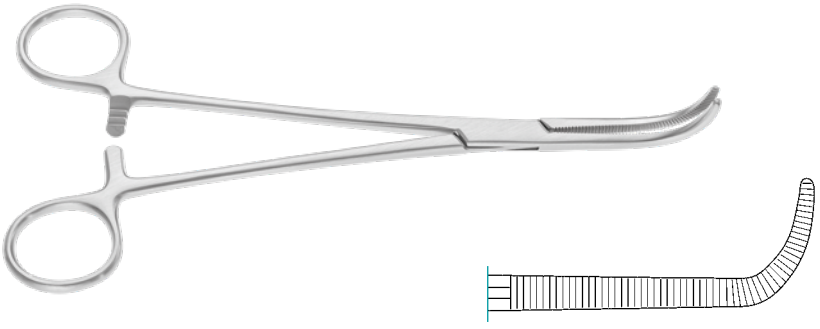


BABY MIXTER
Artery Forceps, slightly curved

140mm, 5 1/2"	140-244-140

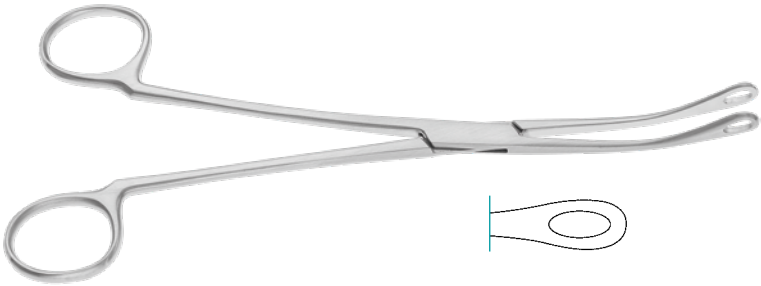
strongly curved

140mm, 5 1/2"	140-245-140



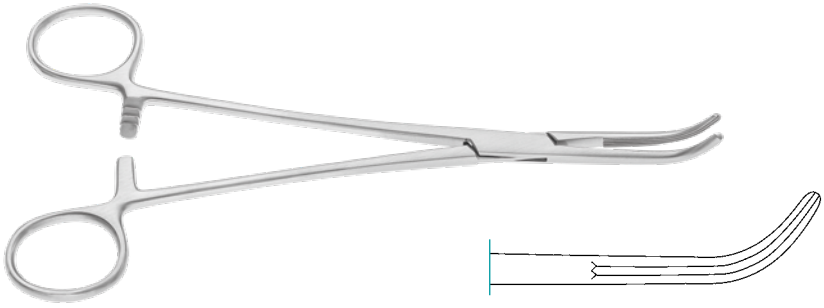
MIXTER
Forceps, fully serrated

155mm, 6 1/8"	140-423-155
190mm, 7 1/2"	140-423-190



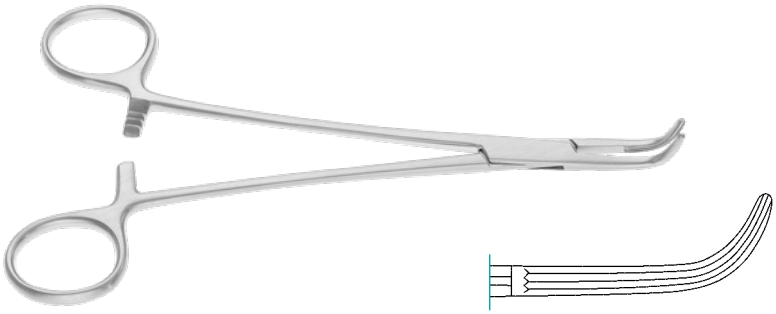
BLAKE
Gall Stone Forceps, 200mm, 8"

straight	320-117-200
curved	320-116-200



LAHEY
Gall Duct Forceps, curved, longitudinal serration

190mm, 7 1/2"	140-439-190
190mm, 7 1/2", fine tip	140-432-190
230mm, 9"	140-439-230



LOWER
Gall Duct Forceps, curved, longitudinal serration

185mm, 7 1/4"	140-437-180



CHAPUT
Organ Holding Forceps

130mm, 5 1/8"	140-134-130



TUFFIER

Organ Holding Forceps

130mm, 5 1/8"	140-135-130



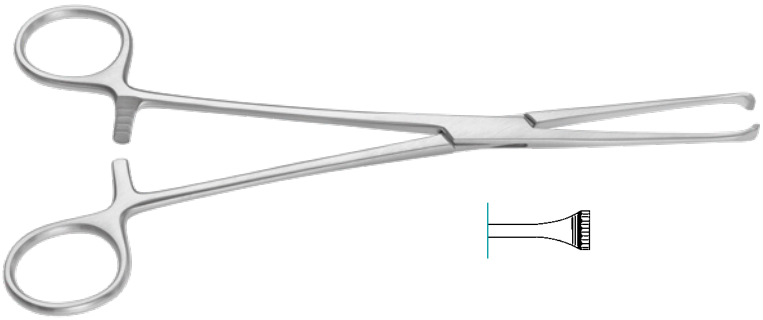
PETIT ALLIS

Tissue Forceps, 2x3 teeth

120mm, 4 3/4"	310-008-120
150mm, 6"	310-008-150

3x4 teeth

150mm, 6"	310-009-150



ALLIS

Tissue Forceps, 5mm wide, 4x5 teeth

200mm, 8"	310-031-200



BABY ALLIS

Tissue Forceps, 4x5 teeth

120mm, 4 3/4"	310-010-120
150mm, 6"	310-010-150
190mm, 7 1/2"	310-010-190



ALLIS
Tissue Forceps, 7mm wide, 5x6 teeth

150mm, 6"	310-014-150
190mm, 7 1/2"	310-014-190
220mm, 8 2/3"	310-014-220
250mm, 9 7/8"	310-014-250



ALLIS ATRAUMA
Tissue Forceps, 7.3mm wide

160mm, 6 1/4"	310-020-160
200mm, 8"	310-020-200
250mm, 9 7/8"	310-020-250



JUDD ALLIS
Tissue Forceps, 3x4 teeth, 4mm wide

150mm, 6"	310-028-150

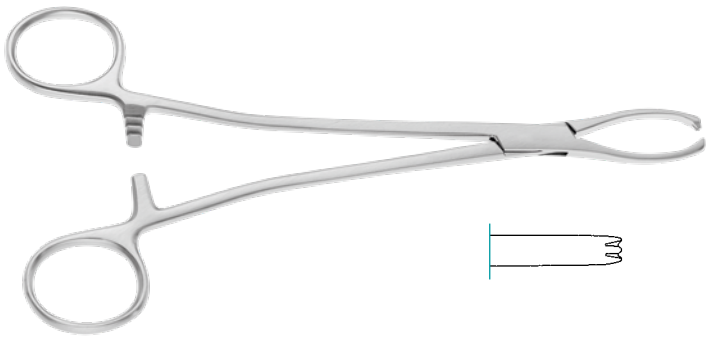
4.3mm wide

190mm, 7 1/2"	310-026-190



ALLIS
Intestinal and Tissue Grasping Forceps, atraumatic

220mm, 8 2/3"	310-020-220
300mm, 11 7/8"	310-020-300



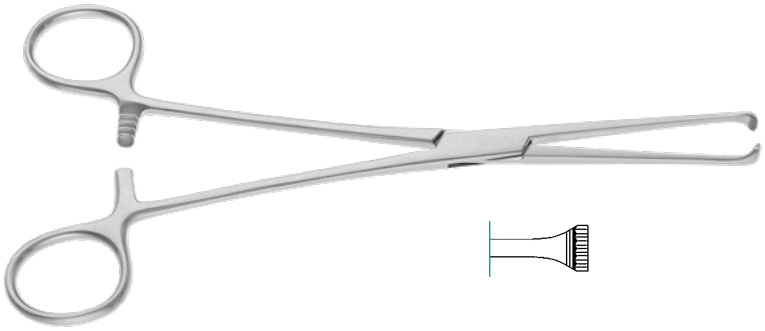
LITTLEWOOD
Tissue Forceps, 2x3 teeth

185mm, 7 1/4"	310-025-185



ALLIS ADAIR
Tissue Forceps, 9x10 teeth, 10mm wide

155mm, 6 1/8"	310-027-155



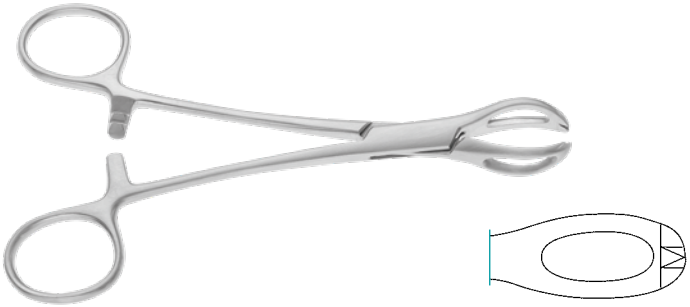
THOMS ALLIS
Tissue Forceps, 6x7 teeth, 7.25mm wide

200mm, 8"	310-030-200



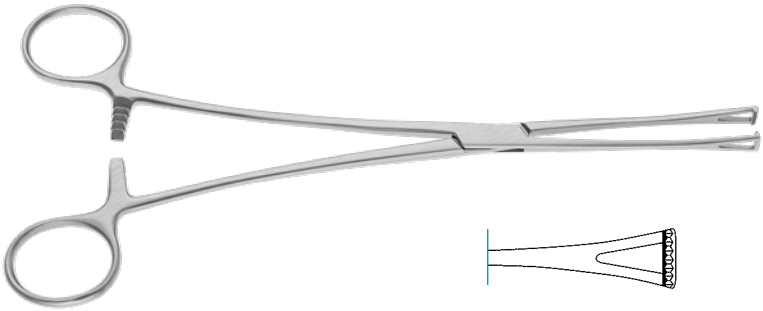
BOYS ALLIS
Tissue Grasping Forceps, 5x6 teeth, 5.2mm wide

155mm, 6 1/8"	310-029-155



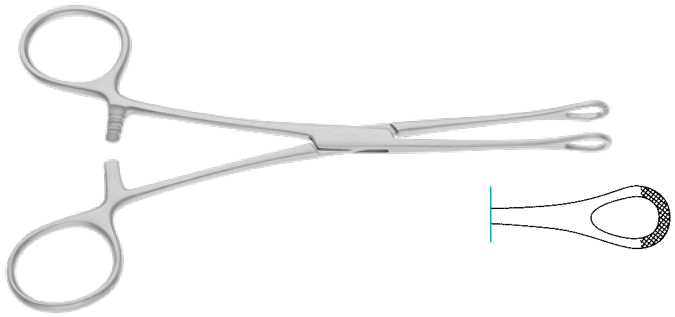
LANE
Grasping Forceps, 1x2 teeth

150mm, 6"	310-030-150
195mm, 7 3/4"	310-030-195



LOCKWOOD
Intestinal Grasping Forceps, 6mm wide

200mm, 8"	310-100-200



WILLIAMS
Intestinal Grasping Forceps, cross-serrated jaw

160mm, 6 1/4"	310-115-160



PETIT BABCOCK
Intestinal Grasping Forceps, 5mm wide

130mm, 5 1/8"	310-105-130
5.6mm wide	
150mm, 6"	310-105-150
7.5mm wide	
155mm, 6 1/8"	310-105-155



BABCOCK
Tissue Forceps, 8mm wide

160mm, 6 1/4"	310-110-160
10.5mm wide	
180mm, 7"	310-110-180
11mm wide	
200mm, 8"	310-110-200
11.8mm wide	
240mm, 9 1/2"	310-110-240
11.5mm wide	
300mm, 11 7/8"	310-110-300
12mm wide	
355mm, 14"	310-110-355



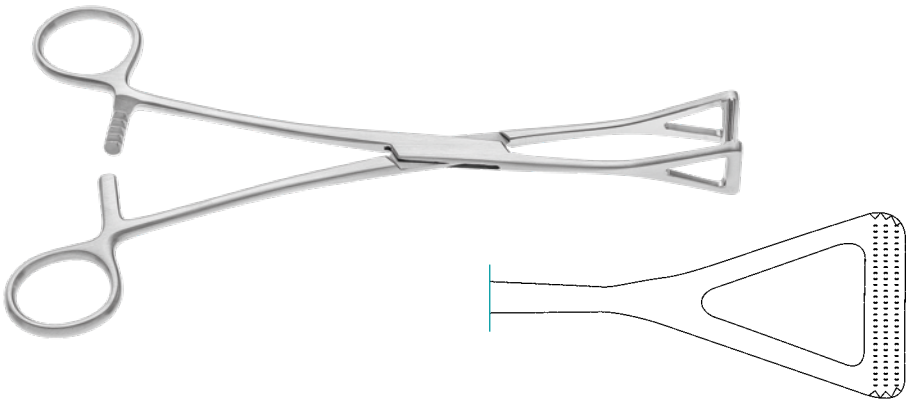
TC BABCOCK
Tissue Forceps, 8.5mm wide

160mm, 6 1/4"	310-118-160
10.5mm wide	
200mm, 8"	310-118-200



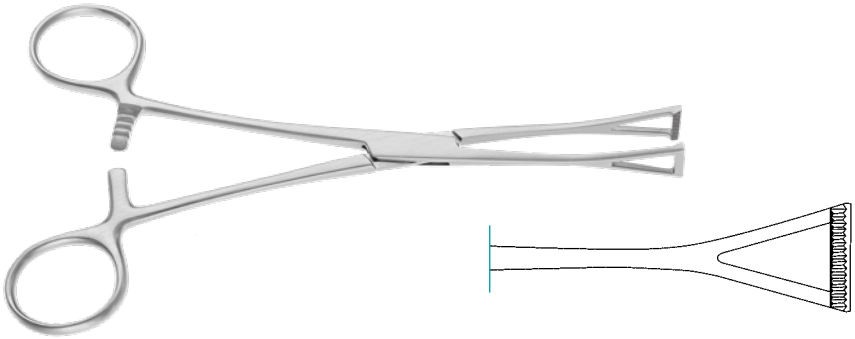
BABCOCK ATRAUMA
Tissue Forceps

160mm, 6 1/4"	310-111-160
200mm, 8"	310-111-200



COLLIN ATRAUMA
Tissue Forceps

195mm, 7 3/4"	310-295-195
230mm, 9"	310-295-230



DUVAL
Tissue Forceps, 16mm wide

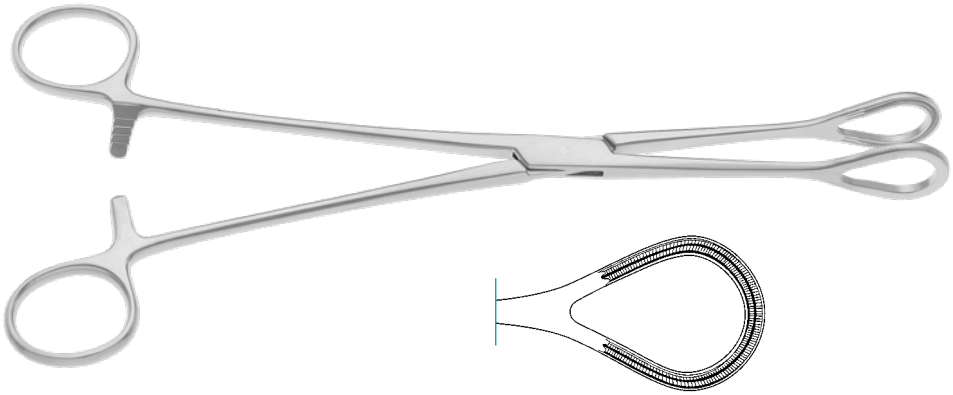
180mm, 7"	310-112-180
200mm, 8"	310-112-200

26mm wide

200mm, 8"	310-114-200
230mm, 9"	310-114-230

TC DUVAL

200mm, 8"	310-113-200



DEBAKEY ATRAUMA
Intestinal and Organ Grasping Forceps, atraumatic serrations, small ring

250mm, 9 7/8"	140-220-250

large ring

260mm, 10 1/4"	140-220-260



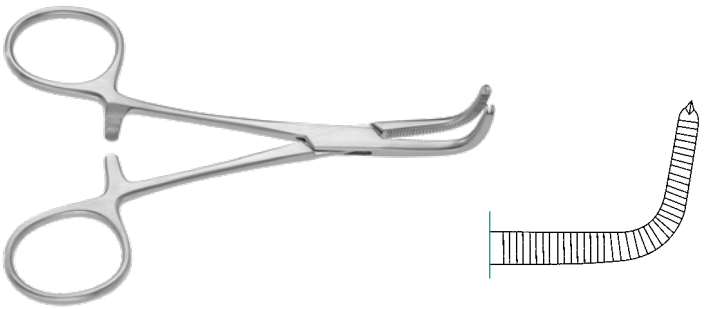
Tobacco Pouch
Colon Rectal Clamp

280mm, 11"	310-500-280



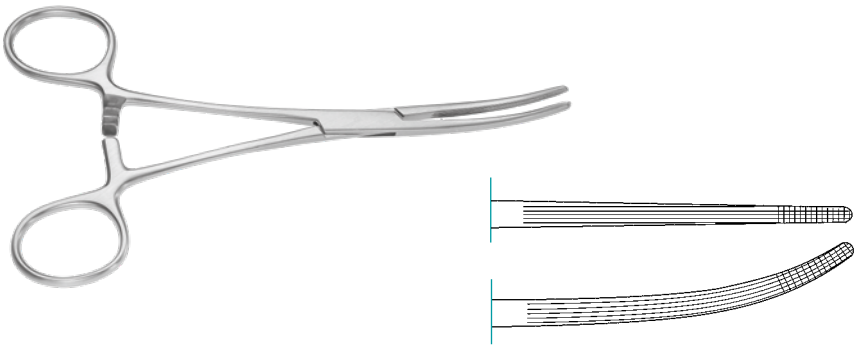
BENSON
Polyrus Spreader

155mm, 6 1/8"	310-116-140



KLEINSCHMIDT
Appendectomy Clamp, 90° angled jaw

130mm, 5 1/8"	140-397-130

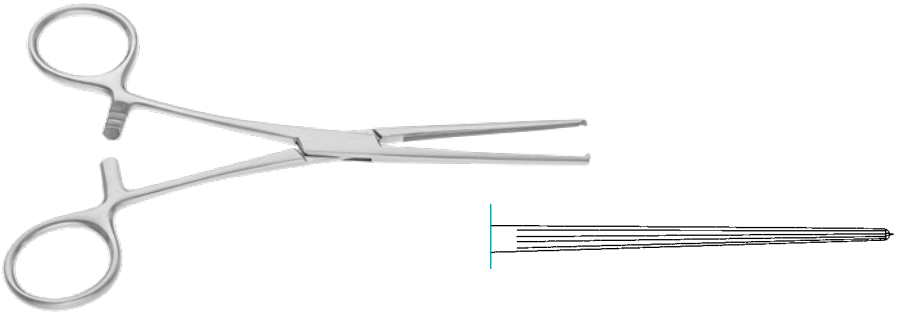


BAINBRIDGE
longitudinal serrations, cross-serrated tip,
straight

150mm, 6"	140-442-150
185mm, 7 1/4"	140-442-185

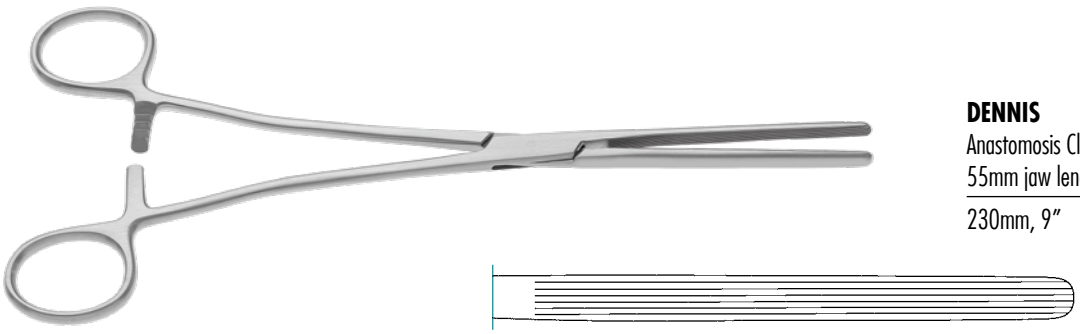
curved

150mm, 6"	140-443-150
185mm, 7 1/4"	140-443-185



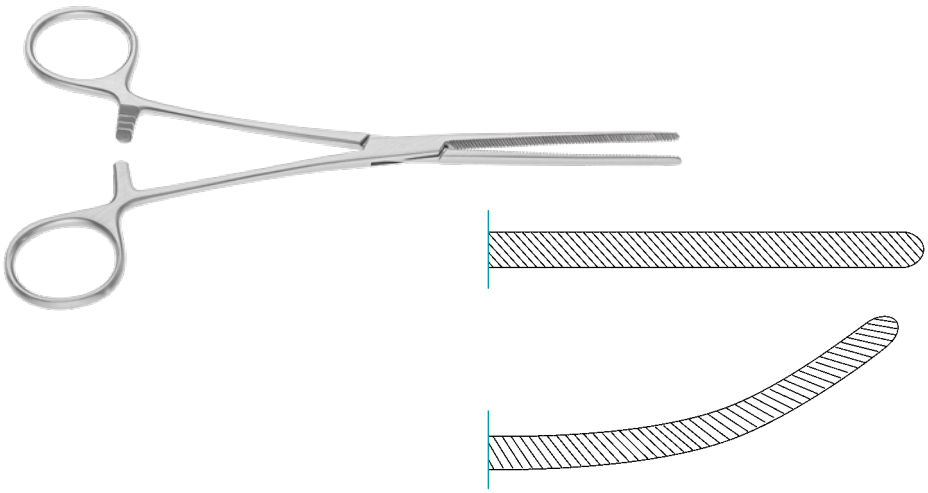
ALLEN
Intestinal Clamp, longitudinal serrations,
for children, 1x2 teeth

155mm, 6 1/8"	310-116-155
200mm, 8"	310-116-200
230mm, 9"	310-116-230



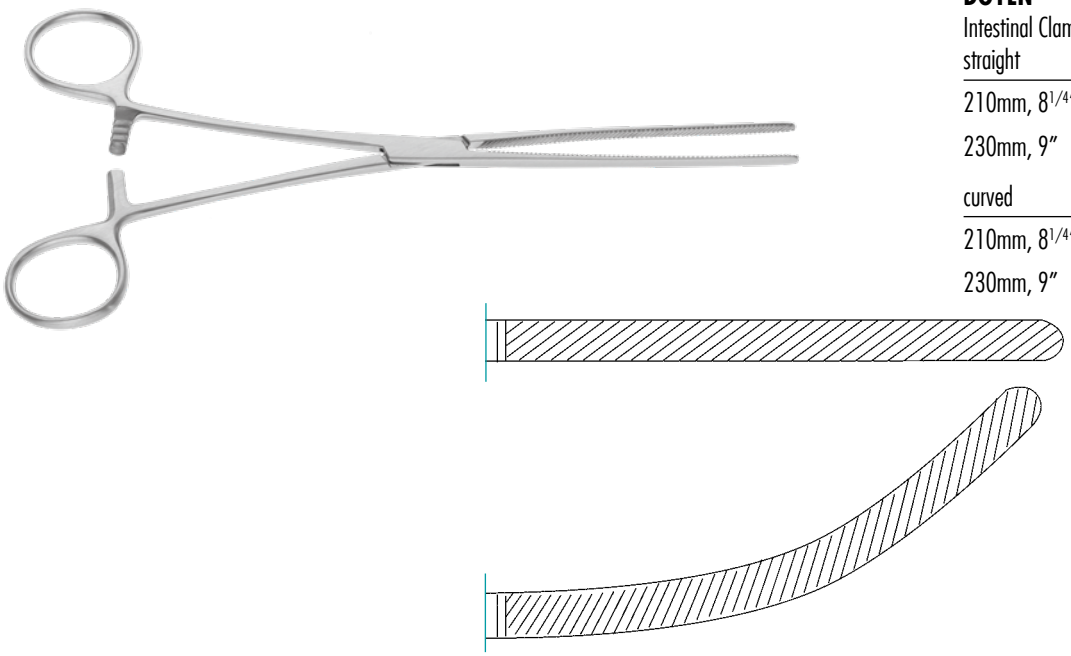
DENNIS
Anastomosis Clamp, longitudinal serrations,
55mm jaw length

230mm, 9"	310-117-230



BABY DOYEN
Intestinal Clamp, diagonal serrations, elastic
180mm, 7″

straight	310-290-180
curved	310-291-180

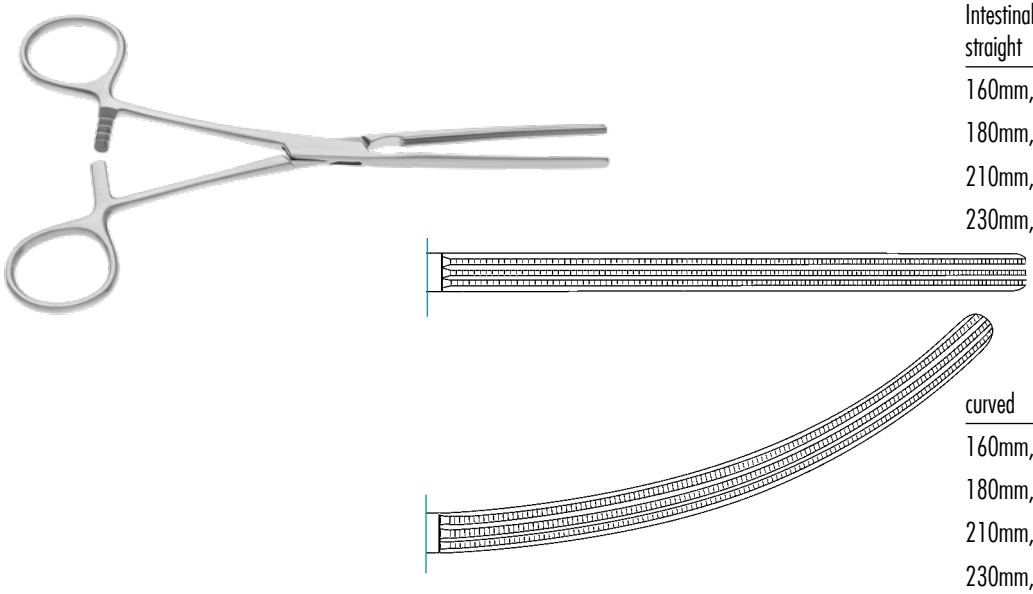


DOYEN
Intestinal Clamp, diagonal serrations, elastic, straight

210mm, 8 1/4″	310-290-210
230mm, 9″	310-290-230

curved

210mm, 8 1/4″	310-291-210
230mm, 9″	310-291-230

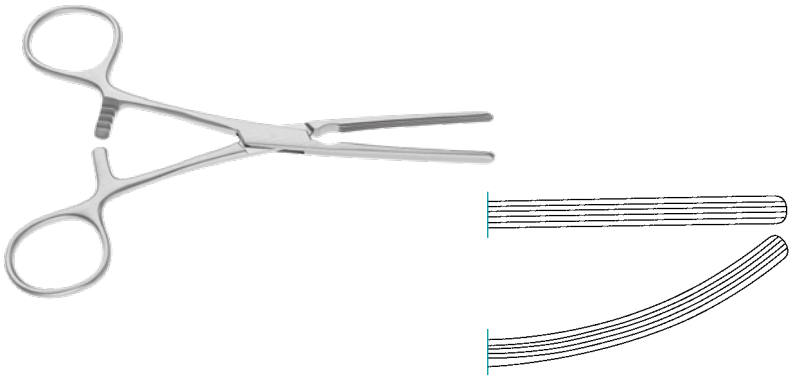


DOYEN ATRAUMATIC
Intestinal Clamp, atraumatic elastic serrations, straight

160mm, 6 1/4″	310-550-160
180mm, 7″	310-550-180
210mm, 8 1/4″	310-550-210
230mm, 9″	310-550-230

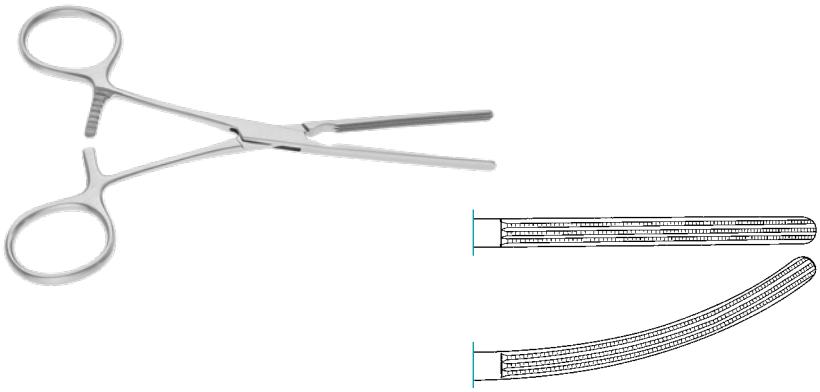
curved

160mm, 6 1/4″	310-551-160
180mm, 7″	310-551-180
210mm, 8 1/4″	310-551-210
230mm, 9″	310-551-230



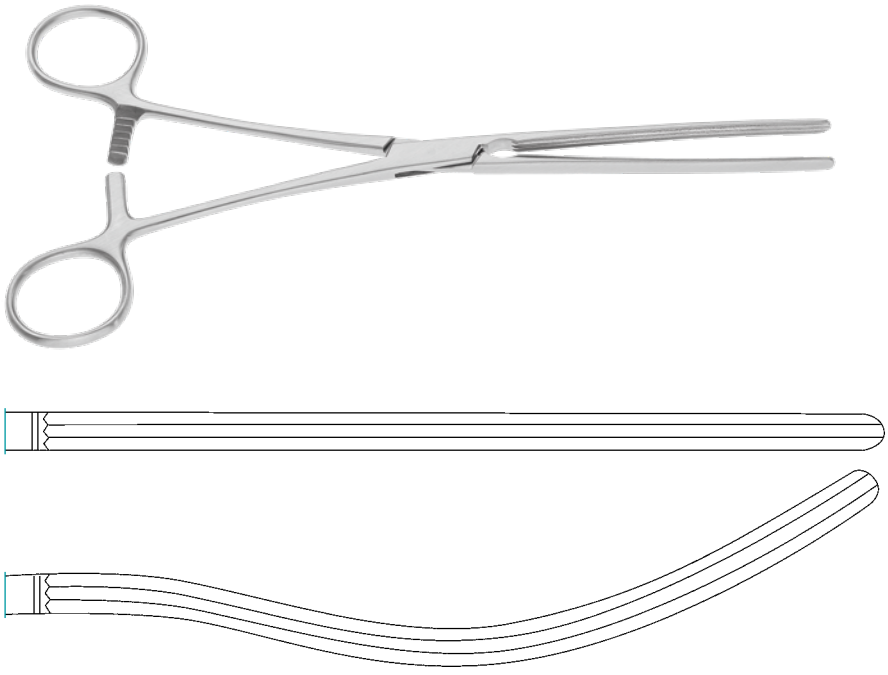
BABY KOCHER
Intestinal Clamp, longitudinal serrations
130mm, 5 1/8"

straight	310-124-130
curved	310-125-130



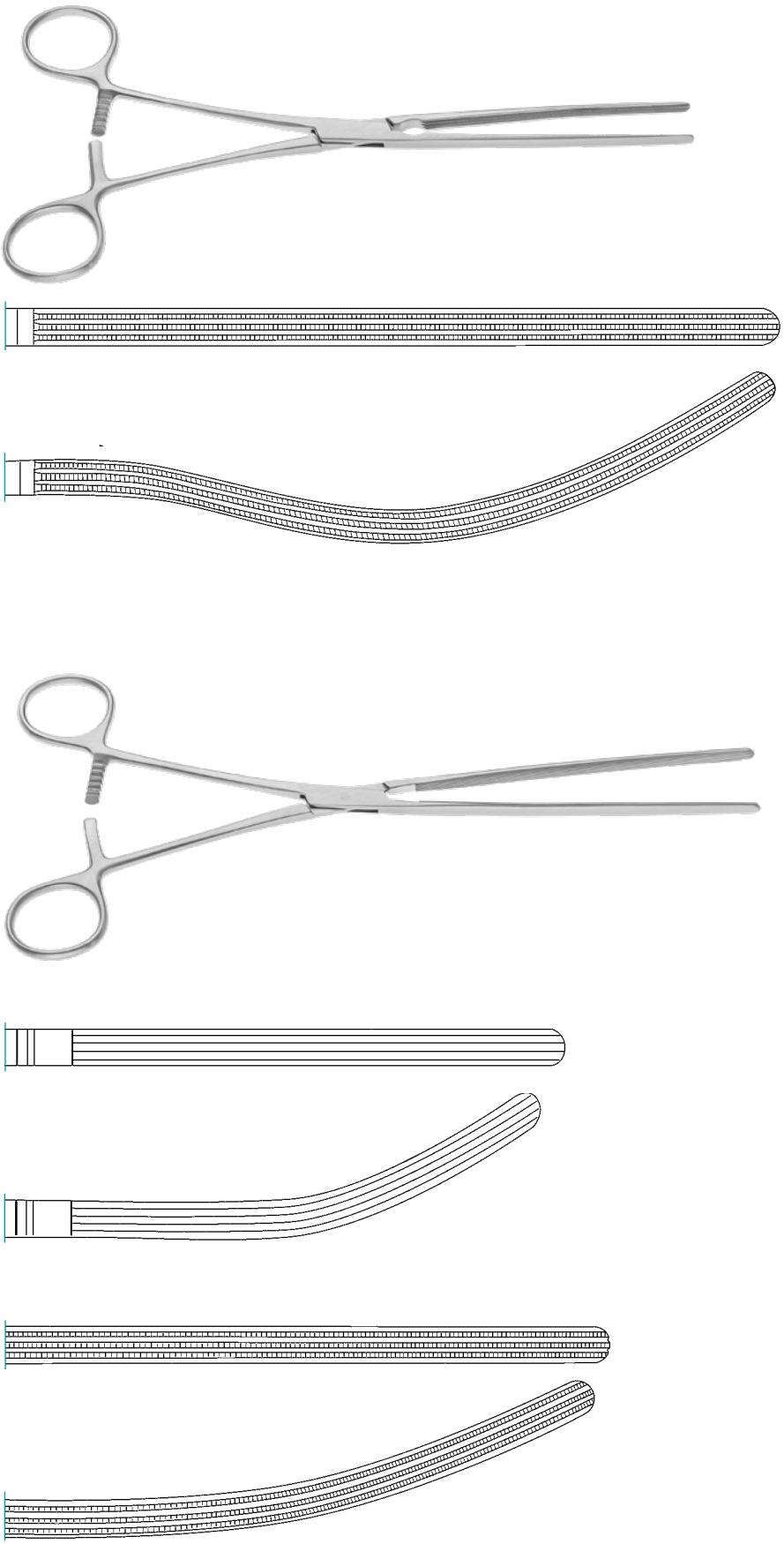
BABY KOCHER
Intestinal Clamp, atraumatic elastic serrations,
130mm, 5 1/8"

straight	310-200-130
curved	310-201-130



KOCHER
Intestinal Clamp, longitudinal serrations, elastic,
straight

220mm, 8 2/3"	310-124-220
250mm, 9 7/8"	310-124-250
280mm, 11"	310-124-280
curved	
220mm, 8 2/3"	310-125-220
250mm, 9 7/8"	310-125-250
280mm, 11"	310-125-280



KOCHER ATRAUMATIC

Intestinal Clamp, atraumatic, elastic serrations, straight

220mm, 8 2/3"	310-126-220
250mm, 9 7/8"	310-126-250
280mm, 11"	310-126-280

curved

220mm, 8 2/3"	310-127-220
250mm, 9 7/8"	310-127-250
280mm, 11"	310-127-280

MAYO ROBSON

Intestinal Clamp, longitudinal serrations straight

210mm, 8 1/4"	310-130-210
230mm, 9"	310-130-230
250mm, 9 7/8"	310-130-250

curved

210mm, 8 1/4"	310-131-210
230mm, 9"	310-131-230
250mm, 9 7/8"	310-131-250

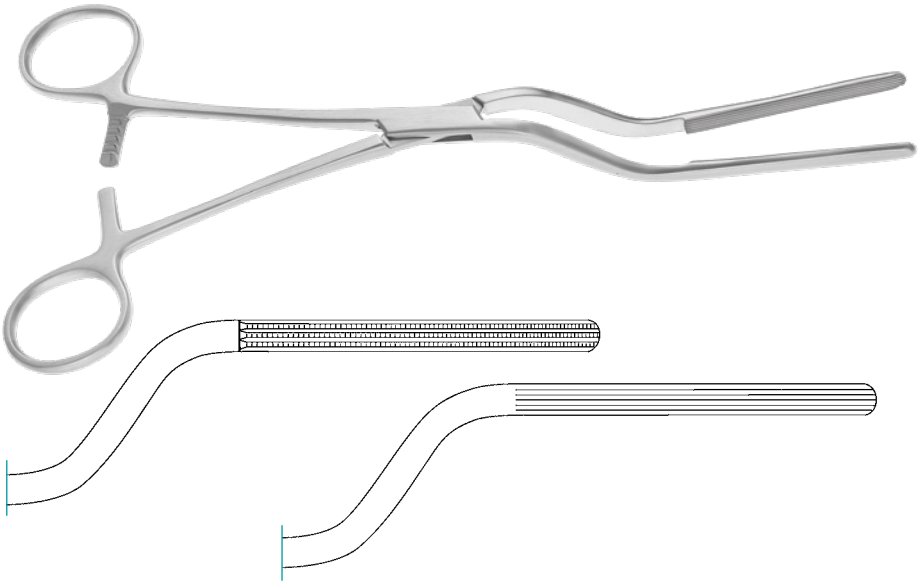
MAYO ROBSON ATRAUMATIC

Intestinal Clamp, atraumatic, elastic serrations straight

210mm, 8 1/4"	310-140-210
230mm, 9"	310-140-230
250mm, 9 7/8"	310-140-250

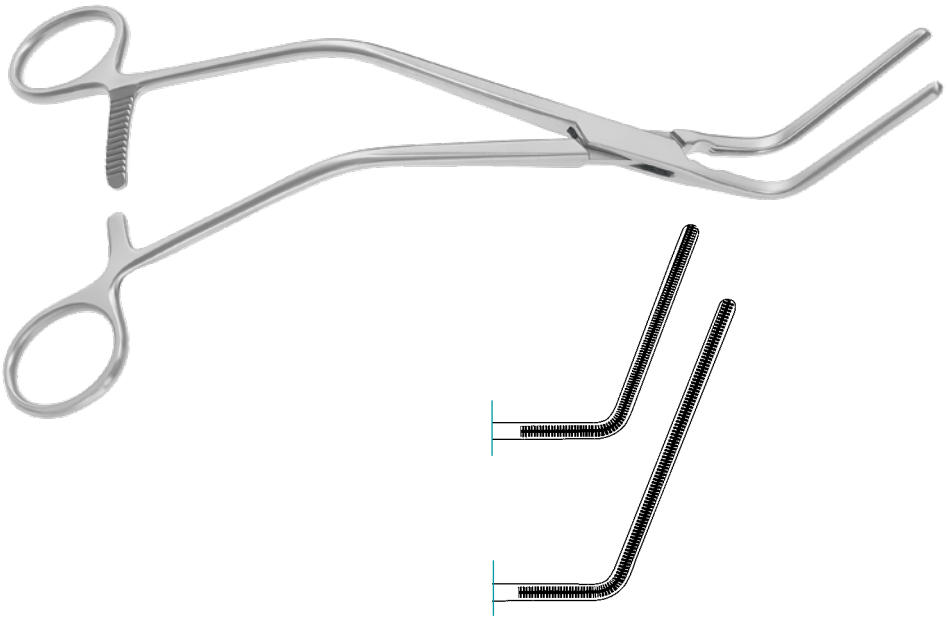
curved

210mm, 8 1/4"	310-141-210
230mm, 9"	310-141-230
250mm, 9 7/8"	310-141-250



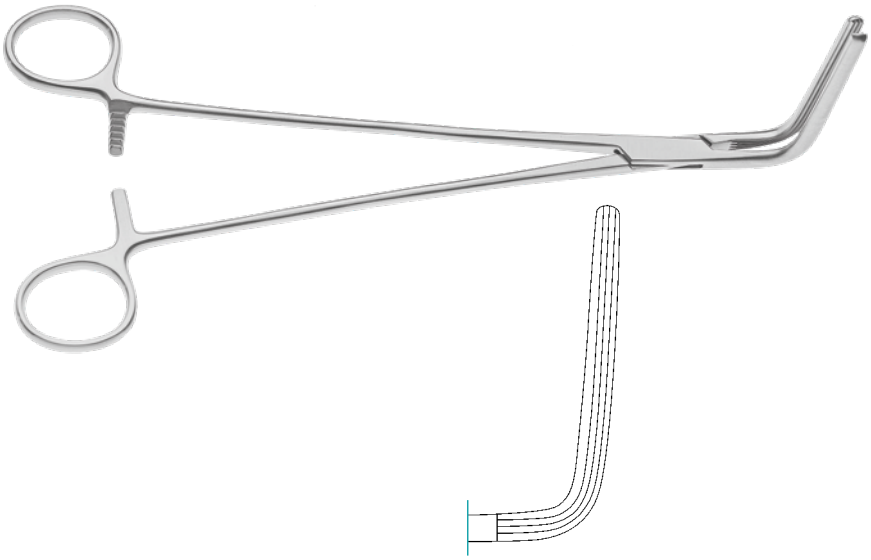
BRUNNER
Intestinal Clamp, bayonet shaped, 240mm, 9 1/2"

atraumatic serrations	310-151-240
longitudinal serrations	310-150-240



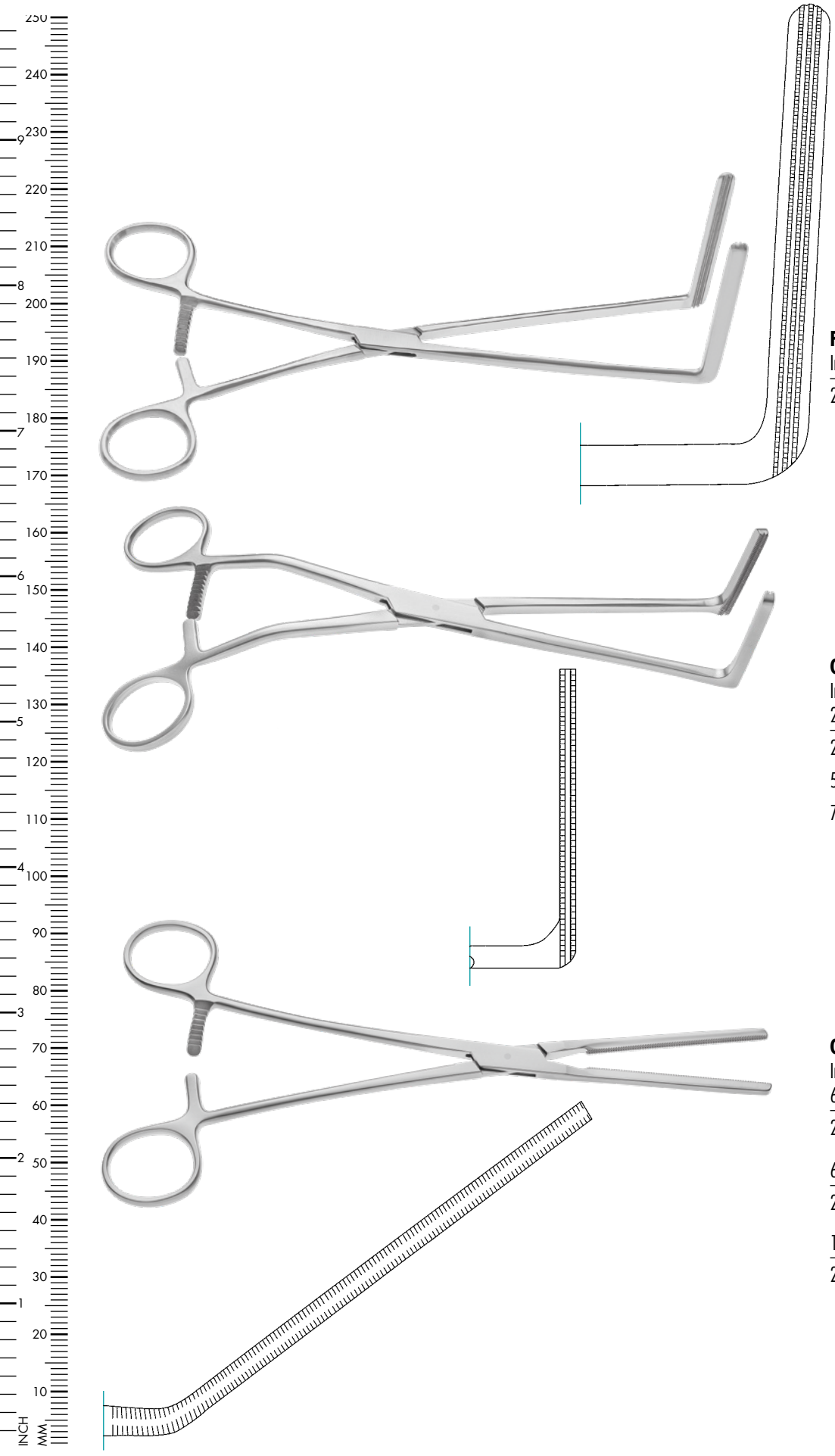
HAYES ATRAUMATIC
Intestinal Clamp, 60mm jaw

270mm, 10 2/3"	310-310-260
85mm jaw	
280mm, 11"	310-310-280



ZUBROD
Intestinal Clamp, longitudinal serrations, 60mm jaw, 90° angled

230mm, 9"	310-710-230



FEHLAND
Intestinal Clamp, atraumatic serrations

250mm, 9 7/8"	310-584-240

GLASSMAN
Intestinal Clamp, atraumatic serrations, 235mm, 9 1/4"

25mm jaw	310-199-235
50mm jaw	310-201-235
75mm jaw	310-203-235

GLASSMAN
Intestinal Clamp, atraumatic serrations, 65mm jaw length, straight

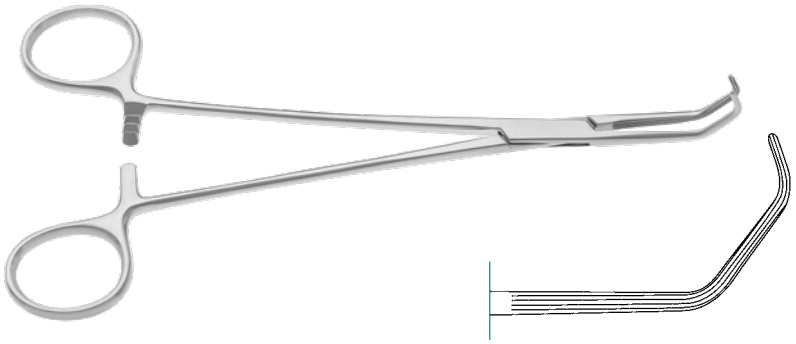
235mm, 9 1/4"	310-200-235

65mm jaw length, 25° angled

229mm, 9"	310-200-229

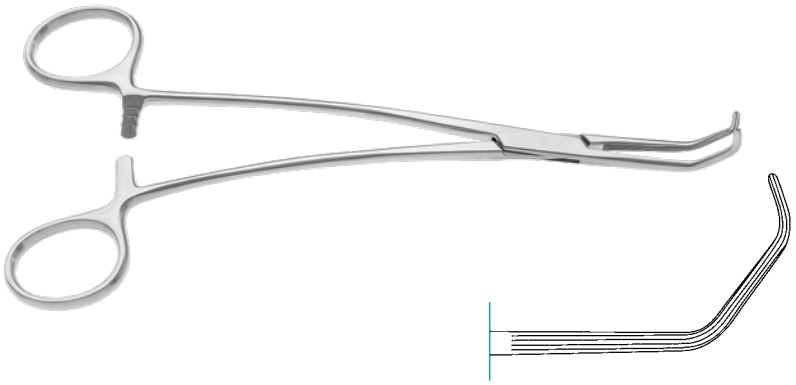
115mm jaw length, 45° angled

280mm, 11"	310-201-290



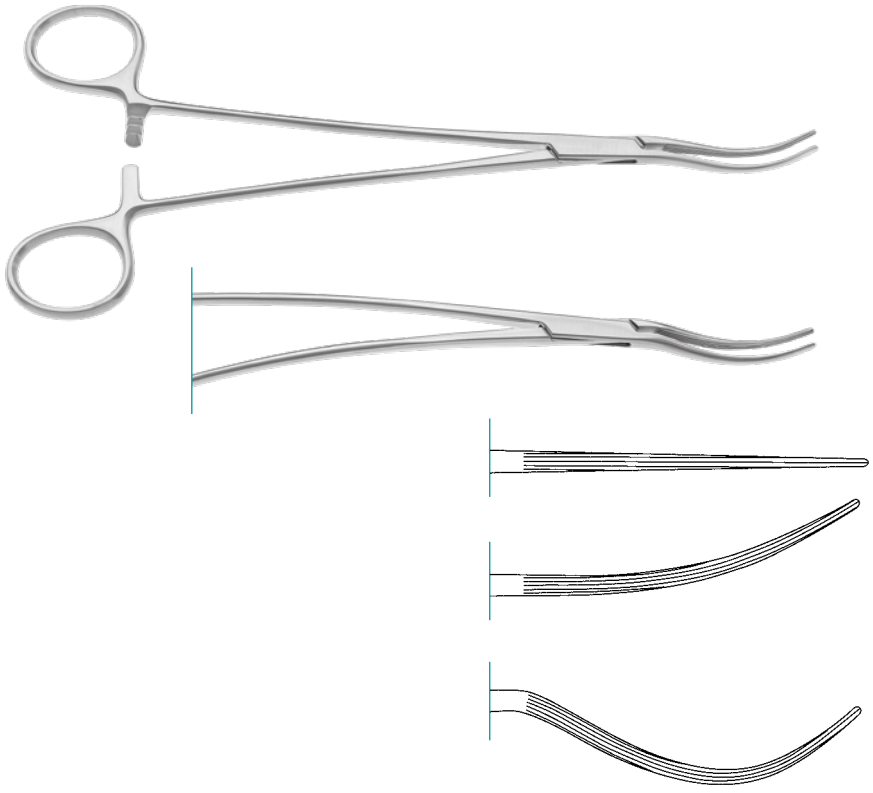
HAUSMANN
Intestinal Clamp, straight shanks, 1.9mm jaw width, 190mm, 7 1/2"

22 x 8mm	310-233-190
195mm, 7 3/4"	
30 x 8mm	310-233-195
205mm, 8 1/8"	
33 x 8mm	310-233-205
38 x 8mm	310-243-205



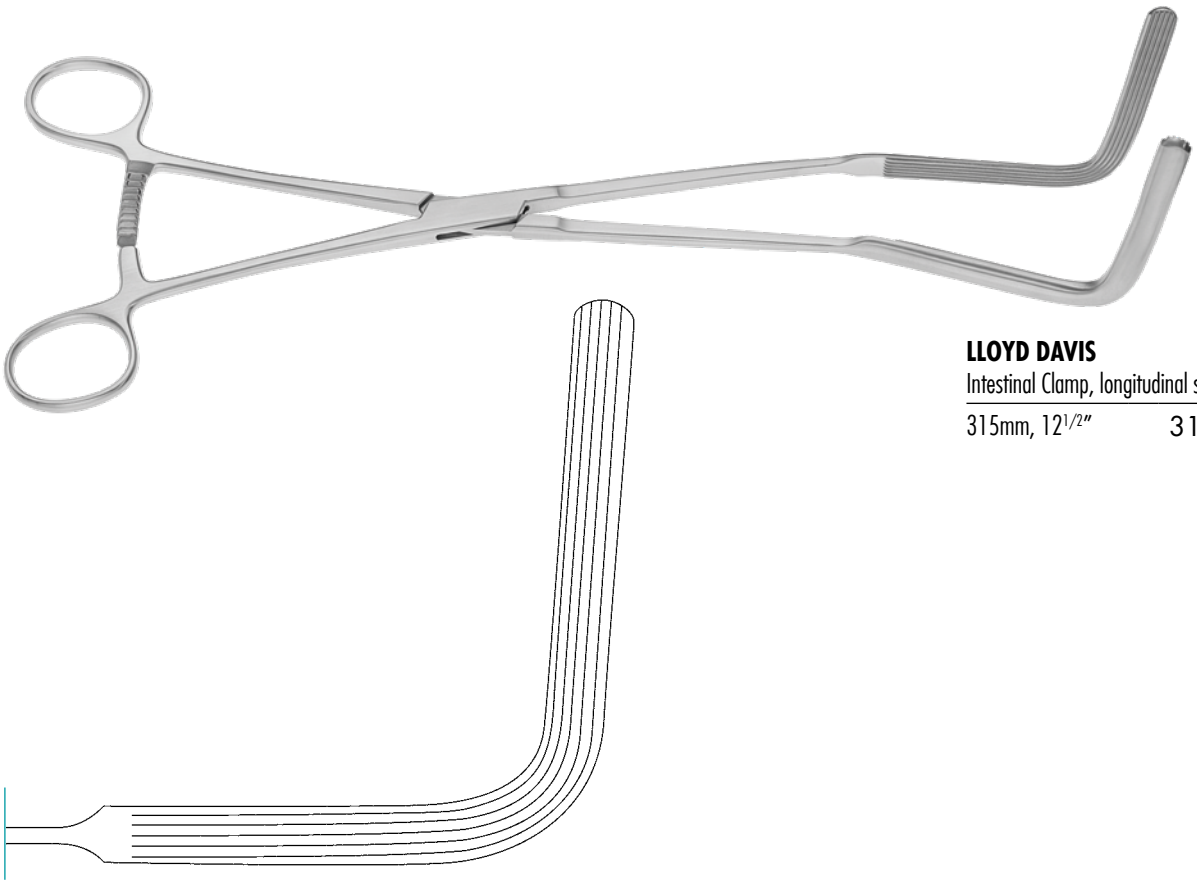
HAUSMANN
Intestinal Clamp, angled shanks, 1.9mm jaw width, 190mm, 7 1/2"

22 x 8mm	310-231-190
195mm, 7 3/4"	
30 x 8mm	310-231-195
205mm, 8 1/8"	
33 x 8mm	310-231-205
38 x 8mm	310-241-205

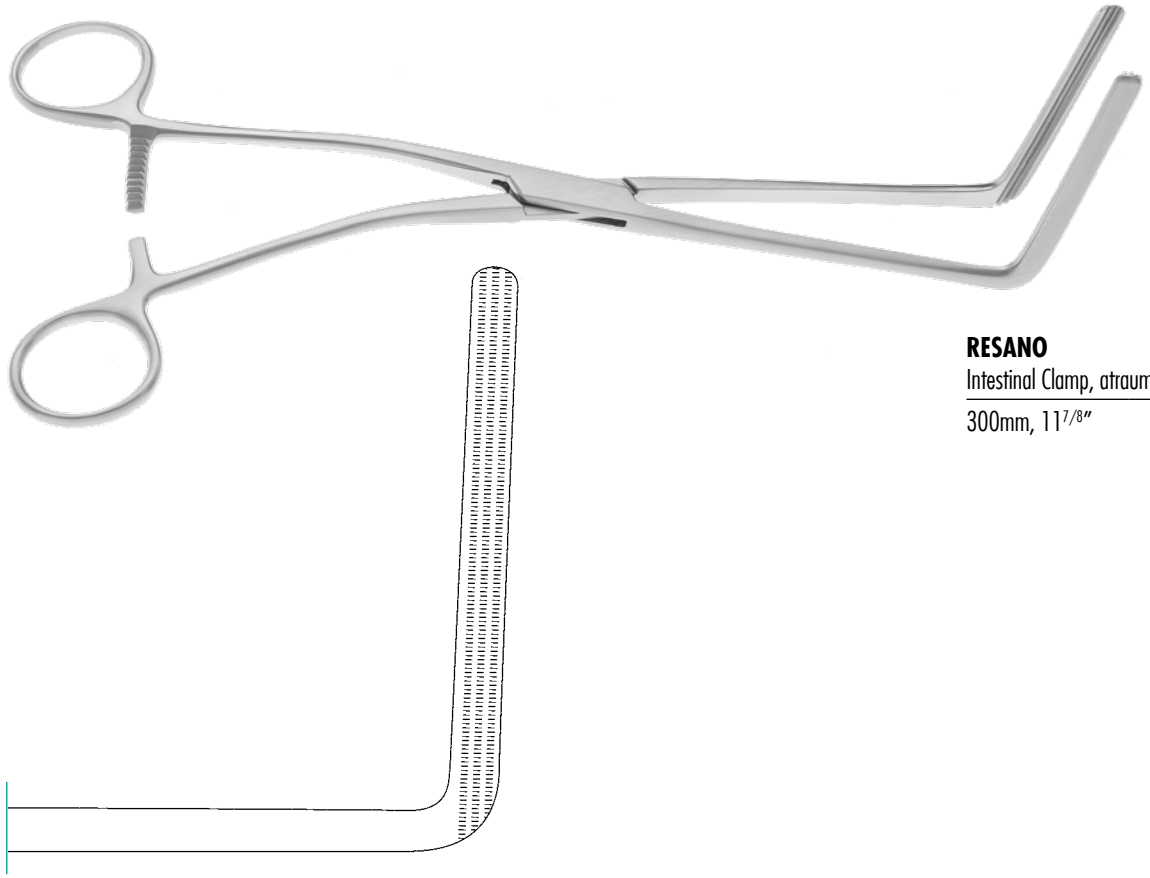


HAUSMANN
Intestinal Clamp, straight shanks, 1.9mm jaw width, 215mm, 8 1/2"

straight jaw	310-230-215
curved jaw	310-233-215
strongly curved jaw	310-234-215
angled shanks, 205mm, 8 1/8"	
straight jaw	310-250-205
angled shanks, 215mm, 8 1/2"	
curved jaw	310-253-215
strongly curved jaw	310-254-215



LLOYD DAVIS
Intestinal Clamp, longitudinal serrations
315mm, 12 1/2" 310-154-315



RESANO
Intestinal Clamp, atraumatic serrations
300mm, 11 7/8" 310-580-300



DEMARTEL WOLFSON
Anastomosis Clamp
Set of 3 clamps

50mm	310-400-005
70mm	310-400-007
100mm	310-400-010



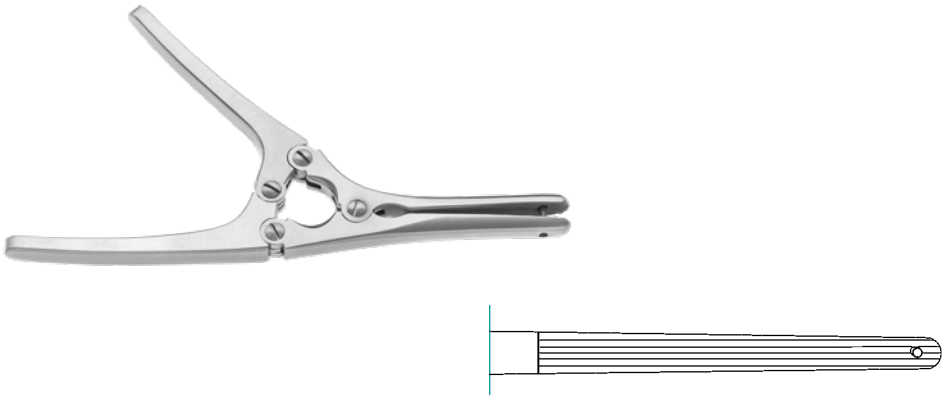
DEMARTEL WOLFSON
Clamp Holder

85mm	310-410-085
225mm	310-410-225



DEMARTEL WOLFSON
Closing Forceps

260mm	310-412-260



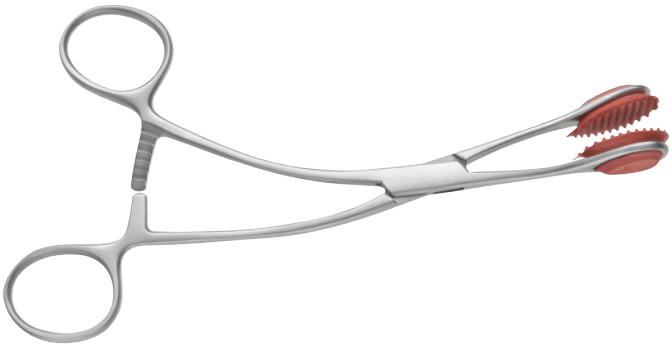
PAYR BABY
Pylorus Clamp, light model for children,
with pin, 57mm jaw length

150mm, 6"	310-032-150



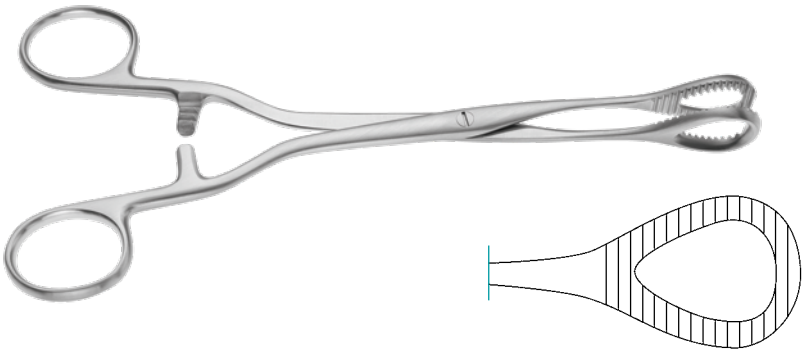
PAYR
Pylorus Clamp, with pin

210mm, 8 1/4" 65mm jaw length	310-033-210
290mm, 11 1/2" 105mm jaw length	310-033-290
315mm, 12 1/2" 146mm jaw length	310-033-315



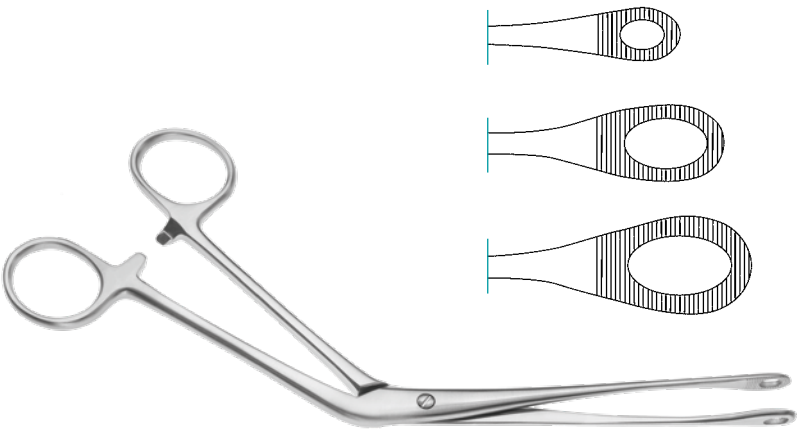
YOUNG
Tongue Holding Forceps

170mm, 6 2/3"	430-467-170



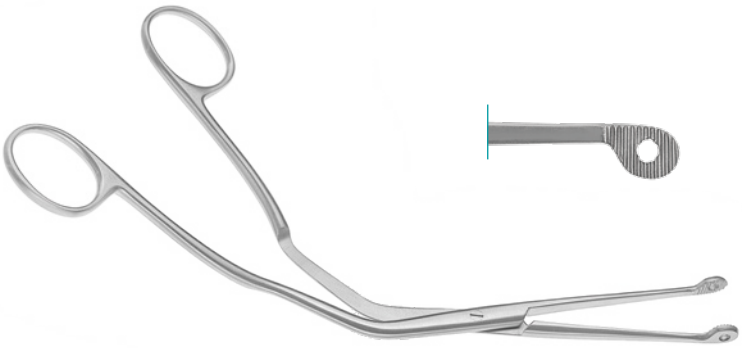
HEYWOOD SMITH
Hemorrhoidal Forceps
fenestrated serrated jaws

200mm, 8"	340-150-200
210mm, 8 1/4"	340-160-210



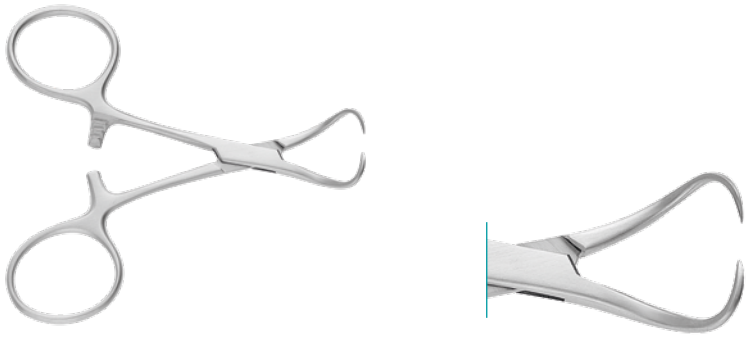
TOENNIS
Tumor Grasping Forceps

Fig. 1	250-066-341
Fig. 2	250-066-342
Fig. 3	250-066-343



MAGILL
Catheter Introducing Forceps,
screw-joint, with serrated jaws

170mm, 6 2/3"	100-010-170
200mm, 8"	100-010-200
250mm, 9 7/8"	100-010-250



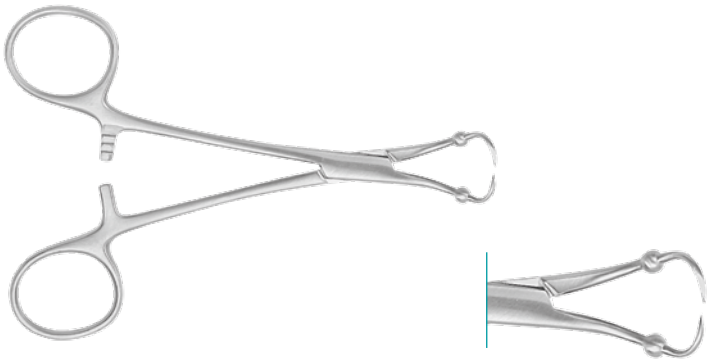
BACKHAUS

Towel Forceps

80mm, 3 1/4"	140-573-080
90mm, 3 1/2"	140-573-090
110mm, 4 1/3"	140-573-110
130mm, 5 1/8"	140-573-130
150mm, 6"	140-573-150

with clip for tubing or cable fixation

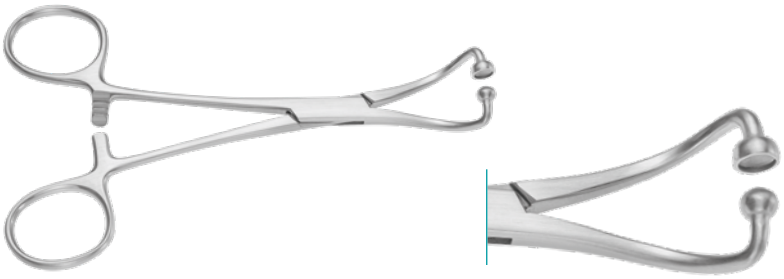
110mm, 4 1/3"	140-575-110



ROEDER

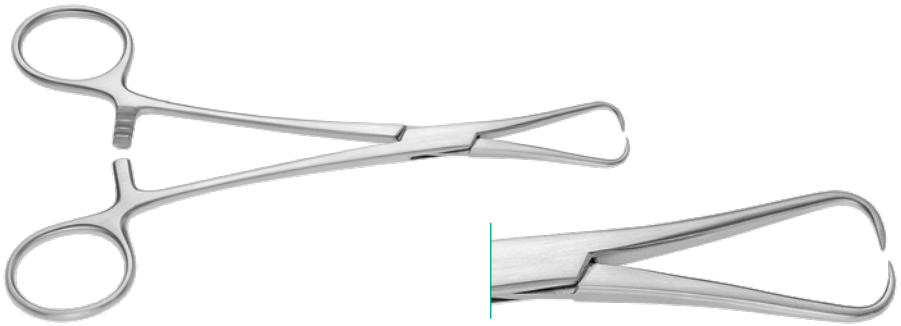
Towel Forceps

130mm, 5 1/8"	140-579-130



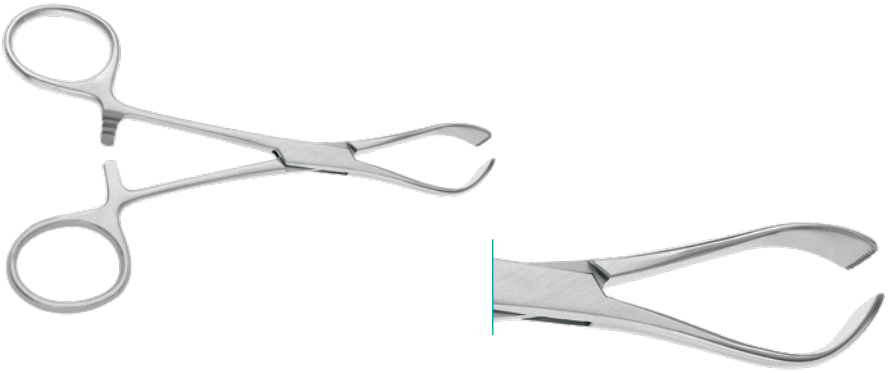
Ball & Socket Towel Forceps

110mm, 4 1/3"	140-580-115
130mm, 5 1/8"	140-580-130



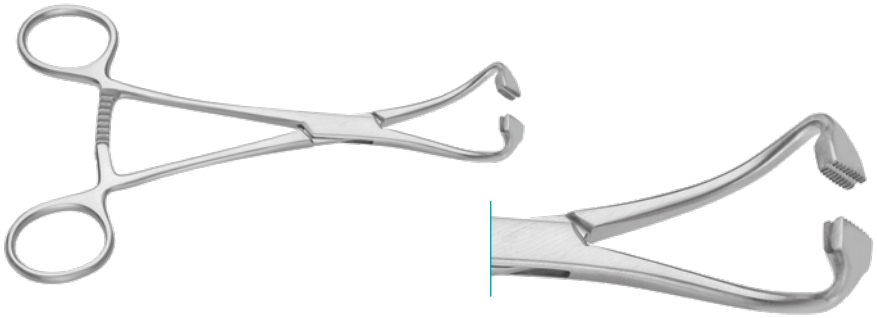
BERNHARD
Towel Forceps

165mm, 6 1/2"	140-579-165



LORNA
Towel Forceps

100mm, 4"	140-578-100
130mm, 5 1/8"	140-578-130



PEERS
Towel Forceps, non-perforating

145mm, 5 3/4"	140-595-145





Non-Perforating Towel Forceps

100mm, 4"	140-597-100
135mm, 5 1/3"	140-597-135

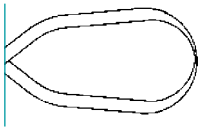




JONES
Towel Clip

60mm, 2 1/3"	140-561-050
90mm, 3 1/2"	140-561-090





SCHAEDEL
Towel Clip

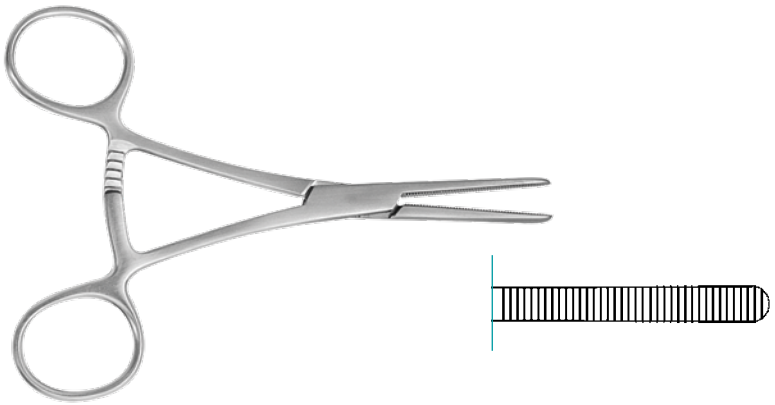
90mm, 3 1/2"	140-559-090





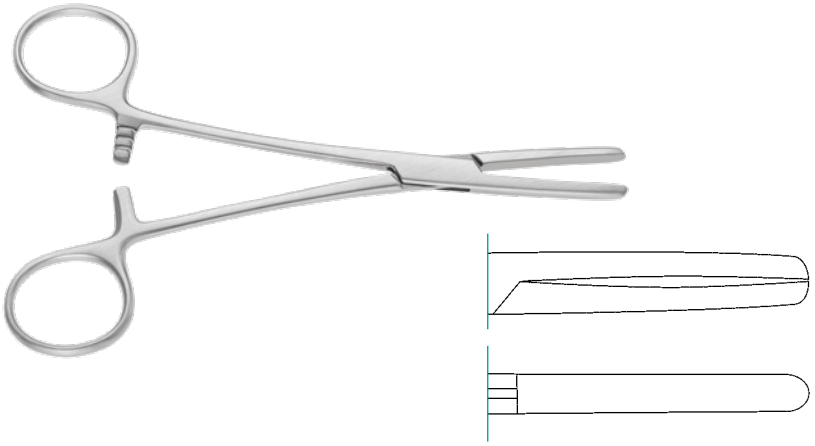
TOHOKU
Towel Clamp

100mm, 4"	140-590-100
130mm, 5 1/8"	140-590-130



Tubing Clamp with extra long ratchet

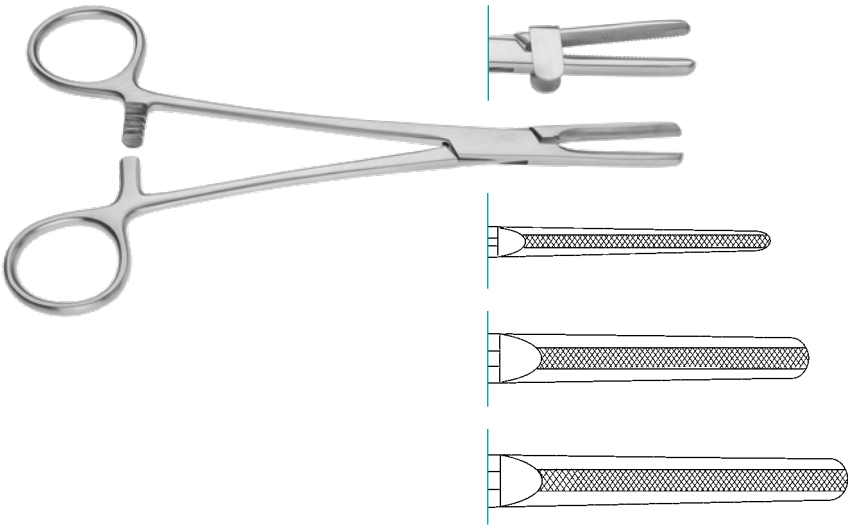
145mm, 5 3/4"	140-600-145



PRESBYTERIAN HOSPITAL

Tubing Clamp

165mm, 6 1/2"	140-601-165
180mm, 7"	140-601-180
200mm, 8"	140-601-200



VORSE

Tubing Clamp, serrated jaws

150mm, 6"	140-603-150
180mm, 7"	140-603-180
200mm, 8"	140-603-200

with safety guard

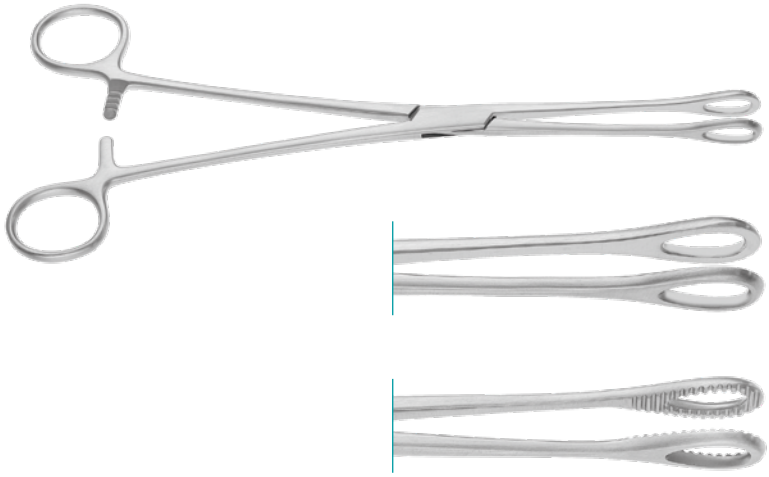
150mm, 6"	140-605-150
180mm, 7"	140-605-180
200mm, 8"	140-605-200



BROMPTON

Tubing Clamp

165mm, 6 1/2"	140-600-165



FOERSTER

Sponge Forceps, smooth, straight

180mm, 7"	150-050-180
200mm, 8"	150-050-200
250mm, 9 7/8"	150-050-250

smooth, curved

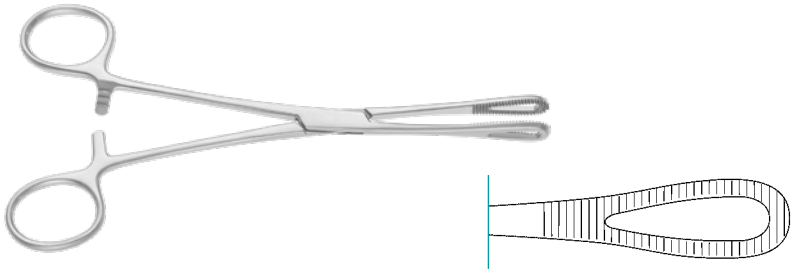
180mm, 7"	150-053-180
200mm, 8"	150-053-200
250mm, 9 7/8"	150-053-250

serrated, straight

180mm, 7"	150-052-180
200mm, 8"	150-052-200
250mm, 9 7/8"	150-052-250
355mm, 14"	150-052-355
410mm, 16"	150-052-410

serrated, curved

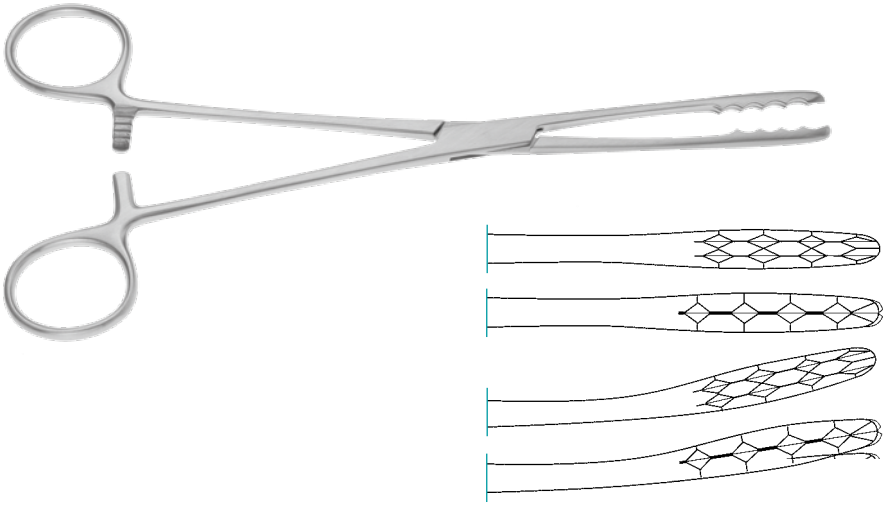
180mm, 7"	150-055-180
200mm, 8"	150-055-200
250mm, 9 7/8"	150-055-250



RAMPLEY

Sponge Forceps, straight, serrated

180mm, 7"	150-070-180
250mm, 9 7/8"	150-070-250



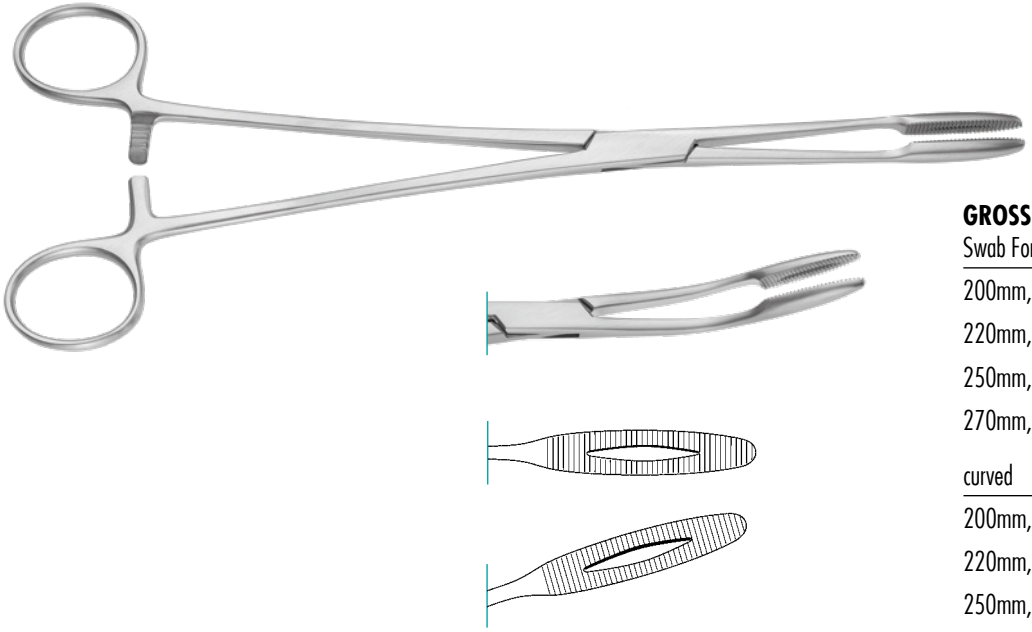
ULRICH

Swab Forceps, straight

220mm, 8 2/3"	150-010-220
250mm, 9 7/8"	150-010-250
270mm, 10 2/3"	150-010-270

curved

220mm, 8 2/3"	150-011-220
250mm, 9 7/8"	150-011-250
270mm, 10 2/3"	150-011-270

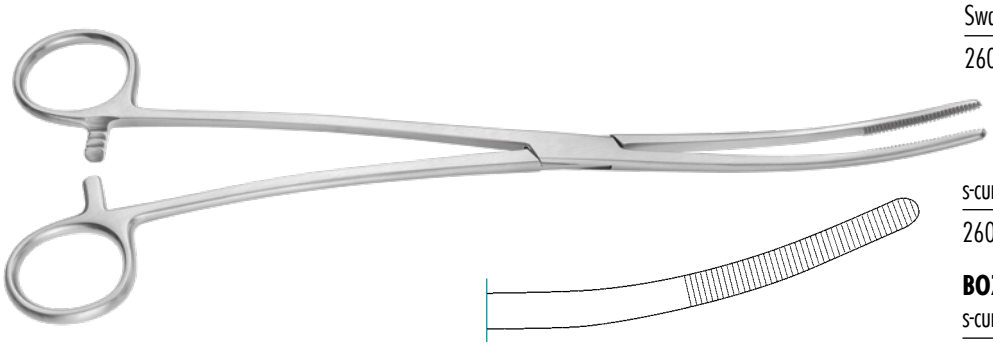


GROSS MAIER
Swab Forceps, serrated, straight

200mm, 8"	150-030-200
220mm, 8 2/3"	150-030-220
250mm, 9 7/8"	150-030-250
270mm, 10 2/3"	150-030-270

curved

200mm, 8"	150-031-200
220mm, 8 2/3"	150-031-220
250mm, 9 7/8"	150-031-250
270mm, 10 2/3"	150-031-270



BOZEMANN
Swab Forceps, serrated, straight

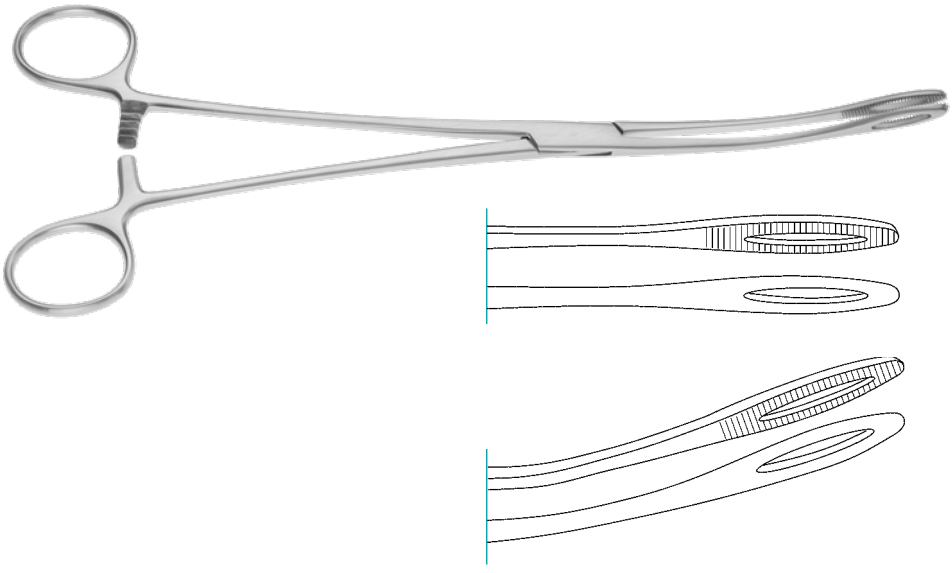
260mm, 10 1/4"	150-040-260

s-curved

260mm, 10 1/4"	150-041-260

BOZEMANN DOUGLAS
s-curved, one large ring

260mm, 10 1/4"	150-043-260

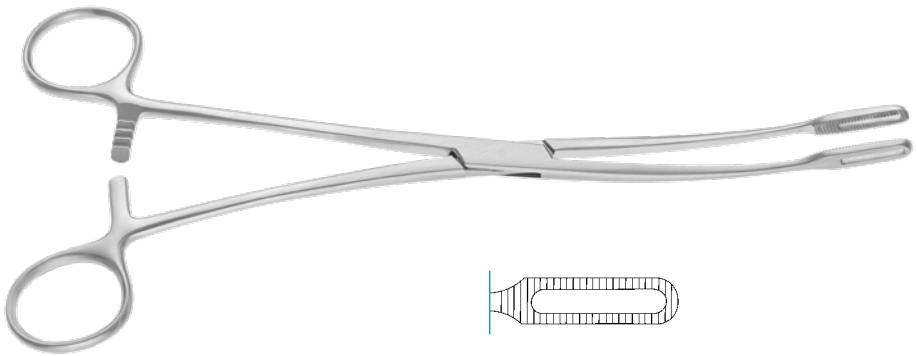


FOERSTER BONNEY
Swab Forceps, serrated, narrow, straight

250mm, 9 7/8"	150-060-250

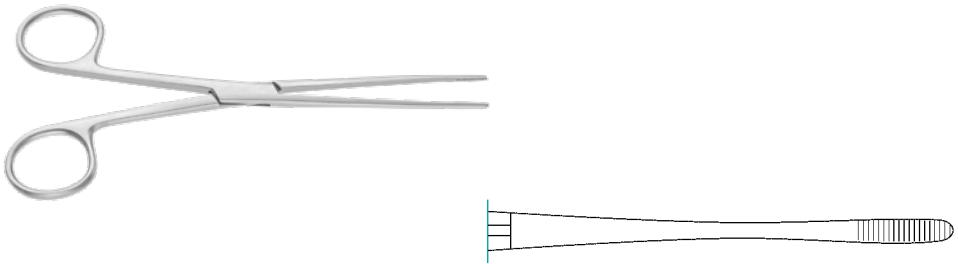
curved

250mm, 9 7/8"	150-061-250



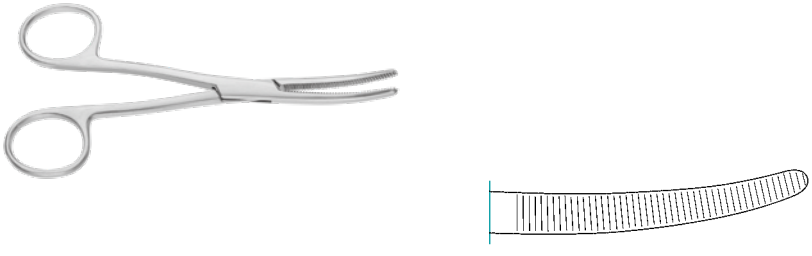
FLETCHER
Sponge Forceps, 240mm, 9 1/2"

straight	150-046-240
s-curved	150-047-240



LISTER
Dressing Forceps

130mm, 5 1/8"	150-080-130
160mm, 6 1/4"	150-080-160
180mm, 7"	150-080-180



BRYANT
Dressing Forceps

130mm, 5 1/8"	150-035-130

NEEDLE HOLDERS

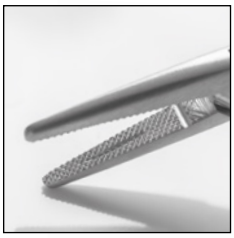


Needle Holders
TC Needle Holders
Ligature Needles
Michel Clips

Needle Holders *without* Tungsten Carbide inserts



Standard serration for an optimal grip of the needle.



Standard serration with additional groove

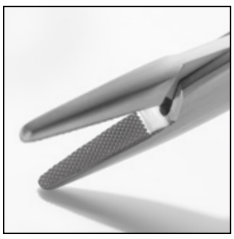


Standard Ring Handle

Needle Holders *with* Tungsten Carbide inserts



Normal serration of 0.5 for use with sutures up to size 4-0



Fine serration of 0.4 for use with sutures up to size 5-0 / 6-0



Mirror gold finished ring handle



Extra fine serration of 0.3 for use with sutures up to size 10-0



Smooth serration for use with sutures up to size 7-0 to 10-0

Needle Holders with Diamond Dusted jaw

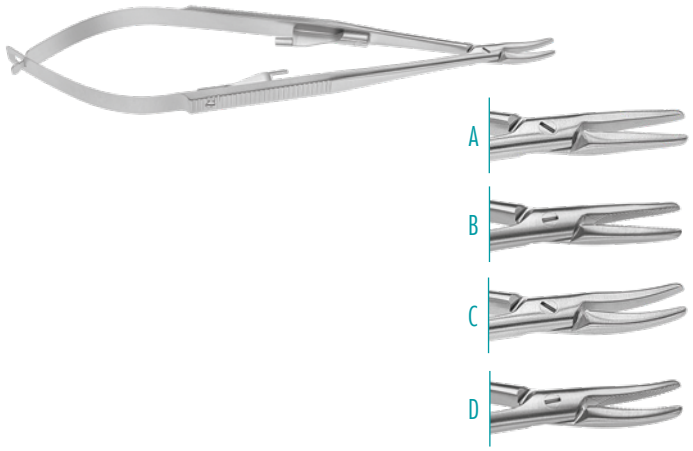


Diamond dusted coating of the jaw hardens the working surface, improves the durability and guarantees a tight grip of fine needles



Mirror finished ring handle





CASTROVIEJO

Micro Needle Holder, with catch, flat handle

A straight, smooth

145mm, 5 3/4″	180-219-145
180mm, 7″	180-219-180

B straight, serrated

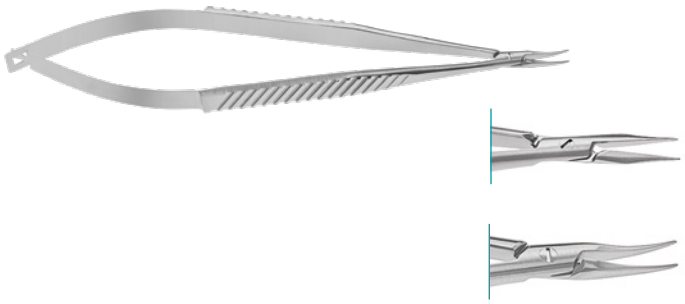
145mm, 5 3/4″	180-220-145
180mm, 7″	180-220-180

C curved, smooth

145mm, 5 3/4″	180-221-145
180mm, 7″	180-221-180

D curved, serrated

145mm, 5 3/4″	180-222-145
180mm, 7″	180-222-180



Vascular Micro Needle Holder, 0.4mm tip, flat handle, 140mm, 5 1/2″

straight, smooth

with catch	250-064-153
without catch	250-064-149

curved, smooth

with catch	250-064-151
without catch	250-064-150



Vascular Micro Needle Holder, 0.4mm tip, straight, smooth, round handle, without catch

130mm, 5 1/8″	250-064-138
180mm, 7″	250-064-244

curved

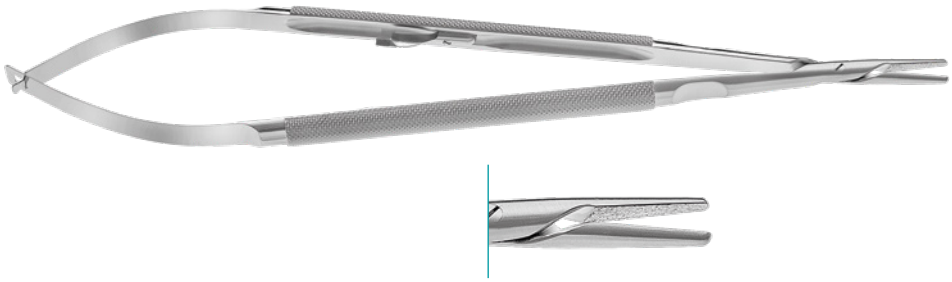
130mm, 5 1/8″	250-064-142
180mm, 7″	250-064-248



BARRAQUER

Micro Needle Holder, curved, smooth, 0.5mm tip, without lock, ∅ 8mm round handle

110mm, 4 1/3″	400-345-110
130mm, 5 1/8″	400-348-135



JACOBSON
Needle Holder, streamline, heavy pattern, 2mm jaw, 10mm round handle, with catch, straight

190mm, 7 1/2"	250-018-190
230mm, 9"	250-018-230
250mm, 9 7/8"	250-018-250

curved

230mm, 9"	250-019-230



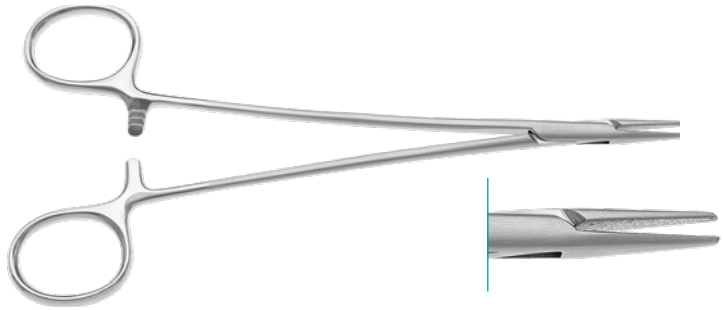
CASTROVIEJO
Micro Needle Holder, with catch, 1mm jaw, flat handle, 140mm, 5 1/2"

straight	250-220-563
curved	250-220-564



LÖFFLER
Needle Holder, delicate, short jaw ring handle, straight

150mm, 6"	180-755-150
180mm, 7"	180-755-180
200mm, 8"	180-755-200
230mm, 9"	180-755-230



DEBAKEY
Needle Holder, ring handle, 1mm jaw, straight

180mm, 7"	180-648-180
200mm, 8"	180-648-200
230mm, 9"	180-648-230



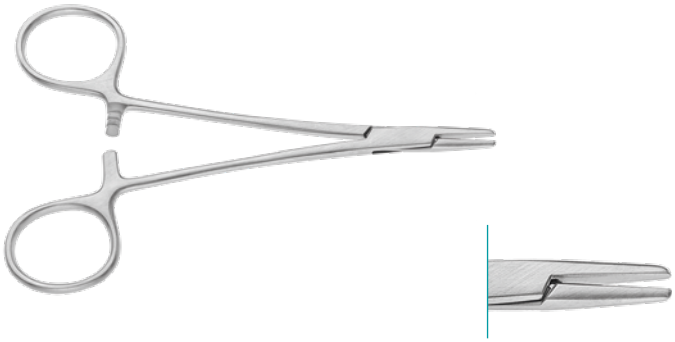
YANG
Very delicate, straight, smooth

110mm, 4 1/3" 180-318-110



YANG
Very delicate, straight

110mm, 4 1/3" 180-320-110



WEBSTER
Straight, smooth

130mm, 5 1/8" 180-318-130



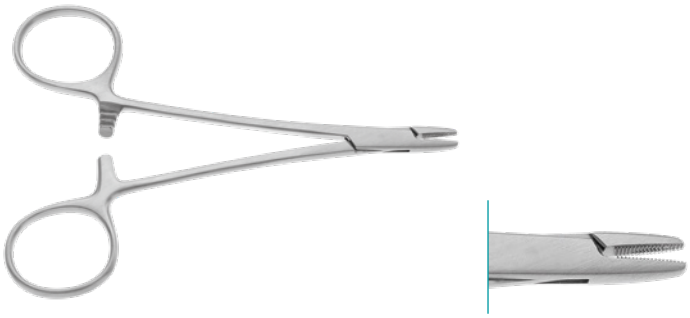
NEIVERT
Off-set ring, smooth, straight

130mm, 5 1/8"	180-322-130



CONVERSE
Longitudinal serrated jaw, straight

125mm, 5"	180-310-125



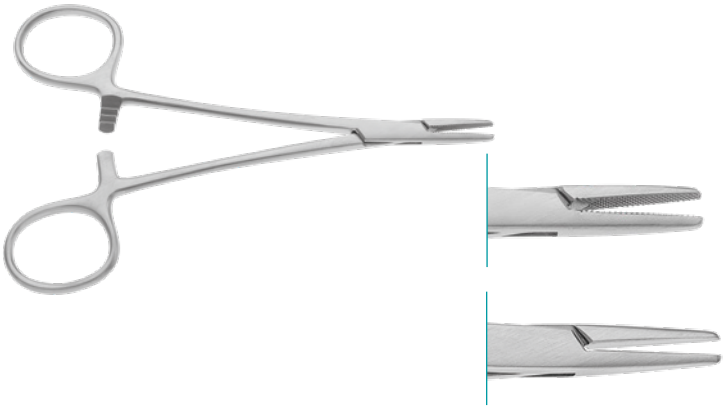
DERF
Grooved serrated jaw, straight

120mm, 4 3/4"	180-310-120



BROWN
Serrated, rounded jaw, straight

130mm, 5 1/8"	180-326-130

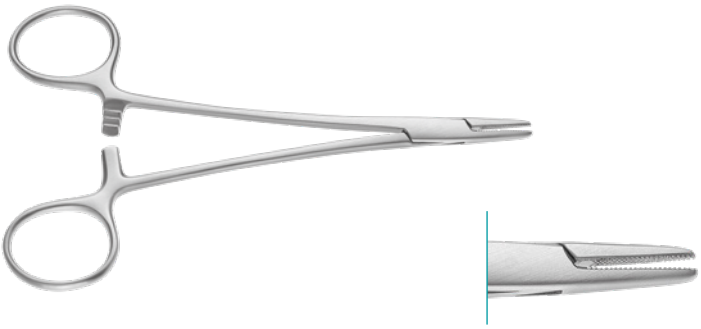


HALSEY
Cross serrated jaw, straight

130mm, 5 1/8"	180-321-130

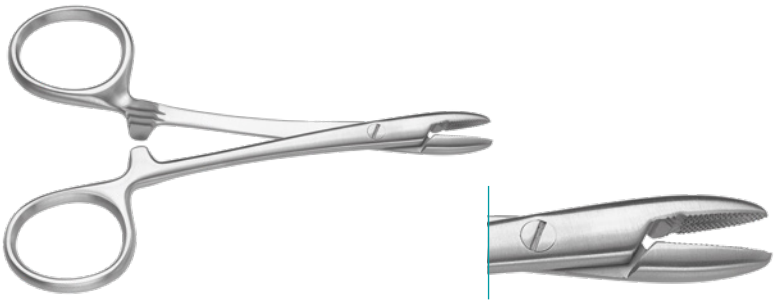
Smooth

130mm, 5 1/8"	180-320-130



BAUMGARTNER
Serrated jaw, straight

125mm, 5"	180-324-125
140mm, 5 1/2"	180-324-140



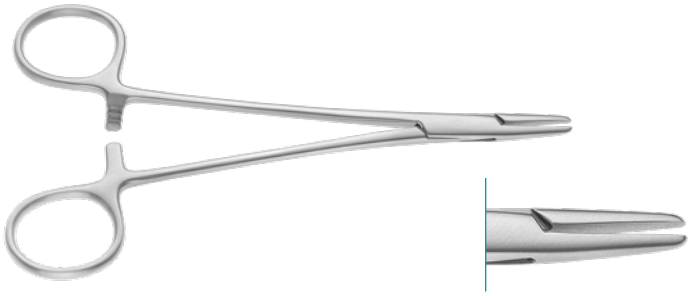
DOYEN
Serrated jaw, straight

130mm, 5 1/8"	180-317-130



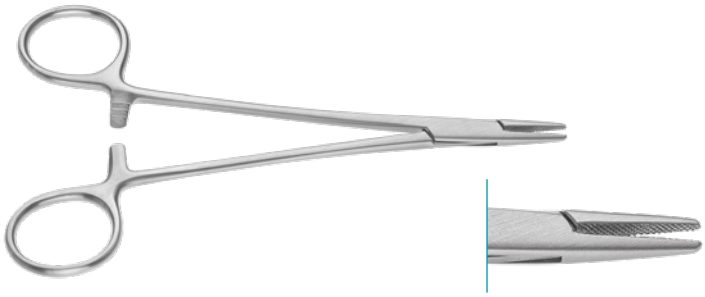
COLLIER
Cross serrated jaw, fenestrated, straight

125mm, 5"	180-314-125



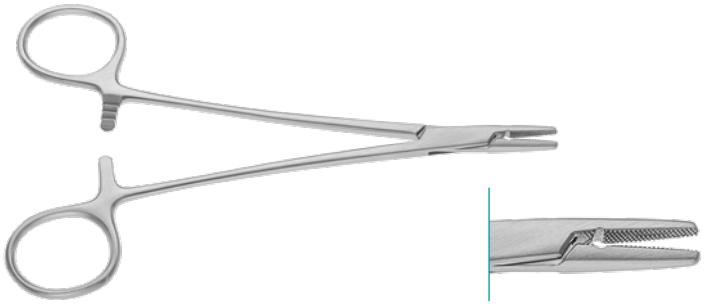
LAWRANCE
Smooth, delicate jaw, straight

150mm, 6"	180-381-150



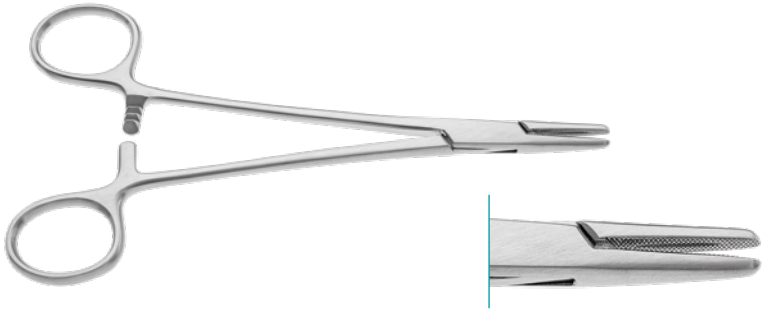
CRILE MURRAY
Serrated jaw, straight

150mm, 6"	180-330-150



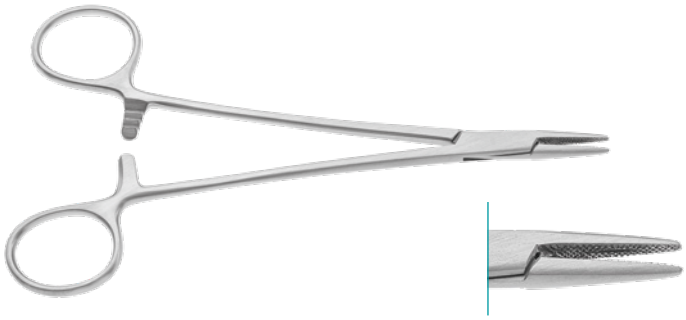
CRILE WOOD
Serrated jaw, straight

150mm, 6″	180-332-150
180mm, 7″	180-332-180
200mm, 8″	180-332-200



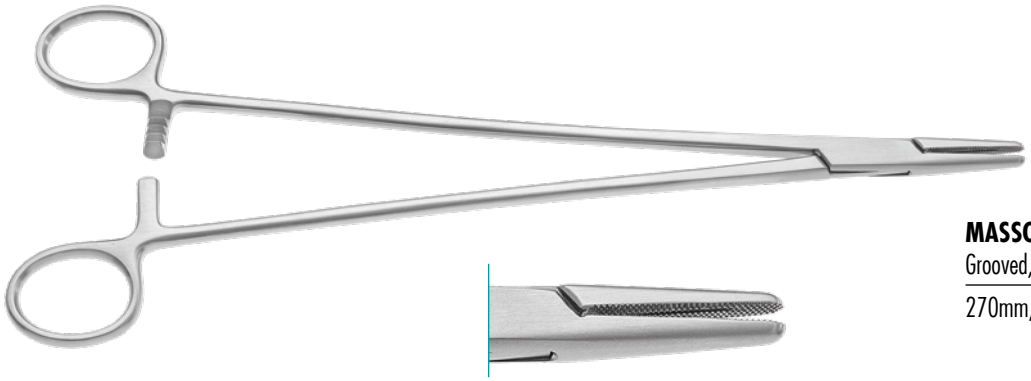
MAYO HEGAR
Grooved serrated jaw, straight

140mm, $5^{1/2}$″	180-354-140
160mm, $6^{1/4}$″	180-354-160
180mm, 7″	180-354-180
200mm, 8″	180-354-200
240mm, $9^{1/2}$″	180-354-240
260mm, $10^{1/4}$″	180-354-260
300mm, $11^{7/8}$″	180-354-300



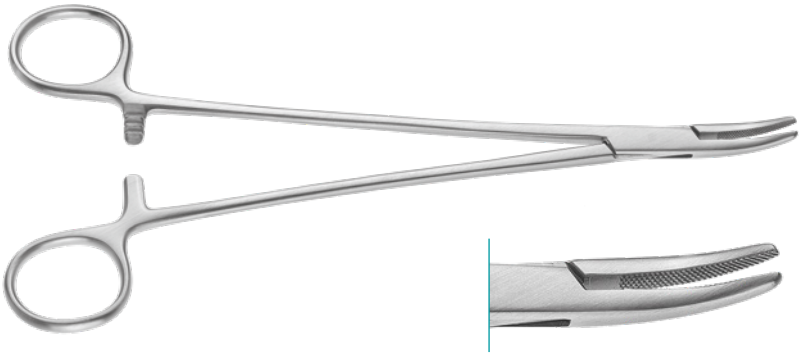
MAYO HEGAR FINO
Delicate Pattern, serrated, straight

140mm, $5^{1/2}$″	180-356-140
160mm, $6^{1/4}$″	180-356-160
180mm, 7″	180-356-180
200mm, 8″	180-356-200



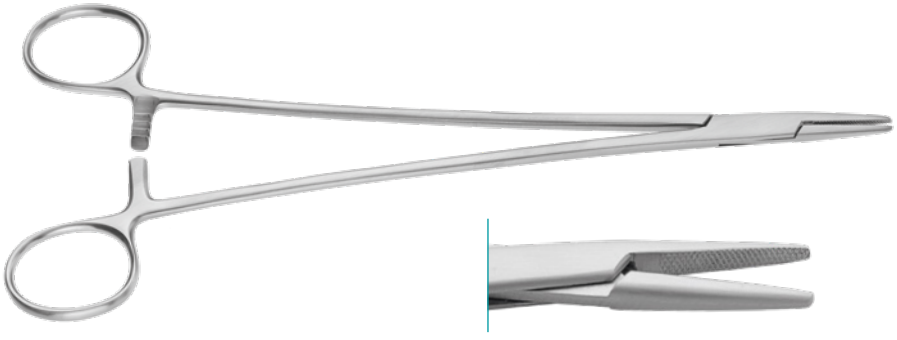
MASSON
Grooved, serrated jaw, straight

270mm, $10^{2/3}$"	180-364-270



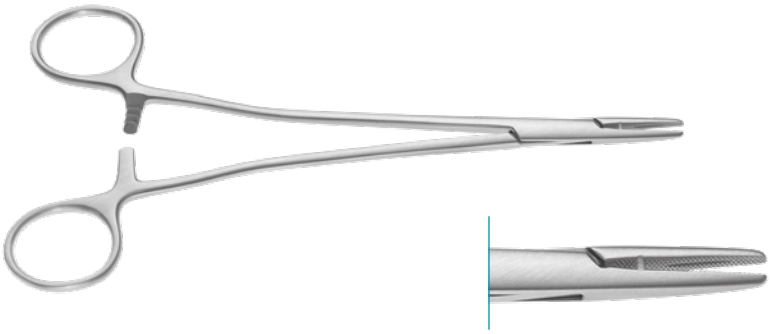
HEANEY
Serrated jaw, curved

210mm, $8^{1/4}$"	180-361-210



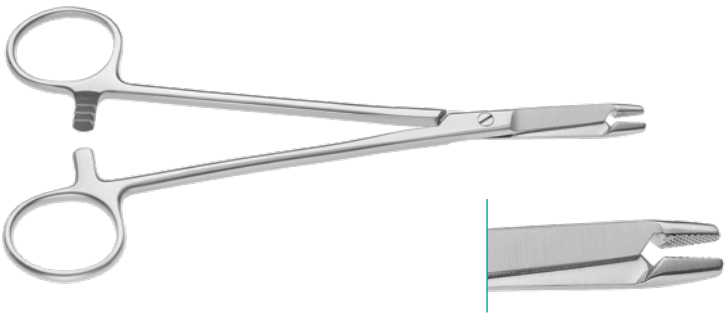
JAMISON
Serrated jaw, straight

235mm, $9^{1/4}$"	180-362-235



SAROT
Grooved serrated jaw, straight

180mm, 7″	180-342-180



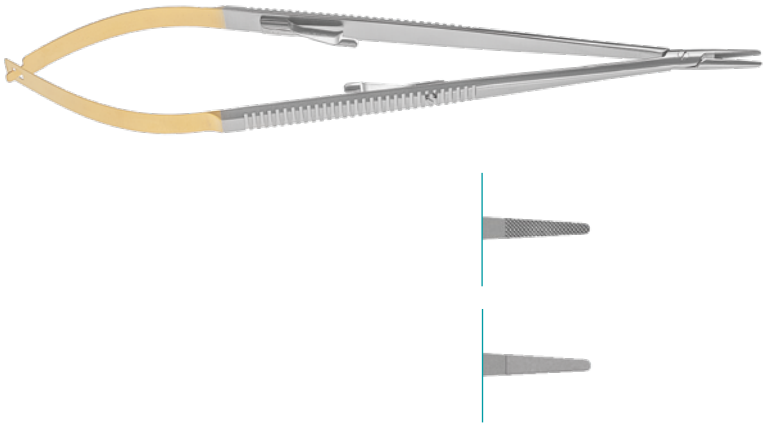
OLSEN HEGAR
Serrated jaw, straight

140mm, $5^{1/2}$″	180-382-140
170mm, $6^{2/3}$″	180-382-170
190mm, 7″	180-382-180



MATHIEU
Serrated jaw, straight

140mm, $5^{1/2}$″	180-420-140
170mm, $6^{2/3}$″	180-420-170
200mm, 8″	180-420-200



CASTROVIEJO
Micro Needle Holder, serrated jaw, flat handle, with catch

140mm, 5 1/2"	180-520-145
180mm, 7"	180-520-180
210mm, 8 1/4"	180-520-210

without catch

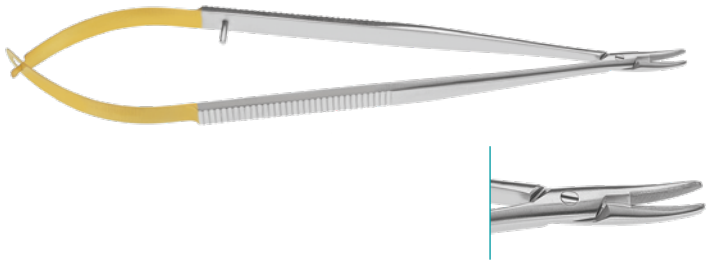
145mm, 5 3/4"	180-524-140
180mm, 7"	180-524-180
210mm, 8 1/4"	180-524-210

smooth jaw, with catch

140mm, 5 1/2"	180-519-145
180mm, 7"	180-519-180
210mm, 8 1/4"	180-519-210

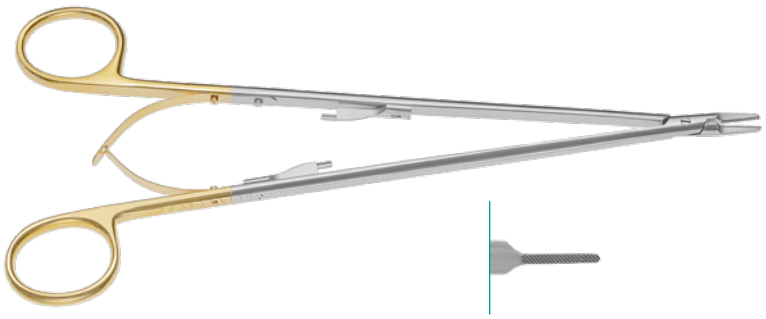
serrated jaw, with catch, curved

140mm, 5 1/2"	180-522-145
180mm, 7"	180-522-180



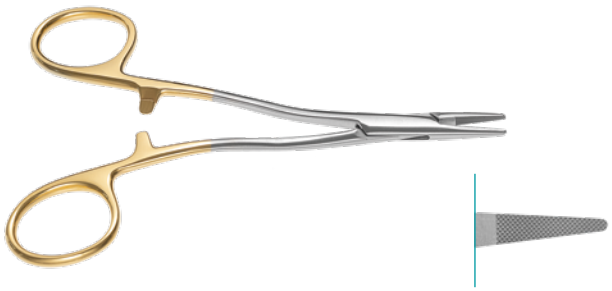
CASTROVIEJO
Smooth jaw, curved, without catch

145mm, 5 3/4"	180-526-145
180mm, 7"	180-526-180
210mm, 8 1/4"	180-526-210



DIETHRICH RYDER
Microvascular, bead blusted, 2mm jaw, straight, serrated

180mm, 7"	180-530-180
200mm, 8"	180-530-200
230mm, 9"	180-530-230



KILNER
s-curved, serrated, 135mm, 5''

135mm, 5 1/3"	180-525-135





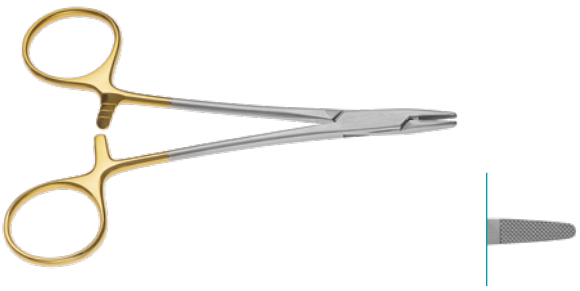
NEIVERT
Fine serrated jaw, upturned thumb ring

130mm, 5 1/8"	180-533-130



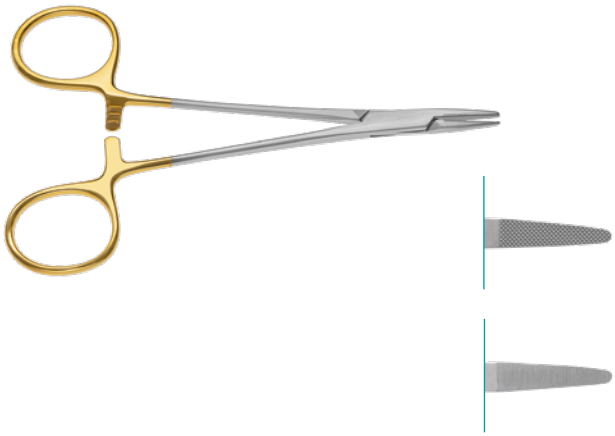
CONVERSE
Cross-serrated jaw, straight

120mm, 4 3/4"	180-544-120



DERF
Serrated jaw, straight

120mm, 4 3/4"	180-532-120



HALSEY
Serrated jaw, straight

130mm, 5 1/8"	180-537-130

smooth jaw

130mm, 5 1/8"	180-536-130

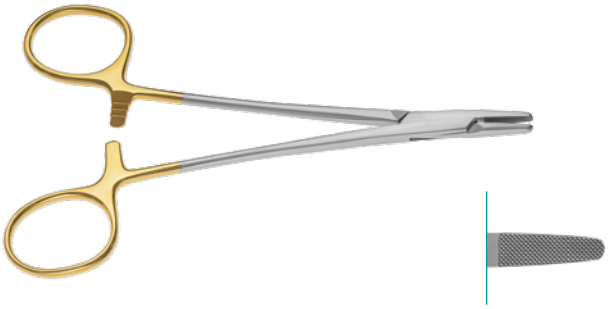


PAR
Serrated, very delicate jaw, straight

115mm, 4 1/2"	180-555-115

delicate, serrated jaw

120mm, 4 3/4"	180-558-120



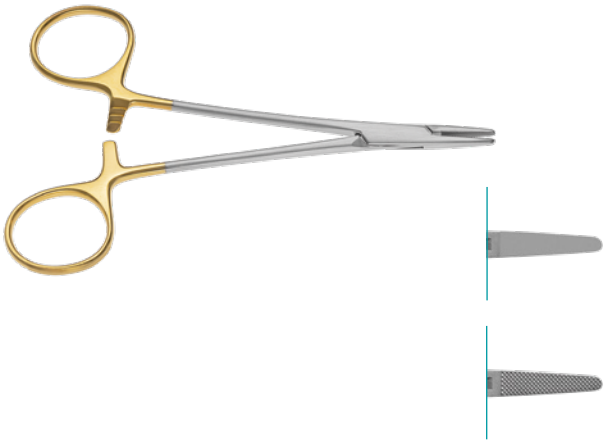
HEGAR BAUMGARTNER
Serrated jaw, straight

140mm, 5 1/2"	180-534-140



YANG
Smooth jaw, delicate pattern, straight

115mm, 4 1/2"	180-536-115



WEBSTER
Smooth jaw, delicate pattern, straight

130mm, 5 1/8"	180-538-130

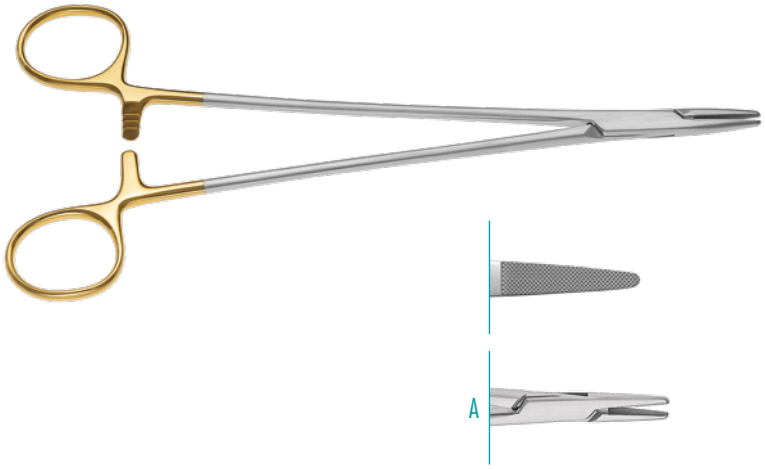
serrated jaw

130mm, 5 1/8"	180-539-130



BABY CRILE WOOD
Serrated jaw, straight

150mm, 6"	180-542-150



CRILE WOOD
Serrated jaw, straight

150mm, 6"	180-540-150
180mm, 7"	180-540-180
200mm, 8"	180-540-200
230mm, 9"	180-540-230
260mm, 10 1/4"	180-540-260
300mm, 11 7/8"	180-540-300

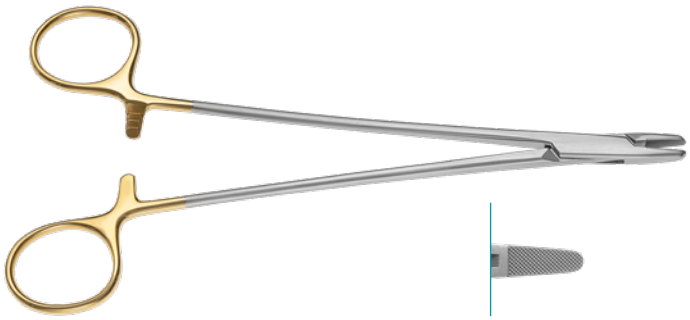
A Left handed, straight

150mm, 6"	180-540-150L



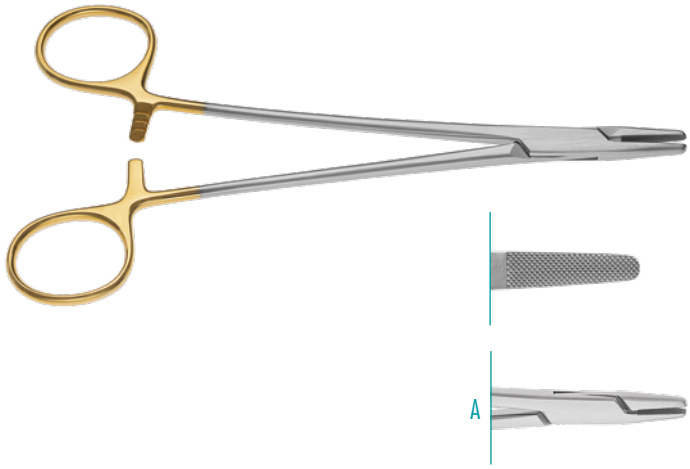
CRILE WOOD
Smooth jaw, straight

150mm, 6"	180-541-150



NEW ORLEANS
Grooved, serrated jaw, straight

180mm, 7"	180-553-180

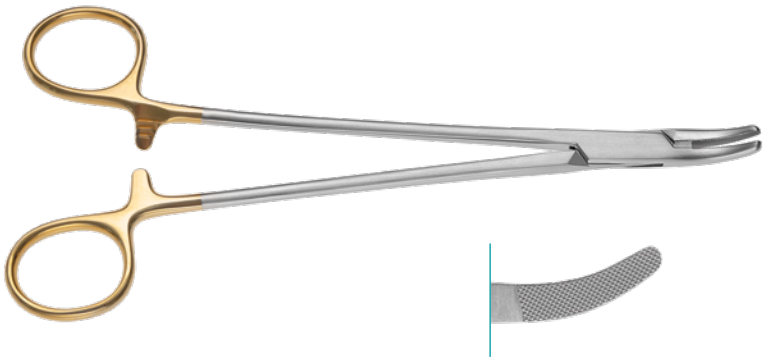


MAYO HEGAR
Serrated jaw, straight

125mm, 5"	180-550-125
140mm, 5 1/2"	180-550-140
160mm, 6 1/4"	180-550-160
180mm, 7"	180-550-180
200mm, 8"	180-550-200
240mm, 9 1/2"	180-550-240
260mm, 10 1/4"	180-550-260
300mm, 11 7/8"	180-550-300

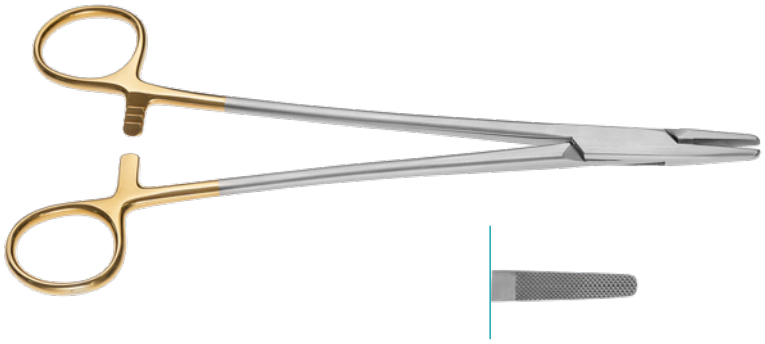
A Left handed, straight

160mm, 6 1/4"	180-550-160L
180mm, 7"	180-550-180L
200mm, 8"	180-550-200L



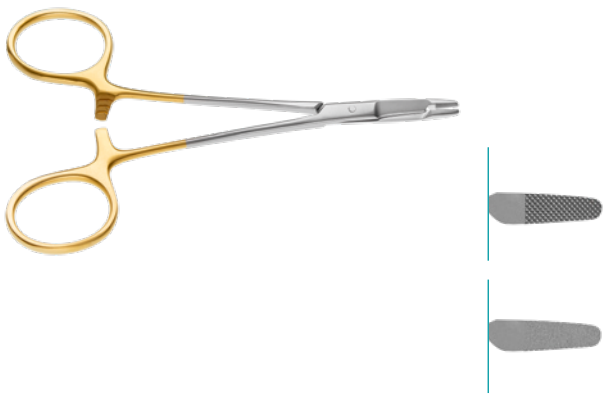
HEANEY
Serrated jaw, curved

200mm, 8"	180-547-200
240mm, 9 1/2"	180-547-240
260mm, 10 1/4"	180-547-260
305mm, 12"	180-547-305



HEGAR
Straight, heavy pattern

200mm, 8"	180-572-200



MINI OLSEN HEGAR
Serrated jaw, straight

120mm, $4^{3/4}$"	180-568-120

smooth jaw

120mm, $4^{3/2}$"	180-569-120



OLSEN HEGAR
Serrated jaw, straight

140mm, $5^{1/2}$"	180-568-140
170mm, $6^{2/3}$"	180-568-170



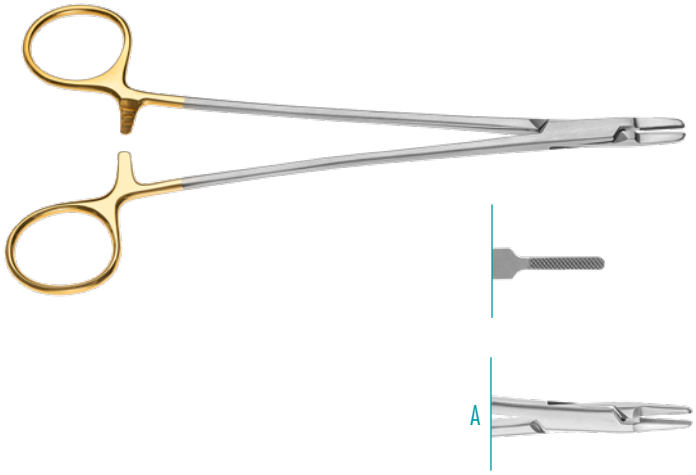
MATHIEU
Serrated jaw, straight

140mm, $5^{1/2}$"	180-576-140
170mm, $6^{2/3}$"	180-576-170



GILLIES
Upturned thumb ring, serrated jaw, curved

160mm, $5^{1/4}$"	180-570-160

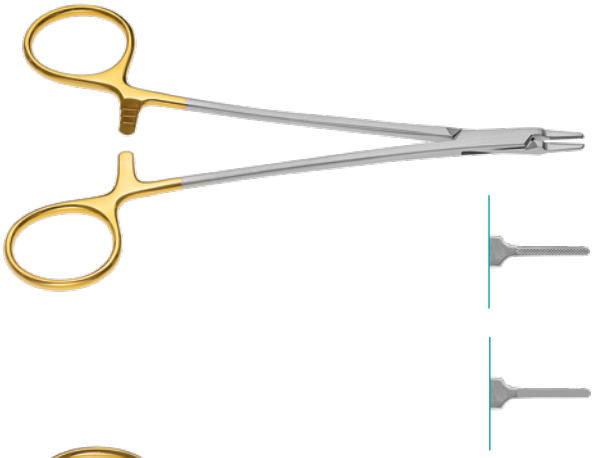


RYDER
2.0mm tip, serrated jaw, straight

130mm, 5 1/8"	180-560-130
160mm, 6 1/4"	180-560-160
180mm, 7"	180-560-180
200mm, 8"	180-560-200
230mm, 9"	180-560-230
260mm, 10 1/4"	180-560-260

A left handed, straight

160mm, 6 1/4"	180-560-130L
200mm, 8"	180-560-200L

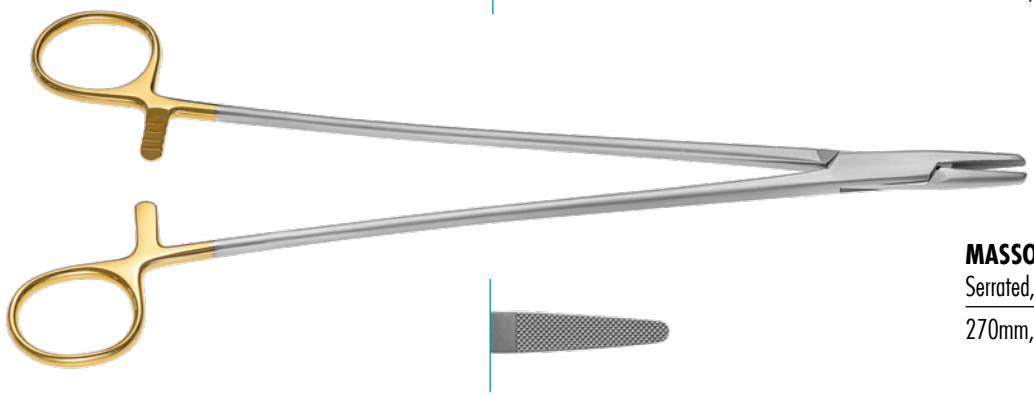


RYDER
1.1mm vascular tip, serrated jaw, straight

130mm, 5 1/8"	180-561-130
160mm, 6 1/4"	180-561-150
180mm, 7"	180-561-180
200mm, 8"	180-561-200
230mm, 9"	180-561-230

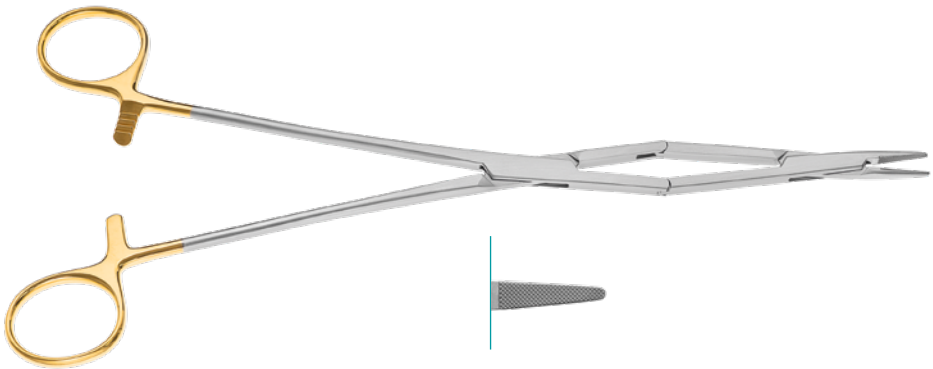
1.0mm smooth jaw

124mm, 5"	180-565-140
156mm, 6 1/8"	180-565-160



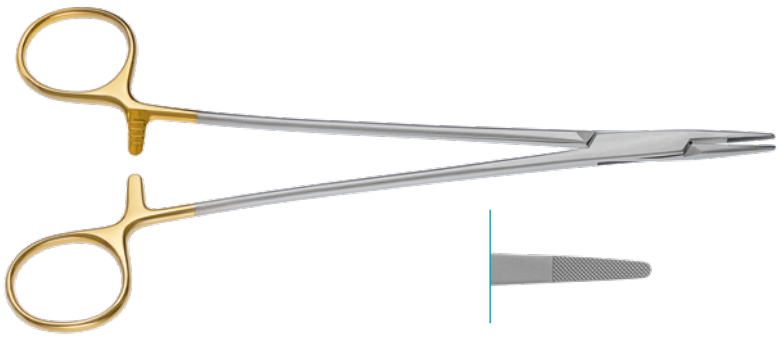
MASSON
Serrated, heavy pattern, straight

270mm, 10 2/3"	180-556-270



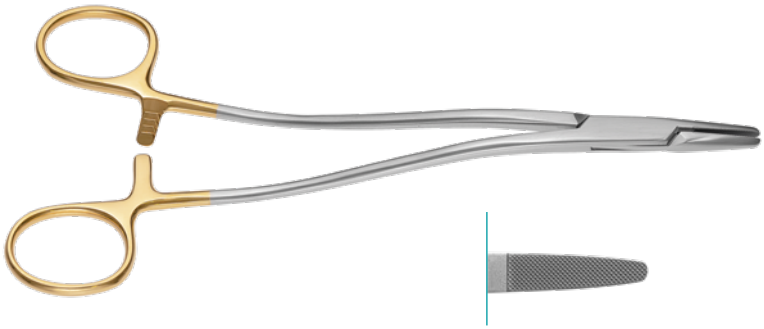
NAUNTON MORGAN
straight, double action

260mm, 10 1/4"	180-563-260



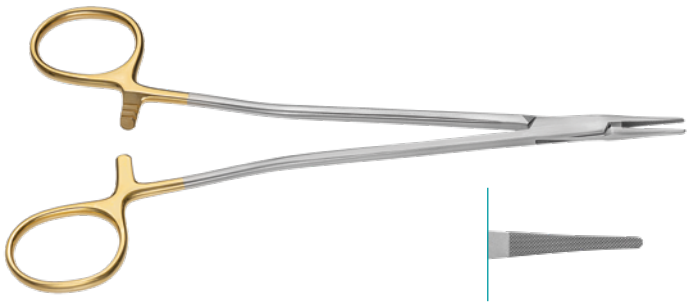
DEBAKEY
Vascular, serrated, straight

150mm, 6″	180-548-150
180mm, 7″	180-548-180
200mm, 8″	180-548-200
230mm, 9″	180-548-230
260mm, 10 1/4″	180-548-260
310mm, 12 1/4″	180-548-310



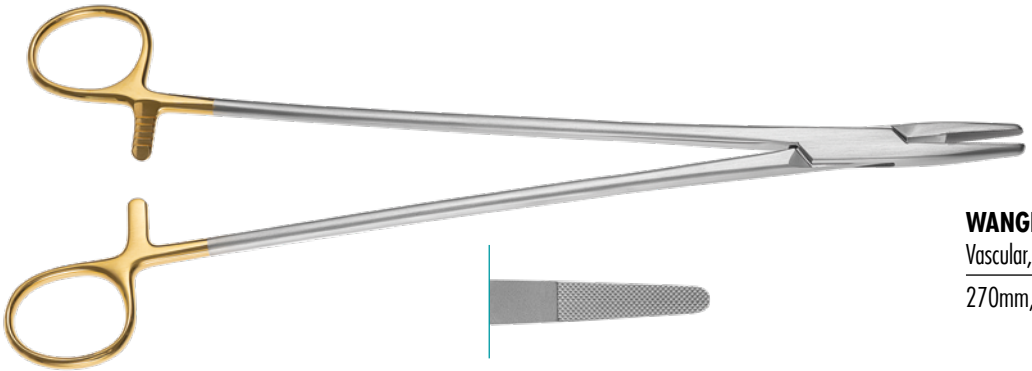
WERTHEIM
S-curved, serrated, straight jaw

200mm, 8″	180-574-200
240mm, 9 1/2″	180-574-240



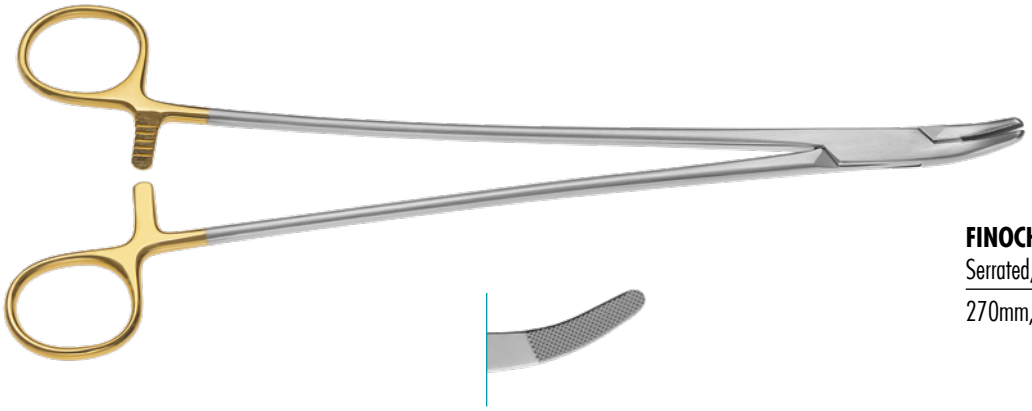
HEGAR
Vascular, micro profile, straight

140mm, 5 1/2″	180-590-140
180mm, 7″	180-590-180
200mm, 8″	180-590-200
230mm, 9″	180-590-230



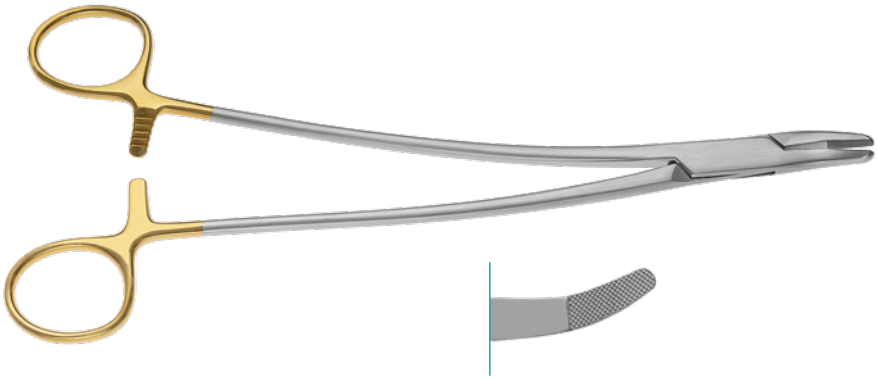
WANGENSTEEN
Vascular, serrated jaw, straight

270mm, 10 2/3″	180-562-270



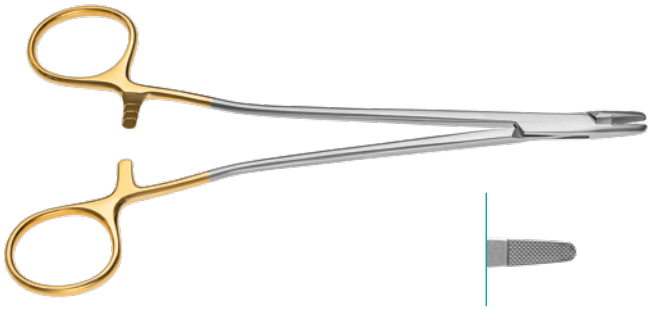
FINOCHIETTO
Serrated, angled jaw

270mm, $10^{2/3}$"	180-558-270



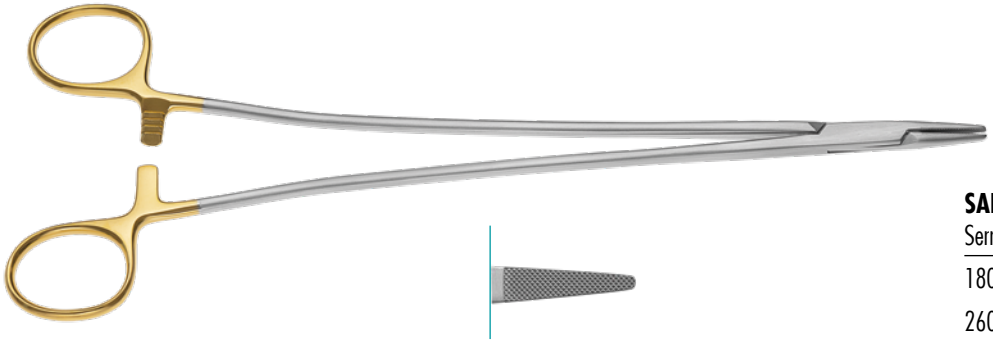
STRATTE
Laterally s-curved, serrated

230mm, 9"	180-567-230



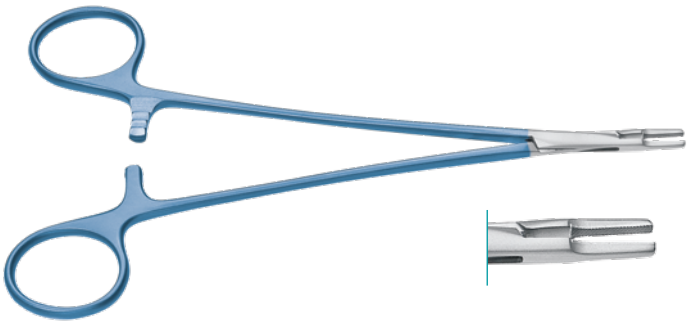
SWEDISH PATTERN
Straight, serrated jaw

150mm, 6"	180-555-150
170mm, $6^{2/3}$"	180-555-170
200mm, 8"	180-555-200



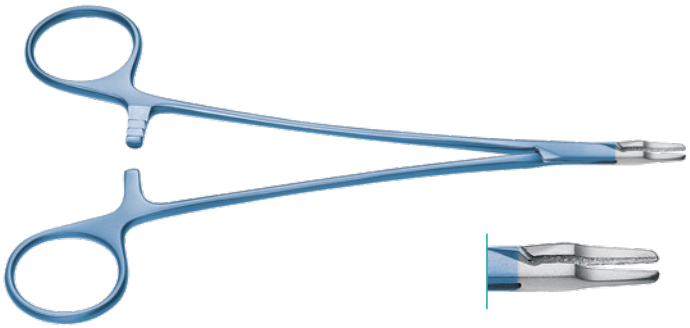
SAROT
Serrated jaw, straight

180mm, 7"	180-545-180
260mm, $10^{1/4}$"	180-545-260



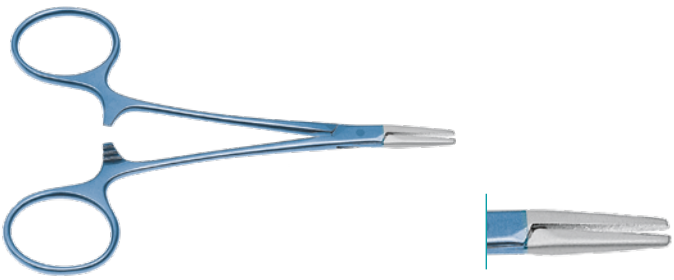
RYDER
TC, delicate tips

150mm, 6"	180-661-150
190mm, 7 1/2"	180-661-190



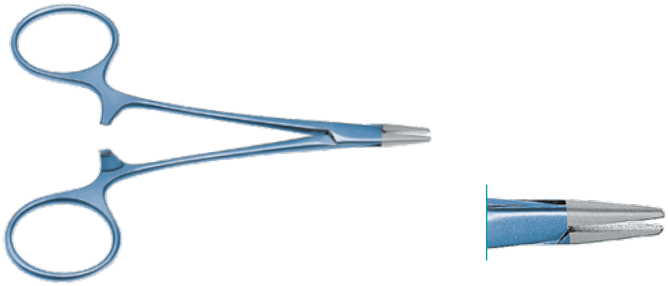
RYDER
TC, 2mm diamond dusted tip

180mm, 6"	180-660-190
190mm, 7 1/2"	180-660-190



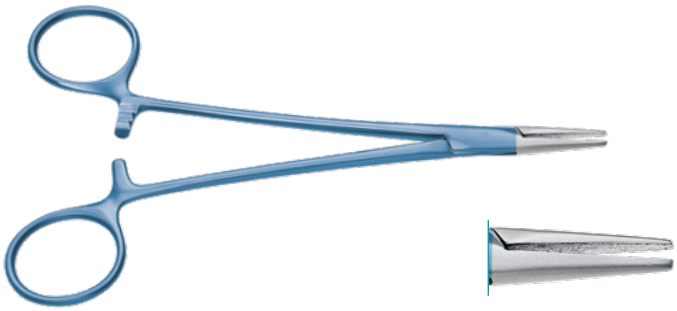
HALSEY
TC, diamond dusted tip

125mm, 5"	180-670-125



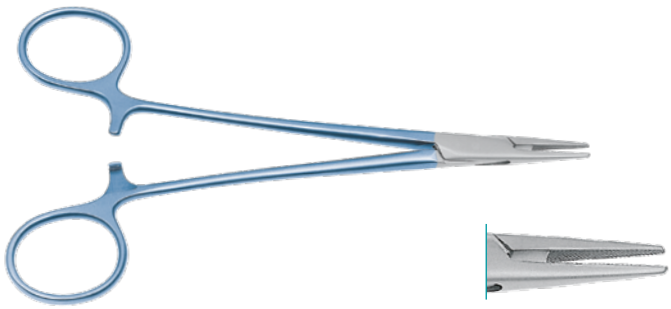
DERF
TC, diamond dusted tip

125mm, 5"	180-671-115



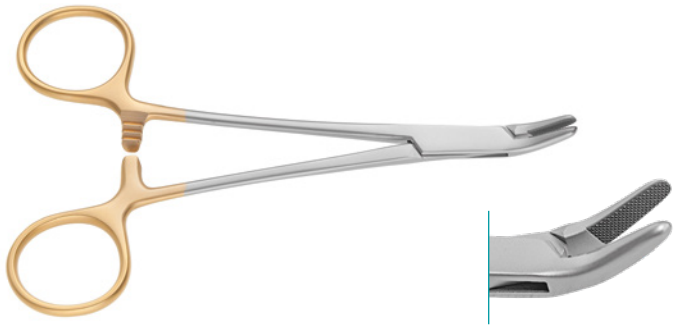
Vascular Needle Holder, delicate, diamond dusted

160mm, 6 1/4"	180-674-160



DEBAKEY
TC, diamond dusted tip

160mm, 6 1/4"	180-675-160



Wire Twister, serrated, curved jaws

150mm, 6"	180-501-150



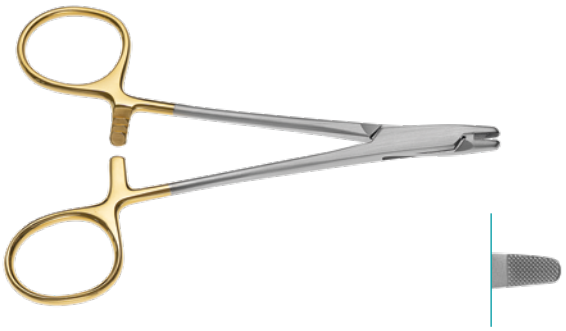
CORWIN
Wire Tightener, straight

150mm, 6"	180-810-150
185mm, 7 1/4"	180-810-185



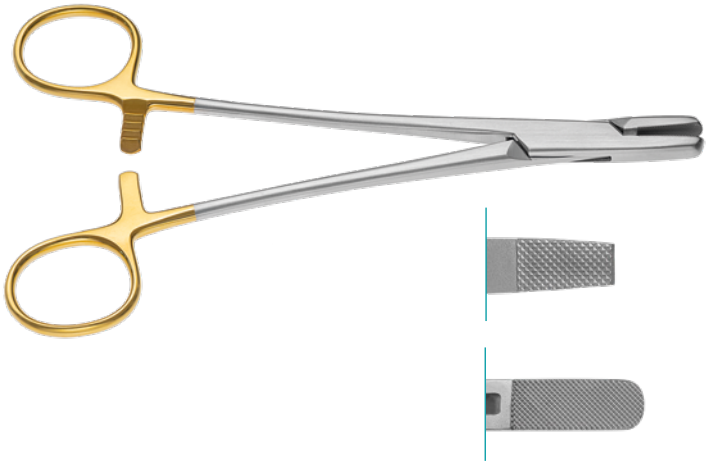
BERRY
Wire Tightener, straight

180mm, 7"	180-309-180



TC Wire Holding Forceps, rounded jaw, straight

130mm, 5 1/8"	180-569-130



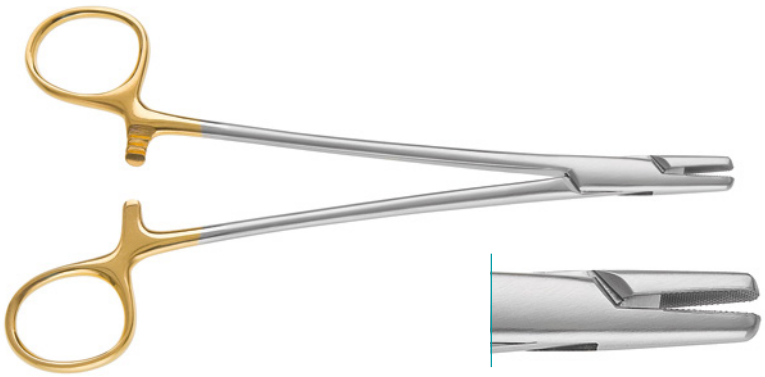
BERRY

TC Heavy Sternal Forceps, square jaw, straight

150mm, 6"	180-307-150
180mm, 7"	180-307-180

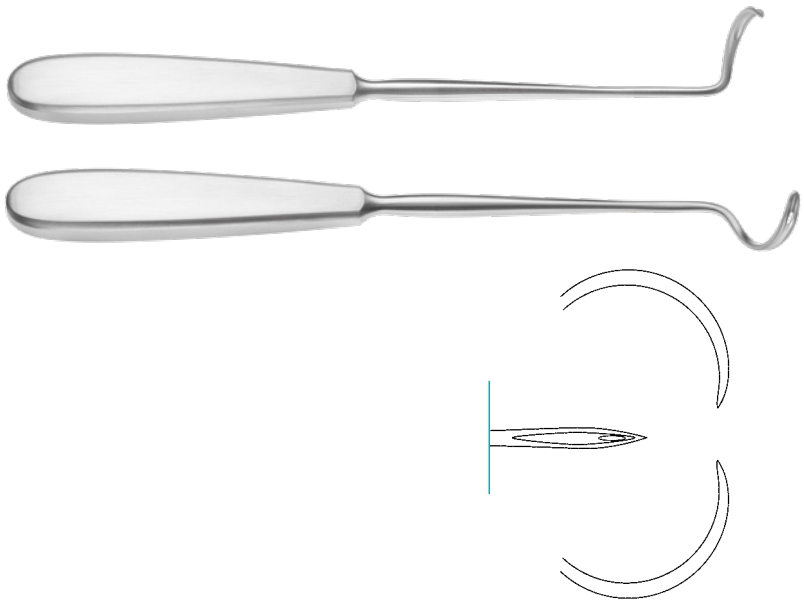
rounded jaw

150mm, 6"	180-308-150
180mm, 7"	180-308-180
185mm, 7 1/4"	180-308-200



Sternum Wire Holding Forceps, rounded jaw

180mm, 7"	180-569-180



DESCHAMPS
Ligature Needles, sharp

left curved, for right hand	180-724-200
right curved, for left hand	180-728-200

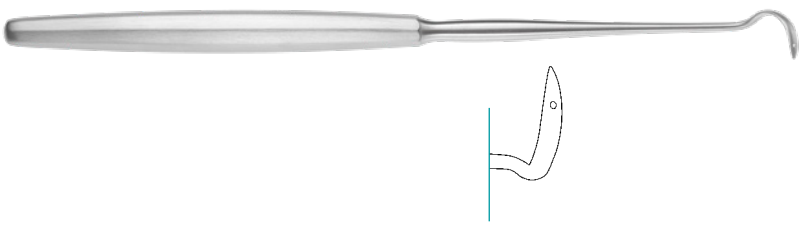
blunt

left curved, for right hand	180-726-210
right curved, for left hand	180-727-210



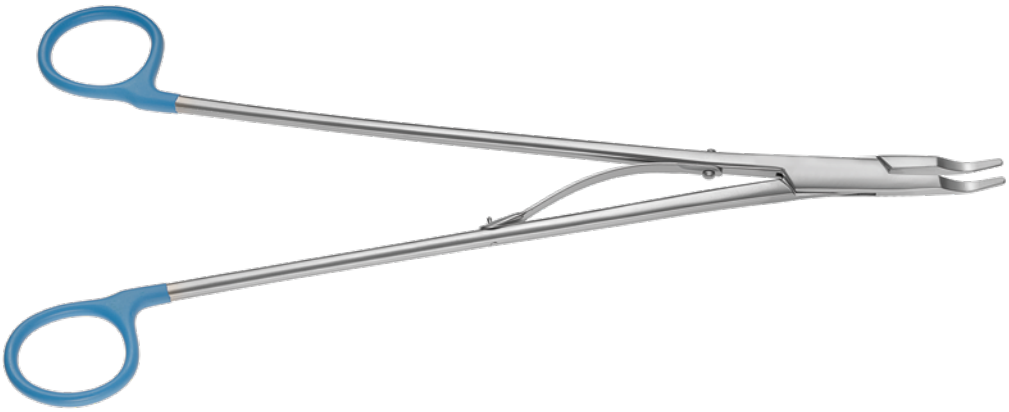
COOPER
Ligature Needle

190mm, 7 1/2"	180-732-190
200mm, 8"	180-732-200



HURD
Ligature Needle, 210mm, 8 1/4"

right	180-719-210
left	180-718-210



Applying Forceps **for SLS Clips**

150mm, 6"	
micro	180-919-001
small	180-919-002
small-medium	180-919-003
medium	180-919-004

190mm, 7 1/2"	
micro	180-919-005
small	180-919-006
small-medium	180-919-007
medium	180-919-008
medium-large	180-919-009
large	180-919-010

280mm, 11"	
micro	180-919-011
small	180-919-012
small-medium	180-919-013
medium	180-919-014
medium-large	180-919-015
large	180-919-016

Applying Forceps **for Pilling Clips**

150mm, 6"	
small	180-919-030
medium	180-919-031

190mm, 7 1/2"	
small	180-919-032
medium	180-919-033
medium-large	180-919-034
large	180-919-035

280mm, 11"	
medium	180-919-036
medium-large	180-919-037
large	180-919-038

Applying Forceps **for Horizon Clips**

150mm, 6"	
small	180-919-060
medium	180-919-061

190mm, 7 1/2"	
medium	180-919-063
medium-large	180-919-064
large	180-919-065

280mm, 11"	
medium	180-919-066
medium-large	180-919-067
large	180-919-068

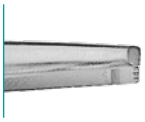
Applying Forceps **for RZ/Ethicon Clips**

150mm, 6"	
small	180-919-103
medium	180-919-104

190mm, 7 1/2"	
small	180-919-105
medium	180-919-106
medium-large	180-919-107
large	180-919-108

280mm, 11"	
medium	180-919-109
medium-large	180-919-110
large	180-919-111





HEGENBARTH
Clip Applying Forceps

125mm, 5"	180-920-125





WACHENFELDT
Clip Applying Forceps

125mm, 5"	180-922-125





MICHEL
Clip Applying & Removal Forceps

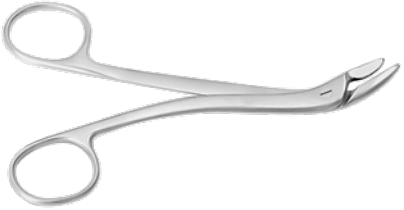
120mm, 4 3/4"	180-916-120





MICHEL
Clip Removal Forceps

120mm, 4 3/4"	180-920-120





RICHTER-HEATH
Clip Removal Forceps

140mm, 5 1/2"	180-936-140

HAND HELD RETRACTORS



Skin Hooks
Hand Held Retractors
Abdominal Retractors





GRAEFE

Micro Skin Hook, 125mm, 5"

sharp	170-010-125
blunt	170-011-125



A

Fig. 1

Fig. 2

GUTHRIE

Micro Skin Hook, 2 prongs, sharp

A	120mm, 4 3/4"	170-042-130
Fig. 1	160mm, 6 1/4"	170-042-160
Fig. 2	160mm, 6 1/4"	170-044-160





O'CONNOR

Skin Hook

120mm, 4 3/4"	170-040-160



FRAZIER
Skin Hook

130mm, 5 1/8"	170-013-130



BARSKY
Double Skin Hooklet, 2 prongs

150mm, 6"	170-019-000



KNAPP
Skin Retractor, 4 prongs, 130mm, 5 1/8"

sharp	170-080-001
blunt	170-080-002



MILLER
Skin Retractor, 9 prongs, 135mm, 5 1/3"

sharp	170-085-130
blunt	170-086-130



CUSHING
Skin Hook, sharp

140mm, 5 1/2"	170-015-140



KILNER
Skin Hook, sharp

150mm, 6"	230-203-150



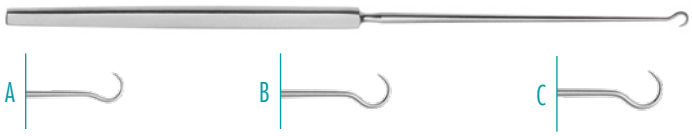
CLOWARD
Skin Hook, sharp

160mm, 6 1/4"	170-014-165



KLEINERT KUTZ
Skin Hook, sharp, 160mm, 6 1/4"

Small, 3mm	170-020-001
Medium, 5mm	170-020-002
Large, 8mm	170-020-003



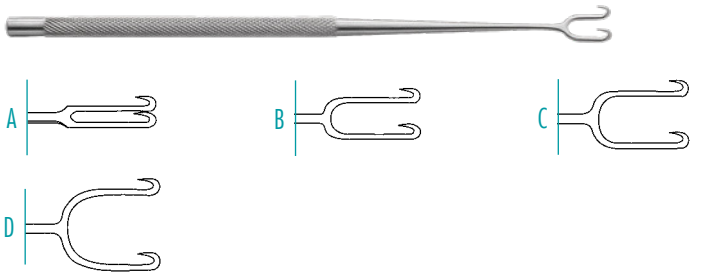
GILLIES
Skin Hook, 180mm, 7"

A Small	230-205-180
B Medium	230-207-180
C Large	230-209-180



JOSEPH
Skin Hook

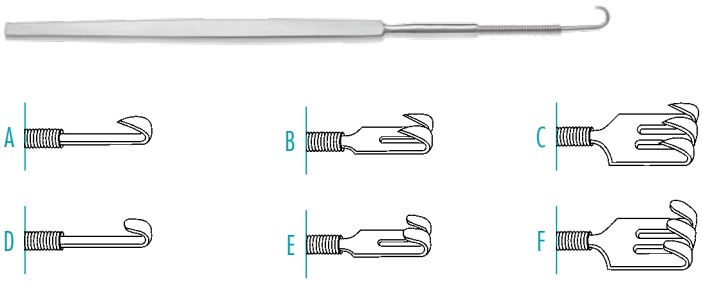
160mm, 6 1/4"	170-014-001



JOSEPH

Skin Hook, 2 prongs, 160mm, 6 1/4"

A 2mm wide	170-014-002
B 5mm wide	170-014-005
C 7mm wide	170-014-007
D 10mm wide	170-014-010

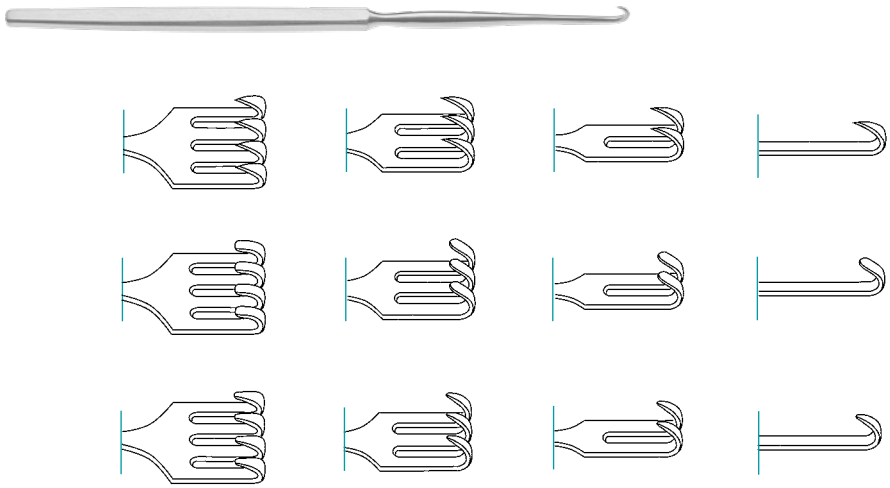


Skin Hook, flexible shaft
160mm, 6 1/4", sharp

A 1 prong	170-079-161
B 2 prongs	170-079-162
C 3 prongs	170-079-163

blunt

D 1 prong	170-076-161
E 2 prongs	170-076-162
F 3 prongs	170-076-163



Hand Held Retractor, 160mm, 6 1/4",
sharp

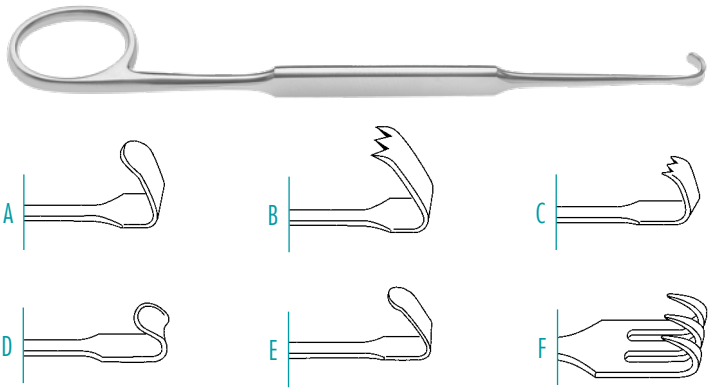
1 prong	170-074-161
2 prongs	170-074-162
3 prongs	170-074-163
4 prongs	170-074-164

blunt

1 prong	170-075-161
2 prongs	170-075-162
3 prongs	170-075-163
4 prongs	170-075-164

semi-blunt

1 prong	170-077-161
2 prongs	170-077-162
3 prongs	170-077-163
4 prongs	170-077-164



MEYERDING
Hand Held Retractor, 180mm, 7"

A 18 x 7mm	170-079-181
B 16 x 5mm, prongs	170-079-182
C 7 x 4mm, prongs	170-079-183
D 10 x 3mm	170-079-184
E 7 x 4mm	170-079-185
F 4 x 10mm, 3 prongs	170-079-186



MINI LANGENBECK
Hand Held Retractor, 160mm, $6^{1/4}$"

10 x 6mm (AxB)	170-130-160
17 x 5mm (AxB)	170-131-160
20 x 6mm (AxB)	170-132-160
22 x 8mm (AxB)	170-133-160



DESMARRES
Hand Held Retractor, 130mm, $5^{1/8}$"

8mm	170-108-130
10mm	170-110-130
12mm	170-112-130
14mm	170-114-130
16mm	170-116-130
18mm	170-118-130

160mm, $6^{1/4}$"

8mm	170-108-160
10mm	170-110-160
12mm	170-112-160
14mm	170-114-160
16mm	170-116-160
18mm	170-118-160

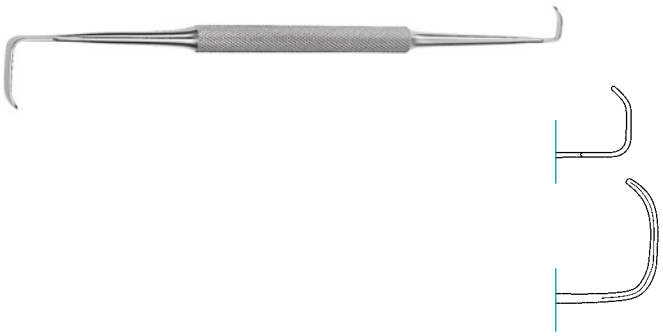


CUSHING
Vein Retractor, 200mm, 8"

8mm	170-231-080
10mm	170-231-100
12mm	170-231-120
14mm	170-231-140
16mm	170-231-160
18mm	170-231-180

240mm, 9 1/2"

8mm	170-233-080
10mm	170-233-100
12mm	170-233-120
14mm	170-233-140
16mm	170-233-160
18mm	170-233-180



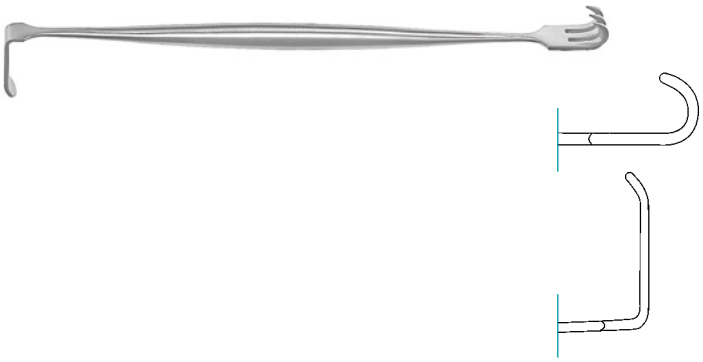
RAGNELL
Hand Held Retractor, double ended,
8 x 3mm and 16 x 5mm blade

150mm, 6"	170-206-150



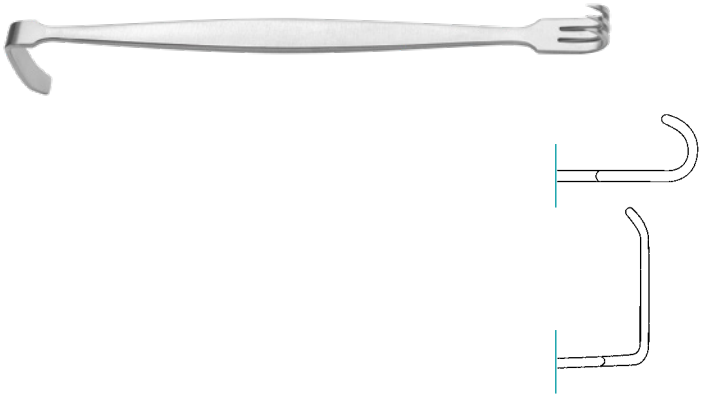
RAGNELL DAVIS
Hand Held Retractor, double ended,
8 x 4mm and 15 x 5.5mm blade

140mm, 5 1/2"	170-207-140



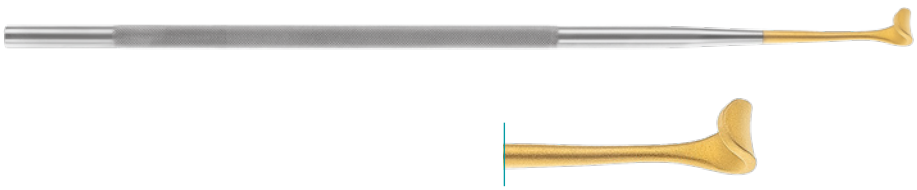
SENN MILLER
Hand Held Retractor,
8 x 7mm / 18 x 5.5mm, 160mm, 6 1/4″

sharp	170-210-160
blunt	170-212-160



BABY SENN-MILLER
Hand Held Retractor,
8 x 7mm / 20 x 7mm, 155mm, 6 1/8″

sharp	170-214-160
blunt	170-213-160



GIL VERNET
Hand Held Retractor, malleable
135mm, 5 1/3″

11mm	170-236-111

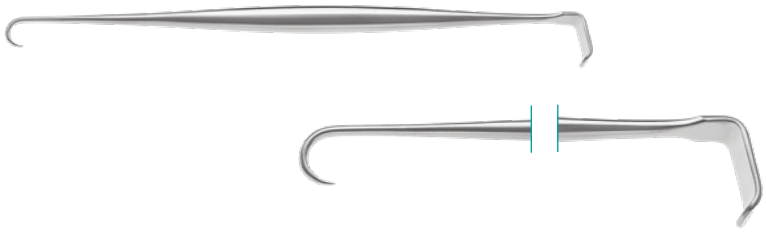
200mm, 8″

8mm	170-236-208
11mm	170-236-211
15mm	170-236-215
17mm	170-236-217



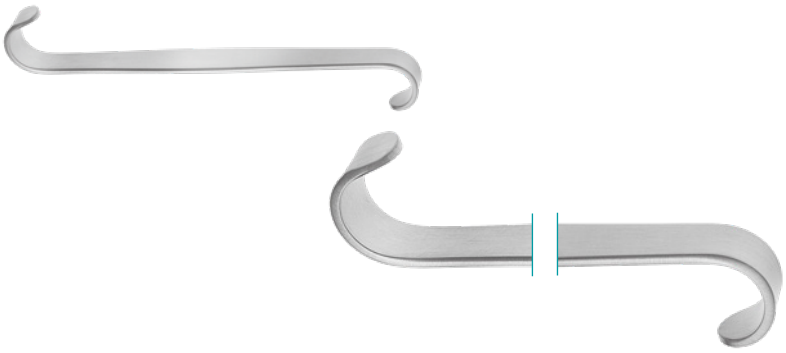
MATHIEU
Hand Held Retractor, 160mm, $6^{1/4}$″
20 x 6.5mm, 8mm wide

blunt	170-002-160



MEYERDING
Hand Held Retractor and Skin Hook,
16 x 5mm

155mm, $6^{1/8}$″	170-165-155



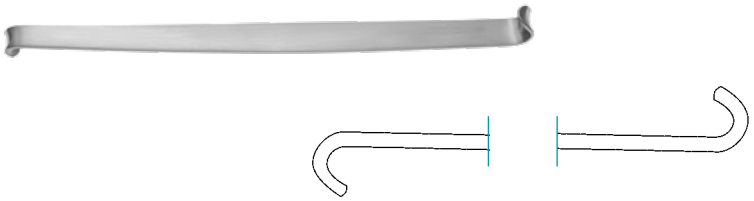
LUER
Retractor, 10.5 x 8mm / 8 x 7mm

110mm, $4^{1/3}$″	170-671-110



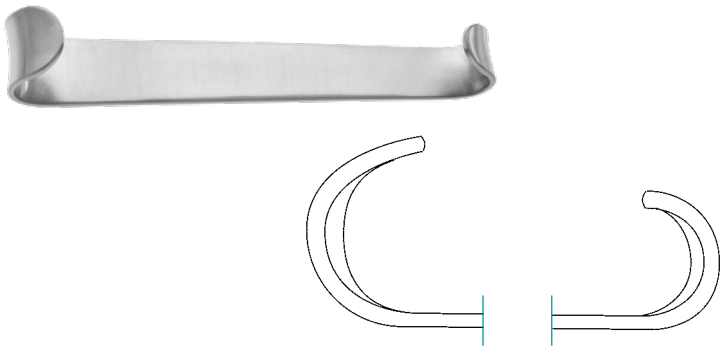
CRILE
Retractor, 12 x 4mm / 20 x 6mm

115mm, $4^{1/2}$″	170-670-115



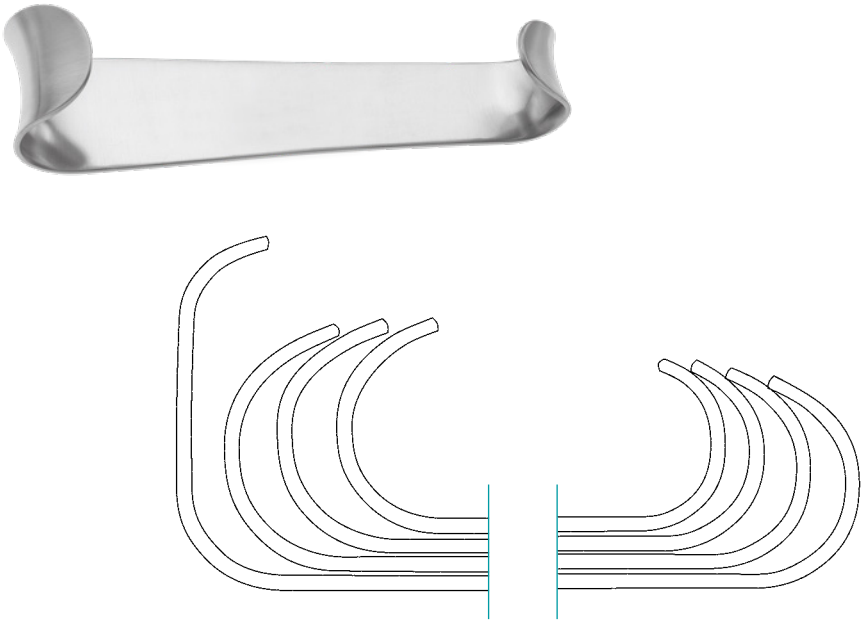
MINI ROUX
Retractor, double-ended, 6 x 7mm

140mm, 5 1/2"	170-667-006



BABY ROUX
Retractor, 17 x 16mm / 18 x 22mm

130mm, 5 1/8"	170-669-130



ROUX
Retractor, 165mm, 6 1/2"

Fig. 1, 19 x 22mm 23 x 30mm	170-655-140
Fig. 2, 25 x 26mm 28 x 38mm	170-655-150
Fig. 3, 28 x 29mm 33 x 45mm	170-655-170
Set of Fig 1-3	170-655-000



FARABEUF
Retractor Set
Fig. 1 30 x 10mm / 26 x 10mm
Fig. 2 30 x 13mm / 34 x 13mm, Fig 2

120mm, 4 3/4"	170-663-120

Fig. 1 23 x 16mm / 27 x 16mm
Fig. 2 27 x 16mm / 30 x 16mm

150mm, 6"	170-665-150



PARKER
Retractor Set
19 x 15mm / 19 x 15mm
22 x 15mm / 22 x 15mm

140mm, 5 1/2"	170-673-001

26 x 25mm / 27 x 25 mm
29 x 25mm / 27 x 25 mm

185mm, 7 1/4"	170-673-002



COLLIN
Retractor Set
28 x 16mm / 32 x 16mm

145mm, 5 3/4"	170-666-145



PARKER MOTT
Retractor Set, Fig. 1 + 2
21 x 24mm / 68 x 24mm
15 x 24mm / 72 x 24mm

160mm, 6 1/4"	170-675-000



MATHIEU
Retractor Set
42 x 13mm / 42 x 26mm
47 x 13mm / 46 x 26mm

200mm, 8"	170-683-000



PARKER LANGENBECK (US ARMY)
Retractor Set

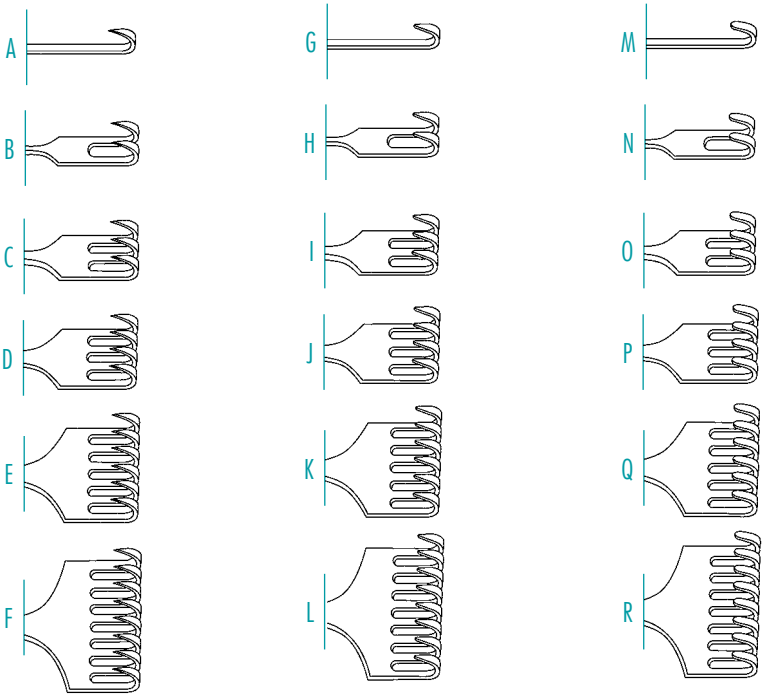
210mm, 8 1/4"	170-687-210



GOELET
Retractor, 40 x 40mm / 30 x 30mm

195mm, 7 1/2"	170-695-000

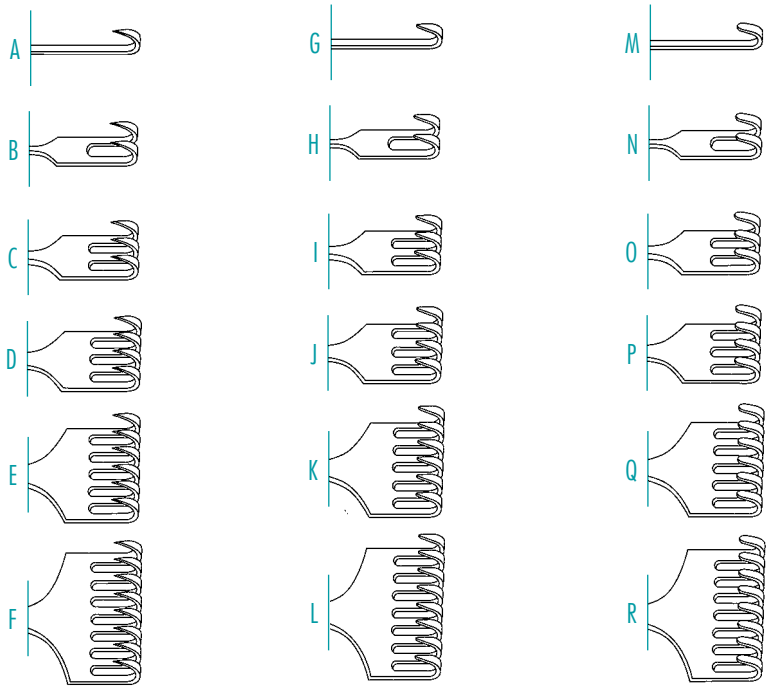




KOCHER
Retractor, 220mm, 8 2/3"

sharp	
A 1 prong, 15mm	170-310-221
B 2 prongs, 9x8mm	170-310-222
C 3 prongs, 15x15mm	170-310-223
D 4 prongs, 15x20mm	170-310-224
E 6 prongs, 15x30mm	170-310-226
F 8 prongs, 15x40mm	170-310-228
semi - sharp	
G 1 prong, 15mm	170-312-221
H 2 prongs, 9x8mm	170-312-222
I 3 prongs, 15x15mm	170-312-223
J 4 prongs, 15x20mm	170-312-224
K 6 prongs, 15x30mm	170-312-226
L 8 prongs, 15x40mm	170-312-228
blunt	
M 1 prong, 15mm	170-311-221
N 2 prongs, 9x8mm	170-311-222
O 3 prongs, 15x15mm	170-311-223
P 4 prongs, 15x20mm	170-311-224
Q 6 prongs, 15x30mm	170-311-226
R 8 prongs, 15x40mm	170-311-228





VOLKMANN
Retractor, 215mm, 8 1/2"

sharp	
A 1 prong, 9mm	170-220-215
B 2 prongs, 9x8mm	170-222-215
C 3 prongs, 9x13mm	170-224-215
D 4 prongs, 9x19mm	170-226-215
E 6 prongs, 9x29mm	170-228-215
F 8 prongs, 9x40mm	170-230-215
semi - sharp	
G 1 prong, 9mm	170-231-215
H 2 prongs, 9x8mm	170-233-215
I 3 prongs, 9x13mm	170-235-215
J 4 prongs, 9x19mm	170-237-215
K 6 prongs, 9x29mm	170-239-215
L 8 prongs, 9x40mm	170-241-215
blunt	
M 1 prong, 9mm	170-221-215
N 2 prongs, 9x8mm	170-223-215
O 3 prongs, 9x13mm	170-225-215
P 4 prongs, 9x19mm	170-227-215
Q 6 prongs, 9x29mm	170-229-215
R 8 prongs, 9x40mm	170-232-215



VOLKMANN
Retractor, 115mm, 4 1/2″
sharp

2 prongs	170-140-002
3 prongs	170-140-003
4 prongs	170-140-004
6 prongs	170-140-006

blunt

2 prongs	170-141-002
3 prongs	170-141-003
4 prongs	170-141-004
6 prongs	170-141-006



MURPHY
Retractor, 200mm, 8″
sharp

2 prongs	170-218-102
3 prongs	170-218-103
4 prongs	170-218-104
6 prongs	170-218-106

blunt

2 prongs	170-218-202
3 prongs	170-218-203
4 prongs	170-218-204
6 prongs	170-218-206



OLLIER
Retractor, blunt, 230mm, 9″

3 prongs, 36 x 30mm	170-214-003
4 prongs, 36 x 60mm	170-214-004



ISRAEL
Retractor, blunt, 250mm, 9 7/8"

4 prongs, 40x40mm	170-220-004
5 prongs, 45x50mm	170-220-005
6 prongs, 50x60mm	170-220-006
6 prongs, 70x70mm	170-220-007



WASSMUND
Retractor

200mm, 8"	170-216-200



KOERTE
Retractor, 40 x 30mm, 240mm, 9 1/2"

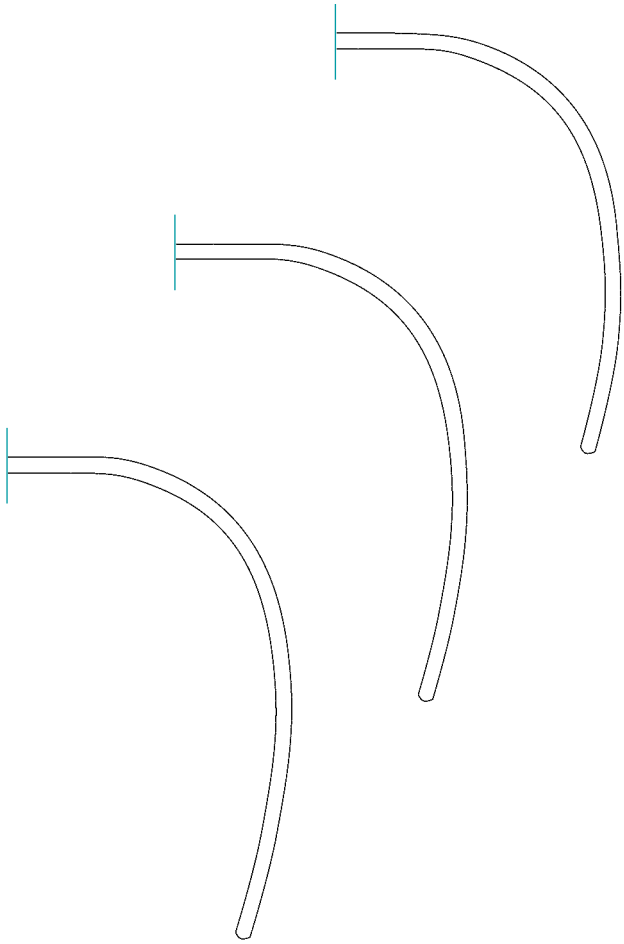
sharp	170-218-008
blunt	170-219-008



KOERTE WAGNER
Retractor, 25 x 40mm, semi - sharp

280mm, 11"	170-220-280





LANGENBECK
Retractor, 210mm, 8 1/4"

55 x 20mm	170-225-210
60 x 20mm	170-226-210
63 x 20mm	170-227-210



LAHEY
Retractor, 28 x 6mm

190mm, 7 1/2"	170-312-190



LITTLE
Retractor, 15 x 12mm

200mm, 8"	170-313-200



GREEN
Retractor, 20 x 23mm

220mm, 8 2/3"	170-319-220







MIDDELDORPF
Retractor, hollow handle

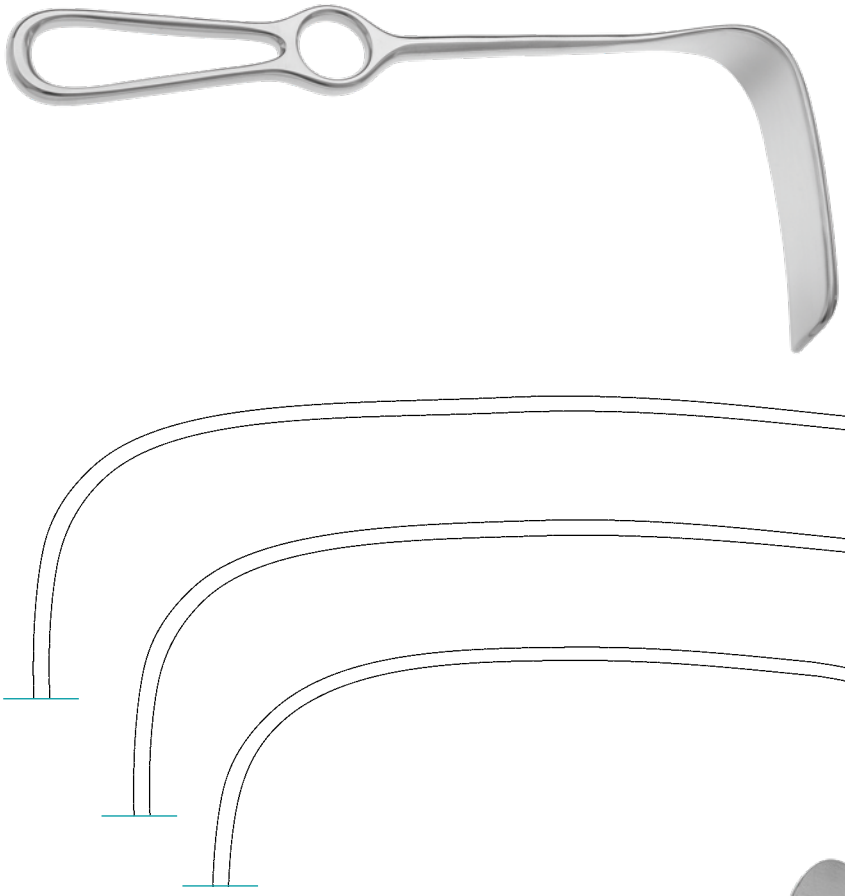
14 x 17mm 215mm, 8 1/2"	170-363-001
20 x 22mm 220mm, 8 2/3"	170-363-002
26 x 30mm 235mm, 9 1/4"	170-363-003

fenestrated handle

14 x 17mm 215mm, 8 1/2"	170-325-001
20 x 22mm 220mm, 8 2/3"	170-325-002
26 x 30mm 235mm, 9 1/4"	170-325-003

MIDDELDORPF
Abdominal Retractor, 255mm, 10"

40 x 45mm	170-443-001
40 x 50mm	170-443-002
55 x 70mm	170-443-003



DOYEN STILLE
Retractor, 240mm, 9 1/2"

120 x 55mm	170-440-001
110 x 40mm	170-440-002
90 x 30mm	170-440-003



FRITSCH
Retractor, 240mm, 9 1/2"

45 x 40mm	170-447-040
45 x 50mm	170-447-050
45 x 60mm	170-447-060
55 x 75mm	170-447-075
65 x 85mm	170-447-085



KOCHER
Retractor

70 x 25mm 220mm, 8 2/3"	170-449-225
80 x 42mm 250mm, 9 7/8"	170-451-002
80 x 50mm 250mm, 9 7/8"	170-451-003
80 x 60mm 250mm, 9 7/8"	170-451-004





RICHARDSON EASTMAN
Retractor, 260mm, 10 1/4" / 280mm, 11"

Set (Fig. 1+2)	170-381-000
Fig. 1, 28 x 20mm / 36 x 28mm	170-381-001
Fig. 2, 40 x 38 mm / 71 x 43 mm	170-381-002



RICHARDSON
Retractor, loop handle, 240mm, 9 1/2"

28 x 20mm	170-383-001
36 x 28mm	170-383-002
44 x 38mm	170-383-003
52 x 22mm	170-383-004



RICHARDSON
Retractor, hollow grip handle, 240mm, 9 1/2"

20 x 25mm	170-386-001
38 x 38mm	170-386-003
19 x 51mm	170-386-004
41 x 64mm	170-386-005



KELLY
Retractor, loop handle, 240mm, 9 1/2″

65 x 50mm	170-383-005
70 x 65mm	170-383-006
40 x 50mm	170-383-007
75 x 90mm	170-383-008

260mm, 10 1/4″



KELLY
Retractor, hollow grip handle, 245mm, 9 2/3″

40 x 54mm	170-386-006
53 x 65mm	170-386-007
65 x 81mm	170-386-008



MURPHY
Gallbladder Retractor, 50mm blade

280mm, 11″	170-500-255



DOYEN
Retractor, 50x85mm

250mm, 9 7/8"	170-461-250



DOYEN
Retractor, slightly concave, 220mm, 8 2/3"

Fig. 2, 85 x 35mm	350-290-002
Fig. 3, 115 x 35mm	350-290-003
Fig. 1, 55 x 45mm	350-290-004
Fig. 2, 85 x 45mm	350-290-005
Fig. 3, 115 x 45mm	350-290-006
Fig. 4, 160 x 45mm	350-290-007
Fig. 1, 55 x 60mm	350-290-008
Fig. 2, 85 x 60mm	350-290-009
Fig. 3, 115 x 60mm	350-290-010
Fig. 4, 160 x 60mm	350-290-011



MAYO
Retractor, 70mm blade

275mm, 10 7/8"	170-070-275



WEINBERG
Vagotomy Retractor
155 x 93mm / 54 x 51mm blades

220mm, 8 2/3"	170-800-220



MORRIS
Retractor, 245mm, 9 2/3"

70 x 38mm	170-465-380
70 x 50mm	170-465-510



MEYERDING
Retractor, 225mm, 8 7/8"

90 x 50mm	170-490-500
75 x 25mm	170-475-160
50 x 16mm	170-450-160



HIBBS
Retractor, 230mm, 9"

25 x 13mm	170-200-000
75 x 25mm	170-200-001
80 x 25mm	170-200-002



SIMON
Retractor, 280mm, 11"

115 x 22mm	170-457-001
115 x 27mm	170-457-002

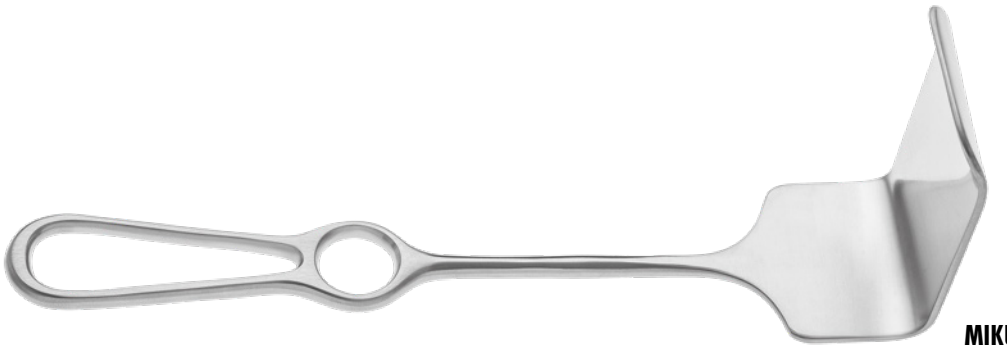


BRUNNER
Retractor, 210mm, 8 1/4"

80 x 20mm	170-471-108
100 x 20mm	170-471-110
120 x 25mm	170-471-112
140 x 25mm	170-471-114
160 x 30mm	170-471-116
180 x 30mm	170-471-118

250mm, 9 7/8"

80 x 20mm	170-471-008
100 x 20mm	170-471-010
120 x 25mm	170-471-012
140 x 25mm	170-471-014
160 x 30mm	170-471-016
180 x 30mm	170-471-018



MIKULICZ
Retractor, 90 x 50mm

260mm, 10 1/4"	170-607-260



MIKULICZ
Retractor, 260mm, 10 1/4"

85 x 35mm	170-489-001
120 x 50mm	170-489-002
150 x 50mm	170-489-003



KELLY
Retractor, 270mm, $10^{2/3}$"

160 x 38mm	170-531-260
160 x 57mm	170-530-260
190 x 38mm	170-533-260
190 x 57mm	170-532-260



CORYLLOS
Retractor, 240mm, $9^{1/2}$"

115 x 65mm	170-461-003
108 x 43mm	170-461-002
82 x 22mm	170-461-001



SAUERBRUCH
Retractor, 125 x 37mm

250mm, $9^{7/8}$"	170-465-250



ZENKER
Retractor

250mm, 9 7/8″ 35 x 8mm	170-319-250
260mm, 10 1/4″ 60 x 12mm	170-319-260
275mm, 10 7/8″ 75 x 12mm	170-319-270



SEMB
Retractor, 250mm, 9 7/8″

Fig. 1, 25 x 25mm 3 prongs	170-462-001
Fig. 2, 25 x 20mm 4 prongs	170-462-002



LANGENBECK
Retractor, solid handle, 220mm, 8 2/3″

30 x 11mm	170-222-220
30 x 14mm	170-222-221
30 x 16mm	170-222-222
40 x 11mm	170-222-223
50 x 11mm	170-222-224

fenestrated handle

30 x 11mm	170-293-001
30 x 14mm	170-293-002
30 x 16mm	170-293-003
40 x 11mm	170-293-004
50 x 11mm	170-293-005



KOCHER LANGENBECK
Retractor, 215mm, 8 1/2"

22 x 6mm	170-317-022
25 x 8mm	170-317-025
25 x 6mm	170-317-026
35 x 8mm	170-317-035
35 x 11mm	170-317-036
35 x 15mm	170-317-037
40 x 11mm	170-317-040
55 x 11mm	170-317-055
70 x 15mm	170-317-070
80 x 12mm	170-317-080
80 x 15mm	170-317-081



KOCHER
Retractor, 230mm, 9"

40 x 18mm	170-315-018
60 x 20mm	170-315-020
60 x 25mm	170-315-025
75 x 30mm	170-315-030
75 x 40mm	170-315-040



SAUERBRUCH
Retractor, 225mm, 8 7/8"

Fig. 1, 44 x 16mm	170-561-001
Fig. 2, 55 x 22mm	170-561-002
Fig. 3, 72 x 19mm	170-561-003



HARRINGTON
Retractor, 320mm, 12 1/2″

127 x 40mm	170-481-040
127 x 62mm	170-481-062



HARRINGTON PEMBERTON
Retractor, 295mm, 11 2/3″

175 x 64mm	170-481-295



WYLIE
Retractor, 310mm, 12 1/4″

25 x 100mm	170-430-001
25 x 180mm	170-430-002



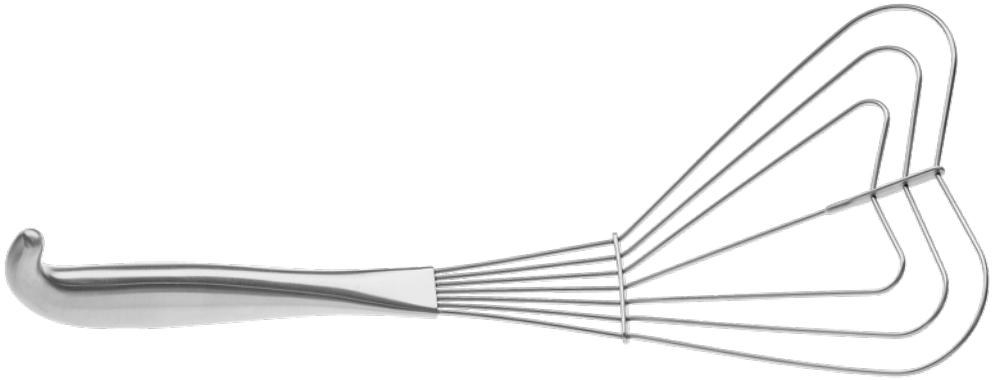
ALLISON

Lung Spatula, 40mm

300mm, 11 7/8"	290-505-300

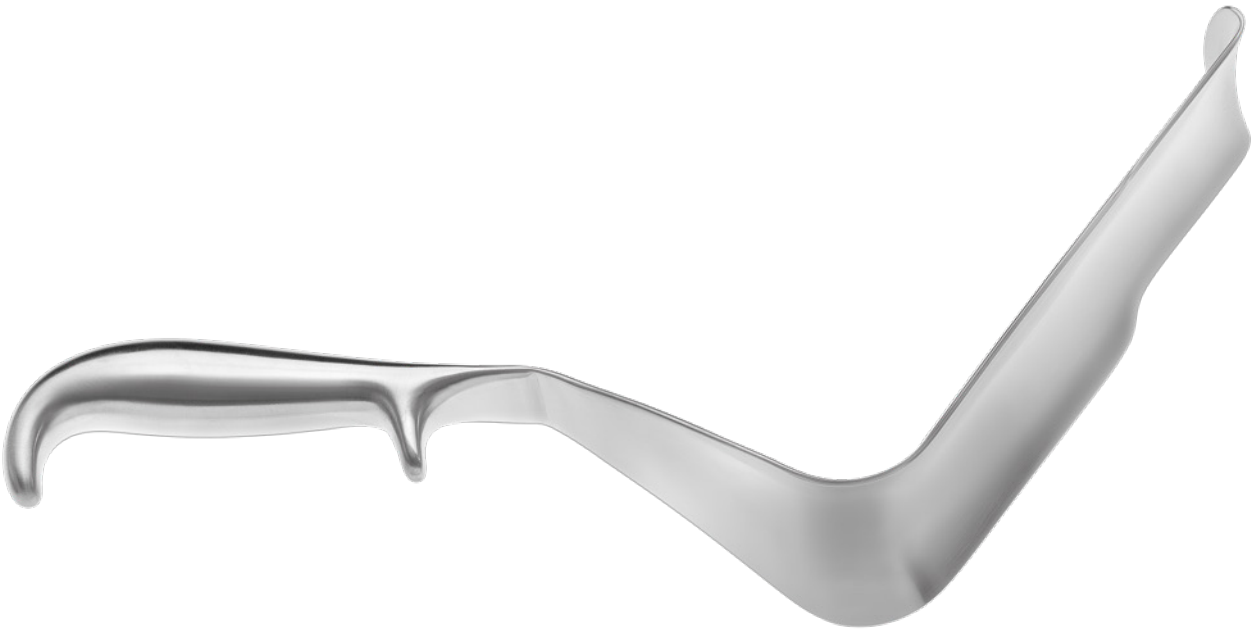
54mm

320mm, 12 1/2"	290-505-320



Lung Spatula

300mm, 11 7/8"	290-511-260



ST. MARKS
Pelvic Retractor with lip,
130x60mm

290mm, 11 1/2"	170-493-001

180x60mm

330mm, 13"	170-493-002

180x60mm, without lip

330mm, 13"	170-493-003



LERICHE
Retractor, 275mm, 10 7/8"

45mm	170-245-275
60mm	170-260-275



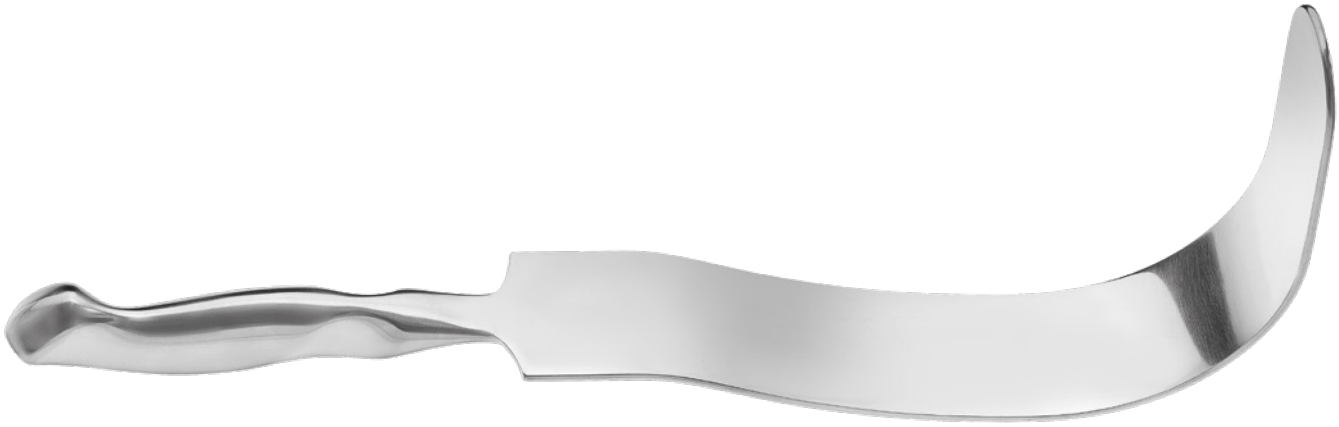
KUEMMEL
Abdominal Retractor, 100 x 45mm

280mm, 11"	170-621-280



KOERTE
Abdominal Retractor, 120 x 47mm

280mm, 11"	170-617-280



DEAVER FORD
Retractor with lip, 420mm, 16 1/2"

255 x 150 x 50mm	170-420-050
255 x 150 x 75mm	170-420-075
255 x 150 x 100mm	170-420-100



DEAVER
Retractor, hollow handle, 250mm, 9 7/8"

25 x 254mm	170-483-024
25 x 300mm	170-483-025
38 x 300mm	170-483-038
50 x 310mm	170-483-050
75 x 300mm	170-483-075
100 x 300mm	170-483-100



DEAVER
Retractor, smooth working end, 180mm, 7"

19mm	170-591-180

serrated working end

19mm	171-591-180

smooth working end, 215mm, 8 1/2"

22mm	170-591-215

serrated working end

22mm	171-591-215

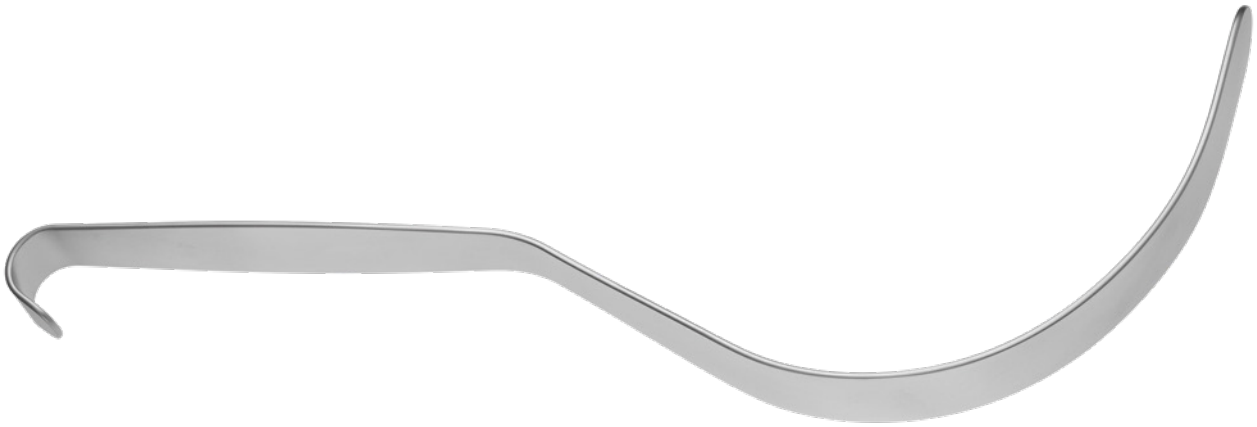


DEAVER
Retractor, smooth working end, 230mm, 9"

25mm	170-591-230

serrated working end, 230mm, 9"

25mm	171-591-230



DEAVER
Retractor, smooth working end, 25mm

300mm, 11 7/8"	170-591-300
330mm, 13"	170-591-330
360mm, 14 1/8"	170-591-360

300mm, 11 7/8"

38mm	170-593-300
50mm	170-595-300
75mm	170-597-300
100mm	170-598-300

serrated working end, 25mm

300mm, 11 7/8"	171-591-300
330mm, 13"	171-591-330
360mm, 14 1/8"	171-591-360

300mm, 11 7/8"

38mm	171-593-300
50mm	171-595-300
75mm	171-597-300



DEAVER
Retractor

25x265mm	170-025-265



DEAVER
Retractor, pediatric size

10x180mm	170-010-180



DEAVER
Retractor, pediatric size, 170mm, $6^{2/3}$″

8mm	170-008-170
10mm	170-010-170
15mm	170-015-170



RIBBON
Abdominal Retractor, malleable

200 x 6mm	170-973-006
200 x 12mm	170-973-012
200 x 17mm	170-973-017
200 x 20mm	170-973-020
250 x 25mm	170-973-025

330 x 13mm	170-963-013
330 x 20mm	170-963-019
330 x 25mm	170-963-025
330 x 32mm	170-963-032
330 x 40mm	170-963-040
330 x 50mm	170-963-050



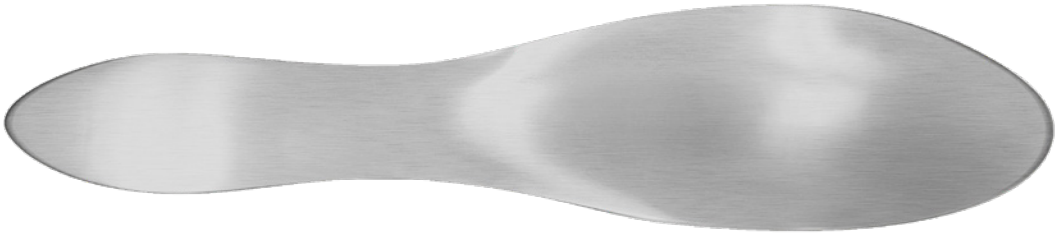
TUFFIER
Abdominal Retractor, malleable

200 x 25mm	170-975-250



HABERER
Abdominal Retractor, malleable

280 x3 5mm 25/30mm	170-971-250
300 x 37mm 37/45mm	170-971-300
300 x 40mm 40/50mm	170-971-370



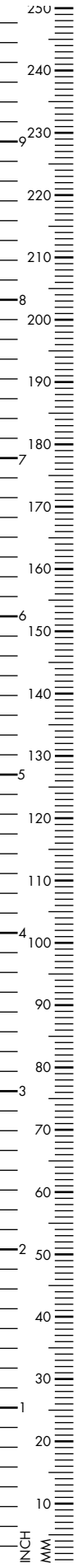
REVERDIN
Abdominal Retractor

280 x 45/60mm	170-953-280

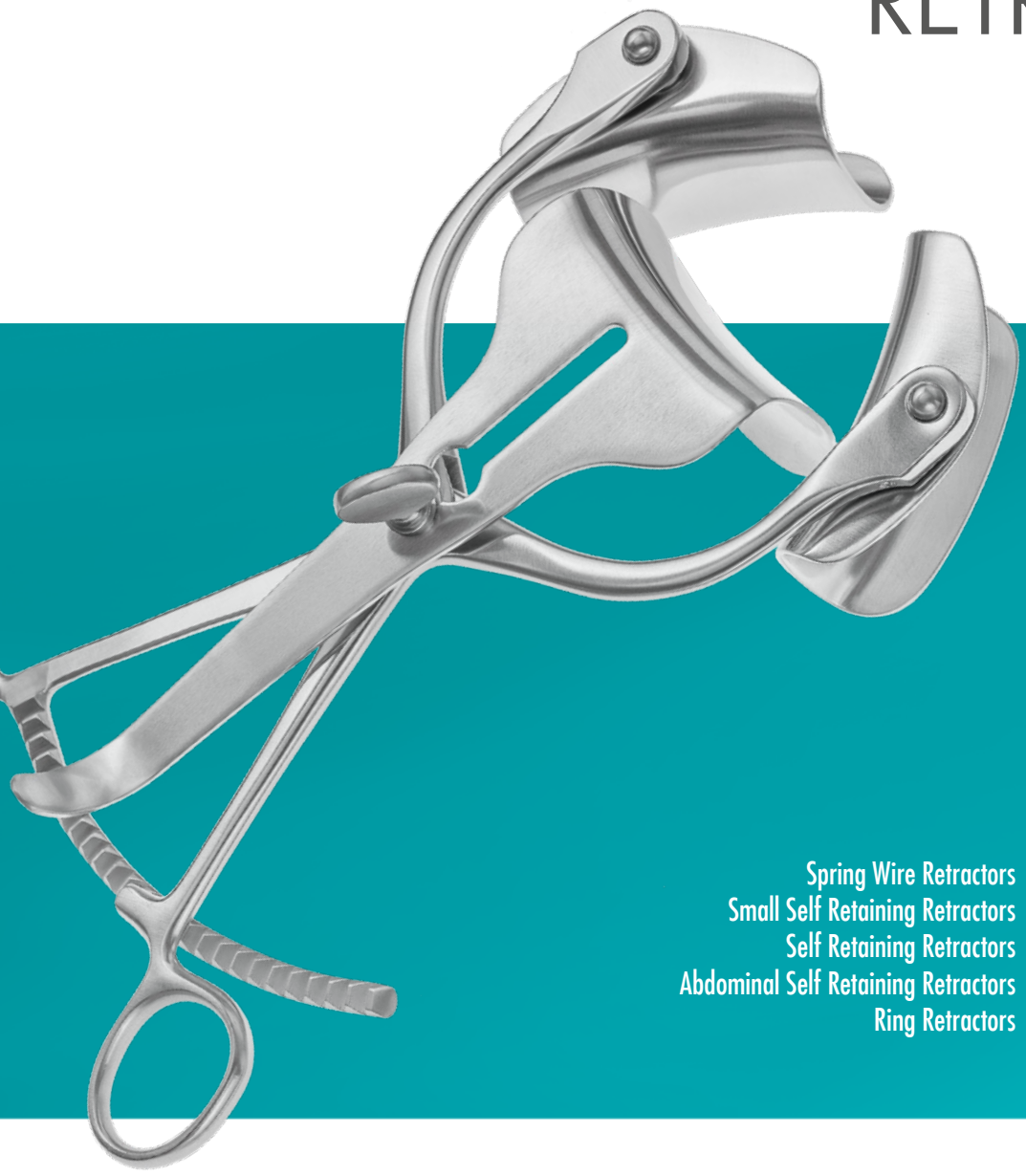


RIBBON
Retractor, hollow handle, 460mm, 18”

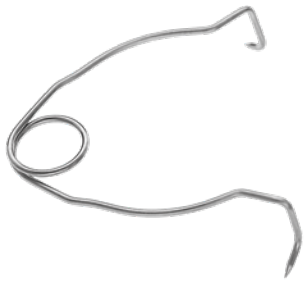
19mm	170-964-019
25mm	170-964-025
32mm	170-964-032
38mm	170-964-038
51mm	170-964-050


250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
9
8
7
6
5
4
3
2
1
INCH
MM

RETAINING RETRACTORS

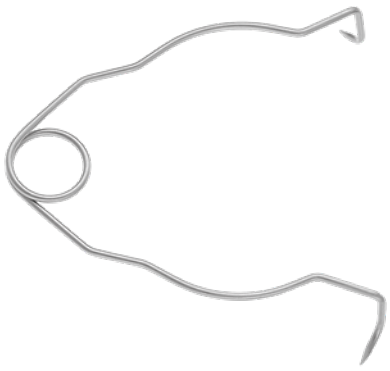


Spring Wire Retractors
Small Self Retaining Retractors
Self Retaining Retractors
Abdominal Self Retaining Retractors
Ring Retractors



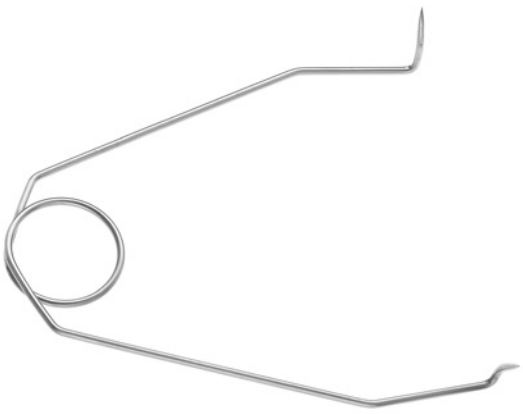
FARR
10mm, sharp

38mm, 1 1/2"	170-710-038



FARR
11mm, sharp

50mm, 2"	170-710-050
58mm, 2 1/4"	170-710-058
64mm, 2 1/2"	170-710-064
75mm, 3"	170-710-075

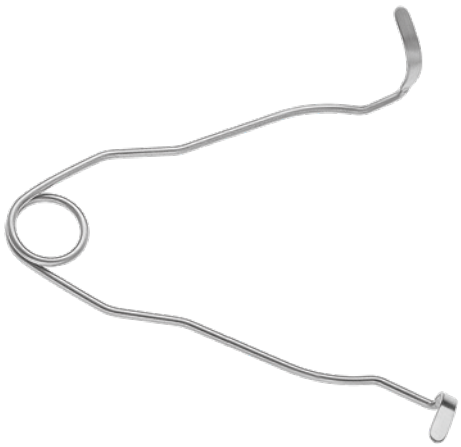


FARR
20mm, sharp

140mm, 5 1/2"	170-711-140

30mm, sharp

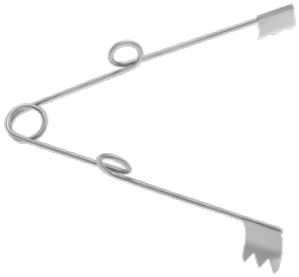
140mm, 5 1/2"	170-712-140



FARR

12mm flat blades

64mm, 2 1/2"	170-712-064





Spring Wire Retractor, 10.5mm sharp points

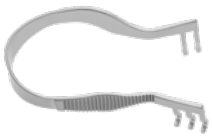
75mm, 3"	170-100-075

11x15.5mm flat blades

90mm, 3 1/2"	170-100-090

15.5x20.5mm flat blades

115mm, 4 1/2"	170-100-115





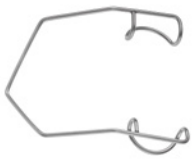
FINSEN

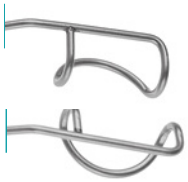
Spring Retractor, 2x3 teeth, 50mm, 2"

sharp	170-700-050
blunt	170-701-050

3x4 teeth, 70mm, 2 3/4"

sharp	170-702-070
blunt	170-703-070



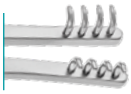


BARRAQUER

Eye Specula

Children, 10mm blade	400-500-030
Adult, 40mm blade	400-500-040





ALM

4x4 teeth, 70mm, 2 3/4"

sharp	170-714-070
blunt	170-715-070

100mm, 4"

sharp	170-714-100
blunt	170-715-100



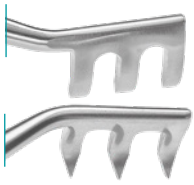


HOLZHEIMER

Skin Retractor, 4 prongs,
8mm wide, 5mm deep, 100mm, 4"

blunt	170-109-001
sharp	170-109-002

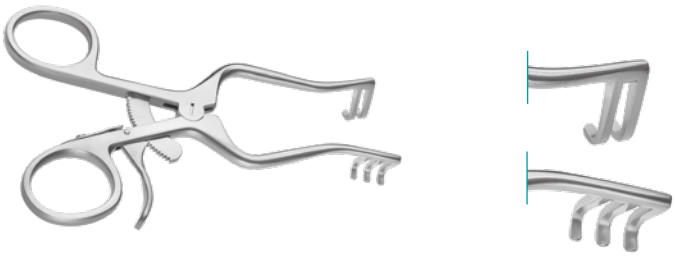




JANSEN

3x3 prongs, 100mm, 4"

sharp	170-720-100
blunt	170-723-100



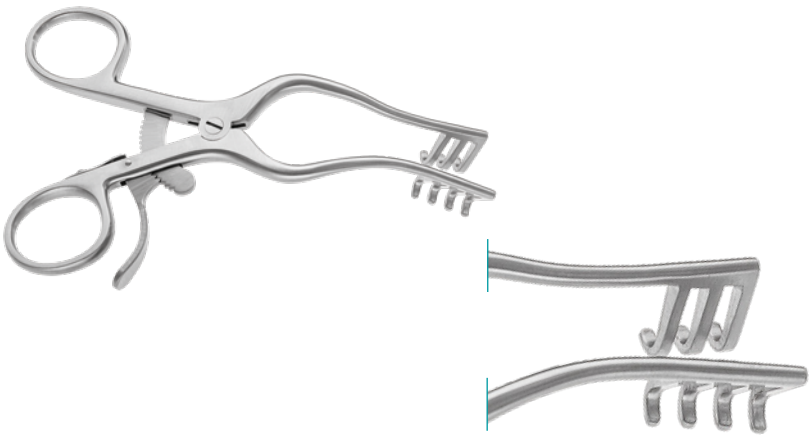
BABY WEITLANER

2x3 teeth, 105mm, 4 1/8″

sharp	170-748-105

115mm, 4 1/2″

blunt	170-749-105
semi-sharp	170-750-105



WULLSTEIN

3x4 teeth, curved arms, 105mm, 4 1/8″

sharp	170-742-105
blunt	170-743-105

130mm, 5 1/8″

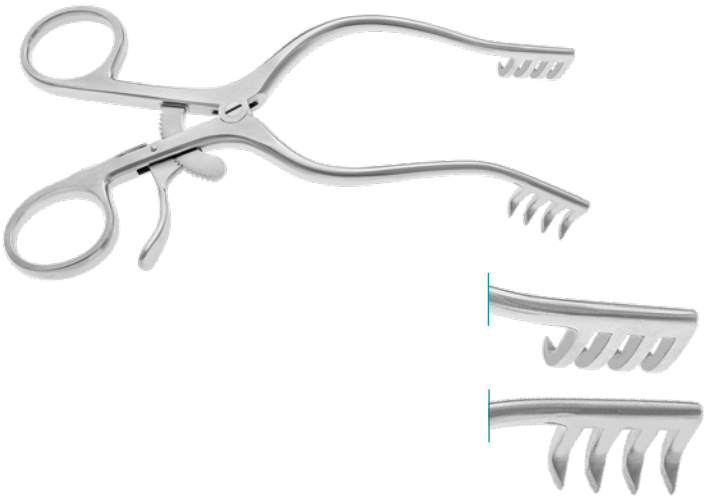
sharp	170-742-130
blunt	170-743-130

150mm, 6″

sharp	170-742-150
blunt	170-743-150

180mm, 7″

sharp	170-742-180
blunt	170-743-180



MOLLISON

4x4 teeth, curved arms, sharp

155mm, 6 1/8″	170-754-155



WEITLANER

3x4 teeth, sharp

130mm, 5 1/8"	170-750-130
165mm, 6 1/2"	170-750-165
200mm, 8"	170-750-200
240mm, 9 1/2"	170-750-240

blunt

130mm, 5 1/8"	170-751-130
165mm, 6 1/2"	170-751-165
200mm, 8"	170-751-200
240mm, 9 1/2"	170-751-240



WEITLANER BECKMANN

3x4 teeth, hinged arms, sharp

140mm, 5 1/2"	170-746-140
160mm, 6 1/4"	170-746-160
200mm, 8"	170-746-200
240mm, 9 1/2"	170-746-240

blunt

140mm, 5 1/2"	170-747-140
160mm, 6 1/4"	170-747-160
200mm, 8"	170-747-200
240mm, 9 1/2"	170-747-240



ADSON

4x4 teeth, straight arms, 200mm, 8"

blunt	170-730-200
sharp	170-731-200



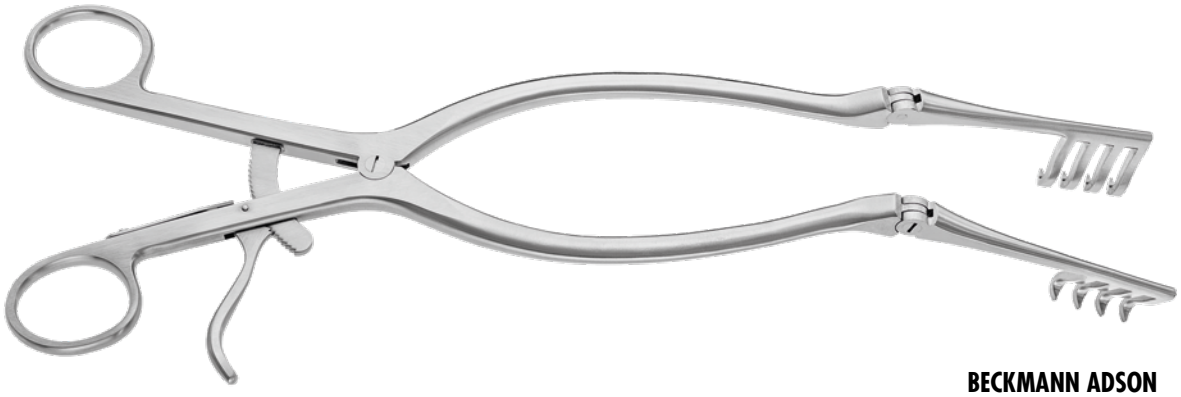
ADSON ANDERSON
4x4 teeth, curved arms, 195mm, 7 3/4"

sharp	170-732-200
blunt	170-733-200



ADSON
3x4 teeth

265mm, 10 1/2"	170-730-265



BECKMANN ADSON
4x4 teeth, hinged arms, 310mm, 12 1/4"
short sharp teeth

25x25mm	170-786-001

short blunt teeth

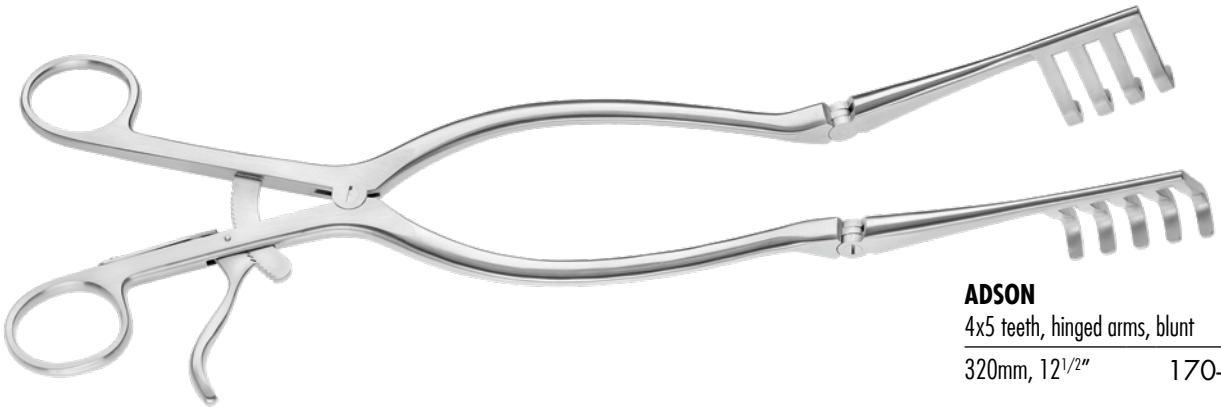
25x25mm	170-786-000

long sharp teeth

25x45mm	170-786-002

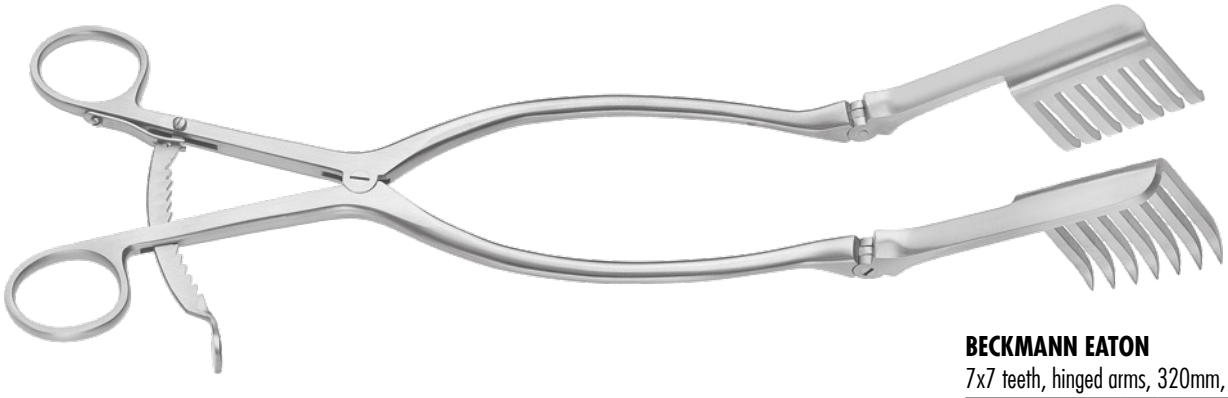
long blunt teeth

25x45mm	170-786-003



ADSON
4x5 teeth, hinged arms, blunt

320mm, 12 1/2"	170-784-320



BECKMANN EATON
7x7 teeth, hinged arms, 320mm, 12 1/2"

sharp	170-788-320
blunt	170-789-320



MISKIMON
Retractor, 7x7 teeth, 220mm, 8 2/3"

sharp	170-738-220
blunt	170-739-220



MEYERDING

Laminectomy Retractor, 200mm, 8"

25x32mm blade	170-791-001
25x54mm blade	170-791-002
19x60mm blade	170-791-003
25x60mm blade	170-791-004



MEYERDING HEMI

Laminectomy Retractor, 180mm, 7"
10mm wide blade, solid blade left

50mm	170-792-001
60mm	170-792-002
70mm	170-792-006

solid blade right

50mm	170-793-001
60mm	170-793-008
70mm	170-793-007

20mm wide blade, solid blade left

50mm	170-792-004
60mm	170-792-003
70mm	170-792-005

solid blade right

50mm	170-793-004
60mm	170-793-005
70mm	170-793-002



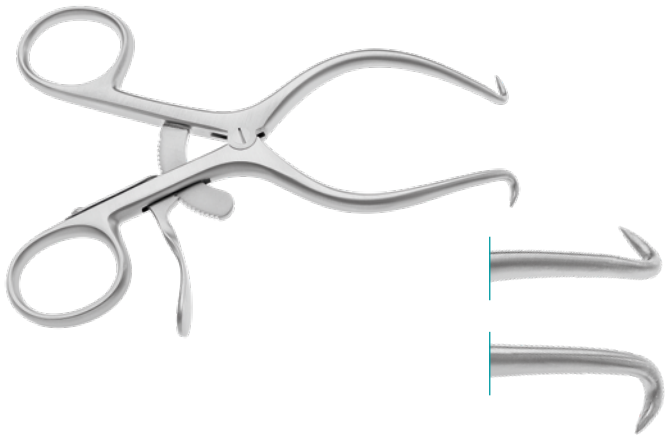
MARKHAM MEYERDING

Laminectomy Retractor, 190mm, $7^{1/2}$"

solid blade left, 50 x 25mm	170-790-006
solid blade right 20 x 25mm	170-790-005

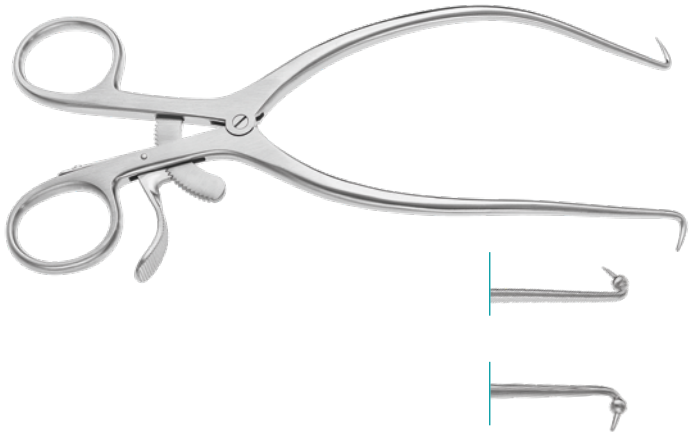
165mm, $6^{1/2}$"

solid blade left, 25 x 65mm	170-790-008
solid blade right, 25x65mm	170-790-007



GELPI
Perineal Retractor, pediatric size

90mm, 3 1/2"	170-802-090
110mm, 4 1/3"	170-802-110
135mm, 5 1/3"	170-802-135



GELPI
Perineal Retractor

180mm, 7"	170-802-180

with ball stops

190mm, 7 1/2"	170-803-180



DEBAKEY
sharp

100mm, 4"	170-745-100
170mm, 6 2/3"	170-745-170



JOHNSON
Neuroma Retractor, 90° angled, 7.5mm tip

85mm, 3 1/4"	170-801-085
100mm, 4"	170-801-100



KÖLBL
Skin and Tissue Spreader, blunt tip, straight shaft

1x1 teeth	259-257-016

angled shaft

1x1 teeth	259-257-009
2x2 teeth	259-257-006



KÖLBL
Capsule Retractor, blunt tip, 90° curved

1x1 teeth	259-257-007



BANKHART
Rotator Retractor, 190mm, 7 1/2"

ring left side	210-905-190
ring right side	210-907-190

250mm, 9 7/8"

ring left side	210-905-250
ring right side	210-907-250



KÖLBEL
Retractor, slightly angled

200mm, 8"	259-257-002

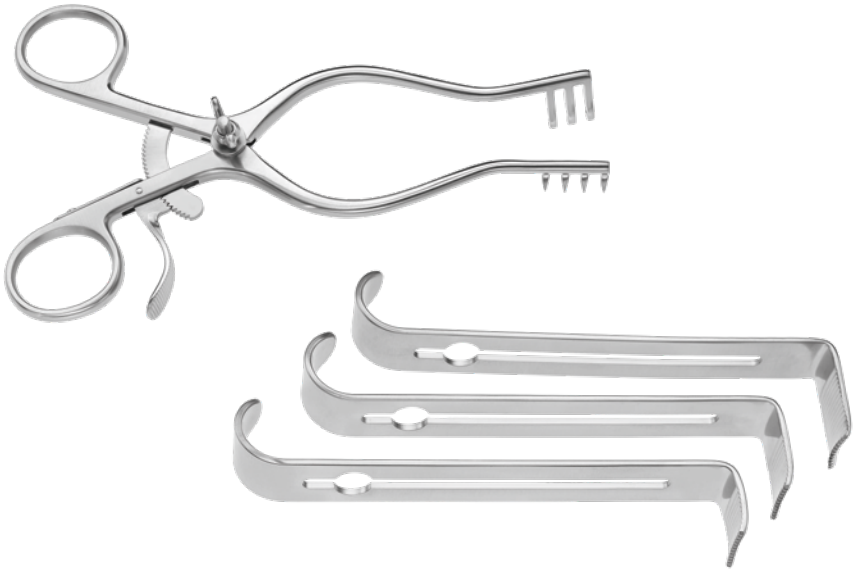
Single Blade

36 x 36mm	259-257-003
53 x 36mm	259-257-004
68 x 36mm	259-257-005
36 x 20mm	259-257-013
53 x 20mm	259-257-014
68 x 20mm	259-257-015



MAYO ADAMS
Retractor Set, removable center blade, 170mm, 6 2/3″

complete set	170-815-170
spreader only	170-815-000



HENLEY
Retractor Set, removable center blade, 160mm, 6 1/4″, sharp/sharp

complete set	170-769-160

blunt/blunt

complete set	170-770-160

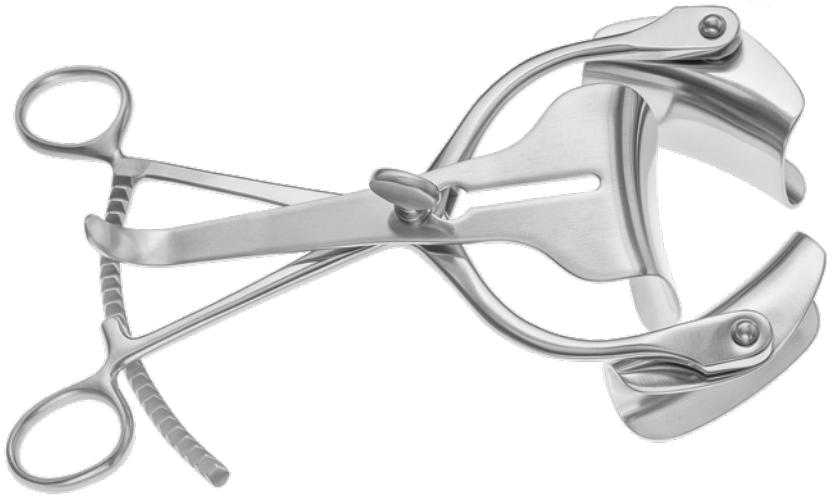
Blades

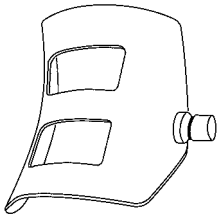
19x16mm	170-771-001
25x16mm	170-771-002
32x16mm	170-771-003



COLLIN BABY
Abdominal Retractor with 2 pairs of valves 30 x 44mm and 23 x 44mm

180mm, 7″	170-819-000





A

COLLIN
Abdominal Retractor,
120mm, 4 3/4" spreading, complete with lateral and centre blades

lateral: 38 x 62mm centre: 55 x 55mm	170-823-000
lateral: 40 x 80mm centre: 55 x 65mm	170-824-000
lateral: 60 x 80mm centre: 60 x 75mm	170-825-000

without centre blade

lateral: 38 x 62mm	170-821-000

A Blade, ball snap closure

60 x 80mm	170-834-060



RICARD
Abdominal Retractor,
280mm, 11" spreading, complete with lateral and centre blades

lateral: 72 x 85mm centre: 80 x 90mm	170-827-000

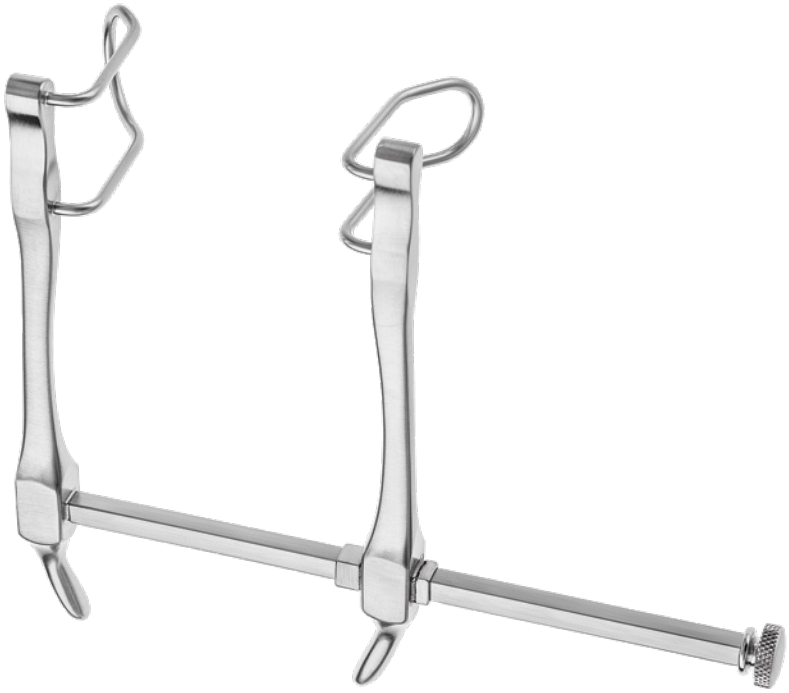
280mm, 11" spreading

lateral: 60 x 80mm centre: 55 x 70mm	170-829-000



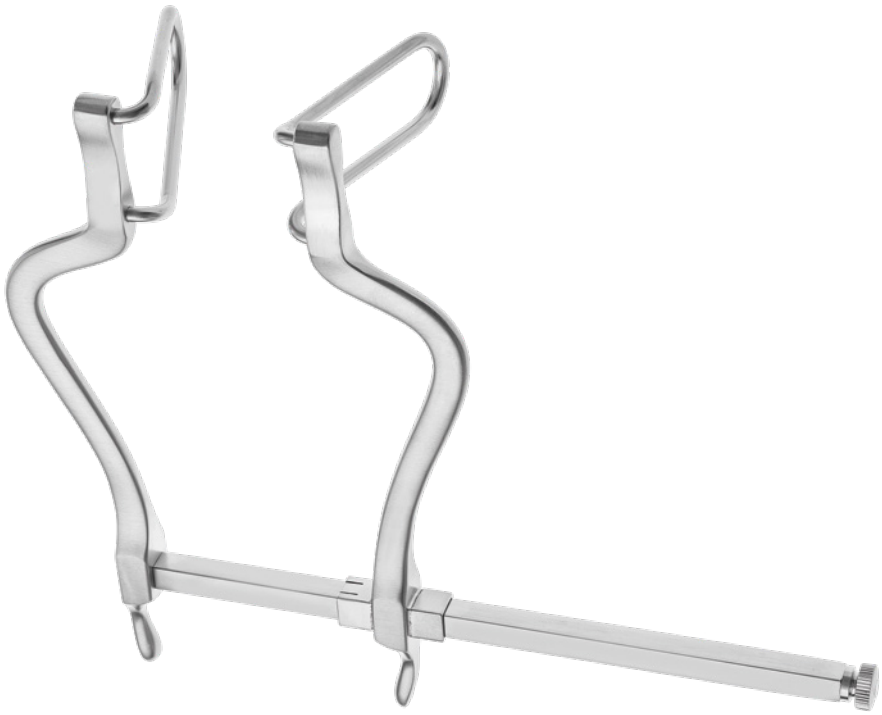
GOSSET
Abdominal Retractor
100mm wide, 26 x 39mm blades

170-818-100



GOSSET
Abdominal Retractor
120mm wide, 30 x 40mm blades

170-818-120



GOSSET
Abdominal Retractor
140mm wide, 26 x 64mm blades

170-818-140



GOSSET
Abdominal Retractor
160mm wide, 56 x 60mm blades

170-818-160



BALFOUR
Abdominal Retractor, 180mm spread width,
lateral wire blades: 50mm

75 x 50mm	170-852-050

lateral blades: 63mm

75 x 50mm	170-852-000

lateral blades: 100mm

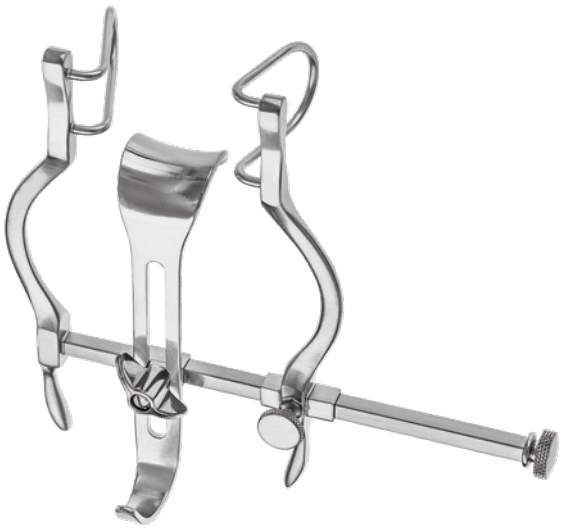
85 x 70mm	170-852-100

BALFOUR
Abdominal Retractor, 180mm spread width,
lateral solid blades: 50mm

75 x 50mm	170-854-000

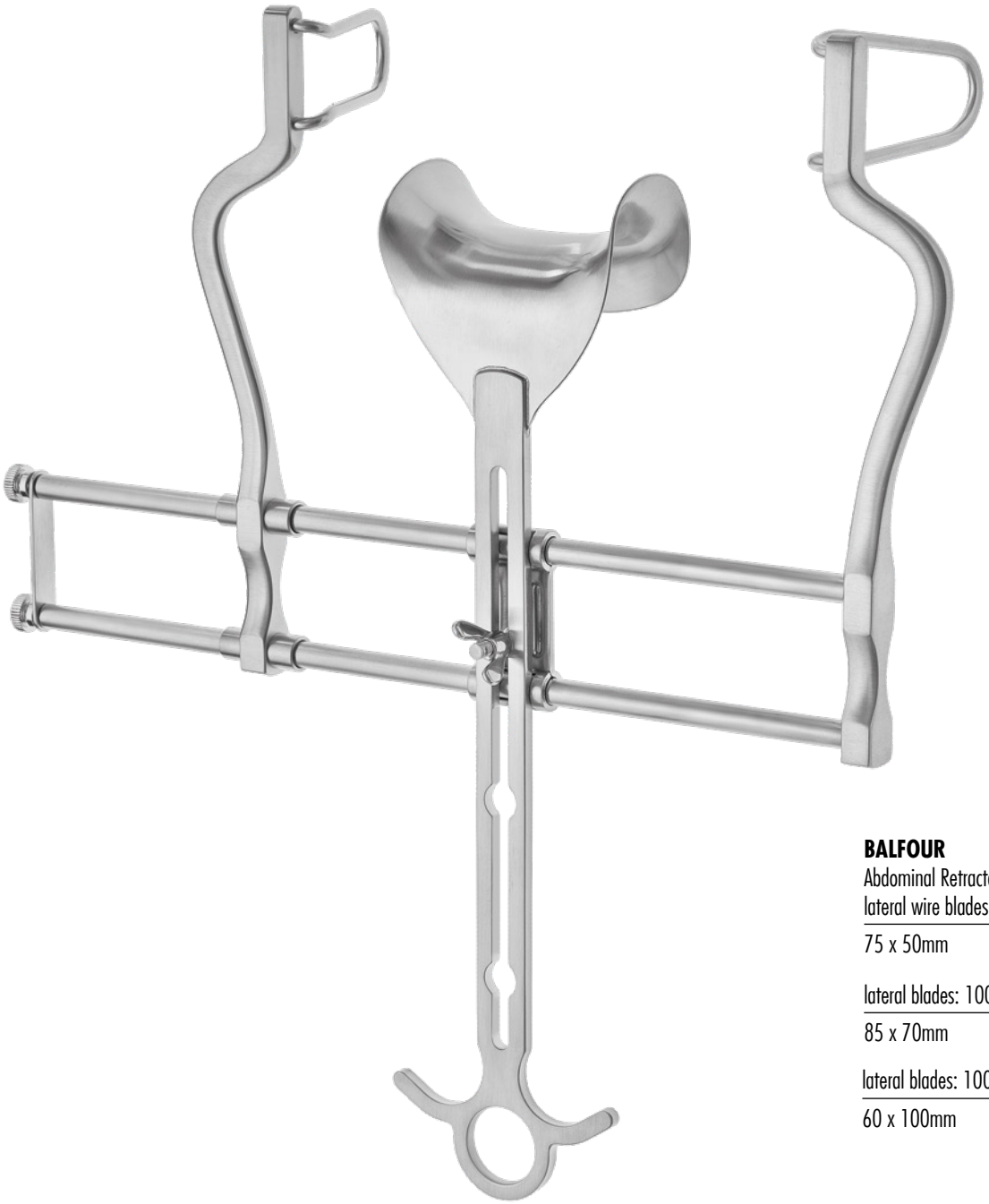
lateral blades: 70mm

75 x 50mm	170-854-070



BALFOUR BABY
Abdominal Retractor
95mm wide, 2 lateral blades: 38mm
center blade: 23 x 25mm

170-766-090



BALFOUR
Abdominal Retractor, 250mm spread width, lateral wire blades: 50mm

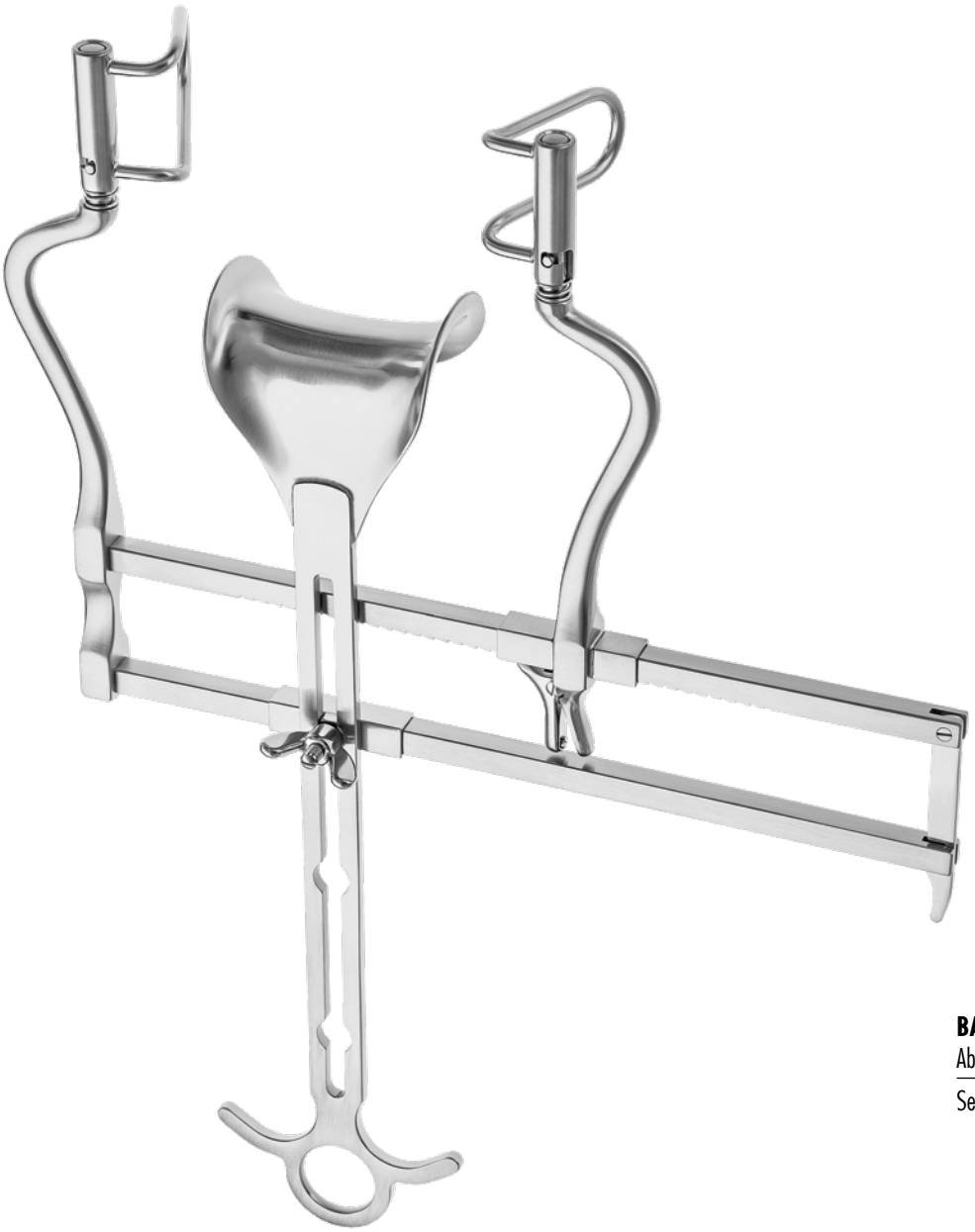
75 x 50mm	170-840-050

lateral blades: 100mm

85 x 70mm	170-840-000

lateral blades: 100mm

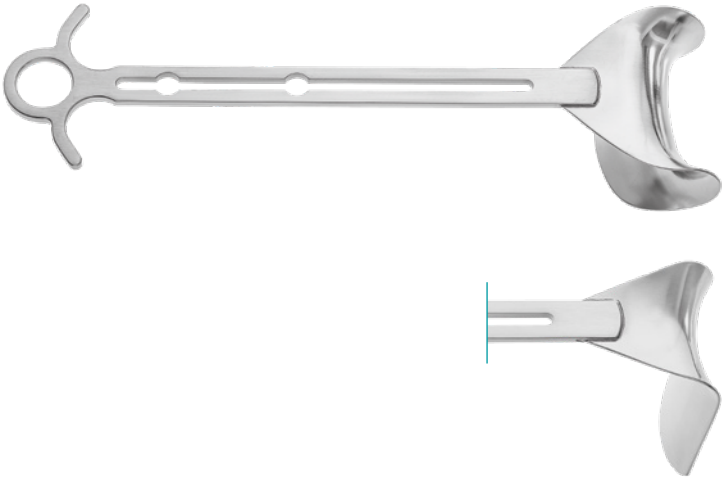
60 x 100mm	170-840-100



BALFOUR US

Abdominal Retractor Set, 180mm spread width

Set	170-860-180



BALFOUR US

Centre Blades, round (W x D)	
68 x 40mm	170-863-001
75 x 50mm	170-863-002
85 x 70mm	170-863-003
93 x 44mm	170-863-004
angular	
60 x 100mm	170-863-005
70 x 100mm	170-863-006



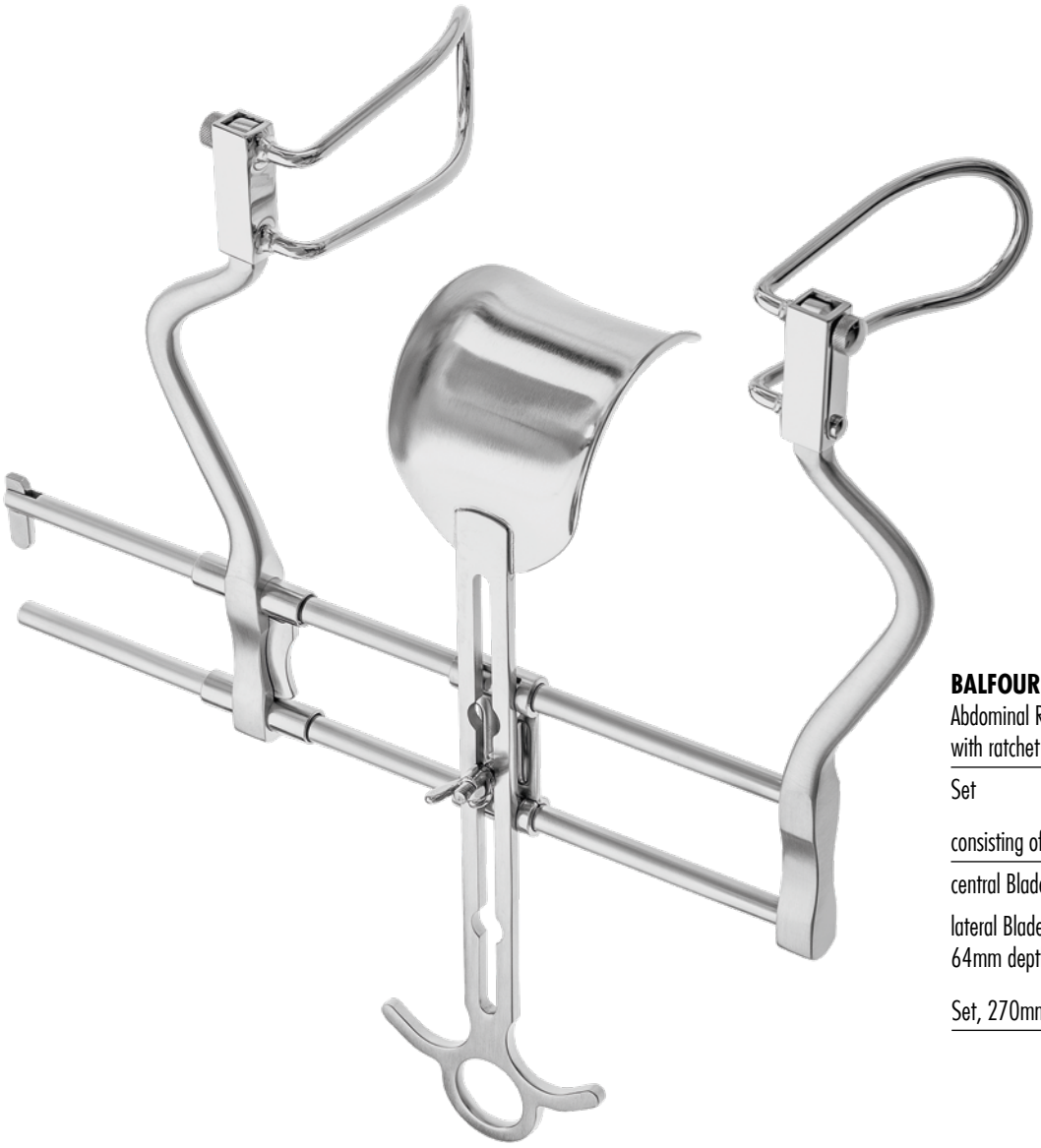
Lateral Blades Pair	
50mm depth	170-860-030
70mm depth	170-860-035
100mm depth	170-860-045





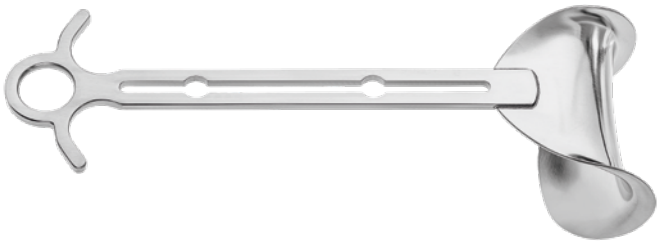
BALFOUR HORGAN

Central Blade, malleable	
50 x 198mm	170-863-007
50 x 127mm	170-863-008



BALFOUR
Abdominal Retractor Set, 200mm spread width, with ratchet bar positioning system

Set	170-865-200
consisting of:	
central Blade	170-865-001
lateral Blade, 64mm depth	170-865-008
Set, 270mm spread width	170-865-270



BALFOUR RSC
Central Blade

64 x 64mm	170-865-001
85 x 70mm	170-865-002
93 x 44mm	170-865-003
64 x 44mm	170-865-004



BALFOUR
Central Blade, malleable

51 x 198mm	170-865-005
51 x 171mm	170-865-006
57 x 267mm	170-865-007



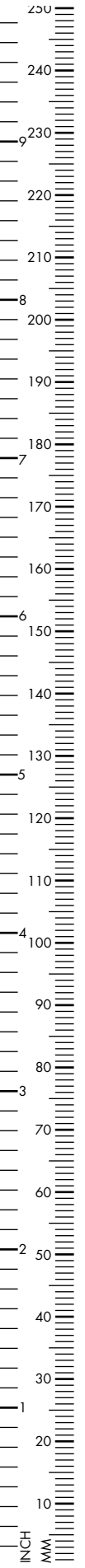
BALFOUR RSC
Lateral Blade, fenestrated

64mm	170-865-008
89mm	170-865-009
100mm	170-865-010



BALFOUR
Lateral Blade, closed

64mm	170-865-011
89mm	170-865-012
100mm	170-865-013





BALFOUR EXTENSION ARM

Side Arm

left	170-861-101
right	170-861-100



O'SULLIVAN O'CONNOR
Abdominal Retractor Set with blades
1x 70 x 110mm, 2x 80 x 45mm

170-868-000

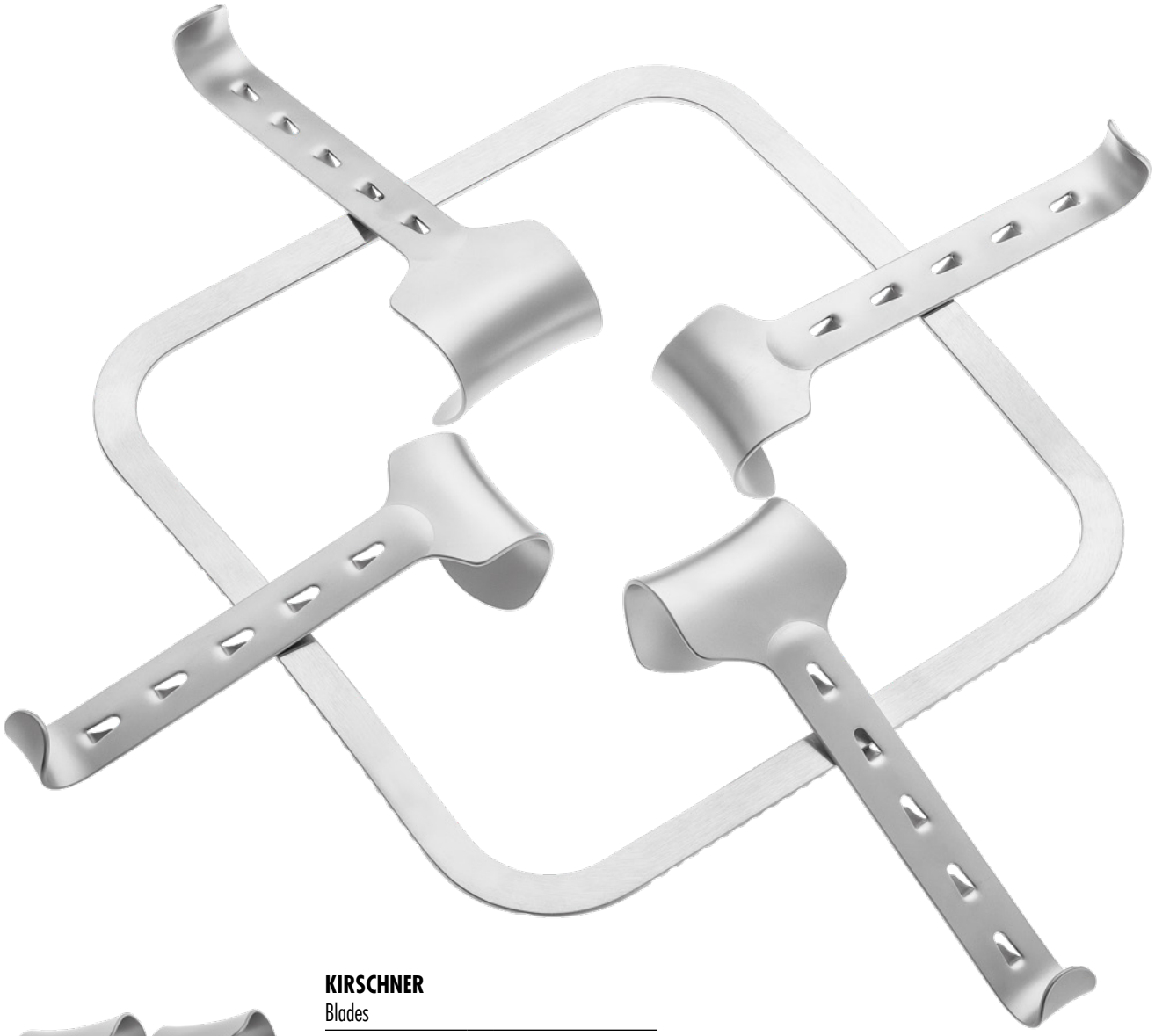
Blades	
80 x 45mm	170-868-001
70 x 110mm	170-868-002



O'SULLIVAN O'CONNOR
Vaginal Retractor Set with blades
1x 44 x 89mm, 1x 38 x 89mm,
1x 13 x 47mm

170-868-100

Blades	
44 x 89mm	170-868-101
38 x 89mm	170-868-102
13 x 47mm	170-868-103





KIRSCHNER

Blades

55 x 40mm	170-889-040
65 x 50mm	170-889-050
85 x 60mm	170-889-060
65 x 78mm	170-889-075
90 x 80mm	170-889-086

Retractor Hook-on

78 x 65mm	170-889-078
80 x 90mm	170-889-080
98 x 50mm	170-889-098
105 x 35mm	170-889-099

Frame

240 x 240mm	170-884-024

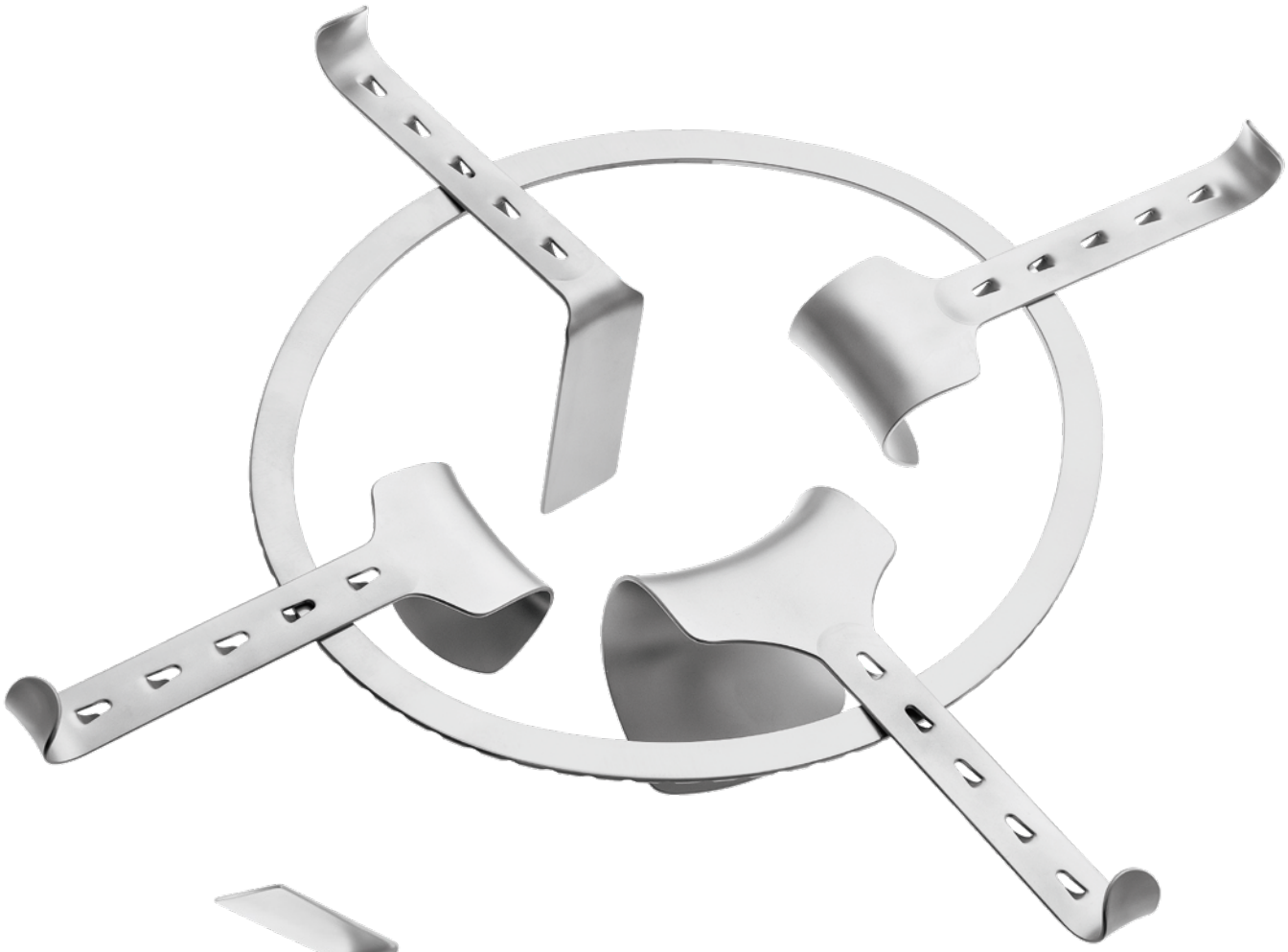
KIRSCHNER

Abdominal Retractor Set, square
consists of:
Frame 240 x 240 mm,
2 blades 50 x 65mm
2 blades 65 x 50mm

170-884-000

Frame 270 x 270 mm,
2 blades 55 x 40mm
2 blades 65 x 50mm

170-886-000





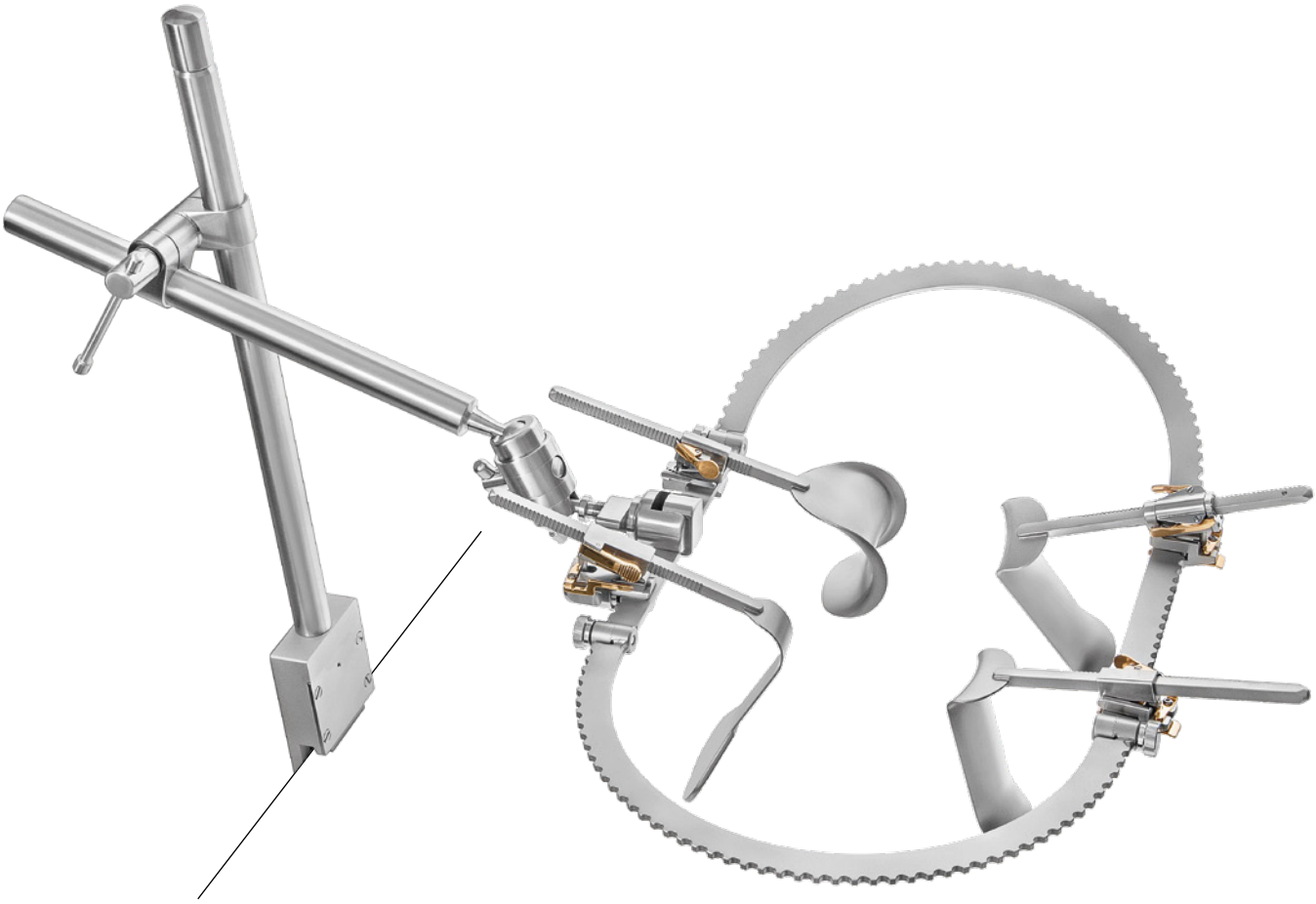
KIRSCHNER

Blade	
35 x 105mm	170-889-099
Frame	
240 x 300mm	170-884-100

KIRSCHNER
Abdominal Retractor Set, oval
Consists of:
Frame 240 x 300 mm,
1 blade 90 x 80 mm
1 blade 50 x 98mm
1 blade 35 x 105mm

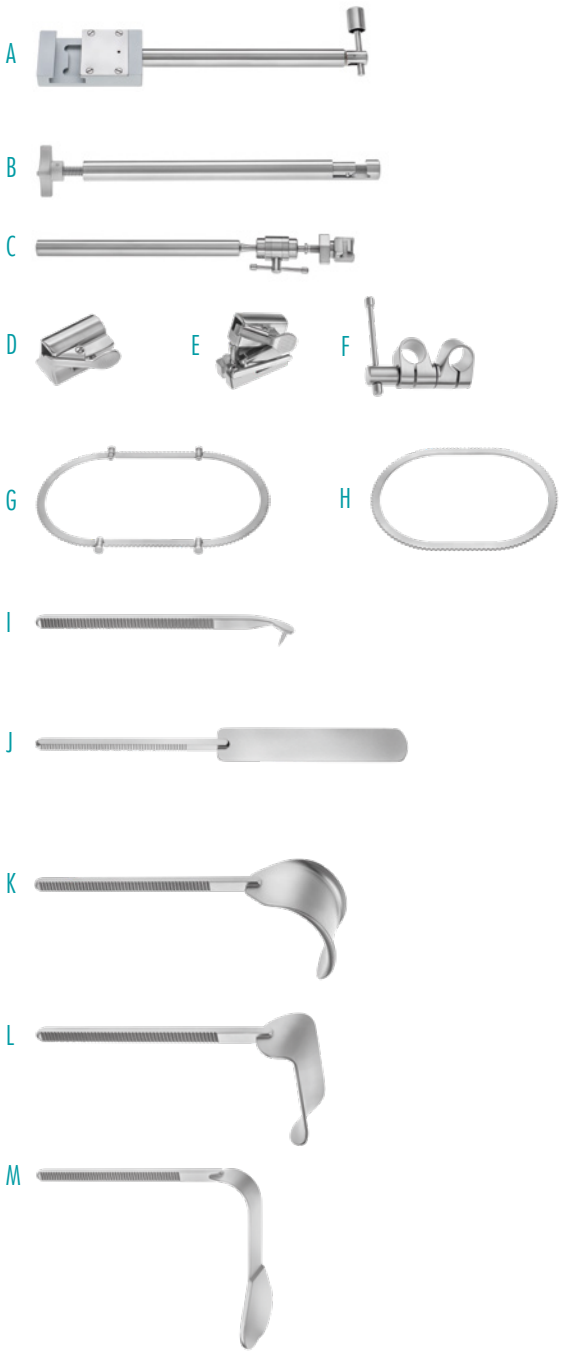
170-882-000

GENUINE RING RETRACTOR SETS



The genuine and established RZ Table Mounted Ring Retractor System provides a large variety of configurations. Every kit can be easily set up and adjusted multi-directional even for complex requirements thanks to the flexible ratchet mechanisms.
Any retractor can be applied as an individual set.

