

FEHLING...

... THE DIFFERENCE

2

SPREADING AND
RETRACTING
INSTRUMENTS

INSTRUMENTE
ZUM SPREIZEN
UND HALTEN



FEHLING
INSTRUMENTS

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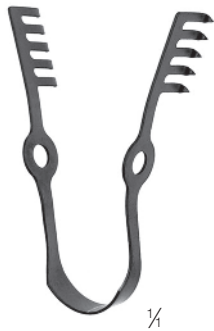


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info@fehling-instruments.de

CERAMO® SUPERFLEX



PRESSURE SPREIZDRUCK	
0,6 N	MNE-2
1,2 N	MNE-1



PRESSURE SPREIZDRUCK	
0,6 N	MNE-3

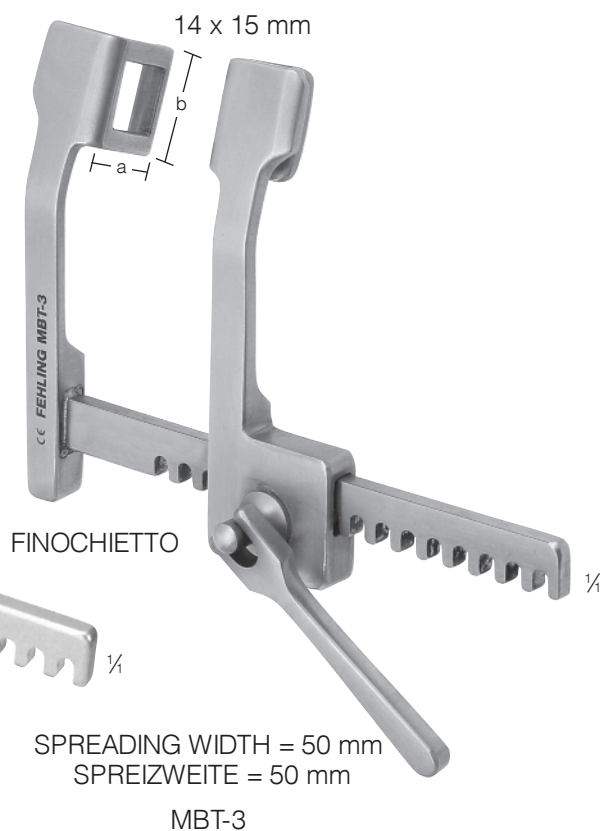
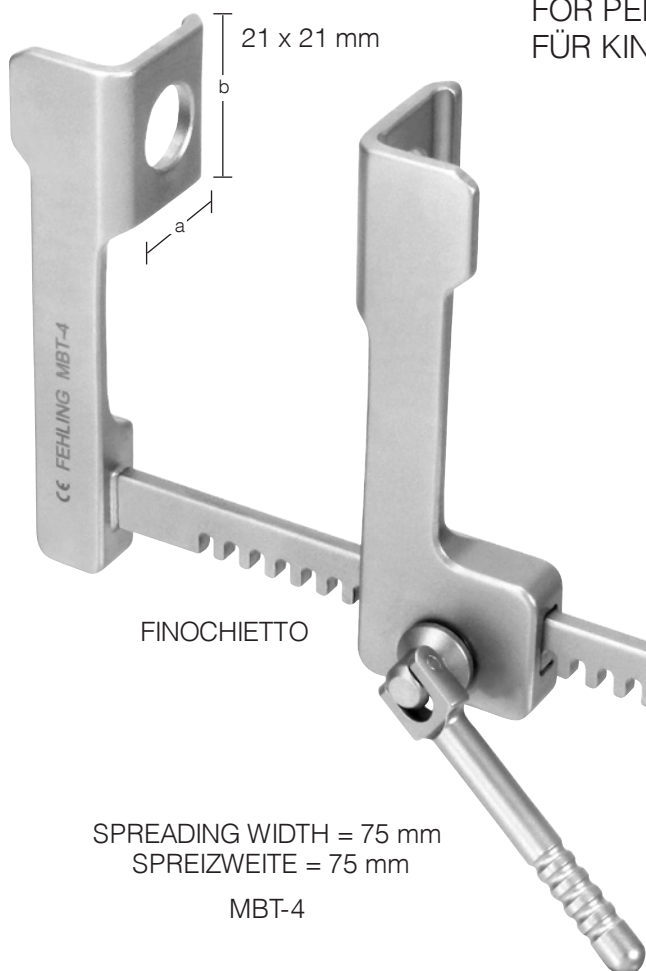


PRESSURE SPREIZDRUCK	
0,6 N	MNE-4

SUPERFLEX instruments are made of shape-memory metal. These instruments are super-elastic in normal O.R. 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 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.

FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



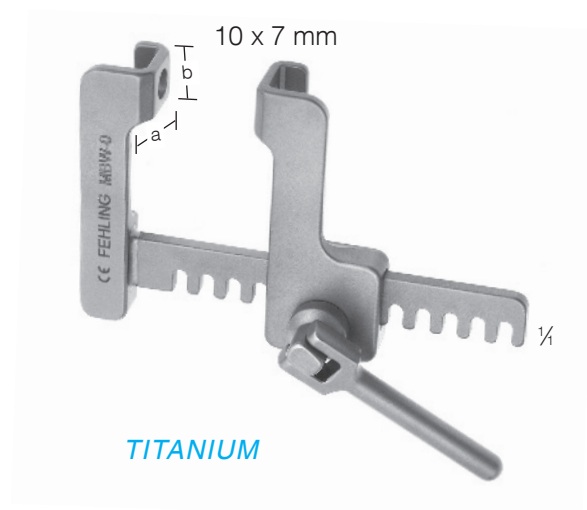
blades (included)
Blätter (inklusive)

10 x 20 mm
(PAIR / PAAR)

MFU-8

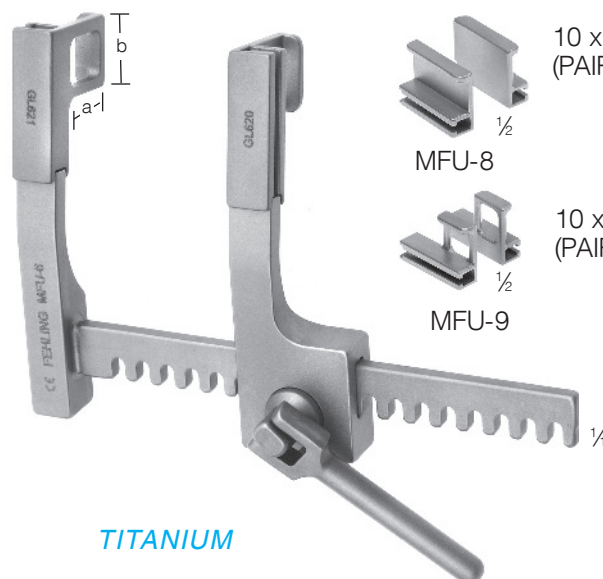
10 x 10 mm
(PAIR / PAAR)

MFU-9



SPREADING WIDTH = 30 mm
SPREIZWEITE = 30 mm

MBW-0



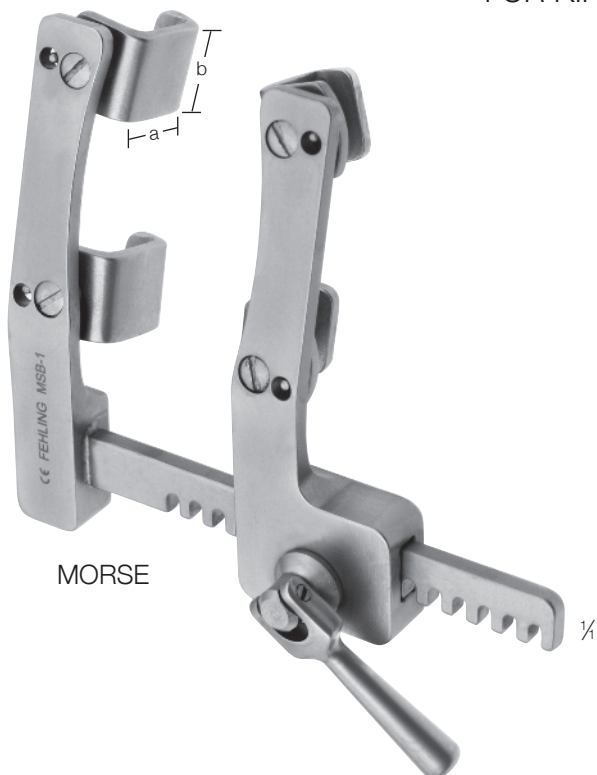
SPREADING WIDTH = 52 mm
SPREIZWEITE = 52 mm

MFU-6

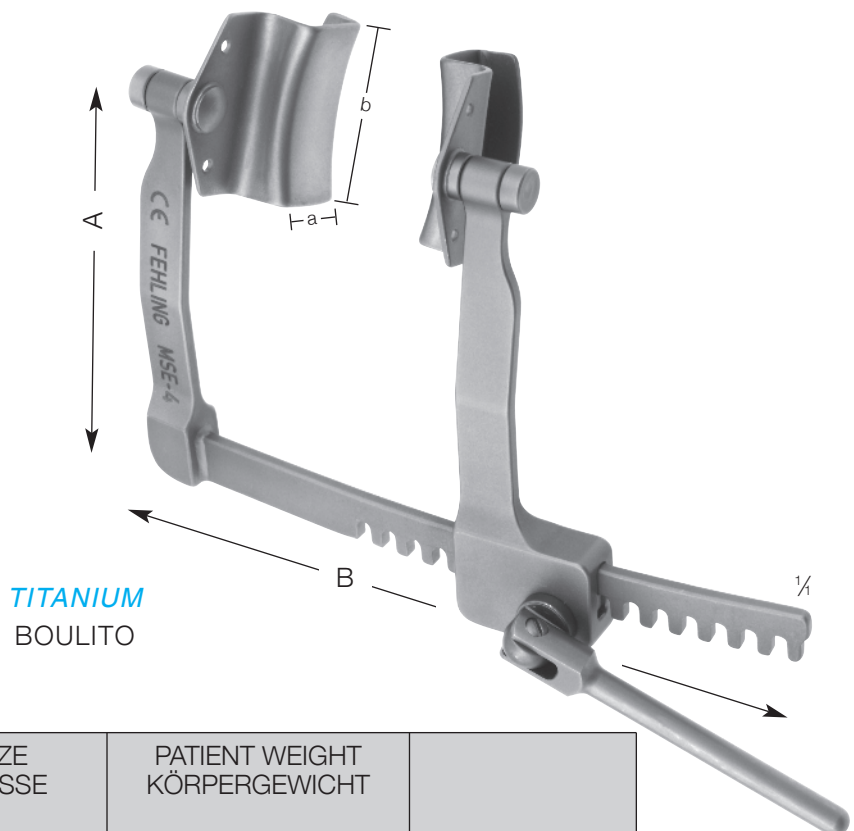
BLADE SIZE: DEPTH (a) x WIDTH (b)

BLATTGRÖSSE: TIEFE (a) x BREITE (b)

FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



SPREADING WIDTH SPREIZWEITE	BLADE SIZE BLATTGRÖSSE a x b	
40 mm	14 x 12 mm	MSB-1
65 mm	14 x 12 mm	MSB-2
90 mm	20 x 15 mm	MSB-6
100 mm	23 x 20 mm	MSB-3
110 mm	20 x 15 mm	MSB-7
130 mm	23 x 20 mm	MSB-4
160 mm	23 x 20 mm	MSB-5

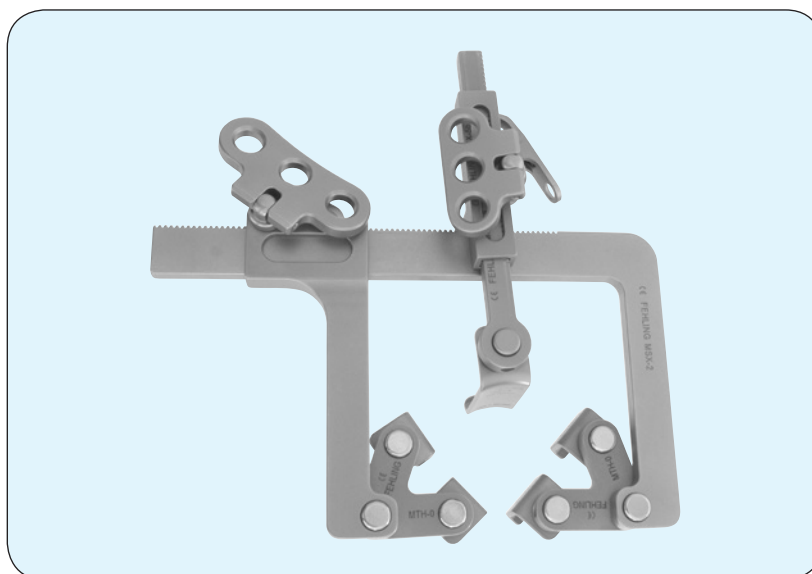


BODY SIZE RAHMENGROSSE A / B	BLADE SIZE BLATTGRÖSSE a x b	PATIENT WEIGHT KÖRPERGEWICHT	
60 / 100 mm	12 x 25 mm	≤ 5 kg	MSE-4
75 / 120 mm	18 x 35 mm	5 – 15 kg	MSE-5
100 / 140 mm	21 x 55 mm	15 – 30 kg	MSE-6
150 / 280 mm	30 x 100 mm	30 – 60 kg	MSE-9*

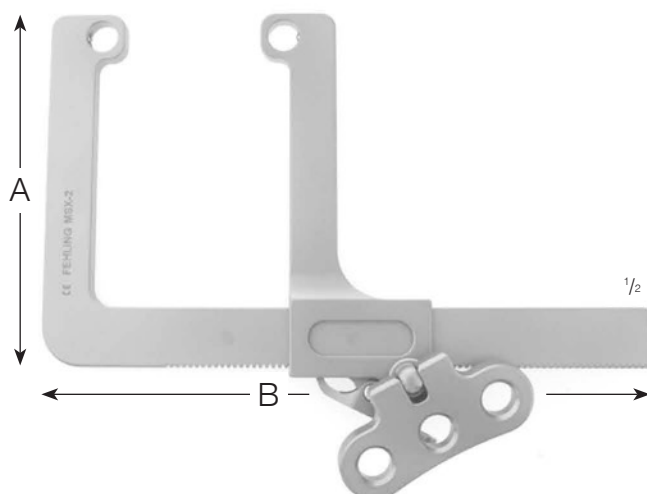
* Stainless Steel / rostfreier Stahl

V-CUT
TITANIUM

FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



exemplary configuration
Konfigurationsbeispiel



RETRACTOR, BODY
SPERRER, RAHMEN

PATIENT WEIGHT KÖRPERGEWICHT	BLADE SIZE BLATTGRÖSSE A x B	
3 – 7 kg	80 x 130 mm	MSX-1
7 – 15 kg	90 x 150 mm	MSX-2
15 – 40 kg	120 x 200 mm	MSX-3



STANDARD
MSX-5B



RIDER
SCHLITTEN
ANGLE ADJUSTABLE
WINKELVERSTELLBAR
MSX-5C



BLADE GUIDE
HAKENFÜHRUNG
MSX-5A

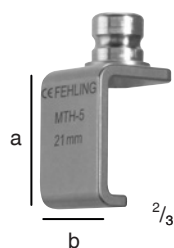


HORKE BLADE SWING
HORKE SCHAUKEL

HOLE DISTANCE LOCHABSTAND	
20 mm	MTH-2
25 mm	MTH-0
35 mm	MTH-1

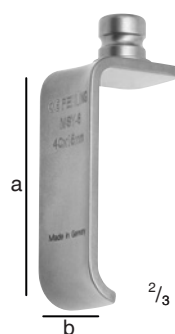
V-CUT
TITANIUM

FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



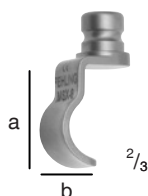
a \ b	15 mm	20 mm
15 mm	MTH-3	MTH-4
21 mm	MTH-5	MTH-6
26 mm	MTH-7	MTH-8

STERNAL BLADE
STERNUMHALTEBLATT



a \ b	15 mm	24 mm
40 mm	MSY-6	MSZ-6
50 mm	MSY-7	MSZ-7
60 mm	MSY-8	MSZ-8
70 mm	MSY-9	MSZ-9

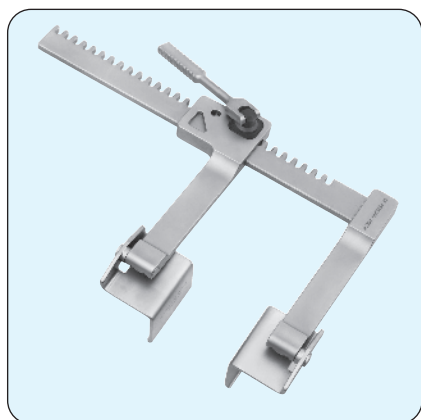
DIAPHRAGM RETRACTOR
ZWERCHFELLHAKEN



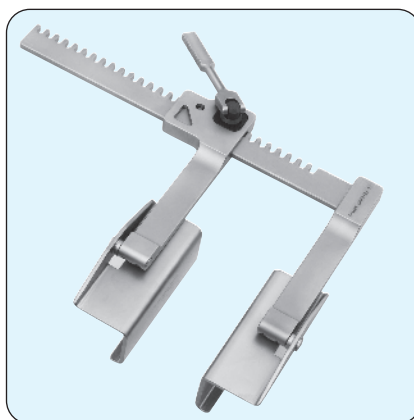
a \ b	10 mm
20 mm	MSX-6
30 mm	MSX-7
40 mm	MSX-8

LID RETRACTOR
LIDHAKEN

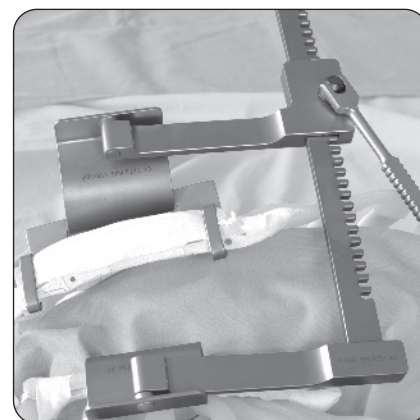
MARJAN MGH



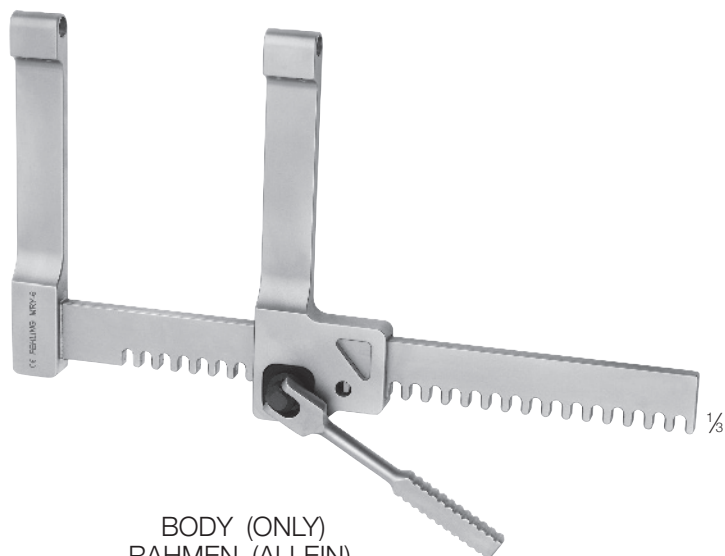
PARTIAL STERNOTOMY
PARTIELLE STERNOTOMIE



