

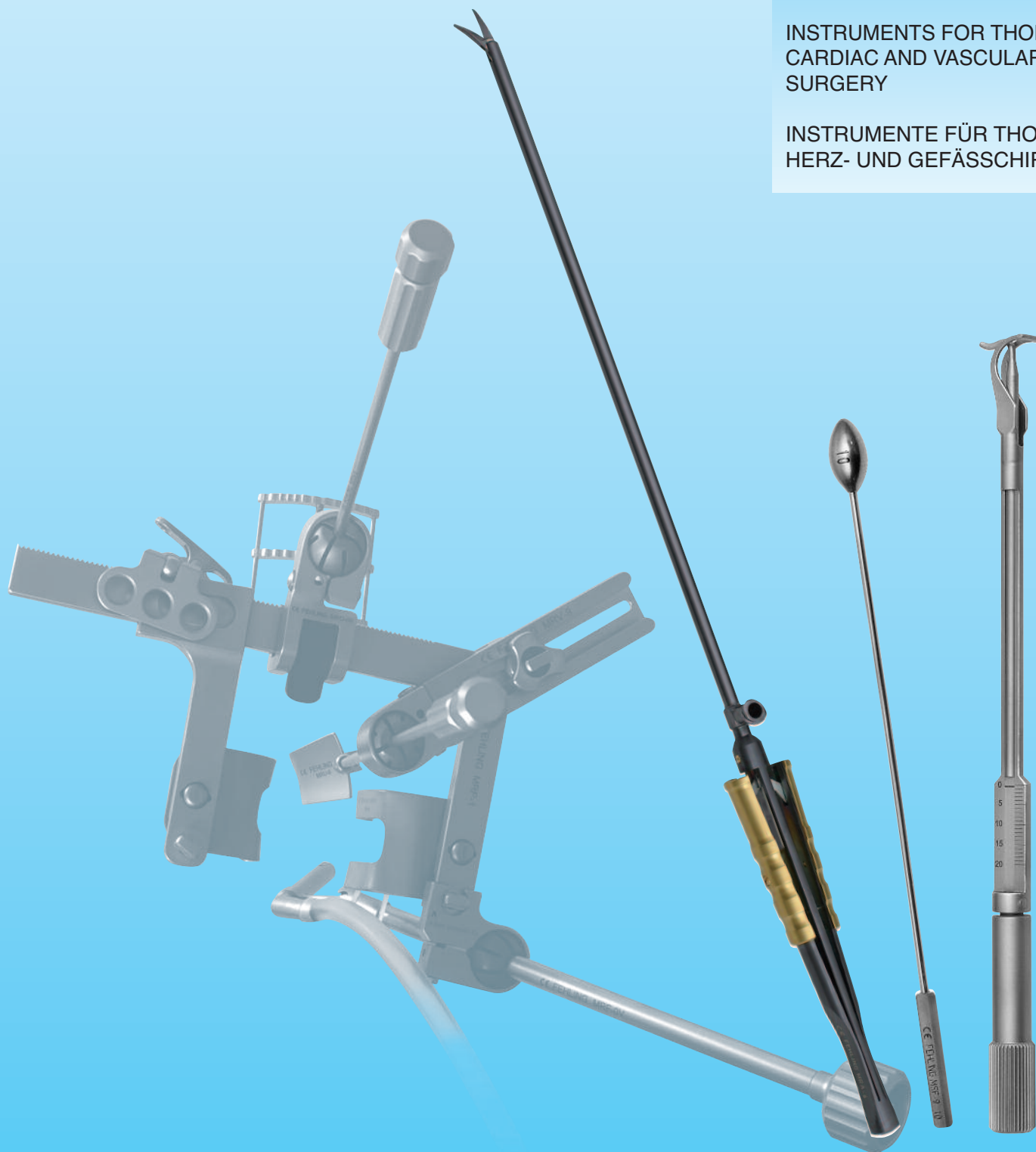
FEHLING...

... THE DIFFERENCE

11

INSTRUMENTS FOR THORACIC,
CARDIAC AND VASCULAR
SURGERY

INSTRUMENTE FÜR THORAX-,
HERZ- UND GEFÄSSCHIRURGIE



FEHLING INSTRUMENTS

Hanauer Landstraße 7A · 63791 Karlstein/Germany · www.fehling-instruments.de



+49 (0) 61 88 - 95 74.40



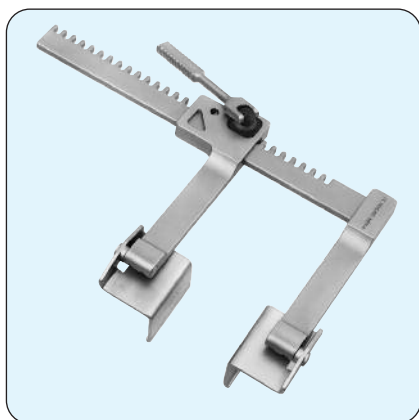
+49 (0) 61 88 - 95 74.45



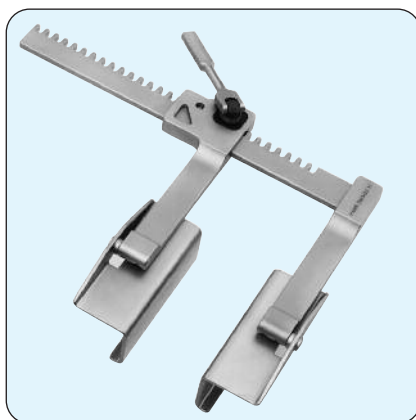
info@fehling-instruments.de

MARJAN MGH

UNIVERSAL STERNAL RETRACTOR
UNIVERSAL STERNUMSPREIZER



PARTIAL STERNOTOMY
PARTIELLE STERNOTOMIE



TOTAL STERNOTOMY
TOTALE STERNOTOMIE



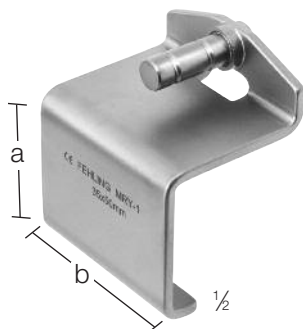
IMA EXPOSURE
IMA EXPOSITION



BODY (ONLY)
RAHMEN (ALLEIN)

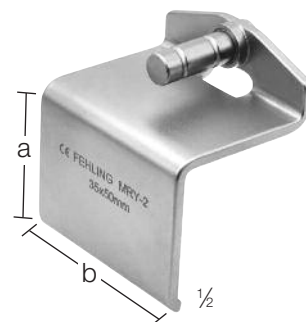
MRY-6

RETRACTING BLADES
HALTEBLÄTTER



FOR PARTIAL STERNOTOMY / L-CUT (PAIR)
FÜR PARTIELLE STERNOTOMIE / L-SCHNITT (PAAR)

a x b	
35 x 50 mm	MRY-1

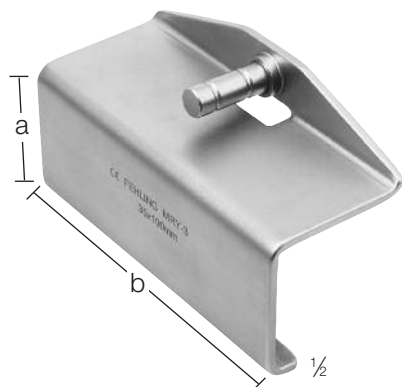


FOR PARTIAL STERNOTOMY / Z-CUT (PAIR)
FÜR PARTIELLE STERNOTOMIE / Z-SCHNITT (PAAR)

a x b	
35 x 50 mm	MRY-2

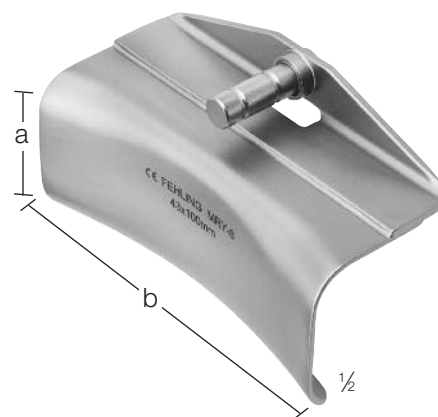
MARJAN MGH

RETRACTING BLADES
HALTEBLÄTTER



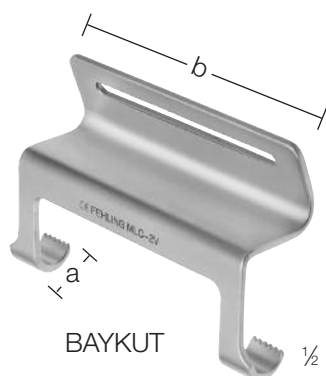
FOR TOTAL STERNOTOMY (PAIR)
FÜR TOTALE STERNOTOMIE (PAAR)

a x b	
35 x 100 mm	MRY-3
45 x 100 mm	MRY-4



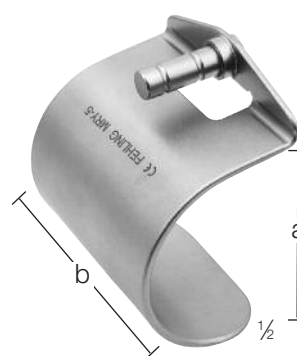
FOR TOTAL STERNOTOMY CONVEX (PAIR)
FÜR TOTALE STERNOTOMIE KONVEX (PAAR)

a x b	
34 x 100 mm	MRY-7
43 x 100 mm	MRY-8
50 x 100 mm	MRY-9
43 x 120 mm	MSD-0



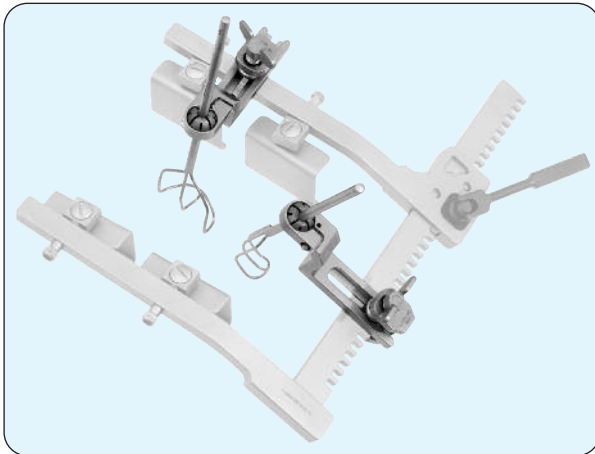
IMA RETRACTING BLADE
IMA HALTEBLATT

a x b	
15 x 50 mm	MLM-6V
15 x 90 mm	MLC-2V
15 x 120 mm	MLM-3V



FOR IMA EXPOSITION
FÜR IMA DARSTELLUNG

a x b	
30 x 65 mm	MSC-8
40 x 65 mm	MSC-9
50 x 65 mm	MRY-5



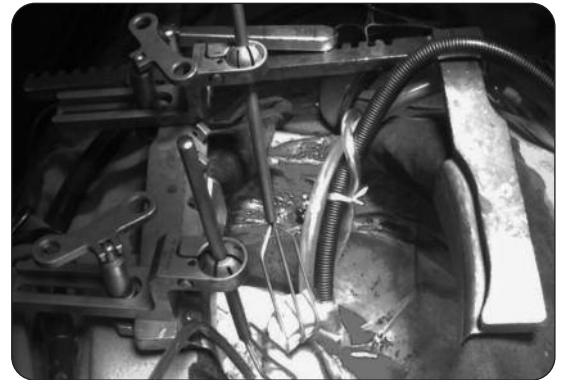
exemplary configuration
Konfigurationsbeispiel



Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4* required for tightening.

Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4* zum Anziehen erforderlich.

* see page 23 / siehe S. 23



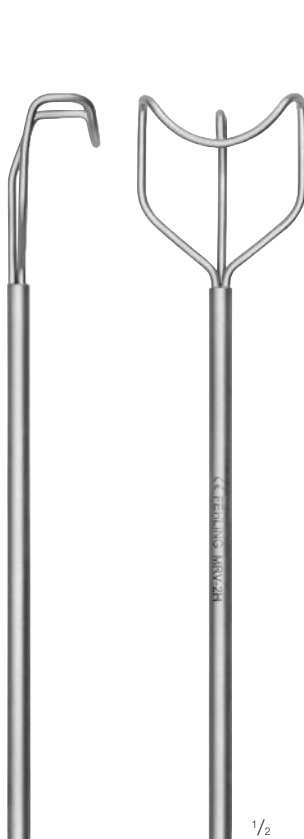
BALL JOINT ADAPTER BAYONET (Ø 6,35)*
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, BAYONETT (Ø 6,35)*
LÄNGE UND HÖHE VARIABLE
+ BEFESTIGUNGSELEMENT

MRV-0F + MZZ-1

* adaptable to most sternal retractors
verwendbar für die meisten Sternumspreizer

HOHE

ATRIAL RETRACTORS, MALLEABLE, LENGTH = 150 mm, SHAFT Ø = 6,35 mm
VORHOFHAKEN, BIEGSAM, LÄNGE = 150 mm, SCHAFT Ø = 6,35 mm



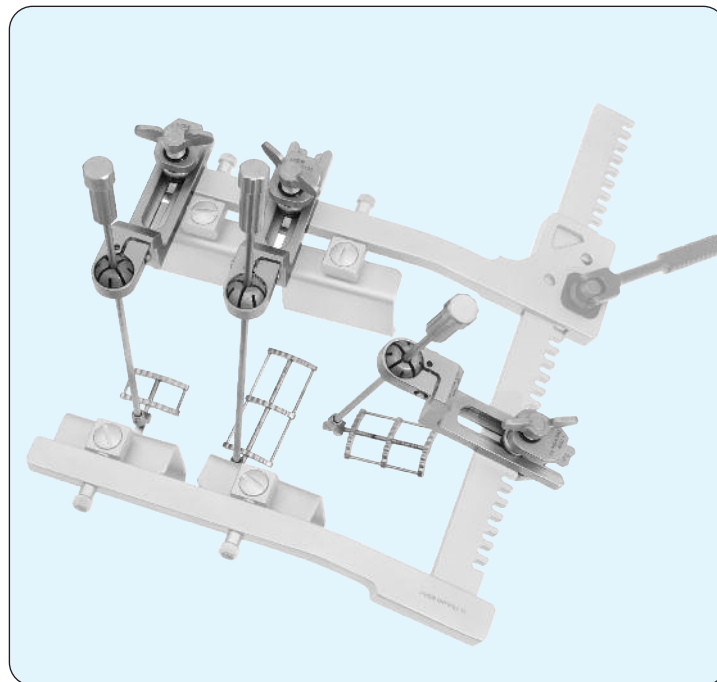
TRICUSPID
45 x 45 mm
MRV-2H



65 x 20 mm
MRV-4H



65 x 30 mm
MRV-3H



Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4* required for tightening.

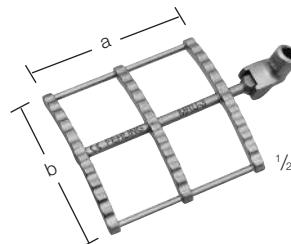
Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4* zum Anziehen erforderlich.

* see page 23 / siehe S. 23

exemplary configuration
Konfigurationsbeispiel

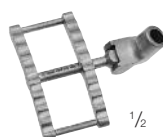


BLADE GUIDE (Ø4)
HAKENFÜHRUNG (Ø4)
220 mm
MRN-3



ATRIAL BLADE
VORHOFBÜGEL

a x b	
45 x 30 mm	MRU-1
60 x 30 mm	MRU-2
45 x 45 mm	MRU-3
60 x 45 mm	MRU-4



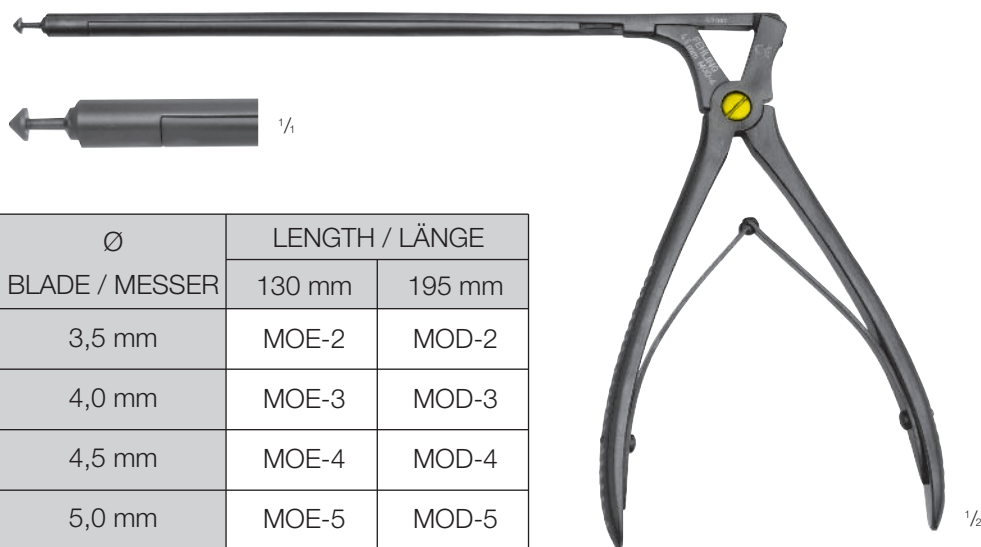
ATRIAL BLADE
FOR TRICUSPIDAL VALVE
VORHOFBLATT
FÜR TRIKUSPIDALKLAPPE
18 x 35 mm
MRU-5



BALL JOINT ADAPTER BAYONET (Ø 4)*
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, BAYONETT (Ø 4)*
LÄNGE UND HÖHE VARIABLE
+ BEFESTIGUNGSELEMENT

MRU-8F + MZZ-1

* adaptable to most sternal retractors
verwendbar für die meisten Sternumspreizer



Ø BLADE / MESSER	LENGTH / LÄNGE	
	130 mm	195 mm
3,5 mm	MOE-2	MOD-2
4,0 mm	MOE-3	MOD-3
4,5 mm	MOE-4	MOD-4
5,0 mm	MOE-5	MOD-5

CERAMO®
AORTIC PUNCH
AORTENSTANZE



AORTIC PUNCH
AORTENSTANZE

Ø BLADE / MESSER	LENGTH / LÄNGE	
	120 mm	150 mm
3,0 mm	MKV-1	MKV-2
3,5 mm	MFT-5	MFT-0
4,0 mm	MFT-6	MFT-9
4,5 mm	MFT-1	MMK-2
5,0 mm	MFT-7	MFU-1
6,0 mm	MFT-8	MFU-2



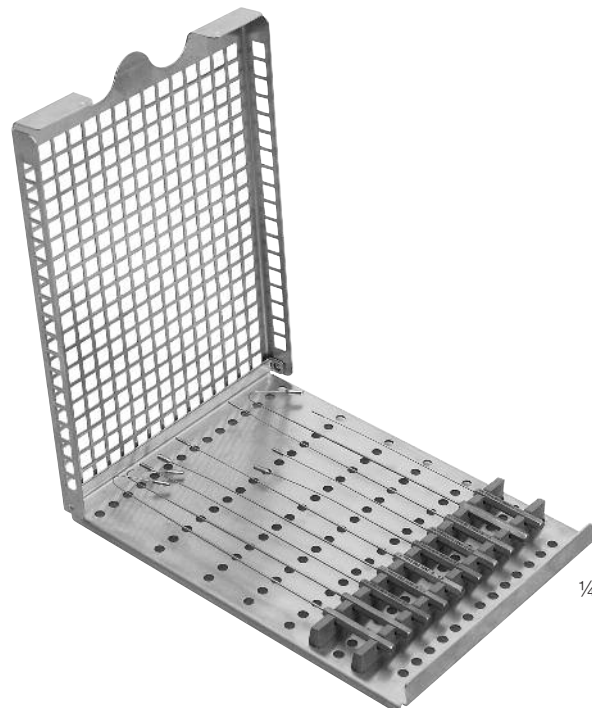
A & E (PORTER)
SINGLE USE AORTIC PUNCH*
EINMAL-AORTENSTANZE*

Ø BLADE / MESSER	ITEM NO. ARTIKEL-NR.
2,7 mm	MOH-1
3,5 mm	MOH-2
4,0 mm	MOH-3
4,5 mm	MOH-4
4,8 mm	MOH-7
5,0 mm	MOH-5

* limited distribution territory
eingeschränktes Vertriebsrecht



SUPERPLAST	LENGTH / LÄNGE		
Ø OLIVE	140 mm	180 mm	210 mm
0,5 mm	MNG-0	MNH-0	–
0,75 mm	–	MNK-7	–
1,0 mm	MNG-1	MNH-1	MIH-1
1,25 mm	MNK-3	MNK-5	–
1,5 mm	MNG-2	MNH-2	MIH-2
1,75 mm	MNK-4	MNK-6	–
2,0 mm	MNG-3	MNH-3	MIH-3
2,25 mm	MNK-8	MNK-9	–
2,5 mm	MNG-4	MNH-4	MIH-4
3,0 mm	MNG-5	MNH-5	MIH-5
3,5 mm	MNG-6	MNH-6	MIH-6
4,0 mm	MNG-7	MNH-7	MIH-7
4,5 mm	MNG-8	MNH-8	MIH-8
5,0 mm	MNG-9	MNH-9	MIH-9



TRAY FOR VASCULAR PROBES
BOX FÜR GEFÄSSSONDEN

OLIVE Ø max. 5 mm
160 x 210 x 17 mm

MNA-0

SUPERPLAST instruments are constructed of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are malleable in normal OR temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperature, such as those found in the autoclave, the instruments regain their initial shape.

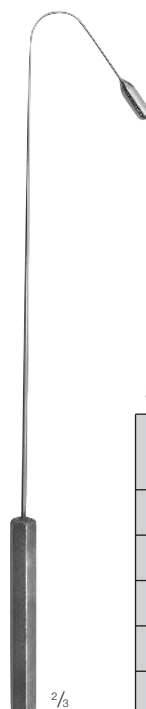
SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie bieten verschiedene Eigenschaften je nach thermischen Bedingungen. Sie sind bei normaler OP-Temperatur biegsam und können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.

SUPERFLEX instruments are constructed of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are super-elastic in normal OR temperatures. Their shape conforms to soft external pressure, yet the instruments regain their normal shape once the pressure is removed. No long-term alteration of shape is possible.

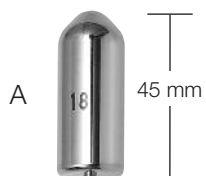
SUPERFLEX Instrumente sind aus Metall mit Formgedächtnis. Sie bieten verschiedene Eigenschaften je nach thermischen Bedingungen. Sie sind bei normaler OP-Temperatur superelastisch. Ihre Form folgt jedem von außen kommenden Druck und sie gewinnen ihre ursprüngliche Form wieder, sobald der Druck entfällt. Ergebnis: Es wird keine bleibende Verformung verursacht.



