



# 13

**Mikro- und Neurochirurgie**

Micro- and neuro surgery

Chirurgie micro et neuro

Cirugía micro y neuro

Micro- e Neuro-Chirurgia



### Mikronadelhalter

*Micro needle holders*

*Micro porte aiguilles*

*Micro porta agujas*

*Micro porta aghi*



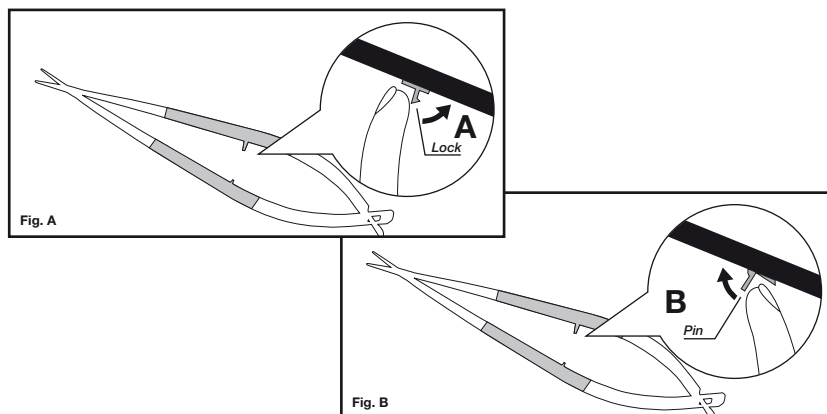
Das 2 in 1 System erlaubt die Benutzung der Nadelhalter, selbst während des Eingriffs, mit Sperre (Fig. A) oder ohne Sperre (Fig. B). Außer dem wirtschaftlichen Aspekt, der für dieses System spricht, erhöht sich auch die Zuverlässigkeit der Instrumente.

The 2 in 1 system allows to switch intraoperatively from lock (Fig. A) to lock free (Fig. B) use of the needle holder. In addition to cost effectiveness, this new concept provides better reliability.

Le système 2 in 1 permet d'utiliser, même en cours d'intervention, les porte-aiguille avec verrou (Fig. A) ou sans verrou (Fig. B). En dehors de l'aspect économique, ce nouveau concept apporte une plus grande fiabilité.

El sistema 2 in 1 permite utilizar el portaaguja con cerrojo (Fig. A) o sin cerrojo (Fig. B) incluso durante la intervención. Aparte del aspecto económico, este nuevo concepto aporta una mayor fiabilidad.

Il sistema 2 in 1 permette di utilizzare, anche in corso d'intervento il portaghi con la chiusura (Fig. A) o senza (Fig. B). Questo nuovo concetto assicura una maggiore affidabilità.





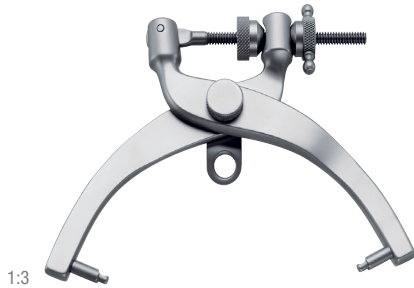
### Schädelhalter

*Cervical traction tongs*

*Pinces de traction crânienne*

*Pinzas de tracción craneal*

*Pinze per trazione craniale*



1:3

**CRUTCHFIELD**

40-190-000



1:3

**CRUTCHFIELD**

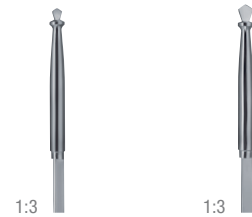
40-192-000



1:3

40-206-000

**grosses Modell, für Extension der Halswirbel – kein Vorbohren erforderlich – Dorne verstellbar**  
 large type, cervical traction tongs – pins adjustable no drilling to be done  
 modèle large, distracteur cervicale – poinçons ajustables pas de perçage nécessaire  
 modelo grande, distractor cervical – espigas ajustables sin necesidad de trepanar  
 modello grande, distrattore cervicale, pin ajustabili, non necessita di perforare, regolabili



1:3

1:3

	3.5 mm Ø	5.0 mm Ø
40-198-035	x	
40-198-050		x

**Satz à 2 Stück für 40-190-000 und 40-192-000**

Set of 2 pieces for 40-190-000 and 40-192-000

Jeu à 2 pièces pour 40-190-000 et pour 40-192-000

Juego con 2 piezas para 40-190-000 y para 40-192-000

Completo con 2 pezzi per 40-190-000 e per 40-192-000

40-208-000

**Ersatzdorn für 40-206-000**  
 Spare pin for 40-206-000  
 Goupille de rechange pour 40-206-000  
 Perno de cambio para 40-206-000  
 Punta di ricambio 40-206-000



1:2

67-386-190

**Gabelschlüssel, doppelendig zu 40-206-000**  
 Wrench, double-ended for 40-206-000  
 Clé de fixation, pour 40-206-000  
 Llave de tuercas, para 40-206-000  
 Chiave per 40-206-000

**Handbohrapparate**  
*Hand drills*

*Perforateurs à main*  
*Perforadores a mano*  
*Perforatori a mano*



1:3

**HUDSON**

270 mm – 10¾"	67-130-000
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**Handbohrapparate alleine**  
Hand drills only  
Perforateurs à main seul  
Perforadores a mano sólo  
Perforatori a mano solo

270 mm – 10¾"	67-130-016
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**komplett mit 4 Bohrern (Fig. 1 – Fig. 4) und Verlängerungsstück**  
complete with 4 twist drills (Fig. 1 – Fig. 4) and extension piece  
complèt avec 4 mèches (Fig. 1 – Fig. 4) et pièce d'extension  
completa con 4 fresas (Fig. 1 – Fig. 4) y pieza de prolongación  
completo con 4 frese (Fig. 1 – Fig. 4) e pezzo di prolungazione



1:2

67-130-009
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**Verlängerungsstück**  
Extension piece  
Pièce d'extension  
Pieza de prolongación  
Pezzo di prolungazione



1:2



1:2



1:2



1:2

Fig. 1	Fig. 2	Fig. 3	Fig. 4
9 mm Ø	14 mm Ø	16 mm Ø	22 mm Ø
67-130-001	67-130-002	67-130-003	67-130-004



1:2

**CUSHING**

14 mm Ø
67-130-005



1:2

**MCKENZIE**

13 mm Ø
422-148-070



### Instrumente zur Schädelöffnung

*Instruments for cranial opening*

*Instrumentos para l'ouverture du crâne*  
*Instrumentos para apertura craneana*  
*Strumenti per l'apertura del cranio*



**DE MARTEL** 1:2

330 mm – 13"
40-140-330



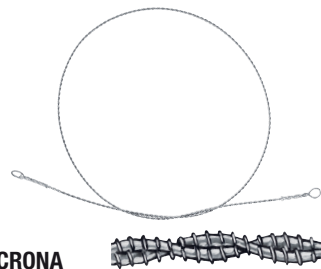
**ADSON** 1:2

150 mm – 6"	422-135-150
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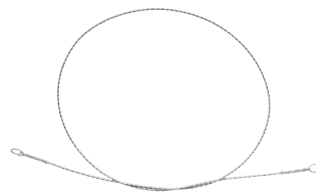
**DE VILBISS** 1:2

210 mm – 8 ¼"	40-180-210
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**OLIVECRONA**

300 mm – 12"	40-120-300
400 mm – 16"	40-120-400
500 mm – 20"	40-120-500
600 mm – 23 ½"	40-120-600
700 mm – 27 ½"	40-120-700



**GIGLI**

300 mm – 12"	40-122-300
400 mm – 16"	40-122-400
500 mm – 20"	40-122-500

**6-teilig**  
 6 wires twisted  
 6 fils tordus  
 6 alambres torcidos  
 6 fili attorcigliati



**GIGLI** 1:2

40-130-000
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**Selbsthaltender Hirnretraktor**  
*Self-retaining brain retractor*

*Retracteur cérébrale autostatique*  
*Separador cerebral autostático*  
*Retrattore celebrale autostatico*



340-217-000

**Selbsthaltender Hirnretraktor, flexibel mit 1 Spannarm, komplett, bestehend aus: Fixierungsvorrichtung für 1 Spannarm, Spannarm und Spatelhalter für flache Spatel**

Brain retractor self-retaining, with 1 flexible arm, complete, consisting of: fixation base for 1 flexible arm, flexible arm only, support for flat brain spatulas

Retracteur cérébrale autostatique, flexible avec 1 tendeur, complét avec support pour 1 tendeur, tendeur et porte-spatule pour spatules plates  
Separador cerebral autostático, 1 brazo flexible con soporte, completo con brazo y soporte para espátulas llanas

Retrattore celebrale autostatico, flessibile  
Completo, contiene: supporto di fissaggio per un braccio, 1 braccio flessibile con supporto di fissaggio per spatole piatte

1:2

340-218-000

**Selbsthaltender Hirnretraktor, flexibel mit 2 Spannarmen, komplett, bestehend aus: Fixierungsvorrichtung für 2 Spannarme, 2 Spannarme und 2 Spatelhalter für flache Spatel**

Brain retractor self-retaining, with 2 flexible arms, complete, consisting of: fixation base for 2 flexible arms, 2 flexible arms, 2 supports for flat brain spatulas

Retracteur cérébrale autostatique, flexible avec 2 tendeurs, complét avec supports pour 2 tendeurs, 2 tendeurs et 2 portes-spatule pour spatules plates  
Separador cerebral autostático, 2 brazos flexibles con soporte, completo con brazos y soporte para 2 spatulas llanas

Retrattore celebrale autostatico, flessibile con 2 bracci completi, contiene: supporto di fissaggio per bracci per 2 spatole piatte



### Selbsthaltender Hirnretraktor

#### Self-retaining brain retractor

*Retracteur cérébrale autostatique*  
*Separador cerebral autostático*  
*Retrattore celebrale autostatico*



340-216-060

**Fixierungsvorrichtung allein, für 2 Spannarme**  
Fixation base only, holding 2 flexible arms  
Support seul pour 2 tendeurs  
Soporte sólo para 2 brazos de separador  
Supporto di fissaggio per 2 bracci, solo

340-216-050

**Fixierungsvorrichtung allein, für 1 Spannarm**  
Fixation base only, holding 1 flexible arm  
Support seul pour 1 tendeur  
Soporte sólo para 1 brazo de separador  
Supporto di fissaggio per 1 braccio, solo

340-216-090

**Spatelhalter allein, für Flachspatel**  
Support only, for flat brain spatulas  
Porte-spatule seul, pour spatules plates  
Soporte sólo, para espátulas planas  
Supporto solo, per fissaggio di spatole piatte

340-216-100

**Spatelhalter allein, für Spatel mit Rundschaft von 4 mm und 5 mm Ø, zum Befestigen am Spannarm**  
Support only, for brain spatulas with round shaft of 4 mm and 5 mm Ø to fix on the flexible arm  
Porte-spatule seul pour la fixation des spatules de 4 mm et 5 mm Ø diam  
Soporte sólo para la fijación de espátulas de 4 mm y 5 mm Ø al brazo  
Supporto solo per spatole con asta tonda di Ø 4 mm e 5 mm

340-216-080

**Spannarm allein – zum Aufstecken auf Kupplungsköpfe und Fixierungsvorrichtungen**  
Flexible arm only – for attaching coupling heads and for fixation bases  
Tendeur flexible seul – pour le montage sur supports et accouplements  
Brazo flexible sólo para montar sobre soportes  
Braccio flessibile sólo – per il montaggio sul supporto di fissaggio

**Hirnspatel**

*Brain spatula*

*Spatules cérébrales*

*Espátulas cerebrales*

*Spatole cerebrali*



**CUSHING**

	180 mm – 7"
7 mm x 9 mm	340-246-070
11 mm x 13 mm	340-246-110
15 mm x 18 mm	340-246-150
18 mm x 22 mm	340-246-180



**OLIVECRONA**

	180 mm – 7"	180 mm – 7"
7 mm x 9 mm	40-323-007	40-321-007
11 mm x 13 mm	40-323-011	40-321-011
15 mm x 18 mm	40-323-015	40-321-015
18 mm x 22 mm	40-323-018	40-321-018

**konvex**  
convex  
convexe  
convexa  
convessa

**konkav**  
concave  
concave  
cóncava  
concava



**HEIFETZ**

	200 mm – 8"
x = 8 mm	340-256-080
x = 11 mm	340-256-110
x = 14 mm	340-256-140
x = 17 mm	340-256-170
x = 20 mm	340-256-200

**biegsam**  
malleable  
malléable  
maleable  
flessibile

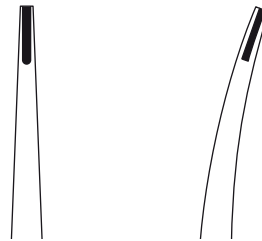




**McKenzie Instrumentarium**  
*McKenzie instruments*  
*McKenzie instruments*  
*Instrumentos McKenzie*  
*Strumenti McKenzie*

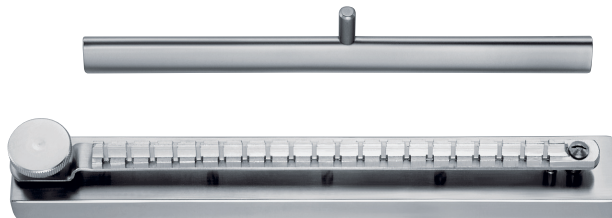


**MCKENZIE**



150 mm – 6"	340-009-150	40-241-150
190 mm – 7½"	340-009-190	40-241-190

**Zangen zum Anlegen der Klammern**  
 Clip applying forceps  
 Pincés pour poser des agrafes  
 Pinzas para poner grapas  
 Pinze per mettere le agraiffe



**MCKENZIE** 1:2

148 mm x 40 mm x 6 mm – 5¾" x 1½" x ½"	40-256-000
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**Klammerblock für 20 Klammern**  
 Brain clip rack for 20 clips  
 Porte-agraifes pour 20 agrafes  
 Porta-grapas para 20 grapas  
 Supporto port'agraiffe per 20 agraffe



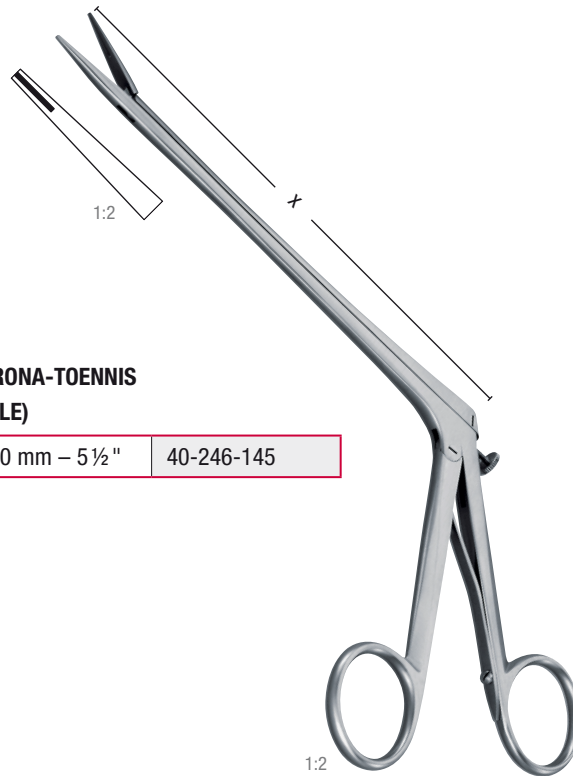
1:1

40-220-100
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**100 Klammern im Plastikbehälter**  
 100 Brain clips in plastic box  
 100 agrafes dans un tube de plastique  
 100 grapas en tubo de plástico  
 100 agraffe nella scatola di plastica

**Clips und Anlegezangen**  
*Clips and applying forceps*

*Clips et pinces à appliquer*  
*Clips y aplicadores*  
*Clips e pinze per mettere clips*



**OLIVECRONA-TOENNIS  
(SCOVILLE)**

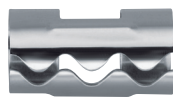
x = 140 mm – 5 ½"	40-246-145
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1:2

**RANEY**

150 mm – 6"	340-024-000
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1:1

340-023-000
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**Kopfhautklammer „Raney“**  
Scalp clip "Raney"  
Agrafes pour le cuir chevelu «Raney»  
Grapa para cuero cabelludo "Raney"  
Agrafes per il cuoio capelluto „Raney“



1:1

22-650-000
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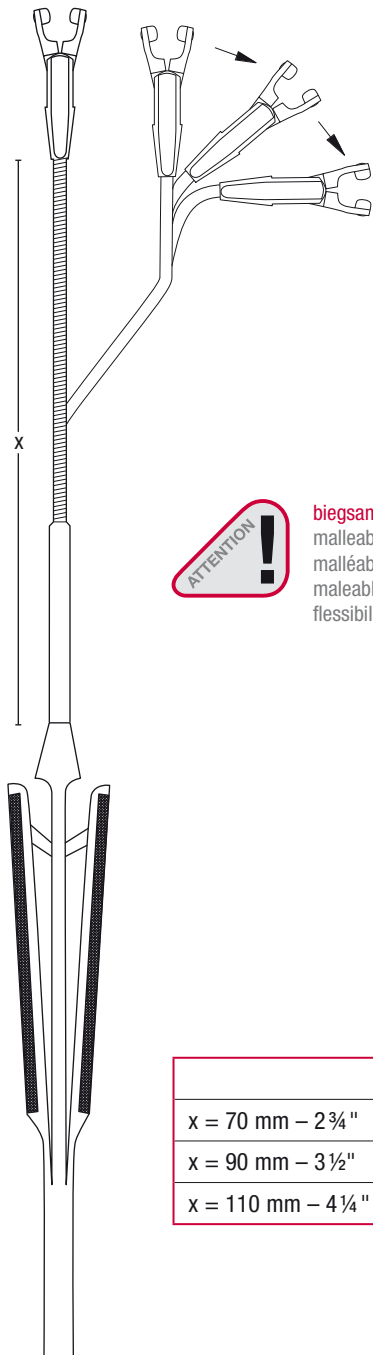
**Kopfhautklammer „Köln“ (Packung mit 10 Stück)**  
Scalp clip "Köln" (Package of 10 pieces)  
Agrafes pour le cuir chevelu «Köln» (Paquet de 10 pièces)  
Grapa para cuero cabelludo "Köln" (Paquetes de 10 piezas)  
Agrafes per il cuoio capelluto „Köln“ (Confezione da 10 pezzi)



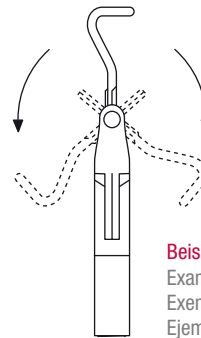
### Anlegezangen für Yasargil Clips

#### Applying forceps for Yasargil clips

*Pince à poser pour des clips Yasargil*  
*Aplicadora para clips Yasargil*  
*Pinze per mettere clips Yasargil*



**biegsam**  
 malleable  
 malléable  
 maleable  
 flessibile



**Beispiel für Drehmechanismus**  
 Example for rotation  
 Exemple pour la rotation  
 Ejemplo de rotación  
 Esempio per la rotazione



	Mini	Standard
x = 70 mm – 2¾"	340-780-002	340-781-002
x = 90 mm – 3½"	340-780-004	340-781-004
x = 110 mm – 4¼"	340-780-006	340-781-006

**nicht drehbar**  
 non rotating  
 non rotatif  
 non rotatorio  
 non rotativo

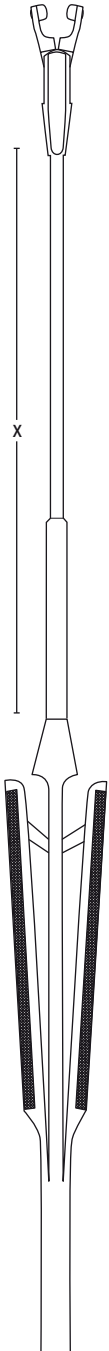


	Mini	Standard
x = 70 mm – 2¾"	340-780-020	340-781-020
x = 90 mm – 3½"	340-780-022	340-781-022
x = 110 mm – 4¼"	340-780-024	340-781-024

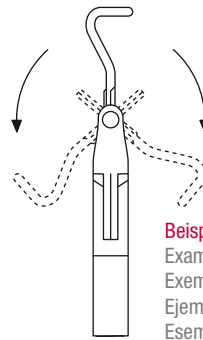
**drehbar**  
 rotating  
 rotatif  
 rotatorio  
 rotativo

**Anlegezangen für Yasargil Clips**  
*Applying forceps for Yasargil clips*

*Pince à poser pour des clips Yasargil*  
*Aplicadora para clips Yasargil*  
*Pinze per mettere clips Yasargil*



