

Aesculap Surgical Instruments

Microinstruments for
Cardiac and Vascular Surgery





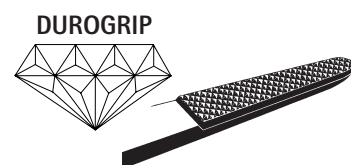
In this catalogue we present you a fine range of microsurgical instruments that are commonly used in cardiac and vascular surgery.

It includes a new line of lightweight single use microsurgical scalpels with an innovative ergonomic handle design and a selected range of vascular clips, scissors, forceps and needleholders produced using different materials and the latest technology to provide outstanding functionality at low weight. The diamond dust coating (DIADUST) or tungsten carbide (DUROGRIP) technology which we use for our forceps and needleholders not only provides a safe grip on tissue and suture material but also ensures high wear resistance in the instrument jaw.



The working surfaces of the jaws of all DIADUST instruments are coated with a fine layer of diamond dust. Over 100 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 DIADUST coating provides a reliable grip for fine needles and sutures, as well as for tissue. Suitable for 6/0 to 10/0 sutures.



Aesculap DUROGRIP needle holders 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.



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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



■ The aim of the Aesculap Technical Service (ATS) specialists is to lengthen the useful life of all instruments. They are careful, for instance, to remove as little material as possible when regrounding scissors. Whether sharpening, polishing, adjusting or cleaning – in the ATS everything is always done with the same precision and care.

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.



- We can only guarantee reproducible Aesculap quality over decades thanks to the technical skill, experience and care of Aesculap's surgical instrument makers. Expertise that is responsibly and conscientiously shared with others.

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



- Today more than ever before, hospitals are being required to think economically and manage their costs efficiently, as well as to ensure their own legal security and the safety of their patients. In future, all processes involving surgical instrumentation will also need to be clearly documented and fully accountable.

Think Service. Think Aesculap.

Think Innovation



- In constant dialogue with practitioners and clinical partners, Aesculap designs and creates instruments for all surgical disciplines – frequently setting the trend. A team of 200 people around the world is employed in research and development into new, economically viable solutions to provide the best patient care.

Think Innovation. Think Aesculap.

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 ratchet.



Scalpel Handles, Blades, Micro Scalpels



Scalpel Handles for Microsurgery Blades

Microsurgery Blades



1/1

BB048R

Scalpel handle,
round
155 mm, 6"



1/1

BB052R

Scalpel handle
round
180 mm, 7"



1/1

BB054R

Scalpel handle
round
200 mm, 8"



BB363R

Microsurgery blades,
stainless steel, sterile
ST = Package of 1 piece



BB365R

Microsurgery blades,
stainless steel, sterile
ST = Package of 10 pieces



BB367R

Microsurgery blades,
stainless steel, sterile
ST = Package of 10 pieces



Microsurgery Scalpels

Single use, sterile packed,
with lightweight ergonomic
handle.



1/1

BA364

Micro Scalpel
with polymer handle

Sales Unit:
PAK = Package of 5 pieces
165 mm, 6 1/2"



1/1

BA365

Micro Scalpel
with polymer handle

Sales Unit:
PAK = Package of 5 pieces
165 mm, 6 1/2"



1/1

BA367

Micro Scalpel
with polymer handle

Sales Unit:
PAK = Package of 5 pieces
165 mm, 6 1/2"

Nerve- and Vessel Hooks, Coronary Retractor,

Nerve- and Vessel Hooks



1/1



1/1

FD396R

KRAYENBÜHL
Nerve- and
Vessel Hooks
185 mm, 7 1/4"



1/1

FD397R

KRAYENBÜHL
Nerve- and
Vessel Hooks
185 mm, 7 1/4"



1/1

FD398R

KRAYENBÜHL
Nerve- and
Vessel Hooks
185 mm, 7 1/4"



1/1

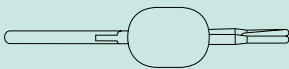
FD399R

KRAYENBÜHL
Nerve- and
Vessel Hooks
185 mm, 7 1/4"



