

OBE5000-18GM70-...-V1

Single path light beam switch

# OBE5000-18GM70-...-V1

with M12 x 1 connector

CE

Sensors in  
threaded housings



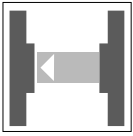
- ◆ Light/dark ON, programmable
- ◆ Protection degree IP67
- ◆ Strong metallic housing in cylindrical shape M18 x 1
- ◆ Sensitivity adjuster for optimal adaptation to the application
- ◆ LED indicating for a simple operation start

For suitable cable sockets, reflectors and mounting aids refer to chapter "accessories".

Date of issue  
10/8/01

| Ordering code                  |                                        | OBE5000-18GM70-SE4-V1 | OBE5000-18GM70-SE5-V1 |
|--------------------------------|----------------------------------------|-----------------------|-----------------------|
| Effective detection range      | 0 ... 5 m                              | ◆                     | ◆                     |
| Reference target               | Receiver                               | ◆                     | ◆                     |
| Adjustment range               | 500 ... 5000 mm                        | ◆                     | ◆                     |
| Light source                   | LED                                    | ◆                     | ◆                     |
| Light type                     | Infrared, alternating light            | ◆                     | ◆                     |
| Ambient light limit            | 10000 Lux                              | ◆                     | ◆                     |
| Standard conformity            | EN 60947-5-2                           | ◆                     | ◆                     |
| Approvals                      | CE                                     | ◆                     | ◆                     |
| Operating display              | LED green (transmitter)                | ◆                     | ◆                     |
| Function display               | LED yellow: switching state (receiver) | ◆                     | ◆                     |
| Controls                       | sensitivity adjuster                   | ◆                     | ◆                     |
| Operating voltage              | 10 ... 30 V DC                         | ◆                     | ◆                     |
| Ripple                         | 10 %                                   | ◆                     | ◆                     |
| No-load supply current         | ≤ 20 mA (device)                       | ◆                     | ◆                     |
| Time delay before availability | ≤ 50 ms                                | ◆                     | ◆                     |
| <b>Signal output</b>           | 1 switch output npn                    | ◆                     | ◆                     |
|                                | 1 switch output pnp                    |                       | ◆                     |
| Switching type                 | light/dark switching                   | ◆                     | ◆                     |
| Switching voltage              | max. 30 V DC                           | ◆                     | ◆                     |
| Switching current              | max. 100 mA                            | ◆                     | ◆                     |
| Voltage drop                   | ≤ 2.5 V                                | ◆                     | ◆                     |
| Switching frequency            | ≤ 300 Hz                               | ◆                     | ◆                     |
| Switch-on delay                | 1.5 ms                                 | ◆                     | ◆                     |
| Response time                  | ≤ 1.5 ms                               | ◆                     | ◆                     |
| Range hysteresis               | ≤ 10 %                                 | ◆                     | ◆                     |
| Ambient temperature            | -25 ... +55 °C                         | ◆                     | ◆                     |
| Storage temperature            | -40 ... +70 °C                         | ◆                     | ◆                     |
| Protection degree              | IP67                                   | ◆                     | ◆                     |
| Connection type                | Connector M12 x 1, 4-pin               | ◆                     | ◆                     |
| Housing                        | brass, nickel plated                   | ◆                     | ◆                     |
| Light exit                     | PC                                     | ◆                     | ◆                     |
| Mass                           | 45 g (device)                          | ◆                     | ◆                     |

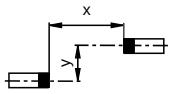
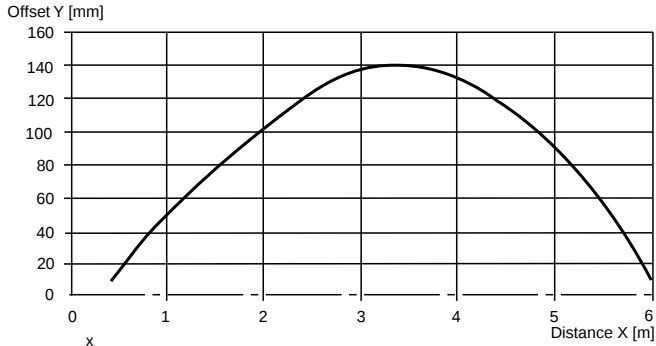
Sensors in  
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## OBE5000-18GM70-...-V1

