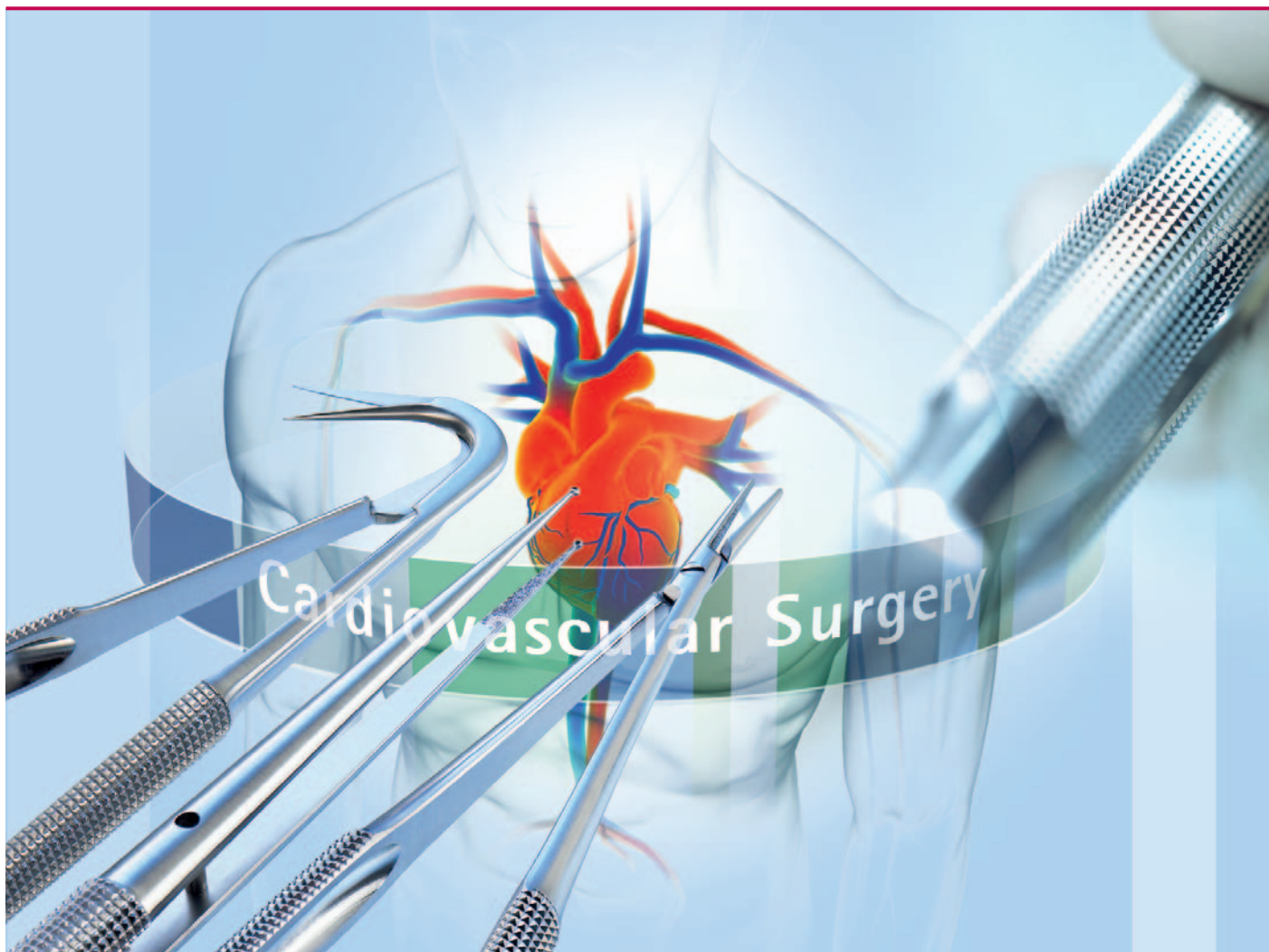


Aesculap Surgical Instruments

Microinstruments for
Cardiac and Vascular Surgery



Think Innovation. Think Aesculap.

In this brochure we present a range of microsurgical instruments for cardiovascular surgery.

Above all, the programme contains a very extensive and well balanced selection of micro scissors, micro forceps and micro needleholders – produced using the most advanced manufacturing technologies and selected materials for outstanding functionality at low weight. The diamond dust coating (DIA DUST®) and the tungsten carbide technology (DUROGRIP®) that we use for our forceps and needleholders leads to a secure hold on tissue and needles and furthermore to high wear resistance.

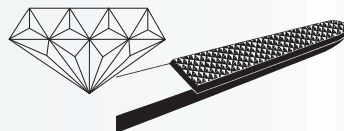
DIA DUST®



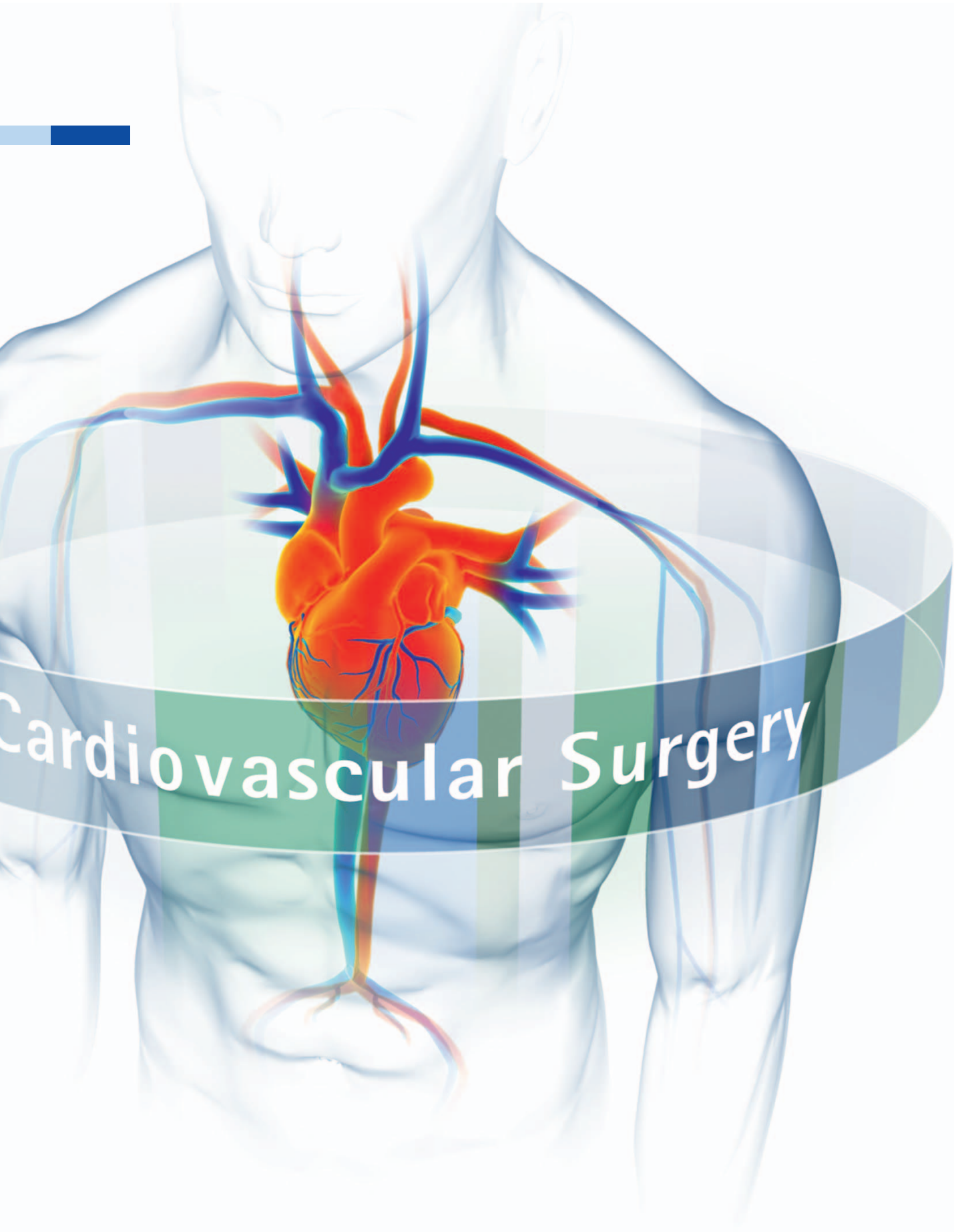
The working surfaces of the jaws of all DIA DUST® instruments are coated with a fine layer of diamond dust. Over 140 years of experience have demonstrated to us which materials to choose for optimum performance. This results in a hard surface with high wear resistance.

Moreover, the structure of the DIA DUST® coating provides a reliable grip for fine needles and sutures, as well as for tissue. Suitable for 2/0 to 10/0 sutures.

DUROGRIP®



Aesculap DUROGRIP® needleholders have jaws with high quality tungsten carbide inserts. A smooth jaw surface as well as a 0.2 mm micro serration guarantee a safe hold on the needle. We recommend carbide inserts with a smooth jaw surface for micro suture material 9/0 – 11/0 and inserts with a 0.2 mm pitch serration for suture material 6/0 – 10/0.



