

# Aesculap MINOP<sup>®</sup> TREND

For transnasal neuroendoscopy on the pituitary gland and cranial base



Aesculap Neurosurgery

## The system at a glance



The endoscope is now widely established in intracranial neurosurgery and is in routine use. Neuroendoscopy has become an indispensable standard for both intraventricular and endoscopic assisted indications.

Increasing numbers of publications also bear witness to a strongly growing interest in transnasal endoscopic approaches. With advantages such as improved light intensity in the deep operating field and an expanded field of vision with direct visualization of the pathoanatomical structures, the TREND is moving more and more towards transnasal approaches.

However, the demands on a well balanced endoscopy system are very high. Not only must it have outstanding optical qualities but, it must also offer clever ergonomics to make the move from microscope to endoscope easier.

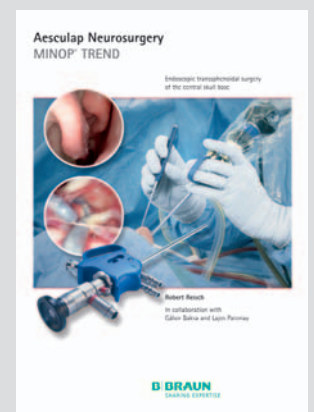
At the same time, it should also inspire advanced users to go further, for example with "extended approaches". Absolutely in line with this TREND, and specially developed for neurosurgery, is Aesculap's new **TR**ansnasal **END**oscopy system – MINOP TREND.

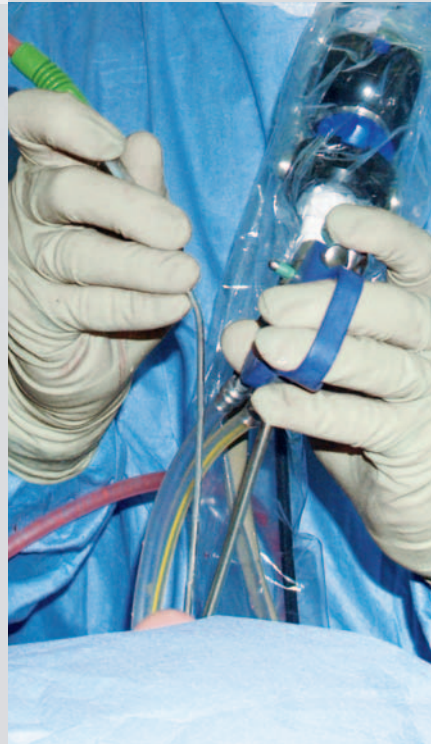


### Endoscopic transsphenoidal surgery of the central skull base

Author: Robert Reisch  
Head of the Division Minimally Invasive Endoscopic Neurosurgery  
Department of Neurosurgery  
University Hospital Zurich, Switzerland  
Chairman: Helmut Bertalanffy

"This illustrative operating manual provides effective assistance in introducing the endoscopic technique into the daily treatment of sellar and parasellar lesions via the transsphenoidal route. After a short historical background, the anatomy of the nasal cavity and the supra- and parasellar regions are illustrated focusing on an endoscopically adapted and applied description. The technique of the endonasal transsphenoidal biportal-binostriil approach is described in detail with illustrative cases. The conclusion consists of a comprehensive description of the Aesculap MINOP<sup>®</sup> TREND pituitary endoscope system with a configuration of newly developed instruments especially designed for transsphenoidal endoscopic surgery."