TOTAL STERNOTOMY
TOTALE STERNOTOMIE



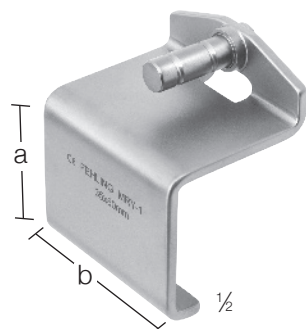
IMA EXPOSURE
IMA EXPOSITION



BODY (ONLY)
RAHMEN (ALLEIN)

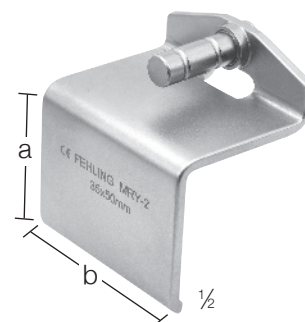
MRY-6

RETRACTING BLADES
HALTEBLÄTTER



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

a x b	
35 x 50 mm	MRY-1

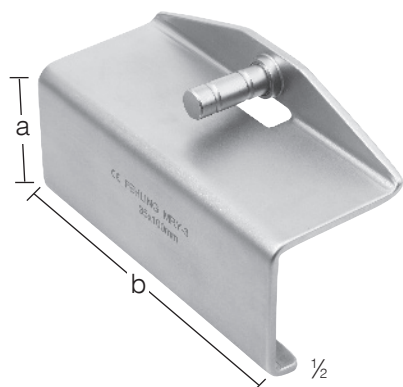


FOR PARTIAL STERNOTOMY / Z-CUT (PAIR)
FÜR PARTIELLE STERNOTOMIE / Z-SCHNITT (PAAR)

a x b	
35 x 50 mm	MRY-2

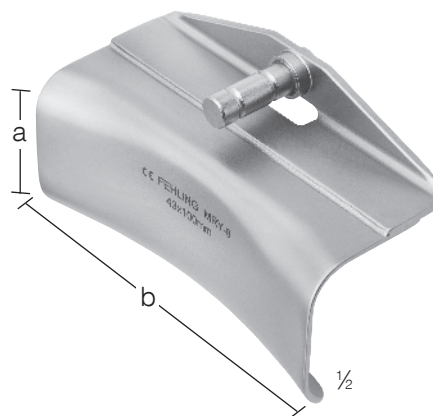
MARJAN MGH

RETRACTING BLADES
HALTEBLÄTTER



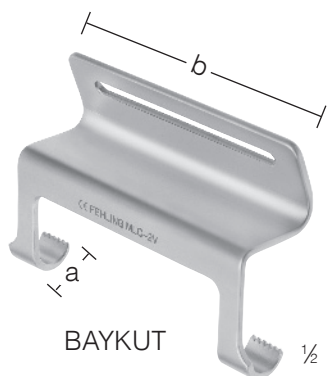
FOR TOTAL STERNOTOMY (PAIR)
FÜR TOTALE STERNOTOMIE (PAAR)

a x b	
35 x 70 mm	MRY-3K
35 x 100 mm	MRY-3
45 x 100 mm	MRY-4



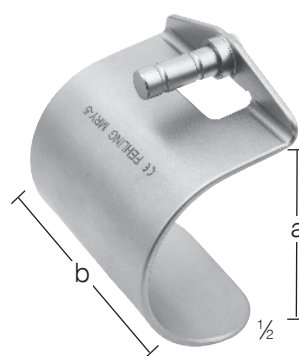
FOR TOTAL STERNOTOMY, CONVEX (PAIR)
FÜR TOTALE STERNOTOMIE, KONVEX (PAAR)

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



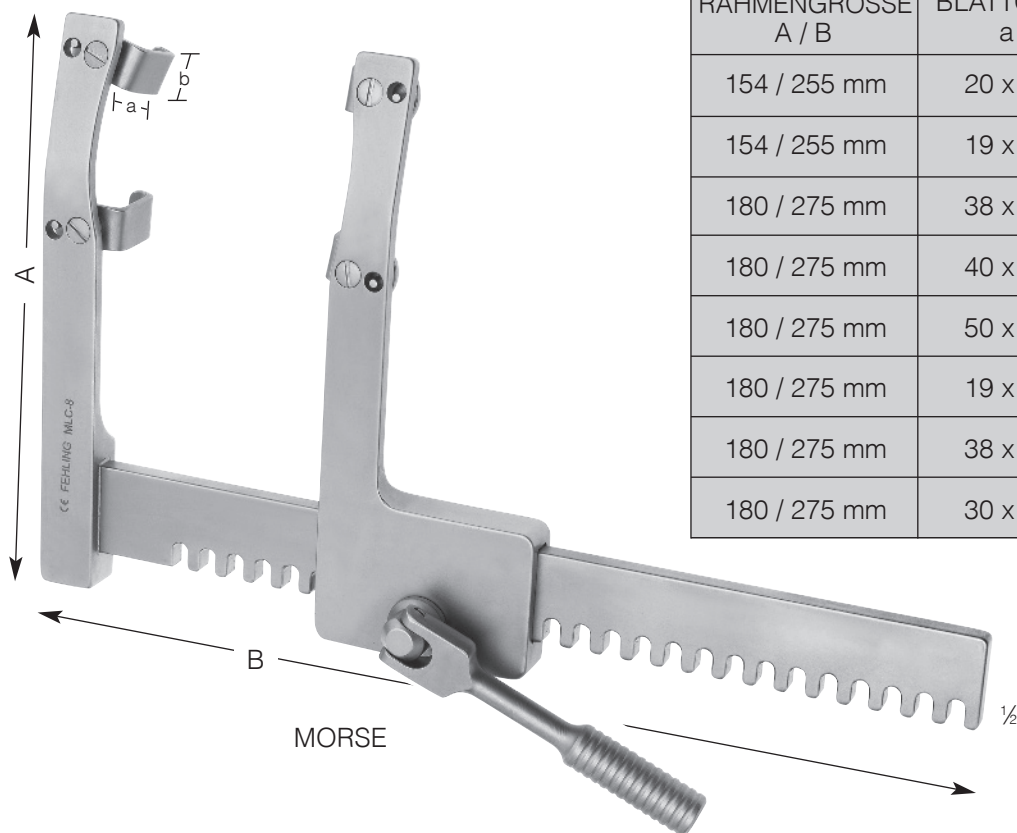
IMA RETRACTING BLADE
IMA HALTEBLATT

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

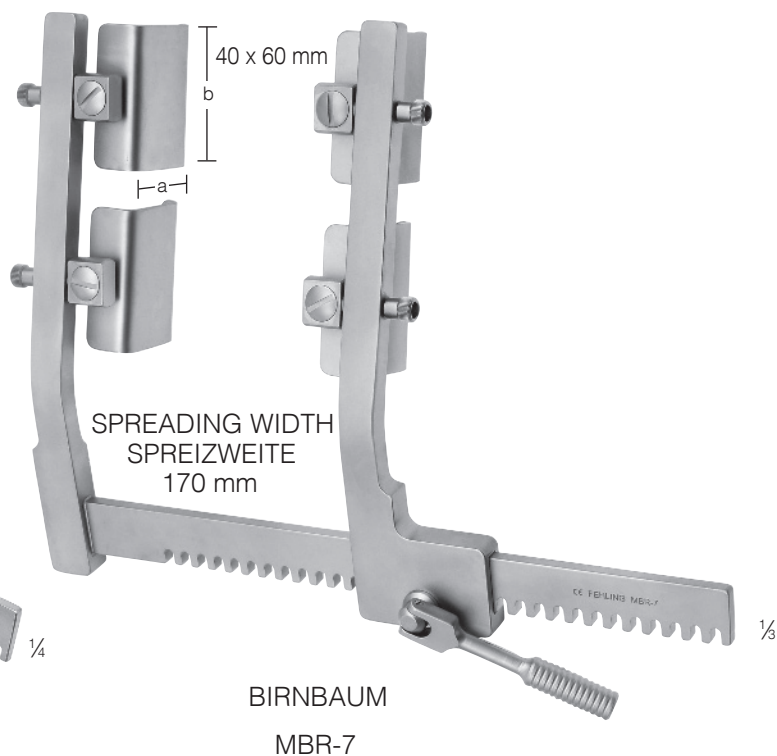
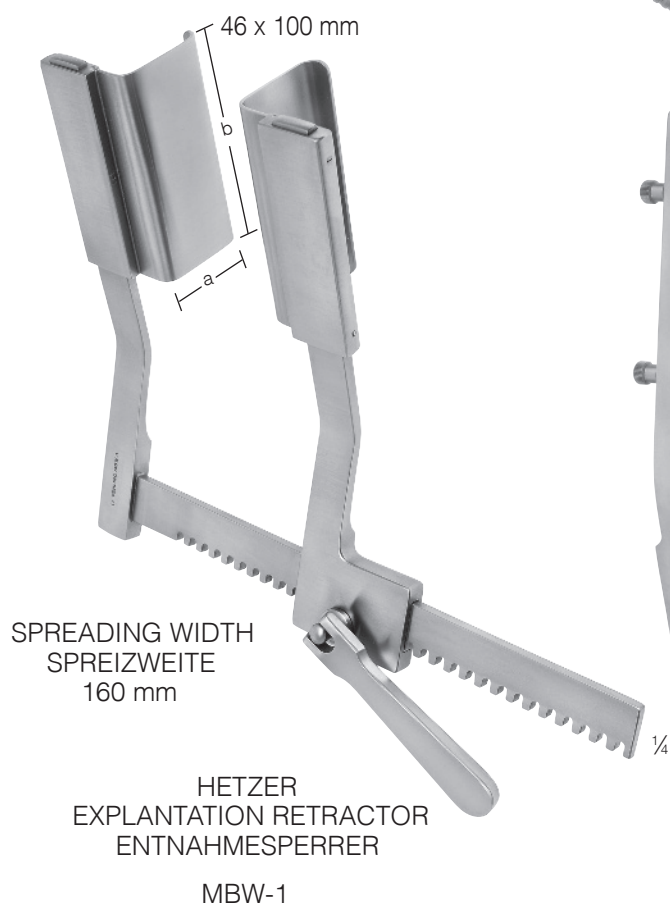


FOR IMA EXPOSITION
FÜR IMA DARSTELLUNG

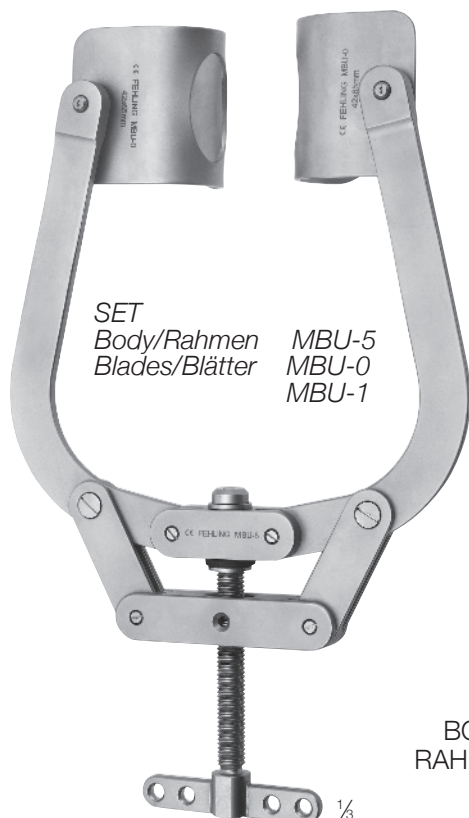
a x b	
30 x 65 mm	MSC-8
40 x 65 mm	MSC-9
50 x 65 mm	MRY-5



BODY SIZE RAHMENGROSSE A / B	BLADE SIZE BLATTGRÖSSE a x b	
154 / 255 mm	20 x 12 mm	MLC-8
154 / 255 mm	19 x 19 mm	MMZ-1
180 / 275 mm	38 x 28 mm	MSB-8
180 / 275 mm	40 x 35 mm	MMZ-4
180 / 275 mm	50 x 35 mm	MMZ-5
180 / 275 mm	19 x 19 mm	MLC-9
180 / 275 mm	38 x 23 mm	MMZ-2
180 / 275 mm	30 x 30 mm	MLD-0



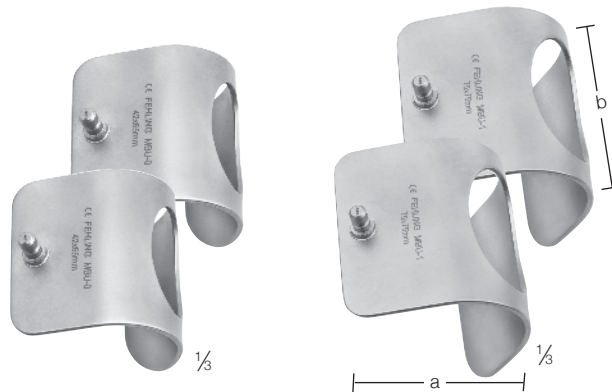
BLADE SIZE: DEPTH (a) x WIDTH (b)
BLATTGRÖSSE: TIEFE (a) x BREITE (b)



MERCEDES
MBU-4

BODY (ONLY)
RAHMEN (ALLEIN)
MBU-5

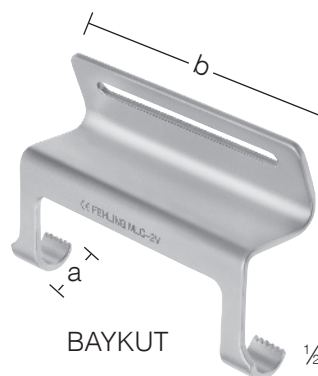
SINGLE COMPONENTS
EINZELKOMPONENTEN



BLADES (PAIR) / BLÄTTER (PAAR)
(a)42 x (b)65 mm (a)75 x (b)75 mm
MBU-0 MBU-1



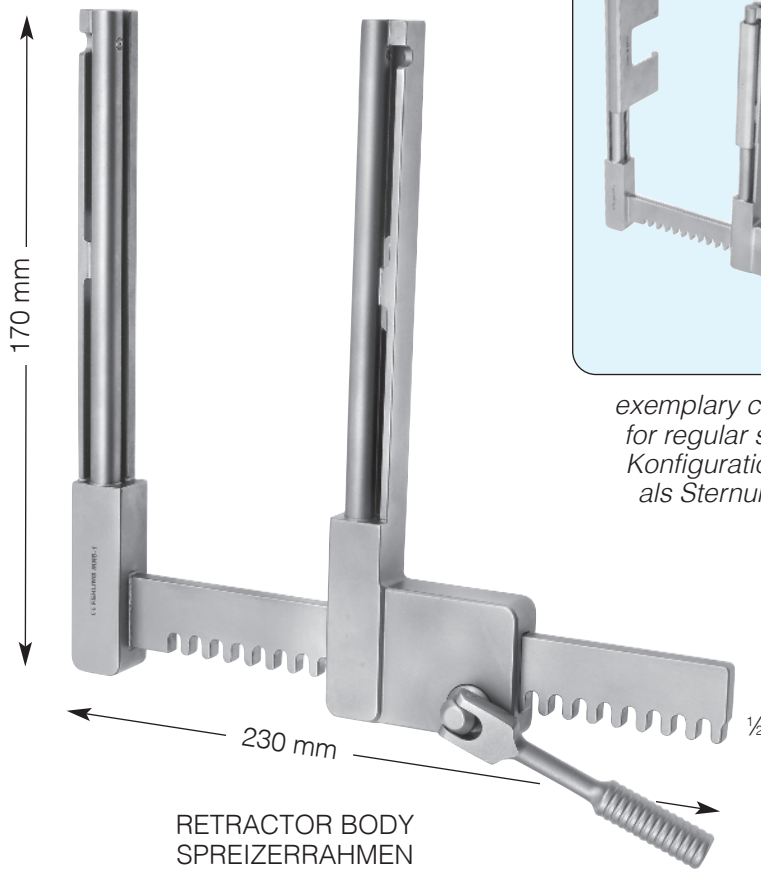
exemplary configuration
Konfigurationsbeispiel



IMA RETRACTING BLADE
IMA HALTEBLATT

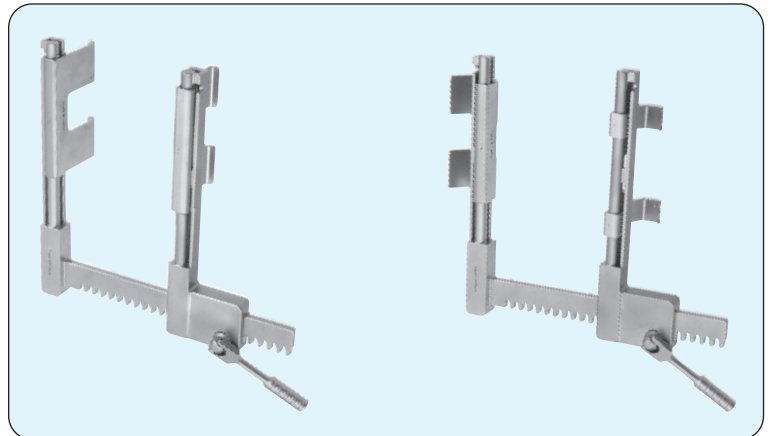
a x b	
15 x 50 mm	MLM-6V
15 x 90 mm	MLC-2V
15 x 120 mm	MLM-3V

BAYKUT



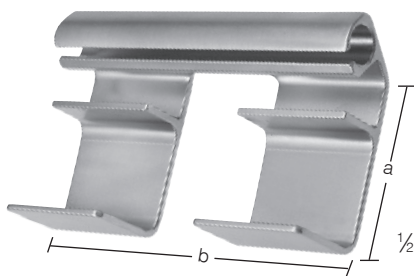
RETRACTOR BODY
SPREIZERRAHMEN

MNS-1



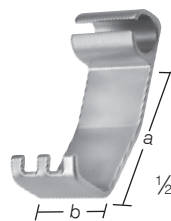
exemplary configuration
for regular sternotomy
Konfigurationsbeispiel
als Sternumspreizer

exemplary configuration
for IMA exposure
Konfigurationsbeispiel
als IMA-Spreizer



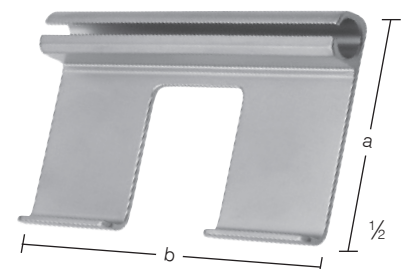
IMA RETRACTING BLADES
IMA-HALTEBLÄTTER

BLADE SIZE BLATTGRÖSSE a x b	
20 x 100 mm	MNT-1
30 x 100 mm	MNT-2
40 x 100 mm	MNT-3



IMA RETRACTING BLADES, ROTATABLE
IMA-HALTEBLÄTTER, DREHBAR

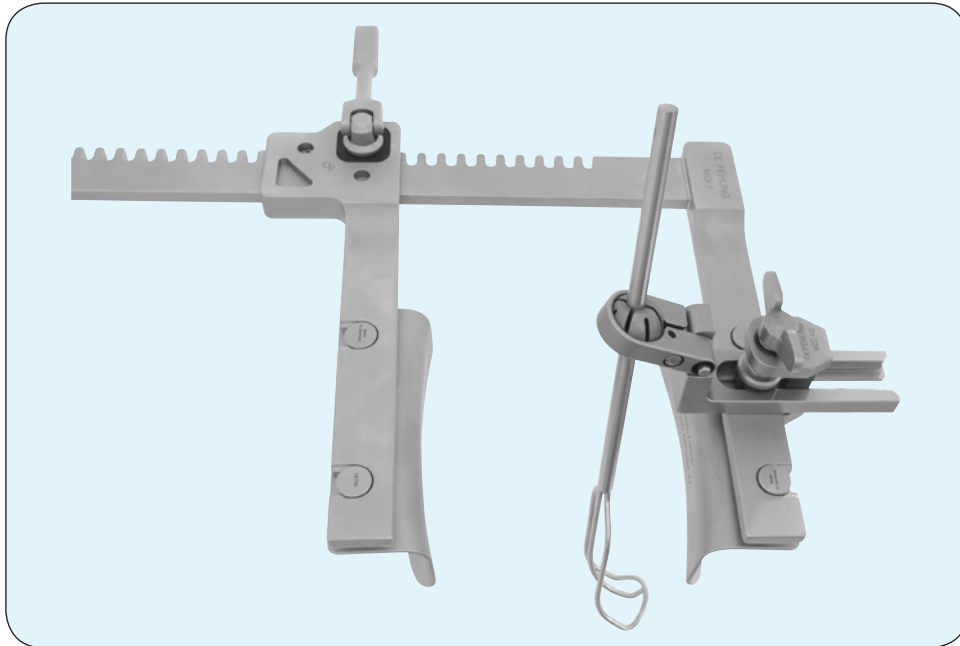
BLADE SIZE BLATTGRÖSSE a x b	
33 x 20 mm	MNT-4
43 x 20 mm	MNT-5