SUPERFLEX	LENGTH / LÄNGE	
Ø OLIVE	140 mm	180 mm
1,0 mm	MNA-1	MNC-1
1,5 mm	MNA-2	MNC-2
2,0 mm	MNA-3	MNC-3
2,5 mm	MNA-4	MNC-4
3,0 mm	MNA-5	MNC-5



SUPERFLEX	LENGTH / LÄNGE	
Ø OLIVE	140 mm	180 mm
1,0 mm	MNB-1	MND-1
1,5 mm	MNB-2	MND-2
2,0 mm	MNB-3	MND-3
2,5 mm	MNB-4	MND-4
3,0 mm	MNB-5	MND-5



SUPERPLAST
AORTIC SIZER
AORTENLEHRE
300 mm

SUPERPLAST instruments are constructed of shape-memory metal. This metal has unique qualities under different thermal conditions. The instruments are malleable in normal OR temperatures. Soft pressure allows "permanent" deformation of shape according to the surgeon's needs. However in higher temperature, such as those found in the autoclave, the instruments regain their initial shape.

SUPERPLAST Instrumente sind aus Metall mit Formgedächtnis. Sie bieten verschiedene Eigenschaften je nach thermischen Bedingungen. Sie sind bei normaler OP-Temperatur biegsam und können durch sanften Druck in die gewünschte Form gebracht werden. Unter höheren Temperaturen, wie bei der Sterilisation, nehmen sie ihre ursprüngliche Form wieder an.

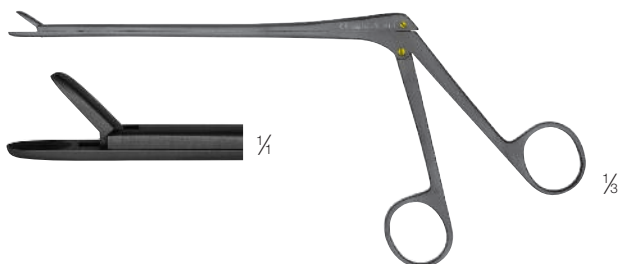


for mitral valve repair techniques
without prosthetic ring
für Mitralklappenrekonstruktion
ohne Ringprothese

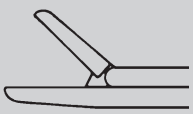
SUPERPLAST HETZER
CROSS-SECTION SIZER
QUERSCHNITTSLHRE
220 mm

Ø A / B	
14 / 16 mm	MNW-7
18 / 20 mm	MNW-1
22 / 24 mm	MNW-2
26 / 28 mm	MNW-3
30 / 32 mm	MNW-4
34 / 36 mm	MNW-5
38 / 40 mm	MNW-6

Ø A / B	
7 / 9 mm	MNZ-0
8 / 10 mm	MNZ-6
11 / 13 mm	MNZ-7
12 / 14 mm	MNZ-2
15 / 17 mm	MNZ-8
16 / 18 mm	MNZ-3
19 / 21 mm	MNZ-9
20 / 22 mm	MNZ-4
24 / 26 mm	MNZ-5
28 / 30 mm	MNY-9



CERAMO® GRUMME
RONGEUR

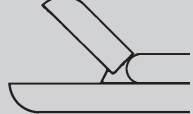
WIDTH BREITE mm	LENGTH LÄNGE mm		
2,0	160	NLT-2	NLT-6
	180	NLU-2	NLU-6
3,0	160	NLT-3	NLT-7
	180	NLU-3	NLU-7
4,0	160	NLT-4	NLT-8
	180	NLU-4	NLU-8
5,0	160	NLT-5	NLT-9
	180	NLU-5	NLU-9

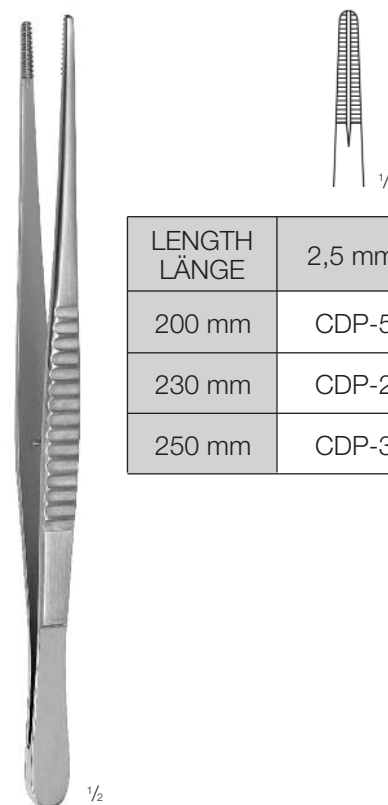


COMB CLAMP
KAMMKLEMMER
160 mm
DDA-2



CERAMO® FERRIS-SMITH
RONGEUR

WIDTH BREITE mm	LENGTH LÄNGE mm		
3,0	200	TOG-1	TOH-1
4,0	200	TOG-2	TOH-2
5,0	200	TOG-3	TOH-3



NON-TRAUMATIC
VALVE FORCEPS
ATRAUMATISCHE
KLAPPENPINZETTE

LENGTH LÄNGE	2,5 mm
200 mm	CDP-5
230 mm	CDP-2
250 mm	CDP-3



TC WIRE TWISTING FORCEPS, STRONG
TC DRAHTSPANNZANGE, STARK
180 mm
KAJ-5



TC WIRE CUTTING FORCEPS
TC DRAHTKNEIFZANGE
175 mm
LAF-1



STERNUMWIRE CUTTER
STERNUMDRAHTZANGE
155 mm
LGJ-5

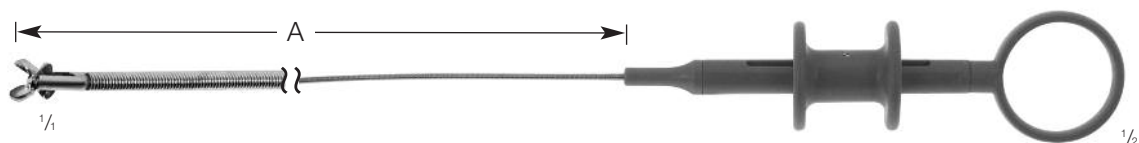


AORTIC DEAIRING CANNULA
AORTEN-ENTLÜFTUNGSKANÜLE
MBR-2



SUTURE HOOK
FADENFÄNGER

	 1/4 1,2 mm	 1/4 1,5 mm	 1/4 2,0 mm	 1/4 2,5 mm	 1/4 3,0 mm
120 mm	—	KAA-5	—	—	—
150 mm	—	KCC-1	—	—	—
200 mm	KAB-0	—	—	—	—
220 mm	—	—	—	KCB-8	—
260 mm	KAA-4	KAA-6	KAA-7	KCA-7	KAA-8
280 mm	—	—	—	KCB-9	—

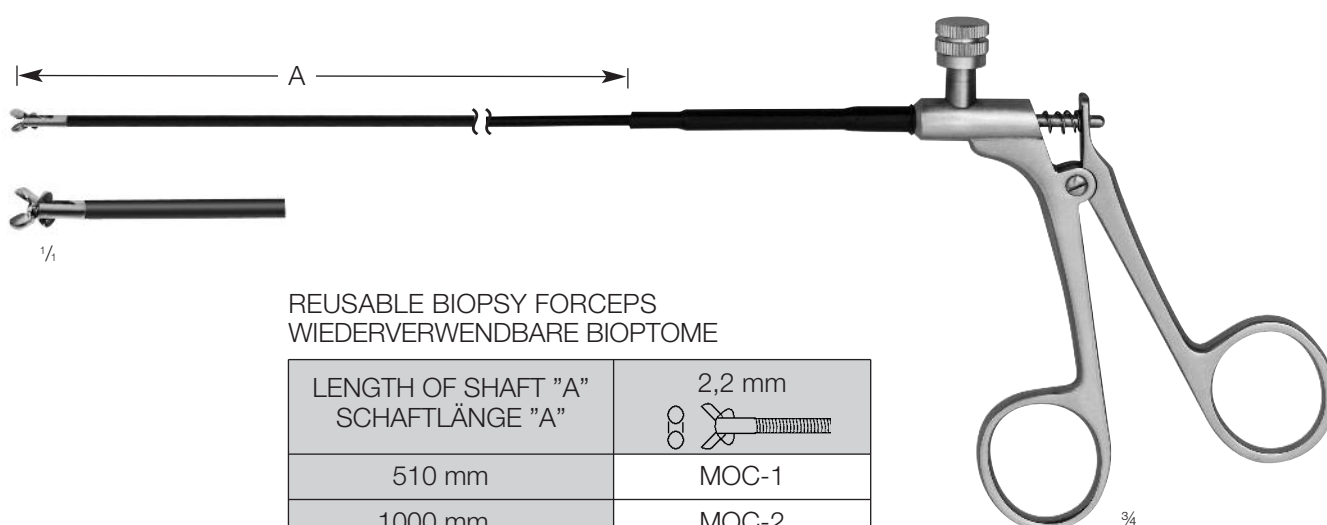


STERILE SINGLE USE BIOPSY FORCEPS
STERILE EINMALBIOPTOME

LENGTH OF SHAFT "A" SCHAFTLÄNGE "A"	1,6 mm	1,8 mm	2,2 mm
510 mm	MOA-1	MOA-5	MOA-9
800 mm	MOA-2	MOA-6	–
1000 mm	MOA-3	MOA-7	–
1200 mm	MOA-4	MOA-8	MOB-1

SOFT SHAFT
WEICHER SCHAFT

510 mm	–	MOB-4	–
1200 mm	–	MOB-5	–



REUSABLE BIOPSY FORCEPS
WIEDERVERWENDBARE BIOPTOME

LENGTH OF SHAFT "A" SCHAFTLÄNGE "A"	2,2 mm
510 mm	MOC-1
1000 mm	MOC-2
1200 mm	MOC-3



CHORDAE GAUGE AND
KNOT ASSISTANT
CHORDAELEHRE UND
KNOTENASSISTENT

230 mm	350 mm
MNV-4	MNV-7



CHORDAE / CUSP
RETRACTOR
CHORDAE- /
SEGELRETRAKTOR

240 mm
MNV-1



CHORDAE / CUSP
RETRACTOR
CHORDAE- /
SEGELRETRAKTOR

240 mm	350 mm
MNV-6	MNV-8



TROCAR WITH PYRAMIDAL TIP
TROKAR MIT DREIKANTSPITZE
10 x 180 mm

MRM-7



PORT WITH FIXATION THREAD
PORT MIT FIXIERGEWINDE
10 x 100 mm

MRM-9



PLANE PORT
GLATTER PORT
10 x 100 mm

MRM-8

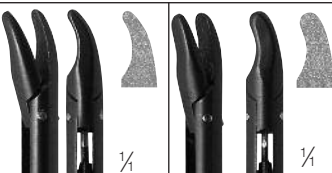
CERAMO® HCR

FORCEPS / PINZETTEN

 1 x 10 mm	 3 x 15 mm	 1,5 x 11 mm	 1,5 x 11 mm 45°	 2,8 x 15 mm	 2,8 x 15 mm 45°	 1/4
SUTURE NAHT	VALVE KLAPPE	NON-TRAUMATIC ATRAUMATISCH				RUSSIAN RUSSISCH
345 mm	350 mm	350 mm	350 mm	280 mm	350 mm	350 mm
MRA-5	MRA-0 1)	MRG-6	MRG-7	MRN-0 ¹⁾	MRA-3 ¹⁾	MRQ-5

