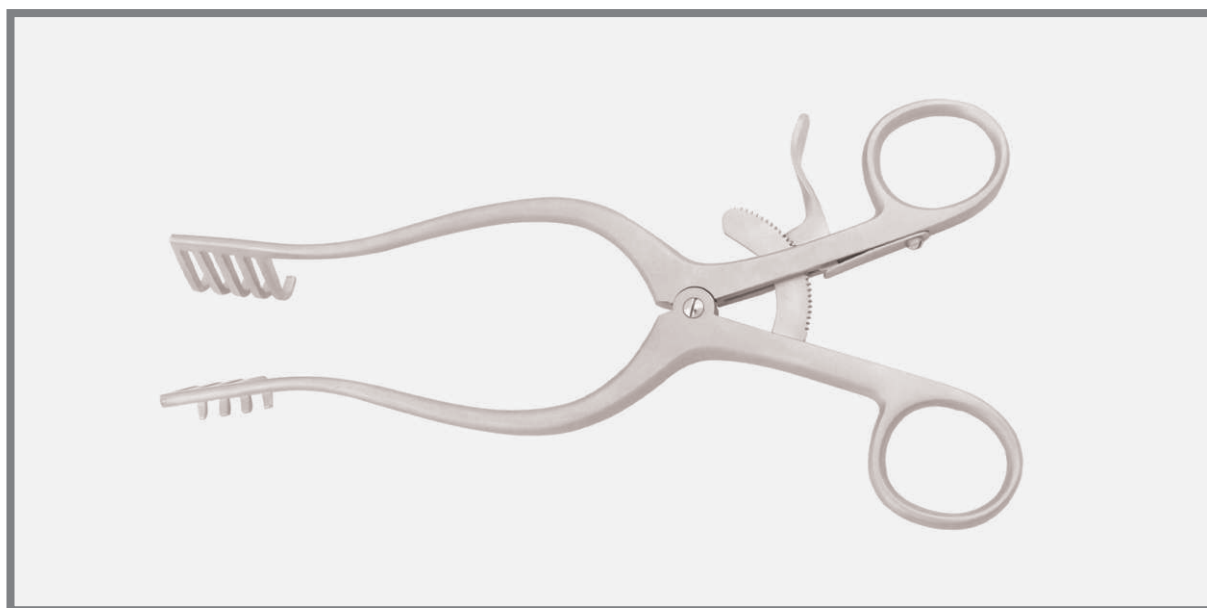
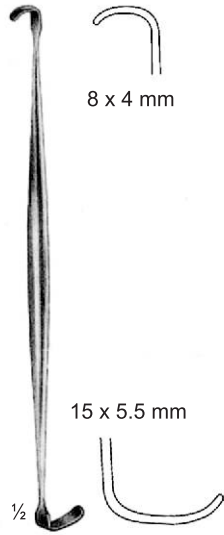


16

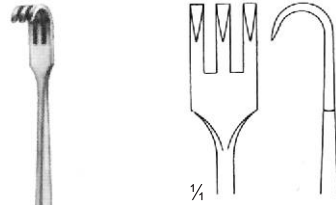
- EN** Retractors
- DE** Wundhaken und -sperrer
- ES** Separadores
- FR** Rétracteurs
- IT** Retrattori

Page 275 to 345

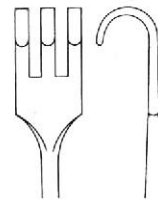




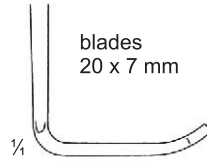
RAGNELL-DAVIS
BI 16-4201-14
14 cm/5 1/2"



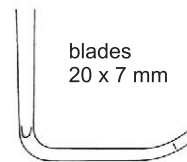
BI 16-4202-16
sharp prongs



BI 16-4203-16
blunt prongs



blades
20 x 7 mm



blades
20 x 7 mm

SENN-MILLER
16 cm/6 1/4"



CUSHING
BI 16-4204-20
20 cm/7 7/8"



CUSHING



BI 16-4205-20
BI 16-4208-24
8 mm



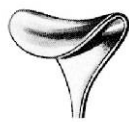
BI 16-4206-20
BI 16-4209-24
10 mm



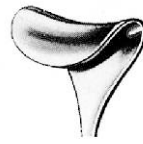
BI 16-4207-20
BI 16-4210-20
12 mm



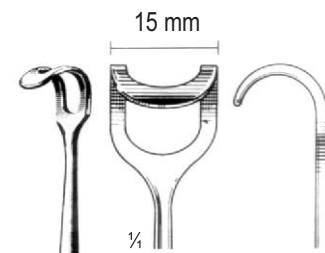
BI 16-4211-20
BI 16-4214-24
14 mm



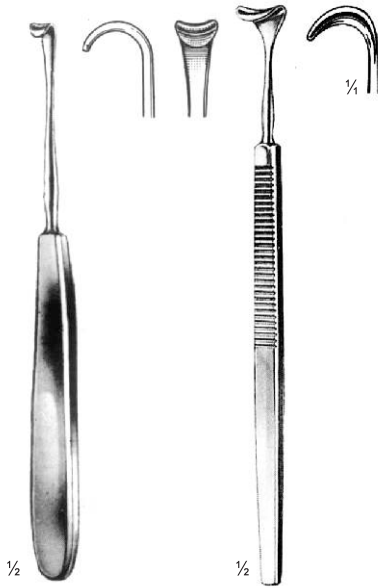
BI 16-4212-20
BI 16-4215-24
16 mm



BI 16-4213-20
BI 16-4216-24
18 mm

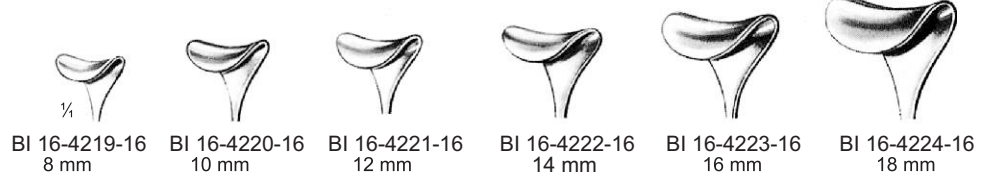


HANDTE



DESMARRES
 BI 16-4218-16
 16 cm/6 1/4"

DESMARRES
 16 cm/6 1/4"



BI 16-4219-16
 8 mm

BI 16-4220-16
 10 mm

BI 16-4221-16
 12 mm

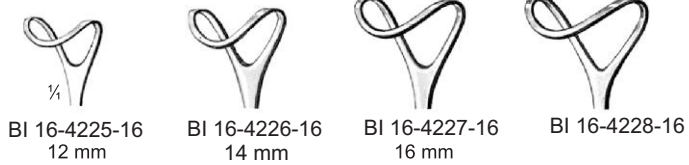
BI 16-4222-16
 14 mm

BI 16-4223-16
 16 mm

BI 16-4224-16
 18 mm



16 cm/6 1/4"



BI 16-4225-16
 12 mm

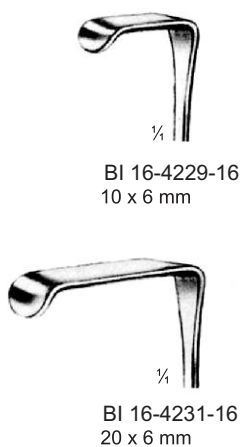
BI 16-4226-16
 14 mm

BI 16-4227-16
 16 mm

BI 16-4228-16



MINI-LANGENBECK
 16 cm/6 1/4"



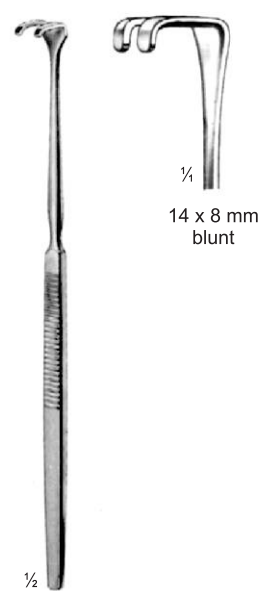
BI 16-4229-16
 10 x 6 mm

BI 16-4231-16
 20 x 6 mm



BI 16-4230-16
 17 x 5 mm

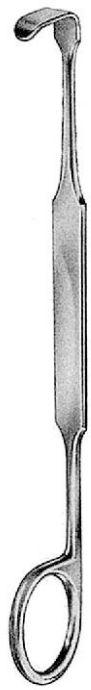
BI 16-4232-16
 22 x 8 mm



MINI-LANGENBECK
 BI 16-4233-16
 16 cm/6 1/4"

14 x 8 mm
 blunt





MEYERDING
18 cm/7 1/8"



1/4
BI 16-4234-18
18 x 7 mm



BI 16-4235-18
16 x 5 mm



1/4
BI 16-4236-18
7 x 4 mm



BI 16-4237-18
10 x 3 mm



1/4
BI 16-4238-18
7 x 4 mm



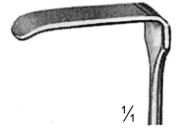
BI 16-4239-18
10 x 4 mm



SENN-GREEN
15 cm/5 7/8"



1/4
10 x 6 mm
BI 16-4240-15



1/4
20 x 6 mm
BI 16-4241-15

28 x 6 mm



LAHEY
BI 16-4242-19
19 cm/7 1/2"

12 x 14 mm



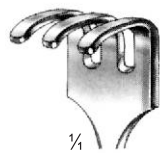
LITTLE
BI 16-4243-20
20 cm/7 7/8"



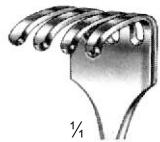
KLAPP
17.5 cm/6 7/8"



1/4
BI 16-4244-17
13 x 6 mm



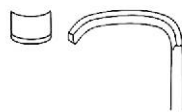
1/4
BI 16-4245-17
12 x 11 mm



1/4
BI 16-4246-17
15 x 12 mm



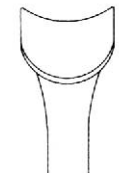
STRANDELL-STILLE
19 cm/7 1/2"



BI 16-4247-19



BI 16-4248-19
toothed



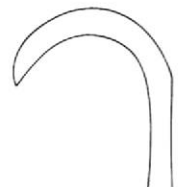
1/4
BI 16-4249-19
19 x 12 mm



1/4
BI 16-4250-19
21 x 14 mm

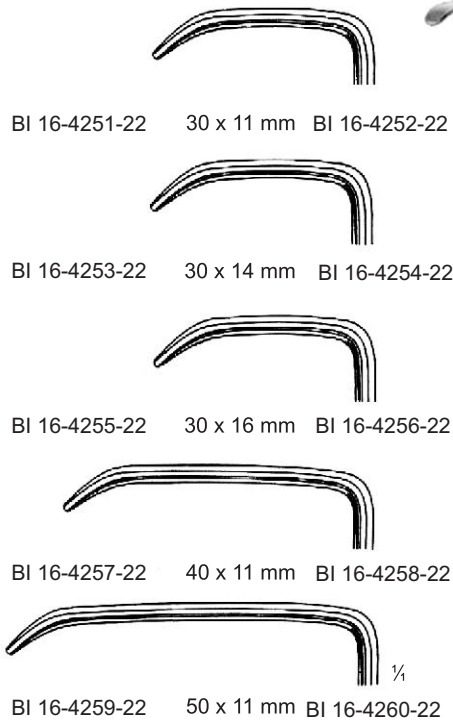


KOCHER
19 cm/7 1/2"

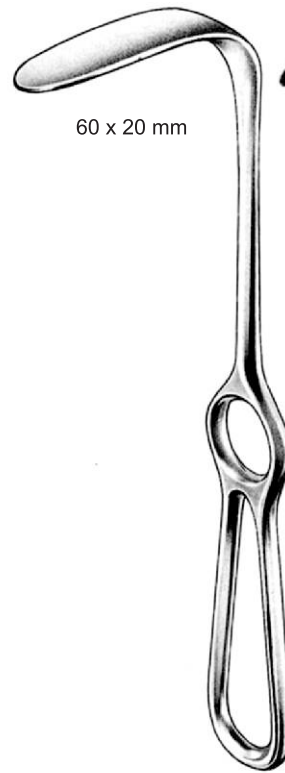




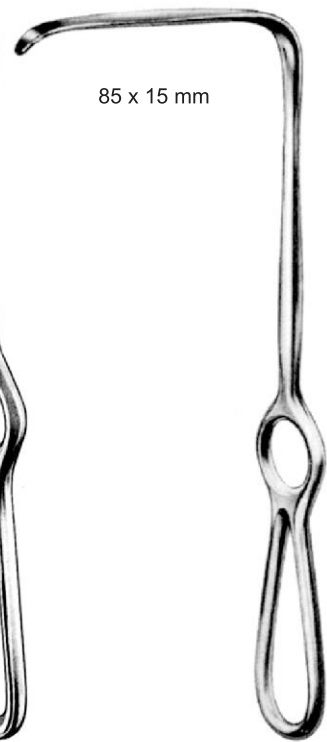
LANGENBECK
 22 cm/8 1/2"



LANGENBECK
 21 cm/8 1/4"



LANGENBECK
 BI 16-4261-21
 21 cm/8 1/4"



LANGENBECK
 BI 16-4262-21
 21 cm/8 1/4"

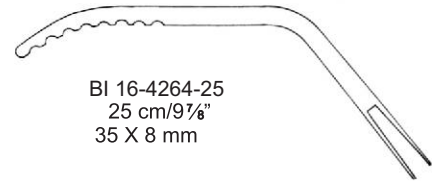




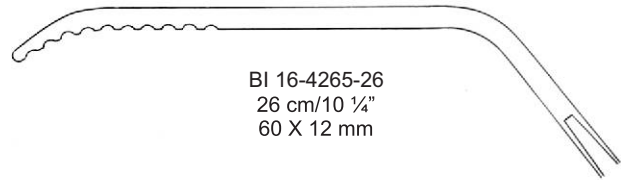
ZENKER



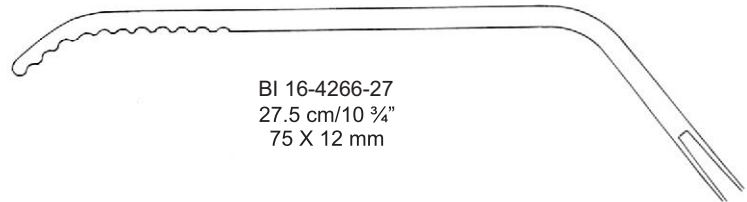
MINI-ZENKER
BI 16-4263-18
18 cm/7 1/8"
10 X 3 mm



