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Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
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Владимир (4922)49-43-18
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Вологда (8172)26-41-59
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Ижевск (3412)26-03-58
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Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
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Красноярск (391)204-63-61
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Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
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Оренбург (3532)37-68-04
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Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
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Технические характеристики на системы клипсирования аневризмы, инструменты для нейрохирургии YASARGIL, Phynox, Vario Clip, XS, Aesculap Aeos, MIETHKE, CranioFix, KAIRison, KERRISON, Noir, FERGUSSON, FUKUSHIMA, RAABE, LEYLA, RANEY компании B. BRAUN

Виды товаров: системы зажимов, титановые зажимы, стандартные титановые зажимы с фенестрацией, клипсы для аневризмы, клипсы «Собачьи уши», титановые усиливающие зажимы, Т-образные зажимы, мини-зажимы, титановые аппликаторы, клипсы-аппликаторы, зажимы для удаления щипцов, ультракороткие клипсы, регулировочные ключи, системы хранения зажимов, платформы цифрового хирургического микроскопа, системы черепной фиксации, системы нейропокрытия, рассасывающиеся системы зажимов для беспрепятственного роста черепа, костные пуансоны, аспирационные канюли, шпатели для головного мозга, ретракторы, системы зажимов для скальпа и др.

Aesculap® YASARGIL Aneurysm Clip System
Titanium Standard Clips

TITANIUM STANDARD

TEMPORARY

Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FT240T	7.0	6.2	1.08	110
FT250T	9.0	7.0	0.88	90
FT260T	11.0	7.8	0.88	90
FT280T	15.0	9.2	0.88	90
FT292T	17.5	10.6	0.88	90
FT290T	20.0	11.4	1.08	110
FT242T	6.5	6.0	1.08	110
FT252T	8.3	6.8	0.88	90
FT262T	10.2	7.5	0.88	90
FT282T	13.7	8.7	1.08	110
FT286T	15.3	9.8	1.08	110
FT244T	5.4	5.5	1.08	110
FT254T	6.4	6.1	1.08	110

PERMANENT

Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FT740T	7.0	6.2	1.47	150
FT750T	9.0	7.0	1.77	180
FT760T	11.0	7.8	1.77	180
FT780D	15.0	9.2	1.96	200
FT792D	17.5	10.6	1.96	200
FT790D	20.0	11.4	1.96	200
FT742T	6.5	6.0	1.47	150
FT752T	8.3	6.8	1.77	180
FT762T	10.2	7.5	1.77	180
FT782T	13.7	8.7	1.96	200
FT786T	15.3	9.8	1.77	180
FT744T	5.4	5.5	1.47	150
FT754T	6.4	6.1	1.77	180

- MRI safety, non- ferromagnetic, tested up to 3 Tesla
- Minor artifacts in CT and MRI
- Color coding with blue spring (Standard clip) and golden or silver blades (temporary or permanent clip respectively)
- Sterile packaging

TEMPORARY

Art. No.		Blade length mm	Maximal opening mm	Closing force N	g
FT264T		8.0	6.5	1.08	110
FT284T		10.3	7.4	1.08	110
FT323T		7.4	5.4	1.08	110
FT324T		8.4	5.8	1.08	110
FT325T		10.5	6.2	1.08	110
FT270T	Height of step 2.5 mm	5.0	8.0	1.08	110
FT271T	Height of step 3.5 mm	5.0	8.0	1.08	110
FT272T	Height of step 4.5 mm	5.0	8.0	1.08	110
FT248T		7.0	7.9	0.88	90
FT258T		9.0	8.7	0.88	90
FT259T		12.0	10.2	0.88	90
FT103T		6.1	6.5	1.08	110
FT113T		8.0	6.2	1.08	110

PERMANENT

Art. No.		Blade length mm	Maximal opening mm	Closing force N	g
FT764T		8.0	6.5	1.77	180
FT784T		10.3	7.4	1.96	200
FT823T		7.4	5.4	1.77	180
FT824T		8.4	5.8	1.77	180
FT825T		10.5	6.2	1.77	180
FT770T	Height of step 2.5 mm	5.0	8.0	1.96	200
FT771T	Height of step 3.5 mm	5.0	8.0	1.96	200
FT772T	Height of step 4.5 mm	5.0	8.0	1.96	200
FT748T		7.0	7.9	1.96	200
FT758T		9.0	8.7	1.96	200
FT759T		12.0	10.2	1.96	200
FT603T		6.1	6.5	1.96	200
FT613T		8.0	6.2	1.96	200

TITANIUM STANDARD

Aesculap® YASARGIL Aneurysm Clip System
Titanium Standard Clips

TITANIUM STANDARD

TEMPORARY

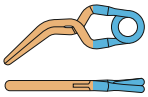
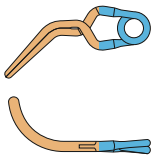
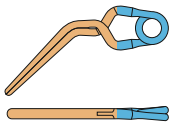
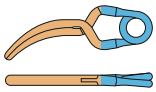
Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FT310T	9.0	6.5	1.08	110
FT123T	10.6	7.8	1.08	110
FT263T	11.8	8.4	1.08	110
FT319T	5.0	5.6	1.28	130
FT320T	7.0	4.5	1.28	130
FT322T	10.0	5.6	1.28	130
FT350T	6.7	5.4	1.28	130
FT351T	9.0	5.6	1.28	130
FT330T	7.0	7.2	0.88	90
FT332T	9.3	7.2	0.88	90
FT333T	11.3	8.2	0.88	90

PERMANENT

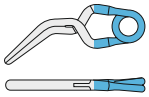
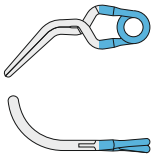
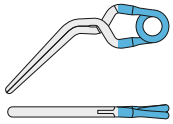
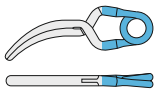
Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FT810T	9.0	6.5	1.96	200
FT623T	10.6	7.8	1.96	200
FT763T	11.8	8.4	1.67	170
FT819T	5.0	5.6	1.96	200
FT820T	7.0	4.5	1.96	200
FT822T	10.0	5.6	1.96	200
FT850T	6.7	5.4	1.96	200
FT851T	9.0	5.6	1.96	200
FT830T	7.0	7.2	1.96	200
FT832T	9.3	7.2	1.96	200
FT833T	11.3	8.2	1.96	200

TITANIUM STANDARD

TEMPORARY

Art. No.		Blade length mm	Maximal opening mm	Closing force N	g
FT246T		7.0	5.7	0.88	90
FT273T		7.8	5.3	0.88	90
FT261T		11.4	8.0	0.88	90
FT247T		8.6	7.0	0.88	90

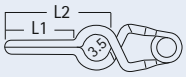
PERMANENT

Art. No.		Blade length mm	Maximal opening mm	Closing force N	g
FT746T		7.0	5.7	1.96	200
FT773T		7.8	5.5	1.77	180
FT761T		11.4	8.0	1.96	200
FT747T		8.6	7.0	1.77	180

Aesculap® YASARGIL Aneurysm Clip System
Titanium Standard Clips with Fenestration

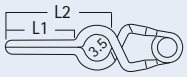
TITANIUM STANDARD

TEMPORARY



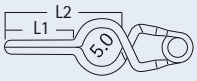
Art. No.	Diameter of fenestration 3.5 mm			
	Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FT097T	3/8.1	7.5	1.08	110
FT098T	4/9.1	7.4	1.08	110
FT099T	5/10.1	7.4	1.08	110
FT100T	6/11.1	7.4	1.08	110
FT110T	9/14.1	8.4	1.08	110
FT120T	12/17	9.6	1.08	110
FT102T	5/7.8	5.8	1.08	110
FT112T	7.5/9.4	6.5	1.08	110
FT122T	10/11	7.2	1.08	110
FT104T	5/5.1	4.9	1.08	110
FT114T	7.5/5.1	4.9	1.08	110

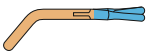
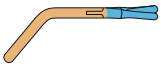
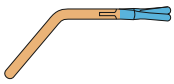
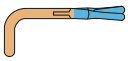
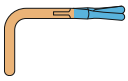
PERMANENT



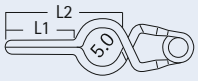
Art. No.	Diameter of fenestration 3.5 mm			
	Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FT597T	3/8.1	7.5	1.47	150
FT598T	4/9.1	7.4	1.47	150
FT599T	5/10.1	7.4	1.47	150
FT600T	6/11.1	7.4	1.47	150
FT610T	9/14.1	8.4	1.47	150
FT620T	12/17	9.6	1.77	180
FT602T	5/7.8	5.8	1.47	150
FT612T	7.5/9.4	6.5	1.47	150
FT622T	10/11	7.2	1.77	180
FT604T	5/5.1	4.9	1.47	150
FT614T	7.5/5.1	4.9	1.47	150

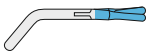
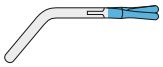
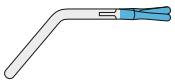
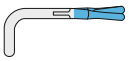
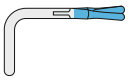
TEMPORARY



Art. No.		Diameter of fenestration 5 mm			
		Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FT137T		3/9.8	7.4	1.08	110
FT138T		4/10.8	7.4	1.08	110
FT139T		5/11.8	7.4	1.08	110
FT140T		6/12.7	7.9	1.08	110
FT150T		9/15.7	9.1	1.08	110
FT142T		5/9	6.5	1.08	110
FT152T		7.5/10.6	7.2	1.08	110
FT162T		10/12.2	7.8	1.08	110
FT144T		5/6.7	5.5	1.08	110
FT154T		7.5/6.7	5.5	1.08	110

PERMANENT



Art. No.		Diameter of fenestration 5 mm			
		Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FT637T		3/9.8	7.4	1.47	150
FT638T		4/10.8	7.4	1.47	150
FT639T		5/11.8	7.4	1.47	150
FT640T		6/12.7	7.9	1.47	150
FT650T		9/15.7	9.1	1.47	150
FT642T		5/9.4	6.5	1.47	150
FT652T		7.5/10.6	7.2	1.47	150
FT662T		10/12.2	7.8	1.77	180
FT644T		5/6.7	5.5	1.47	150
FT654T		7.5/6.7	5.5	1.47	150

TITANIUM STANDARD

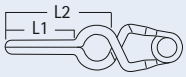
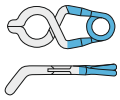
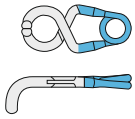
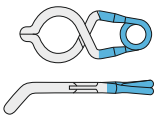
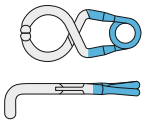
Aesculap® YASARGIL Aneurysm Clip System
ULTRA SHORT FENESTRATED Aneurysm Clip

TITANIUM STANDARD

"Dog-ear"-Clips

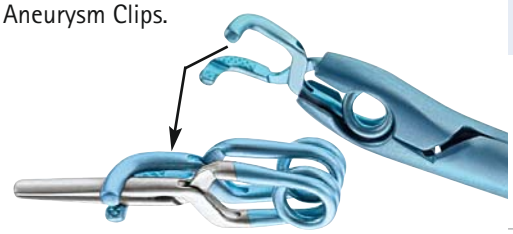
Aneurysm clips with a particularly short blade length (3 mm) and fenestration serve for the treatment of minor aneurysms (e.g. "dog-ear-aneurysms").

PERMANENT

Art. No.		Blade length mm L1/L2	Maximal opening mm	Closing force N	Diam. of fenestration mm
FT902T		3.0/6.3	5.8	1.47	3.5
FT904T		3.0/5.1	4.9	1.47	3.5
FT942T		3.0/8.1	6.0	1.47	5.0
FT944T		3.0/6.7	5.5	1.47	5.0

Titanium Reinforcing Clip

Titanium reinforcing clip to increase the closing force of YASARGIL Titanium Standard Aneurysm Clips.



PERMANENT

Art. No.	
FT900T	

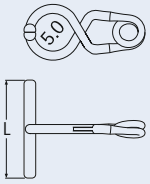
Titanium T-Bar Clips acc. to Kopitnik

Aneurysm clip with a unique design

The blades of the T-Bar Clip are oriented in a 90°, 60° or 45° angle to the axis of the spring plane resulting in a T-like clip form. The unique shape opens up new options for the treatment of complicated cerebral aneurysms. The spring type is identical to the existing and proven standard YASARGIL Aneurysm Clip with a 5 mm diameter fenestration.

PERMANENT

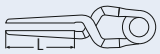
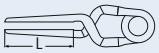
TITANIUM T-BAR CLIP



Art. No.	Diameter of fenestration 5 mm				
	Blade length mm	Angle	Maximal opening mm	Closing force N	g
FT852T	5.0	45°	5.5	1.47	150
FT853T	9.0	45°	5.5	1.47	150
FT854T	5.0	90°	5.5	1.47	150
FT855T	9.0	90°	5.5	1.47	150
FT856T	13.0	90°	5.5	1.77	180
FT864T	9.0	90°	5.5	1.47	150
FT865T	13.0	90°	5.5	1.77	180
FT857T	8.9	90°	5.5	1.47	150
FT858T	9.0	90°	5.5	1.47	150
FT859T	13.0	60°	5.5	1.77	180
FT860T	13.0	60°	5.5	1.77	180

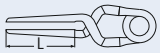
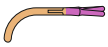
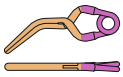
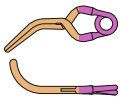
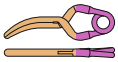
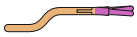
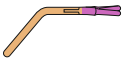
Aesculap® YASARGIL Aneurysm Clip System
Titanium Mini Clips

TITANIUM MINI

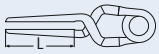
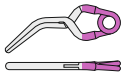
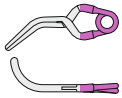
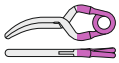
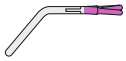
TEMPORARY						PERMANENT					
Art. No.		Blade length mm	Maximal opening mm	Closing force N	Closing force g	Art. No.		Blade length mm	Maximal opening mm	Closing force N	Closing force g
FT180T		3.0	3.3	0.88	90	FT680T		3.0	3.3	1.08	110
FT190T		5.0	4.0	0.69	70	FT690T		5.0	4.0	1.08	110
FT200T		3.0	3.3	0.88	90	FT700T		3.0	3.3	1.08	110
FT210T		5.0	4.0	0.69	70	FT710T		5.0	4.0	1.08	110
FT220T		7.0	4.6	0.69	70	FT720T		7.0	4.6	1.08	110
FT182T		2.8	3.2	0.88	90	FT682T		2.8	3.2	1.08	110
FT194T		4.0	3.6	0.78	80	FT694T		4.0	3.6	1.08	110
FT192T		4.7	3.8	0.69	70	FT692T		4.7	3.8	1.08	110
FT211T		4.0	3.6	0.78	80	FT711T		4.0	3.6	1.08	110
FT212T		4.7	3.8	0.69	70	FT712T		4.7	3.8	1.08	110
FT213T		4.0	3.6	0.78	80	FT713T		4.0	3.6	1.08	110
FT226T		5.2	4.0	0.69	70	FT726T		5.2	4.0	1.08	110
FT222T		6.6	4.4	0.69	70	FT722T		6.6	4.4	1.08	110

- MRI safety, non- ferromagnetic, tested up to 3 Tesla
- Minor artifacts in CT and MRI
- Color coding with violet spring (Mini clip) and golden or silver blades (temporary or permanent clip respectively)
- Sterile packaging

TEMPORARY

Art. No.		Blade length mm	Maximal opening mm	Closing force N	Closing force g
FT214T		3.9	3.5	0.78	80
FT224T		5.0	4.0	0.69	70
FT216T		5.0	3.5	0.69	70
FT307T		4.7	4.0	0.69	70
FT217T		6.3	6.0	0.69	70
FT227T		4.0	7.0	0.69	70
FT228T		7.0	5.7	0.69	70
FT306T		7.0	4.5	0.69	70

PERMANENT

Art. No.		Blade length mm	Maximal opening mm	Closing force N	Closing force g
FT714T		3.9	3.5	1.08	110
FT724T		5.0	4.0	1.08	110
FT716T		5.0	3.5	1.08	110
FT807T		4.7	4.0	1.08	110
FT717T		6.3	6.0	1.08	110
FT727T		4.0	7.0	1.08	110
FT728D		7.0	5.7	1.08	110
FT806T		7.0	4.5	1.08	110

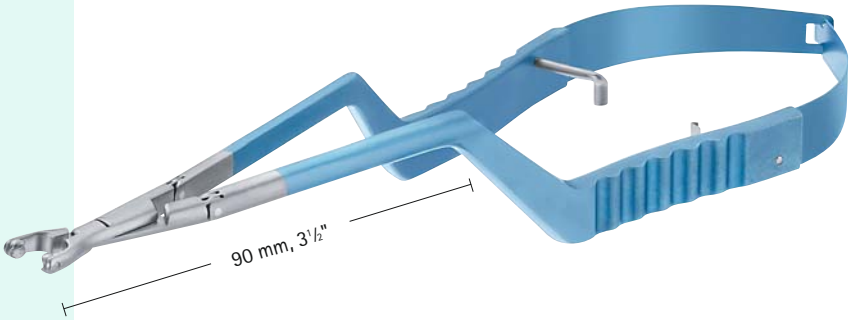
TITANIUM MINI

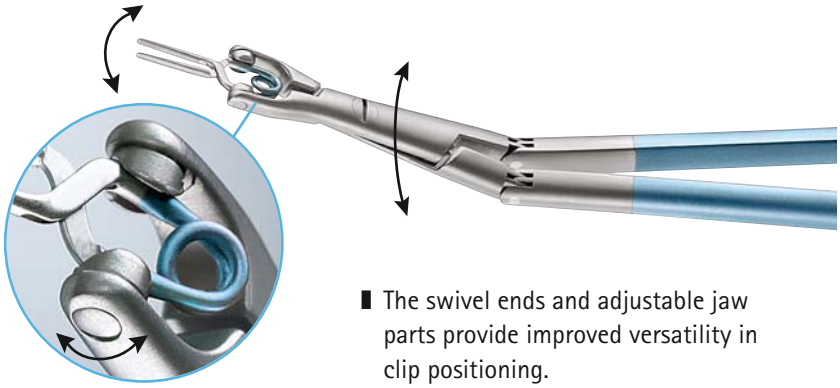
Aesculap® YASARGIL Aneurysm Clip System
Titanium Vario Clip Applier

- Color coding blue for Standard and violet for Mini clips

TITANIUM APPLYING FORCEPS

STANDARD	MINI
	
FT412T	FT402T



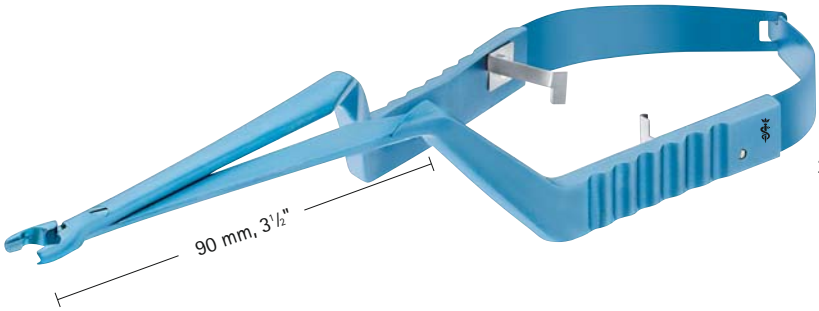
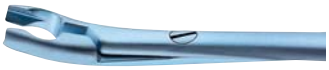
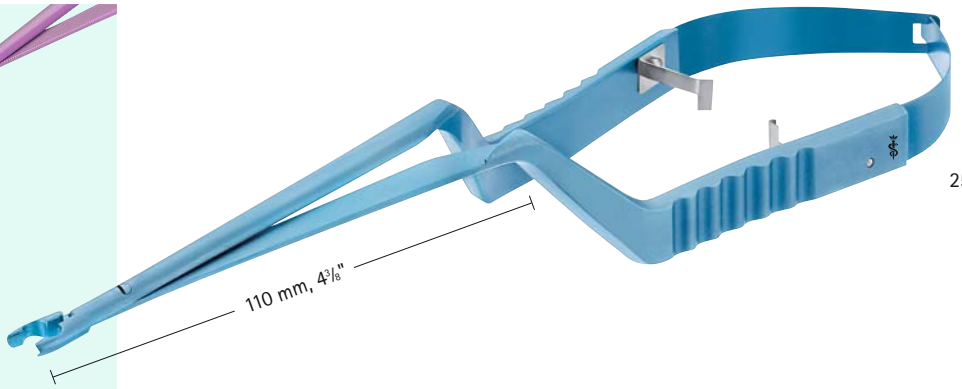


- The swivel ends and adjustable jaw parts provide improved versatility in clip positioning.