**starr**  
rigid  
rigide  
rigido  
rigido



**Beispiel für Drehmechanismus**  
Example for rotation  
Exemple pour la rotation  
Ejemplo de rotación  
Esempio per la rotazione



	Mini	Standard
x = 70 mm – 2 ¾"	340-782-002	340-783-002
x = 90 mm – 3 ½"	340-782-004	340-783-004
x = 110 mm – 4 ¼"	340-782-006	340-783-006

**nicht drehbar**  
non rotating  
non rotatif  
no rotatorio  
non rotativo



	Mini	Standard
	340-782-020	340-783-020
	340-782-022	340-783-022
	340-782-024	340-783-024

**drehbar**  
rotating  
rotatif  
rotatorio  
rotativo



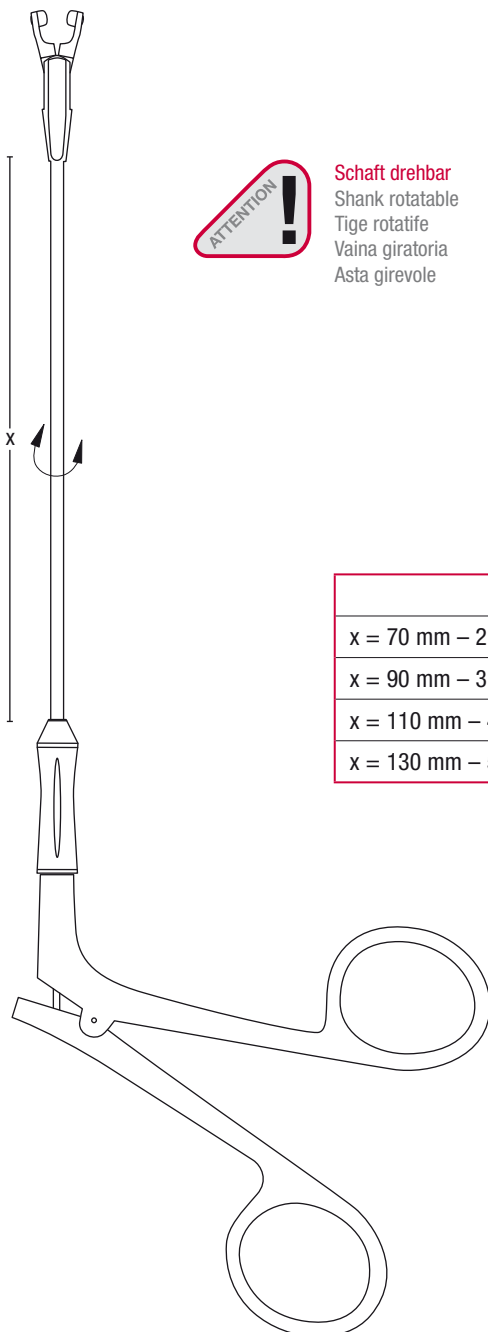
### Anlegezangen für Yasargil Clips

Applying forceps for Yasargil clips

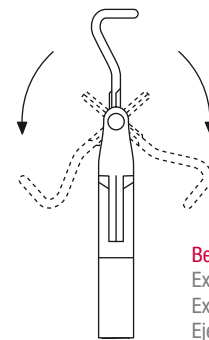
Pince à poser pour des clips Yasargil

Aplicadora para clips Yasargil

Pinze per mettere clips Yasargil



**Schaft drehbar**  
Shank rotatable  
Tige rotatif  
Vaina giratoria  
Asta girevole



**Beispiel für Drehmechanismus**  
Example for rotation  
Exemple pour la rotation  
Ejemplo de rotación  
Esempio per la rotazione



	Mini	Standard
x = 70 mm – 2¾"	340-763-270	340-765-270
x = 90 mm – 3½"	340-763-290	340-765-290
x = 110 mm – 4¼"	340-763-310	340-765-310
x = 130 mm – 5"	340-763-330	340-765-330

**nicht drehbar**  
non rotating  
non rotatif  
no rotatorio  
non rotativo

Mini	Standard
340-763-070	340-765-070
340-763-090	340-765-090
340-763-110	340-765-110
340-763-130	340-765-130

**drehbar**  
rotating  
rotatif  
rotatorio  
rotativo

**Anlegezangen für Yasargil Clips**

*Applying forceps for Yasargil clips*

*Pince à poser pour des clips Yasargil*

*Aplicadora para clips Yasargil*

*Pinze per mettere clips Yasargil*



	Mini	Standard	Mini	Standard
17 mm – 6¾"	340-768-170	340-770-170	340-768-370	340-770-370
21 mm – 8¼"	340-768-210	340-770-210	340-768-410	340-770-410
23 mm – 9"	340-768-230	340-770-230	340-768-430	340-770-430

**bayonett-förmig, mit Sperre**  
bayonett shaped, with ratchet  
en baionette, avec verrou  
forma bayoneta, con cierre  
forma baionetta, con cremagliera

**drehbar**  
rotating  
rotatif  
rotatorio  
rotativo



	Mini	Standard	Mini	Standard
18 mm – 7"	340-772-180	340-774-180	340-772-280	340-774-280

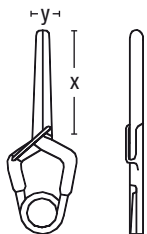
**gerade, mit Sperre**  
straight, with ratchet  
droit, avec verrou  
recta, con cierre  
retta, con cremagliera

**drehbar**  
rotating  
rotatif  
rotatorio  
rotativo



### Aneurysmen Gefäßclips Aneurysm vessel clips

Anévrisme clips  
Aneurisma clips  
Clips per aneurisma e vasi



x	y	gms
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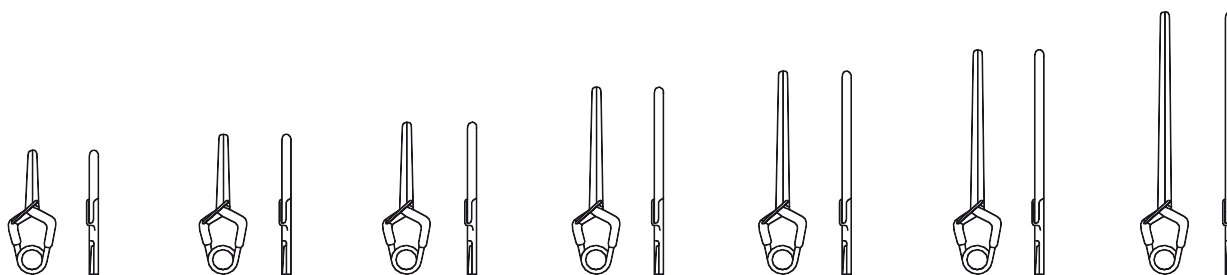
**Maullänge**  
jaw length  
longueur du mors  
longitud de la boca  
lunghezza del morso

**max. Maulöffnung**  
max. jaw opening  
ouverture max. du mors  
apertura máx. de la boca  
apertura mass.

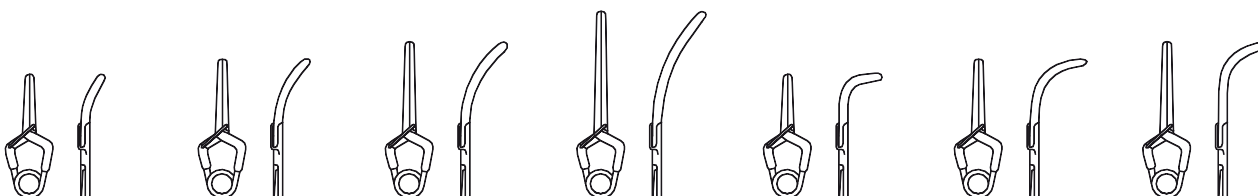
**Schließkraft**  
closing pressure  
force de fermeture  
fuerza de cierre  
pressione

### YASARGIL-STANDARD

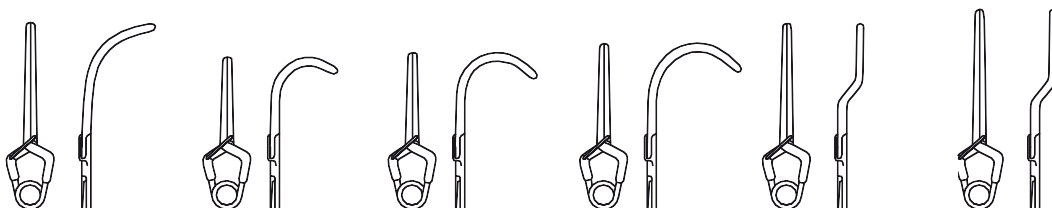
für **permanenten** Verschluss, aus hochwertigem Implantatstahl, antimagnetisch  
for **permanent** closure, in high quality implant steel, antimagnetic  
pour fermeture **permanente**, acier de haute qualité, anti-magnétique  
para oclusión **permanente**, acero de alta calidad, antimagnético  
per chiusura **permanente**, acciaio di alta qualità, antimagnetico



x = 7.0 mm	x = 9.0 mm	x = 11.0 mm	x = 15.0 mm	x = 17.0 mm	x = 20.0 mm	x = 25.0 mm
y = 6.2 mm	y = 7.0 mm	y = 7.8 mm	y = 9.2 mm	y = 10.6 mm	y = 11.4 mm	y = 13.3 mm
gms = 150	gms = 180	gms = 180	gms = 200	gms = 200	gms = 200	gms = 200
341-716-550	341-726-600	341-736-680	341-746-800	341-746-106	341-746-114	341-746-133
341-716-550T	341-726-600T	341-736-680T	341-746-800T	341-746-106T	341-746-114T	341-746-133T



x = 7.0 mm	x = 9.0 mm	x = 11.0 mm	x = 15.0 mm	x = 7.0 mm	x = 9.0 mm	x = 11.0 mm
y = 6.0 mm	y = 6.8 mm	y = 7.5 mm	y = 8.7 mm	y = 5.5 mm	y = 6.1 mm	y = 6.5 mm
gms = 150	gms = 180	gms = 180	gms = 200	gms = 150	gms = 180	gms = 180
341-718-530	341-728-600	341-738-650	341-748-750	341-720-480	341-730-500	341-740-580
341-718-530T	341-728-600T	341-738-650T	341-748-750T	341-720-480T	341-730-500T	341-740-580T

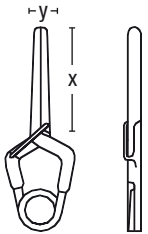


x = 15.0 mm	x = 7.0 mm	x = 9.0 mm	x = 11.0 mm	x = 7.0 mm	x = 9.0 mm
y = 7.4 mm	y = 5.4 mm	y = 5.8 mm	y = 6.2 mm	y = 7.9 mm	y = 8.7 mm
gms = 200	gms = 180	gms = 180	gms = 180	gms = 200	gms = 200
341-750-650	341-750-054	341-750-058	341-750-062	341-724-680	341-734-750
341-750-650T	341-750-054T	341-750-058T	341-750-062T	341-724-680T	341-734-750T

### Aneurysmen Gefäßclips

#### Aneurysm vessel clips

*Anévrisme clips*  
*Aneurisma clips*  
*Clips per aneurisma e vasi*



x	y	gms
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**Maullänge**  
jaw length  
longueur du mors  
longitud de la boca  
lunghezza del morso

**max. Maulöffnung**  
max. jaw opening  
ouverture max. du mors  
apertura máx. de la boca  
apertura mass.

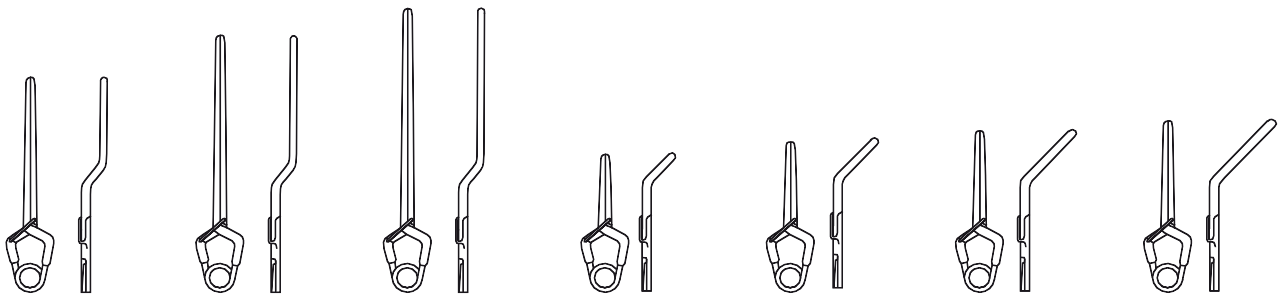
**Schließkraft**  
closing pressure  
force de fermeture  
fuerza de cierre  
pressione

### YASARGIL-STANDARD

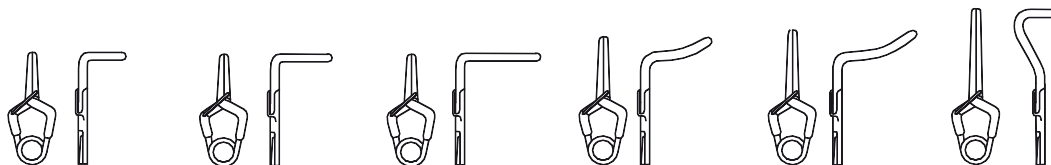
für **permanenten** Verschluss, aus hochwertigem Implantatstahl, antimagnetisch

for **permanent** closure, in high quality implant steel, antimagnetic  
pour fermeture **permanente**, acier de haute qualité, anti-magnétique

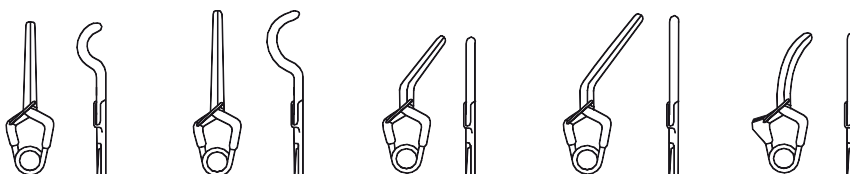
para oclusión **permanente**, acero de alta calidad, antimagnético  
per chiusura **permanente**, acciaio di alta qualità, antimagnetico



x = 12.0 mm	x = 17.0 mm	x = 20.0 mm	x = 5.0 mm	x = 7.0 mm	x = 9.0 mm	x = 11.0 mm
y = 10.2 mm	y = 11.9 mm	y = 13.0 mm	y = 6.2 mm	y = 6.5 mm	y = 7.8 mm	y = 8.4 mm
gms = 200	gms = 180	gms = 180	gms = 200	gms = 200	gms = 200	gms = 200
341-734-102	341-734-119	341-734-130	341-735-062	341-735-065	341-735-078	341-735-084
341-734-102T	341-734-119T	341-734-130T	341-735-062T	341-735-065T	341-735-078T	341-735-084T



x = 5.0 mm	x = 7.0 mm	x = 10.0 mm	x = 8.0 mm	x = 10.0 mm	x = 5.0 mm
y = 5.6 mm	y = 5.6 mm	y = 5.6 mm	y = 5.4 mm	y = 5.6 mm	y = 7.2 mm
gms = 200	gms = 200	gms = 200	gms = 200	gms = 200	gms = 200
341-776-056	341-776-380	341-734-755	341-776-054	341-734-056	341-776-072
341-776-056T	341-776-380T	341-734-755T	341-776-054T	341-734-056T	341-776-072T



x = 9.0 mm	x = 11.0 mm	x = 7.0 mm	x = 11.0 mm	x = 9.0 mm
y = 7.2 mm	y = 8.2 mm	y = 5.7 mm	y = 8.0 mm	y = 7.0 mm
gms = 200	gms = 200	gms = 200	gms = 200	gms = 200
341-734-072	341-734-082	341-722-500	341-722-800	341-722-062
341-734-072T	341-734-082T	341-722-500T	341-722-800T	341-722-062T



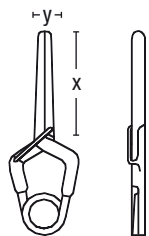


### Aneurysmen Gefäßclips

#### Aneurysm vessel clips

Anévrisme clips  
Aneurisma clips

Clips per aneurisma e vasi



x	y	gms
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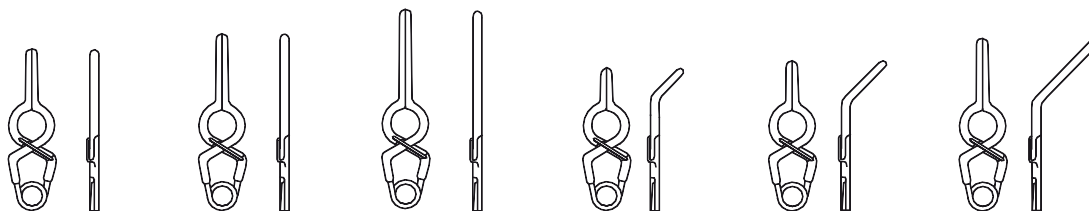
**Maullänge**  
jaw length  
longueur du mors  
longitud de la boca  
lunghezza del morso

**max. Maulöffnung**  
max. jaw opening  
ouverture max. du mors  
apertura máx. de la boca  
apertura mass.

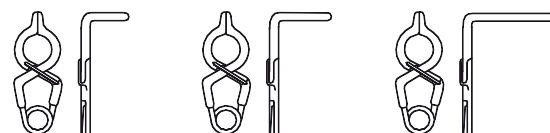
**Schließkraft**  
closing pressure  
force de fermeture  
fuerza de cierre  
pressione

### YASARGIL-STANDARD

für **permanenten** Verschluss, mit Fenster 3.5 mm, aus hochwertigem Implantastahl, antimagnetisch  
for **permanent** closure, with window 3.5 mm, in high quality implant steel, antignetic  
pour fermeture **permanente**, avec fenestra 3.5 mm, acier de haute qualité, anti-magnétique  
para oclusión **permanente**, finestrado de 3.5 mm, acero de alta calidad, antimagnético  
per chiusura **permanente**, con finestra di 3.5 mm, acciaio di alta qualità, antimagnetico



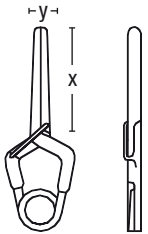
x = 7.0 mm	x = 9.0 mm	x = 12.0 mm	x = 5.0 mm	x = 7.0 mm	x = 11.0 mm
y = 7.4 mm	y = 8.4 mm	y = 9.6 mm	y = 5.8 mm	y = 6.5 mm	y = 7.2 mm
gms = 150	gms = 150	gms = 180	gms = 150	gms = 150	gms = 180
340-556-110	340-556-140	340-556-170	340-557-090	340-557-110	340-557-140
340-556-110T	340-556-140T	340-556-170T	340-557-090T	340-557-110T	340-557-140T



x = 5.0 mm	x = 7.0 mm	x = 11.0 mm
y = 4.9 mm	y = 4.9 mm	y = 4.9 mm
gms = 150	gms = 150	gms = 180
340-558-090	340-558-120	340-558-140
340-558-090T	340-558-120T	340-558-140T

**Aneurysmen Gefäßclips**  
*Aneurysm vessel clips*

*Anévrisme clips*  
*Aneurisma clips*  
*Clips per aneurisma e vasi*



x	y	gms
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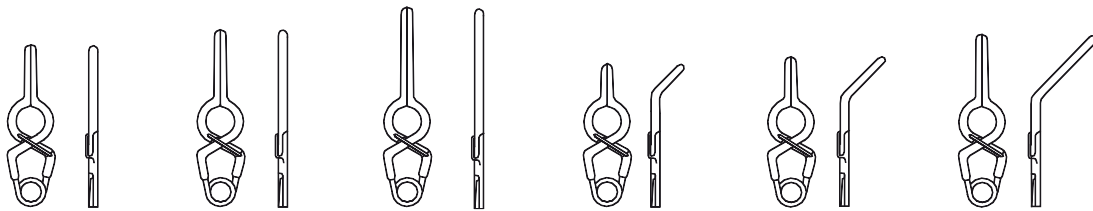
**Maullänge**  
jaw length  
longueur du mors  
longitud de la boca  
lunghezza del morso

**max. Maulöffnung**  
max. jaw opening  
ouverture max. du mors  
apertura máx. de la boca  
apertura mass.

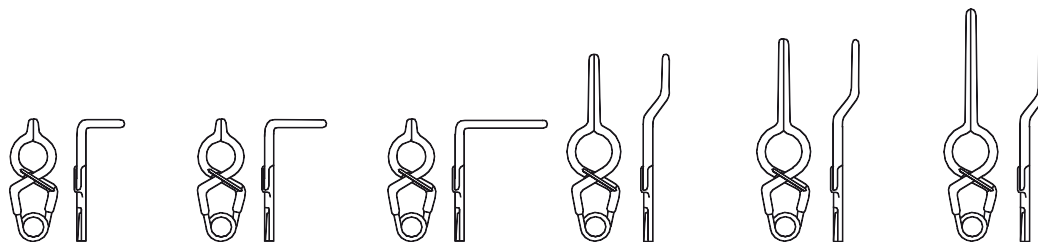
**Schließkraft**  
closing pressure  
force de fermeture  
fuerza de cierre  
pressione