- Large assortment of retractor blades in different sizes
- Expandable basic components to assemble a complex system
- Simple assembly and modifications before and during surgery
- All parts fully autoclavable

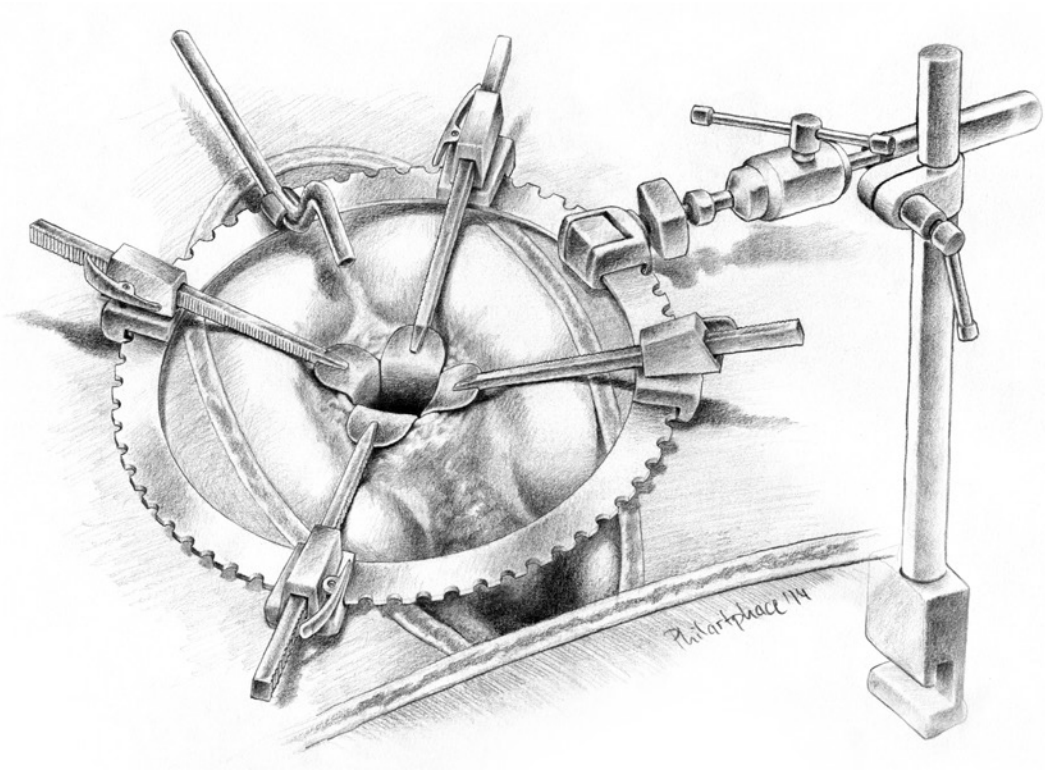


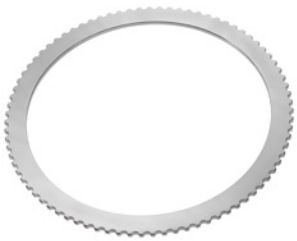
RETRACTOR KIT

12″	170-800-904
18″	170-800-900
24″	170-800-902

RETRACTOR KITS
consisting of:

A	Table Post, 300mm, 11 7/8″	170-800-100
	Table Post, 460mm, 18″	170-800-099
B	Horizontal Bar	170-800-102
C	Horizontal Flex Bar	170-800-103
D	Standard Ratchet (2x)	170-800-113
E	Tilt Ratchet Mechanism (6x)	170-800-110
F	Post Coupler	170-800-104
G	Oval Frame, medium, segmented 538 x 300mm, 21x11 7/8″″	170-800-032
H	Oval Frame, medium 410 x 294mm, 16 x 11 1/2″	170-800-012
I	Gelpi Point Retractor	170-800-241
J	Retractor Blade, malleable	
	38 x 152mm, 1 1/2 x 6″	170-800-231
	51 x 152mm, 2x6″ (2x)	170-800-232
	76 x 152mm, 3x6″	170-800-233
K	**BALFOUR**	
	75 x 75mm, 3x3″	170-800-202
L	**KELLY**	
	51 x 76mm, 2x3″ (2x)	170-800-214
	51 x 102mm, 2x4″	170-800-215
	51 x 127mm, 2x5″	170-800-216
	51 x 152mm, 2x6″	170-800-217
M	**HARRINGTON**	
	Heart-shaped, 64 x 143mm, 2 1/2 x 5 5/8″	170-800-221

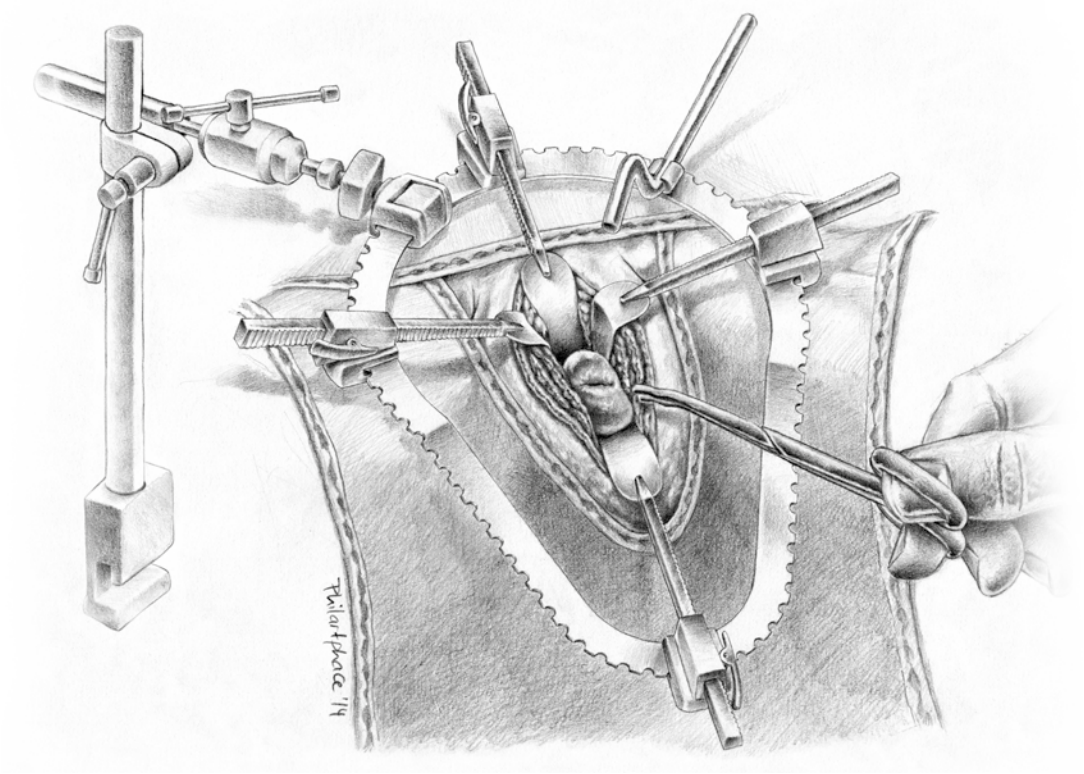


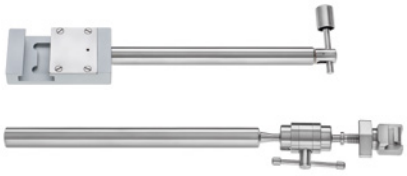




RECTAL SET
170-800-906
consits of:

Round Frame, small	170-800-021
Rectal Blade, small 22 x 72mm (2x)	170-800-311
large 23 x 98mm (2x)	170-800-312









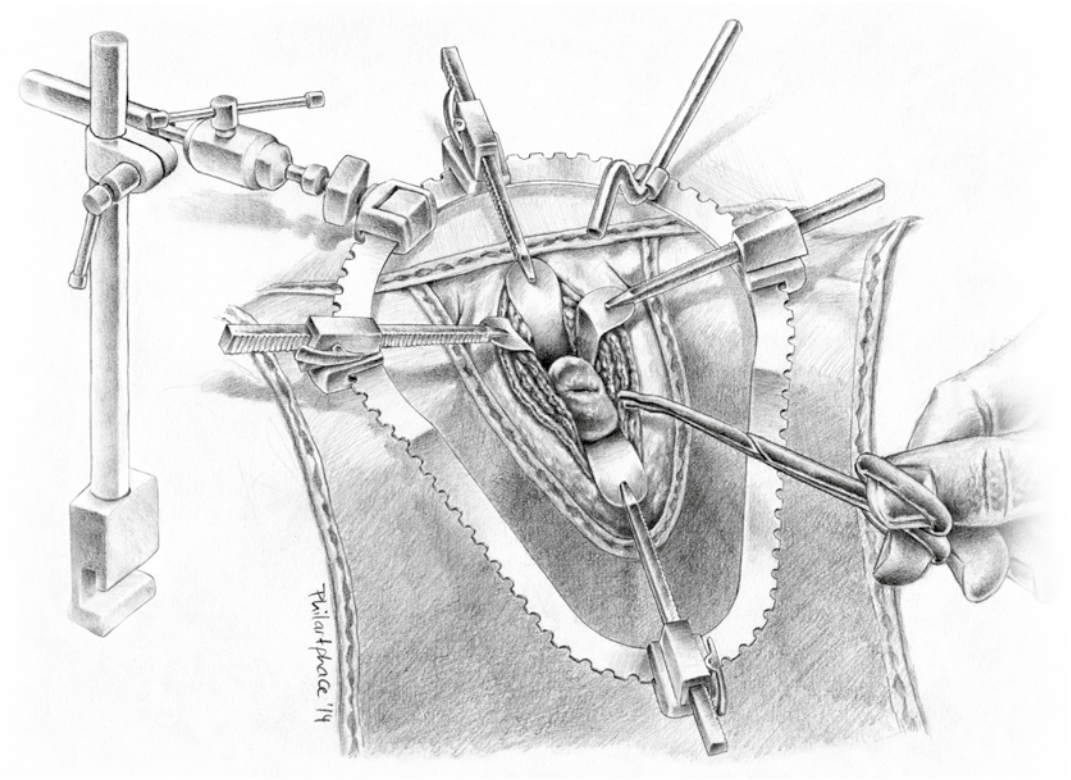






VAGINAL RETRACTOR KIT (STANDARD SETUP)
170-800-909
consists of:

Table Post, 300mm, 11 7/8"	170-800-100
Horizontal Flex Bar	170-800-103
Tilt Ratchet Mechanism (6x)	170-800-110
Post Coupler	170-800-104
Vaginal Frame, oval, 20° angled 203 x 267mm, 8 x 10 1/2"	170-800-051
DEAVER small	170-800-261
large	170-800-262
Vaginal Retractor 25 x 76mm, 1 x 3" (2x)	170-800-271
25 x 114mm, 1 x 4 1/2"	170-800-272







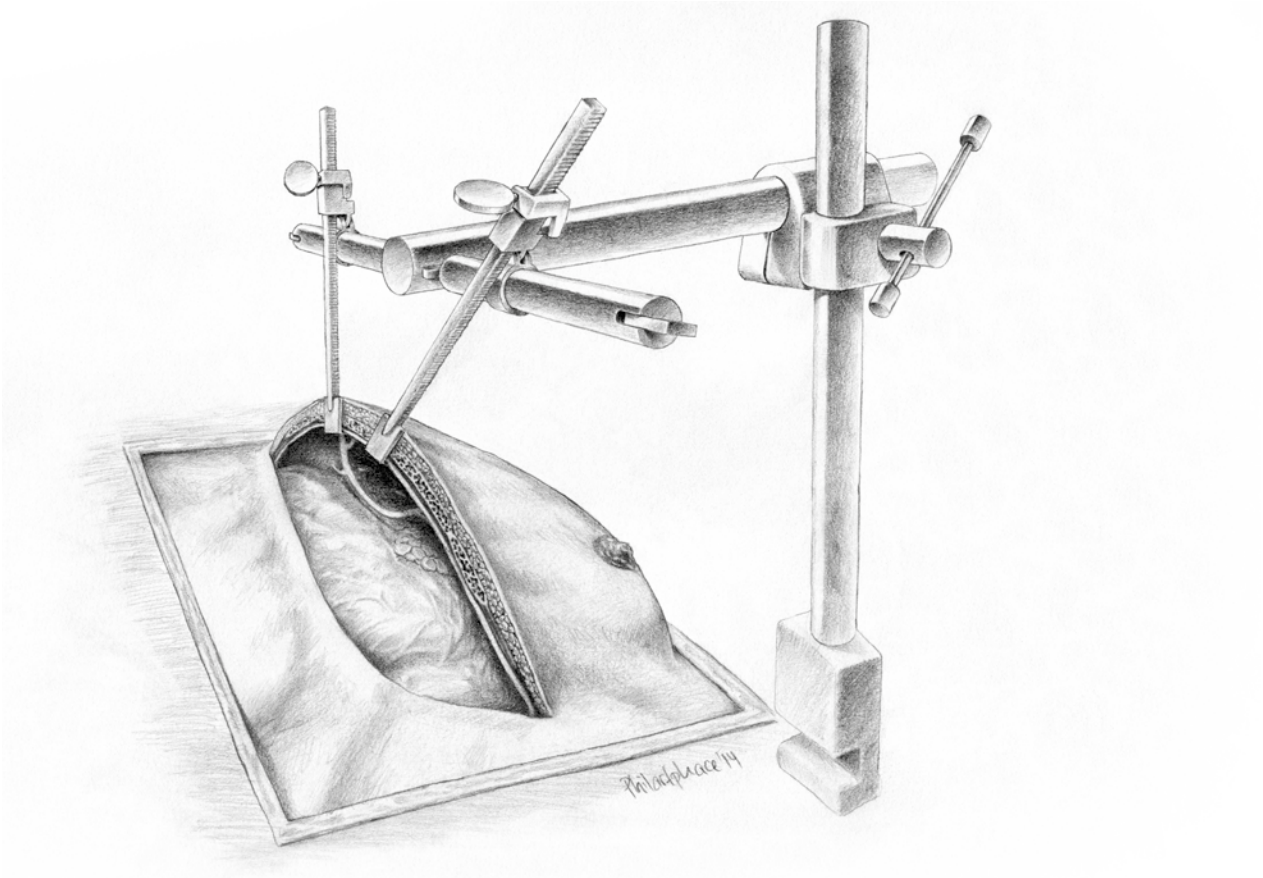






VAGINAL RETRACTOR KIT (ALTERNATIVE SETUP)
170-800-910
consists of:

Table Post, 200mm, 8"	170-800-100
Rotate and Tilt Ratchet Mechanism (6x)	170-800-112
Vaginal Frame, oval, segmented 305 x 241mm, 12 x 9 1/2"	170-800-050
Retractor Blade, malleable 25 x 102mm, 1 x 4"	170-800-237
Vaginal Retractor 25 x 76mm, 1 x 3" (2x)	170-800-271



IMA RETRACTOR KIT
170-800-905
consists of:



Table Post, 300mm, 11 7/8" — 170-800-100



Horizontal Bar — 170-800-102



Cross Bar — 170-798-046



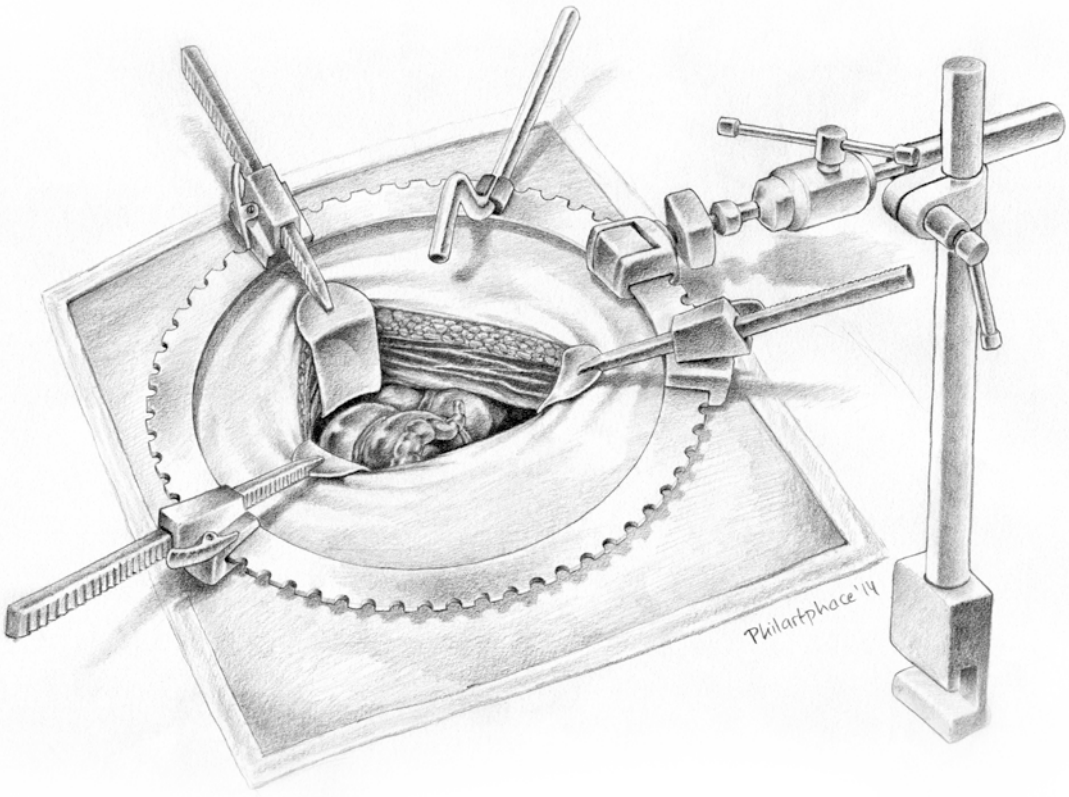
Post Coupler — 170-800-104



Ratchet Mechanism — 170-798-047



Retractor Blade — 170-798-048







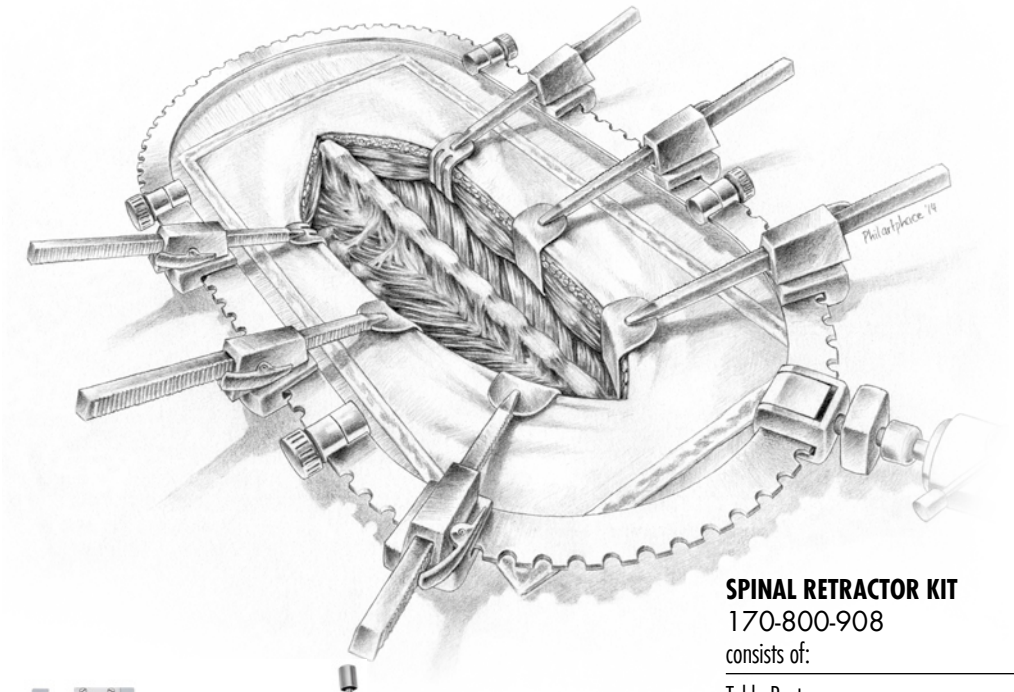


SMALL INCISION KIT
170-800-907
consists of:

Round Frame, small ∅ 248mm, 9 3/4"	170-800-021
Gelpi Point Retractor	170-800-241

KELLY

25 x 38mm, 1 x 1 1/2"	170-800-208
25 x 63mm, 1 x 2 1/2"	170-800-209























SPINAL RETRACTOR KIT
170-800-908
consists of:

Table Post, 300mm, 11 7/8"	170-800-100
Horizontal Flex Bar	170-800-103
Self-Retaining Tilt Ratchet (6x)	170-800-111
Tilt Ratchet Mechanism (6x)	170-800-110
Post Coupler	170-800-104
Round Ring Segment, small, 2 pieces ∅ 254mm, 10"	170-800-041
Ring Segment, small, 100mm, 4" (2x)	170-800-061
Ring Segment, medium, 150mm, 6" (2x)	170-800-062
Ring Segment, large, 200mm, 8" (2x)	170-800-063
SCOVILLE	
small, 25 x 40mm (2x)	170-800-321
large, 25 x 80mm	170-800-322
MEYERDING	
small, 60 x 17mm (2x)	170-800-331
medium, 85 x 25mm (2x)	170-800-332
large, 95 x 50mm (2x)	170-800-333
MEYERDING	
3 prongs (2x)	170-800-343
4 prongs	170-800-344
6 prongs	170-800-345

GENUINE RING RETRACTOR SETS

RETRACTOR KITS
Single Parts

A	Table Post, 300mm, 11 7/8"	170-800-100
	Table Post, 460mm, 18"	170-800-099
B	Horizontal Bar	170-800-102
C	Horizontal Flex Bar	170-800-103
D	Cross Bar	170-798-046
E	Standard Ratchet	170-800-113
F	Tilt Ratchet Mechanism	170-800-110
G	Self-Retaining Tilt Ratchet	170-800-111
H	Rotate and Tilt Ratchet Mechanism	170-800-112
I	Ratchet Mechanism	170-798-047
J	Post Coupler	170-800-104
K	Round Frame, small ∅ 248mm, 9 3/4"	170-800-021
L	Oval Frame, medium, 410 x 294mm, 16 x 11 1/2"	170-800-012
M	Oval Frame, medium, segmented 538 x 300mm, 21 x 11 7/8"	170-800-032
N	Vaginal Frame, oval, 20° angled 203 x 267mm, 8 x 10 1/2"	170-800-051
O	Vaginal Frame, segmented 305 x 241mm, 12 x 9 1/2"	170-800-050
P	Round Ring Segment, small, 2 pieces ∅ 254mm, 10"	170-800-041
Q	Ring Segment, small, 100mm, 4"	170-800-061
	Ring Segment, medium, 150mm, 6"	170-800-062
	Ring Segment, large, 200mm, 8"	170-800-063

A 

B 

C 

D 

E 

F 

G 

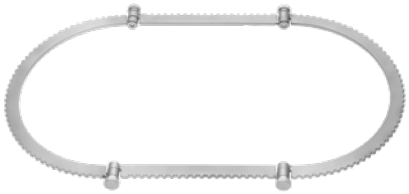
H 

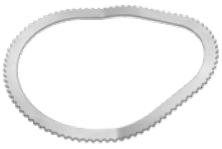
I 

J 

K 

L 

M 

N 

O 

P 

Q 

RETRACTOR KITS
Single Parts

A	Gelpi Point Retractor	170-800-241
B	Retractor Blade, malleable	
	38 x 152mm	170-800-231
	51 x 152mm	170-800-232
	76 x 152mm	170-800-233
	76 x 254mm	170-800-234
	102 x 215mm	170-800-235
	51 x 254mm	170-800-236
	Retractor Blade, malleable, with lib	
	25 x 102mm	170-800-237
	38 x 168mm	170-800-238
	51 x 168mm	170-800-239
	75 x 168mm	170-800-240
	Retractor Blade, extra malleable, with lib, 25 x 102mm	170-800-247
	38 x 168mm	170-800-248
	51 x 168mm	170-800-249
	75 x 168mm	170-800-250
C	Retractor Blade, malleable, titanium coated, with lib, 38 x 279mm	170-800-229
	51 x 279mm	170-800-230
	76 x 279mm	170-800-227
	102 x 279mm	170-800-228
D	**SCOVILLE**	
	Hook, small	170-800-321
	Hook, large	170-800-322
E	**MEYERDING**	
	3 prongs	170-800-343
	4 prongs	170-800-344
	6 prongs	170-800-345
F	Retractor Blade	170-798-048
G	**MEYERDING**	
	small	170-800-331
	medium	170-800-332
	large	170-800-333
H	**BALFOUR**	
	75 x 75mm	170-800-202
	89 x 70mm	170-800-201
I	**KELLY**	170-800-208
	25x 38	
	25 x 63mm	170-800-209
	51 x 76mm	170-800-214
	51 x 102mm	170-800-215
	51 x 127mm	170-800-216
	51 x 152mm	170-800-217
	51 x 200mm	170-800-218
J	**HARRINGTON**	
	64 x 143mm	170-800-221
	90 x 251mm	170-800-222
K	**DEAVER**	
	small	170-800-261
	large	170-800-262
L	Vaginal Retractor	
	25 x 76mm	170-800-271
	25 x114mm	170-800-272
M	Titanium Retractor Blade	170-800-360
	25x 102mm	
	25 x 127mm	170-800-361
	25 x 152mm	170-800-362
	25 x 178mm	170-800-363
	25 x 203mm	170-800-364
	51 x 102mm	170-800-365
	51 x 127mm	170-800-366
	51 x 152mm	170-800-367
	51 x 178mm	170-800-368
	51 x 203mm	170-800-369
N	Malleable Blade with groove	170-800-242
	51 x 152mm	

A 

B 

C 

D 

E 

F 

G 

H 

I 

J 

K 

L 

M 

N 



SET
Blades, Accessories, Case

		170–800-912
Standard Ratchet Mechanism	2x	170-800-113
Tilt Ratchet Mechanism	6x	170-800-110
Post Coupler	1x	170-800-104
Harrington Retractor	1x	170-800-221
Kelly Retractor, 76mm	1x	170-800-214
Kelly Retractor, 102mm	1x	170-800-215
Kelly Retractor, 127mm	1x	170-800-216
Kelly Retractor, 152mm	1x	170-800-217
Balfour Retractor	1x	170-800-202
Gelpi Point Retractor	1x	170-800-241
Blade, malleable, 38mm	1x	170-800-231
Blade, malleable, 51mm	1x	170-800-232
Blade, malleable, 76mm	1x	170-800-233
Case, 527 x 250 x 100mm	1x	170-800-915



SET
Table Fixation and Ring Case

		170–800-913
Table Post	1x	170-800-100
Horizontal Flex Bar	1x	170-800-103
Horizontal Bar	1x	170-800-102
Oval Frame, medium, segmented	1x	170-800-032
Oval Frame, medium	1x	170-800-012
Case, 537 x 250 x 197mm	1x	170-800-914

SUCTION TUBES



Suction Tubes

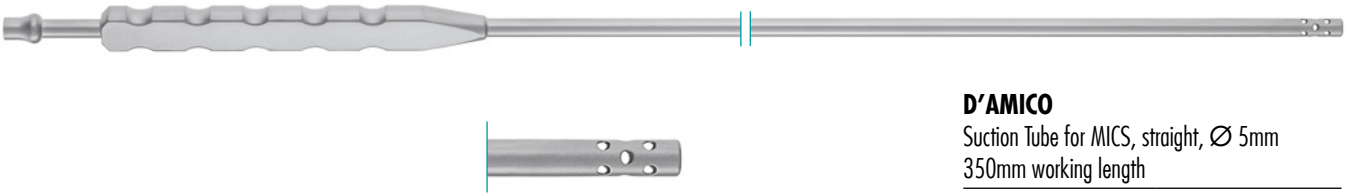


POOLE
Suction Tube, straight, 220mm, $8^{2/3}$"

∅ 6mm	165-549-220
∅ 10mm	165-550-220

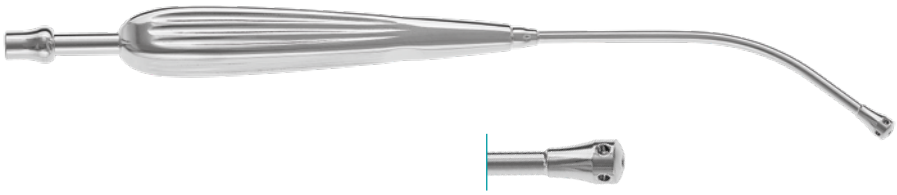
curved

∅ 6mm	165-552-220
∅ 10mm	165-551-220



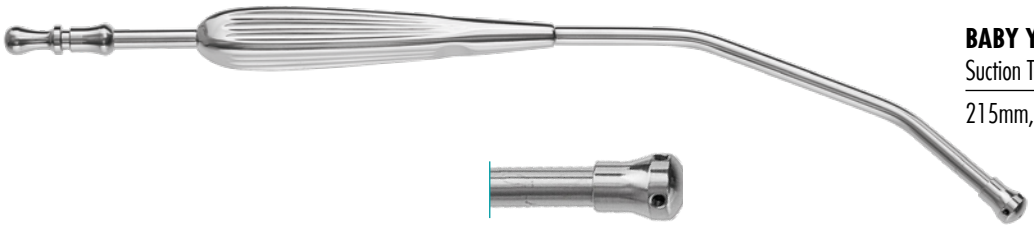
D'AMICO
Suction Tube for MICS, straight, ∅ 5mm
350mm working length

475mm, $18^{3/4}$"	295-165-475



ANDREWS PYNCHON
Suction Tube, curved, ∅ 6mm

240mm, $9^{1/2}$"	165-066-000

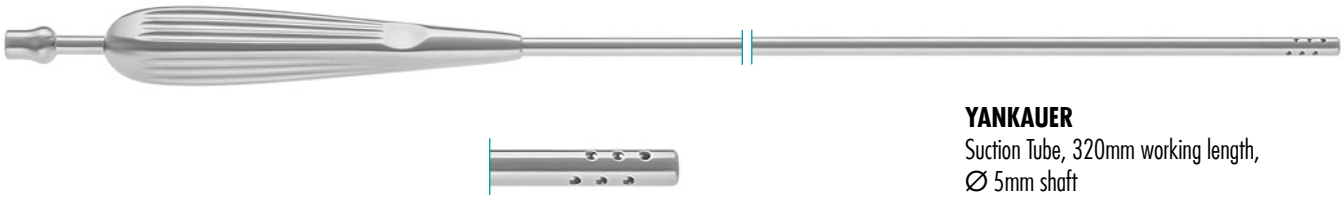


BABY YANKAUER
Suction Tube

215mm, 8 1/2"	165-543-215

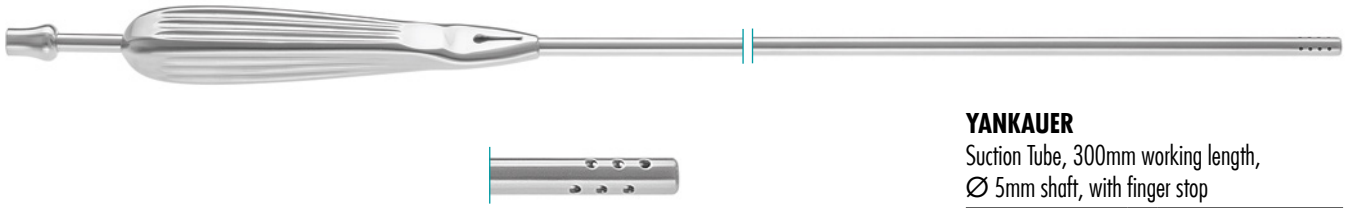
YANKAUER
Suction Tube

270mm, 10 7/8"	165-543-270
355mm, 14"	165-543-355
410mm, 16"	165-543-410



YANKAUER
Suction Tube, 320mm working length,
∅ 5mm shaft

450mm, 17 3/4"	165-544-450



YANKAUER
Suction Tube, 300mm working length,
∅ 5mm shaft, with finger stop

435mm, 17 1/8"	165-544-435



Olive only

165-543-000



GRECO
Suction Tube, 90° angled,
basket detachable, 160mm, 6 1/4"

Ø 3.3mm shaft	165-533-331
Ø 5.0mm shaft	165-533-330



GRECO
Suction Tube, 45° angled, 180mm, 7"

Ø 3.3mm shaft	165-533-321
Ø 5.0mm shaft	165-533-322

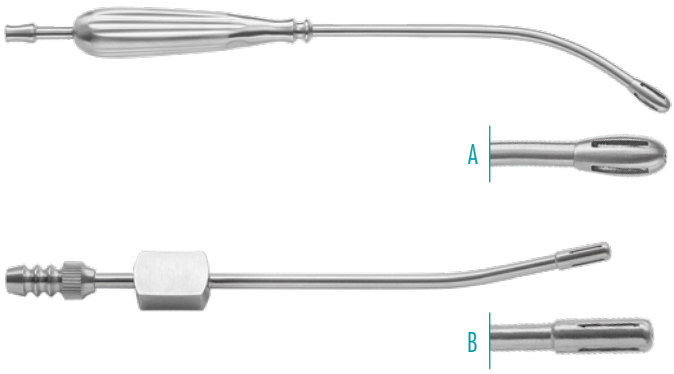


GRECO
Suction Tube, without basket,
60° angled, 180mm, 7"

Ø 3.3mm shaft	165-533-332

45° angled, 210mm, 8 1/4"

Ø 3.3mm shaft	165-533-310
Ø 5.0mm shaft	165-533-311



DEBAKEY

A Suction Tube, lateral slots, ∅ 9mm

280mm, 11"	165-065-270

B ∅ 5mm

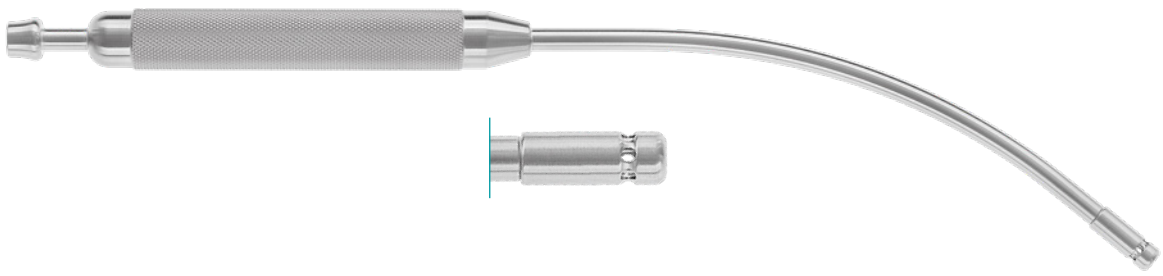
160mm, 6 1/4"	165-065-160



COOLEY

Suction Tube, without basket, ∅ 8mm

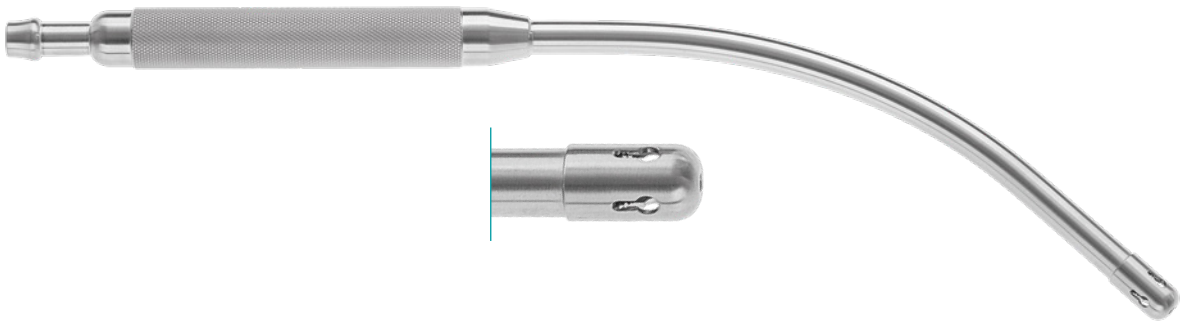
350mm, 14"	165-552-350



COOLEY

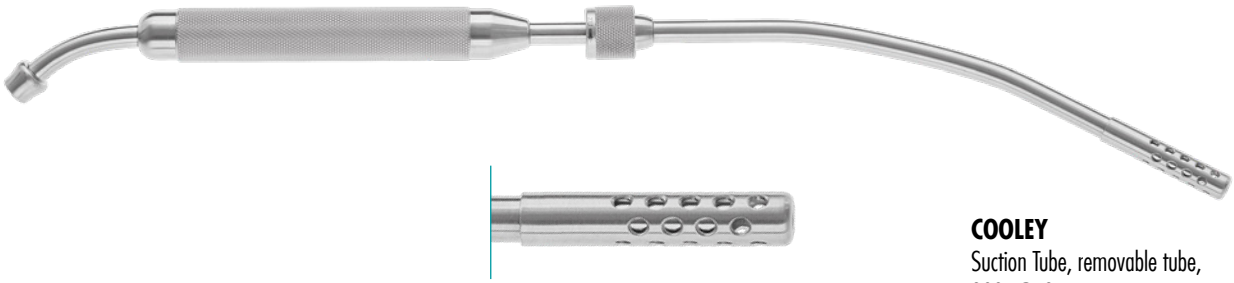
Suction Tube, with basket, ∅ 7mm

300mm, 11 7/8"	165-552-300



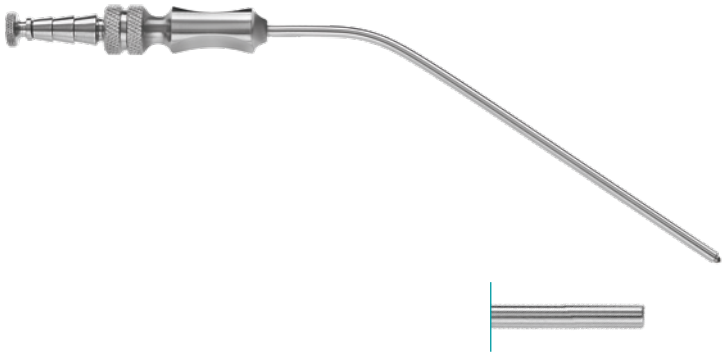
COOLEY
Suction Tube, ∅ 10mm

310mm, 12 1/4"	165-552-310



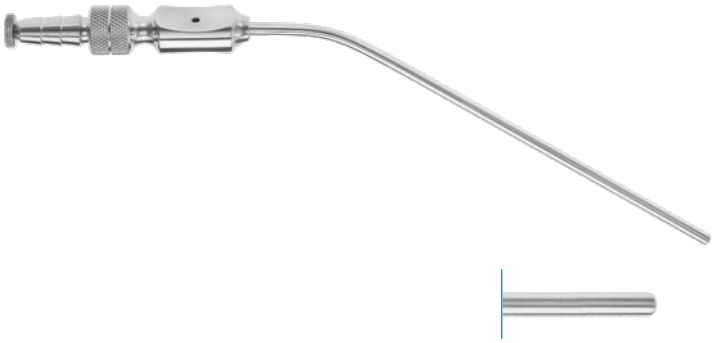
COOLEY
Suction Tube, removable tube, 30°, ∅ 8mm

330mm, 13"	165-552-330



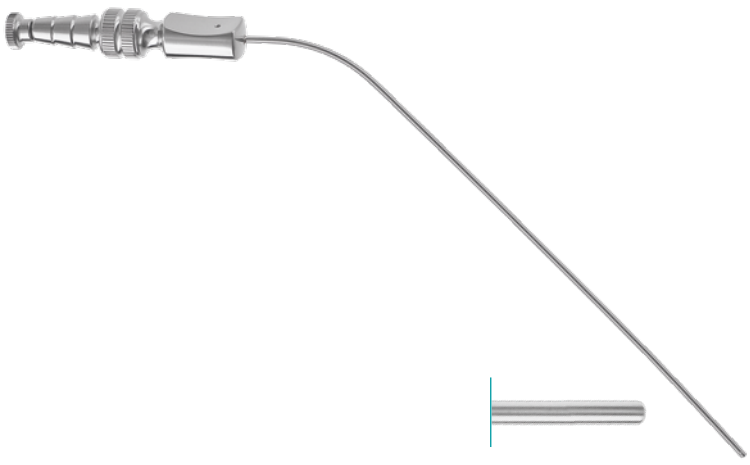
FRAZIER
Suction Tube, 190mm, 7 1/2"

∅ 1.6mm, 5 Charr.	165-523-005
∅ 2.0mm, 6 Charr.	165-523-006
∅ 2.3mm, 7 Charr.	165-523-007
∅ 2.5mm, 8 Charr.	165-523-008
∅ 3.0mm, 9 Charr.	165-523-009
∅ 3.3mm, 10 Charr.	165-523-010
∅ 3.6mm, 11 Charr.	165-523-011
∅ 4.0mm, 12 Charr.	165-523-012
∅ 5.0mm, 15 Charr.	165-523-015



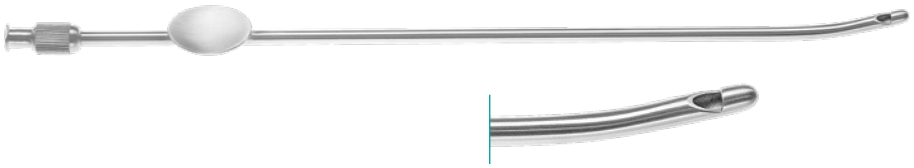
FERGUSSON
Suction Tube, 180mm, 7"

∅ 1.6mm, 5 Charr.	165-525-005
∅ 2.0mm, 6 Charr.	165-525-006
∅ 2.3mm, 7 Charr.	165-525-007
∅ 2.5mm, 8 Charr.	165-525-008
∅ 3.0mm, 9 Charr.	165-525-009
∅ 3.3mm, 10 Charr.	165-525-010
∅ 3.6mm, 11 Charr.	165-525-011
∅ 4.0mm, 12 Charr.	165-525-012
∅ 5.0mm, 15 Charr.	165-525-015



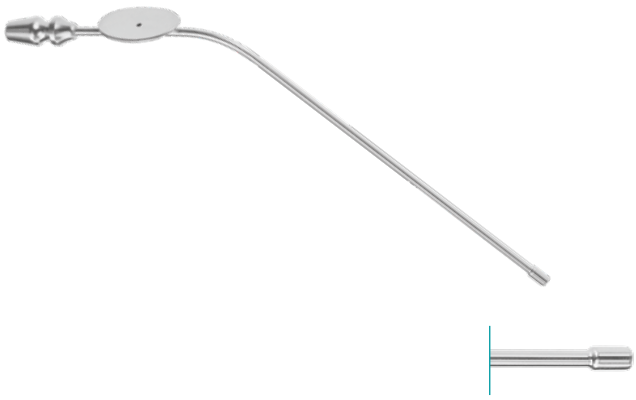
FERGUSSON
Suction Tube, 230mm, 9"

1 x 2.0mm, 5 Charr.	165-525-205
1 x 2.5mm, 7 Charr.	165-525-207
1 x 3.0mm, 9 Charr.	165-525-209
1 x 4.0mm, 12 Charr.	165-525-212



RANDALL
Suction Biopsy Curette, ∅ 4mm

240mm, 9 1/2"	350-602-240



RHOTON MERZ
Suction Tube, curved down, 130mm, 5 1/8"

5 Charr.	165-066-005
7 Charr.	165-066-007

straight, 100mm, 4"

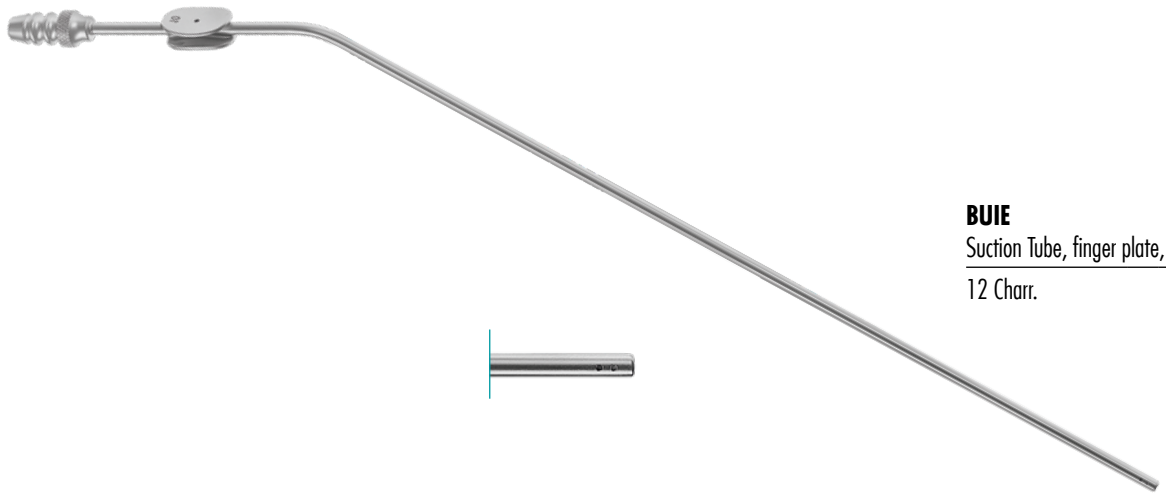
3 Charr.	165-067-003
5 Charr.	165-067-005
7 Charr.	165-067-007
10 Charr.	165-067-010
12 Charr.	165-067-012

angled, 130mm, 5 1/8"

5 Charr.	165-068-005
7 Charr.	165-068-007
10 Charr.	165-068-010

curved up, 130mm, 5 1/8"

5 Charr.	165-069-005
7 Charr.	165-069-007



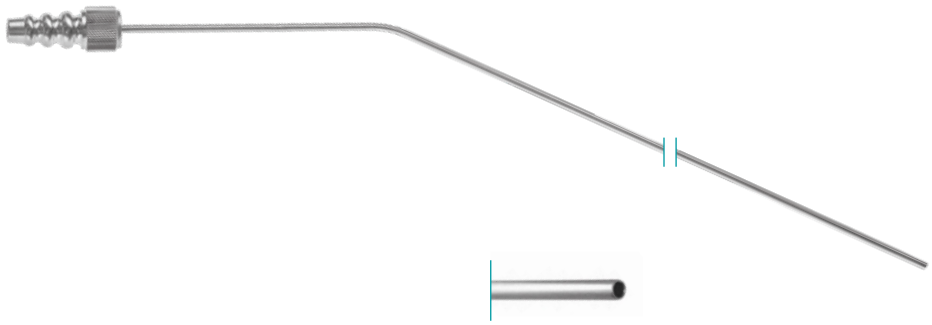
BUIE
Suction Tube, finger plate, 400mm, 15 3/4"

12 Charr.	165-530-012



Suction Cannula, fibre-optic light carrier, 190mm, 7 1/2"

10 Fr.	165-523-110
12 Fr.	165-523-112



YASARGIL

Suction Cannula, ∅ 1.5mm

130mm, 5 1/8"	250-064-152
150mm, 6"	250-064-154
180mm, 7"	250-064-156
220mm, 8 2/3"	250-064-158
∅ 2.0mm	
130mm, 5 1/8"	250-064-162
150mm, 6"	250-064-164
180mm, 7"	250-064-166
220mm, 8 2/3"	250-064-168
∅ 2.5mm	
130mm, 5 1/8"	250-064-172
150mm, 6"	250-064-174
180mm, 7"	250-064-176
220mm, 8 2/3"	250-064-178
∅ 3.5mm	
130mm, 5 1/8"	250-064-182
150mm, 6"	250-064-184
180mm, 7"	250-064-186
220mm, 8 2/3"	250-064-188
∅ 4.5mm	
180mm, 7"	250-064-189



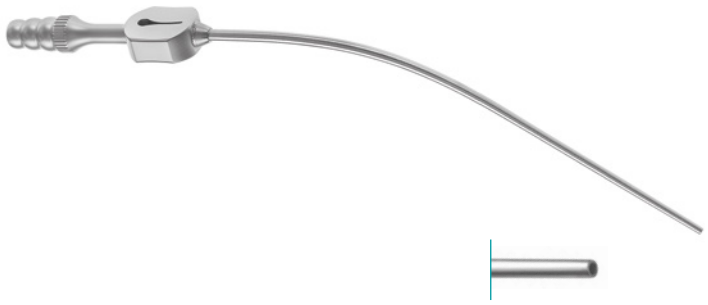
FUKUSHIMA
Suction Tube, conical, malleable,
165mm, 6 1/2"

3 Charr.	165-533-163
4 Charr.	165-533-164
5 Charr.	165-533-165
6 Charr.	165-533-166



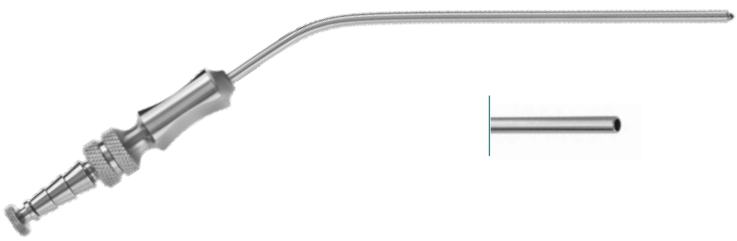
FUKUSHIMA
Suction Tube, conical, malleable,
180mm, 7"

3 Charr.	165-533-183
4 Charr.	165-533-184
5 Charr.	165-533-185
6 Charr.	165-533-186
7 Charr.	165-533-187
8 Charr.	165-533-188
9 Charr.	165-533-189



FUKUSHIMA
Suction Tube, conical, malleable,
205mm, 8 1/8"

3 Charr.	165-533-203
4 Charr.	165-533-204
5 Charr.	165-533-205
6 Charr.	165-533-206
7 Charr.	165-533-207
8 Charr.	165-533-208
9 Charr.	165-533-209
10 Charr.	165-533-210
12 Charr.	165-533-212



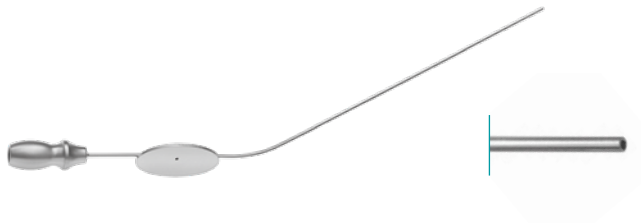
FRAZIER
Suction tube, 30° angled,
190mm, 7 1/2" overall length

5 Charr.	165-523-005
6 Charr.	165-523-006
7 Charr.	165-523-007
8 Charr.	165-523-008
9 Charr.	165-523-009
10 Charr.	165-523-010
11 Charr.	165-523-011
12 Charr.	165-523-012
15 Charr.	165-523-015



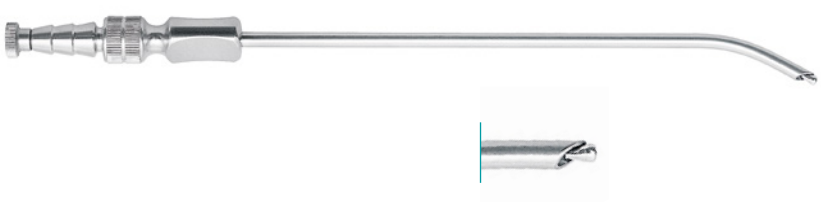
FRAZIER
Suction tube, straight,
130mm, 5 1/8" working length

6 Charr.	165-522-106
8 Charr.	165-522-108
10 Charr.	165-522-110
12 Charr.	165-522-112



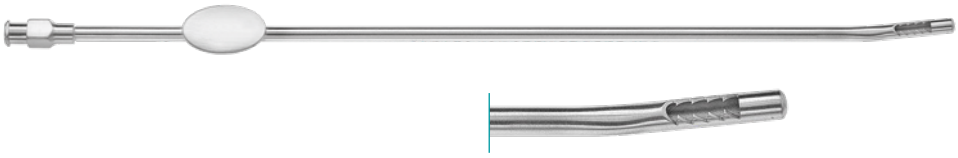
BARON
Suction tube, finger cut-off, stylet, 100mm, 4"

3 Charr.	165-539-003
5 Charr.	165-539-005
7 Charr.	165-539-007



ADSON
Suction tube, ∅ 4mm, 210mm, 8 1/4"

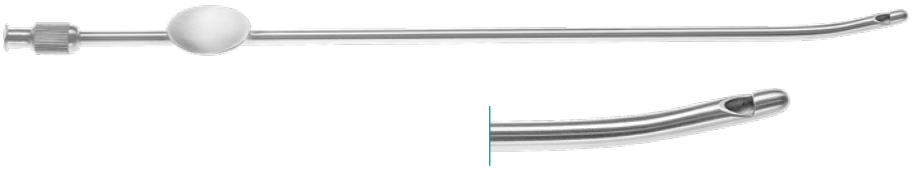
12 Charr.	165-521-004



NOVAK

Biopsy Curette, 250mm, $9^{7/8}$″

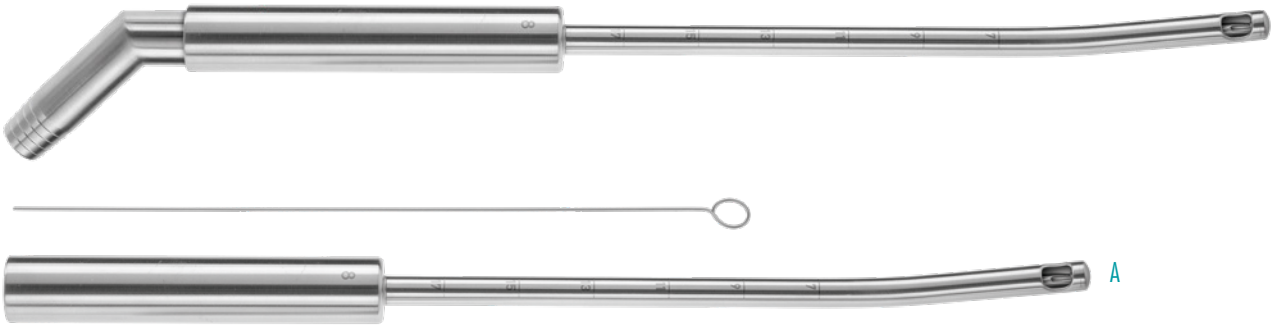
Ø 1mm	350-601-230
Ø 2mm	350-602-230
Ø 3mm	350-603-230
Ø 4mm	350-604-230



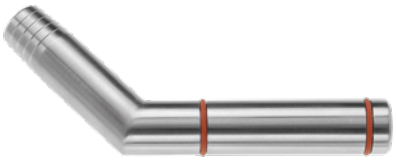
RANDALL

Suction Biopsy Curette, 240mm, $9^{1/2}$″

Ø 4mm	350-602-240



A



B

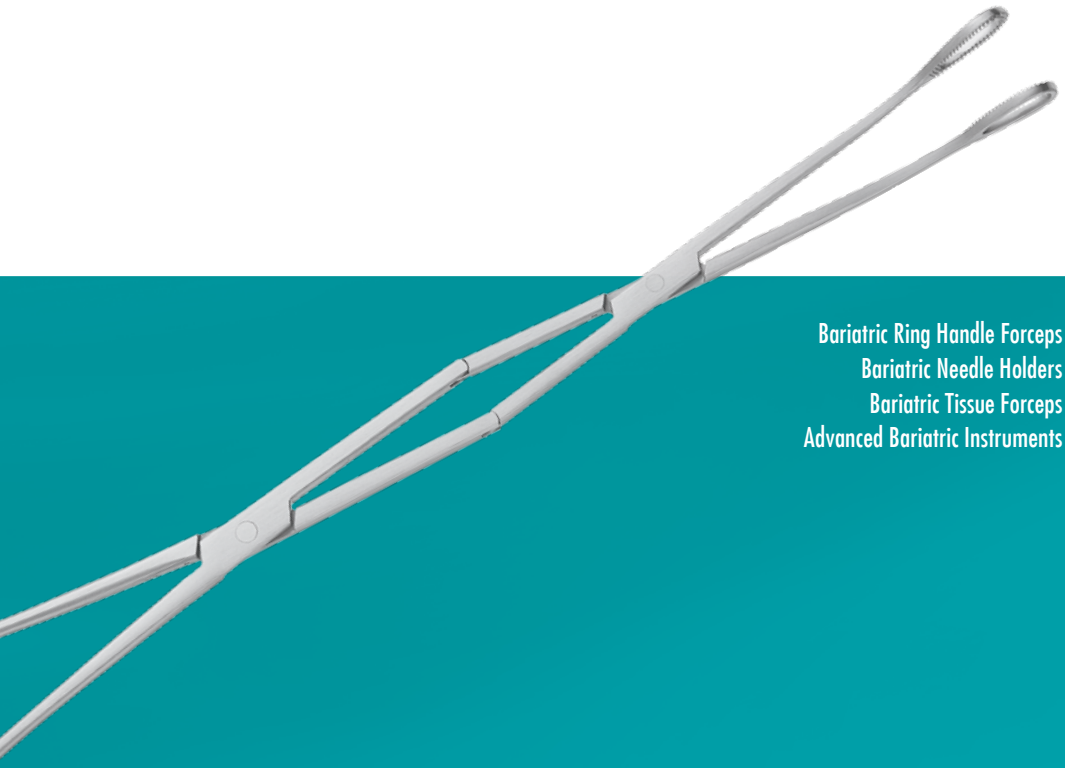
A Aspirating Curette, 290mm, $11^{1/2}$″

4.5mm	350-650-045
6.0mm	350-650-060
8.0mm	350-650-080
10.0mm	350-650-100
12.0mm	350-650-120
14.0mm	350-650-140

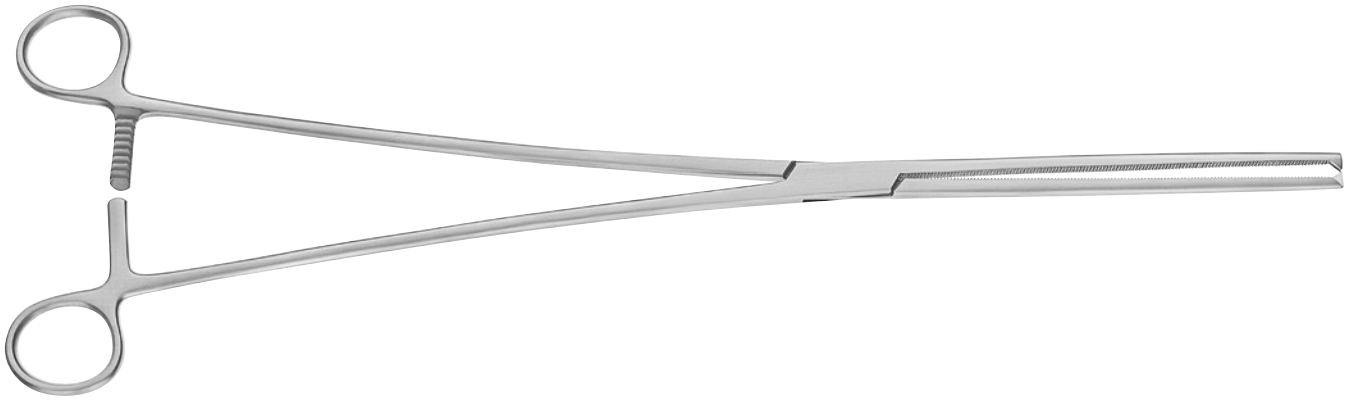
B Coupling Piece

	350-650-000

BARIATRIC INSTRUMENTS



Bariatric Ring Handle Forceps
Bariatric Needle Holders
Bariatric Tissue Forceps
Advanced Bariatric Instruments





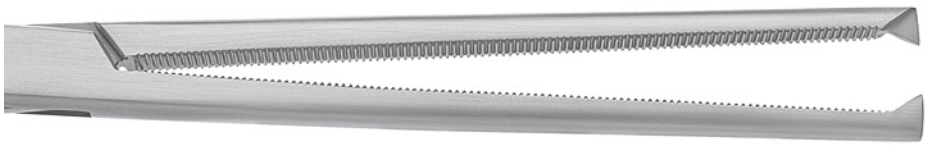
ANDERSON
Ligature Forceps, slightly curved

350mm, 14"	140-284-355
410mm, 16"	140-284-410



ROCHESTER PEAN
Hemostatic Forceps, straight, serrated

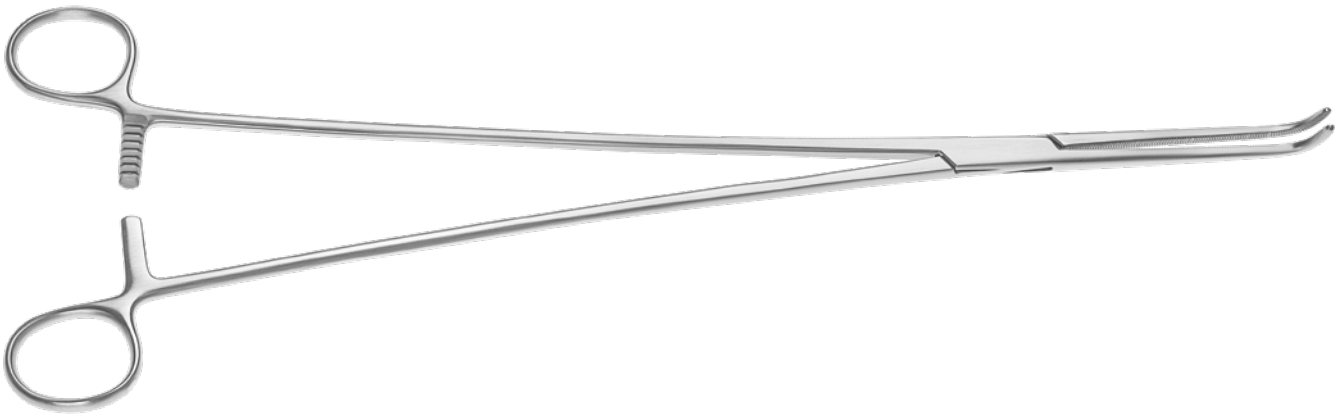
300mm, 12"	140-330-300
350mm, 14"	140-330-355
410mm, 16"	140-330-410



KOCHER OCHSNER
Hemostatic Forceps, 1x2 teeth, straight

300mm, 12"	140-332-300
350mm, 14"	140-332-355
410mm, 16"	140-332-410

Supersize
Bariatric Ring Handle Forceps





GEMINI
Dissecting Forceps, serrated, acutely curved

280mm, 11"	140-361-280
355mm, 14 1/8"	140-361-355
410mm, 16"	140-361-410



MIXTER
Dissecting Forceps, serrated, curved

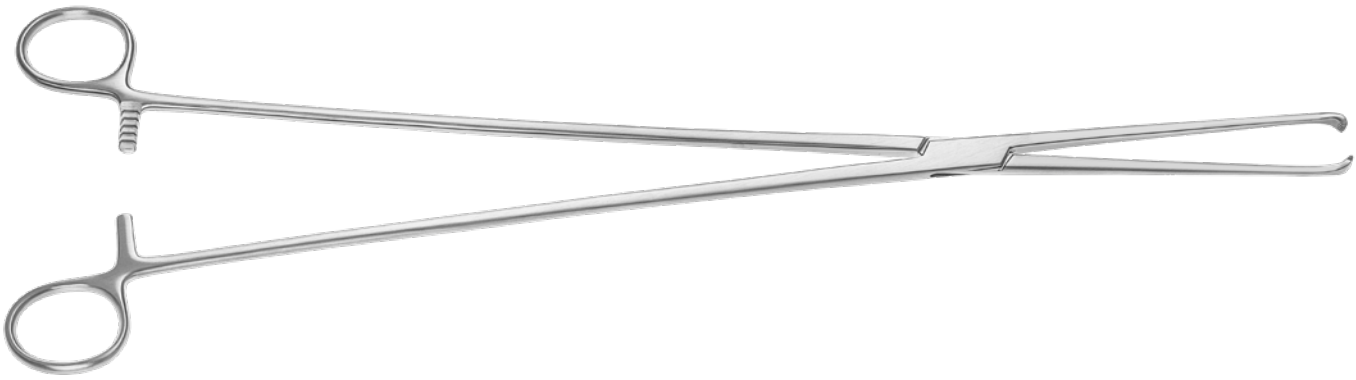
355mm, 14 1/8"	140-423-355
410mm, 16"	140-423-410



CLARK
Artery Forceps, serrated, curved

300mm, 12"	140-441-300
355mm, 14 1/8"	140-441-355
410mm, 16"	140-441-410

Supersize
Bariatric Ring Handle Forceps





FOERSTER
Sponge Forceps, straight

355mm, 14 1/8"	150-052-355
410mm, 16"	150-052-410



ALLIS
Tissue Forceps, 5x6 teeth, straight

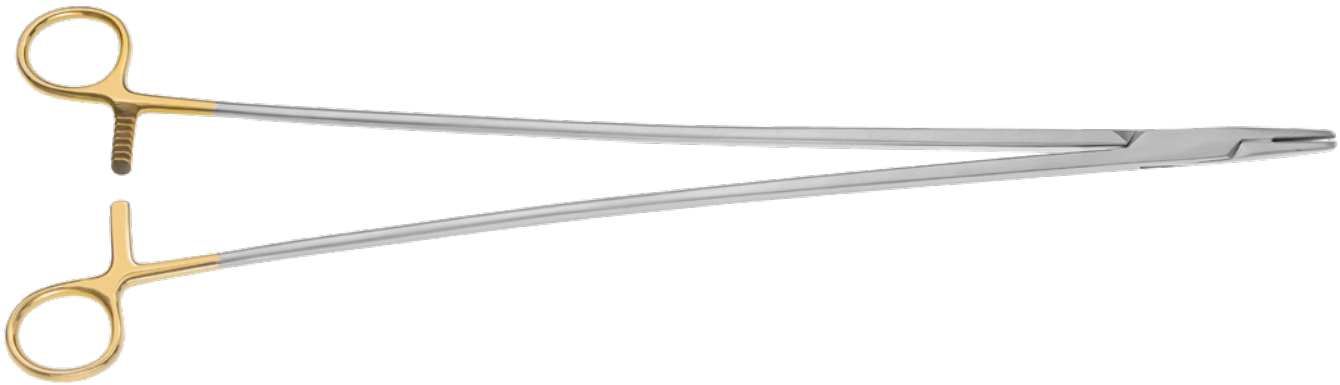
355mm, 14 1/8"	310-014-355
410mm, 16"	310-014-410



BABCOCK
Intestinal Tissue Forceps, straight

300mm, 12"	310-110-300
355mm, 14 1/8"	310-110-355
410mm, 16"	310-110-410

Supersize
Bariatric Needle Holders





HEANEY
TC Needle Holder, slightly curved

350mm, 14“	180-547-355
410mm, 16“	180-547-410



NOLAN
TC Needle Holder, straight

350mm, 14“	180-553-355
410mm, 16“	180-553-410



MASSON
TC Needle Holder, heavy pattern, straight

270mm, $10^{2/3}$“	180-556-270
350mm, 14“	180-556-355
410mm, 16“	180-556-410





Tissue Forceps, 1x2, straight

300mm, 12"	130-110-300
355mm, 14 1/8"	130-110-355
410mm, 16"	130-110-410



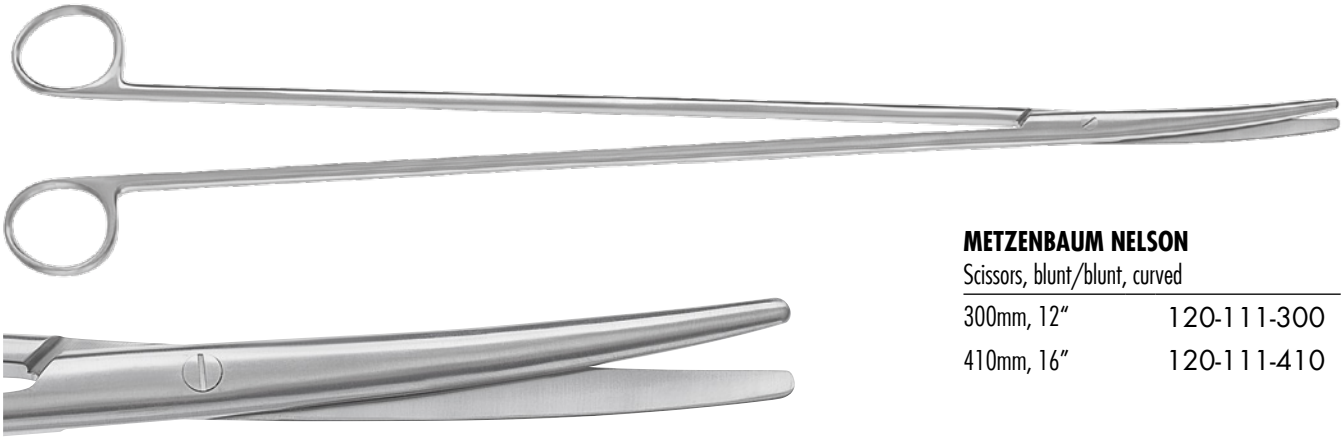
SINGLEY TUTTLE
Dressing Forceps, straight

300mm, 12"	130-560-300
355mm, 14 1/8"	130-560-350
410mm, 16"	130-560-410



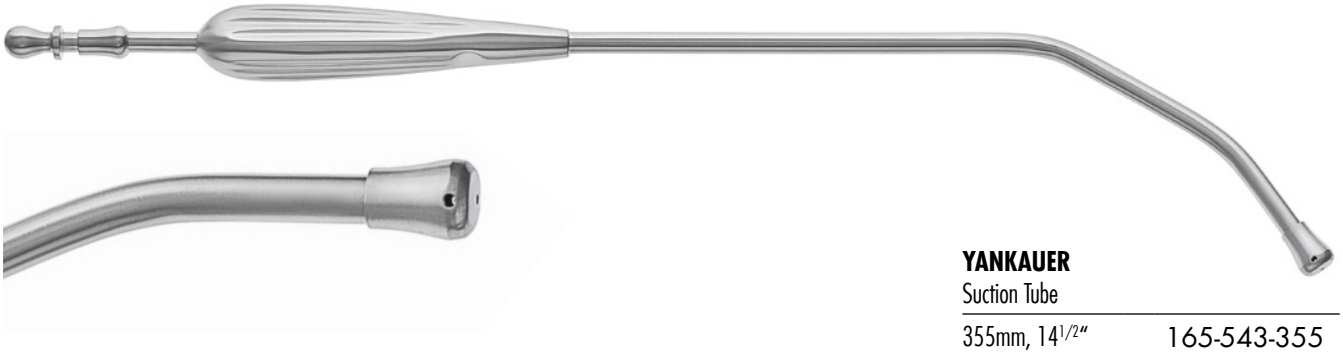
DEBAKEY
Atraumatic Tissue Forceps, 2.8mm tip, step down jaws

300mm, 12"	290-548-300
355mm, 14 1/8"	290-548-355
410mm, 16"	290-548-410



METZENBAUM NELSON
Scissors, blunt/blunt, curved

300mm, 12"	120-111-300
410mm, 16"	120-111-410



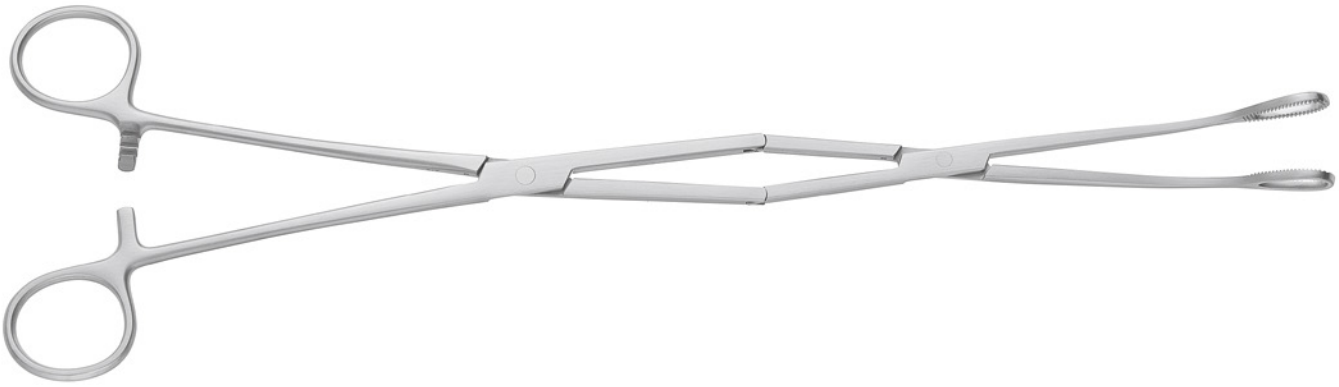
YANKAUER
Suction Tube

355mm, 14 1/2"	165-543-355
410mm, 16"	165-543-410



CUSHING
Vein Retractor

350mm, 14"	170-246-355
410mm, 16"	170-246-410





METZENBAUM
Scissors, double action, blunt/blunt, straight
470mm, 18 1/2" 120-588-450



METZENBAUM
Scissors, double action, blunt/blunt, curved
470mm, 18 1/2" 120-589-450



FOERSTER
Sponge Holding Forceps, double action, curved
350mm, 14" 150-588-350





BABCOCK
Intestinal Forceps, double action

470mm, 18 1/2"	310-588-470



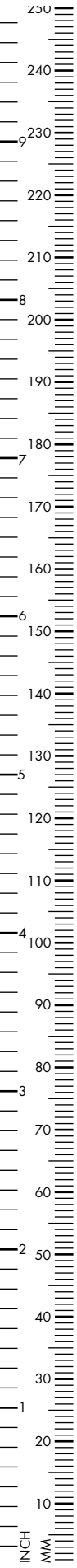
MAYO HEGAR
TC Needle Holder, double action, straight

460mm, 18"	180-588-460

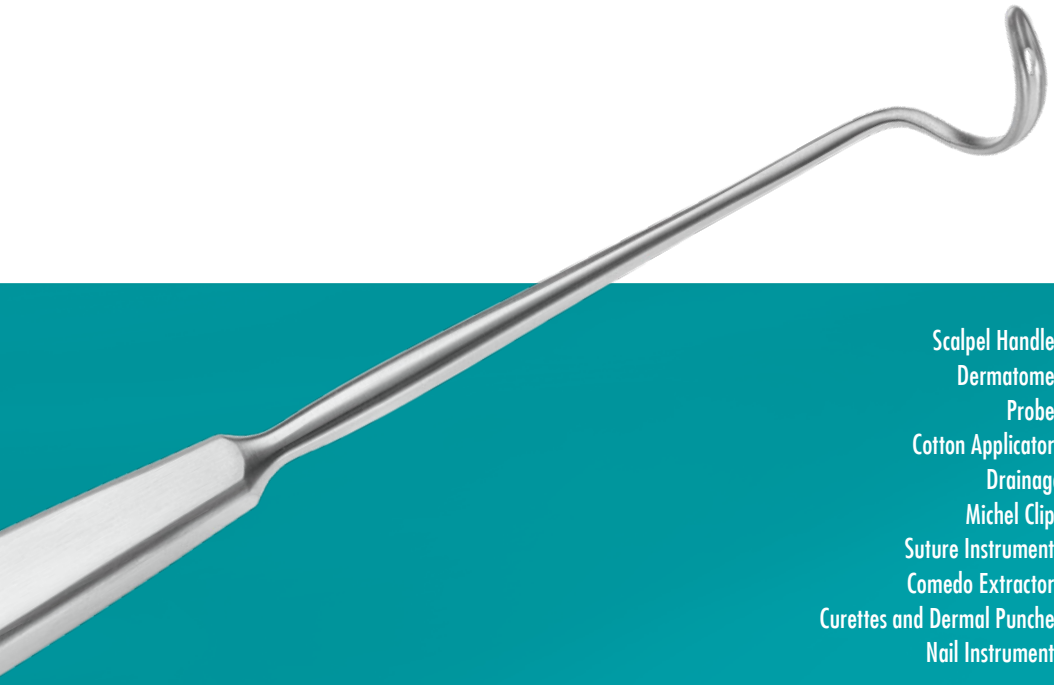


CLARK
Artery Forceps, curved, double action, serrated

465mm, 18 1/3"	140-587-460
370mm, 14 1/2"	140-587-370

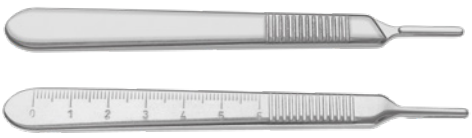

250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
9
8
7
6
5
4
3
2
1
INCH
MM

SKIN AND WOUND



Scalpel Handles
Dermatomes
Probes
Cotton Applicators
Drainage
Michel Clips
Suture Instruments
Comedo Extractors
Curettes and Dermal Punches
Nail Instruments

FOR BLADES #3



Knife Handle #3, 130mm, $5^{1/8}$"

	110-110-003
with cm/mm scale	110-114-003



Knife Handle #3L

210mm, $8^{1/4}$"	110-116-033
360mm, 14"	110-116-133



Knife Handle #3LA

210mm, $8^{1/4}$"	110-117-033

FOR BLADES #3



Knife Handle #7

165mm, 6 1/2"	110-130-077



Knife Handle #7K

130mm, 5 1/8"	110-130-007

FOR BLADES # 4



Knife Handle #4, 135mm, 5 1/3"

	110-140-004
with cm/mm scale	110-141-004



Knife Handle #4L

210mm, 8 1/4"	110-144-004

FOR BLADES # 4



COLLIN
Scalpel Handle #8

130mm, 5 1/8"	110-146-008



COLLIN
Scalpel Handle #9

145mm, 5 3/8"	110-146-009

FOR MINI BLADES



Knife Handle, round knurled handle

#3KL 150mm, 6"	110-150-150



Knife Handle, hexagonal handle

#3HL 160mm, 6 1/4"	110-152-160

Knife Handle, for mini blades

105mm, 4 1/8"	110-152-105

Replacement

	110-150-000

FOR MINI BLADES



CASPAR
Scalpel Handle

155mm, 6 1/8"	250-022-048



Scalpel Handle

200mm, 8"	250-022-054



LANDOLT
Scalpel Handle

210mm, 8 1/4"	250-022-053

vertical

210mm, 8 1/4"	250-022-071



GOMEL
Blade holder with spring

120mm, 4 3/4"	251-300-120



WATSON
Hand Dermatome, right handed, complete,

300mm, 11 7/8"	110-092-305



BRAITHWAITE
Hand Dermatome, complete, 300mm, 11 7/8"

right handed	110-098-305
left handed	110-097-305

Blade only, non sterile, package of 10 pcs.
110-098-399



SILVER
Skin Graft Knife

190mm, 7 1/2"	110-096-019

Spare Blade, 10pcs
110-096-119



GOULIAN
Skin Graft Knife, complete with 5 spare blades

180mm, 7"	110-096-180

Spare blade
110-096-185



SCHINK
Dermatome, with intererchangeable blade
and 2 skin straightening blades

300mm, 11 7/8"	110-090-000

Spare Blade
110-090-001



Skin straightening plate
110-090-002



Button-end Probe, ∅ 1mm	
115mm, 4 1/2"	160-102-115
130mm, 5 1/8"	160-102-130
145mm, 5 3/4"	160-102-145
160mm, 6 1/4"	160-102-160
180mm, 7"	160-102-180
200mm, 8"	160-102-200
∅ 2mm	
115mm, 4 1/2"	160-100-115
130mm, 5 1/8"	160-100-130
145mm, 5 3/4"	160-100-145
160mm, 6 1/4"	160-100-160
180mm, 7"	160-100-180
200mm, 8"	160-100-200



Button-end Probe, with eye, ∅ 2mm	
115mm, 4 1/2"	160-108-115
130mm, 5 1/8"	160-108-130
145mm, 5 3/4"	160-108-145
160mm, 6 1/4"	160-108-160
180mm, 7"	160-108-180
200mm, 8"	160-108-200



Myrtle Leaf Probe , ∅ 2mm	
145mm, 5 3/4"	160-150-145
160mm, 6 1/4"	160-150-160
180mm, 7"	160-150-180
200mm, 8"	160-150-200



Probe, ∅ 1.5mm

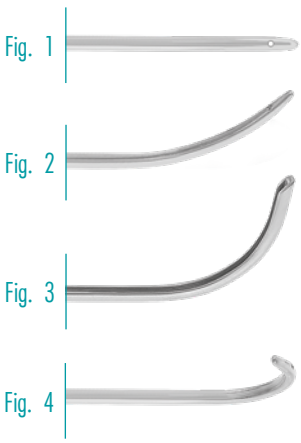
130mm, 5 1/8"	160-099-130
145mm, 5 3/4"	160-099-145
160mm, 6 1/4"	160-099-160
200mm, 8"	160-099-200



BOWMAN
Lacrimal Probe, buttoned up

0000/000	400-497-008
00/0	400-497-003
0/1	400-497-001
1/2	400-497-012
2/3	400-497-023
3/4	400-497-034
4/5	400-497-045
5/6	400-497-056
6/7	400-497-067
7/8	400-497-078





LOCKHART MUMMERY
Fistula Probe, 165mm, 6 1/2"

Fig. 1	160-110-001
Fig. 2	160-110-002
Fig. 3	160-110-003
Fig. 4	160-110-004



Grooved Director

115mm, 4 1/2"	160-107-115
130mm, 5 1/8"	160-107-130
145mm, 5 3/4"	160-107-145
160mm, 6 1/4"	160-107-160
180mm, 7"	160-107-180
200mm, 8"	160-107-200



Grooved Director, buttoned

130mm, 5 1/8"	160-170-130
145mm, 5 3/4"	160-170-145
160mm, 6 1/4"	160-170-160
180mm, 7"	160-170-180



DOYEN

Director

145mm, 5 3/4"	160-175-145



NÉLATON

Director

160mm, 6 1/4"	160-185-160



BRODIE

Probe

200mm, 8"	160-090-200



Cotton Applicator, rough spiral end
Ø 1.5mm

180mm, 7"	160-412-180



FARRELL (LATHBURY UEBE)
Cotton Applicator, threaded, Ø 0.9mm

120mm, $4^{3/4}$"	160-420-120
140mm, $5^{1/2}$"	160-420-140

Ø 1.2mm

180mm, 7"	160-420-180



FARRELL
Cotton Applicator, triangular, Ø 0.9mm

120mm, $4^{3/4}$"	160-426-120
140mm, $5^{1/2}$"	160-426-140

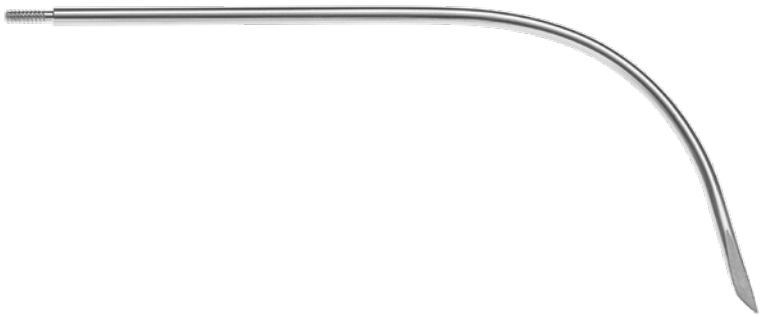
Ø 1.2mm

180mm, 7"	160-426-180
230mm, 9"	160-426-230



REDON
Guide Needle Knife Tip, slightly curved,
with threaded end
195mm, 7 2/3"

8 Charr	165-200-080
10 Charr	165-200-100
12 Charr	165-200-120
14 Charr	165-200-140
16 Charr	165-200-160
18 Charr	165-200-180



REDON
Guide Needle Knife Tip, curved,
with threaded end
195mm, 7 2/3"

8 Charr	165-202-080
10 Charr	165-202-100
12 Charr	165-202-120
14 Charr	165-202-140
16 Charr	165-202-160
18 Charr	165-202-180



REDON
Guide Needle, lancet tip, slightly curved,
with threaded end
185mm, 7 1/4"

8 Charr	165-204-080
10 Charr	165-204-100
12 Charr	165-204-120
14 Charr	165-204-140
16 Charr	165-204-160





HEGENBARTH
Clip Applying Forceps

125mm, 5"	180-920-125





WACHENFELDT
Clip Applying Forceps

125mm, 5"	180-922-125





MICHEL
Clip Applying & Removal Forceps

120mm, 4 3/4"	180-916-120



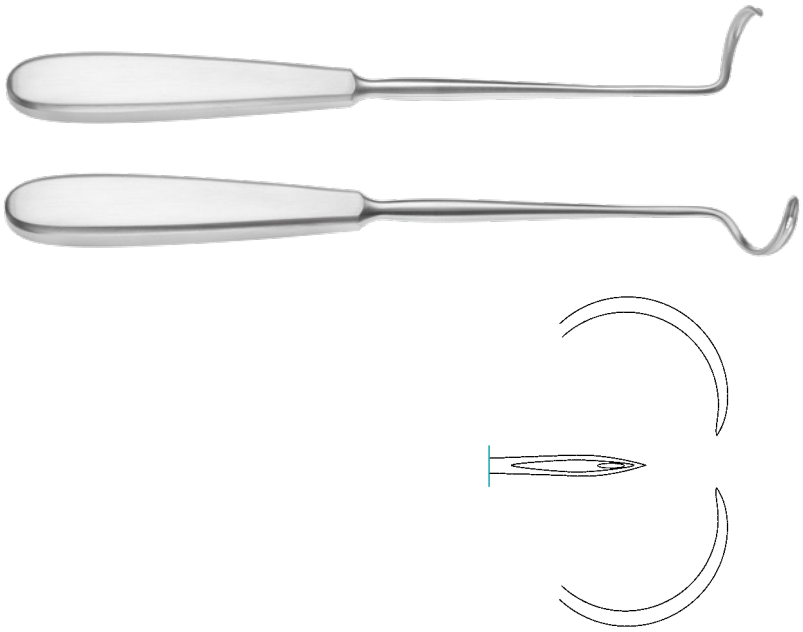
MICHEL
Clip Removal Forceps

120mm, 4 3/4"	180-920-120



RICHTER-HEATH
Clip Removal Forceps

140mm, 5 1/2"	180-936-140

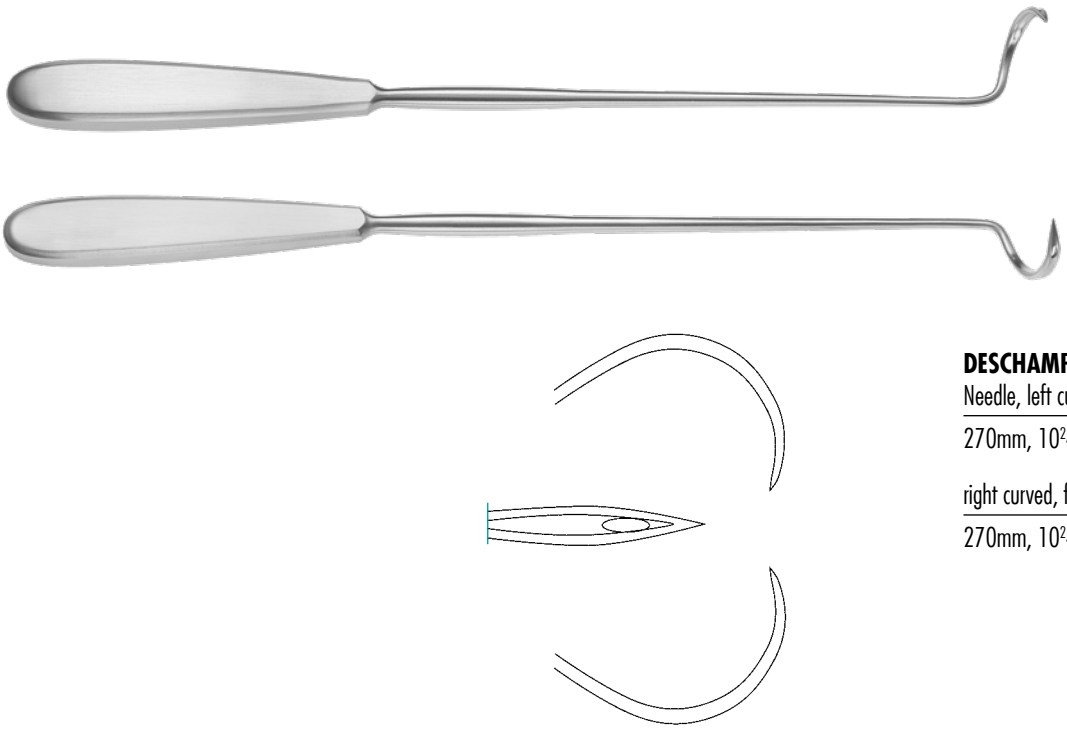


DESCHAMPS
Ligature Needles, sharp

left curved, for right hand	180-724-200
right curved, for left hand	180-728-200

blunt

left curved, for right hand	180-726-210
right curved, for left hand	180-727-210

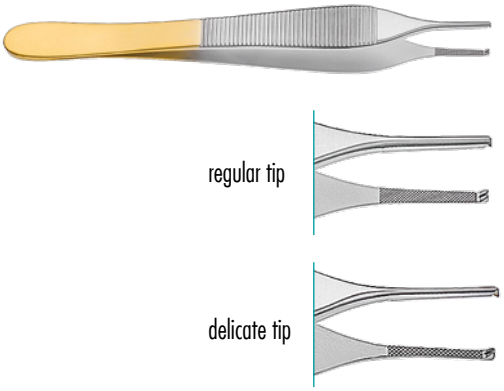


DESCHAMPS
Needle, left curved, sharp, for right hand

270mm, $10^{2/3}$"	180-732-270

right curved, for left hand

270mm, $10^{2/3}$"	180-733-270

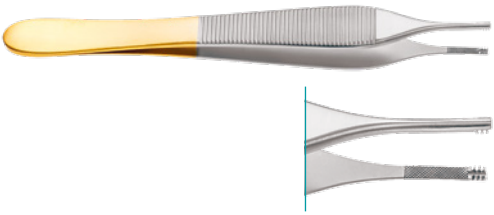


TC ADSON
Needle and Tissue Pulling Forceps, 1x2 teeth
regular tip, cross-serrated

120mm 4 3/4"	130-534-120
150mm, 6"	130-534-150

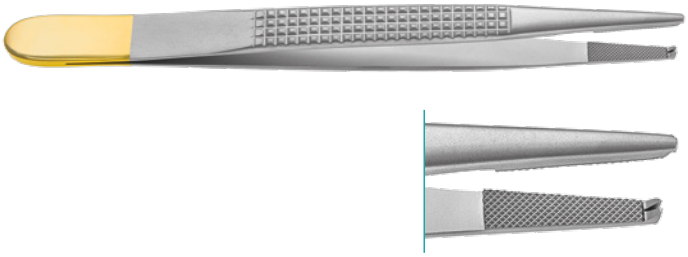
delicate tip

120mm 4 3/4"	130-537-120
150mm, 6"	130-537-150



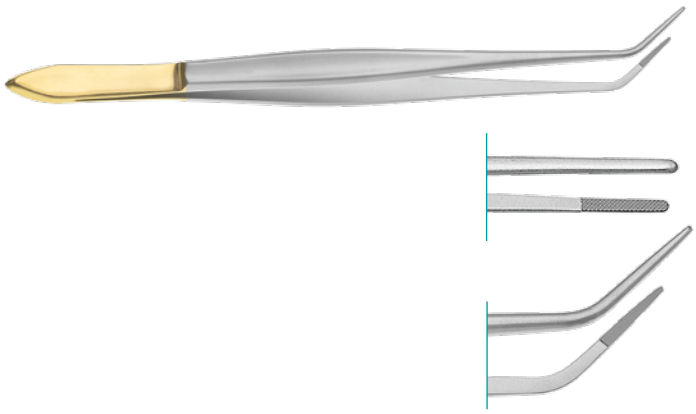
TC ADSON BROWN
Forceps, 7x7 teeth, tying platform

120mm, 4 3/4"	130-529-120
150mm, 6"	130-529-150



TC BONNEY
Needle and Tissue Pulling Forceps, 1x2 teeth, british pattern

170mm, 6 2/3"	130-514-170



TC CUSHING
Needle and Tissue Pulling Forceps,
with scraper/dissector end, straight

180mm, 7"	130-536-175

angled

180mm 7"	130-539-180



TC DEBAKEY
TC Atraumatic Forceps, 2.0mm wide

160mm, 6 1/4"	130-570-160
200mm, 8"	130-570-200
240mm, 9 1/2"	130-570-240



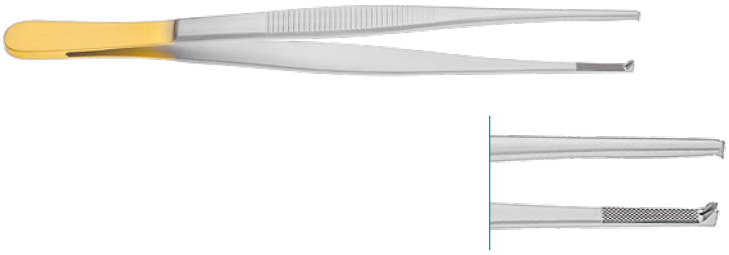
TC DEBAKEY
TC Atraumatic Forceps, 1.5mm wide

160mm, 6 1/4"	130-568-150
200mm, 8"	130-568-190
240mm, 9 1/2"	130-568-240



TC FERRIS SMITH
Needle and Tissue Pulling Forceps,
170mm, $6^{2/3}$"

1x2 teeth	130-510-170
2x3 teeth	130-511-170



TC OEHLER
Needle and Tissue Pulling Forceps, 1x2 teeth

145m, $5^{3/4}$"	130-522-145
160mm, $6^{1/4}$"	130-522-160
200mm, 8"	130-522-200
250mm, $9^{7/8}$"	130-522-250



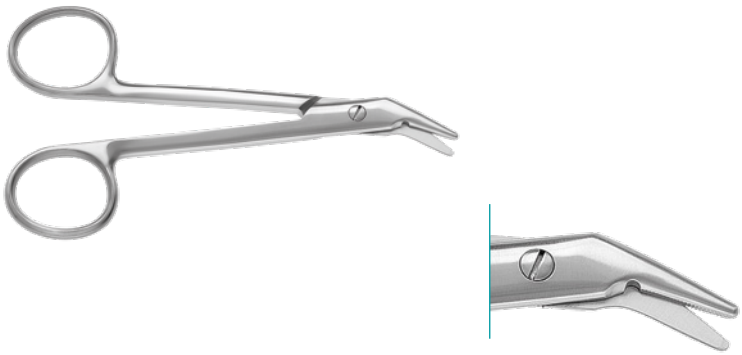
TC GERALD
Needle and Tissue Pulling Forceps, 1x2 teeth

170mm, $6^{2/3}$"	130-518-170



TC SEMKEN
Needle and Tissue Pulling Forceps, 1x2 teeth

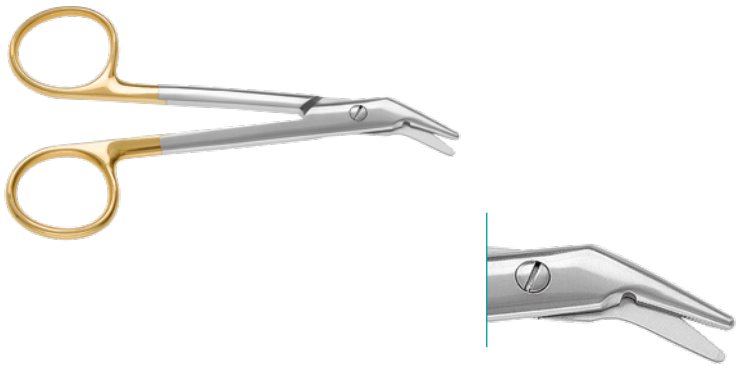
150mm, 6"	130-512-150



CUT ∅
HARD max. 0.6mm
SOFT max. 1.2mm

UNIVERSAL
Wire Suture Scissors, serrated blade

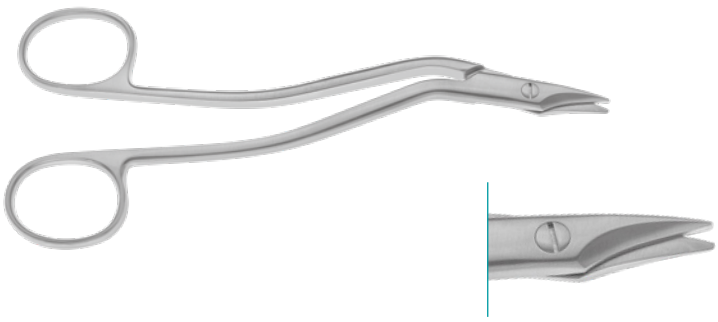
120mm, 4 3/4"	120-265-120



CUT ∅
HARD max. 0.6mm
SOFT max. 1.2mm

Universal Wire Scissors, one serrated blade, with TC inserts

120mm, 4 3/4"	120-565-120



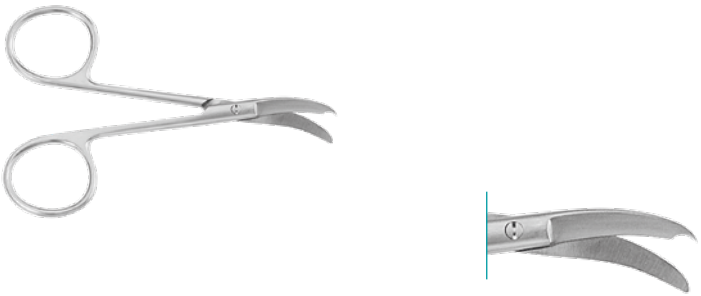
HEATH
Suture Scissors

160mm, 6 1/4"	120-226-160



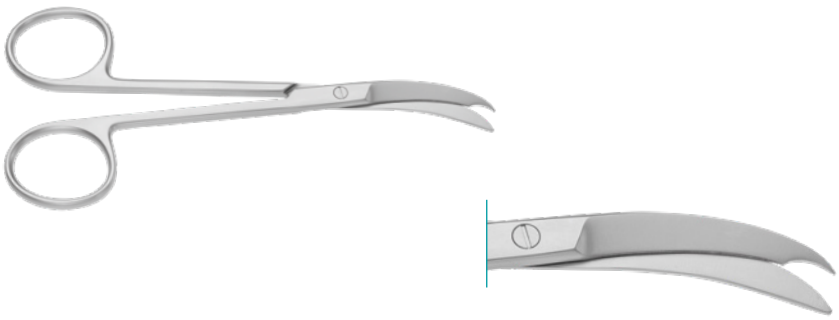
SPENCER
Suture Scissors

90mm, 3 1/2"	120-220-090
130mm, 5 1/8"	120-220-130



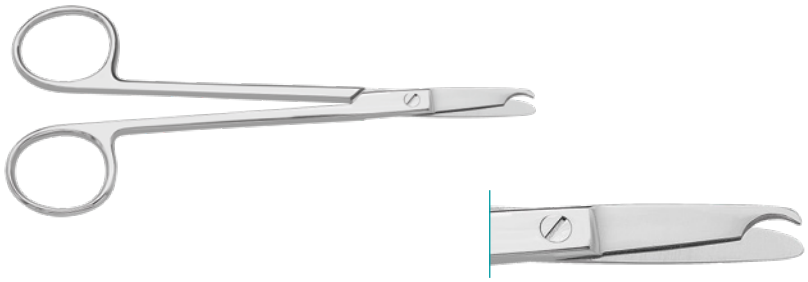
SHORTBENT
Suture Scissors

90mm, 3 1/2"	120-223-090



NORTHBENT
Suture Scissors

130mm, 5 1/8"	120-222-130



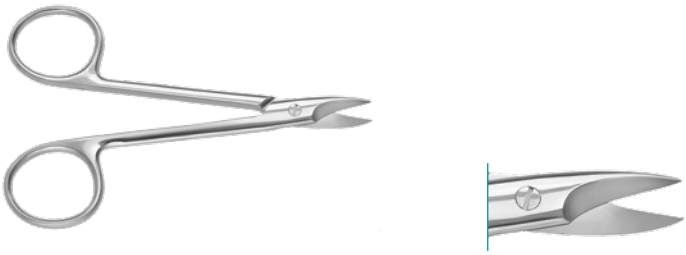
LITTAUER
Stitch Scissors

140mm, 5 1/2"	120-224-140



SPENCER
Suture Scissors

90mm, 3 1/2"	120-220-090
130mm, 5 1/8"	120-220-130

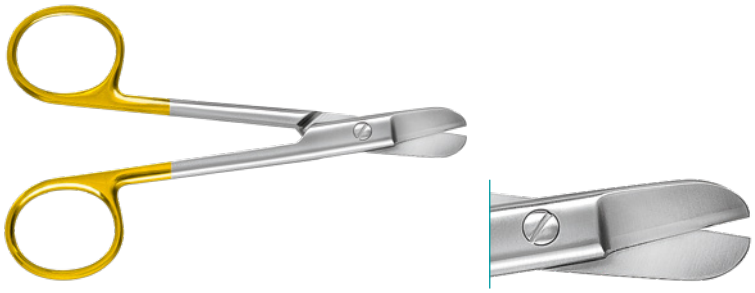


Suture Wire Scissors, serrated
straight

100mm, 4"	120-296-100

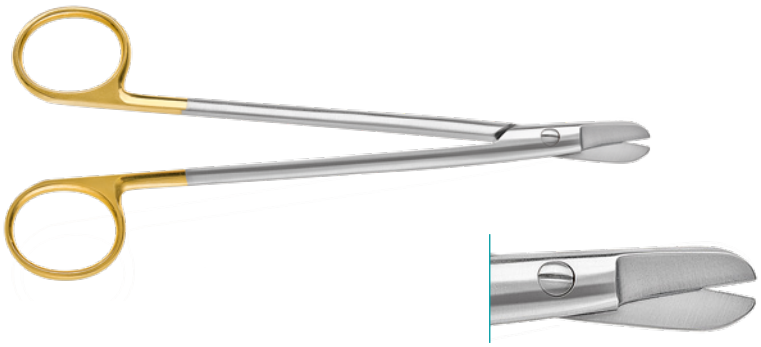
curved

100mm, 4"	120-297-100



TC Plate Cutting Scissors

120mm, 4 3/4"	120-596-120



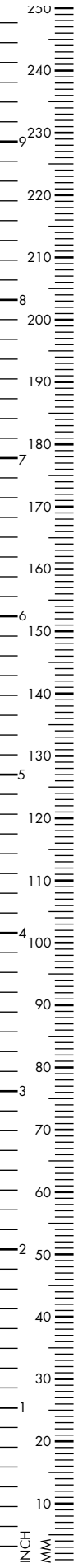
SMITH
TC Wire Scissors

160mm, 6 1/4"	120-570-160



O'BRIEN
Ligature Scissors, angled blade

95mm, 3 3/4"	120-084-095





UNNA
Comedo Extractor, round cup, double-ended

140mm, 5 1/2"	230-232-140



UNNA
Comedo Extractor, oval cup, double-ended

140mm, 5 1/2"	230-230-140



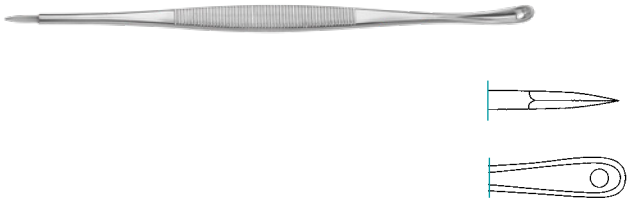
WALTON
Comedo Extractor, with protection cup, double-ended

140mm, 5 1/2"	230-240-140



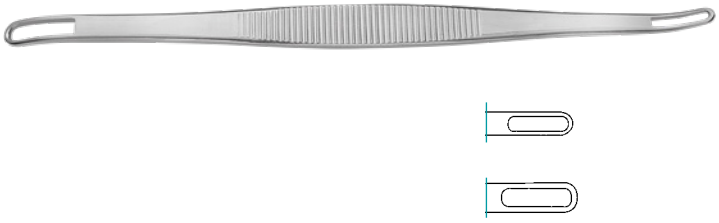
SAALFELD
Comedo Extractor, double-ended

100mm, 4"	230-239-100



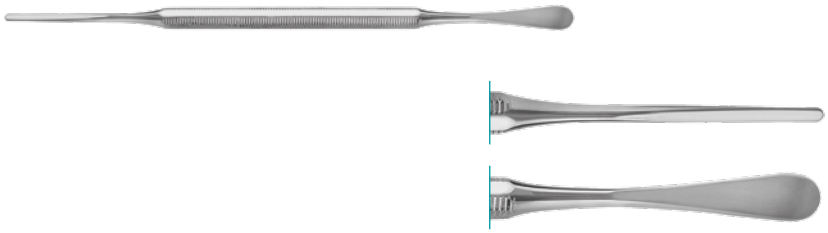
SAALFELD
Comedo Extractor, double-ended

140mm, $5^{1/2}$"	230-236-140



SCHAMBERG
Comedo Extractor, double-ended

100mm, 4"	230-238-100



Spatula-Packer, double-ended

135mm, 5 1/3"	503-013-000



FROST
Elevator, single-ended

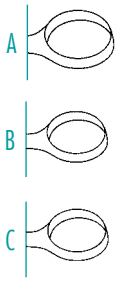
130mm, 5 1/8"	503-011-000



FOX
Lupus Curette, round, single-ended,
140mm, 5 1/2"

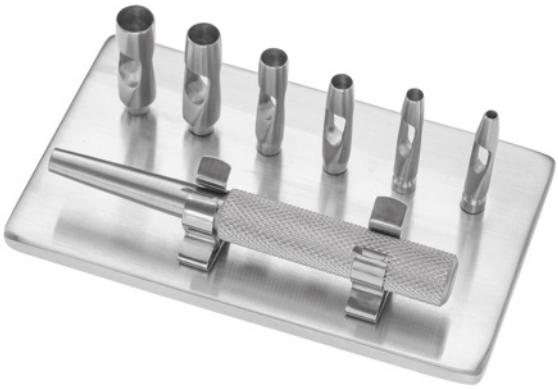
Ø 3mm	230-151-140
Ø 4mm	230-152-140
Ø 5mm	230-153-140
Ø 6mm	230-154-140



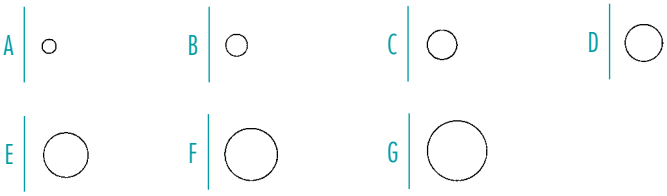


PIFFARD
Lupus Curette, 140mm, 5 1/2"

A	230-155-001
A	230-155-002
C	230-155-003







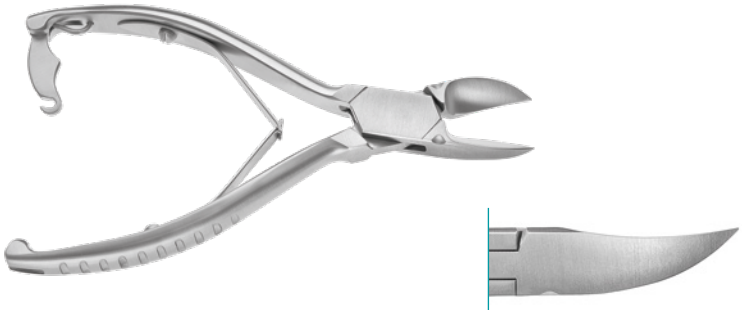
KEYES
Dermal Punch Set

Dermal Punch 120mm, 4 3/4"	230-160-000
A ∅ 2mm	230-160-002
B ∅ 3mm	230-160-003
C ∅ 4mm	230-160-004
D ∅ 5mm	230-160-005
E ∅ 6mm	230-160-006
F ∅ 7mm	230-160-007
G ∅ 8mm	230-160-008



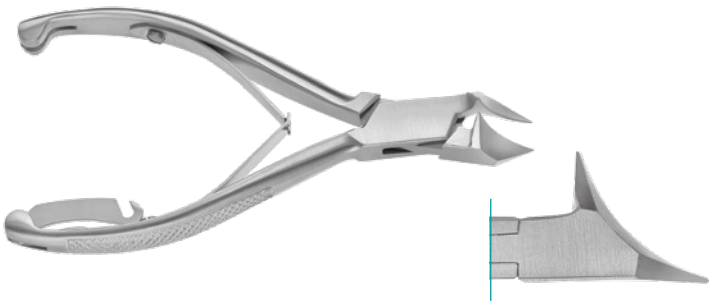
Cuticle and Tissue Nipper, convex jaw

110mm, $4^{1/3}$″	510-250-110
130mm, $5^{1/8}$″	510-251-130



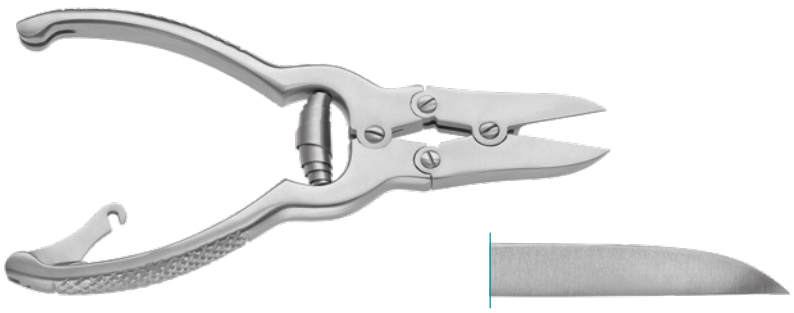
Nail Nipper, double spring, 140mm, $5^{1/2}$″

Concave jaw	510-210-140



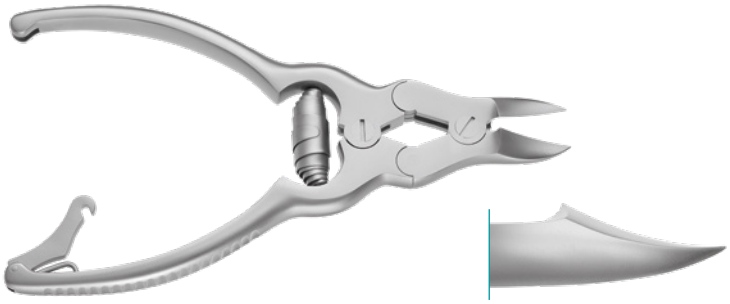
Nail Nipper, angled concave jaw, double spring

140mm, $5^{1/2}$″	510-215-140



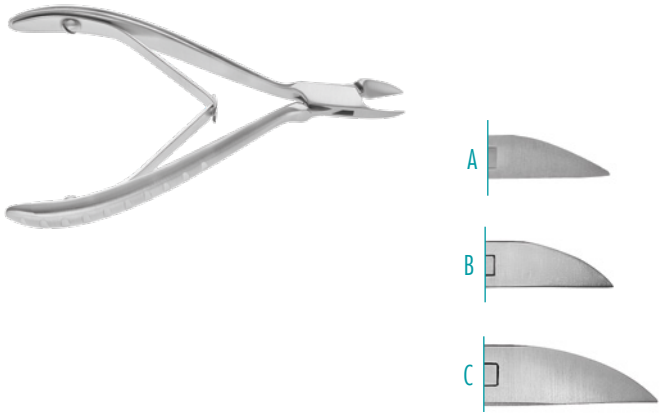
Mycotic Nail Nipper, straight,
heavy duty jaw, with lock, double action

160mm, 6 1/4" 510-337-160



Mycotic Nail Nipper, concave,
heavy duty jaw, with lock, double action

150mm, 6" 510-338-150



Nail Nipper, straight jaw, double spring

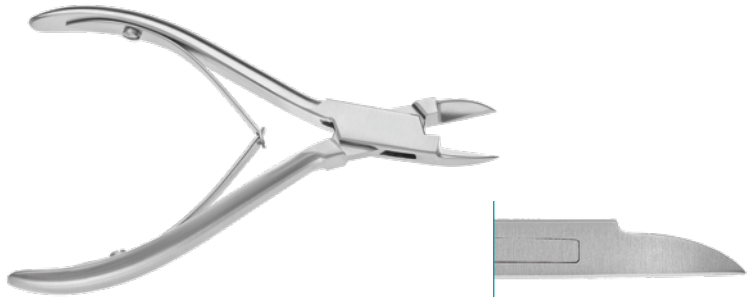
A 100mm, 4" 510-224-140

Delicate, straight jaw

B 110mm, 4 1/3" 510-225-142

straight jaw

C 130mm, 5 1/8" 510-226-140



Nail Nipper, straight jaw

130mm, 5 1/8"	510-347-130



Nail Nipper, concave jaw, spring handle with lock

150mm, 6"	510-332-150



RADOLF
Nail Extraction Forceps, narrow jaw
140mm, 5 1/2" 510-463-140



RADOLF
Nail Extraction Forceps, concave/convex jaw
135mm, 5 1/3" 510-462-130



Nail Extraction Forceps, duck shaped jaw
140mm, 5 1/2" 510-464-140



ANVIL
Nail Splitting Forceps

125mm, 5"	510-334-140



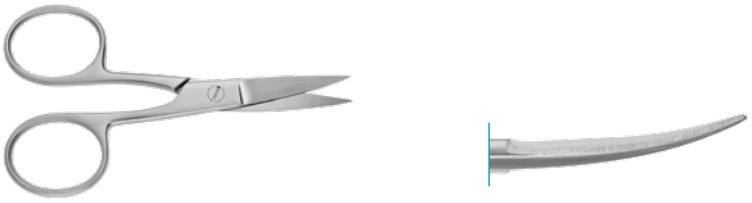
Finger Ring Saw, replaceable circular blade

160mm, 6 1/4"	210-975-170
Spare Blade	210-976-000



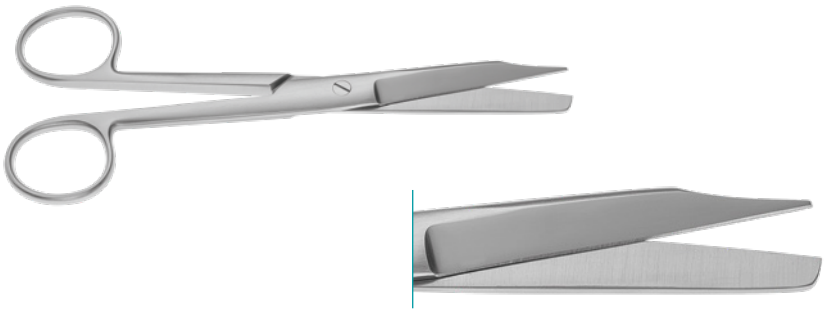
Mini Blade Handle, round blade socket, for mini blades

130mm, 5 1/8"	510-110-130



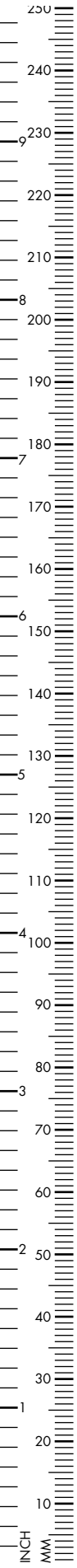
Nail Scissors, curved

90mm, 3 1/2"	510-425-090

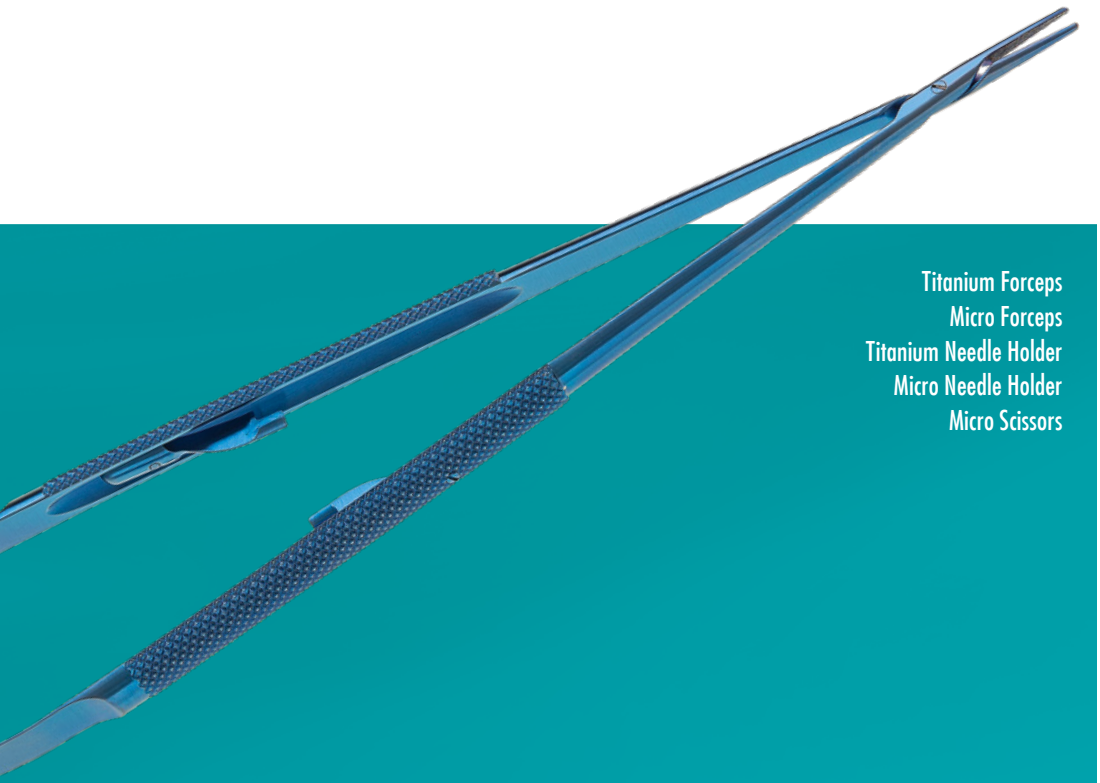


Ingrown Nail Splitting Scissors,
one blade serrated, straight

150mm, 6"	500-380-150


250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
9
8
7
6
5
4
3
2
1
INCH
MM

MICROSURGICAL INSTRUMENTS



Titanium Forceps
Micro Forceps
Titanium Needle Holder
Micro Needle Holder
Micro Scissors



Titanium Micro Suture Tying Forceps
6mm platform, 8mm round handle
straight

120mm, 4 3/4"	250-364-280
150mm, 6"	250-364-284



Titanium Micro Ring Tip Forceps
8mm round handle with counter balance
1mm ring tip

150mm, 6"	250-764-715
180mm, 7"	250-764-718
210mm, 8 1/4"	250-764-721
230mm, 9"	250-764-723
254mm, 10"	250-764-725



Titanium Micro Ring Tip Forceps
8mm round handle
1mm ring tip

150mm, 6"	250-364-705
180mm, 7"	250-364-704

2mm ring tip

150mm, 6"	250-364-703
180mm, 7"	250-364-706
210mm, 8 1/4"	250-364-707

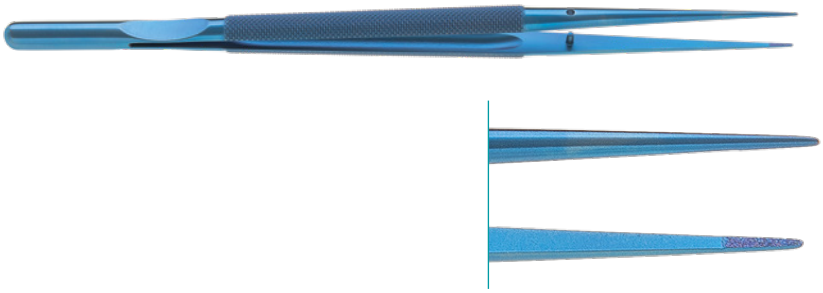


Titanium Micro Forceps
6mm platform, 8mm round handle
straight

180mm, 7"	250-364-286
210mm, 8 1/4"	250-364-276
230mm, 9"	250-364-270

curved

180mm, 7"	250-364-287
210mm, 8 1/4"	250-364-277
230mm, 9"	250-364-271



Titanium Micro Forceps
6mm platform, 8mm round handle
with counter balance, 0.8mm jaw, straight

180mm, 7"	250-364-250
210mm, 8 1/4"	250-364-252

curved

180mm, 7"	250-364-251
210mm, 8 1/4"	250-364-253



Titanium DeBakey Micro Forceps
1.2mm jaw, 8mm round handle, straight

150mm, 6"	250-164-699
180mm, 7"	250-164-701
210mm, 8 1/4"	250-164-703



GERALD
Titanium Micro Ring Tip Forceps
1.0mm ring, flat handle

180mm, 7"	130-734-180
200mm, 8"	130-734-200



GERALD
Titanium Forceps, 6mm platform
1.0mm tip, flat handle

180mm, 7"	130-735-180
200mm, 8"	130-735-200

1x2 teeth, delicate

180mm, 7"	130-728-180



GERALD
Titanium DeBakey Forceps
1.2mm tip, flat handle

180mm, 7"	130-726-180
200mm, 8"	130-726-200



Titanium DeBakey Vascular Forceps
wide flat handle, 1.0mm tip

160mm, 6 1/4"	130-881-160
200mm, 8"	130-881-200
240mm, 9 1/2"	130-881-240

1.5mm tip

160mm, 6 1/4"	130-882-160
200mm, 8"	130-882-200
240mm, 9 1/2"	130-882-240

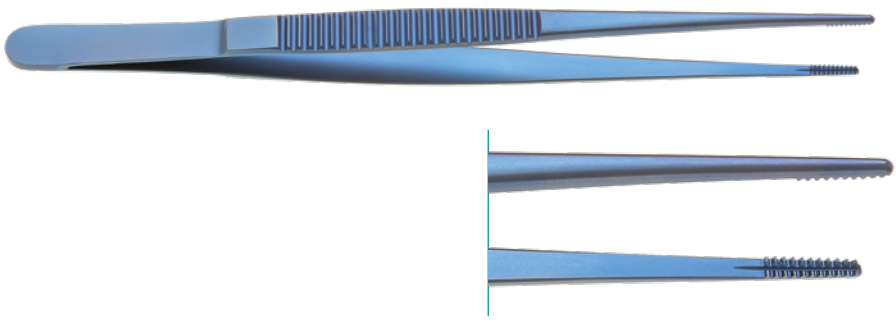
2.0mm tip

160mm, 6 1/4"	130-884-160
200mm, 8"	130-884-200
240mm, 9 1/2"	130-884-240



CUSHING
Titanium Forceps, serrated, fluted handle
1.0mm tip

175mm, 6 7/8"	130-736-180



RESANO
Titanium Valve Forceps, multiple teeth,
wide flat handle

230mm, 9"	130-830-230



Micro Ring Tip Forceps
8mm round handle,
1mm straight ring tip

150mm, 6"	250-264-705
180mm, 7"	250-264-709
210mm, 8 1/4"	250-264-708

2mm straight ring tip

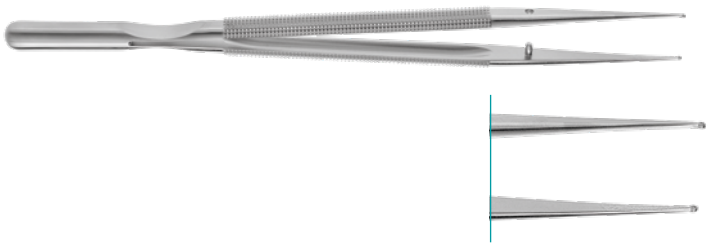
180mm, 7"	250-264-706
210mm, 8 1/4"	250-264-707

1mm straight ring tip, 10mm tying platform

180mm, 7"	250-264-701

1mm curved ring tip

210mm, 8 1/4"	250-264-703



Micro Ring Tip Forceps
8mm round handle with counter balance,
1mm straight ring tip

150mm, 6"	251-655-145
180mm, 7"	251-655-180
210mm, 8 1/4"	251-655-210
230mm, 9"	251-655-230

2mm straight ring tip

180mm, 7"	251-655-182

1mm curved ring tip

180mm, 7"	251-655-181
230mm, 9"	251-655-231



Micro Suture Tying Forceps
6mm platform, 8mm round handle
straight tip

120mm, 4 3/4"	250-264-280
140mm, 5 1/2"	250-264-284

curved tip

120mm, 4 3/4"	250-264-281
140mm, 5 1/2"	250-264-285



Micro Suture Tying Forceps,
6mm platform, 8mm round handle
0.8mm straight tip

180mm, 7"	250-265-180
210mm, 8 1/4"	250-267-210

straight tip with 1x2 teeth

180mm, 7"	250-265-182

curved tip

180mm, 7"	250-265-181
210mm, 8 1/4"	250-267-211



Micro Vascular Forceps, 9mm round handle
6mm platform tip with counter balance
straight tip

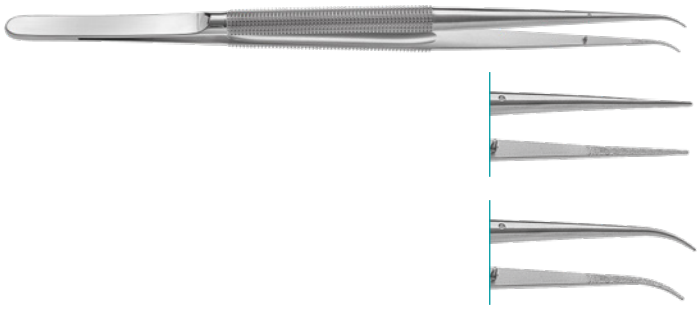
150mm, 6"	251-657-150
180mm, 7"	251-657-180
210mm, 8 1/4"	251-657-210
250mm, 9 7/8"	251-657-250

straight tip with 1x2 teeth

180mm, 7"	251-657-182

curved tip

180mm, 7"	251-657-181
210mm, 8 1/4"	251-657-211
250mm, 9 7/8"	251-657-251



Micro Vascular Tying Forceps
8mm round handle, 180mm, 7″

straight tip	250-264-250
curved tip	250-264-251



DEBAKEY
Micro Vascular Forceps
8mm round handle, 1mm tip

180mm, 7″	130-212-180
210mm, 8 1/4″	130-212-210



DEBAKEY
Micro Vascular Forceps
8mm round handle, 1mm tip
with counter balance

180mm, 7″	250-653-180
210mm, 8 1/4″	250-653-210



GERALD
Micro Vascular Forceps, straight
1mm cross-serrated step-down tip,
flat handle

180mm, 7″	130-020-180
200mm, 8″	130-020-200
250mm, 9 7/8″	130-020-250



GERALD
Micro Ring Tip Forceps
∅ 1.0 x 0.5mm ring, flat handle

180mm, 7″	130-724-180
200mm, 8″	130-724-200

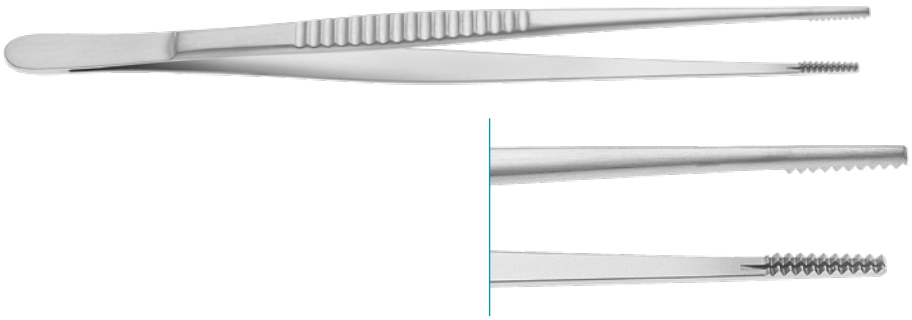


GERALD
Dressing Forceps, narrow
1mm step-down tip

180mm, 7″	130-022-180
200mm, 8″	130-022-200

with 6mm tying platform

180mm, 7″	130-731-180
200mm, 8″	130-731-200



RESANO
Valve Forceps, multi-toothed

230mm, 9″	130-530-230



DEBAKEY
Needle Pulling Forceps, gold plated
8mm round handle, 2.0mm tip

180mm, 7″	250-571-180

1.2mm tip

180mm, 7″	250-571-185
210mm, 8 1/4″	250-571-200



Micro Jeweller Forceps
0.3mm tip, 9mm wide handle
straight tip

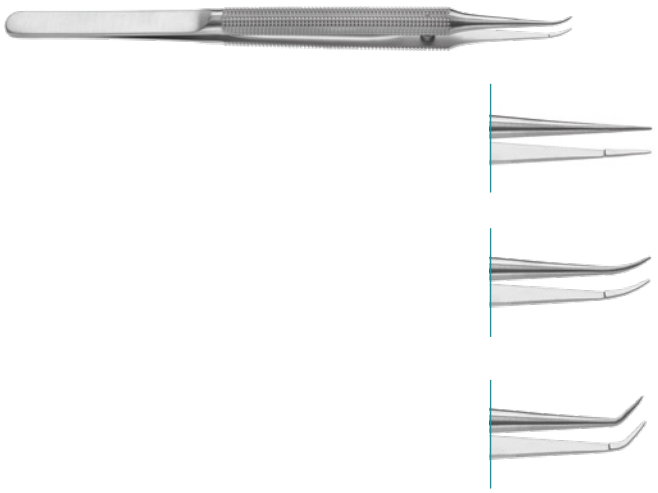
110mm, 4 1/3″	251-613-110
135mm, 5 1/3″	251-611-130

straight tip

110mm, 4 1/3″	251-713-110
135mm, 5 1/3″	251-711-130

45° angled tip

135mm, 5 1/3″	251-703-135



Micro Suture Tying Forceps
tip 0,3mm, smooth, 6mm tying platform,
stop pin, ∅8mm round handle,
120mm, 4 3/4″

straight	250-064-280
curved	250-064-281
angled	250-064-282
150mm, 6″	
straight	250-064-284
curved	250-064-285
180mm, 7″	
straight	250-064-286
curved	250-064-287
230mm, 9″	
straight	250-064-288
curved	250-064-289



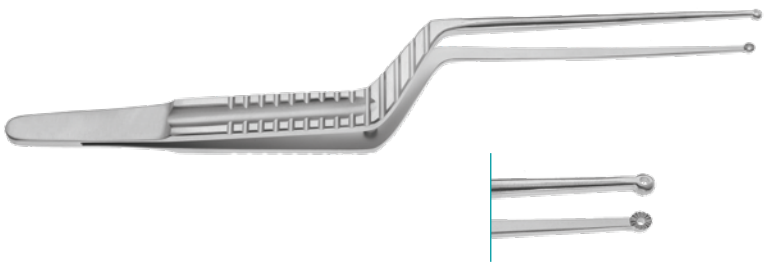
Micro Forceps, angled, 0.35mm

110mm, 4 1/3″	250-024-329



Micro Forceps, straight, 0.15mm

110mm, 4 1/3″	250-024-331



YASARGIL
Tumor Tissue Forceps, bayonet-shaped
∅ 3mm round cup

200mm, 8″	250-024-768





CASTROVIEJO
Suturing Forceps, 1x2 teeth, straight,
0.12mm, with tying platform, US-handle

110mm, 4 1/3"	400-137-021

0.3mm

110mm, 4 1/3"	400-137-031

0.5mm

110mm, 4 1/3"	400-137-055





BISHOP HARMON
Iris Forceps, 1x 2 teeth, straight,
85mm, 3 1/3"

0.3mm	400-118-003
0.4mm	400-118-004
0.5mm	400-118-005
0.8mm	400-118-008





CASTROVIEJO BROWN
Tissue Forceps, 9x9 teeth, US-handle

110mm, 4 1/3"	400-139-050



Micro Needle Holder with streamline box catch
8mm round handle
straight jaw, with catch

150mm, 6″	250-064-309

straight jaw, without catch

150mm, 6″	250-064-319

curved jaw, with catch

150mm, 6″	250-064-329



JACOBSON
Micro Needle Holder with streamline box catch
8mm round handle
straight, with catch

185mm, 7 1/4″	250-264-170
210mm, 8 1/4″	250-264-172
230mm, 9″	250-264-174

straight, with catch, 9mm round handle

250mm, 9 7/8″	250-264-176

straight, 8mm roeund handle, without catch

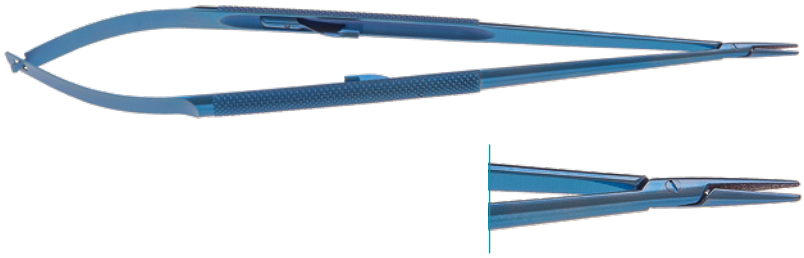
185mm, 7 1/4″	250-264-171
210mm, 8 1/4″	250-264-173
230mm, 9″	250-264-175

curved, with catch

185mm, 7 1/4″	250-264-177
210mm, 8 1/4″	250-264-178

curved, 9mm round handle, without catch

250mm, 9 7/8″	250-264-179



JACOBSON
Micro Needle Holder with regular box catch
8mm round handle
straight, with catch

185mm, 7 1/4"	250-264-100
210mm, 8 1/4"	250-264-102
230mm, 9"	250-264-104

straight, with catch, 9mm round handle

250mm, 9 7/8"	250-264-106

straight, without catch

185mm, 7 1/4"	250-264-101
210mm, 8 1/4"	250-264-103
230mm, 9"	250-264-105

curved, with catch

185mm, 7 1/4"	250-264-107
210mm, 8 1/4"	250-264-108

curved, without catch,
9mm round handle

250mm, 9 7/8"	250-264-109



JACOBSON
Needle Holder with streamline box catch
10mm round handle, for large needles

190mm, 7 1/2"	250-265-190
230mm, 9"	250-265-230
250mm, 9 7/8"	250-265-250



CASTROVIEJO
Micro Needle Holder with regular box catch
flat handle, straight, with catch

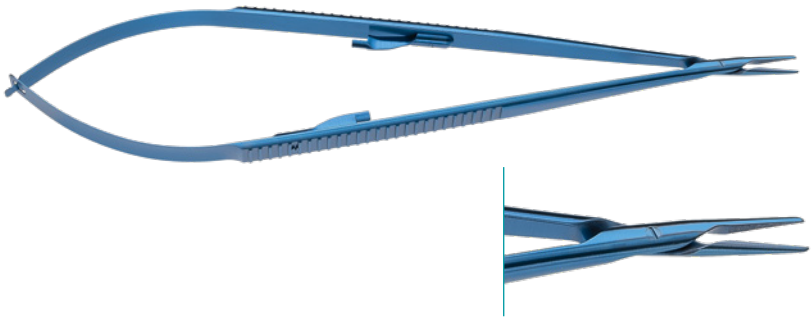
150mm, 6″	250-362-150
180mm, 7″	250-362-185
210mm, 8 1/4″	250-362-215
230mm, 9″	250-362-230

straight, without catch

185mm, 7 1/4″	250-364-185
210mm, 8 1/4″	250-364-215

curved, with catch

180mm, 7″	250-363-185
210mm, 8 1/4″	250-363-215

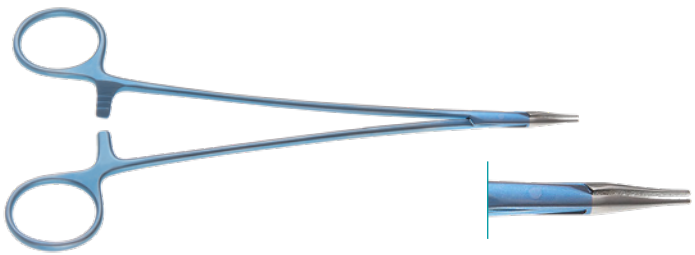


CASTROVIEJO
Micro Needle Holder with streamline box catch
flat handle, straight, with catch

180mm, 7″	250-362-160
210mm, 8 1/4″	250-362-162

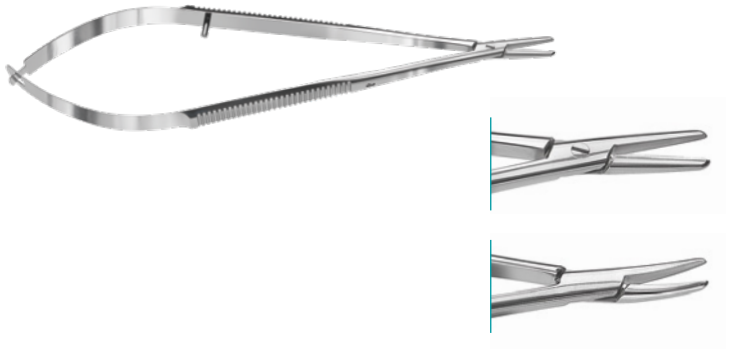
straight, without catch

180mm, 7″	250-362-161
210mm, 8 1/4″	250-362-163



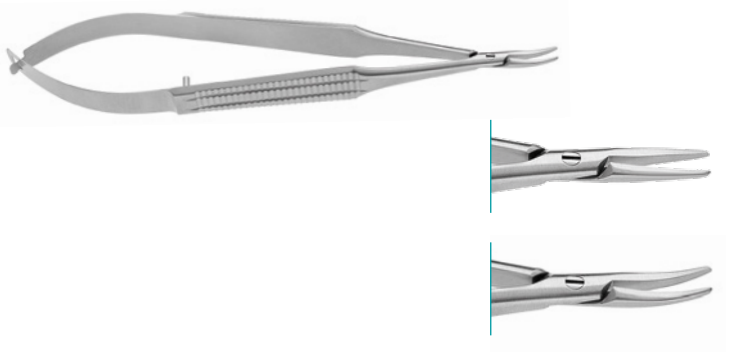
EUFRAT PASQUE
Micro Needle Holder, dekicate jaw

150mm, 6″	180-662-150
170mm, 6 2/3″	180-662-170
190mm, 7 1/2″	180-662-190



CASTROVIEJO
Micro Needle Holder, straight, smooth,
145mm, 5 3/4", flat handle, without catch

straight	250-020-565
curved	250-020-566



CASTROVIEJO
Micro Needle Holder,
straight, with catch, US-handle

140mm, 5 1/2"	250-064-076

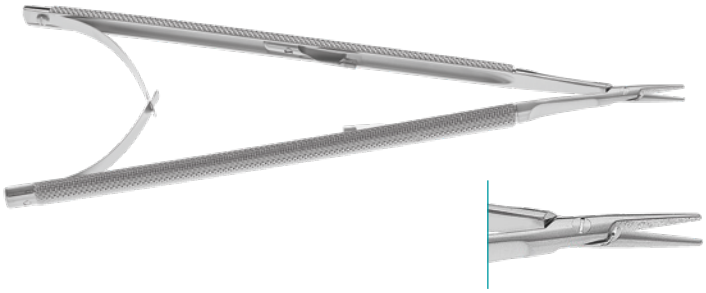
curved, without catch

140mm, 5 1/2"	250-064-079



JACOBSON
Micro Needle Holder,
round handle, straight, with catch

185mm, 7 1/4"	250-064-246
210mm, 8 1/4"	250-064-251



GLASSER
Micro Needle Holder,
with catch, straight

120mm, 4 3/4"	180-100-120
180mm, 7"	180-100-180
curved	
120mm, 4 3/4"	180-101-180



BARRAQUER
Micro Needle Holder
straight, ∅ 8mm round handle, smooth
without catch, 115mm, 4 1/2"

straight	250-064-230
curved	250-064-231
with catch	
straight	250-064-232
curved	250-064-233



BARRAQUER
Micro Needle Holder, 120mm, 4 3/4"
8mm round handle, straight

with catch	250-164-232
without catch	250-164-234
curved	
with catch	250-164-233
without catch	250-164-231



REILL
Micro Needle Holder, 150mm, 6"
8mm round handle, 1mm tip, straight

with catch	250-164-242
without catch	250-164-240
curved	
with catch	250-164-243
without catch	250-164-241



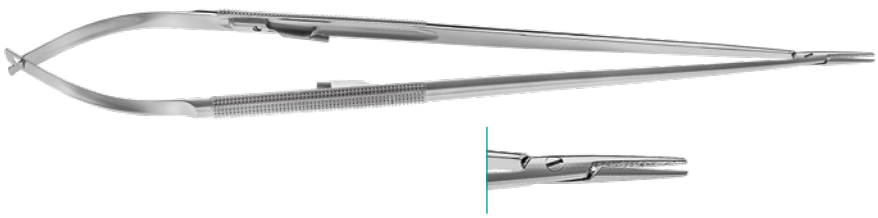
JACOBSON
Micro Needle Holder, 9mm round handle, 0.8mm tip, straight, 165mm, 6 1/2″

with catch	250-164-252
without catch	250-164-253
curved	
with catch	250-164-254



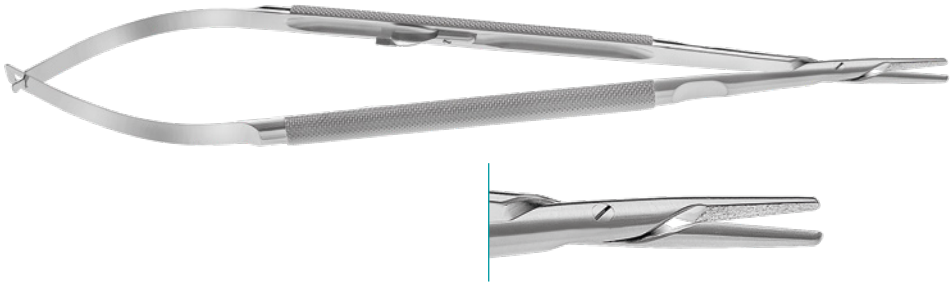
JACOBSON
Micro Needle Holder, regular box catch, 9mm round handle, 0.8mm tip, straight
with catch

180mm, 7″	250-264-246
210mm, 8 1/4″	250-264-210
230mm, 9″	250-264-230
straight, without catch	
180mm, 7″	250-264-248
210mm, 8 1/4″	250-264-211
230mm, 9″	250-264-231
curved, with catch	
180mm, 7″	250-264-247
210mm, 8 1/4″	250-264-212
230mm, 9″	250-264-232
curved, without catch	
180mm, 7″	250-264-249
210mm, 8 1/4″	250-264-213



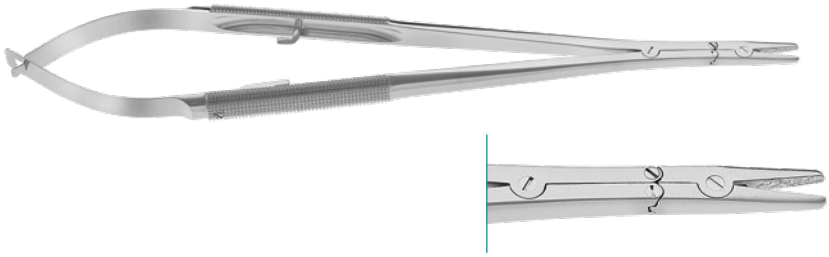
JACOBSON
Micro Needle Holder, regular box catch, 9mm round handle with short knurling, straight, 230mm, 9″

with catch	250-264-234
without catch	250-264-235
curved	
with catch	250-264-236



JACOBSON
Needle Holder, streamline box catch
10mm round handle for large needles
with catch, straight

190mm, 7 1/2"	250-018-190
230mm, 9"	250-018-230
250mm, 9 7/8"	250-018-250
curved	
230mm, 9"	250-019-230



GREGORY
Needle Holder, double action jaw,
10mm round handle with catch,
for large needles, TC Inserts, 2mm tip

180mm, 7"	180-880-180
210mm, 8 1/4"	180-880-210
diamond dusted jaw	
180mm, 7"	180-881-180
210mm, 8 1/4"	180-881-210



CASTROVIEJO
Micro Needle Holder, with catch
flat handle, 1mm tip, 140mm, 5 1/2"

straight	250-220-563
curved	250-220-564



CASTROVIEJO JACOBSON
Micro Needle Holder
flat handle, straight, with catch

180mm, 7″	250-264-049
210mm, 8 1/4″	250-264-060
230mm, 9″	250-264-062

straight, without catch

180mm, 7″	250-264-048

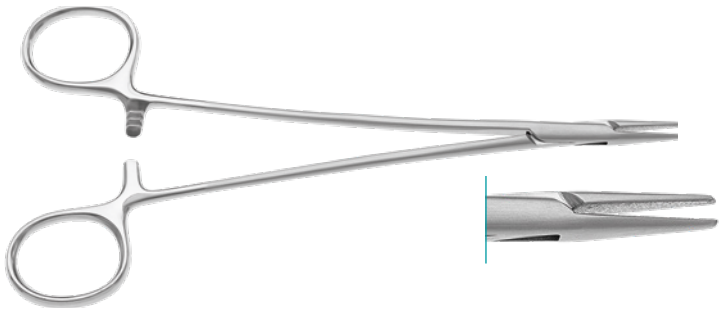
curved, without catch

180mm, 7″	250-264-051



LÖFFLER
Needle Holder, delicate, short jaw,
straight, ring handle

150mm, 6″	180-755-150
180mm, 7″	180-755-180
200mm, 8″	180-755-200
230mm, 9″	180-755-230



DEBAKEY
Needle Holder, straight, ring handle

180mm, 7″	180-648-180
200mm, 8″	180-648-200
230mm, 9″	180-648-230



Micro Scissors, 9mm blades, 120mm, 4 3/4"
7mm round handle, straight

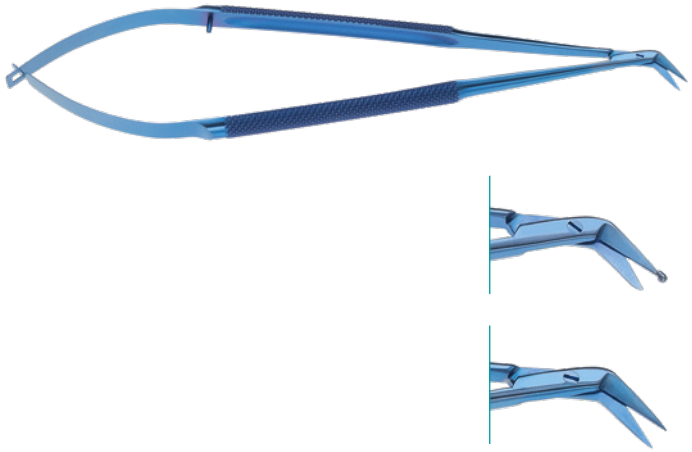
sharp blades	250-060-120
blunt blades	250-060-121
curved	
sharp blades	250-061-120



Ti

JACOBSON
Micro Scissors, 9mm sharp blades
8mm round handle, straight

150mm, 6"	250-360-150
180mm, 7"	250-360-180
210mm, 8 1/4"	250-360-210
230mm, 9"	250-360-230
curved	
180mm, 7"	250-360-181

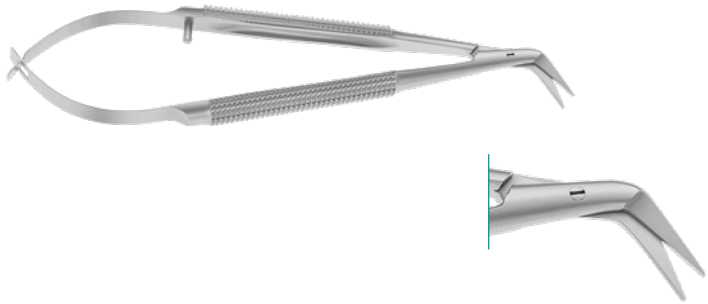


Ti

Micro Scissors, 180mm, 7"
10mm sharp angled blades
8mm round handle, 25°

with ball tip	250-360-025
without ball tip	250-360-125
45°	
with ball tip	250-360-045
without ball tip	250-360-145
60°	
with ball tip	250-360-060
without ball tip	250-360-160
90°	
with ball tip	250-360-090
without ball tip	250-360-190
125°	
with ball tip	250-360-325
without ball tip	250-360-225







JACOBSON

Micro Scissors, 14mm blades
8mm round handle,
straight, 145mm, 5 3/4"

sharp blades	250-060-145
blunt blades	250-062-145

straight, 180mm, 7"

sharp blades	250-060-180

curved, 145mm, 5 3/4"

sharp blades	250-061-145
blunt blades	250-063-145

curved, 180mm, 7"

sharp blades	250-061-180

9mm round handle, straight, sharp blades

210mm, 8 1/4"	250-060-210
230mm, 9"	250-060-230

9mm round handle, curved, sharp blades

210mm, 8 1/4"	250-061-210
230mm, 9"	250-061-230

CASTROVIEJO

Micro Scissors, 115mm, 4 1/2"
8mm round handle
angled fine blades, 10mm

25°	250-060-115
45°	250-061-115
60°	250-062-115
90°	250-063-115
125°	250-064-115

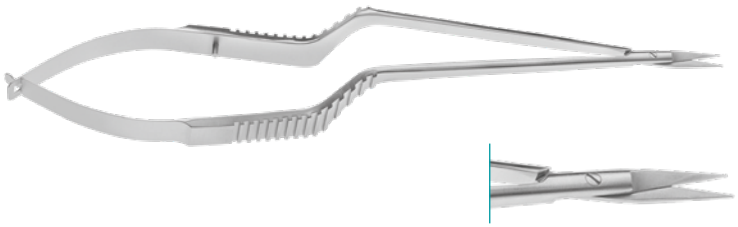
angled micro blades, 7mm

25°	250-060-215
45°	250-061-215
60°	250-062-215
90°	250-063-215
125°	250-065-215

NOYES

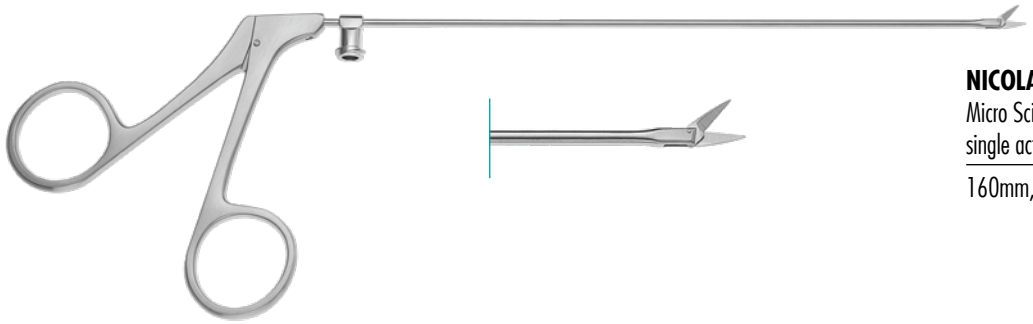
Iridectomy Scissors, straight
110mm, 4 1/3"

blunt/blunt	400-120-050
blunt/sharp	400-120-051
sharp/sharp	400-120-052



Micro Scissors (Spring Type)
bayonet-shaped, straight

190mm, $7^{1/2}$" 250-064-105



NICOLA
Micro Scissors, straight, sharp/sharp,
single action, with Luer-Catch

160mm, $6^{1/4}$" 250-064-226



VANNAS
Micro Scissors, wide handle, angled

120mm, $4^{3/4}$" 250-064-011

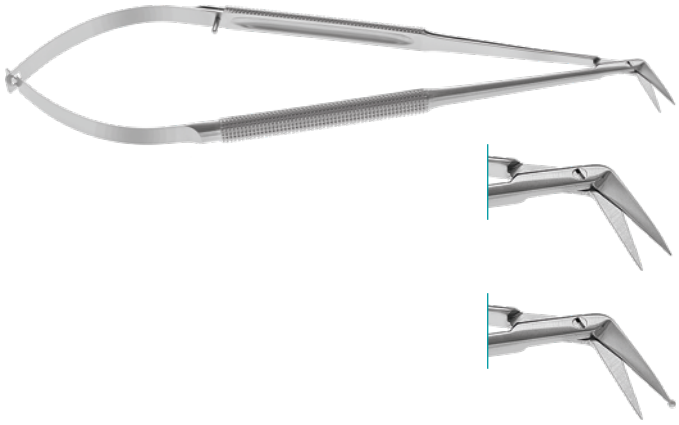


JACOBSON
Micro Scissors, 160mm, 6 1/4"
sharp blades, 8mm round handle
7mm micro blades, angled

25°	120-164-025
45°	120-164-045
60°	120-164-060
90°	120-164-090
125°	120-164-125

10mm micro blades, angled

25°	120-164-225
45°	120-164-245
60°	120-164-260
90°	120-164-290
125°	120-164-325

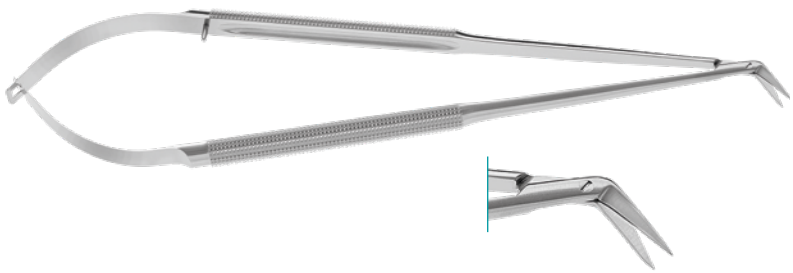


JACOBSON
Micro Scissors, 180mm, 7"
14mm blades, 8mm round handle
sharp blades

25°	120-184-225
45°	120-184-245
60°	120-184-260
90°	120-184-290
125°	120-184-325

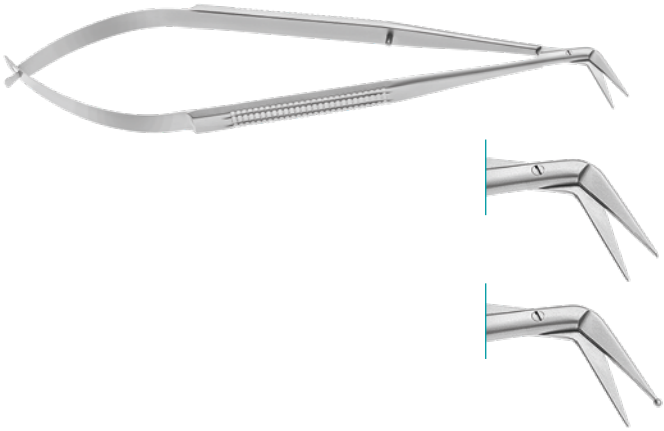
ball tip blade

25°	120-184-425
45°	120-184-445
60°	120-184-460
90°	120-184-490
125°	120-184-525



JACOBSON
Micro Scissors, 210mm, 8 1/4"
14mm sharp blades, 8mm round handle

25°	120-210-025
60°	120-210-060
90°	120-210-090
125°	120-210-125

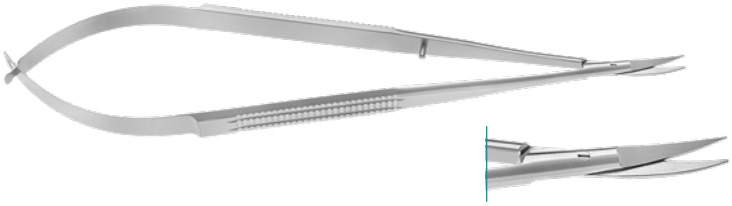


JACOBSON
Micro Scissors, 165mm, 6 1/2″
14mm blades, flat handle
sharp tip

25°	120-184-025
45°	120-184-045
60°	120-184-060
90°	120-184-090
125°	120-184-125

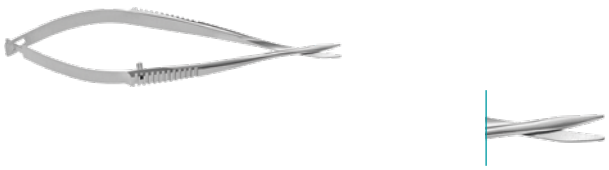
ball tip

25°	120-183-025
45°	120-183-045
60°	120-183-060
90°	120-183-090
125°	120-183-125



JACOBSON
Micro Scissors, flat handle, 180mm, 7″
sharp tip

straight	120-150-185
curved	120-151-185



MINI WESTCOTT
Tenotomy Scissors, curved, blunt

88mm, 3 1/2″	400-101-090



WESTCOTT
Micro Scissors, flat handle, 115mm, 4 1/2″

sharp/sharp	400-102-110
blunt/blunt	400-103-110



WESTCOTT
Tenotomy Scissors, 20mm blades, blunt/blunt
140mm, 5 1/2″

curved right	400-105-001
curved left	400-105-002



VANNAS
Capsultomy Scissors, flat handle, 85mm, 3 1/3″

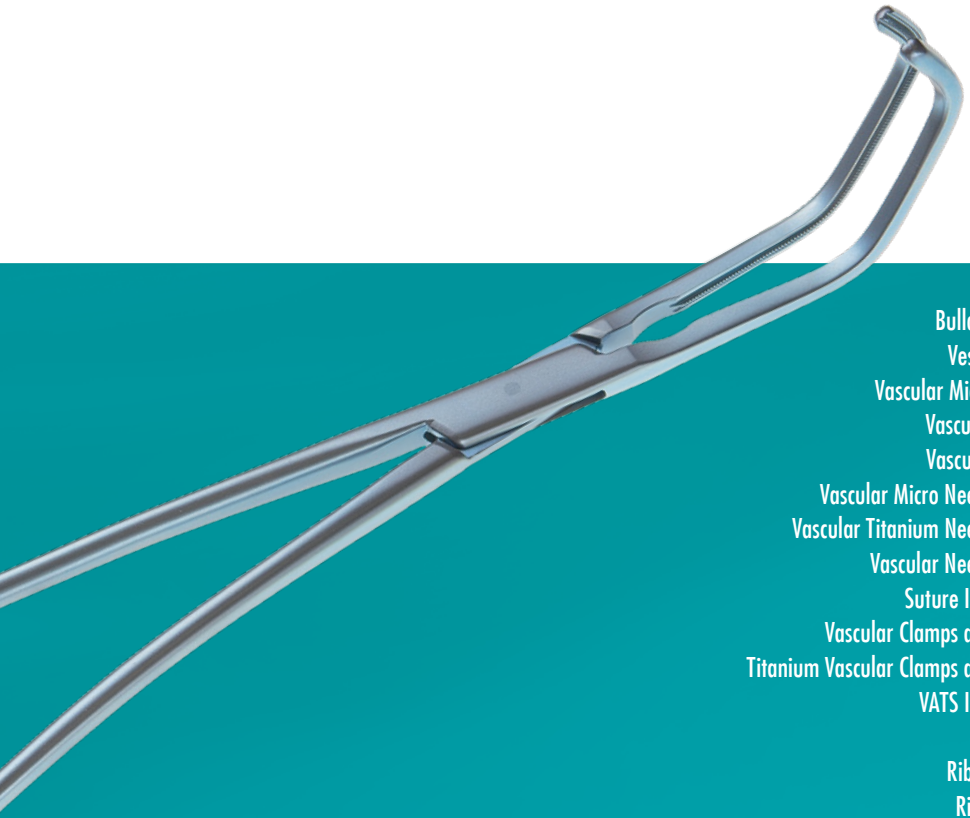
staight	400-842-085
curved	400-843-085
angled up	400-844-085



MILESSI
Micro Scissors, curved

160mm, 6 1/4″	250-064-021

THORACIC & VASCULAR SURGERY



Bulldog Clamps
Vessel Clamps
Vascular Micro Scissors
Vascular Scissors
Vascular Forceps
Vascular Micro Needle Holder
Vascular Titanium Needle Holder
Vascular Needle Holder
Suture Instruments
Vascular Clamps and Forceps
Titanium Vascular Clamps and Forceps
VATS Instruments
Rib Shears
Rib Raspatory
Rib Spreader
Phlebectomy Instruments
Vessel Probes
Dilators
Intima Instruments
Tourniquets
Punches
Probes and Retractors



Ss

DIEFFENBACH
Bulldog Clamp, stainless steel,
extra delicate serrations, straight

35mm	140-114-035
40mm	140-114-040
50mm	140-114-050
curved	
35mm	140-115-035
40mm	140-115-050
50mm	140-115-055
60mm	140-115-060



Ss

JOHNS HOPKINS
Bulldog Clamp, stainless steel, straight

38mm	140-050-038
48mm	140-050-050
56mm	140-050-057
63mm	140-050-063
70mm	140-050-070
80mm	140-050-076
90mm	140-050-090
curved	
38mm	140-051-038
48mm	140-051-050
56mm	140-051-057
63mm	140-051-063
70mm	140-051-070
80mm	140-051-076
90mm	140-051-090

Suitable for Applying Forceps: 140-152-230



CLOSING PRESSURE

V (Vein): 110g (±10g)
A (Artery): 220g (±10g)

Ti

MINI GLOVER
Bulldog Clamp, Titanium
very delicate serrations, straight

(V) 30mm/9mm	140-116-030
(A) 30mm/9mm	140-116-130
(V) 35mm/13mm	140-116-035
(A) 35mm/13mm	140-116-135
(V) 40mm/14mm	140-116-040
(A) 40mm/14mm	140-116-140
(V) 50mm/23mm	140-116-050
(A) 50mm/23mm	140-116-150

slightly curved

(V) 30mm/9mm	140-117-030
(A) 30mm/9mm	140-117-130
(V) 35mm/13mm	140-117-035
(A) 35mm/13mm	140-117-135
(V) 40mm/14mm	140-117-040
(A) 40mm/14mm	140-117-140
(V) 50mm/23mm	140-117-050
(A) 50mm/23mm	140-117-150

strongly curved

(V) 30mm/9mm	140-118-030
(A) 30mm/9mm	140-118-130
(V) 35mm/13mm	140-118-035
(A) 35mm/13mm	140-118-135
(V) 40mm/14mm	140-118-040
(A) 40mm/14mm	140-118-140
(V) 50mm/23mm	140-118-050
(A) 50mm/23mm	140-118-150

Ss

MINI GLOVER
Bulldog Clamp, Stainless Steel
very delicate serrations, straight

(V) 30mm/9mm	140-130-030
(A) 30mm/9mm	140-130-130
(V) 35mm/13mm	140-130-035
(A) 35mm/13mm	140-130-135
(V) 40mm/14mm	140-130-040
(A) 40mm/14mm	140-130-140
(V) 50mm/23mm	140-130-050
(A) 50mm/23mm	140-130-150

slightly curved

(V) 30mm/9mm	140-131-030
(A) 30mm/9mm	140-131-130
(V) 35mm/13mm	140-131-035
(A) 35mm/13mm	140-131-135
(V) 40mm/14mm	140-131-040
(A) 40mm/14mm	140-131-140
(V) 50mm/23mm	140-131-050
(A) 50mm/23mm	140-131-150

strongly curved

(V) 30mm/9mm	140-132-030
(A) 30mm/9mm	140-132-130
(V) 35mm/13mm	140-132-035
(A) 35mm/13mm	140-132-135
(V) 40mm/14mm	140-132-040
(A) 40mm/14mm	140-132-140
(V) 50mm/23mm	140-132-050
(A) 50mm/23mm	140-132-150

Suitable for Applying Forceps: 140-130-240



Ss

DEBAKEY
Bulldog Clamp, stainless steel,
delicate atraumatic serrations, straight

75mm	140-120-075
85mm	140-120-085
100mm	140-120-105
120mm	140-120-120

curved

75mm	140-119-075
85mm	140-119-085
100mm	140-119-105
120mm	140-119-120

Suitable for Applying Forceps: 140-152-250

Ss

COOLEY
Bulldog Clamp, stainless steel,
Cooley serrations, straight

75mm	290-440-075
85mm	290-440-085
100mm	290-440-100
120mm	290-440-120

curved

75mm	290-441-075
85mm	290-441-085
100mm	290-441-100
120mm	290-441-120



Ss

DEBAKEY DIETHRICH
Micro Coronary Bulldog Clamp, stainless steel,
atraumatic serrations, straight

10mm/45mm	290-120-010
14mm/50mm	290-120-014
20mm/60mm	290-120-020

curved

10mm/45mm	290-122-010
14mm/50mm	290-122-014
20mm/60mm	290-122-020

angled

10mm/35mm	290-121-010
14mm/45mm	290-121-014
20mm/60mm	290-121-020

CLOSING PRESSURE

Debakey: 180g (±10g)
Diethrich: 50g (±10g)

Ss

DIETHRICH
Micro Coronary Bulldog Clamp, stainless steel,
straight

8mm/45mm	140-125-080
12mm/50mm	140-125-120
20mm/60mm	140-125-200

curved

8mm/45mm	140-122-080
12mm/50mm	140-122-120
20mm/60mm	140-122-200

angled

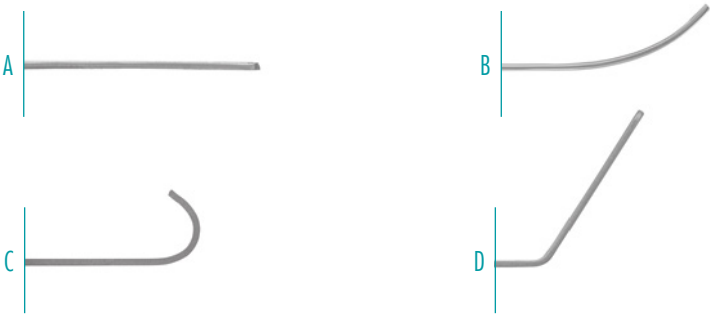
8mm/35mm	140-121-080
12mm/45mm	140-121-120
20mm/60mm	140-121-200



DIETHRICH
Micro Coronary Bulldog Clamp, stainless steel, angled

12mm/45mm	140-112-050





WELDON
Bulldog Clamp, stainless steel, very delicate serrations,

A straight

35mm	140-013-035
45mm	140-022-045

B slightly curved

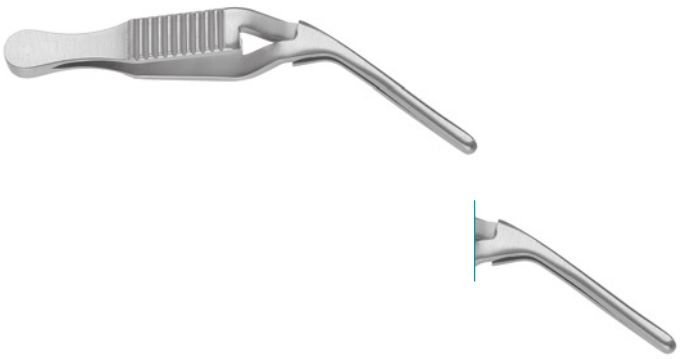
35mm	140-015-035
45mm	140-023-045

C strongly curved

35mm	140-016-035
45mm	140-024-045

D angled

35mm	140-017-035
45mm	140-025-045



HESS
Bulldog Clamp, stainless steel, delicate serrations, angled

20mm jaw	140-056-020
30mm jaw	140-056-030



CLOSING PRESSURE
adjustable

DEBAKEY GLOVER
Bulldog Clamp, stainless steel,
delicate atraumatic serrations, straight

straight		curved		angled	
20mm/60mm	140-130-060	20mm/60mm	140-131-060	27mm/55mm	140-132-060
30mm/75mm	140-130-070	30mm/75mm	140-131-070		
43mm/90mm	140-130-090	43mm/90mm	140-131-090		
56mm/110mm	140-130-110	56mm/110mm	140-131-110		

COOLEY GLOVER
Bulldog Clamp, stainless steel,
Cooley serrations, straight

straight		curved	
20mm/60mm	290-432-060	20mm/60mm	290-433-060
30mm/75mm	290-432-075	30mm/75mm	290-433-075
43mm/90mm	290-432-090	43mm/90mm	290-433-090
56mm/110mm	290-432-110	56mm/110mm	290-433-110



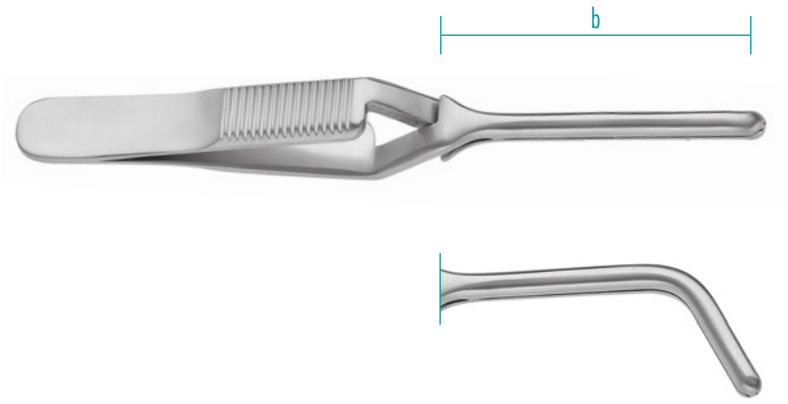


140-133-100

CLOSING PRESSURE
adjustable

DEBAKEY GLOVER SATINSKY
Bulldog Clamp, stainless steel,
delicate atraumatic serrations,
double angulation

38mm/70mm	140-133-060
63mm/100mm	140-133-100



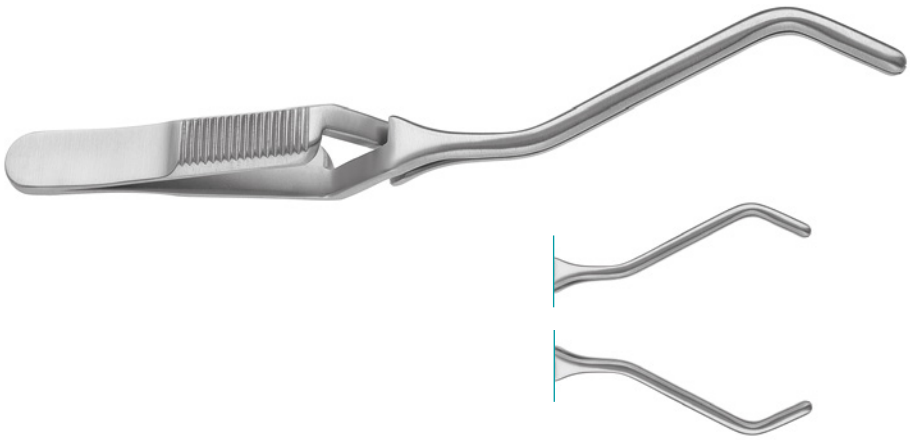
Ss

DEBAKEY GREGORY SOFT
Bulldog Clamp, stainless steel,
delicate atraumatic serrations, straight

total length: 90mm b = 27mm	140-015-090
total length: 110mm b = 44mm	140-015-110

angled

total length: 105mm b = 55mm	140-014-090
total length: 110mm b = 60mm	140-014-110



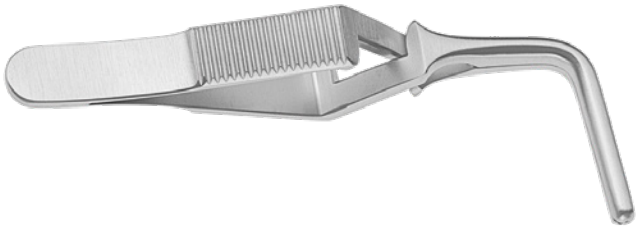
Ss

DEBAKEY GREGORY
Bulldog Clamp, stainless steel,
delicate atraumatic serrations, left angled

total length: 110mm	140-014-025

right angled

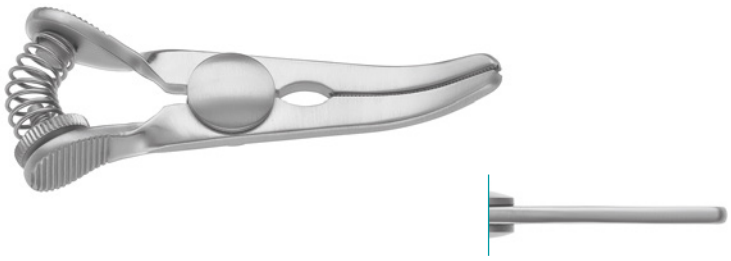
total length: 110mm	140-114-025



Ss

DEBAKEY SANTULLI
Bulldog Clamp, stainless steel,
delicate atraumatic serrations, curved

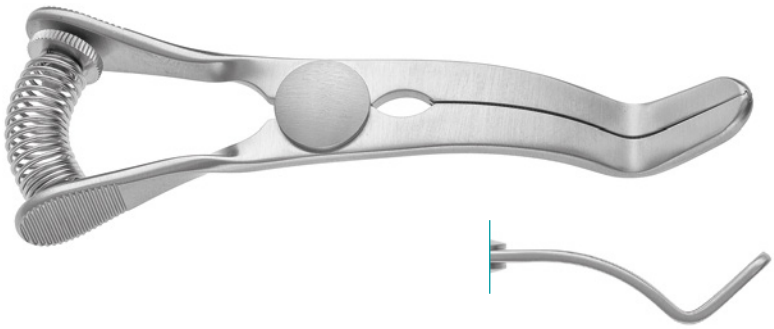
Total length: 70mm	140-135-070



CLOSING PRESSURE
adjustable

DEBAKEY GLOVER DELICATE
Bulldog Clamp, stainless steel,
extra delicate atraumatic serrations, straight

20mm/50mm	290-410-050



CLOSING PRESSURE
adjustable

DEBAKEY CAROTID
Bulldog Clamp, stainless steel,
delicate atraumatic serrations, special curved

90mm	140-133-095





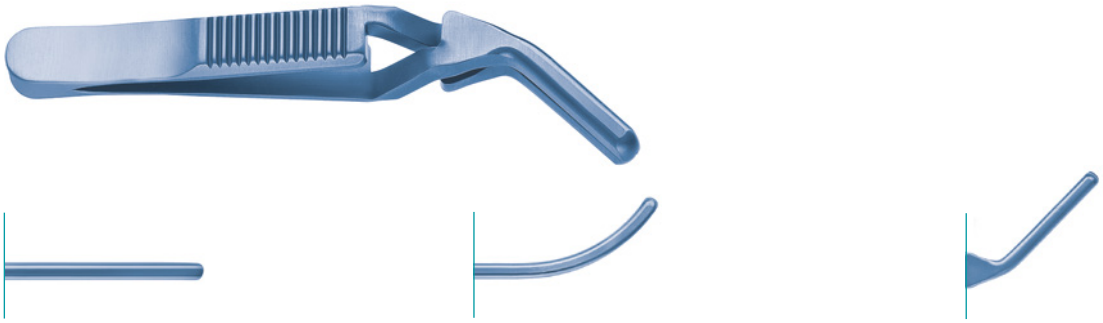
TITANIUM SHUNT

Bulldog Clamp, titanium, smooth jaw, without any serrations, 95mm, 3 3/4"

10Fr	
10°	290-795-010
25°	290-795-025
45°	290-795-045
60°	290-795-060

12Fr	
10°	290-795-210
25°	290-795-225
45°	290-795-245
60°	290-795-260

14Fr	
10°	290-795-410
25°	290-795-425
45°	290-795-445
60°	290-795-460



DEBAKEY ATRAUMA TITANIUM

Bulldog Clamp, titanium, extra delicate atraumatic serrations,

straight	
70mm	290-740-070
80mm	290-740-080
90mm	290-740-090
100mm	290-740-100
110mm	290-740-110
120mm	290-740-120
130mm	290-740-130

curved	
70mm	290-743-070
80mm	290-743-080
90mm	290-743-090
100mm	290-743-100
110mm	290-743-110
120mm	290-743-120
130mm	290-743-130

angled	
70mm	290-745-070
80mm	290-745-080
90mm	290-745-090
100mm	290-745-100
110mm	290-745-110
130mm	290-745-130









DEBAKEY DIETHRICH

Bulldog Clamp, titanium,
extra delicate atraumatic serrations, straight

10mm	290-760-010
14mm	290-760-014
20mm	290-760-020

curved

10mm	290-762-010
14mm	290-762-014
20mm	290-762-020

angled

10mm	290-761-010
14mm	290-761-014
20mm	290-761-020

DIETHRICH

Extra delicate serrations, straight

8mm	140-760-008
12mm	140-760-012
20mm	140-760-020

curved

8mm	140-762-008
12mm	140-762-012

angled

8mm	140-761-008
12mm	140-761-012







CLOSING PRESSURE

150g (±10g)

WICKHAM

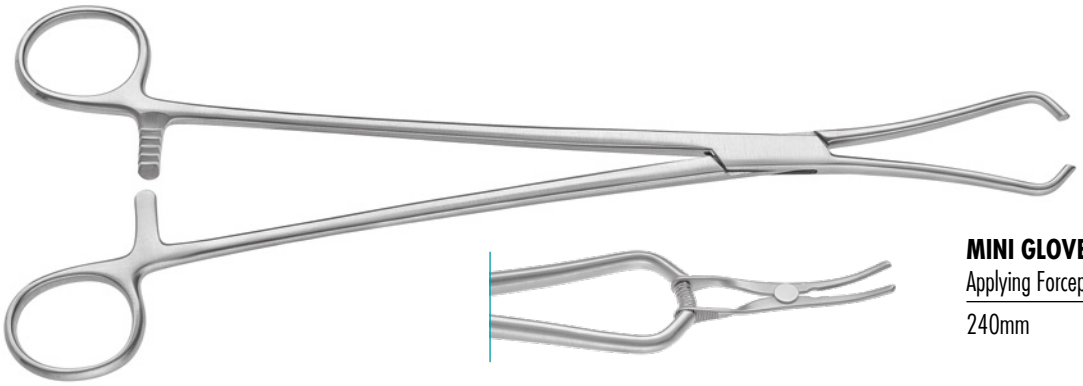
Bulldog Clamp, stainless steel,
very delicate serrations, straight

13mm/49mm	140-108-013
18mm/54mm	140-108-018
25mm/61mm	140-108-025

curved

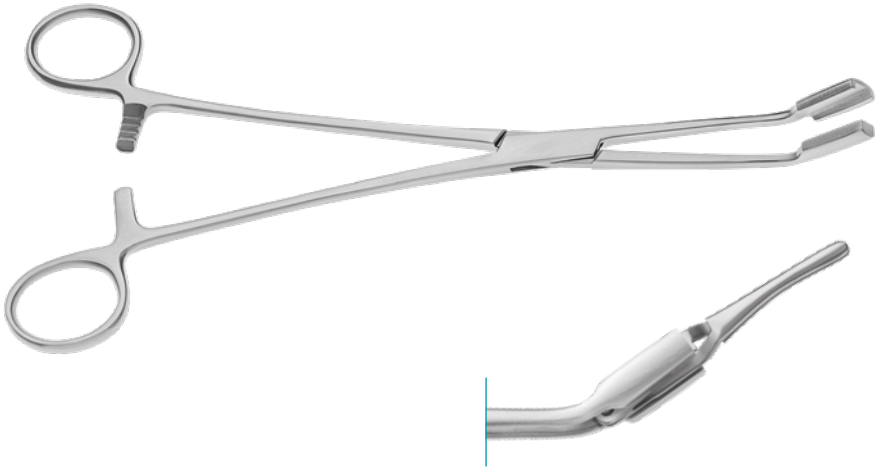
13mm/47mm	140-109-013
18mm/51mm	140-109-018
25mm/65mm	140-109-025

Suitable for Applying Forceps: 140-108-230



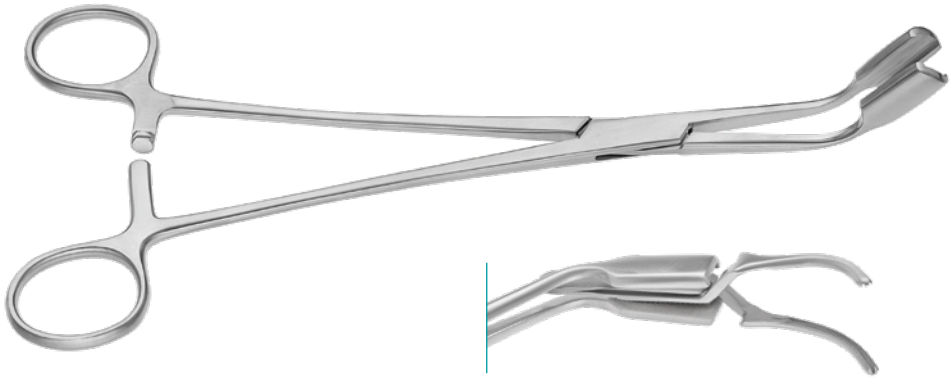
MINI GLOVER
Applying Forceps

240mm	140-130-240



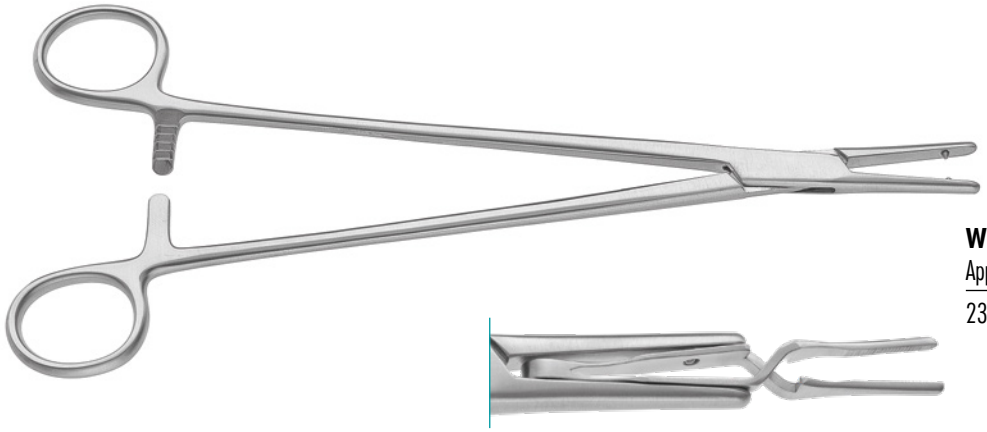
JOHNS HOPKINS
Applying Forceps

230mm	140-152-230



DEBAKEY ATRAUMA
Applying Forceps

250mm	140-152-250



WICKHAM
Applying Forceps

230mm	140-108-230



CLOSING PRESSURE
300 - 375g

Titanium Bulldog Clamp, straight,
Code V (Vein), blue

17mm jaw	300-100-773TV
25mm jaw	300-100-774TV
45mm jaw	300-100-771TV
60mm jaw	300-100-772TV



CLOSING PRESSURE
475 - 500g

Titanium Bulldog Clamp, straight,
Code A (Artery), red

17mm jaw	300-100-773TA
25mm jaw	300-100-774TA
45mm jaw	300-100-771TA
60mm jaw	300-100-772TA



Vascular Bulldog Clamp, curved

17mm jaw	300-100-776
25mm jaw	300-100-777
45mm jaw	300-100-778
60mm jaw	300-100-779



CLOSING PRESSURE
450 - 475g

Vascular Bulldog Clamp, straight

17mm jaw	300-100-773
25mm jaw	300-100-774
45mm jaw	300-100-771
60mm jaw	300-100-772



CLOSING PRESSURE
450 - 475g

SATINSKY
Vascular Bulldog Clamp, upwards angled

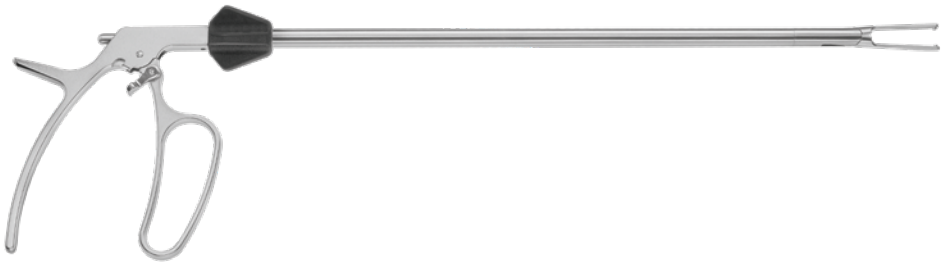
60mm jaw	300-100-786



CLOSING PRESSURE
450 - 475g

SATINSKY
Vascular Bulldog Clamp

60mm jaw	300-100-789



Endoscopic Bulldog Clamp Applier, detachable, 10mm, rotating

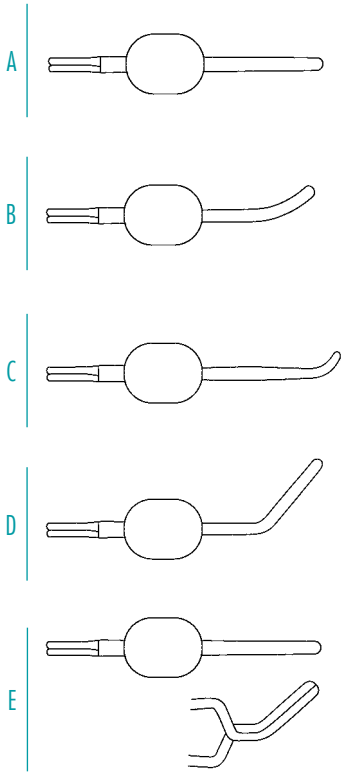
330mm, 13"	300-410-775



Endoscopic Bulldog Clamp Applier, detachable (insert only)

	300-401-775





MÜLLER

Vessel Clip, atraumatic, 50g closing pressure

A straight	250-065-010
B curved	250-065-011
C curved tip	250-065-012
D angled to side	250-065-013
E knee-bent	250-065-014

80g closing pressure

A straight	250-065-020
B curved	250-065-021
C curved tip	250-065-022
D angled to side	250-065-023
E knee-bent	250-065-024



MÜLLER
Vessel Clip, atraumatic, straight

250g closing pressure	250-065-030
350g closing pressure	250-065-040



MÜLLER
Vessel Clip, atraumatic, angled

250g closing pressure	250-065-031
350g closing pressure	250-065-041



MÜLLER
Vessel Clip, atraumatic, curved

250g closing pressure	250-065-032
350g closing pressure	250-065-042



MÜLLER
Vessel Clip, atraumatic, knee bent

250g closing pressure	250-065-034
350g closing pressure	250-065-044

SINGLE CLAMPS (PACKED IN PAIRS)



FIG. 1	8mm, Vessel ∅ 0.3-1.0mm
(A) matt	270-001-001
(A) black	270-001-101
(V) matt	270-101-001
(V) black	270-101-101



FIG. 2	11mm, Vessel ∅ 0.6-1.4mm
(A) matt	270-001-002
(A) black	270-001-102
(V) matt	270-101-002
(V) black	270-101-102



FIG. 3	16mm, Vessel ∅ 1.0-2.2mm
(A) matt	270-001-003
(A) black	270-001-103
(V) matt	270-101-003
(V) black	270-101-103



FIG. 4	24mm, Vessel ∅ 1.5-3.3mm
(A) matt	270-001-004
(A) black	270-001-104
(V) matt	270-101-004
(V) black	270-101-104



FIG. 5	35mm, Vessel ∅ 2.0-5.0mm
(A) matt	270-001-005
(A) black	270-001-105
(V) matt	270-101-005
(V) black	270-101-105

DOUBLE CLAMPS APPROXIMATOR, ADJUSTABLE



FIG. 1	8mm, Vessel ∅ 0.3-1.0mm
(A) matt	270-002-001
(A) black	270-002-101
(V) matt	270-102-001
(V) black	270-102-101



FIG. 2	11mm, Vessel ∅ 0.6-1.4mm
(A) matt	270-002-002
(A) black	270-002-102
(V) matt	270-102-002
(V) black	270-102-102



FIG. 3	16mm, Vessel ∅ 1.0-2.2mm
(A) matt	270-002-003
(A) black	270-002-103
(V) matt	270-102-003
(V) black	270-102-103



FIG. 4	24mm, Vessel ∅ 1.5-3.3mm
(A) matt	270-002-004
(A) black	270-002-104
(V) matt	270-102-004
(V) black	270-102-104



FIG. 5	35mm, Vessel ∅ 2.0-5.0mm
(A) matt	270-002-005
(A) black	270-002-105
(V) matt	270-102-005
(V) black	270-102-105

DOUBLE CLAMPS APPROXIMATOR WITH FRAME, ADJUSTABLE



FIG. 1	8mm, Vessel ∅ 0.3-1.0mm
(A) matt	270-003-001
(A) black	270-003-101
(V) matt	270-103-001
(V) black	270-103-101



FIG. 2	11mm, Vessel ∅ 0.6-1.4mm
(A) matt	270-003-002
(A) black	270-003-102
(V) matt	270-103-002
(V) black	270-103-102



FIG. 3	16mm, Vessel ∅ 1.0-2.2mm
(A) matt	270-003-003
(A) black	270-003-103
(V) matt	270-103-003
(V) black	270-103-103



CLAMP APPLYING FORCEPS

140mm, 5 1/2", without ratchet, straight		with ratchet, straight	
For Fig. 1 - 3	270-103-140	For Fig. 1 - 3	270-108-140
For Fig. 4+5	270-104-160	For Fig. 4+5	270-105-160

155mm, 6 1/8", without ratchet, 30° angled		with ratchet, 30° angled	
For Fig. 1 - 3	270-104-140	For Fig. 1 - 3	270-105-140

DOUBLE CLAMPS WITH FRAME



FIG. 1	8mm, Vessel ∅ 0.3-1.0mm
(A) matt	270-004-001
(A) black	270-004-101
(V) matt	270-104-001
(V) black	270-104-101



FIG. 2	11mm, Vessel ∅ 0.6-1.4mm
(A) matt	270-004-002
(A) black	270-004-102
(V) matt	270-104-002
(V) black	270-104-102



FIG. 3	16mm, Vessel ∅ 1.0-2.2mm
(A) matt	270-004-003
(A) black	270-004-103
(V) matt	270-104-003
(V) black	270-104-103

RZ DC-SINGLE CLAMP, ARTERY (PACKED IN PAIRS)



8mm, Vessel ∅ 0.3-1.0mm	
(A) matt	270-005-001
(A) black	270-005-101
(V) matt	270-105-001
(V) black	270-105-101



11mm, Vessel ∅ 0.6-1.4mm	
(A) matt	270-005-002
(A) black	270-005-102
(V) matt	270-105-002
(V) black	270-105-102



16mm, Vessel ∅ 1.0-2.2mm	
(A) matt	270-005-003
(A) black	270-005-103
(V) matt	270-105-003
(V) black	270-105-103

RADIAL CLAMPS



RZ-1	8mm, Vessel ∅ 0.3-1.0mm
matt	270-010-001
black	270-110-001



RZ-2	11mm, Vessel ∅ 0.6-1.4mm
matt	270-010-002
black	270-110-002



RZ-6	16mm, Vessel ∅ 1.0-2.2mm
matt	270-010-003
black	270-110-003



Tubal Single Clamps, 2 pcs. per set	
19mm, Ø 2.5mm	270-014-005
19mm, Ø 3.0mm	270-014-006
22mm, Ø 3.5mm	270-014-007
22mm, Ø 4.0mm	270-014-008



Approximator Double Tubal Clamp, without frame, Fig. 5	
19mm, Ø 2.5mm	270-015-005



BIEMER
Micro Approximator
jaw length: 6mm, opening: 4mm

	250-064-571



BIEMER MÜLLER
Approximator, 9mm jaw,
25-30g closing pressure

straight	250-064-611
angled	250-064-612



BIEMER
Vessel Clip, jaw opening 4.0mm
Length of jaw 6.0mm

30-40g closing pressure	250-064-560

Jaw opening 5.0mm
Length of jaw 9.0mm

30-40g closing pressure	250-064-561

Jaw opening 5.0mm
Length of jaw 9.0mm

20-25g closing pressure	250-064-562





BIEMER
Applying Forceps, 145mm, $5^{3/4}$"

without lock	250-064-568
with lock	250-064-569





Arteriotomy Clamp

Ø 1.2mm	270-380-012
Ø 1.8mm	270-380-018
Ø 2.4mm	270-380-024

DOUBLE CLAMPS APPROXIMATOR WITH FRAME, ADJUSTABLE



Fig. 1, 8mm, Vessel ∅ 0.3 - 0.8mm	
(A) matt	270-003-201
(V) matt	270-103-201
Fig. 2, 11mm, Vessel ∅ 0.6 - 1.4mm	
(A) matt	270-003-202
(V) matt	270-103-202
Fig. 3, 16mm, Vessel ∅ 1.0 - 2.2mm	
(A) matt	270-003-203
(V) matt	270-103-203

DOUBLE CLAMPS WITH FRAME



Fig. 1, 8mm, Vessel ∅ 0.3 - 0.8mm	
(A) matt	270-004-201
(V) matt	270-104-201
Fig. 2, 11mm, Vessel ∅ 0.6 - 1.4mm	
(A) matt	270-004-202
(V) matt	270-104-202
Fig. 3, 16mm, Vessel ∅ 1.0 - 2.2mm	
(A) matt	270-004-203
(V) matt	270-104-203

MICRO VASCULAR SINGLE CLAMPS (PACKED IN PAIRS)

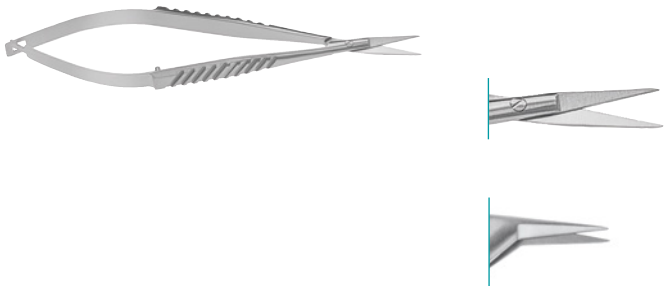


Fig. 1, 8mm, Vessel ∅ 0.3 - 0.8mm	
(A) matt	270-001-201
(V) matt	270-101-201
Fig. 2, 11mm, Vessel ∅ 0.6 - 1.4mm	
(A) matt	270-001-202
(V) matt	270-101-202
Fig. 3, 16mm, Vessel ∅ 1.0 - 2.2mm	
(A) matt	270-001-203
(V) matt	270-101-203
Fig. 4, 24mm, Vessel ∅ 1.5 - 3.3mm	
(A) matt	270-001-204
(V) matt	270-101-204
Fig. 5, 35mm, Vessel ∅ 2.0 - 4.0mm	
(A) matt	270-001-205
(V) matt	270-101-205

DOUBLE CLAMPS APPROXIMATOR, ADJUSTABLE

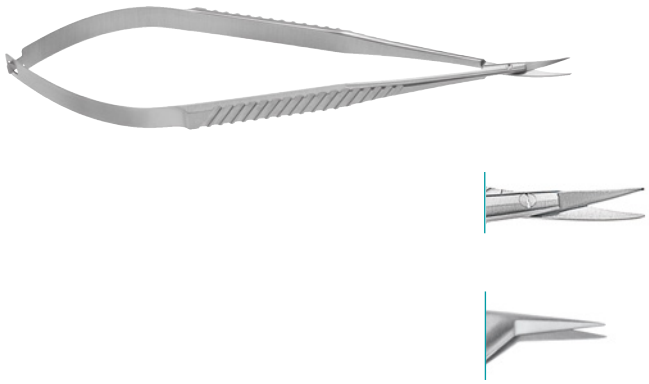


Fig. 1, 8mm, Vessel ∅ 0.3 - 0.8mm	
(A) matt	270-002-201
(V) matt	270-102-201
Fig. 2, 11mm, Vessel ∅ 0.6 - 1.4mm	
(A) matt	270-002-202
(V) matt	270-102-202
Fig. 3, 16mm, Vessel ∅ 1.0 - 2.2mm	
(A) matt	270-002-203
(V) matt	270-102-203
Fig. 4, 24mm, Vessel ∅ 1.5 - 3.3mm	
(A) matt	270-002-204
(V) matt	270-102-204
Fig. 5, 35mm, Vessel ∅ 2.0 - 5.0mm	
(A) matt	270-002-205
(V) matt	270-102-205



Adventitia Scissors, flat handle, straight	
110mm, 4 1/3"	
13mm jaw	251-550-100
19mm jaw	251-550-110
150mm, 6"	
15mm jaw	251-554-150
19mm jaw	251-550-150
19mm jaw (nerve)	251-552-150
180mm, 7"	
20mm jaw	251-550-180
20mm jaw (nerve)	251-552-180

Adventitia Scissors, flat handle, 45° angled, 150mm, 6"	
8mm jaw	251-563-150
45° angled, 180mm, 7"	
12mm jaw	251-563-180



Dissecting Scissors, flat handle, curved	
110mm, 4 1/3"	
13mm jaw	251-551-100
19mm jaw	251-551-110
20mm jaw (Westcott)	251-551-111
150mm, 6"	
15mm jaw	251-555-150
19mm jaw	251-551-150
19mm jaw (nerve)	251-553-150
22mm jaw (Westcott)	251-551-151
180mm, 7"	
20mm jaw	251-551-180
20mm jaw (nerve)	251-553-181
20mm (Westcott)	251-551-181

Dissecting Scissors, flat handle, 45° angled, 150mm, 6"	
8mm jaw	251-556-150
45° angled, 180mm, 7"	
12mm jaw	251-556-180



Ultra Fine Dissecting Scissors, flat handle, 12mm very delicate blade, 8mm handle width, straight

150mm, 6"	251-566-150



Ultra Fine Adventitia Scissors, flat handle, 14mm very delicate blade, 8mm handle width, straight

150mm, 6"	251-565-150



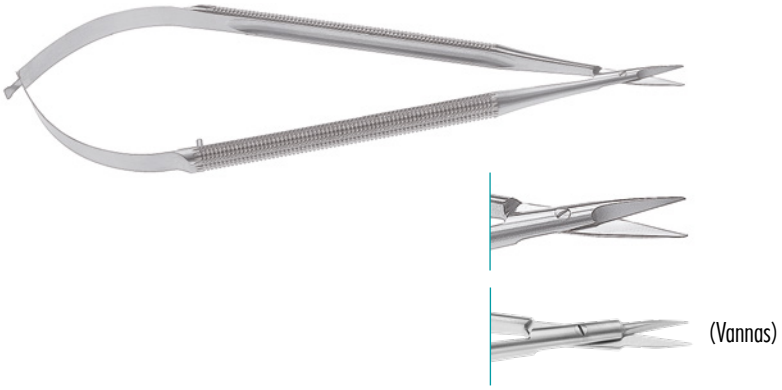
Dissecting Scissors, very delicate curved, 12mm blade, ∅ 8mm round handle

150mm, 6"	251-546-150
180mm, 7"	251-546-180

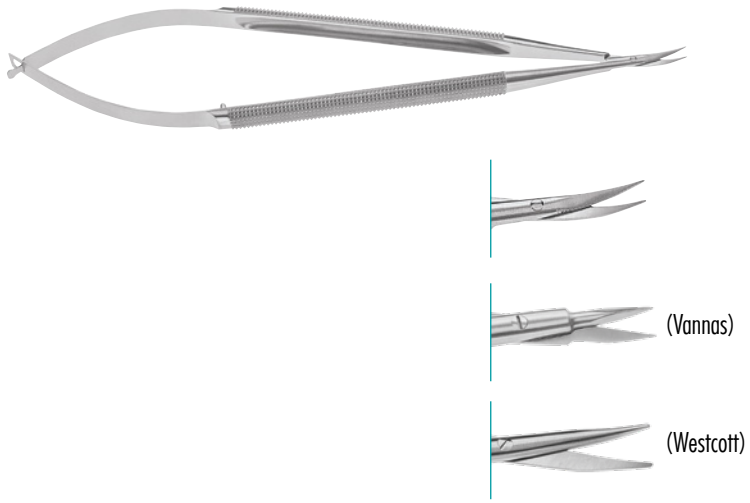


Adventitia Scissors, very delicate straight, 14mm blade, ∅ 8mm round handle

150mm, 6"	251-545-150
180mm, 7"	251-545-180



Adventitia Scissors, 7mm round handle, straight 120mm, 4 3/4"	
11mm jaw	251-540-120
8mm round handle, 150mm, 6"	
12mm jaw	251-540-150
12mm jaw (nerve)	251-542-150
12mm (Vannas)	251-560-150
8mm round handle, 170mm, 6 2/3"	
10mm jaw	251-580-170
8mm round handle, 180mm, 7"	
14mm jaw	120-178-180
14mm jaw (nerve)	251-542-180
10mm round handle, 180mm, 7"	
14mm jaw	251-558-180
8mm round handle, 180mm, 7"	
21mm jaw	251-540-210



Dissecting Scissors, 7mm round handle, curved 120mm, 4 3/4"	
11mm jaw	251-541-120
8mm round handle, 150mm, 6"	
12mm jaw	251-541-150
12mm jaw (nerve)	251-543-150
12mm (Vannas)	251-559-150
20mm (Westcott)	251-541-151
8mm round handle, 180mm, 7"	
14mm jaw	251-541-180
14mm jaw (nerve)	251-543-180
20mm (Westcott)	251-541-181
10mm round handle, 180mm, 7"	
14mm jaw	251-557-180
8mm round handle, 210mm, 8 1/4"	
21mm jaw	251-541-210





JACOBSON
Micro Scissors, 160mm, 6 1/4"
sharp blades, 8mm round handle
7mm micro blades, angled

25°	120-164-025
45°	120-164-045
60°	120-164-060
90°	120-164-090
125°	120-164-125

10mm micro blades, angled

25°	120-164-225
45°	120-164-245
60°	120-164-260
90°	120-164-290
125°	120-164-325

JACOBSON
Micro Scissors, 180mm, 7"
sharp blades, 8mm round handle
14mm blades

25°	120-184-225
45°	120-184-245
60°	120-184-260
90°	120-184-290
125°	120-184-325

ball tip blades

25°	120-184-425
45°	120-184-445
60°	120-184-460
90°	120-184-490
125°	120-184-425





POTTS
∅ 3.5mm, 45° angled, single action
working length:

170mm, 6 2/3"	295-034-045
250mm, 9 7/8"	295-035-045
300mm, 11 7/8"	295-037-045



POTTS
∅ 3.5mm, 90° angled, single action
working length:

170mm, 6 2/3"	295-034-090
250mm, 9 7/8"	295-035-090
300mm, 11 7/8"	295-037-090



POTTS
∅ 3.5mm, 125° angled, single action
working length:

170mm, 6 2/3"	295-034-125
250mm, 9 7/8"	295-035-125
300mm, 11 7/8"	295-037-125



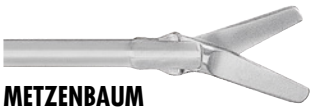
POTTS
∅ 5.0mm, 125° angled, single action
working length:

170mm, 6 2/3"	295-048-125
250mm, 9 7/8"	295-050-125
300mm, 11 7/8"	295-052-125



METZENBAUM
∅ 5.0mm, straight, single action
working length:

170mm, 6 2/3"	295-048-000
250mm, 9 7/8"	295-050-000
300mm, 11 7/8"	295-052-000



METZENBAUM
∅ 5.0mm, straight, double action
working length:

170mm, 6 2/3"	295-048-010
250mm, 9 7/8"	295-050-010
300mm, 11 7/8"	295-052-010



METZENBAUM
∅ 5.0mm, 15° curved, double action
working length:

170mm, 6 2/3"	295-048-015
250mm, 9 7/8"	295-050-015
300mm, 11 7/8"	295-052-015



JAMESON
∅ 5.0mm, 15° curved, double action
working length:

170mm, 6 2/3"	295-048-020
250mm, 9 7/8"	295-050-020
300mm, 11 7/8"	295-052-020



METZENBAUM
∅ 5.0mm, 30° curved, double action
working length:

170mm, 6 2/3"	295-048-030
250mm, 9 7/8"	295-050-030
300mm, 11 7/8"	295-052-030



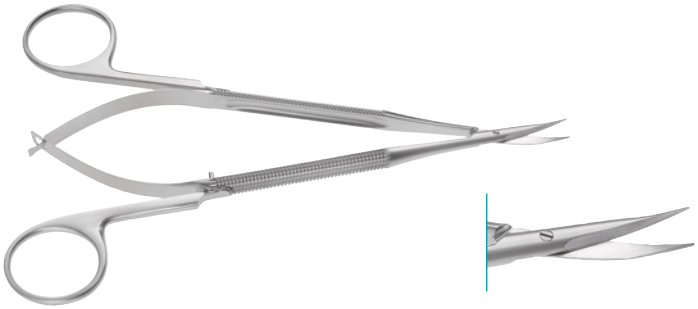
METZENBAUM
∅ 5.0mm, 70° curved, double action
working length:

170mm, 6 2/3"	295-048-070
250mm, 9 7/8"	295-050-070
300mm, 11 7/8"	295-052-070



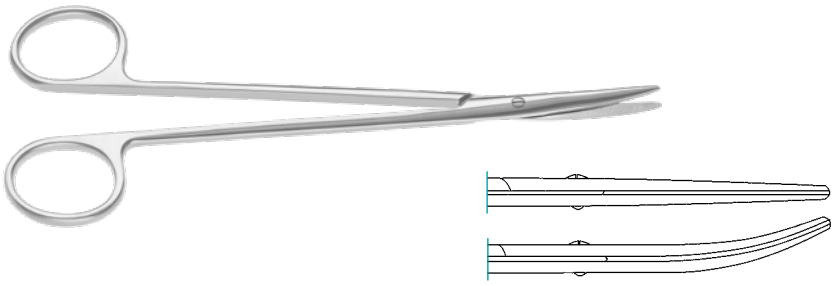
METZENBAUM
∅ 7.0mm, 15° curved, double action
working length:

170mm, 6 2/3"	295-069-015
250mm, 9 7/8"	295-070-015
300mm, 11 7/8"	295-071-015



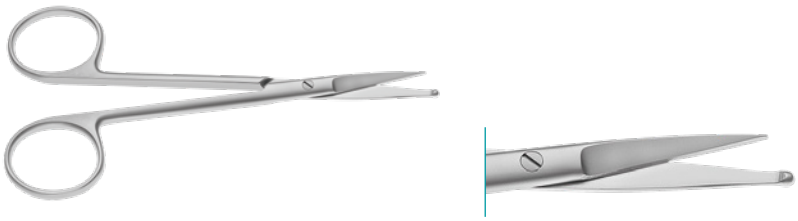
WESTCOTT
Dissecting Scissors, 8mm handle, curved

150mm, 6"	
15mm jaw	251-570-150
180mm, 7"	
15mm jaw	251-570-180



LINCOLN
Vascular Scissors, straight

170mm, $6^{2/3}$"	120-260-170
curved	
170mm, $6^{2/3}$"	120-261-170



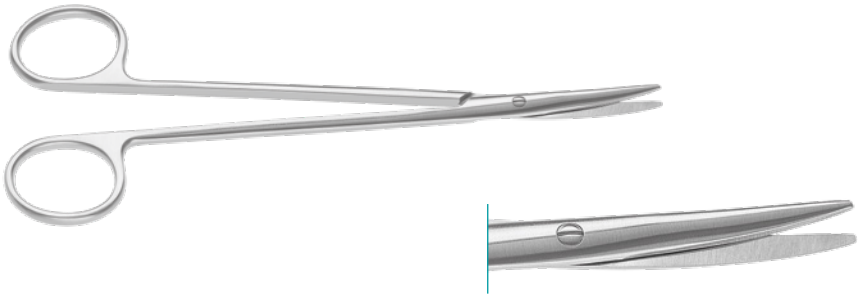
Coronary Scissors, probe-pointed tip

115mm, $4^{1/2}$"	120-420-115



DEBAKEY
Endarterectomy Scissors, 180mm, 7"

slightly curved	120-319-180
strongly curved	120-320-180



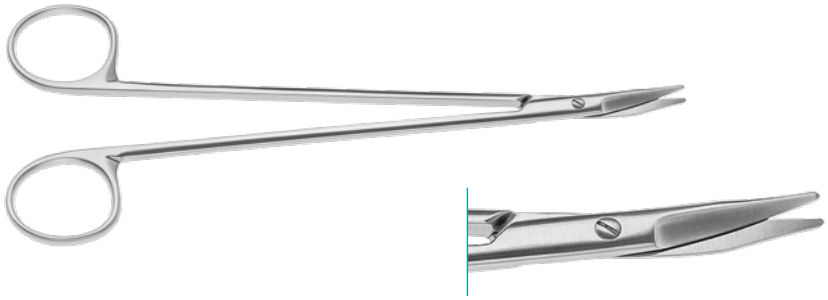
DE MARTEL
Vascular Scissors, 175mm, $6^{7/8}$"

blunt	120-261-175
sharp	120-263-175



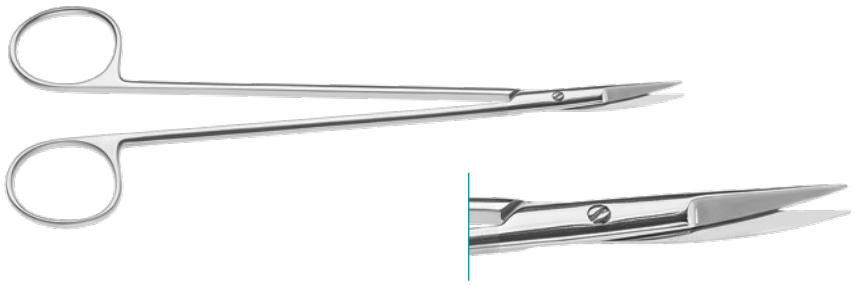
THOMPSON
Valve Scissors, strong curved

250mm, 9 7/8"	120-205-250



LAINE KINDAL
curved, tenotomy tip

180mm, 7"	125-282-778



LAINE KINDAL
curved, sharp tip

180mm, 7"	125-282-776



HOHENFELLER
S-curved

210mm, 8 1/4"	120-060-210



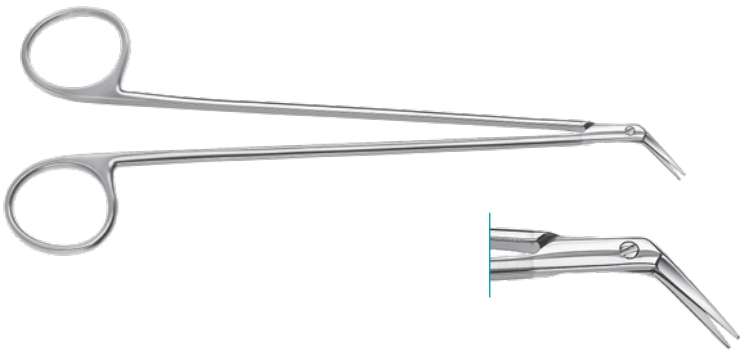
COOLEY
Vascular Scissors, curved

180mm, 7"	120-134-180
230mm, 9"	120-134-230



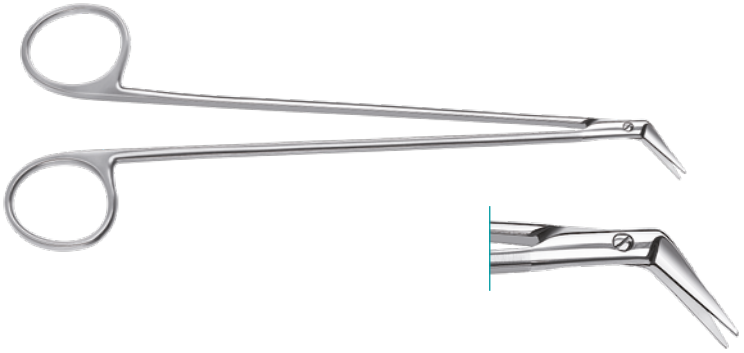
SATINSKY
Vascular Scissors, curved

245mm, 9 2/3"	120-203-245



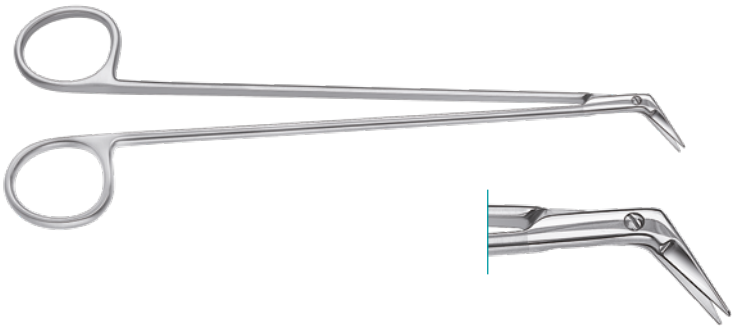
DIETHRICH
sharp, extra delicate, 14mm, 180mm, 7"

25°	125-170-025
45°	125-170-045
60°	125-170-060
90°	125-170-090
125°	125-170-125



DIETHRICH
delicate, 14mm, 180mm, 7"

25°	125-175-025
45°	125-175-045
60°	125-175-060
90°	125-175-090
125°	125-175-125



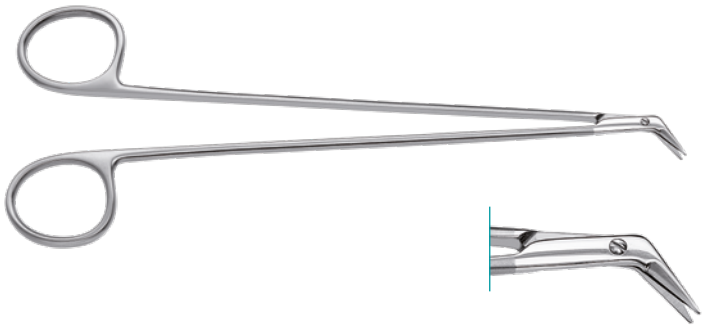
DIETHRICH HEGEMANN
13mm, 180mm, 7"

25°	125-180-025
45°	125-180-045
60°	125-180-060
90°	125-180-090
125°	125-180-125



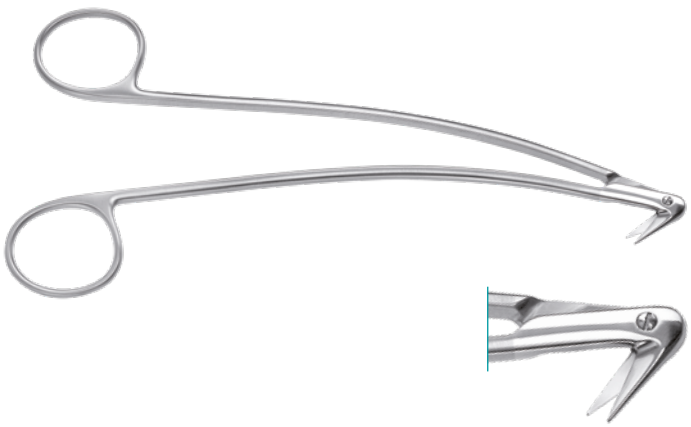
DIETHRICH
Peripheral, 130mm, 5 1/8""

25°	125-130-025
45°	125-130-045
60°	125-130-060
90°	125-130-090
125°	125-130-125



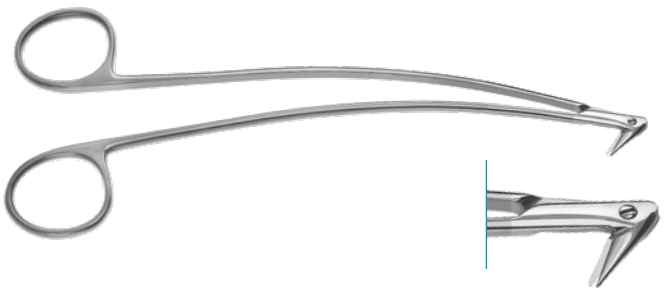
DIETHRICH
sharp blade, 9mm, 180mm, 7"

25°	125-178-025
45°	125-178-045
60°	125-178-060
90°	125-178-090
125°	125-178-125



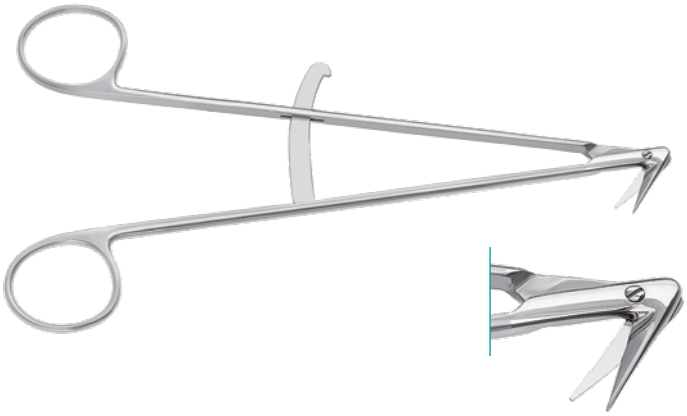
DIETHRICH FAVALORO
13mm, 180mm, 7"

125°	125-185-125



DIETHRICH FAVALORO
9mm, 170mm, 6 3/4"

125°	125-168-125



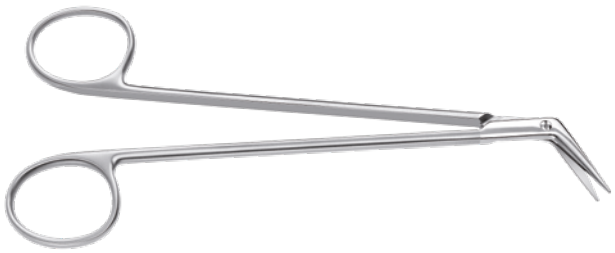
DIETHRICH ARTERY
13mm, 180mm, 7"

125°	125-200-125



BEALL
Circumflex, 150mm, 6"

115°	125-300-115





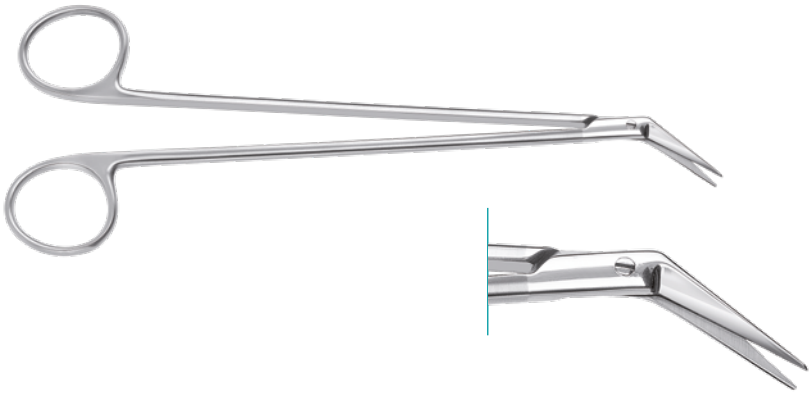
blunt



sharp

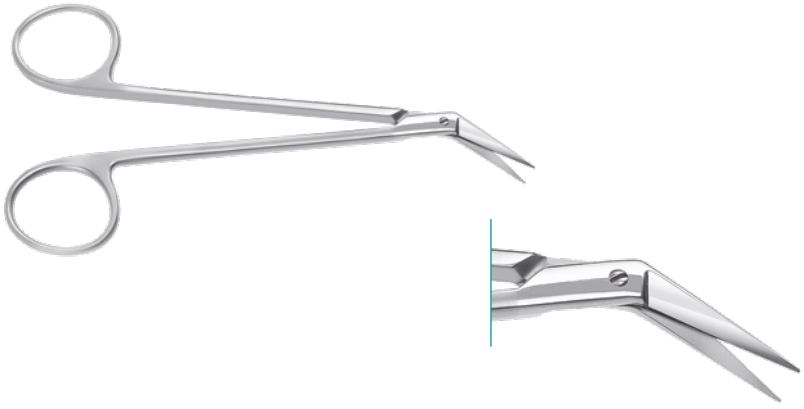
DIETHRICH

26mm, 160mm, 6 1/4"	
25°, blunt tip	125-216-025
25°, sharp tip	125-217-025
45°, blunt tip	125-216-045
45°, sharp tip	125-217-045
225mm, 8 7/8"	
25°, blunt tip	125-220-025
25°, sharp tip	125-221-025
45°, blunt tip	125-220-045
45°, sharp tip	125-221-045
60°, blunt tip	125-220-060
60°, sharp tip	125-221-060



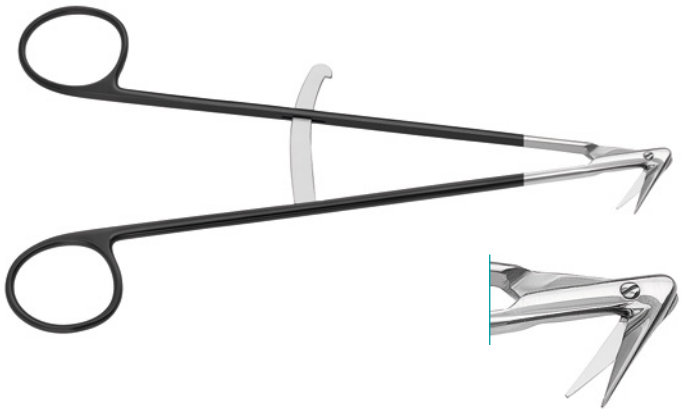
POTTS SMITH

22mm, 190mm, 7 1/2"	
25°	125-490-025
45°	125-490-045
60°	125-490-060



POTTS SMITH

22mm, 140mm, 5 1/2"	
25°	125-440-025
45°	125-440-045
60°	125-440-060



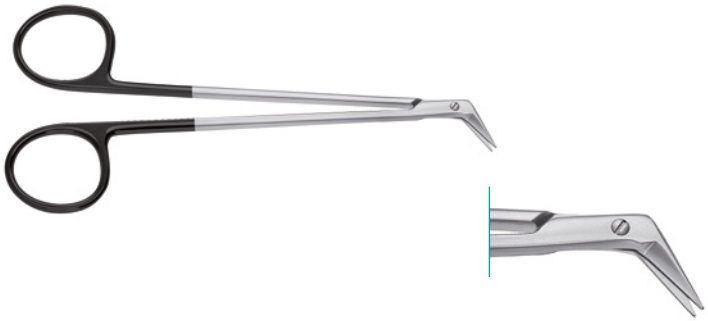
DIETHRICH SC
13mm, with guide, 180mm, 7"

125°	126-200-125



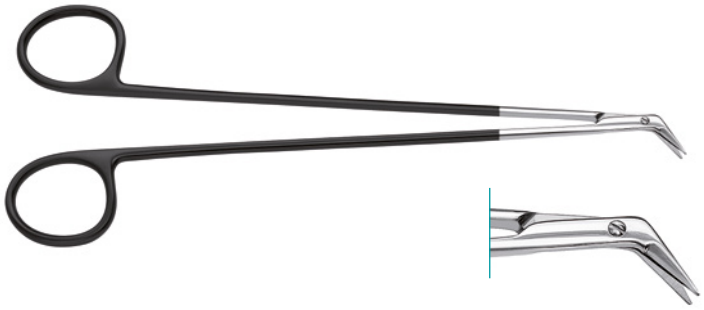
DIETHRICH HEGEMANN SC
13mm, 180mm, 7"

25°	126-180-025
45°	126-180-045
60°	126-180-060
90°	126-180-090
125°	126-180-125



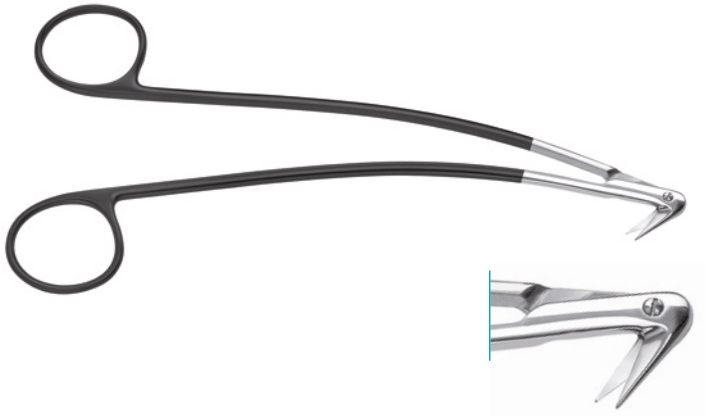
DIETHRICH SC
Peripheral, 13mm, 130mm, $5^{1/8}$"

25°	126-130-025
45°	126-130-045
60°	126-130-060
90°	126-130-090
125°	126-130-125



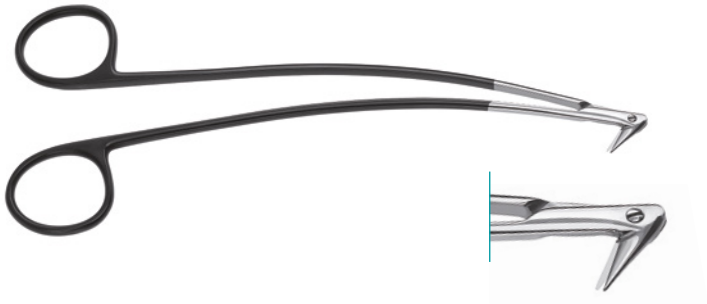
DIETHRICH SC
9mm, 130mm, 5 1/8"

25°	126-178-025
45°	126-178-045
60°	126-178-060
90°	126-178-090
125°	126-178-125



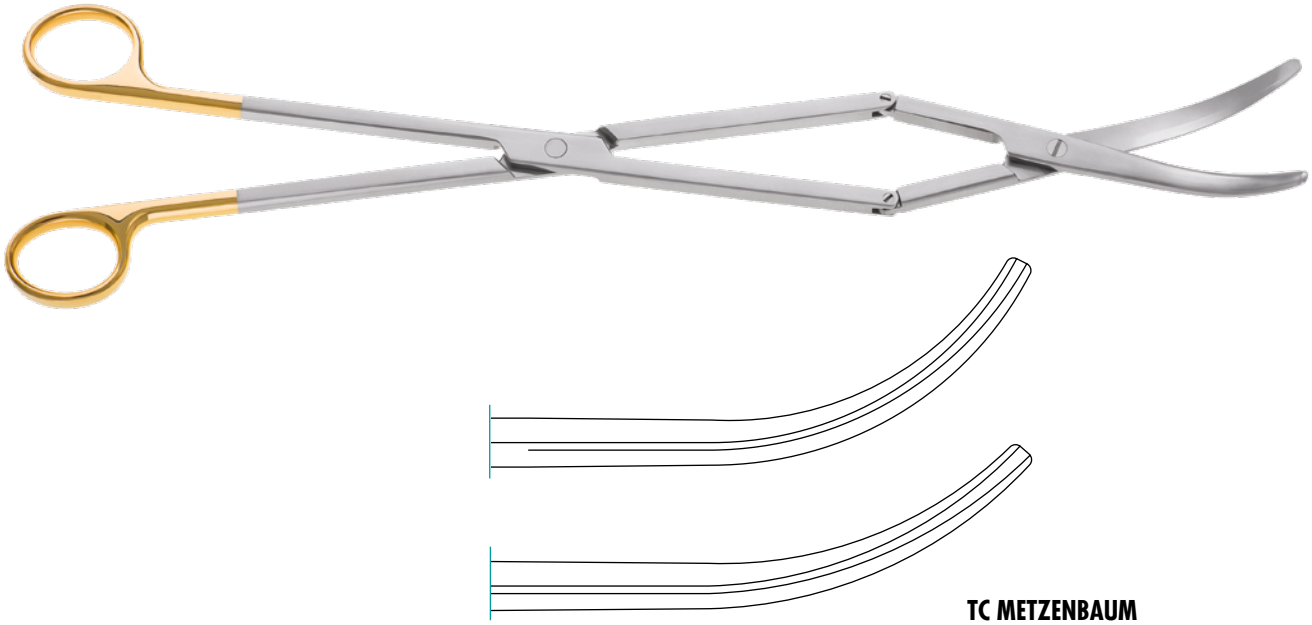
DIETHRICH FAVALORO SC
13mm, 180mm, 7"

125°	126-185-125



DIETHRICH FAVALORO SC
9mm, 170mm, 6 2/3"

125°	126-168-125

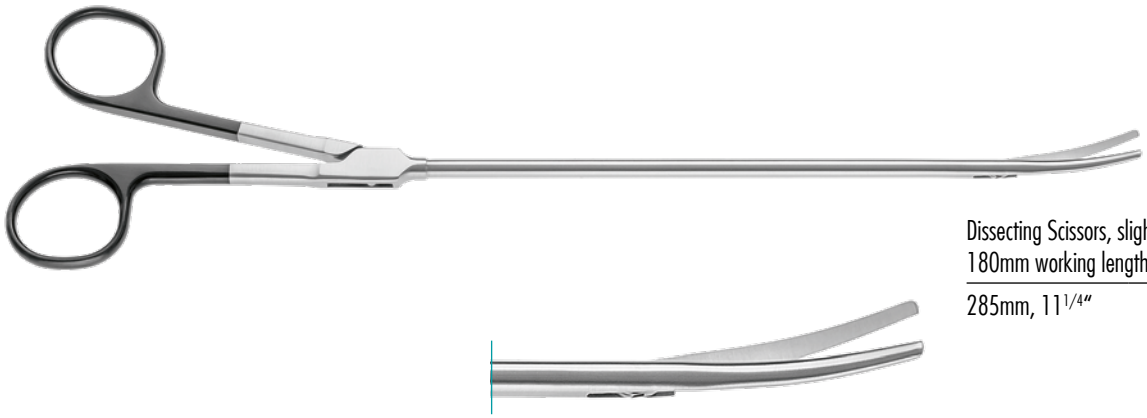


TC METZENBAUM
70mm blade length, double action,
slightly curved

325mm, 12 3/4"	295-120-000
365mm, 14 1/3"	295-120-002

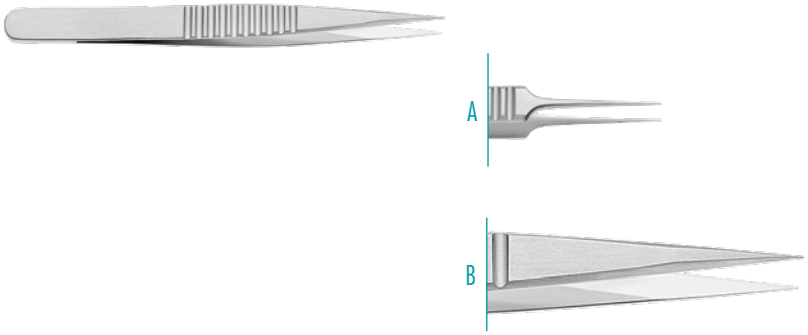
strongly curved

325mm, 12 3/4"	295-120-001
365mm, 14 1/3"	295-120-003



Dissecting Scissors, slightly curved, single action
180mm working length, ∅ 5mm shaft

285mm, 11 1/4"	295-123-180



Micro Forceps, flat handle, ∅ 0.3mm tip, 9mm handle width

A 110mm, 4 1/3"	251-613-110
B 120mm, 4 3/4"	251-611-120

B 7mm handle width, 135mm, 5 1/3"

	251-612-130
with tying platform	251-617-130

B 9mm handle width, 135mm, 5 1/3"

	251-611-130
with tying platform	251-621-135

A 9mm handle width

150mm, 6"	251-613-150

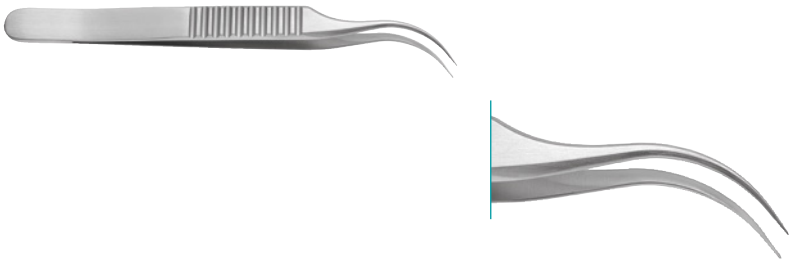
B 9mm handle width, 180mm, 7"

	251-611-180
with tying platform	251-611-181



Micro Forceps, flat, smooth handle, 9mm handle width, 110mm, 4 1/3"

∅ 0.4mm tip	251-600-040
∅ 0.6mm tip	251-600-060
∅ 0.8mm tip	251-600-080



Micro Forceps, flat handle, ∅ 0.4mm tip, 9mm handle width

120mm, 4 3/4"	251-618-120







Fine Micro Forceps, flat handle,
∅ 0.1mm tip, 9mm handle width

A 110mm, 4 1/3"	251-609-110
B 135mm, 5 1/3"	251-613-130







Micro Forceps, flat handle, 45° angled
∅ 0.3mm tip, 9mm handle width

110mm, 4 1/3"	251-616-110
135mm, 5 1/3"	
7mm	251-615-130
9mm	251-603-135
150mm, 6"	
9mm	251-616-150
180mm, 7"	
9mm	251-613-180
with tying platform	251-613-181

90° angled
∅ 0.3mm tip, 9mm handle width

110mm, 4 1/3"	251-617-110



PIERSE
Micro Forceps, flat handle, 9mm handle width

120mm, 4 3/4"	
Ø 0.3mm tip	251-615-120
Ø 0.65mm tip	251-613-120
Ø 0.1mm tip	251-616-120
135mm, 5 1/3"	
Ø 0.3mm tip	251-610-135
180mm, 7"	
Ø 0.65mm tip	251-612-180



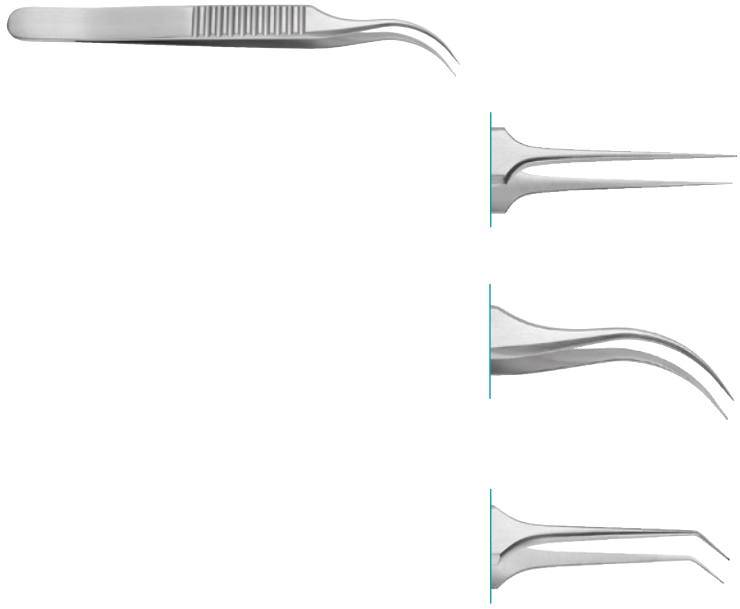
BANIS
Micro Forceps, flat handle, 9mm handle width
Ø 0.3mm tip

135mm, 5 1/3"	251-607-135
180mm, 7"	251-607-180



Tubing Introducer Forceps, 9mm handle width

120mm, 4 3/4"	251-715-120



Micro Forceps, flat handle,
∅ 0.3mm diamond dusted tip,
9mm handle width, straight

110mm, 4 1/3"	251-713-110

7mm handle width, 135mm, 5 1/3"

	251-712-130
with tying platform	251-717-130

9mm handle width, 135mm, 5 1/3"

	251-711-130
with tying platform	251-721-135

9mm handle width

180mm, 7"	251-711-180

Curved, ∅ 0.4mm tip,
9mm handle width

120mm, 4 3/4"	251-718-120

45° angled, ∅ 0.3mm tip,
9mm handle width

110mm, 4 1/3"	251-619-110
135mm, 5 1/3"	251-703-135
180mm, 7"	251-713-180

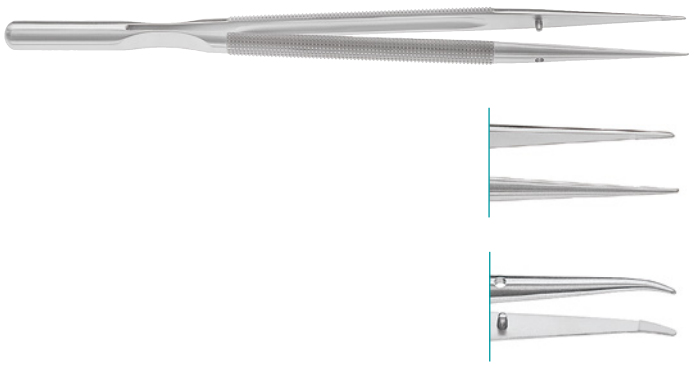
7mm handle width

135mm, 5 1/3"	251-619-130



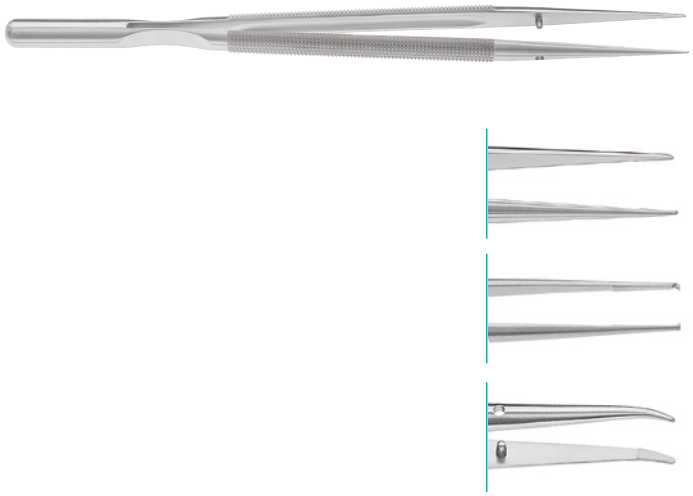
ADSON
Fixation Forceps, ∅ 0.3mm tip,
120mm, 4 3/4"

A 45° angled teeth	251-662-120
B 90° angled teeth	130-554-120



Balanced Micro Forceps, diamond dusted tip, with tying platform, straight

∅ 0.7mm tip	
150mm, 6"	251-657-150
210mm, 8 1/4"	251-657-210
∅ 0.5mm tip	
180mm, 7"	251-657-180
∅ 0.7mm tip	
210mm, 8 1/4"	251-660-210
curved, ∅ 0.7mm tip	
210mm, 8 1/4"	251-661-210



Balanced Micro Forceps, with tying platform, straight

∅ 0.3mm tip	
150mm, 6"	251-650-150
∅ 0.5mm tip	
180mm, 7"	251-650-180
210mm, 8 1/4"	251-650-210
straight, with 1x2 teeth, ∅ 0.3mm tip	
150mm, 6"	251-658-150
180mm, 7"	251-658-180
straight, with 1x2teeth, ∅ 0.7mm tip	
210mm, 8 1/4"	251-658-210
curved, ∅ 0.3mm tip	
150mm, 6"	251-653-150
curved, ∅ 0.5mm tip	
180mm, 7"	251-653-180
210mm, 8 1/4"	251-653-210



DEBAKEY
Micro Forceps, ∅ 8mm handle,
∅ 1.2mm tip

150mm, 6"	250-653-150

∅ 1.0mm tip

180mm, 7"	250-653-180
210mm, 8 1/4"	250-653-210



PIERSE
Micro Fixation Forceps, ∅ 8mm handle,
∅ 0.3mm tip

150mm, 6"	251-652-150

∅ 0.6mm tip

180mm, 6"	251-652-180



Micro Forceps, 45° angled, ∅ 8mm handle,
∅ 0.2mm tip

150mm, 6"	251-655-150
180mm, 7"	251-654-180



Micro Forceps, 45° angled, ∅ 8mm handle,
∅ 0.3mm tip

150mm, 6"	251-656-150
180mm, 7"	251-656-180



Micro Ring Forceps with diamond dusted tip,
straight, ∅ 8mm handle,
∅ 1 x 0.5mm ring

150mm, 6"	251-655-145
180mm, 7"	251-655-180
210mm, 8 1/4"	251-655-210



Micro Ring Forceps, Titan,
with diamond dusted tip,
straight, ∅ 8mm handle, without weight
∅ 1 x 0.5mm ring

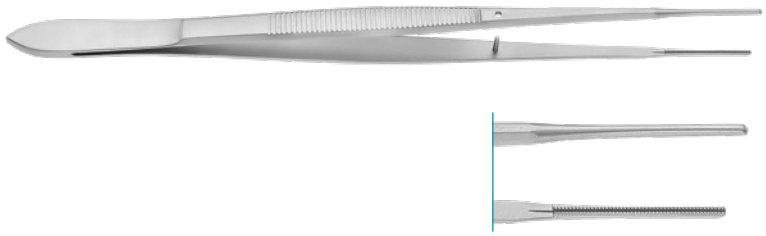
150mm, 6"	250-364-705

∅ 2 x 1mm ring

180mm, 7"	250-364-706
210mm, 8 1/4"	250-364-707

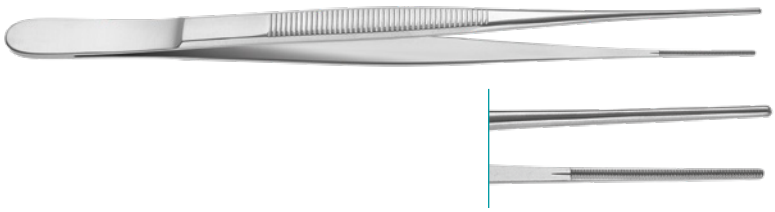
with weight
∅ 1 x 0.5mm ring

150mm, 6"	250-764-715
180mm, 7"	250-764-718
210mm, 8 1/4"	250-764-721



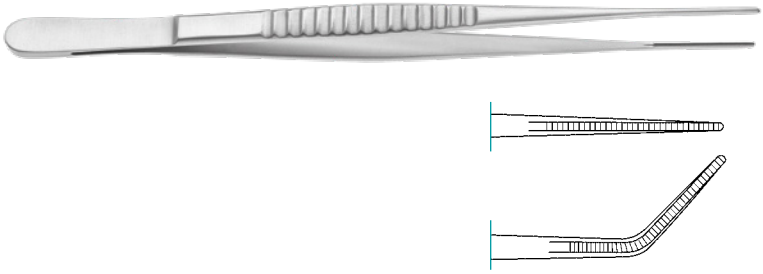
GERALD DEBAKEY
Vascular Tissue Forceps, straight, extra delicate 1.0mm tip, DeBakey serrations

175mm, $6^{7/8}$"	130-520-175
200mm, 8"	130-520-200
240mm, $9^{1/2}$"	130-520-240



DIETHRICH DEBAKEY
Vascular Tissue Forceps, straight, extra delicate 1.5mm tip, DeBakey serrations

160mm, $6^{1/4}$"	130-468-150
200mm, 8"	130-468-200
240mm, $9^{1/2}$"	130-468-240



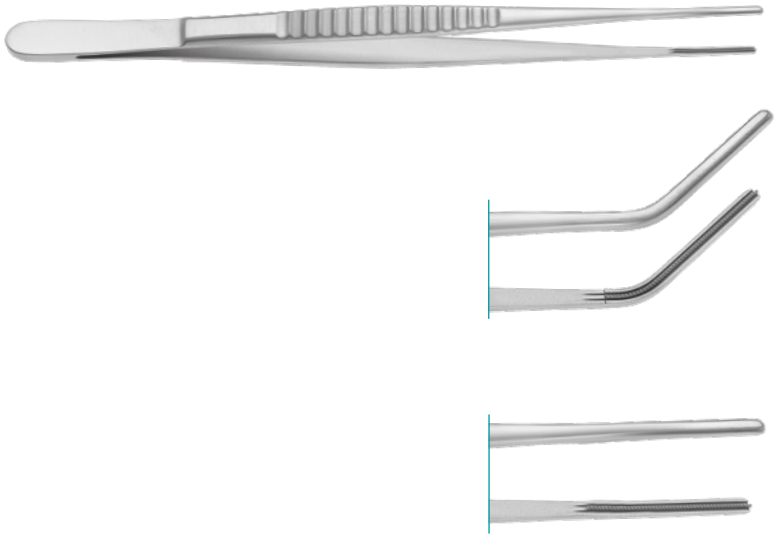
DEBAKEY
Vascular Tissue Forceps, straight, 1.5mm tip, DeBakey serrations,

straight

160mm, $6^{1/4}$"	290-550-160
200mm, 8"	290-550-200
240mm, $9^{1/2}$"	290-550-240
300mm, $11^{7/8}$"	290-550-300

angled

160mm, $6^{1/4}$"	290-551-160
200mm, 8"	290-551-200
240mm, $9^{1/2}$"	290-551-240
300mm, $11^{7/8}$"	290-551-300



DEBAKEY
Vascular Tissue Forceps, straight, 2.0mm tip, DeBakey serrations, straight

160mm, 6 1/4"	290-552-160
200mm, 8"	290-552-200
240mm, 9 1/2"	290-552-240
300mm, 11 7/8"	290-552-300

angled, 2.0mm

160mm, 6 1/4"	290-553-160
200mm, 8"	290-553-200
240mm, 9 1/2"	290-553-240
300mm, 11 7/8"	290-553-300

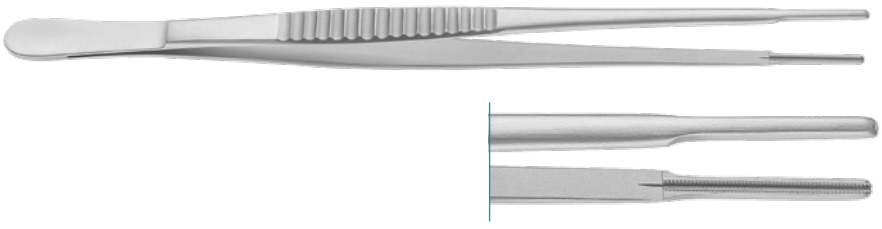
straight, 3.5mm

160mm, 6 1/4"	290-554-160
200mm, 8"	290-554-200
240mm, 9 1/2"	290-554-240
300mm, 11 7/8"	290-554-300



DEBAKEY
Vascular Tissue Forceps, straight, 2.4mm tip, DeBakey serrations

160mm, 6 1/4"	290-557-160
200mm, 8"	290-557-200
240mm, 9 1/2"	290-557-240
300mm, 11 7/8"	290-557-300



DEBAKEY
Vascular Tissue Forceps, straight, 2.8mm step-down tip, DeBakey serrations

160mm, 6 1/4"	290-558-160
200mm, 8"	290-558-200
240mm, 9 1/2"	290-558-240
300mm, 11 7/8"	290-558-300



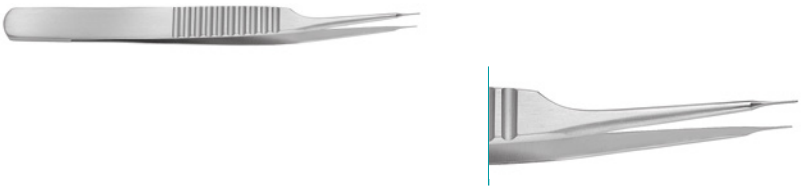
COOLEY
Vascular Tissue Forceps, straight,
delicate 1.5mm tip, DeBakey serrations

150mm, 6"	290-556-150
2.0mm tip	
160mm, 6 1/4"	290-556-160
200mm, 8"	290-556-200
240mm, 9 1/2"	290-556-240



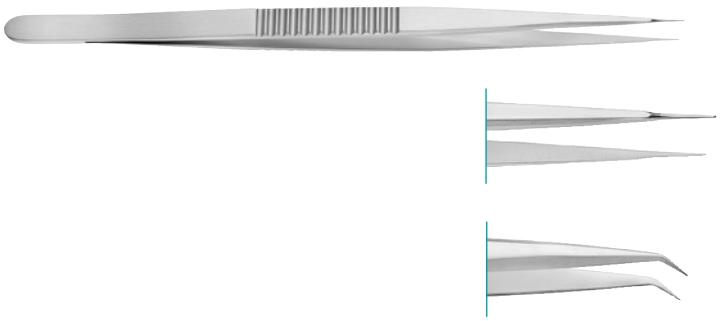
ADSON DEBAKEY
Vascular Tissue Forceps, straight, 2.0mm tip

120mm, 4 3/4"	130-527-120



Micro Dialtor
10° angled, 110mm, 4 1/3", 9mm handle

Ø 0.2mm tip 9mm tip	251-602-110
Ø 0.3mm tip, 4mm tip	251-601-110



Micro Dilator, flat handle, straight,
135mm, 5 1/3", 6mm tip length

Ø 0.2mm tip 7mm handle	251-611-131
Ø 0.2mm tip, 9mm handle	251-611-132

4mm tip length

Ø 0.3mm tip, 9mm handle	251-611-133

180mm, 7", 6mm tip length

Ø 0.1mm tip 9mm handle	251-611-187
Ø 0.2mm tip, 9mm handle	251-611-186

4mm tip length

Ø 0.3mm tip, 9mm handle	251-611-185

45° angled, 135mm, 5 1/3", 9mm handle

Ø 0.3mm tip 4mm tip	251-608-135



Micro Dilator, round handle, straight,
Ø 0.3mm tip, 4mm tip, 8mm handle

150mm, 6"	251-640-150
180mm, 7"	251-640-180







Micro Needle Holder, flat handle,
Ø 0.4mm tip, 140mm, 5 1/2", straight

with ratchet	250-064-153
without ratchet	250-064-149

curved

with ratchet	250-064-151
without ratchet	250-064-150

Micro Needle Holder, round handle,
Ø 0.4mm tip, without ratchet,
Ø 8mm handle, straight

130mm, 5 1/8"	250-064-138
180mm, 7"	250-064-244

Ø 0.2mm tip, Ø 8mm handle, curved,
150mm, 6"

without ratchet	250-064-144

Ø 8mm handle, curved, 130mm, 5 1/8"

without ratchet	250-064-142
with ratchet	250-064-147

Ø 0.5mm tip
Ø 10mm handle, curved, 130mm, 5 1/8"

without ratchet	250-064-146
with ratchet	250-064-145

Ø 0.4mm tip
Ø 8mm handle, curved, 150mm, 6"

without ratchet	250-064-148

Ø 0.4mm tip
Ø 8mm handle, curved, 180mm, 7"

without ratchet	250-064-245

Ø 0.5mm tip
Ø 10mm handle, curved, 180mm, 7"

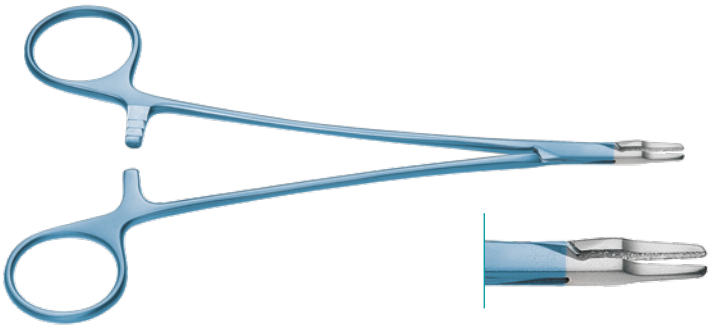
without ratchet	250-064-248

Balanced Micro Needle Holder,
Ø 8mm handle, curved, with tying platform
Ø 0.4mm tip

150mm, 6"	251-660-150

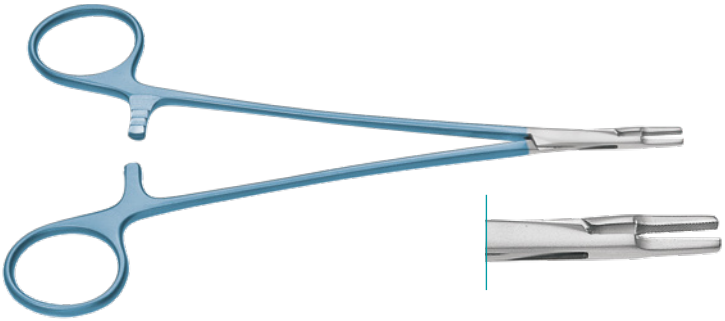
Ø 0.6mm tip

180mm, 7"	251-660-180



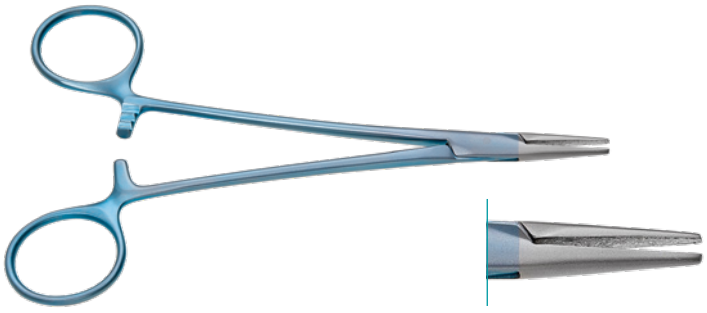
RYDER
Needle Holder

150mm, 6″	180-660-150
170mm, 6 2/3″	180-660-170
190mm, 7 1/2″	180-660-190



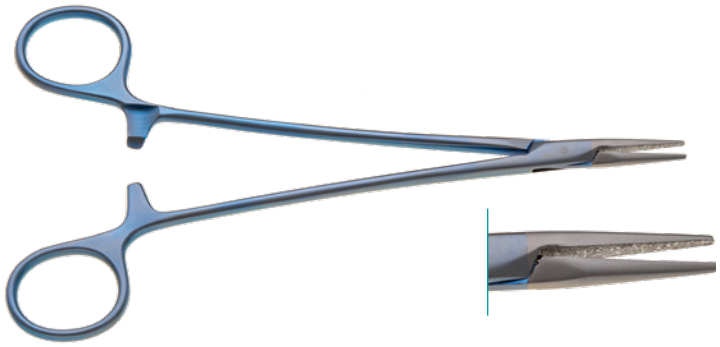
RYDER
Needle Holder, TC jaw, delicate

150mm, 6″	180-661-150
170mm, 6 2/3″	180-661-170
190mm, 7 1/2″	180-661-190



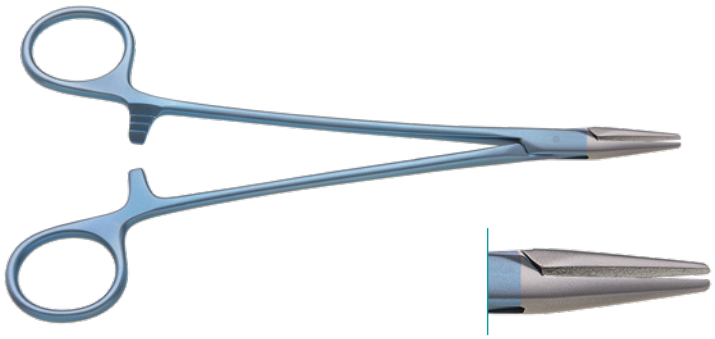
Vascular Needle Holder, TC jaw

160mm, 6 1/4″	180-674-160
180mm, 7″	180-674-180
200mm, 8″	180-674-200
220mm, 8 2/3″	180-674-220
250mm, 9 7/8″	180-674-250



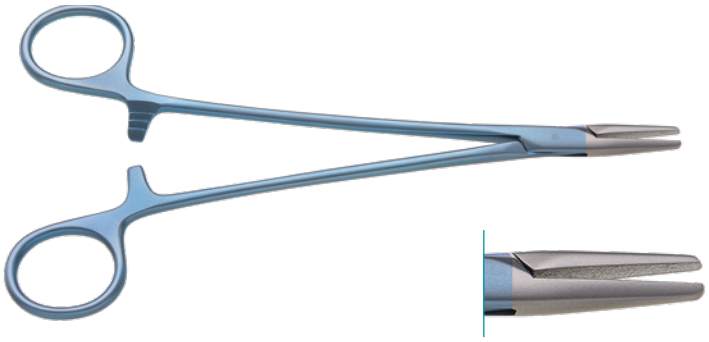
DEBAKEY
Needle Holder

160mm, 6 1/4"	180-675-160
180mm, 7"	180-675-180
200mm, 8"	180-675-200
220mm, 8 2/3"	180-675-220
250mm, 9 7/8"	180-675-250



MAYO HEGAR
Needle Holder
1.8mm fine jaw

160mm, 6 1/4"	180-680-160
180mm, 7"	180-680-180
200mm, 8"	180-680-200
220mm, 8 2/3"	180-680-220
250mm, 9 7/8"	180-680-250



MAYO HEGAR
Needle Holder
2.8mm broad jaw

160mm, 6 1/4"	180-690-160
180mm, 7"	180-690-180
200mm, 8"	180-690-200
220mm, 8 2/3"	180-690-220
250mm, 9 7/8"	180-690-250





Ø 3.5mm shaft, 2x6mm, with ratchet, TC straight

170mm, 6 2/3"	295-034-200
250mm, 9 7/8"	295-035-200
300mm, 11 7/8"	295-037-200



Ø 3.5mm shaft, 2x6mm, with ratchet, TC curved

170mm, 6 2/3"	295-034-201
250mm, 9 7/8"	295-035-201
300mm, 11 7/8"	295-037-201



Ø 5.0mm shaft, 3x10mm, with ratchet, TC straight

170mm, 6 2/3"	295-048-200
250mm, 9 7/8"	295-050-200
300mm, 11 7/8"	295-052-200



Ø 5.0mm shaft, 3x10mm, with ratchet, TC curved left

170mm, 6 2/3"	295-048-201
250mm, 9 7/8"	295-050-201
300mm, 11 7/8"	295-052-201



Ø 5.0mm shaft, 3x10mm, with ratchet, TC curved right

170mm, 6 2/3"	295-048-202
250mm, 9 7/8"	295-050-202
300mm, 11 7/8"	295-052-202



RYDER

Ø 5.0mm shaft, 1x8mm, with ratchet, TC straight

170mm, 6 2/3"	295-048-210
250mm, 9 7/8"	295-050-210
300mm, 11 7/8"	295-052-210



RYDER

Ø 5.0mm shaft, 1x10mm, with ratchet, TC, straight

170mm, 6 2/3"	295-048-212
250mm, 9 7/8"	295-050-212
300mm, 11 7/8"	295-052-212



Ø 5.0mm shaft, 2x8mm, with ratchet, TC, straight

170mm, 6 2/3"	295-048-214
250mm, 9 7/8"	295-050-214
300mm, 11 7/8"	295-052-214



Ø 5.0mm shaft, 3x10mm, with ratchet, diamond dusted, straight

170mm, 6 2/3"	295-048-216
250mm, 9 7/8"	295-050-216
300mm, 11 7/8"	295-052-216



Ø 5.0mm shaft, 3x10mm, with ratchet, diamond dusted, curved left

170mm, 6 2/3"	295-048-217
250mm, 9 7/8"	295-050-217
300mm, 11 7/8"	295-052-217



CRILE WOOD

Ø 5.0mm shaft, 3x10mm, with ratchet, TC, curved left

170mm, 6 2/3"	295-048-219
250mm, 9 7/8"	295-050-219
300mm, 11 7/8"	295-052-219



CHITWOOD
Suture Cutter, ∅ 5mm shaft

180mm, 7"	295-121-180
230mm, 9"	295-121-230
280mm, 11"	295-121-280





SLIDER
Needle Holder, straight, max. 4-0 suture,
210mm working length, ∅ 7mm shaft
345mm, 12 3/4"

straight	295-180-000
curved	295-180-001

∅ 10mm shaft

straight	295-180-002
curved	295-180-003



Knot Pusher for valve surgery
∅ 8.0mm tip

345mm, 12 3/4"	295-000-020



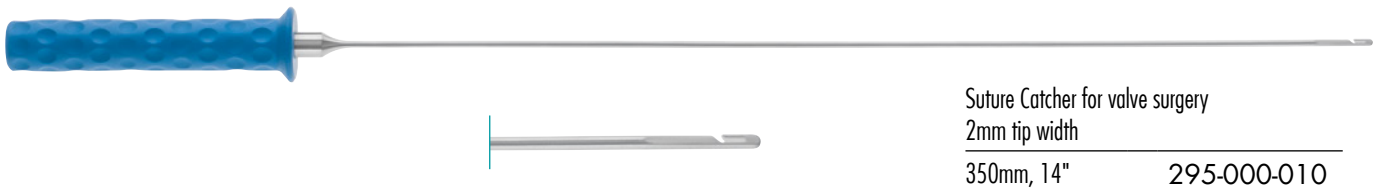
Magnetic Retriever

370mm, 14 1/2"	295-300-000



Suture Ruler, 0 - 60mm measuring range

430mm, 17"	295-100-350



Suture Catcher for valve surgery
2mm tip width

350mm, 14"	295-000-010





Suture Catcher
2mm tip width

320mm, $12^{1/2}$"	295-000-110





∅ 4.0mm shaft, Valve Rongeur, oval, 4mm, single action, straight

170mm, $6^{2/3}$"	295-039-300
250mm, $9^{7/8}$"	295-040-300
300mm, $11^{7/8}$"	295-041-300



∅ 4.0mm shaft, Valve Rongeur, oval, 4mm, single action, 30° angled

170mm, $6^{2/3}$"	295-039-301
250mm, $9^{7/8}$"	295-040-301
300mm, $11^{7/8}$"	295-041-301





DEBAKEY
∅ 3.5mm shaft, 2x1 teeth, 2.8 x 14mm,
double action, 45° lateral angled

without ratchet	
170mm, 6 2/3"	295-034-253
250mm, 9 7/8"	295-035-253
300mm, 11 7/8"	295-037-253
with ratchet	
170mm, 6 2/3"	295-033-253
250mm, 9 7/8"	295-036-253
300mm, 11 7/8"	295-038-253



DEBAKEY
∅ 5.0mm shaft, 2x1 teeth, 1.5 x 10mm,
double action, straight

without ratchet	
170mm, 6 2/3"	295-048-250
250mm, 9 7/8"	295-050-250
300mm, 11 7/8"	295-052-250
with ratchet	
170mm, 6 2/3"	295-049-250
250mm, 9 7/8"	295-051-250
300mm, 11 7/8"	295-053-250



DEBAKEY
∅ 5.0mm shaft, 2x1 teeth, 2.8 x 10mm,
double action, straight

without ratchet	
170mm, 6 2/3"	295-048-251
250mm, 9 7/8"	295-050-251
300mm, 11 7/8"	295-052-251
with ratchet	
170mm, 6 2/3"	295-049-251
250mm, 9 7/8"	295-051-251
300mm, 11 7/8"	295-053-251



DEBAKEY
∅ 5.0mm shaft, 2x1 teeth, 1.5 x 14mm,
single action, straight

without ratchet	
170mm, 6 2/3"	295-048-252
250mm, 9 7/8"	295-050-252
300mm, 11 7/8"	295-052-252
with ratchet	
170mm, 6 2/3"	295-049-252
250mm, 9 7/8"	295-051-252
300mm, 11 7/8"	295-053-252



DEBAKEY
∅ 5.0mm shaft, 2x1 teeth, 1.5 x 14mm,
single action, 45° angled

without ratchet	
170mm, 6 2/3"	295-048-253
250mm, 9 7/8"	295-050-253
300mm, 11 7/8"	295-052-253
with ratchet	
170mm, 6 2/3"	295-049-253
250mm, 9 7/8"	295-051-253
300mm, 11 7/8"	295-053-253



DEBAKEY
∅ 5.0mm shaft, 3x2 teeth, 4.8 x 10mm,
double action, straight

without ratchet	
170mm, 6 2/3"	295-048-254
250mm, 9 7/8"	295-050-254
300mm, 11 7/8"	295-052-254
with ratchet	
170mm, 6 2/3"	295-049-254
250mm, 9 7/8"	295-051-254
300mm, 11 7/8"	295-053-254





DEBAKEY
∅ 5.0mm shaft, 2x1 teeth, 2.8 x 28mm,
single action, 45° lateral angled
without ratchet

170mm, 6 2/3"	295-048-255
250mm, 9 7/8"	295-050-255
300mm, 11 7/8"	295-052-255
with ratchet	
170mm, 6 2/3"	295-049-255
250mm, 9 7/8"	295-051-255
300mm, 11 7/8"	295-053-255



∅ 5.0mm shaft, Knot Pusher
single action, 45° angled
without ratchet

170mm, 6 2/3"	295-048-260
250mm, 9 7/8"	295-050-260
300mm, 11 7/8"	295-052-260
with ratchet	
170mm, 6 2/3"	295-049-260
250mm, 9 7/8"	295-051-260
300mm, 11 7/8"	295-053-260



RESANO
∅ 5.0mm shaft, Grasping Forceps
single action, straight
without ratchet

170mm, 6 2/3"	295-048-265
250mm, 9 7/8"	295-050-265
300mm, 11 7/8"	295-052-265
with ratchet	
170mm, 6 2/3"	295-049-265
250mm, 9 7/8"	295-051-265
300mm, 11 7/8"	295-053-265



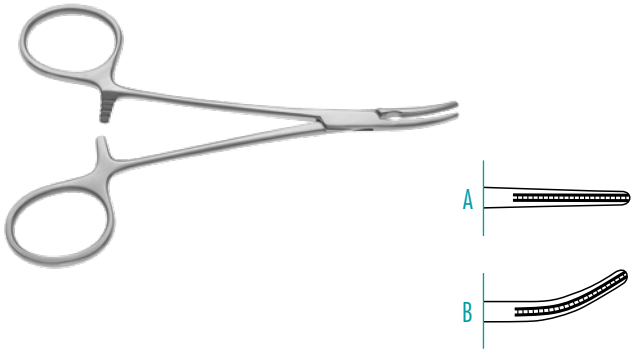
RESANO
∅ 5.0mm shaft, Grasping Forceps
double action, conical shape
without ratchet

170mm, 6 2/3"	295-048-270
250mm, 9 7/8"	295-050-270
300mm, 11 7/8"	295-052-270
with ratchet	
170mm, 6 2/3"	295-049-270
250mm, 9 7/8"	295-051-270
300mm, 11 7/8"	295-053-270



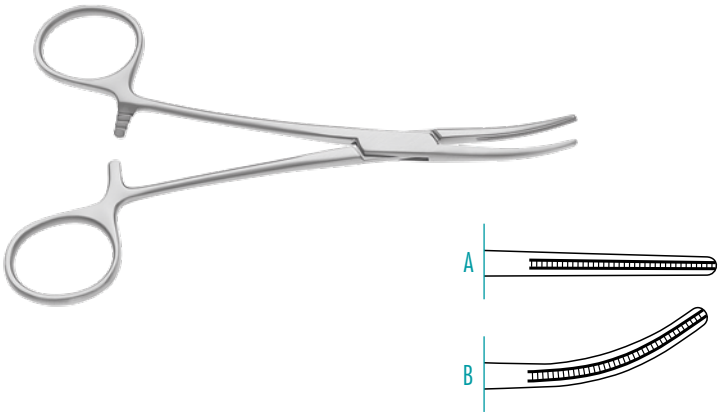
GEMINI
∅ 5.0mm shaft, smooth
double action, curved
without ratchet

170mm, 6 2/3"	295-048-280
250mm, 9 7/8"	295-050-280
300mm, 11 7/8"	295-052-280
with ratchet	
170mm, 6 2/3"	295-049-280
250mm, 9 7/8"	295-051-280
300mm, 11 7/8"	295-053-280



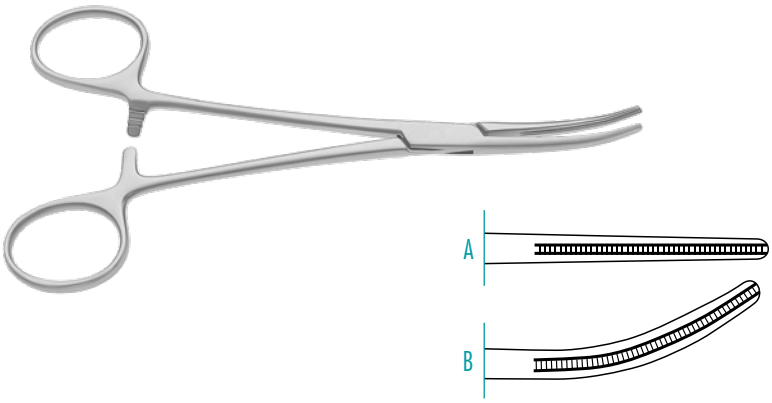
DEBAKEY MOSQUITO
Hemostatic Forceps, 120mm, $4^{3/4}$"

A straight	290-438-120
B curved	290-439-120



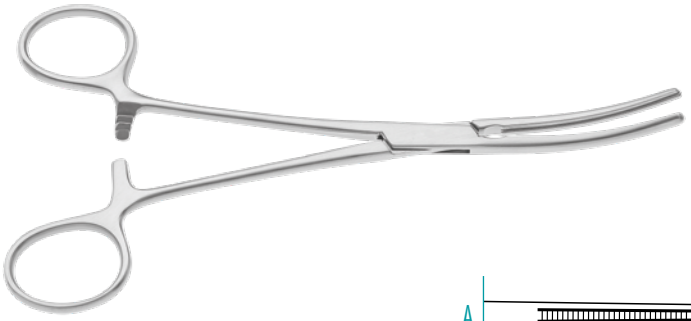
DEBAKEY KELLY
Atraumatic Forceps, 140mm, $5^{1/2}$"

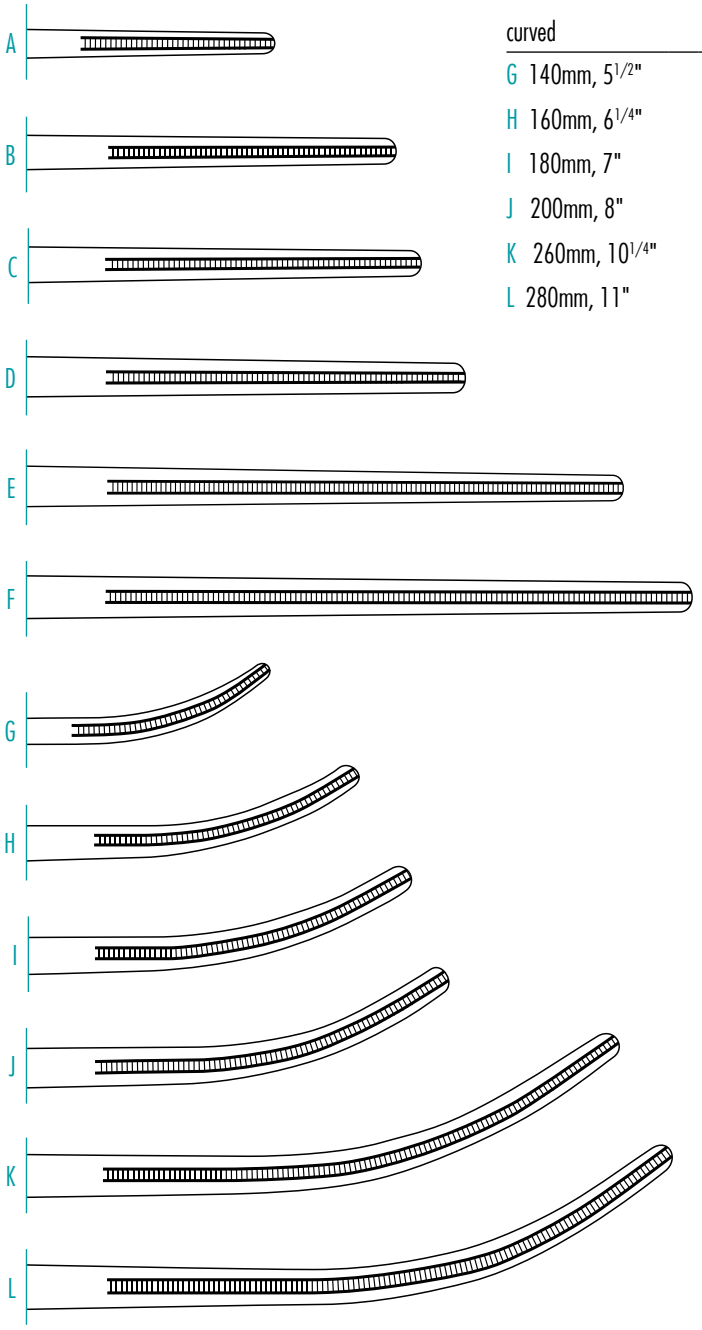
A straight	290-410-140
B curved	290-411-140



DEBAKEY RANKIN
Hemostatic Forceps, 160mm, $6^{1/4}$"

A straight	290-300-160
B curved	290-301-160





DEBAKEY PEAN

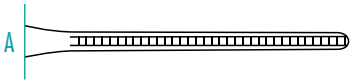
Hemostatic Forceps, straight

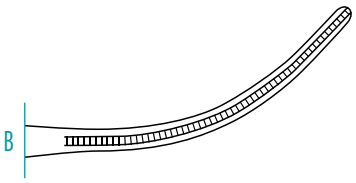
A 140mm, 5 1/2"	290-438-140
B 160mm, 6 1/4"	290-438-160
C 180mm, 7"	290-438-180
D 200mm, 8"	290-438-200
E 260mm, 10 1/4"	290-438-260
F 280mm, 11"	290-438-280

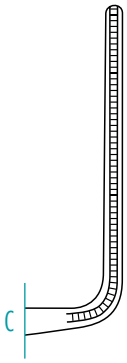
curved

G 140mm, 5 1/2"	290-439-140
H 160mm, 6 1/4"	290-439-160
I 180mm, 7"	290-439-180
J 200mm, 8"	290-439-200
K 260mm, 10 1/4"	290-439-260
L 280mm, 11"	290-439-280







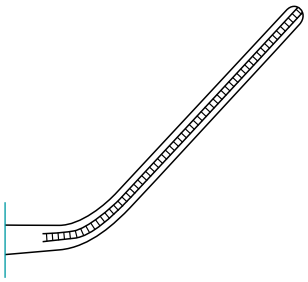


DEBAKEY

Clamp, straight shanks,

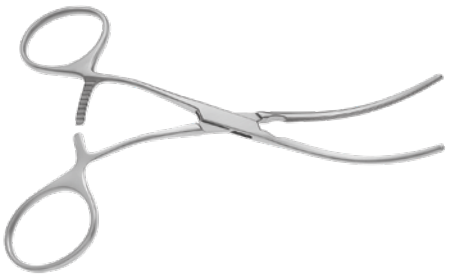
A straight jaw 120mm, 4 3/4"	290-458-120
B curved jaw 110mm, 4 1/3"	290-458-110
C angled jaw 100mm, 4"	290-458-100

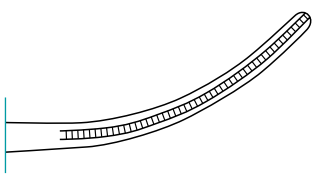




Shanks curved backwards

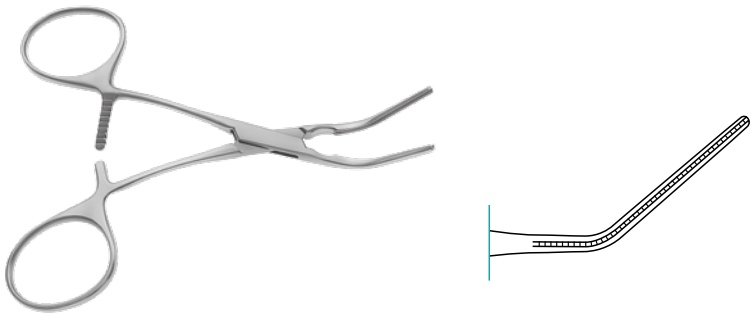
130mm, 5 1/8"	290-459-130





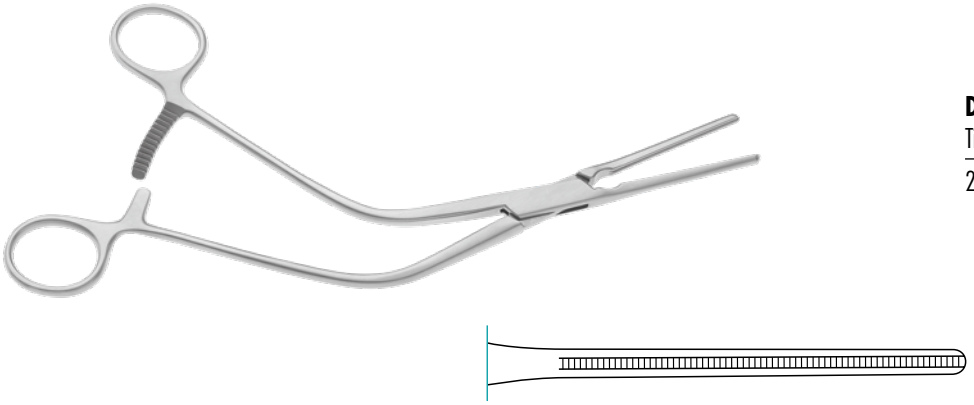
S-curved shanks

125mm, 5"	290-459-120



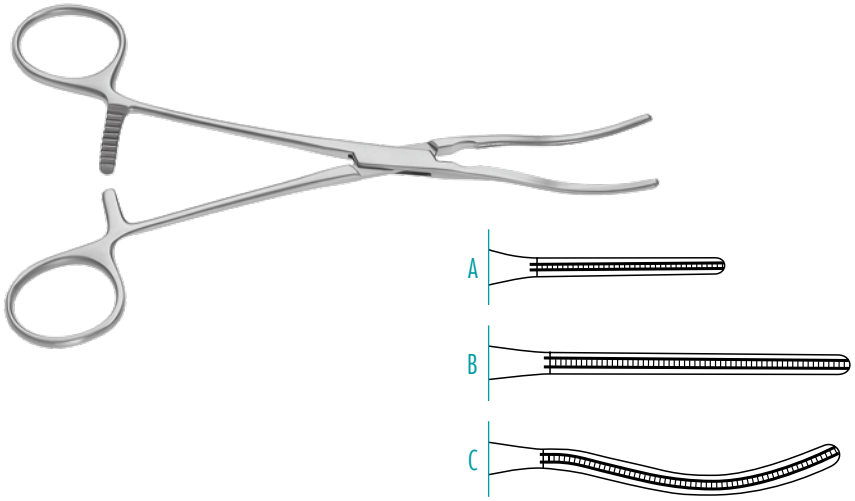
NOON
A.V. Fistula Clamp, 1x2 draft, 50° angled

110mm, $4^{1/3}$"	290-460-110



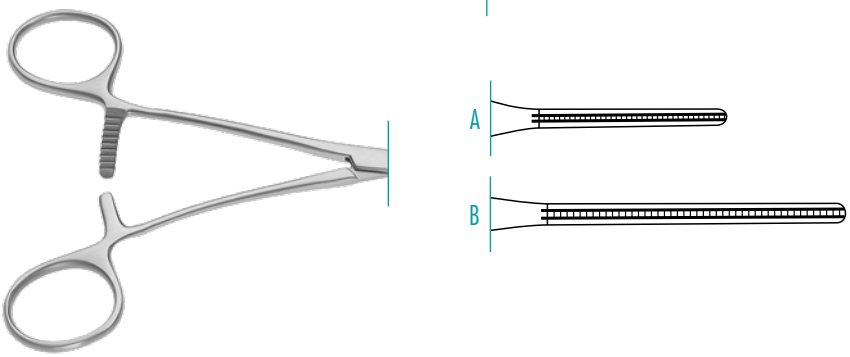
DEMOS
Tibial Artery Clamp, 60° angled shanks

200mm, 8"	290-407-200



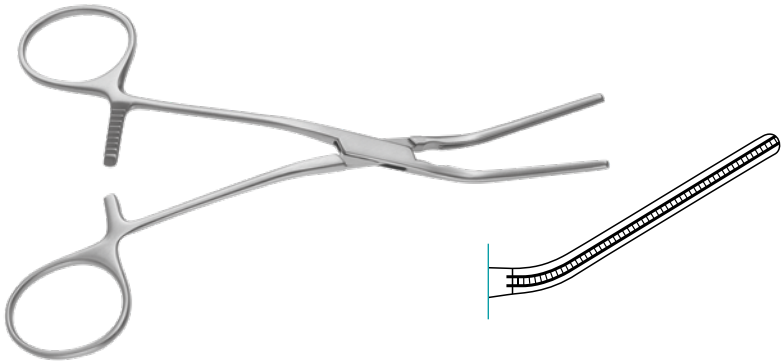
DEBAKEY
Pediatric Forceps, straight shanks

A	160mm, $6^{1/4}$"	290-440-160
B	170mm, $6^{2/3}$"	290-440-170
C	165mm, $6^{1/2}$"	290-451-170
D	155mm, $6^{1/8}$"	290-442-150



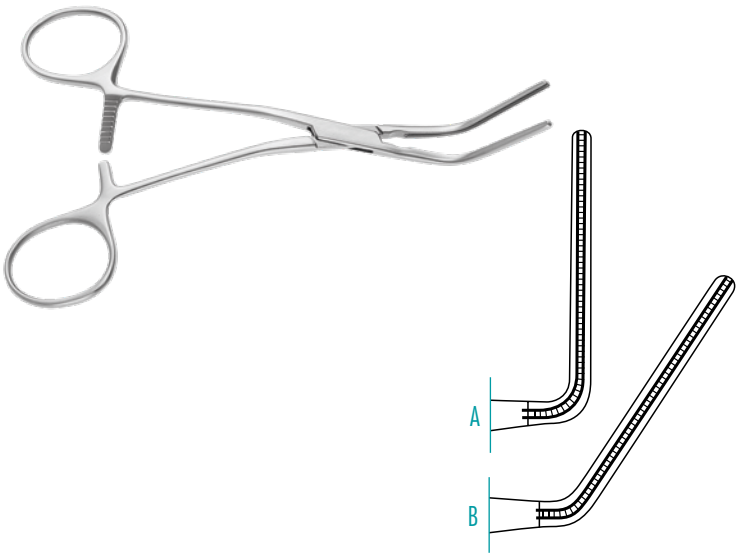
shanks angled forward

A	155mm, $6^{1/8}$"	290-447-155
B	170mm, $6^{2/3}$"	290-447-170



DEBAKEY
Pediatric Forceps,
shanks curved backwards, 30° angled

160mm, 6 1/4"	290-441-160



DEBAKEY
Pediatric Foceps, 150mm, 6"

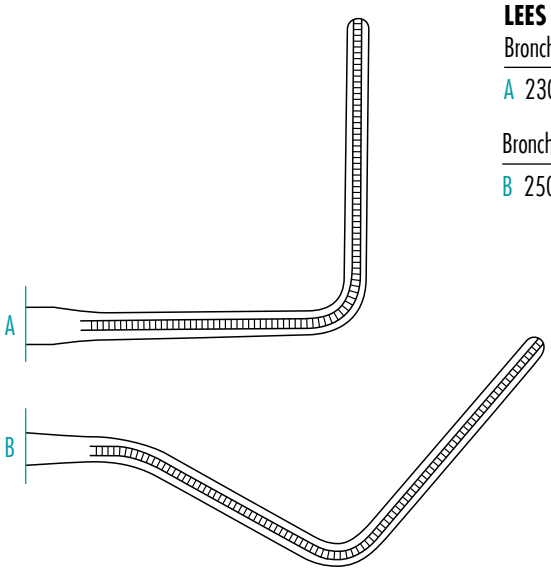
A 90°	290-445-150
B 60°	290-443-150



SAROT
Bronchus Clamp with pins, 230mm, 9"

Teeth left	290-237-230
Teeth right	290-238-230



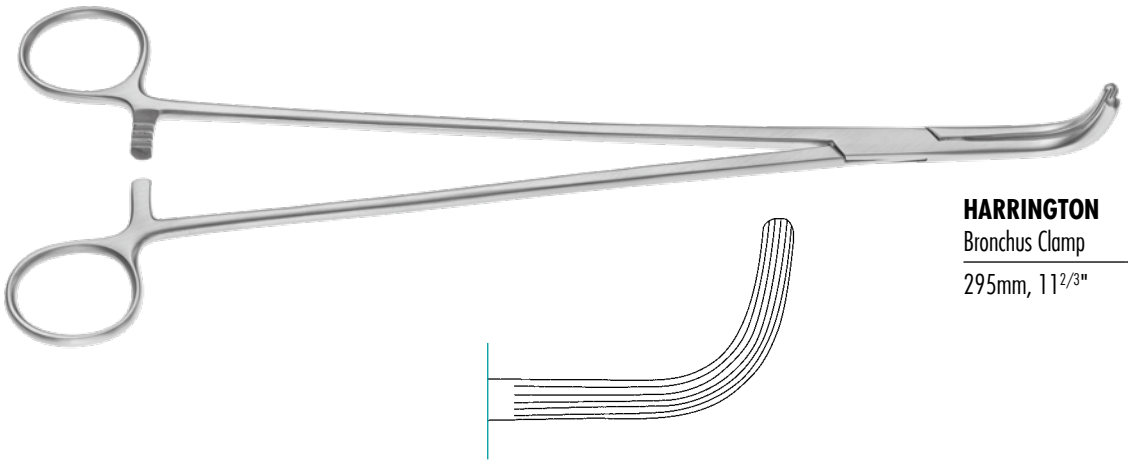


LEES
Bronchus Clamp

A 230mm, 9"	290-427-230

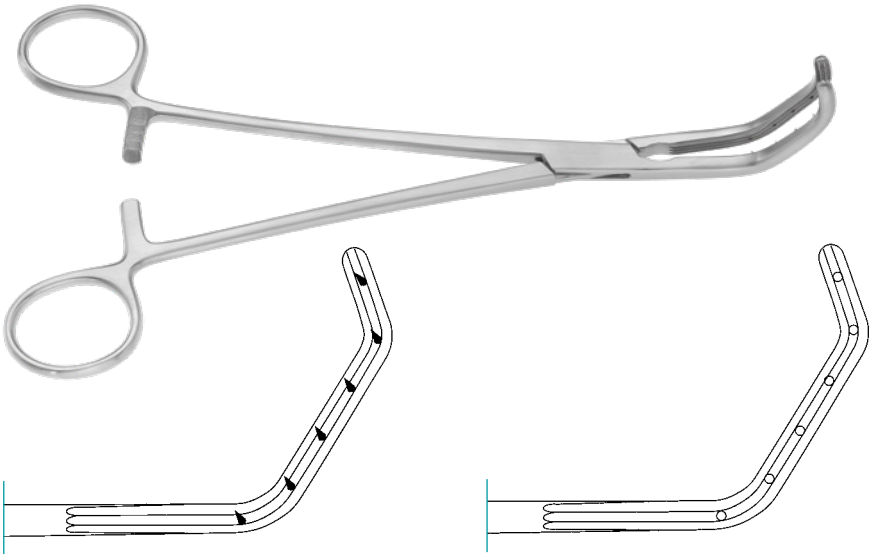
Bronchus Clamp

B 250mm, $9^{7/8}$"	290-429-250



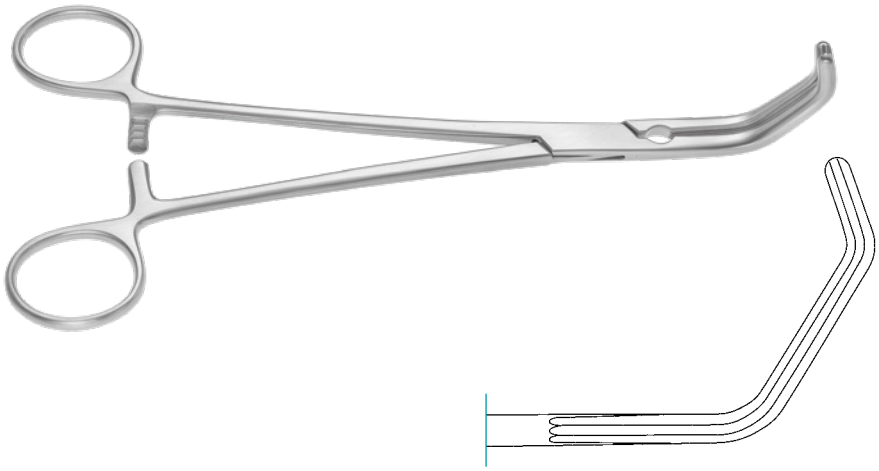
HARRINGTON
Bronchus Clamp

295mm, $11^{2/3}$"	290-271-295



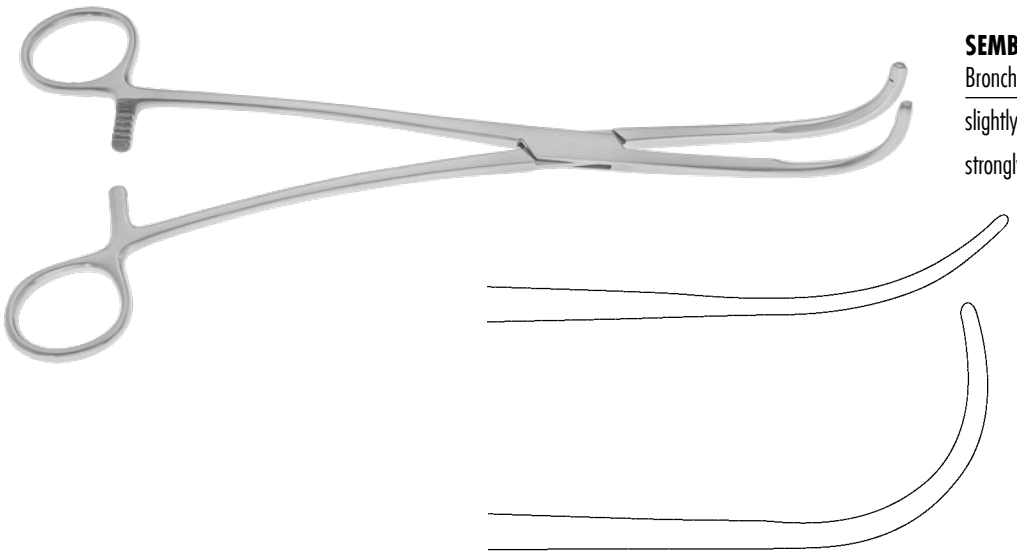
PRICE THOMAS
Bronchus Forceps, 220mm, 8 2/3"

Fig. 1, teeth left	290-245-220
Fig. 2, teeth right	290-247-220



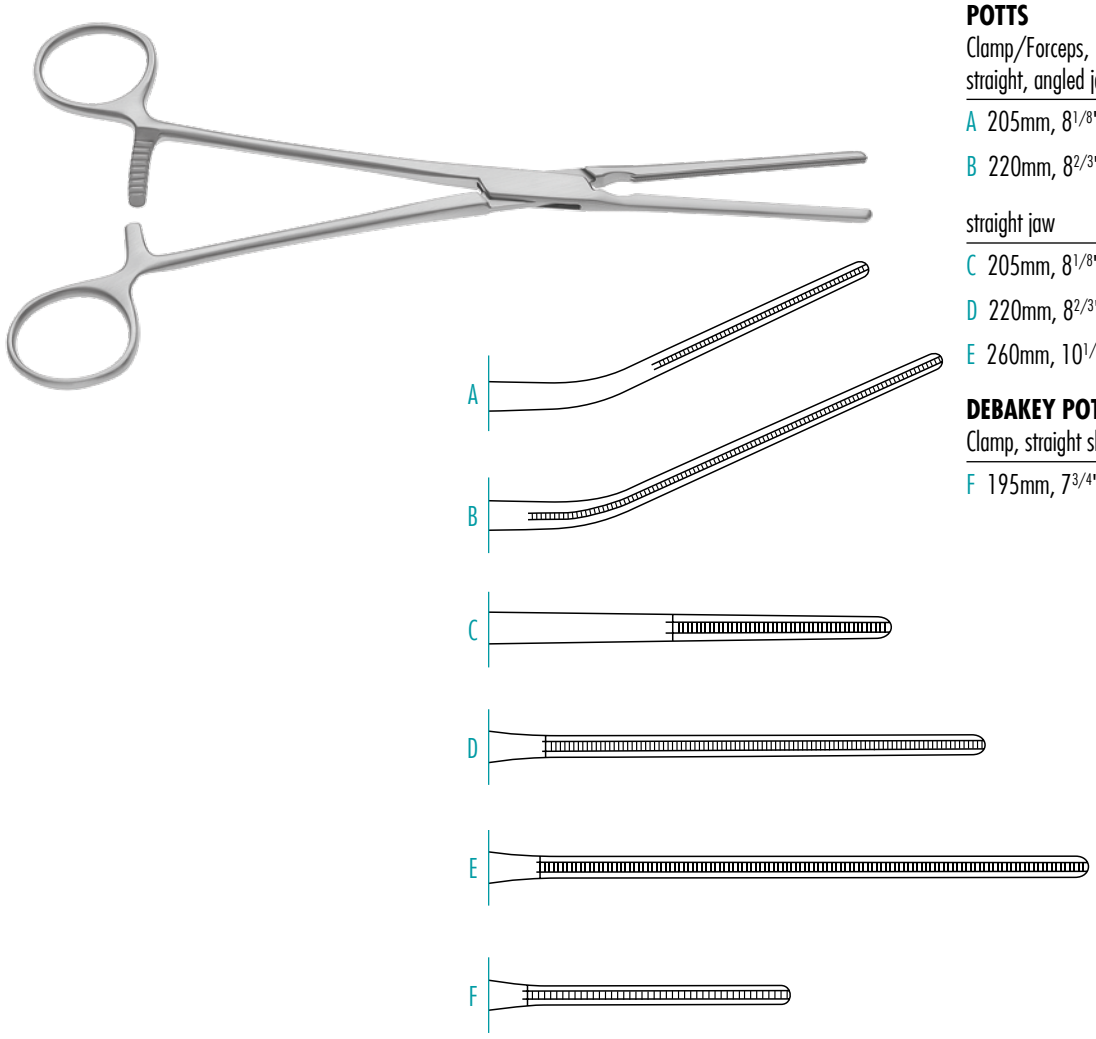
PRICE THOMAS
Bronchus Forceps

220mm, 8 2/3"	290-241-220



SEMB
Bronchus Forceps, 250mm, 9 7/8"

slightly curved	290-265-240
strongly curved	290-267-240



POTTS
Clamp/Forceps,
straight, angled jaw

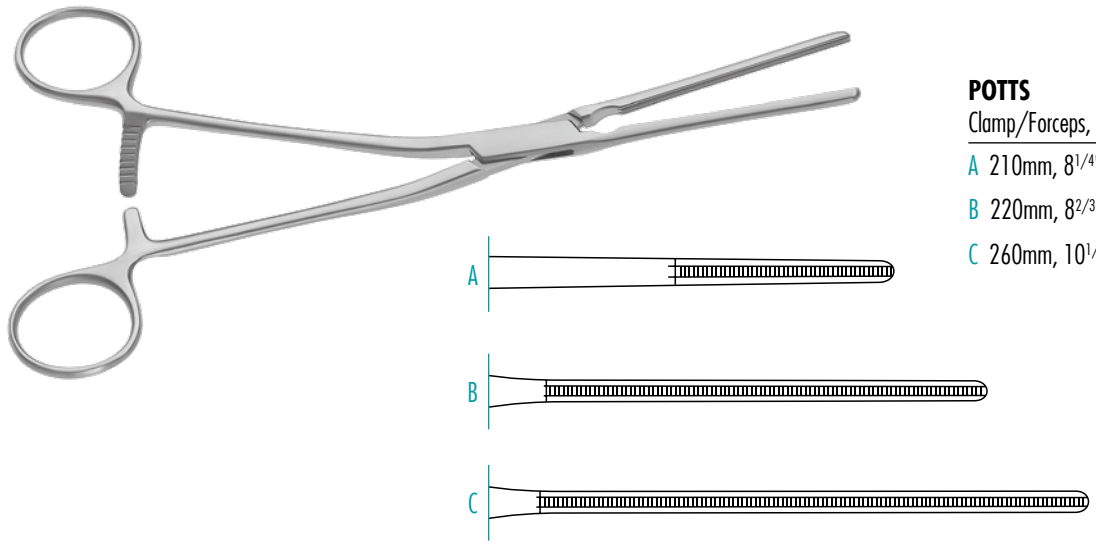
A	205mm, 8 1/8"	290-401-210
B	220mm, 8 2/3"	290-401-220

straight jaw

C	205mm, 8 1/8"	290-400-210
D	220mm, 8 2/3"	290-400-220
E	260mm, 10 1/4"	290-400-260

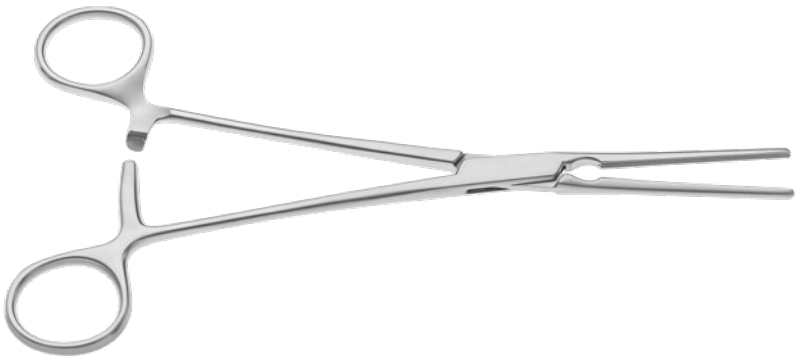
DEBAKEY POTTS
Clamp, straight shanks

F	195mm, 7 3/4"	290-400-195



POTTS
Clamp/Forceps, angled, straight jaw

A	210mm, 8 1/4"	290-403-210
B	220mm, 8 2/3"	290-403-220
C	260mm, 10 1/4"	290-403-260



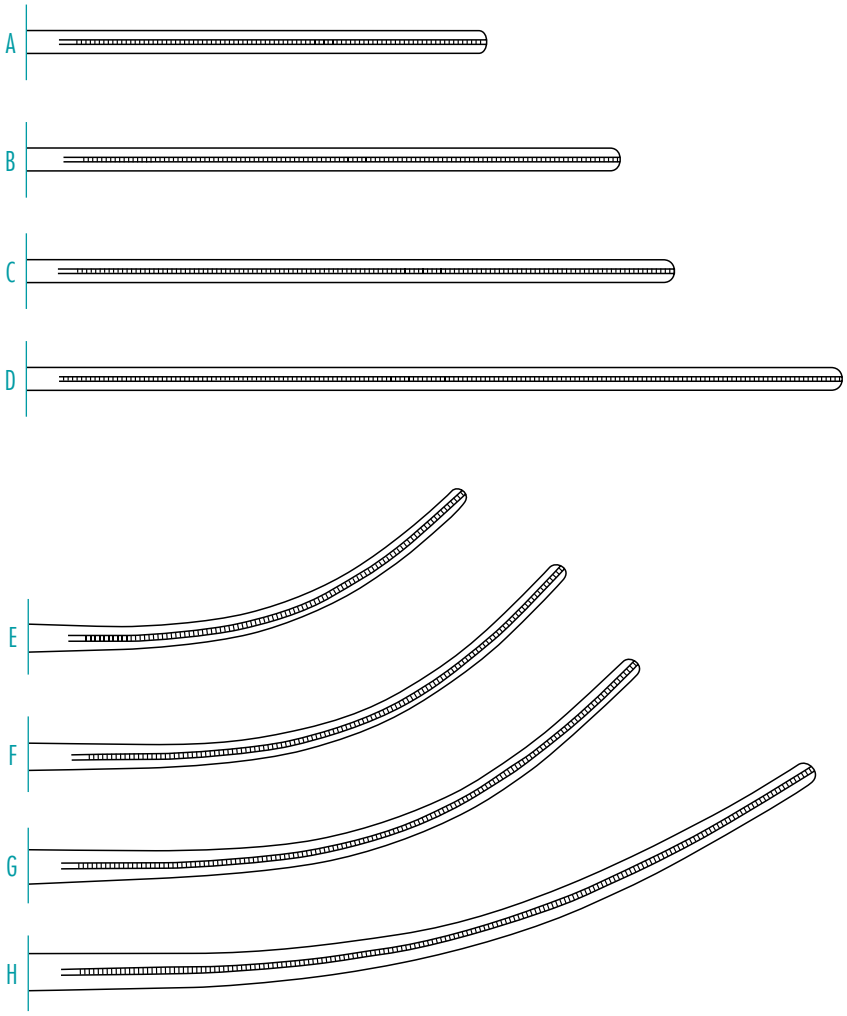
DEBAKEY

Clamp, straight jaw

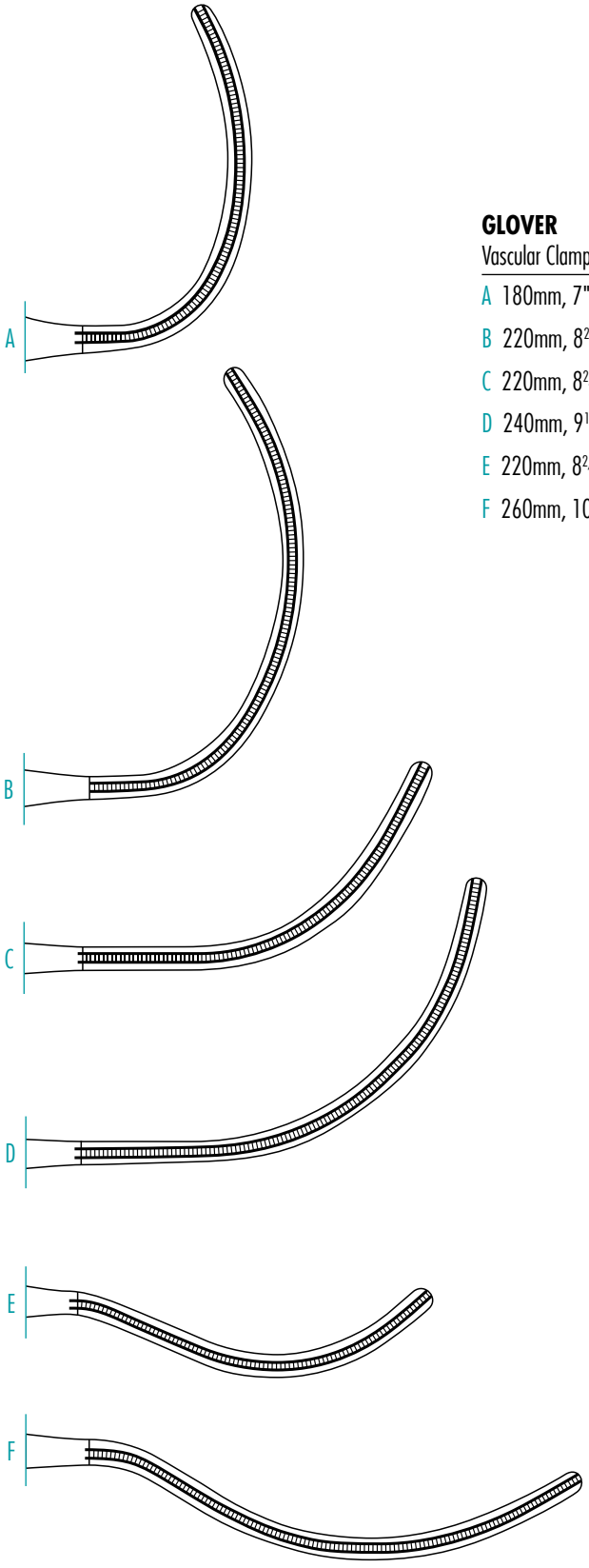
A 215mm, $8^{1/2}$"	290-434-210
B 230mm, 9"	290-434-230
C 270mm, $10^{2/3}$"	290-434-270
D 315mm, $12^{1/2}$"	290-434-310

curved jaw

E 215mm, $8^{1/2}$"	290-435-210
F 230mm, 9"	290-435-230
G 270mm, $10^{2/3}$"	290-435-270
H 315mm, $12^{1/2}$"	290-435-310