FT402800 — Adjusting Key

- Adjusting Key for Vario Clip Applier for setting the swivel at an angle

Titanium YASARGIL Clip Applier

STANDARD	MINI		
 FT480T	 FT470T	 50 mm, 2"	180 mm, 7"
 FT482T	 FT472T	 90 mm, 3½" 	220 mm, 8¾" straight
FT485T	FT475T		15° angled
 FT484T	 FT474T	 110 mm, 4⅜" 	250 mm, 9⅞" straight
FT487T	FT477T		15° angled

Aesculap® YASARGIL Aneurysm Clip System
Titanium XS Clip Applier

- Distinction between Standard and Mini appliers through label inside the handle

TITANIUM APPLYING FORCEPS

STANDARD	MINI

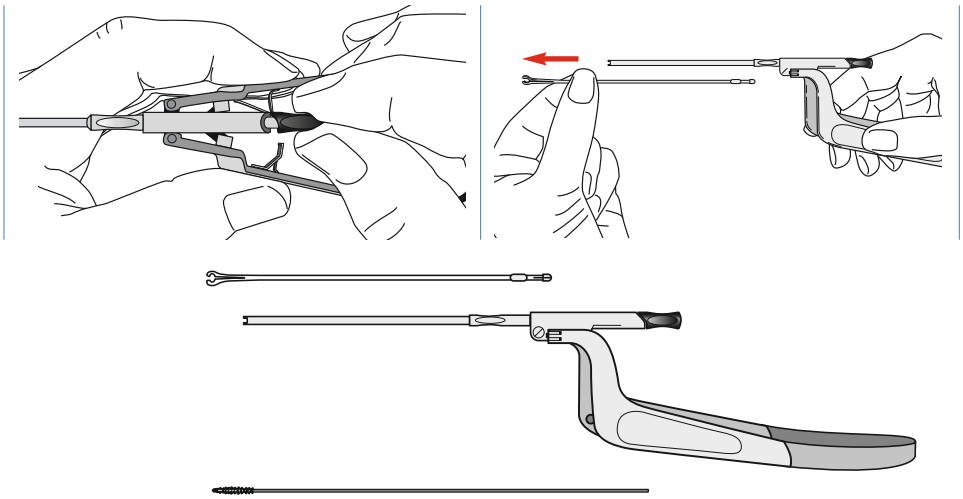
- 360° rotation
- Suitable for narrow approach

FT495T **FT490T**

FT496T **FT491T**

Disassembly
The XS Applier is detachable into 2 parts for thorough cleaning.

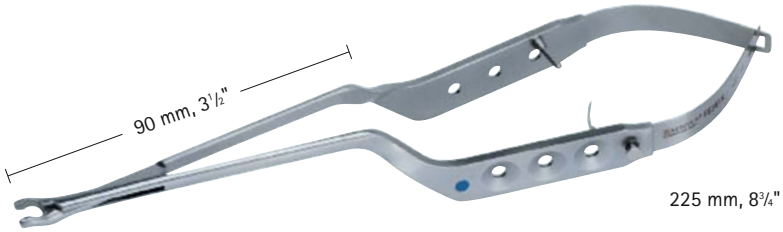
A cleaning brush is provided free of charge with every applier.



Double Bayonet Clip Applier

- Color coding is realized as a colored button in the handle area (● = Standard; ● = Mini)

STANDARD	MINI	
		
FT501T	FT511T	with latch
FT505T	FT515T	without latch



		
FT502T	FT512T	with latch
FT506T	FT516T	without latch

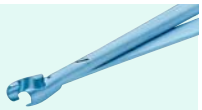
- The Double Bayonet Clip Applier has an additional bayonet shape at the jaw.

- This leads to an optimized view of the clip.

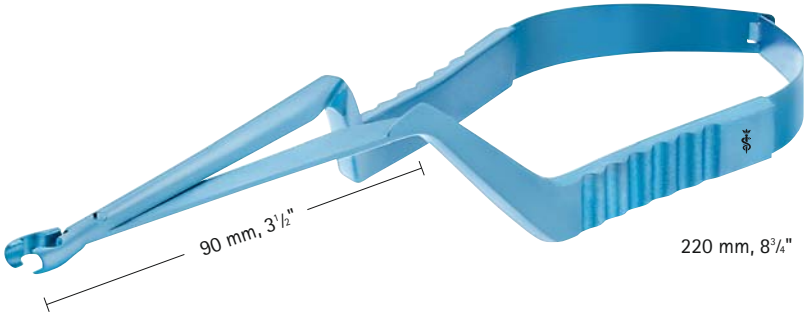
Aesculap® YASARGIL Aneurysm Clip System
Titanium Clip Removing Forceps

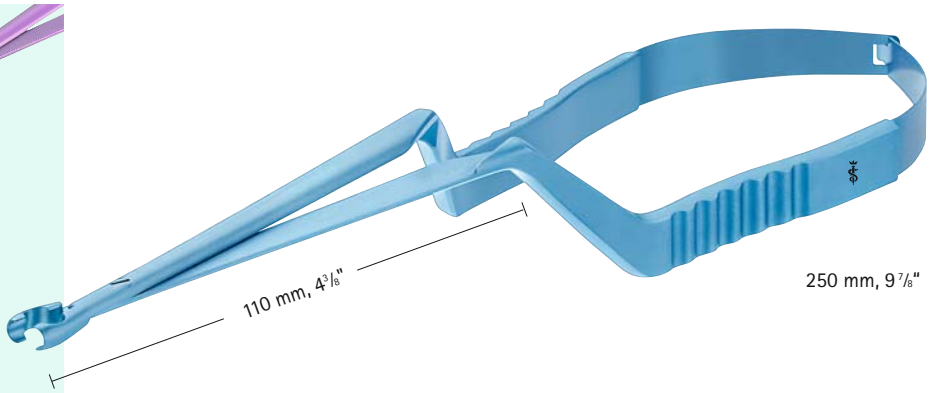
- Color coding blue for Standard and violet for Mini clips

TITANIUM REMOVING FORCEPS

STANDARD	MINI
	
FT082T	FT072T
	
FT083T	FT073T

- With special jaws for safe removal of an applied clip





YASARGIL Phynox Clips and Appliers

Aesculap® YASARGIL Aneurysm Clip System
Phynox Standard Clips

PHYNOX STANDARD

PERMANENT

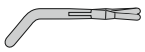
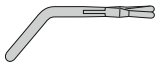
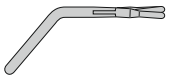
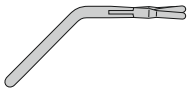
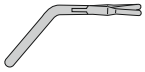
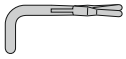
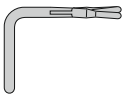
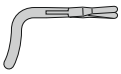
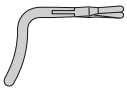
Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FE740K	7.0	6.2	1.47	150
FE750K	9.0	7.0	1.77	180
FE760K	11.0	7.8	1.77	180
FE780K	15.0	9.2	1.96	200
FE792K	17.5	10.6	1.96	200
FE790K	20.0	11.4	1.96	200
FE840K	25.0	13.3	1.77	180
FE742K	6.5	6.0	1.47	150
FE752K	8.3	6.8	1.77	180
FE762K	10.2	7.5	1.77	180
FE782K	13.7	8.7	1.96	200
FE786K	15.3	9.8	1.96	200
FE744K	5.4	5.5	1.47	150

PERMANENT

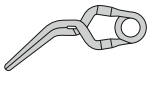
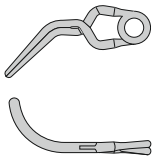
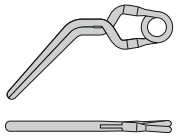
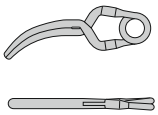
Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FE754K	6.4	6.1	1.77	180
FE764K	8.0	6.5	1.77	180
FE784K	10.3	7.4	1.96	200
FE823K	7.4	5.4	1.77	180
FE824K	8.4	5.8	1.77	180
FE825K	10.5	6.2	1.77	180
FE748K	7.0	7.9	1.96	200
FE758K	9.0	8.7	1.96	200
FE759K	12.0	10.2	1.96	200
FE798K	20.0	13.0	1.77	180
FE770K	5.0	8.0	1.96	200
FE771K	5.0	8.0	1.96	200
FE772K	5.0	8.0	1.96	200

- MRI safety, non-ferromagnetic, tested up to 3 Tesla
- Color coding with silver spring and blades (permanent clip)
- Sterile packaging

PERMANENT

Art. No.		Blade length mm	Maximal opening mm	Closing force N	g
FE603K		6.1	6.5	1.96	200
FE613K		8.0	6.2	1.96	200
FE623K		10.6	7.8	1.96	200
FE763K		11.8	8.4	1.96	200
FE810K		9.0	6.5	1.96	200
FE819K		5.0	5.6	1.96	200
FE820K		7.0	4.5	1.96	200
FE822K		10.0	5.6	1.96	200
FE850K		6.7	5.4	1.96	200
FE851K		9.0	5.6	1.96	200
FE830K		7.0	7.2	1.96	200
FE832K		9.3	7.2	1.96	200
FE833K		11.3	8.2	1.96	200

PERMANENT

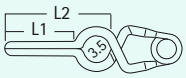
Art. No.		Blade length mm	Maximal opening mm	Closing Force N	g
FE746K		7.0	5.7	1.96	200
FE773K		7.8	6.5	1.77	180
FE761K		11.4	8.0	1.96	200
FE747K		8.6	7.0	1.77	180

PHYNOX STANDARD

Aesculap® YASARGIL Aneurysm Clip System
Phynox Standard Clips with Fenestration

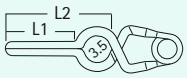
PHYNOX STANDARD

PERMANENT



Art. No.	Diameter of fenestration 3.5 mm			
	Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FE597K	3/8.1	6.5	1.47	150
FE598K	4/9.1	6.6	1.47	150
FE599K	5/10.1	7.0	1.47	150
FE600K	6/11	7.4	1.47	150
FE610K	9/14	8.4	1.47	150
FE620K	12/17	9.6	1.77	180

PERMANENT



Art. No.	Diameter of fenestration 3.5 mm			
	Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FE602K	5/7.3	5.8	1.47	150
FE612K	7.5/8.9	6.5	1.47	150
FE622K	10/10.5	7.2	1.77	180
FE604K	5/4.9	4.9	1.47	150
FE614K	7.5/4.9	4.9	1.47	150
FE624K	10/4.9	4.9	1.77	180

PERMANENT

Art. No.	Diameter of fenestration 5 mm			
	Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FE637K	3/9.8	6.7	1.47	150
FE638K	4/10.8	7.1	1.47	150
FE639K	5/11.8	7.5	1.47	150
FE640K	6/12.7	7.9	1.47	150
FE650K	9/15.7	9.1	1.47	150
FE660K	12/18.7	10.3	1.77	180
FE642K	5/9	6.5	1.47	150
FE652K	7.5/10.6	7.2	1.47	150
FE662K	10/12.2	7.8	1.77	180

PERMANENT

Art. No.	Diameter of fenestration 5 mm			
	Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FE644K	5/6.4	5.5	1.47	150
FE654K	7.5/6.4	5.5	1.47	150
FE664K	10/6.4	5.5	1.77	180
FE648K	5/15.2	7.9	1.47	150
FE658K	7.5/17.7	8.8	1.47	150
FE668K	10/20.2	10.0	1.77	180
FE774K	5/6.7	5.0	1.47	150
FE775K	7.5/6.7	5.0	1.47	150
FE776K	10/6.7	5.0	1.47	150

PHYNOX STANDARD

Aesculap® YASARGIL Aneurysm Clip System
Phynox Standard Clips with Fenestration

PHYNOX STANDARD

PERMANENT

Art. No.	Diameter of fenestration 5 mm			
	Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FE777K	5/6.7	5.0	1.47	150
FE778K	7.5/6.7	5.0	1.47	150
FE779K	10/6.7	5.0	1.47	150
FE881K	5/10.4	7.0	1.47	150
FE882K	7.5/12.4	7.8	1.47	150
FE883K	10/14.5	8.8	1.47	150

PERMANENT

Art. No.	Diameter of fenestration 5 mm			
	Blade length mm L1/L2	Maximal opening mm	Closing force N	g
FE886K	5/7.4	5.0	1.47	150
FE887K	7.5/8.1	5.0	1.47	150
FE888K	5/7.4	5.0	1.47	150
FE889K	7.5/8.1	5.0	1.47	150
FE891K	5/6.6	5.0	1.47	150
FE892K	7.5/6.6	5.0	1.47	150
FE893K	5/6.6	5.0	1.47	150
FE894K	7.5/6.6	5.0	1.47	150

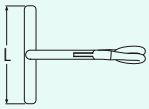
Phynox T-Bar Clips acc. to KOPITNIK

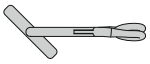
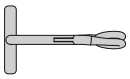
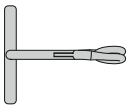
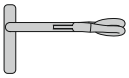
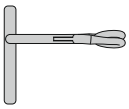
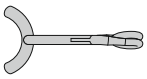
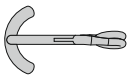
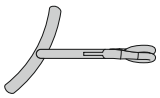
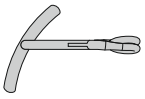
Aneurysm clip with a unique design

The blades of the T-Bar Clip are oriented in a 90° or 45° angle to the axis of the spring plane resulting in a T-like clip form. The unique shape opens up new options for the treatment of complicated cerebral aneurysms. The spring type is identical to the existing and proven standard YASARGIL Aneurysm Clip with a 5 mm diameter fenestration.

PERMANENT

Diameter of fenestration **5 mm**



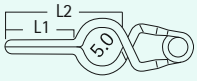
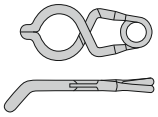
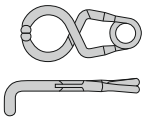
Art. No.		Blade length mm	Angle	Maximal opening mm	Closing force N	g
FE852K		5.0	45°	5.5	1.47	150
FE853K		9.0	45°	5.5	1.47	150
FE854K		5.0	90°	5.5	1.47	150
FE855K		9.0	90°	5.5	1.47	150
FE856K		13.0	90°	5.5	1.77	180
FE864K		9.0	90°	5.5	1.47	150
FE865K		13.0	90°	5.5	1.77	180
FE857K		9.0	90°	5.5	1.47	150
FE858K		9.0	90°	5.5	1.47	150
FE859K		13.0	60°	5.5	1.77	180
FE860K		13.0	60°	5.5	1.77	180

Aesculap® YASARGIL Aneurysm Clip System
ULTRA SHORT FENESTRATED Aneurysm Clip

PHYNOX STANDARD

PERMANENT

Diameter of fenestration **5 mm**

Art. No.		Blade length mm L1/L2	Maximal opening mm	Closing force N	Diam. of fenestration mm
FE942K		3.0/8.1	6.0	1.47	5.0
FE944K		3.0/6.4	5.5	1.47	5.0

Phynox Reinforcing Clip

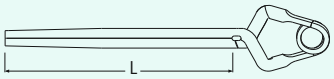
PERMANENT

Phynox reinforcing clip to increase the closing force of YASARGIL Phynox Standard Aneurysm Clips.

Art. No.	
FE900K	

Phynox Long Clips and Applier

PERMANENT



Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FE861K	30	19	1.86	190
FE862K	35	21	1.96	200
FE863K	40	23	1.96	200

- Clip with extra long blades for the treatment of giant aneurysms.

Long Clip Applier

FE560K

- With "active" locking mechanism; the applier can be used with or without the lock being activated, as the surgeon desires.

Aesculap® YASARGIL Aneurysm Clip System
Phynox Standard and Mini Clips

- MRI safety, non-ferromagnetic, tested up to 3 Tesla
- Color coding with gold spring and blades (temporary clip)

PHYNOX STANDARD AND MINI

TEMPORARY (STANDARD)

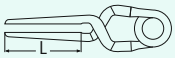
Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FE751K	9.0	7.0	0.69	70
FE753K	8.4	6.8	0.69	70
FE755K	6.7	6.1	0.69	70
FE769K	11.0	7.8	0.69	70
FE781K	15.0	9.2	0.69	70
FE783K	13.8	8.7	0.69	70
FE785K	10.4	7.4	0.69	70
FE756K	9.1	6.2	0.69	70
FE791K	20.0	11.4	0.88	90
FE793K	18.7	11.0	0.88	90
FE795K	16.8	9.9	0.88	90
FE801K	13.0	7.5	0.88	90

TEMPORARY (MINI)

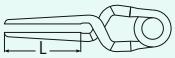
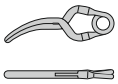
Art. No.	Blade length mm	Maximal opening mm	Closing force N	Closing force g
FE681K	3.0	3.3	0.49	50
FE691K	5.0	4.0	0.49	50
FE683K	2.8	3.2	0.49	50
FE693K	4.7	3.8	0.49	50
FE721K	7.0	4.6	0.69	70
FE723K	6.6	4.4	0.69	70
FE725K	5.0	4.0	0.69	70

- MRI safety, non-ferromagnetic, tested up to 3 Tesla
- Color coding with silver spring and blades (permanent clip)

PERMANENT (MINI)

Art. No.		Blade length mm	Maximal opening mm	Closing force N	g
FE680K		3.0	3.3	1.08	110
FE690K		5.0	4.0	1.08	110
FE700K		3.0	3.3	1.08	110
FE710K		5.0	4.0	1.08	110
FE720K		7.0	4.6	1.08	110
FE682K		2.8	3.2	1.08	110
FE692K		4.7	3.8	1.08	110
FE694K		4.0	3.6	1.08	110
FE711K		4.0	3.6	1.08	110
FE712K		4.7	3.8	1.08	110
FE713K		4.0	3.6	1.08	110
FE726K		5.2	4.0	1.08	110
FE722K		6.6	4.4	1.08	110
FE714K		3.9	3.5	1.08	110
FE724K		5.0	4.0	1.08	110

PERMANENT (MINI)

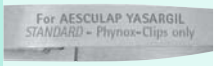
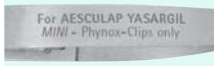
Art. No.		Blade length mm	Maximal opening mm	Closing force N	g
FE716K		5.0	3.5	1.28	130
FE807K		4.7	4.0	1.08	110
FE717K		6.3	6.0	1.28	130
FE727K		4.0	7.0	1.28	130
FE728K		7.0	5.7	1.28	130
FE806K		7.0	4.5	1.28	130

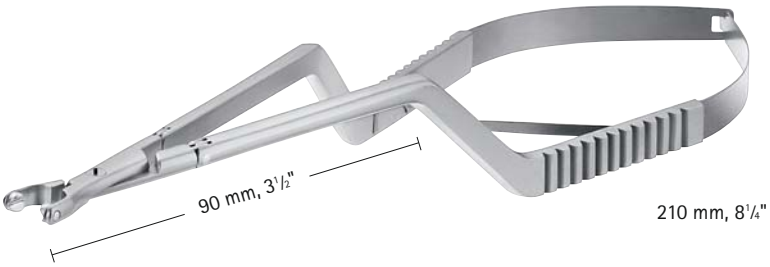
PHYNOX MINI

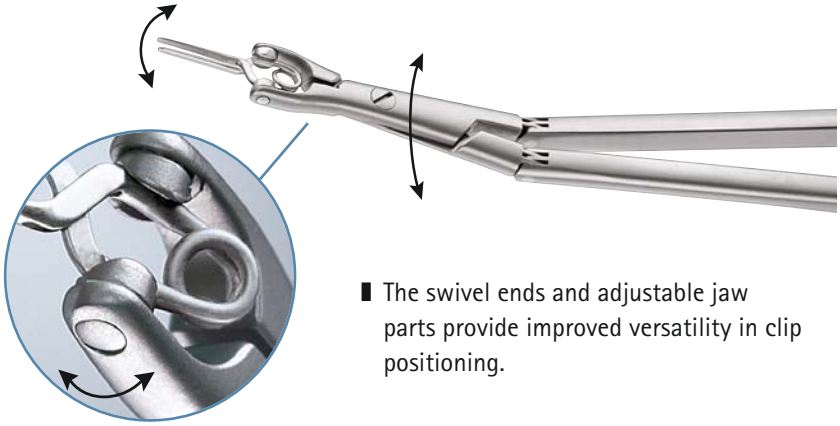
Aesculap® YASARGIL Aneurysm Clip System
Phynox Vario Clip Applier

- Distinction between Standard and Mini appliers through label on the spring

PHYNOX APPLYING FORCEPS

STANDARD	MINI
	
FE512T	FE502T





- The swivel ends and adjustable jaw parts provide improved versatility in clip positioning.

FT402800 — Adjusting Key

- Adjusting Key for Vario Clip Applier for setting the swivel at an angle

Phynox YASARGIL Clip Applier

- Distinction between Standard and Mini appliers through label on the spring

STANDARD	MINI	
		 180 mm, 7"
FE558K	FE548K	
		 50 mm, 2" 175 mm, 6⅞"
FE580K	FE570K	
		 90 mm, 3½" 215 mm, 8½"
FE582K	FE572K	 straight
FE585K	FE575K	 15°angled
		 110 mm, 4⅜" 235 mm, 9¼"
FE584K	FE574K	 straight
FE587K	FE577K	 15° angled

Aesculap® YASARGIL Aneurysm Clip System
Phynox XS Clip Applier

- Distinction between Standard and Mini appliers through label inside the handle

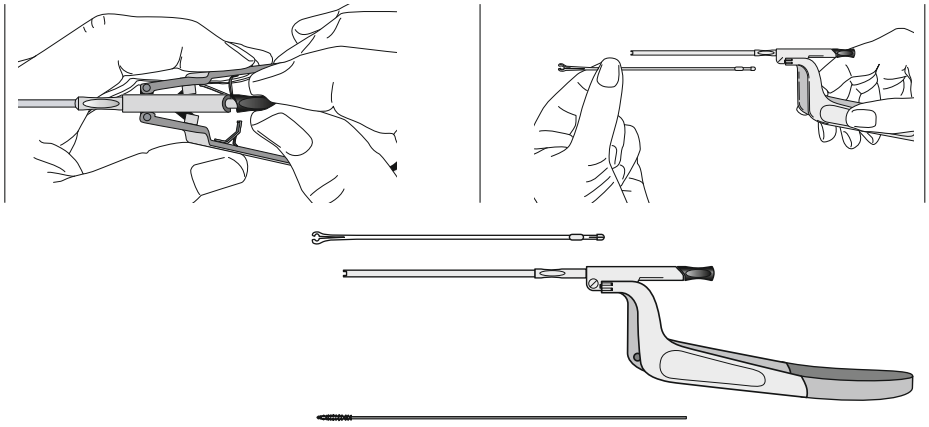
PHYNOX APPLYING FORCEPS

STANDARD	MINI
	
FE495K	FE490K
	
FE496K	FE491K

- 360° rotation
- Suitable for narrow approach

Disassembly
The XS Applier is detachable into 2 parts for thorough cleaning.

