

solutions in sight

300 nm 400 nm 500 nm 600 nm 700 nm 800 nm 900 nm 1000 nm



Industrial Focus Products

- 1 **FlexiScope** - Modular Inspection System
- 2 **micrendo**® - Micro Endoscopes
- 3 **Borescopes**
- 4 **Flexible Endoscopes**
- 5 **Illumination Technology**
- 6 **Video Technology**
- 7 **Fiberoptical Illumination**

Solutions in Sight

Schölly stands for carefully engineered high-end products and a commitment to responsible corporate ethics and fairness in dealing with our employees, customers, business partners, suppliers and our hometown of Denzlingen alike.

For over 30 years we have preserved a corporate culture that is both self-contained but also open to inspiration from the outside world. Our team of professionals create superior products of utmost reliability, based on future-orientated, well integrated designs.

By focussing our creative energy, we can offer visualization technology that is tailor-made to the needs of our customers:

- solutions in sight -



Our fields of activity

Visualization for medical and engineering applications is our core business. All products made by Schölly are targeted at making concealed structures visible and accessible for non-destructive/minimal invasive treatment, using technologies such as micro-optics, fiberoptics and electronics.

We design, manufacture and sell all components dedicated to that purpose independently, starting from our classic endoscopes, to highly complex visualization systems.

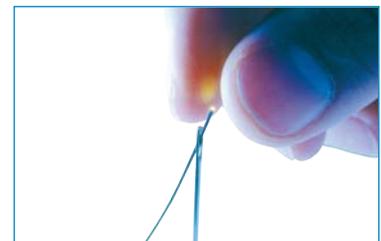
Long-term partnerships with OEM customers and end-users promote the continuous improvement and further development of our products, as well as further research into new fields of application. Our flexibility and readiness to adapt to other mindsets and markets has added much to our credit with partners worldwide.



Reliability and Precision

Our main goal is to anticipate specific customer requirements and translate them into marketable and cost-effective products and systems.

By continuously investing in the improvement of existing products, we offer our customers optimal product quality and support. At the product level, this means that our endoscopes and fiberoptics systems must meet extremely exacting demands in terms of image quality, reliability and corrosion resistance in order to perform well under the extreme conditions of use that are required in industrial applications.



● The Schölly Corporate Family

The Schölly Corporate Family

solutions in sight - this guiding principle applies to a number of areas. It applies to the further expansion of our core business that is supported by a 3-column strategy:

1. Fast and flexible solutions, using the latest technology.
2. Standard, high-quality, top performance program to meet the demands of the core market.
3. Local availability of our global service network - repairs, refurbishment and replacement of any product.



And this principle also applies to our future - for we will continue to meet new challenges and develop and provide new solutions as a family business; as the Schölly Corporate Family.

This means more to us as members of the Schölly family, who will continue to personally uphold its responsibilities, both economic and social, to its employees around the globe. For us, the Schölly Corporate Family means dealing with each other on even turf - eye to eye. This matter of course defines our daily work and communication with one another.

Here in Denzlingen and throughout the world - today and tomorrow.

Industrial Focus Products

1

100-111

***FlexiScope* - Modular Inspection System**

2

200-202

micrendo® - Micro Endoscopes

≤ 4 mm Diameter

3

300-307

Borescopes

≥ 4 mm Diameter

4

400-402

Flexible Endoscopes

Fiberscopes

5

500-503

Illumination Technology

Light Sources and Light Guides

6

600-604

Video Technology

Cameras, TV Adapter and Monitor

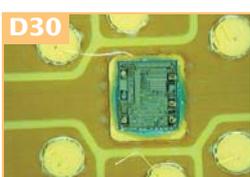
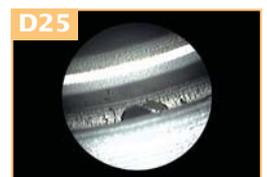
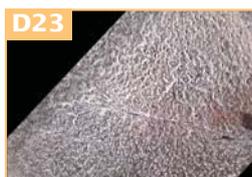
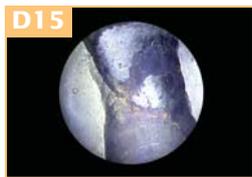
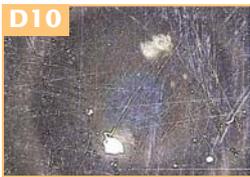
7

700-703

Fiberoptical Illumination

Ring Illuminator and Light Guides for Illumination

Applications with *FlexiScope System*



FlexiScope **Modular Inspection System**

- ***FlexiScope* System Overview**



- ***FlexiScope Explorer MP600***

the modular and portable video system
explore the difference



- ***FlexiVideoskop „Chip-in-the-Tip“***

in 6 mm diameter
and 4-way tip-deflection



- ***FlexiScope 180X-301***

the light source-camera unit with ***FlexiScope*** camera handle “Y”
and special connection system for fast and easy probe exchange



- ***FlexiScope Borescope Probes rigid***

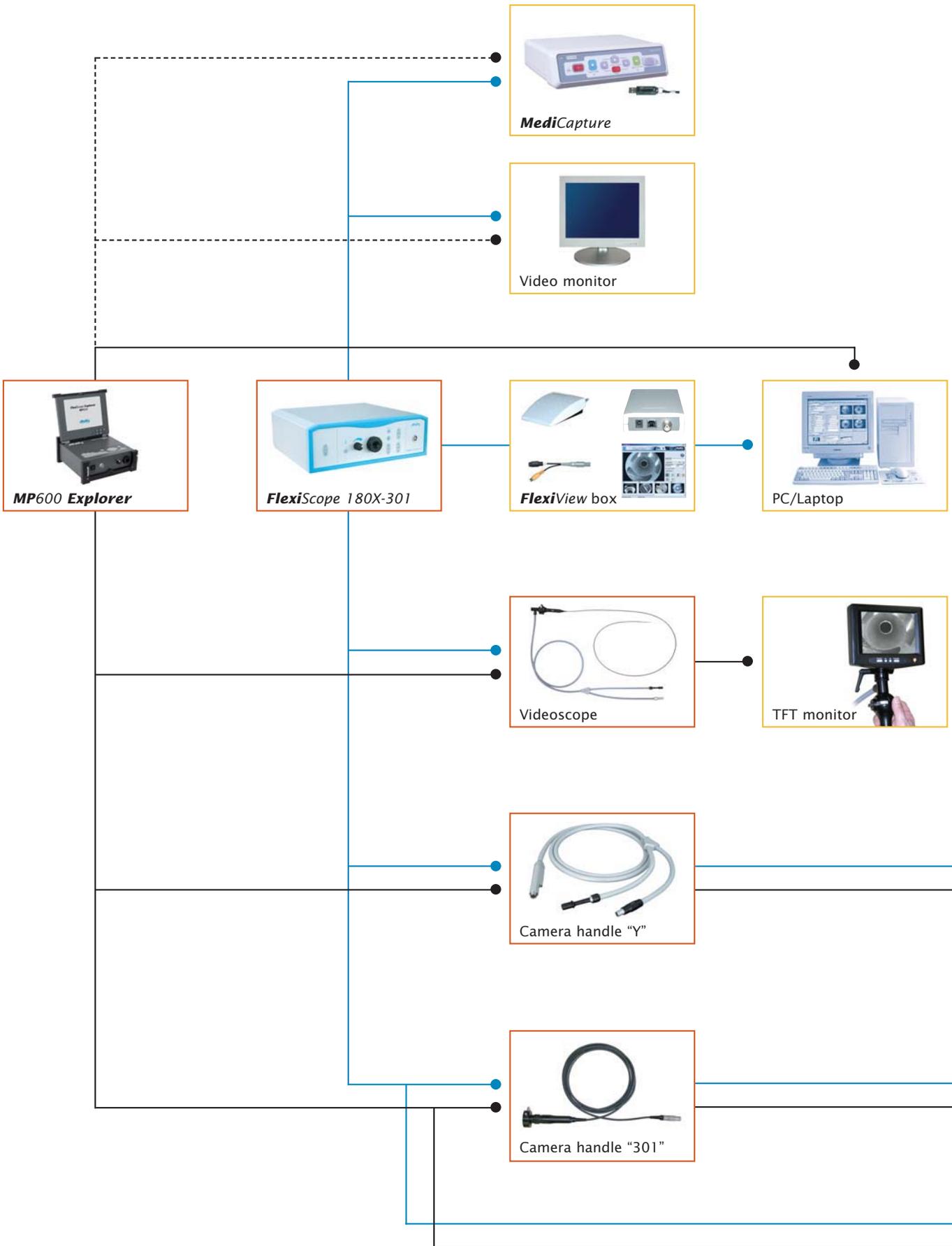
in **micrendo**® 2.7 mm diameter and in 4 mm and 5.5 mm
with rotatable objective tubes



- ***FlexiScope micrendo*® Pencil Probe**

in 1.6 mm diameter

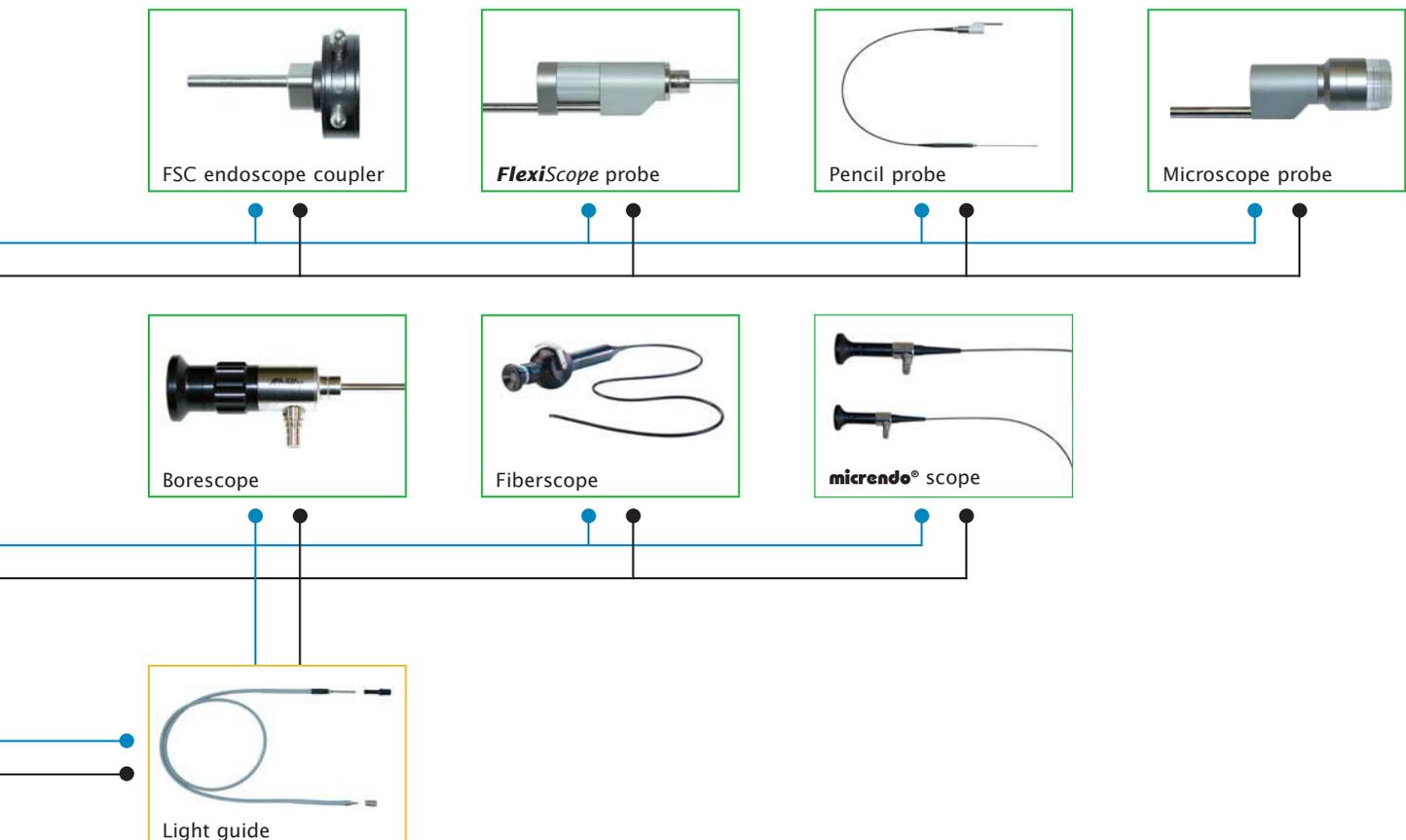
FlexiScope System Overview



FlexiScope System Overview

Choose your own configuration depending on your application or which best fits the equipment that you already have.

