

Safety Light Curtain Emitter/Receiver Pair Cascadable SLPCP14-690



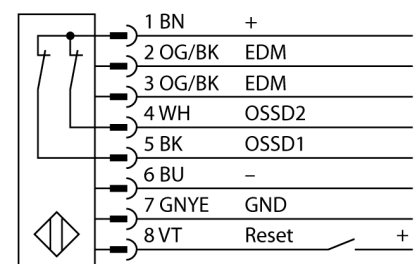
Type	SLPCP14-690
ID	3083796

Optical data	
Function	Light screen
Light type	IR
Wavelength	850 nm
Optical resolution	14 mm
Range	100...7000 mm
Scan field	690 mm
Number of beams	69
With muting function	No
Scan Code	Adjustable

Electrical data	
Operating voltage U_s	20...28 VDC
Residual ripple	< 10 % U_s
DC rated operating current I_s	≤ 210 mA
No-load current I_0	≤ 275 mA
Max. current safe output	500 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	2 x NC contact, 2 x PNP
Number of safe semiconductor outputs	2
Insulation class	III
Response time typical	< 19.5 ms
With restart interlock	yes
Blanking function	yes

- Electrical connection via RDLP-8 with open end or via DELPE-8 with M12 × 1 male connector, 8-pin
- Connection to cascadable nodes via DELP-1...
- Protection class IP65
- Flat housing without blind zone
- Adjustments via DIP switch
- Reducible resolution
- Blanking function
- Operating voltage: 24 VDC ± 15 %
- Resolution 14 mm
- Scan field 690 mm (L1)
- Personnel safety category 4, PL e acc. to EN ISO 13849-1:2008
- Type 4 acc. to IEC 61496-1,-2
- SIL 3 to IEC 61508

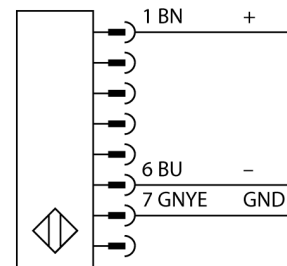
Wiring Diagram



Mechanical data	
Design	Rectangular, EZ-Screen LP
Housing material	Metal, AL, Yellow polyester
Lens	plastic, Acrylic
Cascadable	Yes
Electrical connection	Cable entry for flat connector
Ambient temperature	0...+55 °C
Protection class	IP65

Power-on indication	LED, Green
Switching state	2-color LED, Red

Tests/approvals	
Vibration resistance	10-55 Hz at 0.35 mm
Shock test	10 g at 16 ms (6000 cycles)
Approvals	CE, cTUVus, PL e acc. to EN ISO 13849-1:2008, SIL 3 acc. to IEC 61508



Functional principle

The high-resolution safety light curtain without blind zone consists of an emitter and a receiver. As the system is optically synchronized, no wiring between the emitter and receiver is required. The safety switching outputs of the receiver are directly connected to a load relay (e.g. IM-T-9A) and trigger an immediate stop of dangerous machine cycles. Due to the 2-channel monitoring of the switching device and the diverse redundancy of the design, which involves two processors controlling each other mutually, the requirements of personnel safety PL e acc. to ISO 13849-1 are fulfilled.

Accessories

Type code	Ident no.		Dimension drawing
LPA-MBK-11	3082841	Mounting bracket, retainer for closure caps, 14-ga. steel, galvanized, black, 360 ° sensor rotation, incl.2 pcs. with screw set	
LPA-MBK-12	3082842	Mounting bracket, side mounting, 14-ga. steel, galvanized, black, +10°/-30° sensor rotation, incl.1 pcs. with screw set	
LPA-MBK-20	3082853	Mounting bracket, wall mounting, 12-ga. steel, galvanized, black, in combination with LPA-MBK-11/ -12/ -13, incl. 1 pcs. and screw set	
LPA-MBK-22	3082844	Mounting bracket, wall mounting, 14-ga. steel, galvanized, black, in combination with LPA-MBK-11, incl. 2 pcs. and screw set	
LPA-MBK-21	3082845	Mounting bracket, side mounting, 14-ga. steel, galvanized, black, +10°/-30° sensor rotation, for mounting of cascable EZ-Screen LP, adjustable orientation 90° to 180 °	
LPA-MBK-90	3082846	Mounting bracket, side mounting, 14-ga. steel, galvanized, black, +10°/-30° sensor rotation, for mounting of cascable EZ-Screen LP, firm orientation 90 °	
LPA-MBK-120	3082847	Mounting bracket, side mounting, 14-ga. steel, galvanized, black, +10°/-30° sensor rotation, for mounting of cascable EZ-Screen LP, firm orientation 120°	
LPA-MBK-135	3082848	Mounting bracket, side mounting, 14-ga. steel, galvanized, black, +10°/-30° sensor rotation, for mounting of cascable EZ-Screen LP, firm orientation 135 °	
LPA-MBK-180	3082849	Mounting bracket, side mounting, 14-ga. steel, galvanized, black, +10°/-30° sensor rotation, for mounting of cascable EZ-Screen LP, firm orientation 180 °	