NEEDLE HOLDERS / NADELHALTER (WITH LOCK / MIT SPERRE)

1) OPTIONALLY WITH LOCK
OPTIONAL MIT SPERRE

 2 x 10 mm max. 5x0			 3 x 10 mm max. 3x0			 3 x 10 mm max. 2x0			 3 x 10 mm max. 2x0			 1,5 mm max. 5x0		
TCM						TC						TC RYDER		
340 mm		280 mm	340 mm	280 mm	340 mm	350 mm		350 mm						
MRB-2		MRG-8	MRB-1	MRT-6	MRG-9	MRG-2		MSO-1						

max. needle size
max. Nadelgröße

SCISSORS / SCHEREN

 1/4	 1/4	 1/4	 1/4	 1/4	 1/4
VALVE KLAPPE					
350 mm	350 mm	350 mm	280 mm	350 mm	450 mm
MRA-7	MRT-2	MRT-3	MSO-3	MRD-7	MRD-7L
 45° BLUNT/STUMPF 1/4	 45° 1/4	 90° 1/4	 1/4		
VASCULAR GEFÄSS			DISSECTING PRÄPARATION		
345 mm	345 mm	335 mm	280 mm	350 mm	
MRA-8B	MRA-8	MRA-9	MRQ-0	MRA-6	

SHAFT DIAMETER = 5.0 mm
SCHAFTDURCHMESSER = 5,0 mm

CERAMO® HCR



NON-TRAUMATIC
GRASPING FORCEPS
ATRAUMATISCHE
ORGANFASSZANGE

370 mm

MRL-8¹⁾

1) OPTIONALLY WITH LOCK
OPTIONAL MIT SPERRE



KNOT PUSHER
KNOTENSCHIEBER

280 mm

340 mm

MRQ-2

MRB-6¹⁾

1) OPTIONALLY WITH LOCK
OPTIONAL MIT SPERRE



CLIP APPLIER²⁾
CLIPANLEGEZANGE

365 mm

370 mm

SMALL

MEDIUM

MRG-3

MRG-4

2) FOR / FÜR
ETHICON + HORIZON CLIPS



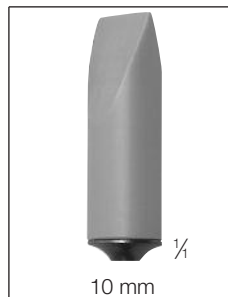
NERV HOOK
NERVHAKEN

280 mm

340 mm

MRQ-1

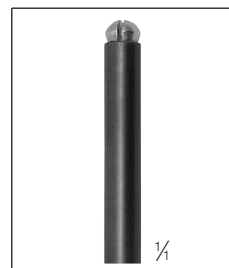
MRB-4



VALVE INSPECTOR
KLAPPENPRÜFINSTR.

350 mm

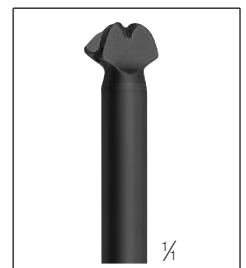
MRL-2



SCALPEL HANDLE³⁾
SKALPELLGRIFF

350 mm

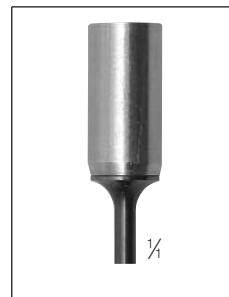
MRL-4



KNOT PUSHER
KNOTENSCHIEBER

340 mm

MRK-9



MAGNETIC FINDER
MAGNETSTAB

350 mm

MRL-5

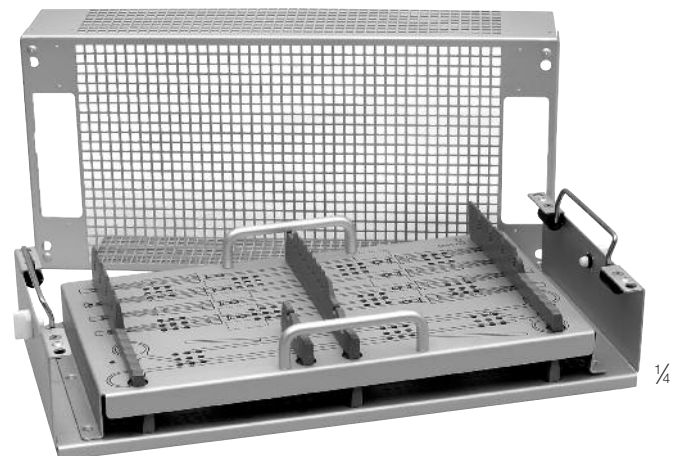


MIRROR
SPIEGEL

360 mm

MRQ-6

3) FOR BEAVER BLADES
FÜR BEAVER MESSER



TRAY FOR HCR INSTRUMENTS
CONTAINER FÜR HCR-INSTRUMENTE
550 x 250 x 100 mm

MRC-9

CERAMO® HCR

FORCEPS / PINZETTEN

 1,2 x 8 mm 1/4	 1,2 x 15 mm 1/4	 45° 1,2 x 12 mm 1/4	 45° 1,4 x 12 mm 1/4
SUTURE NAHT	NON-TRAUMATIC ATRAUMATISCH		
280 mm	290 mm	280 mm	280 mm
MRC-1	MRC-2	MRC-3	MRC-0

TCM NEEDLE HOLDERS / TCM NADELHALTER

 1 x 10 mm max. 6x0 1/4	 2 x 10 mm max. 5x0 1/4
280 mm	280 mm
MRC-5	MRC-4

max. needle size
max. Nadelgröße

SCHEREN / SCISSORS

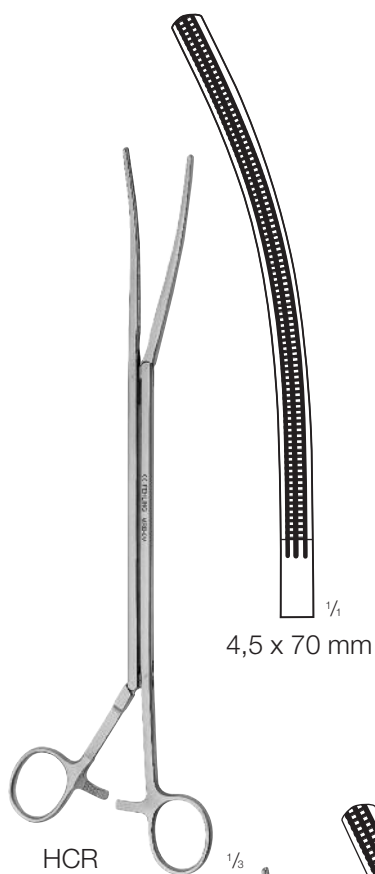
 45° 1/4	 125° 1/4	 45° 7 mm 1/4	 1/4
VASCULAR GEFÄSS			DISSECTING PRÄPARATION
280 mm	280 mm	280 mm	280 mm
MRC-7	MRC-8	MRM-0	MRC-6

SHAFT DIAMETER = 3.5 mm
SCHAFTDURCHMESSER = 3,5 mm

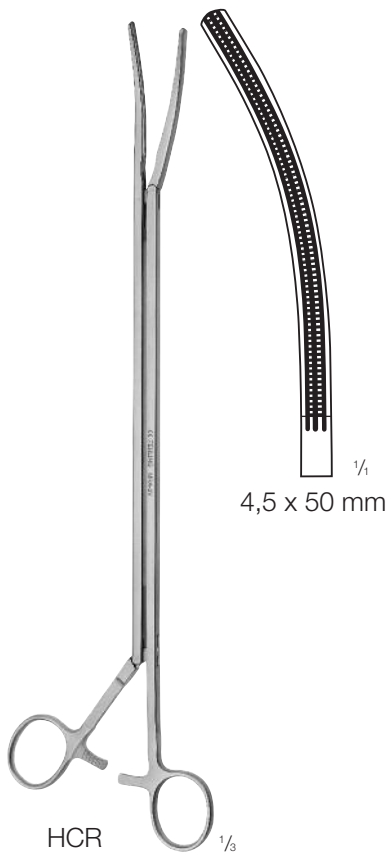


2/3

NON-TRAUMATIC FORCEPS
ATRAUMATISCHE KLEMMEN



HCR
290 mm
MRB-0V



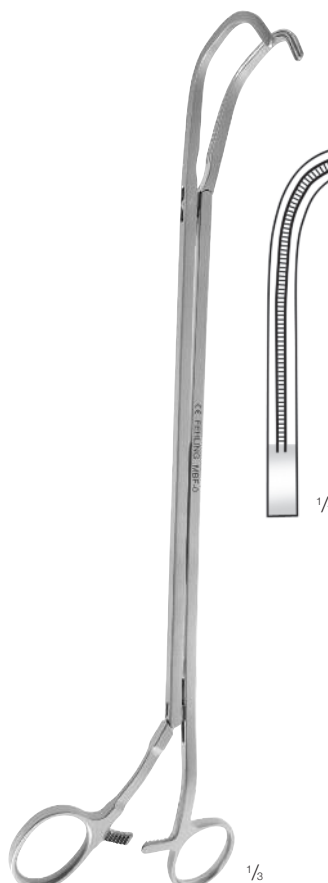
HCR
330 mm
MRA-2V



340 mm
MAQ-8



HCR
360 mm
MRA-1V



SATINSKY
350 mm
MBF-0



3 mm

CARDIOPLEGIA CANNULA
KARDIOPLEGIEKANÜLE
270 mm

MRL-0



SPARE NEEDLE
ERSATZNADEL

MRK-4S



CARDIOPLEGIA CANNULA*
KARDIOPLEGIEKANÜLE*

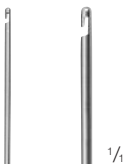
MRK-4

* detachable LL-Adapter
* LL-Anschluss abnehmbar



WRENCH FOR
DETACHABLE LL-ADAPTER
SCHLÜSSEL FÜR
ABNEHMBAREN LL-ANSCHLUSS

MRK-6



1,6 mm

SUTURE HOOK
FADENFÄNGER
350 mm

KCC-0



CERAMO®
HANDLE FOR KCC-0
GRIFF FÜR KCC-0
110 mm

ABB-1

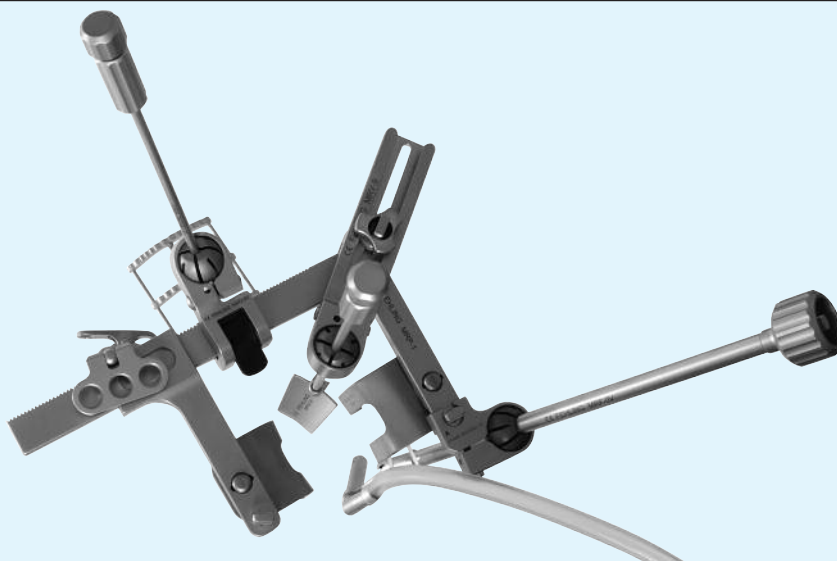


SUMP ASPIRATOR*
SUMPFSAUGER*

270 mm

MRK-5

* detachable LL-Adapter
* LL-Anschluss abnehmbar



exemplary configuration
Konfigurationsbeispiel

BASIC ELEMENTS
BASISKOMPONENTEN



RETRACTING BLADES (PAIR)*
HALTEBLÄTTER (PAAR)*

INTERCOSTAL RETRACTOR
INTERCOSTALSPREIZER

MRP-1

RETRACTING BLADES (PAIR)*
HALTEBLÄTTER (PAAR)*

BLADE SIZE BLATTGRÖSSE a x b	
40 x 35 mm	MRP-2
50 x 35 mm	MRP-3
60 x 35 mm	MRP-4
70 x 35 mm	MRO-7