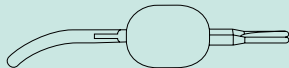
Vessel Clips

Vessel Clip Alpha-Mini Clips



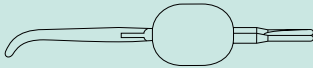
FE010K 50 g
FE020K 80 g

straight



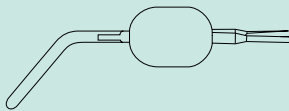
FE011K 50 g
FE021K 80 g

curved



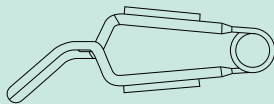
FE012K 50 g
FE022K 80 g

curved tips



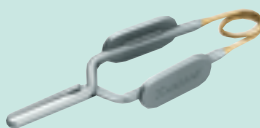
FE013K 50 g
FE023K 80 g

angled-shaped



FE014K 50 g
FE024K 80 g

knee-bent



FE001S 30 g

straight

1/1



Vessel Spreader



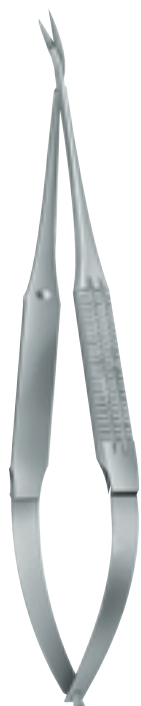
1/1

FD310R

Vessel spreader

Scissors

Micro Scissors (Spring Type)



1/2



1/1

FM190R

Flat handle with
cross serrations
25°, 185 mm, 7¼"



1/1

FM191R

Flat handle
45°, 185 mm, 7¼"



1/1

FM192R

Flat handle
60°, 185 mm, 7¼"



1/1

FM193R

Flat handle
90°, 185 mm, 7¼"



1/1

FM194R

Flat handle
125°, 185 mm, 7¼"



1/2



1/1

FM200R

Flat handle,
with one probe
pointed blade,
25°, 185 mm, 7¼"



1/1

FM201R

Flat handle,
with one probe
pointed blade,
45°, 185 mm, 7¼"



1/1

FM202R

Flat handle,
with one probe
pointed blade,
60°, 185 mm, 7¼"



1/1

FM203R

Flat handle,
with one probe
pointed blade,
90°, 185 mm, 7¼"



1/1

FM204R

Flat handle,
with one probe
pointed blade,
125°, 185 mm, 7¼"



Micro Scissors (Spring Type)



1/2



1/2



1/1

FM210R

Round handle
25°, 180 mm, 7"



1/1

FM211R

Round handle
45°, 180 mm, 7"



1/1

FM213R

Round handle
90°, 180 mm, 7"



1/1

FM214R

Round handle
120°, 180 mm, 7"



1/1

FD022R

YASARGIL
Flat handle,
straight
185 mm, 7¹/₄"



1/1

FD023R

JACOBSON
Flat handle,
curved
185 mm, 7¹/₄"