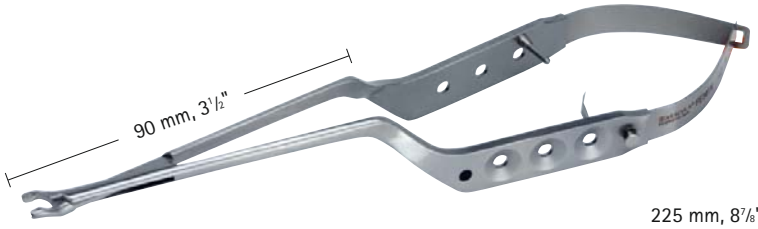
A cleaning brush is provided free of charge with every applier.



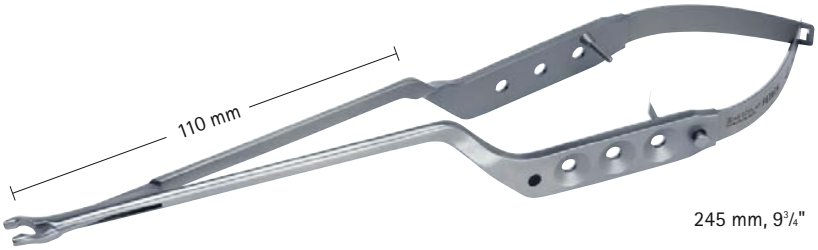
Double Bayonet Clip Applier

- Color coding is realized as a colored button in the handle area (● = Standard; ● = Mini)

STANDARD	MINI	
		
FE301K	FE311K	with latch
FE305K	FE315K	without latch



		
FE302K	FE312K	with latch
FE306K	FE316K	without latch



- The Double Bayonet Clip Applier has an additional bayonet shape at the jaw.

- This leads to an optimized view of the clip.

Aesculap® YASARGIL Aneurysm Clip System Storage

Clip Tray 1/1

For storage, transport and sterilization of Aesculap YASARGIL Aneurysm Clips.

- Autoclavable plastic
- Fits 1/1 standard container
- 34 storage compartments for Standard and Mini Clips
- 4 storage compartments for Long Clips
- With special identification tags for individual tray configuration

Clip Tray 1/2

For storage, transport and sterilization of Aesculap YASARGIL Aneurysm Clips.

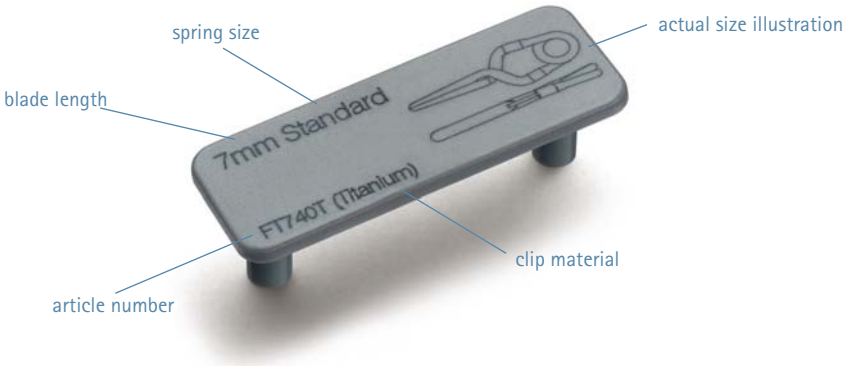
- Autoclavable plastic
- Fits 1/2 standard container
- 15 storage compartments for Standard and Mini Clips
- 3 storage compartments for Long Clips
- With special identification tags for individual tray configuration

FT006P

FT007P

Identification tags for the Clip Trays

Allow quick and easy recording of the necessary clip data;
Helpful for classifying and reordering the clips that have been removed.



_____-TAG

For each clip variant there is a matching identification tag.
The article numbers of the tags are as follows:
Art. No. of clip + "-TAG"

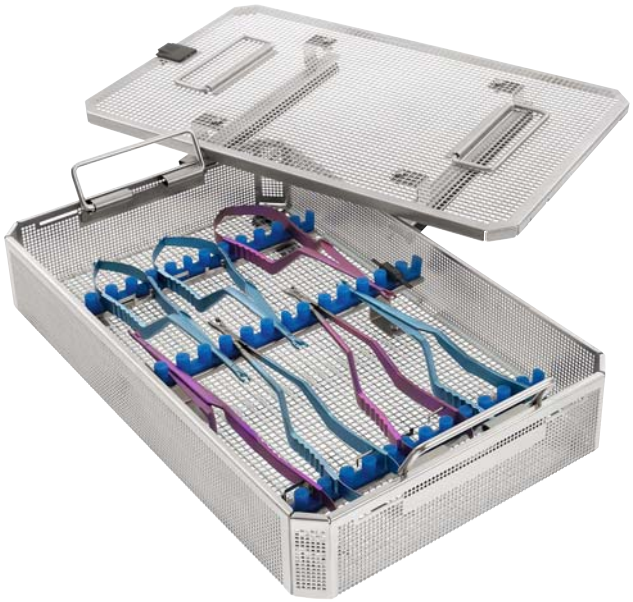
e.g.: FT740T-TAG is the identification tag for the clip FT740T

The identification tags for temporary clips are yellow and for permanent clips grey in line with the color coding of the YASARGIL Aneurysm Clips.

FM665R

Storage for clip appliers

Perforated basket with lid, for storage of clip appliers



Address: www.aesculap-extra.net

Patient identification card for YASARGIL Clip implants

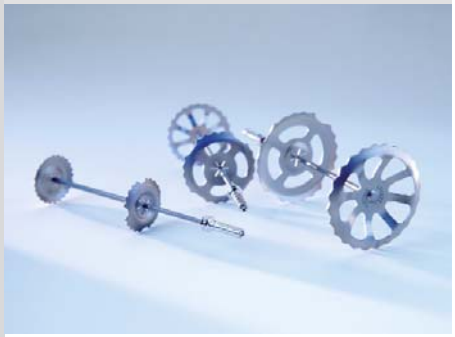
- Provides safety for physician and patient safety for follow-ups
- Information about 3 Tesla safety of Aesculap YASARGIL Aneurysm Clips
- Printed version available in German and English
- Download from the Extranet possible:

C07801	ID in German
C07802	ID in English
C07803	ID in French
C07804	ID in Spanish
C07805	ID in Italian
C07892	ID in Japanese

Aesculap® Neurosurgery

AESCULAP. EXPERTISE IN SURGERY.

CranioFix®2



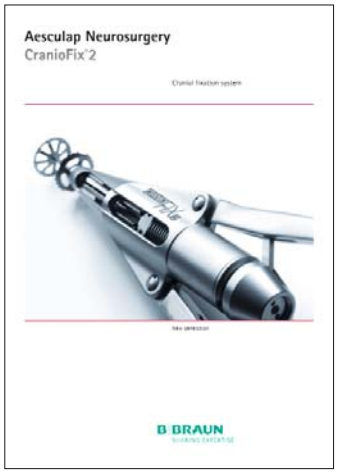
... for fast, easy and stable bone flap fixation and skull fracture repair. Fast, easy and very stable.

CranioFix® absorbable

... for fixation of bone flaps – usable without instruments and especially for children and recurring tumor patients.

CranioPlate

... blade and screw system for fixation of bone flaps with modular storage concept



For more information see
Brochure C08802

For more information see
Brochure C09802

For more information see
Brochure C83402

AESCULAP. EXPERTISE IN SURGERY.

ScalpFix
Scalp clip system

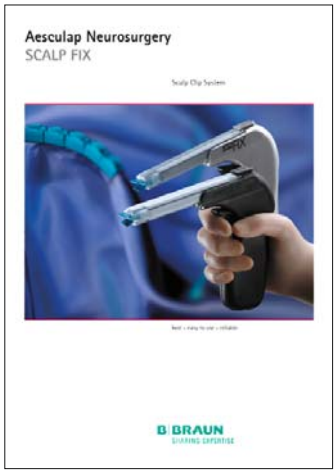
... for reliable haemostasis; easy handling and fast application are time and cost saving.

KOPITNIK AVM
Microclip System

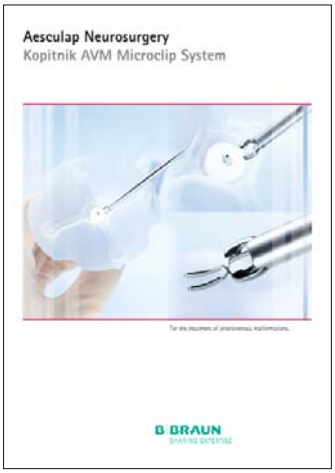
... for the temporary or permanent occlusion of arteriovenous malformations (AVM`s).

Fukushima suction cannulas

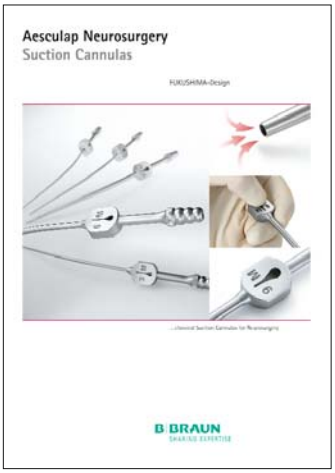
... the classic suction cannulas for neurosurgery procedures!



For more information see
Brochure C79002



For more information see
Brochure C07702



For more information see
Brochure C81202

FERGUSSON Suction Cannulas

Classic suction cannulas for neurosurgery

FERGUSSON Suction Cannulas

FERGUSSON suction cannulas with their round, thumb-operated suction interrupter are the classic suction instruments for neurosurgery.

Note

FERGUSSON suction cannulas are available in 4 lengths and 6 diameters – 1.5 to 5 mm.

B|BRAUN
SHARING EXPERTISE

NEUROSURGERY

AESCULAP® CRANIAL FIXATION

Neuro Plating System, CranioFix®2, CranioFix® absorbable

AESCULAP® CRANIAL FIXATION
AESCULAP® KRANIALE FIXIERUNG

Convinces users ...
Überzeugt Anwender ...

Convinces patients ...
Überzeugt Patienten ...

Every neurosurgical intervention is unique and therefore requires individual treatment. That is why we offer a large variety of products for the cranial fixation: plates and screws, double-sided titanium clamps as well as an absorbable clamp system.

This portfolio allows you to choose the suitable option for your patient.

Jeder neurochirurgischer Eingriff ist einzigartig und benötigt eine individuelle Behandlung. Daher bieten wir eine große Vielfalt an Produkten für die kraniale Fixierung an: Platten und Schrauben, beidseitige Titan-Klammern, sowie ein resorbierbares Klammersystem.

Dieses Portfolio ermöglicht es Ihnen, die geeignete Option für Ihren Patienten auszuwählen.

Neuro Plating System

- The universal and reliable plates and screws solution.

CranioFix®2

- Titanium clamp system for a fast and easy application.

CranioFix® absorbable

- Absorbable clamp system for an unhindered skull growth.

Neuro Platten-Schraubensystem

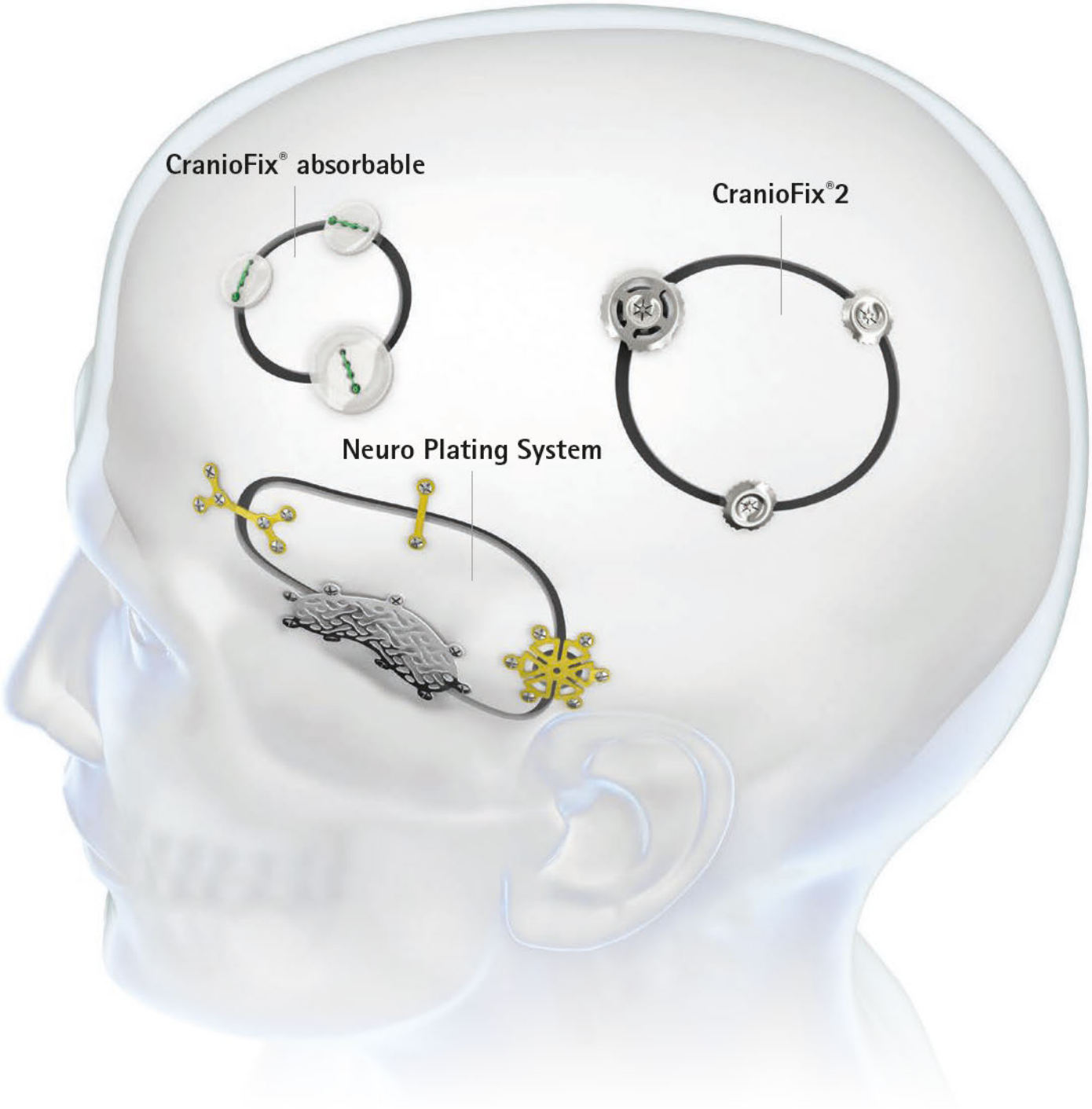
- Die universelle und zuverlässige Platten- und Schrauben-Lösung.

CranioFix®2

- Titan-Klammersystem für eine schnelle und einfache Fixierung.

CranioFix® resorbierbar

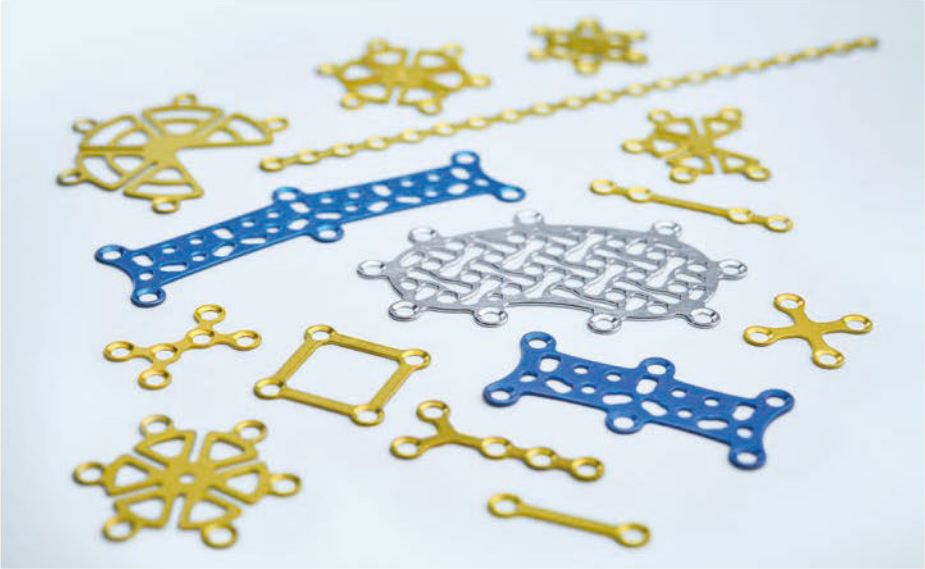
- Resorbierbares Klammersystem für ein ungehindertes Schädelwachstum.


CranioFix® absorbable
CranioFix®2
Neuro Plating System

AESCULAP® Neuro Plating System

The universal and reliable plates and screws solution

Die universelle und zuverlässige Platten- und Schrauben-Lösung



UNIVERSAL

- System covers a wide range of indications in cranial fixation
- Bendable plates and meshes for complex cases

UNIVERSELL

- System deckt eine große Vielfalt der Indikationen in der kranialen Fixierung ab
- Biegbare Platten und Meshes für komplexe Fälle

RELIABLE AND EASY

- Very good connection between screwdriver blade and screw
- Easy and smooth screw insertion
- Battery-powered screwdriver for fast screw insertion
- Prefilled screw magazines

ZUVERLÄSSIG UND EINFACH

- Sehr gute Verbindung von Schraubendreherklinge und Schraube
- Einfaches und leichtes Eindrehen der Schraube
- Schnelles Eindrehen der Schraube mit batteriebetriebenem Schraubendreher
- Vorgefüllte Schraubenmagazine

STABLE AND GOOD COSMETIC RESULTS

- 0.4 mm plates and screws made of titanium
- Highest pull-out force when compared to market leading systems
- Small palpability due to low profile plates

STABIL UND GUTE KOSMETISCHE ERGEBNISSE

- 0,4 mm-Platten und Schrauben aus Titan
- Höchste Ausreißkraft im Vergleich zu marktführenden Systemen
- Geringe Tastbarkeit durch Platten mit geringem Profil

INDIVIDUAL AND SPACE-SAVING

- Modular configuration according to your personal preferences
- Compact tray for storage and reprocessing of plates and screws

INDIVIDUELL UND PLATZSPAREND

- Modulare Konfiguration nach persönlichen Präferenzen
- Kompaktes Tray zur Lagerung und Aufbereitung von Platten und Schrauben

AESCULAP® Neuro Plating System

The universal and reliable plates and screws solution

Die universelle und zuverlässige Platten- und Schrauben-Lösung

Straight Plates Gerade Platten	Art. No. Art. Nr.	Description Beschreibung	Dimensions Maße
	NST304L02A	2 Hole / 2 Loch	12.4 x 3.4 mm
	NST304X02A	2 Hole / 2 Loch	15.4 x 3.4 mm
	NST304L04A	4 Hole / 4 Loch	21.4 x 3.4 mm
	NST304X04A	4 Hole / 4 Loch	24.4 x 3.4 mm
	NST304M05A	5 Hole / 5 Loch	21.4 x 3.4 mm
	NST304M06A	6 Hole / 6 Loch	25.9 x 3.4 mm
	NST304M10A	10 Hole / 10 Loch	43.9 x 3.4 mm
	NST304M20A	20 Hole / 20 Loch	88.9 x 3.4 mm
Double-Y-Plates / Y-Plate / X-Plate Doppel-Y-Platten / Y-Platte / X-Platte			
	NDY304M06A	Double-Y-Plate, 6 Hole Doppel-Y-Platte, 6 Loch	14.3 x 9.8 mm
	NDY304L06A	Double-Y-Plate, 6 Hole Doppel-Y-Platte, 6 Loch	18.8 x 9.8 mm
	NYP304M05A	Y-Plate, 5 Hole Y-Platte, 5 Loch	20.1 x 9.8 mm
	NXP304M04A	X-Plate, 4 Hole X-Platte, 4 Loch	11.0 x 11.0 mm
Square Plates / Rectangular Plate Quadratische Platten / Rechteckige Platte			
	NSQ304M04A	Square Plate, 4 Hole Quadratische Platte, 4 Loch	12.0 x 12.0 mm
	NSQ304L04A	Square Plate, 4 Hole Quadratische Platte, 4 Loch	14.0 x 14.0 mm
	NSQ304X04A	Square Plate, 4 Hole Quadratische Platte, 4 Loch	16.0 x 16.0 mm
	NRE304M04A	Rectangular Plate, 4 Hole Rechteckige Platte, 4 Loch	16.0 x 10.0 mm
Double-Square Plate / Matrix Plates Doppel-Quadrat-Platte / Drei-Quadrat-Platten			
	NDS304M06A	Double Square Plate, 6 Hole Doppel-Quadrat-Platte, 6 Loch	24.0 x 14.0 mm
	NQD304M08A	Matrix Plate, 8 Hole Drei-Quadrat-Platte, 8 Loch	28.0 x 12.0 mm
	NQD304L08A	Matrix Plate, 8 Hole Drei-Quadrat-Platte, 8 Loch	34.0 x 14.0 mm

Burrhole Plates Bohrlochabdeckplatten	Art. No. Art. Nr.	Description Beschreibung	Diameter Durchmesser
	NBP304S06A	6 Hole / 6 Loch	18.4 mm
	NBP304M06A	6 Hole / 6 Loch	21.4 mm
	NBP304L06A	6 Hole / 6 Loch	23.4 mm
	NBP304X06A	6 Hole / 6 Loch	30.4 mm

Burrhole Calvarium Plates Bohrloch-Calvariumplatten			
	NBC304M06A	6 Hole / 6 Loch	25.9 mm
	NBC304L06A	6 Hole / 6 Loch	30.9 mm

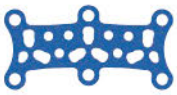
Burrhole Plates Slot Bohrlochabdeckplatten Spalt	Art. No. Art. Nr.	Description Beschreibung	Dimension Maße
	NBS304S05A	5 Hole / 5 Loch	18.4 x 14.7 mm
	NBS304M05A	5 Hole / 5 Loch	21.4 x 16.9 mm
	NBS304L05A	5 Hole / 5 Loch	23.4 x 18.4 mm
	NBS304X05A	5 Hole / 5 Loch	30.4 x 24.3 mm

Note: Plates are 0.4 mm thick. Sales unit: ST = 1 piece. | Hinweis: Platten sind 0,4 mm dick. Verkaufseinheit: ST = 1 Stück.