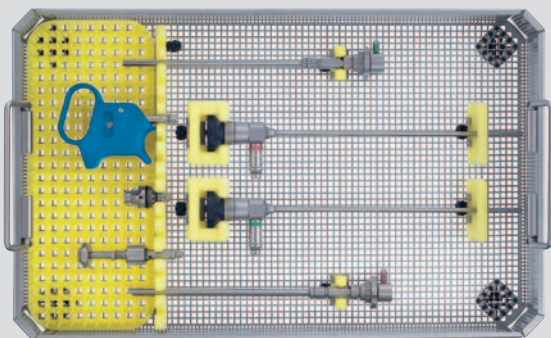
- ▶ **Brilliant newly developed 4 mm optic** provides reliable optical control of the surgical dissection
- ▶ **Revolvable endoscope shaft with straight optics** permits direct visualization of hidden corners of the operating field
- ▶ **Slim handle** for unimpeded paraendoscopic manipulation
- ▶ **Ergonomic handle design** and optimum weight distribution offer the faultless and precise handling like that of a micro instrument
- ▶ **Optimized suction and irrigation function** continuous suction prevents the optic from misting. The trigger-controlled irrigation frees the endoscope from soiling and even provides additional irrigation of the operating field.
- ▶ **Smooth and secure attachment** to a holding arm for fatigue-free working with both hands
- ▶ **Lightweight, stable connection** to a navigation system permits direct navigation of the endoscope, providing additional safety in the operating field
- ▶ **Elongated shaft** for perfect visualization of deep structures, especially when using extended approaches to the cranial base.

## The system at a glance



### FH615

Handle with irrigation button for  
FH610R and FH611R  
Ergonomic grasping part



### FF357R

Storage tray with silicone  
padding and lid for all  
MINOP<sup>®</sup> TREND components

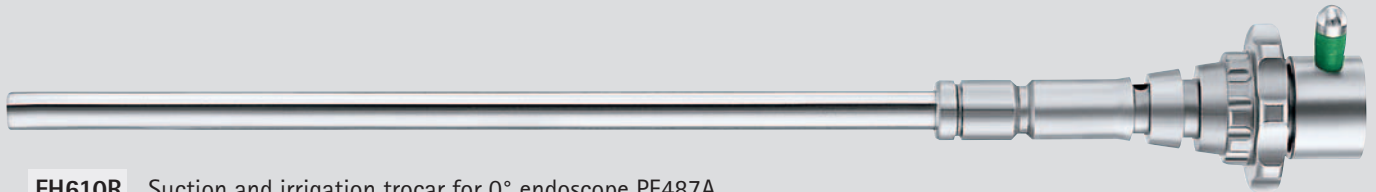
Container for FF357R  
consisting of container  
body JK740 and lid (basic  
version) JK789



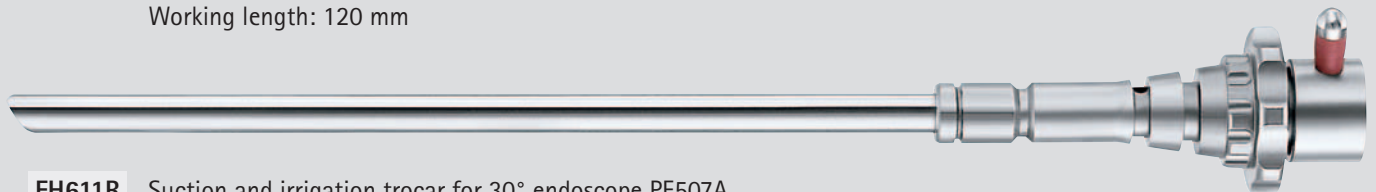
### Product features and advantages at a glance:

- ▶ 4 mm straight (0° and 30°) optics with outstanding picture quality
- ▶ Optimum length for extended approaches to the cranial base
- ▶ Slim, ergonomic blue handle
- ▶ Integrated, trigger-controlled irrigation and cleaning mechanism for continuous suction in the operating site
- ▶ Possibility of direct connection to holding arm and navigation unit
- ▶ Well thought-out container system for safe storage