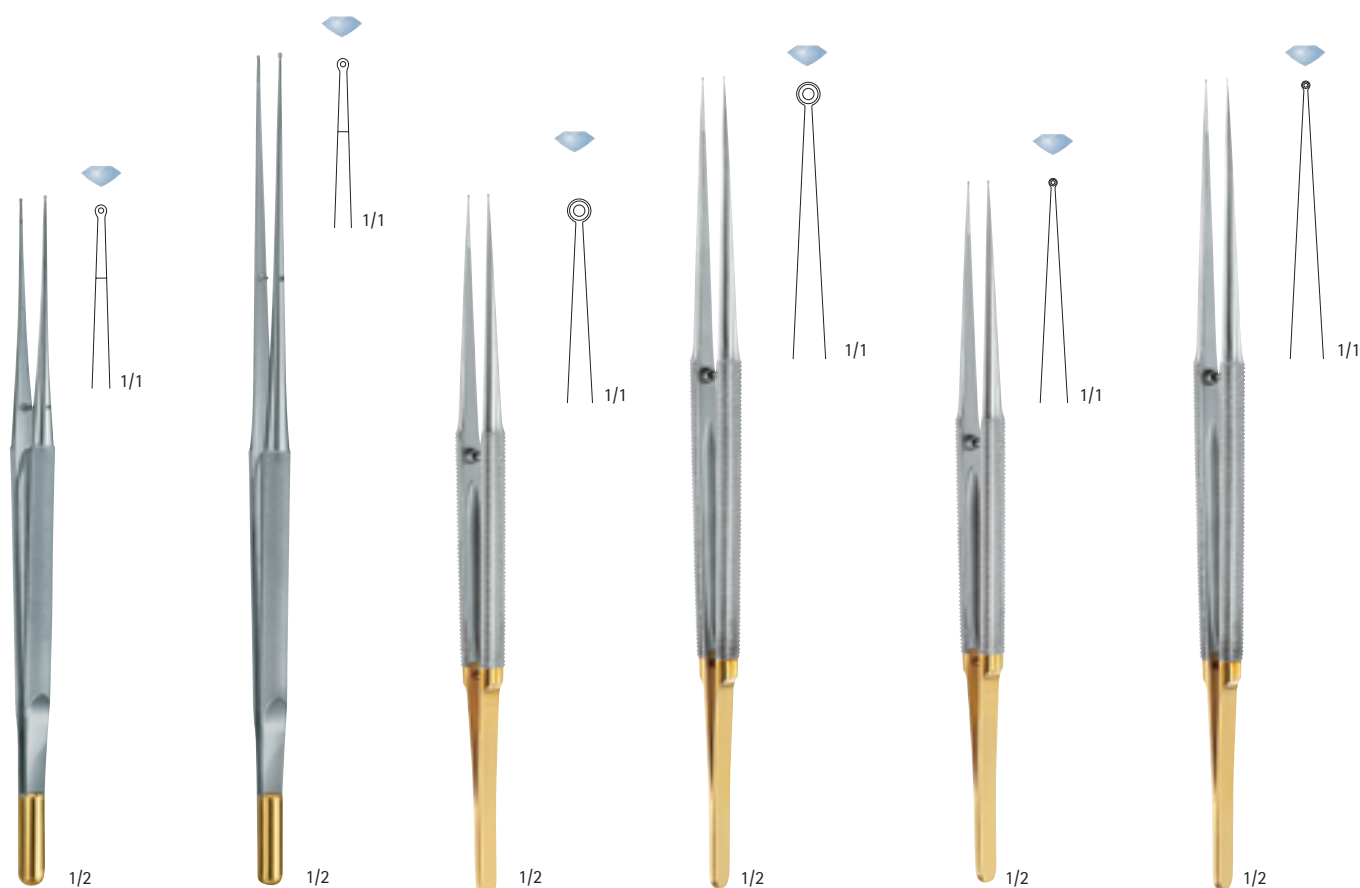
1/1

FD025R

JACOBSON
Flat handle,
straight
185 mm, 7¹/₄"

Forceps

Micro Forceps



FM037R

Micro Ring Forceps,
diam. 1.2 mm,
180 mm, 7"

FM038R

Micro Ring Forceps,
diam. 1.2 mm,
220 mm, 8³/₄"

FM053R

Micro Ring Forceps,
diam. 1.5 mm,
180 mm, 7"

FM054R

Micro Ring Forceps,
diam. 1.5 mm,
200 mm, 8"

FM058R

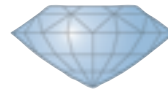
Micro Ring Forceps,
diam. 0.5 mm
180 mm, 7"

FM059R

Micro Ring Forceps,
diam. 0.5 mm
200 mm, 8"



DIADUST



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



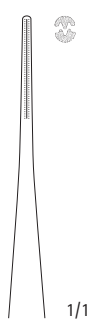
FM063R

Micro Forceps,
cross serration
200 mm, 8"



FM065R

Atraumata
micro forceps,
210 mm, 8 1/4"



FD253R

Micro Forceps,
plateau
180 mm, 7"



FM064R

Micro Forceps,
plateau
210 mm, 8 1/4"



FM072R

Micro Forceps,
plateau
round 1 mm,
210 mm, 8 1/4"



Needle Holders

Needle Holders with DIADUST



FM242R

with catch, 185 mm, 7 1/4"



FM244R

with catch, 210 mm, 8 1/4"



FM246R

with catch, 235 mm, 9 1/4"



FM360R

with catch, 200 mm, 8"



DIADUST



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



FM362R

with catch, 225 mm, 9"



FD258R - FD259R

with catch, 180 mm, 7"



FM236R

with catch, 210 mm, 8 1/4"



FM276R

without catch, 210 mm, 8 1/4"

Needle Holders



Needle Holders with DIADUST



FM228R

with catch, 200 mm, 8"



FM230R

with catch, 230 mm, 9"



FM218R

with catch, 180 mm, 7"



FM220R

with catch, 210 mm, 8 1/4"



DIADUST



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



FM221R

with catch, 210 mm, 8 1/4"



FM223R

with catch, 230 mm, 9"

Needle Holders



Needle Holders with carbide inserts



1/2

BM001R

with catch, 145 mm, 5³/₄"
smooth jaw



1/2

BM002R

with catch, 145 mm, 5³/₄"
0.2 serration



1/2

BM004R

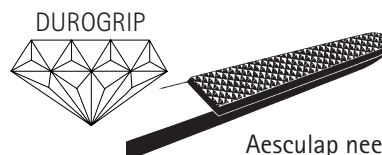
with catch, 180 mm, 7"
0.2 serration



1/2

BM005R

with catch, 145 mm, 5³/₄"
0.2 serration



Aesculap needle holders 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 guarantee 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"
0.2 serration