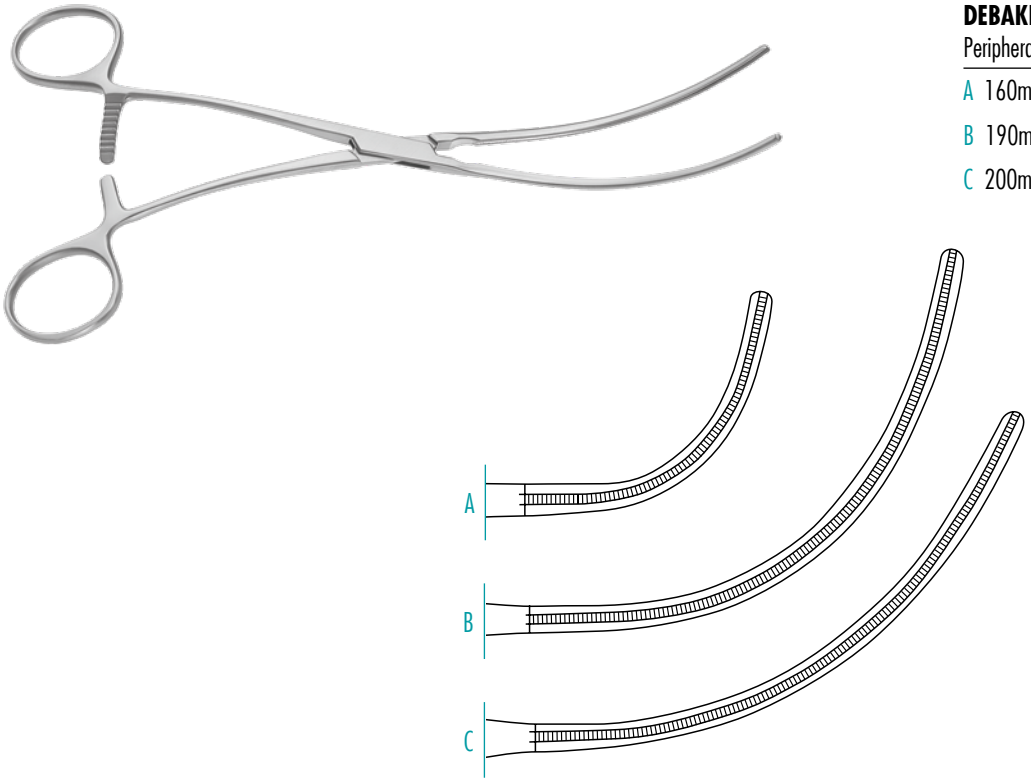






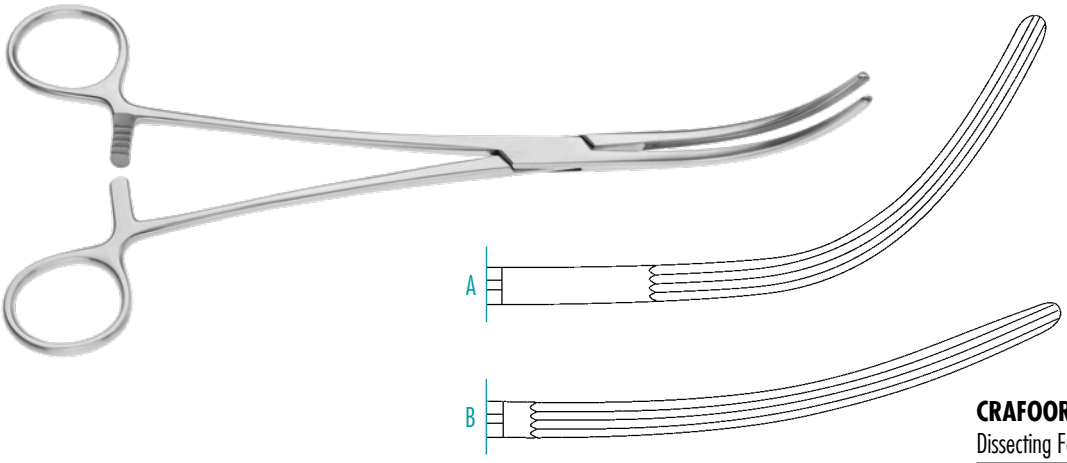
GLOVER
Vascular Clamp

A 180mm, 7"	290-405-195
B 220mm, $8^{2/3}$"	290-405-210
C 220mm, $8^{2/3}$"	290-451-215
D 240mm, $9^{1/2}$"	290-451-240
E 220mm, $8^{2/3}$"	290-412-220
F 260mm, $10^{1/4}$"	290-412-260



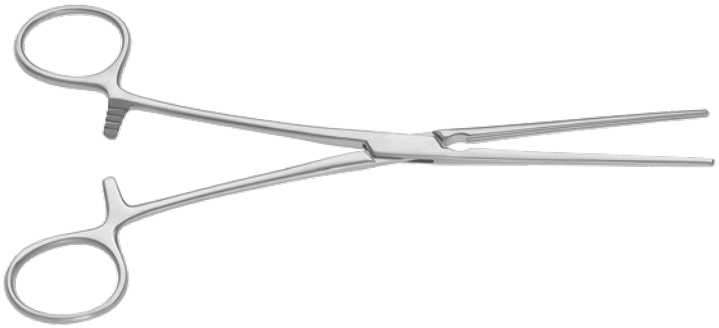
DEBAKEY
Peripheral Vascular Clamp

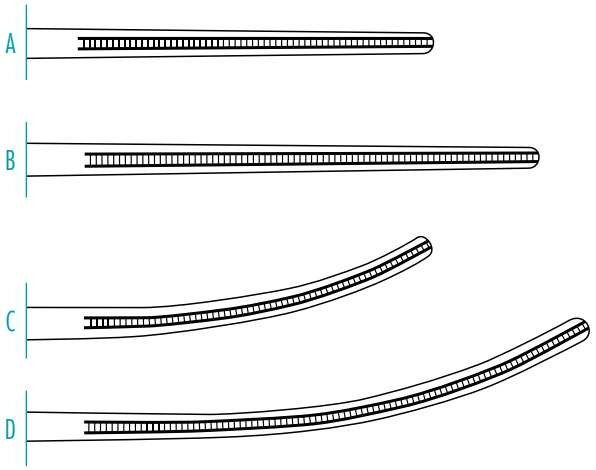
A	160mm, 6 1/4"	290-409-160
B	190mm, 7 1/2"	290-411-190
C	200mm, 8"	290-411-200



CRAFOORD SELLORS
Dissecting Forceps

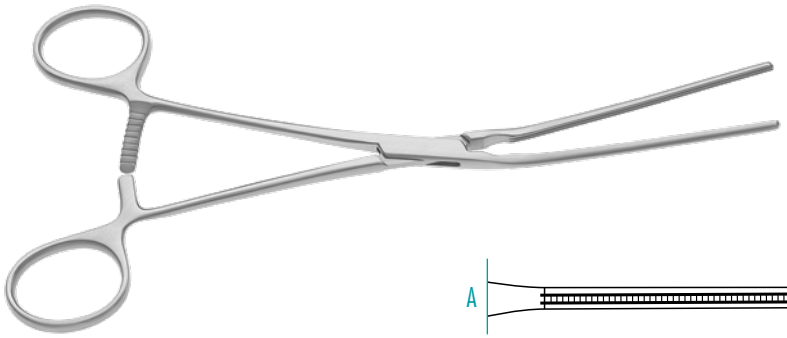
A	230mm, 9"	140-383-230
B	240mm, 9 1/2"	140-385-240

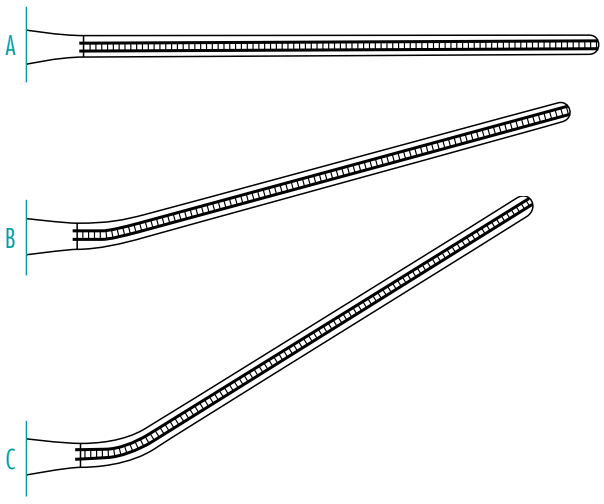




DEBAKEY BAINBRIDGE
Vascular Forceps

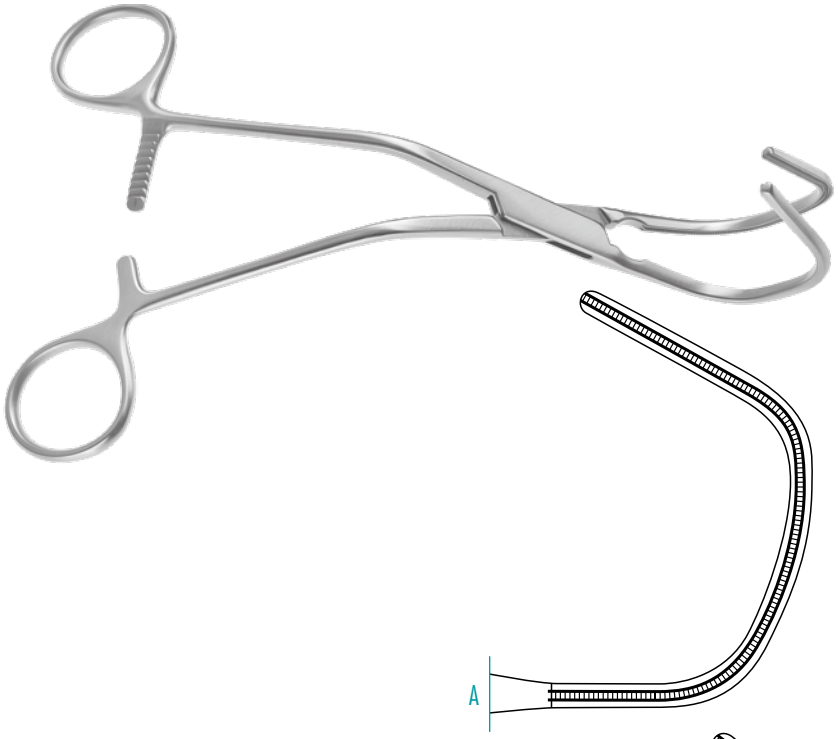
A 150mm, 6"	290-414-150
B 180mm, 7"	290-414-180
C 150mm, 6"	290-415-150
D 180mm, 7"	290-415-180

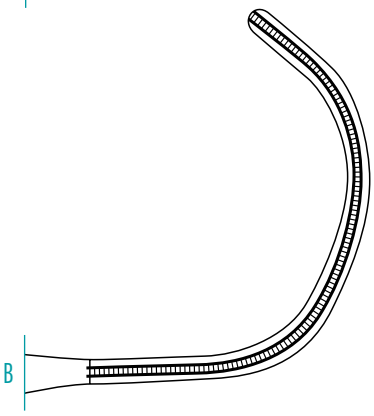




LELAND JONES
Peripheral Vascular Forceps, straight

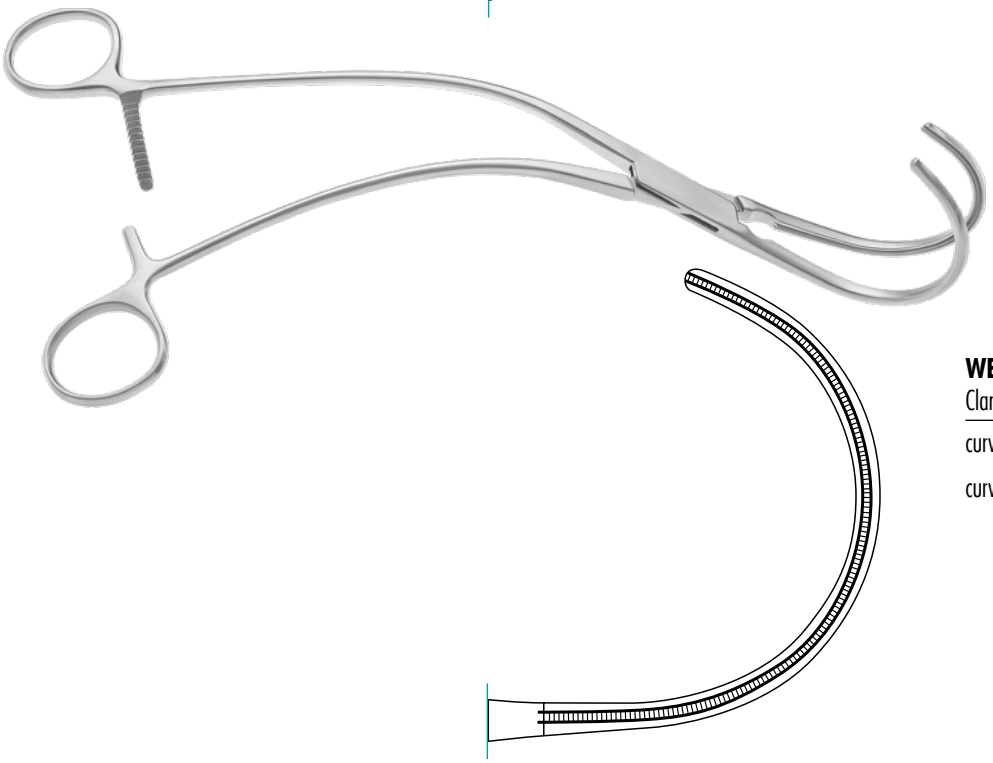
A 200mm, 8"	290-413-195
15° angled	
B 200mm, 8"	290-413-200
30° angled	
C 190mm, 7 1/2"	290-413-190





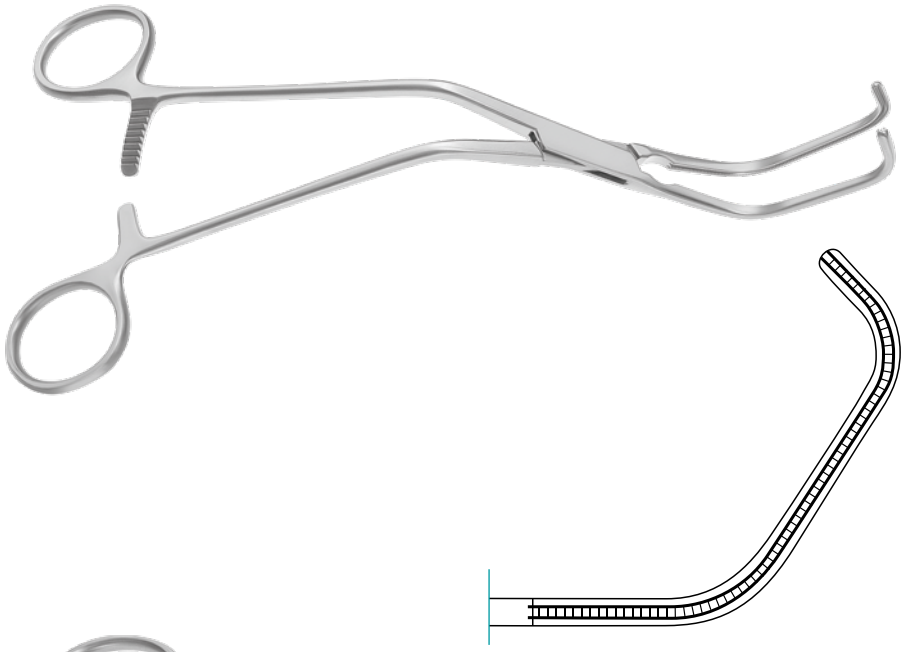
KAY LAMBERT
Clamp

A 220mm, $8^{2/3}$"	290-430-220
B 210mm, $8^{1/4}$"	290-430-210



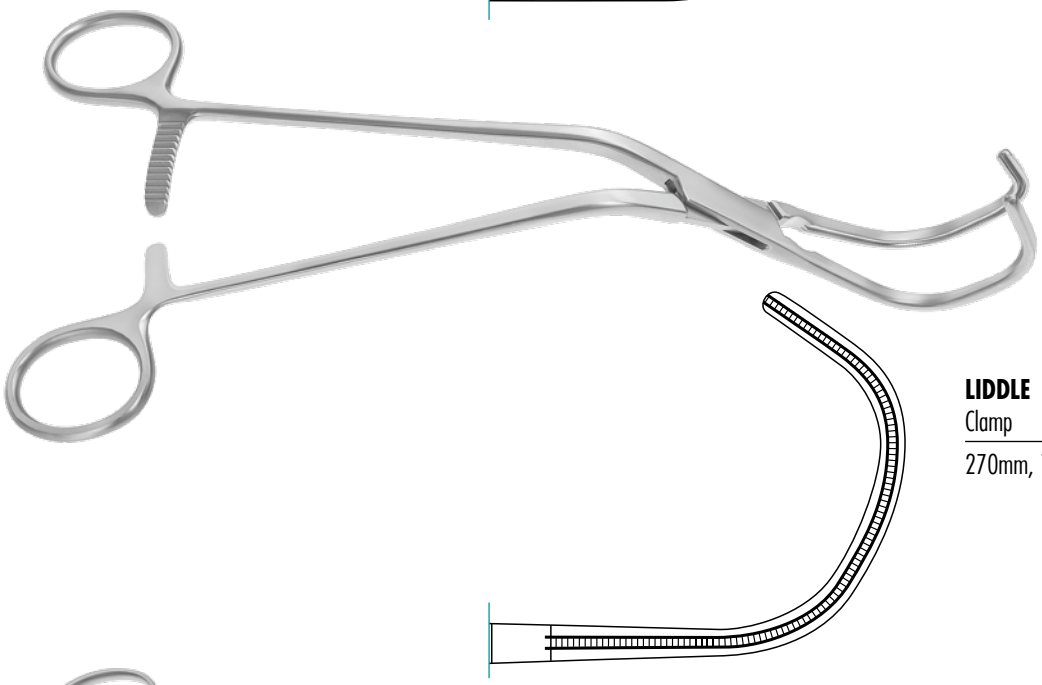
WEBER
Clamp, 260mm, $10^{1/4}$"

curved left	290-424-001
curved right	290-424-002



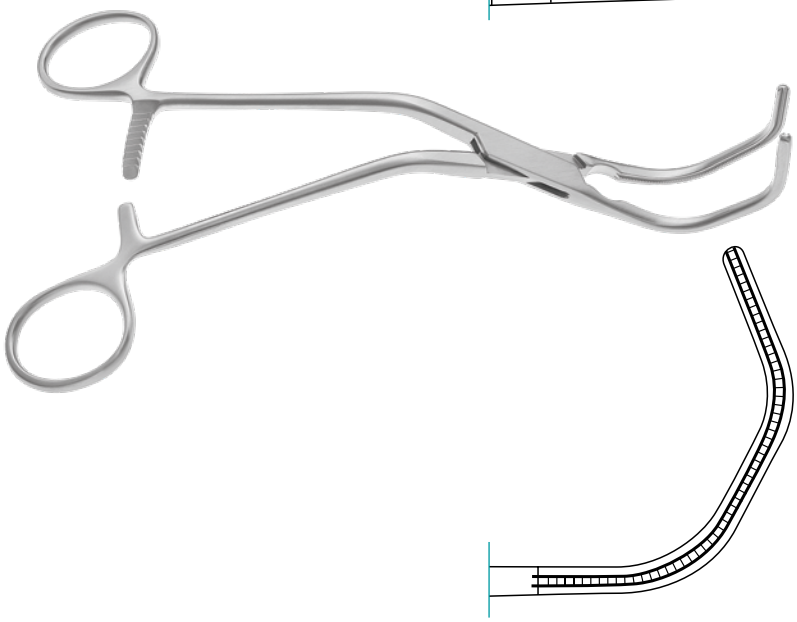
OCHSNER
Clamp

235mm, $9^{1/4}$"	290-317-230



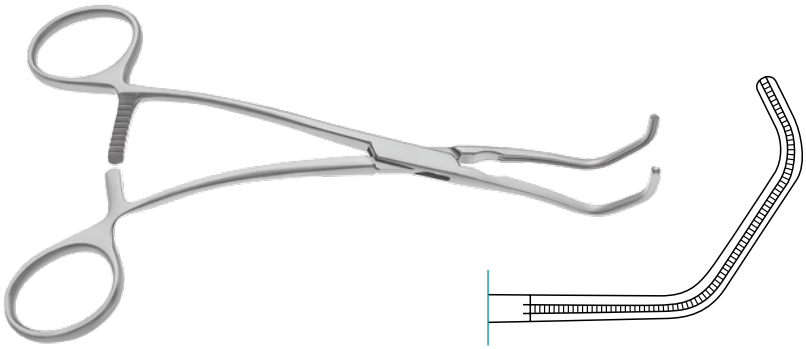
LIDDLE
Clamp

270mm, $10^{2/3}$"	290-318-270



DIETHRICH
Clamp

210mm, $8^{1/4}$"	290-319-210



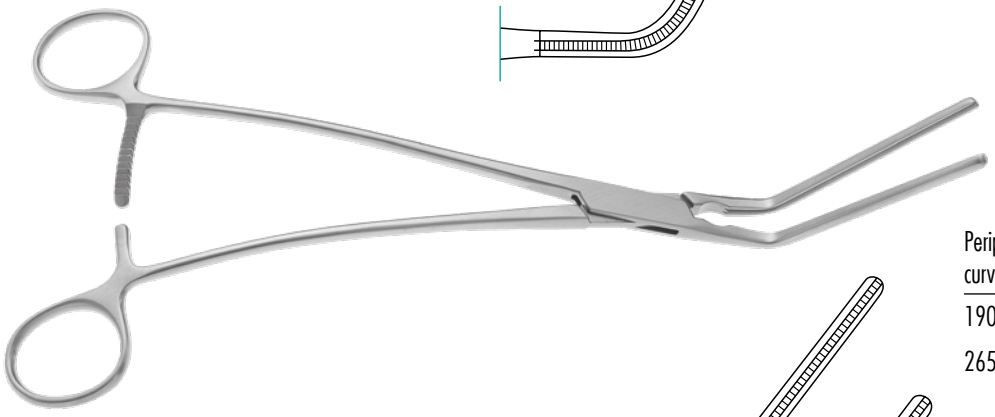
HONGKONG DERRA
Vascular Clamp

170mm, $6^{2/3}$"	290-432-170



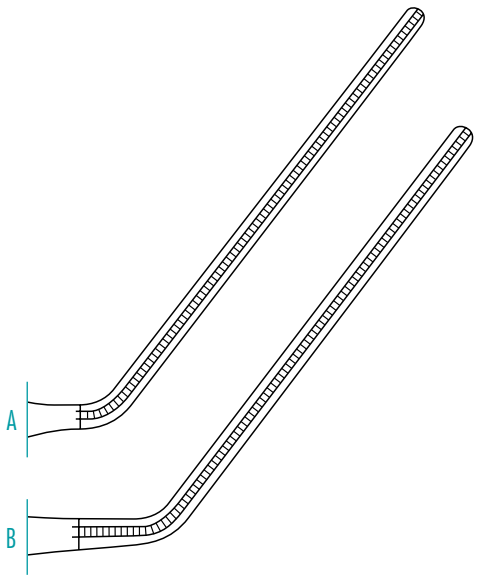
BEIJING SATINSKY
Vascular Clamp

225mm, $8^{7/8}$"	290-425-220

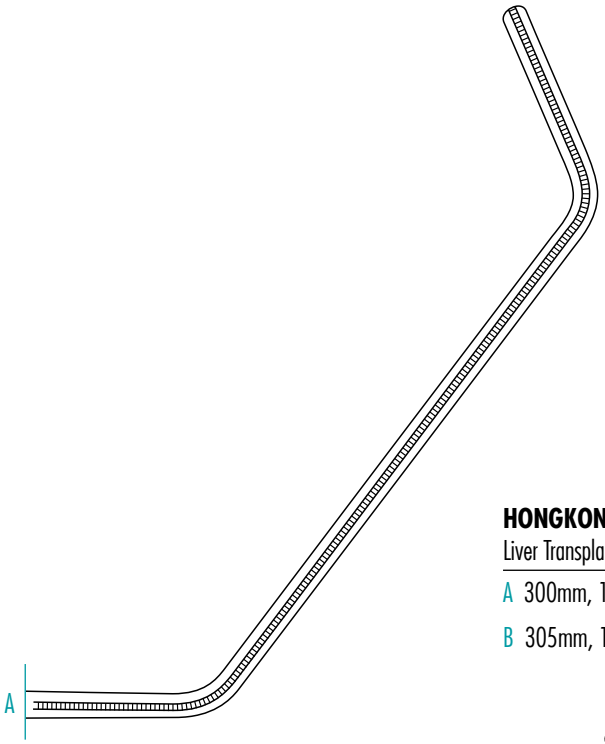


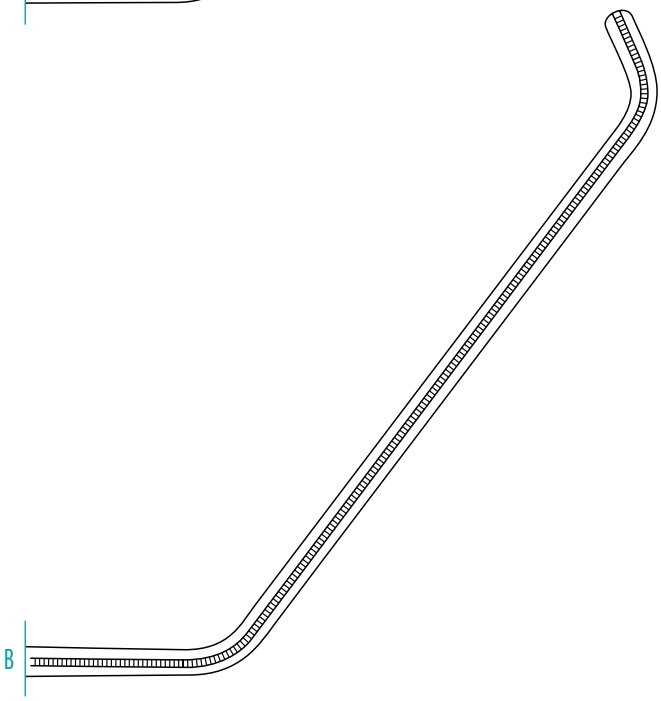
Peripheral Vascular Clamp
curved shanks, angled jaw

190mm, $7^{1/2}$"	290-402-190
265mm, $10^{1/2}$"	290-402-260



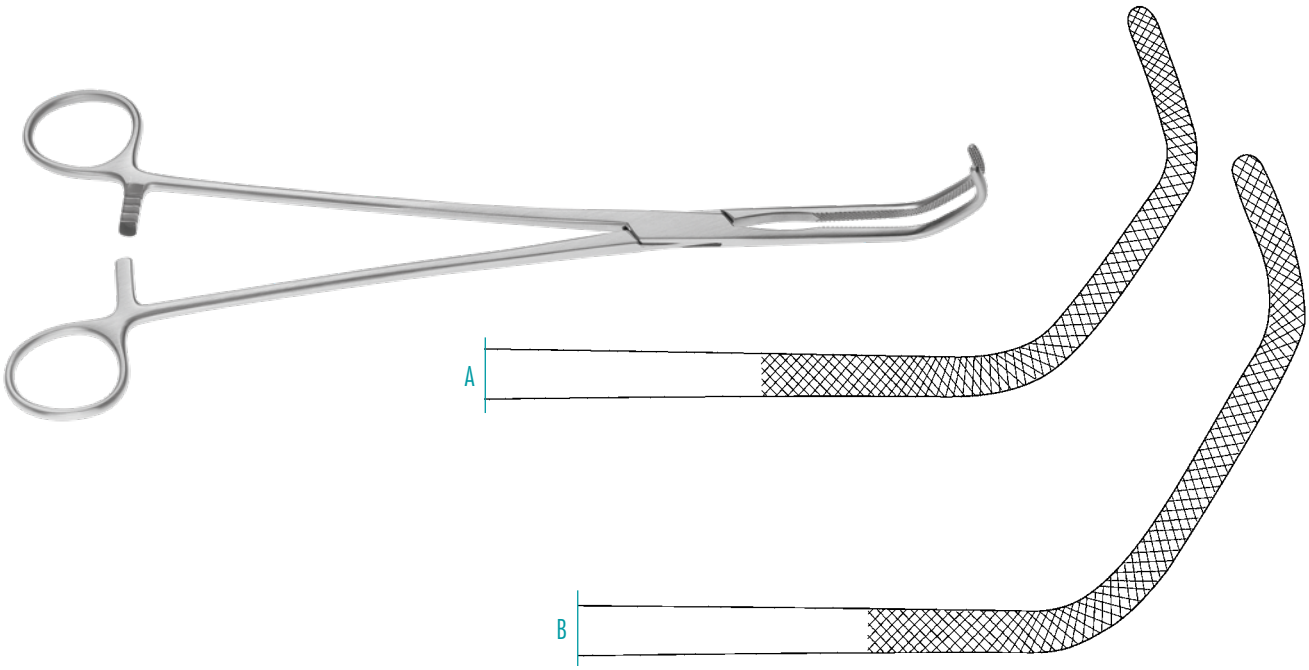






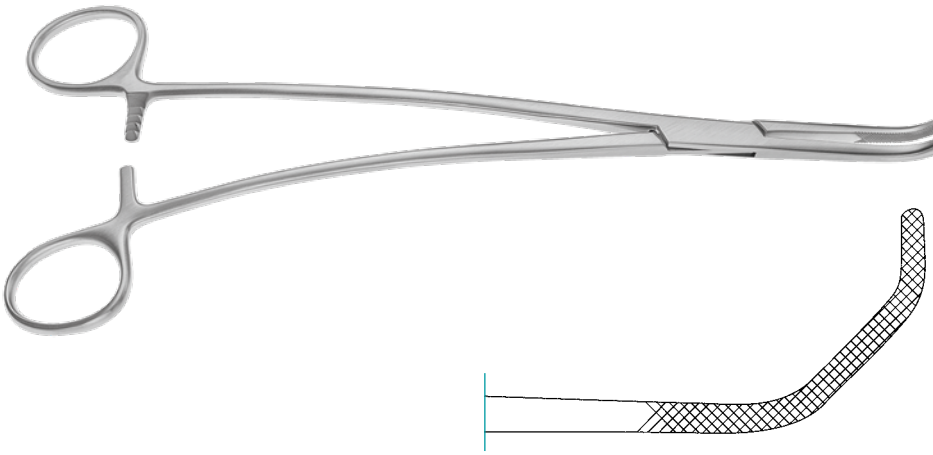
HONGKONG SATINSKY
Liver Transplant Clamp

A	300mm, 11 7/8"	290-426-300
B	305mm, 12"	290-426-305



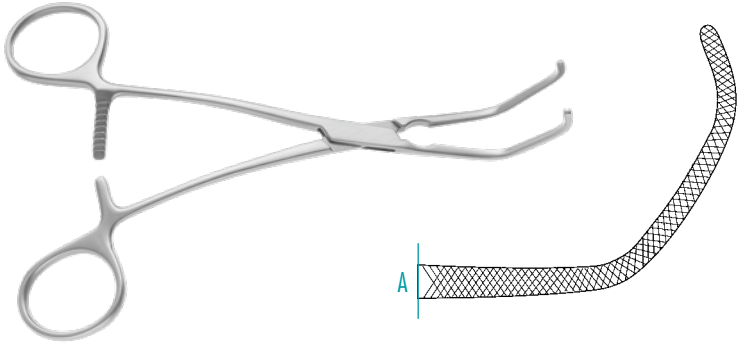
SATINSKY
Anastomosis Clamp, 260mm, 10 1/4"

A Fig. 1	290-321-260
B Fig. 2	290-323-260



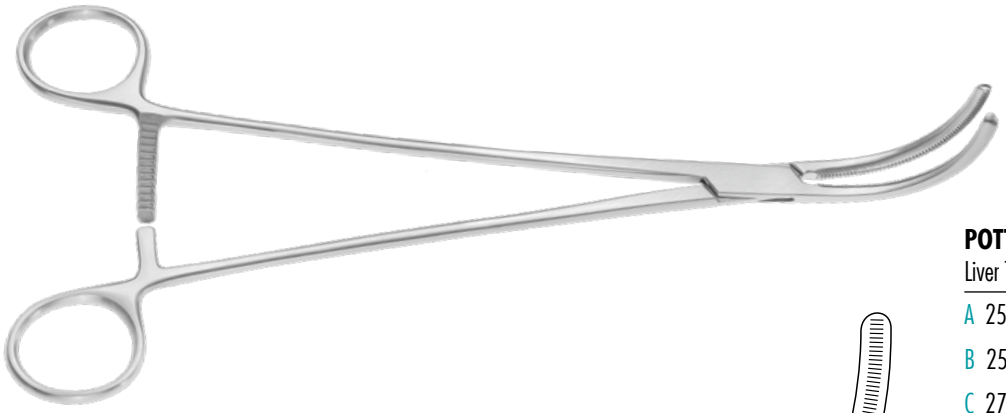
SATINSKY
Clamp S, Fig. 1

265mm, 10 1/2"	290-325-260



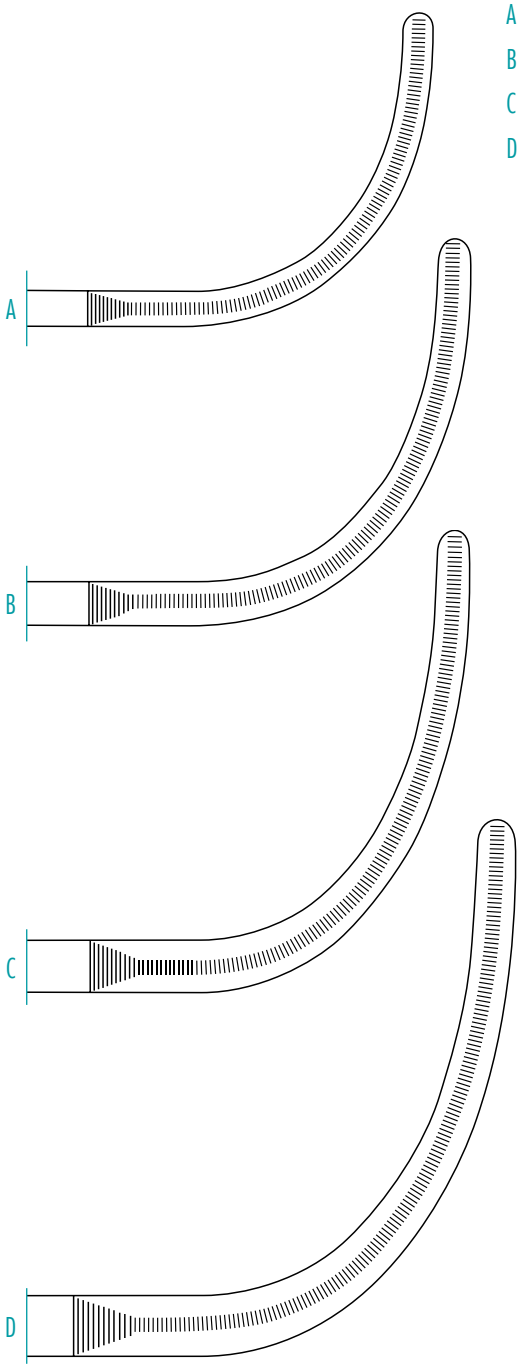
SATINSKY
Anastomosis Clamps, curved

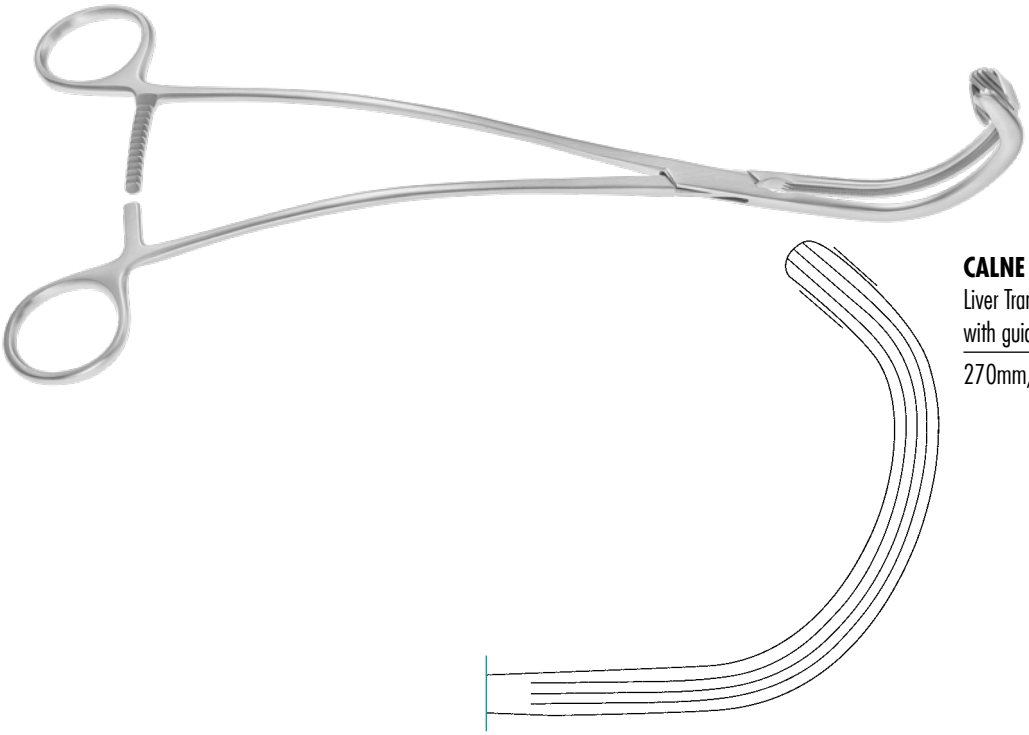
150mm, 6"	290-331-150



POTTS
Liver Transplant Clamp

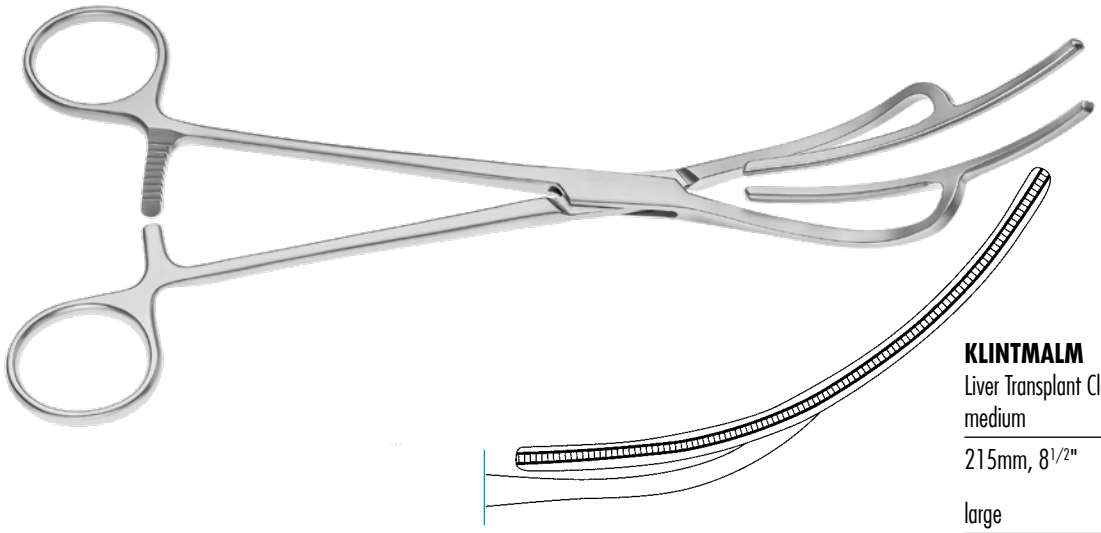
A	255mm, 10"	290-755-255
B	255mm, 10"	290-756-255
C	270mm, 10 2/3"	290-757-270
D	280mm, 11"	290-758-280





CALNE
Liver Transplant Clamp
with guide lock, DeBakey jaws

270mm, $10^{2/3}$"	290-418-270

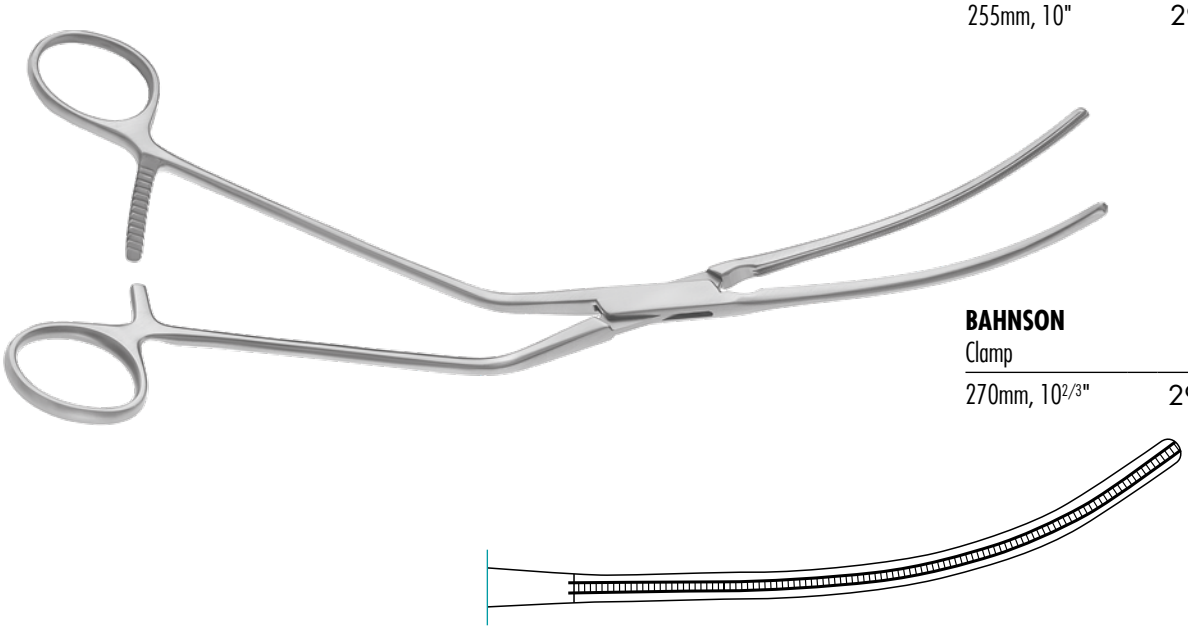


KLINTMALM
Liver Transplant Clamp
medium

215mm, $8^{1/2}$"	290-680-215

large

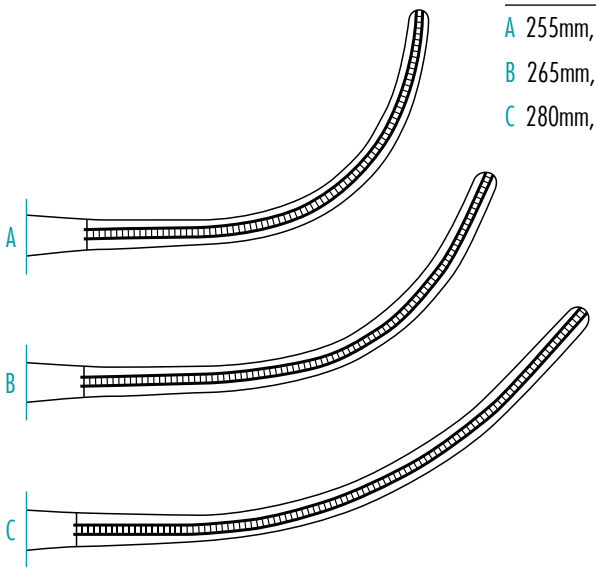
255mm, 10"	290-695-255



BAHNSON
Clamp

270mm, $10^{2/3}$"	290-418-280

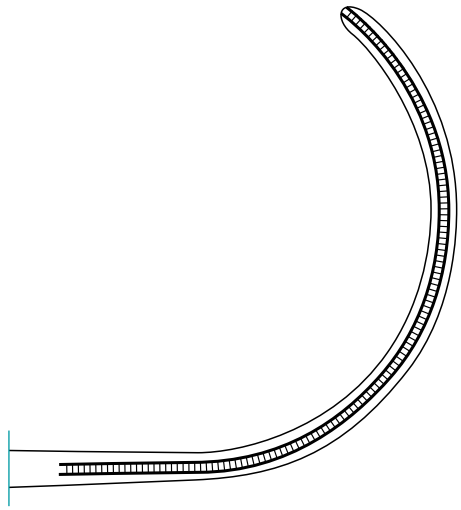




DEBAKEY BAHNSON
Clamp

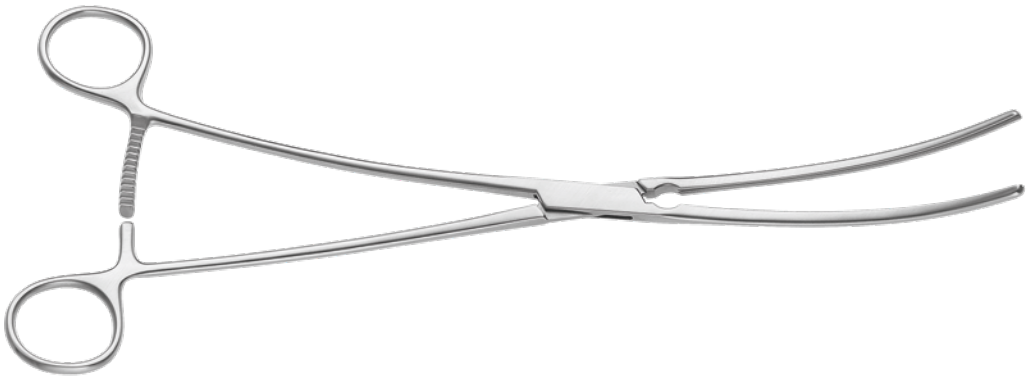
A	255mm, 10"	290-433-230
B	265mm, 10 1/2"	290-433-250
C	280mm, 11"	290-433-270



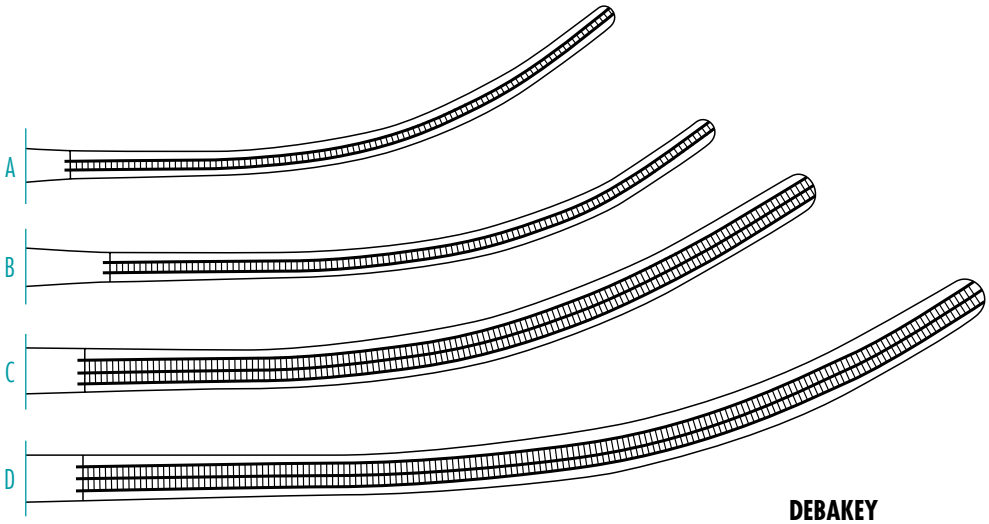


DEBAKEY
Clamp

	260mm, 10 1/4"	290-423-260







DEBAKEY

Clamp, c-curved,
1x2 teeth

A 260mm, 10 1/4"	290-417-260
B 270mm, 10 2/3"	290-417-300

2x3 teeth

C 310mm, 12 1/4"	290-418-310
D 335mm, 13"	290-418-330

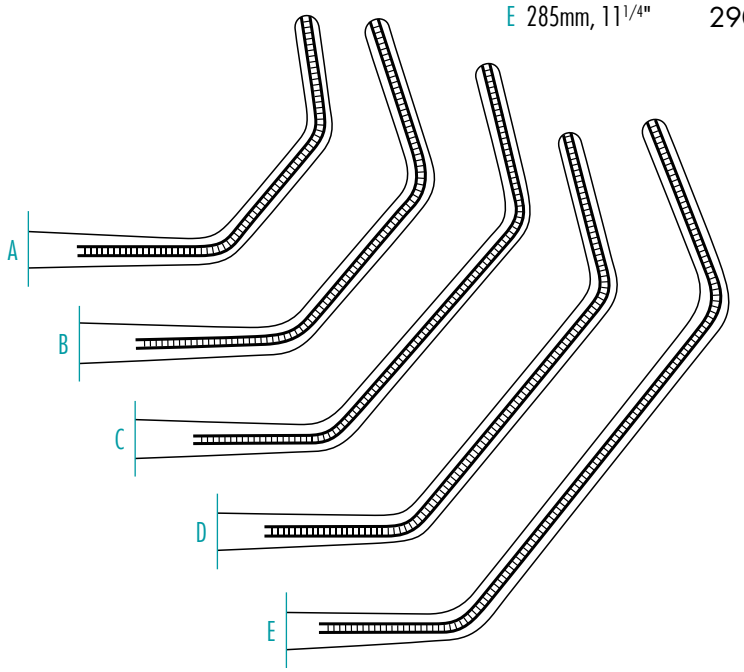
s-curved, 2x3 teeth

B 270mm, 10 2/3"	290-420-300



SATINSKY
Tangential Clamp

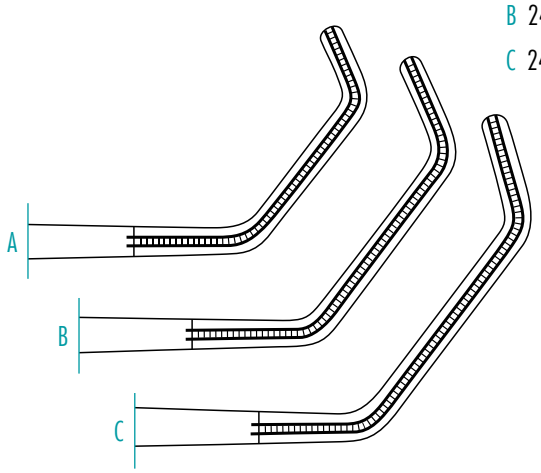
A	200mm, 8"	290-425-200
B	240mm, 9 1/2"	290-425-240
C	250mm, 9 7/8"	290-425-250
D	265mm, 10 1/2"	290-425-260
E	285mm, 11 1/4"	290-425-275

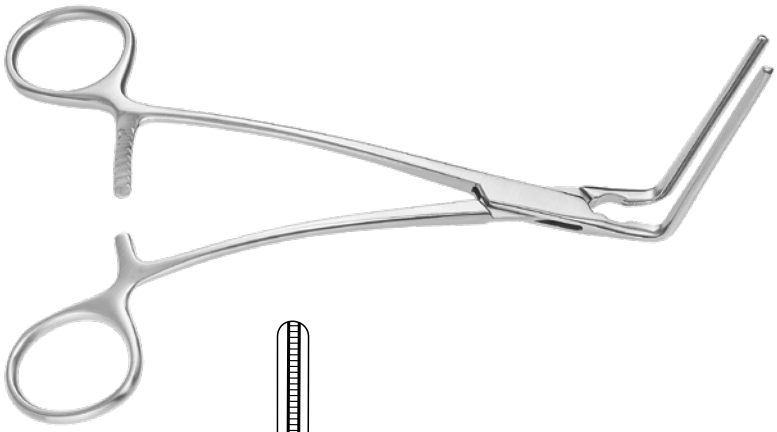




SATINSKY
Tangential Occlusion Clamp

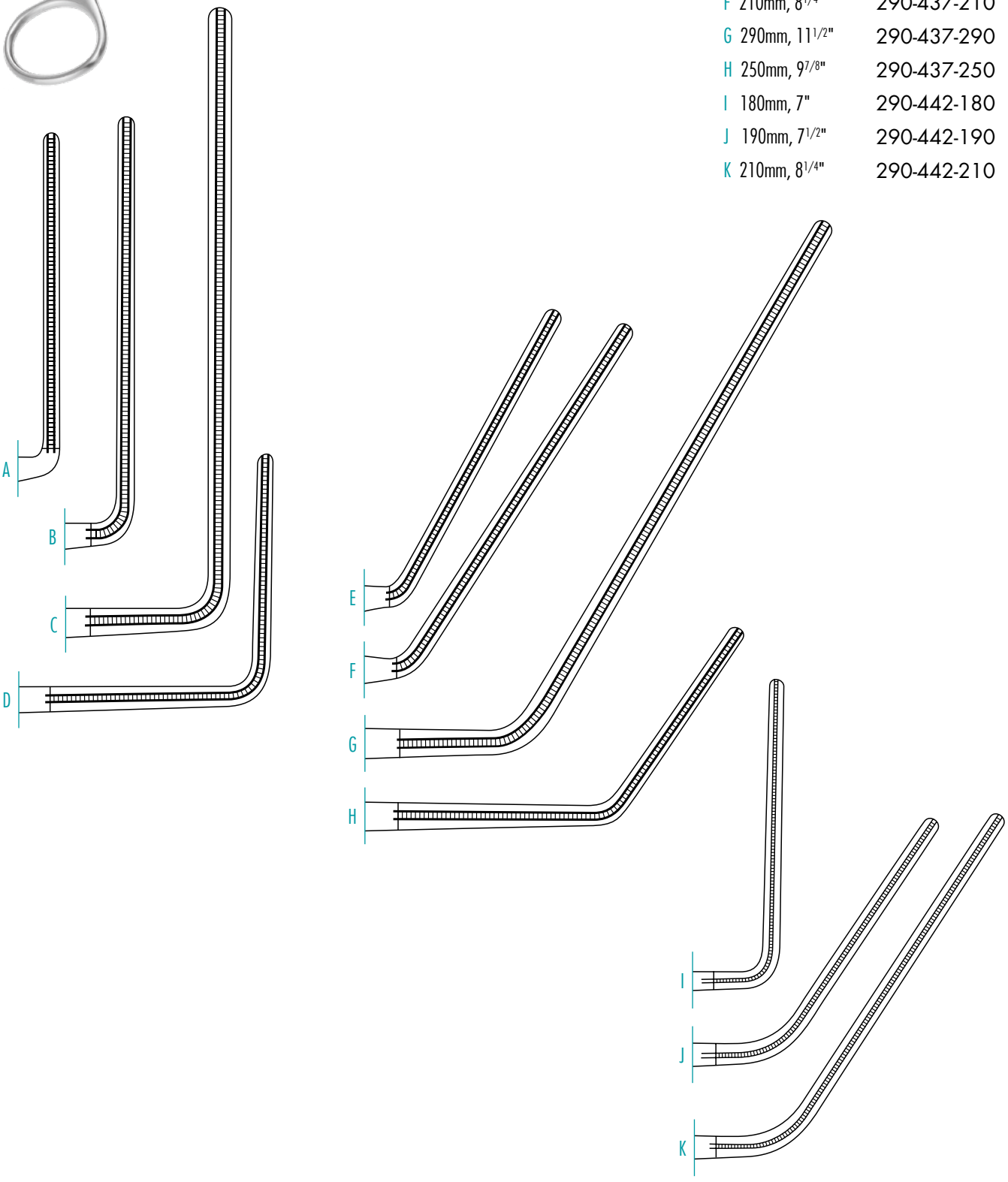
A	235mm, 9 1/4"	290-511-235
B	240mm, 9 1/2"	290-511-240
C	245mm, 9 2/3"	290-511-245

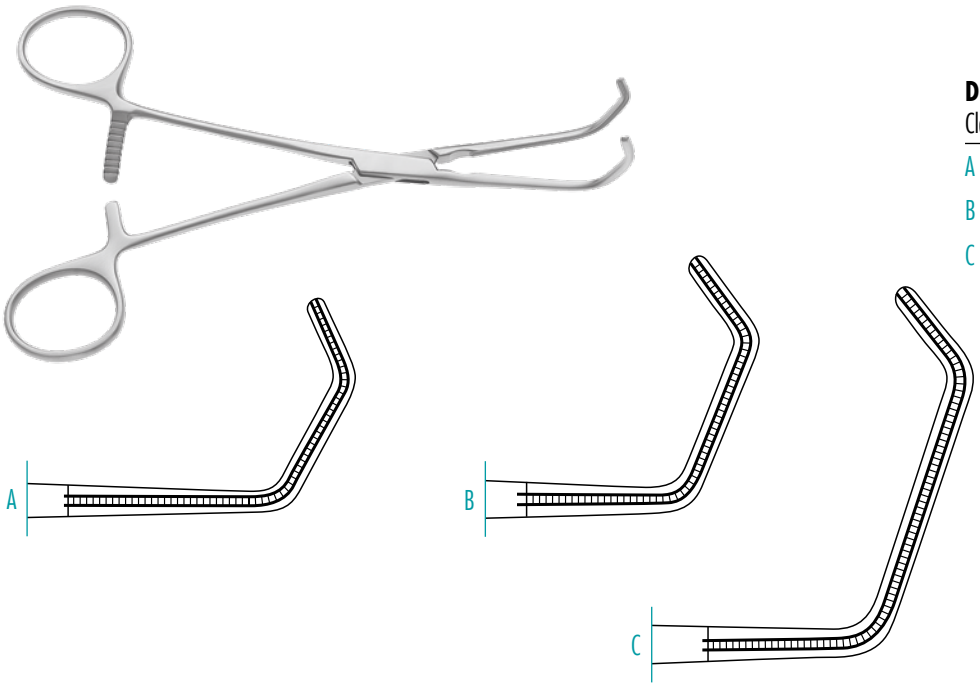




DEBAKEY
Multi-Purpose Clamps

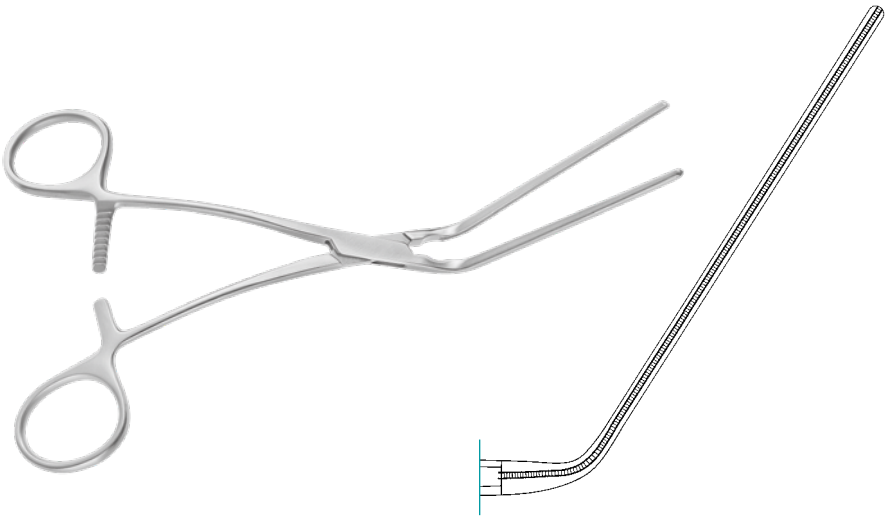
A	180mm, 7"	290-436-180
B	190mm, 7 1/2"	290-436-190
C	225mm, 8 7/8"	290-436-230
D	270mm, 10 2/3"	290-436-270
E	200mm, 8"	290-437-200
F	210mm, 8 1/4"	290-437-210
G	290mm, 11 1/2"	290-437-290
H	250mm, 9 7/8"	290-437-250
I	180mm, 7"	290-442-180
J	190mm, 7 1/2"	290-442-190
K	210mm, 8 1/4"	290-442-210





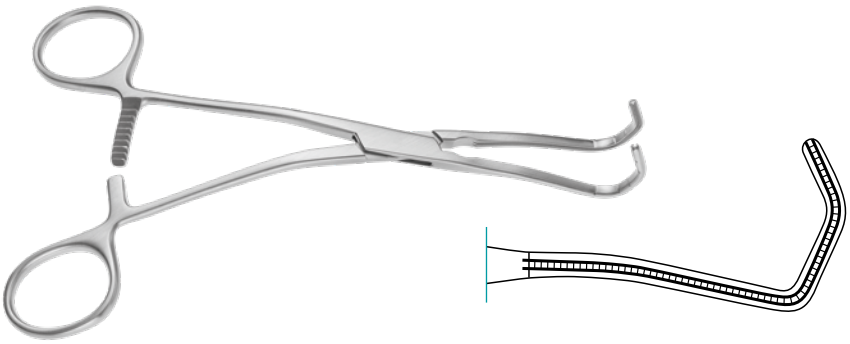
DEBAKEY BECK
Clamp

A 170mm, $6^{2/3}$"	290-457-170
B 195mm, $7^{3/4}$"	290-457-190
C 210mm, $8^{1/4}$"	290-457-210



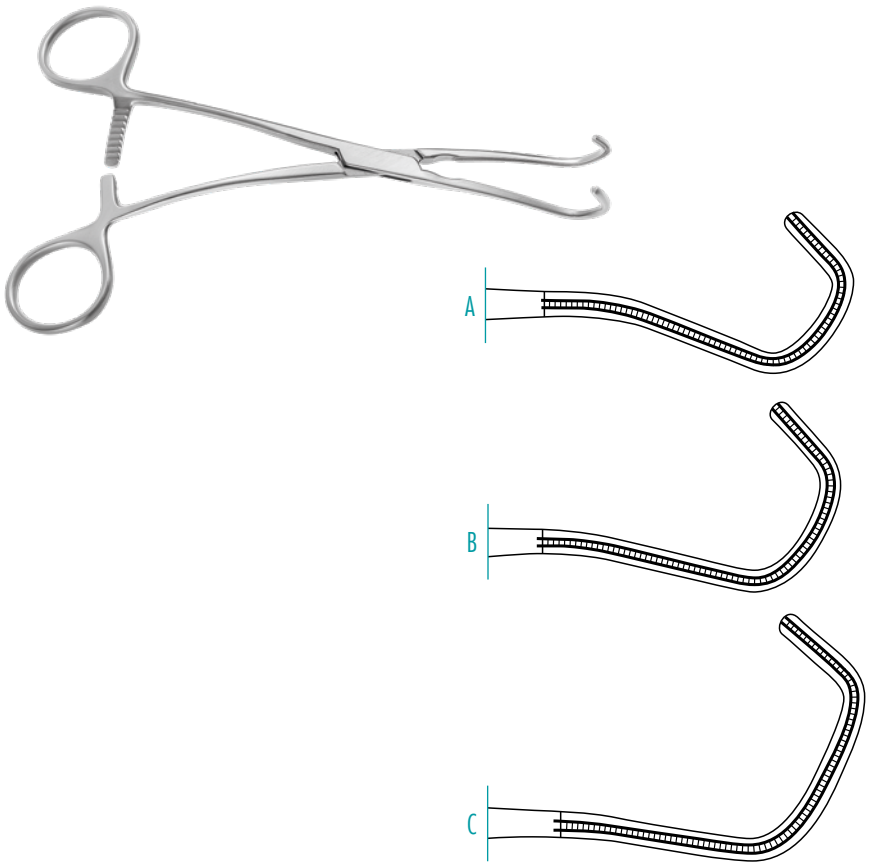
LELAND JONES
Peripheral Vascular Clamps,
shanks curved backwards,
60° angled backwards

180mm, 7"	290-413-180



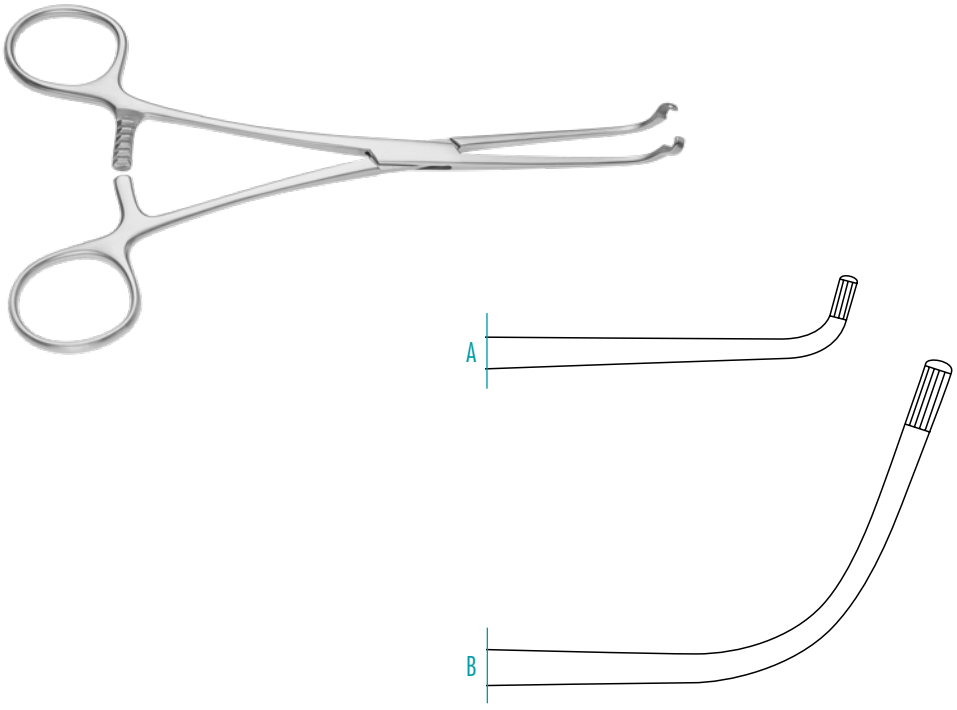
DEBAKEY
Anastomosis Clamp

170mm, $6^{2/3}$"	290-431-170



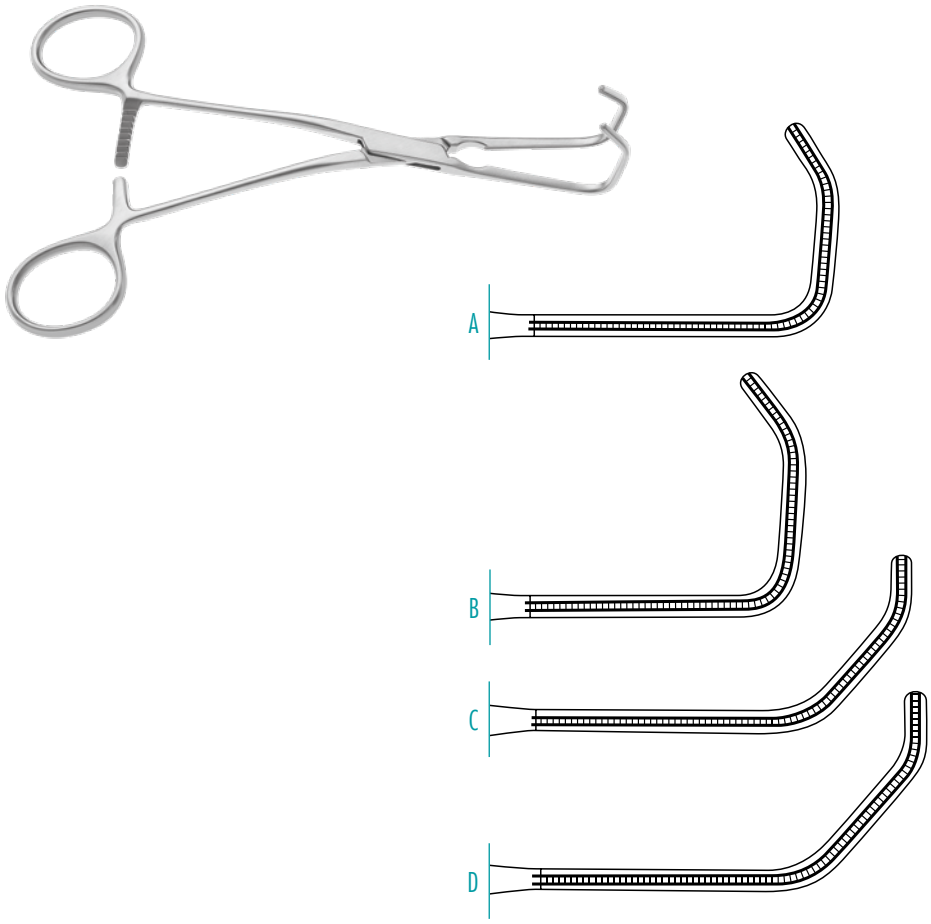
DEBAKEY DERRA
Anastomosis Clamp

A 160mm, $6^{1/4}$"	290-456-160
B 170mm, $6^{2/3}$"	290-456-170
C 180mm, 7"	290-456-180



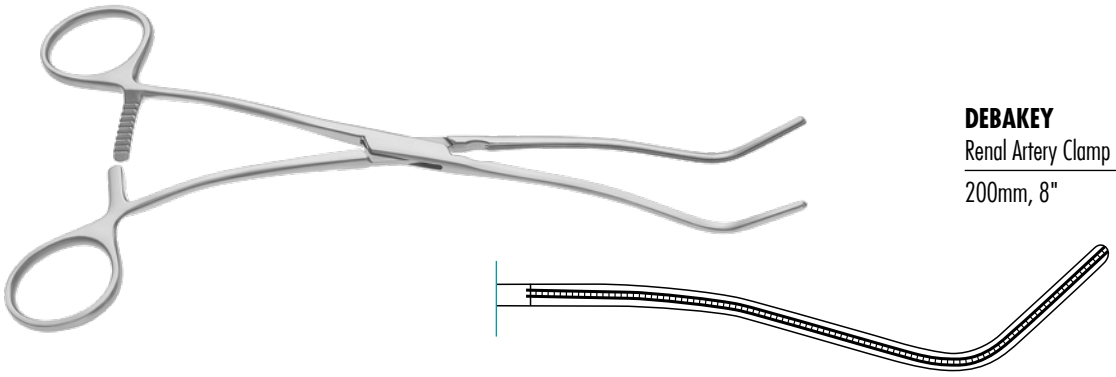
JAVID
Clamp, 180mm, 7"

A	290-343-180
B	290-343-190



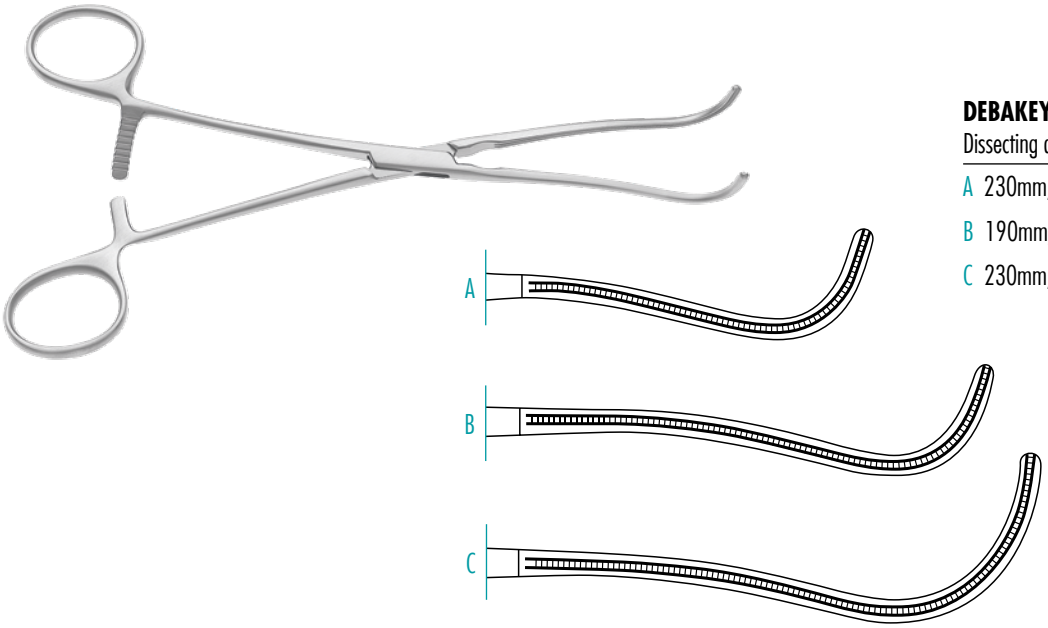
DEBAKEY REYNOLDS
Anastomosis Clamp

A	165mm, 6 1/2", small	290-429-001
B	165mm, 6 1/2", large	290-429-002
C	180mm, 7", small	290-429-003
D	180mm, 7", large	290-429-004



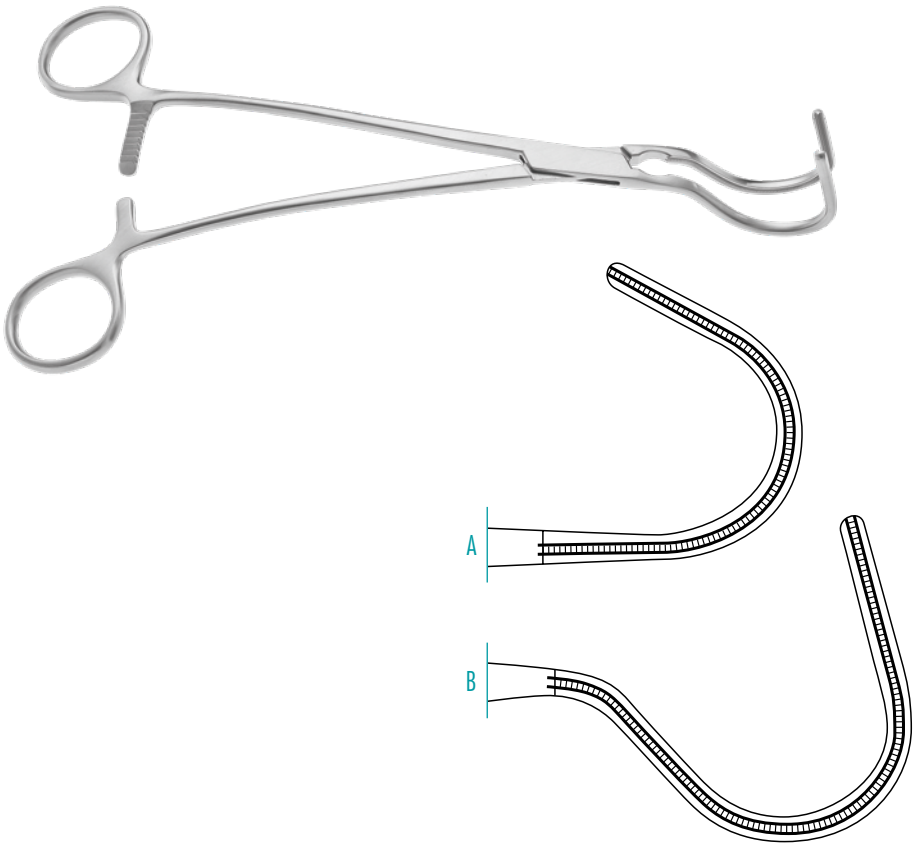
DEBAKEY
Renal Artery Clamp

200mm, 8"	290-416-200



DEBAKEY
Dissecting and Ligature Forceps

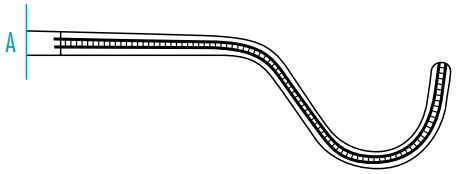
A	230mm, 9"	290-409-230
B	190mm, 7 1/2"	290-408-190
C	230mm, 9"	290-408-230

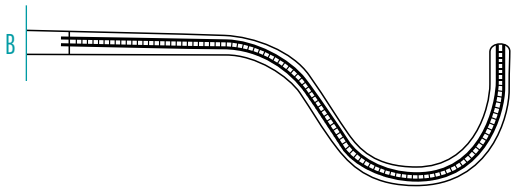


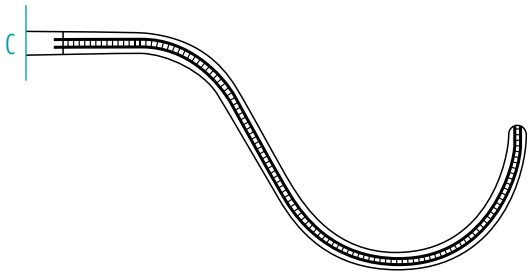
WYLIE
Vascular Clamp

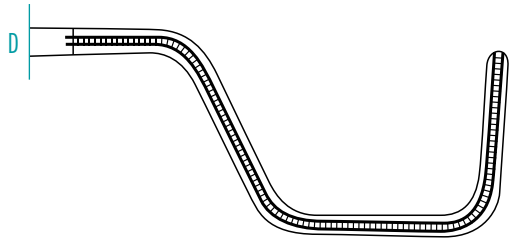
A	210mm, 8 1/4"	290-453-210
B	220mm, 8 2/3"	290-453-220





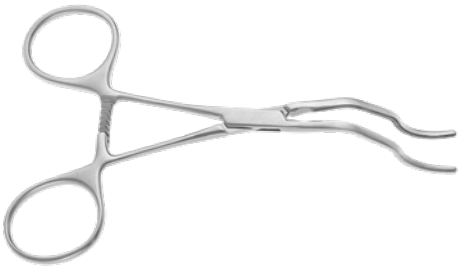






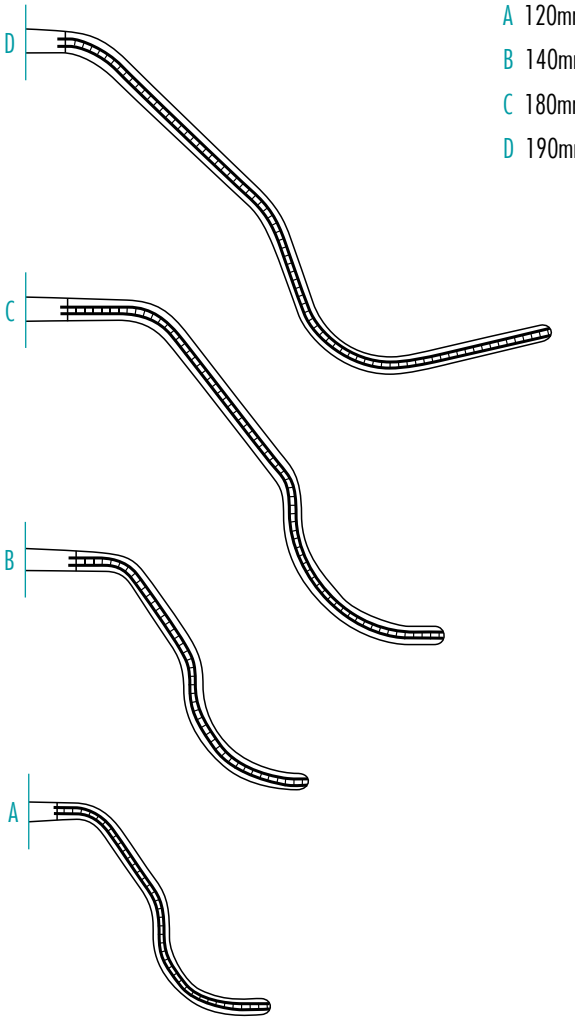
DALE
Peripheral Vascular Clamp

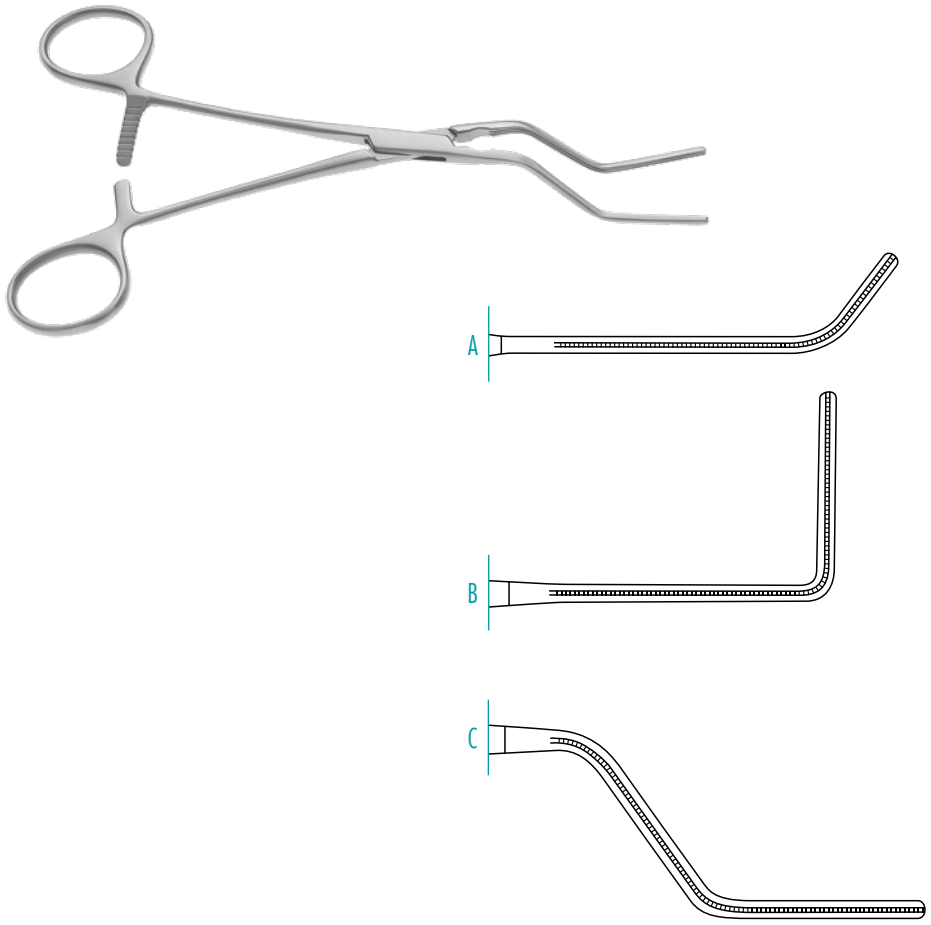
A	170mm, $6^{2/3}$"	290-341-170
B	180mm, 7"	290-341-180
C	185mm, $7^{1/4}$"	290-341-190
D	180mm, 7"	290-340-180



GREGORY
Profunda Clamp

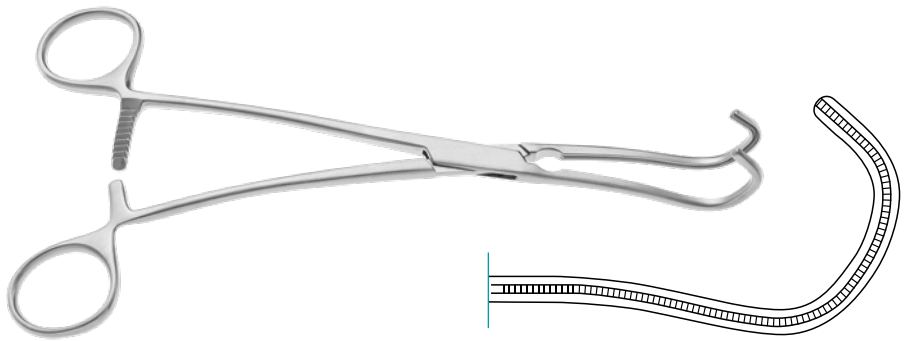
A 120mm, 4 3/4"	290-342-120
B 140mm, 5 1/2"	290-342-140
C 180mm, 7"	290-342-160
D 190mm, 7 1/2"	290-342-180





HUSFELDT
Carotid Profunda Clamp

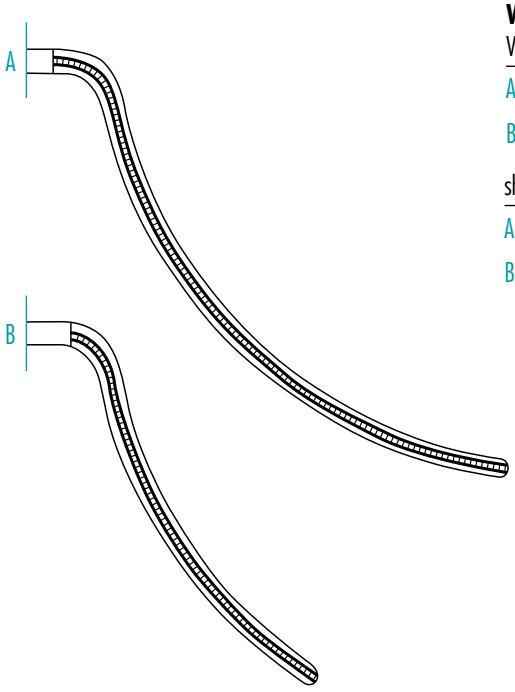
A	180mm, 7"	290-594-175
B	170mm, $6^{2/3}$"	290-594-170
C	180mm, 7"	290-594-180

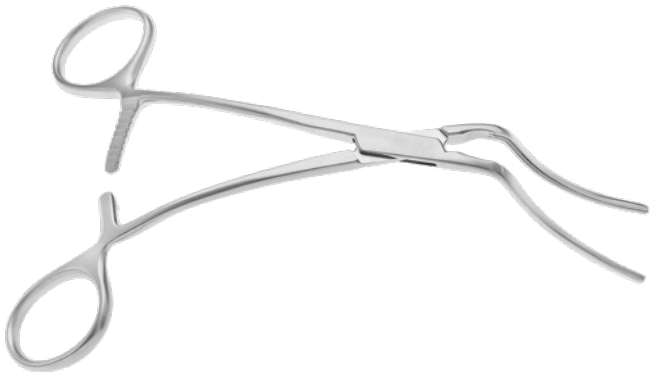


MITCHELL
Clamp

	200mm, 8"	290-424-200







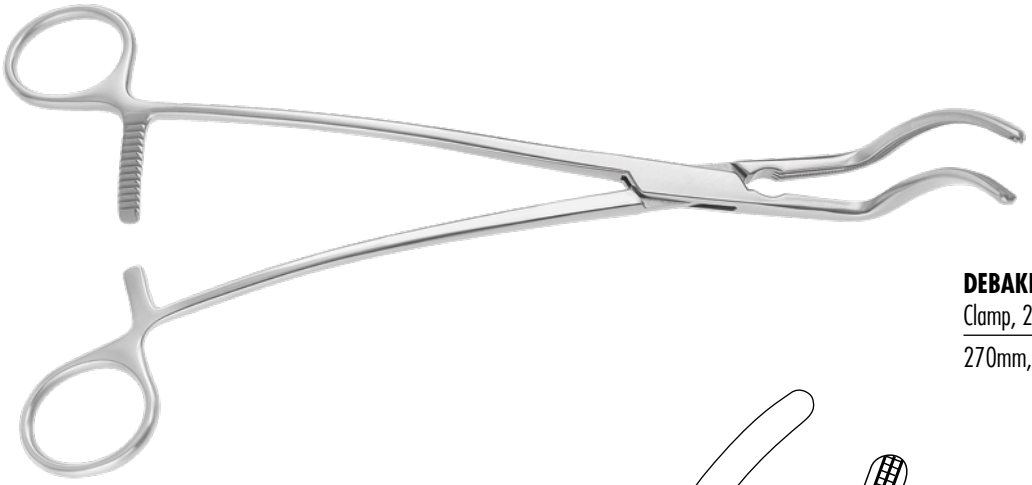
WYLIE

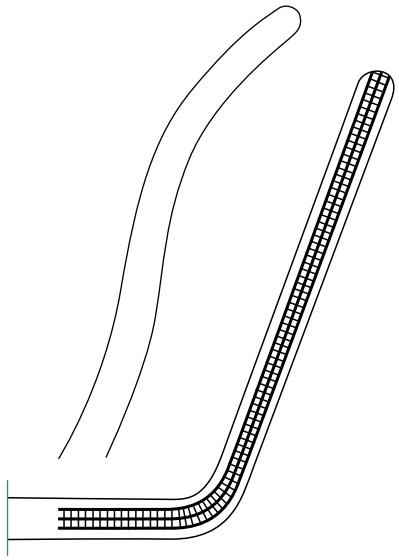
Vascular Clamps, shanks curved up

A	160mm, $6^{1/4}$"	290-344-160
B	180mm, 7"	290-344-180

shanks curved down

A	170mm, $6^{2/3}$"	290-344-170
B	200mm, 8"	290-344-200





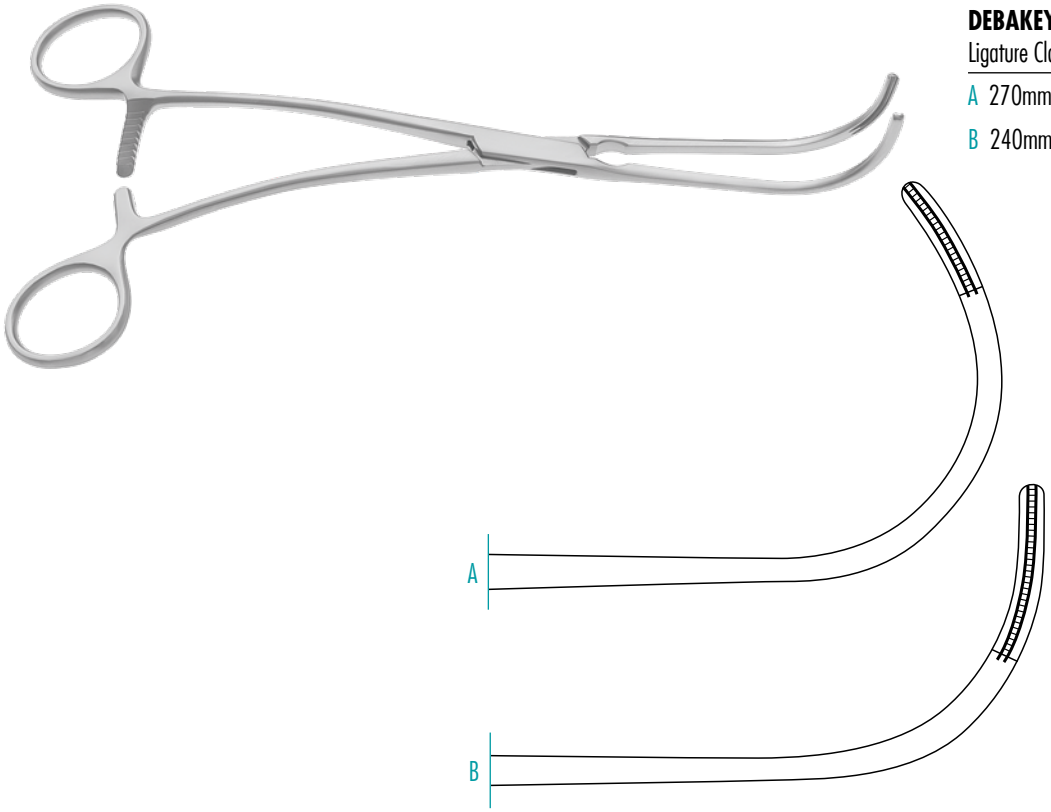
DEBAKEY
Clamp, 2x3 teeth

270mm, $10^{2/3}$"	290-420-270



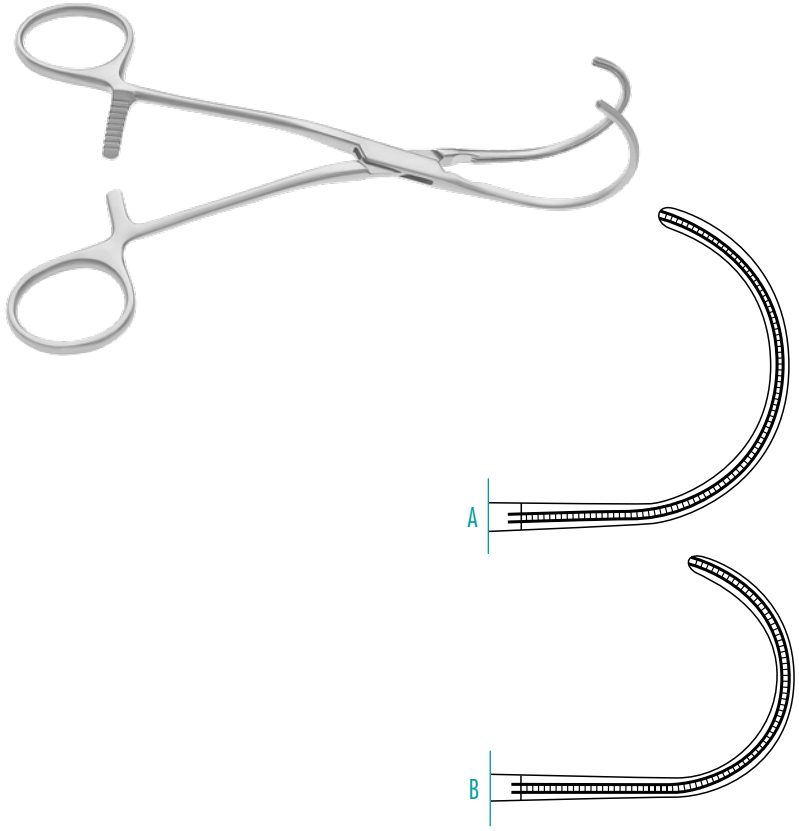
GRANT
Abdominal Clamp, 2x3 teeth

245mm, $9^{2/3}$"	290-431-230



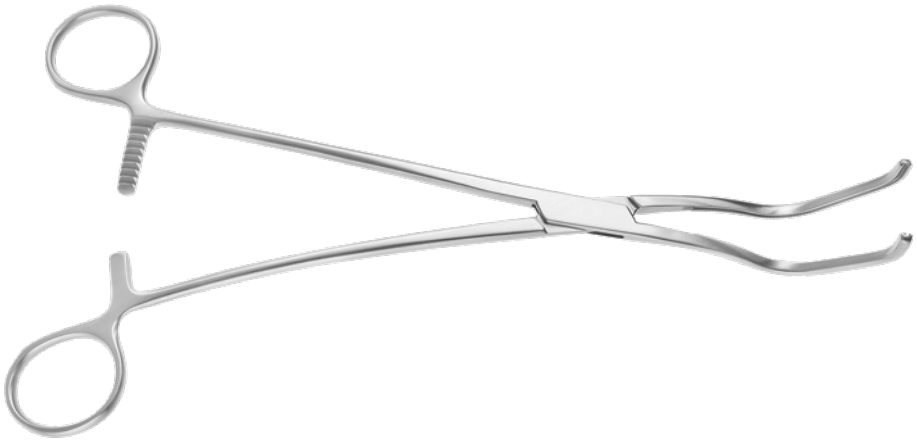
DEBAKEY
Ligature Clamp

A 270mm, $10^{2/3}$"	290-423-250
B 240mm, $9^{1/2}$"	290-421-240



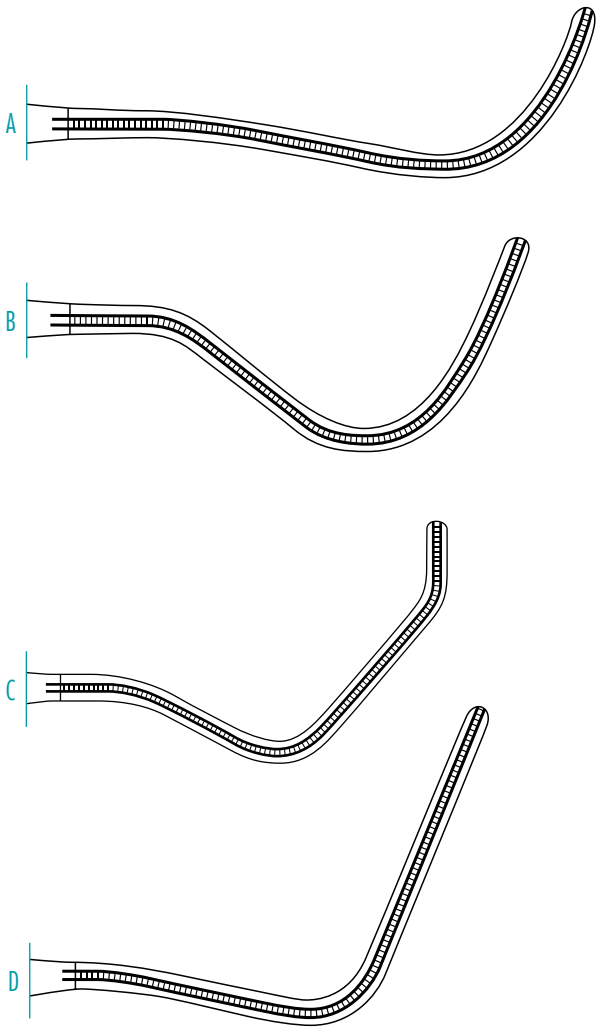
DEBAKEY
Ligature Clamp

A 160mm, $6^{1/4}$"	290-455-170
B 160mm, $6^{1/4}$"	290-453-160

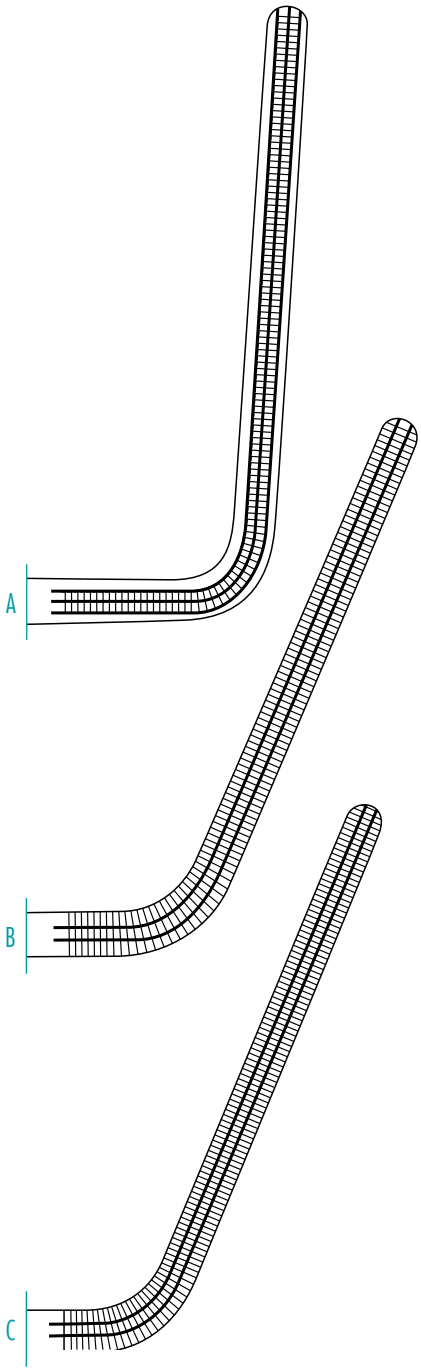


DEBAKEY HARKEN
Auricle Clamp, 240mm, 9 1/2"

A Fig. 1	290-426-001
B Fig. 2	290-426-002
C Fig. 3	290-426-003
D Fig. 4	290-426-004







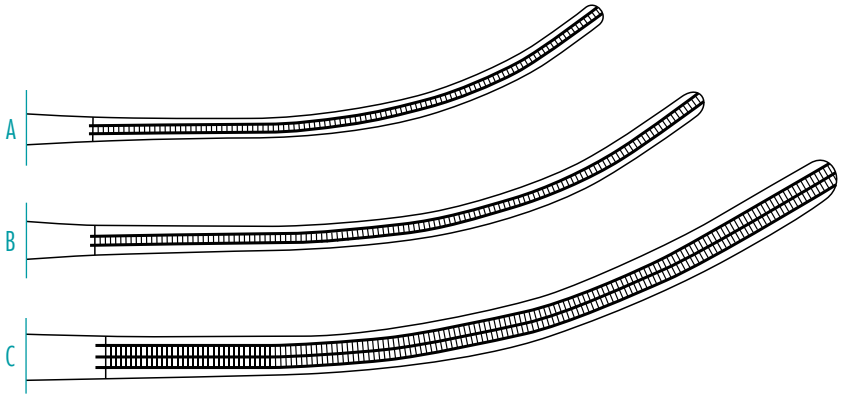
MORRIS
Clamp, 2x3 teeth

A 230mm, 9"	290-432-230
B 250mm, 9 7/8"	290-432-250
C 200mm, 8"	290-432-200



ZANGER
Abdominal Clamp

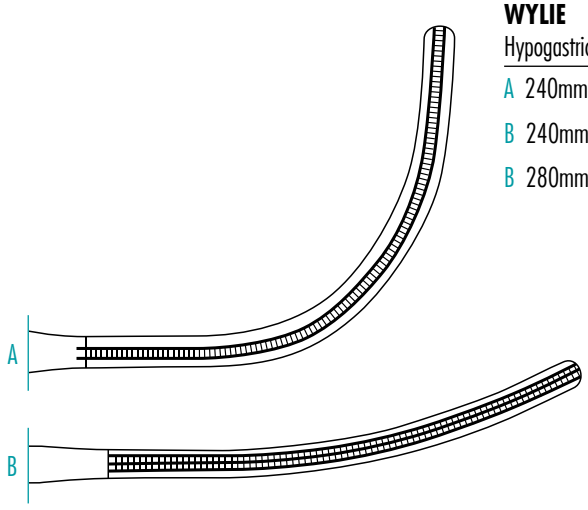
A	215mm, 8 1/2" 1x2 teeth	290-413-220
B	250mm, 9 7/8" 1x2 teeth	290-413-250
C	305mm, 12" 2x3 teeth	290-414-310

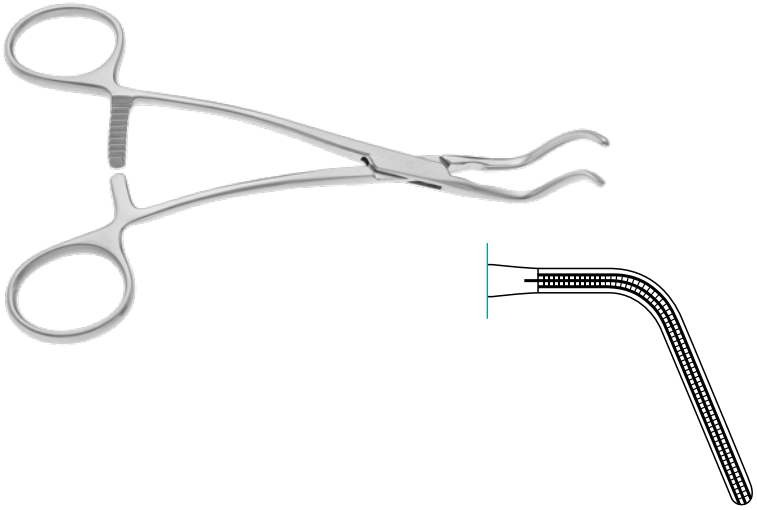




WYLIE
Hypogastric and Abdominal Clamp

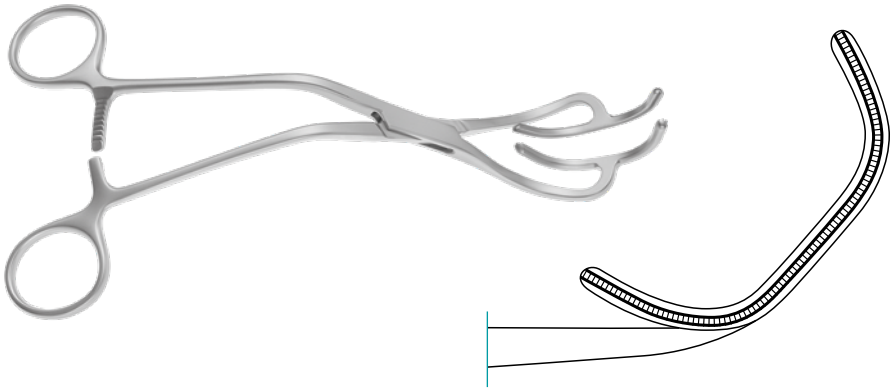
A	240mm, 9 1/2"	290-454-260
B	240mm, 9 1/2"	290-454-240
B	280mm, 11"	290-454-280





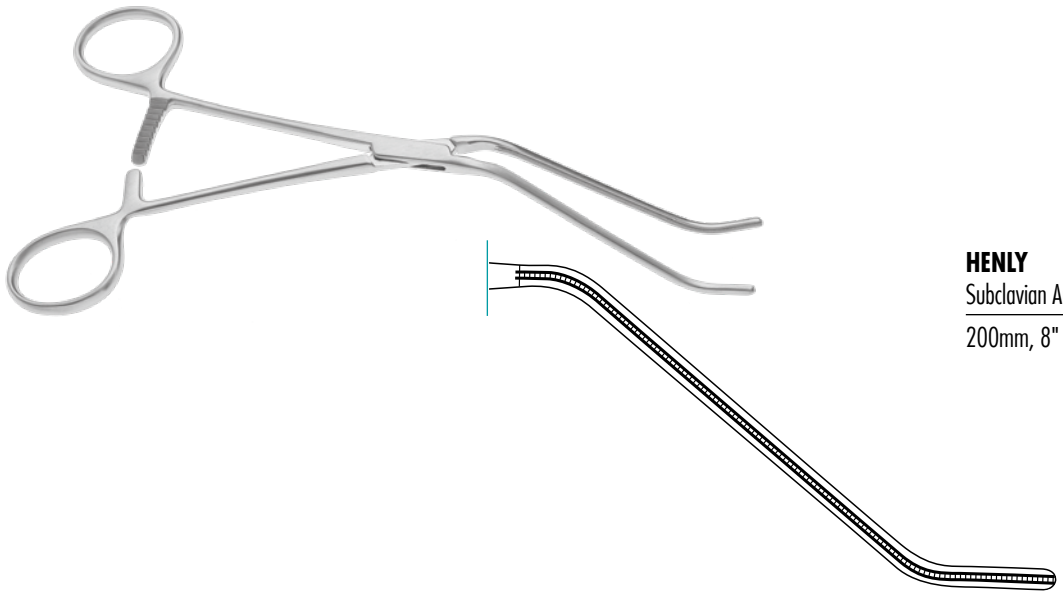
SUBRAMANIAN
Miniature Clamp

160mm, 6 1/4"	290-559-150



STRONG
Clamp, 175mm, 6 7/8"

41x16mm jaw	290-175-410
45x23mm jaw	290-175-450

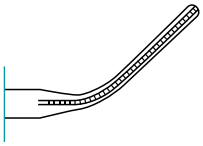


HENLY
Subclavian Artery Clamp

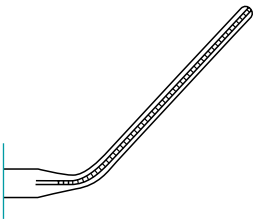
200mm, 8"	290-460-200



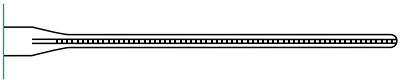
DEBAKEY EXTRA FINE
Pediatric Vessel Clamp



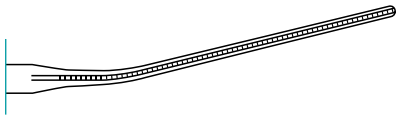
Angled shanks 45°
105mm, 4 1/8" 290-599-001



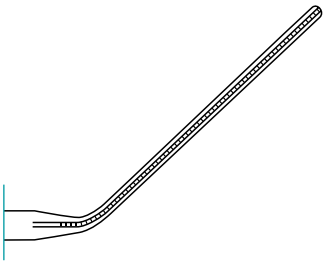
Angled shanks 45°
125mm, 5" 290-599-002



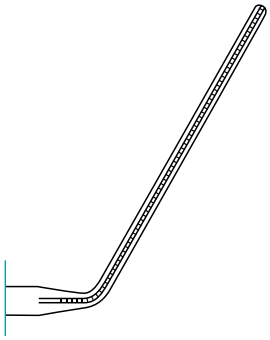
Straight shanks
140mm, 5 1/2" 290-599-003



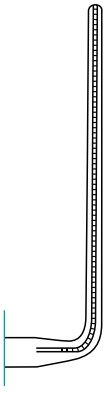
Curved shanks 15°
140mm, 5 1/2" 290-599-004



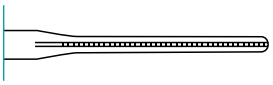
Curved shanks 45°
140mm, 5 1/2" 290-599-005



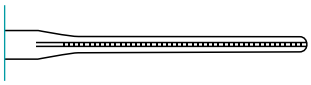
Angled shanks 90°
140mm, 5 1/2" 290-599-006



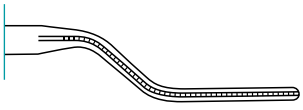
Angled shanks 90°
140mm, 5 1/2" 290-599-007



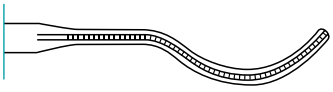
Straight shanks
155mm, 6 1/8" 290-599-008



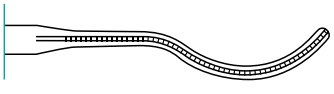
20° angled shanks
155mm, 6 1/8" 290-599-009



Curved shanks
150mm, 6" 290-599-010



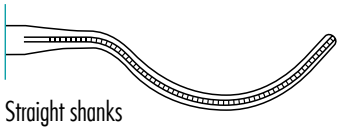
Straight shanks
150mm, 6" 290-599-011



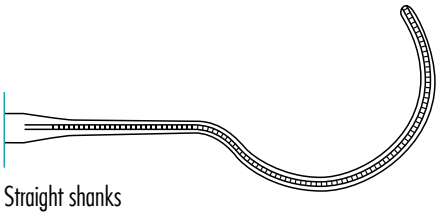
Angled shanks
145mm, 5 3/4" 290-599-012



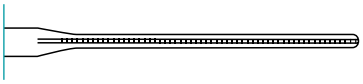
DEBAKEY EXTRA FINE
Pediatric Vessel Clamp



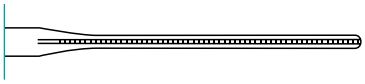
Straight shanks
155mm, 6 1/8" 290-599-013



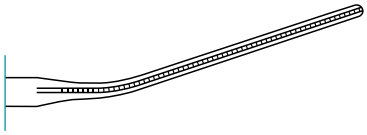
Straight shanks
170mm, 6 3/4" 290-599-014



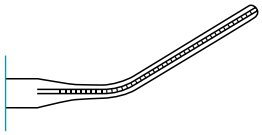
Straight shanks
165mm, 6 1/2" 290-599-015



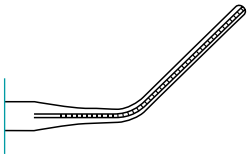
Angled shanks
165mm, 6 1/2" 290-599-016



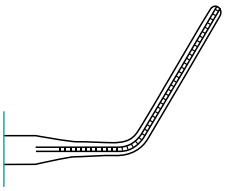
Straight shanks, 15°
155mm, 6 1/8" 290-599-017



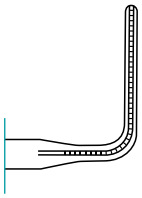
Straight shanks, 30°
145mm, 5 3/4" 290-599-018



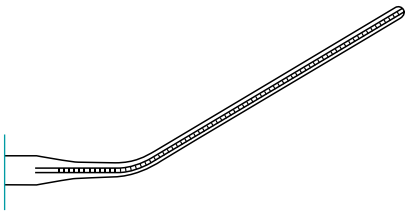
Straight shanks, 45°
145mm, 5 3/4" 290-599-019



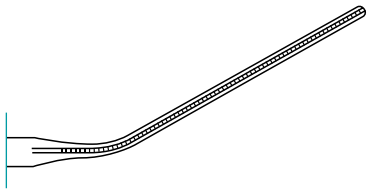
Straight shanks, 60°
145mm, 5 3/4" 290-599-020



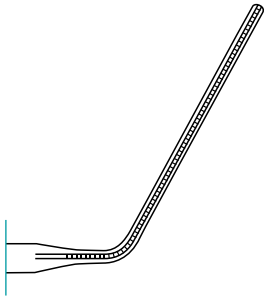
Straight shanks, 90°
140mm, 5 1/2" 290-599-021



Curved shanks, 30°
160mm, 6 1/4" 290-599-022



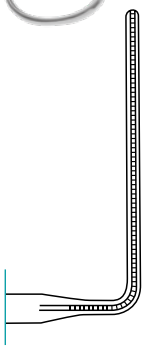
Curved shanks, 45°
160mm, 6 1/4" 290-599-023



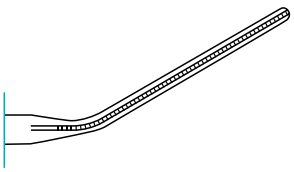
Curved shanks, 60°
145mm, 5 3/4" 290-599-024



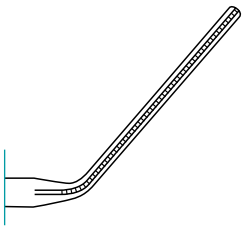
DEBAKEY EXTRA FINE
Pediatric Vessel Clamp



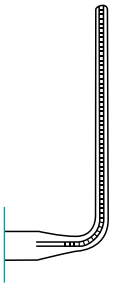
Curved shanks, 90°
130mm, $5^{1/8}$" 290-599-025



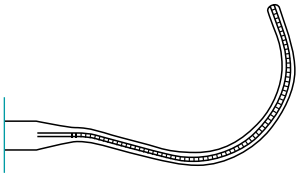
Straight shanks, 30°
120mm, $4^{3/4}$" 290-599-026



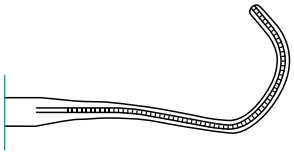
Straight shanks, 50°
120mm, $4^{3/4}$" 290-599-027



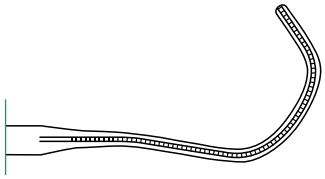
Straight shanks, 90°
105mm, $4^{1/8}$" 290-599-028



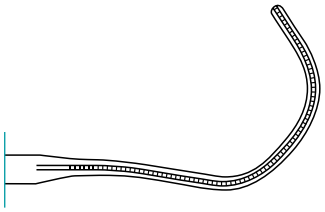
Curved shanks
120mm, $4^{3/4}$" 290-599-029



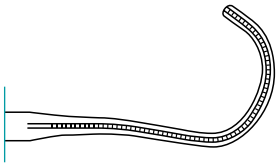
Curved shanks
145mm, $5^{3/4}$" 290-599-030



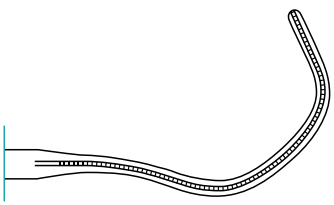
Curved shanks
145mm, $5^{3/4}$" 290-599-031



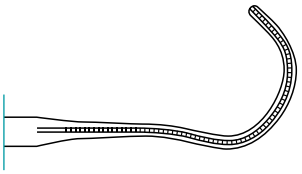
Curved shanks
160mm, $6^{1/4}$" 290-599-032



Angled shanks
115mm, $4^{1/2}$" 290-599-034



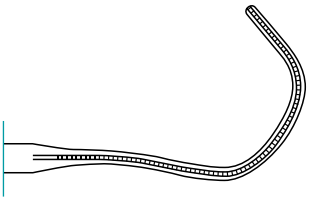
Angled shanks
150mm, 6" 290-599-035



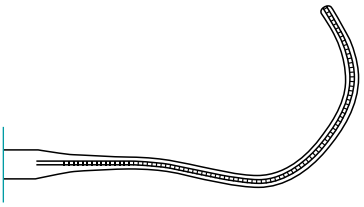
Curved shanks
115mm, $4^{1/2}$" 290-599-036



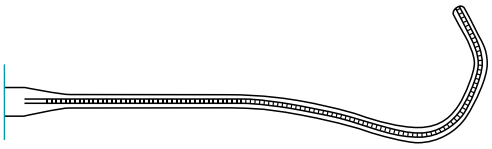
DEBAKEY EXTRA FINE
Pediatric Vessel Clamp



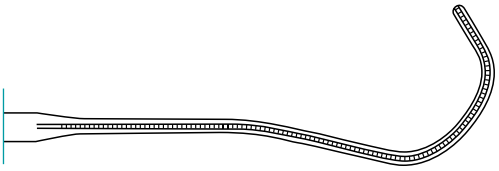
Curved shanks
150mm, 6" 290-599-037



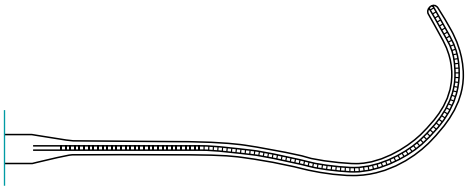
Curved shanks
160mm, 6 1/4" 290-599-038



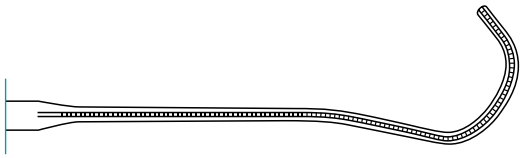
Curved shanks
180mm, 7" 290-599-039



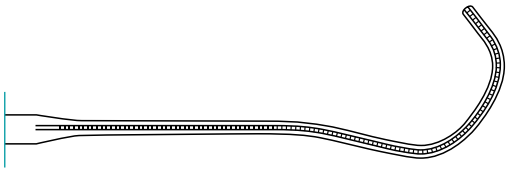
Curved shanks
180mm, 7" 290-599-040



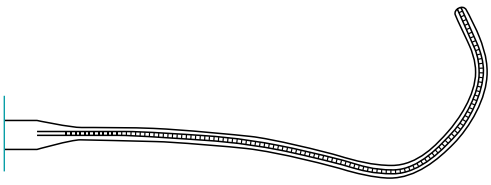
Curved shanks
180mm, 7" 290-599-041



Angled shanks
180mm, 7" 290-599-042



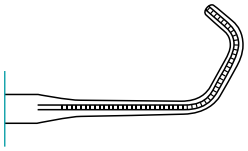
Angled shanks
180mm, 7" 290-599-043



Angled shanks
180mm, 7" 290-599-044

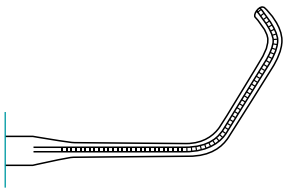


DEBAKEY EXTRA FINE
Pediatric Vessel Clamp



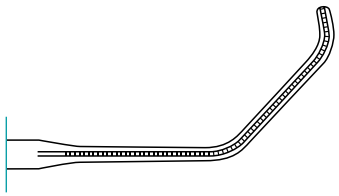
Curved shanks

115mm, $4^{1/2}$" 290-599-045



Angled shanks

120mm, $4^{3/4}$" 290-599-046



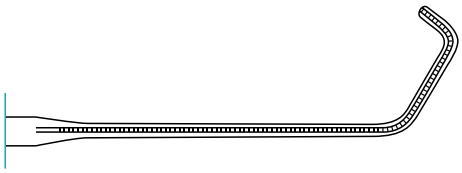
Angled shanks

150mm, 6" 290-599-047



Curved shanks

170mm, $6^{2/3}$" 290-599-048



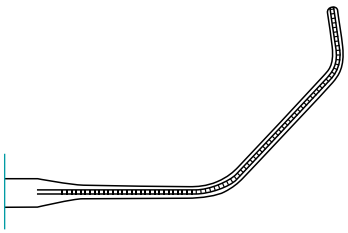
Curved shanks

175mm, $6^{7/8}$" 290-599-049



Curved shanks

180mm, 7" 290-599-050



Curved shanks, carotid

150mm, 6" 290-599-051



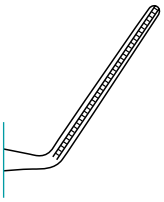
DEBAKEY
Premature Baby Vascular Clamp, ultrafine

105mm, $4^{1/8}$"



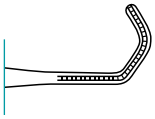
Shanks angled backwards

290-587-001



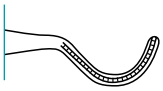
Angled shanks

290-587-002



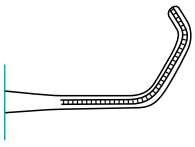
Shanks slightly angled backwards

290-587-003



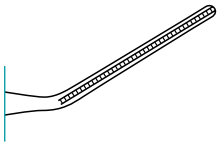
Straight shanks

290-587-004



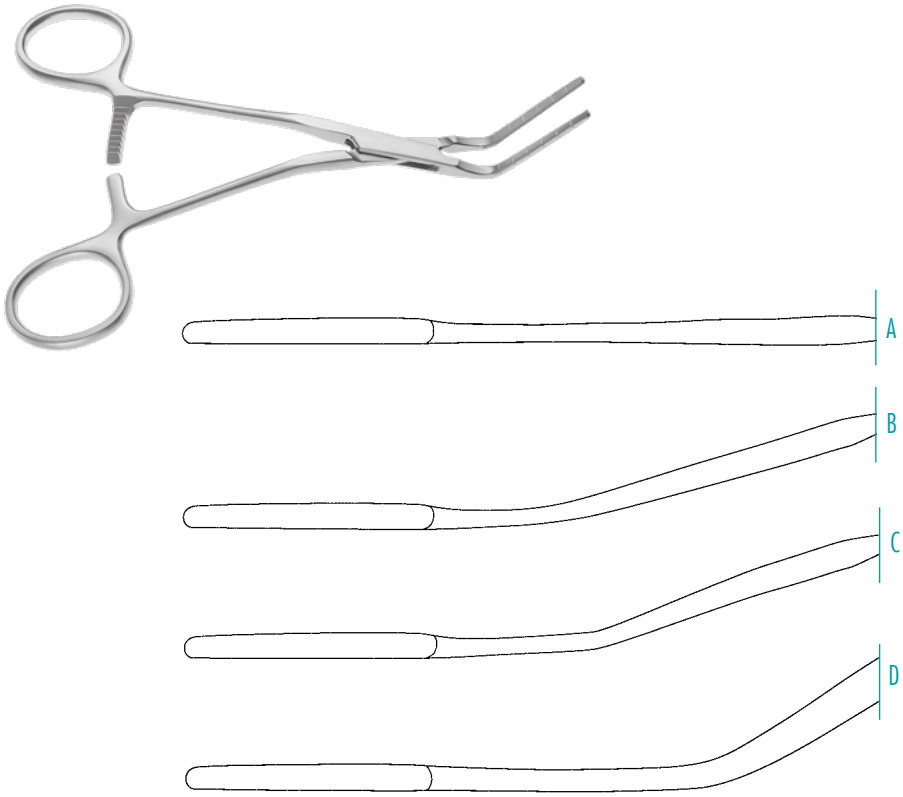
Shanks slightly curved backwards

290-587-005



Straight shanks

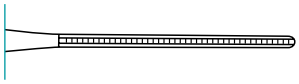
290-587-006



CASTANEDA

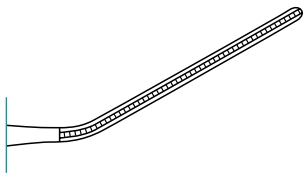
Neonatal Clamp, fine
155mm, 6 1/8"

A Straight shanks
B Slightly curved shanks
C Slightly angled shanks
D Strongly angled shanks



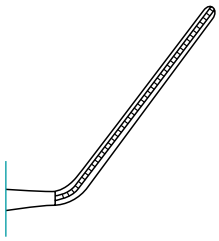
Straight jaw

A	290-594-001
B	290-598-001
C	290-596-001
D	290-597-001



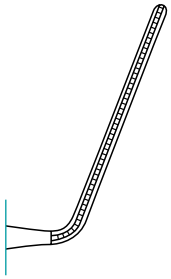
Angled jaw, 30°

A	290-594-002
B	290-598-002
C	290-596-002
D	290-597-002



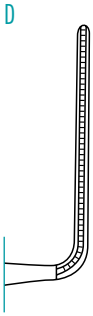
Angled jaw, 45°

A	290-594-003
B	290-598-003
C	290-596-003
D	290-597-003



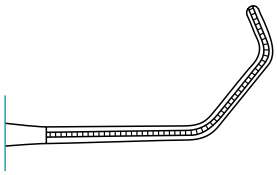
Angled jaw, 60°

A	290-594-004
B	290-598-004
C	290-596-004
D	290-597-004



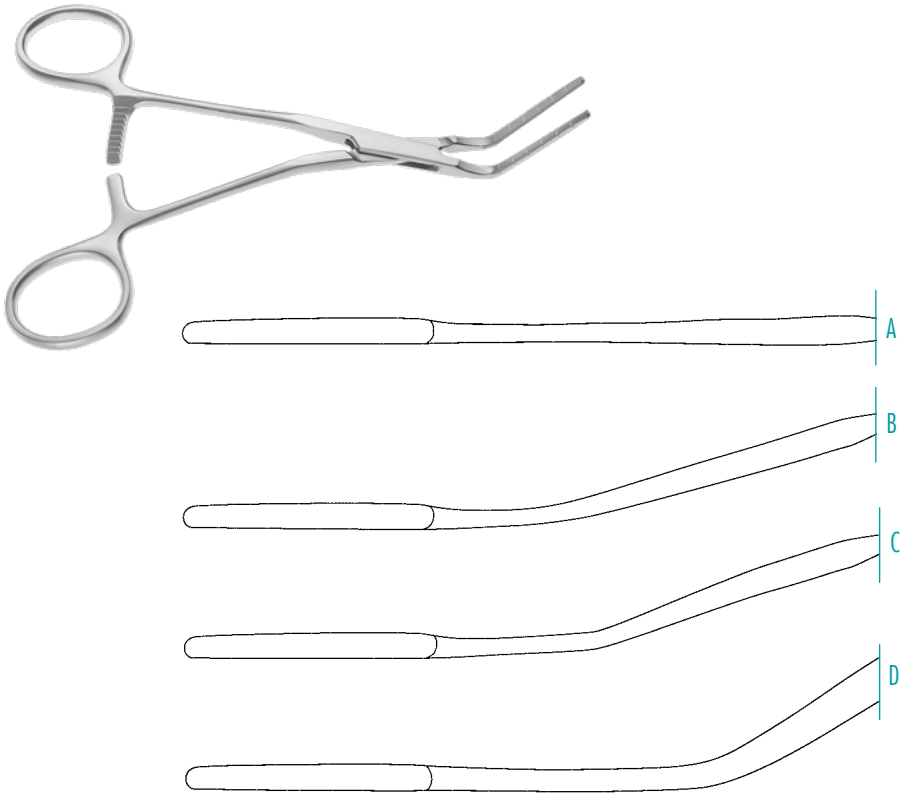
Angled jaw, 90°

A	290-594-005
B	290-598-005
C	290-596-005
D	290-597-005



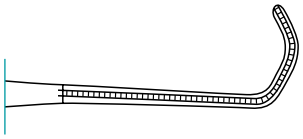
Angled jaw

A	290-594-006
B	290-598-006
C	290-596-006
D	290-597-006



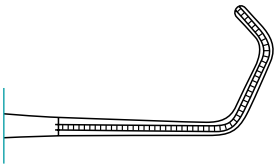
CASTANEDA
Castaneda Neonatal Clamp, fine
155mm, 6 1/8"

A Straight shanks
B Slightly curved shanks
C Slightly angled shanks
D Strongly angled shanks



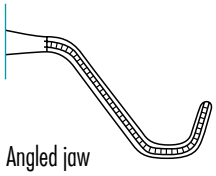
Angled jaw

A	290-594-007
B	290-598-007
C	290-596-007
D	290-597-007



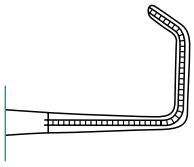
Angled jaw

A	290-594-008
B	290-598-008
C	290-596-008
D	290-597-008



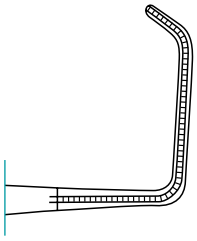
Angled jaw

A	290-594-009
B	290-598-009
C	290-596-009



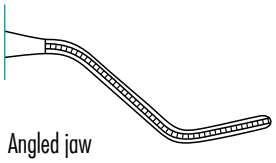
Angled jaw

A	290-594-010
B	290-598-010
C	290-596-010



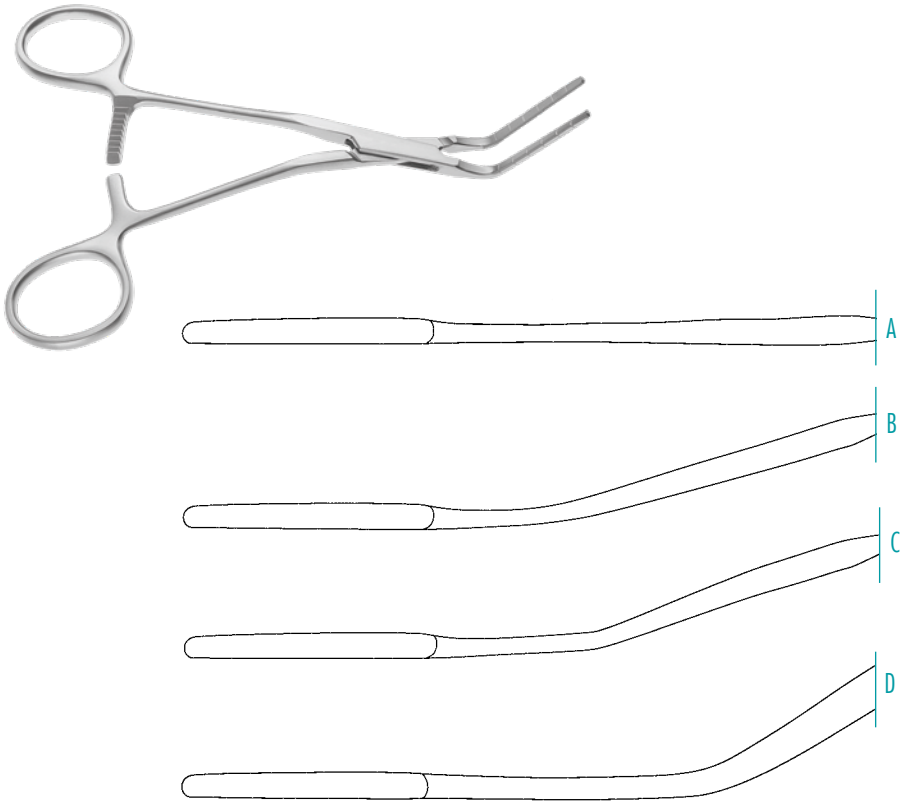
Angled jaw

A	290-594-011
B	290-598-011
C	290-596-011



Angled jaw

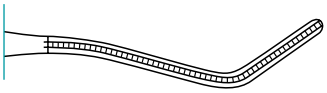
A	290-594-012
B	290-598-012
C	290-596-012
D	290-597-012



CASTANEDA

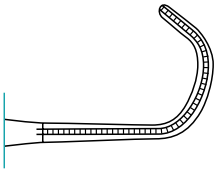
Castaneda Neonatal Clamp, fine
110mm, 6 1/8"

- A Straight shanks
- B Slightly curved shanks
- C Slightly angled shanks
- D Strongly angled shanks



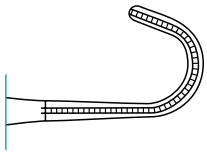
Angled jaw

A	290-594-013
B	290-598-013
C	290-596-013



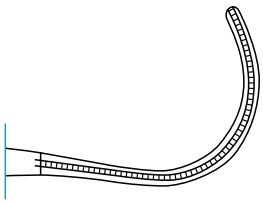
Curved jaw

A	290-594-014
B	290-598-014
C	290-596-014



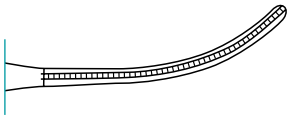
Curved jaw

A	290-594-015
B	290-598-015
C	290-596-015



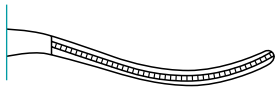
Curved jaw

A	290-594-016
B	290-598-016



Curved jaw

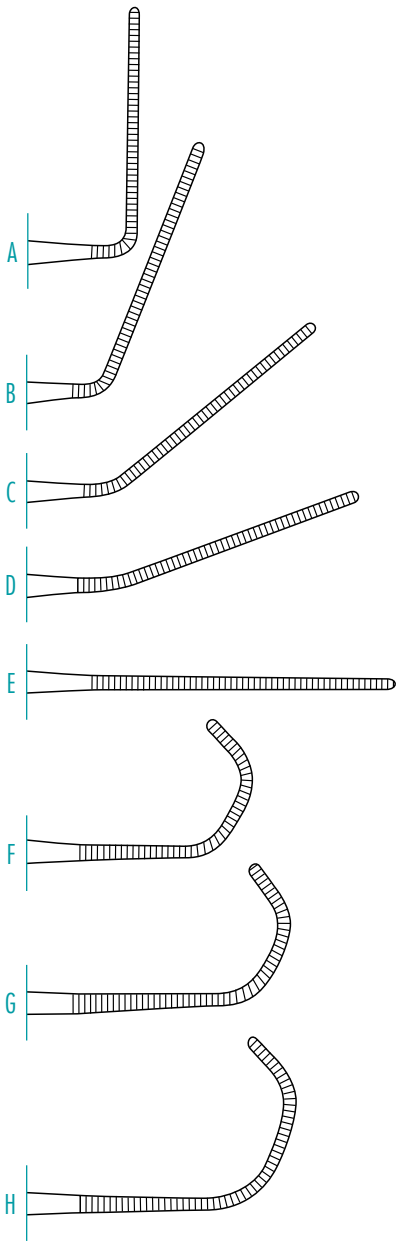
A	290-594-017
B	290-598-017
C	290-596-017



Curved jaw

A	290-594-018
B	290-598-018

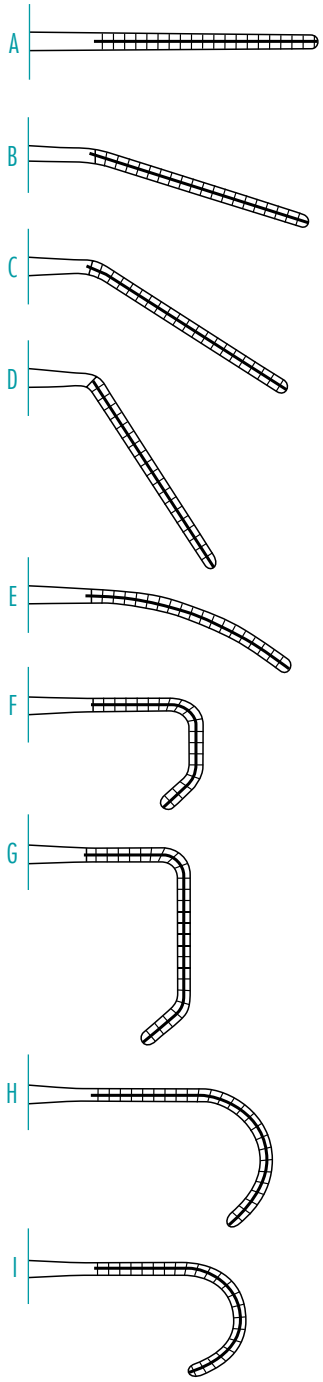




CASTANEDA
Neonatal Clamp, extra delicate, graduated, shanks curved backwards

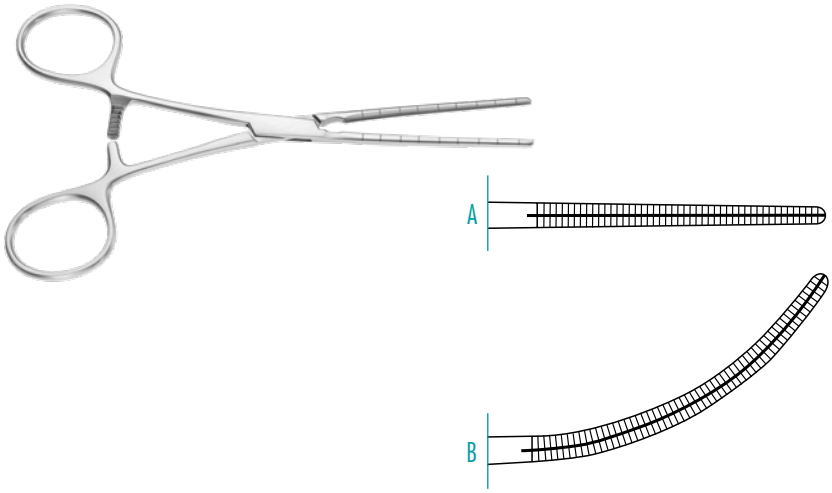
A	130mm, $5^{1/8}$"	290-593-003
B	130mm, $5^{1/8}$"	290-593-002
C	130mm, $5^{1/8}$"	290-593-001
D	130mm, $5^{1/8}$"	290-593-000
E	130mm, $5^{1/8}$"	290-593-004
F	150mm, 6"	290-595-001
G	150mm, 6"	290-595-002
H	150mm, 6"	290-595-003





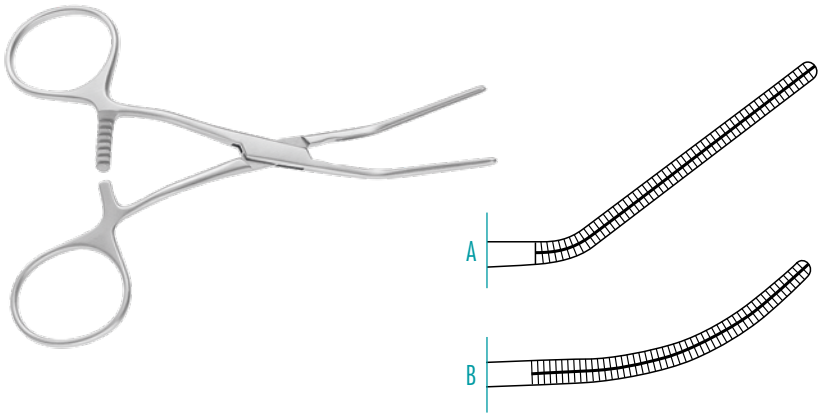
BABY COOLEY
Pediatric Clamp, shanks curved backwards

140mm, 5 1/2"	
A straight	290-573-001
B angled 15°	290-573-002
C angled 45°	290-573-003
D angled 60°	290-573-004
125mm, 5"	
E curved	290-573-005
130mm, 5 1/8"	
F angled	290-573-006
140mm, 5 1/2"	
G angled	290-573-007
H curved	290-573-008
I curved	290-573-009



COOLEY
Atrauma Clamp, straight shanks

A	140mm, 5 1/2"	290-465-000
B	120mm, 4 3/4"	290-465-002



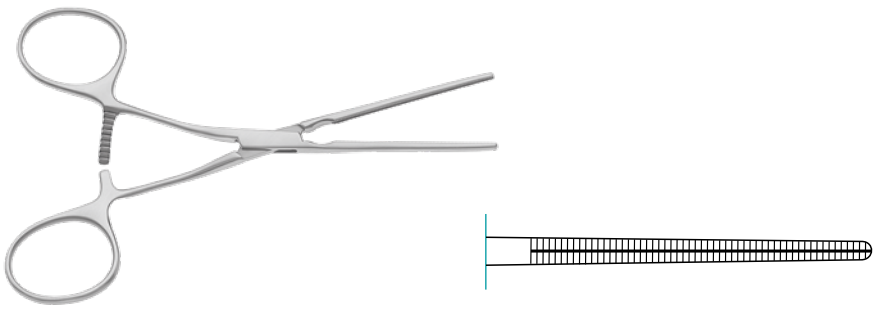
curved shanks

A	125mm, 5"	290-465-004
B	120mm, 4 3/4"	290-465-003



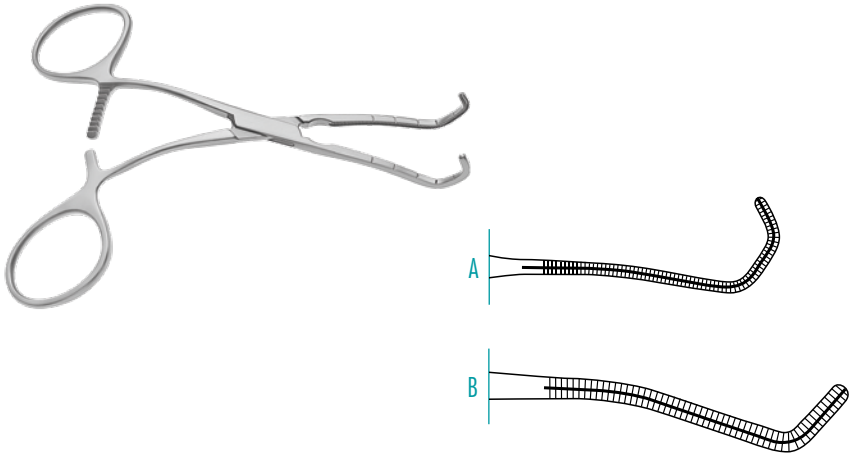
straight shanks

100mm, 4"	290-465-007



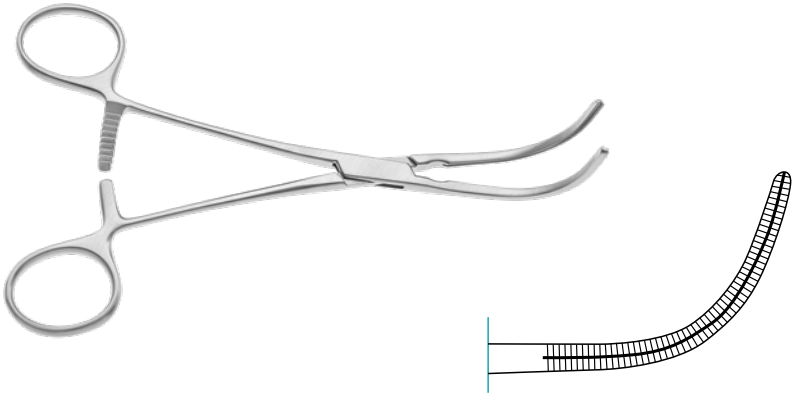
angled shanks

125mm, 5"	290-465-001



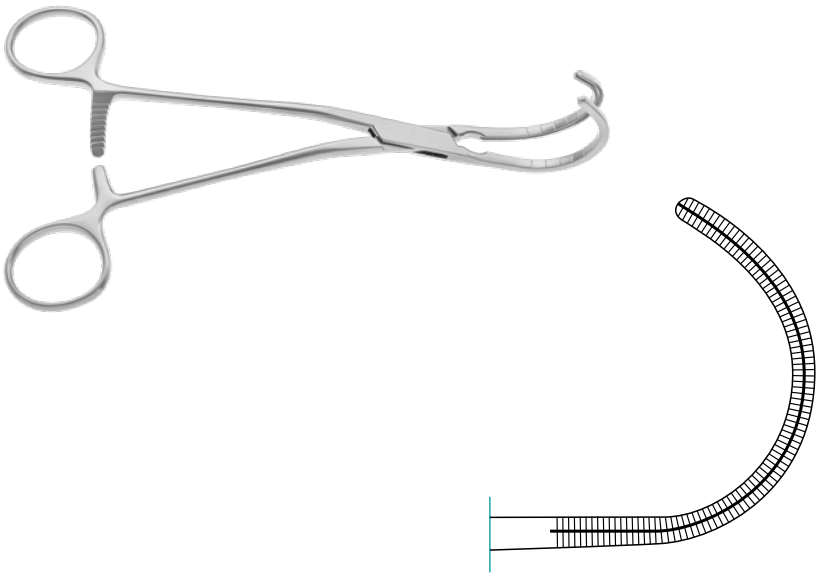
COOLEY
Atrauma Clamp, s-angled

A	120mm, 4 3/4"	290-465-008
B	120mm, 4 3/4"	290-465-005



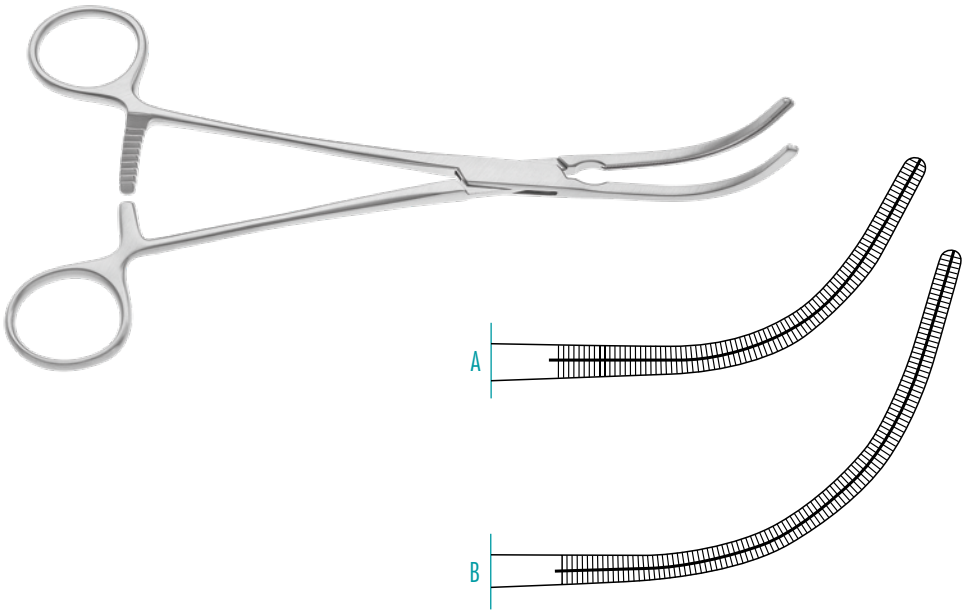
COOLEY
Vascular Clamp

	160mm, 6 1/4"	290-469-160



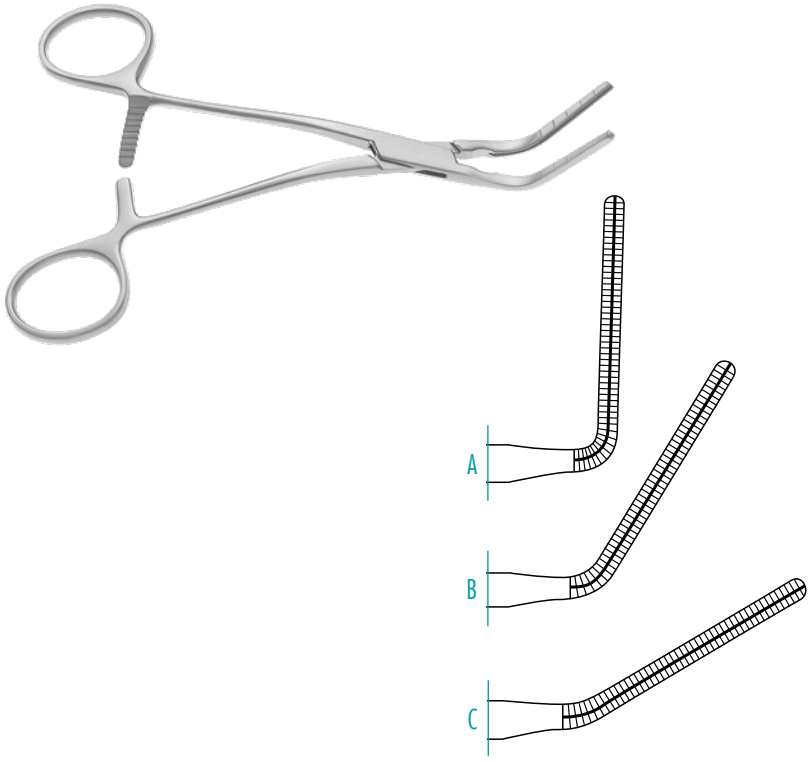
COOLEY
Multi-Purpose Clamp

200mm, 8"	290-480-200



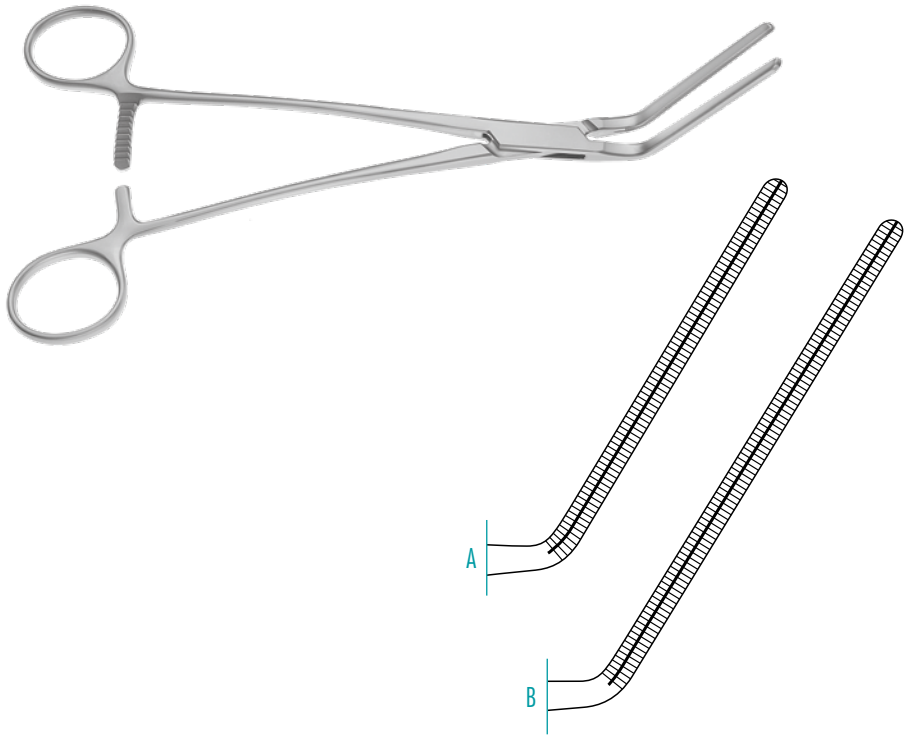
COOLEY
Multi-Purpose Clamp

A 215mm, $8^{1/2}$"	290-471-215
B 245mm, $9^{2/3}$"	290-471-245



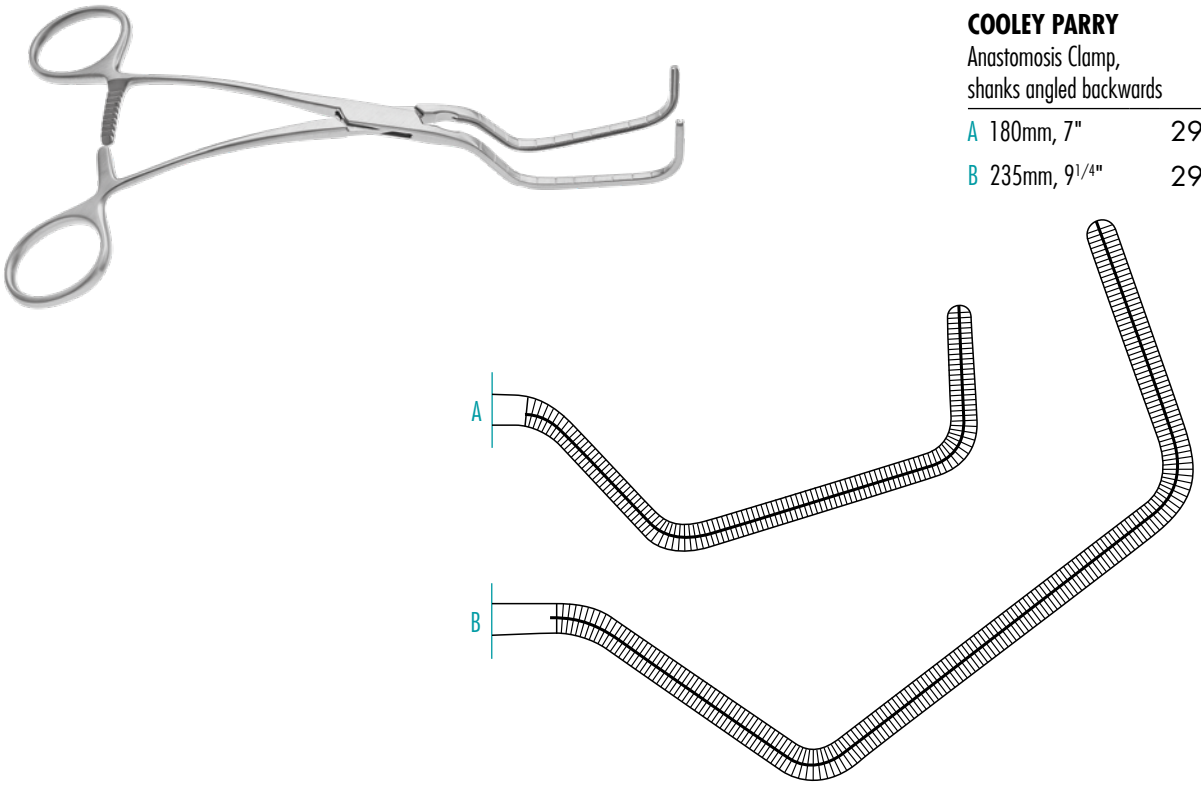
COOLEY
Multi Purpose Forceps

A 150mm, 6"	290-472-150
B 160mm, $6^{1/4}$"	290-472-155
C 170mm, $6^{2/3}$"	290-472-160



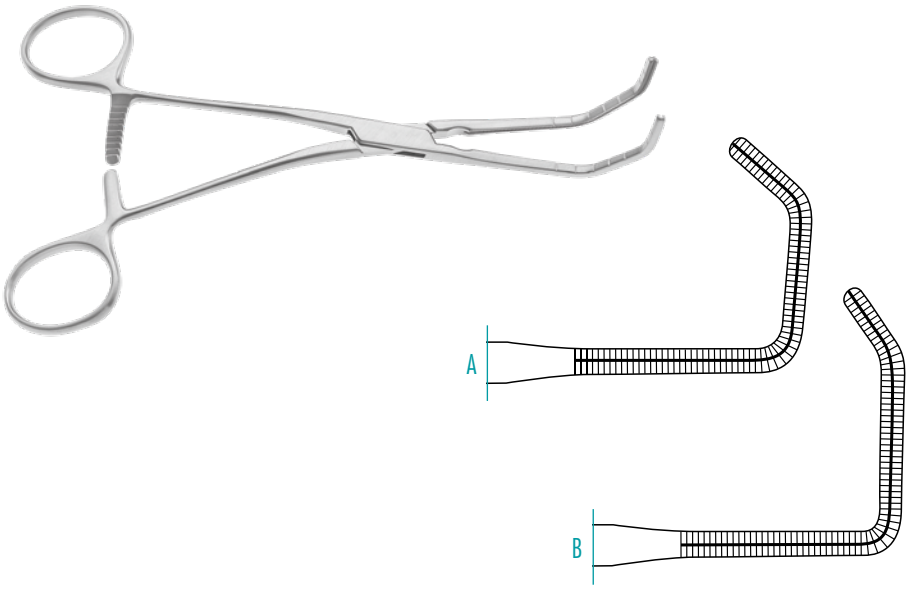
COOLEY
Multi-Purpose Clamp

A 205mm, $8^{1/8}$"	290-509-200
B 240mm, $9^{1/2}$"	290-509-240



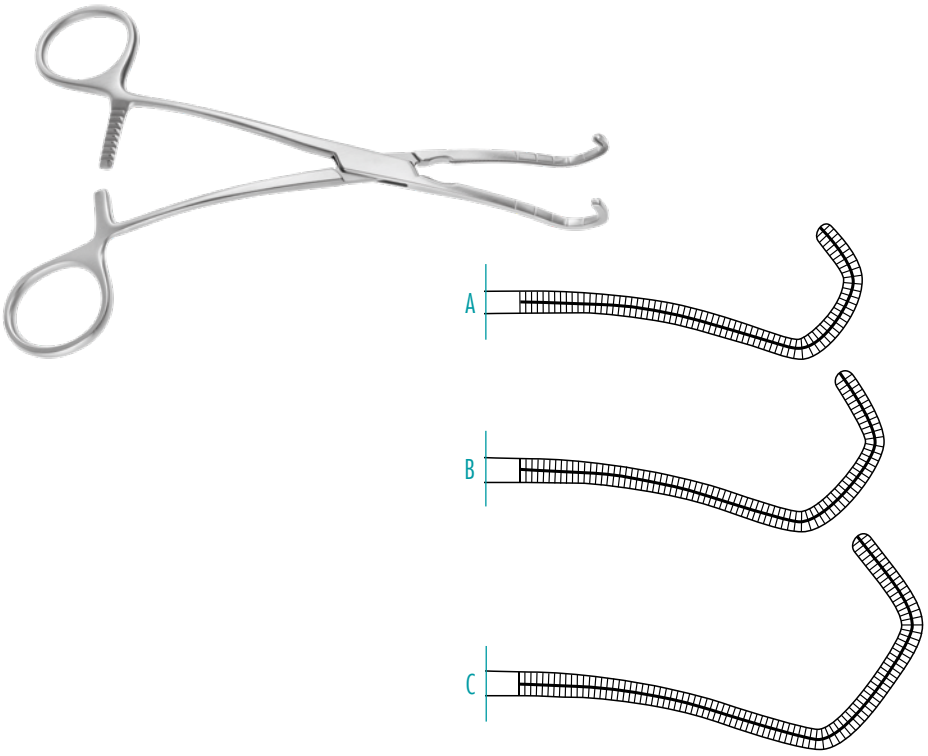
COOLEY PARRY
Anastomosis Clamp,
shanks angled backwards

A	180mm, 7"	290-481-001
B	235mm, 9 1/4"	290-481-002



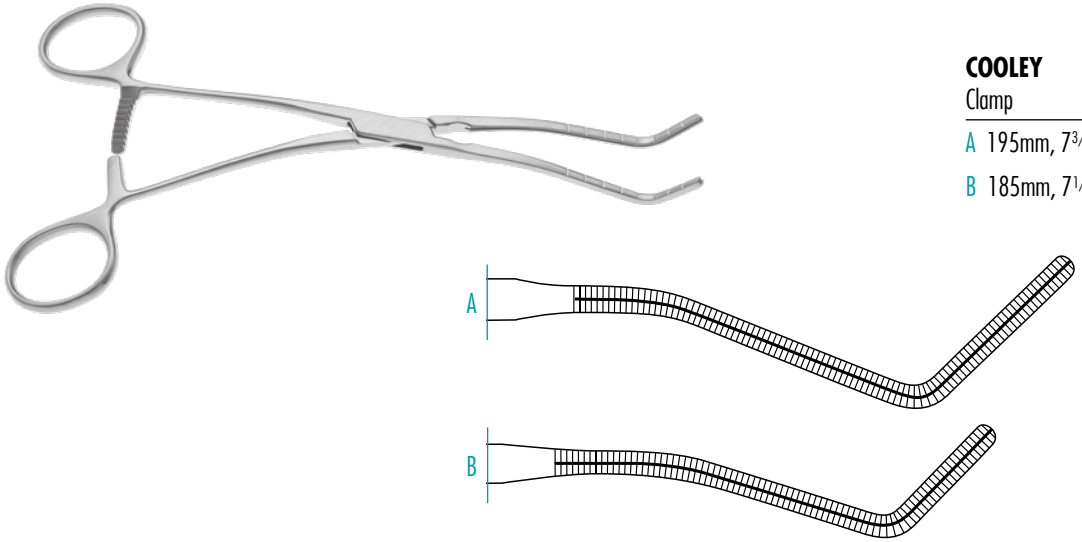
COOLEY
Anastomosis Clamp

A	175mm, 6 7/8"	290-721-165
B	175mm, 6 7/8"	290-722-165



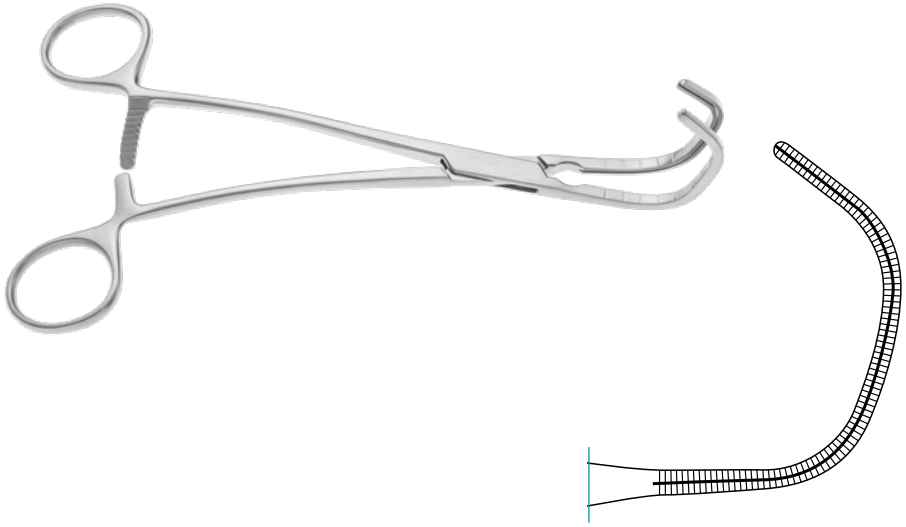
COOLEY DERRA
Anastomosis Clamp

A	160mm, $6^{1/4}$"	290-478-160
B	170mm, $6^{2/3}$"	290-478-170
C	180mm, 7"	290-478-180



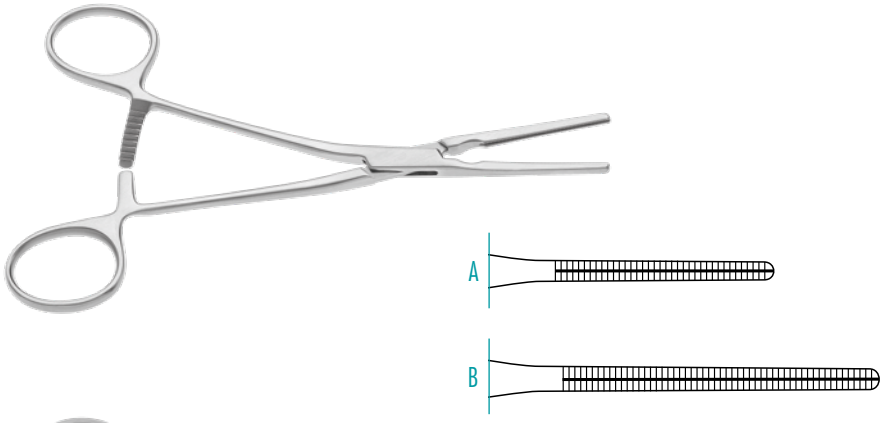
COOLEY
Clamp

A	195mm, $7^{3/4}$"	290-469-200
B	185mm, $7^{1/4}$"	290-469-185



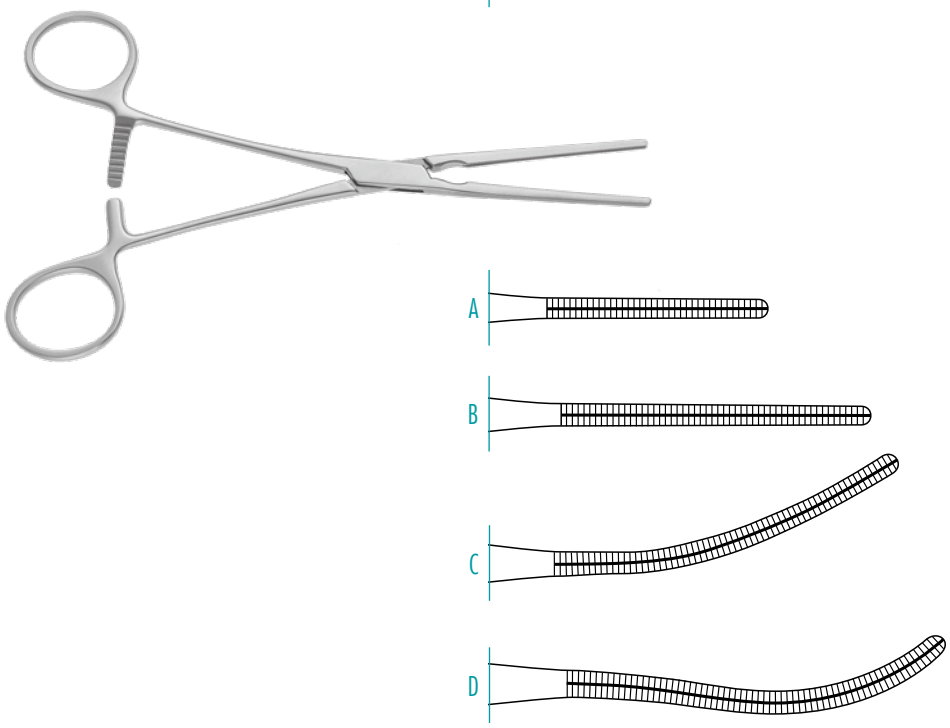
COOLEY LEITZ
Anastomosis Clamp

	195mm, $7^{3/4}$"	290-508-190



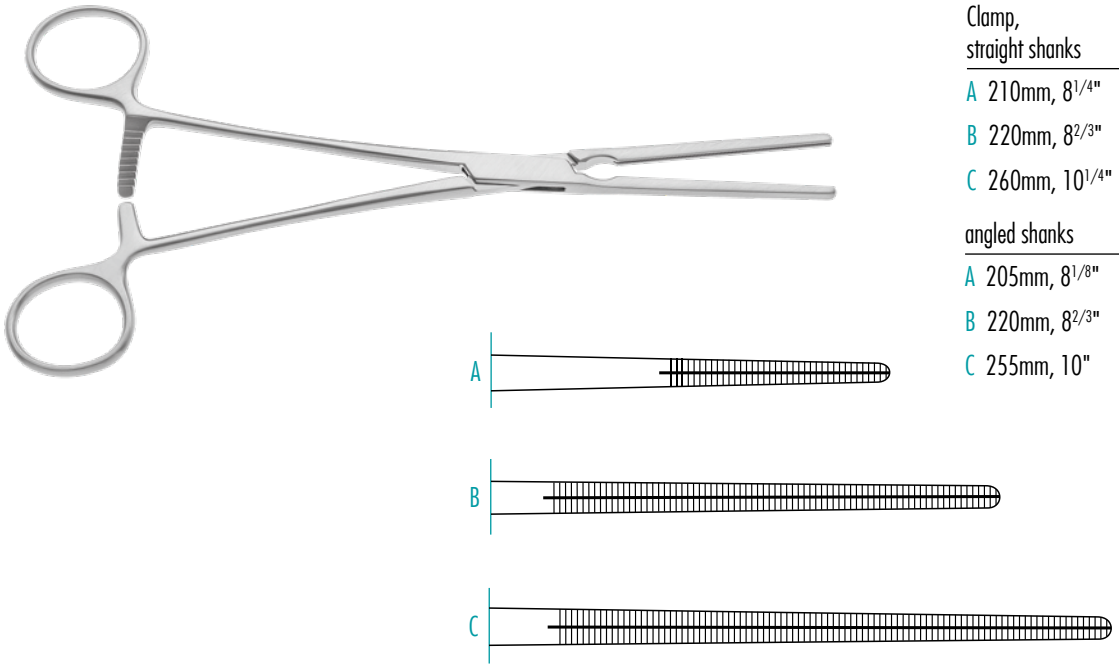
COOLEY
Forceps, shanks angled

A	160mm, $6^{1/4}$"	290-473-160
B	170mm, $6^{2/3}$"	290-473-170



COOLEY
Forceps, straight

A	160mm, $6^{1/4}$"	290-468-160
B	170mm, $6^{2/3}$"	290-468-170
C	170mm, $6^{2/3}$"	290-474-170
D	170mm, $6^{2/3}$"	290-476-170

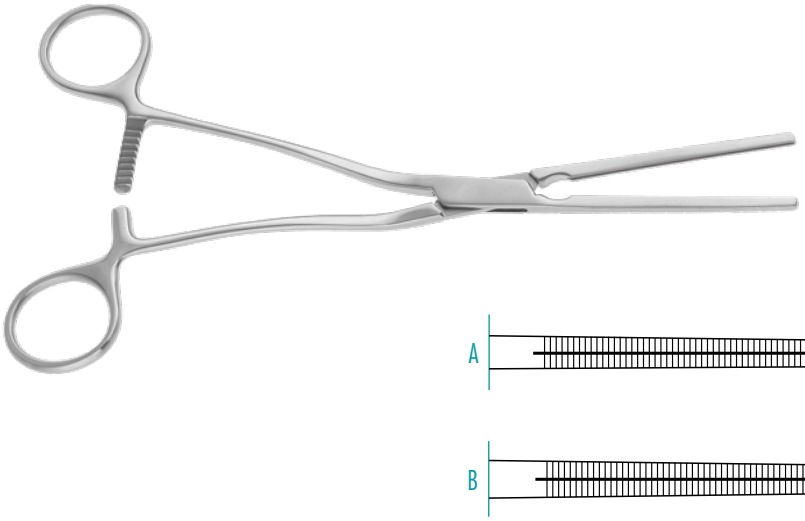


COOLEY
Clamp,
straight shanks

A	210mm, $8^{1/4}$"	290-450-210
B	220mm, $8^{2/3}$"	290-450-220
C	260mm, $10^{1/4}$"	290-450-260

angled shanks

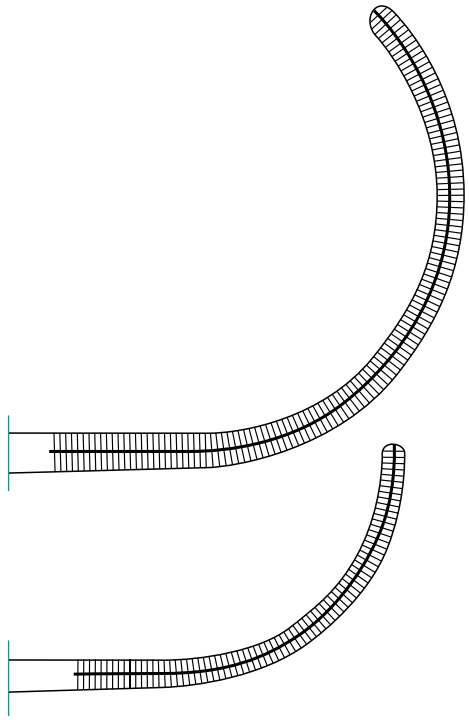
A	205mm, $8^{1/8}$"	290-452-200
B	220mm, $8^{2/3}$"	290-452-220
C	255mm, 10"	290-452-250



COOLEY
Iliac Clamp, straight,
shanks strongly angled

A 210mm, $8^{1/4}$"	290-467-210
B 250mm, $9^{7/8}$"	290-467-255





COOLEY
Clamp, wide curved,
shanks curved backwards

275mm, $10^{7/8}$"	290-512-270

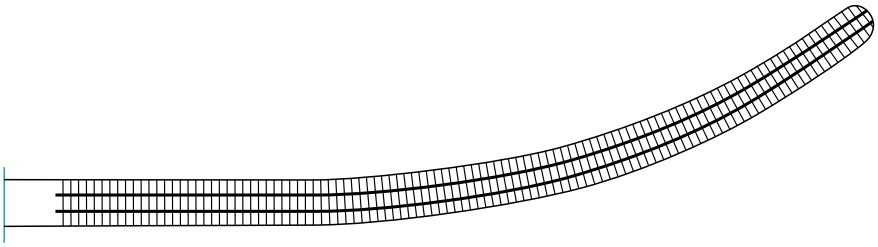
shanks curved backwards

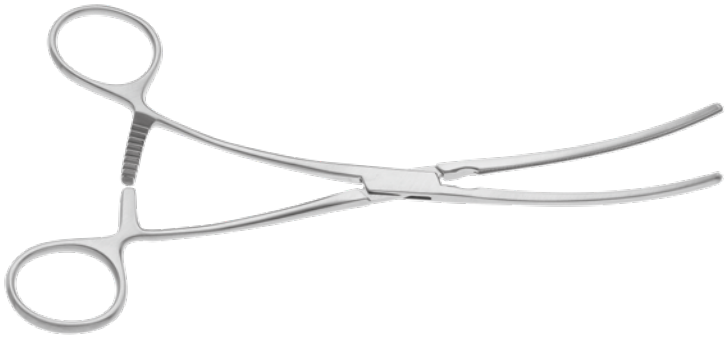
240mm, $9^{1/2}$"	290-519-240



COOLEY
Clamp, 3x3teeth, shanks s-curved

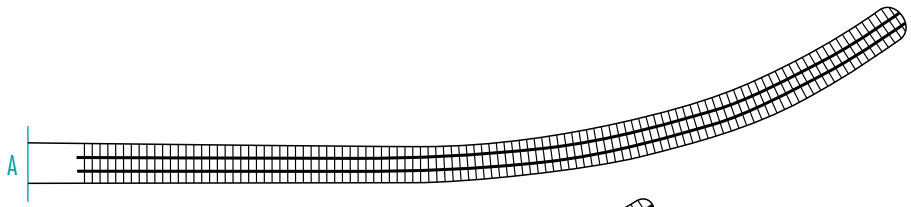
310mm, 12 1/4"	290-512-315

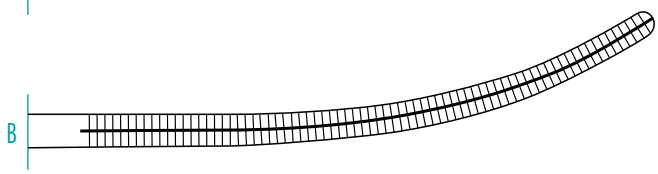


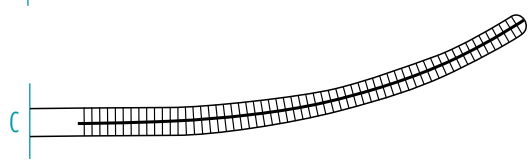


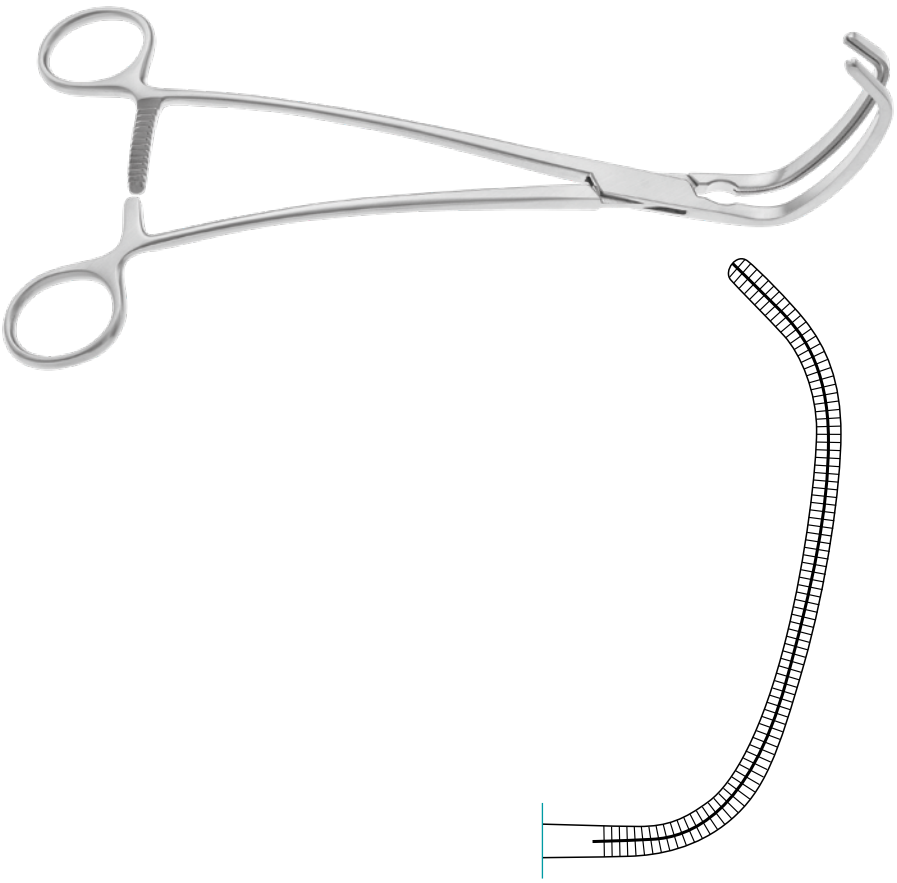
COOLEY
Clamp, curved, 3x3 teeth

A 335mm, 13"	290-515-330
2x2 teeth	
B 265mm, 10 1/2"	290-514-260
C 190mm, 7 1/2"	290-514-190



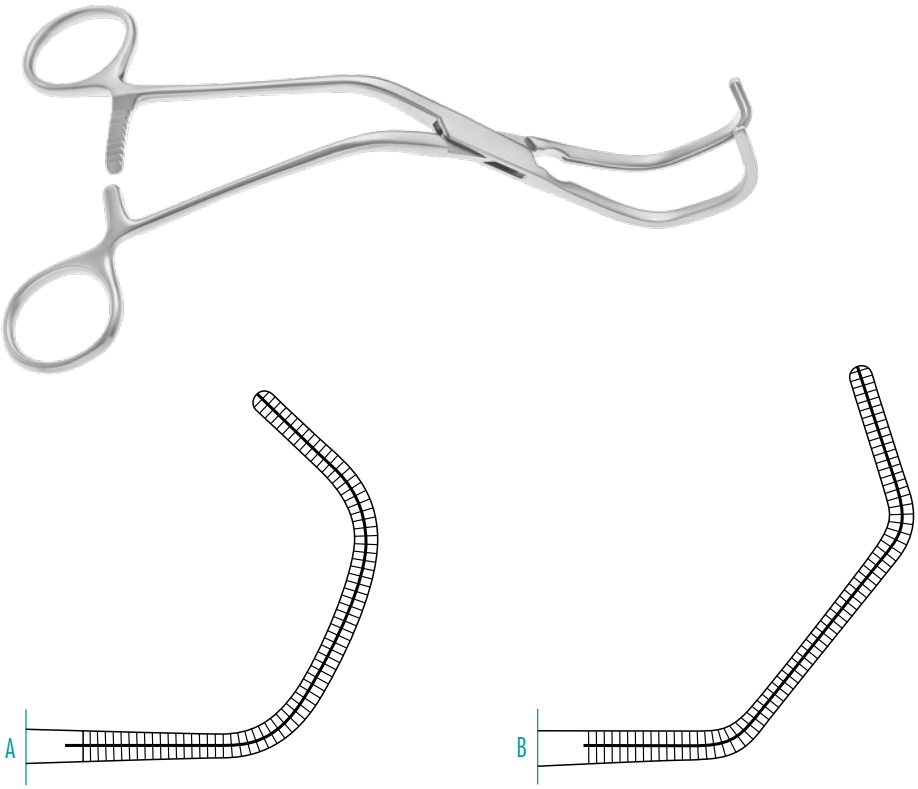






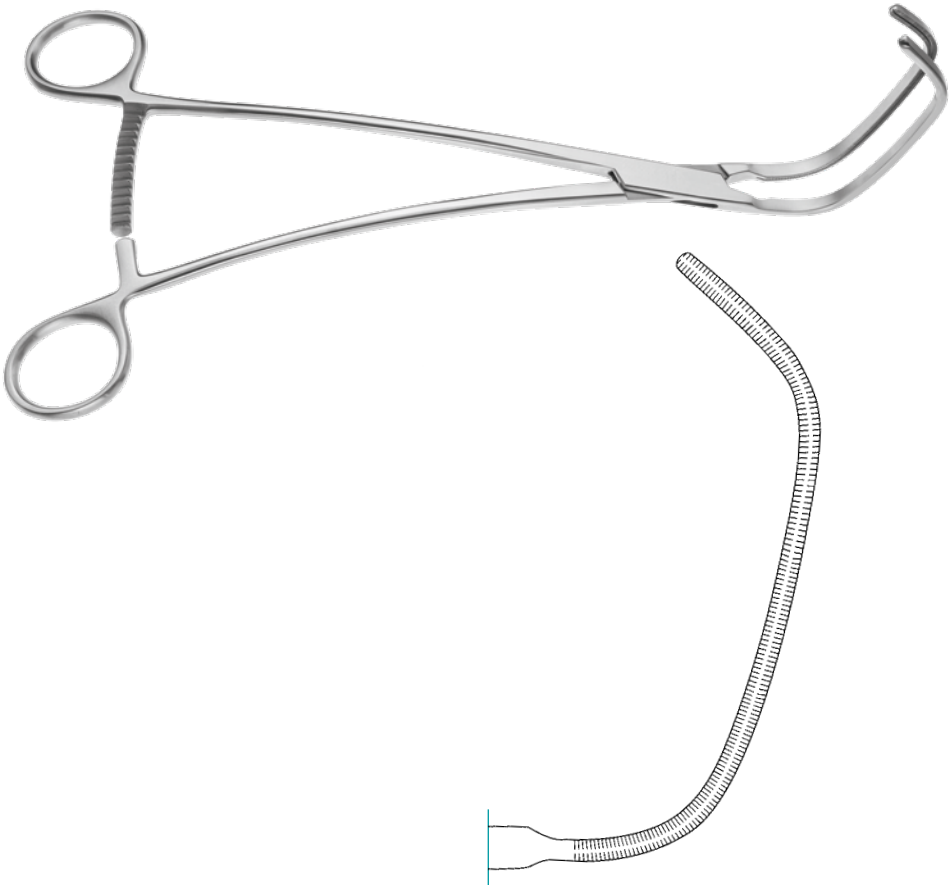
COOLEY
Clamp

225mm, 8 7/8"	290-516-220
260mm, 10 1/4"	290-516-260
270mm, 10 2/3"	290-516-270



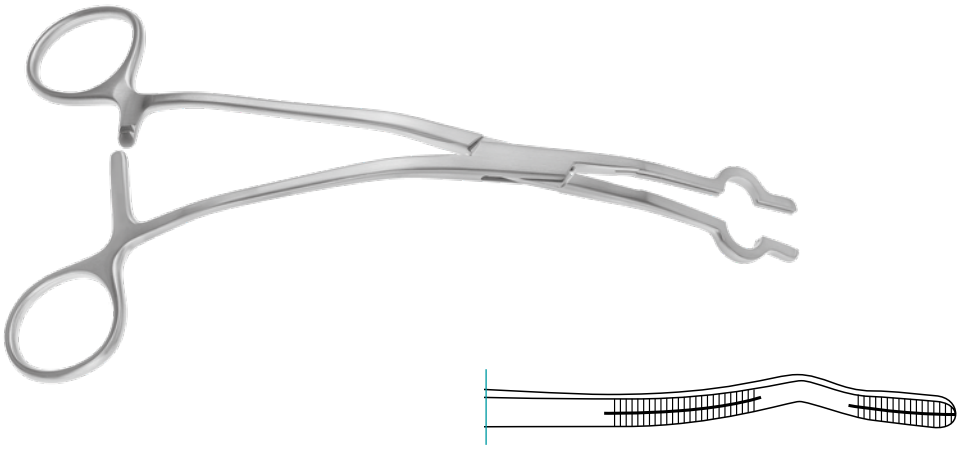
COOLEY
Clamp, shanks stronly curved backwards

A 200mm, 8"	290-517-200
B 255mm, 10"	290-517-250



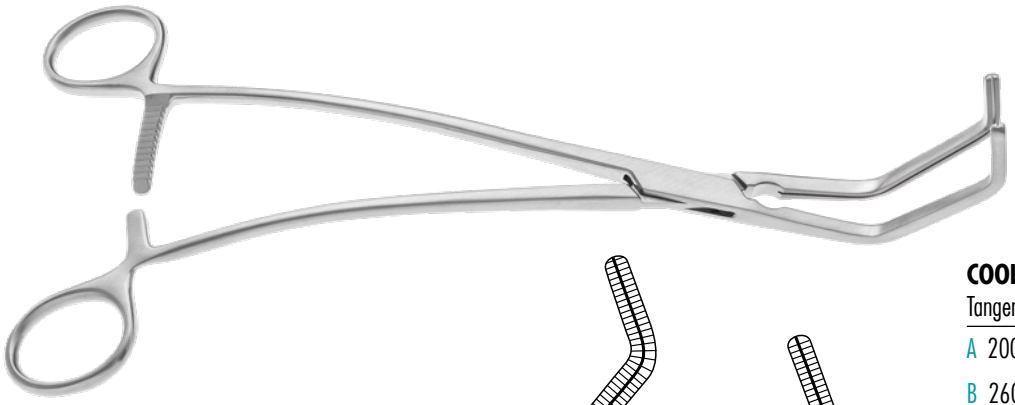
COOLEY
Clamp, double curved,
shanks curved backwards

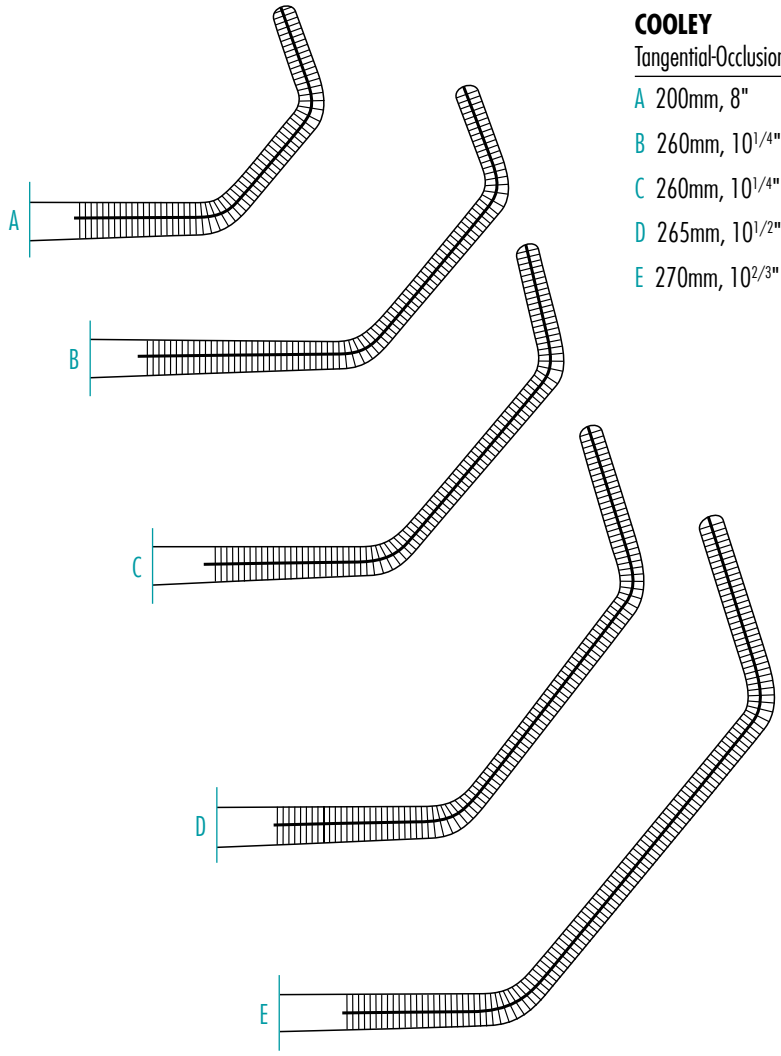
270mm, $10^{2/3}$"	290-518-270



COOLEY
Clamp, 170mm, $6^{2/3}$"

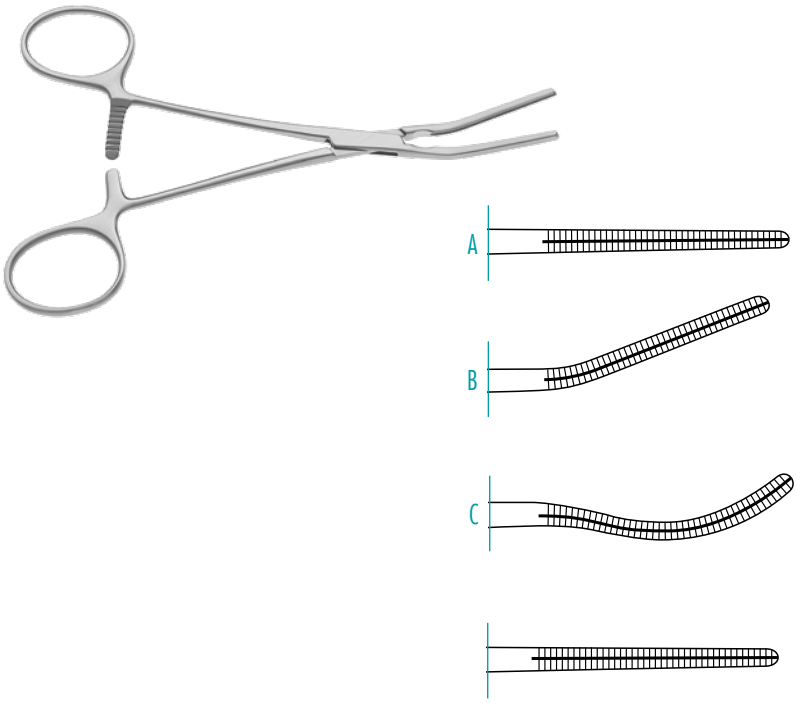
24 Charr.	290-350-001
26 Charr.	290-350-002
28 Charr.	290-350-003
30 Charr.	290-350-004
32 Charr.	290-350-005
36 Charr.	290-350-007





COOLEY
Tangential-Occlusion Clamp

A	200mm, 8"	290-521-200
B	260mm, 10 1/4"	290-521-250
C	260mm, 10 1/4"	290-521-260
D	265mm, 10 1/2"	290-521-265
E	270mm, 10 2/3"	290-521-270

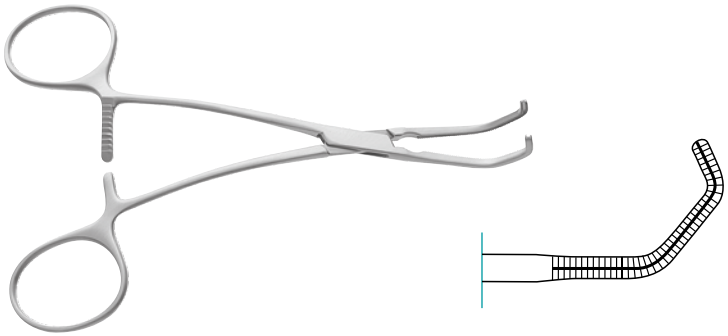


COOLEY
Pediatric Clamp, 140mm, 5 1/2"

A	290-466-001
B	290-466-002
C	290-466-005

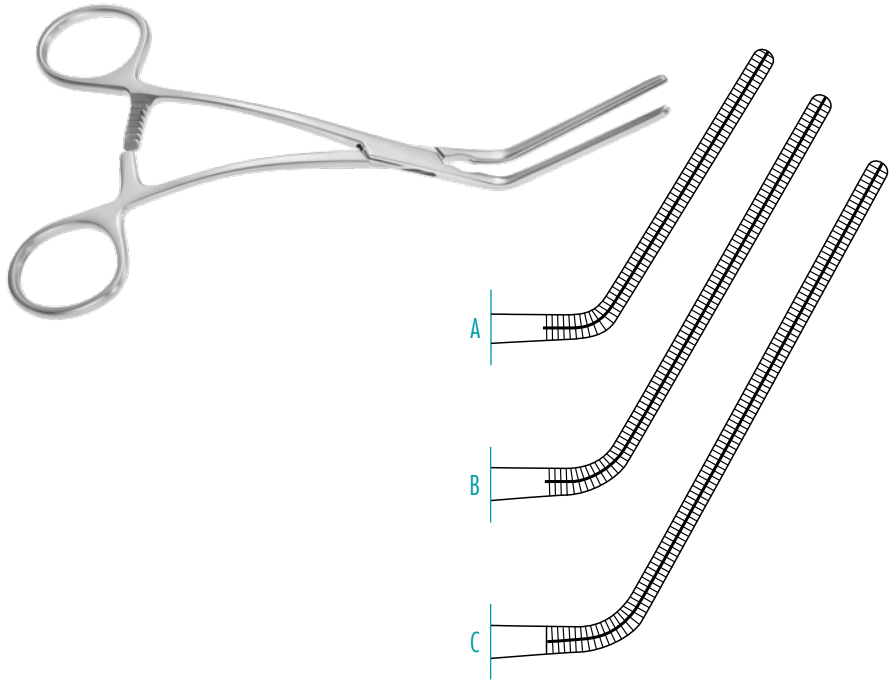
shanks angled

290-466-003



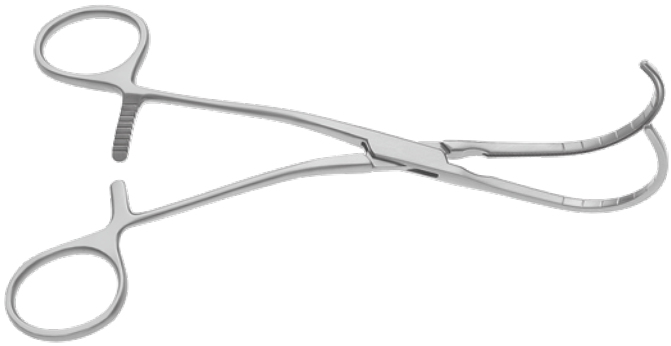
COOLEY
Pediatric Clamp
shanks curved backwards

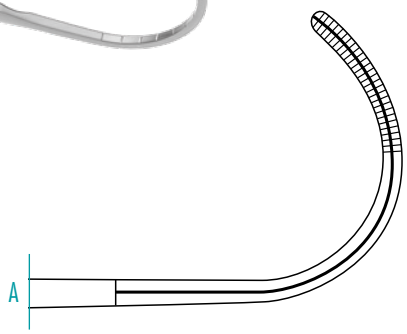
140mm, 5 1/2"	290-466-004

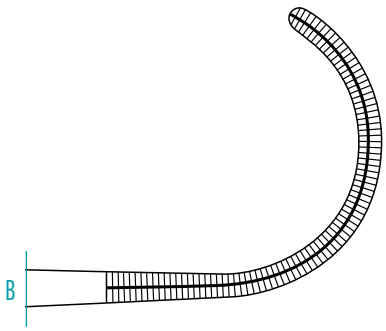


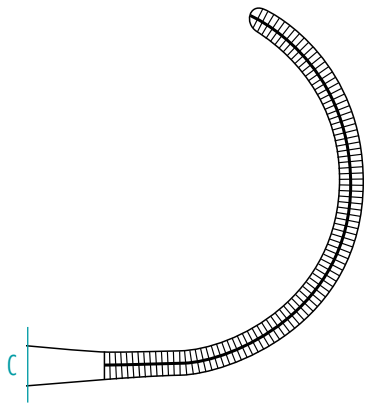
COOLEY
Pediatric Clamp

A 165mm, 6 1/2"	290-468-001
B 175mm, 6 7/8"	290-468-002
C 185mm, 7 1/4"	290-468-003









COOLEY

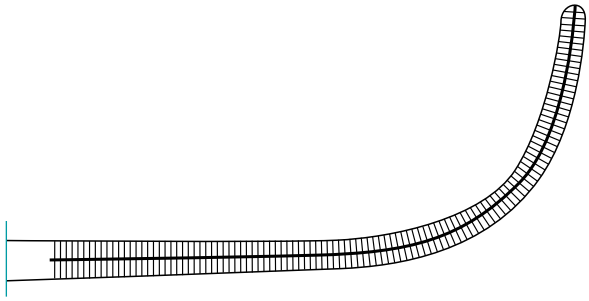
Forceps, shanks backwards

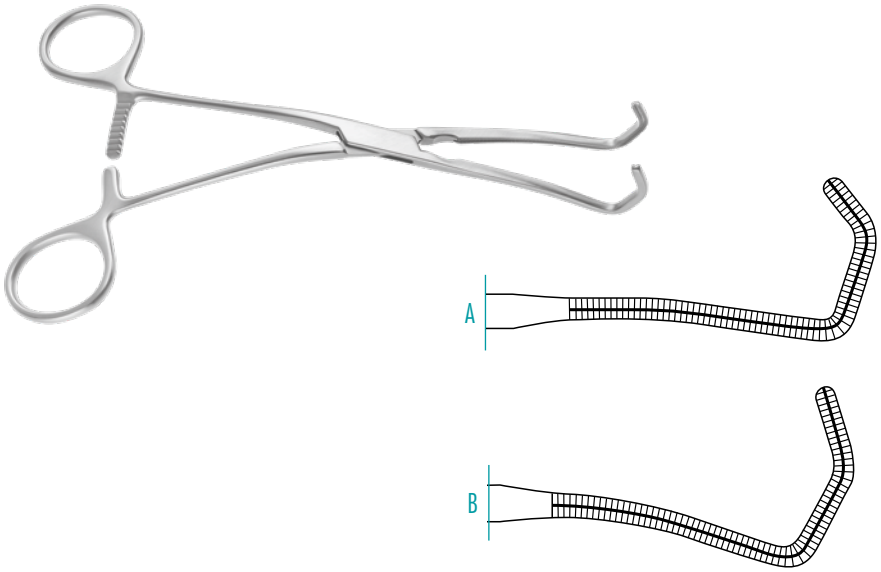
A	170mm, $6^{2/3}$"	290-477-150
B	160mm, $6^{1/4}$"	290-477-160
C	170mm, $6^{2/3}$"	290-477-170



COOLEY
Clamp, shanks curved backwards

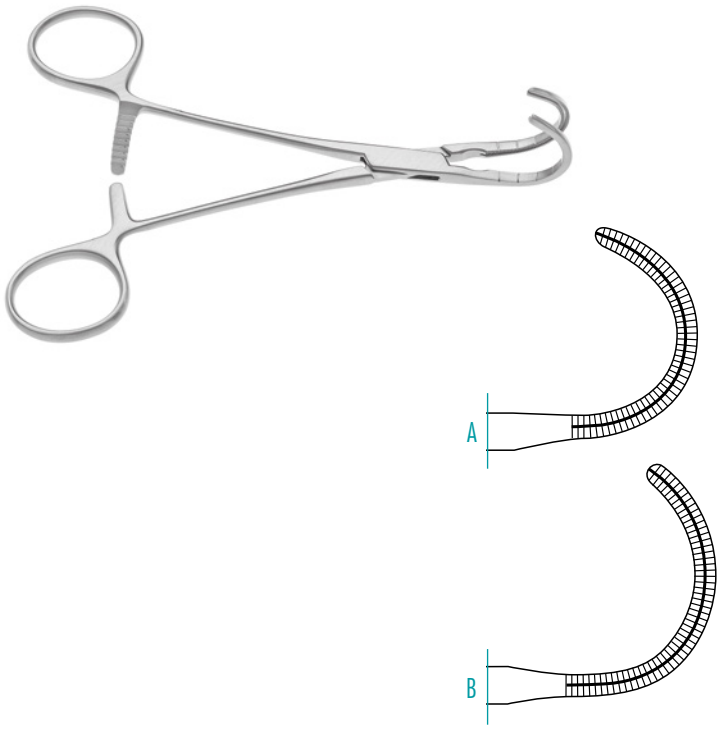
270mm, $10^{2/3}$"	290-513-270





COOLEY
Clamp, shanks curved backwards

A 170mm, $6^{2/3}$"	290-470-170
B 170mm, $6^{2/3}$"	290-471-160

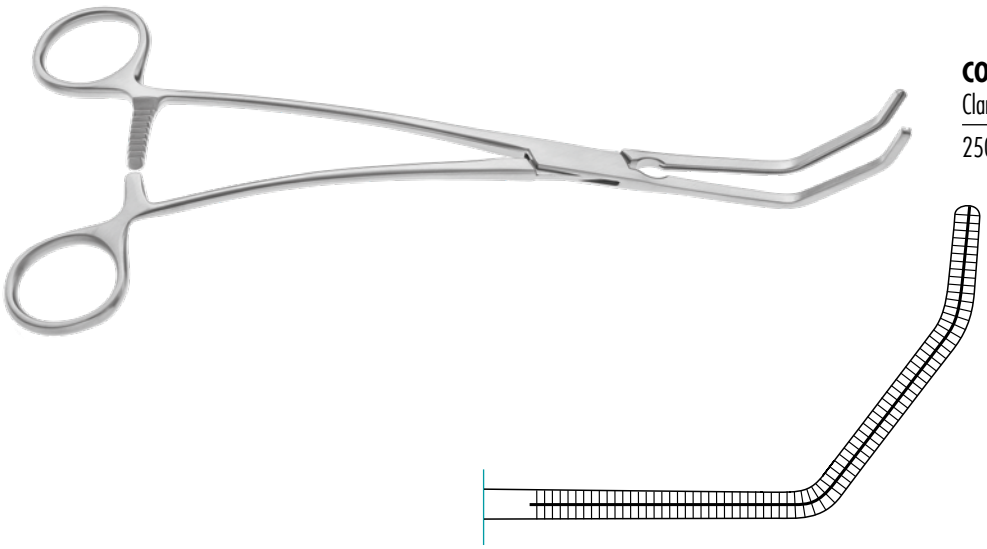


COOLEY BECK
Vessel Clamp, 150mm, 6"
narrow curved

A	290-478-150

wide curved

B	290-478-155



COOLEY
Clamp, s-angled, shanks curved backwards

250mm, $9^{7/8}$"	290-513-240



FOGARTY
Clamp

33mm, 170mm, 6 2/3"	290-487-170
61mm, 290mm, 11 1/2"	290-487-290
86mm, 300mm, 11 7/8"	290-487-300



FOGARTY
Clamp, 60° curved

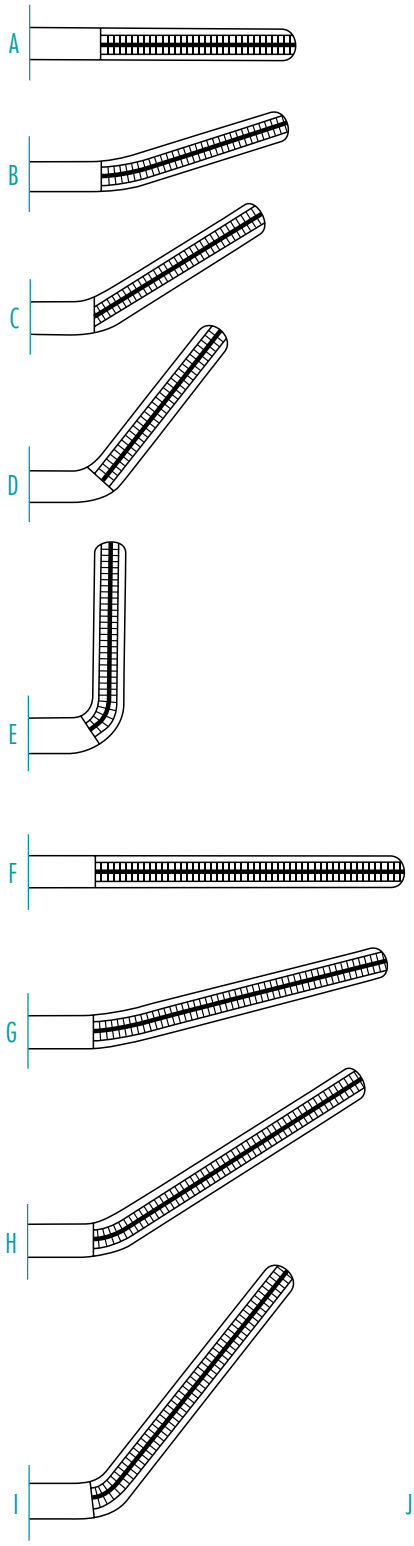
33mm, 160mm, 6 1/4"	290-488-160
61mm, 260mm, 10 1/4"	290-488-260



FOGARTY
Clamp, curved

33mm, 170mm, 6 2/3"	290-489-170
61mm, 260mm, 10 1/4"	290-489-260
86mm, 290mm, 11 1/2"	290-489-290



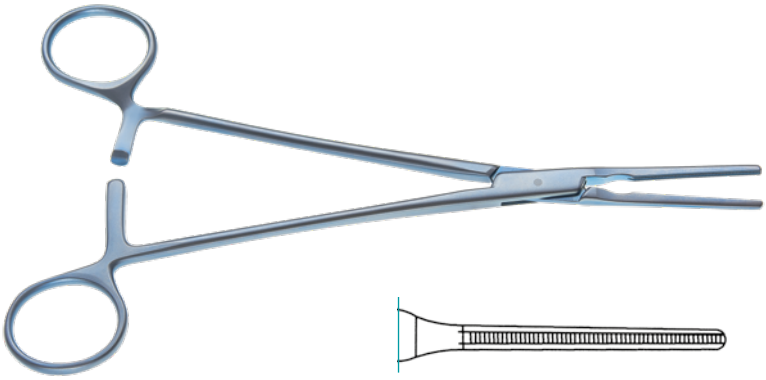


DARDIK
Multi-Purpose Clamp, 38mm

A	130mm, $5^{1/8}$"	290-336-000
B	145mm, $5^{3/4}$"	290-336-015
C	150mm, 6"	290-336-030
D	150mm, 6"	290-336-045
E	150mm, 6"	290-336-090

58mm

F	135mm, $5^{1/3}$"	290-338-000
G	160mm, $6^{1/4}$"	290-338-015
H	170mm, $6^{2/3}$"	290-338-030
I	170mm, $6^{2/3}$"	290-338-045
J	170mm, $6^{2/3}$"	290-338-090



GLOVER
Clamp,

straight shanks	
200mm, 8"	290-700-200
angled shanks	
200mm, 8"	290-701-200



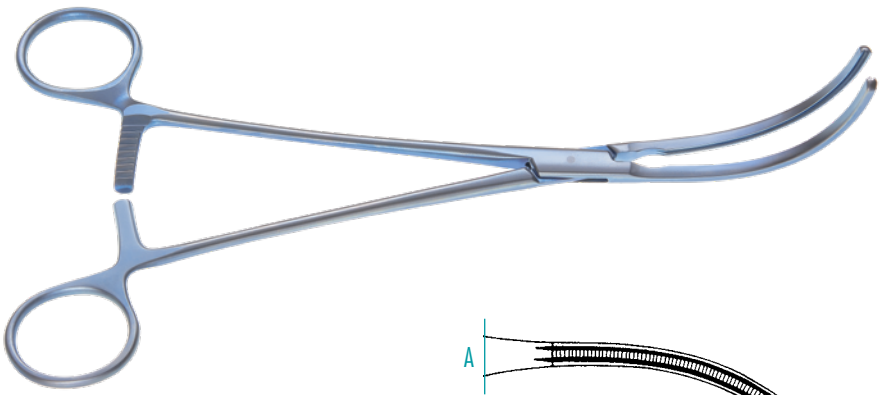
straight shanks	
200mm, 8"	290-700-201
angled shanks	
200mm, 8"	290-701-201

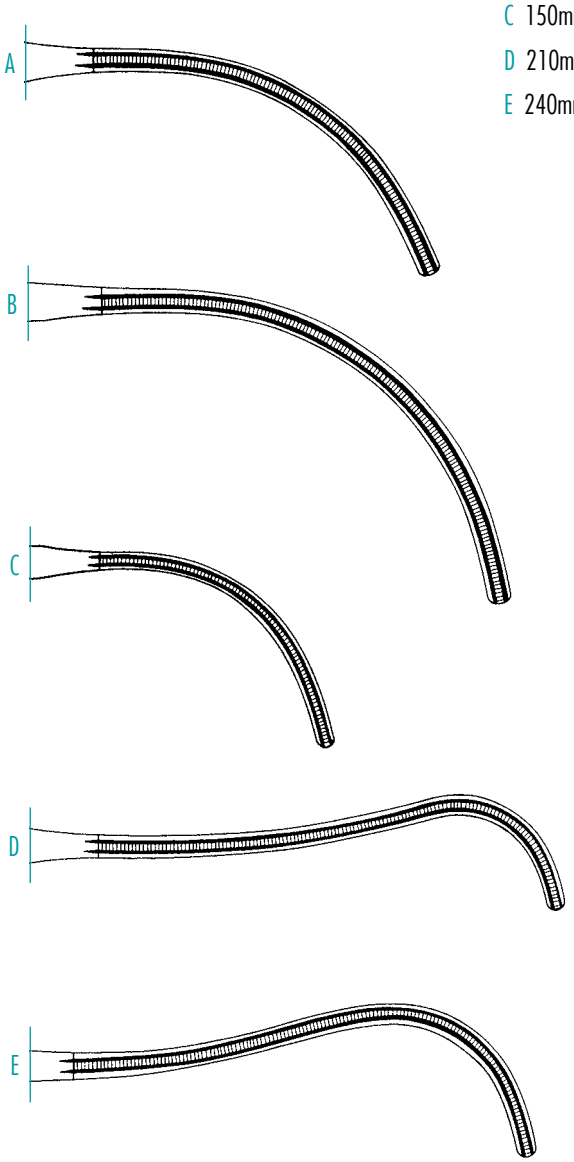


straight shanks	
210mm, 8 1/4"	290-700-210
angled shanks	
210mm, 8 1/4"	290-701-210



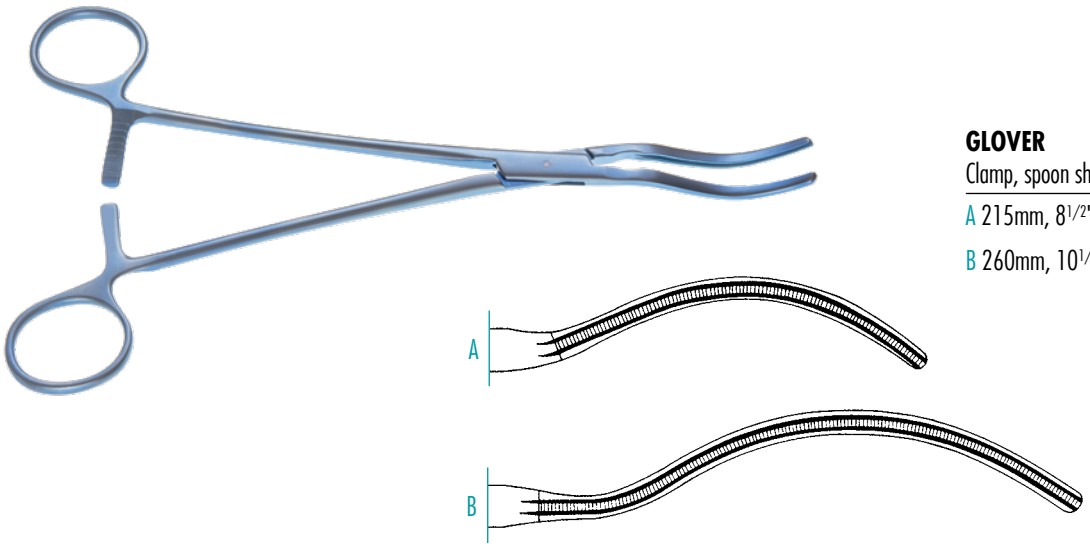
straight shanks	
220mm, 8 2/3"	290-700-220
angled shanks	
220mm, 8 2/3"	290-701-220





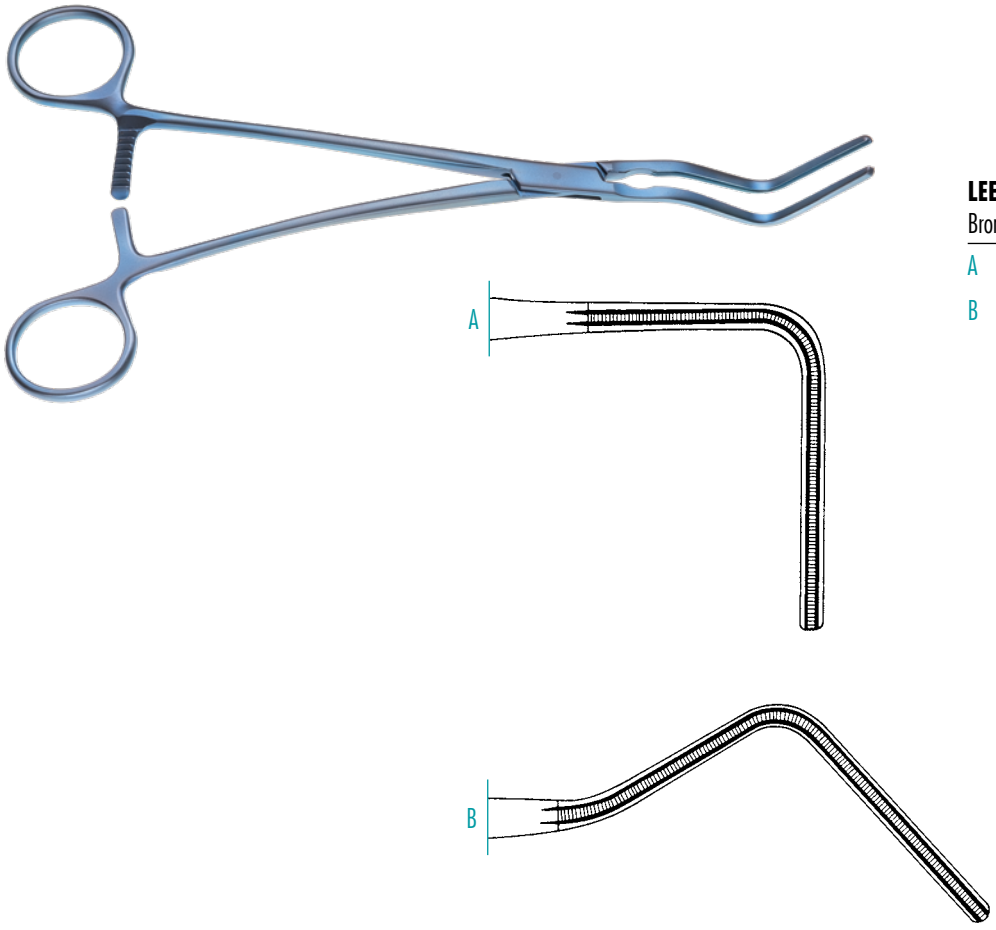
GLOVER
Clamp

A	210mm, 8 1/4"	290-719-210
B	240mm, 9 1/2"	290-719-240
C	150mm, 6"	290-719-150
D	210mm, 8 1/4"	290-721-210
E	240mm, 9 1/2"	290-721-240



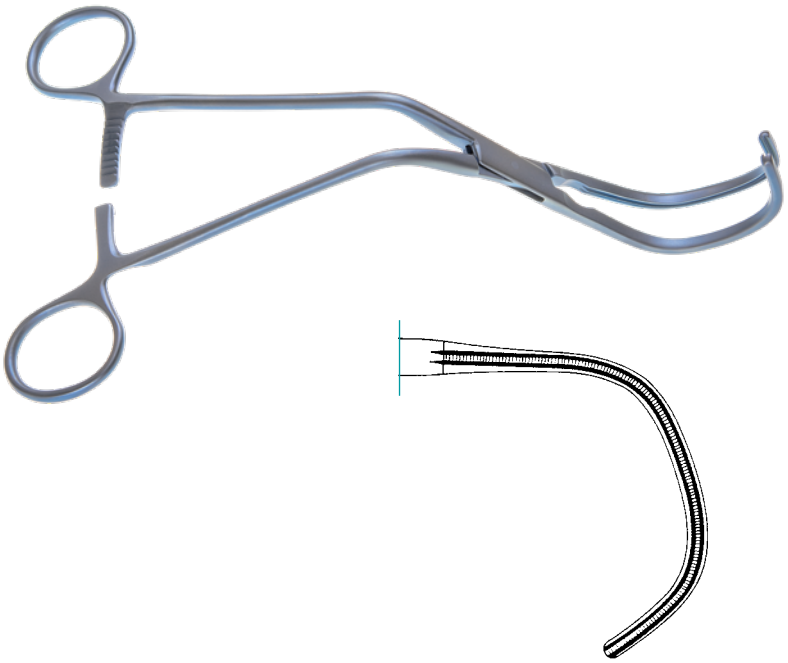
GLOVER
Clamp, spoon shaped

A 215mm, $8^{1/2}$"	290-703-210
B 260mm, $10^{1/4}$"	290-703-260



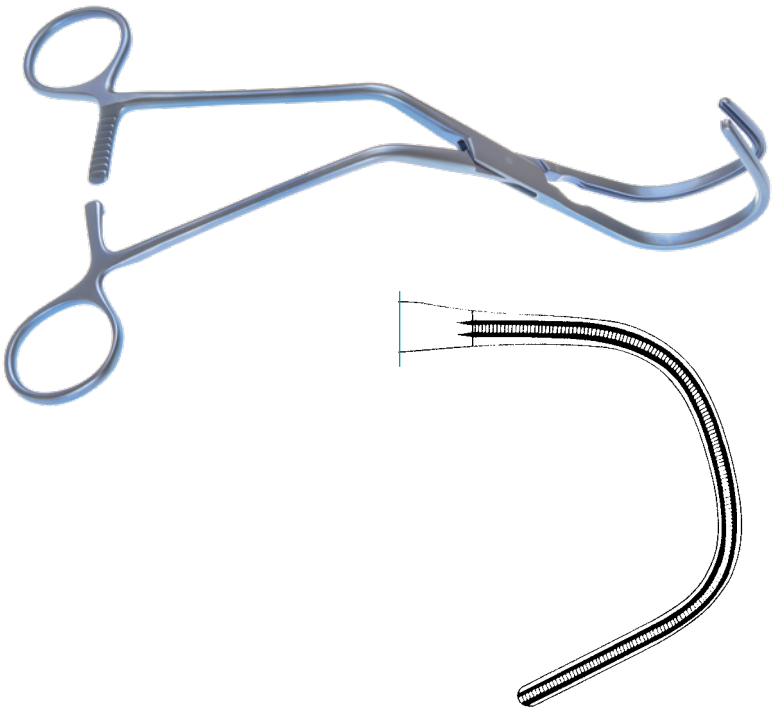
LEES
Bronchus Clamp, 220mm, $8^{2/3}$"

A	290-707-220
B	290-707-230



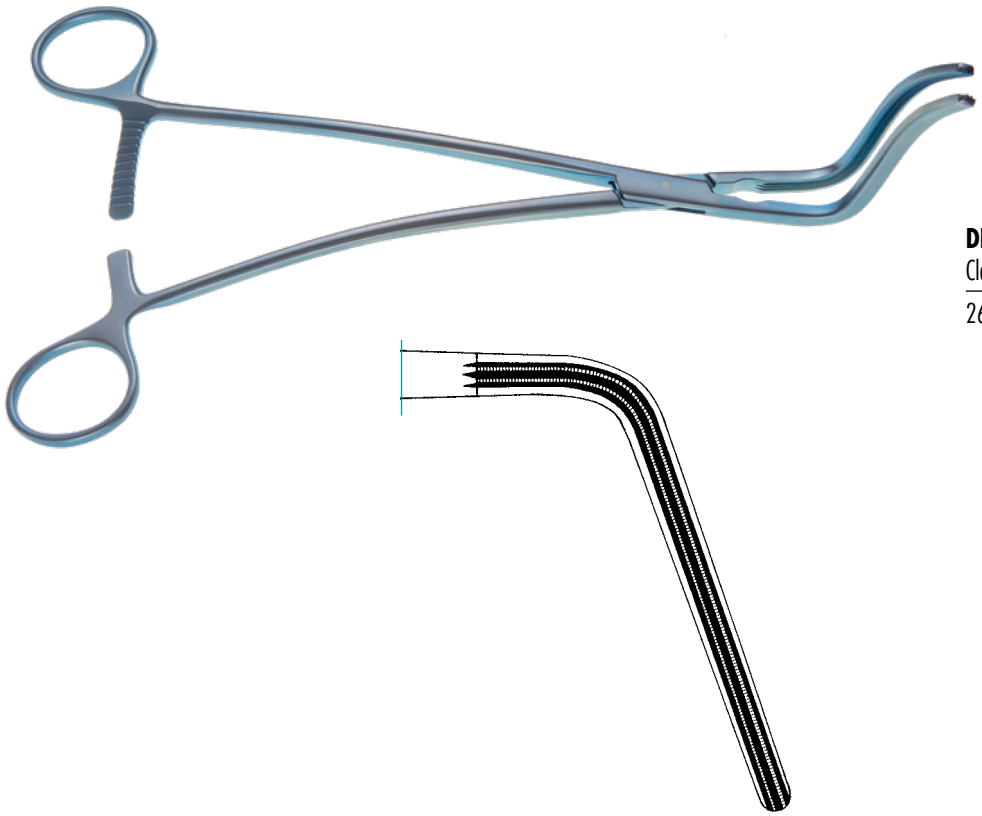
LAMBERT-KAY
Clamp

200mm, 8"	290-730-210



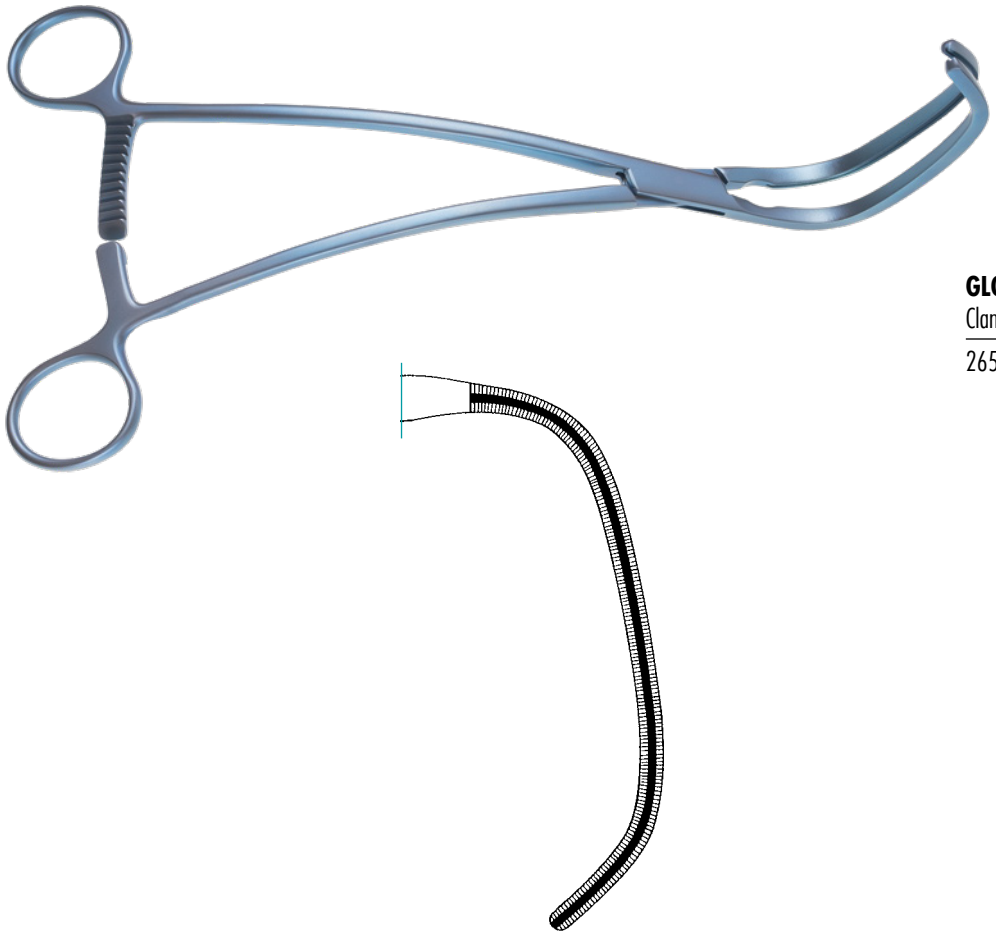
KAY
Clamp

200mm, 8"	290-711-200



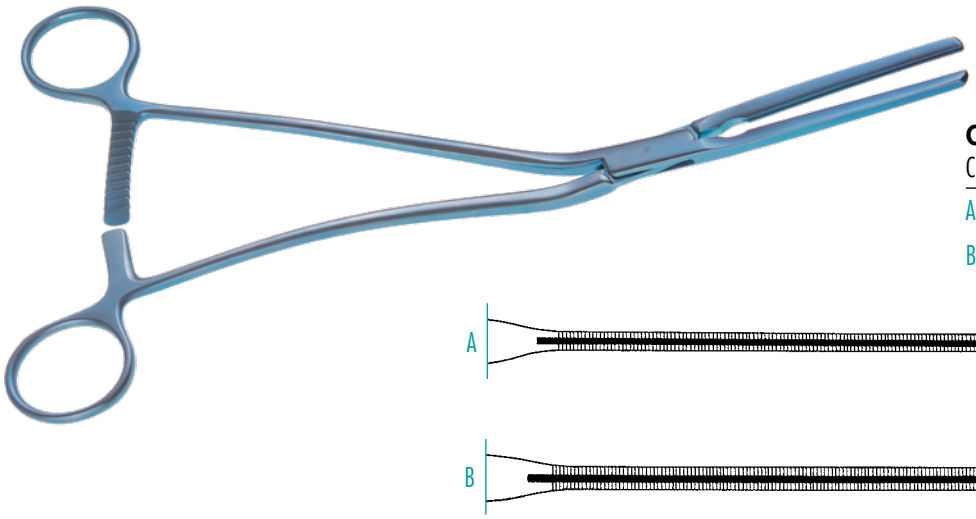
DEBAKEY
Clamp

265mm, 10 1/2"	290-713-260



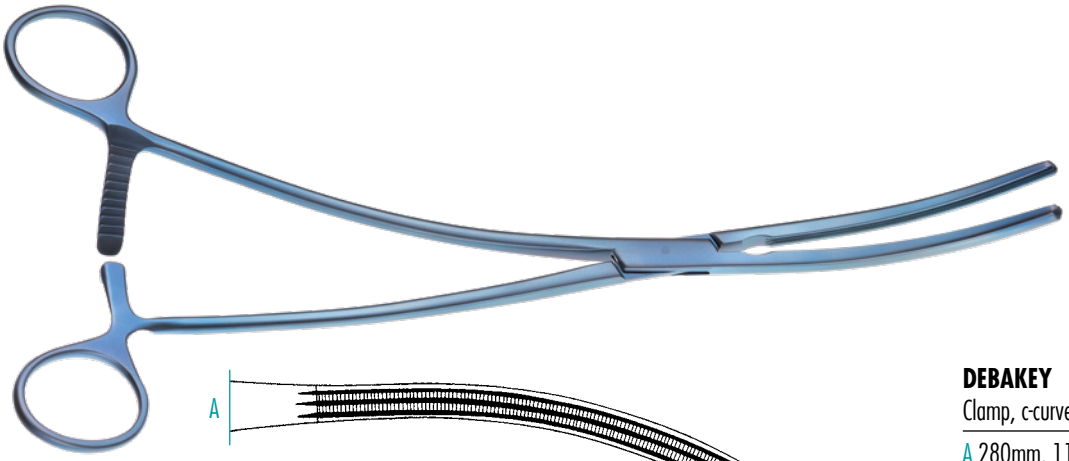
GLOVER
Clamp

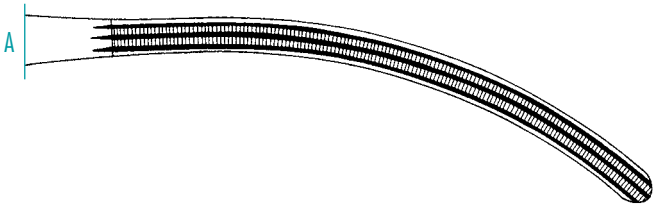
265mm, 10 1/2"	290-715-260

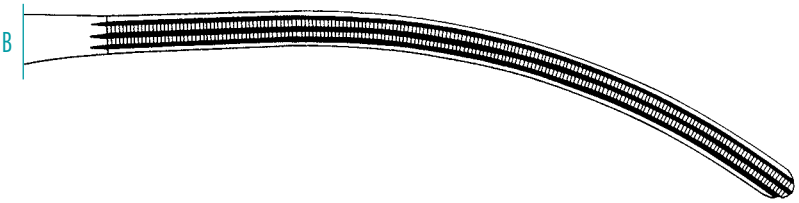


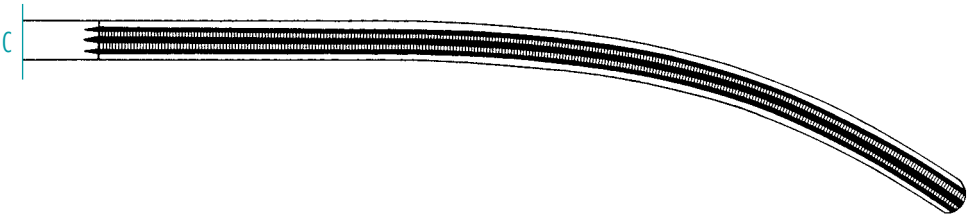
COOLEY
Clamp

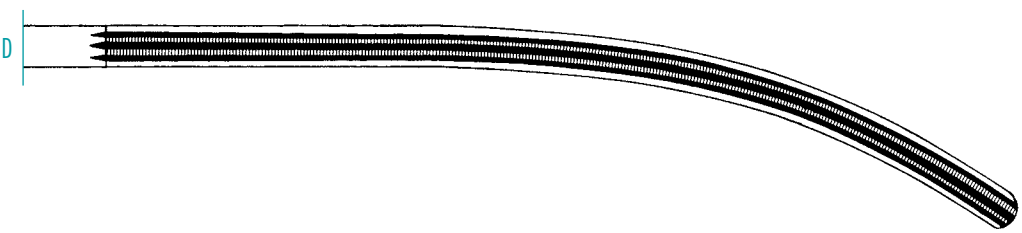
A 215mm, 8 1/2"	290-717-210
B 260mm, 10 1/4"	290-717-260





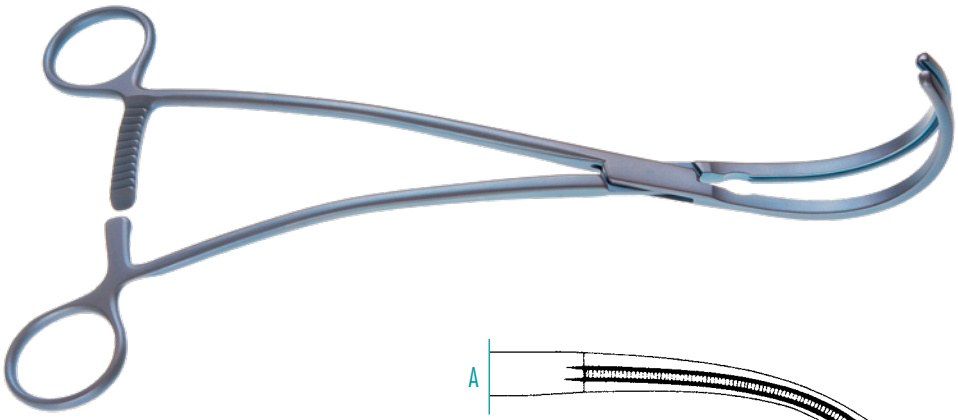


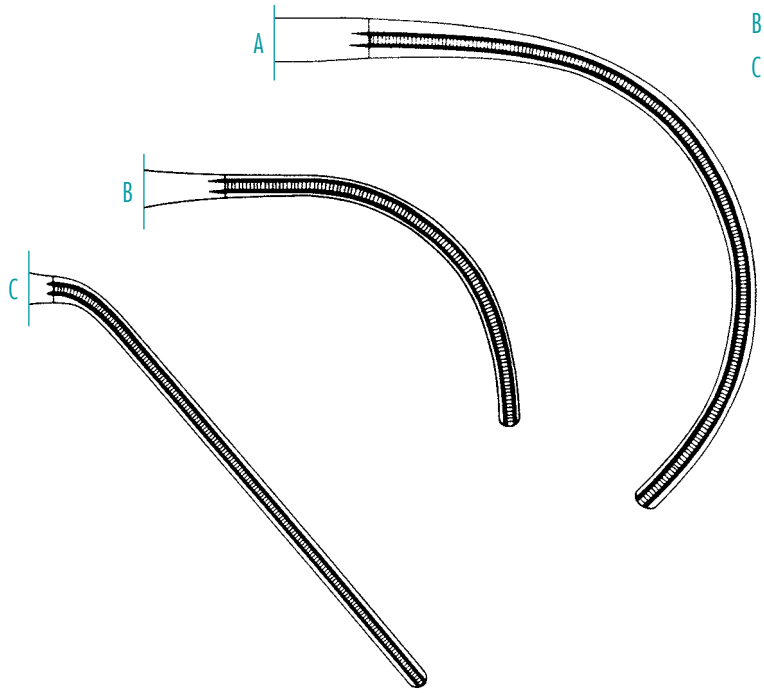




DEBAKEY
Clamp, c-curved

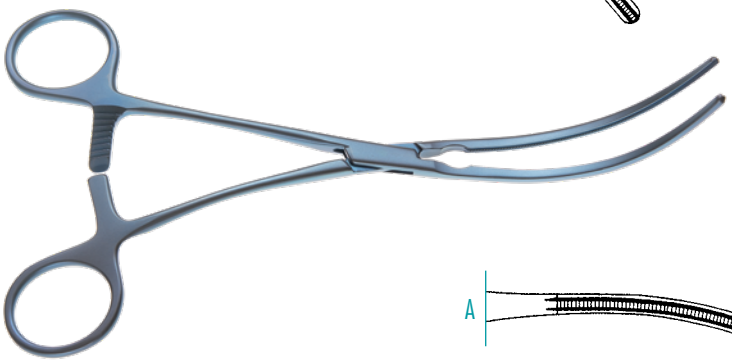
A 280mm, 11"	290-723-280
B 300mm, 11 7/8"	290-723-300
C 320mm, 12 5/8"	290-723-320
D 340mm, 13 1/3"	290-723-340

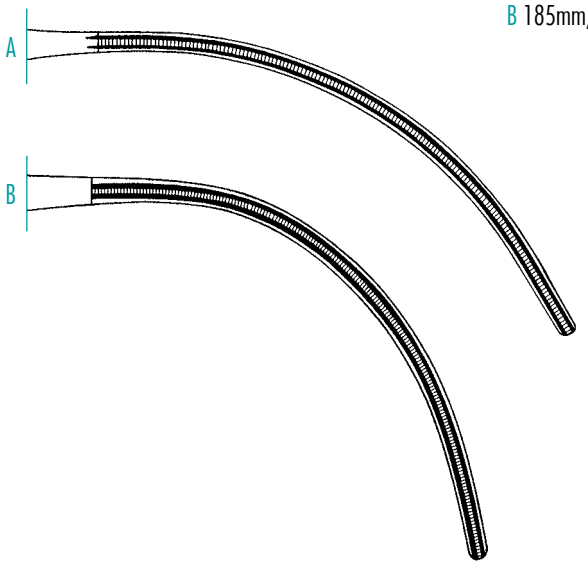




DEBAKEY
Clamp

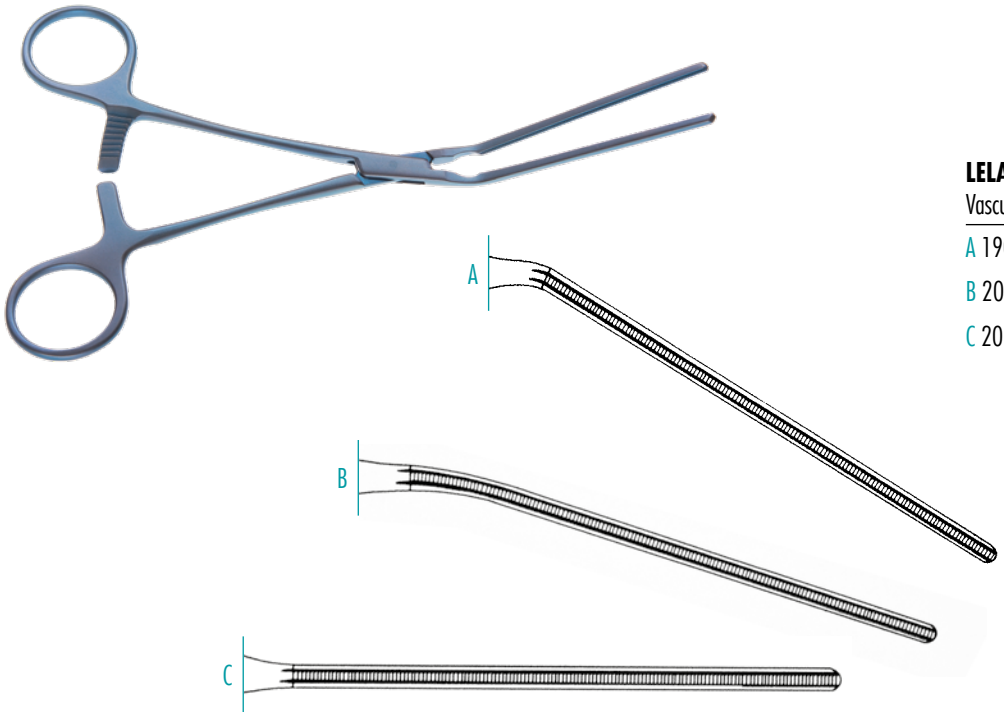
A 265mm, $10^{1/2}$"	290-727-270
B 260mm, $10^{1/4}$"	290-727-260
C 180mm, 7"	290-729-180





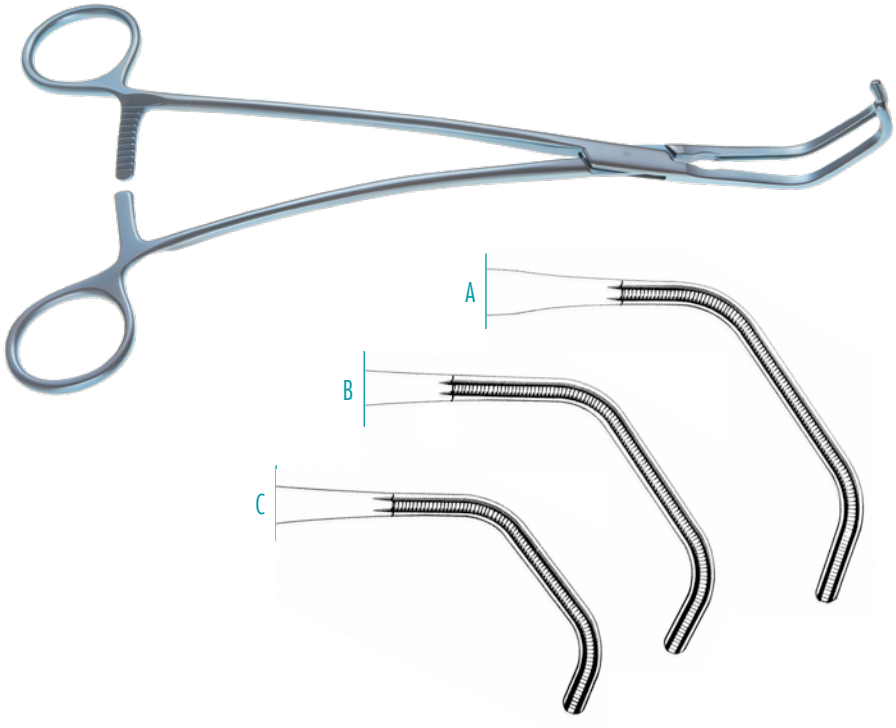
DEBAKEY
Clamp

A 200mm, 8"	290-727-200
B 185mm, $7^{1/4}$"	290-727-180



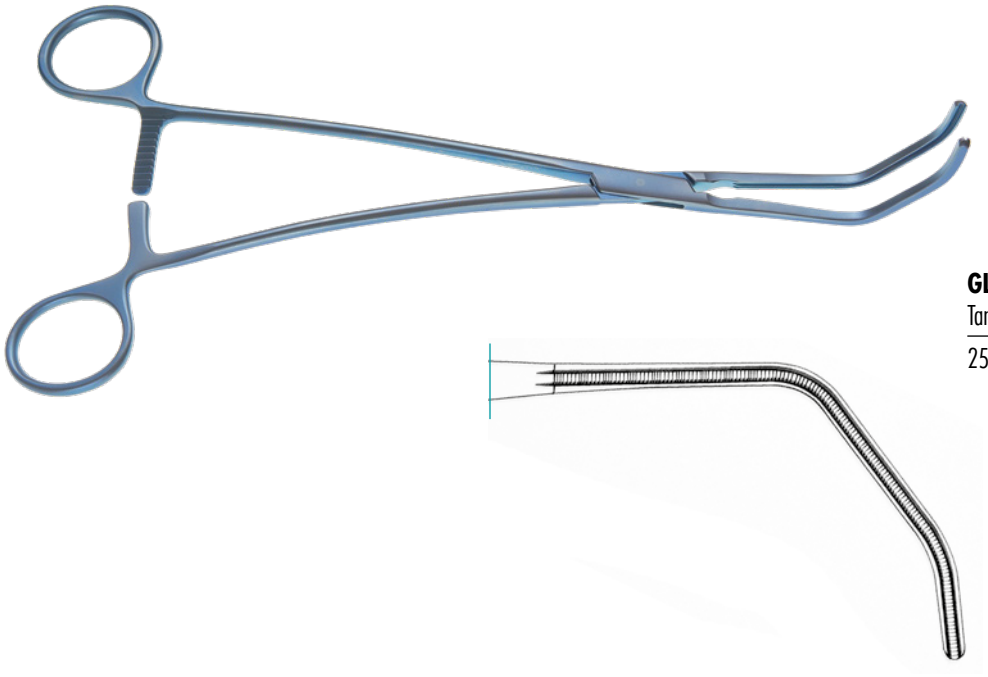
LELAND JONES
Vascular Clamp

A 190mm, 7 1/2"	290-731-190
B 200mm, 8"	290-731-200
C 205mm, 8 1/8"	290-731-210



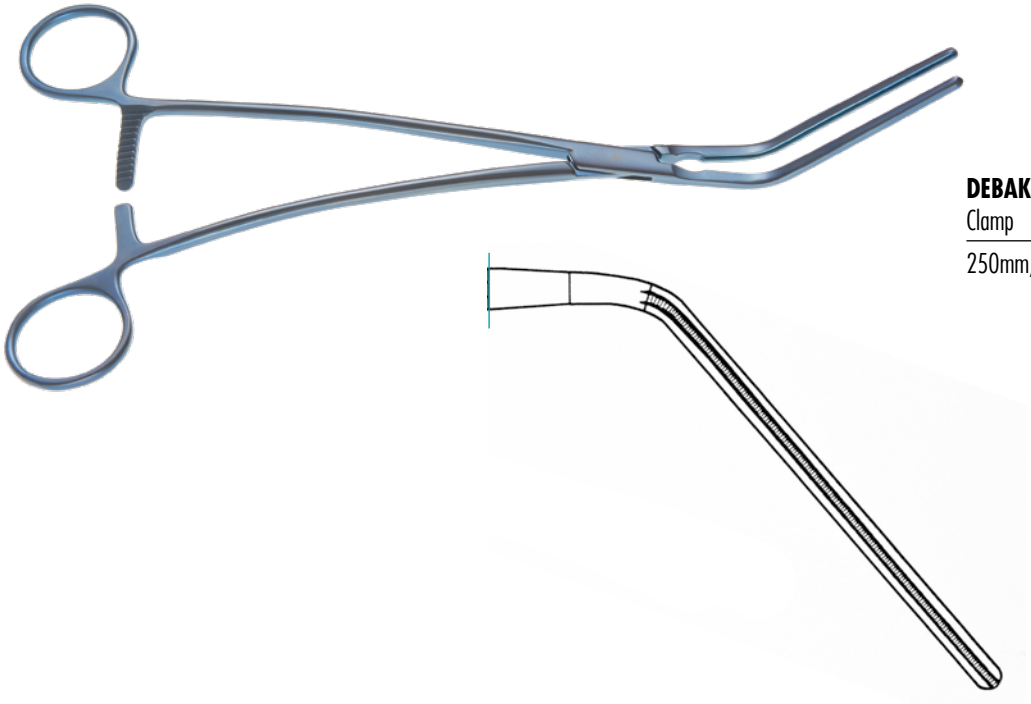
SATINSKY
Clamp, 250mm, 9 7/8"

A	290-735-001
B	290-735-002
C	290-735-003



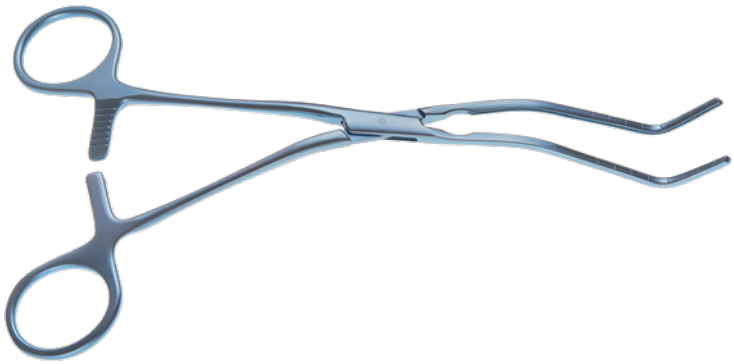
GLOVER
Tangential Clamp

250mm, 9 7/8"	290-735-250



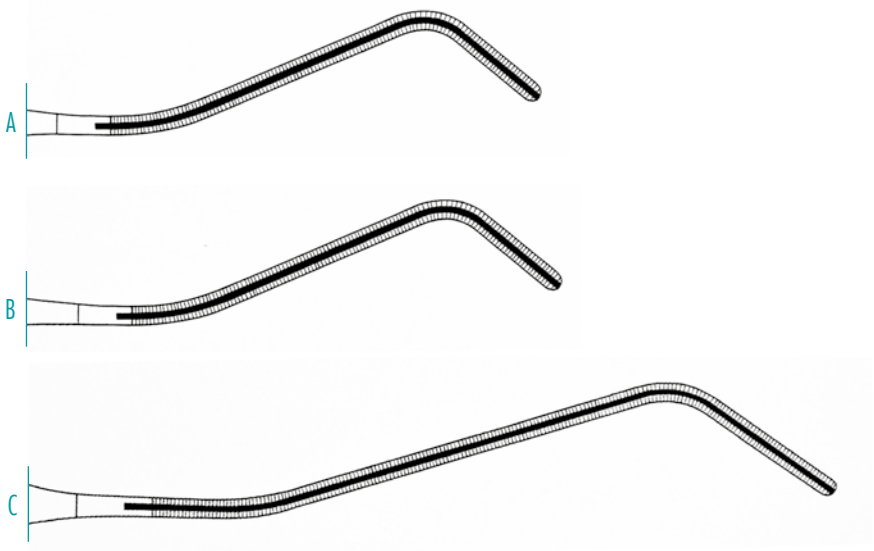
DEBAKEY
Clamp

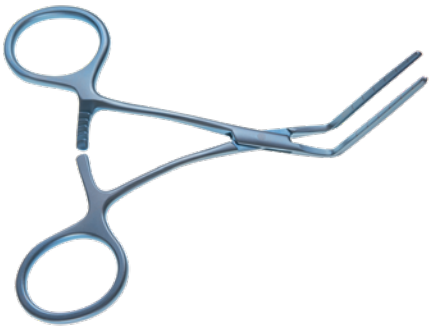
250mm, 9 7/8"	290-737-260

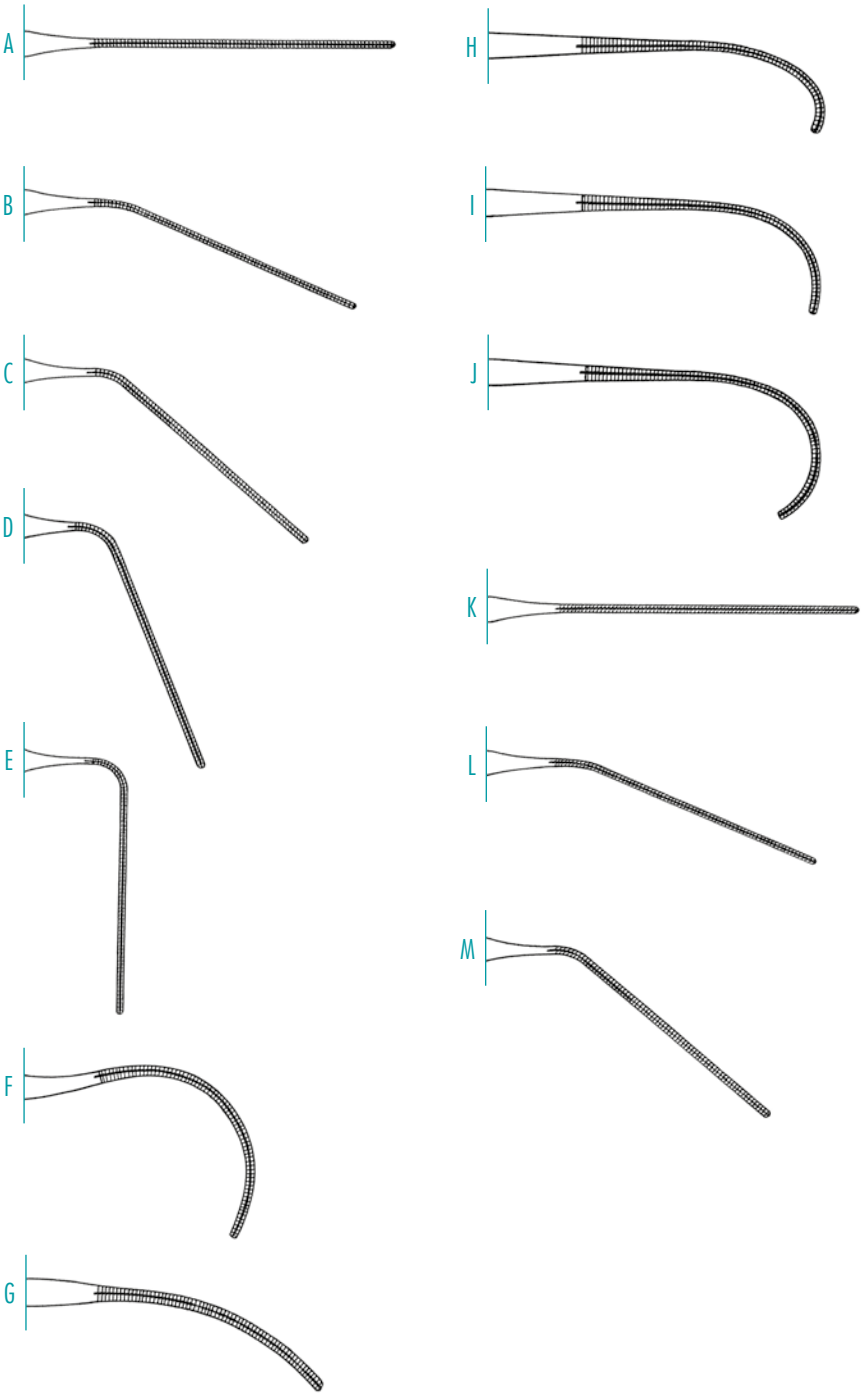


COOLEY
Renal Artery Clamp

A 190mm, $7^{1/2}$"	290-739-190
B 200mm, 8"	290-739-200
C 270mm, $10^{2/3}$"	290-739-270

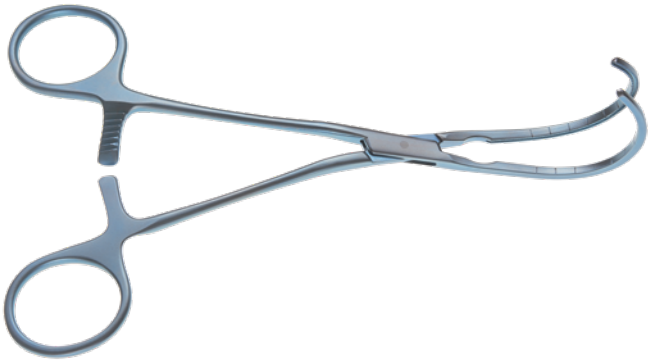






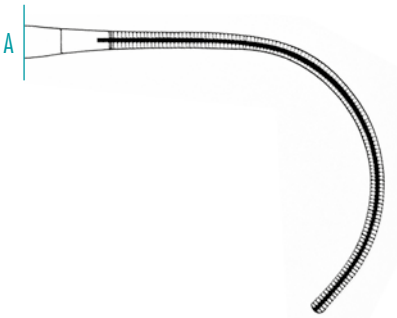
CASTANEDA
Pediatric Clamp

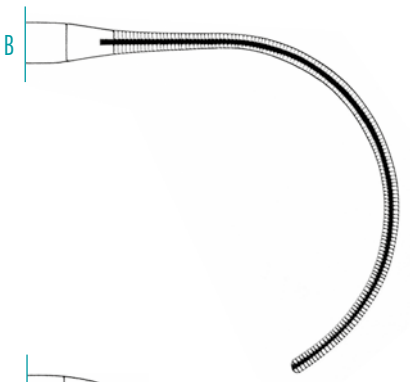
A 130mm, $5^{1/8}$"	290-732-130
B 130mm, $5^{1/8}$"	290-734-130
C 130mm, $5^{1/8}$"	290-735-130
D 120mm, $4^{3/4}$"	290-734-120
E 110mm, $4^{1/3}$"	290-732-110
F 120mm, $4^{3/4}$"	290-793-120
G 130mm, $5^{1/8}$"	290-794-130
H 150mm, 6"	290-796-150
I 150mm, 6"	290-795-150
J 150mm, 6"	290-797-150
K 160mm, $6^{1/4}$"	290-798-160
L 160mm, $6^{1/4}$"	290-799-160
M 150mm, 6"	290-798-150
N 150mm, 6"	290-799-150
O 140mm, $5^{1/2}$"	290-798-140



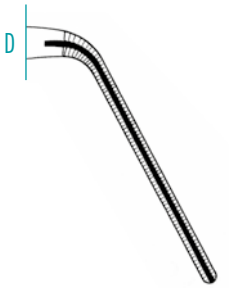
COOLEY
Pediatric Clamp

A 165mm, $6^{1/2}$"	290-760-165
B 170mm, $6^{2/3}$"	290-760-170
C 170mm, $6^{2/3}$"	290-761-170
D 165mm, $6^{1/2}$"	290-761-165
E 150mm, 6"	290-761-150

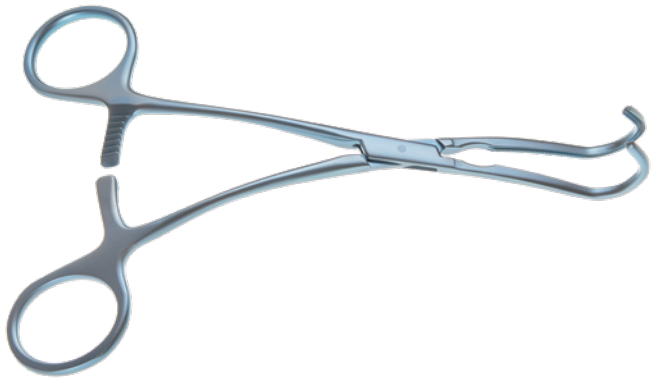






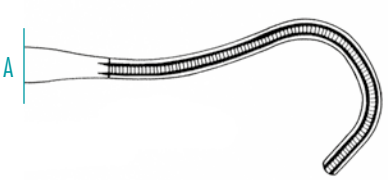


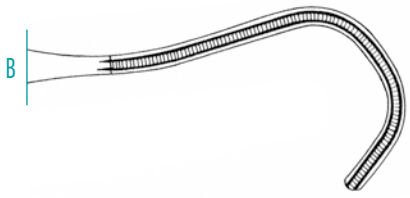


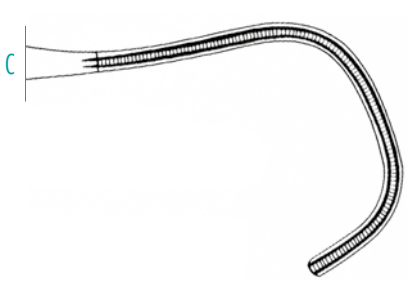


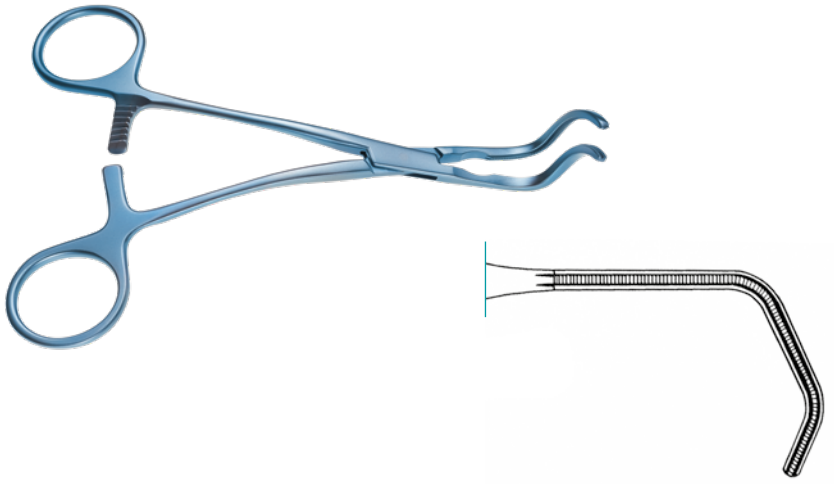
DERRA
Anastomosis Pediatric Clamp

A 165mm, $6^{1/2}$"	290-758-165
B 170mm, $6^{2/3}$"	290-758-170
C 180mm, 7"	290-759-180



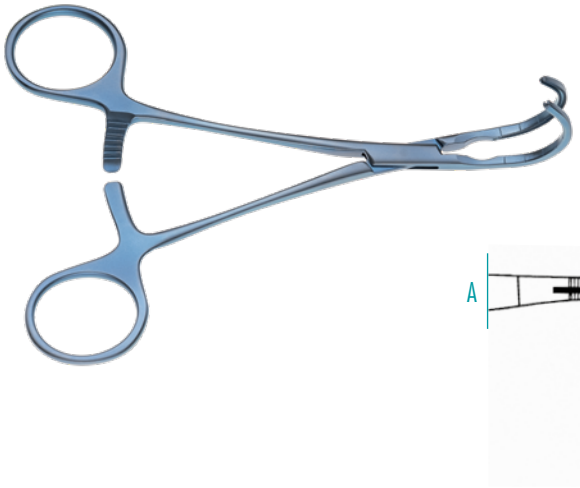






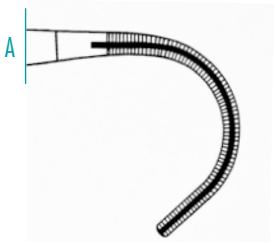
SUBRAMANIAN
Clamp

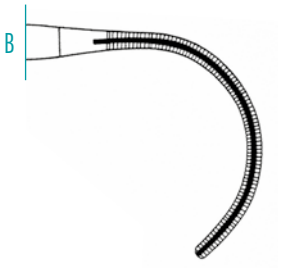
160mm, 6 1/4"	290-733-160

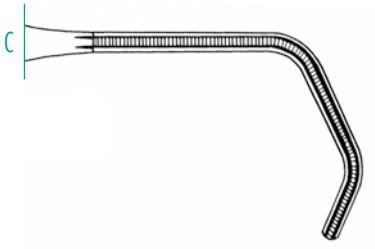


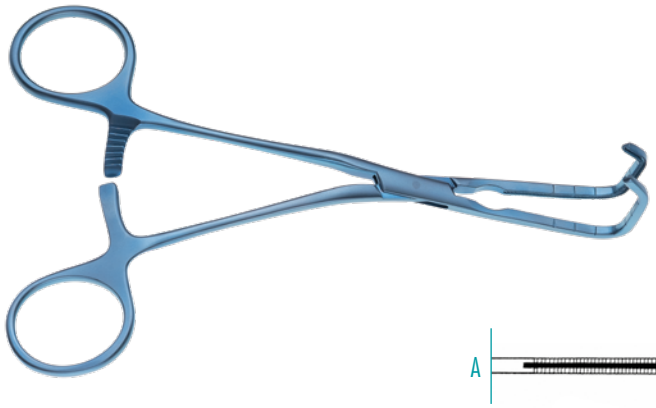
BECK
Pediatric Clamp, 150mm, 6"

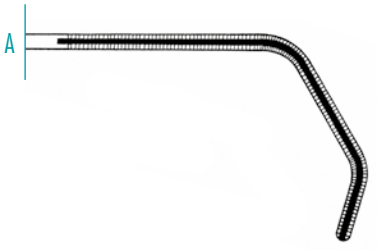
A small jaw	290-734-150
B large jaw	290-735-150
C 165mm, 6 1/2"	290-732-165

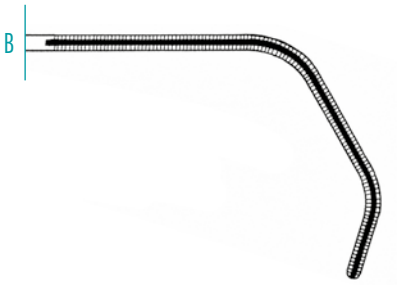


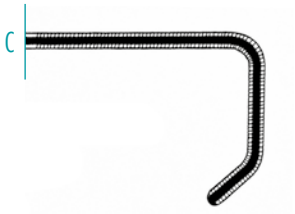


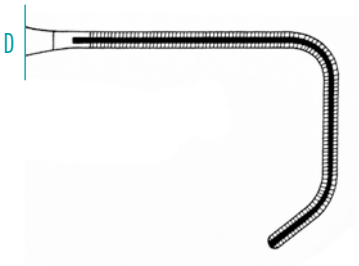






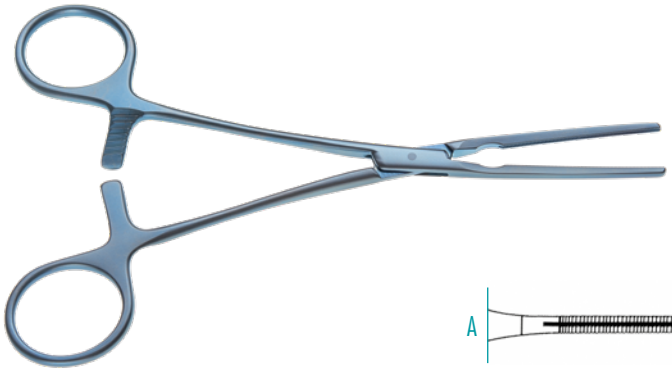






COOLEY
Pediatric Clamp

A 170mm, $6^{2/3}$"	290-762-170
B 180mm, 7"	290-762-180
C 170mm, $6^{2/3}$"	290-763-170
D 175mm, $6^{7/8}$"	290-763-175









COOLEY
Pediatric Clamp, straight shanks

A 160mm, $6^{1/4}$"	290-764-160

angled shanks

A 160mm, $6^{1/4}$"	290-765-160

straight shanks

B 170mm, $6^{2/3}$"	290-764-170

straight shanks

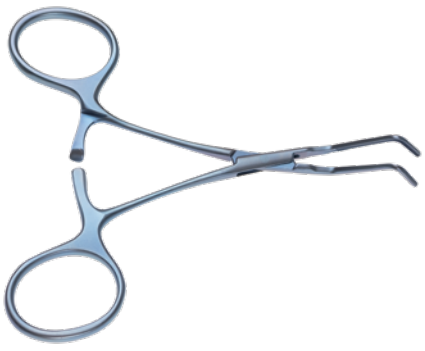
B 170mm, $6^{2/3}$"	290-765-170

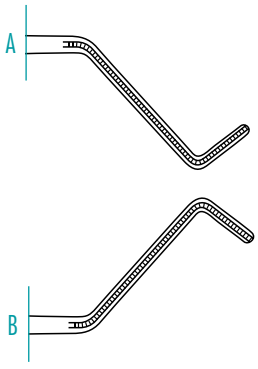
straight shanks, curved jaw

C 170mm, $6^{2/3}$"	290-766-170

straight shanks, spoon-shaped jaw

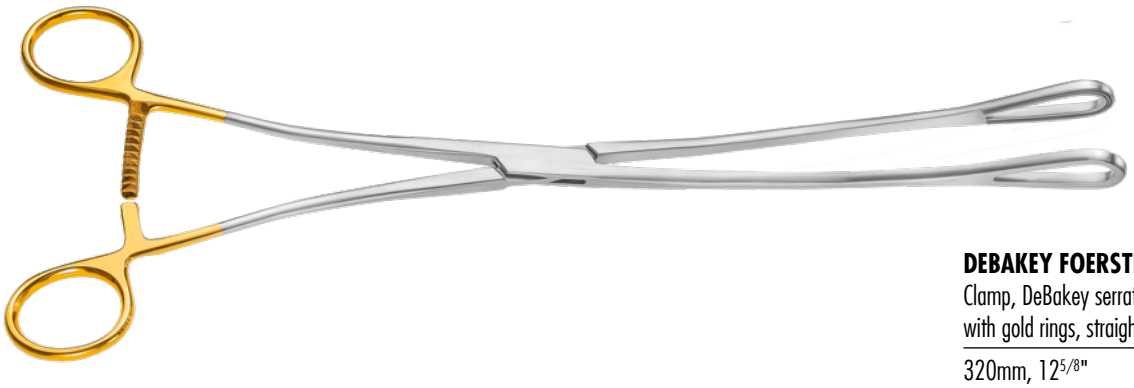
D 170mm, $6^{2/3}$"	290-767-170





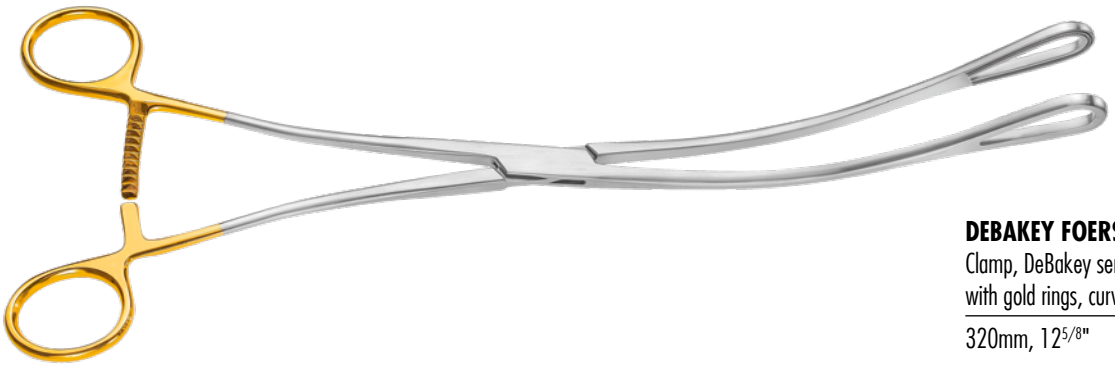
KITZMILLER
Pediatric Clamp, 110mm, $4^{1/3}$"

A left angled	290-723-110
B right angled	290-725-110



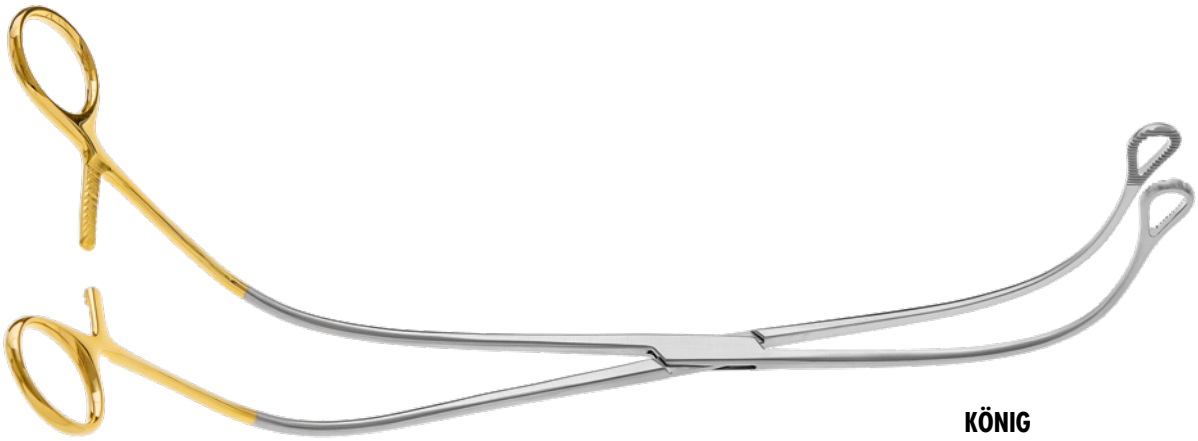
DEBAKEY FOERSTER
Clamp, DeBakey serrations,
with gold rings, straight

320mm, $12^{5/8}$"	290-000-320



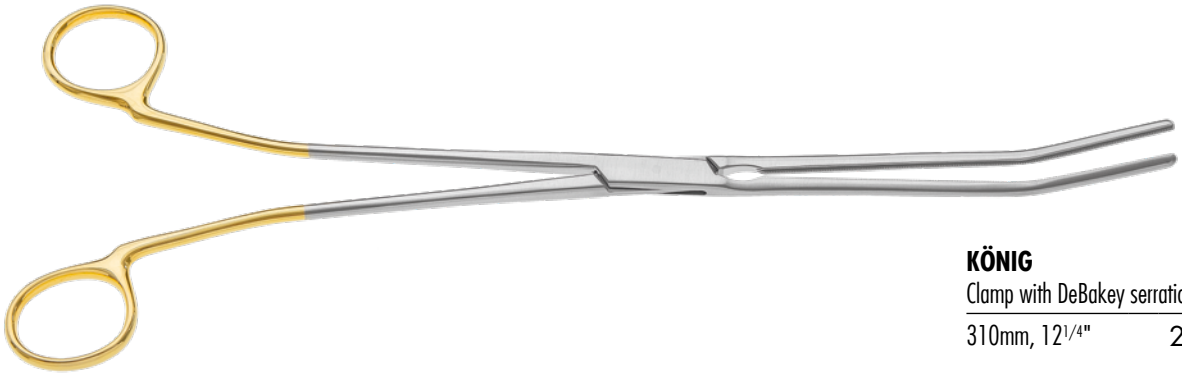
DEBAKEY FOERSTER
Clamp, DeBakey serrations,
with gold rings, curved

320mm, $12^{5/8}$"	290-000-321



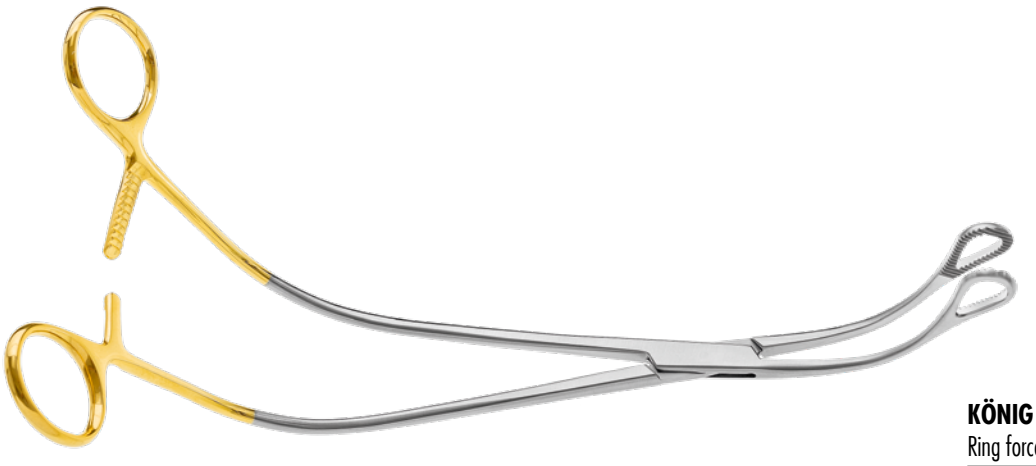
KÖNIG
Ring forceps for thoracic surgery

310mm, 12 1/4"	290-000-315



KÖNIG
Clamp with DeBakey serration

310mm, 12 1/4"	290-000-310



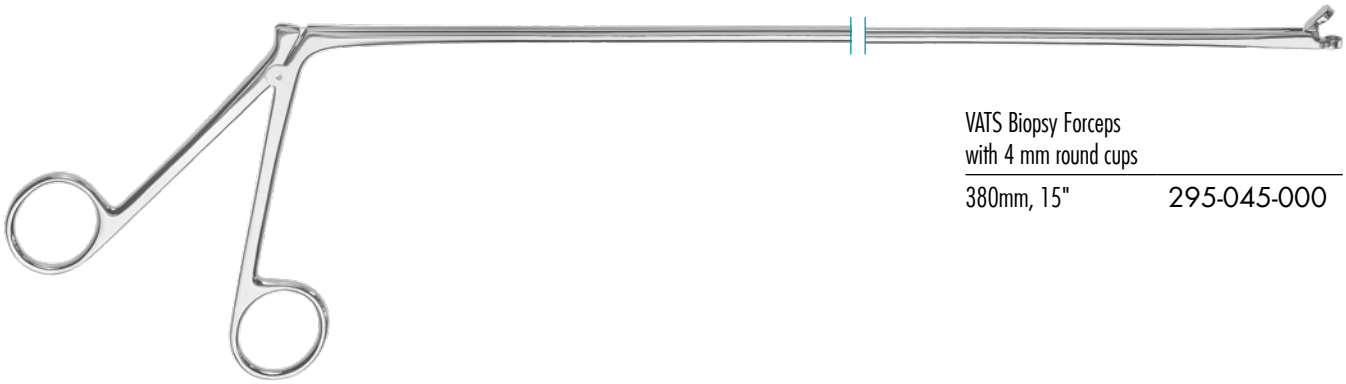
KÖNIG
Ring forceps for thoracic surgery

255mm, 10"	290-000-255



KÖNIG
T-Clamp with DeBakey serration

305mm, 12"	290-000-305



VATS Biopsy Forceps
with 4 mm round cups

380mm, 15"	295-045-000



Chest Tube Passer, ∅ 10mm shaft,
160mm working length, without ratchet

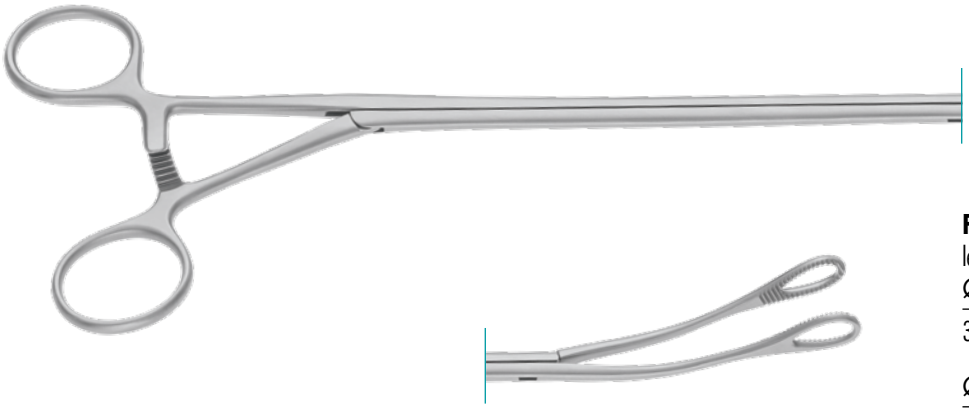
250mm, 9 7/8"	295-080-150
280mm, 11"	295-080-280

155mm working length, with ratchet

240mm, 9 1/2"	295-080-170

280mm working length, with ratchet

355mm, 14"	295-080-281



FOERSTER
left curved, oval shape,
∅ 7mm shaft, 230mm working length

335mm, 13 1/4"	295-150-012

∅ 10mm shaft, 240mm working length

340mm, 13 1/3"	295-150-020



DUVAL
left curved, triangular shape, 10mm jaw width
∅ 10mm shaft, 230mm working length

330mm, 13"	295-310-001

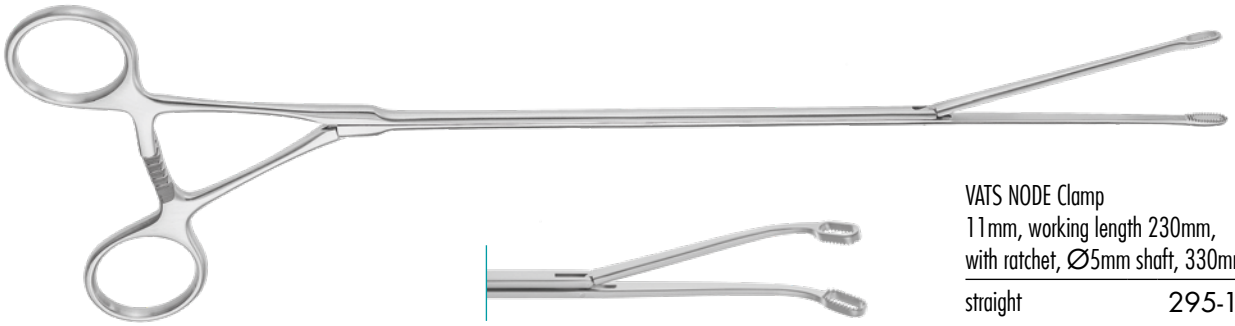
25mm jaw width
235mm working length

330mm, 13"	295-310-002



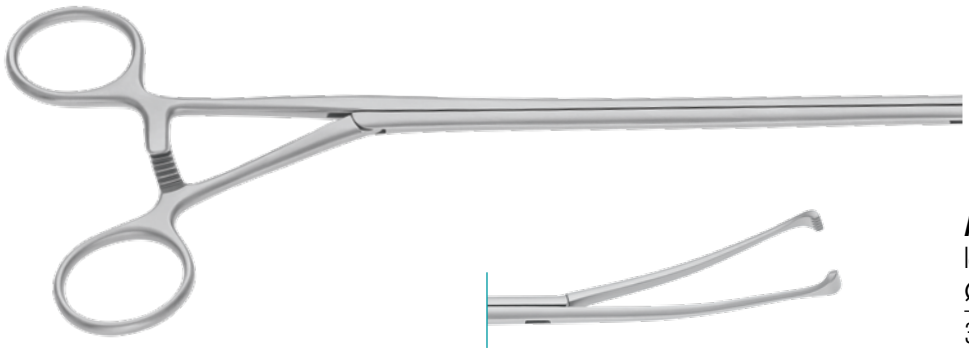
Dissecting Forceps, left curved,
∅ 7mm shaft, 230mm working length

340mm, 13 1/3"	295-100-230



VATS NODE Clamp
11mm, working length 230mm,
with ratchet, ∅5mm shaft, 330mm, 13"

straight	295-150-222
left curved	295-150-223



ALLIS
left curved, 6mm jaw width
∅ 7mm shaft, 240mm working length

330mm, 13"	295-310-100

DEBAKEY
1x2 teeth, ∅ 10mm shaft,
65mm jaw length, 230mm working length

330mm, 13"	295-290-065

75mm jaw length, 250mm working length

340mm, 13 1/3"	295-290-075

100mm jaw length, 255mm working length

360mm, 14 1/4"	295-290-100

2x3 teeth,
100mm jaw length, 250mm working length

350mm, 14"	295-290-101





COOLEY
1x2 teeth, ∅ 10mm shaft,
240mm working length, 345mm, 13 1/2"

with ratchet	295-290-300
without ratchet	295-290-301

Fig.1



HARKEN
1x2 teeth, ∅ 10mm shaft, without ratchet,
250mm working length, Fig. 1

355mm, 14"	295-290-001

270mm working length, without ratchet, Fig. 2

370mm, 14 1/2"	295-290-002

Fig.2



1x2 teeth, ∅ 10mm shaft, with ratchet
250mm working length, Fig. 1

355mm, 14"	295-290-010

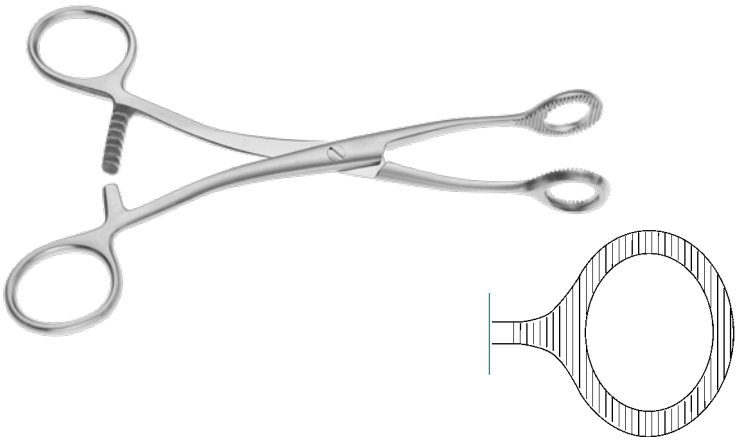
270mm working length, with ratchet, Fig. 2