Legend	Description
	Connection possibilities with FlexiScope Explorer MP600
	Connection possibilities with FlexiScope 180X-301
	Connections possibilities but not essential for the FlexiScope Explorer MP600
	Basic units
	Peripheral devices
	Probe selections



FlexiScope Explorer MP600

Explore the difference

With the new Schöilly Inspection System **FlexiScope Explorer MP600** you can perform inspections easily and quickly. This modular and mobile system, with its robust and shockproof design, opens entirely new inspection possibilities. Your inspection environment decides whether you need the flexibility of a videoscope or the sturdy and versatile **FlexiScope** probes. The large and fully adjustable TFT monitor delivers cristal clear, true colour images. Inspection results can be documented in video or still image format on a SD card, which is then easily transferable. The **FlexiScope Explorer MP600** makes reliable inspection in high quality possible. This increases your productivity and ensures further corporate growth. Explore the difference!



Technical Data	
Control panel	White balance, GAIN (3 presets), window function (4 presets), zoom (1.5 x, 2 x, 3 x), image rotation (0° and 180°)
Video outputs	1 x S-Video (Y/C), 1 x Video (CVBS)
Digital output	USB 2.0
Display	10.4" TFT, resolution: 640 (H) x 480 (V)
Media	SD memory card, video resolution 320 x 240 in AVI format, image resolution 640 x 480 in JPEG format
Light source	50 W metal halide, 4,500 K colour temperature, 10.5 mio. Lux light power
Lamp life	2,500 h (average)
Power supply	100 - 250 V AC, 50/60 Hz or portable 12 V accu (accubag optional)
Operating temperature	0 °C up to + 40 °C
Dimension	305 x 140 x 305 mm (W x H x D)
Weight	7 kg

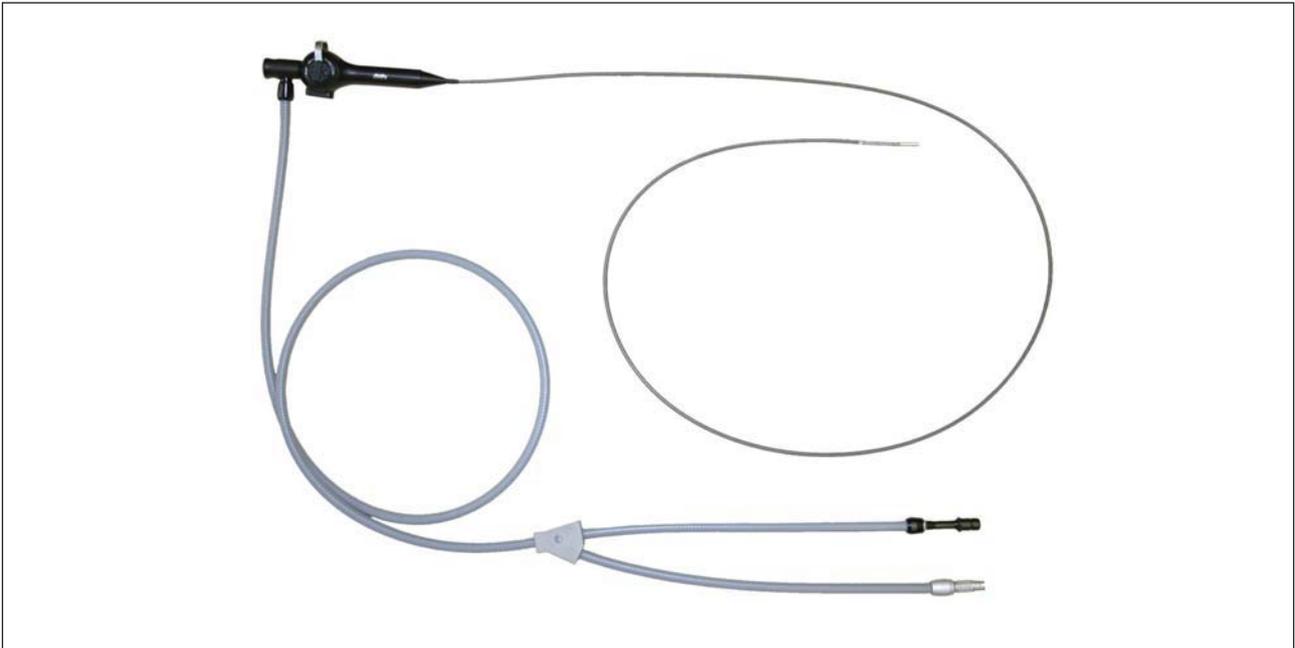
Item No.	Description
FSC.MP600.Base	Basic unit PAL, incl. SD card and power supply

A power cord is always included. Please specify plug type.
Camera handle "Y" and "301" available on request.

FlexiVideoscope 6 mm

FlexiVideoscope 6 mm

This 6 mm videoscope with chip-in-the-tip technology enhances the successful **FlexiScope** series. It can be used with the stationary light source-camera system **180x-301** as well as with the mobile inspection unit **Explorer MP600**. The robust probe is protected with tungsten braid and therefore **oil and gas resistant**. Optional interchangeable objectives and a compact 5.6" TFT monitor allow several combination possibilities and guarantee the modularity and variety which are typical for the **FlexiScope** series.



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FlexiVideoscope 6 mm

Item No.	Working- ϕ (mm)	WL (mm)	Tip deflection	Standard fix objective
FSC.V1.062000.2	6.0	2,000	4 x 150°	0°/50°

Optional Objective Attachements for FlexiVideoscope 6 mm



Item No.	VD	FoV	Depth of field (mm)
FSC.VO06.0080	0°	80°	25 - infinite

You will find further **FlexiVideoscopes** in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

FlexiScope Explorer MP600 with Videoscope



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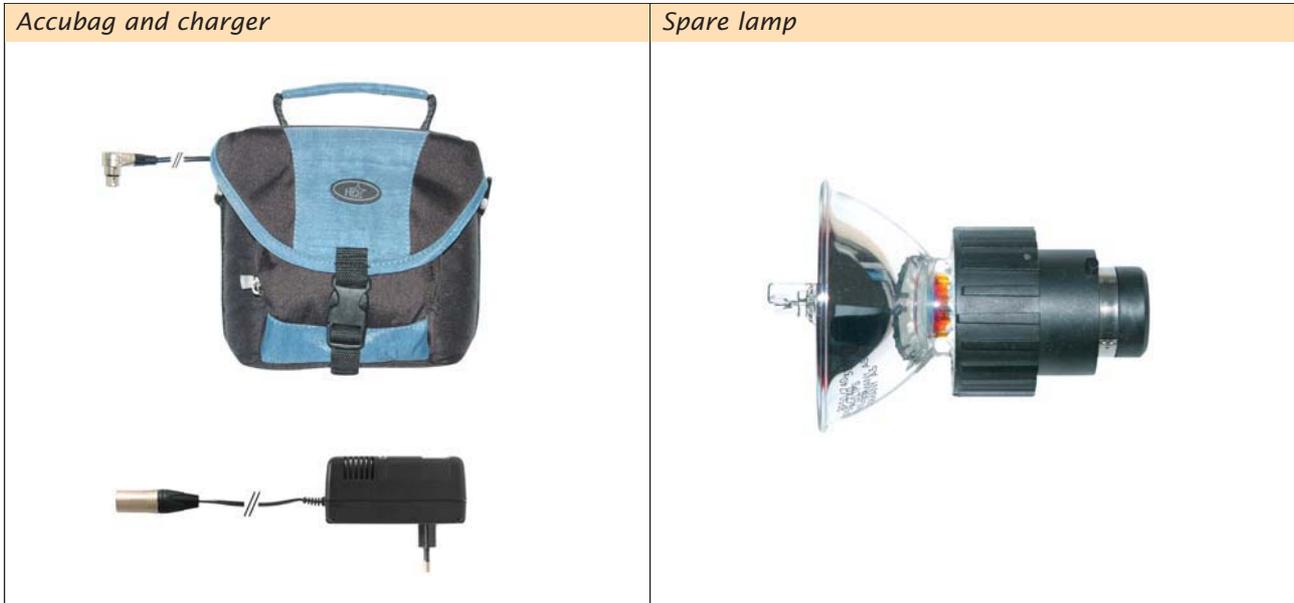
Item No.	Description
FSC.V1.06.10	Basic unit MP600 + Videoscope \varnothing 6 mm, 2,000 mm working length, 4 x 150° tip deflection + transport case

A power cord is always included. Please specify plug type.

FlexiScope Explorer MP600 Accessory

FlexiScope Explorer MP600 Accessory

Genuine accessory which is specifically designed for use with the **FlexiScope MP600**.



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Item No.	Description + Technical Data														
FSC.Accubag	<p>The FSC Accubag is an efficient and mobile 12 Volt power supply system for the Schöilly FlexiScope Explorer MP600</p> <table border="0"> <tr> <td>Technology battery</td> <td>Lead-acid battery, maintenance-free and leak proof</td> </tr> <tr> <td>Output voltage</td> <td>12 V</td> </tr> <tr> <td>Capacity</td> <td>7.0 Ah</td> </tr> <tr> <td>Operating time MP600</td> <td>45 min.</td> </tr> <tr> <td>Charge time</td> <td>3 h</td> </tr> <tr> <td>Weight with carrying bag</td> <td>3.5 kg</td> </tr> <tr> <td>Operating temperature</td> <td>-15 °C up to +50 °C</td> </tr> </table> <p>Protection against overload and short circuit by current limitation Charging with IU-curve Suitable for float charging Trickle charge approx. 20 mA</p>	Technology battery	Lead-acid battery, maintenance-free and leak proof	Output voltage	12 V	Capacity	7.0 Ah	Operating time MP600	45 min.	Charge time	3 h	Weight with carrying bag	3.5 kg	Operating temperature	-15 °C up to +50 °C
Technology battery	Lead-acid battery, maintenance-free and leak proof														
Output voltage	12 V														
Capacity	7.0 Ah														
Operating time MP600	45 min.														
Charge time	3 h														
Weight with carrying bag	3.5 kg														
Operating temperature	-15 °C up to +50 °C														
LAMP.50MH	Spare lamp for FlexiScope Explorer MP600														

A power cord is always included. Please specify plug type.

FlexiScope 180X-301 Light Source-Camera Unit

Robust - for use in production and quality control, single and serial inspection

FlexiScope 180X-301, the combination of a high intensity xenon light source and a fine adjustable 10 bit high-end single-chip camera. The **FlexiScope 180X-301** combines both functions in one space-saving housing. By using a C-mount-coupler, other TV-adapters or the **FlexiScope** camera handle can be easily connected. The integrated anti-Moiré filter guarantees optimized performance with flexible scopes.



