



### Model Number

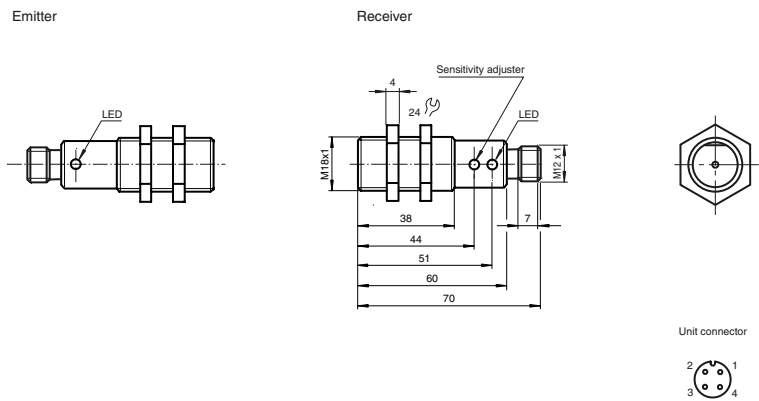
**OBE10M-18GM60-RT-SE4-V1**

Thru-beam sensor  
with 4-pin, M12 x 1 connector

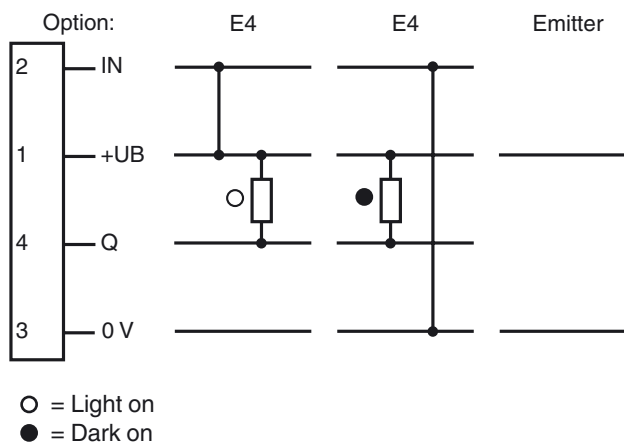
### Features

- Dual color indication LED
- Light/dark ON, programmable
- Sensitivity adjuster for optimal adaptation to the application
- Protection degree IP67
- Strong metallic housing in cylindrical shape M18 x 1

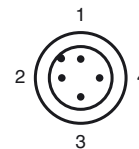
### Dimensions



### Electrical connection



### Pinout



## Technical data

### System components

|          |                        |
|----------|------------------------|
| Emitter  | OBE10M-18GM60-RT-S-V1  |
| Receiver | OBE10M-18GM60-RT-E4-V1 |

### General specifications

|                            |                                                                                            |
|----------------------------|--------------------------------------------------------------------------------------------|
| Effective detection range  | 0 ... 10 m                                                                                 |
| Adjustment range           | 0 ... 10000 mm                                                                             |
| Reference target           | receiver                                                                                   |
| Light source               | Red , 660 nm                                                                               |
| Light type                 | 660 nm visible red light                                                                   |
| Approvals                  | CE, cULus Listed 57M3 (Only in association with UL Class 2 power supply; Type 1 enclosure) |
| Diameter of the light spot | approx. 600 mm at detection range 10 m                                                     |
| Ambient light limit        | 10000 Lux                                                                                  |

### Indicators/operating means

|                   |                                                                                                           |
|-------------------|-----------------------------------------------------------------------------------------------------------|
| Operating display | LED green (emitter)                                                                                       |
| Function display  | Dual color-LED, yellow/green<br>yellow: switching state<br>green: power on<br>flashing: stability control |
| Controls          | sensitivity adjustment                                                                                    |

### Electrical specifications

|                                |       |                          |
|--------------------------------|-------|--------------------------|
| Operating voltage              | $U_B$ | 10 ... 30 V DC , class 2 |
| Ripple                         |       | 10 %                     |
| No-load supply current         | $I_0$ | $\leq 25$ mA (device)    |
| Time delay before availability | $t_v$ | $\leq 25$ ms             |

### Output

|                     |                                                                                   |         |
|---------------------|-----------------------------------------------------------------------------------|---------|
| Switching type      | light/dark on electrically switchable                                             |         |
| Signal output       | 1 NPN output, short-circuit protected, reverse polarity protected, open collector |         |
| Switching voltage   | max. 30 V DC                                                                      |         |
| Switching current   | max. 100 mA                                                                       |         |
| Voltage drop        | U <sub>d</sub>                                                                    | ≤ 2.5 V |
| Switching frequency | f                                                                                 | 500 Hz  |
| Response time       | 1 ms                                                                              |         |

### Standard conformity

|             |              |
|-------------|--------------|
| Standards   | EN 60947-5-2 |
| Standards 2 | UL 508       |

### Ambient conditions

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 55 °C (-13 ... 131 °F) |
| Storage temperature | -40 ... 70 °C (-40 ... 158 °F) |

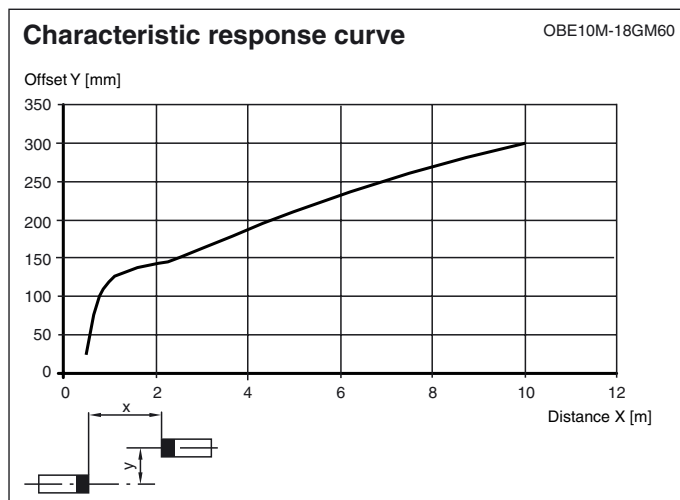
### Mechanical specifications

|                   |                          |
|-------------------|--------------------------|
| Protection degree | IP67                     |
| Connection        | connector M12 x 1, 4-pin |
| Material          |                          |
| Housing           | brass, nickel-plated     |
| Optical face      | PC                       |
| Mass              | 45 g per device          |

### Approvals and certificates

|              |                                                                    |
|--------------|--------------------------------------------------------------------|
| UL approval  | cULus Listed, Type 1 enclosure                                     |
| CCC approval | CCC approval / marking not required for products rated $\leq 36$ V |

## Curves/Diagrams



## Accessories

### CPZ18B03

Mounting Bracket with swivel nut

### BF 18

Mounting flange, 18 mm

### BF 18-F

Mounting flange with dead stop, 18 mm

### BF 5-30

Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

### V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

### V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