370mm, 14 1/2"	295-290-012



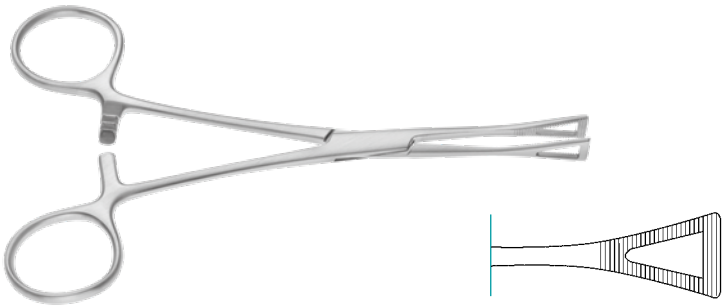
D'AMICO
∅ 10mm shaft, 110mm jaw length
270mm working length, 370mm, 14 1/2"

straight	295-290-200
curved	295-290-201



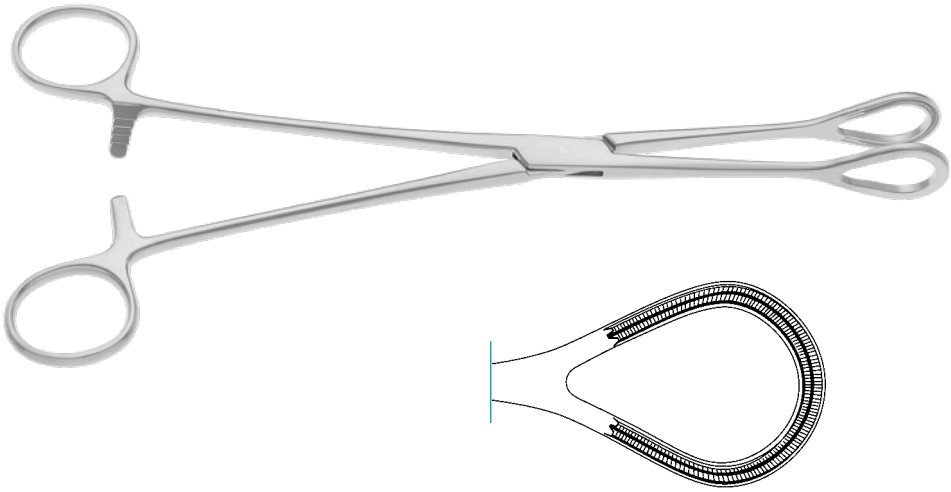
COLLIN
Hemostatic Forceps

160mm, 6 1/4"	140-236-160



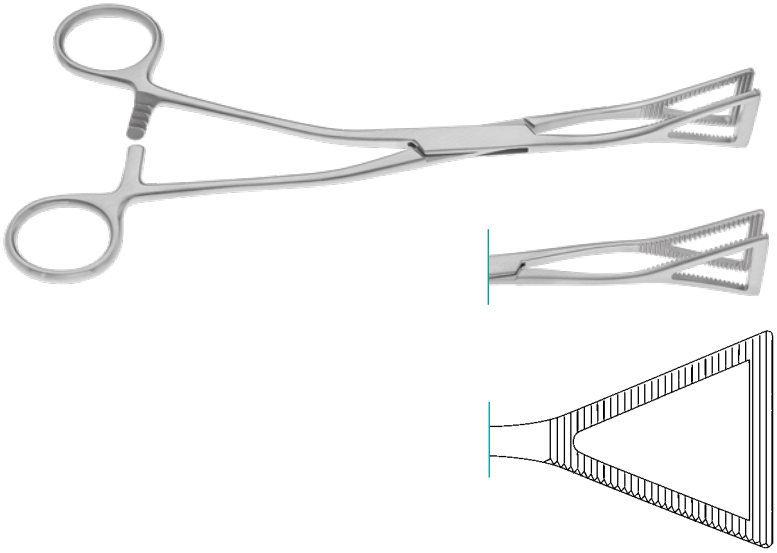
PENNINGTON
Tissue Holding Forceps

155mm, 6 1/8"	140-240-155



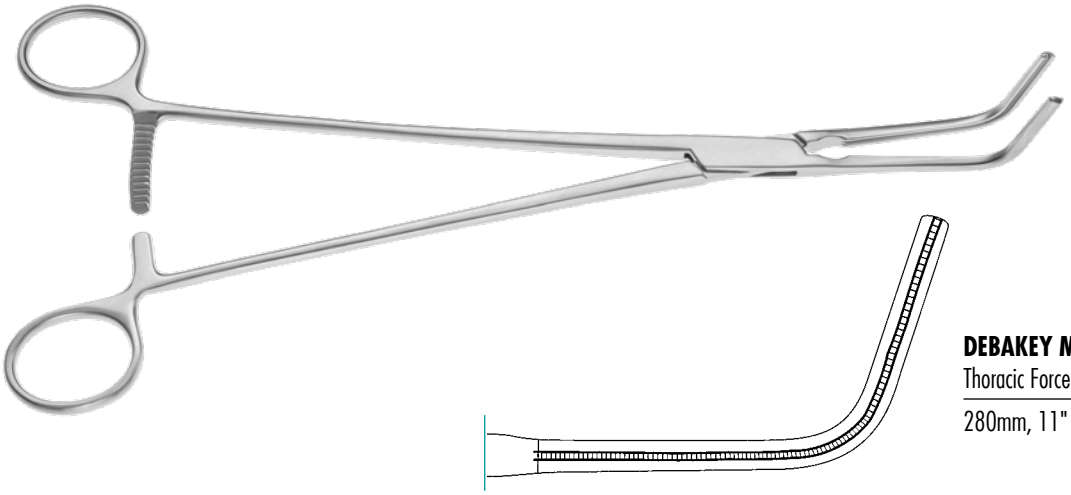
DEBAKEY
Intestinal and Organ Grasping Forceps, atraumatic serrations, small ring

260mm, 10 1/4"	140-220-260



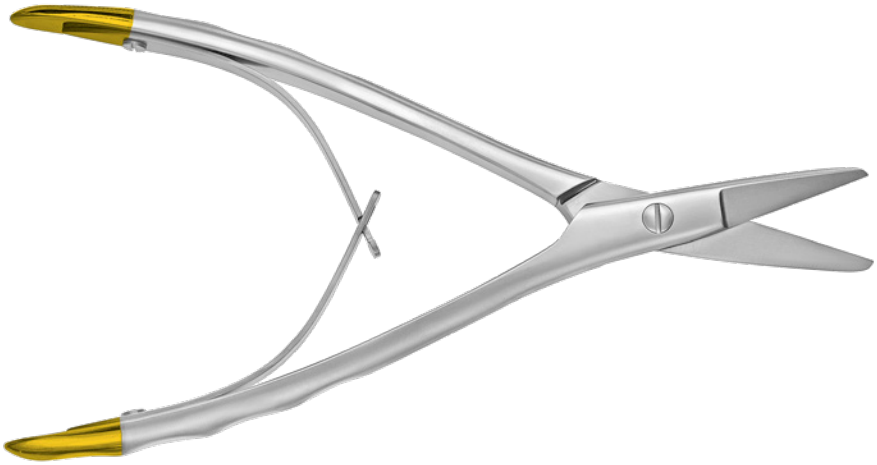
LOVELACE
Lung Grasping Forceps, 200mm, 8"

straight	290-286-200
curved	290-287-200



DEBAKEY MIXTER
Thoracic Forceps, strong serration

280mm, 11"	290-600-230



Rib Shears

230mm, 9"	290-100-230



Rib Shears

220mm, 8 2/3"	290-101-220

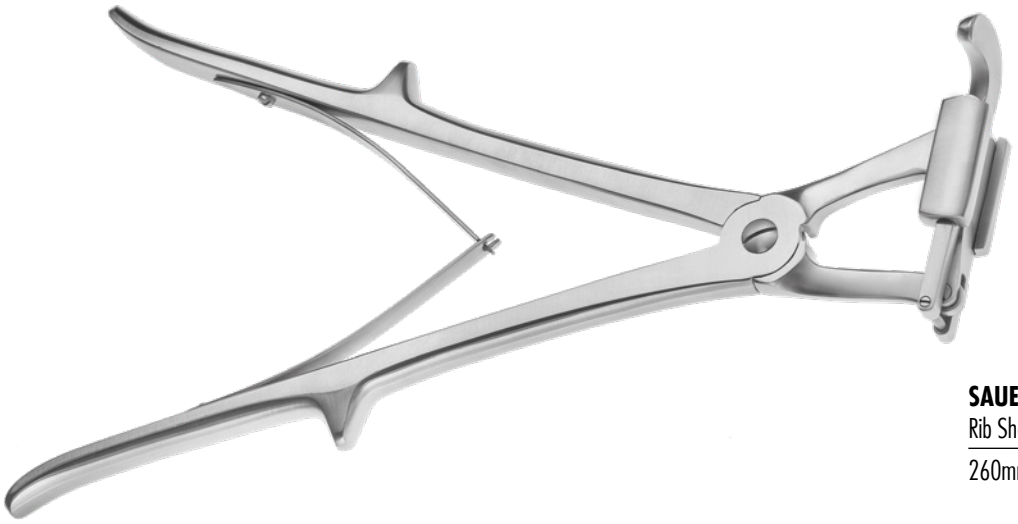


GLUCK
Bone / Rib Shears

220mm, 8 2/3"	290-107-220



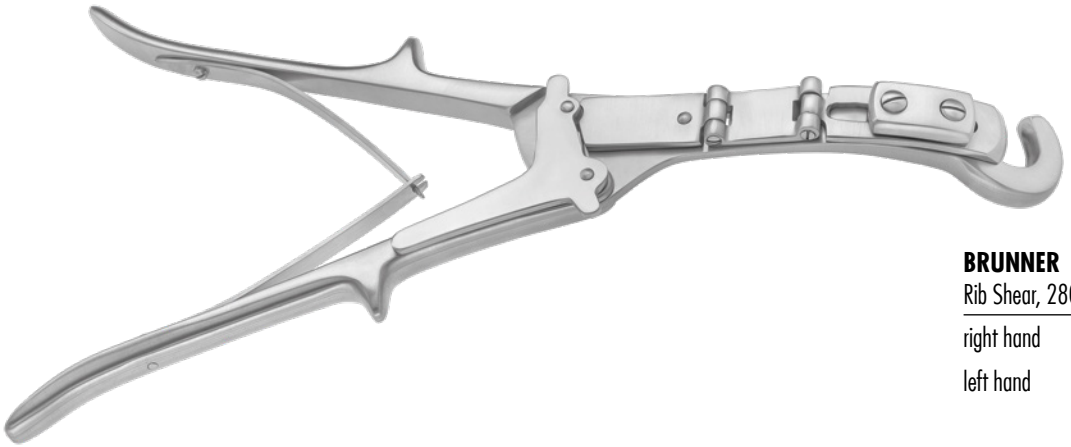
BETHUNE
Rib Shears
345mm, $13^{5/8}$" 290-126-340



SAUERBRUCH
Rib Shears
260mm, $10^{1/4}$" 290-131-260



GIERTZ STILLE
Rib Shears, double action
250mm, $9^{7/8}$" 290-137-270



BRUNNER
Rib Shear, 280mm, 11"

right hand	290-147-280
left hand	290-149-280



VEHMEHREN (TUDOR EDWARDS)
Costotome

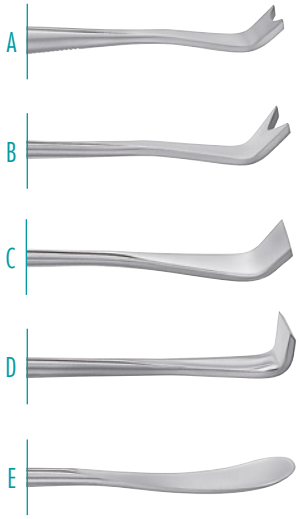
240mm, 9 1/2"	290-110-240



SWEET
Sternum Punch

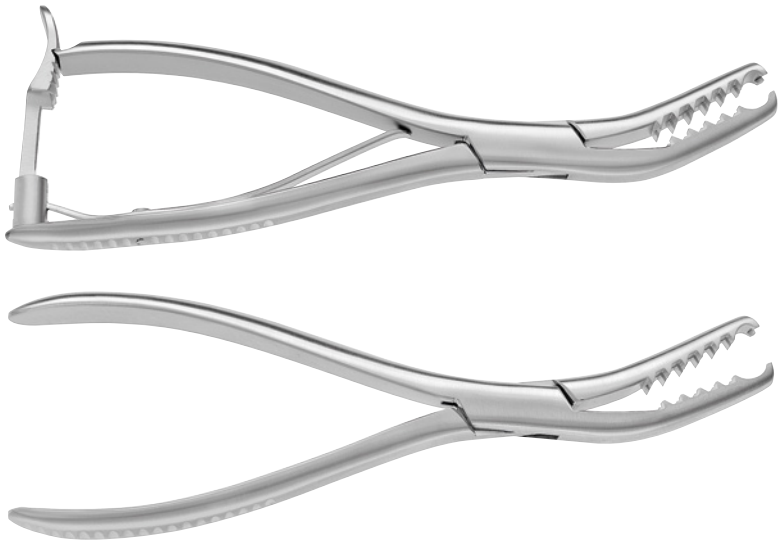
230mm, 9"	290-158-245





SEMB
Raspatory, hollow handle, 190mm, 7 1/2"

A 12mm	210-450-001
230mm, 9"	
B 12mm	210-450-002
C 13mm	210-450-003
D 13mm	210-450-004
E 15mm	210-450-005



SEMB
Bone Holding Forceps, laterally curved with ratchet

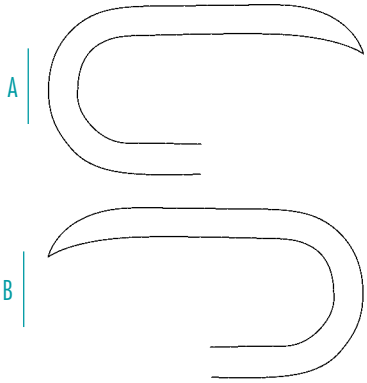
190mm, 7 1/2"	210-624-190
without ratchet	
190mm, 7 1/2"	210-623-190



LEBSCHE
Sternum Chisel

245mm, $9^{2/3}$"	290-151-240

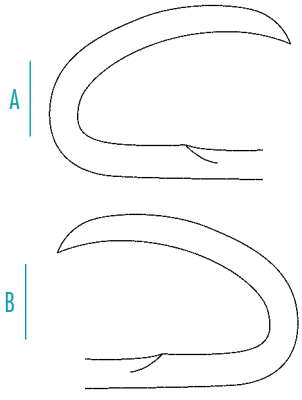




DOYEN
Rib Raspatory, 175mm, $6^{7/8}$"

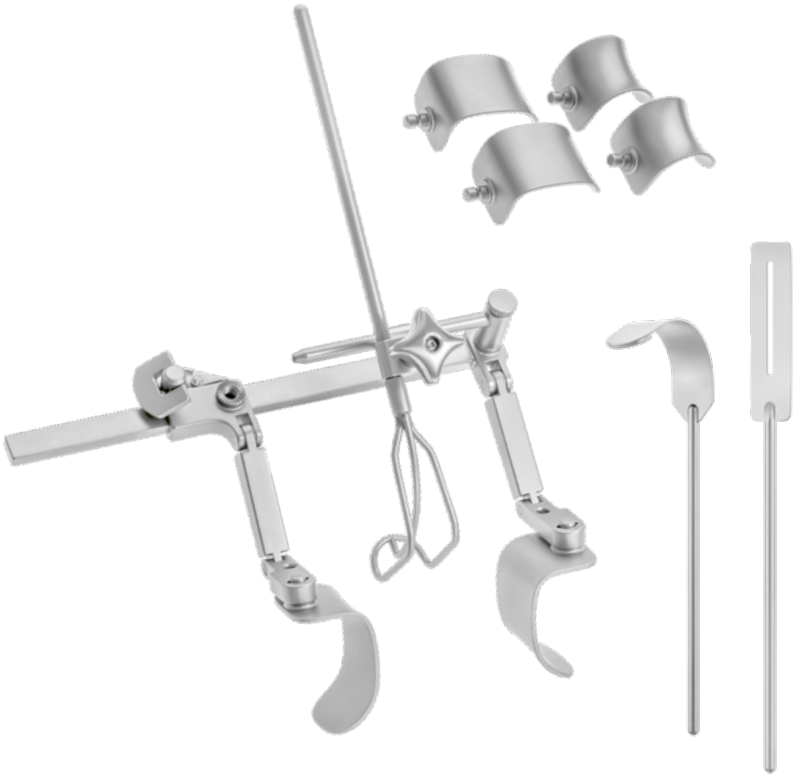
A right, adults	210-331-170
B left, adults	210-333-170





DOYEN
Rib Raspatory, 175mm, $6^{7/8}$"

A right, children	210-335-170
B left, children	210-337-170



Mini Thoracotomy Retractor,
double hinge, set with 2 blades pairs
36 x 55 / 36 x 40mm, detachable crossbar

290-156-000

Blade Pair

40 x 70mm	290-156-001

Blades, 280mm length

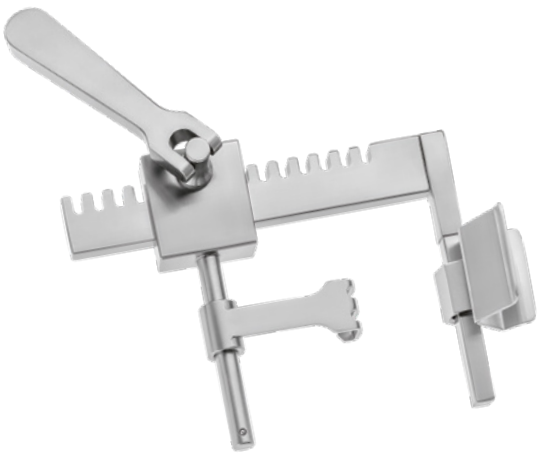
95 x 18mm	290-156-004
95 x 22mm	290-156-005





Mini Thoracotomy Retractor

36 x 45mm blades	290-155-045
36 x 60mm blades	290-155-060
36 x 80mm blades	290-155-080



IMA Mini-Sternotomy Retractor,
complete with U-Blade 38mm, 2x french hooks

120mm, $4^{3/4}$"	290-184-030



FINOCHIETTO
Micro Neonatal Rib Spreader
27 x 12 x 10mm (length/width/depth)

35mm spread	290-177-035



FINOCHIETTO BABY
Rib Spreader, straight arms
51 x 15 x 13mm (length/width/depth)

55mm spread	290-177-055

51 x 15 x 13mm (length/width/depth)

75mm spread	290-177-070

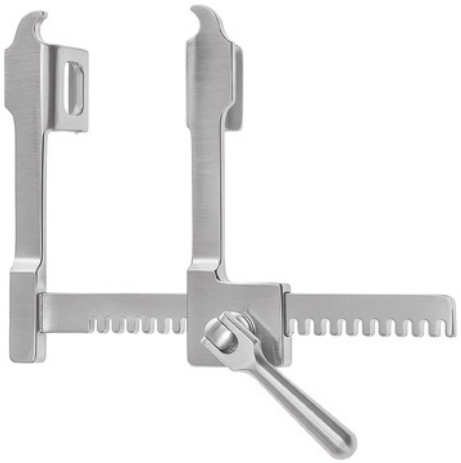
60 x 21 x 18mm (length/width/depth)

80mm spread	290-177-075



FINOCHIETTO BABY
Rib Spreader, curved arms
60 x 21 x 18mm (length/width/depth)

80mm spread	290-179-075



FINOCHIETTO BABY
Rib Spreader, with contractor
68 x 21 x 19mm (length/width/depth)

80mm spread	290-178-075



HAIGHT FINOCHIETTO BABY
Rib Spreader, Aluminium
76 x 31 x 31mm (length/width/depth)

98mm spread	290-161-002



HAIGHT
Rib Spreader, small
64 x 31 x 32mm (length/width/depth)

126mm spread	290-168-060

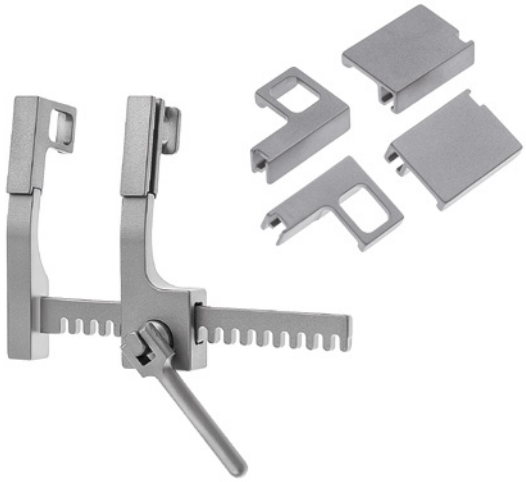
large
90 x 31 x 32mm (length/width/depth)

126mm spread	290-168-090



BAILEY FINOCHIETTO
Rib Spreader, Aluminium
58 x 14 x 12mm (length/width/depth)

74mm spread	290-179-000



Ti

Mini Thorax Spreader, Titanium,
40mm length

39mm spread	290-187-000

Spare Valves, paired
20 x 15mm (width/depth)

290-187-001

Spare Valves, paired
10 x 15mm (width/depth)

290-187-002



MORSE
Rib Spreader, small, black coated,
movable valves
56 x 40 x 12mm (length/width/depth)

65mm spread	290-300-255



CASTANEDA
Rib Spreader, Aluminium
60 x 34 x 11mm (length/width/depth)

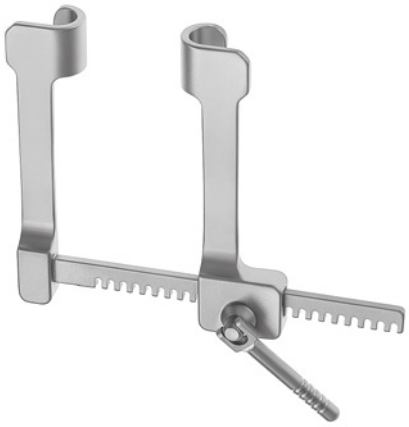
74mm spread	290-166-001

80 x 45 x 13mm (length/width/depth)

80mm spread	290-166-002

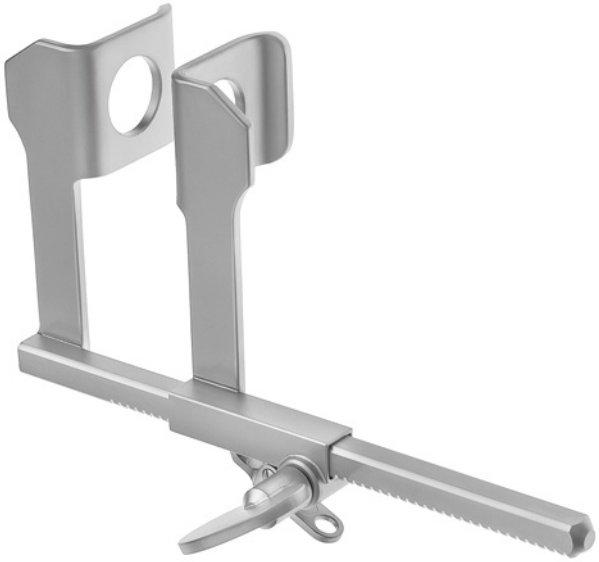
126 x 60 x 17.5mm (length/width/depth)

110mm spread	290-166-003



COOLEY CLARKE
Rib Spreader, Infants
70 x 15 x 10mm (length/width/depth)

65mm spread	290-160-010



HAIGHT BABY
Rib Spreader
73 x 35 x 31.5mm (length/width/depth)

90mm spread	290-168-050



COOLEY
Rib Spreader, Aluminium, Children, with points
77 x 20.5 x 17mm (length/width/depth)

97mm spread	290-160-000



COOLEY
Rib Spreader, Aluminium, Children
58 x 17 x 11mm (length/width/depth)

74mm spread	290-160-001

80 x 30 x 17mm (length/width/depth)

101mm spread	290-160-002



ANKENEY
Rib Spreader, Aluminium, 4 fixed swivel valves
114 x 19 x 23mm (length/width/depth)

139mm spread	290-177-000



RIENHOFF
Rib Spreader
116 x 33 x 30mm (length/width/depth)

140mm spread	290-169-000

146 x 45 x 47mm (length/width/depth)

140mm spread	290-169-010



BADGLEY
Rib Spreader, 4 prongs
108 x 45 x 50mm (length/width/depth)

165mm spread	170-905-000



FINOCHIETTO
Rib Spreader, curved arms, circular fenestration
111 x 32 x 28mm (length/width/depth)

150mm spread	290-181-180



MORSE

Rib Spreader, Children, movable valves
125 x 22 x 15mm (length/width/depth)

154mm spread	290-300-300

148 x 29 x 23mm (length/width/depth)

212mm spread	290-300-400



DEBAKEY

Rib Spreader, Children, incl. 3 paired valves
144mm length

152mm spread	290-180-001

Spare Valves
30 x 30mm (width/depth)

290-180-030

40 x 40mm (width/depth)

290-180-040

50 x 50mm (width/depth)

290-180-050



TUFFIER
Rib Spreader, toothed valves
180 x 45 x 48mm (length/width/depth)

178mm spread	290-174-000

serrated valves
180 x 45 x 48mm (length/width/depth)

178mm spread	290-174-010



COOLEY
Rib Spreader,
112 x 46 x 25mm (length/width/depth)

137mm spread	290-160-003

140 x 52 x 34mm (length/width/depth)

170mm spread	290-160-004

158 x 102 x 29mm (length/width/depth)

194mm spread	290-160-005



BURFORD
Rib Spreader, Children, incl. 4 paired valves
108mm length

157mm spread	290-181-020

Spare Valves
44 x 47mm (width/depth) 290-181-021

45 x 31mm (width/depth) 290-181-022

33 x 30mm (width/depth) 290-181-023

23 x 22mm (width/depth) 290-181-024



BURFORD-FINOCHIETTO
Rib Spreader, Aluminium, incl. 2 paired valves
113mm length

135mm spread	290-164-000

Spare Valves, paired
42 x 34mm (width/depth) 290-165-102

42 x 48mm (width/depth) 290-165-103



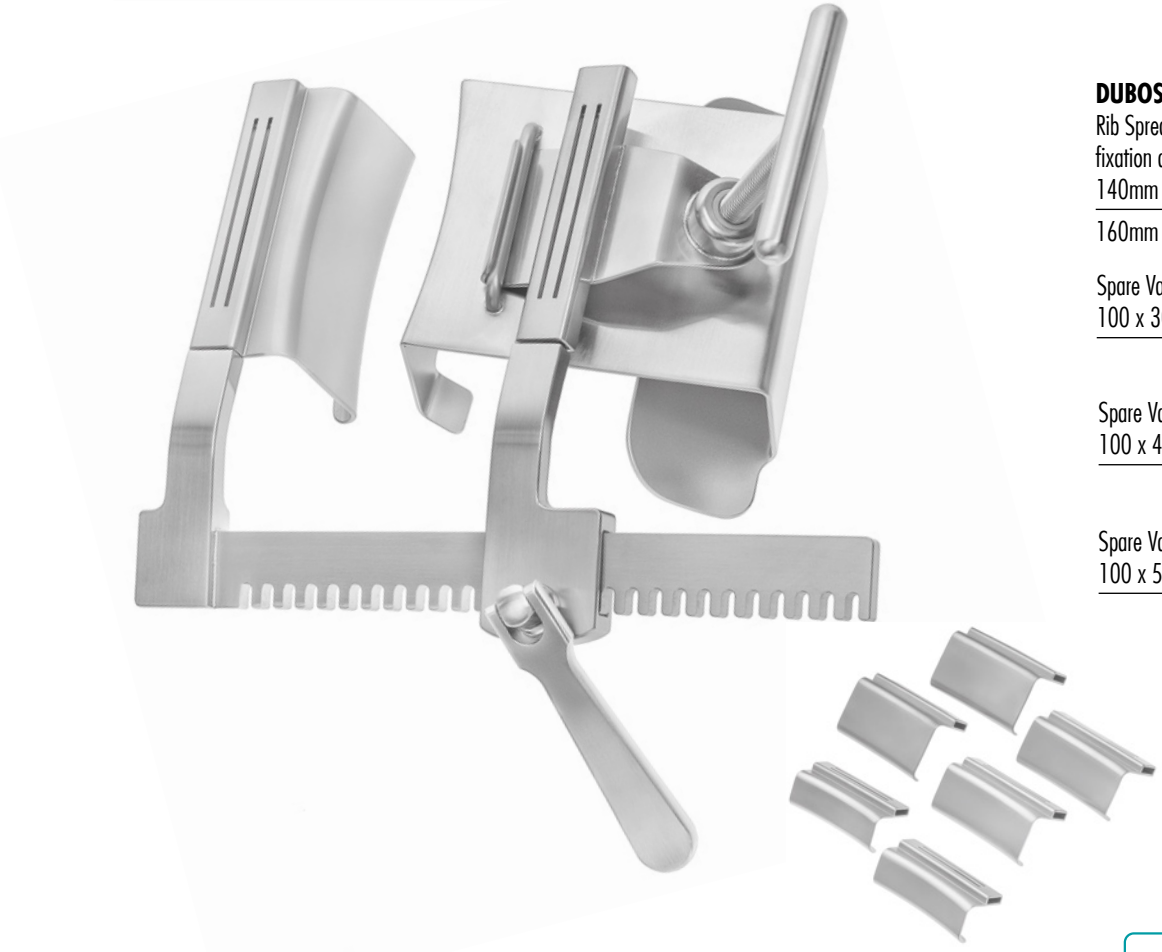
DUBOST
Rib Spreader, incl. 3 paired valves
140mm length

160mm spread	290-186-010

Spare Valves, paired
100 x 30mm (width/depth) 290-186-011

100 x 40mm (width/depth) 290-186-012

100 x 50mm (width/depth) 290-186-013



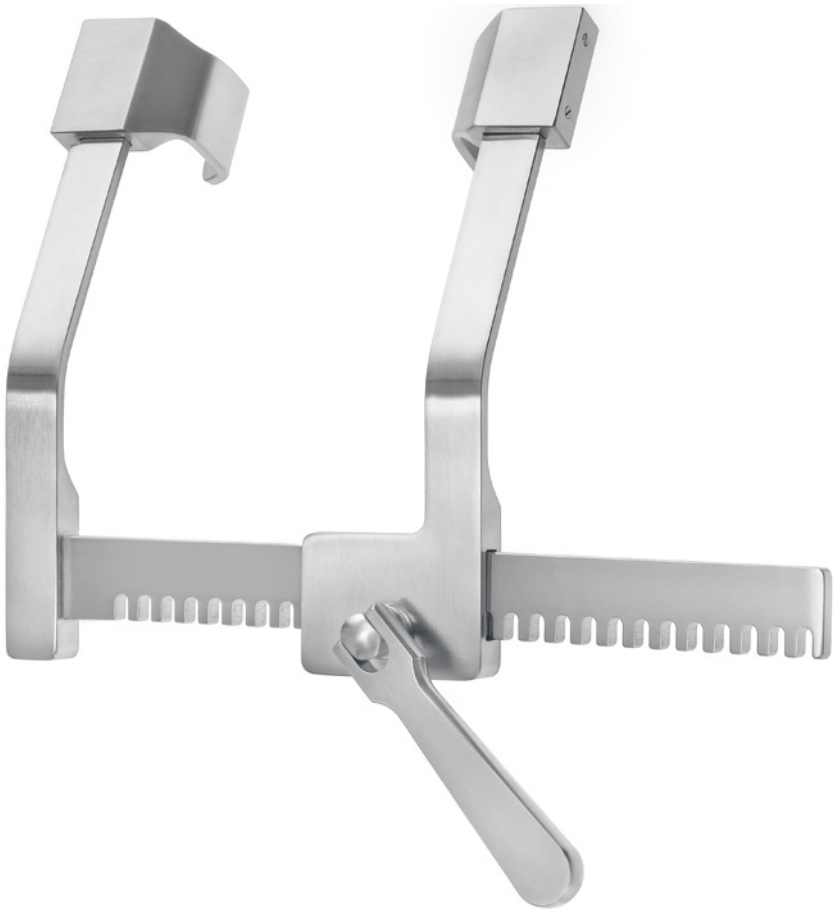
DUBOST
Rib Spreader, incl. 3 pair valves,
fixation and Mammary valve
140mm length

160mm spread	290-186-000

Spare Valves, paired
100 x 30mm (width/depth) 290-186-011

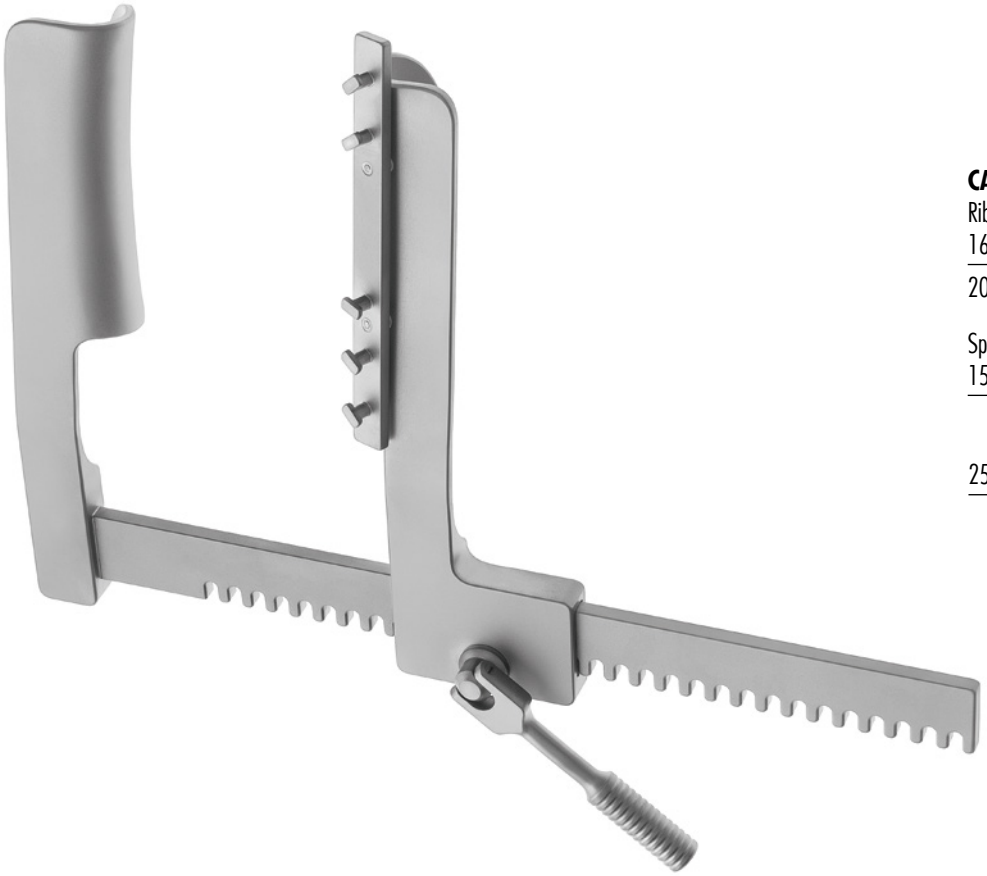
Spare Valves, paired
100 x 40mm (width/depth) 290-186-012

Spare Valves, paired
100 x 50mm (width/depth) 290-186-013



DEBAKEY
Rib Spreader, incl. 3 paired valves
153mm length

192mm spread	290-185-220
Spare Valves, paired 30 x 30mm (width/depth)	290-185-030
40 x 40mm (width/depth)	290-185-040
50 x 50mm (width/depth)	290-185-050



CARPENTIER
Rib Spreader, incl. 2 paired sternal valves
165 x 100 x 36mm (length/width/depth)

200mm spread	290-188-000
Spare Valves, paired 15 x 25mm (width/depth)	290-188-001
25 x 25mm (width/depth)	290-188-002



FINOCHIETTO
Rib Spreader, curved arms
130 x 45 x 40mm (length/width/depth)

148mm spread	290-178-165

180 x 65 x 50mm (length/width/depth)

200mm spread	290-178-200

180 x 65 x 70mm (length/width/depth)

250mm spread	290-178-250

180 x 65 x 50mm (length/width/depth)

265mm spread	290-179-255

180 x 65 x 50mm (length/width/depth)

310mm spread	290-179-310



straight arms

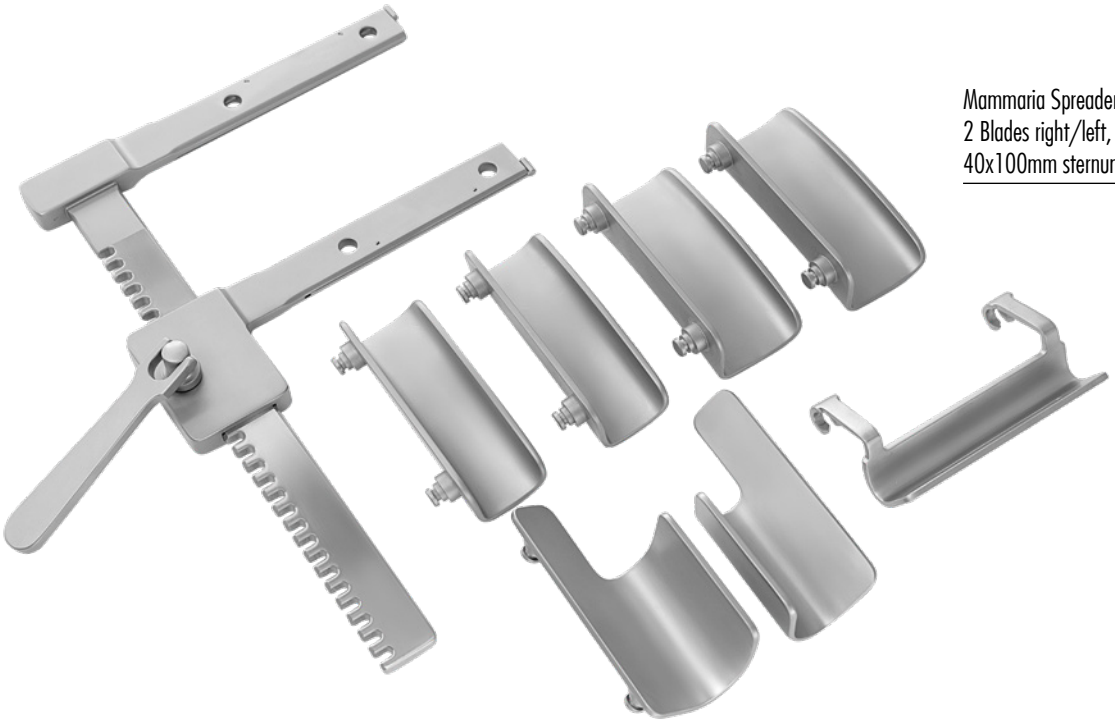
FINOCHIETTO
Rib Spreader, straight arms
186 x 66 x 51mm (length/width/depth)

200mm spread	290-177-200
265mm spread	290-177-255
310mm spread	290-177-310



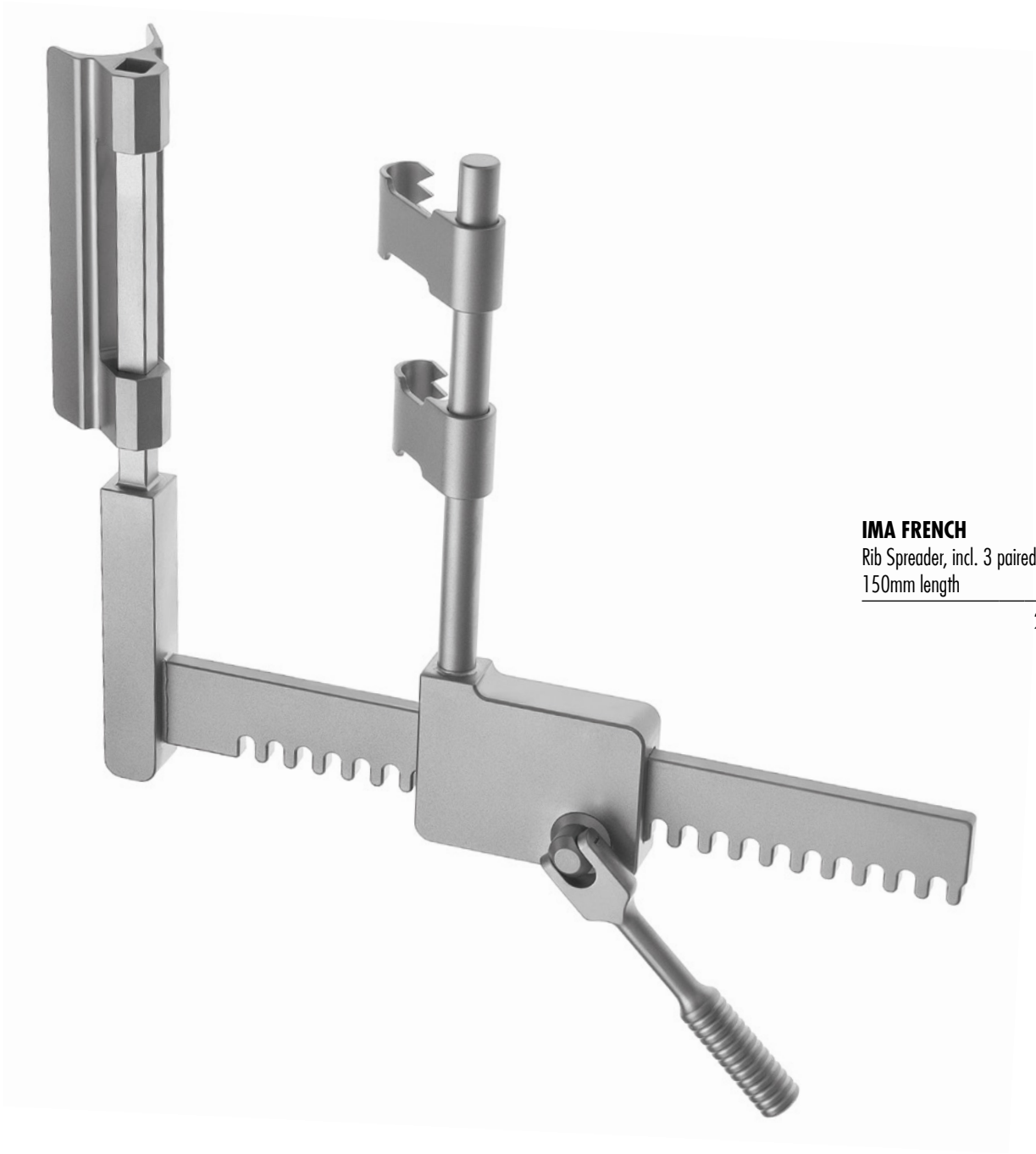
BIRNBAUM
Rib Spreader, movable blades
198 x 60 x 40mm (length/width/depth)

185mm spread	290-189-000



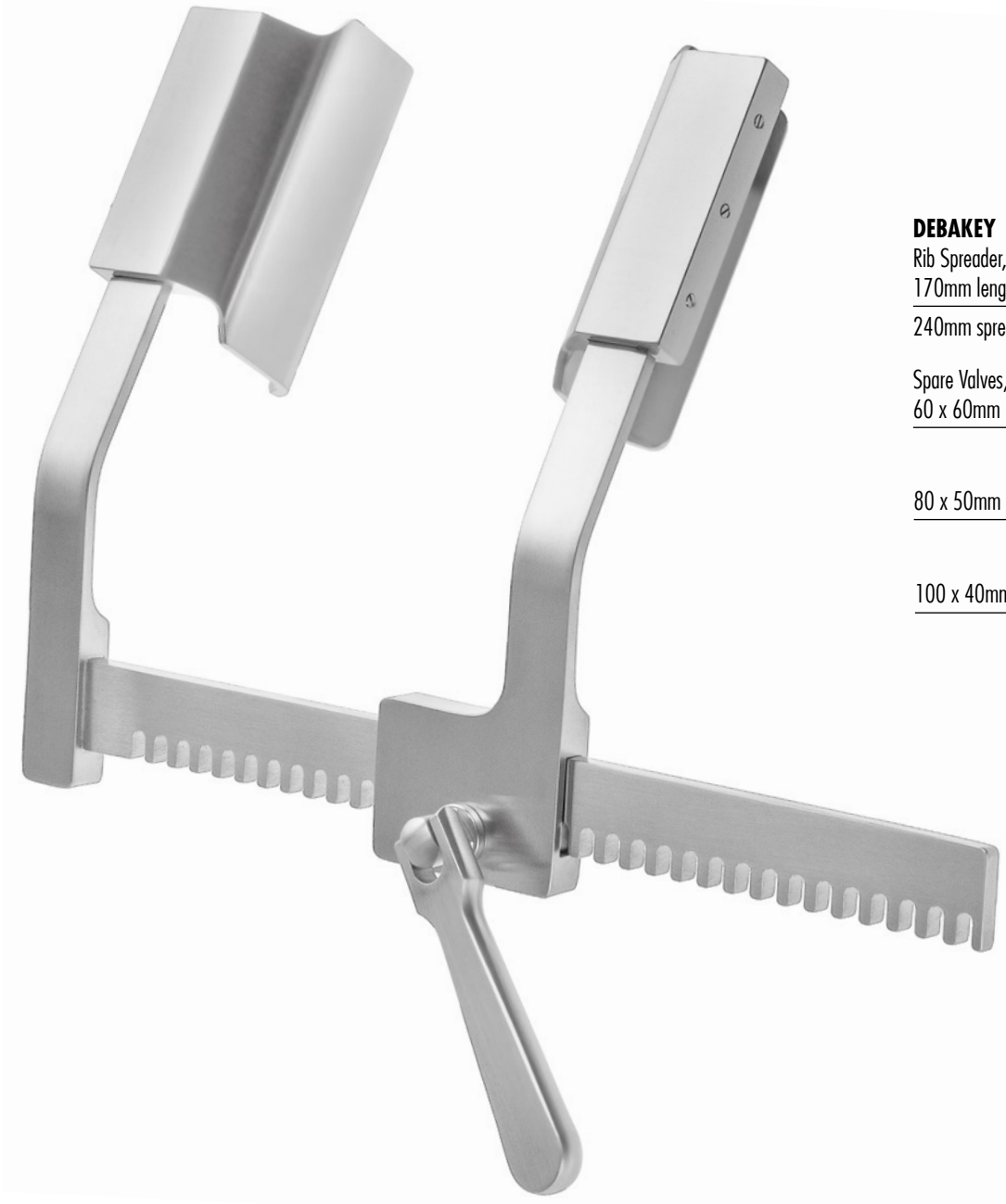
Mammaria Spreader, complete, incl. body
2 Blades right/left, blade: 30x100mm
40x100mm sternum blades

290-300-600



IMA FRENCH
Rib Spreader, incl. 3 paired valves
150mm length

290-184-020



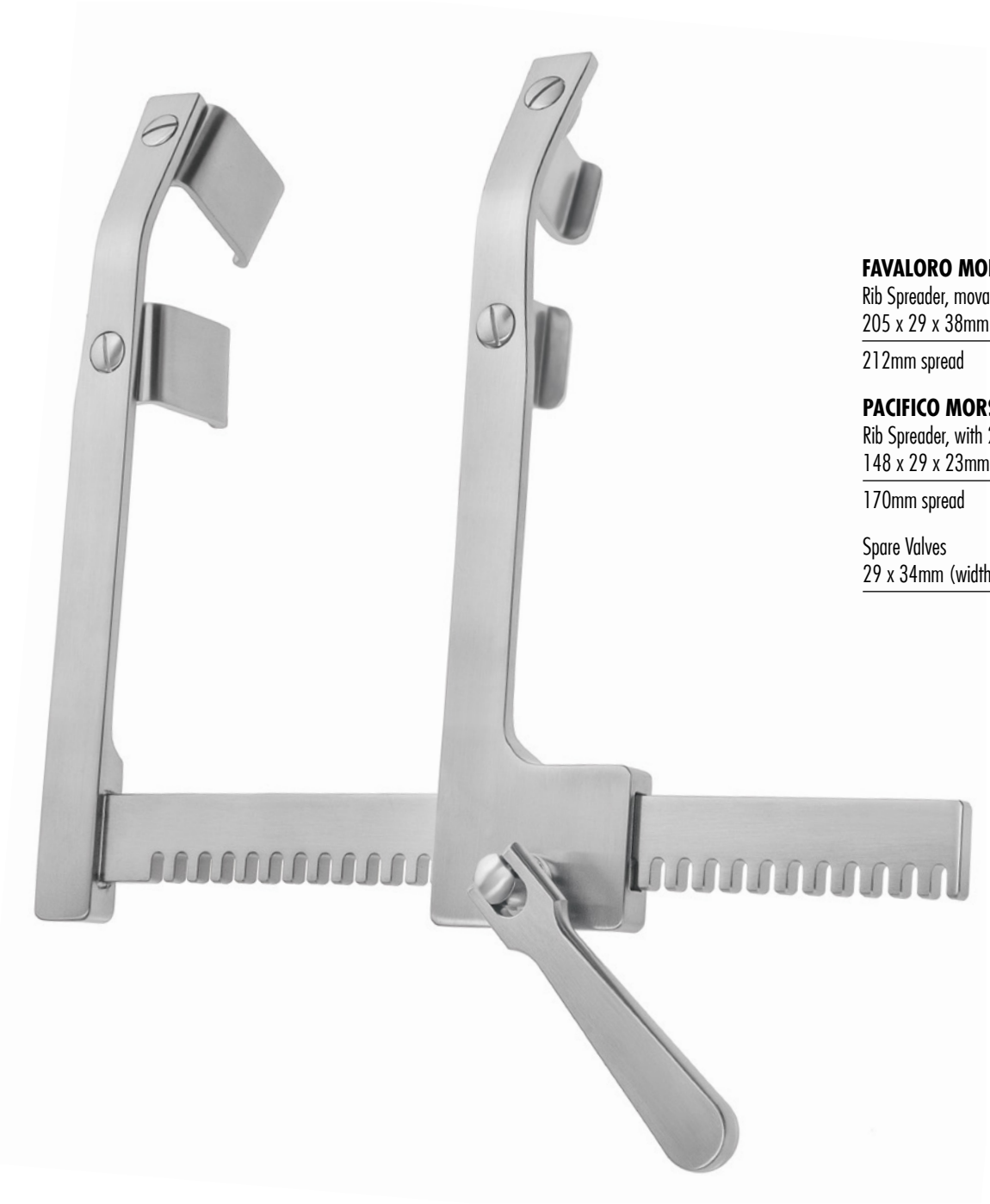
DEBAKEY
Rib Spreader, incl. 3 paired valves
170mm length

240mm spread 290-185-285

Spare Valves, paired
60 x 60mm (width/depth)
290-181-060

80 x 50mm (width/depth)
290-181-050

100 x 40mm (width/depth)
290-181-040



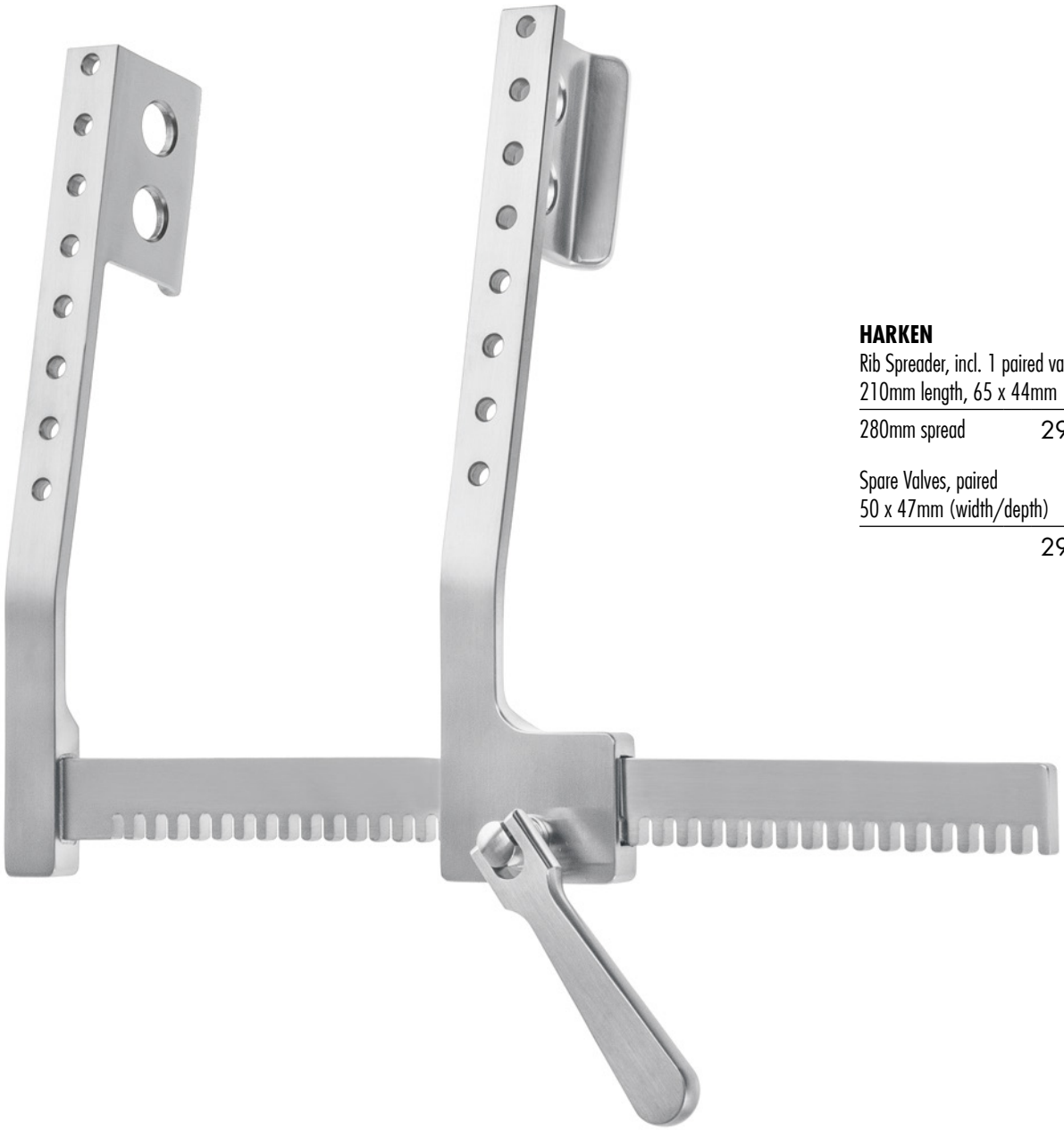
FAVALORO MORSE
Rib Spreader, movable valves
205 x 29 x 38mm (length/width/depth)

212mm spread	290-310-000

PACIFICO MORSE
Rib Spreader, with 2 pair valves
148 x 29 x 23mm (length/width/depth)

170mm spread	290-300-150

Spare Valves
29 x 34mm (width/depth)



HARKEN
Rib Spreader, incl. 1 paired valves
210mm length, 65 x 44mm

280mm spread	290-183-000

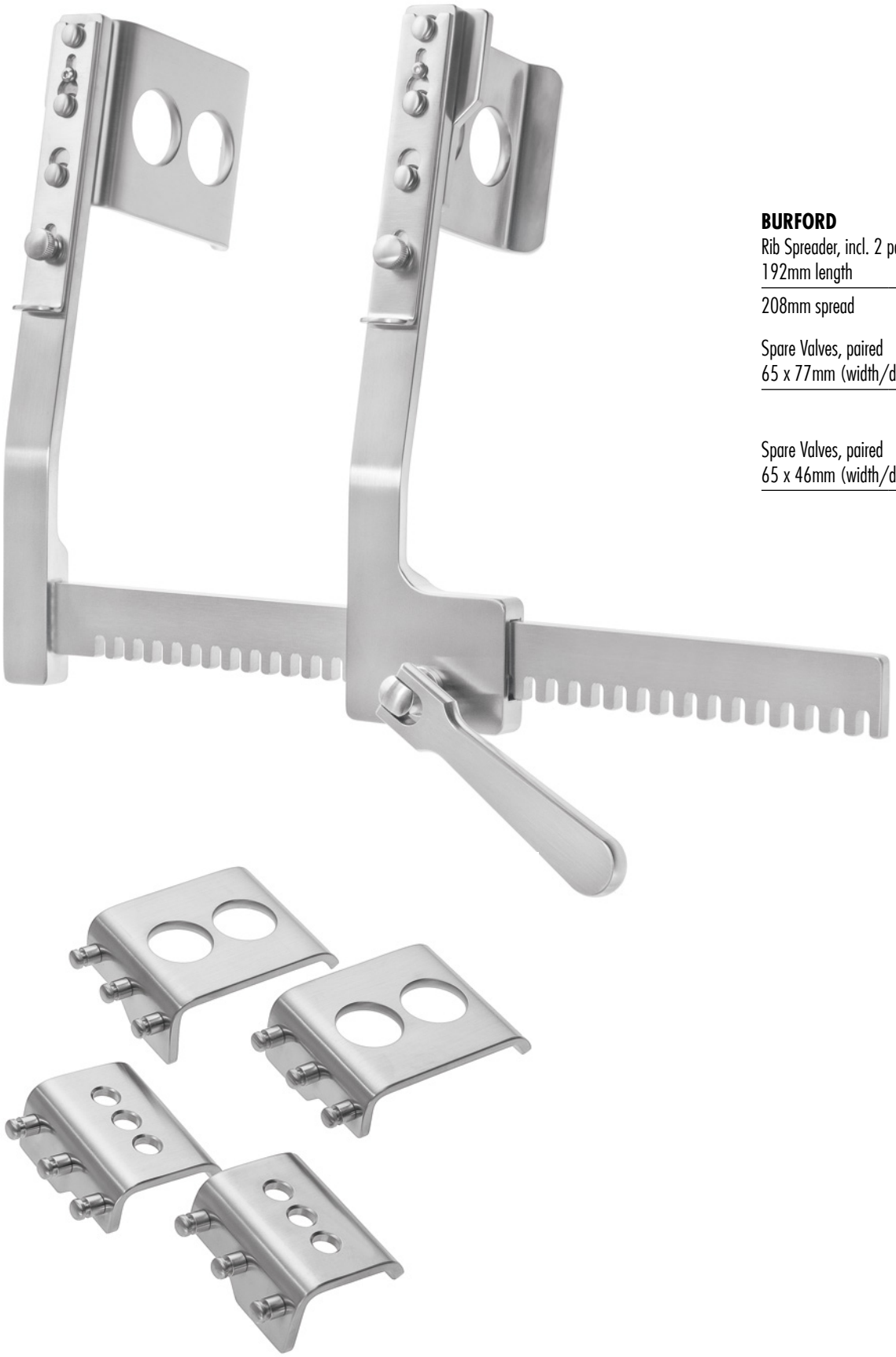
Spare Valves, paired
50 x 47mm (width/depth)

290-183-001



ANKENEY
Rib Spreader, Adult, 6 fixed swivel valves
289 x 35 x 35mm (length/width/depth)

195mm spread	290-178-000



BURFORD
Rib Spreader, incl. 2 pair valves
192mm length

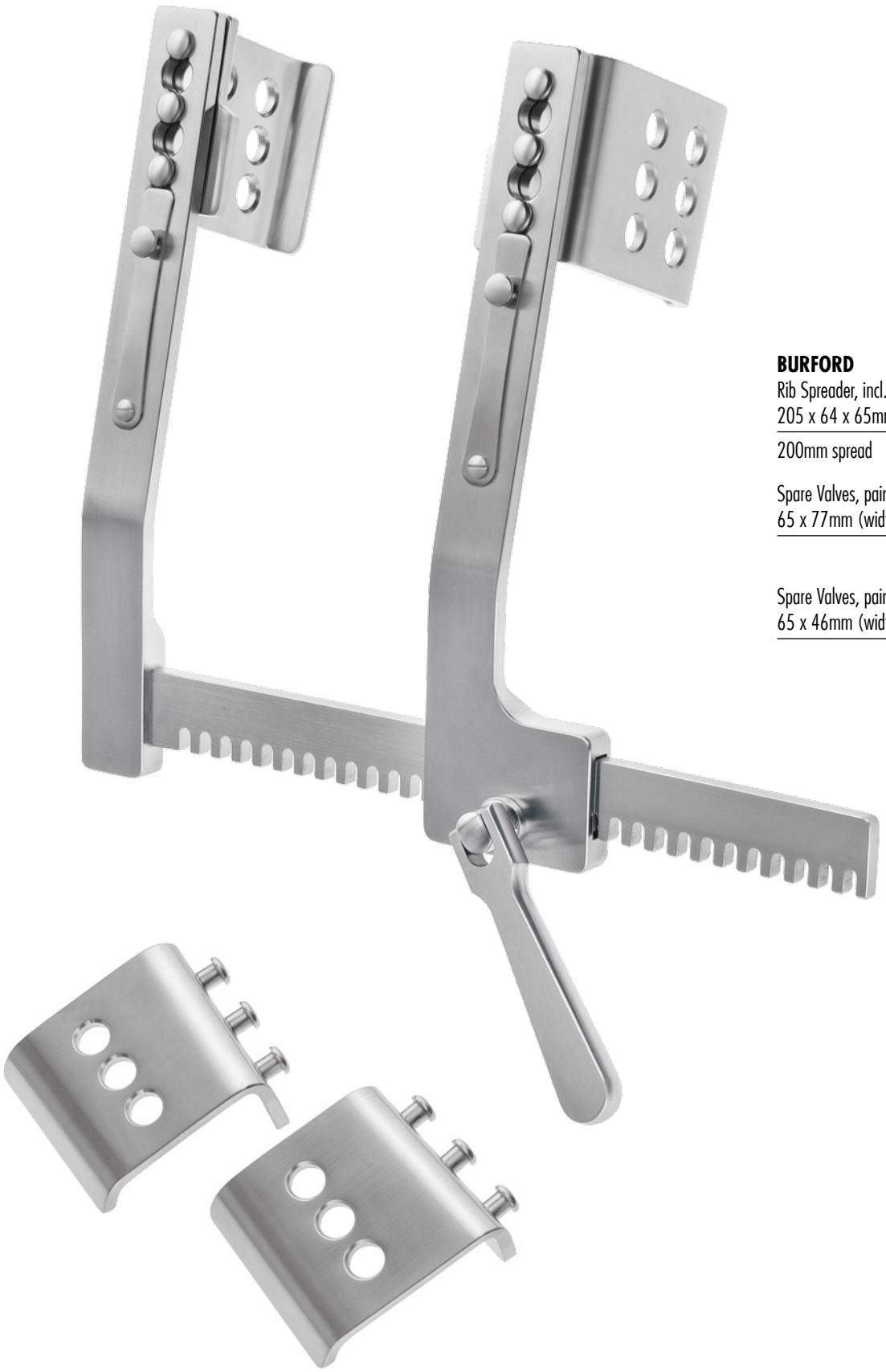
208mm spread	290-181-000

Spare Valves, paired
65 x 77mm (width/depth)

290-181-001

Spare Valves, paired
65 x 46mm (width/depth)

290-181-002



BURFORD
Rib Spreader, incl. 2 pair valves
205 x 64 x 65mm (length/width/depth)

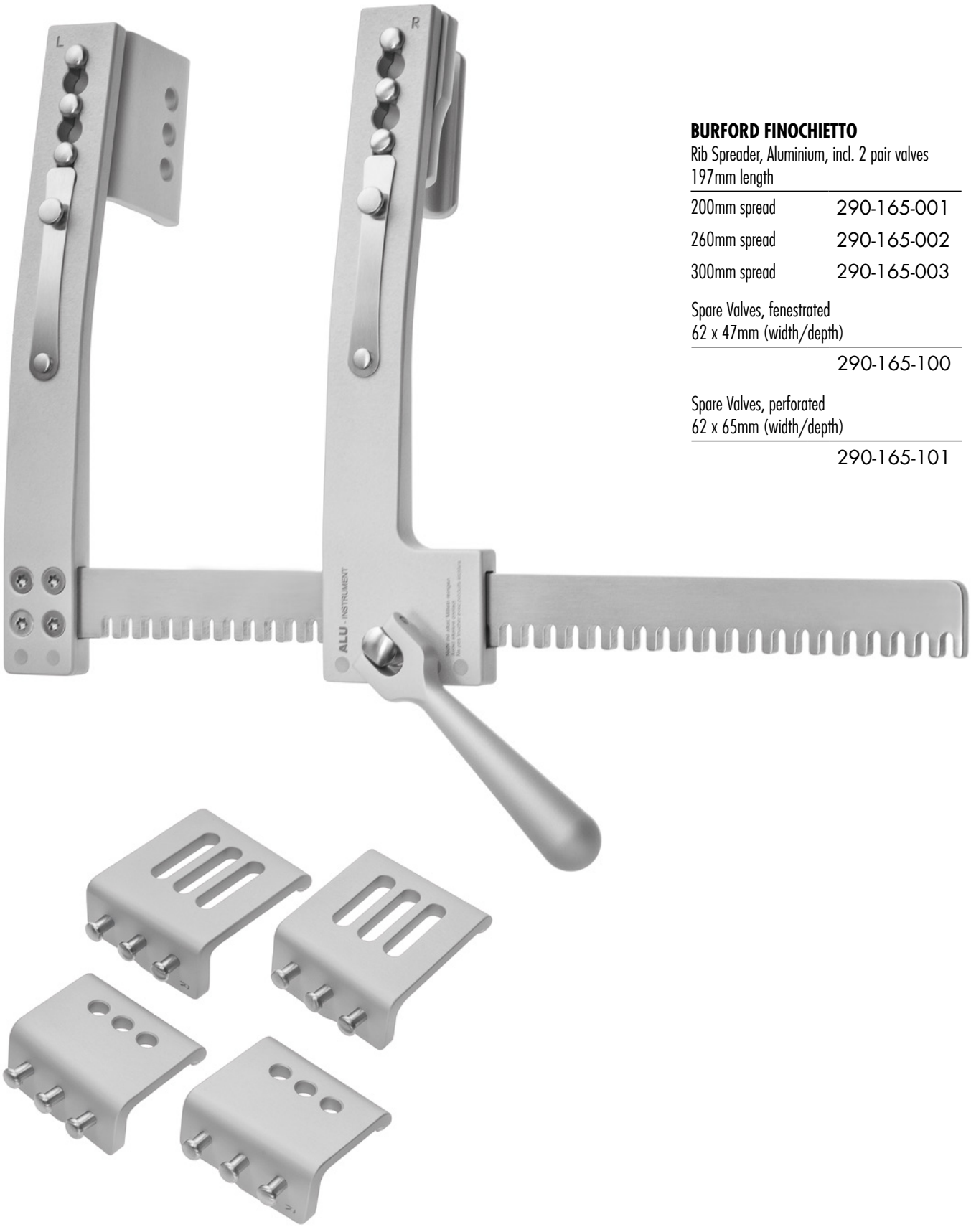
200mm spread	290-181-010

Spare Valves, paired
65 x 77mm (width/depth)

290-181-011

Spare Valves, paired
65 x 46mm (width/depth)

290-181-012



BURFORD FINOCHIETTO
Rib Spreader, Aluminium, incl. 2 pair valves
197mm length

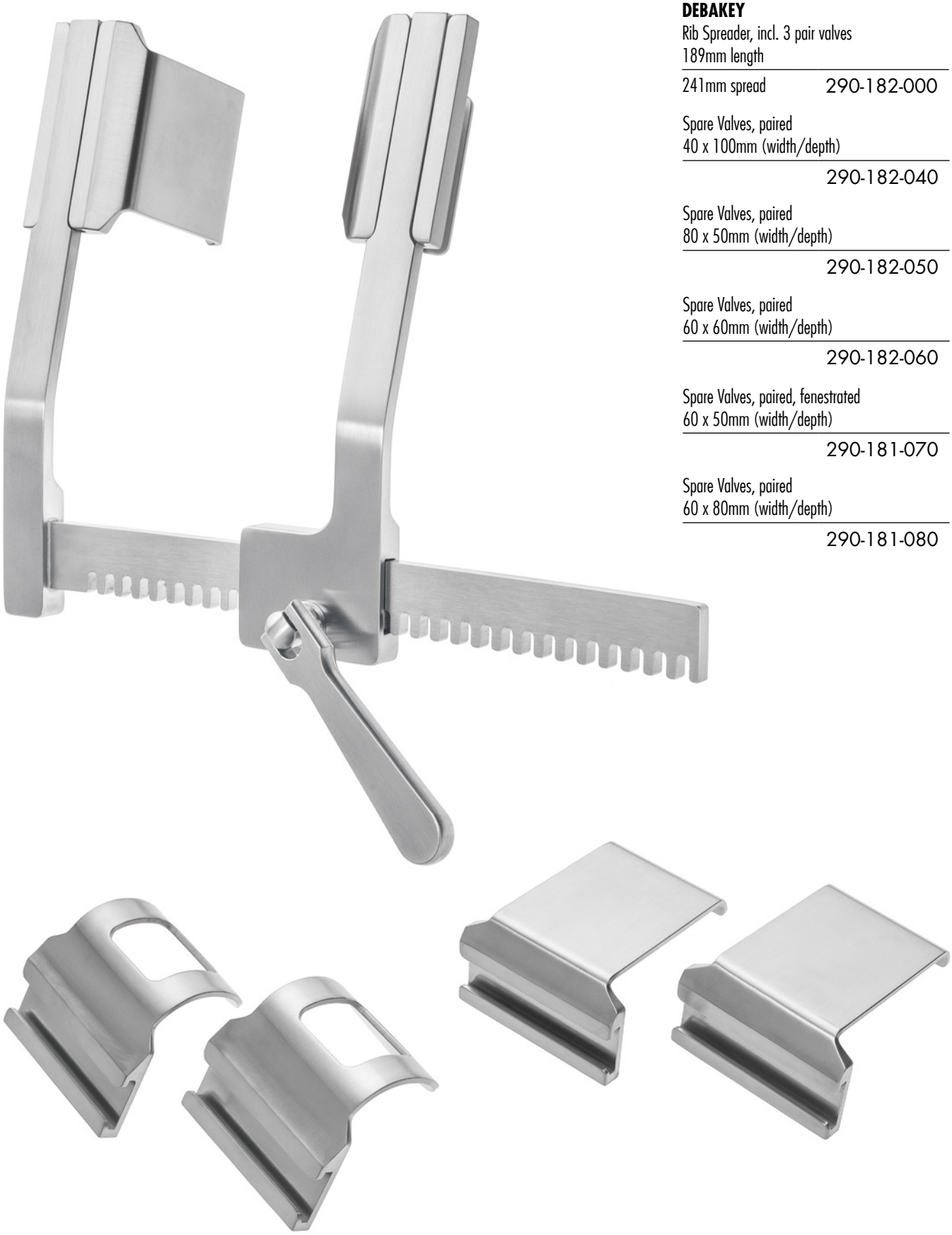
200mm spread	290-165-001
260mm spread	290-165-002
300mm spread	290-165-003

Spare Valves, fenestrated
62 x 47mm (width/depth)

290-165-100

Spare Valves, perforated
62 x 65mm (width/depth)

290-165-101



DEBAKEY
Rib Spreader, incl. 3 pair valves
189mm length

241mm spread 290-182-000

Spare Valves, paired
40 x 100mm (width/depth)
290-182-040

Spare Valves, paired
80 x 50mm (width/depth)
290-182-050

Spare Valves, paired
60 x 60mm (width/depth)
290-182-060

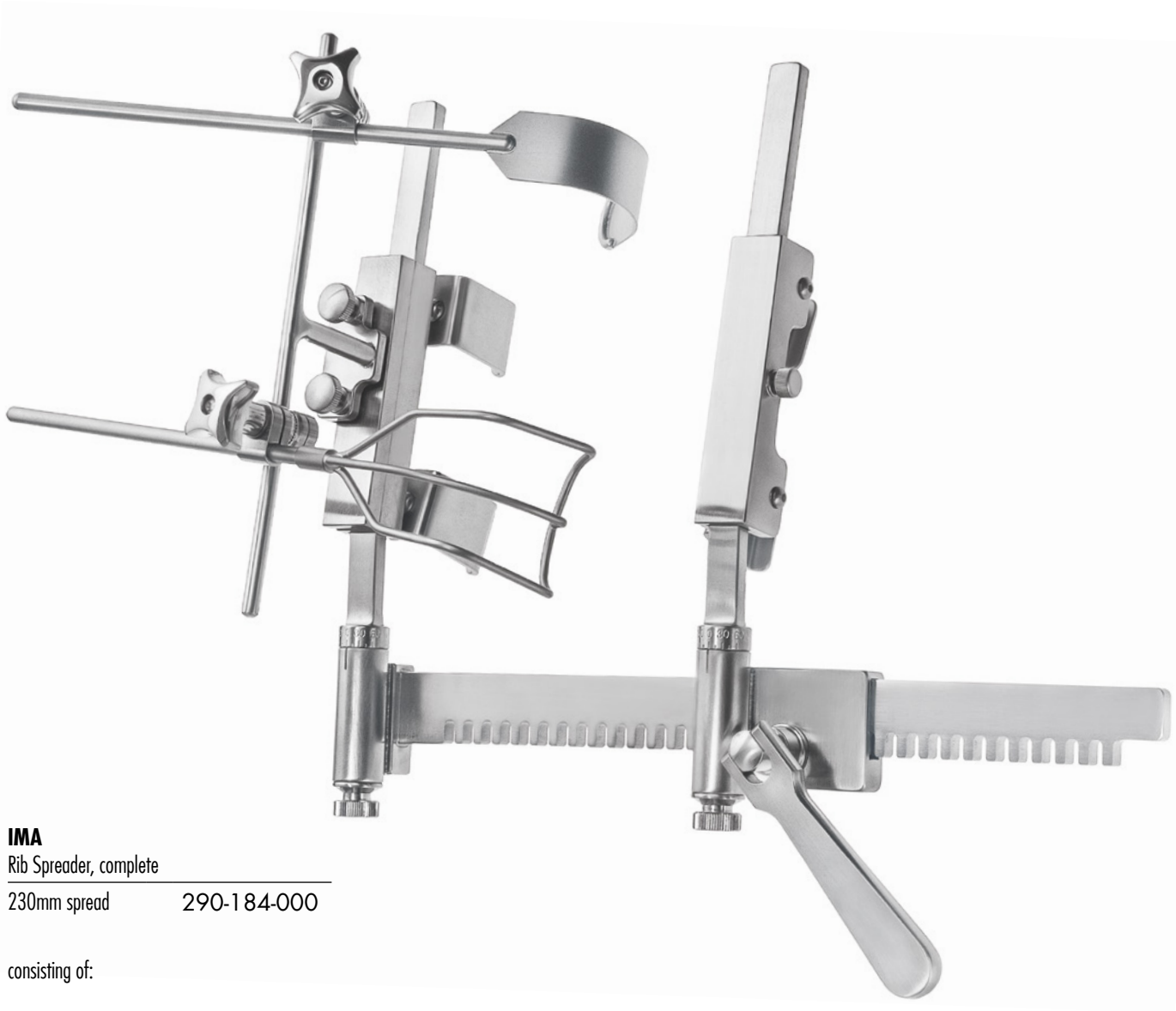
Spare Valves, paired, fenestrated
60 x 50mm (width/depth)
290-181-070

Spare Valves, paired
60 x 80mm (width/depth)
290-181-080



IMA
Rib Spreader, complete with Mammary blade
195 x 150 x 50mm (length/width/depth)

134mm spread	290-184-010



IMA

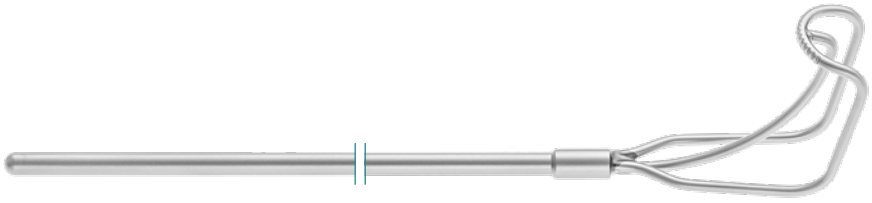
Rib Spreader, complete	
230mm spread	290-184-000

consisting of:

Double fixation valves	
	290-184-001
Double fixation valves with notch	
	290-184-002
T-Clamp	
	290-184-003
Universal Clamp	
	290-184-004

COOLEY

Valve Retractor	
small, 25mm	290-184-005
medium, 40mm	290-184-006
large, 50mm	290-184-007
Ribbon malleable valve	
	290-184-008







QUERVAIN
Rib Spreader, complete

160mm spread	290-190-000

consisting of:

Spare Valves, paired,
50 x 70mm (width/depth)

left	290-190-001

50 x 70mm (width/depth)

right	290-190-002

70 x 70mm (width/depth)

left	290-190-003

70 x 70mm (width/depth)

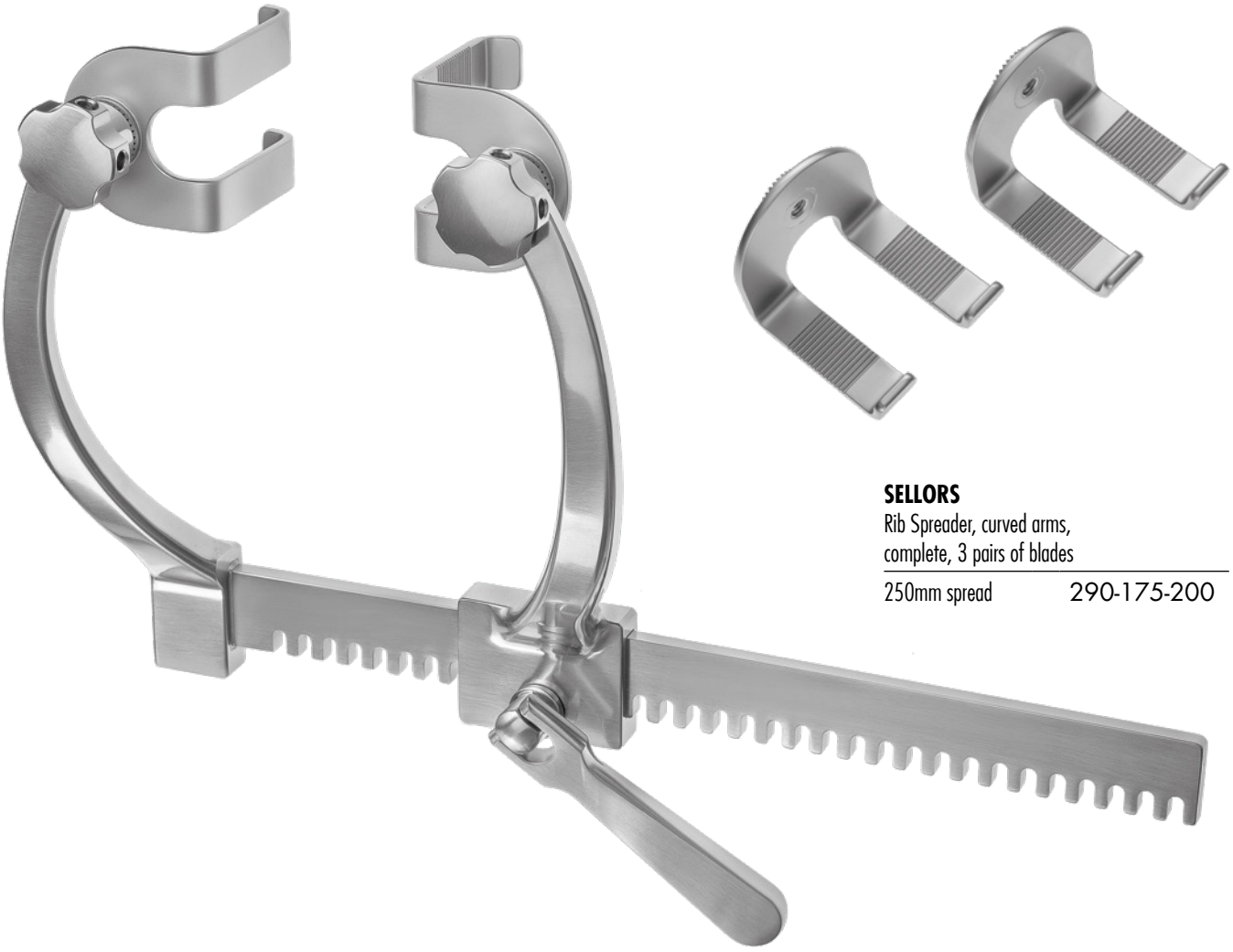
right	290-190-004

70 x 70mm (width/depth)

left, curved	290-190-005

70 x 70mm (width/depth)

right, curved	290-190-006



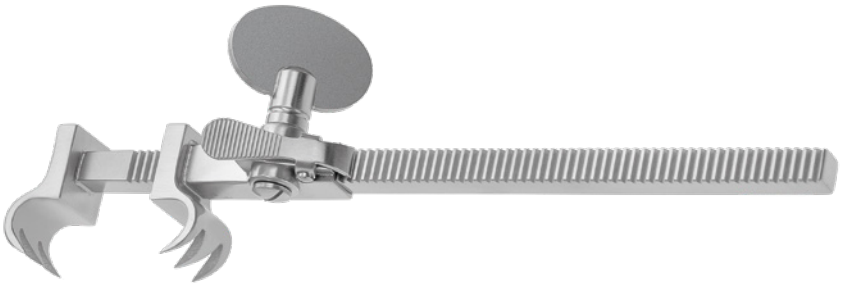
SELLORS
Rib Spreader, curved arms,
complete, 3 pairs of blades

250mm spread	290-175-200



BAILEY BABY
Rib Contractor, 3 prongs, 18mm depth

140mm length	290-501-140



BAILEY
Rib Contractor, 3 prongs, 19mm depth

180mm length	290-502-160



BAILEY GIBBON
Rib Contractor, 3 prongs, 29mm depth

180mm length	290-503-160



LEMMON
Rib Contractor, Adults

180mm length	290-504-180




Fig. 1


Fig. 2


Fig. 3

ÖSCH

Phlebectomy Hook, right handed

Fig. 1	290-150-501
Fig. 2	290-150-502
Fig. 3	290-150-503
Set	290-150-500

left handed

Fig. 1	290-150-601
Fig. 2	290-150-602
Fig. 3	290-150-603
Set	290-150-600




Fig. 1


Fig. 2


Fig. 3


Fig. 4

MÜLLER

Phlebectomy Hook, right handed

Fig. 1	290-150-001
Fig. 2	290-150-002
Fig. 3	290-150-003
Fig. 4	290-150-004
Set	290-150-000

Phlebectomy Hook, left handed

Fig. 1	290-150-101
Fig. 2	290-150-102
Fig. 3	290-150-103
Fig. 4	290-150-104
Set	290-150-000



Fig. 1



Fig. 2



VARADY
Phlebectomy Dissector

180mm, 7"	160-252-001

Phleboextractor, with hook 180mm, 7"

Fig. 1	160-252-002
Fig. 2	160-252-003



VARADY
Micro Spatula

175mm, $6^{7/8}$"	160-252-004



A



B



VARADY
Micro Phlebextractor, 170mm, $6^{2/3}$"

A	160-252-005
B	160-252-006



Probe, malleable	
400mm, 15 3/4"	160-210-400
500mm, 19 3/4"	160-210-500
650mm, 25 1/2"	160-210-650
800mm, 31 1/2"	160-210-800



NABATOFF

Vein Stripper Set consisting of:	
Probe tip, plastic	160-250-002
Stripper head, 3mm	160-250-003
Stripper head, 6mm	160-250-006
Stripper head, 9mm	160-250-009
Stripper head, 12mm	160-250-012
T-Handle	160-250-080
Sterilization Box	160-250-095
Set complete	160-250-000



MYERS

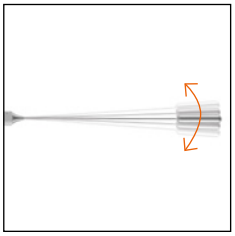
Vein Stripper	
Ø 6mm	160-245-006
Ø 9mm	160-245-009
Ø 12.5mm	160-245-125
Ø 16mm	160-245-016



Vessel Probes, 110mm, $4^{1/3}$"	
Ø 0.5mm	290-704-105
Ø 1.0mm	290-704-110
Ø 1.5mm	290-704-115
Ø 2.0mm	290-704-120
Ø 2.5mm	290-704-125
Ø 3.0mm	290-704-130
Ø 3.5mm	290-704-135
Set	
	290-704-100

140mm, $5^{1/2}$"	
Ø 0.5mm	290-704-405
Ø 1.0mm	290-704-410
Ø 1.5mm	290-704-415
Ø 2.0mm	290-704-420
Ø 2.5mm	290-704-425
Ø 3.0mm	290-704-430
Ø 3.5mm	290-704-435
Set	
	290-704-200

210mm, $8^{1/4}$"	
Ø 0.5mm	290-704-205
Ø 1.0mm	290-704-210
Ø 1.5mm	290-704-215
Ø 2.0mm	290-704-220
Ø 2.5mm	290-704-225
Ø 3.0mm	290-704-230
Ø 3.5mm	290-704-235
Set	
	290-704-300





GARRETT

Vascular Dilator, springy, ∅ 0.5mm	
140mm, 5 1/2"	290-195-105
210mm, 8 1/4"	290-195-005
190mm, 7 1/2"	290-195-205
350mm, 14"	290-195-305

∅ 1.0mm	
140mm, 5 1/2"	290-195-110
210mm, 8 1/4"	290-195-010
190mm, 7 1/2"	290-195-210
350mm, 14"	290-195-310

∅ 1.5mm	
140mm, 5 1/2"	290-195-115
210mm, 8 1/4"	290-195-015
190mm, 7 1/2"	290-195-215
350mm, 14"	290-195-315

∅ 2.0mm	
140mm, 5 1/2"	290-195-120
210mm, 8 1/4"	290-195-020
190mm, 7 1/2"	290-195-220
350mm, 14"	290-195-320

∅ 2.5mm	
140mm, 5 1/2"	290-195-125
210mm, 8 1/4"	290-195-025
190mm, 7 1/2"	290-195-225
350mm, 14"	290-195-325

∅ 3.0mm	
140mm, 5 1/2"	290-195-130
210mm, 8 1/4"	290-195-030
190mm, 7 1/2"	290-195-230
350mm, 14"	290-195-330

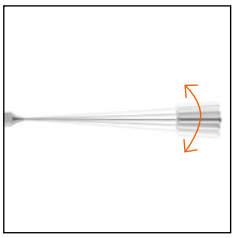
∅ 3.5mm	
140mm, 5 1/2"	290-195-135
210mm, 8 1/4"	290-195-035
190mm, 7 1/2"	290-195-235
350mm, 14"	290-195-335

∅ 4.0mm	
140mm, 5 1/2"	290-195-140
210mm, 8 1/4"	290-195-040
190mm, 7 1/2"	290-195-240
350mm, 14"	290-195-340

∅ 4.5mm	
140mm, 5 1/2"	290-195-145
210mm, 8 1/4"	290-195-045
190mm, 7 1/2"	290-195-245
350mm, 14"	290-195-345

∅ 5.0mm	
140mm, 5 1/2"	290-195-150
210mm, 8 1/4"	290-195-050
190mm, 7 1/2"	290-195-250
350mm, 14"	290-195-350

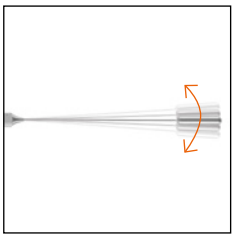
Set	
140mm, 5 1/2"	290-195-100
210mm, 8 1/4"	290-195-000
190mm, 7 1/2"	290-195-200
350mm, 14"	290-195-300





DEBAKEY

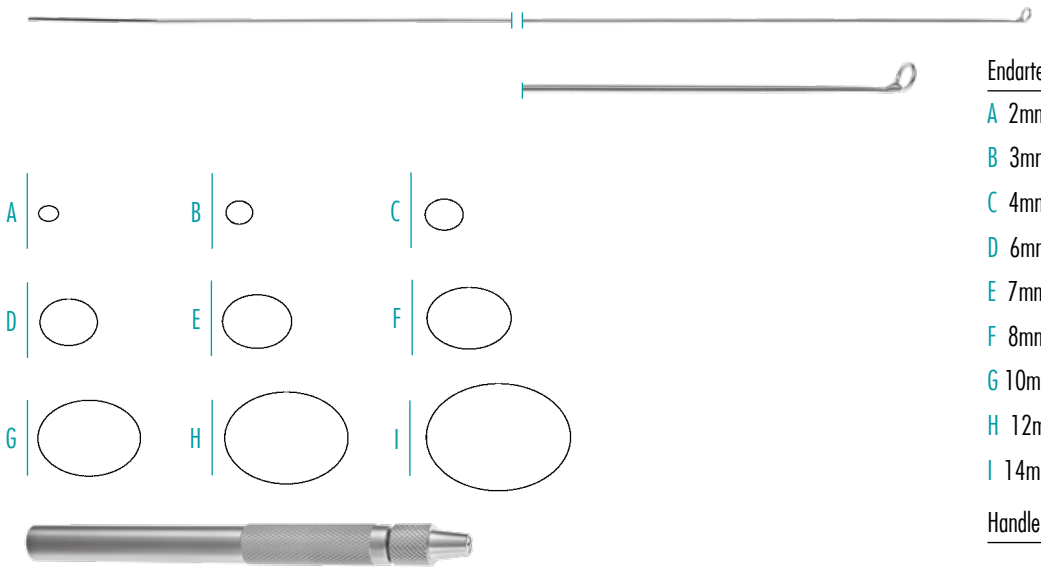
Vascular Dilator, springy, ∅ 0.5mm		∅ 1.0mm		∅ 1.5mm	
190mm, 7 1/2"	290-705-050	190mm, 7 1/2"	290-705-100	190mm, 7 1/2"	290-705-150
350mm, 14"	290-706-050	350mm, 14"	290-706-100	350mm, 14"	290-706-150
∅ 2.0mm		**∅ 2.5mm**		**∅ 3.0mm**	
190mm, 7 1/2"	290-705-200	190mm, 7 1/2"	290-705-250	190mm, 7 1/2"	290-705-300
350mm, 14"	290-706-200	350mm, 14"	290-706-250	350mm, 14"	290-706-300
∅ 3.5mm		**∅ 4.0mm**		**∅ 4.5mm**	
190mm, 7 1/2"	290-705-350	190mm, 7 1/2"	290-705-400	190mm, 7 1/2"	290-705-450
350mm, 14"	290-706-350	350mm, 14"	290-706-400	350mm, 14"	290-706-450
∅ 5.0mm		**∅ 7.0mm**		**∅ 9.0mm**	
190mm, 7 1/2"	290-705-500	190mm, 7 1/2"	290-705-700	190mm, 7 1/2"	290-705-900
350mm, 14"	290-706-500	350mm, 14"	290-706-700	350mm, 14"	290-706-900





COOLEY

Vascular Dilator, springy, ∅ 0.5mm		∅ 1.0mm		∅ 1.5mm	
130mm, 5 1/8"	290-703-005	130mm, 5 1/8"	290-703-010	130mm, 5 1/8"	290-703-015
190mm, 7 1/2"	290-703-105	190mm, 7 1/2"	290-703-110	190mm, 7 1/2"	290-703-115
∅ 2.0mm		**∅ 2.5mm**		**∅ 3.0mm**	
130mm, 5 1/8"	290-703-020	130mm, 5 1/8"	290-703-025	130mm, 5 1/8"	290-703-030
190mm, 7 1/2"	290-703-120	190mm, 7 1/2"	290-703-125	190mm, 7 1/2"	290-703-130
∅ 4.0mm		**∅ 5.0mm**			
130mm, 5 1/8"	290-703-040	130mm, 5 1/8"	290-703-050		
190mm, 7 1/2"	290-703-140	190mm, 7 1/2"	290-703-150		

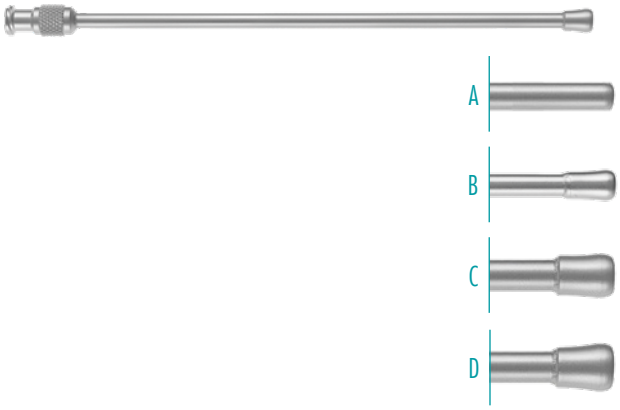


Endarterectomy Stripper, 550mm, 22"

A 2mm	160-251-002
B 3mm	160-251-003
C 4mm	160-251-004
D 6mm	160-251-006
E 7mm	160-251-007
F 8mm	160-251-008
G 10mm	160-251-010
H 12mm	160-251-012
I 14mm	160-251-014

Handle for Endarterectomy Stripper

160-251-030



SCHMID

Vessel irrigating cannula, malleable

A ∅ 3mm	165-700-003
B ∅ 4mm	165-700-004
C ∅ 5mm	165-700-005
D ∅ 6mm	165-700-006



Cannula, venous

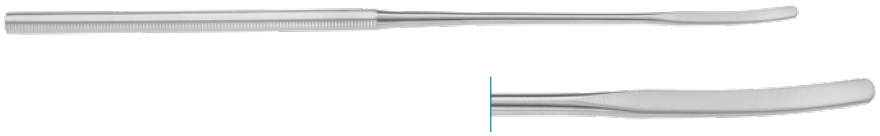
18G x 3 1/8" (1.2 x 80mm)	165-705-120
17G x 3 1/8" (1.5 x 80mm)	165-705-150



MOCK

Heparin Flushing Needle

60mm, 2 3/8"	165-710-060



Intima Spatula, 3mm

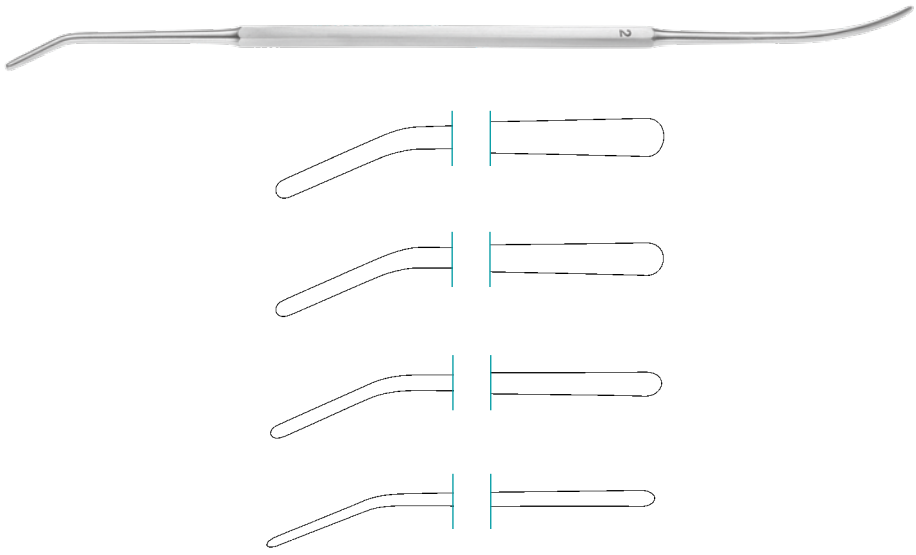
180mm, 7"	290-535-180
210mm, 8 1/4"	290-535-210

4mm

140mm, 5 1/2"	290-537-140

5.5mm

240mm, 9 1/2"	290-537-240



ROBB

Dissector, 240mm, 9 1/2"

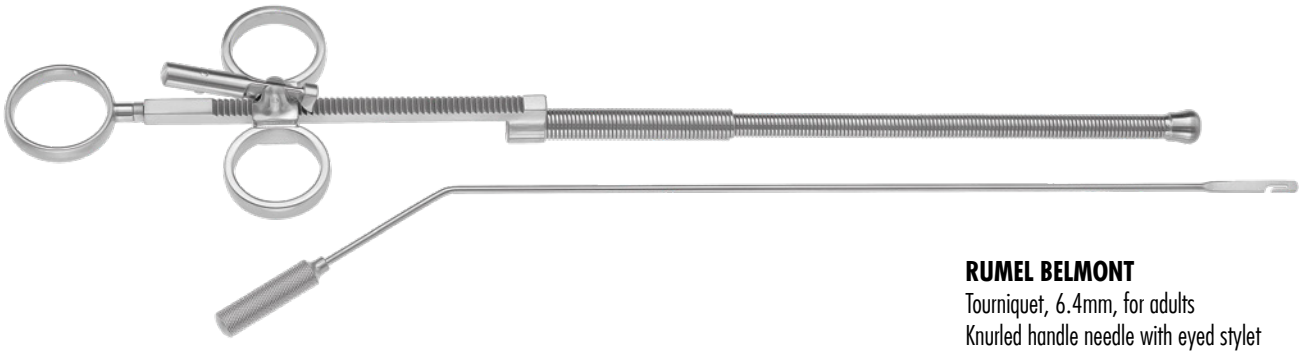
Fig. 1, 5 / 2.5mm	290-539-001
Fig. 2, 4 / 2.0mm	290-539-002
Fig. 3, 3 / 1.5mm	290-539-003
Fig. 4, 2 / 1.0mm	290-539-004



LEMMON

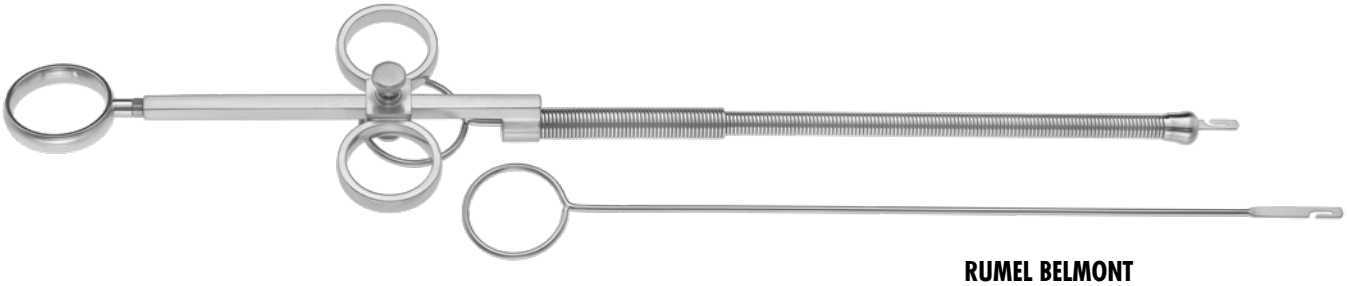
Intima Dissector, 165mm, 6 1/2"

4mm wide	290-707-165
8mm wide	290-708-165
15mm wide	290-709-165



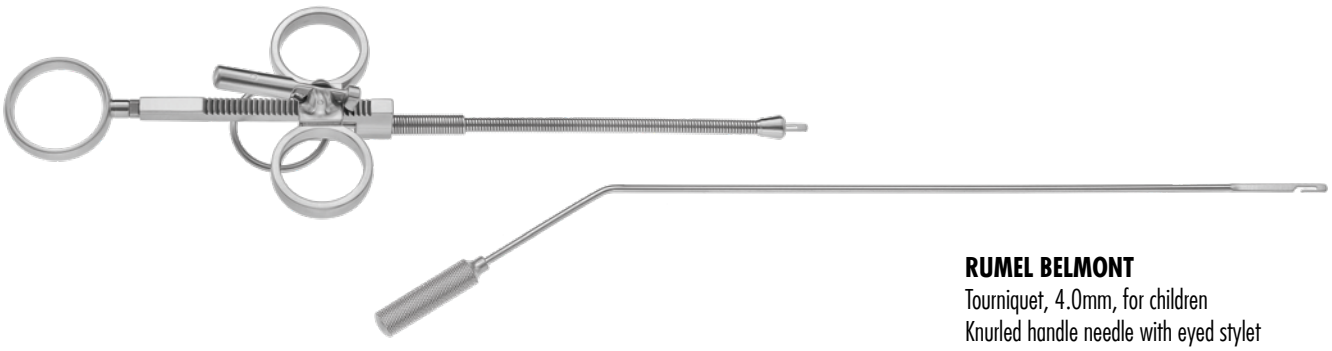
RUMEL BELMONT
Tourniquet, 6.4mm, for adults
Knurled handle needle with eyed stylet

complete	290-558-330
Stylet	290-558-331



RUMEL BELMONT
Tourniquet, 6.5mm, for adults, flexible,
without ratchet,
Ring handle needle with eyed stylet

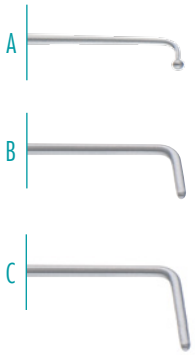
complete	290-564-305
Stylet	290-564-306



RUMEL BELMONT
Tourniquet, 4.0mm, for children
Knurled handle needle with eyed stylet

complete	290-556-330
Stylet	290-556-331





Nerve and Vessel Hook for valve surgery

A 4.5mm tip length, Ø 1.5mm tip

350mm, 14" 295-000-001

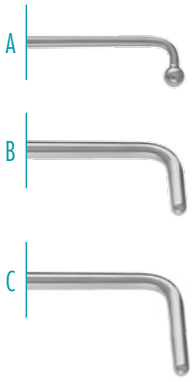
B 5.0mm tip length, Ø 1.0mm tip

350mm, 14" 295-000-002

C 9.0mm tip length, Ø 1.5mm tip

350mm, 14" 295-000-003





Nerve and Vessel Hook for valve surgery

A 5.0mm tip length, Ø 3.0mm tip

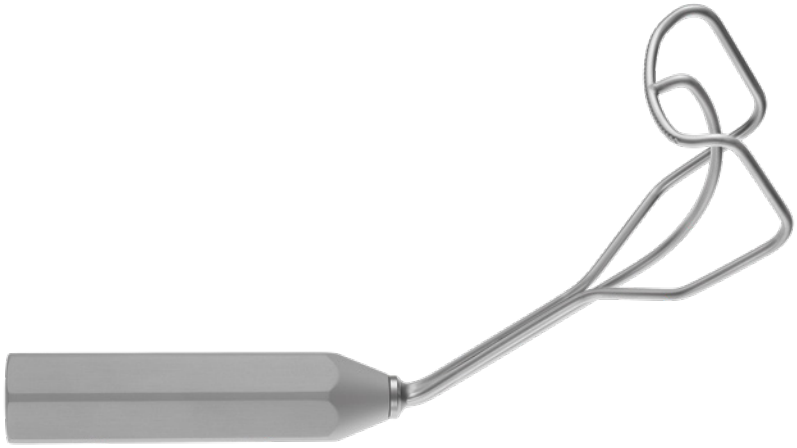
330mm, 13" 295-000-101

B 5.0mm tip length, Ø 1.4mm tip

330mm, 13" 295-000-102

C 9.0mm tip length, Ø 2.3mm tip

330mm, 13" 295-000-103



COOLEY
Retractor, serrated, Aluminium handle,
right

25 x 35mm	290-485-201
40 x 35mm	290-485-202
50 x 35mm	290-485-203

left

50 x 10mm	290-485-204



ROSS
Retractor, 270mm, $10^{2/3}$"

Fig. 1	15 x 16mm	170-475-001
Fig. 2	13 x 23mm	170-475-002
Fig. 3	25 x 18mm	170-475-003
Fig. 4	29 x 13mm	170-475-004
Fig. 5	29 x 29mm	170-475-005
Fig. 6	35 x 21mm	170-475-006



DAVIDSON
Scapular Retractor, 160mm, $6^{1/4}$"

75 x 50mm	170-463-001
75 x 90mm	170-463-002



CORYLLOS
Retractor, 240mm, $9^{1/2}$"

82 x 22mm	170-461-001
108 x 43mm	170-461-002
115 x 65mm	170-461-003



BOROWSKI
Retractor

17 x 21mm	290-485-301
16 x 23mm	290-485-302
20 x 25mm	290-485-303
24 x 27mm	290-485-304
28 x 20mm	290-485-305
28 x 29mm	290-485-306

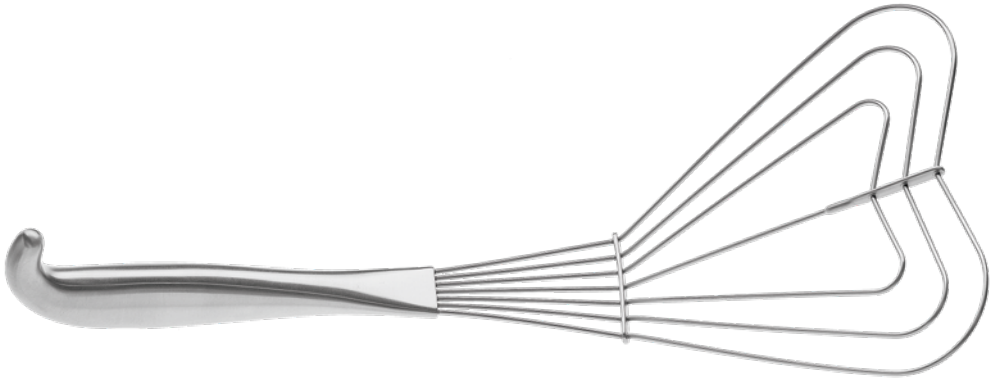


ALLISON
Lung Spatula, 40mm

300mm, 11 7/8"	290-505-300

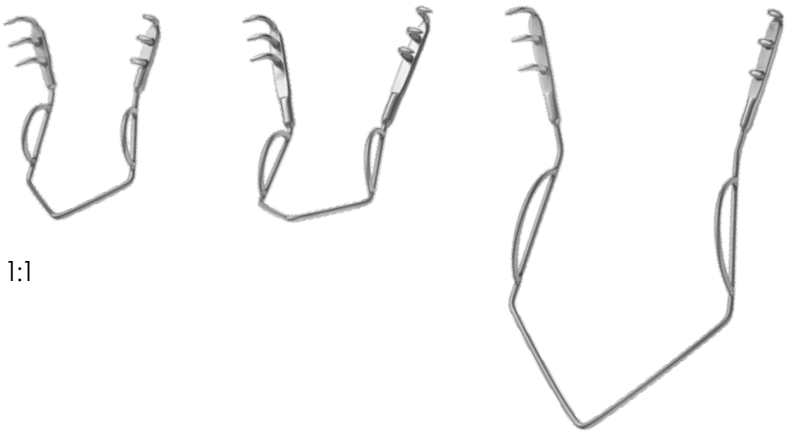
53mm

320mm, 12 1/2"	290-505-320



Lung Spatula

300mm, 11 7/8"	290-511-260



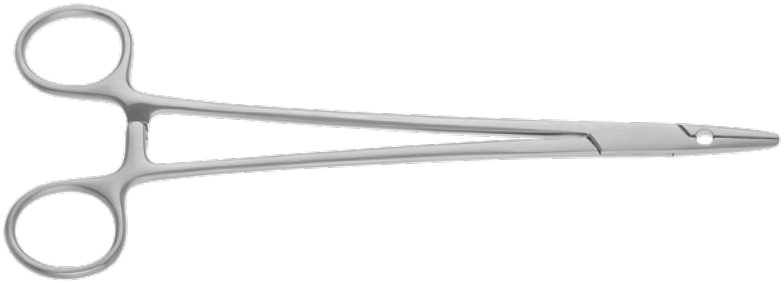
1:1

PARSONNET
Retractor, 3x3 teeth

25mm	290-233-025
32mm	290-233-030
50mm	290-233-047



A



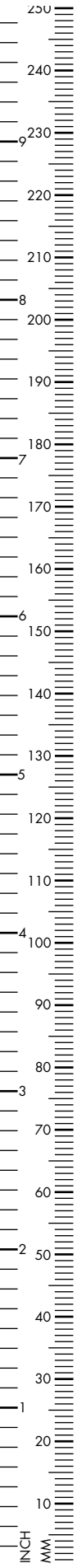
B



C



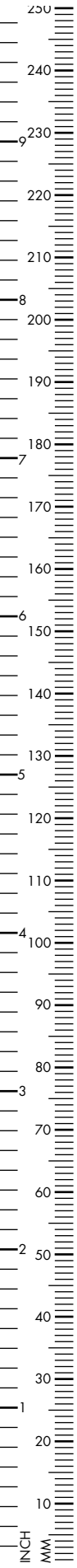
Valve Set	
consiting of:	295-130-000
A Clamp	
230mm	295-130-008
B Stick	
190mm	295-130-001
C Valve	
30 x 35mm	295-130-002
40 x 35mm	295-130-003
50 x 35mm	295-130-004
50 x 45mm	295-130-005
60 x 45mm	295-130-006
75 x 45mm	295-130-007


250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
9
8
7
6
5
4
3
2
1
INCH
MM

GALLBLADDER INSTRUMENTS



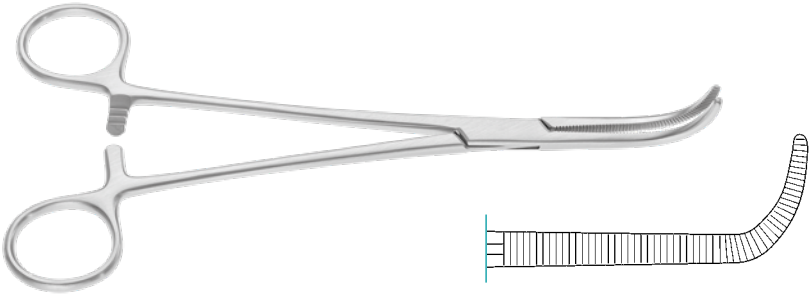
Forceps
Stone Forceps
Gall Duct Probes
Stone Scoops





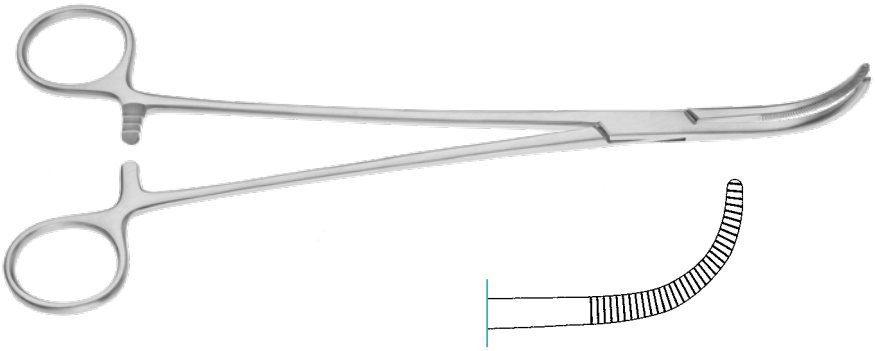
PETIT MIXTER
Forceps, 90° angled

140mm, 5 1/2"	140-373-140
180mm, 7"	140-373-180



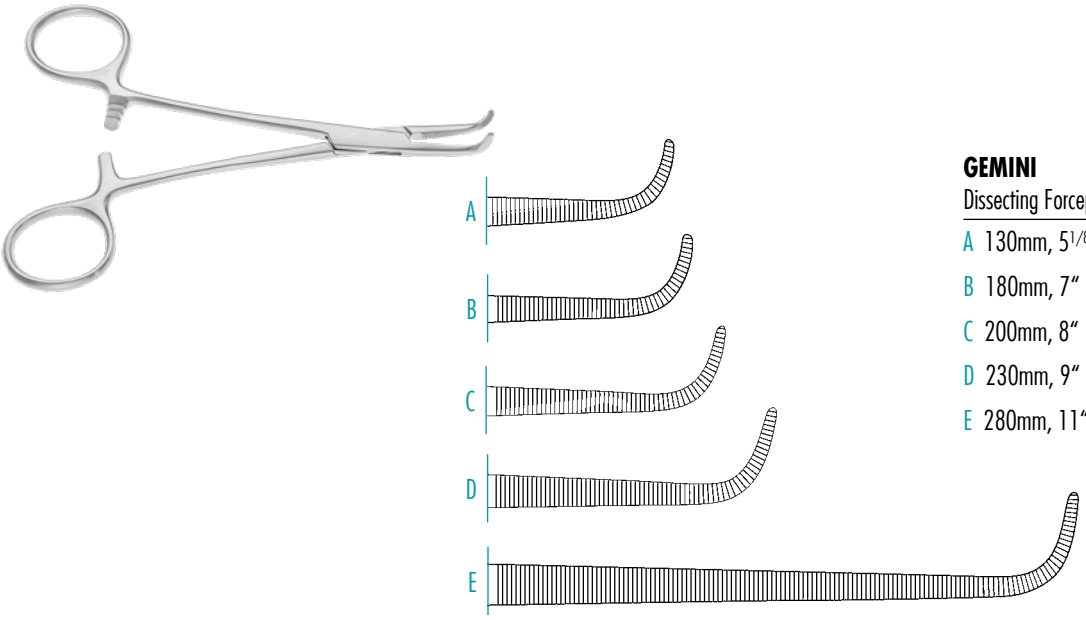
MIXTER
Forceps, fully serrated

155mm, 6 1/8"	140-423-155
190mm, 7 1/2"	140-423-190



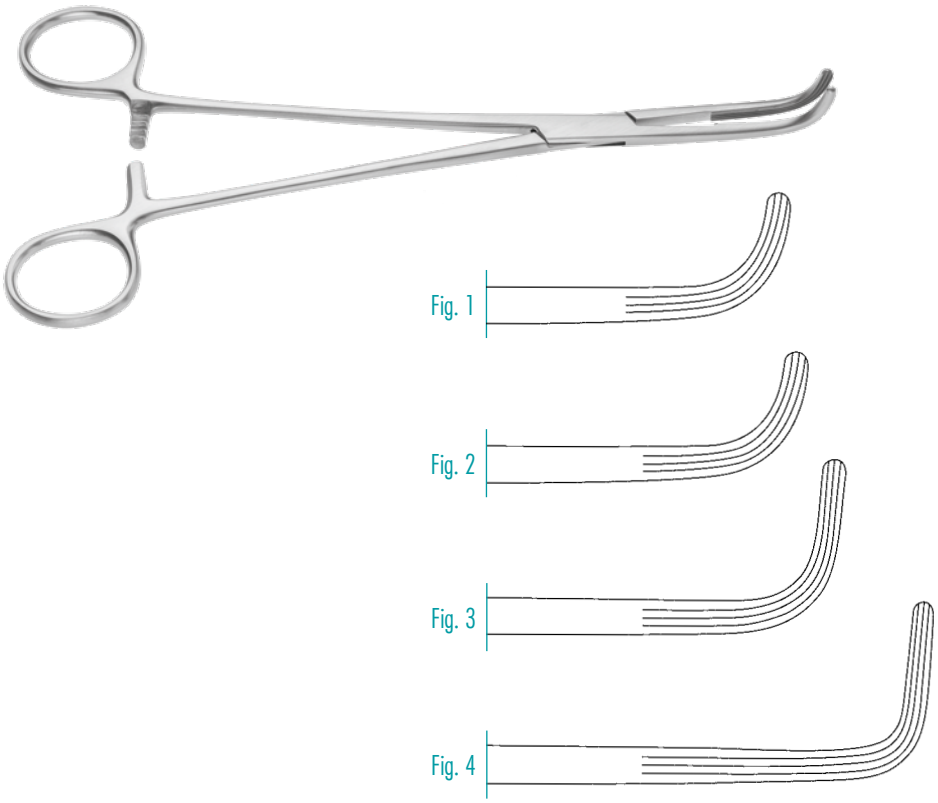
MIXTER
Kidney Pedicle Forceps

230mm, 9"	140-429-230



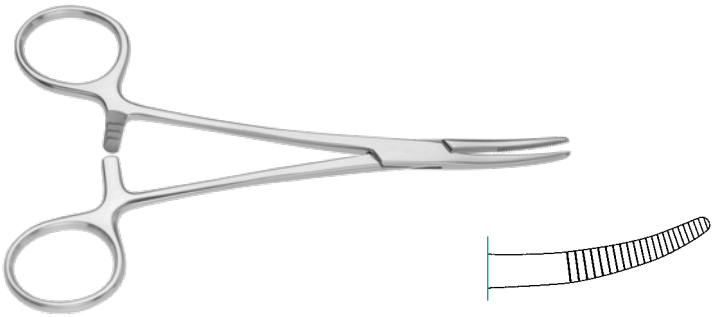
GEMINI
Dissecting Forceps

A	130mm, 5 1/8"	140-361-130
B	180mm, 7"	140-361-180
C	200mm, 8"	140-361-200
D	230mm, 9"	140-361-230
E	280mm, 11"	140-361-280



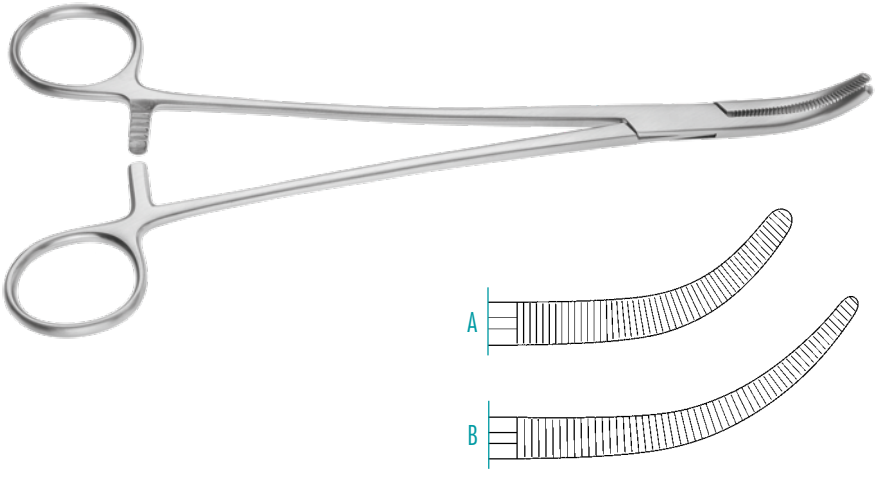
MIXTER
Gall Duct Forceps, Fig. 1

190mm, 7 1/2"	140-433-190
Fig. 2	
220mm, 8 2/3"	140-433-220
Fig. 3	
250mm, 9 7/8"	140-433-250
Fig. 4	
280mm, 11"	140-433-280



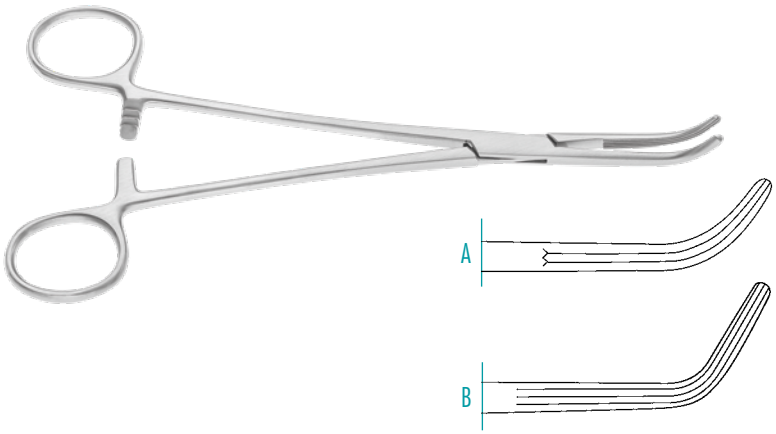
MOYNIHAN
Artery Forceps, delicate, curved

150mm, 6"	140-303-150



MOYNIHAN
Hysterectomy Forceps, curved

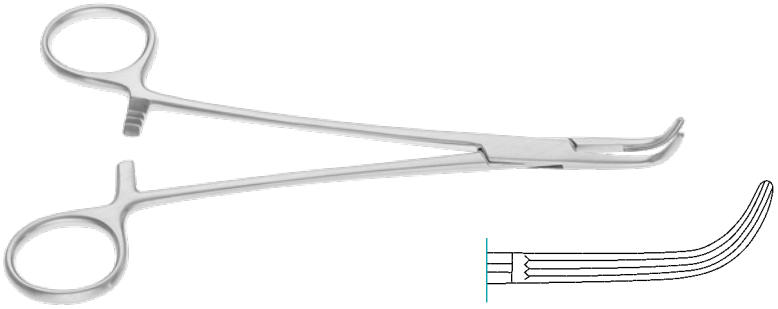
A 230mm, 9"	140-645-230
B 240mm, 9 1/2"	140-647-240



LAHEY

Gall Duct Forceps, curved, longitudinal serration

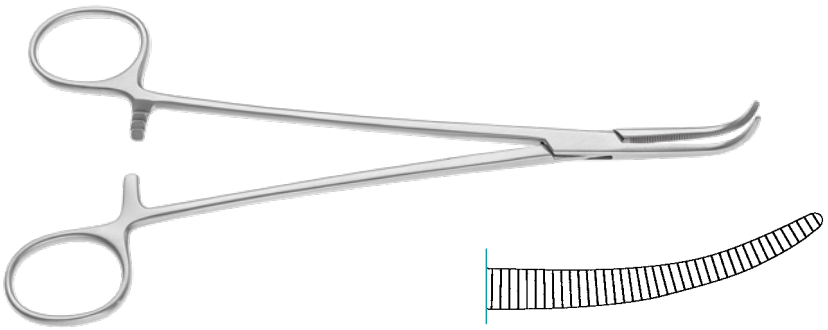
A	190mm, 7 1/2"	140-439-190
B	230mm, 9"	140-439-230



LOWER

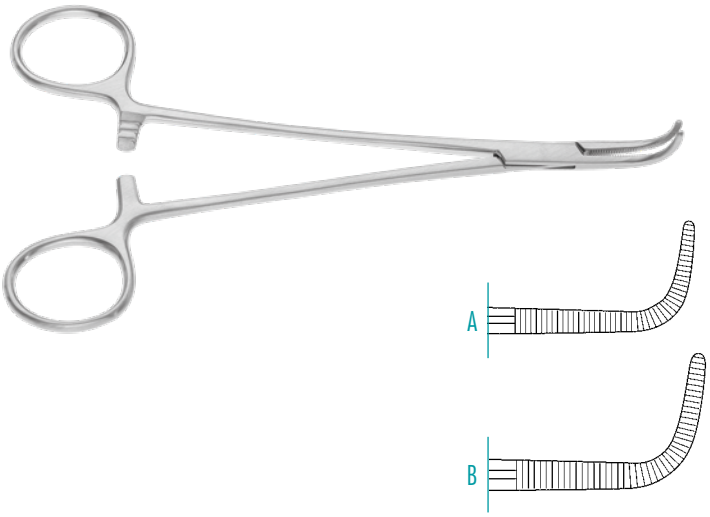
Gall Duct Forceps, curved, longitudinal serration

	185mm, 7 1/4"	140-437-180



VARCO
Gallbladder Forceps, slightly curved

190mm, 7 1/2"	140-403-190

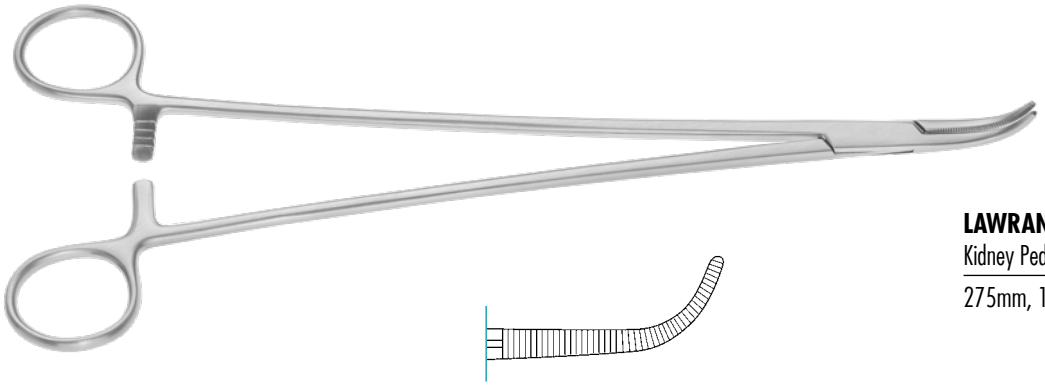


MEEKER
Kidney Pedicle Clamp
Fig. 1

A 180mm, 7"	140-619-180

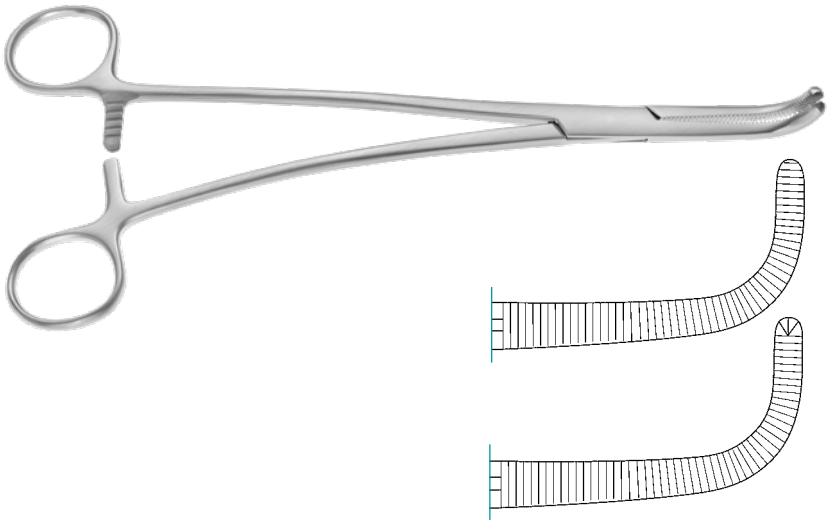
Fig. 2

B 280mm, 11"	140-619-275



LAWRANCE
Kidney Pedicle Clamp

275mm, 10 7/8"	140-617-275

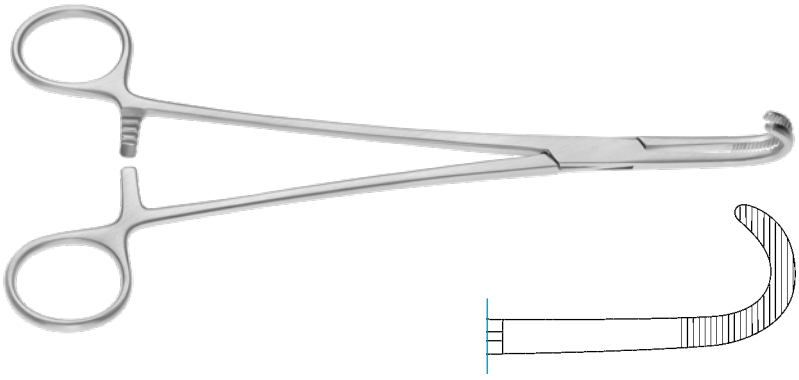


GRAY
Gall Duct Forceps, s-curved

220mm, $8^{2/3}$″	140-607-220
230mm, 9″	140-607-230

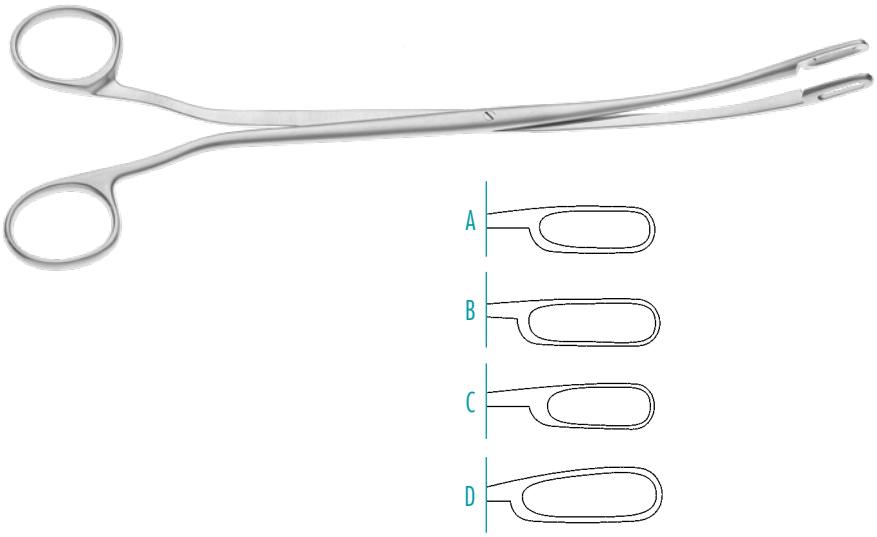
1x2 teeth

220mm, $8^{2/3}$″	140-608-220
230mm, 9″	140-608-230



DESJARDINS
Gall Duct Forceps, curved

210mm, $8^{1/2}$″	140-609-210



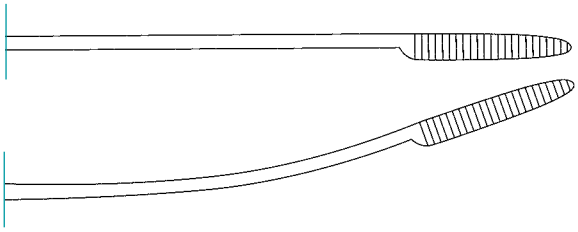
DESJARDINS
Gall Stone Forceps, 230mm, 9“

A #1	320-111-230
B #2	320-112-230
C #3	320-113-230
D #4	320-114-230

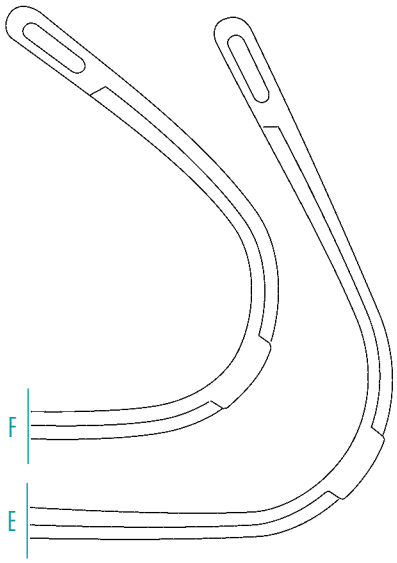


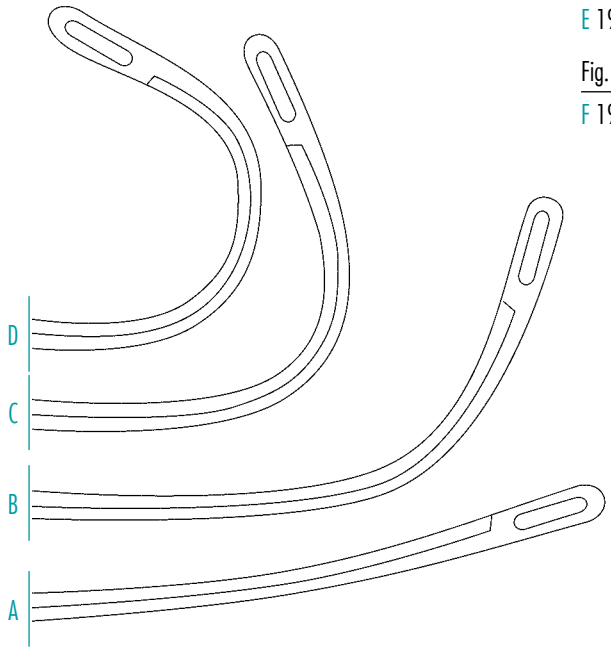
PELKMANN
Swab Forceps

straight	150-045-250
curved	150-046-250



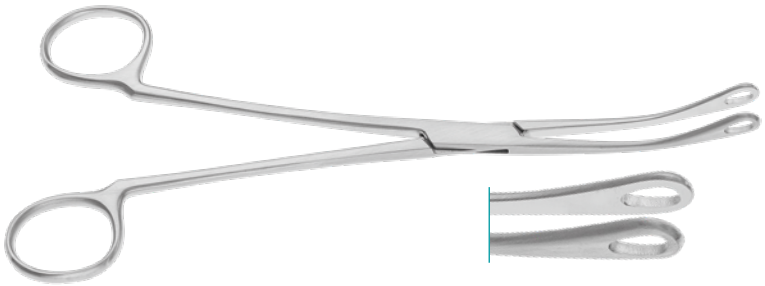






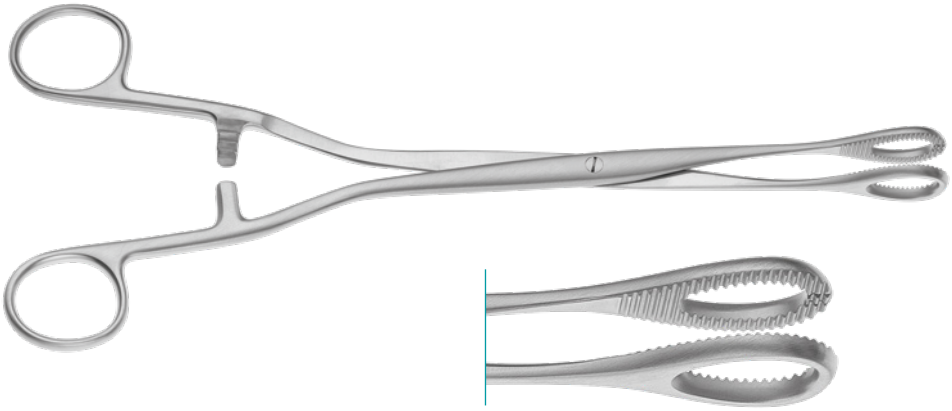
RANDALL
Kidney Stone Forceps

Fig. 1	
A 230mm, 9″	320-101-230
Fig. 2	
B 215mm, $8^{2/3}$″	320-103-220
Fig. 3	
C 190mm, $8^{2/3}$″	320-105-220
Fig. 4	
D 190mm, $8^{2/3}$″	320-107-220
Fig. 5	
E 190mm, $7^{1/2}$″	320-109-190
Fig. 6	
F 190mm, $7^{1/2}$″	320-111-190



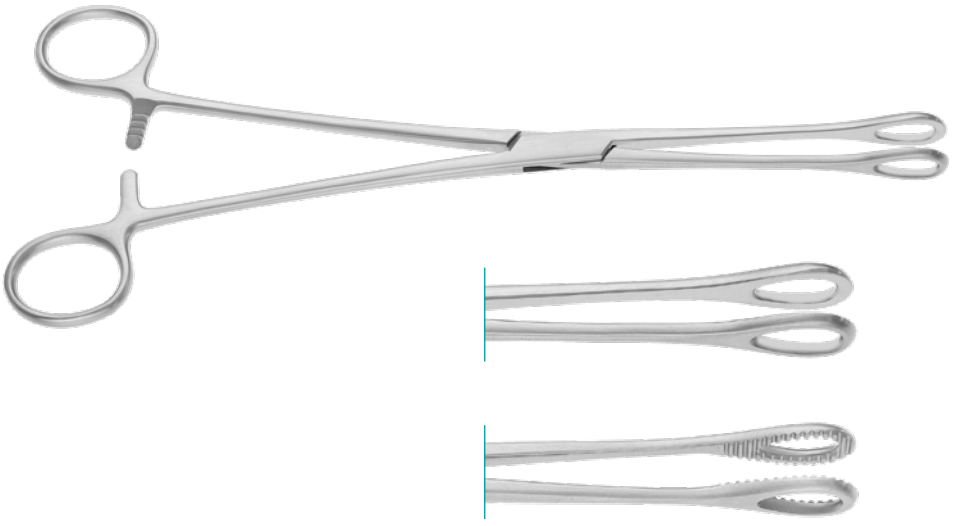
BLAKE
Gall Stone Forceps, 200mm, 8"

Straight	320-117-200
Curved	320-116-200



HEYWOOD SMITH
Gall Bladder Forceps

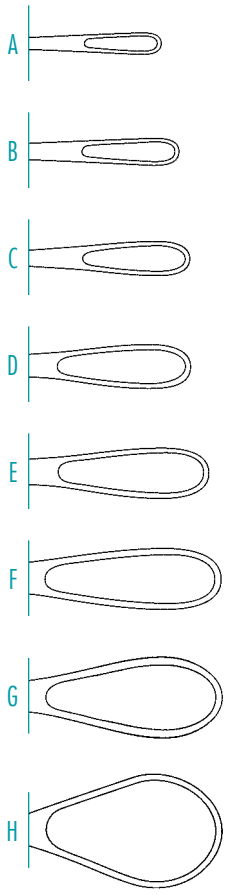
210mm, 8 1/4"	350-491-210
250mm, 9 7/8"	350-491-250



FOERSTER
Sponge Forceps, smooth, straight

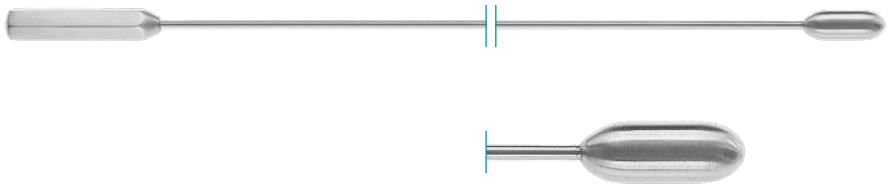
180mm, 7"	150-050-180
250mm, 9 7/8"	150-050-250
smooth, curved	
180mm, 7"	150-053-180
250mm, 9 7/8"	150-053-250
serrated, straight	
180mm, 7"	150-052-180
250mm, 9 7/8"	150-052-250
355mm, 14"	150-052-355
410mm, 16"	150-052-410
serrated, curved	
180mm, 7"	150-055-180
250mm, 9 7/8"	150-055-250





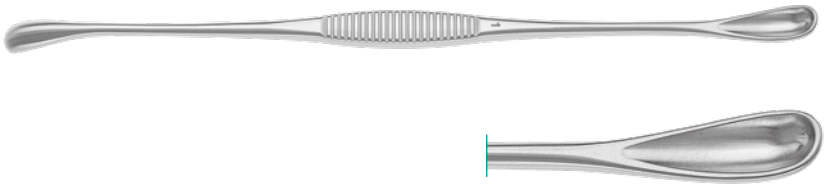
LUER KOERTE
Gall Stone Scoop, malleable, 320mm, 12 1/2"

Fig. 000	
A 2.8mm	320-140-300
Fig. 00	
B 3.4mm	320-140-200
Fig. 0	
C 4.3mm	320-140-100
Fig. 1	
D 5.5mm	320-140-010
Fig. 2	
E 6.7mm	320-140-020
Fig. 3	
F 8.0mm	320-140-030
Fig. 4	
G 11.0mm	320-140-040
Fig. 5	
H 15.0mm	320-140-050



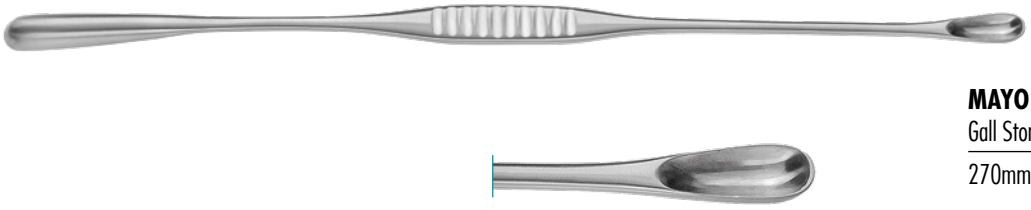
BAKES
Gall Duct Probe, 300mm, $11^{7/8}$"

∅ 1mm	320-150-001
∅ 2mm	320-150-002
∅ 3mm	320-150-003
∅ 4mm	320-150-004
∅ 5mm	320-150-005
∅ 6mm	320-150-006
∅ 7mm	320-150-007
∅ 8mm	320-150-008
∅ 9mm	320-150-009
∅ 10mm	320-150-010
∅ 11mm	320-150-011
∅ 12mm	320-150-012
∅ 13mm	320-150-013



FERGUSSON
Gall Stone Scoop, Fig.2, 11/12mm

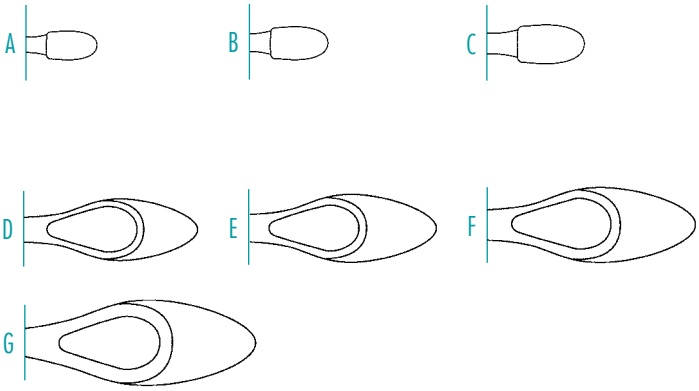
215mm, $8^{1/2}$"	320-150-215



MAYO
Gall Stone Scoop

270mm, $10^{2/3}$"	320-152-270





DESJARDINS
Gall Duct Probe, 280mm, 11″

A 13 Charr.	320-151-001
B 18 Charr.	320-151-002
C 21 Charr.	320-151-003

Scoop

D 18 Charr.	320-121-001
E 21 Charr.	320-121-002
F 24 Charr.	320-121-003
G 27 Charr.	320-121-004

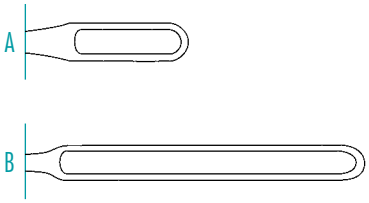




MOYNIHAN
Gall Duct Probe / Scoop

340mm, 13 1/3″	320-142-340





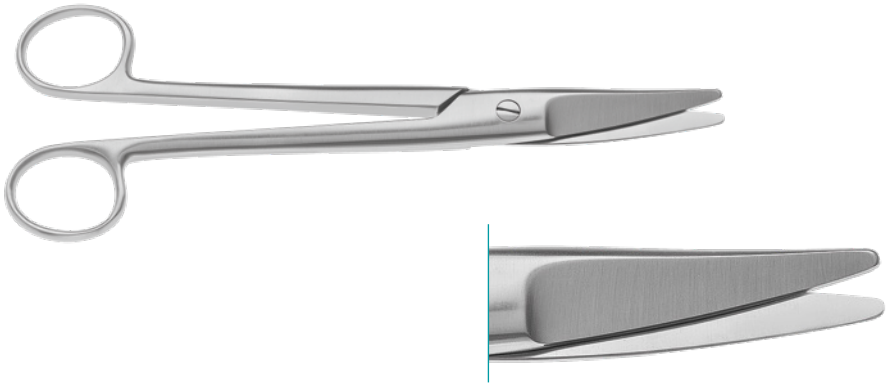
MAYO
Gall Stone Scoop,
working length: 270mm, 10 2/3″

A small	320-153-001
B medium	320-153-002

OBSTETRICS & GYNECOLOGY

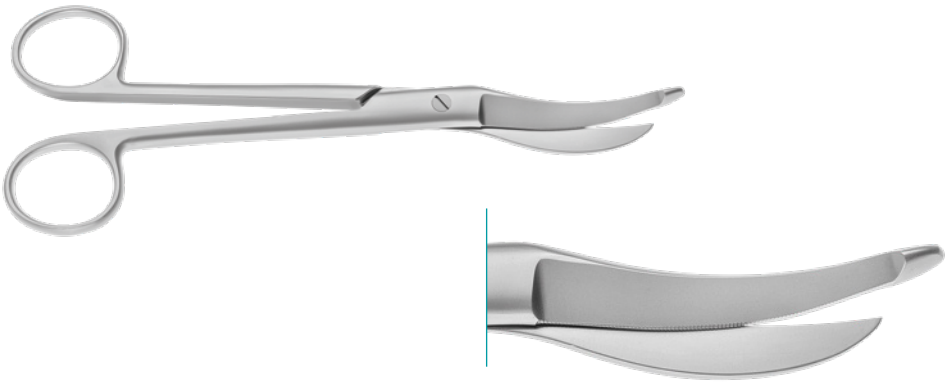


Scissors
Clamps and Forceps
Hysterectomy Forceps
Uterus Forceps
Tenaculum Forceps
Uterine / Placenta Forceps
Obstetrical Forceps
Myoma Screws
Curettes
Amniotome
Uterine Scoops/Curettes
Biopsy Forceps
Probes/Dilators
Retractors/Specula
Pelvimeter



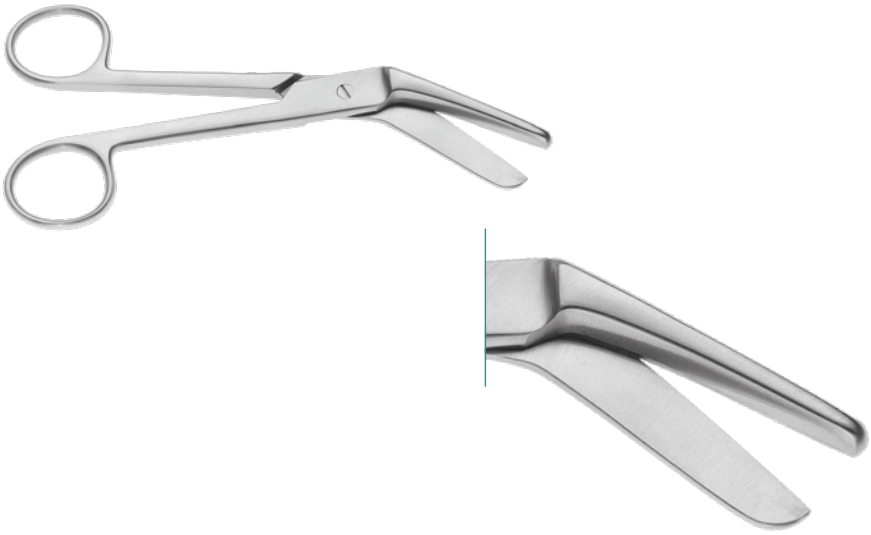
MAYO NOBLE
Scissors, curved

170mm, 6 2/3"	120-049-170
190mm, 7 1/2"	120-049-190



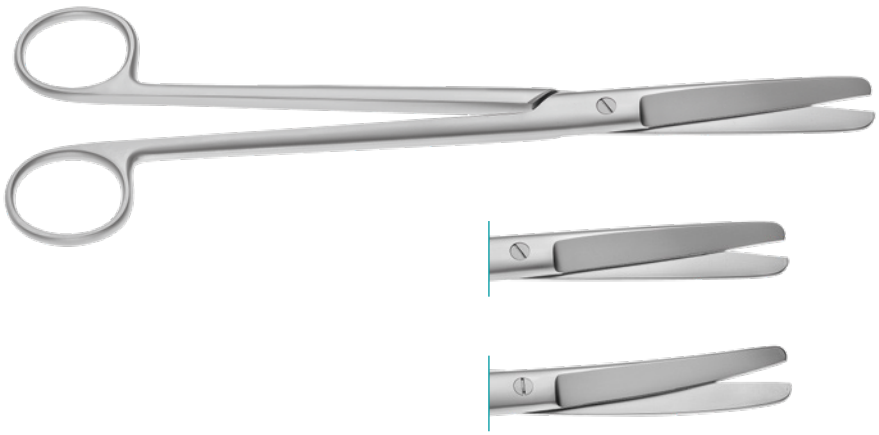
WALDMANN
Episiotomy Scissors, curved, serrated

180mm, 7"	120-231-180



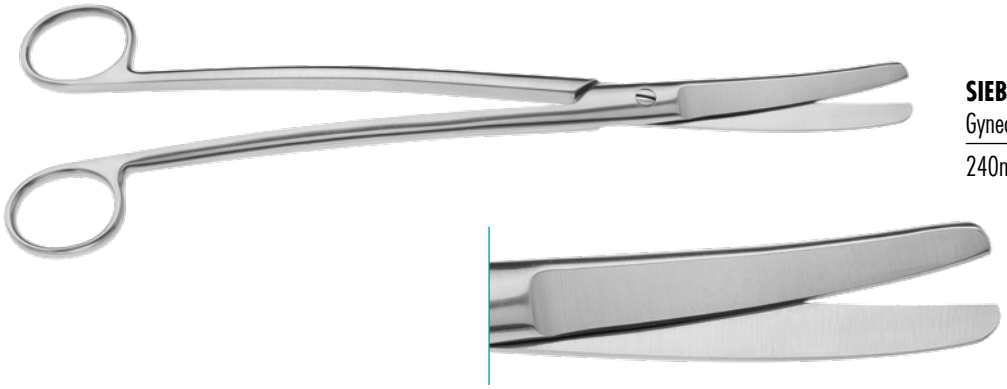
BRAUN STADLER
Episiotomy Scissors

145mm, 5 3/4"	120-225-145
200mm, 8"	120-225-200



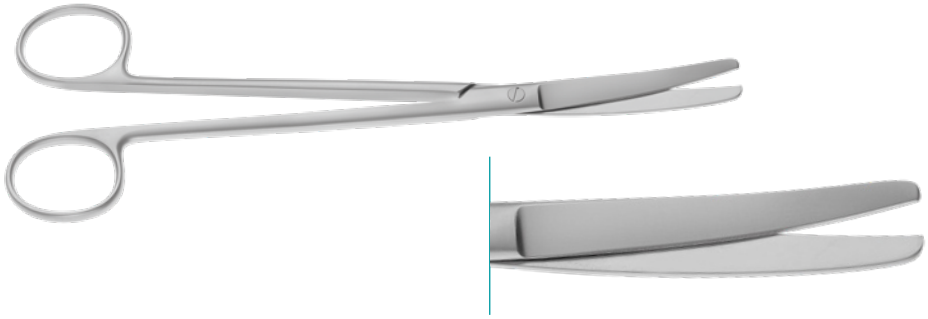
SIMS
Gynecological Scissors, straight, blunt/blunt

200mm, 8″	120-062-200
230mm, 9″	120-062-230
curved	
200mm, 8″	120-063-200
230mm, 9″	120-063-230



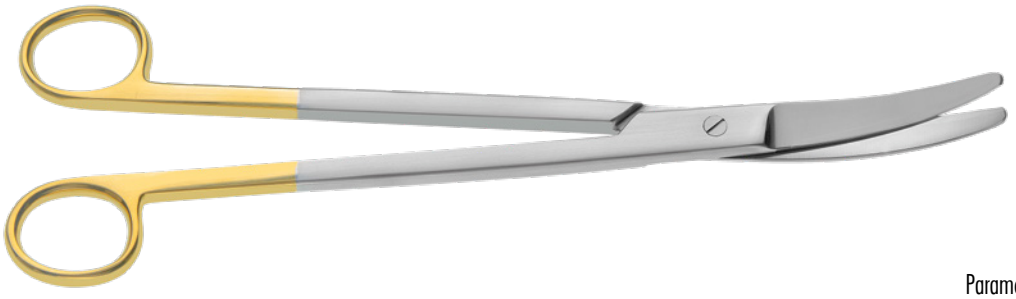
SIEBOLD
Gynecological Scissors, s-curved

240mm, 9 1/2″	120-061-240

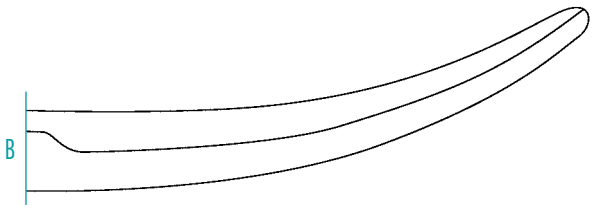


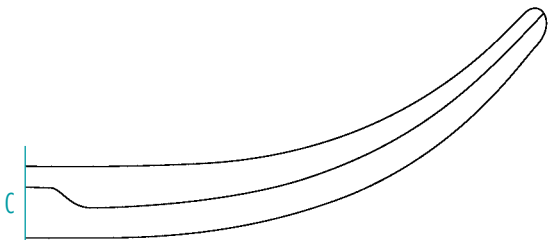
WERTHEIM
Preparation Scissors, curved

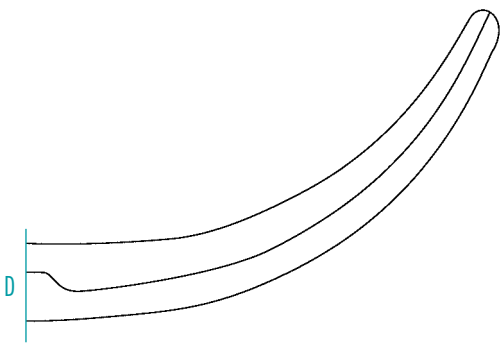
195mm, 7 3/4″	120-053-195
225mm, 8 7/8″	120-053-225



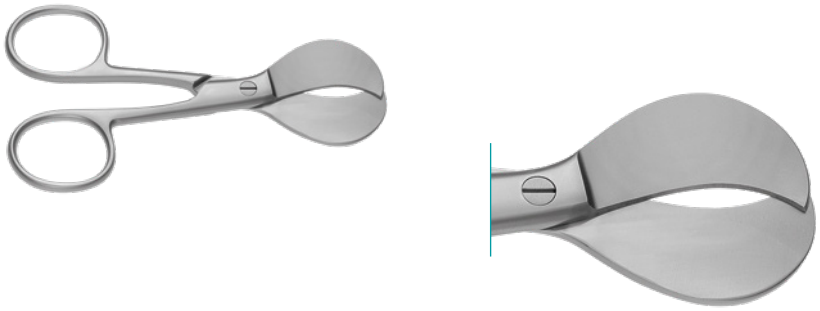






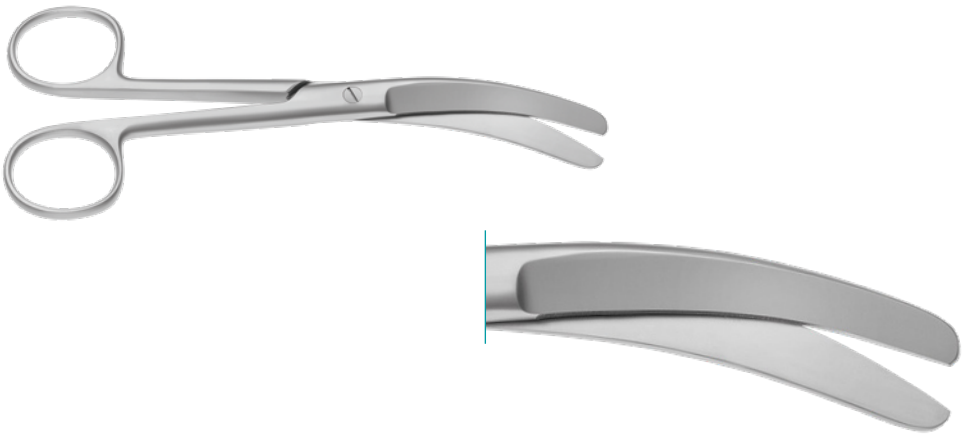


Parametrium Scissors, TC 230mm, 9″	
A straight	120-537-001
B slightly curved	120-537-002
C strongly curved	120-537-003
D angled	120-537-004
265mm, 10 1/2″	
B slightly curved	120-536-002
C strongly curved	120-536-003
D angled	120-536-004
Parametrium Scissors, TC 305mm, 12″	
A straight	120-538-001
B slightly curved	120-538-002
C strongly curved	120-538-003
D angled	120-538-004
Parametrium Scissors, TC 350mm, 14″	
A straight	120-539-001
B slightly curved	120-539-002
C strongly curved	120-539-003
D angled	120-539-004



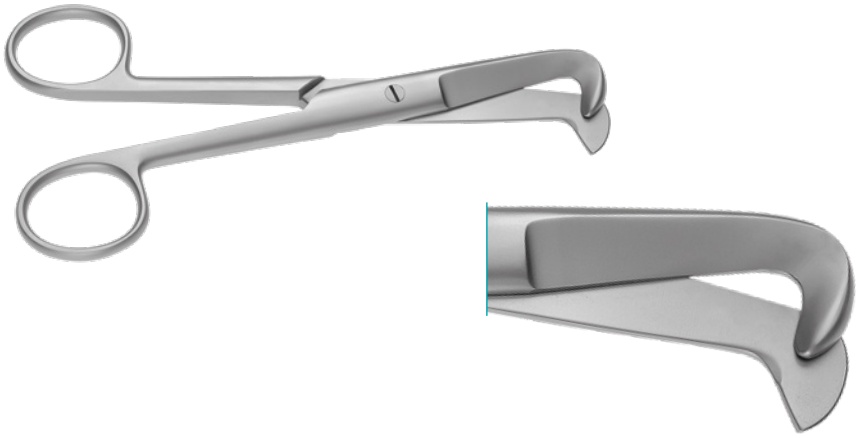
MODEL USA
Umbilical Cord Scissors

105mm, 4 1/3"	120-233-105



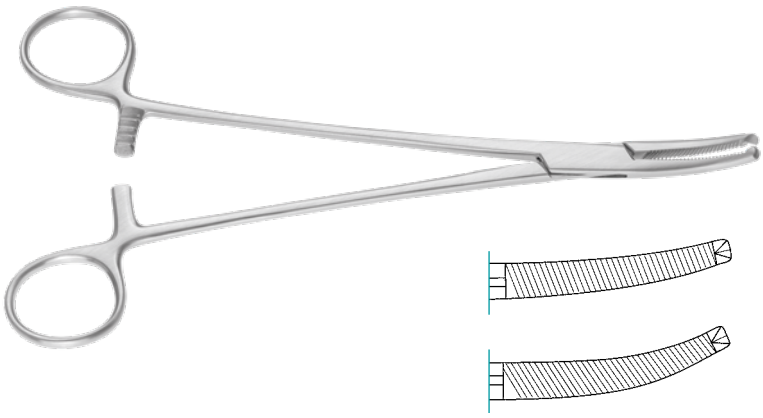
BUSCH
Umbilical Cord Scissors, lateral curved

160mm, 6 1/4"	120-229-160



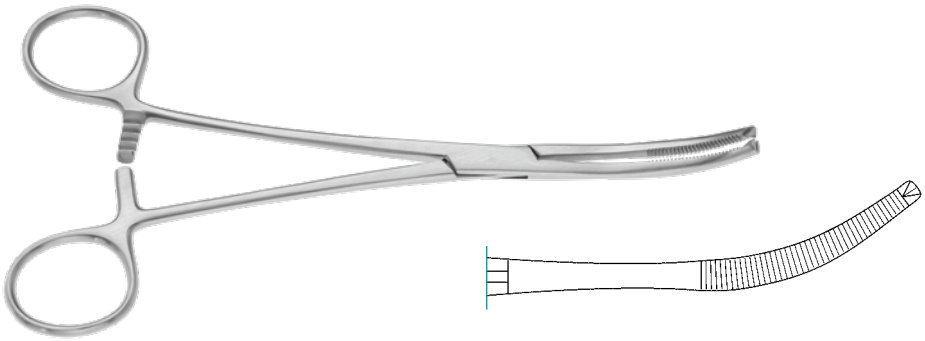
SCHUMACHER
Umbilical Cord Scissors

160mm, 6 1/4"	120-227-160



FAURE
Peritoneal Forceps, 200mm, 8″

Fig. 1 slightly curved	140-551-200
Fig. 2 strongly curved	140-553-200

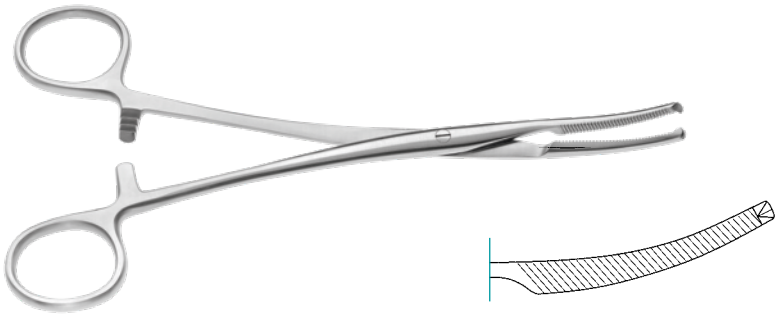


MIKULICZ
Peritoneal Forceps, strongly curved, 1x2 teeth

180mm, 7″	140-549-185
200mm, 8″	140-549-200

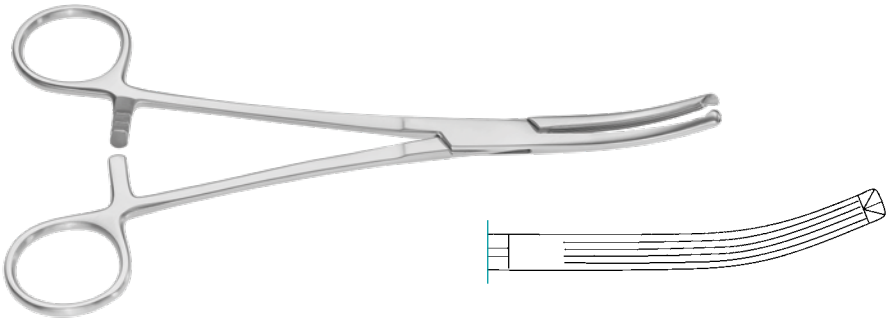
laterally curved, 1x2 teeth

180mm, 7″	140-549-180



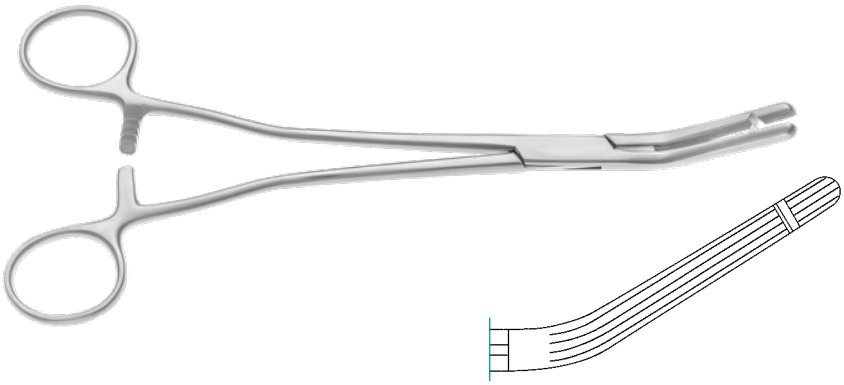
MIKULICZ
Peritoneal Forceps, curved, 1x2 teeth

180mm, 7″	140-548-180
200mm, 8″	140-548-200
245mm, 9 2/3″	140-548-245



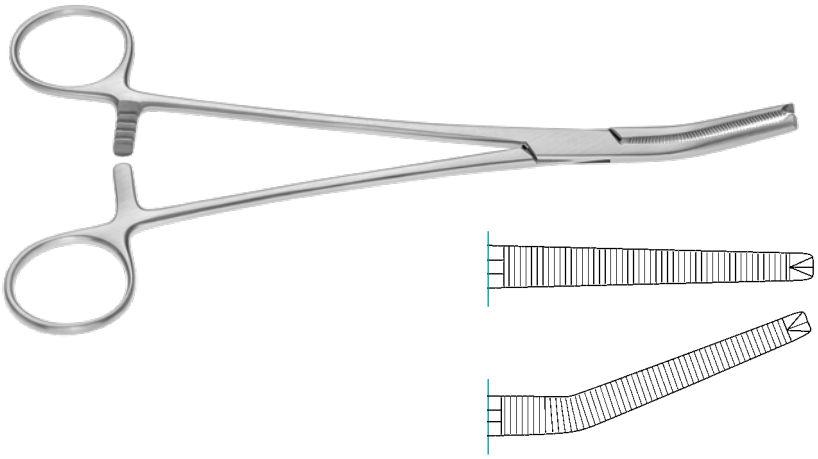
LONG
Hysterectomy Forceps, 1x2 teeth

190mm, 7 1/2"	140-652-190



GARLAND
Hysterectomy Forceps, 1x2 teeth

210mm, 8 1/4"	140-639-210

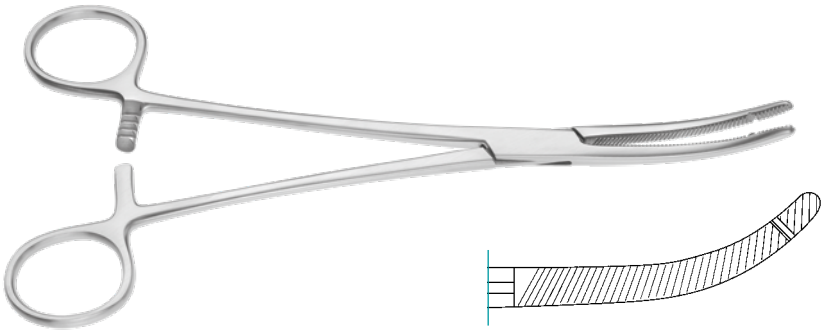


PHANEUF
Peritoneal Forceps, 1x2 teeth,
straight

215mm, 8 1/2"	140-520-210

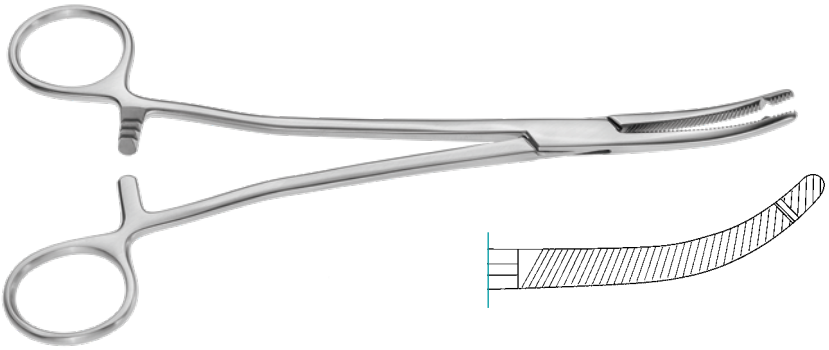
curved

210mm, 8 1/4"	140-521-210



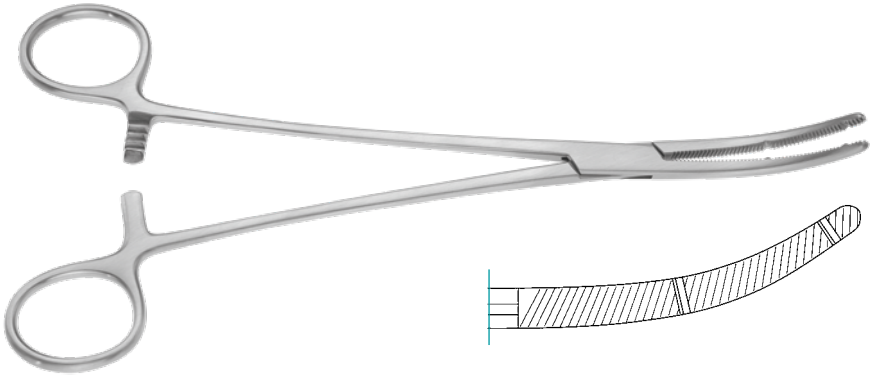
HEANEY
Hysterectomy Forceps, delicate, single tooth, curved

210mm, 8 1/4"	140-612-210



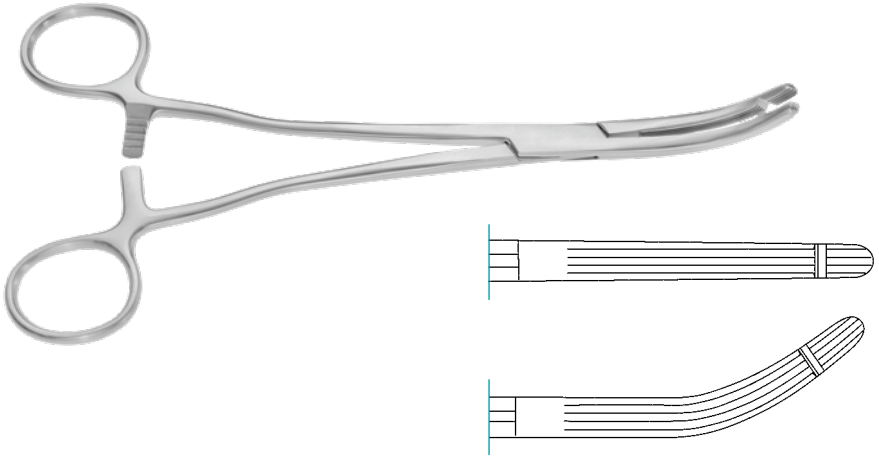
HEANEY
Hysterectomy Forceps, single tooth, curved

210mm, 8 1/4"	140-613-210
230mm, 9"	140-613-230



HEANEY
Hysterectomy Forceps, double tooth, curved

210mm, 8 1/4"	140-615-210
230mm, 9"	140-615-230

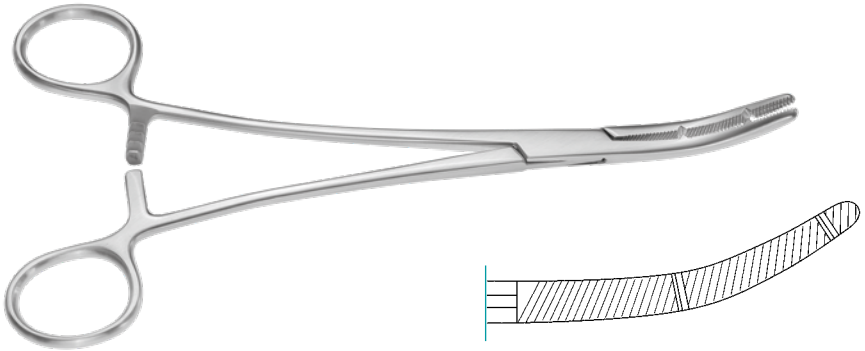


BALLANTINE
Hysterectomy Forceps, straight, single tooth

210mm, 8 1/4"	140-617-210
300mm, 11 7/8"	140-617-300

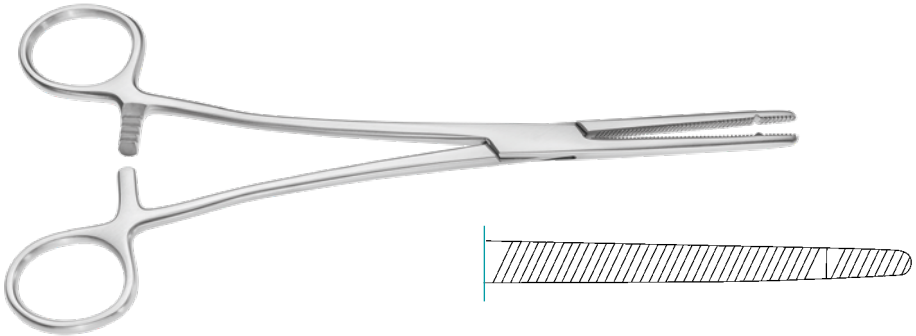
curved

210mm, 8 1/4"	140-618-210



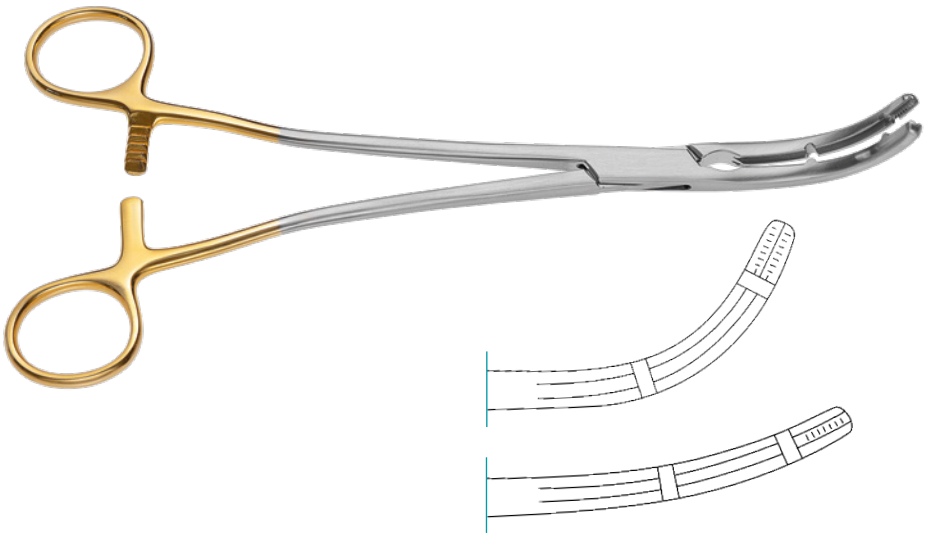
HEANEY KANTER
Hysterectomy Forceps, curved, single tooth

210mm, 8 1/4"	140-619-210



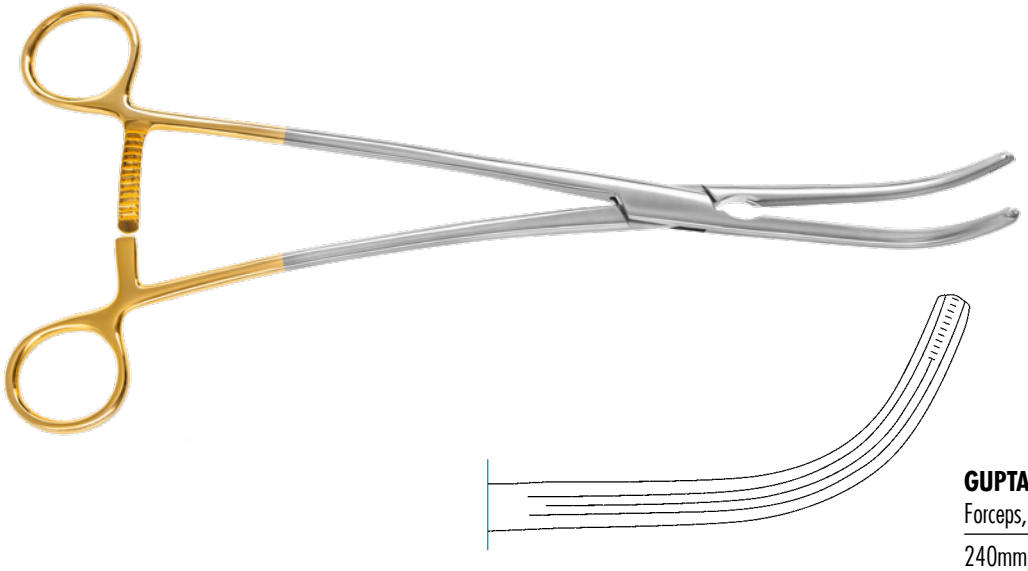
HEANEY REZEK
Hysterectomy Forceps, straight, single tooth

210mm, 8 1/4"	140-627-210



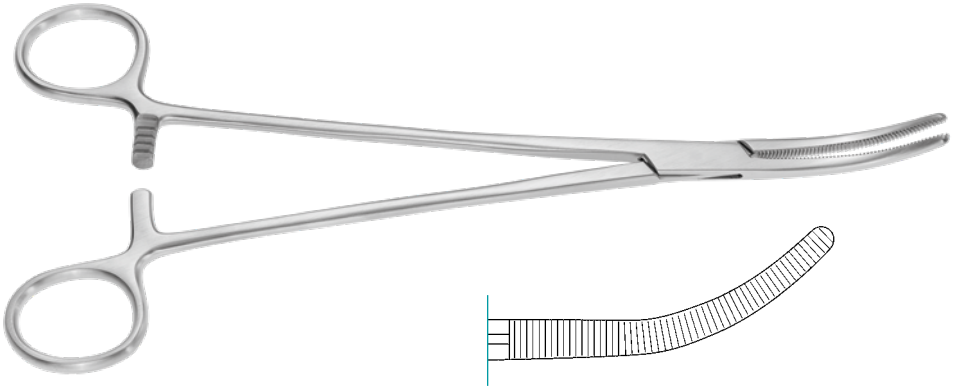
KOVAC
Hysterectomy Forceps, 240mm, 9 1/2"

fully curved	140-742-245
slightly curved	140-741-245



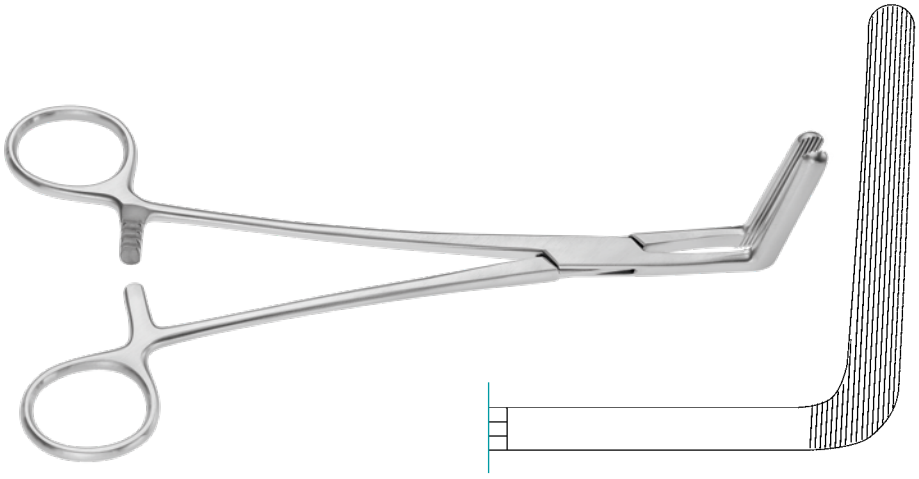
GUPTA FRANK
Forceps, s-curved, 80mm jaw length

240mm, 9 1/2"	140-707-240
270mm, 10 2/3"	140-707-270
320mm, 12 1/2"	140-707-320



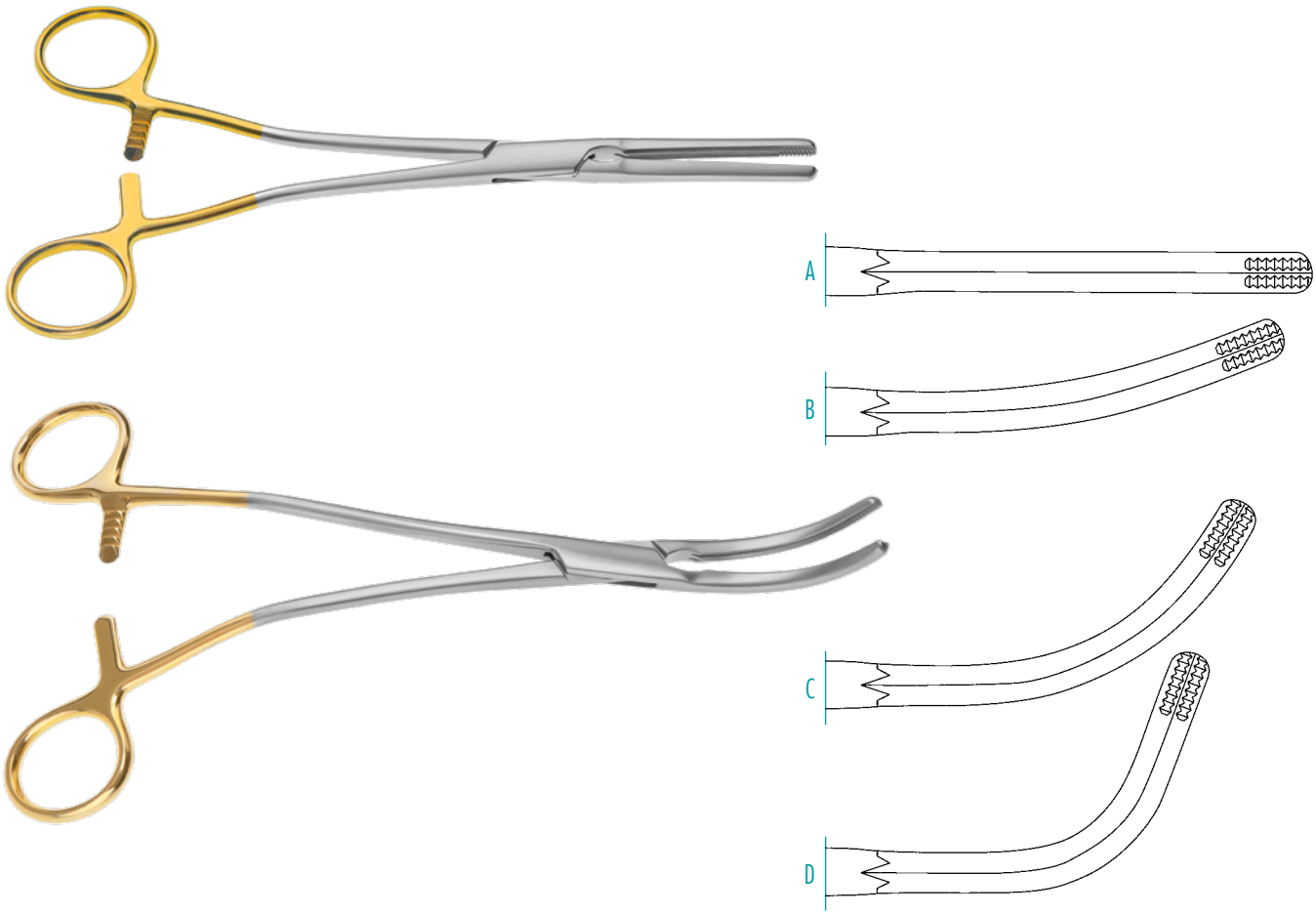
WERTHEIM
Hysterectomy Forceps, serrated, curved

250mm, 9 7/8"	140-697-250



WERTHEIM CULLEN
Hysterectomy Forceps, 90° angled

215mm, 8 1/2"	140-641-215





A Parametrium Forceps, straight

210mm, 8 1/4"	140-700-220
250mm, 9 7/8"	140-700-250
305mm, 12"	140-700-305
355mm, 14"	140-700-350

B slightly curved

210mm, 8 1/4"	140-701-215
240mm, 9 1/2"	140-701-245
305mm, 12"	140-701-305
355mm, 14"	140-701-350

C strongly curved

210mm, 8 1/4"	140-702-210
240mm, 9 1/2"	140-702-245
305mm, 12"	140-702-305
355mm, 14"	140-702-350

D angled

210mm, 8 1/4"	140-703-205
240mm, 9 1/2"	140-703-245
305mm, 12"	140-703-305
355mm, 14"	140-703-350



A straight, angled shanks

210mm, 8 1/4"	141-700-220
240mm, 9 1/2"	141-700-250

B slightly curved, angled shanks

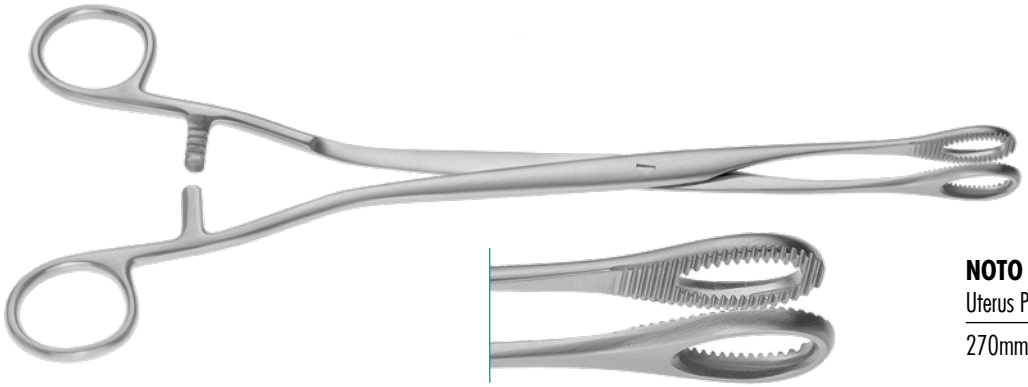
210mm, 8 1/4"	141-701-215
240mm, 9 1/2"	141-701-245

C strongly curved, angled shanks

210mm, 8 1/4"	141-702-210
240mm, 9 1/2"	141-702-245

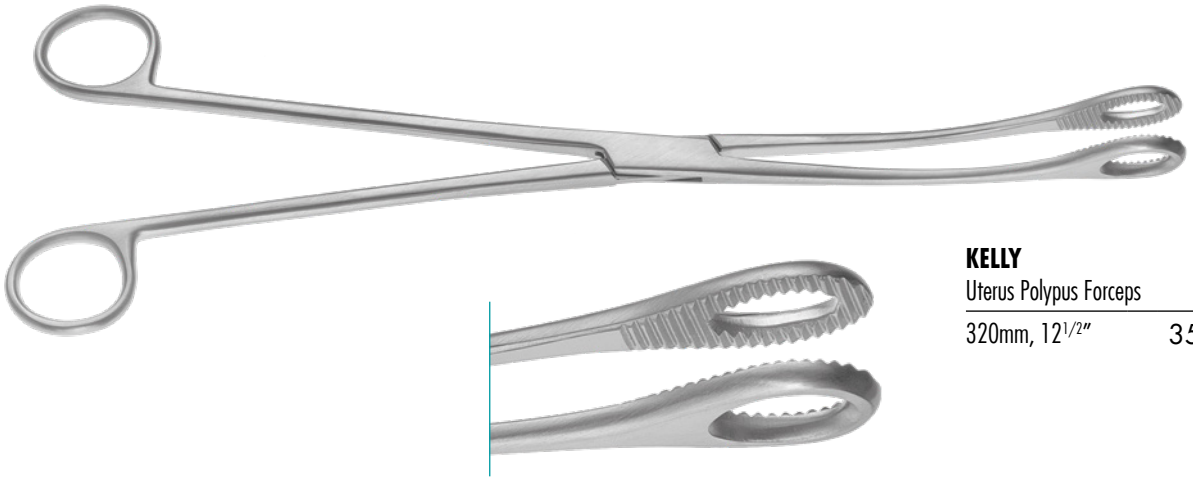
D angled, angled shanks

210mm, 8 1/4"	141-703-210
245mm, 9 2/3"	141-703-245



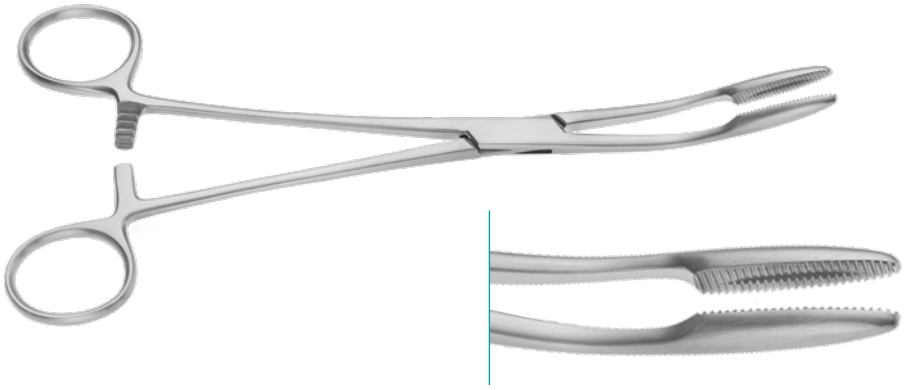
NOTO
Uterus Polypus Forceps

270mm, $10^{2/3}$″	350-492-270



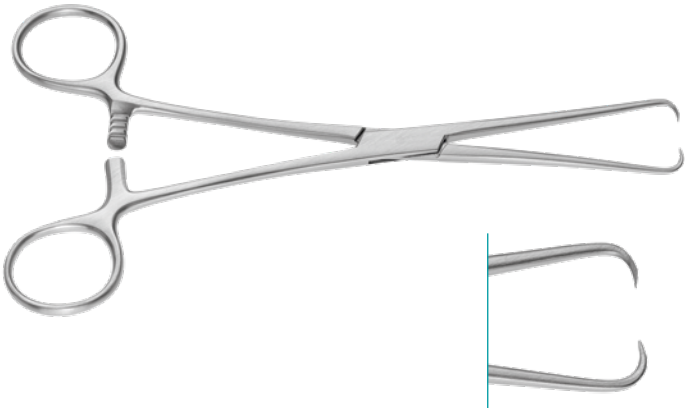
KELLY
Uterus Polypus Forceps

320mm, $12^{1/2}$″	350-490-320



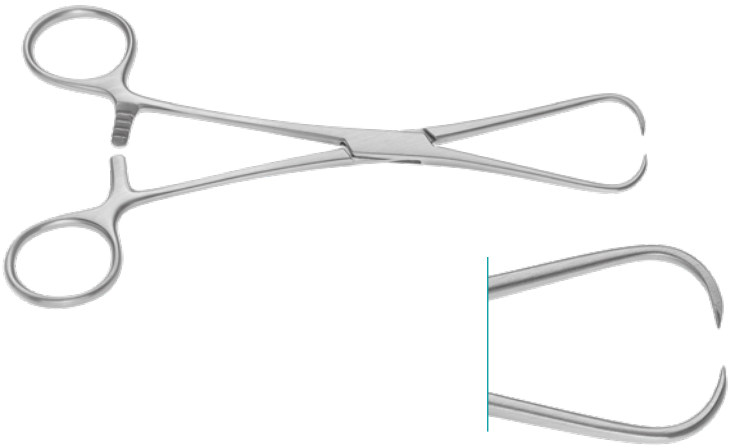
GROSS MAIER
Swab Forceps, curved

220mm, $8^{2/3}$″	150-031-220



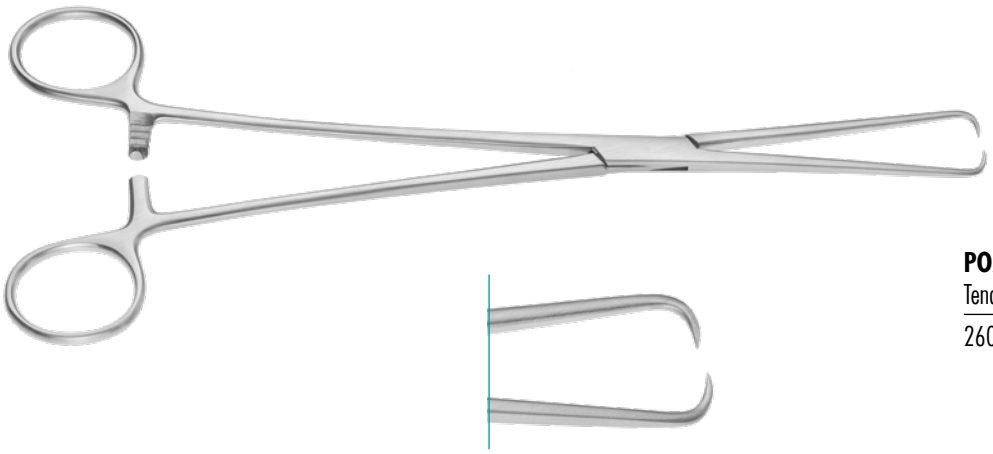
BARRETT
Tenaculum Forceps

180mm, 7″	350-426-180



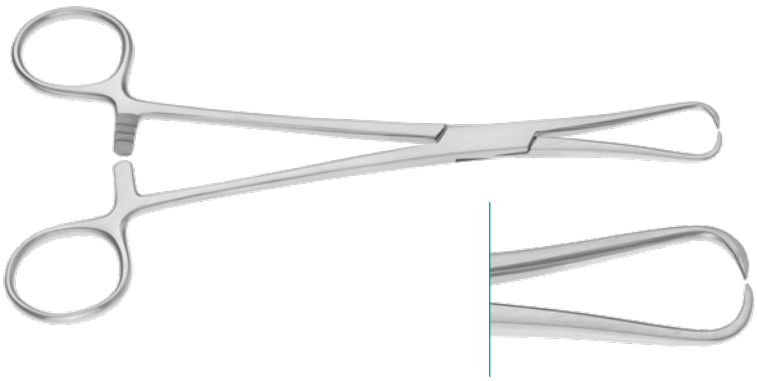
STAUDE MOORE
Tenaculum Forceps

170mm, 6 2/3″	350-422-170

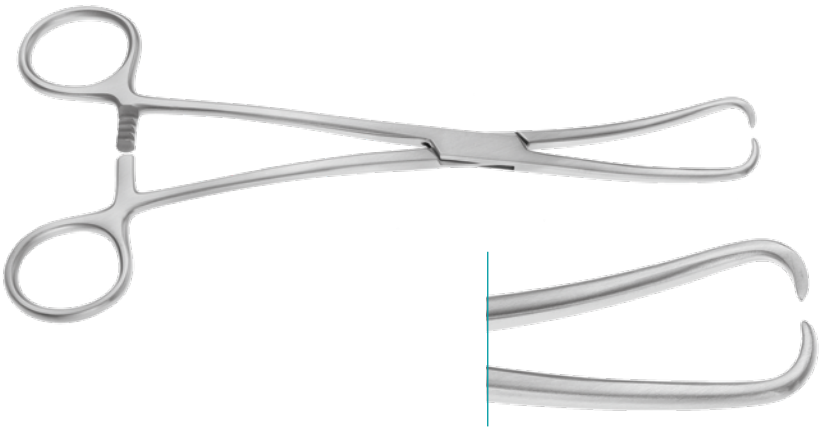


POZZI
Tenaculum Forceps

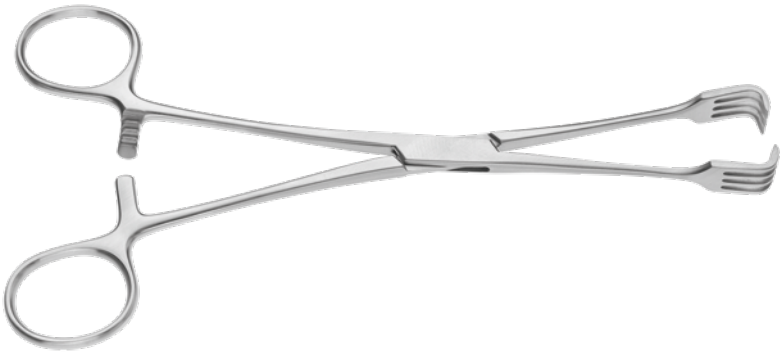
260mm, 10 1/4″	350-420-260



ADAIR
Tenaculum Forceps
190mm, 7 1/2" 350-426-190



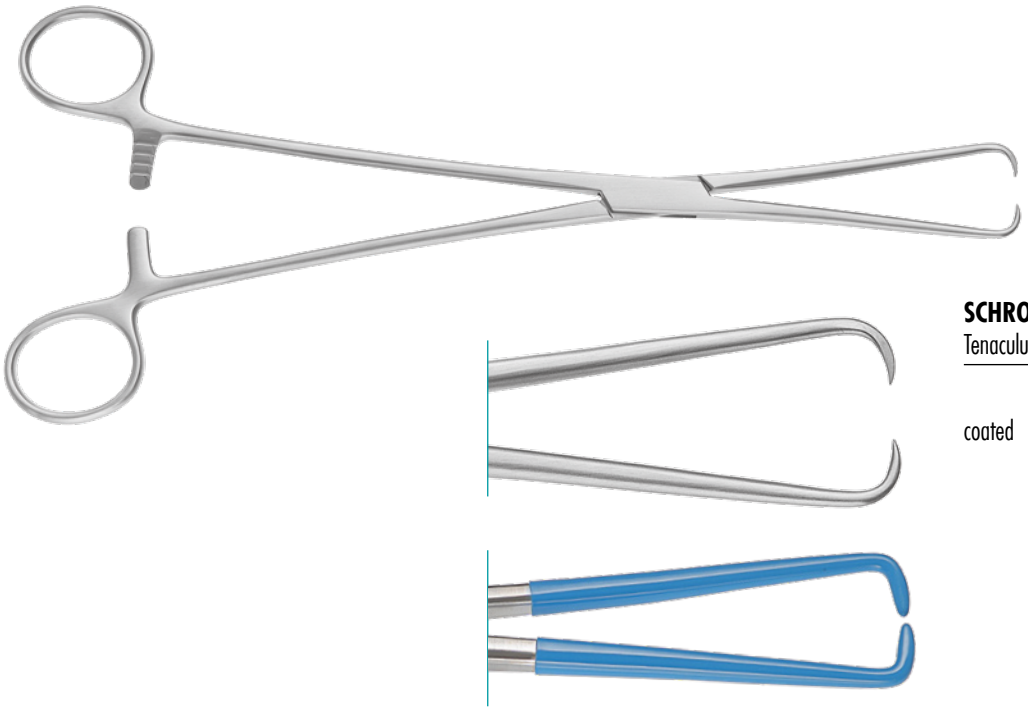
JARCHO
Tenaculum Forceps
200mm, 8" 350-427-200



CZERNY
Tenaculum Forceps, straight
205mm, 8 1/8" 350-480-205

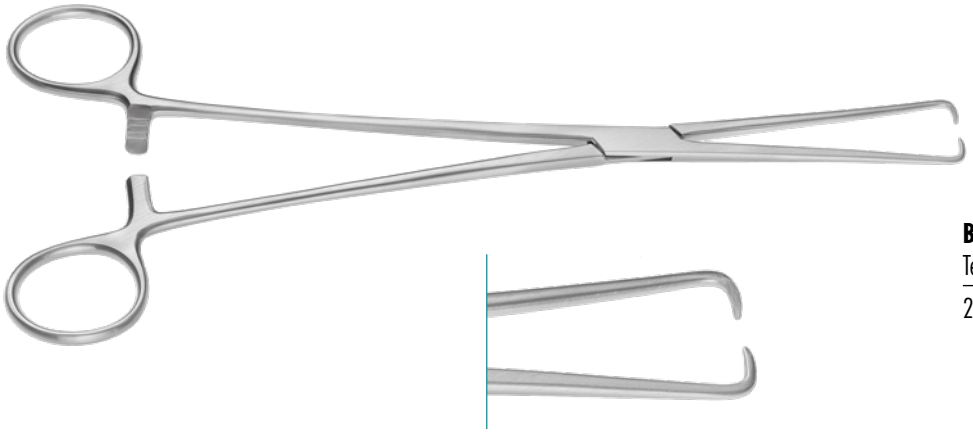


PRATT
Vulsellum Grasper and Depressor
280mm, 11" 350-342-280



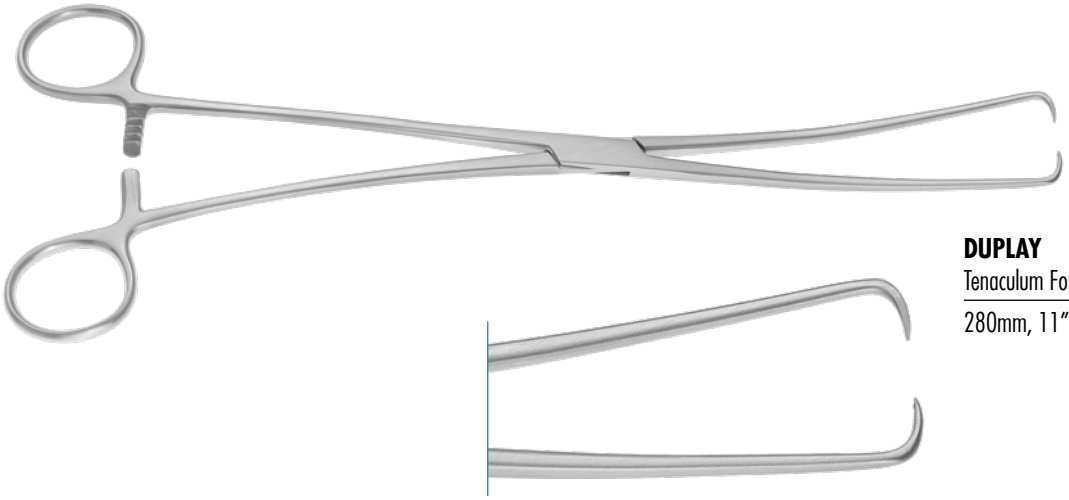
SCHROEDER
Tenaculum Forceps, 250mm, 9 7/8"

	350-400-250
coated	350-401-250



BRAUN
Tenaculum Forceps

250mm, 9 7/8"	350-410-250



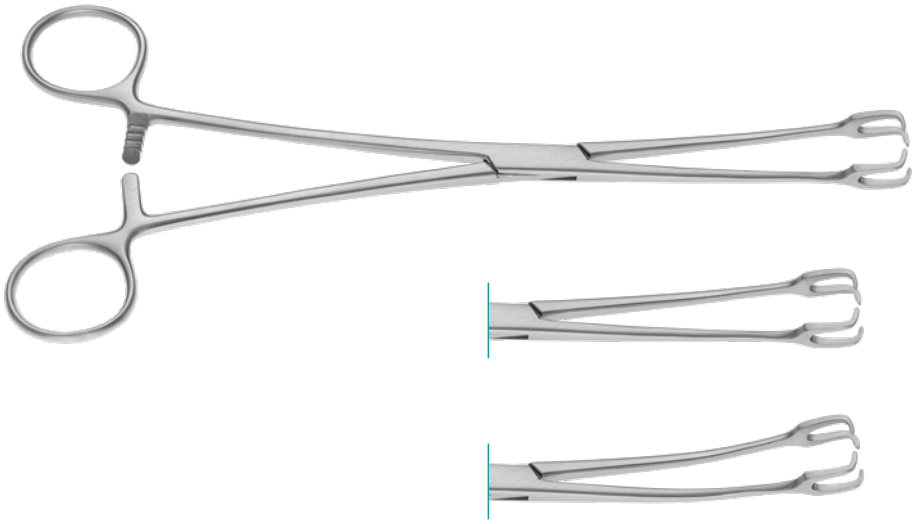
DUPLAY
Tenaculum Forceps

280mm, 11"	350-428-280



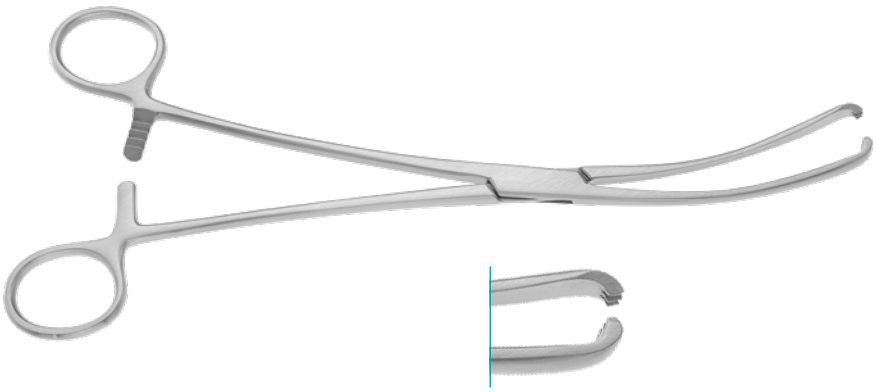
HULKA
Uterine Manipulator Tenaculum Forceps

290mm, 11 1/2"	350-302-290



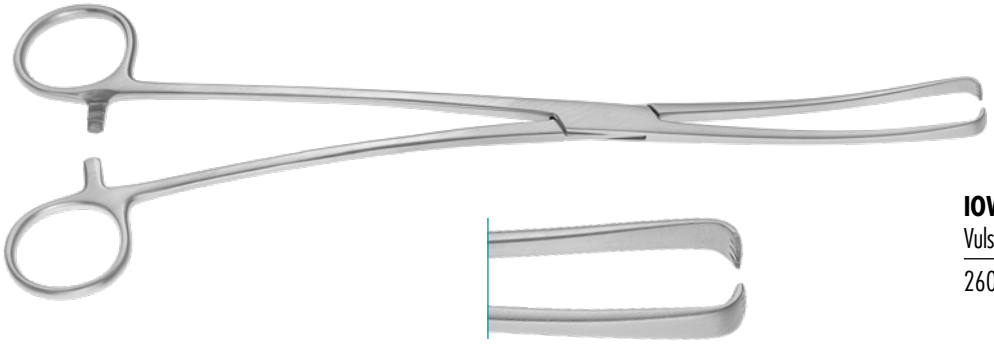
SCHROEDER
Tenaculum Forceps, 2 teeth, 240mm, 9 1/2"

straight	350-440-240
curved	350-441-240



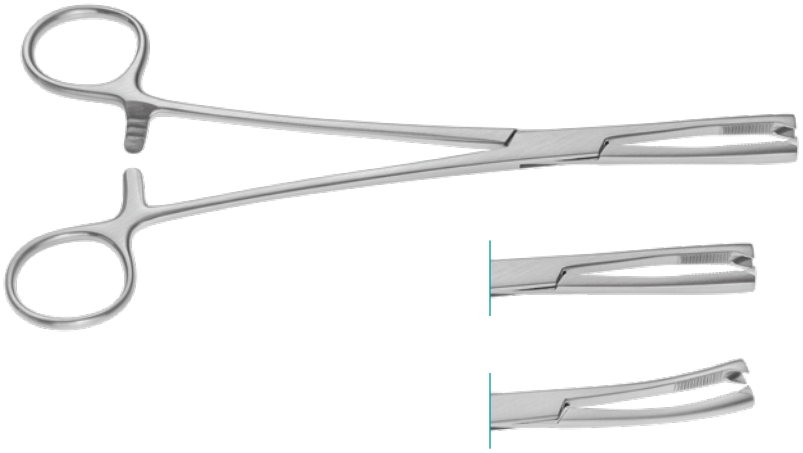
TEALE
Tenaculum Forceps, laterally curved, 3x4 teeth

230mm, 9"	350-443-230



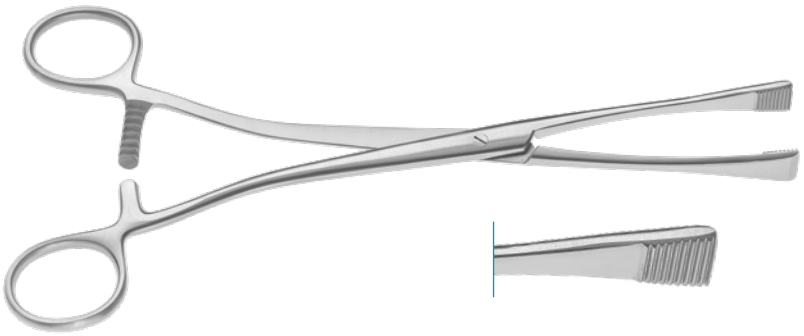
IOWA
Vulsellum Forceps

260mm, 10 1/4"	350-445-260



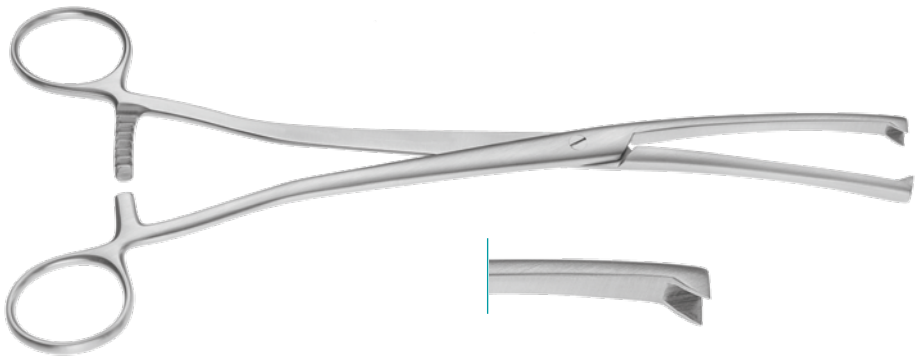
JACOBS
Tenaculum Forceps, 2x2 teeth, 210mm, 8 1/4"

straight	350-470-210
curved	350-471-210



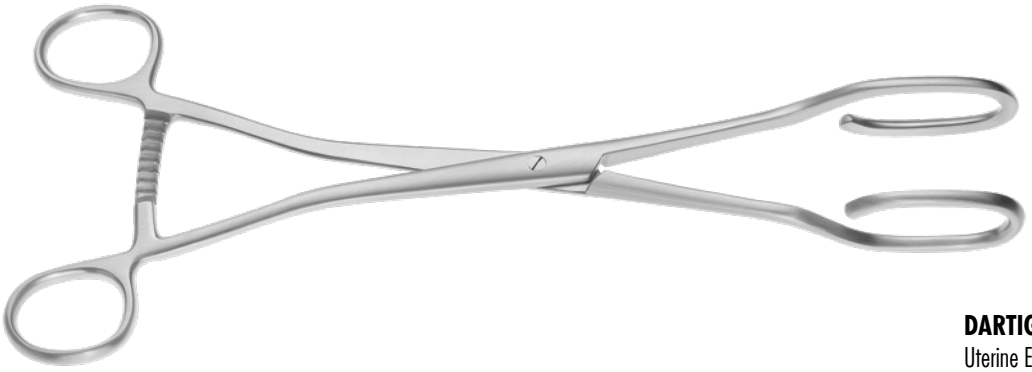
GREEN ARMYTAGE
Caesarean Forceps, straight,
15mm wide serrated jaw

210mm, 8 1/4"	340-150-210



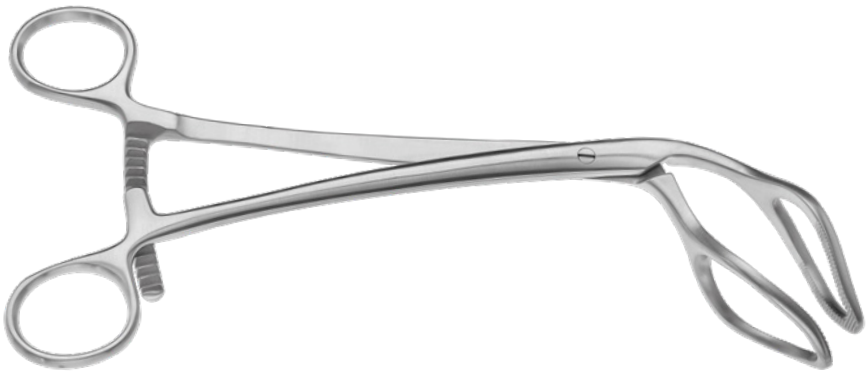
MUSEUX
Forceps, 2x2 teeth, 8mm jaw
240mm, 9 1/2" working length

straight	350-452-240
curved	350-453-240
10mm jaw	
straight	350-454-240
curved	350-455-240



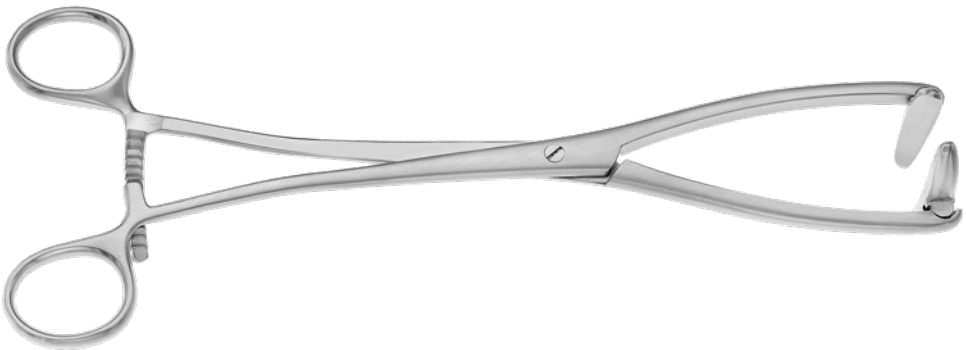
DARTIGUES
Uterine Elevating Forceps

270mm, $10^{2/3}$″	350-493-270



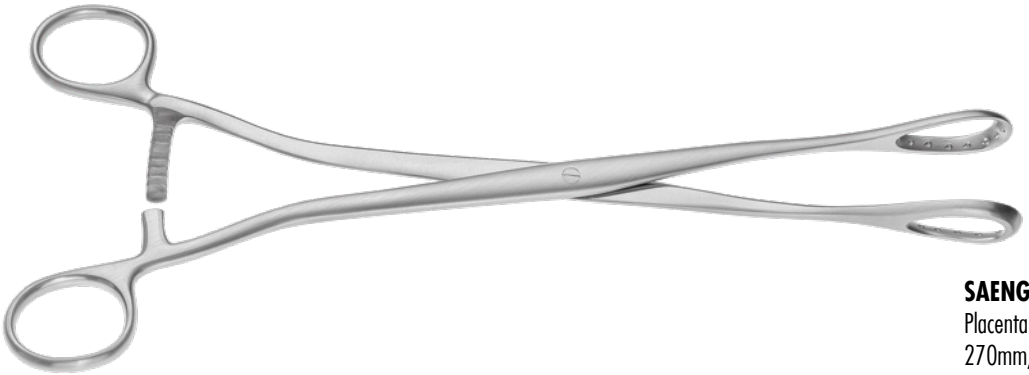
SOMER
Uterine Elevating Forceps

230mm, 9″	350-493-230



COLLIN
Uterine Forceps

250mm, $9^{7/8}$″	350-493-250



SAENGER
Placenta and Ovum Forceps,
270mm, 10 2/3"

straight	340-798-270
curved	340-799-270

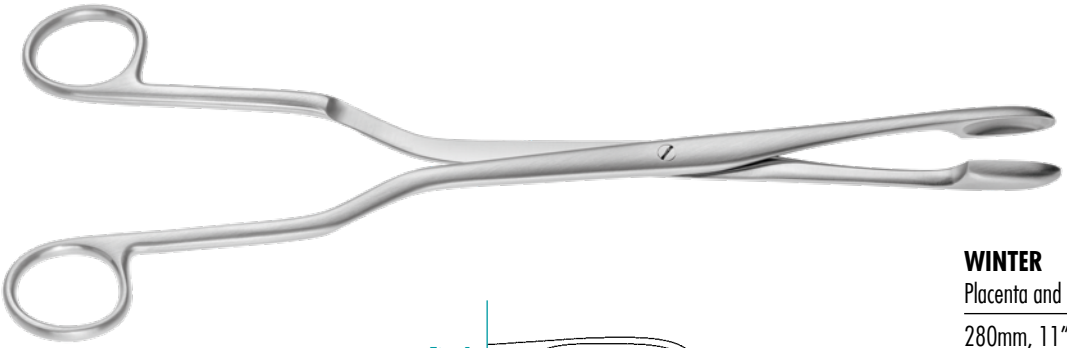


Fig. 1

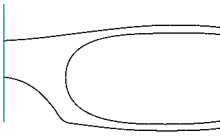


Fig. 2

WINTER
Placenta and Ovum Forceps, Fig. 2

280mm, 11"	340-799-280

Placenta and Ovum Forceps, 280mm, 11"

Fig. 1	340-800-280
Fig. 2	340-802-280

Fig. 1 curved

280mm, 11"	340-801-280



BIERER
Ovum Forceps, curved, 16mm jaw,
280mm, 11"

without ratchet	350-496-330
with ratchet	350-497-330



WRIGLEY
Obstetrical Forceps

280mm, 11″	340-011-280



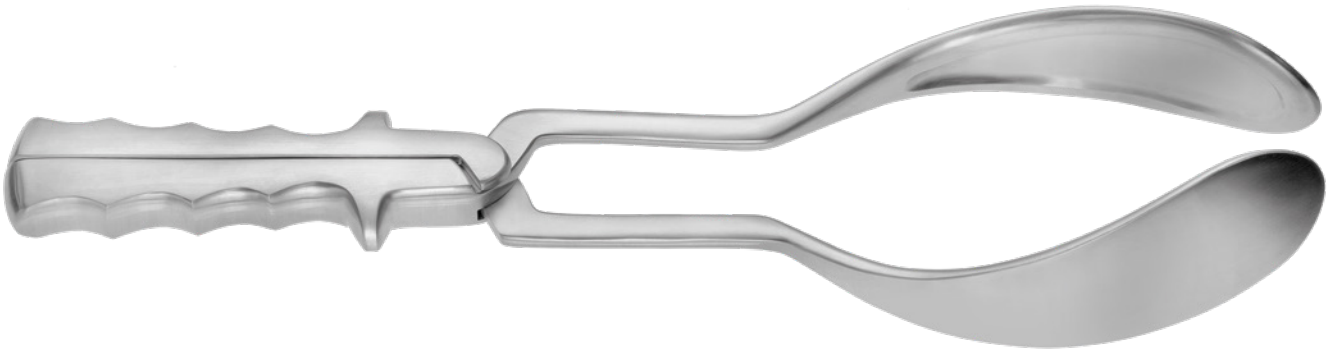
SIMPSON
Obstetrical Forceps

300mm, 11 7/8″	340-013-300



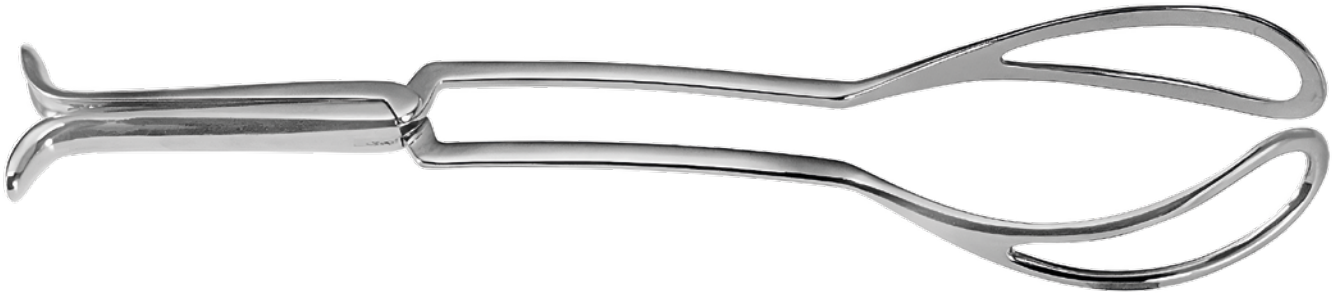
SIMPSON BRAUN
Obstetrical Forceps

330mm, 13″	340-012-330
360mm, 14″	340-012-360



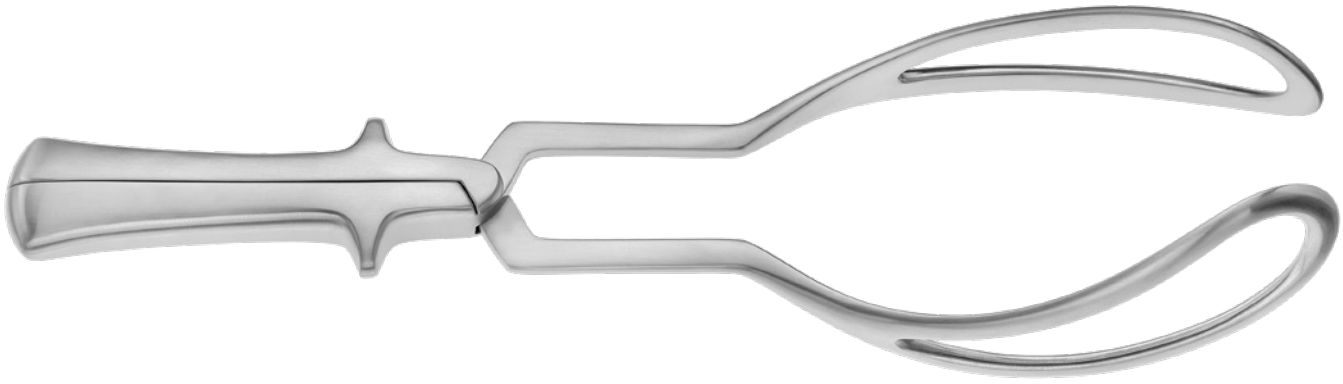
SIMPSON LUIKART
Obstetrical Forceps

360mm, 14″	340-029-360



PIPER
Obstetrical Forceps

440mm, 17 1/3″	340-017-440



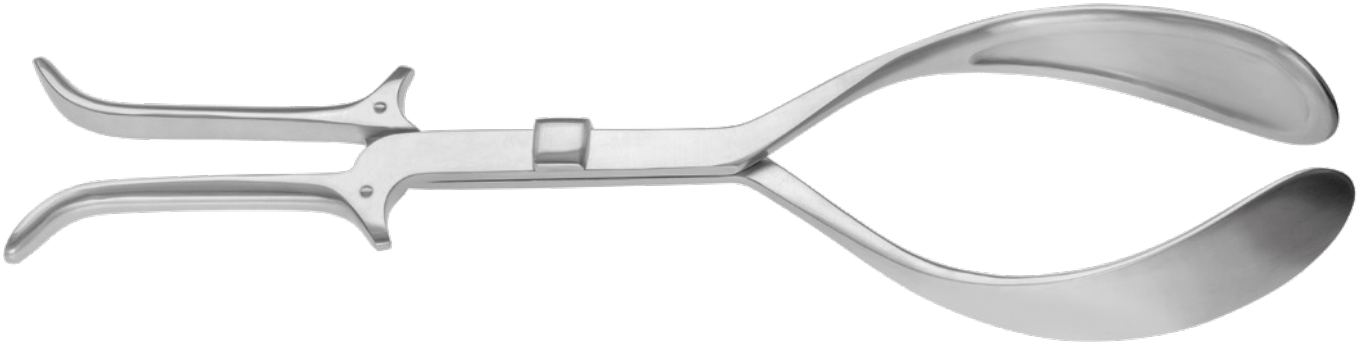
DE LEE
Obstetrical Forceps

300mm, 11 7/8″	340-018-300
360mm, 14″	340-018-360



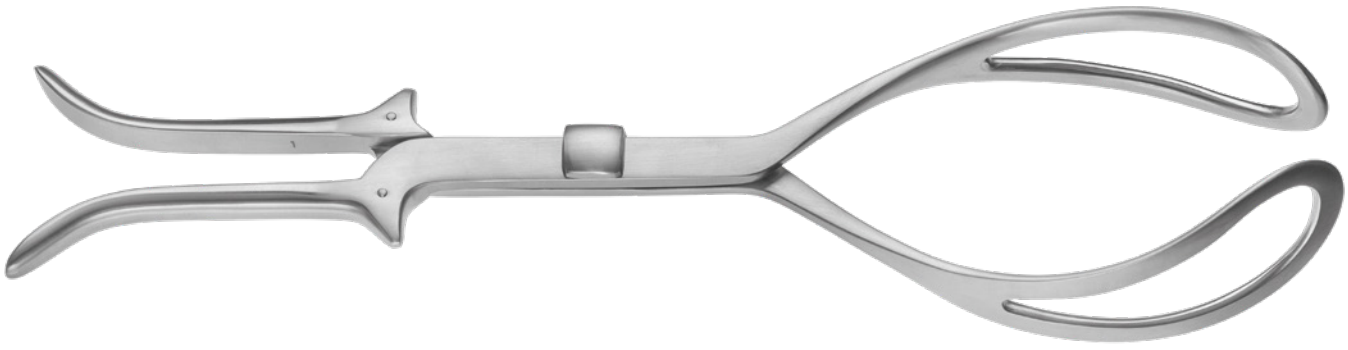
ELLIOT
Obstetrical Forceps

380mm, 15″	340-025-380



KIELLAND LUIKART
Obstetrical Forceps

400mm, 15 3/4″	340-016-400



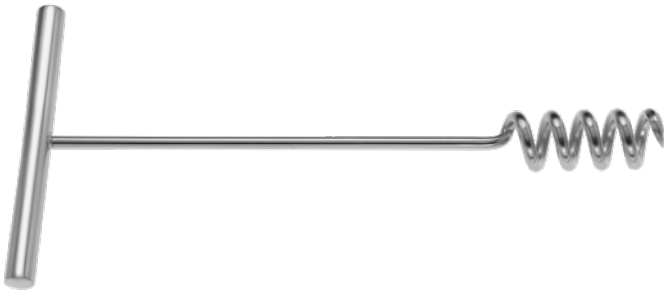
KIELLAND
Obstetrical Forceps

410mm, 16 1/8″	340-014-410



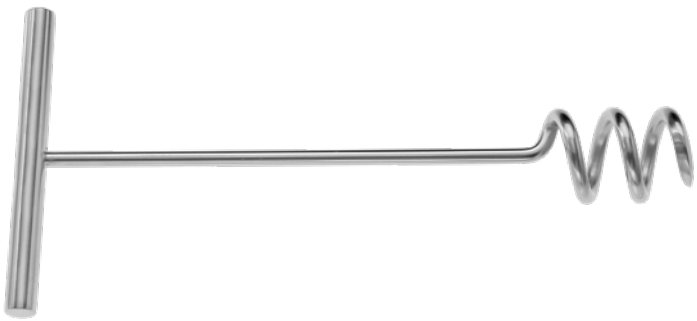
MCLEAN
Obstetrical Forceps

360mm, 14"	340-020-360



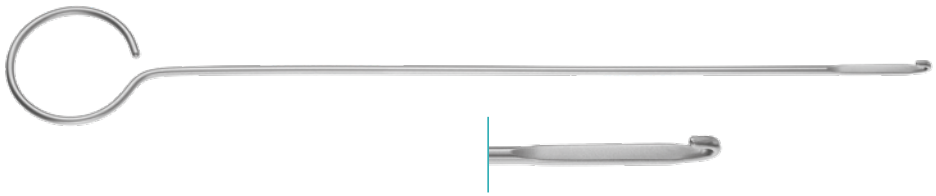
DOYEN
Myoma screw

170mm working length	350-757-190



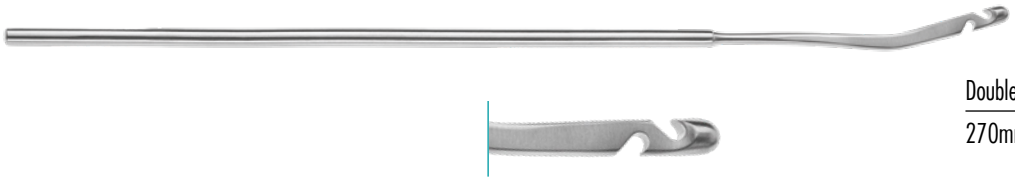
DOYEN
Myoma screw

170mm working length	350-759-170



Simple IUD hook with ring handle, malleable

250mm, 9 7/8"	350-766-001



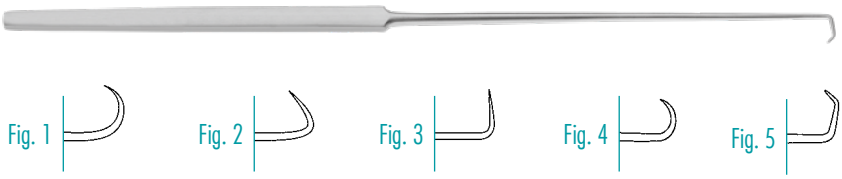
Double IUD Extractor

270mm, 10 2/3"	350-766-010



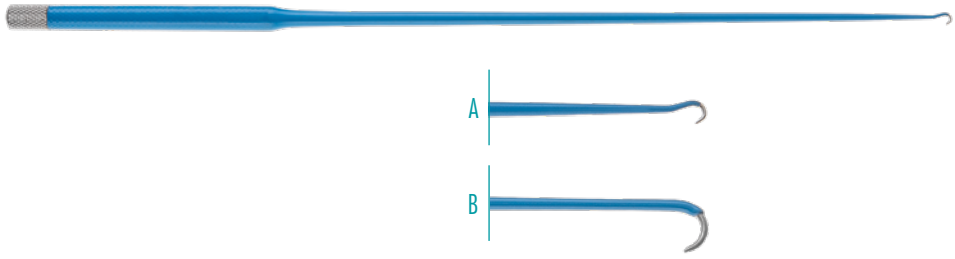
SAUNDERS
IUD Removing Hook

250mm, 9 7/8"	350-766-100



EMMET
Fistula Hook, 220mm, 8 2/3"

Fig. 1	350-765-001
Fig. 2	350-765-002
Fig. 3	350-765-003
Fig. 4	350-765-004
Fig. 5	350-765-005

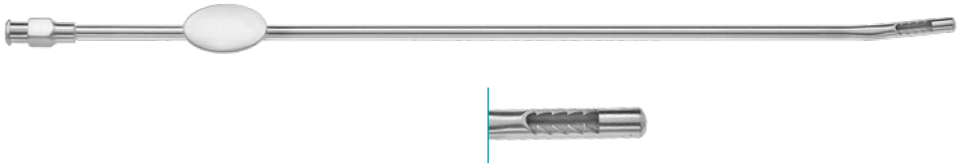


A Fistula Hook, insulated

250mm, 9 7/8"	350-770-250

B **EMMET**
Fistula Hook, insulated

240mm, 9 1/2"	350-767-240



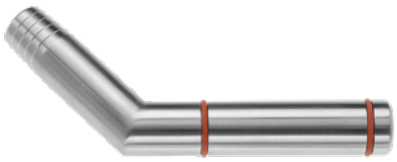
NOVAK

Biopsy Curette, 250mm, $9^{7/8}$″

Ø 1mm	350-601-230
Ø 2mm	350-602-230
Ø 3mm	350-603-230
Ø 4mm	350-604-230



A



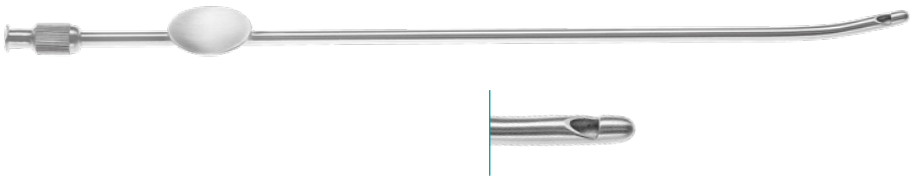
B

A Aspirating Curette, 290mm, $11^{1/2}$″

3.0mm	350-650-030
4.5mm	350-650-045
6.0mm	350-650-060
8.0mm	350-650-080
10.0mm	350-650-100
12.0mm	350-650-120
14.0mm	350-650-140

B Coupling Piece

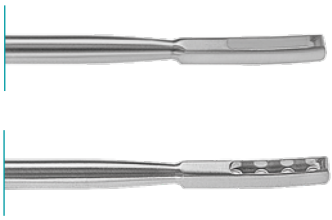
	350-650-000



RANDALL
Suction Biopsy Curette, 240mm, $9^{1/2}$″

Ø 4mm	350-602-240





KEVORKIAN
Suction Biopsy Curette, Ø 4mm,
without basket, rigid

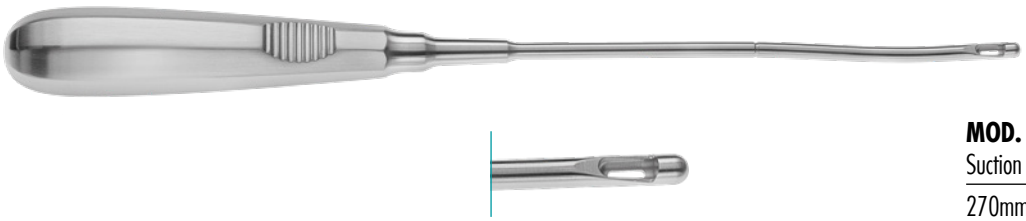
300mm, $11^{7/8}$″	350-599-300

with basket, rigid

300mm, $11^{7/8}$″	350-600-300

with basket, malleable

300mm, $11^{7/8}$″	350-601-300



MOD. MÜNCHEN
Suction Biopsy Curette, Ø 4mm

270mm, $10^{2/3}$″	350-605-270



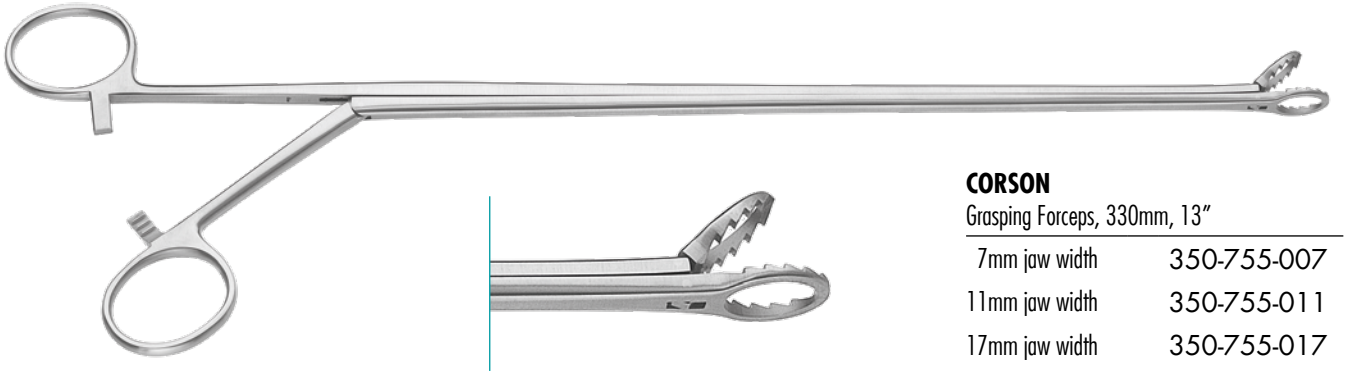
BEACHAM
Amniotome

260mm, 10 1/4"	350-429-260



BRAUN
Uterine Depressor

280mm, 11"	350-399-280



CORSON
Grasping Forceps, 330mm, 13"

7mm jaw width	350-755-007
11mm jaw width	350-755-011
17mm jaw width	350-755-017



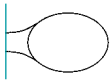
Fig. 1 

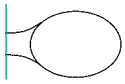
Fig. 2 

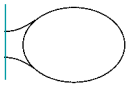
Fig. 3 

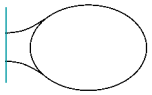
Fig. 4 

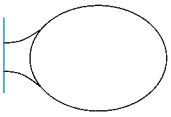
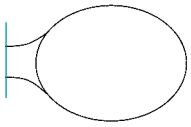
Fig. 5 

Fig. 6 

SIMON
Uterine Scoop, sharp, 240mm, $9^{1/2}$″

Fig. 1, 7.0mm	350-610-001
Fig. 2, 8.5mm	350-610-002
Fig. 3, 9.5mm	350-610-003
Fig. 4, 11.5mm	350-610-004
Fig. 5, 13.0mm	350-610-005
Fig. 6, 14.5mm	350-610-006



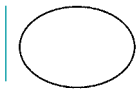
Fig. 1 

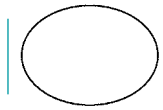
Fig. 2 

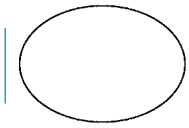
Fig. 3 

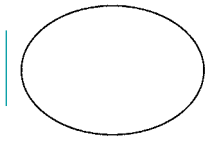
Fig. 4 

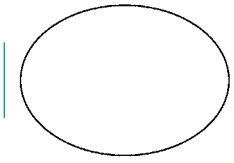
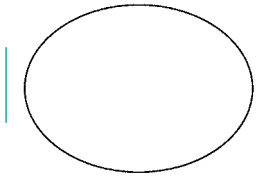
Fig. 5 

Fig. 6 

SCHROEDER
Uterine Scoop, sharp, 300mm, $11^{7/8}$″

Fig. 1, 6.8mm	350-612-001
Fig. 2, 8.5mm	350-612-002
Fig. 3, 10.0mm	350-612-003
Fig. 4, 11.5mm	350-612-004
Fig. 5, 13.0mm	350-612-005
Fig. 6, 14.5mm	350-612-006



Fig. 1



Fig. 2



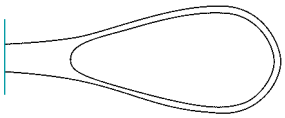
Fig. 3



Fig. 4



Fig. 5



GOURDET

Uterine Scoop, blunt, 280mm, 11"

Fig. 1, 6mm	350-613-006
Fig. 2, 8mm	350-613-008
Fig. 3, 10mm	350-613-010
Fig. 4, 12mm	350-613-012
Fig. 5, 14mm	350-613-014





THOMAS

Uterus Curette, malleable, blunt, 280mm, 11"

Fig. 1, Ø 10mm	350-919-001
Fig. 2, Ø 11mm	350-919-002
Fig. 3, Ø 12mm	350-919-003
Fig. 4, Ø 13mm	350-919-004
Fig. 5, Ø 14mm	350-919-005
Fig. 6, Ø 15mm	350-919-006





SIMS

Uterus Curette, 285mm, 11 1/4"	Fig. 00, 5mm	Fig. 0, 6mm	Fig. 1, 7mm	Fig. 2, 8mm
rigid, sharp	350-630-005	350-630-006	350-630-007	350-630-008
rigid, blunt	350-926-050	350-926-060	350-926-070	350-926-080
malleable, sharp	350-631-005	350-631-006	350-631-007	350-631-008
malleable, blunt	350-927-050	350-927-060	350-927-070	350-927-080

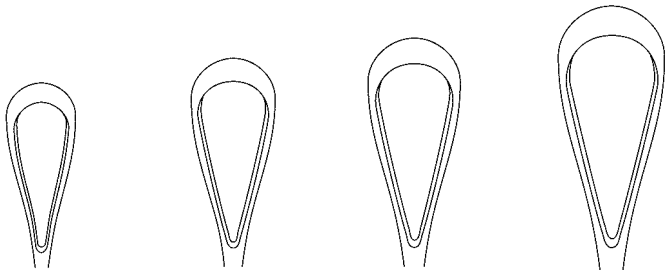


	Fig. 3, 9mm	Fig. 4, 11mm	Fig. 5, 12mm	Fig. 6, 14mm
rigid, sharp	350-630-009	350-630-011	350-630-012	350-630-014
rigid, blunt	350-926-090	350-926-110	350-926-120	350-926-140
malleable, sharp	350-631-009	350-631-011	350-631-012	350-631-014
malleable, blunt	350-927-090	350-927-110	350-927-120	350-927-140

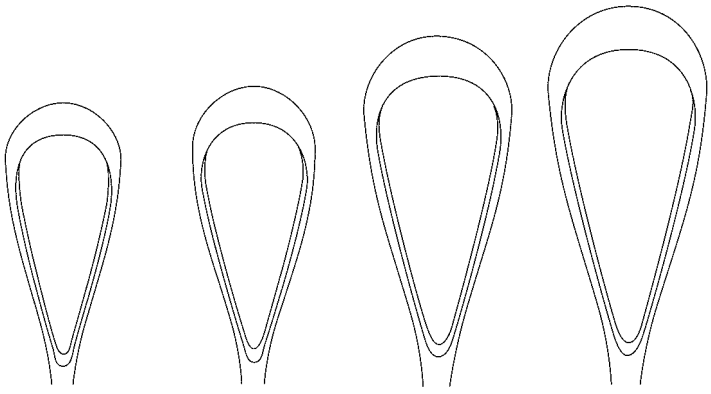


	Fig. 7, 15mm	Fig. 8, 16mm	Fig. 9, 19mm	Fig. 10, 20mm
rigid, sharp	350-630-015	350-630-016	350-630-019	350-630-020
rigid, blunt	350-926-150	350-926-160	350-926-190	350-926-200
malleable, sharp	350-631-015	350-631-016	350-631-019	350-631-020
malleable, blunt	350-927-150	350-927-160	350-927-190	350-927-200








RECAMIER

Uterus Curette, 310mm, 12 1/4"	Fig. 00, 5mm	Fig. 0, 6mm	Fig. 1, 7mm	Fig. 2, 8mm
rigid, sharp	350-620-005	350-620-006	350-620-007	350-620-008
rigid, blunt	350-619-005	350-619-006	350-619-007	350-619-008
malleable, sharp	350-621-005	350-621-006	350-621-007	350-621-008
malleable, blunt	350-622-005	350-622-006	350-622-007	350-622-008



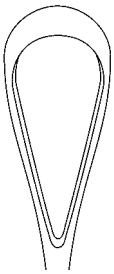



	Fig. 3, 9mm	Fig. 4, 11mm	Fig. 5, 12mm	Fig. 6, 14mm
rigid, sharp	350-620-009	350-620-011	350-620-012	350-620-014
rigid, blunt	350-619-009	350-619-011	350-619-012	350-619-014
malleable, sharp	350-621-009	350-621-011	350-621-012	350-621-014
malleable, blunt	350-622-009	350-622-011	350-622-012	350-622-014

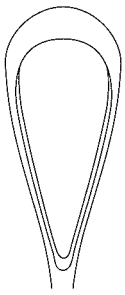
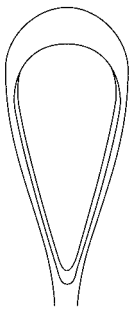
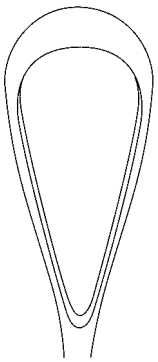
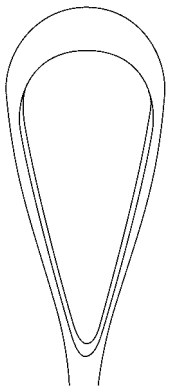
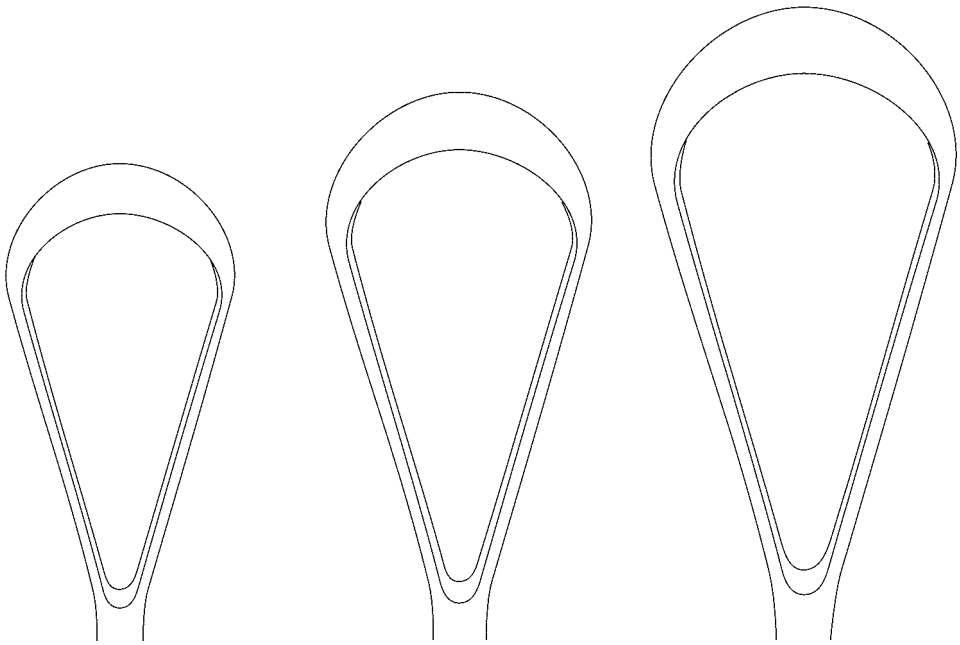





	Fig. 7, 15mm	Fig. 8, 16mm	Fig. 9, 19mm	Fig. 10, 20mm
rigid, sharp	350-620-015	350-620-016	350-620-019	350-620-020
rigid, blunt	350-619-015	350-619-016	350-619-019	350-619-020
malleable, sharp	350-621-015	350-621-016	350-621-019	350-621-020
malleable, blunt	350-622-015	350-622-016	350-622-019	350-622-020

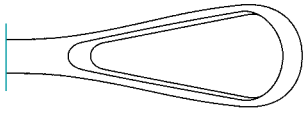


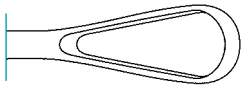


BUMM

Uterus Curette, 300mm, $11^{7/8}$″	Fig. 1, 30mm	Fig. 2, 35mm	Fig. 3, 40mm
rigid, sharp	350-920-300	350-920-350	350-920-400
rigid, blunt	350-926-300	350-926-350	350-926-400
malleable, sharp	350-928-300	350-928-350	350-928-400
malleable, blunt	350-929-300	350-929-350	350-929-400



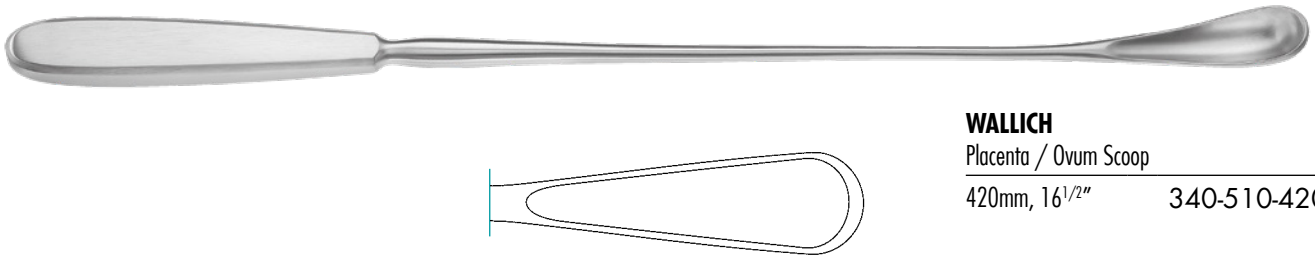




BLAKE

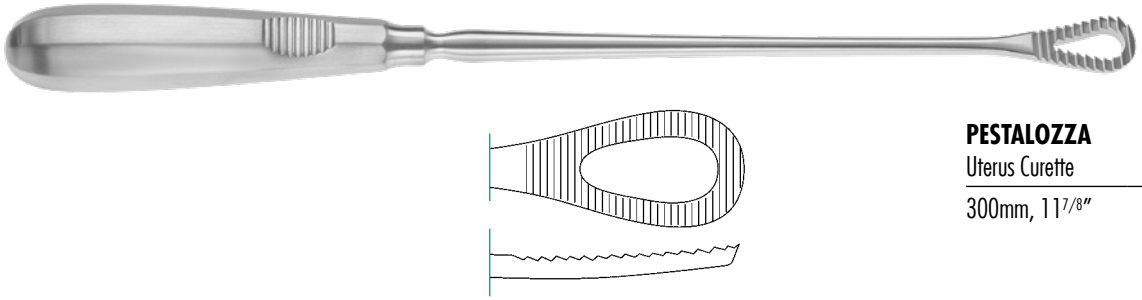
Biopsy Curette, sharp/blunt

270mm, $10^{2/3}$″	350-614-270



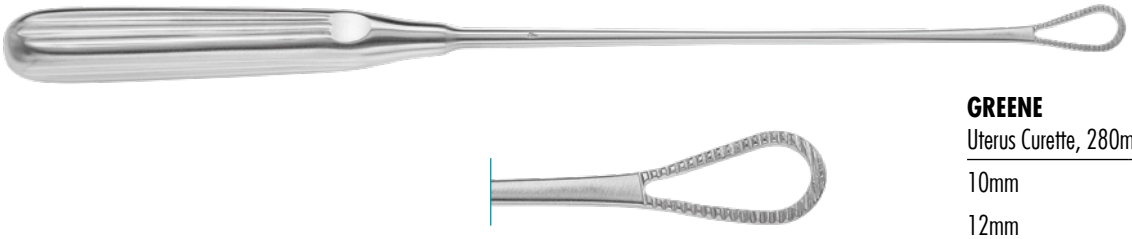
WALLICH
Placenta / Ovum Scoop

420mm, 16 1/2"	340-510-420



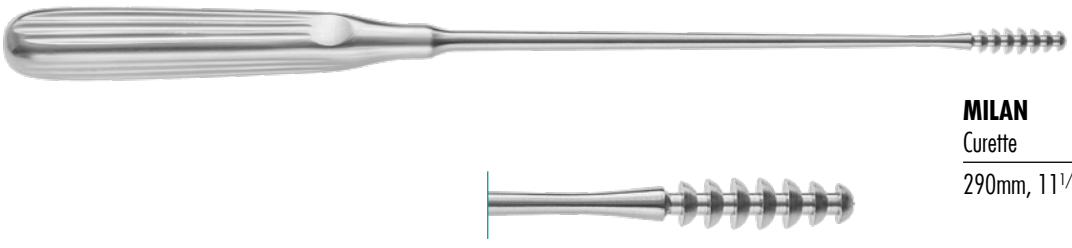
PESTALOZZA
Uterus Curette

300mm, 11 7/8"	340-500-300



GREENE
Uterus Curette, 280mm, 11"

10mm	350-365-010
12mm	350-365-012
14mm	350-365-014



MILAN
Curette

290mm, 11 1/2"	350-605-007



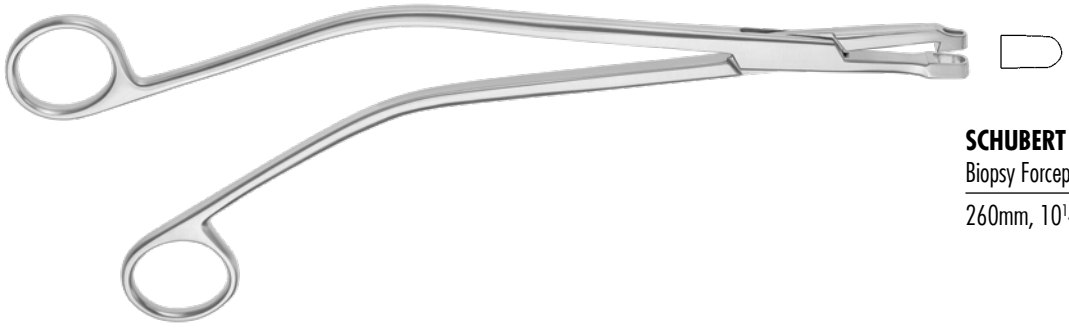
FAURE
Biopsy Forceps

210mm, 8 1/4"	350-843-210



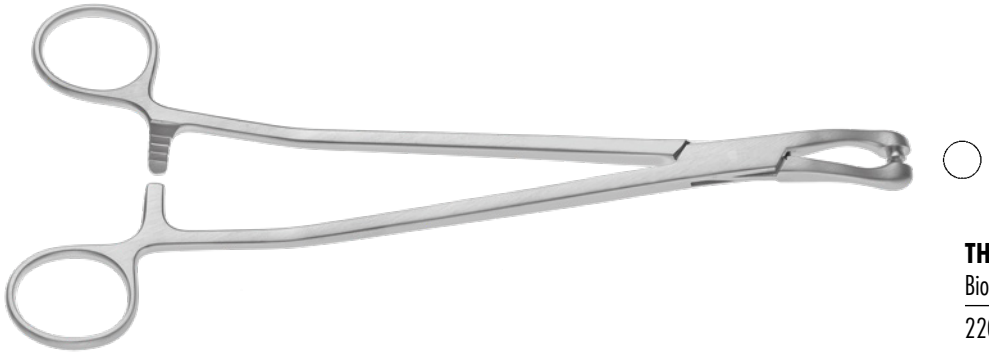
SCHUBERT
Biopsy Forceps

210mm, 8 1/4"	350-844-210
290mm, 11 1/2"	350-844-290



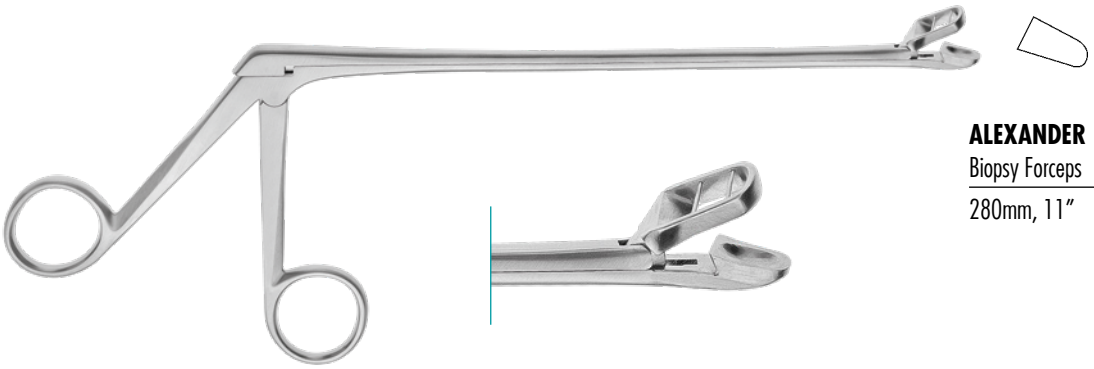
SCHUBERT
Biopsy Forceps

260mm, 10 1/4"	350-847-260



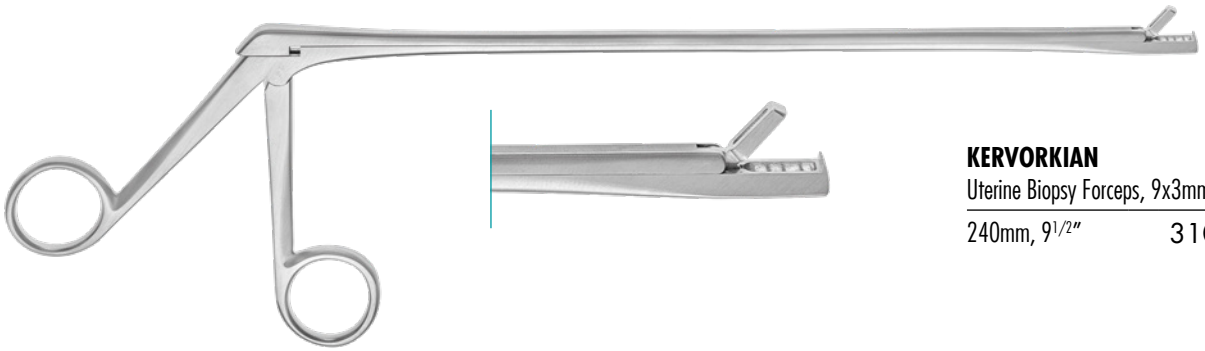
THOMS GAYLOR
Biopsy Forceps, curved

220mm, 8 2/3"	350-857-220
240mm, 9 1/2"	350-857-240



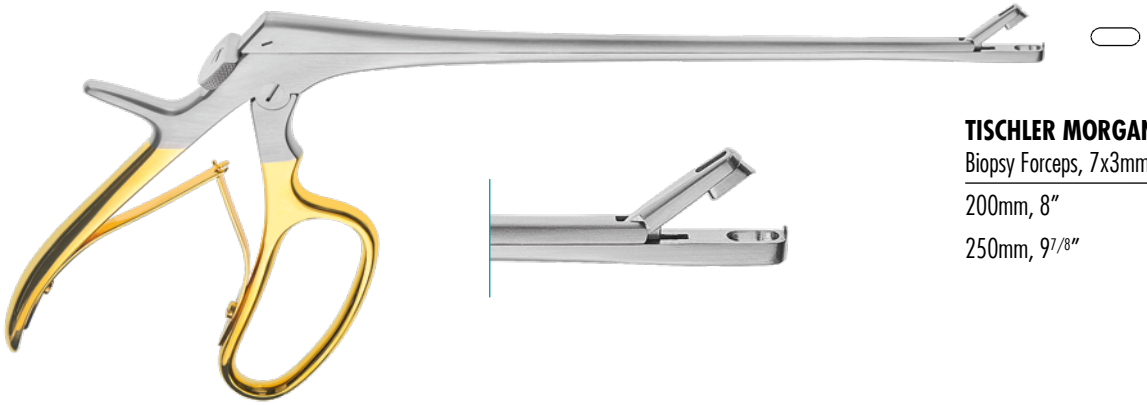
ALEXANDER
Biopsy Forceps

280mm, 11"	310-735-280



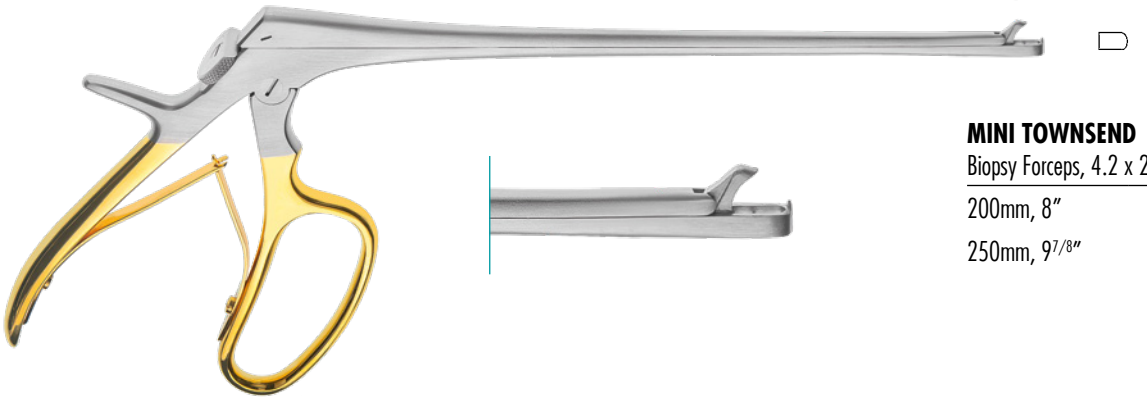
KERVORKIAN
Uterine Biopsy Forceps, 9x3mm

240mm, 9 1/2"	310-730-240



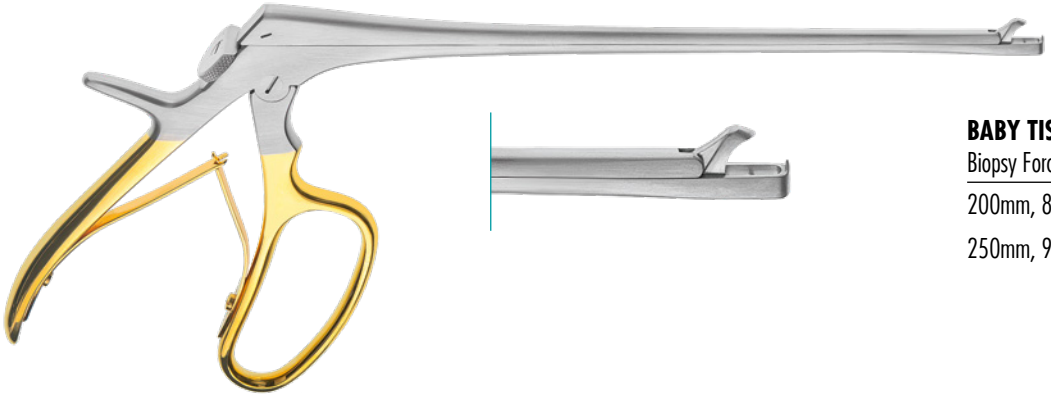
TISCHLER MORGAN
Biopsy Forceps, 7x3mm

200mm, 8"	310-733-001
250mm, 9 7/8"	310-735-001



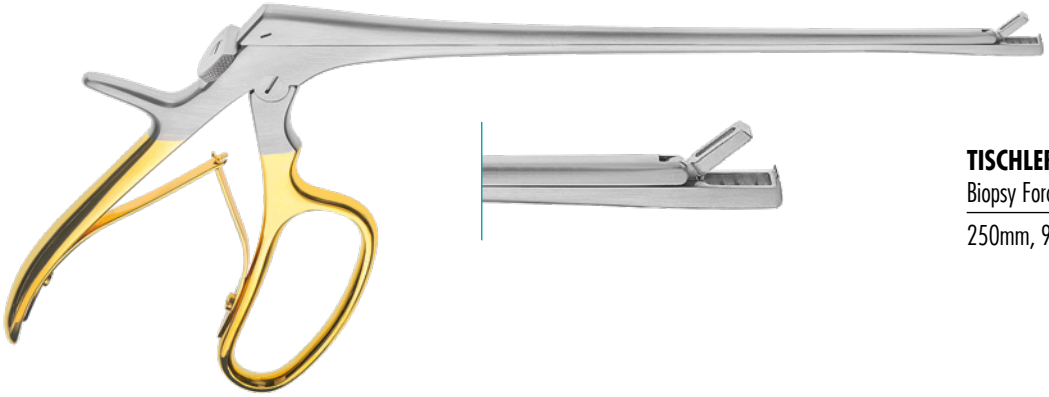
MINI TOWNSEND
Biopsy Forceps, 4.2 x 2.3mm jaw

200mm, 8"	310-733-002
250mm, 9 7/8"	310-735-002



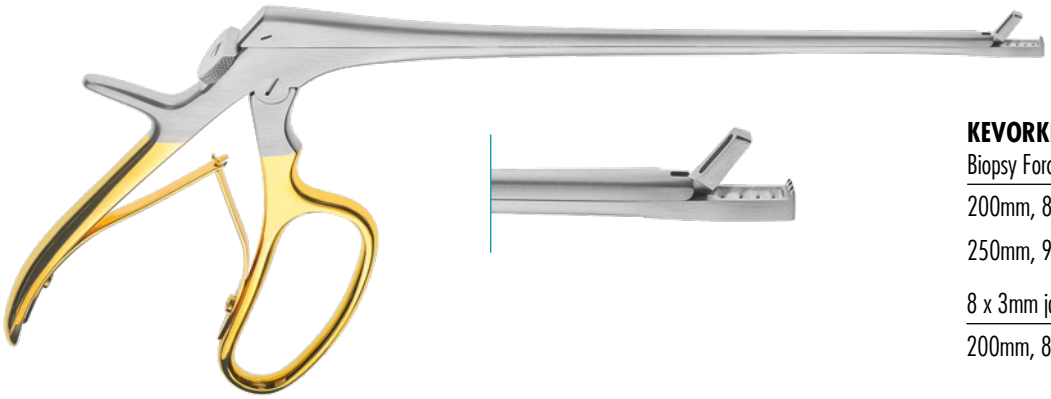
BABY TISCHLER
Biopsy Forceps, 4.2 x 2.3mm jaw

200mm, 8″	310-733-003
250mm, 9 7/8″	310-735-003



TISCHLER KEVORKIAN
Biopsy Forceps, 8 x 3mm jaw

250mm, 9 7/8″	310-731-250



KEVORKIAN PACIFIC
Biopsy Forceps, 9 x 3mm jaw

200mm, 8″	310-732-200
250mm, 9 7/8″	310-732-250

8 x 3mm jaw

200mm, 8″	310-731-200



Detachable Biopsy Forceps "Roto Fit"

















UNI TISCHLER
Insert only, 3 x 7mm, 230mm, 9"

A straight	310-800-100
B angled up	310-801-100
C angled down	310-802-100

complete instrument with handle

A straight	310-800-000
B angled up	310-801-000
C angled down	310-802-000

UNI TOWNSEND
Insert only, 2.3 x 7mm, 230mm, 9"

D straight	310-803-100
E angled up	310-804-100
F angled down	310-805-100

complete instrument with handle

D straight	310-803-000
E angled up	310-804-000
F angled down	310-805-000

UNI KERVOKIAN
Insert only, 3 x 9mm, 230mm, 9"

G straight	310-806-100

complete instrument with handle

G straight	310-806-000

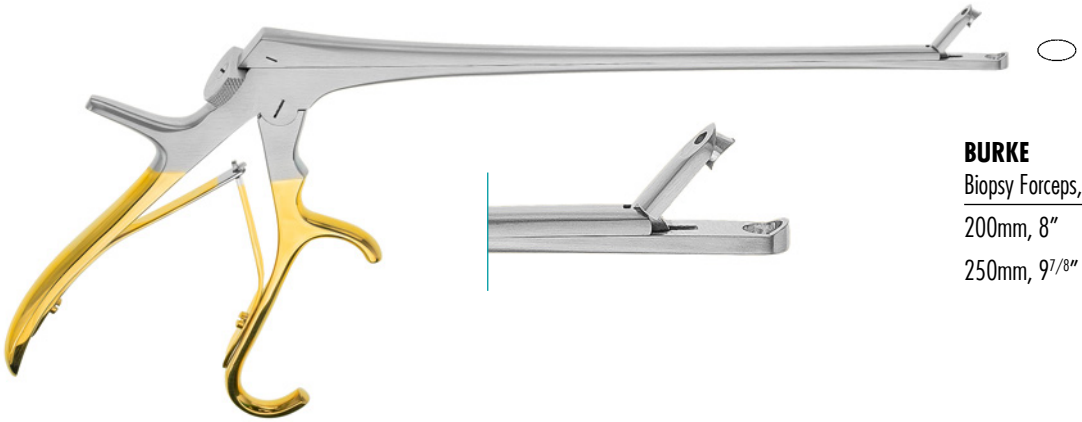
UNI OVAL
Insert only, 3 x 5.5mm, 230mm, 9"

H straight	310-807-100

complete instrument with handle

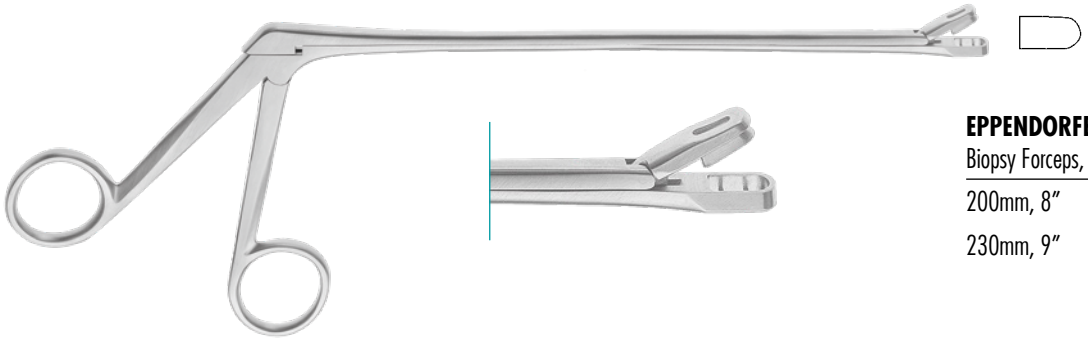
H straight	310-807-000

I Handle only	310-800-600



BURKE
Biopsy Forceps, 5 x 3mm jaw

200mm, 8″	310-732-000
250mm, 9 7/8″	310-735-004



EPPENDORFER
Biopsy Forceps, 4x8mm

200mm, 8″	310-760-200
230mm, 9″	310-760-230

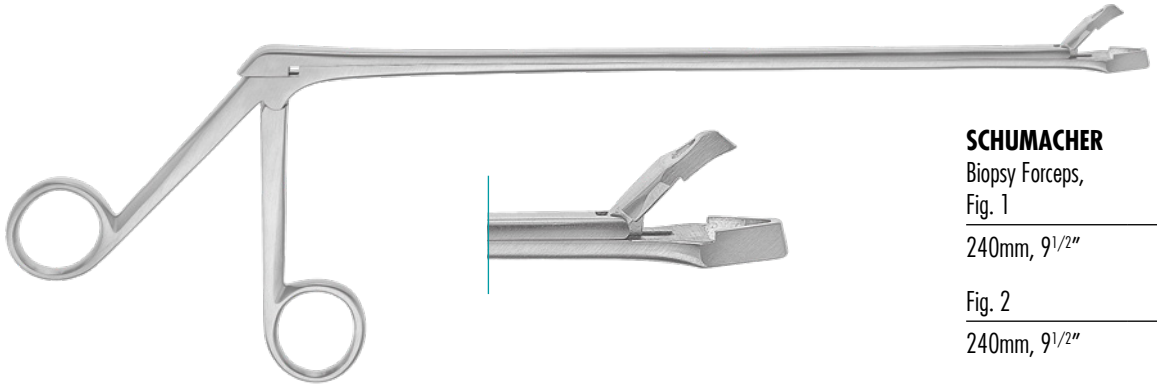


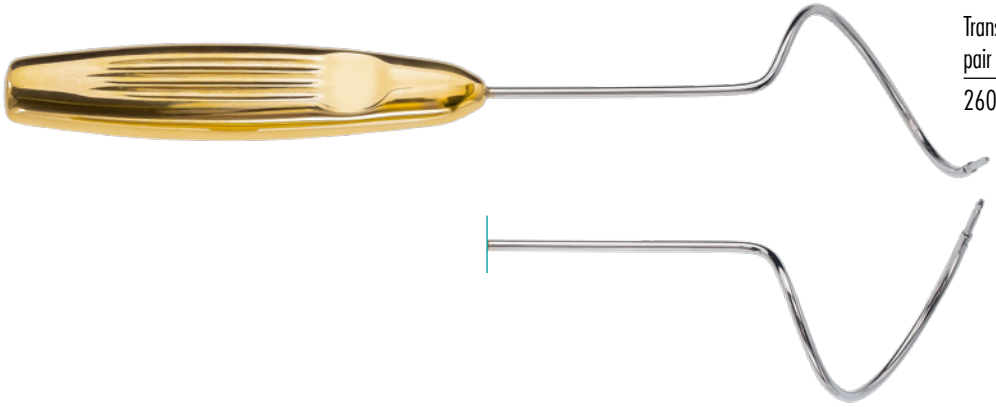
Fig. 1
Fig. 2

SCHUMACHER
Biopsy Forceps,
Fig. 1

240mm, 9 1/2″	310-729-001

Fig. 2

240mm, 9 1/2″	310-729-002



Transobturator Sling needle
pair of right and left curved

260mm, 10 1/4"	350-101-260



MIYAZAKI
Ligature Carrier, large hook 0.75"

200mm, 8" shaft	180-160-000



MIYAZAKI
Speculum with notch

	180-160-010



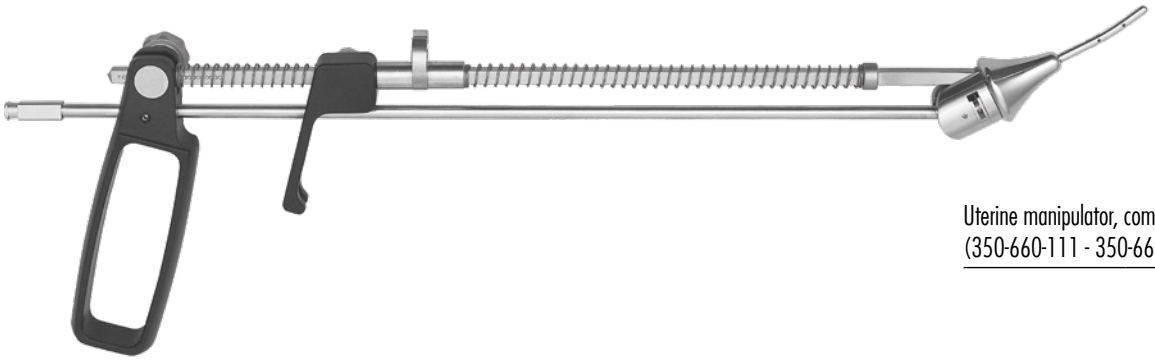
SIMS
Uterine Probe, graduated, ∅ 4mm,
330mm, 13"

rigid	350-395-320
malleable	350-396-320



SIMPSON
Uterine Probe, malleable, ∅ 4mm

290mm, 11 1/2"	350-396-290



Uterine manipulator, complete set
(350-660-111 - 350-660-116)
350-660-100



Adaptor ∅ 8 x 80 mm
350-660-111



Adaptor ∅ 10 x 100 mm
350-660-112



Adaptor ∅ 3 x 45 mm
350-660-113



Adaptor ∅ 3 x 55 mm
350-660-114



Adaptor ∅ 3.2 x 35 mm
350-660-115



Adaptor ∅ 3.2 x 45 mm
350-660-116



COHEN
Uterus Cannula
complete with 2 interchangeable acorns
350-750-000

Acorns	
small	350-750-001
large	350-750-002



HEGAR
Uterine Dilator, double-ended

1.0/2.0mm	350-382-020
3.0/4.0mm	350-382-040
5.0/6.0mm	350-382-060
7.0/8.0mm	350-382-080
9.0/10.0mm	350-382-100
11.0/12.0mm	350-382-120
13.0/14.0mm	350-382-140
15.0/16.0mm	350-382-160
17.0/18.0mm	350-382-180
19.0/20.0mm	350-382-200
21.0/22.0mm	350-382-220
23.0/24.0mm	350-382-240
25.0/26.0mm	350-382-260

Set*, 8 sizes from 3/4 to 17/18 mm in canvas roll

350-383-001



HEGAR
Uterine Dilator with slope handle

1.0mm	350-380-010
1.5mm	350-380-015
2.0mm	350-380-020
2.5mm	350-380-025
3.0mm	350-380-030
3.5mm	350-380-035
4.0mm	350-380-040
4.5mm	350-380-045
5.0mm	350-380-050
5.5mm	350-380-055
6.0mm	350-380-060
6.5mm	350-380-065
7.0mm	350-380-070
7.5mm	350-380-075
8.0mm	350-380-080
8.5mm	350-380-085
9.0mm	350-380-090
9.5mm	350-380-095
10.0mm	350-380-100
10.5mm	350-380-105
11.0mm	350-380-110
11.5mm	350-380-115
12.0mm	350-380-120
12.5mm	350-380-125
13.0mm	350-380-130
13.5mm	350-380-135
14.0mm	350-380-140
14.5mm	350-380-145
15.0mm	350-380-150
15.5mm	350-380-155
16.0mm	350-380-160
16.5mm	350-380-165
17.0mm	350-380-170
17.5mm	350-380-175
18.0mm	350-380-180
18.5mm	350-380-185
19.0mm	350-380-190
19.5mm	350-380-195
20.0mm	350-380-200
21.0mm	350-380-210
22.0mm	350-380-220
23.0mm	350-380-230
24.0mm	350-380-240
25.0mm	350-380-250
26.0mm	350-380-260
27.0mm	350-380-270
28.0mm	350-380-280
29.0mm	350-380-290
30.0mm	350-380-300

* illustration does not show the complete set



PRATT
Uterine Dilators, French Scale $10^{3/8}$"

13 - 15	350-392-015
17 - 19	350-392-019
21 - 23	350-392-023
25 - 27	350-392-027
29 - 31	350-392-031
33 - 35	350-392-035
37 - 39	350-392-039
41 - 43	350-392-043

Set of 8 pieces in canvas roll*

350-392-000



HANK
Uterine Dilator

Fig. 9/10 4.5/5.0mm	350-390-010	Fig. 15/16 7.5/8.0mm	350-390-016
Fig. 11/12 5.5/6.0mm	350-390-012	Fig. 17/18 8.5/9.0mm	350-390-018
Fig. 13/14 6.5/7.0mm	350-390-014	Fig. 19/20 9.5/10.0mm	350-390-020

Set, 6 pieces in canvas roll*

350-391-002

* illustration does not show the complete set



JACKSON
Vaginal Speculum

75 x 38mm	350-206-001
90 x 38mm	350-206-002
100 x 38mm	350-206-003



EASTMAN
Vaginal Speculum

75 x 38mm	350-207-001
90 x 38mm	350-207-002
100 x 38mm	350-207-003



KALLMORGEN
Vaginal Speculum

70 x 40mm	350-270-001
90 x 40mm	350-270-002

Holder

70 x 33mm	350-271-001
90 x 33mm	350-271-002

Set

	350-272-001
	350-272-002



DOYEN
Vaginal Speculum, slightly concave

55 x 35mm	350-290-001
85 x 35mm	350-290-002
115 x 35mm	350-290-003
55 x 45mm	350-290-004
85 x 45mm	350-290-005
115 x 45mm	350-290-006
160 x 45mm	350-290-007
55 x 60mm	350-290-008
85 x 60mm	350-290-009
115 x 60mm	350-290-010
160 x 60mm	350-290-011



HEANEY
Retractor, 270mm, $10^{2/3}$"

73 x 28mm	170-459-001
45 x 28mm	170-459-002
82 x 28mm	170-459-003



HEANEY SIMON
Retractor with horn handle

260mm, $10^{1/4}$"	170-460-260



BREISKY
Vaginal Speculum

100 x 20mm	350-320-020
100 x 25mm	350-320-025
100 x 30mm	350-320-030
100 x 35mm	350-320-035
100 x 40mm	350-320-040

130 x 20mm	350-322-020
130 x 25mm	350-322-025
130 x 30mm	350-322-030
130 x 35mm	350-322-035
130 x 40mm	350-322-040
155 x 40mm	350-324-040



SEIDL
Speculum for children
170mm, $6^{2/3}$″

80 x 8mm	350-254-001
80 x 10mm	350-254-002
90 x 14mm	350-254-003



KRISTELLER
Vaginal Speculum, for children

70 x 15mm	350-210-000

for adults

70 x 27mm	350-210-001
80 x 30mm	350-210-002
90 x 36mm	350-210-003



KRISTELLER
Retractor

Fig. 0	70 x 10mm	350-211-000
Fig. 1	75 x 23mm	350-211-001
Fig. 2	85 x 26mm	350-211-002
Fig. 3	100 x 32mm	350-211-003



KRISTELLER
Vaginal Speculum Set

Fig. 0	350-212-000
Fig. 1	350-212-001
Fig. 2	350-212-002
Fig. 3	350-212-003



KRISTELLER
Vaginal Speculum

Fig. 1 110 x 27mm	350-230-001
Fig. 2 110 x 30mm	350-230-002
Fig. 3 110 x 36mm	350-230-003



KRISTELLER
Retractor

Fig. 1 115 x 18mm	350-231-001
Fig. 2 115 x 22mm	350-231-002
Fig. 3 115 x 28mm	350-231-003



KRISTELLER
Vaginal Speculum Set

Fig. 1	350-232-001
Fig. 2	350-232-002
Fig. 3	350-232-003



KRISTELLER
Vaginal Speculum, low profile

110 x 27mm	350-240-001
110 x 30mm	350-240-002
110 x 36mm	350-240-003

Vaginal Speculum Holder, low profile

Fig. 1 115 x 23mm	350-241-001
Fig. 2 115 x 26mm	350-241-002
Fig. 3 115 x 36mm	350-241-003

Vaginal Speculum, flat profile

110 x 27mm	350-230-001
110 x 30mm	350-230-002
110 x 36mm	350-230-003

Vaginal Speculum Holder, flat profile

Fig. 1 115 x 18mm	350-231-001
Fig. 2 115 x 22mm	350-231-002
Fig. 3 115 x 28mm	350-231-003



SIMS
Vaginal Speculum, small

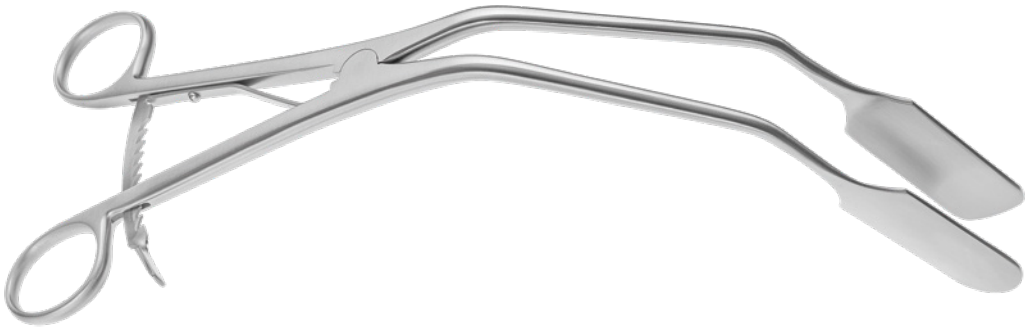
65 x 25mm	350-200-001

medium

70 x 30mm	350-200-002

large

85 x 35mm	350-200-003



RZ
Lateral Retractor

60 x 22mm	350-340-000



KOGAN
Endospeculum, screw ratchet, 240mm, 9 1/2″

5mm	350-361-001
4mm	350-361-002
3mm	350-361-003



GRAVE
Vaginal Speculum

75 x 20mm	350-130-001
95 x 35mm	350-130-002
115 x 35	350-130-003



PEDERSON
Vaginal Speculum

75 x 13mm	350-140-001
100 x 22mm	350-140-002
120 x 25mm	350-140-003



CUSCO
Vaginal Speculum

75 x 32mm	350-100-001
85 x 35mm	350-100-002
100 x 35mm	350-100-003



CUSCO
Vaginal Speculum, Swiss pattern

80 x 22mm	350-102-001
100 x 25mm	350-102-002
105 x 27mm	350-102-003

SEMN
Vaginal Speculum, 100mm blade

17-20mm wide blade	350-120-001
25-30mm wide blade	350-120-002

COLLIN
Vaginal Speculum, detachable

65 x 20mm	350-110-001
85 x 30mm	350-110-002
100 x 35mm	350-110-003
100 x 40mm	350-110-004



AUVARD
Vaginal Speculum, fixed weight,
1.14kg, 45° angled

70 x 42mm	350-309-000
83 x 38mm	350-310-000
102 x 45mm	350-311-000



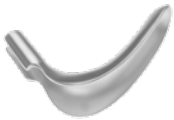
STEINER ANVARD
Vaginal Speculum, fixed weight, 1.14kg

150 x 34mm	350-311-140



SCHERBACK
Vaginal Speculum,complete set
incl. weight 400g, handle, blades Fig. 1 - 5

350-300-000



Blades

80x30mm	330-301-001
85x35mm	330-301-002
85x40mm	330-301-003
55x40mm	330-301-004
70x45mm	330-301-005



Weight

400g	350-302-001
800g	350-302-002

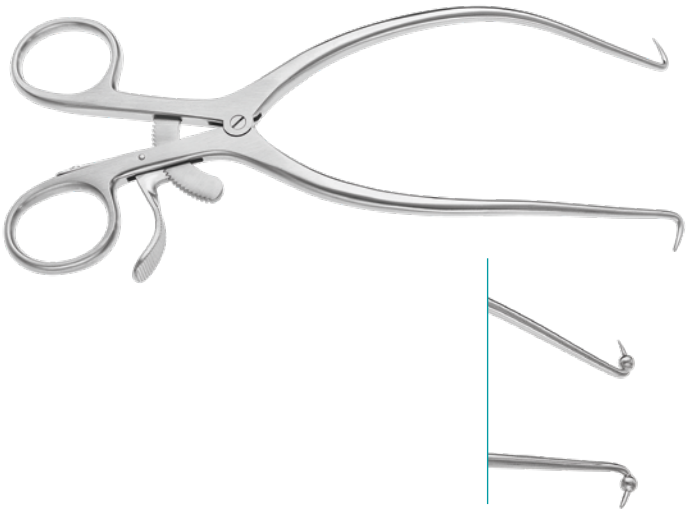
Handle

350-303-000



GELPI
Perineal Retractor, pediatric size

90mm, 3 1/2"	170-802-090
110mm, 4 1/3"	170-802-110
135mm, 5 1/3"	170-802-135



GELPI
Perineal Retractor

180mm, 7"	170-802-180

with ball stops

190mm, 7 1/2"	170-803-180



RIGBY
Perineal Retractor, 21x70mm blades

180mm, 7"	170-806-180



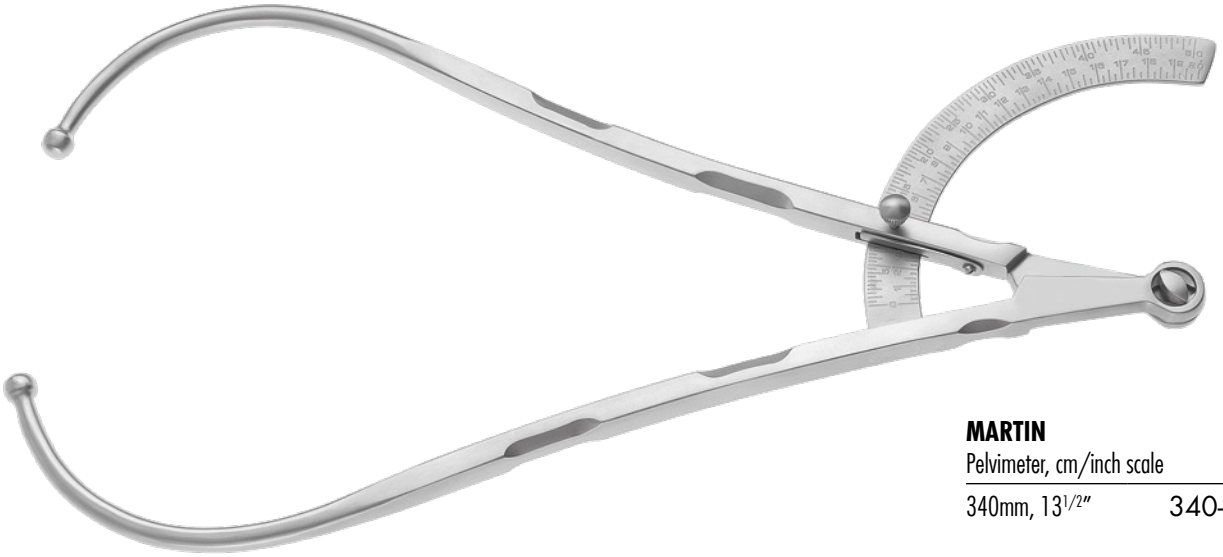
O'SULLIVAN O'CONNOR
Vaginal Retractor Set

350-336-000



RIGBY
Perineal Retractor, 21x70mm blades

180mm, 7"	170-806-180



MARTIN
Pelvimeter, cm/inch scale

340mm, $13^{1/2}$"	340-103-340


A


B



GRAVE
Vaginal Speculum, with suction tube,
A coated

Fig. 1	75 x 20mm	350-131-001
Fig. 2	95 x 35mm	350-131-002
Fig. 3	115 x 35mm	350-131-003

B blackened, for laser

Fig. 1	75 x 20mm	350-137-001
Fig. 2	95 x 35mm	350-137-002
Fig. 3	115 x 35mm	350-137-003

PEDERSON
Vaginal Speculum, with suction tube,
coated

Fig. 1	75 x 13mm	350-141-001
Fig. 2	100 x 22mm	350-141-002
Fig. 3	120 x 25mm	350-141-003



