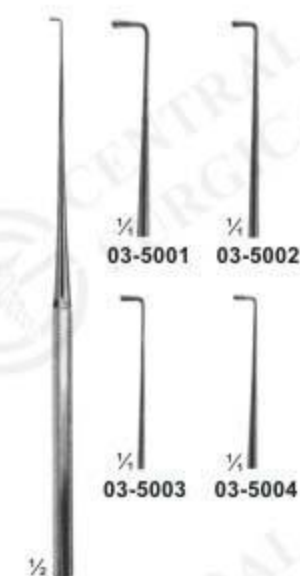
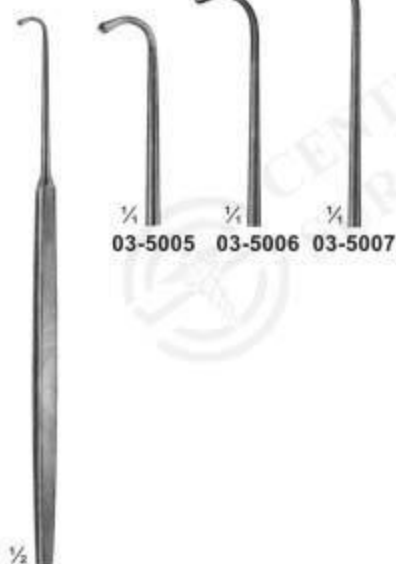




Nerve - and Vessel Hooks



03-5001 - 03-5004
WAGENER
150 mm



03-5005 - 03-5007
GRAEFE
140 mm



03-5008
BROM
Vein hook
170 mm



03-5009
CRILE
200 mm



03-5010 - 03-5011
CUSHING
190 mm

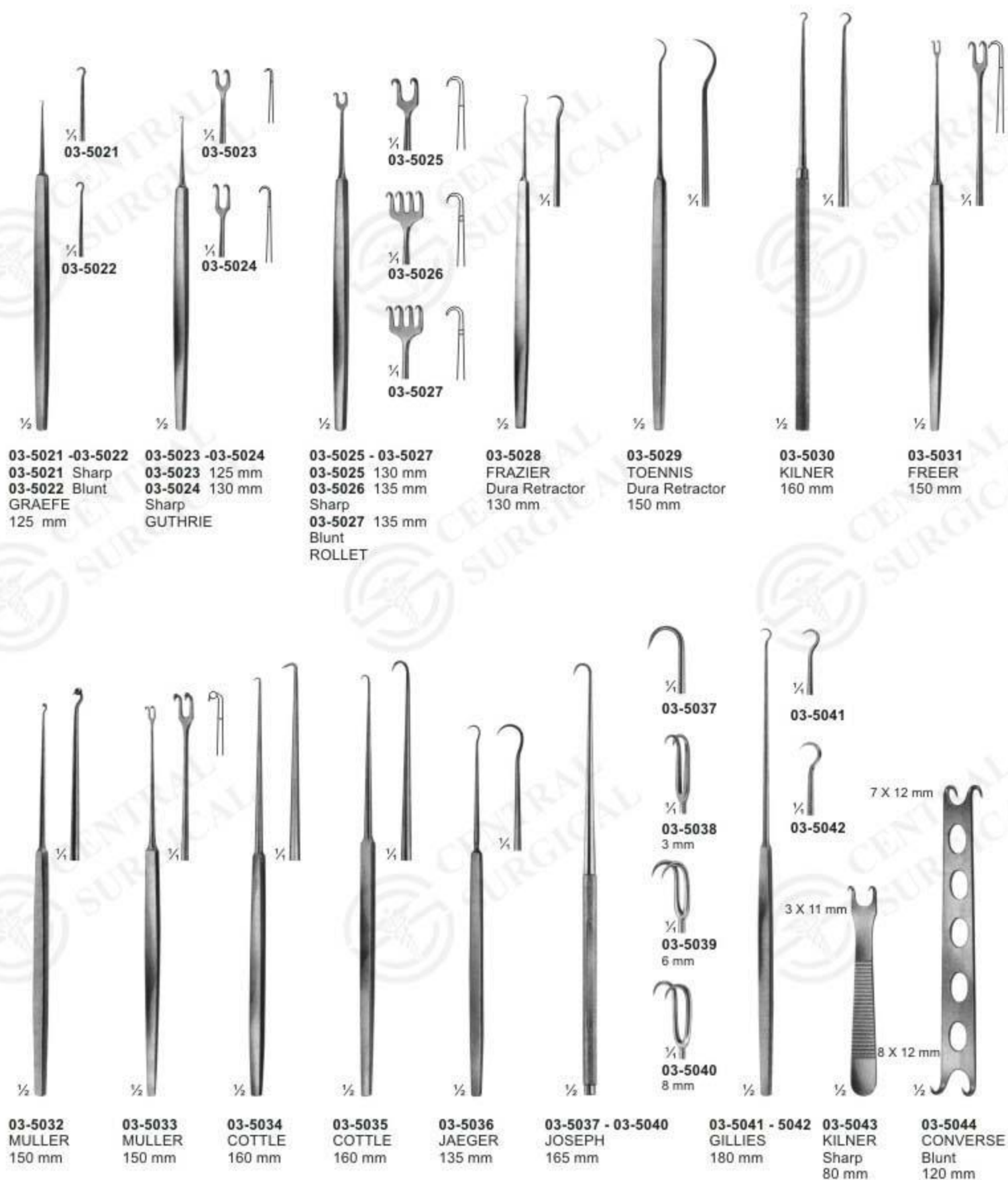


Nerve - and Vessel Hooks





Fine Wound Retractors (Dura- and Skin Retractors)





