

Fiber optic sensor OJ500-M1K-E23

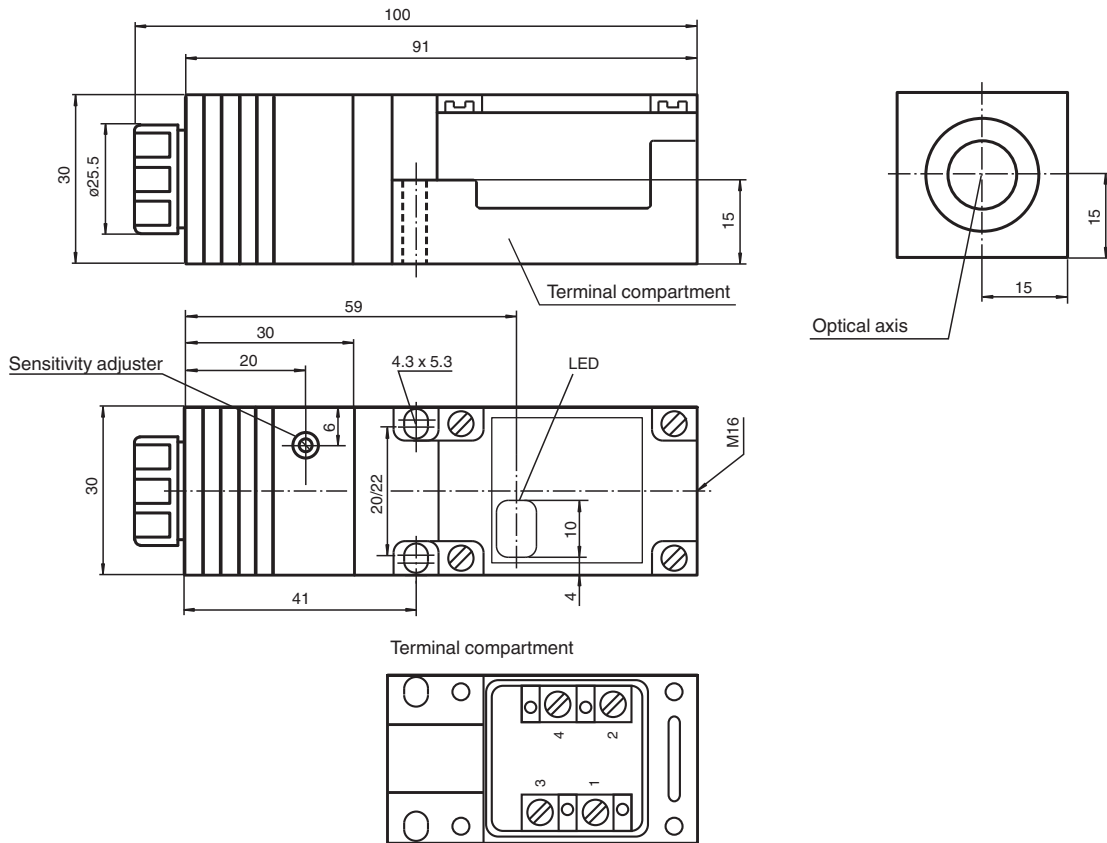
- Light-on/dark-on parameterisable
- Adjustable sensor head



Fiber optic sensor for glass fiber optics



Dimensions



Technical Data

General specifications

Sensor range	up to 100 mm (LMR 18-3,2-1,0-K4)
Detection range	up to 600 mm (LME 18-2,3-0,5-K3)

Release date: 2024-06-19 Date of issue: 2024-06-19 Filename: 018937_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

