

Safety Light Curtain Set

Hand Protection

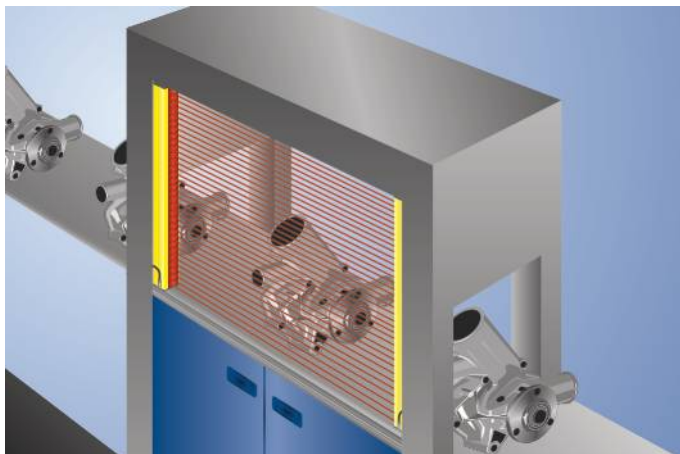
SEMG414

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. The adequate mounting angle ZEMX001 is included in the delivery.

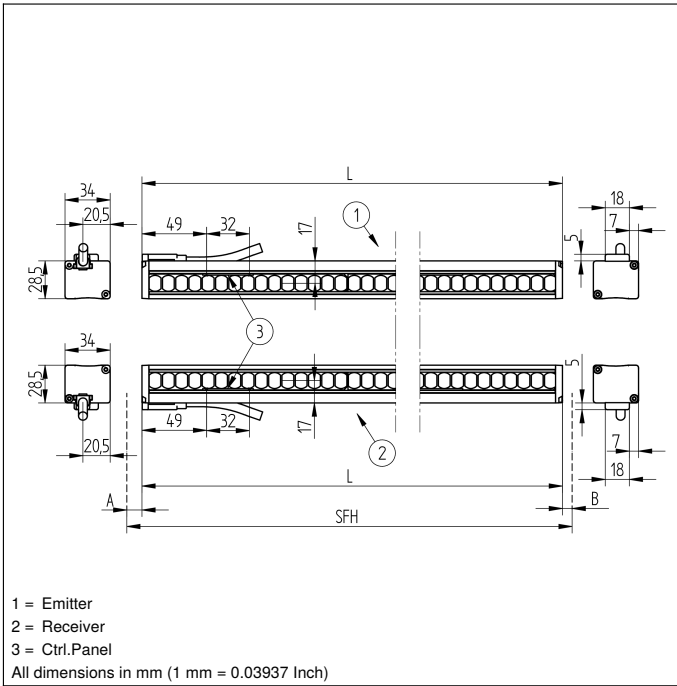


Technical Data

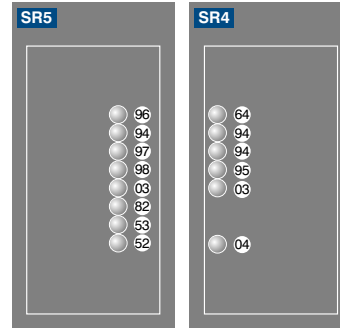
Optical Data	
Range	0,25...14 m
Housing Length (L)	611 mm
Safety Field Height (SFH)	626 mm
Resolution	30 mm
Light Source	Red Light
Wave Length	630 nm
Max. Ambient Light	10000 Lux
Opening Angle	± 2,5 °
Electrical Data	
Sensor Type	Set
Supply Voltage	19,2...28,8 V DC
Response Time	8,3 ms
Temperature Range	-25...55 °C
Storage temperature	-25...60 °C
No. Safety Outputs (OSSDs)	2
Safety Output Voltage Drop	< 2,3 V
PNP Safety Output/Switching Current	300 mA
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
Protection Class	III
Mechanical Data	
Housing Material	Aluminum
Disk Material	Polycarbonate
Degree of Protection	IP65/IP67
Connection	M12 × 1
Cable Length	300 mm
Safety-relevant Data	
ESPE Type (EN 61496)	4
Safety Category (EN ISO 13849-1)	4
Performance Level (EN ISO 13849-1)	PL e
PFHD	1,60 × E-8 1/h
Service Life TM (EN ISO 13849-1)	20 a
Safety Integrity Level (EN 61508)	SIL3
Safety Integrity Level (EN 62061)	SILCL3
Function	
Hand Protection	yes
Restart Inhibit	yes
Safety Operating Mode	yes
Contactor Monitoring	yes
Scope of delivery	Mounting ZEMX001
Scope of delivery (Emitter; Receiver)	SEMG514; SEMG614
Connection Diagram No.	361 362
Control Panel No.	SR4 SR5
Suitable Connection Technology No.	35 89
Suitable Mounting Technology No.	790 810 820