**YASARGIL-STANDARD**

für **permanenten** Verschluss, mit Fenster 3.5 mm,  
aus hochwertigem Implantatstahl, antimagnetisch  
for **permanent** closure, with window 3.5 mm,  
in high quality implant steel, antimagnetic  
pour fermeture **permanente**, avec fenestra 3.5 mm,  
acier de haute qualité, anti-magnétique  
para oclusión **permanente**, finestrado de 3.5 mm,  
acero de alta calidad, antimagnético  
per chiusura **permanente**, con finestra di 3.5 mm,  
acciaio di alta qualità, antimagnetico



x = 7.0 mm	x = 9.0 mm	x = 12.0 mm	x = 5.0 mm	x = 7.0 mm	x = 11.0 mm
y = 7.9 mm	y = 9.1 mm	y = 10.3 mm	y = 6.5 mm	y = 7.2 mm	y = 7.8 mm
gms = 150	gms = 150	gms = 180	gms = 150	gms = 150	gms = 180
340-560-120	340-560-150	340-560-180	340-561-100	340-561-130	340-561-150
340-560-120T	340-560-150T	340-560-180T	340-561-100T	340-561-130T	340-561-150T



x = 5.0 mm	x = 7.0 mm	x = 11.0 mm	x = 5.0 mm	x = 7.0 mm	x = 11.0 mm
y = 5.5 mm	y = 5.5 mm	y = 5.5 mm	y = 7.9 mm	y = 8.8 mm	y = 10.0 mm
gms = 150	gms = 150	gms = 180	gms = 150	gms = 150	gms = 180
340-562-110	340-562-130	340-562-160	340-564-140	340-564-170	340-564-190
340-562-110T	340-562-130T	340-562-160T	340-564-140T	340-564-170T	340-564-190T

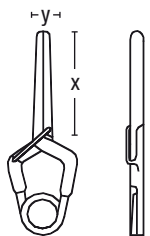


### Aneurysmen Gefäßclips

#### Aneurysm vessel clips

*Anévrisme clips*  
*Aneurisma clips*

*Clips per aneurisma e vasi*



x	y	gms
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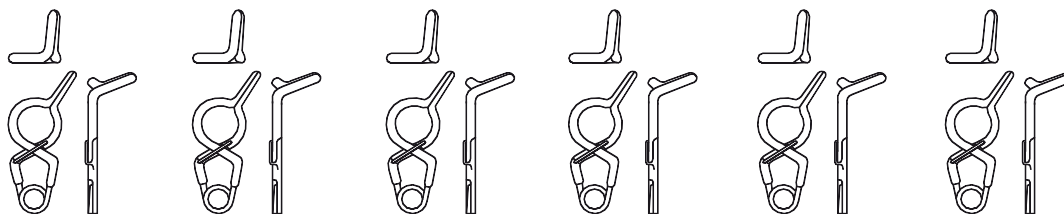
**Maullänge**  
jaw length  
longueur du mors  
longitud de la boca  
lunghezza del morso

**max. Maulöffnung**  
max. jaw opening  
ouverture max. du mors  
apertura máx. de la boca  
apertura mass.

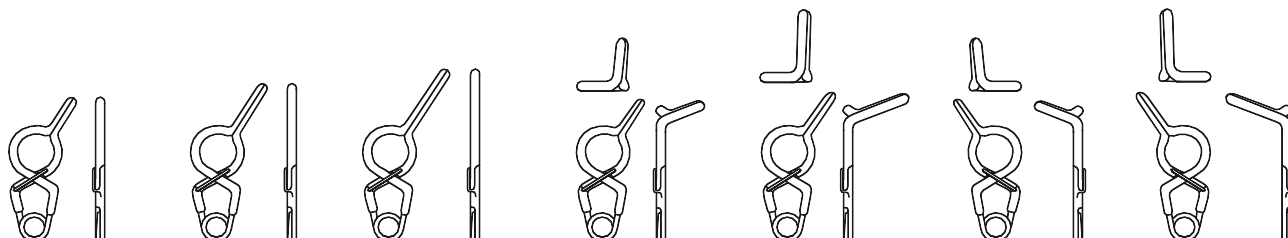
**Schließkraft**  
closing pressure  
force de fermeture  
fuerza de cierre  
pressione

### YASARGIL-STANDARD

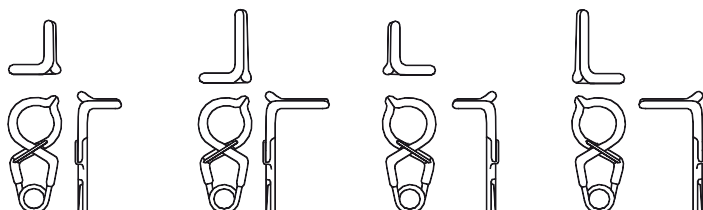
für **permanenten** Verschluss, mit Fenster 5.0 mm, aus hochwertigem Implantastahl, antimagnetisch  
for **permanent** closure, with window 5.0 mm, in high quality implant steel, antignitic  
pour fermeture **permanente**, avec fenestra 5.0 mm, acier de haute qualité, anti-magnétique  
para oclusión **permanente**, finestrado de 5.0 mm, acero de alta calidad, antimagnético  
per chiusura **permanente**, con finestra di 5.0 mm, acciaio di alta qualita, antimagnetico



x = 5.0 mm	x = 7.0 mm	x = 10.0 mm	x = 5.0 mm	x = 7.0 mm	x = 10.0 mm
y = 5.8 mm	y = 5.8 mm	y = 5.8 mm	y = 5.8 mm	y = 5.8 mm	y = 5.8 mm
gms = 150	gms = 150	gms = 150	gms = 150	gms = 150	gms = 150
341-100-058	341-101-058	341-102-058	341-103-058	341-104-058	341-105-058
341-100-058T	341-101-058T	341-102-058T	341-103-058T	341-104-058T	341-105-058T



x = 5.0 mm	x = 7.0 mm	x = 10.0 mm	x = 5.0 mm	x = 7.0 mm	x = 5.0 mm	x = 7.0 mm
y = 7.0 mm	y = 7.8 mm	y = 8.8 mm	y = 5.8 mm	y = 6.2 mm	y = 5.8 mm	y = 6.2 mm
gms = 150	gms = 150	gms = 150	gms = 150	gms = 150	gms = 150	gms = 150
341-100-070	341-100-078	341-100-088	341-106-058	341-100-062	341-107-058	341-101-062
341-100-070T	341-100-078T	341-100-088T	341-106-058T	341-100-062T	341-107-058T	341-101-062T

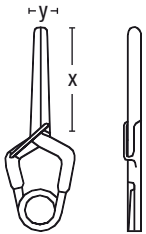


x = 5.0 mm	x = 7.0 mm	x = 5.0 mm	x = 7.0 mm
y = 5.6 mm	y = 5.6 mm	y = 5.6 mm	y = 5.6 mm
gms = 150	gms = 150	gms = 150	gms = 150
341-100-056	341-101-056	341-102-056	341-103-056
341-100-056T	341-101-056T	341-102-056T	341-103-056T

### Aneurysmen Gefäßclips

#### Aneurysm vessel clips

*Anévrisme clips*  
*Aneurisma clips*  
*Clips per aneurisma e vasi*



x	y	gms
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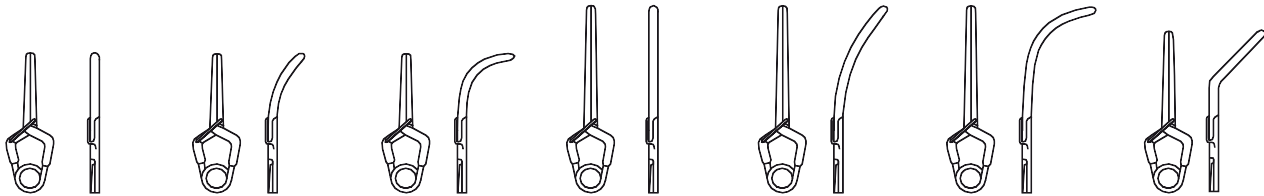
**Maullänge**  
jaw length  
longueur du mors  
longitud de la boca  
lunghezza del morso

**max. Maulöffnung**  
max. jaw opening  
ouverture max. du mors  
apertura máx. de la boca  
apertura mass.

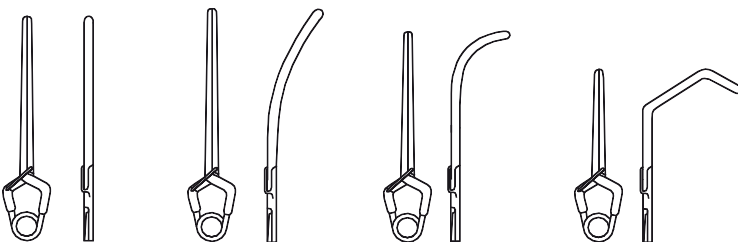
**Schließkraft**  
closing pressure  
force de fermeture  
fuerza de cierre  
pressione

### YASARGIL-STANDARD

für **temporären** Verschluss, aus hochwertigem Implantatstahl, antimagnetisch  
for **temporary** closure, in high quality implant steel, antimagnetic  
pour fermeture **temporaire**, acier de haute qualité, anti-magnétique  
para oclusión **temporal**, acero de alta calidad, antimagnético  
per uso **temporaneo**, acciaio di alta qualità, antimagnetico



x = 9.0 mm	x = 9.0 mm	x = 9.0 mm	x = 15.0 mm	x = 15.0 mm	x = 15.0 mm	x = 9.0 mm
y = 7.0 mm	y = 6.8 mm	y = 6.1 mm	y = 9.2 mm	y = 8.7 mm	y = 7.4 mm	y = 6.2 mm
gms = 90	gms = 90	gms = 110	gms = 90	gms = 110	gms = 110	gms = 110
341-000-070	341-001-068	341-002-061	341-000-092	341-001-087	341-002-074	341-005-078
341-000-070T	341-001-068T	341-002-061T	341-000-092T	341-001-087T	341-002-074T	341-005-078T



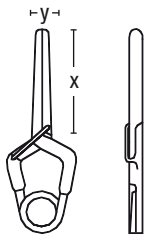
x = 20.0 mm	x = 20.0 mm	x = 17.0 mm	x = 13.0 mm
y = 11.4 mm	y = 11.0 mm	y = 9.9 mm	y = 7.5 mm
gms = 110	gms = 90	gms = 90	gms = 90
341-000-114	341-001-110	341-002-099	341-005-075
341-000-114T	341-001-110T	341-002-099T	341-005-075T



### Aneurysmen Gefäßclips

#### Aneurysm vessel clips

*Anévrisme clips*  
*Aneurisma clips*  
*Clips per aneurisma e vasi*



x	y	gms
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**Maullänge**  
 jaw length  
 longueur du mors  
 longitud de la boca  
 lunghezza del morso

**max. Maulöffnung**  
 max. jaw opening  
 ouverture max. du mors  
 apertura máx. de la boca  
 apertura mass.

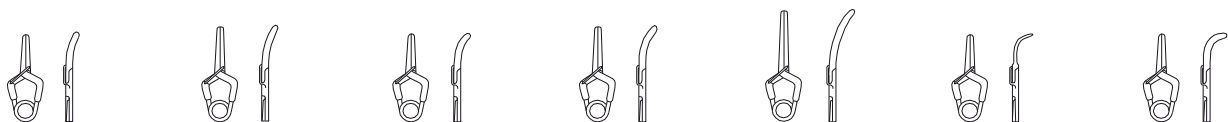
**Schließkraft**  
 closing pressure  
 force de fermeture  
 fuerza de cierre  
 pressione

### YASARGIL-MINI

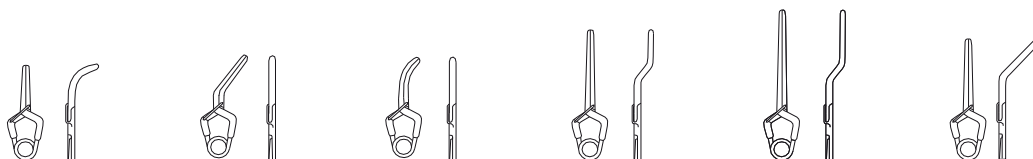
für **permanenten** Verschluss, aus hochwertigem Implantatstahl, antimagnetisch  
 for **permanent** closure, in high quality implant steel, antimagnetic  
 pour fermeture **permanente**, acier de haute qualité, anti-magnétique  
 para oclusión **permanente**, acero de alta calidad, antimagnético  
 per chiusura **permanente**, acciaio di alta qualità, antimagnetico



x = 3.0 mm	x = 5.0 mm	x = 3.0 mm	x = 5.0 mm	x = 7.0 mm	x = 3.0 mm	x = 4.0 mm
y = 3.3 mm	y = 4.0 mm	y = 3.3 mm	y = 4.0 mm	y = 4.6 mm	y = 3.2 mm	y = 3.8 mm
gms = 110	gms = 110	gms = 110	gms = 110	gms = 110	gms = 110	gms = 110
341-566-300	341-576-350	341-688-033	341-688-350	341-706-400	341-568-300	341-578-350
341-566-300T	341-576-350T	341-688-033T	341-688-350T	341-706-400T	341-568-300T	341-578-350T



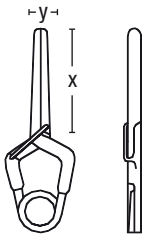
x = 4.0 mm	x = 5.0 mm	x = 4.0 mm	x = 5.0 mm	x = 7.0 mm	x = 4.0 mm	x = 4.0 mm
y = 3.6 mm	y = 3.8 mm	y = 3.6 mm	y = 4.0 mm	y = 4.4 mm	y = 3.6 mm	y = 3.5 mm
gms = 110	gms = 110	gms = 110	gms = 110	gms = 110	gms = 110	gms = 110
341-578-036	341-690-350	341-690-036	341-690-040	341-708-380	341-580-330	341-692-330
341-578-036T	341-690-350T	341-690-036T	341-690-040T	341-708-380T	341-580-330T	341-692-330T



x = 5.0 mm	x = 5.0 mm	x = 6.0 mm	x = 4.0 mm	x = 7.0 mm	x = 7.0 mm
y = 4.0 mm	y = 3.5 mm	y = 6.0 mm	y = 7.0 mm	y = 5.7 mm	y = 4.5 mm
gms = 110	gms = 130	gms = 130	gms = 130	gms = 130	gms = 130
341-710-350	341-694-300	341-694-060	341-714-070	341-714-500	341-762-400
341-710-350T	341-694-300T	341-694-060T	341-714-070T	341-714-500T	341-762-400T

**Aneurysmen Gefäßclips**  
*Aneurysm vessel clips*

*Anévrisme clips*  
*Aneurisma clips*  
*Clips per aneurisma e vasi*



x	y	gms
<b>Maullänge</b> jaw length longueur du mors longitud de la boca lunghezza del morso	<b>max. Maulöffnung</b> max. jaw opening ouverture max. du mors apertura máx. de la boca apertura mass.	<b>Schließkraft</b> closing pressure force de fermeture fuerza de cierre pressione

**YASARGIL-MINI**

für **temporären** Verschluss, aus hochwertigem Implantatstahl, antimagnetisch

for **temporary** closure, in high quality implant steel, antimagnetic  
pour fermeture **temporaire**, acier de haute qualité, anti-magnétique  
para oclusión **temporal**, acero de alta calidad, antimagnético  
per uso **temporaneo**, acciaio di alta qualità, antimagnetico



x = 3.0 mm	x = 5.0 mm	x = 4.0 mm	x = 7.0 mm	x = 7.0 mm	x = 5.0 mm
y = 3.3 mm	y = 4.0 mm	y = 3.8 mm	y = 4.6 mm	y = 4.4 mm	y = 4.0 mm
gms = 90	gms = 70	gms = 70	gms = 70	gms = 70	gms = 70
341-120-033	341-120-040	341-120-038	341-120-046	341-120-044	341-123-040
341-120-033T	341-120-040T	341-120-038T	341-120-046T	341-120-044T	341-123-040T



**Nervenhaken**

*Nerve hooks*

*Crochets à nerfs*

*Ganchos para nervios*

*Uncini per nervi*



**SCOVILLE**

1:2

230 mm – 9"

x = 8 mm

424-720-230

**HOLSHER**

1:2

240 mm – 9½"

x = 7 mm

424-721-240

**SCOVILLE**

1:2

200 mm – 8"

x = 7 mm

424-723-190

210 mm – 8¼"

x = 7 mm

424-725-190

**Duramesser**  
*Dura knives*

*Bistouries pour duremère*  
*Bisturis para duramadre*  
*Bisturi per duramadre*



1:1



1:1



**TOENNIS**

150 mm – 6"	190 mm – 7 ½"
02-164-130	02-164-190



1:2

1:1



**HALLE**

200 mm – 8"	02-168-200
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**Nervenhaken – Durahaken**

*Nerve hooks – Dura hooks*

*Crochets à nerfs – Crochets pour duremère*

*Ganchos para nervios – Ganchos para duramadre*

*Uncini per nervi – Uncini per duramadre*



**SMITHWICK**

1:1

170 mm – 6¾"	424-744-170
210 mm – 8¼"	424-744-210

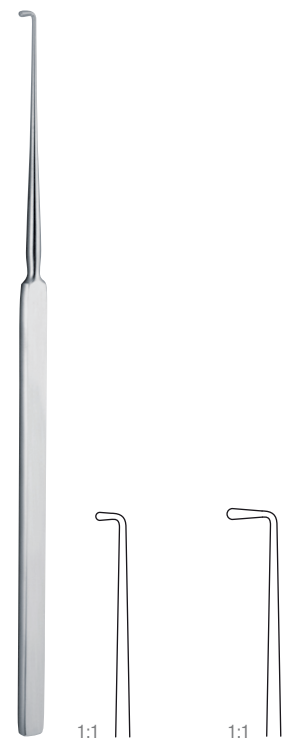


**HOEN**

1:2

1:1

220 mm – 8¾"
424-751-220



**CUSHING**

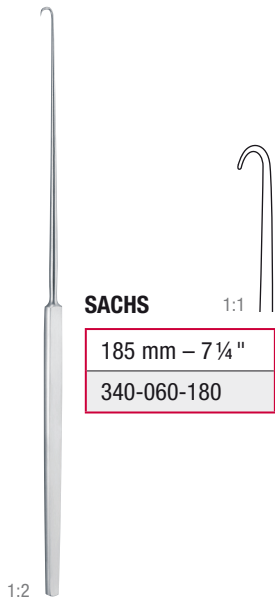
1:1

1:1

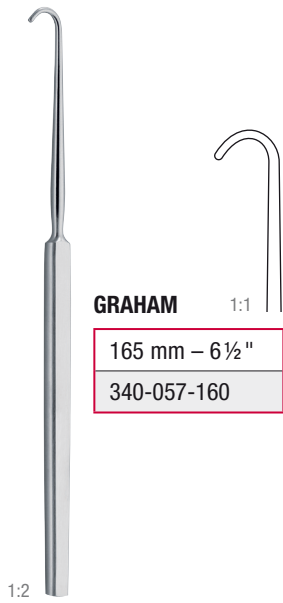
190 mm – 7½"	24-481-190	24-483-190
280 mm – 11"	340-052-280	340-054-280

**Nervenhaken – Durahaken**  
*Nerve hooks – Dura hooks*

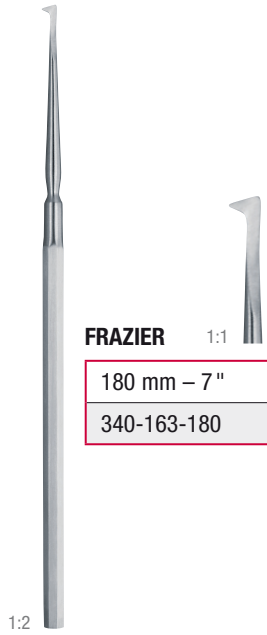
*Crochets à nerfs – Crochets pour duremère*  
*Ganchos para nervios – Ganchos para duramadre*  
*Uncini per nervi – Uncini per duramadre*



