

Technical data sheet

Plastic fiber optics for throughbeam operation

Part no.: 50117778

KFX-L-20ML-20

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For illustration purposes only

Technical data

Basic data

| | |
|---------------------|----------------------------|
| Series | KFX |
| Operating principle | Throughbeam principle |
| Device type | Transmit and receive fiber |
| Area of application | General applications |

Special version

| | |
|-----------------|----------------|
| Special version | Area detection |
|-----------------|----------------|

Optical data

| | |
|--------------------------------|--|
| Light beam exit | Front |
| Fiber core | Mixed fiber configuration Multiple fiber core |
| Fiber core material | Plastic |
| Active fiber diameter | 0.265 mm x 16 Piece(s) |
| Operating range with LV461 | 0 ... 350 mm |
| Operating range with LV462 | 0 ... 600 mm |
| Operating range with LV463 | 0 ... 1,050 mm |
| Operating range with LV463.XV | 0 ... 1,575 mm |
| Operating range with LV463.XR | 0 ... 1,900 mm |
| Operating range with LV463L.XR | 0 ... 2,850 mm |

Measurement data

| | |
|-------------------------|------|
| Minimum object diameter | 1 mm |
|-------------------------|------|

Mechanical data

| | |
|-------------------------------------|---|
| Design | Cubic |
| Outer diameter | 2.8 mm |
| Head material | Plastic |
| Type | Plastic fiber optics with bend protection (KFX) |
| Fiber length | 2,000 mm |
| Light field width | 14.5 mm |
| Fiber sheathing material | PE |
| Fastening of the probe | 2 x M3 |
| Smallest bending radius (moving) | R60 |
| Laying | standard |
| Damping at $\lambda = 650\text{nm}$ | 210 dB/km |

Environmental data

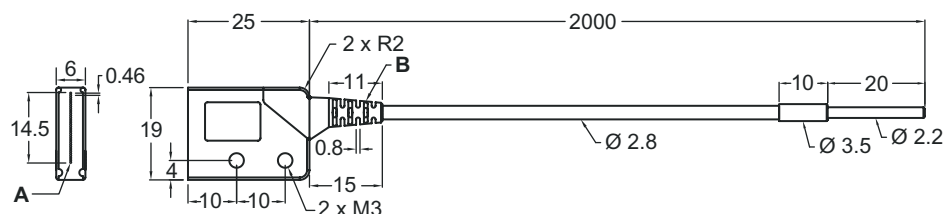
| | |
|--------------------------------|---------------|
| Ambient temperature, operation | -55 ... 70 °C |
|--------------------------------|---------------|

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



A \varnothing 0.265 mm glass fiber core x 32 pcs

B Bend protection, PVC

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 |
|--|-------------|-------------|---------|--------------------|
|  | 50117785 ** | KLC-4530 | Tool | Type: Cutting tool |

** Included in delivery contents

| Note | |
|--|---|
|  | <ul style="list-style-type: none"> ⌘ A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page. |