### Diagrams

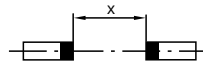
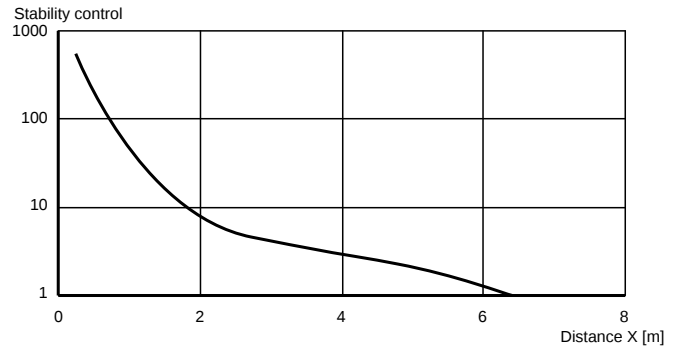
#### Characteristic response curve



Permissible separation (offset) between the optical axis of the emitter and receiver.

#### Relative received light strength

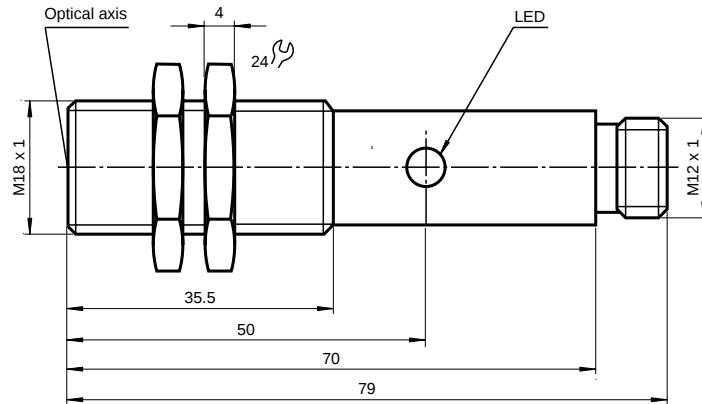
OBE 5000-18GM70



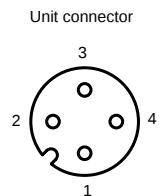
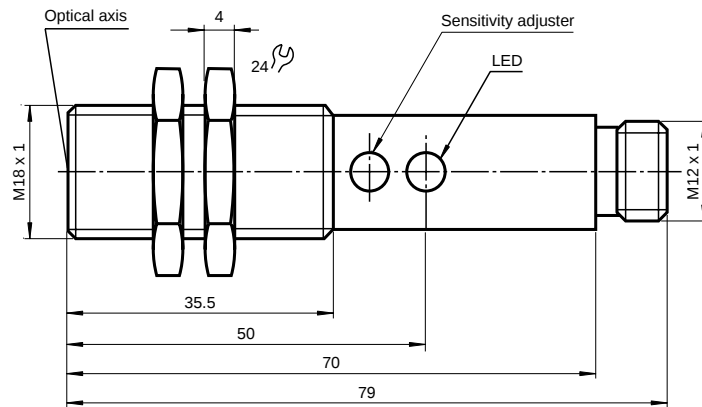
Sensors in threaded housings

## Dimensions

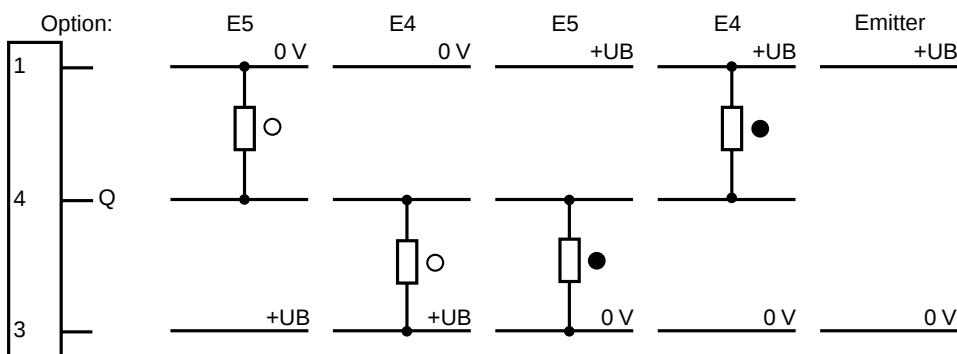
Emitter



Receiver



## Electrical Connection



○ = Light ON, ● = Dark ON