Wound - Trachea Retractors





Retractors With Treangle Handle



03-5073
MANNERFELT modif.
sharp
135 mm



03-5074
MANNERFELT modif.
sharp
155 mm



03-5075
MANNERFELT modif.
sharp
155 mm



03-5076 - 03-5078
MANNERFELT modif.
Small curve, sharp
155 mm



03-5079 - 03-5081
MANNERFELT modif.
Large curve, blunt
155 mm



03-5082 - 03-5085
LANGENBECK-
MANNERFELT modif.
155 mm



03-5082
15 x 6 mm

03-5083
20 x 6 mm

03-5084
25 x 6 mm

03-5085
30 x 8 mm



03-5086 - 03-5088
MANNERFELT modif.
Saddle hooks,
155 mm



03-5086
12 x 12 mm



03-5087
12 x 14 mm



03-5088
14 x 16 mm



03-5089
MANNERFELT modif.
Saddle hooks, fenestrated
155 mm



Retractors



03-5090
FOMON
145 mm



03-5091 - 03-5092
160 mm



03-5093 - 03-5094
LANGENBECK-GREEN
160 mm



03-5095
160 mm



03-5096 - 03-5101
MEYERDING
Fig. A - Fig. F
180 mm



03-5096
18 x 7 mm

03-5099
5 x 10 mm



03-5097
16 x 5 mm

03-5100
11 x 4 mm



03-5098
7 x 4 mm

03-5101
6 x 4 mm



03-5102

4 x 7 mm

03-5103

03-5104

03-5102 - 03-5104
WILLIGER
120 mm



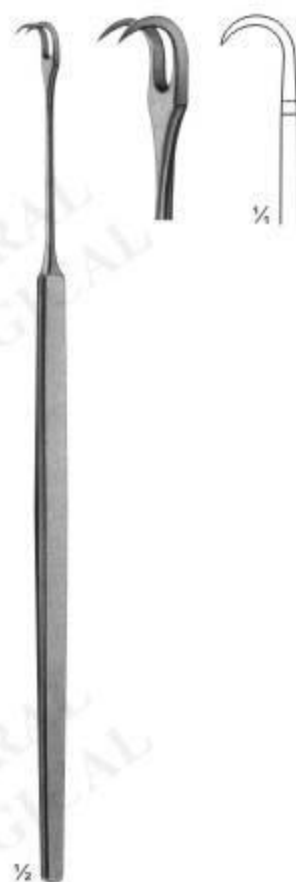
Retractors



03-5105
EMMET
Fistula hook
220 mm



03-5106
SIMON
Fistula hook
220 mm



03-5107
SIMON
Fistula hook
220 mm



03-5108
LANGE
Fistula hook
230 mm



03-5109 - 03-5110
Tendon hooks
175 mm



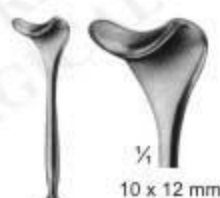
03-5111
KLAPP
Tendon hooks
175 mm



Wound and Vein Retractors



03-5112
MASING
140 mm



03-5113
COTTLE
140 mm



03-5114 - 03-5118
DESMARRES
140 mm



03-5117
12 x 16 mm



03-5118
13 x 18 mm



03-5119 - 03-5120
KOENIG
180 mm



03-5119
13 x 13 mm



03-5121
CUSHING-KOCHER
175 mm



03-5122
20 x 12 mm



03-5123
20 x 15 mm



03-5124
SCHOENBORN
200 mm



03-5125
10 x 13 mm



03-5126
14 x 18 mm



03-5127
205 mm



03-5128
11 x 14 mm



03-5129
13 x 18 mm



03-5130
15 x 22 mm

03-5122 - 03-5123
KOCHER
205 mm

03-5125 - 03-5126
CUSHING
205 mm

03-5128 - 03-5130
CUSHING
250 mm



Retractors





Retractors





Bone Retractors and Retractors



03-5155
KOCHER
Sharp
205 mm



03-5156
KOCHER
Sharp
220 mm



03-5157
VOLKMANN
Sharp
220 mm



03-5158
VOLKMANN
Blunt
220 mm



03-5159
VOLKMANN
Sharp
220 mm



03-5160 - 03-5167
VOLKMANN
225 mm



Sharp



03-5160
9 x 8 mm



03-5161
9 x 13 mm



03-5162
9 x 19 mm



03-5163
9 x 29 mm



Blunt



03-5164
8,5 x 8 mm



03-5165
8,5 x 13 mm



03-5166
8,5 x 19 mm



03-5167
8,5 x 29 mm



Retractors



03-5168 - 03-5181
VOLKMANN
220 mm



03-5168
9 x 8 mm



03-5169
9 x 13 mm



03-5170
9 x 19 mm



03-5171
9 x 29 mm



03-5172
9 x 40 mm



03-5173
8 x 8 mm



03-5174
8 x 13 mm



03-5175
8 x 19 mm



03-5176
8 x 29 mm



03-5177
8 x 40 mm



03-5178
8,5 x 8 mm



03-5179
8,5 x 13 mm



03-5180
8,5 x 19 mm



03-5181
8,5 x 29 mm



03-5182 - 03-5189
KOCHER
220 mm



03-5182
16 x 9 mm



03-5183
16 x 14 mm



03-5184
16 x 20 mm



03-5185
16 x 30 mm



03-5186
15,5 x 9 mm



03-5187
15,5 x 14 mm



03-5188
15,5 x 20 mm



03-5189
15,5 x 30 mm



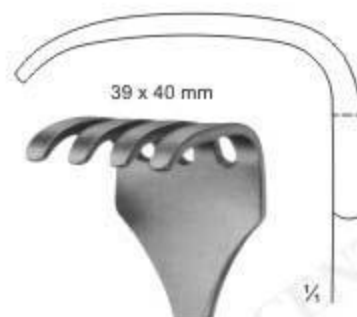
Retractors, Deep form



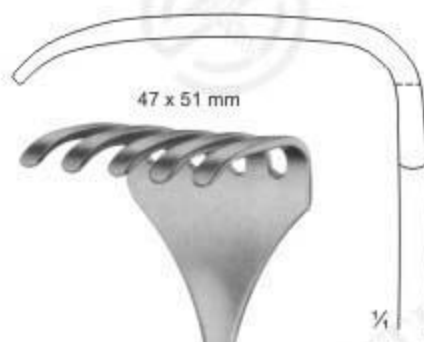
03-5190 - 03-5191
KOERTE
Handle vertical
to the blade.
240 mm



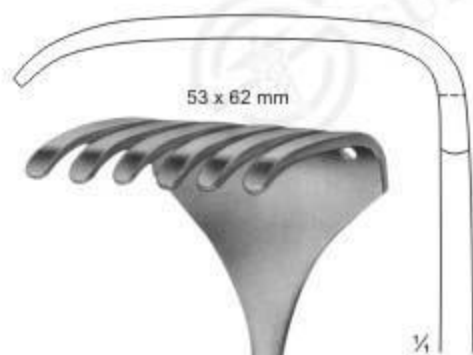
03-5192 - 03-5195
ISRAEL
255 mm



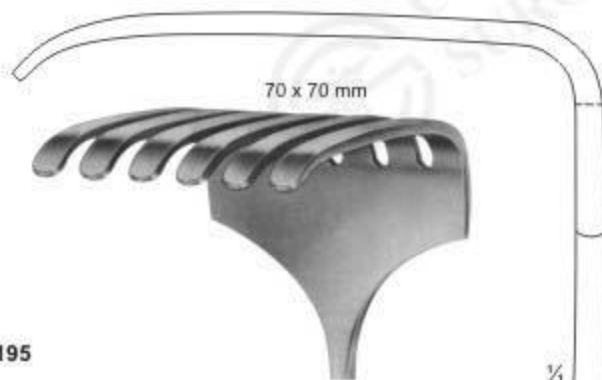
03-5192
4 Prongs, blunt



03-5193
5 Prongs, blunt



03-5194
6 Prongs, blunt



03-5195
6 Prongs, blunt



Retractors



03-5196 - 03-5201
LANGENBECK
210 mm

03-5196	28 x 10 mm
03-5197	28 x 14 mm
03-5198	33 x 14 mm
03-5199	28 x 16 mm
03-5200	40 x 10 mm
03-5201	40 x 13 mm



