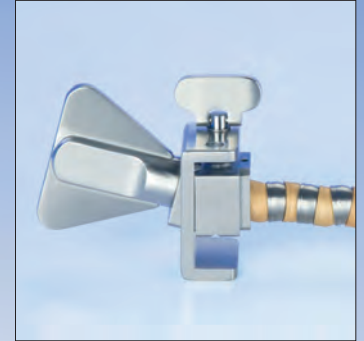


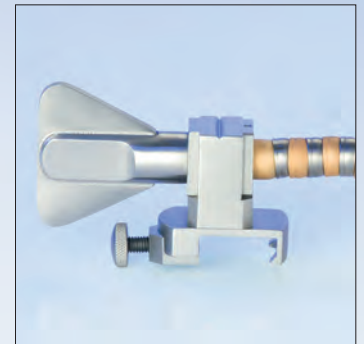


Flexible Arm

- strong reusable design
- superior positioning and articulation
- attachable to any sternal retractor system, up to 12 mm.
- special interlock-joints for ultimate strength
- maximum versatility with interchangeable optional attachments for stabilization, manipulation or retraction
- ball-joint connection of attachments provides additional degrees of freedom
- partially detachable for ease of cleaning



29-1485 Flexible Arm 24 cm



29-1486 Flexible Arm 24 cm with Sliding Carrier for CardioFrame™



Open the thumb screw of the flexible arm so far, that you can slide the foot attachment into the connector.



Pull back the last link and insert the foot attachment. It is helpful to press the thumb between the connector on the stabilizer and the last link.



Release the last link and adjust the position of the foot attachment.



Tighten the thumb screw so far, until the arm has a slight tension, and maintains the predetermined position.



Attach the arm to the selected retractor body.



Bring the arm into the desired position and tighten the thumb screw.



Once you have reached the desired position tighten the thumb screw further.



You can move the already tightened arm and readjust working position. But the tension of the arm will slightly decrease.



Therefore the thumb screw must be tightened again slightly more after doing this.



Flexible Arm



29-1432V

29-1431V

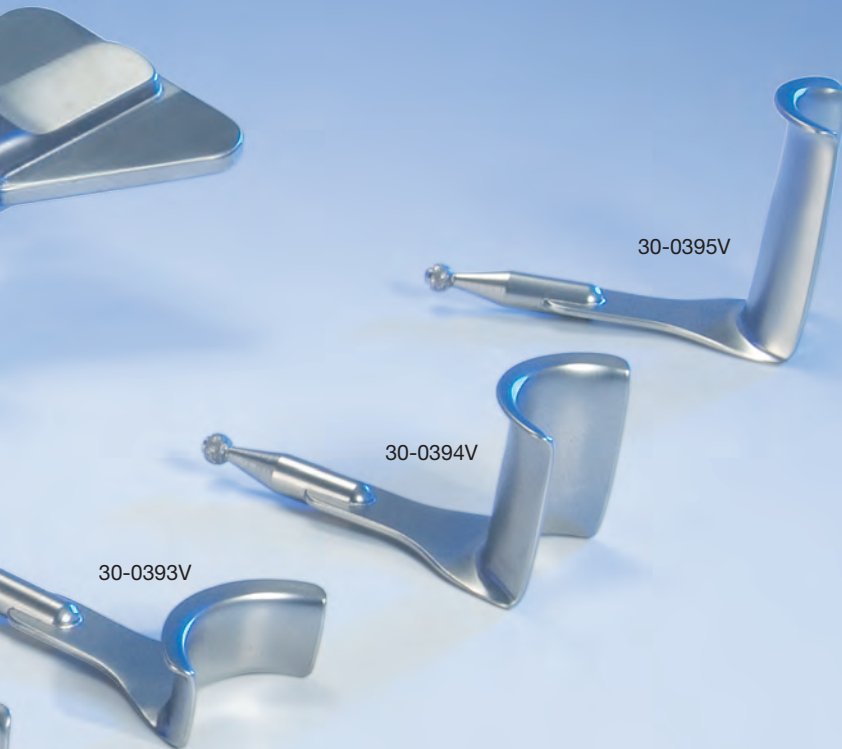
29-1485

29-1430V

30-0391V

30-0390V

30-0392V



Flexible Arm

- provides maximum surgical exposure in vascular and mitral valve procedures
- multiple sizes available
- excellent stability

29-1485 Flexible Arm 24 cm (without foot)

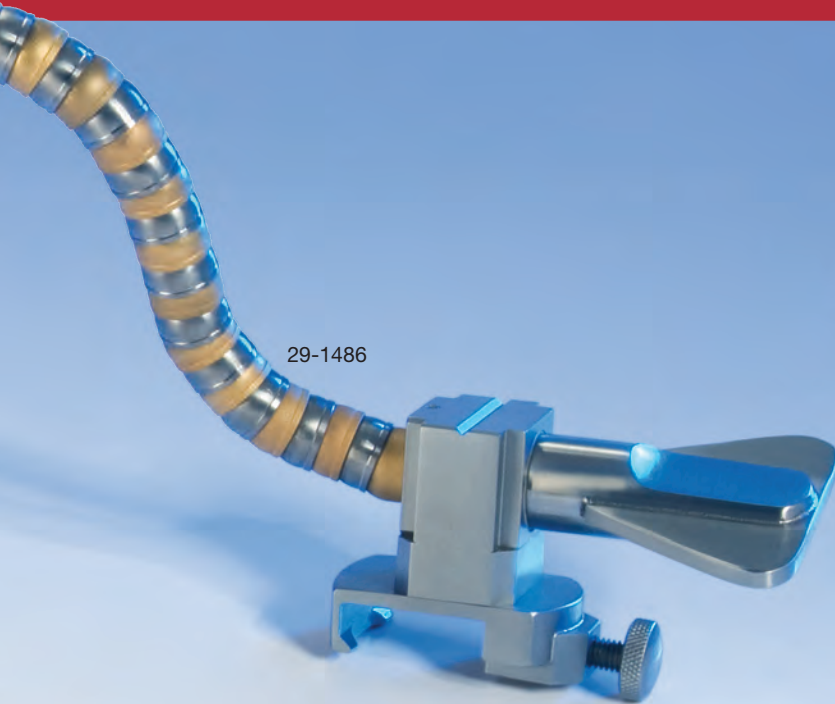
Valve Retracting and Manipulating Foots

29-1430V	Cooley Atrial Rake Blade small 20 mm
29-1431V	Cooley Atrial Rake Blade medium 35 mm
29-1432V	Cooley Atrial Rake Blade large 45 mm
30-0390V	Ross Vascular Hook Fig.1 Blade 16 x 15 mm
30-0391V	Ross Vascular Hook Fig. 2 Blade 23 x 13 mm
30-0392V	Ross Vascular Hook Fig. 3 Blade 24 x 16 mm
30-0393V	Ross Vascular Hook Fig. 4 Blade 27 x 13 mm
30-0394V	Ross Vascular Hook Fig. 5 Blade 27 x 27 mm
30-0395V	Ross Vascular Hook Fig. 6 Blade 25 x 39 mm



Flexible Arm





29-1486

Flexible Arm

- reusable platform, disposable foots optional
- multiple foot designs available
- excellent stability

Flexible Arm

29-1485	Flexible Arm 24 cm (without foot)
29-1486	Flexible Arm 24 cm (without 29-1428 and 29-1433) for Cardioframe
29-1428V	Fixation Clamp 6 mm with connector for Flexible Arm
29-1433.RD	Bar 6 mm, (alone) for Extension Rod for Foots, 6 mm

Stabilizing Foots

29-1433V	Masseti Stabilizer Foot, curved, with snare holders
29-1434V	Masseti Stabilizer Foot, flat, with snare holders
29-1441V	Riess Stabilizer Foot, extra flat, with snare holders
29-1443V	Satoh II Suction Stabilizer Foot, with snare holders
29-1444V	Lectiang Compact Suction Stabilizer Foot with suction
29-1464	Tulip Suction Stabilizer Foot, single use (box of 50)
29-1465	Suction Apex Manipulator Holder
29-1466E	Suction Lip for 29-1465, single use, sterile (single pack)
29-1466	Suction Lip for 29-1465, single use, sterile (box of 50)

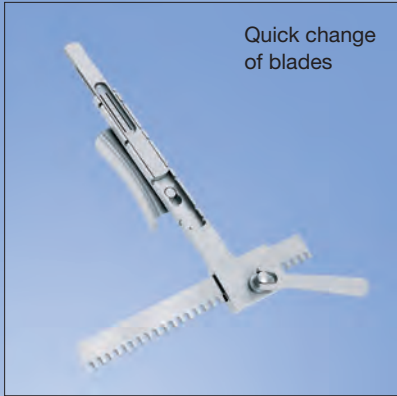


CardioFrame™

29-0955



Quick change of blades





29-0940



29-0955.40



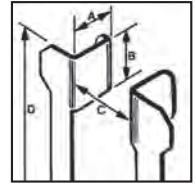
29-0956.40

CARDIOFRAME™

Now with a lower profile and deeper reach than ever! Universal sternum retractor system and operating platform for valve surgery and beating heart surgery.

This low profile operating platform keeps operating area free for surgeon's maneuvers and combines maximum comfort through a unique quick snap-in coupling for accessories with less traumatic tissue handling, stable fixation and excellent exposure. New malleable hooks provide for a deeper reach as well as for versatile adjustment to individual requirements and patient anatomy. Carriers can be moved and fixed to any desired position on arms or spreading bar.

A wide range of GEISTER accessories can also be used with this platform. The system also accommodates some of the most common disposable flexible arms.



Order information:

CardioFrame™ Retractor, Frame (29-0955.BD) with 2 inserts (29-0955.IN) and 2x Cooley blades 30mm deep (29-0956.30)
Sliding Carrier, snap-in coupling (3 recommended)

4x Morse blades	30mm deep 40mm deep	29-0955 29-0940
2x Cooley blades	30mm deep (included in 29-0955) 40mm deep	29-0956.30 29-0956.40
Cooley Rake Hook	small 20mm, malleable shaft medium 35mm, malleable shaft large 45mm, malleable shaft	29-1430.CF 29-1431.CF 29-1432.CF
Malleable Hook	small 18x52mm, short 14cm shaft medium 18x80mm, short 14cm shaft large 22x80mm, short 14cm shaft	29-0941 29-0942 29-0943
Malleable Hook	small 18x52mm, long 19cm shaft medium 18x80mm, long 19cm shaft large 22x80mm, long 19cm shaft	29-0941L 29-0942L 29-0943L
Malleable Hook	small 18x52mm, long 19cm curved shaft medium 18x80mm, long 19cm curved shaft large 22x80mm, long 19cm curved shaft	29-0944L 29-0945L 29-0946L



29-1430.CF



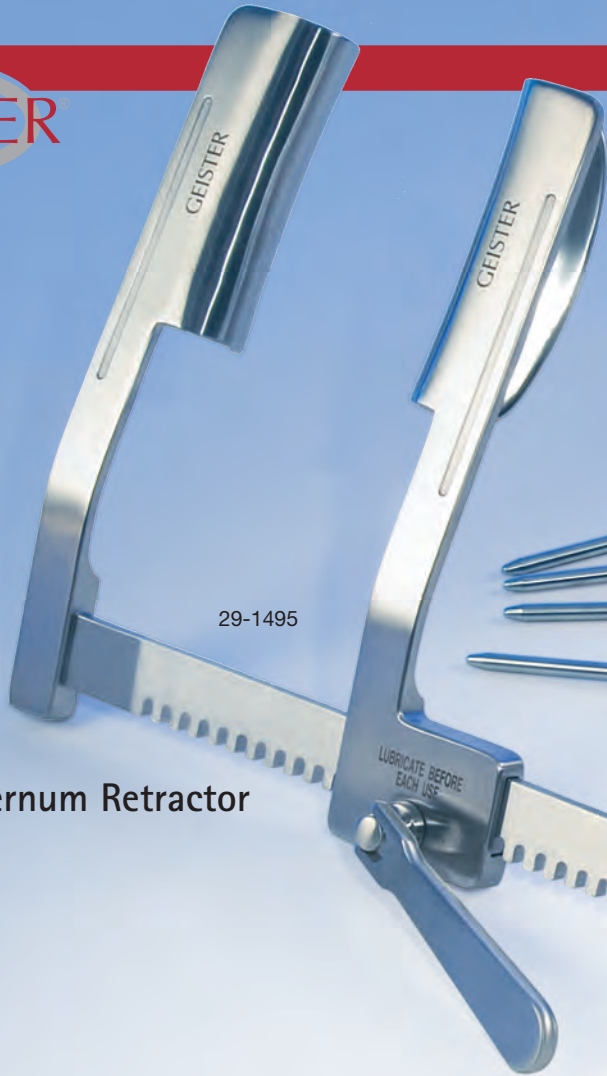
29-0943



29-0942L



29-0944L



29-1495

Cooley-Sternum Retractor

Cooley Rake Retractor
rigid



29-1500.HL

29-1500.HM

29-1500.HS



29-1500.BH

Malleable
Retractor/Spatula

Fixation
Clamp

29-1500.FC





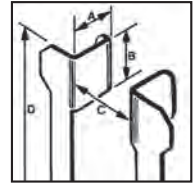
T-bar

29-1005.TS



Cooley Sternum Retractor

Art.-No.	Fig.	A	B	C	D
29-1495	XXL	35 mm	115 mm	230 mm	205 mm
29-1494.RS	XL	35 mm	100 mm	180 mm	180 mm
29-0134.RS	L	30 mm	50 mm	185 mm	145 mm
29-0133.RS	L	30 mm	50 mm	135 mm	145 mm



Cooley T-bar Retractor, complete set

complete consisting of 29-1501.US Attachment set and 29-1495 Retractor body

29-1500.US

T-bar Retractor, attachment only

for use with multiple types of sternal retractors

(consisting of 29-1005.TS, 2x 29-1500.BH, 2x 29-1500.HS, 1x 29-1500.HM, 1x 29-1500.HL, 2x 29-1500.FC)

29-1501.US

T-bar turnable

70 mm

29-1005.TS

Malleable Retractor/Spatula

20 mm

29-1500.BH

Cooley Rake Retractor rigid

20 mm

29-1500.HS

35 mm

29-1500.HM

45 mm

29-1500.HL

Fixation Clamp

29-1500.FC

Recommended optional accessories:

Extention piece

29-1427

(180 mm long) for extending t-bar or creating an L-shaped bar (extra fixation clamps 29-1500.FC are required)

