

## 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
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### 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
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### 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

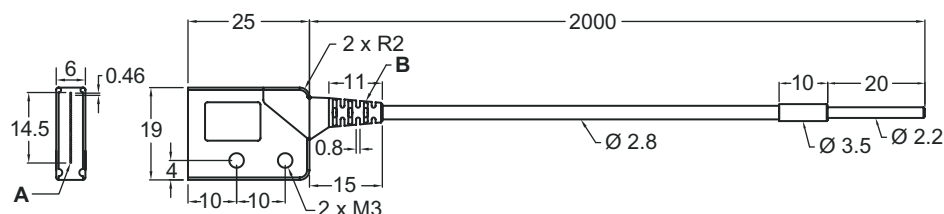
Ambient temperature, operation	-55 ... 70 °C
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### Classification

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

## Dimensioned drawings

All dimensions in millimeters



A  
B

Notes

**Observe intended use!**



- 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 setting 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**



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