03-5202 - 03-5210
KOCHER-LANGENBECK
215 mm

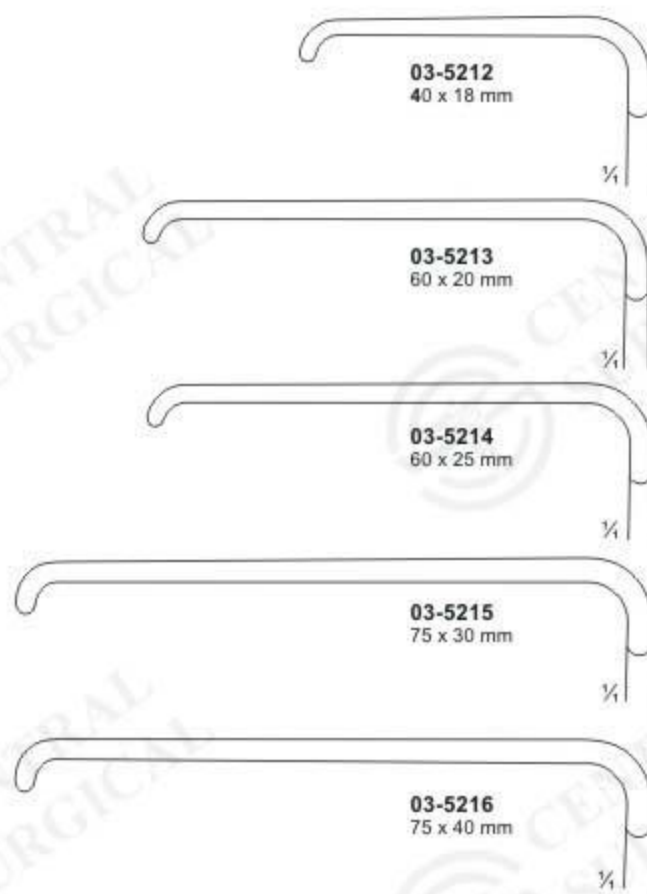
03-5202	25 x 6 mm
03-5203	35 x 8 mm
03-5204	35 x 11 mm
03-5205	35 x 15 mm
03-5206	41 x 11 mm
03-5207	55 x 11 mm
03-5208	70 x 14 mm
03-5209	80 x 12mm
03-5210	80 x 16mm



03-5211
LANGENBECK
215 mm



Retractors





Retractors



03-5220
15 x 15 mm
220 mm



03-5221
20 x 22 mm
215 mm



03-5222
28 x 28 mm
235 mm

03-5220 - 03-5222
MIDDELDORPF



03-5223
BUCHS
205 mm



38 x 18 mm



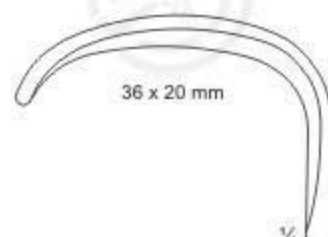
67 x 17 mm



03-5224
CASPAR
210 mm



03-5225
KOCHER
230 mm



36 x 20 mm



Retractors



03-5226 - 03-5231
HOSEL
250 mm



03-5226
60 x 20 mm



03-5227
80 x 30 mm



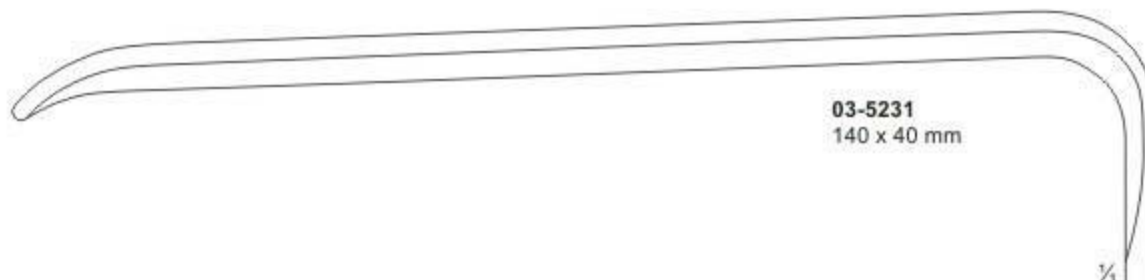
03-5228
100 x 30 mm



03-5229
120 x 30 mm



03-5230
140 x 30 mm



03-5231
140 x 40 mm

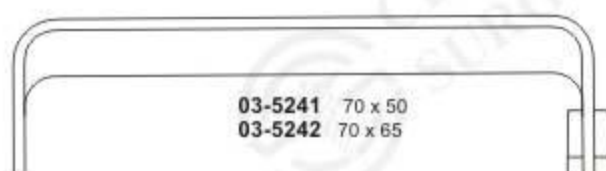
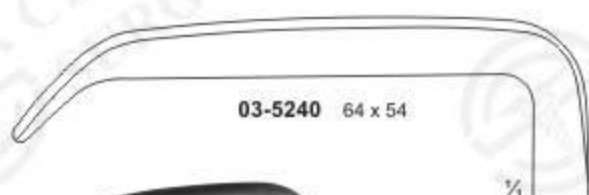
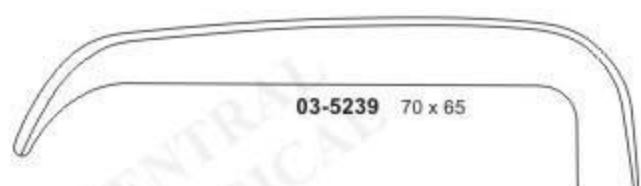