BLADE SIZE BLATTGRÖSSE a x b	
40 x 35 mm	MRP-2V
50 x 35 mm	MRP-3V
60 x 35 mm	MRP-4V
70 x 35 mm	MRO-7V
80 x 35 mm	MRQ-7
90 x 35 mm	MRQ-8
100 x 35 mm	MRQ-9

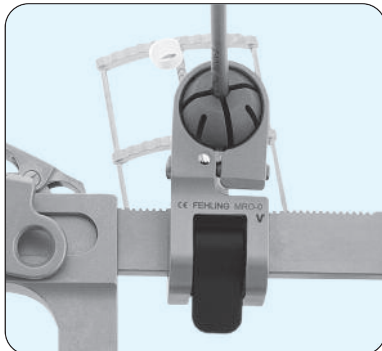
*auxiliary tool: blade ejector NGM-6 see cat. 2 p. 40
Hilfsmittel: Blattentferner NGM-6 siehe Kat. 2 S. 40



BLADE GUIDE (Ø4)
HAKENFÜHRUNG (Ø4)
220 mm

MRN-3

RETRACTION OF THE ATRIAL ROOF
RETRAKTION DES VORHOFDACHS



*exemplary configuration
Konfigurationsbeispiel*



BALL ADAPTER (Ø4)
KUGELADAPTER (Ø4)

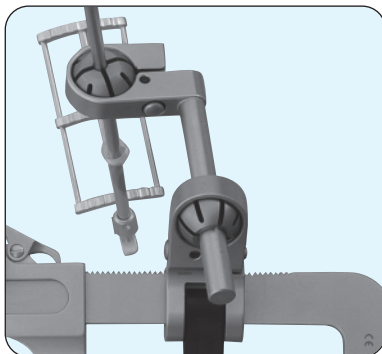
MRO-0V



Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4* required for tightening.

Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4* zum Anziehen erforderlich.

* see page 23 / siehe S. 23

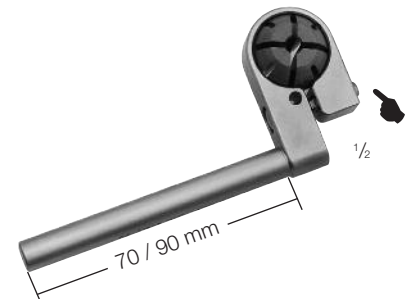


*exemplary configuration
Konfigurationsbeispiel*



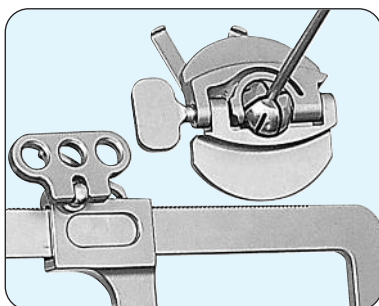
BALL ADAPTER (Ø8) FOR MRR-2V/L
KUGELADAPTER (Ø8) FÜR MRR-2V/L

MRR-1V



BALL ADAPTER (Ø4)
WITH DISTANCE ELEVATOR
KUGELADAPTER (Ø4)
MIT DISTANZHEBEL

70 mm	90 mm
MRR-2V	MRR-2L

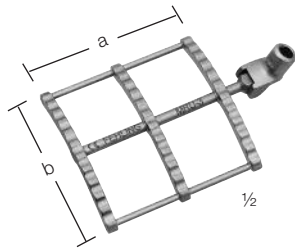


*exemplary configuration
Konfigurationsbeispiel*



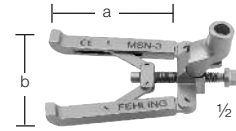
FIXATION DEVICE FOR MRN-3
(FOR EXTERNAL STAB INCISION)
FIXIERVORRICHTUNG FÜR MRN-3
(FÜR SEPARATE STICHINZISION)

MRO-9



ATRIAL BLADE
VORHOFBÜGEL

a x b	
30 x 30 mm	MRX-2
30 x 45 mm	MRX-3
45 x 30 mm	MRU-1
60 x 30 mm	MRU-2
45 x 45 mm	MRU-3
60 x 45 mm	MRU-4



ATRIAL RETRACTOR, EXPANDABLE*
VORHOFGABEL, AUFSPREIZBAR*

a x b
55 x 30 mm

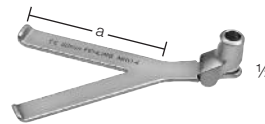
MSN-3

*cardan screw driver LMT-4 required (see page 23)
Kardanschraubendreher LMT-4 erforderlich (siehe S.23)



ATRIAL BLADE
VORHOFBLATT

a x b	
30 x 8 mm	MRN-4
40 x 8 mm	MRN-5
50 x 8 mm	MRN-6



ATRIAL HOOK
VORHOFGABEL

- a -	
30 mm	MRO-2
40 mm	MRO-3
50 mm	MRO-4
60 mm	MRO-5
70 mm	MRO-6

GUIDING CLAMPS FOR THE INSERTION OF ATRIAL BLADES / SEPTUM HOLDERS
FÜHRUNGSZANGEN ZUM EINSpanNEN VON VORHOFBLÄTTERN / SEPTUMNIEDERHALTERN



GUIDING FORCEPS
FÜHRUNGSZANGE
260 mm

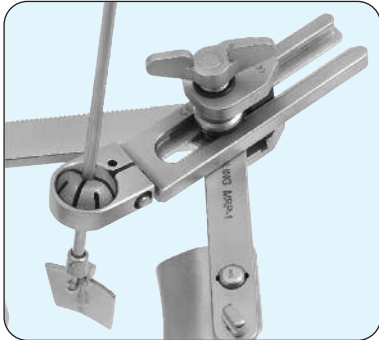
MRN-7



GUIDING CLAMP
FÜHRUNGSKLEMME

MRU-9

HOLDING THE SEPTAL FOLD DOWN NIEDERHALTEN DER SEPTUMFALTE



*exemplary configuration
Konfigurationsbeispiel*



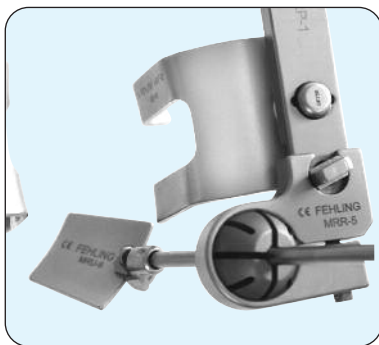
BALL JOINT ADAPTER (Ø4)
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, GERADE (Ø4)
LÄNGE UND HÖHE VARIABEL
+ BEFESTIGUNGSELEMENT

MRV-9F + MZZ-1



RETAINER FOR SEPTAL FOLD
AND DIAPHRAGM
NIEDERHALTER FÜR SEPTUMFALTE
UND ZWERCHFELL

MRU-6



*exemplary configuration
Konfigurationsbeispiel*



LEFT / LINKS
MRR-5



RIGHT / RECHTS
MRR-6

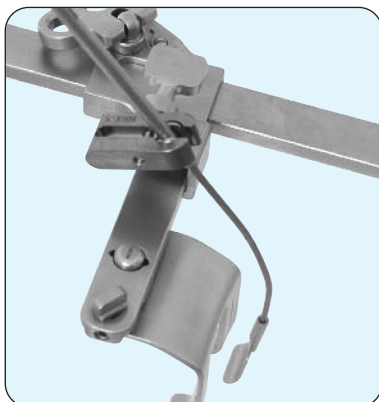
BALL ADAPTER (Ø4)
KUGELADAPTER (Ø4)

Inside screw prevents jammed sutures and is space saving; cardan screwdriver LMT-4* required for tightening.

Innenliegende Schraube verhindert Einklemmen von Fäden und spart Platz; Kardan Schraubendreher LMT-4* zum Anziehen erforderlich.

* see page 23 / siehe S. 23

RETRACTION OF THE MV CUSP RETRAKTION DES MK-SEGELS



*exemplary configuration
Konfigurationsbeispiel*



BALL JOINT ADAPTER MINI FRONT LOAD (Ø4)
VARIABLE HEIGHT
KUGELADAPTER MINI FRONT LOAD (Ø4)
HÖHE VARIABEL

MRX-5



SUPERPLAST
MALLEABLE RETRACTOR FOR MV CUSP (Ø4)
BIEGBARER RETRAKTOR FÜR MK-SEGEL (Ø4)
250 mm

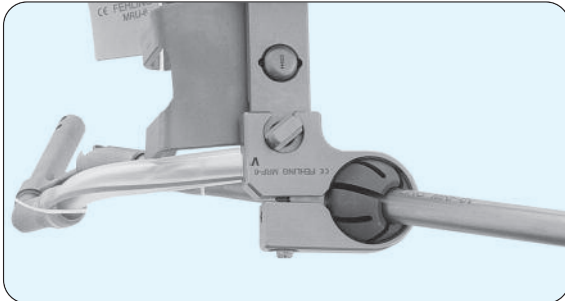
MRX-1V



SUPERPLAST
MALLEABLE LID HOOK (Ø4)
BIEGBARER LIDHAKEN (Ø4)
12 x 14 x 250 mm

MRX-6

HOLDING THE INCISED ATRIUM OPEN
OFFENHALTEN DES INZIDIERTEN VORHOFS



*exemplary configuration
Konfigurationsbeispiel*



BALL ADAPTER (Ø8)
KUGELADAPTER (Ø8)

LEFT / LINKS

MRP-5V



RIGHT / RECHTS

MRP-6V



BLADE GUIDE (Ø8)
HAKENFÜHRUNG (Ø8)

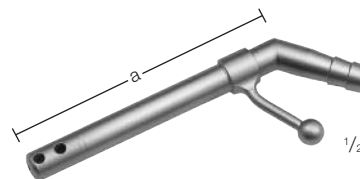
200 mm

MRF-0V



INSERTION FORCEPS FOR MRJ-5,6,7
EINFÜHRZANGE FÜR MRJ-5,6,7

MRJ-4



LATERAL ATRIAL RETRACTOR /
SUCTION DEVICE
SAUGNIEDERHALTER FÜR
LATERALE RETRAKTION DES VORHOFS



Inside screw prevents jammed
sutures and is space saving;
cardan screwdriver LMT-4*
required for tightening.

Innenliegende Schraube verhindert
Einklemmen von Fäden und spart Platz;
Kardan Schraubendreher LMT-4*
zum Anziehen erforderlich.