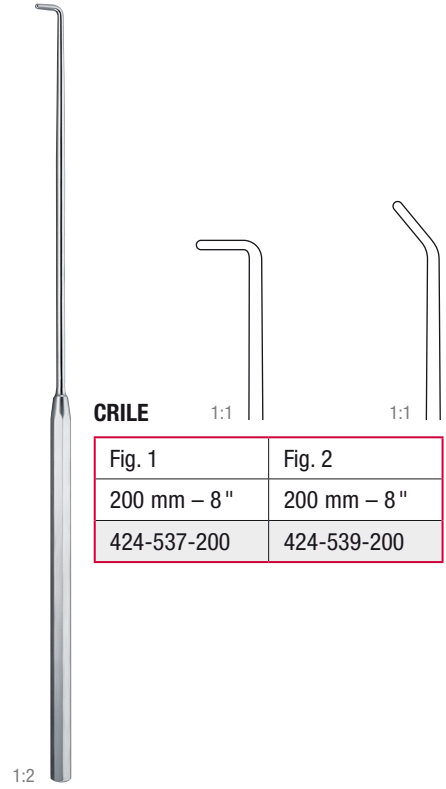
**SACHS** 1:1  
185 mm – 7 ¼"  
340-060-180



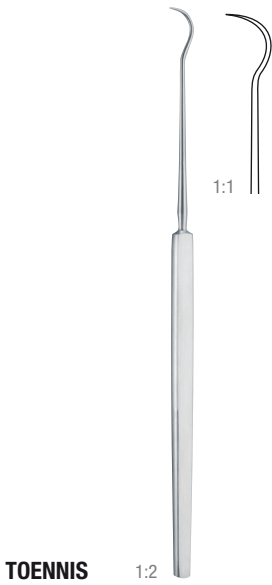
**GRAHAM** 1:1  
165 mm – 6 ½"  
340-057-160



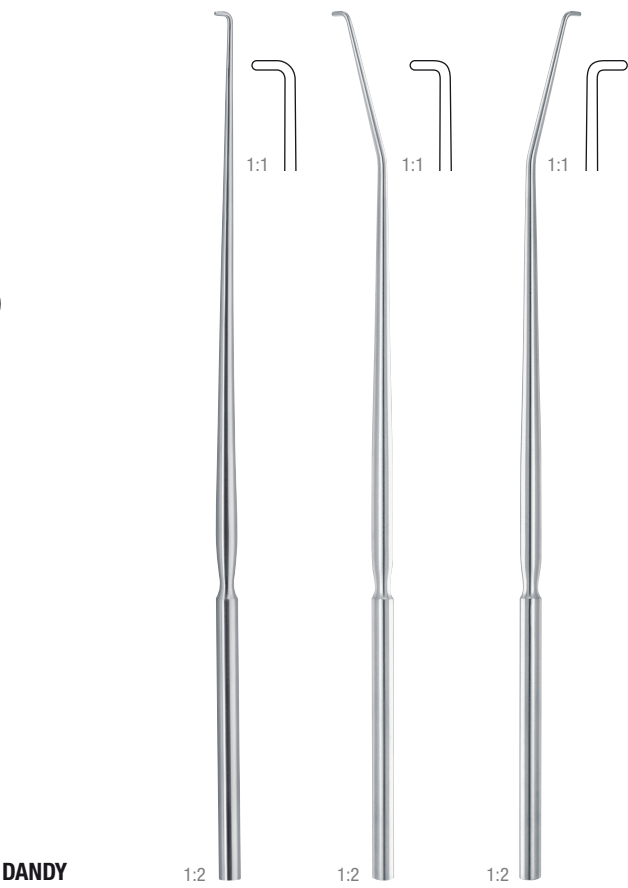
**FRAZIER** 1:1  
180 mm – 7"  
340-163-180



**CRILE** 1:1 1:1  
Fig. 1 Fig. 2  
200 mm – 8" 200 mm – 8"  
424-537-200 424-539-200



**TOENNIS** 1:2  
150 mm – 6"  
424-825-150



**DANDY** 1:2 1:2 1:2  
200 mm – 8" 340-048-200 340-047-200 340-049-200



**ADSON** 1:2 1:1 1:1  
200 mm – 8" 24-449-200 24-451-200



**Nervenhaken – Durahaken**  
*Nerve hooks – Dura hooks*

*Crochets à nerfs – Crochets pour duremère*  
*Ganchos para nervios – Ganchos para duramadre*  
*Uncini per nervi – Uncini per duramadre*



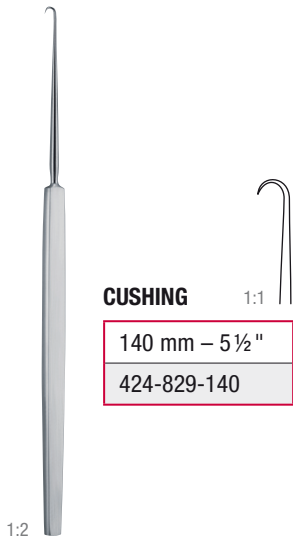
**LOVE**

190 mm – 7 1/2"	24-491-000	24-491-045	24-491-090
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**YASARGIL**

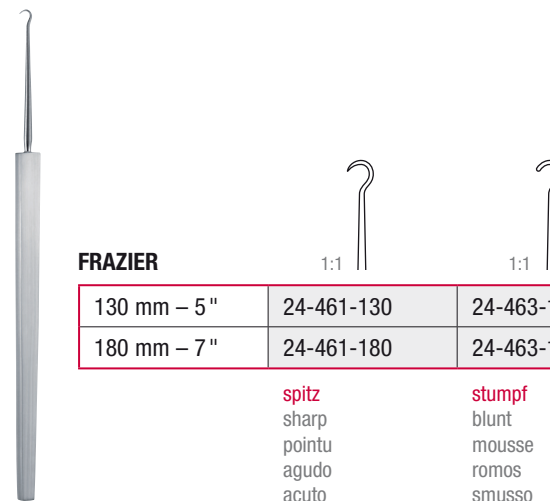
310 mm – 12 1/4"	424-674-010
410 mm – 16 1/4"	424-674-020

**Galeahaken**  
 Galea retractor  
 Retracteur Galea  
 Retractor de Galea  
 Rettrotore di Galea



**CUSHING**

140 mm – 5 1/2"
424-829-140

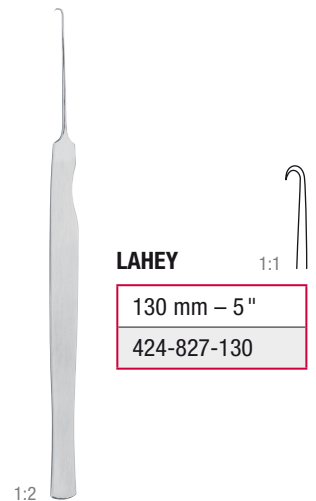


**FRAZIER**

130 mm – 5"	24-461-130	24-463-130
180 mm – 7"	24-461-180	24-463-180

**spitz**  
 sharp  
 pointu  
 agudo  
 acuto

**stumpf**  
 blunt  
 mousse  
 romos  
 smusso



**LAHEY**

130 mm – 5"
424-827-130

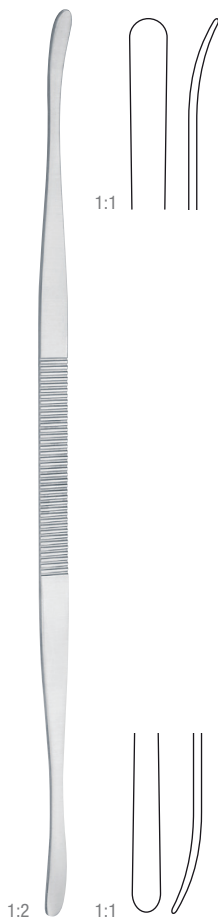
**Dura-Dissektoren**

*Dura dissectors*

*Décolleurs duremère*

*Disectores de duramadre*

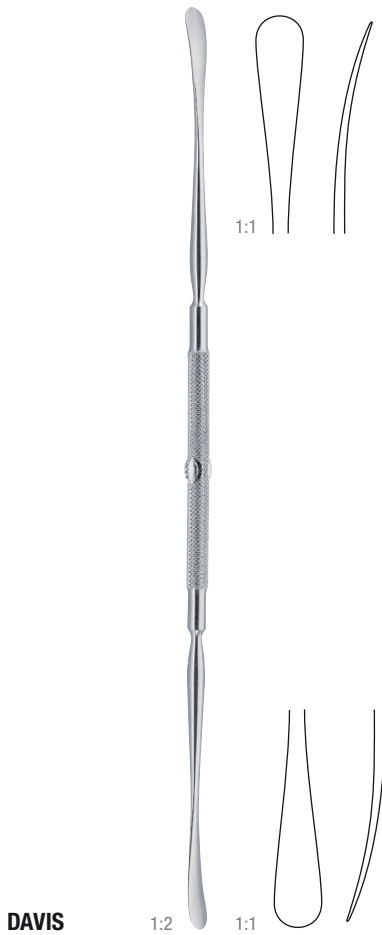
*Dissetori per duramadre*



**TOENNIS**

250 mm – 9¾"

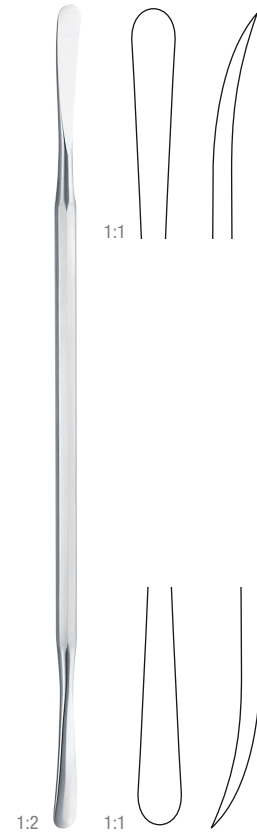
340-137-250



**DAVIS**

245 mm – 9¾"

27-901-245



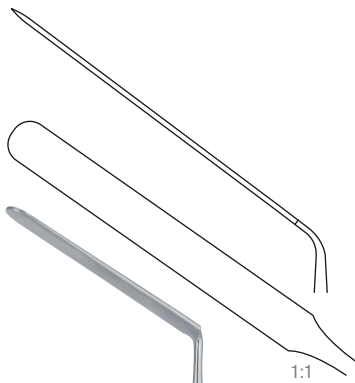
220 mm – 8¾"

340-145-220



**Dura-Dissektoren**  
*Dura dissectors*

*Décolleurs duremère*  
*Disectores de duramadre*  
*Dissetori per duramadre*



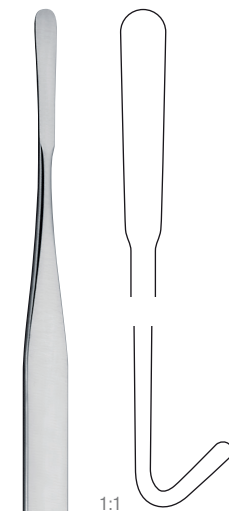
1:1

1:2

**HORSLEY**

200 mm – 8"

340-151-200



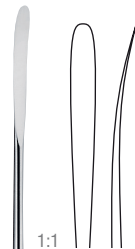
1:1

1:2

**SMITHWICK**

290 mm – 11 ½"

340-066-290



1:1

1:2



1:1

1:2



1:1

1:2

**SACHS**

210 mm – 8 ¼"

340-141-210

340-139-210

27-941-210

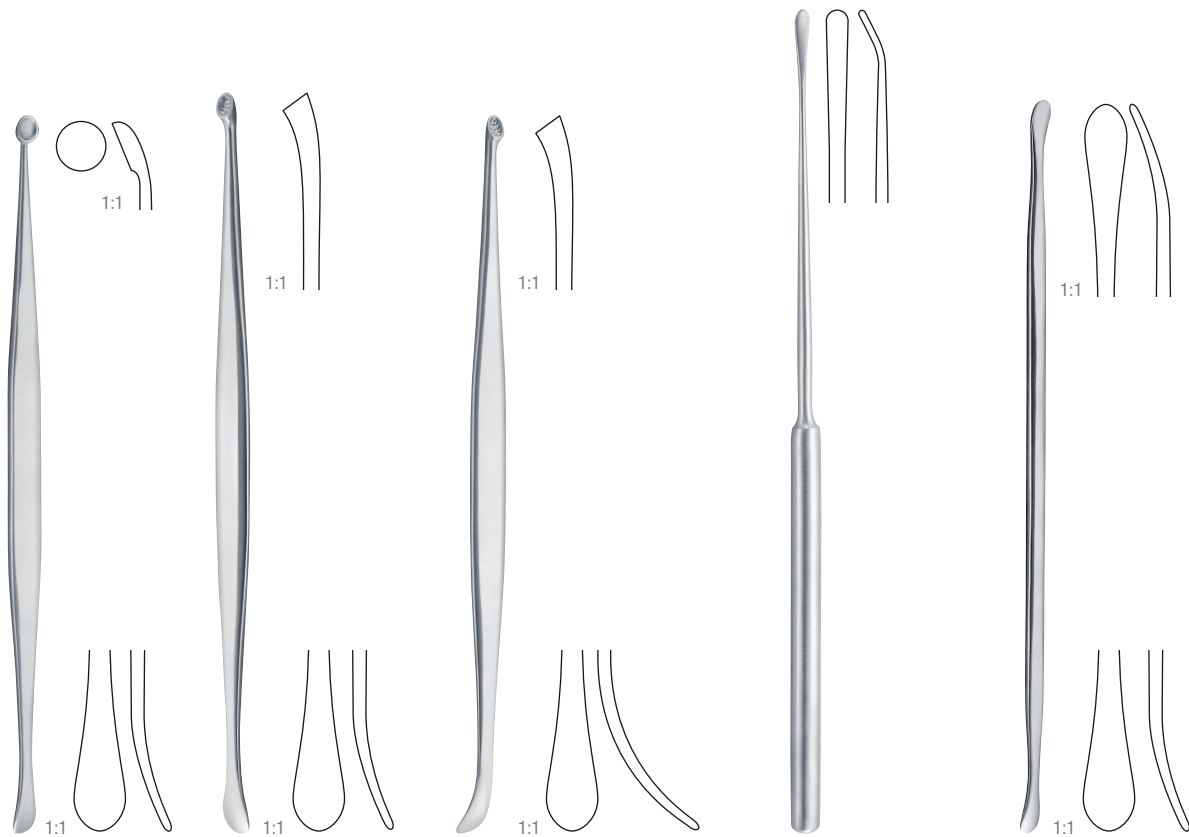
**Dura-Dissektoren**

*Dura dissectors*

*Décolleurs duremère*

*Disectores de duramadre*

*Dissetori per duramadre*



**PENFIELD**

Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5
175 mm – 7"	195 mm – 7¾"	195 mm – 7¾"	215 mm – 8½"	185 mm – 7¼"
340-157-010	340-157-020	340-157-030	340-157-040	340-157-050


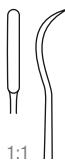




### Neuro-Mikro-Dissektoren

#### Neuro-micro dissectors

Neuro-micro dissecteurs  
Disectores para micro-neurocirugía  
Strumento per micro-neuro chirurgia




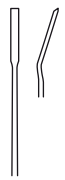


	 1:1	 1:1	 1:1	 1:1	 1:1	
<b>YASARGIL</b>	190 mm – 7 ½"	424-946-070	424-946-080	424-946-090	424-946-100	424-946-050


gerade  
straight  
droit  
recta  
rette

	 1:1	 1:1	 1:1	 1:1	 1:1	
<b>YASARGIL</b>	190 mm – 7 ½"	424-953-050	424-953-030	424-953-040	424-955-190	424-953-020



bajonett  
bayonet  
baionette  
bayoneta  
baionetta

	 1:1	 1:1	 1:1	 1:1	
<b>YASARGIL</b>	190 mm – 7 ½"	424-946-060	424-946-040	424-946-030	424-946-010

gerade  
straight  
droit  
recta  
retta

	 1:1	 1:1	 1:1	 1:1	
<b>YASARGIL</b>	190 mm – 7 ½"	424-947-010	424-947-020	424-947-030	424-947-040

bajonett  
bayonet  
baionette  
bayoneta  
baionetta

	 1:1	 1:1	
<b>YASARGIL</b>	190 mm – 7 ½"	340-186-100	340-186-180

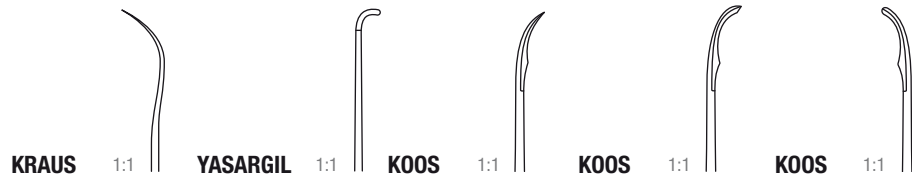
gerade, mit Dreh-Fixierhaken  
straight, with Twist-fixationhook  
droit, avec crochet de fixation  
recta, con gancho de fijación  
rette, con uncino di fissaggio „Twist“

**Neuro-Mikro-Dissektoren**  
*Neuro-micro dissectors*

*Neuro-micro dissecteurs*  
*Disectores para micro-neurocirugía*  
*Strumento per micro-neuro chirurgia*



1:1



190 mm – 7 ½"	KRAUS 1:1 424-917-190	YASARGIL 1:1 424-919-190	KOOS 1:1 424-909-190	KOOS 1:1 424-911-190	KOOS 1:1 424-913-190
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**bajonett**  
bayonet  
baionette  
bayoneta  
baionetta

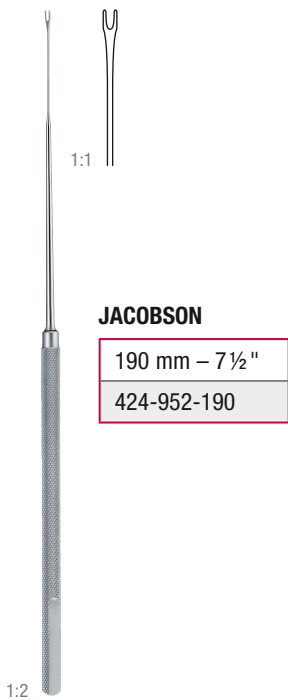




### Neuro-Mikro-Dissektoren

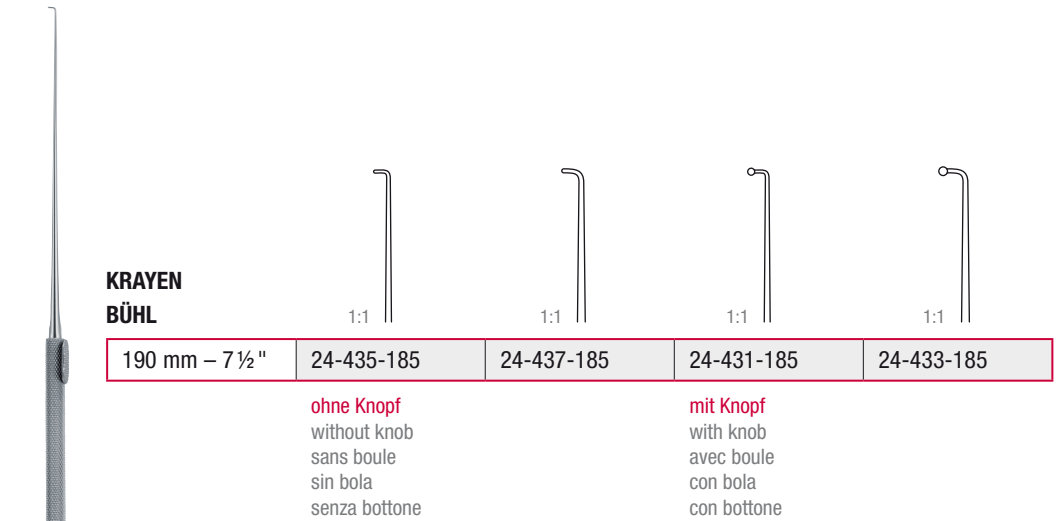
Neuro-micro dissectors

Neuro-micro dissecteurs  
 Disectores para micro-neurocirugía  
 Strumento per micro-neuro chirurgia