Retractors





Retractors



03-5239 - 03-5240
KELLY
260 mm



03-5241 - 03-5242
MORRIS
245 mm



Retractors For Deep Surgery



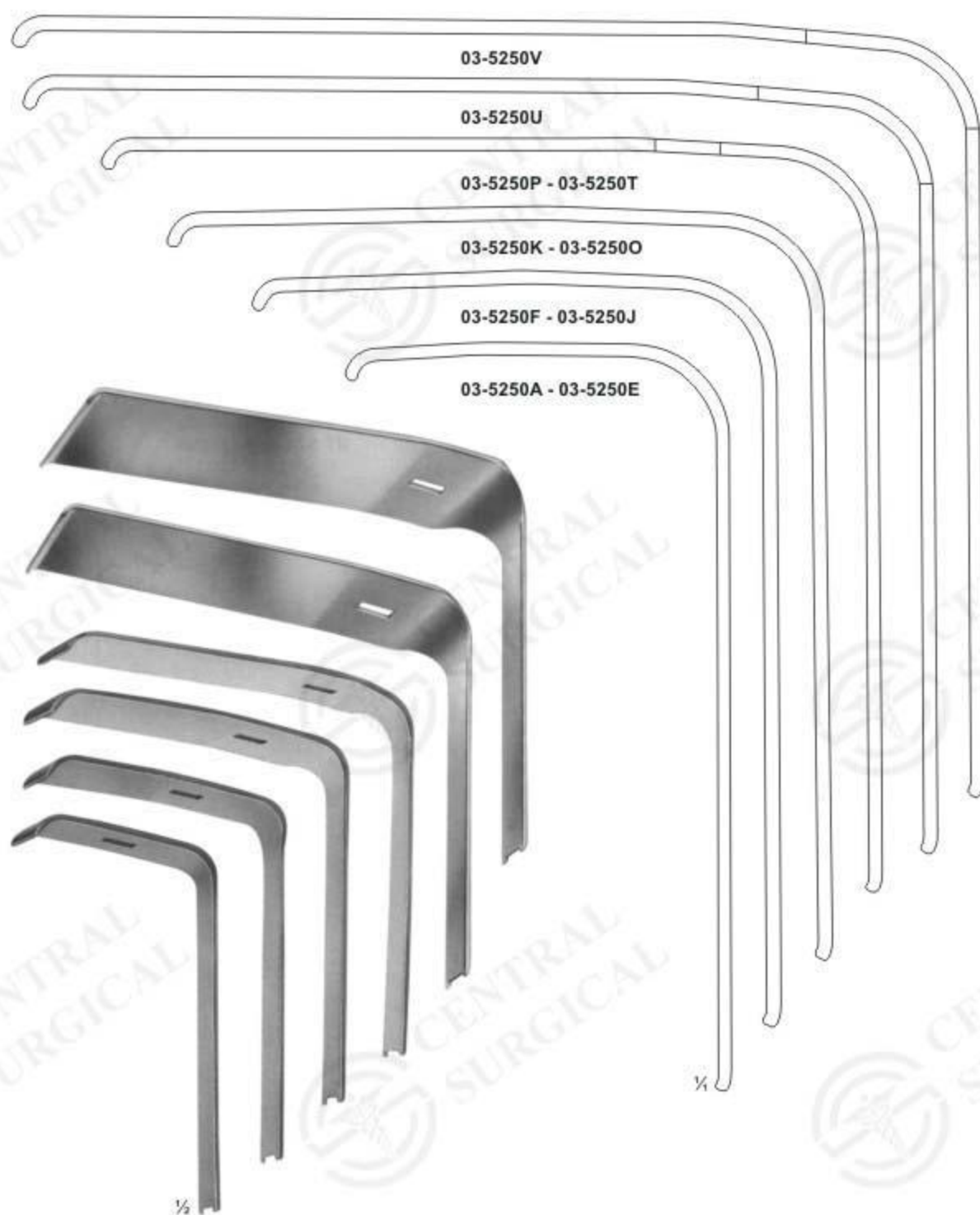


Retractors For Deep Surgery





**Retractors, Vario Retractor System, Germ. Fed
Patent, Germ. Fed. Regd.Des, US-Patent.**



Retractor blades for handles **03-5250**

Depth	Width							
	14mm	18mm	22mm	26mm	30mm	40mm	50mm	
55mm	03-5250A	03-5250B	03-5250C	03-5250D	03-5250E	-	-	
75mm	03-5250F	03-5250G	03-5250H	03-5250I	03-5250J	-	-	
95mm	03-5250K	03-5250L	03-5250M	03-5250N	03-5250O	-	-	
115mm	03-5250P	03-5250Q	03-5250R	03-5250S	03-5250T	-	-	
135mm	-	-	-	-	03-5250U	-	-	
145mm	-	-	-	-	-	-	03-5250V	



Retractors, Vario Retractor System, Germ. Fed.
Patent, Germ. Fed. Regd.Des, US-Patent.



03-5251 - 03-5257
BRUNNER
275 mm

03-5251	80 x 20
03-5252	100 x 25
03-5253	120 x 25
03-5254	130 x 30
03-5255	140 x 30
03-5256	160 x 30
03-5257	180 x 30



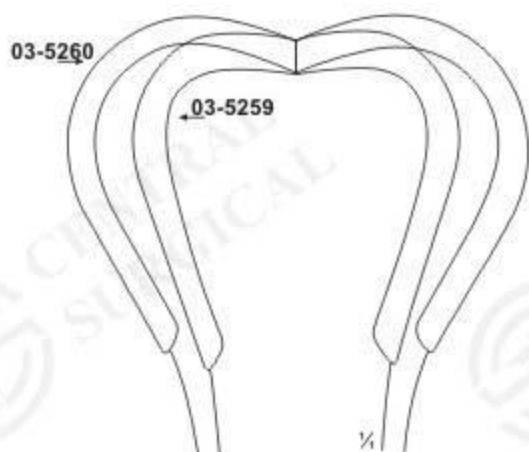
03-5258
Handle with cold
light carrier for
retractor blades.
280 mm



Handle arrange-
ment variable



Retractors, Lung Spatulas



03-5259 - 03-5260
HARRINGTON
03-5259 123 x 45 mm
03-5260 123 x 64 mm
Flexible
295 mm



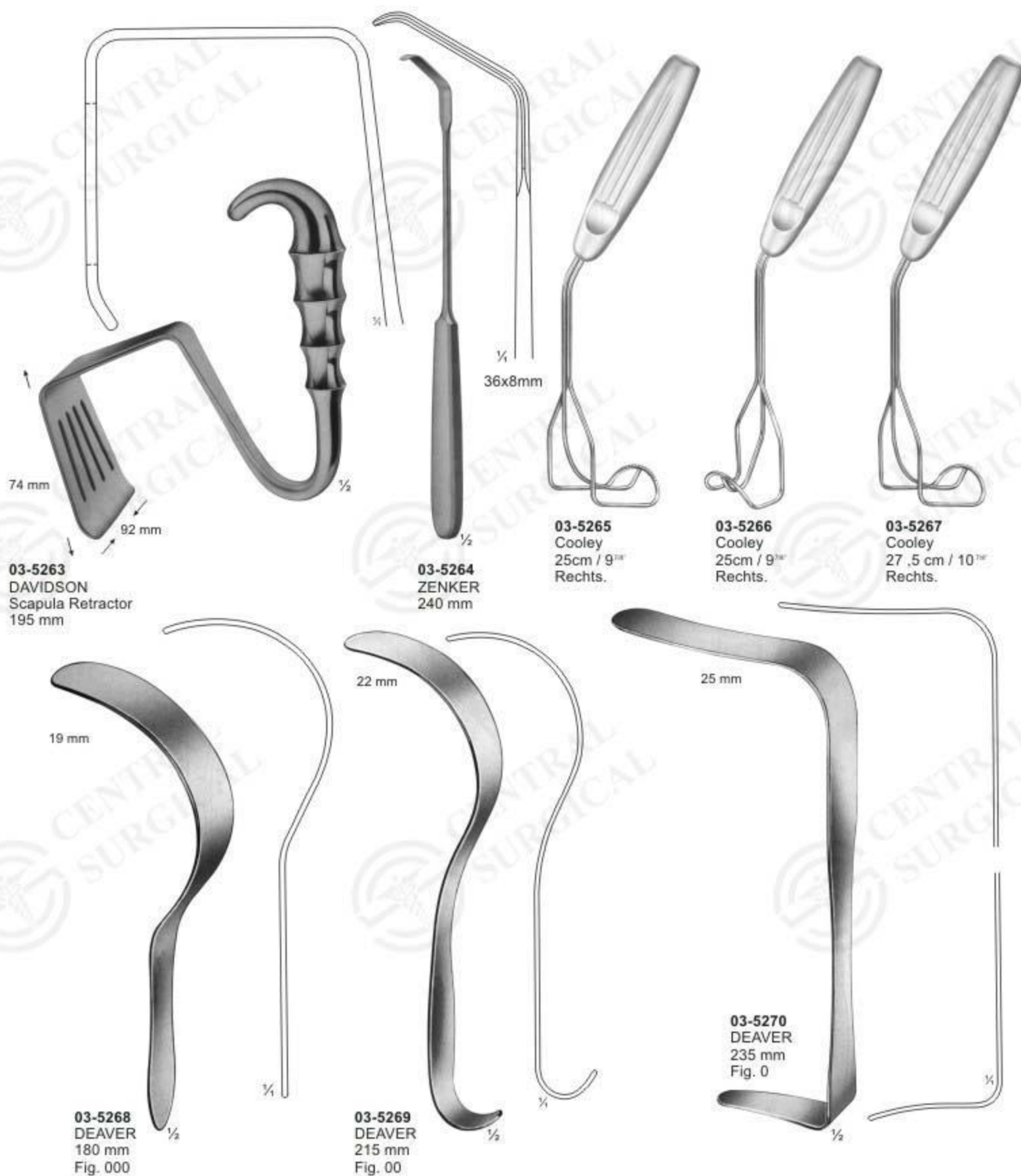
03-5261
ALLISON
255 mm



03-5262
ALLISON
320 mm



Retractors, Lung Spatulas





Retractors, Lung Spatulas



03-5271
DEAVER
300 mm
Fig. 1



03-5272
DEAVER
315 mm
Fig. 2



03-5273
DEAVER
365 mm
Fig. 2½



Retractors, Lung Spatulas



03-5274
DEAVER
300 mm
Fig. 3



03-5275
DEAVER
310 mm
Fig. 4



03-5276
DEAVER
320 mm
Fig. 5



Retractors, Lung Spatulas



03-5277
DEAVER
310 mm
Fig. 1



03-5278
DEAVER
310 mm
Fig. 3



Retractors, Lung Spatulas



03-5279
DEAVER
305 mm
Fig. 4



03-5280
DEAVER
310 mm
Fig. 5



Retractors For Deep Surgery (Abdominal Retractors)





