

1) Optical axis, 2) Focus distance



### Basic features

|                        |                             |
|------------------------|-----------------------------|
| Approval/Conformity    | CE<br>cULus<br>EAC<br>WEEE  |
| Basic standard         | IEC 60947-5-2               |
| Principle of operation | Photoelectric sensor        |
| Reference receiver     | BLE 18M-...1LT-..           |
| Series                 | 18M                         |
| Style                  | Cylinder<br>Straight optics |

### Display/Operation

|          |                   |
|----------|-------------------|
| Adjuster | Adjusting nut     |
| Setting  | Focusing distance |

### Electrical connection

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

### Electrical data

|                                     |             |
|-------------------------------------|-------------|
| No-load current $I_0$ max. at $U_e$ | 10 mA       |
| Operating voltage $U_b$             | 10...30 VDC |
| Rated insulation voltage $U_i$      | 75 V DC     |
| Rated operating voltage $U_e$ DC    | 24 V        |
| Ripple max. (% of $U_e$ )           | 15 %        |

### Environmental conditions

|                         |                                      |
|-------------------------|--------------------------------------|
| Ambient temperature     | -10...50 °C                          |
| EN 60068-2-27, Shock    | Half-sinus, 30 gn, 11 ms, 3x6        |
| EN 60068-2-6, Vibration | 10...55 Hz, amplitude 1 mm, 3x30 min |
| Protection degree       | IP65                                 |

### Functional safety

|              |      |
|--------------|------|
| MTTF (40 °C) | 15 a |
|--------------|------|

### Material

|                          |                      |
|--------------------------|----------------------|
| Housing material         | Brass, nickel plated |
| Material sensing surface | Glass                |
| Surface protection       | nickel plated        |

### Mechanical data

|           |              |
|-----------|--------------|
| Dimension | Ø 18 x 79 mm |
| Mounting  | Nut M18x1    |

### Optical features

|                                |                               |
|--------------------------------|-------------------------------|
| Average power $P_0$ max.       | 1 mW                          |
| Beam characteristic            | Focus adjustable $\geq 0.2$ m |
| Laser class per IEC 60825-1    | 2                             |
| Light type                     | Laser red light               |
| Principle of optical operation | Through-beam sensor (Emitter) |
| Wave length                    | 660 nm                        |

## Range/Distance

|                             |                 |
|-----------------------------|-----------------|
| Range                       | 0...50 m        |
| Rated operating distance Sn | 50 m Adjustable |

## Remarks

Focusing tool included, order other 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.

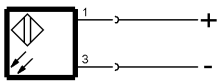
For more information about MTTF and B10d see MTTF / B10d Certificate

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

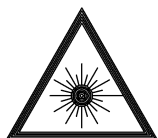


1) Emitter

## Opto Symbols



## Warning Symbols



LASER BEAM - DO NOT STARE INTO THE LIGHT BEAM!

LASER CLASS 2 per IEC60825-1: 2003-10