Technical Data	
Operation control panel	White balance, window function, preset function with three selectable basic setups - all with OSD/LED indicator, contrast/brightness adjustment with OSD indicator
Camera controller	Outputs: 1 x S-Video (Y/C), 1 x Video (CVBS)
Camera head/handle	Image sensor: 1/2" CCD Image resolution lines: 470 (H) x 420 (V) PAL 470 (H) x 350 (V) NTSC Light sensitivity: 2 Lx/f = 1.4 Coupler: FlexiScope quick coupler, focusable
Data light source	ON/OFF with LED indicator, lifetime (bulb) indicator, Schöilly FlexiLux light guide connection, stepless illumination adjustment with mechanical diaphragm Nominal output: 180 W xenon Colour temperature: 6,000 K Light output: 25 mio. Lux Lamp life: 500 h (average)
System	Power connection: 100-250 V AC, 50-60 Hz, 400 VA
Dimensions/Weight:	Housing: 360 x 128 x 338 mm (W x H x D) Camera head: 135 x 50 mm (L x ø) Camera cable: 2.6 m Weight housing: 7.4 kg

Item No.	Description
FSC.180X.301	FlexiScope 180X-301 ; 180 W Xenon LS + Camera CI301 , camera handle "Y", PAL
LAMP.X180.02	Spare lamp Xenon 180 W

A power cord is always included. Please specify plug type.

FlexiScope micrendo® Borescope Probes 2.7 mm

Borescope Probes 2.7 mm

The **micrendo**® borescope line is also available as part of the **FlexiScope** System. For the basic unit with 0°/35° objective mirror tubes with a viewing direction of 70°, 90° or 110° are available. In addition, wide angle, side view and sheath tubes are available.



micrendo® Borescope Probes

Item No.	Working- \varnothing (mm)	WL (mm)	VD	FoV
FSC.ME27100.0035	2.7	100	0°	35°
FSC.ME27100.0080	2.7	100	0°	80°
FSC.ME27100.3080	2.7	100	30°	80°
FSC.ME27100.7080	2.7	100	70°	80°

You will find further **micrendo**® borescope probes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

FlexiScope Borescope Probe 4 mm

Universal Borescope Probe 4 mm

The versatility of the well established Schölly Universal Borescopes is now also integrated into the **FlexiScope** series. Base units, available in different diameters, can be combined with a large variety of rotatable objective tubes.

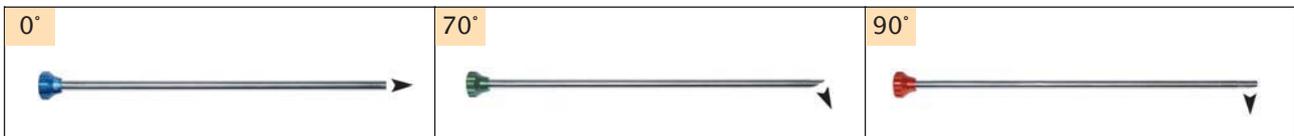


Universal Borescope Probe 4 mm

Item No.	Working- \varnothing (mm)	WL (mm)
FSC.ES40135	4	140

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Rotatable Objective Tubes for universal borescope probes 4 mm, length 140 mm



Item No.	Working- \varnothing (mm)	WL (mm)	VD	FoV
FSC.40135.00100	4.5	150	0°	85°
FSC.40135.7060	4.5	150	70°	60°
FSC.40135.9060	4.5	150	90°	60°

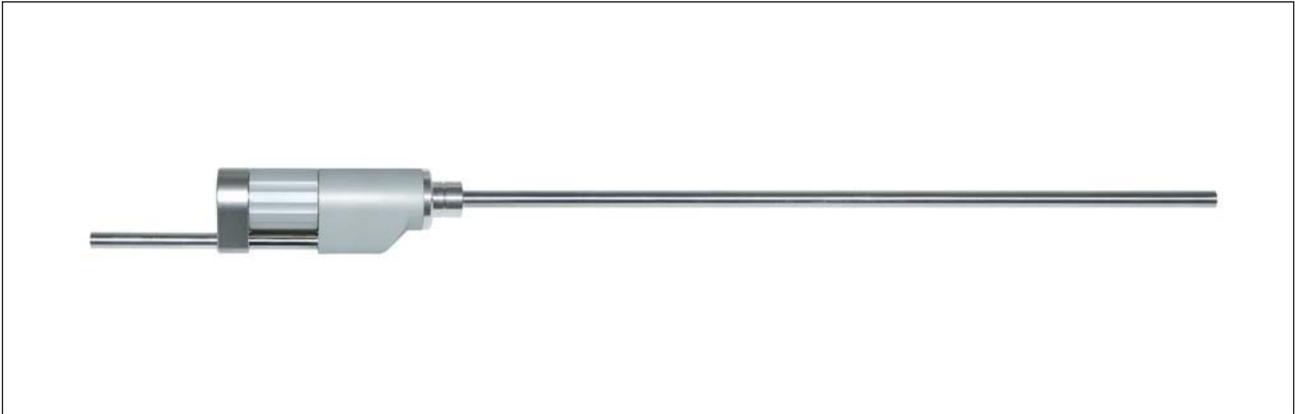
Colour-coding for viewing directions: Blue = 0°, Green = 70°, Red = 90°

You will find further **FlexiScope** borescope probes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

FlexiScope Borescope Probe 5.5 mm

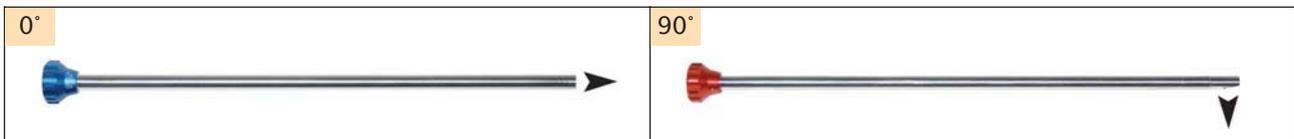


Universal Borescope Probe 5.5 mm

Item No.	Working- \emptyset (mm)	WL (mm)
FSC.ES55280	5.5	250

109

Rotatable Objective Tubes for universal borescope probes 5.5 mm, length 250 mm



Item No.	Working- \emptyset (mm)	WL (mm)	VD	FoV
FSC.55280.00100	5.9	275	0°	80°
FSC.55280.9060	5.9	270	90°	60°

Colour-coding for viewing directions: Blue = 0°, Red = 90°

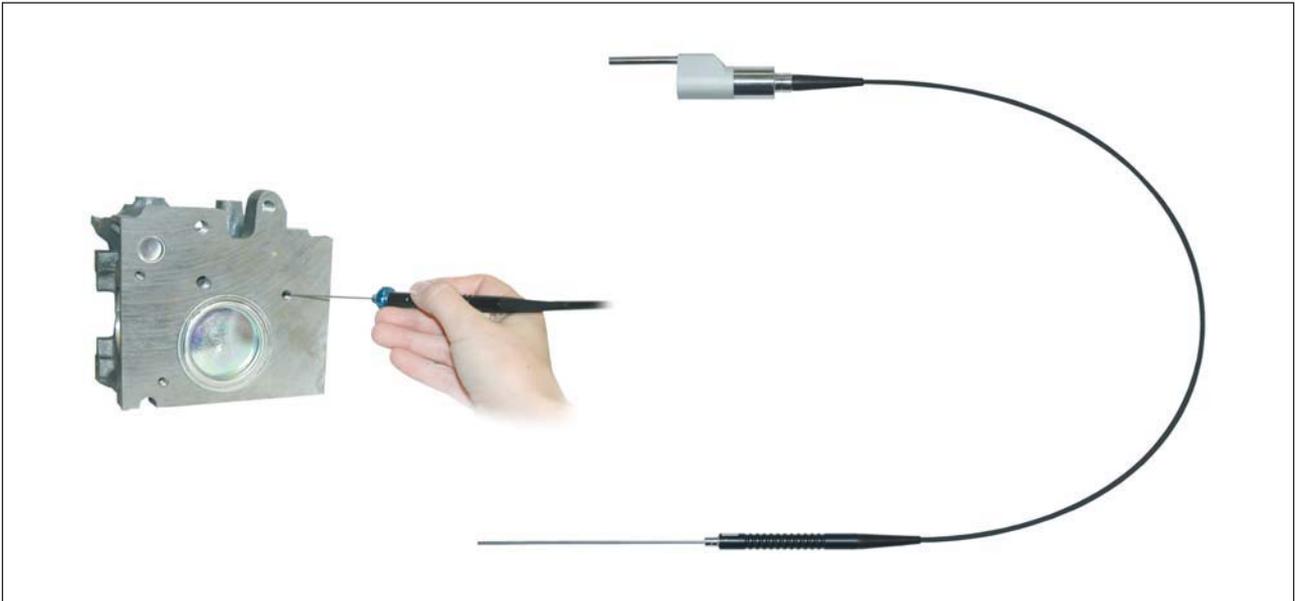
You will find further **FlexiScope** borescope probes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

FlexiScope micrendo® Pencil Probe

The **micrendo®** Pencil Probes are ideally suited for applications which require a high amount of fine motor skills. The ergonomic handpiece of the probe, similar in shape to a pen, is ideal for sensitive and lengthy inspections. The precise control results in far fewer damaged probes. Our experience shows that the amount of repairs is 30% less than for traditional endoscopes.



FlexiScope Pencil Probe

Item No.	Working-Ø Tip (mm)	WL Tip (mm)	Length flex. tube (mm)	VD	FoV	IB (pixels)
FSC.PP160135.0085.NT	1.6	135	1,000	0°	85°	30,000

FlexiScope Pencil Probe protection tube, stainless steel

Item No.	Working-Ø	Length
MSP.18135	1.8 mm	135 mm

You will find further **FlexiScope micrendo®** pencil probes in our catalogue [Modular Solutions](#).

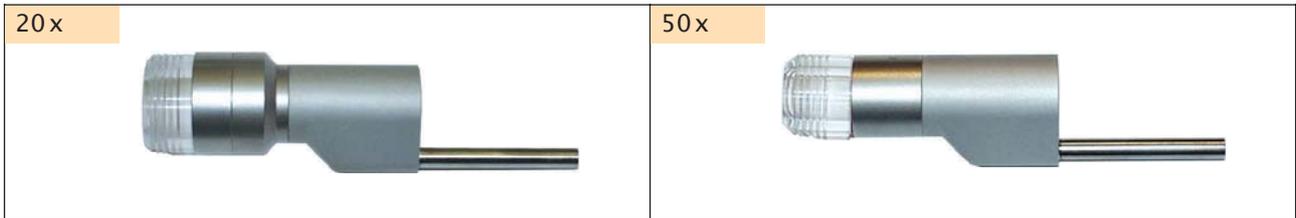
Legend

WL - Working Length VD - Viewing Direction FoV - Field of View IB = Image Bundle

FlexiScope Accessories

For service inspections and other applications where high magnification is needed our **FlexiScope** microscope probes offer a variety of different magnifications.

Reflecting Light Microscopes



Item No.	Magnification
FSC.MS20X	20 x
FSC.MS50X	50 x

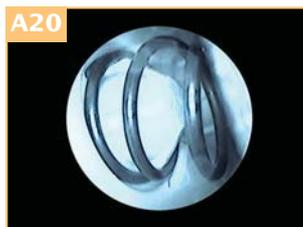
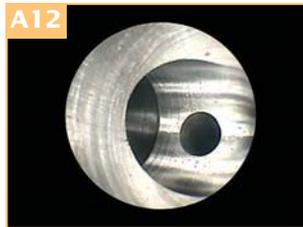
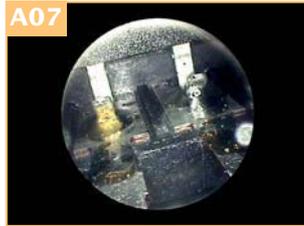
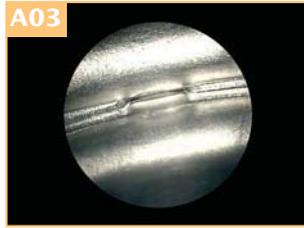
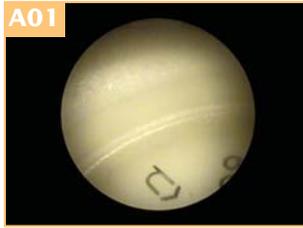
Borescope Adapter



Item No.	Description
FSC.FX.ADAPTER	Adapter for connection of borescopes and fiberscopes with ACMI eye piece to the FlexiScope system. Please provide type and model when ordering.