FM390R

with catch, 200 mm, 8"
0.2 serration

Needle Holders

Needle Holders, smooth jaw



FD076R – FD079R

without catch,
160 mm, 6 1/4"



FD080R – FD081R

without catch,
185 mm, 7 1/4"



BM563R – BM564R

CASTROVIEJO
with catch,
145 mm, 5 3/4"



FD246R – FD247R

with catch,
185 mm, 7 1/4"



FD244R

FD245R

FD244R – FD245R

without catch,
185 mm, 7 1/4"



FD045R
straight,
without
catch

FD046R
straight,
with catch

FD045R – FD046R

JACOBSON
without catch,
185 mm, 7 1/4"



FD048R
YASARGIL
with catch,
200 mm, 8"



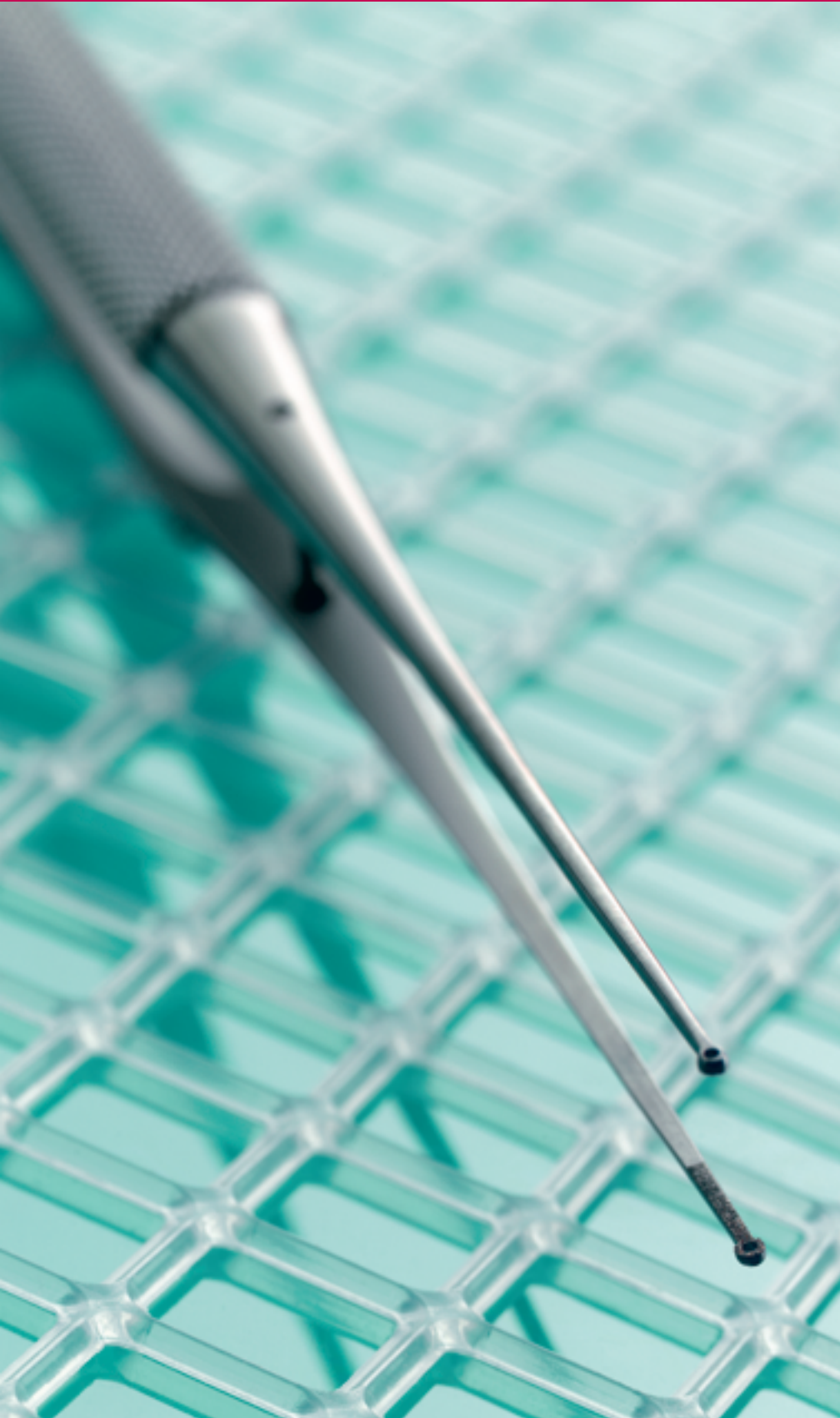
FM398R
without catch,
210 mm, 8 1/4"