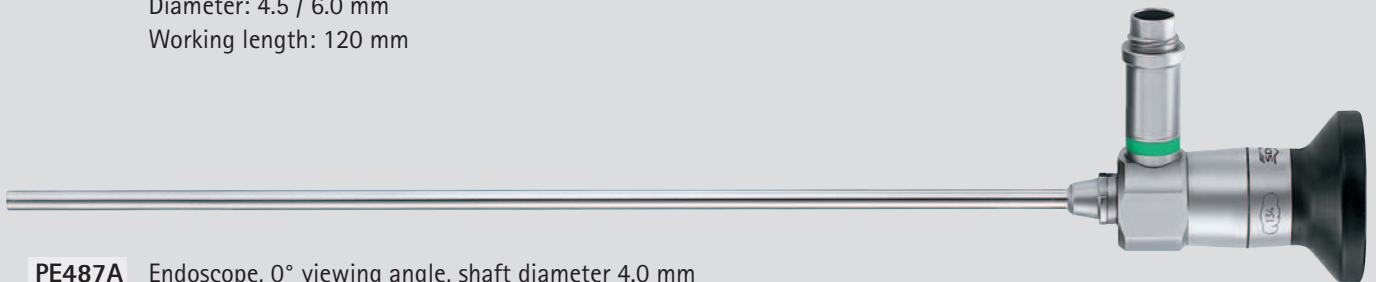




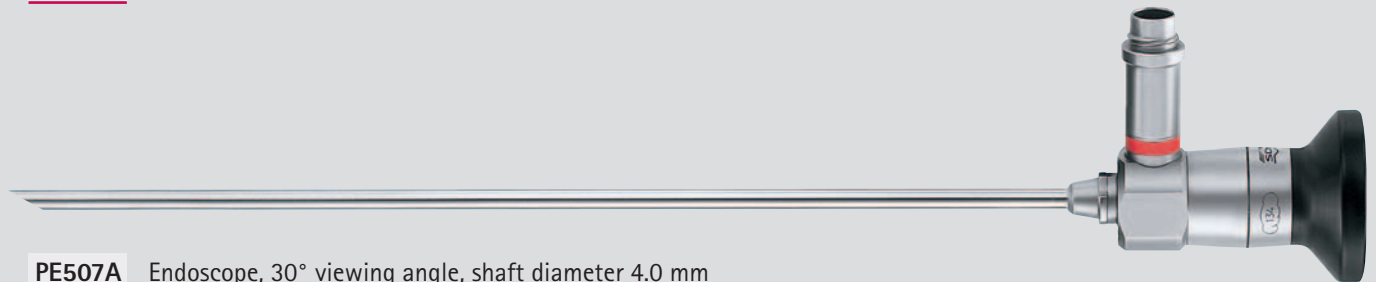
**FH610R** Suction and irrigation trocar for 0° endoscope PE487A  
Diameter: 4.5 / 6.0 mm  
Working length: 120 mm



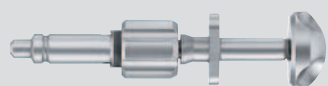
**FH611R** Suction and irrigation trocar for 30° endoscope PE507A  
Diameter: 4.5 / 6.0 mm  
Working length: 120 mm



**PE487A** Endoscope, 0° viewing angle, shaft diameter 4.0 mm



**PE507A** Endoscope, 30° viewing angle, shaft diameter 4.0 mm



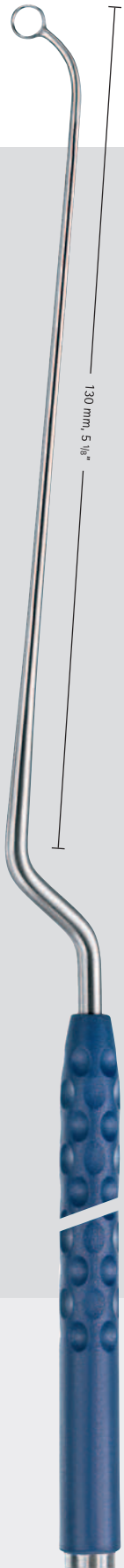
**RT099R**  
Adapter for Aesculap holding arm



**FH605SU**  
Suction and irrigation tube, sterile, 4.5 m, 2 puncture needles,  
for MINOP® TREND handle FH615 and FH610R/FH611R,  
Package of 10 tubes