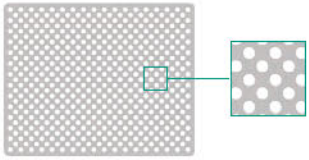
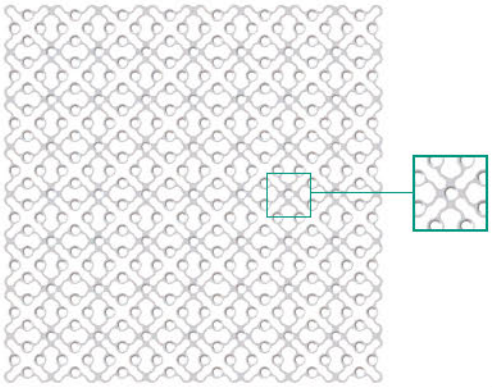
AESCULAP® Neuro Plating System

The universal and reliable plates and screws solution

Die universelle und zuverlässige Platten- und Schrauben-Lösung

Gap Plates / Temporal Mesh Plate Überbrückungsplatten / Temporal-Netzplatte	Art. No. Art. Nr.	Description Beschreibung	Thickness Stärke	Dimensions Maße
	NGP204S06A	Gap Plate, short, 6 Hole Überbrückungsplatte, kurz, 6 Loch	0.4 mm	28.8 x 14.5 mm
	NGP204M06A	Gap Plate, medium, 6 Hole Überbrückungsplatte, mittel, 6 Loch	0.4 mm	38.8 x 15.3 mm
	NGP204L06A	Gap Plate, long, 6 Hole Überbrückungsplatte, lang, 6 Loch	0.4 mm	48.8 x 16.2 mm
	NTE204M00A	Temporal Mesh Plate, 9 Hole Temporal-Netzplatte, 9 Loch	0.4 mm	42.2 x 25.1 mm

Note: Plates are 0.4 mm thick. Sales unit: ST = 1 piece. | Hinweis: Platten sind 0,4 mm dick. Verkaufseinheit: ST = 1 Stück.

Mesh Plates Netzplatten	Art. No. Art. Nr.	Description Beschreibung	Thickness Stärke	Dimensions Maße
	NME103S00 NME103M00	Mesh Plate Netzplatte	0.3 mm 0.3 mm	40.2 x 25.2 mm 40.2 x 50.2 mm
	N3D206S00A N3D206M00A N3D206L00A N3D206X00A	3D Mesh Plate 3D Netzplatte	0.6 mm 0.6 mm 0.6 mm 0.6 mm	50.0 x 50.0 mm 100.0 x 100.0 mm 150.0 x 150.0 mm 200.0 x 200.0 mm

Note: Sales unit: ST = 1 piece | Hinweis: Verkaufseinheit: ST = 1 Stück

silver plates:	malleable	silberne Platten:	biegbar
blue plates:	rigid	blaue Platten:	starr
golden plates:	extra rigid	goldene Platten:	extra starr

Screws Schrauben	Art. No. Art. Nr.	Description Beschreibung	Diameter Durchmesser	Screw length Schraubenlänge
	TSN-012 	Screw disk with 100 self-drilling screws Schraubenmagazin mit 100 Schrauben, selbstbohrend	1.5 mm	4.0 mm
	TSN-013 	Screw Magazine with 6 self-drilling screws Schraubenmagazin mit 6 Schrauben, selbstbohrend	1.5 mm	3.0 mm
	TSN-014 	Screw Magazine with 6 self-drilling screws Schraubenmagazin mit 6 Schrauben, selbstbohrend	1.5 mm	5.0 mm
	TSN-015 	Screw Magazine with 6 self-tapping rescue screws Schraubenmagazin mit 6 Notfall-Schrauben, selbstschneidend	1.8 mm	4.0 mm
	TSN-016 	Screw Magazine with 6 self-tapping rescue screws Schraubenmagazin mit 6 Notfall-Schrauben, selbstschneidend	1.8 mm	6.0 mm

MRI COMPATIBILITY

MRI examinations using magnetic fields of 1.5 and 3.0 Tesla do not present an additional risk to Neuro Plating System implant wearers.

MRT-KOMPATIBILITÄT

Bei MRT-Untersuchungen mit 1,5 und 3,0 Tesla ergibt sich für den Implantatträger des Neuro Platten-Schraubensystems kein zusätzliches Risiko durch magnetisch induzierte Kräfte.

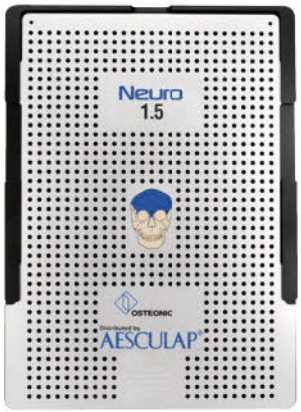
AESCULAP® Neuro Plating System

The universal and reliable plates and screws solution

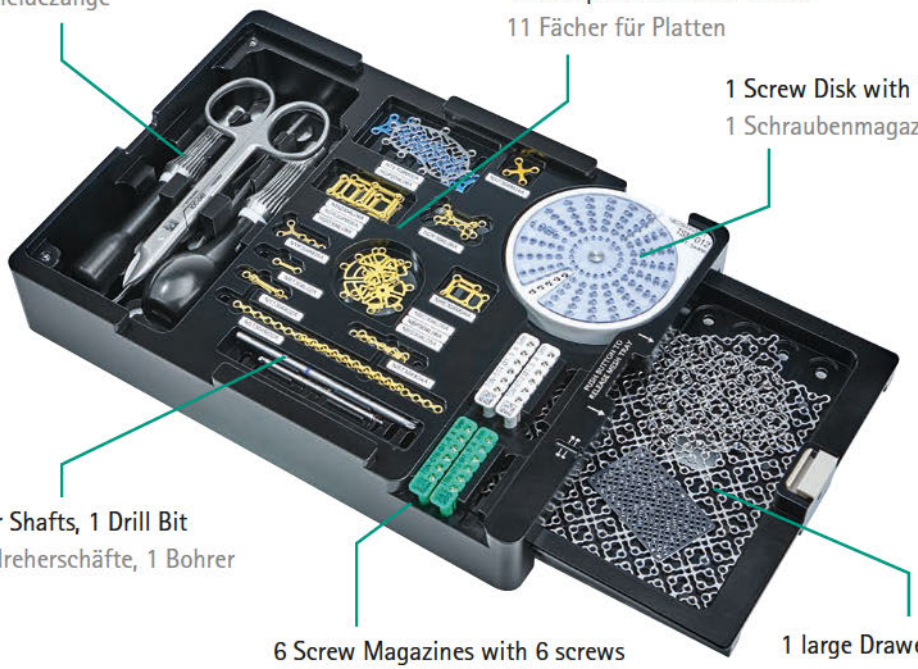
Die universelle und zuverlässige Platten- und Schrauben-Lösung

Instruments Instrumente	Art. No. Art. Nr.	Description Beschreibung	Length Länge
	LDS-01	Screwdriver Shaft Schraubendreherschaft	75 mm
	IOC-017	Screwdriver (large) Schraubendreher (groß)	100 mm
	IOC-018	Screwdriver (small) Schraubendreher (klein)	100 mm
	LDS-02	Screwdriver Shaft for Power Screwdriver Schraubendreherschaft für motorischen Schraubendreher	57 mm
	IOC-141	Power Screwdriver Note: Single-use, sterile delivery Motorischer Schraubendreher Hinweis: Einweg, sterile Lieferung	175 mm
	NDB-01	Drill Bit (J-Notch-coupling) Diameter: 1.1 mm, drill depth: 4 mm Bohrer (J-Notch-Verbindung) Durchmesser: 1,1 mm, Bohrtiefe: 4 mm	52 mm
	GP345R	Twist drill for ELAN4-2-Ring handpieces Diameter: 1.1 mm, Incision depth: 4 mm Spiralbohrer für ELAN4-2-Ring Handstück Durchmesser: 1,1 mm, Schnitttiefe: 4 mm	56 mm
	IOC-033	Holding Forceps angled Haltepinzette gewinkelt	130 mm
	IOC-040	Plate Cutter Plattenschneidezange	110 mm
	IOC-041	Mesh Cutter Schneidezange für Netzplatten	190 mm
	IOC-070	Plate Bending Pliers Plattenbiegezange	150 mm

Note: Sales unit: ST = 1 piece | Hinweis: Verkaufseinheit: ST = 1 Stück

Storage Lagerung	Art. No. Art. Nr.	Description Beschreibung	Dimensions Maße
	TPN-007	Tray for storage and reprocessing of Neuro Plating System implants Tray zur Lagerung und Aufbereitung des Neuro Platten-Schraubensystems	217 x 157 x 37 mm

Maximal loading of the tray:
Maximale Beladung des Trays:



2 Screwdrivers, 1 Holding Forceps, 1 Plate Cutter,
2 Schraubendreher, 1 Haltepinzette,
1 Plattenschneidezange

11 Compartements for Plates
11 Fächer für Platten

1 Screw Disk with 100 screws
1 Schraubenmagazin mit 100 Schrauben

2 Screwdriver Shafts, 1 Drill Bit
2 Schraubendreherschäfte, 1 Bohrer

6 Screw Magazines with 6 screws
6 Schraubenmagazine mit 6 Schrauben

1 large Drawer for Meshes
1 große Schublade für Netzplatten

The Mesh Cutter and the Plate Bending Pliers do not fit into the tray and need to be stored separately.
Die Schneidezange für Netzplatten und die Plattenbiegezange passen nicht in das Tray und müssen separat aufbewahrt werden.

AESCULAP® Neuro Plating System Sterile Kits

The simple plates and screws solution

Die einfache Platten- und Schrauben-Lösung

SPACE-SAVING

- Plates and implants are stored in one kit

PLATZSPAREND

- Lagerung von Platten und Schrauben in einem Kit

COST-SAVING

- Reduces costs associated with handling, inventorying and reprocessing

KOSTENSPAREND

- Reduktion von Kosten, die durch Handhabung, Lagerhaltung und Aufbereitung entstehen

TIME-SAVING

- Delivery in sterile condition

ZEITSPAREND

- Sterile Lieferung

EASY HANDLING

- Various configurations for a wide range of bone flaps
- Fully traceable

EINFACHE HANDHABUNG

- Verschiedene Konfigurationen für eine große Vielfalt an Knochendeckeln
- Komplett nachverfolgbar

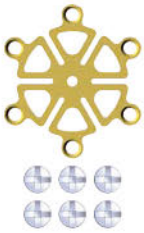
See-trough package for easy identification of plates and screws.

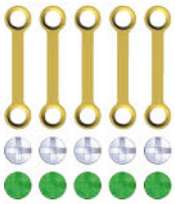
Transparente Verpackung für eine einfache Identifizierung von Platten und Schrauben.

AESCULAP® Neuro Plating System Sterile Kits

The simple plates and screws solution

Die einfache Platten und Schrauben-Lösung

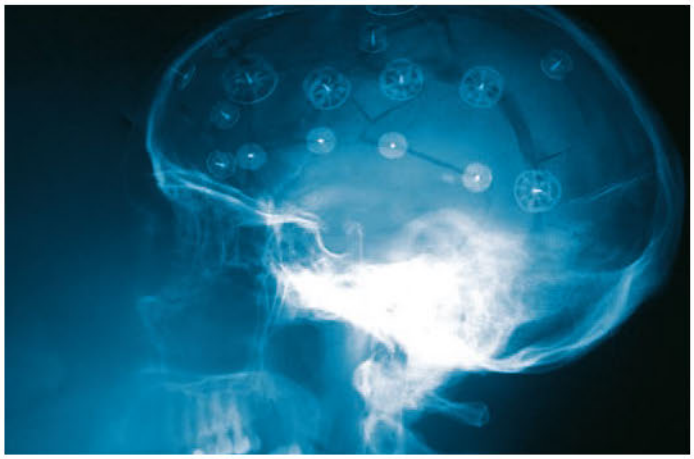
Sterile Kits Sterilkits	Art. No. Art. Nr.	Content Inhalt	Quantity Anzahl	Description Beschreibung
	TCN-011		3 6	**Standard long / Standard lang** Straight Plate, 2 Hole, 15.4 mm Gerade Platte, 2 Loch, 15,4 mm Self-drilling screw, 1.5 x 4 mm Schraube, selbstbohrend, 1,5 x 4 mm
	TCN-021		3 6	**Standard short / Standard kurz** Straight Plate, 2 Hole, 12.4 mm Gerade Platte, 2 Loch, 12,4 mm Self-drilling screw, 1.5 x 4 mm Schraube, selbstbohrend, 1,5 x 4 mm
	TCN-031		1 2 10	**Standard long Burrhole Plate / Standard lang Bohrlochabdeckplatte** Burrhole Plate, 6 Hole, 23.4 mm Bohrlochabdeckplatte, 6 Loch, 23,4 mm Straight Plate, 2 Hole, 15.4 mm Gerade Platte, 2 Loch, 15,4 mm Self-drilling screw, 1.5 x 4 mm Schraube, selbstbohrend, 1,5 x 4 mm
	TCN-041		1 6	**Burrhole Plate / Bohrlochabdeckplatte** Burrhole Plate, 6 Hole, 23.4 mm Bohrlochabdeckplatte, 6 Loch, 23,4 mm Self-drilling Screw, 1.5 x 4 mm Schraube, selbstbohrend, 1,5 x 4 mm
	TCN-051		1 5	**Burrhole Plate Slot / Bohrlochabdeckplatte Spalt** Burrhole Plate Slot, 5 Hole, 23.4 x 18.4 mm Bohrlochabdeckplatte Spalt, 5 Loch, 23,4 x 18,4 mm Self-drilling screw 1.5 x 4 mm Schraube, selbstbohrend, 1,5 x 4 mm

Sterile Kits Sterilkits	Art. No. Art. Nr.	Content Inhalt	Quantity Anzahl	Description Beschreibung
	TCN-012			**Anatomics Acrylic** / Anatomics Acryl
			5	Straight Plate, 2 Hole, 15.4 mm Gerade Platte, 2 Loch, 15,4 mm
			5	Self-drilling screw, 1.5 x 4 mm Schraube, selbstbohrend, 1,5 x 4 mm
			5	Self-tapping screw, 1.5 x 4 mm Schraube, selbstschneidend, 1,5 x 4 mm
For the fixation of acrylic patient specific implants from Anatomics® Für die Fixierung von patientenspezifischen Implantaten aus Acryl von Anatomics®				
	TCN-022			**Anatomics PoreStar** / Anatomics PoreStar
			5	Straight Plate Special, 2 Hole, 15.9 mm Gerade Platte Spezial, 2 Loch, 15,9 mm
			5	Self-drilling screw, 1.5 x 4 mm Schraube, selbstbohrend, 1,5 x 4 mm
			5	Self-drilling screw, 1.95 x 4 mm Schraube, selbstbohrend, 1,95 x 4 mm
For the fixation of PoreStar patient specific implants from Anatomics® Für die Fixierung von patientenspezifischen PoreStar-Implantaten von Anatomics®				

AESCULAP® CranioFix®2

Titanium clamp system for a fast and easy fixation

Titan-Klammersystem für eine schnelle und einfache Fixierung



Approved for the fixation of skull fractures

Introduced in 1997, CranioFix® was the pioneer for clamp-based bone flap fixation. Today CranioFix®2, the second generation, has been established worldwide. Over 3.5 million successfully implanted clamps helped patients in more than 60 countries.

1997 eingeführt, war CranioFix® Vorreiter der klammerbasierten Knochendeckelfixierung. Heute ist CranioFix®2, die zweite Generation, weltweit etabliert. Über 3,5 Millionen erfolgreich implantierte Klammern haben Patienten in über 60 Ländern geholfen.

FAST

- Fast application to save valuable OR time

EASY

- Self-explaining application

RELIABLE

- Reproducible fixation with a defined force

SCHNELL

- Schnelle Applikation spart wertvolle OP-Zeit

EINFACH

- Einfache Handhabung

ZUVERLÄSSIG

- Reproduzierbare Fixierung mit definierter Kraft

MRI COMPATIBILITY

MRI examinations using magnetic fields of 1.5 and 3.0 Tesla do not present an additional risk to CranioFix®2 implant wearers.

MRT-KOMPATIBILITÄT

Bei MRT-Untersuchungen mit 1,5 und 3,0 Tesla ergibt sich für den Implantatträger von CranioFix®2 kein zusätzliches Risiko durch magnetisch induzierte Kräfte.

CranioFix®2 Implants CranioFix®2 Implantate	Art. No. Art. Nr.	Diameter Durchmesser	Unit Bestelleinheit
	FF490T	11 mm	PAK = 12 pieces PAK = 12 Stück
	FF491T	16 mm	PAK = 6 pieces PAK = 6 Stück
	FF492T	20 mm	PAK = 6 pieces PAK = 6 Stück

CranioFix® 2 Instruments CranioFix® 2 Instrumente	Art. No. Art. Nr.	Description Beschreibung	Length Länge
	FF494R	Applier, with automatic stop Applikator, mit automatischem Stopp	205 mm
	FF105R	Holding forceps Halteklemme	115 mm
	FF103R	Pin Cutter Schneidezange	145 mm
	FF104R	Removal forceps Abziehzange	130 mm
	FF094P	Tray (without instruments) Lagerung (ohne Instrumente)	250 x 250 x 32 mm

AESCULAP® CranioFix® absorbable

Absorbable clamp system for an unhindered skull growth

Resorbierbares Klammersystem für ein ungehindertes Schädelwachstum

UNHINDERED SKULL GROWTH

- Particularly suitable for pediatric cases

GOOD COSMETIC RESULTS

- No palpable, visible implants, especially in frontal area

FAST AND EASY APPLICATION

- No instruments needed

ABSORBABLE AND STABLE

- Made from the clinically proven absorbable polyester material [Poly (L-lactide-co-D, L-Lactide) 70:30]
- An in-vitro study has shown that CranioFix® absorbable retains approximately 90% of its initial strength after 12 weeks. The absorbable material completely disappears within 2-3 years.

UNGEHINDERTES SCHÄDELWACHSTUM

- Besonders geeignet für pädiatrische Fälle

GUTE KOSMETISCHE ERGEBNISSE

- Keine tastbaren oder sichtbaren Implantate, speziell im Stirnbereich

SCHNELLE UND EINFACHE APPLIKATION

- Instrumentenfreie Fixierung

RESORBIERBAR UND STABIL

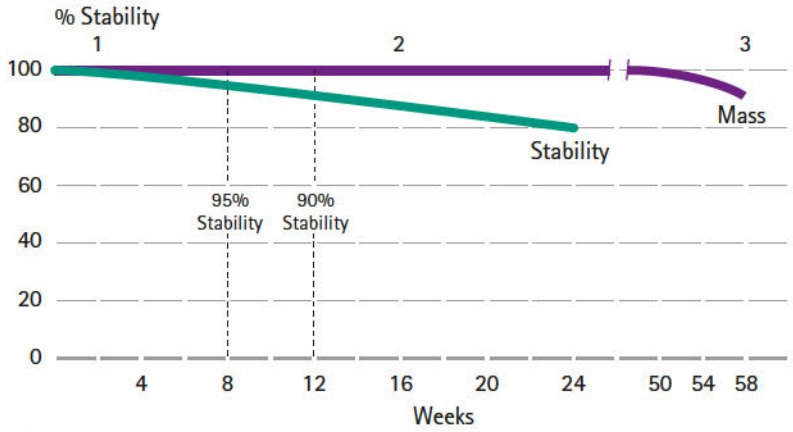
- Aus klinisch erprobtem, resorbierbarem Polyester hergestellt [Poly (L-Lactid-co-D, L-Lactid) 70:30]
- Eine in-vitro Studie hat gezeigt, dass CranioFix® resorbierbar nach 12 Wochen noch ca. 90% seiner ursprünglichen Stabilität aufweist. Nach 2-3 Jahren ist das resorbierbare Material vollständig abgebaut.

CRANIOFIX® ABSORBABLE IN-VITRO STUDY: STABILITY AND MASS

The in-vitro study measures the stability and mass of CranioFix® absorbable implants (only for FF016) with 2 mm depression depth of the bone flap under hydrolysis conditions [Internal study, Aesculap AG, idealized curves, 2003-2005].