Cooley Rake Retractor tricuspid

45 mm

29-1500.HT

Cooley Rake Retractor malleable

20 mm

29-1430

35 mm

29-1431

45 mm

29-1432

T-bar turnable, low profile

30 mm

29-1005.TL



Speroni
One for All Retractor
29-1000



IMA blade



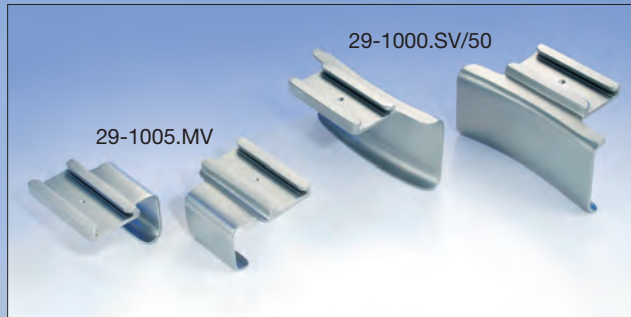
Sternum Blades



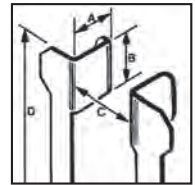
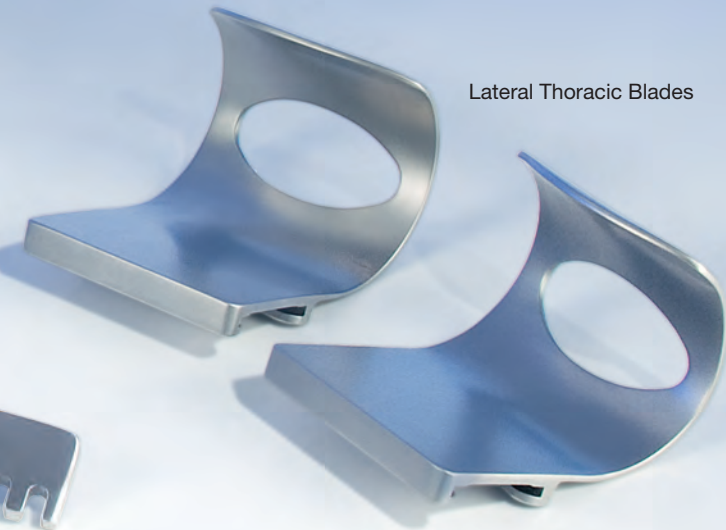
29-1005.IL

29-1005.IM

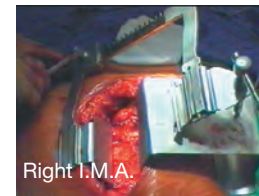
Speroni™ One for All Retractor

Lateral Thoracic Blades



Left I.M.A.



Right I.M.A.



Speroni™ One for All Retractor

Art.-No.	A	B	C	D
29-1000	40 mm	100 mm	230 mm	160 mm
	50 mm	60 mm		

Optional blades:

29-1000.SV/30	30 mm	100 mm		
29-1000.SV/50	50 mm	100 mm		
29-1000.SV/60	60 mm	100 mm		
29-1005.MV	35 mm	42 mm		
29-1005.IL	Mini I.M.A. blade, long			
29-1005.IM	Mini I.M.A. blade, short w/teeth			

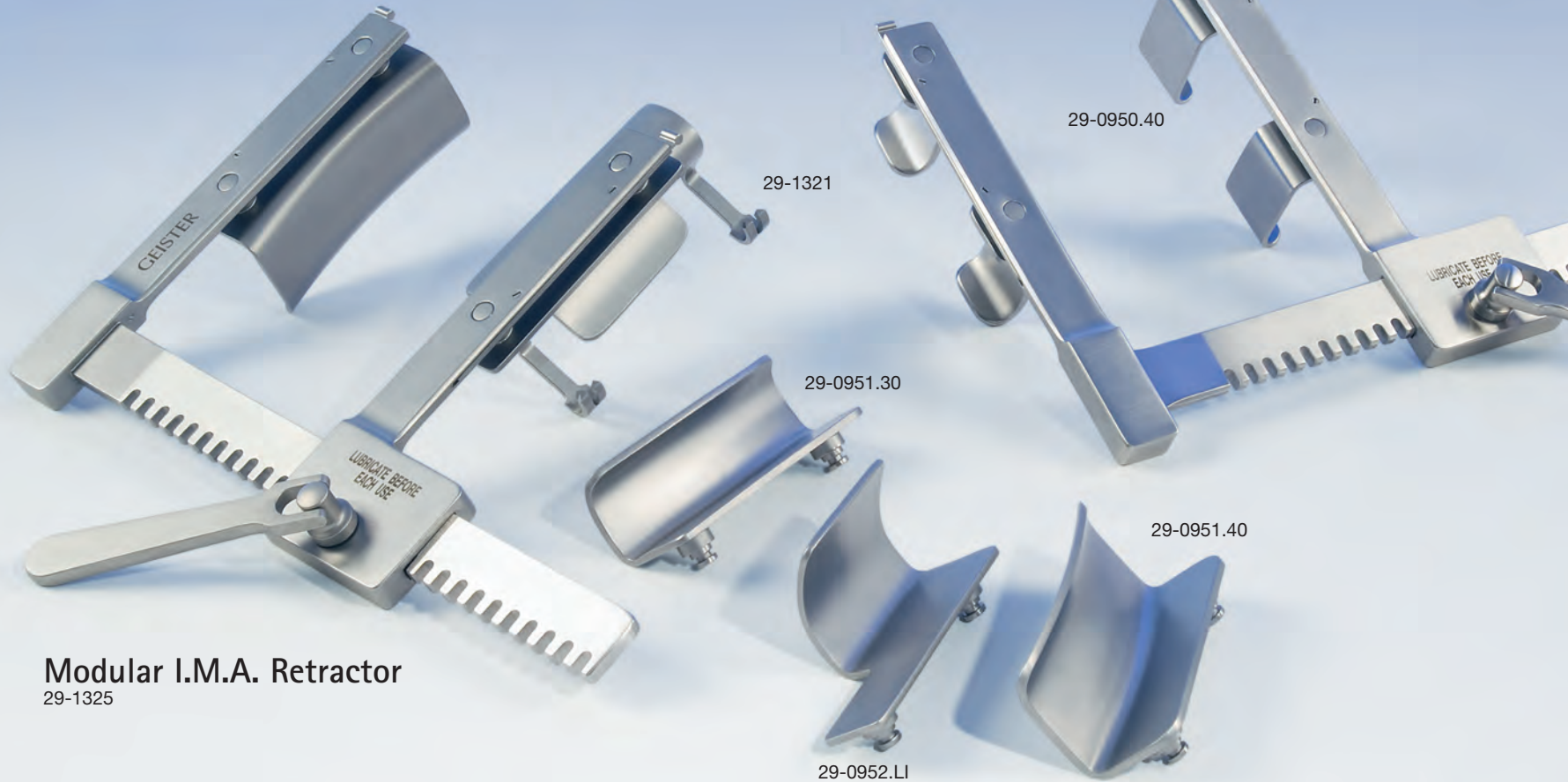
This universal retractor system perfectly covers all requirements of modern cardiothoracic surgery. It comes with one I.M.A. blade with stabilizing screw – converting it into a stable threepoint I.M.A. retractor – as well as with 2 sternum blades and 2 lateral thoracic blades. Optionally available are smaller mini-thoracotomy blades and a t-bar with a wide variety of accessories making it truly **“One for All”**

Developed in cooperation with Dr. Fabio Speroni, German Heart Institute Berlin.



Modular Sternum Retractor

29-0950



29-0950.40

29-1321

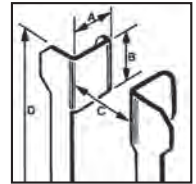
29-0951.30

29-0951.40

29-0952.LI

Modular I.M.A. Retractor

29-1325



29-0950.BD



Modular Sternum Retractor

This compact and fully modular retractor system features a unique quick release system for the blades by simply pulling on the knob at the top of the arms. The valve change is quick and easy. A distance holder between arm and blades allows for easy adaption and free movement of disposable flexible arms. Due to its flat design the retractor can be used from both sides in caudal or cranial position. The retractor comes in its standard version with 4 movable swivel blades, 40 mm deep. Optionally available are shorter 30 mm swivel blades or pairs of large sternum blades.

Art.-No.	A	B	C	D
29-0950	40 mm	28 mm	200 mm	150 mm

29-0950 includes

29-0950.BD	Body only
29-0950.40	Swivel blades (4)

Optional extra blades for 29-0950

29-0950.30	30 mm	28 mm	(4)
29-0951.30	30 mm	100 mm	(2)
29-0951.40	40 mm	100 mm	(2)

Upgrade Kit for I.M.A. see 29-1326

Modular I.M.A. Retractor

Also available is the I.M.A. retractor version utilizing a detachable rake blade for I.M.A. take-down providing for a cost effective and easy to use universal retractor system for Cardiovascular and thoracic surgery. The I.M.A. rake blade is attached to the small I.M.A. rake holder blades (can also be used as small sternum blades or lateral thoracic blades) either on the left or right side. While spreading, the chest wall is lifted up automatically and allows easy preparation of the I.M.A. under excellent visualization.

Art.-No.	A	B	C	D
29-1325			200 mm	150 mm

29-1325 includes

29-0950.BD	Body only
29-1326	I.M.A. Upgrade Kit for 29-0950

29-1326 includes

29-0951.30	30 mm	100 mm	(2)
29-0951.40	40 mm	100 mm	(2)
29-0952.LI	40 mm	60 mm	(1)
29-0952.RE	40 mm	60 mm	(1)
29-1321		100 mm	(1)

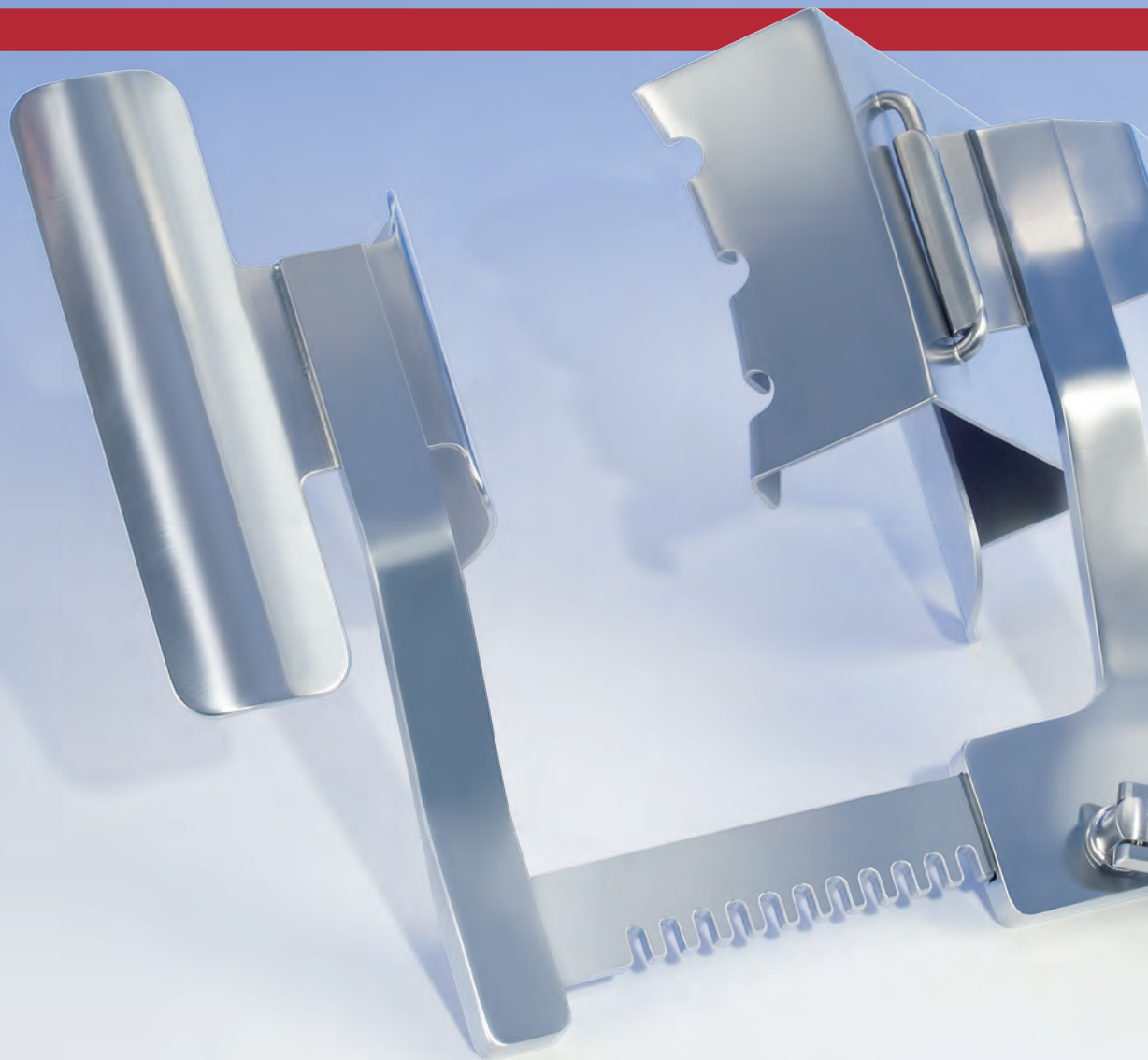
Optional extra blades for 29-1325

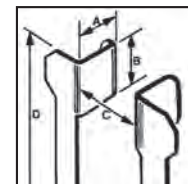
29-0950.30	30 mm	20 mm	(4)
29-0950.40	40 mm	20 mm	(4)



Bugge™
I.M.A. Retractor

29-1010





Bugge™

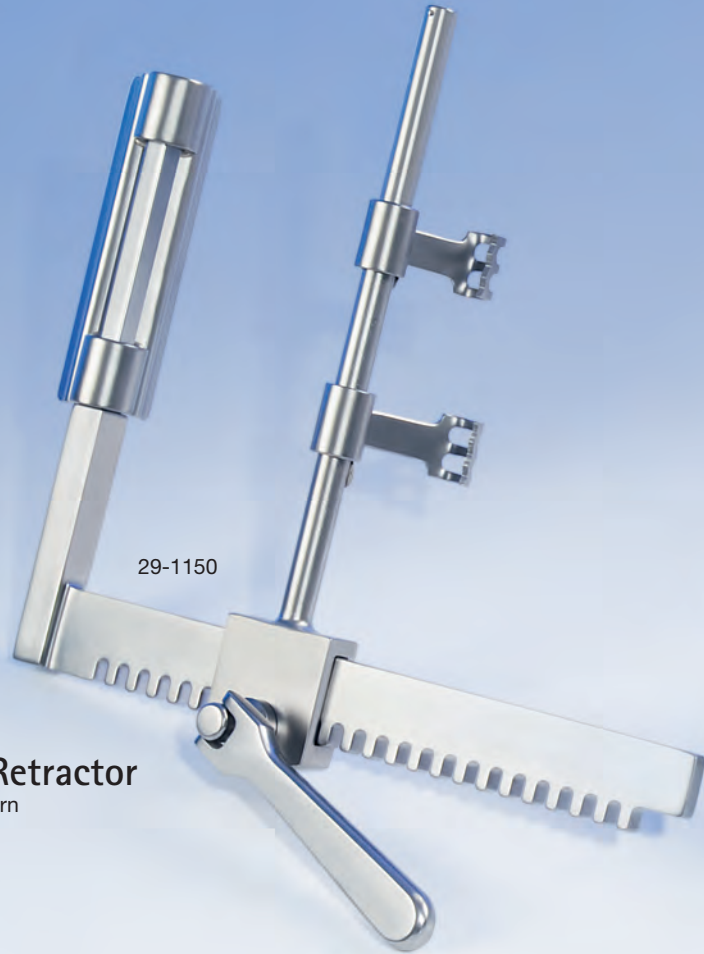
I.M.A. Retractor

This highly efficient and easy to use I.M.A. dissection retractor is placed in the patient after median sternotomy with the larger blade at the chosen donor side to be lifted for I.M.A. harvesting.