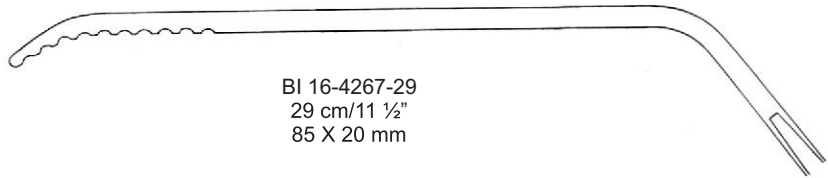
BI 16-4264-25
25 cm/9 7/8"
35 X 8 mm



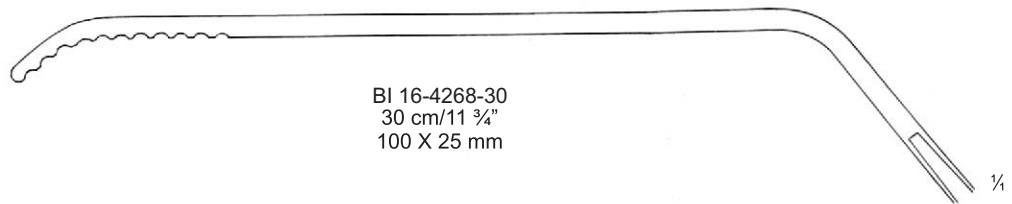
BI 16-4265-26
26 cm/10 1/4"
60 X 12 mm



BI 16-4266-27
27.5 cm/10 3/4"
75 X 12 mm



BI 16-4267-29
29 cm/11 1/2"
85 X 20 mm



BI 16-4268-30
30 cm/11 3/4"
100 X 25 mm



TRACHEAL
 16 cm/6 1/4"
 sharp



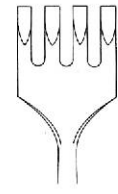
BI 16-4269-16



BI 16-4270-16



BI 16-4271-16



BI 16-4272-16



TRACHEAL
 16 cm/6 1/4"
 blunt



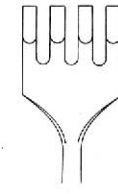
BI 16-4273-16



BI 16-4274-16



BI 16-4275-16



BI 16-4276-16



TRACHEAL
 16 cm/6 1/4"
 semi-sharp



BI 16-4277-16



BI 16-4278-16



BI 16-4279-16



BI 16-4280-16



17 cm/6 3/4"
 sharp



BI 16-4281-17



BI 16-4286-17



BI 16-4282-17



BI 16-4287-17



BI 16-4283-17



BI 16-4288-17



BI 16-4284-17



BI 16-4289-17



BI 16-4285-17



BI 16-4290-17

blunt



RETRACTORS



16 cm/6 1/4"
flexible



BI 16-4291-16



BI 16-4292-16



BI 16-4293-16

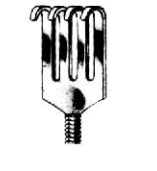


BI 16-4294-16



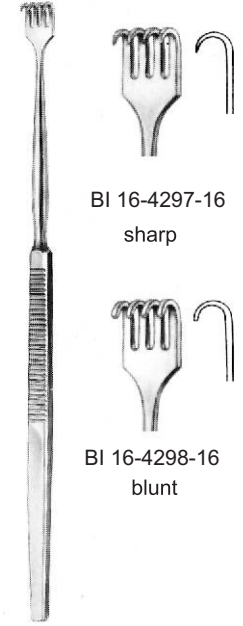
BI 16-4295-16

sharp



BI 16-4296-16

blunt



16 cm/6 1/4"



BI 16-4297-16
sharp



BI 16-4298-16
blunt



VESSEL HOOK
BI 16-4299-12
12 cm/4 3/4"



VOLKMANN
11.5 cm/4 1/2"



BI 16-4300-11



BI 16-4301-11



BI 16-4302-11



BI 16-4303-11



BI 16-4304-11



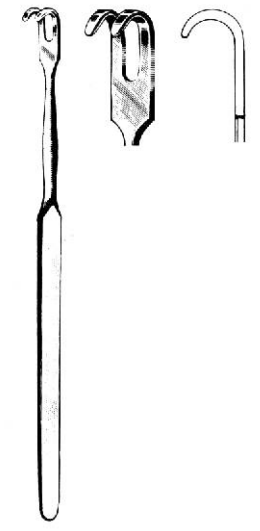
BI 16-4305-11



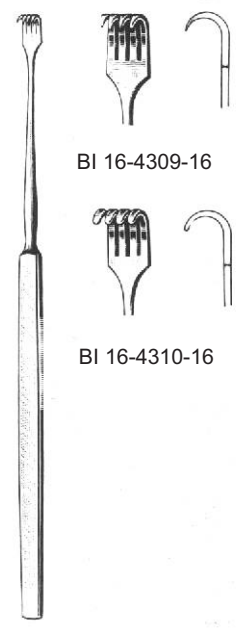
BI 16-4306-11



BI 16-4307-11



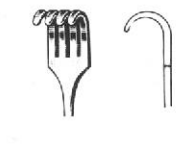
BI 16-4308-13
13.5 cm/5 3/8"



16 cm/6 1/4"



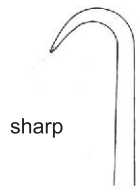
BI 16-4309-16



BI 16-4310-16

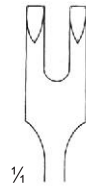
Measurements of retractors: Depth x Width

RETRACTORS



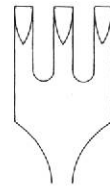
sharp

BI 16-4311-21

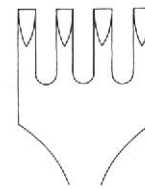


¼

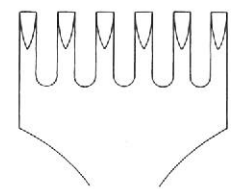
BI 16-4312-21



BI 16-4313-21



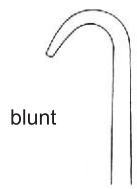
BI 16-4314-21



BI 16-4315-21



VOLKMANN
 21.5 cm/8 ½"



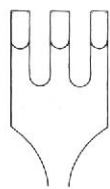
blunt

BI 16-4316-21

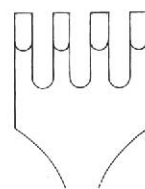


¼

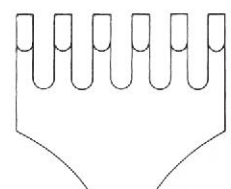
BI 16-4317-21



BI 16-4318-21



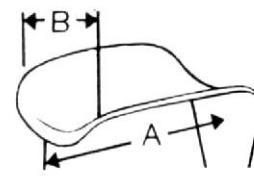
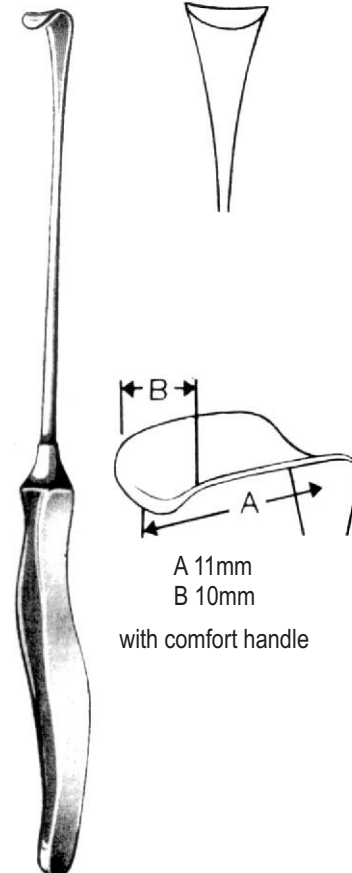
BI 16-4319-21



BI 16-4320-21



CUSHING
 BI 16-4321-21
 21.5 cm/8 ½"
 BI 16-4322-25
 25 cm/10"



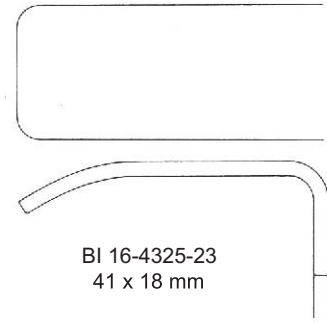
A 11mm
 B 10mm
 with comfort handle

CUSHING
 BI 16-4323-21
 24.5 cm/9 ⅝"
 BI 16-4324-28
 28 cm/11"

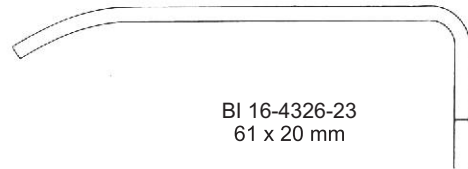




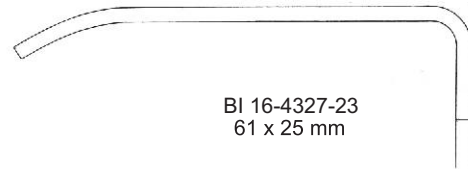
KOCHER
23 cm/9"



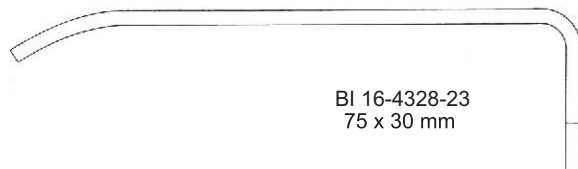
BI 16-4325-23
41 x 18 mm



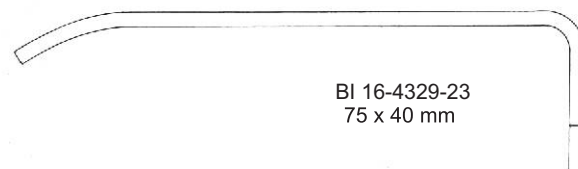
BI 16-4326-23
61 x 20 mm



BI 16-4327-23
61 x 25 mm



BI 16-4328-23
75 x 30 mm

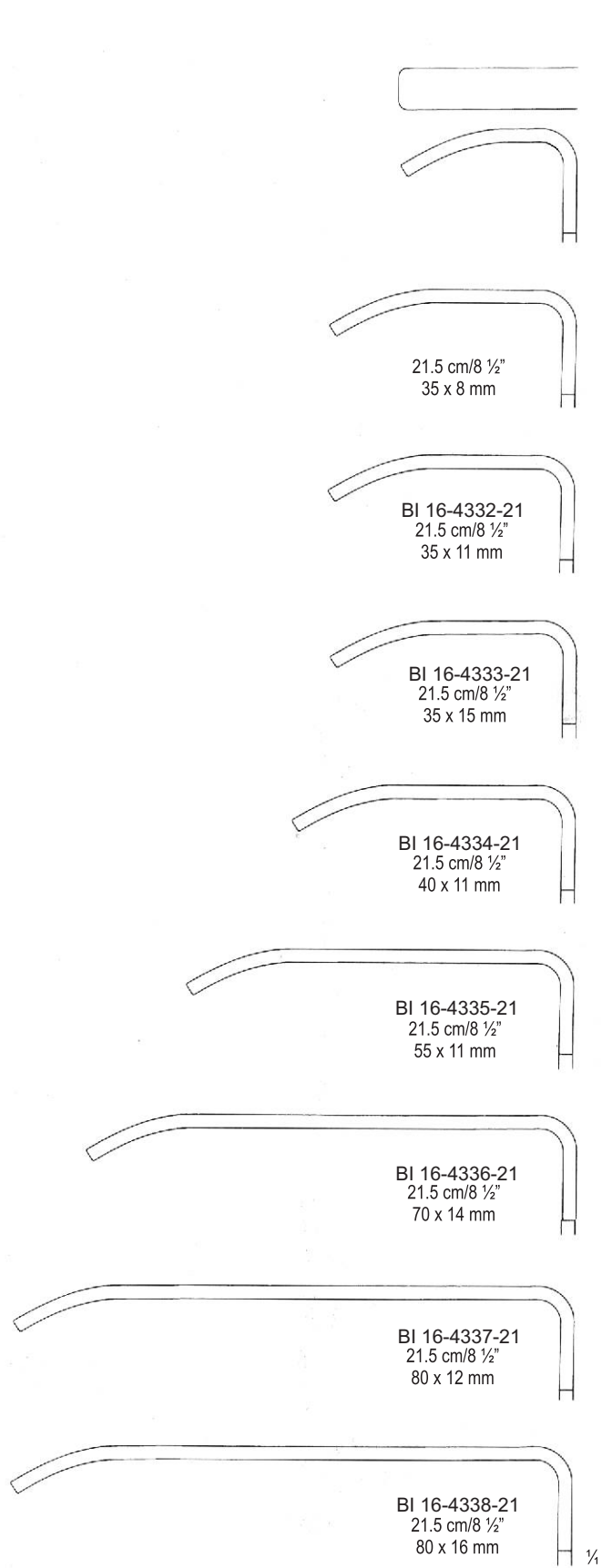


BI 16-4329-23
75 x 40 mm

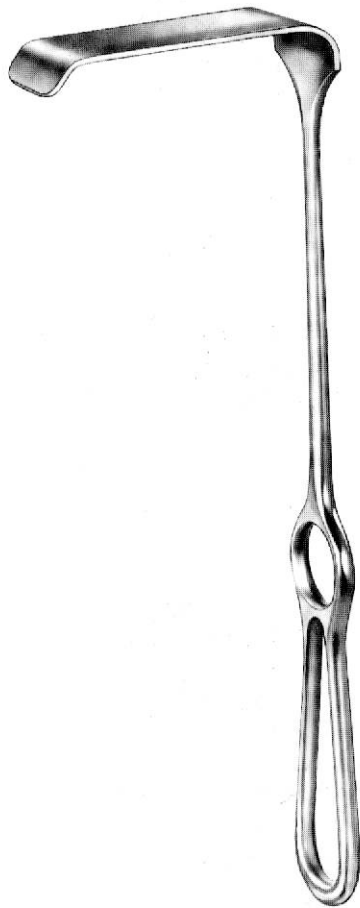
1/4



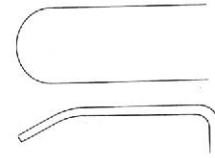
KOCHER-LANGENBECK
 21.5 cm/8 1/2"



Measurements of retractors: Depth x Width



KOCHER-LANGENBECK
21.5 cm/8 1/2"



