

# **Technical data sheet** Plastic fiber optics type diffuse reflective

Part no.: 50117762

KFX-ETD-320-Q



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### **Technical data**



### Basic data

Series	KFX
Operating principle	Diffuse reflection principle
Area of application	Precise object detection

### **Optical data**

Light beam exit	Front
Fiber core	Single fiber core
Fiber core material	Plastic
Active fiber diameter	0.5 mm
Operating range with LV461	0 25 mm
Operating range with LV462	0 40 mm
Operating range with LV463	0 70 mm
Operating range with LV463.XV	0 105 mm
Operating range with LV463.XR	0 125 mm
Operating range with LV463I.XR	0 190 mm

### Measurement data

0.05 mm Minimum object diameter

### Mechanical data

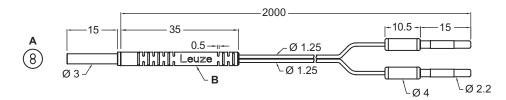
Mechanical data		
Design	Cylindrical	
Outer diameter	1.25 mm	
Head material	Stainless steel	
Туре	Plastic fiber optics with bend protection (KFX)	
Fiber length	2,000 mm	
Fiber sheathing material	PE	
Fastening of the probe	M3	
Smallest bending radius (moving)	R15	
Sleeve length at optical outlet	15 mm	
Metric thread on fiber optic sleeve	No	
Laying	standard	
Damping at λ = 650nm	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



- Ø 0.5 mm glass fiber core x 2 pcs
- Bend protection, PVC

### **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 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 Length: 1,900 mm Outer diameter: 4.6 mm Inner diameter: 3 mm Material: Stainless steel
	50117780	KL-M03	Attachment lens	Functions: Focusing of light spot Light spot diameter: 0.5 mm Focal distance: 8 mm Type of fastening: Screw type
<b>3</b>	50117783	KL-M03-1	Attachment lens	Functions: Focusing of light spot Light spot diameter: 2 mm Focal distance: 8 mm Type of fastening: Screw type
	50117785 **	KLC-4530	Tool	Type: Cutting tool

<sup>\*\*</sup> Included in delivery contents



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