

# MINOP® InVent

Advanced IntraVentricular Neuroendoscopic System



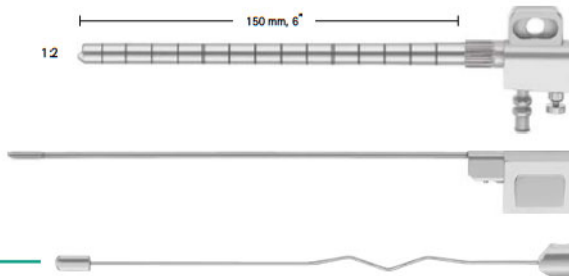
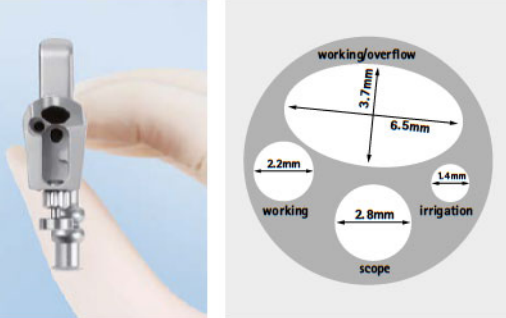
Aesculap® MINOP® InVent is an advanced intraventricular neuroendoscopic system offering a unique solution for bi-manual resection of tumors and cysts.

The multi-directional flexibility experienced through the large working channel coupled with the specially designed instrumentation enables innovative treatment options, thus expanding the possibilities for intraventricular and paraventricular neuroendoscopy.

# MINOP® InVent

Advanced IntraVentricular Neuroendoscopic System - Trocar

- Oval working channel enables innovative treatment options and multi-directional flexibility
- Bi-instrumental technique close to traditional microneurosurgery thanks to the increased freedom of movement
- For the first time, insertion of angled instruments possible
- Grooved section of the sheath for the connection of peripheral devices
- Attachment on top of the trocar for the fixation of the adapter RT068R



## FH620R

### MINOP® InVent trocar

Outer diam. 8.3 mm

#### 3 (4) channels:

- Endoscope channel, diam. 2.8 mm
- Irrigation channel, diam. 1.4 mm
- 2 merging channels
  - Large working/overflow channel, 3.7 x 6.5 mm
  - Small working channel, diam. 2.2 mm

Including:

- 2 obturators for endoscope channel and working /overflow channel
- 1 sealing cap for Luer-Lock connector
- Cleaning brush



## RT068R

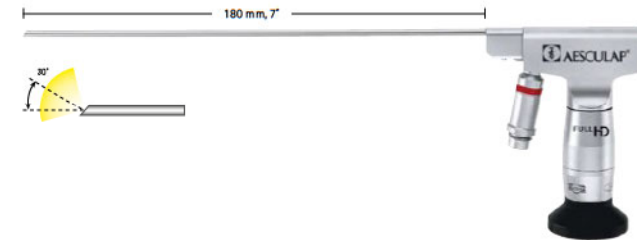
Adapter for fixation of MINOP® InVent trocar FH620R to AESCULAP® holding arm



# MINOP® InVent

Advanced IntraVentricular Neuroendoscopic System - Endoscope

- Full HD compatible
- Optimized optical components leading to an enlarged image area, higher image quality, brightness and contrast
- Angled endoscope design for enhanced instrument maneuverability
- Autoclavable / Sterrad®



## PE204A

### MINOP® angled endoscope

Direction of view: 30° upwards (red ring)

Shaft diam.: 2.7 mm

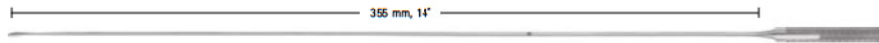
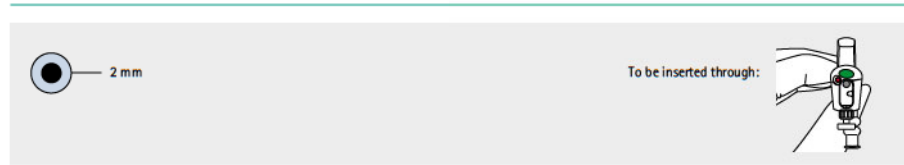


"The MINOP® InVent system is truly unique and the next step for the future of Neuroendoscopy. This system allows for a true bi-manual technique through the large/small working channels expanding the possibilities to treat further indications. The angled instrumentation provide the ability to simultaneously grasp and cut or grasp and coagulate similar to traditional microsurgery. The MINOP InVent provides a new possibility for the treatment of intra- and paraventricular cysts and tumors in complex hydrocephalus and alleviating the need for certain craniotomies."

