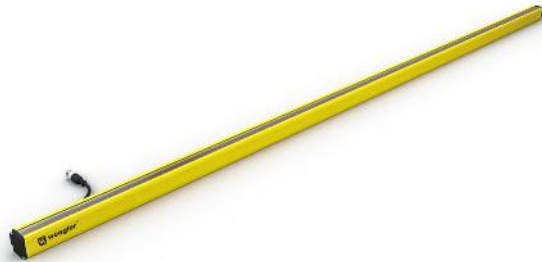


# Safety Light Curtain

## Hand Protection

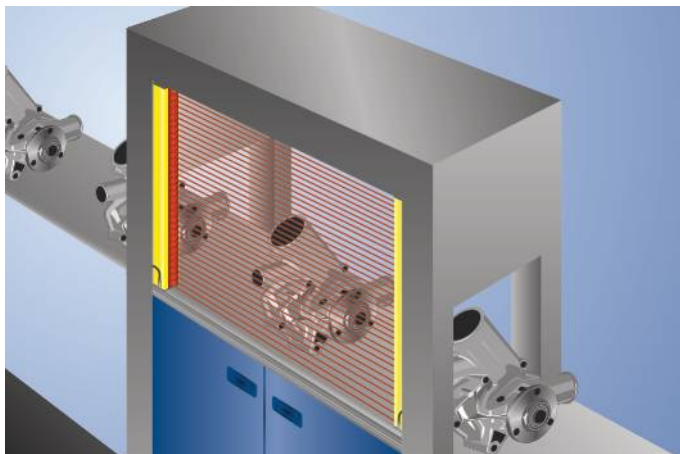
# SEMG520

Part Number



- Easy configuration via wiring
- Protection field over the entire length of the housing for an installation without protrusion
- Quick alignment through visible red light
- Slim design for easy integration

These safety light curtains confidently solve all basic tasks. The basic function protection mode, restart inhibit and protection monitoring are standard and can be easily configured. The protective field always extends up to the end of the housing without protrusion. As a result, protection is easily provided even in confined installation conditions.



## Technical Data

### Optical Data

|                           |             |
|---------------------------|-------------|
| Range                     | 0,25...14 m |
| Housing Length (L)        | 1512 mm     |
| Safety Field Height (SFH) | 1527 mm     |
| Resolution                | 30 mm       |
| Light Source              | Red Light   |
| Wavelength                | 630 nm      |
| Opening Angle             | ± 2,5 °     |

### Electrical Data

|                                             |                  |
|---------------------------------------------|------------------|
| Sensor Type                                 | Emitter          |
| Supply Voltage                              | 19,2...28,8 V DC |
| Current Consumption (U <sub>b</sub> = 24 V) | 75 mA            |
| Temperature Range                           | -25...55 °C      |
| Storage temperature                         | -25...60 °C      |
| Reverse Polarity Protection                 | yes              |
| Protection Class                            | III              |

### Mechanical Data

|                      |                  |
|----------------------|------------------|
| Housing Material     | Aluminum         |
| Disc Material        | Polycarbonate    |
| Degree of Protection | IP65/IP67        |
| Connection           | M12 × 1; 4/5-pin |
| Cable Length         | 300 mm           |

### 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

|                    |                |
|--------------------|----------------|
| Hand Protection    | yes            |
| Scope of functions | Basic function |

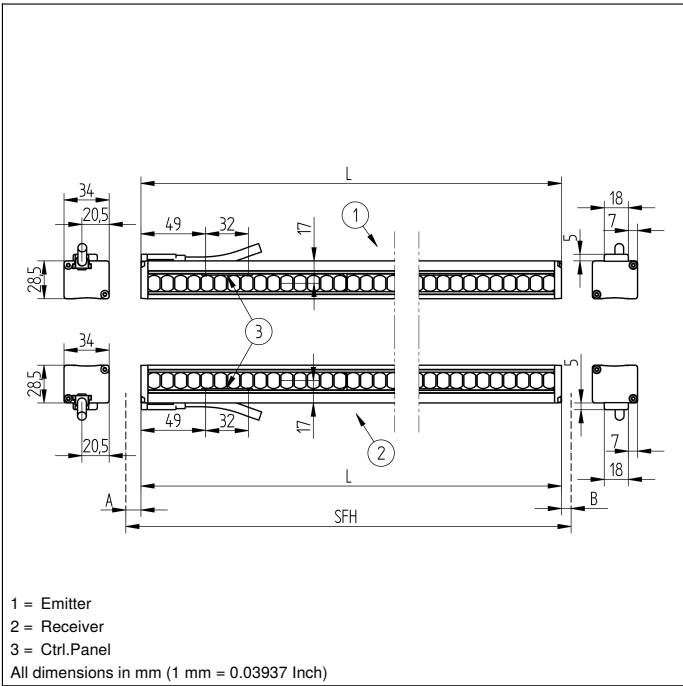
|                                   |             |
|-----------------------------------|-------------|
| Connection Diagram No.            | 362         |
| Control Panel No.                 | SR4         |
| Suitable Connection Equipment No. | 2 35        |
| Suitable Mounting Technology No.  | 790 810 820 |