* see page 23 / siehe S. 23

DEPTH TIEFE a	
60 mm	MRJ-5
70 mm	MRJ-6
80 mm	MRJ-7



CARDAN SCREWDRIVER
KARDAN SCHRAUBENDREHER

LMT-4

OPTIONAL ADAPTERS WITH WING SCREW (no cardan screwdriver required)
OPTIONALE ADAPTER MIT FLÜGELSCHRAUBE (kein Kardanschraubendreher erforderlich)



MRO-0



MRR-1



MRR-2



MRP-5



MRP-6

MICS ENDOSCOPE HOLDING SYSTEM
MICS ENDOSKOPHALTESYSTEM



ENDOSCOPES (ASAP)
ENDOSKOPPE (ASAP)

360 mm

	Ø	
 0°	5 mm	LFI-0
	10 mm	LFI-4
 30°	5 mm	LFI-1
	10 mm	LFI-5
 45°	5 mm	LFI-2
	10 mm	LFI-6
 70°	5 mm	LFI-3

ENDOSCOPE HOLDER
ENDOSKOPHALTER

Ø ENDOSCOPE ADAPTER ENDOSKOPAUFNÄHME	
4 mm	MRT-7
5 mm	MRT-8
8 mm	MRT-0
10 mm	MRT-9

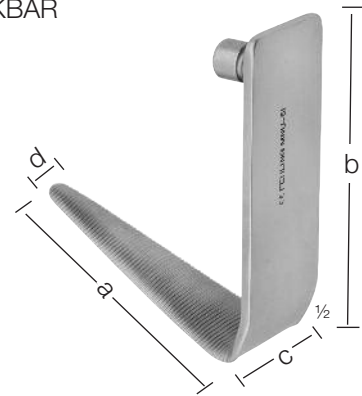
OR-TABLE ADAPTING CLAMP, ADJUSTABLE (Ø16)
OP-TISCHHALTEKLAUE, WINKELVERSTELLBAR (Ø16)

EEK-1F



BLADE GUIDE, TURNING AND SWINGING
HAKENFÜHRUNG, DREH- UND SCHWENKBAR
300 mm

EEL-4F



IMA BLADE
IMA-BLATT
30 x 7 mm (c x d)

a x b	
70 x 70 mm	MNU-6I
75 x 70 mm	MNT-9I
90 x 70 mm	MNU-7I
110 x 70 mm	MNU-8I
130 x 70 mm	MNU-9I



COUPLING RIDER
VERBINDUNGSSCHLITTEN

EEP-0

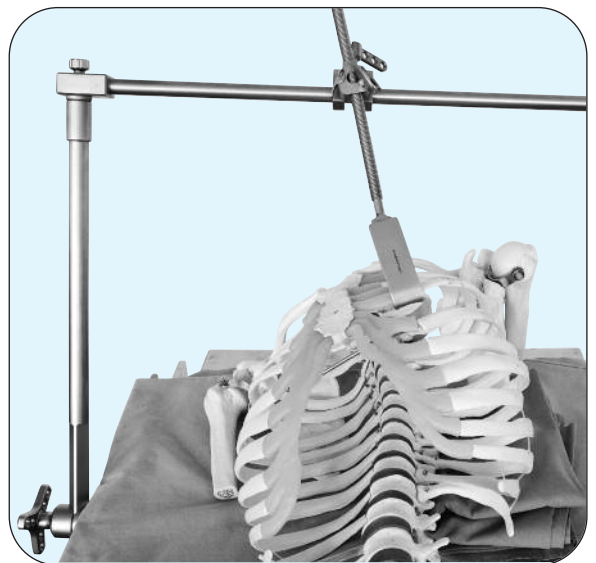
ANGULATED ROD
WINKELSTAB
16 x 1000 x 600 mm

EEJ-2 (a,b,c)



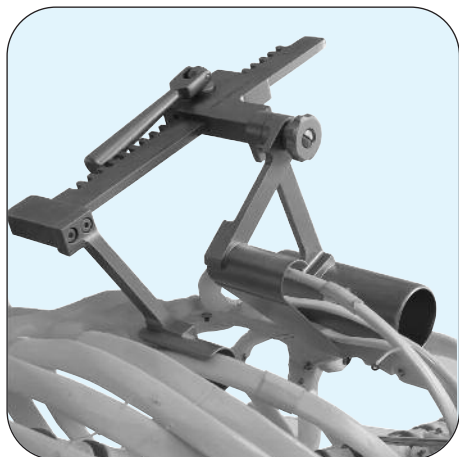
OR-TABLE ADAPTING CLAMP, ADJUSTABLE (Ø16)
OP-TISCHHALTEKLAUE, WINKELVERSTELLBAR (Ø16)

EEJ-1



exemplary configuration
Konfigurationsbeispiel

CTS



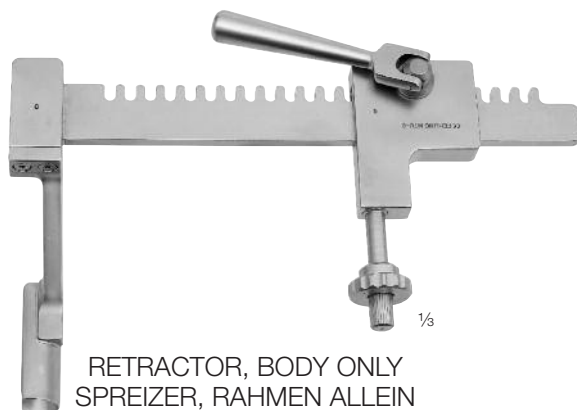
exemplary configuration
Konfigurationsbeispiel



MICS IMA RETRACTOR, COMPLETE
MICS IMA-SPREIZER, KOMPLETT

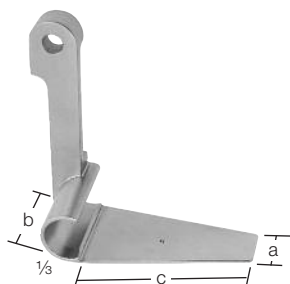
MTU-3

COMPONENTS INCLUDED IN MTU-3:
IN MTU-3 ENTHALTENE BESTANDTEILE:



RETRACTOR, BODY ONLY
SPREIZER, RAHMEN ALLEIN

MTU-3(a)



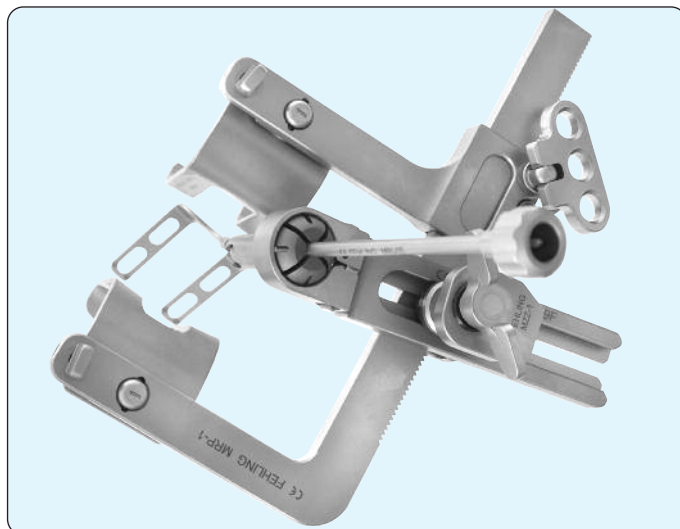
IMA-BLADE
IMA BLATT

a x b x c	
18 x 40 x 72 mm	MTU-3(f1)
20 x 45 x 80 mm	MTU-3(f2)
22 x 50 x 88 mm	MTU-3(f3)

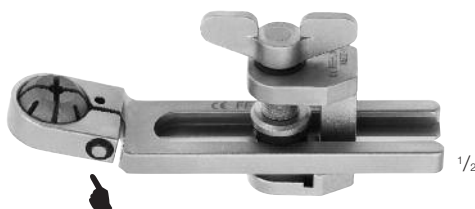


LEVER ARM
HEBELARM

a	
70 mm	MTU-3(g1)
100 mm	MTU-3(g2)



*exemplary configuration
Konfigurationsbeispiel*



BALL JOINT ADAPTER (Ø 4)
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, GERADE (Ø 4)
LÄNGE UND HÖHE VARIABEL
+ BEFESTIGUNGSELEMENT

MRV-9F + MZZ-1



MYOCARDIAL MUSCLE STABILIZER
HERZMUSKELSTABILISATOR

MRR-3V



BLADE GUIDE (Ø4)
HAKENFÜHRUNG (Ø4)
120 mm
MRI-0S

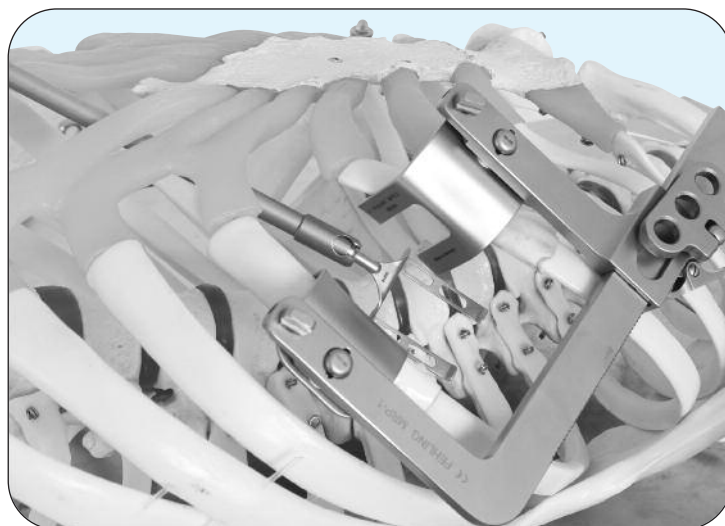
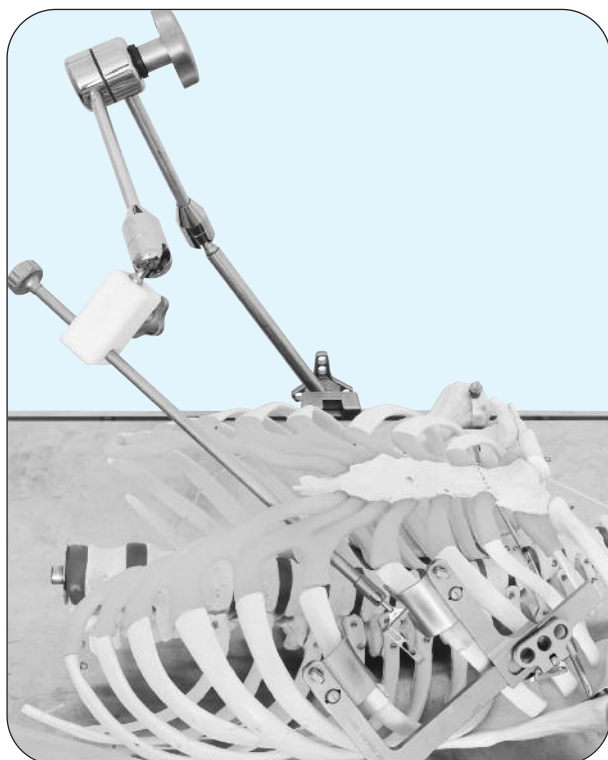


Inside screw prevents jammed
sutures and is space saving;
cardan screwdriver LMT-4*
required for tightening.

Innenliegende Schraube verhindert
Einklemmen von Fäden und spart Platz;
Kardan Schraubendreher LMT-4*
zum Anziehen erforderlich.