Mark Souweidane, New York, USA

# MINOP<sup>®</sup> InVent

Advanced IntraVentricular Neuroendoscopic System - Dissectors, Hook and Knife



**FH629R**

MINOP<sup>®</sup> InVent dissector,  
tip width 2.2 mm



**FH632R**

MINOP<sup>®</sup> InVent hook, 90° blunt,  
hook deflection width 3.5 mm



**FH630R**

MINOP<sup>®</sup> InVent dissector,  
tip width 1.7 mm



**FH634R**

MINOP<sup>®</sup> InVent knife, backwards cutting,  
knife deflection width 3 mm



**FH631R**

MINOP<sup>®</sup> InVent dissector,  
tip width 1 mm



# MINOP<sup>®</sup> InVent

Advanced IntraVentricular Neuroendoscopic System - Shaft Instruments



**FH621R**

MINOP<sup>®</sup> InVent forceps, straight



**FH625R**

MINOP<sup>®</sup> InVent scissors, straight



**FH622R**

MINOP<sup>®</sup> InVent forceps, right



**FH626R**

MINOP<sup>®</sup> InVent scissors, left



**FH623R**

MINOP<sup>®</sup> InVent forceps, left



**FH627R**

MINOP<sup>®</sup> InVent scissors, right



**FH624R**

MINOP<sup>®</sup> InVent grasping forceps, straight



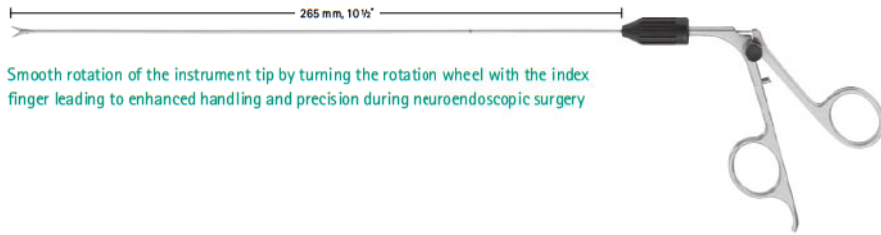
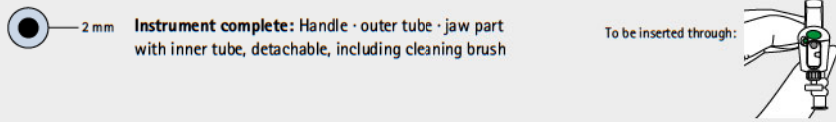
**FH628R**

MINOP<sup>®</sup> InVent scissors, upwards



# MINOP® InVent

Advanced IntraVentricular Neuroendoscopic System - Tube Shaft Instruments



Smooth rotation of the instrument tip by turning the rotation wheel with the index finger leading to enhanced handling and precision during neuroendoscopic surgery



**FH635R**  
MINOP® InVent scissors  
sharp / sharp



**FH637R**  
MINOP® InVent biopsy forceps



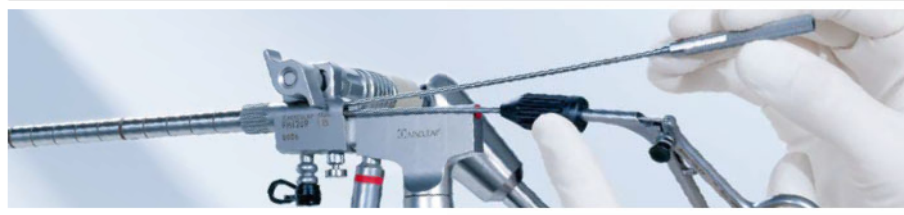
**FH636R**  
MINOP® InVent scissors  
blunt / blunt



**FH638R**  
MINOP® InVent grasping and  
dissecting forceps



**FH639R**  
MINOP® InVent surgical forceps  
1 x 2 teeth



# MINOP® InVent

Advanced IntraVentricular Neuroendoscopic System - Tube Shaft Instruments - Spare Parts



**FF435R**  
Scissors, jaw part with inner tube  
sharp / sharp



**FF437R**  
Biopsy forceps, jaw part with inner tube  
sharp / sharp



**FF436R**  
Scissors, jaw part with inner tube  
blunt / blunt



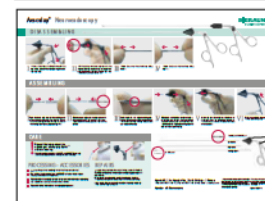
**FF438R**  
Grasping and dissecting forceps, jaw  
part with inner tube



**FF439R**  
Surgical forceps, jaw part with inner tube  
1 x 2 teeth



**TA012889**  
Cleaning brush for tube shaft  
instruments, without illustration



■ For disassembly and assembly of MINOP® InVent tube shaft instruments see poster no. C60911.