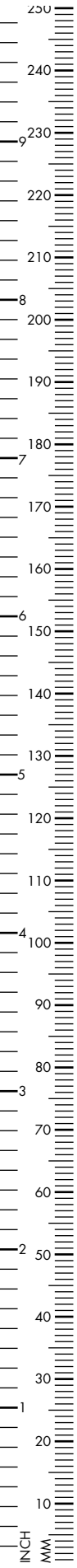
VUMAR
Vaginal Speculum, with evacuation tube, blue coated

medium	350-510-070
large	350-512-070

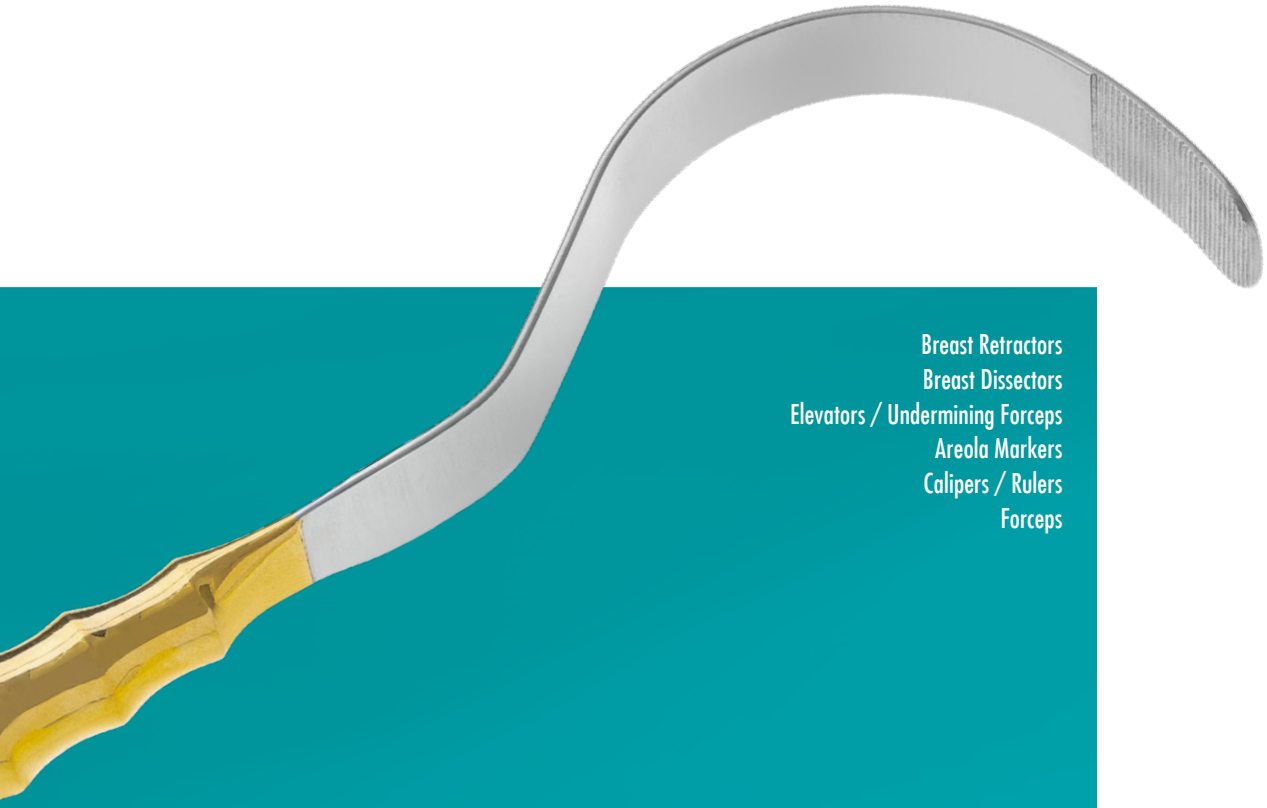


COLLIN
Vaginal Speculum, with evacuation tube, blue coated

85 x 30mm	350-111-002
100 x 40mm	350-111-003
110 x 45mm	350-111-004


250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
9
8
7
6
5
4
3
2
1
INCH
MM

PLASTIC SURGERY



Breast Retractors
Breast Dissectors
Elevators / Undermining Forceps
Areola Markers
Calipers / Rulers
Forceps



FERREIRA STYLE
Breast Retractor, round and smooth blade, with fibre-optic and suction

70 x 16mm	260-070-116
70 x 25mm	260-070-125
90 x 24mm	260-090-124
90 x 27mm	260-090-127
90 x 30mm	260-090-130
100 x 25mm	260-100-125
120 x 25mm	260-120-125
150 x 25mm	260-150-125
150 x 30mm	260-150-130
150 x 36mm	260-150-136
180 x 25mm	260-180-125
180 x 30mm	260-180-130
190 x 36mm	260-190-136



FERREIRA STYLE
Breast Retractor, round and smooth blade, with fibre-optic

70 x 16mm	260-070-916
70 x 25mm	260-070-925
90 x 24mm	260-090-924
90 x 27mm	260-090-927
90 x 30mm	260-090-930
100 x 25mm	260-100-925
110 x 25mm	260-110-925
120 x 25mm	260-120-925
150 x 25mm	260-150-925
150 x 30mm	260-150-930
190 x 36mm	260-190-936
180 x 30mm	260-180-930
190 x 36mm	260-190-936





TEBBET STYLE
Breast Retractor, square and toothed blade, with fibre-optic and suction

70 x 16mm	260-070-316
70 x 25mm	260-070-325
80 x 16mm	260-090-324
90 x 27mm	260-090-327
90 x 30mm	260-090-330
100 x 25mm	260-100-325
110 x 25mm	260-110-325
120 x 25mm	260-120-325
150 x 25mm	260-150-325
150 x 30mm	260-150-330
150 x 36mm	260-150-336
180 x 25mm	260-180-325
180 x 30mm	260-180-330
190 x 36mm	260-190-336





TEBBET STYLE
Breast Retractor, square and smooth blade, with fibre-optic and suction

70 x 16mm	260-070-516
70 x 25mm	260-070-525
80 x 16mm	260-090-524
90 x 27mm	260-090-527
90 x 30mm	260-090-530
100 x 25mm	260-100-525
110 x 25mm	260-110-525
120 x 25mm	260-120-525
150 x 25mm	260-150-525
150 x 30mm	260-150-530
150 x 36mm	260-150-536
180 x 25mm	260-180-525
180 x 30mm	260-180-530
190 x36mm	260-190-536



Breast Optic Retractor,
∅ 10mm optic, with stopcock

180 x 16mm for 4mm scopes	260-130-160
180 x 25mm for 4mm scopes	260-130-000
180 x 25mm for 5mm scopes	260-130-014

for use with optic
∅ 10mm, 225mm, $6^{3/4}$" working length

30°	260-110-030
0°	260-110-000

∅ 4mm, 225mm, $6^{3/4}$" working length

30°	260-104-030



A Mammary Retractor, solid blade,
for ∅ 10mm optic, universal scope connection

120 x 25mm	260-145-250

B **BIGGS**
Mammary Retractor, fenestrated blade,
31mm

for 10mm scopes	260-135-000
for 4mm scopes	260-135-004
for 5mm scopes	260-135-005

50mm

for 10mm scopes	260-145-000



DEAVER
Retractor with Silicone Handle, with fibre-optic

35 x 300mm	260-293-300



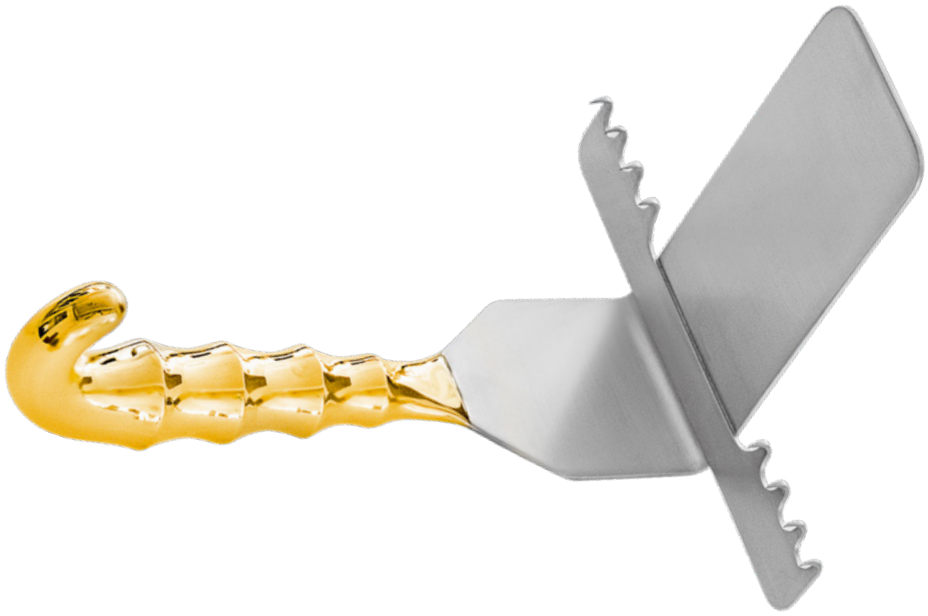
Universal Adaptor for fibre-optic retractors

1 piece	260-990-999



Mammary Retractor, fenestrated blade,
fibre-optic with universal adapter, suction tube

31mm blade	260-131-000
50mm blade	260-141-000

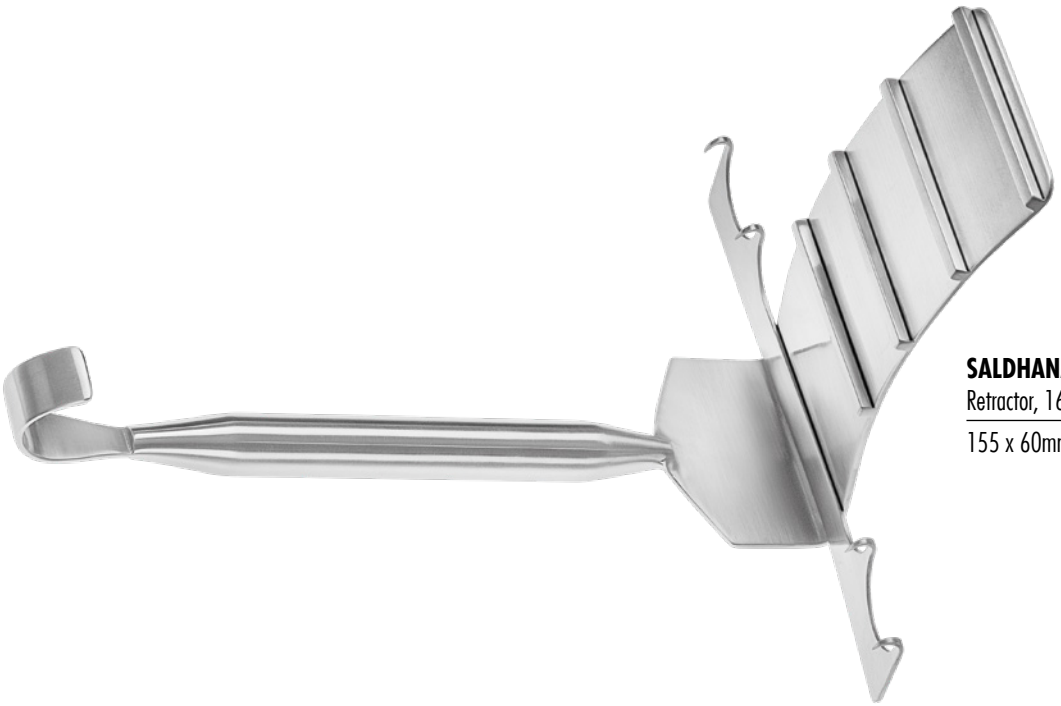


SALDHANA
Breast Retractor, 8 prongs,
with light guide

125 x 60mm	260-060-125
200 x 60mm	260-060-200

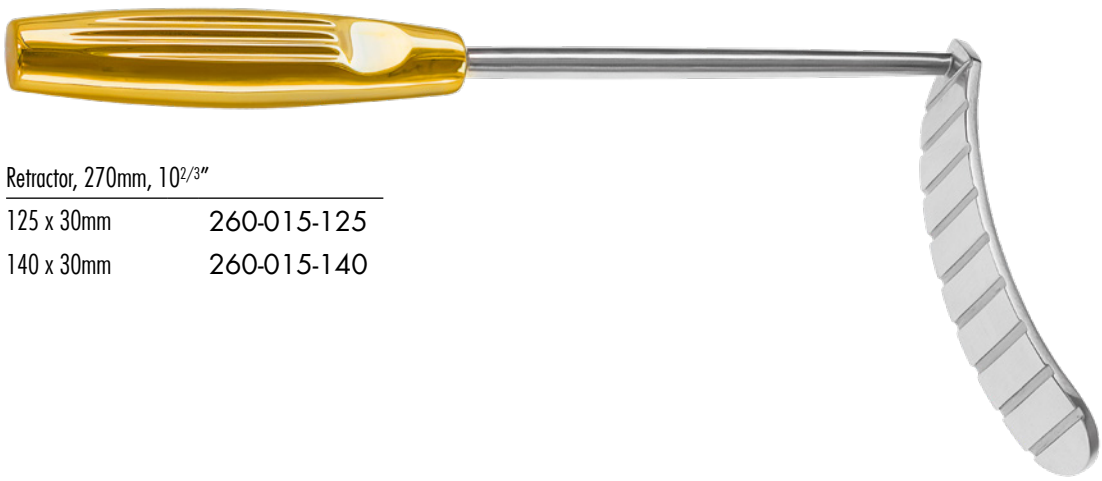
without light guide

125 x 60mm	260-061-185
200 x 60mm	260-061-200



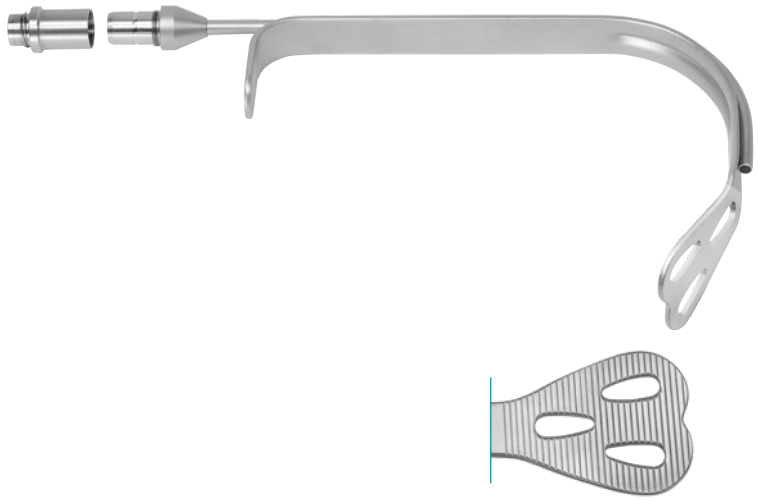
SALDHANA SZ
Retractor, 165mm hitches

155 x 60mm	260-015-155



Retractor, 270mm, $10^{2/3}$"

125 x 30mm	260-015-125
140 x 30mm	260-015-140



Breast and Facial Retractor, fenestrated blade, fine serration, fibre-optic, 125mm, 5“

30mm blade	430-497-141
40mm blade	430-497-151



DEAVER
Retractor, with fibre-optic, 230mm, 9“

110 x 25mm	170-581-230



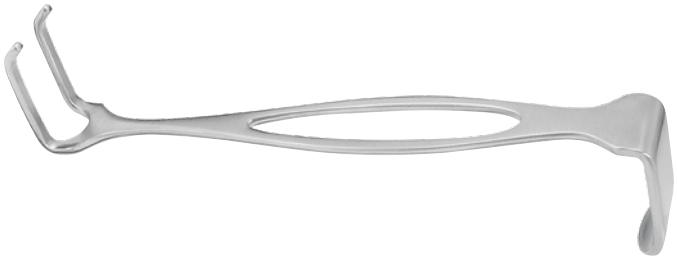
DEAVER
Retractor, with fibre-optic, 300mm, 11 7/8“

25mm blade	170-581-300



FERREIRA
Facelift Retractor, 110 x 22mm, 100mm 4“

with fibre-optic	260-130-110
without fibre-optic	260-230-110



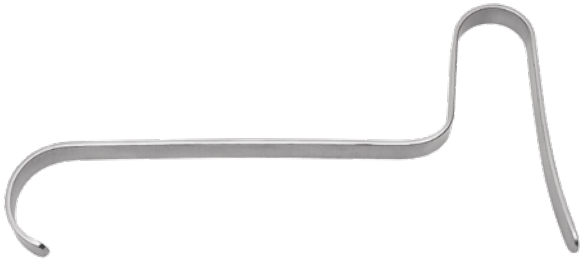
CZERNY
Retractor, 38 x 42mm prongs, 180mm 7“

36mm blade	170-653-000



DEAVER
Grip Retractor, serrated

25 x 300mm	171-483-025
38 x 310mm	171-483-138



FREEMAN
Flap Retractor, 205mm, 8 1/8"

12mm wide	260-012-205
25mm wide	260-025-205



SOLZ
Hook Dissector, graduated

360mm, 14 1/2"	260-001-360



SOLZ
Atraumatic Breast Dissector

340mm, 13 3/4"	260-001-340
370mm, 14 3/4"	260-001-370



SCULPO
Breast Retractor, double-ended,
37 x 70mm / 22 x 54mm

230mm, 9″	260-400-310
310mm, 12 1/4″	260-401-310



TILLEY
Breast Retractor, micro toothing

220mm, 8 2/3″	260-400-220



SCULPO
Breast Spatula, semi-malleable, serrated,
315mm, 12 1/3"

150 x 25mm	260-400-315
150 x 38mm	260-438-315



YANCOSKIE
Abdominoplasty Retractor, 6 prongs

150mm, 6"	260-013-201



SCULPO
Breast Dissector, blunt, curved

340mm, 13 1/3"	260-009-000



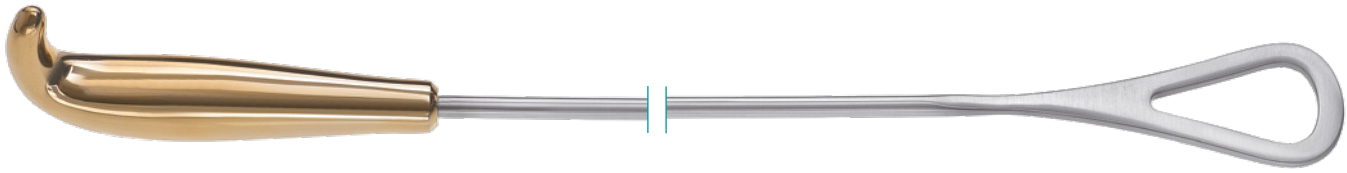
AGRIS DINGMAN
Transaxillary Dissector Set, with scale

360mm, 14"	260-088-370



SCULPO
Breast Dissector, angled

330mm, 13"	260-010-000
420mm, 16 1/2"	260-010-420



REYNOLDS
Transaxillary Breast Dissector, fenestrated blade

400mm, 15 3/4"	260-737-040



REYNOLDS
Breast Dissector, oval spatulated blade

320mm, 12 2/3"	260-140-000
420mm, 16 1/2"	260-140-420



MACCOLLUM DINGMAN
Breast Dissector, angled shaft

410mm, 16"	260-016-410



SCULPO
Spatulated Breast Dissector, malleable shaft

330mm, 13"	260-311-000
420mm, 16 1/2"	260-311-420



Breast Facial Spreader, diamond-shaped
29mm blade

220mm, $8^{2/3}$"	260-001-220
295mm, $11^{2/3}$"	260-001-295



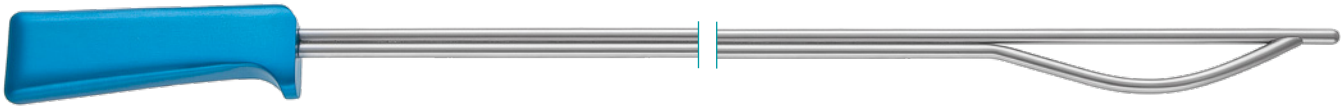
Breast Elevator for Mammoplasty

280mm, 11"	260-500-000



LAROE
Undermining Forceps, curved

245mm, $9^{2/3}$"	260-001-250
300mm, $11^{7/8}$"	260-001-300



LOCKWOOD
Underminer, 30mm lift

380mm, 15"	260-603-380
450mm, 19"	260-603-450



FREEMAN
Areola Marker

Ø 22mm	260-750-122



FREEMAN
Areola Marker

Ø 25mm	260-750-125
Ø 30mm	260-750-130
Ø 34mm	260-750-134
Ø 36mm	260-750-136
Ø 38mm	260-750-138
Ø 40mm	260-750-140
Ø 42mm	260-750-142
Ø 45mm	260-750-145
Ø 50mm	260-750-150
Ø 52mm	260-750-152



FREEMAN
Areola Marker, double-ended

Ø 38 / 42mm	260-751-125
Ø 42 / 45mm	260-751-142



FREEMAN
Areola Marker, double-ended, with markings

Ø 38 / 42mm	260-751-225
Ø 34 / 36mm	260-751-236
Ø 45 / 50mm	260-751-250



Areola Marker

Ø 36mm	260-755-036
Ø 38mm	260-755-038
Ø 42mm	260-755-042
Ø 45mm	260-755-045



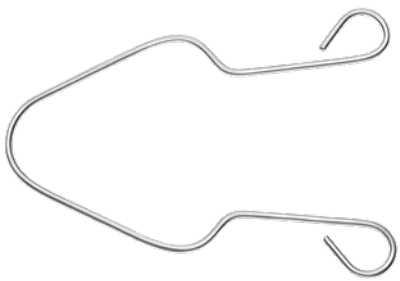
GROSSMANN
Areola Marker, 4-in-1 sizes, non-cutting

Ø 40 / 44 / 48 / 52mm	260-754-000



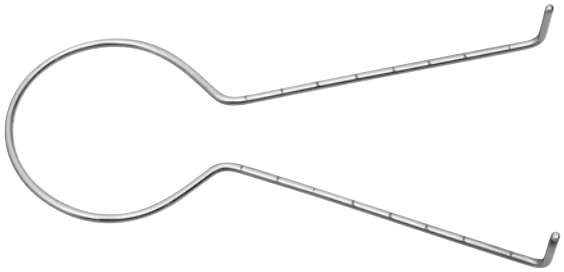
GALVAO
Areola Marker

Ø 40mm	260-753-040
Ø 50mm	260-753-050



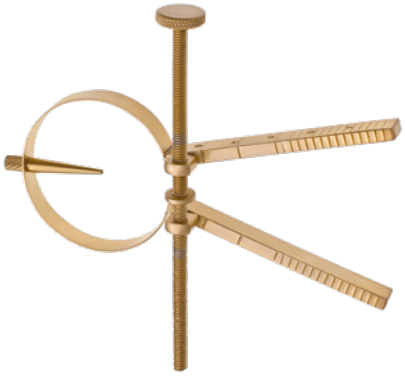
Areola Marker

100mm, 4"	260-746-000



MCKISSOCK
Breast Caliper

Ø 38mm	260-738-000
Ø 42mm	260-742-000
Ø 45mm	260-745-000



HALPERN
Breast Caliper

Ø 38mm	260-755-000
Ø 42mm	260-757-000



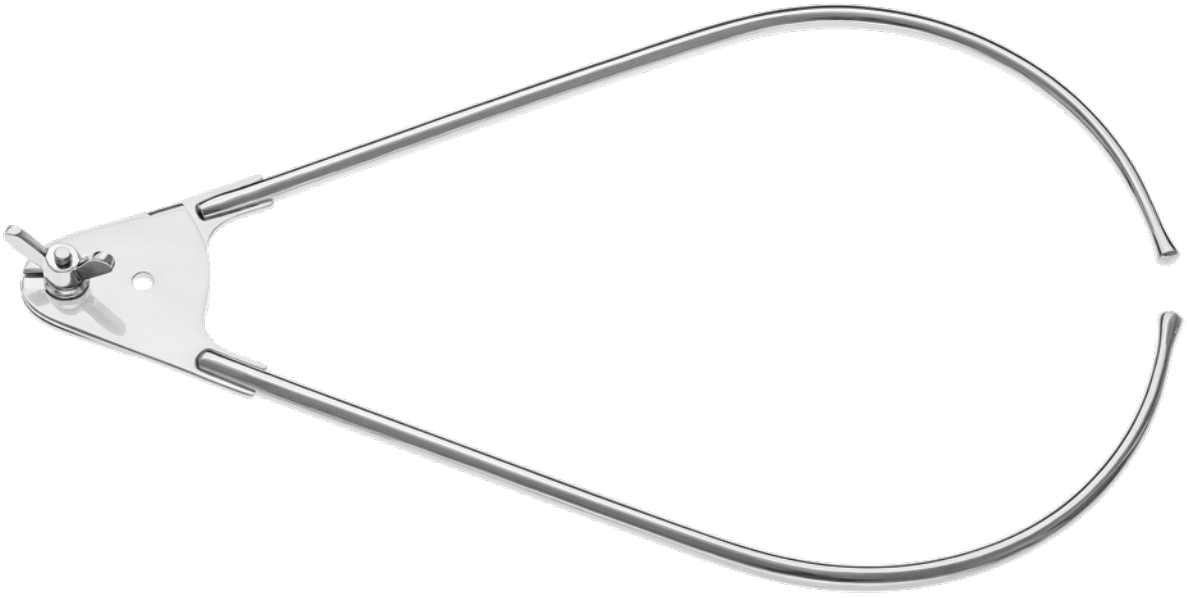
Ruler, with mm inch markings

150mm, 6"	100-418-150
200mm, 8"	100-418-200
300mm, 11 7/8"	100-418-300
500mm, 20"	100-418-500



CASTROVIEJO
Caliper, with locking screw

0-20mm, 85mm	400-583-007
0-40mm, 180mm	400-583-008



MCKISSOCK (COLLYER)
Caliper

300mm, $11^{7/8}$"	260-756-300





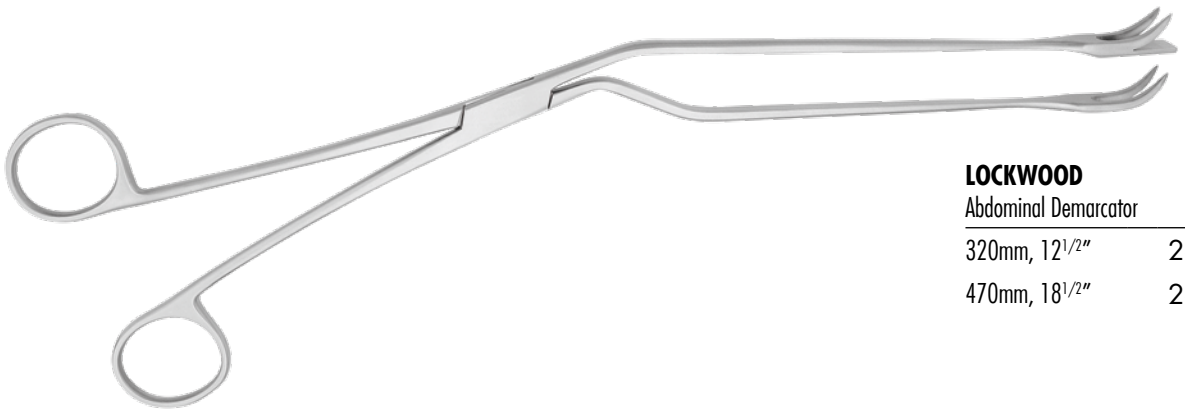
D'ASSUMPCAO
Facelift Forceps

160mm, 6 1/4"	260-520-010
260mm, 10 1/4"	260-520-016



D'ASSUMPCAO
Facelift Forceps, with ratchet

160mm, 6 1/4"	260-520-020
260mm, 10 1/4"	260-520-026



LOCKWOOD
Abdominal Demarcator

320mm, 12 1/2"	260-268-310
470mm, 18 1/2"	260-268-410

GENITO-URINARY



Retractors / Spatula
Forceps
Vasectomy
Penis Clamps
Catheters
Bougies
Urethrotomes

RZ Medizintechnik®
PROGRESS IN SURGERY



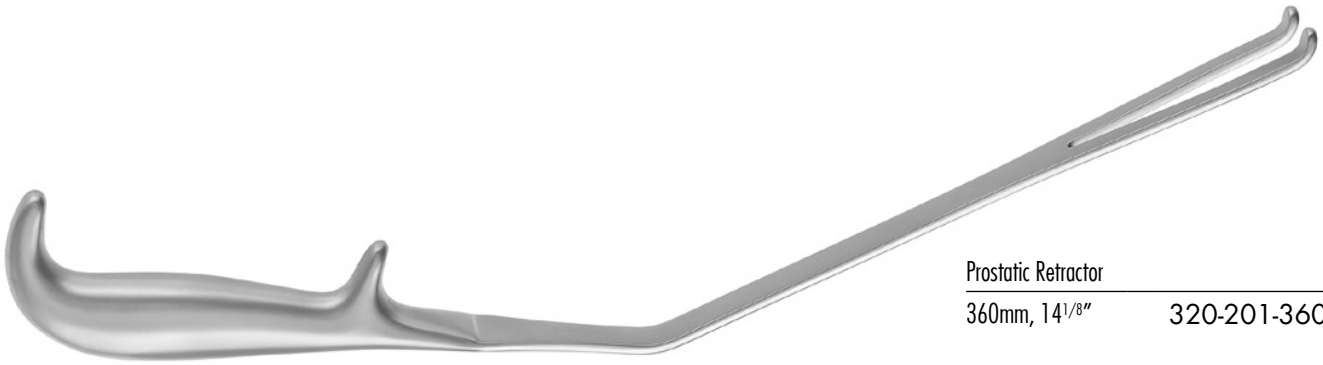
YOUNG
Prostatic Retractor
210mm, 8 1/4" 320-204-210



YOUNG
Prostatic Retractor
220mm, 8 2/3" 320-205-220



YOUNG
Prostatic Retractor
210mm, 8 1/4" 320-206-210



Prostatic Retractor

360mm, 14 1/8" 320-201-360



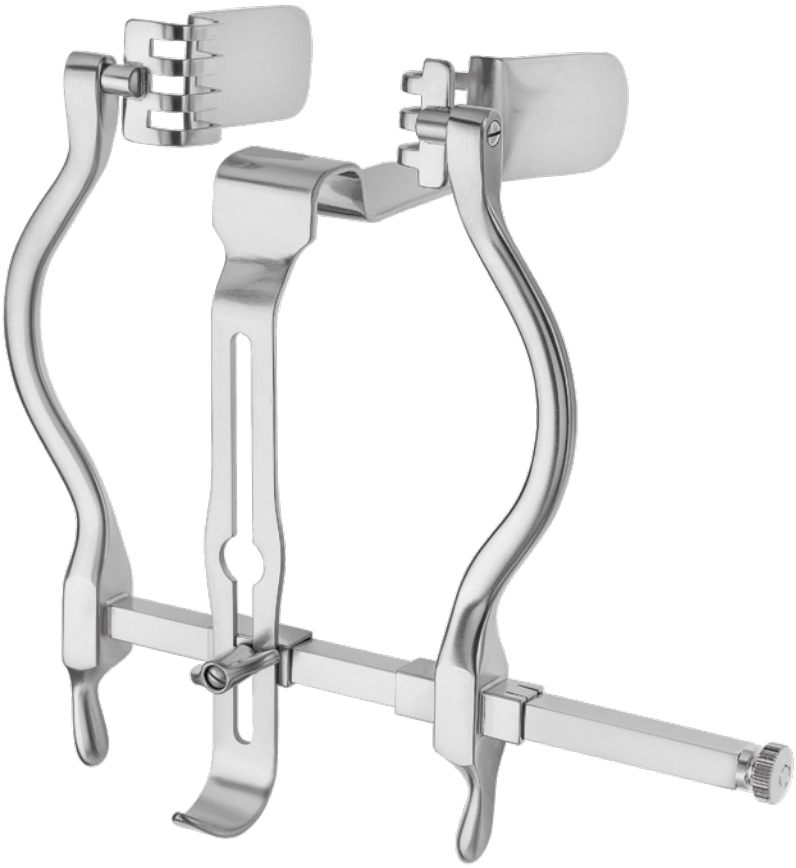
LEGUEU
Bladder Spatula

260mm, 10 1/4" 320-170-260



KOCHER
Bladder Spatula

235mm, 9 1/4" 320-175-235



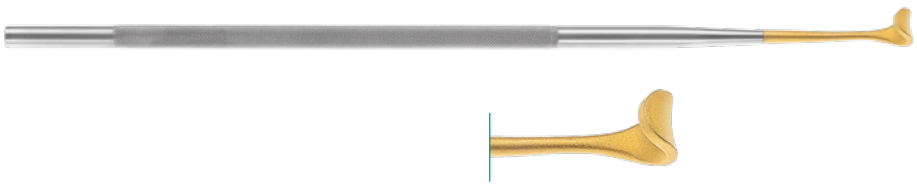
MASSON
Bladder Retractor
blade 73 x 28mm

110mm opening	320-195-000



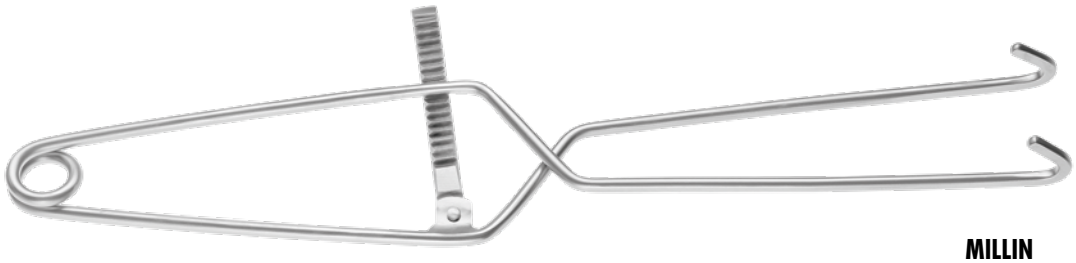
MILLIN
Bladder Retractor, complete

	320-185-000
Central Valve	
105 x 45mm	320-185-004
Lateral Blades	
82 x 25mm	320-185-003
87 x 25mm	320-185-002
Retractor only	
	320-185-001



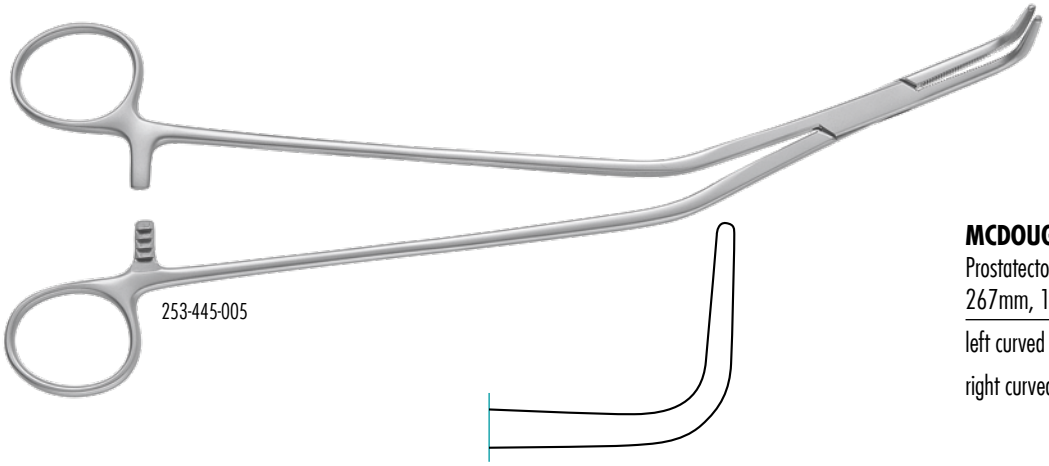
GIL VERNET
Retractor, malleable, 240mm, 9 1/2"

8mm	170-236-008
11mm	170-236-011
17mm	170-236-017
20mm	170-236-020
23mm	170-236-023



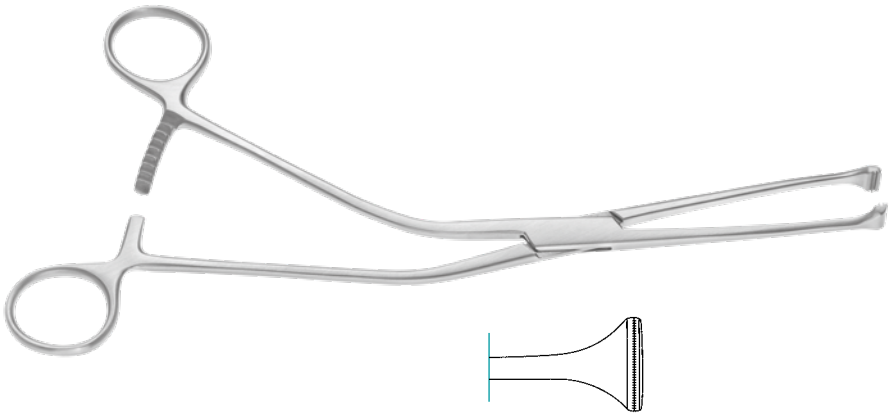
MILLIN
Bladder Neck Spreader

285mm, 11 1/4"	320-165-285



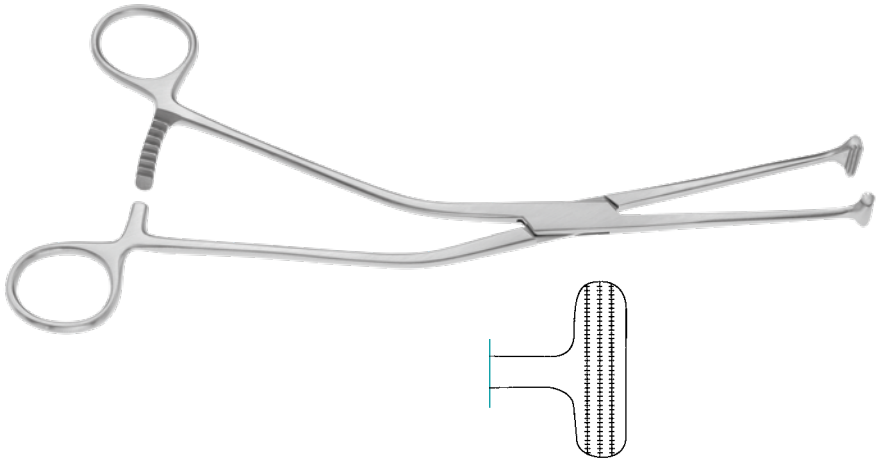
MCDOUGAL
Prostatectomy Clamp, 2mm jaw, serrated, 267mm, 10 1/2"

left curved	253-445-005
right curved	253-445-006



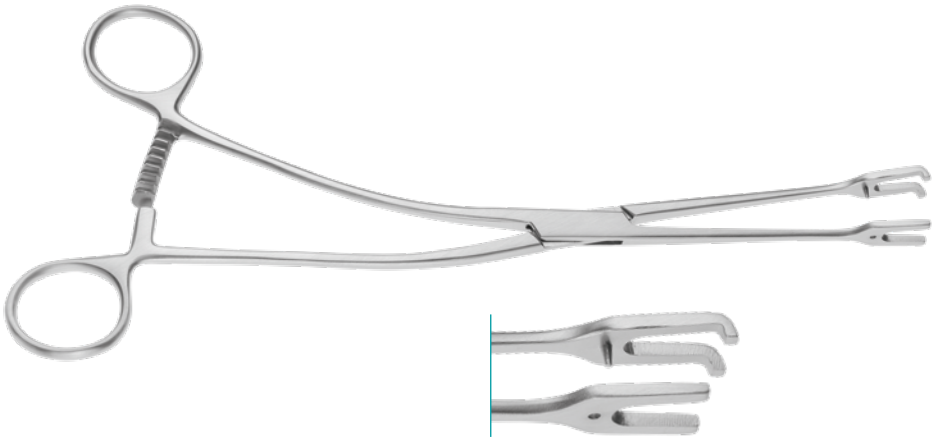
MILLIN
Prostatic Grasping Forceps

230mm, 9"	320-150-230



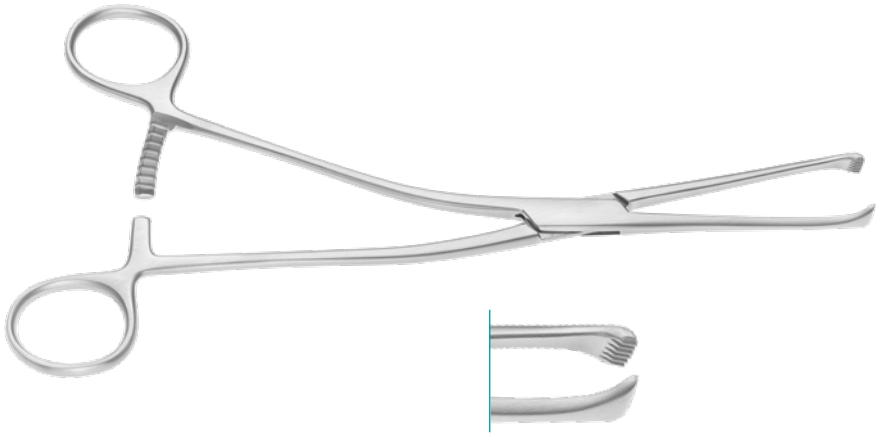
MILLIN
Atraumatic Grasping Forceps
for the capsule

230mm, 9" 320-151-230



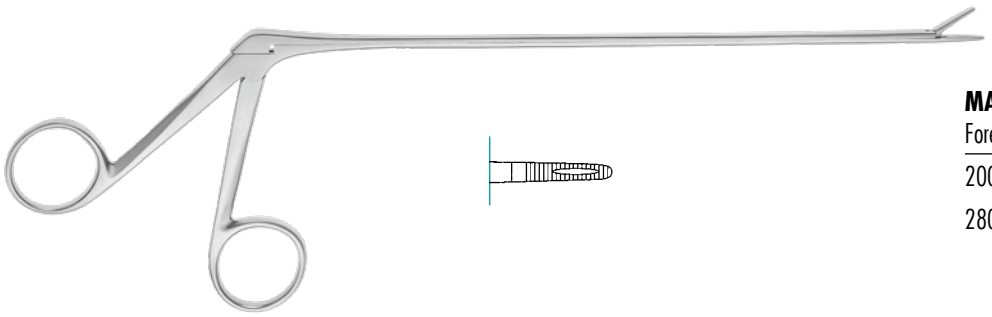
MILLIN
Ligature Carring Forceps

245mm, 9 2/3" 320-151-245



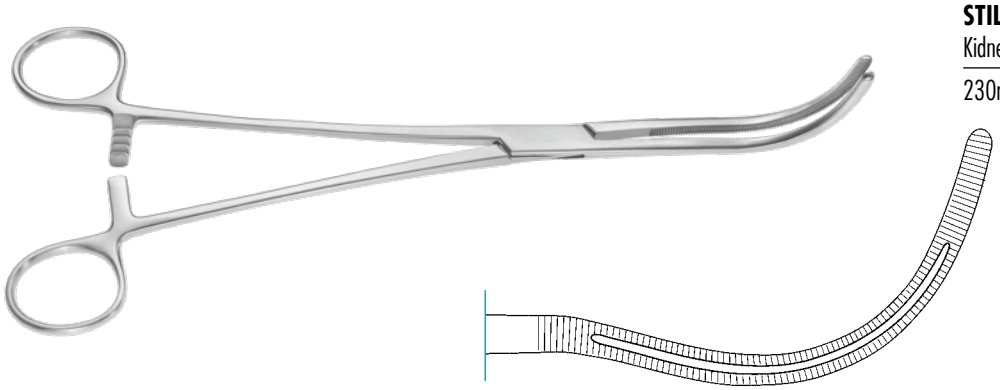
MILLIN
Grasping Forceps for the anterior lobe

230mm, 9" 320-152-230



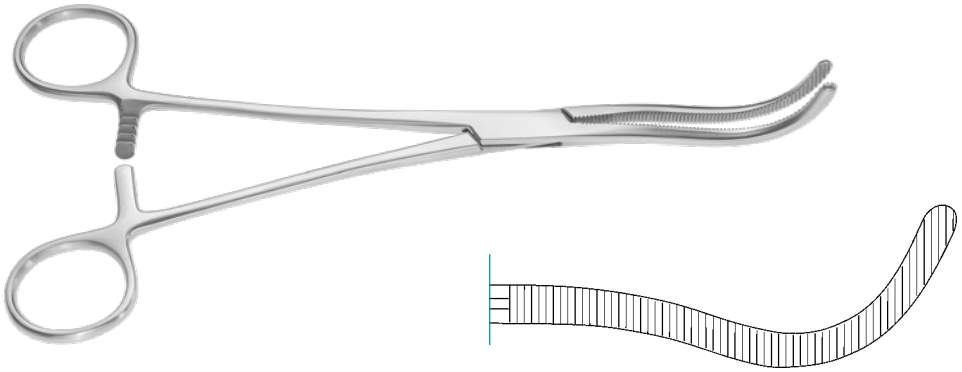
MATHIEU
Foreign Body Forceps

200mm, 8″	320-350-190
280mm, 11″	320-350-280



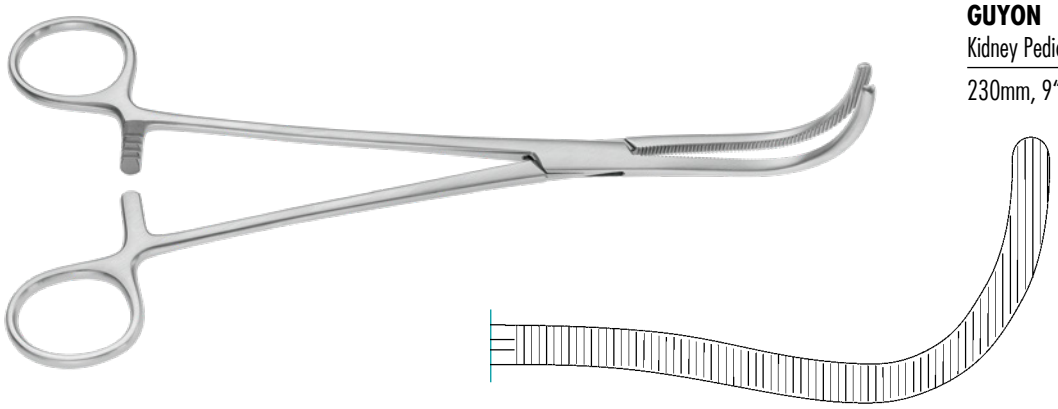
STILLE
Kidney Pedicle Clamp

230mm, 9″	140-602-230



GUYON
Kidney Pedicle Clamp, curved

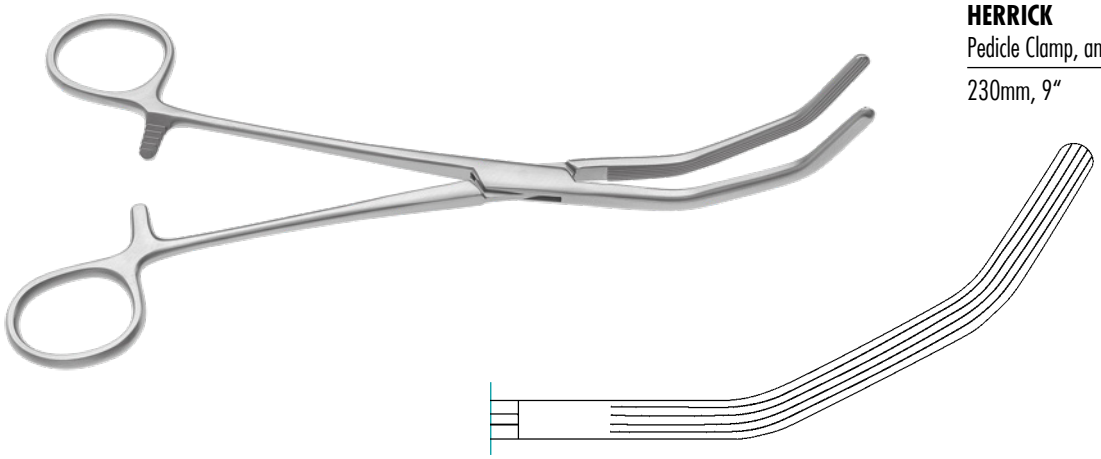
200mm, 8″	140-600-200
220mm, $8^{2/3}$″	140-600-220
240mm, $9^{1/2}$″	140-600-240



GUYON

Kidney Pedicle Clamp

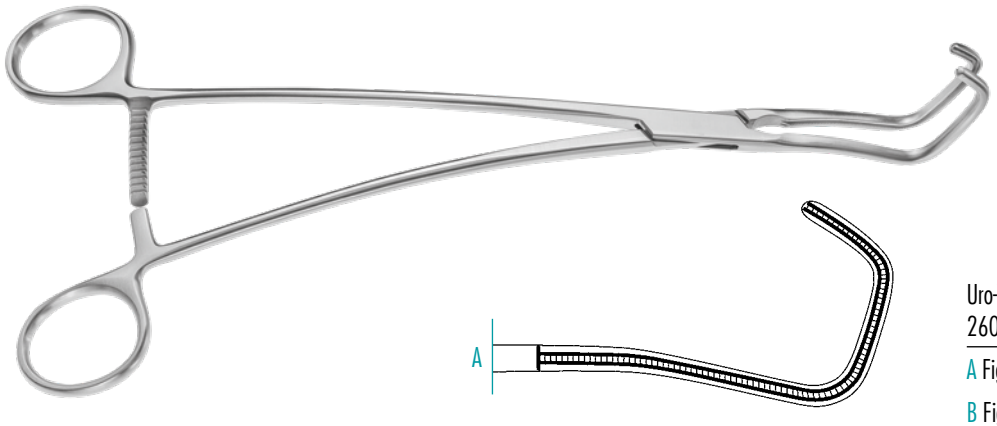
230mm, 9" 140-603-230

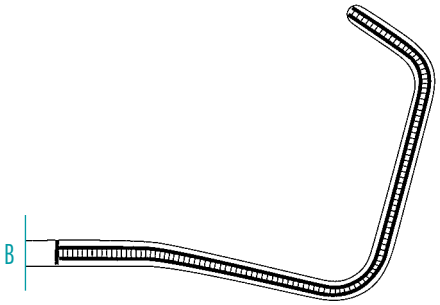


HERRICK

Pedicle Clamp, angled, longitudinal serrated

230mm, 9" 140-604-230



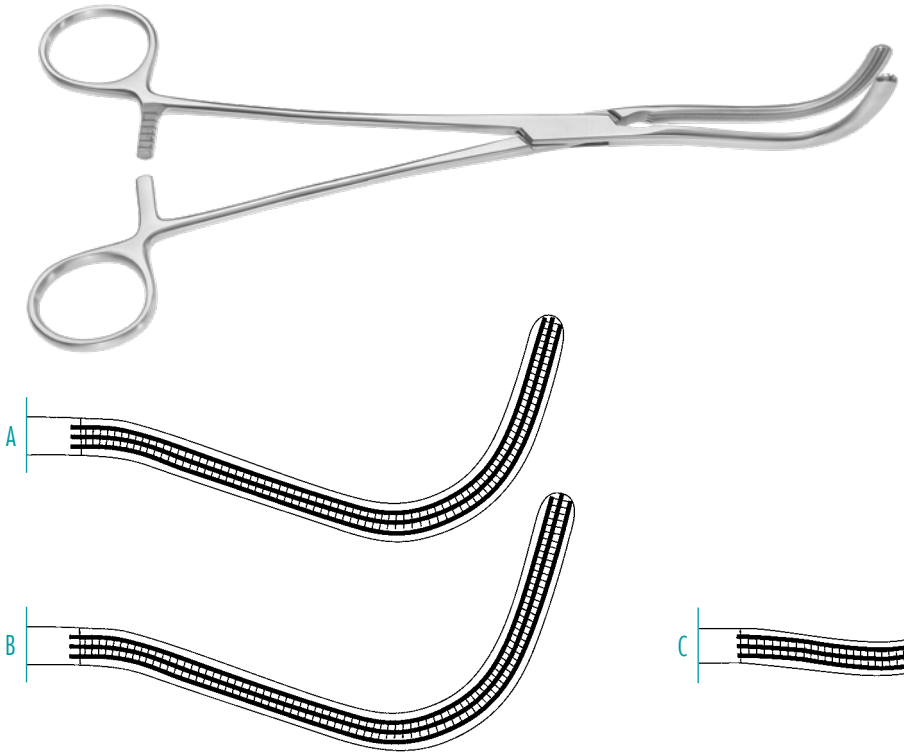


Uro-Tangential Kidney Pedicle Clamp, atraumatic

260mm, $10^{1/4}$"

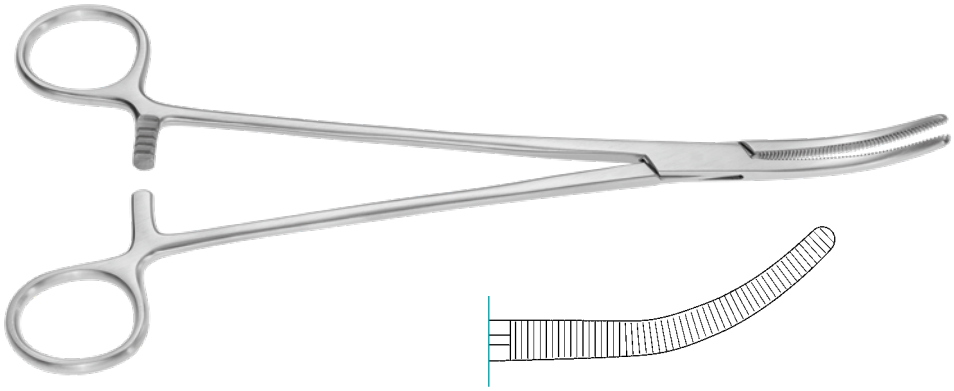
A Fig. 1 140-500-001

B Fig. 2 140-500-002



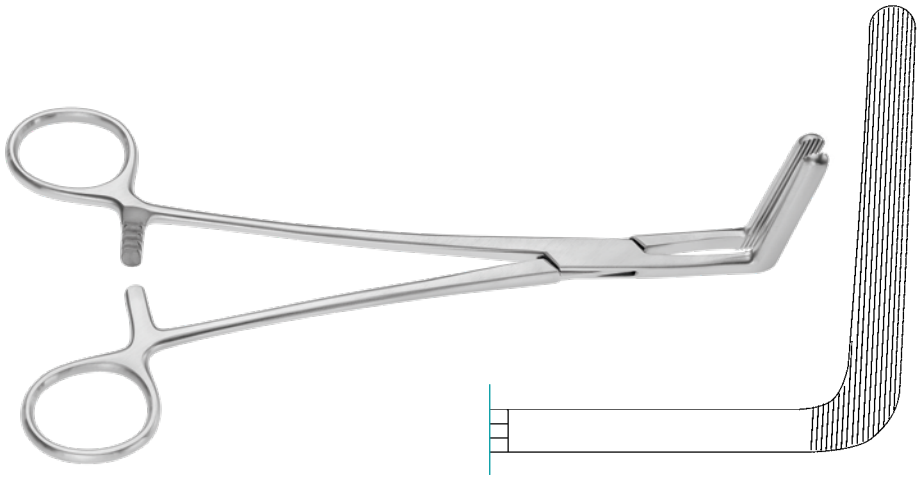
GUYON
Kidney Pedicle Clamp, atraumatic
260mm, 10 1/4"

A 230mm, 9"	140-498-230
B 240mm, 9 1/2"	140-498-240
C 235mm, 9 1/4"	140-498-235



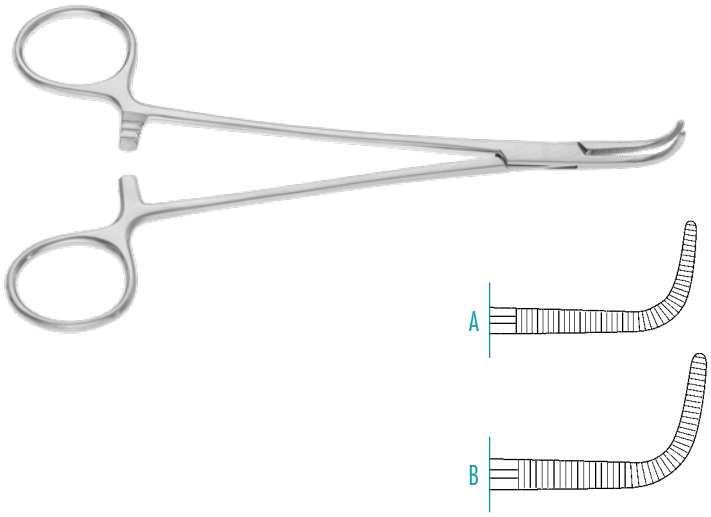
WERTHEIM
Hysterectomy Forceps, serrated, curved

250mm, 9 7/8"	140-697-250



WERTHEIM CULLEN
Hysterectomy Forceps, 90° angled

215mm, 8 1/2"	140-641-215

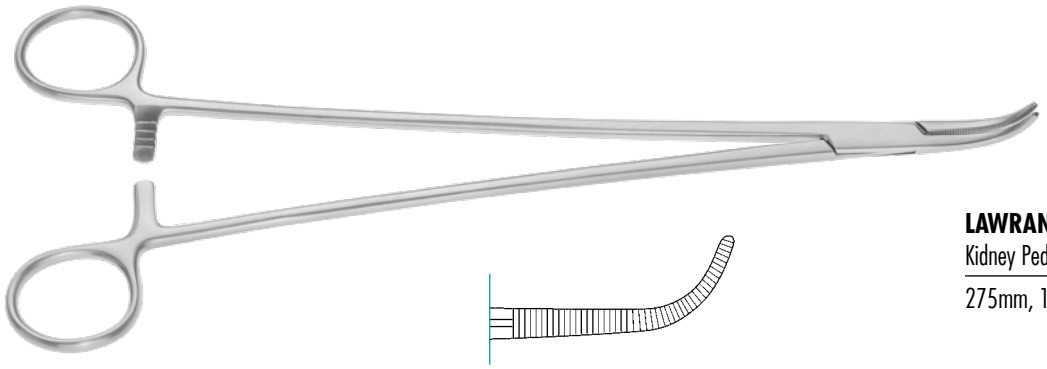


MEEKER
Kidney Pedicle Clamp
Fig. 1

A 180mm, 7″	140-619-180

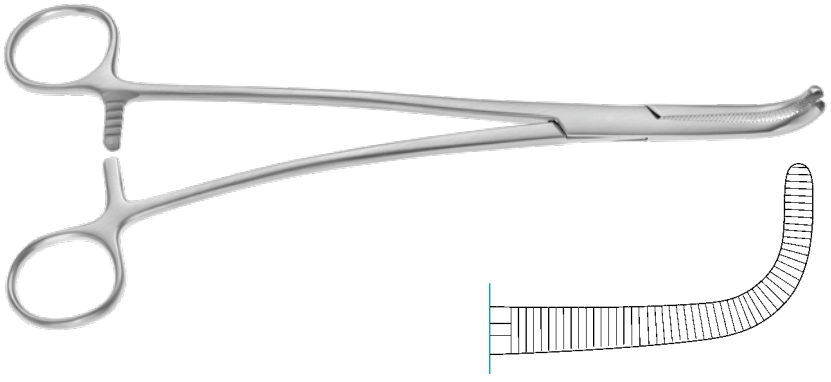
Fig. 2

B 280mm, 11″	140-619-275



LAWRANCE
Kidney Pedicle Clamp

275mm, $10^{7/8}$″	140-617-275



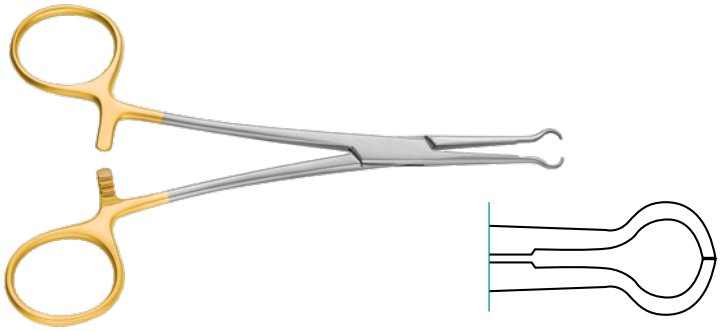
GRAY
Gall Duct Clamp, s-curved

220mm, $8^{2/3}$″	140-607-220
230mm, 9″	140-607-230



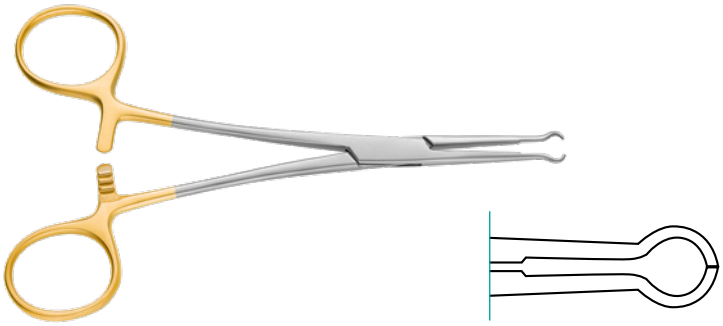
No-Scalpel Vasectomy Forceps, sharp, pointed, smooth curved jaw

125mm, 5"	140-353-125



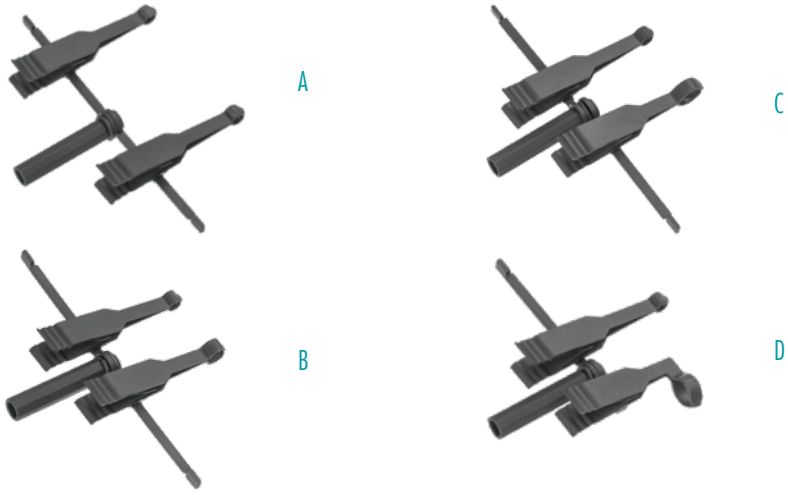
No-Scalpel Vasectomy Fixator Ring Forceps, blunt tip, ∅4.7mm ring size

140mm, 5 1/2"	140-352-140



No-Scalpel Vasectomy Mini Fixator Ring Forceps, blunt tip, ∅3mm ring size

140mm, 5 1/2"	140-353-140



A Microspike Approximator Clamp for Vasovasostomy

∅2mm	270-150-001

B for Vasovasostomy

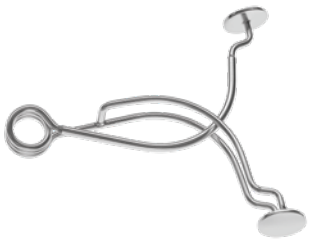
∅4mm / ∅2mm	270-150-002

C for Vasovasostomy, end-to-end, for Vasoepididymostomy

∅6mm / ∅2mm	270-150-003

D for Vasovasostomy, end-to-side, for Vasoepididymostomy

∅6mm / ∅2mm	270-150-200



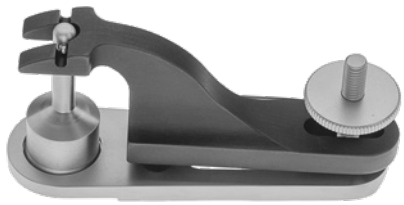
STOCKMANN
Meatus Clamp

80mm, 3 1/6"	320-998-000



STRAUSS
Penis Seizing Forceps

130mm, 5 1/8"	320-999-000



GUMCO
Circumcisions Instrument

∅ 8mm	340-600-008
∅ 11mm	340-600-011
∅ 13mm	340-600-013
∅ 16mm	340-600-016
∅ 21mm	340-600-026
∅ 32mm	340-600-032



FOLEY
Catheter Spanner/Introducer

455mm, 18"	320-603-455



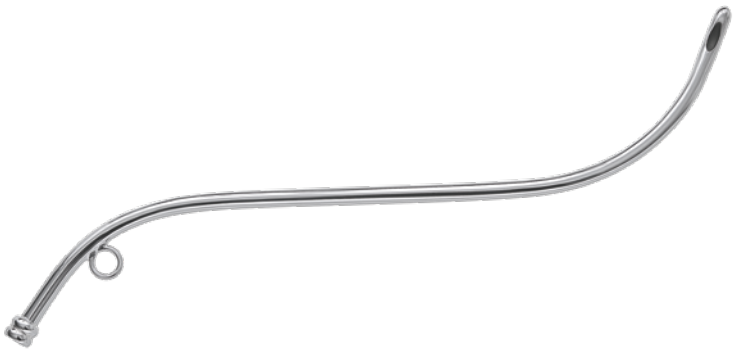
GUYON
Catheter, curved

390mm, 15 1/2"	253-310-390



Metal Catheter for women

8 Charr.	320-721-080
10 Charr.	320-721-100
11 Charr.	320-721-110
12 Charr.	320-721-120
14 Charr.	320-721-140
16 Charr.	320-721-160
18 Charr.	320-721-180
20 Charr.	320-721-200
22 Charr.	320-721-220
24 Charr.	320-721-240



Rotunda Catheter, s-curved

8 Charr.	320-723-080
10 Charr.	320-723-100
12 Charr.	320-723-120
14 Charr.	320-723-140
16 Charr.	320-723-160
18 Charr.	320-723-180
20 Charr.	320-723-200
22 Charr.	320-723-220
24 Charr.	320-723-240



Metal Catheter for men
working length: 290mm, $11^{1/2}$″

8 Charr.	320-720-080
10 Charr.	320-720-100
12 Charr.	320-720-120
14 Charr.	320-720-140
16 Charr.	320-720-160
18 Charr.	320-720-180
20 Charr.	320-720-200
22 Charr.	320-720-220
24 Charr.	320-720-240



DITTEL
Bougie, straight

8 Charr.	253-320-225
9 Charr.	253-321-225
10 Charr.	253-322-225
11 Charr.	253-323-225
12 Charr.	253-324-225
14 Charr.	253-325-225
16 Charr.	253-326-225
18 Charr.	253-327-225
20 Charr.	253-328-225
22 Charr.	253-329-225
24 Charr.	253-330-225
25 Charr.	253-331-225
26 Charr.	253-332-225
27 Charr.	253-333-225
28 Charr.	253-334-225
30 Charr.	253-335-225
32 Charr.	253-336-225
34 Charr.	253-337-225



GUYON
Bougie, strongly curved

8 Charr.	253-340-335
9 Charr.	253-341-335
10 Charr.	253-342-335
11 Charr.	253-343-335
12 Charr.	253-344-335
14 Charr.	253-345-335
16 Charr.	253-346-335
18 Charr.	253-347-335
20 Charr.	253-348-335
22 Charr.	253-349-335
24 Charr.	253-350-335
25 Charr.	253-351-335
26 Charr.	253-352-335
27 Charr.	253-353-335
28 Charr.	253-354-335
30 Charr.	253-355-335
32 Charr.	253-356-335
34 Charr.	253-357-335



VAN BUREN
Bougie, curved

10 Charr.	253-650-010
12 Charr.	253-650-012
14 Charr.	253-650-014
16 Charr.	253-650-016
18 Charr.	253-650-018
20 Charr.	253-650-020
22 Charr.	253-650-022
24 Charr.	253-650-024
26 Charr.	253-650-026
28 Charr.	253-650-028
30 Charr.	253-650-030
32 Charr.	253-650-032
34 Charr.	253-650-034
36 Charr.	253-650-036



DITTEL
Bougie, slightly curved

8 Charr.	253-320-335
9 Charr.	253-321-335
10 Charr.	253-322-335
11 Charr.	253-323-335
12 Charr.	253-324-335
14 Charr.	253-325-335
16 Charr.	253-326-335
18 Charr.	253-327-335
20 Charr.	253-328-335
22 Charr.	253-329-335
24 Charr.	253-330-335
25 Charr.	253-331-335
26 Charr.	253-332-335
27 Charr.	253-333-335
28 Charr.	253-334-335
30 Charr.	253-335-335
32 Charr.	253-336-335
34 Charr.	253-337-335



A

OTIS

A Dilation Urethrotome, complete with 3 atraumatic tip and 2 knifes, wooden case

253-500-100

wooden case only 253-500-103

B Urethrotome only

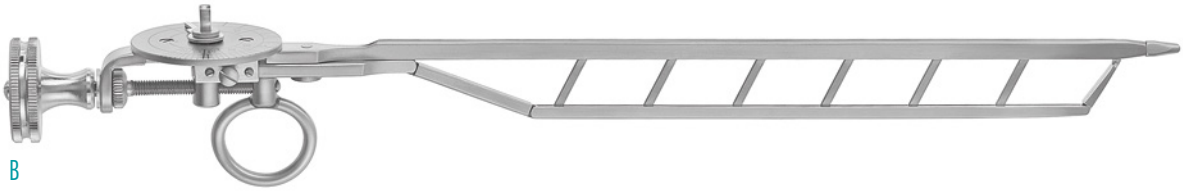
253-500-101

C Knife only

253-500-102

D Set with 3 atraumatic tip only

253-500-108



B



C



D

RZ Medizintechnik® PROGRESS IN SURGERY

RECTAL



Specula / Retractors
Proctoscopes
Hemorrhoidal Ligation
Probes
Forceps



PRATT
Rectal Speculum, blade 89 x 25mm

205mm, 8 1/8"	310-602-000



BODENHAMMER
Rectal Speculum, blade 89 x 17mm

150mm, 6"	310-601-150



SIMS
Rectal Speculum, fenestrated valves, blade 89 x 25mm

150mm, 6"	310-603-150



BODENHAMMER
Rectal Speculum, with fiberoptic,
blade 89 x 25mm

150mm, 6"	310-801-150



SIMS
Rectal Specula with wire blades,
20 x 60mm

190mm, 7 1/2"	310-608-060
with fibreoptic connection	
190mm, 7 1/2"	310-808-060



SMITH BUIE
Rectal Speculum, max. spread: 115mm
valves: 23x70mm

150mm, 6"	310-610-150

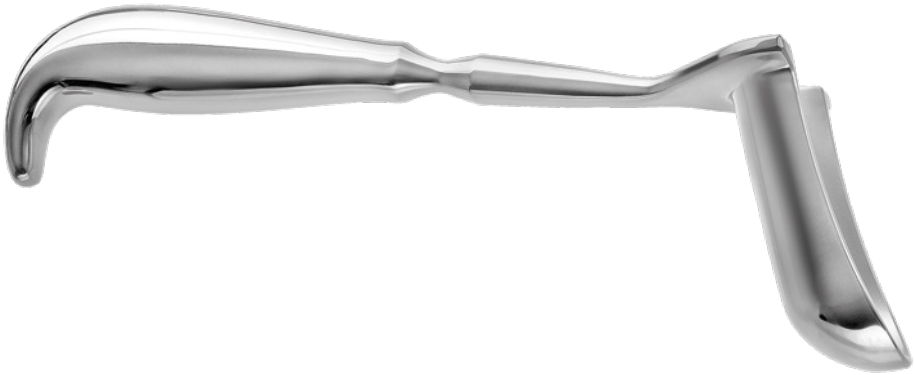


ALAN PARKS
Rectal Retractor, 2 pair blades & centre blade

135mm, 5 1/3"	310-020-135

Central Valve, fenestrated

95 x 24mm	310-023-095



HILL FERGUSON
Rectal Retractor

67x22mm	310-587-001
76x30mm	310-587-002
79x36mm	310-587-003



SAWYER
Rectal Retractor, loop handle

64x22mm	310-585-001
76x29mm	310-585-002
89x38mm	310-585-003



CZERNEY
Rectal Speculum

225mm, $8^{7/8}$"	310-580-001



KELLY
Sphincteroscope

21x50mm	310-679-210
27x50mm	310-679-270



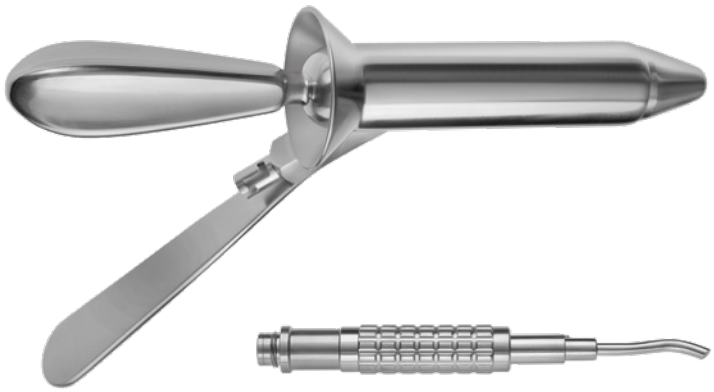
HIRSCHMANN
Anoscope

16x65mm	310-655-001
19x65mm	310-655-002
22x65mm	310-655-003
22x130mm	310-655-004



KELLY
Proctoscope

22x50mm	310-675-050
22x100mm	310-675-100
22x140mm	310-675-140
22x145mm	310-675-145
22x200mm	310-675-200

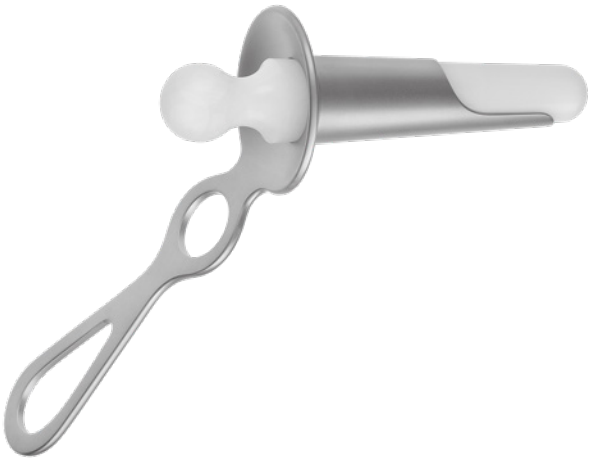


MORGAN
Proctoscope with connector for cold light

20x65mm	310-701-065
24x65mm	310-702-065

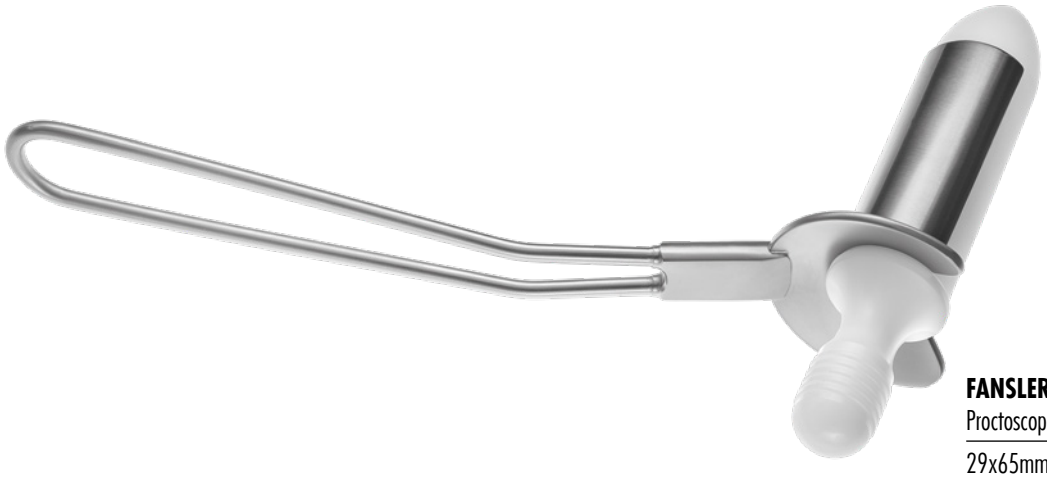
Illumination Adapter

310-710-000



VERNON DAVID
Ø17 to 23mm, fenestrated handle

310-652-000



FANSLER
Proctoscope

29x65mm	310-705-029



FANSLER
Proctoscope

35x70mm	310-705-038



IVES-FANSLER
Proctoscope, conical,
85mm working length

21x26mm	310-695-122



CHELSEY EATON
Anoscope

22x65mm	310-022-065
30x65mm	310-030-065



BRINCKERHOFF
Rectal Specula, 89mm working length
Fig. 1

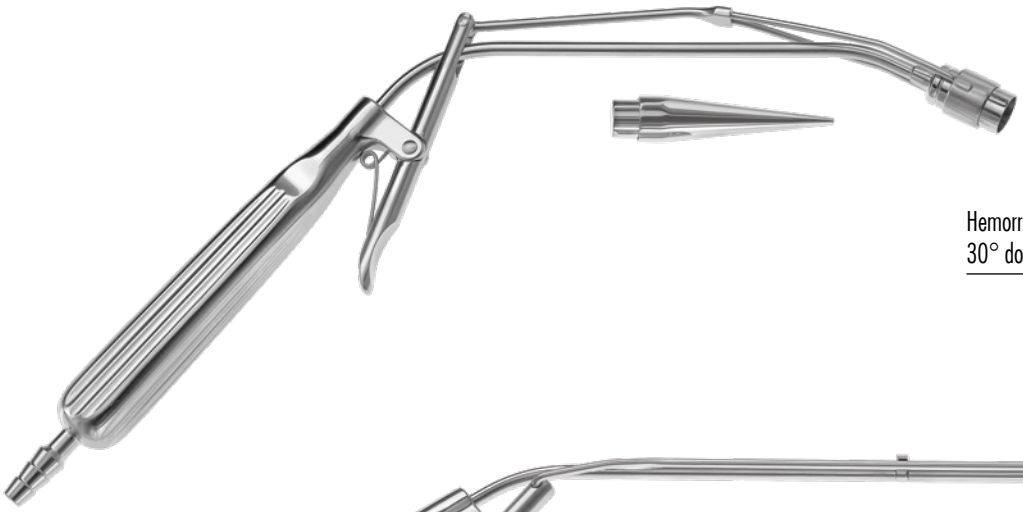
13x25mm	310-654-001

102mm working length
Fig. 2

15x25mm	310-654-002

114mm working length
Fig. 3

19x32mm	310-654-003



Hemorrhoidal Suction Ligator, 10mm,
30° downward angled

340-008-100



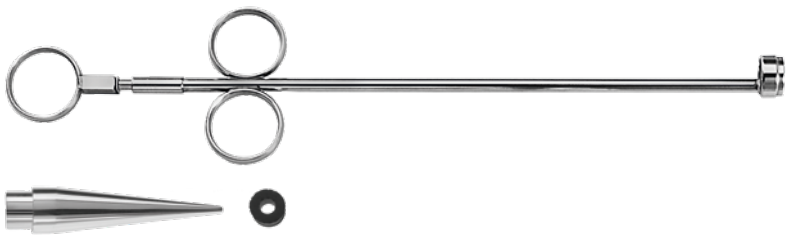
RZ
Hemorrhoidal Suction Ligator, 10mm,
with loading cone and suction,
ligature rings 100 pcs.

straight	340-013-100
upward angled	340-015-100
downward angled	340-014-100



MCGIVNEY
Hemorrhoidal Suction Ligator, complete
incl. ligature rings set of 100 each

340-005-000



RUDD
Haemorrhoidal Ligator,
with loading attachement and 100 rubber rings

340-010-000

Cone

10mm	340-010-010
12mm	340-012-000

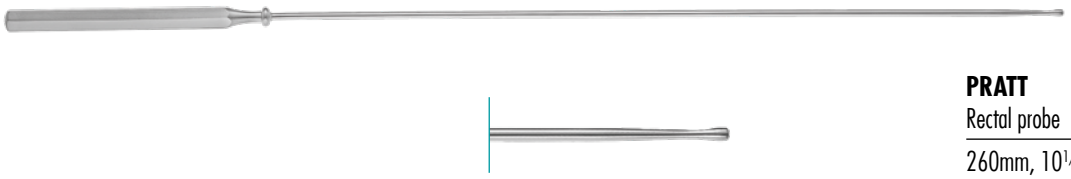
Ligature rubber rings, non sterile, latex free

100 pcs.	340-011-000



LARRY
Rectal probe and grooved director

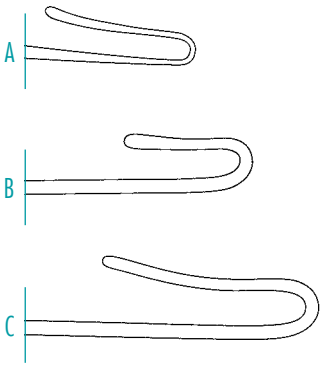
150mm, 6″	160-190-150



PRATT
Rectal probe

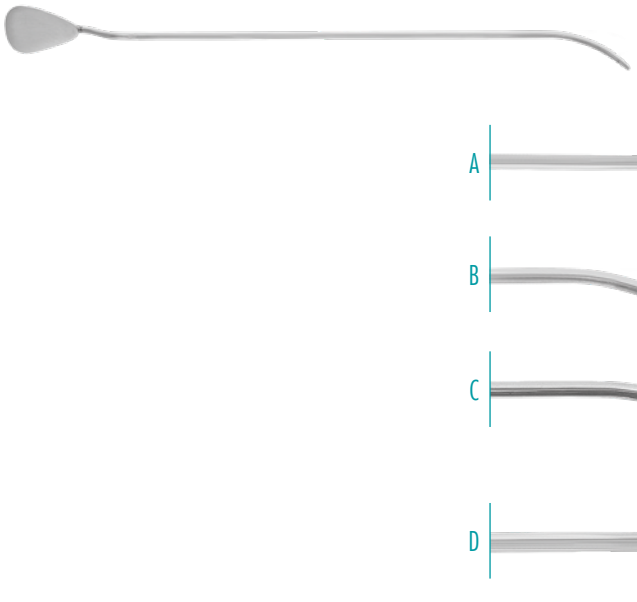
260mm, 10 1/4″	310-685-280





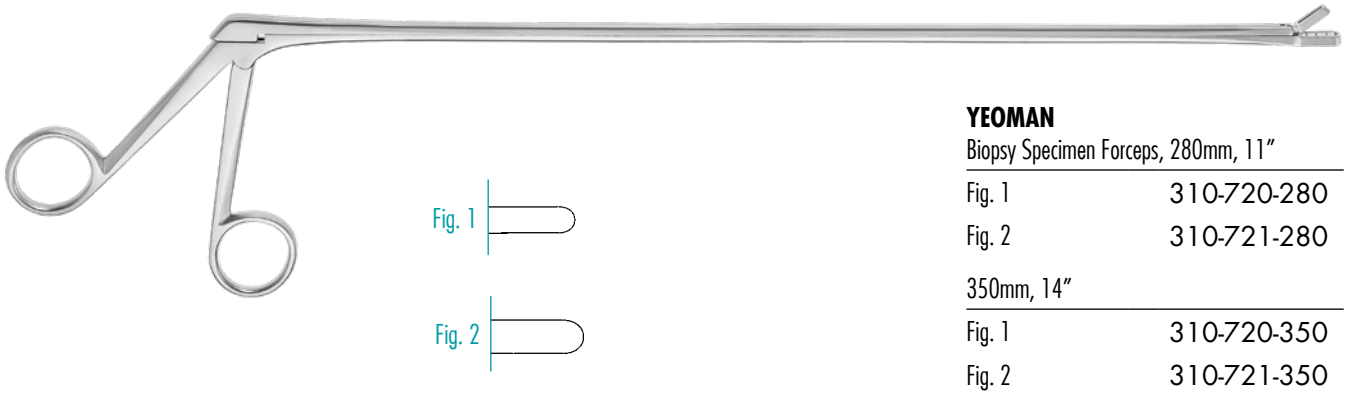
PRATT
Fistula Hook, 210mm, 8 1/4″

A narrow curved	340-401-210
B short hook	340-402-210
C long hook	340-403-210



LOCKHART MUMMERY
Fistula Probe, 165mm, 6 1/2″

A straight	160-110-001
B 45°	160-110-002
C 90°	160-110-003
D retrograde curved	160-110-004



YEOMAN
Biopsy Specimen Forceps, 280mm, 11″

Fig. 1	310-720-280
Fig. 2	310-721-280
350mm, 14″	
Fig. 1	310-720-350
Fig. 2	310-721-350
480mm, 16 1/2″	
Fig. 1	310-720-420
Fig. 2	310-721-420

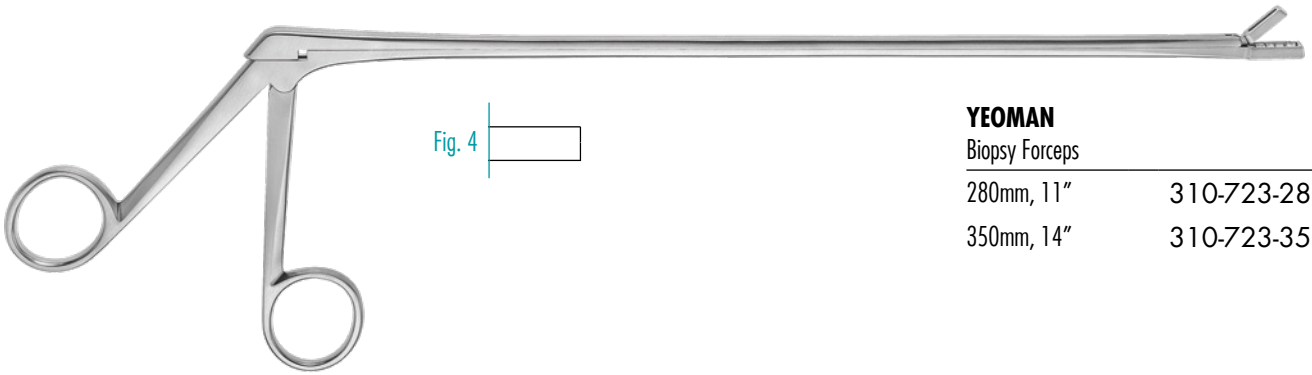


Fig. 4

YEOMAN
Biopsy Forceps

280mm, 11″	310-723-280
350mm, 14″	310-723-350

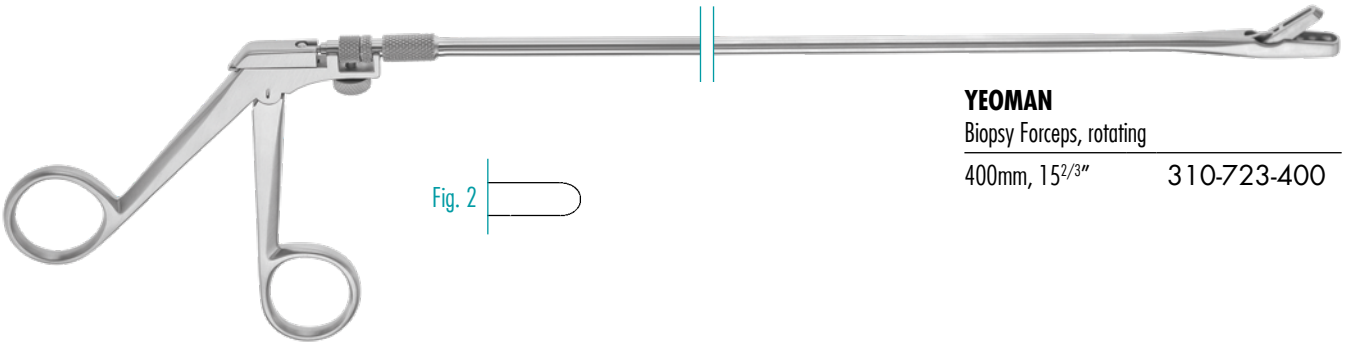
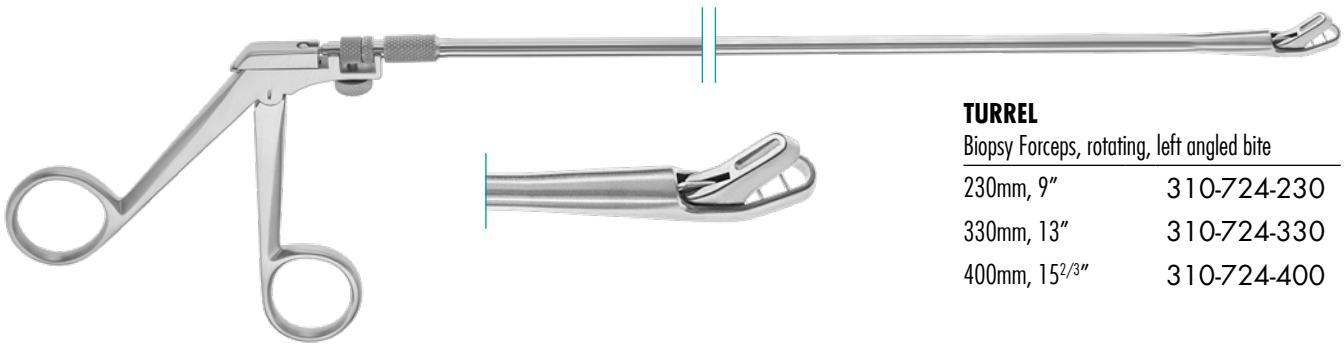


Fig. 2

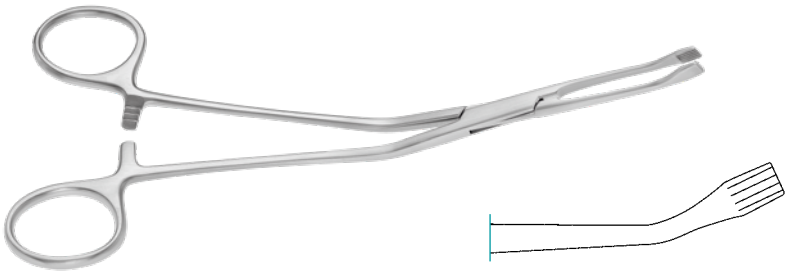
YEOMAN
Biopsy Forceps, rotating

400mm, 15 2/3″	310-723-400



TURREL
Biopsy Forceps, rotating, left angled bite

230mm, 9″	310-724-230
330mm, 13″	310-724-330
400mm, 15 2/3″	310-724-400

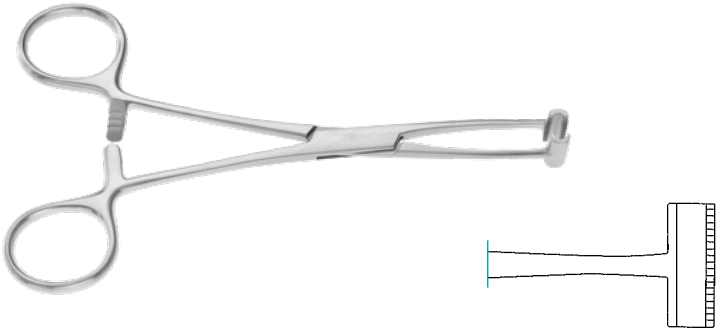


MCGIVNEY
Hemorrhoidal Grasping Forceps
double curved

190mm, 7 1/2"	340-009-190

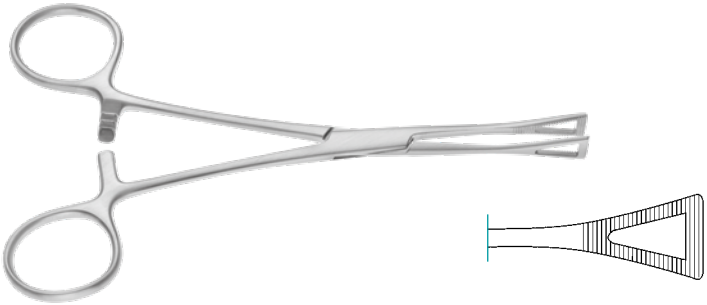
single curved

190mm, 7 1/2"	340-008-190



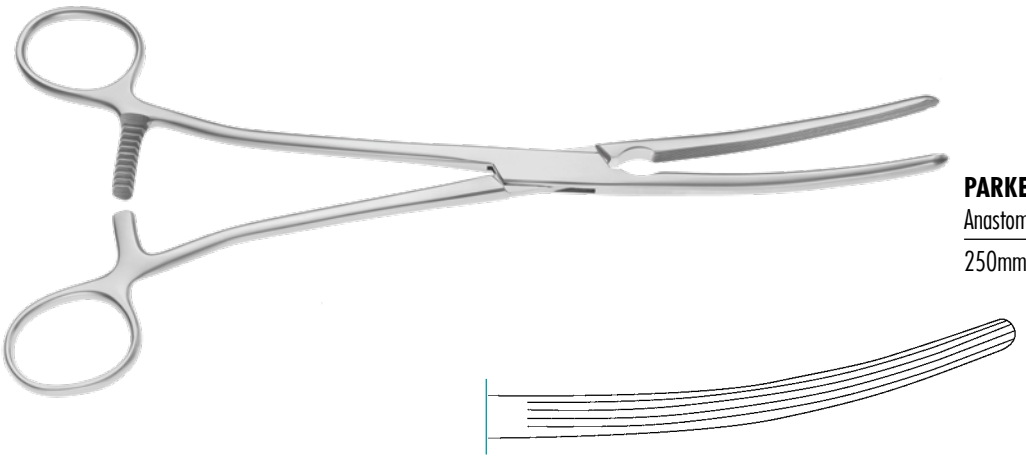
PRATT
T- Hemostatic Forceps

150mm, 6"	140-282-150



PENNINGTON
Tissue Holding Forceps

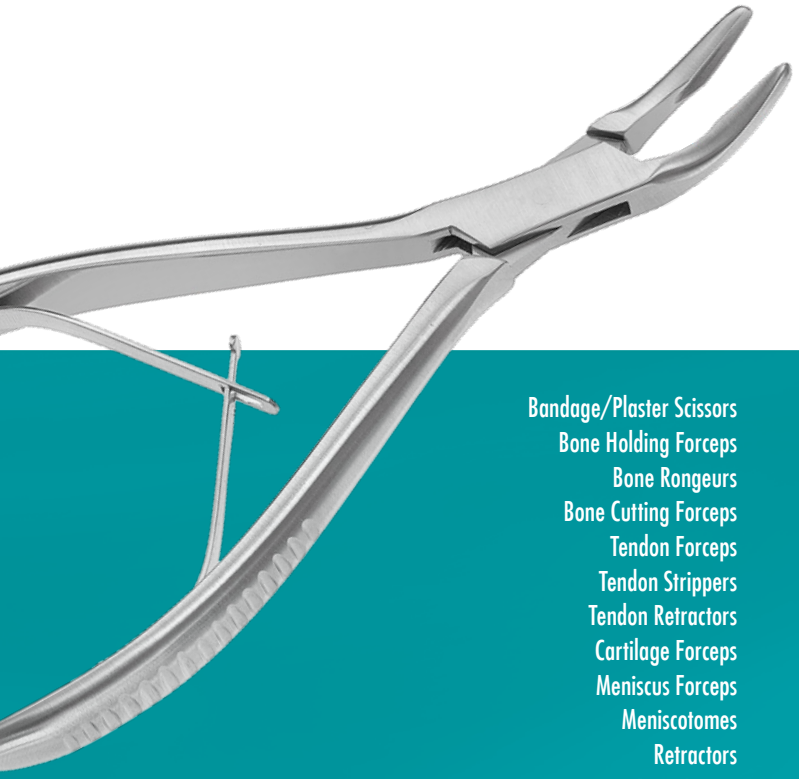
155mm, 6 1/8"	140-240-155
200mm, 8"	140-240-200



PARKER KERR
Anastomosis Forceps

250mm, 9 7/8"	290-463-250

ORTHOPAEDICS



Bandage/Plaster Scissors
Bone Holding Forceps
Bone Rongeurs
Bone Cutting Forceps
Tendon Forceps
Tendon Strippers
Tendon Retractors
Cartilage Forceps
Meniscus Forceps
Meniscotomes
Retractors
Bone Levers
Elevators
Periosteal Elevators
Dissectors

Raspatories
Curettes
Osteotomes/Gouges/Chisels
Mallets
Bone Tampers
Rasps
Wire Instruments
Wire Cutters
Wire Guides
Wire Extension
Reamers, Trephines / Awls
Hand Drills
Screw Drivers
Rulers/Calipers
Amputation



LISTER
Plaster Cast / Bandage Scissors

90mm, 3 1/2"	190-165-090
110mm, 4 1/3"	190-165-110
140mm, 5 1/2"	190-165-140
180mm, 7"	190-165-180
200mm, 8"	190-165-200



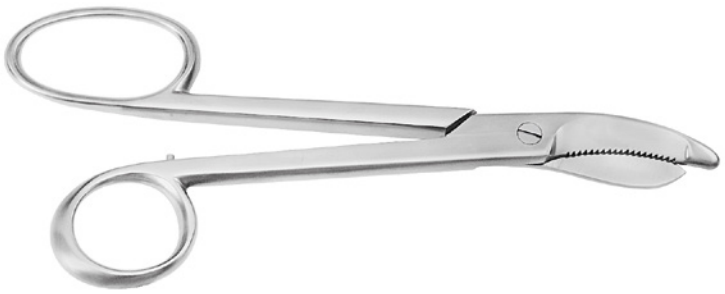
TC LISTER
Bandage Scissors

180mm, 7"	190-291-180



LISTER EXCENTRIC
Plaster Cast / Bandage Scissors, serrated

160mm, 6 1/4"	190-177-160
190mm, 7 1/2"	190-177-190



BRUNS
Plaster Scissors, 240mm, 9 1/2"

serrated blade	190-223-240
smooth blade	190-224-240



Cloth Scissors, serrated

200mm, 8″	190-211-200



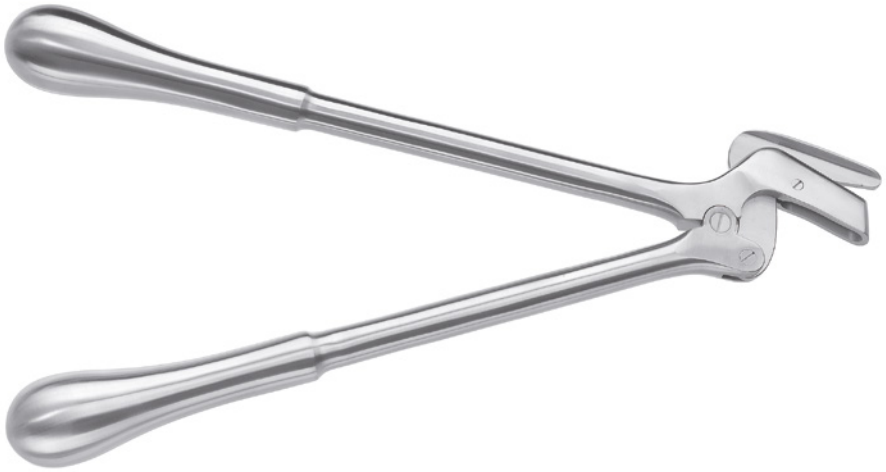
BERGMANN
Plaster Scissors

230mm, 9″	190-195-230



ESMARCH
Plaster Scissors

200mm, 8″	190-205-200
220mm, 8 2/3″	190-205-220



STILLE
Plaster Cast Scissors

260mm, 10 1/4"	190-250-260
370mm, 14 1/2"	190-250-370



WALTON
Plaster Cast Spreader, single hand model

230mm, 9"	190-522-230



HENNING
Plaster Spreader

280mm, 11"	190-516-280



WOLFF BOEHLER
Plaster Cast Breaker

180mm, 7"	190-530-180
240mm, 9 1/2"	190-530-240



UNIVERSAL
Plaster and cloth scissors, small,
140mm, 5 1/2"

black	190-209-151
red	190-209-152
yellow	190-209-153
green	190-209-154



UNIVERSAL
Plaster and cloth scissors, big,
180mm, 7"

blue	190-209-180
black	190-209-181
red	190-209-182
yellow	190-209-183
green	190-209-184
orange	190-209-185









Plaster Saw, incl. round saw blade 65mm, 50mm, pair of wrenches, hexagonal key

230V (black)	200-115-100
110V (blue)	200-115-101



Carry Case with foam inlay

230V	200-115-500



Spare Blade, plaster

Ø 45mm	200-115-145
Ø 50mm	200-115-150
Ø 65mm	200-115-165

Synthetic Cast

Ø 45mm	200-116-145
Ø 50mm	200-116-150
Ø 65mm	200-116-165

PTFE coated (non-stick)

Ø 50mm	200-117-150
Ø 65mm	200-117-165



Vacuum Cleaner

230V	200-118-100



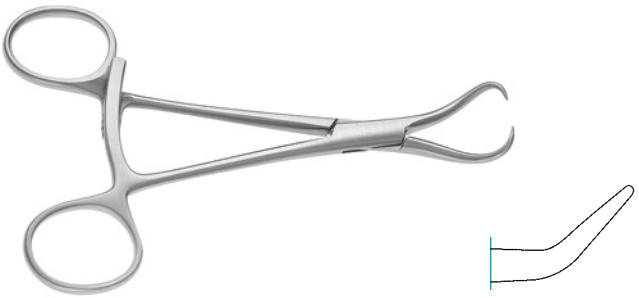
Bone Reposition Forceps

95mm, 3 3/4" 210-651-095



STAGBEETLE
Bone Reposition Forceps, curved fine tip, for small fragments

120mm, 4 3/4" 210-651-120



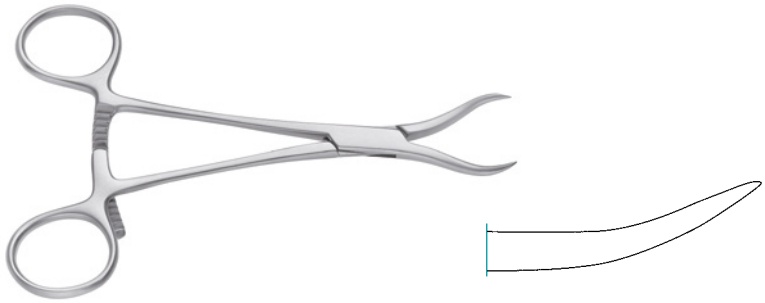
STEINHAUSER
Bone Reposition Forceps, extra long ratchet

135mm, 5 1/3" 210-651-135



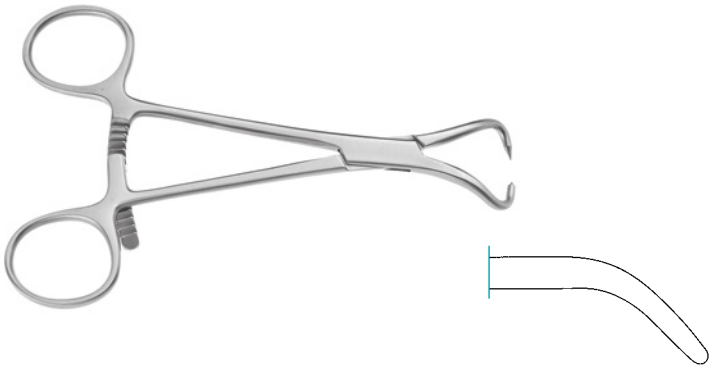
STEINHAUSER
Reposition Forceps, extra long ratchet

150mm, 6"	210-651-150



Bone Reposition Forceps
for maxillary reposition

135mm, $5^{1/3}$"	210-651-130



Bone Reduction Forceps, curved,
stepped point

135mm, $5^{1/3}$"	210-665-135
170mm, $6^{2/3}$"	210-665-170



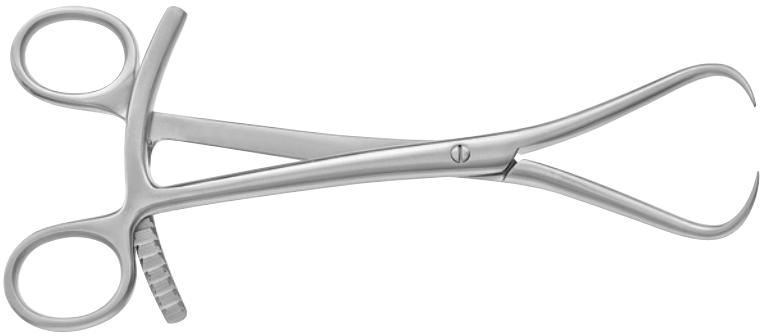
HAASE
Reposition Forceps

165mm, $6^{1/2}$"	210-251-165



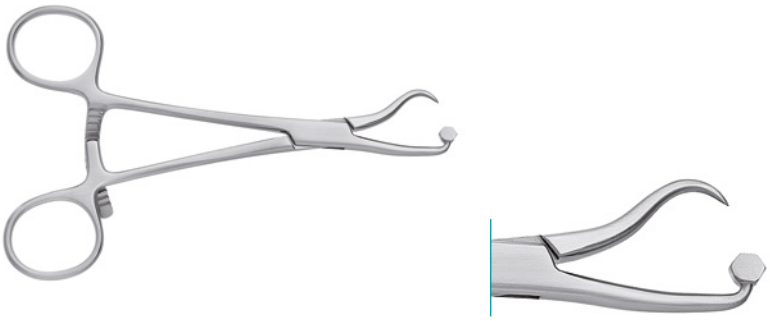
REILL
Reposition Forceps

170mm, 6 2/3"	210-649-170



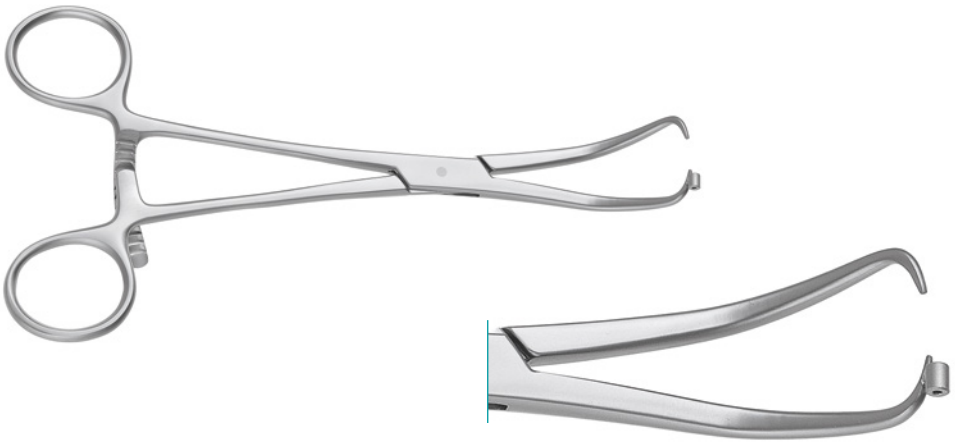
Reposition Forceps

200mm, 8"	210-651-200



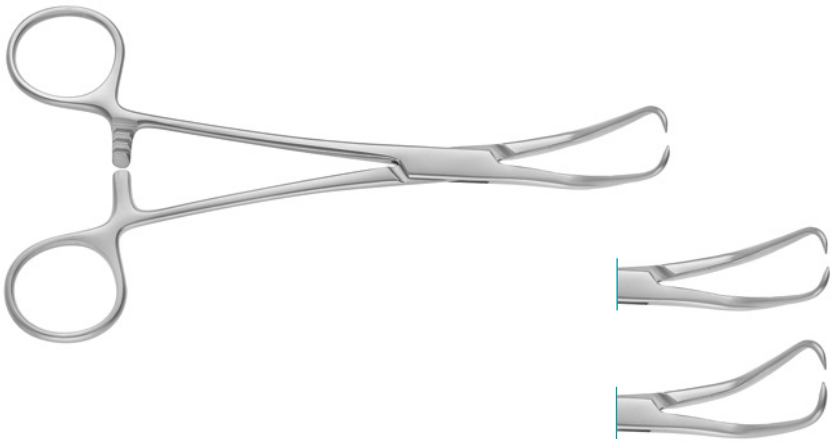
Bone Fragment Clamp

120mm, 4 3/4"	210-631-120



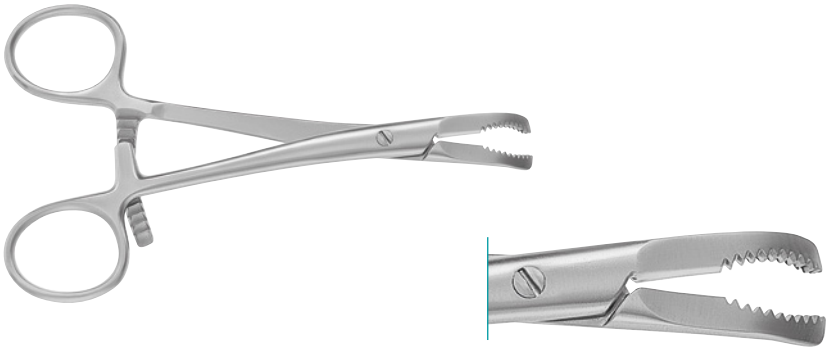
MEYER
Reposition Forceps for Finger, with drill guide

170mm, 6 2/3"	210-650-170
200mm, 8"	210-650-200



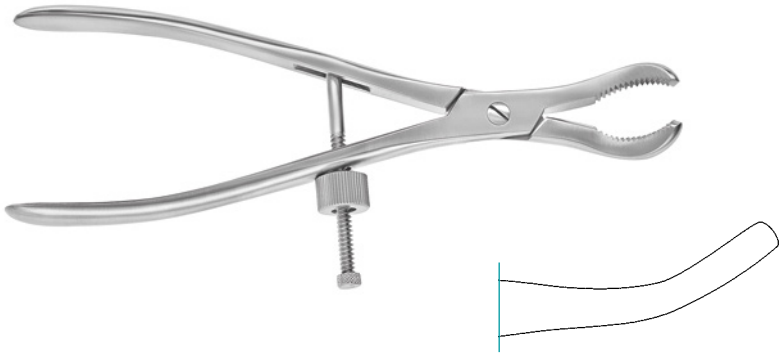
BANKART
Perforating Forceps, 170mm, 6 2/3"

slightly curved	259-900-000
strongly curved	259-900-001



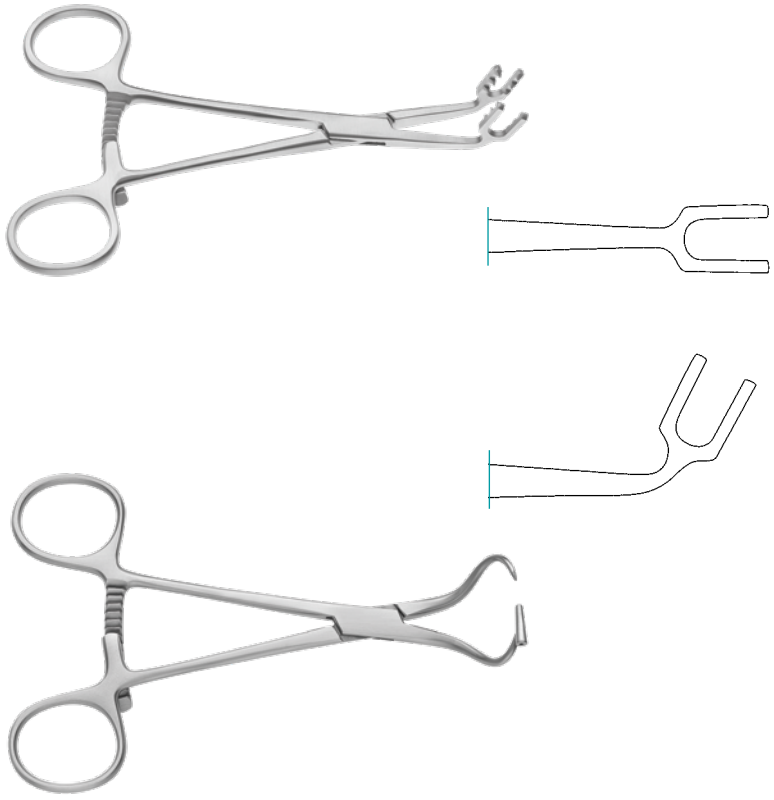
Reposition Forceps

140mm, 5 1/2"	210-718-140



SETTER
Bone Holding Forceps, curved, speed lock

160mm, $6^{1/4}$"	210-719-160
225mm, $8^{7/8}$"	210-719-220



IKUTA
Bone Clamp, 8 pointed teeth jaw,
140mm, $5^{1/2}$", straight

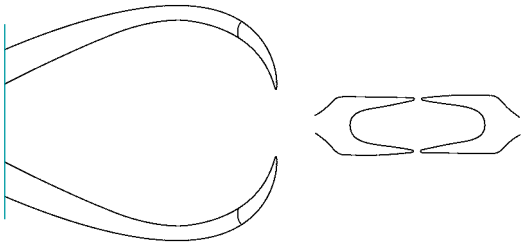
5mm space opening	210-654-005
8mm space opening	210-654-008
160mm, $6^{1/4}$", straight	
10mm space opening	210-654-010
curved	
5mm space opening	210-655-005
8mm space opening	210-655-008
160mm, $6^{1/4}$", curved	
10mm space opening	210-655-010
with drill guide for K-Wires, 135mm, $5^{1/3}$"	
for 1.2mm	210-654-135
for 1.6mm	210-655-135
for 0.9mm	210-656-135



LEWIN
Bone Holding Forceps, serrated, slightly curved

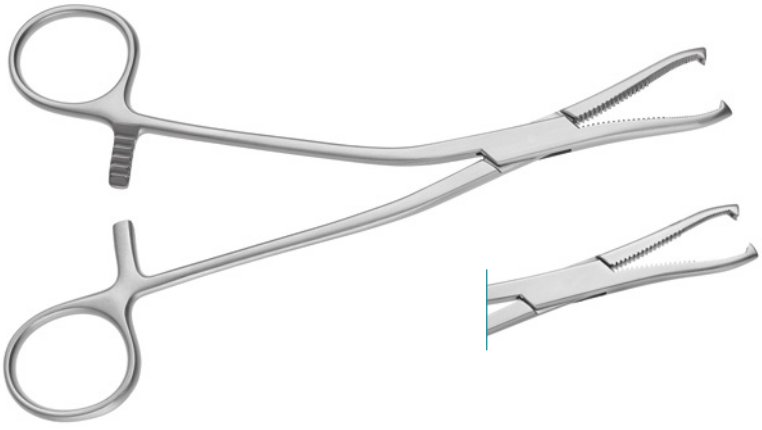
180mm, 7"	210-618-175





Patella Holding Forceps, 2x2 sharp teeth

185mm, 7 1/4"	210-654-185

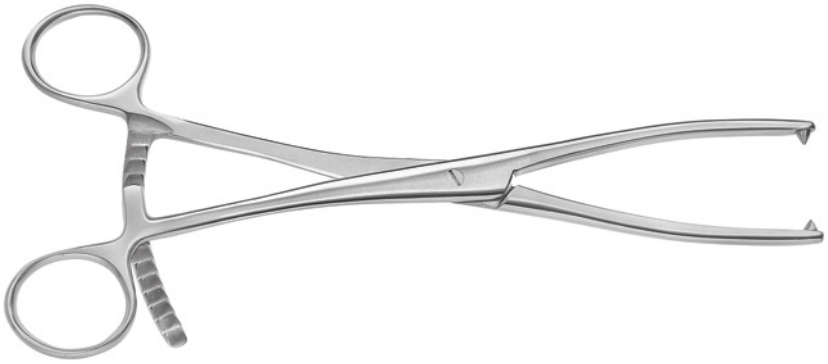


DINGMANN
Bone Holding Forceps, delicate pattern

190mm, 7 1/2"	210-625-190

heavy pattern

190mm, 7 1/2"	210-626-190



MEYER
Malleolar Reposition Forceps

210mm, 8 1/4"	210-656-210



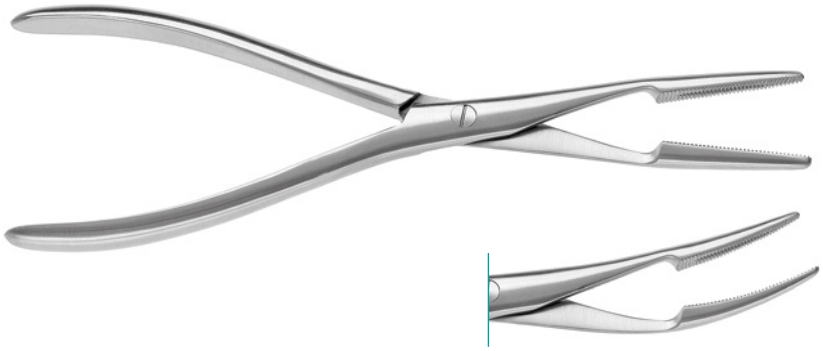
Bone Holding Forceps

200mm, 8"	210-657-200



FROSCH
Bone Holding Forceps

180mm, 7"	210-726-180



Sequestrum Forceps, 200mm, 8"

Straight	210-610-200
Curved	210-611-200



VAN BUREN
Sequestrum Forceps, curved

230mm, 9"	210-615-230



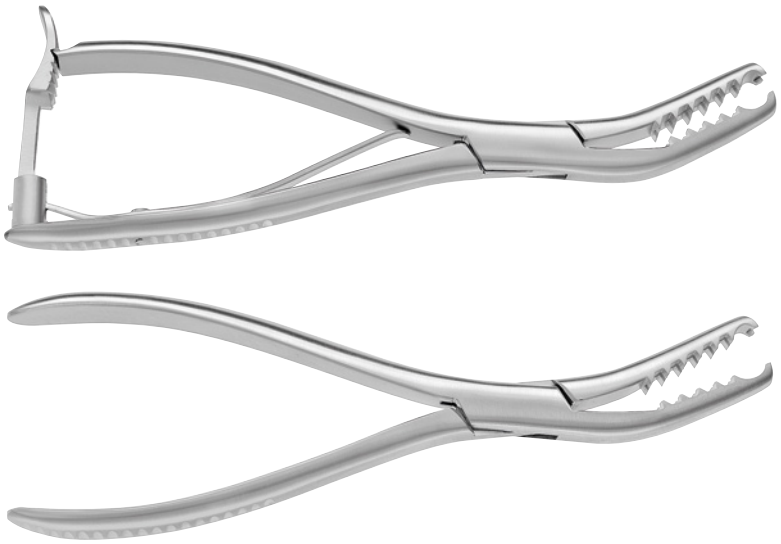
LANGENBECK
Bone Holding Forceps, 11mm wide

210mm, 8 1/4"	210-722-210



FERGUSSON
Bone Holding Forceps, 12mm wide

210mm, 8 1/4"	210-724-210



SEMB
Bone Holding Forceps, laterally curved
with ratchet

190mm, 7 1/2"	210-624-190

without ratchet

190mm, 7 1/2"	210-623-190



FARABEUF
Bone Holding Forceps

230mm, 9"	210-630-230
260mm, 10 1/4"	210-630-260



FARABEUF LAMBOTTE
Bone Holding Forceps, with ratchet

260mm, 10 1/4"	210-634-260

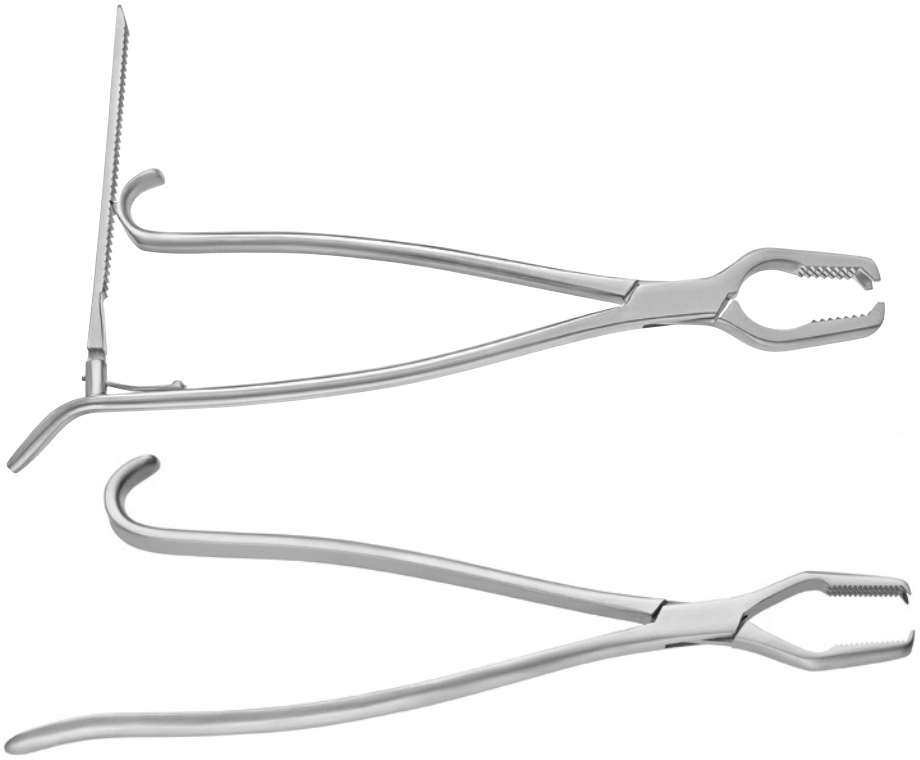


KERN
Bone Holding Forceps, with ratchet

170mm, $6^{2/3}$"	210-621-170
240mm, $9^{1/2}$"	210-621-210

without ratchet

170mm, $6^{2/3}$"	210-620-170
240mm, $9^{1/2}$"	210-620-210

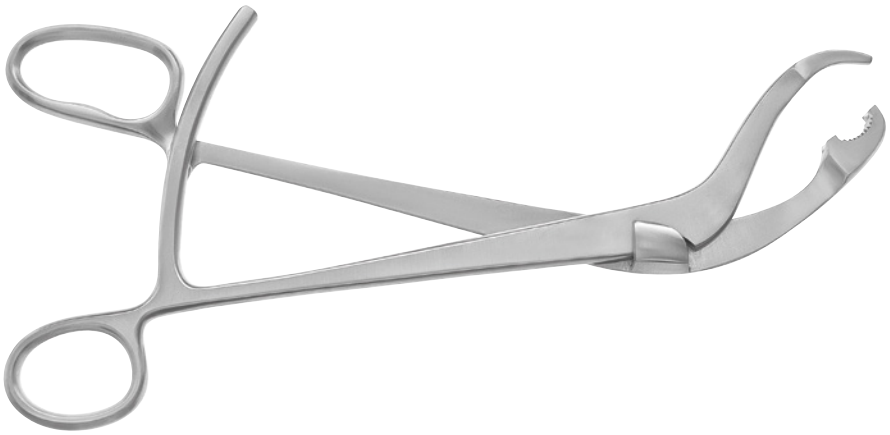


LANE
Bone Holding Forceps, with ratchet

330mm, 13"	210-612-330
450mm, $17^{3/4}$"	210-612-450

without ratchet

330mm, 13"	210-610-330
450mm, $17^{3/4}$"	210-610-450



VERBRUGGE
Bone Holding Forceps

175mm, $6^{7/8}$"	210-605-170
250mm, $9^{7/8}$"	210-605-250
260mm, $10^{1/4}$"	210-605-260
270mm, $10^{2/3}$"	210-605-270



Bone Holding Forceps, self-centering

150mm, 6"	210-603-150
190mm, $7^{1/2}$"	210-603-190
240mm, $9^{1/2}$"	210-603-240
260mm, $10^{1/4}$"	210-603-260
280mm, 11"	210-603-280



LAMBOTTE
Bone Holding Forceps, movable jaw

220mm, $8^{2/3}$", 10mm jaw width	210-640-220
260mm, $10^{1/4}$" 13mm jaw width	210-640-270
330mm, $11^{7/8}$" 16mm jaw width	210-640-300



HEY GROVE
Bone Holding Forceps

210mm, $8^{1/4}$"	210-600-230
245mm, $9^{2/3}$"	210-600-250
270mm, $10^{2/3}$"	210-600-270
300mm, $11^{7/8}$"	210-600-300



ULRICH
Bone Holding Forceps, straight

190mm, $7^{1/2}$" Fig. 0	210-602-190
230mm, 9" Fig. 1	210-602-230
250mm, $9^{7/8}$" Fig. 2	210-602-250
280mm, 11" Fig. 3	210-602-280



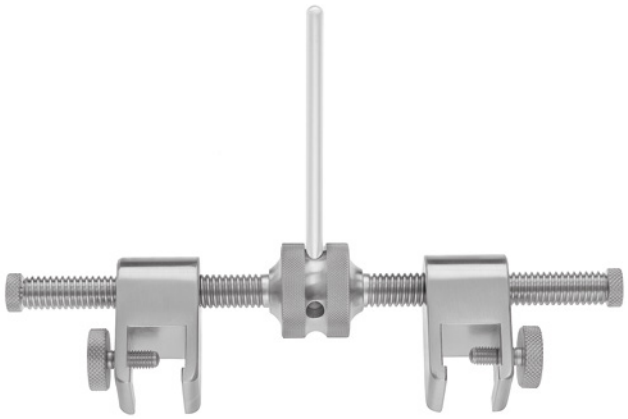
ULRICH
Bone Holding Forceps, laterraly angled

190mm, $7^{1/2}$" Fig. 0	210-601-190
230mm, 9" Fig.1	210-601-230
250mm, $9^{7/8}$" Fig. 2	210-601-250
280mm, 11" Fig. 3	210-601-280



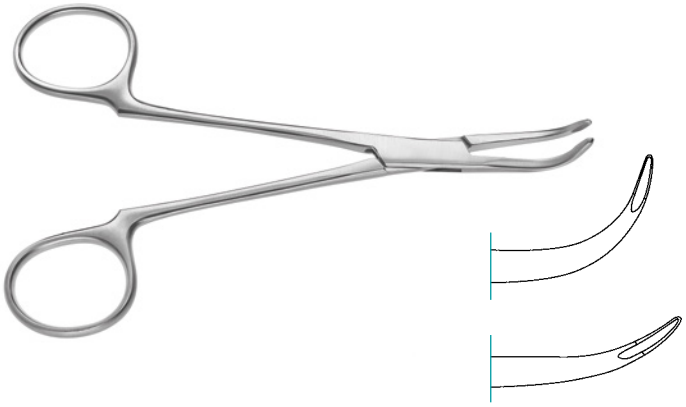
LOWMAN
Bone Holding Clamp, 1x2 teeth

130mm, $5^{1/8}$"	210-980-130
185mm, $7^{1/4}$"	210-980-185
200mm, 8"	210-980-200
220mm, $8^{2/3}$"	210-980-220



GERSTER
Traction Bar, max. ∅ 25mm

160mm, $6^{1/4}$"	210-981-150



Synovectomy Rongeur, 1.2mm wide jaw
130mm, 5 1/8"

Strongly curved	210-773-130
Slightly curved	210-774-130

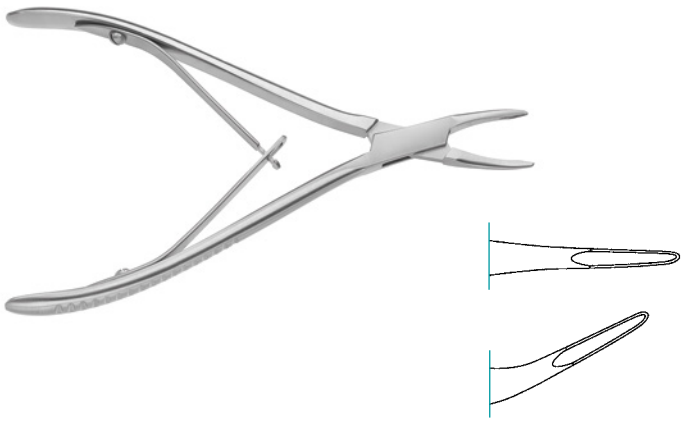
2.0mm wide jaw

Strongly curved	210-775-130
Slightly curved	210-776-130



FRIEDMANN
Bone Rongeur, 90°, curved

140mm, 5 1/2"	210-642-120



MINI FRIEDMANN
Bone Rongeur, 1.1mm delicate jaw
140mm, 5 1/2"

Straight	210-640-150
Curved	210-641-150

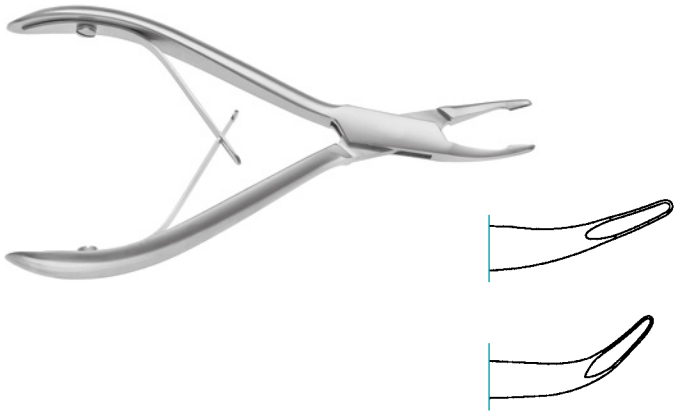
2mm

curved	210-643-150



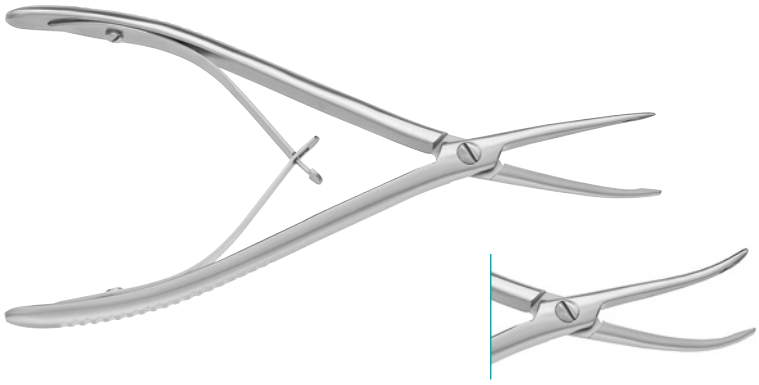
FRIEDMANN
Bone Rongeur, 140mm, 5 1/2"

Curved	210-640-140



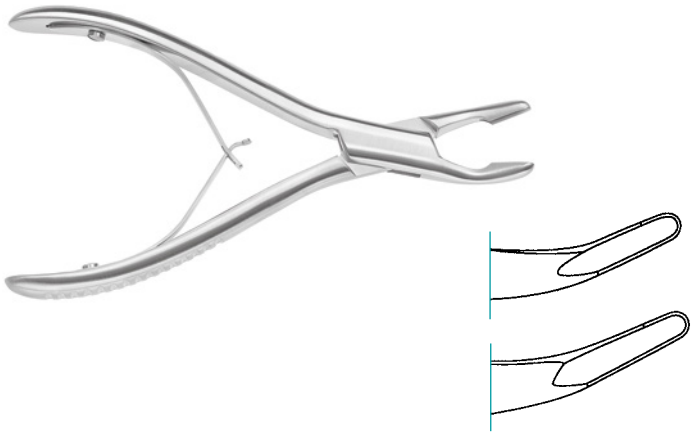
KLEINERT KUTZ
Bone Rongeur, 2mm jaw, 140mm, 5 1/2"

Slightly curved	210-642-140
Strongly curved	210-643-140



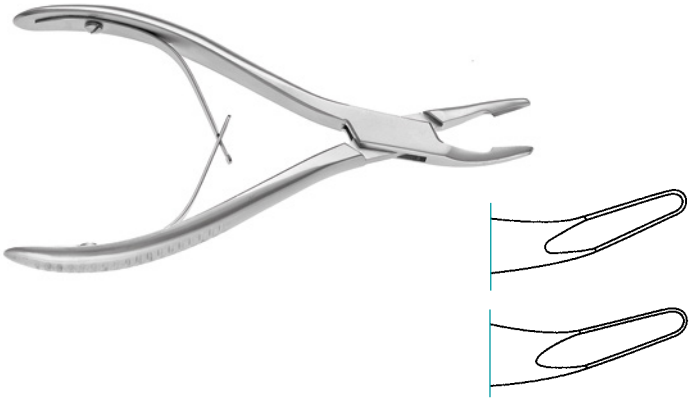
STELLBRINK
Synovectomy Rongeur, 2mm jaw, 170mm, 6 2/3"

Slightly curved	210-777-001
Strongly curved	210-777-002



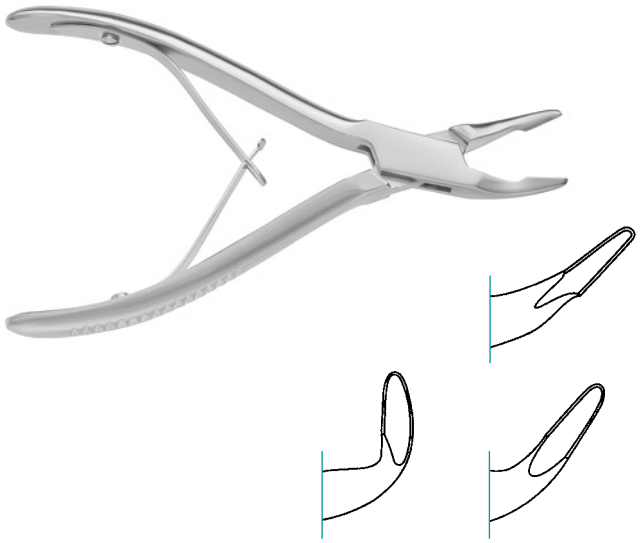
MEAD CLEVELAND
Bone Rongeur

#4 (Mead) 140mm, $5^{1/2}$"	210-805-140
#4A (Cleveland) 170mm, $6^{2/3}$"	210-805-170



MEAD
Bone Rongeur

#1, 140mm, $5^{1/2}$"	210-815-140
#1A, 170mm, $6^{2/3}$"	210-815-165



BLUMENTHAL
Bone Rongeur, 155mm, $6^{1/8}$"

30°	210-691-150
45°	210-693-150
90°	210-695-150



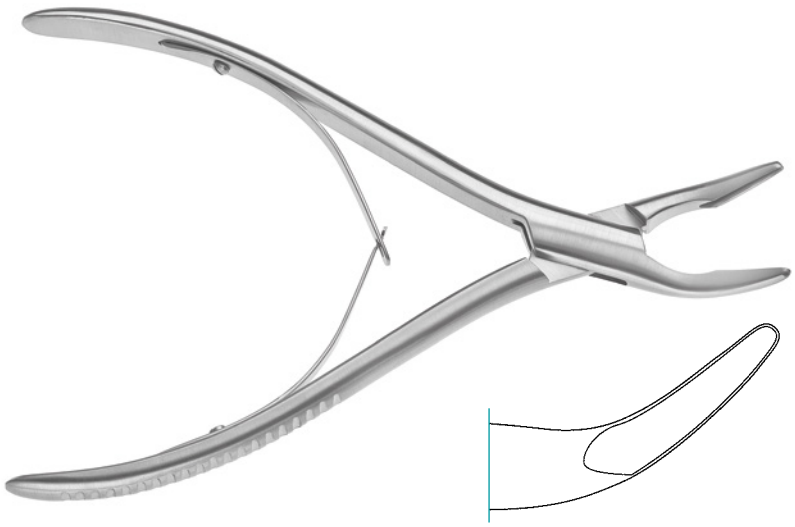
HARTMANN
Bone Rongeur

160mm, 6 1/4"	210-819-180



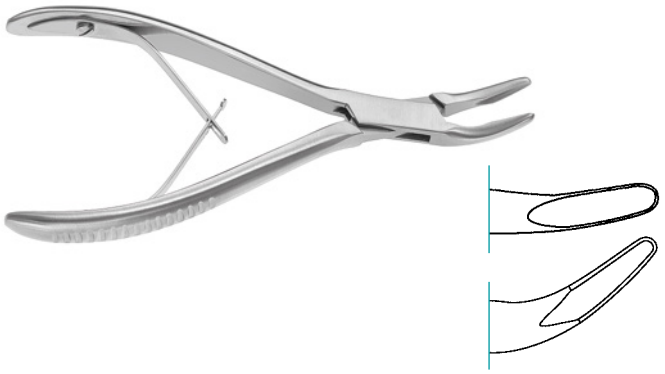
BANE
Bone Rongeur

180mm, 7"	210-787-180



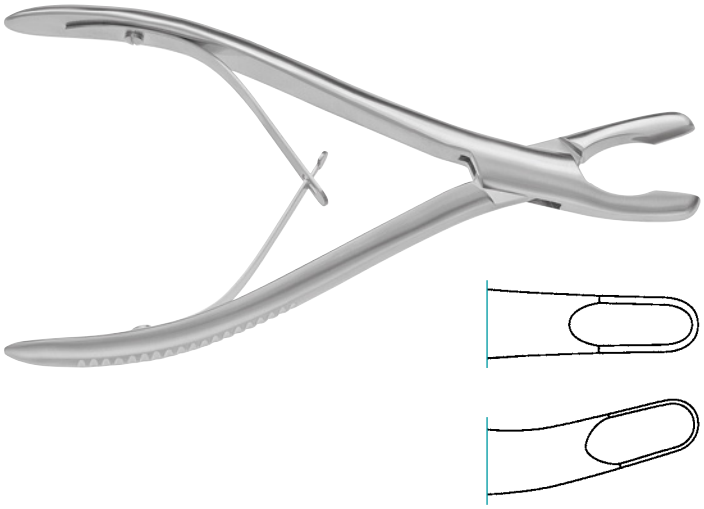
OLIVECRONA
Bone Rongeur

200mm, 8"	210-470-205



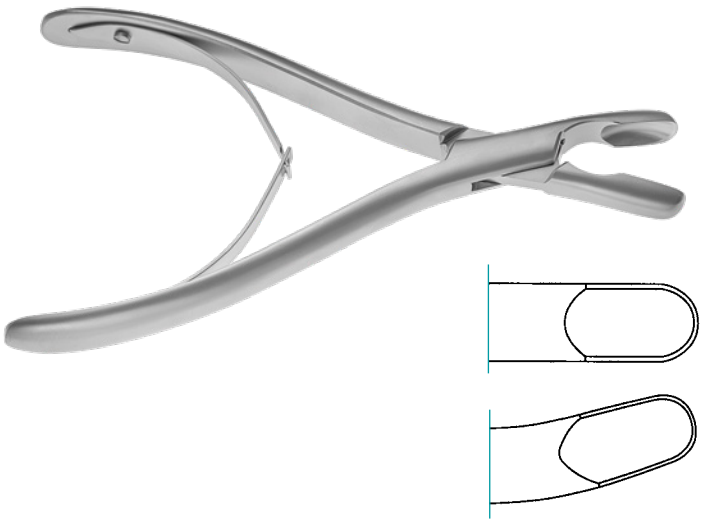
LUER
Bone Rongeur, 140mm, 5 1/2"

Slightly curved	210-685-150
Strongly curved	210-687-150



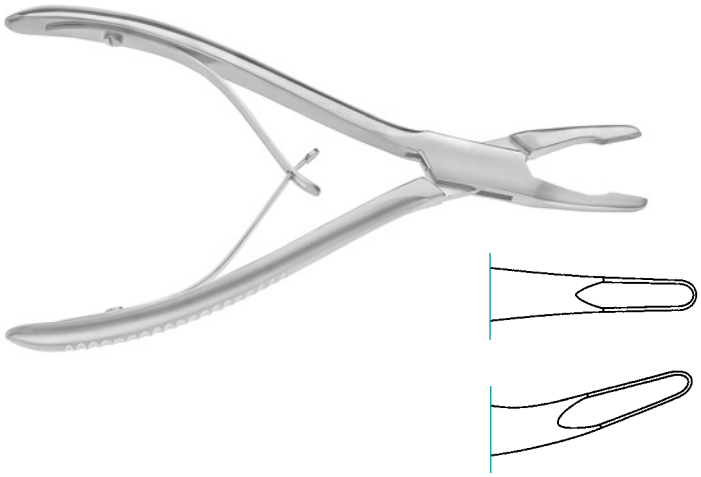
LUER
Bone Rongeur, 170mm, 6 2/3"

Straight	210-846-170
Curved	210-847-170



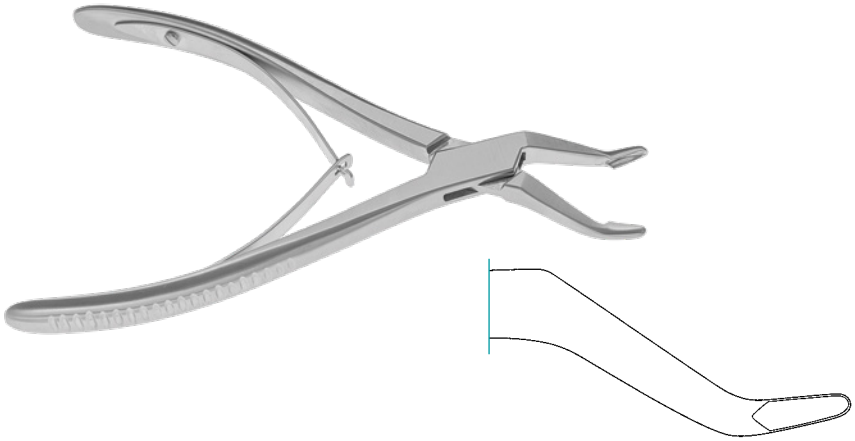
LUER
Bone Rongeur, 180mm, 7"

Straight	210-862-180
Curved	210-863-180



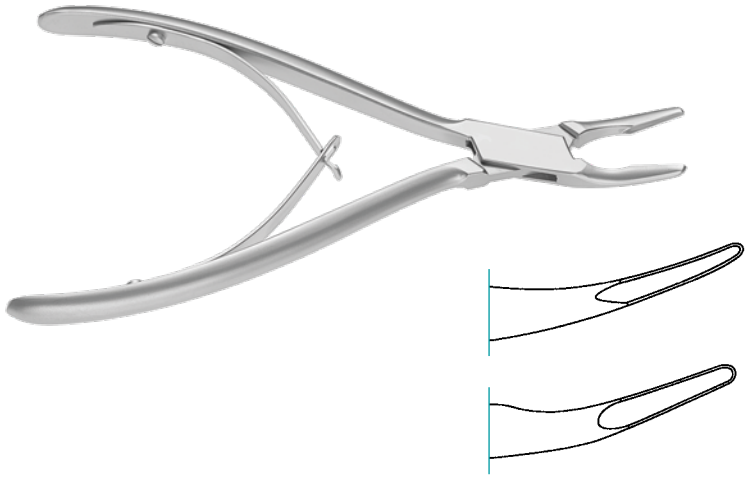
JANSEN
Bone Rongeur, 170mm, $6^{2/3}$"

Straight	210-826-180
Curved	210-829-180



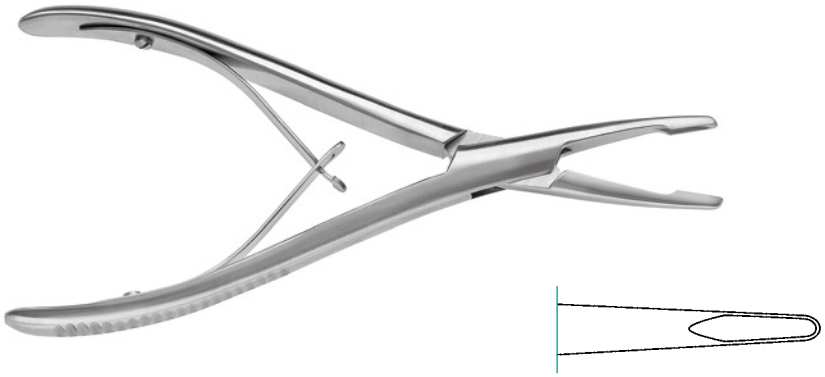
JANSEN
Bone Rongeur, s-shaped

170mm, $6^{2/3}$"	210-829-170



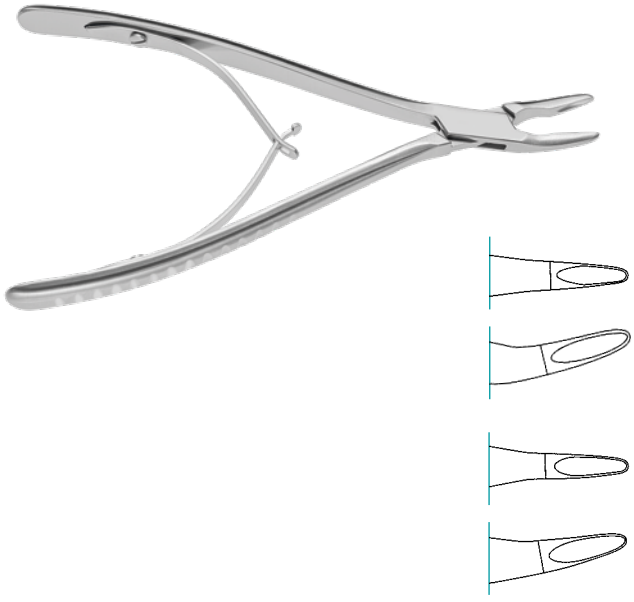
BEYER
Bone Rongeur, 3x16mm, 180mm, 7"

Curved	210-830-180
Strongly Curved	210-831-180



DEFOUR MENTEL
Bone Rongeur, 3mm jaw

190mm, 7 1/2"	210-772-190



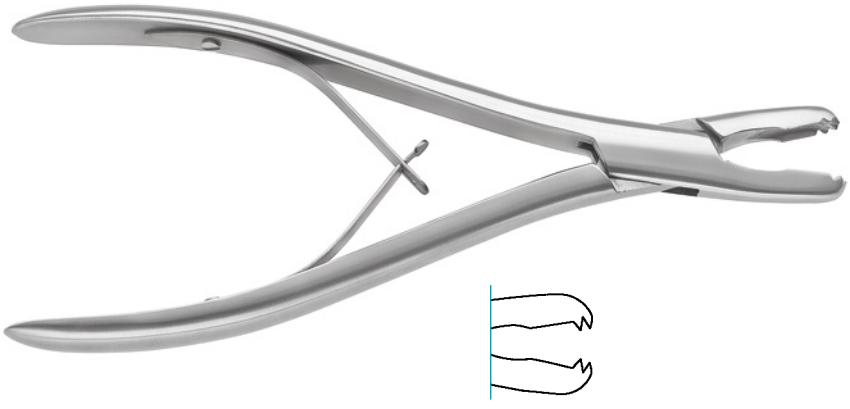
LEMPERT
Bone Rongeur,
160mm, 6 1/4"

straight	210-770-160
curved	210-771-160
180mm, 7"	
straight	210-832-185
curved	210-833-185



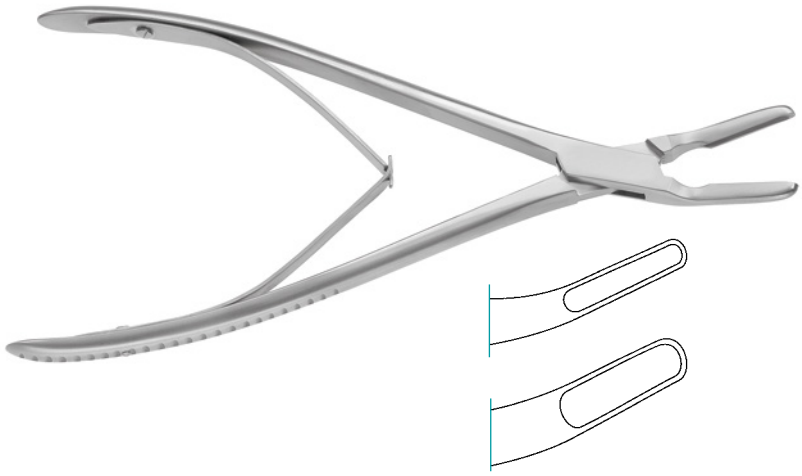
PENNYBACKER
Bone Rongeur, 4mm jaw

200mm, 8"	210-794-200



Bone Rongeur, Rat toothed, 3x3 teeth

210, $8^{1/4}$"	210-781-210

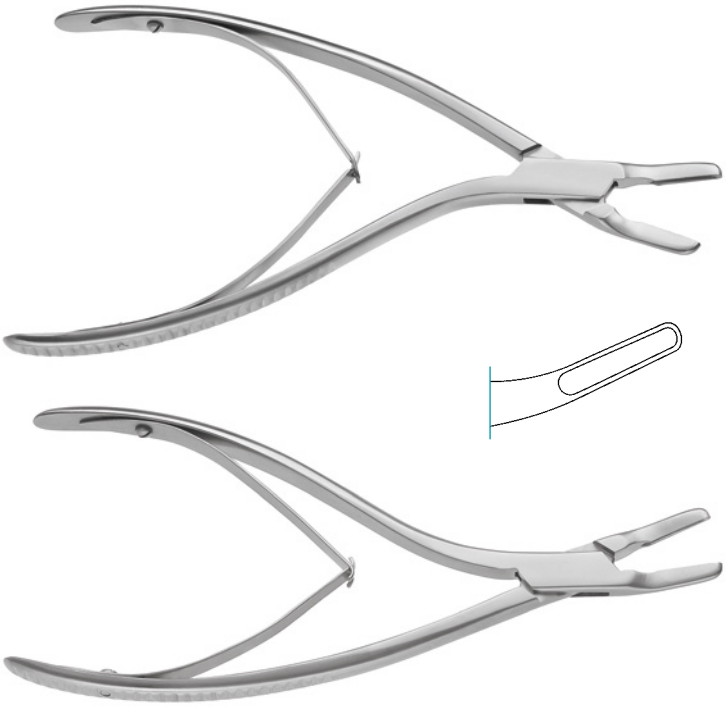


ZIELKE
Bone Rongeur, 210mm, 8 1/4"

3mm jaw	210-730-003
5mm jaw	210-730-005

250mm, 9 7/8"

3mm jaw	210-731-003
5mm jaw	210-731-005

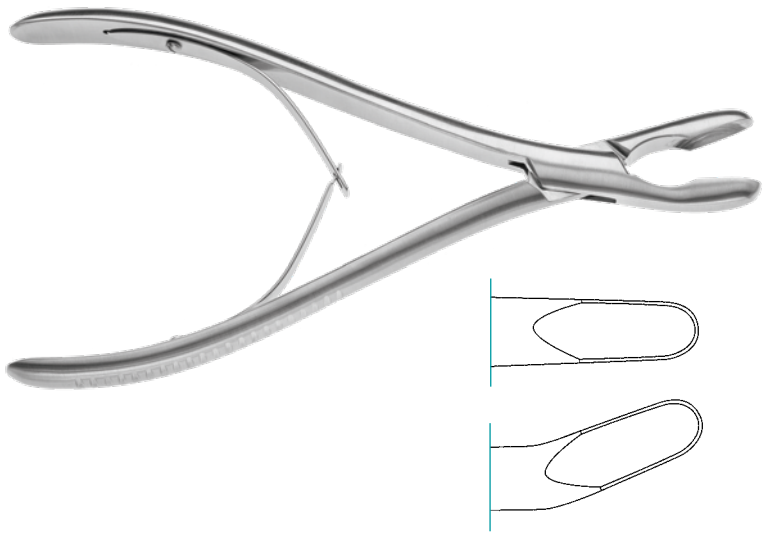


ZIELKE
Bone Rongeur, 3mm jaw, shanks curved right

190mm, 7 1/2"	210-732-002

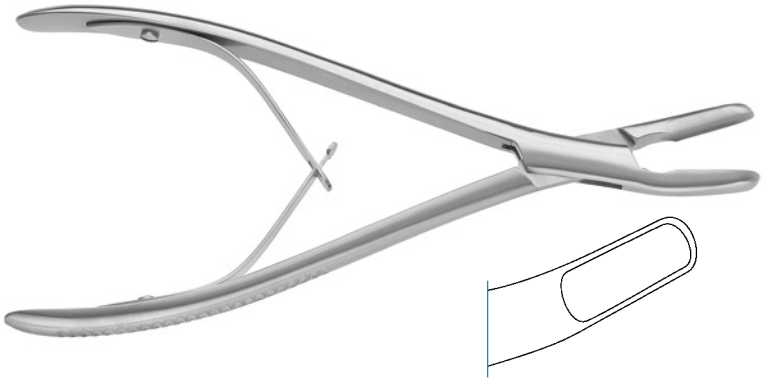
shanks curved left

190mm, 7 1/2"	210-733-003



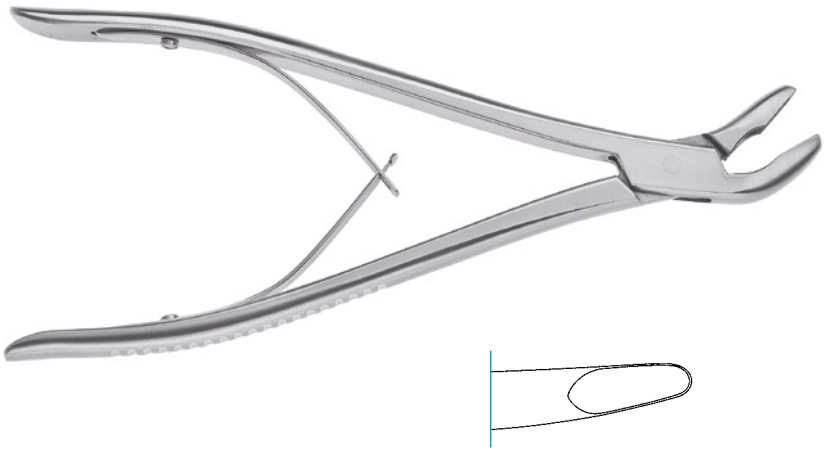
ADSON
Bone Rongeur, 200mm, 8"

Straight	210-845-200
Curved	210-846-200



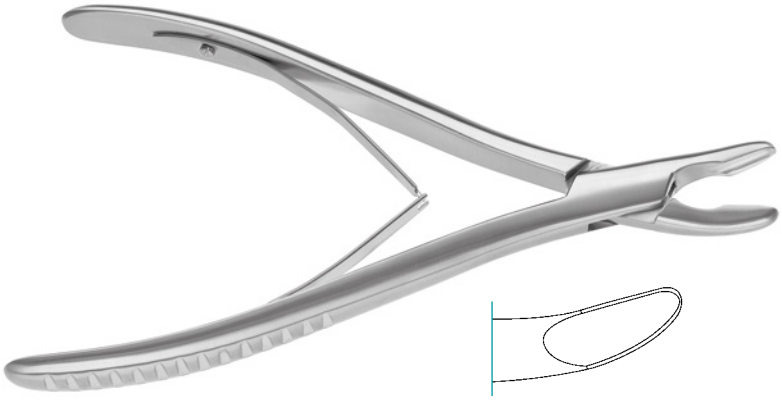
MATZEN
Intervertebral Bone Rongeur, 8mm jaw

200mm, 8"	210-732-200



BACON
Bone Rongeur, angled jaw

200mm, 8"	210-795-195



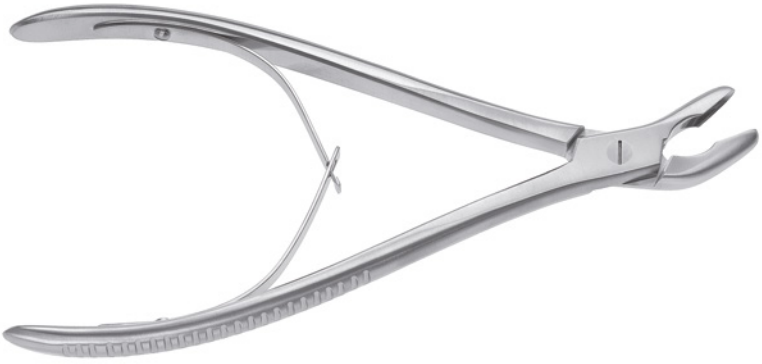
GULEKE
Bone Rongeur, curved

205mm, 8 1/8"	210-847-205



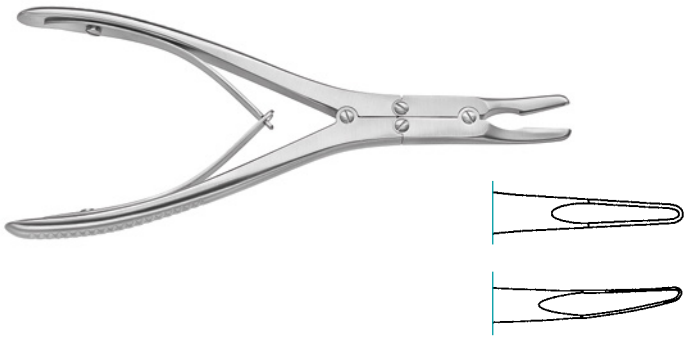
HAKANSSON
Bone Rongeur, curved laterally

160mm, 6 1/4"	210-825-160



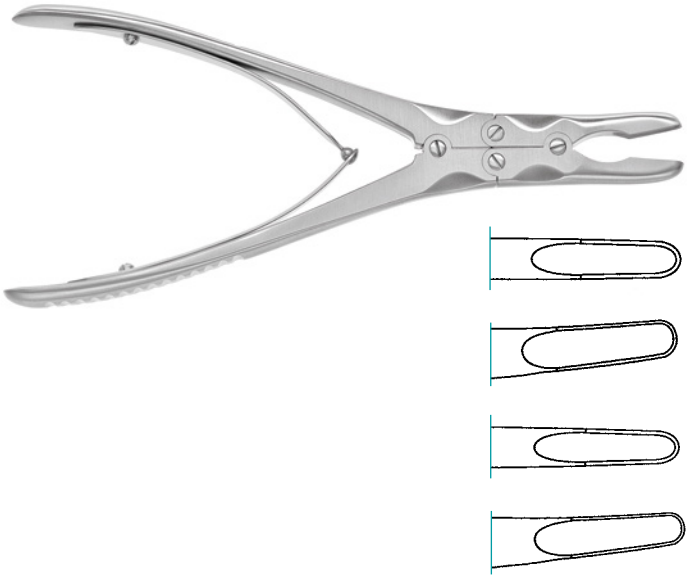
TROTTER
Bone Rongeur, angled laterally

200mm, 8"	210-839-200



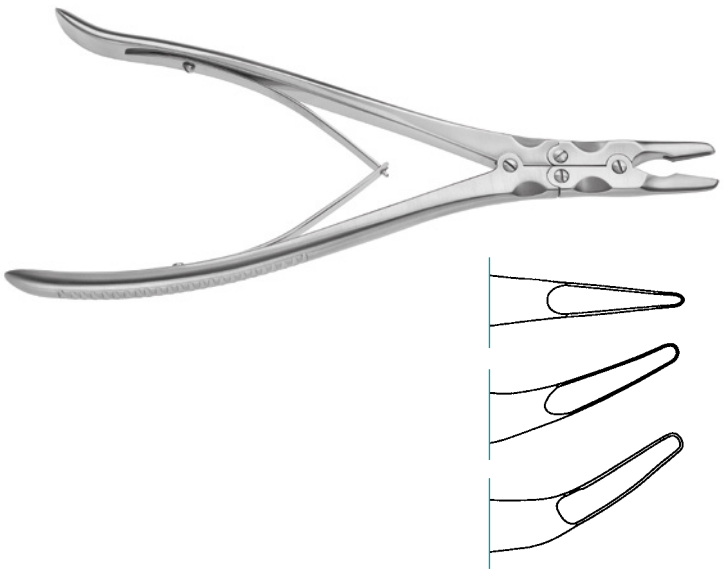
MINI RUSKIN
Bone Rongeur, 2mm, 150mm, 6"

Straight	210-802-150
Curved	210-812-150



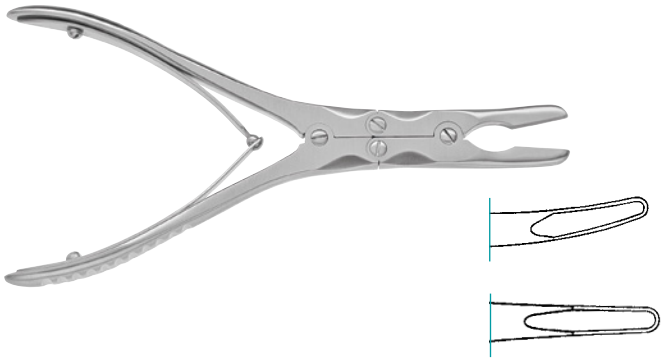
RUSKIN
Bone Rongeur, 5mm, 180mm, 7"

Straight	210-800-180
Curved	210-801-180
4mm	
Straight	210-802-180
Curved	210-803-180



SMITH PETERSEN
Bone Rongeur, 3mm jaw, 190mm, $7^{1/2}$"

Straight	210-832-190
Slightly Curved	210-834-190
Strongly Curved	210-836-190
4mm jaw	
Straight	210-832-194
Slightly Curved	210-834-194
Strongly Curved	210-836-194

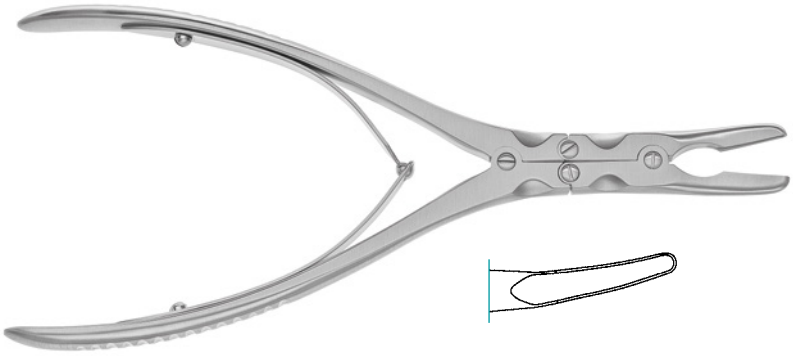


BOEHLER
Bone Rongeur, curved, 150mm, 6"

3mm jaw	210-789-150

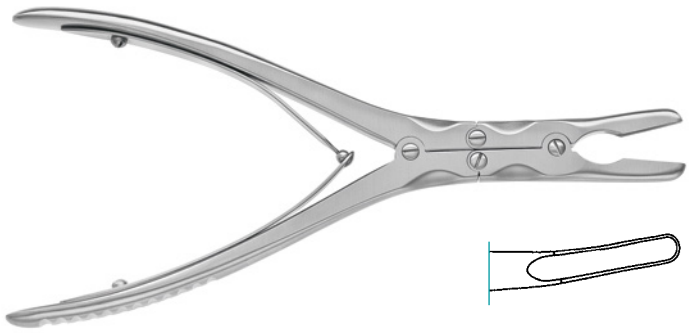
straight

3mm jaw	210-788-150



MARQUARDT
Bone Rongeur, curved, 3mm

200mm, 8"	210-780-200



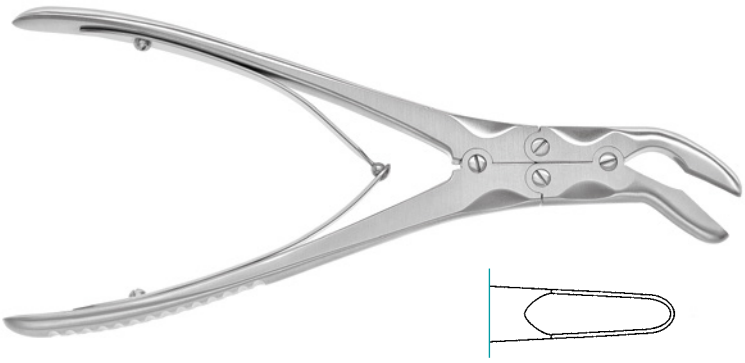
BEYER
Bone Rongeur, curved,
180mm, 7"

3mm	210-789-180
4mm	210-790-180



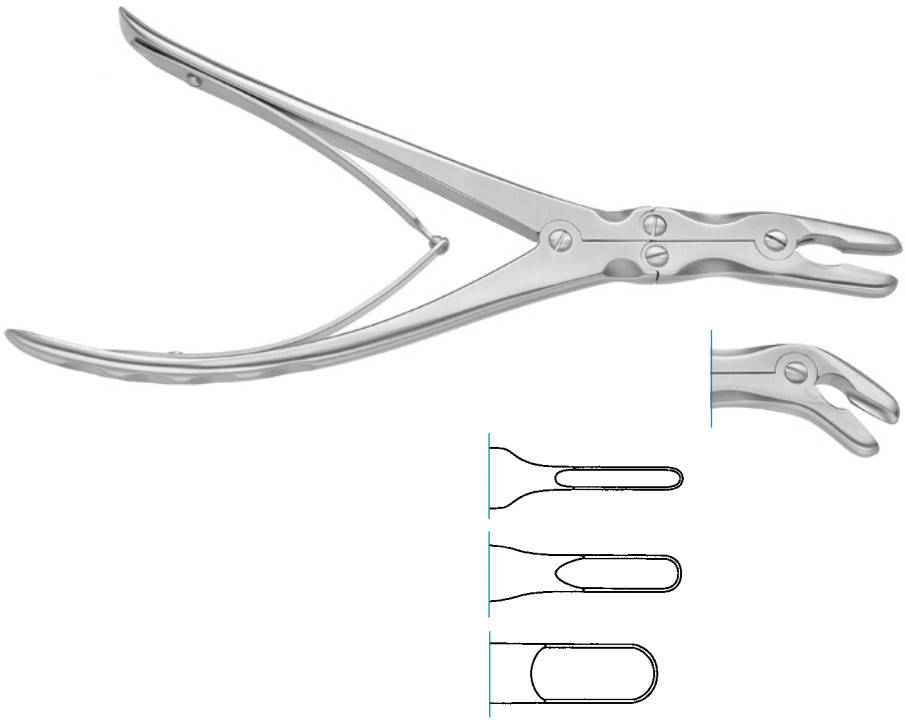
ZAUFAL JANSEN
Bone Rongeur, curved, 5mm jaw

180mm, 7"	210-791-180



RUSKIN
Bone Rongeur, angled laterally

180mm, 7"	210-805-180

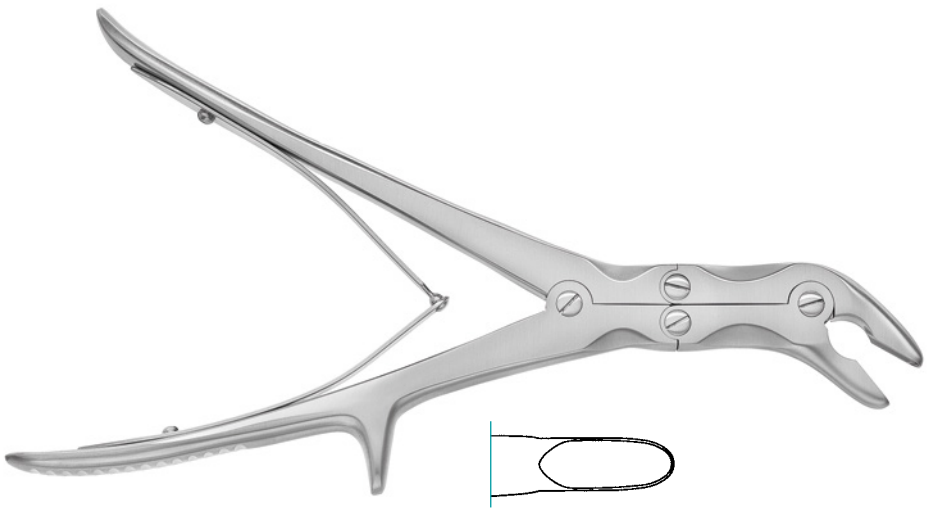


LEKSELL STILLE
Bone Rongeur, curved laterally, 240mm, 9 1/2"

3mm	210-843-240
5mm	210-851-240
8mm	210-850-240

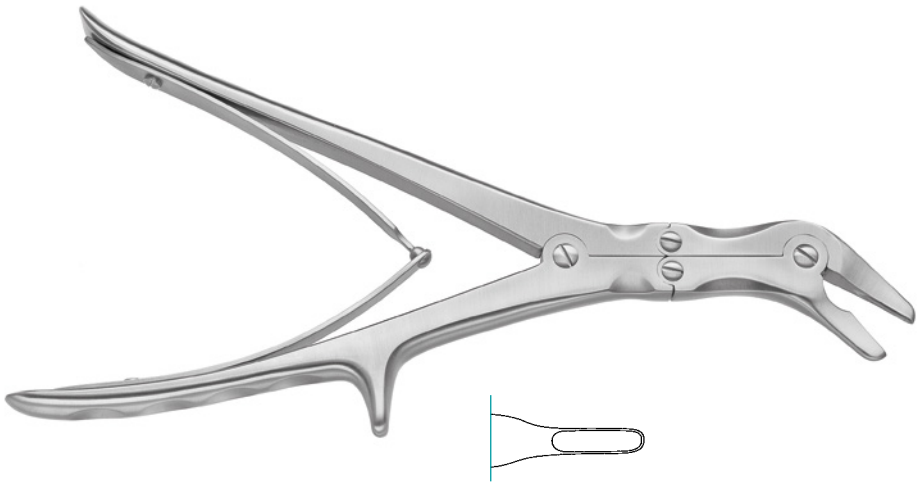
curved strongly laterally

5mm	210-852-240
8mm	210-858-240



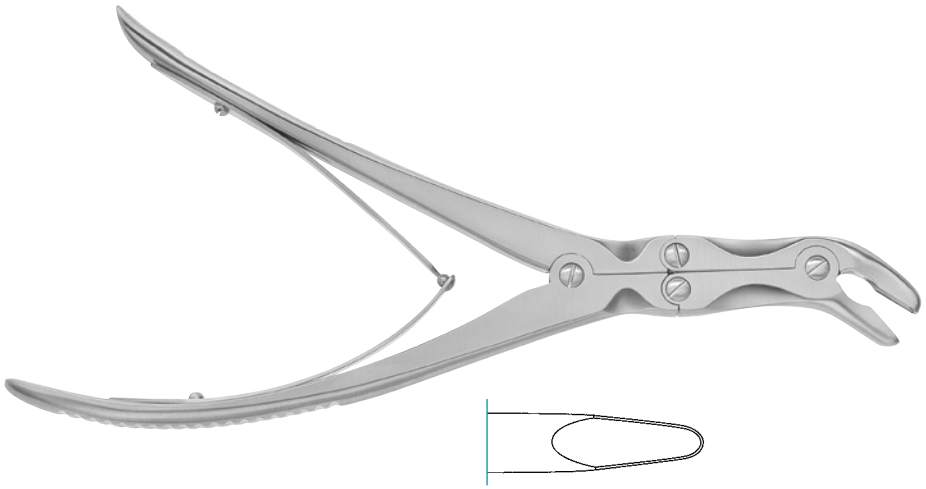
STILLE
Bone Rongeur, sidewards curved, 230mm, 9"

6mm	210-907-230
8mm	210-908-230



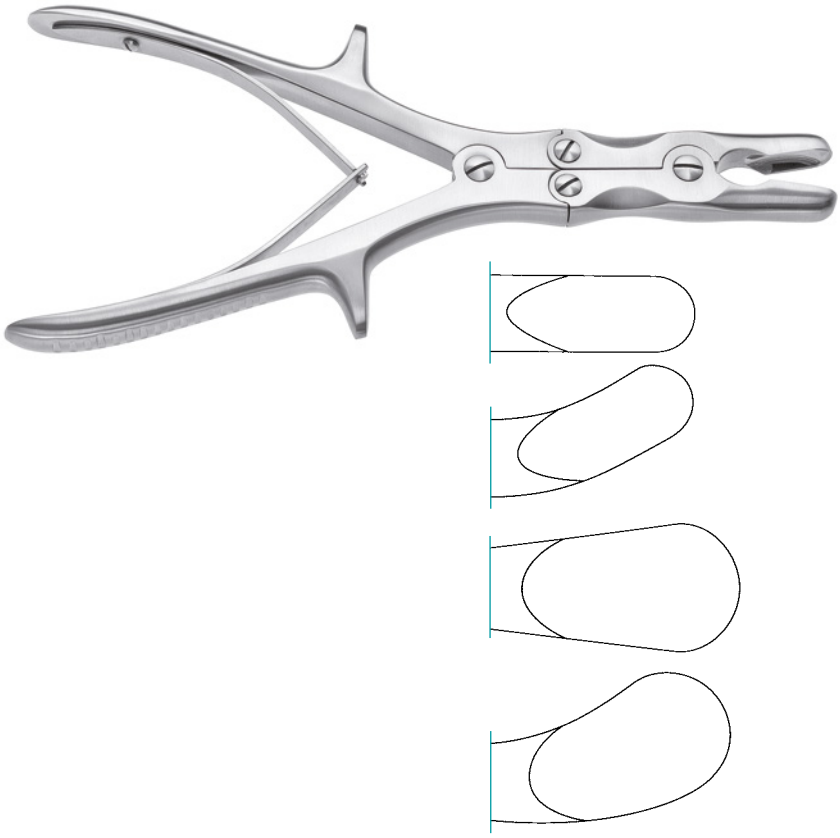
ECHLIN
Bone Rongeur, 230mm, 9"

2x10mm	210-798-230
3x10mm	210-799-230
4x10mm	210-797-230



FRYKHOLM
Bone Rongeur, s-curved, 5mm jaw

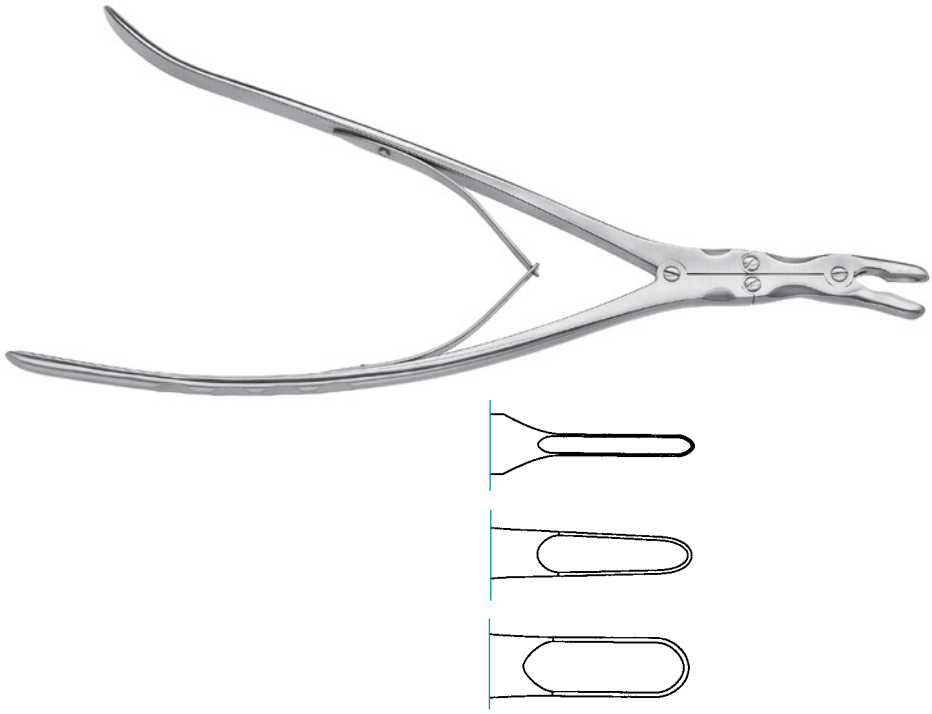
240mm, 9 1/2"	210-855-240



STILLE LUER

Bone Rongeur, straight, 220mm, 8 2/3"

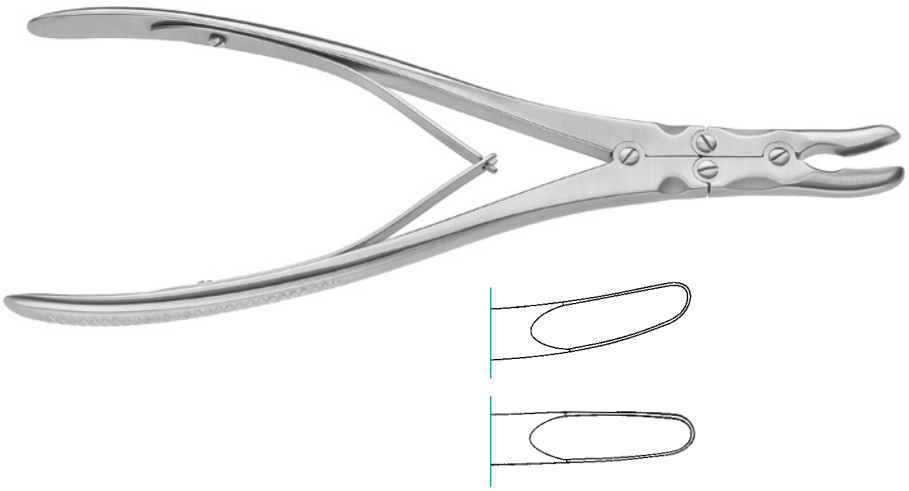
10mm	210-907-220
17mm	210-910-220
curved	
10mm	210-911-220
17mm	210-909-220
straight, 270mm, 10 2/3"	
17mm	210-910-260
curved	
17mm	210-911-260

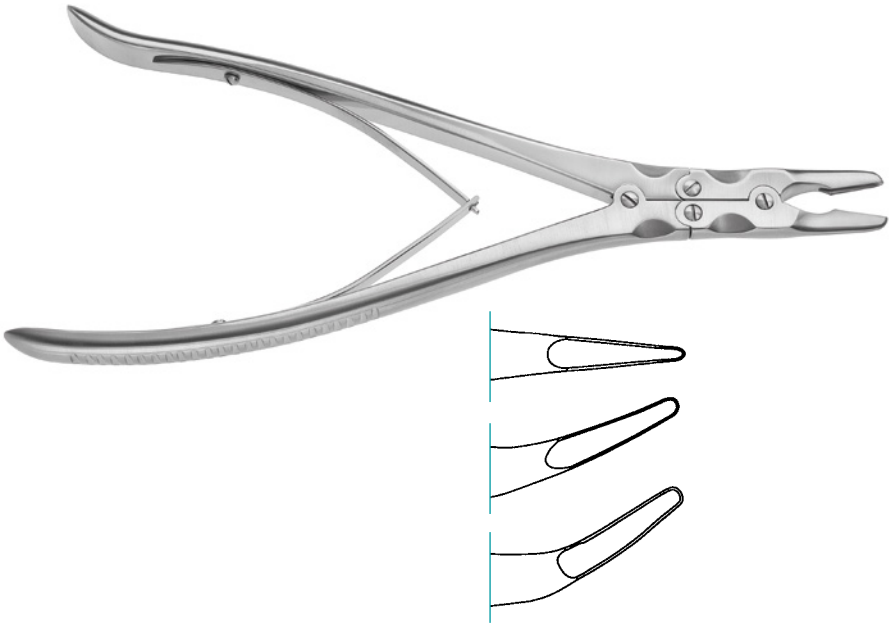


DALE LEKSELL

Bone Rongeur, XL Handle

3mm	210-843-360
5mm	210-845-360
8mm	210-848-360







ROETTGEN RUSKIN
Bone Rongeur, 240mm, 9 1/2"

5mm, curved	210-792-230
5mm, straight	210-793-230
6mm, curved	210-796-230

SMITH PETERSEN
Bone Rongeur, 3mm jaw, 240mm, 9 1/2"

Straight	210-832-240
Slightly Curved	210-834-240
Strongly Curved	210-836-240
4mm jaw	
Straight	210-832-244
Slightly Curved	210-834-244
Strongly Curved	210-836-244

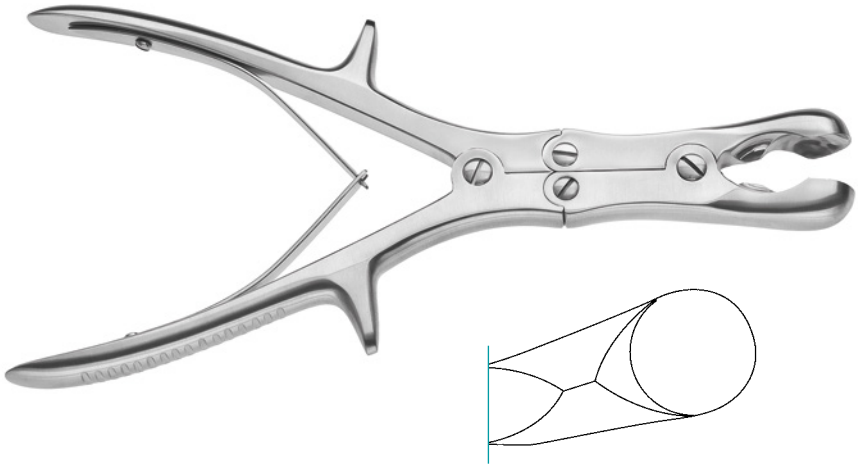
STILLE RUSKIN
Bone Rongeur, 6mm jaw, 230mm, 9"

Straight	210-898-230
Curved	210-899-230
8mm jaw	
Straight	210-900-230
Curved	210-901-230



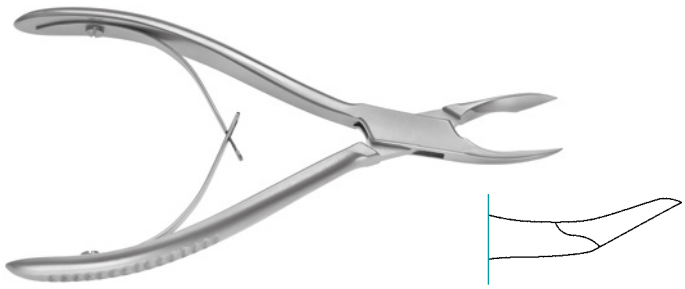
SYPERT
Bone Rongeur, straight, 350mm, 14"

3mm	210-813-350
5mm	210-815-350
8mm	210-818-350
curved	
3mm	210-803-350
5mm	210-805-350
8mm	210-808-350



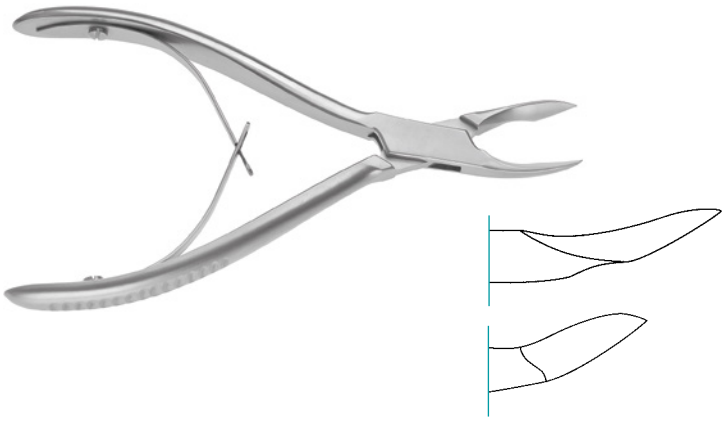
SEMB
Bone Rongeur, curved

225mm, $8^{7/8}$"	210-905-225



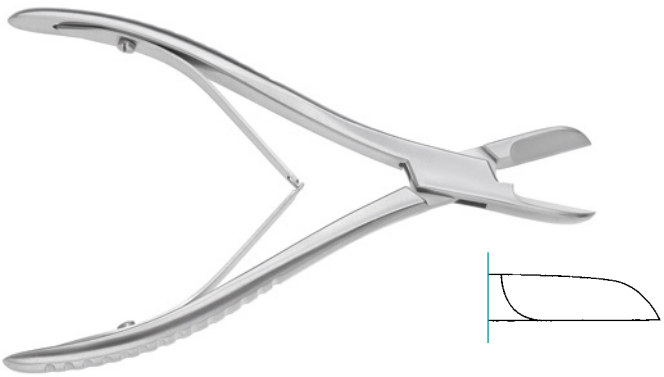
NIRO
Bone Cutting Forceps, angled

140mm, 5 1/2"	210-845-130



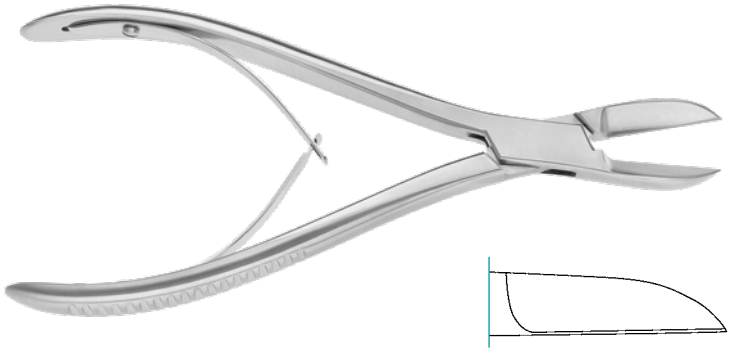
CLEVELAND
Bone Cutting Forceps, angled on flat

145mm, 5 3/4"	210-845-145
170mm, 6 2/3"	210-845-170



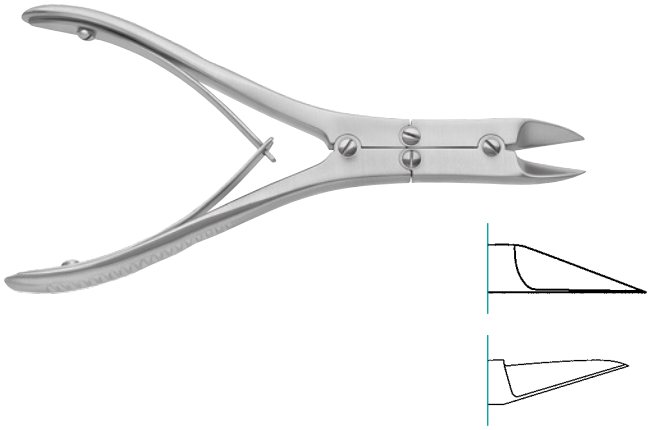
LITTAUER
Bone Cutting Forceps with spring

150mm, 6"	210-397-150



COTTLE KAZANJIAN
Bone Cutting Forceps, straight

180mm, 7"	210-845-185

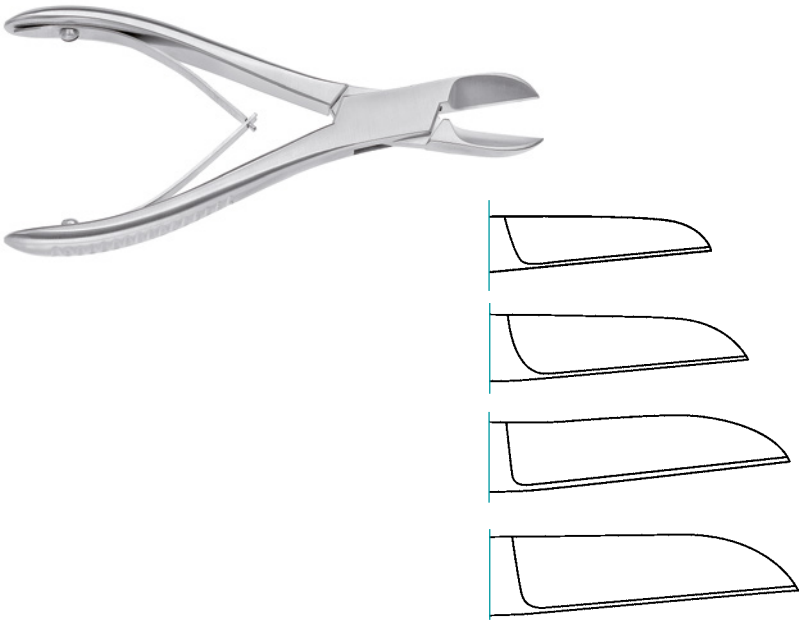


BOEHLER
Bone Cutting Forceps, double action, straight

150mm, 6"	210-892-150

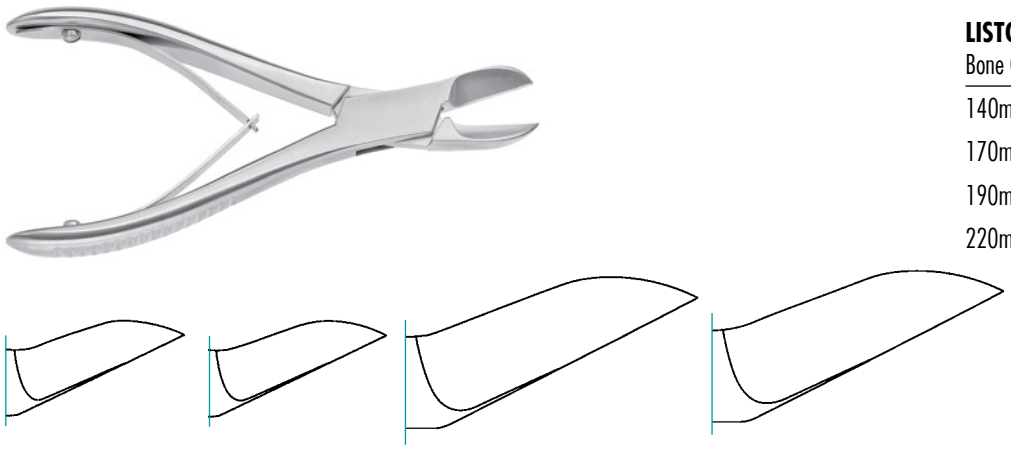
curved on flat

150mm, 6"	210-890-150



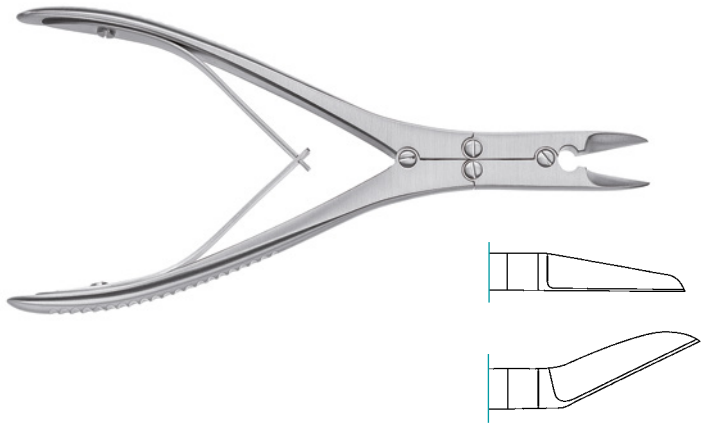
LISTON
Bone Cutting Forceps, straight

140mm, $5^{1/2}$"	210-934-140
170mm, $6^{2/3}$"	210-934-170
190mm, $7^{1/2}$"	210-934-190
220mm, $8^{2/3}$"	210-934-220



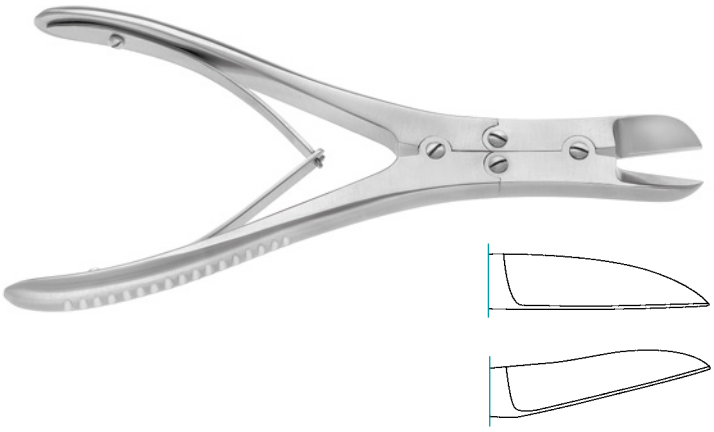
LISTON
Bone Cutting Forceps, angled

140mm, 5 1/2"	210-935-140
170mm, 6 2/3"	210-935-170
190mm, 7 1/2"	210-935-190
220mm, 8 2/3"	210-935-220



RUSKIN LISTON
Bone Cutting Forceps, double action,
170mm, 6 2/3"

Straight	210-844-170
Angled	210-843-170



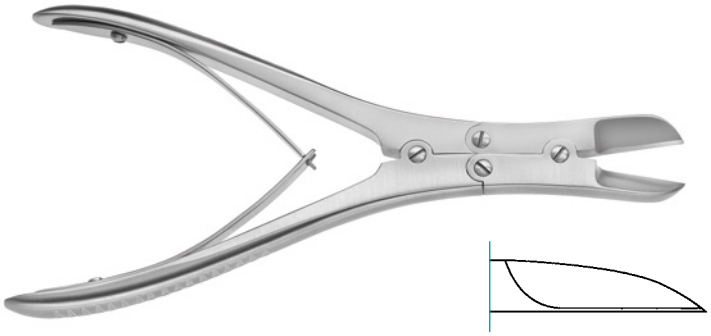
RUSKIN LISTON
Bone Cutting Forceps, double action,
185mm, 7 1/4"

Straight	210-900-185
Angled	210-901-185



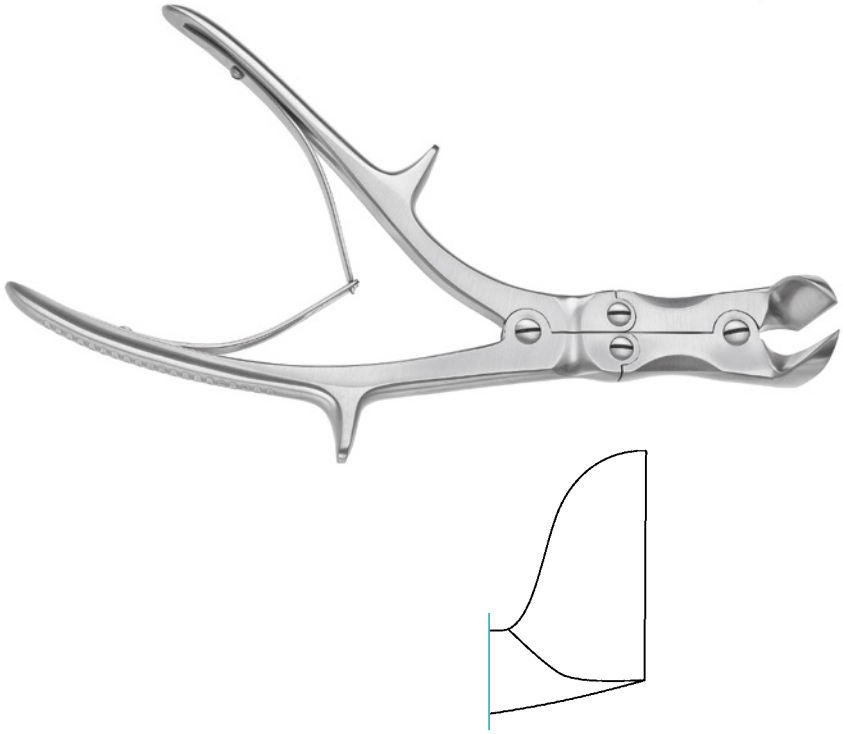
MCINDOE
Bone Cutting Forceps, double action

175mm, 6 7/8"	210-880-175



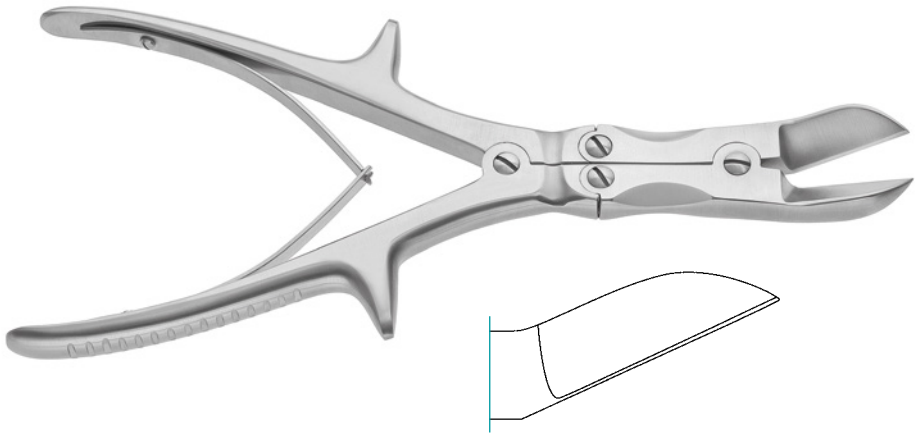
RUSKIN ROWLAND
Bone Cutting Forceps, double action, straight

180mm, 7"	210-855-180



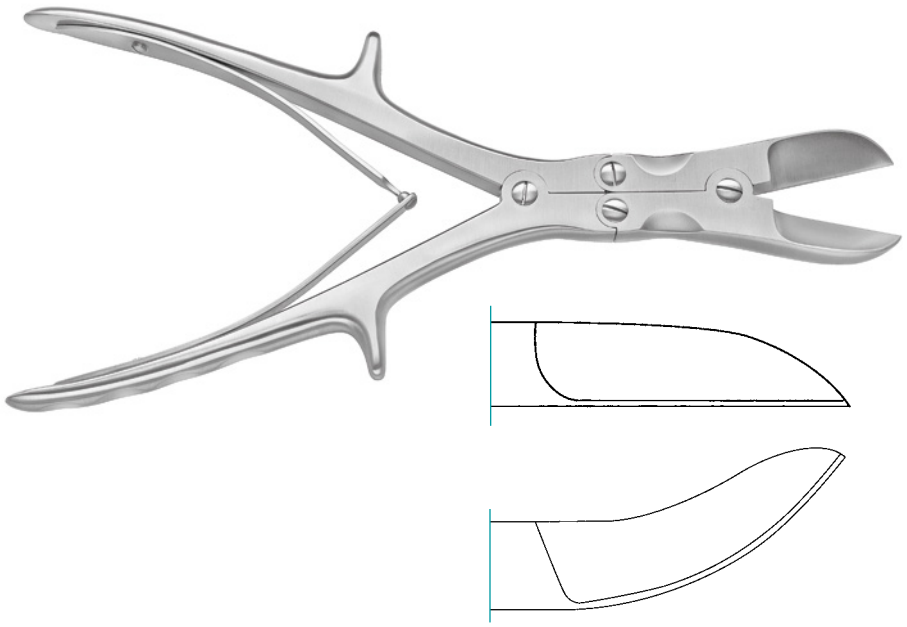
SEMB
Bone Cutting Forceps, double action, shanks lateral angled

245mm, $9^{2/3}$"	210-911-245



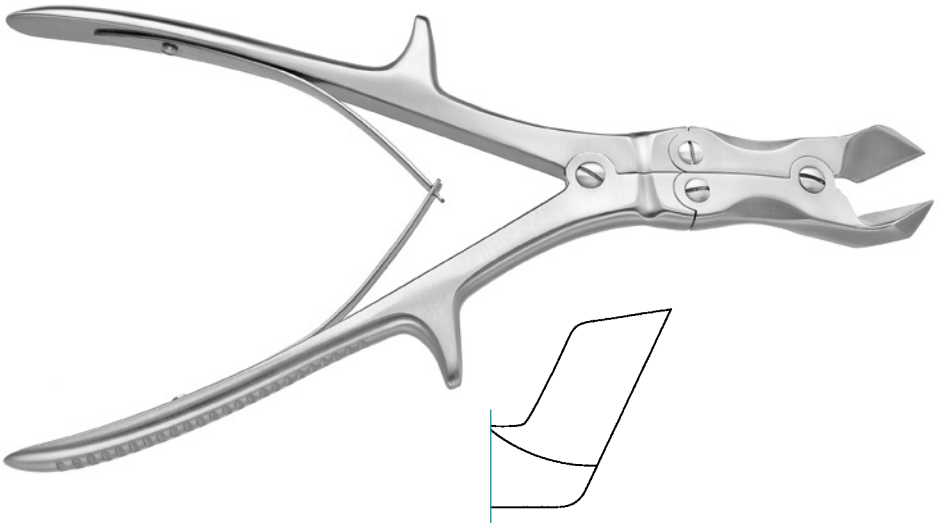
LISTON
Bone Cutting Forceps, double action, angled

240mm, $9^{1/2}$"	210-905-240



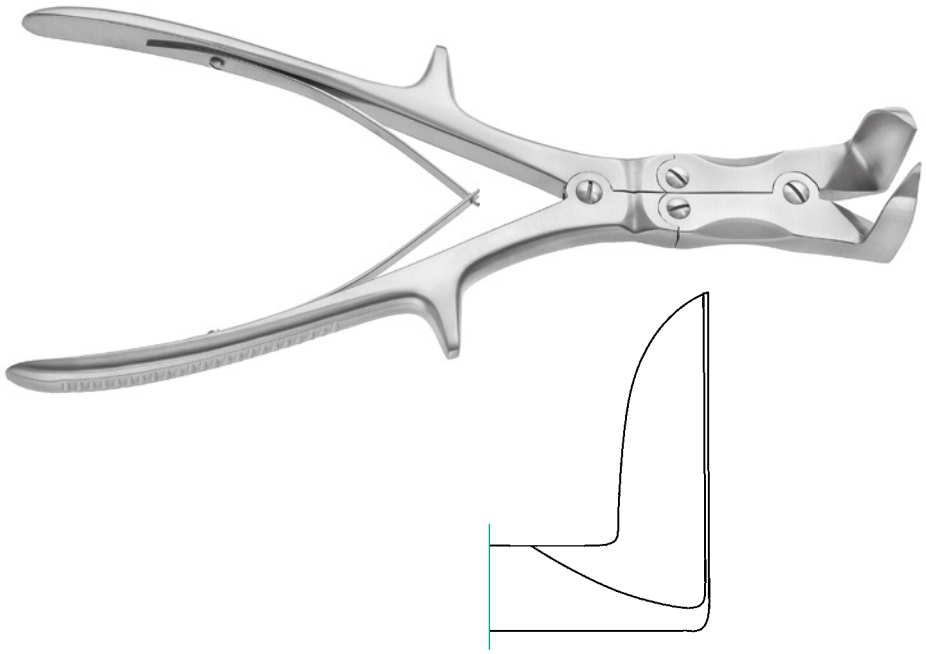
STILLE LISTON
Bone Cutting Forceps, double action
270mm, 10 2/3"

Straight	210-904-270
Angled	210-902-270



LISTON KEY HORSLEY
Bone Cutting Forceps, double action, s-shaped

255mm, 10"	210-910-255



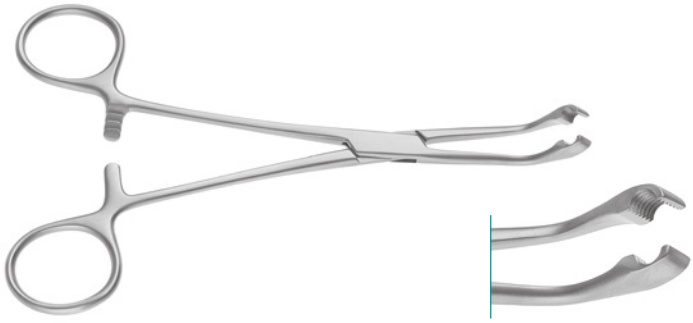
STILLE LISTON
Bone Cutting Forceps, double action, 90° angled

270mm, 10 2/3"	210-908-270



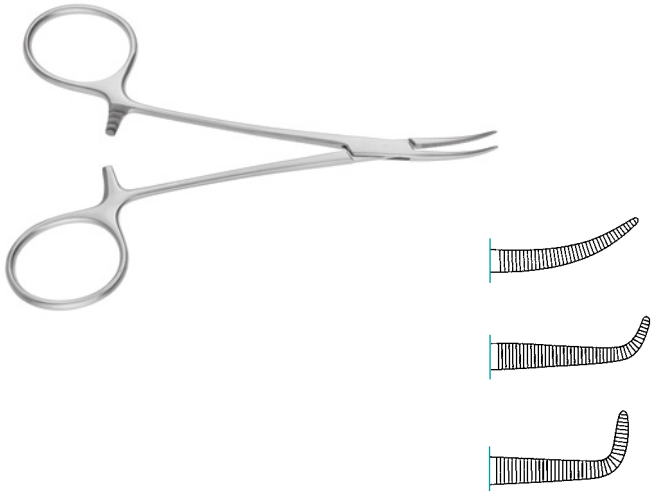
Tendon Grasping Forceps,
100mm, 4"

2.0mm jaw	210-675-002
3.0mm jaw	210-675-003
4.0mm jaw	210-675-004
5.0mm jaw	210-675-005



Tendon Grasping Forceps

155mm, $6^{1/8}$"	140-584-155



HALSTED MOSQUITO
Tendon Grasping Forceps,
125mm, 5"

light curved	140-354-001
medium curved	140-354-002
strong curved	140-354-003





Set 1
6 Nerve and Tendon Holding Forceps,
1 Blade Holder and 1 Sterilization box

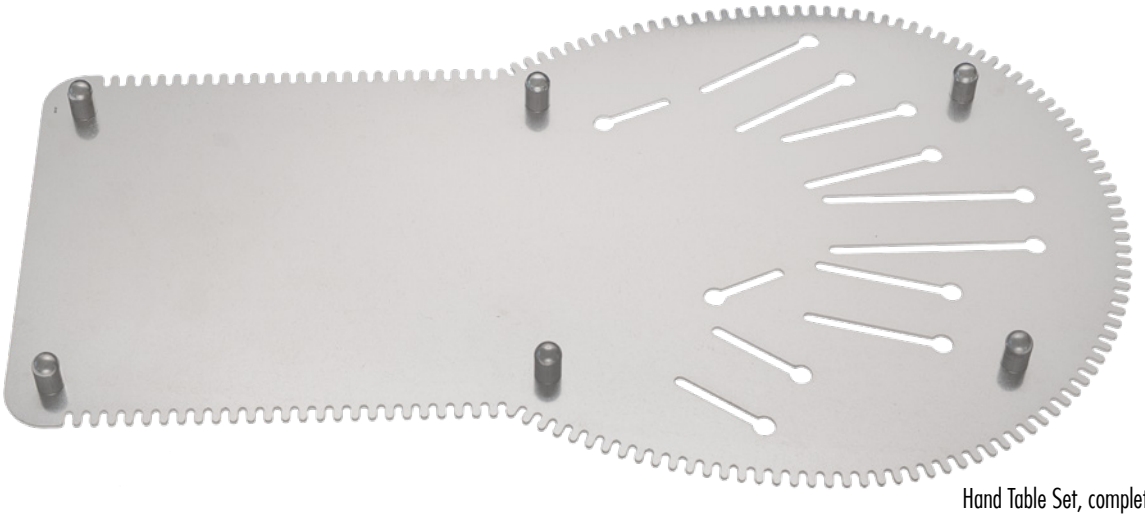
0.5mm	270-202-005
1.0mm	270-202-010
1.5mm	270-202-015
2.0mm	270-202-020
2.5mm	270-202-025
3.0mm	270-202-030
3.5mm	270-202-035
4.0mm	270-202-040
5.0mm	270-202-050
6.0mm	270-202-060
7.0mm	270-202-070

Gomel Blade Holder, straight, with spring

120mm, $4^{3/4}$"	251-300-120

Sterilization Box, with silicone inserts

90 x 130mm	270-202-130
120 x 200mm	270-202-200



Hand Table Set, complete
270-200-100

Hand Table
270-200-101



Chain Holder, elevated
270-200-102



Chain Holder Hook
270-200-103



Ball Chains, with skin hook

320mm	270-200-104
210mm	270-200-105



Ball Chains

320mm	270-200-XXX



Tendon Hook

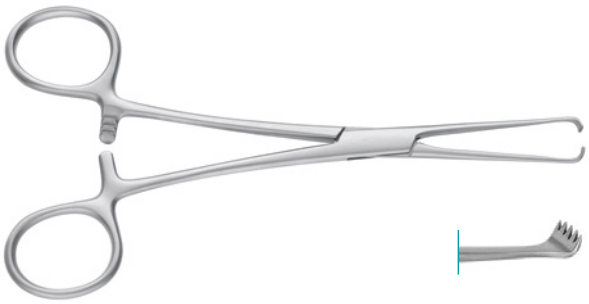
5mm wide	270-200-107



Sliding Hook for rubber bands
270-200-108

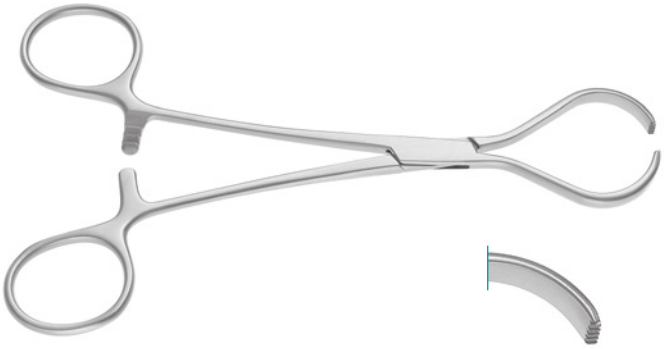


Rubber Band (set of 5 pcs.)
270-200-109



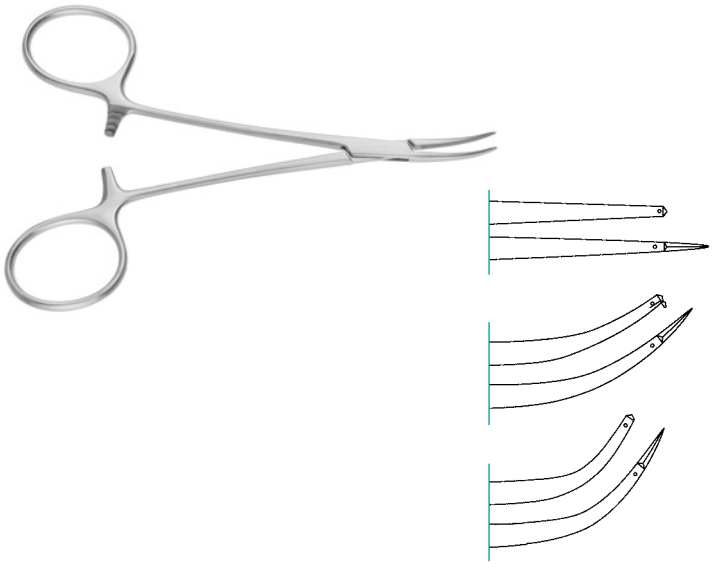
ENGLERT
Tendon Grasping Forceps,
4x5 atraumatic teeth

145mm, 5 3/4"	140-355-145



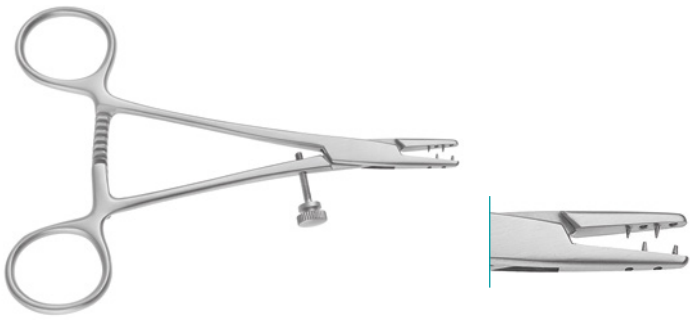
OMBREDANNE (ISELIN)
Tendon Holding Forceps,
4x5 teeth

160mm, 6 1/4"	140-583-160



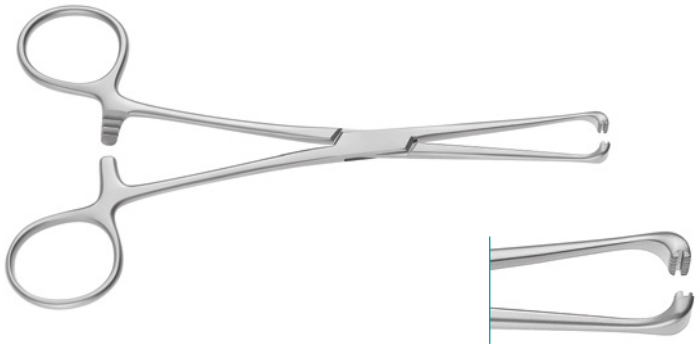
Tendon Interlacing Forceps,
150mm, 6"

straight	210-682-150
curved	210-683-150
strongly curved	210-684-150



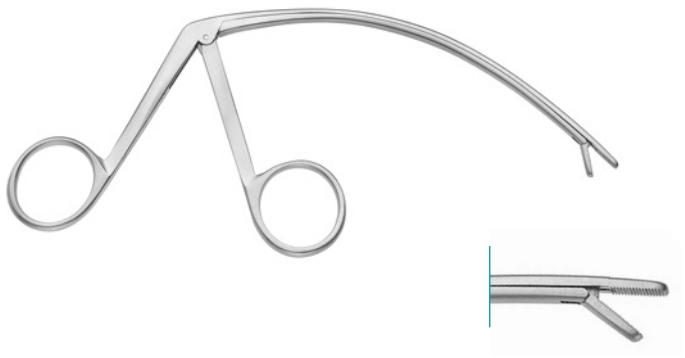
Tendon Seizing Forceps, 4 pins

120mm, $4^{3/4}$"	210-650-120



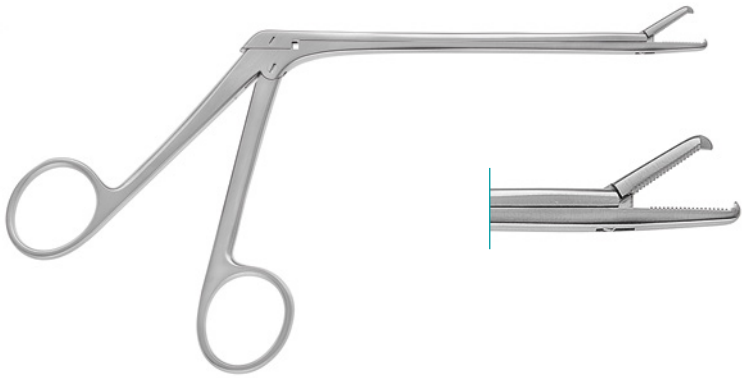
STEINMANN
Tendon Seizing Forceps

160mm, $6^{1/4}$"	210-674-160



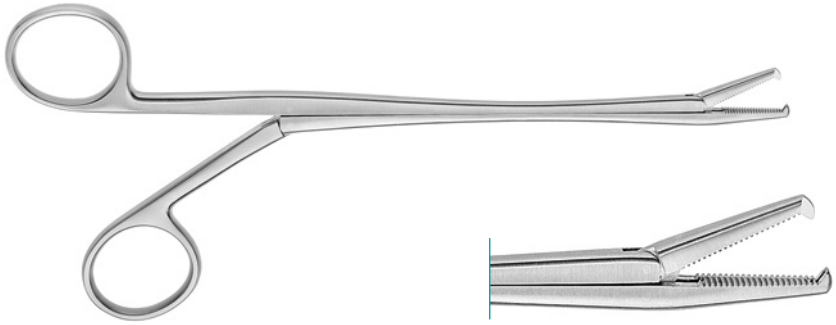
CARROLL
Tendon Forceps, curved

110mm, $4^{1/3}$"	210-679-110



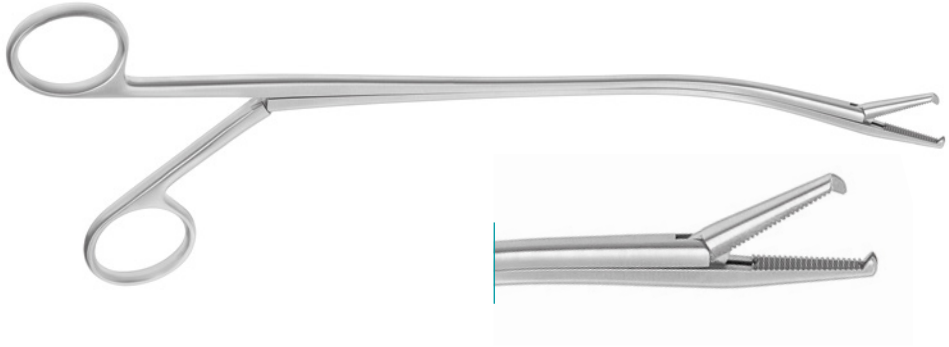
HOEN
Tendon Grasping Forceps, 1x2 teeth

120mm, 4 3/4"	210-660-120



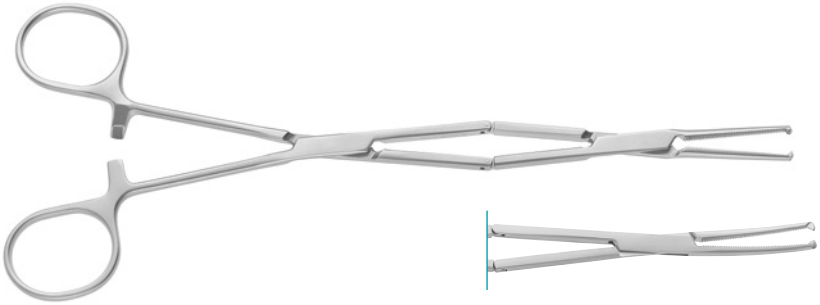
BRAND
Tendon Seizing Forceps, 1x2 teeth

150mm, 6"	210-665-150
190mm, 7 1/2"	210-665-190
245mm, 9 2/3"	210-665-240



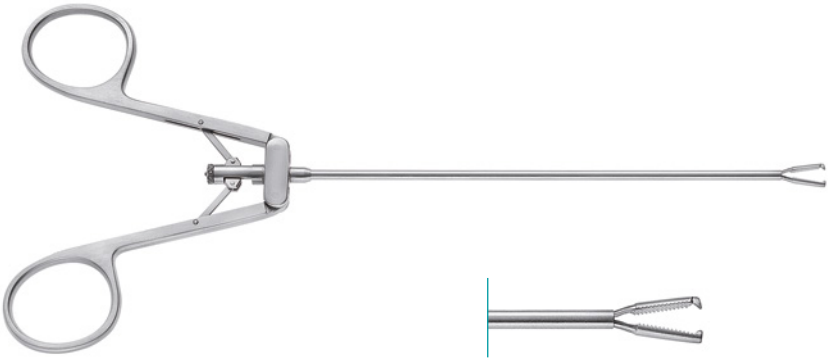
BRAND
Tendon Seizing Forceps, curved, 1x2 teeth

150mm, 6"	210-663-150
250mm, 9 7/8"	210-663-250



Tendon Seizing Forceps, 1x2 teeth, 210mm, 8 1/4"

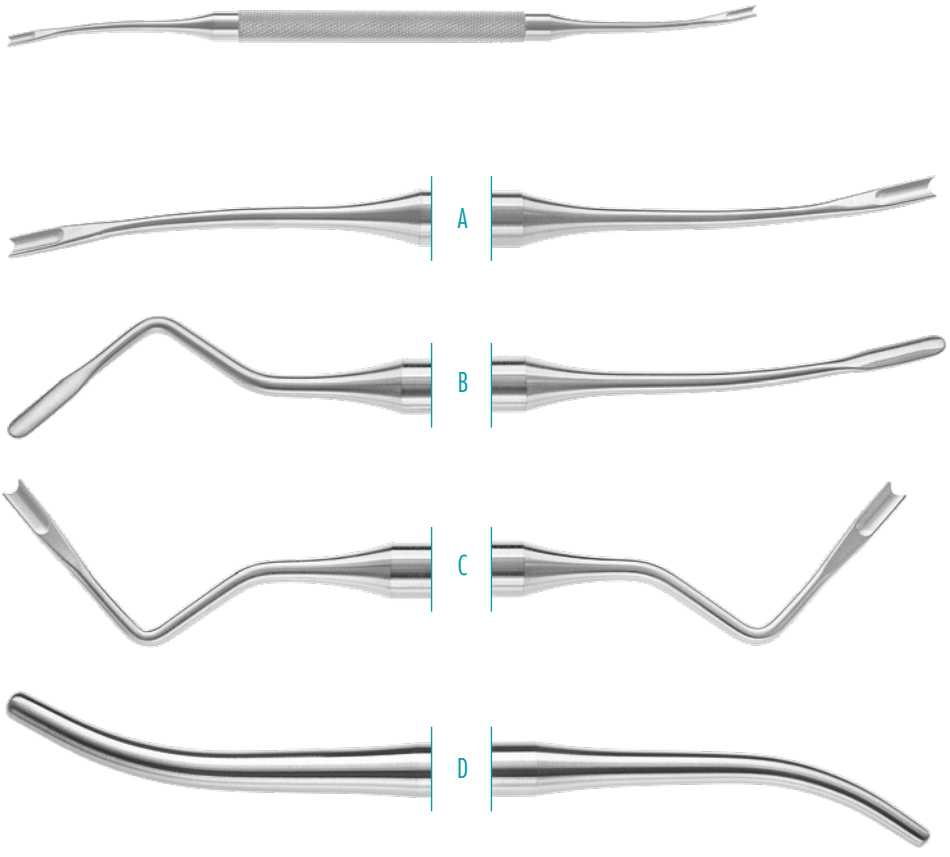
straight	210-668-210
curved	210-669-210



KLEINERT KUTZ

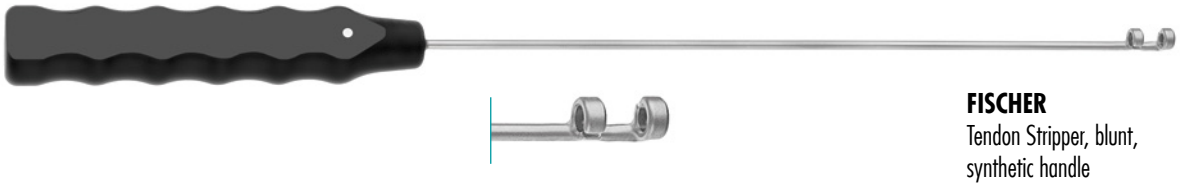
Tendon Seizing Forceps, 1x2 teeth, flexible, 1x8mm serrated jaw

210mm, 8 1/4"	210-681-200



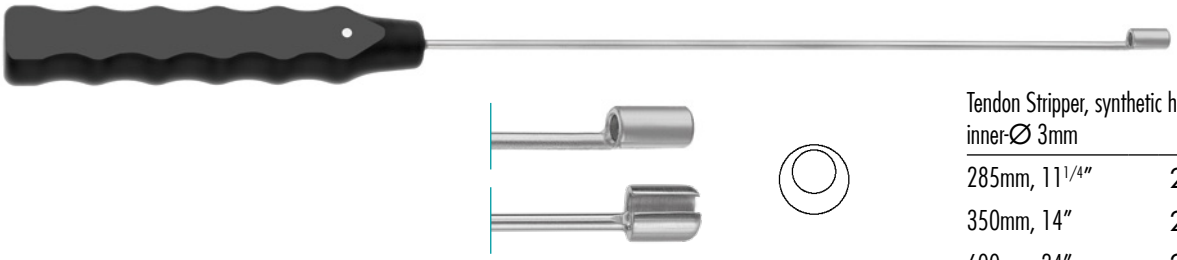
Tenolysis Knife, for tenolysis superficial and deep to the tendon

A	210-681-001
B	210-681-002
C	210-681-003
D	210-681-004



FISCHER
Tendon Stripper, blunt, synthetic handle

310mm, 12 1/4"	210-855-310



Tendon Stripper, synthetic handle, inner-Ø 3mm

285mm, 11 1/4"	210-663-280
350mm, 14"	210-663-350
600mm, 24"	210-663-600
with slot	
285mm, 11 1/4"	210-663-281
350mm, 14"	210-663-351

Inner-Ø 4mm

285mm, 11 1/4"	210-664-280
350mm, 14"	210-664-350
600mm, 24"	210-664-600
with slot	
285mm, 11 1/4"	210-664-281
350mm, 14"	210-664-351

Inner-Ø 5mm

285mm, 11 1/4"	210-665-280
350mm, 14"	210-665-350
500mm, 19 3/4"	210-665-500
600mm, 24"	210-665-600
with slot	
285mm, 11 1/4"	210-665-281
350mm, 14"	210-665-351

Inner-Ø 6mm

285mm, 11 1/4"	210-666-280
350mm, 14"	210-666-350
600mm, 24"	210-666-600
with slot	
285mm, 11 1/4"	210-666-281
350mm, 14"	210-666-351



BUNNELL
Tendon Stripper, 150mm, 6"

Ø 2.5mm	210-652-001
Ø 3.0mm	210-652-002
Ø 4.0mm	210-652-003
Ø 5.0mm	210-652-004
Ø 6.5mm	210-652-005



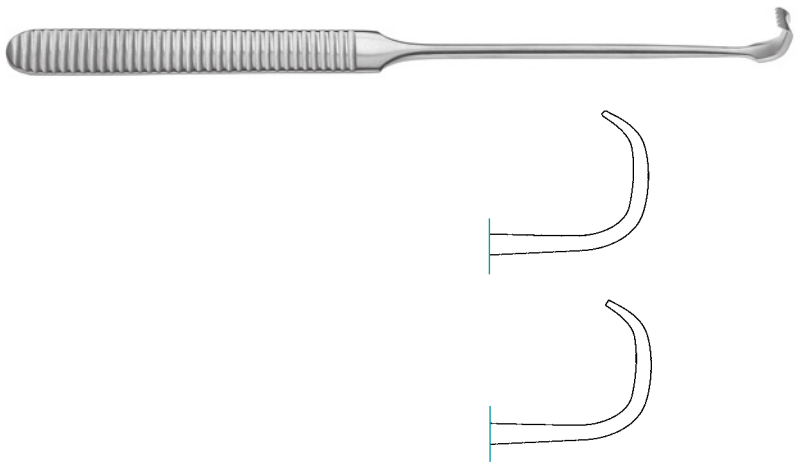
PAUL
Tendon Retractor, blunt, 3 prongs

125mm, 5″	170-177-125



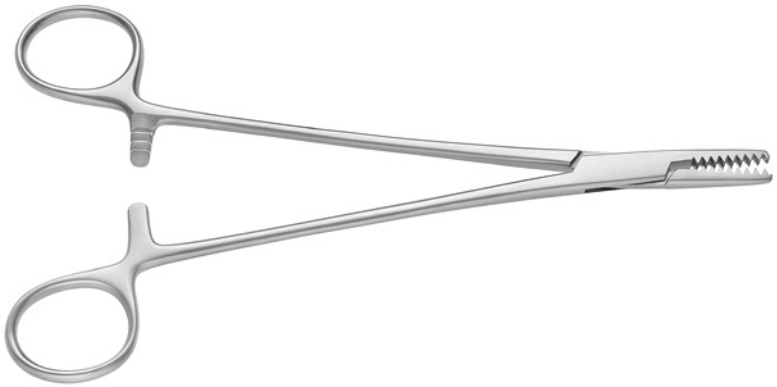
KLAPP
Tendon Retractor, blunt, 175mm, 6 7/8″

2 prongs	170-181-002
3 prongs	170-181-003
4 prongs	170-181-004



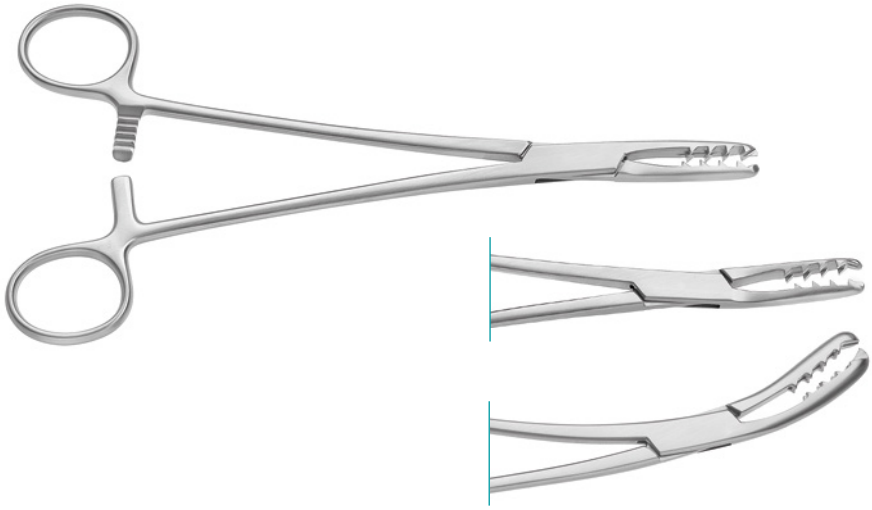
STRANDELL STILLE
Tendon Retractor, 15x6mm, 190mm, 7 1/2″

blunt	170-237-001
toothed	170-237-002



MARTIN
Cartilage Holding Forceps, straight

190mm, 7 1/2"	210-652-190



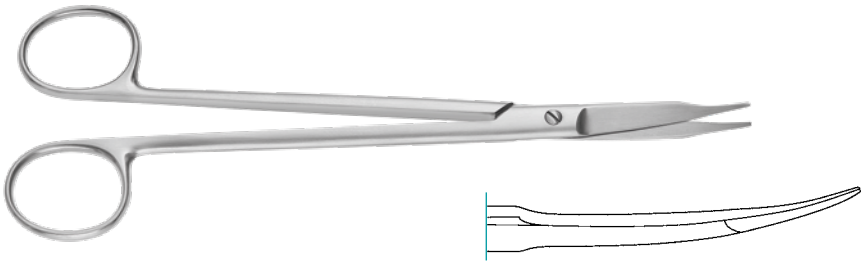
BIRCHER GANSKE
Cartilage Holding Forceps, 200mm, 8"

straight	210-620-200
angled	210-621-200
laterally curved	210-623-200



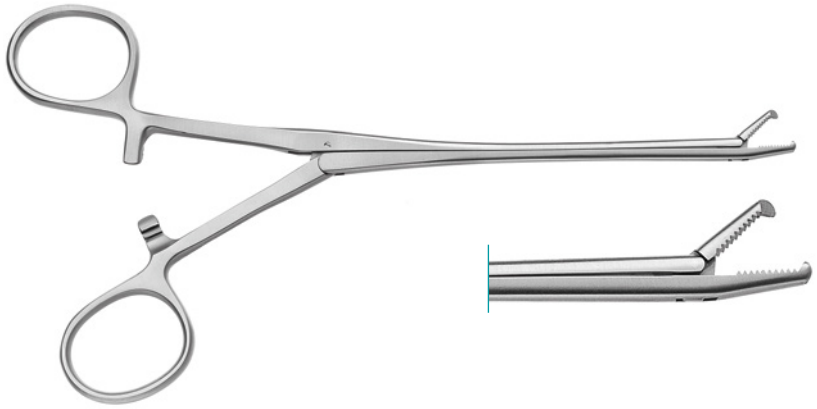
WALTON
Cartilage Forceps, slightly curved, with pins

185mm, 7 1/4"	210-626-185



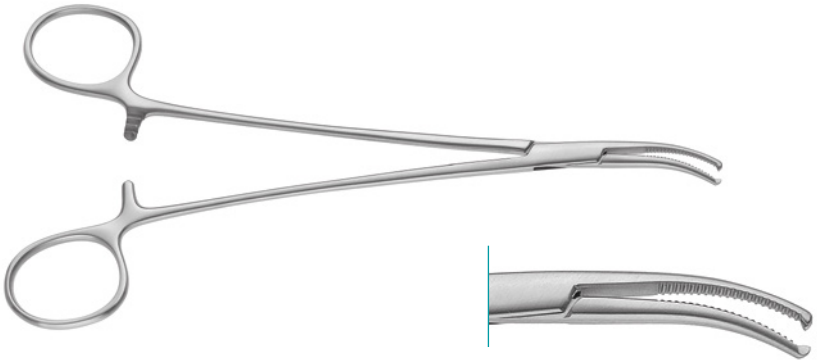
MARTIN
Cartilage Scissors

200mm, 8"	120-206-200



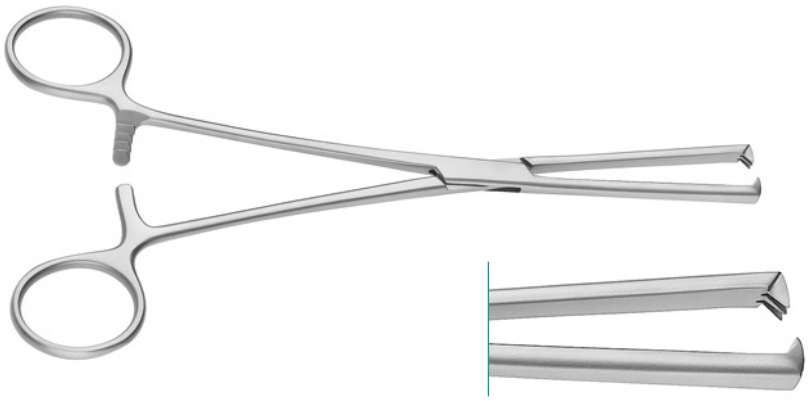
Meniscus Grasping Forceps with ratchet
1x2 teeth, straight

200mm, 8″	225-360-000



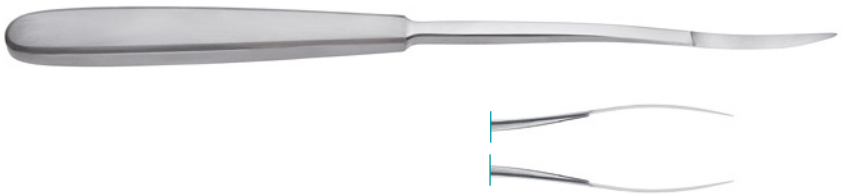
PRESTON
Meniscus Ligament Flavum Forceps,
1x2 teeth, serrated jaw

190mm, 7 1/2″	210-660-190



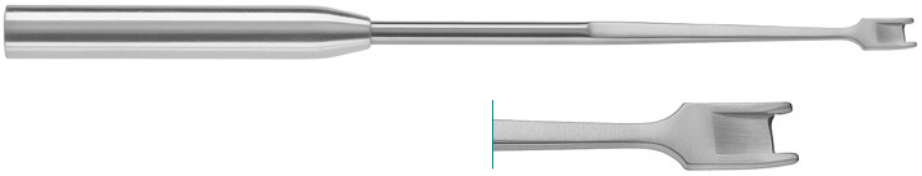
BIRCHER
Meniscus Grasping Forceps, straight

200mm, 8″	210-624-200



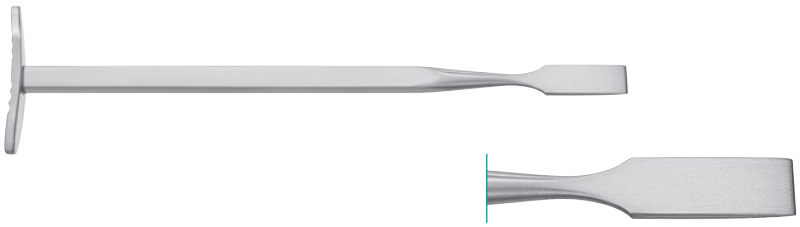
Meniscotome, 220mm, $8^{2/3}$"

Left side	210-650-220
Right side	210-651-220



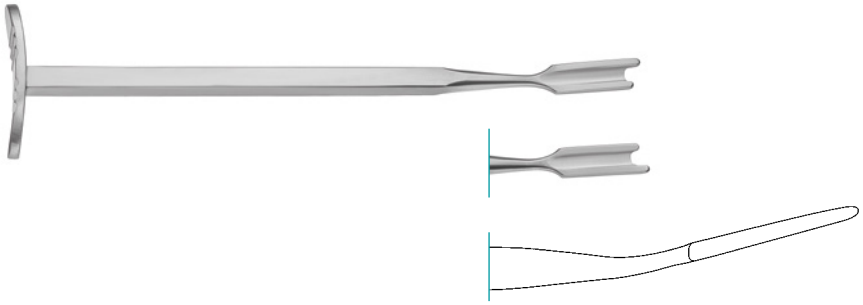
LOWE BRECK
Meniscotome

250mm, $9^{7/8}$"	210-637-250



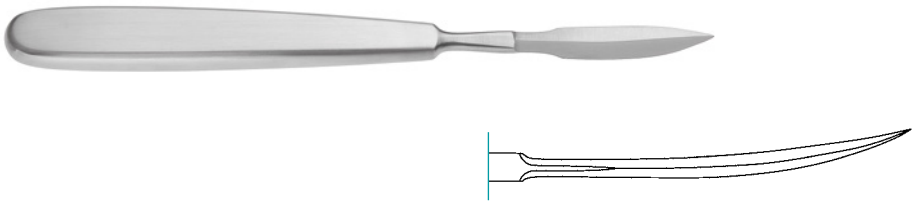
SMILIE
Meniscotome, straight

170mm, $6^{2/3}$"	210-630-170



SMILLIE
Meniscotome with guards, 170mm, $6^{2/3}$"

Left	210-631-170
Right	210-633-170



Meniscotome, double edge, 180mm, 7″

Slightly curved	210-641-180



Meniscotome, 220mm, $8^{2/3}$″

Curved right	210-645-220
Curved left	210-643-220



Meniscotome, curved

190mm, $7^{1/2}$″	210-613-190



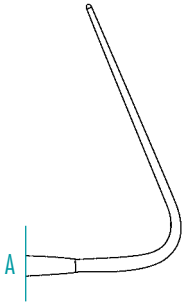
DOANE
Knee Retractor

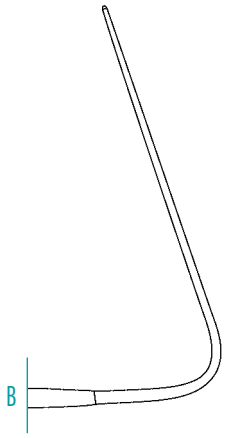
57 x 70mm blade	210-700-150
64 x 76mm blade	210-700-190

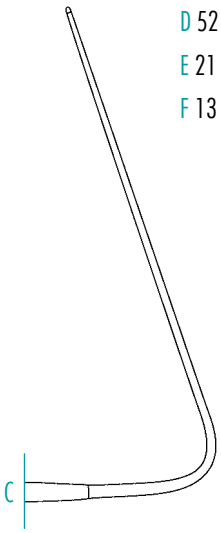


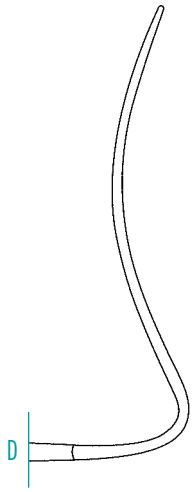
SMILLIE
Knee wound retractor, 140mm, 5 1/2"

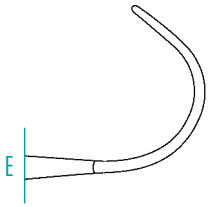
A 32 x 19mm	210-628-001
B 45 x 19mm	210-628-002
C 60 x 19mm	210-628-003
D 52 x 13mm	210-628-004
E 21 x 13mm	210-628-005
F 13 x 15mm	210-628-006

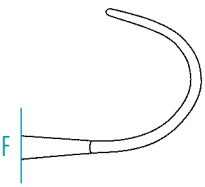








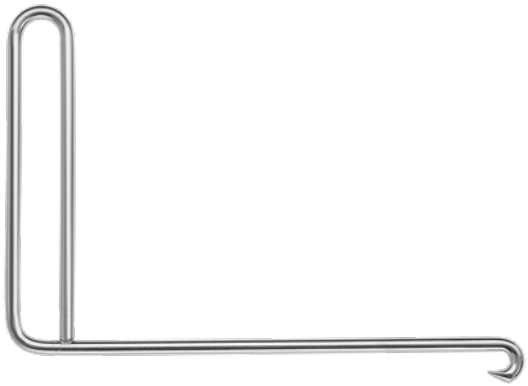






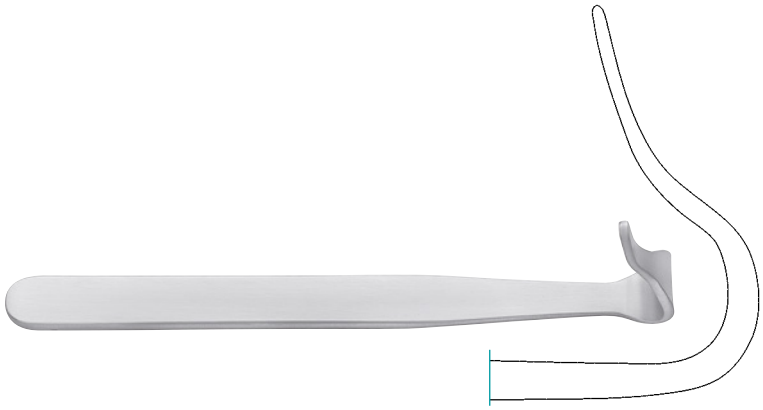
Knee Retractor, 38 x 9mm

210mm, $8^{1/4}$"	210-568-210



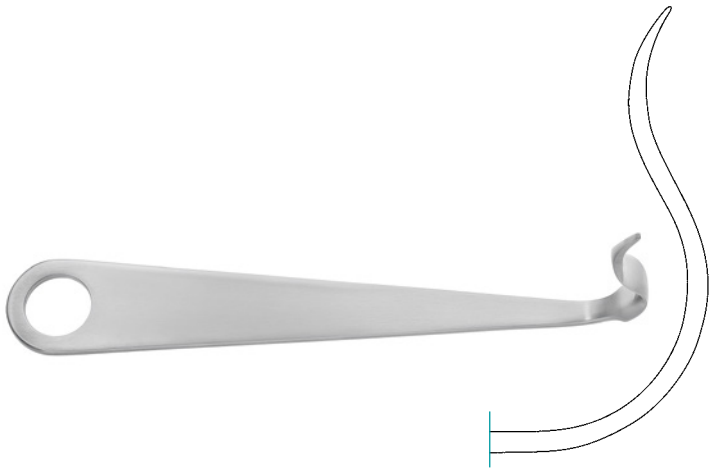
Cruciate ligament hook

140 x 105 x 20mm	170-310-140



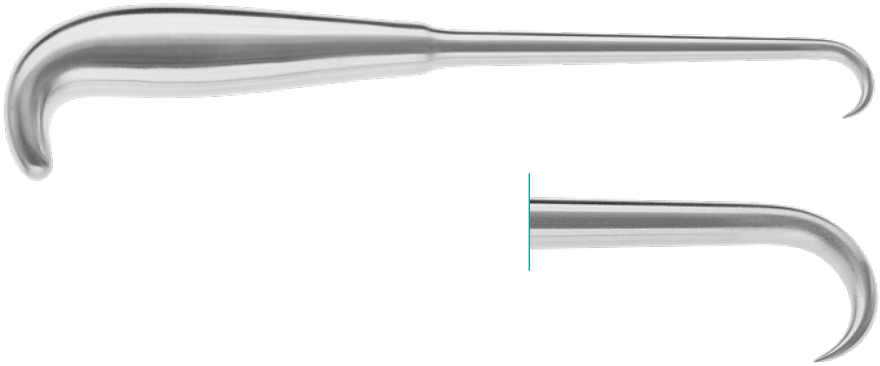
BLOUNT
Knee Retractor

175mm, $6^{7/8}$"	210-567-170



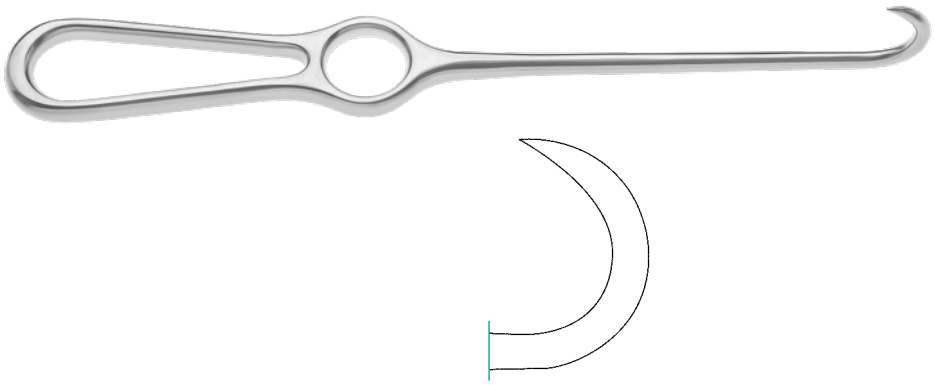
Knee and Meniscus Retractor

175mm, $6^{7/8}$"	210-569-170



Bone Hook, sharp, hollow handle, 230mm, 9″

9.5mm	210-230-101
25mm	210-230-103



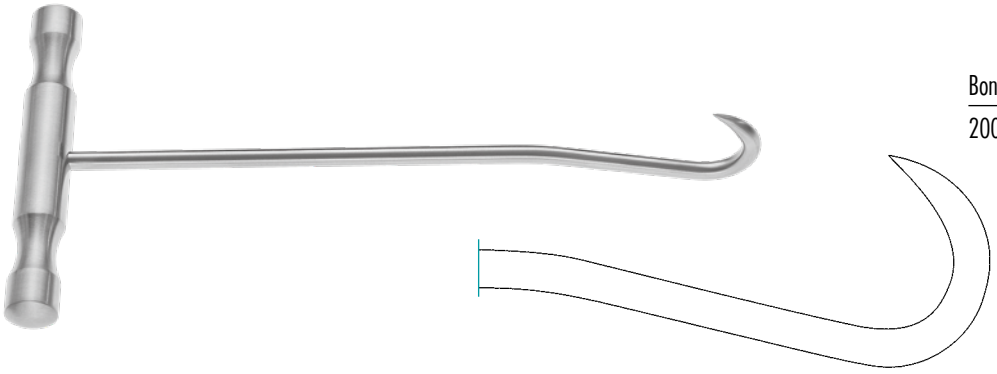
Bone Hook, 1 tooth, sharp

245mm, 9 2/3″	170-292-245



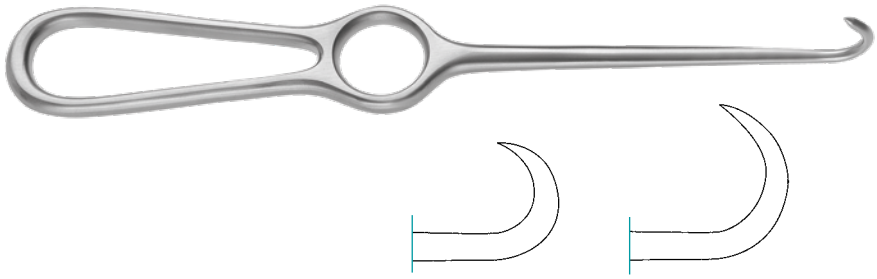
Bone Hook, 1 tooth, 200mm, 8″

Blunt	170-280-200
Sharp	170-282-200

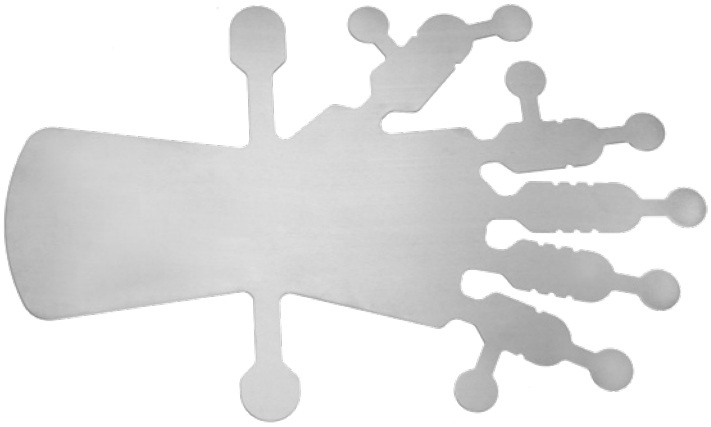


Bone Hook with T-Handle, sharp, 21mm

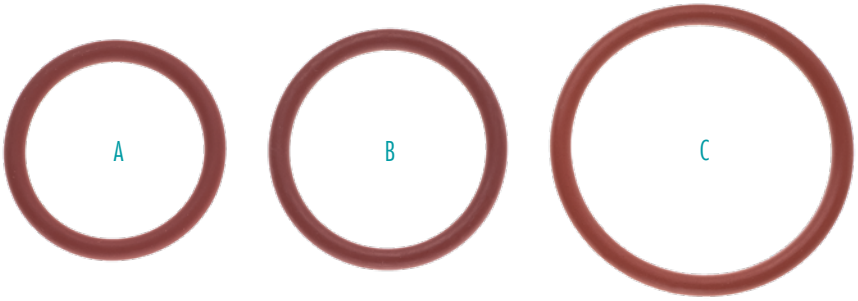
200mm, 8″	200-410-200



Bone Hook, 1 tooth, sharp, 230mm, 9”	
Medium	200-410-001
Small	200-410-002



Lead Hand	
Children	260-988-002
Adolescents	260-988-003
Adults	260-988-001



Fixation Rings (Scale 1:1)	
A Children	260-988-004
B Adolescents	260-988-005
C Adults	260-988-006



Silicone Hand, malleable, black with fixation rings	
	260-988-000



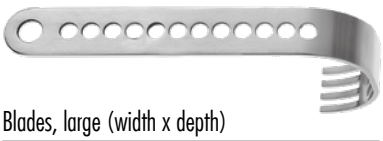
CHARNLEY
Initial Incision Retractor
frame and blade small, 25 x 38mm
big blade 25 x 44mm
with weight and chain

Complete set	170-300-001
Frame	170-300-123
Weight and Chain	170-300-122



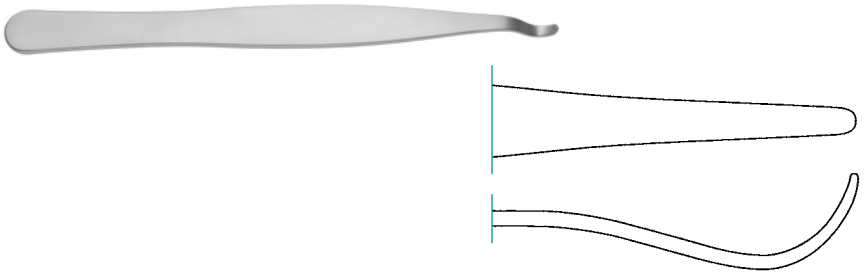
Blades, small (width x depth)

25 x 25mm	170-300-025
25 x 38mm	170-300-038
25 x 50mm	170-300-050
25 x 57mm	170-300-057
25 x 63mm	170-300-010
25 x 75mm	170-300-013
25 x 101mm	170-300-017
25 x 114mm	170-300-114
25 x 127mm	170-300-016



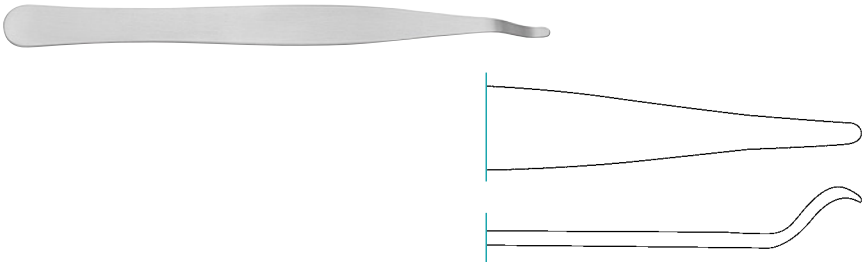
Blades, large (width x depth)

25 x 25mm	170-301-025
25 x 44mm	170-301-044
25 x 50mm	170-301-050
25 x 57mm	170-301-057
25 x 63mm	170-301-012
25 x 75mm	170-301-014
25 x 101mm	170-301-101
25 x 114mm	170-301-114
25 x 127mm	170-301-015



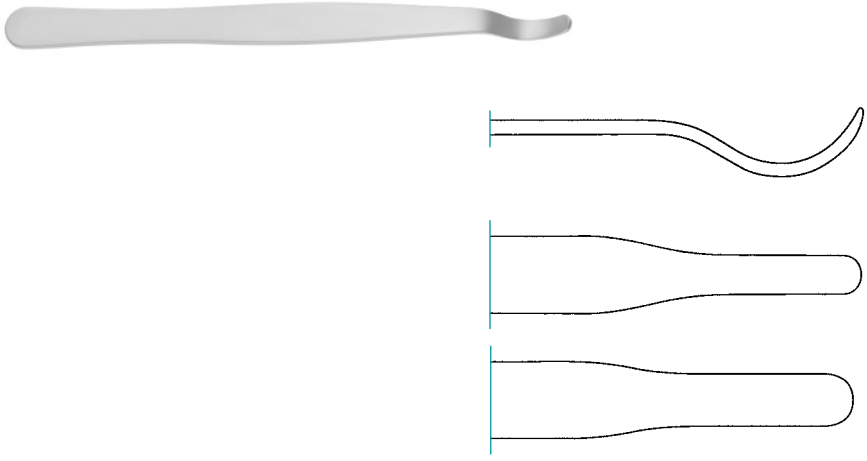
HAYES
Phalangeal Elevator, 3mm wide blade

150mm, 6"	210-473-150



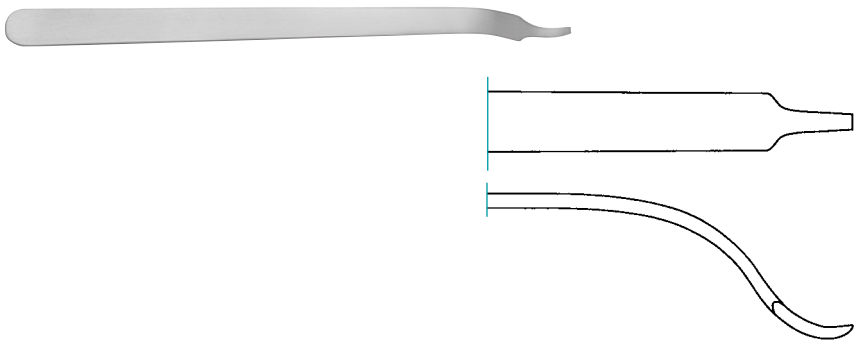
Bone Lever, 2.8mm

140mm, 5 1/2"	210-539-110



Phalangeal Elevator, 150mm, 6"

5mm	210-475-150
7mm	210-477-150



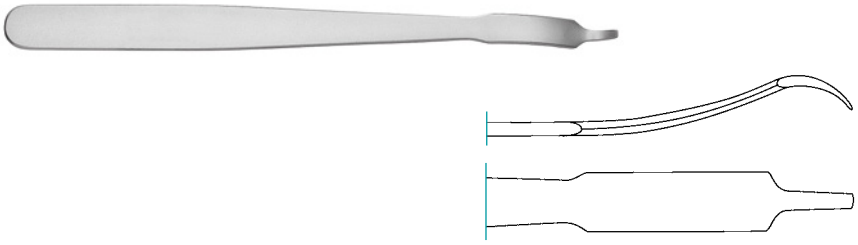
BUCK GRAMCKO
Bone Lever, 7.5mm wide, 2mm tip

150mm, 6"	210-541-075

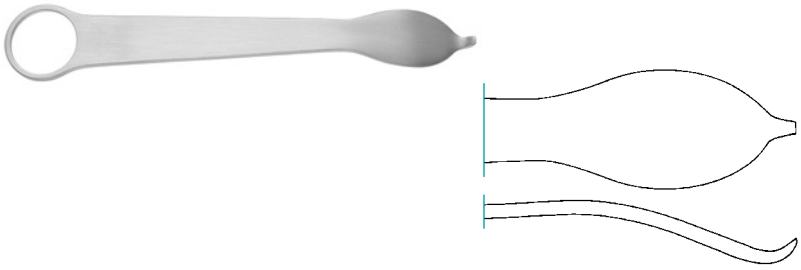


MINI HOHMANN
Bone Lever, 6mm wide, 2mm tip

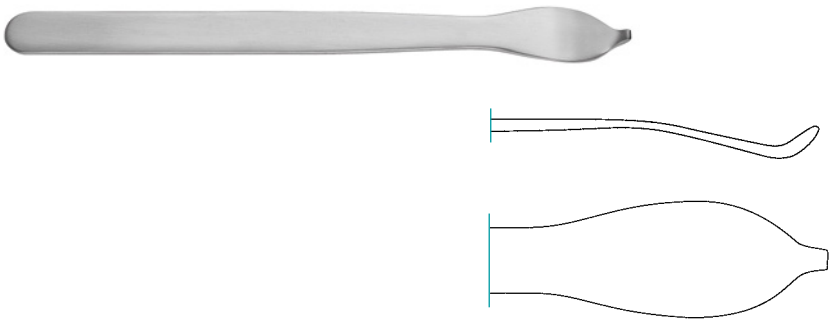
160mm, 6 1/4"	210-539-060



HOHMANN
Bone Lever, 2mm tip, 8mm wide
160mm, 6 1/4" 210-541-080

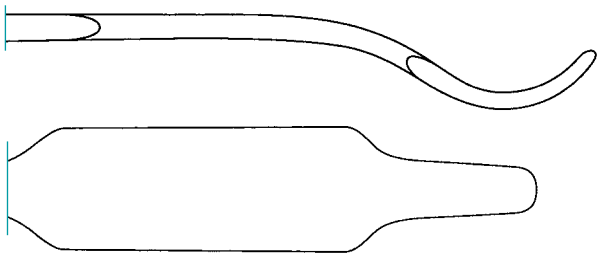


HOHMANN
Bone Lever, 15mm wide tip, with finger ring
120mm, 4 3/4" 210-541-150



Mini Bone Lever, 15mm wide tip
160mm, 6 1/4" 210-539-150

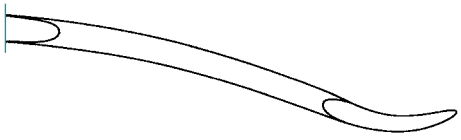




LANGE BABY
Bone Lever, 17mm wide

170mm, $6^{2/3}$"	210-534-170

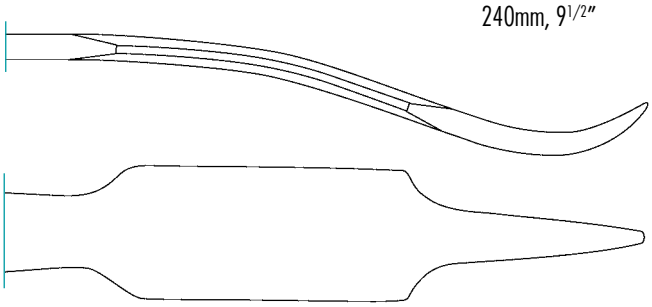




HOHMANN
Bone Lever, 240mm, $9^{1/2}$"

8mm	210-541-108
10mm	210-541-100
18mm	210-541-180
24mm	210-541-240
43mm	210-541-430
70mm	210-541-700

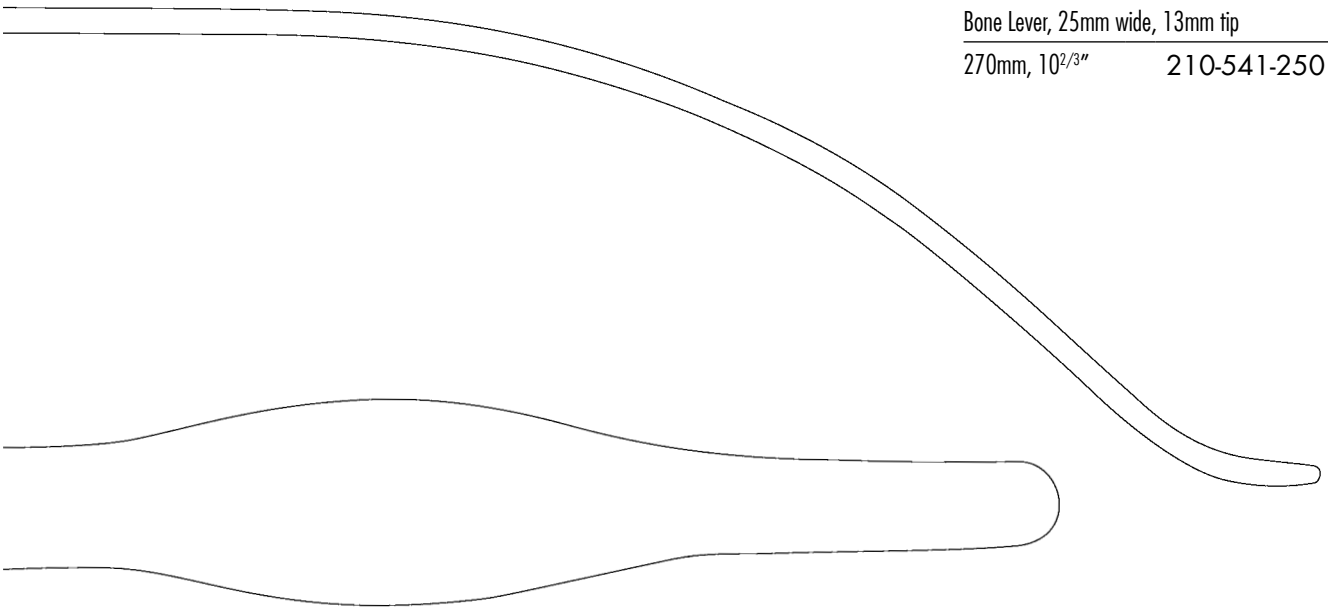




HOHMANN
Bone Lever, 17mm, sharp

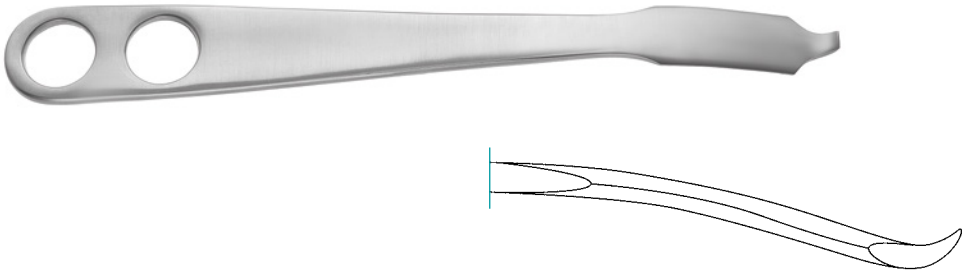
240mm, 9 1/2"	210-542-180





HOHMANN
Bone Lever, 25mm wide, 13mm tip

270mm, 10 2/3"	210-541-250



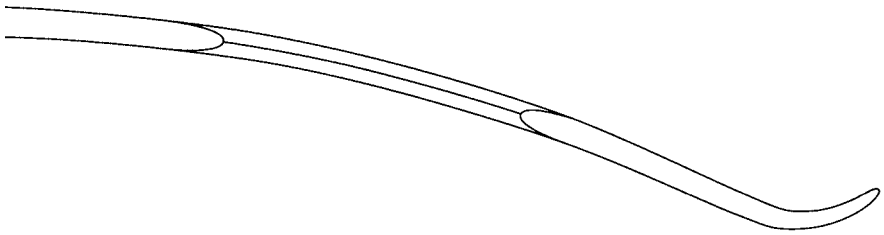
WAGNER
Bone Lever, 17mm

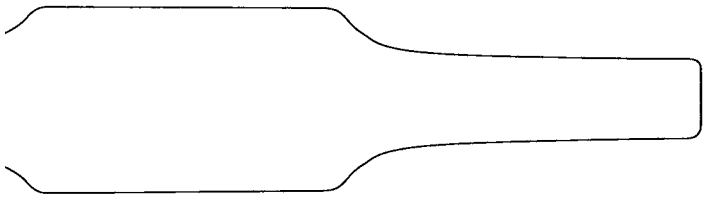
220mm, $8^{2/3}$"	210-540-220

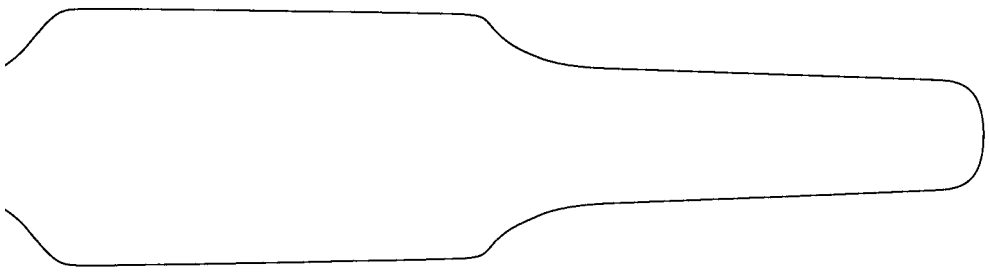


HOHMANN
Bone Lever, 24mm

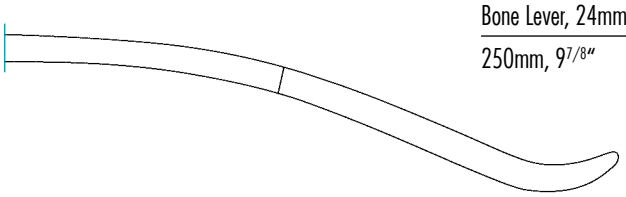
260mm, $10^{1/4}$"	210-545-220
35mm	
285mm, $11^{1/4}$"	210-545-350







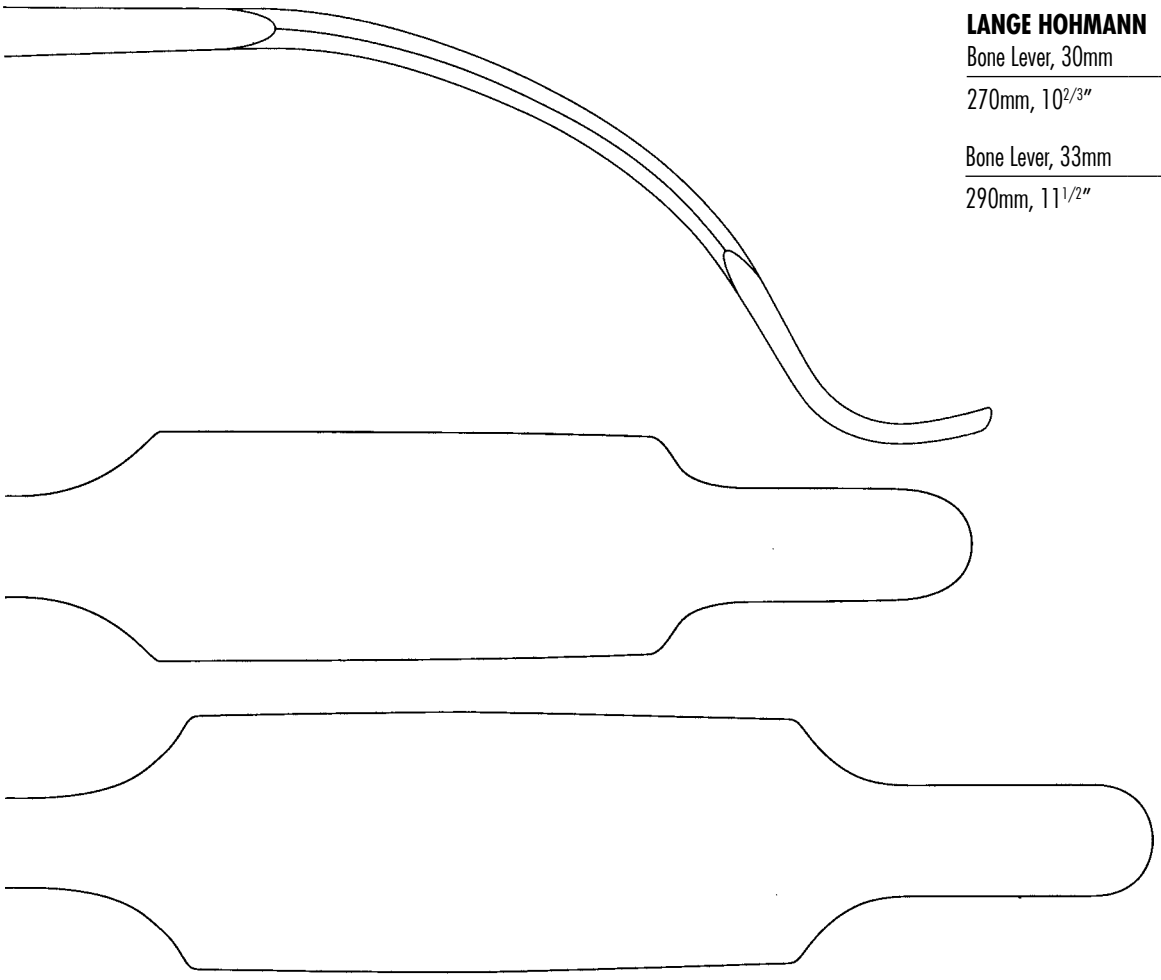




LANGE HOHMANN
Bone Lever, 24mm wide

250mm, $9^{7/8}$"	210-557-250



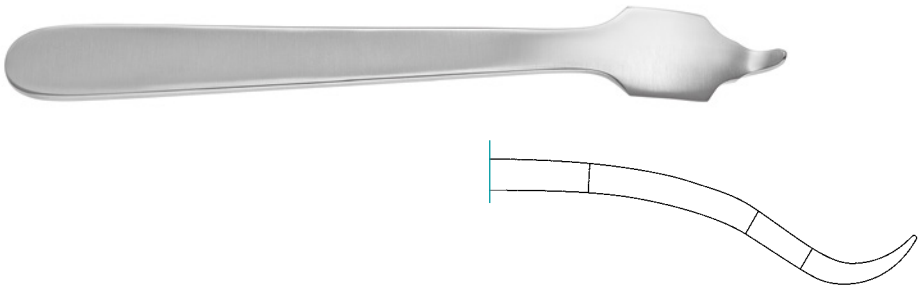


LANGE HOHMANN
Bone Lever, 30mm

270mm, $10^{2/3}$"	210-557-270

Bone Lever, 33mm

290mm, $11^{1/2}$"	210-557-290



VERBRUGGE
Bone Lever, 25mm

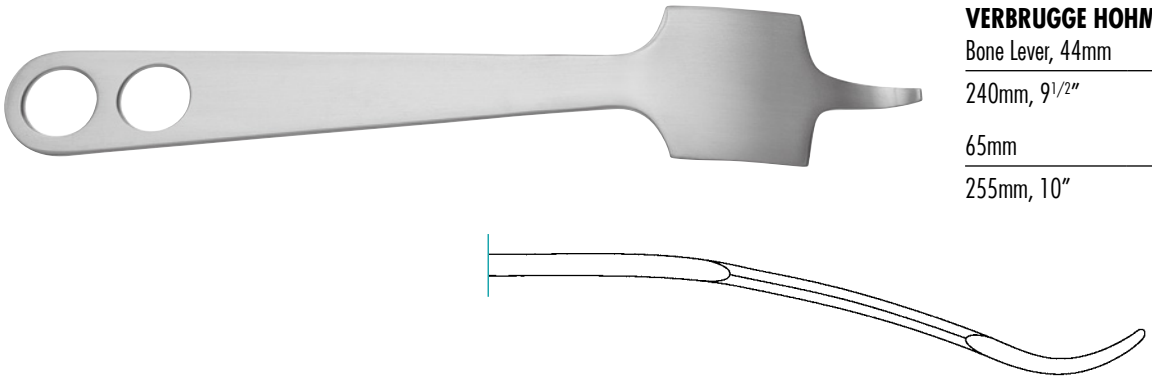
200mm, 8″	210-542-025

45mm

230mm, 9″	210-542-045

70mm

250mm, 9 7/8″	210-542-070

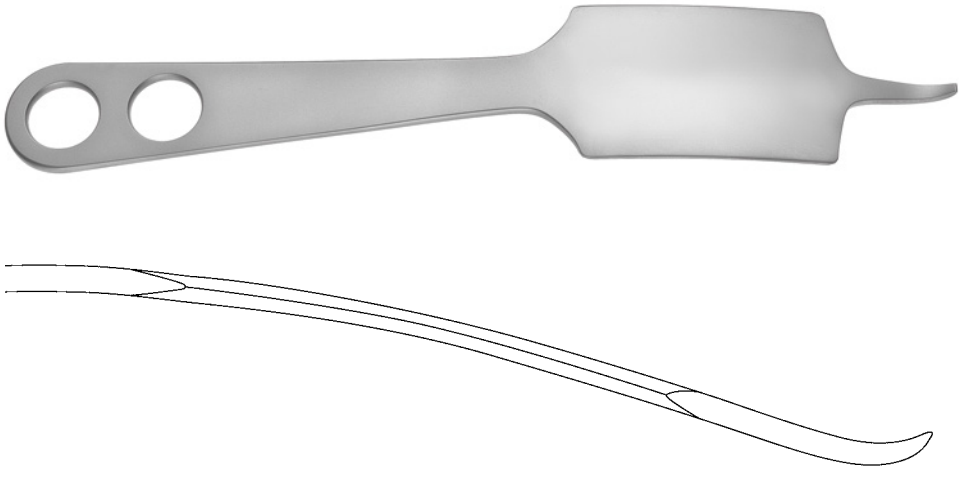


VERBRUGGE HOHMANN
Bone Lever, 44mm

240mm, 9 1/2″	210-541-043

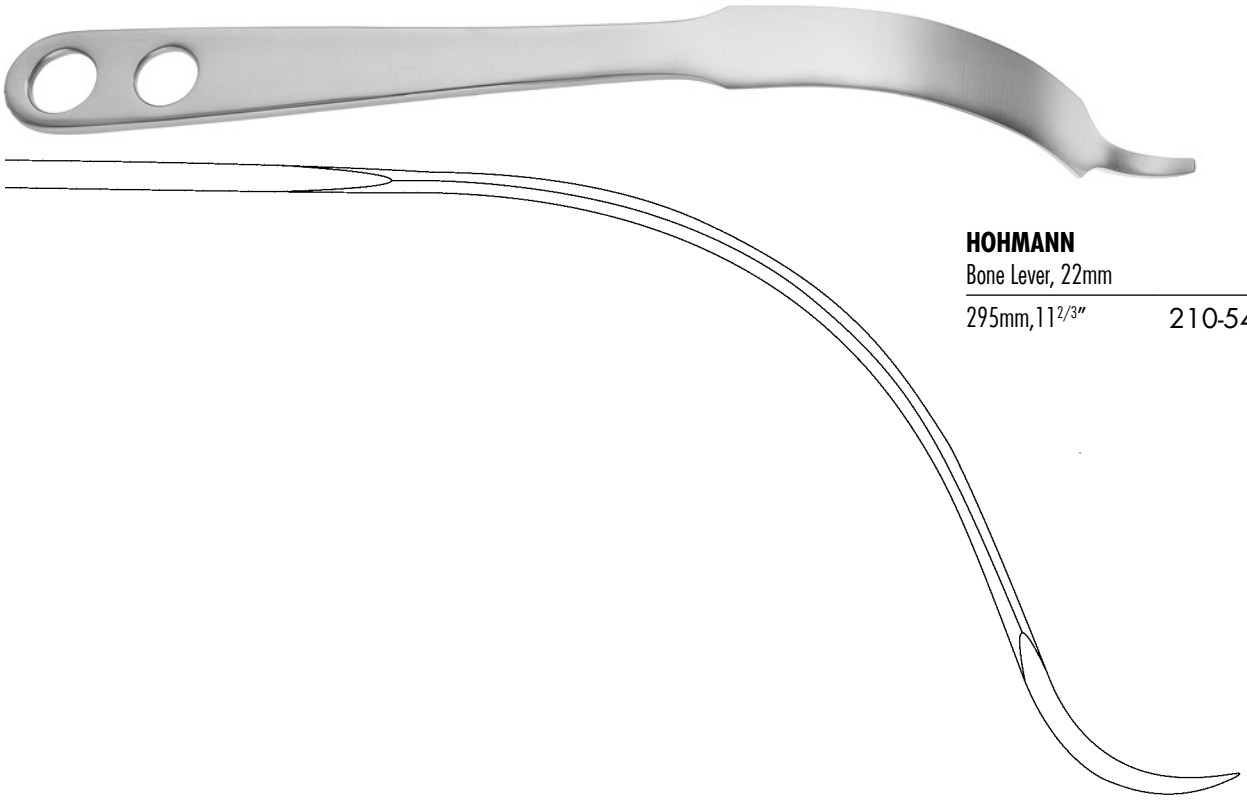
65mm

255mm, 10″	210-541-065

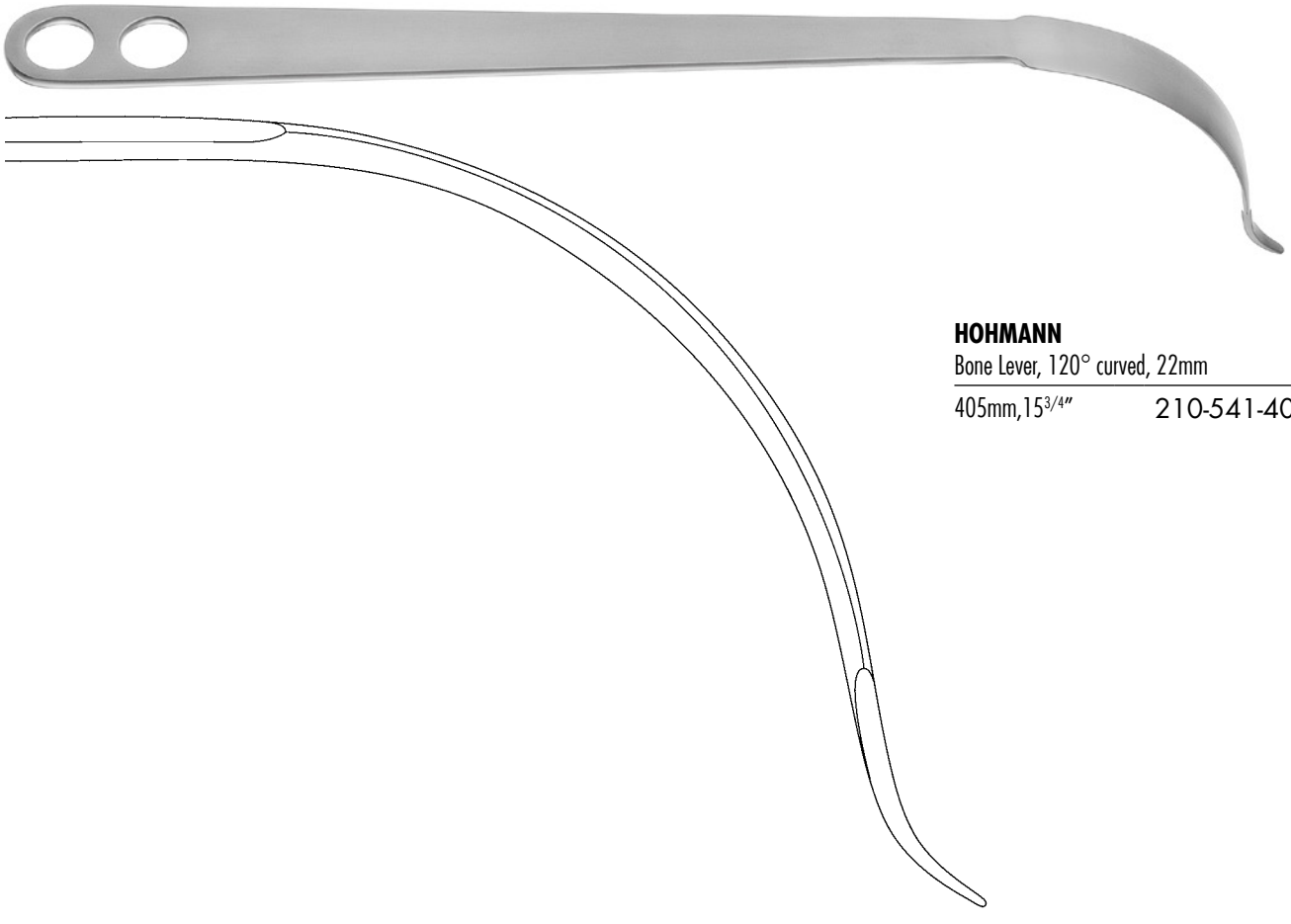


HOHMANN
Bone Lever, 43mm

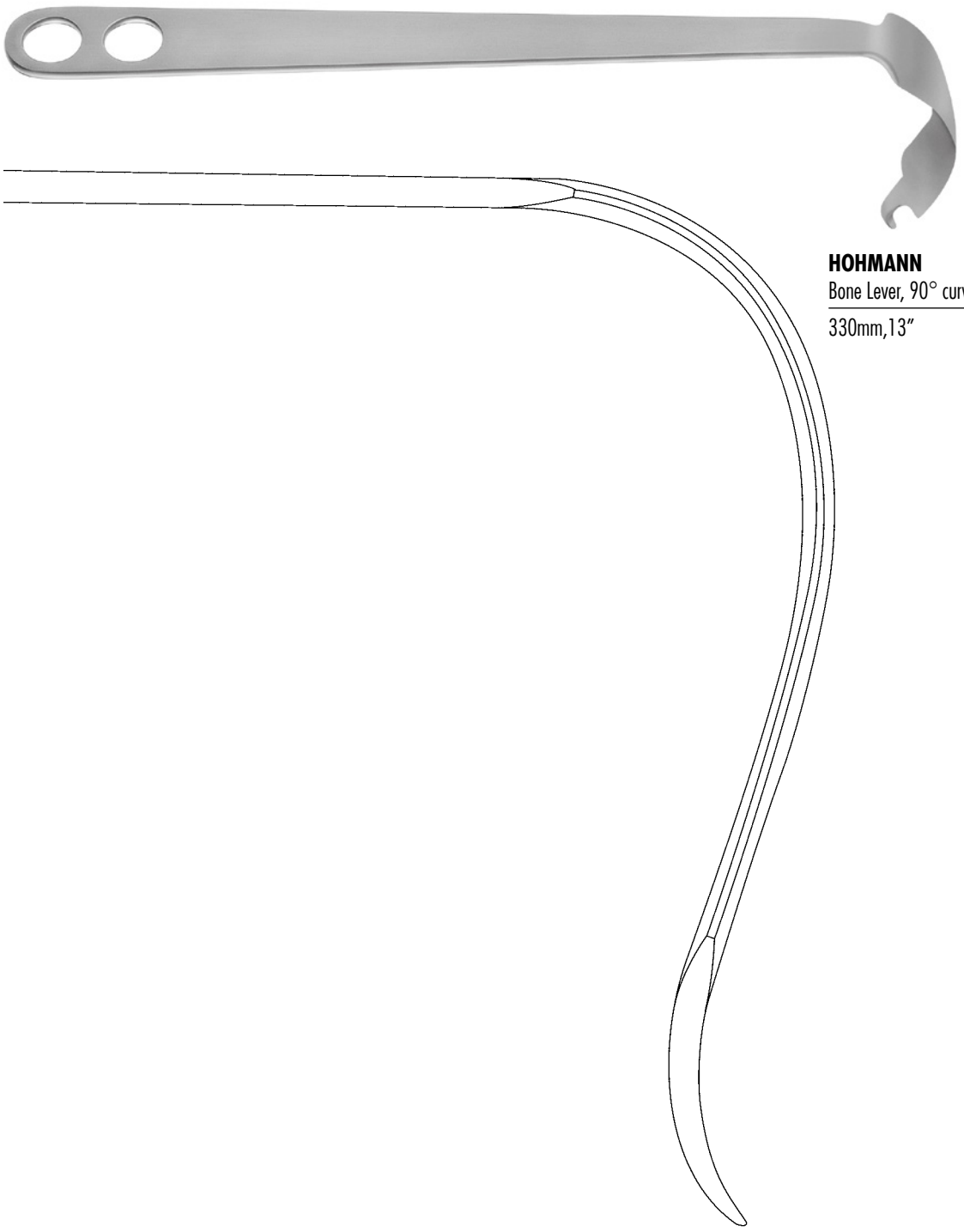
240mm, 9 1/2″	210-543-430



HOHMANN
Bone Lever, 22mm
295mm,11 2/3" 210-545-221

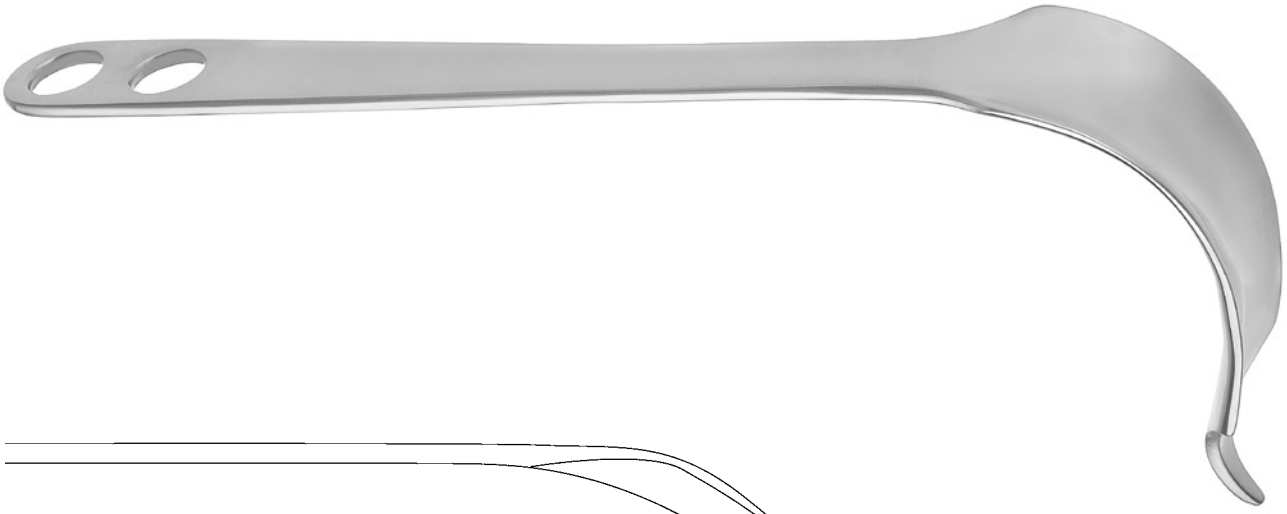


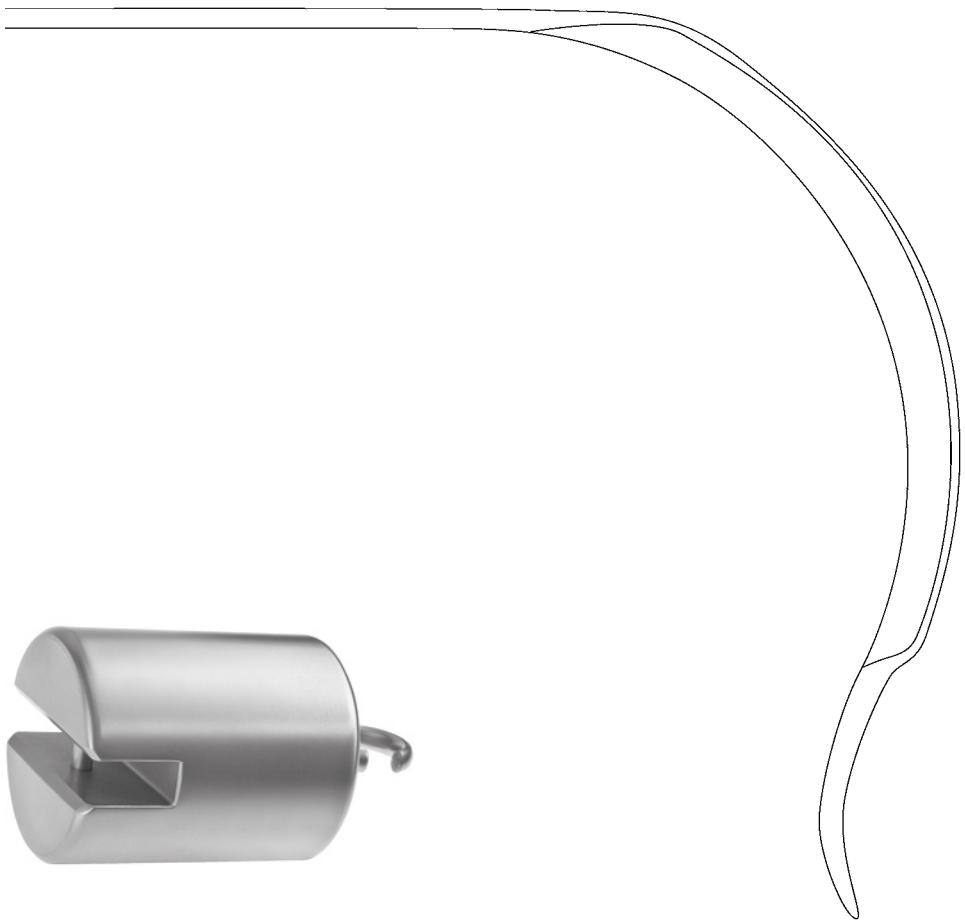
HOHMANN
Bone Lever, 120° curved, 22mm
405mm,15 3/4" 210-541-400