FM392R
with catch,
230 mm, 9"

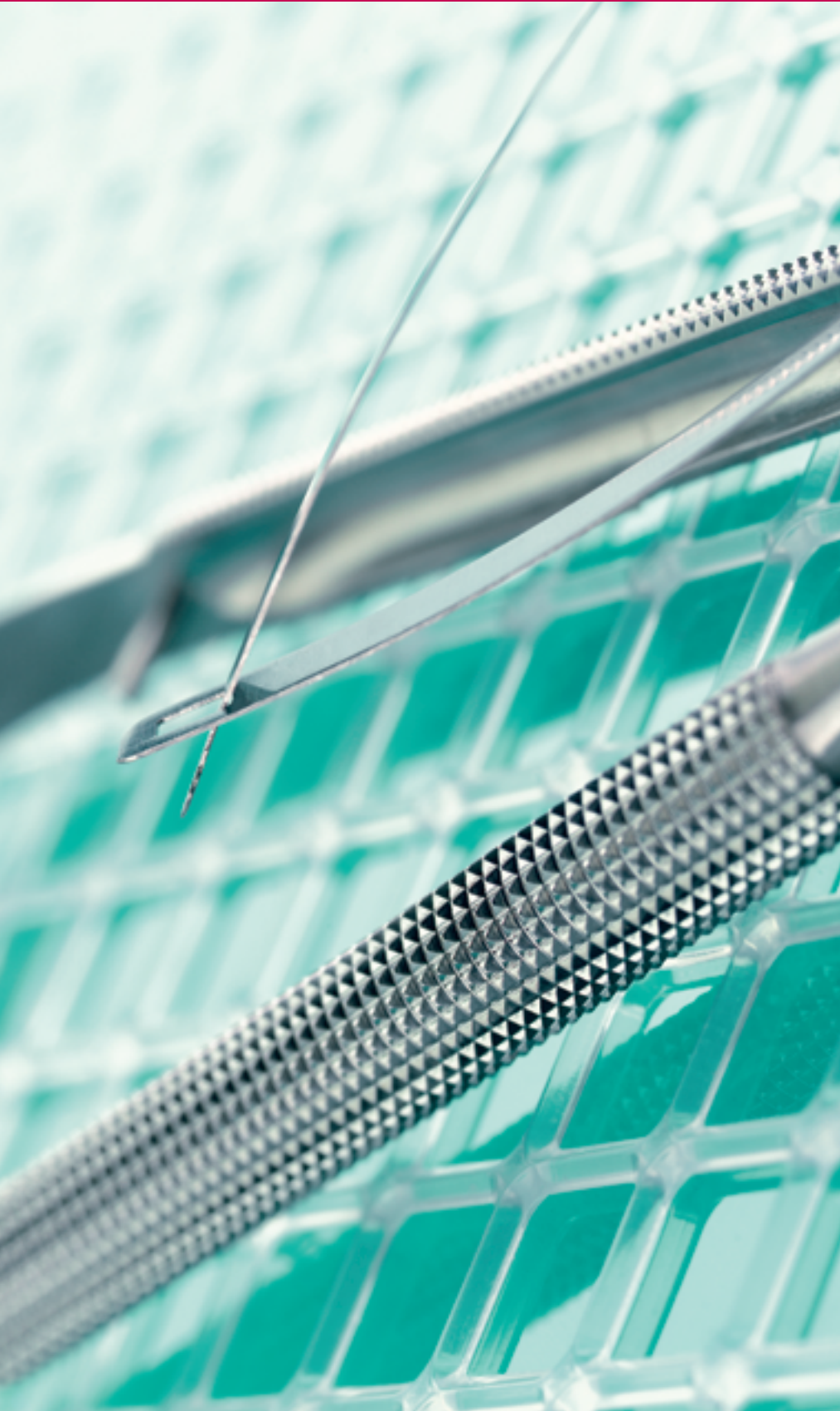
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For more information please also ask for our brochure C053: "Instruments for Cardiovascular and Thoracic Surgery"





AESCULAP®

B | BRAUN
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