**JACOBSON**

190 mm – 7 ½"
424-952-190

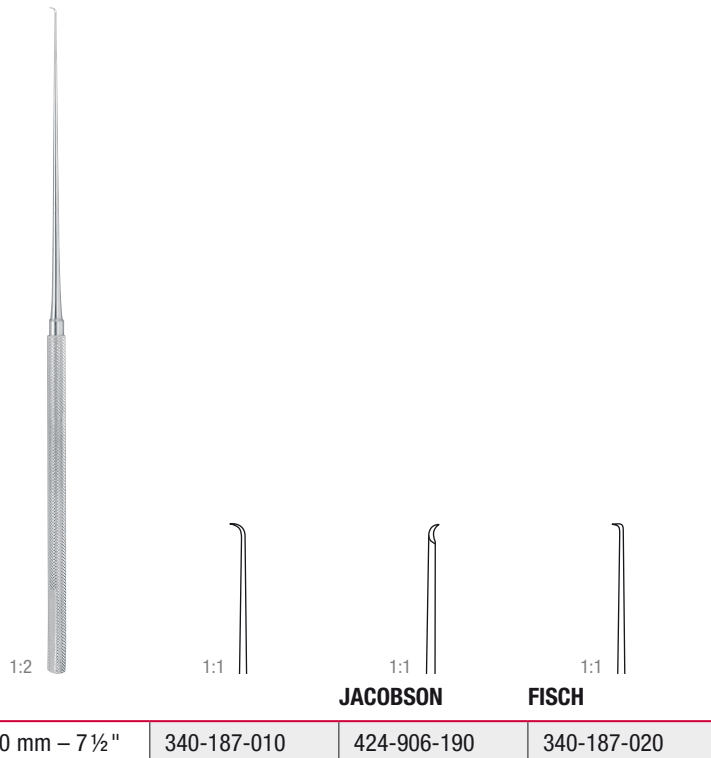


**KRAYEN  
BÜHL**

190 mm – 7 ½"	24-435-185	24-437-185	24-431-185	24-433-185
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ohne Knopf  
 without knob  
 sans boule  
 sin bola  
 senza bottone

mit Knopf  
 with knob  
 avec boule  
 con bola  
 con bottone



**JACOBSON**

**FISCH**

190 mm – 7 ½"	340-187-010	424-906-190	340-187-020
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**Neuro-Dissektoren und Küretten**  
*Neuro dissectors and curettes*

*Neuro-dissecteurs et curettes*  
*Disectores y curetas para neurocirugía*  
*Scollatori per neuro-chirurgia*



**HARDY**

1:2

1:2

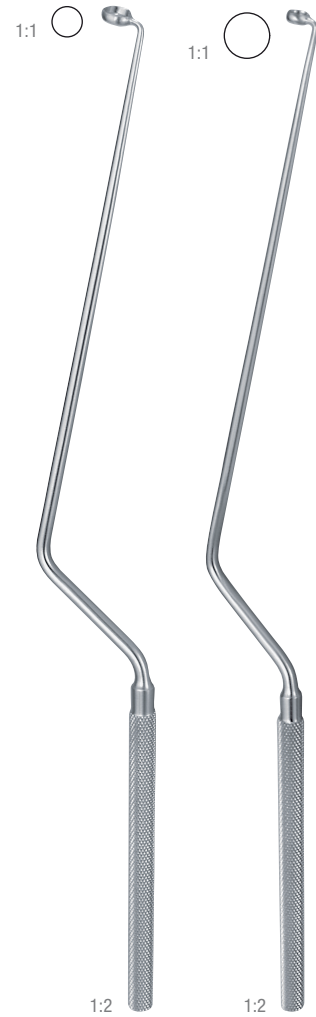
1:2

1:2

250 mm – 9¾"	340-828-020	340-827-020	340-827-030	340-828-010
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**bajonett, innen scharf**

bayonet, sharp inner edge  
baionette, tranchant à l'interno  
bayoneta, cortante al interno  
baionetta, acuto all'interno



**HARDY**

1:2

1:2

	4 mm Ø	6 mm Ø
270 mm – 10¾"	340-811-040	340-811-060

**bajonett, biegsam**

bayonet, malleable  
baionette, malléable  
bayoneta, maleable  
baionetta, flessibile



**Mikro-Federscheren**

*Micro scissors*

*Micro ciseaux à ressorts*

*Micro tijeras con resorte*

*Forbici per microchirurgia*



1:1



1:1



1:1

**VANNAS**

80 mm – 3 1/4"

05-220-085

05-223-085

**Vannas-Schneide**

Vannas-blade

Lame de Vannas

Hoja de Vannas

Lama Vannas

### Mikro-Federscheren

*Micro scissors*

*Micro ciseaux à ressorts*

*Micro tijeras con resorte*

*Forbici per microchirurgia*

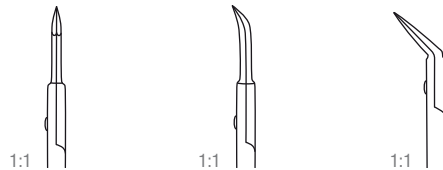


120 mm – 4 3/4"	411-752-120	411-751-110
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**Schneide 10 mm, spitz**  
Blade 10 mm, sharp  
Lame 10 mm, pointu  
Hoja 10 mm, agudas  
Lama 10 mm, acuta

**gerade**  
straight  
droit  
recta  
retta

**gebogen**  
curved  
courbe  
curva  
curva



120 mm – 4 3/4"	309-258-120	309-259-120	05-229-120
-----------------	-------------	-------------	------------

**Vannas-Schneide**  
Vannas blade  
Lama de Vannas  
Hoja de Vannas  
Vannas-lama

**gerade**  
straight  
droit  
recta  
retta

**gebogen**  
curved  
courbe  
curva  
curva

**aufgewinkelt**  
angled up  
angulaire  
acodada  
angolata



### BIEMER

120 mm – 4 3/4"	309-256-120
-----------------	-------------

**Venen-Schneide**  
Vein blade  
Lame pour vènes  
Hoja para venas  
Lama per vene

**gerade**  
straight  
droit  
recta  
retta



### Mikro-Federscheren

#### Micro scissors

*Micro ciseaux à ressorts*  
*Micro tijeras con resorte*  
*Forbici per microchirurgia*



160 mm – 6 1/3"

05-640-160

**gerade, kurze Schneide**  
 curved, short blades  
 courbes, lames courtes  
 curva, hojas cortas  
 curva, lama corta



05-641-160

**gebogen, kurze Schneide**  
 straight, long blades  
 droites, lames longues  
 recta, hojas largas  
 retta, lama lunga



05-644-160

**gerade, lange Schneide**  
 straight, long blades  
 droites, lames longues  
 recta, hojas largas  
 retta, lama lunga



05-645-160

**gebogen, lange Schneide**  
 curved, long blades  
 courbes, lames longues  
 curva, hojas largas  
 curva, lama lunga



160 mm – 6 1/3"

05-642-160

**gerade, gezahnt**  
 straight, saw edge  
 droites, dentelés  
 recta, dentadas  
 retta, dentata



05-643-160

**gebogen, gezahnt**  
 curved, saw edge  
 courbes, dentelés  
 curva, dentadas  
 curva, dentata



150 mm – 6"

05-647-150

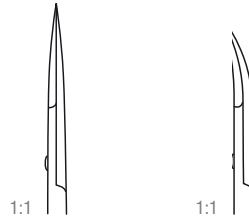
180 mm – 7"

05-647-180

**kniegebogen, 45°**  
 angled on flat, 45°  
 angulaires, 45°  
 acodada, 45°  
 angolata, 45°

**Mikro-Federscheren**  
*Micro scissors*

*Micro ciseaux à ressorts*  
*Micro tijeras con resorte*  
*Forbici per microchirurgia*

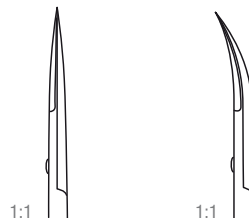


120 mm – 4 3/4"	05-620-120	05-621-120
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**Lange Schneide 14 mm, glatt, spitz**  
Long blades 14 mm, smooth, sharp  
Lames longues 14 mm, lisses, pointues  
Hojas largas 14 mm, lisas, agudas  
Lama lunga 14 mm, liscia, acuta

**gerade**  
straight  
droites  
recta  
retta

**gebogen**  
curved  
courbes  
curva  
curva

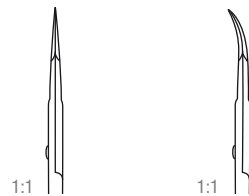


120 mm – 4 3/4"	05-642-120	05-643-120
-----------------	------------	------------

**Lange Schneide 14 mm, spitz**  
Long blades 14 mm, sharp  
Lames longues 14 mm, pointues  
Hojas largas 14 mm, agudas  
Lama lunga 14 mm, acuta

**gerade, gezahnt**  
straight, saw edge  
droites, dentelés  
recta, dentadas  
retta, dentata

**gebogen, gezahnt**  
curved, saw edge  
courbes, dentelés  
curva, dentadas  
curva, dentata



145 mm – 5 3/4"	309-258-145	309-259-145
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**Vannas-Schneide, glatt, spitz**  
Vannas-blades, smooth, sharp  
Lames de Vannas, lisses, pointues  
Hojas de Vannas, lisas, agudas  
Vannas-lama, liscia, acuta

**gerade**  
straight  
droites  
recta  
retta

**gebogen**  
curved  
courbes  
curva  
curva



**Mikro-Federscheren**  
*Micro scissors*

*Micro ciseaux à ressorts*  
*Micro tijeras con resorte*  
*Forbici per microchirurgia*



1:1



1:1



1:1



1:1

**YASARGIL**

185 mm – 7 ¼"	05-620-185	05-621-185	411-735-190
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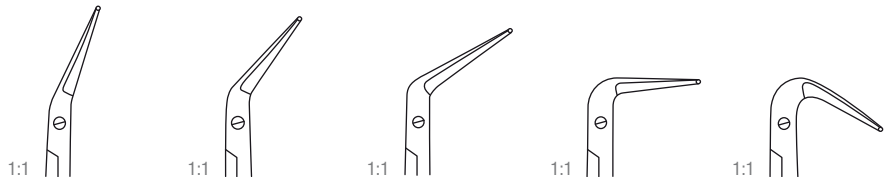
**gerade**  
 straight  
 droit  
 recta  
 retta

**gebogen**  
 curved  
 courbe  
 curva  
 curva

**kniegebogen**  
 angled on flat  
 angulaires  
 acodada  
 angolata

**Mikro-Federscheren**  
*Micro scissors*

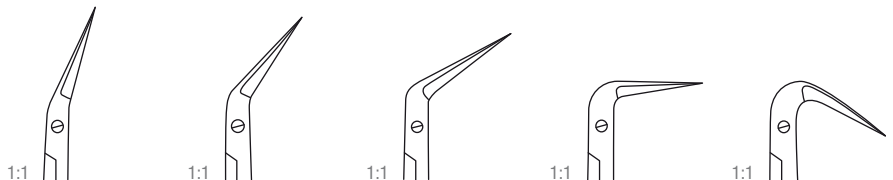
*Micro ciseaux à ressorts*  
*Micro tijeras con resorte*  
*Forbici per microchirurgia*



**YASARGIL**

	25°	45°	60°	90°	125°
170 mm – 6¾"	411-771-025	411-771-045	411-771-060	411-771-090	411-771-125

**mit Knopf**  
with ball  
avec bouton  
con botón  
con bottone



**YASARGIL**

	25°	45°	60°	90°	125°
170 mm – 6¾"	411-773-025	411-773-045	411-771-060	411-771-090	411-771-125

**ohne Knopf**  
without ball  
sans bouton  
sin botón  
senza bottone





### Mikro-Präparierscheren

Micro dissecting scissors

Micro ciseaux à dissection

Micro tijeras de disección

Forbici per micro chirurgia con manico rotondo



145 mm – 5 3/4"	309-216-140	309-217-140	309-218-140	309-219-140
180 mm – 7"	309-216-180	309-217-180	309-218-180	309-219-180

kurze Schneide 8 mm, glatt  
short blades 8 mm, smooth  
lames courtes 8 mm, lisses  
hojas cortas 8 mm, lisos  
lama corta 8 mm, liscia

gerade, spitz  
straight, sharp  
droites, pointues  
rectas, agudas  
retta, acuta

gebogen, spitz  
curved, sharp  
courbes, pointues  
curvas, agudas  
curva, acuta

gerade, stumpf  
straight, blunt  
droites, mousses  
rectas, romas  
retta, smussa

gebogen, stumpf  
curved, blunt  
courbes, mousses  
curvas, romas  
curva, smussa



145 mm – 5 3/4"	309-216-140L	309-217-140L	309-218-140L	309-219-140L
180 mm – 7"	309-216-180L	309-217-180L	309-218-180L	309-219-180L

lange Schneide 14 mm, glatt  
long blades 14 mm, smooth  
lames longues 14 mm, lisses  
hojas largas 14 mm, lisos  
lama lunga 14 mm, liscia

gerade, spitz  
straight, sharp  
droites, pointues  
rectas, agudas  
retta, acuta

gebogen, spitz  
curved, sharp  
courbes, pointues  
curvas, agudas  
curva, acuta

gerade, stumpf  
straight, blunt  
droites, mousses  
rectas, romas  
retta, smussa

gebogen, stumpf  
curved, blunt  
courbes, mousses  
curvas, romas  
curva, smussa

**Mikroscheren mit Rundgriff**

*Micro scissors with round handle*

*Micro ciseaux avec manche ronde*

*Micro tijeras con mango redondo*

*Forbici per micro chirurgia con manico rotondo*



**VANNAS**

1:1



1:1



	7 mm Ø	7 mm Ø
120 mm – 5 "	309-222-120	309-223-120

**VANNAS**

1:1



1:1



	8 mm Ø	8 mm Ø
150 mm – 6 "	309-222-150	309-223-150

**CASTROVIEJO**

1:1



1:1



	8 mm Ø	8 mm Ø
150 mm – 6 "	309-224-150	309-225-150



### Mikroscheren mit Rundgriff

*Micro scissors with round handle*

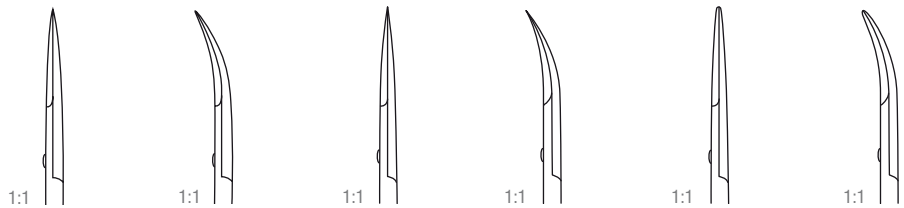
*Micro ciseaux avec manche ronde*

*Micro tijeras con mango redondo*

*Forbici per micro chirurgia con manico rotondo*



1:1



	180 mm – 7"	180 mm – 7"	180 mm – 7"	180 mm – 7"	180 mm – 7"	180 mm – 7"
10 mm Ø	309-198-180	309-199-180	05-820-180	05-821-180	05-826-180	05-827-180
	gerade, gezahnt straight, saw edge droites, dentelés recta, dentadas retta, dentata	gebogen, gezahnt curved, saw edge courbes, dentelés curva, dentadas curva, dentata	gerade, spitz straight, sharp droites, pointue recta, aguda retta, acuta	gebogen, spitz curved, sharp courbes, pointue curva, aguda curva, acuta	gerade, stumpf straight, blunt droites, mousse recta, roma retta, smussa	gebogen, stumpf curved, blunt courbes, mousse curva, roma curva, smussa

### Mikroscheren mit Rundgriff

*Micro scissors with round handle*

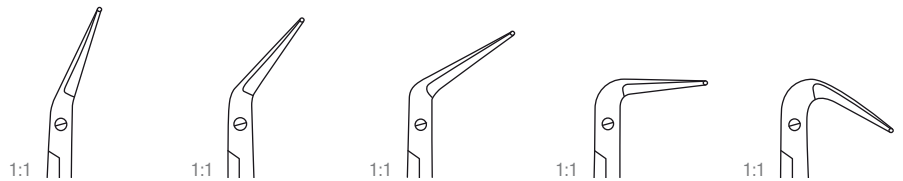
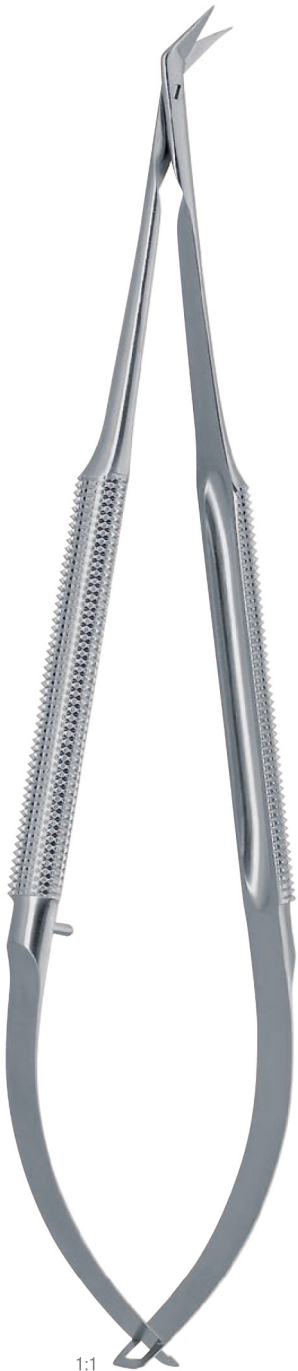
*Micro ciseaux avec manche ronde*

*Micro tijeras con mango redondo*

*Forbici per micro chirurgia con manico rotondo*



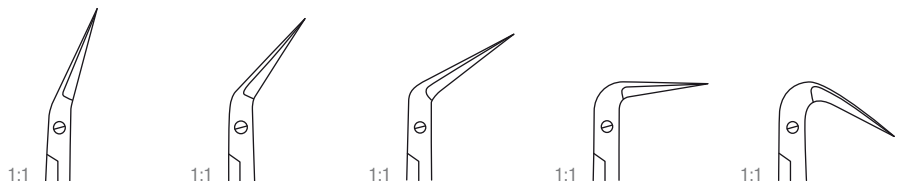
mit gedrehtem Schluss  
90° twisted  
tordus de 90°  
giradas de 90°  
girato 90°



8 mm Ø	25°	45°	60°	90°	125°
180 mm – 7"	309-211-025	309-211-045	309-211-060	309-211-090	309-211-125

**Schneide 10 mm, mit Knopf, spitz**

Blade 10 mm, with ball, sharp  
Lames 10 mm, avec bouton, pointues  
Hojas 10 mm, con botón, agudas  
Lama 10 mm, con bottone, acuta



8 mm Ø	25°	45°	60°	90°	125°
180 mm – 7"	309-210-025	309-210-045	309-210-060	309-210-090	309-210-125

**Schneide 10 mm, ohne Knopf, spitz**

Blade 10 mm, without ball, sharp  
Lames 10 mm, sans bouton, pointues  
Hojas 10 mm, sin botón, agudas  
Lama 10 mm, senza bottone, acuta



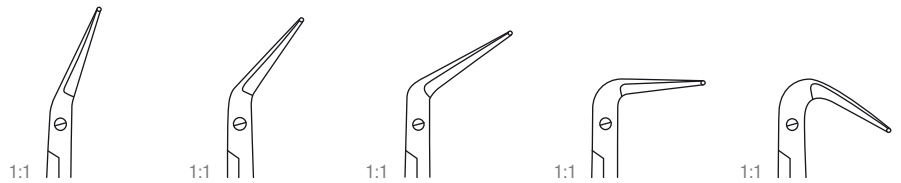
### Mikroscheren mit Rundgriff

*Micro scissors with round handle*

*Micro ciseaux avec manche ronde*

*Micro tijeras con mango redondo*

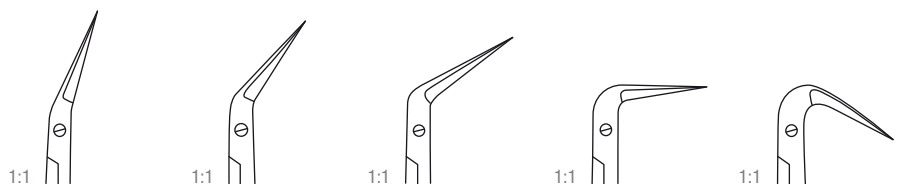
*Forbici per micro chirurgia con manico rotondo*



8 mm Ø	25°	45°	60°	90°	125°
180 mm – 7"	309-209-025	309-209-045	309-209-060	309-209-090	309-209-125

#### mit Knopf

with ball  
avec bouton  
con botón  
con bottone



8 mm Ø	25°	45°	60°	90°	125°
180 mm – 7"	309-208-025	309-208-045	309-208-060	309-208-090	309-208-125

#### ohne Knopf

without ball  
sans bouton  
sin botón  
senza bottone

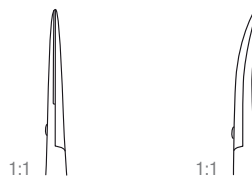
**Mikroscheren mit Rundgriff**

*Micro scissors with round handle*

*Micro ciseaux avec manche ronde*

*Micro tijeras con mango redondo*

*Forbici per micro chirurgia con manico rotondo*



	9 mm Ø	9 mm Ø
150 mm – 6"	309-206-150	309-207-150



**Mikro-Federscheren**  
*Micro scissors*

*Micro ciseaux à ressorts*  
*Micro tijeras con resorte*  
*Forbici per microchirurgia*