Retractors For Deep Surgery (Abdominal Retractors)

03-5285 150 x 39 mm
03-5286 150 x 57 mm

03-5283 121 x 50 mm
03-5284 147 x 50 mm

03-5285 - 03-5286
KELLY
03-5285 150 x 39 mm
03-5286 150 x 57 mm
260 mm

03-5283 - 03-5284
MIKULICZ
03-5283 121 x 50 mm
03-5284 147 x 50 mm
Liver Retractor
250 mm



Retractors, Abdominal Retractors



Length of Blades	Width of Blades		
	35mm	45mm	60mm
62mm	03-5287	03-5290	03-5294
92mm	03-5288	03-5291	03-5295
122mm	03-5289	03-5292	03-5296
160mm		03-5293	03-5297



Abdominal Retractors



03-5304 - 03-5308

ROCHARD

310 mm

03-5304 48 x 90 mm

03-5305 48 x 105 mm

03-5306 48 x 120 mm

03-5307 48 x 135 mm

03-5308 48 x 155 mm



03-5309

ROCHARD

Fixation device for



03-5310 - 03-5313

DOYEN

280 mm

03-5310 48 x 90 mm

03-5311 48 x 105 mm

03-5312 48 x 120 mm

03-5313 48 x 135 mm



03-5314

DOYEN-CHILD

Fixation device

220 mm



03-5315

Chain
with weight
645g
790 mm



Pelvis Retractors





Abdominal- and Intestinal Spatulas





Abdominal- and Intestinal Spatulas



03-5324
REVERDIN
285 mm



03-5325
HABERER
Malleable
305 mm



03-5326 - 03-5328
03-5326 30 mm
03-5327 40 mm
03-5328 50 mm
Malleable
330 mm



03-5329
TUFFIER
Malleable
200 mm



Self-Retaining Retractors



03-5330
BOSE
60 mm



03-5331
FINSEN
50 mm



03-5332
FINSEN
70 mm



03-5333
FINSEN modif.
75 mm



03-5334
45 mm



03-5335
55 mm



03-5336
MUELLER
65 mm



03-5337
100 mm



03-5338



03-5339



03-5338 - 03-5339
03-5338 70 mm
03-5339 100 mm



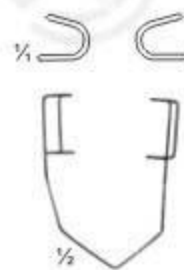
03-5340
LOGAN
modif. REILL
50 mm



03-5341
JANSEN
100 mm



03-5342
JANSEN
100 mm



03-5343
BARRAQUER
45 mm



Self-Retaining Retractors



03-5344
WEITLANER
Sharp
110 mm



03-5345
WEITLANER
Semi-Sharp
110 mm



03-5346
WEITLANER
Blunt
110 mm



03-5347
WEITLANER
Sharp
130 mm



03-5348
WEITLANER
Semi-Sharp
130 mm



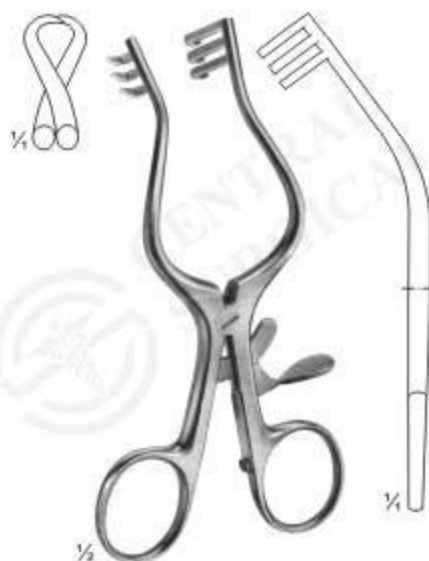
03-5349
WEITLANER
Blunt
130 mm



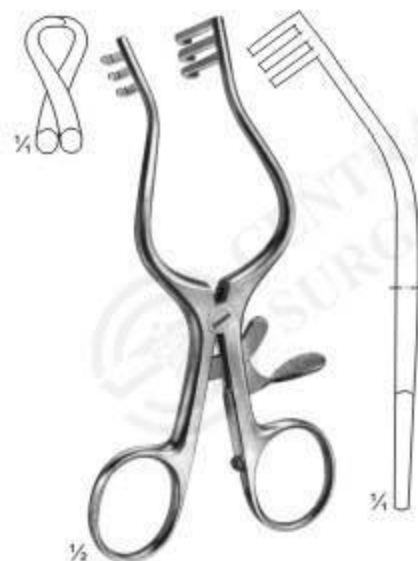
Self-Retaining Retractors



03-5350
WEITLANER
Sharp
130 mm



03-5351
WULLSTEIN
Sharp
130 mm



03-5352
WULLSTEIN
Blunt
130 mm



03-5353
WEITLANER
Sharp
165 mm



03-5354
PLESTER
Blunt
110 mm



03-5355
PERKINS
130 mm



Self-Retaining Retractors



03-5356
ADSON-BABY
Blunt
140 mm



03-5357
MOLLISON
Sharp
155 mm



03-5358
MAYO-ADAMS
165 mm



Self-Retaining Laminectomy Retractors



03-5359
ANDERSON-ADSON
Sharp
190 mm



03-5360
NORFOLK and
NORWICH
Blunt
220 mm



03-5361
ADSON
Sharp
265 mm



Self-Retaining Laminectomy Retractors



Sharp



Semi-Sharp



Semi-Sharp



1/4



03-5362 - 03-5363
BECKMANN-ADSON
Sharp
310 mm



03-5363
BECKMANN-ADSON
Semi-Sharp
310 mm



03-5364
ADSON
Semi-Sharp
320 mm



03-5365
BECKMANN-EATON
Sharp
320 mm



Special Retractors



03-5366
JOLL (FRIEDMAN)
Thyroid- and Vaginal Retractor
155 mm



03-5367
JACKSON BURROWS
Retractor, blunt
185 mm



03-5368
GELPI
Vaginal Retractor
135 mm



03-5369
GELPI
Skin- and Vaginal Retractor
175 mm



03-5370
DE BAKEY
Femur Retractor
145 mm



Self Retaining Retractors for Laminectomy and other Operations



03-5371
SCOVILLE-RICHTER
Retractor with 1 pair
blades reversible type.
The Retractor bar and shanks
may be easily rotated 180° when
blades are in situ.



03-5372
62 x 52 mm 62 x 37 mm
PR= Pair



03-5373
47 x 51 mm



03-5374
30 x 40 mm



03-5375
37 x 62 mm



Retractors for Cervical Spine



03-5376

CLOWARD modif.

