

Safety Light Curtain

Finger Protection

SEMG542

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...6 m
Housing Length (L)	1810 mm
Safety Field Height (SFH)	1811 mm
Resolution	14 mm
Light Source	Red Light
Wave Length	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
Temperature Range	-5...55 °C
Storage temperature	-25...60 °C
Reverse Polarity Protection	yes
Protection Class	III

Mechanical Data

Housing Material	Aluminum
Disk 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
Service Life 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	Mounting ZEMX001
Connection Diagram No.	362
Control Panel No.	SR4
Suitable Connection Technology No.	2 35
Suitable Mounting Technology No.	790 810 820

Suitable Receiver

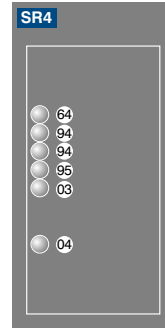
SEMG642

Complementary Products

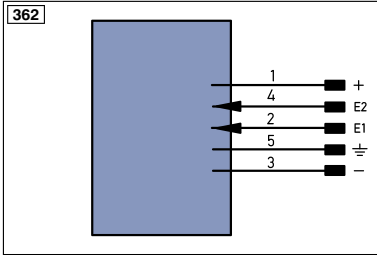
Path-Folding Mirror Z2UG004
Protection Column with Path-Folding Mirror SZ000EU215NN01
Protection Column with Protective Screen SZ000EG215NN01
Software



Ctrl. Panel



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



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
ṽ	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	≡	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	Contactorm Monitoring		
EN0r5422	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