HOHMANN
Bone Lever, 90° curved, 40mm

330mm,13"	210-541-330



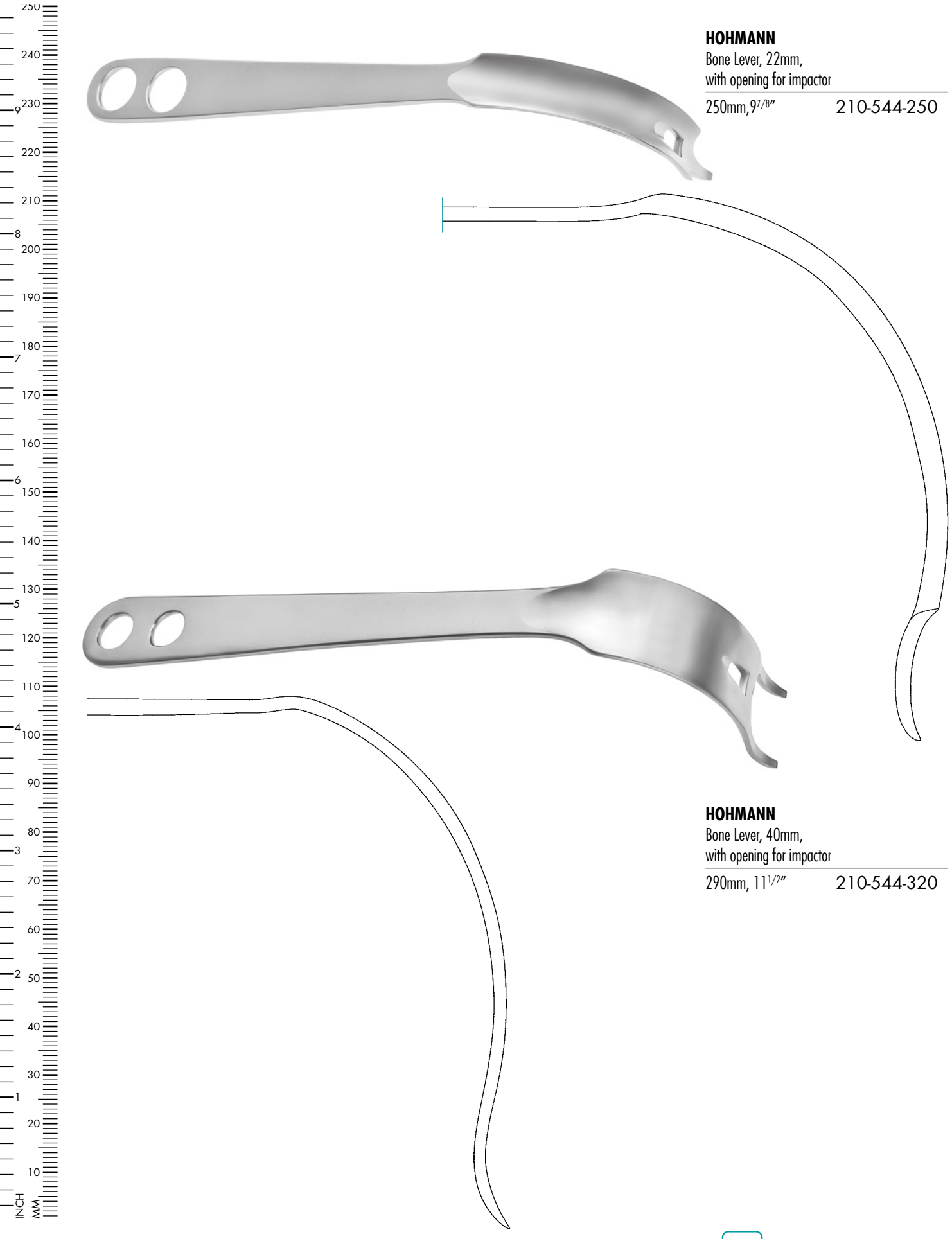


HOHMANN
Bone Lever, 40mm

300mm,11 7/8"	210-545-400

Weight for Hohmann Bone Levers, combinable

1200gr	210-541-000

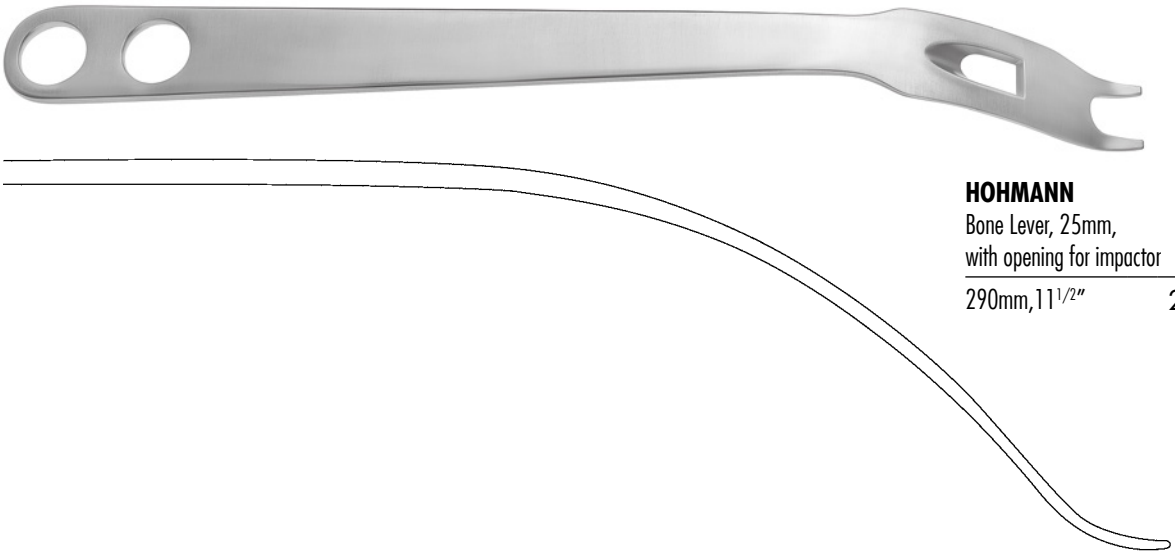


HOHMANN
Bone Lever, 22mm,
with opening for impactor

250mm, $9^{7/8}$" 210-544-250

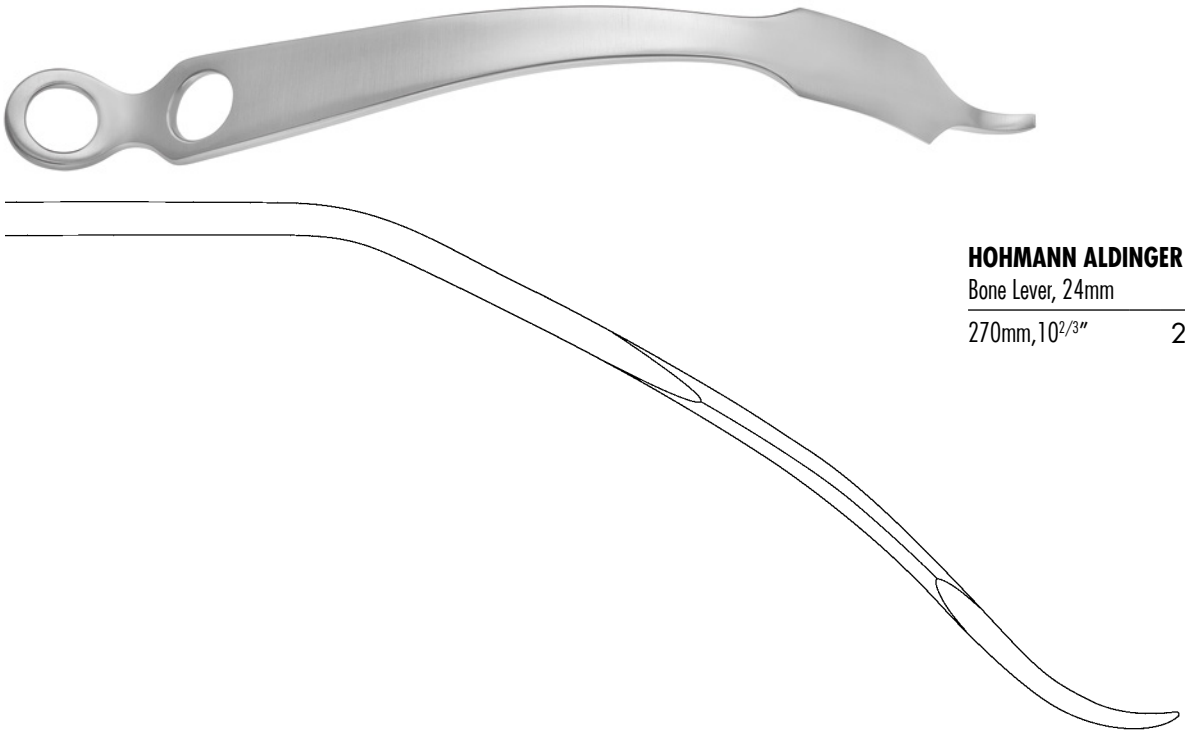
HOHMANN
Bone Lever, 40mm,
with opening for impactor

290mm, $11^{1/2}$" 210-544-320



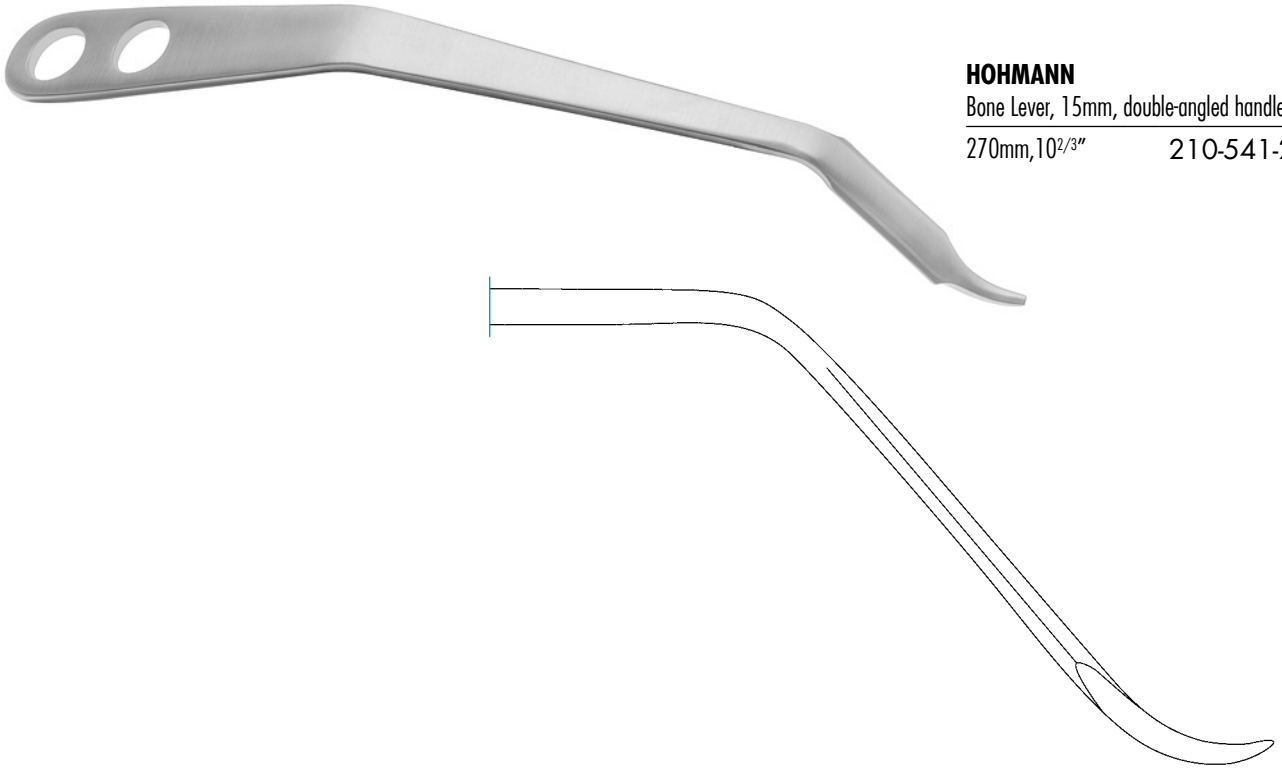
HOHMANN
Bone Lever, 25mm,
with opening for impactor

290mm, $11^{1/2}$″ 210-544-270

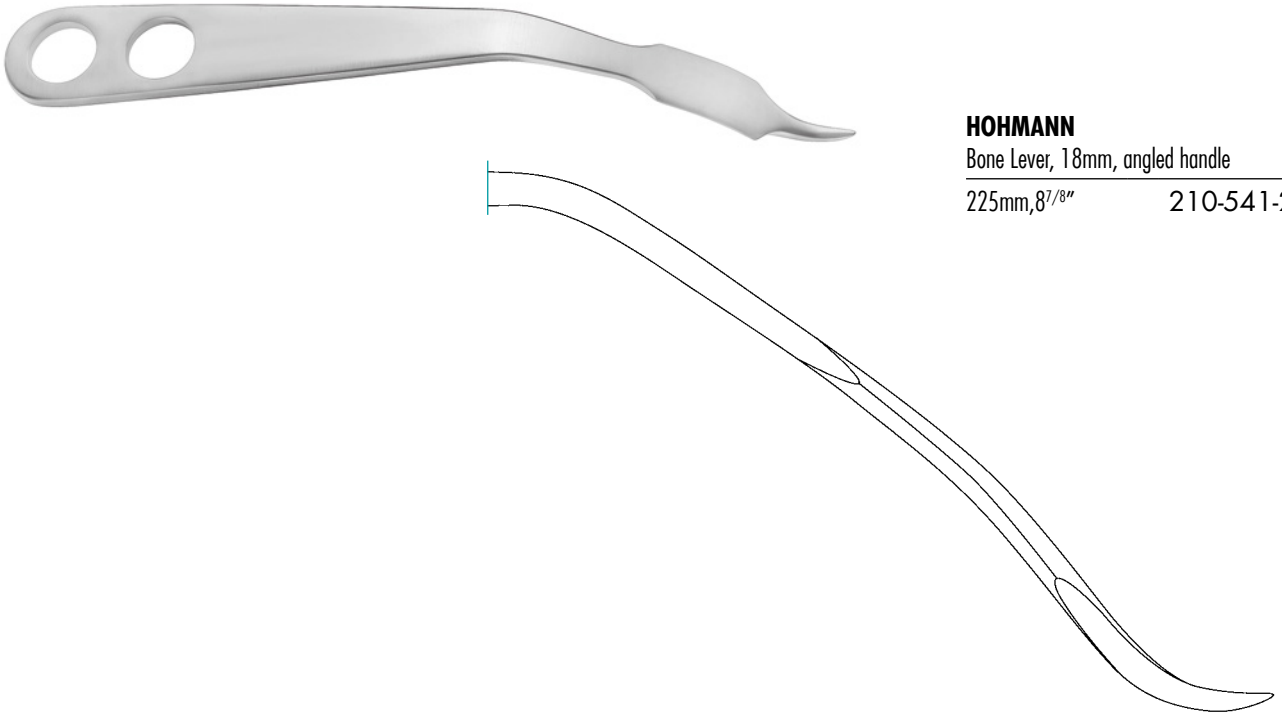


HOHMANN ALDINGER
Bone Lever, 24mm

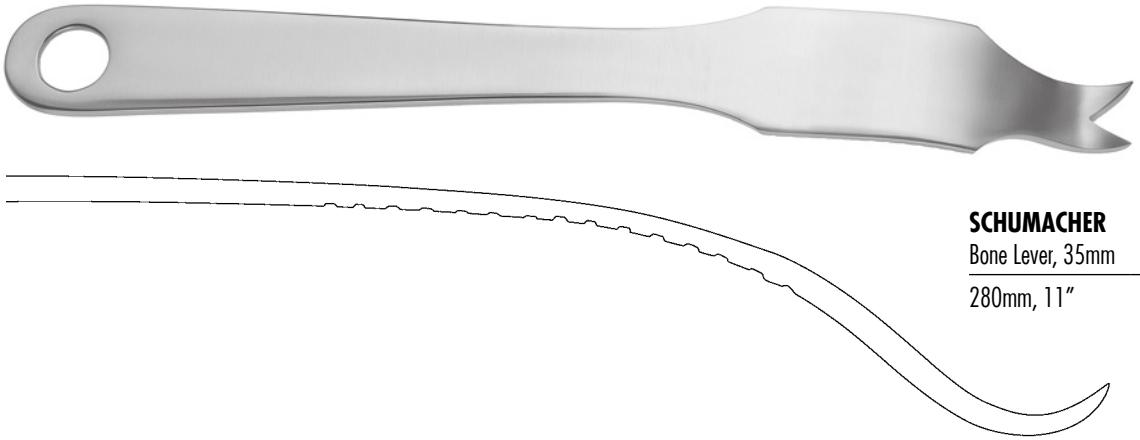
270mm, $10^{2/3}$″ 210-543-270



HOHMANN
Bone Lever, 15mm, double-angled handle
270mm,10 2/3" 210-541-270



HOHMANN
Bone Lever, 18mm, angled handle
225mm,8 7/8" 210-541-225

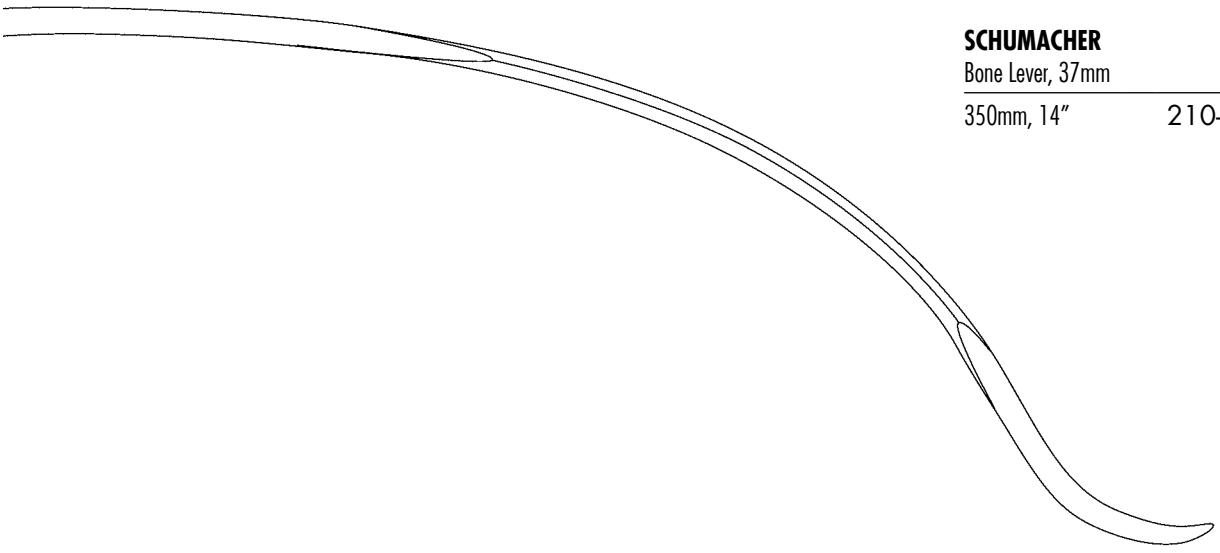




SCHUMACHER
Bone Lever, 35mm

280mm, 11"	210-550-280





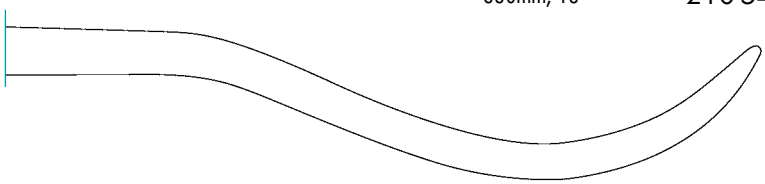
SCHUMACHER
Bone Lever, 37mm

350mm, 14"	210-550-350



WAGNER
Bone Lever, 8mm, synthetic handle

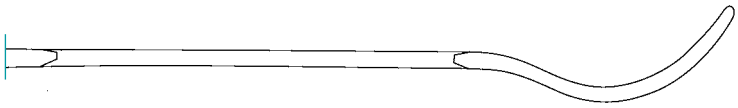
330mm, 13″	210-540-330





WATSON JONES
Bone Lever

280mm, 11″	210-545-280





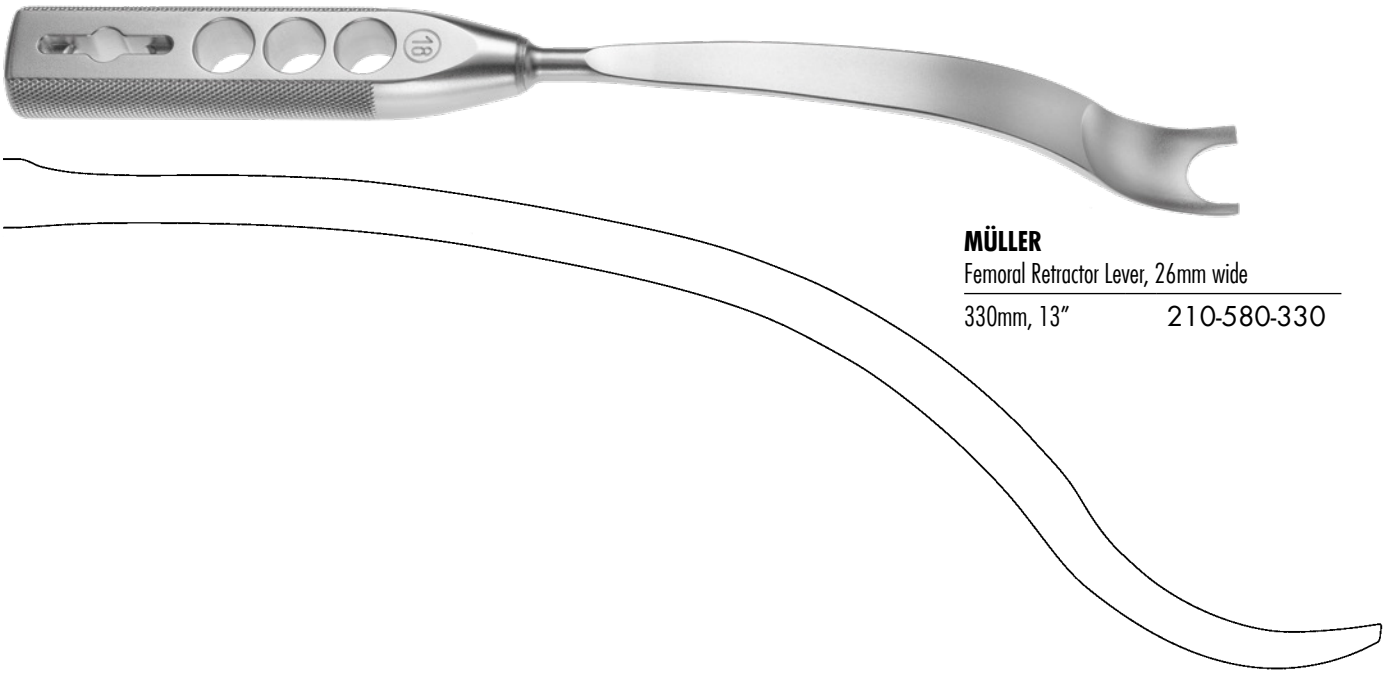
BENNET
Bone Lever, 240mm, 9 1/2″

45mm	210-561-045
65mm	210-561-065



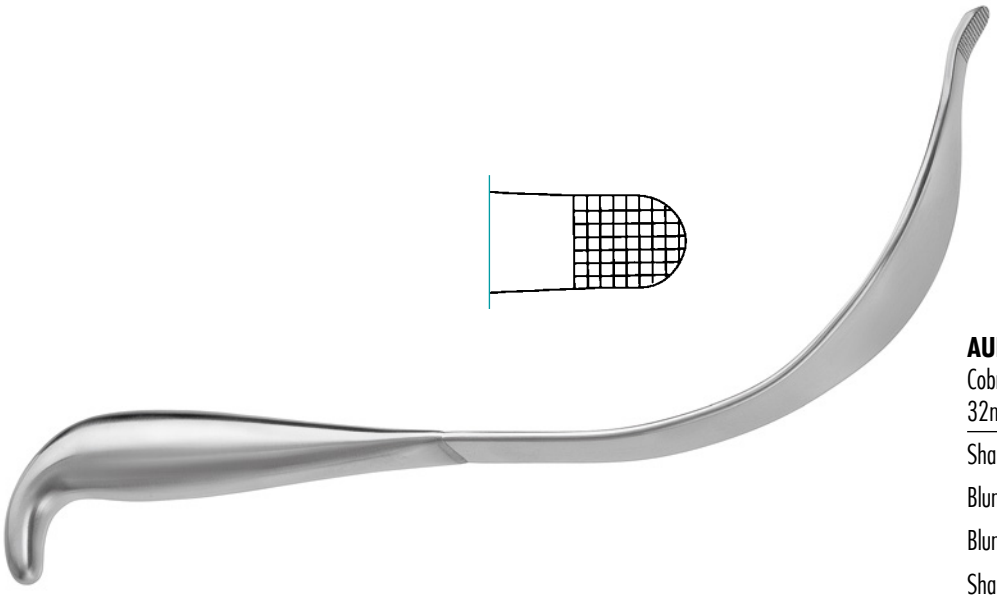
Luxation Lever, synthetic handle, 25mm

310mm, 12 1/4″	210-151-310



MÜLLER
Femoral Retractor Lever, 26mm wide

330mm, 13"	210-580-330



AUFRANC
Cobra Elevator, 260mm, 10 1/4"
32mm

Sharp, serrated	210-568-260
Blunt, serrated	210-569-260
Blunt, smooth	210-570-260
Sharp, smooth	210-571-260

44mm

Blunt, serrated	210-572-260
Sharp, serrated	210-573-260

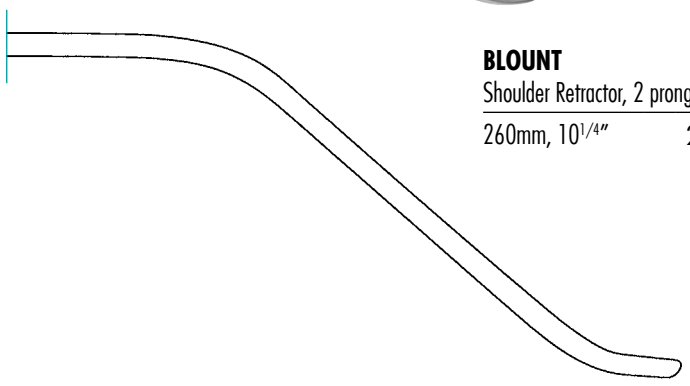


MURPHY LANE
Luxation Lever, 30mm

280mm, 11″	210-575-340







BLOUNT
Shoulder Retractor, 2 prongs

260mm, 10 1/4″	210-565-260



BLOUNT
Bone Lever

260mm, $10^{1/4}$″	210-563-260

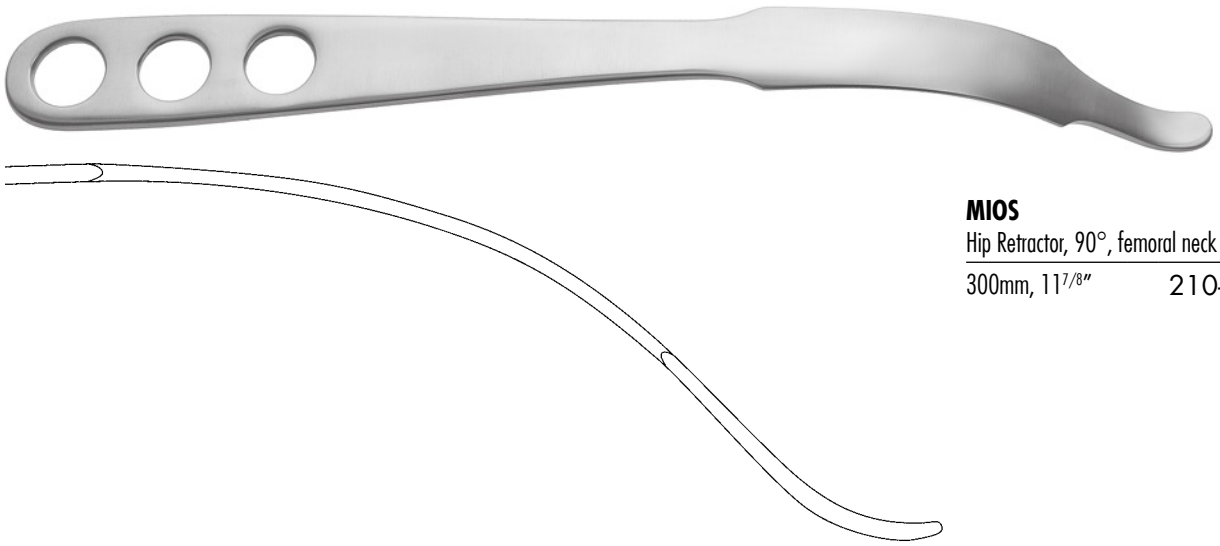




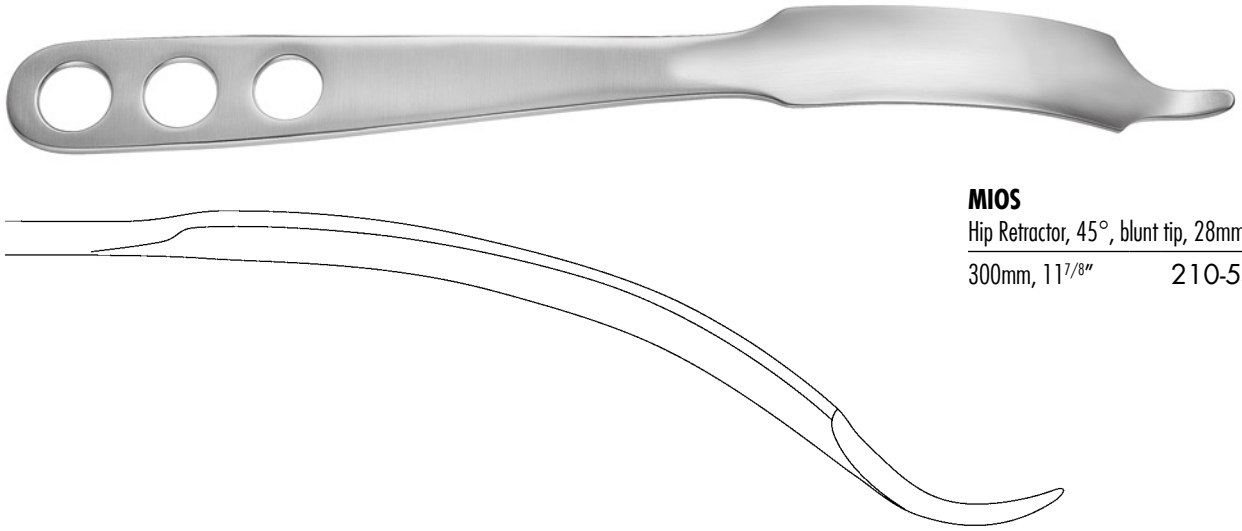


Humeral Head Retractor, strongly curved,
18mm wide, 1 blunt prong

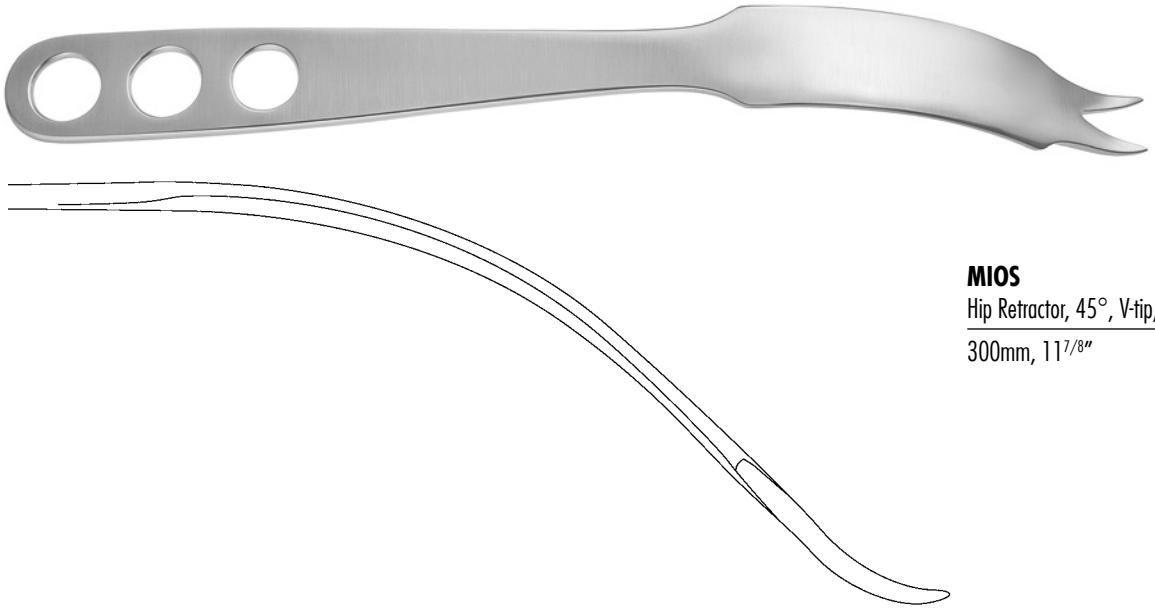
210mm, $8^{1/4}$″	210-536-180



MIOS
Hip Retractor, 90°, femoral neck tip, 22mm
300mm, 11 7/8" 210-590-240

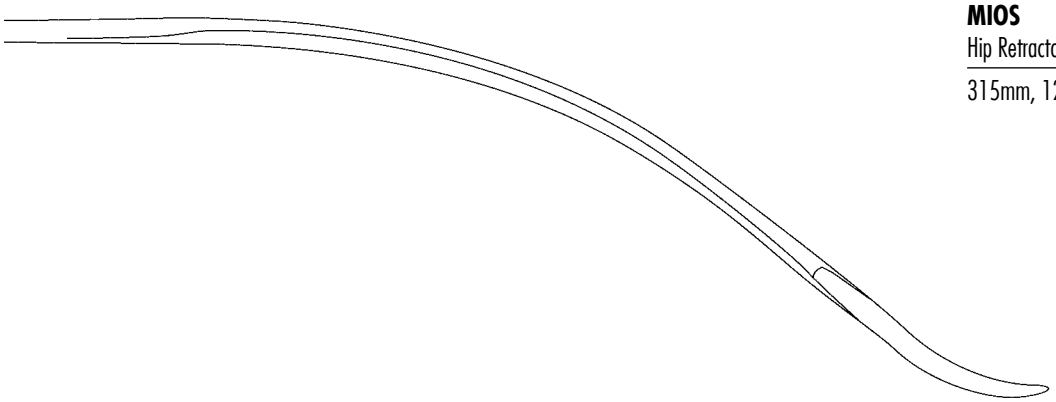


MIOS
Hip Retractor, 45°, blunt tip, 28mm
300mm, 11 7/8" 210-545-302



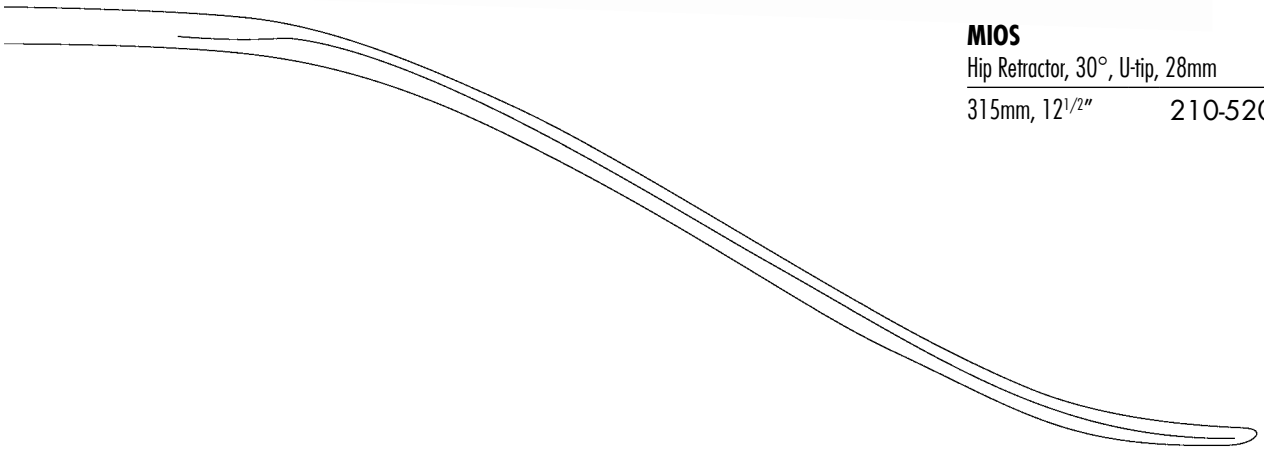
MIOS
Hip Retractor, 45°, V-tip, 28mm
300mm, 11 7/8" 210-545-300



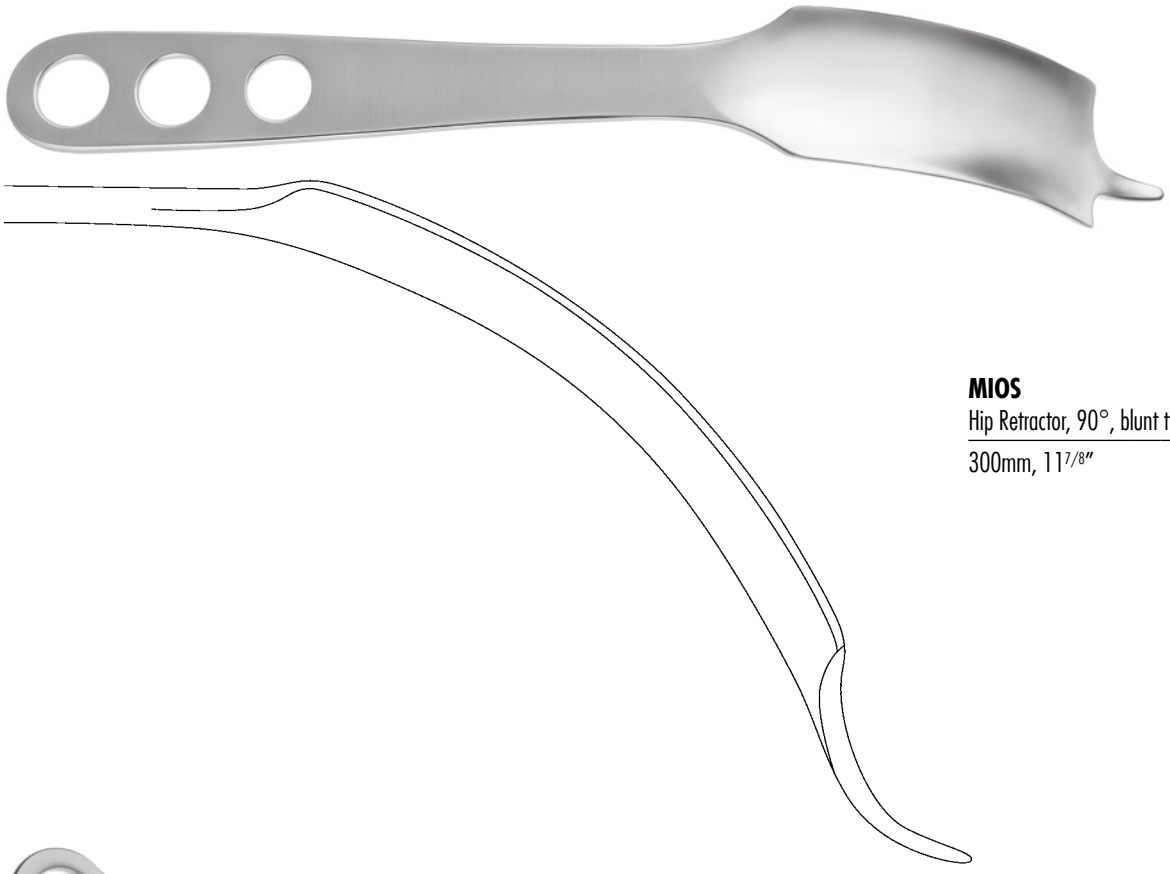


MIOS
Hip Retractor, 30°, V-tip, 28mm
315mm, 12 1/2" 210-530-315





MIOS
Hip Retractor, 30°, U-tip, 28mm
315mm, 12 1/2" 210-520-315



MIOS
Hip Retractor, 90°, blunt tip, 40mm

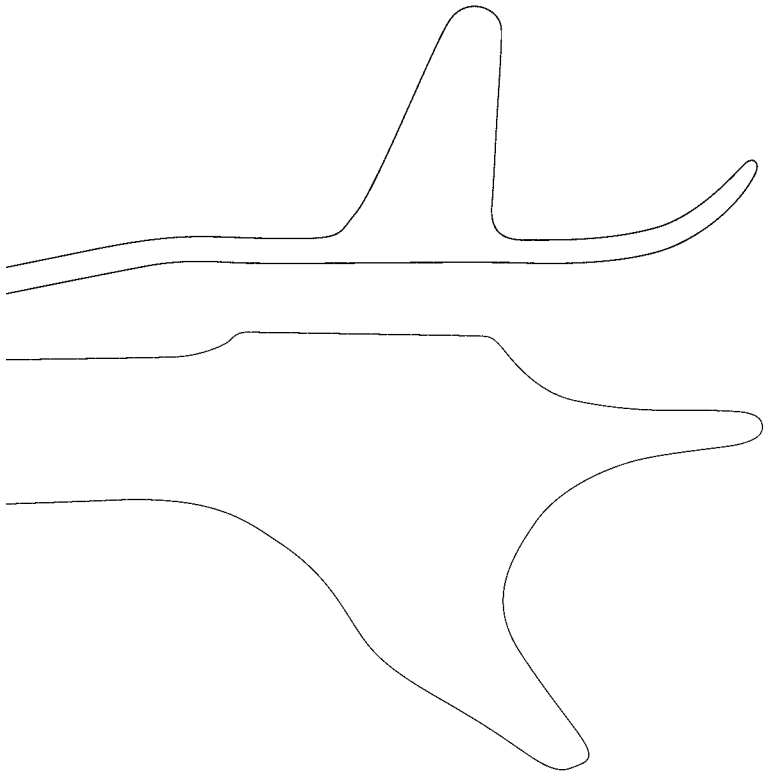
300mm, 11 7/8"	210-590-241



(210-590-001)

Infero - Posterior Acetabular Capsule Retractor

left	210-590-001
right	210-590-002





FUKUDA
Retractor, 180mm, 7″

small, 32mm blade	259-901-180
large, 38mm blade	259-902-180



FUKUDA KUJAT
Retractor, 225mm, $8^{7/8}$″

small, 30mm blade	259-900-225
large, 35mm blade	259-903-225



FUKUDA
Retractor, 170mm, $6^{2/3}$″

small, 32mm blade	259-904-032
large, 40mm blade	259-904-040



DARRACH
Shoulder Elevator, 260mm, 10 1/4"

9mm wide tip	259-260-009
12mm wide tip	259-260-012
16mm wide tip	259-260-016
20mm wide tip	259-260-020

360mm, 14 1/8"

25mm wide tip	259-260-025



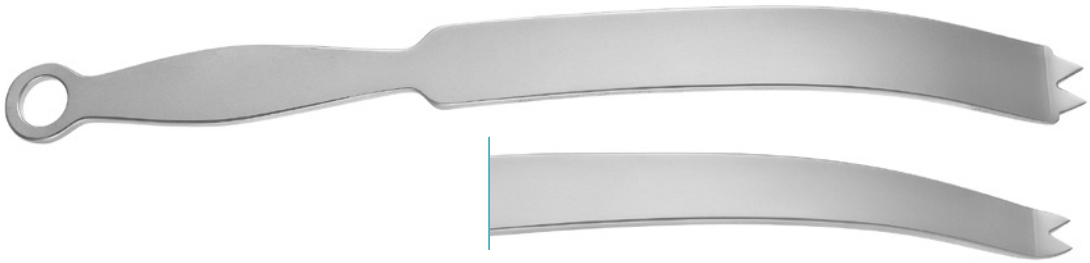


KÖLBEL
Shoulder Elevator, 2 sharp prongs

15mm wide tip	210-537-281
20mm wide tip	210-537-282
15mm wide tip, hook end	210-537-283
20mm wide tip, hook end	210-537-284

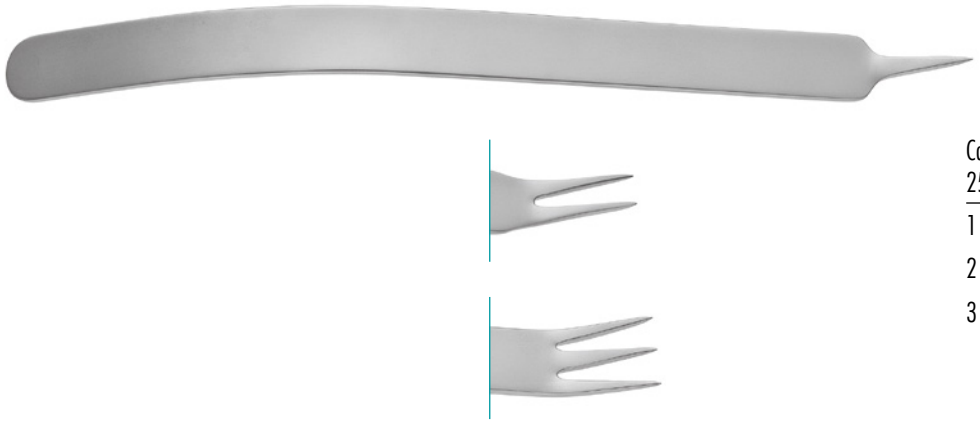
slightly curved, smooth end

18mm wide tip	210-537-285



Thin Glenoud Neck Retractor
280mm, 11"

wide, 22mm	259-258-422
narrow, 14mm	259-258-414



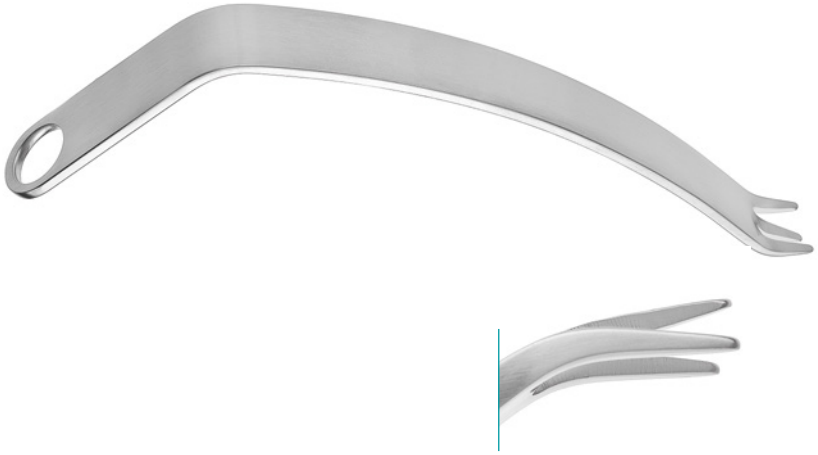
Capsule Retractor for use in Bankhart surgery
250mm, 9 7/8"

1 prong	259-258-251
2 prongs	259-258-252
3 prongs	259-258-253



BRISTOW BANKHART
Capsule Retractor, 20mm wide

250mm, 9 7/8"	259-254-020



BRISTOW BANKHART
Soft Tissue Retractor, 3 blunt prongs
21mm blade width

190mm, 7 1/2"	259-253-180



Anterior Glenoid Neck Retractor
25mm wide tip

280mm, 11″	259-258-100



Posterior Glenoid Neck Retractor,
30mm wide blade

250mm, 9 7/8″	259-258-200



GOLDSTEIN
Glenoid Neck Retractor, 18mm wide tip at teeth

215mm, 8 1/2"	259-258-400



BHATTMANN
Humeral Head Retractor,
36mm wide blade

255mm, 10"	259-258-600



Humeral Head Retractor

180mm, 7"	259-258-500



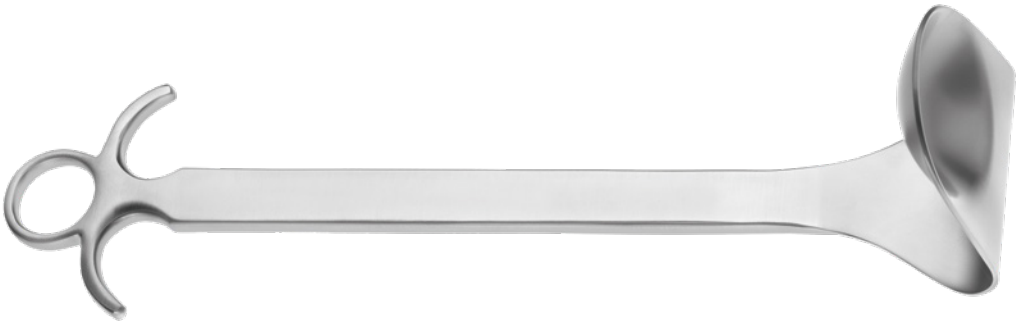
Humeral Head Retractor

190mm, 7 1/2"	259-258-550



SKID
Bone Elevator, double ended

280mm, 11"	259-258-700



BROWNE
Deltoid Retractor, 60x65mm blade

270mm, $10^{2/3}$"	259-258-270



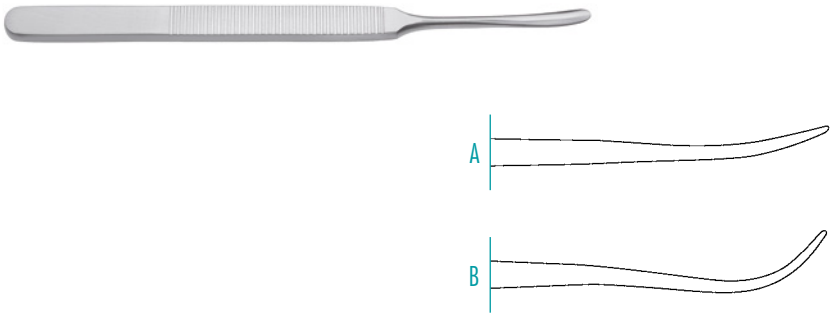
BRISTOW BANKART
Humerus Retractor,
2 blunt prongs, hollow handle

25 x 102mm	259-252-180



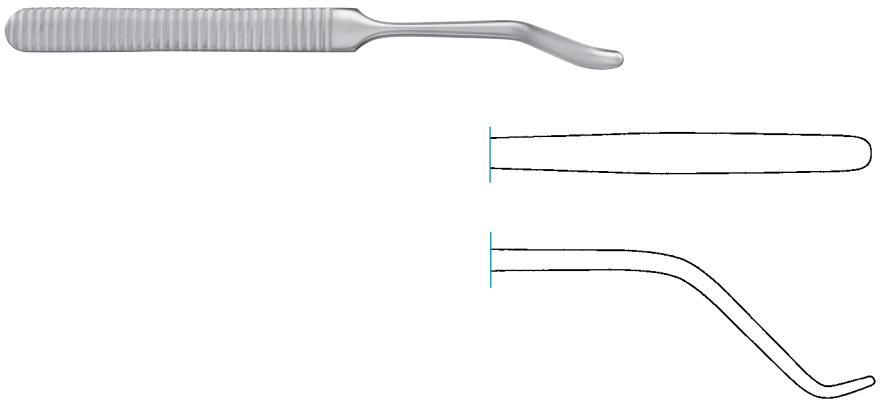
CHANDLER
Tissue Retractor, 230mm, 9"

16mm wide tip	259-258-316
19mm wide tip	259-258-319
25mm wide tip	259-258-325



KOENIG
Elevator, 4.5mm wide, 155mm, $6^{1/8}$″

A Slightly curved	210-551-150
B Strongly curved	210-552-150



Phalangeal Elevator, 5.5mm wide, bayonet strongly curved

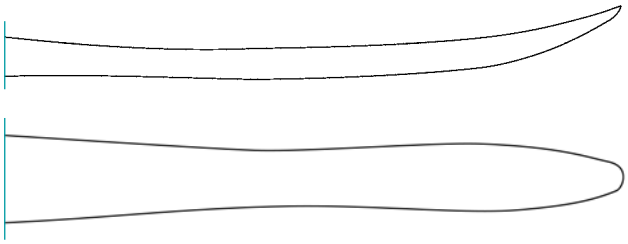
165mm, $6^{1/2}$″	210-523-175



WILLIGER
Elevator, 160mm, $6^{1/4}$″

5.5mm	210-395-160
7.0mm	210-396-170

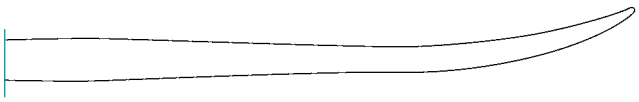




CAIRNS
Skull Flap Elevator

175mm, 6 7/8"	250-066-141

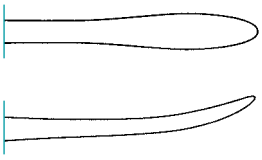




QUERVAIN
Elevator, 6mm

200mm, 8"	210-386-200





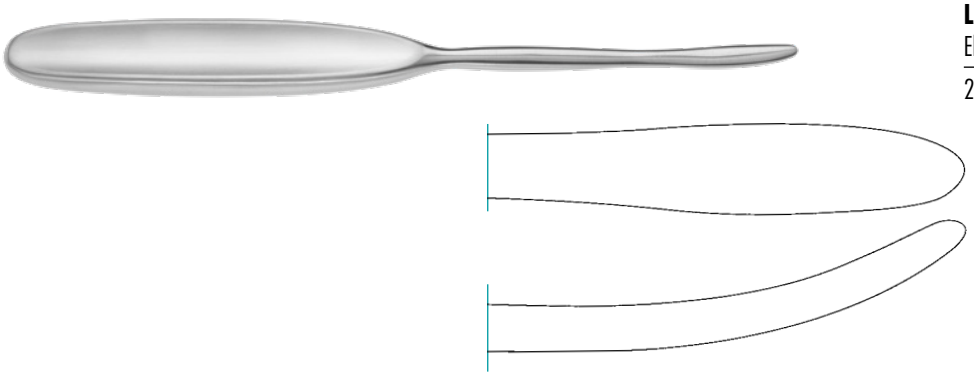
SEBILEAU
Elevator, 5mm

175mm, 6 7/8"	210-395-175



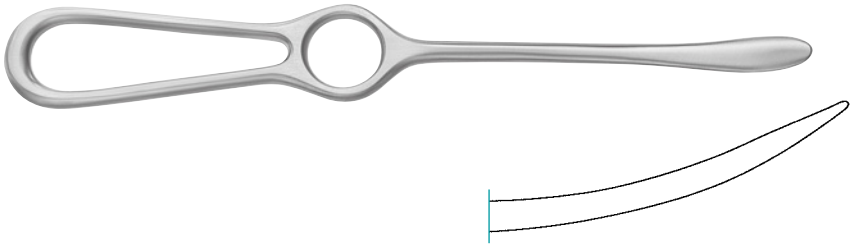
LANGENBECK
Elevator, 200mm, 8"

7mm	210-395-200
10mm	210-397-200



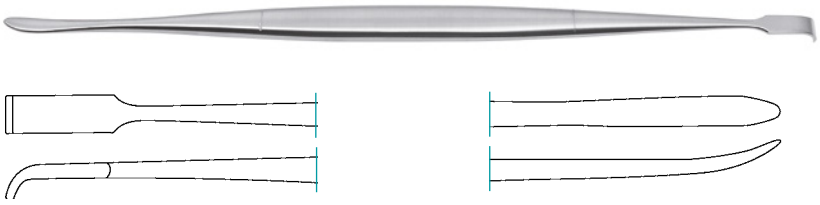
LANGENBECK
Elevator, 6.5mm

210mm, 8 1/4"	210-396-210



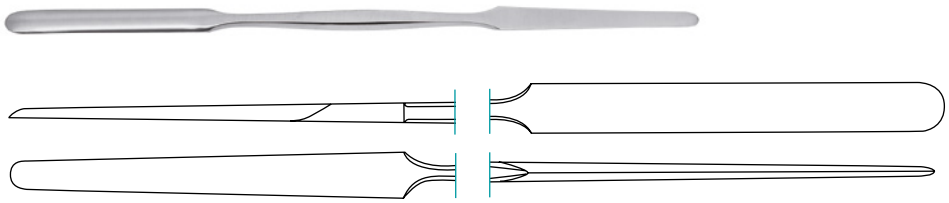
LANGENBECK
Elevator, 11mm

230mm, 9"	210-398-230



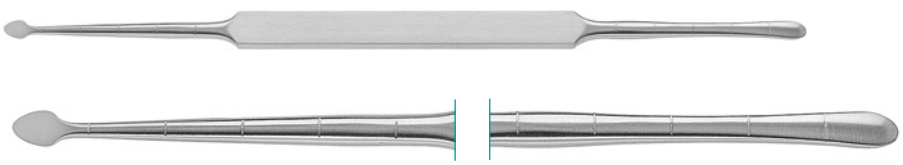
HOWARTH
Elevator, double-ended, sharp/blunt

215mm, 8 1/2″	420-552-215



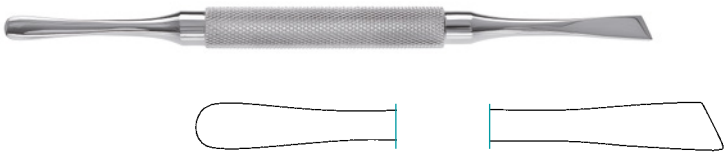
KILLIAN
Elevator, double-ended, sharp/blunt

185mm, 7 1/4″	420-541-180



COTTLE
Elevator, double-ended, graduated, sharp/sharp

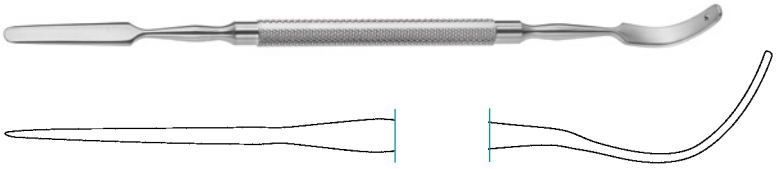
200mm, 8″	420-550-230



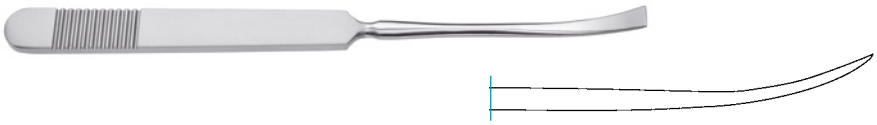
MEAD
Elevator, double-ended, oblique/rounded
165mm, 6 1/2" 500-446-165



MOLT
Elevator, double-ended, sharp/sharp
165mm, 6 1/2" 500-440-180



MCDONALD
Elevator, double-ended, straight / curved
190mm, 7 1/2" 210-527-190



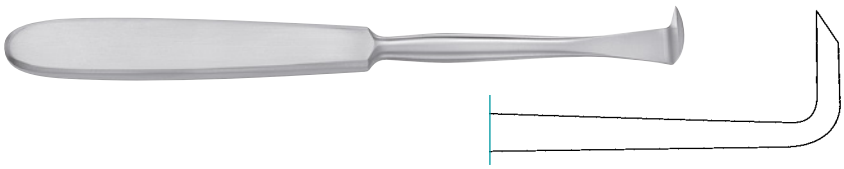
PENNYBAKER
Elevator, sharp, 6mm

150mm, 6"	210-488-170



JANSEN
Periosteal Elevator, curved

165mm, 6 1/2"	210-303-165



LANGENBECK
Periosteal Elevator, 14mm, hollow handle

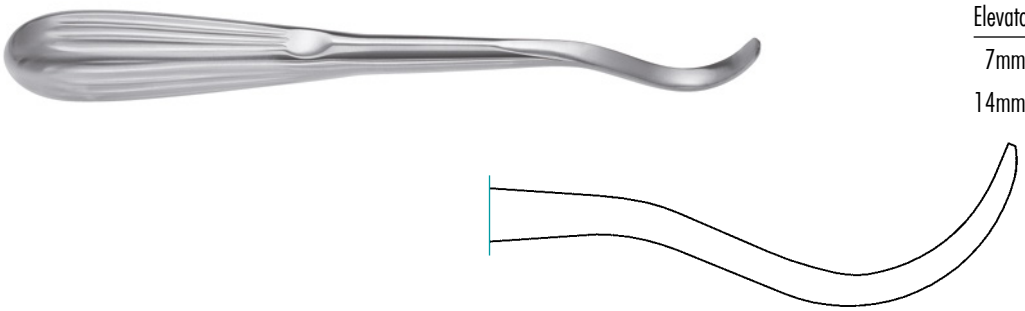
180mm, 7"	210-301-180



KEY

Elevator, 180mm, 7″

3mm	210-489-003
6mm	210-489-006
190mm, 7 1/2″	
10mm	210-489-010
12mm	210-489-012
13mm	210-489-013
16mm	210-489-016
200mm, 8″	
19mm	210-489-019
210mm, 8 1/4″	
25mm	210-489-025



CREGO

Elevator, 200mm, 8″

7mm	170-492-001
14mm	170-492-004



COBB

Elevator, 240mm, 9 1/2″

9mm	210-401-095
13mm	210-401-127
19mm	210-401-019
25mm	210-401-025
32mm	210-401-032

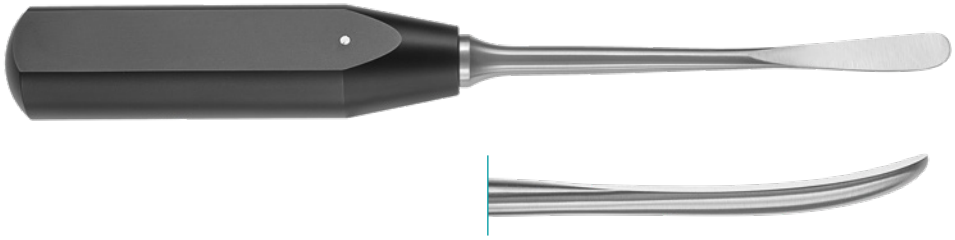


COBB
Spinal Elevator, 240mm, 9 1/2″

9mm	210-400-001
13mm	210-400-002
19mm	210-400-003
25mm	210-400-004
32mm	210-400-005

290mm, 11 1/2″

9mm	210-402-009
13mm	210-402-013
19mm	210-402-019
25mm	210-402-025
32mm	210-402-032



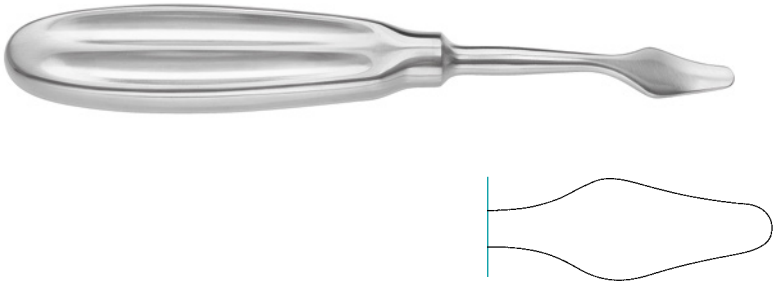
COBB
Elevator, semi-sharp, slightly curved, synthetic handle, 250mm, 9 7/8″

10mm	210-420-010
13mm	210-420-013
19mm	210-420-019
25mm	210-420-025



COBB
Elevator, synthetic handle, 340mm, 13 1/2″

10mm	210-405-010
15mm	210-405-015
20mm	210-405-020
25mm	210-405-025
30mm	210-405-030
35mm	210-405-035



CHANDLER
Elevator, 180mm, 7″

13mm	210-490-013

200mm, 8″

19mm	210-490-019
25mm	210-490-025

250mm, $9^{7/8}$″

31mm	210-491-030



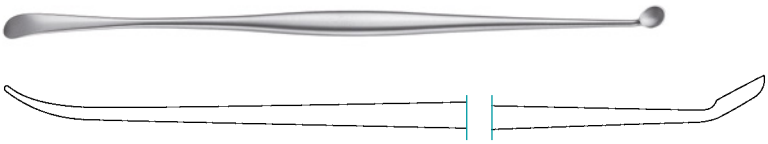
LANE
Periosteal Elevator, 190mm, $7^{1/2}$″

7mm	210-483-190
10mm	210-484-190



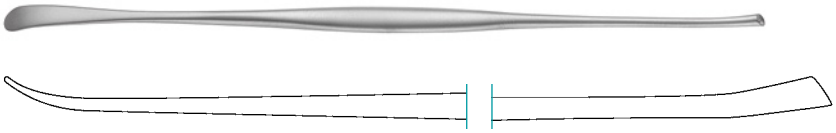
SAYRE
Periosteal Elevator, double-ended, 9.5mm, 170mm, $6^{2/3}$″

sharp	210-397-170
blunt	210-340-170



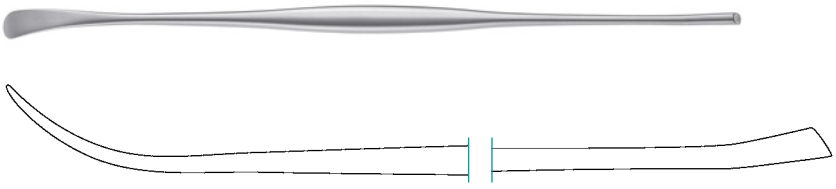
PENFIELD
Dissector, Fig. 1

175mm, $6^{7/8}$″	250-691-175



PENFIELD
Dissector, Fig. 2

195mm, $7^{3/4}$″	250-692-195



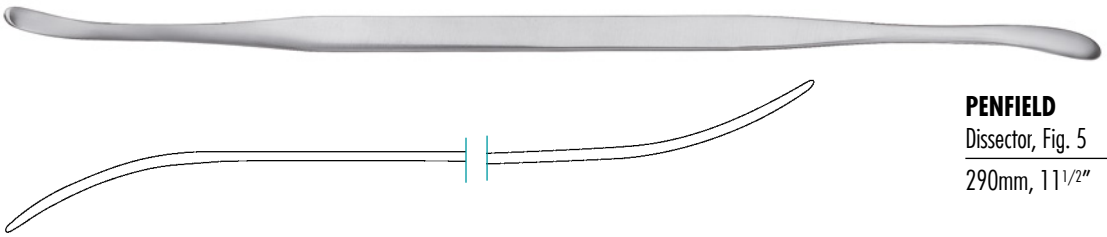
PENFIELD
Dissector, Fig. 3

195mm, $7^{3/4}$″	250-693-195



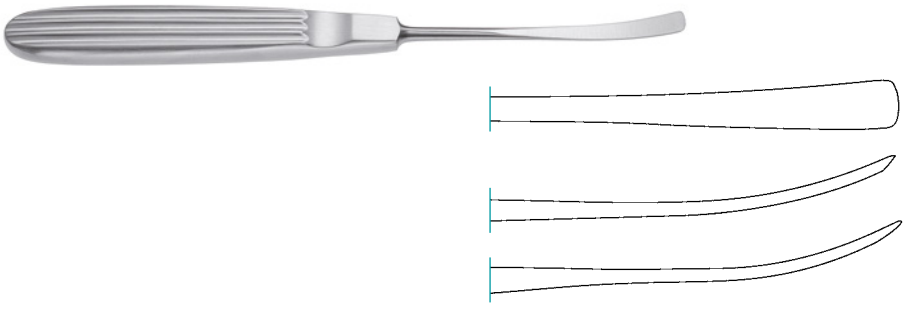
PENFIELD
Dissector, Fig. 4

205mm, 8 1/8"	250-694-215



PENFIELD
Dissector, Fig. 5

290mm, 11 1/2"	250-695-290



CASPAR
Dissector, 6.2mm, 180mm, 7"

sharp	259-185-328
blunt	259-185-329



MCKENTY
Raspatory, 150mm, 6″

4mm	420-547-004
5mm	420-547-005



KOENIG
Raspatory, 5mm

150mm, 6″	210-553-150



FREER
Raspatory, 4mm, 190mm, 7 1/2″

blunt	420-547-190
sharp	420-548-190



SEWALL
Raspatory, 6mm, blunt

200mm, 8"	420-549-200



KILLIAN
Raspatory, 6mm, sharp/blunt

180mm, 7"	420-540-180



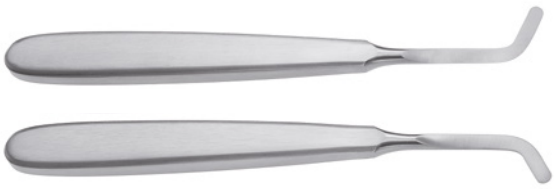
KLEINERT-KUTZ
Elevator and Dissector, double-ended,
blade A: 4.5mm / blade b: 3.0mm

180mm, 7"	420-554-178



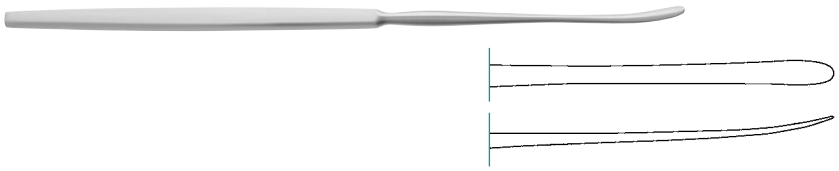
KLEINERT-KUTZ
Elevator and Dissector, double-ended,
blade A: 2.5mm / blade b: 3.0mm

190mm, 7 1/2"	420-554-190



Raspatory, 4mm, 140mm, 5 1/2"

Curved left	210-552-140
Curved right	210-551-140



HALLE

Raspatory, 4mm, blunt

180mm, 7"	420-544-165



WILLIGER

Raspatory, 4mm

130mm, 5 1/8"	210-434-130

160mm, 6 1/4"

5mm	210-436-160
7mm	210-438-160



JOSEPH
Raspatory, 4mm

160mm, 6 1/4"	210-396-160



LEMPERT
Raspatory, 4mm

185mm, 7 1/4"	210-397-185



COTTLE
Raspatory, 8mm, sharp

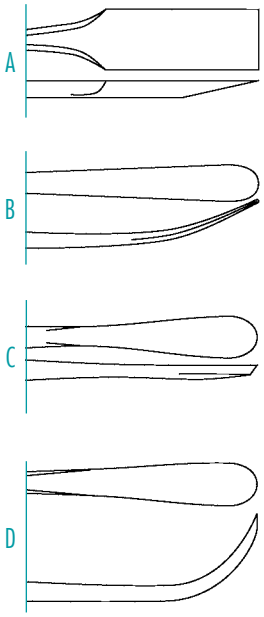
190mm, 7 1/2"	210-438-195



LANDOLT
Raspatory, 4.5mm

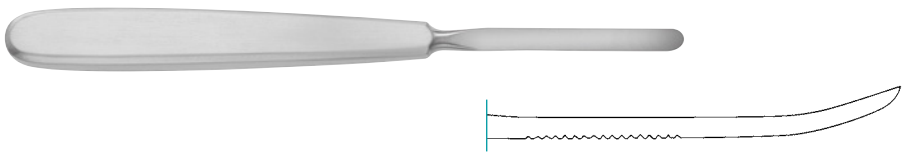
175mm, $6^{7/8}$"	210-439-175





ADSON
Raspatory, 170mm, $6^{2/3}$"

A 8mm, sharp	210-484-170
B 8mm, blunt	210-485-170
C 7mm, semi-sharp	210-486-170
D 7mm, semi-sharp	210-487-170



Raspatory, 170mm, $6^{2/3}$"

6mm	210-439-006
8mm	210-439-008



Raspatory, synthetic handle,
6mm

190mm, 7 1/2"	210-434-180



3mm

185mm, 7 1/4"	210-432-185



6mm

185mm, 7 1/4"	210-433-180



6mm

185mm, 7 1/4"	210-432-180



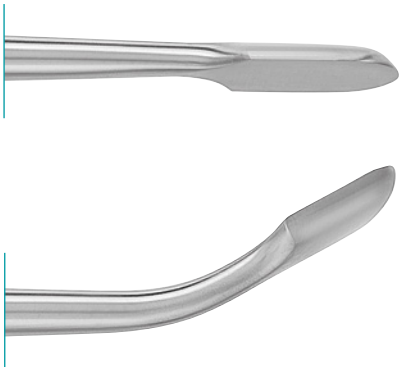
Raspatory, synthetic handle,
13mm

185mm, 7 1/4"	210-433-185



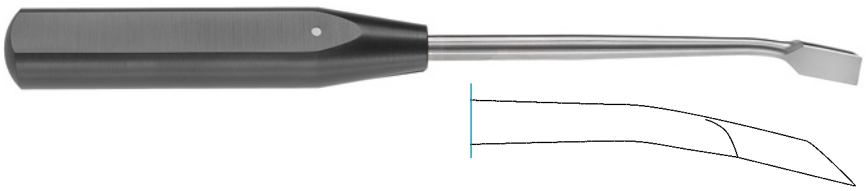
14mm

200mm, 8"	210-430-200



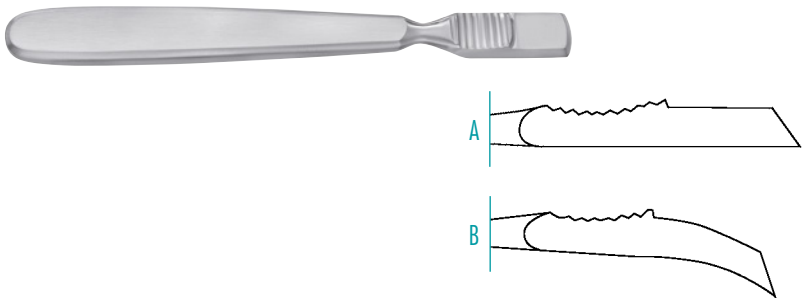
14mm

200mm, 8"	210-431-200



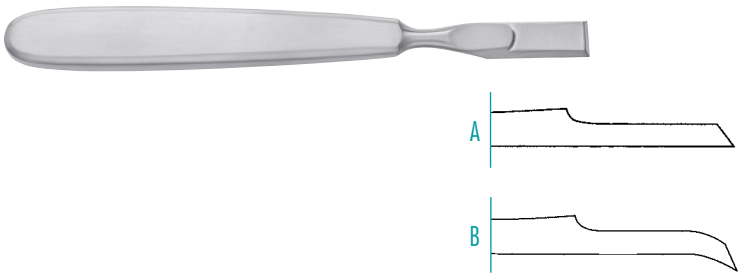
Raspatory, 13mm, synthetic handle

230mm, 9"	210-433-230



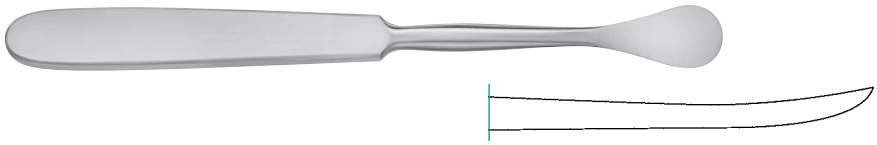
FARABEUF
Raspatory, 12.5mm, 150mm, 6″

A straight	210-310-150
B curved	210-311-150



FARABEUF COLLIN
Raspatory, 11mm, 155mm, 6 1/8″

A straight	210-312-155
B curved	210-313-155



SEDILLOT
Raspatory, 18mm, hollow handle

190mm, 7 1/2″	210-316-190



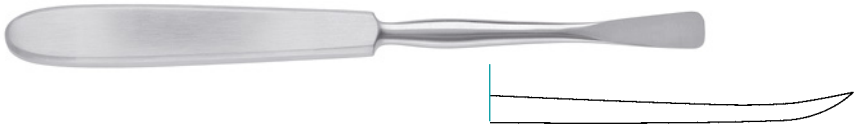
HENAHAN
Raspatory, curved, 170mm, 6 2/3"

10mm	210-410-170
12mm	210-412-170



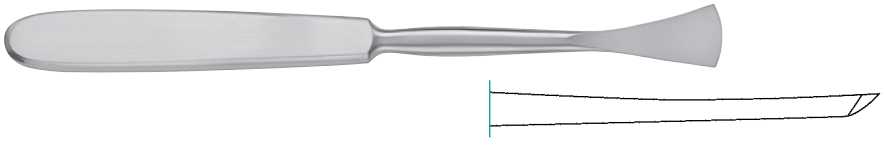
KRAEMER
Raspatory, 10mm, round blade

185mm, 7 1/4"	210-313-185



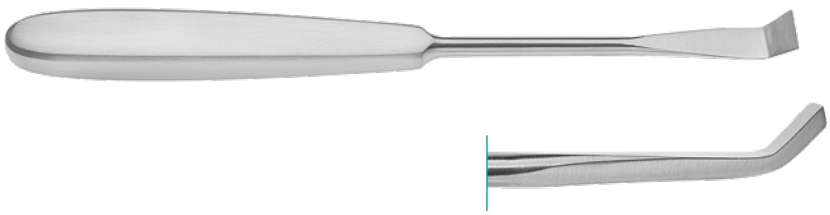
KRAEMER
Raspatory, 10mm, straight blade

185mm, 7 1/4"	210-314-185



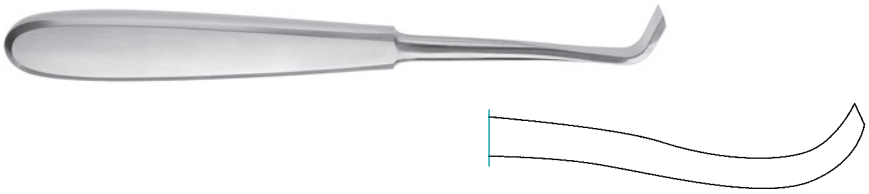
LANGENBECK
Raspatory, 16mm

190mm, 7 1/2"	210-303-190



Periosteal Raspatory, 11mm

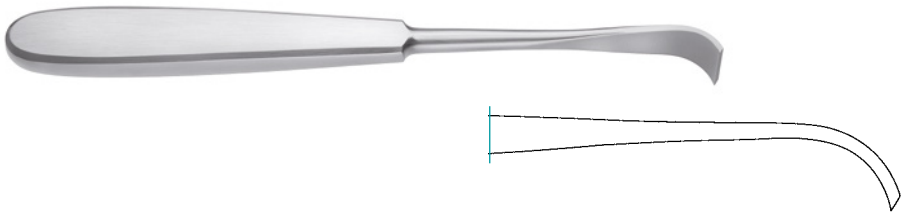
210mm, 8 1/4" 410-148-210



SCHNEIDER

Raspatory, 13mm

175mm, 6 7/8" 210-315-175



SCHNEIDER SAUERBRUCH

Raspatory, 13mm

190mm, 7 1/2" 210-315-190



SEDILLOT

Raspatory, 15mm

210mm, 8 1/4" 210-315-210



LAMBOTTE
Raspatory, 210mm, 8 1/4"

5mm	210-461-005
10mm	210-461-210
15mm	210-462-210
20mm	210-463-210
25mm	210-464-210



ALEXANDER
Periosteotome, 12mm

210mm, 8 1/4"	210-440-200



MCGLAMRY
Raspatory, 210mm, 8 1/4"

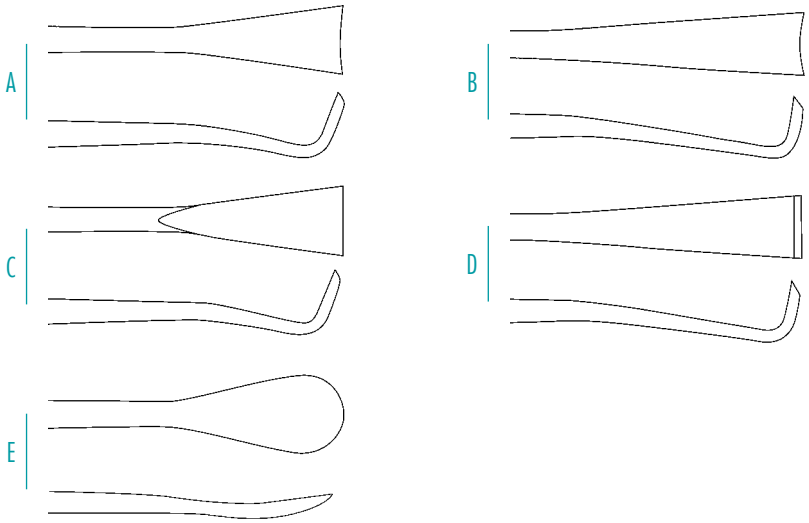
9mm	170-160-010
11mm	170-160-012
15mm	170-160-015
17mm	170-160-017



Trapeziectomy screw with handle

190mm, 7 1/2"	225-810-500





SEMB

Raspatory, hollow handle, 175mm, 6 7/8″

A 12mm	210-450-001

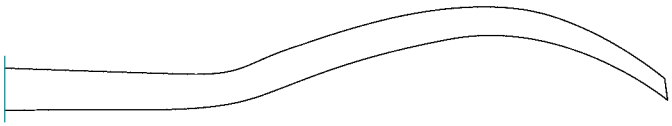
230mm, 9″

B 12mm	210-450-002
C 13mm	210-450-003
D 13mm	210-450-004
E 15mm	210-450-005



Hip Raspatory, synthetic handle, 20mm

275mm, 10 7/8″	210-420-275

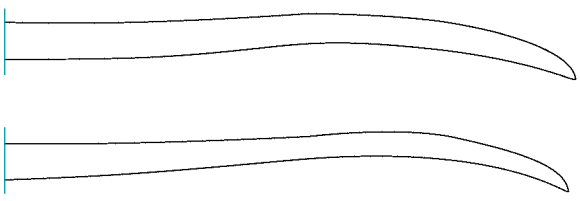


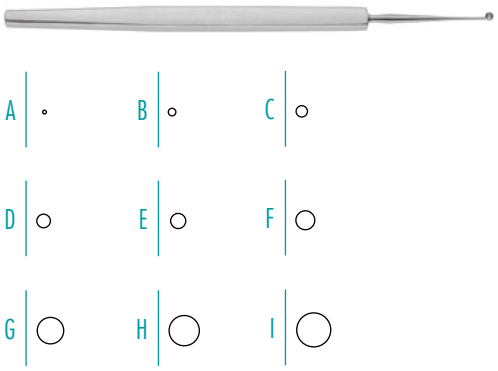


WAGNER

Raspatory, synthetic handle, 330mm, 13″

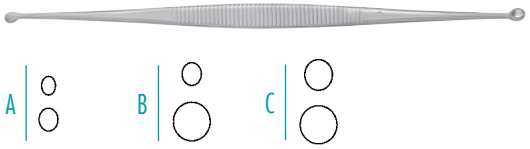
8mm	210-428-330
17mm	210-417-330





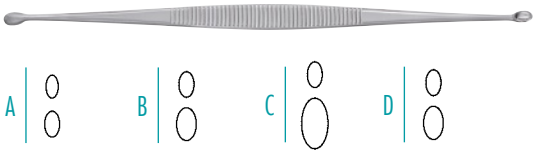
MEYERHOFER
Chalazion Curette, 130mm, $5^{1/8}$"

A Size 000, ∅ 0.5mm	400-402-005
B Size 00, ∅ 1.0mm	400-402-010
C Size 0, ∅ 1.5mm	400-402-015
D Size 1, ∅ 1.8mm	400-402-018
E Size 2, ∅ 2.0mm	400-402-020
F Size 3, ∅ 2.5mm	400-402-025
G Size 4, ∅ 3.5mm	400-402-035
H Size 5, ∅ 4.0mm	400-402-040
I Size 6, ∅ 4.5mm	400-402-045



MARTINI
Double Curette, round/round, 140mm, $5^{1/2}$"

A #00/0 (∅ 3.0 / 3.2mm)	210-218-140
B #0/1 (∅ 3.2 / 4.0mm)	210-219-140
C #1/2 (∅ 4.0 / 4.8mm)	210-218-012



WILLIGER
Double Curette, oval/oval, 140mm, $5^{1/2}$"

A #00/0 (∅ 2.5 / 3.0mm)	210-216-000
B #0/1 (∅ 3.0 / 3.5mm)	210-216-001
C #1/2 (∅ 3.5 / 4.2mm)	210-216-002

135mm, $5^{1/3}$"

D #0/1 (∅ 3.0 / 3.5mm)	210-216-000



JACOBSON
Double Curette

140mm, 5 1/2"	210-213-140



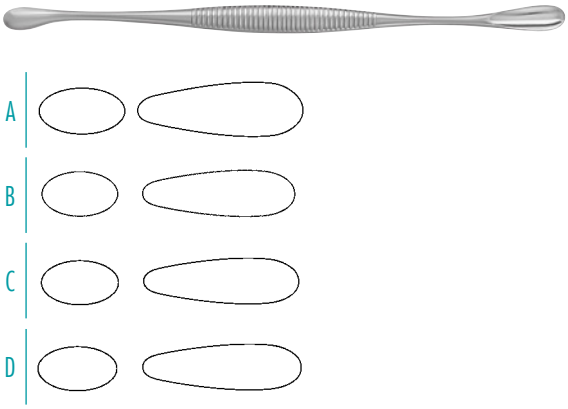
JANSEN
Double Curette, 4.0/3.0mm

160mm, 6 1/4"	210-218-160



JANSEN
Double Curette, 4.0/3.0mm

210mm, 8 1/4"	210-214-210



VOLKMANN
Double Curette, 130mm, $5^{1/8}$″

A 6.5 / 7.7mm	210-210-130

140mm, $5^{1/2}$″

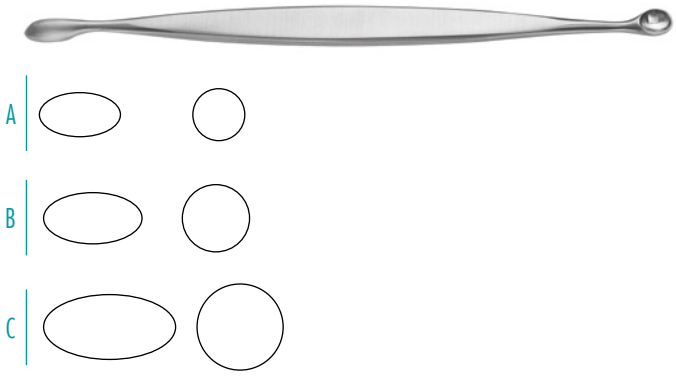
B 6.2 / 6.8mm	210-210-140

170mm, $6^{2/3}$″

C 6.8 / 6.8mm	210-210-170

200mm, 8″

D 6.2 / 7.5mm	210-210-200



VOLKMANN
Double Curette, 130mm, $5^{1/8}$″

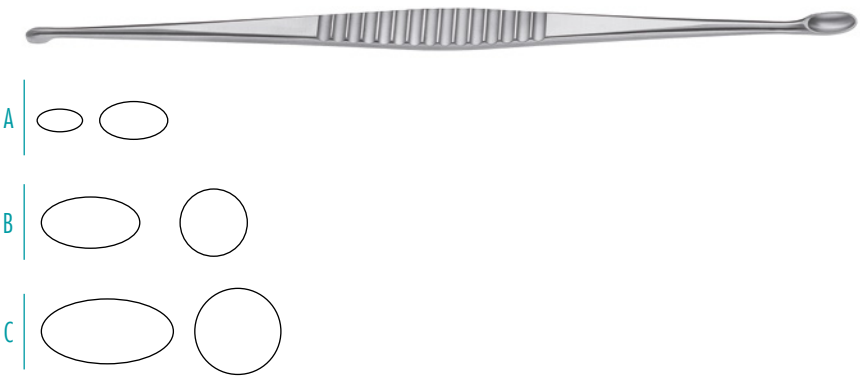
A 6.8 / 6.3mm	210-211-130

160mm, $6^{1/4}$″

B 9.0 / 7.0mm	210-211-160

200mm, 8″

C 11.0 / 9.0mm	210-211-200



VOLKMANN
Double Curette, 220mm, $8^{2/3}$″

A #1 3.0/5.0mm	410-746-001
B #2 4.0/6.0mm	410-746-002
C #3 5.0/7.0mm	410-746-003



WILLIGER
Double Curette, 160mm, 6 1/4"

#00/00	210-216-020



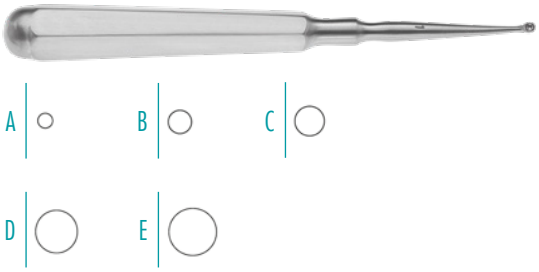
JANSEN
Double Curette, 3.0/4.0mm

150mm, 6"	210-216-150



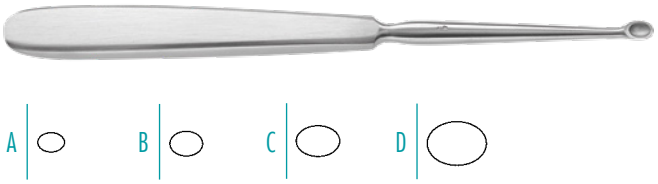
HEMINGWAY
Double Curette, #4

180mm, 7"	210-215-004



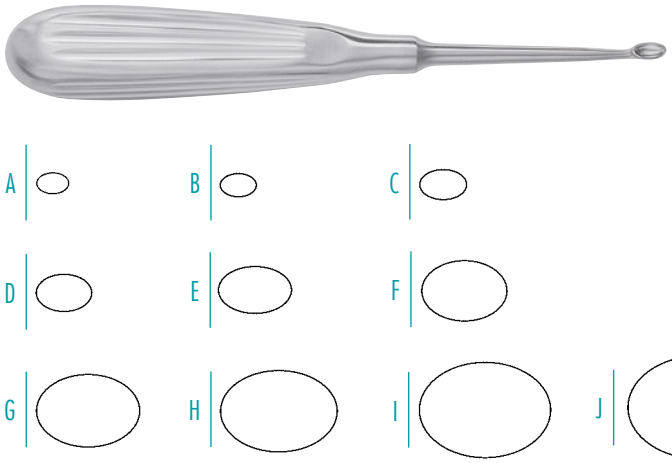
BUCK
Bone Curette, 145mm, $5^{3/4}$″

A Fig. 1	210-201-145
B Fig. 2	210-202-145
C Fig. 3	210-203-145
D Fig. 4	210-204-145
E Fig. 5	210-205-145



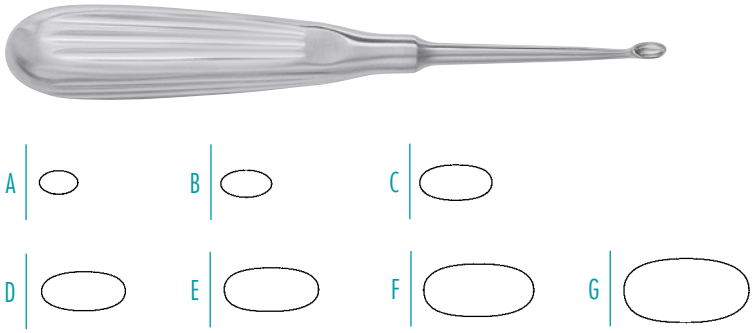
BUCK
Bone Curette, oval, 170mm, $6^{2/3}$″

A Fig. 00, 2.5mm	210-294-010
B Fig. 0, 3.2mm	210-294-020
C Fig. 1, 4.0mm	210-294-040
D Fig. 2, 5.7mm	210-294-050



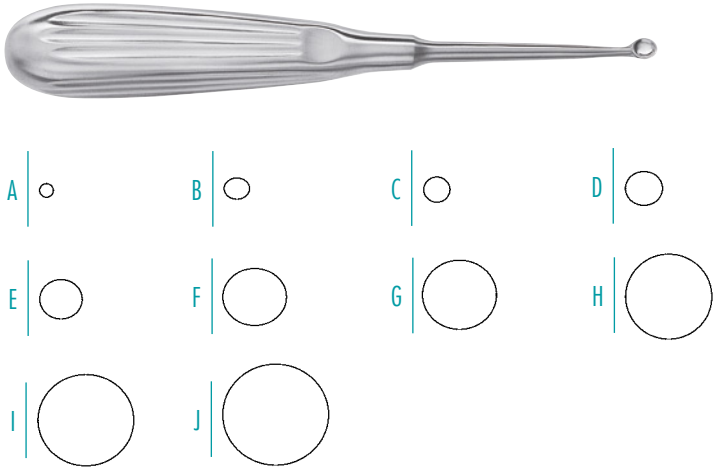
VOLKMANN
Bone Curette, 170mm, 6 2/3"

A #0000	210-304-400
B #000	210-304-300
C #00	210-304-200
D #0	210-304-100
E #1	210-304-010
F #2	210-304-020
G #3	210-304-030
H #4	210-304-040
I #5	210-304-050
J #6	210-304-060



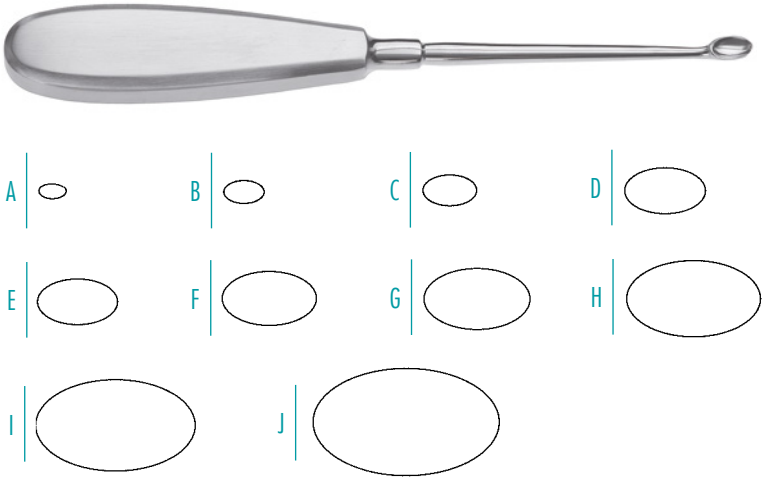
SCHEDE
Bone Curette, 170mm, 6 2/3"

A #000	210-300-300
B #00	210-300-200
C #0	210-300-100
D #1	210-300-010
E #2	210-300-020
F #3	210-300-030
G #4	210-300-040



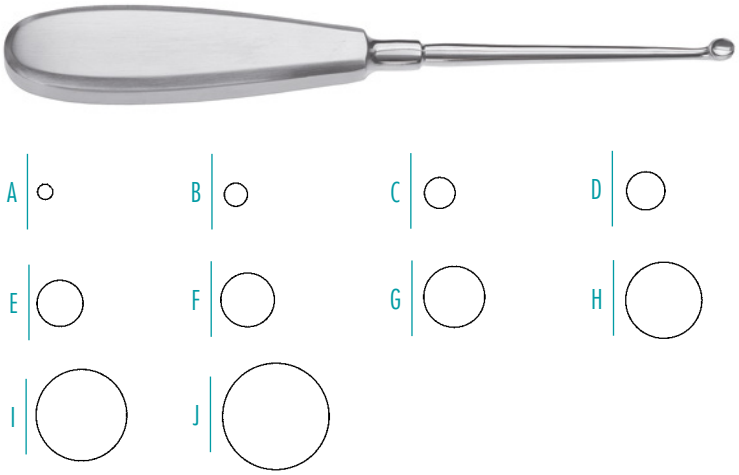
BRUNS
Bone Curette, round, 170mm, 6 2/3"

A #0000	210-306-400
B #000	210-306-300
C #00	210-306-200
D #0	210-306-100
E #1	210-306-010
F #2	210-306-020
G #3	210-306-030
H #4	210-306-040
I #5	210-306-050
J #6	210-306-060



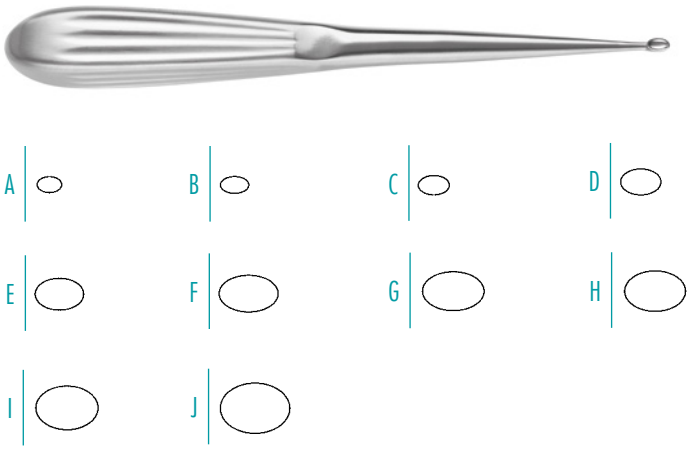
STILLE
Bone Curette, oval, 170mm, $6^{2/3}$"

A Ø 2mm	210-249-002
B Ø 3mm	210-249-003
C Ø 4mm	210-249-004
195mm, $7^{3/4}$"	
D Ø 5mm	210-249-005
E Ø 6mm	210-249-006
F Ø 7mm	210-249-007
200mm, 8"	
G Ø 8mm	210-249-008
205mm, $8^{1/8}$"	
H Ø 10mm	210-249-010
I Ø 12mm	210-249-012
J Ø 14mm	210-249-014



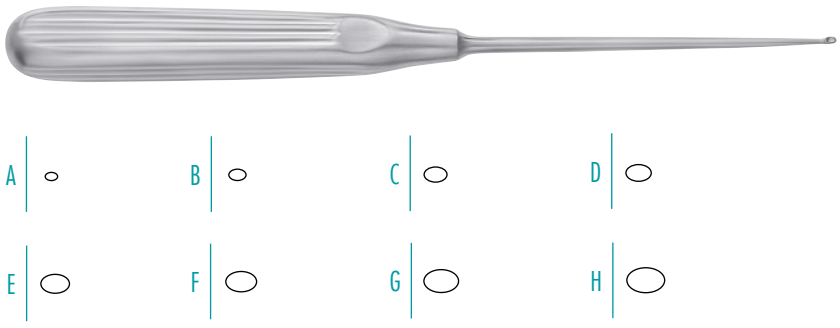
STILLE
Bone Curette, round, 170mm, $6^{2/3}$"

A Ø 2mm	210-248-002
B Ø 3mm	210-248-003
C Ø 4mm	210-248-004
195mm, $7^{3/4}$"	
D Ø 5mm	210-248-005
E Ø 6mm	210-248-006
F Ø 7mm	210-248-007
200mm, 8"	
G Ø 8mm	210-248-008
205mm, $8^{1/8}$"	
H Ø 10mm	210-248-010
I Ø 12mm	210-248-012
J Ø 14mm	210-248-014



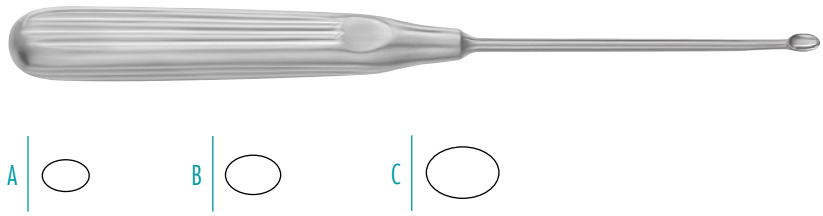
SPRATT
Bone Curette, oval, 170mm, 6 2/3″

A #0000, 2.5mm	210-308-008
B #000, 3.0mm	210-308-000
C #00, 4.0mm	210-308-001
D #0, 4.5mm	210-308-002
E #1, 5.0mm	210-308-003
F #2, 6.0mm	210-308-004
G #3, 7.0mm	210-308-005
H #4, 8.0mm	210-308-006
I #5, 9.6mm	210-308-007
J #6 11.5mm	210-308-009



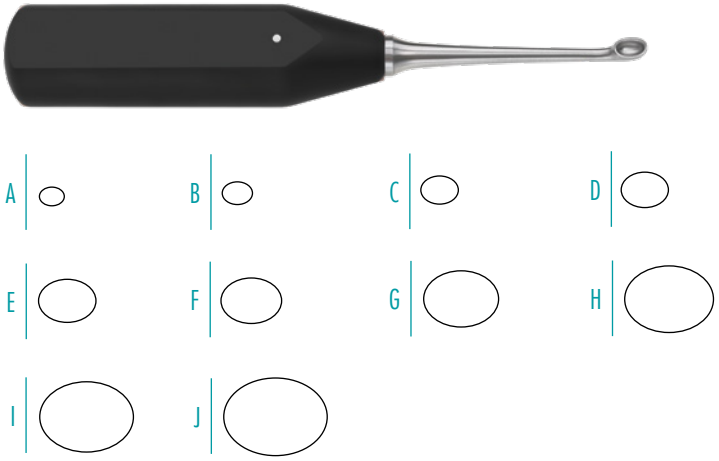
LEMPERT
Bone Curette, 200mm, 8″

A #000000, 1mm	210-348-600
B #00000, 1.5mm	210-348-500
C #0000, 2.0mm	210-348-400
D #000, 2.2mm	210-348-300
E #00, 2.5mm	210-348-200
F #0, 2.7mm	210-348-100
G #1, 3.0mm	210-348-010
H #2, 3.3mm	210-348-002



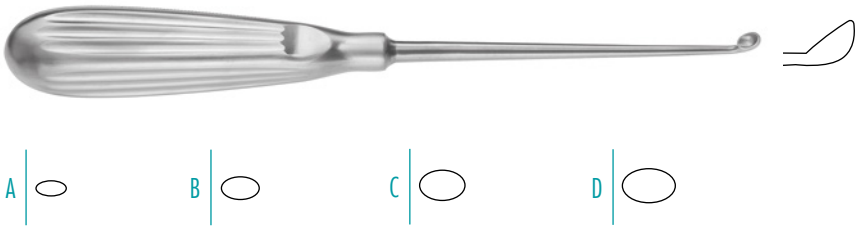
HALLE
Bone Curette, malleable, 210mm, 8 1/4"

A #1, 4.8mm	210-350-200
B #2, 5.8mm	210-350-100
C #3, 6.8mm	210-350-010



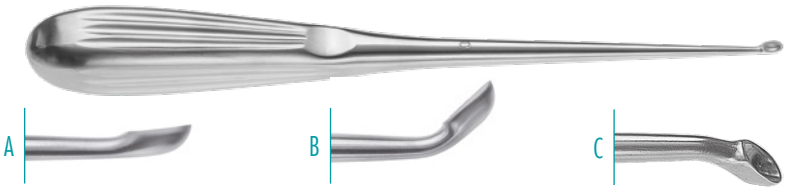
BRUNS
Bone Curette, synthetic handle, 170mm, 6 2/3"

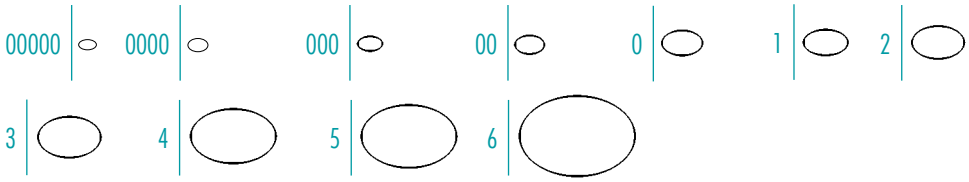
A #0000, 2.5mm	210-302-100
B #000, 3.0mm	210-302-101
C #00, 3.7mm	210-302-102
D #0, 4.7mm	210-302-103
E #1, 5.7mm	210-302-104
F #2, 6.0mm	210-302-105
G #3, 7.4mm	210-302-106
H #4, 8.8mm	210-302-107
I #5, 9.2mm	210-302-108
J #6, 10.3mm	210-302-109



DAUBENSPECK
Bone Curette, 200mm, 8"

A Fig. 00, 2.8mm	210-217-200
B Fig.0, 3.6mm	210-217-100
C Fig. 1, 4.4mm	210-217-010
D Fig. 2, 5.2mm	210-217-020

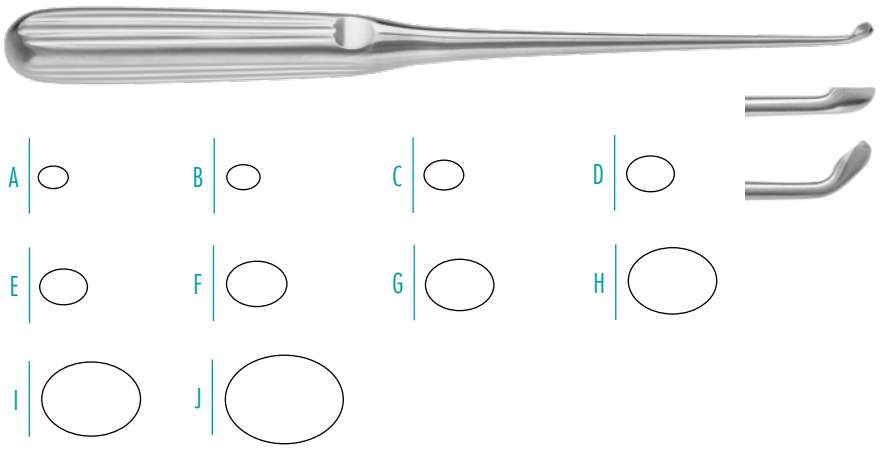




SPINAL
Bone Curette

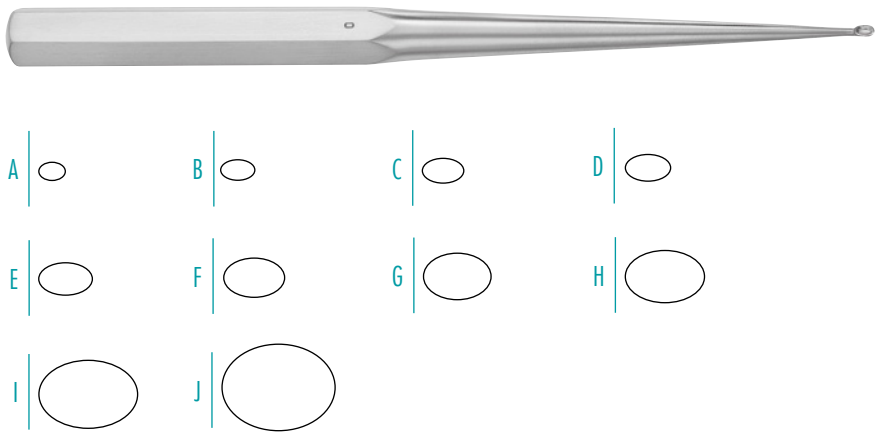
A straight
B forward angled
C reverse angled

tip shape	size	200mm, 8"	230mm, 9"	300mm, 11 7/8"
straight	00000	210-299-500	210-326-500	210-330-500
straight	0000	210-299-400	210-326-400	210-330-400
straight	000	210-299-300	210-326-300	210-330-300
straight	00	210-299-200	210-326-200	210-330-200
straight	0	210-299-100	210-326-100	210-330-100
straight	1	210-299-001	210-326-001	210-330-001
straight	2	210-299-002	210-326-002	210-330-002
straight	3	210-299-003	210-326-003	210-330-003
straight	4	210-299-004	210-326-004	210-330-004
straight	5	210-299-005	210-326-005	210-330-005
straight	6	210-299-006	210-326-006	210-330-006
forward angled	00000	210-301-500	210-328-500	210-331-500
forward angled	0000	210-301-400	210-328-400	210-331-400
forward angled	000	210-301-300	210-328-300	210-331-300
forward angled	00	210-301-200	210-328-200	210-331-200
forward angled	0	210-301-100	210-328-100	210-331-100
forward angled	1	210-301-001	210-328-001	210-331-001
forward angled	2	210-301-002	210-328-002	210-331-002
forward angled	3	210-301-003	210-328-003	210-331-003
forward angled	4	210-301-004	210-328-004	210-331-004
forward angled	5	210-301-005	210-328-005	210-331-005
forward angled	6	210-301-006	210-328-006	210-331-006
reverse angled	00000	210-327-500	210-329-500	210-333-500
reverse angled	0000	210-327-400	210-329-400	210-333-400
reverse angled	000	210-327-300	210-329-300	210-333-300
reverse angled	00	210-327-200	210-329-200	210-333-200
reverse angled	0	210-327-100	210-329-100	210-333-100
reverse angled	1	210-327-001	210-329-001	210-333-001
reverse angled	2	210-327-002	210-329-002	210-333-002
reverse angled	3	210-327-003	210-329-003	210-333-003
reverse angled	4	210-327-004	210-329-004	210-333-004
reverse angled	5	210-327-005	210-329-005	210-333-005
reverse angled	6	210-327-006	210-329-006	210-333-006



VOLKMANN BRUNS
Bone Curette, 230mm, 9"

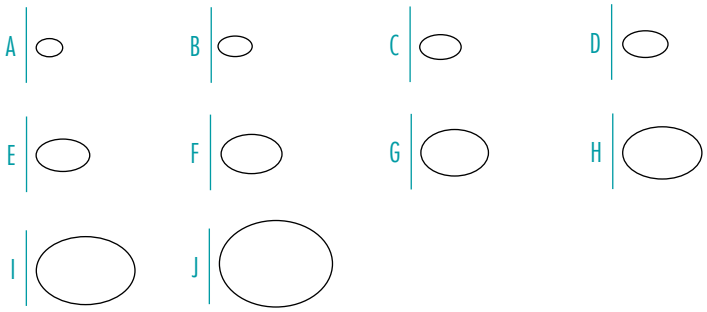
straight jaw	
A #0000	210-314-400
B #000	210-314-300
C #00	210-314-200
D #0	210-314-100
E #1	210-314-001
F #2	210-314-002
G #3	210-314-003
H #4	210-314-004
I #5	210-314-005
J #6	210-314-006
angled	
A #0000	210-315-400
B #000	210-315-300
C #00	210-315-200
D #0	210-315-100
E #1	210-315-001
F #2	210-315-002
G #3	210-315-003
H #4	210-315-004
I #5	210-315-005
J #6	210-315-006



BRUNS
Bone Curette, 230mm, 9"

A #0000	210-296-400
B #000	210-296-300
C #00	210-296-200
D #0	210-296-100
E #1	210-296-001
F #2	210-296-002
G #3	210-296-003
H #4	210-296-004
I #5	210-296-005
J #6	210-296-006

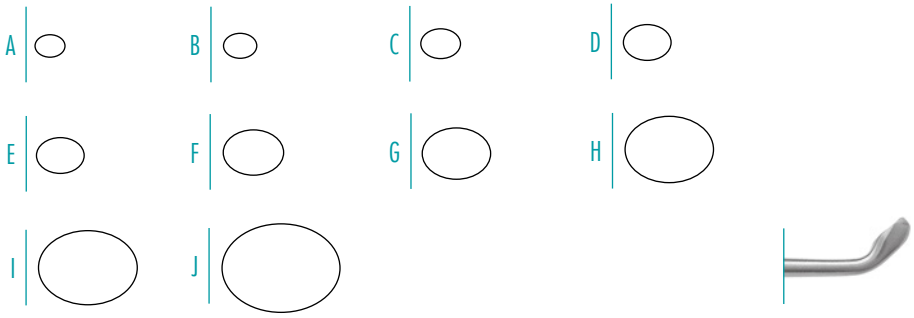




BRUNS
Bone Curette, synthetic handle,
270mm, 10 2/3"

A #0000	210-302-000
B #000	210-302-001
C #00	210-302-002
D #0	210-302-003
E #1	210-302-004
F #2	210-302-005
G #3	210-302-006
H #4	210-302-007
I #5	210-302-008
J #6	210-302-009



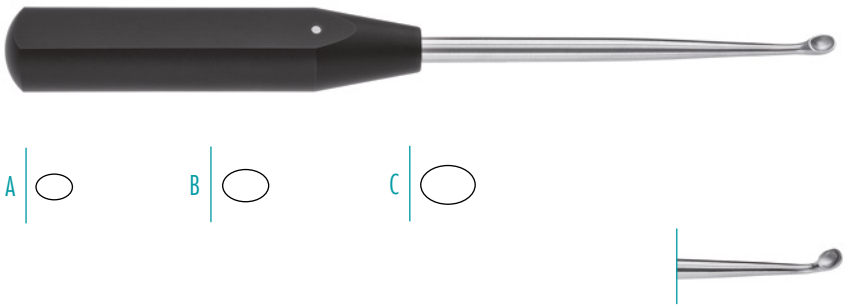


VOLKMANN SCOVILLE
Bone Curette, 250mm, 9 7/8"
straight jaw

A #0000	210-215-250
B #000	210-214-250
C #00	210-213-250
D #0	210-212-250
E #1	210-211-250
F #2	210-202-250
G #3	210-203-250
H #4	210-204-250
I #5	210-205-250
J #6	210-206-250

angled jaw

A #0000	210-315-250
B #000	210-314-250
C #00	210-313-250
D #0	210-312-250
E #1	210-311-250
F #2	210-302-250
G #3	210-303-250
H #4	210-304-250
I #5	210-305-250
J #6	210-306-250

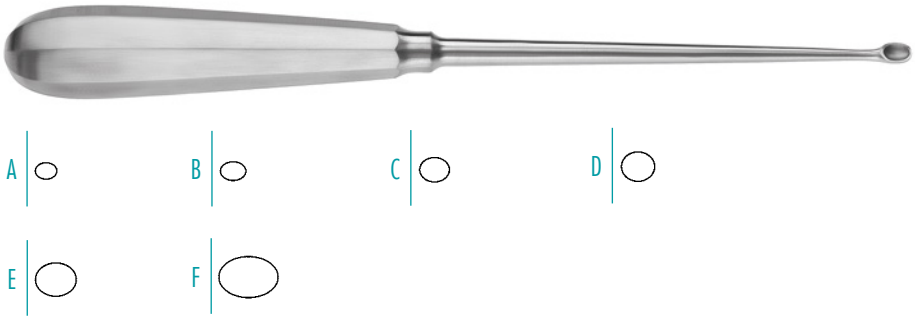


CASPAR
Bone Curette, synthetic handle, 220mm, 8 2/3″
straight

A #000	259-185-912
B #00	259-185-913
C #0	259-185-914

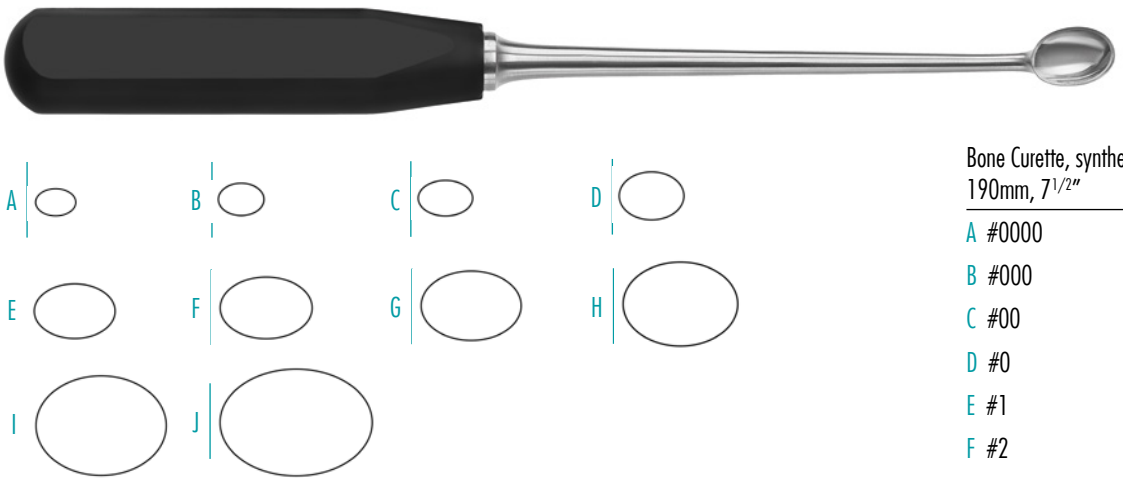
angled

A #000	259-185-921
B #00	259-185-922
C #0	259-185-919



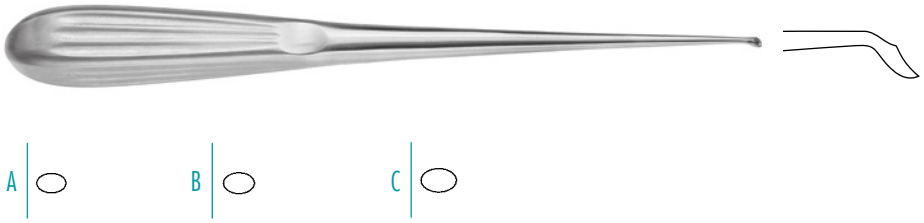
SIMON
Bone Curette, 230mm, 9 1/2″

A #1	210-298-001
B #2	210-298-002
C #3	210-298-003
D #4	210-298-004
E #5	210-298-005
F #6	210-298-006



Bone Curette, synthetic handle,
190mm, 7 1/2″

A #0000	210-166-030
B #000	210-166-020
C #00	210-166-010
D #0	210-166-000
E #1	210-166-001
F #2	210-166-002
G #3	210-166-003
H #4	210-166-004
I #5	210-166-005
J #6	210-166-006



EPSTEIN
Bone Curette, hollow handle, 200mm, 8"

A #000	210-309-003
B #00	210-309-002
C #0	210-309-001

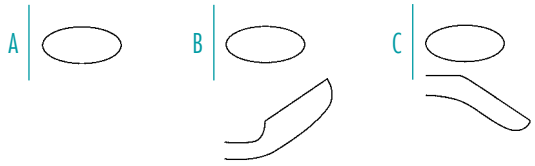




BUSHE
Bone Curette, upwards cutting, 250mm, $9^{7/8}$"

A 3mm	210-338-250
B 4mm	210-339-250
C 5mm	210-340-250
D 6mm	210-341-250

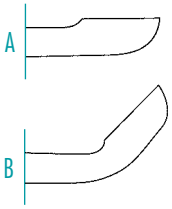




SCOVILLE
Bone Curette, hollow handle, 250mm, $9^{7/8}$"

A straight	210-316-250
B forward angled	210-318-250
C backward angled	210-317-250





SPINAL

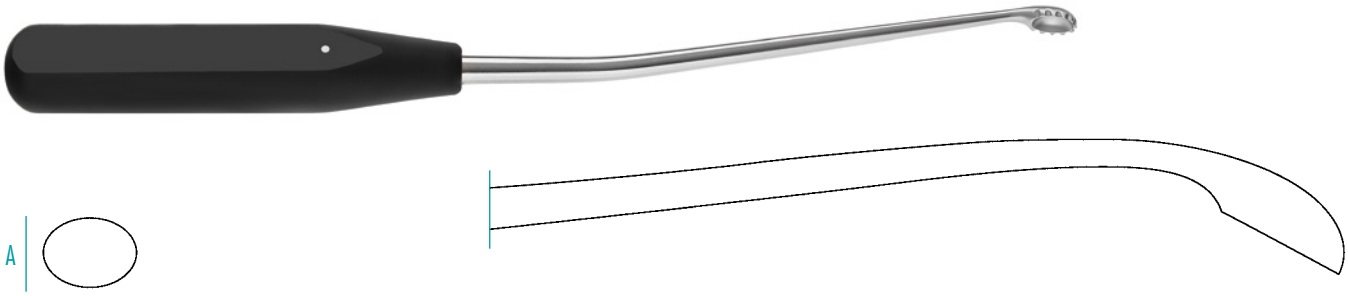
Bone Curette, oval, 280mm, 11"

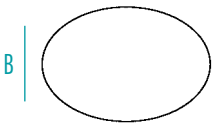
A straight, massive aluminium handle	
#000, 2.5mm	210-320-011
#00, 3.0mm	210-320-012
#0, 3.5mm	210-320-013
#1, 4.0mm	210-320-014
#2, 4.5mm	210-320-015
#3, 5.0mm	210-320-016
#4, 5.5mm	210-320-017
#5, 6.5mm	210-320-018
#6, 8.0mm	210-320-019

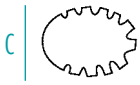
A straight, hollow, stainless steel handle	
#000, 2.5mm	210-320-111
#00, 3.0mm	210-320-112
#0, 3.5mm	210-320-113
#1, 4.0mm	210-320-114
#2, 4.5mm	210-320-115
#3, 5.0mm	210-320-116
#4, 5.5mm	210-320-117
#5, 6.5mm	210-320-118
#6, 8.0mm	210-320-119

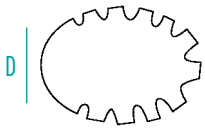
B curved, massive aluminium handle	
#000, 2.5mm	210-321-011
#00, 3.0mm	210-321-012
#0, 3.5mm	210-321-013
#1, 4.0mm	210-321-014
#2, 4.5mm	210-321-015
#3, 5.0mm	210-321-016
#4, 5.5mm	210-321-017
#5, 6.5mm	210-321-018
#6, 8.0mm	210-321-019

B curved, hollow, stainless steel handle	
#000, 2.5mm	210-321-111
#00, 3.0mm	210-321-112
#0, 3.5mm	210-321-113
#1, 4.0mm	210-321-114
#2, 4.5mm	210-321-115
#3, 5.0mm	210-321-116
#4, 5.5mm	210-321-117
#5, 6.5mm	210-321-118
#6, 8.0mm	210-321-119









Bone Curette, synthetic handle
270mm, $10^{2/3}$″

A 9.0mm	210-163-009
B 15.0mm	210-163-015

toothed

C 9.0mm	210-164-009
D 15.0mm	210-164-015



Bone Curette, synthetic handle,
toothed, double angled, 9mm

270mm, $10^{2/3}$″	210-164-109



Bone Curette, synthetic handle, 27mm
small

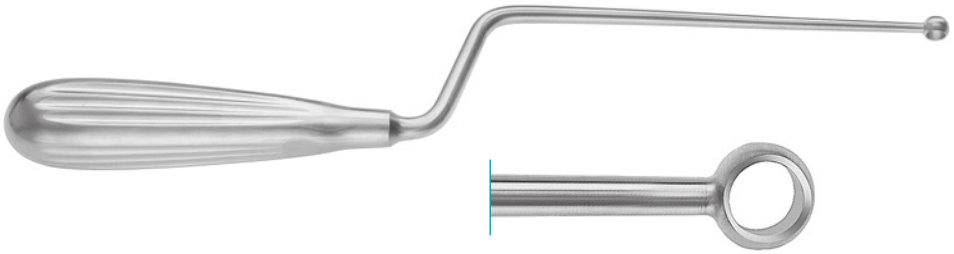
240mm, $9^{1/2}$″	210-184-503

medium

270mm, $10^{2/3}$″	210-184-504

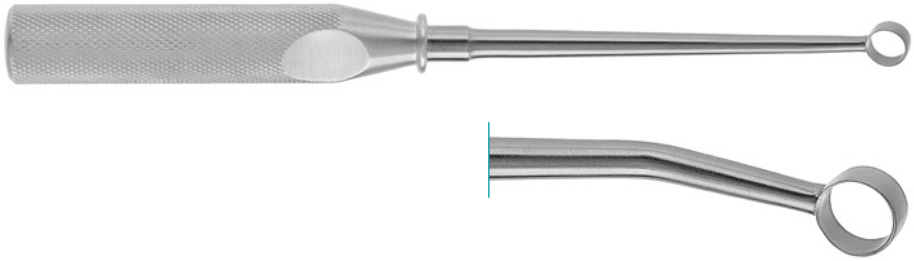
large

320mm, $12^{2/3}$″	210-184-505



KRAEMER
Ring Curette, sharpened double-sided,
250mm, 9 7/8″

4.0mm	210-321-004
5.0mm	210-321-005
6.0mm	210-321-006

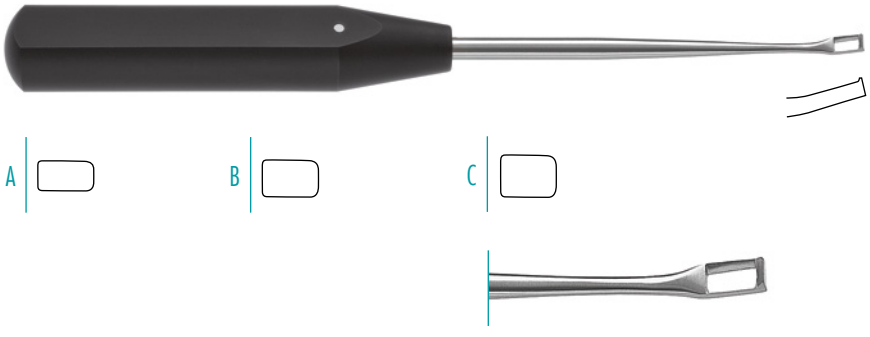


CONE
Ring Curette, 230mm, 9″
straight

#3 3mm	210-320-003
#2 6mm	210-320-002
#1 8mm	210-320-001

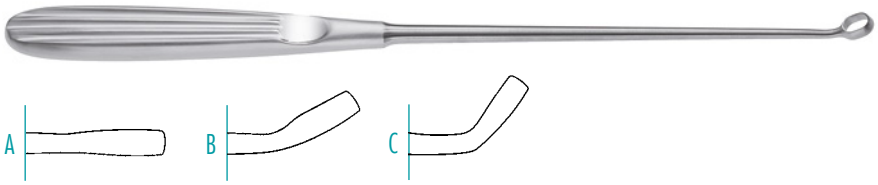
angled

#3 3mm	210-319-003
#2 6mm	210-319-002
#1 8mm	210-319-001



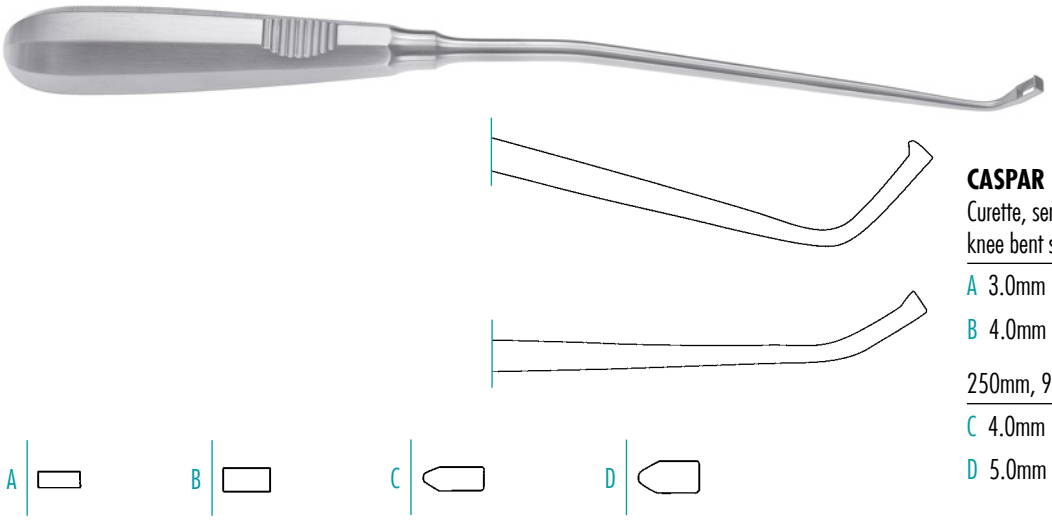
CASPAR
Bone Scoop, curved, toothed, synthetic handle
220mm, 8 2/3″

A 4.0mm	259-185-915
B 5.0mm	259-185-916
C 6.0mm	259-185-910



SEMMES
Spinal Curette, 4x7mm, 230mm, 9″

A straight	210-294-001
B slightly curved	210-294-002
C fully curved	210-294-003

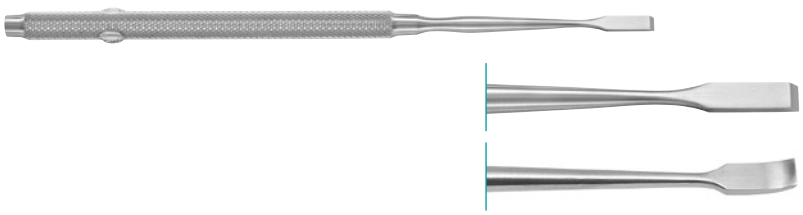


CASPAR
Curette, serrated, 270mm, $10^{2/3}$″
knee bent shaft

A 3.0mm	210-340-003
B 4.0mm	210-340-004

250mm, $9^{7/8}$″, curved shaft

C 4.0mm	210-342-004
D 5.0mm	210-342-005



FREER

Septum Chisel, 4mm, 160mm, $6^{1/4}$"

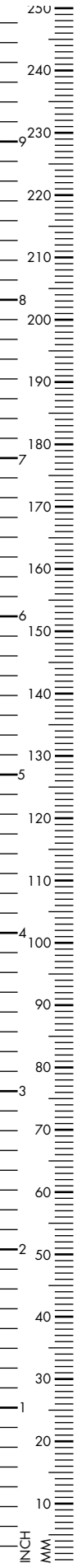
straight	420-590-004
curved	420-591-004



THIES

Gouge, straight, 160mm, $6^{1/4}$"

2mm	210-100-162
3mm	210-100-163
4mm	210-100-164









PARTSCH
Osteotome, 140mm, $5^{1/2}$″

4mm	210-100-004
6mm	210-100-006
8mm	210-100-008
10mm	210-100-010
12mm	210-100-012

PARTSCH
Chisel, 135mm, $5^{1/3}$″

2mm	210-302-135
3mm	210-303-135
5mm	210-305-135
6mm	210-306-135
7mm	210-307-135
8mm	210-308-135

170mm, $6^{2/3}$″

2mm	210-302-170
3mm	210-303-170
5mm	210-305-170
6mm	210-306-170
7mm	210-307-170
8mm	210-308-170

PARTSCH
Gouge, 140mm, $5^{1/2}$″

2mm	210-109-002
3mm	210-109-003
4mm	210-109-004
5mm	210-109-005
6mm	210-109-006
7mm	210-109-007
8mm	210-109-008

170mm, $6^{2/3}$″

2mm	210-110-002
3mm	210-110-003
4mm	210-110-004
5mm	210-110-005
6mm	210-110-006
7mm	210-110-007
8mm	210-110-008



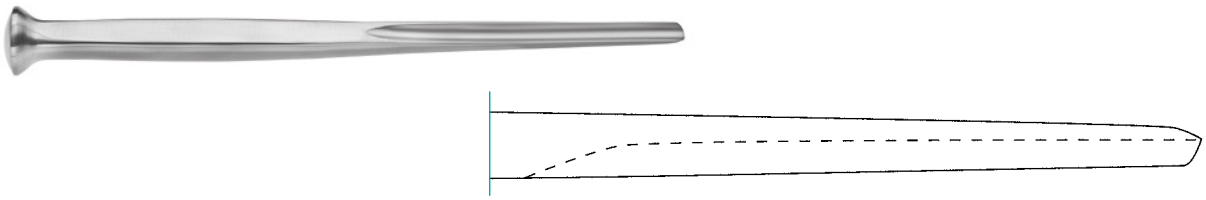
LUCAS
Chisel, 160mm, 6 1/4"

4mm	210-204-160



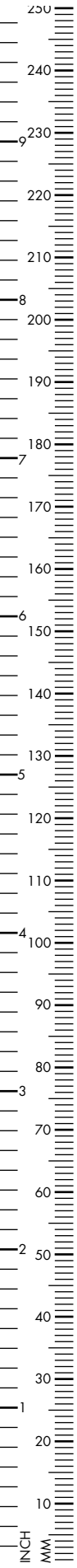
LUCAS
Gouge, 160mm, 6 1/4"

3mm	210-103-160



ALEXANDER
Gouge, 180mm, 7"

4mm	210-604-180
6mm	210-606-180
8mm	210-608-180
10mm	210-610-180
12mm	210-612-180
14mm	210-614-180





SHEEHAN
Osteotome, 160mm, 6 1/4"

2mm	420-594-002
3mm	420-594-003
4mm	420-594-004
5mm	420-594-005
6mm	420-594-006
7mm	420-594-007
8mm	420-594-008
10mm	420-594-010
12mm	420-594-012
15mm	420-594-015



COTTLE
Osteotome with depth marking, 180mm, 7"

4mm	210-487-004
7mm	210-487-007
8mm	210-487-008
10mm	210-487-010
12mm	210-487-012



COTTLE
Chisel with depth marking, 180mm, 7"

4mm	210-488-004
7mm	210-488-007
9mm	210-488-009
12mm	210-488-012



COTTLE
Fishtail Osteotome, protecting ends, double guarded, 8mm

180mm, 7″	210-486-008



HARDT DELIMA
Osteotome, straight, 130mm, $5^{1/8}$″

2mm	210-134-102
4mm	210-134-104
6mm	210-134-106
8mm	210-134-108
10mm	210-134-110
12mm	210-134-112
15mm	210-134-115
170mm, $6^{2/3}$″	
2mm	210-134-202
4mm	210-134-204
6mm	210-134-206
8mm	210-134-208
10mm	210-134-210
12mm	210-134-212
15mm	210-134-215



CARROLL
Osteotome, 145mm, $5^{3/4}$″

3mm	210-226-003
6mm	210-226-006
10mm	210-226-010
13mm	210-226-013



MINI LAMBOTTE
Osteotome, 125mm, 5″

2mm	210-136-002
3mm	210-136-003
4mm	210-136-004
5mm	210-136-005
6mm	210-136-006
7mm	210-136-007
8mm	210-136-008
9mm	210-136-009
10mm	210-136-010
12mm	210-136-012
14mm	210-136-014
15mm	210-136-015

170mm, $6^{2/3}$″

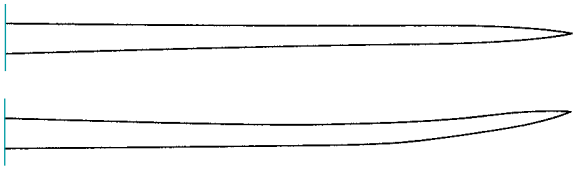
2mm	210-136-052
4mm	210-136-054
5mm	210-136-055
6mm	210-136-056
8mm	210-136-058
10mm	210-136-060
12mm	210-136-062
15mm	210-136-065



MINI LAMBOTTE
Osteotome, curved, 125mm, 5″

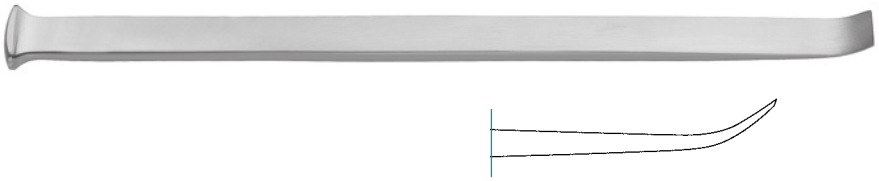
2mm	210-137-002
4mm	210-137-005
6mm	210-137-007
8mm	210-137-009
10mm	210-137-011
12mm	210-137-013





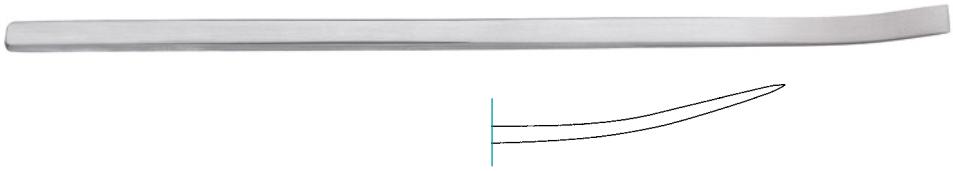
LAMBOTTE
Osteotome, 240mm, $9^{1/2}$″

straight		curved	
4mm	210-132-004	4mm	210-133-004
6mm	210-132-006	6mm	210-133-006
8mm	210-132-008	8mm	210-133-008
10mm	210-132-010	10mm	210-133-010
12mm	210-132-012	12mm	210-133-012
15mm	210-132-015	15mm	210-133-015
20mm	210-132-020	20mm	210-133-020
25mm	210-132-025	25mm	210-133-025
30mm	210-132-030	30mm	210-133-032
38mm	210-132-038	38mm	210-133-038
44mm	210-132-044	44mm	210-133-044
50mm	210-132-050	50mm	210-133-050



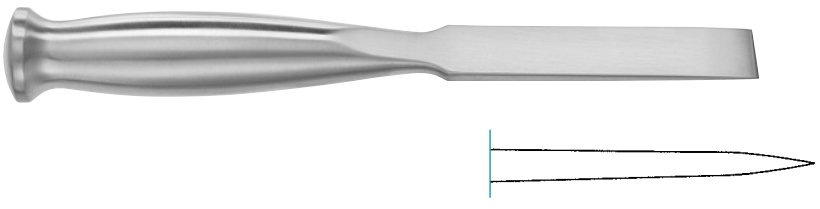
OBWEGESER
Osteotome, curved, 13mm

235mm, 9 1/4"	431-656-235



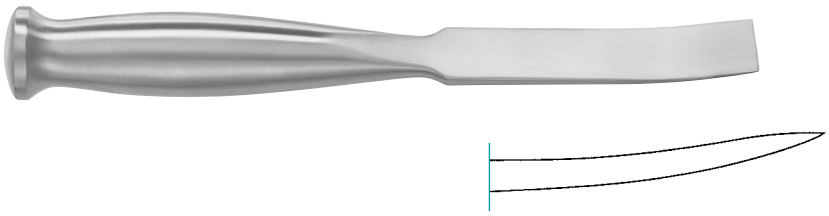
NIEDERDELLMANN
Osteotome, curved, 250mm, 9 7/8"

8mm	431-658-250
10mm	431-660-250



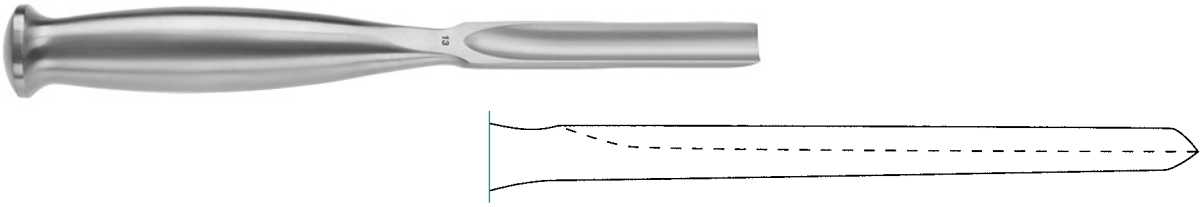
SMITH PETERSEN
Osteotome, straight, 200mm, 8"

6mm	210-106-200
9mm	210-109-200
13mm	210-113-200
16mm	210-116-200
19mm	210-119-200
25mm	210-125-200
32mm	210-132-200



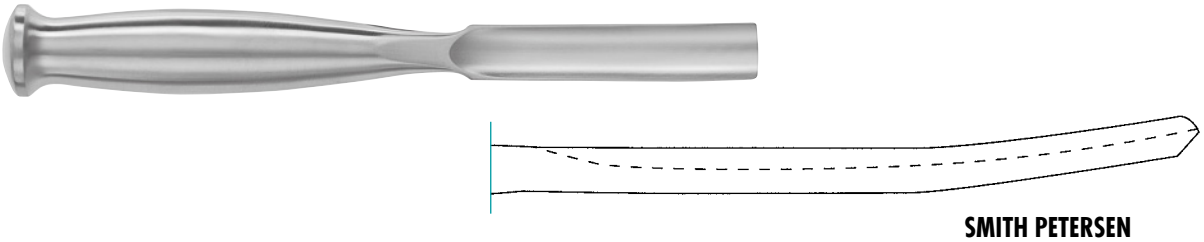
SMITH PETERSEN
Osteotome, curved, 200mm, 8"

6mm	210-206-200
9mm	210-209-200
13mm	210-213-200
16mm	210-216-200
19mm	210-219-200
25mm	210-225-200
32mm	210-232-200



SMITH PETERSEN
Gouge, straight, 200mm, 8"

6mm	210-305-200
9mm	210-309-200
13mm	210-313-200
16mm	210-316-200
19mm	210-319-200
25mm	210-325-200
32mm	210-332-200



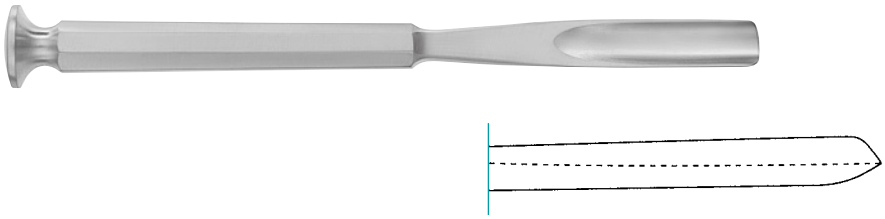
SMITH PETERSEN
Gouge, curved, 200mm, 8"

6mm	210-406-200
9mm	210-409-200
13mm	210-413-200
16mm	210-416-200
19mm	210-419-200
25mm	210-425-200
32mm	210-432-200



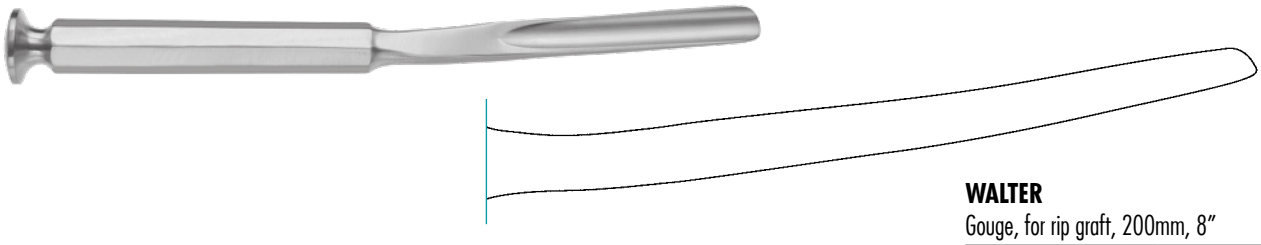
STILLE
Chisel, 200mm, 8"

10mm	210-810-200
12mm	210-812-200
15mm	210-815-200
20mm	210-820-200
25mm	210-825-200



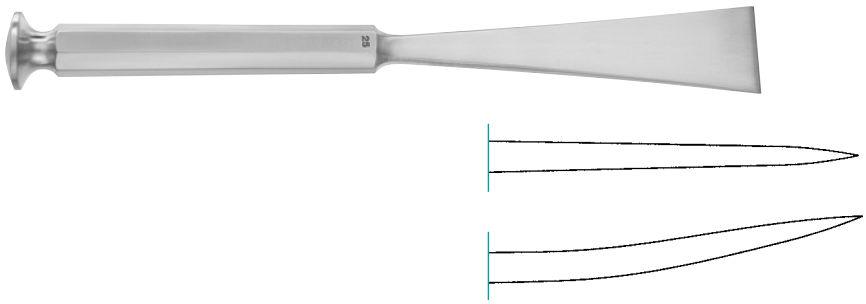
STILLE
Gouge, 200mm, 8"

8mm	210-508-200
10mm	210-510-200
12mm	210-512-200
15mm	210-515-200
20mm	210-520-200
25mm	210-525-200

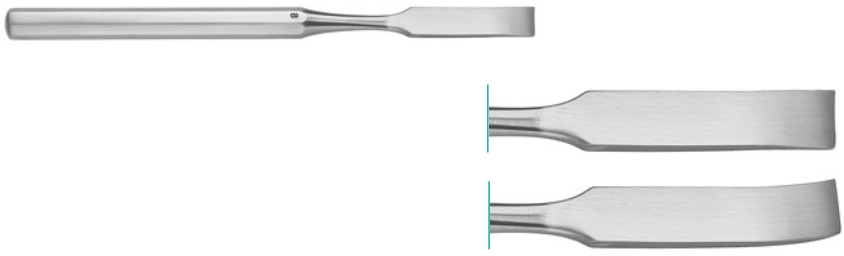


WALTER
Gouge, for rip graft, 200mm, 8"

10mm	210-701-010
15mm	210-701-015







STILLE
Osteotome, 200mm, 8"
straight

8mm	210-708-200
10mm	210-710-200
12mm	210-712-200
15mm	210-715-200
20mm	210-720-200
25mm	210-725-200

curved

8mm	210-908-200
10mm	210-910-200
12mm	210-912-200
15mm	210-915-200
20mm	210-920-200
25mm	210-925-200

STILLE
Osteotome, fine model, 200mm, 8"

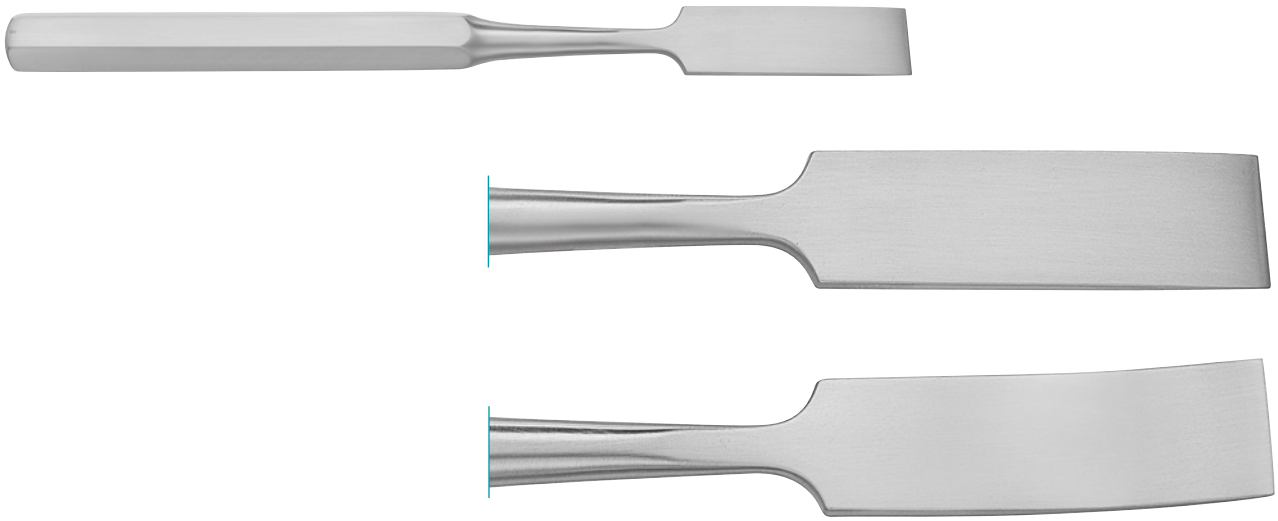
10mm	210-410-200
12mm	210-412-200
15mm	210-415-200
20mm	210-420-200

HOKE
Osteotome, 140mm, $5^{1/2}$"
straight

3mm	210-219-003
5mm	210-219-005
6mm	210-219-006
8mm	210-219-008
9mm	210-219-009
12mm	210-219-012
16mm	210-219-016

curved

3mm	210-218-103
5mm	210-218-105
6mm	210-218-106
8mm	210-218-108
9mm	210-218-110
12mm	210-218-113
16mm	210-218-116

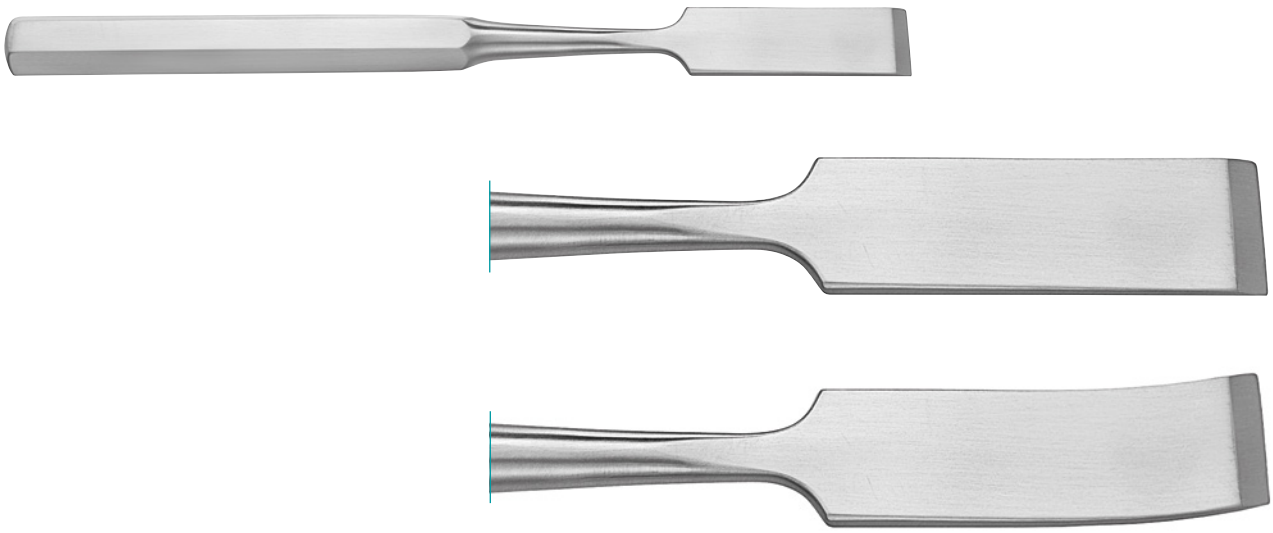


HIBBS
Osteotome, 240mm, 9 1/2"
straight

6mm	210-212-006
9mm	210-212-010
13mm	210-212-013
16mm	210-212-016
19mm	210-212-019
22mm	210-212-022
25mm	210-212-025
28mm	210-212-028
32mm	210-212-032
38mm	210-212-038

curved

6mm	210-213-006
9mm	210-213-010
13mm	210-213-013
16mm	210-213-016
19mm	210-213-019
22mm	210-213-022
25mm	210-213-025
28mm	210-213-028
32mm	210-213-032
38mm	210-213-038

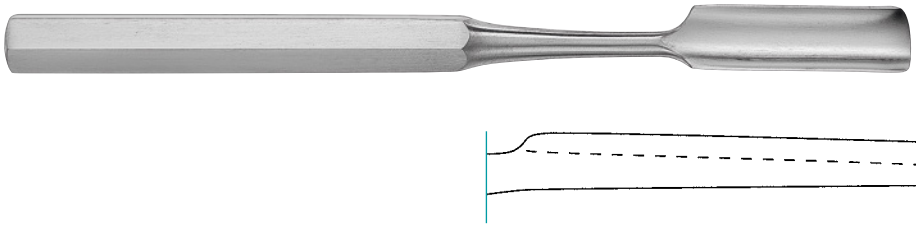


HIBBS
Chisel, 240mm, 9 1/2"
straight

6mm	210-206-006
9mm	210-206-010
13mm	210-206-013
16mm	210-206-016
19mm	210-206-019
22mm	210-206-022
25mm	210-206-025
28mm	210-206-029
32mm	210-206-032
38mm	210-206-038

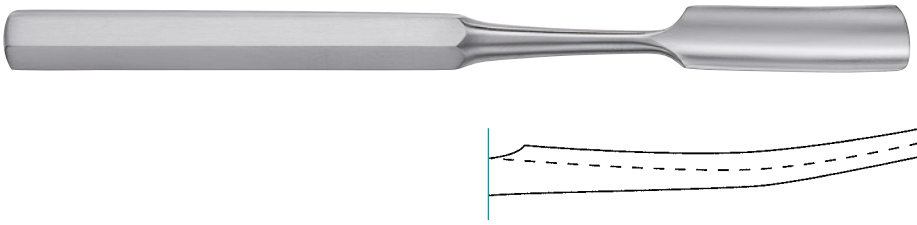
curved

6mm	210-207-006
9mm	210-207-010
13mm	210-207-013
16mm	210-207-016
19mm	210-207-019
22mm	210-207-022
25mm	210-207-025
28mm	210-207-029
32mm	210-207-032
38mm	210-207-038



HIBBS
Gouge, 240mm, 9 1/2"
straight

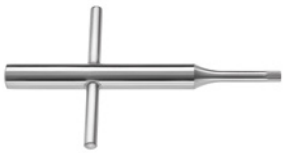
6mm	210-144-060
9mm	210-144-090
13mm	210-144-130
16mm	210-144-150
19mm	210-144-190
22mm	210-144-220
25mm	210-144-250
28mm	210-144-280
32mm	210-144-320
38mm	210-144-380

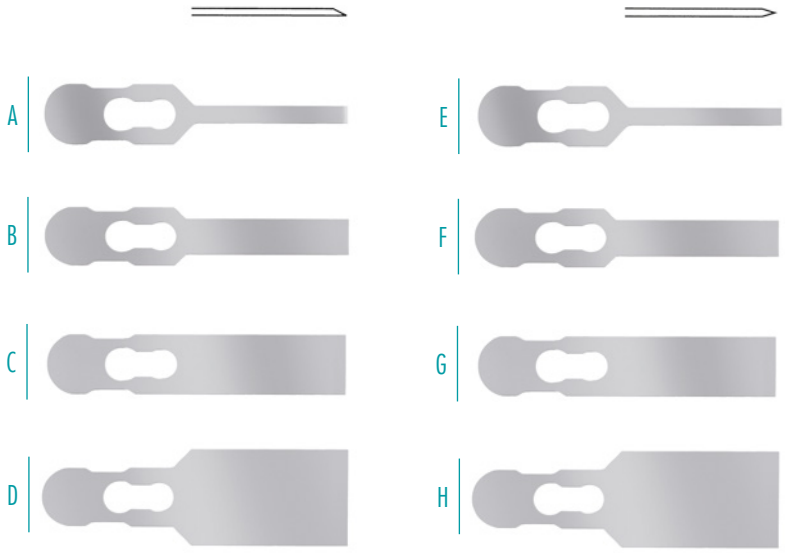


HIBBS
Gouge, 240mm, 9 1/2"
curved

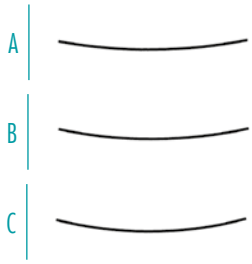
6mm	210-145-060
9mm	210-145-090
13mm	210-145-130
16mm	210-145-150
19mm	210-145-190
22mm	210-145-220
25mm	210-145-250
28mm	210-145-280
32mm	210-145-320
38mm	210-145-380











Handle for interchangeable blades, synthetic handle

210-130-000

Spare Screw (not illustrated)

210-130-001

Wrench

90mm, 3 1/2"	210-130-500

Chisel Blade, 85mm, 3 1/4"

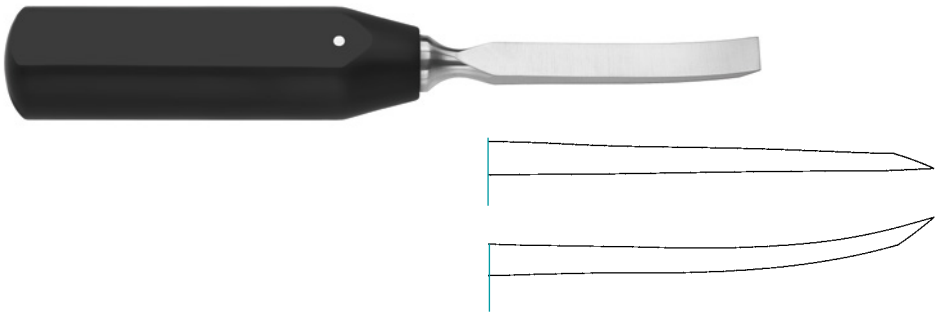
A 5mm	210-130-005
B 10mm	210-130-010
C 16mm	210-130-016
D 25mm	210-130-025

Osteotome Blade, 85mm, 3 1/4"

E 5mm	210-130-105
F 10mm	210-130-110
G 16mm	210-130-116
H 25mm	210-130-125

Gouge Blade, 85mm, 3 1/4"

A r = 50mm	210-130-050
B r = 60mm	210-130-060
C r = 70mm	210-130-070



Osteotome, synthetic handle, 200mm, 8"

straight

10mm	210-435-010
15mm	210-435-015
20mm	210-435-020

curved

10mm	210-437-010
15mm	210-437-015
20mm	210-437-020



LEXER MINI

Osteotome, synthetic handle, 180mm, 7"

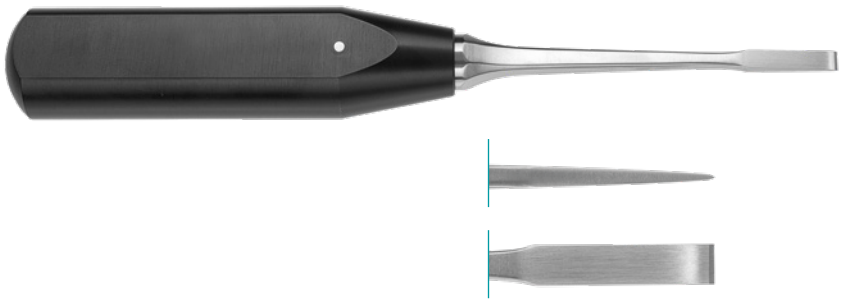
2mm	210-137-002
4mm	210-137-004
6mm	210-137-006
8mm	210-137-008
10mm	210-137-010
12mm	210-137-012



LEXER MINI

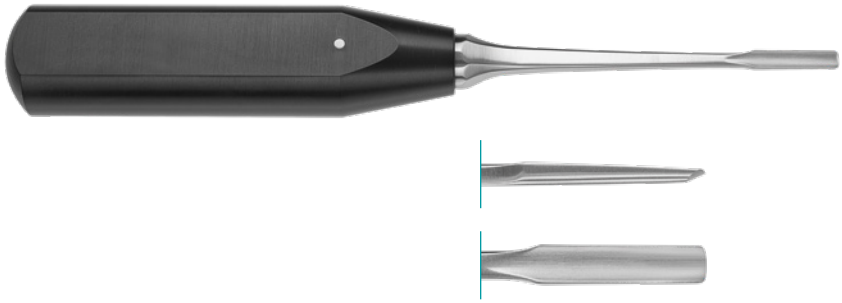
Gouge, synthetic handle, 180mm, 7"

2mm	210-138-002
4mm	210-138-004
6mm	210-138-006
8mm	210-138-008
10mm	210-138-010
12mm	210-138-012
15mm	210-138-015



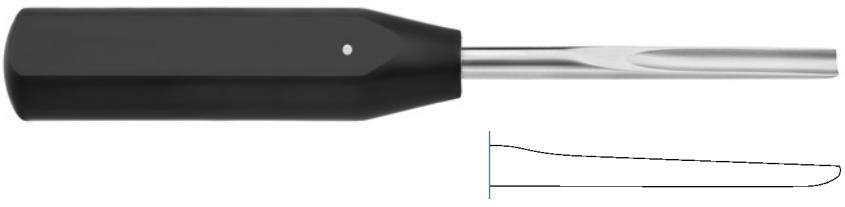
LEXER
Osteotome, synthetic handle, 220mm, 8 2/3″

5mm	210-134-005
7mm	210-134-007
10mm	210-134-010
12mm	210-134-012
15mm	210-134-015
20mm	210-134-020
25mm	210-134-025
30mm	210-134-030



LEXER
Gouge, synthetic handle, 220mm, 8 2/3″

5mm	210-135-005
7mm	210-135-007
10mm	210-135-010
12mm	210-135-012
15mm	210-135-015
20mm	210-135-020
25mm	210-135-025
30mm	210-135-030



Gouge, for removing broken screws, synthetic handle, 220mm, 8 2/3″

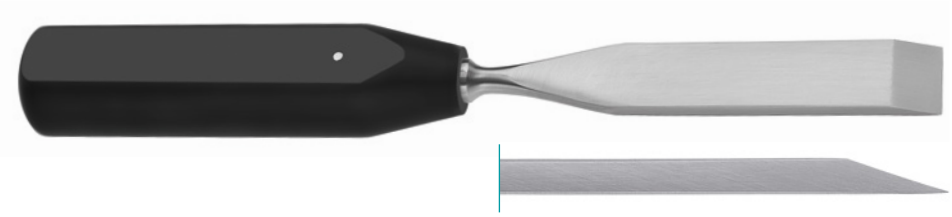
10mm	210-153-010



ZIELKE

Gouge, synthetic handle, 230mm, 9″

6mm	210-500-006
9mm	210-500-009



Chisel, synthetic handle, 20mm, straight

245mm, $9^{2/3}$″	210-146-240



Chisel, synthetic handle, 16mm, curved

265mm, $10^{1/2}$″	210-149-260



LEXER
Osteotome, synthetic handle, angled, 275mm, $10^{7/8}$"

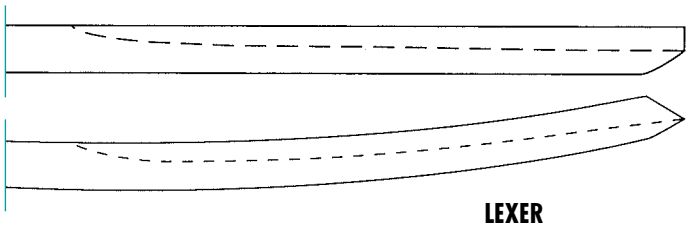
10mm	210-251-010
15mm	210-251-015



LEXER
Gouge, synthetic handle, angled, 275mm, $10^{7/8}$"

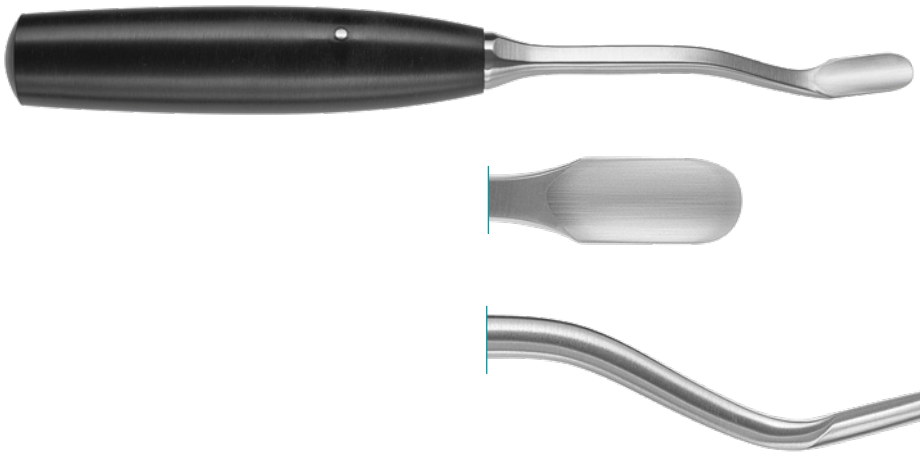
10mm	210-252-010
15mm	210-252-015





LEXER
Spongiosa Gouge, synthetic handle, 250mm, $9^{7/8}$", straight

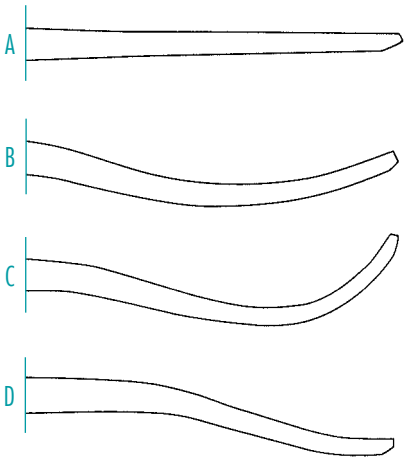
5mm	210-240-005
10mm	210-240-010
15mm	210-240-015
curved	
5mm	210-240-105
10mm	210-240-110
15mm	210-240-115



CAPENER
Lamina Gouge, synthetic handle,
240mm, 9 1/2"

6mm	210-235-006
8mm	210-235-008
10mm	210-235-010
11mm	210-235-011
13mm	210-235-013
16mm	210-235-016
19mm	210-235-019





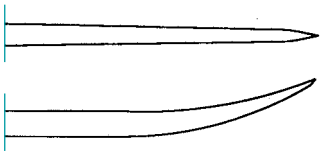
COBB
Gouge, synthetic handle, 4mm
280mm, 11"

A	straight (8mm)	210-405-195
B	slightly curved	210-405-295
C	strongly curved	210-405-395
D	backwards curved	210-405-495

Hexagonal Handle, 4mm
240mm, 9 1/2"

A	straight	210-405-100
B	slightly curved	210-405-101
C	strongly curved	210-405-102
D	backwards curved	210-405-103





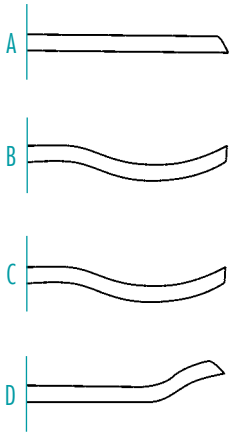
COBB
Osteotome, 280mm, 11″
straight

6mm	210-403-006
9mm	210-403-009
13mm	210-403-013
16mm	210-403-016
19mm	210-403-019
25mm	210-403-025
32mm	210-403-032

curved

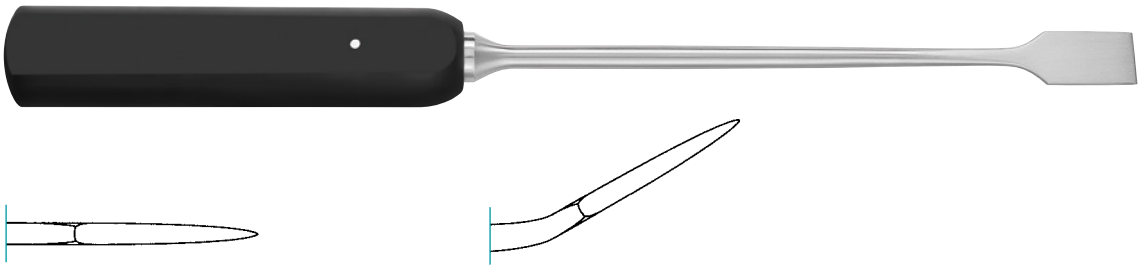
6mm	210-406-006
9mm	210-406-009
13mm	210-406-013
16mm	210-406-016
19mm	210-406-019
25mm	210-406-025
32mm	210-406-032





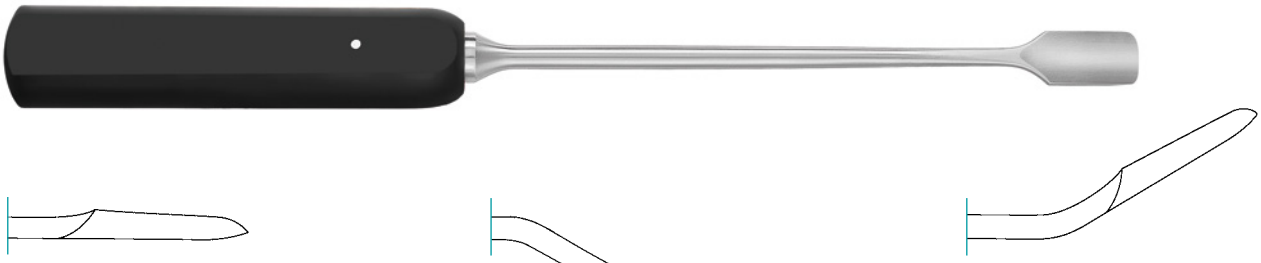
COBB
Gouge, 7.5mm, 280mm, 11″

A	straight	210-405-300
B	slightly curved	210-405-301
C	strongly curved	210-405-302
D	backwards curved	210-405-303



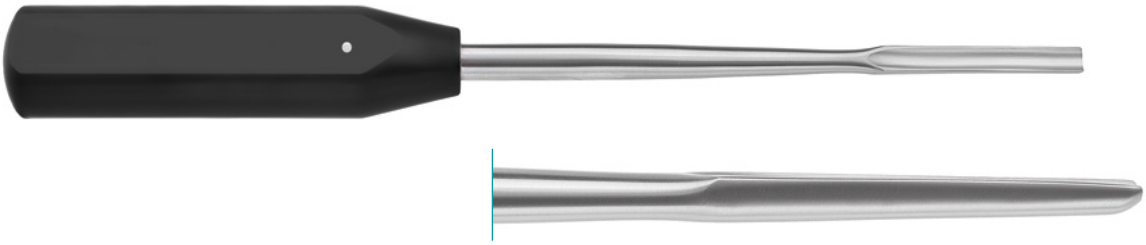
DAHMEN
Osteotome, synthetic handle, 300mm, 11 7/8"

straight		angled	
4mm	210-111-004	4mm	210-118-004
5mm	210-111-005	5mm	210-118-005
6mm	210-111-006	6mm	210-118-006
7mm	210-111-007	8mm	210-118-008
8mm	210-111-008	10mm	210-118-010
10mm	210-111-010	12mm	210-118-012
12mm	210-111-012	15mm	210-118-015
15mm	210-111-015	20mm	210-118-020
20mm	210-111-020	22mm	210-118-022
22mm	210-111-022	25mm	210-118-025
25mm	210-111-025		



DAHMEN
Gouge, synthetic handle, 300mm, 11 7/8"

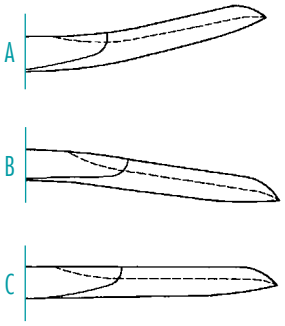
straight		angled backward		angled forward	
4mm	210-112-004	4mm	210-119-004	4mm	210-113-004
5mm	210-112-005	5mm	210-119-005	5mm	210-113-005
6mm	210-112-006	6mm	210-119-006	6mm	210-113-006
8mm	210-112-008	8mm	210-119-008	8mm	210-113-008
10mm	210-112-010	10mm	210-119-010	10mm	210-113-010
12mm	210-112-012	12mm	210-119-012	12mm	210-113-012
15mm	210-112-015	15mm	210-119-015	15mm	210-113-015
20mm	210-112-020	20mm	210-119-020	20mm	210-113-020
22mm	210-112-022	22mm	210-119-022	22mm	210-113-022
25mm	210-112-025	25mm	210-119-025	25mm	210-113-025



LEXER
Gouge, synthetic handle, 5mm

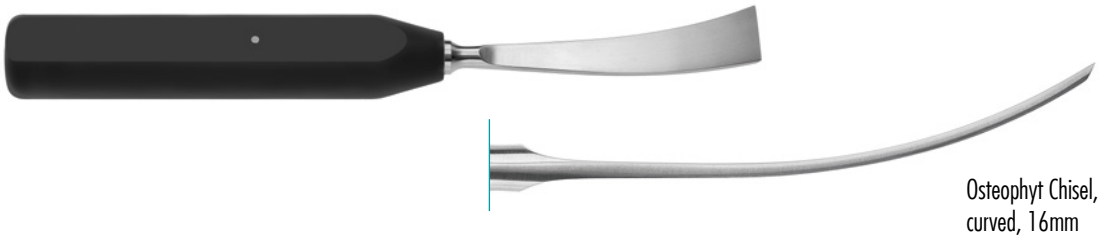
280mm, 11″	210-135-050





WAGNER
Gouge, synthetic handle, 340mm, 13 1/2″

A angled forward	
9mm	210-409-341
15mm	210-415-341
B angled backward	
9mm	210-409-342
15mm	210-415-342
C straight	
9mm	210-409-340
15mm	210-415-340



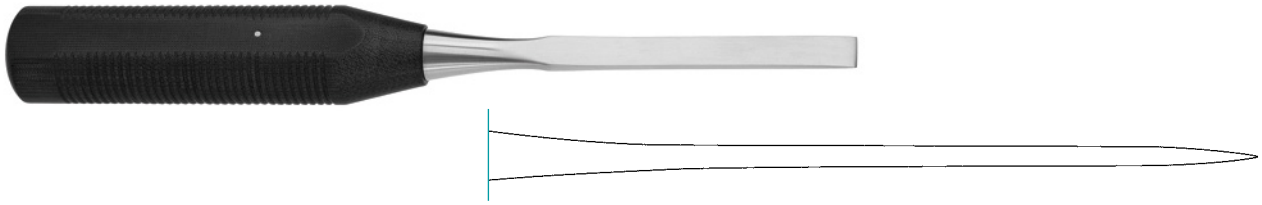
Osteophyt Chisel, synthetic handle, curved, 16mm

200mm, 8"	210-437-160



LEXER
Chisel, synthetic handle, 16mm

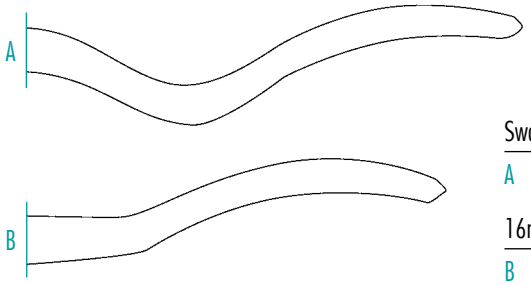
250mm, 9 7/8"	
straight	210-148-250
curved	210-149-250
320mm, 12 1/2"	
straight	210-148-320
curved	210-149-320



CAPENER
Osteotome, synthetic handle, 12.7mm

255mm, 10", straight		curved	
6mm	210-230-006	6mm	210-231-006
10mm	210-230-010	10mm	210-231-010
12mm	210-230-012	12mm	210-231-012
15mm	210-230-015	15mm	210-231-015
20mm	210-230-020	20mm	210-231-020
25mm	210-230-025	25mm	210-231-025
30mm	210-230-030	30mm	210-231-030





Swan Neck Gouge, 25mm

A	285mm, $11^{1/4}$″	210-410-280

16mm

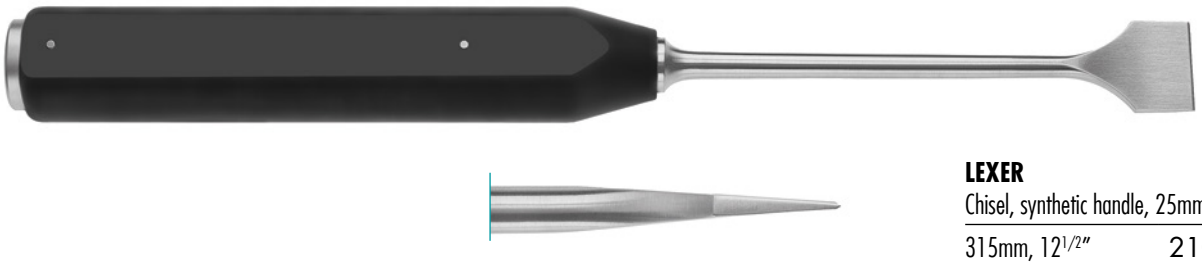
B	270mm, $10^{2/3}$″	210-410-260
B	320mm, $12^{1/2}$″	210-410-320





Gouge for cement removal, synthetic handle, 8mm

320mm, $12^{1/2}$″	210-154-320



LEXER
Chisel, synthetic handle, 25mm

315mm, 12 1/2"	210-251-025



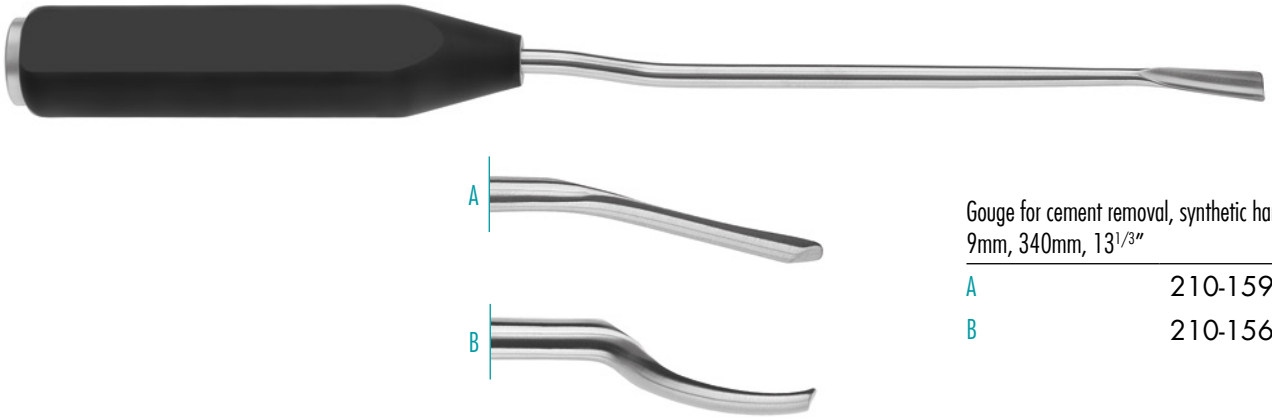
LEXER
Chisel, synthetic handle, 8mm

280mm, 11"	210-251-280
330mm, 13"	210-251-330



Chisel for cement removal, synthetic handle, 5mm, 45° angled upwards

310mm, 12 1/4"	210-153-310



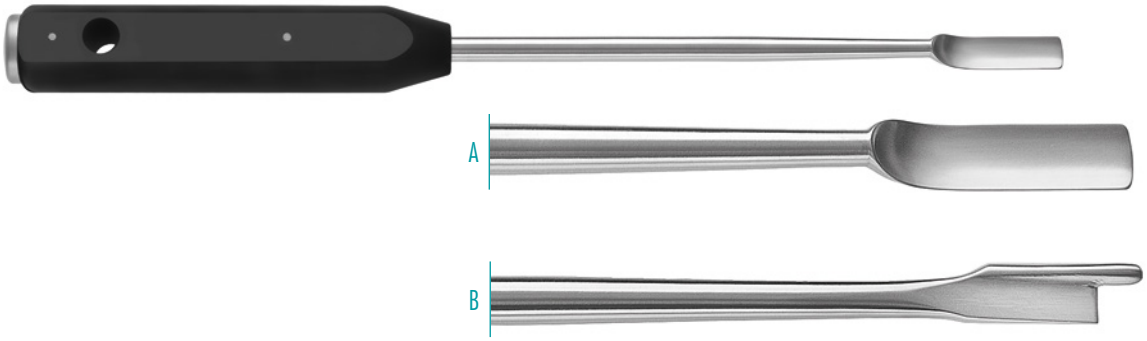
Gouge for cement removal, synthetic handle, 9mm, 340mm, 13 1/3″

A	210-159-009
B	210-156-009



Gouge, bayonet-shaped, synthetic handle, 8mm

320mm, 12 3/4″	210-154-300



Chisel, synthetic handle, 280mm, 11″

A For cement extraction, 9mm	210-157-009
B For cement splitting, 8.5mm	210-515-280



Mallet, lead filled head, ∅ 20mm,
80g

165mm, 6 1/2"	210-220-080



LUCAE
Mallet, ∅ 19mm
80g

190mm, 7 1/2"	210-230-190



LUCAE
Mallet, ∅ 25mm
140g

190mm, 7 1/2"	210-231-190



PARTSCH
Mallet, ∅ 22mm
120g

180mm, 7″	210-225-180



DOYEN
Mallet, ∅ 25mm
120g

210mm, 8 1/4″	210-250-210



BERGMANN
Mallet, ∅ 45mm
300g

240mm, 9 1/2″	210-300-240



CLOWARD
Mallet, lead filled, ∅ 19mm
215g

190mm, 7 1/2"	210-215-190



COLLIN (LUCAE)
Mallet, ∅ 30mm
220g

200mm, 8"	210-220-200



Mallet, 2 interchangeable plastic discs,
∅ 25mm
140g

185mm, 7 1/4"	210-264-140
Spare Discs, pair	210-265-000



Mallet, anodized aluminium handle and head,
Ø 32mm
140g

225mm, $8^{7/8}$"	210-264-220
Spare Discs, pair	210-264-221







WAGNER
Mallet,
complete with plastic discs 210-235-132,
Ø 35mm
130g

235mm, $9^{1/4}$"	210-235-130
Plastic Discs, pair	210-235-132
Metal Discs, pair, 215g	210-235-131
Wrench	210-235-133



HAJEK
Mallet, ∅ 27mm
140g

220mm, $8^{2/3}$″	210-244-220



DOYEN
Mallet, ∅ 30mm
180g

210mm, $8^{1/4}$″	210-300-210



Mallet, exchangeable disc,
1 teflon insert / 1 metal insert
∅ 25mm
205g

190mm, $7^{1/2}$″	210-261-191



Mallet, handle with recessed grip,
265mm, 10 1/2"

Ø 35mm, 450g	210-265-450
Ø 50mm, 900g	210-265-900



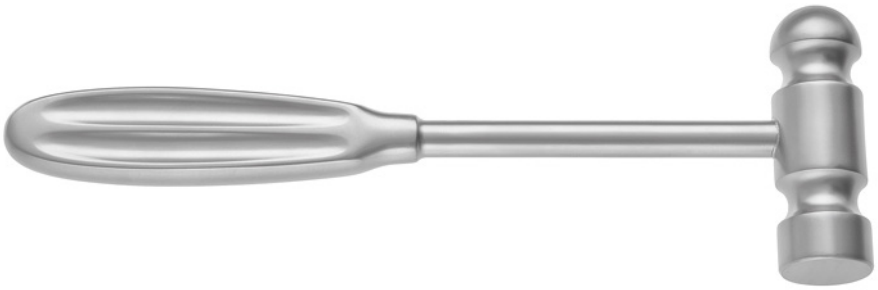
USA MODEL
Mallet, Ø 35mm
485g

180mm, 7"	210-300-180



USA MODEL
Mallet, Ø 38mm
900g

190mm, 7 1/2"	210-300-190



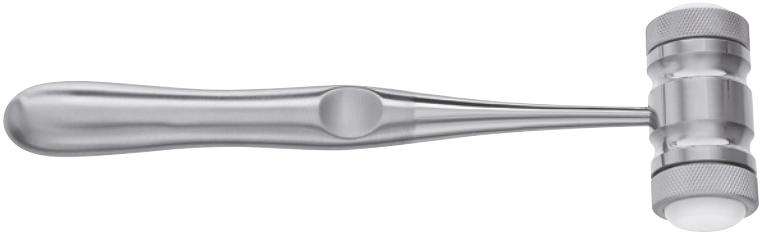
CLOWARD
Mallet, ∅ 25mm
220g

230mm, 9″	210-220-230



BERGMANN (HIBBS)
Mallet, ∅ 40mm
260g

230mm, 9″	210-500-230



MEAD
Mallet, with 2 interchangeable plastic discs,
∅ 27mm
180g

190mm, 7 1/2″	210-262-170
Spare Discs, pair	210-263-000



WILLIGER

Mallet, ∅ 26mm
300g

240mm, 9 1/2"	210-240-300

∅ 28mm
300g

240mm, 9 1/2"	210-240-340

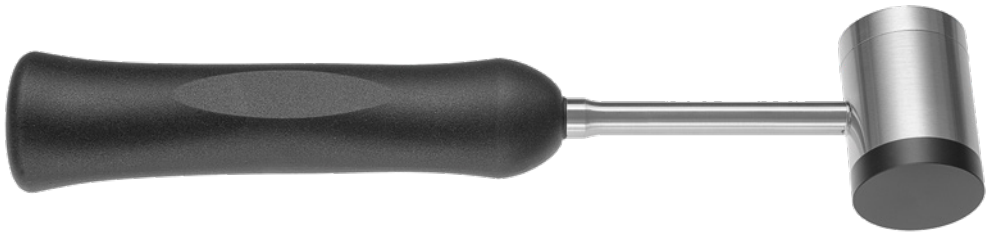
∅ 30mm, 400g

240mm, 9 1/2"	210-240-400



Mallet, lead filled head, repercussion-free, synthetic handle
∅ 30mm
290g

265mm, 10 1/2"	210-290-260
Spare Discs, pair	210-290-000



Mallet, with plastic/metal disks, black

308g	210-265-260



Mallet, ∅ 35mm, synthetic	
240mm, 9 1/2"	210-260-150
∅ 42mm	
260mm, 10 1/4"	210-260-240
∅ 50mm	
260mm, 10 1/4"	210-260-330
∅ 52mm	
260mm, 10 1/4"	210-260-355



Mallet, ∅ 30mm / 42mm, synthetic handle, 420g	
260mm, 10 1/4"	210-242-240



Mallet, silicone handle, ∅ 30mm, 350g	
230mm, 9 7/8"	210-260-350
∅ 35mm, 500g	
250mm, 9 7/8"	210-260-500
∅ 40mm, 700g	
230mm, 9 7/8"	210-260-700
∅ 42mm, 1000g	
250mm, 9 7/8"	210-260-100



GERZOG
Mallet, lead filled head, ∅ 30mm
300g

190mm, 7 1/2"	210-180-400



BERGMANN
Mallet, ∅ 30mm
300g

230mm, 9"	210-218-230



Mallet with full metal head, black
335g 210-265-280



Mallet, ∅ 35mm
450g

280mm, 11″	210-298-280



BERGMANN
Mallet, ∅ 30mm
450g

230mm, 9″	210-329-230



Mallet, synthetic handle, ∅ 35mm
450g

265mm, 10 1/2″	210-240-450

∅ 50mm, 900g

265mm, 10 1/2″	210-240-451



Mallet, ∅ 40mm
520g

185mm, 7 1/4"	210-240-520



OMBREDANNE
Mallet, ∅ 40mm
520g

230mm, 9"	210-271-240



KIRK
Mallet, ∅ 40mm
690g

195mm, 7 3/4"	210-225-185



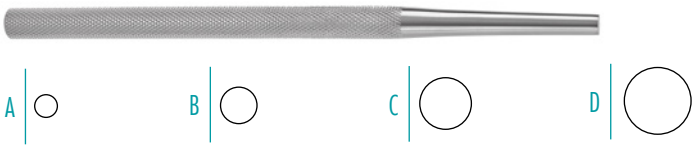
OMBREDANNE
Mallet, ∅ 40mm
710g

240mm, $9^{1/2}$″	210-270-240



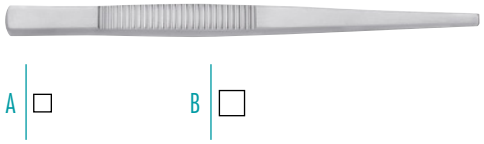
Head extractor, with steel handle

270mm, $10^{2/3}$″	210-581-230



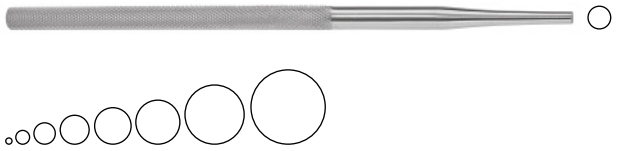
BRUENINGS
Bone Tamper,
160mm, 6 1/4"

A ∅ 3mm	210-115-003
B ∅ 5mm	210-115-005
C ∅ 7mm	210-115-007
D ∅ 9mm	210-115-009



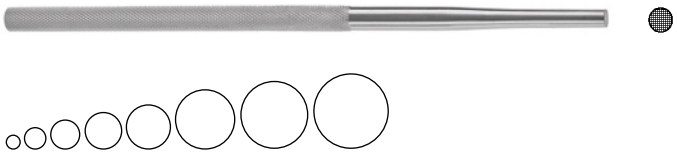
PASSOW
Bone Tamper,
120mm, 4 3/4"

A ∅ 2.5mm	210-325-120
B ∅ 3.5mm	210-335-120



Bone Tamper, round handle, smooth
150mm, 6"

1mm	210-275-151
2mm	210-275-152
3mm	210-275-153
4mm	210-275-154
5mm	210-275-155
6mm	210-275-156
8mm	210-275-158
10mm	210-275-160



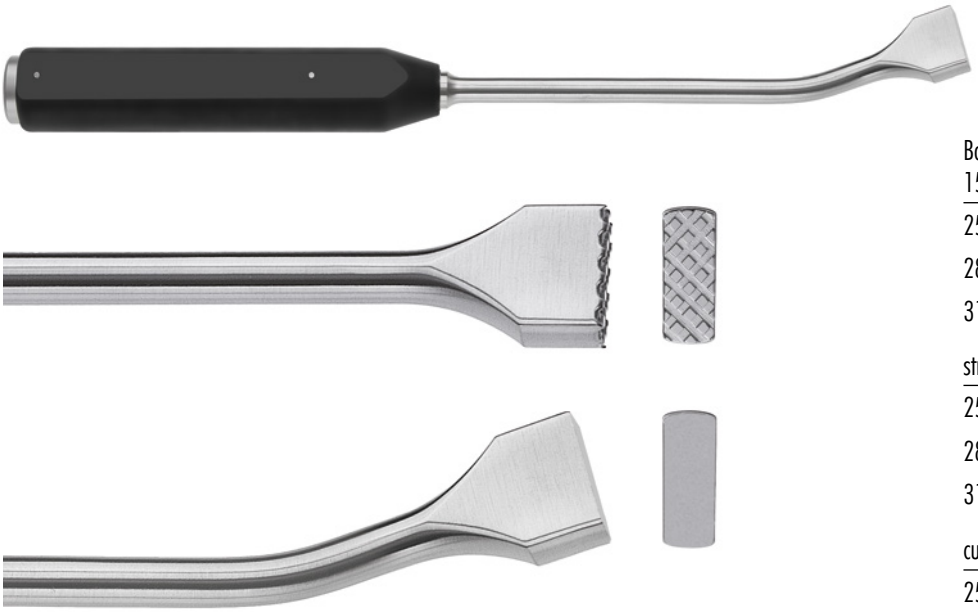
Bone Tamper, smooth round handle, serrated
155mm, 6 1/8"

2mm	210-090-002
3mm	210-090-003
4mm	210-090-004
5mm	210-090-005
6mm	210-090-006
8mm	210-090-008
9mm	210-090-009
10mm	210-090-010



Bone Tamper, synthetic handle,
17 x 7mm, straight

280mm, 11″	210-090-020



Bone Tamper, synthetic handle,
15 x 6mm, straight, serrated

255mm, 10″	210-090-021
280mm, 11″	210-090-030
315mm, 12 1/3″	210-090-033

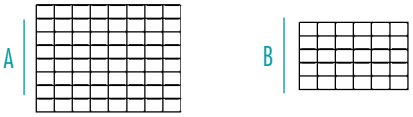
straight, smooth

255mm, 10″	210-090-023
280mm, 11″	210-090-032
315mm, 12 1/3″	210-090-035

curved, smooth

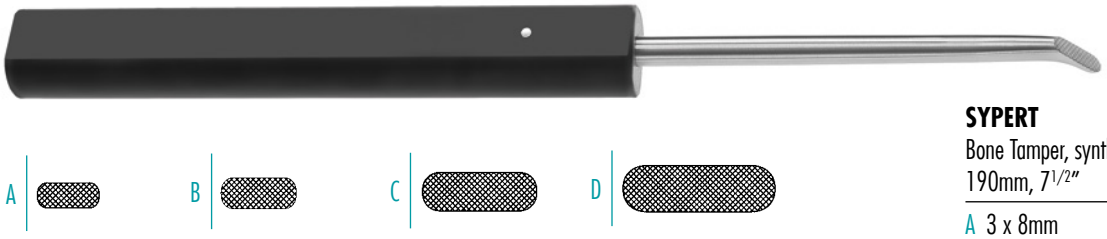
255mm, 10″	210-090-022
280mm, 11″	210-090-031
315mm, 12 1/3″	210-090-034





Bone Tamper, synthetic handle,
350mm, 14″

A 19 x 14mm	210-090-012
B 15 x 10mm	210-090-011



SYPERT
Bone Tamper, synthetic handle
190mm, 7 1/2″

A 3 x 8mm	210-091-100
B 4 x 10mm	210-091-101
C 5 x 15mm	210-091-102
D 6 x 20mm	210-091-103



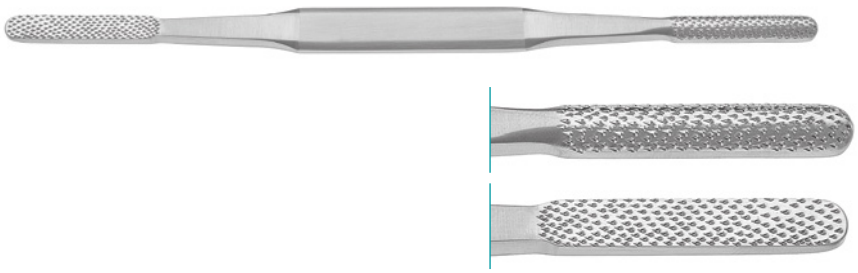
CASPAR
Bone Tamper, synthetic handle, 200mm, 8″

3mm	210-273-200
5mm	210-274-200
8mm	210-275-200
12mm	210-212-200
14mm	210-214-200
16mm	210-215-200



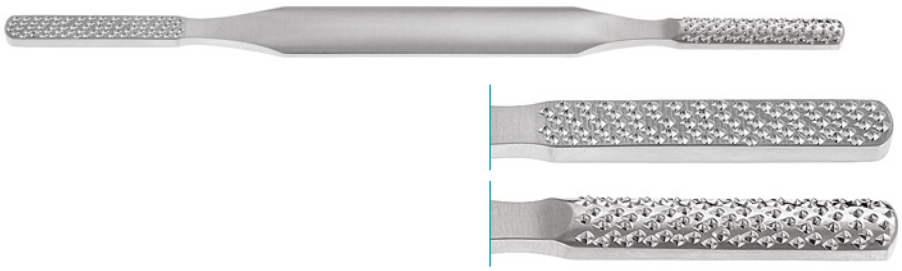
Cement Tamper, small, double-ended,
7mm / 3mm

230mm, 9″	210-093-230



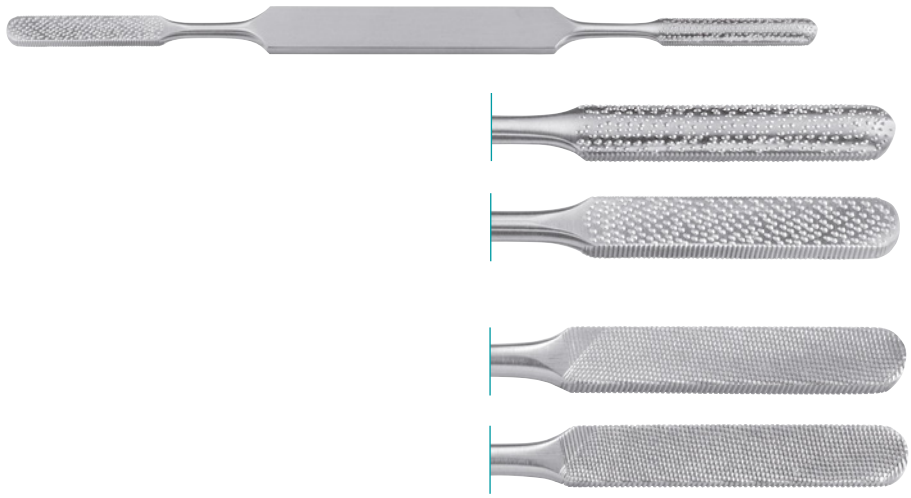
FOMON
Rasp, fine, double-ended, 7.5mm / 6.5mm

215mm, 8 1/2"	420-661-000



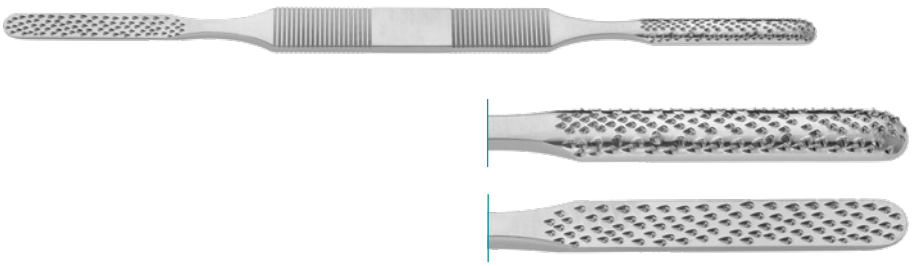
FOMON
Rasp, coarse, double-ended, 7.0mm / 8.0mm

215mm, 8 1/2"	420-660-000



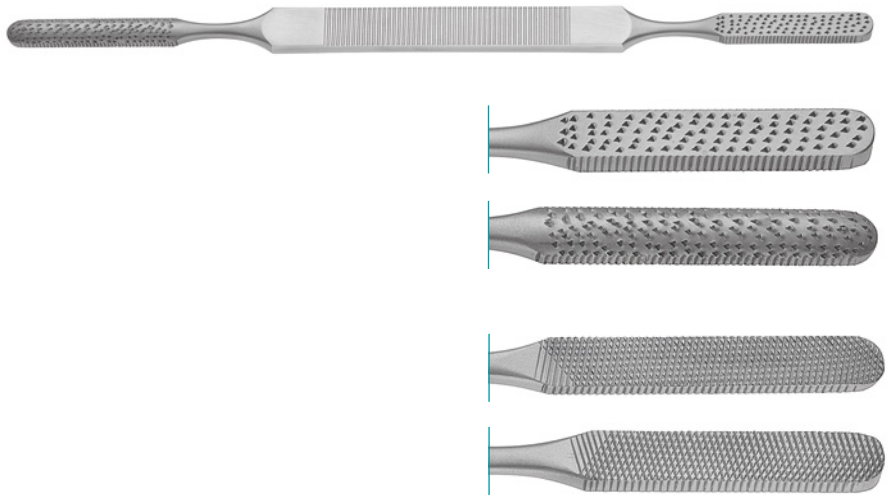
FOMON
Rasp, fine/coarse, double-ended, 4 sides

215mm, 8 1/2"	420-661-100



FOMON LIGHTWEIGHT
Rasp, double-ended, 7.0mm
215mm, 8 1/2"

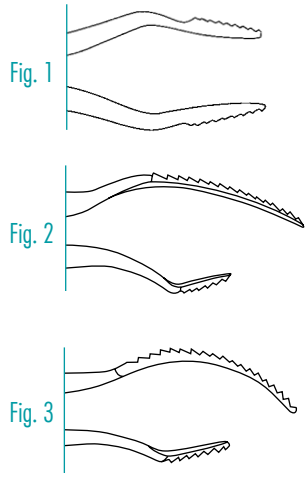
Coarse	420-662-001
Fine	420-662-002



KLEINERT KUTZ
Rasp, double-ended, 4 sides

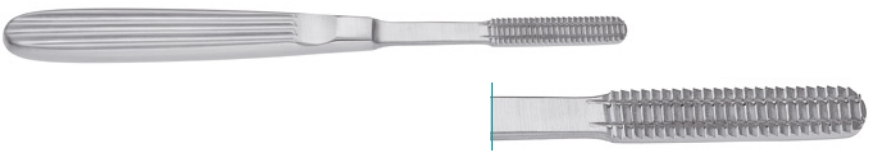
220mm, $8^{2/3}$"	420-656-000





MILLER
Rasp, 90° cross-serrated, backwards cutting, 180mm, 7"

Fig. 1	8mm / 5mm	500-387-000
Fig. 2	6mm / 4mm	500-384-010
Fig. 3	6mm / 5mm	500-386-045



MALTZ
Rasp, straight, backward cutting

180mm, 7"	420-654-180



FOMON
TC Rasp, double-ended, 7 x 40mm
210mm, $8^{1/4}$″

Fig. 1 / Fig. 2	420-660-219
Fig. 3 / Fig. 4	420-660-214
Fig. 5 / Fig. 6	420-660-216
Fig. 7 / Fig. 8	420-660-218
Fig. 9 / Fig. 10	420-660-200



PARKES
TC Rasp, straight, 8 x 39mm
210mm, $8^{1/4}$″

Fig. 1	420-490-210
Fig. 2	420-491-210
Fig. 3	420-492-210
Fig. 4	420-493-210
Fig. 5	420-494-210
Fig. 6	420-495-210
Fig. 7	420-496-210
Fig. 8	420-497-210
Fig. 9	420-498-210
Fig. 10	420-499-210

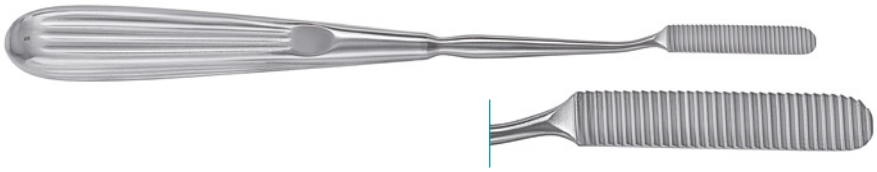


MALTZ
TC Rasp,
165mm, $6^{1/2}$″

Fig. 2	420-492-165
Fig. 3	420-493-165
Fig. 4	420-494-165
Fig. 5	420-495-165
Fig. 6	420-496-165



Fig.1 0.8 | Fig.2 1.1 | Fig.3 1.3 | Fig.4 1.6 | Fig.5 1.8 | Fig.6 2.0 | Fig.7 2.4 | Fig.8 2.6 | Fig.9 2.8 | Fig.10 3.0



MALTZ (COTTLE)
Rasp, backward cutting

210mm, $8^{1/4}$″	420-670-210



GALLAHER
Rasp, with ring, coarse

170mm, $6^{2/3}$″	420-678-190



PUTTI
Bone File

300mm, $11^{7/8}$″	210-181-300



PUTTI
Bone File

270mm, $10^{2/3}$″	210-183-270



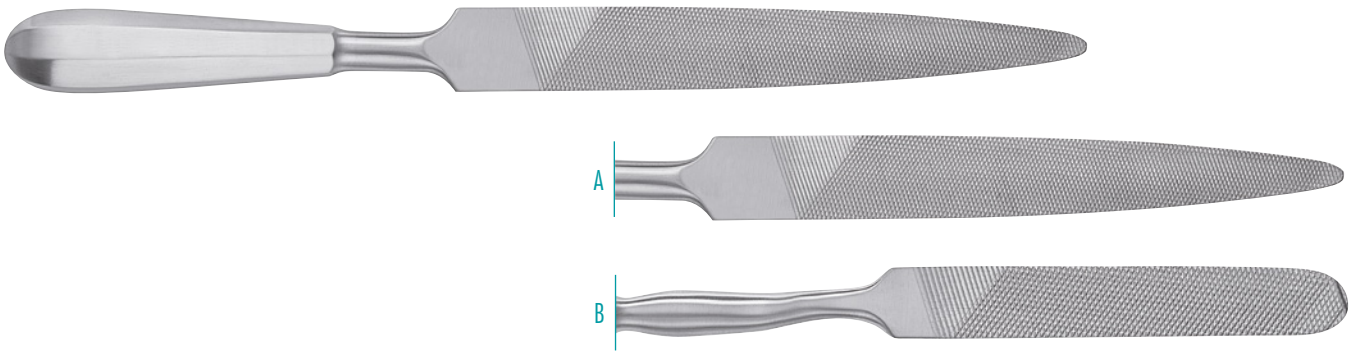
PUTTI
Rasp, angled shaft, silicone handle

310mm, 12 1/4"	210-181-000



Bone File / Rasp

220mm, 8 2/3"	210-178-220



Bone File, hollow handle,
A semi-round

280mm, 11"	210-176-280

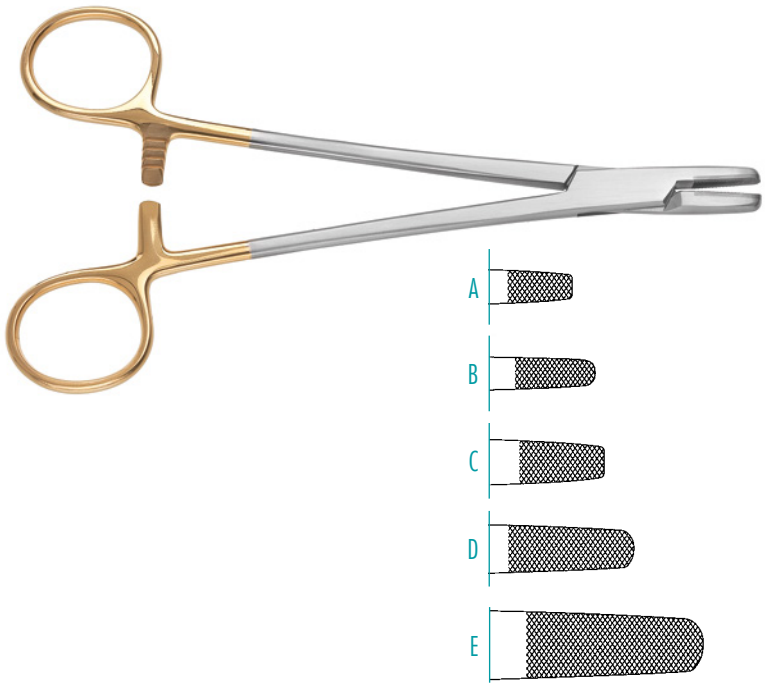
B bayonet-shaped

240mm, 9 1/2"	210-177-245



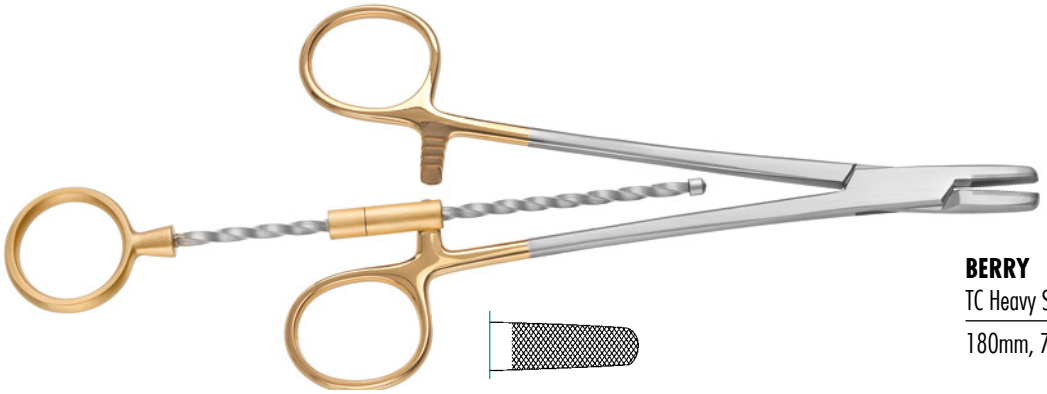
TC Wire Twisting Forceps

150mm, 6"	180-501-150



BERRY
TC Heavy Sternal Needle Holder

150mm, 6"	
A	180-307-150
B	180-308-150
180mm, 7"	
C	180-307-180
D	180-308-180
185mm, 7 1/4"	
E	180-308-200



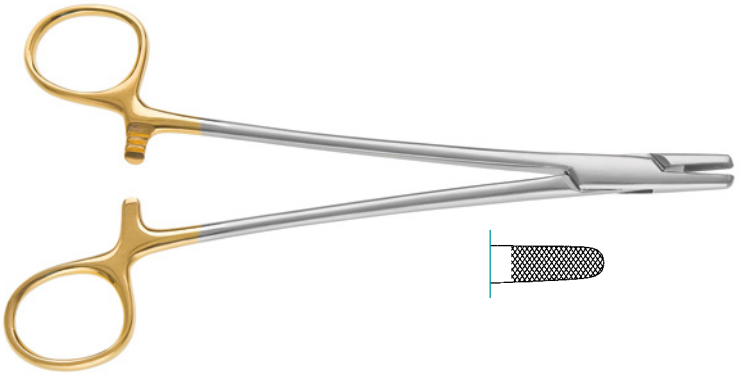
BERRY
TC Heavy Sternal Needle Holder

180mm, 7"	180-309-180



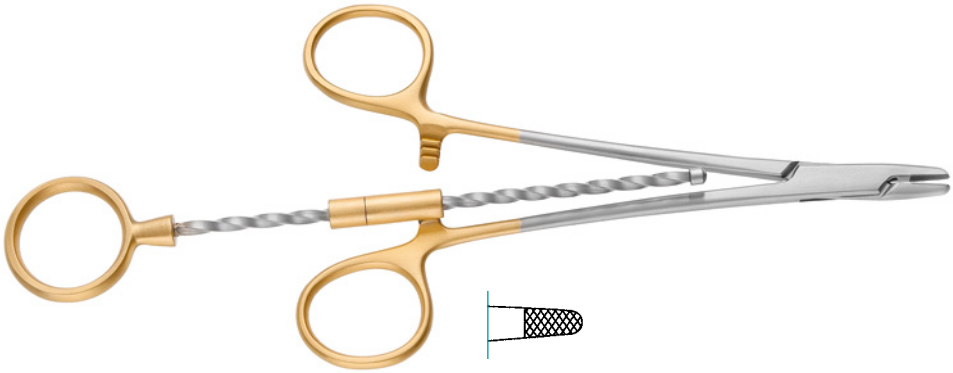
TC Wire Holding Clamp, round jaw

130mm, 5 1/8" 180-569-130



TC Wire Holding Clamp / Sternum

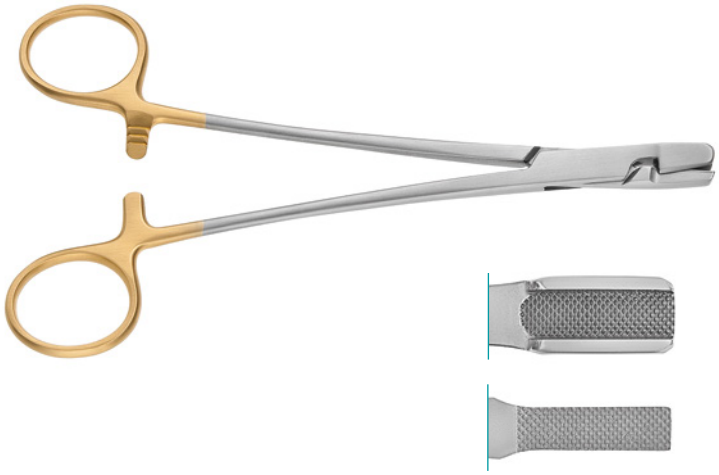
180mm, 7" 180-569-180



CORWIN

TC Wire Twister with drill

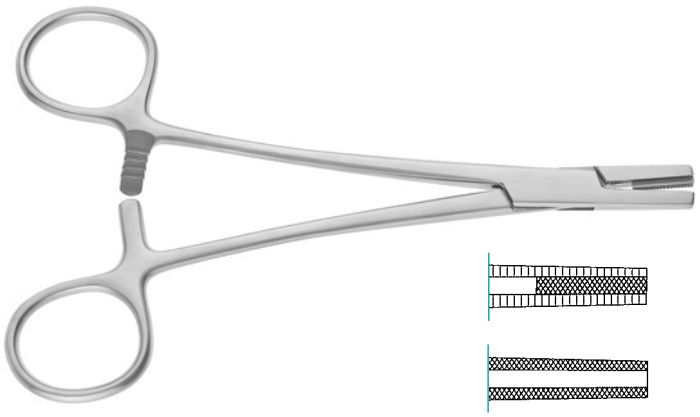
185mm, 7 1/4" 180-810-185





Wire Extraction Plier, lateral support to hold wire in place, 170mm, $6^{2/3}$"

without drill	200-514-170
with drill	200-515-170



Wire Pulling Forceps

165mm, $6^{1/2}$"	200-503-165



Wire Holding Forceps

140mm, 5 1/2"	200-515-140



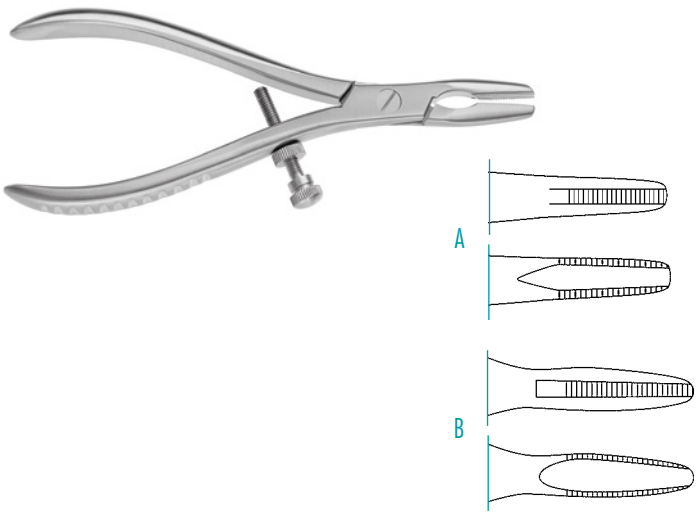
Flat Nose Plier, distal jaw, smooth

140mm, 5 1/2"	180-507-140



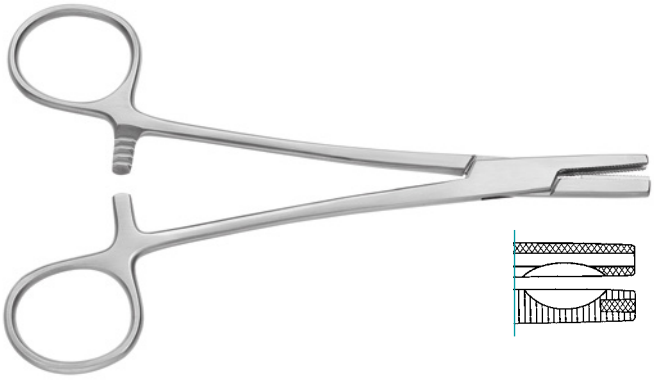
Flat Nose Plier, serrated jaw

140mm, 5 1/2"	180-511-140



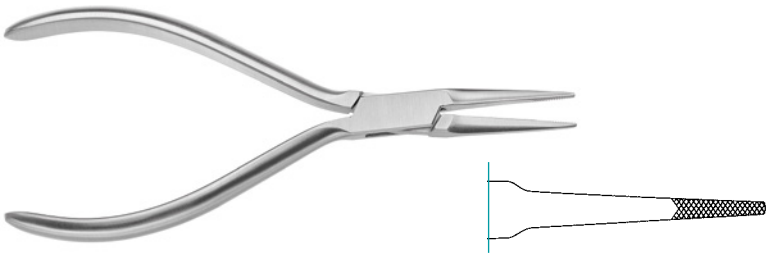
Wire Extraction Forceps

A 130mm, 5 1/8"	200-507-130
B 180mm, 7"	200-507-180



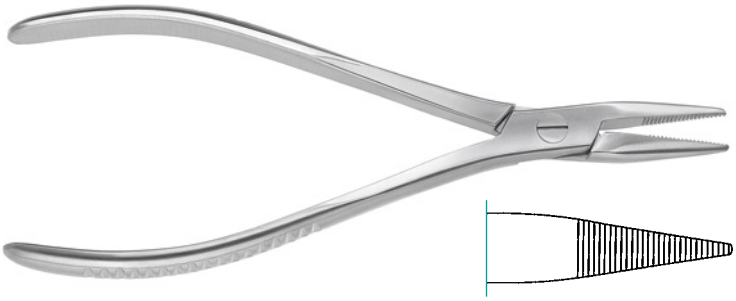
Wire Twister / Tightener

160mm, 6 1/4" 180-512-160



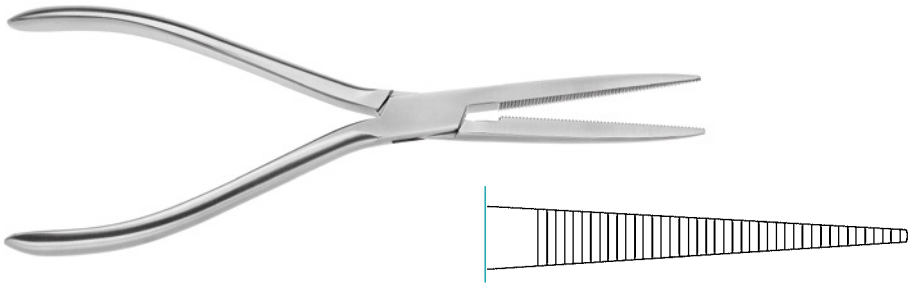
Flat Nose Plier, delicate long jaw,
2mm wide tip

160mm, 6 1/4" 180-515-160



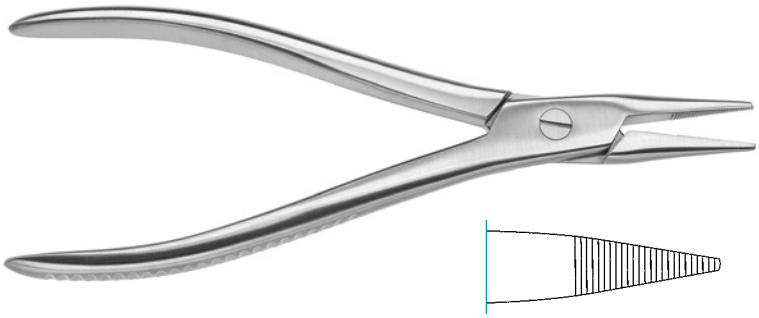
Flat Nose Plier, sharp

195mm, 7 3/4" 180-500-180



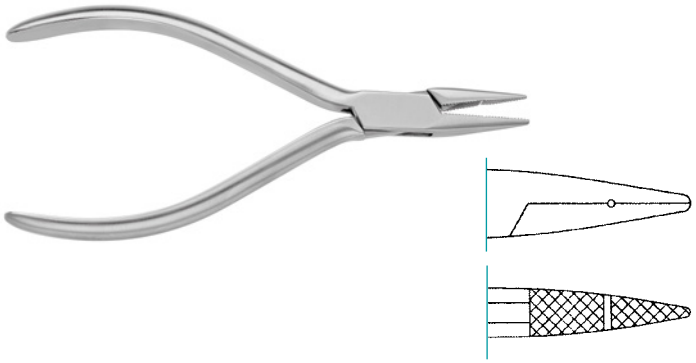
Long Jaw Needle Nose Plier,
parallel serrated jaw

178mm, 7" 180-513-170



Narrow Nose Wire Pulling Forceps,
3mm jaw

190mm, 7 1/2"	180-513-190



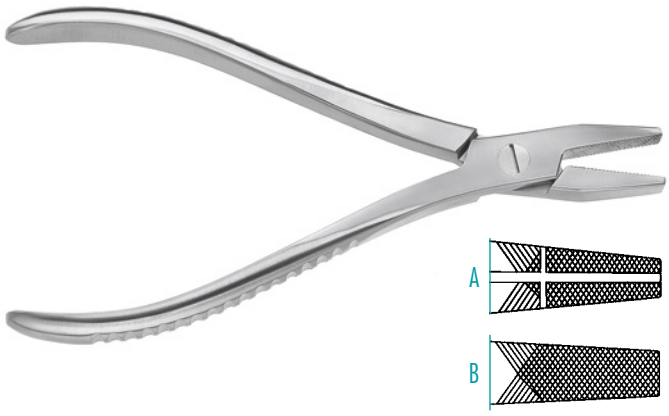
Needle Nose Plier,
wire with groove, for 1mm cerclage

140mm, 5 1/2"	200-518-140



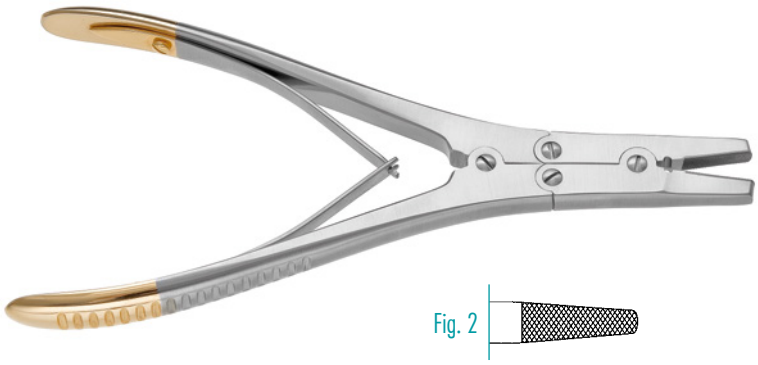
Flat Nose Plier, with groove

160mm, 6 1/4"	200-518-160



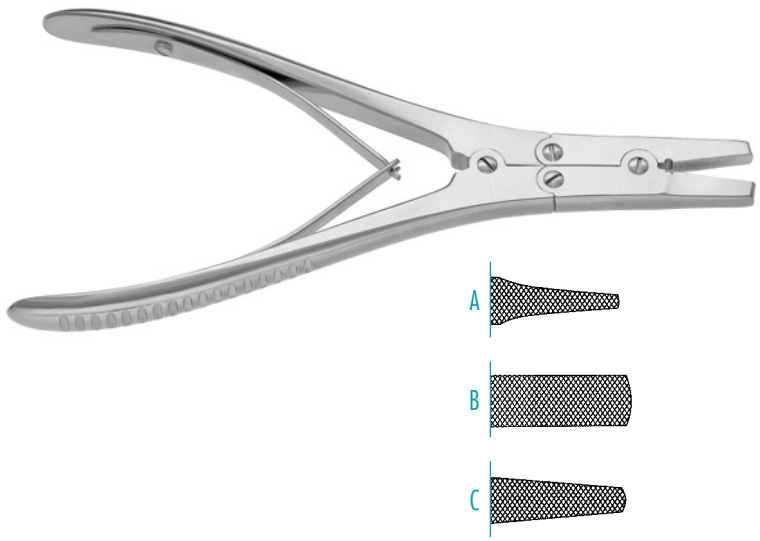
Wire Holding Pliers,
with longitudinal and transversal grooves,
170mm, 6 2/3"

A	180-500-170
B	180-501-170



TC Flat Nose Plier, double action
180mm, 7"

Fig. 2	200-511-002



Wire Extraction Plier, double action
145mm, 5 3/4"

A	200-514-145

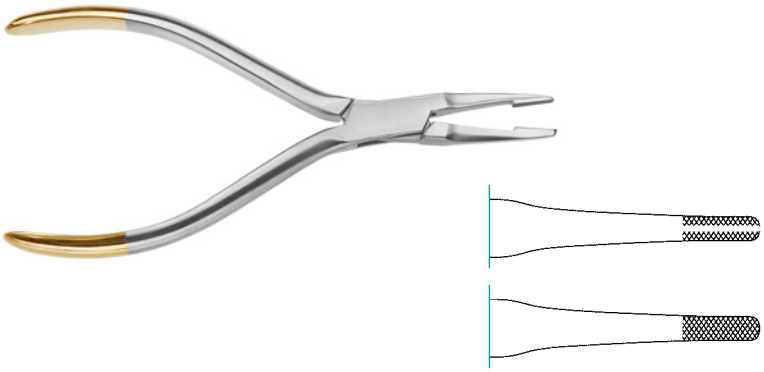
180mm, 7"

B	200-507-180
C	200-514-180



Flat Nose Plier, 2mm tapered tip

140mm, 5 1/2" 180-510-140



Pin Pulling Forceps, 1 TC Insert

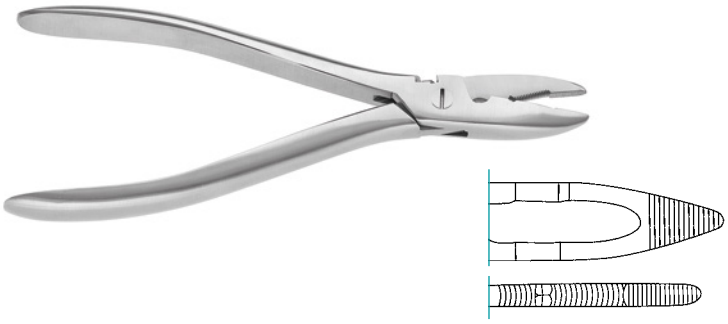
140mm, 5 1/2" 180-512-140



LANGENBECK

Round Plier, smooth, round jaw

140mm, 5 1/2" 180-634-140



WALDSACHS
Universal Plier

155mm, 6 1/8"	180-790-150



TC Multi-Purpose Plier

190mm, 7 1/2"	180-501-190



PEESO
Wire Bending Plier

135mm, 5 1/3"	180-843-135



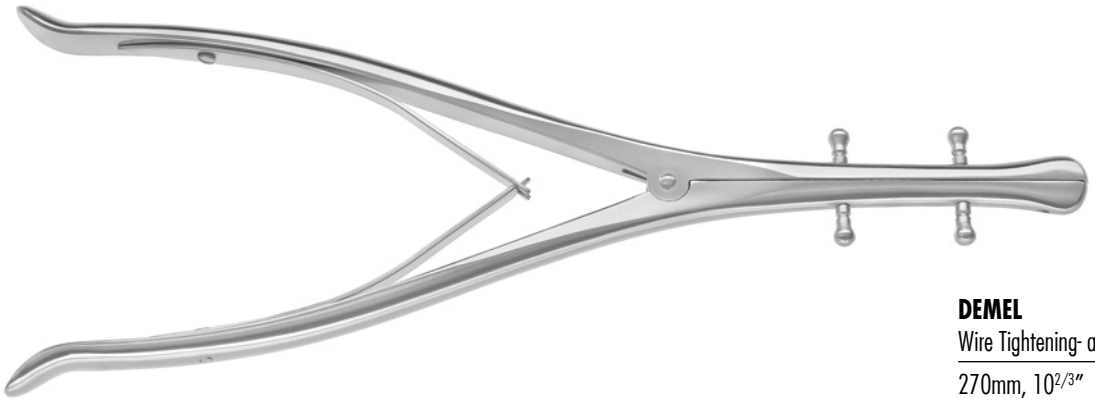
Wire and Pin Bender / up to 3.2mm

150mm, 6" 200-204-150



LOUTE
Wire Tightener

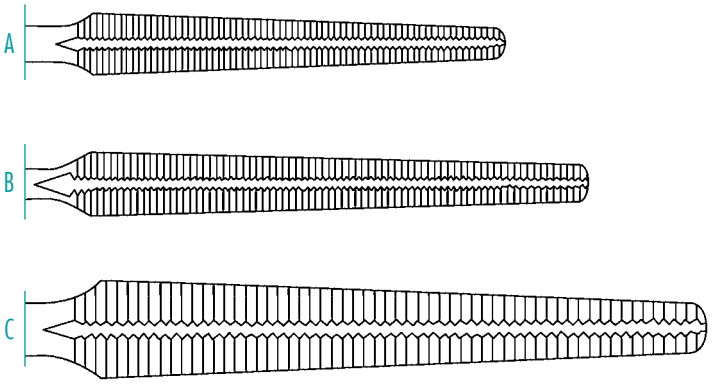
210mm, 8 1/4" 200-513-210



DEMEL
Wire Tightening- and Twisting Forceps

270mm, 10 2/3" 200-755-270





Needle Nose Locking Plier

A 220mm, 8 2/3" / small	
Regular model	200-515-220
For Extraction Mallet	200-515-221
B 250mm, 9 7/8" / medium	
Regular model	200-515-250
For Extraction Mallet	200-515-251
C 300mm, 11 7/8" / large	
Regular model	200-515-300
For Extraction Mallet	200-515-301

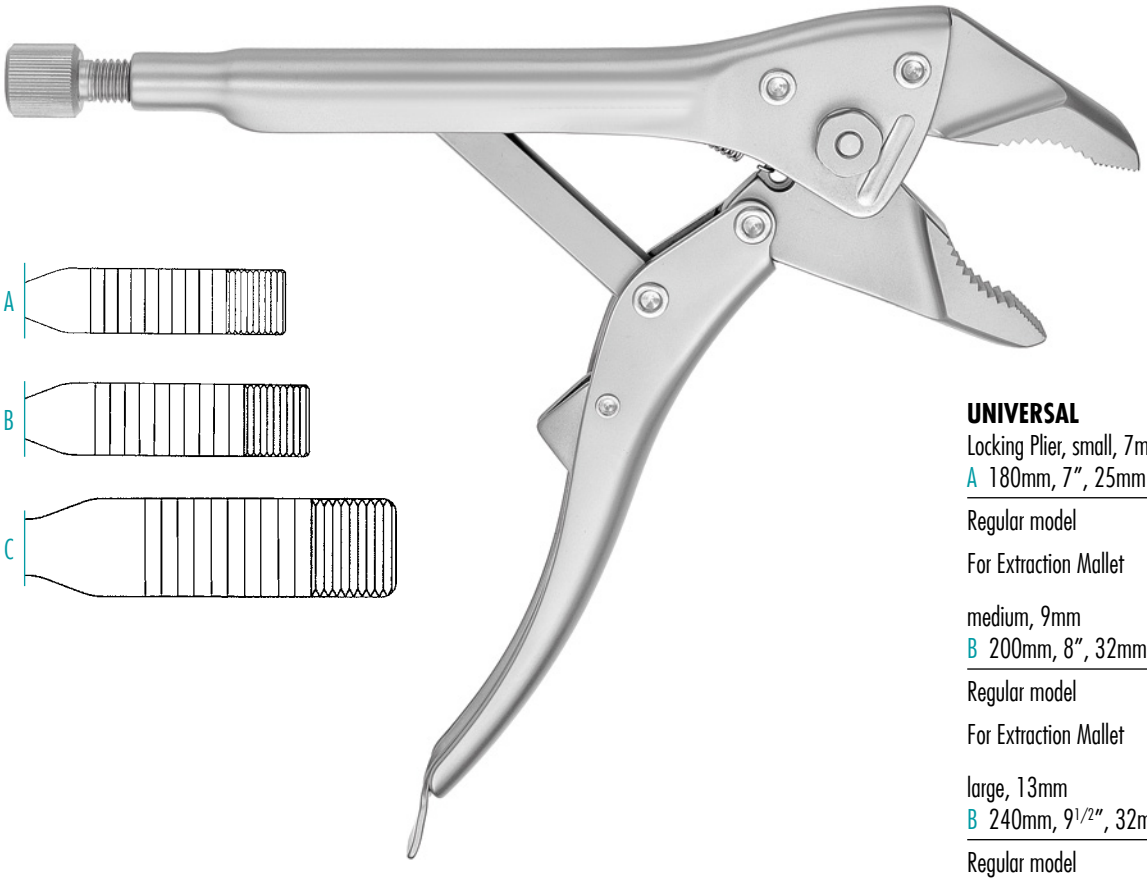


Extraction Mallet
for small and medium models
400g

350mm, 14"	210-400-350

for large models
700g

400mm, 15 3/4"	210-700-350



UNIVERSAL
Locking Plier, small, 7mm
A 180mm, 7", 25mm jaw spreading

Regular model	200-511-180
For Extraction Mallet	200-511-181

medium, 9mm
B 200mm, 8", 32mm jaw spreading

Regular model	200-511-200
For Extraction Mallet	200-511-201

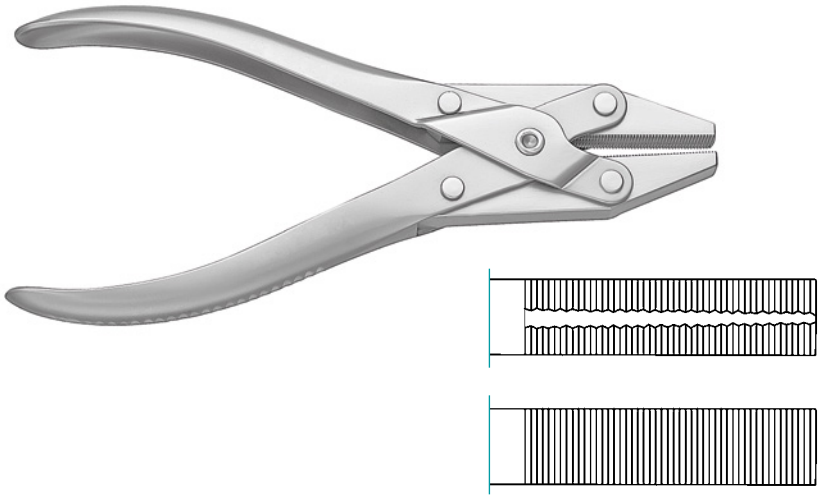
large, 13mm
B 240mm, 9 1/2", 32mm jaw spreading

Regular model	200-511-240
For Extraction Mallet	200-511-241



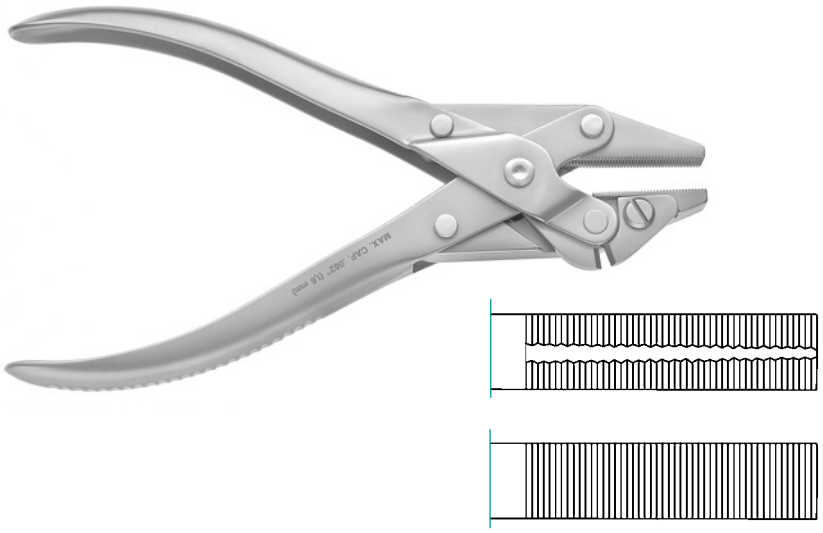
UNIVERSAL
Wire sizing Forceps,
max. opening 50mm

200mm, 8"	180-502-200



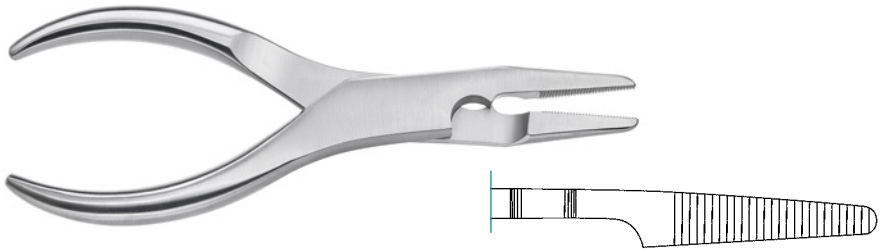
Wire Gripper, parallel closure

185mm, 7 1/4"	200-513-185



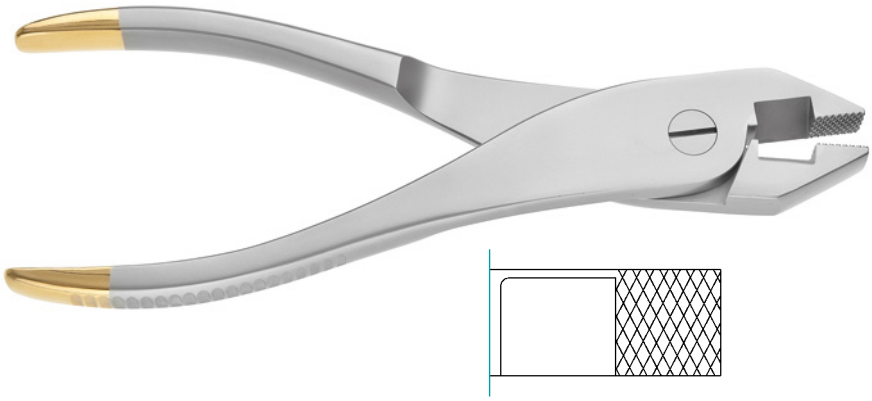
Combined Wire Cutter and Gripper

180mm, 7″	200-512-185



Flat Nose Plier, 3.5mm jaw

160mm, 6 1/4″	180-535-160



CUT ∅

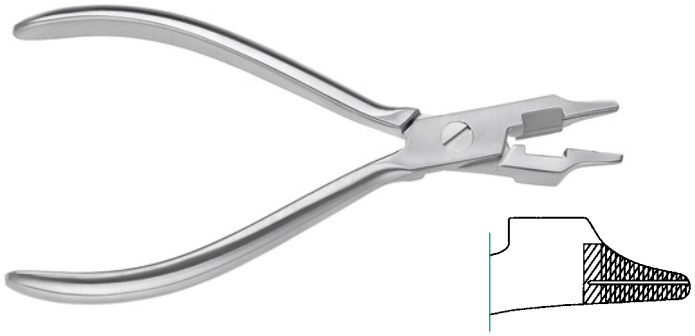
HARD max. 1.2mm

SOFT max. 2.0mm

LINEMAN

Plier with cutting edge

220mm, 8 2/3″	200-516-220



CUT ∅
HARD max. 1.0mm
SOFT max. 1.5mm

UNIVERSAL
Wire Cutting and Bending Forceps

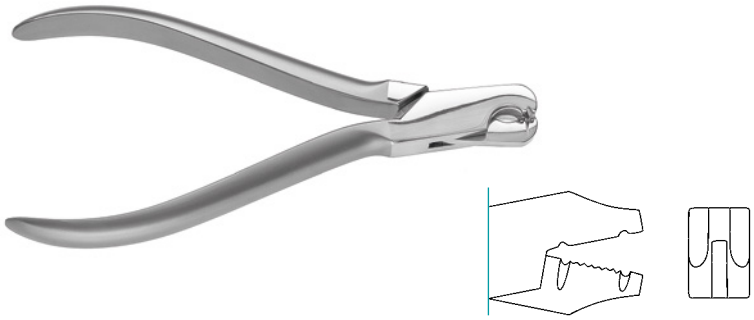
150mm, 6"	200-513-150



CUT ∅
HARD max. 0.7mm
SOFT max. 1.0mm

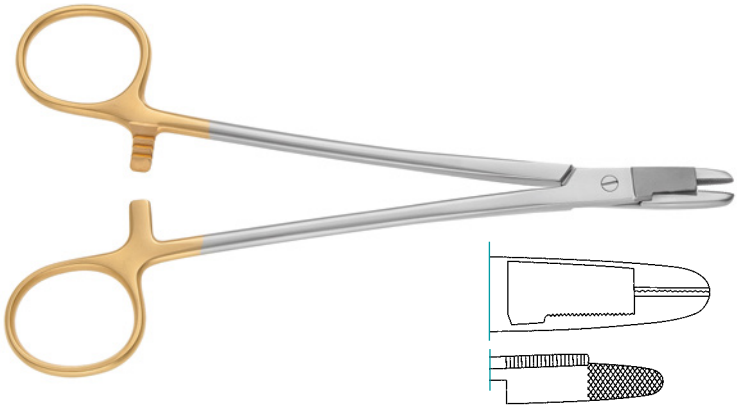
Wire Cutting / Bending Forceps

150mm, 6"	200-514-150



K-Wire and Plate Bending Forceps,
for mini plates up to 1.6mm,
90° - bending for K-Wires

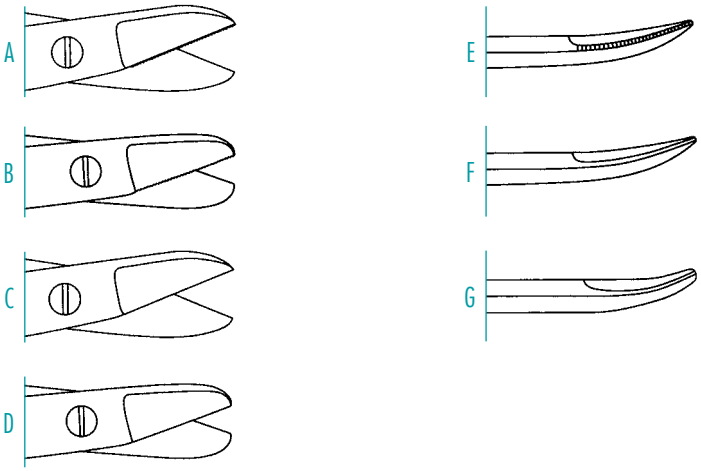
140mm, $5^{1/2}$"	200-416-140



KOPPELMANN
Wire Twister and Scissors

185mm, $7^{1/4}$"	180-572-185

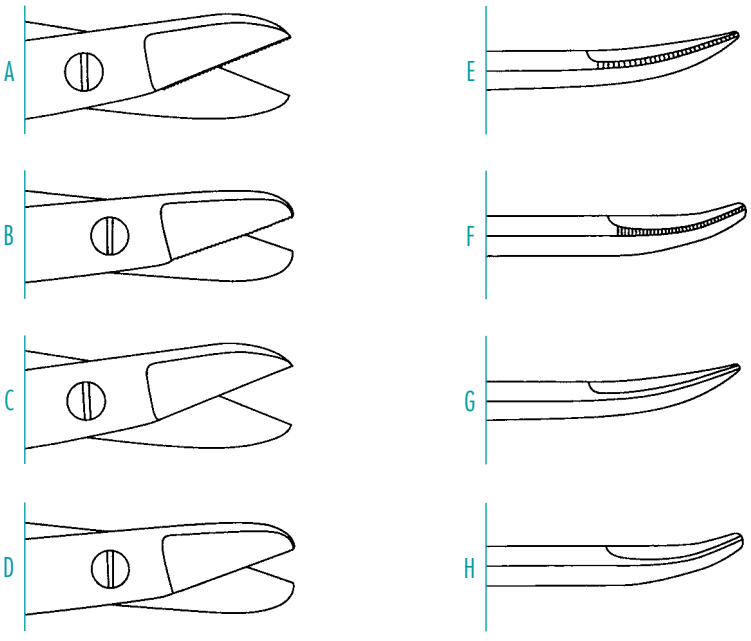




Crown & Collar Scissors, 100mm, 4"

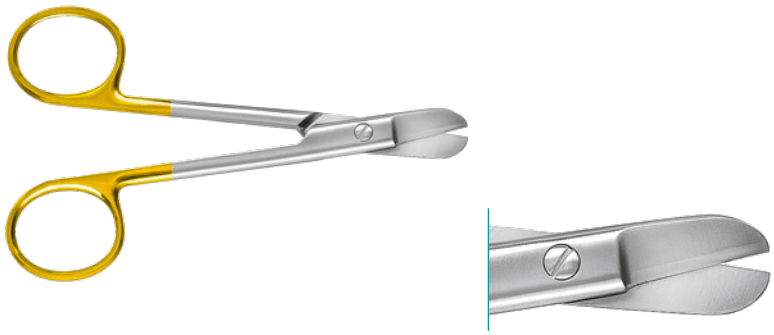
A	Straight, sharp, serrated	120-296-100
B	Straight, blunt, serrated	120-300-100
C	Straight, sharp	120-294-100
D	Straight, blunt	120-298-100
E	Curved, sharp, serrated	120-297-100
F	Curved, sharp	120-295-100
G	Curved, blunt	120-299-100





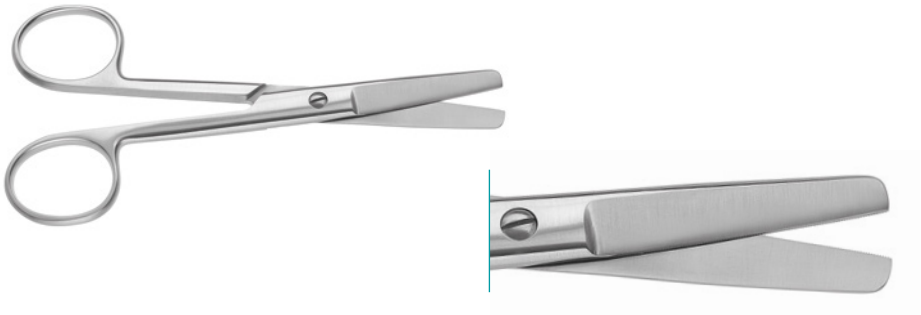
Crown & Collar Scissors, 120mm, 4 3/4"

A	Straight, sharp, serrated	120-296-120
B	Straight, blunt, serrated	120-300-120
C	Straight, sharp	120-294-120
D	Straight, blunt	120-298-120
E	Curved, sharp, serrated	120-297-120
F	Curved, blunt, serrated	120-301-120
G	Curved, sharp	120-295-120
H	Curved, blunt	120-299-120



TC Wire Scissors

120mm, 4 3/4"	120-596-120

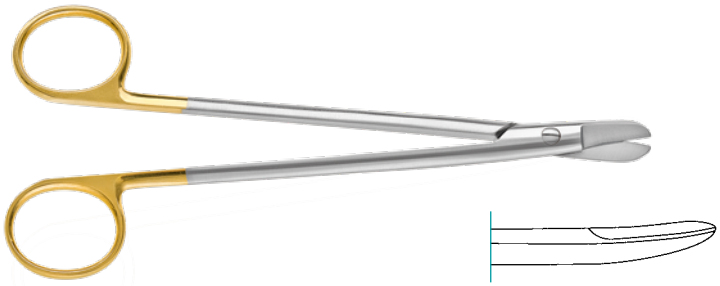


CUT ∅

HARD max. 0.3mm
SOFT max. 0.4mm

HARVEY
Wire Cutting Scissors, serrated

125mm, 5"	120-262-125



SMITH
TC Wire Scissors, serrated, 160mm, 6 1/4"

straight	120-570-160
curved	120-571-160



SCHUKNECHT
Wire Scissors, straight, short blade

100mm, 4"	120-120-100



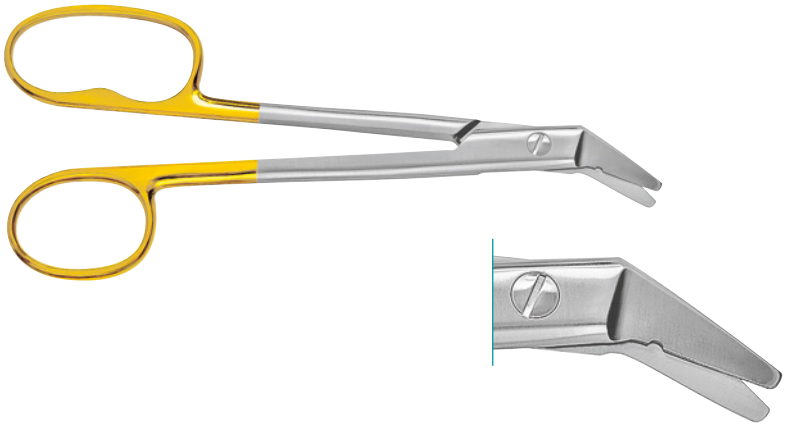
CUT Ø
HARD max. 0.8mm
SOFT max. 1.2mm

UNIVERSAL
Wire & Plate Scissors, serrated

120mm, 4 3/4"	120-265-120

With TC inserts

120mm, 4 3/4"	120-565-120



UNIVERSAL
TC Wire & Plate Scissors

170mm, 6 2/3"	120-565-170



CUT ∅
UP TO 0.7mm

TC Wire Cutter, up to 0.7mm

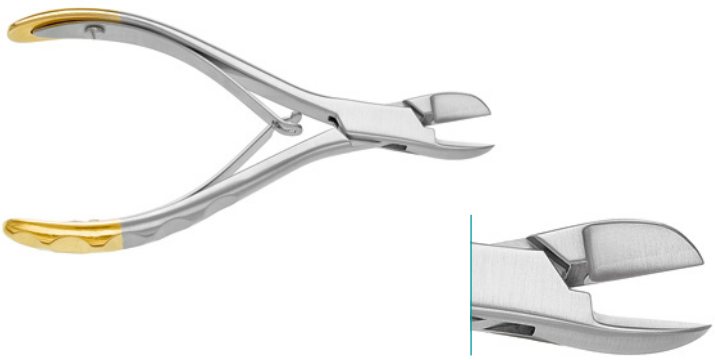
110mm, 4 1/3"	200-500-110



CUT ∅
HARD max. 1.0mm
SOFT max. 1.5mm

TC Wire Cutter

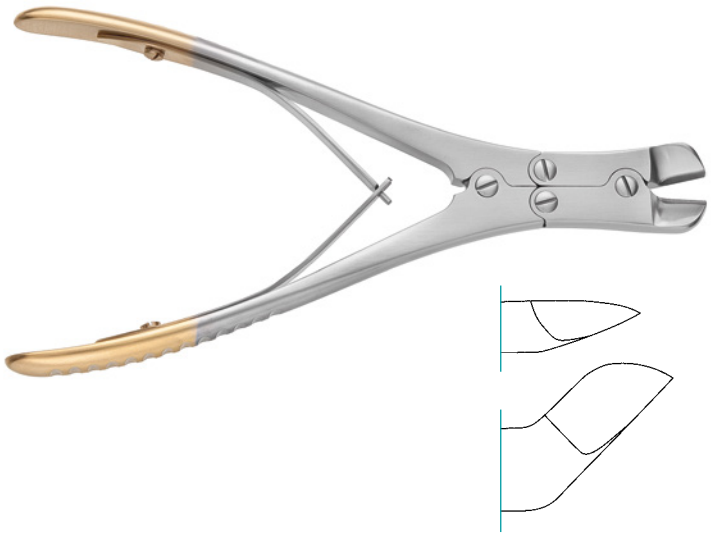
150mm, 6"	180-513-530



CUT ∅
HARD max. 0.6mm
SOFT max. 1.0mm

TC Wire Cutter

120mm, 4 3/4"	200-500-120



CUT ∅
HARD max. 1.6mm
SOFT max. 2.0mm

TC Wire Cutter, angled
170mm, $6^{2/3}$" 200-500-160

CUT ∅
HARD max. 1.8mm
SOFT max. 2.2mm

REILL
TC Wire Cutter, angled
220mm, $8^{2/3}$" 200-500-220



CUT ∅
HARD max. 2.2mm
SOFT max. 3.0mm

TC Wire Cutter, 45° angled jaw
235mm, $9^{1/4}$" 200-504-235



CUT ∅
HARD max. 2.2mm
SOFT max. 3.0mm

TC Wire Cutter, 12° angled jaw
235mm, $9^{1/4}$" 200-503-235



CUT ∅
HARD max. 2.5mm
SOFT max. 3.5mm

TC Front Wire Cutter

220mm, $8^{2/3}$"	200-506-220



CUT ∅
HARD max. 1.5mm
SOFT max. 2.0mm

TC Front and Lateral Wire Cutter

150mm, 6"	200-510-150



CUT ∅
HARD max. 1.5mm
SOFT max. 2.0mm

Wire Cutter, 180mm, 7"

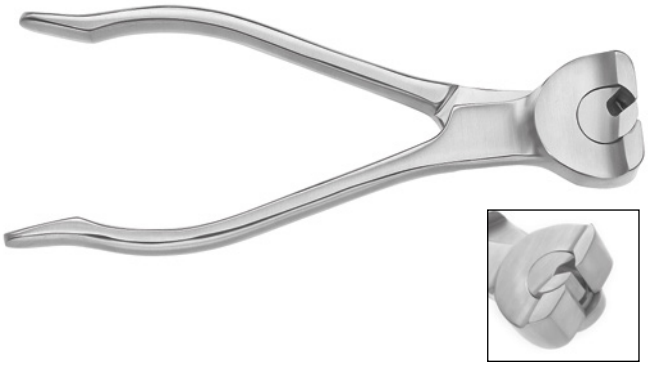
	200-504-180
TC Inserts	200-502-180



CUT ∅
HARD max. 0.7mm
SOFT max. 1.0mm

TC Wire Cutter

145mm, $5^{3/4}$" 200-510-145



CUT ∅
HARD max. 1.6mm
SOFT max. 2.0mm

Diamond Head-Wire Cutter, front action

160mm, $6^{1/4}$" 200-510-160



CUT ∅
HARD max. 1.6mm
SOFT max. 2.4mm

Head Cutter, cannulated

185mm, $7^{1/4}$" 200-502-185





CUT ∅
HARD max. 2.2mm
SOFT max. 2.8mm

TC "Easy Cut" Wire Cutter

200mm, 8"	200-502-200







CUT ∅
HARD max. 2.2mm
SOFT max. 2.8mm

TC Wire Cutter,
exchangeable TC Blades and rubber jaw

up to ∅ 3.0mm	
230mm, 9"	200-500-230
up to ∅ 4.0mm	
280mm, 11"	200-502-280

TC Blades spare set
for 200-500-230 — 200-502-997

Rubber jaw spare set
for 200-500-230 and 200-502-280 — 200-502-998



CUT ∅
UP TO 2.0mm

TC Wire Holder and Cutter,
exchangeable TC blades

180mm, 7"	200-512-180

TC Blades spare set — 200-500-997

Rubber jaw spare set — 200-500-998



CUT ∅
UP TO 1.6mm

TC Wire Cutter, exchangeable TC blades

150mm, 6" 200-500-150

TC Blades spare set

200-500-997

Rubber jaw spare set

200-500-998



CUT ∅
UP TO 2.2mm

TC Wire Cutter for right-hander, exchangeable TC blades and rubber jaw

180mm, 7" 200-505-180

TC Blade Spare Set

200-505-997

Rubber Jaw Spare Set

200-505-998



CUT ∅
HARD max. 1.6mm
SOFT max. 2.0mm

TC Flush Wire Cutter

180mm, 7" 200-508-180



CUT ∅
UP TO 3.2mm

TC Wire Cutter, double action

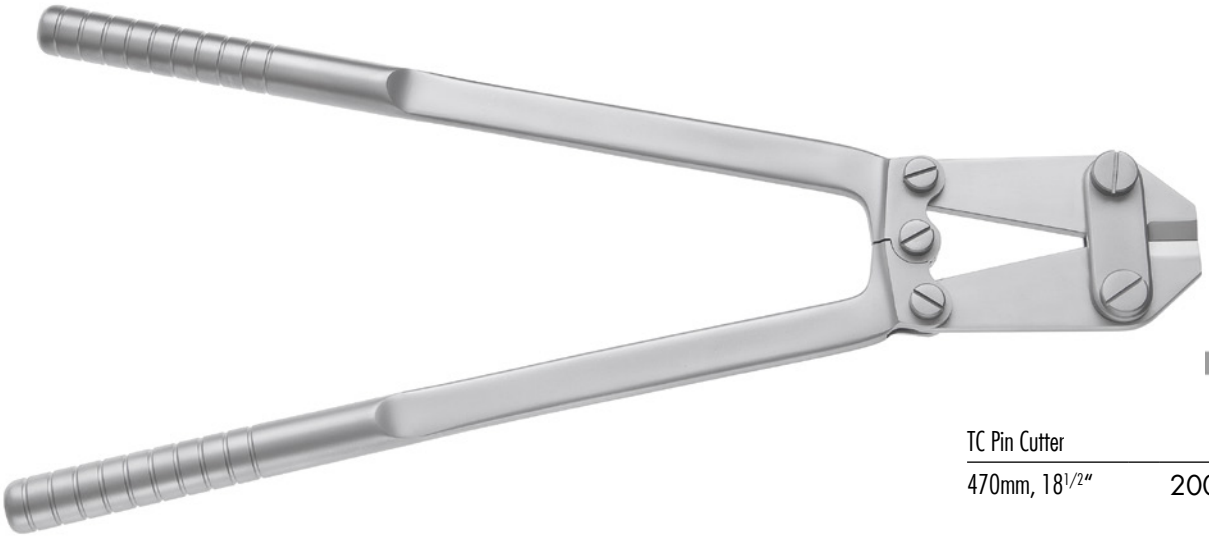
240mm, 9 1/2" 200-522-240



CUT ∅
UP TO 6.35mm

Pin Cutter, detachable handles

575mm, 22 1/2" 200-500-585



CUT ∅
UP TO 5.0mm

TC Pin Cutter

470mm, 18 1/2"	200-500-470



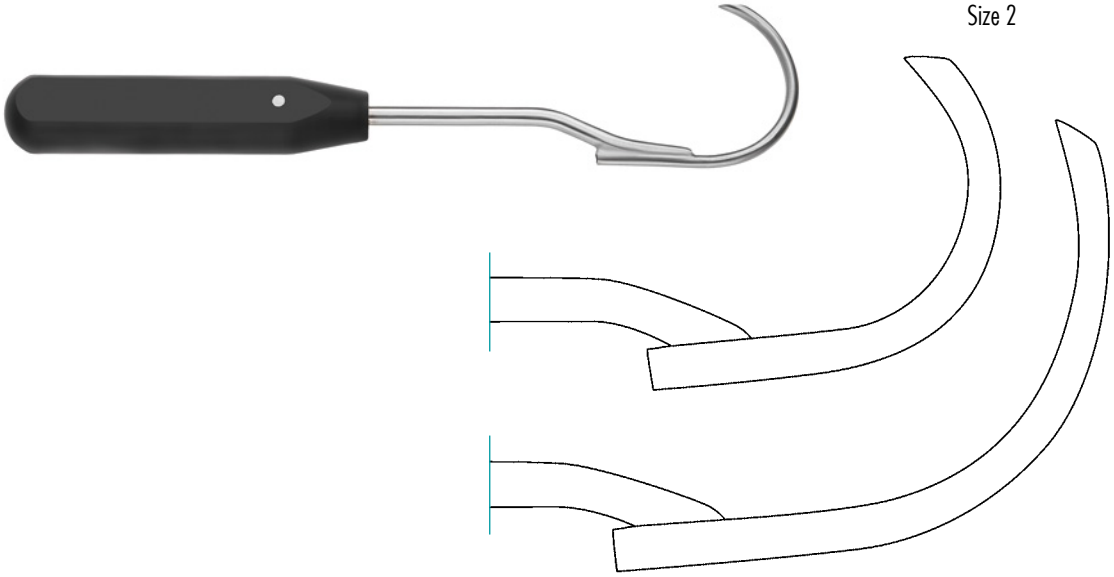
CUT ∅
UP TO 6.0mm

TC Front Cutter

380mm, 15"	200-500-380

Wire Guide, synthetic handle, 210mm, 8 1/4″

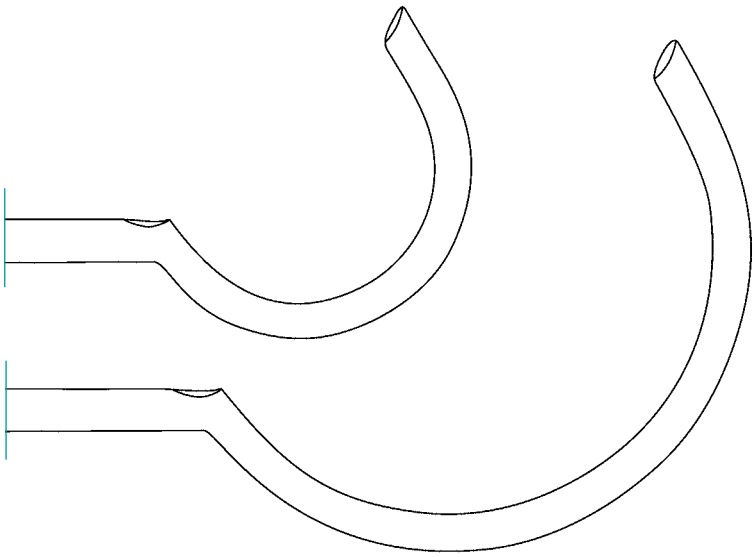
Size 1	180-751-018
Size 2	180-751-020





Bone Wire Guide, hollow, sharp

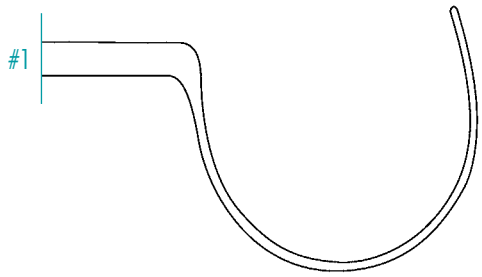
240mm, 9 1/2″	180-751-014
270mm, 10 2/3″	180-751-016

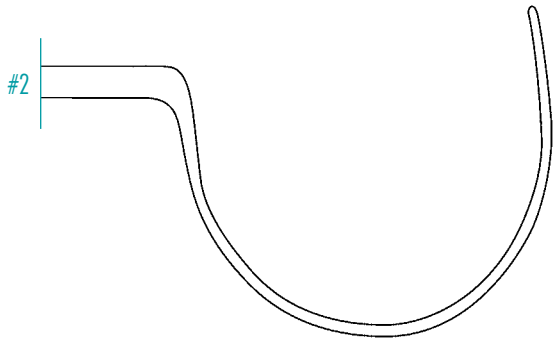


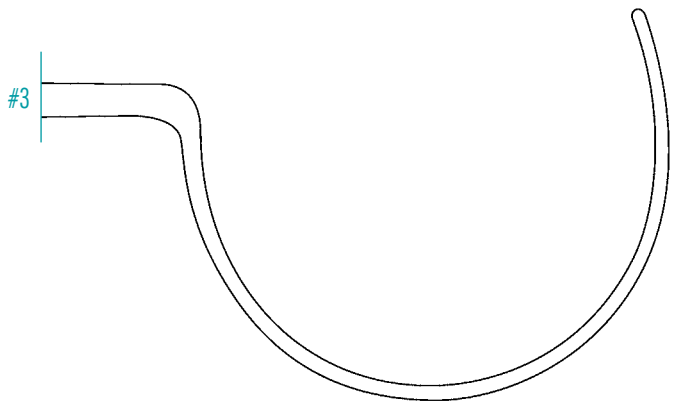
DEMEL

Bone Wire Guide, 280mm, 11"	
#1	180-751-001
#2	180-751-002
305mm, 12"	
#3	180-751-003











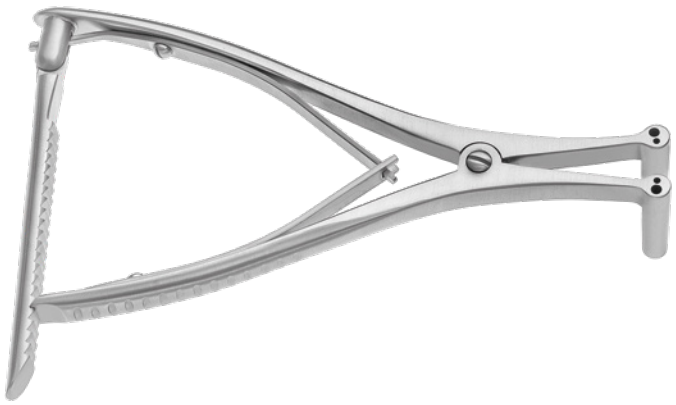
KIRSCHNER
Extension Bow

Max. opening: medium		Max. opening: large		Max. opening: extra large	
130mm, 5 1/8"	200-555-180	185mm, 7 1/4"	200-555-220	220mm, 8 2/3"	200-555-220



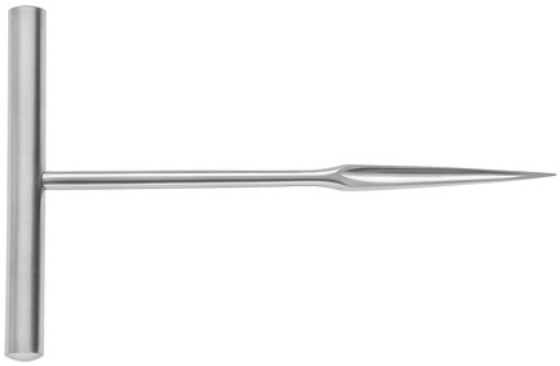
Bone Fragment Distractor,
2.5mm and 1.6mm pin holes,
outspread

150mm, 6"	210-974-300
210mm, 8 1/4"	210-974-310



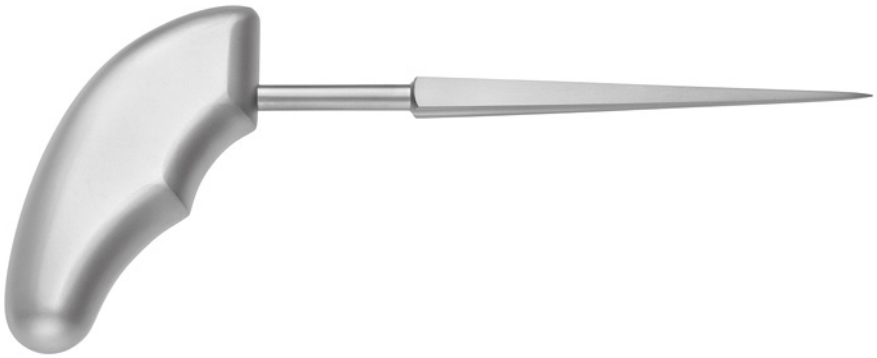
Bone Fragment Distractor,
2.5mm and 1.6mm pin holes,
closed

150mm, 6"	210-974-301
210mm, 8 1/4"	210-974-311



Awl with T-Handle

150mm, 6″	200-124-140



PERTHES
Reamer, square

220mm, 8 2/3″	200-122-210



Reamer, ∅ 2.5 - 3.5mm

160mm, 6 1/4″	200-120-140

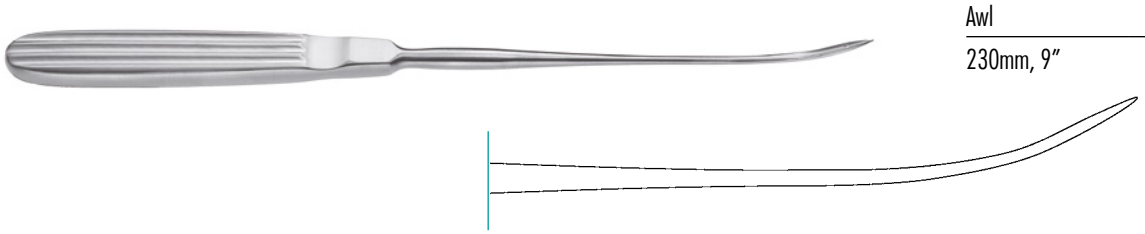


Large Awl, 235mm, 9 1/4", pyramidal tip	
large	259-258-145
small	259-258-144
Crotched Hook Awl, 235mm, 9 1/4"	
large	259-258-146
small	259-258-147



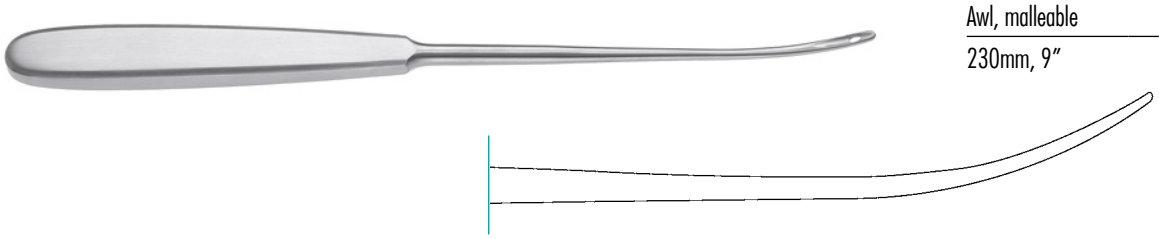
PERTHES
Bone Drill

210mm, 8 1/4"	200-160-210



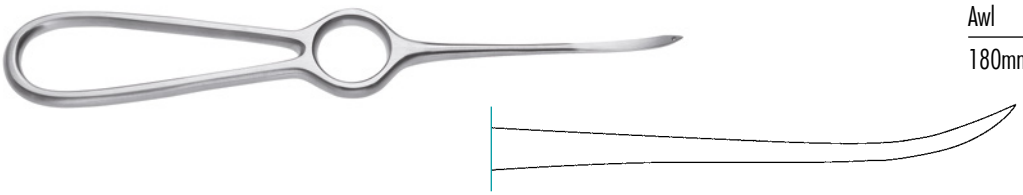
OBWEGESER
Awl

230mm, 9"	430-500-230



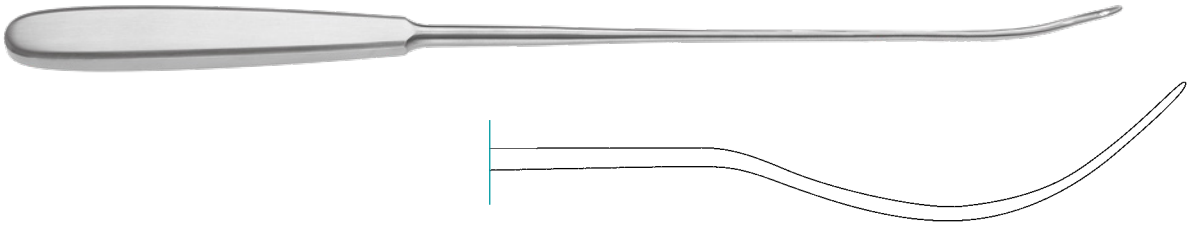
BRUNNER
Awl, malleable

230mm, 9"	200-124-230



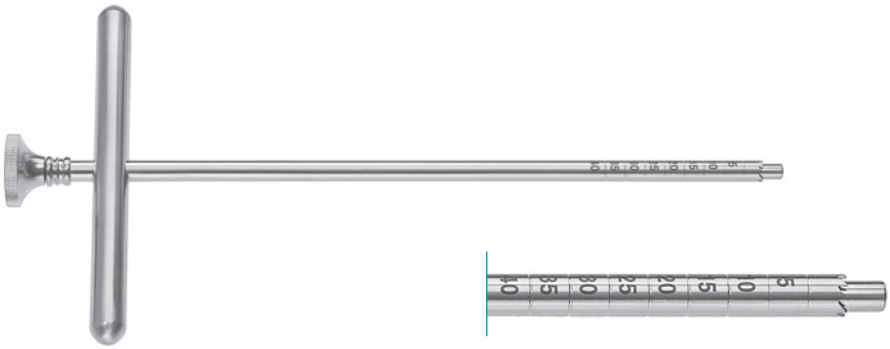
OBWEGESER
Awl

180mm, 7″	430-504-180



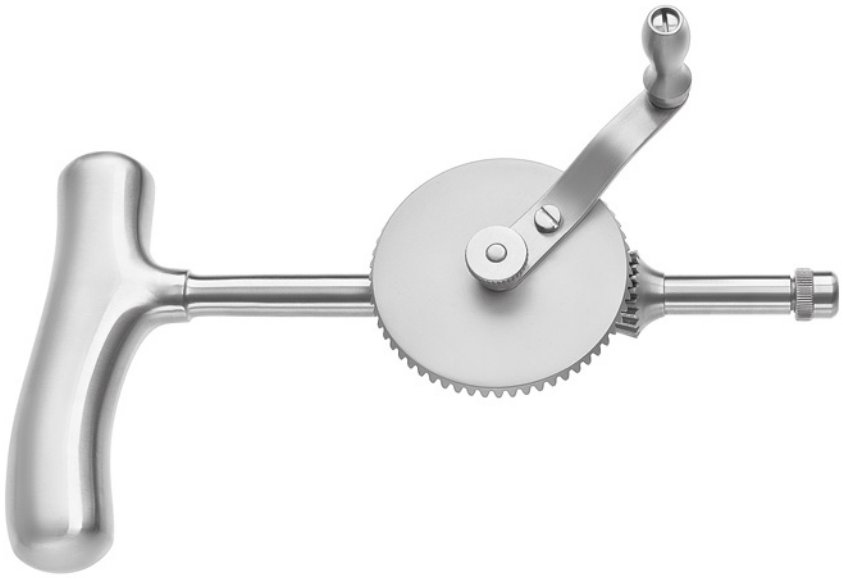
BRUNNER
Awl, curved

300mm, $11^{7/8}$″	200-122-300



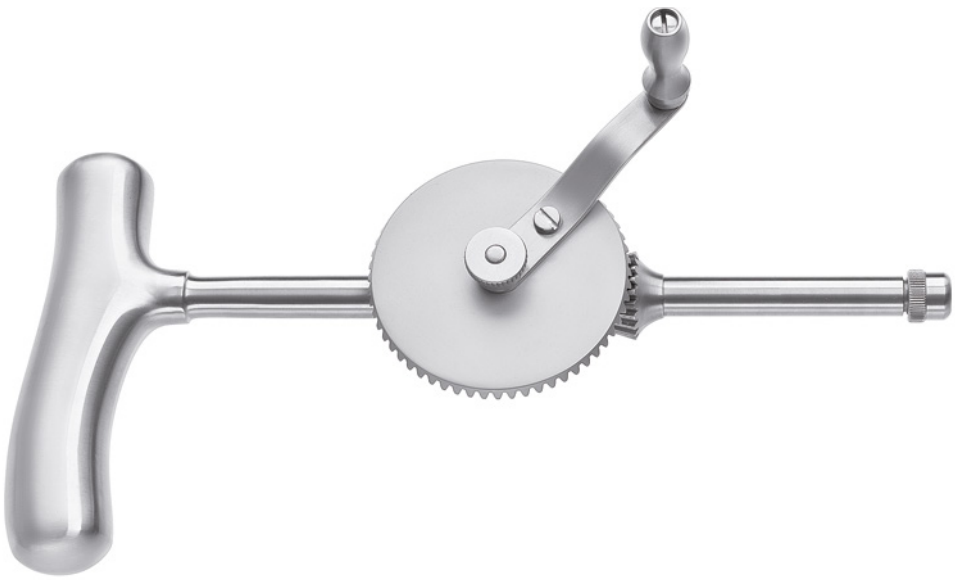
MICHELE
Trephine, 180mm, 7″

Ø 3.0mm (inside) Ø 5.0mm (outside)	210-405-180
Ø 5.0mm (inside) Ø 6.0mm (outside)	210-406-180
Ø 6.5mm (inside) Ø 8.0mm (outside)	210-408-180



STILLE
Hand Drill, complete with 4 drills & burrs
Ø 2.5 - 4.0mm

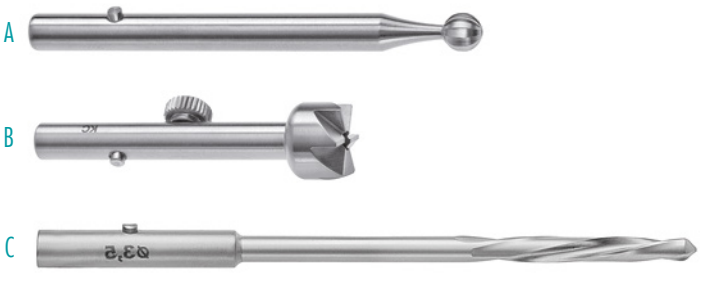
200-144-200



STILLE SHERMAN
Hand Drill, complete with 3 drills
Ø 2.5 - 3.5mm

200-140-240

Brace only 200-140-200



A Burrs, 60mm length

Ø 5.0mm	200-145-050
Ø 8.0mm	200-145-080
Ø 12.0mm	200-145-120
Ø 16.0mm	200-145-160

B Trephine

Ø 10.0mm	200-145-100

C Twist Drills

Ø 1.0mm, 56mm	200-145-010
Ø 1.5mm, 61mm	200-145-015
Ø 2.0mm, 66mm	200-145-020
Ø 2.5mm, 81mm	200-145-025
Ø 3.0mm, 81mm	200-145-030
Ø 3.5mm, 86mm	200-145-035
Ø 4.0mm, 86mm	200-145-040



BUNNELL
Hand Drill, max. shanks ∅ 4mm

160mm, 6 1/4"	200-154-160



RALK
Hand Drill, Jacobs chuck and key
up to ∅ 4mm

	200-153-000
large	200-153-005





HUDSON
Hand Drill (tightening screw),
complete with 4 burrs and extension (A - E)

270mm, $10^{2/3}$″	200-152-000

Hand Drill only, with tightening screw

	200-150-000

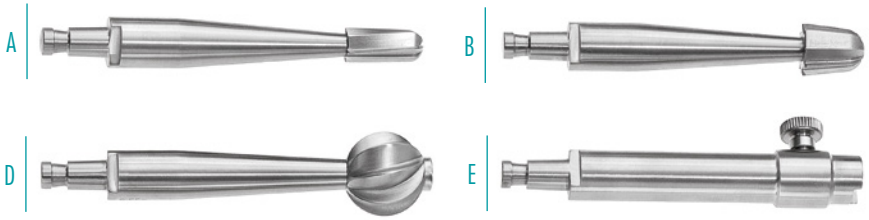


HUDSON
Hand Drill (snap lock),
complete with 4 burrs and extension (A - E)

270mm, $10^{2/3}$″	200-152-010

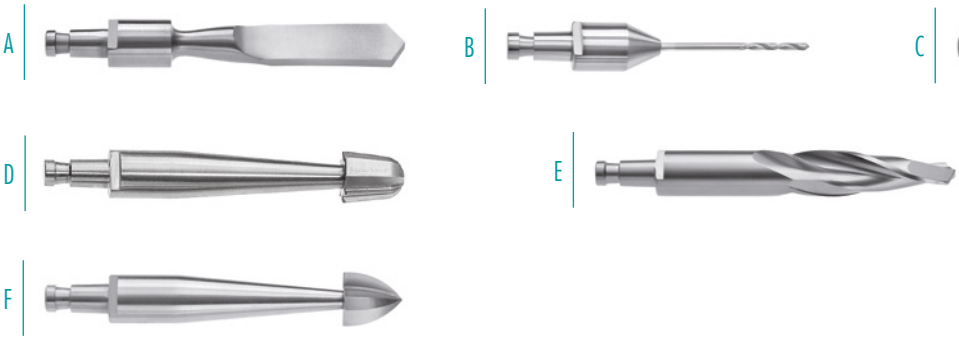
Hand Drill only, with tightening screw

	200-151-000



Burrs, 60mm

A	Ø 9.0mm	200-152-001
B	Ø 14.0mm	200-152-002
C	Ø 16.0mm	200-152-003
D	Ø 22.0mm	200-152-004
E	Extension Piece	200-152-009



A CUSHING
Flat Drill, Hudson connection

Ø 14mm, 95mm	200-152-005

D CUSHING
Round Drill, Hudson connection

Ø 15mm, 95mm	200-152-021

B ADSON
Twist Drill, Hudson connection

Ø 2.0mm, 90mm	200-152-006

E MCKENZIE
Twist Drill, Hudson connection

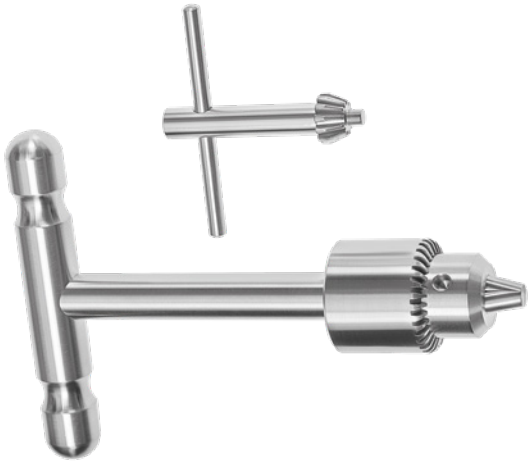
Ø 13mm, 95mm	200-152-007

C D'ERRICO
Twist Drill, Hudson connection

Ø 16mm, 95mm	200-152-008

F ADSON
Burr, Hudson connection

Ø 15mm, 95mm	200-152-012



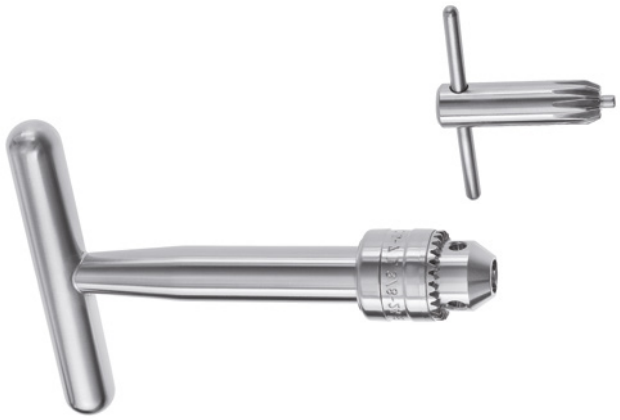
T-Handle, incl. key

Jacob Chuck	200-157-001



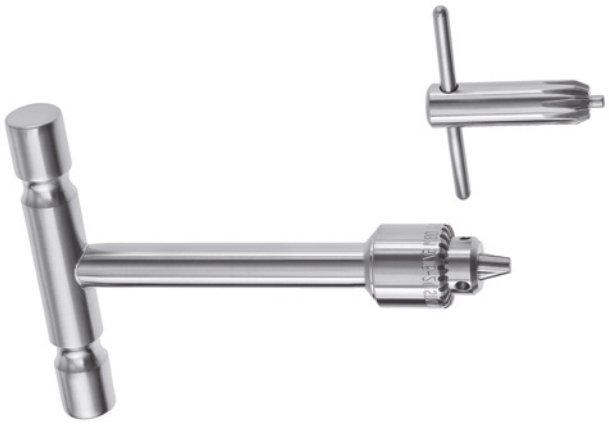
T-Handle Drill, 1.0 - 6.0mm, cannulated,
Ø 5.2mm

Universal Chuck	200-157-100



T-Handle, 0.5 - 7.0mm, cannulated,
Ø 5.2mm, incl. key

Roehm Chuck	200-157-200



T-Handle, 0.5 - 4.0mm, cannulated,
∅ 5.2mm, incl. key

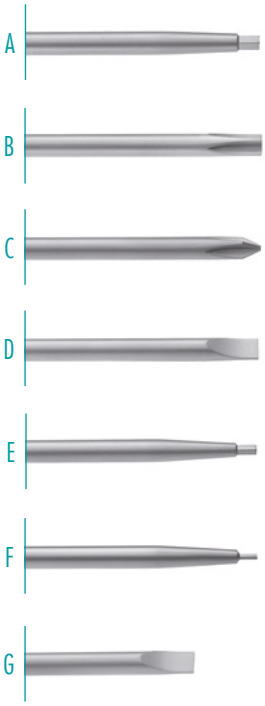
Jacobs Chuck	200-157-210



T-Handle, 1.0 - 6.0mm, cannulated,
∅ 6.1mm, reverse lock

Universal Chuck	200-157-250





A
Screw Driver, synthetic handle,
hexagonal,
for 2.7 - 3.5 - 4.0mm screws

250mm, 9 7/8"	200-604-235
200mm, 8"	200-604-275

B
cross-slot, 6mm

250mm, 9 7/8"	200-601-250

C
cross-slot, 6mm, for small Philips screws

250mm, 9 7/8"	200-600-200

D
LANE
flat, 6mm, for 2.7 - 3.5 - 4.0mm screws

250mm, 9 7/8"	200-604-250

E
hexagonal, sw 2.5mm
for 2.7 - 3.5 - 4.0mm screws

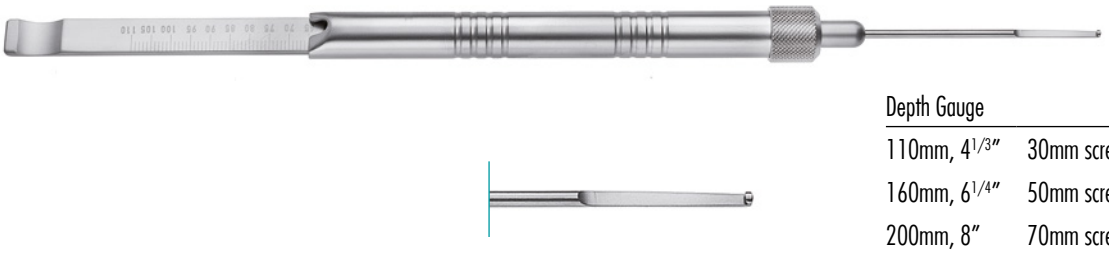
250mm, 9 7/8"	200-604-200
200mm, 8"	200-604-220