BI 16-4339-21
21.5 cm/8 1/2"
25 x 10 mm



BI 16-4340-21
21.5 cm/8 1/2"
40 x 13 mm



BI 16-4341-21
21.5 cm/8 1/2"
60 x 13 mm



BI 16-4342-21
21.5 cm/8 1/2"
40 x 18 mm



BI 16-4343-21
21.5 cm/8 1/2"
60 x 18 mm



BI 16-4344-21
21.5 cm/8 1/2"
85 x 18 mm



BI 16-4345-21
21.5 cm/8 1/2"
60 x 25 mm

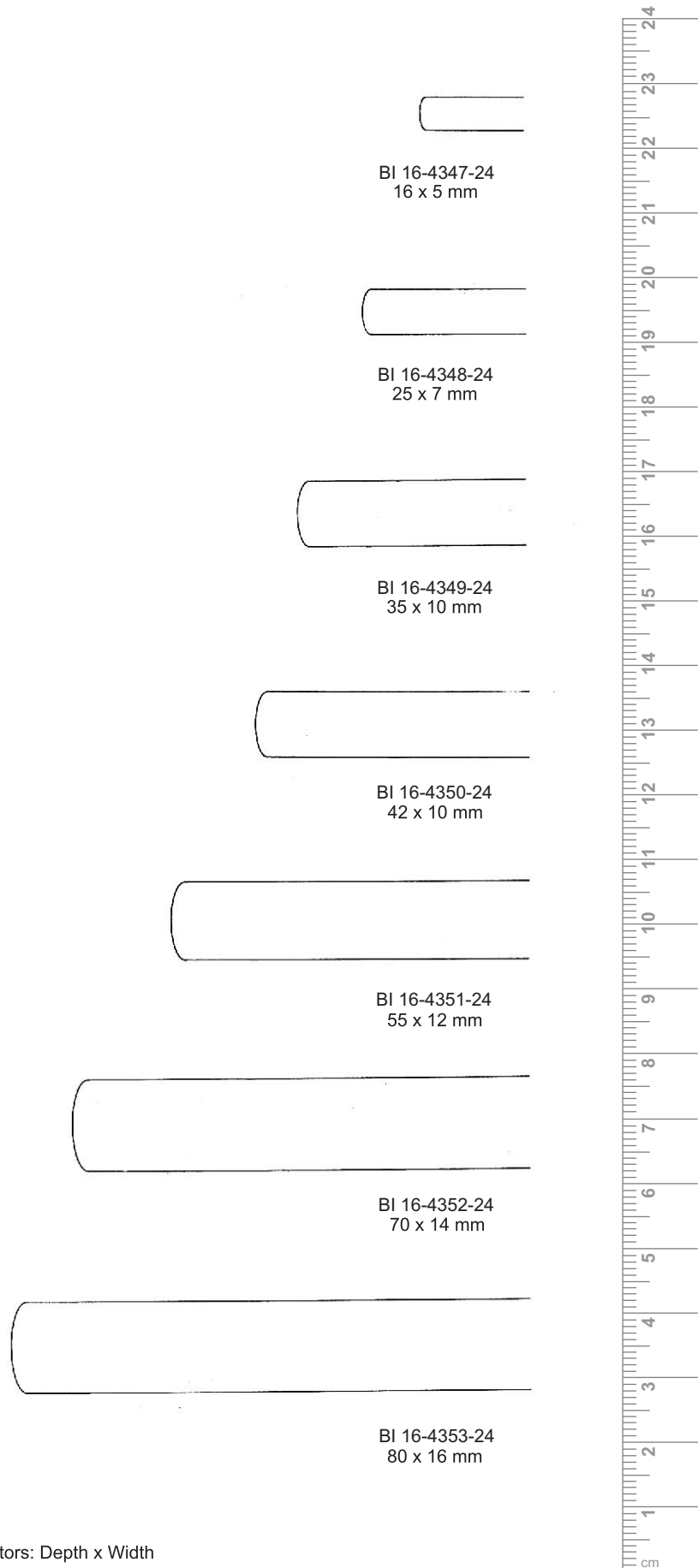


BI 16-4346-21
21.5 cm/8 1/2"
85 x 25 mm

Measurements of retractors: Depth x Width



OBWEGESER
 24 cm/9 1/2"
 bent downwards

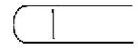


Measurements of retractors: Depth x Width

RETRACTORS



OBWEGESER
24cm/9 1/2"
bent upward



BI 16-4354-24
16 x 5 mm



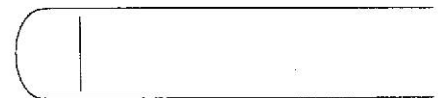
BI 16-4355-24
25 x 7 mm



BI 16-4356-24
35 x 10 mm



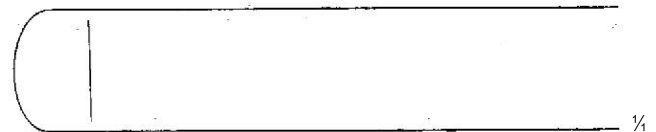
BI 16-4357-24
42 x 10 mm



BI 16-4358-24
55 x 12 mm



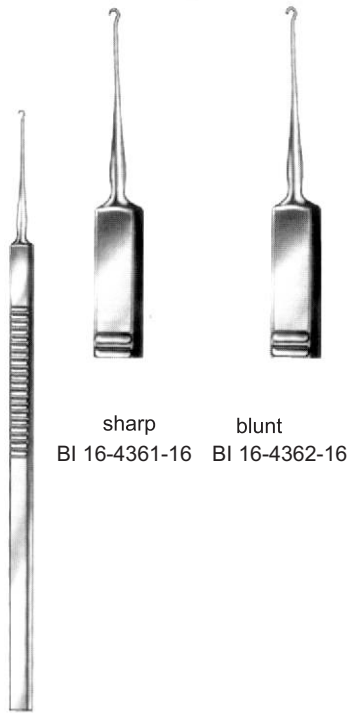
BI 16-4359-24
70 x 14 mm



BI 16-4360-24
80 x 16 mm

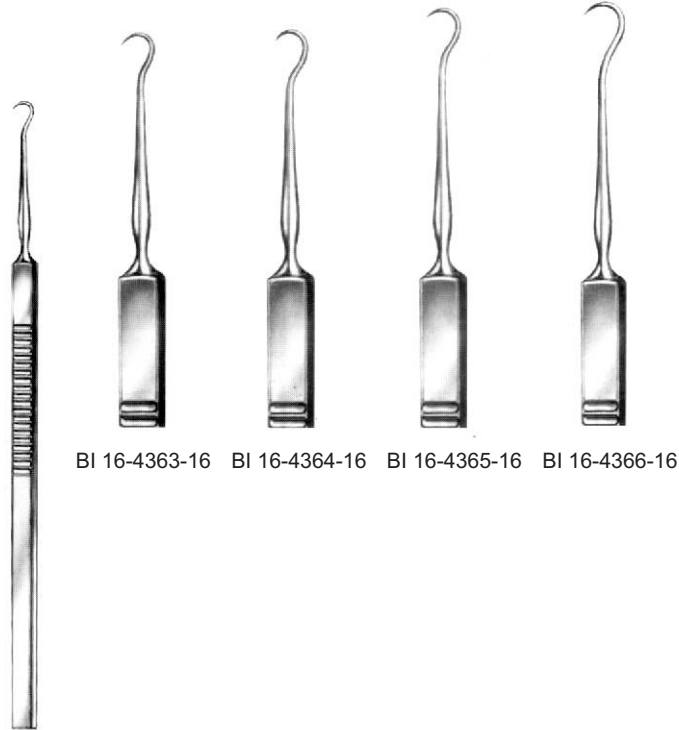
Measurements of retractors: Depth x Width

RETRACTORS



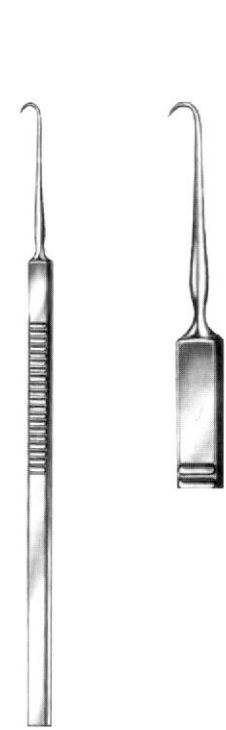
sharp BI 16-4361-16
 blunt BI 16-4362-16

GRAEFE
 16 cm/6 1/4"

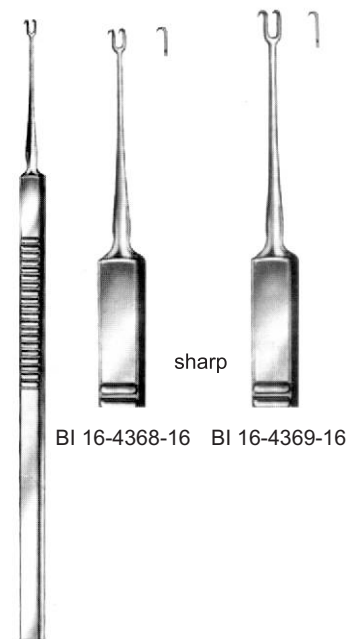


BI 16-4363-16 BI 16-4364-16 BI 16-4365-16 BI 16-4366-16

GRAEFE
 16 cm/6 1/4"

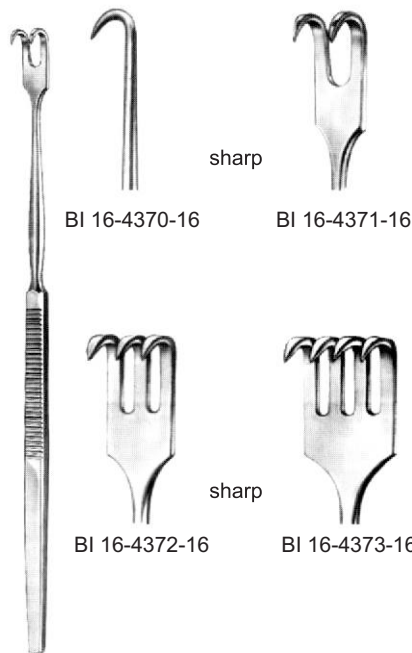


O'CONNOR
 BI 16-4367-16
 16 cm/6 1/4"



sharp BI 16-4368-16 BI 16-4369-16

GUTHRIE
 16 cm/6 1/4"



sharp BI 16-4370-16 BI 16-4371-16
 blunt BI 16-4374-16 BI 16-4375-16
 sharp BI 16-4372-16 BI 16-4373-16
 blunt BI 16-4376-16 BI 16-4377-16

KEHLEGRIFF
 16 cm/6 1/4"

KEHLEGRIFF
 16 cm/6 1/4"

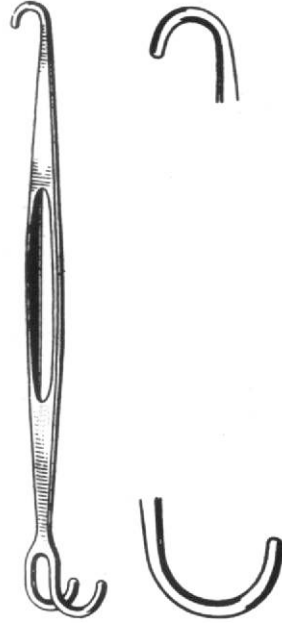


Measurements of retractors: Depth x Width

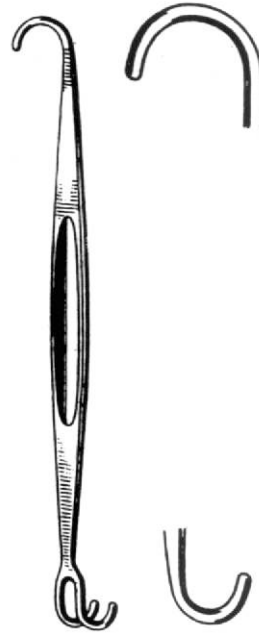
16 x 5 mm



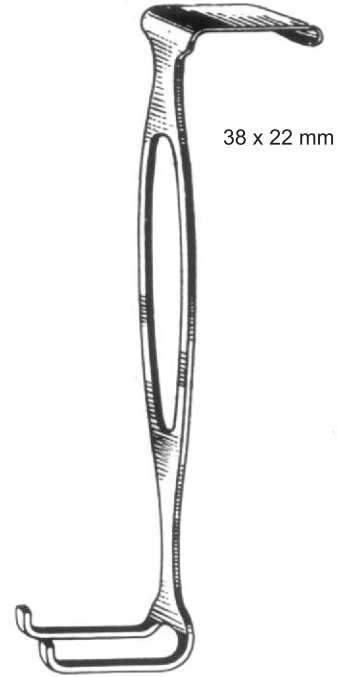
CANNY RYALL
BI 16-4378-15 15mm
BI 16-4378-20 20mm
BI 16-4378-25 25mm
BI 16-4378-30 30mm



CANNY RYALL
BI 16-4379-17 17 cm/6 3/4"



CANNY RYALL
BI 16-4380-17 17 cm/6 3/4"



38 x 22 mm

CZERNEY
BI 16-4381-17 17 cm/6 3/4"



BI 16-4382-23



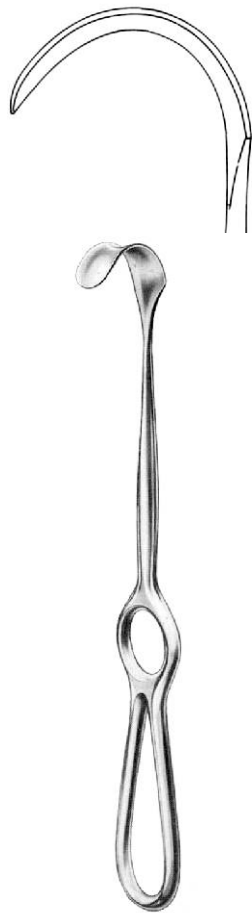
BI 16-4383-23



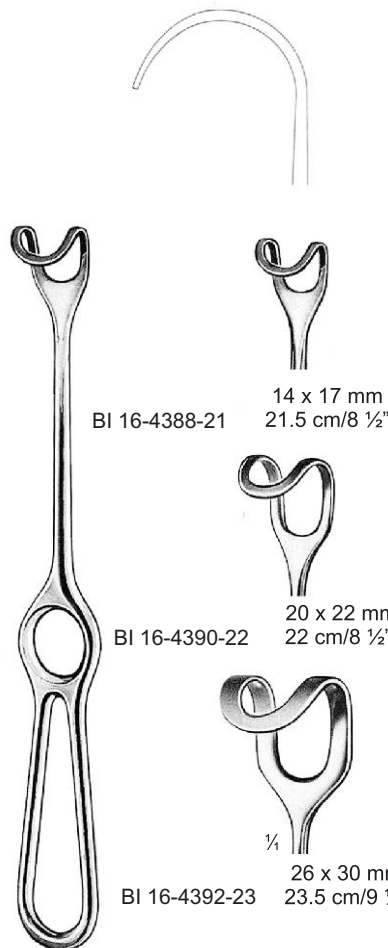
BI 16-4384-23

Sharp





KOCHER
 22 cm/8 1/2"
 BI 16-4385-22 40 x 10 mm
 BI 16-4386-22 40 x 15 mm
 BI 16-4387-22 40 x 20 mm



