

Technical data sheet

Plastic fiber optics for throughbeam operation

Part no.: 50117747

KF-L-50ML-20

Contents

- Technical data
- Dimensioned drawings
- Notes
- Further information



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

Special version

Special version	Area detection
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Optical data

Light beam exit	Lateral
Fiber core	Mixed fiber configuration
	Multiple fiber core
Fiber core material	Plastic
Active fiber diameter	0.265 mm x 32 Piece(s)
Operating range with LV461	0 ... 250 mm
Operating range with LV462	0 ... 430 mm
Operating range with LV463	0 ... 900 mm
Operating range with LV463.XV	0 ... 1,300 mm
Operating range with LV463.XR	0 ... 1,550 mm
Operating range with LV463L.XR	0 ... 2,500 mm

Measurement data

Minimum object diameter	2 mm
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Mechanical data

Design	Cubic
Outer diameter	2.2 mm
Net weight	43 g
Head material	Plastic
Type	Plastic fiber optics (KF)
Fiber length	2,000 mm
Light field width	46.5 mm
Fiber sheathing material	PE
Fastening of the probe	2 x Ø 3.2mm
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
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

All dimensions in millimeters

A Ø 0.265 mm plastic fiber core x 32 pcs

- ⚠ 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.

- 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