

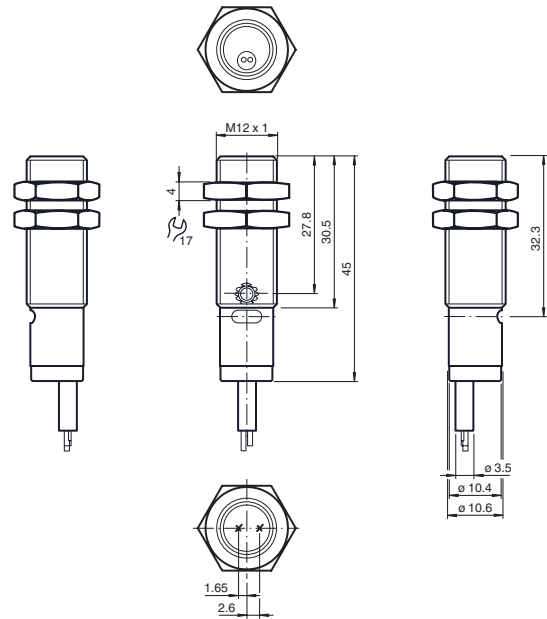


Thru-beam sensor
2 m fixed cable

Features

- Robust M12 threaded housing
- Less space required
- Light/dark ON, programmable
- Degree of protection IP67

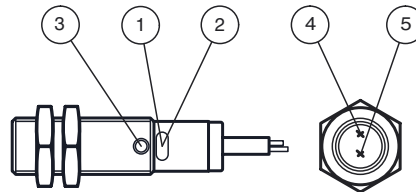
Dimensions



Electrical connection



Indicators/operating means



1	Operating display	green
2	Signal display	yellow
3	Potentiometer	
4	Emitter	
5	Receiver	

Technical data

System components

Emitter	OBE6000-12GM40
Receiver	OBE6000-12GM40-E4

General specifications

Effective detection range	0 ... 6000 mm
Threshold detection range	8500 mm
Adjustment range	500 ... 8500 mm
Reference target	receiver
Light source	LED
Light type	red, 640 nm
Angle deviation	+/- 2 °
Diameter of the light spot	approx. 800 mm at a distance of 6 m Red light
Angle of divergence	approx. 4
Optical face	frontal
Ambient light limit	EN 60947-5-2 ; 20000 Lux

Functional safety related parameters

MTTF _d	806 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Operation indicator	LED green: Power on
Function indicator	LED yellow: lights up when receiving the light beam ; flashes when falling short of the stability control; OFF when light beam is interrupted
Control elements	sensitivity adjustment , receiver

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC , class 2
Ripple		10 %
No-load supply current	I ₀	≤ 30 mA (emitter and receiver)

Input

Control input	light on +UB dark on: 0 V
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Output

Switching type	light/dark on electrically switchable	
Signal output	1 NPN output, short-circuit protected, reverse polarity protected, open collector	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Voltage drop	U _d	≤ 2 V
Switching frequency	f	≤ 1000 Hz
Response time	0.5 ms	

Ambient conditions

Ambient temperature	-30 ... 60 °C (-22 ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)

Mechanical specifications

Degree of protection	IP67
Connection	2 m fixed cable
Material	
Housing	brass, nickel-plated
Optical face	PMMA
Mass	approx. 45 g (device)
Cable length	2 m

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 60947-5-2:2007
Standard conformity	
Standards	UL 508

Approvals and certificates

UL approval	cULus Listed, Class 2 Power Source, Type 1 enclosure
CCC approval	CCC approval / marking not required for products rated ≤36 V
Approvals	CE, cULus Listed 57M3 (Only in association with UL Class 2 power supply; Type 1 enclosure)

Accessories

BF 12

Mounting flange, 12 mm

BF 12-F

Mounting flange with dead stop, 12 mm

BF 5-30

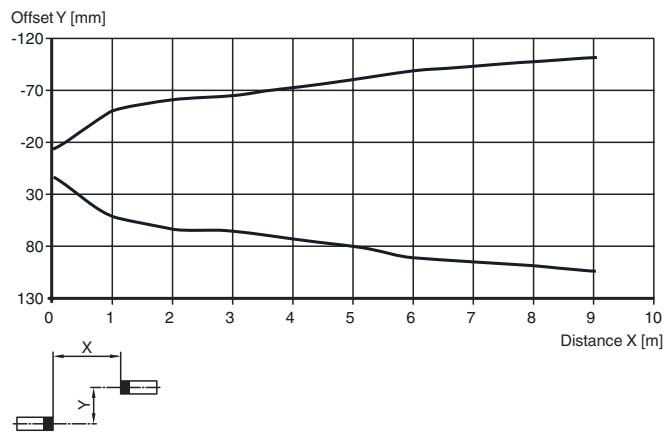
Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

Other suitable accessories can be found at www.pepperl-fuchs.com



Curves/Diagrams

Characteristic response curve



Relative received light strength