# MINOP® InVent

Advanced IntraVentricular Neuroendoscopic System - Electrodes

BIPOLAR

Width x Height:  
3.2 mm x 2.1 mm



**GK343R**  
MINOP® InVent bipolar electrode  
0°

**GK344R**  
MINOP® InVent bipolar electrode  
40°

**GK345R**  
MINOP® InVent bipolar electrode  
30°

2.1 mm



**GK360R**  
Fork electrode, 0°

**GN130**  
Bipolar cable, 4 m length  
suitable for GN060, GN160, GN300,  
GN640



1.1 mm



**GK361R**  
Blunt electrode

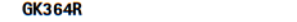


**GK363R**  
Needle electrode



MONOPOLAR

**GK364R**  
Hook electrode, 45°



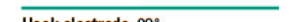
**GK365R**  
Hook electrode, 70°



**GK362R**  
Hook electrode, 90°



**GK362R**  
Hook electrode, 90°



**GK366R**  
Hook electrode, 180°



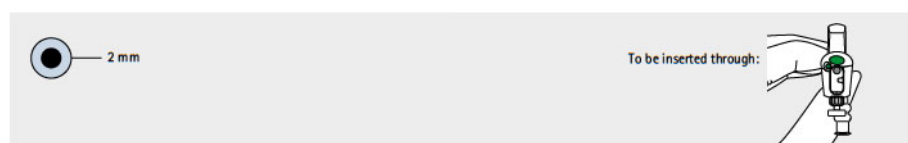
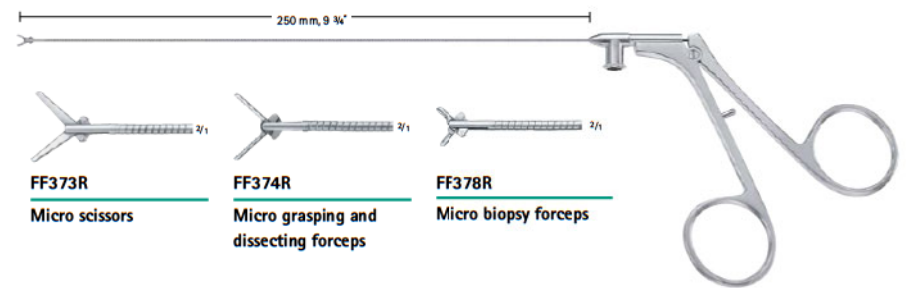
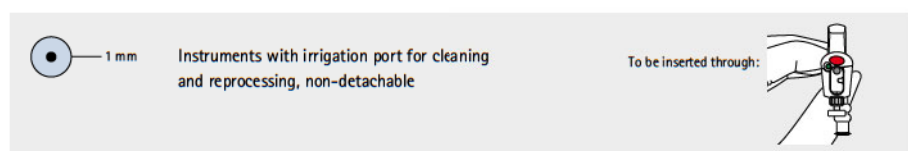
Hook electrodes:  
tip width 2.2 mm

**GN202**  
Monopolar cable, 3.5 m length  
suitable for GN300, GN640



# MINOP® InVent

Advanced IntraVentricular Neuroendoscopic System - Flexible Instruments, Suction Cannulas



# MINOP® InVent

Advanced IntraVentricular Neuroendoscopic System - Sterilization and Storage

■ Basket for MINOP® InVent trocars and endoscopes



**FH358R** Dimensions (L/W/H) 540 x 253 x 56 mm  
Basket with silicone mat, instrument racks with silicone and lid (instruments not included)

■ Basket for MINOP® InVent instruments and electrodes



**FH359R** Dimensions (L/W/H) 540 x 253 x 166 mm  
Basket with silicone mat and instrument racks with silicone, without lid (lid not necessary) (instruments not included)

■ 1/1 Sterile container (basic version) for baskets FH358R and FH359R



consisting of:

**JK440**  
Bottom 1/1 for FH358R without base perforation  
Outside/Inside dimensions with inner lid:  
L/W/H 592 x 285 x 108 mm  
L/W/H 544 x 258 x 75 mm

**JK444**  
Bottom 1/1 for FH359R without base perforation  
Outside/Inside dimensions with inner lid:  
L/W/H 592 x 285 x 205 mm  
L/W/H 544 x 258 x 172 mm

**JK486**  
Inner lid 1/1 blue

■ For further details about the AEscuLAP® Sterile Container System see brochure no. C40402.



■ For further details about MINOP® InVent see brochure no. C86802.