MIDDELDORPF

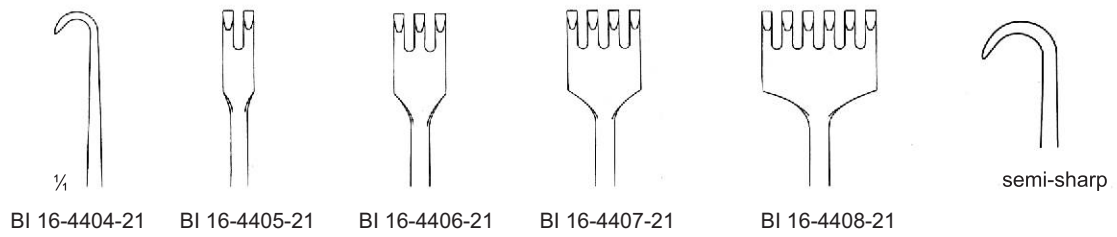
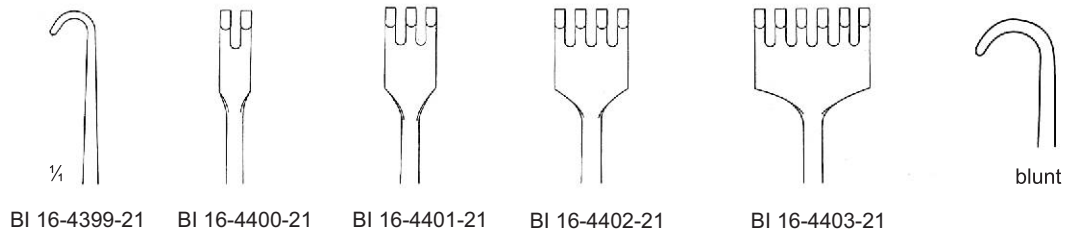
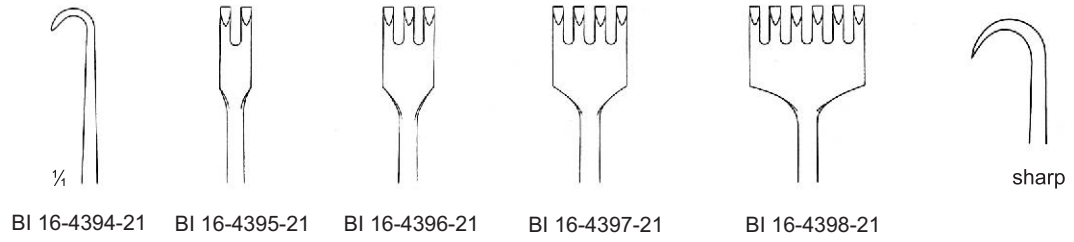
BI 16-4388-21 14 x 17 mm 21.5 cm/8 1/2" BI 16-4389-21
 BI 16-4390-22 20 x 22 mm 22 cm/8 1/2" BI 16-4391-21
 BI 16-4392-23 26 x 30 mm 23.5 cm/9 1/4" BI 16-4393-23



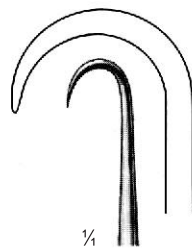
MIDDELDORPF



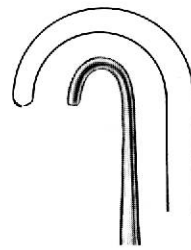
Measurements of retractors: Depth x Width



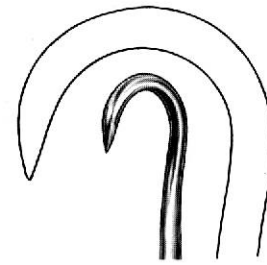
VOLKMANN
21.5 cm/8 1/2"



BI 16-4409-21
21.5 cm/8 1/2"



BI 16-4410-21
21.5 cm/8 1/2"

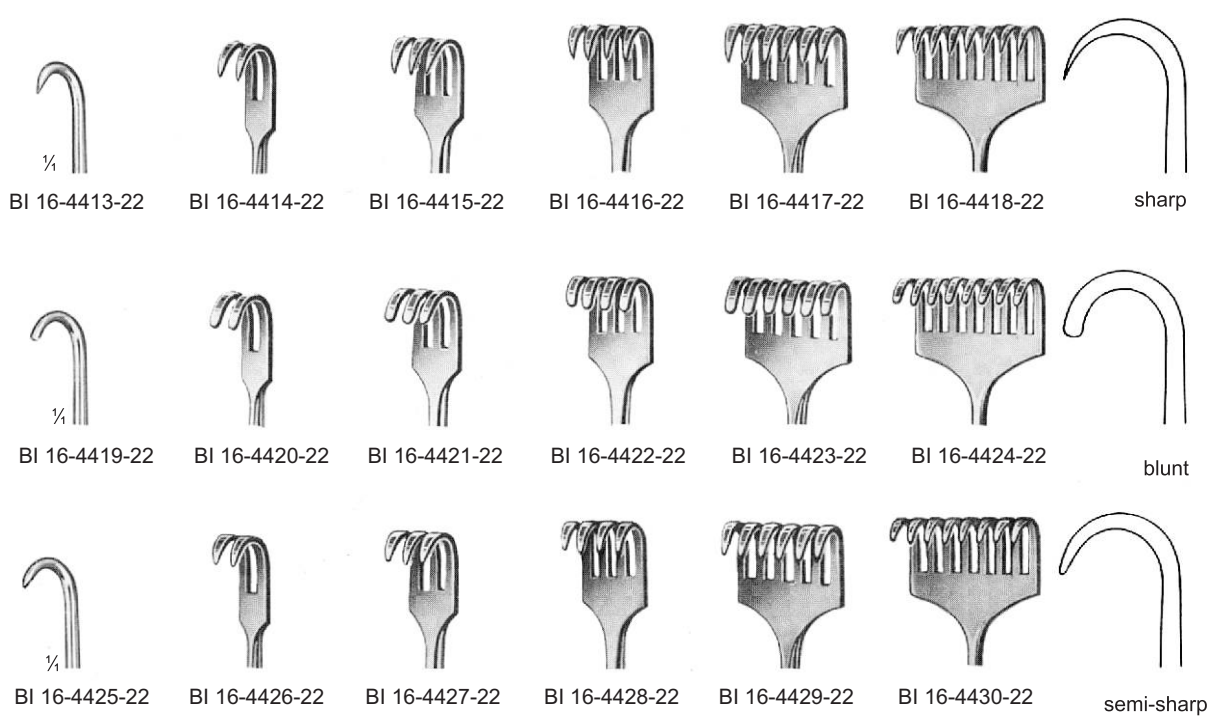


BI 16-4411-21 sharp
BI 16-4412-21 blunt
20 cm/7 7/8"

Measurements of retractors: Depth x Width



KOCHER
 22 cm/8 1/2"



OLLIER
 BI 16-4432-22
 22.5 cm/8 3/4"



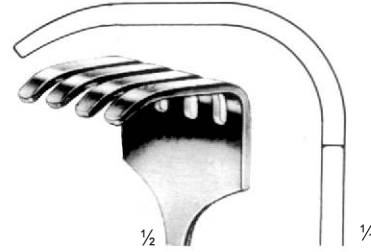
WASSMUND
 BI 16-4433-20
 20 cm/7 7/8"

Measurements of retractors: Depth x Width

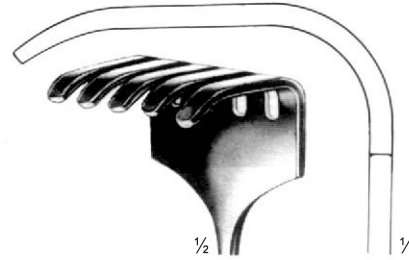




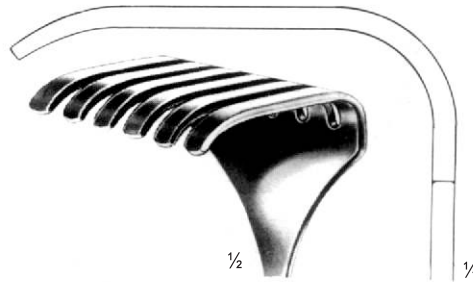
BI 16-4434-27
27 cm/10 1/2"



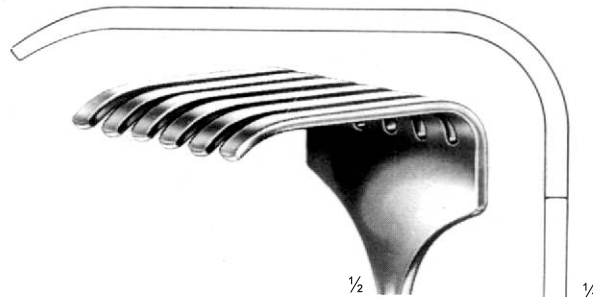
BI 16-4435-25
40 x 40 mm



BI 16-4436-25
45 x 50 mm



BI 16-4437-25
50 x 60 mm

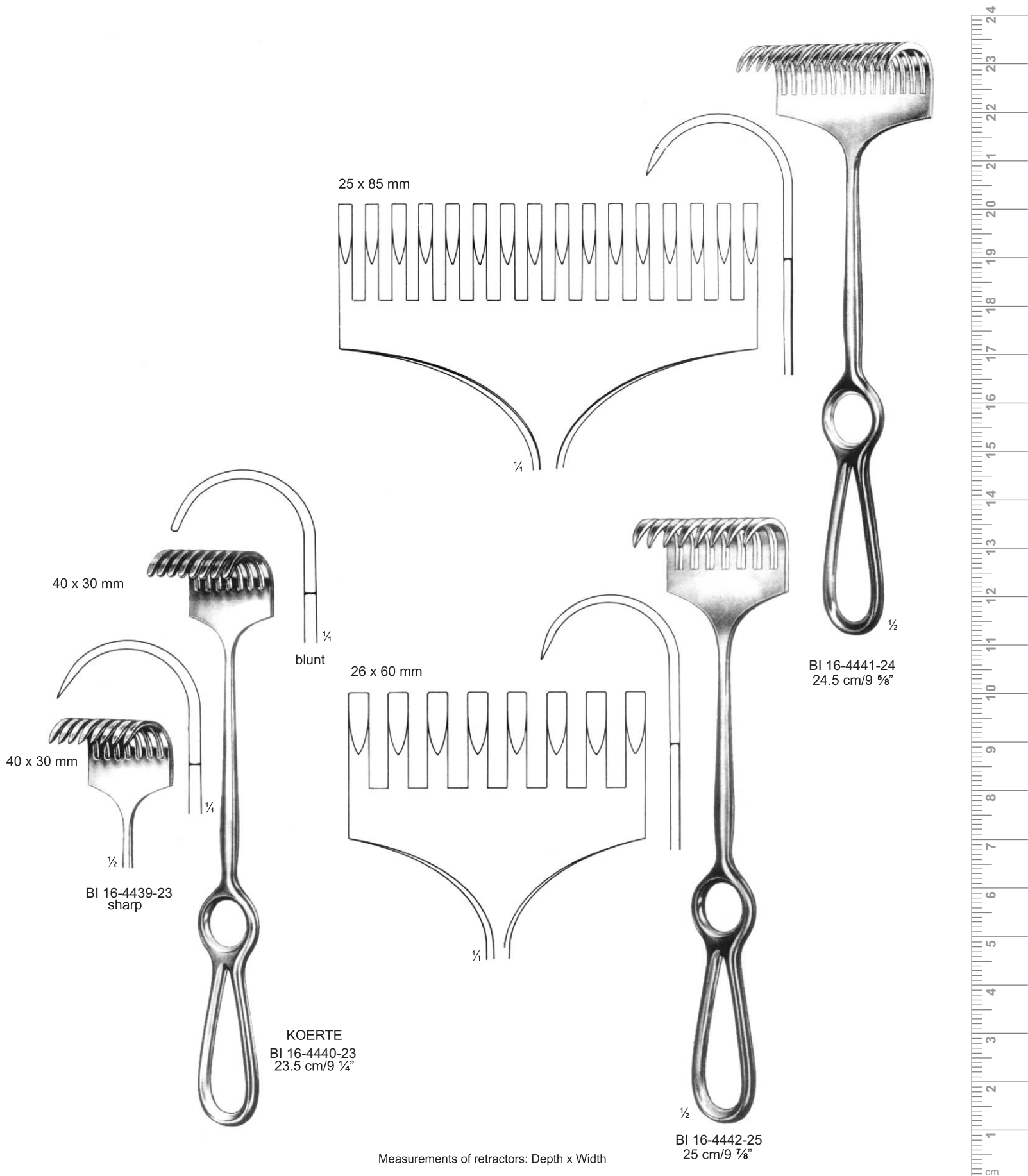


BI 16-4438-25
70 x 70 mm



ISRAEL
25 cm/9 7/8"

Measurements of retractors: Depth x Width



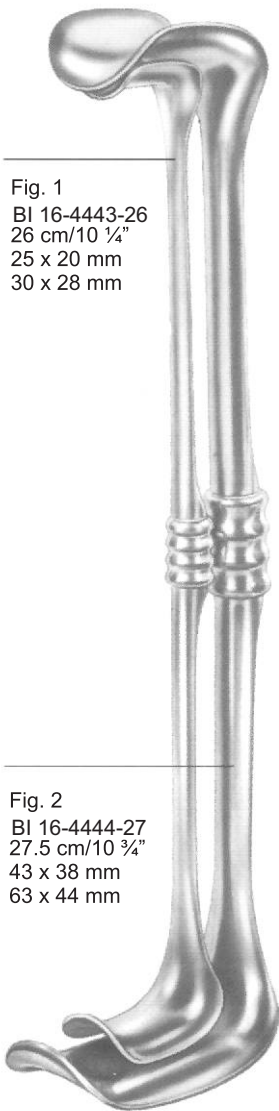


Fig. 1
BI 16-4443-26
26 cm/10 1/4"
25 x 20 mm
30 x 28 mm

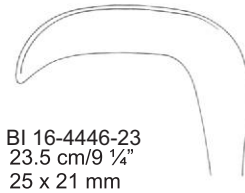


Fig. 2
BI 16-4444-27
27.5 cm/10 3/4"
43 x 38 mm
63 x 44 mm

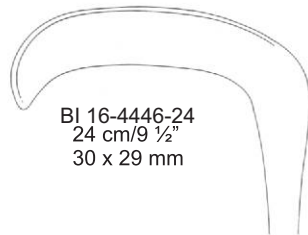
RICHARDSON-EASTMAN
BI 16-4445-1
Set Fig. 1 + 2



