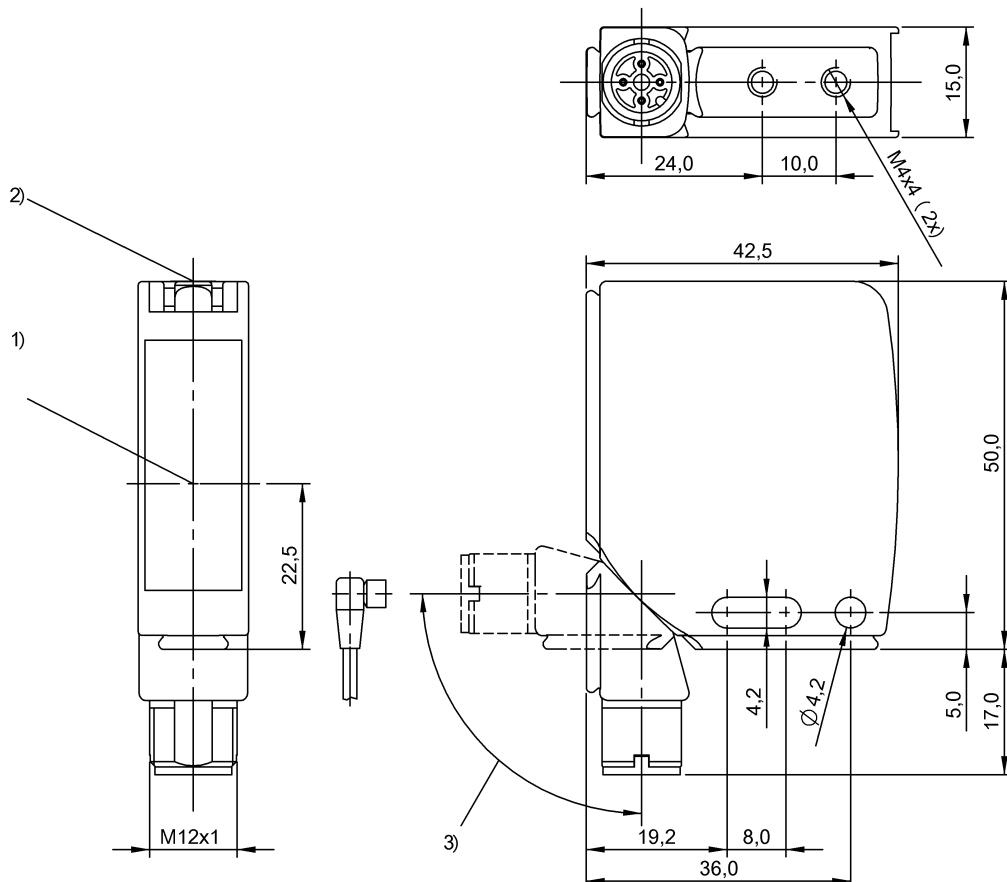


Photoelectric Sensors  
BOS 21M-XT-LS11-S4  
Order Code: BOS00Y0

**BALLUFF**



1) Optical axis, 2) Operating voltage, 3) rotatable 270°



#### Basic features

|                        |                                     |
|------------------------|-------------------------------------|
| Approval/Conformity    | CE<br>UKCA<br>cULus<br>WEEE         |
| Basic standard         | IEC 60947-5-2                       |
| Principle of operation | Photoelectric sensor                |
| Reference receiver     | BOS 12M-..-LE10-..                  |
| Series                 | 21M                                 |
| Style                  | Square<br>Connection can be rotated |

#### Display/Operation

|         |                  |
|---------|------------------|
| Display | LED green: Power |
|---------|------------------|

#### Electrical connection

|                                   |                              |
|-----------------------------------|------------------------------|
| Connection                        | Connector, M12x1-Male, 4-pin |
| Polarity reversal protected       | yes                          |
| Protection against device mix-ups | yes                          |

#### Electrical data

|   |                    |
|---|--------------------|
| Input function  | Test (Emitter off) |
| No-load current I <sub>0</sub> max. at U <sub>e</sub> | 35 mA              |
| Operating voltage U <sub>b</sub>                      | 10...30 VDC        |
| Protection class                                      | II                 |
| Rated insulation voltage U <sub>i</sub>               | 75 V DC            |
| Rated operating voltage U <sub>e</sub> DC             | 24 V               |
| Ripple max. (% of U <sub>e</sub> )                    | 8 %                |

#### Environmental conditions

|                         |  |
|-------------------------|--|
| Ambient temperature     | -10...50 °C                                |
| Contamination scale     | 3  |
| EN 60068-2-27, Shock    | Half-sinus, 30 g <sub>n</sub> , 11 ms, 3x6 |
| EN 60068-2-6, Vibration | 10...55 Hz, amplitude 1 mm, 3x30 min       |
| IP rating               | IP67                                       |

#### Functional safety

|              |       |
|--------------|-------|
| MTTF (40 °C) | 429 a |
|--------------|-------|

Material

|                          |                                  |
|--------------------------|----------------------------------|
| Housing material         | Zinc, Die casting, Powder coated |
|                          | Aluminium                        |
| Material sensing surface | PMMA                             |
| Surface protection       | Powder coated                    |

Mechanical data

|               |                   |
|---------------|-------------------|
| Dimension     | 15 x 50 x 42.5 mm |
| Mounting part | Screw M4          |

Optical features

|                                |                               |
|--------------------------------|-------------------------------|
| Average power Po max.          | 390 µW                        |
| Laser class per IEC 60825-1    | 1                             |
| Light type                     | Laser red light               |
| Principle of optical operation | Through-beam sensor (Emitter) |
| Pulse frequency                | 12 kHz                        |
| Wave length                    | 650 nm                        |

Range/Distance

|                             |                 |
|-----------------------------|-----------------|
| Range                       | 0...60 m        |
| Rated operating distance Sn | 60 m Adjustable |

Remarks

For additional information, refer to user's guide.

Order accessories separately.

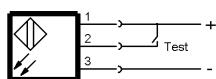
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

Connector Drawings



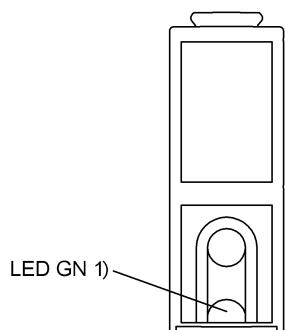
Wiring Diagrams



Photoelectric Sensors  
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**BALLUFF**

### Help Views

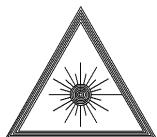


1) Operating voltage

### Opto Symbols



### Warning Symbols



LASER CLASS 1 per IEC 60825-1