

# Safety Light Curtain

## Finger Protection

# SEFG531

Part Number



- Higher levels of safety and availability thanks to intelligent muting functions
- Multifunctional thanks to measuring function
- Quick duplication of settings via microSD memory card
- Simple configuration and diagnosis with wTeach2 software

The safety light curtain can be flexibly integrated into systems thanks to the well-conceived mounting technology and the compact housing. Alignment of the emitter and the receiver is simplified by the visible red light and the signal strength display. User-friendly wTeach2 software make settings and diagnosis via the IO-Link interface extremely easy. Settings can be subsequently saved to a microSD card and quickly duplicated on other products. Extensive blanking and muting functions ensure an ideal solution for every application, in order to safely transport objects into and out of the danger zone.



## Technical Data

Optical Data	
Range	0,25...7 m
Housing Length (L)	258 mm
Safety Field Height (SFH)	159 mm
Resolution	14 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)	≤ 100 mA
Response Time	9 ms
Temperature Range	-30...55 °C
Storage temperature	-30...70 °C
Protection Class	III
Mechanical Data	
Housing Material	Aluminum
Disc Material	Polycarbonate
Degree of Protection	IP65/IP67
Connection	M12 × 1; 5-pin
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	
Finger Protection	yes
Scope of delivery	ZEFX001 mounting
IO-Link	●
Connection Diagram No.	1031
Control Panel No.	A38
Suitable Connection Equipment No.	35
Suitable Mounting Technology No.	860 870 880
Suitable Receiver	
SEFG631	

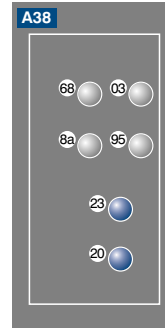
## Complementary Products

Protection column with Z2SU001 path-folding mirror
Protection columns with/without protective screen (Z2SS001/ Z2SM001)
Z0030 path-folding mirror

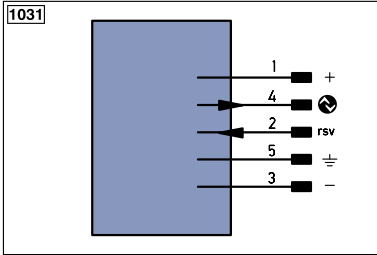


All dimensions in mm (1 mm = 0.03937 Inch)


### Ctrl. Panel



- 03 = Error Indicator
- 68 = Supply Voltage Indicator
- 8a = Coding
- 95 = Diagnosis/Large Detection Range



#### Legend

<b>+</b> Supply Voltage +	<b>PT</b> Platinum measuring resistor	<b>EN<sub>A</sub>EN<sub>5422</sub></b> Encoder A/ $\bar{A}$ (TTL)
<b>-</b> Supply Voltage 0 V	<b>nc</b> not connected	<b>EN<sub>B</sub>EN<sub>5422</sub></b> Encoder B/ $\bar{B}$ (TTL)
<b>~</b> Supply Voltage (AC Voltage)	<b>U</b> Test Input	<b>EN<sub>A</sub></b> Encoder A
<b>A</b> Switching Output (NO)	<b><math>\bar{U}</math></b> Test Input inverted	<b>EN<sub>B</sub></b> Encoder B
<b><math>\bar{A}</math></b> Switching Output (NC)	<b>W</b> Trigger Input	<b>A<sub>MIN</sub></b> Digital output MIN
<b>V</b> Contamination/Error Output (NO)	<b>W-</b> Ground for the Trigger Input	<b>A<sub>MAX</sub></b> Digital output MAX
<b><math>\bar{V}</math></b> Contamination/Error Output (NC)	<b>O</b> Analog Output	<b>A<sub>OK</sub></b> Digital output OK
<b>E</b> Input (analog or digital)	<b>O-</b> Ground for the Analog Output	<b>SY<sub>in</sub></b> Synchronization In
<b>T</b> Teach Input	<b>BZ</b> Block Discharge	<b>SY<sub>OUT</sub></b> Synchronization OUT
<b>Z</b> Time Delay (activation)	<b>A<sub>MV</sub></b> Valve Output	<b>OL<sub>T</sub></b> Brightness output
<b>S</b> Shielding	<b>a</b> Valve Control Output +	<b>M</b> Maintenance
<b>RxD</b> Interface Receive Path	<b>b</b> Valve Control Output 0 V	<b>rsv</b> reserved
<b>TxD</b> Interface Send Path	<b>SY</b> Synchronization	Wire Colors according to IEC 60757
<b>RDY</b> Ready	<b>SY-</b> Ground for the Synchronization	<b>BK</b> Black
<b>GND</b> Ground	<b>E+</b> Receiver-Line	<b>BN</b> Brown
<b>CL</b> Clock	<b>S+</b> Emitter-Line	<b>RD</b> Red
<b>E/A</b> Output/Input programmable	$\pm$ Grounding	<b>OG</b> Orange
 <b>IO-Link</b>	<b>S<sub>n</sub>R</b> Switching Distance Reduction	<b>YE</b> Yellow
<b>PoE</b> Power over Ethernet	<b>Rx+/-</b> Ethernet Receive Path	<b>GN</b> Green
<b>IN</b> Safety Input	<b>Tx+/-</b> Ethernet Send Path	<b>BU</b> Blue
<b>OSSD</b> Safety Output	<b>Bus</b> Interfaces-Bus A(+)/B(-)	<b>VT</b> Violet
<b>Signal</b> Signal Output	<b>L<sub>a</sub></b> Emitted Light disengageable	<b>GY</b> Grey
<b>Bl_D+/-</b> Ethernet Gigabit bidirect. data line (A-D)	<b>Mag</b> Magnet activation	<b>WH</b> White
<b>EN<sub>0</sub>EN<sub>5422</sub></b> Encoder 0-pulse 0-0 (TTL)	<b>RES</b> Input confirmation	<b>PK</b> Pink
	<b>EDM</b> Contactor Monitoring	<b>GNYE</b> Green/Yellow