Cardiovascular Surgery

Think Aesculap.

Profound knowledge derives from appreciating the significance of individual pieces of knowledge or experience and fitting them together into a coherent network. A principle B. Braun has been following consistently for more than 160 years, clearly reflected in its corporate claim: "Sharing Expertise". Sharing knowledge across all company divisions creates a broader, sounder knowledge base for everyone involved, resulting in far-sighted, detailed solutions and maximum safety. For the benefit of the patient and in the interests of the user.

With over 130 years of experience in the surgical instrument sector, the Aesculap Division is a competent partner for this interdisciplinary knowledge sharing process.

The Aesculap brand represents a varied spectrum that intelligently and economically combines high quality products with process-orientated services. Aesculap is a reliable and accepted partner for the entire surgical process in the hospital.

Aesculap owes its standing among the best in the business to its employees, who, searching for the best possible solution, are never satisfied with their initial idea. Who repeatedly examine, question and optimise every development.

Thus, Aesculap is much more than a supplier of high precision surgical instruments: a partner who listens carefully and contributes ideas, who understands the customer's needs and requirements and provides for them on a high level. From products to services and seminars for all areas of activity within the hospital.



Think Quality

Think Partnership



I treat contracts like a partnership: based on mutual trust and respect.

Think Partnership. Think Aesculap.

Think Competence



The Aesculap Information Center in Tuttlingen is unique. Nowhere else in the world could I advise my customers so competently and offer such choice.

Think Competence. Think Aesculap.



- Our instruments are held in high esteem by surgeons all over the world. I know why this is and I make sure it stays that way.

Think Quality. Think Aesculap.

- People I talk to can be critical at first: high quality, but still an economically sensible solution? Then I simply let the facts speak for themselves.

Think Economy. Think Aesculap.



Think Economy

Think Service



- Sometimes it's the minor details we provide that make the process run smoothly. The main thing is, everything works and everyone is happy.

Think Service. Think Aesculap.

























Think Innovation



- Each new product is like your own baby. You lovingly take care of it until it grows up and leaves home.

Think Innovation. Think Aesculap.

Micro Scissors with Flat Handle
























	25°	45°	60°	90°	125°	straight	curved on flat
Fine blade blade length: 15 mm	 FM470R	 FM471R	 FM472R	 FM473R	 FM474R		
Fine blade, with 1 probe pointed blade blade length: 15 mm	 FM451R	 FM452R	 FM453R	 FM454R	 FM455R		
Delicate blade blade length: 10 mm	 FM437R	 FM438R	 FM439R	 FM440R	 FM441R	 FM442R	 FM436R
Ultra delicate blade blade length: 7 mm	 FM431R	 FM432R	 FM433R	 FM434R	 FM435R	 FM444R	 FM430R



1/1
165 mm, 6 1/2"

Instrument length depends
on the blade length or angle

Micro Scissors with Round Handle

	25°	45°	60°	90°	125°	straight	curved on flat
Fine blade blade length: 15 mm	 FM476R	 FM477R	 FM478R	 FM479R	 FM480R		
Delicate blade blade length: 10 mm	 FM482R	 FM483R	 FM484R	 FM485R	 FM486R	 FM488R	 FM481R
Delicate blade, with 1 probe pointed blade blade length: 10 mm	 FM489R	 FM490R	 FM491R	 FM492R	 FM493R		
Ultra delicate blade blade length: 7 mm	 FM504R	 FM505R	 FM506R	 FM507R	 FM508R		 FM503R



1/1
165 mm, 6 1/2"

Instrument length depends on the blade length or angle

Micro Vascular Scissors

	25°	45°	60°	90°	125°
Standard blade blade length: 12 mm	 BC522R	 BC523R	 BC524R	 BC525R	 BC526R ^{1/1}
Delicate blade blade length: 10 mm	 BC531R	 BC532R	 BC533R	 BC534R	 BC535R ^{1/1}
Ultra delicate blade blade length: 8 mm	 BC515R	 BC516R	 BC517R	 BC518R	 BC519R ^{1/1}









180 mm, 7"

1/1

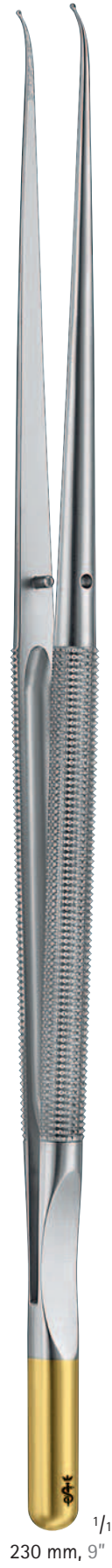
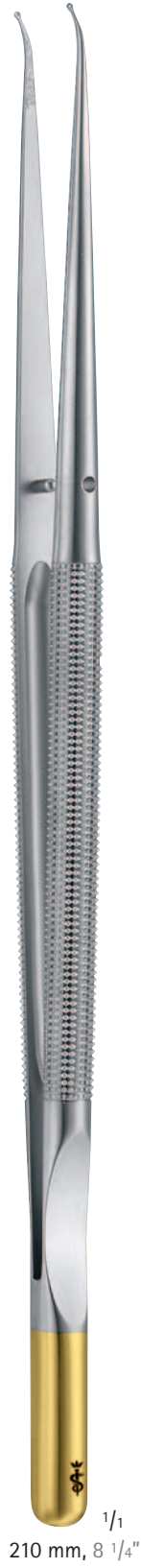
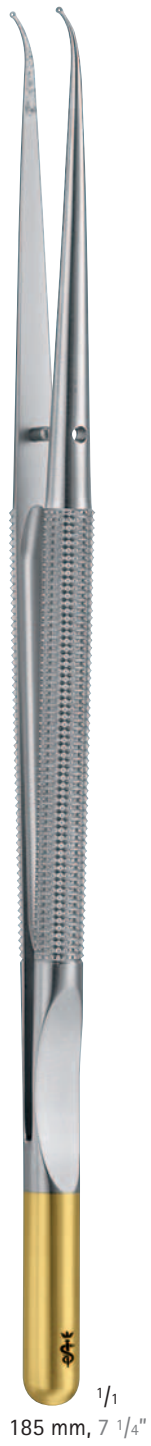
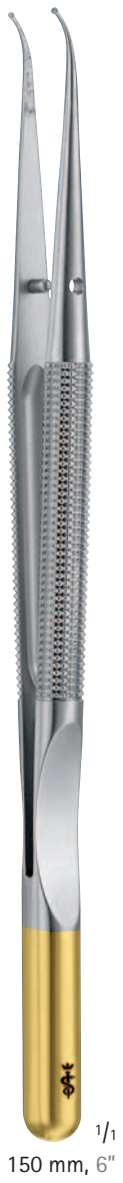
Instrument length depends on the blade length or angle

Micro Forceps with Round Handle and Counter Balance






Jaw	diam. of ring: 1 mm, straight	diam. of ring: 1 mm, curved	diam. of ring: 2 mm, straight	Platform tips, straight	Platform tips, curved	1 mm, DeBakey tip
Total length (in.)						
150 mm 6"	FM570R	FM571R		FM578R	FM581R	
185 mm 7 1/4"	FM572R	FM573R	FM579R	FM580R	FM583R	FM592R
210 mm 8 1/4"	FM574R	FM575R		FM599R	FM585R	FM600R
230 mm 9"	FM576R	FM577R				
250 mm 10"	FM596R	FM595R		FM594R	FM593R	



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



Micro Forceps with Round Handle without Counter Balance

Jaw	diam. of ring: 1 mm, straight	diam. of ring: 1 mm , curved	diam. of ring: 1 mm with platform tip	Platform tip, straight	1 mm, DeBakey tip
Total length (in.)					
185 mm 7 1/4"	FM597R	FM587R	FM582R	FM586R	FM590R
210 mm 8 1/4"	FM598R	FM589R	FM584R	FM588R	FM591R