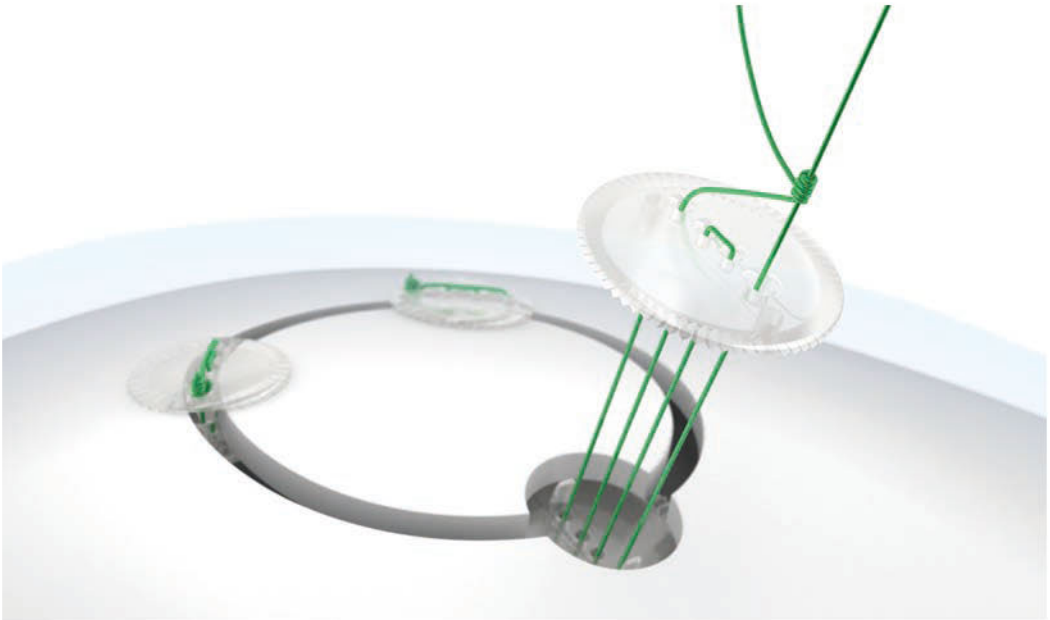
CRANIOFIX® RESORBIERBAR IN-VITRO STUDIE: STABILITÄT UND MASSE

Die In-vitro Studie untersucht Stabilität und Masse von CranioFix® resorbierbar Implantaten (nur für FF016) bei einer Eindrucktiefe des Knochendeckels von 2 mm unter Hydrolysebedingungen [Interne Untersuchungen, Aesculap AG, idealisierte Kurven, 2003-2005].



1| Hydration: Adsorption of water on polymer chains
2| Loss of stability: Polymer chains start to break. Degradation of molecular weight
3| Loss of mass: Further breakage of polymer chains. Formation of small granular particles.

1| Hydration: Anlagerung von Wasser an die Polymerketten
2| Stabilitätsverlust: Bindungen werden gespalten. Molekulargewichtsabbau.
3| Masseverlust: Spaltung weiterer Bindungen. Entstehung kleiner granulöser Partikel.



	Art. No. Art. Nr.	Diameter Durchmesser	Description Beschreibung	Unit Bestelleinheit
AESCULAP FF016	FF016	11 mm	for craniotomy gaps für Kraniotomiespalt	PAK = 6 pieces PAK = 6 Stück
AESCULAP FF017	FF017	16 mm	for burrhole für Bohrloch	PAK = 6 pieces PAK = 6 Stück

STERILE PACKED

CranioFix® absorbable is sterile packed for immediate use.

STERIL VERPACKT

CranioFix® resorbierbar ist für den sofortigen Gebrauch steril verpackt.

MRI COMPATIBILITY

MRI examinations do not present an additional risk to CranioFix® absorbable implant wearers.

MRT-KOMPATIBILITÄT

Bei MRT-Untersuchungen ergibt sich für den Implantatträger von CranioFix® resorbierbar kein zusätzliches Risiko durch magnetisch induzierte Kräfte.

B|BRAUN
SHARING EXPERTISE

NEUROSURGERY

AESCULAP® KERRISON

BONE PUNCHES MADE BY AESCULAP®

KERRISON BONE PUNCHES MADE BY AESCULAP®

» A TRADITION OF HIGH QUALITY!

AESCULAP® has manufactured KERRISON bone punches for over 100 years.

Throughout the world, "Made by AESCULAP®" is synonymous with high quality and durability.

(1) The gloss level of the Noir® – coated KERRISON Bone Punch (FK902B) was compared to the gloss level of the uncoated KERRISON bone punch (FK902R) by means of a glossmeter. The reflections (gloss levels were determined at 6 different measure points) were reduced by 60% (crosswise), and 80% (lengthwise) on average.

(2) Publication Reference: Maroon JC, El-Kadi M, Bost J. Pneumatic Kerrison rongeur: technical note. Surg Neurol 2009; 71(4):466–8.

AESTHETIC

KERRISON Noir® Bone Punch

...detachable, with a special black coating for reduced light reflection in the operating area (1).

DETACHABLE

Detachable KERRISON Bone Punch

...can be disassembled without tools in only 3 steps for cleaning.

PROVEN

Non-detachable KERRISON Bone Punch

...considered a classic for over 100 years.

SPECIAL

Special KERRISON Bone Punches

...whether curved, bayonet-shaped, extra long, of intermediate size or with a large jaw opening – we provide the solution.

PNEUMATIC

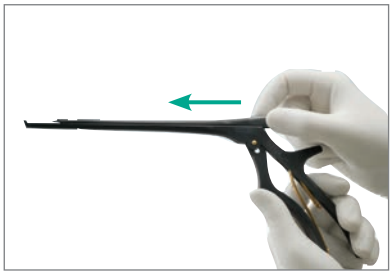
KAIRison® Pneumatic Bone Punch

...reduces physical effort - technology that makes life easier (2).

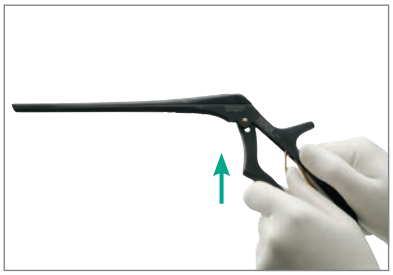
AESCULAP® KERRISON

AESCULAP® Noir® – COATED, DETACHABLE BONE PUNCHES

ASSEMBLY IN 3 STEPS:



1. Attach the slider and push it forwards



2. Push the inner handle upwards and open the handle.

3. Insert the spring in the rear handle.

(Disassembly see page 8)

AESTHETIC

BLACK SURFACE COATING
reduces distracting light reflections.

EJECTOR
for the removal of punched-out material.

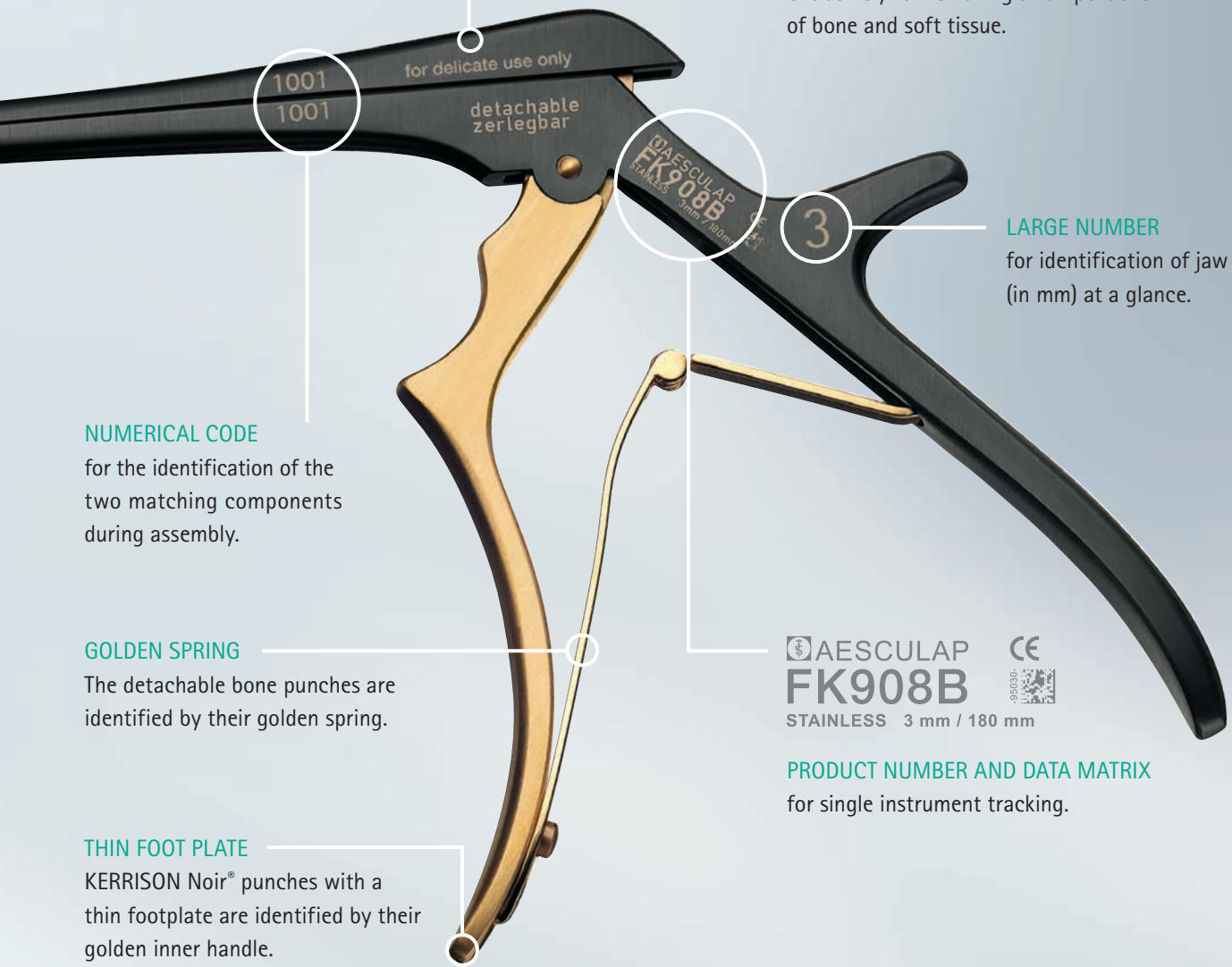
STANDARD JAW PUNCHES
8 - 12 mm jaw opening.

LARGE JAW PUNCHES
offer an up to 66 % wider jaw opening (15 mm) compared to standard punches.

- >60 KERRISON Noir® models
- 130° / 90° upbiting
- With standard / thin footplate
- Standard / large jaw punches

» ADVANTAGES

- Disassembly and assembly without tools.
- Easier verification of cleaning success due to less overlapping surfaces.
- Black Noir® coating – reduces light reflections (1).



FOR DELICATE USE ONLY
Punches with a thin footplate are used exclusively for removing small portions of bone and soft tissue.

LARGE NUMBER
for identification of jaw width (in mm) at a glance.

NUMERICAL CODE
for the identification of the two matching components during assembly.

GOLDEN SPRING
The detachable bone punches are identified by their golden spring.

PRODUCT NUMBER AND DATA MATRIX
for single instrument tracking.

THIN FOOT PLATE
KERRISON Noir® punches with a thin footplate are identified by their golden inner handle.

AESCULAP® KERRISON

AESCULAP® Noir® – COATED. DETACHABLE BONE PUNCHES

JAW POSITION 130°, UPWARDS

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FK900B	(8)	-	-	FK906B	(8)
	1.5 mm	FK911B	(9)	-	-	FK923B	(9)
	2.0 mm	FK901B	(9)	FK971B	(15)	FK907B	(9)
	2.5 mm	FK912B	(10)	-	-	FK924B	(10)
	3.0 mm	FK902B	(10)	FK972B	(15)	FK908B	(10)
	4.0 mm	FK903B	(12)	FK973B	(15)	FK909B	(12)
	5.0 mm	FK904B	(12)	FK974B	(15)	FK910B	(12)
	6.0 mm	FK905B	(12)	-	-	-	-
200 mm	1.0 mm	FK960B	(8)	-	-	FK961B	(8)
	1.5 mm	FK966B	(9)	-	-	FK968B	(9)
	2.0 mm	FK913B	(9)	FK970B	(15)	FK962B	(9)
	2.5 mm	FK967B	(10)	-	-	FK969B	(10)
	3.0 mm	FK914B	(10)	FK982B	(15)	FK963B	(10)
	4.0 mm	FK915B	(12)	FK983B	(15)	FK964B	(12)
	5.0 mm	FK916B	(12)	FK984B	(15)	FK965B	(12)
	6.0 mm	FK917B	(12)	FK985B	(15)	-	-
230 mm	1.0 mm	FK918B	(8)	-	-	FK929B	(8)
	2.0 mm	FK919B	(9)	-	-	FK925B	(9)
	3.0 mm	FK920B	(10)	-	-	FK926B	(10)
	4.0 mm	FK921B	(12)	-	-	FK927B	(12)
	5.0 mm	FK922B	(12)	-	-	FK928B	(12)
280 mm	1.0 mm	FK981B	(8)	-	-	-	-
	2.0 mm	FK986B	(9)	-	-	FK976B	(9)
	3.0 mm	FK987B	(10)	-	-	FK977B	(10)
	4.0 mm	FK988B	(12)	-	-	FK978B	(12)
	5.0 mm	FK989B	(12)	-	-	FK979B	(12)

JAW POSITION 90°, UPWARDS

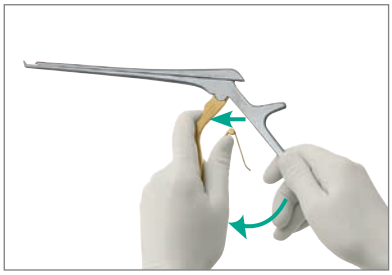
		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FK948B	(8)	-	-	-	-
	2.0 mm	FK949B	(9)	-	-	-	-
	3.0 mm	FK950B	(10)	-	-	-	-
	4.0 mm	FK951B	(12)	-	-	-	-
	5.0 mm	FK952B	(12)	-	-	-	-

Ejector	✘	✘	✔	✔	✔	✔	✔	✔
Width (mm)	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0

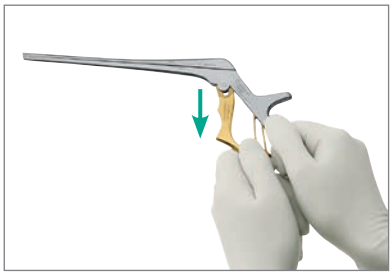
AESCULAP® KERRISON

DETACHABLE BONE PUNCHES

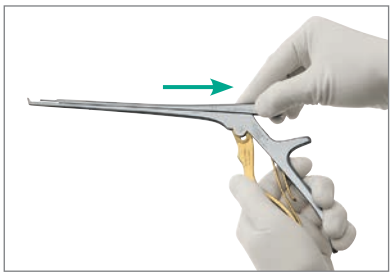
DISASSEMBLY IN 3 STEPS:



1. Unhook the spring from the rear handle.



2. Close the handle completely and pull the inner handle downwards.



3. Pull back the slider to remove.

(Assemply see page 4)

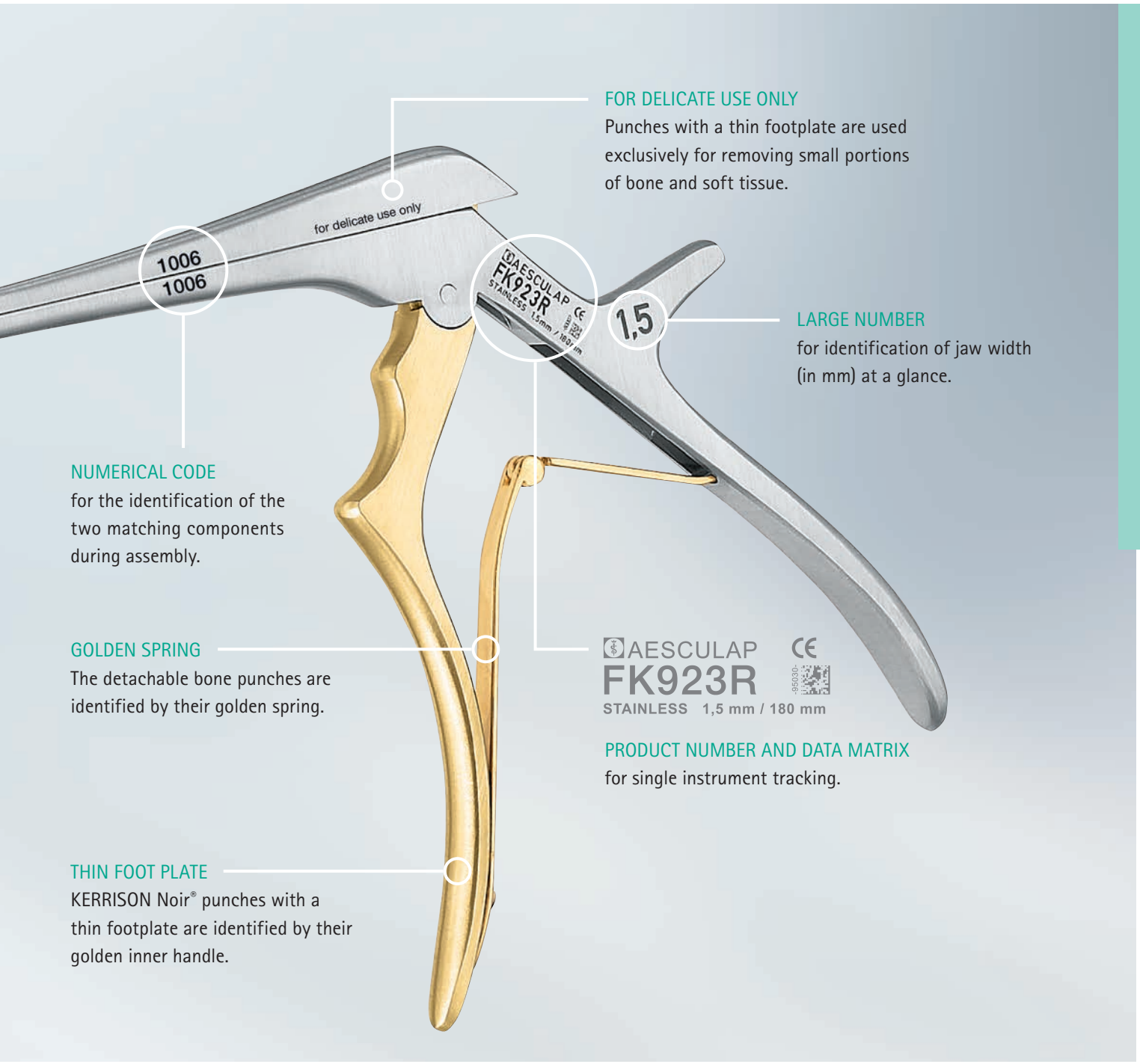
DETACHABLE

EJECTOR
for removal of punched-out material.

- >80 detachable KERRISON models
- 130°/90° upbiting
- with standard/thin footplate
- Standard/large jaw punches

» ADVANTAGES:

- Disassembly and assembly without tools.
- Easier verification of cleaning success due to less overlapping surfaces.



FOR DELICATE USE ONLY
Punches with a thin footplate are used exclusively for removing small portions of bone and soft tissue.

LARGE NUMBER
for identification of jaw width (in mm) at a glance.

NUMERICAL CODE
for the identification of the two matching components during assembly.

GOLDEN SPRING
The detachable bone punches are identified by their golden spring.

PRODUCT NUMBER AND DATA MATRIX
for single instrument tracking.

THIN FOOT PLATE
KERRISON Noir® punches with a thin footplate are identified by their golden inner handle.