Once the blades are opened sufficiently by turning the wheel of the bar, the reinforcing screw can be turned in order to tilt the instrument for lifting the sternum at the side of the larger blade. The I.M.A. dissection can be performed under excellent exposure. Once the I.M.A. dissection is finished the retractor can be removed and a standard sternum retractor can be used for the rest of the operation.

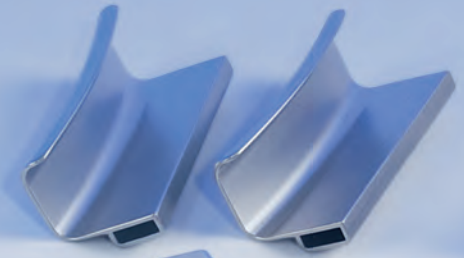
Art.-No.	A	B	C	D	
29-1010	55 mm	100 mm	170 mm	130 mm	regular model
29-1010.JP	50 mm	80 mm	160 mm	130 mm	small model

Developed in cooperation with: Mogens Bugge, M.D., Ph.D., Dept. of Cardiothoracic Surgery, Sahlgrenska Hospital, Gothenburg, Sweden



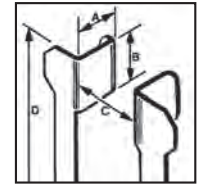
29-1150

I.M.A. Retractor
French pattern



29-1050

GEISTER
LUBRICATED
E.A.



Dubost

Dubost

with 3 pairs of blades

Art.-No.	Fig.	A	B	C	D
29-1050	with 3 pairs of blades			200 mm	175 mm
29-1050.30	L	30 mm	100 mm		
29-1050.40	XL	40 mm	100 mm		
29-1050.50	XXL	50 mm	100 mm		

I.M.A. Retractor French pattern

Art.-No.		A	B	C	D
29-1150	with 3 blades			150 mm	150 mm
29-1150.CB	Sterxnum blade	20 mm	100 mm		
29-1150.CS	Blade short	28 mm	15 mm		
29-1150.CL	Blade long	32 mm	15 mm		

Optional extra blades

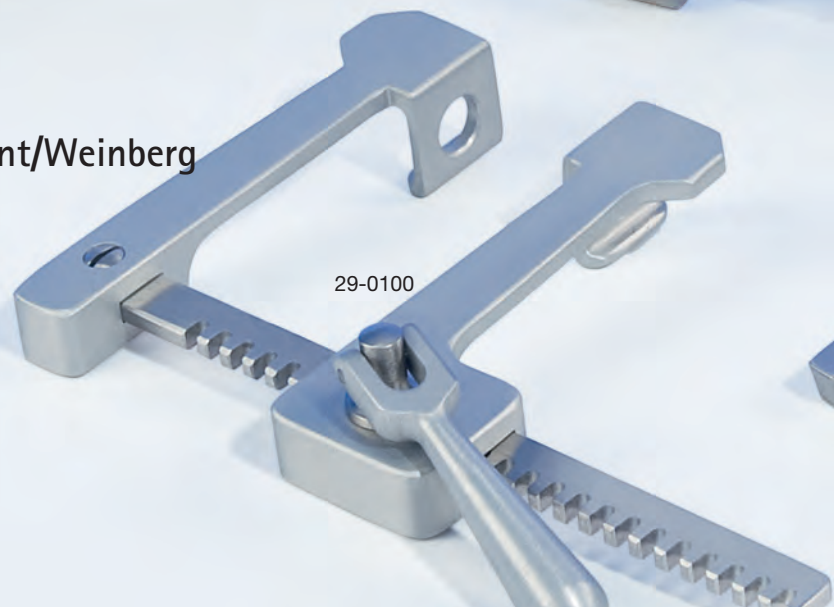
Art.-No.	A	B	C	D
29-1151	38 mm	20 mm		
29-1152	25 mm	100 mm		

This highly efficient and easy to use I.M.A. dissection retractor is placed in the patient after median sternotomy with the larger blade at the chosen donor side to be lifted for I.M.A. harvesting. Once the blades are opened sufficiently by turning the wheel of the bar, the reinforcing screw can be turned in order to tilt the instrument for lifting the sternum at the side of the larger blade. The I.M.A. dissection can be performed under excellent exposure. Once the I.M.A. dissection is finished the retractor can be removed and a standard sternum retractor can be used for the rest of the operation.

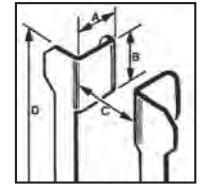


29-0102

Finochietto-Infant/Weinberg
Aluminium



29-0100



29-0105

Finochietto-Baby-Haight

Aluminium

Aluminium

The specific gravity of Aluminium is very low (2.7), approximately only one third of steel (7.8). Therefore, products made of Aluminium are very lightweight. At the same time it has a high tensile strength, which makes it so suitable as durable structural material for spreading instruments. Aluminium is also non-magnetic, corrosion-resistant and recyclable. The surface of our Aluminium Rib Spreaders is anodized for a smooth non-glare appearance. Aluminium requires the use of non-alkaline, neutral cleaning agents in combination with fully demineralized water for cleaning and sterilization. Otherwise damages to the anodized surface are possible. Many of our Aluminium Rib Spreader models are also available in stainless steel alternatively, usually identified by ".RS" behind the article number.

Mini-Finochietto

Steel

29-0090

Fig.

XXS

A

6 mm

B

7 mm

C

37 mm

D

25 mm

Finochietto-Infant/Weinberg

Aluminium

29-0100

Steel

29-0100.RS

Fig.

XS

A

12 mm

B

15 mm

C

70 mm

D

55 mm

29-0102

29-0102.RS

S

12 mm

20 mm

95 mm

75 mm

Mini-Finochietto

Stainless Steel

29-0090

Finochietto-Baby-Haight

Aluminium

29-0105

Steel

29-0105.RS

Fig.

M

A

28 mm

B

30 mm

C

100 mm

D

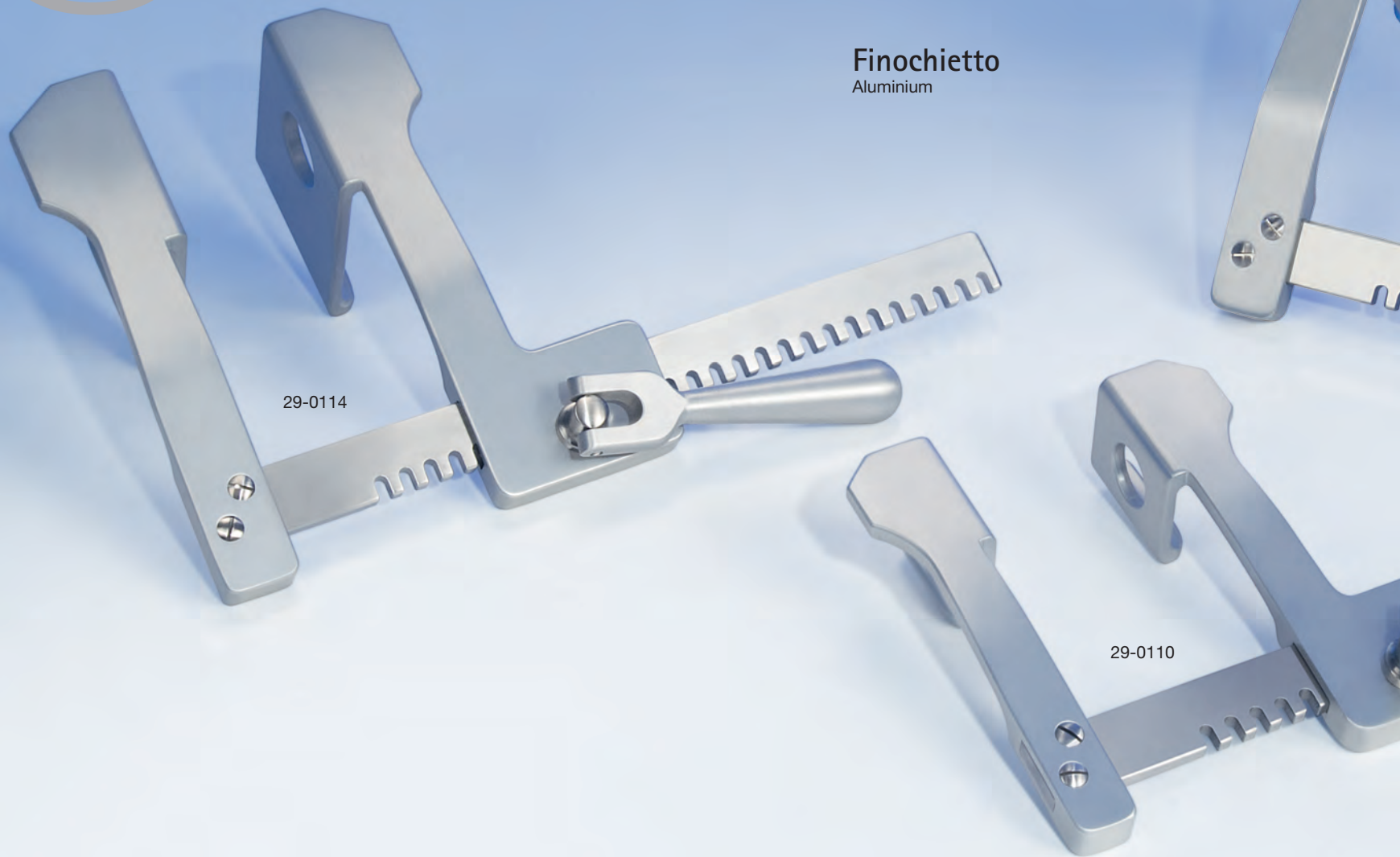
75 mm

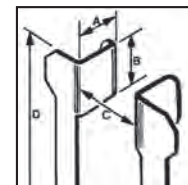


Finochietto
Aluminium

29-0114

29-0110





29-0112



Aluminium

The specific gravity of Aluminum is very low (2.7), approximately only one third of steel (7.8). Therefore, products made of Aluminum are very lightweight. At the same time it has a high tensile strength, which makes it so suitable as durable structural material for spreading instruments. Aluminum is also non-magnetic, corrosion-resistant and recyclable. The surface of our Aluminium Rib Spreaders is anodized for a smooth non-glare appearance. Aluminum requires the use of non-alkaline, neutral cleaning agents in combination with fully demineralized water for cleaning and sterilization. Otherwise damages to the anodized surface are possible. Many of our Aluminium Rib Spreader models are also available in stainless steel alternatively, usually identified by “.RS” behind the article number.

Finochietto

Aluminium	Steel	Fig.	A	B	C	D
29-0110	29-0110.RS	ML	30 mm	45 mm	140 mm	110 mm
29-0112	29-0112.RS	L	42 mm	62 mm	175 mm	140 mm
29-0114	29-0114.RS	XL	75 mm	65 mm	175 mm	140 mm



Cooley
Aluminium



29-1494



29-0134



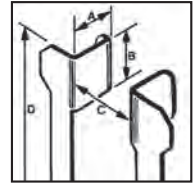
29-0131



29-0129

Aluminium

The specific gravity of Aluminium is very low (2.7), approximately only one third of steel (7.8). Therefore, products made of Aluminium are very lightweight. At the same time it has a high tensile strength, which makes it so suitable as durable structural material for spreading instruments. Aluminium is also non-magnetic, corrosion-resistant and recyclable. The surface of our Aluminium Rib Spreaders is anodized for a smooth non-glare appearance. Aluminium requires the use of non-alkaline, neutral cleaning agents in combination with fully demineralized water for cleaning and sterilization. Otherwise damages to the anodized surface are possible. Many of our Aluminium Rib Spreader models are also available in stainless steel alternatively, usually identified by ".RS" behind the article number.



