

Technical data sheet

Plastic fiber optics for throughbeam operation

Part no.: 50151112

KF-LY-77TZ-30

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For illustration purposes only

Technical data

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 | 0.5 mm |
|-------------------------|--------|

Mechanical data

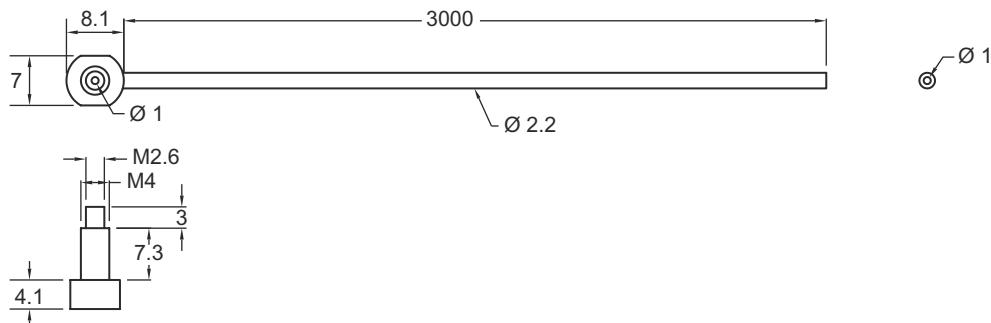
| | |
|-------------------------------------|---------------------------|
| Design | Cylindrical |
| Outer diameter | 2.2 mm |
| Net weight | 37 g |
| Head material | Stainless steel |
| Type | Plastic fiber optics (KF) |
| Fiber length | 3,000 mm |
| Fiber sheathing material | PE |
| Fastening of the probe | M4 |
| Smallest bending radius (moving) | R2 |
| Metric thread on fiber optic sleeve | No |
| Laying | Flexible |
| Damping at $\lambda = 650\text{nm}$ | 210 dB/km |

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 |
| ECLASS 16.0 | 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! |
|  | <ul style="list-style-type: none"> ↳ This product is not a safety sensor and is not intended as personnel protection. ↳ The product may only be put into operation by competent persons. ↳ Only use the product in accordance with its intended use. |

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. amplification
 - min. switching threshold

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 Outer diameter: 4.6 mm Inner diameter: 3 mm Material: Stainless steel |
|  | 50117779 | KL-M02 | Attachment lens Functions: Collimated Type of fastening: Screw type |
|  | 50117784 | KL-M06 | Attachment lens Functions: Collimated Type of fastening: Screw type |
|  | 50117782 | KL-SM02 | Attachment lens Functions: 90° - deflection Type of fastening: Screw type |
|  | 50117785 ** | KLC-4530 | Tool Type: Cutting tool |

** Included in delivery contents

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