# Safety Light Array
**Body Protection**

# SEFB612

Part Number



- **Increased safety thanks to intelligent muting functions**
- **Multifunctional thanks to measuring function**
- **Simple configuration and diagnosis with wTeach2 software**

The safety light array can be attached anywhere thanks to the T nut and mounting bracket. The visible red light and signal strength display make it easy to align the emitter and the receiver. Safety mode, restart prevention, and contactor monitoring are included as standard functions. The user-friendly IO-Link and wenglor software wTeach2 are used for configuration. In addition, safety light arrays provide various muting features for transporting material through hazardous areas. Optional LED indicators visualize the various muting phases.



## Technical Data

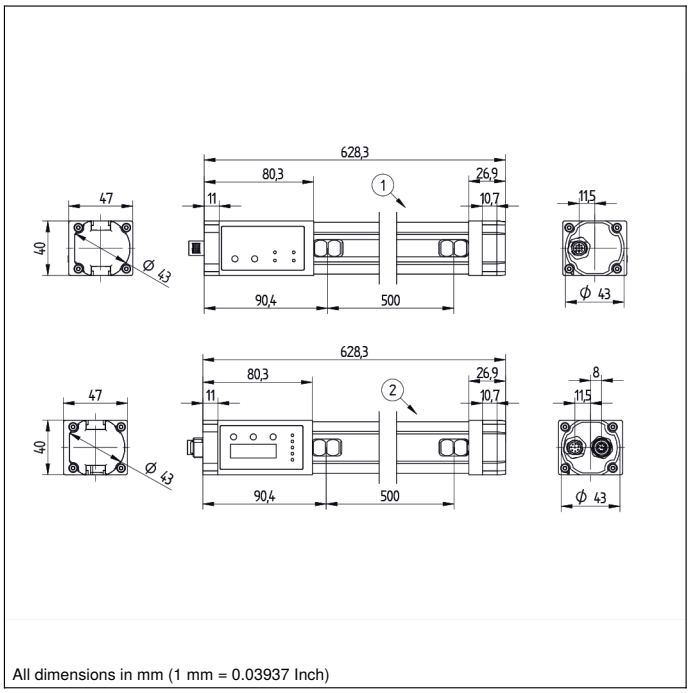
| | |
|---|---|
| **Optical Data** | |
| Range | 0,5...50 m |
| Beam Distance | 500 mm |
| Number of Beams | 2 |
| Light Source | Red Light |
| Max. Ambient Light | 10000 Lux |
| Opening Angle | ± 2,5 ° |
| **Electrical Data** | |
| Sensor Type | Receiver |
| Supply Voltage | 19,2...28,8 V DC |
| Current Consumption (Ub = 24 V) | ≤ 350 mA |
| Response Time | 15 ms |
| Temperature Range | -30...55 °C |
| Storage temperature | -30...70 °C |
| No. Safety Outputs (OSSDs) | 2 |
| Safety Output Voltage Drop | ≤ 2,3 V |
| PNP Safety Output/Switching Current | ≤ 300 mA |
| Number of Signal Outputs | 1 |
| Signal Output Voltage Drop | ≤ 2,5 V |
| Signal Output/Switching Current | ≤ 100 mA |
| Short Circuit and Overload Protection | yes |
| Reverse Polarity Protection | yes |
| Interface | IO-Link V1.1 |
| Protection Class | III |
| **Mechanical Data** | |
| Housing Material | Aluminum |
| Disc Material | Polycarbonate |
| Degree of Protection | IP65/IP67 |
| Connection | M12 × 1 |
| **Safety-relevant Data** | |
| ESPE Type (EN 61496) | 4 |
| Performance Level (EN ISO 13849-1) | Cat. 4 PL e |
| Mission Time TM (EN ISO 13849-1) | 20 a |
| Safety Integrity Level (EN 61508) | SIL3 |
| Safety Integrity Level (EN 62061) | SILCL3 |
| **Function** | |
| Body Protection | yes |
| Scope of Functions | Muting |
| IO-Link | ● |
| Connection Diagram No. | 1029 1030 |
| Control Panel No. | A39 |
| Suitable Connection Equipment No. | 89 |
| Suitable Mounting Technology No. | 860 870 880 |

## Suitable Emitter

| |
|---|
| SEFB512 |

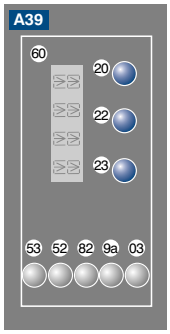
## Complementary Products

| |
|---|
| Connection Box for Muting Sensors |
| IO-Link Master |
| Muting Sensor Set |
| Path-Folding Mirror Z2UG001 |
| Protection Column with Path-Folding Mirror SZ000EU125NN01 |
| Protection Column with Protective Screen Z2SS001 |
| Safety Relay SG4-00VA000R2, SR4B3B01S, SR4D3B01S |
| Software |

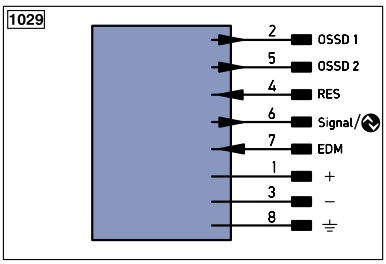


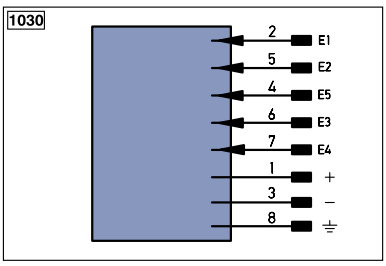

All dimensions in mm (1 mm = 0.03937 Inch)

## Ctrl. Panel




03 = Error Indicator
20 = Enter Button
22 = UP Button
23 = Down Button
52 = OSSD ON
53 = OSSD OFF
60 = Display
82 = Acknowledgement Request
9a = Weak signal




Legend

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

Wire Colors according to IEC 60757

| | |
|---|---|
| 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 |

Specifications are subject to change without notice