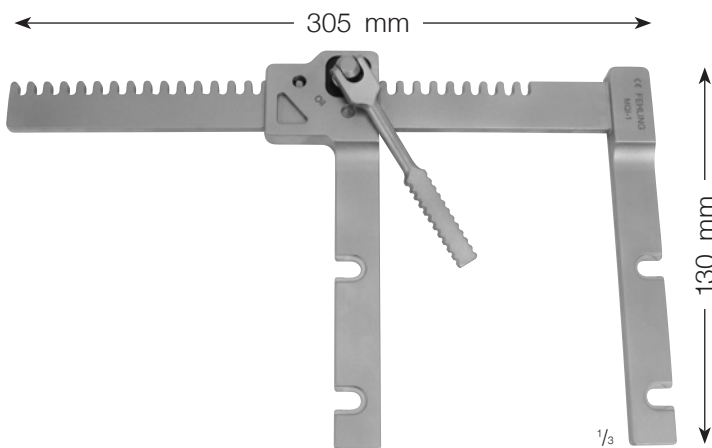
STERNAL RETRACTING BLADES
STERNUMBLÄTTER

BLADE SIZE BLATTGRÖSSE a x b	
30 x 100 mm	MNS-3
40 x 100 mm	MNS-4
50 x 100 mm	MNS-5

FALK

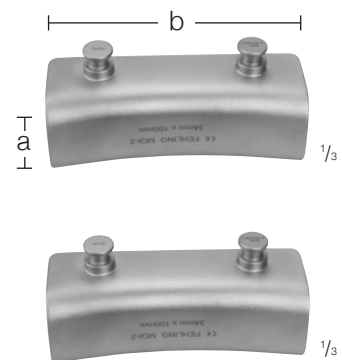


exemplary configuration
Konfigurationsbeispiel



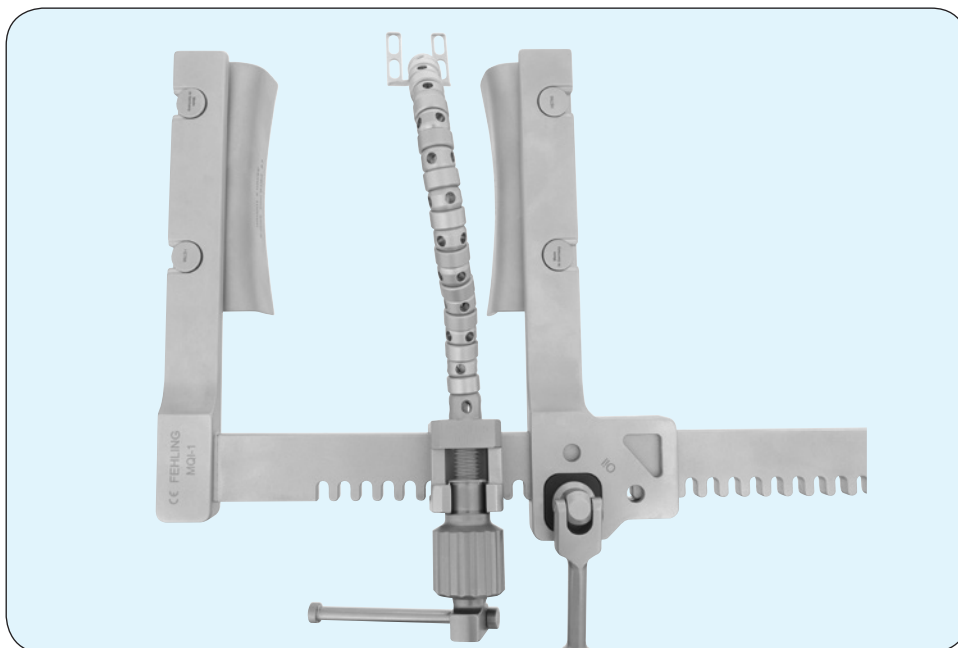
BODY (ONLY)
RAHMEN (ALLEIN)

MQI-1

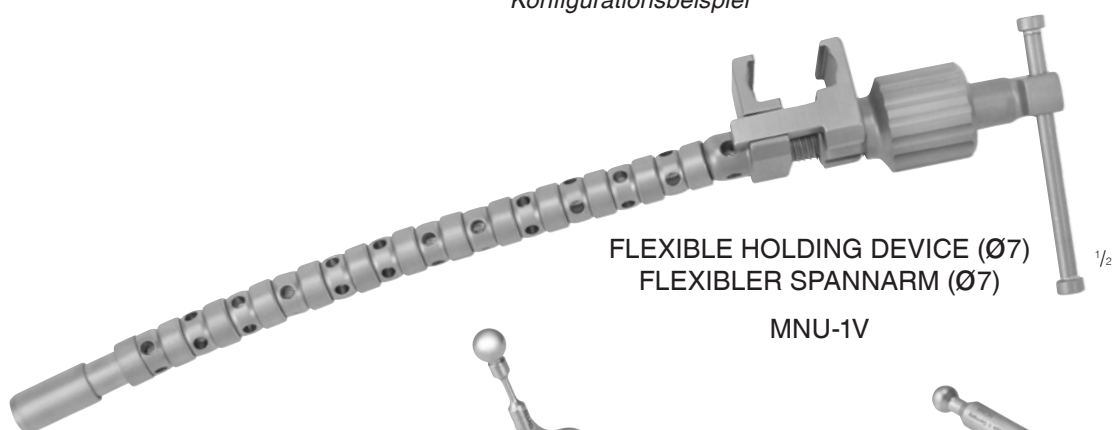


RETRACTOR BLADE (PAIR)
SPREIZERBLATT (PAAR)

BLADE SIZE BLATTGRÖSSE a x b	
34 x 100 mm	MQI-2
43 x 100 mm	MQI-3



*exemplary configuration
Konfigurationsbeispiel*



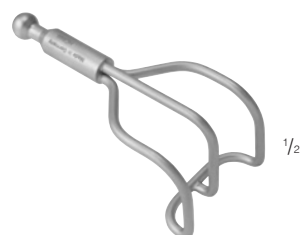
FLEXIBLE HOLDING DEVICE (Ø7)
FLEXIBLER SPANNARM (Ø7)

MNU-1V



MYOCARDIAL STABILIZER (Ø7)
HERZMUSKELSTABILISATOR (Ø7)

MRR-3V



ATRIAL RETRACTOR (Ø7)
VORHOFHAKEN (Ø7)



SUPERPLAST
MI CARDIAC MOBILIZER (Ø7)
MI HERZMOBILISATOR (Ø7)

MQG-4

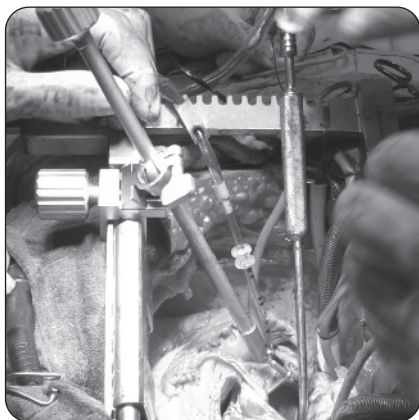


ZENKER
HOOK (Ø7)
HAKEN (Ø7)

MQG-5

SMALL KLEIN	MQG-1
MEDIUM	MQG-2
LARGE GROSS	MQG-3

ACCESSORIES FOR VALVE SURGERY ZUBEHÖR FÜR KLAPPENCHIRURGIE

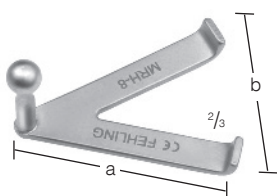


*exemplary configuration
Konfigurationsbeispiel*



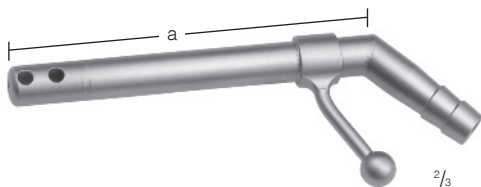
BALL JOINT ADAPTER (Ø 8)*
(FOR BLADE GUIDE MRF-0V)
KUGELGELENKADAPTER (Ø 8)*
(FÜR HAKENFÜHRUNG MRF-0V)

MRF-1V



ATRIAL FORK
VORHOFGABEL

BLADE SIZE BLATTGRÖSSE a x b	
30 x 25 mm	MRH-7
40 x 35 mm	MRH-8
50 x 45 mm	MRH-9



ATRIAL SUCTION DOWNHOLDER
ATRIALER SAUGNIEDERHALTER

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



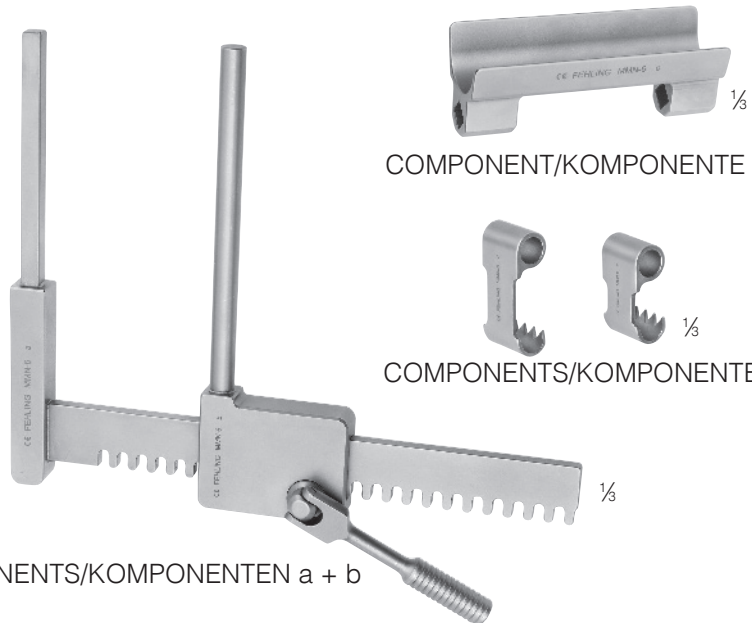
BLADE GUIDE (Ø 8)
HAKENFÜHRUNG (Ø 8)
200 mm

MRF-0V

DC-VERSION



*exemplary configuration
Konfigurationsbeispiel*



COMPONENT/KOMPONENTE c

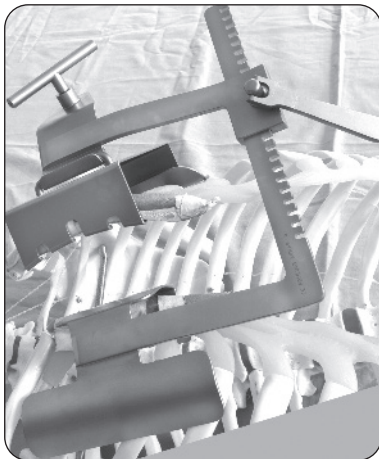
COMPONENTS/KOMPONENTEN d + e

COMPONENTS/KOMPONENTEN a + b

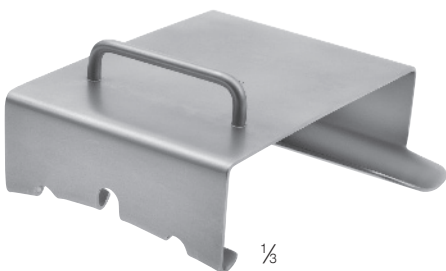
COMPLETE SET
KOMPLETTSET

MMN-6

J-VERSION



*exemplary configuration
Konfigurationsbeispiel*



COMPONENT/KOMPONENTE b

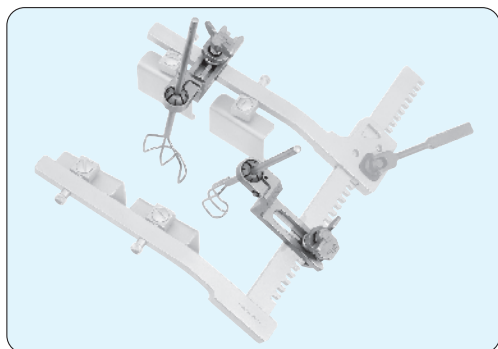


COMPONENT/KOMPONENTE c

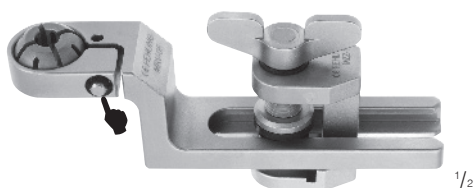
COMPONENT/KOMPONENTE a

COMPLETE SET
KOMPLETTSET

MDU-9



exemplary configuration
Konfigurationsbeispiel



BALL JOINT ADAPTER BAYONET (Ø 6,35 mm)*
+ CLAMPING ELEMENT
KUGELADAPTER, BAYONETT (Ø 6,35 mm)*
+ BEFESTIGUNGSELEMENT

MRV-0F + MZZ-1Q

* adaptable to most sternal retractors
verwendbar für die meisten Sternumspreizer



BALL ADAPTER WITH JOINT (Ø 6,35 mm)**
+ CLAMPING ELEMENT
KUGELADAPTER MIT GELENK (Ø 6,35 mm)**
+ BEFESTIGUNGSELEMENT

MRV-0R + MZZ-1Q

** no screwdriver necessary
kein Schraubendreher erforderlich

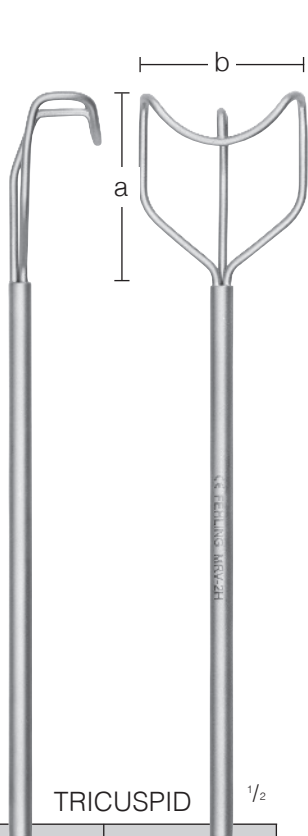


BALL ADAPTER WITH JOINT (Ø 6,35 mm)**
+ CLAMPING ELEMENT
KUGELADAPTER MIT GELENK (Ø 6,35 mm)**
+ BEFESTIGUNGSELEMENT

MRV-0J + MZZ-1Q

** no screwdriver necessary
kein Schraubendreher erforderlich

HOHE ATRIAL RETRACTORS, MALLEABLE, SHAFT Ø = 6,35 mm
HOHE VORHOFHAKEN, BIEGSAM, SCHAFT Ø = 6,35 mm



TRICUSPID

LENGTH LÄNGE	45 x 45 mm a x b
150 mm	MRV-2H
200 mm	MRV-2L



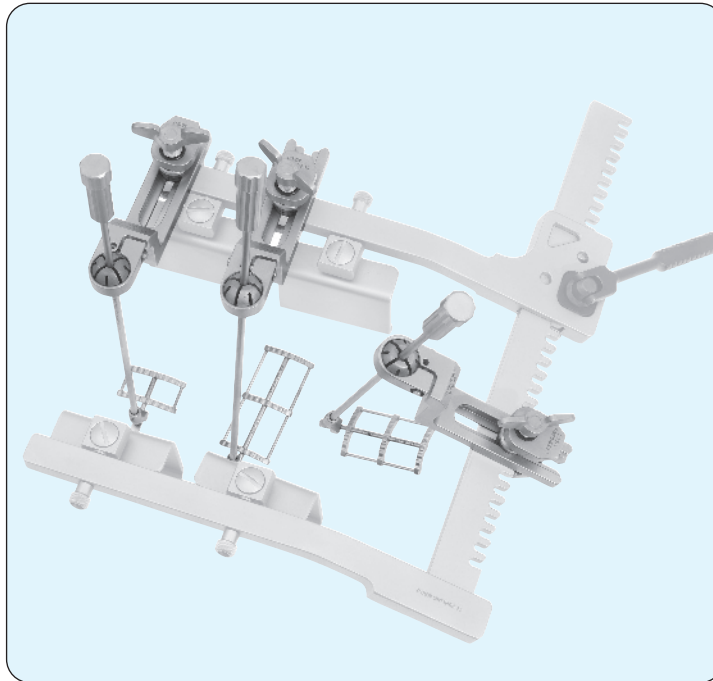
LENGTH LÄNGE	65 x 20 mm a x b
150 mm	MRV-4H
200 mm	MRV-4L



LENGTH LÄNGE	65 x 30 mm a x b
150 mm	MRV-3H
200 mm	MRV-3L



65 x 40 mm
a x b
200 mm
MPF-1H



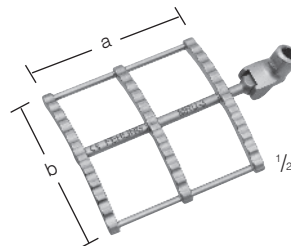
exemplary configuration
Konfigurationsbeispiel

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.

