

## OH700370

### OPTICAL SENSORS • FRAME LIGHT BARRIERS

Frame and ring light barriers operate according to the principle of a through-beam sensor. Within the housing there is a variety of transmitter and receiver elements that form a light curtain and thus detect various objects. Application examples for these systems are ejection control of presses, presence monitoring or length measurements of wires or tubes.



#### MECHANICAL DATA

|   |              |
|---|--------------|
| Active zone height                          | 62 mm        |
| Active zone width                           | 70 mm        |
| Ambient temperature (MAX)                   | 60 °C        |
| Ambient temperature (MIN)                   | 0 °C         |
| Constructive design                         | One-piece    |
| Degree of protection (IP)                   | IP67         |
| Frame opening, crosswise                    | 70 mm        |
| Frame opening, lengthwise                   | 62 mm        |
| Housing design                              | Cuboid       |
| Housing design                              | Frame-shaped |
| Housing material                            | Aluminium    |
| Material of optical surface                 | PMMA         |
| Reflector included in the scope of delivery | No           |
| Sensor height                               | 110 mm       |
| Sensor length                               | 20 mm        |
| Sensor width                                | 123 mm       |
| With compressed air connection              | Yes          |
| With mechanical impact protection           | Yes          |

#### ELECTRICAL DATA

|  |        |
|--|--------|
| Analogue output 0 mA ... 20 mA                 | No     |
| Analogue output 0 V ... 10 V                   | No     |
| Analogue output -10 V ... +10 V                | No     |
| Analogue output 4 mA ... 20 mA                 | No     |
| Max. output current                            | 200 mA |
| No-load current                                | 30 mA  |
| Number of pins                                 | 3      |
| Operating voltage (MAX)                        | 35 V   |
| Pulse stretching                               | 150 ms |
| Pulse stretching                               | 0.1 ms |
| Rated control supply voltage $U_s$ at DC (MAX) | 35 V   |

**ELECTRICAL DATA**

|  |   |
|--|---|
| Rated control supply voltage $U_s$ at DC (MIN) | 18 V  |
| Reaction time                                  | 0.1 ms  |
| Reverse polarity protection                    | Yes   |
| Setting procedure                              | Manual adjustment                             |
| Short-circuit-proof                            | Yes   |
| Suitable for safety functions                  | No  |
| Type of electrical connection                  | Connector M8                                  |
| Type of switching function                     | Normally closed contact/normally open contact |
| Type of switching output                       | PNP   |
| Voltage type                                   | DC  |
| With communication interface, analog           | No  |
| With communication interface, AS-Interface     | No  |
| With communication interface, CANOpen          | No  |
| With communication interface, DeviceNet        | No  |
| With communication interface, Ethernet         | No  |
| With communication interface, INTERBUS         | No  |
| With communication interface, PROFIBUS         | No  |
| With communication interface, RS-232           | No  |
| With communication interface, RS-422           | No  |
| With communication interface, RS-485           | No  |
| With communication interface, SSD              | No  |
| With communication interface, SSI              | No  |
| With LED display                               | Yes   |
| With monitoring function of downstream devices | No  |
| With other analog output                       | No  |
| With time function                             | Yes   |

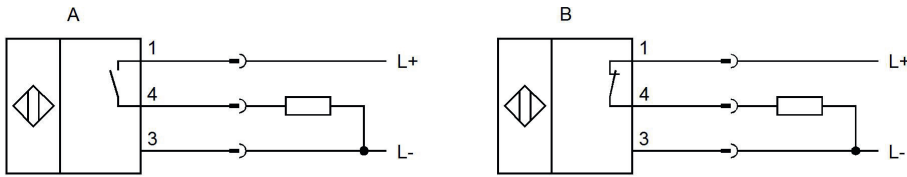
**OPTICAL DATA**

|                          |                |
|--------------------------|----------------|
| Light source             | Infrared light |
| Min. object size         | 2 mm           |
| Resolution, dynamic      | 1.5            |
| Resolution, static       | 2              |
| Wavelength of the sensor | 880 nm         |

**OTHER DATA**

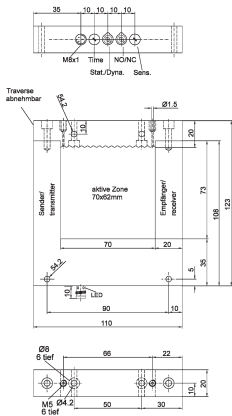
|         |                    |
|---------|--------------------|
| Version | Static and dynamic |
|---------|--------------------|

**CONNECTION**



**Colors:** A: 1 = BN (brown), 3 = BU (blue), 4 = BK (black)  
 B: 1 = BN (brown), 3 = BU (blue), 4 = BK (black)  
**Functions:** A: 1 = L+, 3 = L-, 4 = PNP NO  
 B: 1 = L+, 3 = L-, 4 = PNP NC

**DIMENSIONAL DRAWING**



**INSTALLATION**



Mounting / Installation may only be carried out by a qualified electrician!

**DISPOSAL**



**SAFETY WARNINGS**

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

Never use these devices in applications where the safety of a person depends on their functionality.