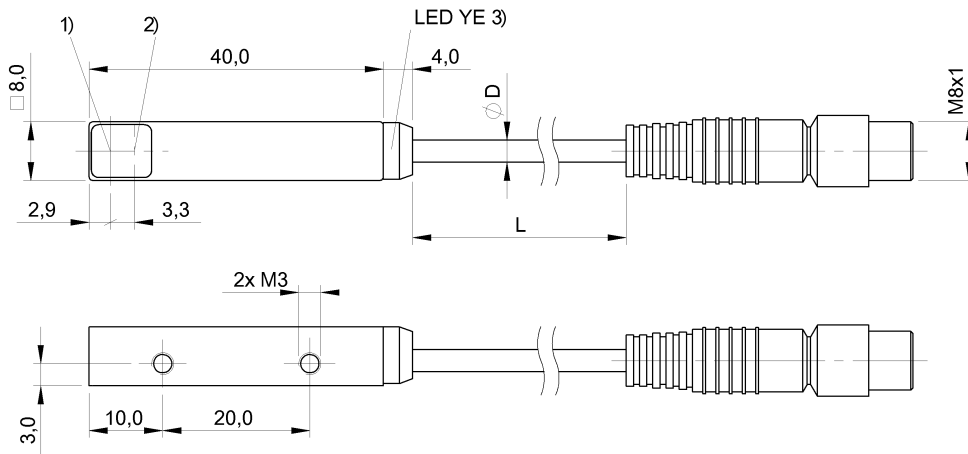


BOS Q08M-NS-PR20-00,2-S49 BOS01TH



1) Optical axis emitter 2) Optical axis receiver 3) Output function



Electrical connection

Cable diameter D	3.00 mm
Cable length	0.2 m
Connection type	Cable with connector, 0.20 m, PUR
Contact, surface protection	Gold plated
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.5 µF
No-load current I ₀ max. at Ue	15 mA
Operating voltage U _b	10...30 VDC
Protected against miswiring	yes
Rated insulation voltage U _i	75 V DC
Rated operating current I _e DC	100 mA
Rated operating voltage U _e DC	24 V
Ready delay t _v max.	20 ms
Switching frequency	500 Hz
Turn-off delay t _{off} max.	1 ms
Turn-on delay t _{on} max.	1 ms
Utilization category	DC -13
Voltage drop U _d max. at I _e	0.7 V

Environmental conditions

Ambient temperature	-5...55 °C
Protection type IEC 60529	IP67
Reference reflector	BOS R-2

General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Series	Q08M
Style	Square Connection 90°

Material

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

Mechanical data

Dimension	8 x 44 x 8 mm
Fastening detail	Screw M3

Optical data

Beam characteristic	Divergent
LED group per IEC 62471	Exempt Group
Light type	LED Red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Wave length	645 nm

Output/Interface

Switching output	NPN Normally open (NO)
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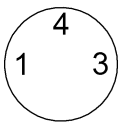
Range/Distance

Measuring range	0...1 m
Range	0...1 m
Rated operating distance S_n	1 m
Ripple max. (% of U_e)	10 %

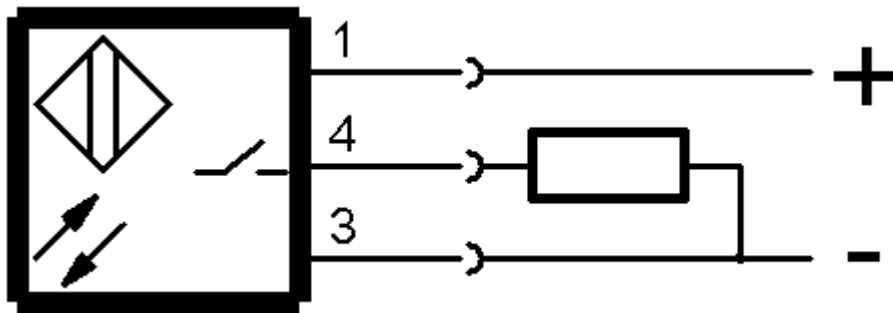
Remarks

Order accessories separately.
For additional information, refer to user's guide.
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.
Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.
The sensor is functional again after the overload has been eliminated.

Connector view



Wiring Diagram



Symbols for Optoelectronic Sensors