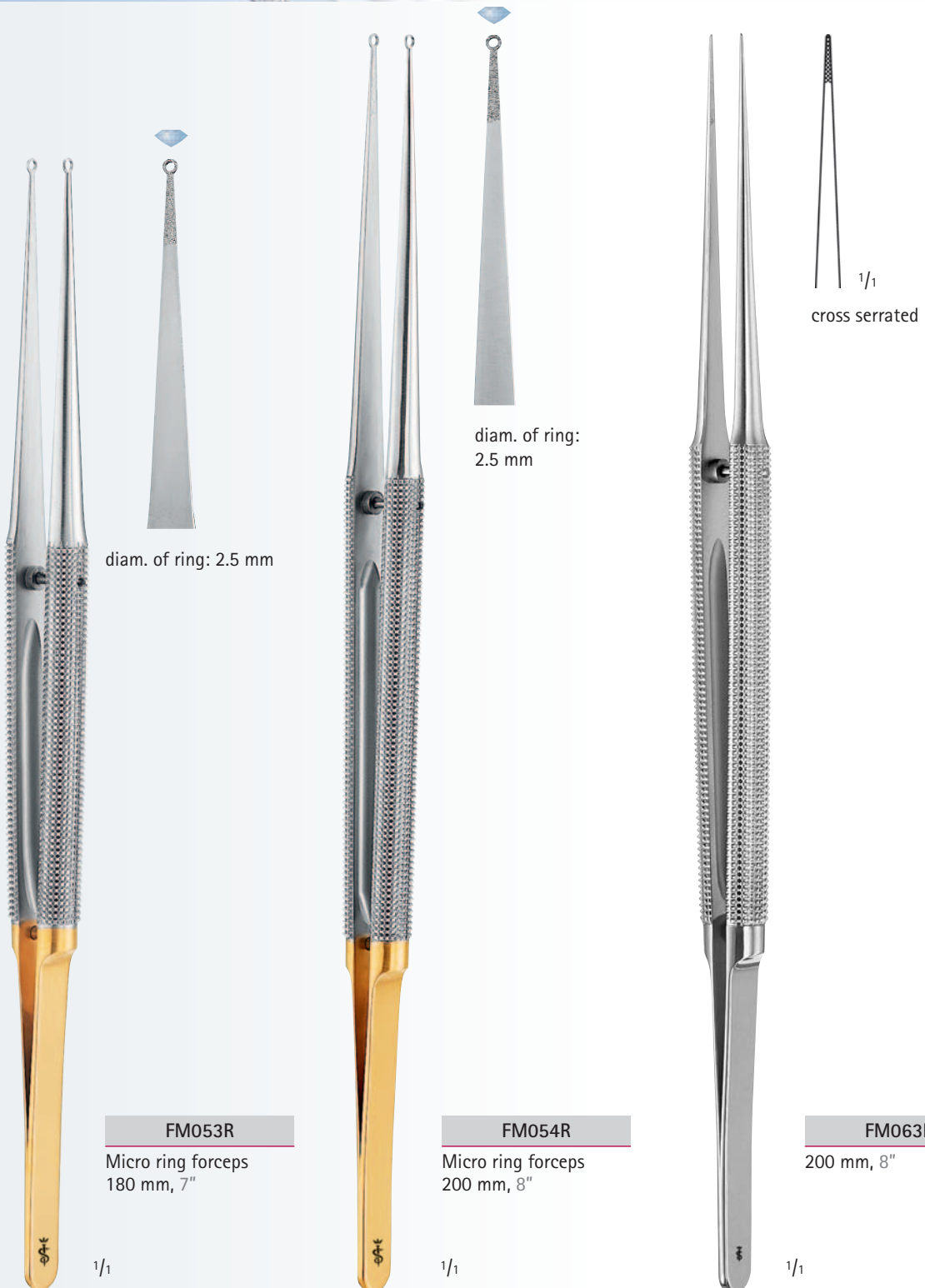
The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



185 mm, 7 1/4"

210 mm, 8 1/4"

Micro Forceps with Round Handle without Counter Balance



FM053R

Micro ring forceps
180 mm, 7"

1/1

FM054R

Micro ring forceps
200 mm, 8"

1/1

FM063R

200 mm, 8"
cross serrated

1/1

Micro Forceps with Flat Handle



BD200R
180 mm, 7"


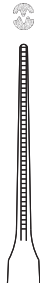



BD201R
210 mm, 8 1/4"



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



Micro Forceps with Flat Handle

Jaw	1 mm, cross serrated	1 mm, DeBakey tip	diam. of ring: 1 mm, straight	diam. of ring: 1 mm, curved	1 mm, straight
Total length (in.)					
180 mm 7"	BD190R	BD191R	BD192R	BD193R	BD194R
200 mm 8"		BD195R			BD196R
250 mm 10"	BD197R				



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



180 mm, 7" ^{1/1}





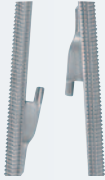
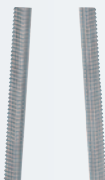


200 mm, 8" ^{1/1}



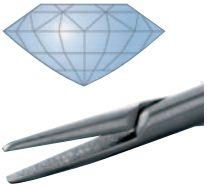
250 mm, 10" ^{1/1}

DIA DUST® Micro Needle Holders with Round Handle

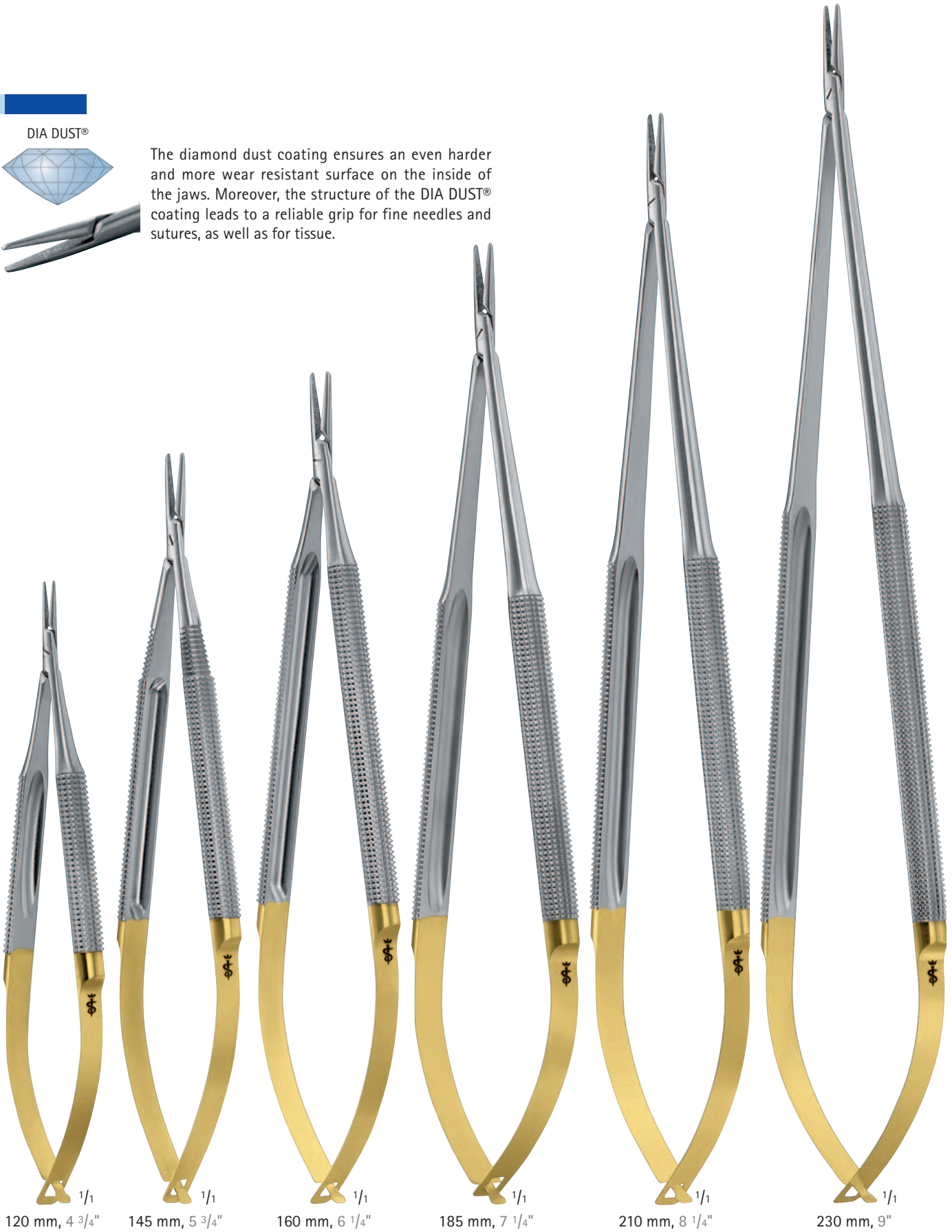
		 1/1	 1/1	 1/1	 1/1
		Suture size			
with catch	Total length (in.)	7/0 and smaller	5/0 and smaller	4/0 and smaller	4/0 and smaller
	120 mm 4 3/4"	FM520R			
	145 mm 5 3/4"		FM522R		
	160 mm 6 1/4"	FM521R	FM523R		
	185 mm 7 1/4"	FM563R	FM564R	FM218R	
	210 mm 8 1/4"	FM565R	FM566R	FM228R	FM221R
	230 mm 9"	FM567R	FM568R	FM230R	FM223R
without catch	Total length (in.)	7/0 and smaller	5/0 and smaller		
	120 mm 4 3/4"	FM524R			
	145 mm 5 3/4"		FM528R		
	160 mm 6 1/4"	FM525R	FM529R		
	185 mm 7 1/4"	FM526R	FM530R		
	210 mm 8 1/4"	FM527R	FM531R		
	230 mm 9"	FM532R	FM533R		



DIA DUST®



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



120 mm, 4 3/4" 1/1

145 mm, 5 3/4" 1/1

160 mm, 6 1/4" 1/1



185 mm, 7 1/4" 1/1


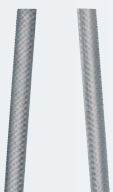
210 mm, 8 1/4" 1/1

230 mm, 9" 1/1



DIA DUST® Micro Needle Holders with Round Handle

		
		Suture size
with catch, heavy style	Total length (in.)	2/0 and smaller
	190 mm 7 1/2"	FM538R
	230 mm 9"	FM539R
	250 mm 10"	FM534R

