

## Light Curtain for Measuring Tasks

# OSEB902Z0103

Part Number



### ● Test input

### Technical Data

#### Optical Data

|                                |                |
|--------------------------------|----------------|
| Range                          | 3000 mm        |
| Measurement Field Height (MFH) | 900 mm         |
| Beam Distance                  | 30 mm          |
| Light Source                   | Infrared Light |
| Service Life (T = +25 °C)      | 100000 h       |

#### Electrical Data

|                                             |              |
|---------------------------------------------|--------------|
| Sensor Type                                 | Emitter      |
| Supply Voltage                              | 18...30 V DC |
| Current Consumption (U <sub>b</sub> = 24 V) | < 50 mA      |
| Temperature Drift                           | < 10 %       |
| Temperature Range                           | -25...60 °C  |
| Reverse Polarity Protection                 | yes          |
| Test input                                  | yes          |
| Protection Class                            | III          |

#### Mechanical Data

|                      |                |
|----------------------|----------------|
| Housing Material     | Aluminum       |
| Degree of Protection | IP65           |
| Connection           | M12 × 1; 4-pin |

Connection Diagram No. **1018**

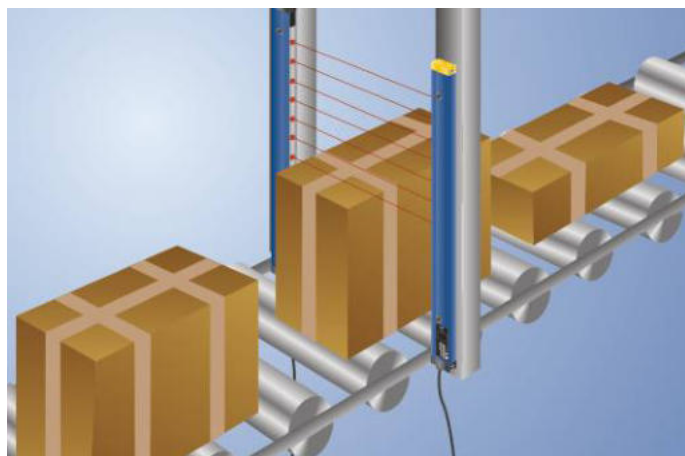
Control Panel No. **EB2**

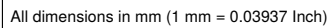
Suitable Connection Equipment No. **2**

### Suitable Receiver

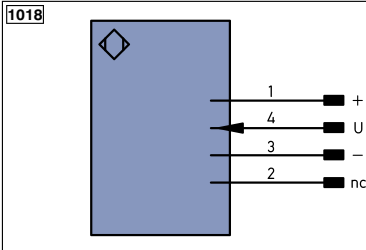
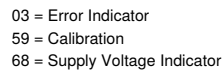
OEEB902U0135

As these light curtains for measurement tasks are equipped with an integrated evaluation unit, external connection units are not needed. Objects are both recognized (via the digital output) and measured (via the analog output). The light curtains can be set up easily using the menu-controlled graphic display. Convenient parametrization and quick diagnosis is possible via the IO-Link interface.





## EB2



|           |                                            |       |                                |
|-----------|--------------------------------------------|-------|--------------------------------|
| +         | Supply Voltage +                           | PI    | Platform measuring resistor    |
| −         | Supply Voltage 0 V                         | nc    | not connected                  |
| ~         | Supply Voltage (AC Voltage)                | U     | Test Input                     |
| A         | Switching Output (NO)                      | Ū     | Test Input inverted            |
| Ā         | Switching Output (NC)                      | W     | Trigger Input                  |
| V         | Contamination/Error Output (NO)            | W−    | Ground for the Trigger Input   |
| Ṽ         | Contamination/Error Output (NC)            | O     | Analog Output                  |
| E         | Input (analog or digital)                  | O−    | Ground for the Analog Output   |
| T         | Teach Input                                | BZ    | Block Discharge                |
| Z         | Time Delay (activation)                    | AW    | Valve Output                   |
| S         | Shielding                                  | a     | Valve Control Output +         |
| RxD       | Interface Receive Path                     | b     | Valve Control Output 0 V       |
| TxD       | Interface Send Path                        | SY    | Synchronization                |
| RDY       | Ready                                      | SY−   | Ground for the Synchronization |
| GND       | Ground                                     | E+    | Receiver-Line                  |
| CL        | Clock                                      | S+    | Emitter-Line                   |
| E/A       | Output/Input programmable                  | ±     | Grounding                      |
| ⚡         | <b>IO-Link</b>                             | SnR   | Switching Distance Reduction   |
| PoE       | Power over Ethernet                        | Rx+/- | Ethernet Receive Path          |
| IN        | Safety Input                               | Tx+/- | Ethernet Send Path             |
| OSD       | Safety Output                              | Bus   | Interfaces-Bus A(+)/B(-)       |
| Signal    | Signal Output                              | La    | Emitted Light disengageable    |
| Bi-D+/-   | Ethernet Gigabit bidirect. data line (A-D) | Mag   | Magnet activation              |
| EN0 RS422 | Encoder 0-pulse 0-0 (TTL)                  | RES   | Input confirmation             |
|           |                                            | EDM   | Contactor Monitoring           |

|                                      |                            |
|--------------------------------------|----------------------------|
| ENAR5422                             | Encoder A/ $\bar{A}$ (TTL) |
| ENBR5422                             | Encoder B/B (TTL)          |
| ENA                                  | Encoder A                  |
| ENB                                  | Encoder B                  |
| AMIN                                 | Digital output MIN         |
| AMAX                                 | Digital output MAX         |
| AOK                                  | Digital output OK          |
| SY In                                | Synchronization In         |
| SY OUT                               | Synchronization OUT        |
| OLT                                  | Brightness output          |
| M                                    | Maintenance                |
| rsy                                  | reserved                   |
| Wire Colors according to DIN IEC 757 |                            |
| BK                                   | Black                      |
| BN                                   | Brown                      |
| RD                                   | Red                        |
| OG                                   | Orange                     |
| YE                                   | Yellow                     |
| GN                                   | Green                      |
| BU                                   | Blue                       |
| VT                                   | Violet                     |
| GY                                   | Grey                       |
| WH                                   | White                      |
| PK                                   | Pink                       |
| GNYE                                 | Green/Yellow               |