**JACOBSON**

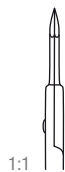


160 mm – 6 ¼ "	05-629-155	05-631-155	411-749-160
180 mm – 7 "	05-629-185	05-631-185	411-749-190

**gerade**  
 straight  
 droites  
 recta  
 retta

**gebogen**  
 curved  
 courbes  
 curva  
 curva

**abgewinkelt, 45°**  
 angled, 45°  
 angulaires, 45°  
 acodada, 45°  
 angolata, 45°



160 mm – 6 ¼ "	05-633-155	05-635-155
180 mm – 7 "	05-633-185	05-635-185

**Vannas Schneide**  
 Vannas blade  
 Lame de Vannas  
 Hoja de Vannas  
 Lama Vannas

**Mikro-Federscheren**

*Micro scissors*

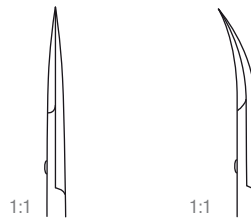
*Micro ciseaux à ressorts*

*Micro tijeras con resorte*

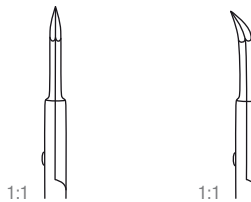
*Forbici per microchirurgia*



**YASARGIL-  
MOD.**



180 mm – 7 "	411-746-190	411-747-190
225 mm – 8 ¾ "	05-629-225	05-631-225



220 mm – 8 ¾ "	05-633-225	05-635-225
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**Vannas Schneide**

Vannas blade

Lame de Vannas

Hoja de Vannas

Lama Vannas





### Mikro-Federscheren

Micro scissors

Micro ciseaux à ressorts

Micro tijeras con resorte

Forbici per microchirurgia



200 mm – 8"	05-616-001	05-616-002	05-616-003	05-616-004
225 mm – 8¾"	05-618-001	05-618-002	05-618-003	05-618-004

**Schneide glatt, spitz**  
Blade smooth, sharp  
Lames lisses, pointues  
Hojas lisas, agudas  
Lama liscia, acuta

**gerade**  
straight  
droites  
recta  
retta

**gebogen**  
curved  
courbes  
curva  
curva

**gerade, gezahnt**  
straight, saw edge  
droites, dentelés  
recta, dentadas  
retta, dentata

**gebogen, gezahnt**  
curved, saw edge  
courbes, dentelés  
curva, dentadas  
curva, dentata



200 mm – 8"	05-616-005	05-616-006
225 mm – 8¾"	05-618-005	05-618-006

### Vannas Schneide

Vannas blade  
Lame de Vannas  
Hoja de Vannas  
Lama Vannas



200 mm – 8"	05-616-007	05-616-008
225 mm – 8¾"	05-618-007	05-618-008

### Präparier-Schneide, stumpf

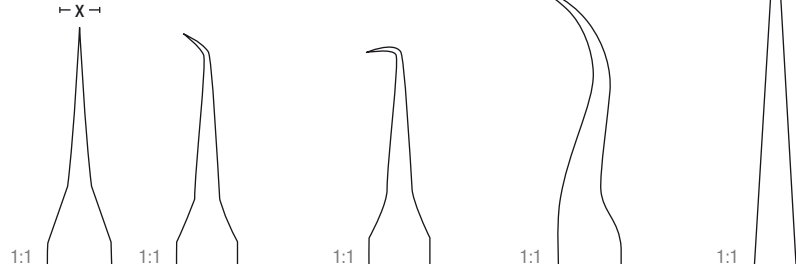
Dissector blade, blunt  
Lames de dissection, moussé  
Hojas de dissección, roma  
Lama da dissezione, smussa

**Fixierpinzetten – Gefäßdilatoren**  
*Fixation forceps – Vascular dilators*

*Pinces à fixation – Dilatateurs vasculaires*  
*Pinzas de fixaciòn – Dilatadores vasculares*  
*Pinze di fissaggio – Pinze per allargare i vasi*



**TYP**  
**JUWELIER**

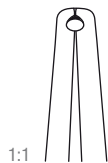


x = 0.2 mm	x = 0.3 mm	x = 0.3 mm	x = 0.2 mm	x = 0.3 mm
110 mm – 4 ¼ "	110 mm – 4 ¼ "	110 mm – 4 ¼ "	120 mm – 4 ¾ "	120 mm – 4 ¾ "
08-962-004	08-962-045	08-962-090	08-962-005	08-962-001

Titan	Titan	Titan
x = 0.2 mm	x = 0.3 mm	x = 0.3 mm
110 mm – 4 ¼ "	110 mm – 4 ¼ "	110 mm – 4 ¼ "
11-962-004	11-962-045	11-962-090



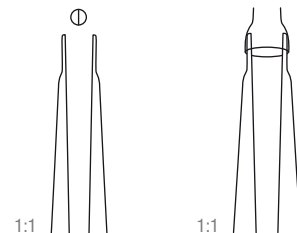
**PIERSE**



120 mm – 4 ¾ "	08-980-120
135 mm – 5 ¼ "	08-980-135



1:1



	x = 0.2 mm	x = 0.3 mm
110 mm – 4 ¼ "	08-969-007	08-969-008

**sehr fein**  
very fine  
très fin  
muy fino  
molto fino



**Mikro-Knüpfpinzetten**

*Micro suture tying forceps*

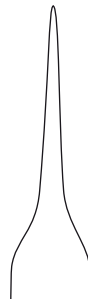
*Pinces à fixation – Dilatateurs vasculaires*

*Pinzas de fixaciòn – Dilatadores vasculares*

*Pinze di fissaggio – Pinze per allargare i vasi*



1:1



1:1



1:1

**LAZAR**

	0.5 mm	0.8 mm
155 mm – 6"	09-260-155	09-262-155



### Mikropinzetten

Micro forceps

Micro pinces  
Micro pinzas  
Pinze per microchirurgia



8 mm Ø	0.3 mm	0.3 mm	0.3 mm	0.3 mm
120 mm – 4 ¾"	09-220-120	09-221-120		
150 mm – 6"	09-230-150	09-231-150	09-230-150Z	09-231-150Z
180 mm – 7"	09-220-180	09-221-180	09-220-180Z	09-221-180Z
210 mm – 8 ¼"	09-230-210	09-231-210	09-230-210Z	09-231-210Z
230 mm – 9"	09-230-230	09-231-230	09-230-230Z	09-231-230Z

**Fadenplatte 6,0 mm x 0,3 mm, glatt**  
Tying platform 6.0 mm x 0.3 mm, smooth  
Plate-forme 6.0 mm x 0.3 mm, lisse  
Plataforma 6.0 mm x 0.3 mm, lisa  
Piano per sutura 6.0 mm x 0.3 mm, liscio

1 x 2                      1 x 2



	Titan	Titan	Titan	Titan
8 mm Ø	0.3 mm	0.3 mm	0.3 mm	0.3 mm
150 mm – 6"	09-230-150T	09-231-150T	09-230-150ZT	09-231-150ZT
180 mm – 7"	09-230-180T	09-231-180T	09-230-180ZT	09-231-180ZT
210 mm – 8 ¼"	09-230-210T	09-231-210T	09-230-210ZT	09-231-210ZT

**Fadenplatte 6,0 mm x 0,3 mm, glatt**  
Tying platform 6.0 mm x 0.3 mm, smooth  
Plate-forme 6.0 mm x 0.3 mm, lisse  
Plataforma 6.0 mm x 0.3 mm, lisa  
Piano per sutura 6.0 mm x 0.3 mm, liscio

1 x 2                      1 x 2



8 mm Ø	0.7 mm	0.7 mm	0.7 mm	0.7 mm
150 mm – 6"	09-226-150	09-227-150	09-223-150Z	09-225-150Z
180 mm – 7"	09-226-180	09-227-180	09-223-180Z	09-225-180Z
210 mm – 8 ¼"	09-226-210	09-227-210	09-223-210Z	09-225-210Z
230 mm – 9"	09-226-230	09-227-230	09-223-230Z	09-225-230Z

**Fadenplatte 6,0 mm x 0,7 mm, glatt**  
Tying platform 6.0 mm x 0.7 mm, smooth  
Plate-forme 6.0 mm x 0.7 mm, lisse  
Plataforma 6.0 mm x 0.7 mm, lisa  
Piano per sutura 6.0 mm x 0.7 mm, liscio

1 x 2                      1 x 2

	Titan	Titan	Titan	Titan
8 mm Ø	0.7 mm	0.7 mm	0.7 mm	0.7 mm
150 mm – 6"	09-226-150T	09-227-150T	09-223-150ZT	09-225-150ZT
180 mm – 7"	09-226-180T	09-227-180T	09-223-180ZT	09-225-180ZT
210 mm – 8 ¼"	09-226-210T	09-227-210T	09-223-210ZT	09-225-210ZT

**Fadenplatte 6,0 mm x 0,7 mm, glatt**  
Tying platform 6.0 mm x 0.7 mm, smooth  
Plate-forme 6.0 mm x 0.7 mm, lisse  
Plataforma 6.0 mm x 0.7 mm, lisa  
Piano per sutura 6.0 mm x 0.7 mm, liscio

1 x 2                      1 x 2



**Mikropinzetten**  
*Micro forceps*

*Micro pincers*  
*Micro pinzas*  
*Pinze per microchirurgia*



	Diamond Coated	Diamond Coated	Diamond Coated	Diamond Coated
8 mm Ø	0.3 mm	0.3 mm	0.3 mm	0.3 mm
150 mm – 6 "	09-230-150D	09-231-150D	09-230-150ZD	09-231-150ZD
180 mm – 7 "	09-220-180D	09-221-180D	09-220-180ZD	09-221-180ZD
210 mm – 8 ¼ "	09-230-210D	09-231-210D	09-230-210ZD	09-231-210ZD
230 mm – 9 "	09-230-230D	09-231-230D	09-230-230ZD	09-231-230ZD

**Fadenplatte 6,0 mm x 0,3 mm**  
Tying platform 6.0 mm x 0.3 mm  
Plate-forme 6.0 mm x 0.3 mm  
Plataforma 6.0 mm x 0.3 mm  
Piano per sutura 6.0 mm x 0.3 mm

1 x 2

1 x 2



	Diamond Coated	Diamond Coated	Diamond Coated	Diamond Coated
8 mm Ø	0.7 mm	0.7 mm	0.7 mm	0.7 mm
150 mm – 6 "	09-226-150D	09-227-150D	09-223-150ZD	09-225-150ZD
180 mm – 7 "	09-226-180D	09-227-180D	09-223-180ZD	09-225-180ZD
210 mm – 8 ¼ "	09-226-210D	09-227-210D	09-223-210ZD	09-225-210ZD
230 mm – 9 "	09-226-230D	09-227-230D	09-223-230ZD	09-225-230ZD

**Fadenplatte 6,0 mm x 0,7 mm**  
Tying platform 6.0 mm x 0.7 mm  
Plate-forme 6.0 mm x 0.7 mm  
Plataforma 6.0 mm x 0.7 mm  
Piano per sutura 6.0 mm x 0.7 mm

1 x 2

1 x 2

**Mikropinzetten**

*Micro forceps*

*Micro pincers*

*Micro pinzas*

*Pinze per microchirurgia*



**JACOBSON**



160 mm – 6 ¼ "	09-121-160	09-125-160	09-127-160	09-123-160
185 mm – 7 ¼ "	09-121-185	09-125-185	09-127-185	09-123-185

**gerade, spitz**  
straight, sharp  
droites, pointues  
rectas, agudas  
retta, acuta

**gerade, stumpf**  
straight, blunt  
droites, mousses  
rectas, romas  
retta, smussa

**abgewinkelt, spitz**  
angled, sharp  
angulaire, pointue  
acodada, aguda  
angolata, acuta

**abgewinkelt, stumpf**  
angled, blunt  
angulaire, mousse  
acodada, roma  
angolata, smussa

	<b>Diamond Coated</b>	<b>Diamond Coated</b>	<b>Diamond Coated</b>	<b>Diamond Coated</b>
160 mm – 6 ¼ "	09-121-160D	09-125-160D	09-127-160D	09-123-160D
185 mm – 7 ¼ "	09-121-185D	09-125-185D	09-127-185D	09-123-185D

**gerade, spitz**  
straight, sharp  
droites, pointues  
rectas, agudas  
retta, acuta

**gerade, stumpf**  
straight, blunt  
droites, mousses  
rectas, romas  
retta, smussa

**abgewinkelt, spitz**  
angled, sharp  
angulaire, pointue  
acodada, aguda  
angolata, acuta

**abgewinkelt, stumpf**  
angled, blunt  
angulaire, mousse  
acodada, roma  
angolata, smussa



**Mikropinzetten**

*Micro forceps*

*Micro pincers*

*Micro pinzas*

*Pinze per microchirurgia*



**YASARGIL**

	225 mm – 8 3/4 "	225 mm – 8 3/4 "	225 mm – 8 3/4 "
3.0 mm	08-165-220	08-196-220	08-177-220
5.0 mm	08-167-220	08-197-220	08-179-220

**löffelförmig**  
 spoon form  
 forme de cuillère  
 forma de cuchara  
 forma di cucchiaio

**flach gezahnt**  
 plan toothed  
 dentelé  
 dentada  
 dentato

**kürettenförmig**  
 curette form  
 forme de curette  
 forma de cureta  
 forma di curetta

1:1

**Mikropinzetten**

*Micro forceps*

*Micro pincers*

*Micro pinzas*

*Pinze per microchirurgia*



**YASARGIL**

160 mm – 1 1/3 "	311-502-160	311-505-160
180 mm – 1 1/2 "	311-502-180	311-505-180
200 mm – 8 "	311-502-200	311-505-200
225 mm – 8 3/4 "	311-502-220	311-505-220
240 mm – 9 1/2 "	311-502-240	311-505-240

**gerade, spitz**  
straight, sharp  
droites, pointues  
rectas, agudas  
retta, acuta

**gerade, stumpf**  
straight, blunt  
droites, mousses  
rectas, romas  
retta, smussa





### Mikro-Ringpinzetten

Micro ring forceps

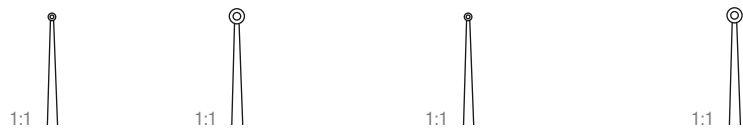
Micro pinces avec anneaux  
 Micro pinzas con anillos  
 Micro pinze con anelli



			Diamond Coated	Diamond Coated
9 mm Ø	1.0 x 0.5 mm	2.0 x 1.0 mm	1.0 x 0.5 mm	2.0 x 1.0 mm
150 mm – 6"	09-280-150	09-280-151	09-280-150D	09-280-151D
180 mm – 7"	09-280-180	09-280-181	09-280-180D	09-280-181D
210 mm – 8¼"	09-280-210	09-280-211	09-280-210D	09-280-211D
230 mm – 9"	09-280-230	09-280-231	09-280-230D	09-280-231D

glatt  
 smooth  
 lisse  
 lisa  
 liscia

glatt  
 smooth  
 lisse  
 lisa  
 liscia



	Titan	Titan	Titan / Diamond Coated	Titan / Diamond Coated
9 mm Ø	1.0 x 0.5 mm	2.0 x 1.0 mm	1.0 x 0.5 mm	2.0 x 1.0 mm
150 mm – 6"	09-280-150T	09-280-151T	09-280-150DT	09-280-151DT
180 mm – 7"	09-280-180T	09-280-181T	09-280-180DT	09-280-181DT
210 mm – 8¼"	09-280-210T	09-280-211T	09-280-210DT	09-280-211DT
230 mm – 9"	09-280-230T	09-280-231T	09-280-230DT	09-280-231DT

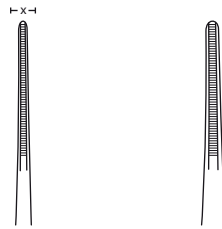
glatt  
 smooth  
 lisse  
 lisa  
 liscia

glatt  
 smooth  
 lisse  
 lisa  
 liscia

### Atraumatische Mikropinzetten

*Atraumatic micro forceps*

*Micro pinces atraumatiques*  
*Micro pinzas atraumáticas*  
*Micro pinze atraumatiche*



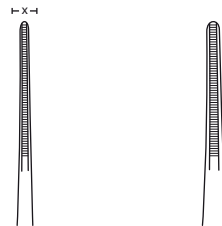
	Atrauma	Atrauma	Atrauma	Atrauma
	x = 1.2 mm	x = 1.8 mm	x = 1.2 mm	x = 1.8 mm
150 mm – 6"	09-300-150	09-304-150	09-301-150	09-305-150
180 mm – 7"	09-300-180	09-304-180	09-301-180	09-305-180
210 mm – 8¼"	09-300-210	09-304-210	09-301-210	09-305-210
230 mm – 9"	09-300-230	09-304-230	09-301-230	09-305-230

gerade  
straight  
droites  
recta  
retta

gerade  
straight  
droites  
recta  
retta

abgewinkelt  
angled  
angulaire  
acodada  
angolata

abgewinkelt  
angled  
angulaire  
acodada  
angolata



	Titan	Titan	Titan	Titan
	x = 1.2 mm	x = 1.8 mm	x = 1.2 mm	x = 1.8 mm
150 mm – 6"	09-300-150T	09-304-150T	09-301-150T	09-305-150T
180 mm – 7"	09-300-180T	09-304-180T	09-301-180T	09-305-180T
210 mm – 8¼"	09-300-210T	09-304-210T	09-301-210T	09-305-210T
230 mm – 9"	09-300-230T	09-304-230T	09-301-230T	09-305-230T

gerade  
straight  
droites  
recta  
retta

gerade  
straight  
droites  
recta  
retta

abgewinkelt  
angled  
angulaire  
acodada  
angolata

abgewinkelt  
angled  
angulaire  
acodada  
angolata

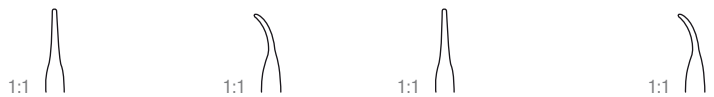


**Mikronadelhalter**  
*Micro needle holders*  
*Micro porte aiguilles*  
*Micro porta agujas*  
*Micro porta aghi*



1:1

### CASTROVIEJO



			Diamond Coated	Diamond Coated
x = 11.0 mm x 0.75 mm				
140 mm – 5 ½"	19-860-140	19-861-140	19-860-140D	19-861-140D

**ohne Sperre, feines Maul**  
 without ratchet, fine jaws  
 sans crémaillère, mors fine  
 sin cremallera, boca fina  
 senza cremagliera, morso fino

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

			Diamond Coated	Diamond Coated
x = 11.0 mm x 0.75 mm				
140 mm – 5 ½"	19-870-140	19-871-140	19-870-140D	19-871-140D

**mit Sperre, feines Maul**  
 with ratchet, fine jaws  
 avec crémaillère, mors fine  
 con cremallera, boca fina  
 con cremagliera, morso fino

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

### Mikronadelhalter

Micro needle holders

Micro porte aiguilles  
Micro porta agujas  
Micro porta aghi



#### JACOBSON

			Diamond Coated	Diamond Coated
	x = 1 mm	x = 1 mm	x = 1 mm	x = 1 mm
185 mm – 7 1/3"	19-620-185	19-621-185	19-620-185D	19-621-185D

**ohne Sperre**  
without ratchet  
sans crémaillère  
sin cremallera  
senza cremagliera

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

			Diamond Coated	Diamond Coated
	x = 1 mm	x = 1 mm	x = 1 mm	x = 1 mm
185 mm – 7 1/3"	19-622-185	19-623-185	19-622-185D	19-623-185D

**mit Sperre**  
with ratchet  
avec crémaillère  
con cremallera  
con cremagliera

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo



	almedur	almedur	almedur	almedur
	x = 1 mm	x = 1 mm	x = 1 mm	x = 1 mm
180 mm – 7"	20-636-180	20-637-180	20-638-180	20-639-180

**ohne Sperre**  
without ratchet  
sans crémaillère  
sin cremallera  
senza cremagliera

**gerade, glatt**  
straight, smooth  
droit, lisse  
curva, lisa  
retto, liscio

**gebogen, glatt**  
curved, smooth  
courbe, lisse  
curva, lisa  
curvo, liscio

**gerade, gerieft**  
straight, serrated  
droit, strié  
recta, estriada  
retto, zigrinato

**gebogen, gerieft**  
curved, serrated  
courbe, strié  
curva, estriada  
curvo, zigrinato

	almedur	almedur	almedur	almedur
	x = 1 mm	x = 1 mm	x = 1 mm	x = 1 mm
180 mm – 7"	20-640-180	20-641-180	20-644-180	20-645-180