DETACHABLE

AESCULAP® KERRISON

DETACHABLE BONE PUNCHES

JAW POSITION 130°, UPWARDS

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FK900R	(8)	-	-	FK906R	(8)
	1.5 mm	FK911R	(9)	-	-	FK923R	(9)
	2.0 mm	FK901R	(9)	FK971R	(15)	FK907R	(9)
	2.5 mm	FK912R	(10)	-	-	FK924R	(10)
	3.0 mm	FK902R	(10)	FK972R	(15)	FK908R	(10)
	4.0 mm	FK903R	(12)	FK973R	(15)	FK909R	(12)
	5.0 mm	FK904R	(12)	FK974R	(15)	FK910R	(12)
	6.0 mm	FK905R	(12)	-	-	-	-
200 mm	1.0 mm	FK960R	(8)	-	-	FK961R	(8)
	1.5 mm	FK966R	(9)	-	-	FK968R	(9)
	2.0 mm	FK913R	(9)	FK970R	(15)	FK962R	(9)
	2.5 mm	FK967R	(10)	-	-	FK969R	(10)
	3.0 mm	FK914R	(10)	FK982R	(15)	FK963R	(10)
	4.0 mm	FK915R	(12)	FK983R	(15)	FK964R	(12)
	5.0 mm	FK916R	(12)	FK984R	(15)	FK965R	(12)
	6.0 mm	FK917R	(12)	FK985R	(15)	-	-
230 mm	1.0 mm	FK918R	(8)	-	-	FK929R	(8)
	2.0 mm	FK919R	(9)	-	-	FK925R	(9)
	3.0 mm	FK920R	(10)	-	-	FK926R	(10)
	4.0 mm	FK921R	(12)	-	-	FK927R	(12)
	5.0 mm	FK922R	(12)	-	-	FK928R	(12)
280 mm	1.0 mm	FK981R	(8)	-	-	FK980R	(8)
	2.0 mm	FK986R	(9)	-	-	FK976R	(9)
	3.0 mm	FK987R	(10)	-	-	FK977R	(10)
	4.0 mm	FK988R	(12)	-	-	FK978R	(12)
	5.0 mm	FK989R	(12)	-	-	FK979R	(12)

JAW POSITION 130°, DOWNWARDS

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FK930R	(8)	-	-	FK936R	(8)
	2.0 mm	FK931R	(9)	-	-	FK937R	(9)
	3.0 mm	FK932R	(10)	-	-	FK938R	(10)
	4.0 mm	FK933R	(12)	-	-	-	-
	5.0 mm	FK934R	(12)	-	-	-	-

JAW POSITION 130°, DOWNWARDS

Length	Width	Footplate Standard / Jaw opening Standard (mm)	
230 mm	2.0 mm	FK943R	(9)
	3.0 mm	FK944R	(10)

JAW POSITION 90°, UPWARDS

Length	Width	Footplate Standard / Jaw opening Standard (mm)	
180 mm	1.0 mm	FK948R	(8)
	2.0 mm	FK949R	(9)
	3.0 mm	FK950R	(10)
	4.0 mm	FK951R	(12)
	5.0 mm	FK952R	(12)

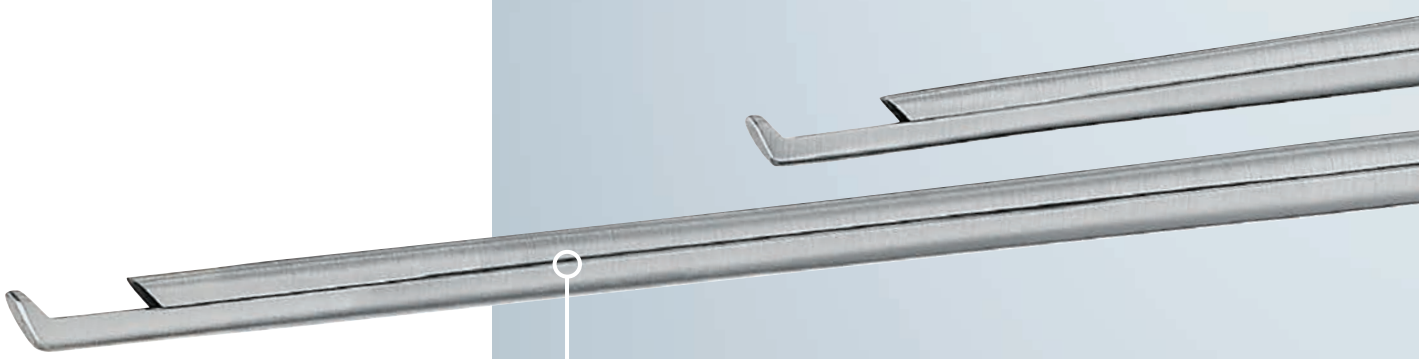
JAW POSITION 90°, DOWNWARDS

Length	Width	Footplate Standard / Jaw opening Standard (mm)	
180 mm	1.0 mm	FK954R	(8)
	2.0 mm	FK955R	(9)
	3.0 mm	FK956R	(10)
	4.0 mm	FK957R	(12)
	5.0 mm	FK958R	(12)

Ejector	✘	✘	✔	✔	✔	✔	✔	✔
Width (mm)	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0

AESCULAP® KERRISON

NON-DETACHABLE BONE PUNCHES

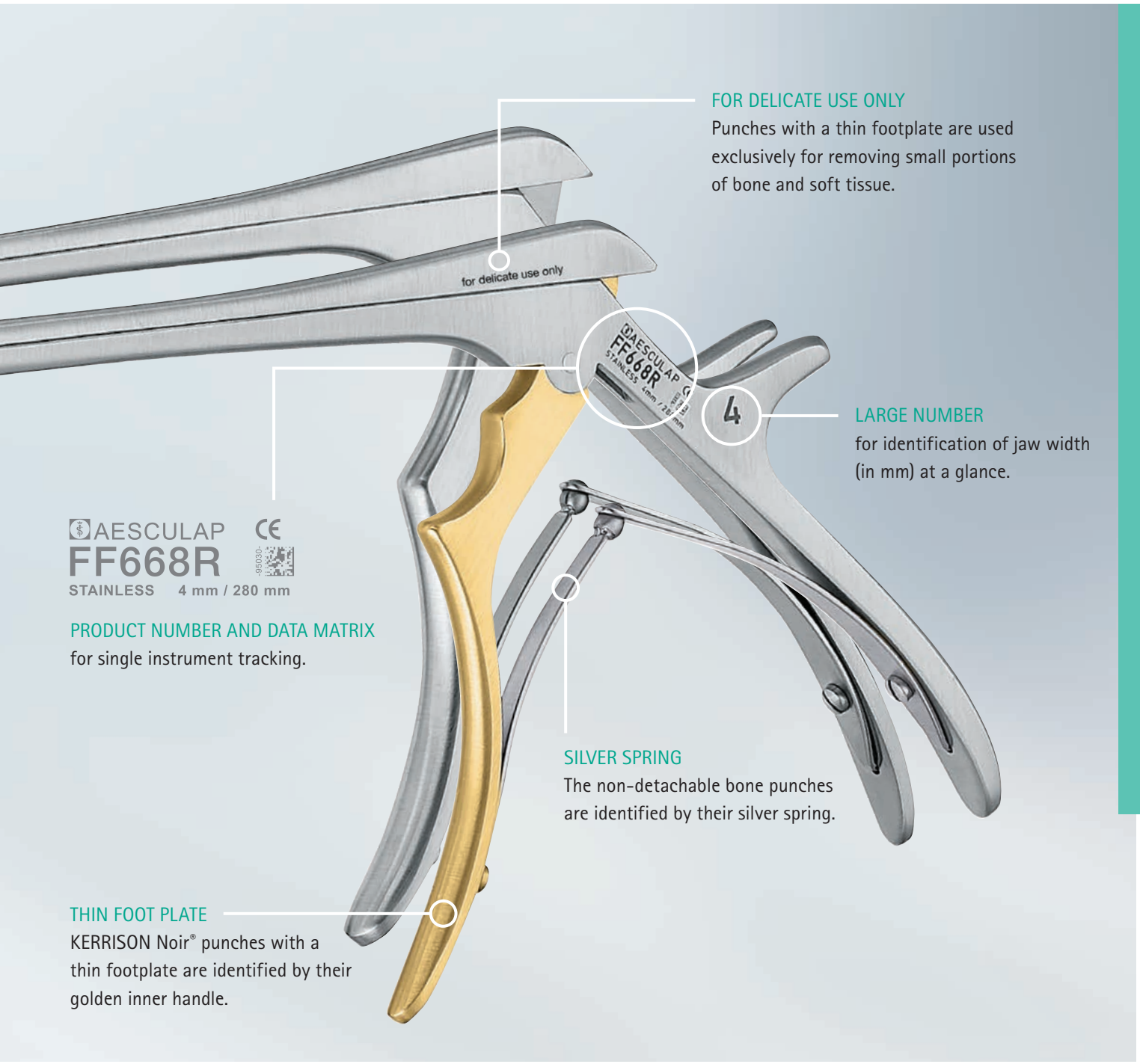


PROVEN

EXTRA-LONG VERSION

This 280 mm punch completes the portfolio.
When the situation requires extra reach, this long punch can offer reserves for bridging the distance.

- >80 non-detachable KERRISON models
- 130° / 90° upbiting / downbiting
- with standard / thin footplate
- Standard / large jaw punches



FOR DELICATE USE ONLY
Punches with a thin footplate are used exclusively for removing small portions of bone and soft tissue.

LARGE NUMBER
for identification of jaw width (in mm) at a glance.

AESCULAP CE
FF668R
STAINLESS 4 mm / 280 mm

PRODUCT NUMBER AND DATA MATRIX
for single instrument tracking.

SILVER SPRING
The non-detachable bone punches are identified by their silver spring.

THIN FOOT PLATE
KERRISON Noir® punches with a thin footplate are identified by their golden inner handle.

PROVEN

AESCULAP® KERRISON

NON-DETACHABLE BONE PUNCHES

JAW POSITION 130°, UPWARDS

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FF715R	(8)	-	-	FF771R	(8)
	1.5 mm	FF638R	(9)	-	-	FF645R	(9)
	2.0 mm	FF717R	(9)	FF677R	(15)	FF772R	(9)
	2.5 mm	FF639R	(10)	-	-	FF646R	(10)
	3.0 mm	FF720R	(10)	FF678R	(15)	FF773R	(10)
	4.0 mm	FF724R	(12)	FF679R	(15)	FF769R	(12)
	5.0 mm	FF722R	(12)	FF680R	(15)	FF770R	(12)
	6.0 mm	FF726R	(12)	-	-	-	-
200 mm	1.0 mm	FF691R	(8)	-	-	FF661R	(8)
	1.5 mm	FF649R	(9)	-	-	FF658R	(9)
	2.0 mm	FF737R	(9)	FF660R	(15)	FF662R	(9)
	2.5 mm	FF657R	(10)	-	-	FF659R	(10)
	3.0 mm	FF738R	(10)	FF739R	(15)	FF663R	(10)
	4.0 mm	FF727R	(12)	FF745R	(15)	FF664R	(12)
	5.0 mm	FF728R	(12)	FF751R	(15)	FF665R	(12)
	6.0 mm	FF729R	(12)	FF753R	(15)	-	-
230 mm	1.0 mm	FF674R	(8)	-	-	FF734R	(8)
	2.0 mm	FF682R	(9)	-	-	FF746R	(9)
	3.0 mm	FF683R	(10)	-	-	FF747R	(10)
	4.0 mm	FF684R	(12)	-	-	FF748R	(12)
	5.0 mm	FF685R	(12)	-	-	FF749R	(12)
280 mm	1.0 mm	-	-	-	-	FF673R	(8)
	2.0 mm	FF686R	(9)	-	-	FF666R	(9)
	3.0 mm	FF687R	(10)	-	-	FF667R	(10)
	4.0 mm	FF688R	(12)	-	-	FF668R	(12)
	5.0 mm	FF689R	(12)	-	-	FF669R	(12)

JAW POSITION 130°, DOWNWARDS

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FF711R	(8)	-	-	FF781R	(8)
	2.0 mm	FF712R	(9)	-	-	FF782R	(9)
	3.0 mm	FF713R	(10)	-	-	FF783R	(10)
	4.0 mm	FF714R	(12)	-	-	-	-
	5.0 mm	FF725R	(12)	-	-	-	-

JAW POSITION 130°, DOWNWARDS

Length	Width	Footplate Standard	Jaw opening Standard (mm)
230 mm	2.0 mm	FF692R	(9)
	3.0 mm	FF693R	(10)

JAW POSITION 90°, UPWARDS

Length	Width	Footplate Standard	Jaw opening Standard (mm)
180 mm	1.0 mm	FF716R	(8)
	2.0 mm	FF718R	(9)
	3.0 mm	FF750R	(10)
	4.0 mm	FF752R	(12)
	5.0 mm	FF754R	(12)

JAW POSITION 90°, DOWNWARDS

Length	Width	Footplate Standard	Jaw opening Standard (mm)
180 mm	1.0 mm	FF741R	(8)
	2.0 mm	FF719R	(9)
	3.0 mm	FF721R	(10)
	4.0 mm	FF742R	(12)
	5.0 mm	FF723R	(12)

Non-detachable KERRISON punches don't have an ejector.

Width (mm)	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0

PROVEN

AESCULAP® KERRISON

SPECIAL BONE PUNCHES (NON-DETACHABLE)

In addition to standard punches, AESCULAP® offers a portfolio of special bone punches for various surgical situations.

CURVED KERRISON PUNCH, UPBITING

Length	Width	Jaw opening	Art. no.
200 mm	2.0 mm	10 mm	FF466R
	3.0 mm	10 mm	FF467R
	4.0 mm	10 mm	FF468R
	5.0 mm	10 mm	FF469R

BAYONET-SHAPED KERRISON PUNCH, 130°, UPBITING

Length	Width	Working length	Jaw opening	Art. no
240 mm	2.0 mm	170 mm	10 mm	FF496R
	3.0 mm	170 mm	10 mm	FF497R
	4.0 mm	170 mm	10 mm	FF498R
	5.0 mm	170 mm	10 mm	FF499R

SPECIAL

CURVED KERRISON PUNCH

Classic non-detachable bone punch with an upbiting curved jaw for the removal of bone material in difficult to access areas (i.e. in-between the vertebral arches).

BAYONET-SHAPED KERRISON PUNCH

Classic non-detachable bayonet-shaped bone punch for a less obstructed view on the operating area.

- 8 KERRISON special models
- Bayonet-shaped, for an improved overview
- Curved, for areas that are difficult to reach

- Extra long – 12 KERRISON models

LARGE NUMBER
for identification of jaw width (in mm) at a glance.

SILVER SPRING
The non-detachable bone punches are identified by their silver spring.

AESCULAP CE
FF496R
STAINLESS 2 mm / 240 mm

PRODUCT NUMBER AND DATA MATRIX
for single instrument tracking.

Intermediate sizes – 30 KERRISON models

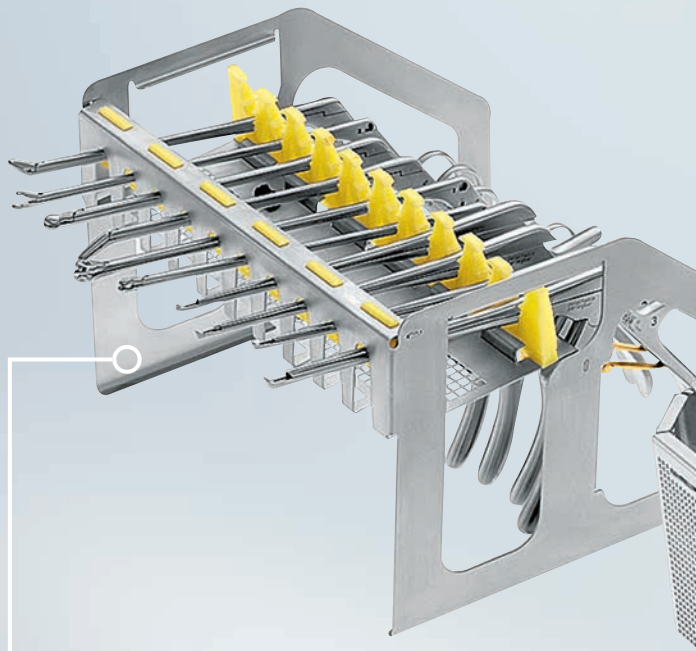
Large jaw – 36 KERRISON models

AESCULAP® KERRISON

AESCULAP® INSTRUMENT ORGANISATION SYSTEM

- Special Storage frame JF120R for bone punches available
- Fully compatible with the AESCULAP® Instrument Organisation System

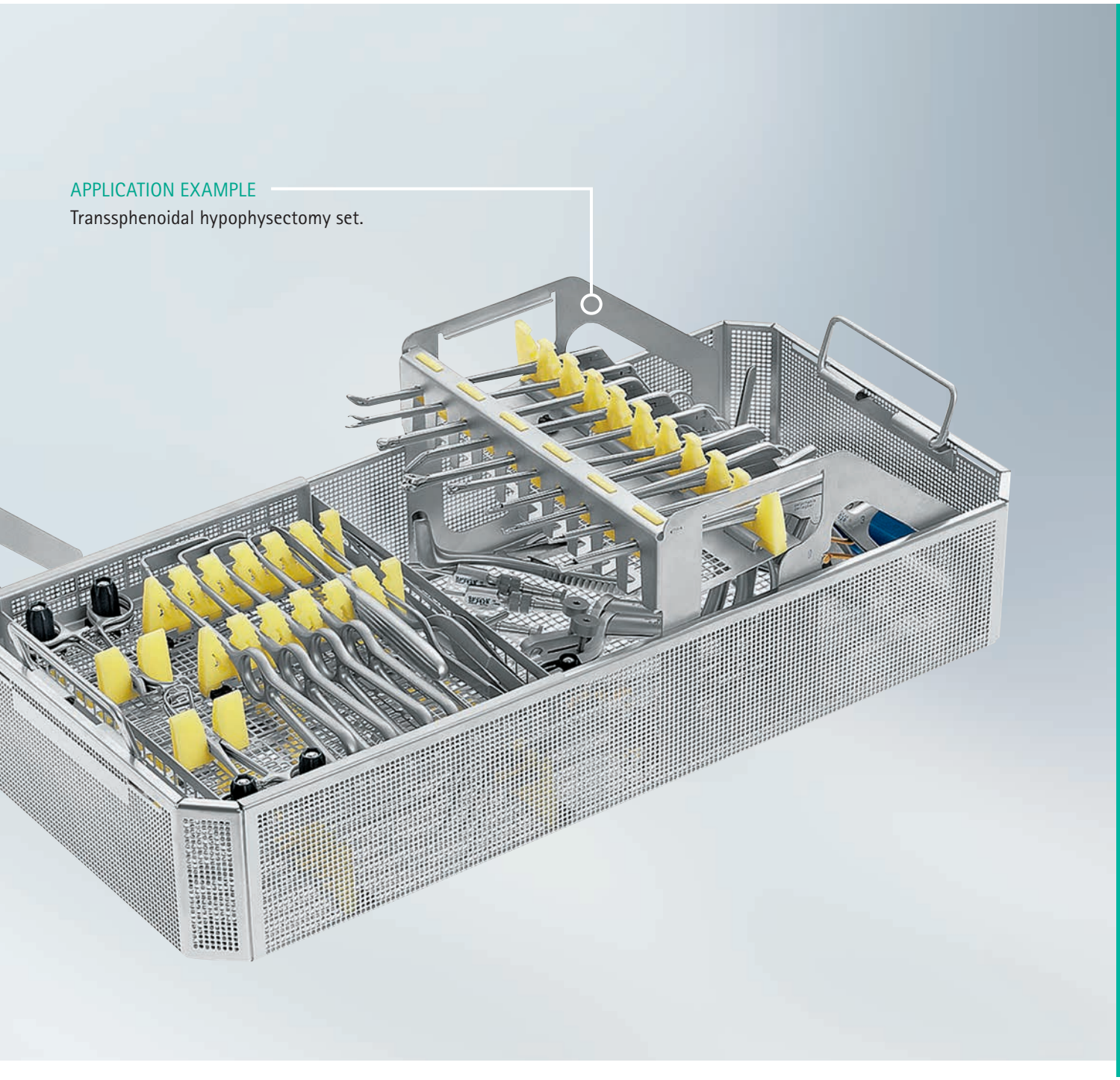
AESCULAP® InOS



JF120R
STORAGE FRAME FOR BONE PUNCHES
for storage during and after sterilization.

» FURTHER INFORMATION:

- For further information on the reprocessing of instruments, please refer to the brochure "Proper Maintenance of Instruments".



APPLICATION EXAMPLE

Transsphenoidal hypophysectomy set.

AESCULAP® InOS

Information on disassembly and reprocessing of the KERRISON bone punch is also available on the KERRISON poster C22911.

AESCULAP® KAIRison®

PNEUMATIC BONE PUNCH

» THE BENEFITS

- Reduces physical effort required (2)
- Very good cutting properties (2)
- Disassembly enables efficient reprocessing
- Two-level safety mechanism
- Suitable for right- and left-handed use

» THE FEEDBACK

"My first reaction after using the KAIRison® was to wonder why this unique tool had not been invented 20 years sooner"

Dr. Joseph Maroon, UPMC, Pittsburgh, PA, USA.

PNEUMATIC

SAFETY

Apply the safety catch to block the trigger mechanism when cleaning the punch.

COMPLETE CONTROL

There are two power settings. For positioning the bone punch, apply light pressure to the trigger and stop when you meet resistance. Release the trigger to stop the flow of air at any time, and return the bone to its original position – without punching. To cute bone, apply full pressure to the trigger.

» TECHNOLOGY THAT MAKES LIFE EASIER.

TO LOCK AND OPEN
for shaft replacement

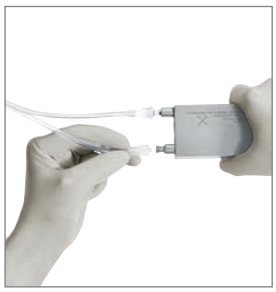
ON AND OFF
When the bone punch is not in use, deactivate the system via the on / off switch to avoid accidental operation.

AIR ON TAP
Simply connect to the existing compressed air outlet in the OR.

AESCULAP® KAIRison®

PNEUMATIC BONE PUNCH

SETUP IN JUST THREE STEPS



1. Connect the tube to the compressed air outlet in the OR. Then connect the tube to the pressure reducer, and connect the disposable tube to the handle.

2. Insert the shaft, and turn this toward the handle until you hear it click into place. Check if the shaft is positioned correctly.

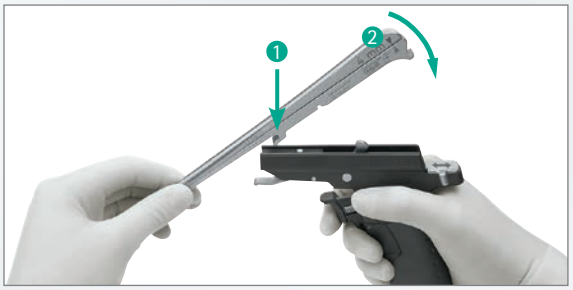
3. Switch the KAIRison® on. It is now ready to use. It is that simple.

   Further information in the KAIRison® short guide poster C25511.

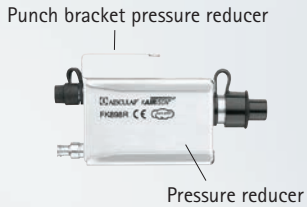
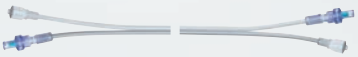
SHAFT REPLACEMENT

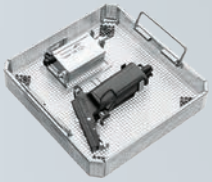
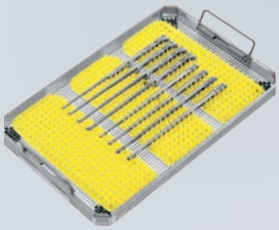
1. Pull the hook (1) and turn the shaft (2).