## The system at a glance

Bayonet design with ergonomic grasping part and semi-sharp tips



<b>NICOLA</b> <b>FA041R</b>	<b>NICOLA</b> <b>FA042R</b>	<b>HARDY</b> <b>FA043R</b>	<b>HARDY</b> <b>FA044R</b>	<b>HARDY</b> <b>FA045R</b>	<b>HARDY</b> <b>FA046R</b>	<b>HARDY</b> <b>FA047R</b>	<b>HARDY</b> <b>FA060R</b>
Curette 6.5 mm	Curette 6.5 mm	Enucleator left cutting	Enucleator right cutting	Curette 4.0 mm	Curette 4.0 mm	Curette 4.0 mm	Curette 4.0 mm
45° vertical angled long neck	45° horizon- tal angled short neck			90° left angled long neck	90° left angled short neck	90° right angled long neck	90° right angled short neck
<b>HARDY</b> <b>FA061R</b>	<b>HARDY</b> <b>FA062R</b>	<b>HARDY</b> <b>FA063R</b>	<b>HARDY</b> <b>FA064R</b>	<b>HARDY</b> <b>FA065R</b>	<b>HARDY</b> <b>FA066R</b>	<b>LANDOLT-REULEN</b> <b>FA067R</b>	<b>LANDOLT-REULEN</b> <b>FA068R</b>
Curette 4.0 mm	Curette 4.0 mm	Curette 6.0 mm	Curette 6.0 mm	Curette 6.0 mm	Curette 6.0 mm	Micro Hook 1.7 mm	Dissector 2.0 mm
45° left horizontal angled short neck	45° right horizontal angled short neck	90° left angled long neck	90° left angled short neck	90° right angled long neck	90° right angled short neck		blunt

### **FA041R-FA068R**


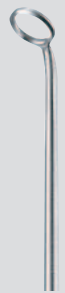



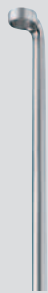

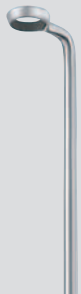
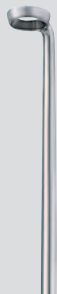
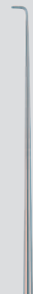

Working length: 130 mm, 5 1/8"

Total length: 280 mm, 11"





**Straight design with ergonomic grasping part and semi-sharp tips**

					
NICOLA <b>FA030R</b>	NICOLA <b>FA031R</b>	HARDY <b>FA032R</b>	HARDY <b>FA033R</b>	HARDY <b>FA034R</b>	HARDY <b>FA035R</b>
Curette 6.5 mm	Curette 6.5 mm	Enucleator left cutting	Enucleator right cutting	Curette 4.0 mm	Curette 4.0 mm
45° vertical angled long neck	45° horizon- tal angled short neck			90° angled long neck	90° angled short neck
					
HARDY <b>FA036R</b>	HARDY <b>FA037R</b>	HARDY <b>FA038R</b>	LANDOLT- REULEN <b>FA039R</b>	LANDOLT- REULEN <b>FA040R</b>	
Curette 4.0 mm	Curette 6.0 mm	Curette 6.0 mm	Micro Hook 1.7 mm	Dissector 2.0 mm	
45° angled short neck	90° angled long neck	90° angled short neck		blunt	

**FA030R-FA040R**

Working length: 140 mm, 5 1/2"  
Total length: 265 mm, 10 1/2"

The TREND instruments, available in straight or bayonet form, are specifically designed to complement and complete pleasant and precise operating with MINOP® TREND.

## The system at a glance

### Recommended Set

**FH615R, FH610R,  
FH611R, PE487A,  
PE507A**

MINOP® TREND Transnasal Endoscopy system incl. handle, trocar and scopes

**FA041R – FA047R**

TREND pituitary curettes, dissectors, hooks, enucleators

**FA060R – FA068R**

TREND pituitary curettes, dissectors, hooks, enucleators

**FF590B**

NOIR® transsphenoidal speculum

**OK090R**

Self-retaining nasal speculum

**FA076R**

Antrum bone punch

**FA069R – FA075R**

Pituitary scissors and forceps

**FF345R**

Landolt tumor grasping forceps

**FM156R – FM158R**

Sensation micro forceps straight

**GK801R**

Bipolar coagulation forceps with slender jaws & active tip opening

**GF432R**

Suction cannula Fukushima design with curved instrument tip

**FK906B – FK909B**

Kerrison NOIR®, detachable with thin footplate, upwards

**FK936R – FK939R**

Kerrison, detachable with thin footplate, downwards

**FM682R, FM702,  
FM722R**

XS tube shaft instruments, scissors and forceps

**FF168R**

Flexible holding arm with mechanic fixation

**GD670, GD676,  
GD672, GD671**

Microspeed UNI, highspeed drill system, incl. motor & foot pedal

**GB758R, GB771R**

Hi-Line XS handpiece, angled and extra-long for narrow and deep-seated drill work

