

Safety Light Curtain

Hand Protection

SEFG521

Part Number



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...20 m
Housing Length (L)	1760 mm
Safety Field Height (SFH)	1662 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 _b = 24 V)	≤ 100 mA
Response Time	17,2 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
Interface	IO-Link V1.1
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	
Hand Protection	yes

Connection Diagram No.	1031
Control Panel No.	A38
Suitable Connection Equipment No.	35
Suitable Mounting Technology No.	860 870 880

Suitable Receiver

SEFG621

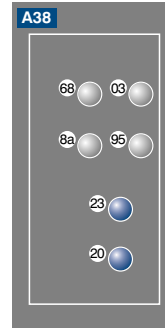
Complementary Products

Protection column with Z2SU003 path-folding mirror
Protection columns with/without protective screen (Z2SS003/ Z2SM003)
Z0032 path-folding mirror

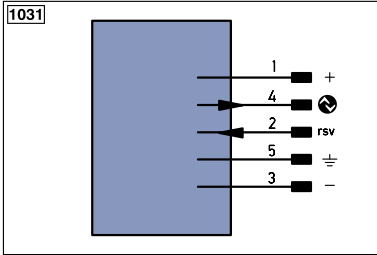


All dimensions in mm (1 mm = 0.03937 Inch)


Ctrl. Panel



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



Legend

+ Supply Voltage +	PT Platinum measuring resistor	EN_AES42Z Encoder A/ \bar{A} (TTL)
- Supply Voltage 0 V	nc not connected	EN_BES42Z Encoder B/ \bar{B} (TTL)
~ Supply Voltage (AC Voltage)	U Test Input	EN_A Encoder A
A Switching Output (NO)	U Test Input inverted	EN_B Encoder B
\bar{A} Switching Output (NC)	W Trigger Input	A_{MIN} Digital output MIN
V Contamination/Error Output (NO)	W- Ground for the Trigger Input	A_{MAX} Digital output MAX
\bar{V} Contamination/Error Output (NC)	O Analog Output	A_{OK} Digital output OK
E Input (analog or digital)	O- Ground for the Analog Output	SY_{in} Synchronization In
T Teach Input	BZ Block Discharge	SY_{OUT} Synchronization OUT
Z Time Delay (activation)	AW_V Valve Output	OL_T Brightness output
S Shielding	a Valve Control Output +	M Maintenance
RxD Interface Receive Path	b Valve Control Output 0 V	rsv reserved
TxD Interface Send Path	SY Synchronization	Wire Colors according to IEC 60757
RDY Ready	SY- Ground for the Synchronization	BK Black
GND Ground	E+ Receiver-Line	BN Brown
CL Clock	S+ Emitter-Line	RD Red
E/A Output/Input programmable	\pm Grounding	OG Orange
 IO-Link	S_nR Switching Distance Reduction	YE Yellow
PoE Power over Ethernet	Rx+/- Ethernet Receive Path	GN Green
IN Safety Input	Tx+/- Ethernet Send Path	BU Blue
OSSD Safety Output	Bus Interfaces-Bus A(+)/B(-)	VT Violet
Signal Signal Output	L_a Emitted Light disengageable	GY Grey
Bl..D+/- Ethernet Gigabit bidirect. data line (A-D)	Mag Magnet activation	WH White
EN₀ES42Z Encoder 0-pulse 0-0 (TTL)	RES Input confirmation	PK Pink
	EDM Contactor Monitoring	GNYE Green/Yellow