2. To detach the shaft just lift it up.



3. Insert the new shaft (1) and turn this toward the handle until you hear it click into place (2) – „click".

	Art no. / Description
	**FK899R** Pneumatic punch handle
	**FK898R** Pressure reducer **FK887R** Punch bracket pressure reducer
	**FK888SU** Disposable tube (3 m) Sales unit: PAK = Package of 10 tubes

	Art no. / Description
	**FK881R** Storage rack for KAIRison® handle and pressur reducer
	**FK891R** Storage rack for KAIRison® shafts
	**GA466R** Pneumatic hose (5 m) with AESCULAP® – Dräger connection
	**GA468R** Pneumatic hose (5 m) with AESCULAP® – Schrader connection

Length	Punch shaft	Width	Footplate	Working Length	Jaw opening	Ejector
235 mm	FK882R	2 mm	standard	140 mm	12 mm	✔
	FK883R	3 mm	standard	140 mm	12 mm	✔
	FK884R	4 mm	standard	140 mm	12 mm	✔
	FK885R	5 mm	standard	140 mm	12 mm	✔
	FK886R	6 mm	standard	140 mm	12 mm	✔
285 mm	FK892R	2 mm	standard	190 mm	12 mm	✔
	FK893R	3 mm	standard	190 mm	12 mm	✔
	FK894R	4 mm	standard	190 mm	12 mm	✔
	FK895R	5 mm	standard	190 mm	12 mm	✔
	FK896R	6 mm	standard	190 mm	12 mm	✔

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DEDICATED TO THE TRUE PIONEERS OF SURGERY.

NEUROSURGERY

SEE MORE. STAND TALL.

Aesculap Aeos®
DIGITAL SURGICAL MICROSCOPE PLATFORM

SEE MORE
WITH THE Aesculap Aeos®.

TRUE PIONEERS DESERVE A BETTER VIEW.

In neurosurgery, where a few millimeters can decide between health and disability, proper vision means everything. Conventional optical microscopes have supported the work of surgeons for many decades and continue to fulfill this important task in the neurosurgical operating room. The hands of a neurosurgeon can't treat what his eyes can't see, therefore a microscope which provides good vision is key to success in neurosurgery. Neurosurgeons should however not be content with solutions that are just "good", with limitations such as a relatively shallow depth of field, rather small field of view, or illumination challenges.

Challenges of the current technology in terms of vision

VISION

Small depth of field and field of view

LIGHT

Illumination challenges (1)

FLUORESCENCE

Inconvenient fluorescence imaging

WORKFLOW

Teamwork and teaching difficult

References

(1) Kalani MY, Yagmurlu K, Martirosyan N, Cavalcanti D, Spetzler R: Approach selection for intrinsic brainstem pathologies. Journal of Neurosurgery. 2016;125:1-12

SEE MORE

TRUE PIONEERS DESERVE A BETTER VIEW.

READY FOR A NEW LEVEL OF VISION?

In order to perform their outstanding tasks with high precision, neurosurgeons deserve to literally see more, supported by advanced imaging equipment.

SEEING MORE THANKS TO IMPROVED DIGITAL IMAGING

The Aesculap Aeos® can provide the solution to many challenges of conventional optical technology. As a partner of neurosurgeons all over the world, we are committed to introduce groundbreaking Digital Surgical Microscopy technology to neurosurgical operating rooms. Every day, neurosurgeons give their best in the operating room to help patients – and we give our best to support their delicate and precise work with the development of valuable products.

MORE INFORMATION AT A GLANCE

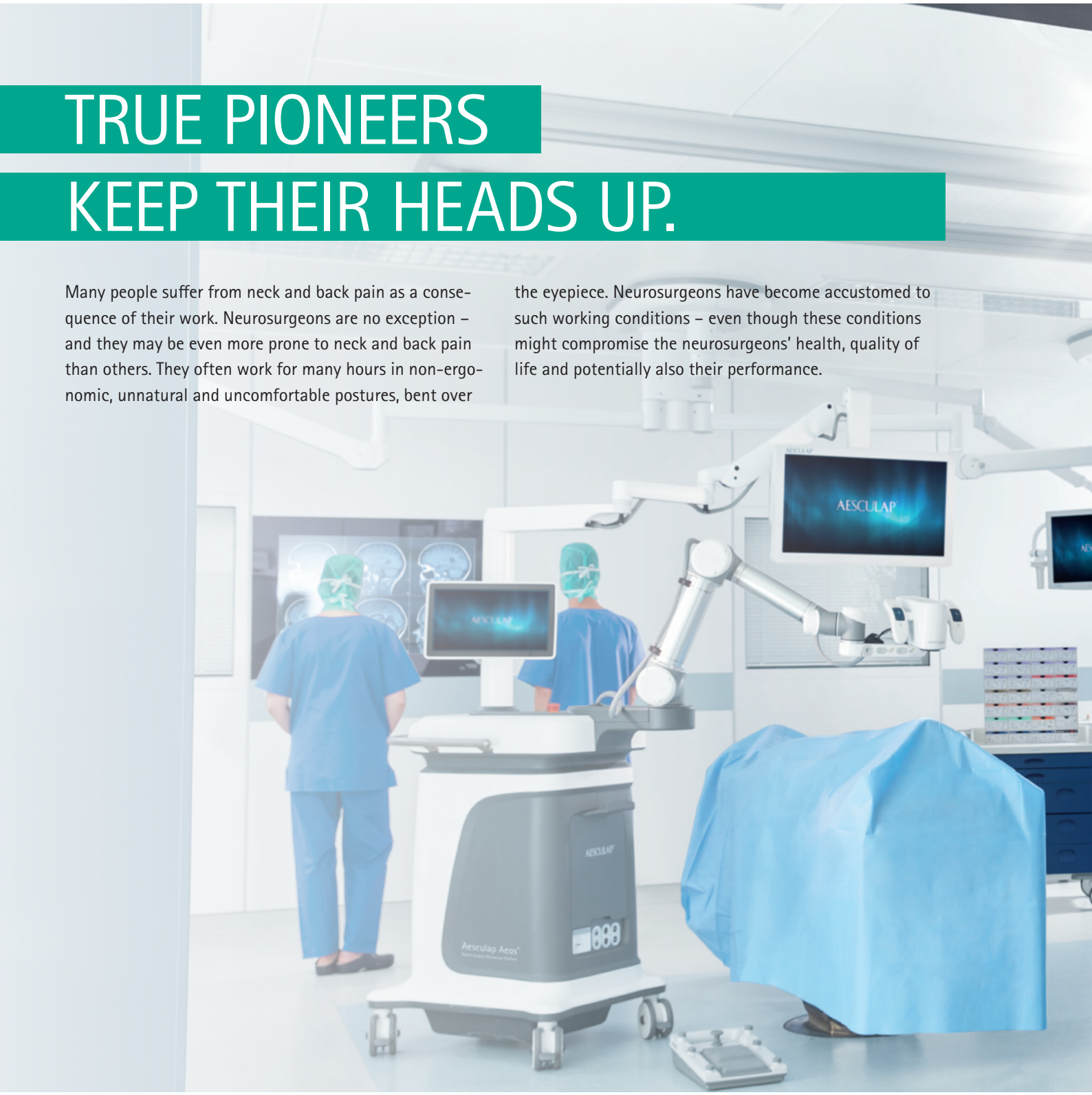
- Superior depth of field
- Wider field of view
- Superior illumination
- Backlight illuminated 3D fluorescence modes
- Improved teamwork and teaching

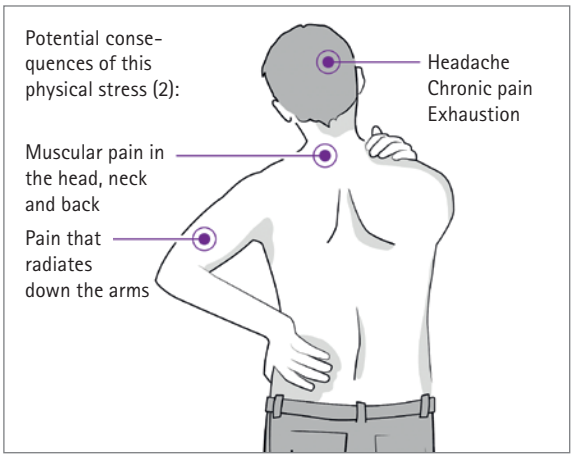
16:9 WIDE VIEW

STAND TALL
WITH THE Aesculap Aeos®.

TRUE PIONEERS KEEP THEIR HEADS UP.

Many people suffer from neck and back pain as a consequence of their work. Neurosurgeons are no exception – and they may be even more prone to neck and back pain than others. They often work for many hours in non-ergonomic, unnatural and uncomfortable postures, bent over the eyepiece. Neurosurgeons have become accustomed to such working conditions – even though these conditions might compromise the neurosurgeons' health, quality of life and potentially also their performance.





Challenges of the current technology in terms of ergonomics

4 in 5
neurosurgeons report pain after a day of surgery (3).

83 %
of these had musculoskeletal pain (3).

1 in 2
surgeons confirm a negative effect on their performance (4).

For every inch the head moves forward, the head, neck and upper muscles must support an additional **10 pounds** of weight (5).

References

(2) Pingel K, Ludescher J for Leica Science Lab: Ergonomically Designed Surgical Microscope Support Performance (2013).

(3) Pingel K for Leica Science Lab: 7 Tips For Better Ergonomics in Neurosurgery (2014).

(4) Davis WT, Fletcher SA, Guillamondegui OD: Musculoskeletal occupational injury among surgeons: effects for patients, providers, and institutions. J Surg Res. 2014 in "Shape Shifters". Surgeon News. September 2017:28-30

(5) Kapandji A. The Physiology of the Joints. Volume 3. 6th ed. London: Churchill Livingstone; 2008.

STAND TALL

TRUE PIONEERS KEEP THEIR HEADS UP.

READY FOR A NEW LEVEL OF COMFORT?

Don't you think that neurosurgeons should have everything they need to execute their demanding, high-precision work under favorable ergonomic conditions? We believe that neurosurgeons deserve to be able to stand tall and work more smoothly in an upright position.

STANDING TALL THANKS TO IMPROVED ERGONOMICS

The Aesculap Aeos® provides remarkable vision quality on one or several 3D screens and therefore enables the neurosurgeons to maintain an ergonomically comfortable posture while performing the surgery.

» ENHANCED WORKING COMFORT

- Look-over 3D heads-up surgery allows to work in an ergonomically comfortable posture
- Robotic-assisted features allow to position camera conveniently

BE EFFICIENT
WITH THE Aesculap Aeos®.

PIONEERING ROBOTIC-ASSISTED DIGITAL PLATFORM.

In neurosurgery, millimeters and seconds can change everything. It is therefore of utmost importance that neurosurgeons can perform their sophisticated work under ideal conditions. The surgical microscope has been key to the neurosurgeons' success – however, there are some challenges with respect to efficiency.

A significant amount of the neurosurgeons' time during surgery is spent on constant repositioning, refocusing and readjustments of the microscope, which can prolong surgery by up to 10 % (5). This is not ideal – fewer of these interruptions would make the workflow much more efficient.

Challenges of the current technology in terms of efficiency

VISION
Small depth of field and field of view

PAIN
Neck and back pain

ADJUSTMENTS
Manual repositioning

HEAT
Risk of burns trough xenon light

HIGH COSTS
Replacement of xenon lamps

WORKFLOW
Teamwork and teaching difficult

References

(5) Eivazi S, Afkari H, Bednarik R, Leinonen V, Tukiainen M, E Jääskeläinen J: Analysis of disruptive events and precarious situations caused by interaction with neurosurgical microscope. Acta neurochirurgica. 2015;157:1147–1154.

BE EFFICIENT

PIONEERING ROBOTIC-ASSISTED PLATFORM.

IMPROVED WORKFLOW

The Aesculap Aeos® allows for a more efficient workflow thanks to robotic-assisted features along with a remarkable vision quality. Assisted or automated positioning, superior depth of field and wider field of view are only some aspects that contribute to reduce interaction with the microscope and allow to completely focus on the task at hand.

IMPROVED WORKING CONDITIONS

Long hours in uncomfortable, non-ergonomic postures, bent over the eyepiece likely causes neck and back pain. Such pain may compromise the neurosurgeons' performance, with a potential economic impact for the department. With our Digital Surgical Microscope Platform, however, neurosurgeons work heads-up in an upright and ergonomic posture.

» BETTER EFFICIENCY

- More information at a glance
- Enhanced working comfort
- Facilitated workflows
- Forward-looking digital platform
- Reduced running cost due to LED illumination

THE AESCULAP® SERVICE OFFER

FOR THE Aesculap Aeos®.

Aesculap Aeos® TECHNICAL SERVICE

COMPETENCE. SUPPORT. SOLUTIONS.

Neurosurgeons have many responsibilities. Therefore, disruptions of the neurosurgeon's routine are more than just an inconvenience - they interrupt the workflow, reduce the efficiency, and increase the neurosurgeon's stress level.

At AESCULAP®, we have a whole team of skilled service technicians that can take care of your equipment. Our long-standing experience allows us to anticipate and prevent many potentially disruptive situations, ensuring your equipment is always available and ready when needed.

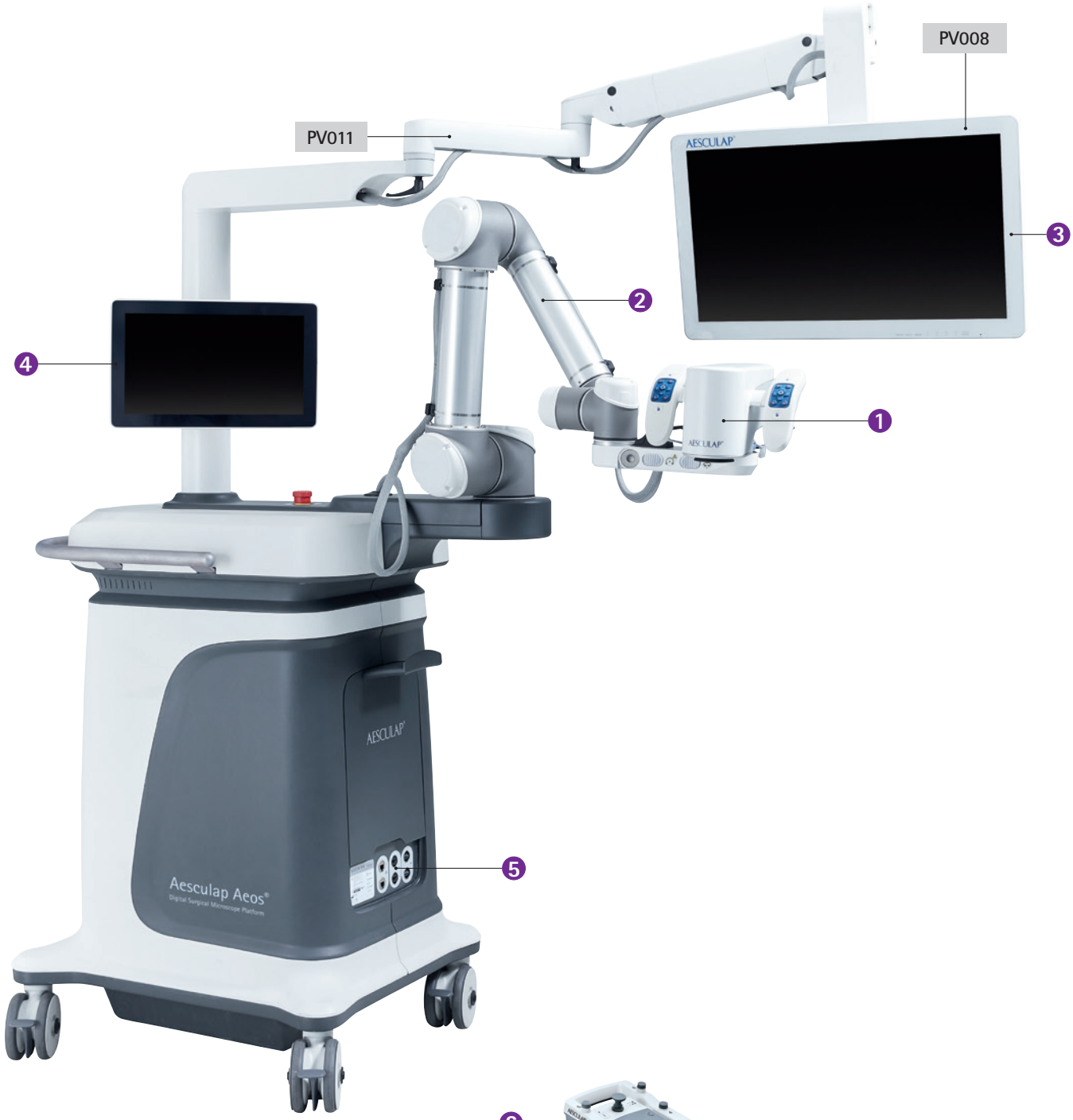
Our comprehensive service portfolio contributes to a trouble-free and smooth daily routine – and allows neurosurgeons to focus entirely on their high-precision work.

» OUR SERVICE OFFER

- Installation exclusively by competent service technicians ensures secure use and full functionality of the system right from the start
- Transparent and comprehensive service portfolio at good value for money guarantees full system functionality at a fixed cost
- Prevention services to ensure functionality and long system life (included in all levels of service contracts)
- Complete service solution to provide operational and legal certainty. Hotline and on-site service for unexpected service cases.
- Education and consulting services to increase user confidence

ORDER INFORMATION

FOR THE Aesculap Aeos®.



PV014

PV010

Aesculap Aeos®

Please note: PV008 and PV011 not included

1

CAMERA

- 10 x Optical zoom
- Working distance 200 – 450 mm
- HDR imaging
- Coaxial direct LED illumination
- 3D backlight illuminated fluorescence (optional)

2

ROBOTIC ARM

- 6-axis robotic arm
- Manual positioning
- Automatic / Robotic-assisted positioning
  - Lock-on-target
  - Waypoints

3

3D SURGICAL SCREEN

- 26", 31", 32" and 55" models*
- Full HD and 4K UHD models*
- Passive 3D technology

*not all models integratable in base

4

CONTROL SCREEN

- 15.6" display size
- Touchscreen

5

BASE

- 3D surgical screen integratable (optional)
- 3D recording
- Video outputs: HDMI, DP
- Video inputs: HDMI, 6G-SDI to integrate external sources such as endoscopic cameras
- Other interfaces: USB, Gigabit-LAN
- DICOM (optional)

6

FOOTSWITCH

- Wireless / Cabled
- Programmable buttons
- Joystick

PRODUCT OVERVIEW

PV010
Aesculap Aeos®

PV014
Footswitch, wireless

PV012SU
Sterile Drape, single-use
PAK = Package of 5 pieces

SURGICAL SCREENS AND MONITOR STANDS

PV011
Upgrate kit for integration of 3D monitor (PV008)

PV008
26" Full HD 3D monitor

PV016
Mobile monitor stand (for PV015)

PV015
55" 4K UHD 3D monitor

PV818
Mobile monitor stand (for PV644 & PV008)

PV644
31" 4K UHD 3D monitor

PV648
32" Full HD 3D monitor

SOFTWARE MODULES

PV022
Software module DUV 400

PV023
Software module DIR 800

PV024
Software module DICOM

ACCESSORIES

PV030
White balance cards
PAK = Package of 5 pieces

PV031
Keyboard, wireless

PV032SU
Test card for DUV 400, single-use

PV033SU
Test card for DIR 800, single-use

PV034
Locking HDMI cable, 5 m

PV969
HDMI to DVI video signal cable, 3 m

PV621
3D polarization glasses
PAK = Package of 15 pieces

PV622
3D anti-fog glasses
PAK = Package of 5 pieces

PV623
3D polarization glasses clip

PV624
3D eye shield glasses kit

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ROBOTIC-ASSISTED DIGITAL SURGICAL MICROSCOPE PLATFORM

CHALLENGES OF TRADITIONAL OPTICAL MICROSCOPES

FOR EVERY INCH THE HEAD MOVES FORWARD, THE HEAD, NECK AND UPPER BACK MUSCLES MUST SUPPORT AN ADDITIONAL

10 POUNDS OF WEIGHT. (1)

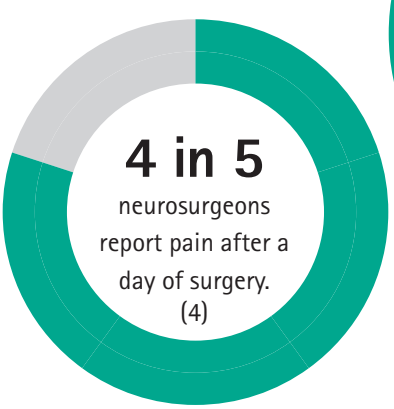
Torso positions, such as forward flexion, lateral bending and axial twisting are associated with back pain. (2)

(1) Kapandji A. The Physiology of the Joints. Volume 3. 6th ed. London: Churchill Livingstone; 2008.
(2) Keyserling WM, Punnett L, Fine LJ. Trunk Posture and Back Pain: Identification and Control of Occupational Risk Factors. Applied Industrial Hygiene; 3(3):87–92.
(3) Kerstin Pingel. 7 Tips For Better Ergonomics in Neurosurgery. Leica Science Lab. 2014.
(4) Kerstin Pingel. Ergonomically Designed Surgical Microscopes Support Performance. Leica Science Lab. 2014.
(5) Epstein S, Sparer EH, Tran BN, et al. Prevalence of Work-Related Musculoskeletal Disorders Among Surgeons and Interventionalists: A Systematic Review and Meta-analysis. JAMA Surg. Published online February 01, 2018153(2):e174947. doi:10.1001/jamasurg.2017.4947

FLAWED ERGONOMICS TAKE A TOLL ON THE HEALTH AND PERFORMANCE OF SURGEONS.