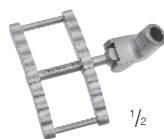


BLADE GUIDE (Ø4)
HAKENFÜHRUNG (Ø4)
220 mm
MRN-3

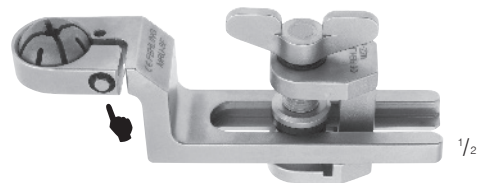


ATRIAL BLADE
VORHOFBÜGEL

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



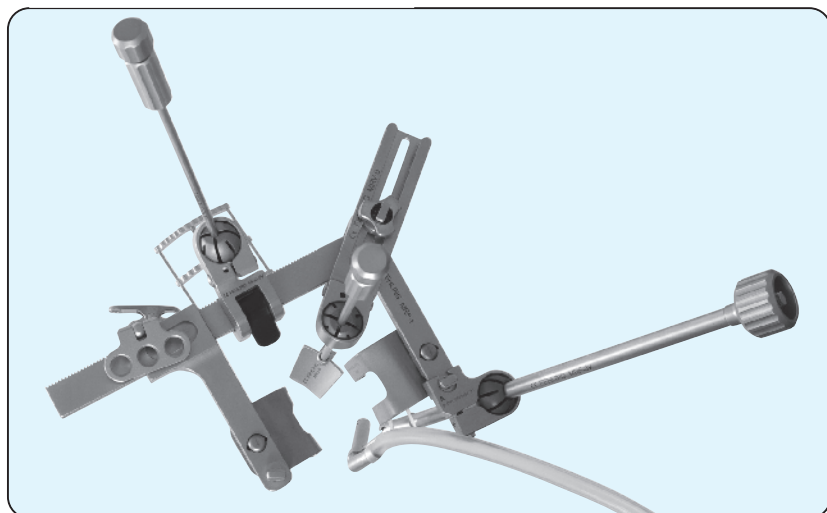
ATRIAL BLADE
FOR TRICUSPIDAL VALVE
VORHOFBLATT
FÜR TRIKUSPIDALKLAPPE
18 x 35 mm
MRU-5



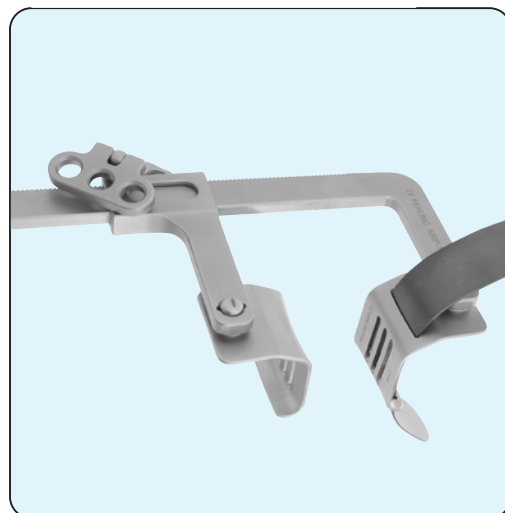
BALL JOINT ADAPTER BAYONET (Ø 4)*
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, BAYONETT (Ø 4)*
LÄNGE UND HÖHE VARIABLE
+ BEFESTIGUNGSELEMENT

MRU-8F + MZZ-1Q

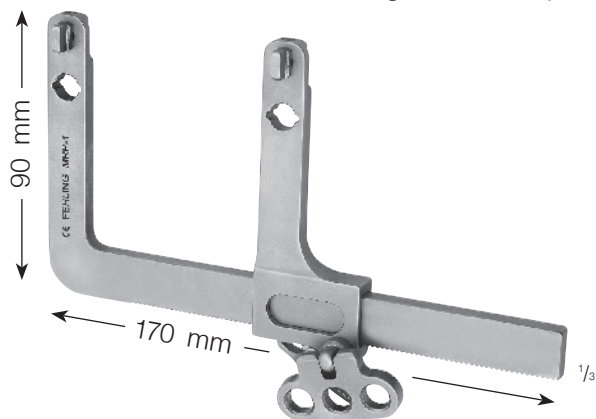
* adaptable to most sternal retractors
verwendbar für die meisten Sternumspreizer



exemplary configuration
Konfigurationsbeispiel

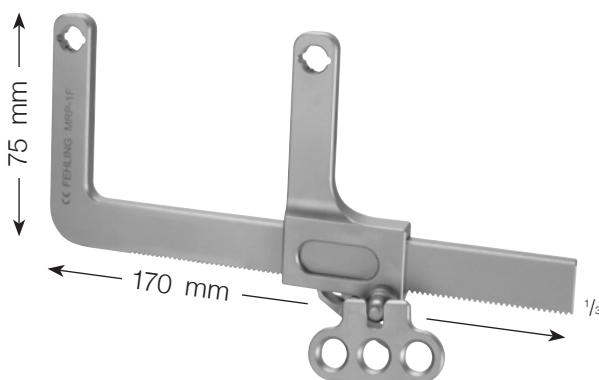


exemplary configuration
Konfigurationsbeispiel



INTERCOSTAL RETRACTOR
INTERCOSTALSPREIZER

MRP-1



INTERCOSTAL RETRACTOR SHORT ARM
INTERCOSTALSPREIZER KURZARM

MRP-1F

RETRACTING BLADES (PAIR)
HALTEBLÄTTER (PAAR)

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



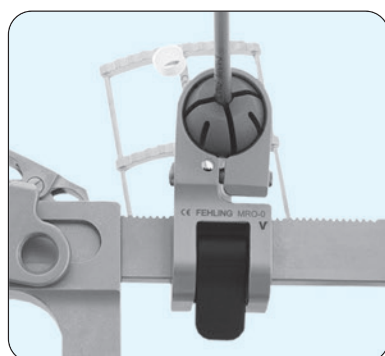
CERAMO® SUPERPLAST
SPATULA
SPATEL
24 x 250 mm
EOJ-7

MVR RETRACTOR ACCESSORIES MKR SPREIZER ZUBEHÖR

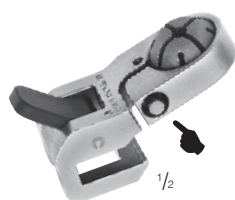


BLADE GUIDE (Ø4)
HAKENFÜHRUNG (Ø4)
220 mm
MRN-3

RETRACTION OF THE AORTIC ROOF RETRAKTION DES VORHOFDACHS



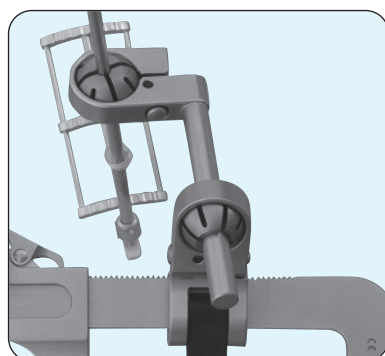
*exemplary configuration
Konfigurationsbeispiel*



BALL ADAPTER (Ø4)
KUGELADAPTER (Ø4)
MRO-0V*

* with wing screw: MRO-0
* mit Flügelschraube: MRO-0

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.
For adapters with wing screw no screwdriver required.
Für Adapter mit Flügelschraube kein Schraubendreher erforderlich.

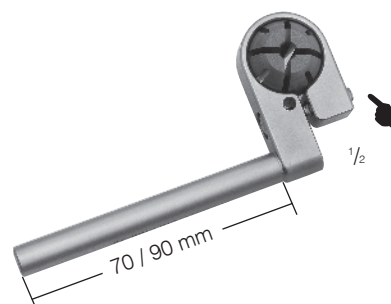


*exemplary configuration
Konfigurationsbeispiel*



BALL ADAPTER (Ø8) FOR MRR-2V/L
KUGELADAPTER (Ø8) FÜR MRR-2V/L
MRR-1V*

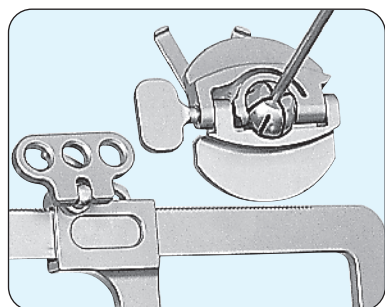
* with wing screw: MRR-1
* mit Flügelschraube: MRR-1



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

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

* with wing screw: MRR-2
* mit Flügelschraube: MRR-2



*exemplary configuration
Konfigurationsbeispiel*

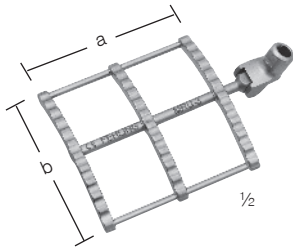


FIXATION DEVICE FOR MRN-3 (Ø4)
(FOR EXTERNAL STAB INCISION)
FIXIERVORRICHTUNG FÜR MRN-3 (Ø4)
(FÜR SEPARATE STICHINZISION)

MRO-9*

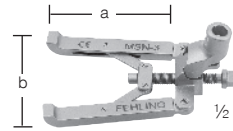
*with inside screw MRO-9V
*mit innenliegender Schraube MRO-9V

MVR RETRACTOR ACCESSORIES MKR SPREIZER ZUBEHÖR



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*

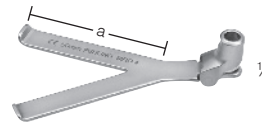
a x b	
35 x 25 mm	MSN-2
55 x 30 mm	MSN-3

*cardan screw driver LMT-4 required
Kardanschraubendreher LMT-4 erforderlich



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

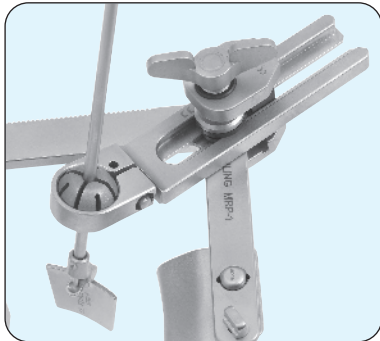


GUIDING CLAMP
FÜHRUNGSKLEMME

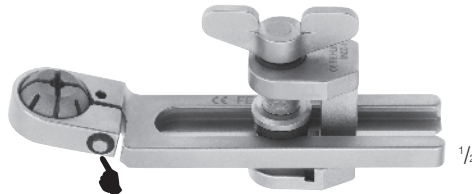
MRU-9

MVR RETRACTOR ACCESSORIES MKR SPREIZER ZUBEHÖR

HOLDING THE SEPTAL FOLD DOWN NIEDERHALTEN DER SEPTUMFALTE



*exemplary configuration
Konfigurationsbeispiel*



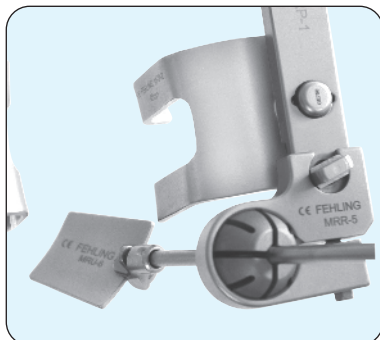
BALL JOINT ADAPTER (Ø4)
+ CLAMPING ELEMENT
KUGELADAPTER, GERADE (Ø4)
+ BEFESTIGUNGSELEMENT

MRV-9F + MZZ-1Q



RETAINER FOR SEPTAL FOLD
AND DIAPHRAGM
NIEDERHALTER FÜR SEPTUMFALTE
UND ZWERCHFELL

MRU-6



*exemplary configuration
Konfigurationsbeispiel*



LEFT / LINKS

MRR-5



RIGHT / RECHTS

MRR-6

only with MRP-1
nur mit MRP-1

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.



BALL JOINT ADAPTER MINI FRONT LOAD (Ø4)
KUGELADAPTER MINI FRONT LOAD (Ø4)

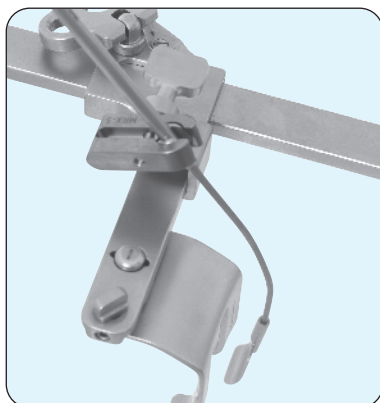
MRX-5*

* Screwdriver TXW-9X required.

* Schraubendreher TXW-9X erforderlich.



RETRACTION OF THE MV CUSP RETRAKTION DES MK-SEGELS



*exemplary configuration
Konfigurationsbeispiel*



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

MRX-1V

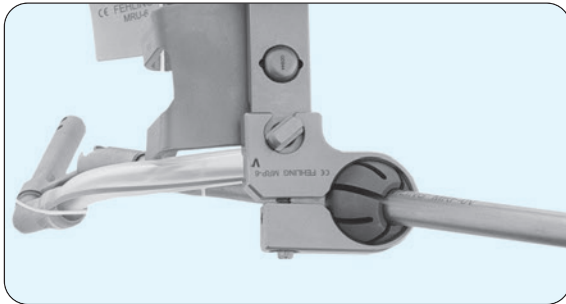


SUPERPLAST
MALLEABLE LID HOOK (Ø4)
BIEGBARER LIDHAKEN (Ø4)
12 x 14 x 250 mm

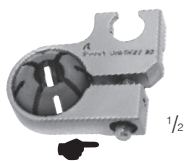
MRX-6

MVR RETRACTOR ACCESSORIES MKR SPREIZER ZUBEHÖR

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*

only with MRP-1
nur mit MRP-1

* with wing screw: MRP-5
* mit Flügelschraube: MRP-5

* with wing screw: MRP-6
* mit Flügelschraube: MRP-6



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.

For adapters with wing screw no screwdriver required.

Für Adapter mit Flügelschraube kein Schraubendreher erforderlich.



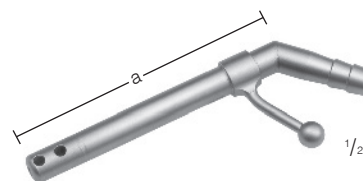
BLADE GUIDE (Ø8)
HAKENFÜHRUNG (Ø8)
200 mm

MRF-0V



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

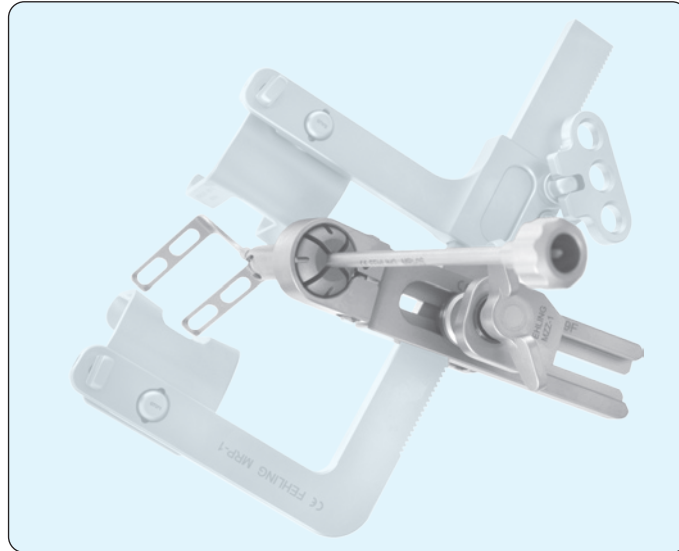
MRJ-4



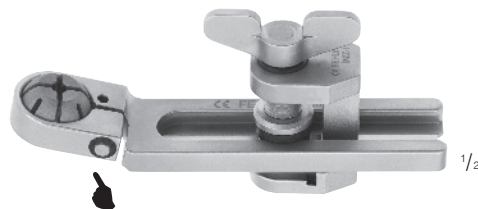
LATERAL ATRIAL RETRACTOR /
SUCTION DEVICE
SAUGNIEDERHALTER FÜR
LATERALE RETRAKTION DES VORHOFS

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

MIDCAB/OPCAB RETRACTOR ACCESSORIES
MIDCAB/OPCAB SPREIZER ZUBEHÖR



*exemplary configuration
Konfigurationsbeispiel*



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

MRV-9F + MZZ-1Q



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.



MYOCARDIAL MUSCLE STABILIZER
HERZMUSKELSTABILISATOR

MRR-3V

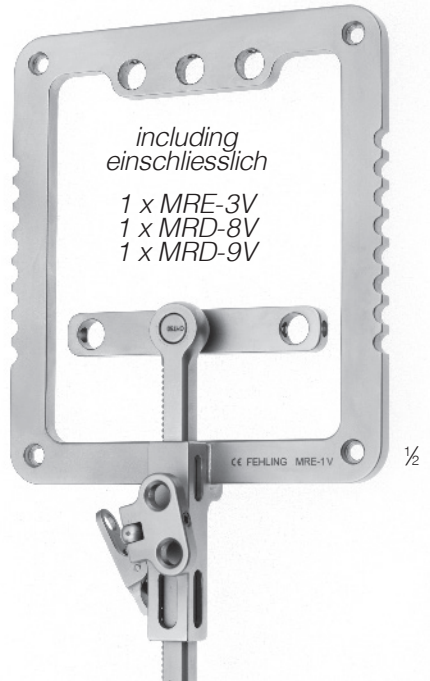


BLADE GUIDE (Ø4)
HAKENFÜHRUNG (Ø4)
120 mm

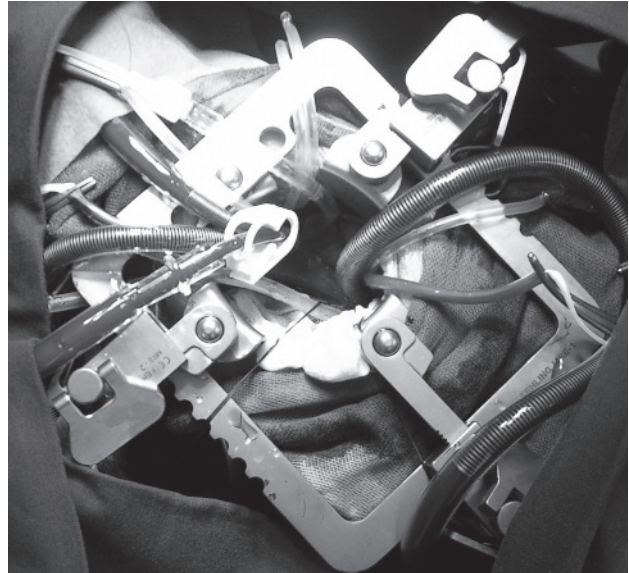
MRI-0S

FANTASMIKS

FOR MINIMALLY INVASIVE SURGERY
FÜR MINIMALINVASIVE CHIRURGIE



BODY / RAHMEN
SPREADING WIDTH 80 x 80 mm
SPREIZWEITE 80 x 80 mm
MRE-1V



exemplary configuration
Konfigurationsbeispiel



CROSS BRACKET FOR BLADES 25 - 55 mm
QUERBÜGEL FÜR HALTEBLÄTTER 25 - 55 mm
MRD-8V



COUPLING RIDER
FIXIERSCHLITTEN
MRE-2V



CROSS BRACKET FOR BLADES 60 - 95 mm
QUERBÜGEL FÜR HALTEBLÄTTER 60 - 95 mm
MRD-9V

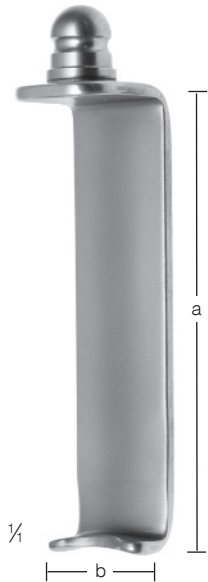


BLADE GUIDE
HAKENFÜHRUNG
MRE-3V

FANTASMICS

FOR MINIMALLY INVASIVE SURGERY
FÜR MINIMALINVASIVE CHIRURGIE

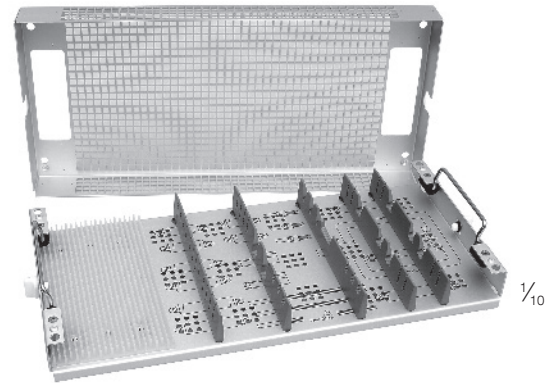
RETRACTING BLADES*
HALTEBLÄTTER*



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

*auxiliary tool: blade ejector NGM-6 see page 2/40

*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/40



STORAGE AND
STERILISATION TRAY
AUFBEWAHRUNGS- UND
STERILISATIONSCONTAINER
511 x 243 mm

MRE-0

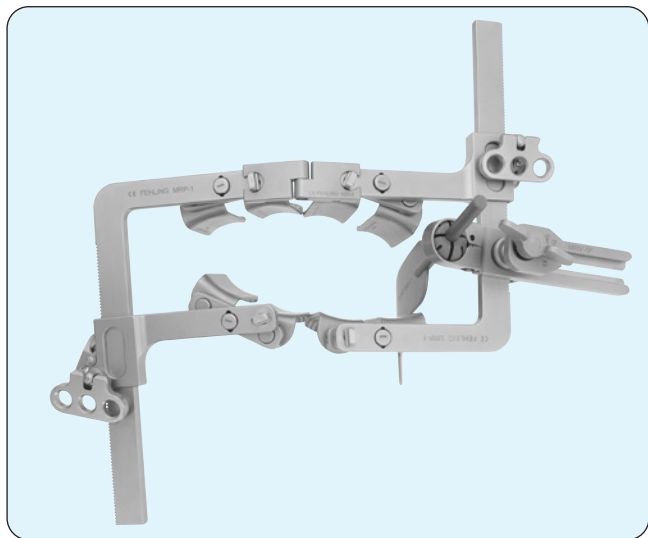
a x b = 12 x 7,5 mm



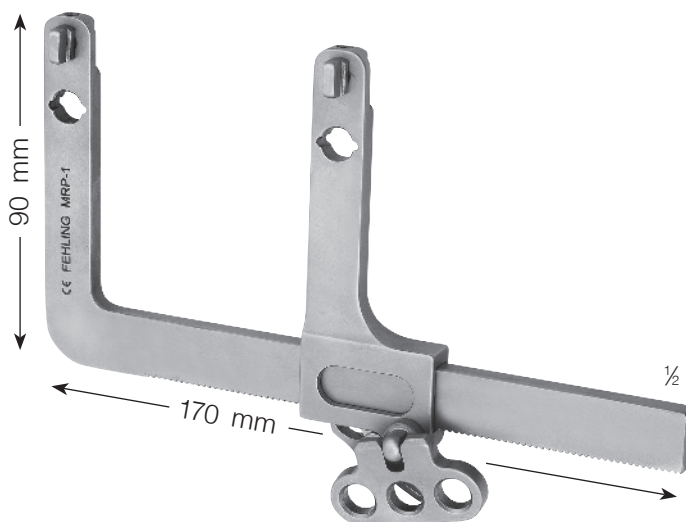
MINI THORACOTOMY RETRACTOR (PEDIATRIC)
MINI-THORAKOTOMIESPREIZER (PÄDIATRISCH)
115 mm