Spreader Only

Consisting of:

Spreader Only

03-5377 1 Blade

03-5378 1 Blade

03-5379 1 Blade

03-5380 1 Blade

03-5381 1 Blade



03-5377



03-5378



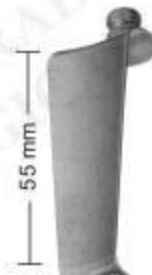
03-5382



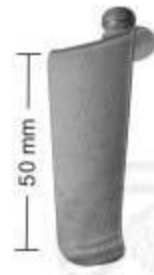
03-5383



03-5379



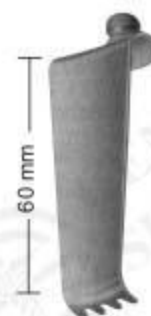
03-5380



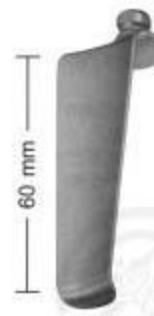
03-5384



03-5385



03-5381

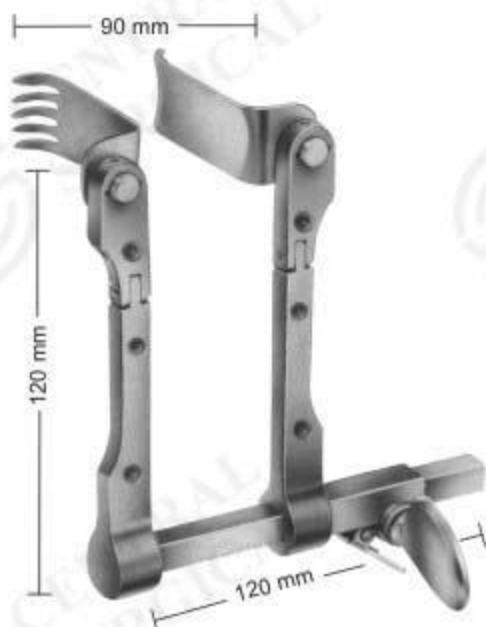


03-5386

Blades only used for **03-5375**



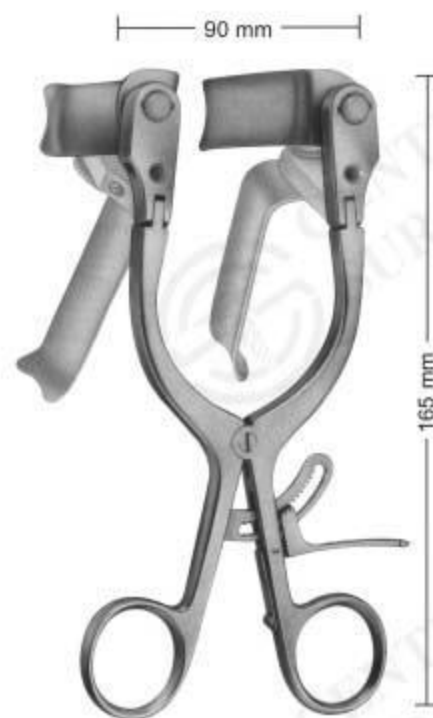
Retractors for Cervical Vertebral Column



03-5387
CASPAR

Retractor, adjustable, consisting of:
5 medial blades (03-5389 - 03-5393) 5 Lateral
blades. (03-5394 - 03-5398) and the retractor
only By Reversing the Screw,
The Retractor Can be Used From Both Sides

To be used preferably for transverse retraction.



03-5388
CASPAR

Counter retractor, adjustable,
consisting of: 5 blades. (03-5399 - 03-5403)
and the retractor only

To be used preferably for
up and down retraction.



03-5389 40 x 23 mm
03-5390 45 x 23 mm
03-5391 50 x 23 mm
03-5392 55 x 23 mm
03-5393 60 x 23 mm
Medial blades

03-5394 40 x 23 mm
03-5395 45 x 23 mm
03-5396 50 x 23 mm
03-5397 55 x 23 mm
03-5398 60 x 23 mm
Lateral blades

03-5399 45 x 23 mm
03-5400 50 x 23 mm
03-5401 55 x 23 mm
03-5402 60 x 23 mm
03-5403 65 x 23 mm
Blunt blades

03-5404 50 x 25 mm
03-5405 60 x 25 mm
Blunt blades,
for harvesting of the
fusion graft from the
iliac crest

03-5406 40 x 25 mm
03-5407 45 x 25 mm
03-5408 50 x 25 mm
03-5409 55 x 25 mm
03-5410 60 x 25 mm
Medial Titan blades
semi transparent to x-ray

03-5411 40 x 25 mm
03-5412 45 x 25 mm
03-5413 50 x 25 mm
03-5414 55 x 25 mm
03-5415 60 x 25 mm
Lateral Titan blades
semi transparent to x-ray



Lamina Spreaders



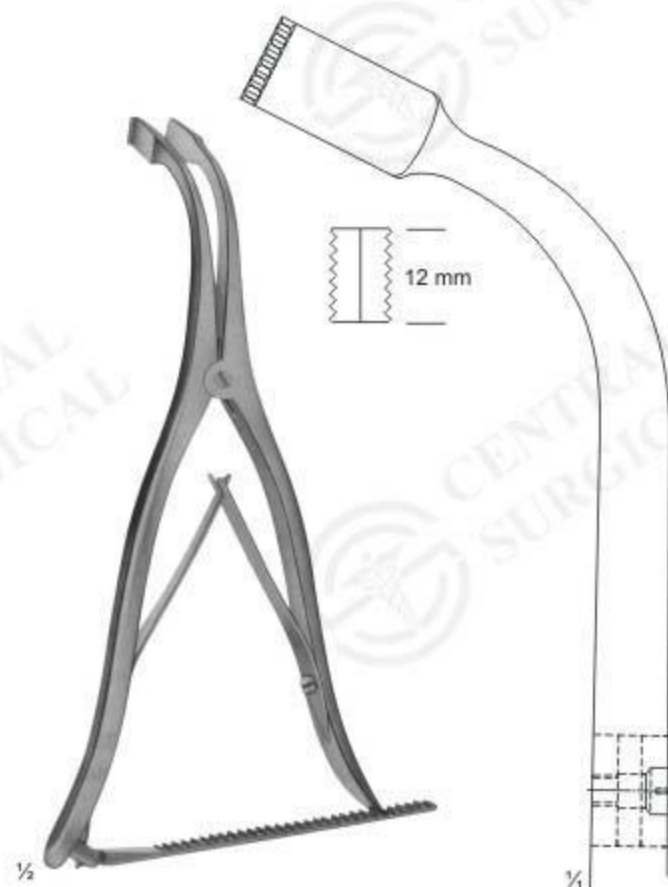
03-5416
CLOWARD
155 mm



03-5417
CLOWARD
135 mm



03-5418
INGE
170 mm



03-5419
INGE
275 mm



Abdominal Retractors



03-5420
BABY-COLLIN
with 2 pair of blades



03-5421
COLLIN
complete



03-5422
COLLIN
complete



03-5423
RICARD
complete
Spreader only
Lateral blade
Center blade



03-5424
HOLZBACH
Complete
Spreader only
Lateral blade 59x80mm
Center blade 74x82mm