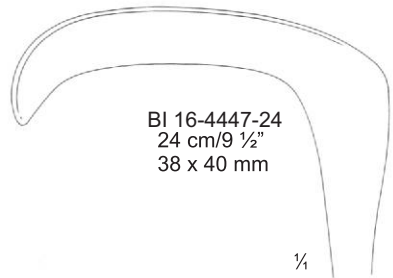
RICHARDSON



BI 16-4446-23
23.5 cm/9 1/4"
25 x 21 mm



BI 16-4446-24
24 cm/9 1/2"
30 x 29 mm



BI 16-4447-24
24 cm/9 1/2"
38 x 40 mm

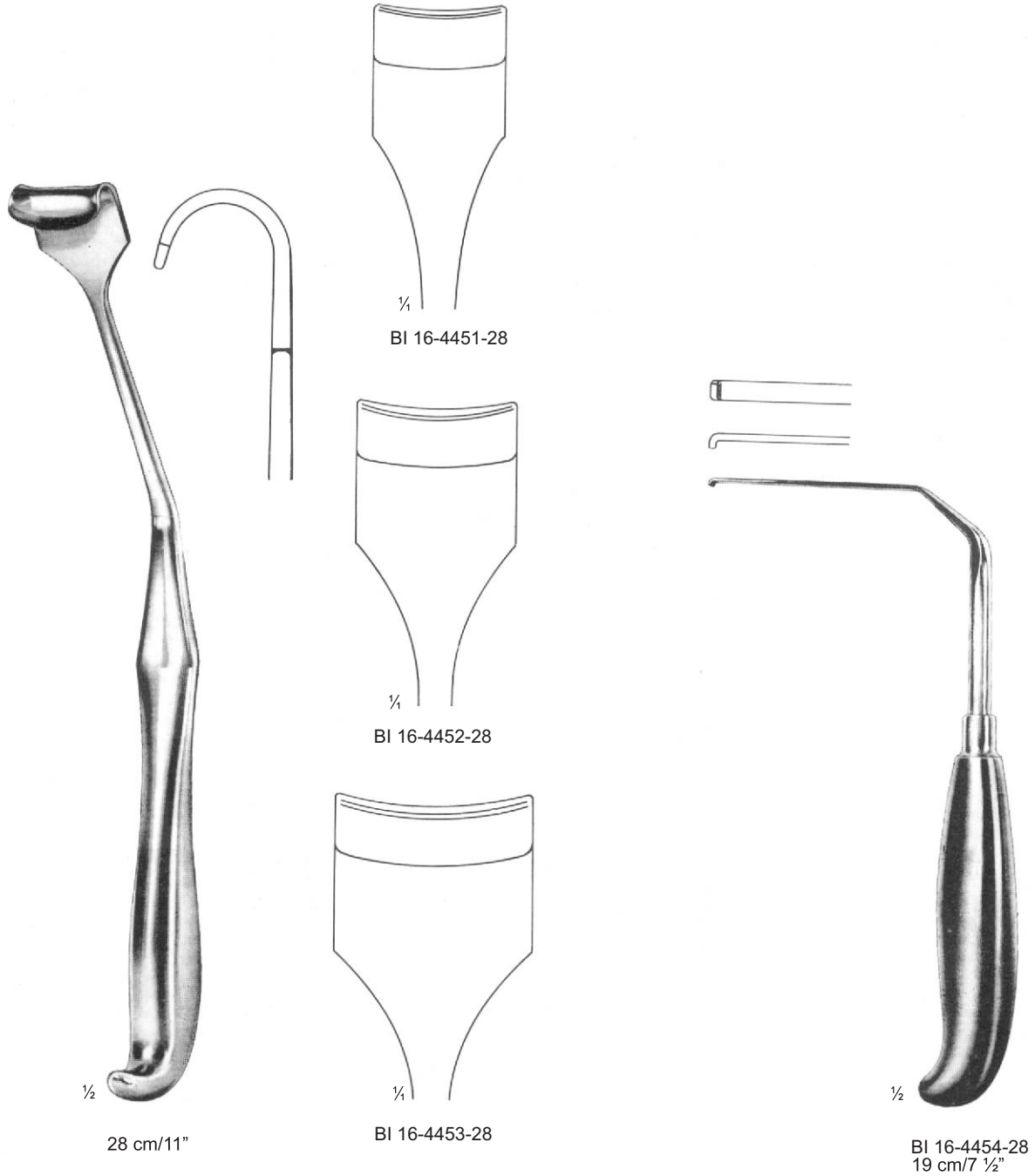


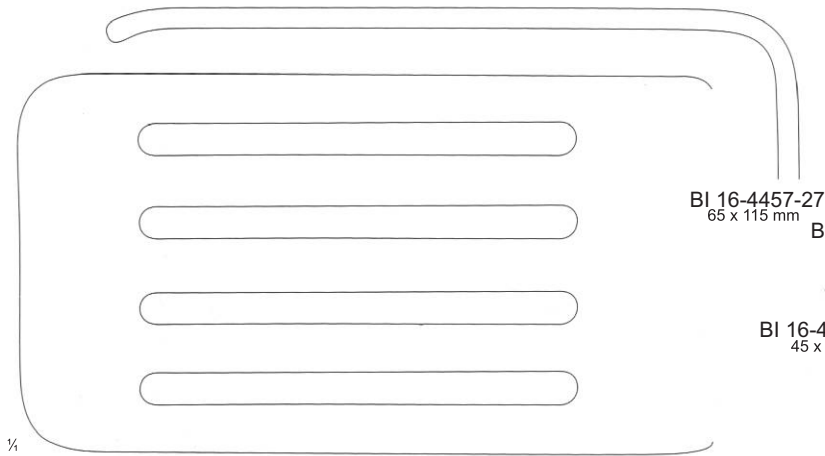
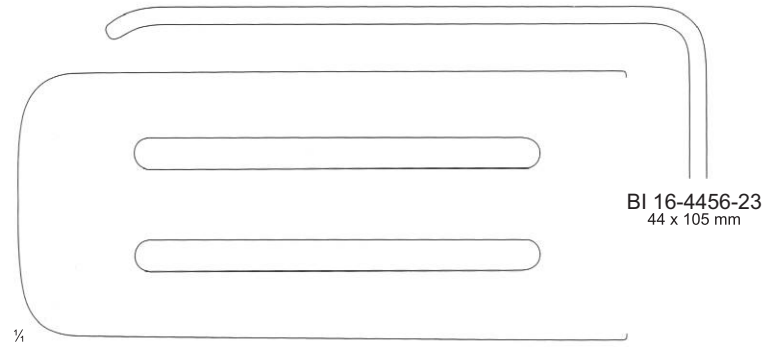
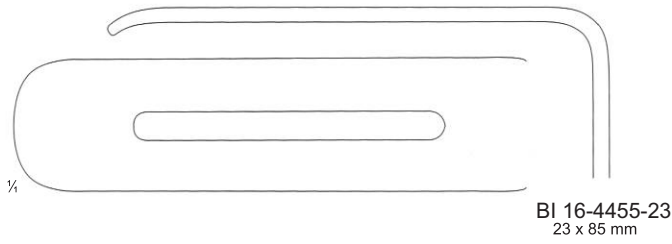
48 x 22 mm

RICHARDSON
BI 16-4448-24
24 cm/9 1/2"

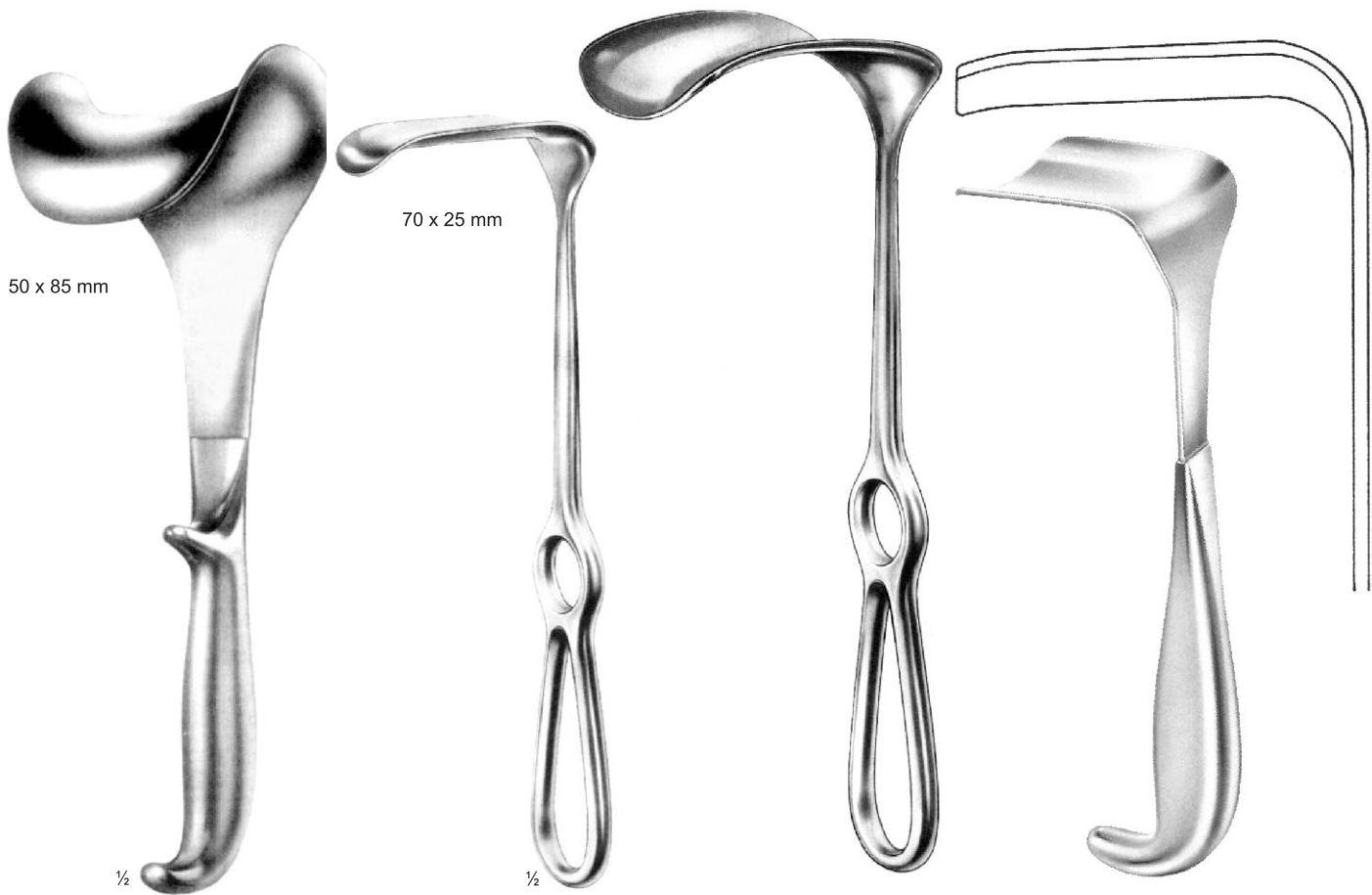


KELLY
BI 16-4449-26 62 x 50 mm
BI 16-4450-26 70 X 65 mm
26 cm/10 1/4"





RETRACTORS



50 x 85 mm

70 x 25 mm

½

½

DOYEN

BI 16-4461-25
 25 cm/9 7/8"

KOCHER

BI 16-4462-22
 22.5 cm/8 3/4"

KOCHER

	Total length	Blade
	cm in.	mm
BI 16-4463-25	25 9 7/8"	80 x 45
BI 16-4464-25	25 9 7/8"	80 x 55
BI 16-4465-25	25 9 7/8"	80 x 65

TUFFIER

BI 16-4466-21
 21.5 cm/8 1/2"

Measurements of retractors: Depth x width



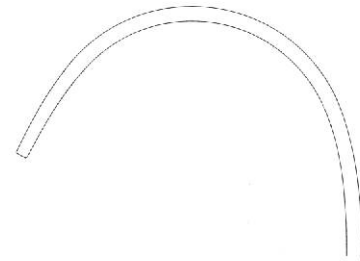
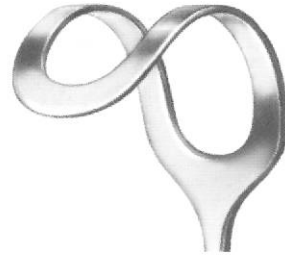
BI 16-4467-25
 25 cm/9 7/8"
 87 x 28 mm

BI 16-4468-25
 25 cm/9 7/8"
 97 x 31 mm

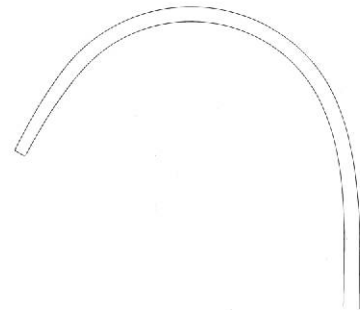
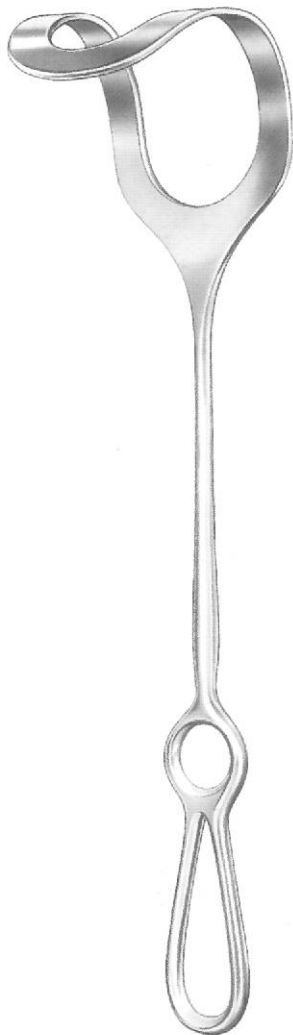
BI 16-4469-25
 26 cm/10 1/4"
 117 x 52 mm

DOYEN-STILLE

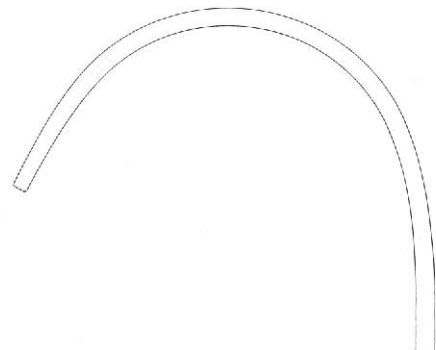
RETRACTORS



BI 16-4470-27
 27 cm/10 1/2"
 43 x 45 mm



BI 16-4471-27
 27 cm/10 1/2"
 52 x 50 mm



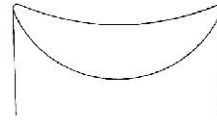
BI 16-4471-28
 28 cm/11"
 52 x 70 mm

MIDDELDORPF

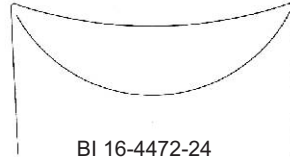




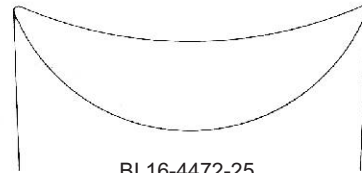
FRITSCH



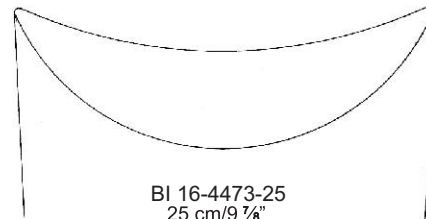
BI 16-4472-23
 23.5 cm/9 1/4"
 37 x 31 mm