Cooley

Aluminium	Steel	Fig.	A	B	C	D
29-0130	29-0130.RS	XS	12 mm	15 mm	70 mm	55 mm
29-0129	29-0129.RS	S	14 mm	16 mm	80 mm	55 mm
29-0128*	29-0128.RS	SM	15 mm	20 mm	100 mm	80 mm
29-0131	29-0131.RS	M	15 mm	30 mm	110 mm	80 mm
29-0132	29-0132.RS	ML	20 mm	45 mm	140 mm	110 mm
29-0133	29-0133.RS	L	30 mm	50 mm	135 mm	145 mm
29-0134	29-0134.RS	L	30 mm	50 mm	185 mm	145 mm
29-1494	29-1494.RS	XL	35 mm	100 mm	180 mm	170 mm
29-1496	29-1496	XXL	35 mm	115 mm	230 mm	205 mm

with suture holder

29-1490	29-1490.RS	XL	35 mm	100 mm	180 mm	180 mm
---------	------------	----	-------	--------	--------	--------

* with stabilizing pins in blade



Morse
Aluminium

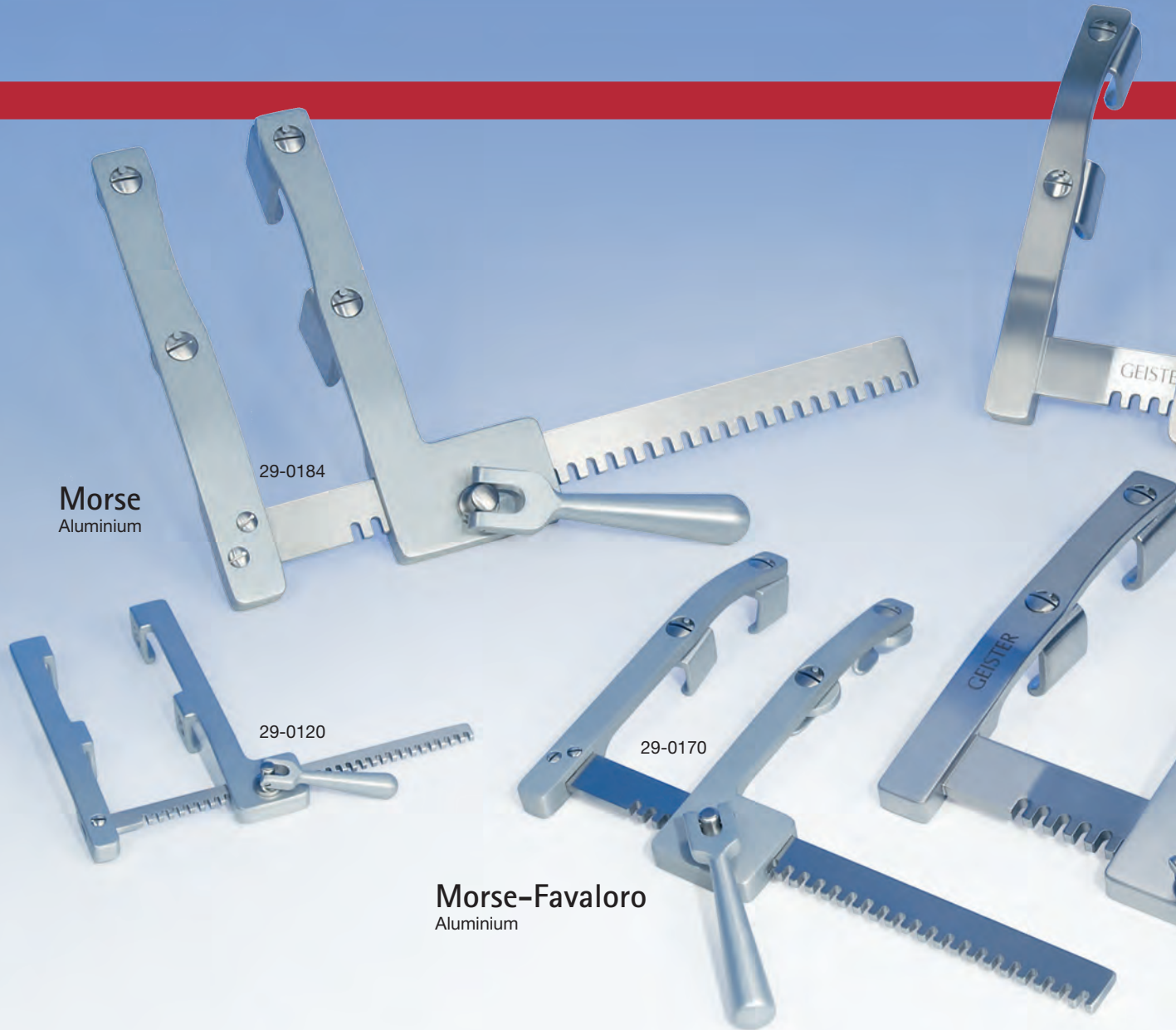
29-0184

Mod. Finochietto
Aluminium

29-0120

Morse-Favaloro
Aluminium

29-0170





Morse Mod. USA

Stainless Steel

29-0183.RS



Morse

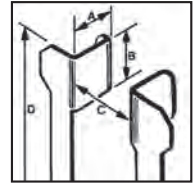
Stainless Steel

29-0182.RS



Aluminium

The specific gravity of Aluminium is very low (2.7), approximately only one third of steel (7.8). Therefore, products made of Aluminium are very lightweight. At the same time it has a high tensile strength, which makes it so suitable as durable structural material for spreading instruments. Aluminium is also non-magnetic, corrosion-resistant and recyclable. The surface of our Aluminium Rib Spreaders is anodized for a smooth non-glare appearance. Aluminium requires the use of non-alkaline, neutral cleaning agents in combination with fully demineralized water for cleaning and sterilization. Otherwise damages to the anodized surface are possible. Many of our Aluminium Rib Spreader models are also available in stainless steel alternatively, usually identified by “.RS” behind the article number.



Mod. Finochietto

Aluminium	Fig.	A	B	C	D	blades
29-0120	S	10 mm	15 mm	120 mm	105 mm	2x2

Morse-Favaloro

Aluminium	Steel					
29-0170	29-0170.RS	M	12 mm	20 mm	155 mm	120 mm 2x2
29-0172	29-0172.RS	L	40 mm	20 mm	155 mm	175 mm 2x2

Morse Mod. USA

Aluminium	Steel					
29-0181	29-0181.RS	M	20 mm	20 mm	155 mm	120 mm 2x2
29-0183	29-0183.RS	L	20 mm	28 mm	210 mm	155 mm 2x2

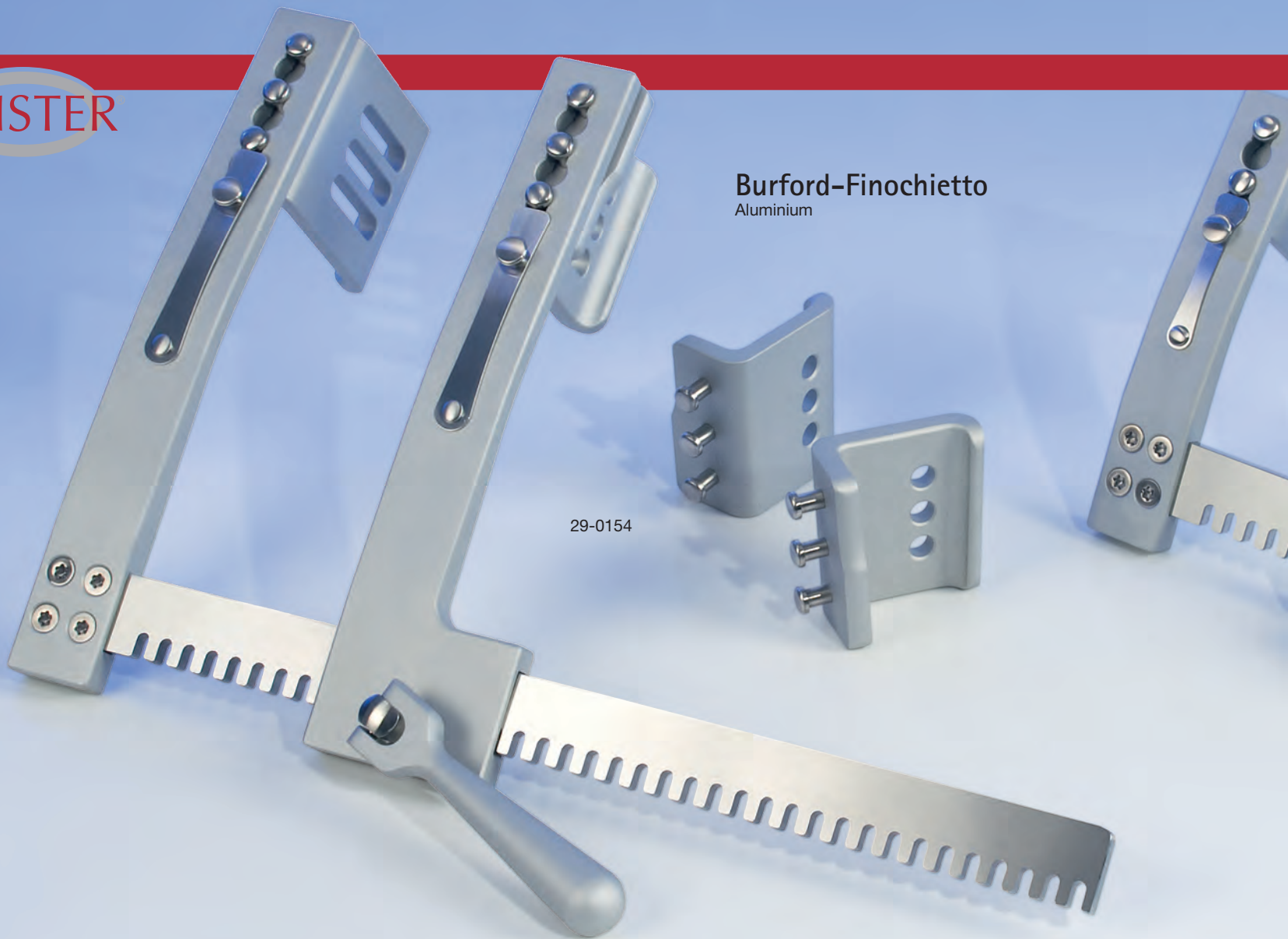
Morse

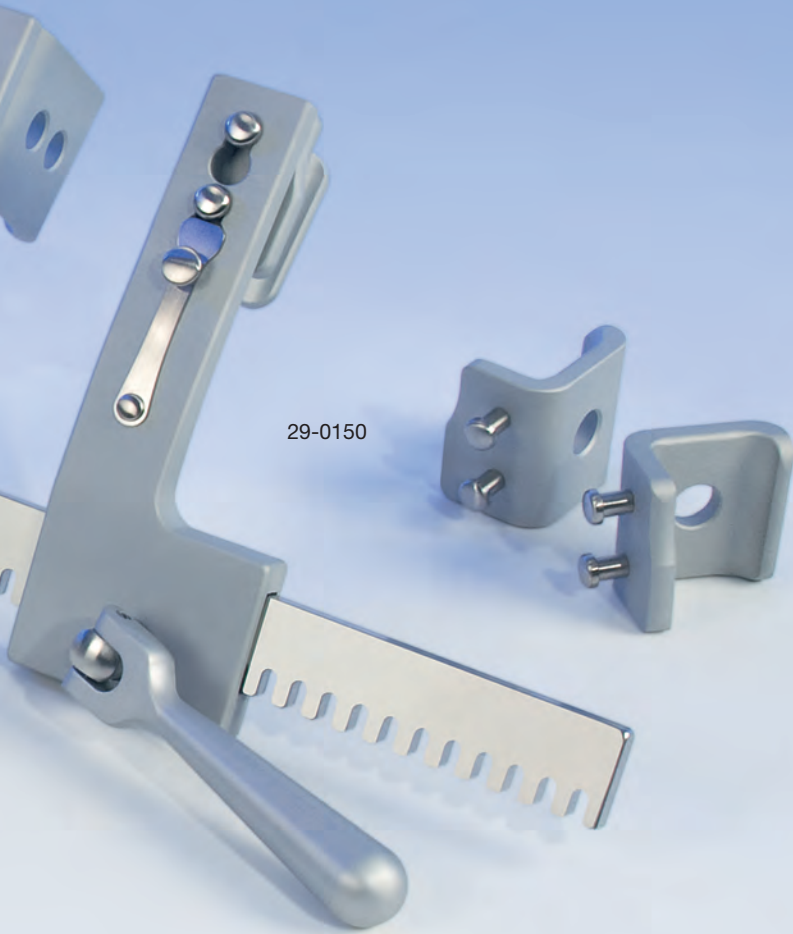
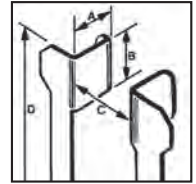
Aluminium	Steel					
29-0180	29-0180.RS	M	20 mm	20 mm	155 mm	120 mm 2x2
29-0182	29-0182.RS	L	20 mm	28 mm	210 mm	155 mm 2x2
29-0184	29-0184.RS	L	30 mm	28 mm	210 mm	155 mm 2x2
29-0185	29-0185.RS	L	42 mm	28 mm	210 mm	155 mm 2x2
29-0186	29-0186.RS	XL	30 mm	35 mm	200 mm	195 mm 3x3



Burford-Finochietto
Aluminium

29-0154





29-0150

Aluminium

The specific gravity of Aluminum is very low (2.7), approximately only one third of steel (7.8). Therefore, products made of Aluminum are very lightweight. At the same time it has a high tensile strength, which makes it so suitable as durable structural material for spreading instruments. Aluminum is also non-magnetic, corrosion-resistant and recyclable. The surface of our Aluminium Rib Spreaders is anodized for a smooth non-glare appearance. Aluminum requires the use of non-alkaline, neutral cleaning agents in combination with fully demineralized water for cleaning and sterilization. Otherwise damages to the anodized surface are possible. Many of our Aluminium Rib Spreader models are also available in stainless steel alternatively, usually identified by ".RS" behind the article number.

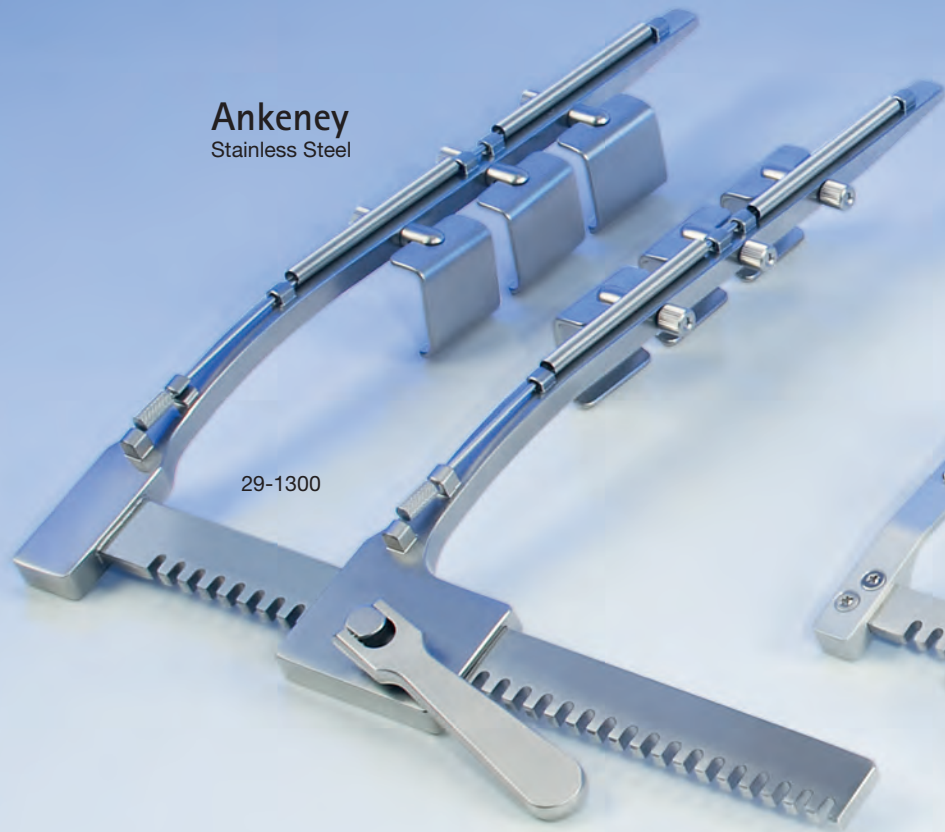
Burford-Finochietto with 2 pairs of blades