MSD-5

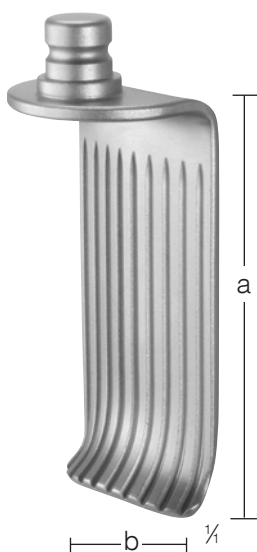
RETRACTOR FOR MILuTX
RETRAKTOR FÜR MILuTX



exemplary configuration
Konfigurationsbeispiel



MICS INTERCOSTAL RETRACTOR
MICS INTERCOSTALSPREIZER
MRP-1



RETRACTING BLADES*
HALTEBLÄTTER*

DEPTH TIEFE a	WIDTH / BREITE b	
	15 mm	24 mm
23 mm	—	MRE-4M
33 mm	MRI-1M	MRE-5M
43 mm	MRI-2M	MRE-6M
53 mm	MRI-3M	MRE-7M
63 mm	MRI-4M	MRE-8M
73 mm	MRI-5M	MRE-9M
83 mm	MRI-6M	MRI-8M
93 mm	MRI-7M	MRI-9M

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



HINGE CONNECTOR
GELENKVERBINDER
MZI-5



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

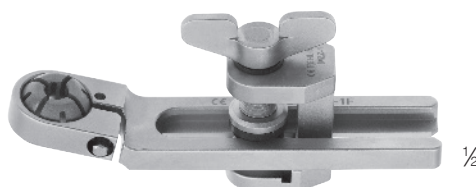
SUPERPLAST
LUNG/DIAPHRAGM RETRACTOR, MALLEABLE (Ø 6,35)
LUNGEN-/ZWERCHFELLRETRAKTOR, BIEGSAM (Ø 6,35)



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 6,35)
LENGTH AND HEIGHT VARIABLE
+ CLAMPING ELEMENT
KUGELADAPTER, GERADE (Ø 6,35)
LÄNGE + HÖHE VARIABLE
+ BEFESTIGUNGSELEMENT

MRV-1F + MZZ-1Q

COOLEY



LEFT / LINKS

a x b	LENGTH / LÄNGE 240 mm
25 x 20 mm	MFV-9
25 x 25 mm	MFW-7
25 x 30 mm	MFW-0
25 x 35 mm	MFW-6
25 x 45 mm	MFW-5



RIGHT / RECHTS

a x b	LENGTH / LÄNGE 240 mm
25 x 20 mm	MFV-6
40 x 25 mm	MFW-4
40 x 30 mm	MFV-7
40 x 35 mm	MFW-3
40 x 45 mm	MFW-2
50 x 35 mm	MFV-8



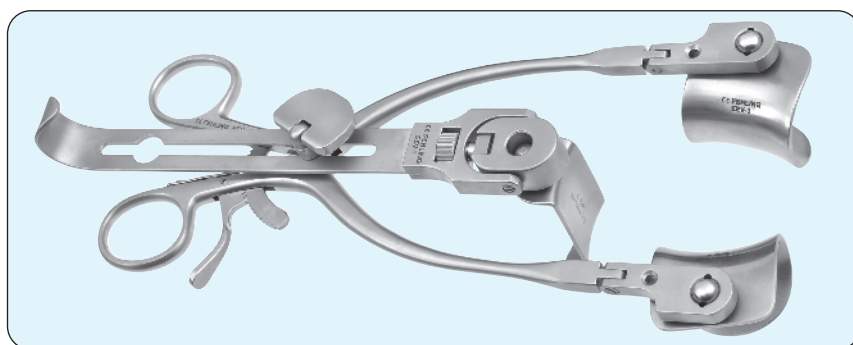
SHUNT RETRACTOR
SHUNTSPREIZER
70 mm
ECF-0

HOOK LENGTH
HAKENLÄNGE
9 mm

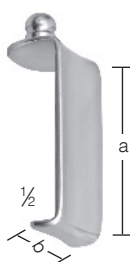
BLUNT
STUMPF



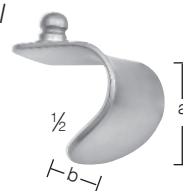
MAYO-ADAMS
RETRACTOR
WUNDSPREIZER
170 mm
ECG-7



exemplary configuration
Konfigurationsbeispiel



RETRACTING BLADES*
HALTEBLÄTTER*



ROUX
RETRACTING BLADES*
HALTEBLÄTTER*



SPREADING WIDTH
SPREIZWEITE
MAX. 80 x 100 mm
210 mm

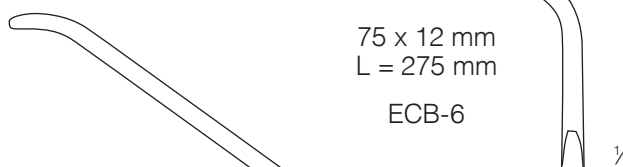
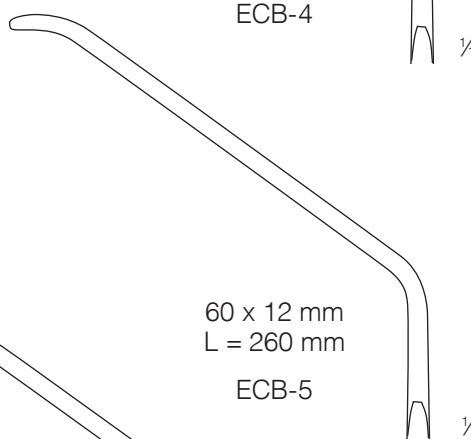
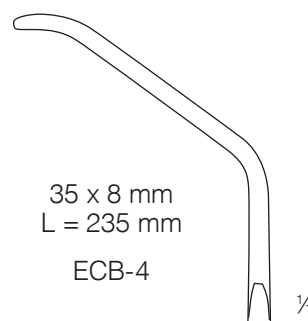
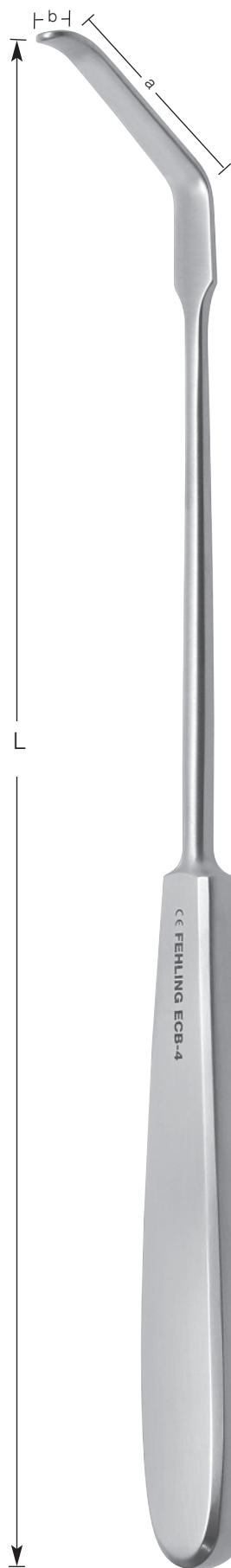
EEV-1

BLADE SIZE BLATTGRÖSSE a x b	
35 x 24 mm	MRE-5
45 x 24 mm	MRE-6
55 x 24 mm	MRE-7

BLADE SIZE BLATTGRÖSSE a x b	
23 x 30 mm	EEV-2
28 x 38 mm	EEV-3
33 x 45 mm	EEV-4

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

ZENKER

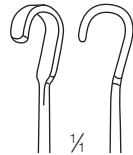


BLADE SIZE: DEPTH (a) x WIDTH (b)
BLATTGRÖSSE: TIEFE (a) x BREITE (b)

CERAMO®

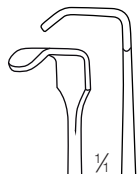


ASD/VSD RETRACTOR
HERZDEFEKTHAKEN

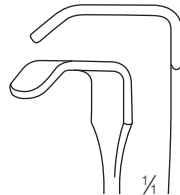


3 x 5 mm
EOB-7

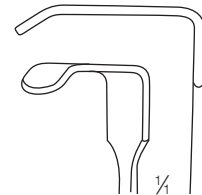
LANGENBECK



12 x 5 mm
EOB-1

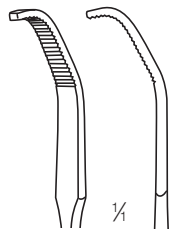


20 x 6 mm
EOB-2

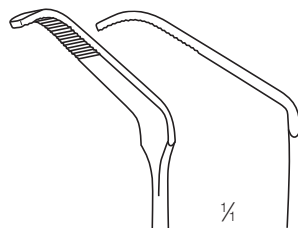


25 x 6 mm
EOB-3

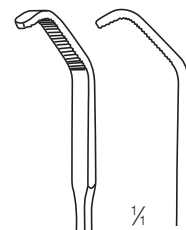
ZENKER



10 x 3 mm
EOB-5



25 x 3 mm
EOB-6



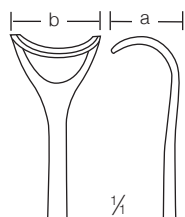
10 x 3 mm
(L=190 mm)
EOB-0

BLADE SIZE: DEPTH (a) x WIDTH (b)
BLATTGRÖSSE: TIEFE (a) x BREITE (b)

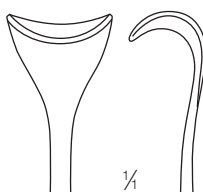
CERAMO®



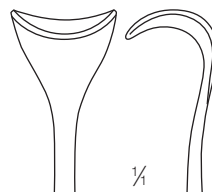
175 mm



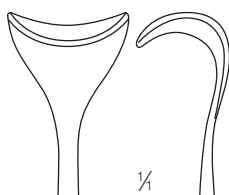
8 x 12 mm
EOA-6



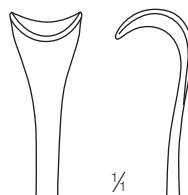
8 x 14 mm
EOA-5



12 x 14 mm
EOA-8



13 x 16 mm
EOA-9



8 x 8 mm
EOA-0



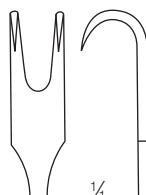
a = 3 mm
pointed / scharf
EOA-2



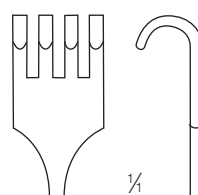
a = 7 mm
pointed / scharf
EOF-1



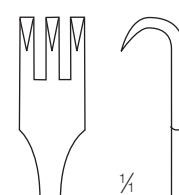
2 x 3 mm
pointed / scharf
EOA-1



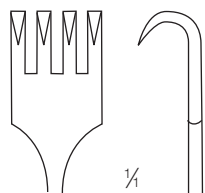
7 x 7 mm
pointed / scharf
EOA-3



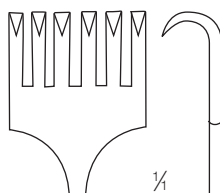
7 x 12 mm
blunt / stumpf
EOF-3



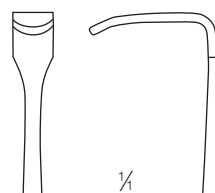
7 x 9 mm
pointed / scharf
EOF-2



7 x 12 mm
pointed / scharf
EOF-4



7 x 18 mm
pointed / scharf
EOF-5



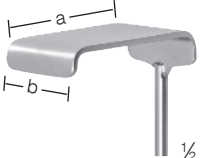
17 x 5 mm
EOB-8

BLADE SIZE: DEPTH (a) x WIDTH (b)
BLATTGRÖSSE: TIEFE (a) x BREITE (b)

SCHWABINGER

FOR PEDIATRIC SURGERY
FÜR KINDERCHIRURGIE



120 mm	 14 x 12 mm EZB-1	 20 x 15 mm EZB-2	 26 x 22 mm EZB-3	 32 x 30 mm EZB-4	 50 x 25 mm EZB-5
170 mm	 14 x 12 mm EZA-1	 20 x 15 mm ECZ-5	 32 x 30 mm ECZ-6	 BLUNT / STUMPF 20 x 12 mm EZA-3	 POINTED / SCHARF 20 x 20 mm EZA-2



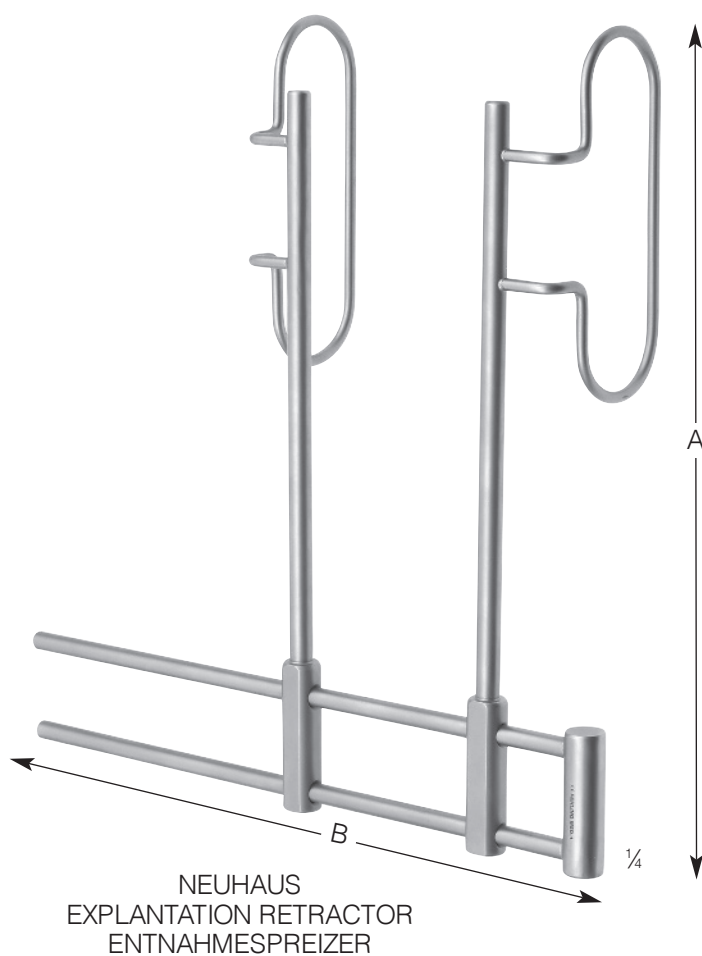
BLADE SIZE: DEPTH (a) x WIDTH (b)
BLATTGRÖSSE: TIEFE (a) x BREITE (b)



ADAPTER
ECZ-7

FITTING RETRACTING BLADES FOR EZA-0 ON PAGE 2/25
HALTEBLÄTTER FÜR EZA-0 AUF SEITE 2/25

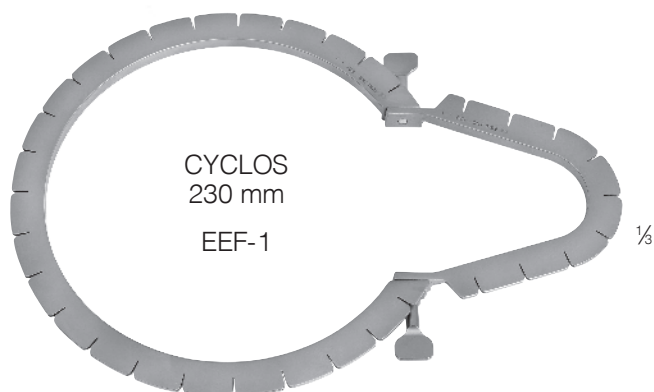
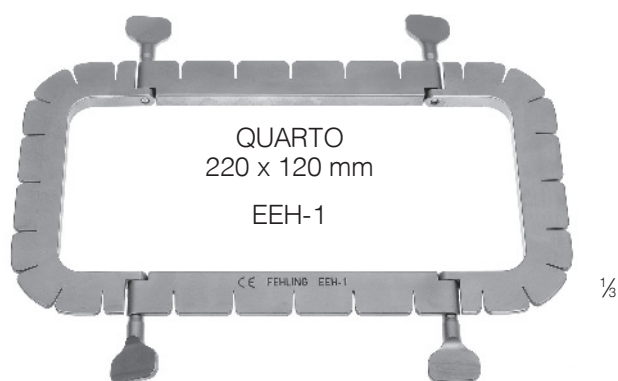




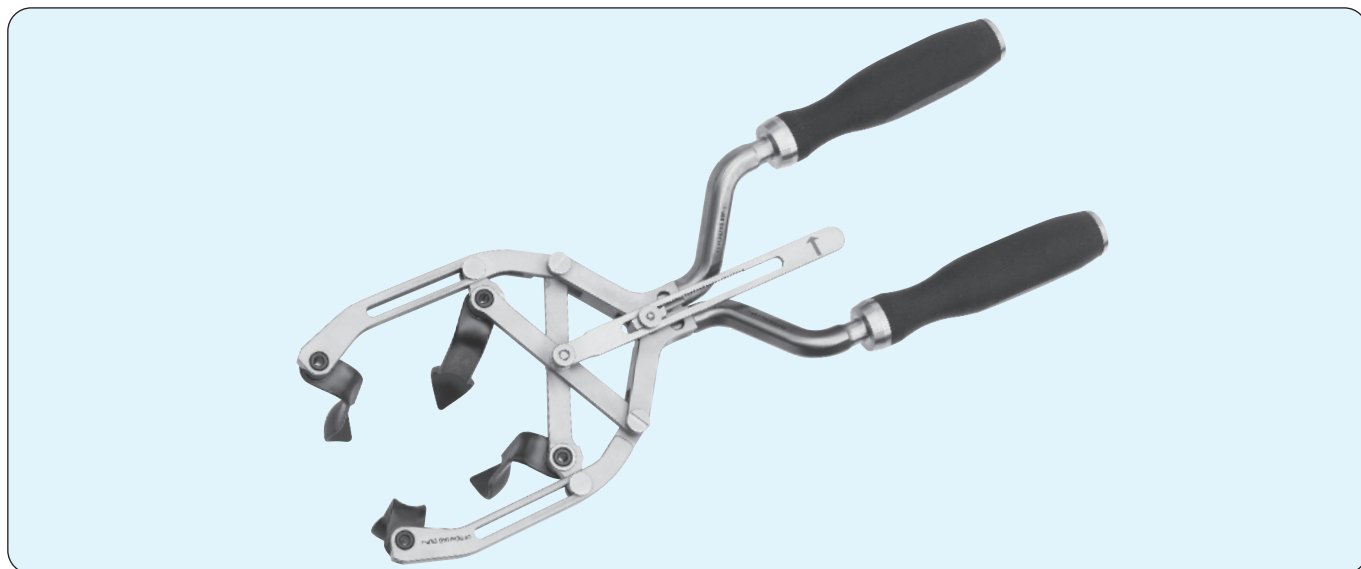
BODY SIZE RAHMENGROSSE A / B	
180 / 180 mm	MSD-3
270 / 270 mm	MSD-2
360 / 360 mm	MSD-1