You will find further **FlexiScope** accessories in our catalogue [Modular Solutions](#).

Applications with micrendo® Micro Endoscopes



micrendo® Micro Endoscopes



micrendo® Borescopes

in 1.8 mm and 2.7 mm diameter
with rotatable mirror tubes



micrendo® Borescopes - Wide Angle

in 2.7 mm and 4 mm diameter

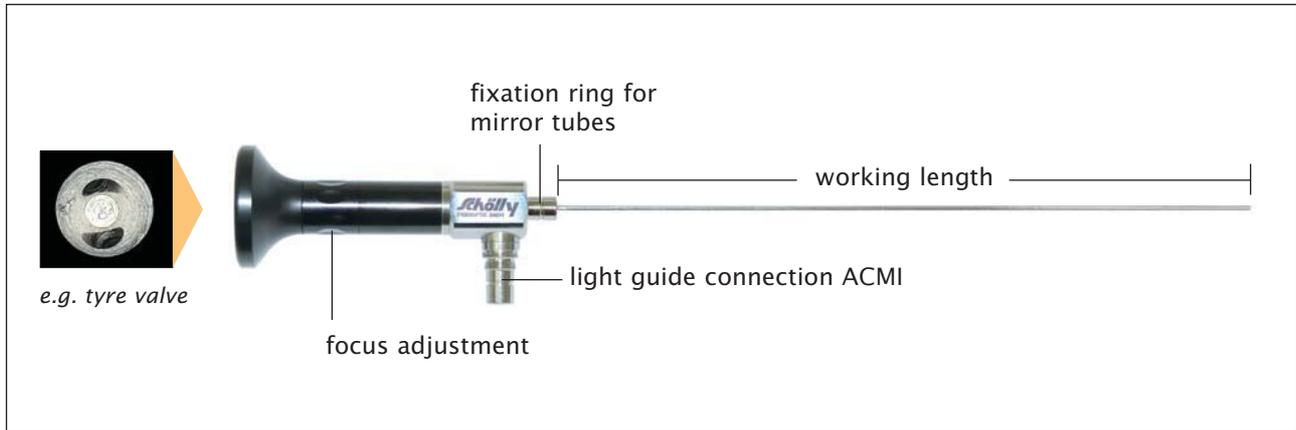


micrendo® Fiberscopes

from 0.5 mm up to 2.4 mm diameter
designed for very small difficult to access tubes or bores

micrendo® Borescopes and Mirror Tubes

Designed for internal examination and inspection of very small bores and tubes, the **micrendo®** borescopes cover a range of working diameters of 1.8 to 2.7 mm. In addition to the standard version with mirror tubes, wide angle and side-view models are also available.



micrendo® Borescopes

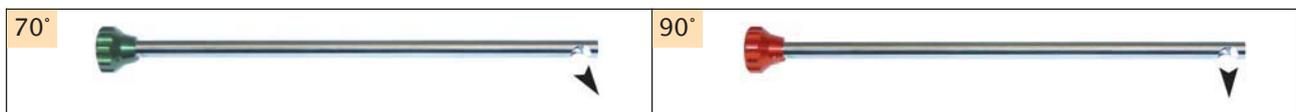
Item No.	Working- ϕ (mm)	WL (mm)	VD	FoV	Application
ME.18090.0035	1.8	95	0°	30°	Can be used with mirror tube ϕ 2.0
ME.27185.0035	2.7	185	0°	35°	Can be used with mirror tube ϕ 3.0

Rotatable Mirror Tubes

For easy all-round inspection in bores or tubes. Simple snap-lock connection to basic unit.

Colour-coding for viewing directions:

Green = 70° and Red = 90° (to be used with 30°/35° basic units).



Item No.	Working- ϕ (mm)	VD	Length (mm)
MS.20090.70	2.0	70°	95
MSS.30185.90	3.0	90°	185

You will find further borescopes in our catalogue [Modular Solutions](#).

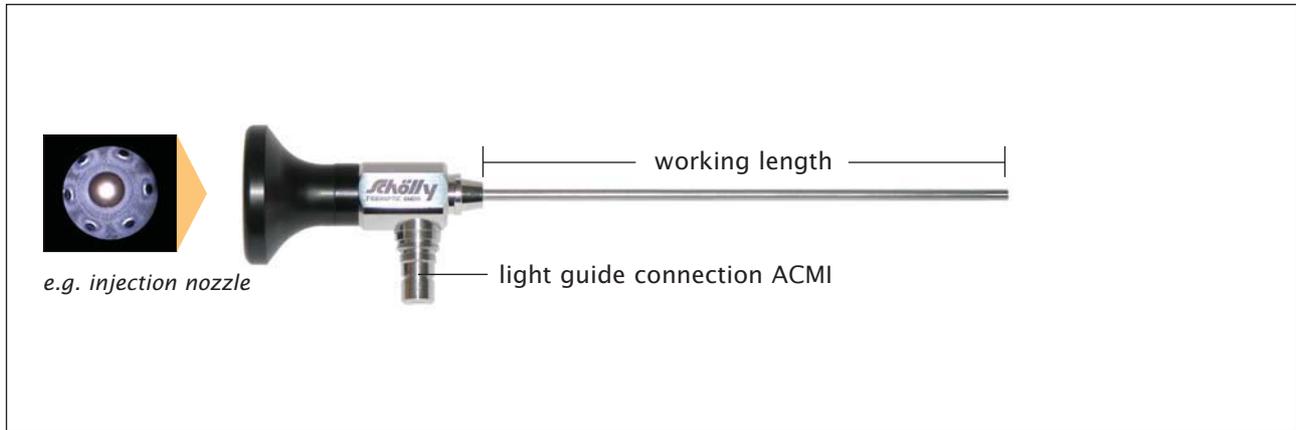
Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

micrendo® Borescopes - wide angle

micrendo® Borescopes - wide angle

Rod lens optic with maximum picture quality. Good overview in production control through wide angle. Viewing direction according to your demands. The borescopes are specially aligned for critical quality inspection.



micrendo® Borescopes wide angle

Item No.	Working- \emptyset (mm)	WL (mm)	VD	FoV
ME.27120.0085	2.7	110	0°	95°
ME.27120.3085	2.7	110	30°	87°
ME.27120.7085	2.7	110	70°	82°
ME.27210.7085	2.7	187.5	70°	82°
ME.40175.00100	4.0	175	0°	100°

The borescopes are heat resistant up to 100 °C, resistant against saltwater and light oil as well as fully watertight.

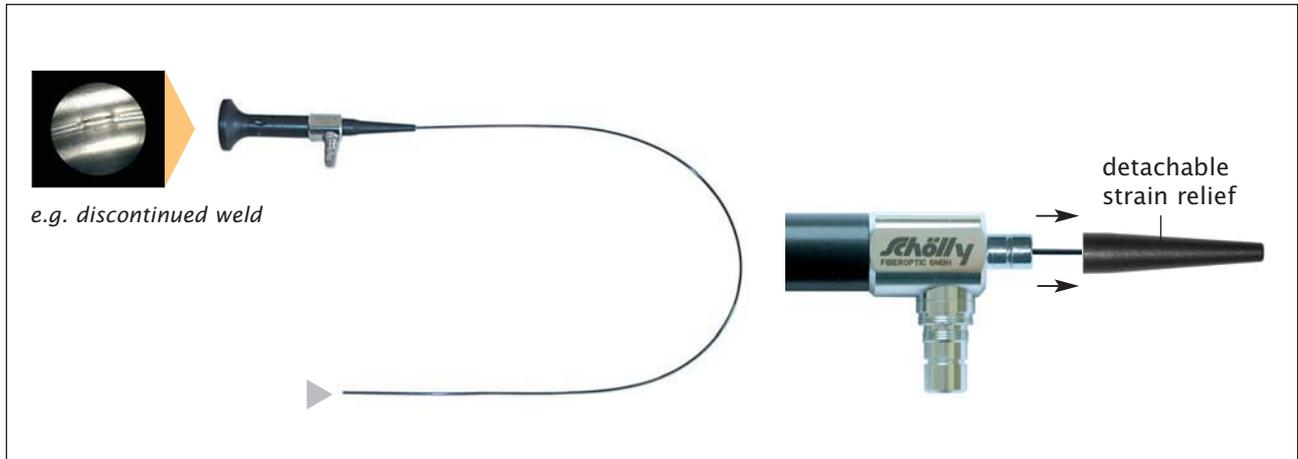
You will find further borescopes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

micrendo® Fiberscopes

Designed for internal examination of very small bores and tubes without access for rigid instruments, the fully flexible **micrendo®** fiberscope serie offers a range of diameters starting from 0.5 mm.



micrendo® Fiberscopes

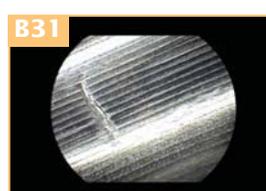
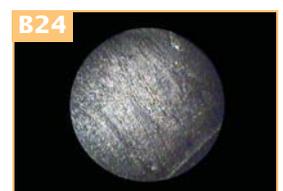
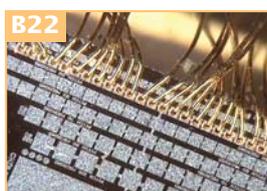
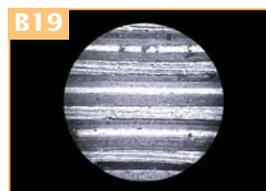
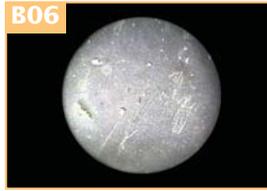
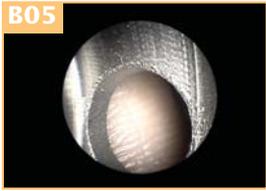
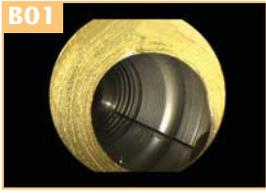
Item No.	Working- \emptyset (mm)	WL (mm)	VD	FoV	IB (pixels)
MO.050500.0070	0.5	500	0°	70°	3,000
MO.080500.0070	0.8	500	0°	70°	6,000
MO.100500.0070	1.0	500	0°	70°	6,000
MO.140500.0085	1.4	500	0°	85°	17,000
MO.240500.0085	2.4	500	0°	85°	30,000

You will find further **micrendo®** fiberscopes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View IB - Image Bundle

Applications with Borescopes



Borescopes



***FlexiLux* Universal Borescopes**

in 4 mm, 5.5 mm and 8 mm diameter with interchangeable objectives, rotatable objectives and mirror tubes



