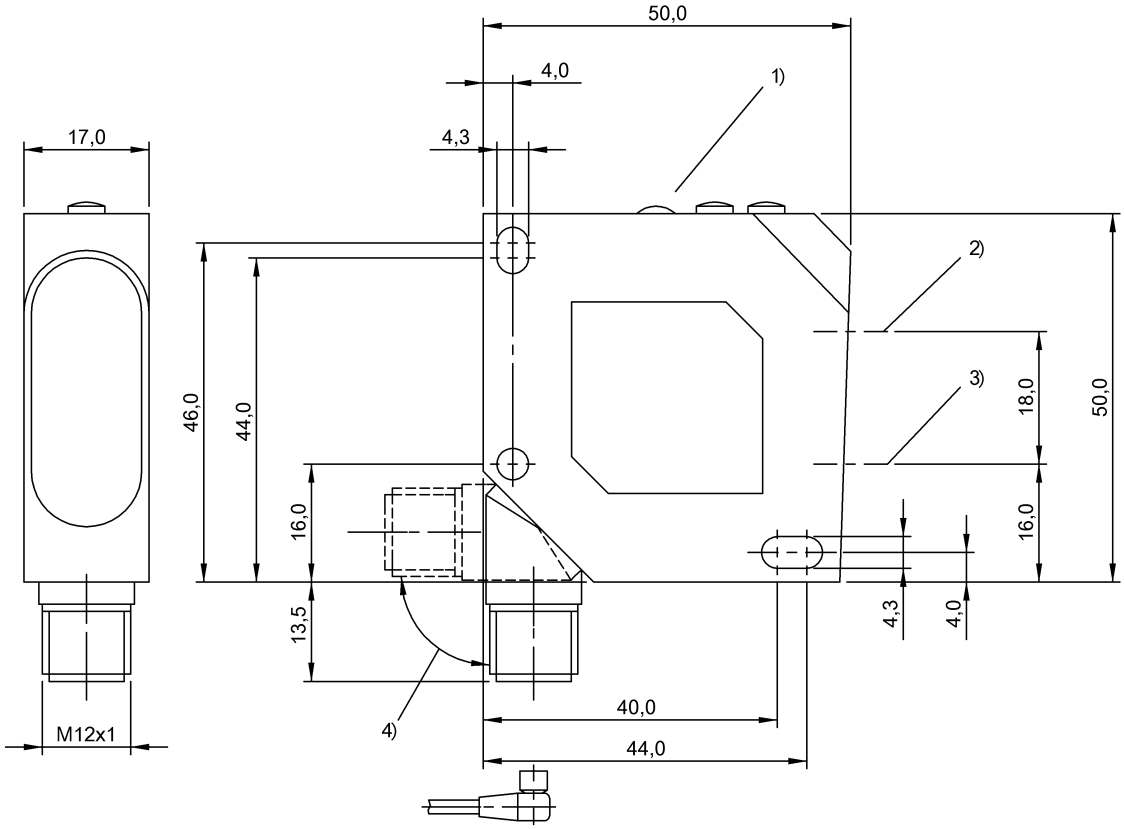
Photoelectric Sensors

BOS 26K-PA-1LHC-S4-C
Order Code: BOS008F



1) Display and control panel, 2) Optical axis receiver, 3) Optical axis emitter, 4) rotatable 270°

IND. CONT. EQ
77HA
for use in the secondary of
a class 2 source of supply

Display/Operation

Adjuster	2-turn potentiometer
Display	Output function- LED yellow Error - LED red Switching dist. - dig. disp. Stability - LED green
Setting	Rated switching distance (Sn)

Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

No-load current Io max. at Ue	50 mA
Operating voltage Ub	10...30 VDC
Protection class	II
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	10 %
Switching frequency	2500 Hz
Turn-off delay toff max.	0.2 ms
Turn-on delay ton max.	0.2 ms
Utilization category	DC -13
Voltage drop Ud max. at Ie	2.4 V

Environmental conditions

Ambient temperature	-20...45 °C
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	10…55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67

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Functional safety

MTTF (40 °C)	188 a

General data

Approval/Conformity	cULus CE EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Series	26K
Style	Square Connection can be rotated

Material

Housing material	ABS
Material sensing surface	PMMA

Mechanical data

Dimension	17 x 50 x 50 mm
Mounting	Screw M4

Optical data

Ambient light max.	5000 Lux
Average power Po max.	1 mW
Beam characteristic	Collimated
Laser class per IEC 60825-1	2
Light spot size	3 x 1 mm at 300 mm
Light type	Laser red light
Principle of optical operation	Diffuse sensor, triangulation
Pulse duration t max.	10.0 µs
Pulse frequency	14 kHz
Pulse power Pp max.	4.8 mW
Special optical feature	Background suppression
Switching function, optical	Light-on dark-on
Wave length	670 nm

Output/Interface

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

Range/Distance

Distance deviation 18 % max. (% of Sr)	5 % on 90 % rem.
Range	50...300 mm
Rated operating distance Sn	300 mm Adjustable

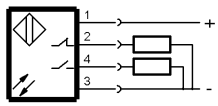
Remarks

Order accessories separately.
For additional information, refer to user's guide.
The sensor is functional again after the overload has been eliminated.
Reference object (target): gray card, 200 x 200, 90 % remission, axial approach.
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Use an R/C (CYJV2) cable with suitable properties for attaching the device.
For further information about the MTTF and B10d see MTTF / B10d certificate

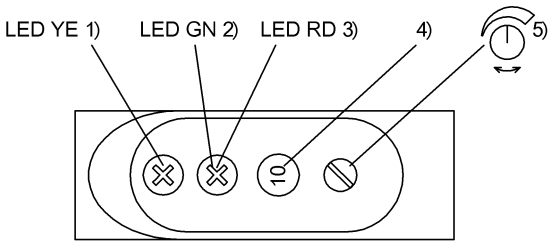
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings

Wiring Diagrams

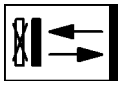


Help Views

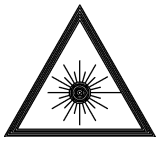


1) Output function
2) Stability
3) Error
4) Switching dist. dig. displ.
5) Sensitivity

Opto Symbols



Warning Symbols



LASER BEAM - DO NOT STARE INTO THE LIGHT BEAM!

LASER CLASS 2 per IEC60825-1: 2003-10