Potential consequences of this physical stress: Headaches, Chronic pain Exhaustion (3)

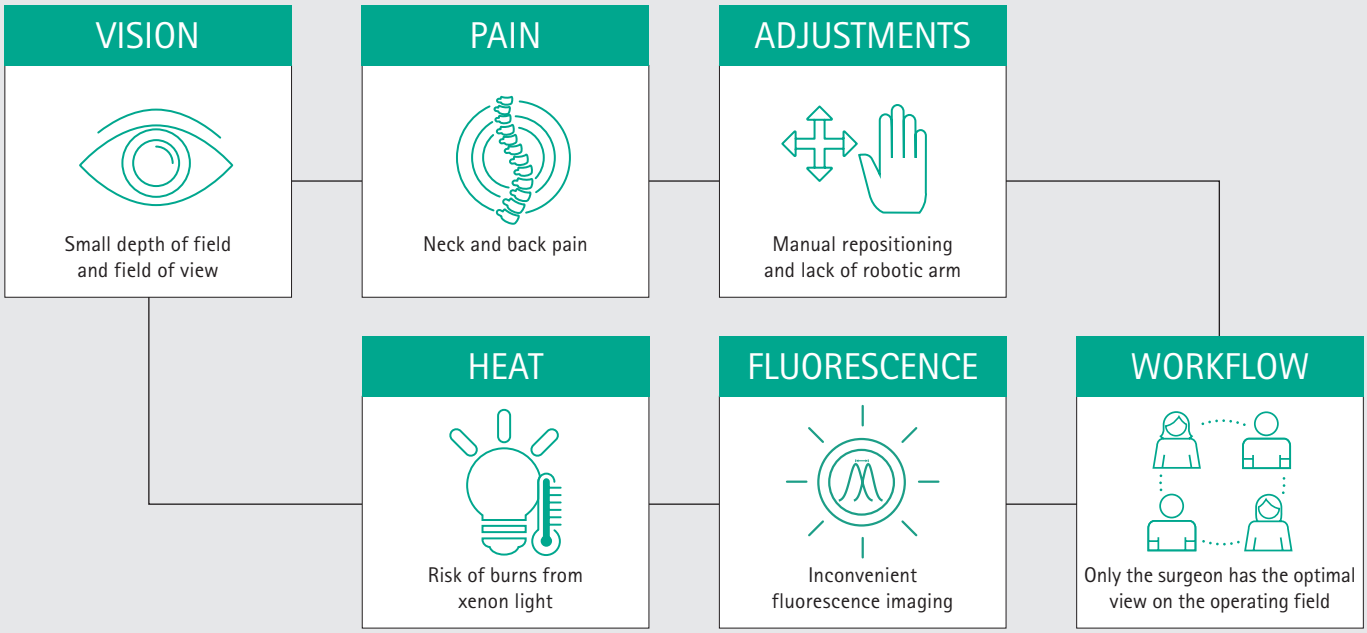
Muscular pain in the head, neck and back which can radiate down the arms (3)



35 %

of surgeons performed fewer operations due to injury. (5)

THE SURGEON FACES SEVERAL CHALLENGES WITH THE CURRENT TECHNOLOGY



Aesculap Aeos®

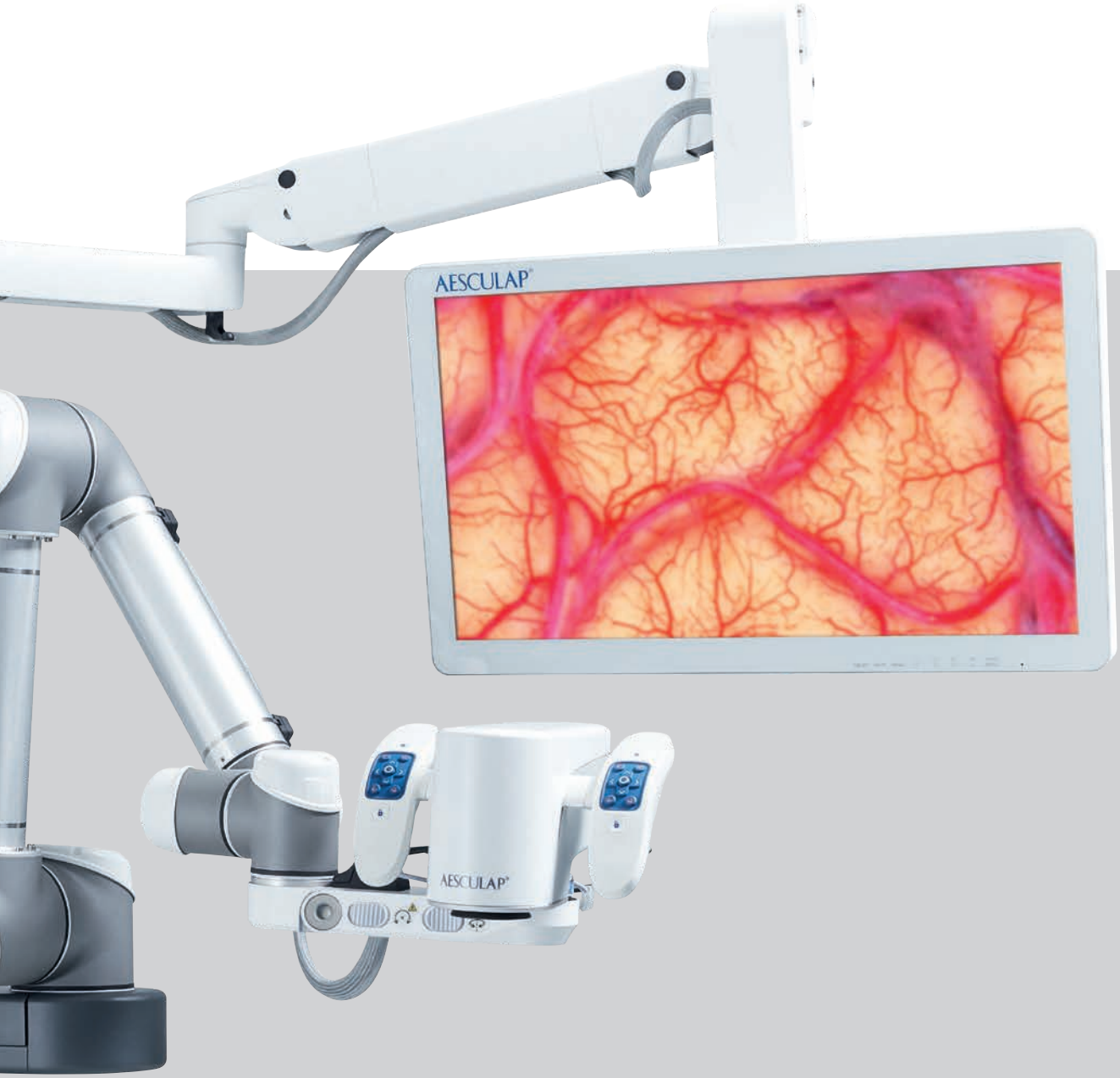
ROBOTIC-ASSISTED DIGITAL SURGICAL MICROSCOPE PLATFORM

SURGICAL DIFFERENTIATORS

WELCOME TO THE NEXT GENERATION SURGICAL VISUALIZATION SYSTEM

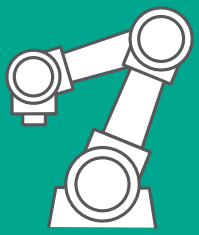
The user experience and overall concept of traditional optical microscopes have remained materially the same for over 20 years. Surgeons are tethered to their oculars which often forces them to choose between the view they need versus the view that's comfortable. Aesculap Aeos® upends all of that with an innovative design ushering in a new era of intraoperative work-flows and a new, more ergonomic way for surgeons to see their patients.

The Aesculap Aeos® Digital Surgical Microscope combines the ergonomic and educational benefits typically found in digital systems with the high-quality imaging and fluorescence capabilities of traditional optical microscopes along with pro-prietary digital and robotic functionalities.



» IMPROVEMENTS IN


Ergonomics


Robotics


3D Imaging


Fluorescence


Digital Platform

Aesculap Aeos®

ROBOTIC-ASSISTED DIGITAL SURGICAL MICROSCOPE PLATFORM

ADVANTAGES

UPGRADE YOUR ERGONOMICS

- Heads-up positioning frees the surgeon from the microscope ocular tether allowing the surgeon, not the microscope, to dictate ergonomics
- Due to the integrated 3D monitor on the flexible boom arm, the surgeon is able to work more ergononomically and gains flexibility regarding the OR set-up
- Good repositioning with look over design paired with robotic arm
- Option for hands-free, full functionality with wireless foot switch
- Handgrip and wireless foot switch controls are custom tailored for each user

WHO BENEFITS?

SURGEONS

Potential to work more ergonomically (1)

TRAINING

Optimize hands-on opportunities for residents and fellows

OR TEAM

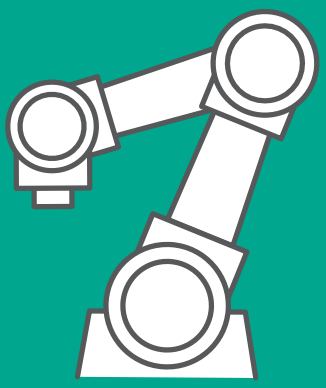
Multiple 3D monitor setup ensures full OR team involvement as everybody can see the same

HOSPITAL

Help mitigate risk of ergonomic-related injuries to surgeons

(1) According to feedback within the scope of a survey of 24 surgeons that used the Aesculap Aeos® clinically conducted by AESCULAP®

SURGEON-CONTROLLED PRECISION ROBOTICS



- Fully robotic arm features six degrees of freedom and provides a range of repositioning options:
  - Assisted drive
  - Micro movements
  - Waypoints
  - Lock-on target
  - Hands-free via wireless foot switch

- Handgrip and wireless foot switch controls are custom tailored for each user

WHO BENEFITS?

SURGEONS

Convenient manual positioning (1)

TRAINING

View angles previously challenging with traditional optical microscopes

OR TEAM

Easy draping

HOSPITAL

Ability to incorporate robotic neurosurgery into hospital's patient marketing strategy

(1) According to feedback within the scope of a survey of 24 surgeons that used the Aesculap Aeos® clinically conducted by AESCULAP®

Aesculap Aeos®

ROBOTIC-ASSISTED DIGITAL SURGICAL MICROSCOPE PLATFORM

ADVANTAGES

SEE WHAT YOU'VE BEEN MISSING

- 3D 4K imaging paired with High Dynamic Range (HDR)
- Full-time 3D allows surgeons to focus on the task at hand without worrying about 2D-to-3D magnification requirements
- 10x optical zoom delivers full resolution, regardless of magnification level
- Cool field due to direct LED illlumination, coaxial illumination leads to superior illumination in deep and narrow cavities (1)

WHO BENEFITS?

SURGEONS

Excellent depth of field enhances focus on the patient (1)

TRAINING

Great teaching tool as everybody can see the same (e.g. for residents and fellows)

OR TEAM

Optimized commu-nication and surgical workflows

HOSPITAL

Ability to incorporate 3D neurosurgery into hospital's patient marketing strategy

(1) According to feedback within the scope of a survey of 24 surgeons that used the Aesculap Aeos® clinically conducted by AESCULAP®

FLUORESCENCE-GUIDED SURGERY IN A WHOLE NEW LIGHT

- 3D digital fluorescence in DUV400 ultraviolet and DIR800 infrared light modes
- Backlight illumination aids visualization of nearby non-fluorescing structures without switching back to white light
- Augmented Reality (AR) capabilities in DUV400 ultraviolet light mode provide additional insights from combined fluorescence and white light images

WHO BENEFITS?

SURGEONS

Enhanced working comfort without toggling between fluorescence and white light (1)

TRAINING

Optimized hands-on opportunities for residents and fellows

OR TEAM

Full OR team involvement as everybody can see the same

HOSPITAL

Ability to incorporate advancements in imaging technology into hospital's patient marketing strategy

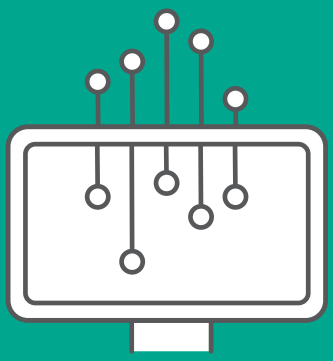
(1) According to feedback within the scope of a survey of 24 surgeons that used the Aesculap Aeos® clinically conducted by AESCULAP®

Aesculap Aeos®

ROBOTIC-ASSISTED DIGITAL SURGICAL MICROSCOPE PLATFORM

ADVANTAGES

THE FUTURE IS DIGITAL



- Digitally augment on-screen images with multiple imaging modes
- Future-proof your investment with software updates and an upgradeable digital platform
- Unlimited profiles allow customized user settings for each surgeon and/or procedure
- Plug-and-play integration with neuroendoscopes and other imaging technologies (2)

WHO BENEFITS?

SURGEONS

See more

TRAINING

Trainees experience the latest technology on an innovative platform

OR TEAM

Visualization on one or several 3D screens, therefore full OR team involvement

HOSPITAL

Maximize ownership return on invesment and gain financial flexibility

(2) Video output: SDI or HDMI output required

CLINICAL APPLICATIONS

- Designed specifically with cranial and spinal neurosurgery in mind
- For use with patients undergoing microsurgery within its indications for use. It must not be used for ophthalmology. For more details, see IFU

PPE
Versatility

Heads-up surgery design is PPE-friendly, allowing for more freedom of movement and easing the burden of increased PPE requirements.

Aesculap Aeos® SERVICE

PROFESSIONAL. RELIABLE. TRANSPARENT.

YOUR ADVANTAGES

- Reliable on-site service
- Safeguards your valuable equipment
- Reducing downtime
- Individual risk covering
- Transparent service agreement
- Clearly defined service scope

OUR OFFER

A WIDE RANGE SERVICE PACKAGE FOR YOUR VALUABLE MEDICAL EQUIPMENT

Manufacturer service

Fully trained and qualified service technicians use original equipment to guarantee the quality service of your medical devices. We follow and adhere to all regulatory standards to safeguard patient and user integrity.

Always at your service

We provide a global network of service hubs which enables our technicians to offer a fast and efficient preventative service process. Our service hubs are located worldwide to guarantee a quick turn around time for your Aesculap Aeos® system. You will find your nearest service hub, response times and contact details in your service contract.

Adherence to budget

We offer full transparency on the overall project cost. You decide by choosing which service level is required depending on your budget. For each option you will receive a transparent forecast of your expenses.

Economic and efficient

Optimum performance of our equipment is our highest priority in the operating theatre. Through preventive maintenance we avoid any unexpected breakdowns which can cause many inconvenient problems for the hospital. We handle each service contract customer with the highest priority should assistance be required.

Value preservation service

Regular service prevents any unplanned downtime or major damage to your equipment. Whether you require regular maintenance or repair, we always update your system to the latest standards. This ensures you have a fully up to date and reliable system in the hospital.

Original spare parts

In this case, we exchange any defects with reworked parts. Each of these parts have underwent AESCULAP® quality controls and are refurbished according to manufacturing standards.

Aesculap Aeos® SERVICE

PROFESSIONAL. RELIABLE. TRANSPARENT.

INSTALLATION	BASIC	ADVANCED	PREMIUM
Installation of Aesculap Aeos® by a service technician on-site with the customer, including technical documentation	✔	✔	✔
Integration of DICOM, if required	✔	✔	✔
Set-up of activated software modules	✔	✔	✔
User training	✔	✔	✔
PREVENTIVE MAINTENANCE			
Proactive reminder for annual inspection	✔	✔	✔
Annual inspection (visual, functional and electrical safety check), including travel and labor	✔	✔	✔
Technical documentation of annual inspection	✔	✔	✔
Safety relevant software updates	✔	✔	✔
SERVICE SUPPORT			
Reaction time	72h	48h	24h
Service hotline	✔	✔	✔
Software updates – improved functionality		✔	✔
Backup for OR data, incl. external hard drive during annual inspection		✔	✔
REPAIRS			
Cost covering on-site (repair & support) visits		1 visit	2 visits
Cost covering defective components*	10 %**	25 %**	100 %**
ADDITIONAL SERVICES			
Update/refresher training for OR staff into handling of the Aesculap Aeos®		1 visit	2 visits

* self-inflicted and misuse repair cases are excluded

** discount on list price

Silicone Brain Spatulas

Malleable metal spatula with elastic silicone coating.

Silicone Brain Spatulas

Reduced potential for causing trauma, due to soft silicone edges (wings).

Features

- Individually sterile packaged
- For single use

Note

Silicone Brain Spatulas are available in five different widths – from 6 to 15 mm with an overall length of 200 mm.

RANEY Clips

Clips for manual application

RANEY Scalp Clip System

- For prevention of bleeding of the scalp
- Space-saving comparison to clamps
- Atraumatic design

RAABE Micro Suction Cannulas

Very fine suction instruments for narrow approaches

RAABE Micro Suction Cannulas

Our atraumatic micro suction cannulas for neurosurgery – for gentle and precise preparation with the rigid cannula.

Advantages

- Fine suction devices for narrow approaches
- Stable suction tube for suction
- The ball tip at the end of the instrument allows for gentle preparation

Features

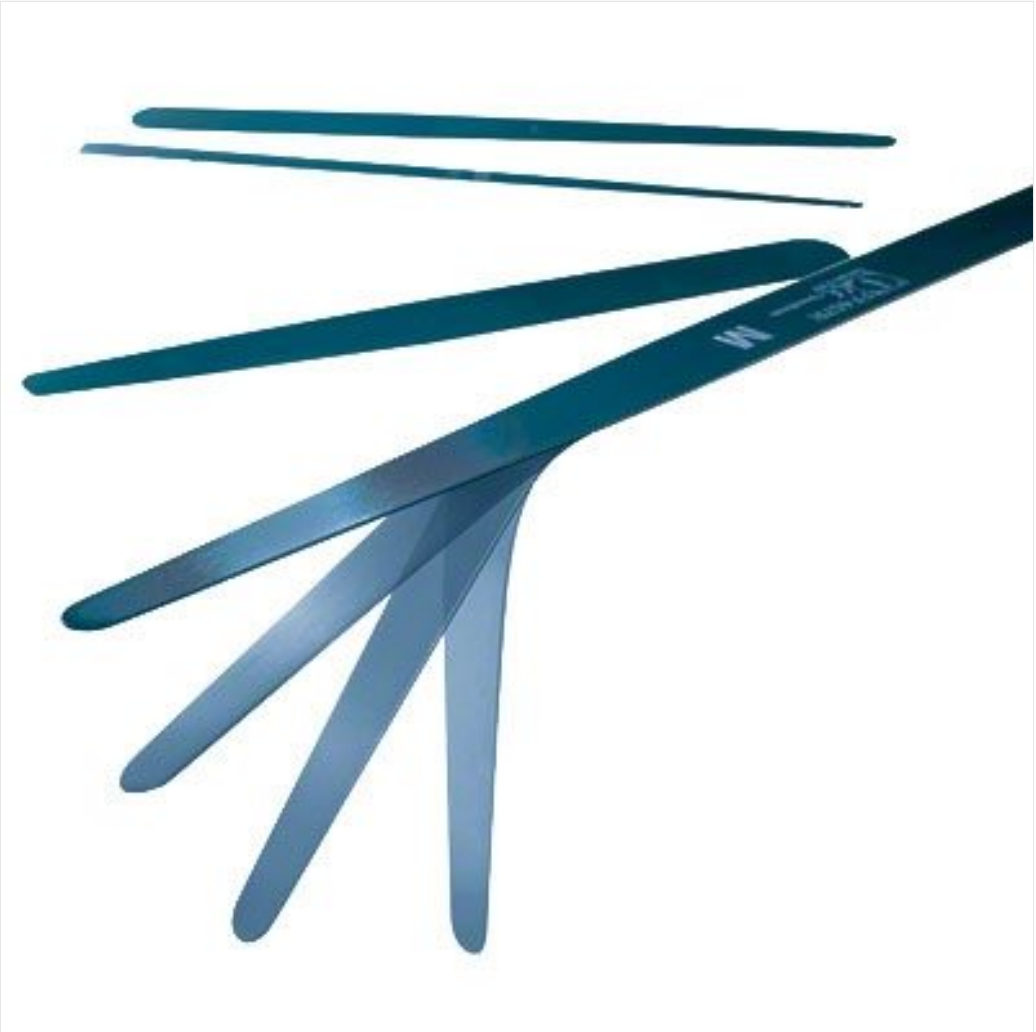
- Drop shaped suction-interrupter
- Coded widths and lengths

Note

Micro suction cannulas are available in 4 lenghts and 3 diameters - 4, 6, 8 French.

Noir® Spatulas

Black coated, smooth and tapered spatulas for less OR light reflection



Noir® Spatulas

With their tapered shape, the Noir® spatulas allow for retraction with an enhanced visibility of the operating area.

Advantages

- Enhanced visibility of the surgical site due to its tapered shape.
- Black Noir® coating to reduce disturbing light reflections.
- Smooth surface.

Features

- Malleable instrument made of surgical steel.
- Clear marking for identification of spatulas.
- Reusable.

Note

Noir® Brain Spatulas are available in four sizes: S, M, L and XL – widths from 4 mm to 21 mm with an overall length of 200 mm.

LEYLA Retractor

For three-dimensional fixation of spatulas

Flexible Holding Arm and LEYLA Retractor

The position of the flexible holding arm and the LEYLA retractor can be adjusted in three dimensions. A locking mechanism allows fixating the device in any position.

Product features – flexible holding arm

- Stable holding arm with single-hand locking mechanism
- For endoscopes and MINOP® system, ventriculoscopy or endoscope-assisted neurosurgery

Product features – LEYLA retractor

- Adjustability of clamping and holding force
- For spatula fixation
- Various clamping elements available

FUKUSHIMA-Design Suction Cannulas

Control of suction power

FUKUSHIMA-Design Suction Cannulas

Malleable cannulas for adaption to anatomical conditions. Employed material allows for individual forming.

Advantages

- Suction control due to tear drop shaped suction interrupter
- Individual adaption of the suction tube due to bendable material
- Conical suction tube reduces plugging
- Atraumatic distal tip

Features

- Conical suction tube made of malleable material
- Suction cannula supplied complete with stylet

Note

FUKUSHIMA-Design suction tubes are available in 4 lengths and 8 diameters — 3 to 12 French.

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