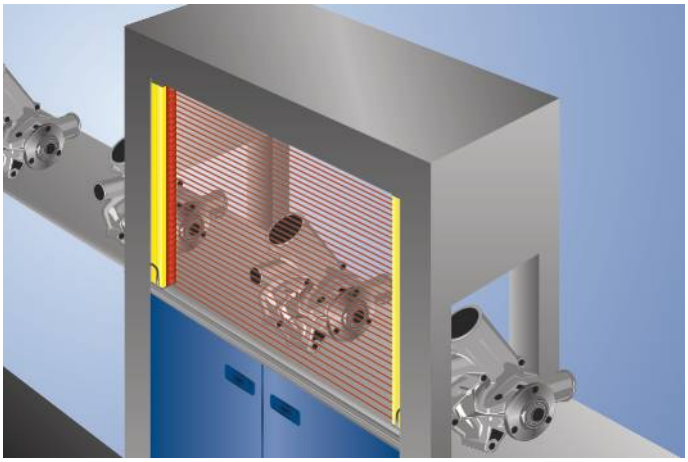
Safety Light Curtain
Finger Protection

SEMG531

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)	249 mm
Safety Field Height (SFH)	250 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 (Ub = 24 V)	100 mA
Temperature Range	-25...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

SEMG631

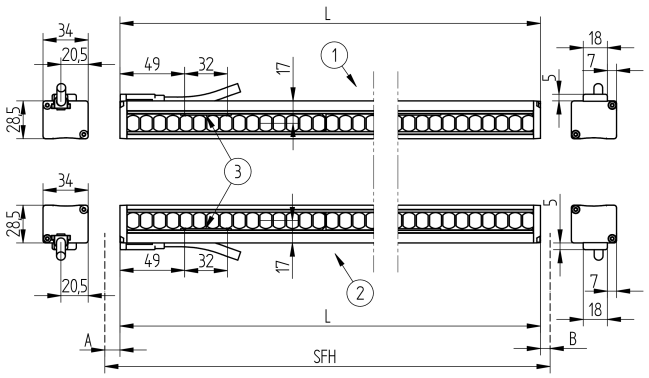
Complementary Products

Path-Folding Mirror Z2UG002

Protection Column with Path-Folding Mirror SZ000EU125NN01

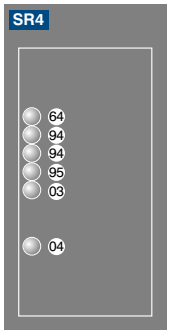
Protection Column with Protective Screen SZ000EG125NN01

Software

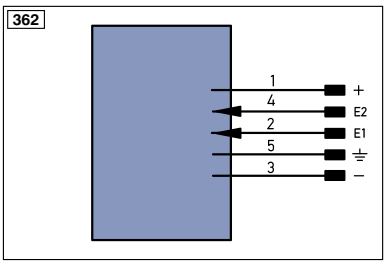


1 = Emitter
2 = Receiver
3 = Ctrl.Panel
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel



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



Legend

+	Supply Voltage +
–	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
Ā	Switching Output (NC)
V	Contamination/Error Output (NO)
V̄	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
	IO-Link
PoE	Power over Ethernet
IN	Safety Input
OSSD	Safety Output
Signal	Signal Output
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)
EN0 RS422	Encoder 0-pulse 0-0̄ (TTL)
PT	Platinum measuring resistor
nc	not connected
U	Test Input
Ū	Test Input inverted
W	Trigger Input
O	Analog Output
O–	Ground for the Analog Output
BZ	Block Discharge
AMV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
E+	Receiver-Line
S+	Emitter-Line
⏚	Grounding
SnR	Switching Distance Reduction
Rx+/–	Ethernet Receive Path
Tx+/–	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(–)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactor Monitoring
ENA RS422	Encoder A/Ā (TTL)
ENB RS422	Encoder B/B̄ (TTL)
ENA	Encoder A
ENB	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY In	Synchronization In
SY OUT	Synchronization OUT
OLT	Brightness output
M	Maintenance

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