Complementary Products

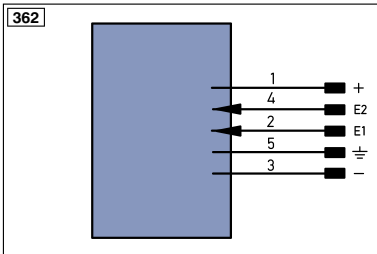
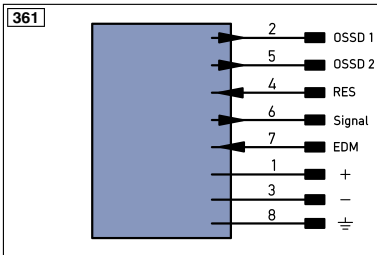
Path-Folding Mirror Z2UG002
Protection Column with Path-Folding Mirror SZ000EU125NN01
Protection Column with Protective Screen SZ000EG125NN01
Safety Relay SG4-00VA000R2, SR4B3B01S, SR4D3B01S
Software




Ctrl. Panel



- 03 = Error Indicator
- 04 = Function Indicator
- 52 = OSSD ON
- 53 = OSSD OFF
- 64 = Diagnosis/Test
- 82 = Acknowledgement Request
- 94 = Diagnosis
- 95 = Diagnosis/Large Detection Range
- 96 = Diagnosis/Signal weak
- 97 = Diagnosis/Contactor Monitoring
- 98 = Diagnosis/Synchronization



Legend

+ Supply Voltage +	PT Platinum measuring resistor	ENa Encoder A
- Supply Voltage 0 V	nc not connected	ENb Encoder B
~ Supply Voltage (AC Voltage)	U Test Input	AMIN Digital output MIN
A Switching Output (NO)	U Test Input inverted	AMAX Digital output MAX
Ā Switching Output (NC)	W Trigger Input	AOK Digital output OK
V Contamination/Error Output (NO)	O Analog Output	SY In Synchronization In
V̄ Contamination/Error Output (NC)	O- Ground for the Analog Output	SY OUT Synchronization OUT
E Input (analog or digital)	BZ Block Discharge	Out Brightness output
T Teach Input	AWV Valve Output	M Maintenance
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	E+ Receiver-Line	
RDY Ready	S+ Emitter-Line	
GND Ground	$\frac{\square}{\square}$ Grounding	
CL Clock	SnR Switching Distance Reduction	
E/A Output/Input programmable	Rx+/- Ethernet Receive Path	
 IO-Link	Tx+/- Ethernet Send Path	
PoE Power over Ethernet	Bus Interfaces-Bus A(+)/B(-)	
IN Safety Input	La Emitted Light disengageable	
OSSD Safety Output	Mag Magnet activation	
Signal Signal Output	RES Input confirmation	
Bl..D+/- Ethernet Gigabit bidirect. data line (A-D)	EDM Contactor Monitoring	
EN0.R5422 Encoder 0-pulse 0-0 (TTL)	ENAR5422 Encoder A/Ā (TTL)	
	ENBR5422 Encoder B/B̄ (TTL)	

Wire Colors according to DIN IEC 757

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