Aluminium	Steel	Fig.	A	B	C	D
29-0150	29-0150.RS	ML	41 mm 30 mm	42 mm 42 mm	130 mm	117 mm
29-0152	29-0152.RS	L XL	45 mm 65 mm	62 mm 62 mm	165 mm	200 mm
29-0154	29-0154.RS	L XL	45 mm 65 mm	62 mm 62 mm	250 mm	200 mm
29-0156	29-0156.RS	L XL	45 mm 65 mm	62 mm 62 mm	290 mm	200 mm



Ankeney
Stainless Steel

29-1300



DeBakey
Stainless Steel

29-1370

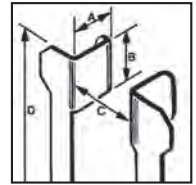


29-1299



Ankeney
Aluminium





Sellors (UK)

Stainless Steel

29-1600

Ankeney

Aluminium	Fig.	A	B	C	D
29-1299	M	20 mm	20 mm	160 mm	115 mm
Steel	Fig.	A	B	C	D
29-1300	XXL	33 mm	35 mm	180 mm	300 mm

optional extra blades

29-1300.42	42 mm	35 mm
29-1300.52	52 mm	35 mm

Spare Springs (Set of 4)

29-1300.FE

DeBaKey with 3 pairs of blades

Steel	Fig.	A	B	C	D
29-1360	XL	40 mm	100 mm	200 mm	225 mm
		50 mm	80 mm		
		60 mm	60 mm		
29-1370	ML	50 mm	50 mm	150 mm	180 mm
		40 mm	40 mm		
		30 mm	30 mm		

Sellors (UK) with 3 pairs of blades and key

Steel	Fig.	A	B	C	D
29-1600	L	38 mm	50 mm	200 mm	195 mm
		45 mm			
		65 mm			



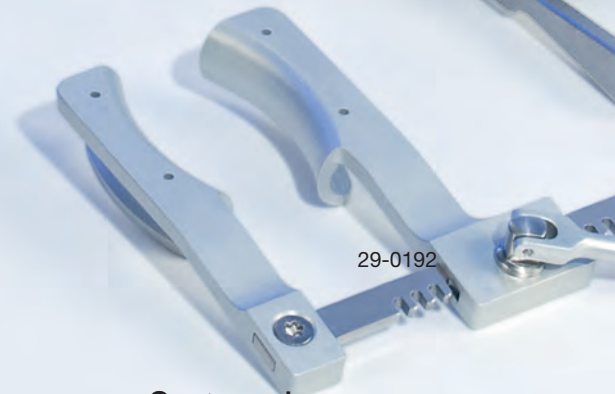
Speroni-Alexi Infant
Stainless Steel



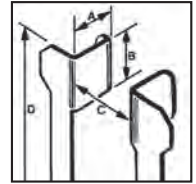
29-0990

29-0197

Castaneda
Aluminium



29-0192



Eufrate-Pasqué

Stainless Steel



29-0195

29-0095

Premie

Titanium

Premie with 2 pairs of blades

Titanium	Fig.	A	B	C	D
29-0095	XS	15 mm 15 mm	10 mm 20 mm	52 mm	40 mm

Castaneda

Aluminium	Steel	Fig.	A	B	C	D
29-0190	29-0190.RS	XS	16 mm	30 mm	65 mm	55 mm
29-0192	29-0192.RS	S	12 mm	45 mm	73 mm	80 mm
29-0194	29-0194.RS	M	15 mm	60 mm	100 mm	125 mm

Speroni-Alexi Infant with 2x4 blades

Steel	Fig.	A	B	C	D
29-0990	S	20 mm 30 mm	20 mm 20 mm	135 mm	120 mm

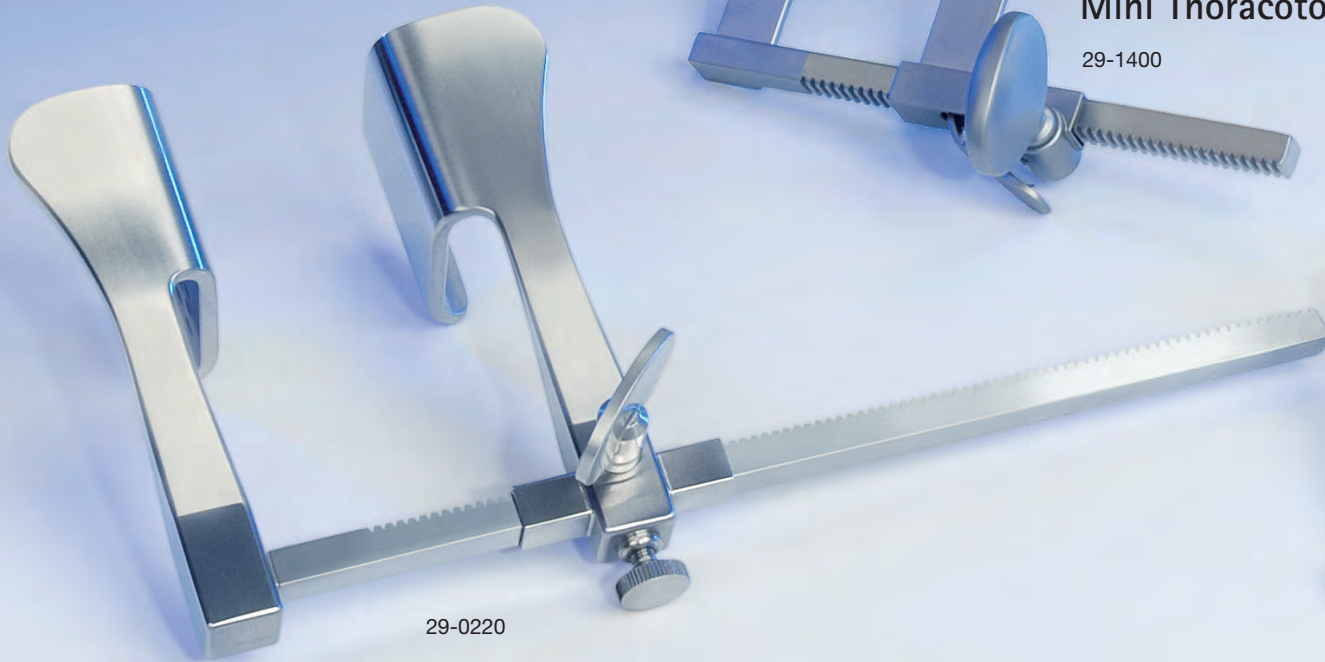
Alexi Tavi

29-0989	M	40 mm 50 mm	20 mm 20 mm	135 mm	120 mm
---------	---	----------------	----------------	--------	--------

Size adjustable with free positionable blades. Usable with 2, 3 or 4 blades. Gently rounded for suture protection.

Eufrate-Pasqué flip-over style

Steel	Fig.	A	B	C	D
29-0195	XS	16 mm	30 mm	65 mm	75 mm
29-0196	S	18 mm	45 mm	80 mm	90 mm
29-0197	M	18 mm	45 mm	90 mm	100 mm
29-0198	L	18 mm	55 mm	90 mm	85 mm



29-0220

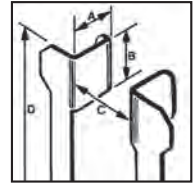
Tuffier



Mini Thoracotomy

29-1400





Rienhoff-Finochietto

29-0230

Baby-Haight

29-0240

Rienhoff-Finochietto

Art.-No.	Fig.	A	B	C	D
29-0230	M	20 mm	25 mm	150 mm	110 mm

Baby-Haight

Art.-No.	Fig.	A	B	C	D
29-0240	S	30 mm	30 mm	85 mm	70 mm
29-0242	M	30 mm	30 mm	120 mm	90 mm

Tuffier

Art.-No.	Fig.	A	B	C	D
29-0220	ML	42 mm	45 mm	170 mm	110 mm

Mini-Thoracotomy

Art.-No.	A	B	C	D
29-1400	38 mm	12 mm	70 mm	90 mm



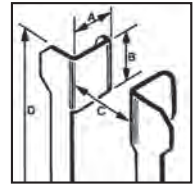
Amato Neonatal Sternal Retractors



29-0905



29-0904



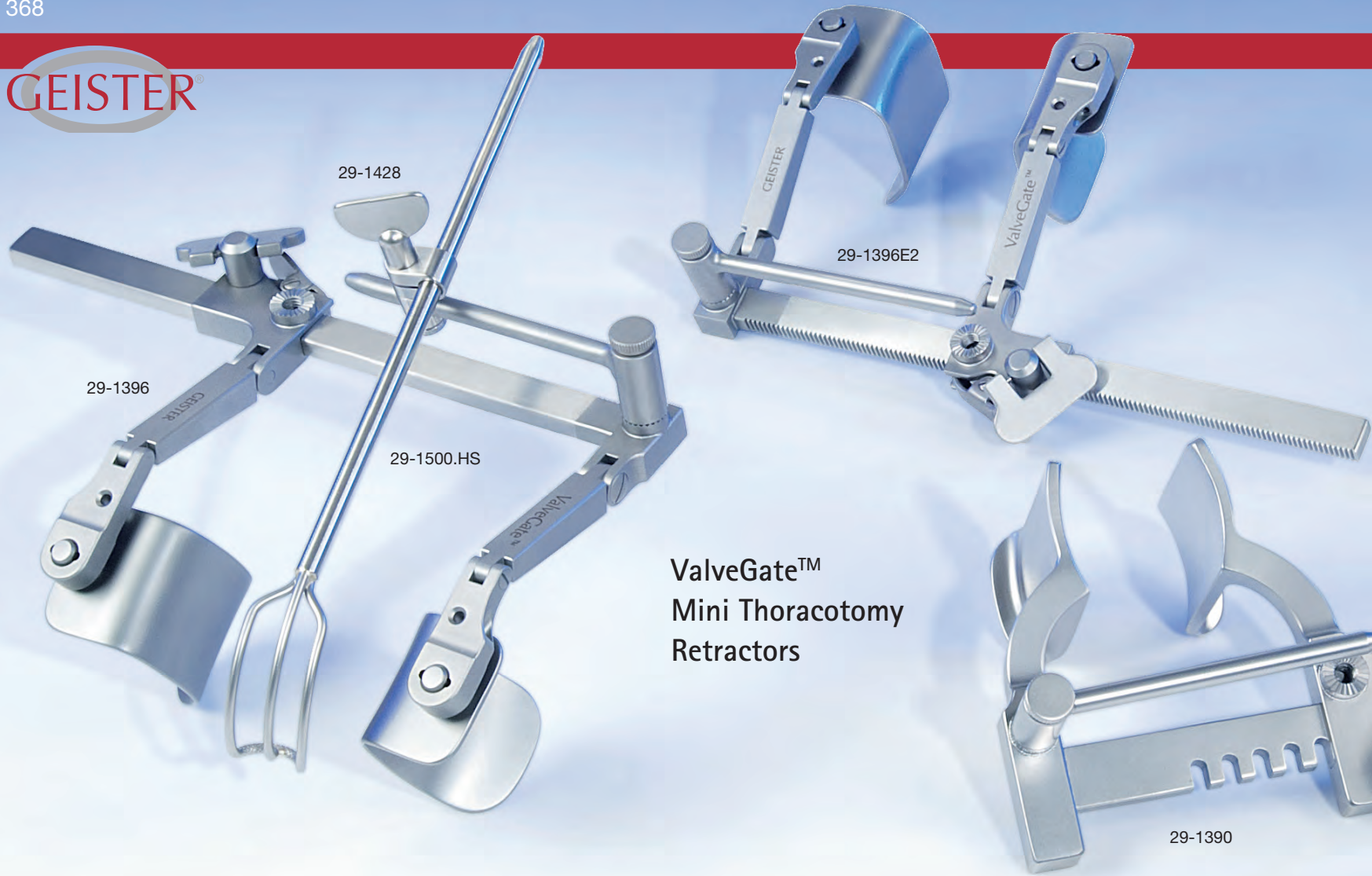
29-0903

Amato Neonatal Sternal Retractors

Specifically designed by Joseph J. Amato (Rush University Medical Center, Chicago, U.S.A.) for use in the infant or small child surgery, the Amato neonatal sternal retractors* are designed to assist in avoiding bowing of the chest by spreading pressure over 2 or 3 points, rather than only one area. The selection of three sizes with arm length of 4 cm, 5.9 cm and 8.9 cm provides flexibility in matching retractor size to the incision.

Art.-No.	Fig.	A	B	C	D	blades
29-0905	SM	14 mm	13 mm	70 mm	89 mm	6
29-0904	S	14 mm	13 mm	70 mm	59 mm	4
29-0903	XS	10 mm	10 mm	60 mm	40 mm	4

* as specified by Joseph J. Amato, Rush University Medical Center, Chicago, Illinois, U.S.A.