***FlexiLux* Standard Borescopes**

in 4 mm and 8 mm diameter
with fix objective and rotatable mirror tubes



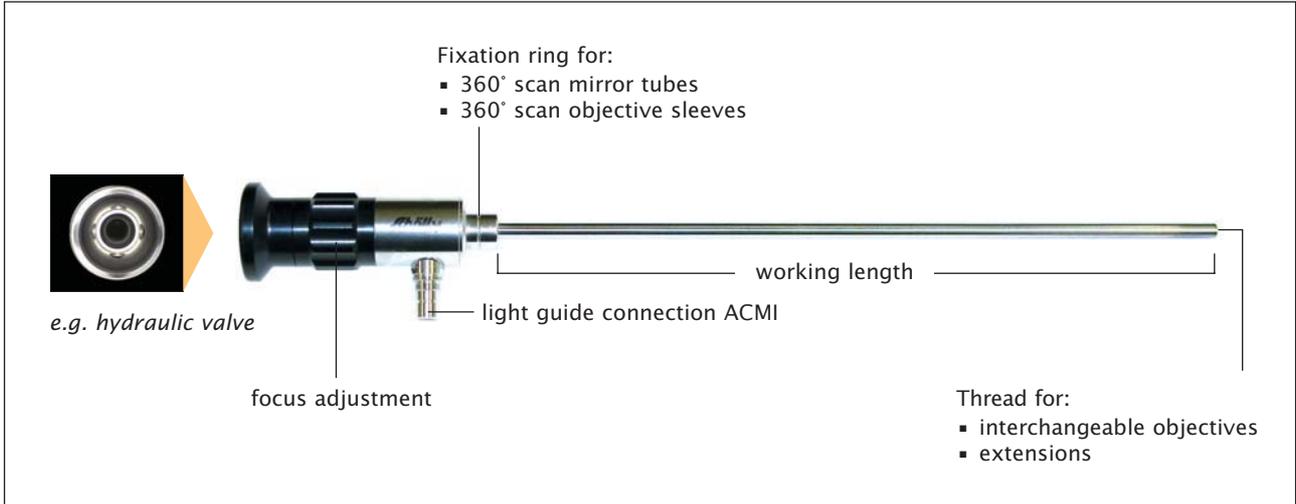
***ValueLine* Borescopes**

in 7.5 mm diameter
with mirror tube

FlexiLux Universal Borescope 4 mm

Universal Borescopes ø 4 mm

Our **FlexiLux** Universal Line with patented interchangeable objectives is a modular borescope system for various applications in rough and changing industrial environments.



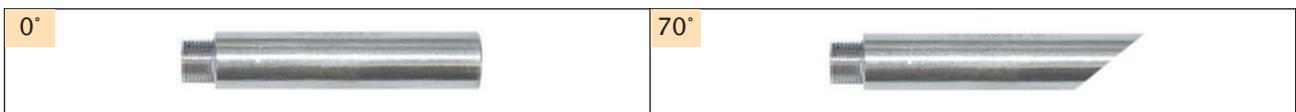
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Basic Unit 4 mm

Item No.	Working-ø (mm)	WL (mm)
UE.04270	4.0	270

Basic unit has to be used together with either an interchangeable objective or a rotatable objective sleeve.

Interchangeable Objectives for Basic Unit



Item No.	VD	FoV	OL (mm)	Application
UO.0400.35	0°	35°	16	For mirror tubes
UO.0400.80	0°	80°	16	Wide angle
UO.0470.80	70°	80°	17	For oblique view 70°, wide angle

You will find further **FlexiLux** Universal Borescopes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View OL - Objective Length

Universal Objective and Mirror Tubes 4 mm

Rotatable Objective Tube

The easy solution for your all-around inspection. Simple snap-lock connection to basic unit. Watertight along the entire working length. Working diameter incl. objective sleeve = 4.4 mm



Item No.	Working- ϕ (mm)	WL (mm)	VD	FoV
UD.04270.9080	4.4	278	90°	80°

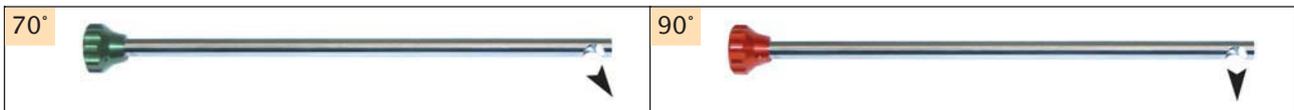
Colour coding for viewing direction: Red = 90°

Rotatable Mirror Tubes

The ideal accessory for short working distance inspection in bores or tubes. Simple snap-lock connection to basic unit (to be used with basic unit 35° objective).

Colour coding for viewing directions: Green = 70°; Red = 90°.

Working diameter incl. mirror tube = 4.4 mm. Length mirror tubes = basic unit + 0/35° objective.



Item No.	Working- ϕ (mm)	WL (mm)	VD
US.04285.70	4.4	286	70°
US.04285.90	4.4	286	90°

You will find further Universal objective and mirror tubes in our catalogue [Modular Solutions](#).

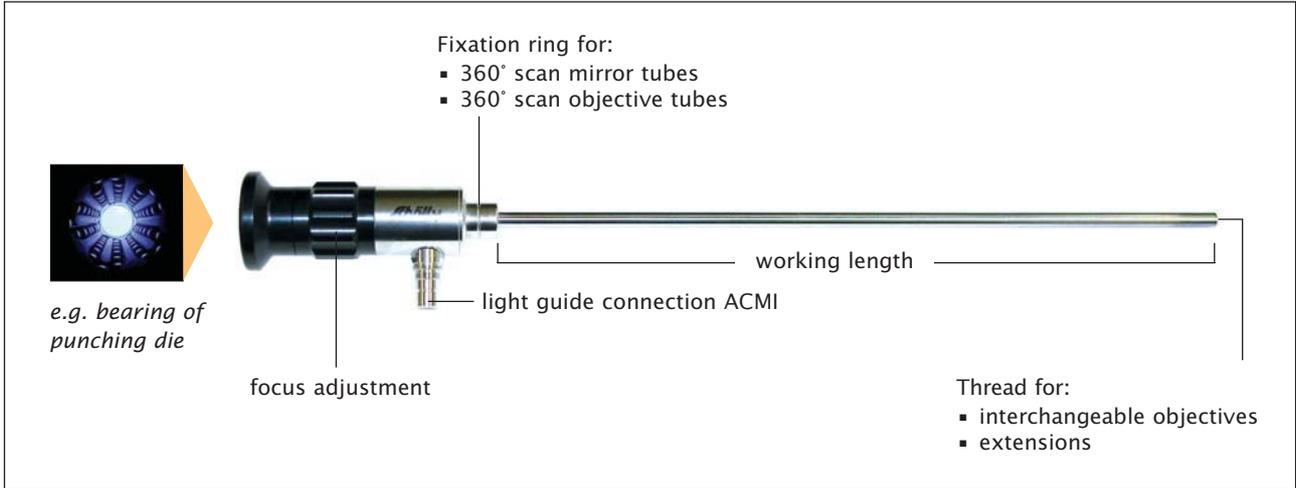
Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

FlexiLux Universal Borescopes 5.5 mm

Universal Borescopes \varnothing 5.5 mm

Our **FlexiLux** Universal Line with patented interchangeable objectives is a modular borescope system for various applications in rough industrial environments.

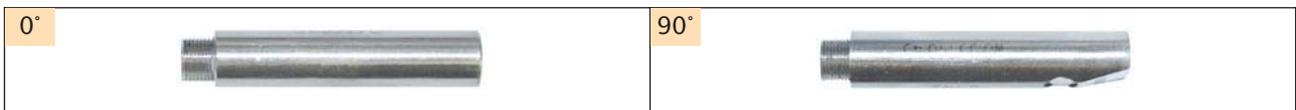


Basic Unit 5.5 mm

Item No.	Working- \varnothing (mm)	WL (mm)
FE.55250	5.5	250
FE.55355	5.5	355

Basic unit has to be used together with either an interchangeable objective or a rotatable objective sleeve.

Interchangeable Objectives for Basic Unit



Item No.	VD	FoV	OL (mm)	Application
WO.5500.40	0°	40°	25	For mirror tubes
WO.5500.85	0°	85°	22	Wide angle
WO.5590.45	90°	45°	21	Side view 90°

You will find further **FlexiLux** universal borescopes in our catalogue [Modular Solutions](#).

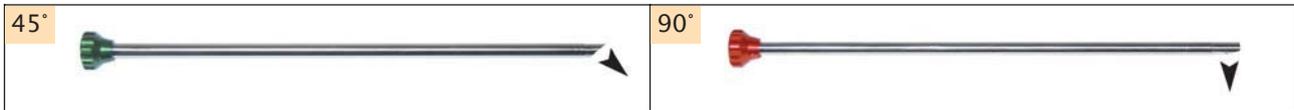
Legend

WL - Working Length VD - Viewing Direction FoV - Field of View OL - Objective Length

Universal Objective and Mirror Tubes 5.5 mm

Rotatable Objective Tubes

The easy solution for your all-around inspection. Simple snap-lock connection to basic unit. Watertight along the entire working length. Working diameter incl. objective tube = 5.9 mm.



Item No.	Working- \varnothing (mm)	WL (mm)	VD	FoV
FD.55250.9045	5.9	250	90°	45°
FD.55355.4545	5.9	355	45°	45°

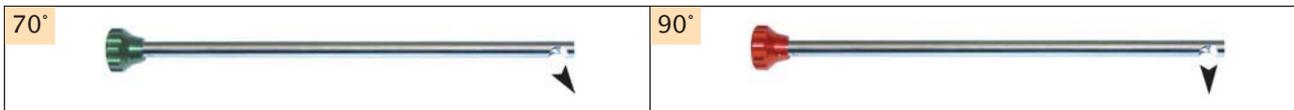
Colour-coding for viewing directions: Green = 45°, Red = 90°

Rotatable Mirror Tubes

The ideal accessory for short working distance inspection in bores or tubes. Simple snap-lock connection to basic unit (to be used with basic unit +40° objective).

Colour-coding for viewing directions: Green = 70° and Red = 90°.

Working diameter incl. mirror tube = 5.9 mm. Length mirror tube = basic unit +0/40° objective.



Item No.	Working- \varnothing (mm)	WL (mm)	VD
FS.55275.70	5.9	275	70°
FS.55380.70	5.9	380	70°
FS.55275.90	5.9	275	90°
FS.55380.90	5.9	380	90°

You will find further Universal objective and mirror tubes in our catalogue [Modular Solutions](#).

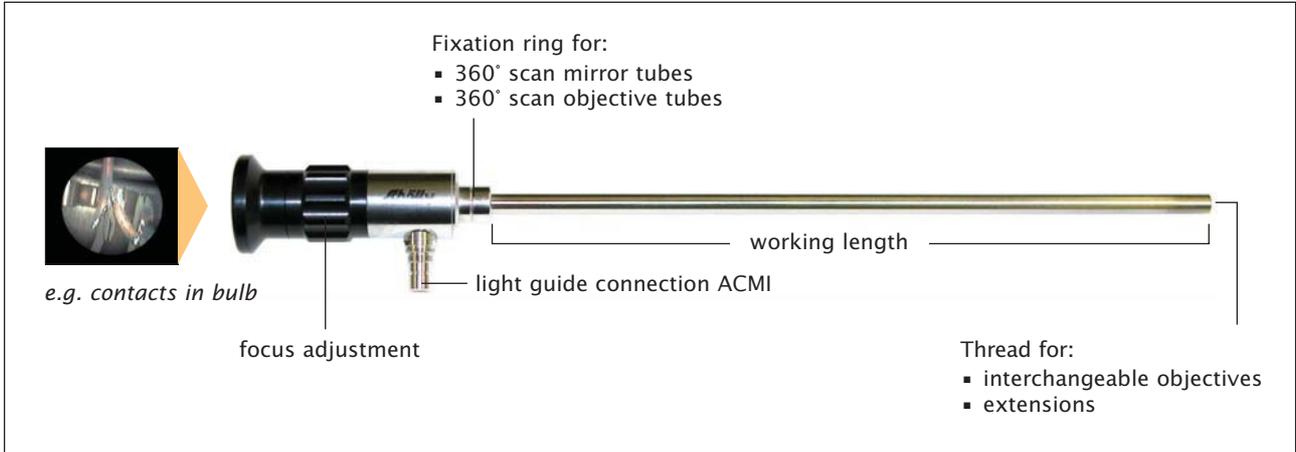
Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

FlexiLux Universal Borescope 8 mm

Universal Borescope \varnothing 8 mm

The **FlexiLux** Universal Line with patented interchangeable objectives - a modular borescope system for various applications in rough industrial environments.



