

# BF10

## High Power Laser Cable (LLK-A)



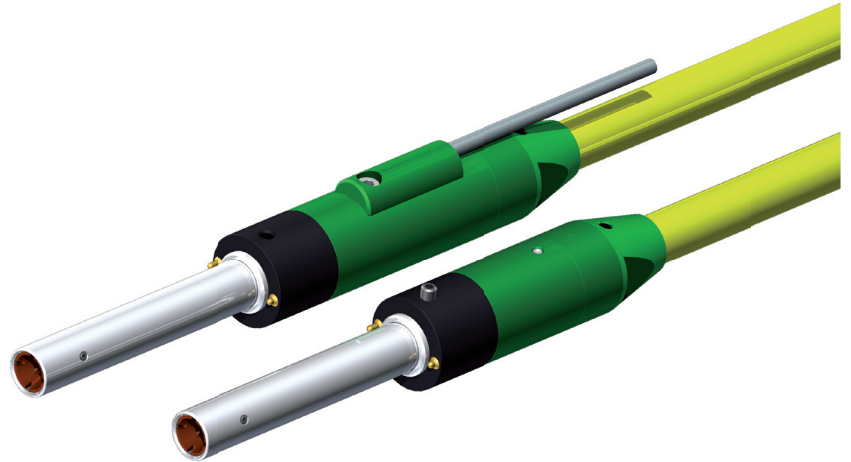
www.berlin-fibre.de  
Faseroptik aus Berlin.  
Made in Germany.

### Applications:

- High-Power Lasers
- Laser welding, marking, cutting
- Laboratory

### Benefits:

- small housing dimensions
- Ruggedized, torsion-protected metal conduit
- Interface compatible to LLK-A
- Safety circuit compatible to LLK-A



### Standard features:

- Metal conduit tubing with zinc-plated steel-coil (Agraff), Cu-braid and PU sheathing, yellow, outer diameter: 11,5 mm
- Output connector keyed (rotation prevention)
- high reflective fibre alignment parts

### Safety features:

- inner safety tubing with Cu-braided shielding
- Fibre break detection, fully electrical compatible to LLK-A
- Plug detection with spring contacts, gold-plated, short spring range
- Temperature switch: 90°C, reversible (on both connectors)
- Resistance value: ca. 0,6 - 1 Ohm/m
- Laser interlock connector: 3pol. DIN connector C091A male (DIN EN 60130-9 / 41 524, IP40)

### Optional features:

- Laser interlock with 9pol. Sub-D connector or adapter cable
- different temperature switch ranges from 60 to 90°C available
- additional temperature fuse (non reversible, @ input/output/both connectors)
- Mode strip configuration (@ input/output/both connectors)
- Version w/o safety features for low-power or laboratory applications
- Hybrid configurations with different output connectors (SMA, BF-D80 ...)
- Customer-specific modifications realizable

### Fibre configurations:

Wavelength range:  
350 ... 2400 nm  
(VIS-IR fibres, low OH)

Core diameters:  
100  $\mu\text{m}$   
200  $\mu\text{m}$   
400  $\mu\text{m}$   
600  $\mu\text{m}$   
800  $\mu\text{m}$   
1000  $\mu\text{m}$   
(others on request)

NA: 0,22  $\pm$ 0,02  
0,12 (on request)

Cable lengths: 5 ... 20m  
(others on request)

### Technical specifications:

Connector type: BF10 (LLK-A)  
Ferrule diameter: 10 mm -10/-20  $\mu\text{m}$   
Ferrule length: 56 mm  $\pm$ 0,5 mm  
Focus position: 54 mm  $\pm$ 0,05 mm from end stop  
Centricity:  $\leq$  8  $\mu\text{m}$   
Overall length: input connector: 141 mm +3 mm  
output connector: 121 mm +3 mm  
max. housing dimension: input connector: 23 mm  
(for feeding through walls) output connector: 22 mm  
Housing material: Aluminium, anodized, color green

### Article Number

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cable length in m  
05 => 5 m  
10 => 10 m  
20 => 20 m

core diameter  
10 => 100  $\mu\text{m}$   
20 => 200  $\mu\text{m}$   
40 => 400  $\mu\text{m}$

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Specifications subject to change without notice.

