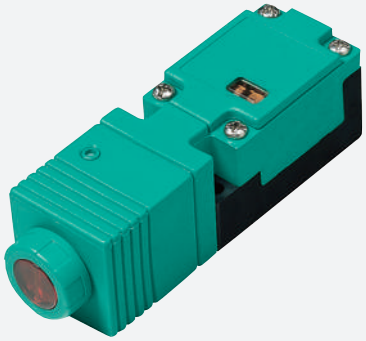


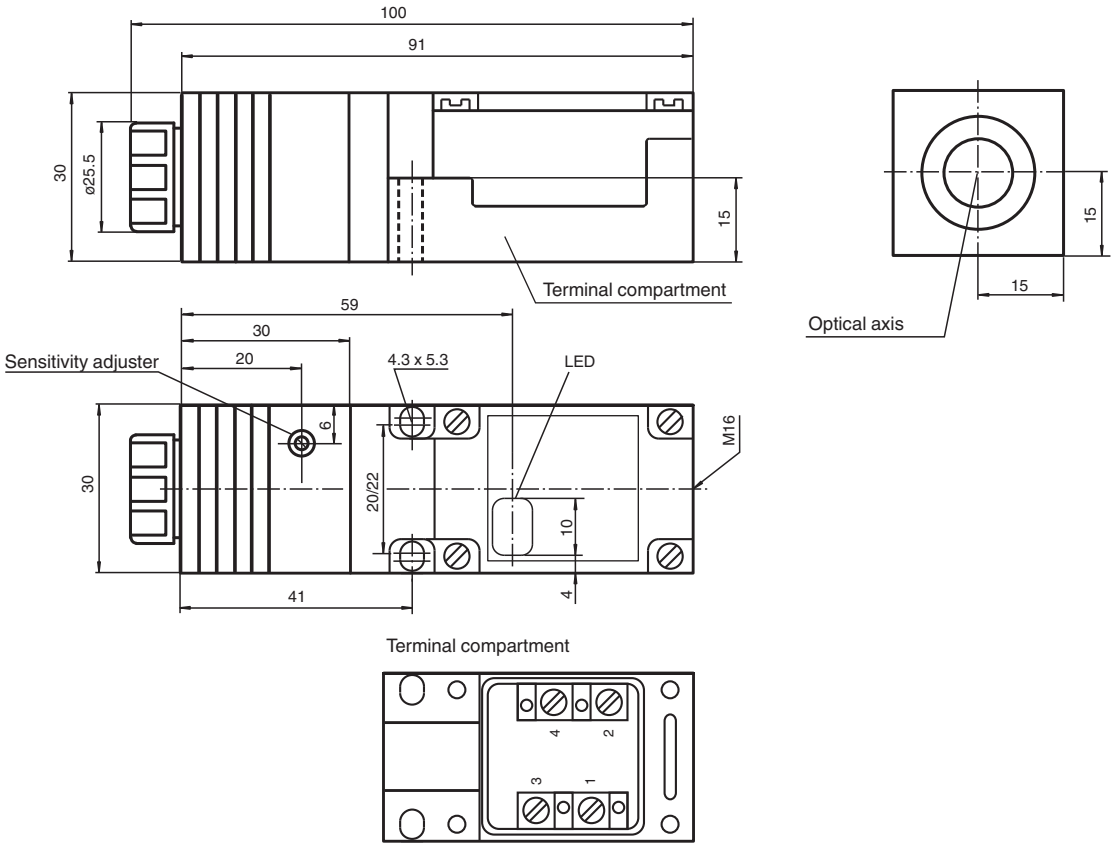
Fiber optic sensor

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)

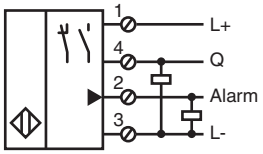
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Technical Data

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 mm²
Material		
Housing		PBT
Optical face		Scratch resistant mineral glass lens
Mass		100 g
Dimensions		
Height		30 mm
Width		30 mm
Depth		102 mm

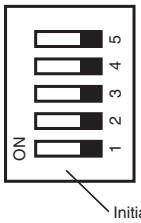
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Connection



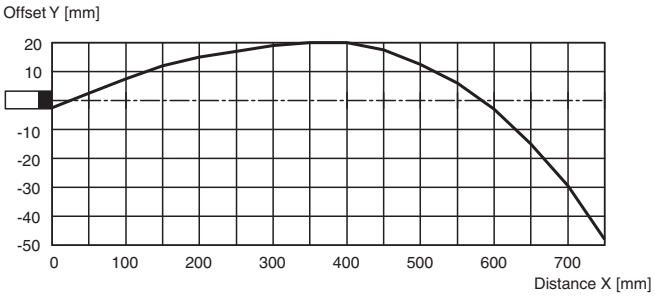
Selector switches in terminal compartment

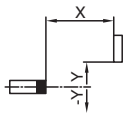
Switch output:	Dark ON		Light ON
Pulse frequency:	2. frequency		1. frequency
Pre-fault indicator:	Dynamic		Static
Pulse extension:	20 ms		0 ms
Switch frequency:	1.5 kHz		200 Hz



Characteristic Curve

Characteristic response curve

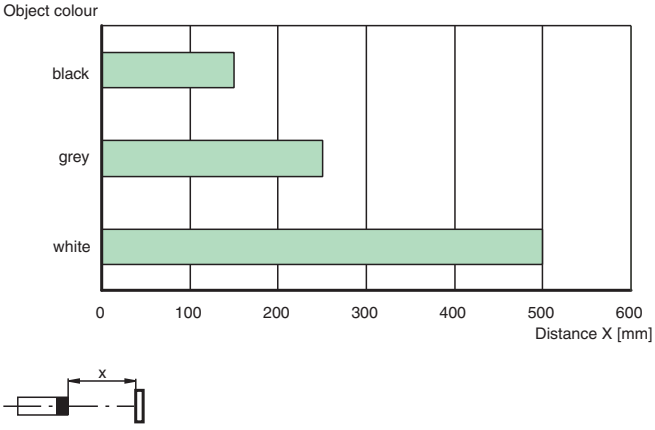




Permissible distance (offset) between optical axis and object.

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.

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