

## Technical data sheet Plastic fiber optics for throughbeam operation

Part no.: 50117739 KF-L-320-D-T14L



## **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	0 200 mm
Operating range with LV462	0 250 mm
Operating range with LV463	0 600 mm
Operating range with LV463.XV	0 900 mm
Operating range with LV463.XR	0 1,080 mm
Operating range with LV463I.XR	0 1,620 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	Ø 3 mm	
Smallest bending radius (moving)	R25	
Sleeve length at optical outlet	30 mm	
Metric thread on fiber optic sleeve	No	
Laying	standard	
Damping at λ = 650nm	210 dB/km	

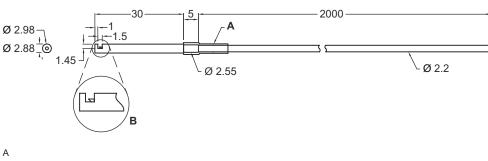
0.1 mm

## 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

## **Dimensioned drawings**

All dimensions in millimeters



В

### Notes





#### Observe intended use!

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

 $\ensuremath{^{\ensuremath{\oplus}}}$  The product may only be put into operation by competent persons.

b 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 timemax. 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 Length: 1,900 mm Outer diameter: 4.6 mm Inner diameter: 3 mm Material: Stainless steel

### Note

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