F
hexagonal, sw 1.5mm
for screw 1.5 - 2.0 - 2.4

250mm, 9 7/8"	200-608-200

G
flat, 6mm, for 2.7 - 3.5 - 4.0mm screws

170mm, 6 2/3"	200-604-240



Depth Gauge

110mm, 4 1/3"	30mm screw	200-200-014
160mm, 6 1/4"	50mm screw	200-200-016
200mm, 8"	70mm screw	200-200-018
200mm, 8"	80mm screw	200-200-080
280mm, 11"	120mm screw	200-200-120



Ruler, mm and inch markings

150mm, 6″	100-418-150
200mm, 8″	100-418-200
300mm, 11 7/8″	100-418-300
500mm, 19 2/3″	100-418-500



Ruler, with holes for wires and pins

150mm, 6″	100-422-150



CASTROVIEJO

Caliper, measuring range 0 - 20mm
locking screw

80mm, 3 1/8″	400-583-007

Caliper, measuring range 0 - 40mm

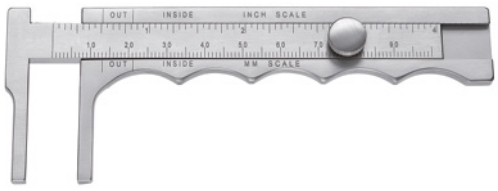
180mm, 7″	400-583-008



CARROLL

Finger Goniometer

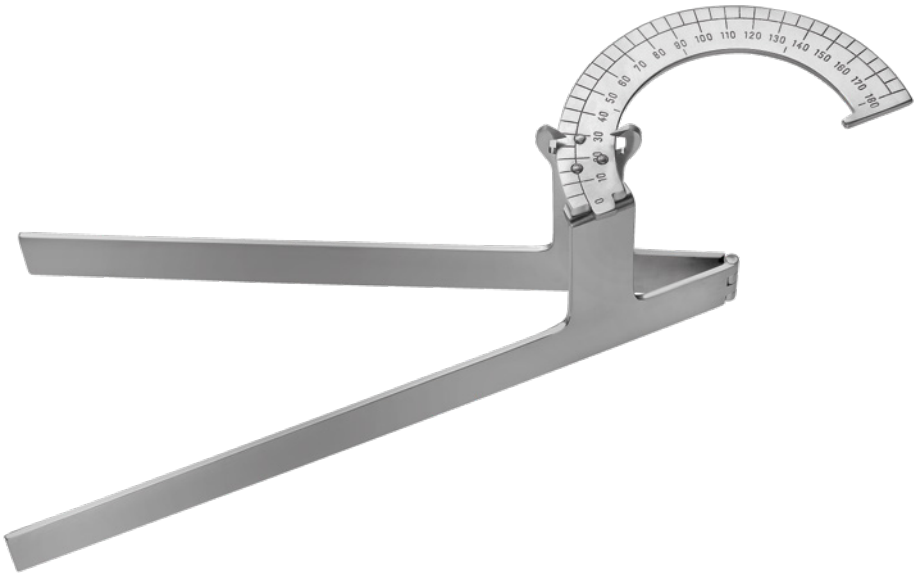
140mm, 5 1/2″	100-150-000



TOWNLEY

Caliper, 0 - 100mm

100mm, 4″	100-152-000



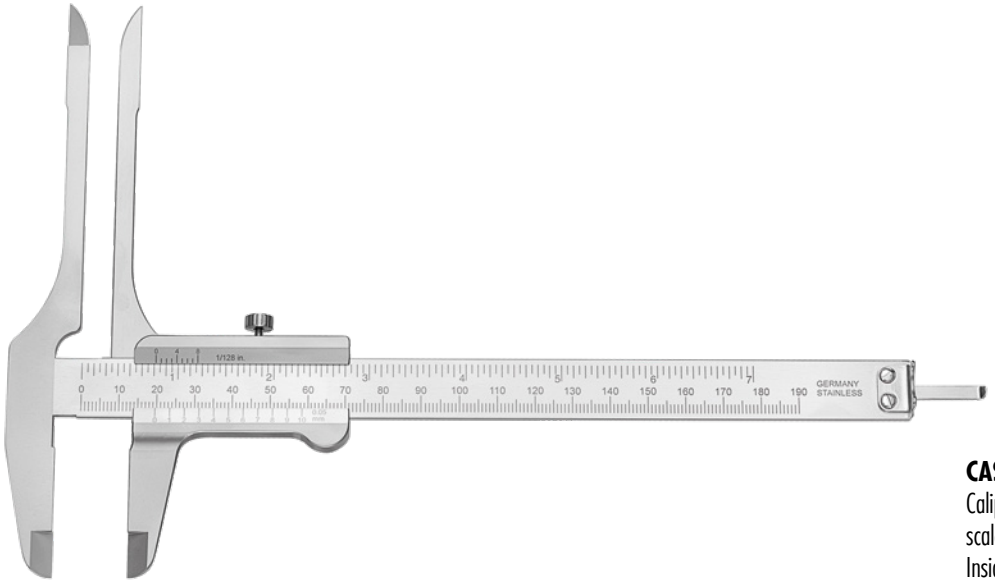
MOELTGEN
Goniometer
100-412-000



Bone Caliper, angled, blunt, 140mm opening
180mm, 7" 200-200-170



Bone Caliper, straight, pointed
115mm opening
200-200-200



CASPAR
Caliper for measuring bone craft
scale: mm, max. 180mm
Inside and outside measuring, faces & depth

259-185-885



Neuro-Caliper, 150mm range

211-550-235



COLLIN
Amputating Knife

130mm, 5 1/8″	110-014-013
160mm, 6 1/4″	110-014-016
190mm, 7 1/2″	110-014-019
220mm, 8 2/3″	110-014-022
280mm, 11″	110-014-028



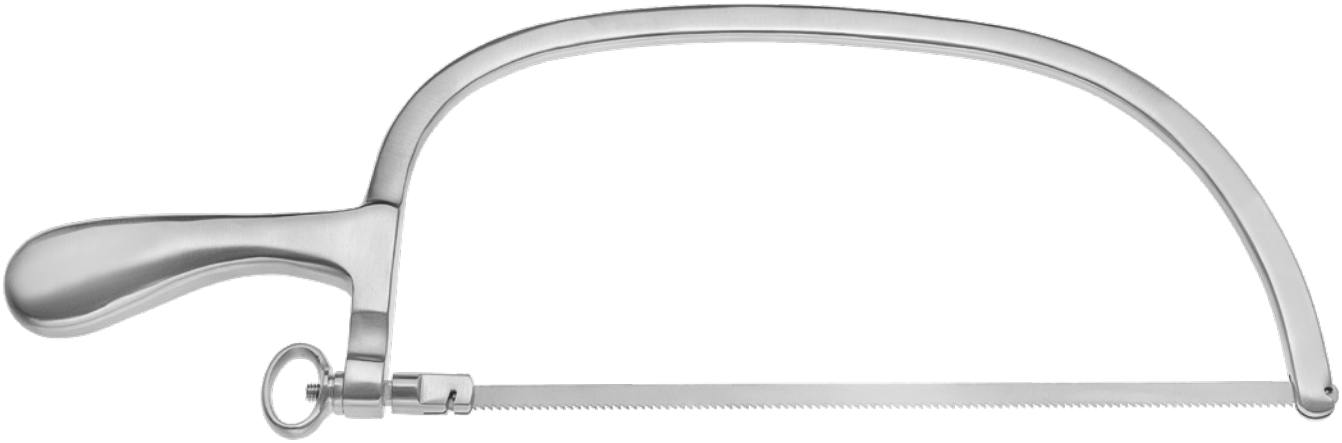
CATLIN
Amputating Knife, double cutting

160mm, 6 1/4″	110-018-016
190mm, 7 1/2″	110-018-019
220mm, 8 2/3″	110-018-022



LANGENBECK
Resection Knife, 55mm blade

180mm, 7″	110-028-055



HELFERICH BIER
Amputation Saw

390mm, 15 1/2″	200-103-390

Spare Blade

4mm	200-103-394
6mm	200-103-396
8mm	200-103-398



CHARRIÈRE
Amputation Saw

270mm, 10 2/3″	200-112-270
300mm, 11 7/8	200-112-300



LANGENBECK
Metacarpal Saw

230mm, 9″	200-110-230



SATTERLEE
Amputation Saw

310mm, 12 1/4"	200-114-310



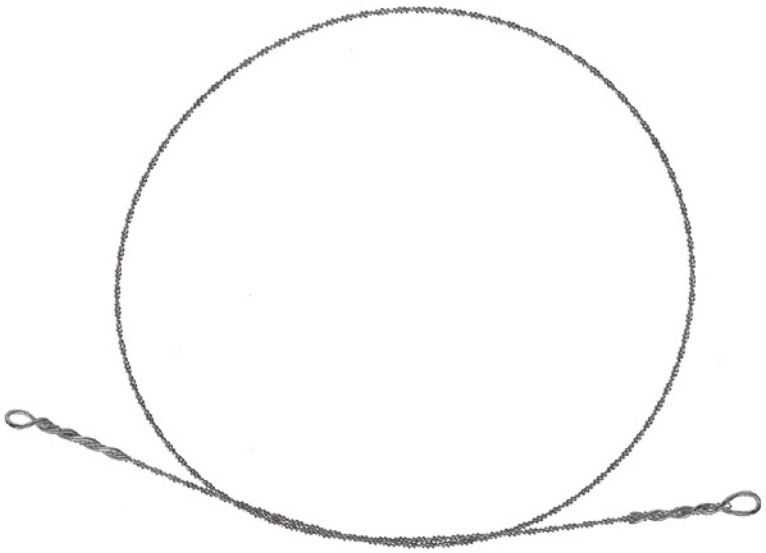
CHARRIÈRE
Amputation Saw

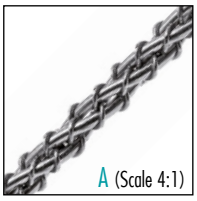
350mm, 14"	200-101-350

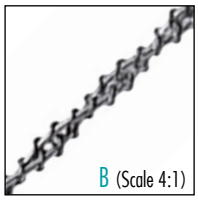


Spare Blade

12mm	200-101-012
15mm	200-101-015







OLIVECRONA
A Wire Saw, ∅ 1.2mm

250mm, 9 7/8"	290-100-250
300mm, 11 7/8"	290-100-300
400mm, 16"	290-100-400
500mm, 20"	290-100-500
600mm, 23 3/4"	290-100-600
700mm, 28"	290-100-700
760mm, 30"	290-100-760

GIGLI
B Wire Saw, ∅ 1.4mm

300mm, 11 7/8"	290-101-300
400mm, 16"	290-101-400
500mm, 20"	290-101-500
600mm, 23 3/4"	290-101-600
700mm, 28"	290-101-700



GIGLI
Handle for Wire Saw, 2 pcs.
290-102-000



GIGLI
Handle, loop design, for Wire Saws
290-103-000



DEMARTEL
Saw Conductor

305mm, 12"	290-118-305
330mm, 13"	290-118-330



BAILEY
Saw Conductor, 305mm, 12"

curved	290-118-300
straight	290-118-301



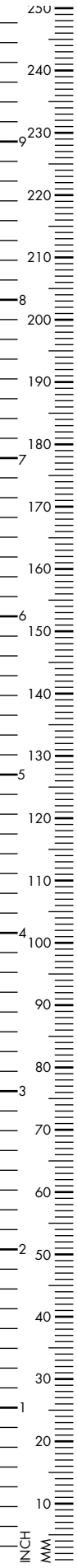
PERCY
Retractor for amputation,
removable handles

200-100-000

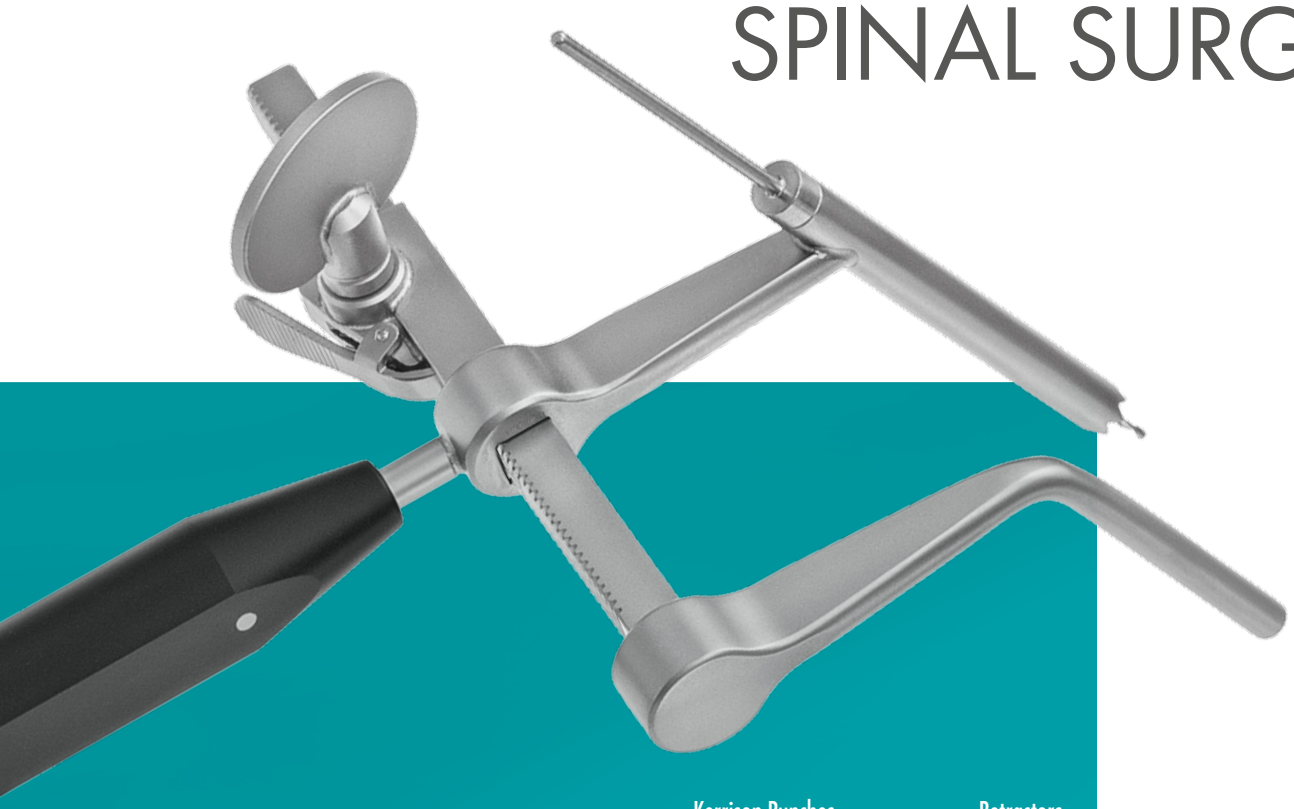


SWEET
Amputation Shield

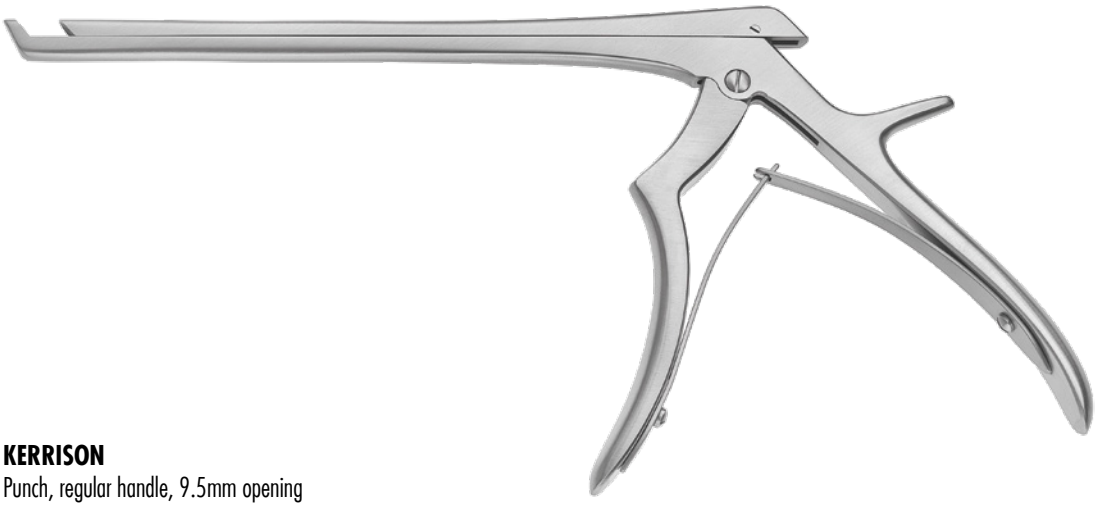
200-100-002


250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
9
8
7
6
5
4
3
2
1
INCH
MM

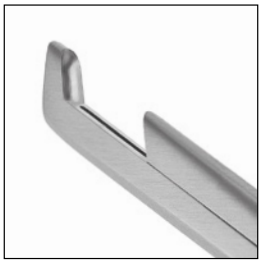
NEURO & SPINAL SURGERY



- Kerrison Punches
- Rongeurs
- Micro Instruments
- Hooks
- Elevators / Dissectors
- Raspatories / Knifes
- Micro Dissectors
- Neuro Surgery
- Periosteal Elevators
- Retractors
- Curettes
- Chisels
- Mallets
- Spinal Retractors
- Drills
- Scalp Clips
- Suction Tubes
- Percussion Mallets



KERRISON
Punch, regular handle, 9.5mm opening



40° upwards cutting
180mm, 7″

1mm	250-400-181
2mm	250-400-182
3mm	250-400-183
4mm	250-400-184
5mm	250-400-185
6mm	250-400-186
200mm, 8″	
1mm	250-400-201
2mm	250-400-202
3mm	250-400-203
4mm	250-400-204
5mm	250-400-205
6mm	250-400-206
230mm, 9″	
1mm	250-400-231
2mm	250-400-232
3mm	250-400-233
4mm	250-400-234
5mm	250-400-235
6mm	250-400-236



90° upwards cutting
180mm, 7″

1mm	250-410-181
2mm	250-410-182
3mm	250-410-183
4mm	250-410-184
5mm	250-410-185
6mm	250-410-186
200mm, 8″	
1mm	250-410-201
2mm	250-410-202
3mm	250-410-203
4mm	250-410-204
5mm	250-410-205
6mm	250-410-206
230mm, 9″	
1mm	250-410-231
2mm	250-410-232
3mm	250-410-233
4mm	250-410-234
5mm	250-410-235
6mm	250-410-236



40° downwards cutting
180mm, 7″

1mm	250-420-181
2mm	250-420-182
3mm	250-420-183
4mm	250-420-184
5mm	250-420-185
6mm	250-420-186
200mm, 8″	
1mm	250-420-201
2mm	250-420-202
3mm	250-420-203
4mm	250-420-204
5mm	250-420-205
6mm	250-420-206
230mm, 9″	
1mm	250-420-231
2mm	250-420-232
3mm	250-420-233
4mm	250-420-234
5mm	250-420-235
6mm	250-420-236



90° downwards cutting
180mm, 7″

1mm	250-430-181
2mm	250-430-182
3mm	250-430-183
4mm	250-430-184
5mm	250-430-185
6mm	250-430-186
200mm, 8″	
1mm	250-430-201
2mm	250-430-202
3mm	250-430-203
4mm	250-430-204
5mm	250-430-205
6mm	250-430-206
230mm, 9″	
1mm	250-430-231
2mm	250-430-232
3mm	250-430-233
4mm	250-430-234
5mm	250-430-235
6mm	250-430-236

All Kerrison instruments are available with CERACUT® coating. Code number + CC (e.g. 250-400-181CC)



KERRISON
Punch, large handle,
15.5mm opening

40° upwards cutting 180mm, 7″	
2mm	250-450-182
3mm	250-450-183
4mm	250-450-184
5mm	250-450-185
6mm	250-450-186
200mm, 8″	
2mm	250-450-202
3mm	250-450-203
4mm	250-450-204
5mm	250-450-205
6mm	250-450-206
230mm, 9″	
2mm	250-450-232
3mm	250-450-233
4mm	250-450-234
5mm	250-450-235
6mm	250-450-236

90° upwards cutting 180mm, 7″	
2mm	250-460-182
3mm	250-460-183
4mm	250-460-184
5mm	250-460-185
6mm	250-460-186
200mm, 8″	
2mm	250-460-202
3mm	250-460-203
4mm	250-460-204
5mm	250-460-205
6mm	250-460-206
230mm, 9″	
2mm	250-460-232
3mm	250-460-233
4mm	250-460-234
5mm	250-460-235
6mm	250-460-236

40° downwards cutting 180mm, 7″	
2mm	250-470-182
3mm	250-470-183
4mm	250-470-184
5mm	250-470-185
6mm	250-470-186
200mm, 8″	
2mm	250-470-202
3mm	250-470-203
4mm	250-470-204
5mm	250-470-205
6mm	250-470-206
230mm, 9″	
2mm	250-470-232
3mm	250-470-233
4mm	250-470-234
5mm	250-470-235
6mm	250-470-236

90° downwards cutting 180mm, 7″	
2mm	250-480-182
3mm	250-480-183
4mm	250-480-184
5mm	250-480-185
6mm	250-480-186
200mm, 8″	
2mm	250-480-202
3mm	250-480-203
4mm	250-480-204
5mm	250-480-205
6mm	250-480-206
230mm, 9″	
2mm	250-480-232
3mm	250-480-233
4mm	250-480-234
5mm	250-480-235
6mm	250-480-236

All Kerrison instruments are available with CERACUT® coating. Code number + CC (e.g. 250-400-181CC)




regular footplate


thin footplate

KERRISON
Punch, regular handle, thin footplate, 9.5mm opening

40° upwards cutting 180mm, 7"	
1mm	250-401-181
2mm	250-401-182
3mm	250-401-183
4mm	250-401-184
5mm	250-401-185
200mm, 8"	
1mm	250-401-201
2mm	250-401-202
3mm	250-401-203
4mm	250-401-204
5mm	250-401-205
230mm, 9"	
1mm	250-401-231
2mm	250-401-232
3mm	250-401-233
4mm	250-401-234
5mm	250-401-235

90° upwards cutting 180mm, 7"	
1mm	250-411-181
2mm	250-411-182
3mm	250-411-183
4mm	250-411-184
5mm	250-411-185
200mm, 8"	
1mm	250-411-201
2mm	250-411-202
3mm	250-411-203
4mm	250-411-204
5mm	250-411-205
230mm, 9"	
1mm	250-411-231
2mm	250-411-232
3mm	250-411-233
4mm	250-411-234
5mm	250-411-235

40° downwards cutting 180mm, 7"	
1mm	250-421-181
2mm	250-421-182
3mm	250-421-183
4mm	250-421-184
5mm	250-421-185
200mm, 8"	
1mm	250-421-201
2mm	250-421-202
3mm	250-421-203
4mm	250-421-204
5mm	250-421-205
230mm, 9"	
1mm	250-421-231
2mm	250-421-232
3mm	250-421-233
4mm	250-421-234
5mm	250-421-235

90° downwards cutting 180mm, 7"	
1mm	250-431-181
2mm	250-431-182
3mm	250-431-183
4mm	250-431-184
5mm	250-431-185
200mm, 8"	
1mm	250-431-201
2mm	250-431-202
3mm	250-431-203
4mm	250-431-204
5mm	250-431-205
230mm, 9"	
1mm	250-431-231
2mm	250-431-232
3mm	250-431-233
4mm	250-431-234
5mm	250-431-235

All Kerrison instruments are available with CERACUT® coating. Code number + CC (e.g. 250-400-181CC)



KERRISON
Punch, regular handle, superflat footplate



180mm, 7"
40° upwards cutting

1mm	250-400-181SF
1.5mm	250-400-189SF
2mm	250-400-182SF
3mm	250-400-183SF
4mm	250-400-184SF
5mm	250-400-185SF
6mm	250-400-186SF

200mm, 8"

1mm	250-400-201SF
1.5mm	250-400-209SF
2mm	250-400-202SF
3mm	250-400-203SF
4mm	250-400-204SF
5mm	250-400-205SF
6mm	250-400-206SF

230mm, 9"

1mm	250-400-231SF
1.5mm	250-400-239SF
2mm	250-400-232SF
3mm	250-400-233SF
4mm	250-400-234SF
5mm	250-400-235SF
6mm	250-400-236SF



180mm, 7"
40° upwards cutting,
standard ejector

2mm	250-400-182ESF
3mm	250-400-183ESF
4mm	250-400-184ESF
5mm	250-400-185ESF
6mm	250-400-186ESF

200mm, 8"

2mm	250-400-202ESF
3mm	250-400-203ESF
4mm	250-400-204ESF
5mm	250-400-205ESF
6mm	250-400-206ESF

230mm, 9"

2mm	250-400-232ESF
3mm	250-400-233ESF
4mm	250-400-234ESF
5mm	250-400-235ESF
6mm	250-400-236ESF



180mm, 7"
40° upwards cutting, CERA-CUT®

1mm	250-400-181SFCC
2mm	250-400-182SFCC
3mm	250-400-183SFCC
4mm	250-400-184SFCC
5mm	250-400-185SFCC
6mm	250-400-186SFCC

200mm, 8"

1mm	250-400-201SFCC
2mm	250-400-202SFCC
3mm	250-400-203SFCC
4mm	250-400-204SFCC
5mm	250-400-205SFCC
6mm	250-400-206SFCC

230mm, 9"

1mm	250-400-231SFCC
2mm	250-400-232SFCC
3mm	250-400-233SFCC
4mm	250-400-234SFCC
5mm	250-400-235SFCC
6mm	250-400-236SFCC

All Kerrison instruments are available with CERACUT® coating. Code number + CC (e.g. 250-400-181CC)



KERRISON
Punch, regular handle, superflat footplate



180mm, 7"
90° upwards cutting

1mm	250-411-181SF
2mm	250-411-182SF
3mm	250-411-183SF
4mm	250-411-184SF
5mm	250-411-185SF
6mm	250-411-186SF

200mm, 8"

1mm	250-411-201SF
2mm	250-411-202SF
3mm	250-411-203SF
4mm	250-411-204SF
5mm	250-411-205SF
6mm	250-411-206SF

230mm, 9"

1mm	250-411-231SF
2mm	250-411-232SF
3mm	250-411-233SF
4mm	250-411-234SF
5mm	250-411-235SF
6mm	250-411-236SF



180mm, 7"
90° upwards cutting,
standard ejector

2mm	250-411-182ESF
3mm	250-411-183ESF
4mm	250-411-184ESF
5mm	250-411-185ESF
6mm	250-411-186ESF

200mm, 8"

2mm	250-411-202ESF
3mm	250-411-203ESF
4mm	250-411-204ESF
5mm	250-411-205ESF
6mm	250-411-206ESF

230mm, 9"

2mm	250-411-232ESF
3mm	250-411-233ESF
4mm	250-411-234ESF
5mm	250-411-235ESF
6mm	250-411-236ESF



180mm, 7"
90° upwards cutting, CERA-CUT®

1mm	250-411-181SFCC
2mm	250-411-182SFCC
3mm	250-411-183SFCC
4mm	250-411-184SFCC
5mm	250-411-185SFCC
6mm	250-411-186SFCC

200mm, 8"

1mm	250-411-201SFCC
2mm	250-411-202SFCC
3mm	250-411-203SFCC
4mm	250-411-204SFCC
5mm	250-411-205SFCC
6mm	250-411-206SFCC

230mm, 9"

1mm	250-411-231SFCC
2mm	250-411-232SFCC
3mm	250-411-233SFCC
4mm	250-411-234SFCC
5mm	250-411-235SFCC
6mm	250-411-236SFCC

All Kerrison instruments are available with CERACUT® coating. Code number + CC (e.g. 250-400-181CC)



KERRISON
Long Anterior Punch, regular handle,
9.5mm opening,
40° upwards cutting

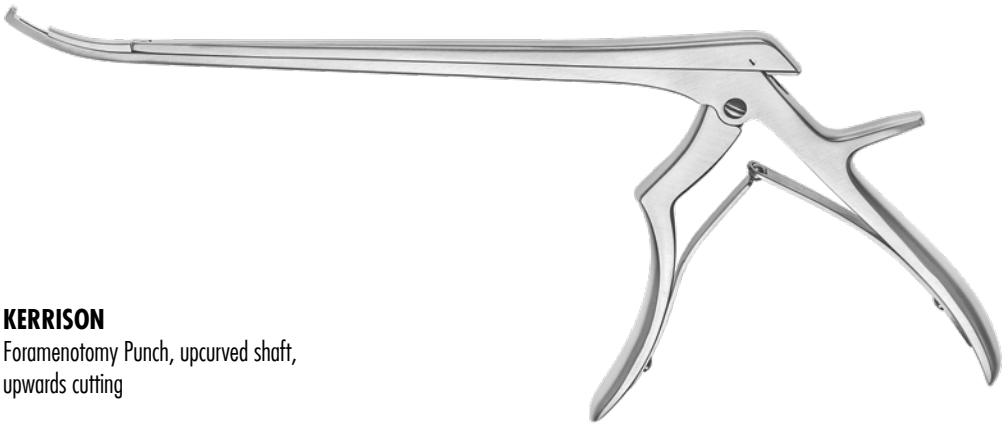
250mm, 9 7/8"	
2mm	250-400-252
3mm	250-400-253
4mm	250-400-254
5mm	250-400-255
6mm	250-400-256

280mm, 11"	
2mm	250-400-282
3mm	250-400-283
4mm	250-400-284
5mm	250-400-285
6mm	250-400-286

15.5mm opening,
40° upwards cutting

250mm, 9 7/8"	
2mm	250-450-252
3mm	250-450-253
4mm	250-450-254
5mm	250-450-255
6mm	250-450-256

280mm, 11"	
2mm	250-450-282
3mm	250-450-283
4mm	250-450-284
5mm	250-450-285
6mm	250-450-286

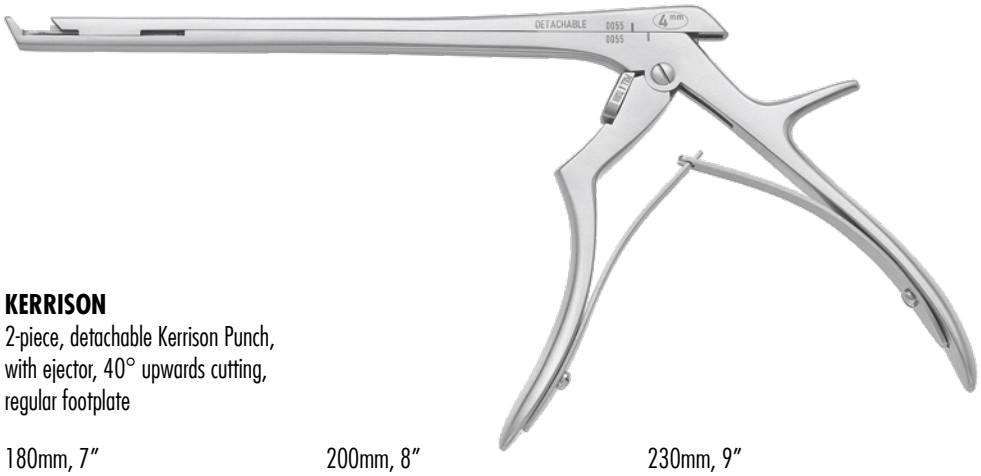


KERRISON
Foramenotomy Punch, upcurved shaft,
upwards cutting

180mm, 7"	
2mm	210-728-002
3mm	210-728-003
4mm	210-728-004

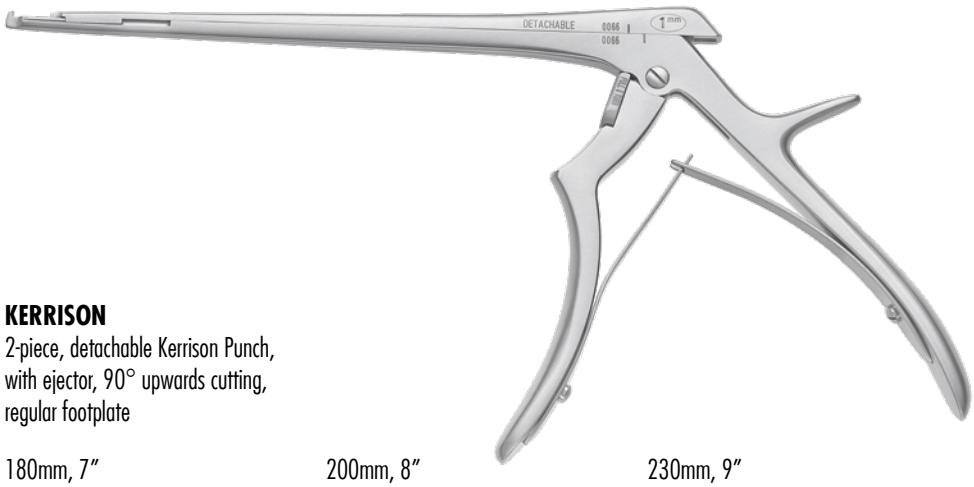
200mm, 8"	
2mm	210-728-102
3mm	210-728-103
4mm	210-728-104

All Kerrison instruments are available with CERACUT® coating. Code number + CC (e.g. 250-400-181CC)



KERRISON
2-piece, detachable Kerrison Punch, with ejector, 40° upwards cutting, regular footplate

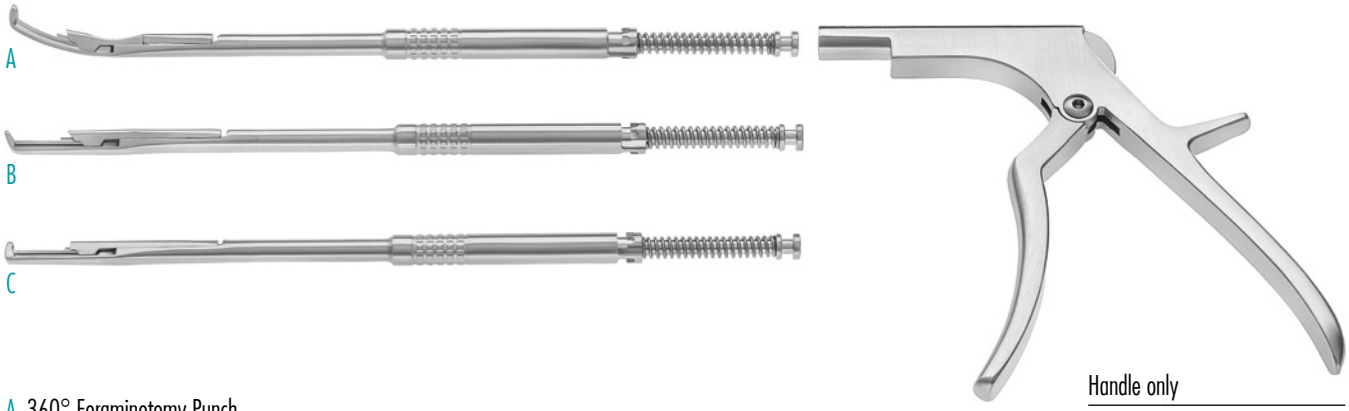
180mm, 7"		200mm, 8"		230mm, 9"	
1mm	250-500-181	1mm	250-500-201	1mm	250-500-231
2mm	250-500-182	2mm	250-500-202	2mm	250-500-232
3mm	250-500-183	3mm	250-500-203	3mm	250-500-233
4mm	250-500-184	4mm	250-500-204	4mm	250-500-234
5mm	250-500-185	5mm	250-500-205	5mm	250-500-235
6mm	250-500-186	6mm	250-500-206	6mm	250-500-236
thin footplate 180mm, 7"		thin footplate 200mm, 8"		thin footplate 230mm, 9"	
1mm	250-510-181	1mm	250-510-201	1mm	250-510-231
2mm	250-510-182	2mm	250-510-202	2mm	250-510-232
3mm	250-510-183	3mm	250-510-203	3mm	250-510-233
4mm	250-510-184	4mm	250-510-204	4mm	250-510-234



KERRISON
2-piece, detachable Kerrison Punch, with ejector, 90° upwards cutting, regular footplate

180mm, 7"		200mm, 8"		230mm, 9"	
1mm	250-590-181	1mm	250-590-201	1mm	250-590-231
2mm	250-590-182	2mm	250-590-202	2mm	250-590-232
3mm	250-590-183	3mm	250-590-203	3mm	250-590-233
4mm	250-590-184	4mm	250-590-204	4mm	250-590-234
5mm	250-590-185	5mm	250-590-205	5mm	250-590-235
6mm	250-590-186	6mm	250-590-206	6mm	250-590-236

All Kerrison instruments are available with CERACUT® coating. Code number + CC (e.g. 250-400-181CC)



Handle only

250-245-000

A 360° Foraminotomy Punch
exchangeable shaft, ejector, thin footplate
40° angled

180mm, 7″		200mm, 8″		230mm, 9″		250mm, 9 7/8″	
2mm	250-280-182	2mm	250-280-202	2mm	250-280-232	2mm	250-280-252
3mm	250-280-183	3mm	250-280-203	3mm	250-280-233	3mm	250-280-253
4mm	250-280-184	4mm	250-280-204	4mm	250-280-234	4mm	250-280-254
5mm	250-280-185	5mm	250-280-205	5mm	250-280-235	5mm	250-280-255

B 360° Laminectomy Punch
exchangeable shaft, ejector, thin footplate
40° angled

180mm, 7″		200mm, 8″		230mm, 9″		250mm, 9 7/8″	
1mm	250-210-181	1mm	250-210-201	1mm	250-210-231	1mm	250-210-251
1.5mm	250-210-180	1.5mm	250-210-200	2mm	250-210-232	2mm	250-210-252
2mm	250-210-182	2mm	250-210-202	3mm	250-210-233	3mm	250-210-253
3mm	250-210-183	3mm	250-210-203	4mm	250-210-234	4mm	250-210-254
4mm	250-210-183	4mm	250-210-204	5mm	250-210-235	5mm	250-210-255
5mm	250-210-185	5mm	250-210-205				

C 360° Laminectomy Punch
exchangeable shaft, ejector, thin footplate
90° angled

180mm, 7″		200mm, 8″		230mm, 9″		250mm, 9 7/8″	
1mm	250-245-181	1mm	250-245-201	1mm	250-245-231	1mm	250-245-251
1.5mm	250-245-180	1.5mm	250-245-200	2mm	250-245-232	2mm	250-245-252
2mm	250-245-182	2mm	250-245-202	3mm	250-245-233	3mm	250-245-253
3mm	250-245-183	3mm	250-245-203	4mm	250-245-234	4mm	250-245-254
4mm	250-245-184	4mm	250-245-204	5mm	250-245-235	5mm	250-245-255
5mm	250-245-185	5mm	250-245-205				

All Kerrison instruments are available with CERACUT® coating. Code number + CC (e.g. 250-400-181CC)



KERRISON
Kerrison Swivel Punch
2-piece detachable punch



Regular footplate
40° upwards cutting

180mm, 7"	
1mm	250-600-181
2mm	250-600-182
3mm	250-600-183
4mm	250-600-184
5mm	250-600-185
6mm	250-600-186

200mm, 8"	
1mm	250-600-201
2mm	250-600-202
3mm	250-600-203
4mm	250-600-204
5mm	250-600-205
6mm	250-600-206

230mm, 9"	
1mm	250-600-231
2mm	250-600-232
3mm	250-600-233
4mm	250-600-234
5mm	250-600-235
6mm	250-600-236



Regular footplate
90° upwards cutting

180mm, 7"	
1mm	250-640-181
2mm	250-640-182
3mm	250-640-183
4mm	250-640-184
5mm	250-640-185
6mm	250-640-186

200mm, 8"	
1mm	250-640-201
2mm	250-640-202
3mm	250-640-203
4mm	250-640-204
5mm	250-640-205
6mm	250-640-206

230mm, 9"	
1mm	250-640-231
2mm	250-640-232
3mm	250-640-233
4mm	250-640-234
5mm	250-640-235
6mm	250-640-236



Regular footplate
40° downwards cutting

180mm, 7"	
1mm	250-630-181
2mm	250-630-182
3mm	250-630-183
4mm	250-630-184
5mm	250-630-185
6mm	250-630-186

200mm, 8"	
1mm	250-630-201
2mm	250-630-202
3mm	250-630-203
4mm	250-630-204
5mm	250-630-205
6mm	250-630-206

230mm, 9"	
1mm	250-630-231
2mm	250-630-232
3mm	250-630-233
4mm	250-630-234
5mm	250-630-235
6mm	250-630-236

All instruments are available with CERACUT® coating. Code number + CC (e.g. 250-600-181CC)



KERRISON
Kerrison Swivel Punch
2-piece detachable punch



Regular footplate
90° downwards cutting

180mm, 7"	
1mm	250-660-181
2mm	250-660-182
3mm	250-660-183
4mm	250-660-184
5mm	250-660-185
6mm	250-660-186

200mm, 8"	
1mm	250-660-201
2mm	250-660-202
3mm	250-660-203
4mm	250-660-204
5mm	250-660-205
6mm	250-660-206

230mm, 9"	
1mm	250-660-231
2mm	250-660-232
3mm	250-660-233
4mm	250-660-234
5mm	250-660-235
6mm	250-660-236



Thin footplate
40° upwards cutting

180mm, 7"	
1mm	250-610-181
2mm	250-610-182
3mm	250-610-183
4mm	250-610-184
5mm	250-610-185
6mm	250-610-186

200mm, 8"	
1mm	250-610-201
2mm	250-610-202
3mm	250-610-203
4mm	250-610-204
5mm	250-610-205
6mm	250-610-206

230mm, 9"	
1mm	250-610-231
2mm	250-610-232
3mm	250-610-233
4mm	250-610-234
5mm	250-610-235
6mm	250-610-236



Thin footplate
40° downwards cutting

180mm, 7"	
1mm	250-620-181
2mm	250-620-182
3mm	250-620-183
4mm	250-620-184
6mm	250-620-186

200mm, 8"	
1mm	250-620-201
2mm	250-620-202
3mm	250-620-203
4mm	250-620-204
5mm	250-620-205
6mm	250-620-206

230mm, 9"	
1mm	250-620-231
2mm	250-620-232
3mm	250-620-233
4mm	250-620-234
5mm	250-620-235
6mm	250-620-236

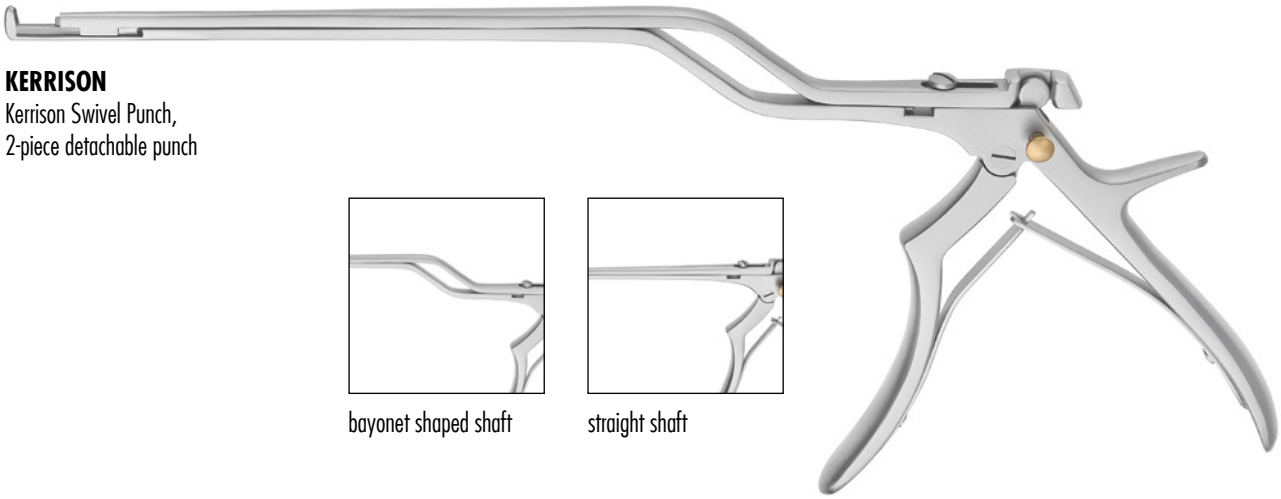


Foramenotomy
40° upwards cutting

180mm, 7"	
1mm	250-680-181
2mm	250-680-182
3mm	250-680-183
4mm	250-680-184
5mm	250-680-185
6mm	250-680-186

200mm, 8"	
1mm	250-680-201
2mm	250-680-202
3mm	250-680-203
4mm	250-680-204
5mm	250-680-205
6mm	250-680-206

All instruments are available with CERACUT® coating. Code number + CC (e.g. 250-600-181CC)



KERRISON
Kerrison Swivel Punch,
2-piece detachable punch

bayonet shaped shaft

straight shaft


90° upwards cutting,
bayonet shaped shaft


90° upwards cutting,
left curved jaw,
straight shaft


90° upwards cutting,
right curved jaw,
straight shaft

200mm, 8″ shaft length, 110mm working length	
1mm	250-650-111
2mm	250-650-112
3mm	250-650-113
4mm	250-650-114
5mm	250-650-115
6mm	250-650-116

240mm, 9 1/2″ shaft length, 150mm working length	
1mm	250-650-151
2mm	250-650-152
3mm	250-650-153
4mm	250-650-154
5mm	250-650-155
6mm	250-650-156

270mm, 10 2/3″ shaft length, 180mm working length	
1mm	250-650-181
2mm	250-650-182
3mm	250-650-183
4mm	250-650-184
5mm	250-650-185
6mm	250-650-186

180mm working length	
1mm	250-651-111
2mm	250-651-112
3mm	250-651-113
4mm	250-651-114
5mm	250-651-115
6mm	250-651-116

200mm working length	
1mm	250-651-151
2mm	250-651-152
3mm	250-651-153
4mm	250-651-154
5mm	250-651-155
6mm	250-651-156

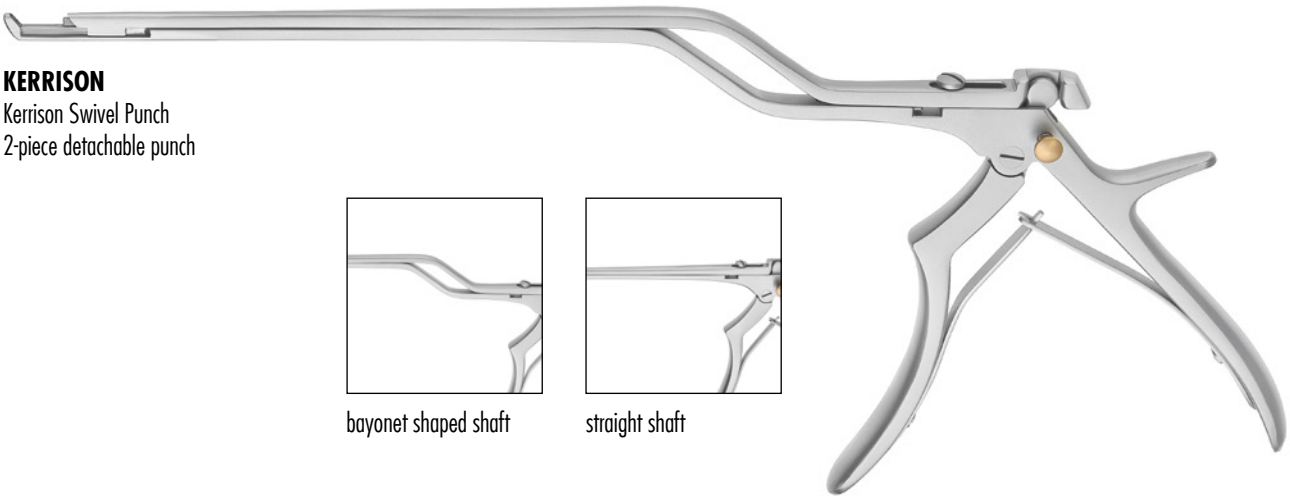
230mm working length	
1mm	250-651-181
2mm	250-651-182
3mm	250-651-183
4mm	250-651-184
5mm	250-651-185
6mm	250-651-186

180mm working length	
1mm	250-652-111
2mm	250-652-112
3mm	250-652-113
4mm	250-652-114
5mm	250-652-115
6mm	250-652-116

200mm working length	
1mm	250-652-151
2mm	250-652-152
3mm	250-652-153
4mm	250-652-154
5mm	250-652-155
6mm	250-652-156

230mm working length	
1mm	250-652-181
2mm	250-652-182
3mm	250-652-183
4mm	250-652-184
5mm	250-652-185
6mm	250-652-186

All instruments are available with CERACUT® coating. Code number + CC (e.g. 250-600-181CC)



KERRISON
Kerrison Swivel Punch
2-piece detachable punch

bayonet shaped shaft

straight shaft


40° upwards cutting,
bayonet shaped shaft

200mm, 8″ shaft length, 110mm working length	
1mm	250-641-111
2mm	250-641-112
3mm	250-641-113
4mm	250-641-114
5mm	250-641-115
6mm	250-641-116

240mm, 9 1/2″ shaft length, 150mm working length	
1mm	250-641-151
2mm	250-641-152
3mm	250-641-153
4mm	250-641-154
5mm	250-641-155
6mm	250-641-156

270mm, 10 2/3″ shaft length, 180mm working length	
1mm	250-641-181
2mm	250-641-182
3mm	250-641-183
4mm	250-641-184
5mm	250-641-185
6mm	250-641-186


40° upwards cutting
left curved jaw,
straight shaft

180mm working length	
1mm	250-643-111
2mm	250-643-112
3mm	250-643-113
4mm	250-643-114
5mm	250-643-115
6mm	250-643-116

200mm working length	
1mm	250-643-151
2mm	250-643-152
3mm	250-643-153
4mm	250-643-154
5mm	250-643-155
6mm	250-643-156

230mm working length	
1mm	250-643-181
2mm	250-643-182
3mm	250-643-183
4mm	250-643-184
5mm	250-643-185
6mm	250-643-186


40° upwards cutting
right curved jaw,
straight shaft

180mm working length	
1mm	250-642-111
2mm	250-642-112
3mm	250-642-113
4mm	250-642-114
5mm	250-642-115
6mm	250-642-116

200mm working length	
1mm	250-642-151
2mm	250-642-152
3mm	250-642-153
4mm	250-642-154
5mm	250-642-155
6mm	250-642-156

230mm working length	
1mm	250-642-181
2mm	250-642-182
3mm	250-642-183
4mm	250-642-184
5mm	250-642-185
6mm	250-642-186

All instruments are available with CERACUT® coating. Code number + CC (e.g. 250-600-181CC)



KERRISON
Kerrison Swivel Punch
bayonet shaped shaft
black finish, handle with silicone coating



40° upwards cutting

140mm, 5 1/2" working length	
1mm	250-000-001
2mm	250-000-002
3mm	250-000-003
4mm	250-000-004
5mm	250-000-005



90° upwards cutting

140mm, 5 1/2" working length	
1mm	250-000-006
2mm	250-000-007
3mm	250-000-008
4mm	250-000-009
5mm	250-000-010

Disc Rongeurs









straight

MINI-CUSHING	
1.5x10mm bite	
180mm, 7″	250-100-181
200mm, 8″	250-100-201

CUSHING	
2x10mm bite	
130mm, 5 1/8″	250-100-132
150mm, 6″	250-100-152
180mm, 7″	250-100-182
200mm, 8″	250-100-202
230mm, 9″	250-100-232



upwards curved

1.5x10mm bite	
180mm, 7″	250-110-181
200mm, 8″	250-110-201

2x10mm bite	
130mm, 5 1/8″	250-110-132
150mm, 6″	250-110-152
180mm, 7″	250-110-182
200mm, 8″	250-110-202
230mm, 9″	250-110-232



downwards curved

1.5x10mm bite	
180mm, 7″	250-120-181
200mm, 8″	250-120-201

2x10mm bite	
130mm, 5 1/8″	250-120-132
150mm, 6″	250-120-152
180mm, 7″	250-120-182
200mm, 8″	250-120-202
230mm, 9″	250-120-232

Laminectomy Rongeurs









LOVE GRUENWALD

straight, 3x10mm bite

130mm, 5 1/8"	250-100-133
150mm, 6"	250-100-153
180mm, 7"	250-100-183
200mm, 8"	250-100-203
230mm, 9"	250-100-233

upwards curved, 3x10mm bite

130mm, 5 1/8"	250-110-133
150mm, 6"	250-110-153
180mm, 7"	250-110-183
200mm, 8"	250-110-203
230mm, 9"	250-110-233

downwards curved, 3x10mm bite

130mm, 5 1/8"	250-120-133
150mm, 6"	250-120-153
180mm, 7"	250-120-183
200mm, 8"	250-120-203
230mm, 9"	250-120-233

SPURLING

straight, 4x10mm bite

130mm, 5 1/8"	250-100-134
150mm, 6"	250-100-154
180mm, 7"	250-100-184
200mm, 8"	250-100-204
230mm, 9"	250-100-234

upwards curved, 4x10mm bite

130mm, 5 1/8"	250-110-134
150mm, 6"	250-110-154
180mm, 7"	250-110-184
200mm, 8"	250-110-204
230mm, 9"	250-110-234

downwards curved, 4x10mm bite

130mm, 5 1/8"	250-120-134
150mm, 6"	250-120-154
180mm, 7"	250-120-184
200mm, 8"	250-120-204
230mm, 9"	250-120-234

CASPAR

straight, 5x10mm bite

130mm, 5 1/8"	250-100-135
150mm, 6"	250-100-155
180mm, 7"	250-100-185
200mm, 8"	250-100-205
230mm, 9"	250-100-235

upwards curved, 5x10mm bite

130mm, 5 1/8"	250-110-135
150mm, 6"	250-110-155
180mm, 7"	250-110-185
200mm, 8"	250-110-205
230mm, 9"	250-110-235

downwards curved, 5x10mm bite

130mm, 5 1/8"	250-120-135
150mm, 6"	250-120-155
180mm, 7"	250-120-185
200mm, 8"	250-120-205
230mm, 9"	250-120-235


straight


upwards curved


downwards curved

CASPAR
Toothed Disc Rongeurs





straight



upwards curved



downwards curved

2x12mm bite	
140mm, 5 1/2"	250-130-142
160mm, 6 1/4"	250-130-162
180mm, 7"	250-130-182

2x12mm bite	
140mm, 5 1/2"	250-140-142
160mm, 6 1/4"	250-140-162
180mm, 7"	250-140-182

2x12mm bite	
140mm, 5 1/2"	250-150-142
160mm, 6 1/4"	250-150-162
180mm, 7"	250-150-182

3x12mm bite	
140mm, 5 1/2"	250-130-143
160mm, 6 1/4"	250-130-163
180mm, 7"	250-130-183

3x12mm bite	
140mm, 5 1/2"	250-140-143
160mm, 6 1/4"	250-140-163
180mm, 7"	250-140-183

3x12mm bite	
140mm, 5 1/2"	250-150-143
160mm, 6 1/4"	250-150-163
180mm, 7"	250-150-183

straight, 4x14mm bite	
140mm, 5 1/2"	250-130-144
160mm, 6 1/4"	250-130-164
180mm, 7"	250-130-184

upwards curved, 4x14mm bite	
140mm, 5 1/2"	250-140-144
160mm, 6 1/4"	250-140-164
180mm, 7"	250-140-184

downwards curved, 4x14mm bite	
140mm, 5 1/2"	250-150-144
160mm, 6 1/4"	250-150-164
180mm, 7"	250-150-184

straight, 5x14mm bite	
140mm, 5 1/2"	250-130-145
160mm, 6 1/4"	250-130-165
180mm, 7"	250-130-185

upwards curved, 5x14mm bite	
140mm, 5 1/2"	250-140-145
160mm, 6 1/4"	250-140-165
180mm, 7"	250-140-185

downwards curved, 5x14mm bite	
140mm, 5 1/2"	250-150-145
160mm, 6 1/4"	250-150-165
180mm, 7"	250-150-185

straight, 6x16mm bite	
140mm, 5 1/2"	250-130-146
160mm, 6 1/4"	250-130-166
180mm, 7"	250-130-186



Swivel Disc Rongeur
2-piece detachable punch, straight







CUSHING
2x10mm

length	straight jaw	30° upwards jaw	30° downwards jaw
150mm, 6"	250-700-152	250-710-152	250-720-152
180mm, 7"	250-700-182	250-710-182	250-720-182
200mm, 8"	250-700-202	250-710-202	250-720-202

LOVE GRUENWALD
3x10mm

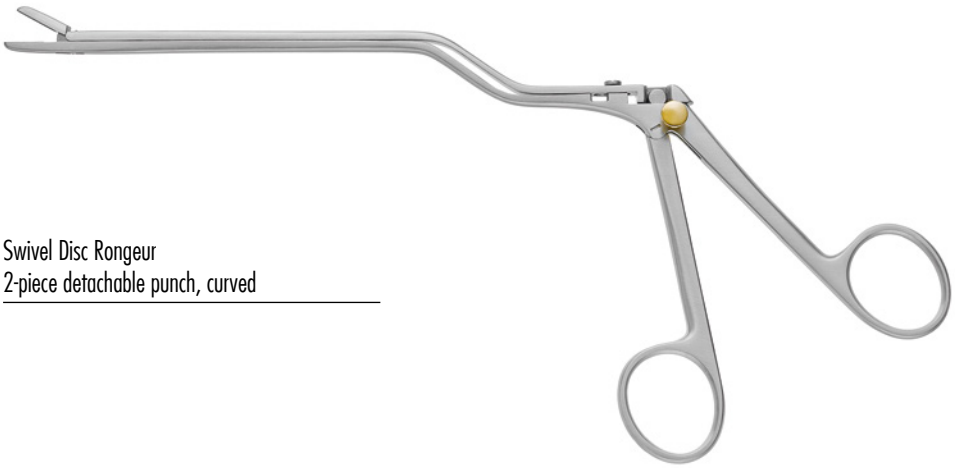
length	straight jaw	30° upwards jaw	30° downwards jaw
150mm, 6"	250-700-153	250-710-153	250-720-153
180mm, 7"	250-700-183	250-710-183	250-720-183
200mm, 8"	250-700-203	250-710-203	250-720-203

SPURLING
4x10mm

length	straight jaw	30° upwards jaw	30° downwards jaw
150mm, 6"	250-700-154	250-710-154	250-720-154
180mm, 7"	250-700-184	250-710-184	250-720-184
200mm, 8"	250-700-204	250-710-204	250-720-204

CASPAR
5x10mm

length	straight jaw	30° upwards jaw	30° downwards jaw
150mm, 6"	250-700-155	250-710-155	250-720-155
180mm, 7"	250-700-185	250-710-185	250-720-185
200mm, 8"	250-700-205	250-710-205	250-720-205



Swivel Disc Rongeur
2-piece detachable punch, curved





CUSHING
2x10mm

length	bayonet right, straight jaw	bayonet left, straight jaw	bayonet up, straight jaw
110mm, 4 1/3"	250-750-112	250-760-112	250-770-112
150mm, 6"	250-750-152	250-760-152	250-770-152
180mm, 7"	250-750-182	250-760-182	250-770-182

LOVE GRUENWALD
3x10mm

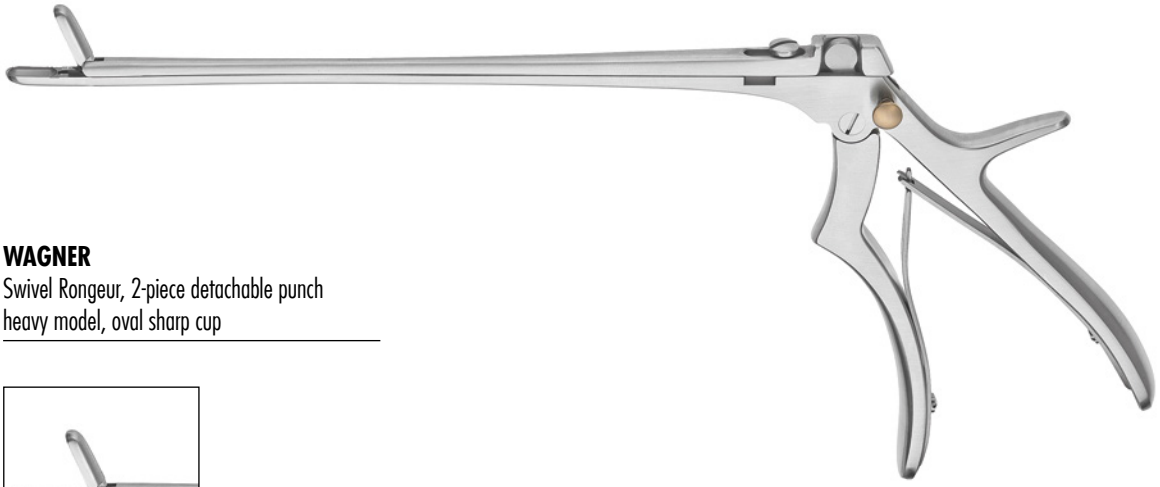
length			
110mm, 4 1/3"	250-750-113	250-760-113	250-770-113
150mm, 6"	250-750-153	250-760-153	250-770-153
180mm, 7"	250-750-183	250-760-183	250-770-182

SPURLING
4x10mm

length			
110mm, 4 1/3"	250-750-114	250-760-114	250-770-114
150mm, 6"	250-750-154	250-760-154	250-770-154
180mm, 7"	250-750-184	250-760-184	250-770-184

CASPAR
5x10mm

length			
110mm, 4 1/3"	250-750-115	250-760-115	250-770-115
150mm, 6"	250-750-155	250-760-155	250-770-155
180mm, 7"	250-750-185	250-760-185	250-770-185



WAGNER
Swivel Rongeur, 2-piece detachable punch
heavy model, oval sharp cup



straight

bite	200mm, 8″	300mm, $11^{7/8}$″
3mm	250-670-203	250-670-303
4mm	250-670-204	250-670-304
5mm	250-670-205	250-670-305



50° upwards

bite	200mm, 8″	300mm, $11^{7/8}$″
4mm	250-671-204	250-671-304

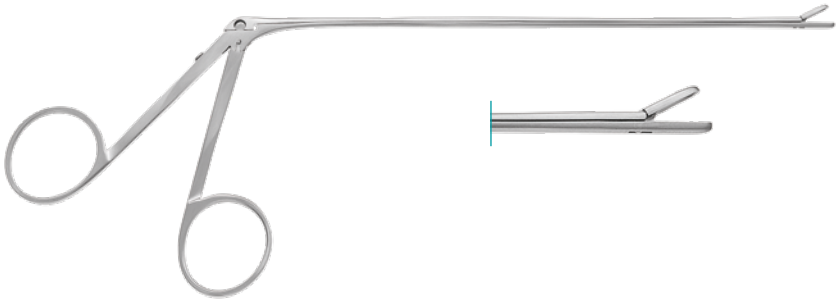


bayonet shape, straight jaw

bite	110mm, $4^{1/3}$″	150mm, 6″	180mm, 7″
3mm	250-672-113	250-672-153	250-672-183
4mm	250-672-114	250-672-154	250-672-184
5mm	250-672-115	250-672-155	250-672-185

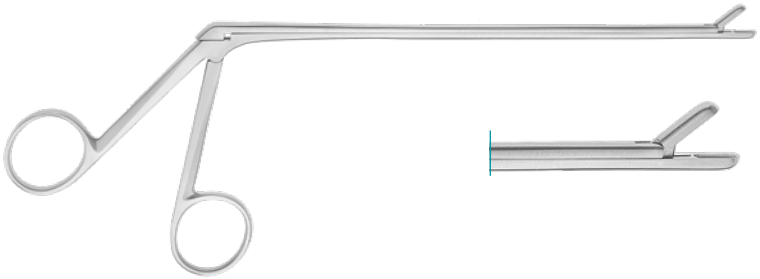
bayonet shape, 50° upwards

bite	110mm, $4^{1/3}$″	150mm, 6″	180mm, 7″
4mm	250-673-114	250-673-154	250-673-184



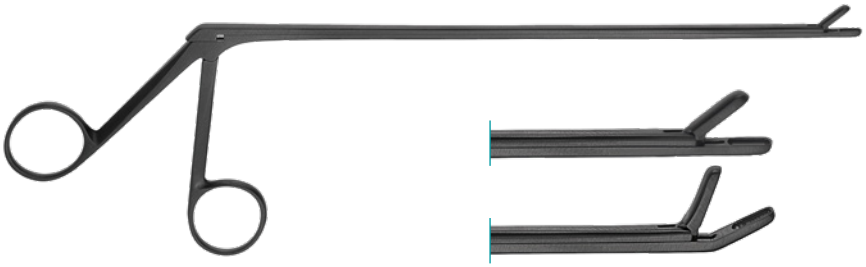
DECKER
Rongeur, fine model, 2x6mm jaw
150mm, 6"

straight	250-066-817
left curved	250-066-824
right curved	250-066-827



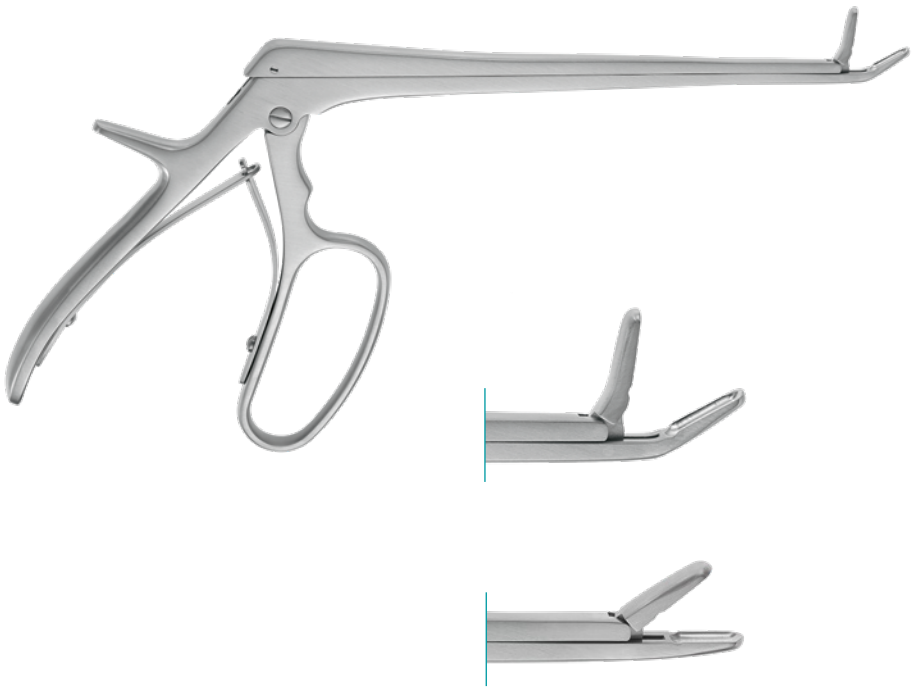
DECKER
Rongeur, 2x6mm jaw, straight

150mm, 6"	250-067-817



Micro Rongeur, CERA-CUT®
2mm jaw, 170mm, $6^{2/3}$"

straight	250-300-170CC
upcurved	250-301-170CC



FERRIS SMITH
Disc Rongeur, straight
180mm, 7″

2mm	250-067-802
3mm	250-067-803
4mm	250-067-804
6mm	250-067-806

200mm, 8″

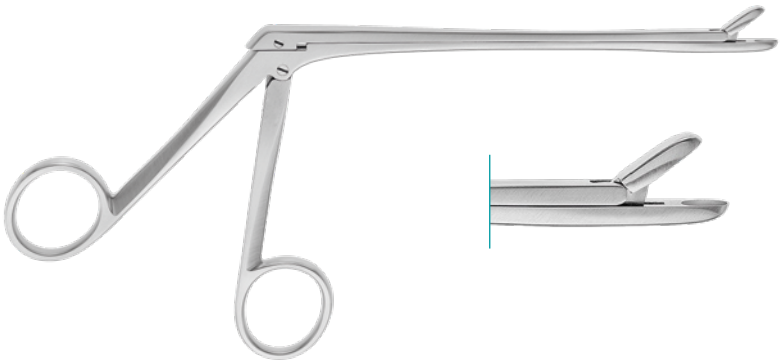
2mm	250-068-802
3mm	250-068-803
4mm	250-068-804
6mm	250-068-806

upwards angled
180mm, 7″

2mm	250-067-782
3mm	250-067-783
4mm	250-067-784
6mm	250-067-786

200mm, 8″

2mm	250-067-765
3mm	250-067-766
4mm	250-067-767
6mm	250-067-768



PEAPOD
Rongeur, 140mm, $5^{1/2}$″
straight

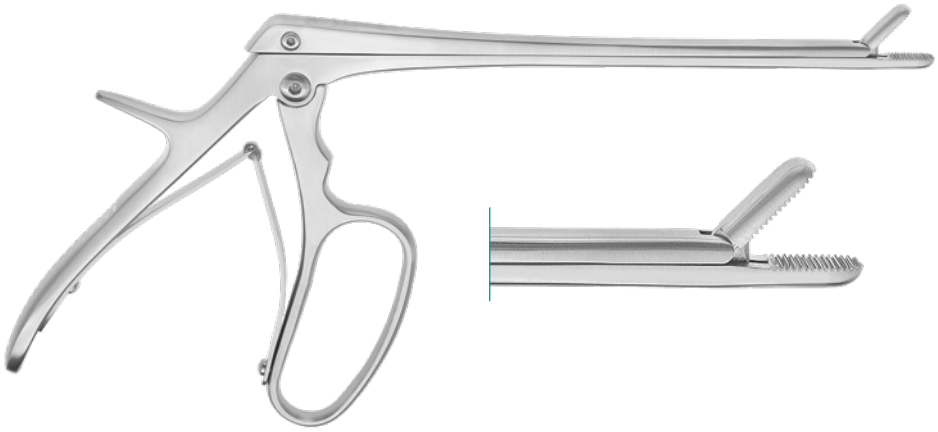
2 x 6mm bite	250-115-140
2.5 x 7mm bite	250-118-140
3 x 10mm bite	250-116-140

130mm, $5^{1/8}$″

2 x 5mm bite	250-116-135

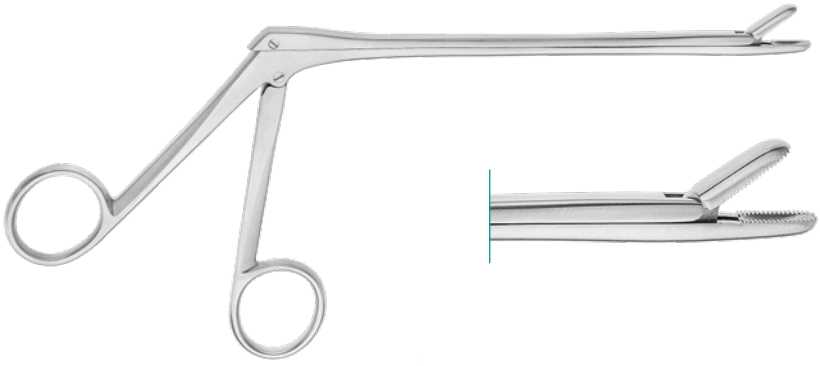
140mm, $5^{1/2}$″, upwards angled

2 x 6mm bite	250-114-140
2.5 x 7mm bite	250-119-140
3 x 10mm bite	250-117-140



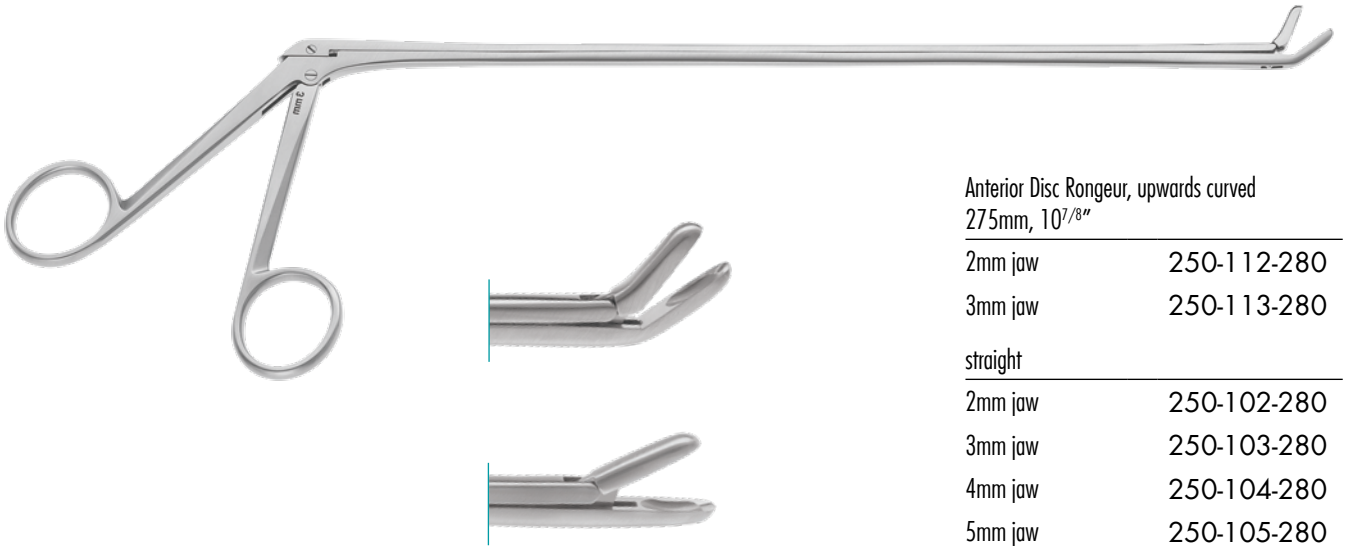
CLOWARD
Rongeur, straight jaw, serrated

180mm, 7”	
4mm	250-066-796
6mm	250-066-797
200mm, 8”	
4mm	250-066-786
6mm	250-066-787



SCHLESINGER
Rongeur, straight jaw, fine serrated

150mm, 6”	
2mm	259-195-002
3mm	259-195-003
4mm	259-195-004
180mm, 7”	
2mm	259-196-002
3mm	259-196-003
4mm	259-196-004

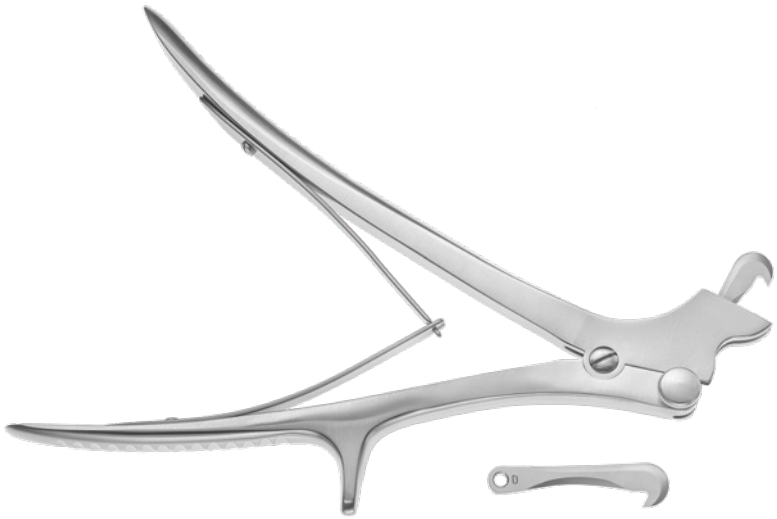


Anterior Disc Rongeur, upwards curved
275mm, $10^{7/8}$"

2mm jaw	250-112-280
3mm jaw	250-113-280

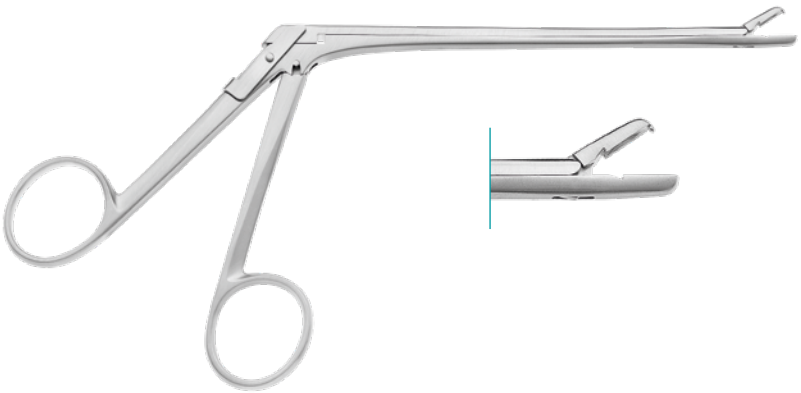
straight

2mm jaw	250-102-280
3mm jaw	250-103-280
4mm jaw	250-104-280
5mm jaw	250-105-280



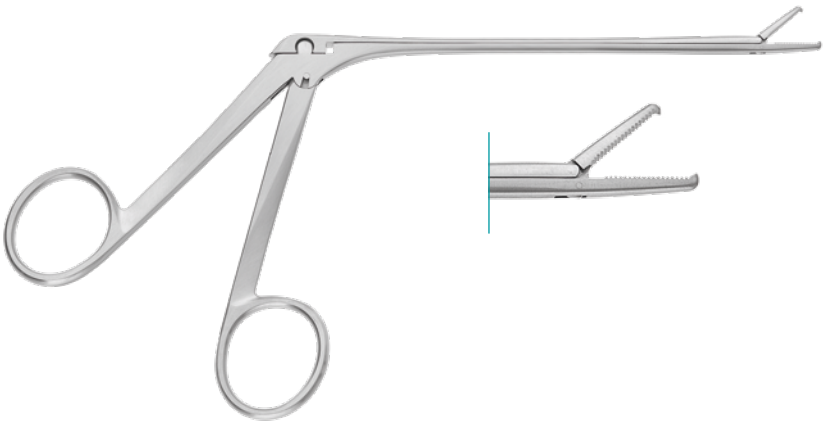
VILBISS
Cranial Rongeur Forceps
with replacement blade

210mm, $8^{1/4}$"	250-066-798



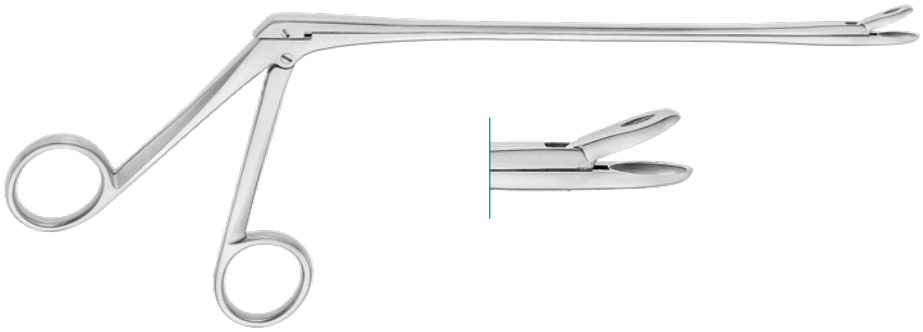
WILLIAMS
Discectomy Rongeur, 2.3mm wide cup, 1.0mm single teeth

140mm, 5 1/2"	250-068-140
230mm, 9"	250-068-230



NOYES
Alligator Forceps, 1x2 teeth with serrated jaw

140mm, 5 1/2"	250-526-140

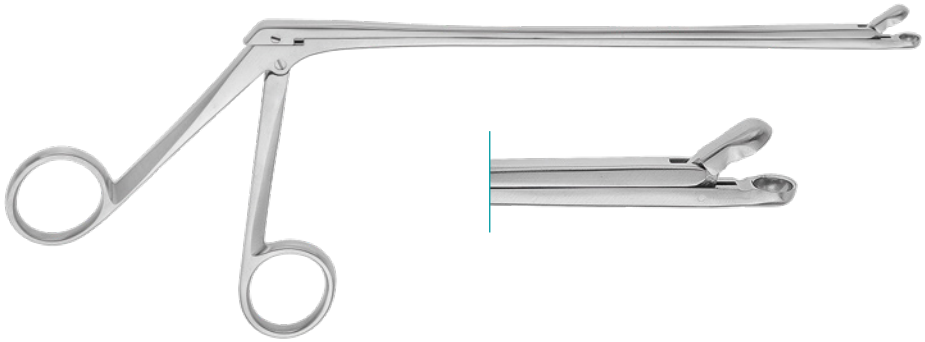


WEIL BLAKESLEY
Rongeur, fenestrated jaw, 180mm, 7", straight

3.0mm	252-030-180
3.5mm	252-035-180
4.0mm	252-040-180

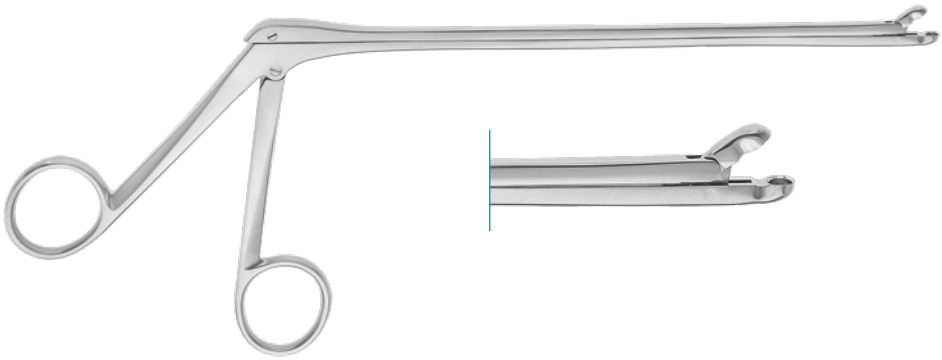
upwards angled

3.0mm	252-030-181
3.5mm	252-035-181
4.0mm	252-040-181



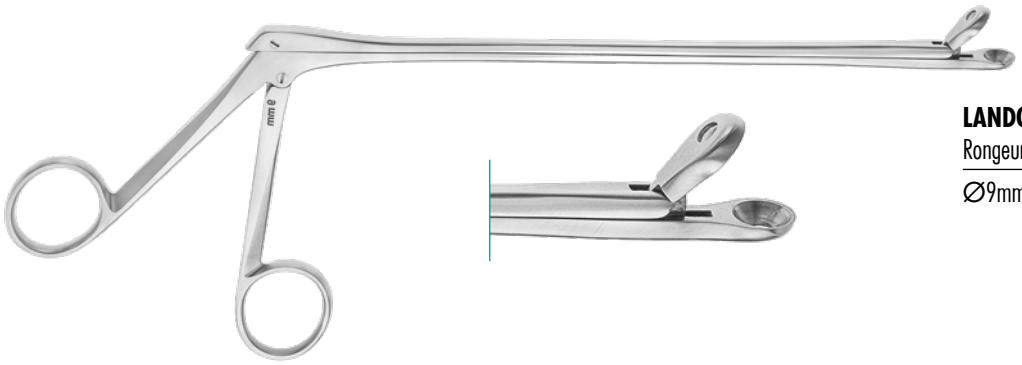
OLDBERG
Rongeur, Ø7mm

180mm, 7"	250-066-605



YASARGIL
Rongeur, 190mm, 7 1/2"

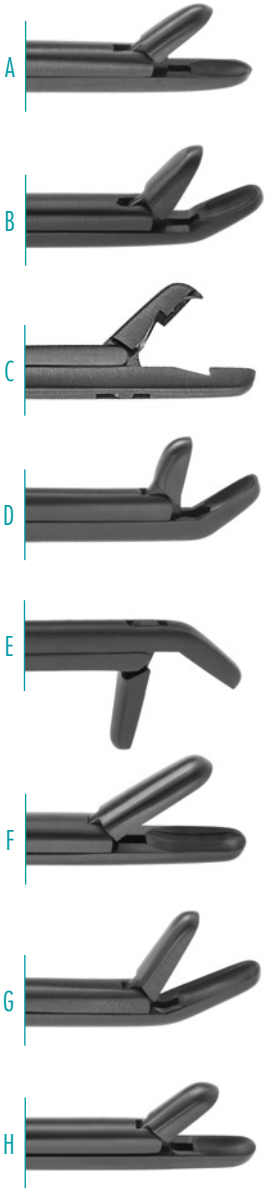
Ø2.2mm	250-066-599
Ø3.5mm	250-066-600



LANDOLT
Rongeur, 200mm, 8"

Ø9mm	250-066-345

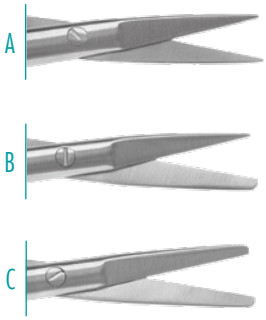




Micro Discectomy Rongeur, black coated, 180mm, 7"

A	straight, 2x6mm	250-000-016
B	30° bent up, 2x6mm	250-000-017
C	Grasper, 2mm	250-000-018
D	40° upwards curved, 2x6mm	250-000-019
E	downwards curved, 2x6mm	250-000-020
F	straight, 4mm	250-000-021
G	upwards angled, 4mm	250-000-022
H	short straight, Kerrison handle 4mm	250-000-023





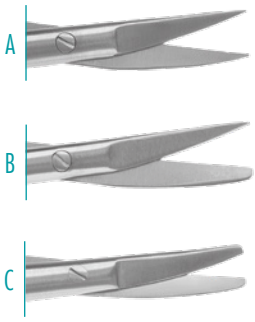
Micro Scissors, straight

A sharp/sharp, 70mm working length	
190mm, 7 1/2"	250-800-190
90mm working length	
210mm, 8 1/4"	250-800-210
120mm working length	
240mm, 9 1/2"	250-800-240
135mm working length	
255mm, 10"	250-800-255

B sharp/blunt, 70mm working length	
190mm, 7 1/2"	250-802-190
90mm working length	
210mm, 8 1/4"	250-802-210
120mm working length	
240mm, 9 1/2"	250-802-240

C blunt/blunt, 70mm working length	
190mm, 7 1/2"	250-804-190
90mm working length	
210mm, 8 1/4"	250-804-210
120mm working length	
240mm, 9 1/2"	250-804-240
135mm working length	
255mm, 10"	250-804-255



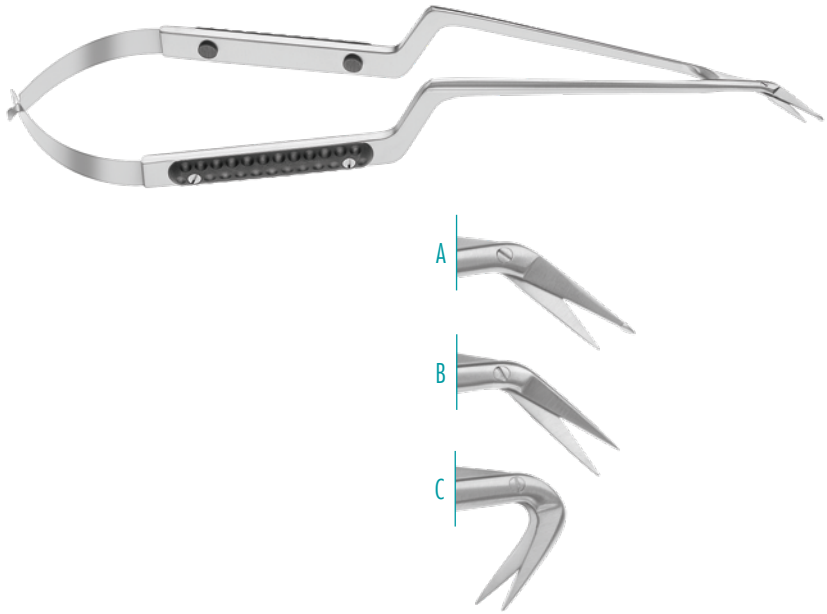


Micro Scissors, curved

A sharp/sharp, 70mm working length	
190mm, 7 1/2"	250-801-190
90mm working length	
210mm, 8 1/4"	250-801-210
120mm working length	
240mm, 9 1/2"	250-801-240
135mm working length	
255mm, 10"	250-801-255

B sharp/blunt, 70mm working length	
190mm, 7 1/2"	250-803-190
90mm working length	
210mm, 8 1/4"	250-803-210
120mm working length	
240mm, 9 1/2"	250-803-240

C blunt/blunt, 70mm working length	
190mm, 7 1/2"	250-805-190
90mm working length	
210mm, 8 1/4"	250-805-210
120mm working length	
240mm, 9 1/2"	250-805-240
135mm working length	
255mm, 10"	250-805-255



Micro Scissors, angled
90mm working length

A knob/sharp, 45° angled

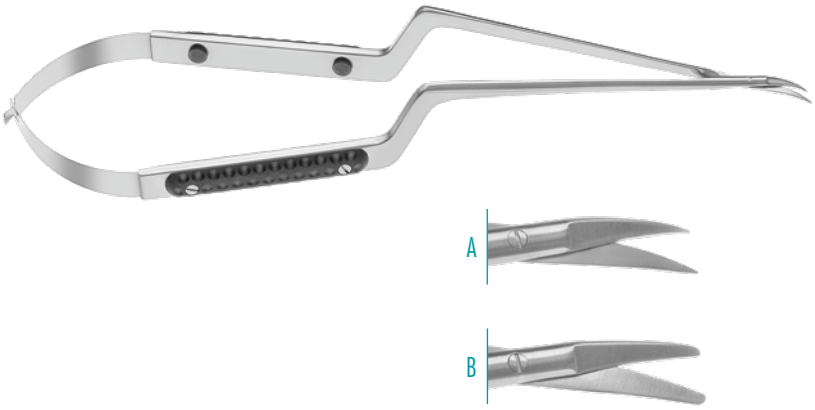
210mm, 8 1/4"	250-811-210

B sharp/sharp, 45° angled

210mm, 8 1/4"	250-813-210

C sharp/sharp, 125° angled

210mm, 8 1/4"	250-815-210



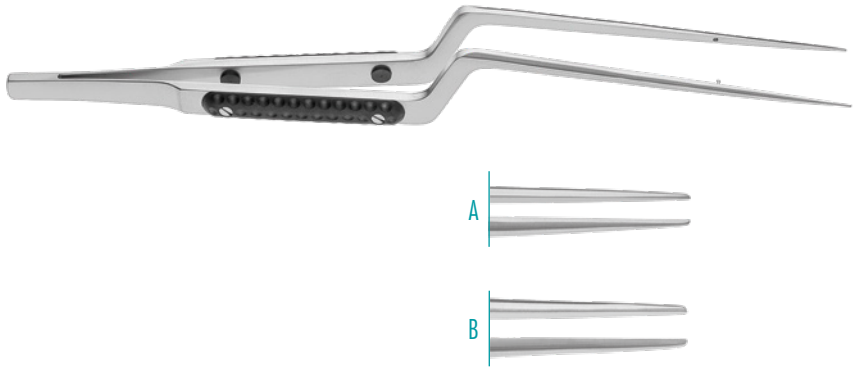
Micro Scissors, downward curved
90mm working length

A sharp/sharp

210mm, 8 1/4"	250-807-210

B blunt/blunt

210mm, 8 1/4"	250-809-210

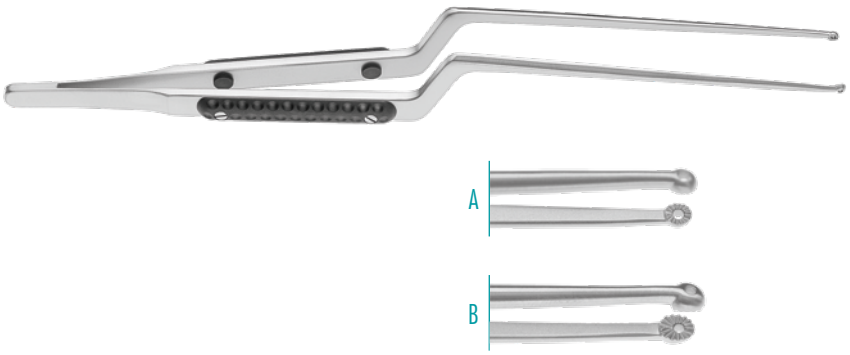


Micro Forceps

A 0.5mm jaw	
190mm, 7 1/2"	250-820-190
210mm, 8 1/4"	250-820-210
240mm, 9 1/2"	250-820-240

Neuro Forceps

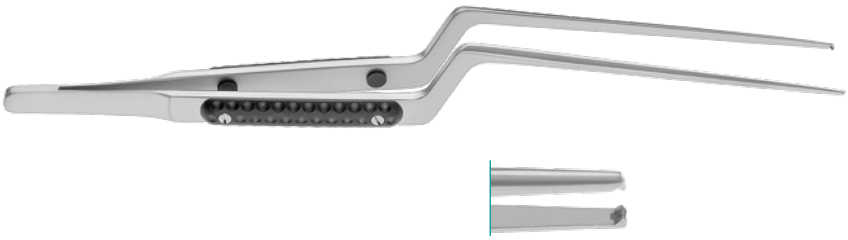
B 0.9mm jaw	
190mm, 7 1/2"	250-822-190
210mm, 8 1/4"	250-822-210
240mm, 9 1/2"	250-822-240



Micro Tumor Grasping Forceps

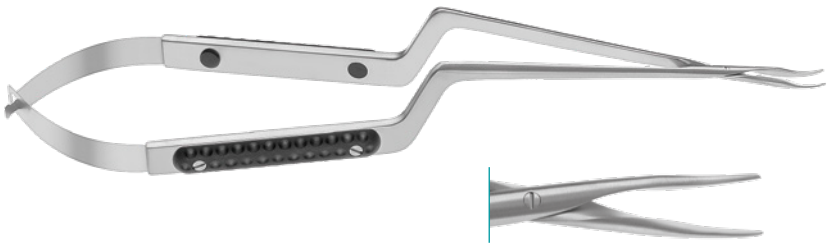
A ∅ 2.5mm	
210mm, 8 1/4"	250-830-210
245mm, 9 2/3"	250-830-245

B ∅ 3.5mm	
210mm, 8 1/4"	250-832-210
245mm, 9 2/3"	250-832-245



Micro Tissue Forceps
1x2 teeth

210mm, 8 1/4"	250-850-210



Micro Needle Holder,
curved, 0.5mm jaw,
70mm working length

200mm, 8"	250-841-200

90mm working length

220mm, 8 2/3"	250-841-220

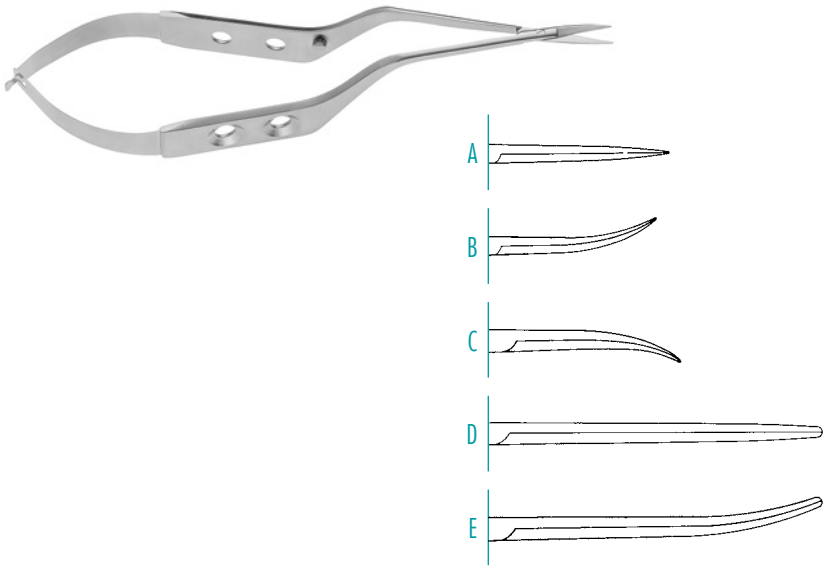
120mm working length

250mm, 9 7/8"	250-841-250



Container, double layer system

265 x 255 x 65mm	600-407-255
400 x 290 x 75mm	600-407-260



YASARGIL

A Micro Scissors, straight

165mm, 6 1/2"	250-064-030
200mm, 8"	250-064-034

B curved

165mm, 6 1/2"	250-064-031
200mm, 8"	250-064-035

C curved downwards

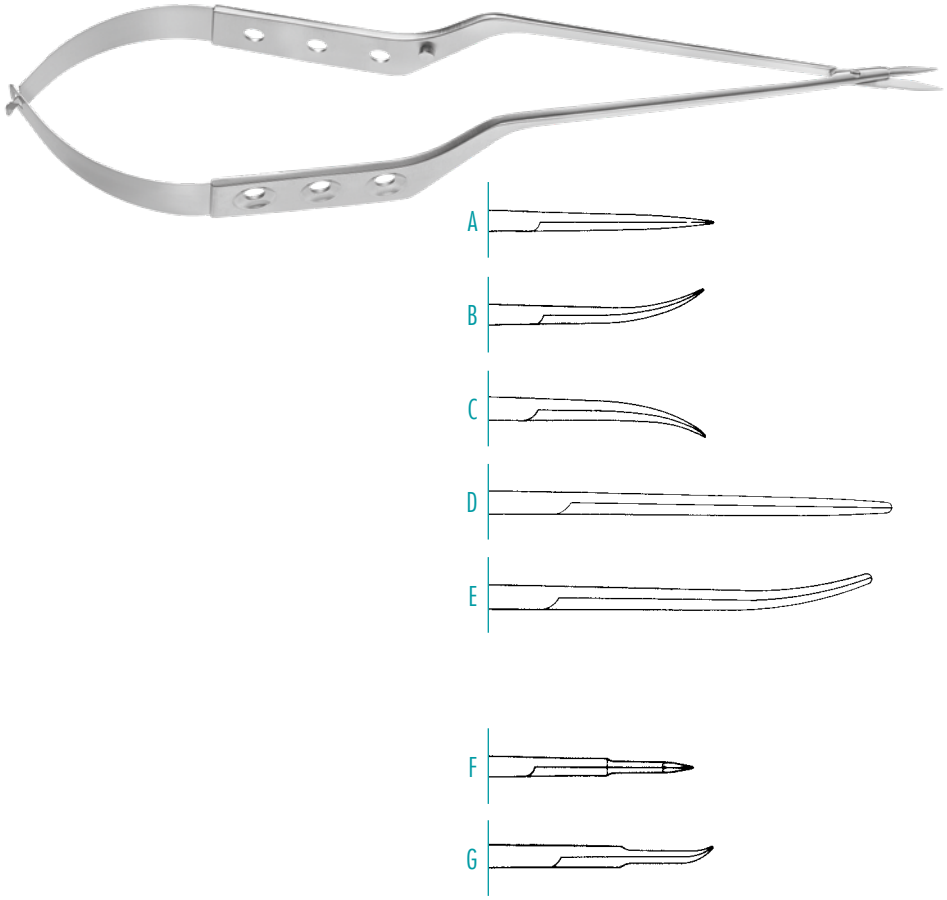
200mm, 8"	250-064-036

D straight, dissecting

200mm, 8"	250-064-032

E curved, dissecting

200mm, 8"	250-064-033



YASARGIL

A Micro Scissors, straight

225mm, 8 7/8"	250-064-038
toothed blades	250-064-060

B curved

225mm, 8 7/8"	250-064-039
245mm, 9 2/3"	250-064-061

C curved downwards

225mm, 8 7/8"	250-064-047

D Dissecting Scissors, straight

225mm, 8 7/8"	250-064-044

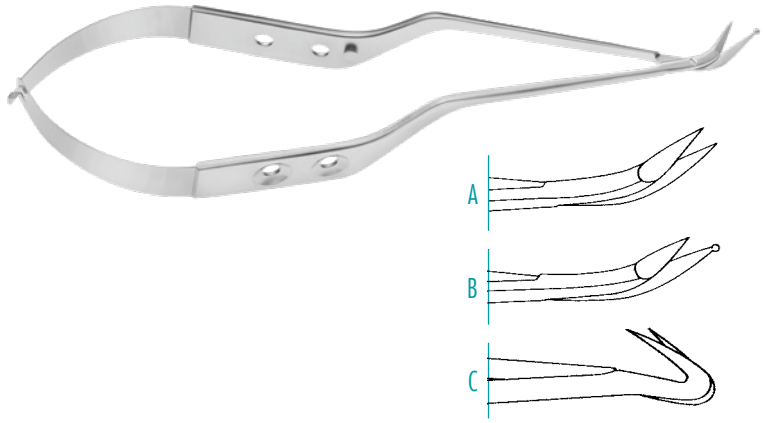
E Dissecting Scissors, curved

225mm, 8 7/8"	250-064-043

VANNAS

Micro Scissors, straight, 225mm, 8 7/8"

F straight	250-064-037
G curved	250-064-040



NAGEL

A Micro Scissors, 45°

200mm, 8″	250-064-056

B 45°, with probe-pointed blade

200mm, 8″	250-064-057

C 125°

190mm, 7 1/2″	250-064-059



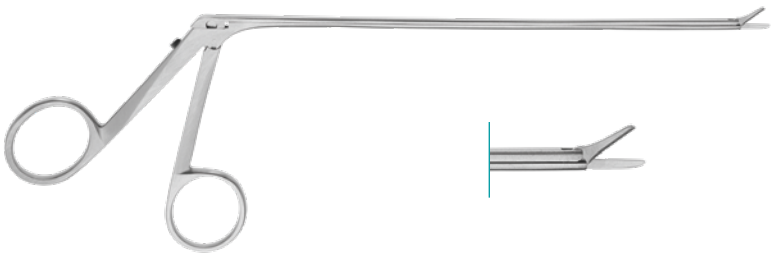
YASARGIL

Micro Needle Holder, straight

165mm, 6 1/2″	250-064-089
200mm, 8″	250-064-092
225mm, 8 7/8″	250-064-096

curved

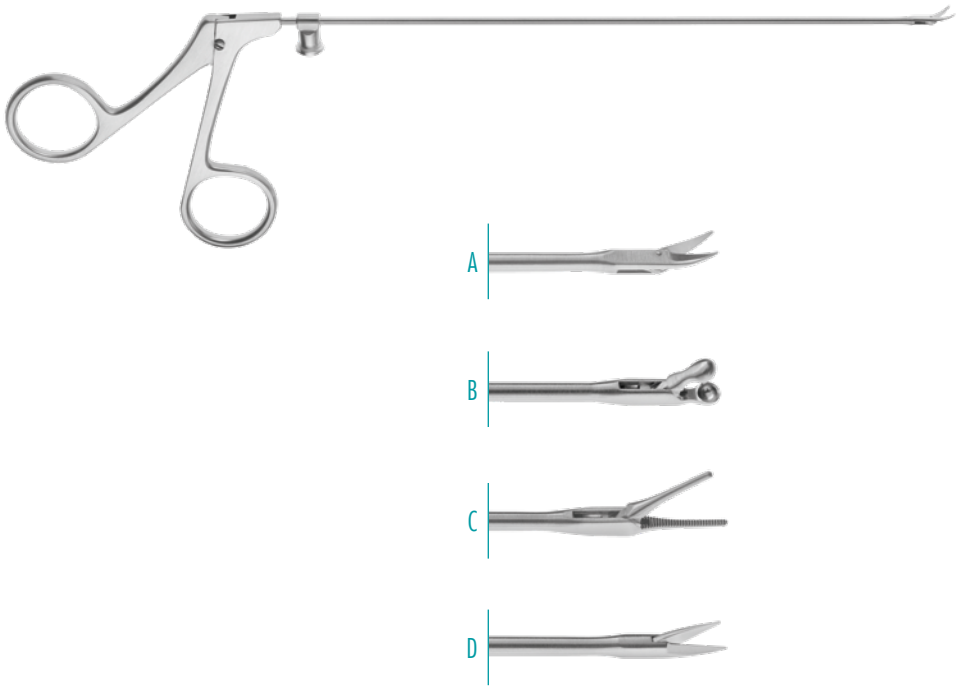
165mm, 6 1/2″	250-064-089
200mm, 8″	250-064-093
225mm, 8 7/8″	250-064-097
245mm, 9 2/3″	250-064-099



DECKER

Micro Scissors, fine model, 5mm
150mm, 6″

straight	250-066-601
left curved	250-066-602
right curved	250-066-603



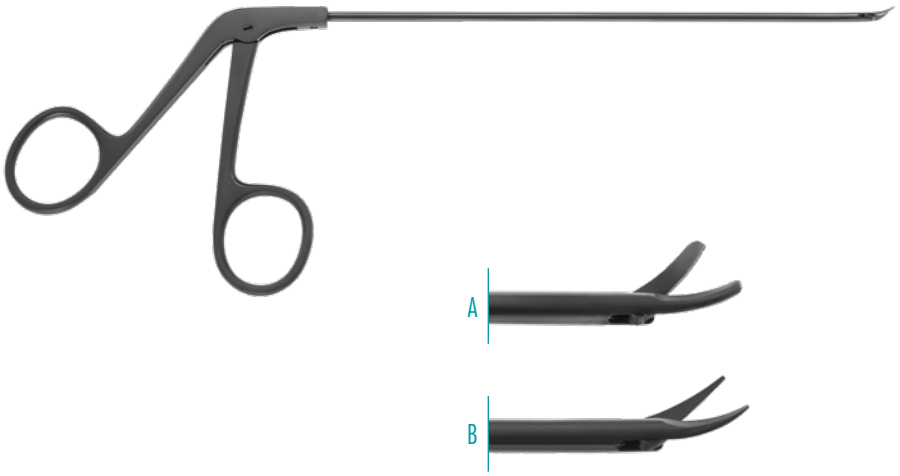
Micro Instruments with Luer-Lock
160mm, $6^{1/4}$" working length

A **FAHLBUSCH**
Micro Scissors
250-064-223

B **NICOLA**
Micro Forceps, ∅ 2.5mm
250-064-222

C **YASARGIL NICOLA**
Micro Grasping Forceps, 1mm conical jaw
250-064-224

D **NICOLA**
Micro Scissors, straight
250-064-226



Micro Spinal Scissors
150mm, 6" working length, black coated, 2mm, curved

A blunt	250-000-033
B sharp	250-000-034



Titanium Micro Needle Holder, straight, with box catch, 1mm diamond dusted jaw, 8mm round handle

210mm, 8 1/4"	250-218-210

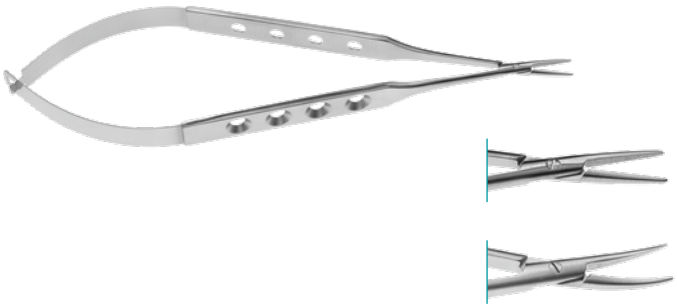


Micro Needle Holder, without catch, 160mm, 6 1/4" working length

straight	250-069-076
curved	250-069-079

180mm, 7" working length

straight	250-069-080
curved	250-069-081

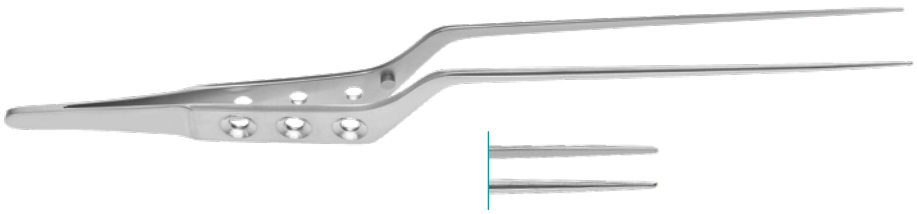


Micro Needle Holder, diamond dusted without catch, 160mm, 6 1/4" working length

straight	250-269-076
curved	250-269-079

180mm, 7" working length

straight	250-269-080
curved	250-269-081







YASARGIL

Micro Forceps, 0.6mm tip

160mm, 6 1/4"	250-024-830
180mm, 7"	250-024-835
200mm, 8"	250-024-840
220mm, 8 2/3"	250-024-845
240mm, 9 1/2"	250-024-850

0.9mm tip

160mm, 6 1/4"	250-024-831
180mm, 7"	250-024-836
200mm, 8"	250-024-841
220mm, 8 2/3"	250-024-846
240mm, 9 1/2"	250-024-851

1x2 teeth

180mm, 7"	250-024-837

YASARGIL

A Micro Grasping Forceps Ø 3mm

220mm, 8 2/3"	250-064-210

B Ø 5mm

220mm, 8 2/3"	250-064-212

C Ø 3mm, flat jaw, serrated

220mm, 8 2/3"	250-064-214

D Ø 5mm, flat jaw, serrated

220mm, 8 2/3"	250-064-216

YASARGIL SAMII

E Ø 3mm, spoon-shaped

240mm, 9 1/2"	250-064-200

F Ø 5mm, spoon-shaped

240mm, 9 1/2"	250-064-202

G Ø 7mm, spoon-shaped

240mm, 9 1/2"	250-064-204

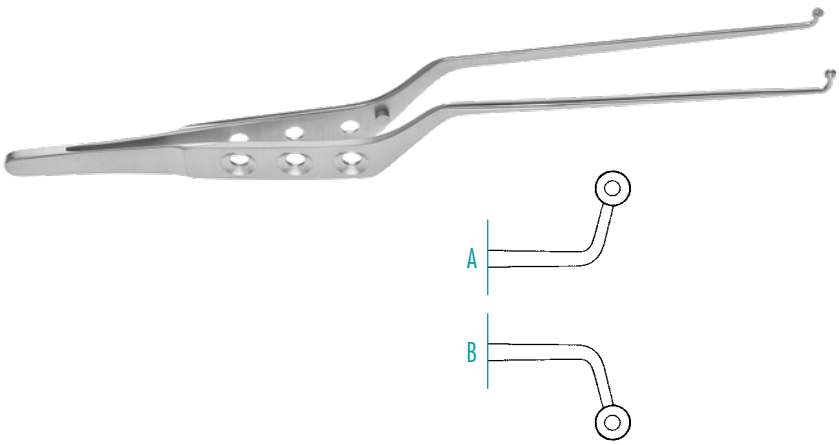
HEIFETZ

H Ø 3mm, curette jaw, toothed

220mm, 8 2/3"	250-064-215

I Ø 5mm, curette jaw, toothed

220mm, 8 2/3"	250-064-217



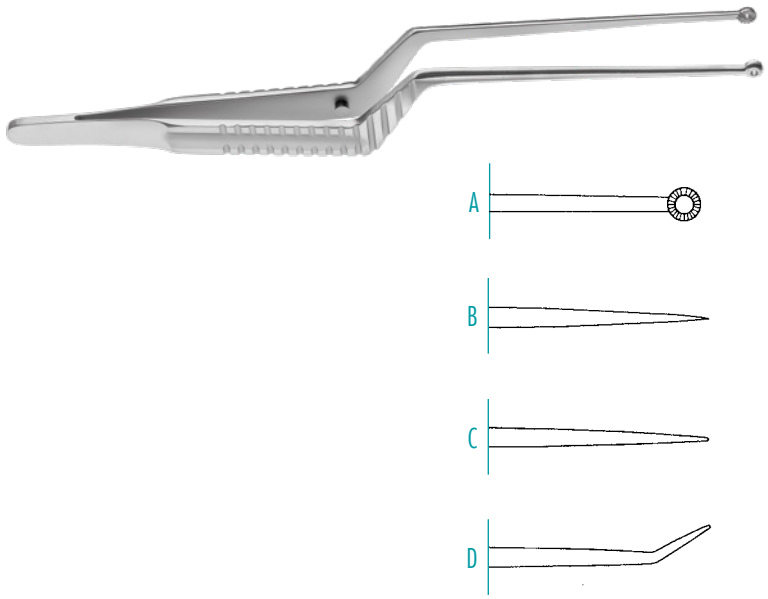
SAMII

A Micro Grasping Forceps, 230mm, 9"
left angled

Ø 3mm	250-064-190
Ø 4mm	250-064-191
Ø 5mm	250-064-192

B right angled

Ø 3mm	250-064-195
Ø 4mm	250-064-196
Ø 5mm	250-064-197



HUNT

A Tumor Tissue Forceps, Ø 5mm
flat jaw, serrated, straight

200mm, 8"	250-024-766

B fine tip

185mm, 7 1/4"	250-064-110

C broad tip

185mm, 7 1/4"	250-064-111

D broad tip, angled

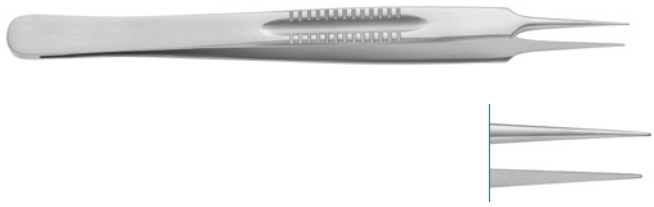
185mm, 7 1/4"	250-064-112



HUNT

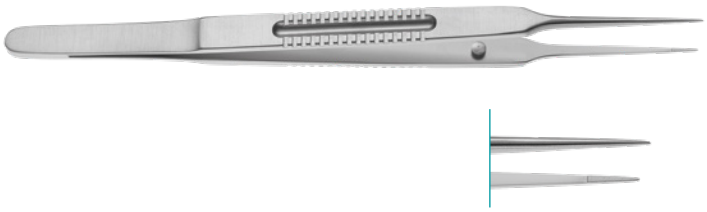
Tumor Tissue Forceps, Ø 5mm
serrated jaw

200mm, 8"	250-024-765



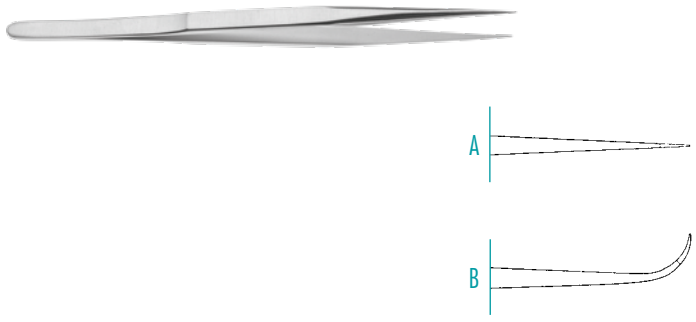
LAZAR
Micro Suture Tying Forceps
155mm, 6 1/8″

0.5mm tip	250-024-260
0.8mm tip	250-024-261



Micro Suture Tying Forceps
185mm, 7 1/4″

0.5mm tip	250-024-264

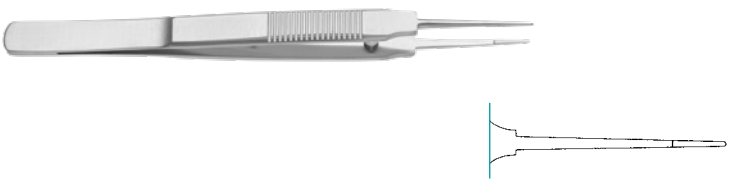


VISE
Micro Suture Tying Forceps
A straight, 0.3mm tip

120mm, 4 3/4″	250-024-338
135mm, 5 1/3″	250-024-336

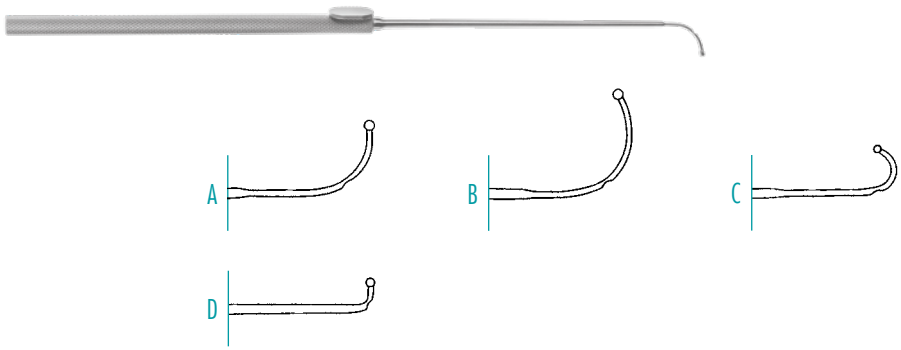
B curved, 0.3mm tip

135mm, 5 1/3″	250-024-337



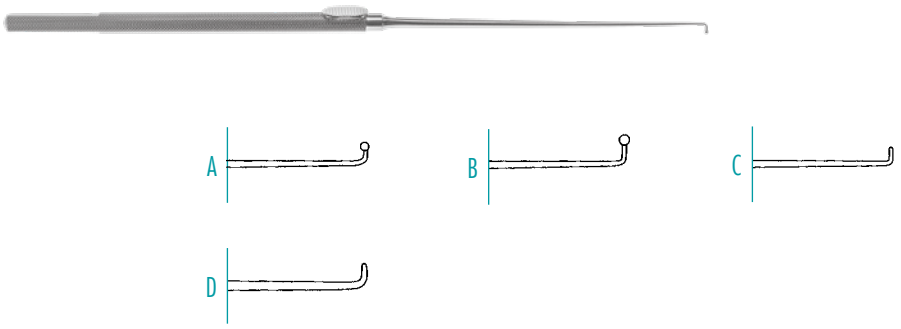
AUSTIN
Micro Suture Tying Forceps,
0.8mm tip

140mm, 5 1/2″	250-024-340
180mm, 7″	250-024-342



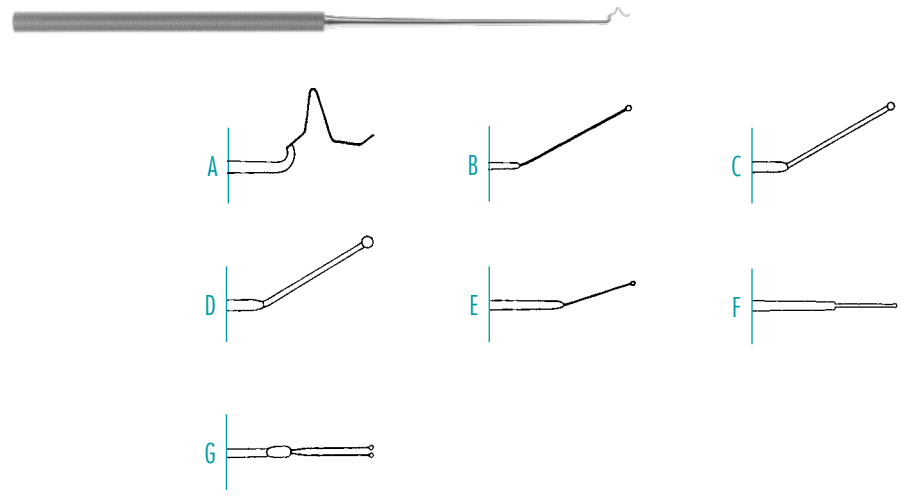
YASARGIL
Ligature Guide, 185mm, 7 1/4"

A	250-064-270
B	250-064-271
C	250-064-272
D	250-064-273



KRAYENBÜHL
Nerve / Vessel Hook, 185mm, 7 1/4"

A	250-064-396
B	250-064-397
C	250-064-398
D	250-064-399



BIEMER
A Vessel Spreader,

160mm, 6 1/4"	250-064-310

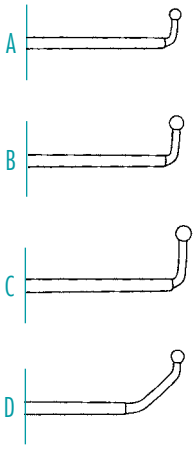
Vessel Dilator, 125mm, 5"

B Ø 0.5mm	250-064-306
C Ø 1.0mm	250-064-307
D Ø 1.5mm	250-064-308

JACOBSON
Vessel Probe, 185mm, 7 1/4"

E	250-064-311
F	250-064-313
G	250-064-312





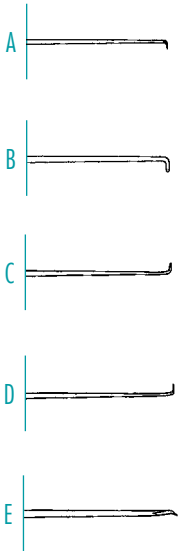
CASPAR
Exploration / Coagulation Hook, 245mm, 9 2/3", insulated

A	250-020-088
B	250-020-089
C	250-020-090
D	250-020-091

non-insulated

A	250-010-088
B	250-010-089
C	250-010-090
D	250-010-091





Micro Hook, 90°, 230mm, 9"

A sharp	250-064-330
B blunt	250-064-331

FISCH
90°, sharp , 185mm, 7 1/4"

C curved	250-064-375
D angled	250-064-376

JACOBSON
Micro Vessel Knife, 185mm, 7 1/4"

E	250-064-350



Tissue Pick, ∅ 1.8mm

185mm, 7 1/4"	250-064-392



FRAZIER
Dura Hook, sharp

130mm, 5 1/8"	170-013-130



O'CONNOR
Nerve Hook, sharp

120mm, 4 3/4"	170-040-160



DANDY
Nerve Hook, 3mm, 200mm, 8"

straight	250-746-000
right curved	250-746-001
left curved	250-746-002



COTTLE
Nerve Hook, 168mm, $6^{2/3}$″

180° retrograde curved	230-286-160
120° retrograde curved	230-285-160



SMITHWICK
Nerve Hook

170mm, $6^{2/3}$″	250-507-170



GRAHAM
Dura Hook

165mm, $6^{1/2}$″	250-405-160



CUSHING
Nerve Hook, 190mm, 7 1/2"

small	170-060-001
large	170-060-002



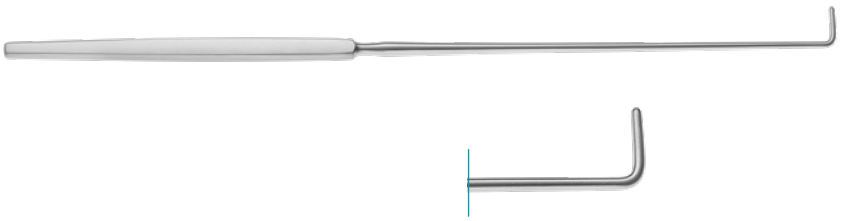
ADSON
Dura Hook, 200mm, 8"

blunt	250-407-200
sharp	250-409-200



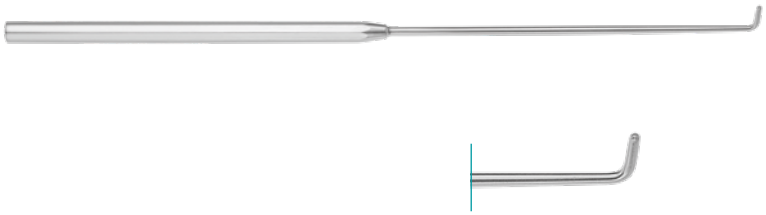
WEARY
Nerve Hook, fine, blunt, black coated

200mm, 8"	250-408-200



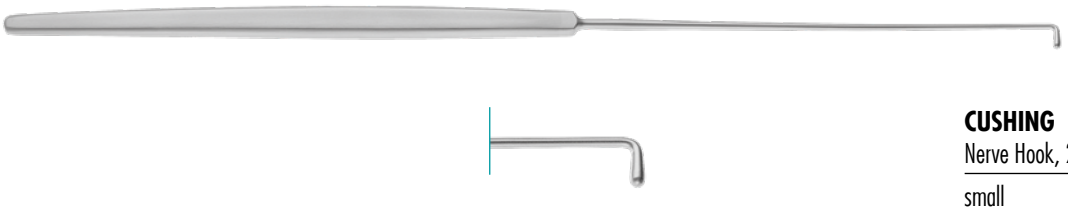
HOEN
Hook, 90°

220mm, 8 2/3"	250-747-220



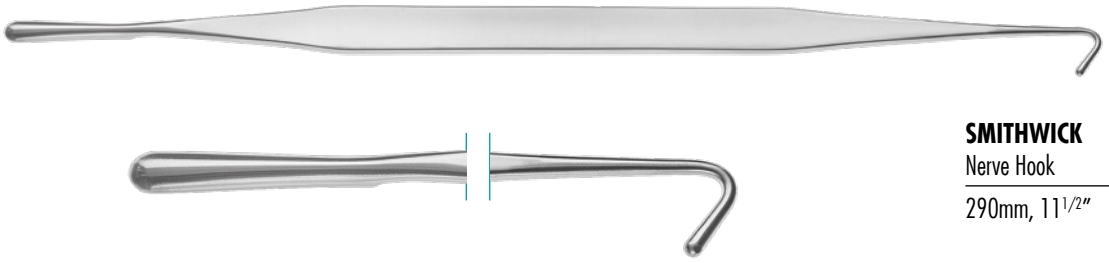
CRILE
Hook, Fig. 1

200mm, 8"	290-541-200



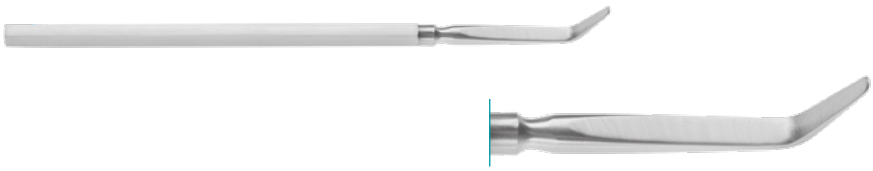
CUSHING
Nerve Hook, 280mm, 11"

small	250-742-280
large	250-743-280



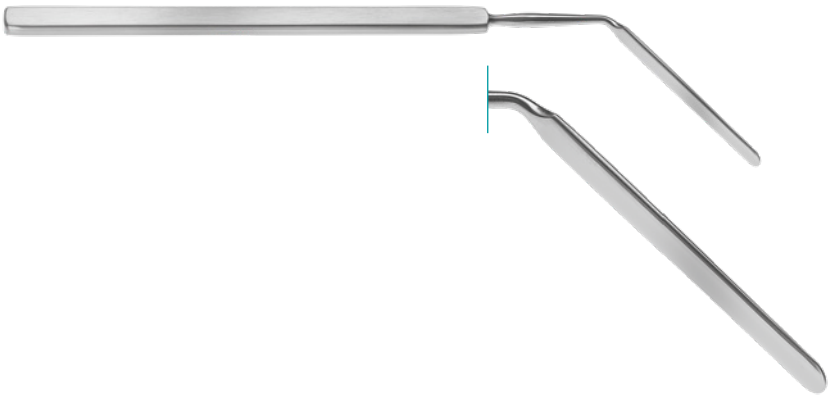
SMITHWICK
Nerve Hook

290mm, 11 1/2"	250-507-290



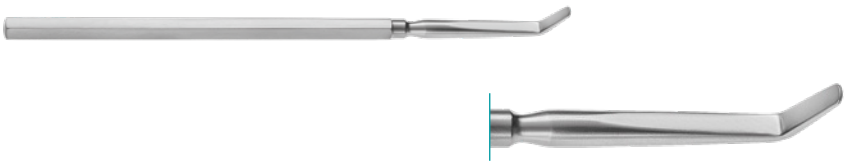
FRAZIER
Elevator

160mm, 6 1/4"	250-746-150



HORSLEY
Dissector, angled

200mm, 8"	250-750-200



HOEN
Elevator, 150mm, 6"

45°	250-747-150
90°	250-747-153



SACHS
Dissector, sharp

210mm, 8 1/4"	250-687-210



DAVIS
Dissector

195mm, 7 3/4"	250-696-195



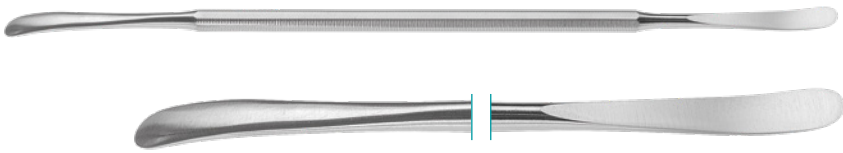
OLIVECRONA
Dissector, double-ended
4 x 5mm, heavy pattern

180mm, 7"	250-694-180
240mm, 9 1/2"	250-694-240



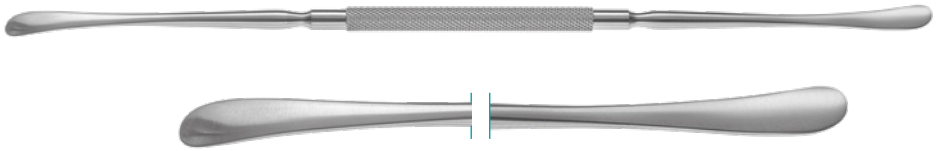
OLIVECRONA
Dissector, double-ended, fenestrated tip,
2 x 3mm

180mm, 7"	250-696-180
240mm, 9 1/2"	250-696-240



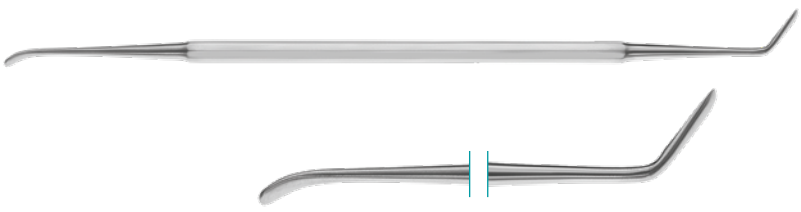
Dissector, double ended

220mm, 8 2/3"	290-500-220



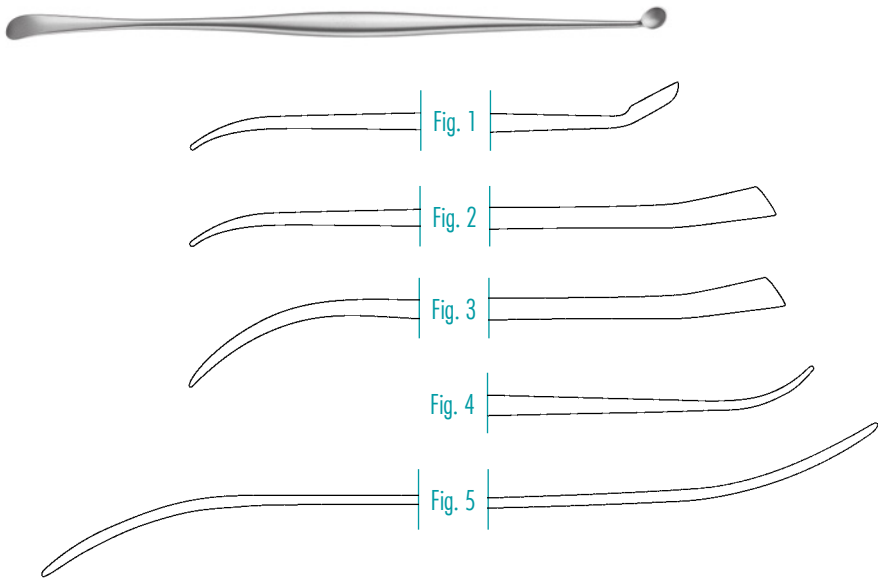
DAVIS
Vascular Dissector, double ended

245mm, 9 2/3"	290-300-245



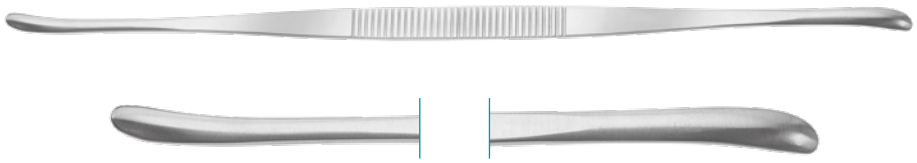
MILLIGAN
Dura Dissector, double ended

210mm, 8 1/4"	250-685-210



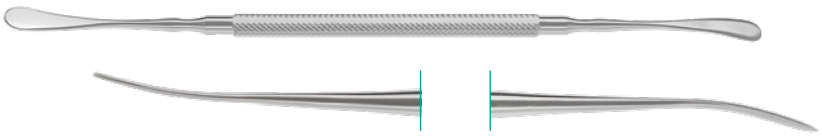
PENFIELD
Dissector

Fig. 1 175mm, $6^{7/8}$″	250-691-175
Fig. 2 195mm, $7^{3/4}$″	250-692-195
Fig. 3 195mm, $7^{3/4}$″	250-693-195
Fig. 4 215mm, $8^{1/2}$″	250-694-215
Fig. 5 290mm, $11^{1/2}$″	250-695-290



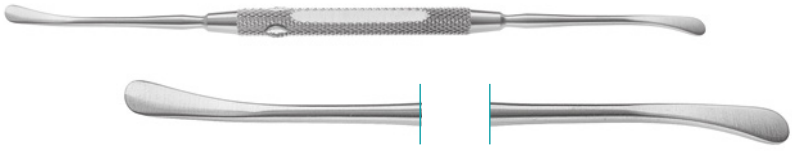
TOENNIS
Dissector, blunt/blunt

Fig. 1 3+4mm	250-301-240
Fig. 2 5+6mm	250-302-240



FREER
Septum Elevator, sharp/blunt, 200mm, 8″

4.5mm	420-545-001
6.5mm	420-545-002



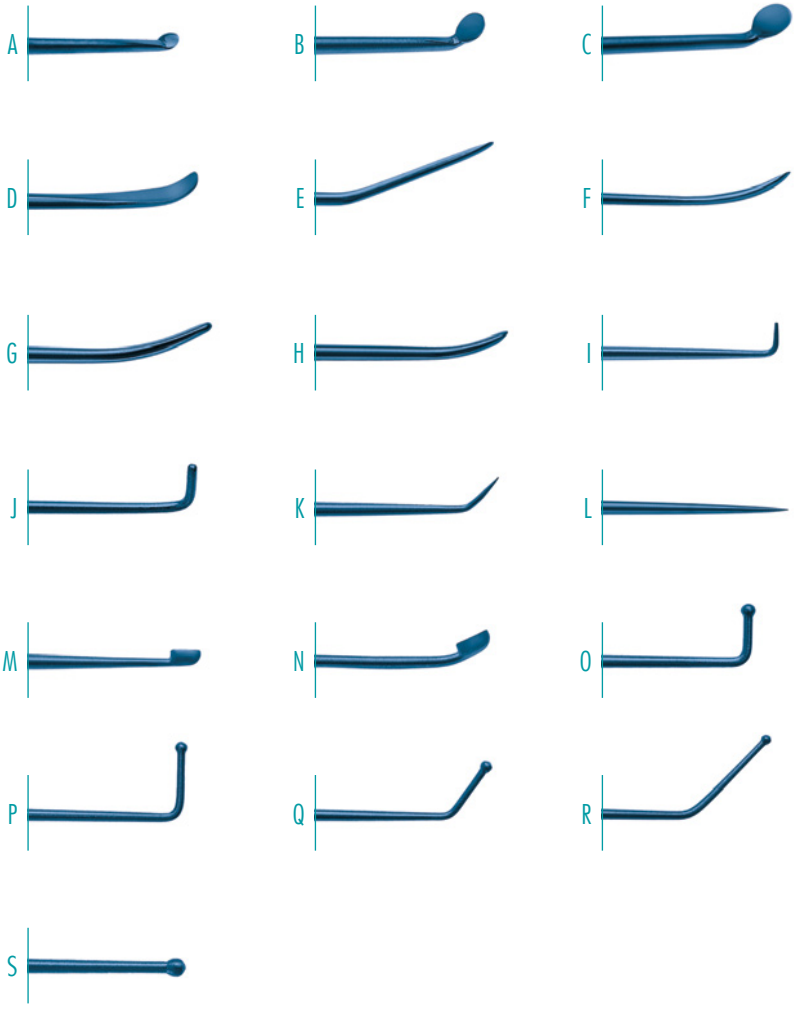
FREER
Septum Elevator, sharp/blunt, 5mm

185mm, $7^{1/4}$″	420-546-180



↑Scale 1:2

↓Scale 3:1 (A - S)



T

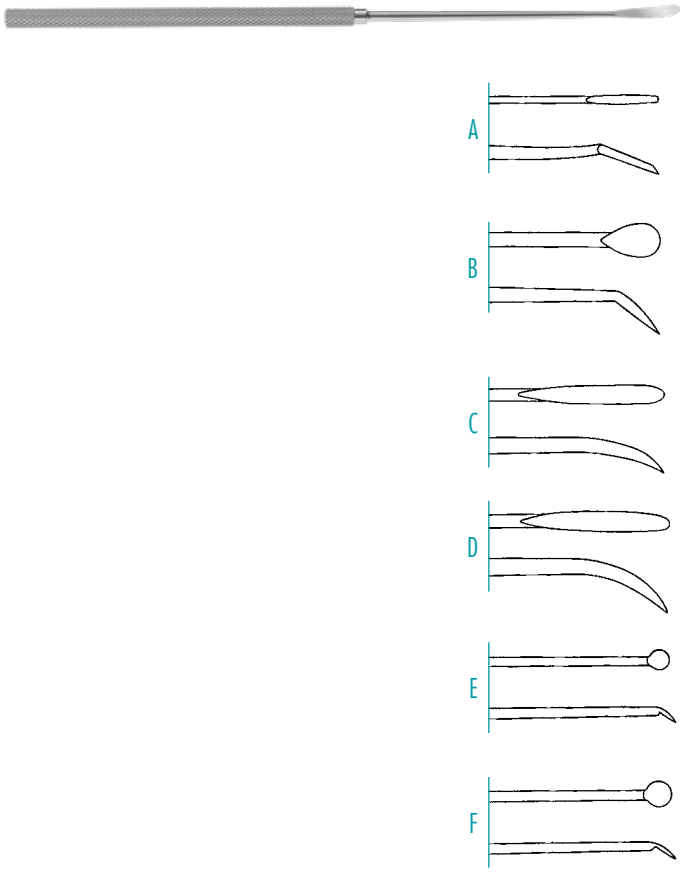


Nerve Micro Dissection Instruments, Titanium
190mm, 7 1/2"

A round, ∅ 1mm	250-501-190
B round, ∅ 2mm	250-502-190
C round, ∅ 3mm	250-503-190
D curved, 2.8mm	250-514-190
E angled, 1.2mm	250-515-190
F narrow, 1.0mm	250-517-190
G medium, 1.5mm	250-518-190
H wide, 2.0mm	250-519-190
I 90°, semi-sharp	250-520-190
J 90°, blunt	250-521-190
K 45°, semi-sharp	250-522-190
L straight, sharp	250-523-190
M straight, 1x2mm	250-524-190
N angled, 1x2mm	250-525-190
O 90°, 3mm	250-526-190
P 90°, 5mm	250-527-190
Q 45°, 4mm	250-528-190
R 45°, 8mm	250-529-190
S straight	250-530-190
T Set (+Tray)	250-501-001

Stainless Steel

A round, ∅ 1mm	250-101-190
B round, ∅ 2mm	250-102-190
C round, ∅ 3mm	250-103-190
D curved, 2.8mm	250-114-190
E angled, 1.2mm	250-115-190
F narrow, 1.0mm	250-117-190
G medium, 1.5mm	250-118-190
H wide, 2.0mm	250-119-190
I 90°, blunt, 2.3mm	250-120-190
J 90°, blunt, 2.9mm	250-121-190
K 45°, semi-sharp	250-122-190
L straight, sharp	250-123-190
M straight, 1x2mm	250-124-190
N angled, 1x2mm	250-125-190
O 90°, 3mm	250-126-190
P 90°, 5mm	250-127-190
Q 45°, 4mm	250-128-190
R 45°, 8mm	250-129-190
S straight	250-130-190
T Set (+tray)	250-101-001



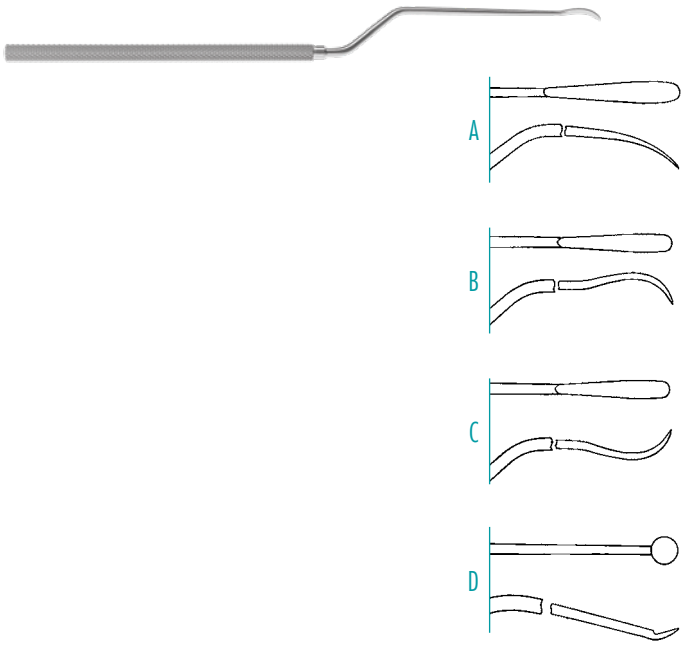
YASARGIL

Micro Raspatory, 185mm, 7 1/4"

A	250-064-301
B	250-064-303
C	250-064-304
D	250-064-305

Micro Raspatory, round blade, 230mm, 9"

E	250-064-337
F	250-064-338



YASARGIL

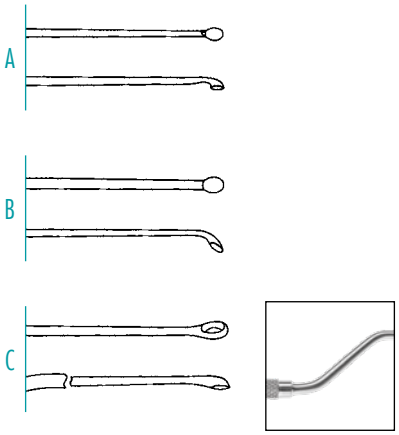
Micro Raspatory, 185mm, 7 1/4"

A	250-064-320
B	250-064-321
C	250-064-322

Micro Raspatory, 230mm, 9"

D	250-064-346





Micro Scoop, 230mm, 9″

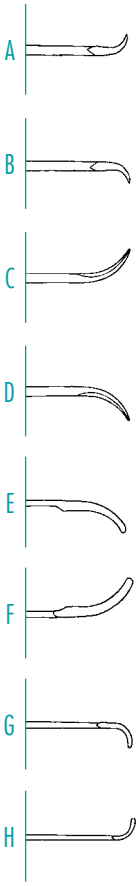
A	250-064-335
B	250-064-336

YASARGIL

Micro Raspatory, bayonet-shape, 185mm, 7 1/4″

C	250-064-325





KOOS

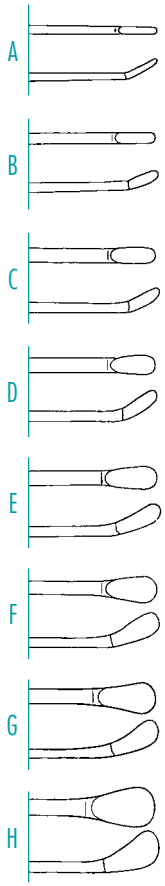
Micro Vessel Knife, 185mm, 7 1/4″

A	250-064-351
B	250-064-352
C	250-064-353
D	250-064-354
E	250-064-356
F	250-064-357

YASARGIL

G	250-064-365
H	250-064-366





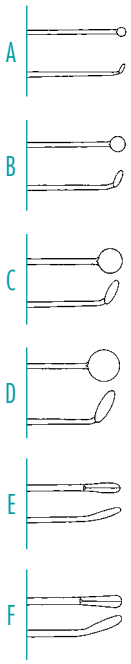
SAMII
Tumor Knife, 200mm, 8"

A 1.0mm	250-064-400
B 1.5mm	250-064-401
C 2.0mm	250-064-402
D 2.5mm	250-064-403
E 3.0mm	250-064-404
F 3.5mm	250-064-405
G 4.0mm	250-064-406
H 5.0mm	250-064-408

230mm, 9"

A 1.0mm	250-064-410
B 1.5mm	250-064-411
C 2.0mm	250-064-412
D 2.5mm	250-064-413
E 3.0mm	250-064-414
F 3.5mm	250-064-415
G 4.0mm	250-064-416
H 5.0mm	250-064-418





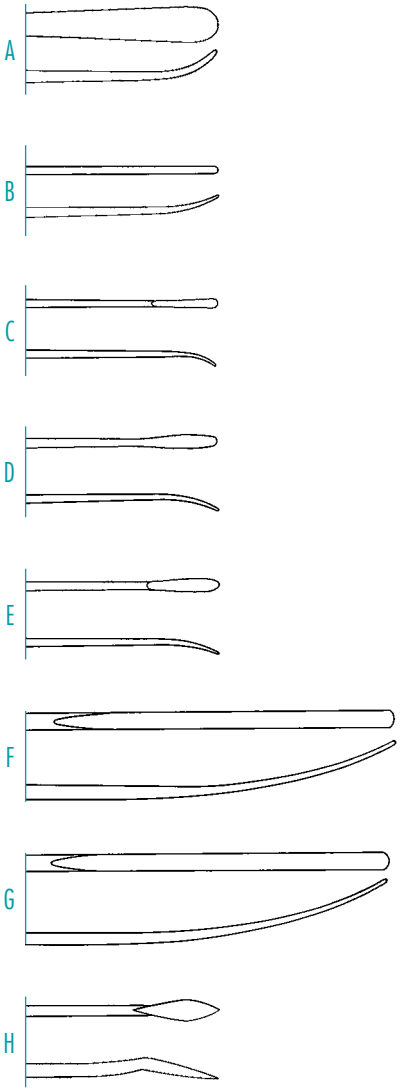
SAMII
Tumor Knife, 200mm, 8"

A 1.5mm	250-064-851
B 3.0mm	250-064-854
C 4.5mm	250-064-856
D 6.0mm	250-064-858

230mm, 9"

A 1.5mm	250-064-861
B 3.0mm	250-064-864
C 4.5mm	250-064-866
D 6.0mm	250-064-868
E 1.8mm	250-064-298
F 2.5mm	250-064-299





CASPAR
Micro Dissector, 230mm, 9"

A 4.5mm	250-066-303
C 1.4mm	250-064-332
D 2.0mm	250-064-333
E 1.8mm	250-064-334
185mm, 7 1/4"	
F 3.0mm	250-062-150
200mm, 8"	
B 1.0mm	250-066-310
215mm, 8 1/2"	
G 3.0mm	250-062-151

YASARGIL
185mm, 7 1/4"

H	250-064-302









A Nerve Hook, 262mm, $10^{1/4}$″ bayonet length, black coated, 125mm, 5″ working length

left	250-000-043
straight	250-000-042
right	250-000-044

B Micro Nerve Hook

left	250-000-046
straight	250-000-045
right	250-000-047

C Dissector

left	250-000-049
straight	250-000-048
right	250-000-050









A Probe, 269mm, $10^{2/3}$″ bayonet length, black coated, 125mm, 5″ working length

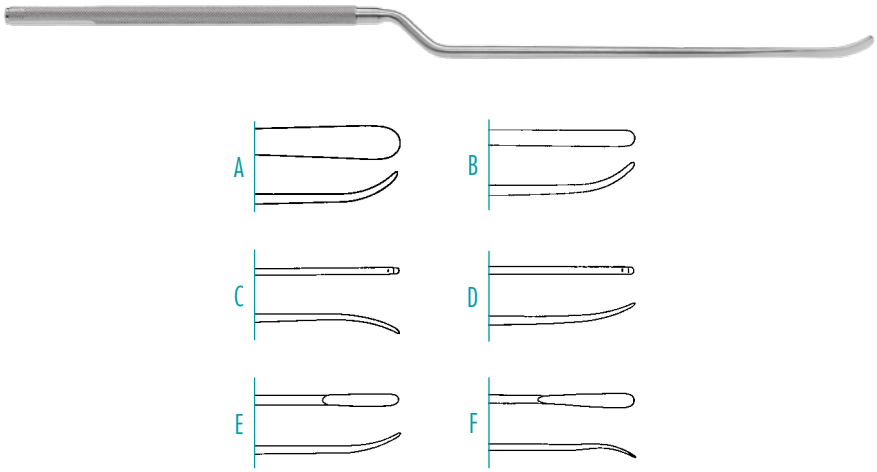
WOODSON	250-000-035

B Hook, short, 6mm

left	250-000-037
straight	250-000-036
right	250-000-038

C Hook, long, 9mm

left	250-000-040
straight	250-000-039
right	250-000-041



CASPAR
Micro Dissector, 230mm, 9"

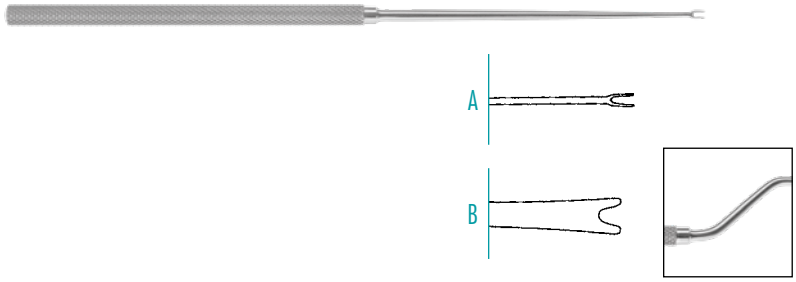
A 4.5mm	250-066-305
B 2.0mm	250-066-307

210mm, 8 1/4"

C 1.0mm	250-066-311
D 1.0mm	250-066-312

Micro Dissector, 230mm, 9"

E	250-064-343
F	250-064-344

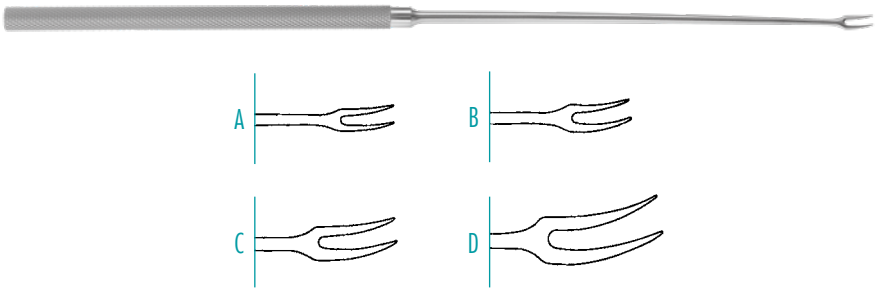


JACOBSON
A Suture Pusher

185mm, 7 1/4"	250-064-315

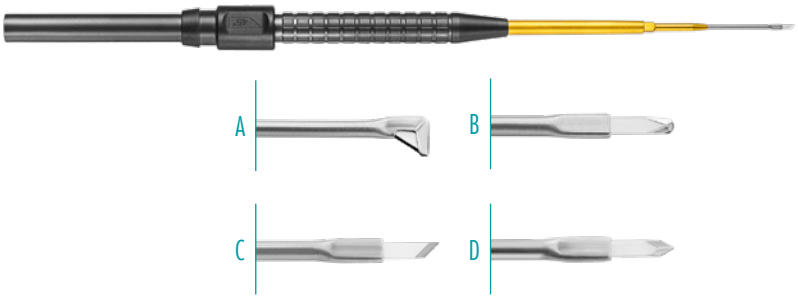
CASPAR
B Suture Pusher, bayonet-shape

230mm, 9"	250-066-309



OKONEK YASARGIL
Tumor Fork, 230mm, 9"

A 3.0mm	250-064-380
B 2.0mm	250-064-381
C 5.0mm	250-064-382
D 8.0mm	250-064-384

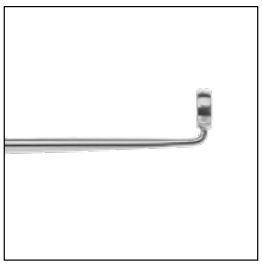


Diamond Knife, 7 facets, single sided
1.0 x 0.17mm, 205mm, 8 1/8"

A hook 1.4 x 0.17mm	250-001-100
B round	250-001-101
C straight, 45°	250-001-102
D lancet, 60°	250-001-103



HARDY
Ring Curette, bayonet-shaped, 240mm, 9 1/2"



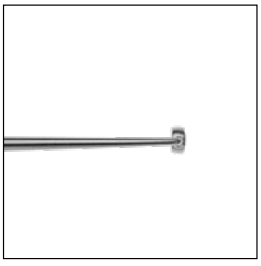
upwards angled

Ø 3mm	250-066-500
Ø 5mm	250-066-501



downwards angled

Ø 3mm	250-066-502
Ø 5mm	250-066-503



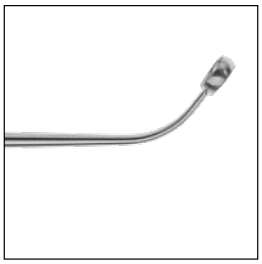
90° curved left

Ø 3mm	250-066-504
Ø 5mm	250-066-505



45° curved right

Ø 3mm	250-066-506
Ø 5mm	250-066-507



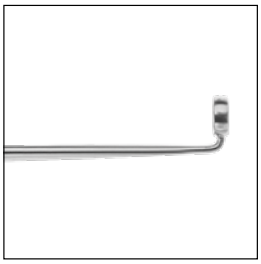
left curved

Ø 5mm	250-066-508



right curved

Ø 5mm	250-066-509



260mm, 10 1/4", malleable

Ø 4mm	250-066-631
Ø 6mm	250-066-632



RAY
Ring Curette, 190mm, 7 1/2"



45° horizontal curved

Ø 4mm	250-066-611

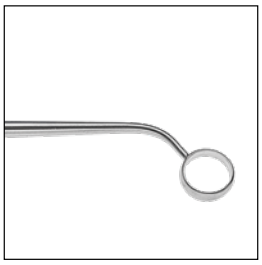


45° vertically curved

Ø 4mm	250-066-614



NICOLA
Ring Curette, 210mm, 8 1/4"



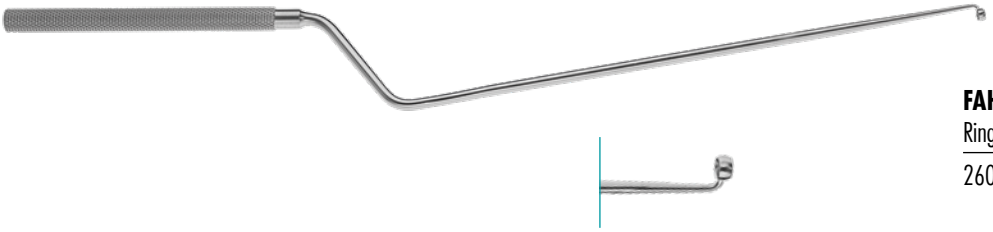
cutting to right
Ø 6.5mm 250-066-616



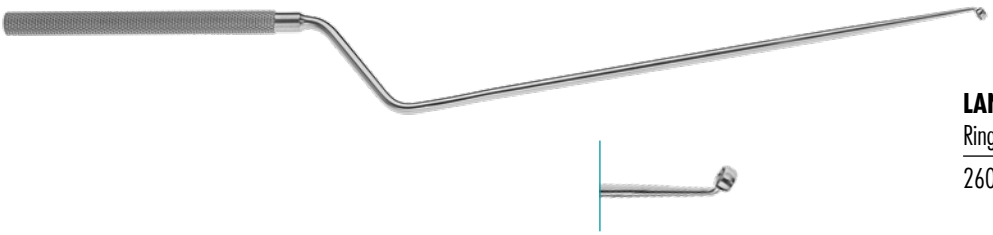
cutting to left
Ø 6.5mm 250-066-617



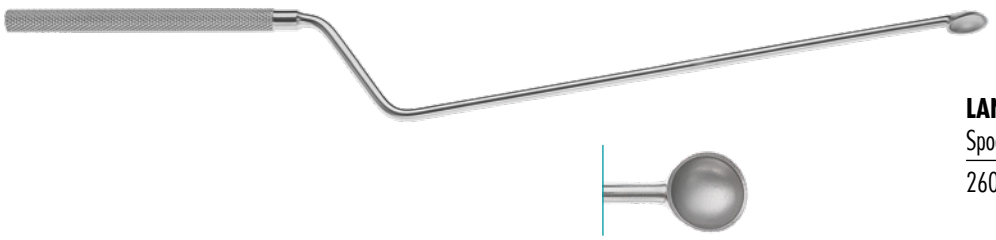
curved up
Ø 6.5mm 250-066-618



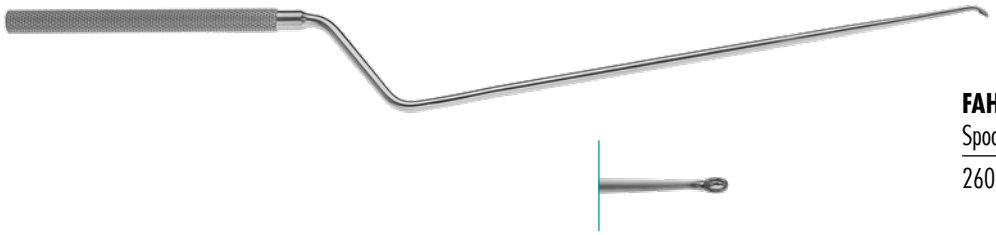
FAHLBUSCH
Ring Curette, 90°, Ø 2.5mm, malleable
260mm, 10 1/4" 250-066-637



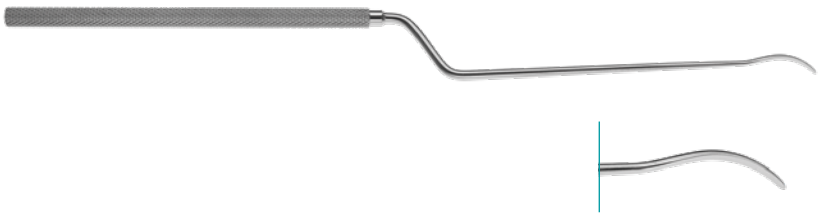
LANDOLT-REULEN
Ring Curette, 45°, Ø 2.5mm
260mm, 10 1/4" 250-066-642



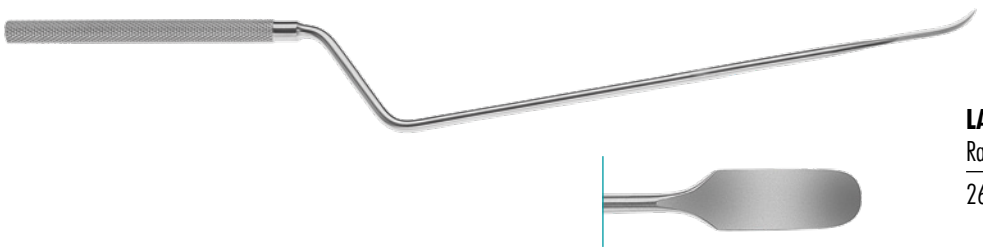
LANDOLT
Spoon, malleable
260mm, 10 1/4" 250-066-628



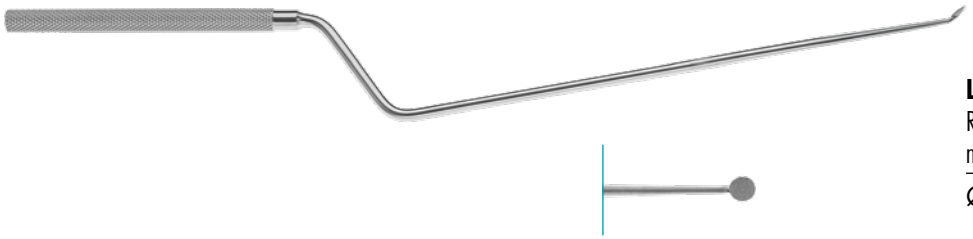
FAHLBUSCH
Spoon, malleable
260mm, 10 1/4" 250-066-635



NICOLA
Raspatory, 2mm
215mm, 8 1/2" 250-066-619



LANDOLT
Raspatory, malleable
260mm, 10 1/4" 250-066-627

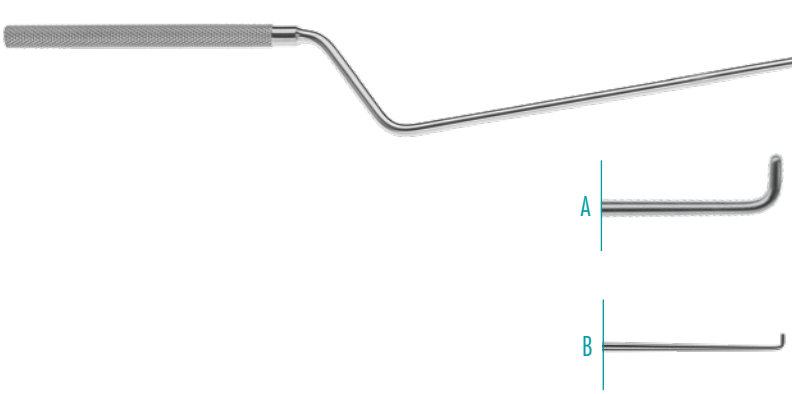


LANDOLT-REULEN
Raspatory, 260mm, 10 1/4"
malleable

Ø 2.2mm	250-066-640

rigid

Ø 3.2mm	250-066-640

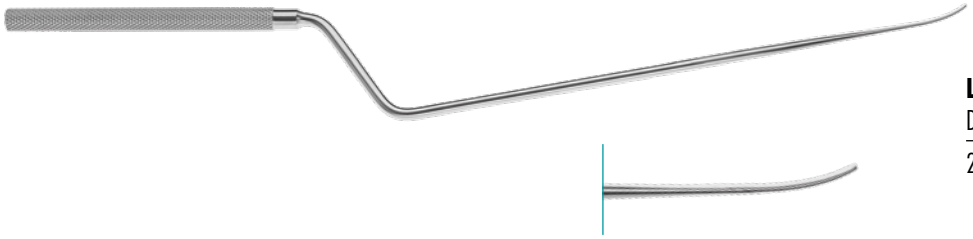


LANDOLT
Hook, blunt

A 260mm, 10 1/4"	250-066-629

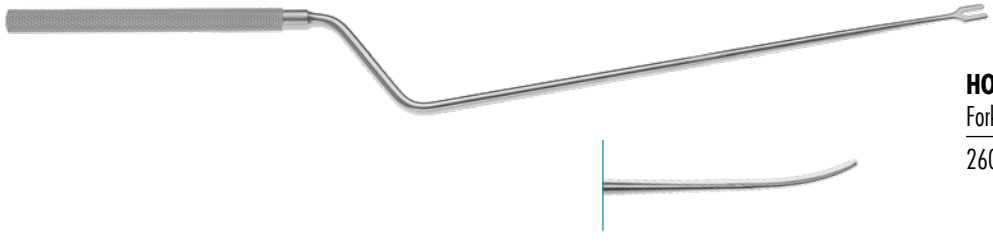
LANDOLT-REULEN
Hook, blunt

B 260mm, 10 1/4"	250-066-643



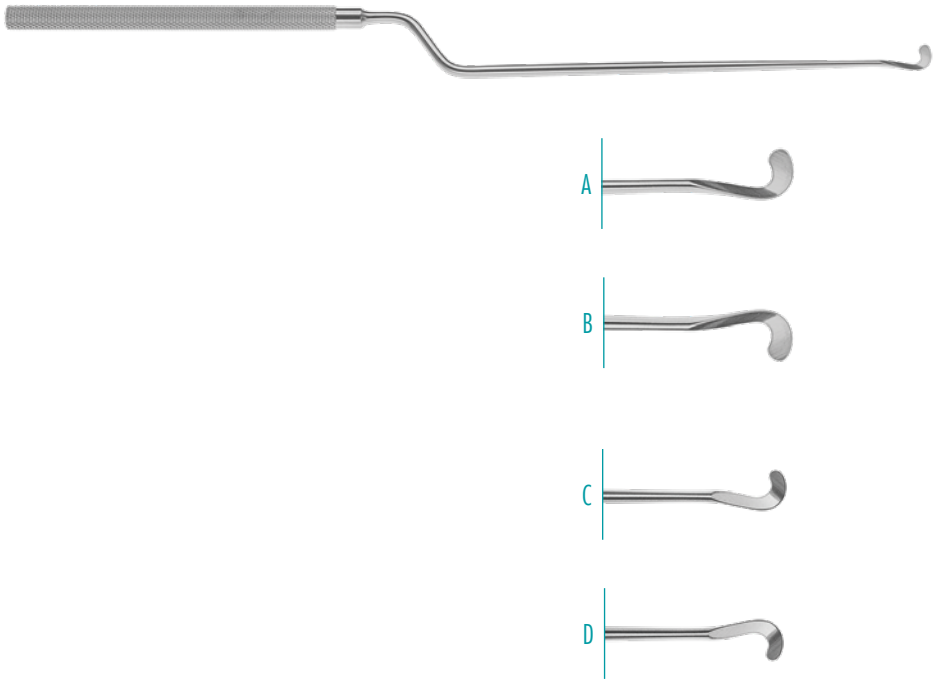
LANDOLT-REULEN
Dissector, Ø 2.0mm

260mm, 10 1/4"	250-066-644



HOSOBUCHI
Fork Spatula

260mm, 10 1/4"	250-066-630

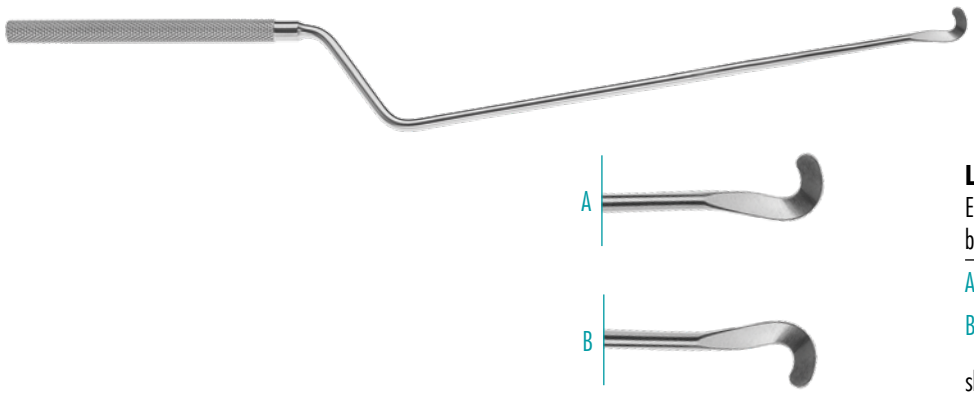


HARDY
Enucleator, blunt, 245mm, $9^{2/3}$″

A curved left	250-066-620
B curved right	250-066-621

HARDY-FAHLENBUSCH
Enucleator, fine, sharpened inner edge, 245mm, $9^{2/3}$″

C curved left	250-066-608
D curved right	250-066-609



LANDOLT
Enucleator, malleable, 260mm, $10^{1/4}$″

blunt

A right	250-066-625
B left	250-066-655

sharp

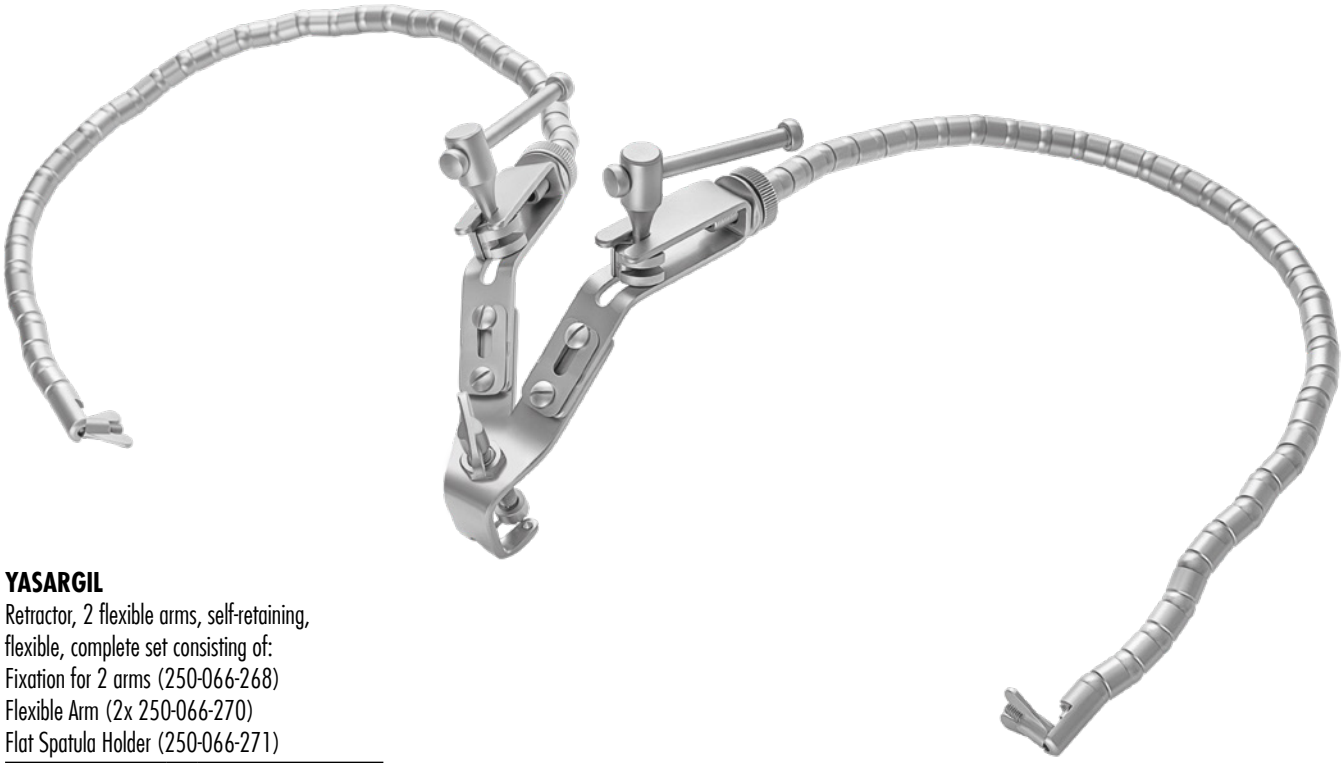
A right	250-066-626
B left	250-066-656

LEYLAR RETRACTOR SYSTEM



YASARGIL
Retractor, 1 flexible arm, self-retaining, flexible, complete set consisting of:
Fixation (250-066-267)
Flexible Arm (250-066-270)
Flat Spatula Holder (250-066-271)

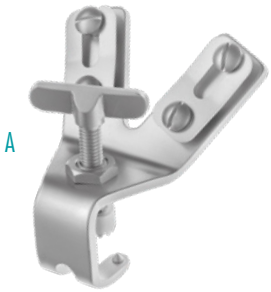
250-066-260



YASARGIL
Retractor, 2 flexible arms, self-retaining, flexible, complete set consisting of:
Fixation for 2 arms (250-066-268)
Flexible Arm (2x 250-066-270)
Flat Spatula Holder (250-066-271)

250-066-262

LEYLAR RETRACTOR SYSTEM


A


B


C

Fixation	
A for 2 arms (skull)	250-066-268
B for 1 arm (skull)	250-066-267
C for 1 arm (base)	250-066-266


A


B

YASARGIL
Spatula Holder

A for round shaft	250-066-272
B for flat Spatula	250-066-271



YASARGIL
Spatula, malleable

200 x 9mm	250-066-220
200 x 12mm	250-066-221
250 x 12mm	250-066-222



Spatula, malleable

200 x 14mm	250-066-231
200 x 17mm	250-066-232
200 x 20mm	250-066-233



HEIFETZ
Spatula, malleable

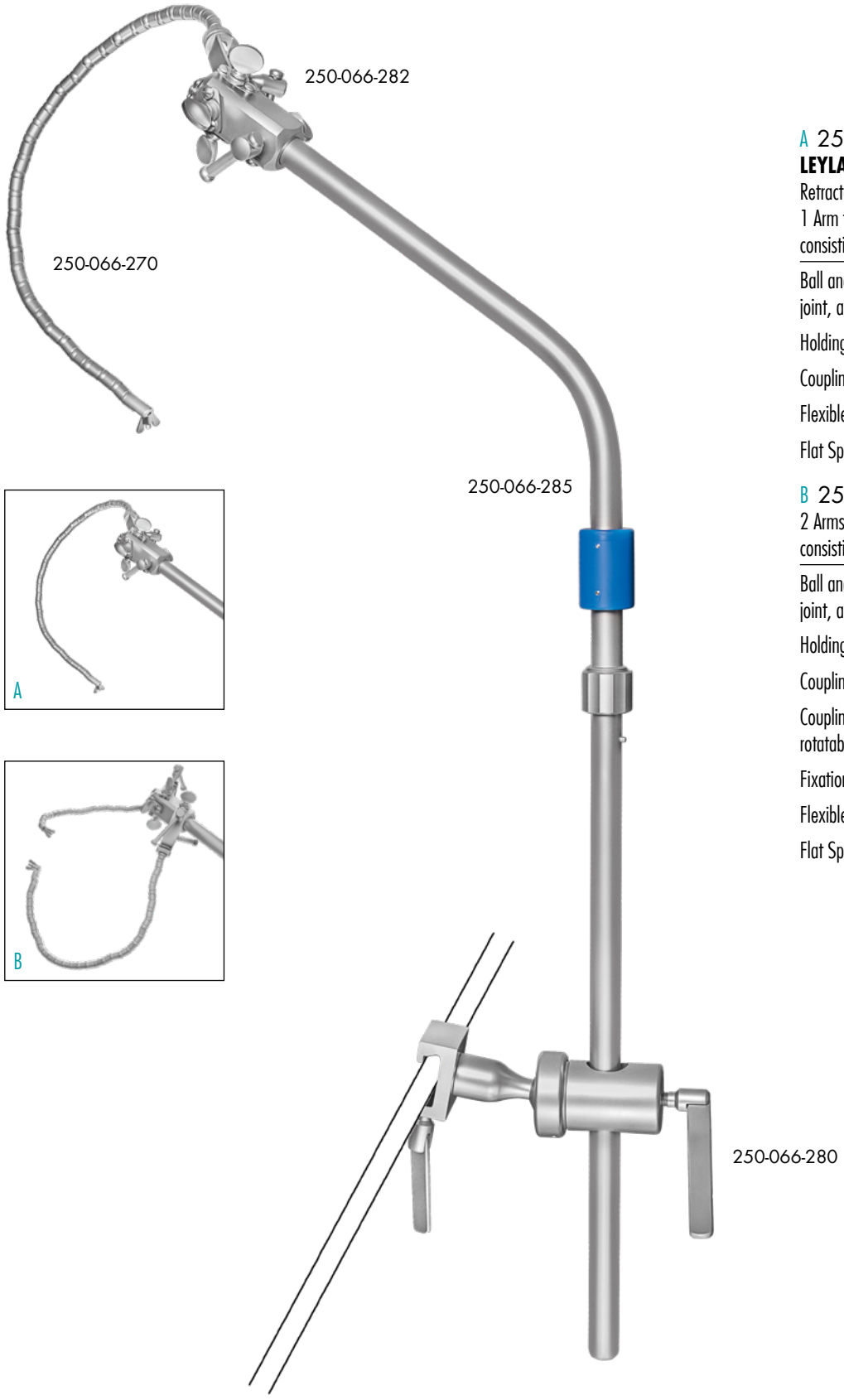
155 x 8mm	250-066-256
155 x 11mm	250-066-257
155 x 14mm	250-066-258
155 x 17mm	250-066-259



DAVIS
Spatula, double-ended, malleable, 180mm, 7”

6mm	250-065-630
10mm	250-065-950
14mm	250-065-130
16mm	250-065-116
19mm	250-065-119
25mm	250-065-125
32mm	250-065-132
38mm	250-065-138

LEYLAR RETRACTOR SYSTEM



A 250-066-287
LEYLAR
Retractor Set,
1 Arm for fixation to/or table siderails
consisting of:

Ball and socket joint, articulated	250-066-280
Holding rod	250-066-285
Coupling head	250-066-282
Flexible Arm	250-066-270
Flat Spatula Holder	250-066-271

B 250-066-288
2 Arms
consisting of:

Ball and socket joint, articulated	250-066-280
Holding rod	250-066-285
Coupling head	250-066-282
Coupling head, rotatable	250-066-283
Fixation Base	250-066-266
Flexible Arm	250-066-270
Flat Spatula Holder	250-066-271



CUSHING

Spatula, 170mm, 6 2/3"

7 x 9mm	250-066-212
7 x 9mm CeraCut®	250-066-212CC
8 x 10mm	250-066-213
8 x 10mm CeraCut®	250-066-213CC

200mm, 8"

7 x 9mm	250-066-214
7 x 9mm CeraCut®	250-066-214CC

280mm, 11"

16 x 18mm	250-066-215
16 x 18mm CeraCut®	250-066-215CC



OLIVECRONA

Spatula, flexible, 180mm, 7"

7 x 9mm	250-066-216
11 x 13mm	250-066-217
15 x 18mm	250-066-218
18 x 22mm	250-066-219

CeraCut®

7 x 9mm	250-066-216CC
11 x 13mm	250-066-217CC
15 x 18mm	250-066-218CC
18 x 22mm	250-066-219CC



AACHEN

Spatula, 200mm 8"

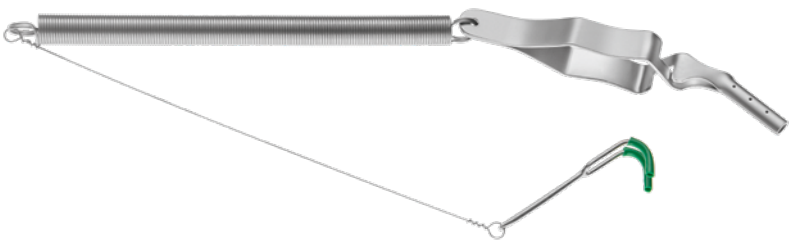
7 x 8mm	250-066-441
11 x 11mm	250-066-442
13 x 14mm	250-066-443
16 x 17mm	250-066-444
19 x 20mm	250-066-445
22 x 25mm	250-066-446



SCOVILLE

Spatula, 203mm, 8"

13 x 9.5mm	250-066-202
19 x 16mm	250-066-203



YASARGIL

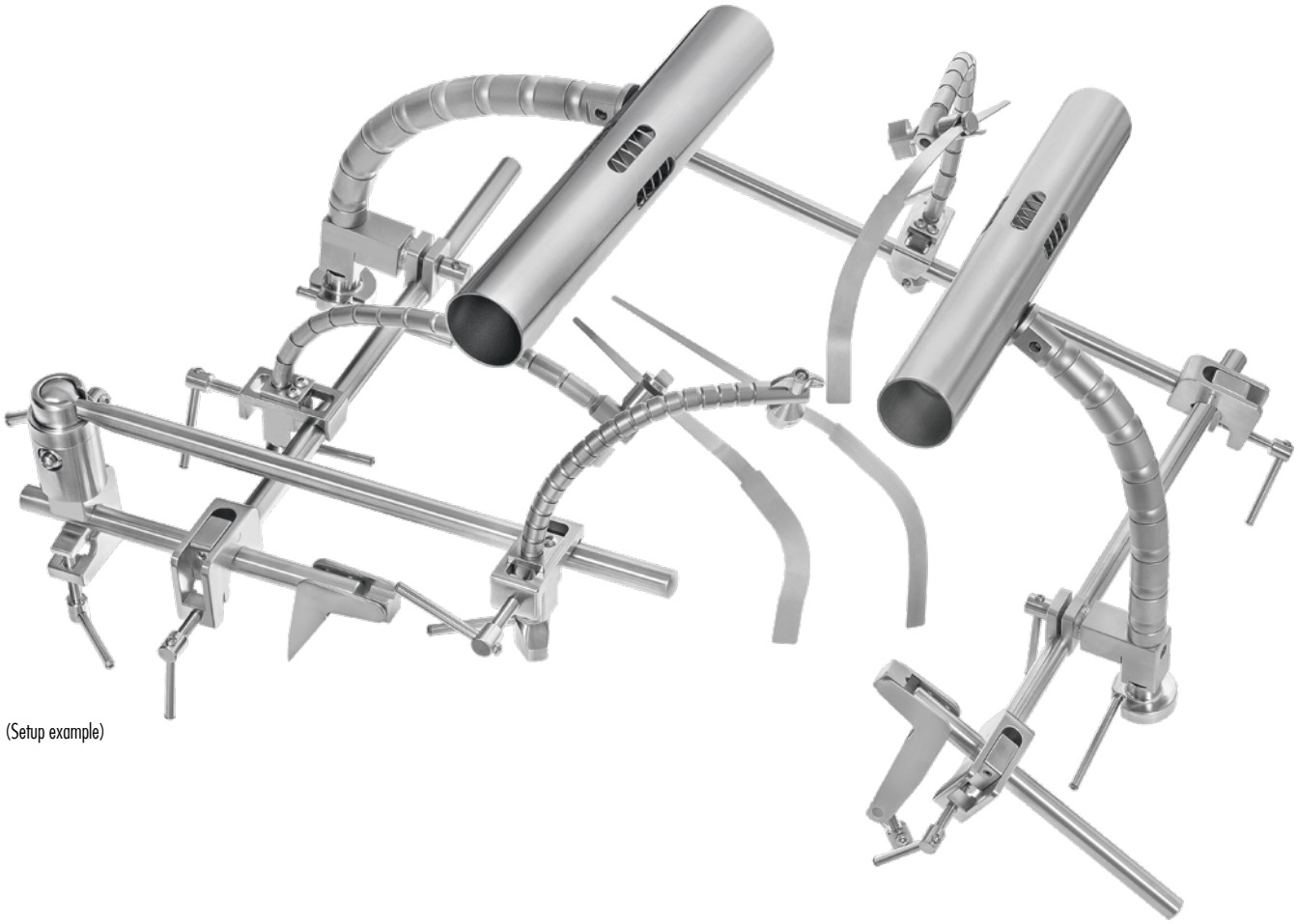
Galea Hook, 310mm, 12 1/4"

Ø 7mm	250-066-020

410mm, 16"

Ø 9mm	250-066-022

GRUENBERG RETRACTOR & HAND REST SYSTEM

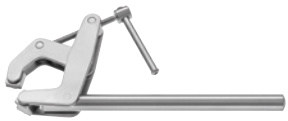


(Setup example)

250-050-150
GRUENBERG
Retractor Kit, consisting of:

Primary Bar (2x)	250-050-007
Secodary Bar (4x)	250-050-002
Large Arm Retractor (4x)	250-050-009
Blade 1.6 x 19mm (1x)	250-050-050
Blade 2.0 x 10mm (1x)	250-050-051
Blade 3.0 x 13mm (1x)	250-050-052
Blade 4.0 x 16mm (1x)	250-050-053
Blade 6.0 x 19mm (1x)	250-050-054
Hand Rest (1x)	250-050-012
Pattie Tray (1x)	250-066-513

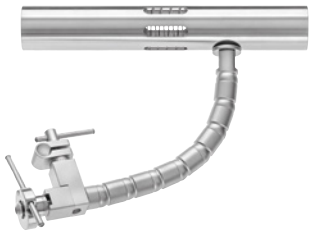
GRUENBERG RETRACTOR & HAND REST SYSTEM

A 

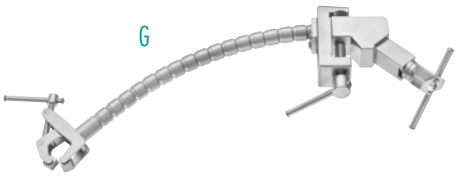
B 

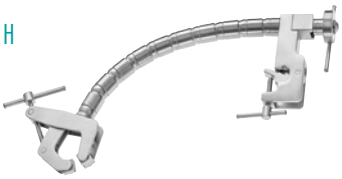
C 

D 

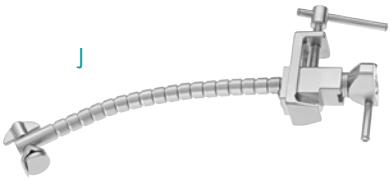
E 

F 

G 

H 

I 

J 

K 

L 

M 

GRUENBERG
Single Parts

A	Primary Bar, 152mm	250-050-007
B	Secondary Bar, 305mm	250-050-002
C	Floating Secondary Bar	250-050-003
D	Short Coupler	250-050-004
E	Hand Rest	250-050-012
F	Small Instrument Holder (up to 8mm)	250-050-030
G	Large Instrument Holder (up to 25mm)	250-050-031
H	Extra Large Instrument Holder (up to 51mm)	250-050-032
I	Micro Instrument Holder (up to 3mm)	250-050-033
J	Arm Retractor, short (165mm)	250-050-011
	Arm Retractor, large (240mm)	250-050-009

K	Blade, 1.6 x 19mm	250-050-050
	Blade, 2.0 x 10mm	250-050-051
	Blade, 3.0 x 13mm	250-050-052
	Blade, 4.0 x 16mm	250-050-053
	Blade, 6.0 x 19mm	250-050-054
L	Pattie Tray with towel clamps, 75 x 170 x 20mm	250-066-513
M	Sterilization Tray with 4 components, 480 x 253 x 70mm	600-050-514



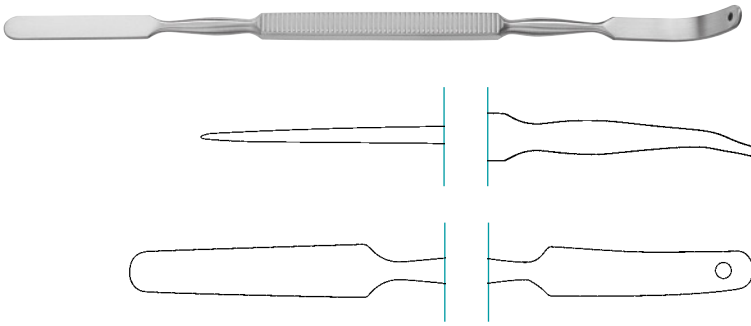


A MF Headrest System, complete with skull clamp

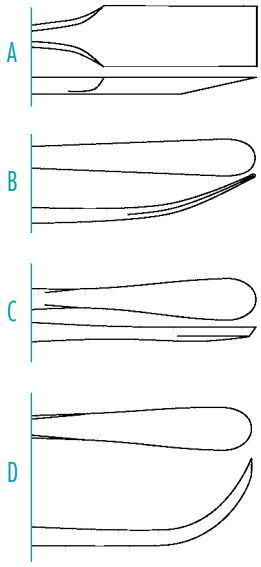
Aluminium	250-140-100

B MF Headrest System, with horseshoe headrest

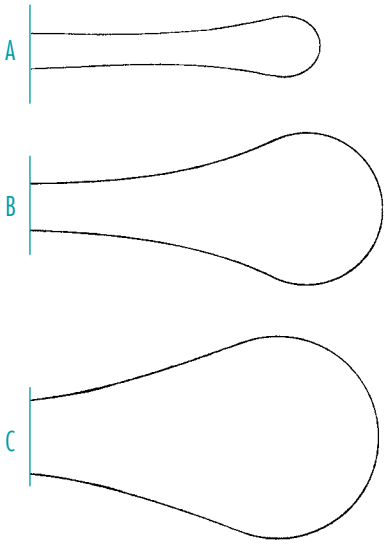
Aluminium	250-140-105











MCDONALD
Elevator, straight / curved

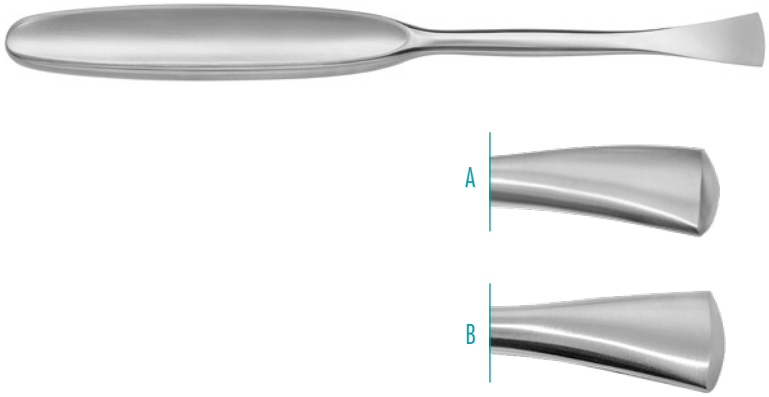
190mm, 7 1/2"	210-527-190

ADSON
Elevator, 8mm, 170mm, 6 2/3"

A straight, sharp	210-484-170
B curved, blunt	210-485-170
7mm	
C straight, semi-sharp	210-486-170
D curved, semi-sharp	210-487-170

HOEN
Periosteal Elevator
7mm

A 160mm, 6 1/4"	210-455-007
15mm	
B 185mm, 7 1/4"	210-455-015
20mm	
C 190mm, 7 1/2"	210-455-020

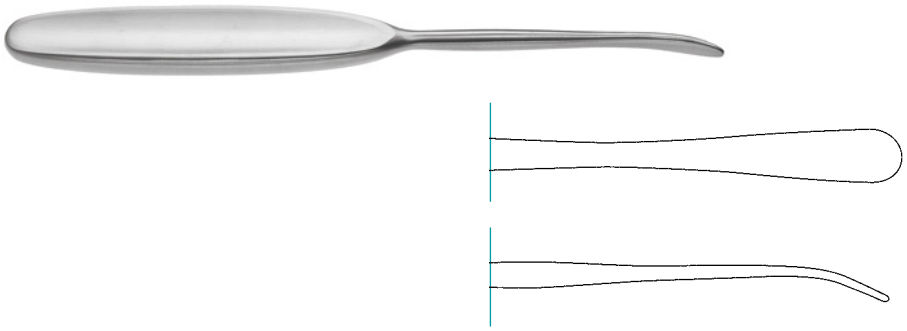


CUSHING
Periosteal Elevator
sharp end with rounded edge, 15mm

A 190mm, 7 1/2"	210-460-001

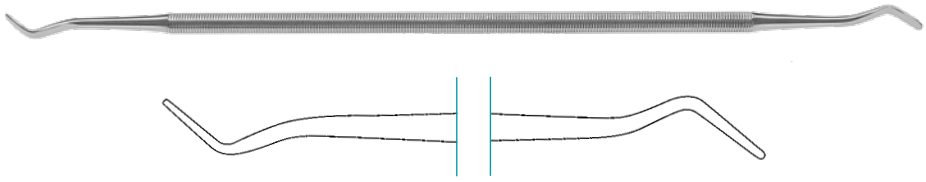
sharp end with square edge

B 190mm, 7 1/2"	210-460-003



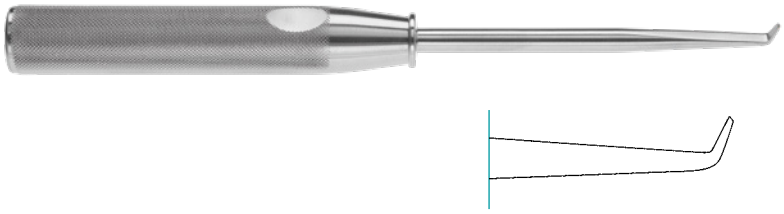
CUSHING LITTLE JOKER
Periosteal Elevator

150mm, 6"	210-488-150
190mm, 7 1/2"	210-488-190



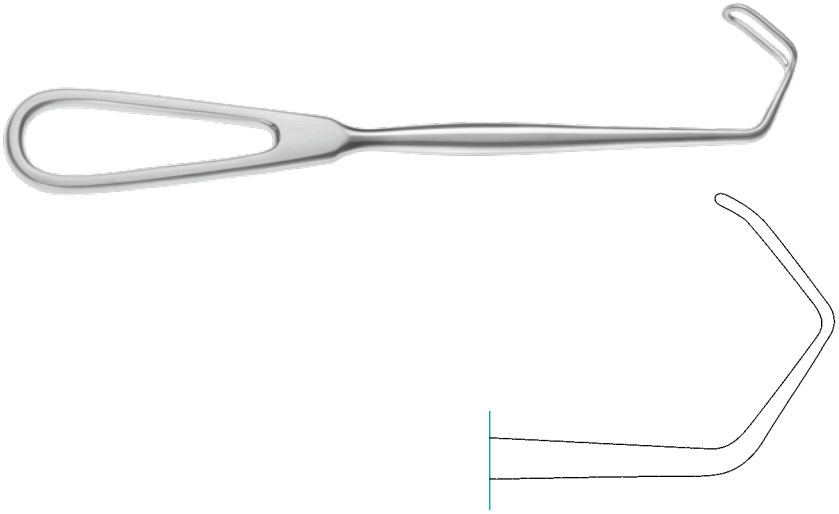
WOODSON
Elevator and Spatula, semi-sharp, 3mm,
flat end 4mm

254mm 10"	250-746-250



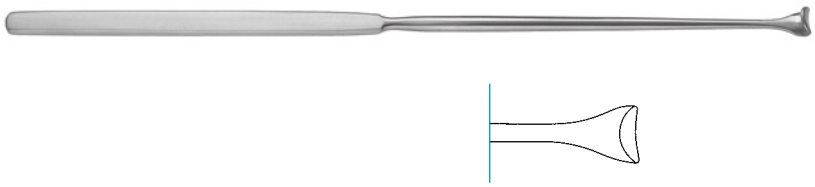
CLOWARD
Osteophyte Elevator, round handle,
90° curved tip, sharp

200mm, 8″	259-252-000



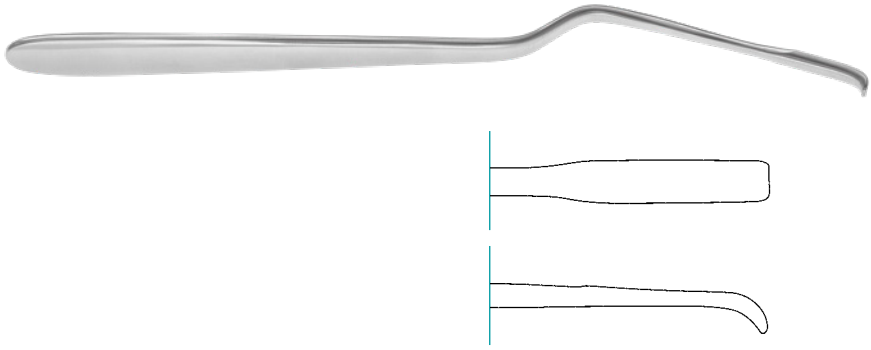
CUSHING
Retractor
22mm wide, open handle

210mm, $8^{1/4}$″	170-237-210



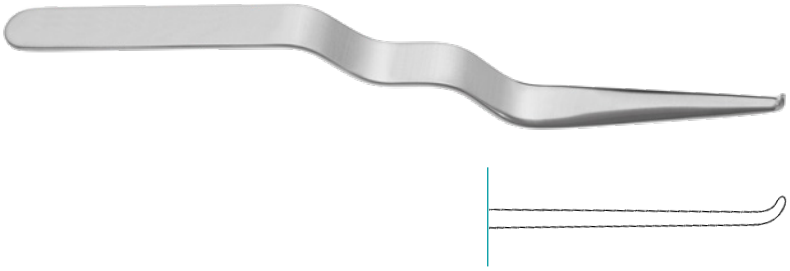
LOVE
Nerve Root Retractor
190mm, $7^{1/2}$″

straight	250-694-190
45°	250-695-190
90°	250-697-190



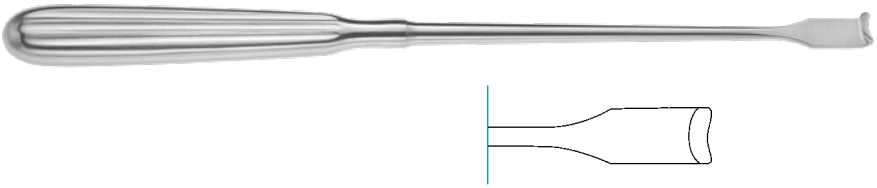
D'ERRICO
Nerve Spatula, bayonet shaped,
6mm wide

230mm, 9″	250-689-230



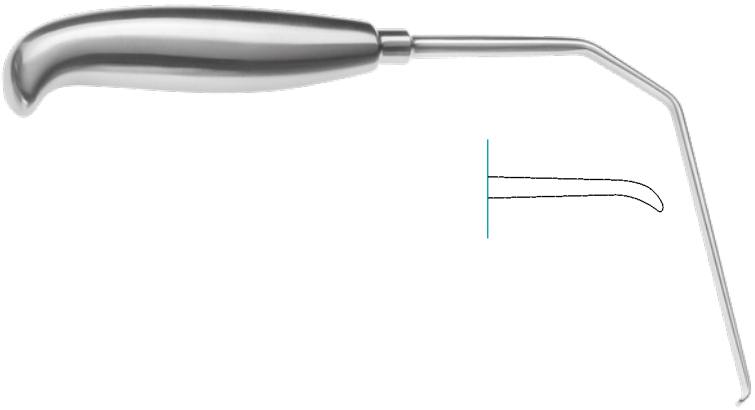
KRAYENBÜHL
Nerve Root Retractor
with guide groove, double bayonet shaped

210mm, 8 1/4"	250-688-210
245mm, 9 2/3"	250-688-245



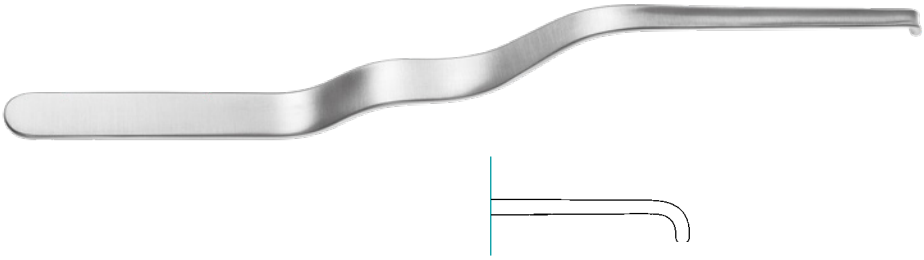
SCOVILLE
Nerve Root Retractor, 230mm, 9"

straight	250-698-230
45°	
90°	



HESS
Nerve Root Retractor, angled
175mm, 6 7/8"

3mm	250-690-030
4mm	250-690-040
5mm	250-690-050
7mm	250-690-070



CASPAR
Nerve Root Retractor
240mm, 9 1/2"

4mm	250-690-240
6mm	250-691-240
8mm	250-692-240
10mm	250-693-240



A Forward straight



#0 #00 #000 #0000 Cortical Bone Cutter

B Forward angled



#0 #00 #000 #0000 Cortical Bone Cutter

C Backward straight



#0 #00 #000 #0000 Cortical Bone Cutter

D Backward angled



#0 #00 #000 #0000 Cortical Bone Cutter

E Hooks



Nerve Hook | Micro Nerve Hook | Cervical Bone Waxer

Microdiscectomy
Cervical Curette, 210mm, 8 1/4"

A forward straight

#0	259-100-100
#00	259-100-200
#000	259-100-300
#0000	259-100-400
Cortical Bone Cutter	259-100-500

B forward angled

#0	259-101-100
#00	259-101-200
#000	259-101-300
#0000	259-101-400
Cortical Bone Cutter	259-101-500

C backward straight

#0	259-102-100
#00	259-102-200
#000	259-102-300
#0000	259-102-400
Cortical Bone Cutter	259-102-500

D backward angled

#0	259-103-100
#00	259-103-200
#000	259-103-300
#0000	259-103-400
Cortical Bone Cutter	259-103-500

E Hooks

Nerve Hook	259-104-001
Micro Nerve Hook	259-104-002
Cervical Bone Waxer	259-104-003





A Forward straight



#0 #1 #2



B Forward angled



#0 #1 #2



C Forward down angled



#0 #1 #2



D Backward straight



#0 #1 #2



E Backward angled



#0 #1 #2



F Backward down angled



#0 #1 #2

G Instruments



Penfield Dissector #1 | Penfield Dissector #2 | Nerve Hook | Penfield Dissector #4 | Bone Waxer | Spine Probe

Microdiscectomy
Lumbar Curette, 240mm, 9 1/2"

A forward straight	
#0	259-120-100
#1	259-120-001
#2	259-120-002

B forward angled	
#0	259-121-100
#1	259-121-001
#2	259-121-002

C forward down angled	
#0	259-122-100
#1	259-122-001
#2	259-122-002

D backward straight	
#0	259-124-100
#1	259-124-001
#2	259-124-002

E backward angled	
#0	259-125-100
#1	259-125-001
#2	259-125-002

F backward down angled	
#0	259-126-100
#1	259-126-001
#2	259-126-002

G Instruments	
Penfield Dissector #1	259-127-001
Penfield Dissector #2	259-127-002
Nerve Hook	259-127-003
Penfield Dissector #4	259-127-004
Bone Waxer	259-127-005
Spine Probe	259-127-006



A Forward straight



#0 #00 #000 #0000 Cortical Bone Cutter

B Forward angled



#0 #00 #000 #0000 Cortical Bone Cutter

C Backward straight



#0 #00 #000 #0000 Cortical Bone Cutter

D Backward angled



#0 #00 #000 #0000 Cortical Bone Cutter

E Hooks



Nerve Hook | Micro Nerve Hook | Cervical Bone Waxer

Microdiscectomy
Cervical Curette, 240mm, 9 1/2"

A forward straight	
#0	259-110-100
#00	259-110-200
#000	259-110-300
#0000	259-110-400
Cortical Bone Cutter	259-110-500
B forward angled	
#0	259-111-100
#00	259-111-200
#000	259-111-300
#0000	259-111-400
Cortical Bone Cutter	259-111-500
C backward straight	
#0	259-112-100
#00	259-112-200
#000	259-112-300
#0000	259-112-400
Cortical Bone Cutter	259-112-500
D backward angled	
#0	259-113-100
#00	259-113-200
#000	259-113-300
#0000	259-113-400
Cortical Bone Cutter	259-113-500
E Hooks	
Nerve Hook	259-114-001
Micro Nerve Hook	259-114-002
Cervical Bone Waxer	259-114-003



259-100-000
Cervical Microdiscectomy Set
consisting of:

	259-100-200
	259-100-300
	259-100-400
	259-101-100
	259-101-300
	259-101-400
	259-102-300
	259-102-400
	259-103-200
	259-103-300
	259-104-001
	259-104-002
	600-404-000

259-110-000
Cervical Microdiscectomy Set
consisting of:

	259-110-100
	259-110-300
	259-110-400
	259-111-100
	259-111-200
	259-111-300
	259-112-100
	259-112-200
	259-112-300
	259-113-100
	259-113-300
	259-113-400
	600-404-000

259-120-000
Lumbar Microdiscectomy Set
consisting of:

	259-120-001
	259-120-002
	259-121-001
	259-121-002
	259-122-001
	259-122-002
	259-124-002
	259-125-001
	259-126-100
	259-126-001
	259-127-001
	259-127-004
	600-404-000

Case for Micro Curettes,
12 Instruments (not illustrated)

265 x 255 x 45mm	600-404-000





A Forward angled



#1 #2 #3 #4 #5



B Backward angled



#1 #2 #3 #4 #5

C Dissectors



3mm 5mm

Micro Spinal Curette, 250mm, $9^{7/8}$″

A forward angled	
#1	259-130-001
#2	259-130-002
#3	259-130-003
#4	259-130-004
#5	259-130-005
B backward angled	
#1	259-131-001
#2	259-131-002
#3	259-131-003
#4	259-131-004
#5	259-131-005
C Dissector, straight	
3mm	259-132-003
5mm	259-132-005



Curette measurements	
Overall length	320mm, 12 1/2″
Handle length	200mm, 8″
Working length	125mm, 5″
Handle diameter	28mm, 1 1/10″

XL Curette measurements	
Overall length	340mm, 13 1/3″
Handle length	220mm, 8 2/3″
Working length	125mm, 5″
Handle diameter	32mm, 1 1/3″



Cup Curette Set with 12 Curettes
consisting of:

straight		
A	7mm	259-152-007
B	9mm	259-152-009
C	11mm	259-152-011
D	13mm	259-152-013
E	15mm	259-152-015
F	17mm	259-152-017
G	19mm	259-152-019
forward angled		
H	7mm	259-152-107
I	9mm	259-152-109
J	11mm	259-152-111
backward angled		
K	7mm	259-152-207
L	9mm	259-152-209

Cup Curette Set with 12 XL Curettes
consisting of:

straight		
A	7mm	259-155-007
B	9mm	259-155-009
C	11mm	259-155-011
D	13mm	259-155-013
E	15mm	259-155-015
F	17mm	259-155-017
G	19mm	259-155-019
forward angled		
H	7mm	259-155-107
I	9mm	259-155-109
J	11mm	259-155-111
backward angled		
K	7mm	259-155-207
L	9mm	259-155-209





Chisel measurements

Overall length	270mm, $10^{2/3}$″
Handle length	145mm, $5^{3/4}$″
Working length	125mm, 5″
Handle diameter	32mm, $1^{1/3}$″

Chisel Set with 6 Chisels, straight
consisting of:

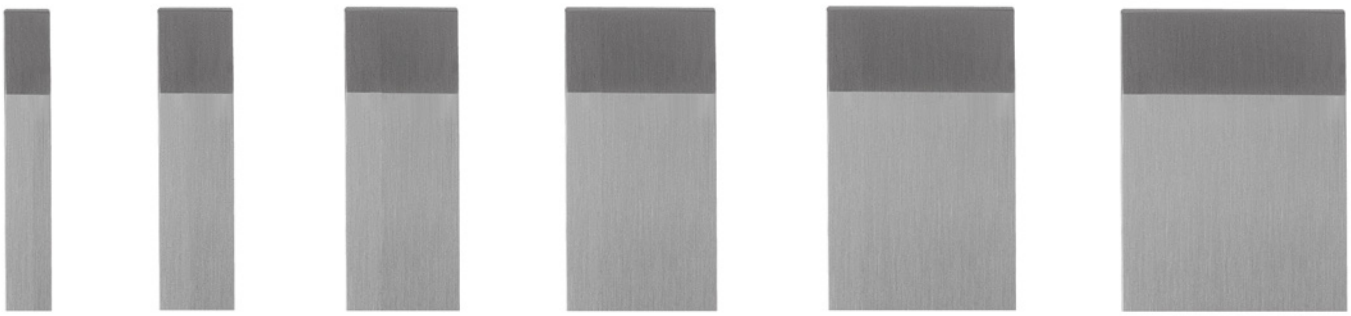
A	6mm	259-151-006
B	10mm	259-151-010
C	15mm	259-151-015
D	20mm	259-151-020
E	25mm	259-151-025
F	30mm	259-151-030
Sterilizing Case		259-151-002





Chisel Set with 6 Chisels, curved
consisting of:

A	6mm	259-151-106
B	10mm	259-151-110
C	15mm	259-151-115
D	20mm	259-151-120
E	25mm	259-151-125
F	30mm	259-151-130
Sterilizing Case		259-151-002



A B C D E F



Ring Curette measurements	
Overall length	320mm, 12 1/2″
Handle length	200mm, 8″
Working length	125mm, 5″
Handle diameter	28mm, 1 1/10″

XL Ring Curette measurements	
Overall length	340mm, 13 1/3″
Handle length	220mm, 8 2/3″
Working length	125mm, 5″
Handle diameter	32mm, 1 1/3″

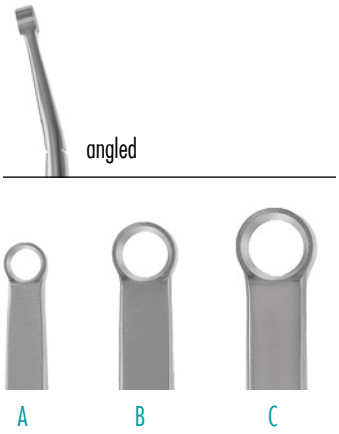
Ring Curette Set with 6 Ring Curettes
consisting of:

straight		
A	6mm	259-153-006
B	8mm	259-153-008
C	11mm	259-153-010
angled		
A	6mm	259-153-106
B	8mm	259-153-108
C	11mm	259-153-110

Ring Curette Set with 6 XL Ring Curettes
consisting of:

straight		
A	6mm	259-154-006
B	8mm	259-154-008
C	11mm	259-154-010
angled		
A	6mm	259-154-106
B	8mm	259-154-108
C	11mm	259-154-110









Elevator measurements

Overall length	320mm, 12 1/2″
Handle length	200mm, 8″
Working length	125mm, 5″
Handle Diameter	28mm, 1 1/10″

XL Elevator measurements

Overall length	340mm, 13 1/3″
Handle length	220mm, 8 2/3″
Working length	125mm, 5″
Handle diameter	32mm, 1 1/3″

Elevator Set with 6 Elevators consisting of:

A	10mm	259-157-010
B	15mm	259-157-015
C	20mm	259-157-020
D	25mm	259-157-025
E	30mm	259-157-030
F	35mm	259-157-035

Elevator Set with XL 6 Elevators consisting of:

A	10mm	259-158-010
B	15mm	259-158-015
C	20mm	259-158-020
D	25mm	259-158-025
E	30mm	259-158-030
F	35mm	259-158-035



A



B



C



D



E

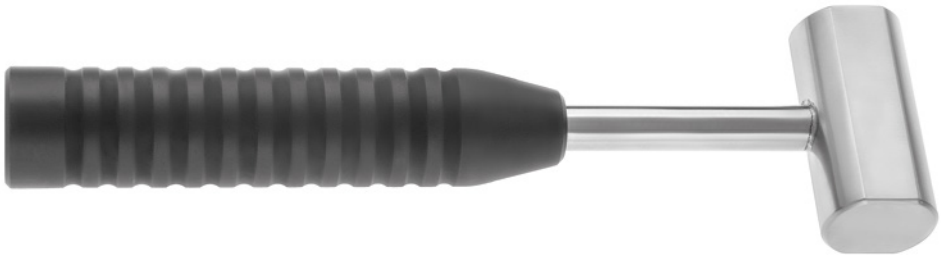


F



SMITH PETERSON
Mallet with brass head, aluminium handle,
∅ 38mm, 282g

Overall length 165mm, $6^{1/2}$″	259-149-165



Mallet, large, ∅ 31.8mm, 340g

Overall length 247mm, $9^{2/3}$″	259-149-002



Mallet, small, ∅ 22.5mm, 193g

Overall length 241mm, $9^{1/3}$″	259-149-001



CLOWARD
Retractor, 112mm handle length

70x13mm	259-260-001
75x18mm	259-260-002
75x20mm	259-260-003
75x23mm	259-260-004



TAYLOR
Spinal Retractor, 185mm, 7 1/4"

70x30mm	210-571-165
85x30mm	210-572-165
100x30mm	210-573-165



HIBBS
Retractor, Fig. 0, 230mm, 9"

25x13mm	170-200-000

Fig. 1, 230mm, 9"

75x25mm	170-200-001

Fig. 2, 240mm, 9 1/2"

80x25mm	170-200-002



HIBBS
2-piece Retractor Set
19x50mm blade

235mm, $9^{1/4}$"	250-979-235



INGE
Lamina Spreader, with teeth

170mm, $6^{2/3}$"	250-975-170
270mm, $10^{2/3}$"	250-975-270



Lamina Spreader

265mm, $10^{1/2}$"	250-978-265



CUSHING LANDOLT
Specula for transsphenoidal hypophysectomy, black finishing

70 x 15mm	250-150-100
90 x 15mm	250-150-101
100 x 15mm	250-150-102



PAPAVERO CASPAR
Specula for trans-sphenoidal hypophysectomy, stainless steel

80 x 11mm	250-150-589
90 x 13mm	250-150-590
100 x 15mm	250-150-591

black finishing

80 x 11mm	250-150-689
90 x 13mm	250-150-690
100 x 15mm	250-150-691

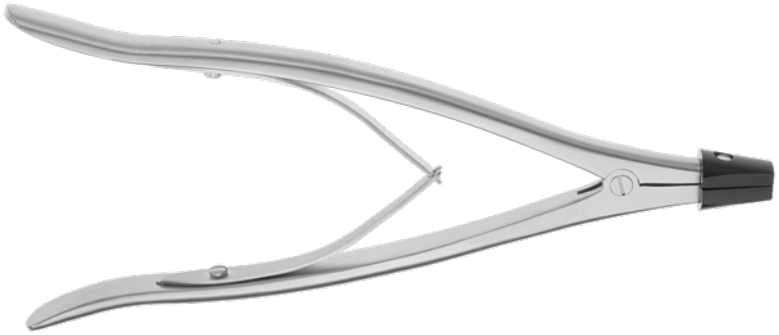
Key for specula

	250-150-592



Transnasal Speculum, stainless steel, matted

80 x 9mm	250-150-280
90 x 9mm	250-150-290
100 x 9mm	250-150-300



LANDOLT
Spreader for specula

210mm, $8^{1/4}$"	250-150-210



MEYERDING
Laminectomy Retractor, 200mm, 8"

25x32mm blade	170-791-001
25x54mm blade	170-791-002
19x60mm blade	170-791-003
25x60mm blade	170-791-004



MEYERDING
Hemi Laminectomy Retractor, 180mm, 7"
10mm wide blade, solid blade left

50mm	170-792-001
60mm	170-792-002
70mm	170-792-006

solid blade right

50mm	170-793-001
60mm	170-793-008
70mm	170-793-007

20mm wide blade, solid blade left

50mm	170-792-004
60mm	170-792-003
70mm	170-792-005

solid blade right

50mm	170-793-004
60mm	170-793-005
70mm	170-793-002



MARKHAM MEYERDING
Laminectomy Retractor, 165mm, $6^{1/2}$"
solid blade left

25x65mm	170-790-007

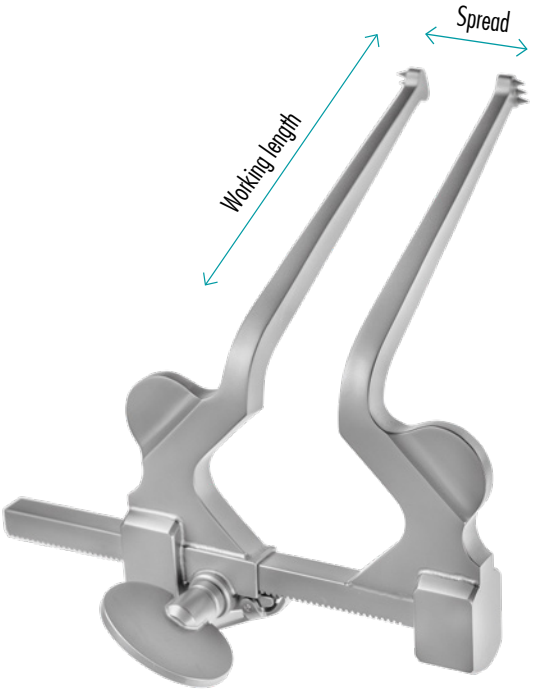
solid blade right

25x65mm	170-790-008



Vertebral Distractor, 127mm length

18mm spread	250-259-018



3 Tip

Vertebral Distractor, with 3 tips,
70mm working length

90mm spread	250-259-070



CLOWARD
Lamina Spreader

160mm, $6^{1/4}$″	250-973-160



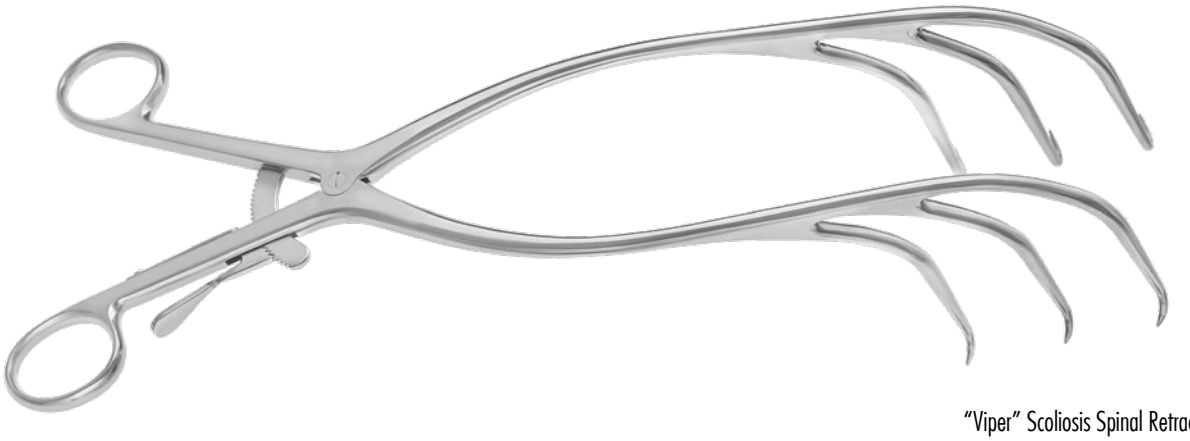
CLOWARD
Self-Retaining Retractor Set, 150mm, 6"
complete with 5 blades

58mm spread	170-780-160

Blades

40mm, $1^{5/8}$"	170-780-040
45mm, $1^{6/8}$"	170-780-045
50mm, 2"	170-780-050
55mm, $2^{1/8}$"	170-780-055
60mm, $2^{3/8}$"	170-780-060





"Viper" Scoliosis Spinal Retractor,
80mm deep, 3 prongs, rigid

300mm, $11^{7/8}$"	170-800-300



CLOWARD
Self-Retaining Retractor

250mm, 9 7/8″	170-774-250

Blades (pair)

40mm, 1 5/8″	170-774-040
45mm, 1 6/8″	170-774-045
50mm, 2″	170-774-050
55mm, 2 1/8″	170-774-055
60mm, 2 3/8″	170-774-060

SCOVILLE DISTRACTOR



SCOVILLE HAVERVIELD

Spreader, rigid arms, without valves	
171mm spread	170-906-000
hinged arms, without valves	
171mm spread	170-906-001



Hook, blunt	
51mm	170-906-102
75mm	170-906-104



Hook, with crossbar	
51mm	170-906-106
75mm	170-906-108



Blade, toothed	
26 x 63mm	170-906-122
51 x 63mm	170-906-124
32 x 66mm	170-906-126
26 x 89mm	170-906-128



Blade, forked, blunt	
38 x 41mm	170-906-144
48 x 66mm	170-906-145



MEYERDING
Blade, toothed

26 x 61mm	170-906-162
26 x 67mm	170-906-164
51 x 89mm	170-906-166



HIBBS
Blade, toothed

26 x 51mm	170-906-182
51x 51mm	170-906-184
26 x 76mm	170-906-190
38 x 76mm	170-906-192
51 x 76mm	170-906-194
26 x 101mm	170-906-196
51 x 101mm	170-906-198



TAYLOR
Blade

32 x 76mm	170-906-120
32 x 101mm	170-906-121



TAYLOR
Blade, forked, sharp

38 x 44mm	170-906-132



TAYLOR
Blade, forked, blunt

51 x48mm	170-906-141
63 x 63mm	170-906-142
58 x 82mm	170-906-143

CASPAR CERVICAL DISTRACTOR



CASPAR
Cervical Distractor System



CASPAR
Cervical Distractor with 110mm rack
for two-level distraction

left approach	259-190-110
right approach	259-190-111

with 130mm rack
for multi-level distraction

left approach	259-190-130
right approach	259-190-131



CASPAR
Drill Guide

left	259-190-200
right	259-190-300

CASPAR CERVICAL DISTRACTOR



CASPAR
Drill Bit, 2.35mm shank, 148mm overall length
∅ 1.7mm

8mm drilling depth	259-190-408
14mm drilling depth	259-190-414



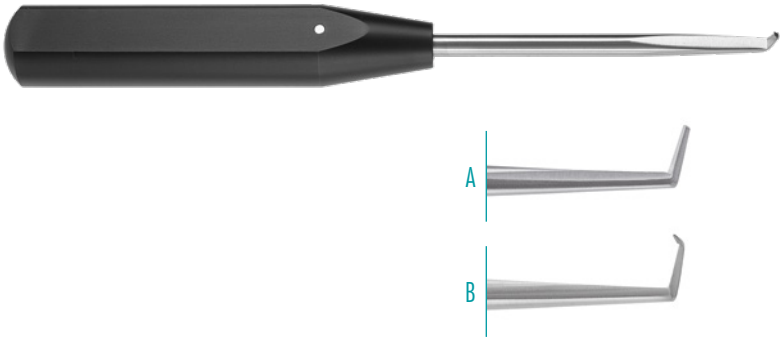
CASPAR
Distraction Screw, self-drilling

12mm	259-190-512
14mm	259-190-514
16mm	259-190-516
18mm	259-190-518



CASPAR
Screw Driver, 200mm overall length

259-190-550



CASPAR
Dissector, 205mm, 8 1/4"

A	259-185-917
B	259-185-918

CASPAR CERVICAL RETRACTOR SYSTEM



CASPAR
CCR Basis Retractor, double hinged arms, reverse butterfly screw, distal hinge made of titanium

259-180-490



CASPAR
Basis Counter Retractor, double hinged arms, distal hinge made of titanium

259-180-470



CASPAR
Counter Retractor, distal hinge made of titanium

259-180-480

CASPAR CERVICAL RETRACTOR SYSTEM



CASPAR
Side Load Handle for use with titanium blades

259-180-100



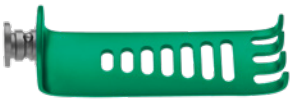
CASPAR
Caspar Handle for blades, side load,
cannulated, with Luer Lock, ratchet mechanism

259-180-101



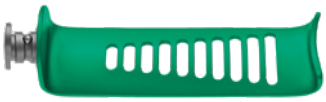
CASPAR
Depth Gauge

259-180-200



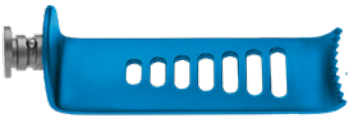
Titanium Medial/Lateral Blade, 4 prongs,
19mm width

25mm	259-180-125
30mm	259-180-130
35mm	259-180-135
40mm	259-180-140
45mm	259-180-145
50mm	259-180-150
55mm	259-180-155
60mm	259-180-160
65mm	259-180-165
70mm	259-180-170
75mm	259-180-175



Titanium Longitudinal Blade, blunt
19mm width

25mm	259-180-225
30mm	259-180-230
35mm	259-180-235
40mm	259-180-240
45mm	259-180-245
50mm	259-180-250
55mm	259-180-255
60mm	259-180-260
65mm	259-180-265
70mm	259-180-270
75mm	259-180-275



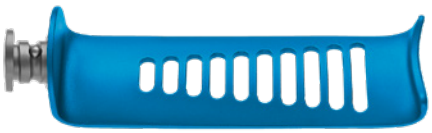
Titanium Lateral Blade, 8 teeth
24mm width

25mm	259-180-325
30mm	259-180-330
35mm	259-180-335
40mm	259-180-340
45mm	259-180-345
50mm	259-180-350
55mm	259-180-355
60mm	259-180-360
65mm	259-180-365
70mm	259-180-370
75mm	259-180-375



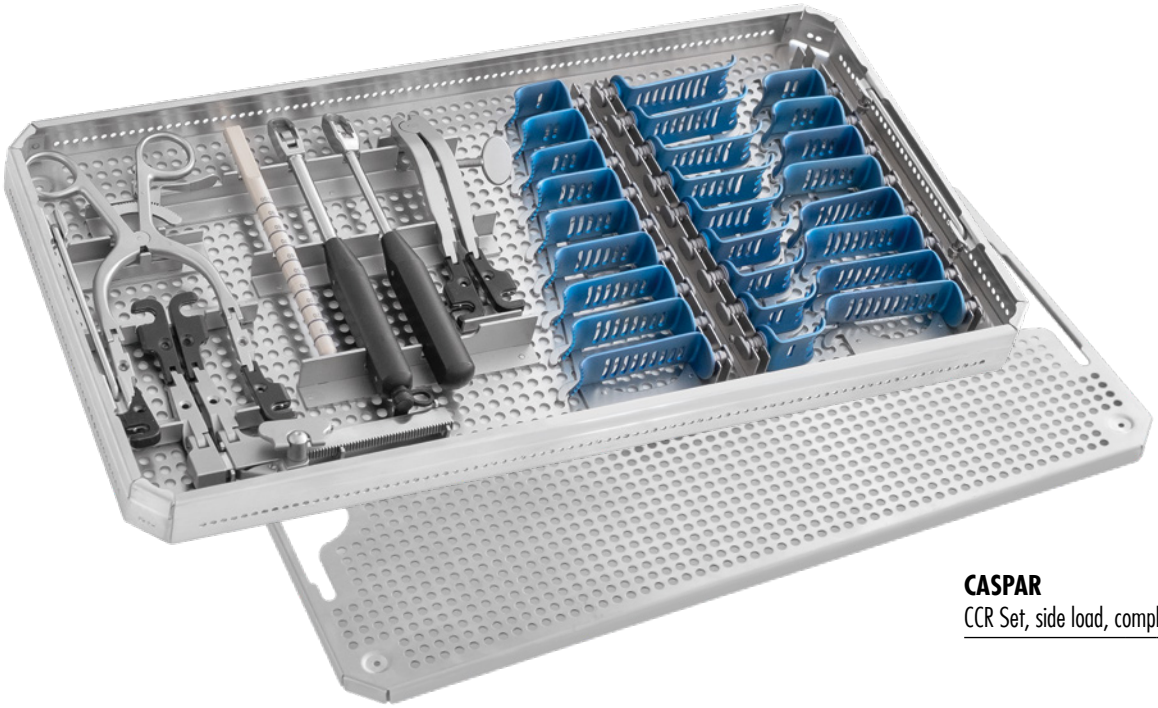
Titanium Medial Blade, 5 prongs,
24mm width

25mm	259-180-425
30mm	259-180-430
35mm	259-180-435
40mm	259-180-440
45mm	259-180-445
50mm	259-180-450
55mm	259-180-455
60mm	259-180-460
65mm	259-180-465
70mm	259-180-471
75mm	259-180-475

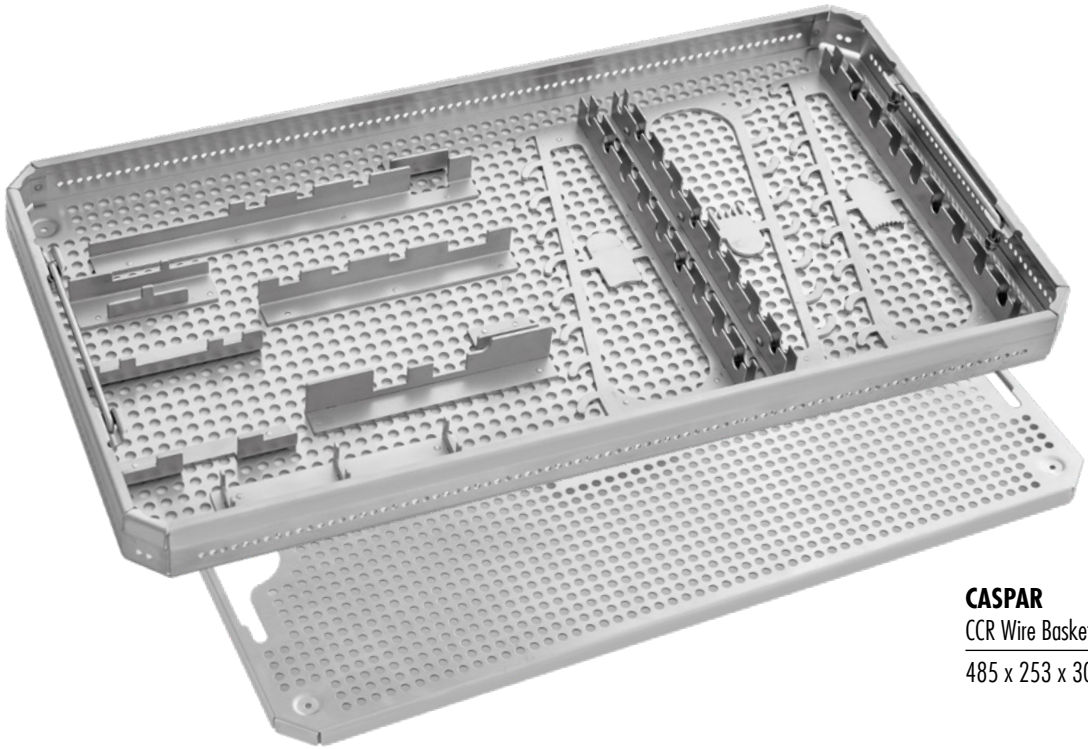


Titanium Longitudinal Blade, blunt
24mm width

25mm	259-180-525
30mm	259-180-530
35mm	259-180-535
40mm	259-180-540
45mm	259-180-545
50mm	259-180-550
55mm	259-180-555
60mm	259-180-560
65mm	259-180-565
70mm	259-180-570
75mm	259-180-575

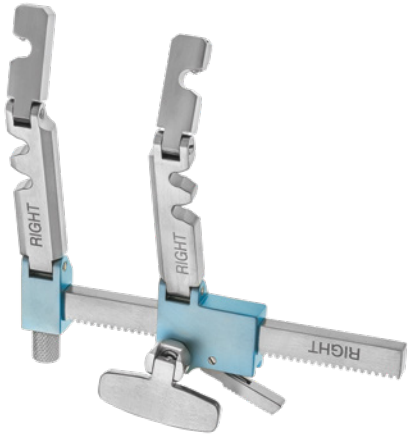


CASPAR
CCR Set, side load, complete
259-180-000



CASPAR
CCR Wire Basket, with lid
485 x 253 x 30mm 259-180-001

RAINBOW CERVICAL RETRACTOR



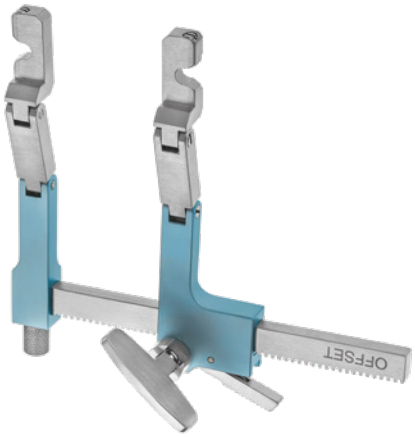
Rainbow Cervical Retractor Frame Right
Max opening: 65mm
Arm length: 80mm

259-188-001



Rainbow Cervical Retractor Frame Left
Max opening: 65mm
Arm length: 80mm

259-188-002



Rainbow Cervical Retractor Offset
Max opening: 80mm
Arm length: 80mm

259-188-003



Rainbow Lumbar Retractor Frame
with instrument coupling
Max opening: 80mm
Arm length: 80mm

259-188-101

RAINBOW CERVICAL RETRACTOR



Rainbow Cervical Toothed Rack
with finger screw

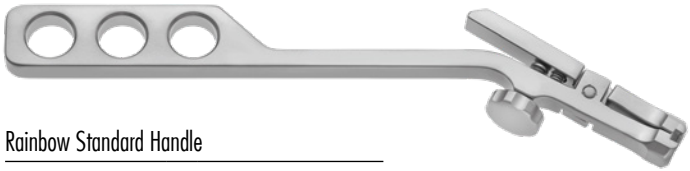
259-188-032



Rainbow Handle

259-188-005





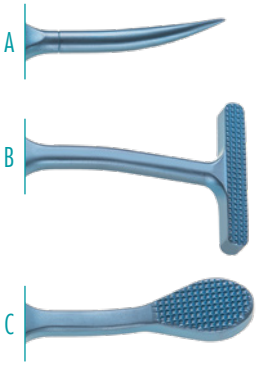
Rainbow Standard Handle

259-188-102

Rainbow Cervical Depth Gauge
with color markings

259-188-102





Rainbow Valve

A Sharp	259-188-029
B T-Valve	259-188-030
C Ligament	259-188-031



Rainbow Instrument Coupling

259-188-028

RAINBOW CERVICAL RETRACTOR









Ti

Rainbow Valve, 4 prongs

34mm	259-188-013
40mm	259-188-014
45mm	259-188-015
50mm	259-188-016
55mm	259-188-017
60mm	259-188-018
70mm	259-188-019
85mm	259-188-020

Ti

Rainbow Depth Valve, 4 prongs

40mm	259-188-007
47mm	259-188-008
55mm	259-188-009

Ti

Rainbow Depth Valve

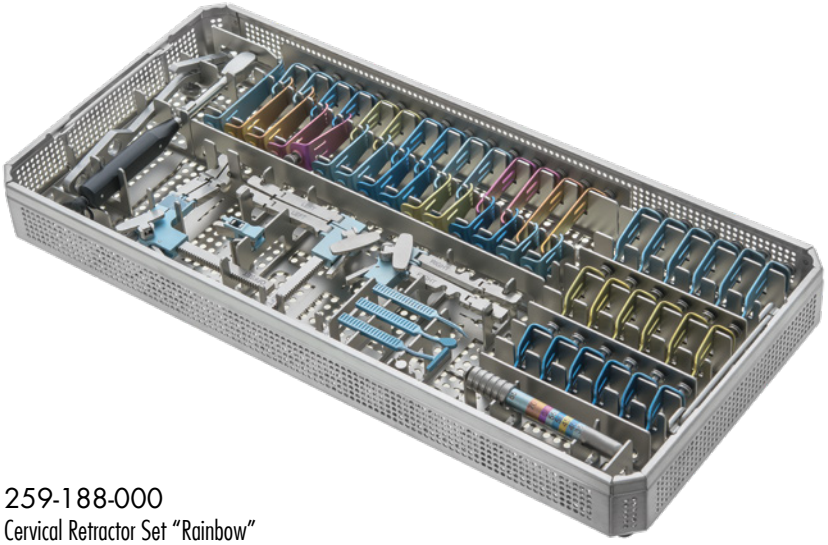
40mm	259-188-010
47mm	259-188-011
55mm	259-188-012

Ti

Rainbow Blunt Valve

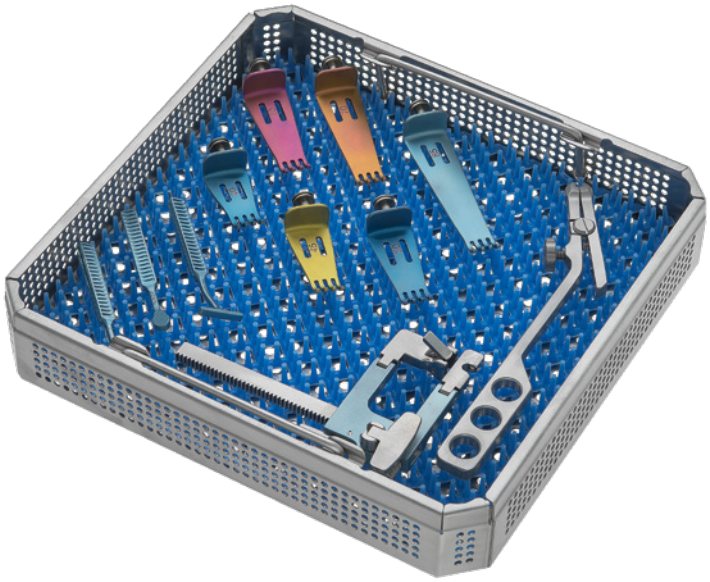
34mm	259-188-021
40mm	259-188-022
45mm	259-188-023
50mm	259-188-024
55mm	259-188-025
60mm	259-188-026
70mm	259-188-027

RAINBOW CERVICAL RETRACTOR



259-188-000
Cervical Retractor Set "Rainbow"
consisting of:

1x		259-188-001
1x		259-188-002
1x		259-188-003
1x		259-188-004
1x		259-188-005
1x		259-188-102
4x		259-188-007
4x		259-188-008
4x		259-188-009
2x		259-188-010
2x		259-188-011
2x		259-188-012
2x		259-188-013
2x		259-188-014
2x		259-188-015
2x		259-188-016
2x		259-188-017
2x		259-188-018
2x		259-188-019
1x		259-188-020
2x		259-188-021
2x		259-188-022
2x		259-188-023
2x		259-188-024
2x		259-188-025
2x		259-188-026
2x		259-188-027
1x		259-188-028
1x		259-188-029
1x		259-188-030
1x		259-188-031
1x		259-188-032
1x (Container only)		259-188-033



259-188-100
Lumbar Microdiscectomy Retractor Set
"Rainbow"
consisting of:

1x	259-188-101
1x	259-188-102
1x	259-188-029
1x	259-188-030
1x	259-188-031
1x	259-188-014
1x	259-188-015
1x	259-188-016
1x	259-188-018
1x	259-188-019
1x	259-188-020
1x (Container only)	259-188-133

CASPAR LUMBAR RETRACTOR



CLR Retractor side-load

259-190-610



CCR/CLR handle for blades,
with black PPSU handle

259-180-100



CCR/CLR handle for blades, cannulated with
luer-lock, with black PPSU handle

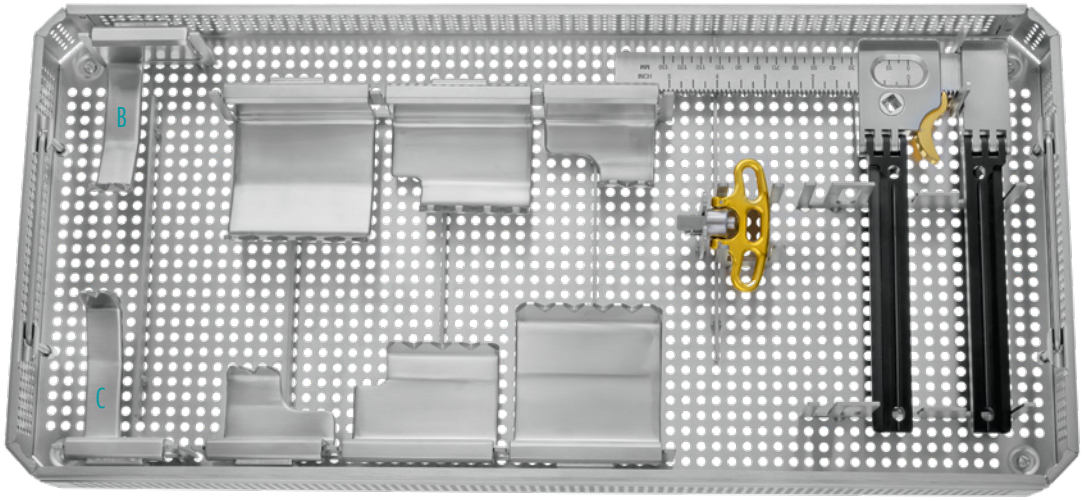
259-180-101



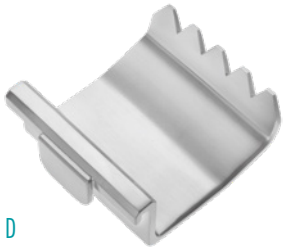
CCR/CLR Depth Gauge instrument, natural

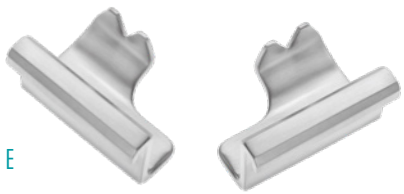
259-180-200

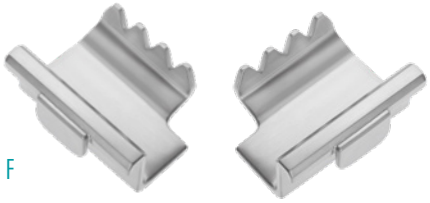
BUTTERFLY SPINE RETRACTOR SET




A


D


E


F

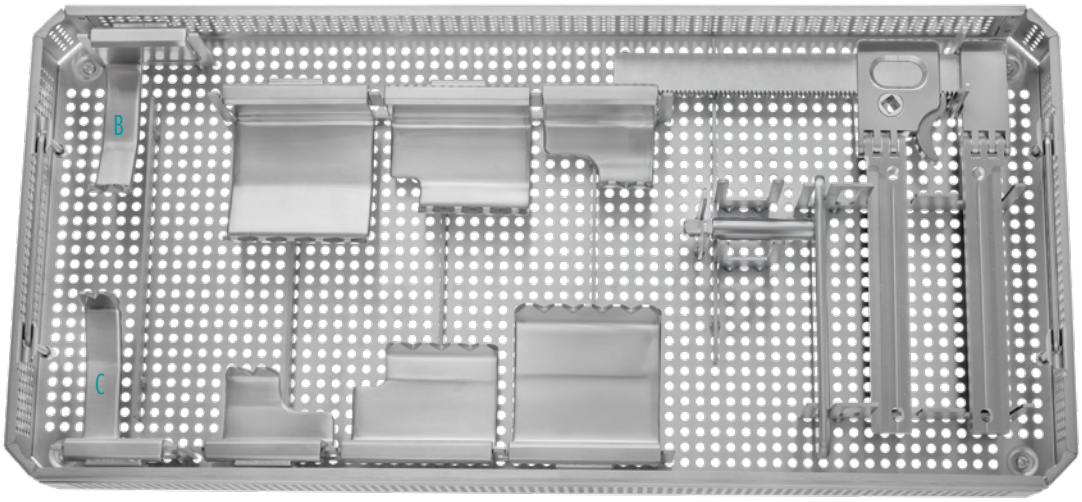
Lightweight, new designed set

with tray	290-300-340
without tray	290-300-330

B + C optional, not included in the set

Set consists of

Type	Width	Length	Quantity	
A Retractor			1	290-300-311
D Retractor 5 teeth	76mm	64mm	2	290-300-312
E Retractor left	31mm	38mm	1	290-300-313
E Retractor right	31mm	38mm	1	290-300-314
F Retractor left	57mm	44mm	1	290-300-315
F Retractor right	57mm	44mm	1	290-300-316




G

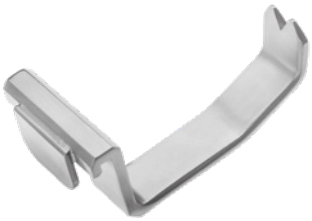
Standard Butterfly Set

with tray and lid	290-300-320
without tray and lid	290-300-310

B + C optional, not included in the set

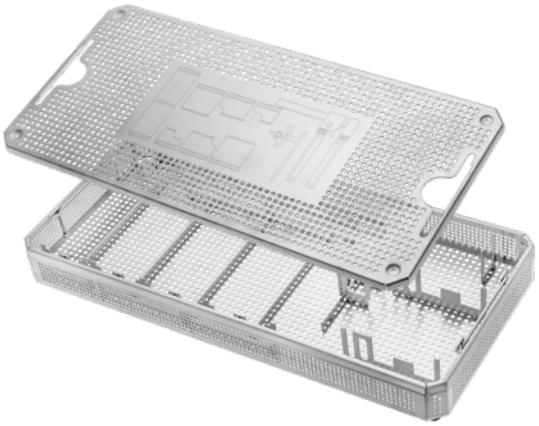
Set consists of

Type	Width	Length	Quantity	
G Standard Retractor			1	290-300-301
D Retractor 5 teeth	76mm	64mm	2	290-300-302
E Retractor left	31mm	38mm	1	290-300-303
E Retractor right	31mm	38mm	1	290-300-304
F Retractor left	57mm	44mm	1	290-300-305
F Retractor right	57mm	44mm	1	290-300-306



Optional Retractors, right/left angled (standard), for B + C

Width	Length	Quantity	
19mm	44mm	2	290-300-206
19mm	57mm	2	290-300-207
19mm	83mm	2	290-300-209
19mm	76mm	2	290-300-208
19mm	102mm	2	290-300-210
51mm	102mm	2	290-300-216 (not offset)



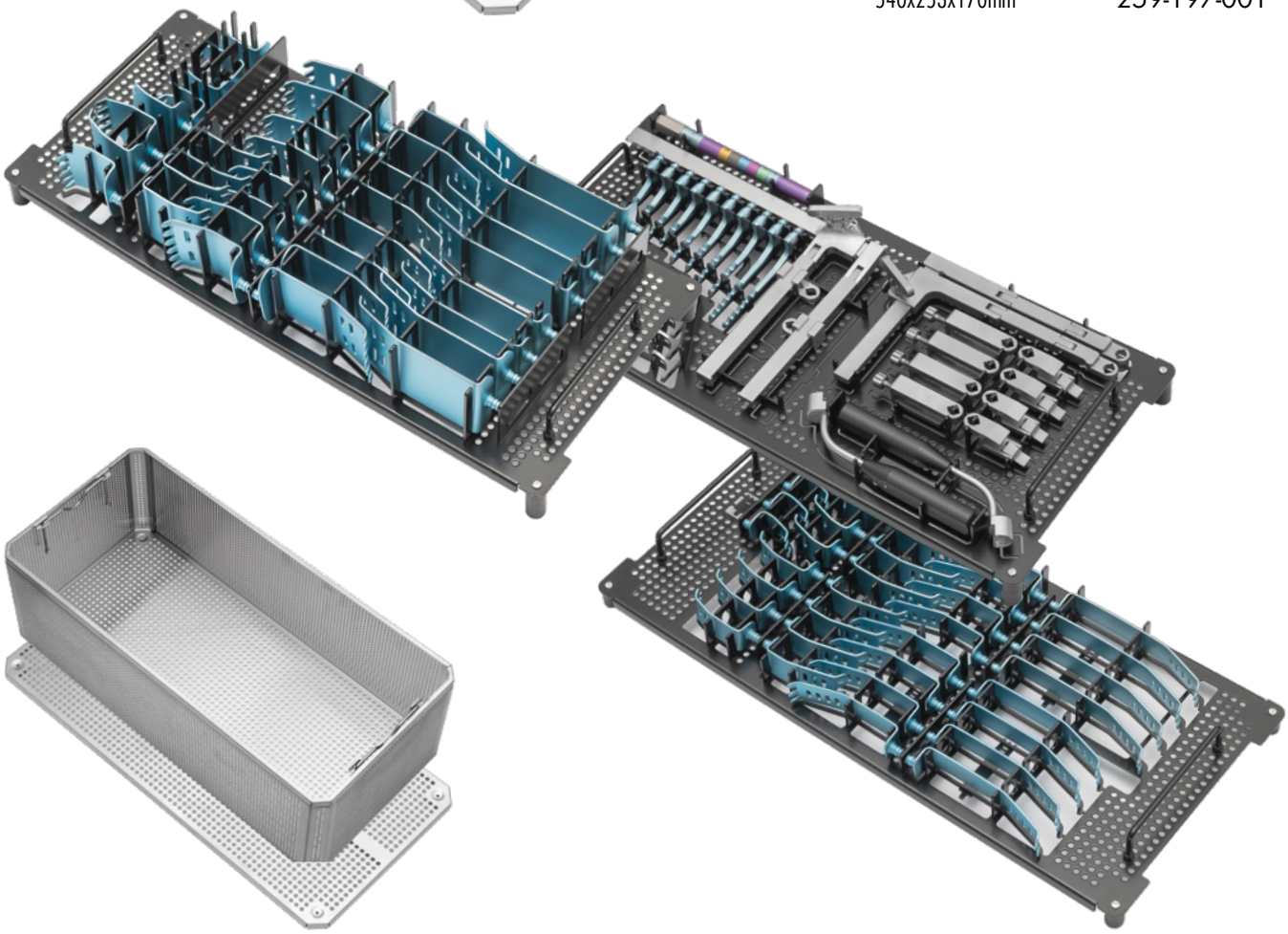
Tray with lid (fits for standard and lightweight)

290-300-350

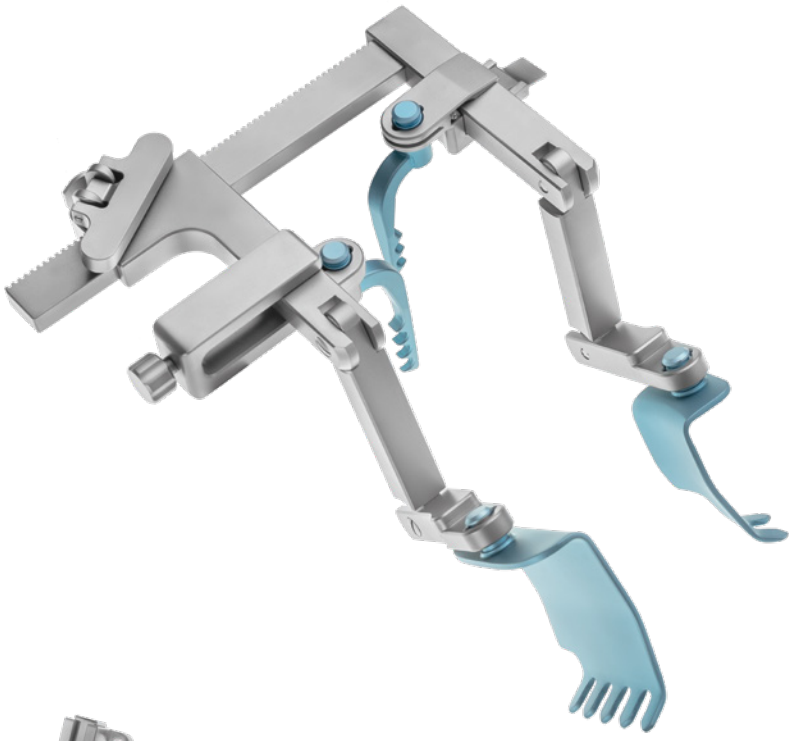
LT - SET FOR LUMBAR RETRACTION



LT Lumbar Retraction Set, complete with tray	259-197-000
Tray only	
540x253x170mm	259-197-001



LT - SET FOR LUMBAR RETRACTION







LT Retractor, hinged	
209mm spread	259-197-002

LT Retractor, double hinged	
102mm spread	259-197-003
209mm spread	259-197-004

LT - SET FOR LUMBAR RETRACTION



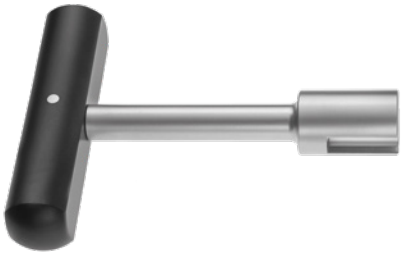
Blade connector with quick coupling

259-197-005



Blade connector with screw connection

259-197-006



T-Handle

259-197-007



Handle, manual blade retraction

259-197-009



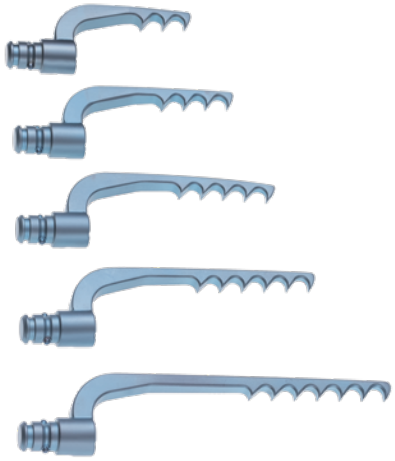
Depth Gauge

259-197-008

LT - SET FOR LUMBAR RETRACTION



LT Valve, 6 prongs, 60mm wide	
50mm depth	259-197-650
60mm depth	259-197-660
70mm depth	259-197-670
80mm depth	259-197-680
90mm depth	259-197-690
110mm depth	259-197-691
130mm depth	259-197-693



LT Hook, toothed	
34mm depth, 3 teeth	259-197-103
44mm depth, 4 teeth	259-197-104
54mm depth, 5 teeth	259-197-105
64mm depth, 6 teeth	259-197-106
84mm depth, 7 teeth	259-197-107





LT Valve, left, 2 prongs	
30mm width, 40mm depth	259-197-111
60mm width, 45mm depth	259-197-112
right, 5 prongs	
30mm width, 40mm depth	259-197-113
60mm width, 45mm depth	259-197-114

LT - SET FOR LUMBAR RETRACTION



LT Valve, 3 prongs, 24mm wide	
30mm depth	259-197-330
40mm depth	259-197-340
50mm depth	259-197-350
60mm depth	259-197-360
70mm depth	259-197-370
80mm depth	259-197-380
90mm depth	259-197-390
110mm depth	259-197-410
130mm depth	259-197-430



LT Valve, 5 prongs, 45mm wide	
50mm depth	259-197-550
60mm depth	259-197-560
70mm depth	259-197-570
80mm depth	259-197-580
90mm depth	259-197-590
110mm depth	259-197-591
130mm depth	259-197-593



LT T-Valve, 25mm wide	
40mm depth	259-197-254
50mm depth	259-197-255
60mm depth	259-197-256
70mm depth	259-197-257

CASPAR MICRO DISCECTOMY RETRACTOR







CASPAR
Counter Retractor, hinged arms

	259-185-100

CASPAR
Specula

40mm	259-185-040
45mm	259-185-045
50mm	259-185-050
55mm	259-185-055
60mm	259-185-060
65mm	259-185-065
75mm	259-185-070

CASPAR MICRO DISCECTOMY RETRACTOR



Lateral blade with snap lock	
35mm	259-185-235
40mm	259-185-240
45mm	259-185-245
50mm	259-185-250
55mm	259-185-255
60mm	259-185-260
65mm	259-185-265
75mm	259-185-275
80mm	259-185-280
85mm	259-185-285

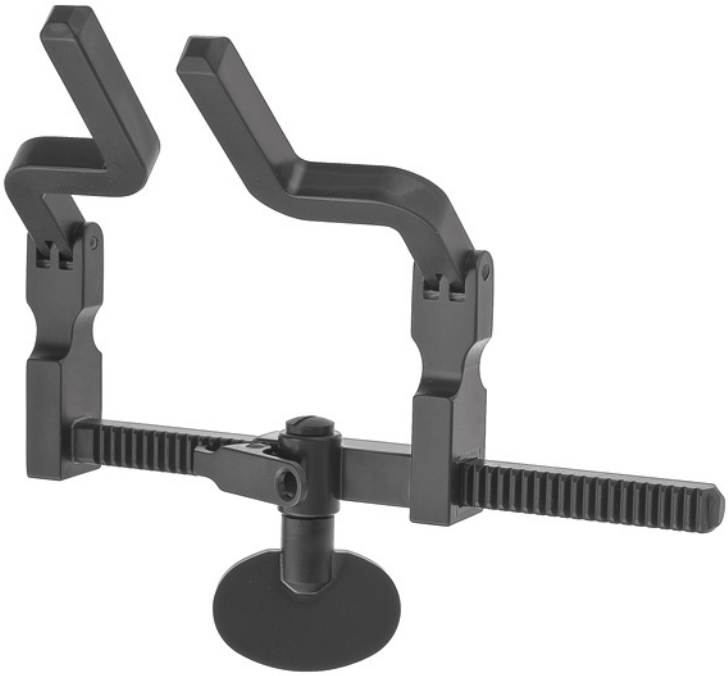


Medial blade	
40mm	259-185-340
45mm	259-185-345
50mm	259-185-350
55mm	259-185-355
60mm	259-185-360
65mm	259-185-365
70mm	259-185-370



Blade Ejector Forceps	
115mm, 4 1/2″	259-185-101

MCCULLOCH MICRO DISCECTOMY RETRACTOR





MCCULLOCH

Retractor Frame, with hinged arms

85mm, 3"	259-170-200

with rigid arms

85mm, 3"	259-170-100

MCCULLOCH MICRO DISCECTOMY RETRACTOR



MCCULLOCH
Muscle blade, 27mm wide, 6 teeth

30mm, 1 1/5"	259-170-130
40mm, 1 2/3"	259-170-140
50mm, 2"	259-170-150
60mm, 2 1/3"	259-170-160
70mm, 2 4/5"	259-170-170
80mm, 3 1/5"	259-170-180
90mm, 3 1/2"	259-170-190

Blade Set, large

Set with 12 pcs. (2 blades each) 259-170-130 to 259-170-180 — 259-170-110

Blade Set, small

Set with 8 pcs. (2 blades each) 259-170-140 to 259-170-170 — 259-170-111



MCCULLOCH
Muscle blade, 20mm wide, 4 teeth

30mm, 1 1/5"	259-170-230
40mm, 1 2/3"	259-170-240
50mm, 2"	259-170-250
60mm, 2 1/3"	259-170-260
70mm, 2 4/5"	259-170-270
80mm, 3 1/5"	259-170-280

Blade Set, large

Set with 12 pcs. (2 blades each) 259-170-230 to 259-170-280 — 259-170-210

Blade Set, small

Set with 8 pcs. (2 blades each) 259-170-240 to 259-170-270 — 259-170-211



MCCULLOCH
Muscle blade, 17mm wide, 2 teeth

30mm, 1 1/5"	259-170-330
40mm, 1 2/3"	259-170-340
50mm, 2"	259-170-350
60mm, 2 1/3"	259-170-360
70mm, 2 4/5"	259-170-370
80mm, 3 1/5"	259-170-380
90mm, 3 1/2"	259-170-390

Blade Set, large

Set with 12 pcs. (2 blades each) 259-170-330 to 259-170-380 — 259-170-310

Blade Set, small

Set with 8 pcs. (2 blades each) 259-170-340 to 259-170-370 — 259-170-311

MCCULLOCH MICRO DISCECTOMY RETRACTOR



MCCULLOCH
Cervical blade, 20mm wide, 2 teeth

50mm, 2″	259-170-650
60mm, 2 1/3″	259-170-660
70mm, 2 4/5″	259-170-670



MCCULLOCH
Hook #1

20mm, 4/5″	259-170-420
30mm, 1 1/5″	259-170-430
40mm, 1 2/3″	259-170-440
50mm, 2″	259-170-450
60mm, 2 1/3″	259-170-460
70mm, 2 4/5″	259-170-470
80mm, 3 1/5″	259-170-480

Blade Set, large

Set with 12 pcs. (2 blades each) 259-170-420 to 259-170-470	259-170-410

Blade Set, small

Set with 8 pcs. (2 blades each) 259-170-430 to 259-170-460	259-170-411



MCCULLOCH
Hook #2

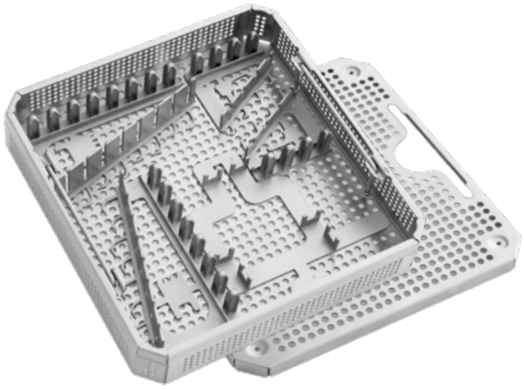
20mm, 4/5″	259-170-520
30mm, 1 1/5″	259-170-530
40mm, 1 2/3″	259-170-540
50mm, 2″	259-170-550
60mm, 2 1/3″	259-170-560
70mm, 2 4/5″	259-170-570
80mm, 3 1/5″	259-170-580

Blade Set, large

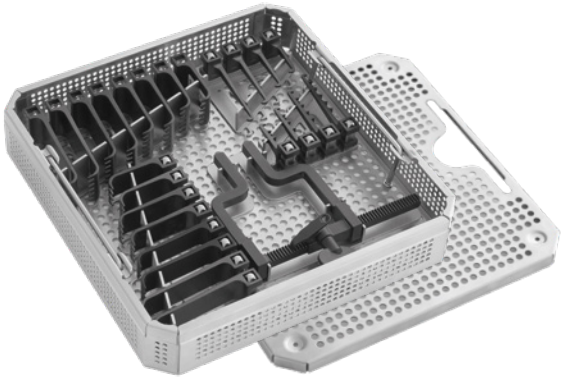
Set with 12 pcs. (2 blades each) 259-170-520 to 259-170-570	259-170-510

Blade Set, small

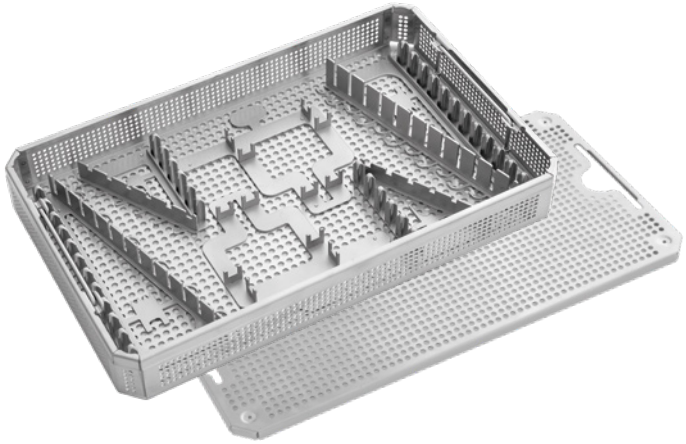
Set with 8 pcs. (2 blades each) 259-170-530 to 259-170-560	259-170-511



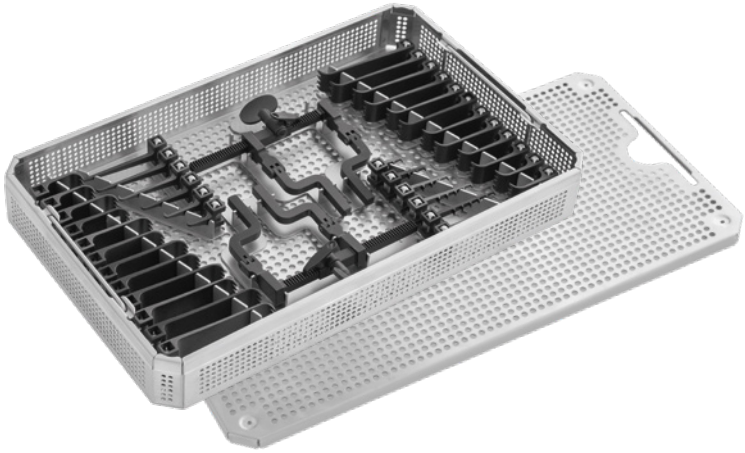
MCCULLOCH
Tray, small, with lid
253 x 253 x 50mm 259-170-000



MCCULLOCH
Set with Tray, small 259-170-000
and hinged retractors,
blades 2 each, 1 hook each
259-170-001

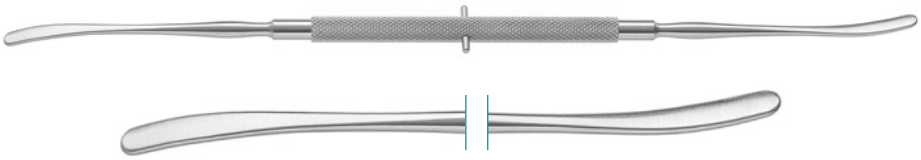


MCCULLOCH
Tray, large, with lid
405 x 253 x 50mm 259-170-002



MCCULLOCH
Set with Tray, large 259-170-002
and hinged retractors,
blades 2 each, 1 hook each
259-170-003

MCCULLOCH MICRO DISCECTOMY RETRACTOR



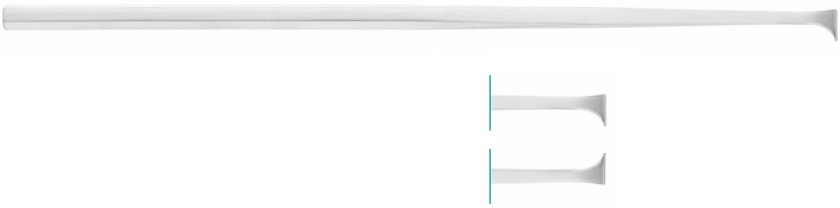
Double Ended Elevator

230mm, 9"	259-160-042



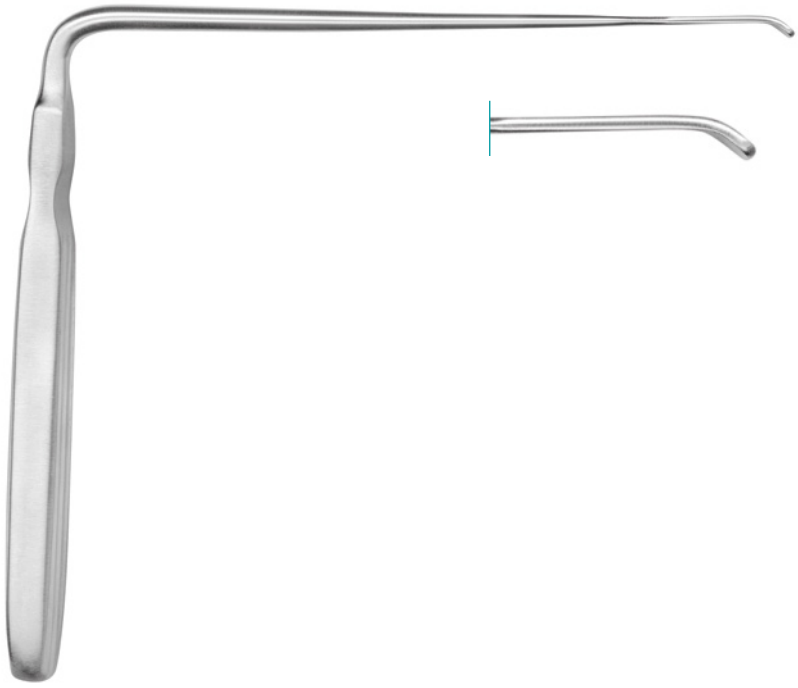
Osteotome, 215mm, 8 1/2"

4mm wide	259-210-004
6mm wide	259-210-006



Hockey-Stick Chisel, 215mm, 8 1/2"

left curved	259-210-005
right curved	259-211-005



Nerve Root Retractor, 90° angled shaft

6mm wide tip	259-160-006

MCCULLOCH MICRO DISCECTOMY RETRACTOR





Ball Probe, 235mm, 9 1/4"

A 4mm tip	259-230-004
B 7mm tip	259-230-007

Manipulation Hook, 235mm, 9 1/4"

C 4mm tip	259-230-104



Spinal Elevator, semi-sharp, 290mm, 11 1/2"

12mm wide tip	259-440-100
19mm wide tip	259-450-100

CASPAR WOUND RETRACTOR



CASPAR
Retractor with key

	259-185-449



CASPAR
Hook

38mm	259-185-435
58mm	259-185-437



CASPAR
Blade, 2 prongs

32x22mm	259-185-442
52x22mm	259-185-445
62x22mm	259-185-447



CASPAR
Blade, 3 prongs

37x37mm	259-185-452
62x37mm	259-185-457



CASPAR
Blade, 4 prongs

37x52mm	259-185-462
67x52mm	259-185-467

BLAX SPINE TUBULAR RETRACTOR SYSTEM



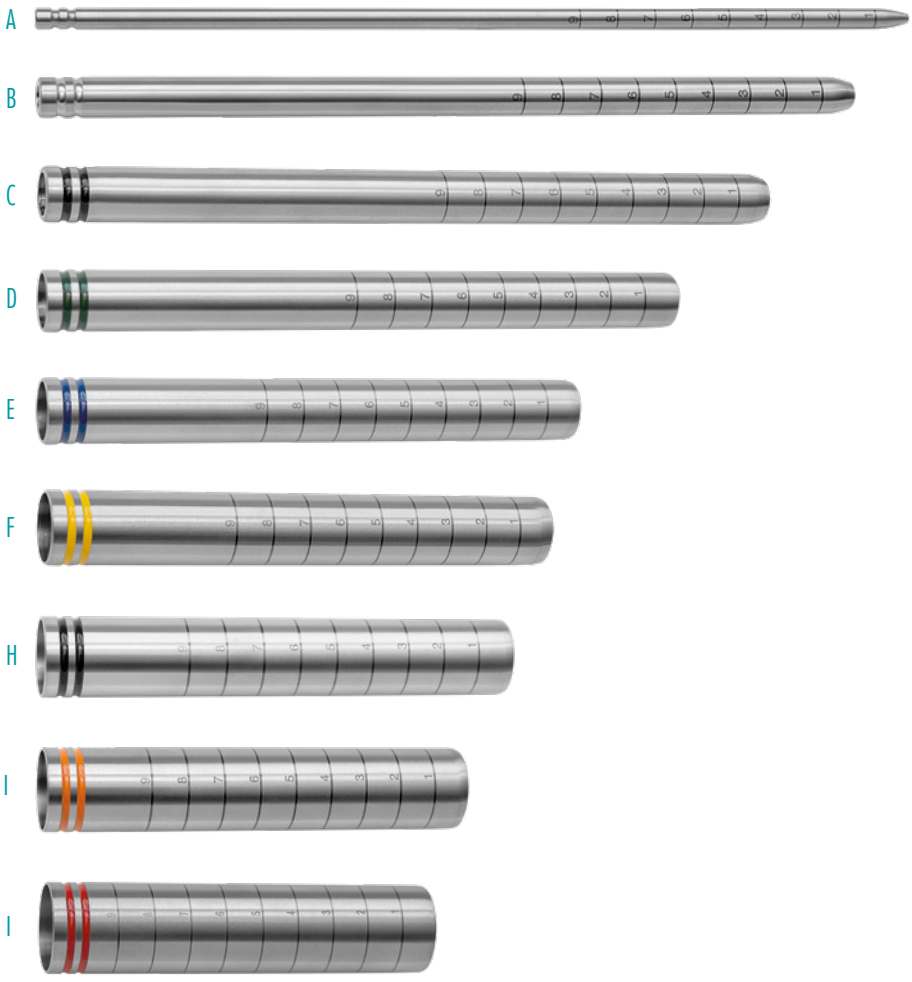
Expanding Retractor (2 pcs. each)

25 x 40mm	250-000-060
25 x 50mm	250-000-061
25 x 60mm	250-000-062
25 x 70mm	250-000-063
25 x 80mm	250-000-064
25 x 90mm	250-000-065



Guide Wire, 305mm length

Ø 1.6mm	250-000-080

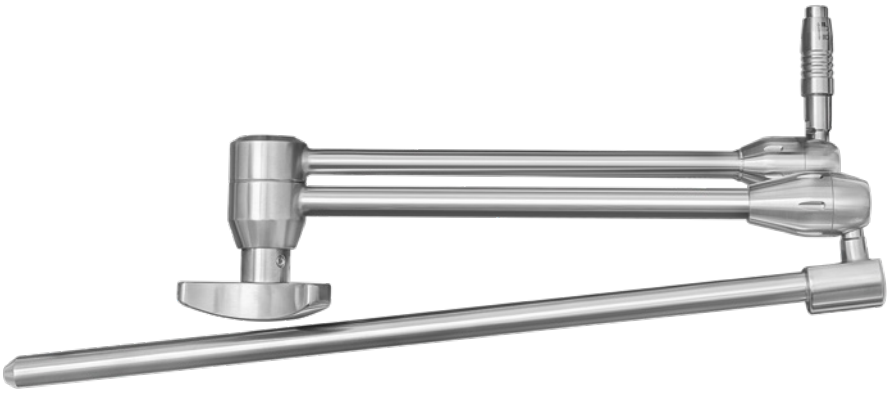


Dilators, color coded

A Ø 5.3mm	250-000-070
B Ø 9.4mm	250-000-071
C Ø 12.8mm	250-000-072
D Ø 14.6mm	250-000-073
E Ø 16.8mm	250-000-074
F Ø 18.8mm	250-000-075
G Ø 20.8mm	250-000-076
H Ø 22.8mm	250-000-077
I Ø 24.8mm	250-000-078



Nathanson Table Clamp
170-801-503



Nathanson Holding Arm
170-801-501



Holding Arm Adaptor
250-000-082

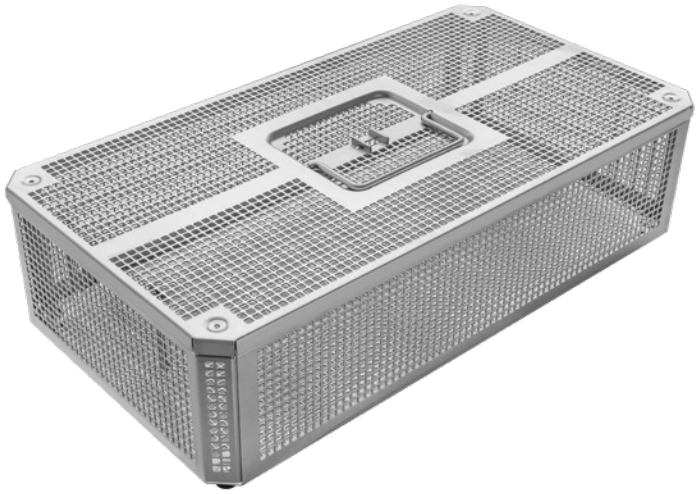


Opening/Closure Instrument
80mm 250-000-801



Complete Set with tray and lid

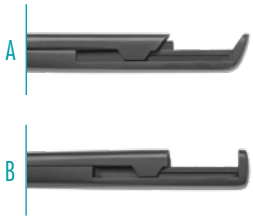
250-000-100



Tray only, bottom and lid

250-000-083

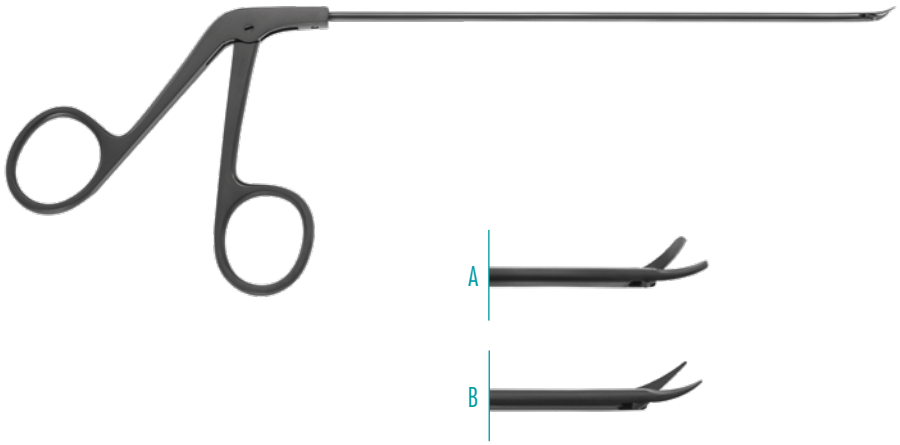




Kerrison Punch, bayonet-shaped,

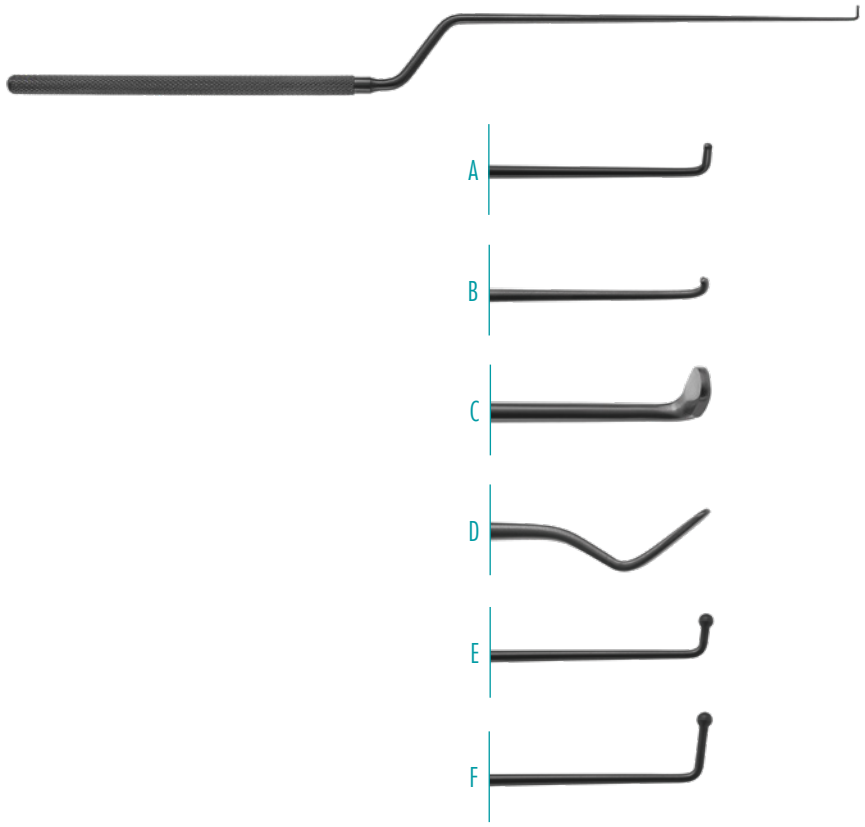
A 40° footplate	
1.0mm	250-000-001
2.0mm	250-000-002
3.0mm	250-000-003
4.0mm	250-000-004
5.0mm	250-000-005

A 90° footplate	
1.0mm	250-000-006
2.0mm	250-000-007
3.0mm	250-000-008
4.0mm	250-000-009
5.0mm	250-000-010



Micro Vertebral Scissors, 2mm,
155mm working length

blunt	250-000-033
sharp	250-000-034



A Nerve Hook, 125mm working length

straight	250-000-042
left	250-000-043
right	250-000-044

B Micro Nerve Hook

straight	250-000-045
left	250-000-046
right	250-000-047

C Dissector, 90°

straight	250-000-048
left	250-000-049
right	250-000-050

D WOODSON
Dissector, 45°

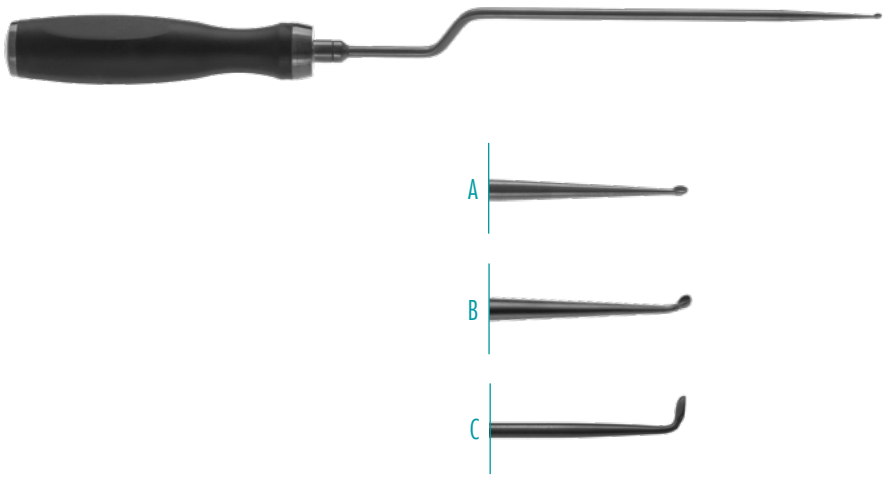
180mm	250-000-035

E Ball Probe, 2mm
6mm

straight	250-000-036
left	250-000-037
right	250-000-038

F 9mm

straight	250-000-039
left	250-000-040
right	250-000-041



Curette, 135mm working length
A forward straight

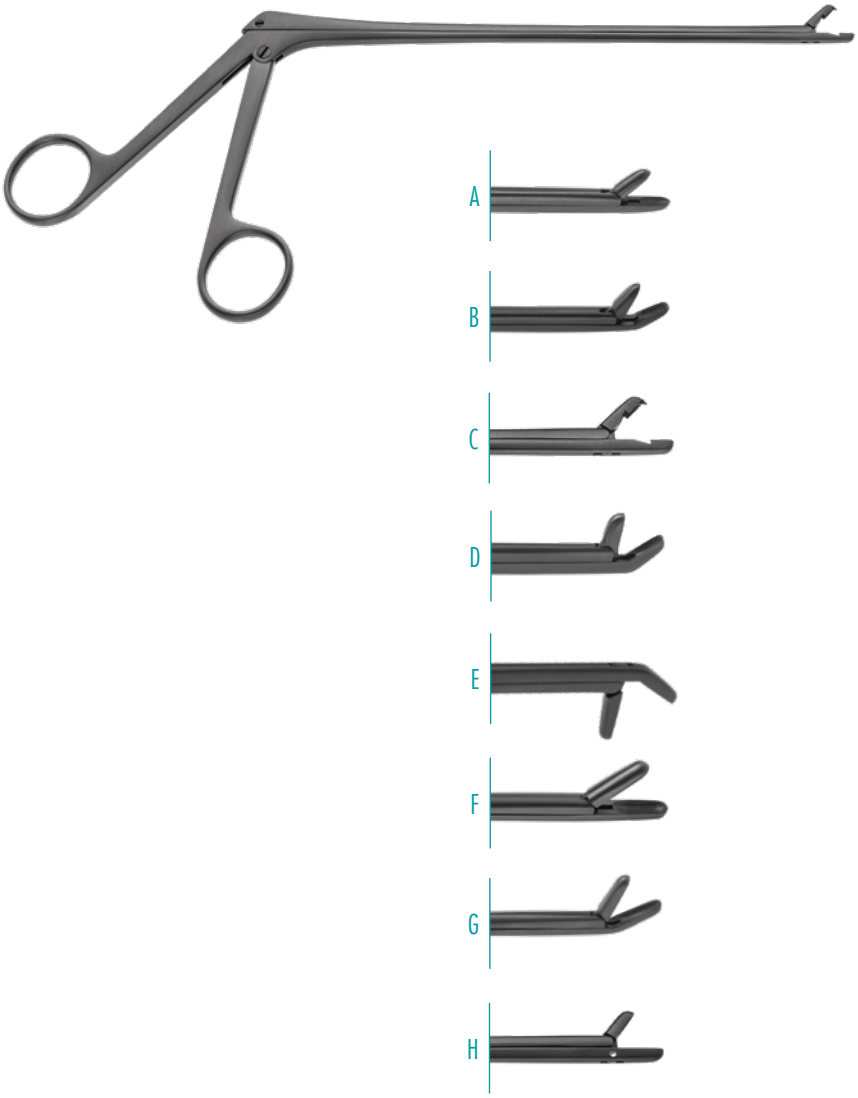
1.8mm	250-000-024
3.6mm	250-000-025
5.2mm	250-000-026

B forward angled

1.8mm	250-000-027
3.6mm	250-000-028
5.2mm	250-000-029

C reverse angled

1.8mm	250-000-030
3.6mm	250-000-031
5.2mm	250-000-032



Rongeur, 180mm working length

DECKER

A straight

2.0 x 6.0mm	250-000-016

B 30° bent up

2.0 x 6.0mm	250-000-017

C Rat Tooth Rongeur/Grasper,

2.0mm	250-000-018

PEAPOD

D 40° upcurved

2.0mm	250-000-019

E downcurved

2.0 x 6.0mm	250-000-020

SPURLING

F straight

4.0mm	250-000-021

GRUENWALD

G bent up

4.0mm	250-000-022

FERRIS SMITH

H short, straight, with Kerrison Handle▼

4.0mm	250-000-023





HUDSON
Hand Drill, complete with 4 burrs and extension (Hudson tightening screw)

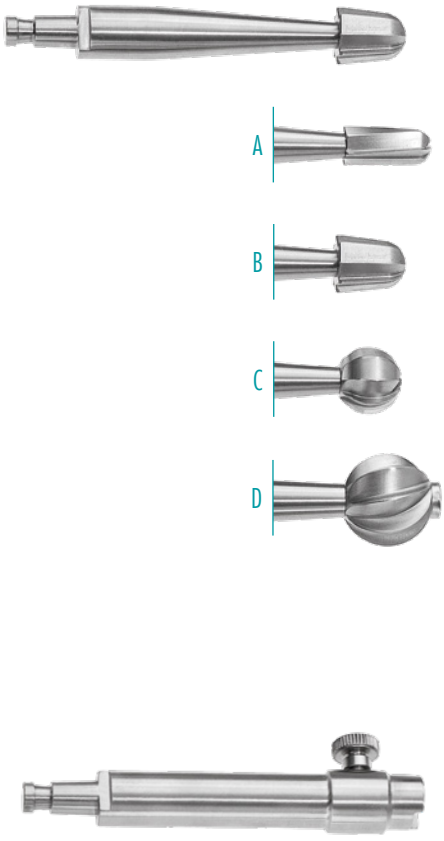
270mm, $10^{2/3}$"	200-152-000

Hand Drill only with clamping screw

200-150-000

Hand Drill only with Hudson snap lock

200-151-000



Burrs, 60mm length

A ∅ 9mm	200-152-001
B ∅ 14mm	200-152-002
C ∅ 16mm	200-152-003
D ∅ 22mm	200-152-004

Extension piece

200-152-009



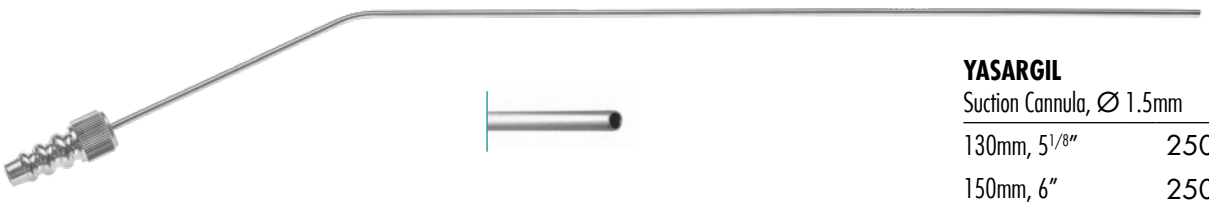
RANEY
Scalp Haemostasis Clip, 12 pcs. per package