* see page 23 / siehe S. 23

MIDCAB MYOCARDIAL MUSCLE STABILIZER
MIDCAB HERZMUSKELSTABILISATOR



*exemplary configuration
Konfigurationsbeispiel*



BLADE GUIDE (Ø8)
HAKENFÜHRUNG (Ø8)
300 mm

MTI-1



GUIDING PROBE
FÜHRUNGSSONDE

MTI-2V



MYOCARDIAL MUSCLE STABILIZER 90°
HERZMUSKELSTABILISATOR 90°

MRJ-9V

REQUIRED ACCESSORY FOR
TABLE-FIXATION

ERFORDERLICHES ZUBEHÖR
FÜR TISCHFIXIERUNG

ENDOSCOPE HOLDER (Ø8)
ENDOSKOPHALTER (Ø8)

MRT-0

OR-TABLE ADAPTING CLAMP
OP-TISCHHALTEKLAUE

EEK-1F

SCHÄFERS

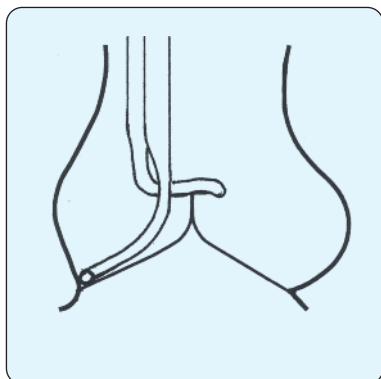


CALLIPER FOR
AORTIC VALVE CUSP
LEHRE FÜR
AORTENKLAPPENSEGEL
200 mm



LOCK NUT FOR MSS-1/2
KONTERMUTTER FÜR MSS-1/2
ZDS-6

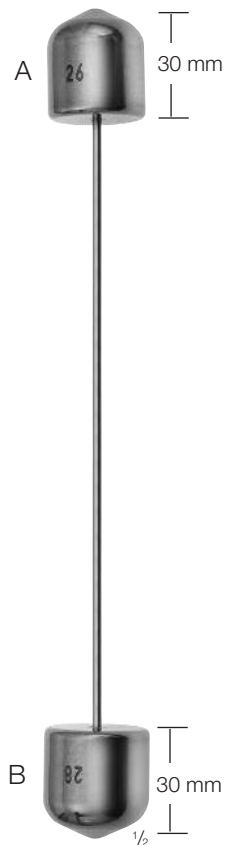
* optional – for fixation of the measuring
optional – zur Fixierung der Messung



RULER*
MESSSTAB*
160 mm

MNV-0

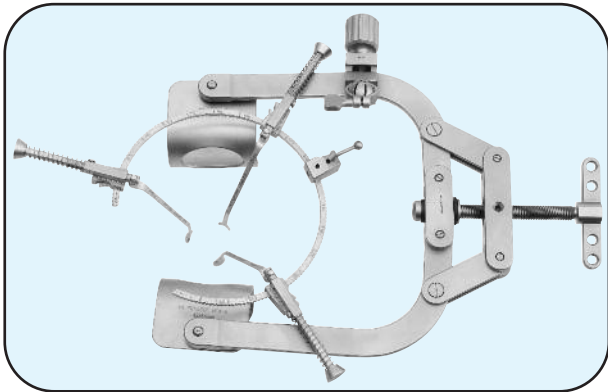
* both sides calibrated
beidseitig kalibriert



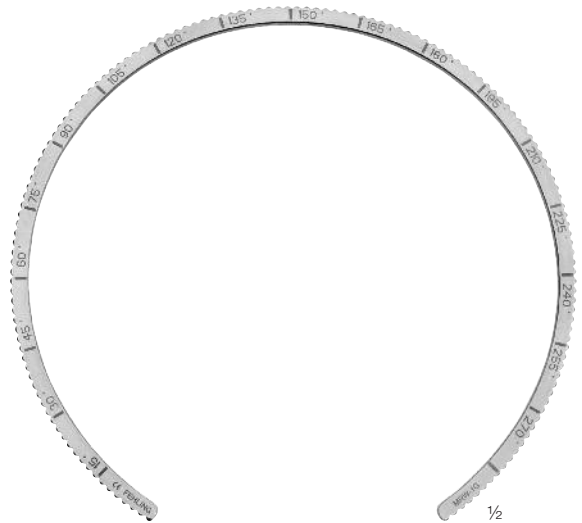
SUPERPLAST
CROSS-SECTION SIZER
QUERSCHNITTSLEHRE
220 mm

Ø A / B	
18 / 20 mm	MNX-1
19 / 21 mm	MNX-6
22 / 24 mm	MNX-2
23 / 25 mm	MNX-7
26 / 28 mm	MNX-3
27 / 29 mm	MNX-8
30 / 32 mm	MNX-4
31 / 33 mm	MNX-9
34 / 36 mm	MNX-5

SCHÄFERS



exemplary configuration
Konfigurationsbeispiel



AVR RETRACTOR / BODY ONLY
AKR-SPREIZER / RAHMEN ALLEIN
Ø 140 mm

MRW-1G



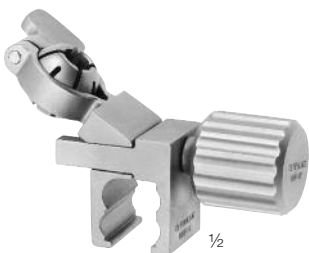
COUPLING RIDER FOR RETRACTING BLADES
FIXIERSCHLITTEN FÜR HALTEBLÄTTER

MRW-7



COUPLING RIDER WITH
CONNECTION BALL
KONNEKTORSCHLITTEN

MRW-6



BALL JOINT ADAPTER (Ø8)
KUGELADAPTER (Ø8)

MRF-1V



BLADE GUIDE (Ø8)
HAKENFÜHRUNG (Ø8)

120 mm

MRI-0

RETRACTING BLADES
HALTEBLÄTTER

BLADE DEPTH BLATTTIEFE	
70 mm	MRW-2G
85 mm	MRW-3G
100 mm	MRW-4G
115 mm	MRW-5G



AVR STERILISATION AND STORAGE TRAY
AKR STERILISIER- UND LAGERCONTAINER

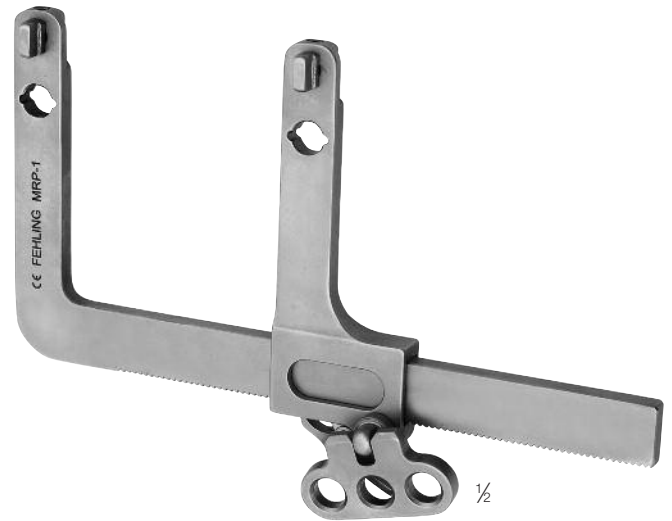
530 x 250 x 100 mm

MRW-0

RETRACTOR FOR MILuTX
RETRAKTOR FÜR MILuTX

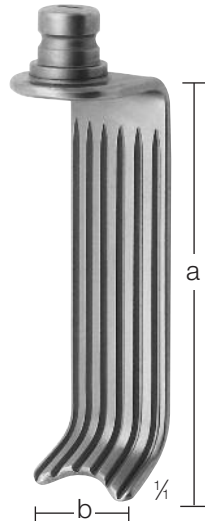


*exemplary configuration
Konfigurationsbeispiel*



MICS INTERCOSTAL RETRACTOR
MICS INTERCOSTALSPREIZER

MRP-1



RETRACTING BLADES*
HALTEBLÄTTER*

DEPTH TIEFE a	WIDTH / BREITE b	
	15 mm	24 mm
25 mm	—	MRE-4S
35 mm	MRI-1S	MRE-5S
45 mm	MRI-2S	MRE-6S
55 mm	MRI-3S	MRE-7S
65 mm	MRI-4S	MRE-8S
75 mm	MRI-5S	MRE-9S
85 mm	MRI-6S	MRI-8S
95 mm	MRI-7S	MRI-9S

* auxiliary tool: blade ejector NGM-6 see catalogue 2 page 40
Hilfsmittel: Blattentferner NGM-6 siehe Katalog 2 Seite 40



CROSS BRACKET FOR RETRACTING BLADES
QUERBÜGEL FÜR HALTEBLÄTTER

35 mm

MRD-8V



CROSS BRACKET FOR RETRACTING BLADES
QUERBÜGEL FÜR HALTEBLÄTTER

60 mm

MRD-9V

RETRACTOR FOR MILuTX
RETRAKTOR FÜR MILuTX

SUPERPLAST

LUNG/DIAPHRAGM RETRACTOR, MALLEABLE (Ø 6,35)

LUNGEN-/ZWERCHFELLRETRAKTOR, BIEGSAM (Ø 6,35)



THICKNESS STÄRKE	70x35x225 mm
1,2 mm	MRV-7V
2,0 mm	MRV-7



THICKNESS STÄRKE	70x35x182 mm
1,2 mm	MRV-8V
2,0 mm	MRV-8



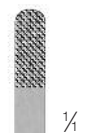
BALL JOINT ADAPTER, (Ø 6,36)
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, GERADE (Ø 6,36)
LÄNGE + HÖHE VARIABEL
+ BEFESTIGUNGSELEMENT

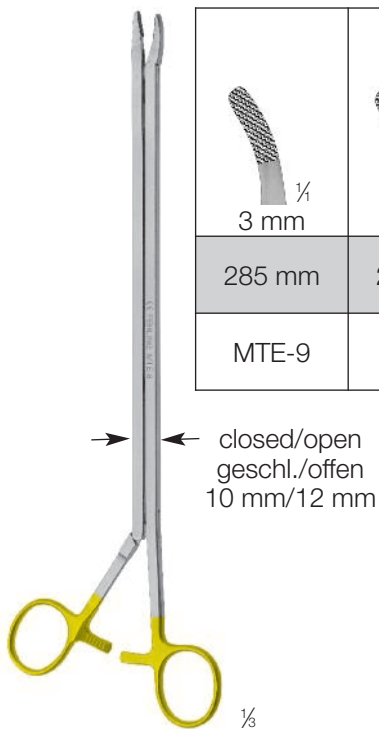
MRV-1F + MZZ-1

MITHOS

INSTRUMENTS FOR MINIMALLY INVASIVE THORACIC SURGERY
INSTRUMENTE FÜR MINIMALINVASIVE THORAXCHIRURGIE

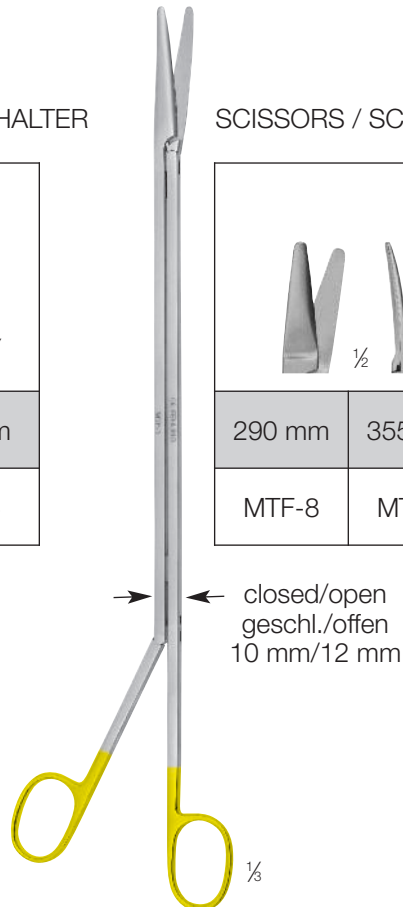
TC NEEDLEHOLDERS / TC NADELHALTER

		
3 mm $\frac{1}{4}$	4 mm $\frac{1}{4}$	4 mm $\frac{1}{4}$
285 mm	285 mm	340 mm
MTE-9	MTE-8	MTF-5