TITANIUM

SOFT TISSUE RETRACTORS
WEICHTEILRETRAKTOREN



PICHLMAYR



*exemplary configuration
Konfigurationsbeispiel*



RETRACTOR (BODY ONLY)
SPREIZER (RAHMEN ALLEIN)

EEP-1



1/2

CERAMO®
RETRACTING BLADE*
SPREIZERBLATT*

DEPTH TIEFE	WIDTH BREITE 10 mm
50 mm	EEP-2
70 mm	EEP-3
90 mm	EEP-4
120 mm	EEP-5

*auxiliary tool:
blade ejector TXW-9X

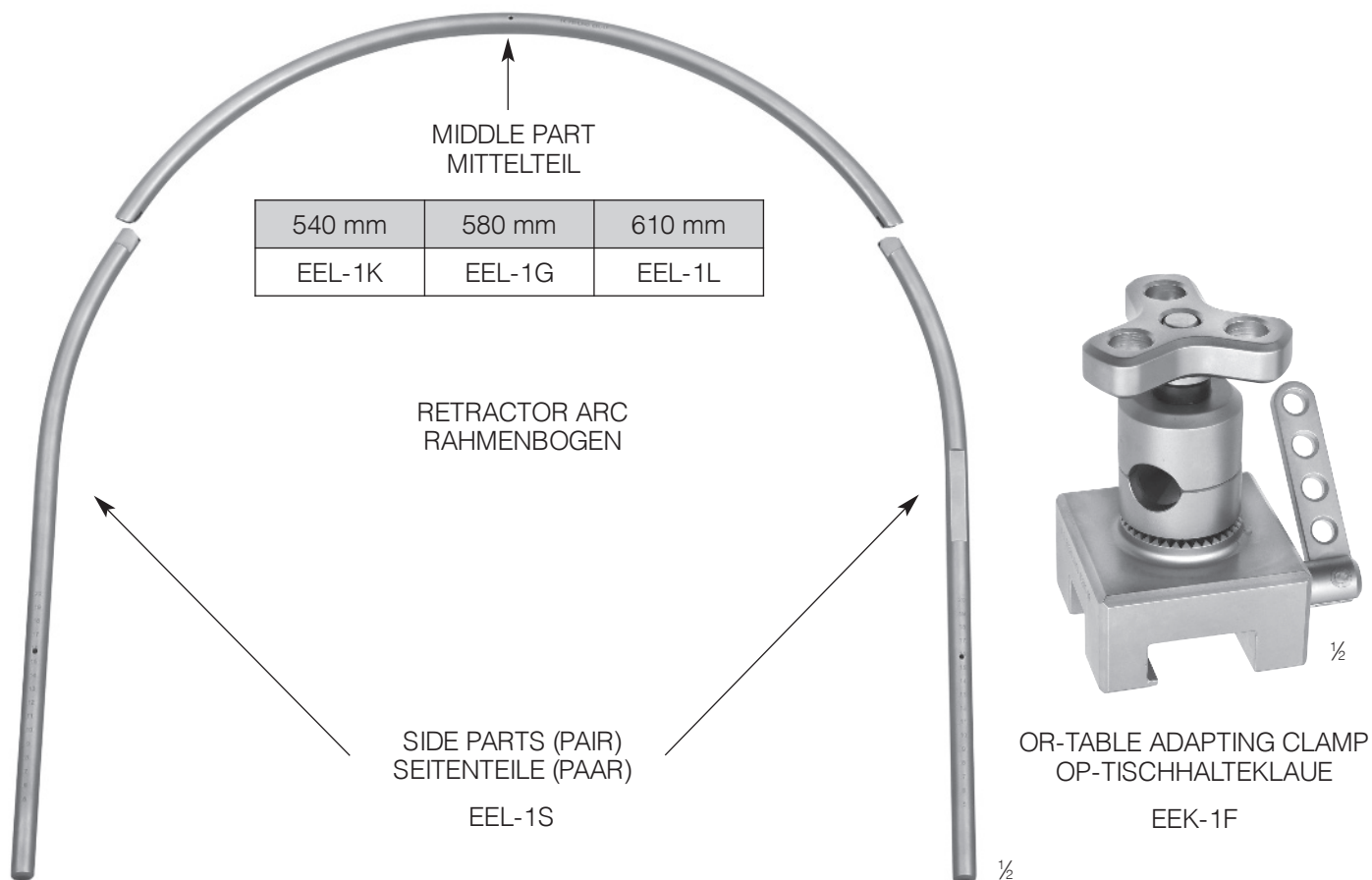
*Hilfsmittel:
Blattentferner TXW-9X



THOREXPO



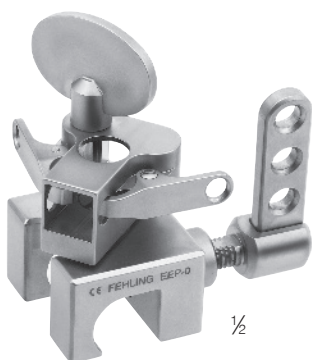
*exemplary configuration
Konfigurationsbeispiel*



THOREXPO



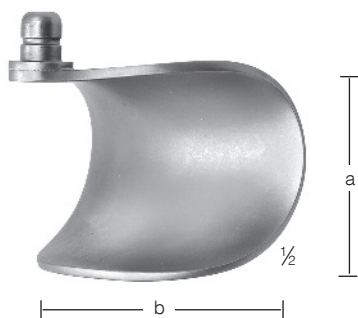
BLADE GUIDE
HAKENFÜHRUNG
300 mm
EEL-4F



COUPLING RIDER
VERBINDUNGSSCHLITTEN
EEP-0

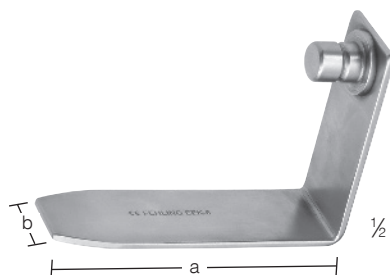


CROSS LINK (VENTREXPO)
KREUZVERBINDER (VENTREXPO)
EEM-2F



RETRACTING BLADE
HALTEBLATT

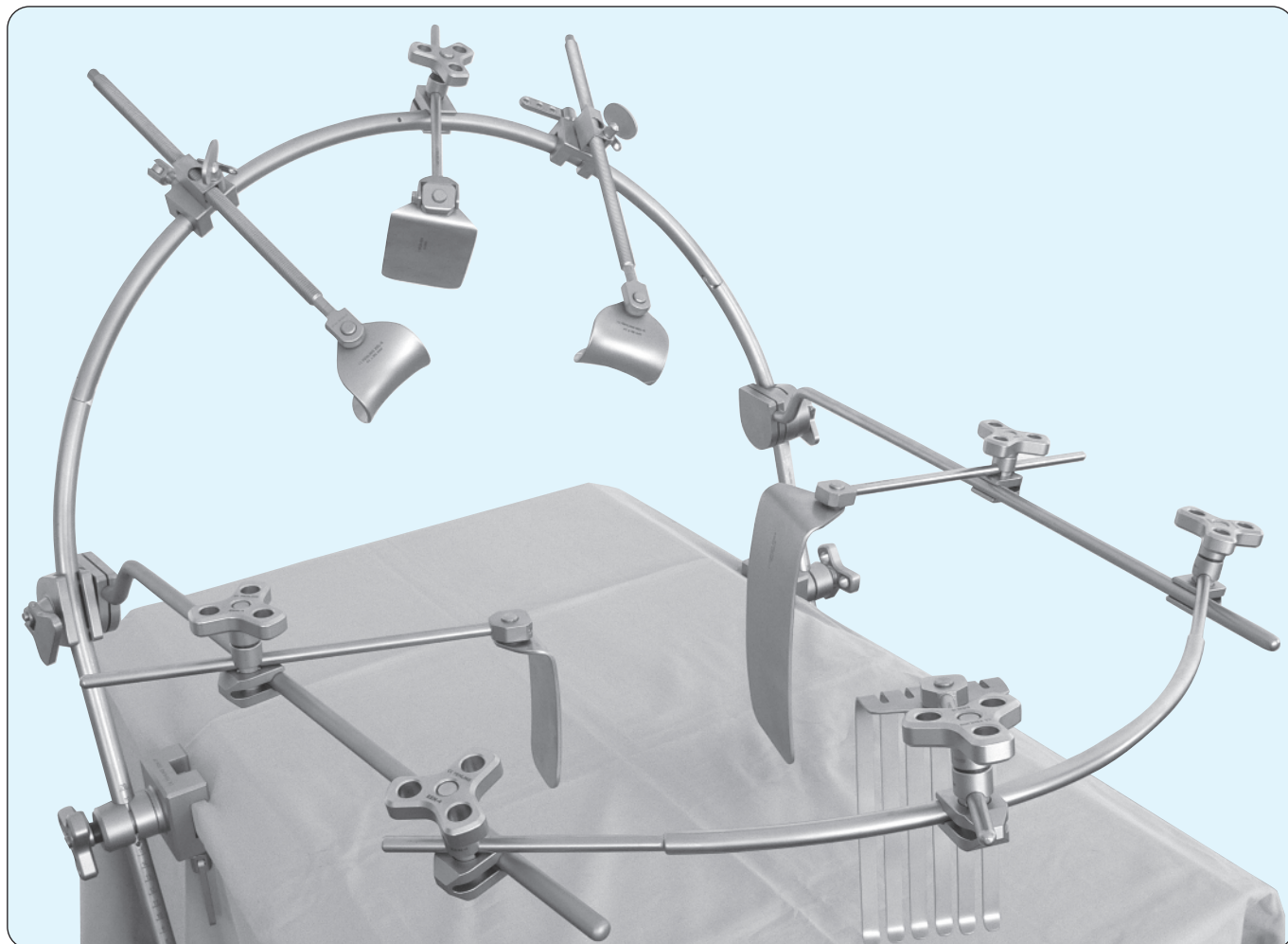
BLADE SIZE BLATTGRÖSSE a x b	
41 x 44 mm	EEL-5
41 x 60 mm	EEL-6
46 x 75 mm	EEL-7
65 x 85 mm	EEL-8
85 x 85 mm	EEL-9
90 x 130 mm	EEM-1



MANUBRIUM HOOK
MANUBRIUM HAKEN

BLADE SIZE BLATTGRÖSSE a x b	
75 x 19 mm	EEK-5
75 x 24 mm	EEK-8
95 x 24 mm	EEK-6
95 x 30 mm	EEK-7

VENTREXPO

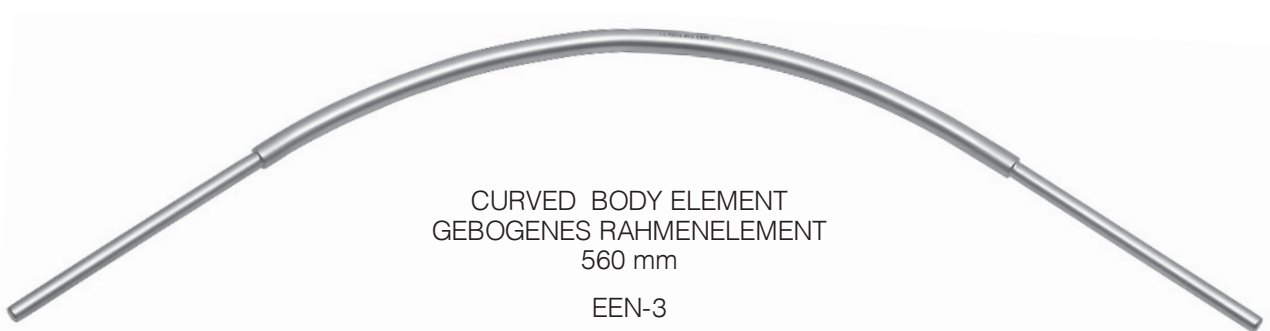


*exemplary configuration
Konfigurationsbeispiel*



BAYONET-SHAPED BODY ELEMENT
BAYONETT FÖRMIGES RAHMENELEMENT

LENGTH LÄNGE	
420 mm	EEN-2K
570 mm	EEN-2V



CURVED BODY ELEMENT
GEBOGENES RAHMENELEMENT
560 mm
EEN-3

VENTREXPO



CROSS LINK 16/11 (THOREXPO ARC)
KREUZVERBINDER 16/11 (THOREXPO-BOGEN)

EEN-1



CROSS LINK 11/8 (BLADE GUIDE)
KREUZVERBINDER 11/8 (HAKENFÜHRUNG)

EEN-4



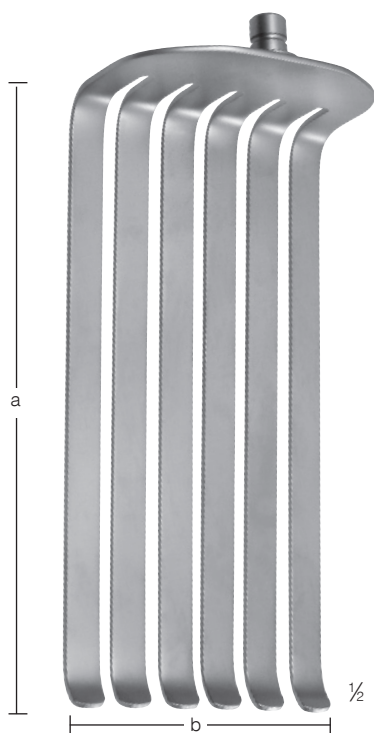
BLADE GUIDE WITH ADJUSTABLE ANGLE
WINKELVERSTELLBARE HAKENFÜHRUNG

LENGTH / LÄNGE	
260 mm	EEN-7
450 mm	EEK-9



BLADE GUIDE / HAKENFÜHRUNG

LENGTH / LÄNGE	
180 mm	EEN-6
260 mm	EEN-5



INTESTINAL RAKE, MALLEABLE
INTESTINALFÄCHER, BIEGSAM
(a) 160 x (b) 80 (-120) mm

EEM-6

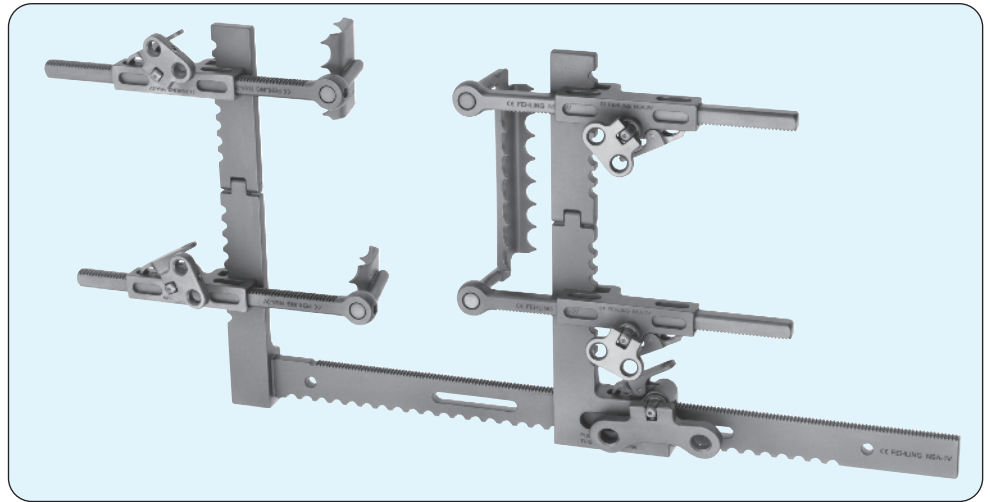


ABDOMINAL SPATULAS
BAUCHSPATEL

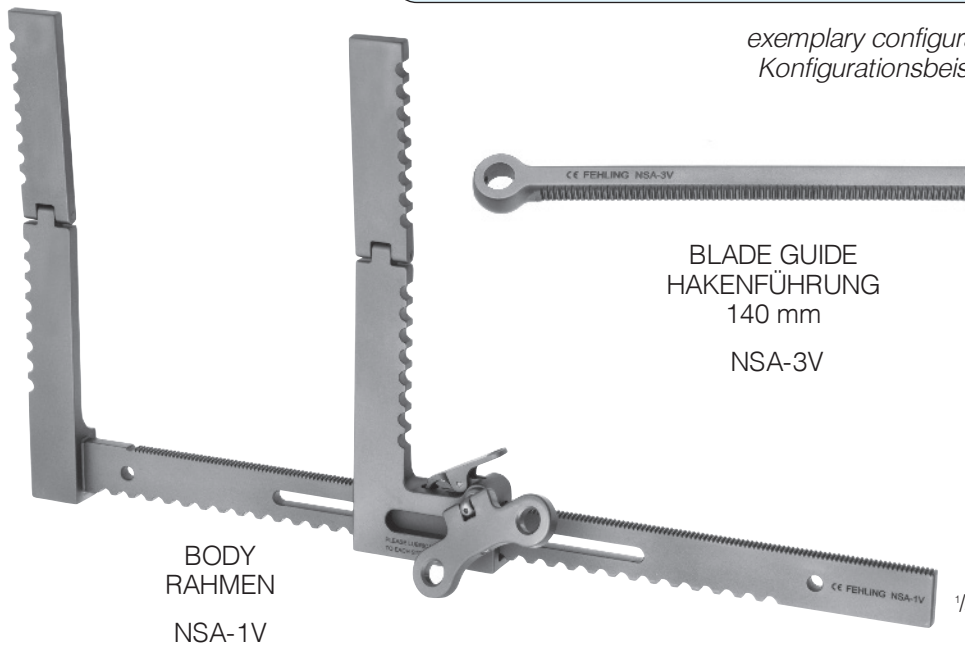
BLADE SIZE BLATTGRÖSSE a x b	
100 x 50 mm	EEN-8
130 x 65 mm	EEN-9
150 x 65 mm	EEN-0
180 x 80 mm	EEM-4
180 x 80 mm MALLEABLE/BIEGSAM	EEM-5
150 x 50 mm	EEM-8
150 x 120 mm	EEO-5
180 x 65mm	EEO-6

