

1) Receiver, 2) LED yellow



### Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference emitter	BOS Q08M-X-LS21-..
Series	Q08M
Style	Square Connection 90°

### Display/Operation

Adjuster	no
Display	LED yellow: Light received

### Electrical connection

Cable diameter D	3.00 mm
Cable length L	3 m
Conductor cross-section	0.14 mm <sup>2</sup>
Connection	Cable, 3.00 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Short-circuit protection	yes

### Electrical data

Load capacitance max. at U <sub>e</sub>	0.05 µF
No-load current I <sub>o</sub> max. at U <sub>e</sub>	10 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	100 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	150 ms
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	500 Hz
Utilization category	DC -13
Voltage drop U <sub>d</sub> max. at I <sub>e</sub>	0.7 V

### Environmental conditions

Ambient temperature	-5...55 °C
EN 60068-2-27, Shock	Half-sinus, 100 gn, 2 ms, 3x8000 Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	10...2000 Hz, amplitude 1 mm, 30 gn, 3x5 h 10...55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

### Functional safety

MTTF (40 °C)	182 a
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### Interface

Switching output	PNP normally open (NO)
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Photoelectric Sensors  
**BOS Q08M-PS-LE21-03**  
Order Code: BOS028N

# BALLUFF

## Material

Housing material	Zinc, Die casting, nickel-plated
Material jacket	PUR
Material sensing surface	PMMA
Surface protection	nickel-plated

## Mechanical data

Dimension	8 x 44 x 8 mm
Mounting part	Screw M3

## Optical features

Ambient light max.	5000 Lux
Light type	Laser red light
Principle of optical operation	Through-beam sensor (receiver)
Smallest part typ.	0.28 mm at 1 m. R0 = 3.0 m
Switching function, optical	dark-on

## Range/Distance

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

## Remarks

Order accessories separately.

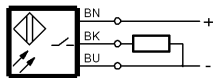
The sensor is functional again after the overload has been eliminated.

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 more information about 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.

## Wiring Diagrams



## Opto Symbols