29-1428

29-1396

29-1500.HS

29-1396E2

ValveGate™
Mini Thoracotomy
Retractors

29-1390



ValveGate™ Mini-Thoracotomy Retractors 29-1395
 Retractor with straight arms, 40 x 60 mm blades with turnable crossbar (detachable) for accessories

Recommended Accessories:

Extra turnable crossbar		29-1395.TB
Cooley Atrial Hook small, rigid	20 mm	29-1500.HS
Fixation Clamp	Ø 6 mm	29-1428

ValveGate™ Mini-Thoracotomy Retractor 29-1390
 Retractor with curved arms, 36 x 60 mm blades with strong spreading bar and turnable crossbar (detachable) for accessories*

ValveGate™ Mini-Thoracotomy Retractor 29-1396
 Retractor with hinged arms, 2 x 2 exchangeable parallel blades 36 x 38 mm and 36 x 52 mm, turnable crossbar (detachable) for accessories

ValveGate™ Mini-Thoracotomy ** 29-1396E2
 Retractor with hinged arms, 2 x 2 exchangeable tubular 40 x 50 mm and 40 x 70 mm, turnable crossbar (detachable) for accessories*

ValveGate™ Mini-Thoracotomy 29-1396E3
 Retractor with hinged arms, 3 x 2 exchangeable tubular 40 x 30 mm, 40 x 50 mm and 40 x 70 mm, turnable crossbar (detachable) for accessories

* shown with 29-1428 and 29-1500.HS (not included)

** also available with fenestrated blades. Add „M“ behind article number.



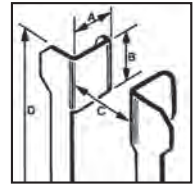
29-1120

29-1121



29-1120 SET

ThoraGate™ Rip Up Retractor



29-1121 SET



Adams-Yozu

29-0930

29-1155

Mini IMA

Mini IMA Retractor, French-type

Art.-No.	A	B	C	D
29-1155	20 mm	24 mm	110 mm	75 mm

Adams-Yozu Retractor

Art.-No.	A	B	C	D
29-0930	55 mm 65 mm	50 mm 50 mm	95 mm	85 mm

small version

29-0929	45 mm 55 mm	40 mm 40 mm	95 mm	85 mm
---------	----------------	----------------	-------	-------

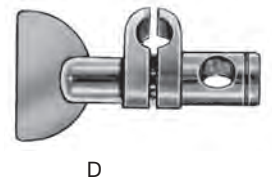
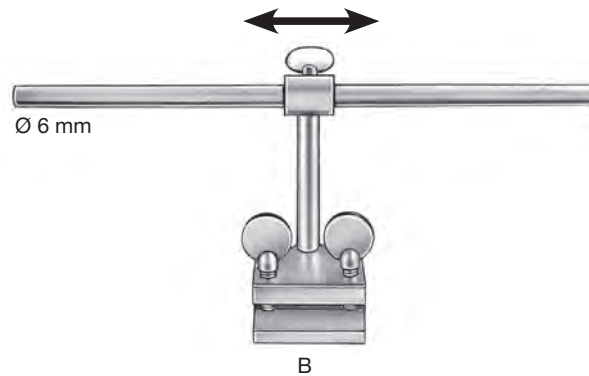
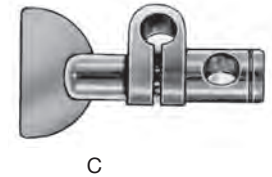
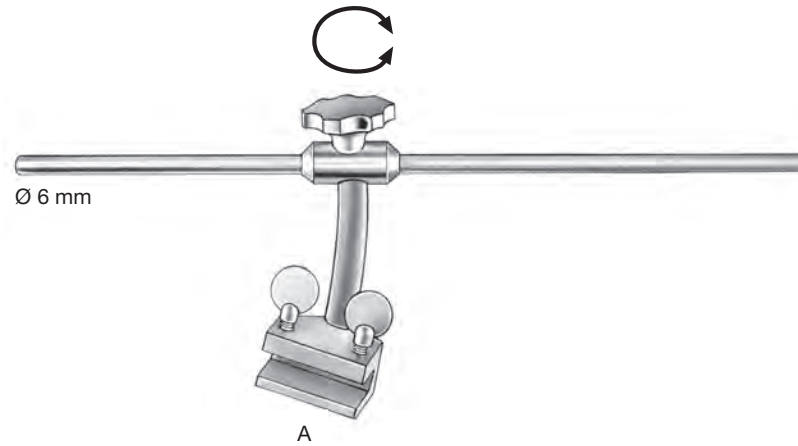
ThoraGate™ Rip Up Retractor (for MIDCAB a.o.)

- + stable rib elevation
- + facilitates harvesting
- + excellent exposure
- + larger operating area
- + choice of 2 lower blades
- + choice of 3 upper blades

Art.-No.	Art.-No.	A	B	C	D
left side open	right side open				
29-1120	29-1121	120 mm	20 mm	95 mm	115 mm
		96 mm	20 mm		
		75 mm	20 mm		
		45 mm	20 mm		
		35 mm	20 mm		



T-bars and Fixation Clamps

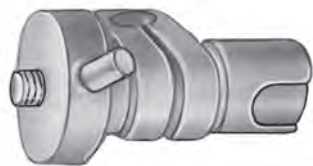
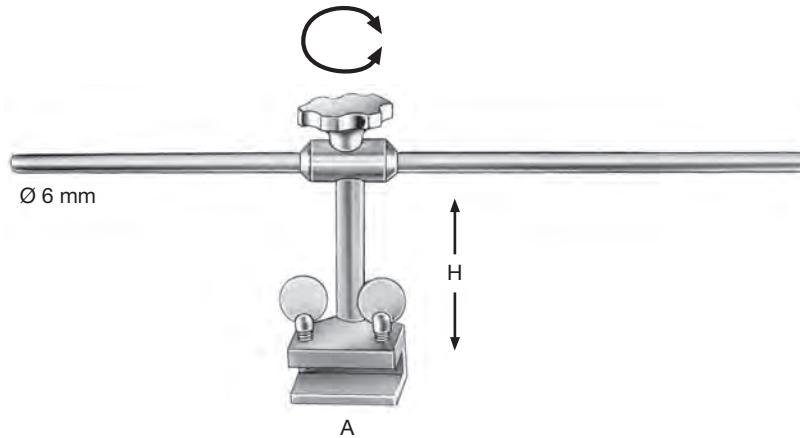


T-bars and Fixation Clamps

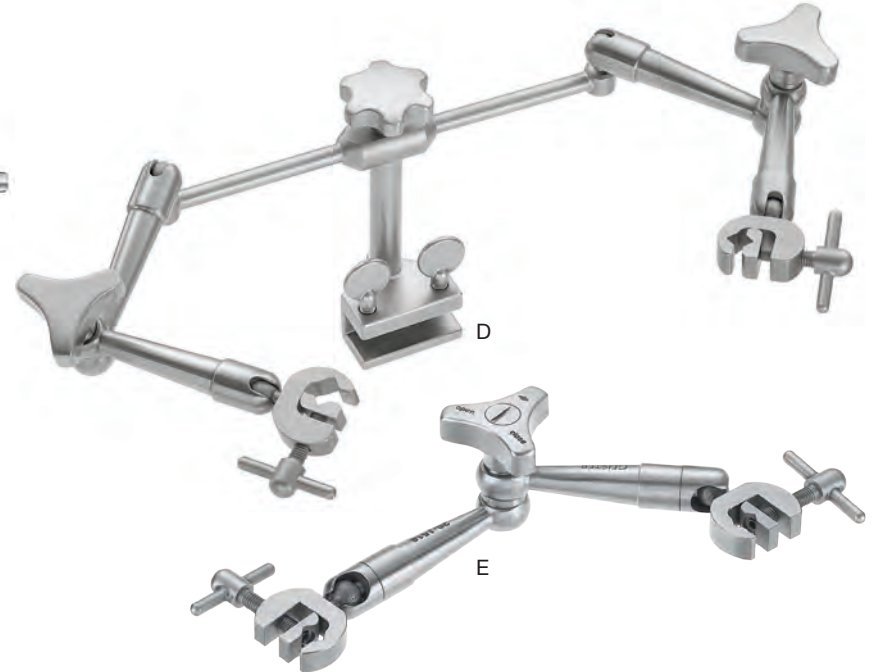
Art.-No.	Fig.	Ø	
29-1005.TB	A	6 mm	250 mm/10"
29-1414	B	6 mm	180 mm/7"
29-1428	C	6 mm	
29-1429	D	6 mm	splitted



T-bars and Fixation Clamps



Mini Iron-Assistant™

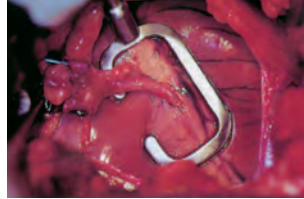


T-bars and Fixation Clamp

Art.-No.	Fig.	Ø	H
29-1005.TS	A	6 mm	250 mm/10''
29-1005.TL			
29-1511	B	6 mm	
29-1500.FC	C	6 mm	

Mini Iron-Assistant™

Art.-No.	Fig.	H
29-1515	D	60
29-1516	E	

Lectiang Stabilizer, large**Lectiang Stabilizer, small**

**Lectiang Stabilizer
large**
Art.-No.
29-1436

**Lectiang Stabilizer
small**
Art.-No.
29-1438



Fork Stabilizer



Multipurpose Spatula



Bulldog Clamp / Vascular Holder



Fork Stabilizer

Art.-No.

29-1435

Multipurpose Spatula

Art.-No.

29-1437

Bulldog Clamp/Vascular Holder

Art.-No.

29-1440

Ross Retractor

serrated



Marberger Retractor



Ross Retractor serrated, 25 cm

Art.-No.

29-1471	16 x 16 mm	small
29-1472	24 x 14 mm	medium
29-1473	24 x 17 mm	large

Marberger Retractor, 23 cm

Art.-No.

29-1445	17 mm	small
29-1446	20 mm	medium
29-1447	23 mm	large

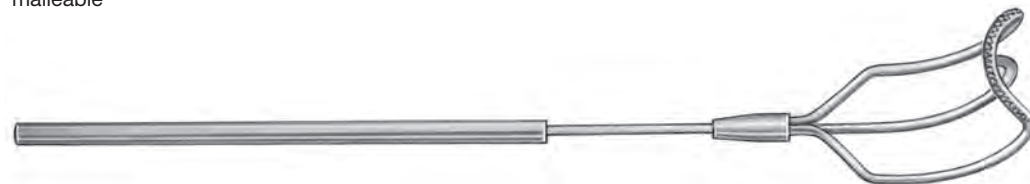
Cooley Rake Retractor malleable, 26 cm

Art.-No.

29-1430	20 mm	small
29-1431	35 mm	medium
29-1432	45 mm	large

Cooley Rake Retractor

malleable





Cooley Rake Retractor

rigid



29-1500.HS



29-1500.HT

Malleable Rake Retractor



Malleable Illumination Arm



Cooley Rake Retractor rigid, 23 cm

Art.-No.

29-1500.HS	20 mm	small
29-1500.HM	35 mm	medium
29-1500.HT	45 mm	tricuspid
29-1500.HL	45 mm	large

Malleable Rake Retractor, 23 cm

Art.-No.

29-1500.BH

Malleable Illumination Arm

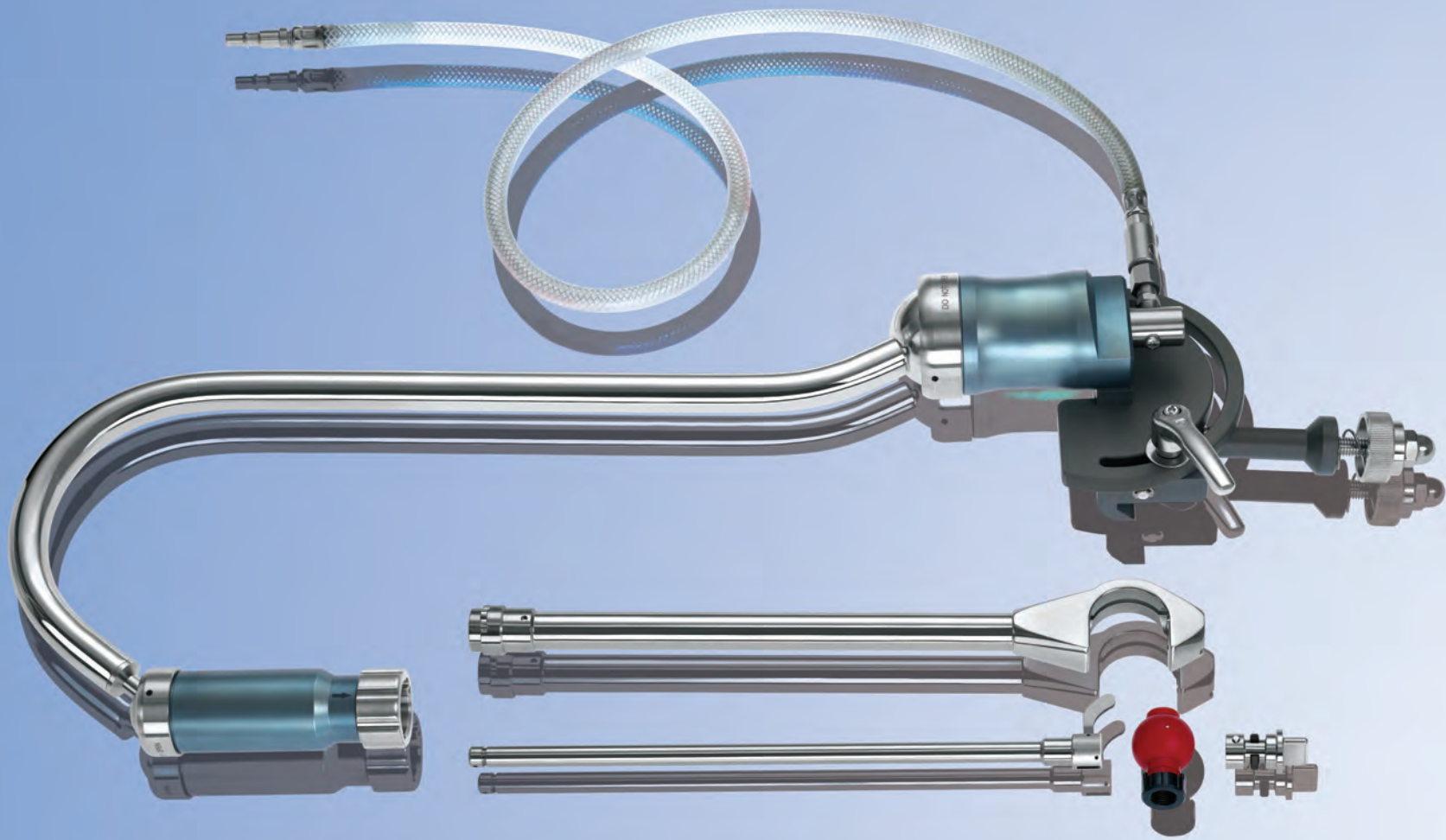
fits onto almost all available rib spreaders.

Art.-No.

29-1215

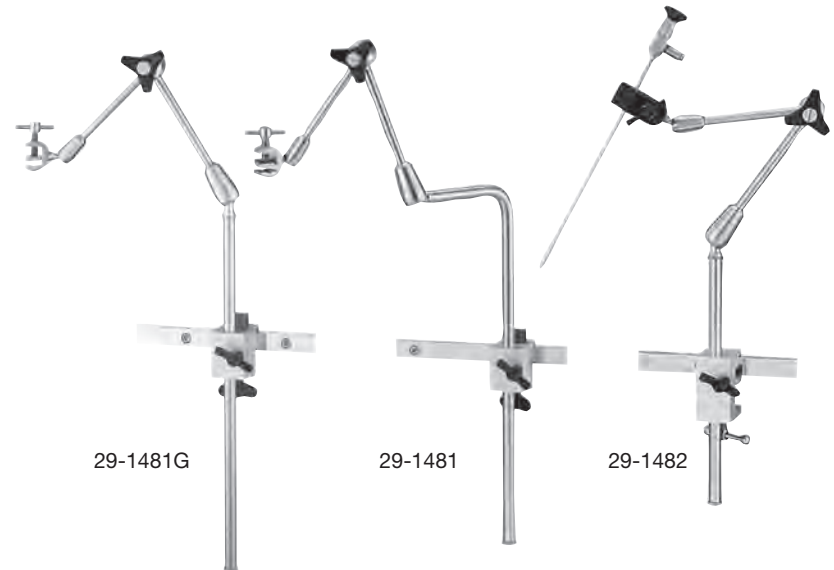
Storz-type connector

GEISTER





29-5000 Iron-Assistant™ Pneumatic Endoscope Holder
for direct connection with the compressed air supply in the OR (working pressure 5 bar up to 7 bar). Enables instantaneous and unlimited one-hand manipulation of an endoscope or tube shaft instrument within the operating field followed by total steadiness and stability under load once in the „locked“ position. Easy handling and highest reliability due to the one-hand concept with only 3 hinges and the use of titanium components for weight reduction. The pneumatic arm can be easily attached to the OR table rail and is autoclavable completely or partially (if draping is preferred) for quick sterile set-up.