Basic Unit 8 mm

Item No.	Working- \varnothing (mm)	WL (mm)
UE.04270	8.0	355

Basic unit has to be used together with either an interchangeable objective or a rotatable objective sleeve.

Interchangeable Objectives for Basic Unit



Item No.	VD	FoV	OL (mm)	Application
WO.0800.40	0°	40°	25	For mirror tubes
WO.0800.85	0°	85°	23	Wide angle

You will find further **FlexiLux** universal borescopes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View OL - Objective Length

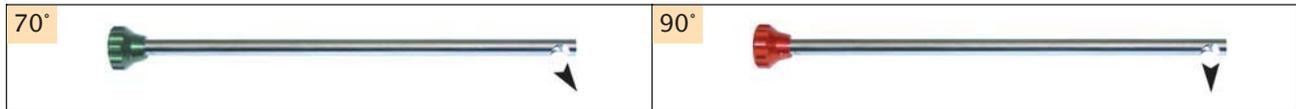
FlexiLux Mirror Tubes 8 mm

Rotatable Mirror Tubes

The ideal accessory for short working distance inspection in bores or tubes. Simple snap-lock connection to basic unit (to be used with basic unit + 40° objective).

Colour-coding for viewing directions: Green = 70° and Red = 90°.

Working diameter incl. mirror tube = 8.5 mm. Length mirror tube = basic unit + 0/40° objective.



Item No.	Working- \varnothing (mm)	WL (mm)	VD
FS.08380.70	8.5	380	70°
FS.08380.90	8.5	380	90°

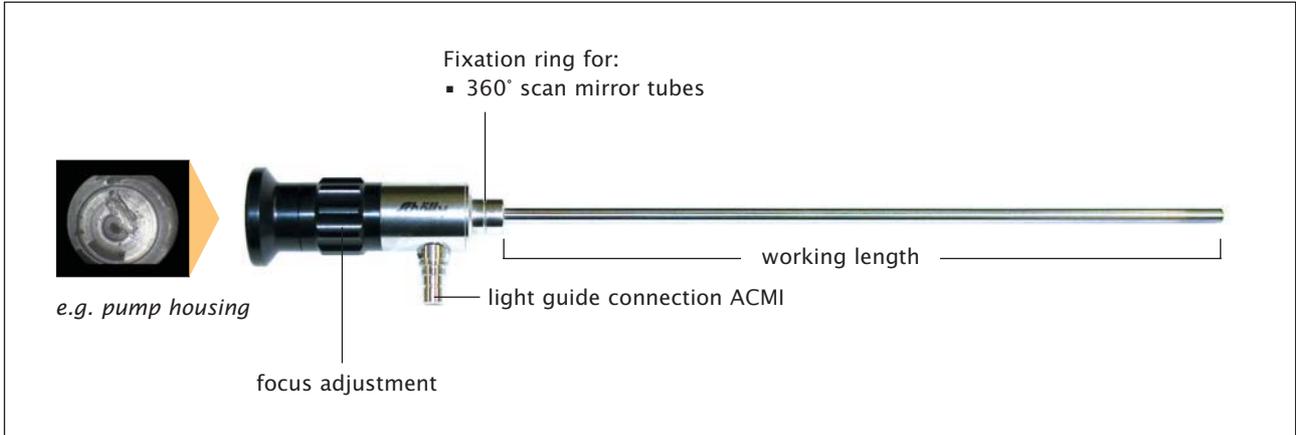
You will find further **FlexiLux** mirror tubes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction

FlexiLux Standard Borescopes

The **FlexiLux** standard borescope, equipped with a fixed objective lens, is ideally suited for inspections which require a large amount of light. This is due to the fact that the fixed objective lens design provides 20 % more light than an endoscope with interchangeable objective lenses. The **FlexiLux** scopes are perfect for standardized applications where the optical requirements regarding Field of View (FoV) and Viewing Direction (VD) remain constant.



FlexiLux Standard Borescopes

Item No.	Working-ø	WL (mm)	VD	FoV
FP2.04135.0035	4.0	135	0°	35°
FP2.04260.0035	4.0	260	0°	35°
FP2.08485.0035	8.0	485	0°	35°

Rotatable Mirror Tube

The ideal accessory for short working distance inspection in bores or tubes. Simple snap-lock connection to standard borescope. Colour-coding for viewing directions: Yellow = 110°

Working diameter incl. mirror tube = 4.4 mm.



Item No.	VD	Length (mm)
FS.04135.110	110°	135

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

ValueLine Borescopes

The **ValueLine** borescopes have been developed cost-oriented for multi-purpose applications in the production industry and therefore achieve an outstanding price-quality ratio. Thanks to the 90° mirror tube, included with the **ValueLine** borescopes, different examination and inspection applications can be easily performed.



ValueLine Borescope 7.5 x 200 mm

Item No.	Borescope-ø	WL (mm)	VD	FoV
FMScope200	7.5	200	0°	40°

Incl. mirror tube 90° (FS.75200.90)

ValueLine Borescope 7.5 x 300 mm

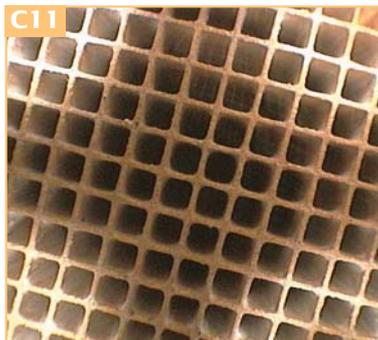
Item No.	Borescope-ø	WL (mm)	VD	FoV
FMScope300	7.5	340	0°	40°

Incl. mirror tube 90° (FS.75300.90)

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View

Applications with Fiberscopes and Videoscopes



Fiberscopes



***FlexiLux* Universal Fiberscope**

in 3.2 mm, 3.4 mm and 3.8 mm diameter
and 2-way tip-deflection



***FlexiLux* ECO Fiberscope**

in 6 mm diameter
and 4-way tip-deflection



***ValueLine* Fiberscope**

in 6 mm diameter
and 2-way tip-deflection

FlexiLux Universal Fiberscopes

The ultimate optical instrument for tests and inspections of inaccessible areas in turbines, tubes, tanks etc. High flexibility combined with robustness ensures excellent results for all NDT applications even with very small working diameters.



400

Technical Data

- High resolution image bundle with good contrast.
- One-hand operation due to ergonomically designed hand section and control levers.
- Standardized eyecups and light guide connection (ACMI) guarantee high versatility.
- 2-way tip deflection with small bending radius for high flexibility.
- Watertight along the entire working length.
- Temperature resistant from -10 °C up to +85 °C. (-50 °F up to +185 °F).
- Pressure resistant up to 1.2 bar (17.4 LB/in²).

FlexiLux Universal Fiberscopes

Item No.	Working- ϕ (mm)	WL (mm)	Tip Deflection	VD	FoV	IB (pixels)
32100.0070.PV2X.PU	3.2	1,000	2 x 160°	0°	70°	7,000 glass
38072.0080.PV2X.PU	3.8	720	2 x 160°	0°	80°	10,000 glass

FlexiLux Universal Fiberscope with tungsten protection tube

Item No.	Working- ϕ (mm)	WL (mm)	Tip Deflection	VD	FoV	IB (pixels)
34030.0070.PV2X.W	3.4	300	2 x 140°	0°	70°	7,000 glass

Light guide, transport case and cleaning material included.

You will find further Universal Fiberscopes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View IB - Image Bundle

FlexiLux ECO Fiberscope

ECO Fiberscopes for visualization and inspection of difficult to reach cavities. High flexibility and a robust design allow for quick visual inspections. An optimized design and the use of a robust glass-fiber image bundle enable us to offer an extremely reasonable price for a fiberscope in this diameter segment.



Technical Data

- Robust image bundle with high contrast.
- One-hand operation due to ergonomically designed hand section and control levers with locking mechanism.
- Standardized eye piece and light guide connections can be used in most versatile applications.
- 4-way tip deflection with small tip-radius for high flexibility.
- Robust, multi-layer tube body with low friction and abrasion-resistant high-grade steel wire mesh.
- Temperature resistant from -10 °C up to +85 °C (-50 °F up to +185 °F).

FlexiLux ECO Fiberscope

Item No.	Working- ϕ (mm)	WL (mm)	Tip Deflection	VD	FoV	IB (pixels)
6018.00105.4x	6.0	1,350	4 x 120°	0°	105°	13,000 glass

Light guide, transport case and cleaning material included.

You will find further **FlexiLux** ECO Fiberscopes in our catalogue [Modular Solutions](#).

Legend

WL - Working Length VD - Viewing Direction FoV - Field of View IB - Image Bundle

ValueLine Fiberscope

ValueLine offers cost-efficient fiberscope solutions with an outstanding price-quality ratio. The highly flexible devices deliver convincing high resolution views. The liquid-tight design of the flexible probe also allows the use under difficult conditions. High flexibility and utmost robustness allow complex visual inspection.



402

ValueLine Fiberscope 6 mm

Item No.	Working- \varnothing (mm)	WL (mm)	Tip deflection	Standard fix objective
FMFlex2	6.0	1,470	2 x 90° minimum, lockable	0°/90°

Transport and storage case with inlay included.

Legend

WL - Working Length

Illumination Technology



***FlexiLux* Cold Light Sources**

Halogen 75/150 W



***FlexiLux* Cold Light Source**

Metal halide 50 W
portable



***FlexiLux* Borescope Light Guide**

in 4.8 mm diameter



***FlexiLux* LED Light Source**

battery-powered

FlexiLux Cold Light Source Halogen

Halogen

Powerful light sources used together with reliable fiberoptical guides are the ideal accessories for optical systems that demand high standards for industrial and medical applications. Robust construction and attractive design combined with state-of-the-art technology are features of all **FlexiLux** cold light sources.



500

Item No.	Description + Technical Data
<i>FX.2000.230.1</i>	Continuous control of brightness, soft start function, lateral plug-in unit for colour filter, stackable casing, lightweight, Schöly light guide connection Power supply 230-240 V AC, 50/60 Hz, 120 VA Nominal power 75 W halogen Colour temperature 3,250 K Light power 9.8 mio. Lux Lamp life 50 h (average) Dimensions/weight 168 x 120 x 268 mm (W x H x D) approx. 1.5 kg
<i>Lamp.7512</i>	Spare lamp for <i>FX.2000.230.1</i> 75 Watt, 12 Volt
<i>FX.3000.230</i>	Continuous control of brightness, soft start function, lateral plug-in unit for colour filter, stackable casing, lightweight, Schöly light guide connection Power supply 230-240 V AC, 50/60 Hz, 190 VA Nominal power 150 W halogen Colour temperature 3,250 K Light power 9.2 mio. Lux Lamp life Step 4: 1.500 h (average) Step 6: 200 h (average) Dimensions/weight 168 x 120 x 268 mm (W x H x D) approx. 1.6 kg
<i>FXL.15021</i>	Spare lamp for <i>FX.3000.230</i> 150 Watt, 21 Volt

Please specify required voltage on your order.