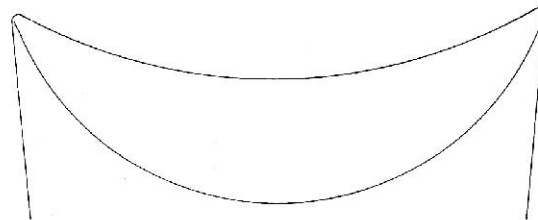
BI 16-4472-24
 24 cm/9 1/2"
 38 x 40 mm



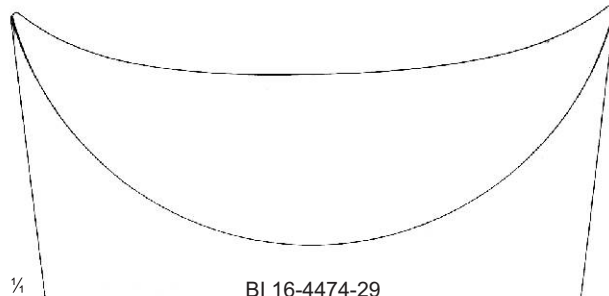
BI 16-4472-25
 25 cm/9 7/8"
 43 x 51 mm



BI 16-4473-25
 25 cm/9 7/8"
 49 x 61 mm

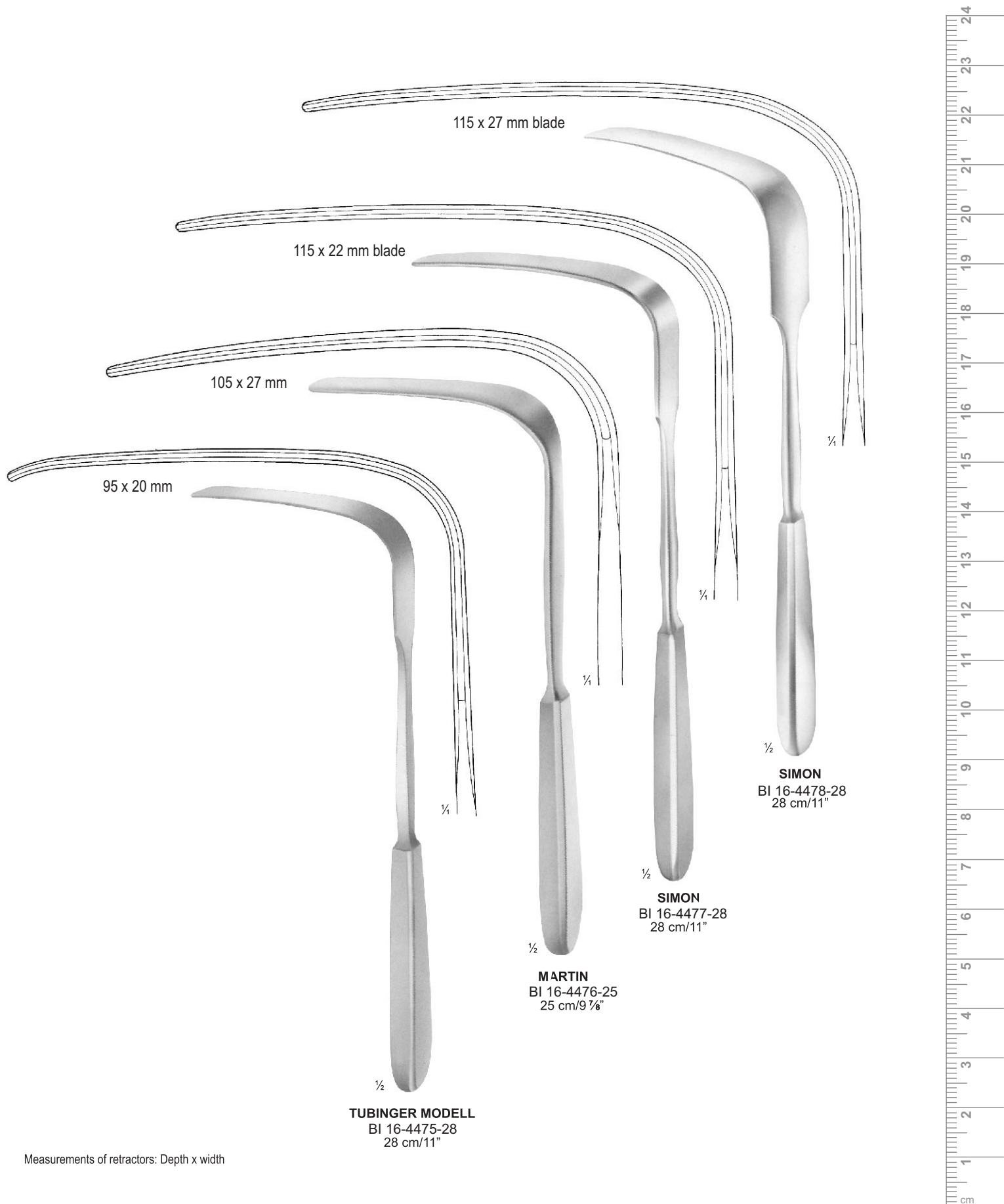


BI 16-4474-25
 25.5 cm/10"
 48 x 75 mm

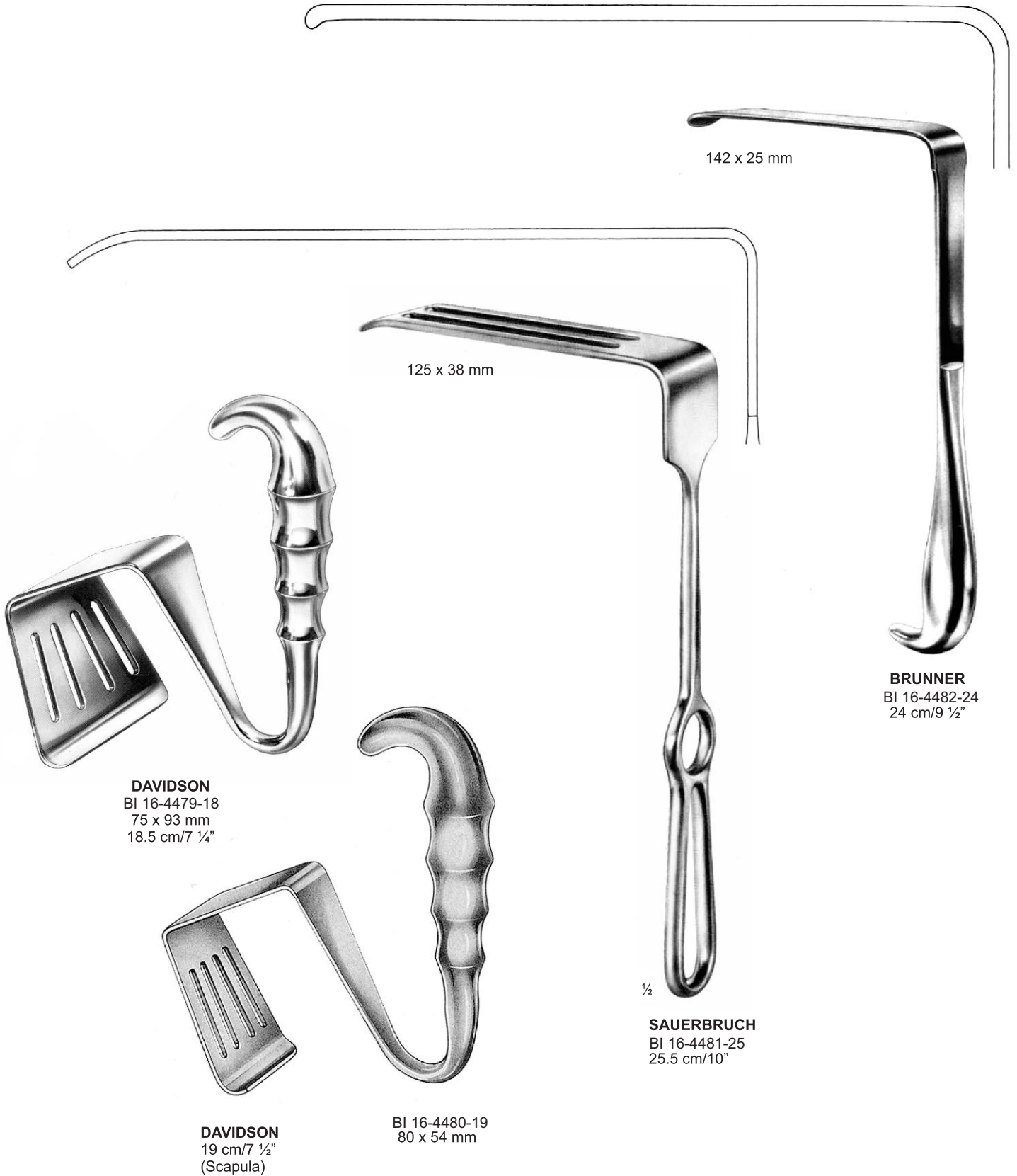


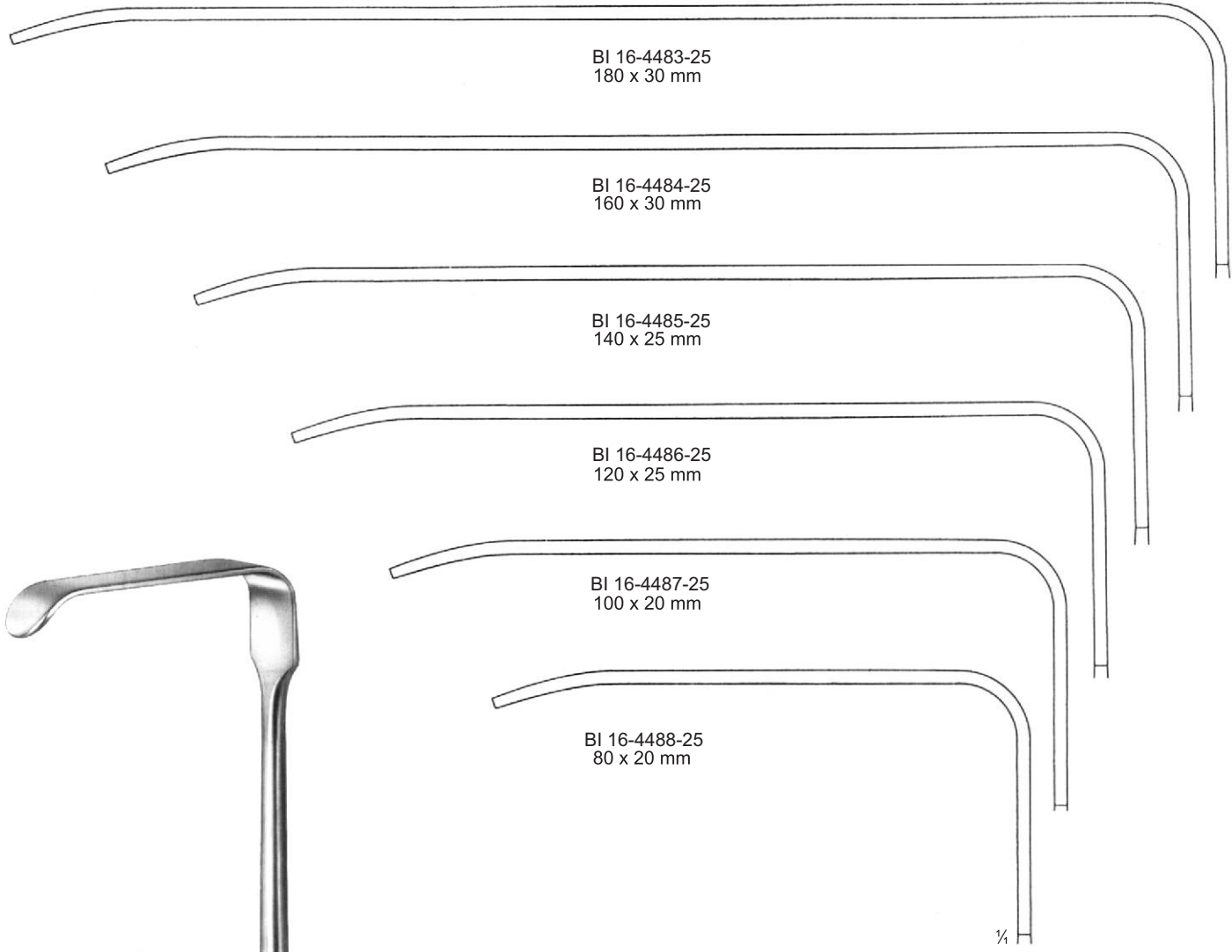
BI 16-4474-29
 29.5 cm/11 3/8"
 65 x 85 mm

RETRACTORS



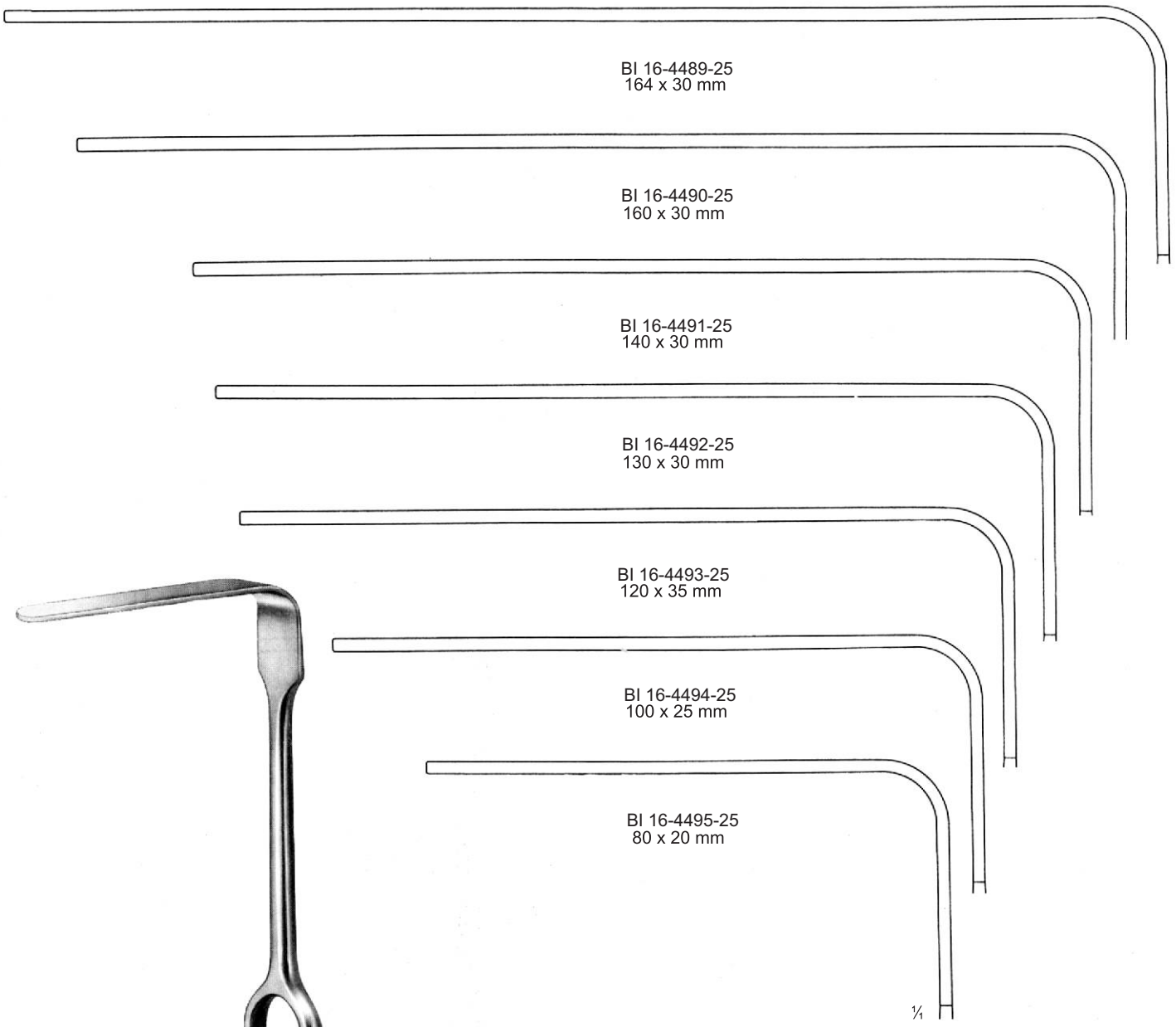
Measurements of retractors: Depth x width