## Suitable Receiver

SEMG620

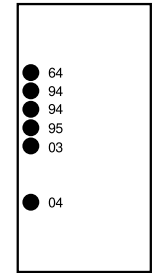
## Complementary Products

|                                                           |
|-----------------------------------------------------------|
| Path-Folding Mirror Z2UG004                               |
| Protection column with deflection mirror Z2SU003          |
| Protection Column with Path-Folding Mirror SZ000EU170NN01 |
| Protection Column with Protective Screen SZ000EG170NN01   |
| Protection column with protective screen Z2SS003          |
| Software                                                  |

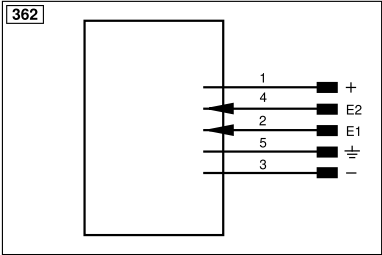


**Ctrl. Panel**

**SR4**



- 03 = Error Indicator  
04 = Function Indicator  
64 = Diagnosis/Test  
94 = Diagnosis  
95 = Diagnosis/Large Detection Range



| Legend    |                                            |                                        |                                |
|-----------|--------------------------------------------|----------------------------------------|--------------------------------|
| +         | Supply Voltage +                           | nc                                     | Not connected                  |
| -         | Supply Voltage 0 V                         | U                                      | Test Input                     |
| ~         | Supply Voltage (AC Voltage)                | Ū                                      | Test Input inverted            |
| A         | Switching Output (NO)                      | W                                      | Trigger Input                  |
| Ā         | Switching Output (NC)                      | W-                                     | Ground for the Trigger Input   |
| V         | Contamination/Error Output (NO)            | O                                      | Analog Output                  |
| Ȳ         | Contamination/Error Output (NC)            | O-                                     | Ground for the Analog Output   |
| E         | Input (analog or digital)                  | BZ                                     | Block Discharge                |
| T         | Teach Input                                | Amv                                    | Valve Output                   |
| Z         | Time Delay (activation)                    | a                                      | Valve Control Output +         |
| S         | Shielding                                  | b                                      | Valve Control Output 0 V       |
| RxD       | Interface Receive Path                     | SY                                     | Synchronization                |
| TxD       | Interface Send Path                        | SY-                                    | Ground for the Synchronization |
| RDY       | Ready                                      | E+                                     | Receiver-Line                  |
| GND       | Ground                                     | S+                                     | Emitter-Line                   |
| CL        | Clock                                      | ⊕                                      | Grounding                      |
| E/A       | Output/Input programmable                  | SnR                                    | Switching Distance Reduction   |
| IO-Link   |                                            | Rx+/-                                  | Ethernet Receive Path          |
| PoE       | Power over Ethernet                        | Tx+/-                                  | Ethernet Send Path             |
| IN        | Safety Input                               | Bus                                    | Interfaces-Bus A(+)/B(-)       |
| OSSD      | Safety Output                              | La                                     | Emitted Light disengageable    |
| Signal    | Signal Output                              | Mag                                    | Magnet activation              |
| BL_D+/-   | Ethernet Gigabit bidirect. data line (A-D) | RES                                    | Input confirmation             |
| ENo RS422 | Encoder 0-pulse 0/0 (TTL)                  | EDM                                    | Contacteur Monitoring          |
| PT        | Platinum measuring resistor                | ENARIS422                              | Encoder A/Ā (TTL)              |
|           |                                            | ENBRIS422                              | 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 DIN 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                   |