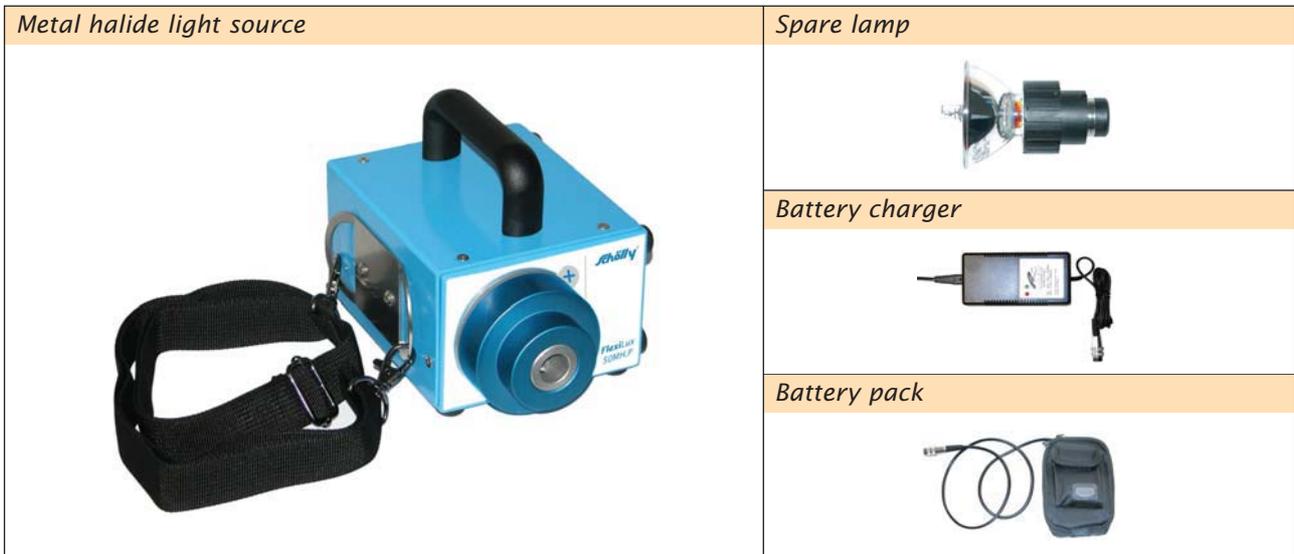
A power cord is always included. Please specify plug type.

You will find further **FlexiLux** cold light sources in our catalogue [Modular Solutions](#).

FlexiLux Cold Light Source Metal Halide

Metal Halide

The new metal halide lamp technology guarantees a high light intensity with a low power consumption, as well as a xenon-like colour temperature and a long lamp life. This modern technology is ideal when it becomes portable with the optional battery pack.



501

Item No.	Description + Technical Data
LQ.50MH.P	Portable 50 W metal halide light source unit with tether and handle Unit ON/OFF switch (on the back of the unit) Power supply 90 - 230 V AC, 50/60 Hz, 100 VA Output 12 V Nominal power 50 W (lamp 35 W, HID) Colour temperature 4,500 K (constant) Dimensions 110 x 75 x 130 mm (W x H x D) Weight approx. 1.4 kg (w/o accu)
LAMP.50MH	Spare lamp for LQ.50MH.P Type Phillips metal halide lamp, 35 W, type no.: RP50/740 Lamp life 2,500 h (average)
FLQ.30.Netz	Battery charger Li-Ion Input 100 - 240 V, 50/60 Hz Output 14.8 V $\ddot{\sim}$ 2,000 mA Status LED indicator
FLQ.30.Akku	Battery pack Type Lithium-Ion accu Nominal voltage 14.4 V DC Capacity 4.3 Ah Operation time 1 h at 50 W Charge time approx. 2 h Weight 0.5 kg

A power cord is always included. Please specify plug type.

You will find further **FlexiLux** cold light sources in our catalogue [Modular Solutions](#).

FlexiLux LED Light Source

FlexiLux LED Light Source

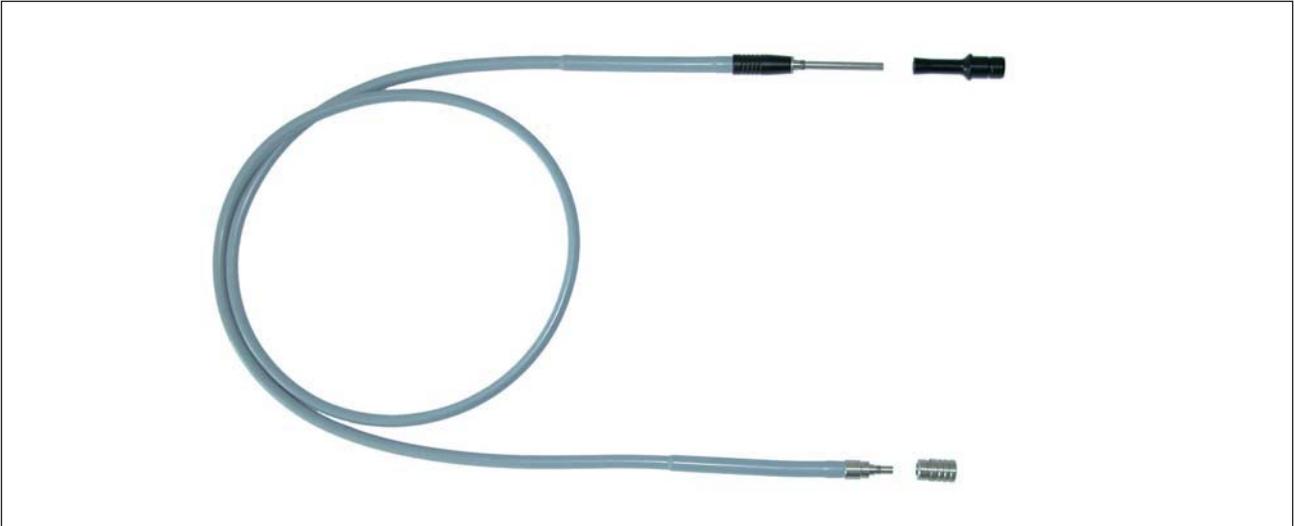
Rechargeable battery powered LED light source which can be attached to any standard borescope. High-power LED for maximum performance at minimal energy use. Adjustable light intensity. Robust aluminium housing.

LED light source and charger



Item No.	Description + Technical Data
FMLED.LQ1	Battery-supplied LED light source
	Colour temperature 5,500 K
	Max. Light intensity 20,000 Lux
	Lamp life 50,000 h LED-typical (average)
	Power supply 3.6 V, 1,000 mA lithium ion rechargeable battery
	Battery charger 100-240 V AC, 50-60 Hz
	Operating time 45 min. (at full power)
	Recharging time 2 h
	Dimensions/weight Ø 27 mm, length 89 mm approx. 90 g (with accu)
	Accessories Rechargeable battery and battery charger

Glass Fiber Light Guide for Borescopes/Fiberscopes



Item No.	Description + Technical Data
LL.48180.FX	<p>Glass Fiber Light Guide Working length 1,800 mm Active diameter 4.8 mm Light source connection is temperature resistant up to 300 °C. For use with halogen-, xenon- and HTI light sources. Standard: for Schölly light sources and ACMI borescope/fiberscope adaption. Multiple adaptations for other light sources and borescopes/fiberscopes of other makes.</p>

Video Technology



FlexiScope Compact Camera

with 1/3" CCD
and ***FlexiView*** software for image archiving



ValueLine Camera

with 1/3" APS Chip Technology



Variozoom TV Adapter

f = 18 - 50 mm, parfocal



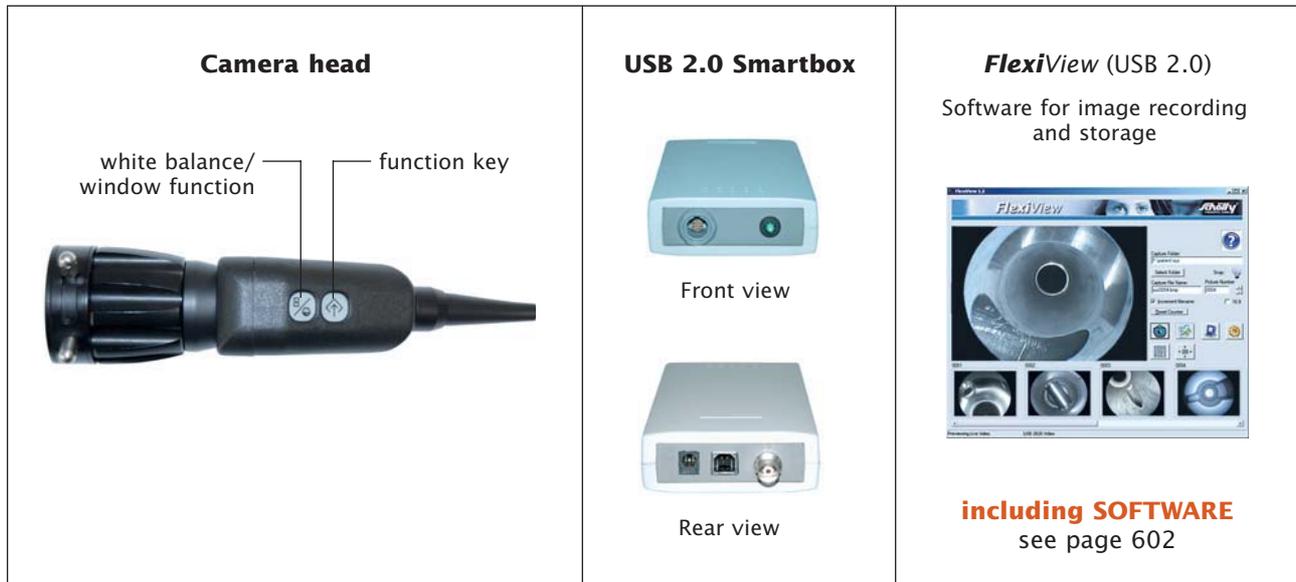
TFT Colour Monitor

17"

FlexiScope IQ101 Compact CCD Camera

Ergonomic and Compact

Compact, easy-to-handle CCD camera system. The electronics integrated in the camera head provide optimized image quality when used with rigid scopes and especially flexible fiberscopes due to the integrated **anti-Moiré filter**. Several functions can be controlled from the camera handle directly. The camera head/TV adapter have been optimized according to ergonomic aspects.



Technical Data	
Operation control hand piece	White balance/window function, function key
Smartbox outputs	Version video: 1 x S-Video (Y/C), 1 x Video (CVBS) Version video, USB: 1 x USB 2.0, 1 x Video (CVBS)
Camera head	Image sensor: 1/3" CCD Image resolution lines: 470 (H) x 420 (V) PAL 470 (H) x 350 (V) NTSC Image resolution act. pixels: 440,000 (PAL)/380,000 (NTSC) Light sensitivity: 2 Lx/f = 1.4 Endoscope coupler: for standard eye piece, detachable, C-Mount Focal length TV adapter: f = 23 mm
System	Power connection: 100-240 V AC, 50/60 Hz Power consumption: 2 VA Separat power supply
Dimensions/Weight	Smartbox: 80 x 34 x 170 mm (W x H x D) Camera head: 135 x 50 mm (L x ø) Camera cable: 3 m Weight Smartbox: max. 200 g Weight camera head: 300 g
Transport and storage case included.	

Item No.	Description
FTCO.CC.03	FlexiScope IQ101 Compact , anti-Moiré, USB 2.0, FlexiView

A power cord is always included. Please specify plug type.

You will find further types in our catalogue [Modular Solutions](#).

ValueLine Camera ValueCam

Outstanding price-quality ratio

The **ValueCam**, equipped with the most modern 1-Chip technology has an absolutely outstanding price-quality ratio in the field of endoscopy-cameras. Direct connection to monitor and easy handling allow uncomplicated application. The remote function for control of optional **ValueView** Box/Software, white balance as well as of image optimization function can be operated directly with the camera head.



