

# Safety Light Curtain

## Hand Protection

# SEMG657

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 complete all basic tasks with ease. The basic functions of safety operating mode, restart inhibit and contactor monitoring are integrated as standard and can be easily configured. Without protrusion, the safety field always extends to the end of the housing. This makes it easy to secure even in confined installation conditions.



## Technical Data

### Optical Data

Range	0,25...14 m
Housing Length (L)	1063 mm
Safety Field Height (SFH)	1087 mm
Resolution	30 mm
Light Source	Red Light
Max. Ambient Light	10000 Lux
Opening Angle	± 2,5 °

### Electrical Data

Sensor Type	Receiver
Supply Voltage	19,2...28,8 V DC
Current Consumption (U <sub>b</sub> = 24 V)	115 mA
Response Time	10,8 ms
Temperature Range	-25...55 °C
Storage temperature	-25...60 °C
Number of 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
Reverse Polarity Protection	yes
Protection Class	III

### Mechanical Data

Housing Material	Aluminum
Disc Material	Polycarbonate
Degree of Protection	IP65/IP67
Connection	M12 × 1; 8-pin

### Safety-relevant Data

ESPE Type (EN 61496)	4
Performance Level (EN ISO 13849-1)	Cat. 4 PL e
PFHD	1,60 × E-8 1/h
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
Scope of functions	Basic function

Connection Diagram No.	<b>361</b>
Control Panel No.	<b>SR5</b>
Suitable Connection Equipment No.	<b>89</b>
Suitable Mounting Technology No.	701   790   810   820

## Suitable Emitter

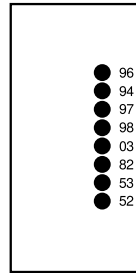
SEMG557

## Complementary Products

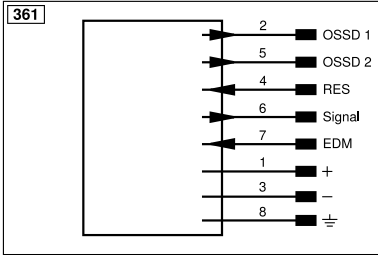
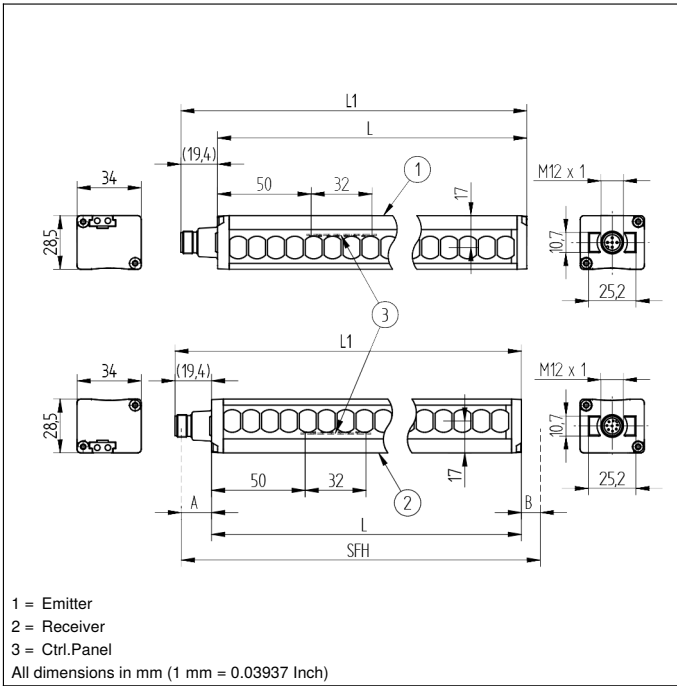
Path-Folding Mirror Z2UG003
Protection column with deflection mirror Z2SU002
Protection Column with Path-Folding Mirror SZ000EU125NN01
Protection Column with Protective Screen SZ000EG125NN01
Protection column with protective screen Z2SS002
Safety Relay SG4-00VA000R2, SR4B3B01S, SR4D3B01S
Software

### Ctrl. Panel

SR5



- 03 = Error Indicator
- 52 = OSSD ON
- 53 = OSSD OFF
- 82 = Acknowledgement Request
- 94 = Diagnosis
- 96 = Diagnosis/Signal weak
- 97 = Diagnosis/Contactor Monitoring
- 98 = Diagnosis/Synchronization



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
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	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link		Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contactor Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
			Wire Colors according to DIN IEC 60757
			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