BRUNNER
25 cm/9 7/8"





BI 16-4489-25
164 x 30 mm

BI 16-4490-25
160 x 30 mm

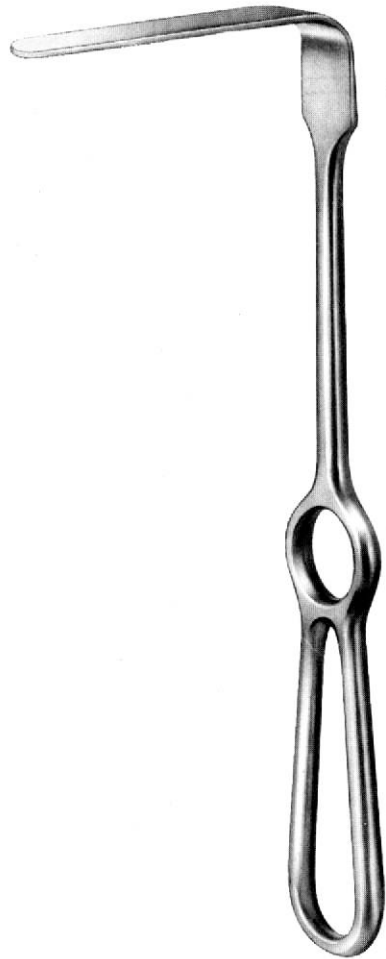
BI 16-4491-25
140 x 30 mm

BI 16-4492-25
130 x 30 mm

BI 16-4493-25
120 x 35 mm

BI 16-4494-25
100 x 25 mm

BI 16-4495-25
80 x 20 mm



BRUNNER
25.5 cm/10"

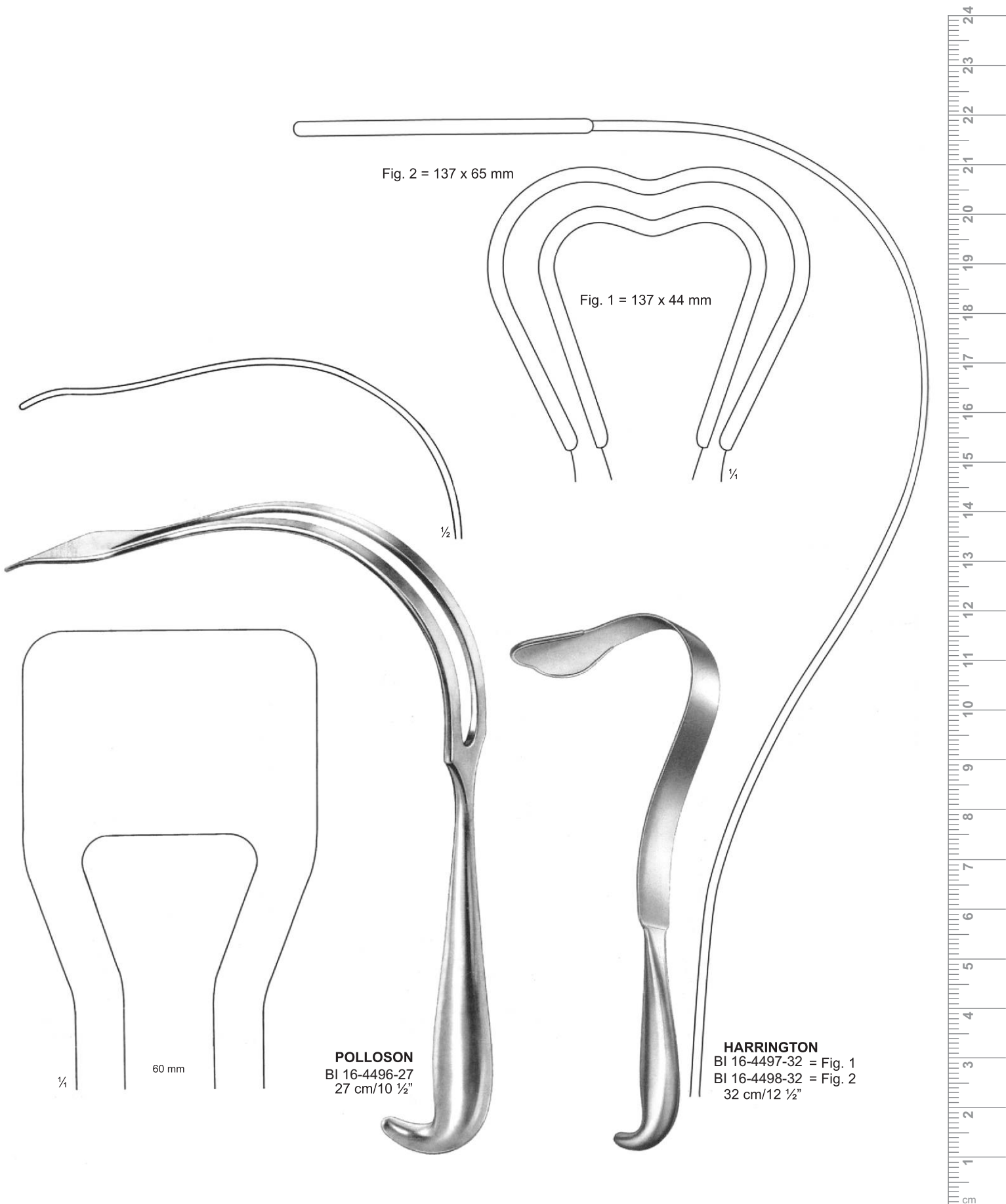
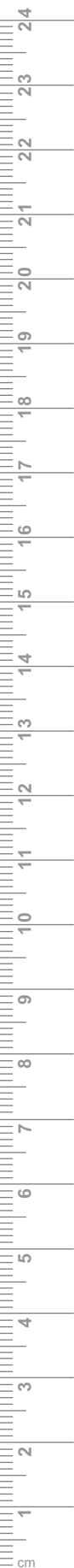


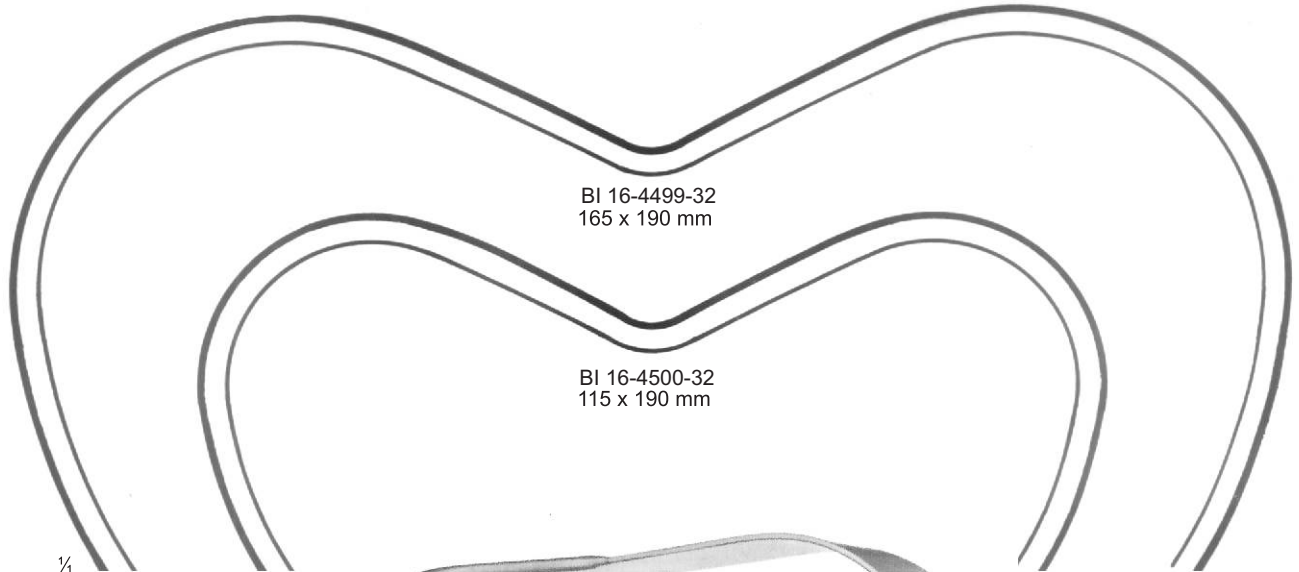
Fig. 2 = 137 x 65 mm

Fig. 1 = 137 x 44 mm

POLLOSON
 BI 16-4496-27
 27 cm/10 1/2"

HARRINGTON
 BI 16-4497-32 = Fig. 1
 BI 16-4498-32 = Fig. 2
 32 cm/12 1/2"

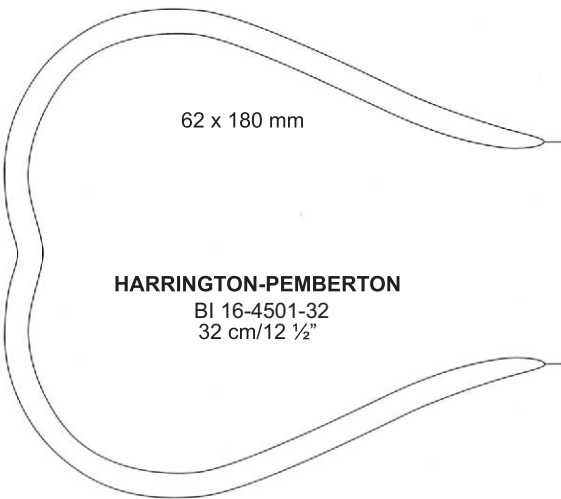




BI 16-4499-32
165 x 190 mm

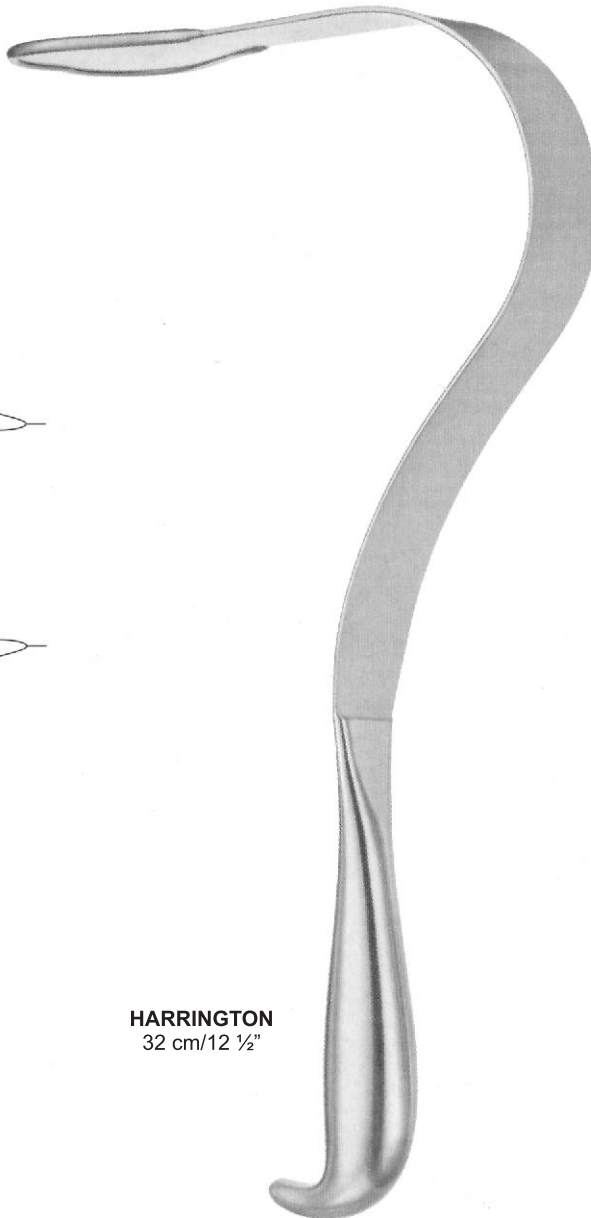
BI 16-4500-32
115 x 190 mm

¼



62 x 180 mm

HARRINGTON-PEMBERTON
BI 16-4501-32
32 cm/12 ½"



HARRINGTON
32 cm/12 ½"

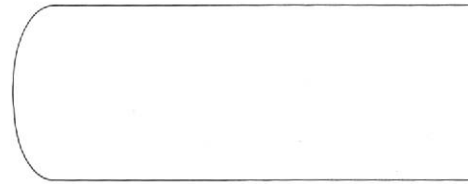
Measurements of retractors: Depth x Width



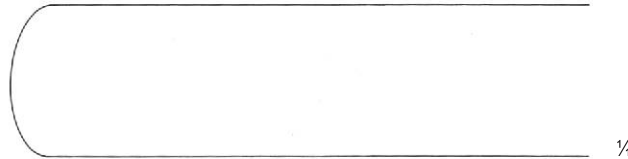
SAUERBRUCH
 22.5 cm/8 3/4"



BI 16-4502-22
 45 x 15 mm



BI 16-4503-22
 60 x 23 mm



BI 16-4504-22
 72 x 20 mm



Measurements of retractors: Depth x Width





38 mm

50 mm

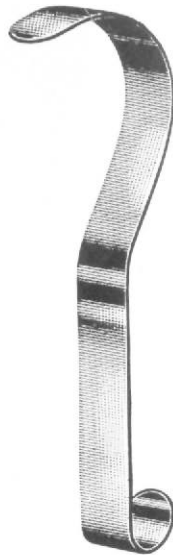
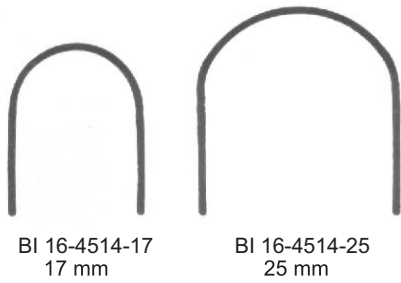
75 mm

