

Technical data sheet Plastic fiber optics for throughbeam operation Part no.: 50117750

KF-LY-77TZ-20



Technical data

Leuze

Basic data

| Series | KF |
|--------------------------------|----------------------------|
| Operating principle | Throughbeam principle |
| Device type | Transmit and receive fiber |
| Area of application | General applications |
| Optical data | |
| Light beam exit | Lateral |
| Fiber core | Single fiber core |
| Fiber core material | Plastic |
| Active fiber diameter | 1 mm |
| Operating range with LV461 | 0 250 mm |
| Operating range with LV462 | 0 430 mm |
| Operating range with LV463 | 0 750 mm |
| Operating range with LV463.XV | 0 1,125 mm |
| Operating range with LV463.XR | 0 1,350 mm |
| Operating range with LV463I.XR | 0 2,025 mm |
| | |

Measurement data

Minimum object diameter

Mechanical data

| Design | Cylindrical | | |
|-------------------------------------|---------------------------|--|--|
| Outer diameter | 2.2 mm | | |
| Head material | Stainless steel | | |
| Туре | Plastic fiber optics (KF) | | |
| Fiber length | 2,000 mm | | |
| Fiber sheathing material | PE | | |
| Fastening of the probe | M4 | | |
| Smallest bending radius (moving) | R2 | | |
| Metric thread on fiber optic sleeve | No | | |
| Laying | Flexible | | |
| Damping at λ = 650nm | 210 dB/km | | |

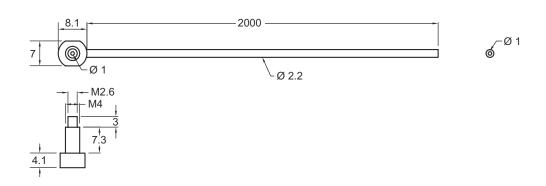
0.5 mm

Environmental data

| Ambient temperature, operation | -40 70 °C | | | |
|--------------------------------|-----------|--|--|--|
| Classification | | | | |
| Customs tariff number | 90011090 | | | |
| ECLASS 5.1.4 | 27270905 | | | |
| ECLASS 8.0 | 27270905 | | | |
| ECLASS 9.0 | 27270905 | | | |
| ECLASS 10.0 | 27270905 | | | |
| ECLASS 11.0 | 27273606 | | | |
| ECLASS 12.0 | 27273606 | | | |
| ECLASS 13.0 | 27273606 | | | |
| ECLASS 14.0 | 27273606 | | | |
| ECLASS 15.0 | 27273606 | | | |
| ETIM 5.0 | EC002651 | | | |
| ETIM 6.0 | EC002651 | | | |
| ETIM 7.0 | EC002651 | | | |
| ETIM 8.0 | EC002651 | | | |
| ETIM 9.0 | EC002651 | | | |
| ETIM 10.0 | EC002651 | | | |
| | | | | |

Dimensioned drawings

All dimensions in millimeters



Notes





Observe intended use!

∜ This product is not a safety sensor and is not intended as personnel protection.

b The product may only be put into operation by competent persons.

Further information

- Suitable products for operating these fiber optics are the fiber optic amplifiers LV461, LV462B as well as LV463, LV463.XV and LV463.XR.
- The maximum range is limited by the length of the light conductor.
- Operating range measured on a white object (90% diffuse reflection) with the following settings on the fiber optic amplifier:

• max. response time

max. amplificationmin. switching threshold

· min. switching theshold

Accessories

General

| | Part no. | Designation | Article | Description |
|-----|-------------|--------------|--------------------|--|
| | 50135984 | KF-PT-SS-619 | Protective housing | Type of article: Protection tube for mechanical protection of plastic fiber optic cables Suitable for: Plastic fiber optics Length: 1,900 mm Outer diameter: 4.6 mm Inner diameter: 3 mm Material: Stainless steel |
| | 50117779 | KL-M02 | Attachment lens | Type of fastening: Screw type Functions: Collimated |
| | 50117784 | KL-M06 | Attachment lens | Type of fastening: Screw type Functions: Collimated |
| Ø 🖏 | 50117782 | KL-SM02 | Attachment lens | Functions: 90° - deflection Type of fastening: Screw type |
| | 50117785 ** | KLC-4530 | Tool | Type: Cutting tool |

** Included in delivery contents



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.