POLYTEL
TITANIUM

COMPONENTS / KOMPONENTEN



exemplary configuration
Konfigurationsbeispiel

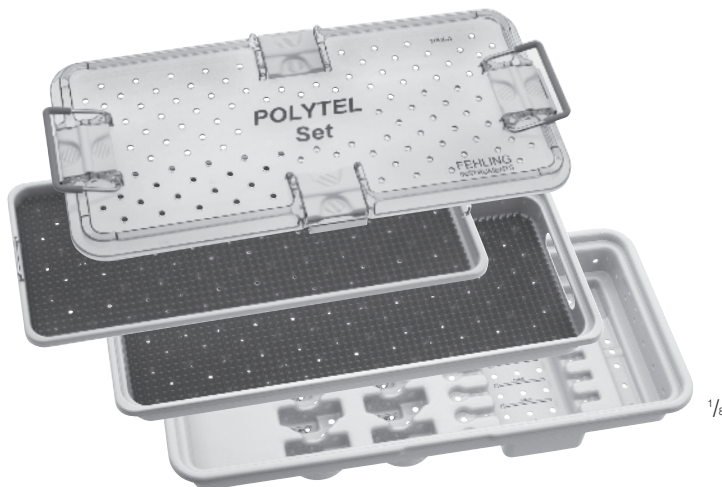


BODY
RAHMEN
NSA-1V

BLADE GUIDE
HAKENFÜHRUNG
140 mm
NSA-3V



COUPLING RIDER
FIXIERSCHLITTEN
NSA-2V



POLYTEL
STERILISATION AND STORAGE TRAY
STERILISIER- UND LAGERCONTAINER
530 x 250 x 100 mm

NSX-0



BODY JOINT STABILIZER
RAHMENGelenkstabilisator
NSA-5



BLADE EJECTOR
BLATTENTFERNER
115 mm
NGM-6

ATLAS

CERVICAL RETRACTOR
HWS-SPREIZER

See retracting blades for ATLAS on pages 2/42, 43
Halteblätter für ATLAS auf Seite 2/42, 43



LONGITUDINAL
LÄNGSVERSION

NHL-1



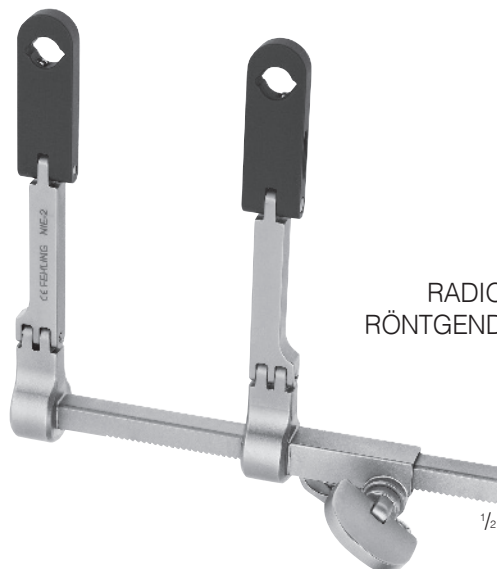
TRANSVERSAL
QUERVERSION

NHK-9



PEEK CONNECTION ELEMENTS, RADIOLOGIC
PEEK ENDGLIEDER, RÖNTGENDURCHLÄSSIG

NIE-1



PEEK CONNECTION ELEMENTS, RADIOLOGIC
PEEK ENDGLIEDER, RÖNTGENDURCHLÄSSIG

NIE-2



PEEK

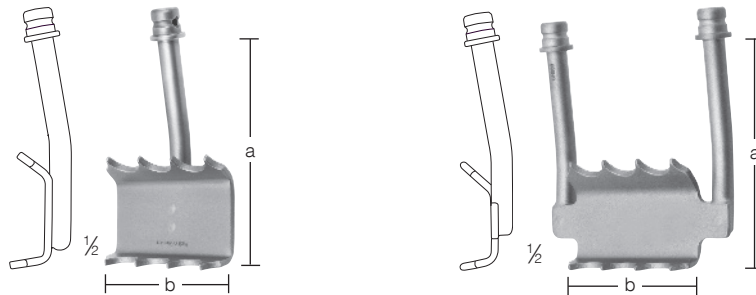
RADIOLOGIC HANDLE
RÖNTGENDURCHLÄSSIGER GRIFF
NIG-1

POLYTEL/ATLAS

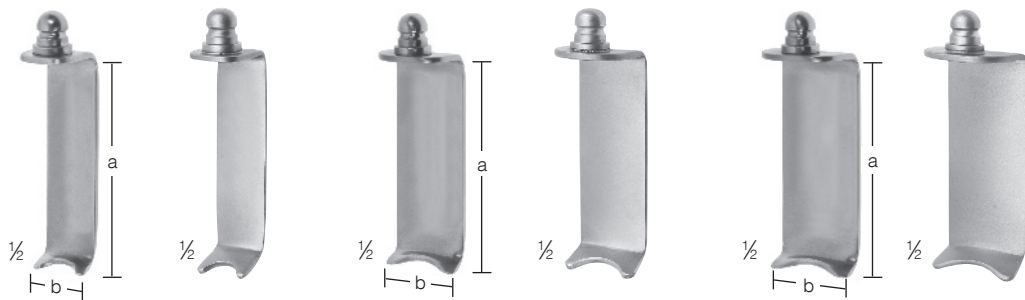
TITANIUM

RETRACTING BLADES / HALTEBLÄTTER*

PARAFASCIAL BLADES
PARAFASCIAL-BLÄTTER



DEPTH TIEFE a	ROTATABLE / DREHBAR		FIXED / STARR	
	b = 25 mm	b = 40 mm	b = 40 mm	b = 80 mm
40 mm	NSS-6	NSM-6	NSO-6	NSP-6
60 mm	NSS-7	NSM-7	NSO-7	NSP-7
80 mm	NSS-8	NSM-8	NSO-8	NSP-8
100 mm	NSS-9	NSM-9	NSO-9	NSP-9
120 mm	NSU-9	NST-9	–	NSK-8
140 mm	NSS-0	–	–	–



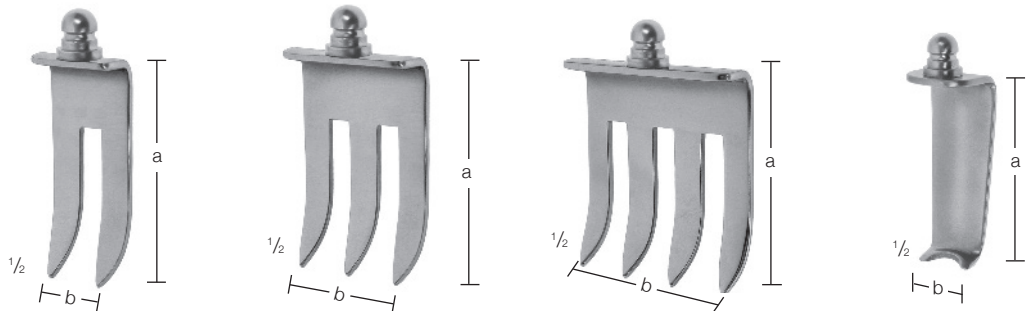
DEPTH TIEFE a	WIDTH / BREITE b					
	15 mm		20 mm		24 mm	
	POINTED SCHARF	BLUNT STUMPF	POINTED SCHARF	BLUNT STUMPF	POINTED SCHARF	BLUNT STUMPF
20 mm	–	NSR-8	–	–	–	NSG-8
25 mm	–	NSR-9	NSL-8	NST-8	NSF-8	NSG-9
30 mm	NSO-0	NSN-0	NSP-0	NSY-4	NSM-0	NSH-8
35 mm	NSB-0	NSN-1	NSL-0	NST-0	NSF-0	NSH-0
40 mm	NSO-1	NSN-2	NSP-1	NSY-5	NSM-1	NSH-9
45 mm	NSB-1	NSN-3	NSL-1	NST-1	NSF-1	NSH-1
50 mm	NSO-2	NSN-4	NSP-2	NSY-6	NSM-2	NSQ-8
55 mm	NSB-2	NSN-5	NSL-2	NST-2	NSF-2	NSH-2
60 mm	NSO-3	NSN-6	NSP-3	NSQ-7	NSM-3	NSQ-9
65 mm	NSB-3	NSN-7	NSL-3	NST-3	NSF-3	NSH-3
70 mm	NSO-4	NSN-8	NSP-4	–	NSM-4	NSQ-0
75 mm	NSB-4	NSN-9	NSL-4	NST-4	NSF-4	NSH-4
80 mm	NSO-5	–	–	–	NSM-5	–
85 mm	NSB-5	–	NSL-5	NST-5	NSF-5	NSH-5
95 mm	NSB-6	–	NSL-6	NST-6	NSF-6	NSH-6
105 mm	NSB-7	–	NSL-7	NST-7	NSF-7	NSH-7

*auxiliary tool: blade ejector NGM-6 see page 2/40

*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/40

POLYTEL/ATLAS
TITANIUM

RETRACTING BLADES / HALTEBLÄTTER*



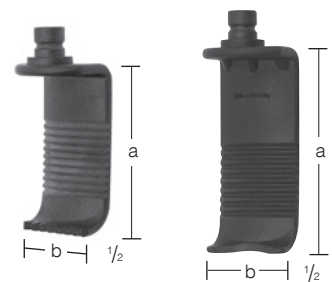
DEPTH TIEFE a	POINTED / SCHARF			CONIC / KONISCH
	WIDTH / BREITE b			
	24 mm	40 mm	56 mm	15 mm
25 mm	–	NSI-8	–	–
35 mm	NSR-0	NSI-0	NSK-0	NSG-0
45 mm	NSR-1	NSI-1	NSK-1	NSG-1
55 mm	NSR-2	NSI-2	NSK-2	NSG-2
65 mm	NSR-3	NSI-3	NSK-3	NSG-3
75 mm	NSR-4	NSI-4	NSK-4	NSG-4
85 mm	NSR-5	NSI-5	NSK-5	NSG-5
95 mm	NSR-6	NSI-6	NSK-6	NSG-6
105 mm	NSR-7	NSI-7	NSK-7	NSG-7

SPINOUS PINS
WIRBELDORNE



DEPTH TIEFE a	
25 mm	NSC-8
30 mm	NSC-9
35 mm	NSC-1
40 mm	NSC-2
45 mm	NSC-3
50 mm	NSC-4
55 mm	NSC-5

PEEK
RADIOLUCENT
RÖNTGENDURCHLÄSSIG



DEPTH TIEFE a	POINTED SCHARF	BLUNT STUMPF
	b = 23 mm	
40 mm	NIE-4	NIF-2
45 mm	NIE-5	NIF-3
50 mm	NIE-6	NIF-4
55 mm	NIE-7	NIF-5
60 mm	NIE-8	NIF-6
65 mm	NIE-9	NIF-7
70 mm	–	NIG-2
75 mm	NIF-0	NIF-8
80 mm	–	NIG-3
90 mm	–	NIG-4

*auxiliary tool: blade ejector NGM-6 see page 2/40

*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/40

ATLAS SIDE LOAD

CERVICAL SPINE RETRACTOR
HWS-SPREIZER



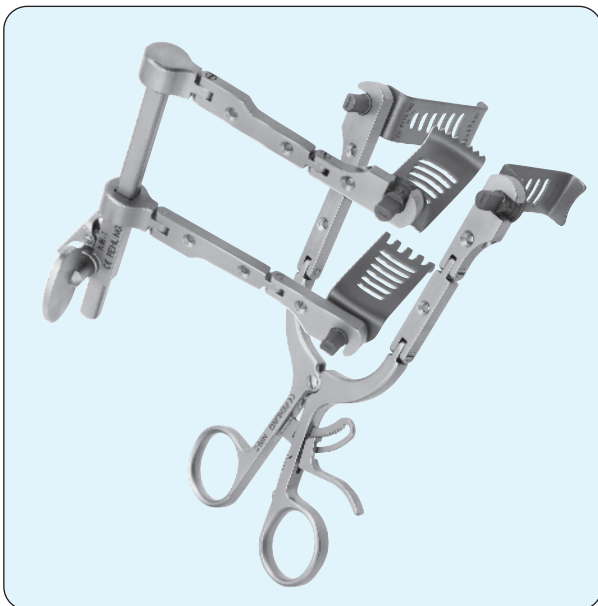
LONGITUDINAL
LÄNGSVERSION

NIN-2



TRANSVERSAL
QUERVERSION

NIN-1



*exemplary configuration
Konfigurationsbeispiel*

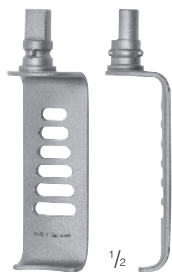


HANDLE
HANDGRIFF

NIN-3K

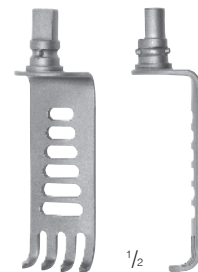
ATLAS SIDE LOAD
TITANIUM

BLADES
BLÄTTER



BLUNT
STUMPF

(LONGITUDINAL)



TOOTHED
GEZAHNT

(MEDIAL/LATERAL)

DEPTH TIEFE	WIDTH BREITE	
	19 mm	24 mm
25 mm	NIJ-1	–
30 mm	NIJ-2	–
35 mm	NIJ-3	NIM-1
40 mm	NIJ-4	NIM-2
45 mm	NIJ-5	NIM-3
50 mm	NIJ-6	NIM-4
55 mm	NIJ-7	NIM-5
60 mm	NIJ-8	NIM-6
65 mm	–	NIM-7
70 mm	–	NIM-8
75 mm	–	NIM-9

DEPTH TIEFE	WIDTH BREITE 19 mm
25 mm	NII-1
30 mm	NII-2
35 mm	NII-3
40 mm	NII-4
45 mm	NII-5
50 mm	NII-6
55 mm	NII-7
60 mm	NII-8



SERRATED
GEZAHNT

(LATERAL)



TOOTHED
GEZAHNT

(MEDIAL)

DEPTH TIEFE	WIDTH BREITE 24 mm
30 mm	NIK-1
35 mm	NIK-2
40 mm	NIK-3
45 mm	NIK-4
50 mm	NIK-5
55 mm	NIK-6
60 mm	NIK-7
65 mm	NIK-8
70 mm	NIK-9

DEPTH TIEFE	WIDTH BREITE 24 mm
30 mm	NIL-1
35 mm	NIL-2
40 mm	NIL-3
45 mm	NIL-4
50 mm	NIL-5
55 mm	NIL-6
60 mm	NIL-7
65 mm	NIL-8
70 mm	NIL-9

CASPAR

INTERVERTEBRAL RETRACTOR SYSTEM
INTERVERTEBRALES SPREIZERSYSTEM



BODY LEFT
RAHMEN LINKS

LMJ-6



BODY RIGHT
RAHMEN RECHTS

LMJ-5



DISTRACTION SCREW
DISTRAKTIONSSCHRAUBE

THREAD LENGTH GEWINDELÄNGE	
12 mm	NGN-0
14 mm	LMJ-8
16 mm	LMJ-9
18 mm	NGN-5



SCREW DRIVER
SCHRAUBENDREHER

LMK-1

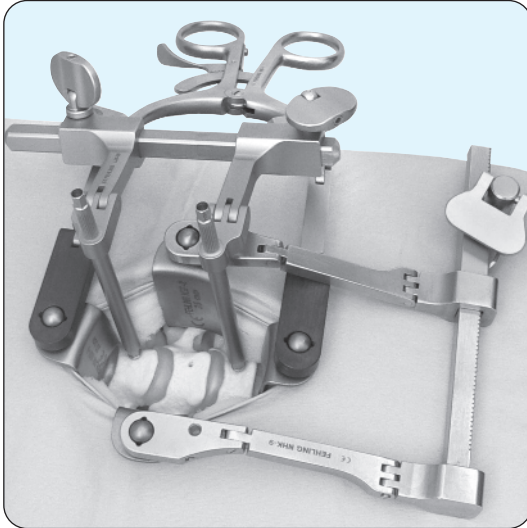


DRILLGUIDE
BOHRLEHRE

NGM-8

CONCEPT

INTERVERTEBRAL DISTRACTOR SYSTEM INTERVERTEBRALES SPREIZERSYSTEM



*exemplary configuration
Konfigurationsbeispiel*



DISTRACTOR
DISTRAKTOR
LMI-9F



LOCK NUT FOR PIN
FIXIERMUTTER FÜR PIN
LMJ-0F

DISTRACTION PINS
DISTRAKTIONSPINS

THREAD LENGTH GEWINDELÄNGE	
12 mm	LMI-3F
14 mm	LMI-4F
16 mm	LMI-5F
18 mm	LMH-0F



PIN DRIVER
PINDREHER
LMI-6F



PARALLEL DISTRACTOR
INTERVERTEBRALSPREIZZANGE
LMI-8F



LEFT TYPE
LINKSMODELL

170 mm

SCHUL
MICRO DISCECTOMY RETRACTOR
MIKRODISKEKTOMIESPREIZER

BLADE SIZE BLATTGRÖSSE a x b	LEFT LINKS	RIGHT RECHTS
40 x 10 mm	NDM-1	NDM-2
50 x 10 mm	NDM-3	NDM-4
60 x 10 mm	NDM-5	NDM-6
70 x 10 mm	NDM-7	NDM-8
50 x 20 mm	NDP-1	NDP-2
60 x 20 mm	NDP-3	NDP-4
70 x 20 mm	NDP-5	NDP-6



RIGHT TYPE
RECHTSMODELL

170 mm



LEFT TYPE
LINKSMODELL

180 mm

CERAMO® FEIGL
MICRO DISCECTOMY RETRACTOR
MIKRODISKEKTOMIESPREIZER

BLADE SIZE BLATTGRÖSSE a x b/c	LEFT TYPE LINKS	RIGHT TYPE RECHTS
40 x 10/15 mm	FBA-1C	FBB-1C
50 x 10/15 mm	FBA-2C	FBB-2C
60 x 10/15 mm	FBA-3C	FBB-3C
70 x 15/20 mm	FBA-4C	FBB-4C
80 x 15/20 mm	FBA-5C	FBB-5C
90 x 15/20 mm	FBA-6C	FBB-6C
100 x 15/20 mm	FBA-7C	FBB-7C



RIGHT TYPE
RECHTSMODELL

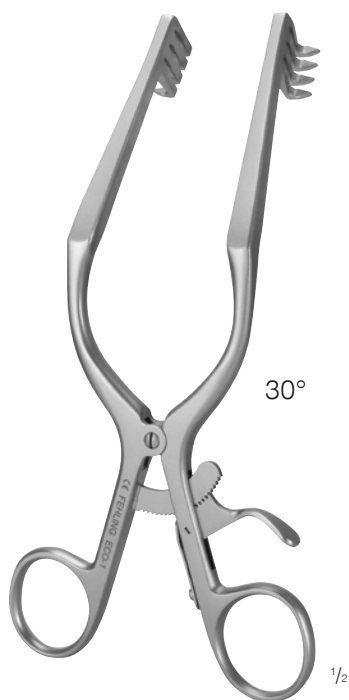
180 mm



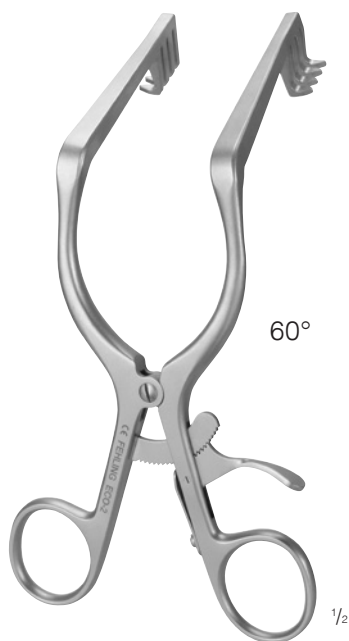
BLADE SIZE BLATTGRÖSSE a x b	
50 x 10 mm	NDQ-8
60 x 10 mm	NDQ-6
70 x 10 mm	NDQ-7
80 x 10 mm	NDQ-9