Abdominal Baldes

Lateral blades only
03-5425 37x62 mm
03-5426 37x80 mm
03-5427 37x98 mm

03-5428 61x80 mm

03-5429 48x59 mm
03-5430 58x80 mm
03-5431 72x84 mm

03-5432 59x80 mm

03-5427

03-5428

03-5431

03-5430

03-5429



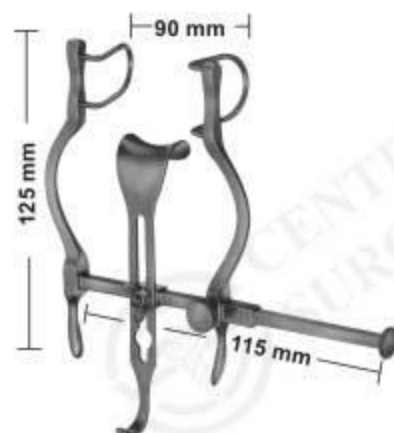
Abdominal Retractors



03-5433
GOSSET
Blades: 38 mm deep



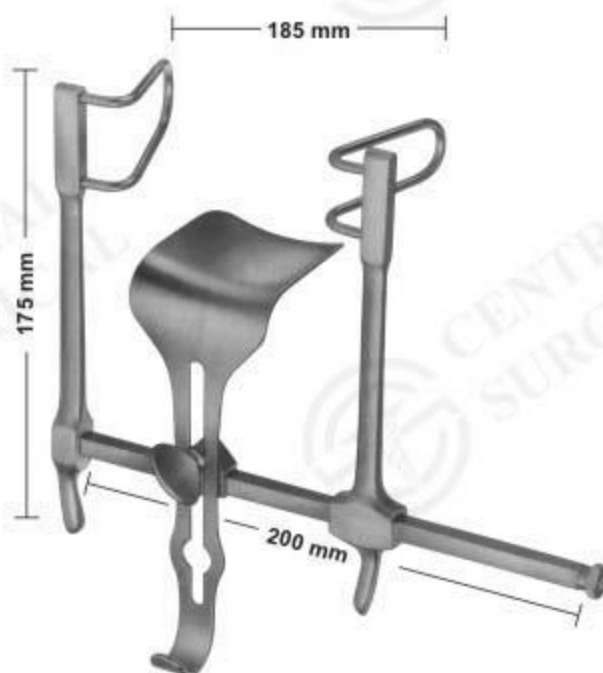
03-5434
HERTZLER
Blades 20 X 25 mm



03-5435
BALFOUR-BABY
Lateral blades 27 mm deep
(03-5435) Center blade 21x24 mm



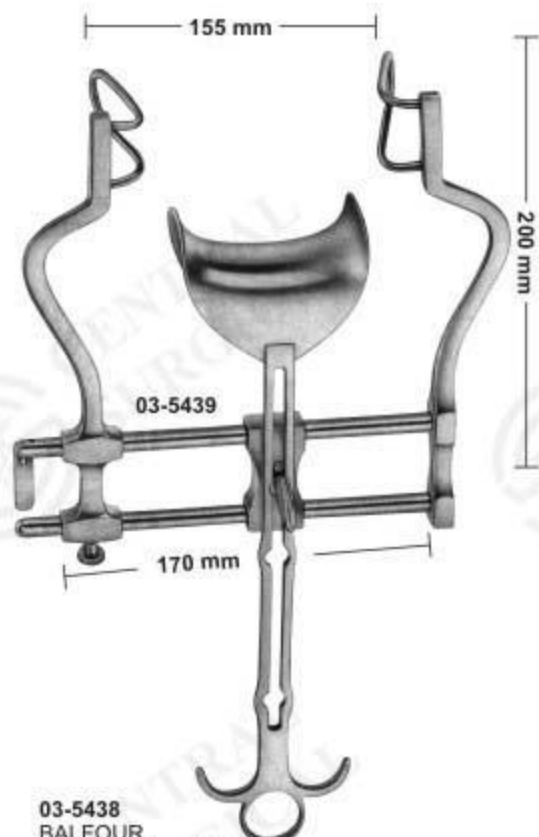
03-5436
GOSSET
Blades: 55mm deep



03-5437
GOSSET
Lateral blades 58 mm deep
Center blade
59 x 57 mm



Abdominal Retractors



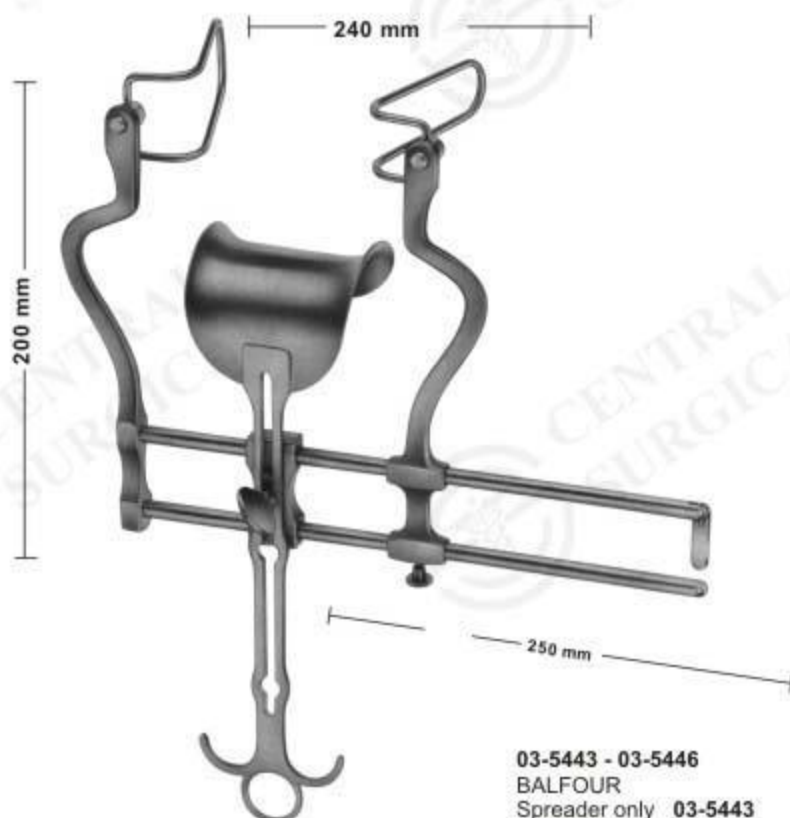
03-5438
BALFOUR
Lateral blades 60 mm deep
(03-5439) Center blade
47 x 80 mm



03-5440
BALFOUR
Lateral blades 105 mm deep
(03-5441) Center blade
107 x 59 mm



03-5442
Center blade only
54x80 mm



03-5443 - 03-5446

BALFOUR				
Spreader only	03-5443	03-5444	03-5445	03-5446
Lateral blades	50 mm	60 mm	75 mm	90 mm
Center blade	47 x 80 mm	62x76 mm	80x80 mm	80x80 mm