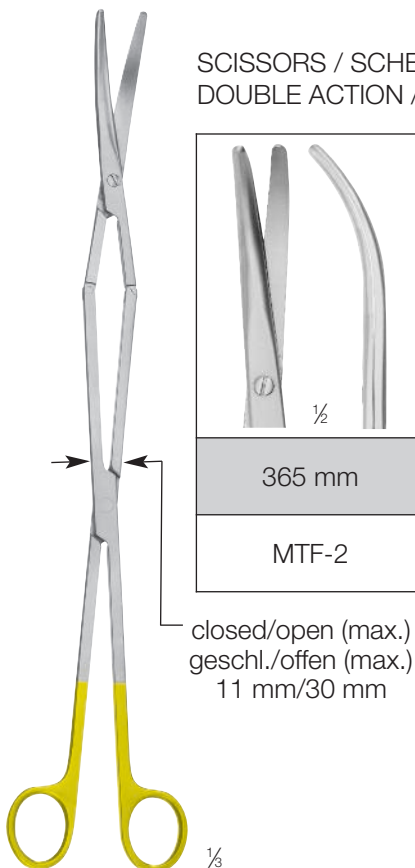
SCISSORS / SCHEREN

		
290 mm	355 mm	360 mm
MTF-8	MTF-7	MTF-1



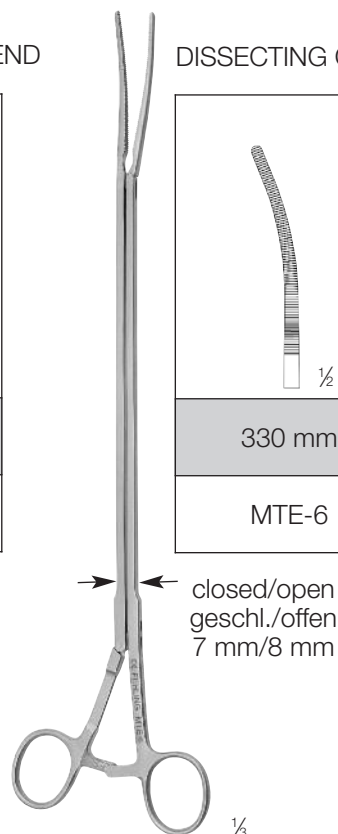
SCISSORS / SCHEREN DOUBLE ACTION / BEIDSEITIG ÖFFNEND

	
365 mm	360 mm
MTF-2	MTF-6



DISSECTING CLAMP / DISSEKTIONSKLEMME


330 mm
MTE-6



MITHOS

INSTRUMENTS FOR MINIMALLY INVASIVE THORACIC SURGERY
INSTRUMENTE FÜR MINIMALINVASIVE THORAXCHIRURGIE

FORCEPS / KLEMMEN



NON-TRAUMATIC / ATRAUMATISCH			GRASPING FORCEPS FASSZANGE	LUNG GRASPING FORCEPS LUNGENFASSZANGE
330 mm	330 mm	350 mm	340 mm	350 mm
MTE-7	MTF-4	MTF-3	MTE-1	MTE-2

closed/open
geschl./offen
10 mm/12 mm

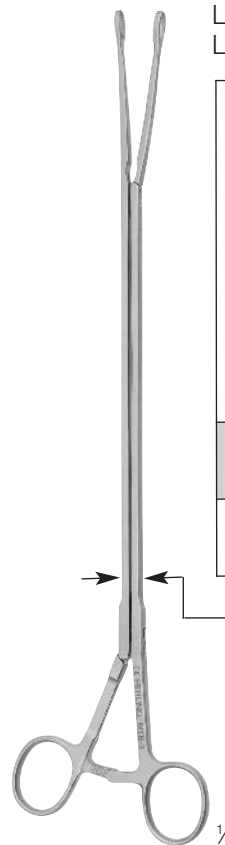
GRASPING FORCEPS / FASSZANGEN



11 mm	11 mm
340 mm	340 mm
MTE-4	MTE-5

closed/open
geschl./offen
5 mm/6 mm

LUNG GRASPING FORCEPS / LUNGENFASSZANGE

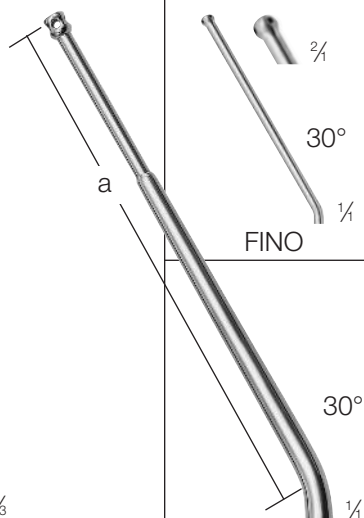


12 mm
350 mm
MTE-3

closed/open
geschl./offen
7 mm/8 mm

JAMIESON

DISSECTION CANNULAS FOR PULMONARY TEA
DISSEKTIONSSAUGER FÜR PULMONALE TEA



	Ø HOLE / BALL LOCH / KUGEL	LENGTH LÄNGE	
 1/4	0,5 mm	270 mm	MMT-1
	1,0 mm	210 mm	MNF-0
	1,5 mm	270 mm	MMA-7
 60° 1/4	1,0 mm	260 mm	MMC-0
 [-10 mm -] 90° 1/4	1,5 mm	270 mm	MME-5
 2/4 FINO 1/4	1,5 mm	290 mm	MME-1
 30° FINO 1/4	1,5 mm	290 mm	MME-2
 30° 1/4	0,5 mm	a = 70 mm 270 mm	MMJ-0
	1,0 mm	a = 60 mm 270 mm	MMJ-6
		a = 70 mm 270 mm	MMB-0

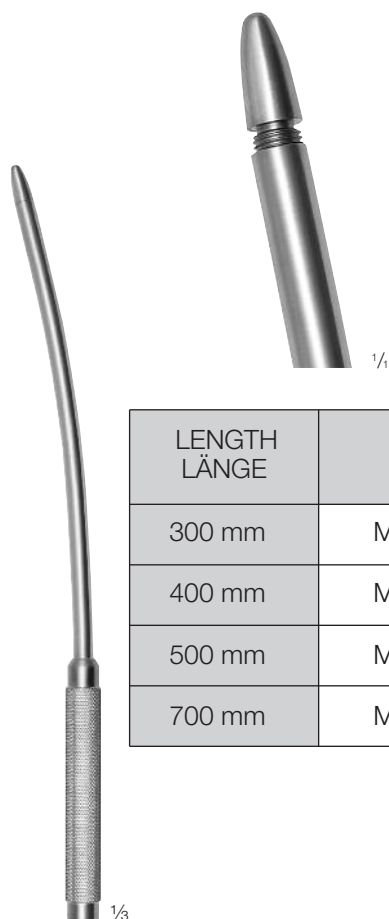
MAYER PEA RETRACTOR
MAYER PEA SPREIZER

FOR EXPOSITION OF PULMONARY ARTERY
FÜR DIE EXPOSITION DER PULMONALARTERIE



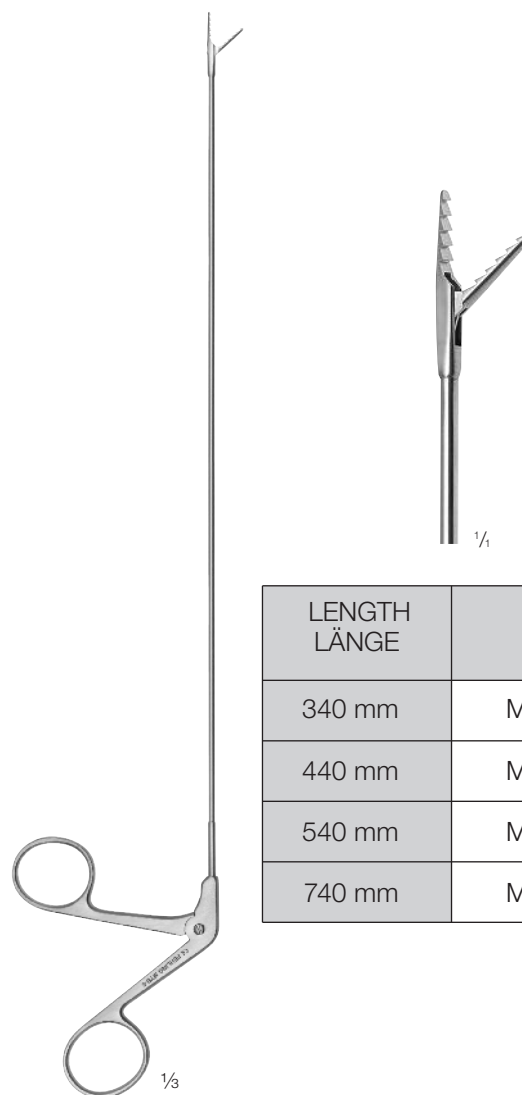
260 mm

MCA-2



LENGTH LÄNGE	
300 mm	MTB-1
400 mm	MTB-2
500 mm	MTB-3
700 mm	MTB-4

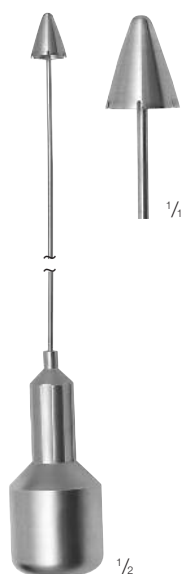
TUNNELING INSTRUMENT
TUNNELIERINSTRUMENT



LENGTH LÄNGE	
340 mm	MTB-5
440 mm	MTB-6
540 mm	MTB-7
740 mm	MTB-8

GRASPING FORCEPS
FASSZANGE





SUPERPLAST
PETZOLD
250 mm

STRIPPER FOR VARICOSE VEINS
VARIZENSTRIPPER

Ø	
2 mm	MIE-7
3 mm	MIE-8
4 mm	MIE-1
5 mm	MIE-2
6 mm	MIE-3
7 mm	MIE-4
8 mm	MIE-5
10 mm	MIE-6



SUPERPLAST
OCCLUDER
80 mm

1,0 mm	1,5 mm	2,5 mm
2,5 mm	2,0 mm	3,0 mm
MNK-0	MNK-1	MNK-2



SUPERFLEX
500 mm

INSTRUMENTS FOR THROMBECTOMY
INSTRUMENTE FÜR THROMBEKTOMIE



Ø	RING STRIPPER* RINGSTRIPPER*	SPIRAL CURETTE** SPIRALKÜRETTE**
3 mm	MIG-3	–
4 mm	MIG-4	–
5 mm	MIG-5	MID-1
6 mm	MIG-6	MID-2
7 mm	MIG-7	MID-3
8 mm	MIG-8	MID-4
9 mm	MIG-2	MID-5
10 mm	MIG-9	MID-6
12 mm	MIG-0	–
14 mm	MIG-1	–

* FOR NATIVE VESSELS / FÜR NATÜRLICHE GEFÄSSE

** FOR PROSTHESES / FÜR PROTHESEN



HANDLE
GRIFF
105 mm
ABB-5