		
		Suture size
without catch, heavy style	Total length (in.)	2/0 and smaller
	190 mm 7 1/2"	FM535R
	230 mm 9"	FM536R
	250 mm 10"	FM537R



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



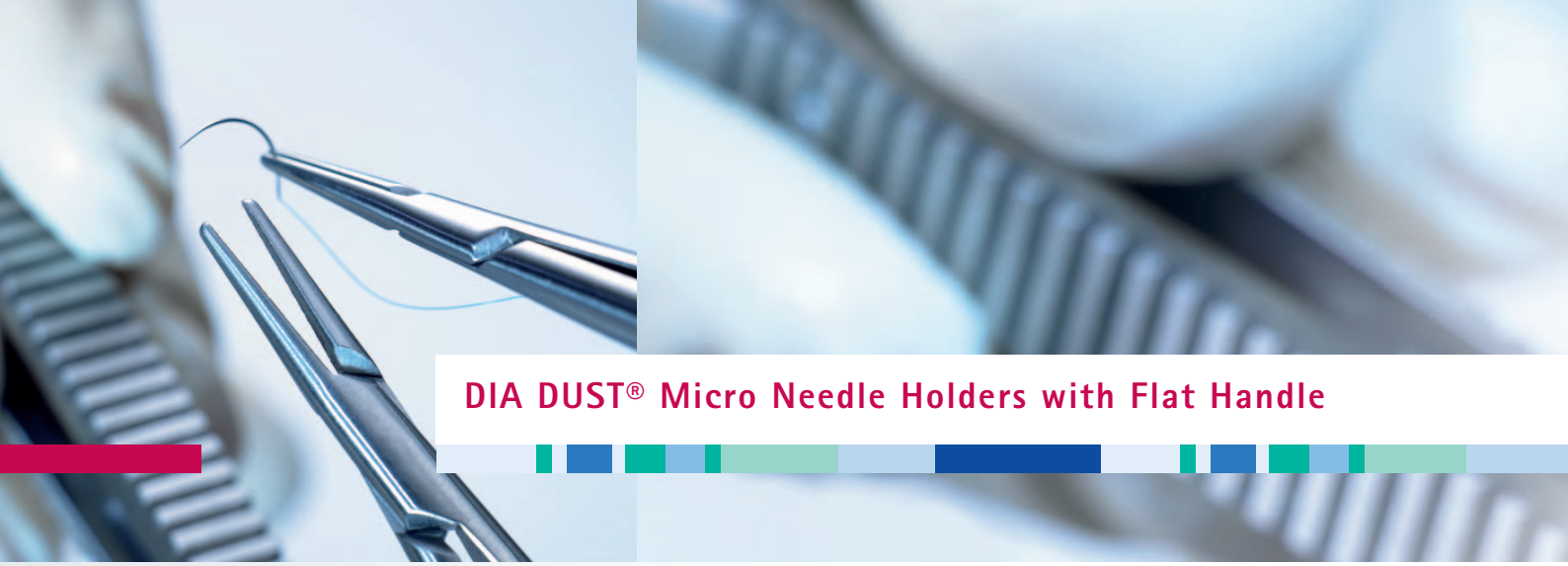
190 mm, 7 1/2" ^{1/1}





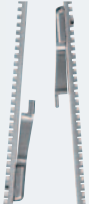
230 mm, 9" ^{1/1}




250 mm, 10" ^{1/1}



DIA DUST® Micro Needle Holders with Flat Handle

		 1/1	 1/1
		Suture size	
with catch	Total length (in.)	7/0 and smaller	5/0 and smaller
	145 mm 5 3/4"		FM541R
	170 mm 6 3/4"	FM540R	
	185 mm 7 1/4"		FM542R
	210 mm 8 1/4"		FM543R
	230 mm 9"		FM544R

without catch	Total length (in.)	7/0 and smaller	5/0 and smaller
	145 mm 5 3/4"		FM546R
	170 mm 6 3/4"	FM545R	
	185 mm 7 1/4"		FM547R
	210 mm 8 1/4"		FM548R
	230 mm 9"		FM549R



DIA DUST®



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



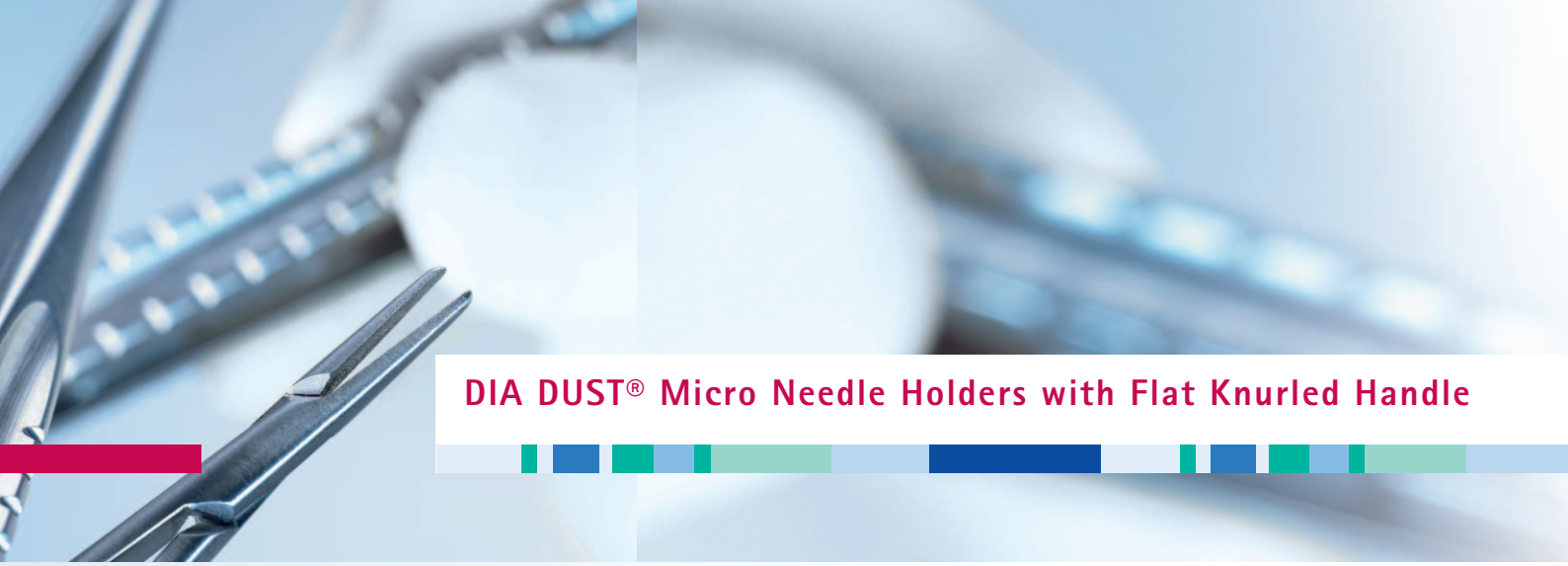
145 mm, 5 ³/₄" ¹/₁

170 mm, 6 ³/₄" ¹/₁



185 mm, 7 ¹/₄" ¹/₁



210 mm, 8 ¹/₄" ¹/₁

230 mm, 9" ¹/₁



DIA DUST® Micro Needle Holders with Flat Knurled Handle

		 1/1
		Suture size
with catch	Total length (in.)	5/0 and smaller
	185 mm 7 1/4"	FM550R
	210 mm 8 1/4"	FM551R
	230 mm 9"	FM552R

		 1/1
		Suture size
without catch	Total length (in.)	5/0 and smaller
	185 mm 7 1/4"	FM553R
	210 mm 8 1/4"	FM554R
	230 mm 9"	FM555R



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



DIA DUST® Micro Needle Holders



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



GLASSER

FM560R

Suture size: 5/0 and smaller
125 mm, 5"



GLASSER

FM561R

Suture size: 5/0 and smaller
180 mm, 7"