**GE613R – GE617R**

Hi-Line XS diamond burrs

**PV440, PV944**

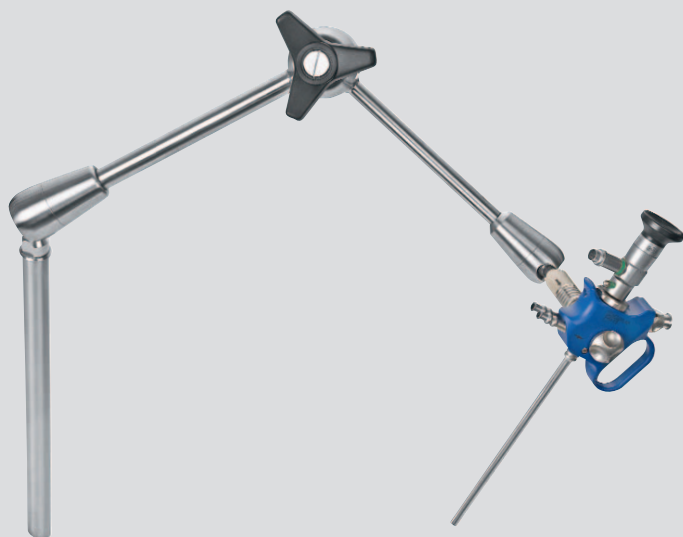
Full HD camera and wide-screen monitor

**OP930**

Xenon light source

**PV920**

Digital documentation system EDDY-DVD







## The system at a glance

### ■ Neuroendoscopic Equipment



... for cranial and spinal neuroendoscopy.

### ■ Visual Equipment

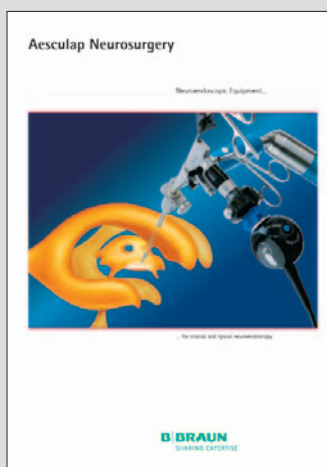


... imaging and accessories for minimal invasive surgery.

### ■ Aesculap Power Systems Catalogue



... dedicated power systems for minimally-invasive neurosurgery.



For more information see  
Brochure C35502



For more information see  
Brochure C46702



For more information see  
Brochure O22711

# Aesculap Academy



## Horizons of Knowledge. Competence to master the future.

Innovative developments in the field of medical technology, sophisticated new treatment methods, increasingly more stringent requirements for hospital and quality management and, last but not least, a healthy interest in acquiring new knowledge have given rise to an enormous and ever-increasing demand for further and advanced training.

The Aesculap Academy enjoys a world-wide reputation as a leading forum for medical training and answers the demands of physicians and medical staff in OR, anaesthesia, ward, outpatient care and hospital management. The course program comprises a wide range of hands-on workshops, management seminars and international symposia.

Aesculap Academy courses are of premium quality and are accredited by the respective medical societies and international medical organizations. A scientific advisory board guarantees the perfect selection of speakers and topics.

All of our courses are conducted by pioneering neurosurgeons who will address the theoretical knowledge of neuroendoscopy, cranial endoscopic anatomy, and clinical applications of neuroendoscopy. Each course includes extensive hands-on sessions or even live surgeries. Course attendees will benefit from discussions and analysis of real cases together with expert colleagues from all over the world. The training facilities of the Aesculap Academy in Berlin or Tuttlingen are traditional and spectacular locations for "sharing expertise".

Competence to master the future – keep yourself fit for the future and ask for the latest course programme offerings, e.g.

- Basic Intracranial Neuroendoscopy
- Advanced Intracranial Neuroendoscopy
- Applied Intracranial Neuroendoscopy

**Visit our website and register for one of the next neuroendoscopy courses - [www.aesculap-neuro.com](http://www.aesculap-neuro.com) or [www.aesculap-academy.com](http://www.aesculap-academy.com) or contact your local B. Braun Aesculap representative.**

