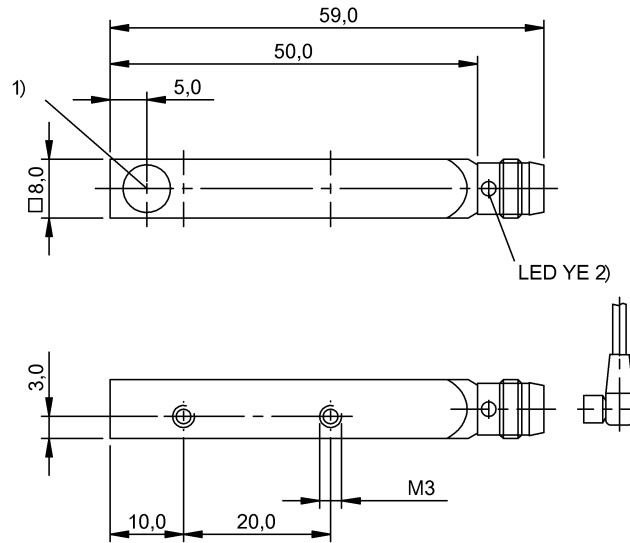


BOS Q08M-NO-RD11-S49 BOS003T



1) Sensing surface 2) Light reception/limit area



Electrical connection

| | |
|-----------------------------|------------------------|
| Connection | M8x1-Connector, 3-pole |
| Contact, surface protection | Gold plated |
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|--|-------------|
| Hysteresis H max. (% of Sr) | 15.0 % |
| Load capacitance max. at Ue | 0.1 μ F |
| No-load current I _o max. at Ue | 15 mA |
| Operating voltage U _b | 10...30 VDC |
| Output resistance R _a | 33.0 kOhm |
| Pollution degree | 3 |
| 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. | 150 ms |
| Repeat accuracy max. (% of Sr) | 5.0 % |
| Residual current I _r max. | 50 μ A |
| Switching frequency | 400 Hz |
| Turn-off delay t _{off} max. | 1.25 ms |
| Turn-on delay t _{on} max. | 1.25 ms |
| Utilization category | DC -13 |
| Voltage drop U _d max. at I _e | 2.5 V |

Environmental conditions

| | |
|---------------------------|-------------|
| Ambient temperature | -10...60 °C |
| Protection type IEC 60529 | IP67 |

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 sensing surface | PMMA |
| Surface protection | nickel plates |

Mechanical data

| | |
|------------------|---------------|
| Dimension | 8 x 59 x 8 mm |
| Fastening detail | Screw M3 |

Optical data

| | |
|-------------------------|---------------|
| Ambient light max. | 5000 Lux |
| Beam characteristic | Divergent |
| LED group per IEC 62471 | Exempt Group |
| Light type | LED Red light |
| Wave length | 640 nm |

Output/Interface

| | |
|------------------|--------------------------|
| Switching output | NPN Normally closed (NC) |
|------------------|--------------------------|

BOS Q08M-NO-RD11-S49 BOS003T

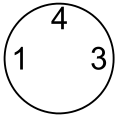
Range/Distance

| | |
|--------------------------------------|-----------|
| Measuring range | 0...55 mm |
| Range | 0...55 mm |
| Rated operating distance S_n | 55 mm |
| Ripple max. (% of U_e) | 10 % |
| Temperature drift max. (% of S_r) | 10 % |

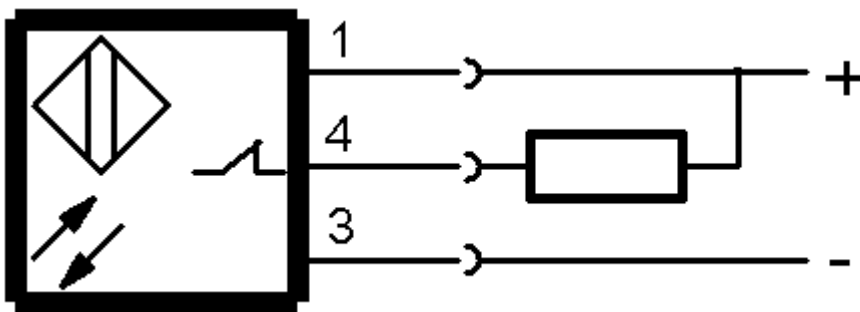
Remarks

For additional information, refer to user's guide.
 Order accessories separately.
 The sensor is functional again after the overload has been eliminated.
 Reference object (target): gray card, 100 x 100 90 % remission, axial approach.
 For line-transmitted disturbances an external protection circuit is recommended, e.g. capacitors ($\geq 20\text{nF}$) to ground, (see also Instruction for Protection Circuit Doc.-No.: 864234).
 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.

Connector view



Wiring Diagram



Symbols for Optoelectronic Sensors