29-1481G

29-1481

29-1482

29-1481G
29-1481
29-1481/I
29-1482
29-1482/I

Iron-Assistant™ Instrument Holder, extra long straight bar
Iron-Assistant™ Instrument Holder, L-shaped bar
ditto, insulated for use with HF-surgery
Iron-Assistant™ Endoscope Holder, straight bar
ditto, insulated for use with HF-surgery



Universal Table Mounted Retractor System



Universal Table Mounted Retractor System

A multipurpose retractor featuring independently moveable arms. The unique multi-plane positioning allows for virtually unlimited angle and retractor blade placement. Quick-connect blade clamps feature Fast-Lock turret design.

+ Universal Positioning Frame with Independently Moving Arms

More options for positioning than a fixed frame system

+ Locking Pivotal Neck

Move complete retractor set-up with the push of a button

+ Traditional Side Rail Attachment

Familiar setup procedure

+ Equipped with a Variety of Retractor Blades

Adaptable to virtually any open procedure

+ Now Available with Bariatric Blades

See reverse side for sizes and types of retractors for bariatric use

+ Retractor arms can be independently moved in all directions and tightened into position.

Complete Universal Retractor System

30-4000

Includes:

- (1) 30-4010 Retractor Frame
- (1) 30-4016 Table Clamp with vertical post
- (1) 30-4025 Post Coupling
- (6) 30-4031 Retractor Clamp
(over-the-post, snap-on version)
- (6) Standard Retractor Blades
(1 each, see next column)

Optional extras:

- 30-4027 Extension Bridge to connect the frame ends
(Liver Bridge)
- 30-4030 Retractor Clamp (slide-on)

Standard Retractor Blades:

- 30-4050 Balfour, 25/8" x 3" (6.5 x 7.5 cm)
- 30-4052 Harrington, Standard
- 30-4055 Malleable 8" x 3" (20 x 7.5 cm)
- 30-4056 Malleable 6" x 2" (15 x 5 cm)
- 30-4060 Kelly 2" x 3" (5 x 6.5 cm)
- 30-4061 Kelly 2" x 4" (5 x 10 cm)

Optional Bariatric Blades:

- 30-4053 Harrington 31/2" x 8" (9 x 20 cm)
- 30-4057 Malleable 3" x 10" (7.5 x 25 cm)
- 30-4058 Malleable 4" x 12" (10 x 30 cm)
- 30-4062 Kelly 21/2" x 10" (6.5 x 25 cm)
- 30-4070 Joe's Hoe 31/2" x 61/2" (9 x 17.5 cm)
- 30-4075 Deaver 4" x 7" (10 x 18 cm)



Buchmeister™ Table Mounted Abdominal Retractor System

Buchmeister™ table mounted Abdominal Retractor System

- + Provides multi-directional surgical site exposure
- + Applicable in a wide variety of abdominal procedures
- + Easy to assemble
 - consisting of solid and segmented rings, two types of horizontal bars, tilt and non-tilt ratchets and a wide selection of rigid and malleable blades
- + Use can be easily expanded by adding extra accessories
 - e.g. IMA accessories or Rectal Surgery accessories
- + Traditional Side Rail Attachment
 - familiar setup procedure

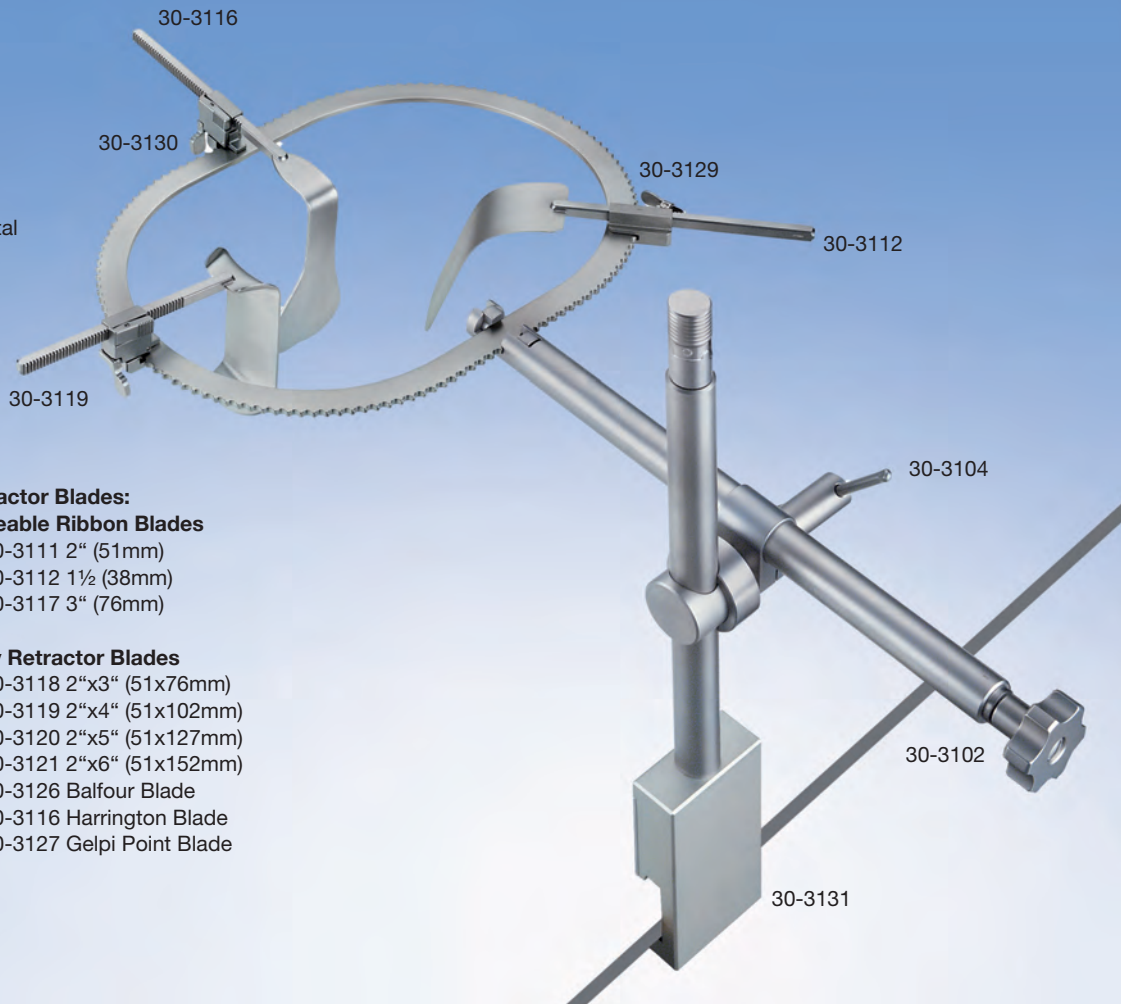
01-1550 Buchmeister™ Abdominal Retractor - Basic Kit

Includes:

- (1) 30-3131 Table Clamp with vertical post
- (1) 30-3102 Horizontal Bar
- (1) 30-3132 Horizontal Flex Bar
- (1) 30-3104 1" Post Coupling
- (2) 30-3129 Standard Ratchet Mechanism
- (6) 30-3130 Tilt Ratchet Mechanism
- (1) 30-3107 Oval Ring, medium size
- (1) 30-3133 Segmented Ring

Optional:

- 77-5000 Container Set (2 boxes) for Buchmeister™ Retractor System and its accessories



Retractor Blades:

Malleable Ribbon Blades

- (2) 30-3111 2" (51mm)
- (2) 30-3112 1½" (38mm)
- (2) 30-3117 3" (76mm)

Kelly Retractor Blades

- (1) 30-3118 2"x3" (51x76mm)
- (1) 30-3119 2"x4" (51x102mm)
- (1) 30-3120 2"x5" (51x127mm)
- (1) 30-3121 2"x6" (51x152mm)
- (1) 30-3126 Balfour Blade
- (1) 30-3116 Harrington Blade
- (1) 30-3127 Gelpi Point Blade

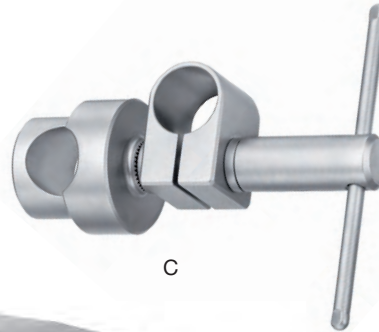
Buchmeister™ Table Mounted Abdominal Retractor System



A



B



C



D



E



F



G

H

Order information

Art.-No.	Fig.	
30-3130	A	Tilting Ratchet Mechanism
30-3129	B	Standard Ratched Mechanism
30-3104	C	Post Coupling 1" (25mm)
30-3132	D	Horizontal Flex Bar 360° rotation
30-3102	E	Horizontal Bar 1" (25mm)
30-3103		Vertical Extension Bar 1" (25mm) Length: 12" (305mm)
30-3131	F	Table Post 1" (25mm)

Retractor Blades

Art.-No.	Fig.	
30-3116	G	Harrington Blade 2½"x5½" (63x143mm)
30-3118	H	Kelly Blade, 2"x3" (51x76mm)
30-3119	H	Kelly Blade, 2"x4" (51x102mm)
30-3120	H	Kelly Blade, 2"x5" (51x127mm)
30-3121	H	Kelly Blade, 2"x6" (51x152mm)
30-3122	H	Kelly Blade, 2"x2½" (51x63mm)
30-3113		Kelly Blade, 2"x2" (51x51 mm)
30-3115		Kelly Blade, 2"x1½" (51x38mm)
30-3124		Kelly Blade 1"x1½" (25x38mm)
30-3125		Kelly Blade 1"x2½" (25x63mm)



Retractor Blades

Art.-No. Fig.

30-3126	A	Balfour Blade 2½"x3" (67x76mm)
30-3135	B	Rectal Blade, small 3" (73mm)
30-3136	B	Rectal Blade, large 4" (98mm)
30-3127	C	Gelpi Point Blade, sharp
30-3111	D	Malleable (Ribbon) Blade, 2" (51mm)
30-3112	D	Malleable (Ribbon) Blade, 1½" (38mm)
30-3117	D	Malleable (Ribbon) Blade, 3" (76mm)
30-3192		Deaver Blade, small 1"x3½" (5x89mm)
30-3193		Deaver Blade, large 1"x 5" (25x127mm)
30-3197		Richardson Blade ¾"x1" (19x25mm)
30-3198		Richardson Blade ¾"x2" (19x51mm)
30-3199		Richardson Blade 1"x1¼" (25x32mm)
30-3191		Lateral Blade 1"x3" (25x76mm)
30-3194		Posterior Blade 1"x4½" (25x114 mm)



A



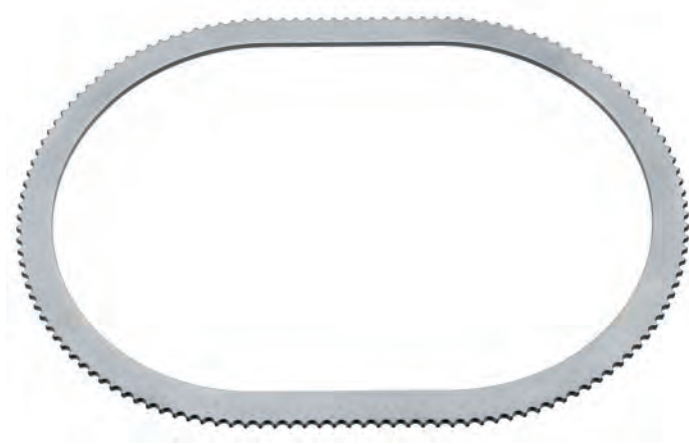
B



C



D



A



B



C

Rings

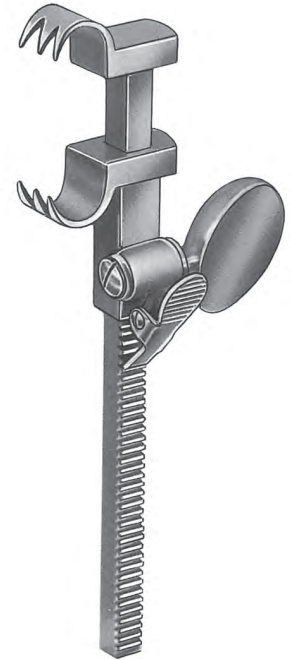
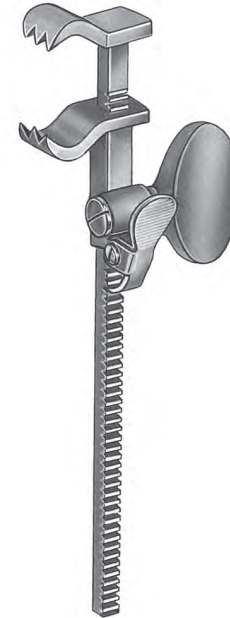
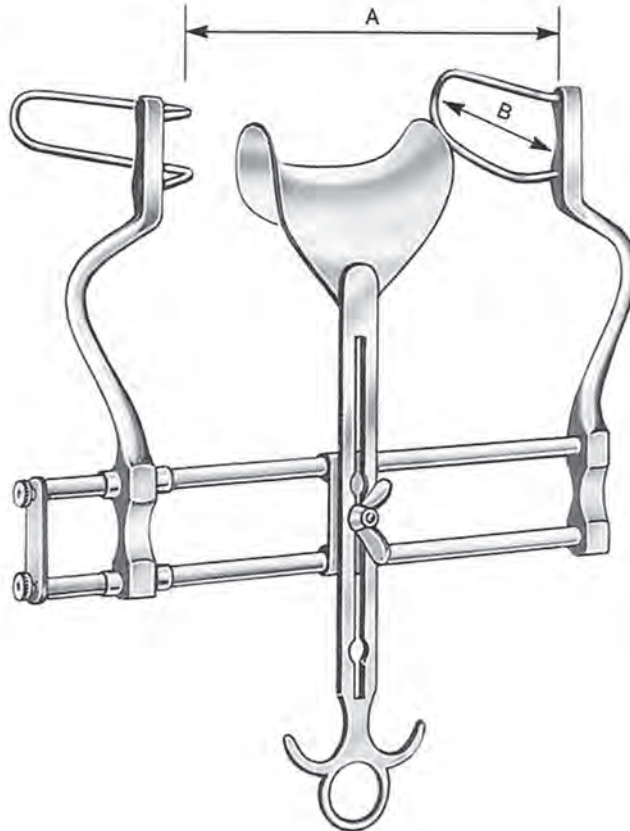
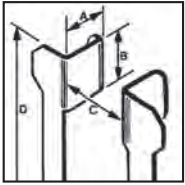
Art.-No.	Fig.	Description
30-3106	A	Oval Ring, large 12"x18½" (267x470mm)
30-3107	A	Oval Ring, medium 10x14½" (267x368mm)
30-3108	A	Oval Ring, small 8"x12¼" (203x311mm)
30-3110	B	Round Ring, large 12½" (317mm)
30-3109	B	Round Ring, medium 10½" (266mm)
30-3134	B	Round Ring, small 8½" (216 mm)
30-3138	C	Segmented Ring, large 12½"x19½" (317x495mm)
30-3133	C	Segmented Ring, medium 10½"x19½" (266x495mm)
30-3137	C	Segmented Ring, small 8½"x14" (216x356mm)
30-3215	C	Segmented Ring, spinal 8½" (216mm)