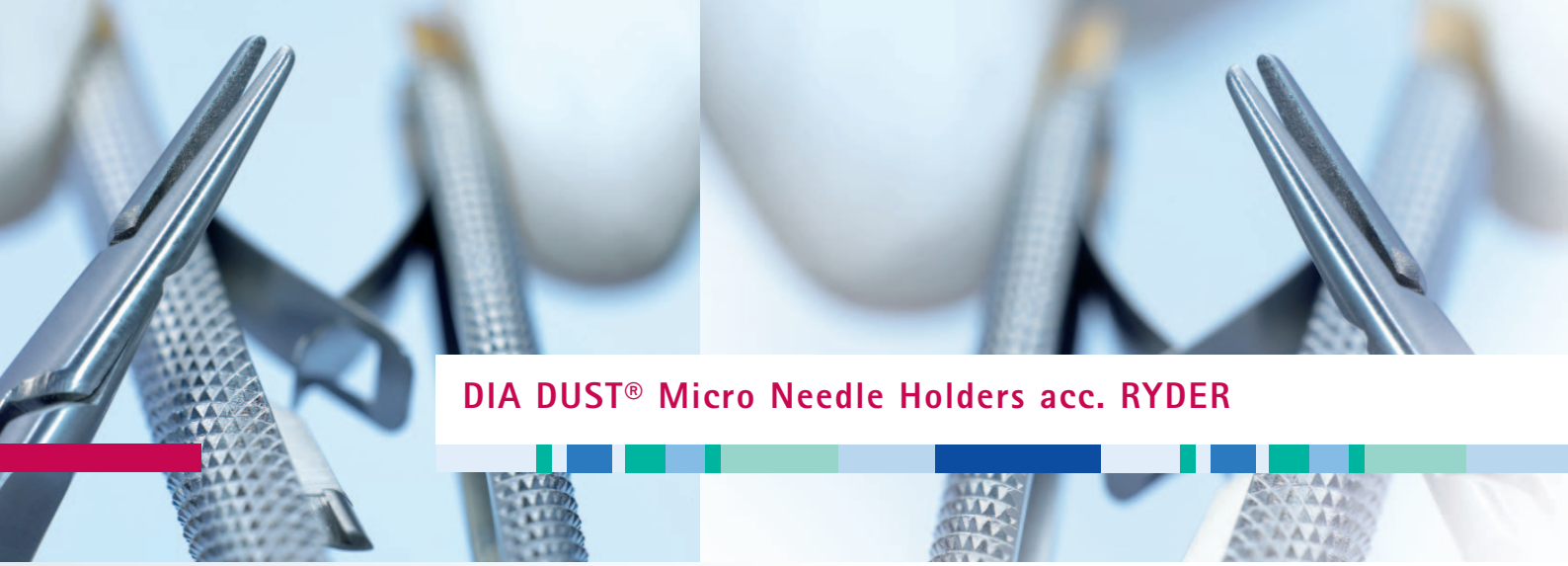
FM236R

with catch
Suture size: 5/0 and smaller
215 mm, 8 1/2"



FM276R

without catch
Suture size: 5/0 and smaller
215 mm, 8 1/2"



DIA DUST® Micro Needle Holders acc. RYDER



The diamond dust coating ensures an even harder and more wear resistant surface on the inside of the jaws. Moreover, the structure of the DIA DUST® coating leads to a reliable grip for fine needles and sutures, as well as for tissue.



BM301R	BM325R	BM302R	BM327R	BM328R
140 mm	160 mm	180 mm	220 mm	250 mm
5 1/2"	6 1/4"	7"	8 3/4"	10"

Suture Size: 5/0 and smaller



RYDER

BM301R–BM328R



The broad back of the jaw exerts greater force on the needle, facilitating a secure hold.

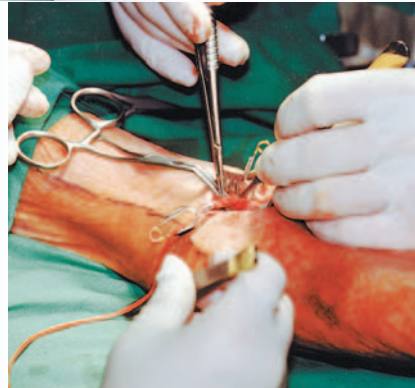
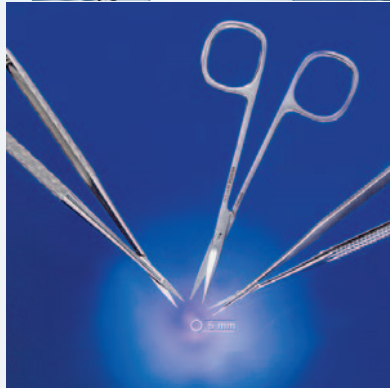


BM300R

195 mm, 7 3/4"

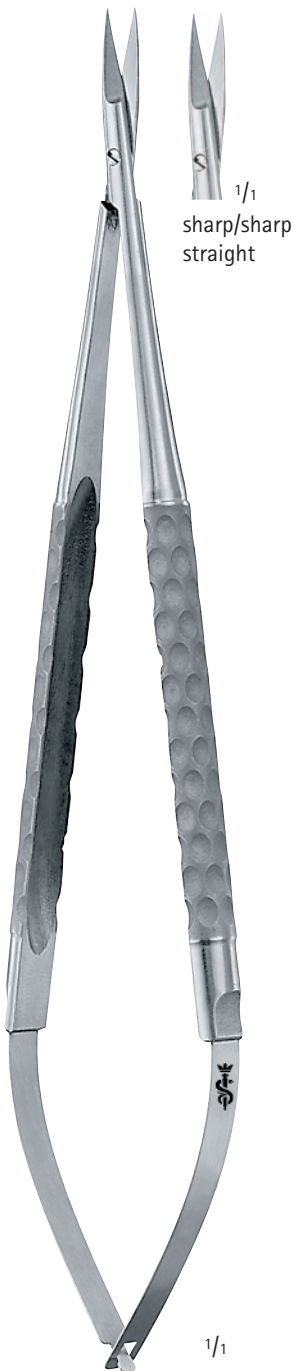


Instruments for Shunt Operations



The shunt instruments were developed especially for operations on vessels that are between 4 and 6 mm in diameter. This width is frequently found in dialysis shunt operations and re-operations. These instruments combine the features of conventional instruments and micro instruments. The working tips are larger than usual for instruments of this type, and the micro instrument style handles make the instruments better to use.

The shunt set was developed in cooperation with
Prof. Dr. med. Gottfried Müller, M.D.
Caritas Krankenhaus Bad Mergentheim
Uhlandstrasse 7
97980 Bad Mergentheim

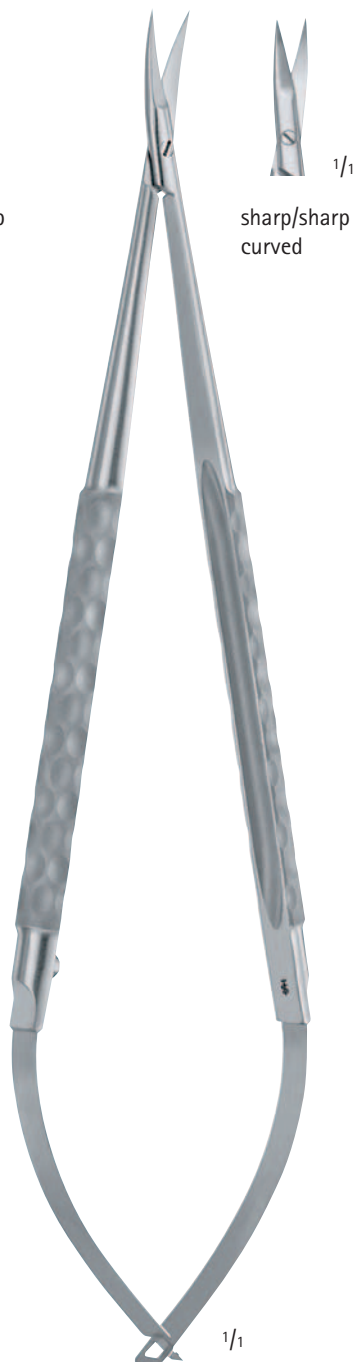


1/1
sharp/sharp
straight

1/1

FM042R

Micro scissors
180 mm, 7"

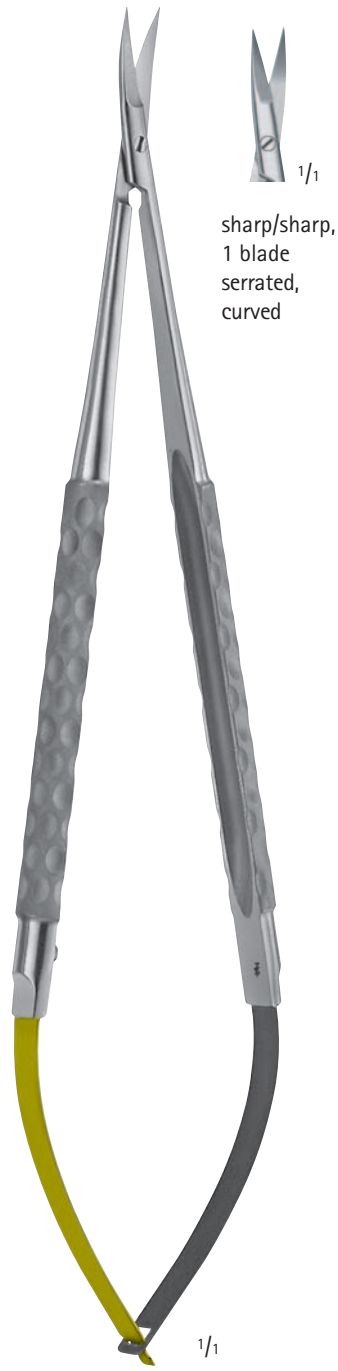


1/1
sharp/sharp
curved

1/1

FD251R

Micro scissors
180 mm, 7"