FOR TRANSMUSCULAR ACCESS
FÜR TRANSMUSKULÄREN ZUGANG

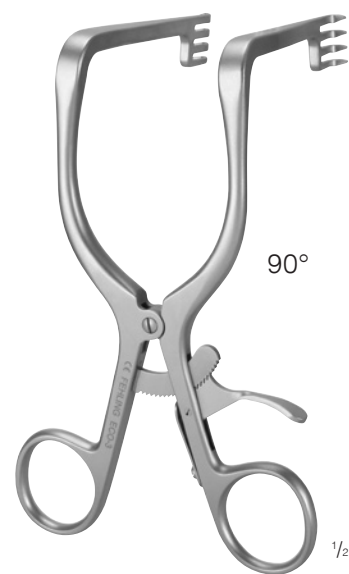
WINKING
170 mm



190 mm
ECO-1



170 mm
ECO-2



150 mm
ECO-3

CERAMO® CONCEPT

MICRO DISCECTOMY SPECULUM MIKRODISKEKTOMIESPEKULUM



*exemplary configuration
Konfigurationsbeispiel*



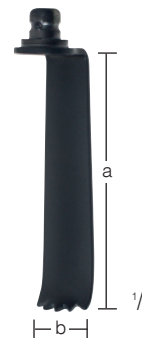
SPECULUM
SPEKULUM

DEPTH TIEFE	
45 mm	NVH-1V
55 mm	NVH-2V
65 mm	NVH-3V
75 mm	NVH-4V
85 mm	NVH-5V
95 mm	NVH-6V

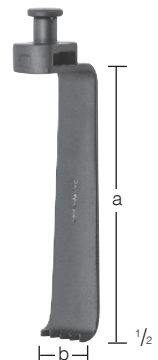
BLADES FOR COUNTER RETRACTOR*
BLÄTTER FÜR GEGENSPERRER*



COUNTER RETRACTOR
GEGENSPERRER
NVH-9V



LATERAL



MEDIAL

DEPTH TIEFE	a	b = 15 mm
35 mm		NVK-6V
40 mm		NVI-0V
45 mm		NVI-1V
50 mm		NVI-6V
55 mm		NVI-2V
60 mm		NVI-7V
65 mm		NVI-3V
75 mm		NVI-4V
85 mm		NVI-5V
95 mm		NVI-8V

DEPTH TIEFE	a	b = 15 mm
40 mm		NVW-1
45 mm		NVW-2
50 mm		NVW-3
55 mm		NVW-4
60 mm		NVW-5
65 mm		NVW-6
70 mm		NVW-7

*auxiliary tool: blade ejector NGM-6
see page 2/40

*Hilfsmittel: Blattentferner NGM-6
siehe Seite 2/40

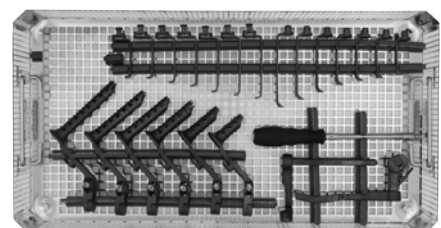


CARDAN SCREWDRIVER
KARDAN SCHRAUBENDREHER
LMT-4



HEXAGON WRENCH
FOR SPECULUM
SECHSKANTSCHLÜSSEL
FÜR SPEKULUM

NVG-9

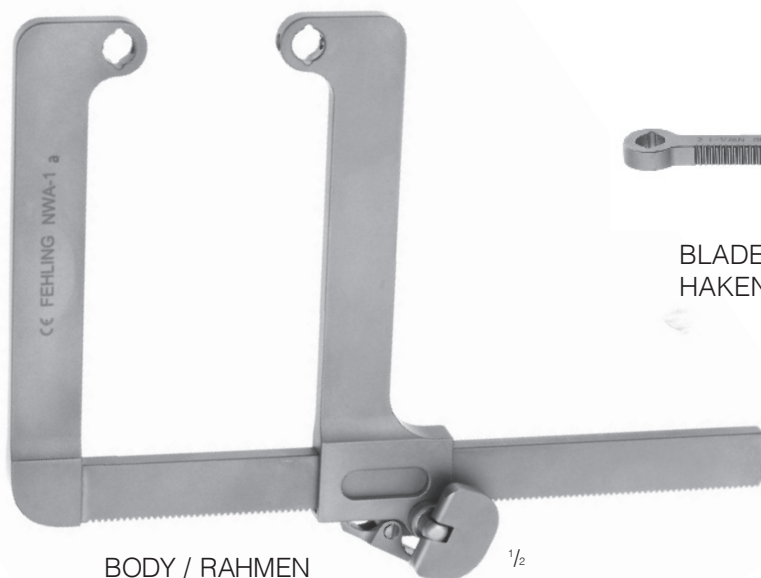


STERILISATION AND STORAGE TRAY
STERILISIER- UND LAGERCONTAINER
480 x 250 x 70 mm

NVH-0V

RAABE
TITANIUM

HEMI-LAMINECTOMY RETRACTOR
HEMILAMINEKTOMIESPREIZER

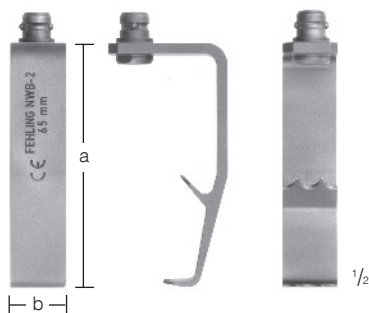


BODY / RAHMEN
110 x 200 mm

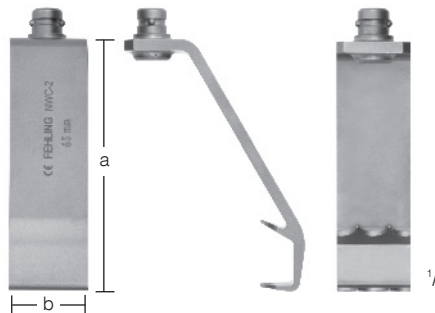
NWA-1



BLADEGUIDE (included in NWA-1)
HAKENFÜHRUNG (beinhaltet in NWA-1)



MUSCLE BLADES*
MUSKELBLÄTTER*



"CROSS-OVER"
MUSCLE BLADES*
MUSKELBLÄTTER*



CRANIAL-CAUDAL PINS (PAIR)*
CRANIAL-CAUDAL SPREIZPINS (PAAR)*

BLADE SIZE BLATTGRÖSSE a x b	
50 x 15 mm	NWB-1
65 x 15 mm	NWB-2
80 x 15 mm	NWB-3
95 x 15 mm	NWB-4
50 x 30 mm	NWB-5
65 x 30 mm	NWB-6
80 x 30 mm	NWB-7
95 x 30 mm	NWB-8

BLADE SIZE BLATTGRÖSSE a x b	
50 x 20 mm	NWC-1
65 x 20 mm	NWC-2
80 x 20 mm	NWC-3
95 x 20 mm	NWC-4

DEPTH TIEFE a	
35 mm	NWA-2
45 mm	NWA-3
55 mm	NWA-4

*auxiliary tool: blade ejector NGM-6 see page 2/40

*Hilfsmittel: Blattentferner NGM-6 siehe Seite 2/40

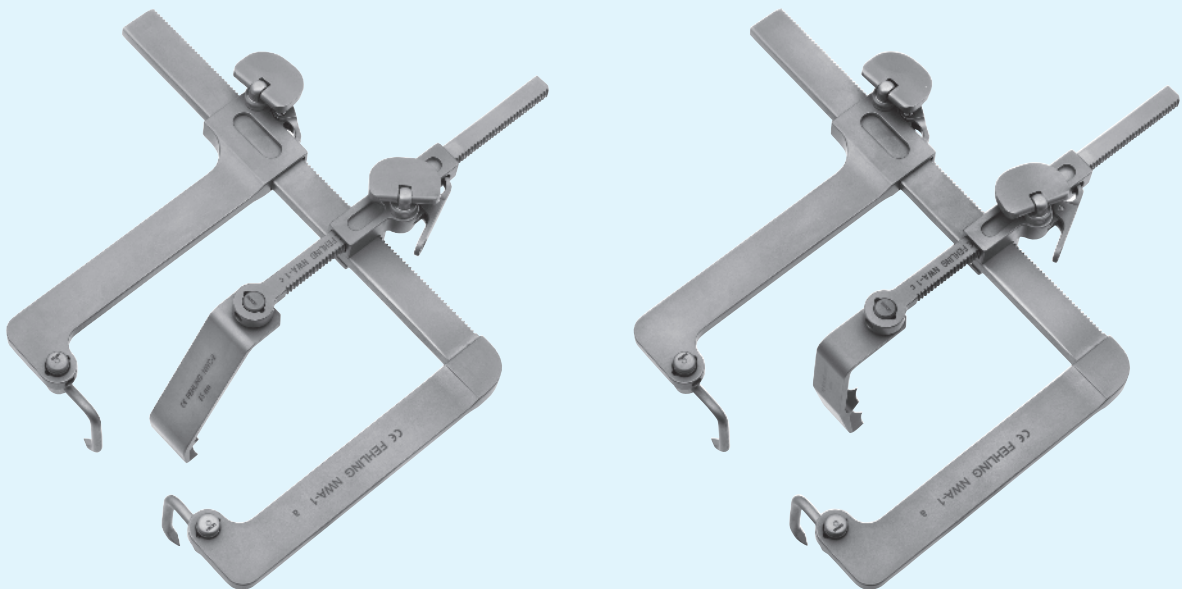
RAABE
TITANIUM

HEMI-LAMINECTOMY RETRACTOR
HEMILAMINEKTOMIESPREIZER



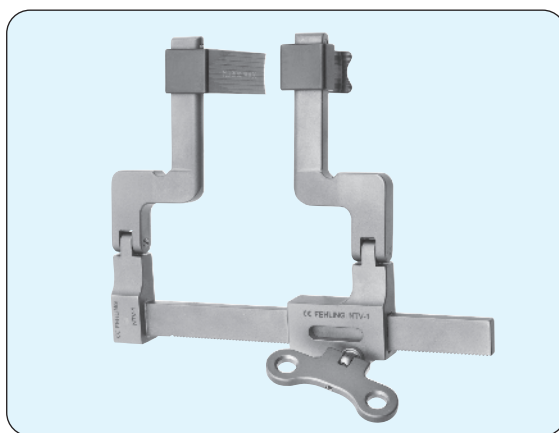
STERILISATION AND STORAGE TRAY
STERILISIER- UND LAGERCONTAINER
400 x 260 x 50 mm

NWA-0



*exemplary configuration
Konfigurationsbeispiel*

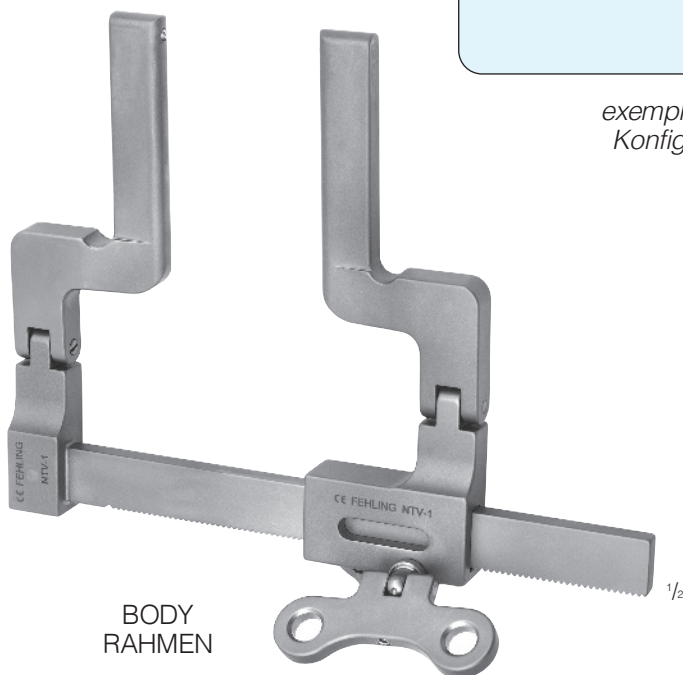
DOERNER
TITANIUM



exemplary configuration
Konfigurationsbeispiel



CERAMO®
BLADES (PAIR)
BLÄTTER (PAAR)



BODY
RAHMEN

FOR 1-2 SEGMENTS
FÜR 1-2 SEGMENTE

NTV-1

FOR 1-4 SEGMENTS
FÜR 1-4 SEGMENTE

NTV-0

DEPTH LÄNGE a	WIDTH / BREITE b	
	20 mm	30 mm
40 mm	NTT-0	NTT-6
50 mm	NTT-1	NTT-7
60 mm	NTT-2	NTT-8
70 mm	NTT-3	NTT-9
80 mm	NTT-4	NTU-0
100 mm	NTT-5	NTU-1
120 mm	NTU-3	NTU-2

CERAMO®
SPINOUS PINS
WIRBELDORNE

	DEPTH TIEFE a	
	20 mm	NTR-9
	30 mm	NTS-0
	40 mm	NTS-1
	50 mm	NTS-2
	60 mm	NTS-4
	70 mm	NTS-6
	80 mm	NTS-8

	DEPTH TIEFE a	
	30 mm	NTV-2
	40 mm	NTV-3
	50 mm	NTS-3
	60 mm	NTS-5
	70 mm	NTS-7
	80 mm	NTS-9

HEY

DISCECTOMY RETRACTOR
DISKEKTOMIESPREIZER



BODY
RAHMEN
NCL-4



SPINOUS PINS*
WIRBELDORNE*

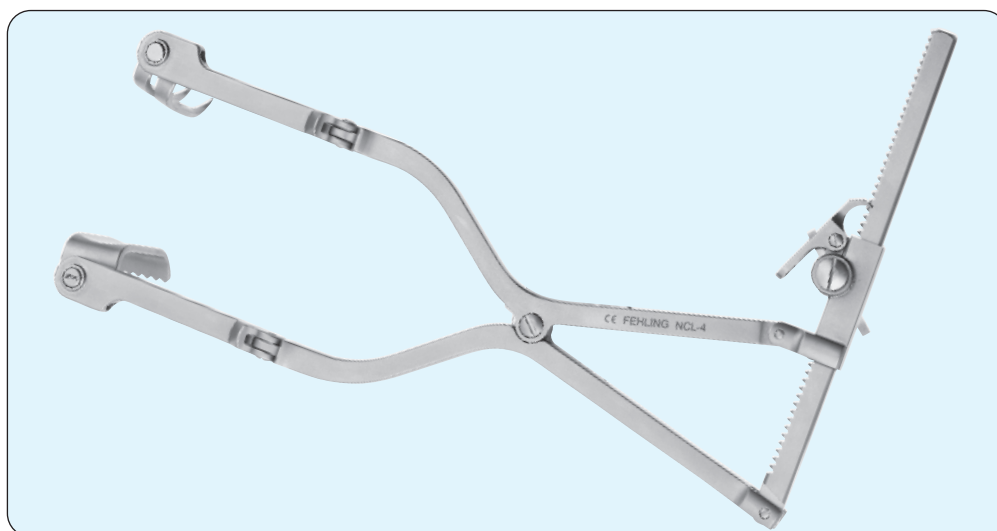
DEPTH TIEFE a	
32 mm	NFR-7
37 mm	NCL-8
53 mm	NCL-9
62 mm	NCM-1

*auxiliary tool: blade ejector NGM-6 see page 2/40
*Hilfsmittel: Blatentferner NGM-6 siehe Seite 2/40



BLADES, POINTED*
BLÄTTER, SCHARF*

DEPTH TIEFE a	b = 20 mm
40 mm	NEG-6
50 mm	NCL-5
60 mm	NCL-6
70 mm	NCL-7



exemplary configuration
Konfigurationsbeispiel



DEPTH TIEFE a	
35 mm	NHY-5
50 mm	NHY-9
65 mm	NHY-0

MAYER
SPINOUS DISTRACTOR
DORNDISTRAKTOR

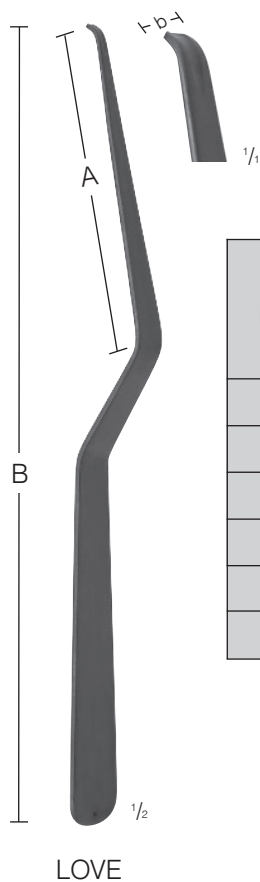


WIDTH BREITE	DEPTH /TIEFE a			
	65 mm	100 mm	120 mm	160 mm
3 mm	NDH-2	NDW-2	NEH-1	NEH-0
		NOW-1		
5 mm	NDH-3	NDW-3	NEH-2	NEH-4
		NOW-2	NOV-8	
7 mm	NDH-4	NDW-4	NEH-3	-
		NOW-3	NOV-9	

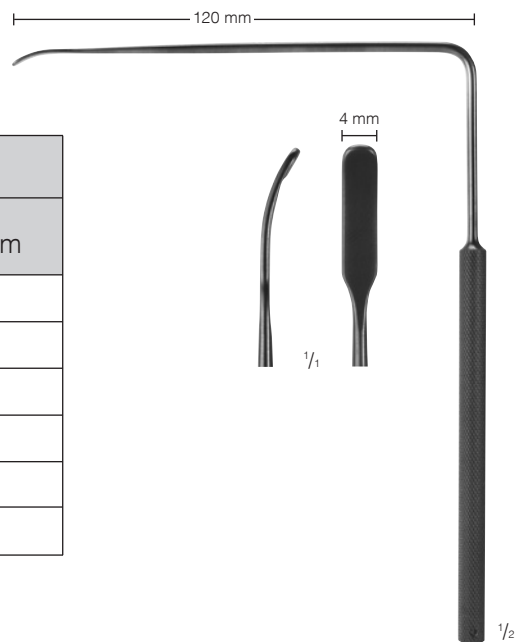
LOVE (MODIF.)
NERVE ROOT RETRACTOR
NERVWURZELHAKEN

CERAMO®

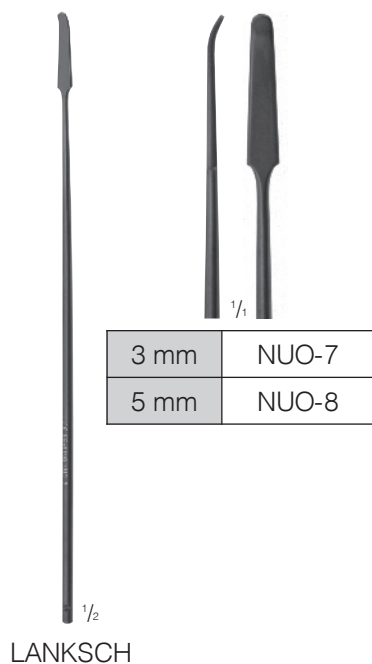
CERAMO®



WIDTH BREITE -b-	LENGTH/LÄNGE A/B	
	80/120 mm	160/290 mm
3 mm	NDH-1	NDI-9
5 mm	NDH-0	NDJ-0
7 mm	NDI-1	—
9 mm	NDI-2	—
11 mm	NDI-3	—
13 mm	NDI-4	—



RAABE
4 x 120 mm
NUX-5G



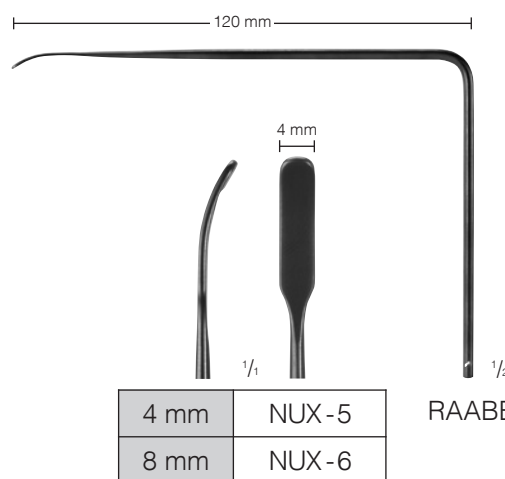
LANKSCH



ROUND
RUND
ABB-1



FLAT
FLACH
ABB-1F



RAABE