DEAVER
 BI 16-4511-32
 32 cm/12 1/2"

DEAVER
 BI 16-4512-31
 31.5 cm/12 3/8"

DEAVER
 BI 16-4513-31
 31.5 cm/12 3/8"

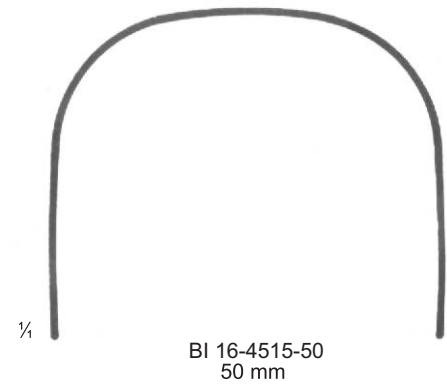
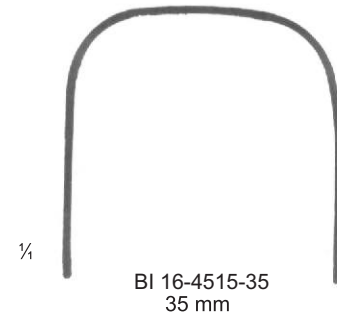
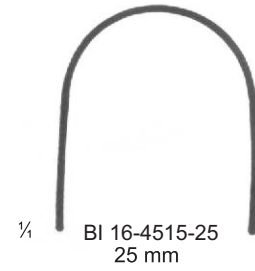




DEAVER-BABY



DEAVER



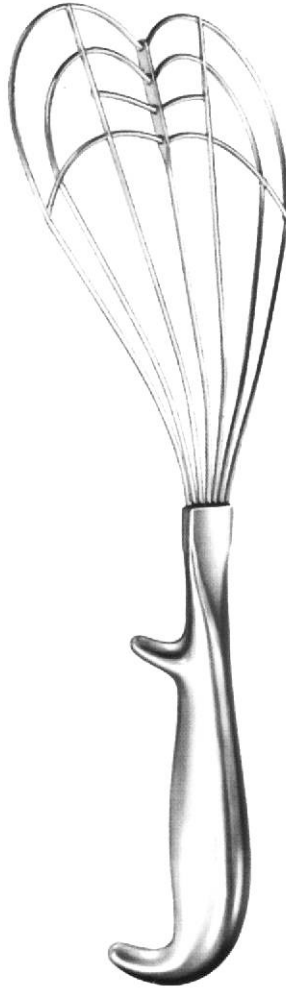
RETRACTORS



BI 16-4516-29
 29.5 cm/11⁵/₈"
 width of blade 48 mm

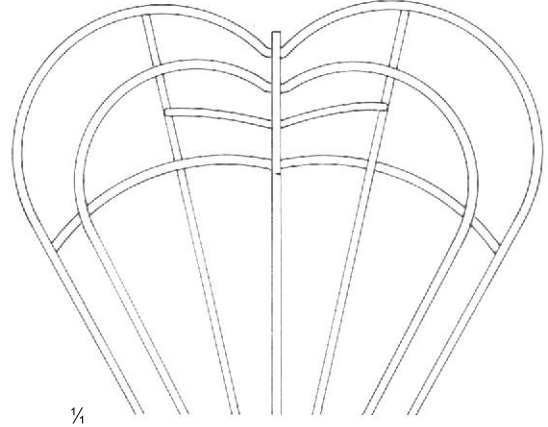
BI 16-4516-33
 33 cm/13"
 width of blade 63 mm

ALLISON



BI 16-4517-29
 29.5 cm/11⁵/₈"
 width of blade 132 mm

ALLISON



1/4

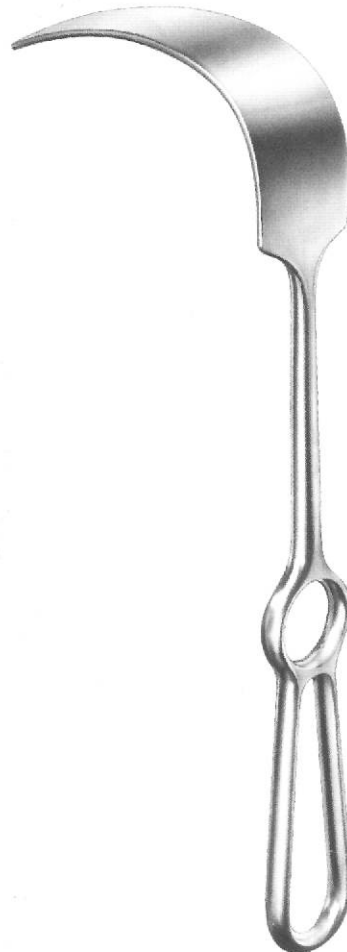
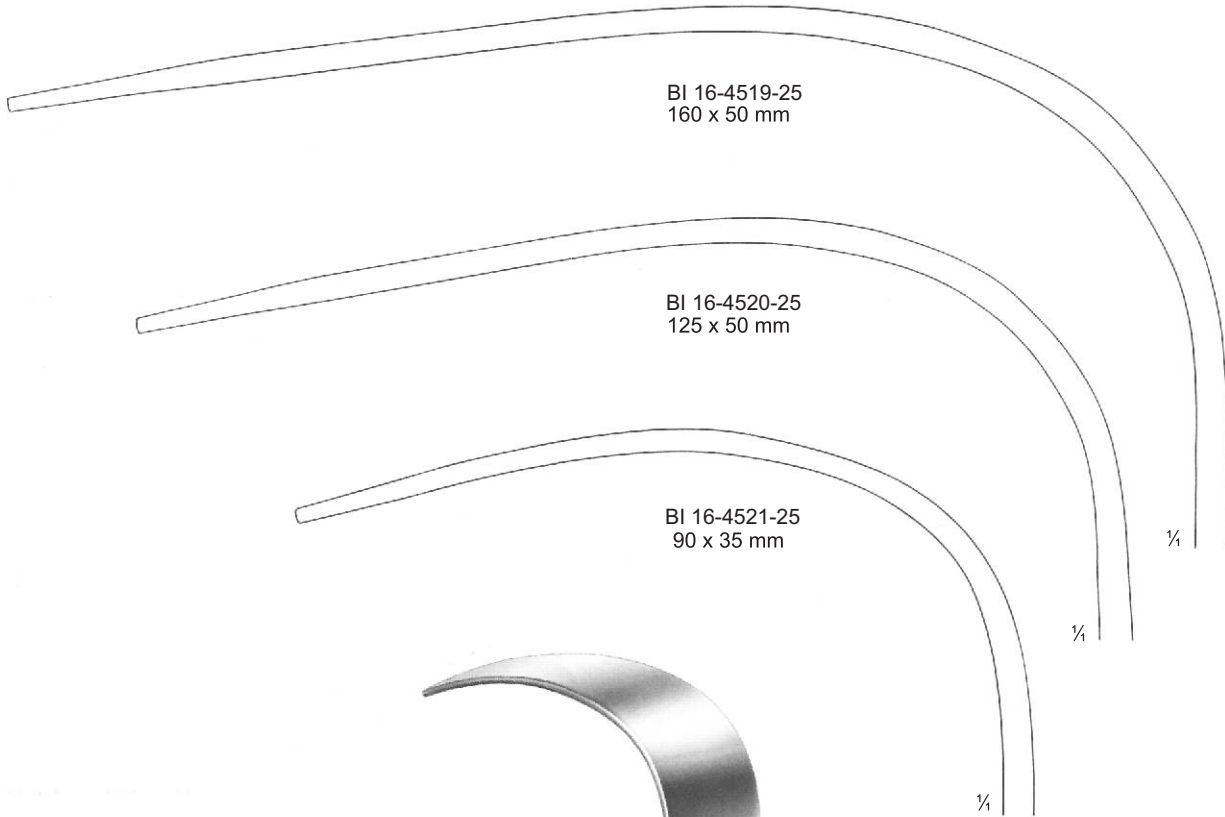


HIBBS

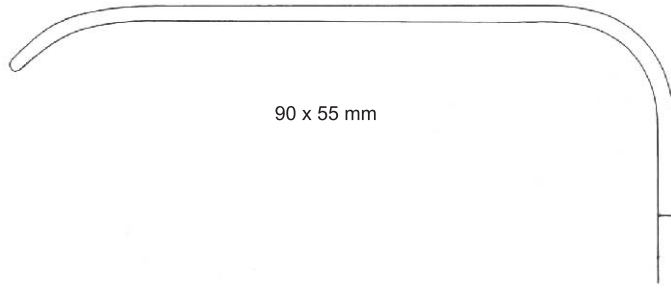
BI 16-4518-75 75 x 25 mm
 BI 16-4518-50 50 x 19 mm
 BI 16-4518-25 25 x 13 mm



Measurements of retractors: Depth x Width



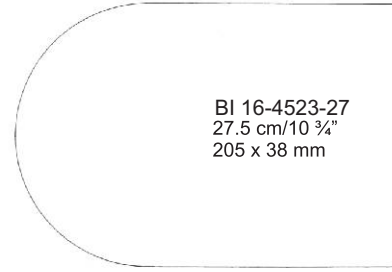
MIKULICZ
25 cm/9 7/8"



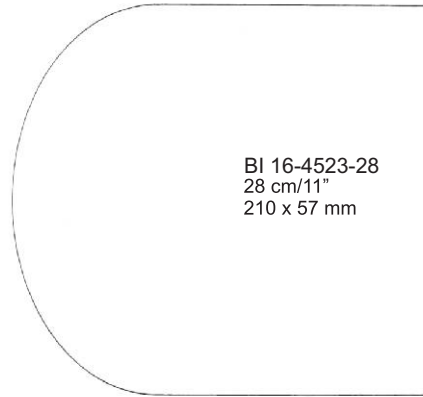
90 x 55 mm



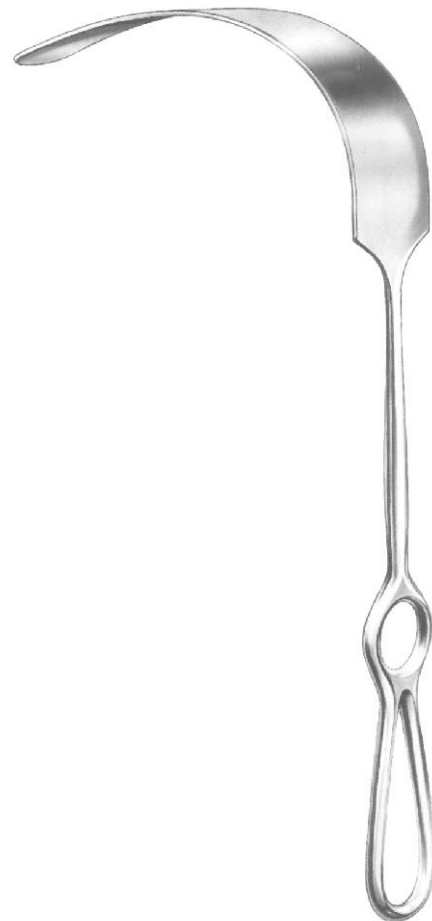
MIKULICZ
 BI 16-4522-26
 26 cm/10 7/8"



BI 16-4523-27
 27.5 cm/10 3/4"
 205 x 38 mm

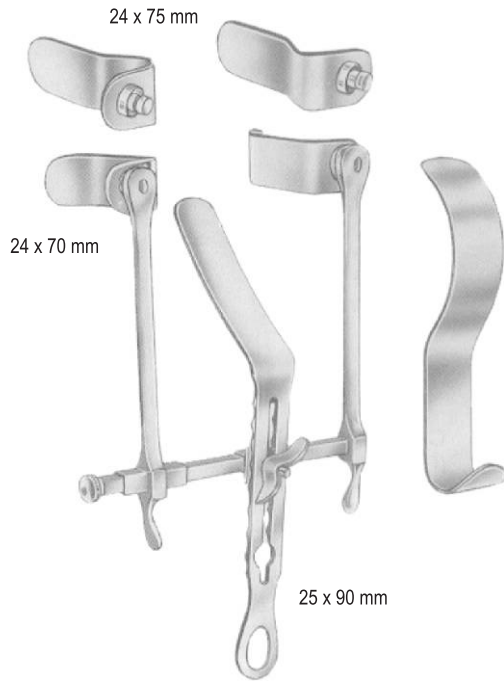


BI 16-4523-28
 28 cm/11"
 210 x 57 mm

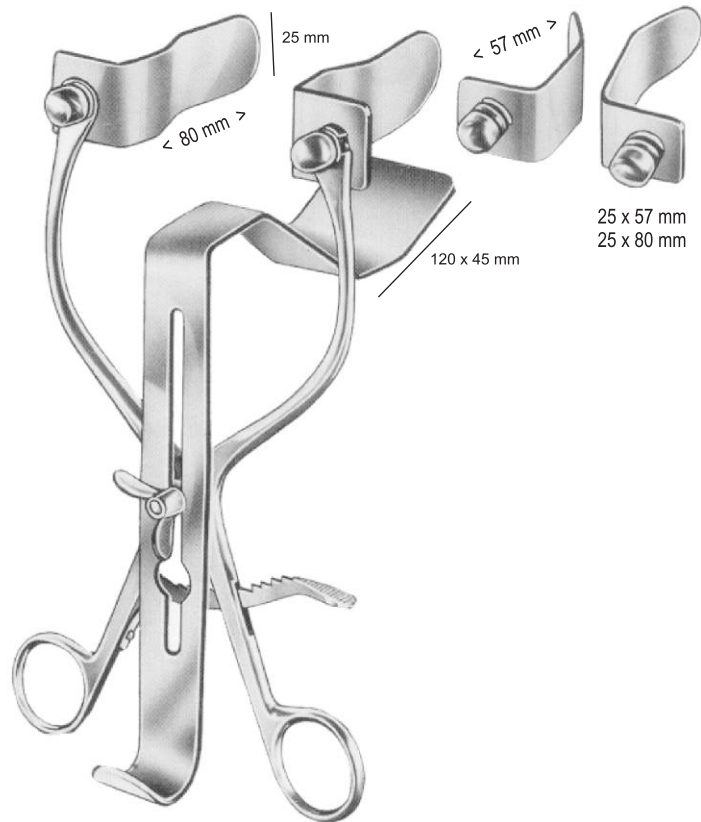


KELLY





THOMSON-WALKER
BI 16-4803-25



MILLIN
BI 16-4804-25

Measurements of retractors: Depth x Width