

Safety Light Curtain

Hand Protection

SEMG653

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)	462 mm
Safety Field Height (SFH)	486 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 _b = 24 V)	95 mA
Response Time	7,5 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
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.	361
Control Panel No.	SR5
Suitable Connection Equipment No.	89
Suitable Mounting Technology No.	701 790 810 820

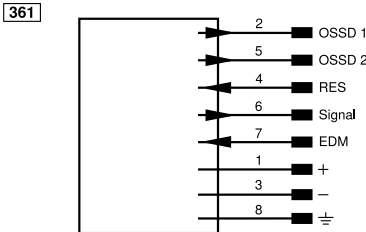
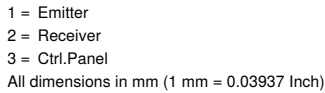
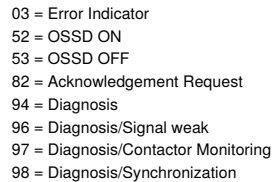
Suitable Emitter

SEMG553

Complementary Products

Path-Folding Mirror Z2UG002
Protection Column with Path-Folding Mirror SZ000EU125NN01
Protection Column with Protective Screen SZ000EG125NN01
Protection column with protective screen Z2SS001
Protection column with Z2SU001 deflection mirror
Safety Relay SG4-00VA000R2, SR4B3B01S, SR4D3B01S
Software

SR5



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
Ä	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
∇	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Ämv	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(-)
QSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/Ö (TTL)	EDM	Contactor Monitoring
PT	Platinum measuring resistor	ENÄRS422	Encoder A/Ä (TTL)
		ENÄRS422	Encoder B/B̄ (TTL)
		ENÄ	Encoder A
		ENÄ	Encoder B
		ÄMIN	Digital output MIN
		ÄMAX	Digital output MAX
		ÄOK	Digital output OK
		SY In	Synchronization In
		SY OUT	Synchronization OUT
		ÖLT	Brightness output
		M	Maintenance
		rsv	Reserved
		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