Balfour

Bailey-Baby

Bailey

**Balfour**

Art.-No.	A	B
30-2330	160 mm	70 mm
30-2335	250 mm	100 mm

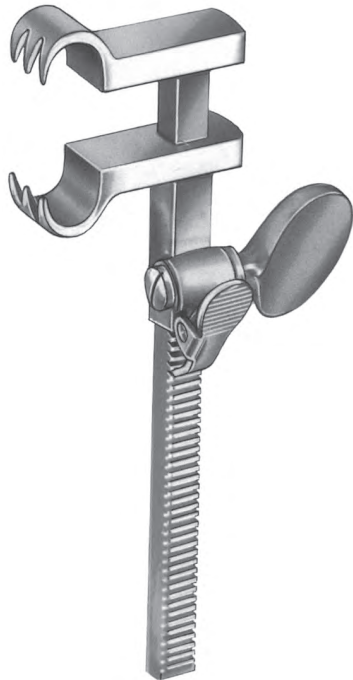
Bailey-Baby

Art.-No.	Length
29-0340	150 mm/6"

**Bailey
short arm**

Art.-No.	Length
29-0320	165 mm/6¼"

Bailey-Gibbon



Sellors



Lemmon


Bailey-Gibbon
long arm

Art.-No.	Length
29-0325	165 mm/6¼"

Sellors

Art.-No.	Length
29-0310	200 mm/8"

Lemmon

Art.-No.	Length
29-0330	180 mm/7"



Izzat Spring Retractor

Optimal performance of vascular valve repair or replacement requires:

1. Full exposure of the vascular root.
2. Symmetrical retraction of all vascular sinuses to avoid distortion of the vascular root.
3. Stability of retraction throughout the procedure.





The **Izzat Spring Retractor*** is designed to achieve all three goals. Three specifically designed blades are joined together to achieve 360 degrees radial retraction. The inter-connecting springs apply equal tension to all three sinuses and ensure maintenance of the natural shape of the vascular root.

The self-retaining design of the Spring Retractor ensures its stability throughout the procedure, and avoids the need for its repositioning during surgery.

The Spring retractor is available in two sizes to fit the wide range of vascular root sizes.

Order information:

- 30-1050 Izzat Spring Retractor large 8,5 cm 10 mm
- 30-1051 Izzat Spring Retractor small 8,5 cm 6 mm
- 30-1055 Izzat Spring Retractor Applicator 20 cm



*Developed in cooperation with Professor M. Bashar Izzat, FRCS(CTH), Damascus, Syria

Spring Retractor



Spring Retractor

3 x 3 blunt prongs

Art.-No.	Size	Length
30-1001	Mini	25 mm
30-1002	Small	31 mm
30-1003	Medium	38 mm
30-1005	Large	54 mm

3 x 3 sharp prongs

30-1001.SH	Mini	25 mm
30-1002.SH	Small	31 mm
30-1003.SH	Medium	38 mm
30-1005.SH	Large	54 mm

Finsen Spring Retractor

2 x 3 blunt prongs

Art.-No.	Size	Length
30-1011	Large	50 mm
30-1013	Extra-Large	70 mm

2 x 3 sharp prongs

30-1010	Large	50 mm
30-1012	Extra-Large	70 mm

Nitinol Spring Retractor

with superelastic memory effect

5 x 5 semi-sharp prongs

Art.-No.	Size	Length	pressure
30-1019	Medium	40 mm	1.8N
30-1020	Medium	40 mm	1.2N
30-1021	Medium	40 mm	0.6N

Spring Wire Retractor

1 x 1 semi-sharp prongs

Art.-No.	Size	Length
30-1000	Medium	40 mm

Finsen Spring Retractor



Nitinol Spring Retractor

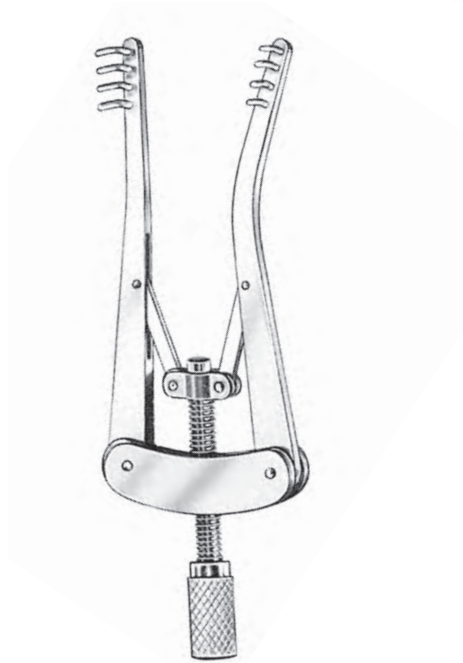
with superelastic memory effect



Spring Wire Retractor



Alm



Weitlaner

**Alm**

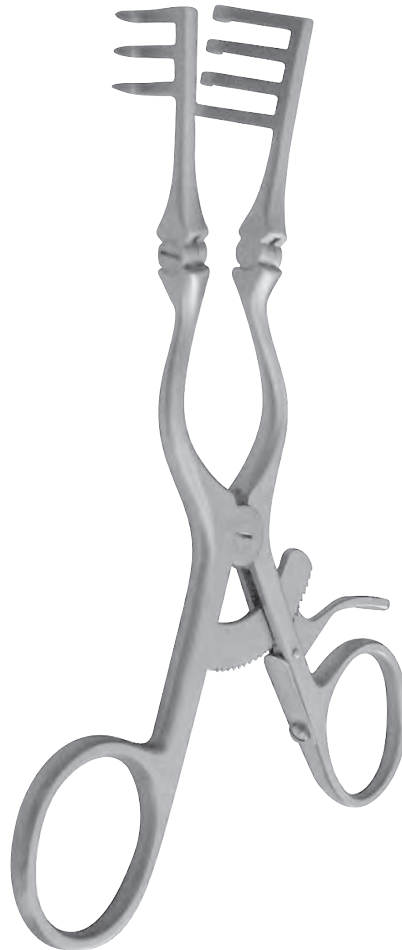
Art.-No.		Length
30-0900	sharp	10 cm/4"
30-0910	sharp	7 cm/2½"
30-0901	blunt	10 cm/4"
30-0911	blunt	7 cm/2½"

Weitlaner

Art.-No.		Length	prongs
30-0590	sharp	11 cm/4¼"	2 x 3
30-0600	sharp	13 cm/5"	3 x 4
30-0605	sharp	16 cm/6¼"	3 x 4
30-0610	sharp	20 cm/8"	3 x 4
30-0615	sharp	25 cm/10"	3 x 4
30-0601	semi-sharp	13 cm/5"	3 x 4
30-0606	semi-sharp	16 cm/6¼"	3 x 4
30-0611	semi-sharp	20 cm/8"	3 x 4
30-0616	semi-sharp	25 cm/10"	3 x 4
30-0592	blunt	11 cm/4¼"	2 x 3
30-0602	blunt	13 cm/5"	3 x 4
30-0607	blunt	16 cm/6¼"	3 x 4
30-0612	blunt	20 cm/8"	3 x 4
30-0617	blunt	25 cm/10"	3 x 4



Cone



West's (UK)

**Cone**

Art.-No.		Length	prongs
30-0640	sharp	13 cm/5"	3 x 4
30-0642	sharp	16 cm/6¼"	3 x 4
30-0644	sharp	20 cm/8"	3 x 4
30-0641	blunt	13 cm/5"	3 x 4
30-0643	blunt	16 cm/6¼"	3 x 4
30-0645	blunt	20 cm/8"	3 x 4

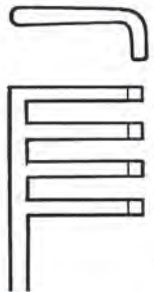
West's (UK)

Art.-No.		Length	prongs
30-0599		14 cm/5½"	3 x 4

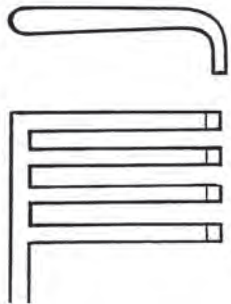
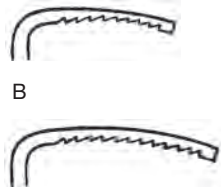
Henly

This modification of the Weitlaner retractors offers improved exposure in femoral, popliteal, and carotid positions through attachment of a third blade. It is also very useful for hernia repair.

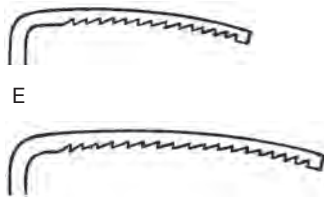
Self-retaining



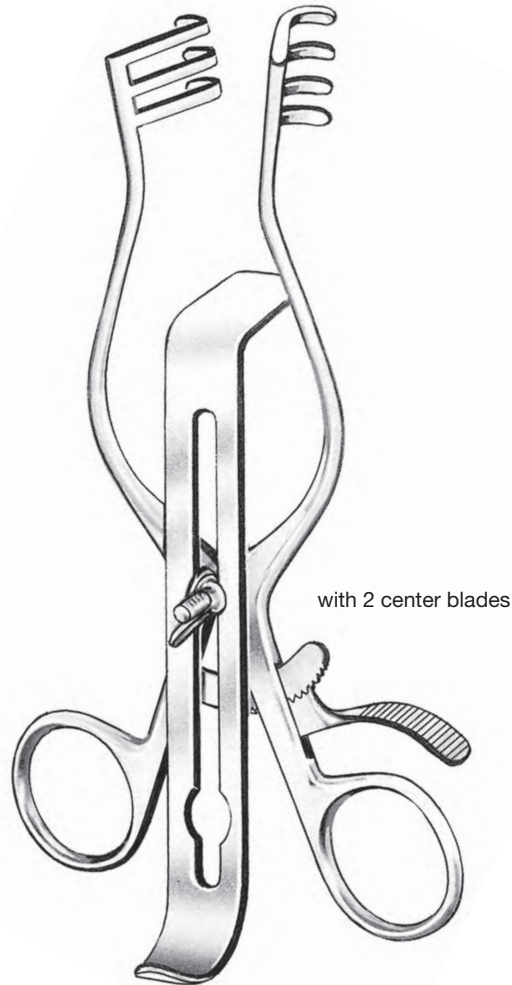
A



D



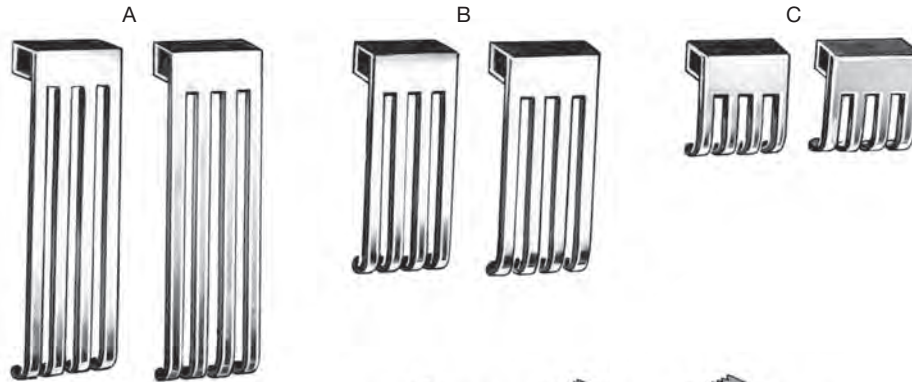
F



Henly Self-retaining Art.-No.	Fig.	
30-0700	A	Standard pattern with center blade 19 and 25 mm
30-0730	B	19 mm
30-0732	C	25 mm
30-0710	D	Deep pattern with center blade 30 and 40 mm
30-0734	E	30 mm
30-0736	F	40 mm

Mod. Henly

with interchangeable center and side blades, complete set



Mod. Henly

Art.-No.

30-0717	complete system, 17.5 cm arms straight
30-0718	complete system, 17 cm arms spread outward (not illustrated)
30-0736	Optional deep blade, 40 mm
30-0719.51	Optional deep blade, 51 mm
30-0719.76	Optional deep blade, 76 mm

Art.-No. Fig. Length

30-0717.76	A	76 mm
30-0717.51	B	51 mm
30-0717.25	C	25 mm
30-0717.BD	D	
30-0730	E	19 mm
30-0732	F	25 mm
30-0734	G	30 mm

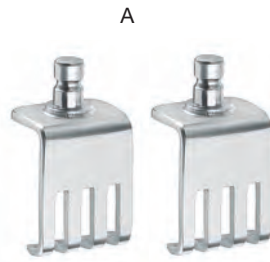


Multipurpose Retractor

for use in vascular surgery, spinal surgery,
orthopaedic surgery and general surgery



D



A



B



C



E

F

G

Multipurpose Retractor

Art.-No.

30-0720

complete with frame
and 3 center blades
and 3 pairs of side
blades

Art.-No.

30-0720.25

Fig.

A

Length
25 mm

30-0720.50

B

50 mm

30-0720.75

C

75 mm

30-0720.BD

D

30-0730

E

19 mm

30-0732

F

25 mm

30-0734

G

30 mm