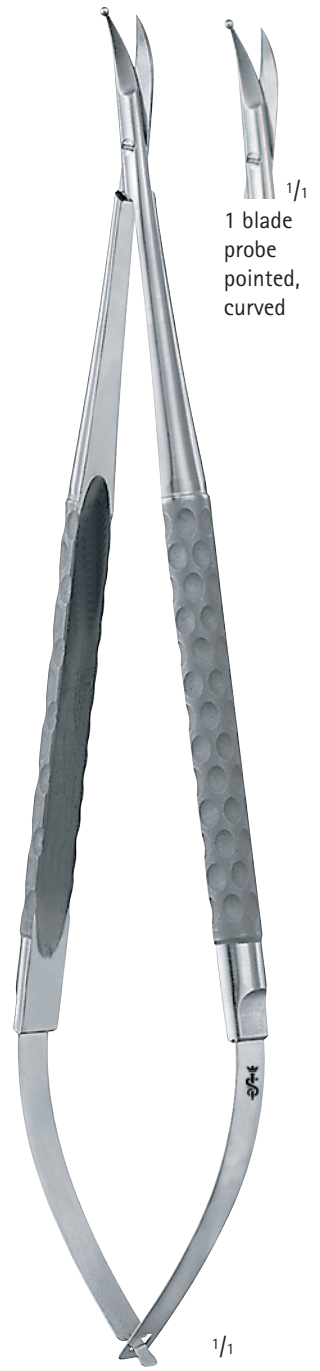


1/1
sharp/sharp,
1 blade
serrated,
curved

1/1

FD252R

Micro scissors
180 mm, 7"



1/1
1 blade
probe
pointed,
curved

1/1

FM043R

Micro scissors
180 mm, 7"

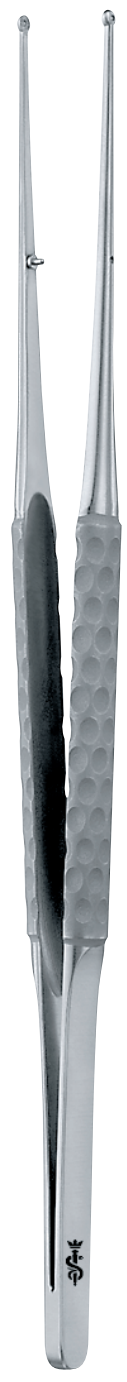


Instruments for Shunt Operations



BV059R
Self-retaining retractor
120 mm, 4 3/4"

1/1



FM047R
Micro ring forceps
180 mm, 7"

1/1
diam. of
ring: 2 mm

1/1



1/1

1/1

FD255R

Micro tissue forceps
180 mm, 7"

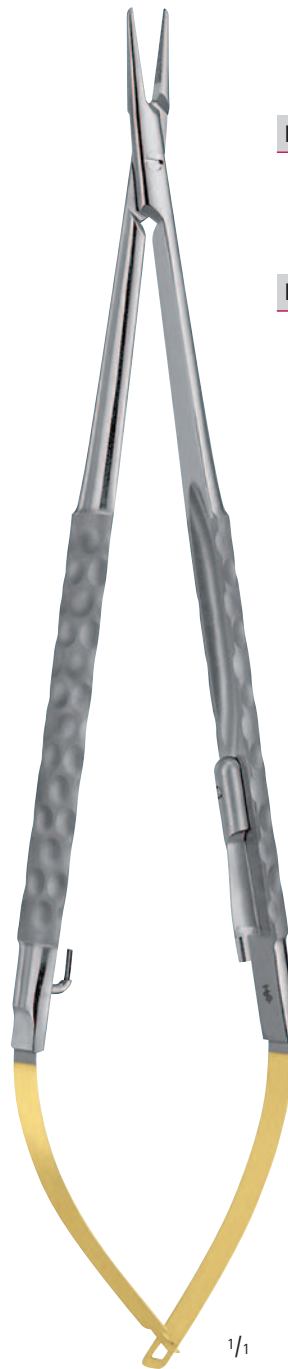


1/1
with
platform
tip

1/1

FD253R

Micro dissecting forceps
180 mm, 7"



FD258R



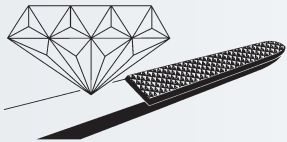
FD259R

1/1

FD258R-FD259R

Micro needle holders
180 mm, 7",
Suture Size 7/0 and smaller

DUROGRIP® Micro Needle Holders with Round Handle



Aesculap needleholders have jaws with tungsten carbide inserts with a choice of structure depending on the application. A smooth jaw surface as well as a 0.2 mm micro serration leads to a safe hold on the needle. We recommend tungsten carbide inserts with a smooth jaw surface for micro suture material 9/0 – 11/0 and inserts with a 0.2 mm pitch serration for suture material 6/0 – 10/0.



FM388R

with catch
180 mm, 7"

FM390R

with catch
200 mm, 8"

DUROGRIP® Micro Needle Holders with Flat Handle



CASTROVIEJO
BM001R
145 mm, 5 3/4"



CASTROVIEJO
BM002R
145 mm, 5 3/4"

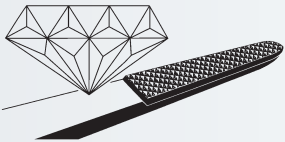


CASTROVIEJO
BM004R
180 mm, 7"



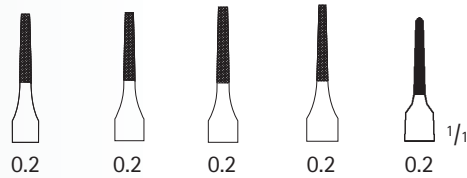
CASTROVIEJO
BM005R
215 mm, 8 1/2"

DUROGRIP® Micro Needle Holders acc. RYDER



Aesculap needleholders have jaws with tungsten carbide inserts with a choice of structure depending on the application. A smooth jaw surface as well as a 0.2 mm micro serration leads to a safe hold on the needle. We recommend tungsten carbide inserts with a smooth jaw surface for micro suture material 9/0 – 11/0 and inserts with a 0.2 mm pitch serration for suture material 6/0 – 10/0.

»grazil«



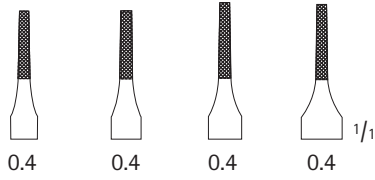
BM054R	BM055R	BM056R	BM057R	BM058R
135 mm	155 mm	175 mm	210 mm	230 mm
5 1/4"	6"	7"	8 1/4"	9"



RYDER

BM054R–BM058R

very delicate

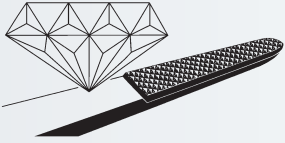


BM044R	BM045R	BM046R	BM047R
135 mm	175 mm	195 mm	265 mm
5 1/4"	7"	7 3/4"	10 1/2"

RYDER

BM044R-BM047R

DUROGRIP® Needle Holders with Ergonomic Handle



Aesculap needleholders have jaws with tungsten carbide inserts with a choice of structure depending on the application. A smooth jaw surface as well as a 0.2 mm micro serration leads to a safe hold on the needle. We recommend tungsten carbide inserts with a smooth jaw surface for micro suture material 9/0 – 11/0 and inserts with a 0.2 mm pitch serration for suture material 6/0 – 10/0.



REIN-KUPKA

BM310R

without catch
190 mm, 7 1/2"



REIN-KUPKA

BM311R

with catch
190 mm, 7 1/2"

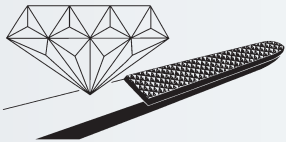


HELLBERG-KUPKA

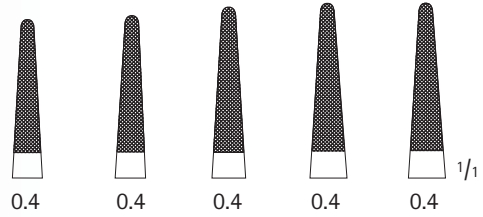
BM320R

with locking catch
210 mm, 8 1/4"