Light source	LED	
Light type	modulated infrared light	
Ambient light limit	40000 Lux	
Temperature influence	≤ 0.5 mm/K	
Indicators/operating means		
Operation indicator	LED green	
Function indicator	LED yellow: switching state LED red: stability control (flashing)	
Control elements	programming switch: bright/dark changeover switch selection of the operating frequency selection of the switching frequency pulse extension stability control dynamic/static	
Control elements	Sensing range adjuster	
Electrical specifications		
Operating voltage	U _B	10 ... 30 V DC
Ripple	10 %	
No-load supply current	I ₀	≤ 35 mA
Output		
Stability alarm output	1 PNP, active when falling short of the stability control	
Switching type	light/dark on	
Signal output	1 PNP output, short-circuit protected, reverse polarity protected, open collector	
Switching voltage	max. 30 V DC	
Switching current	≤ 200 mA	
Switching frequency	f	≤ 1.5 kHz / 200 Hz switchable
Response time	≤ 0.3 ms at 1.5 kHz ≤ 2.5 ms at 200 Hz	
Timer function	pulse extension 20 ms, switchable	
Conformity		
Product standard	EN 60947-5-2	
Approvals and certificates		
CCC approval	CCC approval / marking not required for products rated ≤36 V	
Approvals	CE	
Ambient conditions		
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)	
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)	
Mechanical specifications		
Degree of protection	IP67	
Connection	M16&bspterminal compartment, core cross section ≤ 2.5 mm ²	
Material		
Housing	PBT	
Optical face	Scratch resistant mineral glass lens	
Mass	100 g	
Dimensions		
Height	30 mm	
Width	30 mm	
Depth	102 mm	

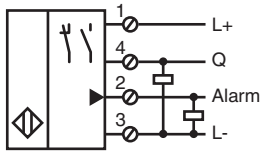
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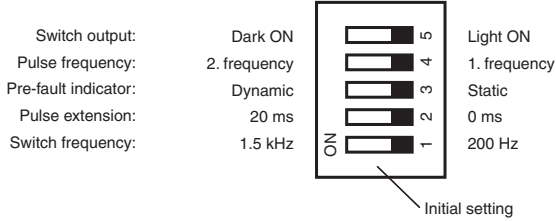
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Connection

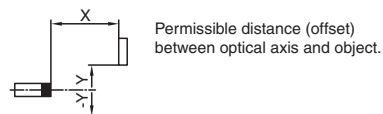
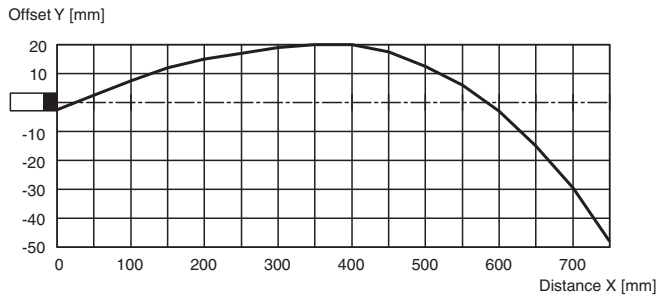


Selector switches in terminal compartment



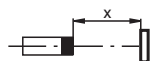
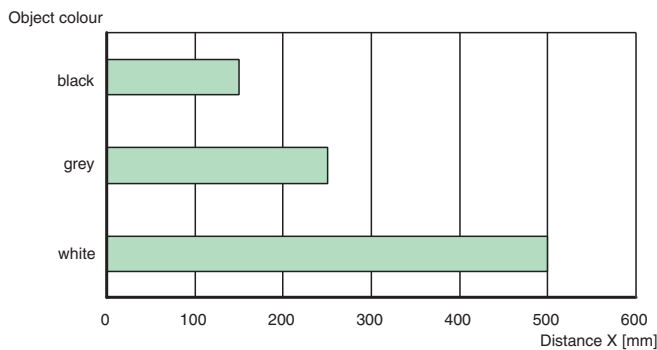
Characteristic Curve

Characteristic response curve



Detection ranges

OJ 500-M1K



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Safety Information

Safety Instructions:

- Read the operating instructions before commissioning.
- Installation, connection and adjustments should only be undertaken by qualified personnel.
- No safety component according to Machinery Directive 2006/42/EC, may not be used for personal protection or EMERGENCY STOP function.