**mit Sperre**  
with ratchet  
avec crémaillère  
con cremallera  
con cremagliera

**gerade, glatt**  
straight, smooth  
droit, lisse  
curva, lisa  
retto, liscio

**gebogen, glatt**  
curved, smooth  
courbe, lisse  
curva, lisa  
curvo, liscio

**gerade, gerieft**  
straight, serrated  
droit, strié  
recta, estriada  
retto, zigrinato

**gebogen, gerieft**  
curved, serrated  
courbe, strié  
curva, estriada  
curvo, zigrinato





**Mikronadelhalter**  
*Micro needle holders*  
*Micro porte aiguilles*  
*Micro porta agujas*  
*Micro porta aghi*



**YASARGIL**

			Diamond Coated	Diamond Coated
180 mm – 7 "	420-040-180	420-041-180	420-040-180D	420-041-180D
200 mm – 8 "	420-040-200	420-041-200	420-040-200D	420-041-200D

**ohne Sperre**  
 without ratchet  
 sans crémaillère  
 sin cremallera  
 senza cremagliera

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curvo

			Diamond Coated	Diamond Coated
180 mm – 7 "	420-044-180	420-045-180	420-044-180D	420-045-180D
200 mm – 8 "	420-044-200	420-045-200	420-044-200D	420-045-200D

**mit Sperre**  
 with ratchet  
 avec crémaillère  
 con cremallera  
 con cremagliera

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curvo

### Mikronadelhalter mit Rundgriff

Micro needle holders with round handle

Micro porte aiguilles avec manche ronde

Micro porta agujas con mango redondo

Micro porta aghi con manico rotondo



1:1

#### YASARGIL



			Diamond Coated	Diamond Coated
	x = 1 mm	x = 1 mm	x = 1 mm	x = 1 mm
210 mm – 8 ¼ "	324-652-210	324-653-210	324-652-210D	324-653-210D

**ohne Sperre**  
without ratchet  
sans crémaillère  
sin cremallera  
senza cremagliera

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

			Diamond Coated	Diamond Coated
	x = 1 mm	x = 1 mm	x = 1 mm	x = 1 mm
210 mm – 8 ¼ "	324-654-210	324-655-210	324-654-210D	324-655-210D

**mit Sperre**  
with ratchet  
avec crémaillère  
con cremallera  
con cremagliera

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo



	almedur	almedur	almedur	almedur
	x = 1 mm	x = 1 mm	x = 1 mm	x = 1 mm
210 mm – 8 ¼ "	324-652-210TCG	324-653-210TCG	324-652-210TCS	324-653-210TCS

**ohne Sperre**  
without ratchet  
sans crémaillère  
sin cremallera  
senza cremagliera

**gerade, glatt**  
straight, smooth  
droit, lisse  
curva, lisa  
retto, liscio

**gebogen, glatt**  
curved, smooth  
courbe, lisse  
curva, lisa  
curvo, liscio

**gerade, gerieft**  
straight, serrated  
droit, strié  
recta, estriada  
retto, zigrinato

**gebogen, gerieft**  
curved, serrated  
courbe, strié  
curva, estriada  
curvo, zigrinato

	almedur	almedur	almedur	almedur
	x = 1 mm	x = 1 mm	x = 1 mm	x = 1 mm
210 mm – 8 ¼ "	324-654-210TCG	324-655-210TCG	324-654-210TCS	324-655-210TCS

**mit Sperre**  
with ratchet  
avec crémaillère  
con cremallera  
con cremagliera

**gerade, glatt**  
straight, smooth  
droit, lisse  
curva, lisa  
retto, liscio

**gebogen, glatt**  
curved, smooth  
courbe, lisse  
curva, lisa  
curvo, liscio

**gerade, gerieft**  
straight, serrated  
droit, strié  
recta, estriada  
retto, zigrinato

**gebogen, gerieft**  
curved, serrated  
courbe, strié  
curva, estriada  
curvo, zigrinato



**Mikronadelhalter mit Rundgriff**

*Micro needle holders with round handle*

*Micro porte aiguilles avec manche ronde*

*Micro porta agujas con mango redondo*

*Micro porta aghi con manico rotondo*



110 mm – 4 ¼ "	19-780-110	19-781-110
125 mm – 5 "	19-780-125	19-781-125
130 mm – 5 "	19-780-130	19-781-130
150 mm – 6 "	19-780-150	19-781-150
180 mm – 7 "	19-780-180	19-781-180

**ohne Sperre**  
 without ratchet  
 sans crémaillère  
 sin cremallera  
 senza cremagliera

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

110 mm – 4 ¼ "	19-782-110	19-783-110
125 mm – 5 "	19-782-125	19-783-125
130 mm – 5 "	19-782-130	19-783-130
150 mm – 6 "	19-782-150	19-783-150
180 mm – 7 "	19-782-180	19-783-180

**mit Sperre**  
 with ratchet  
 avec crémaillère  
 con cremallera  
 con cremagliera

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

**Mikronadelhalter mit Rundgriff**

*Micro needle holders with round handle*

*Micro porte aiguilles avec manche ronde*

*Micro porta agujas con mango redondo*

*Micro porta aghi con manico rotondo*



1:1

**BARRAQUER**



1:1



1:1



1:1



1:1

				Diamond Coated	Diamond Coated
140 mm – 5 ½"	8 mm Ø	324-648-140	324-649-140	324-648-140D	324-649-140D

**ohne Sperre, sehr feines Maul**  
without ratchet, extra delicate jaws  
sans crémaillère, mors très fine  
sin cremallera, boca muy fina  
senza cremagliera, morso molto fino

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curva

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbe  
curva  
curvo

				Diamond Coated	Diamond Coated
140 mm – 5 ½"	8 mm Ø	324-658-140	324-659-140	324-658-140D	324-659-140D

**mit Sperre, sehr feines Maul**  
with ratchet, extra delicate jaws  
avec crémaillère, mors très fine  
con cremallera, boca muy fina  
con cremagliera, morso molto fino

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curva

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curva





**Mikronadelhalter**  
*Micro needle holders*  
*Micro porte aiguilles*  
*Micro porta agujas*  
*Micro porta aghi*



150 mm – 6 "	9 mm Ø	324-646-150
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**ohne Sperre, gebogen**  
without ratchet, curved  
sans crémaillère, courbe  
sin cremallera, curvo  
senza cremagliera, curvo

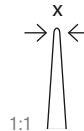
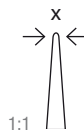
### Mikronadelhalter mit gedrehtem Schluss

Micro needle holders, 90° twisted

Micro porte aiguilles, tordus de 90°

Micro porta agujas, giradas de 90°

Porta aghi per micro-neurochirurgia



	x = 0.4 mm	x = 0.4 mm	x = 0.9 mm	x = 0.9 mm
200 mm – 8 "	324-704-200	324-705-200	324-706-200	324-707-200
225 mm – 8 ¾ "	324-704-220	324-705-220	324-706-220	324-707-220
240 mm – 9 ½ "	324-704-240	324-705-240	324-706-240	324-707-240

**ohne Sperre**  
without ratchet  
sans crémaillère  
sin cremallera  
senza cremagliera

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curva

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curva

	Diamond Coated	Diamond Coated	Diamond Coated	Diamond Coated
	x = 0.4 mm	x = 0.4 mm	x = 0.9 mm	x = 0.9 mm
200 mm – 8 "	324-704-200D	324-705-200D	324-706-200D	324-707-200D
225 mm – 8 ¾ "	324-704-220D	324-705-220D	324-706-220D	324-707-220D
240 mm – 9 ½ "	324-704-240D	324-705-240D	324-706-240D	324-707-240D

**ohne Sperre, diamantiert**  
without ratchet, diamond coated  
sans crémaillère, diamanté  
sin cremallera, diamantada  
senza cremagliera, diamantato

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curva

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curva



**Diese Nadelhalter sind auch mit Sperre erhältlich.**

These needle holders are also available with ratchet.

Ces porte aiguilles sont également disponibles avec crémaillère.

Estas porta agujas también son disponibles con cremallera.

Questi port'aghi son fornibili anche con cremagliera.



**Mikronadelhalter**  
**Micro needle holders**  
**Micro porte aiguilles**  
**Micro porta agujas**  
**Micro porta aghi**



1:1

**JACOBSON**

1:1



1:1



1:1



1:1



			Diamond Coated	Diamond Coated
180 mm – 7"	19-631-185	19-633-185	19-631-185D	19-633-185D

**ohne Sperre**  
 without ratchet  
 sans crémaillère  
 sin cremallera  
 senza cremagliera

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

			Diamond Coated	Diamond Coated
180 mm – 7"	19-635-185	19-637-185	19-635-185D	19-637-185D

**mit Sperre**  
 with ratchet  
 avec crémaillère  
 con cremallera  
 con cremagliera

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva

**gerade**  
 straight  
 droites  
 recta  
 retto

**gebogen**  
 curved  
 courbes  
 curva  
 curva



**Diese Nadelhalter sind auch mit Sperre erhältlich.**

These needle holders are also available with ratchet.

Ces porte aiguilles sont également disponibles avec crémaillère.

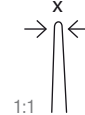
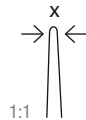
Estas porta agujas también son disponibles con cremallera.

Questi port'aghi son fornibili anche con cremagliera.

**Mikronadelhalter**  
*Micro needle holders*  
*Micro porte aiguilles*  
*Micro porta agujas*  
*Micro porta aghi*



1:1



			Diamond Coated	Diamond Coated
9 mm Ø	x = 1.0 mm	x = 1.0 mm	x = 1.0 mm	x = 1.0 mm
230 mm – 9"	19-641-001	19-641-002	19-641-003D	19-641-004D

**ohne Sperre**  
without ratchet  
sans crémaillère  
sin cremallera  
senza cremagliera

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

			Diamond Coated	Diamond Coated
9 mm Ø	x = 1.0 mm	x = 1.0 mm	x = 1.0 mm	x = 1.0 mm
230 mm – 9"	19-643-001	19-643-002	19-643-003D	19-643-004D

**mit Sperre**  
with ratchet  
avec crémaillère  
con cremallera  
con cremagliera

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo

**gerade**  
straight  
droites  
recta  
retto

**gebogen**  
curved  
courbes  
curva  
curvo



	almedur	almedur	almedur	almedur
9 mm Ø				
230 mm – 9"	20-651-001	20-651-002	20-651-003	20-651-004

**ohne Sperre**  
without ratchet  
sans crémaillère  
sin cremallera  
senza cremagliera

**gerade, glatt**  
straight, smooth  
droit, lisse  
curva, lisa  
retto, liscio

**gebogen, glatt**  
curved, smooth  
courbe, lisse  
curva, lisa  
curvo, liscio

**gerade, gerieft**  
straight, serrated  
droit, strié  
recta, estriada  
retto, zigrinato

**gebogen, gerieft**  
curved, serrated  
courbe, strié  
curva, estriada  
curvo, zigrinato

	almedur	almedur	almedur	almedur
9 mm Ø				
230 mm – 9"	20-653-001	20-653-002	20-653-003	20-653-004

**mit Sperre**  
with ratchet  
avec crémaillère  
con cremallera  
con cremagliera

**gerade, glatt**  
straight, smooth  
droit, lisse  
curva, lisa  
retto, liscio

**gebogen, glatt**  
curved, smooth  
courbe, lisse  
curva, lisa  
curvo, liscio

**gerade, gerieft**  
straight, serrated  
droit, strié  
recta, estriada  
retto, zigrinato

**gebogen, gerieft**  
curved, serrated  
courbe, strié  
curva, estriada  
curvo, zigrinato



**Mikronadelhalter**  
*Micro needle holders*  
*Micro porte aiguilles*  
*Micro porta agujas*  
*Micro porta aghi*



1:1



1:1



1:1



1:1

	Titan	Titan
	0.3 mm x 0.4 mm	0.3 mm x 0.4 mm
180 mm – 7"	21-202-180	21-203-180

**mit Sperre**  
 with ratchet  
 avec crémaillère  
 con cremallera  
 con cremagliera



1:1



1:1

	Titan	Titan
	0.8 mm x 0.8 mm	0.8 mm x 0.8 mm
185 mm – 7 ¼"	21-200-185	21-201-185

**mit Sperre**  
 with ratchet  
 avec crémaillère  
 con cremallera  
 con cremagliera

**Mikronadelhalter**  
*Micro needle holders*  
*Micro porte aiguilles*  
*Micro porta agujas*  
*Micro porta aghi*



	Titan	Titan
	0.5 mm x 0.8 mm	0.5 mm x 0.8 mm
200 mm – 8 "	21-216-200	21-217-200

**mit Sperre**  
with ratchet  
avec crémaillère  
con cremallera  
con cremagliera



	Titan	Titan	Titan	Titan
	0.4 x 0.6 mm	0.4 x 0.6 mm	0.6 x 0.6 mm	0.6 x 0.6 mm
200 mm – 8 "	21-208-200	21-209-200	21-210-200	21-211-200

**mit Sperre**  
with ratchet  
avec crémaillère  
con cremallera  
con cremagliera



**Mikronadelhalter**  
*Micro needle holders*  
*Micro porte aiguilles*  
*Micro porta agujas*  
*Micro porta aghi*



1:1



225 mm – 8 ¾ "	19-650-225	19-651-225
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	<b>almedur</b>	<b>almedur</b>
225 mm – 8 ¾ "	20-650-225	20-651-225

	<b>Titan</b>	<b>Titan</b>
225 mm – 8 ¾ "	21-650-225	21-651-225

**ohne Sperre**  
 without ratchet  
 sans crémaillère  
 sin cremallera  
 senza cremagliera







	<b>Titan</b>	<b>Titan</b>
225 mm – 8 ¾ "	19-652-225	19-653-225
225 mm – 8 ¾ "	21-652-225	21-653-225

**mit Sperre**  
 with ratchet  
 avec crémaillère  
 con cremallera  
 con cremagliera

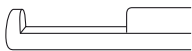
**Laminektomiestanzen**  
*Laminectomy punches*

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglienti per laminectomia*



1:1 	1:1 	1:1 	1:1 	1:1 	1:1 
1 mm	2 mm	3 mm	4 mm	5 mm	6 mm

**FERRIS-SMITH-KERRISON**



	x = 150mm – 6"	x = 180 mm – 7"	x = 200 mm – 8"	x = 230 mm – 9"
1 mm	29-414-001	340-506-010	340-502-010	29-430-001
2 mm	29-414-002	29-420-002	340-502-020	29-430-002
3 mm	29-414-003	29-420-003	340-502-030	29-430-003
4 mm	29-414-004	340-506-040	340-502-040	29-430-004
5 mm	29-414-005	29-420-005	340-502-050	29-430-005
6 mm	29-414-006	340-506-060	340-502-060	29-430-006



1 mm	29-416-001	340-507-010	340-500-010	29-432-001
2 mm	29-416-002	29-422-002	340-500-020	29-432-002
3 mm	29-416-003	29-422-003	340-500-030	29-432-003
4 mm	29-416-004	340-507-040	340-500-040	29-432-004
5 mm	29-416-005	29-422-005	340-500-050	29-432-005
6 mm	29-416-006	340-507-060	340-500-060	29-432-006





### Laminektomiestanzen Laminectomy punches

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglienti per laminectomia*

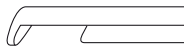


1 mm	2 mm	3 mm	4 mm	5 mm	6 mm
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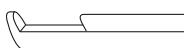
#### FERRIS-SMITH-KERRISON



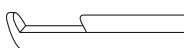
	x = 150mm – 6"	x = 180 mm – 7"	x = 200 mm – 8"	x = 230 mm – 9"
1 mm	29-418-001	340-508-010	340-503-010	29-434-001
2 mm	29-418-002	29-424-002	340-503-020	29-434-002
3 mm	29-418-003	29-424-003	340-503-030	29-434-003
4 mm	29-418-004	340-508-040	340-503-040	29-434-004
5 mm	29-418-005	29-424-005	340-503-050	29-434-005
6 mm	29-418-006	340-508-060	340-503-060	29-434-006



1 mm		340-509-010	340-519-010	
2 mm		340-509-020	340-519-020	29-436-002
3 mm		340-509-030	340-519-030	29-436-003
4 mm		340-509-040	340-519-040	29-436-004
5 mm		340-509-050	340-519-050	29-436-005
6 mm		340-509-060	340-519-060	29-436-006



1 mm		340-511-010		
2 mm		340-511-020		
3 mm		340-511-030		



1 mm		340-513-010		
2 mm		340-513-020		
3 mm		340-513-030		



**Dünne Fußplatte**  
Thin footplate  
Plaque de coupe étroite  
Lámina de punción estrecha  
Battente sottile

**Zerlegbare Laminektomiestanzen**  
*Dismantable laminectomy punches*

*Pinces emporte-pièces démontables à laminectomie*  
*Pinzas cortantes desmontables para laminectomía*  
*Pinze taglienti smontabili per laminectomia*

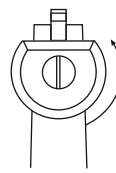
**Einfaches Zerlegen und Montieren**  
easy dismantling and assembling  
Démontage et montage facile  
Sencillo desmontaje y montaje  
Semplicità di smontaggio e assemblaggio

**zerlegbar für leichtes Reinigen und bessere Hygiene**  
dismantable for easy cleaning and better hygiene  
démontable pour nettoyage facile et meilleure hygiène  
desmontable para una óptima limpieza y esterilización  
smontare signifi ca avere maggiore pulizia ed igiene

**Zerlegen**  
Dismantling  
Démontage  
Desmontaje  
Smontaggio



**geschlossene Position**  
closed position  
position fermée  
posición cerrada  
posizione chiuso



**Drehung zum Öffnen**  
turn to open  
position ouverture  
girar para abrir  
giro per aprire

**1. Öffnen der Verschlusscheibe durch Vierteldrehung.**  
opening of the locking nut by a quarter turn.  
Tourner la disque arrière de 90° à gauche pour ouvrir.  
Girar de 90° el disco de cierre.  
Girare di 90° il disco di chiusura.

**2. Den Schlitten (oberes Stanzteil) nach hinten abziehen.**  
Pulling backwards of the upper cutting part.  
Tirer la partie supérieure vers l'arrière.  
Tirar la parte superior del vástago hacia atrás.  
Sfi lare la slitta (parte superiore) tirandola indietro.





### Zerlegbare Laminektomiestanzen

*Dismantable laminectomy punches*

*Pinces emporte-pièces démontables à laminectomie*

*Pinzas cortantes desmontables para laminectomía*

*Pinze taglienti smontabili per laminectomia*

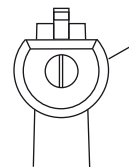
Zuordnung  
relation  
Classement  
Asignación  
Aggiungere

- des oberen Stanzteils zum Basis-Instrument erfolgt durch Nummern-Code.
- the upper cutting part with the basic instrument is related by numerical codes.
- des pièces démontées par un code numérique.
- de las partes desmontadas a través un código numérico.
- unire la slitta e lo strumento base con lo stesso codice di riferimento.

Montieren  
Assembling  
Montage  
Montaje  
Montaggio

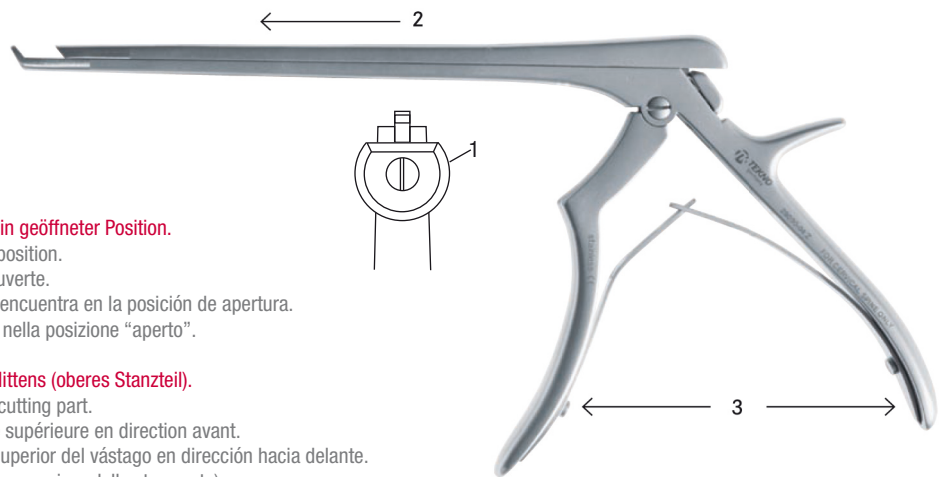
**1. Verschlusscheibe ist in geöffneter Position.**

Locking nut in open position.  
Disque en position ouverte.  
El disco de cierre se encuentra en la posición de apertura.  
Il disco di chiusura è nella posizione "aperto".



