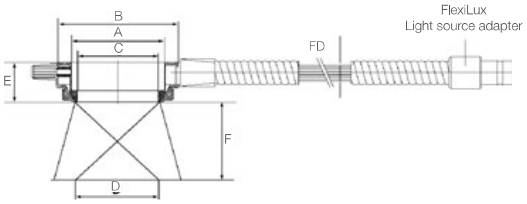
FLEXILUX Fiberoptical Ring Light

FLEXILUX **FIBEROPTICAL RING LIGHT**



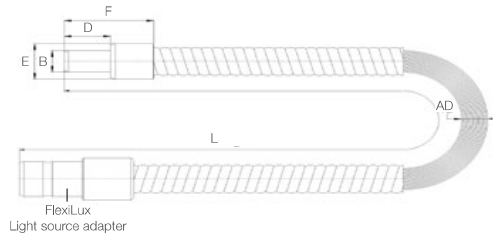
- Homogeneous and shadow-free illumination
- Compact and robust construction

Item no.	A Connection Ø	B Outer Ø	C Inner Ø	D Illumination field	E Height	F Working distance	FD Active Ø	Cable length
10.485	66.2 mm	93.0 mm	57.0 mm	50 - 100 mm	25.0 mm	45 - 125 mm	10.0 mm	750 mm
10.486	58.2 mm	78.0 mm	51.0 mm	50 - 100 mm	25.0 mm	24 - 80 mm	9.1 mm	750 mm

Further types will be verified on request.

Light Guides Made of Optical Glass

LIGHT GUIDES MADE OF OPTICAL GLASS – ONE-ARMED



- Very flexible due to covering with metal spiral hose and PVC coating
- Various diameters and lengths available
- Equipped with an end sleeve for fixation

Item no.	AD Active Ø	L Length	B Ferrule Ø	D Ferrule length	E Max. outer Ø	F Length metal end
LOG2.401000.FX	4.0 mm	1,000 mm	6.0 mm	12.0 mm	10.0 mm	24.0 mm
LOG2.402000.FX	4.0 mm	2,000 mm	6.0 mm	12.0 mm	10.0 mm	24.0 mm
LOG2.501000.FX	5.0 mm	1,000 mm	7.0 mm	16.0 mm	12.0 mm	31.0 mm
LOG2.502000.FX	5.0 mm	2,000 mm	7.0 mm	16.0 mm	12.0 mm	31.0 mm
LOG2.601000.FX	6.0 mm	1,000 mm	8.0 mm	16.0 mm	14.0 mm	30.7 mm
LOG2.602000.FX	6.0 mm	2,000 mm	8.0 mm	16.0 mm	14.0 mm	30.7 mm

Further types will be verified on request.

Light Guides Made of Optical Glass

LIGHT GUIDE MADE OF OPTICAL GLASS – TWO-ARMED, FULLY FLEXIBLE

- Very flexible due to covering with metal spiral hose and PVC coating
- Equipped with an end sleeve for fixation

Item no.	Active Ø arm	Arms	Active Ø common	Length
10.470	9.0 mm	2	12.7 mm	1,000 mm

LIGHT GUIDE MADE OF OPTICAL GLASS – ONE-ARMED, FULLY FLEXIBLE AND VERY ROBUST

- On the heavily stressed ends protected against fiber fracture
- Flexible part is strengthened with a spiral spring for bend protection on the side of the light source
- Reinforced with additional shrinking hose at the light exit end
- Various diameters and lengths

Item no.	Active Ø	Length
12.578.002	4.0 mm	1,800 mm
12.580.001	6.0 mm	1,800 mm
12.581.001	6.0 mm	3,000 mm

Probe Handle and Light Probes

PROBE HANDLE

- Can be combined with various light probes

Item no.	Outer Ø	Length
12.606	15.0 mm	75 mm

1 - fits to probe light guide item no. 12.580.001 and 12.581.001
2 - fits to light probes (fixation via clamping nut inside handle)

LIGHT PROBES

- For illumination of the interior of objects
- Interchangeable light probes for the probe handle
- Different lengths and directions

Item no.	Active Ø	Outer Ø	Length	Form
12.610	4.0 mm	5.0 mm	100 mm	straight
12.610.006	4.0 mm	5.0 mm	400 mm	straight
12.612	4.0 mm	5.0 mm	200 mm	straight
12.615	4.0 mm	5.0 mm	115 mm	45° angled

Goose Neck Light Guide, Diagnostic Light Guide

GOOSE NECK LIGHT GUIDE – TWO-ARMED, SEMI-FLEXIBLE

- Precise illumination
- Semi-flexible and therefore individually adjustable
- The black design avoids unwanted light reflection onto the working area