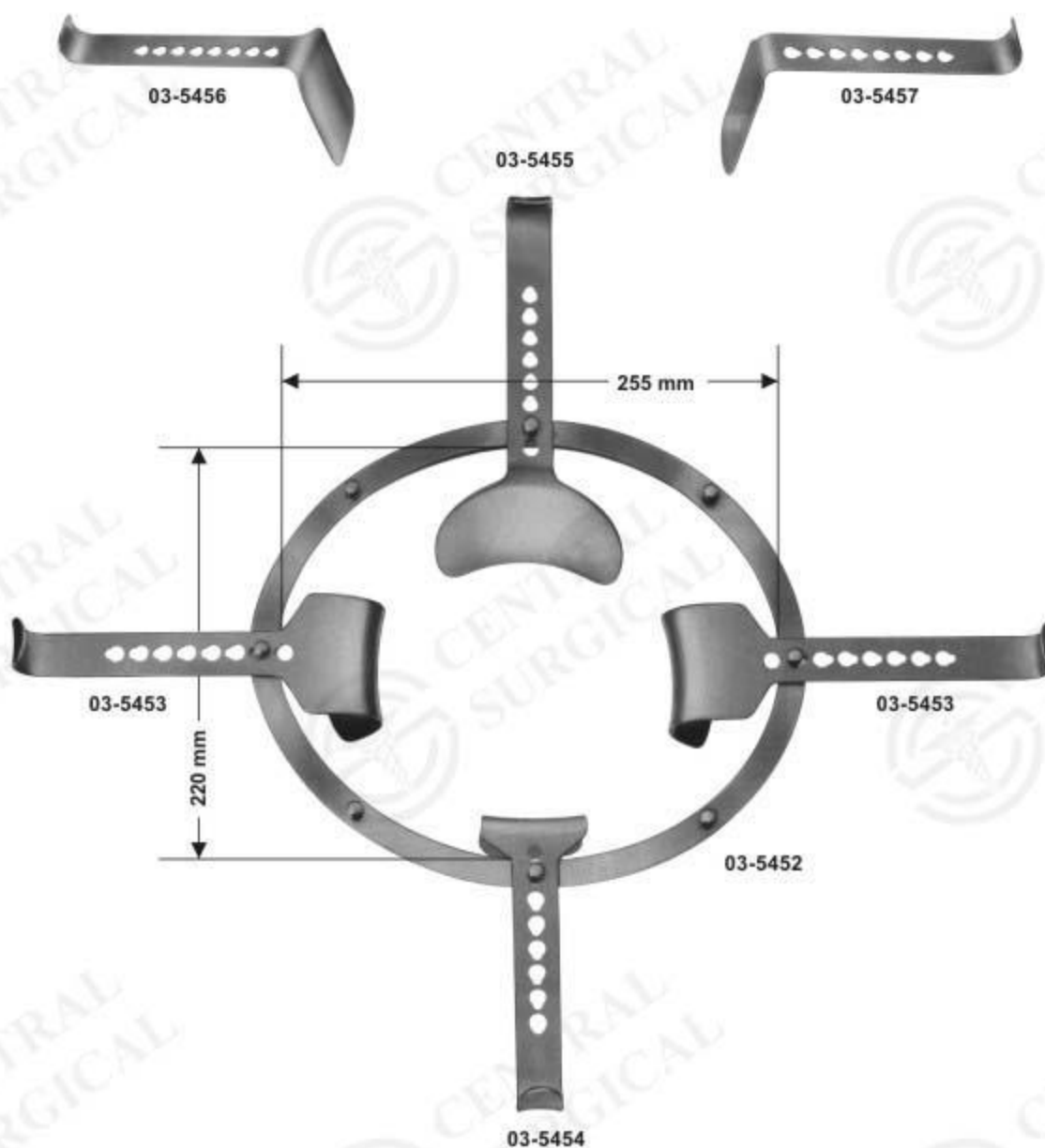


Sales Unit of blades: PR = pair

Lateral blades
03-5447
50 mm deep
03-5448
60 mm deep
03-5449
75 mm deep
03-5450
90 mm deep



Abdominal Retractors



03-5451

SEMM

consisting of:

03-5452 1 frame 225 x 220 mm

03-5453 2 blades 46 x 64 mm

03-5454 1 blade 53 x 54 mm
(for bladder)

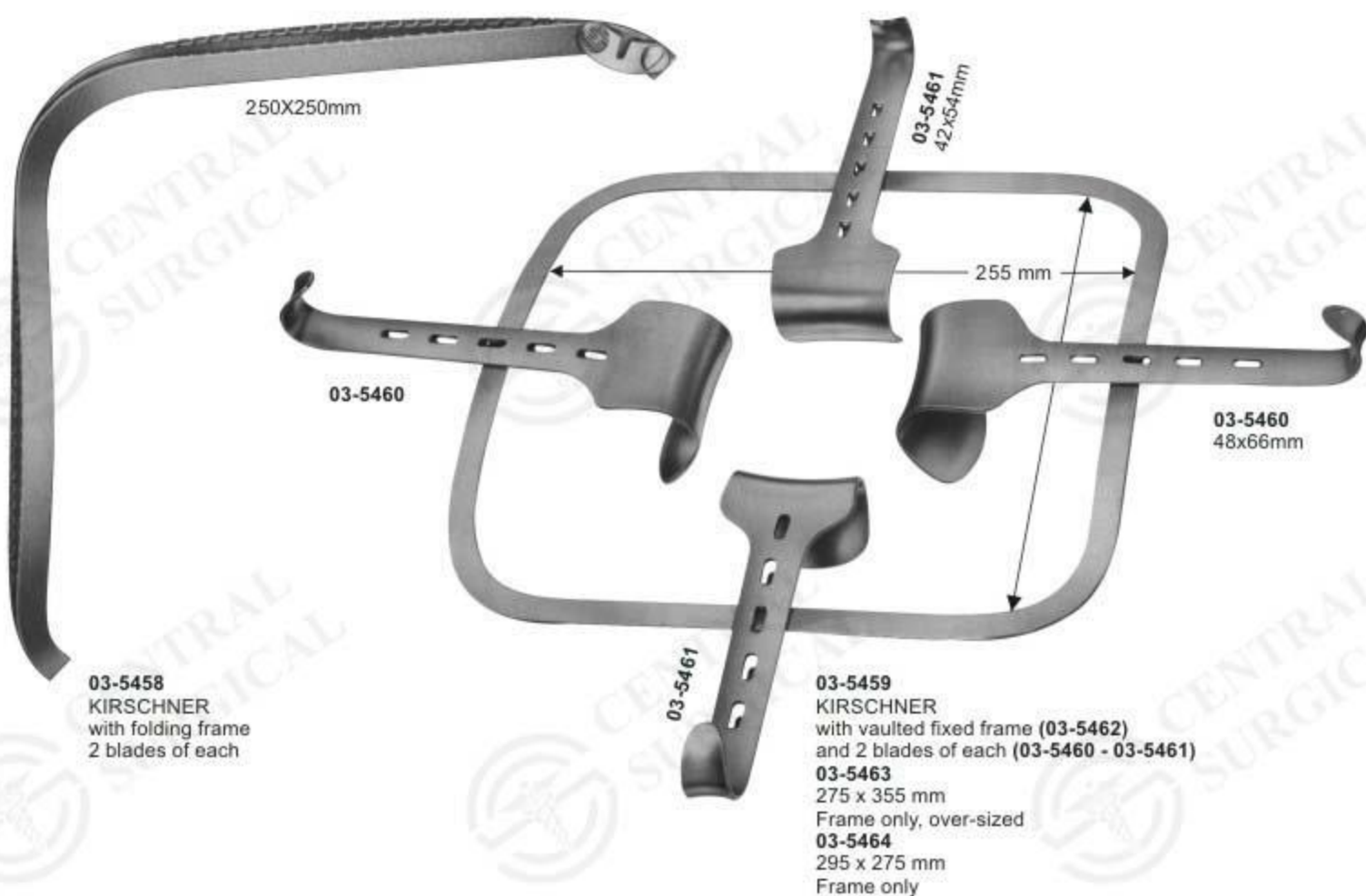
03-5455 1 blade 82 x 97 mm
(for intestine)

03-5456 1 blade 98 x 51 mm
(for intestine)

03-5457 1 blade, narrow
107 x 36 mm



Abdominal Retractors



03-5465
KIRSCHNER
64 x 80 mm



03-5466
KIRSCHNER-BALFOUR
80x 82 mm



03-5467 - 03-5469
KIRSCHNER
03-5467 90x 69mm
03-5468 92x 95mm
03-5469 78x 58mm



03-5470 - 03-5472
KIRSCHNER
03-5470 108x42mm
03-5471 91x 55mm
03-5472 121x 55mm

Addition valves for corpulent persons.