	250-066-001
black	250-066-002



RANEY
Applying and Removing Forceps
for 250-066-001

160mm, $6^{1/4}$″	250-066-003



YASARGIL

Suction Cannula, ∅ 1.5mm

130mm, 5 1/8"	250-064-152
150mm, 6"	250-064-154
180mm, 7"	250-064-156
220mm, 8 2/3"	250-064-158

∅ 2.0mm

130mm, 5 1/8"	250-064-162
150mm, 6"	250-064-164
180mm, 7"	250-064-166
220mm, 8 2/3"	250-064-168

∅ 2.5mm

130mm, 5 1/8"	250-064-172
150mm, 6"	250-064-174
180mm, 7"	250-064-176
220mm, 8 2/3"	250-064-178

∅ 3.5mm

130mm, 5 1/8"	250-064-182
150mm, 6"	250-064-184
180mm, 7"	250-064-186
220mm, 8 2/3"	250-064-188

∅ 4.5mm

180mm, 7"	250-064-189



FUKUSHIMA
Suction Tube, conical, malleable,
165mm, $6^{1/2}$"

3 Charr.	165-533-163
4 Charr.	165-533-164
5 Charr.	165-533-165
6 Charr.	165-533-166



FUKUSHIMA
Suction Tube, conical, malleable,
180mm, 7"

3 Charr.	165-533-183
4 Charr.	165-533-184
5 Charr.	165-533-185
6 Charr.	165-533-186
7 Charr.	165-533-187
8 Charr.	165-533-188
9 Charr.	165-533-189



FUKUSHIMA
Suction Tube, conical, malleable,
205mm, $8^{1/8}$"

3 Charr.	165-533-203
4 Charr.	165-533-204
5 Charr.	165-533-205
6 Charr.	165-533-206
7 Charr.	165-533-207
8 Charr.	165-533-208
9 Charr.	165-533-209
10 Charr.	165-533-210
12 Charr.	165-533-212



FRAZIER
Suction tube, 30° angled,
190mm, 7 1/2" overall length

5 Charr.	165-523-005
6 Charr.	165-523-006
7 Charr.	165-523-007
8 Charr.	165-523-008
9 Charr.	165-523-009
10 Charr.	165-523-010
11 Charr.	165-523-011
12 Charr.	165-523-012
15 Charr.	165-523-015



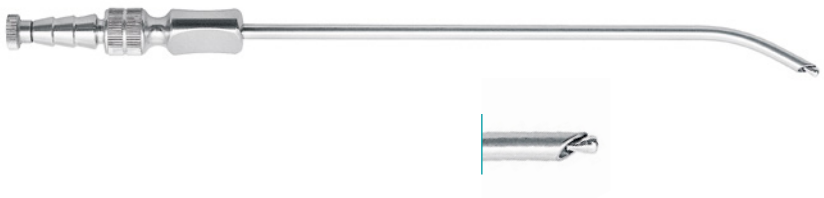
FRAZIER
Suction tube, straight,
130mm, 5 1/8" working length

6 Charr.	165-522-106
8 Charr.	165-522-108
10 Charr.	165-522-110
12 Charr.	165-522-112



BARON
Suction tube, finger cut-off, stylet, 100mm, 4"

3 Charr.	165-539-003
5 Charr.	165-539-005
7 Charr.	165-539-007



ADSON
Suction tube, ∅ 4mm, 210mm, 8 1/4"

12 Charr.	165-521-004



TAYLOR
Percussion Mallet

170mm, 6 2/3"	100-111-170
200mm, 8"	100-111-200



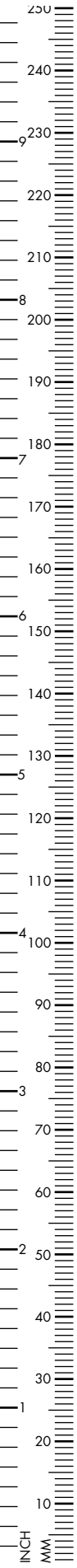
TROEMNER
Percussion Mallet

240mm, 9 1/2"	100-113-240

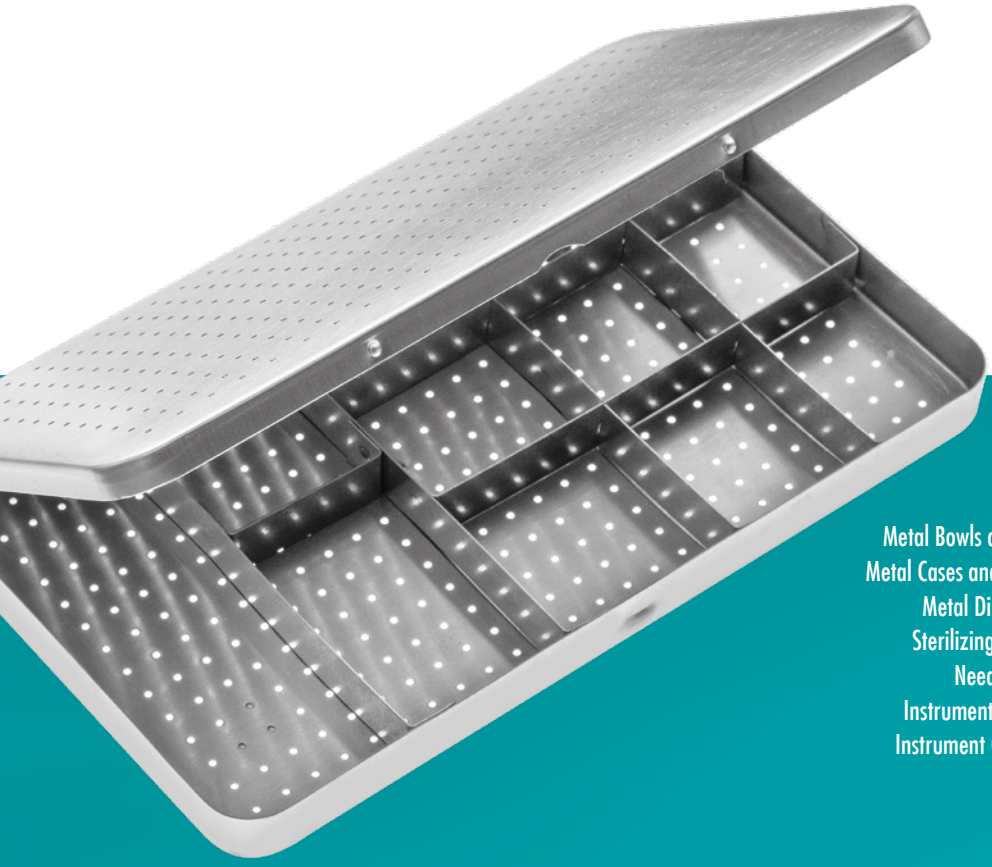


DERJERINE
Percussion Mallet with needle

200mm, 8"	100-115-200


250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
INCH
MM
9
8
7
6
5
4
3
2
1

ACCESSORIES



Metal Bowls and Cups
Metal Cases and Tablets
Metal Dispensers
Sterilizing Forceps
Needle Cases
Instrument Holders
Instrument Cleaning

RZ Medizintechnik®
PROGRESS IN SURGERY



Kidney Bowl

170mm, 0.25L	600-673-170
205mm, 0.35L	600-673-200
250mm, 0.50L	600-673-250
275mm, 0.75L	600-673-275



Laboratory Bowl

Diameter	Capacity	Height	
140mm, 5 1/2″	0.5L	55mm	600-170-151
150mm, 6″	0.75L	75mm	600-170-165
160mm, 6 1/4″	1.0L	75mm	600-170-175
220mm, 8 2/3″	2.0L	75mm	600-170-220
225mm, 8 7/8″	2.0L	100mm	600-170-225
240mm, 9 1/2″	3.0L	95mm	600-170-240
260mm, 10 1/4″	4.0L	120mm	600-170-260
260mm, 10 1/4″	4.5L	120mm	600-170-275
290mm, 11 1/2″	5.0L	100mm	600-170-290
300mm, 11 7/8″	6.0L	120mm	600-170-310
320mm, 12 1/2″	8.0L	140mm	600-170-325
380mm, 15″	11.0L	130mm	600-170-380
400mm, 15 3/4″	14.0L	155mm	600-170-415



Bowl, round

Diameter	Capacity	Height	
40mm, 1 1/2″	0.02L	19mm	600-231-040
60mm, 2 1/3″	0.06L	30mm	600-231-060
85mm, 3 1/3″	0.16L	40mm	600-231-080
110mm, 4 1/3″	0.40L	55mm	600-231-100
150mm, 6″	1.00L	75mm	600-231-150



Measuring Jug, with feet, graduated

0.5L / 110mm height	600-098-205
1.0L / 140mm height	600-098-100
1.5L / 160mm height	600-098-150
2.0L / 200mm height	600-098-220



Instrument Tray (L x W x H)	
215 x 155 x 18mm	600-113-100
295 x 195 x 20mm	600-113-110
360 x 240 x 10mm	600-113-120
390 x 270 x 10mm	600-113-130
490 x 320 x 14mm	600-113-140
445 x 350 x 12mm	600-113-150
445 x 325 x 9mm	600-113-160



Dressing Tray (L x W x H)	
235 x 190 x 45mm	600-340-230



Instrument Box with lid (L x W x H)	
100 x 60 x 40mm	600-310-100
120 x 80 x 40mm	600-310-120
160 x 100 x 30mm	600-310-160
180 x 120 x 50mm	600-310-180
200 x 100 x 50mm	600-310-200
220 x 150 x 50mm	600-312-220
260 x 150 x 50mm	600-310-260
400 x 200 x 80mm	600-312-400
500 x 270 x 70mm	600-312-500



Cylinder Jar

Ø 30mm / 95mm	600-142-001
Ø 50mm / 105mm	600-142-002
Ø 50mm / 135mm	600-142-003
Ø 50mm / 180mm	600-142-004
Ø 80mm / 135mm	600-142-006
Ø 80mm / 175mm	600-142-007
Ø 95mm / 205mm	600-142-009



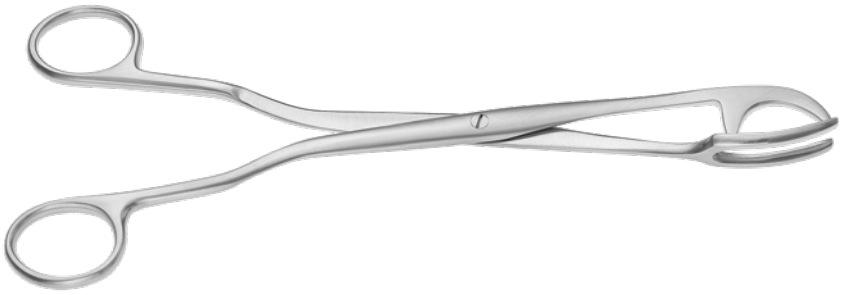
Cotton Wool Dispenser

Diameter	Capacity	Height	
60mm, 2 1/3"	0.15L	60mm	600-397-010
85mm, 3 1/3"	0.25L	50mm	600-397-020
100mm, 4"	0.35L	50mm	600-397-060
85mm, 3 1/3"	0.40L	85mm	600-397-080
85mm, 3 1/3"	0.60L	125mm	600-397-030
100mm, 4"	0.75L	100mm	600-397-040
120mm, 4 3/4"	1.25L	120mm	600-398-120
150mm, 6"	1.75L	100mm	600-398-130
150mm, 6"	2.50L	150mm	600-398-150
200mm, 8"	3.0L	100mm	600-398-160
200mm, 8"	6.0L	200mm	600-398-170



Sputum Cup with lid

Diameter	Capacity	Height	
75mm, 3"	0.30L	75mm	600-662-075
80mm, 3 1/4"	0.40L	85mm	600-662-080



ROGGE
Sterilizing Forceps

235mm, 9 1/4"	600-087-230



CHEATLE
Sterilizing Forceps

270mm, 10 2/3"	600-095-270



DAVIS
Sterilizing Forceps

200mm, 8"	600-080-200



SAUERBRUCH
Needle Sterilising Case, 12 compartments
Lid / Bottom perforation

210 x 125 x 17mm 600-210-125



Needle Sterilizing Case, with holes

Ø 65mm 600-100-065

Perforated Interior Box only

600-100-070

Non-perforated exterior box only

600-100-071



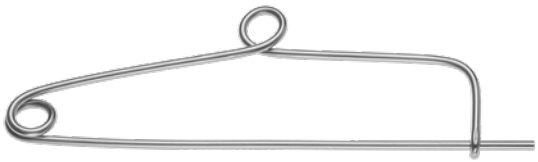
Needle Sterilizing Case, with holes

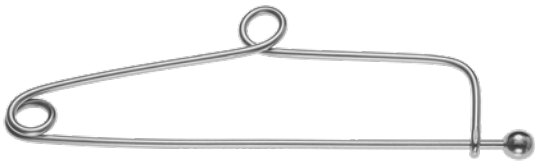
65 x 42 x 8mm 600-110-065



Needle Sterilising Case, 7 compartments, rectangular, Bottom perforation

150 x 95 x 13mm	600-115-100





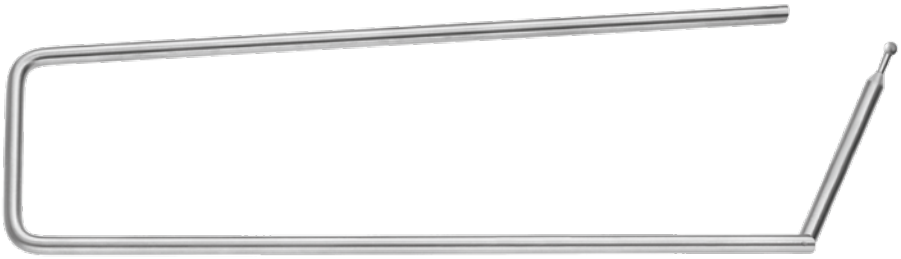
MAJO
Safety Pin, 140mm, $5^{1/2}$″, with ball

without ball	660-100-100
with ball	660-100-140



BUNT
Safety Pin

120mm, $4^{3/4}$″	660-102-120



STRINGER
Instrument Holder

102 x 70mm (4″)	660-160-100
152 x 70mm (6″)	660-160-150
203 x 70mm (8″)	660-160-200
254 x 70mm (10″)	660-160-250
305 x 70mm (12″)	660-160-300
356 x 70mm (14″)	660-160-350
406 x 70mm (16″)	660-160-400
457 x 70mm (18″)	660-160-450



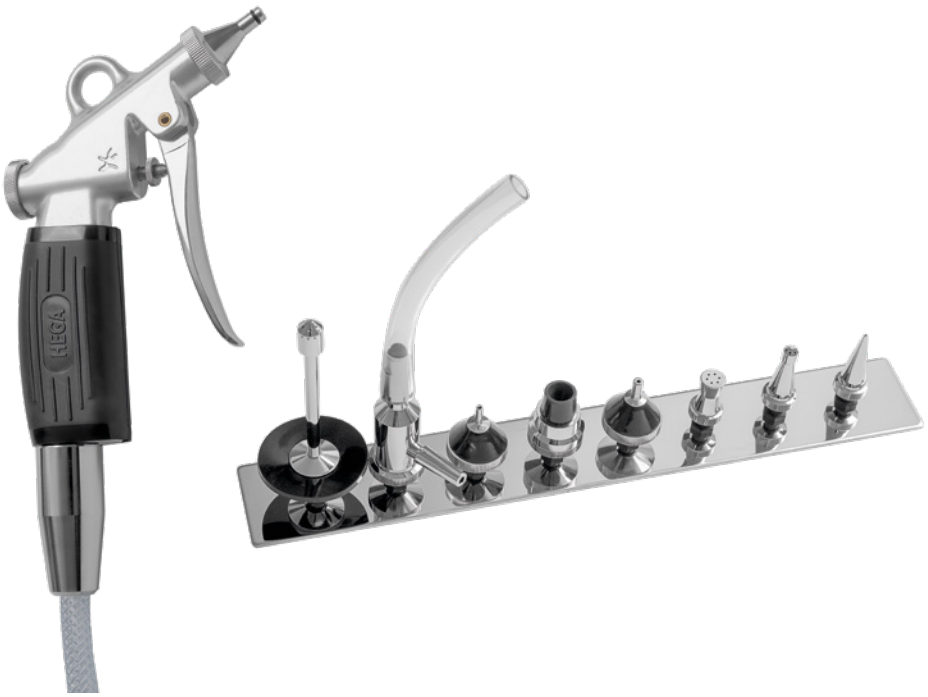
WEINSTEIN
Instrument Holder

63 x 200mm (8″)	660-163-200
63 x 250mm (10″)	660-163-250
63 x 300mm (12″)	660-163-300
63 x 350mm (14″)	660-163-350
63 x 400mm (16″)	660-163-400
63 x 450mm (18″)	660-163-450



Infusion Bottle Opening Forceps

200mm, 8″	600-201-200



RZ Aquajet Water Pistol, complete
9 tip, 1m pressure tubing, strap,
suspension hook

600-100-000



Oil Dispenser

140mm, $5^{1/2}$" 700-900-250



Special Cotton for polishing metal sheaths
and instruments

700-900-220



Oil Spray	
400ml	700-900-149



Instrument Oil	
50ml	700-900-160



Tape	
green	900-950-001
yellow	900-950-002
blue	900-950-003
red	900-950-004
brown	900-950-005
white	900-950-006
orange	900-950-007
black	900-950-008
purple	900-950-009



Cleaning Brush for ∅ 5mm

500mm, 19 3/4"	300-135-905



Cleaning Brush for ∅ 10mm

500mm, 19 3/4"	300-135-910



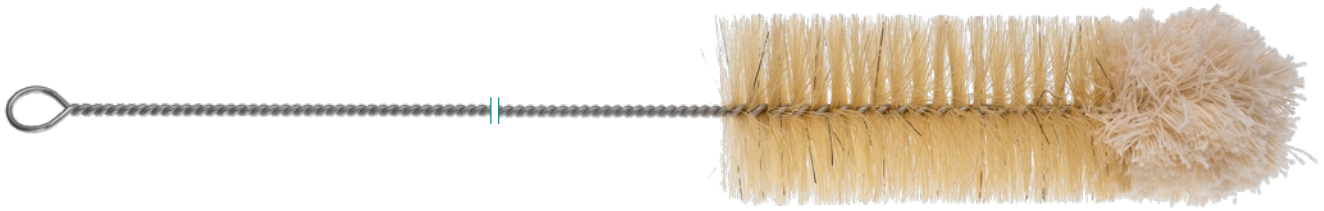
Cleaning Brush, 10 pcs. per package

∅3mm, 245 x 65mm	300-245-000
∅3mm, 420 x 65mm	300-420-065
∅7mm, 285 x 75mm	300-285-000
∅8mm, 270 x 65mm	300-270-000



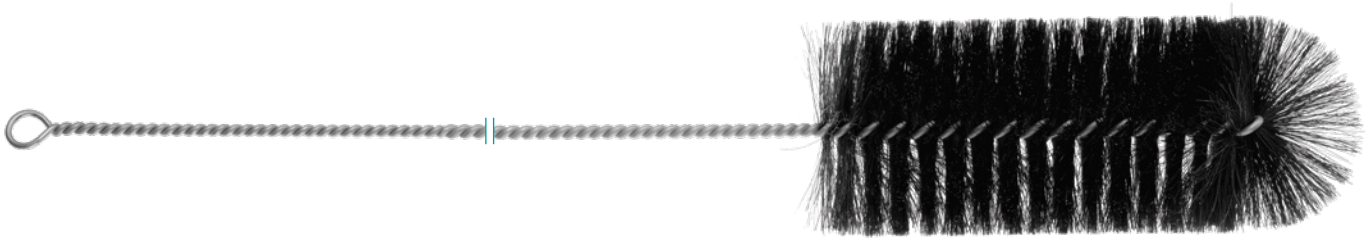
Cleaning Brush, 10 pcs. per package

∅12mm, 270 x 65mm	300-215-050
∅13mm, 215 x 60mm	300-215-000
∅15mm, 215 x 70mm	300-215-070
∅20mm, 215 x 65mm	300-215-080
∅25mm, 215 x 65mm	300-215-090
∅30mm, 215 x 60mm	300-215-100



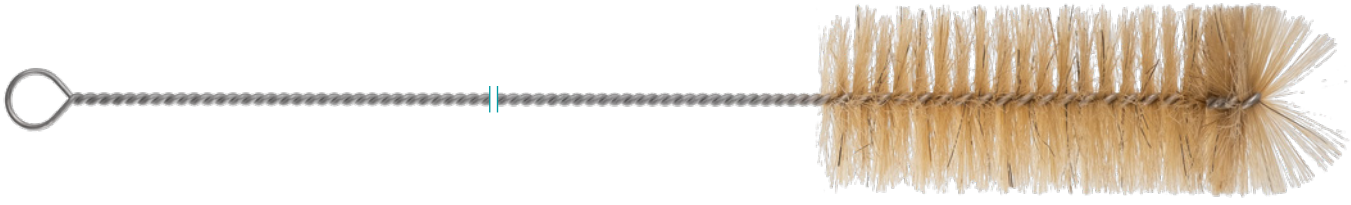
Cleaning Brush, 10pcs. per package

Ø12mm, 275 x 65mm	600-091-012
Ø15mm, 275 x 80mm	600-091-015
Ø30mm, 300 x 120mm	600-091-030
Ø50mm, 320 x 130mm	600-091-050



Cleaning Brush

Ø80mm, 490 x 180mm	600-092-080



Cleaning Brush, 10pcs. per package

Ø50mm, 330 x 130mm	600-092-050



Cleaning Brush, 10 pcs. per package

Ø8/20mm, 300 x 190mm — 300-215-110



Cleaning Brush, 10 pcs. per package

Ø18/33mm, 300 x 110mm — 300-215-111



Cleaning Brush, 10 pcs. per package

Ø15/25mm, 320 x 70mm — 300-215-112



Cleaning Brush

Ø15/25mm, 320 x 70mm — 300-215-112



RZ Brush Dispenser
for 20 brushes with suspension hook

240 x 275 x 70mm 600-950-100



Cleaning Brush with plastic handle
10 pcs. / package

600-050-000

INDEX

A

AACHEN
Spatula 944

Abdominal Retractor 210, 223-228, 242-255
Abdominoplasty Retractor 619
Abdominal Clamp 436, 440

ADAIR
Tenaculum Forceps 566
Tissue Forceps 140

ADLERKREUTZ
Tissue Forceps 92

ADSON
Elevator 948
Dissecting Forceps 132
Dura Hook 923
Drill 868
Hemostatic Forceps 122
Raspatory 762
Bone Rongeur 687
Suction Tube 279, 1008
Self Retaining Retractor 236 - 238
Hemostatic Forceps 122
Dressing/Tissue Forceps 79-87
TC Forceps 94
Monopolar Forceps 110, 111

ADSON ANDERSON
Retaining Retractor 237

ADSON BROWN
Tissue Forceps 86, 305

ADSON DEBAKEY
Vascular Forceps 102, 394

ADSON TOENNIS
TC Scissors 59

Adventitia Scissors 369 - 371

AGRIS DINGMAN
Transaxillary Dissector Set 620

ALAN PARKS
Rectal Retractor 648

ALEXANDER
Gouge 789
Periosteotome 767
Biopsy Forceps 587

ALLEN
Intestinal Clamp 145

Alligator Forceps 905

ALLIS
VATS Forceps 490
Tissue Forceps 138-140
Intestinal Forceps 141

ALLIS ADAIR
Tissue Forceps 140

ALLISON
Lung Spatula 222, 538

ALM
Retaining Retractor 234

Amniotome 579
Amputation 875-879
Anastomosis Clamp 145, 153, 421, 428 - 430, 457, 458, 482, 658

ANDERSON
Ligature Forceps 282

ANDREWS PYNCHON
Suction Tube 270

ANKENEY
Rib Spreader 504, 517

Anterior Glenoid Neck Retractor 744
Anoscope 650, 653

ANVIL
Nail Splitting Forceps 320

Appendectomy Clamp 144
Applying Forceps 189, 190, 302, 359, 362, 365, 367, 1000
Applicator 300
Approximator 364-368, 639
Areola Marker 624, 625
Artery Forceps 136, 283, 289, 543
Aspirating Curette 280, 577
Atraumatic Forceps 100-102, 113, 306, 405

AUFRANC
Coba Elevator 735

AUSTIN
Micro Forceps 918

AUVARD
Vaginal Speculum 619

Awl 862-865

B

BABY ADSON
Dissecting Forceps 132

BABY ALLIS
Tissue Forceps 138

BABY BAILEY
Rib Contractor 526

BABY BALFOUR
Retractor 246

BABY COLLIN
Retractor 242

BABY COOLEY
Vascular Clamp 452

BABY CRILE
Hemostatic Forceps 117

BABY CRILE WOOD
TC Needle Holder 178

BABY DOYEN
Intestinal Clamp 146

BABY FINOCHIETTO
Rib Spreader 499, 500

BABY HAIGHT FINOCHIETTO
Rib Spreader 500

BABY KOCHER
Intestinal Clamp 147

BABY LANGE
Bone Lever 722

BABY LEXER
Dissecting Scissors 5

BABY METZENBAUM
Dissecting Scissors 6
Supercut Scissors 45
TC Scissors 60, 62
Ceracut Scissors 68

BABY MIXTER
Artery Forceps 136
Dissecting Forceps 128

BABY OVERHOLT
Hemostatic Forceps 131

BABY ROUX
Retractor 201

BABY SENN-MILLER
Retractor 199

BABY TISCHLER
Biopsy Forceps 589

BABY WEITLANER
Retractor 235

BABY YANKAUER
Suction Tube 271

BABCOCK
Intestinal Forceps 284, 289
Tissue Forceps 142, 143

BACKHAUS
Towel Forceps 156

BACON
Bone Rongeur 687

BADGLEY
Rib Spreader 505

BAHNSON
Clamp 423, 424

BAILEY
Hemostatic Forceps 131
Rib Contractor 526
Saw Conductor 878

BAILEY BABY
Rib Contractor 526

BAILEY FINOCHIETTO
Rib Spreader 501

BAILEY GIBBON
Rib Contractor 526

BAINBRIDGE
Forceps 124, 145, 416

BAKES
Gall Duct Probe 551

BALFOUR
Blades 251, 257
Abdominal Retractor 246, 247, 250
Extension Arm 252

BALFOUR BABY
Abdominal Retractor 246

BALFOUR HORGAN
Central Blade 249

BALFOUR RSC
Retractor 251

BALFOUR US
Abdominal Retractor 248
Blades 249

BALLANTINE
Hysterectomy Forceps 561

Ball & Socket Forceps 156
Bandage Scissors 13, 14, 15, 660

BANE
Bone Rongeur 681

BANIS
Micro Forceps 387

BANKART
Perforating Forceps 668

BARON
Suction Tube 279, 1008

BARRAQUER
Micro Needle Holder 166, 339
Eye Spectula 233

BARRETT
Tenaculum Forceps 565

BARSKY
Double Skin Hooklet 193

BAUMGARTNER
Needle Holder 170

BEACHAM
Amniotome 579

BEALL
Circumflex 27, 380

BEASLEY BABCOCK
Tissue Forceps 91

BECK
Pediatric Clamp 483

BECKMANN EATON
Self Retaining Retractor 238

BEIJING SATINSKY
Vascular Clamp 419

BENGOLEA
Hemostatic Forceps 119

BENNET
Bone Lever 734

BENSON
Polyrus Spreader 144

BERGMANN
Mallet 814, 822, 823
Plaster Scissors 15, 661

BERGMANN (HIBBS)
Mallet 819

BERNHARD
Towel Forceps 157

BERRY
TC Sternal Forceps 187, 834
Wire Tightener 186

BETHUNE
Rib Shears 494

BEUSE
Nasal Scissors 37

BEASLEY BABCOCK
Tissue Forceps 91

BEYER
Bone Rongeur 683, 690

BHATTMANN
Humeral Head Retractor 745

BIEMER
Applying Forceps 367
Vessel Spreader 919
Micro Approximator 367
Vessel Clip 367

BIEMER MÜLLER
Micro Approximator 367

BIERER
Ovum Forceps 571

BIGGS
Mammary Retractor 612

Biopsy Curette 276, 280, 577, 578, 584
Biopsy Forceps 488, 586 - 591, 657
Biopsy Specimen Forceps 656
Bipolar Forceps 106 - 109

BIRCHER
Meniscus Grasping Forceps 711

BIRCHER GANSKE
Cartilage Holding Forceps 710

BIRKETT
Hemostatic Forceps 122

BIRNBAUM
Rib Spreader 512

BISHOP HARMON
Iris Forceps 75, 334

Bladder Gall Forceps 549
Bladder Neck Spreader 633
Bladder Spatula 631
Bladder Retractor 632

BLAKE
Biopsy Curette 584
Gall Stone Forceps 137, 549

BLAX
Spinal Retractor 993 - 996

BLOUNT
Bone Lever 737
Shoulder Retractor 736
Knee Retractor 715

BLUMENTHAL
Bone Rongeur 680

BODENHAMMER
Rectal Speculum 646, 647

BOEHLER
Bone Cutting Forceps 697
Bone Rongeur 690

BOETTCHER
Tonsil Scissors 37

Bone Clamp 669
Bone Cutting Forceps 696 - 700
Bone Drill 863
Bone File 832, 833
Bone Holding Forceps 496, 669 - 677
Bone Hook 716, 717
Bone Lever 719 - 737
Bone Reduction Forceps 666
Bone Reposition Forceps 665 - 668
Bone Scoop 785
Bone Tampers 826 - 828

BONN
Iris Scissors 32

BONNEY
Tissue Forceps 79, 92, 95, 305

BOROWSKI
Retractor 538

Bougie 642, 643
Bowl 1012

BOWMAN
Lacrimal Probe 268

BOYS ALLIS
Tissue Grasping Forceps 141

BOZEMANN
Swab Forceps 161

BOZEMANN DOUGLAS
Swab Forceps 161

Brain Spatula 939

BRAITHWAITE
Hand Dermatome 296

BRAND
Tendon Seizing Forceps 706

BRAUN
Uterine Depressor 579
Tenaculum Forceps 567

BRAUN STADLER
Episiotomy Scissors 554

Breast Caliper 626
Breast Dissector 617, 620, 621
Breast Elevator 622
Breast Retractors 610 - 619

BREISKY
Vaginal Speculum 597

BRINCKERHOFF
Rectal Specula 653

BRISTOW BANKHART
Retractor 743

BRODIE
Probe 299

BROLI ADSON
Tissue Forceps 87

Bronchus Clamp 410, 473

BROPHY
Dressing Forceps 81
Gum and Suture Scissors 20

BROWN
Needle Holder 170
Tissue Forceps 87
Dissecting Scissors 10

BROWNE
Deltoid Retractor 746

BRUENINGS
Bone Tamper 826

BRUNNER
Awl 864, 865
Rib Shear 495
Retractor 217
Intestinal Clamp 149

BRUNS
Bone Curette 774, 777 - 780
Plaster Scissors 660

Brush 1021 - 1024

BRYANT
Dressing Forceps 162

BUCK
Ligature Scissors 18
Bone Curette 773

BUCK GRAMCKO
Bone Lever 720

BUIE
Suction Tube 276

Bulldog Clamp 350 - 361

BUMM
Uterus Curette 584

BUNNELL
Hand Drill 867
Tendon Stripper 708

BUNT
Safety Pin 1017

BURFORD
Rib Spreader 508, 518, 519

BURFORD-FINOCHIETTO
Rib Spreader 508, 520

BURKE
Biopsy Forceps 591

Burr 866, 868, 999

BUSCH
Umbilical Cord Scissors 557

BUSHE
Bone Curette 782

Button-end Probe 297

C

Caesarean Forceps 569

CAIRNS
Skull Flap Elevator 748

Caliper 626, 627, 872 - 874
Cannula 533

CALNE
Liver Transplant Clamp 423

CAPENER
Osteotome 809
Gouge 805
Capsule Retractor 241, 740, 743
Capsultomy Scissors 348

CARPENTIER
Rib Spreader 510

CARROLL
Finger Geniometer 872
Osteotome 791
Tendon Forceps 705

Cartilage Forceps 710
Case 664, 950, 953, 1007, 1010, 1011

CASPAR
Retractor 997, 1025
Cervical Retractor 973 - 976, 989
Bone Curette 781, 785, 786
Nerve Root Retractor 951
Hook 920
Rongeur 896 - 899
Caliper 874
Bone Tamper 828
Dissector 757, 933, 972
Scalpel Handle 295
Screw Driver 972
Spine Distracor 971
Lumbar Retractor 981 - 988

CASTANEDA
Rib Spreader 502
Vascular Clamp 448 - 451, 481

CASTROVIEJO
Caliper 627, 872
Micro Scissors 352
Needle Holder 166, 167, 175, 337, 338, 341, 342, 344
Suture Forceps 75, 334

CASTROVIEJO BROWN
Tissue Forceps 76, 334

CASTROVIEJO JACOBSON
Tissue Forceps 342

Catheter 640, 641

CATLIN
Amputating Knife 875

Cervical Curette 952 - 955
Cervical Distractor 973 - 980
Cervical Retractor 968 - 975, 988
Circumcision Instrument 640
Chalazion Curette 769

CHANDLER
Elevator 755
Tissue Retractor 746

CHAPUT
Organ Holding Forceps 137

CHARNLEY
Retractor 718

CHEATLE
Sterilizing Forceps 1015

CHELSEY EATON
Anoscope 653

Chisel 497, 787 - 790, 795 , 798, 800, 803, 809 , 811, 812, 953, 990

CHITWOOD
Suture Cutter 400

Chuck 867, 869, 870

CINELLI
Nasal Scissors 36

CLARK
Artery Forceps 283, 289

Clamps
- Bulldog 350 - 361
- Gynecology 558
- Penis 640
- Tubing 159
- Vessel 364 - 368, 442 - 446, 468

CLEVELAND
Bone Cutting Forceps 696
Bone Rongeur 680

Clip
- Applying Forceps 190, 302
- Clip Removal Forceps 190, 303
Cloth Scissors 661, 663

CLOWARD
Lamina Spreader 966
Retractor 967, 968
Elevator 950
Rongeur 903
Mallet 815, 819
Skin Hook 194

COBB
Gouge 805, 806
Elevator 753, 754
Osteotome 806

COHEN
Uterus Cannula 593

COLLER
Hemostatic Forceps 119

COLLIER
Needle Holder 171

COLLIN
Amptutation Knife 875
Hemostatic Forceps 491
Retractor 202, 243
Scalpe Handle 294
Vaginal Speculum 602, 607
Uterine Forceps 570

COLLIN ATRAUMA
Tissue Forceps 143

COLLIN BABY
Abdominal Retractor 242

COLLIN (LUCAE)
Mallet 815

Colon Rectal Clamp 144
Comedo 312, 313

CONE
Curette 785

CONVERSE
Needle Holder 169, 176

COOLEY
Vascular Dilator 532
Valve Retractor 523, 537
Rib Spreader 503, 507
VATS Forceps 490
Vascular Clamp 453 - 468, 480 - 485
Tissue Forceps 394
Suction Tube 273, 274
Bulldog Clamp 352
Forceps 99, 102
Vascular Scissors 23, 377

COOLEY BECK
Vessel Clamp 468

COOLEY CLARKE
Rib Spreader 502

COOLEY DERRA
Anastomosis Clamp 458

COOLEY GLOVER
Bulldog Clamp 354

COOLEY LEITZ
Anastomosis Clamp 458

COOLEY PARRY
Anastomosis Clamp 457

COOPER
Ligature Needle 188

Coronary Scissors 374

CORSON
Grasping Forceps 579

CORWIN
Wire Instrument 186, 835

CORYLLOS
Retractor 218, 537

Costotome 495

COTTLE
Nerve Hook 922
Osteotome 790, 791
Raspatory 761
Elevator 750
SC Scissors 49
Nasal Scissors 38
Septum Scissors 38

COTTLE KAZANJIAN
Bone Cutting Forceps 697

COTTLE MASING
Nasal plastic scissors 10

Cotton Applicator 300

CRAFOORD
Vascular Clamp 123

CRAFOORD SELLORS
Dissecting Forceps 415

CREGO
Elevator 753

CRILE
Hemostatic Forceps 117
Retractor 200
Nerve Hook 924

CRILE MURRAY
Needle Holder 171

CRILE RANKIN
Hemostatic Forceps 117

Cruciate ligament hook 715

CRILE WOOD
Needle Holder 172, 178, 399

Crown & Collar Scissors 16, 848
Curettes 276, 280, 314, 315, 577 - 585, 769 - 786, 916, 947 - 954, 997

CUSCO
Vaginal Speculum 601, 602

CUSHING
Retractor 950
Periosteal Elevator 949
Spatula 949
Nerve Hook 951, 952

CUSHING
Rongeur 895, 898, 899
Drill 868
Nerve Hook 923, 924
Periosteal Elevator 944
Retractor 198, 287, 945
Skin Hook 194
Spatula 939
Monopolar Forceps 113
Dressing / Tissue Forceps 83, 90 , 96, 97, 306, 327

CUSHING BROWN
Tissue Forceps 92, 93

CUSHING LANDOLT
Specula 964

CUSHING LITTLE JOKER
Periosteal Elevator 949

CUSHING TAYLOR
TC Dressing Forceps 98

CZERNY
Retractor 616
Tenaculum Forceps 566

D

D'ERRICO
Nerve Spatula 950

DAHMEN
Osteotome 807

DALE
Vascular Clamp 432

DALE LEKSELL
Bone Rongeur 693

DANDY
Hemostatic Forceps 125
Nerve Hook 921

DARDIK
Multi-Purpose Clamp 470

DARRACH
Shoulder Elevator 742

DARTIGUES
Uterine Elevating Forceps 570

DAUBENSPECK
Bone Curette 777

DAVIDSON
Scapular Retractor 537

DAVIS
Dissector 926, 927
Facelift Scissors 36
Spatula 937
Sterilizing Forceps 1015
SuperCut Scissors 48

DE LEE
Obstetrical Forceps 573

DE MARTEL
Vascular Scissors 24, 375

DEAVER
Surgical Scissors 3
Retractor 225, 226, 227, 259, 613, 615, 616

DEAVER FORD
Retractor 225

DEBAKEY
Dissecting Scissors 9
Bulldog Clamp 352, 354 - 359
Endarterectomy Scissors 24, 375
Dissecting Forceps 96, 286, 306, 325, 326, 327, 330, 332
Hemostatic Forceps 405
Vascular Forceps 101, 102, 390, 392, 393, 394, 405 - 409, 412, 413, 415, 416, 424, 425, 427 - 431, 436, 437, 438, 442 - 447, 475 - 479, 486, 492
Vascular Dilator 532
VATS Forceps 490, 491
Monopolar Forceps 113
Intestinal Forceps 144
Needle Holder 167, 182, 185, 342, 398, 403, 404
Retractor 240
Rib Spreader 506, 510, 514, 521
Suction Tube 273

DECKER
Micro Scissors 913
Rongeur 901, 998

DEFOUR MENTEL
Bone Rongeur 684

Deltoid Retractor 746

DEMARTEL
Saw Conductor 878

DEMARTEL WOLFSON
Anastomosis Clamp 153
Clamp Holder 153
Closing Forceps 153

DEMEL
Bone Wire Guide 860
Wire Tightening Forceps 843

DEMOS
Tibial Artery Clamp 408

DENNIS
Anastomosis Clamp 145

Depth Gauge 871, 969, 976, 976 , 981

DERF
Needle Holder 169, 176, 185

DERJERINE
Percussion Mallet 1009

Dermal Instruments 296, 315

DERRA
Anastomosis Clamp 482

DESCHAMPS
Ligature Needle 188, 304

DESJARDINS
Gall Forceps 546, 547
Gall Duct Probe 552

DESMARRES
Hand Held Retractor 197

Diamond Knife 935

DIEFFENBACH
Bulldog Clamp 350

DIETHRICH
Bulldog Clamp 352, 353, 358
Dissecting Clamp 126
Vascular Forceps 100, 392, 418
Vascular Scissors 25 - 28, 56, 57, 378, 379 - 383

DIETHRICH DEBAKEY
Vascular Tissue Forceps 392

DIETHRICH FAVALORO
Vascular Scissors 26, 27, 57, 379, 380, 383

DIETHRICH HEGEMANN
Vascular Scissors 25, 56, 378, 382

DIETHRICH RYDER
Needle Holder 175

Dilators 531, 532, 533, 594, 595, 993

DINGMANN
Bone Holding Forceps 670

Director 299, 655
Dispenser 1014
Dissecting and Ligature Forceps 124 - 128, 130, 431
Dissecting Forceps 96, 97, 126 - 136 283, 415, 431
Dissecting Scissors 5 -12, 22, 45, 46, 65, 68, 369, 370, 371, 347, 384, 912

Dissector
- Phlebecotmy 528
- Intima 534
- Breast 617, 620, 621
- Spine 948

DITTEL
Bougie 642, 643

DOANE
Knee Retractor 714

Double Vessel Clamps 364, 365, 368

DOYEN
Mallet 814, 817
Gynecology Scissors 40
Intestinal Clamp 146
Needle Holder 171
Retractor 211, 214
Director 299
Rib Raspatory 497
Myoma Screw 575
Vaginal Speculum 596

DUBOST
Rib Spreader 509

Drill 1004

DUPLAY
Tenaculum Forceps 567

Dura Dissector 927
Dura Hook 921,922, 923

DURANTE
Tissue Forceps 91

DUVAL
Tissue Forceps 143
VATS Instrument 489

E

EASTMAN
Vaginal Speculum 596

ECHLIN
Bone Rongeur 692

EISELSBERG
Ligature Scissors 19

Elevators / Levers 314, 719, 735, 742, 746, 747 - 755, 928, 943, 944, 945, 955

ELLIOT
Obstetrical Forceps 574

EMMET
Fistula Hook 576

Endarterectomy Scissors 24, 375
Endarterectomy Stripper 533
Endospeculum 600

ENGLERT
Tendon Grasping Forceps 704

ENT Forceps 105
ENT Scissors 36 - 39
Enterotomy Scissors 40
Enucleation Scissors 34
Episiotomy Scissors 554

EPPENDORFER
Biopsy Forceps 591

EPSTEIN
Bone Curette 782

ESMARCH
Plaster Scissors 15, 661

EUFRAT PASQUE
Micro Needle Holder 337

EWALD ADSON
Dressing / Tissue Forceps 79, 85

Eye Forceps 104
Eye Scissors 29 - 34
Eye Specula 233

F

Facelift Scissors 36, 39, 49, 51 - 55, 63, 65, 67, 70
Facial Retractor 615

FAHLBUSCH
Micro Scissors 914
Ring Curette 937
Spoon 938

FANSLER
Proctoscope 652

FARABEUF
Raspatory 764
Bone Holding Forceps 673
Retractor 202

FARABEUF COLLIN
Raspatory 764

FARABEUF LAMBOTTE
Bone Holding Forceps 673

FARR
Spring Wire Retractor 232, 233

FARRELL
Cotton Applicator 300

FARRELL (LATHBURY UEBE)
Cotton Applicator 300

FAURE
Biopsy Forceps 586
Peritoneal Forceps 558

FAVALORO MORSE
Rib Spreader 515

FEHLAND
Intestinal Clamp 150

FEILCHENFELD
Splinter Forceps 103

Femoral Retractor 735, 738

FERGUSSON
Bone Holding Forceps 672
Gall Stone Scoop 551
Suction Tube 275
Pressure Clamp 125

FERREIRA
Facelift Retractor 616

FERREIRA STYLE
Breast Retractor 610

FERRIS SMITH
Rongeur 902, 998
Needle / Tissue Forceps 95, 307

Finger Goniometer 872
Finger Ring Saw 320

FINOCHIETTO
Ligature Forceps 134
TC Needle Holder 183
Rib Spreader 499, 505, 511

FINOCHIETTO BABY
Rib Spreader 499, 500

FINSEN
Spring Retractor 233

FISCH
Hook 920

FISCHER
Tendon Stripper 708

Fistula Probe 298, 656
Fixation Forceps 104, 388, 390

FLETCHER
Sponge Forceps 162

FOERSTER
Sponge Forceps 160, 161, 284, 288, 549
VATS Instrument 489

FOGARTY
Clamps 469

FOLEY
Catheter Spanner 640

FOMON
Rasps 829, 831
Dorsal Scissors 49
ENT Scissors 37, 39
Lateral Scissors 48

FOMON-SABER
Facelift Scissors 55

Foreign Body Forceps 635
Forceps
- Anastomosis 658
- Applying 189, 190, 302, 359, 365, 367, 1000
- Bariatric 282 - 289
- Biopsy 488, 586 - 591, 627
- Bipolar 106 - 109
- Blade Ejector 985
- Bone Cutting 996 - 700
- Bone Holding 496, 665 - 674
- Cartilage 710
- Clamp Applying 365
- Clip Removal 190, 303
- Closing 153
- Dissecting 96, 97, 126 - 137 283, 415, 489, 542
- Dressing / Tissue 76 - 83, 94 - 99, 111, 112, 113, 162, 286, 331
- ENT 105
- Eye 104
- Facelift 628
- Foreign Body 635
- Gall Duct 137, 543, 544,546
- Gallbladder 126, 545
- Hemorrhoidal 155, 658
- Hemostatic 116 - 125, 131, 133, 282, 405, 406, 491, 658
- Hysterectomy 543, 559 - 563, 637
- Intestinal 124, 141 - 154, 289
- Iris 75, 334
- Ligature 124, 126 - 134, 282, 431
- Lung Grasping 93, 492
- Meniscus 711
- Micro 74, 325, 328 - 334, 385 - 391, 910, 914, 916
- Monopolar 110 - 113
- Nail Extraction 319
- Nail Splitting 320
- Neuro 910
- Obstetrical 572, 573, 574
- Ovum 571
- Penis 640
- Peritoneal 558, 559
- Placenta 571
- Prostatic 633
- Splinter 103
- Sponge 160, 161, 162, 284, 288, 549
- Sterilizing 1015
- Stone 137, 549, 545 - 548
- Suture 75
- Swab 160, 161, 564
- Tenaculum 565 - 569
- Tendon 701 - 707
- Titanium 324 - 327
- Tongue Holding 155
- Towel 156, 157, 158
- Tumor 155
- Undermining 623
- Uterine 568, 570, 588
- Uterus 564
- Vascular 327, 329, 330, 331, 385 - 395, 416
- Vasectomy 639
- VATS 488, 489

FOX
Lupus Curette 314

Frame 254, 255, 257, 258, 259, 262, 365, 368, 718, 972, 986

FRAZIER
Dura Hook 921
Elevator 925
Suction Tube 275, 279, 1008
Skin Hook 193

FREEMAN
Areola Marker 624
Flap Retractor 617

FREER
Elevator 928
Chisel 787
Raspatory 758

FRIEDMANN
Bone Rongeur 678, 679

FRITSCH
Retractor 211

FROSCH
Bone Holding Forceps 671

FROST
Elevator 314

FRYKHOLM
Bone Rongeur 692

FUKUDA
Retractor 741

FUKUDA KUJAT
Retractor 741

FUKUSHIMA
Suction Tube 278, 1007

G

Galea Hook 939
Gall Duct Forceps 137, 543, 544, 546
Gall Stone Forceps 137, 549, 545 - 548
Gall Duct Probe 551, 552
Gall Stone Scoop 550, 551, 552

GALLAHER
Rasp 832

Gallbladder Retractor 213

GALVAO
Areola Marker 625

GARLAND
Hysterectomy Forceps 559

GARRETT
Vascular Dilator 531

GELPI
Retractor 240, 257, 262, 604

GEMINI
Forceps 135, 283, 404, 542

Genuine Ring Retractor Sets 256 - 268

GERALD
Micro Ring Tip Forceps 326
Monopolar Forceps 110
Dissecting / Tissue Forceps 81, 89, 95, 97, 331
Titanium Forceps 326
Vascular Forceps 100, 331

GERALD DEBAKEY
Vascular Tissue Forceps 392

GERSTER
Traction Bar 667

GERZOG
Mallet 822

GIERTZ STILLE
Rib Shears 494

GIGLI
Wire Saw 878

GIL VERNET
Retractor 199, 633

GILLIES
Skin Hook 195
Needle Holder 180
Monopolar Forceps 110
Dressing / Tissue Forceps 90, 96

GLASSER
Micro Needle Holder 339

GLASSMAN
Intestinal Clamp 150

Glenoid Neck Retractor 744, 745

GLOVER
Vascular Clamp 351, 414, 471 - 479
Applying Forceps 359

GLUCK
Bone/Rib Shears 493

GOELET
Retractor 203

GOLDMAN
Nasal Scissors 37, 39, 64

GOLDMAN FOX
Scissors 64

GOLDSTEIN
Glenoid Neck Retractor 745

Goniometer 872, 873

GORNEY
Scissors 52, 53, 70

GOSSET
Abdominal Retractor 244, 245

Gouges 787 - 812

GOULIAN
Skin Graft Knife 296

GOURDET
Uterine Scoop 581

GRADLE WALTON
Scissors 34, 43

GRAEFE
Micro Skin Hook 192
Fixation Forceps 104
Dressing Forceps 76

GRAHAM
Dura Hook 922

GRANT
Abdominal Clamp 436

Grasping Forceps
- Hemorrhoidal 658
- Lung 93, 492
- Meniscus 711
- Micro 914, 916, 917
- Prostatic 633
- Tissue 139, 141
- Intestinal 141, 142
- Tendon 701, 704, 706
- Tumor 155, 910

GRAVE
Vaginal Speculum 601, 606

GRAY
Gall Duct Forceps 546, 638

GRAZIL
Surgical Scissors 3

GRECO
Suction Tube 272

GREEN
Retractor 209
Fixation Forceps 104

GREEN ARMYTAGE
Caesarean Forceps 569

GREENE
Uterus Curette 585

GREGORY
Profunda Clamp 433
Needle Holder 341

GROSS MAIER
Swab Forceps 161, 564

GROSSMANN
Areola Marker 625

GRUENBERG
Retractor Kit 945, 946

GUPTA FRANK
Forceps 562

GUMCO
Circumcision Instrument 640

GUYON
Bougie 642
Catheter 640
Kidney Pedicle Clamp 635, 636, 637

H

HAASE
Reposition Forceps 666

HABERER
Abdominal Retractor 228

HAIGHT
Rib Spreader 500

HAIGHT BABY
Rib Spreader 503

HAIGHT FINOCHIETTO BABY
Rib Spreader 500

HAJEK
Mallet 817

HAKANSSON
Bone Curette 688

HALLE
Raspatory 760
Bone Curette 777

HALPERN
Breast Caliper 626

HALSEY
Needle Holder 170, 176, 184

HALSTEAD MOSQUITO
Hemostatic Forceps 116

Hand Dermatome 296
Hand Drill 866 - 870, 1004

HANK
Uterine Dilator 595

HARDT DELIMA
Osteotome 791

HARDY
Ring Curette 936
Enucleator 940

HARKEN
Rib Spreader 516
VATS Instrument 490

HARRINGTON
Bronchus Clamp 410
Retractor 221, 257

HARRINGTON PEMBERTON
Retractor 221

HARTMANN
Bone Rongeur 681

HARTMANN MOSQUITO
Hemostatic Forceps 117

HARVEY
Wire Cutting Scissors 16, 849

HAUSMANN
Intestinal Clamp 151

HAYES
Phalangeal Elevator 719

HAYES ATRAUMATIC
Intestinal Clamp 149

Headrest System 947

HEANEY
Hysterectomy Forceps 560
Needle Holder 173, 179, 285
Retractor 597

HEANEY KANTER
Hysterectomy Clamp 561

HEANEY REZEK
Hysterectomy Forceps 561

HEANEY SIMON
Retractor 597

HEATH
Ligature Scissors 19, 308

HEGAR
Uterine Dilator 594
TC Needle Holder 182

HEGAR BAUMGARTNER
TC Needle Holder 117

HEGENBARTH
Clip Applying Forceps 190, 302

HEIFETZ
Micro Instrument 919
Spatula 937

HEISS
Dissecting and Ligature Forceps 124

HELFERICH BIER
Amputation Saw 876

Hemi Laminectomy Retractor 960

HEMINGWAY
Double Curette 772

Hemorrhoidal Forceps 155
Hemorrhoidal Suction Ligator 654
Hemorrhoidal Grasping Forceps 658
Hemostatic Forceps 116 - 125, 131, 133, 282, 405, 406, 491, 658

HENAHAN
Raspatory 765

HENLEY
Retractor 242

HENLY
Subclavian Artery Clamp 441

HENNING
Plaster Spreader 662

Heparin Flushing Needle 533

HERRICK
Pedicle Clamp 636

HESS
Nerve Root Retractor 951
Bulldog Clamp 353

HEY GROVE
Bone Holding Forceps 676

HEYMAN KNIGHT
Nasal Scissors 38

HEYWOOD SMITH
Gall Bladder Forceps 549
Hemorrhoidal Forceps 155

HIBBS
Blade 970
Gouge 799
Osteotome 797
Chisel 798
Retractor 216, 962, 963

HILL FERGUSON
Rectal Retractor 649

Hip Raspatory 768
Hip Retractor 738, 739, 740

HIRSCHMANN
Anoscope 650

HOEN
Elevator 925, 948
Hook 924
Tendon Grasping Forceps 706

HOHENFELLER
Vascular Scissors 23, 377

HOHMANN
Bone Lever 720 - 723, 726, 727 - 732

HOHMANN ALDINGER
Bone Lever 731

HOKE
Osteotome 796

HOLZHEIMER
Skin Retractor 234

HONGKONG DERRA
Vascular Clamp 419

HONGKONG SATINSKY
Liver Transplant Clamp 420

Hooks
- Bone 716, 717
- Dissector 617, 948
- Fistula 576
- Galea 939
- IUD 576
- Nerve 921 - 924, 934, 947, 948, 949, 997
- Phlebectomy 527, 528
- Skin 192-196, 200, 703

HORSLEY
Dissector 925

HOSOBUCHI
Fork Spatula 939

HOWARTH
Elevator 750

HUDSON
Hand Drill 868, 1004

HULKA
Uterine Forceps 568

Humeral Head Retractor 737, 745

HUNT
Forceps 917

HURD
Ligature Needle 188

HUSFELDT
Carotid Profunda Clamp 434

Hysterectomy Forceps 543, 559 - 563, 637

I

IKUTA
Bone Clamp 669
Iliac Clamp 460

IMA
Rib Spreader 261, 522, 523

IMA FRENCH
Rib Spreader 513

INGE
Lamina Spreader 963

Initial Incision Retractor 718
Instrument Cleaning 1013 - 1018
Instrument Holder 1012
Intervertebral Bone Rongeur 687
Intestinal Clamp 145 - 152
Intestinal Forceps 124, 141 - 154, 289
Intima Instruments 534

IOWA
Vulsellum Forceps 569

Iridectomy Scissors 344
Iris Forceps 75, 334
Iris Scissors 29 - 32

ISRAEL
Retractor 207

IUD Removing Hook 576
IUD Hook 576

IVES-FANSLER
Proctoscope 652

J

JABALEY
Super Cut Scissors 44

JACKSON
Vaginal Speculum 596

JACOBS
Tenaculum Forceps 569

JACOBSON
Curette 770
Micro Scissors 343 - 347, 372
Needle Holder 167, 335, 336, 338, 340, 341, 342
Hemostatic Forceps 116
Suture Pusher 935
Vessel Knife / Probe 919, 920

JAMESON
VATS Scissors 373
Dissecting Scissors 12
SC Scissors 44, 47

JAMISON
Needle Holder 165

JAMESON WERBER
Scissors 12

JANSEN
Retractor 234
Dressing Forceps 105
Curette 770, 772
Elevator 757
Bone Rongeur 683

JARCHO
Tenaculum Forceps 566

JAVID
Clamp 429

JEFFERSON
Tissue Forceps 85

JEWELER TYPE
Bipolar Forceps 106

Jeweller's Forceps 103, 332

JOHNS HOPINS
Applying Forceps 359
Bulldog Clamp 350

JOHNSON
Neuroma Retractor 240

JONES
Towel Clip 158

JORGENSEN
Scissors 40

JOSEPH
Raspatory 761
Skin Hook 195, 196
Dissecting Scissors 11

JUDD ALLIS
Tissue Forceps 139

Jug 1006

K

KAHN
Facelift Scissors 39, 49

KALLMORGEN
Specula 596

KANTROWITZ
Thorax Forceps 131

KAY
Clamp 474

KAY LAMBERT
Anastomosis Clamp 417

KAYE
Scissors 39, 50, 52, 63

KAYE FREEMAN SC
Facelift Scissors 51, 63

KAYE SC
Facelift Scissors 47

KELLY
Dissecting Forceps 127
Hemostatic Forceps 118
Dissecting Scissors 11
Proctoscope 650
Uterus Polypus Forceps 564
Retractor 213, 218, 257, 262

KELLY RANKIN
Hemostatic Forceps 118

KERN
Bone Holding Forceps 674

KERRISON
Punch 882 - 894, 1001

KERVOKIAN
Biopsy Forceps 590

KEY
Elevator 753

KEYES
Dermal Punch Set 315

Kidney Pedicle Clamp 127, 542, 545, 635 - 638
Kidney Stone Forceps 548

KIELLAND
Obstetrical Forceps 574

KIELLAND LUIKART
Obstetrical Forceps 574

KILLIAN
Raspatory 759
Elevator 750

KILNER
Skin Hook 194
Needle Holder 175

KILNER RAGNELL
Dissecting Scissors 7

KIRK
Mallet 824

KIRSCHNER
Extension Bow 861
Abdominal Retractor 254, 255

KITZMILLER
Pediatric Clamp 485

KLAPP
Tendon Retractor 709

KLEINERT KUTZ
Rasp 830
Tendon Forceps 707
Bone Rongeur 679
Skin Hook 195
Elevator 720

KLEINSCHMIDT
Appendectomy Clamp 144

KLINTMALM
Liver Transplant Clamp 423

KNAPP
Retractor 193
Strabismus Scissors 33
Iris Scissors 29

Knee Retractor 714, 715
Knife Handle 292, 293, 294
Knot Pusher 400, 404

KOCHER
Retractor 204, 211, 220, 631
Intestinal Clamp 147, 148
Hemostatic Forceps 121

KOCHER LANGENBECK
Retractor 213, 220

KOCHER OCHSNER
Hemostatic Forceps 282

KÖNIG
Vascular Forceps 487, 488

KOENIG
Raspatory 758
Elevator 747

KOERTE
Retractor 207, 224

KOERTE WAGNER
Retractor 208

KOGAN
Endospeculum 600

KOOS
Micro Vessel Knife 931

KOPPELMANN
Wire Twister and Scissors 847

KRAEMER
Ring Curette 785
Raspatory 765

KRAYENBÜHL
Nerve Hook 919, 951

KRISTELLER
Vaginal Speculum 598, 599

KUEMMEL
Abdominal Retractor 224

L

Lacrimal Probe 298

LAHEY
Retractor 209
Gall Duct Forceps 137, 544

LAINE KINDAL
Vascular Scissors 376

LAMBERT-KAY
Clamp 474

LAMBOTTE
Osteotome 792

LAMBOTTE
Raspatory 767
Bone Holding Forceps 675

Lamina Gouge 805
Laminectomy Retractor 239
Lamina Spreader 963

LANDOLT
Scalpel Handle 295
Spreader 964
Rongeur 906
Raspatory 789, 938
Spoon 938
Hook 939
Enucleator 940

LANDOLT-REULEN
Dissector 939
Hook 939
Raspatory 939
Ring Curette 937

LANE
Grasping Forceps 141
Screw Driver 871
Elevator 755
Bone Holding Forceps 674

LANGE BABY
Bone Lever 722

LANGE HOHMANN
Bone Lever 725

LANGENBECK
Retractor 208, 219
Amputation Saw 876
Resection Knife 875
Round Plier 841
Raspatory 765
Elevator 749, 752
Bone Holding Forceps 672

LAROE
Undermining Forceps 623

LARRY
Rectal probe / director 655

LAWRANCE
Needle Holders 171
Kidney Pedicle Clamp 545, 638

LAZAR
Micro Suture Forceps 918

Lead Hand 717

LEBSCHE
Sternum Chisel 497

LEES
Bronchus Clamp 410, 473

LEGUEU
Bladder Spatula 631

LEKSELL STILLE
Bone Rongeur 691

LELAND JONES
Vascular Clamp 416, 428, 478

LEMMON
Intima Dissector 534
Rib Contractor 526

LEMPERT
Bone Curette 776
Raspatory 761
Bone Rongeur 684

LERICHE
Retractor 223
Hemostatic Forceps 118

Levers
- Bone 719 - 737

LEWIN
Bone Holding Forceps 670

LEYLAR
Retractor System 941, 942, 943

LEXER
Dissecting Scissors 5
TC Scissors 59
Chisel 809, 811
Gouge 804, 808
Osteotome 802, 804

LEXER MINI
Osteotome 801

LIDDLE
Clamp 418

Ligature Carrier 592
Ligature Clamp 437
Ligature Forceps 124 - 134, 282
Ligature Guide 919
Ligature Needles 188, 304
Ligature Scissors 17, 18, 19, 311

LILLEHEI POTTS
Dissecting Scissors 9, 47

LINCOLN
Vascular Scissors 23, 374

LINEMAN
Plier 846

LISTER
Plaster Cast Scissors 660
Dressing Forceps 162
Bandage Scissors 13, 660

LISTON
Bone Cutting Forcpes 697, 698, 699

LISTON KEY HORSLEY
Bone Cutting Forceps 700

LITTAUER
Bone Cutting Forceps 696
Stitch Scissors 310
Ligature Scissors 17

LITTLE
Retractor 209

LITTLER
Suture Scissors 20, 50

LITTLEWOOD
Tissue Forceps 140

Liver Transplant Clamp 420 - 423

LLOYD DAVIS
Intestinal Clamp 152

LOCKHART MUMMERY
Fistula Probe 298, 656

LOCKWOOD
Abdominal Demarcator 628
Underminer 623
Intestinal Graspig Forceps 141

LONG
Hysterectomy Forceps 559

LÖFFLER
Needle Holder 167, 342

LORENZ
Bandage Scissors 15

LORNA
Towel Forceps 157

LOUTE
Wire Tightener 843

LOVE
Nerve Root Retractor 950

LOVE GRUENWALD
Laminectomy Rongeur 896, 898, 899

LOVELACE
Lung Grasping Forcpes 492

LOWE BRECK
Meniscotome 712

LOWER
Gall Duct Forceps 137, 544

LOWMAN
Bone Holding Forceps 677

LUCAE
Mallet 813
Dressing Forceps 105

LUCAS
Chisel / Gouge 789

LUER
Retractor 200
Bone Rongeur 682

LUER KOERTE
Gall Stone Scoop 550

Lung Grasping Forceps 93, 492
Lung Spatula 222, 538
Lupus Curette 314, 315
Luxation Lever 734, 736

M

MACCOLLUM DINGMAN
Breast Dissector 621

Magnetic Retriever 401
Malleolar Reposition Forceps 671
Mallets 813 - 825, 961, 1009

MAGILL
Catheter Introducing Forceps 155

MALTZ
Rasp 830, 831

MALTZ (COTTLE)
Raspatory 832

Mammary Retractor/Spreader 512, 612, 613

MARKHAM MEYERDING
Laminectomy Retractor 239, 965

MARTIN
Cartilage Forceps 710
Curette 769
Pelvimeter 605
Cartilage Scissors 21, 710

MARTINI
Curette 769

MASSON
Bladder Retractor 632
Needle Holder 173, 181, 285

MATARASSO
Facelift Scissors 54, 70

MATHIEU
Retractor 200, 203
Needle Holder 174,180
Foreign Body Forceps 635

MATZEN
Intervertebral Bone Rongeur 687

MAYO
Ceracut-Scissors 69
TC Scissors 58
Supercut Scissors 45
Surgical Scissors 4
Gall Stone Scoop 551, 552
Retractor 214
Safety Pin 1017

MAYO ADAMS
Retractor Set 242

MAYO HARRINGTON
Dissecting Scissors 5, 45

MAYO HEGAR
Needle Holder 164, 171, 289, 296, 408

MAYO NOBLE
Gynecology Scissors 554

MAYO ROBSON
Intestinal Clamp 148

MAYO STILLE
Surgical Scissors 4, 58, 69

MAYO HARRINGTON
Supercut Scissors 53
TC Scissors 59

MAYO-HEGAR
Needle Holder 172, 179, 289, 398

MAYO RUSSIAN
Tissue Forceps 91

MAYO ROBSON
Intestinal Clamp 148

MCCULLOCH
Discectomy Retractors 991 - 996

MCDONALD
Elevator 751, 948

MCDOUGAL
Prostatectomy Clamp 633

MCGIVNEY
Hemorrhoidal Grasping Forceps 658
Hemorrhoidal Suction Ligator 654

MCGLAMRY
Raspatory 767

MCINDOE
Bone Cutting Forceps 698
Dissecting Forceps 97
Dressing Forceps 83
Cartilage Scissors 21

MCKENTY
Raspatory 758

MCKENZIE
Twist Drill 868

MCKISSOCK
Caliper 626, 627

MCLEAN
Obsterical Forceps 575

MCQUIGG MIXTER
Hemostatic Forceps 133

MEAD
Mallet 819
Elevator 751
Bone Rongeur 680

MEAD CLEVELAND
Bone Rongeur 680

Meatus Clamp 640

MEEKER
Kidney Pedicle Clamp 127, 545, 638

Meniscotome 712, 713
Meniscus Forceps 711
Metacarpal Saw 876

METZENBAUM
Bariatric Scissors 288
Dissecting Scissors 6
Supercut Scissors 46
TC Scissors 61
Vascular Scissors 373

METZENBAUM BABY
Ceracut Scissors 68
Dissecting Scissors 6
Supercut Scissors 45
TC Scissors 60, 62

METZENBAUM FINO
Dissecting Scissors 7, 47, 61
SuperCut Scissors 47
TC Scissors 61

METZENBAUM FREEMAN SC
Rhytidectomy Scissors 51

METZENBAUM LAHEY
Scissors 6, 54

METZENBAUM NELSON
Dissecting Scissors 8, 287
Ceracut Scissors 69
SuperCut Scissors 46
TC Scissors 62

MEYER
Bone Holding Forceps 668, 671

MEYERDING
Retractor 197, 200, 216, 239, 263, 965, 965
Blade 970

MEYERDING HEMI
Laminectomy Retractor 239

MEYERHOFER
Chalazion Curette 769

MICHEL
Clip Forceps 190, 302, 303

MICHELE
Trephine 865

Micro Dilator 395

Micro Forceps 74, 325, 329 - 334, 385 - 391, 910, 914, 916
Micro Needle Holder 166, 167, 175, 335 - 342, 396, 911, 913, 915,
Micro Raspatory 930, 931
Micro Scissors 343 - 348, 369 - 372, 908 , 909, 912 - 914
Micro Scoop 931
Micro Skin Hook 192
Micro Vessel Knife 920, 931

MIKULICZ
Peritoneal Forceps 558
Retractor 217

MILAN
Curette 585

MILLER
Rasp 830
Retractor 193

MILLIGAN
Dura Dissector 927

MILLIN
Forceps 633, 634
Bladder Retractor 632, 633

MINI TOWNSEND
Biopsy Forceps 588

MIOS
Hip Retractor 738, 739, 740

MISKIMON
Retractor 238

MITCHELL
Clamp 434

MIXTER
Forceps 542, 543
Gall Duct Clamp 133
Dissecting Forceps 127, 136, 283

MIXTER O'SHAUGNESSY
Forceps 133

MIYAZAKI
Ligature Carrier 592
Speculum 592

MOCK
Heparin Flushing Needle 533

MOD. USA
Tissue Forceps 93

MOELTGEN
Gonimeter 873

MOLLISON
Self Retraining Retractor 235

MOLT
Elevator 751

Monopolar Forceps 110 - 113

MORGAN
Proctoscope 651

MORRIS
Clamp 439
Retractor 215

MORSE
Rib Spreader 501, 506

MOYNIHAN
Gall Stone Proop 552
Artery Forceps 543

MURPHY
Retractor 206, 213

MURPHY LANE
Luxation Lever 736

MUSEUX
Forceps 569

MÜLLER
Retractor 735
Vessel Clips 362, 363
Phlebectomy Hook 527

Mycotic Nail Nipper 317

MYERS
Vein Stripper 529

Myoma screw 575
Myrtle Leaf Probe 297

N

NABATOFF
Vein Stripper Set 529

NAGEL
Micro Scissors 913

Nail Extraction Forceps 319
Nail Nipper 316, 317, 318
Nail Splitting Forceps 320
Nail Scissors 321
Nasal Forceps 105
Nasal Scissors 36, 37, 38
Needle Forceps 94- 97, 305 - 315
Needle Holder
- Bariatric 285
- Standard 168 - 174
- Micro 116, 167, 335 - 342, 396, 911, 913, 915
- Titanium 335 -337, 343 - 345, 943
- TC 175 - 183
- Vascular 116, 397 - 400
- Wire 186, 834
Needle Cases 1010, 1011

NEIVERT
Needle Holder 169, 176

NELSON
Tissue Forceps 93

Neonatal Clamp 448 - 451
Nerve Hook 921 - 924, 934, 1002
Nerve Root Retractor 945, 946, 990
Nerve Spatula 945
Neuroma Retractor 240

NEW ORLEANS
Needle Holder 179

NICOLA
Micro Forceps 914
Micro Scissors 345, 914
Raspatory 938
Ring Curette 937

NIEDERDELLMANN
Osteotome 793

NIRO
Bone Cutting Forceps 696

Node Clamp 489

NOLAN
TC Needle Holder 285

Non-Stick Forceps 106 - 109

NOON
Fistula Clamp 408

NORTHBENT
Suture Scissors 309
Ligature Scissors 17

NOTO
Uterus Forceps 564

NOVAK
Biopsy Curette 280, 577

NOYES
Alligator Forceps 905
Iridectomy Scissors 344

O

Obstetrical Forceps 572 - 574

OBWEGESER
Awl 864, 865
Osteotome 793

OCHSNER
Clamp 418

Oil 1019, 1020

OKONEK YASARGIL
Tumor Fork 935

OLDBERG
Rongeur 906

OLIVECRONA
Spatula 944
Dissector 926
Wire Saw 878
Bone Rongeur 681

OLLIER
Retractor 206

OLSEN HEGAR
Needle Holder 174, 180

OMBREDANNE
Mallet 824, 825

OMBREDANNE (ISELIN)
Tendon Holding Forceps 704

Osteophyt Chisel 809
Osteophyte Elevator 945

Osteotomes 788, 790 - 798, 801 - 809
Organ Grasping Forceps 144, 491

OTIS
Urethrotome 644

OVERHOLT
Ligature Forceps 129, 130
Dissecting Forceps 128

OVERHOLT GEISSENDOERFER
Dissecting / Ligature Forceps 134

OVERHOLT MIXTER
Dissecting / Ligature Forceps 126, 132

Ovum Forceps 571

P

PACIFICO MORSE
Rib Spreader 515

PAPAVERO CASPAR
Specula 964

PAR TYPE
SuperCut Scissors 50

Parametrium Scrissors 66, 556
Parametrium Forceps 563

PARKER
Retractor 202

PARKER KERR
Anastomosis Forceps 658

PARKER LANGENBECK (US ARMY)
Retractor 203

PARKER MOTT
Retractor Set 202

PARKES
TC Rasp 831

PARSONNET
Epicardial Retractor 539

PARTSCH
Mallet 814
Osteotome 788

PASSOW
Bone Tamper 826

Patella Holding Forceps 670

PAUL
Tendon Retractor 709

PAYR
Pylorus Clamp 154

PEAN
Hemostatic Forceps 120

PEAPOD
Rongeur 930

PEDERSON
Vaginal Speculum 601, 606

Pediatric Clamp 452 - 456, 465, 481 - 485
Pediatric Forceps 408, 409

PEERS
Towel Forceps 157

PEESO
Wire Bending Plier 842

Pelvic Retractor 223
Pelvimeter 605

PENFIELD
Dissector 756, 757, 928, 948

Penis Clamp 640

PENNINGTON
Tissue Holding Forceps 491, 658

PENNYBACKER
Bone Rongeur 685

PERCY
Retractor 879

Perforating Forceps 668
Perineal Retractor 240, 604, 605
Periosteotome 767
Peripherial Vascular Clamp 415, 419, 428, 432
Peritoneal Forceps 558, 559
Periosteal Raspatory 766

PERTHES
Reamer 862, 863

PESTALOZZA
Uterus Curette 585

PETIT ALLIS
Tissue Forceps 138

PETIT BABCOCK
Intestinal Forceps 142

PETIT MIXTER
Forceps 542

PETIT POINT MIXTER
Artery Forceps 136

Phalangeal Elevator 719, 747

PHANEUF
Peritoneal Forceps 559

Phlebectomy Instruments 527 - 529

PIERSE
Micro Forceps 387, 390

PIPER
Obstetrical Forceps 573

PIFFARD
Lupus Curette 315

Pin Cutter 857, 858
Placenta and Ovum Forceps 571
Placenta Scoop 585
Plain Splinter Forceps 103
Plaster Cast Breaker 662
Plaster Saw 686
Plaster Scissors 660, 662
Plaster Spreader 662
Plate Bending Forceps 847
Plate Scissors 850
Plier 836 - 846
Polyrus Spreader 144

POOLE
Suction Tube 270

Posterior Glenoid Neck Retractor 744

POTTS
Vascular Clamps 412, 422
Vascular Scissors 373

POTTS (JACOBSON)
Bulldog Clamp 365

POTTS SMITH
Dissecting Scissors 10
Dressing Forceps 79, 98
Monopolar Forceps 111, 112

POTTS SMITH
Tissue Forceps 92
Vascular Scissors 27, 28, 56, 64, 381

POZZI
Tenaculum Forceps 565

PRATT
Hemostatic Forceps 658
Fistula Hook 655
Rectal Speculum 646
Rectal Probe 655
Uterine Dilator 595
T-Clamp 125
Vulsellum Grasper and Depressor 566

Premature Baby Vascular Clamp 447

PRESBYTERIAN HOSPITAL
Tubing Clamp 159

Pressure Clamp 125

PRESTON
Meniscus Forceps 711

PRICE THOMAS
Bronchus Forceps 411

Probe
- Button-end 297
- Fistula 298, 656
- Gall Duct 551, 552
- Lacrimal 298
- Myrtle Leaf 297
- Neuro 934, 948, 991
- Phlebectomy 529
- Rectal 655
- Skin 299
- Uterine 592
- Vessel 530

Proctoscopes 650 - 653
Profunda Clamp 433, 434
Prostatic Retractor 630, 631
Punches 314, 315, 882 - 894

PUTTI
Bone File 832, 833

Pylorus Clamp 154

Q

QUERVAIN
Rib Spreader 524
Elevator 748

R

Radial Clamps 366

RADOLF
Nail Extraction Forceps 319

RAGNELL
Hand Held Retractor 198
Scissors 56

RAGNELL DAVIS
Hand Held Retractor 198

RAGNELL KILNER SC
SuperCut Scissors 48

RALK
Hand Drill 876

RAMPLEY
Sponge Forceps 160

RANDALL
Kidney Stone Forceps 548
Suction Biopsy Curette 276, 280

RANEY
Scalp Haemostasis Clip 1005
Applying Forceps 1005

Raspatories 496, 497, 758 - 768, 930, 931, 932
Rasp 829 - 833
Reamers 862 - 865

RAY
Ring Curette 791

RECAMIER
Uterus Curette 583

Rectal probe 655
Rectal Speculum 646 - 649
Rectal Retractor 648, 649

REDON
Guide Needle 301

REILL
Wire Cutter 852
Reposition Forceps 667
Needle Holder 339

Renal Artery Clamp 430, 480

RESANO
Vascular Clamp 404
Micro Forceps 327, 332
Intestinal Clamp 152
Capsule Scissors 21

Removing Hook 576
Reposition Forceps 665 - 668, 671
Resection Knife 875
Retractor
- Abdominal 210, 224, 228, 229, 242 - 255
- Amputation 879
- Bariatric 287
- Bladder 632
- Breast 610 - 619
- Capsule 241, 740, 743
- Cervical 968, 969, 972 - 975
- Deltoid 746
- Femoral 735
- Gallbladder 213
- Glenoid Neck 744, 745
- Gynecological 604, 605
- Hand Held 192 - 230
- Hip 738, 739, 740
- Humeral Head 737, 745
- Humerus 746
- Incision 718
- Knee 714, 715
- Laminectomy 239, 960
- Lumbar 981 - 988
- Micro Discectomy 907, 984 - 991
- Prostatic 630, 631
- Rectal 648, 649
- Ring Retractor 256 - 268
- Self Retaining 232 - 268
- Shoulder 736
- Skin 193, 234
- Spring Wire 232, 233

Retractor
- Tendon 709
- Tissue 743, 746
- Vaginal 253, 259, 260, 605
- Vagotomy 215

RESANO
Forceps 327, 332
Vascular Clamp 404
Capsule Scissors 21
Intestinal Clamp 152

REVERDIN
Abdominal Retractor 229

REYNOLDS
Breast Dissector 621
Dissecting Scissors 12
Tenotomy Scissors 50, 347, 348

RHOTON MERZ
Suction Tube 276

Rhytidectomy Scissors 51
Rib Contractor 526
Rib Raspatory 497
Rib Shears 493, 494, 495
Rib Spreader 498, 499 - 526

RICARD
Abdominal Retractor 243

RICHARDSON
Retractor 212

RICHARDSON EASTMAN
Retractor 212

RICHTER-HEATH
Clip Removal Forceps 190, 303

RIENHOFF
Rib Spreader 504

RIGBY
Perineal Retractor 604, 605

Ring Curette 785, 954
Ring Forceps 391, 487, 488, 639

ROBB
Dissector 534

ROBERTS
Hemostatic Forceps 123

ROCHESTER CARMALT
Hemostatic Forceps 124

ROCHESTER PEAN
Hemostatic Forceps 120, 282

ROEDER
Towel Forceps 156

ROETTGEN RUSKIN
Bone Rongeur 694

ROGGE
Sterilizing Forceps 1015

Rongeurs
- Bone 678 - 695 , 1003
- Laminectomy 896
- Synovectomy 678, 679
- Valve 402

ROSS
Retractor 537

Rotator Retractor 241
Rotunda Catheter 641

ROUX
Retractor 201

RUDD
Cone 654
Ligator 654

Ruler 872 - 874, 626, 627

RUMEL
Thorax Forceps 123

RUMEL BELMONT
Tourniquet 535

RUSKIN
Bone Rongeur 689 - 699

RUSKIN LISTON
Bone Cutting Forceps 698

RUSKIN ROWLAND
Bone Cutting Forceps 699

RUSSIAN
Tissue Forceps 91

RYDER
Needle Holder 181, 184, 397, 399

RZ DAVIS
SuperCut Scissors 48

RZ DC CLAMP
Vessel Clamp 366

S

SAALFELD
Comedo 313

SACHS
Dissector 926

SAENGER
Placenta and Ovum Forceps 571

SALDHANA
Retractor 614

SAMII
Tumor Knife 960
Micro Grasping Forceps 917

SANVENERO
Dissecting Scissors 11

SAROT
Bronchus Clamp 410
Needle Holder 174, 183
Hemostatic Forceps 122

SATINSKY
Tangential Clamp 426
Clamp 421
Bulldog Clamp 361
Vascular Scissors 23, 377

SATTERLEE
Amputation Saw 877

SAUERBRUCH
Needle Case 1016
Rib Shears 494
Retractor 218, 220

SAUNDERS
IUD Removing Hook 576

Saw Conductor 978

SAWYER
Rextal Retractor 649

SAYRE
Periosteal Elevator 755

Scalp Haemostasis Clip 1000
Scalpel Handle 292 - 295

SCHAEDEL
Towel Forceps 158

SCHAMBERG
Comedo Extractor 313

SCHEDE
Bone Curette 774

SCHERBACK
Vaginal Speculum 603

SCHINK
Dermatome 296

SCHLESINGER
Rongeur 903

SCHMIEDEN-TAYLOR
Dura Scissors 22

SCHNEIDER
Raspatory 766

SCHNEIDER SAUERBRUCH
Raspatory 766

SCHNIDT SAWTELL
Tonsil Seizing Forceps 135

SCHROEDER
Uterine Scoop 580
Tenaculum Forceps 567, 568

SCHUBERT
Biopsy Forceps 586

SCHUKNECHT
Wire Scissors 850

SCHUMACHER
Bone Lever 733
Biopsy Forceps 591
Umbilical Cord Scissors 557

Scissors
- Adventitia 369, 370, 371
- Bandage 13, 14, 15, 660
- Bariatric 287, 288
- Capsule 21
- Cartilage 21, 710
- Ceracut 68 - 71
- Cloth 661, 663
- Crown and Collar 16, 848
- Dissecting 5 - 12, 22, 45, 46, 65, 68, 369 - 374, 384, 912
- ENT 36 - 39
- Enucleation 34
- Eye 29 - 34
- Gynecology 40, 554 - 557
- Incision 3
- Iris 29 - 32
- Left Handed 4
- Micro 343 - 348, 369 - 371, 908 - 914
- Nail 321
- Neurosurgical 22
- Parametrium 66, 556
- Plaster Cast 660, 662
- Strabismus 33, 62
- Supercut 41 - 57
- Surgical 2 - 4, 45
- Suture 17 - 20, 308, 309, 310
- TC 58 - 71
- Tenotomy 35, 41, 42, 50, 68, 71
- Umbilical Cord 557
- Universal 663
- Vascular 23 - 27, 56, 57, 64, 373 - 384
- Wire 66, 308, 310, 311, 849

Silicone Hand 717

SCOVILLE
Nerve Root Retractor 951
Spatula 944
Bone Curette 782
Blade 263

SCOVILLE HAVERVIELD
Spreader 969

Screw Driver 871, 967
Screws 871

SEBILEAU
Elevator 748

SEDILLOT
Raspatory 764, 766

SEIDL
Speculum 598

SELLORS
Rib Spreader 525

SELMAN
Tissue Forceps 91

SEMB
Bone Cutting Forceps 699
Bone Rongeur 695
Bone Holding Forceps 496, 673
Raspatory 496, 768
Bronchus Forceps 411
Retractor 219

SEMKEN
Needle Forceps 307
Dressing Forceps 82, 89, 96

SEMMES
Spinal Curette 786

SEMN
Vaginal Speculum 602

SENN MILLER
Hand Held Retractor 199

Septum Chisel 787
Septum Elevator 928
Septum Scissors 38
Sequestrum Forceps 672

SETTER
Bone Holding Forceps 669

SEWALL
Raspatory 759

Shears
- Rib 493, 494, 495

SHEEHAN
Osteotome 790

SHORTBENT
Suture Scissors 309

Shoulder Elevator 742
Shoulder Retractor 736

SIEBOLD
Gynecological Scissors 555

SILVER
Skin Graft Knife 296

SIMON
Bone Curette 781
Uterine Scoop 580
Retractor 216

SIMPSON
Uterine Probe 592
Obstetrical Forceps 572

SIMPSON BRAUN
Obstetrical Forceps 572

SIMPSON LUIKART
Obstetrical Forceps 573

SIMS
Rectal Speculum 646, 647
Vaginal Speculum 600
Uterine Probe 592
Uterus Curette 582
Gynecological Scissors 555

SINGLEY TUTTLE
Dressing Forceps 286

SKID
Bone Elevator 746

Skin Graft Knife 296
Skin Hook 192 - 196, 200
Skin Retractor 193, 234
Skin Straightening Plate 296
Skull Flap Elevator 748

SLIDER
Needle Holder 400

SMILLIE
Meniscotome 712

SMITH
Wire Sissors 66, 311, 849

SMITH BUIE
Rectal Specula 648

SMITH PETERSON
Osteotome 793, 794
Bone Rongeur 689, 694
Gouge 794
Mallet 961

SMITHWICK
Nerve Hook 922, 924

SOLZ
Breast Retractor 617

SOMER
Uterine Elevating Forceps 570

Spatula
- Breast 619
- Brain 937, 939
- Bladder 631
- Holder 938
- Intima 534
- Lung 222, 538
- Micro 528
- Neuro 939
- Nerve 945

Speculum 592, 596 - 603, 646 - 694, 959

SPENCER
Suture Scissors 17, 309, 310

SPENCER WELLS
Hemostatic Forceps 118

Sphincteroscope 650
Spinal Curette 786, 956
Spinal Elevator 754, 991
Spinal Retractor 263, 957, 962
Sponge Forceps 160, 162, 284, 549
Spongiosa Gouge 804
Splinter Forceps 103

SPRATT
Bone Curette 776

Spreader
- Lamina 958, 961
- Polyrus 144
- Rib 499 - 526
- Bladder 633
- Vessel 919

Spring Wire Retractors 232, 233

SPURLING
Rongeur 896, 898, 899, 998

ST. MARKS
Pelvic Retractor 223

STAGBEETLE
Bone Holding Forceps 665

STANDARD
Dressing Forceps 77, 78
Surgical Scissors 2, 58

STAUDE MOORE
Tenaculum Forceps 565

STEINHAUSER
Bone Reposition Forceps 665, 666

STEINMANN
Tendon Seizing Forceps 705

STELLBRINK
Synovectomy Rongeur 679

Sterilizing Forceps 1015
Sterilizing Tray 1013
Sternum Chisel 497
Sternum Punch 495
Sternum Wire Holding Forceps 187

STEVENS
Dressing Forceps 76
Ceracut Scissors 68, 71
Tenotomy Scissors 35, 41, 42

STEVENS RIBBON
Tenotomy Scissors 35

STILLE
Hand Drill 866
Osteotome 796
Gouge 795
Chisel 795
Bone Curette 775
Bone Rongeur 692
Kidney Pedicle Clamp 635
Plaster Cast Scissors 662

STILLE LISTON
Bone Cutting Forceps 700

STILLE LUER
Bone Rongeur 693

STILLE RUSKIN
Bone Rongeur 694

STILLE SHERMAN
Hand Drill 866

STOCKMANN
Meatus Clamp 640

Stone Forceps 137, 545 - 549
Stone Scoop 550, 551, 552
Strabismus Scissors 33, 46, 62, 71

STRANDELL STILLE
Tendon Retractor 709

STRATTE
TC Needle Holder 183

STRAUSS
Penis Seizing Forceps 640

STRINGER
Instrument Holder 1018

Stripper 529, 533, 708

STRULLY
Neurosurgical Scissors 22

Subclavian Artery Clamp 441

SUBRAMANIAN
Clamp 441, 483

Suction
- Biopsy Curette 276, 280, 577, 578
- Tube 270 - 280
- Cannula 277, 1007
- Ligator 654

SULLIVAN
Monopolar Forceps 111

Supercut Scissors 41 - 57
Surgical Scissors 2 - 4, 22, 41
Suture Catcher 401
Suture Cutter 400
Suture Forceps 75
Suture Ruler 401
Suture Scissors 17 - 20, 308 , 309, 310
Swab Forceps 160, 161, 547, 564

SWEET
Amputation Shield 879
Sternum Punch 495

Synovectomy Rongeur 678, 679

SYPERT
Bone Tamper 828
Bone Rongeur 695

T

Table Fixation 268
Tangential Clamp 426, 464, 479, 636
Tangential Occlusion Clamp 426
Tape 1020

TAYLOR
Mallet 1009
Blade 970
Spinal Retractor 962
Dressing Forceps 82, 89

TC Forceps 94 - 99
TC Needle Holder 175 - 186
TC Scissors 58 - 71
TC Wire Holding Forceps 187, 835
T-Clamp 125, 488, 523

TEALE
Tenaculum Forceps 568

TEBBET STYLE
Breast Retractor 611

Tenaculum Forceps 565 - 569
Tendon Forceps 701 - 707
Tendon Retractors 709
Tendon Strippers 708
Tenolysis Knife 707
Tenotomy Scissors 9, 35, 41, 42, 47, 50, 68,71, 376

THIES
Gouge 787

THOMPSON
Valve Scissors 376

THOMS ALLIS
Tissue Forceps 140

THOMS GAYLOR
Biopsy Forceps 587

Thorax Forceps 21
Thoracotomy Retractor 510

THOREK
Dissecting Scissors 9

TILLEY
Breast Retracrtor 618

TISCHLER KEVORKIAN
Biopsy Forceps 589

TISCHLER MORGAN
Biopsy Forceps 588

Tissue Forceps 76, 84, 85 - 94, 100, 110, 111, 112, 138 - 143, 284, 286, 333, 334, 392, 393, 394, 911, 917
Titanium Forceps 324 - 327
Titanium Needle Holders 335 - 337
Titanium Vascular Clamps 471 - 485
Tobacco Pouch Clamp 144

TOENNIS
Dissecor 928
Tumor Grasping Forceps 155
Vascular Scissors 24
Hemostatic Forceps 121

TOENNIS ADSON
TC Scissors 59

TOHOKU
Towel Clamp 158

Tongue Holding Forceps 155
Tonsil Seizing Forceps 135
Tourniquets 535
Towel Clamp 158
Towel Clip 158
Towel Forceps 156, 157, 158

TOWNLEY
Caliper 872

Traction Bar 677
Transaxillary Dissector 620, 621
Transnasal Speculum 964
Transobturator Sling Needle 592
Trapeziectomy Screw 767
Trephine 862

TROELTSCH (WILDE)
Nasal Forceps 105

TROEMNER
Mallet 1009

TROTTER
Bone Rongeur 688

Tubing Clamps 159, 387
Tubing Introducer Forceps 387

TUFFIER
Rib Spreader 507
Retractor 228
Organ Holding Forceps 138

Tumor
- Fork 935
- Grasping Forceps 155
- Knife 932
- Tissue Forceps 333, 917

TURREL
Biopsy Forceps 657

U

ULRICH
Bone Holding Forceps 676
Swab Forceps 160

Umbilical Cord Scissors 557
Underminer 623
Undermining Forceps 623

UNNA
Comedo Extractor 312

Universal
- Scissors 14, 663
- Plier 842, 845
- Wire Instrument 66, 308, 845, 847, 850
Urethrotome 644
Uro-Tangential Clamp 636
US Army Retractor 203
Uterine Biopsy Forceps 588
Uterine Depressor 579
Uterine Dilator 595
Uterine Elevating Forceps 570
Uterine Forceps 570
Uterine Manipulator 568, 593
Uterine Probe 592
Uterine Scoop 580
Uterus Cannula 593
Uterus Curette 581 - 585
Uterus Polypus Forceps 564

V

Vacuum Cleaner 664
Vaginal Retractor 253, 259, 260, 605
Vaginal Speculum 596 - 607
Vagotomy Retractor 215
Valve Forceps 327, 332
Valve Scissors 376

VAN BUREN
Sequestrum Forceps 672
Bougie 643

VANNAS
Micro Scissors 345, 348, 912, 371

VARADY
Micro Spatula 528

VARCO
Gallbladder Forceps 126, 545

Vascular Atraumatic Forceps 101, 102
Vascular Bulldog Clamp 360, 361
Vascular Clamps and Forceps 403 - 488
Vascular Dilator 531, 532
Vascular Needle Holder 185, 396 - 399
Vascular Scissors 23 - 28, 56, 57, 64, 373 - 384
Vascular Tissue Forceps 100, 392, 393, 394
Vasectomy Forceps 639
VATS Biopsy Forceps 488
VATS Instruments 489 - 492
VATS Rib Spreaders 498

VEHMEHREN (TUDOR EDWARDS)
Costotome 495

Vein Retractor 198, 287
Vein Stripper 529

VERBRUGGE
Bone Lever 726
Bone Holding Forceps 675

VERBRUGGE HOHMANN
Bone Lever 726

VERNON DAVID
Proctoscope 651

Vertebral Distractor 966
Vessel Clamps/Clips 364 - 368
Vessel Irrigating Cannula 533
Vessel Probe 530
Vessel Spreader 919

VILBISS
Cranial Rongeur 904

VIRTUS (RALK)
Splinter Forceps 103

VISE
Micro Forceps 918

VOLKMANN
Curette 771, 774
Retractor 205, 206

VOLKMANN BRUNS
Bone Curette 779

VOLKMANN SCOVILLE
Bone Curette 780

VORSE
Tubing Clamp 159

Vulsellum Forceps 566

VUMAR
Vaginal Speculum 607

W

WACHENFELDT
Clip Applying Forceps 190, 302

WAGNER
Bone lever 724, 734
Gouge 808
Mallet 816
Raspatory 768
Swivel Rongeur 900

WALDEN MARSHALL
Breast Dissecting Scissors 10

WALDMANN
Episiotomy Scissors 554

WALDSACHS
Universal Plier 842

WALLICH
Placenta / Ovum Scoop 585

WALTER-CARMALT
Splinter Forceps 103

WALTER
Gouge 795

WALTON
Cartilage Forceps 710
Plaster Cast Spreader 662
Comedo Extractor 312
Tenotomy Scissors 35

WANGENSTEEN
TC Needle Holders 182
TC Dressing Forceps 99

WASSMUND
Retractor 207

WATSON
Hand Dermatome 734

WATSON JONES
Bone Lever 734

WAUGH
Tissue Forceps 90
Dressing Forceps 83

WEARY
Nerve Hook 923

WEBER
Clamp 417

WEBSTER
Needle Holder 168, 177

WEIL BLAKESLEY
Rongeur 905

WEINBERG
Vagotomy Retractor 215

WEINSTEIN
Instrument Holder 1018

WEITLANER
Self Retaining Retractor 236

WEITLANER BECKMANN
Self Retaining Retractor 236

WELDON
Bulldog Clamp 353

WERTHEIM
Hysterectomy Forceps 562, 637
Scissors 555
TC Needle Holder 182

WERTHEIM CULLEN
Hysterectomy Forceps 562, 637

WESTCOTT
Micro Scissors 347, 348, 369, 371, 374

WICKHAM
Applying Forceps 359
Bulldog Clamp 358

WILLAUER
Gynecology Scissors 40

WILLIAMS
Rongeur 905
Intestinal Forceps 142

WILLIGER
Mallet 820
Curette 769, 772
Raspatory 760
Elevator 747

WINKSTROEM
Artery Forceps 132

WILMER
Eye Scissors 31

WINTER
Placenta and Ovum Forceps 571

Wire
- Bending 842
- Cutter 846, 851 - 857
- Scissors 16, 66, 847, 849
- Extraction 836, 837, 840
- Extension 861
- Guides 859, 860
- Holding 187, 835, 837, 840
- Pulling 836, 839
- Saw 838
- Tightener 186, 838, 843
- Twister 186, 835, 838, 847

WOLFF BOEHLER
Plaster Cast Breaker 662

WOODSON
Elevator 949
Hook 997
Probe 934

Wound Retractor 714, 992

WRIGLEY
Obstetrical Forceps 572

WULLSTEIN
Self Retaining Retractor 235

WYLIE
Vascular Clamp 431, 435, 440
Hand Held Retractor 221

Y

YANCOSKIE
Abdominoplasty Retractor 619

YANG
Needle Holder 168, 177

YANG ADSON
Dressing Forceps 79, 86

YANKAUER
Suction Tube 271, 287

YASARGIL
Rongeur 906
Head Retractor 936 - 939
Micro Dissector 933
Micro Raspatory 930, 931
Ligature Guide 919
Micro Forceps 916
Micro Needle Holder 913
Micro Scissors 912
Tumor Tissue Forceps 333
Suction Cannula 277, 1006
Galea Hook 944

YASARGIL NICOLA
Micro Grasping Forceps 914

YASARGIL SAMII
Micro Forceps 916

YEOMAN
Biopsy Forceps 656, 657

YANG
Needle Holder 168, 177

YANG ADSON
Tissue Forceps 79, 86

YOUNG
Prostatic Retractor 630
Tongue Holding Forceps 155

Z

ZANGER
Abdominal Clamp 440

ZAUFAL JANSEN
Bone Rongeur 690

ZENKER
Hand Held Retractor 219
Hemostatic Forceps 130

ZIELKE
Bone Rongeur 686
Gouge 803

ZUBROD
Intestinal Clamp 149

100-010-170 155
100-010-200 155
100-010-250 155
100-111-170 1009
100-111-200 1009
100-113-240 1009
100-115-200 1009
100-150-000 872
100-152-000 872
100-412-000 873
100-418-150 626, 872
100-418-200 626, 872
100-418-300 626, 872
100-418-500 626, 872
100-422-150 872
110-014-013 875
110-014-016 875
110-014-019 875
110-014-022 875
110-014-028 875
110-018-016 875
110-018-019 875
110-018-022 875
110-028-055 875
110-090-000 296
110-090-001 296
110-090-002 296
110-092-305 296
110-096-019 296
110-096-119 296
110-096-180 296
110-096-185 296
110-097-305 296
110-098-305 296
110-098-399 296
110-110-003 292
110-114-003 292
110-116-033 292
110-116-133 292
110-117-033 292
110-130-007 293
110-130-077 293
110-140-004 293
110-141-004 293
110-144-004 293
110-146-008 294
110-146-009 294
110-150-000 294
110-150-150 294
110-152-105 294
110-152-160 294
120-010-115 2
120-010-130 2
120-010-145 2
120-010-155 2
120-010-165 2
120-010-185 2
120-010-200 2
120-011-115 2
120-011-130 2
120-011-145 2
120-011-155 2
120-011-165 2
120-011-185 2
120-011-200 2
120-012-115 2
120-012-130 2
120-012-145 2
120-012-155 2
120-012-165 2
120-012-175 2
120-012-185 2
120-012-200 2
120-013-115 2
120-013-130 2
120-013-145 2
120-013-155 2
120-013-165 2
120-013-185 2
120-013-200 2
120-014-115 2
120-014-130 2
120-014-145 2
120-014-155 2
120-014-165 2
120-014-185 2
120-014-200 2
120-015-115 2
120-015-130 2
120-015-145 2
120-015-155 2
120-015-165 2
120-015-185 2
120-015-200 2
120-016-130 3
120-016-145 3
120-017-130 3
120-017-145 3
120-018-130 3
120-018-145 3
120-019-130 3
120-019-145 3
120-020-130 3
120-020-145 3
120-021-130 3
120-021-145 3
120-022-130 3
120-022-145 3
120-024-120 3
120-024-145 3
120-025-120 3
120-025-145 3
120-026-120 3
120-026-145 3
120-027-120 3
120-027-145 3
120-028-120 3
120-028-145 3
120-029-120 3
120-029-145 3
120-030-145 4
120-030-150 4
120-030-170 4
120-030-230 5
120-030-280 5
120-031-145 4
120-031-150 4
120-031-170 4
120-031-230 5
120-031-280 5
120-036-150 4
120-036-170 4
120-036-195 4
120-036-210 4
120-037-150 4
120-037-170 4
120-037-195 4
120-037-210 4

120-040-160 40
120-040-175 40
120-041-160 40
120-041-175 40
120-043-150 12
120-043-151 12
120-043-180 12
120-043-181 12
120-046-160 11
120-046-200 11
120-047-160 11
120-048-140 10
120-048-170 4
120-049-170 4, 554
120-049-190 4, 554
120-053-195 555
120-053-225 555
120-054-140 20
120-055-140 20
120-056-140 11
120-057-140 11
120-058-140 11
120-059-140 11
120-060-210 23, 377
120-060-240 23
120-061-115 20
120-061-240 555
120-062-200 555
120-062-230 555
120-063-200 555
120-063-230 555
120-065-120 7
120-065-130 7
120-065-150 7
120-065-180 7
120-065-200 7
120-065-230 7
120-070-090 29
120-070-105 29
120-070-115 29
120-071-090 29
120-071-105 29
120-071-115 29
120-072-080 32
120-073-080 32
120-074-080 32
120-075-080 32
120-078-100 18
120-078-105 32
120-079-105 11
120-080-095 32
120-080-105 31
120-080-115 31
120-081-095 32
120-081-105 31
120-081-115 31
120-082-100 31
120-082-110 34
120-083-100 31
120-083-105 32
120-083-115 30
120-084-095 20, 311
120-084-100 31
120-085-115 30
120-086-120 29
120-087-120 29
120-090-105 35
120-090-115 35
120-090-125 35
120-091-095 35
120-091-105 35
120-091-115 35
120-091-182 55
120-092-105 35
120-092-115 35
120-092-125 35
120-092-182 55
120-093-090 35
120-093-105 35
120-093-115 35
120-093-125 35
120-093-182 55
120-094-105 33
120-094-115 33
120-095-105 33
120-095-115 33
120-098-100 35
120-099-100 35
120-110-110 10
120-110-115 6
120-110-145 6
120-110-160 6
120-110-180 8
120-110-200 8
120-110-230 8
120-110-250 8
120-110-280 8
120-110-300 8
120-111-115 6
120-111-145 6
120-111-160 6
120-111-180 8
120-111-200 8
120-111-230 8
120-111-250 8
120-111-280 8
120-111-300 8, 287
120-111-410 287
120-112-110 10
120-114-145 8
120-114-180 8
120-114-200 8
120-115-145 8
120-115-180 8
120-115-200 8
120-120-100 850
120-120-150 22
120-121-150 22
120-126-160 5
120-126-210 5
120-127-160 5
120-127-210 5
120-133-190 9
120-133-200 34
120-133-230 9
120-134-180 23, 377
120-134-230 23, 377
120-135-115 39
120-135-175 9
120-135-200 9
120-136-100 5
120-137-100 5
120-137-145 39
120-137-180 39
120-139-135 39
120-141-120 12
120-150-185 347
120-151-185 347

120-152-145 7
120-152-180 7
120-152-200 7
120-152-230 7
120-153-145 7
120-153-180 7
120-153-200 7
120-153-230 7
120-157-180 7
120-157-200 7
120-157-230 7
120-164-025 346, 372
120-164-045 346, 372
120-164-060 346, 372
120-164-090 346, 372
120-164-125 346, 372
120-164-225 346, 372
120-164-245 346, 372
120-164-260 346, 372
120-164-290 346, 372
120-164-325 346, 372
120-173-180 36
120-174-105 29
120-175-105 29
120-177-105 29
120-178-105 29
120-178-180 371
120-179-105 29
120-181-190 27
120-182-190 27
120-183-025 347
120-183-045 347
120-183-060 347
120-183-090 347
120-183-125 347
120-183-190 27
120-184-025 347
120-184-045 347
120-184-060 347
120-184-090 347
120-184-125 347
120-184-225 346, 372
120-184-245 346, 372
120-184-260 346, 372
120-184-290 346, 372
120-184-325 346, 372
120-184-425 346, 372
120-184-445 346, 372
120-184-460 346, 372
120-184-490 346, 372
120-184-525 346
120-190-190 21
120-203-245 23, 377
120-205-250 376
120-206-200 21, 710
120-209-180 37
120-210-025 346
120-210-060 346
120-210-090 346
120-210-125 346
120-214-250 40
120-214-280 40
120-215-250 40
120-215-280 40
120-216-190 10
120-220-090 17, 309, 310
120-220-130 17, 309, 310
120-222-130 17, 309
120-223-090 309
120-224-115 17
120-224-140 17, 310
120-225-145 554
120-225-165 19
120-225-200 554
120-226-160 19, 308
120-227-160 557
120-228-145 18
120-228-180 18
120-229-160 557
120-230-120 19
120-231-180 554
120-233-105 557
120-233-210 40
120-234-210 40
120-235-210 40
120-241-250 21
120-250-220 22
120-254-180 24
120-255-180 24
120-260-170 23, 374
120-261-170 23, 374
120-261-175 24, 375
120-262-125 16, 849
120-263-175 24, 375
120-265-120 16, 308, 850
120-280-150 37
120-281-110 37
120-281-160 38
120-283-180 38
120-294-100 848
120-294-120 848
120-295-100 848
120-295-120 848
120-296-100 16, 310, 848
120-296-120 16, 848
120-297-100 16, 310, 848
120-297-120 16, 848
120-298-100 848
120-298-120 848
120-299-100 848
120-299-120 848
120-300-100 848
120-300-120 848
120-301-120 848
120-313-130 12
120-315-150 12
120-315-180 12
120-315-200 12
120-315-230 12
120-319-180 24, 375
120-320-180 24, 375
120-325-220 40
120-330-145 6
120-338-110 36
120-339-120 36
120-339-170 36
120-356-150 37
120-360-103 30
120-420-115 374
120-430-170 22
120-500-145 58
120-501-145 58
120-501-170 65
120-501-200 65
120-502-145 58
120-503-145 58
120-504-145 58
120-505-145 58

120-506-145 58
120-506-170 58
120-506-230 59
120-507-145 58
120-507-170 58
120-507-230 59
120-508-150 58
120-508-170 58
120-509-150 58
120-509-170 58
120-510-115 60
120-510-145 60
120-510-180 60
120-510-200 60
120-510-230 60
120-510-250 62
120-510-280 62
120-510-300 62
120-511-115 60
120-511-145 60
120-511-180 60
120-511-200 60
120-511-230 60
120-511-250 62
120-511-280 62
120-511-300 62
120-511-360 62
120-514-145 61
120-514-180 61
120-514-230 61
120-515-145 61
120-515-180 61
120-515-200 61
120-516-160 59
120-516-210 59
120-517-160 59
120-517-210 59
120-520-145 61
120-520-180 61
120-520-200 61
120-520-230 61
120-521-145 61
120-521-180 61
120-521-200 61
120-521-230 61
120-522-145 61
120-522-180 61
120-522-200 61
120-522-230 61
120-523-145 61
120-523-180 61
120-523-200 61
120-523-230 61
120-525-180 61
120-525-200 61
120-529-170 63
120-529-190 63
120-529-230 63
120-530-140 60
120-531-170 59
120-536-002 66, 556
120-536-003 66, 556
120-536-004 66, 556
120-537-001 556
120-537-002 66, 556
120-537-003 66, 556
120-537-004 66, 556
120-538-001 556
120-538-002 66, 556
120-538-003 66, 556
120-538-004 66, 556
120-539-001 556
120-539-002 556
120-539-003 556
120-539-004 556
120-554-115 64
120-555-115 64
120-559-120 62
120-559-150 62
120-559-180 62
120-561-140 65
120-565-120 66, 308, 850
120-565-170 850
120-570-160 66, 311, 849
120-571-115 63
120-571-160 66, 849
120-573-170 63
120-573-190 63
120-573-230 63
120-574-170 67
120-575-145 67
120-577-170 65
120-577-205 65
120-580-230 10
120-580-250 10
120-580-305 10
120-580-355 10
120-581-190 64
120-582-190 64
120-583-190 64
120-584-190 64
120-588-450 288
120-589-450 288
120-593-115 67
120-594-115 62
120-595-115 62
120-596-120 311, 849
120-611-115 18
120-611-140 18
120-611-180 18
120-611-230 18
120-666-130 39
120-667-130 39
120-966-130 64
120-967-130 64
121-011-125 43
121-012-125 42
121-030-145 45
121-030-170 45
121-030-230 45
121-031-145 45
121-031-170 45
121-031-230 45
121-032-300 45
121-033-280 45
121-060-140 44
121-061-115 50
121-061-140 44
121-070-110 43
121-071-110 43
121-077-170 54
121-077-205 54
121-081-100 43
121-089-110 42
121-089-130 44
121-089-150 42
121-091-095 41
121-093-105 41

121-093-125 41
121-094-115 46
121-095-115 46
121-099-100 41
121-110-145 46
121-110-180 46
121-110-200 46
121-110-260 46
121-111-145 46
121-111-180 46
121-111-200 46
121-111-230 46
121-111-250 46
121-111-280 46
121-111-300 46
121-111-355 46
121-131-110 48
121-132-200 43
121-133-200 43
121-137-145 49
121-139-135 55
121-153-115 47
121-153-145 47
121-153-180 47
121-153-200 47
121-153-230 47
121-181-190 56
121-182-190 56
121-183-190 56
121-196-100 41
121-196-110 41
121-196-120 41
121-197-100 41
121-197-110 41
121-197-120 41
121-204-200 51
121-211-180 51
121-211-200 51
121-211-230 51
121-214-150 51
121-214-200 51
121-280-145 49
121-290-165 49
121-297-120 42
121-301-170 54
121-301-200 54
121-304-170 54
121-304-200 54
121-305-170 54
121-305-200 54
121-310-170 52
121-310-190 52
121-310-230 52
121-311-170 52
121-311-190 52
121-311-230 52
121-313-135 44
121-313-170 48
121-315-150 47
121-315-180 47
121-316-115 50
121-317-110 45
121-317-145 45
121-318-125 50
121-327-145 52
121-327-180 52
121-328-180 51
121-329-180 51, 63
121-330-110 50
121-331-110 50
121-331-150 50
121-332-130 48
121-332-150 48
121-332-180 48
121-332-200 48
121-335-190 53
121-335-230 53
121-336-190 52
121-337-185 52
121-343-190 53
121-345-170 53
121-345-190 53
121-345-230 53
121-575-145 55
123-030-145 69
123-030-170 69
123-031-145 69
123-031-170 69
123-036-170 69
123-037-170 69
123-070-115 68
123-071-115 68
123-089-150 71
123-092-185 68
123-111-145 69
123-111-180 69
123-111-200 69
123-184-115 68
123-196-110 68
123-197-100 68
123-197-110 68
123-197-120 68
123-197-150 68
123-305-170 70
123-305-200 70
123-311-190 70
123-317-110 68
123-317-145 68
123-584-190 70
123-585-190 70
123-595-115 71
125-130-025 26, 379
125-130-045 26, 379
125-130-060 26, 379
125-130-090 26, 379
125-130-125 26, 379
125-168-125 27, 380
125-170-025 25, 378
125-170-045 25, 378
125-170-060 25, 378
125-170-090 25, 378
125-170-125 25, 378
125-175-025 25, 378
125-175-045 25, 378
125-175-060 25, 378
125-175-090 25, 378
125-175-125 25, 378
125-178-025 26, 379
125-178-045 26, 379
125-178-060 26, 379
125-178-090 26, 379
125-178-125 26, 379
125-180-000 25
125-180-025 25, 378
125-180-045 25, 378
125-180-060 25, 378
125-180-090 25, 378
125-180-125 25, 378

125-185-125 26, 379
125-200-125 27, 380
125-216-025 28, 381
125-216-045 28, 381
125-217-025 28, 381
125-217-045 28, 381
125-220-025 28, 381
125-220-045 28, 381
125-220-060 28, 381
125-221-025 28, 381
125-221-045 28, 381
125-221-060 28, 381
125-282-776 376
125-282-778 376
125-300-115 27, 380
125-322-180 9
125-323-180 9
125-326-180 9
125-327-180 9
125-328-180 9
125-329-180 9
125-440-025 28, 381
125-440-045 28, 381
125-440-060 28, 381
125-490-025 28, 381
125-490-045 28, 381
125-490-060 28, 381
126-130-025 56, 382
126-130-045 56, 382
126-130-060 56, 382
126-130-090 56, 382
126-130-125 56, 382
126-168-125 57, 383
126-178-025 56, 383
126-178-045 56, 383
126-178-060 56, 383
126-178-090 56, 383
126-178-125 56, 383
126-180-025 56, 382
126-180-045 56, 382
126-180-060 56, 382
126-180-090 56, 382
126-180-125 56, 382
126-185-125 57, 383
126-200-125 57, 382
126-312-180 47
126-312-230 47
126-313-180 47
126-313-230 47
126-314-180 47
126-314-230 47
130-010-105 77
130-010-115 77
130-010-130 77
130-010-145 77
130-010-150 77
130-010-160 77
130-010-180 77
130-010-200 77
130-010-230 77
130-010-250 77
130-010-300 77
130-011-145 77
130-011-160 77
130-012-105 78
130-012-115 78
130-012-130 78
130-012-145 78
130-012-160 78
130-012-180 78
130-012-200 78
130-012-250 78
130-012-300 78
130-013-105 77
130-013-115 77
130-013-130 77
130-013-145 77
130-014-105 78
130-014-115 78
130-014-130 78
130-014-145 78
130-014-160 78
130-014-180 78
130-014-200 78
130-014-250 78
130-014-300 78
130-015-105 78
130-015-130 78
130-015-145 78
130-020-180 331
130-020-200 331
130-020-250 331
130-021-120 79
130-022-180 81, 331
130-022-200 81, 331
130-024-151 87
130-024-152 87
130-024-153 87
130-024-154 87
130-025-120 80
130-026-120 80
130-026-150 80
130-026-180 80
130-028-150 83
130-029-120 80
130-030-175 82
130-034-180 81
130-034-230 81
130-035-180 81
130-035-185 82
130-035-230 81
130-036-175 83
130-037-175 83
130-037-180 79
130-037-210 79
130-037-250 79
130-038-180 79
130-038-210 79
130-038-250 79
130-041-180 81
130-042-200 81
130-043-180 79
130-046-120 77
130-046-130 77
130-046-145 77
130-046-180 77
130-046-200 77
130-049-200 99
130-049-250 99
130-110-105 87
130-110-115 87
130-110-130 87
130-110-145 87
130-110-150 87
130-110-160 87
130-110-180 87
130-110-200 87
130-110-230 87

130-110-250 87
130-110-300 87, 286
130-110-355 286
130-110-410 286
130-112-115 78
130-112-130 78
130-112-145 88
130-112-160 88
130-112-180 78
130-112-200 78
130-112-250 78
130-114-130 78
130-114-145 88
130-114-160 88
130-114-200 78
130-115-180 85
130-116-145 88
130-116-160 88
130-118-145 88
130-118-155 88
130-118-160 88
130-118-180 88
130-120-115 88
130-120-130 88
130-120-145 88
130-120-150 90
130-120-160 88
130-120-180 88
130-120-200 88
130-120-250 88
130-120-300 88
130-126-120 87
130-126-130 93
130-126-145 87
130-126-155 87
130-126-180 93
130-126-200 93
130-126-250 93
130-137-150 92
130-137-200 92
130-138-150 92
130-138-200 92
130-140-120 84
130-140-150 84
130-140-180 84
130-141-009 85
130-141-010 85
130-141-012 85
130-142-120 85
130-143-120 84
130-143-180 92
130-144-125 82
130-144-150 82
130-145-125 89
130-145-150 89
130-147-125 89
130-147-175 89
130-150-180 89
130-150-230 89
130-151-180 89
130-152-175 90
130-153-175 90
130-153-195 89
130-154-180 92
130-154-210 92
130-154-250 92
130-155-180 92
130-155-210 92
130-155-250 92
130-157-175 89
130-160-150 90
130-160-200 90
130-162-150 83
130-162-200 83
130-212-180 330
130-212-210 330
130-437-100 74
130-438-100 74
130-456-230 91
130-468-150 100, 392
130-468-200 100, 392
130-468-240 100, 392
130-490-100 104
130-491-100 104
130-492-100 104
130-500-100 76
130-501-100 76
130-502-100 76
130-503-100 76
130-504-100 76
130-505-100 76
130-510-150 91
130-510-170 95, 307
130-510-200 91
130-510-250 91
130-510-300 91
130-510-350 91
130-511-110 76
130-511-145 91
130-511-160 91
130-511-170 307
130-511-200 91
130-512-150 96, 307
130-513-110 76
130-514-170 95, 305
130-516-170 97
130-518-145 97
130-518-160 97
130-518-170 95, 307
130-520-150 96
130-520-175 100, 392
130-520-200 100, 392
130-520-240 100, 392
130-522-145 307
130-522-150 97
130-522-160 95, 307
130-522-200 95, 307
130-522-250 95, 307
130-527-120 102, 394
130-529-120 94, 305
130-529-150 94, 305
130-530-230 332
130-532-120 94
130-532-150 94
130-534-120 94, 305
130-534-150 94, 305
130-536-175 96, 306
130-537-120 94, 305
130-537-150 94, 305
130-538-120 94
130-538-175 96
130-539-180 97, 306
130-540-120 79
130-541-180 98
130-542-150 98
130-542-180 98
130-542-210 98
130-542-230 98

130-542-250 98
130-544-195 98
130-548-120 80
130-548-150 80
130-552-120 86
130-552-150 86
130-554-120 86, 388
130-554-160 87
130-554-175 92
130-554-200 87
130-554-250 87
130-555-120 86
130-555-150 86
130-555-180 93
130-557-120 84
130-560-180 93
130-560-230 93
130-560-300 286
130-560-350 93, 286
130-560-410 286
130-561-125 91
130-562-150 93
130-562-200 93
130-562-230 93
130-566-150 99
130-566-230 99
130-566-250 99
130-568-150 96, 306
130-568-190 96, 306
130-568-240 96, 306
130-570-160 96, 306
130-570-200 96, 306
130-570-240 96, 306
130-575-250 99
130-622-090 103
130-622-115 103
130-630-075 103
130-630-090 103
130-630-115 103
130-632-105 103
130-633-105 103
130-640-140 103
130-644-150 91
130-644-200 91
130-644-250 91
130-719-150 110
130-720-150 110
130-724-180 331
130-724-200 331
130-726-180 326
130-726-200 326
130-728-180 326
130-731-180 331
130-731-200 331
130-734-180 326
130-734-200 326
130-735-180 326
130-735-200 326
130-736-175 113
130-736-180 327
130-736-200 113
130-738-180 111
130-738-210 111
130-738-250 111
130-738-300 111
130-740-120 110
130-740-145 112
130-740-180 112
130-740-210 112
130-740-250 112
130-740-300 112
130-741-180 112
130-741-210 112
130-741-250 112
130-741-300 112
130-743-250 111
130-746-120 110
130-747-145 112
130-747-180 112
130-747-210 112
130-747-250 112
130-747-300 112
130-748-180 112
130-748-210 112
130-748-250 112
130-748-300 112
130-750-150 111
130-750-180 110
130-752-180 111
130-752-210 111
130-752-250 111
130-752-300 111
130-753-145 112
130-753-180 112
130-753-210 112
130-753-250 112
130-753-300 112
130-754-145 112
130-754-180 112
130-754-210 112
130-754-250 112
130-754-300 112
130-830-230 327
130-881-160 327
130-881-200 327
130-881-240 327
130-882-160 327
130-882-200 327
130-882-240 327
130-884-160 327
130-884-200 327
130-884-240 327
140-013-035 353
140-014-025 355
140-014-090 355
140-014-110 355
140-015-035 353
140-015-090 355
140-015-110 355
140-016-035 353
140-017-035 353
140-022-045 353
140-023-045 353
140-024-045 353
140-025-045 353
140-050-038 350
140-050-050 350
140-050-057 350
140-050-063 350
140-050-070 350
140-050-076 350
140-050-090 350
140-051-038 350
140-051-050 350
140-051-057 350
140-051-063 350
140-051-070 350
140-051-076 350

140-051-090 350
140-056-020 353
140-056-030 353
140-108-013 358
140-108-018 358
140-108-025 358
140-108-230 358, 359
140-109-013 358
140-109-018 358
140-109-025 358
140-112-050 353
140-114-025 355
140-114-035 350
140-114-040 350
140-114-050 350
140-115-035 350
140-115-050 350
140-115-055 350
140-115-060 350
140-116-030 351
140-116-035 351
140-116-040 351
140-116-050 351
140-116-130 351
140-116-135 351
140-116-140 351
140-116-150 351
140-117-030 351
140-117-035 351
140-117-040 351
140-117-050 351
140-117-130 351
140-117-135 351
140-117-140 351
140-117-150 351
140-118-030 351
140-118-035 351
140-118-040 351
140-118-050 351
140-118-130 351
140-118-135 351
140-118-140 351
140-118-150 351
140-119-075 352
140-119-085 352
140-119-105 352
140-119-120 352
140-120-075 352
140-120-085 352
140-120-105 352
140-120-120 352
140-121-080 352
140-121-120 352
140-121-200 352
140-122-080 352
140-122-120 352
140-122-200 352
140-125-080 352
140-125-120 352
140-125-200 352
140-130-030 351
140-130-035 351
140-130-040 351
140-130-050 351
140-130-060 354
140-130-070 354
140-130-090 354
140-130-110 354
140-130-130 351
140-130-135 351
140-130-140 351
140-130-150 351
140-130-240 351, 359
140-131-030 351
140-131-035 351
140-131-040 351
140-131-050 351
140-131-060 354
140-131-070 354
140-131-090 354
140-131-110 354
140-131-130 351
140-131-135 351
140-131-140 351
140-131-150 351
140-132-030 351
140-132-035 351
140-132-040 351
140-132-050 351
140-132-060 354
140-132-130 351
140-132-135 351
140-132-140 351
140-132-150 351
140-133-060 354
140-133-095 356
140-133-100 354
140-134-130 137
140-135-070 355
140-135-130 138
140-135-185 128
140-135-205 128
140-135-210 128
140-135-215 128
140-137-000 129
140-137-001 129
140-137-002 129
140-137-003 129
140-137-006 129
140-137-008 129
140-137-010 129
140-137-011 129
140-137-014 129
140-140-200 119
140-140-260 119
140-141-200 119
140-141-260 119
140-142-200 119
140-142-260 119
140-143-200 119
140-143-260 119
140-144-060 131
140-144-090 131
140-150-130 118
140-150-150 118
140-150-180 118
140-150-200 118
140-151-130 118
140-151-150 118
140-151-180 118
140-151-200 118
140-152-230 350, 359
140-152-250 352, 359
140-161-100 116
140-161-130 116
140-161-190 116
140-162-130 116
140-162-190 116

140-220-250 144
140-220-260 144, 491
140-228-125 125
140-228-140 125
140-228-160 125
140-229-140 125
140-236-160 491
140-240-155 491, 658
140-240-200 658
140-244-140 136
140-245-140 136
140-248-100 117
140-249-100 117
140-250-100 117
140-251-100 117
140-254-125 116
140-254-140 116
140-254-180 116
140-254-210 116
140-255-110 116
140-255-125 116
140-255-140 116
140-255-180 116
140-255-210 116
140-256-125 116
140-256-140 116
140-256-180 116
140-256-210 116
140-257-125 116
140-257-140 116
140-257-180 116
140-257-210 116
140-270-100 116
140-270-120 116
140-271-100 116
140-271-120 116
140-271-150 116
140-272-100 116
140-272-120 116
140-273-100 116
140-273-120 116
140-274-140 119
140-275-140 119
140-276-150 118
140-277-150 118
140-278-150 118
140-279-150 118
140-280-140 118
140-281-140 118
140-282-150 125, 658
140-284-355 282
140-284-410 282
140-285-135 131
140-286-160 118
140-287-160 118
140-288-140 119
140-288-160 119
140-289-140 119
140-289-160 119
140-290-140 117
140-291-140 117
140-291-180 117
140-292-140 117
140-293-140 117
140-294-160 117
140-295-160 117
140-296-160 117
140-297-160 117
140-300-160 125
140-301-140 125
140-301-160 125
140-303-140 125
140-303-150 543
140-314-160 124
140-314-200 124
140-315-160 124
140-315-200 124
140-316-130 120
140-316-140 120
140-316-160 120
140-317-130 120
140-317-140 120
140-317-160 120
140-318-130 121
140-318-140 121
140-318-160 121
140-319-130 121
140-319-140 121
140-319-160 121
140-330-140 120
140-330-160 120
140-330-180 120
140-330-200 120
140-330-220 120
140-330-240 120
140-330-260 120
140-330-300 120, 282
140-330-355 120, 282
140-330-410 282
140-331-140 120
140-331-160 120
140-331-180 120
140-331-200 120
140-331-220 120
140-331-240 120
140-331-260 120
140-331-300 120
140-331-355 120
140-332-140 121
140-332-160 121
140-332-180 121
140-332-200 121
140-332-220 121
140-332-240 121
140-332-260 121
140-332-300 121, 282
140-332-355 121, 282
140-332-410 282
140-333-140 121
140-333-160 121
140-333-180 121
140-333-200 121
140-333-220 121
140-333-240 121
140-333-260 121
140-333-300 121
140-333-355 121
140-334-140 117
140-335-140 117
140-336-140 117
140-337-180 128
140-338-140 132
140-339-140 132
140-339-180 132
140-340-200 124
140-341-200 124
140-343-200 124
140-345-210 126, 132

140-346-001 123
140-346-002 123
140-346-003 123
140-346-004 123
140-348-240 122
140-349-240 122
140-352-140 639
140-353-125 639
140-353-140 639
140-354-001 701
140-354-002 701
140-354-003 701
140-355-145 704
140-359-130 135
140-359-160 135
140-359-180 135
140-359-200 135
140-359-220 135
140-359-230 135
140-359-250 135
140-359-280 135
140-361-130 135, 542
140-361-160 135
140-361-180 135, 542
140-361-200 135, 542
140-361-220 135
140-361-230 135, 542
140-361-250 135
140-361-280 135, 283, 542
140-361-355 283
140-361-410 283
140-366-185 122
140-367-185 122
140-368-185 122
140-369-185 122
140-372-185 122
140-373-140 136, 542
140-373-180 136, 542
140-373-185 122
140-383-230 123, 415
140-385-240 123, 415
140-397-130 144
140-401-125 126
140-401-140 126
140-401-180 126
140-403-190 126, 545
140-412-210 121
140-412-260 121
140-414-210 121
140-414-260 121
140-415-210 121
140-415-260 121
140-417-190 131
140-417-240 131
140-417-280 131
140-419-295 130
140-420-295 130
140-421-140 128
140-423-155 136, 542
140-423-190 136, 542
140-423-355 283
140-423-410 283
140-425-155 133
140-425-190 133
140-427-220 127
140-429-230 127, 542
140-431-210 132
140-431-240 132
140-432-190 137
140-433-190 543
140-433-220 133, 543
140-433-250 133, 543
140-433-280 133, 543
140-435-220 133
140-437-180 137, 544
140-439-190 137, 544
140-439-230 137, 544
140-440-240 134
140-441-300 283
140-441-355 283
140-441-410 283
140-442-150 124, 145
140-442-185 124, 145
140-443-001 130
140-443-002 130
140-443-003 130
140-443-004 130
140-443-005 130
140-443-006 130
140-443-007 130
140-443-150 124, 145
140-443-185 124, 145
140-447-001 134
140-447-002 134
140-447-003 134
140-447-004 134
140-447-005 134
140-447-006 134
140-447-007 134
140-452-220 123
140-453-220 123
140-498-230 637
140-498-235 637
140-498-240 637
140-500-001 636
140-500-002 636
140-520-210 559
140-521-210 559
140-548-180 558
140-548-200 558
140-548-245 558
140-549-180 558
140-549-185 558
140-549-200 558
140-551-200 558
140-553-200 558
140-559-090 158
140-561-050 158
140-561-090 158
140-573-080 156
140-573-090 156
140-573-110 156
140-573-130 156
140-573-150 156
140-575-110 156
140-578-100 157
140-578-130 157
140-579-130 156
140-579-165 157
140-580-115 156
140-580-130 156
140-583-160 704
140-584-155 701
140-587-370 289
140-587-460 289
140-590-100 158
140-590-130 158
140-595-145 157

140-597-100 158
140-597-135 158
140-600-145 159
140-600-165 159
140-600-200 635
140-600-220 635
140-600-240 635
140-601-165 159
140-601-180 159
140-601-200 159
140-602-230 635
140-603-150 159
140-603-180 159
140-603-200 159
140-603-230 636
140-604-230 636
140-605-150 159
140-605-180 159
140-605-200 159
140-607-220 546, 638
140-607-230 546, 638
140-608-220 546
140-608-230 546
140-609-210 546
140-612-210 560
140-613-210 560
140-613-230 560
140-615-210 560
140-615-230 560
140-617-210 561
140-617-275 545, 638
140-617-300 561
140-618-210 561
140-619-180 127, 545, 638
140-619-210 561
140-619-275 127, 545, 638
140-627-210 561
140-628-190 135
140-629-190 135
140-630-190 135
140-631-190 135
140-633-190 127
140-633-220 127
140-633-240 127
140-635-190 127
140-635-220 127
140-635-240 127
140-637-190 127
140-637-220 127
140-637-240 127
140-639-210 559
140-641-215 562, 637
140-645-230 543
140-647-240 543
140-652-190 559
140-697-250 562, 637
140-700-220 563
140-700-250 563
140-700-305 563
140-700-350 563
140-701-215 563
140-701-245 563
140-701-305 563
140-701-350 563
140-702-210 563
140-702-245 563
140-702-305 563
140-702-350 563
140-703-205 563
140-703-245 563
140-703-305 563
140-703-350 563
140-707-240 562
140-707-270 562
140-707-320 562
140-741-245 561
140-742-245 561
140-760-008 358
140-760-012 358
140-760-020 358
140-761-008 358
140-761-012 358
140-762-008 358
140-762-012 358
141-700-220 563
141-700-250 563
141-701-215 563
141-701-245 563
141-702-210 563
141-702-245 563
141-703-210 563
141-703-245 563
150-010-220 160
150-010-250 160
150-010-270 160
150-011-220 160
150-011-250 160
150-011-270 160
150-030-200 161
150-030-220 161
150-030-250 161
150-030-270 161
150-031-200 161
150-031-220 161, 564
150-031-250 161
150-031-270 161
150-035-130 162
150-040-260 161
150-041-260 161
150-043-260 161
150-045-250 547
150-046-240 162
150-046-250 547
150-047-240 162
150-050-180 160, 549
150-050-200 160
150-050-250 160, 549
150-052-180 160, 549
150-052-200 160
150-052-250 160, 549
150-052-355 160, 284, 549
150-052-410 160, 284, 549
150-053-180 160, 549
150-053-200 160
150-053-250 160, 549
150-055-180 160, 549
150-055-200 160
150-055-250 160, 549
150-060-250 161
150-061-250 161
150-070-180 160
150-070-250 160
150-080-130 162
150-080-160 162
150-080-180 162
150-588-350 288
160-090-200 299
160-099-130 298

160-099-145 298
160-099-160 298
160-099-200 298
160-100-115 297
160-100-130 297
160-100-145 297
160-100-160 297
160-100-180 297
160-100-200 297
160-102-115 297
160-102-130 297
160-102-145 297
160-102-160 297
160-102-180 297
160-102-200 297
160-107-115 299
160-107-130 299
160-107-145 299
160-107-160 299
160-107-180 299
160-107-200 299
160-108-115 297
160-108-130 297
160-108-145 297
160-108-160 297
160-108-180 297
160-108-200 297
160-110-001 298, 656
160-110-002 298, 656
160-110-003 298, 656
160-110-004 298, 656
160-150-145 297
160-150-160 297
160-150-180 297
160-150-200 297
160-170-130 299
160-170-145 299
160-170-160 299
160-170-180 299
160-175-145 299
160-185-160 299
160-190-150 655
160-210-400 529
160-210-500 529
160-210-650 529
160-210-800 529
160-245-006 529
160-245-009 529
160-245-016 529
160-245-125 529
160-250-000 529
160-250-002 529
160-250-003 529
160-250-006 529
160-250-009 529
160-250-012 529
160-250-080 529
160-250-095 529
160-251-002 533
160-251-003 533
160-251-004 533
160-251-006 533
160-251-007 533
160-251-008 533
160-251-010 533
160-251-012 533
160-251-014 533
160-251-030 533
160-252-001 528
160-252-002 528
160-252-003 528
160-252-004 528
160-252-005 528
160-252-006 528
160-412-180 300
160-420-120 300
160-420-140 300
160-420-180 300
160-426-120 300
160-426-140 300
160-426-180 300
160-426-230 300
165-065-160 273
165-065-270 273
165-066-000 270
165-066-005 276
165-066-007 276
165-067-003 276
165-067-005 276
165-067-007 276
165-067-010 276
165-067-012 276
165-068-005 276
165-068-007 276
165-068-010 276
165-069-005 276
165-069-007 276
165-200-080 301
165-200-100 301
165-200-120 301
165-200-140 301
165-200-160 301
165-200-180 301
165-202-080 301
165-202-100 301
165-202-120 301
165-202-140 301
165-202-160 301
165-202-180 301
165-204-080 301
165-204-100 301
165-204-120 301
165-204-140 301
165-204-160 301
165-521-004 279, 1008
165-522-106 279, 1008
165-522-108 279, 1008
165-522-110 279, 1008
165-522-112 279, 1008
165-523-005 275, 279, 1008
165-523-006 275, 279, 1008
165-523-007 275, 279, 1008
165-523-008 275, 279, 1008
165-523-009 275, 279, 1008
165-523-010 275, 279, 1008
165-523-011 275, 279, 1008
165-523-012 275, 279, 1008
165-523-015 275, 279, 1008
165-523-110 277
165-523-112 277
165-525-005 275
165-525-006 275
165-525-007 275
165-525-008 275
165-525-009 275
165-525-010 275
165-525-011 275
165-525-012 275

165-525-015 275
165-525-205 275
165-525-207 275
165-525-209 275
165-525-212 275
165-530-012 276
165-533-163 278, 1007
165-533-164 278, 1007
165-533-165 278, 1007
165-533-166 278, 1007
165-533-183 278, 1007
165-533-184 278, 1007
165-533-185 278, 1007
165-533-186 278, 1007
165-533-187 278, 1007
165-533-188 278, 1007
165-533-189 278, 1007
165-533-203 278, 1007
165-533-204 278, 1007
165-533-205 278, 1007
165-533-206 278, 1007
165-533-207 278, 1007
165-533-208 278, 1007
165-533-209 278, 1007
165-533-210 278, 1007
165-533-212 278, 1007
165-533-310 272
165-533-311 272
165-533-321 272
165-533-322 272
165-533-330 272
165-533-331 272
165-533-332 272
165-539-003 279, 1008
165-539-005 279, 1008
165-539-007 279, 1008
165-543-000 271
165-543-215 271
165-543-270 271
165-543-355 271, 287
165-543-410 271, 287
165-544-435 271
165-544-450 271
165-549-220 270
165-550-220 270
165-551-220 270
165-552-220 270
165-552-300 273
165-552-310 274
165-552-330 274
165-552-350 273
165-700-003 533
165-700-004 533
165-700-005 533
165-700-006 533
165-705-120 533
165-705-150 533
165-710-060 533
170-002-160 200
170-008-170 227
170-010-125 192
170-010-170 227
170-010-180 227
170-011-125 192
170-013-130 193, 921
170-014-001 195
170-014-002 196
170-014-005 196
170-014-007 196
170-014-010 196
170-014-165 194
170-015-140 194
170-015-170 227
170-019-000 193
170-020-001 195
170-020-002 195
170-020-003 195
170-025-265 227
170-040-160 192, 921
170-042-130 192
170-042-160 192
170-044-160 192
170-060-001 923
170-060-002 923
170-070-275 214
170-074-161 196
170-074-162 196
170-074-163 196
170-074-164 196
170-075-161 196
170-075-162 196
170-075-163 196
170-075-164 196
170-076-161 196
170-076-162 196
170-076-163 196
170-077-161 196
170-077-162 196
170-077-163 196
170-077-164 196
170-079-161 196
170-079-162 196
170-079-163 196
170-079-181 197
170-079-182 197
170-079-183 197
170-079-184 197
170-079-185 197
170-079-186 197
170-080-001 193
170-080-002 193
170-085-130 193
170-086-130 193
170-100-075 233
170-100-090 233
170-100-115 233
170-108-130 197
170-108-160 197
170-109-001 234
170-109-002 234
170-110-130 197
170-110-160 197
170-112-130 197
170-112-160 197
170-114-130 197
170-114-160 197
170-116-130 197
170-116-160 197
170-118-130 197
170-118-160 197
170-130-160 197
170-131-160 197
170-132-160 197
170-133-160 197
170-140-002 206
170-140-003 206
170-140-004 206
170-140-006 206

170-141-002 206
170-141-003 206
170-141-004 206
170-141-006 206
170-160-010 767
170-160-012 767
170-160-015 767
170-160-017 767
170-165-155 200
170-177-125 709
170-181-002 709
170-181-003 709
170-181-004 709
170-200-000 216, 962
170-200-001 216, 962
170-200-002 216, 962
170-206-150 198
170-207-140 198
170-210-160 199
170-212-160 199
170-213-160 199
170-214-003 206
170-214-004 206
170-214-160 199
170-216-200 207
170-218-008 207
170-218-102 206
170-218-103 206
170-218-104 206
170-218-106 206
170-218-202 206
170-218-203 206
170-218-204 206
170-218-206 206
170-219-008 207
170-220-004 207
170-220-005 207
170-220-006 207
170-220-007 207
170-220-215 205
170-220-280 208
170-221-215 205
170-222-215 205
170-222-220 219
170-222-221 219
170-222-222 219
170-222-223 219
170-222-224 219
170-223-215 205
170-224-215 205
170-225-210 208
170-225-215 205
170-226-210 208
170-226-215 205
170-227-210 208
170-227-215 205
170-228-215 205
170-229-215 205
170-230-215 205
170-231-080 198
170-231-100 198
170-231-120 198
170-231-140 198
170-231-160 198
170-231-180 198
170-231-215 205
170-232-215 205
170-233-080 198
170-233-100 198
170-233-120 198
170-233-140 198
170-233-160 198
170-233-180 198
170-233-215 205
170-235-215 205
170-236-008 633
170-236-011 633
170-236-017 633
170-236-020 633
170-236-023 633
170-236-111 199
170-236-208 199
170-236-211 199
170-236-215 199
170-236-217 199
170-237-001 709
170-237-002 709
170-237-210 950
170-237-215 205
170-239-215 205
170-241-215 205
170-245-275 223
170-246-355 287
170-246-410 287
170-260-275 223
170-280-200 716
170-282-200 716
170-292-245 716
170-293-001 219
170-293-002 219
170-293-003 219
170-293-004 219
170-293-005 219
170-300-001 718
170-300-010 718
170-300-013 718
170-300-016 718
170-300-017 718
170-300-025 718
170-300-038 718
170-300-050 718
170-300-057 718
170-300-114 718
170-300-122 718
170-300-123 718
170-301-012 718
170-301-014 718
170-301-015 718
170-301-025 718
170-301-044 718
170-301-050 718
170-301-057 718
170-301-101 718
170-301-114 718
170-310-140 715
170-310-221 204
170-310-222 204
170-310-223 204
170-310-224 204
170-310-226 204
170-310-228 204
170-311-221 204
170-311-222 204
170-311-223 204
170-311-224 204
170-311-226 204
170-311-228 204
170-312-190 209

170-312-221 204
170-312-222 204
170-312-223 204
170-312-224 204
170-312-226 204
170-312-228 204
170-313-200 209
170-315-018 220
170-315-020 220
170-315-025 220
170-315-030 220
170-315-040 220
170-317-022 220
170-317-025 220
170-317-026 220
170-317-035 220
170-317-036 220
170-317-037 220
170-317-040 220
170-317-055 220
170-317-070 220
170-317-080 220
170-317-081 220
170-319-220 209
170-319-250 219
170-319-260 219
170-319-270 219
170-325-001 210
170-325-002 210
170-325-003 210
170-363-001 210
170-363-002 210
170-363-003 210
170-381-000 212
170-381-001 212
170-381-002 212
170-383-001 212
170-383-002 212
170-383-003 212
170-383-004 212
170-383-005 213
170-383-006 213
170-383-007 213
170-383-008 213
170-386-001 212
170-386-003 212
170-386-004 212
170-386-005 212
170-386-006 213
170-386-007 213
170-386-008 213
170-420-050 225
170-420-075 225
170-420-100 225
170-430-001 221
170-430-002 221
170-440-001 211
170-440-002 211
170-440-003 211
170-443-001 210
170-443-002 210
170-443-003 210
170-447-040 211
170-447-050 211
170-447-060 211
170-447-075 211
170-447-085 211
170-449-225 211
170-450-160 216
170-451-002 211
170-451-003 211
170-451-004 211
170-457-001 216
170-457-002 216
170-459-001 597
170-459-002 597
170-459-003 597
170-460-260 597
170-461-001 218, 537
170-461-002 218, 537
170-461-003 218, 537
170-461-250 214
170-462-001 219
170-462-002 219
170-463-001 537
170-463-002 537
170-465-250 218
170-465-380 215
170-465-510 215
170-471-008 217
170-471-010 217
170-471-012 217
170-471-014 217
170-471-016 217
170-471-018 217
170-471-108 217
170-471-110 217
170-471-112 217
170-471-114 217
170-471-116 217
170-471-118 217
170-475-001 537
170-475-002 537
170-475-003 537
170-475-004 537
170-475-005 537
170-475-006 537
170-475-160 216
170-481-040 221
170-481-062 221
170-481-295 221
170-483-024 225
170-483-025 225
170-483-038 225
170-483-050 225
170-483-075 225
170-483-100 225
170-489-001 217
170-489-002 217
170-489-003 217
170-490-500 216
170-492-001 753
170-492-004 753
170-493-001 223
170-493-002 223
170-493-003 223
170-500-255 213
170-530-260 218
170-531-260 218
170-532-260 218
170-533-260 218
170-561-001 220
170-561-002 220
170-561-003 220
170-581-230 615
170-581-300 615
170-591-180 226
170-591-215 226

170-591-230 226
170-591-300 226
170-591-330 226
170-591-360 226
170-593-300 226
170-595-300 226
170-597-300 226
170-598-300 226
170-607-260 217
170-617-280 224
170-621-280 224
170-653-000 616
170-655-000 201
170-655-140 201
170-655-150 201
170-655-170 201
170-663-120 202
170-665-150 202
170-666-145 202
170-667-006 201
170-669-130 201
170-670-115 200
170-671-110 200
170-673-001 202
170-673-002 202
170-675-000 202
170-683-000 203
170-687-210 203
170-695-000 203
170-700-050 233
170-701-050 233
170-702-070 233
170-703-070 233
170-710-038 232
170-710-050 232
170-710-058 232
170-710-064 232
170-710-075 232
170-711-140 232
170-712-064 233
170-712-140 232
170-714-070 234
170-714-100 234
170-715-070 234
170-715-100 234
170-720-100 234
170-723-100 234
170-730-200 236
170-730-265 237
170-731-200 236
170-732-200 237
170-733-200 237
170-738-220 238
170-739-220 238
170-742-105 235
170-742-130 235
170-742-150 235
170-742-180 235
170-743-105 235
170-743-130 235
170-743-150 235
170-743-180 235
170-745-100 240
170-745-170 240
170-746-140 236
170-746-160 236
170-746-200 236
170-746-240 236
170-747-140 236
170-747-160 236
170-747-200 236
170-747-240 236
170-748-105 235
170-749-105 235
170-750-105 235
170-750-130 236
170-750-165 236
170-750-200 236
170-750-240 236
170-751-130 236
170-751-165 236
170-751-200 236
170-751-240 236
170-754-155 235
170-766-090 246
170-769-160 242
170-770-160 242
170-771-001 242
170-771-002 242
170-771-003 242
170-774-040 968
170-774-045 968
170-774-050 968
170-774-055 968
170-774-060 968
170-774-250 968
170-780-040 967
170-780-045 967
170-780-050 967
170-780-055 967
170-780-060 967
170-780-160 967
170-784-320 238
170-786-000 237
170-786-001 237
170-786-002 237
170-786-003 237
170-788-320 238
170-789-320 238
170-790-005 239
170-790-006 239
170-790-007 239, 965
170-790-008 239, 965
170-791-001 239, 965
170-791-002 239, 965
170-791-003 239, 965
170-791-004 239, 965
170-792-001 239, 965
170-792-002 239, 965
170-792-003 239, 965
170-792-004 239, 965
170-792-005 239, 965
170-792-006 239, 965
170-793-001 239, 965
170-793-002 239, 965
170-793-004 239, 965
170-793-005 239, 965
170-793-007 239, 965
170-793-008 239, 965
170-798-046 261, 264
170-798-047 261, 264
170-798-048 261, 266
170-800-012 257, 264, 268
170-800-021 258, 262, 264
170-800-032 257, 264, 268
170-800-041 263, 264
170-800-050 260, 264
170-800-051 259, 264

170-800-061 263, 264
170-800-062 263, 264
170-800-063 263, 264
170-800-099 257, 264
170-800-100 257, 259, 260, 261, 263, 264, 268
170-800-102 257, 261, 264, 268
170-800-103 257, 259, 263, 264, 268
170-800-104 257, 259, 261, 263, 264, 268
170-800-110 257, 259, 263, 264, 268
170-800-111 263, 264
170-800-112 260, 264
170-800-113 257, 264, 268
170-800-201 266
170-800-202 257, 266, 268
170-800-208 262, 266
170-800-209 262, 266
170-800-214 257, 266, 268
170-800-215 257, 266, 268
170-800-216 257, 266, 268
170-800-217 257, 266, 268
170-800-218 266
170-800-220 215
170-800-221 257, 266, 268
170-800-222 266
170-800-227 266
170-800-228 266
170-800-229 266
170-800-230 266
170-800-231 257, 266, 268
170-800-232 257, 266, 268
170-800-233 257, 266, 268
170-800-234 266
170-800-235 266
170-800-236 266
170-800-237 260, 266
170-800-238 266
170-800-239 266
170-800-240 266
170-800-241 257, 262, 266, 268
170-800-242 266
170-800-247 266
170-800-248 266
170-800-249 266
170-800-250 266
170-800-261 259, 266
170-800-262 259, 266
170-800-271 259, 260, 266
170-800-272 259, 266
170-800-300 967
170-800-311 258
170-800-312 258
170-800-321 263, 266
170-800-322 263, 266
170-800-331 263, 266
170-800-332 263, 266
170-800-333 263, 266
170-800-343 263, 266
170-800-344 263, 266
170-800-345 263, 266
170-800-360 266
170-800-361 266
170-800-362 266
170-800-363 266
170-800-364 266
170-800-365 266
170-800-366 266
170-800-367 266
170-800-368 266
170-800-369 266
170-800-900 257
170-800-902 257
170-800-904 257
170-800-905 261
170-800-906 258
170-800-907 262
170-800-908 263
170-800-909 259
170-800-910 260
170-800-914 268
170-800-915 268
170-801-085 240
170-801-100 240
170-801-501 999
170-801-503 999
170-802-090 240, 604
170-802-110 240, 604
170-802-135 240, 604
170-802-180 240, 604
170-803-180 240, 604
170-806-180 604, 605
170-815-000 242
170-815-170 242
170-818-100 244
170-818-120 244
170-818-140 245
170-818-160 245
170-819-000 242
170-821-000 243
170-823-000 243
170-824-000 243
170-825-000 243
170-827-000 243
170-829-000 243
170-834-060 243
170-840-000 247
170-840-050 247
170-840-100 247
170-852-000 246
170-852-050 246
170-852-100 246
170-854-000 246
170-854-070 246
170-860-030 249
170-860-035 249
170-860-045 249
170-860-180 248
170-861-100 252
170-861-101 252
170-863-001 249
170-863-002 249
170-863-003 249
170-863-004 249
170-863-005 249
170-863-006 249
170-863-007 249
170-863-008 249
170-865-001 250, 251
170-865-002 251
170-865-003 251
170-865-004 251
170-865-005 251
170-865-006 251

170-865-007 251
170-865-008 250, 251
170-865-009 251
170-865-010 251
170-865-011 251
170-865-012 251
170-865-013 251
170-865-200 250
170-865-270 250
170-868-000 253
170-868-001 253
170-868-002 253
170-868-100 253
170-868-101 253
170-868-102 253
170-868-103 253
170-882-000 255
170-884-000 254
170-884-024 254
170-884-100 255
170-886-000 254
170-889-040 254
170-889-050 254
170-889-060 254
170-889-075 254
170-889-078 254
170-889-080 254
170-889-086 254
170-889-098 254
170-889-099 254, 255
170-905-000 505
170-906-000 969
170-906-001 969
170-906-102 969
170-906-104 969
170-906-106 969
170-906-108 969
170-906-120 970
170-906-121 970
170-906-122 969
170-906-124 969
170-906-126 969
170-906-128 969
170-906-132 970
170-906-141 970
170-906-142 970
170-906-143 970
170-906-144 969
170-906-145 969
170-906-162 970
170-906-164 970
170-906-166 970
170-906-182 970
170-906-184 970
170-906-190 970
170-906-192 970
170-906-194 970
170-906-196 970
170-906-198 970
170-953-280 229
170-963-013 228
170-963-019 228
170-963-025 228
170-963-032 228
170-963-040 228
170-963-050 228
170-964-019 229
170-964-025 229
170-964-032 229
170-964-038 229
170-964-050 229
170-971-250 228
170-971-300 228
170-971-370 228
170-973-006 228
170-973-012 228
170-973-017 228
170-973-020 228
170-973-025 228
170-975-250 228
171-483-025 616
171-483-138 616
171-591-180 226
171-591-215 226
171-591-230 226
171-591-300 226
171-591-330 226
171-591-360 226
171-593-300 226
171-595-300 226
171-597-300 226
180-100-120 339
180-100-180 339
180-101-180 339
180-160-000 592
180-160-010 592
180-219-145 166
180-219-180 166
180-220-145 166
180-220-180 166
180-221-145 166
180-221-180 166
180-222-145 166
180-222-180 166
180-307-150 187, 834
180-307-180 187, 834
180-308-150 187, 834
180-308-180 187, 834
180-308-200 187, 834
180-309-180 186, 834
180-310-120 169
180-310-125 169
180-314-125 171
180-317-130 171
180-318-110 168
180-318-130 168
180-320-110 168
180-320-130 170
180-321-130 170
180-322-130 169
180-324-125 170
180-324-140 170
180-326-130 170
180-330-150 171
180-332-150 172
180-332-180 172
180-332-200 172
180-342-180 174
180-354-140 172
180-354-160 172
180-354-180 172
180-354-200 172
180-354-240 172
180-354-260 172
180-354-300 172
180-356-140 172
180-356-160 172
180-356-180 172

180-356-200 172
180-361-210 173
180-362-235 173
180-364-270 173
180-381-150 171
180-382-140 174
180-382-170 174
180-382-180 174
180-420-140 174
180-420-170 174
180-420-200 174
180-500-170 840
180-500-180 838
180-501-150 186, 834
180-501-170 840
180-501-190 842
180-502-200 845
180-507-140 837
180-510-140 841
180-511-140 837
180-512-140 841
180-512-160 838
180-513-170 838
180-513-190 839
180-513-530 851
180-515-160 838
180-519-145 175
180-519-180 175
180-519-210 175
180-520-145 175
180-520-180 175
180-520-210 175
180-522-145 175
180-522-180 175
180-524-140 175
180-524-180 175
180-524-210 175
180-525-135 175
180-526-145 175
180-526-180 175
180-526-210 175
180-530-180 175
180-530-200 175
180-530-230 175
180-532-120 176
180-533-130 176
180-534-140 177
180-535-160 846
180-536-115 177
180-536-130 176
180-537-130 176
180-538-130 177
180-539-130 177
180-540-150 178
180-540-180 178
180-540-200 178
180-540-230 178
180-540-260 178
180-540-300 178
180-541-150 178
180-542-150 178
180-544-120 176
180-545-180 183
180-545-260 183
180-547-200 179
180-547-240 179
180-547-260 179
180-547-305 179
180-547-355 285
180-547-410 285
180-548-150 182
180-548-180 182
180-548-200 182
180-548-230 182
180-548-260 182
180-548-310 182
180-550-125 179
180-550-140 179
180-550-160 179
180-550-180 179
180-550-200 179
180-550-240 179
180-550-260 179
180-550-300 179
180-553-180 179
180-553-355 285
180-553-410 285
180-555-115 177
180-555-150 183
180-555-170 183
180-555-200 183
180-556-270 181, 285
180-556-355 285
180-556-410 285
180-558-120 177
180-558-270 183
180-560-130 181
180-560-160 181
180-560-180 181
180-560-200 181
180-560-230 181
180-560-260 181
180-561-130 181
180-561-150 181
180-561-180 181
180-561-200 181
180-561-230 181
180-562-270 182
180-563-260 181
180-565-140 181
180-565-160 181
180-567-230 183
180-568-120 180
180-568-140 180
180-568-170 180
180-569-120 180
180-569-130 187, 835
180-569-180 187, 835
180-570-160 180
180-572-185 847
180-572-200 179
180-574-200 182
180-574-240 182
180-576-140 180
180-576-170 180
180-588-460 289
180-590-140 182
180-590-180 182
180-590-200 182
180-590-230 182
180-634-140 841
180-648-180 167, 342
180-648-200 167, 342
180-648-230 167, 342
180-660-150 397
180-660-170 397
180-660-190 184, 397
180-661-150 184, 397

180-661-170 397
180-661-190 184, 397
180-662-150 337
180-662-170 337
180-662-190 337
180-670-125 184
180-671-115 185
180-674-160 185, 397
180-674-180 397
180-674-200 397
180-674-220 397
180-674-250 397
180-675-160 185, 398
180-675-180 398
180-675-200 398
180-675-220 398
180-675-250 398
180-680-160 398
180-680-180 398
180-680-200 398
180-680-220 398
180-680-250 398
180-690-160 398
180-690-180 398
180-690-200 398
180-690-220 398
180-690-250 398
180-718-210 188
180-719-210 188
180-724-200 188, 304
180-726-210 188, 304
180-727-210 188, 304
180-728-200 188, 304
180-732-190 188
180-732-200 188
180-732-270 304
180-733-270 304
180-751-001 860
180-751-002 860
180-751-003 860
180-751-014 859
180-751-016 859
180-751-018 859
180-751-020 859
180-755-150 167, 342
180-755-180 167, 342
180-755-200 167, 342
180-755-230 167, 342
180-790-150 842
180-810-150 186
180-810-185 186, 835
180-843-135 842
180-880-180 341
180-880-210 341
180-881-180 341
180-881-210 341
180-916-120 190, 302
180-919-001 189
180-919-002 189
180-919-003 189
180-919-004 189
180-919-005 189
180-919-006 189
180-919-007 189
180-919-008 189
180-919-009 189
180-919-010 189
180-919-011 189
180-919-012 189
180-919-013 189
180-919-014 189
180-919-015 189
180-919-016 189
180-919-030 189
180-919-031 189
180-919-032 189
180-919-033 189
180-919-034 189
180-919-035 189
180-919-036 189
180-919-037 189
180-919-038 189
180-919-060 189
180-919-061 189
180-919-063 189
180-919-064 189
180-919-065 189
180-919-066 189
180-919-067 189
180-919-068 189
180-919-103 189
180-919-104 189
180-919-105 189
180-919-106 189
180-919-107 189
180-919-108 189
180-919-109 189
180-919-110 189
180-919-111 189
180-920-120 190, 303
180-920-125 190, 302
180-922-125 190, 302
180-936-140 190, 303
190-155-230 15
190-160-140 13
190-161-140 13
190-162-140 13
190-165-090 13, 660
190-165-110 13, 660
190-165-140 13, 660
190-165-180 13, 660
190-165-200 13, 660
190-170-210 13
190-177-160 660
190-177-190 660
190-195-230 15, 661
190-205-200 15, 661
190-205-220 15, 661
190-209-151 14, 663
190-209-152 14, 663
190-209-153 14, 663
190-209-154 14, 663
190-209-180 14, 663
190-209-181 14, 663
190-209-182 14, 663
190-209-183 14, 663
190-209-184 14, 663
190-209-185 14, 663
190-211-200 661
190-223-240 660
190-224-240 660
190-250-260 662
190-250-370 662
190-291-180 660
190-516-280 662
190-522-230 662
190-530-180 662
190-530-240 662

200-100-000 879
200-100-002 879
200-101-012 877
200-101-015 877
200-101-350 877
200-103-390 876
200-103-394 876
200-103-396 876
200-103-398 876
200-110-230 876
200-112-270 876
200-112-300 876
200-114-310 877
200-115-100 664
200-115-101 664
200-115-145 664
200-115-150 664
200-115-165 664
200-115-500 664
200-116-145 664
200-116-150 664
200-116-165 664
200-117-150 664
200-117-165 664
200-118-100 664
200-120-140 862
200-122-210 862
200-122-300 865
200-124-140 862
200-124-230 864
200-140-200 866
200-140-240 866
200-144-200 866
200-145-010 866
200-145-015 866
200-145-020 866
200-145-025 866
200-145-030 866
200-145-035 866
200-145-040 866
200-145-050 866
200-145-080 866
200-145-100 866
200-145-120 866
200-145-160 866
200-150-000 868, 1004
200-151-000 868, 1004
200-152-000 868, 1004
200-152-001 868, 1004
200-152-002 868, 1004
200-152-003 868, 1004
200-152-004 868, 1004
200-152-005 868
200-152-006 868
200-152-007 868
200-152-008 868
200-152-009 868, 1004
200-152-010 868
200-152-012 868
200-152-021 868
200-153-000 867
200-153-005 867
200-154-160 867
200-157-001 869
200-157-100 869
200-157-200 869
200-157-210 870
200-157-250 870
200-160-210 863
200-200-014 871
200-200-016 871
200-200-018 871
200-200-080 871
200-200-120 871
200-200-170 873
200-200-200 873
200-204-150 843
200-410-001 717
200-410-002 717
200-410-200 716
200-416-140 847
200-500-110 851
200-500-120 851
200-500-150 856
200-500-160 852
200-500-220 852
200-500-230 855
200-500-380 858
200-500-470 858
200-500-585 857
200-500-997 855, 856
200-500-998 855, 856
200-502-180 853
200-502-185 854
200-502-200 855
200-502-280 855
200-502-997 855
200-502-998 855
200-503-165 836
200-503-235 852
200-504-180 853
200-504-235 852
200-505-180 856
200-505-997 856
200-505-998 856
200-506-220 853
200-507-130 837
200-507-180 837, 840
200-508-180 856
200-510-145 854
200-510-150 853
200-510-160 854
200-511-002 840
200-511-180 845
200-511-181 845
200-511-200 845
200-511-201 845
200-511-240 845
200-511-241 845
200-512-180 855
200-512-185 846
200-513-150 847
200-513-185 845
200-513-210 843
200-514-145 840
200-514-150 847
200-514-170 836
200-514-180 840
200-515-140 837
200-515-170 836
200-515-220 844
200-515-221 844
200-515-250 844
200-515-251 844
200-515-300 844
200-515-301 844
200-516-220 846
200-518-140 839

200-518-160 839
200-522-240 857
200-555-180 861
200-555-220 861
200-600-200 871
200-601-250 871
200-604-200 871
200-604-220 871
200-604-235 871
200-604-240 871
200-604-250 871
200-604-275 871
200-608-200 871
200-755-270 843
210-090-002 826
210-090-003 826
210-090-004 826
210-090-005 826
210-090-006 826
210-090-008 826
210-090-009 826
210-090-010 826
210-090-011 827
210-090-012 827
210-090-020 827
210-090-021 827
210-090-022 827
210-090-023 827
210-090-030 827
210-090-031 827
210-090-032 827
210-090-033 827
210-090-034 827
210-090-035 827
210-091-100 828
210-091-101 828
210-091-102 828
210-091-103 828
210-093-230 828
210-100-004 788
210-100-006 788
210-100-008 788
210-100-010 788
210-100-012 788
210-100-162 787
210-100-163 787
210-100-164 787
210-103-160 789
210-106-200 793
210-109-002 788
210-109-003 788
210-109-004 788
210-109-005 788
210-109-006 788
210-109-007 788
210-109-008 788
210-109-200 793
210-110-002 788
210-110-003 788
210-110-004 788
210-110-005 788
210-110-006 788
210-110-007 788
210-110-008 788
210-111-004 807
210-111-005 807
210-111-006 807
210-111-007 807
210-111-008 807
210-111-010 807
210-111-012 807
210-111-015 807
210-111-020 807
210-111-022 807
210-111-025 807
210-112-004 807
210-112-005 807
210-112-006 807
210-112-008 807
210-112-010 807
210-112-012 807
210-112-015 807
210-112-020 807
210-112-022 807
210-112-025 807
210-113-004 807
210-113-005 807
210-113-006 807
210-113-008 807
210-113-010 807
210-113-012 807
210-113-015 807
210-113-020 807
210-113-022 807
210-113-025 807
210-113-200 793
210-115-003 826
210-115-005 826
210-115-007 826
210-115-009 826
210-116-200 793
210-118-004 807
210-118-005 807
210-118-006 807
210-118-008 807
210-118-010 807
210-118-012 807
210-118-015 807
210-118-020 807
210-118-022 807
210-118-025 807
210-119-004 807
210-119-005 807
210-119-006 807
210-119-008 807
210-119-010 807
210-119-012 807
210-119-015 807
210-119-020 807
210-119-022 807
210-119-025 807
210-119-200 793
210-125-200 793
210-130-000 800
210-130-001 800
210-130-005 800
210-130-010 800
210-130-016 800
210-130-025 800
210-130-050 800
210-130-060 800
210-130-070 800
210-130-105 800
210-130-110 800
210-130-116 800
210-130-125 800
210-130-500 800
210-132-004 792

210-132-006 792
210-132-008 792
210-132-010 792
210-132-012 792
210-132-015 792
210-132-020 792
210-132-025 792
210-132-030 792
210-132-038 792
210-132-044 792
210-132-050 792
210-132-200 793
210-133-004 792
210-133-006 792
210-133-008 792
210-133-010 792
210-133-012 792
210-133-015 792
210-133-020 792
210-133-025 792
210-133-032 792
210-133-038 792
210-133-044 792
210-133-050 792
210-134-005 802
210-134-007 802
210-134-010 802
210-134-012 802
210-134-015 802
210-134-020 802
210-134-025 802
210-134-030 802
210-134-102 791
210-134-104 791
210-134-106 791
210-134-108 791
210-134-110 791
210-134-112 791
210-134-115 791
210-134-202 791
210-134-204 791
210-134-206 791
210-134-208 791
210-134-210 791
210-134-212 791
210-134-215 791
210-135-005 802
210-135-007 802
210-135-010 802
210-135-012 802
210-135-015 802
210-135-020 802
210-135-025 802
210-135-030 802
210-135-050 808
210-136-002 792
210-136-003 792
210-136-004 792
210-136-005 792
210-136-006 792
210-136-007 792
210-136-008 792
210-136-009 792
210-136-010 792
210-136-012 792
210-136-014 792
210-136-015 792
210-136-052 792
210-136-054 792
210-136-055 792
210-136-056 792
210-136-058 792
210-136-060 792
210-136-062 792
210-136-065 792
210-137-002 792, 801
210-137-004 801
210-137-005 792
210-137-006 801
210-137-007 792
210-137-008 801
210-137-009 792
210-137-010 801
210-137-011 792
210-137-012 801
210-137-013 792
210-138-002 801
210-138-004 801
210-138-006 801
210-138-008 801
210-138-010 801
210-138-012 801
210-138-015 801
210-144-060 799
210-144-090 799
210-144-130 799
210-144-150 799
210-144-190 799
210-144-220 799
210-144-250 799
210-144-280 799
210-144-320 799
210-144-380 799
210-145-060 799
210-145-090 799
210-145-130 799
210-145-150 799
210-145-190 799
210-145-220 799
210-145-250 799
210-145-280 799
210-145-320 799
210-145-380 799
210-146-240 803
210-148-250 809
210-148-320 809
210-149-250 809
210-149-260 803
210-149-320 809
210-151-310 734
210-153-010 802
210-153-310 811
210-154-300 812
210-154-320 810
210-156-009 812
210-157-009 812
210-159-009 812
210-163-009 784
210-163-015 784
210-164-009 784
210-164-015 784
210-164-109 784
210-166-000 781
210-166-001 781
210-166-002 781
210-166-003 781
210-166-004 781
210-166-005 781

210-166-006 781
210-166-010 781
210-166-020 781
210-166-030 781
210-176-280 833
210-177-245 833
210-178-220 833
210-180-400 822
210-181-000 833
210-181-300 832
210-183-270 832
210-184-503 784
210-184-504 784
210-184-505 784
210-201-145 773
210-202-145 773
210-202-250 780
210-203-145 773
210-203-250 780
210-204-145 773
210-204-160 789
210-204-250 780
210-205-145 773
210-205-250 780
210-206-006 798
210-206-010 798
210-206-013 798
210-206-016 798
210-206-019 798
210-206-022 798
210-206-025 798
210-206-029 798
210-206-032 798
210-206-038 798
210-206-200 794
210-206-250 780
210-207-006 798
210-207-010 798
210-207-013 798
210-207-016 798
210-207-019 798
210-207-022 798
210-207-025 798
210-207-029 798
210-207-032 798
210-207-038 798
210-209-200 794
210-210-130 771
210-210-140 771
210-210-170 771
210-210-200 771
210-211-130 771
210-211-160 771
210-211-200 771
210-211-250 780
210-212-006 797
210-212-010 797
210-212-013 797
210-212-016 797
210-212-019 797
210-212-022 797
210-212-025 797
210-212-028 797
210-212-032 797
210-212-038 797
210-212-200 828
210-212-250 780
210-213-006 797
210-213-010 797
210-213-013 797
210-213-016 797
210-213-019 797
210-213-022 797
210-213-025 797
210-213-028 797
210-213-032 797
210-213-038 797
210-213-140 770
210-213-175 773
210-213-200 794
210-213-250 780
210-214-175 773
210-214-200 828
210-214-210 770
210-214-250 780
210-215-004 772
210-215-175 773
210-215-190 815
210-215-200 828
210-215-250 780
210-216-000 769
210-216-001 769
210-216-002 769
210-216-020 772
210-216-150 772
210-216-175 773
210-216-200 794
210-217-010 777
210-217-020 777
210-217-100 777
210-217-200 777
210-218-012 769
210-218-103 796
210-218-105 796
210-218-106 796
210-218-108 796
210-218-110 796
210-218-113 796
210-218-116 796
210-218-140 769
210-218-160 770
210-218-230 822
210-219-003 796
210-219-005 796
210-219-006 796
210-219-008 796
210-219-009 796
210-219-012 796
210-219-016 796
210-219-140 769
210-219-200 794
210-220-080 813
210-220-200 815
210-220-230 819
210-225-180 814
210-225-185 824
210-225-200 794
210-226-003 791
210-226-006 791
210-226-010 791
210-226-013 791
210-230-006 809
210-230-010 809
210-230-012 809
210-230-015 809
210-230-020 809
210-230-025 809
210-230-030 809

210-230-101 716
210-230-103 716
210-230-190 813
210-231-006 809
210-231-010 809
210-231-012 809
210-231-015 809
210-231-020 809
210-231-025 809
210-231-030 809
210-231-190 813
210-232-200 794
210-235-006 805
210-235-008 805
210-235-010 805
210-235-011 805
210-235-013 805
210-235-016 805
210-235-019 805
210-235-130 816
210-235-131 816
210-235-132 816
210-235-133 816
210-240-005 804
210-240-010 804
210-240-015 804
210-240-105 804
210-240-110 804
210-240-115 804
210-240-300 820
210-240-340 820
210-240-400 820
210-240-450 823
210-240-451 823
210-240-520 824
210-242-240 821
210-244-220 817
210-248-002 775
210-248-003 775
210-248-004 775
210-248-005 775
210-248-006 775
210-248-007 775
210-248-008 775
210-248-010 775
210-248-012 775
210-248-014 775
210-249-002 775
210-249-003 775
210-249-004 775
210-249-005 775
210-249-006 775
210-249-007 775
210-249-008 775
210-249-010 775
210-249-012 775
210-249-014 775
210-250-210 814
210-251-010 804
210-251-015 804
210-251-025 811
210-251-165 666
210-251-280 811
210-251-330 811
210-252-010 804
210-252-015 804
210-260-100 821
210-260-150 821
210-260-240 821
210-260-330 821
210-260-350 821
210-260-355 821
210-260-500 821
210-260-700 821
210-261-191 817
210-262-170 819
210-263-000 819
210-264-140 815
210-264-220 816
210-264-221 816
210-265-000 815
210-265-260 820
210-265-280 822
210-265-450 818
210-265-900 818
210-270-240 825
210-271-240 824
210-273-200 828
210-274-200 828
210-275-151 826
210-275-152 826
210-275-153 826
210-275-154 826
210-275-155 826
210-275-156 826
210-275-158 826
210-275-160 826
210-275-200 828
210-290-000 820
210-290-260 820
210-294-001 786
210-294-002 786
210-294-003 786
210-294-010 773
210-294-020 773
210-294-040 773
210-294-050 773
210-296-001 779
210-296-002 779
210-296-003 779
210-296-004 779
210-296-005 779
210-296-006 779
210-296-100 779
210-296-200 779
210-296-300 779
210-296-400 779
210-298-001 781
210-298-002 781
210-298-003 781
210-298-004 781
210-298-005 781
210-298-006 781
210-298-280 823
210-299-001 778
210-299-002 778
210-299-003 778
210-299-004 778
210-299-005 778
210-299-006 778
210-299-100 778
210-299-200 778
210-299-300 778
210-299-400 778
210-299-500 778
210-300-010 774
210-300-020 774
210-300-030 774

210-300-040 774
210-300-100 774
210-300-180 818
210-300-190 818
210-300-200 774
210-300-210 817
210-300-240 814
210-300-300 774
210-301-001 778
210-301-002 778
210-301-003 778
210-301-004 778
210-301-005 778
210-301-006 778
210-301-100 778
210-301-180 752
210-301-200 778
210-301-300 778
210-301-400 778
210-301-500 778
210-302-000 780
210-302-001 780
210-302-002 780
210-302-003 780
210-302-004 780
210-302-005 780
210-302-006 780
210-302-007 780
210-302-008 780
210-302-009 780
210-302-100 777
210-302-101 777
210-302-102 777
210-302-103 777
210-302-104 777
210-302-105 777
210-302-106 777
210-302-107 777
210-302-108 777
210-302-109 777
210-302-135 788
210-302-170 788
210-302-250 780
210-303-135 788
210-303-165 752
210-303-170 788
210-303-190 765
210-303-250 780
210-304-010 774
210-304-020 774
210-304-030 774
210-304-040 774
210-304-050 774
210-304-060 774
210-304-100 774
210-304-200 774
210-304-250 780
210-304-300 774
210-304-400 774
210-305-135 788
210-305-170 788
210-305-200 794
210-305-250 780
210-306-010 774
210-306-020 774
210-306-030 774
210-306-040 774
210-306-050 774
210-306-060 774
210-306-100 774
210-306-135 788
210-306-170 788
210-306-200 774
210-306-250 780
210-306-300 774
210-306-400 774
210-307-135 788
210-307-170 788
210-308-000 776
210-308-001 776
210-308-002 776
210-308-003 776
210-308-004 776
210-308-005 776
210-308-006 776
210-308-007 776
210-308-008 776
210-308-009 776
210-308-135 788
210-308-170 788
210-309-001 782
210-309-002 782
210-309-003 782
210-309-200 794
210-310-150 764
210-311-150 764
210-311-250 780
210-312-155 764
210-312-250 780
210-313-155 764
210-313-185 765
210-313-200 794
210-313-250 780
210-314-001 779
210-314-002 779
210-314-003 779
210-314-004 779
210-314-005 779
210-314-006 779
210-314-100 779
210-314-185 765
210-314-200 779
210-314-250 780
210-314-300 779
210-314-400 779
210-315-001 779
210-315-002 779
210-315-003 779
210-315-004 779
210-315-005 779
210-315-006 779
210-315-100 779
210-315-175 766
210-315-190 766
210-315-200 779
210-315-210 766
210-315-250 780
210-315-300 779
210-315-400 779
210-316-190 764
210-316-200 794
210-316-250 782
210-317-250 782
210-318-250 782
210-319-001 785
210-319-002 785
210-319-003 785
210-319-200 794

210-320-001 785
210-320-002 785
210-320-003 785
210-320-011 783
210-320-012 783
210-320-013 783
210-320-014 783
210-320-015 783
210-320-016 783
210-320-017 783
210-320-018 783
210-320-019 783
210-320-111 783
210-320-112 783
210-320-113 783
210-320-114 783
210-320-115 783
210-320-116 783
210-320-117 783
210-320-118 783
210-320-119 783
210-321-004 785
210-321-005 785
210-321-006 785
210-321-011 783
210-321-012 783
210-321-013 783
210-321-014 783
210-321-015 783
210-321-016 783
210-321-017 783
210-321-018 783
210-321-019 783
210-321-111 783
210-321-112 783
210-321-113 783
210-321-114 783
210-321-115 783
210-321-116 783
210-321-117 783
210-321-118 783
210-321-119 783
210-325-120 826
210-325-200 794
210-326-001 778
210-326-002 778
210-326-003 778
210-326-004 778
210-326-005 778
210-326-006 778
210-326-100 778
210-326-200 778
210-326-300 778
210-326-400 778
210-326-500 778
210-327-001 778
210-327-002 778
210-327-003 778
210-327-004 778
210-327-005 778
210-327-006 778
210-327-100 778
210-327-200 778
210-327-300 778
210-327-400 778
210-327-500 778
210-328-001 778
210-328-002 778
210-328-003 778
210-328-004 778
210-328-005 778
210-328-006 778
210-328-100 778
210-328-200 778
210-328-300 778
210-328-400 778
210-328-500 778
210-329-001 778
210-329-002 778
210-329-003 778
210-329-004 778
210-329-005 778
210-329-006 778
210-329-100 778
210-329-200 778
210-329-230 823
210-329-300 778
210-329-400 778
210-329-500 778
210-330-001 778
210-330-002 778
210-330-003 778
210-330-004 778
210-330-005 778
210-330-006 778
210-330-100 778
210-330-200 778
210-330-300 778
210-330-400 778
210-330-500 778
210-331-001 778
210-331-002 778
210-331-003 778
210-331-004 778
210-331-005 778
210-331-006 778
210-331-100 778
210-331-170 497
210-331-200 778
210-331-300 778
210-331-400 778
210-331-500 778
210-332-200 794
210-333-001 778
210-333-002 778
210-333-003 778
210-333-004 778
210-333-005 778
210-333-006 778
210-333-100 778
210-333-170 497
210-333-200 778
210-333-300 778
210-333-400 778
210-333-500 778
210-335-120 826
210-335-170 497
210-337-170 497
210-338-250 782
210-339-250 782
210-340-003 786
210-340-004 786
210-340-170 755
210-340-250 782
210-341-250 782
210-342-004 786
210-342-005 786
210-348-002 776

210-348-010 776
210-348-100 776
210-348-200 776
210-348-300 776
210-348-400 776
210-348-500 776
210-348-600 776
210-350-010 777
210-350-100 777
210-350-200 777
210-386-200 748
210-395-160 747
210-395-175 748
210-395-200 749
210-396-160 761
210-396-170 747
210-396-210 749
210-397-150 696
210-397-170 755
210-397-185 761
210-397-200 749
210-398-230 749
210-400-001 754
210-400-002 754
210-400-003 754
210-400-004 754
210-400-005 754
210-400-350 844
210-401-019 753
210-401-025 753
210-401-032 753
210-401-095 753
210-401-127 753
210-402-009 754
210-402-013 754
210-402-019 754
210-402-025 754
210-402-032 754
210-403-006 806
210-403-009 806
210-403-013 806
210-403-016 806
210-403-019 806
210-403-025 806
210-403-032 806
210-405-010 754
210-405-015 754
210-405-020 754
210-405-025 754
210-405-030 754
210-405-035 754
210-405-100 805
210-405-101 805
210-405-102 805
210-405-103 805
210-405-180 865
210-405-195 805
210-405-295 805
210-405-300 806
210-405-301 806
210-405-302 806
210-405-303 806
210-405-395 805
210-405-495 805
210-406-006 806
210-406-009 806
210-406-013 806
210-406-016 806
210-406-019 806
210-406-025 806
210-406-032 806
210-406-180 865
210-406-200 794
210-408-180 865
210-409-200 794
210-409-340 808
210-409-341 808
210-409-342 808
210-410-170 765
210-410-200 796
210-410-260 810
210-410-280 810
210-410-320 810
210-412-170 765
210-412-200 796
210-413-200 794
210-415-200 796
210-415-340 808
210-415-341 808
210-415-342 808
210-416-200 794
210-417-330 768
210-419-200 794
210-420-010 754
210-420-013 754
210-420-019 754
210-420-025 754
210-420-200 796
210-420-275 768
210-425-200 794
210-428-330 768
210-430-200 763
210-431-200 763
210-432-180 763
210-432-185 763
210-432-200 794
210-433-180 763
210-433-185 763
210-433-230 763
210-434-130 760
210-434-180 763
210-435-010 801
210-435-015 801
210-435-020 801
210-436-160 760
210-437-010 801
210-437-015 801
210-437-020 801
210-437-160 809
210-438-160 760
210-438-195 761
210-439-006 762
210-439-008 762
210-439-175 762
210-440-200 767
210-450-001 496, 768
210-450-002 496, 768
210-450-003 496, 768
210-450-004 496, 768
210-450-005 496, 768
210-455-007 948
210-455-015 948
210-455-020 948
210-460-001 949
210-460-003 949
210-461-005 767
210-461-210 767
210-462-210 767

210-463-210 767
210-464-210 767
210-470-205 681
210-473-150 719
210-475-150 719
210-477-150 719
210-483-190 755
210-484-170 762, 948
210-484-190 755
210-485-170 762, 948
210-486-008 791
210-486-170 762, 948
210-487-004 790
210-487-007 790
210-487-008 790
210-487-010 790
210-487-012 790
210-487-170 762, 948
210-488-004 790
210-488-007 790
210-488-009 790
210-488-012 790
210-488-150 949
210-488-170 752
210-488-190 949
210-489-003 753
210-489-006 753
210-489-010 753
210-489-012 753
210-489-013 753
210-489-016 753
210-489-019 753
210-489-025 753
210-490-013 755
210-490-019 755
210-490-025 755
210-491-030 755
210-500-006 803
210-500-009 803
210-500-230 819
210-508-200 795
210-510-200 795
210-512-200 795
210-515-200 795
210-515-280 812
210-520-200 795
210-520-315 739
210-523-175 747
210-525-200 795
210-527-190 751, 948
210-530-315 739
210-534-170 722
210-536-180 737
210-537-281 742
210-537-282 742
210-537-283 742
210-537-284 742
210-537-285 742
210-539-060 720
210-539-110 719
210-539-150 721
210-540-220 724
210-540-330 734
210-541-000 729
210-541-043 726
210-541-065 726
210-541-075 720
210-541-080 721
210-541-100 722
210-541-108 722
210-541-150 721
210-541-180 722
210-541-225 732
210-541-240 722
210-541-250 723
210-541-270 732
210-541-330 728
210-541-400 727
210-541-430 722
210-541-700 722
210-542-025 726
210-542-045 726
210-542-070 726
210-542-180 723
210-543-270 731
210-543-430 726
210-544-250 730
210-544-270 731
210-544-320 730
210-545-220 724
210-545-221 727
210-545-280 734
210-545-300 738
210-545-302 738
210-545-350 724
210-545-400 729
210-550-280 733
210-550-350 733
210-551-140 760
210-551-150 747
210-552-140 760
210-552-150 747
210-553-150 758
210-557-250 725
210-557-270 725
210-557-290 725
210-561-045 734
210-561-065 734
210-563-260 737
210-565-260 736
210-567-170 715
210-568-210 715
210-568-260 735
210-569-170 715
210-569-260 735
210-570-260 735
210-571-165 962
210-571-260 735
210-572-165 962
210-572-260 735
210-573-165 962
210-573-260 735
210-575-340 736
210-580-330 735
210-581-230 825
210-590-001 740
210-590-002 740
210-590-240 738
210-590-241 740
210-600-230 676
210-600-250 676
210-600-270 676
210-600-300 676
210-601-190 676
210-601-230 676
210-601-250 676
210-601-280 676
210-602-190 676

210-602-230 676
210-602-250 676
210-602-280 676
210-603-150 675
210-603-190 675
210-603-240 675
210-603-260 675
210-603-280 675
210-604-180 789
210-605-170 675
210-605-250 675
210-605-260 675
210-605-270 675
210-606-180 789
210-608-180 789
210-610-180 789
210-610-200 672
210-610-330 674
210-610-450 674
210-611-200 672
210-612-180 789
210-612-330 674
210-612-450 674
210-613-190 713
210-614-180 789
210-615-230 672
210-618-175 670
210-620-170 674
210-620-200 710
210-620-210 674
210-621-170 674
210-621-200 710
210-621-210 674
210-623-190 496, 673
210-623-200 710
210-624-190 496, 673
210-624-200 711
210-625-190 670
210-626-185 710
210-626-190 670
210-628-001 714
210-628-002 714
210-628-003 714
210-628-004 714
210-628-005 714
210-628-006 714
210-630-170 712
210-630-230 673
210-630-260 673
210-631-120 667
210-631-170 712
210-633-170 712
210-634-260 673
210-637-250 712
210-640-140 679
210-640-150 678
210-640-220 675
210-640-270 675
210-640-300 675
210-641-150 678
210-641-180 713
210-642-120 678
210-642-140 679
210-643-140 679
210-643-150 678
210-643-220 713
210-645-220 713
210-649-170 667
210-650-120 705
210-650-170 668
210-650-200 668
210-650-220 712
210-651-095 665
210-651-120 665
210-651-130 666
210-651-135 665
210-651-150 666
210-651-200 667
210-651-220 712
210-652-001 708
210-652-002 708
210-652-003 708
210-652-004 708
210-652-005 708
210-652-190 710
210-654-005 669
210-654-008 669
210-654-010 669
210-654-135 669
210-654-185 670
210-655-005 669
210-655-008 669
210-655-010 669
210-655-135 669
210-656-135 669
210-656-210 671
210-657-200 671
210-660-120 706
210-660-190 711
210-663-150 706
210-663-250 706
210-663-280 708
210-663-281 708
210-663-350 708
210-663-351 708
210-663-600 708
210-664-280 708
210-664-281 708
210-664-350 708
210-664-351 708
210-664-600 708
210-665-135 666
210-665-150 706
210-665-170 666
210-665-190 706
210-665-240 706
210-665-280 708
210-665-281 708
210-665-350 708
210-665-351 708
210-665-500 708
210-665-600 708
210-666-280 708
210-666-281 708
210-666-350 708
210-666-351 708
210-666-600 708
210-668-210 707
210-669-210 707
210-674-160 705
210-675-002 701
210-675-003 701
210-675-004 701
210-675-005 701
210-679-110 705
210-681-001 707
210-681-002 707
210-681-003 707

210-681-004 707
210-681-200 707
210-682-150 704
210-683-150 704
210-684-150 704
210-685-150 682
210-687-150 682
210-691-150 680
210-693-150 680
210-695-150 680
210-700-150 714
210-700-190 714
210-700-350 844
210-701-010 795
210-701-015 795
210-708-200 796
210-710-200 796
210-712-200 796
210-715-200 796
210-718-140 668
210-719-160 669
210-719-220 669
210-720-200 796
210-722-210 672
210-724-210 672
210-725-200 796
210-726-180 671
210-728-002 887
210-728-003 887
210-728-004 887
210-728-102 887
210-728-103 887
210-728-104 887
210-730-003 686
210-730-005 686
210-731-003 686
210-731-005 686
210-732-002 686
210-732-200 687
210-733-003 686
210-770-160 684
210-771-160 684
210-772-190 684
210-773-130 678
210-774-130 678
210-775-130 678
210-776-130 678
210-777-001 679
210-777-002 679
210-780-200 690
210-781-210 685
210-787-180 681
210-788-150 690
210-789-150 690
210-789-180 690
210-790-180 690
210-791-180 690
210-792-230 694
210-793-230 694
210-794-200 685
210-795-195 687
210-796-230 694
210-797-230 692
210-798-230 692
210-799-230 692
210-800-180 689
210-801-180 689
210-802-150 689
210-802-180 689
210-803-180 689
210-803-350 695
210-805-140 680
210-805-170 680
210-805-180 691
210-805-350 695
210-808-350 695
210-810-200 795
210-812-150 689
210-812-200 795
210-813-350 695
210-815-140 680
210-815-165 680
210-815-200 795
210-815-350 695
210-818-350 695
210-819-180 681
210-820-200 795
210-825-160 688
210-825-200 795
210-826-180 683
210-829-170 683
210-829-180 683
210-830-180 683
210-831-180 683
210-832-185 684
210-832-190 689
210-832-194 689
210-832-240 694
210-832-244 694
210-833-185 684
210-834-190 689
210-834-194 689
210-834-240 694
210-834-244 694
210-836-190 689
210-836-194 689
210-836-240 694
210-836-244 694
210-839-200 688
210-843-170 698
210-843-240 691
210-843-360 693
210-844-170 698
210-845-130 696
210-845-145 696
210-845-170 696
210-845-185 697
210-845-200 687
210-845-360 693
210-846-170 682
210-846-200 687
210-847-170 682
210-847-205 688
210-848-360 693
210-850-240 691
210-851-240 691
210-852-240 691
210-855-180 699
210-855-240 692
210-855-310 708
210-858-240 691
210-862-180 682
210-863-180 682
210-880-175 698
210-890-150 697
210-892-150 697
210-898-230 694
210-899-230 694

210-900-185 698
210-900-230 694
210-901-185 698
210-901-230 694
210-902-270 700
210-904-270 700
210-905-190 241
210-905-225 695
210-905-240 699
210-905-250 241
210-907-190 241
210-907-220 693
210-907-230 692
210-907-250 241
210-908-200 796
210-908-230 692
210-908-270 700
210-909-220 693
210-910-200 796
210-910-220 693
210-910-255 700
210-910-260 693
210-911-220 693
210-911-245 699
210-911-260 693
210-912-200 796
210-915-200 796
210-920-200 796
210-925-200 796
210-934-140 697
210-934-170 697
210-934-190 697
210-934-220 697
210-935-140 698
210-935-170 698
210-935-190 698
210-935-220 698
210-974-300 861
210-974-301 861
210-974-310 861
210-974-311 861
210-975-170 320
210-976-000 320
210-980-130 677
210-980-185 677
210-980-200 677
210-980-220 677
210-981-150 677
211-550-235 874
225-360-000 711
225-810-500 767
230-151-140 314
230-152-140 314
230-153-140 314
230-154-140 314
230-155-001 315
230-155-002 315
230-155-003 315
230-160-000 315
230-160-002 315
230-160-003 315
230-160-004 315
230-160-005 315
230-160-006 315
230-160-007 315
230-160-008 315
230-203-150 194
230-205-180 195
230-207-180 195
230-209-180 195
230-230-140 312
230-232-140 312
230-236-140 313
230-238-100 313
230-239-100 313
230-240-140 312
230-285-160 922
230-286-160 922
250-000-001 894, 1001
250-000-002 894, 1001
250-000-003 894, 1001
250-000-004 894, 1001
250-000-005 894, 1001
250-000-006 894, 1001
250-000-007 894, 1001
250-000-008 894, 1001
250-000-009 894, 1001
250-000-010 894, 1001
250-000-016 907, 1003
250-000-017 907, 1003
250-000-018 907, 1003
250-000-019 907, 1003
250-000-020 907, 1003
250-000-021 907, 1003
250-000-022 907, 1003
250-000-023 907, 1003
250-000-024 1002
250-000-025 1002
250-000-026 1002
250-000-027 1002
250-000-028 1002
250-000-029 1002
250-000-030 1002
250-000-031 1002
250-000-032 1002
250-000-033 914, 1001
250-000-034 914, 1001
250-000-035 934, 1002
250-000-036 934, 1002
250-000-037 934, 1002
250-000-038 934, 1002
250-000-039 934, 1002
250-000-040 934, 1002
250-000-041 934, 1002
250-000-042 934, 1002
250-000-043 934, 1002
250-000-044 934, 1002
250-000-045 934, 1002
250-000-046 934, 1002
250-000-047 934, 1002
250-000-048 934, 1002
250-000-049 934, 1002
250-000-050 934, 1002
250-000-060 998
250-000-061 998
250-000-062 998
250-000-063 998
250-000-064 998
250-000-065 998
250-000-070 998
250-000-071 998
250-000-072 998
250-000-073 998
250-000-074 998
250-000-075 998
250-000-076 998
250-000-077 998
250-000-078 998

250-000-080 998
250-000-082 999
250-000-083 1000
250-000-100 1000
250-000-801 999
250-001-100 935
250-001-101 935
250-001-102 935
250-001-103 935
250-010-088 920
250-010-089 920
250-010-090 920
250-010-091 920
250-018-190 167, 341
250-018-230 167, 341
250-018-250 167, 341
250-019-230 167, 341
250-020-088 920
250-020-089 920
250-020-090 920
250-020-091 920
250-020-565 338
250-020-566 338
250-022-048 295
250-022-053 295
250-022-054 295
250-022-071 295
250-024-260 918
250-024-261 918
250-024-264 918
250-024-329 333
250-024-331 333
250-024-336 918
250-024-337 918
250-024-338 918
250-024-340 918
250-024-342 918
250-024-765 917
250-024-766 917
250-024-768 333
250-024-830 916
250-024-831 916
250-024-835 916
250-024-836 916
250-024-837 916
250-024-840 916
250-024-841 916
250-024-845 916
250-024-846 916
250-024-850 916
250-024-851 916
250-050-002 945, 946
250-050-003 946
250-050-004 946
250-050-007 945, 946
250-050-009 945, 946
250-050-011 946
250-050-012 945, 946
250-050-030 946
250-050-031 946
250-050-032 946
250-050-033 946
250-050-050 945, 946
250-050-051 945, 946
250-050-052 945, 946
250-050-053 945, 946
250-050-054 945, 946
250-050-150 945
250-060-115 344
250-060-120 343
250-060-121 343
250-060-145 344
250-060-180 344
250-060-210 344
250-060-215 344
250-060-230 344
250-061-115 344
250-061-120 343
250-061-145 344
250-061-180 344
250-061-210 344
250-061-215 344
250-061-230 344
250-062-115 344
250-062-145 344
250-062-150 933
250-062-151 933
250-062-215 344
250-063-115 344
250-063-145 344
250-063-215 344
250-064-011 345
250-064-021 348
250-064-030 912
250-064-031 912
250-064-032 912
250-064-033 912
250-064-034 912
250-064-035 912
250-064-036 912
250-064-037 912
250-064-038 912
250-064-039 912
250-064-040 912
250-064-043 912
250-064-044 912
250-064-047 912
250-064-056 913
250-064-057 913
250-064-059 913
250-064-060 912
250-064-061 912
250-064-076 338
250-064-079 338
250-064-089 913
250-064-092 913
250-064-093 913
250-064-096 913
250-064-097 913
250-064-099 913
250-064-105 345
250-064-110 917
250-064-111 917
250-064-112 917
250-064-115 344
250-064-138 166, 396
250-064-142 166, 396
250-064-144 396
250-064-145 396
250-064-146 396
250-064-147 396
250-064-148 396
250-064-149 166, 396
250-064-150 166, 396
250-064-151 166, 396
250-064-152 277, 1006
250-064-153 166, 396
250-064-154 277, 1006

250-064-156 277, 1006
250-064-158 277, 1006
250-064-162 277, 1006
250-064-164 277, 1006
250-064-166 277, 1006
250-064-168 277, 1006
250-064-172 277, 1006
250-064-174 277, 1006
250-064-176 277, 1006
250-064-178 277, 1006
250-064-182 277, 1006
250-064-184 277, 1006
250-064-186 277, 1006
250-064-188 277, 1006
250-064-189 277, 1006
250-064-190 917
250-064-191 917
250-064-192 917
250-064-195 917
250-064-196 917
250-064-197 917
250-064-200 916
250-064-202 916
250-064-204 916
250-064-210 916
250-064-212 916
250-064-214 916
250-064-215 916
250-064-216 916
250-064-217 916
250-064-222 914
250-064-223 914
250-064-224 914
250-064-226 345, 914
250-064-230 339
250-064-231 339
250-064-232 339
250-064-233 339
250-064-244 166, 396
250-064-245 396
250-064-246 338
250-064-248 166, 396
250-064-251 338
250-064-270 919
250-064-271 919
250-064-272 919
250-064-273 919
250-064-280 333
250-064-281 333
250-064-282 333
250-064-284 333
250-064-285 333
250-064-286 333
250-064-287 333
250-064-288 333
250-064-289 333
250-064-298 932
250-064-299 932
250-064-301 930
250-064-302 933
250-064-303 930
250-064-304 930
250-064-305 930
250-064-306 919
250-064-307 919
250-064-308 919
250-064-309 335
250-064-310 919
250-064-311 919
250-064-312 919
250-064-313 919
250-064-315 935
250-064-319 335
250-064-320 930
250-064-321 930
250-064-322 930
250-064-325 931
250-064-329 335
250-064-330 920
250-064-331 920
250-064-332 933
250-064-333 933
250-064-334 933
250-064-335 931
250-064-336 931
250-064-337 930
250-064-338 930
250-064-343 935
250-064-344 935
250-064-346 930
250-064-350 920
250-064-351 931
250-064-352 931
250-064-353 931
250-064-354 931
250-064-356 931
250-064-357 931
250-064-365 931
250-064-366 931
250-064-375 920
250-064-376 920
250-064-380 935
250-064-381 935
250-064-382 935
250-064-384 935
250-064-392 920
250-064-396 919
250-064-397 919
250-064-398 919
250-064-399 919
250-064-400 932
250-064-401 932
250-064-402 932
250-064-403 932
250-064-404 932
250-064-405 932
250-064-406 932
250-064-408 932
250-064-410 932
250-064-411 932
250-064-412 932
250-064-413 932
250-064-414 932
250-064-415 932
250-064-416 932
250-064-418 932
250-064-560 367
250-064-561 367
250-064-562 367
250-064-568 367
250-064-569 367
250-064-571 367
250-064-611 367
250-064-612 367
250-064-851 932
250-064-854 932
250-064-856 932
250-064-858 932

250-064-861 932
250-064-864 932
250-064-866 932
250-064-868 932
250-065-010 362
250-065-011 362
250-065-012 362
250-065-013 362
250-065-014 362
250-065-020 362
250-065-021 362
250-065-022 362
250-065-023 362
250-065-024 362
250-065-030 363
250-065-031 363
250-065-032 363
250-065-034 363
250-065-040 363
250-065-041 363
250-065-042 363
250-065-044 363
250-065-116 942
250-065-119 942
250-065-125 942
250-065-130 942
250-065-132 942
250-065-138 942
250-065-215 344
250-065-630 942
250-065-950 942
250-066-001 1005
250-066-002 1005
250-066-003 1005
250-066-020 944
250-066-022 944
250-066-141 748
250-066-202 944
250-066-203 944
250-066-212 944
250-066-213 944
250-066-214 944
250-066-215 944
250-066-216 944
250-066-217 944
250-066-218 944
250-066-219 944
250-066-220 942
250-066-221 942
250-066-222 942
250-066-231 942
250-066-232 942
250-066-233 942
250-066-256 942
250-066-257 942
250-066-258 942
250-066-259 942
250-066-260 941
250-066-262 941
250-066-266 942, 943
250-066-267 941, 942
250-066-268 941, 942
250-066-270 941, 943
250-066-271 941, 942, 943
250-066-272 942
250-066-280 943
250-066-282 943
250-066-283 943
250-066-285 943
250-066-287 943
250-066-288 943
250-066-303 933
250-066-305 935
250-066-307 935
250-066-309 935
250-066-310 933
250-066-311 935
250-066-312 935
250-066-341 155
250-066-342 155
250-066-343 155
250-066-345 906
250-066-441 944
250-066-442 944
250-066-443 944
250-066-444 944
250-066-445 944
250-066-446 944
250-066-500 936
250-066-501 936
250-066-502 936
250-066-503 936
250-066-504 936
250-066-505 936
250-066-506 936
250-066-507 936
250-066-508 936
250-066-509 936
250-066-513 945, 946
250-066-599 906
250-066-600 906
250-066-601 913
250-066-602 913
250-066-603 913
250-066-605 906
250-066-608 940
250-066-609 940
250-066-611 936
250-066-614 936
250-066-616 937
250-066-617 937
250-066-618 937
250-066-619 938
250-066-620 940
250-066-621 940
250-066-625 940
250-066-626 940
250-066-627 938
250-066-628 938
250-066-629 939
250-066-630 939
250-066-631 936
250-066-632 936
250-066-635 938
250-066-637 937
250-066-640 939
250-066-642 937
250-066-643 939
250-066-644 939
250-066-655 940
250-066-656 940
250-066-786 903
250-066-787 903
250-066-796 903
250-066-797 903
250-066-798 904
250-066-817 901
250-066-824 901

250-066-827 901
250-067-765 902
250-067-766 902
250-067-767 902
250-067-768 902
250-067-782 902
250-067-783 902
250-067-784 902
250-067-786 902
250-067-802 902
250-067-803 902
250-067-804 902
250-067-806 902
250-067-817 901
250-068-140 905
250-068-230 905
250-068-802 902
250-068-803 902
250-068-804 902
250-068-806 902
250-069-076 915
250-069-079 915
250-069-080 915
250-069-081 915
250-100-132 895
250-100-133 896
250-100-134 896
250-100-135 896
250-100-152 895
250-100-153 896
250-100-154 896
250-100-155 896
250-100-181 895
250-100-182 895
250-100-183 896
250-100-184 896
250-100-185 896
250-100-201 895
250-100-202 895
250-100-203 896
250-100-204 896
250-100-205 896
250-100-232 895
250-100-233 896
250-100-234 896
250-100-235 896
250-101-001 929
250-101-190 929
250-102-190 929
250-102-280 904
250-103-190 929
250-103-280 904
250-104-280 904
250-105-280 904
250-110-132 895
250-110-133 896
250-110-134 896
250-110-135 896
250-110-152 895
250-110-153 896
250-110-154 896
250-110-155 896
250-110-181 895
250-110-182 895
250-110-183 896
250-110-184 896
250-110-185 896
250-110-201 895
250-110-202 895
250-110-203 896
250-110-204 896
250-110-205 896
250-110-232 895
250-110-233 896
250-110-234 896
250-110-235 896
250-112-280 904
250-113-280 904
250-114-140 902
250-114-190 929
250-115-140 902
250-115-190 929
250-116-135 902
250-116-140 902
250-117-140 902
250-117-190 929
250-118-140 902
250-118-190 929
250-119-140 902
250-119-190 929
250-120-132 895
250-120-133 896
250-120-134 896
250-120-135 896
250-120-152 895
250-120-153 896
250-120-154 896
250-120-155 896
250-120-181 895
250-120-182 895
250-120-183 896
250-120-184 896
250-120-185 896
250-120-190 929
250-120-201 895
250-120-202 895
250-120-203 896
250-120-204 896
250-120-205 896
250-120-232 895
250-120-233 896
250-120-234 896
250-120-235 896
250-121-190 929
250-122-190 929
250-123-190 929
250-124-190 929
250-125-190 929
250-126-190 929
250-127-190 929
250-128-190 929
250-129-190 929
250-130-142 897
250-130-143 897
250-130-144 897
250-130-145 897
250-130-146 897
250-130-162 897
250-130-163 897
250-130-164 897
250-130-165 897
250-130-166 897
250-130-182 897
250-130-183 897
250-130-184 897
250-130-185 897
250-130-186 897
250-130-190 929

250-140-100 947
250-140-105 947
250-140-142 897
250-140-143 897
250-140-144 897
250-140-145 897
250-140-162 897
250-140-163 897
250-140-164 897
250-140-165 897
250-140-182 897
250-140-183 897
250-140-184 897
250-140-185 897
250-150-100 964
250-150-101 964
250-150-102 964
250-150-142 897
250-150-143 897
250-150-144 897
250-150-145 897
250-150-162 897
250-150-163 897
250-150-164 897
250-150-165 897
250-150-182 897
250-150-183 897
250-150-184 897
250-150-185 897
250-150-210 964
250-150-280 964
250-150-290 964
250-150-300 964
250-150-589 964
250-150-590 964
250-150-591 964
250-150-592 964
250-150-689 964
250-150-690 964
250-150-691 964
250-164-231 339
250-164-232 339
250-164-233 339
250-164-234 339
250-164-240 339
250-164-241 339
250-164-242 339
250-164-243 339
250-164-252 340
250-164-253 340
250-164-254 340
250-164-699 325
250-164-701 325
250-164-703 325
250-210-180 889
250-210-181 889
250-210-182 889
250-210-183 889
250-210-185 889
250-210-200 889
250-210-201 889
250-210-202 889
250-210-203 889
250-210-204 889
250-210-205 889
250-210-231 889
250-210-232 889
250-210-233 889
250-210-234 889
250-210-235 889
250-210-251 889
250-210-252 889
250-210-253 889
250-210-254 889
250-210-255 889
250-218-210 915
250-220-563 167, 341
250-220-564 167, 341
250-245-000 889
250-245-180 889
250-245-181 889
250-245-182 889
250-245-183 889
250-245-184 889
250-245-185 889
250-245-200 889
250-245-201 889
250-245-202 889
250-245-203 889
250-245-204 889
250-245-205 889
250-245-231 889
250-245-232 889
250-245-233 889
250-245-234 889
250-245-235 889
250-245-251 889
250-245-252 889
250-245-253 889
250-245-254 889
250-245-255 889
250-259-018 966
250-259-070 966
250-264-048 342
250-264-049 342
250-264-051 342
250-264-060 342
250-264-062 342
250-264-100 336
250-264-101 336
250-264-102 336
250-264-103 336
250-264-104 336
250-264-105 336
250-264-106 336
250-264-107 336
250-264-108 336
250-264-109 336
250-264-170 335
250-264-171 335
250-264-172 335
250-264-173 335
250-264-174 335
250-264-175 335
250-264-176 335
250-264-177 335
250-264-178 335
250-264-179 335
250-264-210 340
250-264-211 340
250-264-212 340
250-264-213 340
250-264-230 340
250-264-231 340
250-264-232 340
250-264-234 340
250-264-235 340
250-264-236 340

250-264-246 340
250-264-247 340
250-264-248 340
250-264-249 340
250-264-250 330
250-264-251 330
250-264-280 329
250-264-281 329
250-264-284 329
250-264-285 329
250-264-701 328
250-264-703 328
250-264-705 328
250-264-706 328
250-264-707 328
250-264-708 328
250-264-709 328
250-265-180 329
250-265-181 329
250-265-182 329
250-265-190 336
250-265-230 336
250-265-250 336
250-267-210 329
250-267-211 329
250-269-076 915
250-269-079 915
250-269-080 915
250-269-081 915
250-280-182 889
250-280-183 889
250-280-184 889
250-280-185 889
250-280-202 889
250-280-203 889
250-280-204 889
250-280-205 889
250-280-232 889
250-280-233 889
250-280-234 889
250-280-235 889
250-280-252 889
250-280-253 889
250-280-254 889
250-280-255 889
250-300-170 901
250-301-170 901
250-301-240 928
250-302-240 928
250-360-025 343
250-360-045 343
250-360-060 343
250-360-090 343
250-360-125 343
250-360-145 343
250-360-150 343
250-360-160 343
250-360-180 343
250-360-181 343
250-360-190 343
250-360-210 343
250-360-225 343
250-360-230 343
250-360-325 343
250-362-150 337
250-362-160 337
250-362-161 337
250-362-162 337
250-362-163 337
250-362-185 337
250-362-215 337
250-362-230 337
250-363-185 337
250-363-215 337
250-364-185 337
250-364-215 337
250-364-250 325
250-364-251 325
250-364-252 325
250-364-253 325
250-364-270 325
250-364-271 325
250-364-276 325
250-364-277 325
250-364-280 324
250-364-284 324
250-364-286 325
250-364-287 325
250-364-703 324
250-364-704 324
250-364-705 324, 391
250-364-706 324, 391
250-364-707 324, 391
250-400-181 882, 883, 884, 885, 886, 887, 888, 889
250-400-182 882, 885
250-400-183 882, 885
250-400-184 882, 885
250-400-185 882, 885
250-400-186 882, 885
250-400-189 885
250-400-201 882, 885
250-400-202 882, 885
250-400-203 882, 885
250-400-204 882, 885
250-400-205 882, 885
250-400-206 882, 885
250-400-209 885
250-400-231 882, 885
250-400-232 882, 885
250-400-233 882, 885
250-400-234 882, 885
250-400-235 882, 885
250-400-236 882, 885
250-400-239 885
250-400-252 887
250-400-253 887
250-400-254 887
250-400-255 887
250-400-256 887
250-400-282 887
250-400-283 887
250-400-284 887
250-400-285 887
250-400-286 887
250-401-181 884
250-401-182 884
250-401-183 884
250-401-184 884
250-401-185 884
250-401-201 884
250-401-202 884
250-401-203 884
250-401-204 884
250-401-205 884
250-401-231 884
250-401-232 884
250-401-233 884

250-401-234 884
250-401-235 884
250-405-160 922
250-407-200 923
250-408-200 923
250-409-200 923
250-410-181 882
250-410-182 882
250-410-183 882
250-410-184 882
250-410-185 882
250-410-186 882
250-410-201 882
250-410-202 882
250-410-203 882
250-410-204 882
250-410-205 882
250-410-206 882
250-410-231 882
250-410-232 882
250-410-233 882
250-410-234 882
250-410-235 882
250-410-236 882
250-411-181 884, 886
250-411-182 884, 886
250-411-183 884, 886
250-411-184 884, 886
250-411-185 884, 886
250-411-186 886
250-411-201 884, 886
250-411-202 884, 886
250-411-203 884, 886
250-411-204 884, 886
250-411-205 884, 886
250-411-206 886
250-411-231 884, 886
250-411-232 884, 886
250-411-233 884, 886
250-411-234 884, 886
250-411-235 884, 886
250-411-236 886
250-420-181 882
250-420-182 882
250-420-183 882
250-420-184 882
250-420-185 882
250-420-186 882
250-420-201 882
250-420-202 882
250-420-203 882
250-420-204 882
250-420-205 882
250-420-206 882
250-420-231 882
250-420-232 882
250-420-233 882
250-420-234 882
250-420-235 882
250-420-236 882
250-421-181 884
250-421-182 884
250-421-183 884
250-421-184 884
250-421-185 884
250-421-201 884
250-421-202 884
250-421-203 884
250-421-204 884
250-421-205 884
250-421-231 884
250-421-232 884
250-421-233 884
250-421-234 884
250-421-235 884
250-430-181 882
250-430-182 882
250-430-183 882
250-430-184 882
250-430-185 882
250-430-186 882
250-430-201 882
250-430-202 882
250-430-203 882
250-430-204 882
250-430-205 882
250-430-206 882
250-430-231 882
250-430-232 882
250-430-233 882
250-430-234 882
250-430-235 882
250-430-236 882
250-431-181 884
250-431-182 884
250-431-183 884
250-431-184 884
250-431-185 884
250-431-201 884
250-431-202 884
250-431-203 884
250-431-204 884
250-431-205 884
250-431-231 884
250-431-232 884
250-431-233 884
250-431-234 884
250-431-235 884
250-450-182 883
250-450-183 883
250-450-184 883
250-450-185 883
250-450-186 883
250-450-202 883
250-450-203 883
250-450-204 883
250-450-205 883
250-450-206 883
250-450-232 883
250-450-233 883
250-450-234 883
250-450-235 883
250-450-236 883
250-450-252 887
250-450-253 887
250-450-254 887
250-450-255 887
250-450-256 887
250-450-282 887
250-450-283 887
250-450-284 887
250-450-285 887
250-450-286 887
250-460-182 883
250-460-183 883
250-460-184 883
250-460-185 883
250-460-186 883

250-460-202 883
250-460-203 883
250-460-204 883
250-460-205 883
250-460-206 883
250-460-232 883
250-460-233 883
250-460-234 883
250-460-235 883
250-460-236 883
250-470-182 883
250-470-183 883
250-470-184 883
250-470-185 883
250-470-186 883
250-470-202 883
250-470-203 883
250-470-204 883
250-470-205 883
250-470-206 883
250-470-232 883
250-470-233 883
250-470-234 883
250-470-235 883
250-470-236 883
250-480-182 883
250-480-183 883
250-480-184 883
250-480-185 883
250-480-186 883
250-480-202 883
250-480-203 883
250-480-204 883
250-480-205 883
250-480-206 883
250-480-232 883
250-480-233 883
250-480-234 883
250-480-235 883
250-480-236 883
250-500-181 888
250-500-182 888
250-500-183 888
250-500-184 888
250-500-185 888
250-500-186 888
250-500-201 888
250-500-202 888
250-500-203 888
250-500-204 888
250-500-205 888
250-500-206 888
250-500-231 888
250-500-232 888
250-500-233 888
250-500-234 888
250-500-235 888
250-500-236 888
250-501-001 929
250-501-190 929
250-502-190 929
250-503-190 929
250-507-170 922
250-507-290 924
250-510-181 888
250-510-182 888
250-510-183 888
250-510-184 888
250-510-201 888
250-510-202 888
250-510-203 888
250-510-204 888
250-510-231 888
250-510-232 888
250-510-233 888
250-510-234 888
250-514-190 929
250-515-190 929
250-517-190 929
250-518-190 929
250-519-190 929
250-520-190 929
250-521-190 929
250-522-190 929
250-523-190 929
250-524-190 929
250-525-190 929
250-526-140 905
250-526-190 929
250-527-190 929
250-528-190 929
250-529-190 929
250-530-190 929
250-571-180 332
250-571-185 332
250-571-200 332
250-590-181 888
250-590-182 888
250-590-183 888
250-590-184 888
250-590-185 888
250-590-186 888
250-590-201 888
250-590-202 888
250-590-203 888
250-590-204 888
250-590-205 888
250-590-206 888
250-590-231 888
250-590-232 888
250-590-233 888
250-590-234 888
250-590-235 888
250-590-236 888
250-600-181 890, 891, 892, 893
250-600-182 890
250-600-183 890
250-600-184 890
250-600-185 890
250-600-186 890
250-600-201 890
250-600-202 890
250-600-203 890
250-600-204 890
250-600-205 890
250-600-206 890
250-600-231 890
250-600-232 890
250-600-233 890
250-600-234 890
250-600-235 890
250-600-236 890
250-610-181 891
250-610-182 891
250-610-183 891
250-610-184 891
250-610-185 891

250-610-186 891
250-610-201 891
250-610-202 891
250-610-203 891
250-610-204 891
250-610-205 891
250-610-206 891
250-610-231 891
250-610-232 891
250-610-233 891
250-610-234 891
250-610-235 891
250-610-236 891
250-620-181 891
250-620-182 891
250-620-183 891
250-620-184 891
250-620-186 891
250-620-201 891
250-620-202 891
250-620-203 891
250-620-204 891
250-620-205 891
250-620-206 891
250-620-231 891
250-620-232 891
250-620-233 891
250-620-234 891
250-620-235 891
250-620-236 891
250-630-181 890
250-630-182 890
250-630-183 890
250-630-184 890
250-630-185 890
250-630-186 890
250-630-201 890
250-630-202 890
250-630-203 890
250-630-204 890
250-630-205 890
250-630-206 890
250-630-231 890
250-630-232 890
250-630-233 890
250-630-234 890
250-630-235 890
250-630-236 890
250-640-181 890
250-640-182 890
250-640-183 890
250-640-184 890
250-640-185 890
250-640-186 890
250-640-201 890
250-640-202 890
250-640-203 890
250-640-204 890
250-640-205 890
250-640-206 890
250-640-231 890
250-640-232 890
250-640-233 890
250-640-234 890
250-640-235 890
250-640-236 890
250-641-111 893
250-641-112 893
250-641-113 893
250-641-114 893
250-641-115 893
250-641-116 893
250-641-151 893
250-641-152 893
250-641-153 893
250-641-154 893
250-641-155 893
250-641-156 893
250-641-181 893
250-641-182 893
250-641-183 893
250-641-184 893
250-641-185 893
250-641-186 893
250-642-111 893
250-642-112 893
250-642-113 893
250-642-114 893
250-642-115 893
250-642-116 893
250-642-151 893
250-642-152 893
250-642-153 893
250-642-154 893
250-642-155 893
250-642-156 893
250-642-181 893
250-642-182 893
250-642-183 893
250-642-184 893
250-642-185 893
250-642-186 893
250-643-111 893
250-643-112 893
250-643-113 893
250-643-114 893
250-643-115 893
250-643-116 893
250-643-151 893
250-643-152 893
250-643-153 893
250-643-154 893
250-643-155 893
250-643-156 893
250-643-181 893
250-643-182 893
250-643-183 893
250-643-184 893
250-643-185 893
250-643-186 893
250-650-111 892
250-650-112 892
250-650-113 892
250-650-114 892
250-650-115 892
250-650-116 892
250-650-151 892
250-650-152 892
250-650-153 892
250-650-154 892
250-650-155 892
250-650-156 892
250-650-181 892
250-650-182 892
250-650-183 892
250-650-184 892
250-650-185 892
250-650-186 892

250-651-111 892
250-651-112 892
250-651-113 892
250-651-114 892
250-651-115 892
250-651-116 892
250-651-151 892
250-651-152 892
250-651-153 892
250-651-154 892
250-651-155 892
250-651-156 892
250-651-181 892
250-651-182 892
250-651-183 892
250-651-184 892
250-651-185 892
250-651-186 892
250-652-111 892
250-652-112 892
250-652-113 892
250-652-114 892
250-652-115 892
250-652-116 892
250-652-151 892
250-652-152 892
250-652-153 892
250-652-154 892
250-652-155 892
250-652-156 892
250-652-181 892
250-652-182 892
250-652-183 892
250-652-184 892
250-652-185 892
250-652-186 892
250-653-150 390
250-653-180 330, 390
250-653-210 330, 390
250-660-181 891
250-660-182 891
250-660-183 891
250-660-184 891
250-660-185 891
250-660-186 891
250-660-201 891
250-660-202 891
250-660-203 891
250-660-204 891
250-660-205 891
250-660-206 891
250-660-231 891
250-660-232 891
250-660-233 891
250-660-234 891
250-660-235 891
250-660-236 891
250-670-203 900
250-670-204 900
250-670-205 900
250-670-303 900
250-670-304 900
250-670-305 900
250-671-204 900
250-671-304 900
250-672-113 900
250-672-114 900
250-672-115 900
250-672-153 900
250-672-154 900
250-672-155 900
250-672-183 900
250-672-184 900
250-672-185 900
250-673-114 900
250-673-154 900
250-673-184 900
250-680-181 891
250-680-182 891
250-680-183 891
250-680-184 891
250-680-185 891
250-680-186 891
250-680-201 891
250-680-202 891
250-680-203 891
250-680-204 891
250-680-205 891
250-680-206 891
250-685-210 927
250-687-210 926
250-688-210 951
250-688-245 951
250-689-230 950
250-690-030 951
250-690-040 951
250-690-050 951
250-690-070 951
250-690-240 951
250-691-175 756, 928
250-691-240 951
250-692-195 756, 928
250-692-240 951
250-693-195 756, 928
250-693-240 951
250-694-180 926
250-694-190 950
250-694-215 757, 928
250-694-240 926
250-695-190 950
250-695-290 757, 928
250-696-180 926
250-696-195 926
250-696-240 926
250-697-190 950
250-698-230 951
250-700-152 898
250-700-153 898
250-700-154 898
250-700-155 898
250-700-182 898
250-700-183 898
250-700-184 898
250-700-185 898
250-700-202 898
250-700-203 898
250-700-204 898
250-700-205 898
250-710-152 898
250-710-153 898
250-710-154 898
250-710-155 898
250-710-182 898
250-710-183 898
250-710-184 898
250-710-185 898
250-710-202 898
250-710-203 898

250-710-204 898
250-710-205 898
250-720-152 898
250-720-153 898
250-720-154 898
250-720-155 898
250-720-182 898
250-720-183 898
250-720-184 898
250-720-185 898
250-720-202 898
250-720-203 898
250-720-204 898
250-720-205 898
250-742-280 924
250-743-280 924
250-746-000 921
250-746-001 921
250-746-002 921
250-746-150 925
250-746-250 949
250-747-150 925
250-747-153 925
250-747-220 924
250-750-112 899
250-750-113 899
250-750-114 899
250-750-115 899
250-750-152 899
250-750-153 899
250-750-154 899
250-750-155 899
250-750-182 899
250-750-183 899
250-750-184 899
250-750-185 899
250-750-200 925
250-760-112 899
250-760-113 899
250-760-114 899
250-760-115 899
250-760-152 899
250-760-153 899
250-760-154 899
250-760-155 899
250-760-182 899
250-760-183 899
250-760-184 899
250-760-185 899
250-764-715 324, 391
250-764-718 324, 391
250-764-721 324, 391
250-764-723 324
250-764-725 324
250-770-112 899
250-770-113 899
250-770-114 899
250-770-115 899
250-770-152 899
250-770-153 899
250-770-154 899
250-770-155 899
250-770-182 899
250-770-184 899
250-770-185 899
250-800-190 908
250-800-210 908
250-800-240 908
250-800-255 908
250-801-190 908
250-801-210 908
250-801-240 908
250-801-255 908
250-802-190 908
250-802-210 908
250-802-240 908
250-803-190 908
250-803-210 908
250-803-240 908
250-804-190 908
250-804-210 908
250-804-240 908
250-804-255 908
250-805-190 908
250-805-210 908
250-805-240 908
250-805-255 908
250-807-210 909
250-809-210 909
250-811-210 909
250-813-210 909
250-815-210 909
250-820-190 910
250-820-210 910
250-820-240 910
250-822-190 910
250-822-210 910
250-822-240 910
250-830-210 910
250-830-245 910
250-832-210 910
250-832-245 910
250-841-200 911
250-841-220 911
250-841-250 911
250-850-210 911
250-973-160 966
250-975-170 963
250-975-270 963
250-978-265 963
250-979-235 963
251-300-120 295, 702
251-540-120 371
251-540-150 371
251-540-210 371
251-541-120 371
251-541-150 371
251-541-151 371
251-541-180 371
251-541-181 371
251-541-210 371
251-542-150 371
251-542-180 371
251-543-150 371
251-543-180 371
251-545-150 370
251-545-180 370
251-546-150 370
251-546-180 370
251-550-100 369
251-550-110 369
251-550-150 369
251-550-180 369
251-551-100 369
251-551-110 369
251-551-111 369
251-551-150 369
251-551-151 369

251-551-180 369
251-551-181 369
251-552-150 369
251-552-180 369
251-553-150 369
251-553-181 369
251-554-150 369
251-555-150 369
251-556-150 369
251-556-180 369
251-557-180 371
251-558-180 371
251-559-150 371
251-560-150 371
251-563-150 369
251-563-180 369
251-565-150 370
251-566-150 370
251-570-150 374
251-570-180 374
251-580-170 371
251-600-040 385
251-600-060 385
251-600-080 385
251-601-110 394
251-602-110 394
251-603-135 386
251-607-135 387
251-607-180 387
251-608-135 395
251-609-110 386
251-610-135 387
251-611-120 385
251-611-130 332, 385
251-611-131 395
251-611-132 395
251-611-133 395
251-611-180 385
251-611-181 385
251-611-185 395
251-611-186 395
251-611-187 395
251-612-130 74, 385
251-612-180 387
251-613-110 332, 385
251-613-120 387
251-613-130 386
251-613-150 385
251-613-180 386
251-613-181 386
251-615-120 387
251-615-130 386
251-616-110 386
251-616-120 387
251-616-150 386
251-617-110 386
251-617-130 385
251-618-120 385
251-619-110 388
251-619-130 388
251-621-135 385
251-640-150 395
251-640-180 395
251-650-150 389
251-650-180 389
251-650-210 389
251-652-150 390
251-652-180 390
251-653-150 389
251-653-180 389
251-653-210 389
251-654-180 390
251-655-145 328, 391
251-655-150 390
251-655-180 328, 391
251-655-181 328
251-655-182 328
251-655-210 328, 391
251-655-230 328
251-655-231 328
251-656-150 391
251-656-180 391
251-657-150 329, 389
251-657-180 329, 389
251-657-181 329
251-657-182 329
251-657-210 329, 389
251-657-211 329
251-657-250 329
251-657-251 329
251-658-150 389
251-658-180 389
251-658-210 389
251-660-150 396
251-660-180 396
251-660-210 389
251-661-210 389
251-662-120 388
251-703-135 332, 388
251-711-130 332, 388
251-711-180 388
251-712-130 388
251-713-110 332, 388
251-713-180 388
251-715-120 387
251-717-130 388
251-718-120 388
251-721-135 388
252-030-180 905
252-030-181 905
252-035-180 905
252-035-181 905
252-040-180 905
252-040-181 905
253-310-390 640
253-320-225 642
253-320-335 643
253-321-225 642
253-321-335 643
253-322-225 642
253-322-335 643
253-323-225 642
253-323-335 643
253-324-225 642
253-324-335 643
253-325-225 642
253-325-335 643
253-326-225 642
253-326-335 643
253-327-225 642
253-327-335 643
253-328-225 642
253-328-335 643
253-329-225 642
253-329-335 643
253-330-225 642
253-330-335 643
253-331-225 642

253-331-335 643
253-332-225 642
253-332-335 643
253-333-225 642
253-333-335 643
253-334-225 642
253-334-335 643
253-335-225 642
253-335-335 643
253-336-225 642
253-336-335 643
253-337-225 642
253-337-335 643
253-340-335 642
253-341-335 642
253-342-335 642
253-343-335 642
253-344-335 642
253-345-335 642
253-346-335 642
253-347-335 642
253-348-335 642
253-349-335 642
253-350-335 642
253-351-335 642
253-352-335 642
253-353-335 642
253-354-335 642
253-355-335 642
253-356-335 642
253-357-335 642
253-445-005 633
253-445-006 633
253-500-100 644
253-500-101 644
253-500-102 644
253-500-103 644
253-500-108 644
253-650-010 643
253-650-012 643
253-650-014 643
253-650-016 643
253-650-018 643
253-650-020 643
253-650-022 643
253-650-024 643
253-650-026 643
253-650-028 643
253-650-030 643
253-650-032 643
253-650-034 643
253-650-036 643
259-100-000 955
259-100-100 952
259-100-200 952, 955
259-100-300 952, 955
259-100-400 952, 955
259-100-500 952
259-101-100 952, 955
259-101-200 952
259-101-300 952, 955
259-101-400 952, 955
259-101-500 952
259-102-100 952
259-102-200 952
259-102-300 952, 955
259-102-400 952, 955
259-102-500 952
259-103-100 952
259-103-200 952, 955
259-103-300 952, 955
259-103-400 952
259-103-500 952
259-104-001 952, 955
259-104-002 952, 955
259-104-003 952
259-110-000 955
259-110-100 954, 955
259-110-200 954
259-110-300 954, 955
259-110-400 954, 955
259-110-500 954
259-111-100 954, 955
259-111-200 954, 955
259-111-300 954, 955
259-111-400 954
259-111-500 954
259-112-100 954, 955
259-112-200 954, 955
259-112-300 954, 955
259-112-400 954
259-112-500 954
259-113-100 954, 955
259-113-200 954
259-113-300 954, 955
259-113-400 954, 955
259-113-500 954
259-114-001 954
259-114-002 954
259-114-003 954
259-120-000 955
259-120-001 953, 955
259-120-002 953, 955
259-120-100 953
259-121-001 953, 955
259-121-002 953, 955
259-121-100 953
259-122-001 953, 955
259-122-002 953, 955
259-122-100 953
259-124-001 953
259-124-002 953, 955
259-124-100 953
259-125-001 953, 955
259-125-002 953
259-125-100 953
259-126-001 953, 955
259-126-002 953
259-126-100 953, 955
259-127-001 953, 955
259-127-002 953
259-127-003 953
259-127-004 953, 955
259-127-005 953
259-127-006 953
259-130-001 956
259-130-002 956
259-130-003 956
259-130-004 956
259-130-005 956
259-131-001 956
259-131-002 956
259-131-003 956
259-131-004 956
259-131-005 956
259-132-003 956
259-132-005 956
259-149-001 961

259-149-002 961
259-149-165 961
259-151-002 958
259-151-006 958
259-151-010 958
259-151-015 958
259-151-020 958
259-151-025 958
259-151-030 958
259-151-106 958
259-151-110 958
259-151-115 958
259-151-120 958
259-151-125 958
259-151-130 958
259-152-007 957
259-152-009 957
259-152-011 957
259-152-013 957
259-152-015 957
259-152-017 957
259-152-019 957
259-152-107 957
259-152-109 957
259-152-111 957
259-152-207 957
259-152-209 957
259-153-006 959
259-153-008 959
259-153-010 959
259-153-106 959
259-153-108 959
259-153-110 959
259-154-006 959
259-154-008 959
259-154-010 959
259-154-106 959
259-154-108 959
259-154-110 959
259-155-007 957
259-155-009 957
259-155-011 957
259-155-013 957
259-155-015 957
259-155-017 957
259-155-019 957
259-155-107 957
259-155-109 957
259-155-111 957
259-155-207 957
259-155-209 957
259-157-010 960
259-157-015 960
259-157-020 960
259-157-025 960
259-157-030 960
259-157-035 960
259-158-010 960
259-158-015 960
259-158-020 960
259-158-025 960
259-158-030 960
259-158-035 960
259-160-006 995
259-160-042 995
259-170-000 994
259-170-001 994
259-170-002 994
259-170-003 994
259-170-100 991
259-170-110 992
259-170-111 992
259-170-130 992
259-170-140 992
259-170-150 992
259-170-160 992
259-170-170 992
259-170-180 992
259-170-190 992
259-170-200 991
259-170-210 992
259-170-211 992
259-170-230 992
259-170-240 992
259-170-250 992
259-170-260 992
259-170-270 992
259-170-280 992
259-170-310 992
259-170-311 992
259-170-330 992
259-170-340 992
259-170-350 992
259-170-360 992
259-170-370 992
259-170-380 992
259-170-390 992
259-170-410 993
259-170-411 993
259-170-420 993
259-170-430 993
259-170-440 993
259-170-450 993
259-170-460 993
259-170-470 993
259-170-480 993
259-170-510 993
259-170-511 993
259-170-520 993
259-170-530 993
259-170-540 993
259-170-550 993
259-170-560 993
259-170-570 993
259-170-580 993
259-170-650 993
259-170-660 993
259-170-670 993
259-180-000 976
259-180-001 976
259-180-100 974, 981
259-180-101 974, 981
259-180-125 975
259-180-130 975
259-180-135 975
259-180-140 975
259-180-145 975
259-180-150 975
259-180-155 975
259-180-160 975
259-180-165 975
259-180-170 975
259-180-175 975
259-180-200 974, 981
259-180-225 975
259-180-230 975
259-180-235 975
259-180-240 975

259-180-245 975
259-180-250 975
259-180-255 975
259-180-260 975
259-180-265 975
259-180-270 975
259-180-275 975
259-180-325 975
259-180-330 975
259-180-335 975
259-180-340 975
259-180-345 975
259-180-350 975
259-180-355 975
259-180-360 975
259-180-365 975
259-180-370 975
259-180-375 975
259-180-425 975
259-180-430 975
259-180-435 975
259-180-440 975
259-180-445 975
259-180-450 975
259-180-455 975
259-180-460 975
259-180-465 975
259-180-470 973
259-180-471 975
259-180-475 975
259-180-480 973
259-180-490 973
259-180-525 975
259-180-530 975
259-180-535 975
259-180-540 975
259-180-545 975
259-180-550 975
259-180-555 975
259-180-560 975
259-180-565 975
259-180-570 975
259-180-575 975
259-185-040 989
259-185-045 989
259-185-050 989
259-185-055 989
259-185-060 989
259-185-065 989
259-185-070 989
259-185-100 989
259-185-101 990
259-185-235 990
259-185-240 990
259-185-245 990
259-185-250 990
259-185-255 990
259-185-260 990
259-185-265 990
259-185-275 990
259-185-280 990
259-185-285 990
259-185-328 757
259-185-329 757
259-185-340 990
259-185-345 990
259-185-350 990
259-185-355 990
259-185-360 990
259-185-365 990
259-185-370 990
259-185-435 997
259-185-437 997
259-185-442 997
259-185-445 997
259-185-447 997
259-185-449 997
259-185-452 997
259-185-457 997
259-185-462 997
259-185-467 997
259-185-885 874
259-185-910 785
259-185-912 781
259-185-913 781
259-185-914 781
259-185-915 785
259-185-916 785
259-185-917 972
259-185-918 972
259-185-919 781
259-185-921 781
259-185-922 781
259-188-000 980
259-188-001 977, 980
259-188-002 977, 980
259-188-003 977, 980
259-188-004 980
259-188-005 978, 980
259-188-007 979, 980
259-188-008 979, 980
259-188-009 979, 980
259-188-010 979, 980
259-188-011 979, 980
259-188-012 979, 980
259-188-013 979, 980
259-188-014 979, 980
259-188-015 979, 980
259-188-016 979, 980
259-188-017 979, 980
259-188-018 979, 980
259-188-019 979, 980
259-188-020 979, 980
259-188-021 979, 980
259-188-022 979, 980
259-188-023 979, 980
259-188-024 979, 980
259-188-025 979, 980
259-188-026 979, 980
259-188-027 979, 980
259-188-028 978, 980
259-188-029 978, 980
259-188-030 978, 980
259-188-031 978, 980
259-188-032 978, 980
259-188-033 980
259-188-100 980
259-188-101 977, 980
259-188-102 978, 980
259-188-133 980
259-190-110 971
259-190-111 971
259-190-130 971
259-190-131 971
259-190-200 971
259-190-300 971
259-190-408 972
259-190-414 972

259-190-512 972
259-190-514 972
259-190-516 972
259-190-518 972
259-190-550 972
259-190-610 981
259-195-002 903
259-195-003 903
259-195-004 903
259-196-002 903
259-196-003 903
259-196-004 903
259-197-000 984
259-197-001 984
259-197-002 985
259-197-003 985
259-197-004 985
259-197-005 986
259-197-006 986
259-197-007 986
259-197-008 986
259-197-009 986
259-197-103 987
259-197-104 987
259-197-105 987
259-197-106 987
259-197-107 987
259-197-111 987
259-197-112 987
259-197-113 987
259-197-114 987
259-197-254 988
259-197-255 988
259-197-256 988
259-197-257 988
259-197-330 988
259-197-340 988
259-197-350 988
259-197-360 988
259-197-370 988
259-197-380 988
259-197-390 988
259-197-410 988
259-197-430 988
259-197-550 988
259-197-560 988
259-197-570 988
259-197-580 988
259-197-590 988
259-197-591 988
259-197-593 988
259-197-650 987
259-197-660 987
259-197-670 987
259-197-680 987
259-197-690 987
259-197-691 987
259-197-693 987
259-210-004 995
259-210-005 995
259-210-006 995
259-211-005 995
259-230-004 996
259-230-007 996
259-230-104 996
259-252-000 950
259-252-180 746
259-253-180 743
259-254-020 743
259-257-002 241
259-257-003 241
259-257-004 241
259-257-005 241
259-257-006 241
259-257-007 241
259-257-009 241
259-257-013 241
259-257-014 241
259-257-015 241
259-257-016 241
259-258-100 744
259-258-144 863
259-258-145 863
259-258-146 863
259-258-147 863
259-258-200 744
259-258-251 743
259-258-252 743
259-258-253 743
259-258-270 746
259-258-316 746
259-258-319 746
259-258-325 746
259-258-400 745
259-258-414 742
259-258-422 742
259-258-500 745
259-258-550 745
259-258-600 745
259-258-700 746
259-260-001 962
259-260-002 962
259-260-003 962
259-260-004 962
259-260-009 742
259-260-012 742
259-260-016 742
259-260-020 742
259-260-025 742
259-440-100 996
259-450-100 996
259-900-000 668
259-900-001 668
259-900-225 741
259-901-180 741
259-902-180 741
259-903-225 741
259-904-032 741
259-904-040 741
260-001-220 622
260-001-250 623
260-001-295 622
260-001-300 623
260-001-340 617
260-001-360 617
260-001-370 617
260-009-000 620
260-010-000 620
260-010-420 620
260-012-205 617
260-013-201 619
260-015-125 614
260-015-140 614
260-015-155 614
260-016-410 621
260-025-205 617
260-060-125 614
260-060-200 614

260-061-185 614
260-061-200 614
260-070-116 610
260-070-125 610
260-070-316 611
260-070-325 611
260-070-516 611
260-070-525 611
260-070-916 610
260-070-925 610
260-088-370 620
260-090-124 610
260-090-127 610
260-090-130 610
260-090-324 611
260-090-327 611
260-090-330 611
260-090-524 611
260-090-527 611
260-090-530 611
260-090-924 610
260-090-927 610
260-090-930 610
260-100-125 610
260-100-325 611
260-100-525 611
260-100-925 610
260-104-030 612
260-110-000 612
260-110-030 612
260-110-325 611
260-110-525 611
260-110-925 610
260-120-125 610
260-120-325 611
260-120-525 611
260-120-925 610
260-130-000 612
260-130-014 612
260-130-110 616
260-130-160 612
260-131-000 613
260-135-000 612
260-135-004 612
260-135-005 612
260-140-000 621
260-140-420 621
260-141-000 613
260-145-000 612
260-145-250 612
260-150-125 610
260-150-130 610
260-150-136 610
260-150-325 611
260-150-330 611
260-150-336 611
260-150-525 611
260-150-530 611
260-150-536 611
260-150-925 610
260-150-930 610
260-180-125 610
260-180-130 610
260-180-325 611
260-180-330 611
260-180-525 611
260-180-530 611
260-180-930 610
260-190-136 610
260-190-336 611
260-190-536 611
260-190-936 610
260-230-110 616
260-268-310 628
260-268-410 628
260-293-300 613
260-311-000 621
260-311-420 621
260-400-220 618
260-400-310 618
260-400-315 619
260-401-310 618
260-438-315 619
260-500-000 622
260-520-010 628
260-520-016 628
260-520-020 628
260-520-026 628
260-603-380 623
260-603-450 623
260-737-040 621
260-738-000 626
260-742-000 626
260-745-000 626
260-746-000 625
260-750-122 624
260-750-125 624
260-750-130 624
260-750-134 624
260-750-136 624
260-750-138 624
260-750-140 624
260-750-142 624
260-750-145 624
260-750-150 624
260-750-152 624
260-751-125 624
260-751-142 624
260-751-225 624
260-751-236 624
260-751-250 624
260-753-040 625
260-753-050 625
260-754-000 625
260-755-000 626
260-755-036 624
260-755-038 624
260-755-042 624
260-755-045 624
260-756-300 627
260-757-000 626
260-988-000 717
260-988-001 717
260-988-002 717
260-988-003 717
260-988-004 717
260-988-005 717
260-988-006 717
260-990-999 613
270-001-001 364
270-001-002 364
270-001-003 364
270-001-004 364
270-001-005 364
270-001-101 364
270-001-102 364
270-001-103 364
270-001-104 364

270-001-105 364
270-001-201 368
270-001-202 368
270-001-203 368
270-001-204 368
270-001-205 368
270-002-001 364
270-002-002 364
270-002-003 364
270-002-004 364
270-002-005 364
270-002-101 364
270-002-102 364
270-002-103 364
270-002-104 364
270-002-105 364
270-002-201 368
270-002-202 368
270-002-203 368
270-002-204 368
270-002-205 368
270-003-001 365
270-003-002 365
270-003-003 365
270-003-101 365
270-003-102 365
270-003-103 365
270-003-201 368
270-003-202 368
270-003-203 368
270-004-001 365
270-004-002 365
270-004-003 365
270-004-101 365
270-004-102 365
270-004-103 365
270-004-201 368
270-004-202 368
270-004-203 368
270-005-001 366
270-005-002 366
270-005-003 366
270-005-101 366
270-005-102 366
270-005-103 366
270-010-001 366
270-010-002 366
270-010-003 366
270-014-005 366
270-014-006 366
270-014-007 366
270-014-008 366
270-015-005 366
270-101-001 364
270-101-002 364
270-101-003 364
270-101-004 364
270-101-005 364
270-101-101 364
270-101-102 364
270-101-103 364
270-101-104 364
270-101-105 364
270-101-201 368
270-101-202 368
270-101-203 368
270-101-204 368
270-101-205 368
270-102-001 364
270-102-002 364
270-102-003 364
270-102-004 364
270-102-005 364
270-102-101 364
270-102-102 364
270-102-103 364
270-102-104 364
270-102-105 364
270-102-201 368
270-102-202 368
270-102-203 368
270-102-204 368
270-102-205 368
270-103-001 365
270-103-002 365
270-103-003 365
270-103-101 365
270-103-102 365
270-103-103 365
270-103-140 365
270-103-201 368
270-103-202 368
270-103-203 368
270-104-001 365
270-104-002 365
270-104-003 365
270-104-101 365
270-104-102 365
270-104-103 365
270-104-140 365
270-104-160 365
270-104-201 368
270-104-202 368
270-104-203 368
270-105-001 366
270-105-002 366
270-105-003 366
270-105-101 366
270-105-102 366
270-105-103 366
270-105-140 365
270-105-160 365
270-108-140 365
270-110-001 366
270-110-002 366
270-110-003 366
270-150-001 639
270-150-002 639
270-150-003 639
270-150-200 639
270-200-100 703
270-200-101 703
270-200-102 703
270-200-103 703
270-200-104 703
270-200-105 703
270-200-107 703
270-200-108 703
270-200-109 703
270-202-005 702
270-202-010 702
270-202-015 702
270-202-020 702
270-202-025 702
270-202-030 702
270-202-035 702
270-202-040 702
270-202-050 702

270-202-060 702
270-202-070 702
270-202-130 702
270-202-200 702
270-380-012 367
270-380-018 367
270-380-024 367
290-000-255 488
290-000-305 488
290-000-310 487
290-000-315 487
290-000-320 486
290-000-321 486
290-100-230 493
290-100-250 878
290-100-300 878
290-100-400 878
290-100-500 878
290-100-600 878
290-100-700 878
290-100-760 878
290-101-220 493
290-101-300 878
290-101-400 878
290-101-500 878
290-101-600 878
290-101-700 878
290-102-000 878
290-103-000 878
290-107-220 493
290-110-240 495
290-118-300 878
290-118-301 878
290-118-305 878
290-118-330 878
290-120-010 352
290-120-014 352
290-120-020 352
290-121-010 352
290-121-014 352
290-121-020 352
290-122-010 352
290-122-014 352
290-122-020 352
290-126-340 494
290-131-260 494
290-137-270 494
290-147-280 495
290-149-280 495
290-150-000 527
290-150-001 527
290-150-002 527
290-150-003 527
290-150-004 527
290-150-101 527
290-150-102 527
290-150-103 527
290-150-104 527
290-150-500 527
290-150-501 527
290-150-502 527
290-150-503 527
290-150-600 527
290-150-601 527
290-150-602 527
290-150-603 527
290-151-240 497
290-155-045 498
290-155-060 498
290-155-080 498
290-156-000 498
290-156-001 498
290-156-004 498
290-156-005 498
290-158-245 495
290-160-000 503
290-160-001 503
290-160-002 503
290-160-003 507
290-160-004 507
290-160-005 507
290-160-010 502
290-161-002 500
290-164-000 508
290-165-001 520
290-165-002 520
290-165-003 520
290-165-100 520
290-165-101 520
290-165-102 508
290-165-103 508
290-166-001 502
290-166-002 502
290-166-003 502
290-168-050 503
290-168-060 500
290-168-090 500
290-169-000 504
290-169-010 504
290-174-000 507
290-174-010 507
290-175-200 525
290-175-410 441
290-175-450 441
290-177-000 504
290-177-035 499
290-177-055 499
290-177-070 499
290-177-075 499
290-177-200 511
290-177-255 511
290-177-310 511
290-178-000 517
290-178-075 500
290-178-165 511
290-178-200 511
290-178-250 511
290-179-000 501
290-179-075 499
290-179-255 511
290-179-310 511
290-180-001 506
290-180-030 506
290-180-040 506
290-180-050 506
290-181-000 518
290-181-001 518
290-181-002 518
290-181-010 519
290-181-011 519
290-181-012 519
290-181-020 508
290-181-021 508
290-181-022 508
290-181-023 508
290-181-024 508
290-181-040 514
290-181-050 514

290-181-060 514
290-181-070 521
290-181-080 521
290-181-180 505
290-182-000 521
290-182-040 521
290-182-050 521
290-182-060 521
290-183-000 516
290-183-001 516
290-184-000 523
290-184-001 523
290-184-002 523
290-184-003 523
290-184-004 523
290-184-005 523
290-184-006 523
290-184-007 523
290-184-008 523
290-184-010 522
290-184-020 513
290-184-030 498
290-185-030 510
290-185-040 510
290-185-050 510
290-185-220 510
290-185-285 514
290-186-000 509
290-186-010 509
290-186-011 509
290-186-012 509
290-186-013 509
290-187-000 501
290-187-001 501
290-187-002 501
290-188-000 510
290-188-001 510
290-188-002 510
290-189-000 512
290-190-000 524
290-190-001 524
290-190-002 524
290-190-003 524
290-190-004 524
290-190-005 524
290-190-006 524
290-195-000 531
290-195-005 531
290-195-010 531
290-195-015 531
290-195-020 531
290-195-025 531
290-195-030 531
290-195-035 531
290-195-040 531
290-195-045 531
290-195-050 531
290-195-100 531
290-195-105 531
290-195-110 531
290-195-115 531
290-195-120 531
290-195-125 531
290-195-130 531
290-195-135 531
290-195-140 531
290-195-145 531
290-195-150 531
290-195-200 531
290-195-205 531
290-195-210 531
290-195-215 531
290-195-220 531
290-195-225 531
290-195-230 531
290-195-235 531
290-195-240 531
290-195-245 531
290-195-250 531
290-195-300 531
290-195-305 531
290-195-310 531
290-195-315 531
290-195-320 531
290-195-325 531
290-195-330 531
290-195-335 531
290-195-340 531
290-195-345 531
290-195-350 531
290-233-025 539
290-233-030 539
290-233-047 539
290-237-230 410
290-238-230 410
290-241-220 411
290-245-220 411
290-247-220 411
290-265-240 411
290-267-240 411
290-271-295 410
290-286-200 492
290-287-200 492
290-300-150 515
290-300-160 405
290-300-206 983
290-300-207 983
290-300-208 983
290-300-209 983
290-300-210 983
290-300-216 983
290-300-245 927
290-300-255 501
290-300-300 506
290-300-301 983
290-300-302 983
290-300-303 983
290-300-304 983
290-300-305 983
290-300-306 983
290-300-310 983
290-300-311 982
290-300-312 982
290-300-313 982
290-300-314 982
290-300-315 982
290-300-316 982
290-300-320 983
290-300-330 982
290-300-340 982
290-300-350 983
290-300-400 506
290-300-600 512
290-301-160 405
290-310-000 515
290-317-230 418
290-318-270 418
290-319-210 418

290-321-260 421
290-323-260 421
290-325-260 421
290-331-150 421
290-336-000 470
290-336-015 470
290-336-030 470
290-336-045 470
290-336-090 470
290-338-000 470
290-338-015 470
290-338-030 470
290-338-045 470
290-338-090 470
290-340-180 432
290-341-170 432
290-341-180 432
290-341-190 432
290-342-120 433
290-342-140 433
290-342-160 433
290-342-180 433
290-343-180 429
290-343-190 429
290-344-160 435
290-344-170 435
290-344-180 435
290-344-200 435
290-350-001 463
290-350-002 463
290-350-003 463
290-350-004 463
290-350-005 463
290-350-007 463
290-400-195 412
290-400-210 412
290-400-220 412
290-400-260 412
290-401-210 412
290-401-220 412
290-402-190 419
290-402-260 419
290-403-210 412
290-403-220 412
290-403-260 412
290-405-195 414
290-405-210 414
290-407-200 408
290-408-190 431
290-408-230 431
290-409-160 415
290-409-230 431
290-410-050 356
290-410-140 405
290-411-140 405
290-411-190 415
290-411-200 415
290-412-220 414
290-412-260 414
290-413-180 428
290-413-190 416
290-413-195 416
290-413-200 416
290-413-220 440
290-413-250 440
290-414-150 416
290-414-180 416
290-414-310 440
290-415-150 416
290-415-180 416
290-416-200 430
290-417-260 425
290-417-300 425
290-418-270 423
290-418-280 423
290-418-310 425
290-418-330 425
290-420-270 436
290-420-300 425
290-421-240 437
290-423-250 437
290-423-260 424
290-424-001 417
290-424-002 417
290-424-200 434
290-425-200 426
290-425-220 419
290-425-240 426
290-425-250 426
290-425-260 426
290-425-275 426
290-426-001 438
290-426-002 438
290-426-003 438
290-426-004 438
290-426-300 420
290-426-305 420
290-427-230 410
290-429-001 430
290-429-002 430
290-429-003 430
290-429-004 430
290-429-250 410
290-430-210 417
290-430-220 417
290-431-170 428
290-431-230 436
290-432-060 354
290-432-075 354
290-432-090 354
290-432-110 354
290-432-170 419
290-432-200 439
290-432-230 439
290-432-250 439
290-433-060 354
290-433-075 354
290-433-090 354
290-433-110 354
290-433-230 424
290-433-250 424
290-433-270 424
290-434-210 413
290-434-230 413
290-434-270 413
290-434-310 413
290-435-210 413
290-435-230 413
290-435-270 413
290-435-310 413
290-436-180 427
290-436-190 427
290-436-230 427
290-436-270 427
290-437-200 427
290-437-210 427
290-437-250 427
290-437-290 427

290-438-120 405
290-438-140 406
290-438-160 406
290-438-180 406
290-438-200 406
290-438-260 406
290-438-280 406
290-439-120 405
290-439-140 406
290-439-160 406
290-439-180 406
290-439-200 406
290-439-260 406
290-439-280 406
290-440-075 352
290-440-085 352
290-440-100 352
290-440-120 352
290-440-160 408
290-440-170 408
290-441-075 352
290-441-085 352
290-441-100 352
290-441-120 352
290-441-160 409
290-442-150 408
290-442-180 427
290-442-190 427
290-442-210 427
290-443-150 409
290-445-150 409
290-447-155 408
290-447-170 408
290-450-210 459
290-450-220 459
290-450-260 459
290-451-170 408
290-451-215 414
290-451-240 414
290-452-200 459
290-452-220 459
290-452-250 459
290-453-160 437
290-453-210 431
290-453-220 431
290-454-240 440
290-454-260 440
290-454-280 440
290-455-170 437
290-456-160 429
290-456-170 429
290-456-180 429
290-457-170 428
290-457-190 428
290-457-210 428
290-458-100 407
290-458-110 407
290-458-120 407
290-459-120 407
290-459-130 407
290-460-110 408
290-460-200 441
290-463-250 658
290-465-000 453
290-465-001 453
290-465-002 453
290-465-003 453
290-465-004 453
290-465-005 454
290-465-007 453
290-465-008 454
290-466-001 465
290-466-002 465
290-466-003 465
290-466-004 465
290-466-005 465
290-467-210 460
290-467-255 460
290-468-001 465
290-468-002 465
290-468-003 465
290-468-160 459
290-468-170 459
290-469-160 454
290-469-185 458
290-469-200 458
290-470-170 467
290-471-160 467
290-471-215 455
290-471-245 455
290-472-150 456
290-472-155 456
290-472-160 456
290-473-160 459
290-473-170 459
290-474-170 459
290-476-170 459
290-477-150 466
290-477-160 466
290-477-170 466
290-478-150 468
290-478-155 468
290-478-160 458
290-478-170 458
290-478-180 458
290-480-200 455
290-481-001 457
290-481-002 457
290-485-201 537
290-485-202 537
290-485-203 537
290-485-204 537
290-485-301 538
290-485-302 538
290-485-303 538
290-485-304 538
290-485-305 538
290-485-306 538
290-487-170 469
290-487-290 469
290-487-300 469
290-488-160 469
290-488-260 469
290-489-170 469
290-489-260 469
290-489-290 469
290-500-220 927
290-501-140 526
290-502-160 526
290-503-160 526
290-504-180 526
290-505-300 222, 538
290-505-320 222, 538
290-508-190 458
290-509-200 456
290-509-240 456
290-511-235 426
290-511-240 426

290-511-245 426
290-511-260 222, 538
290-512-270 460
290-512-315 461
290-513-240 468
290-513-270 467
290-514-190 461
290-514-260 461
290-515-330 461
290-516-220 462
290-516-260 462
290-516-270 462
290-517-200 462
290-517-250 462
290-518-270 463
290-519-240 460
290-521-200 464
290-521-250 464
290-521-260 464
290-521-265 464
290-521-270 464
290-535-180 534
290-535-210 534
290-537-140 534
290-537-240 534
290-539-001 534
290-539-002 534
290-539-003 534
290-539-004 534
290-541-200 924
290-548-160 101
290-548-200 101
290-548-240 101
290-548-300 286
290-548-355 286
290-548-410 286
290-550-160 100, 392
290-550-200 100, 392
290-550-240 100, 392
290-550-300 100, 392
290-551-160 392
290-551-200 392
290-551-240 392
290-551-300 392
290-552-160 101, 393
290-552-200 101, 393
290-552-240 101, 393
290-552-300 101, 393
290-553-160 101, 393
290-553-200 101, 393
290-553-240 101, 393
290-553-300 101, 393
290-554-160 393
290-554-200 393
290-554-240 393
290-554-300 393
290-555-160 102
290-555-200 102
290-555-240 102
290-555-300 102
290-556-150 102, 394
290-556-160 102, 394
290-556-200 102, 394
290-556-240 102, 394
290-556-330 535
290-556-331 535
290-557-160 101, 393
290-557-200 101, 393
290-557-240 101, 393
290-557-300 101, 393
290-558-160 101, 393
290-558-200 101, 393
290-558-240 101, 393
290-558-300 101, 393
290-558-330 535
290-558-331 535
290-559-150 441
290-564-305 535
290-564-306 535
290-573-001 452
290-573-002 452
290-573-003 452
290-573-004 452
290-573-005 452
290-573-006 452
290-573-007 452
290-573-008 452
290-573-009 452
290-587-001 447
290-587-002 447
290-587-003 447
290-587-004 447
290-587-005 447
290-587-006 447
290-593-000 451
290-593-001 451
290-593-002 451
290-593-003 451
290-593-004 451
290-594-001 448
290-594-002 448
290-594-003 448
290-594-004 448
290-594-005 448
290-594-006 448
290-594-007 449
290-594-008 449
290-594-009 449
290-594-010 449
290-594-011 449
290-594-012 449
290-594-013 450
290-594-014 450
290-594-015 450
290-594-016 450
290-594-017 450
290-594-018 450
290-594-170 434
290-594-175 434
290-594-180 434
290-595-001 451
290-595-002 451
290-595-003 451
290-596-001 448
290-596-002 448
290-596-003 448
290-596-004 448
290-596-005 448
290-596-006 448
290-596-007 449
290-596-008 449
290-596-009 449
290-596-010 449
290-596-011 449
290-596-012 449
290-596-013 450
290-596-014 450
290-596-015 450

290-596-017 450
290-597-001 448
290-597-002 448
290-597-003 448
290-597-004 448
290-597-005 448
290-597-006 448
290-597-007 449
290-597-008 449
290-597-012 449
290-598-001 448
290-598-002 448
290-598-003 448
290-598-004 448
290-598-005 448
290-598-006 448
290-598-007 449
290-598-008 449
290-598-009 449
290-598-010 449
290-598-011 449
290-598-012 449
290-598-013 450
290-598-014 450
290-598-015 450
290-598-016 450
290-598-017 450
290-598-018 450
290-599-001 442
290-599-002 442
290-599-003 442
290-599-004 442
290-599-005 442
290-599-006 442
290-599-007 442
290-599-008 442
290-599-009 442
290-599-010 442
290-599-011 442
290-599-012 442
290-599-013 443
290-599-014 443
290-599-015 443
290-599-016 443
290-599-017 443
290-599-018 443
290-599-019 443
290-599-020 443
290-599-021 443
290-599-022 443
290-599-023 443
290-599-024 443
290-599-025 444
290-599-026 444
290-599-027 444
290-599-028 444
290-599-029 444
290-599-030 444
290-599-031 444
290-599-032 444
290-599-034 444
290-599-035 444
290-599-036 444
290-599-037 445
290-599-038 445
290-599-039 445
290-599-040 445
290-599-041 445
290-599-042 445
290-599-043 445
290-599-044 445
290-599-045 446
290-599-046 446
290-599-047 446
290-599-048 446
290-599-049 446
290-599-050 446
290-599-051 446
290-600-230 492
290-680-215 423
290-695-255 423
290-700-200 471
290-700-201 471
290-700-210 471
290-700-220 471
290-701-200 471
290-701-201 471
290-701-210 471
290-701-220 471
290-703-005 532
290-703-010 532
290-703-015 532
290-703-020 532
290-703-025 532
290-703-030 532
290-703-040 532
290-703-050 532
290-703-105 532
290-703-110 532
290-703-115 532
290-703-120 532
290-703-125 532
290-703-130 532
290-703-140 532
290-703-150 532
290-703-210 473
290-703-260 473
290-704-100 530
290-704-105 530
290-704-110 530
290-704-115 530
290-704-120 530
290-704-125 530
290-704-130 530
290-704-135 530
290-704-200 530
290-704-205 530
290-704-210 530
290-704-215 530
290-704-220 530
290-704-225 530
290-704-230 530
290-704-235 530
290-704-300 530
290-704-405 530
290-704-410 530
290-704-415 530
290-704-420 530
290-704-425 530
290-704-430 530
290-704-435 530
290-705-050 532
290-705-100 532
290-705-150 532
290-705-200 532
290-705-250 532
290-705-300 532
290-705-350 532

290-705-400 532
290-705-450 532
290-705-500 532
290-705-700 532
290-705-900 532
290-706-050 532
290-706-100 532
290-706-150 532
290-706-200 532
290-706-250 532
290-706-300 532
290-706-350 532
290-706-400 532
290-706-450 532
290-706-500 532
290-706-700 532
290-706-900 532
290-707-165 534
290-707-220 473
290-707-230 473
290-708-165 534
290-709-165 534
290-711-200 474
290-713-260 475
290-715-260 475
290-717-210 476
290-717-260 476
290-719-150 472
290-719-210 472
290-719-240 472
290-721-165 457
290-721-210 472
290-721-240 472
290-722-165 457
290-723-110 485
290-723-280 476
290-723-300 476
290-723-320 476
290-723-340 476
290-725-110 485
290-727-180 477
290-727-200 477
290-727-260 477
290-727-270 477
290-729-180 477
290-730-210 474
290-731-190 478
290-731-200 478
290-731-210 478
290-732-110 481
290-732-130 481
290-732-165 483
290-733-160 483
290-734-120 481
290-734-130 481
290-734-150 483
290-735-001 478
290-735-002 478
290-735-003 478
290-735-130 481
290-735-150 483
290-735-250 479
290-737-260 479
290-739-190 480
290-739-200 480
290-739-270 480
290-740-070 357
290-740-080 357
290-740-090 357
290-740-100 357
290-740-110 357
290-740-120 357
290-740-130 357
290-743-070 357
290-743-080 357
290-743-090 357
290-743-100 357
290-743-110 357
290-743-120 357
290-743-130 357
290-745-070 357
290-745-080 357
290-745-090 357
290-745-100 357
290-745-110 357
290-745-130 357
290-755-255 422
290-756-255 422
290-757-270 422
290-758-165 482
290-758-170 482
290-758-280 422
290-759-180 482
290-760-010 358
290-760-014 358
290-760-020 358
290-760-165 482
290-760-170 482
290-761-010 358
290-761-014 358
290-761-020 358
290-761-150 482
290-761-165 482
290-761-170 482
290-762-010 358
290-762-014 358
290-762-020 358
290-762-170 484
290-762-180 484
290-763-170 484
290-763-175 484
290-764-160 485
290-764-170 485
290-765-160 485
290-765-170 485
290-766-170 485
290-767-170 485
290-793-120 481
290-794-130 481
290-795-010 357
290-795-025 357
290-795-045 357
290-795-060 357
290-795-150 481
290-795-210 357
290-795-225 357
290-795-245 357
290-795-260 357
290-795-410 357
290-795-425 357
290-795-445 357
290-795-460 357
290-796-150 481
290-797-150 481
290-798-140 481
290-798-150 481
290-798-160 481
290-799-150 481

290-799-160 481
290-850-160 113
290-850-200 113
290-850-240 113
290-850-300 113
290-851-200 113
290-851-240 113
290-852-160 113
290-852-240 113
290-853-160 113
290-854-160 113
290-854-200 113
290-854-300 113
295-000-001 536
295-000-002 536
295-000-003 536
295-000-010 401
295-000-020 400
295-000-101 536
295-000-102 536
295-000-103 536
295-000-110 402
295-033-253 403
295-034-045 373
295-034-090 373
295-034-125 373
295-034-200 399
295-034-201 399
295-034-253 403
295-035-045 373
295-035-090 373
295-035-125 373
295-035-200 399
295-035-201 399
295-035-253 403
295-036-253 403
295-037-045 373
295-037-090 373
295-037-125 373
295-037-200 399
295-037-201 399
295-037-253 403
295-038-253 403
295-039-300 402
295-039-301 402
295-040-300 402
295-040-301 402
295-041-300 402
295-041-301 402
295-045-000 488
295-048-000 373
295-048-010 373
295-048-015 373
295-048-020 373
295-048-030 373
295-048-070 373
295-048-125 373
295-048-200 399
295-048-201 399
295-048-202 399
295-048-210 399
295-048-212 399
295-048-214 399
295-048-216 399
295-048-217 399
295-048-219 399
295-048-250 403
295-048-251 403
295-048-252 403
295-048-253 403
295-048-254 403
295-048-255 404
295-048-260 404
295-048-265 404
295-048-270 404
295-048-280 404
295-049-250 403
295-049-251 403
295-049-252 403
295-049-253 403
295-049-254 403
295-049-255 404
295-049-260 404
295-049-265 404
295-049-270 404
295-049-280 404
295-050-000 373
295-050-010 373
295-050-015 373
295-050-020 373
295-050-030 373
295-050-070 373
295-050-125 373
295-050-200 399
295-050-201 399
295-050-202 399
295-050-210 399
295-050-212 399
295-050-214 399
295-050-216 399
295-050-217 399
295-050-219 399
295-050-250 403
295-050-251 403
295-050-252 403
295-050-253 403
295-050-254 403
295-050-255 404
295-050-260 404
295-050-265 404
295-050-270 404
295-050-280 404
295-051-250 403
295-051-251 403
295-051-252 403
295-051-253 403
295-051-254 403
295-051-255 404
295-051-260 404
295-051-265 404
295-051-270 404
295-051-280 404
295-052-000 373
295-052-010 373
295-052-015 373
295-052-020 373
295-052-030 373
295-052-070 373
295-052-125 373
295-052-200 399
295-052-201 399
295-052-202 399
295-052-210 399
295-052-212 399
295-052-214 399
295-052-216 399
295-052-217 399
295-052-219 399

295-052-250 403
295-052-251 403
295-052-252 403
295-052-253 403
295-052-254 403
295-052-255 404
295-052-260 404
295-052-265 404
295-052-270 404
295-052-280 404
295-053-250 403
295-053-251 403
295-053-252 403
295-053-253 403
295-053-254 403
295-053-255 404
295-053-260 404
295-053-265 404
295-053-270 404
295-053-280 404
295-069-015 373
295-070-015 373
295-071-015 373
295-080-150 489
295-080-170 489
295-080-280 489
295-080-281 489
295-100-230 489
295-100-350 401
295-120-000 384
295-120-001 384
295-120-002 384
295-120-003 384
295-121-180 400
295-121-230 400
295-121-280 400
295-123-180 384
295-130-000 539
295-130-001 539
295-130-002 539
295-130-003 539
295-130-004 539
295-130-005 539
295-130-006 539
295-130-007 539
295-130-008 539
295-150-012 489
295-150-020 489
295-150-222 489
295-150-223 489
295-165-475 270
295-180-000 400
295-180-001 400
295-180-002 400
295-180-003 400
295-290-001 490
295-290-002 490
295-290-010 490
295-290-012 490
295-290-065 490
295-290-075 490
295-290-100 490
295-290-101 490
295-290-200 490
295-290-201 490
295-290-300 490
295-290-301 490
295-300-000 401
295-310-001 489
295-310-002 489
295-310-100 490
300-100-771 360, 361
300-100-772 360, 361
300-100-773 360, 361
300-100-774 360, 361
300-100-776 360
300-100-777 360
300-100-778 360
300-100-779 360
300-100-786 361
300-100-789 361
300-135-905 1021
300-135-910 1021
300-215-000 1021
300-215-050 1021
300-215-070 1021
300-215-080 1021
300-215-090 1021
300-215-100 1021
300-215-110 1023
300-215-111 1023
300-215-112 1023
300-245-000 1021
300-270-000 1021
300-285-000 1021
300-401-775 362
300-410-775 362
300-420-065 1021
310-008-120 138
310-008-150 138
310-009-150 138
310-010-120 138
310-010-150 138
310-010-190 138
310-014-150 139
310-014-190 139
310-014-220 139
310-014-250 139
310-014-355 284
310-014-410 284
310-020-135 648
310-020-160 139
310-020-200 139
310-020-220 139
310-020-250 139
310-020-300 139
310-022-065 653
310-023-095 648
310-025-185 140
310-026-190 139
310-027-155 140
310-028-150 139
310-029-155 141
310-030-065 653
310-030-150 141
310-030-195 141
310-030-200 140
310-031-200 138
310-032-150 154
310-033-210 154
310-033-290 154
310-033-315 154
310-100-200 141
310-105-130 142
310-105-150 142
310-105-155 142
310-110-160 142
310-110-180 142

310-110-200 142
310-110-240 142
310-110-300 142, 284
310-110-355 142, 284
310-110-410 284
310-111-160 143
310-111-200 143
310-112-180 143
310-112-200 143
310-113-200 143
310-114-200 143
310-114-230 143
310-115-160 142
310-116-140 144
310-116-155 145
310-116-200 145
310-116-230 145
310-117-230 145
310-118-160 142
310-118-200 142
310-124-130 147
310-124-220 147
310-124-250 147
310-124-280 147
310-125-130 147
310-125-220 147
310-125-250 147
310-125-280 147
310-126-220 148
310-126-250 148
310-126-280 148
310-127-220 148
310-127-250 148
310-127-280 148
310-130-210 148
310-130-230 148
310-130-250 148
310-131-210 148
310-131-230 148
310-131-250 148
310-140-210 148
310-140-230 148
310-140-250 148
310-141-210 148
310-141-230 148
310-141-250 148
310-150-240 149
310-151-240 149
310-154-315 152
310-199-235 150
310-200-130 147
310-200-229 150
310-200-235 150
310-201-130 147
310-201-235 150
310-201-290 150
310-203-235 150
310-230-215 151
310-231-190 151
310-231-195 151
310-231-205 151
310-233-190 151
310-233-195 151
310-233-205 151
310-233-215 151
310-234-215 151
310-241-205 151
310-243-205 151
310-250-205 151
310-253-215 151
310-254-215 151
310-290-180 146
310-290-210 146
310-290-230 146
310-291-180 146
310-291-210 146
310-291-230 146
310-295-195 143
310-295-230 143
310-310-260 149
310-310-280 149
310-400-005 153
310-400-007 153
310-400-010 153
310-410-085 153
310-410-225 153
310-412-260 153
310-500-280 144
310-550-160 146
310-550-180 146
310-550-210 146
310-550-230 146
310-551-160 146
310-551-180 146
310-551-210 146
310-551-230 146
310-580-001 649
310-580-300 152
310-584-240 150
310-585-001 649
310-585-002 649
310-585-003 649
310-587-001 649
310-587-002 649
310-587-003 649
310-588-470 289
310-601-150 646
310-602-000 646
310-603-150 646
310-608-060 647
310-610-150 648
310-652-000 651
310-654-001 653
310-654-002 653
310-654-003 653
310-655-001 650
310-655-002 650
310-655-003 650
310-655-004 650
310-675-050 650
310-675-100 650
310-675-140 650
310-675-145 650
310-675-200 650
310-679-210 650
310-679-270 650
310-685-280 655
310-695-122 652
310-701-065 651
310-702-065 651
310-705-029 652
310-705-038 652
310-710-000 651
310-710-230 149
310-720-280 656
310-720-350 656
310-720-420 656
310-721-280 656

310-721-350 656
310-721-420 656
310-723-280 657
310-723-350 657
310-723-400 657
310-724-230 657
310-724-330 657
310-724-400 657
310-729-001 591
310-729-002 591
310-730-240 588
310-731-200 589
310-731-250 589
310-732-000 591
310-732-200 589
310-732-250 589
310-733-001 588
310-733-002 588
310-733-003 589
310-735-001 588
310-735-002 588
310-735-003 589
310-735-004 591
310-735-280 587
310-760-200 591
310-760-230 591
310-800-000 590
310-800-100 590
310-800-600 590
310-801-000 590
310-801-100 590
310-801-150 647
310-802-000 590
310-802-100 590
310-803-000 590
310-803-100 590
310-804-000 590
310-804-100 590
310-805-000 590
310-805-100 590
310-806-000 590
310-806-100 590
310-807-000 590
310-807-100 590
310-808-060 647
320-101-230 548
320-103-220 548
320-105-220 548
320-107-220 548
320-109-190 548
320-111-190 548
320-111-230 547
320-112-230 547
320-113-230 547
320-114-230 547
320-116-200 137, 549
320-117-200 137, 549
320-121-001 552
320-121-002 552
320-121-003 552
320-121-004 552
320-140-010 550
320-140-020 550
320-140-030 550
320-140-040 550
320-140-050 550
320-140-100 550
320-140-200 550
320-140-300 550
320-142-340 552
320-150-001 551
320-150-002 551
320-150-003 551
320-150-004 551
320-150-005 551
320-150-006 551
320-150-007 551
320-150-008 551
320-150-009 551
320-150-010 551
320-150-011 551
320-150-012 551
320-150-013 551
320-150-215 551
320-150-230 633
320-151-001 552
320-151-002 552
320-151-003 552
320-151-230 634
320-151-245 634
320-152-230 634
320-152-270 551
320-153-001 552
320-153-002 552
320-165-285 633
320-170-260 631
320-175-235 631
320-185-000 632
320-185-001 632
320-185-002 632
320-185-003 632
320-185-004 632
320-195-000 632
320-201-360 631
320-204-210 630
320-205-220 630
320-206-210 630
320-350-190 635
320-350-280 635
320-603-455 640
320-720-080 641
320-720-100 641
320-720-120 641
320-720-140 641
320-720-160 641
320-720-180 641
320-720-200 641
320-720-220 641
320-720-240 641
320-721-080 641
320-721-100 641
320-721-110 641
320-721-120 641
320-721-140 641
320-721-160 641
320-721-180 641
320-721-200 641
320-721-220 641
320-721-240 641
320-723-080 641
320-723-100 641
320-723-120 641
320-723-140 641
320-723-160 641
320-723-180 641
320-723-200 641
320-723-220 641
320-723-240 641

320-998-000 640
320-999-000 640
330-301-001 603
330-301-002 603
330-301-003 603
330-301-004 603
330-301-005 603
340-005-000 654
340-008-100 654
340-008-190 658
340-009-190 658
340-010-000 654
340-010-010 654
340-011-000 654
340-011-280 572
340-012-000 654
340-012-330 572
340-012-360 572
340-013-100 654
340-013-300 572
340-014-100 654
340-014-410 574
340-015-100 654
340-016-400 574
340-017-440 573
340-018-300 573
340-018-360 573
340-020-360 575
340-025-380 574
340-029-360 573
340-103-340 605
340-150-200 155
340-150-210 569
340-160-210 155
340-401-210 655
340-402-210 655
340-403-210 655
340-500-300 585
340-510-420 585
340-600-008 640
340-600-011 640
340-600-013 640
340-600-016 640
340-600-026 640
340-600-032 640
340-798-270 571
340-799-270 571
340-799-280 571
340-800-280 571
340-801-280 571
340-802-280 571
350-100-001 601
350-100-002 601
350-100-003 601
350-101-260 592
350-102-001 602
350-102-002 602
350-102-003 602
350-110-001 602
350-110-002 602
350-110-003 602
350-110-004 602
350-111-002 607
350-111-003 607
350-111-004 607
350-120-001 602
350-120-002 602
350-130-001 601
350-130-002 601
350-130-003 601
350-131-001 606
350-131-002 606
350-131-003 606
350-137-001 606
350-137-002 606
350-137-003 606
350-140-001 601
350-140-002 601
350-140-003 601
350-141-001 606
350-141-002 606
350-141-003 606
350-200-001 600
350-200-002 600
350-200-003 600
350-206-001 596
350-206-002 596
350-206-003 596
350-207-001 596
350-207-002 596
350-207-003 596
350-210-000 598
350-210-001 598
350-210-002 598
350-210-003 598
350-211-000 598
350-211-001 598
350-211-002 598
350-211-003 598
350-212-000 598
350-212-001 598
350-212-002 598
350-212-003 598
350-230-001 599
350-230-002 599
350-230-003 599
350-231-001 599
350-231-002 599
350-231-003 599
350-232-001 599
350-232-002 599
350-232-003 599
350-240-001 599
350-240-002 599
350-240-003 599
350-241-001 599
350-241-002 599
350-241-003 599
350-254-001 598
350-254-002 598
350-254-003 598
350-270-001 596
350-270-002 596
350-271-001 596
350-271-002 596
350-272-001 596
350-272-002 596
350-290-001 596
350-290-002 214, 596
350-290-003 214, 596
350-290-004 214, 596
350-290-005 214, 596
350-290-006 214, 596
350-290-007 214, 596
350-290-008 214, 596
350-290-009 214, 596
350-290-010 214, 596
350-290-011 214, 596

350-300-000 603
350-302-001 603
350-302-002 603
350-302-290 568
350-303-000 603
350-309-000 603
350-310-000 603
350-311-000 603
350-311-140 603
350-320-020 597
350-320-025 597
350-320-030 597
350-320-035 597
350-320-040 597
350-322-020 597
350-322-025 597
350-322-030 597
350-322-035 597
350-322-040 597
350-324-040 597
350-336-000 605
350-340-000 600
350-342-280 566
350-361-001 600
350-361-002 600
350-361-003 600
350-365-010 585
350-365-012 585
350-365-014 585
350-380-010 594
350-380-015 594
350-380-020 594
350-380-025 594
350-380-030 594
350-380-035 594
350-380-040 594
350-380-045 594
350-380-050 594
350-380-055 594
350-380-060 594
350-380-065 594
350-380-070 594
350-380-075 594
350-380-080 594
350-380-085 594
350-380-090 594
350-380-095 594
350-380-100 594
350-380-105 594
350-380-110 594
350-380-115 594
350-380-120 594
350-380-125 594
350-380-130 594
350-380-135 594
350-380-140 594
350-380-145 594
350-380-150 594
350-380-155 594
350-380-160 594
350-380-165 594
350-380-170 594
350-380-175 594
350-380-180 594
350-380-185 594
350-380-190 594
350-380-195 594
350-380-200 594
350-380-210 594
350-380-220 594
350-380-230 594
350-380-240 594
350-380-250 594
350-380-260 594
350-380-270 594
350-380-280 594
350-380-290 594
350-380-300 594
350-382-020 594
350-382-040 594
350-382-060 594
350-382-080 594
350-382-100 594
350-382-120 594
350-382-140 594
350-382-160 594
350-382-180 594
350-382-200 594
350-382-220 594
350-382-240 594
350-382-260 594
350-383-001 594
350-390-010 595
350-390-012 595
350-390-014 595
350-390-016 595
350-390-018 595
350-390-020 595
350-391-002 595
350-392-000 595
350-392-015 595
350-392-019 595
350-392-023 595
350-392-027 595
350-392-031 595
350-392-035 595
350-392-039 595
350-392-043 595
350-395-320 592
350-396-290 592
350-396-320 592
350-399-280 579
350-400-250 567
350-401-250 567
350-410-250 567
350-420-260 565
350-422-170 565
350-426-180 565
350-426-190 566
350-427-200 566
350-428-280 567
350-429-260 579
350-440-240 568
350-441-240 568
350-443-230 568
350-445-260 569
350-452-240 569
350-453-240 569
350-454-240 569
350-455-240 569
350-470-210 569
350-471-210 569
350-480-205 566
350-490-320 564
350-491-210 549
350-491-250 549
350-492-270 564
350-493-230 570

350-493-250 570
350-493-270 570
350-496-330 571
350-497-330 571
350-510-070 607
350-512-070 607
350-599-300 578
350-600-300 578
350-601-230 280, 577
350-601-300 578
350-602-230 280, 577
350-602-240 276, 280, 578
350-603-230 280, 577
350-604-230 280, 577
350-605-007 585
350-605-270 578
350-610-001 580
350-610-002 580
350-610-003 580
350-610-004 580
350-610-005 580
350-610-006 580
350-612-001 580
350-612-002 580
350-612-003 580
350-612-004 580
350-612-005 580
350-612-006 580
350-613-006 581
350-613-008 581
350-613-010 581
350-613-012 581
350-613-014 581
350-614-270 584
350-619-005 583
350-619-006 583
350-619-007 583
350-619-008 583
350-619-009 583
350-619-011 583
350-619-012 583
350-619-014 583
350-619-015 583
350-619-016 583
350-619-019 583
350-619-020 583
350-620-005 583
350-620-006 583
350-620-007 583
350-620-008 583
350-620-009 583
350-620-011 583
350-620-012 583
350-620-014 583
350-620-015 583
350-620-016 583
350-620-019 583
350-620-020 583
350-621-005 583
350-621-006 583
350-621-007 583
350-621-008 583
350-621-009 583
350-621-011 583
350-621-012 583
350-621-014 583
350-621-015 583
350-621-016 583
350-621-019 583
350-621-020 583
350-622-005 583
350-622-006 583
350-622-007 583
350-622-008 583
350-622-009 583
350-622-011 583
350-622-012 583
350-622-014 583
350-622-015 583
350-622-016 583
350-622-019 583
350-622-020 583
350-630-005 582
350-630-006 582
350-630-007 582
350-630-008 582
350-630-009 582
350-630-011 582
350-630-012 582
350-630-014 582
350-630-015 582
350-630-016 582
350-630-019 582
350-630-020 582
350-631-005 582
350-631-006 582
350-631-007 582
350-631-008 582
350-631-009 582
350-631-011 582
350-631-012 582
350-631-014 582
350-631-015 582
350-631-016 582
350-631-019 582
350-631-020 582
350-650-000 280, 577
350-650-030 577
350-650-045 280, 577
350-650-060 280, 577
350-650-080 280, 577
350-650-100 280, 577
350-650-120 280, 577
350-650-140 280, 577
350-660-100 593
350-660-111 593
350-660-112 593
350-660-113 593
350-660-114 593
350-660-115 593
350-660-116 593
350-750-000 593
350-750-001 593
350-750-002 593
350-755-007 579
350-755-011 579
350-755-017 579
350-757-190 575
350-759-170 575
350-765-001 576
350-765-002 576
350-765-003 576
350-765-004 576
350-765-005 576
350-766-001 576
350-766-010 576
350-766-100 576
350-767-240 576

350-770-250 576
350-843-210 586
350-844-210 586
350-844-290 586
350-847-260 586
350-857-220 587
350-857-240 587
350-919-001 581
350-919-002 581
350-919-003 581
350-919-004 581
350-919-005 581
350-919-006 581
350-920-300 584
350-920-350 584
350-920-400 584
350-926-050 582
350-926-060 582
350-926-070 582
350-926-080 582
350-926-090 582
350-926-110 582
350-926-120 582
350-926-140 582
350-926-150 582
350-926-160 582
350-926-190 582
350-926-200 582
350-926-300 584
350-926-350 584
350-926-400 584
350-927-050 582
350-927-060 582
350-927-070 582
350-927-080 582
350-927-090 582
350-927-110 582
350-927-120 582
350-927-140 582
350-927-150 582
350-927-160 582
350-927-190 582
350-927-200 582
350-928-300 584
350-928-350 584
350-928-400 584
350-929-300 584
350-929-350 584
350-929-400 584
400-018-005 75
400-019-008 75
400-025-001 76
400-025-110 104
400-029-012 104
400-060-003 103
400-060-004 103
400-060-005 103
400-060-007 103
400-101-090 347
400-102-110 347
400-103-110 347
400-105-001 348
400-105-002 348
400-112-105 33
400-113-105 33
400-118-003 75, 334
400-118-004 75, 334
400-118-005 75, 334
400-118-008 75, 334
400-120-050 344
400-120-051 344
400-120-052 344
400-137-003 75
400-137-021 75, 334
400-137-031 75, 334
400-137-055 75, 334
400-137-090 75
400-139-050 76, 334
400-345-110 166
400-348-135 166
400-402-005 769
400-402-010 769
400-402-015 769
400-402-018 769
400-402-020 769
400-402-025 769
400-402-035 769
400-402-040 769
400-402-045 769
400-497-001 298
400-497-003 298
400-497-008 298
400-497-012 298
400-497-023 298
400-497-034 298
400-497-045 298
400-497-056 298
400-497-067 298
400-497-078 298
400-500-030 233
400-500-040 233
400-583-007 627, 872
400-583-008 627, 872
400-842-085 348
400-843-085 348
400-844-085 348
400-881-130 34
400-883-130 34
410-148-210 766
410-391-140 105
410-395-190 105
410-395-210 105
410-396-190 105
410-746-001 771
410-746-002 771
410-746-003 771
420-119-175 38
420-375-165 105
420-490-210 831
420-491-210 831
420-492-165 831
420-492-210 831
420-493-165 831
420-493-210 831
420-494-165 831
420-494-210 831
420-495-165 831
420-495-210 831
420-496-165 831
420-496-210 831
420-497-210 831
420-498-210 831
420-499-210 831
420-540-180 759
420-541-180 750
420-544-165 760
420-545-001 928
420-545-002 928

420-546-180 928
420-547-004 758
420-547-005 758
420-547-190 758
420-548-190 758
420-549-200 759
420-550-230 750
420-552-215 750
420-554-178 759
420-554-190 759
420-590-004 787
420-591-004 787
420-594-002 790
420-594-003 790
420-594-004 790
420-594-005 790
420-594-006 790
420-594-007 790
420-594-008 790
420-594-010 790
420-594-012 790
420-594-015 790
420-654-180 830
420-656-000 830
420-660-000 829
420-660-200 831
420-660-214 831
420-660-216 831
420-660-218 831
420-660-219 831
420-661-000 829
420-661-100 829
420-662-001 829
420-662-002 829
420-670-210 832
420-678-190 832
430-467-170 155
430-497-141 615
430-497-151 615
430-500-230 864
430-504-180 865
431-656-235 793
431-658-250 793
431-660-250 793
500-380-150 321
500-384-010 830
500-386-045 830
500-387-000 830
500-440-180 751
500-446-165 751
503-011-000 314
503-013-000 314
510-110-130 320
510-210-140 316
510-215-140 316
510-224-140 317
510-225-142 317
510-226-140 317
510-250-110 316
510-251-130 316
510-332-150 318
510-334-140 320
510-337-160 317
510-338-150 317
510-347-130 318
510-425-090 321
510-462-130 319
510-463-140 319
510-464-140 319
600-050-000 1024
600-050-514 946
600-080-200 1015
600-087-230 1015
600-091-012 1022
600-091-015 1022
600-091-030 1022
600-091-050 1022
600-092-050 1022
600-092-080 1022
600-095-270 1015
600-098-100 1012
600-098-150 1012
600-098-205 1012
600-098-220 1012
600-100-000 1019
600-100-065 1016
600-100-070 1016
600-100-071 1016
600-110-065 1016
600-113-100 1013
600-113-110 1013
600-113-120 1013
600-113-130 1013
600-113-140 1013
600-113-150 1013
600-113-160 1013
600-115-100 1017
600-142-001 1014
600-142-002 1014
600-142-003 1014
600-142-004 1014
600-142-006 1014
600-142-007 1014
600-142-009 1014
600-170-151 1012
600-170-165 1012
600-170-175 1012
600-170-220 1012
600-170-225 1012
600-170-240 1012
600-170-260 1012
600-170-275 1012
600-170-290 1012
600-170-310 1012
600-170-325 1012
600-170-380 1012
600-170-415 1012
600-201-200 1018
600-210-125 1016
600-231-040 1012
600-231-060 1012
600-231-080 1012
600-231-100 1012
600-231-150 1012
600-310-100 1013
600-310-120 1013
600-310-160 1013
600-310-180 1013
600-310-200 1013
600-310-260 1013
600-312-220 1013
600-312-400 1013
600-312-500 1013
600-340-230 1013
600-397-010 1014
600-397-020 1014
600-397-030 1014
600-397-040 1014

600-397-060 1014
600-397-080 1014
600-398-120 1014
600-398-130 1014
600-398-150 1014
600-398-160 1014
600-398-170 1014
600-404-000 955
600-407-255 911
600-407-260 911
600-662-075 1014
600-662-080 1014
600-673-170 1012
600-673-200 1012
600-673-250 1012
600-673-275 1012
600-950-100 1024
660-100-100 1017
660-100-140 1017
660-102-120 1017
660-160-100 1018
660-160-150 1018
660-160-200 1018
660-160-250 1018
660-160-300 1018
660-160-350 1018
660-160-400 1018
660-160-450 1018
660-163-200 1018
660-163-250 1018
660-163-300 1018
660-163-350 1018
660-163-400 1018
660-163-450 1018
700-010-150 108
700-010-180 108
700-010-200 108
700-010-220 108
700-011-150 108
700-011-180 108
700-011-200 108
700-011-220 108
700-012-150 108
700-012-180 108
700-012-200 108
700-012-220 108
700-013-150 108
700-013-180 108
700-013-200 108
700-013-220 108
700-020-150 108
700-020-180 108
700-020-200 108
700-020-220 108
700-021-150 108
700-021-180 108
700-021-200 108
700-021-220 108
700-022-150 108
700-022-180 108
700-022-200 108
700-022-220 108
700-023-150 108
700-023-180 108
700-023-200 108
700-023-220 108
700-030-150 108
700-030-180 108
700-030-200 108
700-030-220 108
700-031-150 108
700-031-180 108
700-031-200 108
700-031-220 108
700-032-150 108
700-032-180 108
700-032-200 108
700-032-220 108
700-033-150 108
700-033-180 108
700-033-200 108
700-033-220 108
700-040-150 108
700-040-180 108
700-040-200 108
700-040-220 108
700-041-150 108
700-041-180 108
700-041-200 108
700-041-220 108
700-042-150 108
700-042-180 108
700-042-200 108
700-042-220 108
700-043-150 108
700-043-180 108
700-043-200 108
700-043-220 108
700-050-180 109
700-050-200 109
700-050-220 109
700-050-250 109
700-052-180 109
700-052-200 109
700-052-220 109
700-052-250 109
700-060-180 109
700-060-200 109
700-060-220 109
700-060-250 109
700-062-180 109
700-062-200 109
700-062-220 109
700-062-250 109
700-070-180 109
700-070-220 109
700-070-250 109
700-072-180 109
700-072-200 109
700-072-220 109
700-072-250 109
700-080-180 109
700-080-220 109
700-080-250 109
700-082-180 109
700-082-200 109
700-082-220 109
700-082-250 109
700-601-710 106
700-601-711 106
700-601-712 106
700-601-713 106
700-601-714 106
700-601-715 106
700-601-730 106
700-601-731 106
700-601-732 106
700-601-733 106

700-601-734 106
700-601-735 106
700-610-150 106
700-610-180 106
700-610-200 106
700-610-220 106
700-611-150 106
700-611-180 106
700-612-150 106
700-612-180 106
700-612-200 106
700-613-150 106
700-613-180 106
700-620-150 106
700-620-180 106
700-620-200 106
700-620-220 106
700-621-150 106
700-621-180 106
700-622-150 106
700-622-180 106
700-622-200 106
700-622-220 106
700-623-150 106
700-623-180 106
700-630-150 106
700-630-180 106
700-630-200 106
700-630-220 106
700-631-150 106
700-631-180 106
700-632-150 106
700-632-180 106
700-632-200 106
700-632-220 106
700-633-150 106
700-633-180 106
700-640-150 106
700-640-180 106
700-640-200 106
700-640-220 106
700-641-150 106
700-641-180 106
700-642-150 106
700-642-180 106
700-642-200 106
700-642-220 106
700-643-150 106
700-643-180 106
700-650-180 107
700-650-200 107
700-650-220 107
700-650-240 107
700-652-180 107
700-652-200 107
700-652-220 107
700-652-240 107
700-660-180 107
700-660-200 107
700-660-220 107
700-660-240 107
700-662-180 107
700-662-200 107
700-662-220 107
700-662-240 107
700-670-180 107
700-670-200 107
700-670-201 107
700-670-203 107
700-670-220 107
700-670-221 107
700-670-223 107
700-670-240 107
700-672-180 107
700-672-200 107
700-672-201 107
700-672-203 107
700-672-220 107
700-672-221 107
700-672-223 107
700-672-240 107
700-680-180 107
700-680-200 107
700-680-220 107
700-680-240 107
700-682-180 107
700-682-200 107
700-682-220 107
700-682-240 107
700-900-149 1020
700-900-160 1020
700-900-220 1019
700-900-250 1019
900-950-001 1020
900-950-002 1020
900-950-003 1020
900-950-004 1020
900-950-005 1020
900-950-006 1020
900-950-007 1020
900-950-008 1020
900-950-009 1020