Item no.	Active Ø Arm	Arms	Active Ø common	Length
10.466	5.5 mm	2	7.8 mm	600 mm

DIAGNOSTIC LIGHT GUIDE MADE OF SYNTHETIC WITH PROBE – ONE-ARMED

- With integrated probe and handle for convenient guidance of the light guide

Item no.	Active Ø	Length	Probe Ø	Probe length
12.608	1.5 mm	2,000 mm	2.0 mm	50 mm

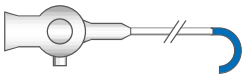
Universal Light Guide

UNIVERSAL LIGHT GUIDE MADE OF SYNTHETIC - WITH TEN SINGLE ARMS, FULLY FLEXIBLE

- 10 single arms for simultaneous illumination of different openings of an object
- Extremely flexible under the influence of heat and therefore individually adjustable
- If required, synthetic fibers can be cut

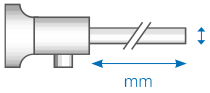
Item no.	Arms	Length	Active Ø
12.592	10	2,000 mm	1.0 mm

Glossary



Tip deflection

With a deflectable tip, flexible borescopes can be used to examine hollow spaces from various angles of view. The tip can be deflected in two-way or four-way direction via an adjusting lever on the device.



Working diameter and working length

The working diameter is the outer diameter of the borescope/fiberscope shaft. In principle, the working diameter selected should be as large as possible. However, the depth of field range and direction of view must also be taken into account. The working length is the length of the borescope shaft.

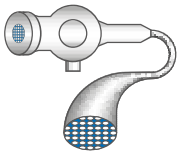
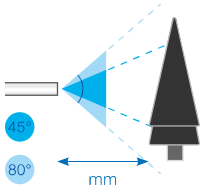


Image bundle

In fiberscopes, also called flexible borescopes, the transmission of images and light takes place via image bundles. Image bundles consist of individual fibers which have the same relative position to each other at the input and output. Each fiber transmits a pixel from the objective to the ocular. The quality of the image depends on the number of pixels and the size of each individual fiber. The image bundle systems ensure the flexibility and movability of the probe.

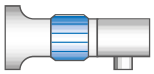


Field of view and wide angle

The field of view, also called angle of view or aperture angle, indicates the visible image section. It is specified in degrees. As of 80° and above, it is called a wide angle. The field of view is independent of the direction of view of the borescope/fiberscope. In its standard product range, SCHÖLLY offers fields of view ranging from 30° - 100°.

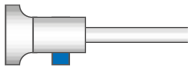
Direction of view

The inspection site inside the object is not always positioned opposite the borescope or fiberscope. This is why there are different directions of view. This makes it possible, for example, to look to the side or diagonally to the front. The direction of view is specified in degrees in relation to the shaft. SCHÖLLY offers directions of view ranging from 0° - 110°.



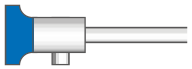
Focusing

The focus ring can be used to adjust the focus of the image within the defined working area.



Light guide connection

Flexible and rigid borescopes have a light guide connection to illuminate the inspection site via an external light source. The light guide connects the light source to the borescope or fiberscope. The light guide connector used in our borescopes/fiberscopes is a SCHÖLLY standard connector.

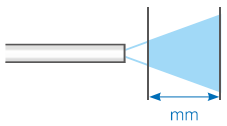


Ocular

The ocular is the part of the borescope and fiberscope through which you look with the eye at the inspection site. For a digital display of the inspection, a camera or a camera head can be connected to the ocular and the images can be displayed on a monitor. Our borescopes and fiberscopes are equipped with a DIN ocular and these fit all SCHÖLLY camera heads. With a SCHÖLLY endocoupler, borescopes can also be connected to other endoscopic cameras.

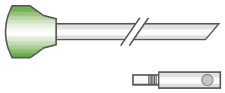
Mirror tubes

Mirror tubes are attachments that the user can use to change the direction of view of the borescope. By turning the reflector tube during the inspection, the user can gain a 360-degree view. Mirror tubes are available with different directions of view. Directions of view of 70°, 90° or 110° are available.



Depth of field

The depth of field is the area in which the borescope/fiberscope gives a focused image of the object.



Interchangeable objectives and objective tubes

For its universal borescopes, SCHÖLLY offers a range of interchangeable objectives and rotatable objective tubes with different directions and fields of view. The rotatable objective tubes can be used to gain a 360-degree view inside the inspection object. The user only needs a basic device to use the interchangeable objectives and rotatable objective tubes to adapt their equipment to different requirements within a similar diameter range. Directions of view ranging from 0° - 90° are available.