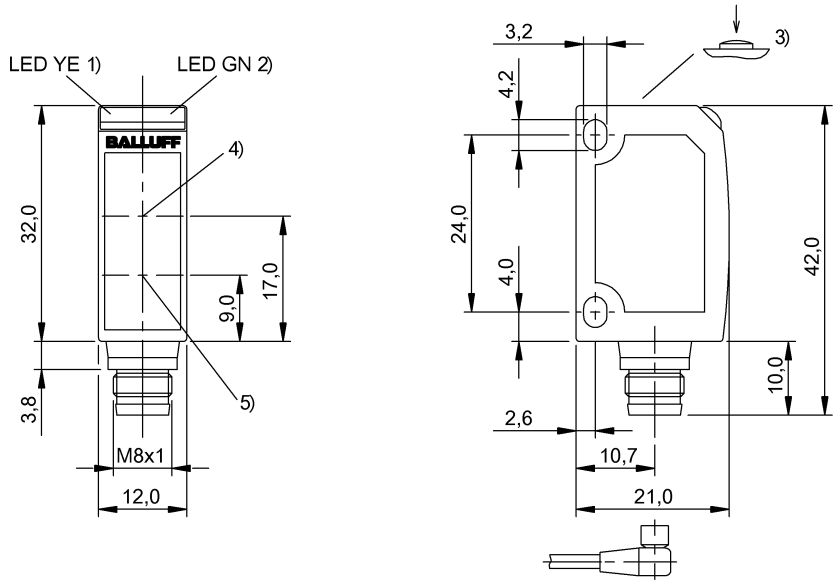
Photoelectric Sensors

BOS 6K-PU-1QC-S75-C
Order Code: BOS00AJ



1) Light reception, 2) Stability, 3) Sn, light/dark, 4) Optical axis receiver, 5) Optical axis emitter

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

Basic features

Approval/Conformity	cULus CE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference reflector	BOS R-9
Series	6K
Style	Square Connection 90°

Display/Operation

Adjuster	button
Display	LED yellow: Light received Stability - LED green
Setting	Sensitivity (Sn) Light-on/dark-on Factory setting (Reset)

Electrical connection

Connection	Connector, M8x1-Male, 4-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Input function	Same function as button Key disable on/off
No-load current Io max. at Ue	25 mA
Operating voltage Ub	10...30 VDC
Protection class	II
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Switching frequency	1000 Hz
Turn-off delay toff max.	0.5 ms
Turn-on delay ton max.	0.5 ms
Voltage drop Ud max. at Ie	2.4 V

Environmental conditions

Ambient temperature	-20...60 °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
Protection degree	IP67

Material

Housing material	ABS
Material sensing surface	PMMA

Mechanical data

Dimension	12 x 42 x 21 mm
Mounting	Screw M3

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Optical features

Ambient light max.	5000 Lux
Beam characteristic	Divergent
Blind zone	50 mm
Light spot size	75 x 75 mm at 150 mm
Light type	LED, red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Switching function, optical	dark-on/light-on
Wave length	660 nm

Output/Interface

Switching output	PNP normally open/normally closed (NO/NC)

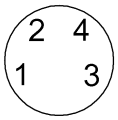
Range/Distance

Range	0...3 m
Rated operating distance Sn	3 m Adjustable

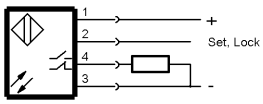
Remarks

For additional information, refer to user's guide.
Order accessories separately.
Do not press key using a pointed tool.
Polarizing filters prevent spurious switching due to reflecting and shiny parts.
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.
The sensor is functional again after the overload has been eliminated.
Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

Connector Drawings



Wiring Diagrams



Opto Symbols