

Safety Light Curtain

Hand Protection

SEFG512

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)	408 mm
Safety Field Height (SFH)	309 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	9 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
-----------------	-----

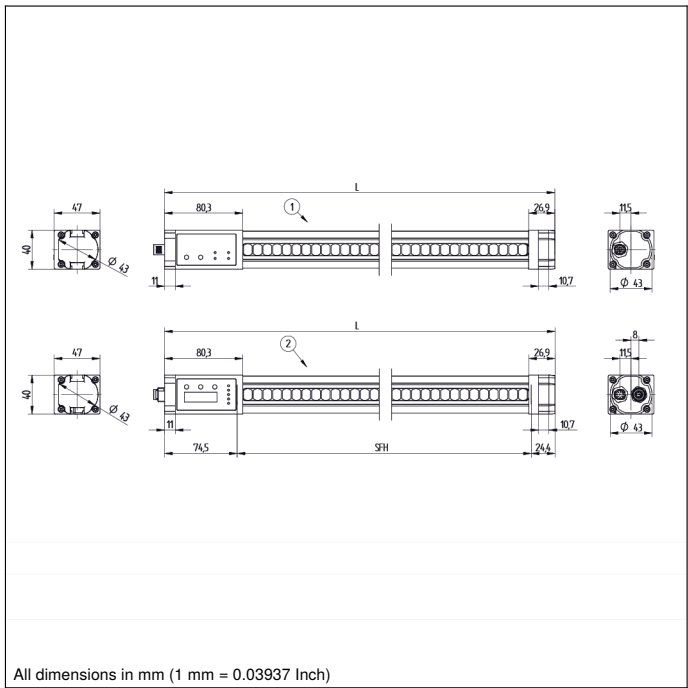
Connection Diagram No.	1031
Control Panel No.	A38
Suitable Connection Equipment No.	35
Suitable Mounting Technology No.	860 870 880

Suitable Receiver

SEFG612

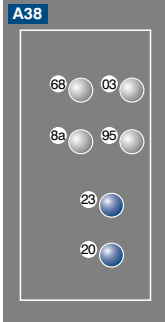
Complementary Products

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

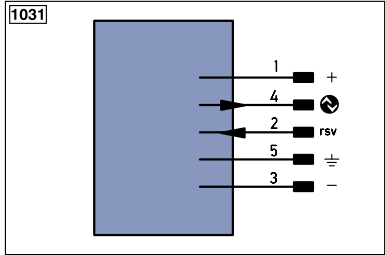


All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel



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



Legend

+	Supply Voltage +	PT	Platinum measuring resistor	ENAR5422	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	ENB5422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENa	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	ENb	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
Ū	Contamination/Error Output (NC)	O	Analog Output	AOK	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)	AMV	Valve Output	OLt	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	±	Grounding	OG	Orange
IO-Link	IO-Link	SnR	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	La	Emitted Light disengageable	GY	Grey
BI-D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN05422	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contacting Monitoring	GNYE	Green/Yellow

