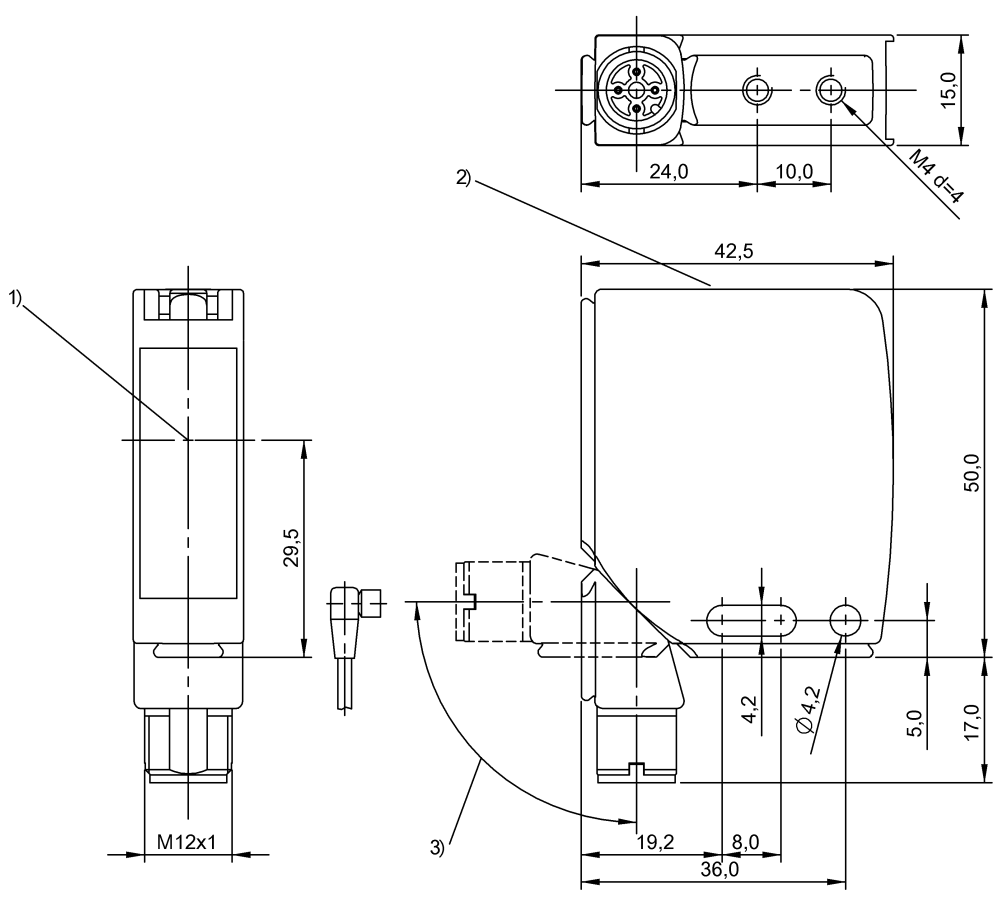


Photoelectric Sensors
BOS 21M-PA-PK10-S4S
Order Code: BOS00TP

BALLUFF



1) Optical axis, 2) Display and control panel, 3) rotatable 270°



Basic features

Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	21M
Style	Square
	Connection can be rotated

Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
No-load current I ₀ max. at Ue	35 mA
Operating voltage U _b	10...30 VDC
Protection class	II
Rated insulation voltage U _i	75 V DC
Rated operating current I _e	100 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	200 ms
Residual current I _r max.	10 µA
Ripple max. (% of U _e)	8 %
Switching frequency	1000 Hz
Voltage drop U _d max. at I _e	2 V

Environmental conditions

Ambient temperature	-25...55 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms, 3x6
IP rating	IP67

Functional safety

MTTF (40 °C) 595 a

Interface

Switching output PNP normally closed (NC)
PNP normally open (NO) Pins 2-4

Material

Housing material Zinc, Die casting, Powder coated
Aluminium
Material sensing surface Glass
Surface protection Powder coated

Mechanical data

Dimension 15 x 50 x 42.5 mm
Mounting part Screw M4

Optical features

Ambient light max. 10000 Lux
Beam characteristic Divergent
Light type LED, red light
Polarizing filter yes
Principle of optical operation Retroreflective sensor
Switching function, optical Light-on
dark-on
Wave length 650 nm

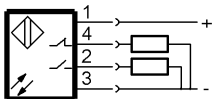
Range/Distance

Range 0...4 m
Rated operating distance Sn 4 m, Adjustable

Connector Drawings



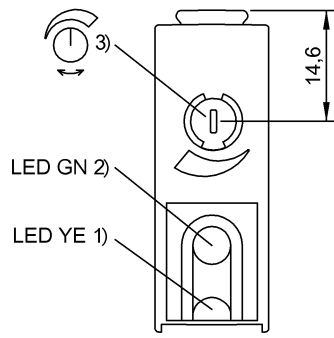
Wiring Diagrams



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Help Views



- 1) Output function
- 2) Stability
- 3) Sensitivity

Opto Symbols