**2. Aufschieben des Schlittens (oberes Stanzteil).**

Positioning of upper cutting part.  
Faire glisser la partie supérieure en direction avant.  
Posecionar la parte superior del vástago en dirección hacia delante.  
Inserire la slitta (parte superiore dello strumento).

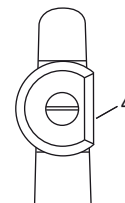


**3. Zangenmaul schliessen durch Zusammendrücken der beiden Griffenden.**

closing of punch jaws by pressing both handles.  
Serrer la poignée.  
Cerrar el bocado (punta) de la pinza comprimiendo el mango.  
Chiudere il morso della pinza premendo il manico.

**4. Verriegelung durch Verschlusschraube (eine Vierteldrehung nachrechts).**

interlocking of locking screw by a quarter turn to the right side.  
Pour fermer tourner la disque arrière de 90° à droite.  
Bloquear la pinza girando el disco de cierre de 90°.  
Chiudere la pinza con un giro di 90° del disco di chiusura.



Einsatzbereit  
ready for use  
Pince prêt pour l'utilisation  
La pinza está lista para su uso  
Lo strumento è pronto



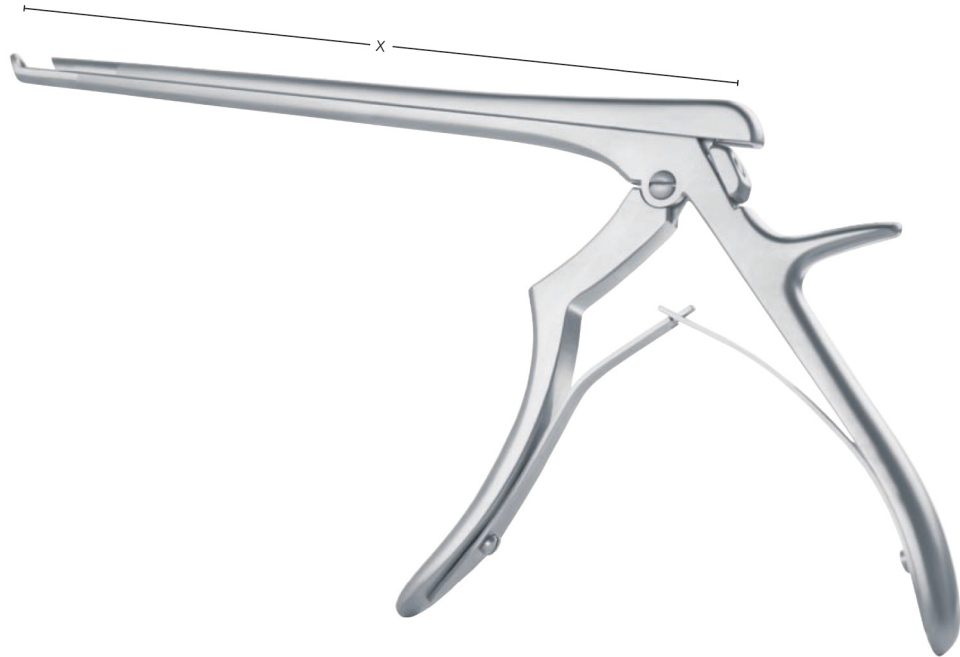
**Zerlegbare Laminektomiestanzen**




*Dismantable laminectomy punches*

*Pinces emporte-pièces démontables à laminectomie*

*Pinzas cortantes desmontables para laminectomía*

*Pinze taglienti smontabili per laminectomia*



1:1 	1:1 	1:1 	1:1 	1:1 	1:1 
1 mm	2 mm	3 mm	4 mm	5 mm	6 mm

**FERRIS-SMITH-KERRISON**



	x = 180 mm – 7"	x = 200 mm – 8"	x = 230 mm – 9"
1 mm	340-506-010Z	340-502-010Z	29-430-001Z
2 mm	29-420-002Z	340-502-020Z	29-430-002Z
3 mm	29-420-003Z	340-502-030Z	29-430-003Z
4 mm	340-506-040Z	340-502-040Z	29-430-004Z
5 mm	29-420-005Z	340-502-050Z	29-430-005Z
6 mm	340-506-060Z	340-502-060Z	29-430-006Z



1 mm	340-507-010Z	340-500-010Z	29-432-001Z
2 mm	29-422-002Z	340-500-020Z	29-432-002Z
3 mm	29-422-003Z	340-500-030Z	29-432-003Z
4 mm	340-507-040Z	340-500-040Z	29-432-004Z
5 mm	29-422-005Z	340-500-050Z	29-432-005Z
6 mm	340-507-060Z	340-500-060Z	29-432-006Z



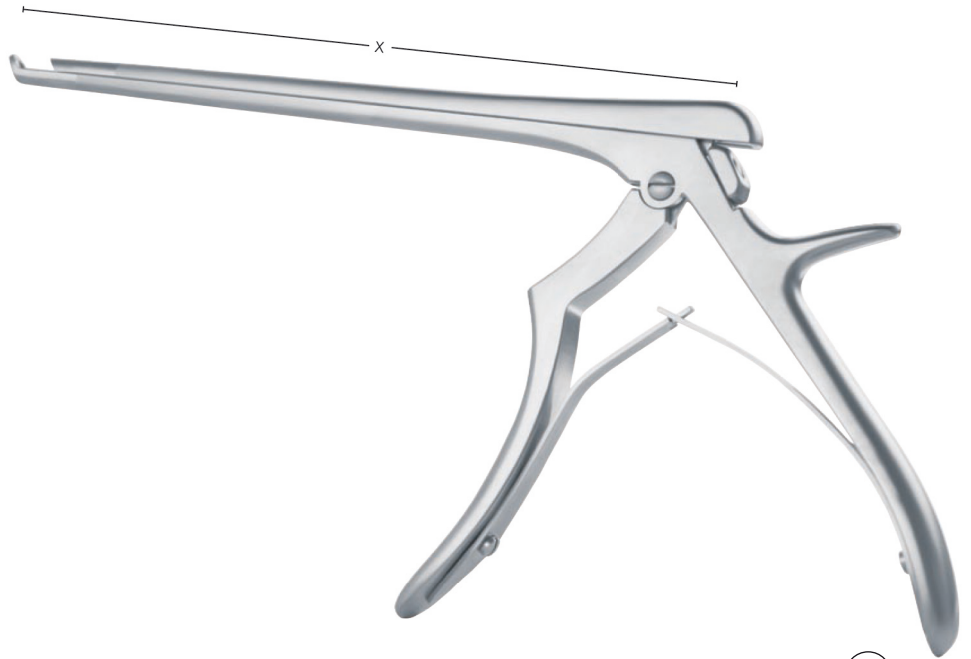
### Zerlegbare Laminektomiestanzen

*Dismantable laminectomy punches*

*Pinces emporte-pièces démontables à laminectomie*

*Pinzas cortantes desmontables para laminectomía*

*Pinze taglianti smontabili per laminectomia*

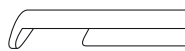


1 mm	2 mm	3 mm	4 mm	5 mm	6 mm
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#### FERRIS-SMITH-KERRISON



	x = 180 mm - 7 "	x = 200 mm - 8 "	x = 230 mm - 9 "
1 mm	340-508-010Z	340-503-010Z	29-434-001Z
2 mm	29-424-002Z	340-503-020Z	29-434-002Z
3 mm	29-424-003Z	340-503-030Z	29-434-003Z
4 mm	340-508-040Z	340-503-040Z	29-434-004Z
5 mm	29-424-005Z	340-503-050Z	29-434-005Z
6 mm	340-508-060Z	340-503-060Z	29-434-006Z



1 mm	340-509-010Z	340-519-010Z	
2 mm	340-509-020Z	340-519-020Z	29-436-002Z
3 mm	340-509-030Z	340-519-030Z	29-436-003Z
4 mm	340-509-040Z	340-519-040Z	29-436-004Z
5 mm	340-509-050Z	340-519-050Z	29-436-005Z
6 mm	340-509-060Z	340-519-060Z	29-436-006Z



1 mm	340-511-010Z		
2 mm	340-511-020Z		
3 mm	340-511-030Z		



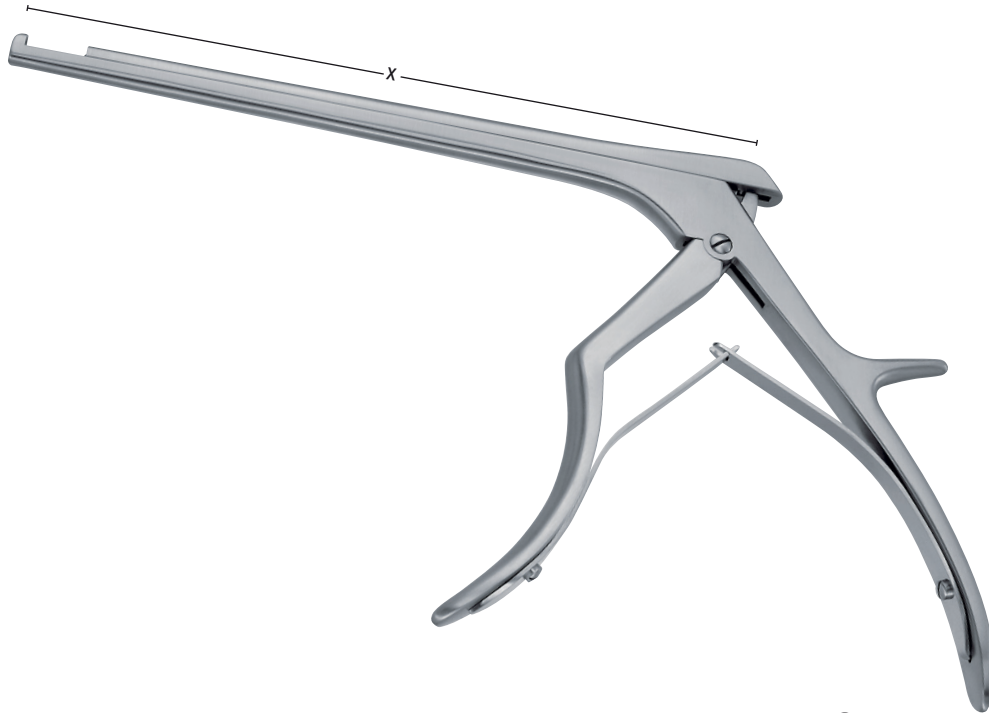
1 mm	340-513-010Z		
2 mm	340-513-020Z		
3 mm	340-513-030Z		



**Dünne Fußplatte**  
Thin footplate  
Plaque de coupe étroite  
Lámina de punción estrecha  
Battente sottile

**Laminektomiestanzen**  
*Laminectomy punches*

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglienti per laminectomia*

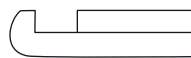


1:1 

1:1 

3 mm	5 mm
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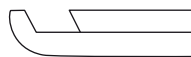
**COLCLOUGH**



	$x = 150 \text{ mm} - 6''$	$x = 200 \text{ mm} - 8''$
3 mm	29-320-150	29-320-200
5 mm	29-322-150	29-322-200



3 mm	29-330-150	29-330-200
5 mm	29-332-150	29-332-200

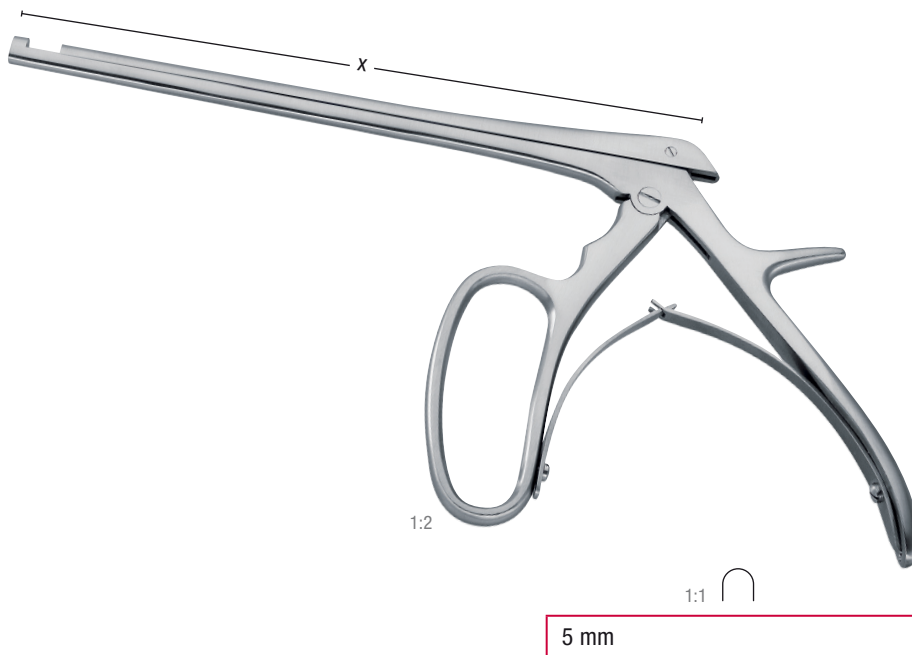


3 mm	29-380-150	29-380-200
5 mm	29-382-150	29-382-200

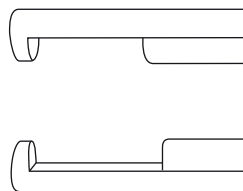


**Laminektomiestanzen**  
*Laminectomy punches*

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglianti per laminectomia*



**FERRIS-SMITH-KERRISON**



	$x = 180 \text{ mm} - 7''$
5 mm	29-252-050

5 mm	29-250-050
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**Laminektomiestanzen**  
*Laminectomy punches*

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglienti per laminectomia*



1:1

**CUSHING**

	2 mm x 10 mm	2 mm x 10 mm	2 mm x 10 mm
x = 130 mm – 5"	29-730-130	29-733-130	29-735-130
x = 180 mm – 7"	29-730-180	29-733-180	29-735-180
x = 220 mm – 8¾"	29-730-220	29-733-220	29-735-220

1:1

**LOVE-GRUENWALD**

	3 mm x 10 mm	3 mm x 10 mm	3 mm x 10 mm
x = 130 mm – 5"	29-770-130	29-773-130	29-775-130
x = 150 mm – 6"	29-770-150	29-773-150	29-775-150
x = 180 mm – 7"	29-770-180	29-773-180	29-775-180

1:1

**SPURLING**

	4 mm x 10 mm	4 mm x 10 mm	4 mm x 10 mm
x = 150 mm – 6"	29-820-150	29-823-150	29-825-150
x = 180 mm – 7"	29-820-180	29-823-180	29-825-180
x = 230 mm – 9"	29-820-230	29-823-230	29-825-230

1:1

**CLOWARD**

	6 mm x 10 mm
x = 180 mm – 7"	29-830-180

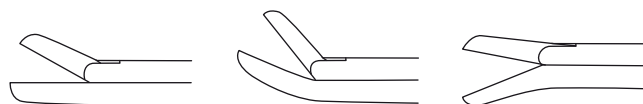




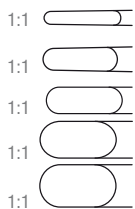
### Laminektomiestanzen

Laminectomy punches

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglienti per laminectomia*



#### FERRIS-SMITH



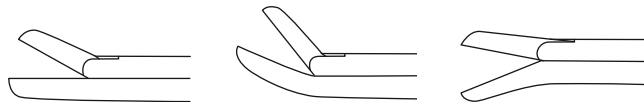
	x = 180 mm – 7"	x = 180 mm – 7"	x = 180 mm – 7"
2 mm x 10 mm	29-720-002	340-451-020	340-453-020
3 mm x 10 mm	29-720-003	340-451-030	340-453-030
4 mm x 10 mm	29-720-004	340-451-040	340-453-040
5 mm x 10 mm	29-720-005	340-451-050	340-453-050
6 mm x 10 mm	29-720-006	340-451-060	340-453-060







**Andere Längen und Ausführungen sind auf Anfrage lieferbar.**  
 Other lengths and executions are available upon request.  
 Autres longueurs et exécutions sont disponibles sur demande.  
 Otras longitudes y dimensiones son disponibles según demanda.  
 Altre lunghezze e modelli fornibili a richiesta.

**Laminektomiestanzen**  
*Laminectomy punches*

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglianti per laminectomia*



**CASPAR**

		x = 155 mm – 6"	x = 155 mm – 6"	x = 155 mm – 6"
1:1 	2 mm	340-466-020	340-467-020	340-469-020
1:1 	3 mm	340-466-030	340-467-030	340-469-030
1:1 	4 mm	340-466-040	340-467-040	340-469-040
1:1 	5 mm	340-466-050		



**Laminektomiestanzen**  
*Laminectomy punches*

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglienti per laminectomia*



**OLDBERG**

$x = 180 \text{ mm} - 7''$	3.5 mm Ø	6.0 mm Ø
	29-912-035	29-912-065



**SCHLESINGER**

	2 mm x 10 mm	3 mm x 10 mm	4 mm x 10 mm
	$x = 125 \text{ mm} - 5''$	$x = 125 \text{ mm} - 5''$	$x = 125 \text{ mm} - 5''$
190 mm - 7½''	424-994-020	424-994-030	424-994-040

gezahnt  
 saw edge  
 dentelé  
 dentada  
 dentata

**Laminektomiestanzen**  
*Laminectomy punches*

*Pinces emporte-pièces à laminectomie*  
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*Pinze taglienti per laminectomia*



**Maul gefenestert und gezahnt**  
Jaw fenestrated and serrated  
Mors fenêtré et dentelé  
Boca con orificio y dentada  
Morso finestrato e dentellato



**CASPAR**

	x = 140 mm – 5 ½"	x = 160 mm – 6 ¼"	x = 185 mm – 7 ¼"
2 mm x 12 mm	340-456-200	340-460-200	340-464-200
3 mm x 12 mm	340-456-300	340-460-300	340-464-300
4 mm x 14 mm	340-456-400	340-460-400	340-464-400
5 mm x 14 mm	340-456-500	340-460-500	340-464-500
6 mm x 16 mm	340-456-600	340-460-600	340-464-600



	x = 140 mm – 5 ½"	x = 160 mm – 6 ¼"	x = 185 mm – 7 ¼"
2 mm x 12 mm	340-457-200	340-461-200	
2.5 mm x 12 mm	340-457-250	340-461-250	340-465-300
4 mm x 14 mm	340-457-400	340-461-400	340-465-400
5 mm x 14 mm	340-457-500	340-461-500	340-465-500



	x = 140 mm – 5 ½"	x = 160 mm – 6 ¼"	x = 185 mm – 7 ¼"
2 mm x 12 mm	340-459-200	340-463-200	
3 mm x 12 mm	340-459-250	340-463-250	340-471-300
4 mm x 14 mm	340-459-400	340-463-400	340-471-400



### Laminektomiestanzen

#### Laminectomy punches

*Pinces emporte-pièces à laminectomie*  
*Pinzas cortantes para laminectomía*  
*Pinze taglianti per laminectomia*



**WEIL-  
BLAKESLEY**

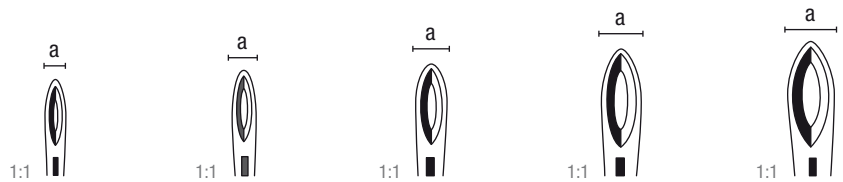
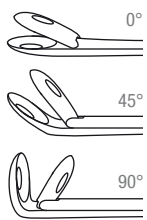


	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5
	a = 3.0 mm	a = 3.5 mm	a = 4.5 mm	a = 5.0 mm	a = 5.5 mm

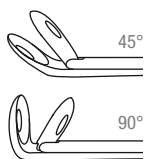


x = 120 mm – 4 3/4"	46-321-001	46-321-002	46-321-003	46-321-004	46-321-005
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x = 120 mm – 4 3/4"	46-319-001	46-319-002	46-319-003	46-319-004	
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x = 120 mm – 4 3/4"	46-317-001	46-317-002	46-317-003		
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	Fig. 1	Fig. 2	Fig. 3	Fig. 4	Fig. 5
	a = 3.0 mm	a = 3.5 mm	a = 4.5 mm	a = 5.0 mm	a = 5.5 mm



x = 180 mm – 7"	346-223-010	346-223-020	346-223-030	346-223-040	346-223-050
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x = 180 mm – 7"	346-225-010	346-225-020	346-225-030	346-225-040	
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