Data	
ValueCam	
1/3" APS camera chip (Advanced Pixel Sensor), PAL camera. Integrated anti-Moiré filter, especially for endoscopy with flexible devices. Active window function.	
Operation control hand piece	1 x white balance, Image Enhancement 1 x release key for optional Video Grabber System (see page 602) for connection to PC with USB 2.0
Video output	Video Composite (CVBS)
Resolution	380,000 pixels
Endoscope coupling	Standard eye-piece, ACMI
Focal length TV adapter	f = 23 mm
Separate power supply unit	5 V
Power connection	100-240 V AC, 50/60 Hz
Power consumption	1.5 VA
Dimensions and weight	Camera head: 135 x 50 mm (L x ø) Camera cable: 3 m Weight camera head: 300 g
Transport and storage case included.	

Item No.	Description
FMValuecam.01	ValueCam PAL, anti-Moiré

A power cord is always included. Please specify plug type.

FlexiView - Image Archiving Software

Developed as an accessory for all Schöilly cameras with powerful digital USB 2.0 output, for demonstration and storing endoscopic pictures. The software distinguishes itself with an especially user-friendly operator interface, as well as easy installation. It can be operated by remote control via all camera heads with function key. See how uncomplicated it is to save and organise pictures, even if you are not a PC specialist.



*Main screen:
live video image, last 4 stored images, settings for folder, file name, file number.*

-  *Picture recording per mouse click, alternative via camera function key*
-  *Open Picture Overview*
-  *Video Settings*
-  *Program Options*
-  *Quad Split View*
-  *Full Screen View*

602

Description	
	Simple installation and easy handling Clearly arranged user interface Pictures can be opened with available image processing programs Executable on WIN2000 (SP4) and XP (SP1), DirectX/Direct Show compatible Remote control via camera function key (in conjunction with Schöilly camera systems with dig. USB 2.0 output and PC 2 GHz or more) Standard version included in delivery of all Schöilly cameras with USB 2.0 interface

FlexiView Video Grabber System: Developed as accessory for all endoscopic cameras without USB 2.0 output.

Item No.	Description
<i>Flexiview.Box1</i>	Smartbox, foot switch, video/foot pedal connection cable, USB 2.0 cable, driver software and FlexiView software.

Optional ValueView Video Grabber System: Developed as accessory for **ValueCam**.

Item No.	Description
<i>FMValueviewbox.01</i>	Smartbox with release function for FlexiView software, USB 2.0 cable, driver software and FlexiView software.

Videocamera Adapter

Videocamera Adapter

All **FlexiLux** borescopes are supplied with a ACMI eyepiece which allows for quick snap-lock connection onto the following accessories.



Focussing TV Adapter

For use with borescopes without focussing. Suitable for all TV cameras with C-mount thread.

Item No.	Focal Distance
TVAD.FOK.F30	f = 30 mm 

Vario-Zoom TV Adapter

Suitable for all TV cameras with C-mount thread. For stepless image size adjustment - without the need to readjust the focus.

Item No.	Focal Distance
TVAD.ZOOM02	f = 18 - 50 mm, parfocal

You will find further adapters in our catalogue [Modular Solutions](#).

TFT Colour Screen 17"

The monitor below can be used as video monitor (for the direct adaption of video cameras) as well as for computer monitor.



604

Item No.	Technical Data	
FA.TVMON05	Module type	17" Active Matrix, TFT LCD panel
	Max. resolution	1,280 x 1,024 SXGA / 500 TV lines
	Inputs	BNC, S-Video, VGA
	Outputs	BNC (video through capability), S-Video
	Contrast ratio	800 : 01 : 00
	Brightness	300 cd/m ²
	Response time	5 ms
	Viewing angle	170° (H) / 160° (V)
	Display mode	VGA / SVGA / XGA / SXGA
	Display colours	16.7 mio.
	Dimensions (WxHxD)	386 x 388 x 170 mm
	Weight	7.2 kg
	Approval	FCC, CE (EMC/LVD), UL, CUL, BSMI
	Settings	Multilingual OSD

You will find further screens in our catalogue [Modular Solutions](#).

Fiberoptical Illumination



Ring Illuminator

for homogeneous and shadow free illumination of working area



Light Guides for Illumination

Goose neck light guide - semi-flexible



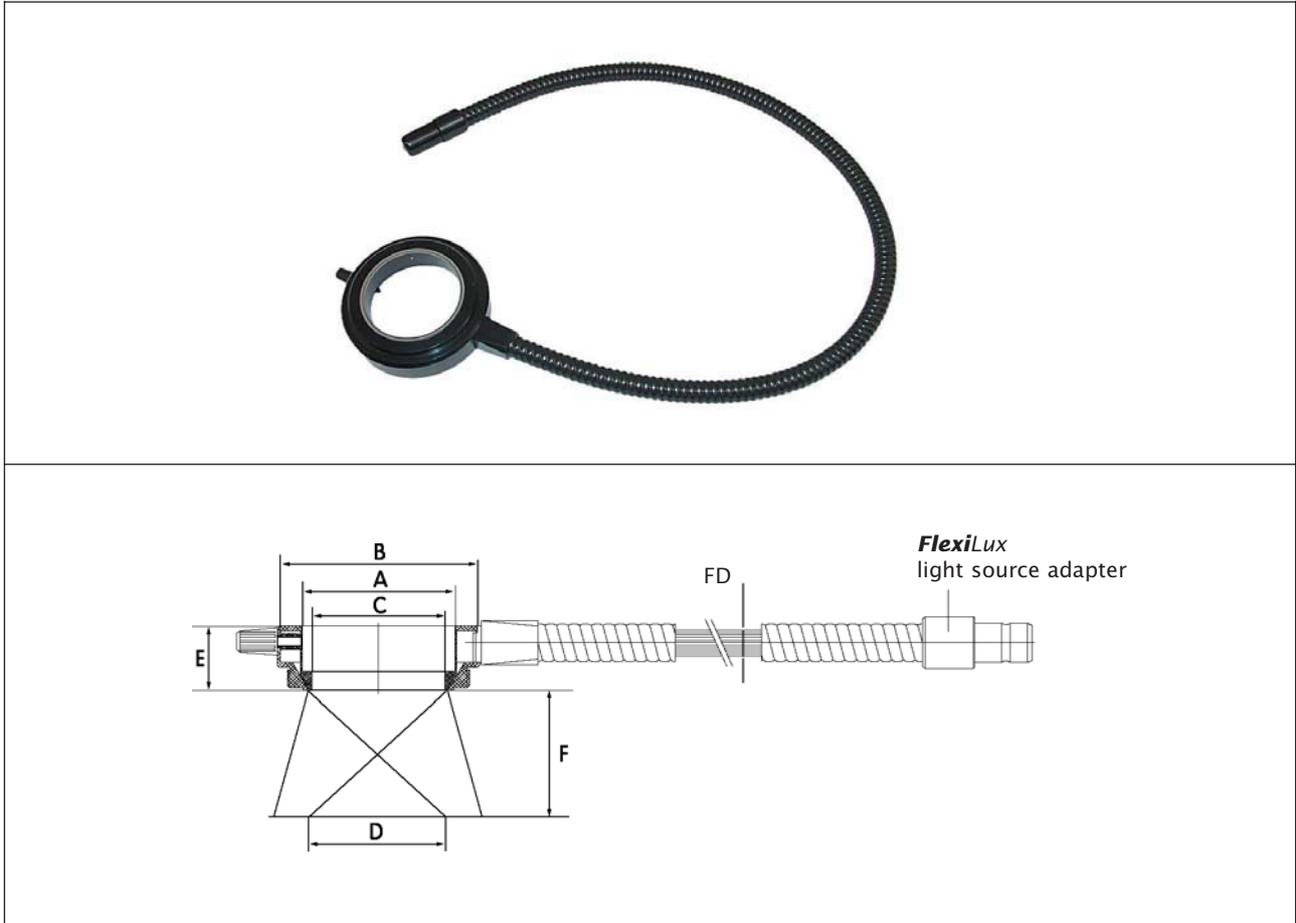
Inspection Program

Probe light guide and light probes

Ring Illuminator

Fiberoptical Ring Illuminator

The *FlexiLux* ring illuminators combines compact but robust construction with homogeneous, shadow-free illumination of the working area.



700

Item No.	Dimmension							Cable (mm)	Model
	A	B	C	D	E	F	G		
10.485	66.2	93.0	57.0	50-100 mm	25.0	45-125	10.0	750	standard full ring illuminator

A = connection diameter

B = outer diameter

C = inner diameter

D = illumination field

E = height

F = working distance

FD = active diameter

Other dimensions available on request.

Light Guides for Illumination

Goose Neck Light Guide - Semiflexibel

Black anti-reflective version of the goose neck. Since the arms exit vertically, they do not slacken over time. Standard metal endings for use with optical attachments. Including **FlexiLux** Light Source connection.



Item No.	Arms	FD Comm.	FD Arm	Length (mm)
10.466	2	7.8 mm	5.5 mm	600

701

Universal Light Guide

Synthetic fibers may be recut with scissors and a lens may be melted on by heating. Single arms may be bent under heat in order to transmit light to inaccessible spots. Including **FlexiLux** Light Source Adapter.



Item No.	FD Arm (mm)	Length (mm)	Arms
12.592	1.0	2,000	10

Legend

FD - Active Diameter

Probe Light Guide

Flexible part in metal protection tube with PVC coating; all critical parts additionally protected by strain relief. Including *FlexiLux* light source adapter.



Item No.	FD (mm)	Length (mm)	Application
12.580.001	6	1,800	for mirror and light probes

Probe Handle



Item No.	Outer-Ø (mm)	Length (mm)
12.606	15	75

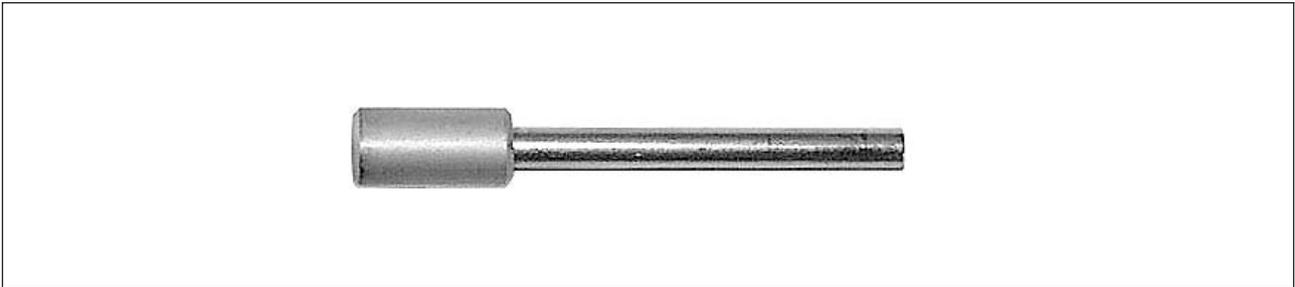
1 - Fits to probe light guide Item No. 12.580.001.

2 - Fits to light probes and spherical mirror probes (fixation via tension inside handle).

Legend

FD - Active Diameter

Light Probe



Item No.	FD (mm)	Outer-Ø (mm)	Length (mm)	Form
12.610	4	5	100	straight

Spherical mirror probe and spherical mirror



Spherical Mirror Probe

Item No.	Outer-Ø (mm)	Length (mm)
12.596.120.002	10	120

Spherical Mirror

Item No.	Mirror-Ø (mm)
12.597.21.002	21

Spherical mirror probe and spherical mirror can only be used together.

You will find further illumination products in our catalogue [Fiberoptical Illumination](#).

Legend

FD - Active Diameter