DUROGRIP® Needle Holders



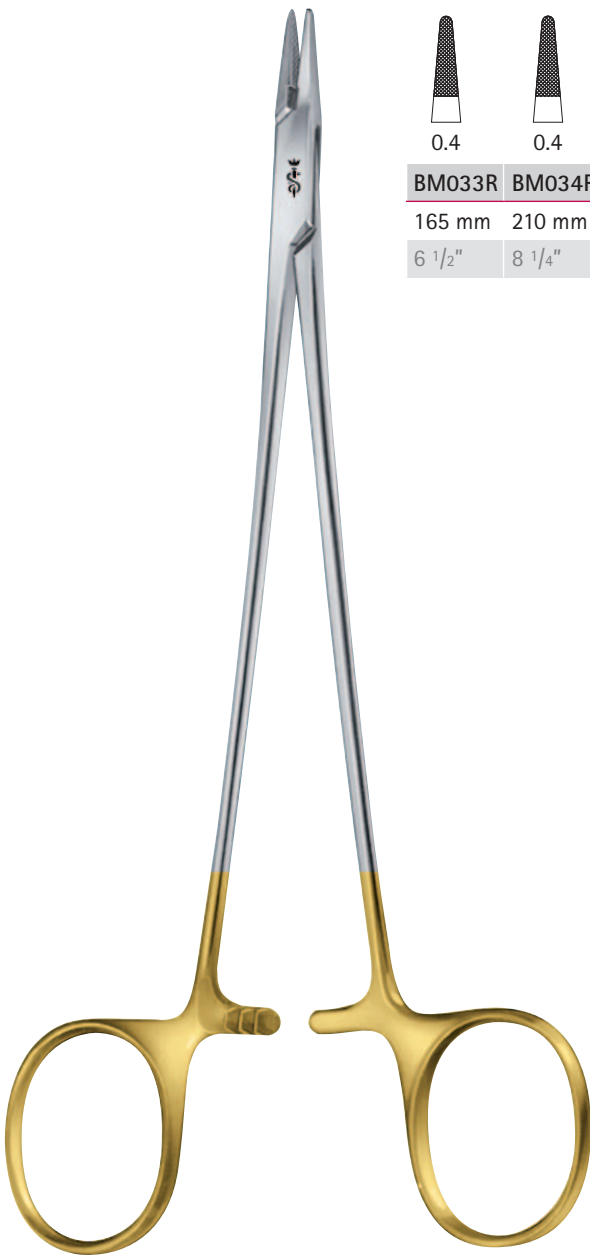
Aesculap needleholders have jaws with tungsten carbide inserts with a choice of structure depending on the application. A smooth jaw surface as well as a 0.2 mm micro serration leads to a safe hold on the needle. We recommend tungsten carbide inserts with a smooth jaw surface for micro suture material 9/0 – 11/0 and inserts with a 0.2 mm pitch serration for suture material 6/0 – 10/0.



BM032R	BM035R	BM036R	BM037R	BM038R
150 mm	180 mm	230 mm	250 mm	305 mm
6"	7"	9"	10"	12"

DE BAKEY

BM032R–BM038R



0.4	0.4	0.2	0.2 ^{1/1}
BM033R	BM034R	BM063R	BM064R
165 mm	210 mm	165 mm	210 mm
6 1/2"	8 1/4"	6 1/2"	8 1/4"



0.2	0.2	0.2 ^{1/1}
BM025R	BM026R	BM027R
180 mm	200 mm	230 mm
7"	8"	9"

DE BAKEY

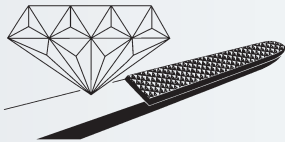
BM033R-BM064R

very delicate

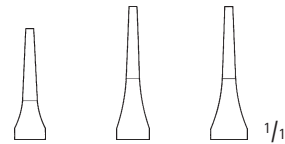
BM025R-BM027R

very delicate

DUROGRIP® Needle Holders



Aesculap needleholders have jaws with tungsten carbide inserts with a choice of structure depending on the application. A smooth jaw surface as well as a 0.2 mm micro serration leads to a safe hold on the needle. We recommend tungsten carbide inserts with a smooth jaw surface for micro suture material 9/0 – 11/0 and inserts with a 0.2 mm pitch serration for suture material 6/0 – 10/0.



BM074R	BM075R	BM076R
150 mm	180 mm	230 mm
6"	7"	9"



RYDER

BM074R-BM076R

with smooth jaws

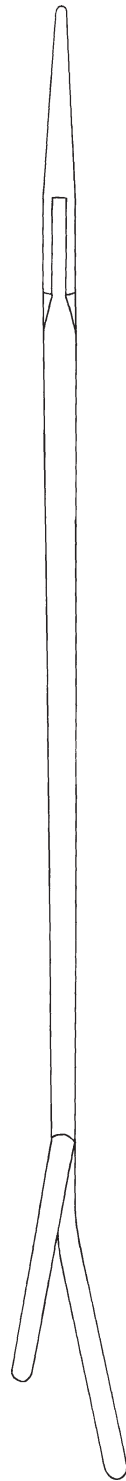


BM051R	BM052R
195 mm	245 mm
7 3/4"	9 3/4"

DE BAKEY

BM051R-BM052R

one extended handle and curved rings ensure optimum grip



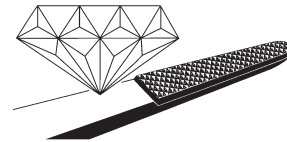
BM184R

200 mm, 8"



DUROGRIP® Needle Holders





Aesculap needleholders have jaws with tungsten carbide inserts with a choice of structure depending on the application. A smooth jaw surface as well as a 0.2 mm micro serration leads to a safe hold on the needle. We recommend tungsten carbide inserts with a smooth jaw surface for micro suture material 9/0 – 11/0 and inserts with a 0.2 mm pitch serration for suture material 6/0 – 10/0.

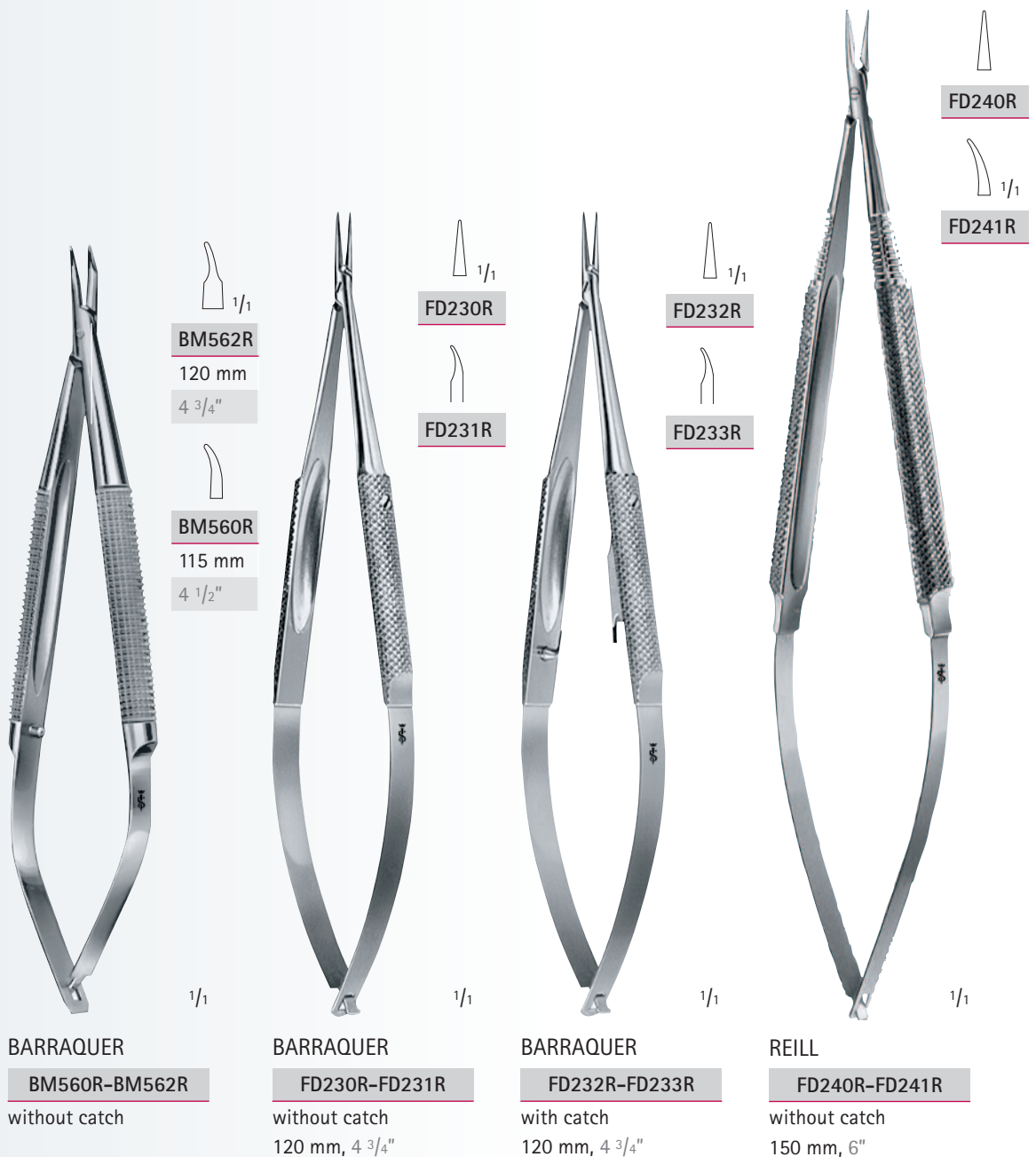
DE BAKEY

BM040R

slender pattern
305 mm, 12"

3/4

Micro Needle Holders with Round Handle



BARRAQUER
BM560R-BM562R
 without catch

BARRAQUER
FD230R-FD231R
 without catch
 120 mm, 4 3/4"

BARRAQUER
FD232R-FD233R
 with catch
 120 mm, 4 3/4"

REILL
FD240R-FD241R
 without catch
 150 mm, 6"



FD242R

FD243R

FD242R-FD243R
with catch
150 mm, 6"



FD244R

FD245R

FD244R-FD245R
without catch
185 mm, 7 1/4"



FD246R

FD247R

FD246R-FD247R
with catch
185 mm, 7 1/4"



FM398R
without catch
200 mm, 8"

FM392R
with catch
230 mm, 9"

FM398R-FM392R

Micro Needle Holders with Flat Handle



CASTROVIEJO

BM563R-BM564R
with catch
145 mm, 5 3/4"

FD076R-FD079R
without catch
160 mm, 6 1/4"



FD080R

FD081R

FD080R-FD081R
without catch
185 mm, 7 1/4"



FD045R
without catch

FD046R
with catch

JACOBSON
FD045R-FD046R
185 mm, 7 1/4"



FD048R
with catch
200 mm, 8"

Microsurgery Scalpels Single Use



1/1

BA364

165 mm, 6 1/2"



1/1

BA365

165 mm, 6 1/2"



1/1

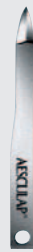
BA367

165 mm, 6 1/2"

Single use, sterile packed, with light-weight ergonomic handle.

Sales Unit: PAK = Package of 5 Pieces

Microsurgery blades, stainless steel, sterile



1/1

BB363R

ST = Package of 1 piece



1/1

BB364R

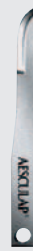
PAK = Package of 10 pieces



1/1

BB365R

PAK = Package of 10 pieces



1/1

BB367R

PAK = Package of 10 pieces

Scalpel Handles for Microsurgery Blades



1/1

BB045T

145 mm, 5 3/4"



1/1

BB046R

135 mm, 5 1/2"



1/1

BB048R

155 mm, 6"



1/1

CASPAR

BB052R

180 mm, 7"



1/1

BB054R

200 mm, 8"

Nerve- and Vesselhooks



1/1

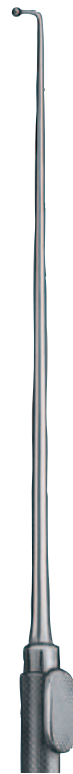
KRAYENBÜHL

FD396R-FD399R

185 mm, 7 1/4"



FD396R



FD397R




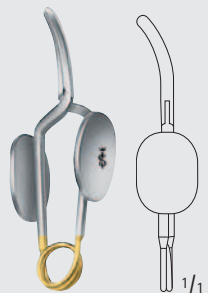

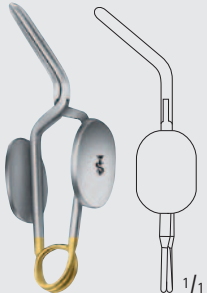
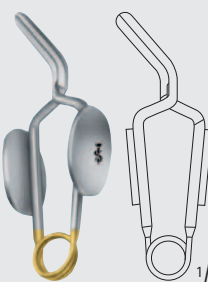
FD398R



FD399R

1/1

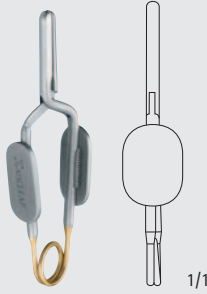
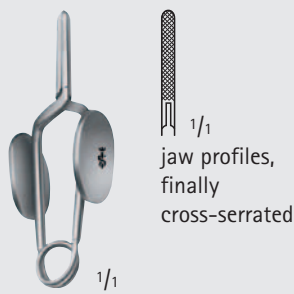
Vessel Clips

Closing force					
50 g	<u>FE010K</u>	<u>FE011K</u>	<u>FE012K</u>	<u>FE013K</u>	<u>FE014K</u>
80 g	<u>FE020K</u>	<u>FE021K</u>	<u>FE022K</u>	<u>FE023K</u>	<u>FE024K</u>
	straight	curved	curved tips	angled to side	knee-bent

MÜLLER

FE010K-FE024K

Non-traumatic vessel clips, temporary

Closing force		
30 g	<u>FE001S</u> straight	<u>FE005K</u> Ligature Forceps

Care and Maintenance of Surgical Instruments

Treatment of New Instruments

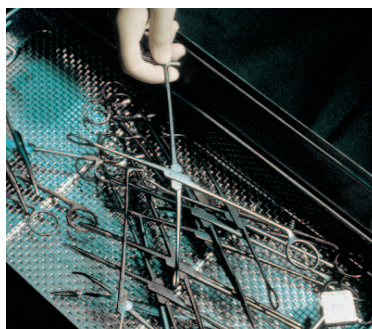
Brand new instruments must be cleaned before the first sterilization or use. Protective caps and protective films must be removed completely, especially from chisels, raspatories or microsurgical instruments.

After each use

- 1) Clean contaminated instruments as quick as possible.
- 2) Open instruments with a joint to a 90° angle.
- 3) For machine cleaning, place the instrument in a wire basket suitable for the cleaning process, (make sure the cleaning solution and rinse water from the machine come into contact with all surfaces of the instrument).
- 4) Completely dismantle any dismantable instruments.
- 5) Preferably dry disposal.
- 6) For wet disposal, always use an active cleaning disinfectant. Rinse the instrument thoroughly with clear, flowing water before machine cleaning and disinfecting.
- 7) If necessary, treat with ultrasound according to the manufacturer's instructions:
 - for effective mechanical support during manual cleaning
 - for pre-treatment of instruments with dried-on contaminant before machine cleaning
- 8) If cleaning manually or in a machine: Always follow manufacturer's instructions for detergents and other cleaning solutions.

Manual Cleaning / Disinfection

- 1) Place instruments into a suitable disinfectant with active cleaning properties so that all surfaces, inner cavities, lumens and openings come into contact with the solution. Follow the disinfectant manufacturer's instructions.
- 2) After chemical disinfection, always rinse thoroughly with clear, flowing water. Follow the instructions provided by the manufacturer of disinfectant.
- 3) Remove any dirt still clinging to the instrument with a soft synthetic brush. Do not use a scouring or metal brush.
- 4) Clean any lumens and conduits with soft, round, synthetic brushes. Please note - the lumen and the brush must have the same diameter.
- 5) Final rinsing should be done with distilled or deionized water.
- 6) Dry instrument with an absorbent, soft and lint-free cloth.
- 7) Dry lumens and conduits with compressed air.





Machine Cleaning / Disinfection

- 1) Select the program according to the material (e.g. stainless instrument steel, aluminium) of the instrument to be cleaned. Follow the machine manufacturer's instructions.
- 2) Final rinsing to be done with deionized water.
- 3) Leave sufficient time for drying.
- 4) Remove the instrument from the machine immediately after the program is done.



Care / Testing

- 1) Let instrument cool down to room temperature.
- 2) Lubricate movable parts (e.g. joints and ends) slightly with special sterilization-capable, vaporpermeable lubricant (e.g. AESCULAP STERILIT Spray JG600 or Lubricant JG598), see page 44 - 45.
- 3) After each cleaning and disinfection process, check the instrument to make sure it is clean, it functions properly and it has not suffered any damage, (e.g. bent, broken, fractured or worn parts).
- 4) Discard any damaged and defective instruments and replace.

Storage

- 1) Place instruments with fine working ends and/or microsurgery instruments in a suitable storage rack.
- 2) Secure instruments with lock in the first detent.

Sterilization

- 1) To steam sterilize, proceed as follows:
Steam sterilization must be carried out according to a validated steam sterilisation process (e.g. with a sterilizer meeting the specifications of EN 285 and validated according to EN 554). When using the fractional vacuum method, use the 134°C/2 bar program for sterilisation with a minimum holding time of 5 minutes.
- 2) Where possible, sterilize instruments in the first catch.





Service for you

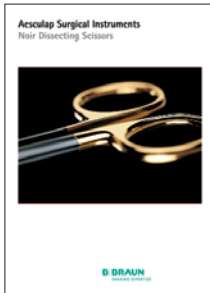
Storage example

JG372
Silicone rack for
tray inserts

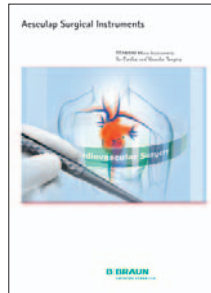
JF110R
Tray insert



For more information please also ask for our catalog C053: "Instruments for Cardiovascular and Thoracic Surgery"



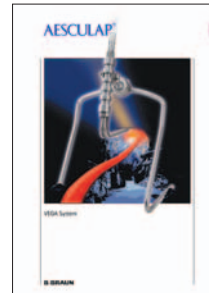
C092
Aesculap Noir
Dissecting Scissors



C239
TITANIUM Microinstruments
for Cardiac and Vascular
Surgery



C251
BipoJet,
Bipolar Dissecting Scissors



C793
Vega System



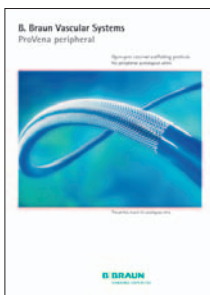
C468
Titanium Ligating Clips



C819
Aesculap universal
Storage System



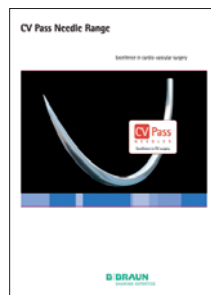
O310
Motors



6050161
ProVena



6050151
UniGraft W Vascular Prosthesis



BBSE-126-02
CV Pass

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B | BRAUN
SHARING EXPERTISE

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