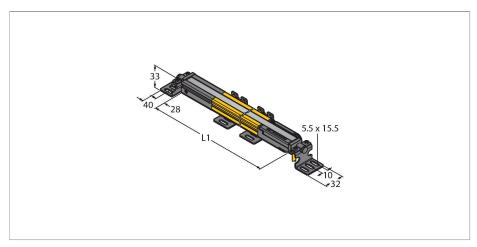


SLPE14-970 Personnel Safety, Light Screen – Emitter



Technical data

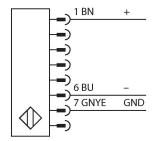
ID 3083637 Optical data Eunction Light type IR Wavelength 850 nm Optical resolution 14 mm Range 1007000 mm Scan field 970 mm Number of beams 97 With muting function no Scan Code Adjustable Electrical data Operating voltage Operating voltage 2028 VDC Residual ripple < 10 % Us DC rated operational current ≤ 60 mA Current consumption non-actuated ≤ 60 mA No-load current ≤ 100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical < 25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester Lens plastic, Acrylic	Туре	SLPE14-970
Function Light type Light type IR Wavelength 850 nm Optical resolution 14 mm Range 1007000 mm Scan field 970 mm Number of beams 97 With muting function no Scan Code Adjustable Electrical data Coperating voltage Operating voltage 2028 VDC Residual ripple < 10 % U₂	ID	3083637
Light type IR Wavelength 850 nm Optical resolution 14 mm Range 1007000 mm Scan field 970 mm Number of beams 97 With muting function no Scan Code Adjustable Electrical data Operating voltage 2028 VDC Residual ripple <10 % U₃ DC rated operational current ≤60 mA Current consumption non-actuated ≤60 mA No-load current ≤100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical <25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Optical data	
Wavelength 850 nm Optical resolution 14 mm Range 1007000 mm Scan field 970 mm Number of beams 97 With muting function no Scan Code Adjustable Electrical data Operating voltage 2028 VDC Residual ripple <10 % U₅s DC rated operational current ≤60 mA Current consumption non-actuated ≤60 mA No-load current ≤100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical <25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Function	Light screen
Optical resolution 14 mm Range 1007000 mm Scan field 970 mm Number of beams 97 With muting function no Scan Code Adjustable Electrical data Operating voltage 2028 VDC Residual ripple <10 % U₅ DC rated operational current ≤ 60 mA Current consumption non-actuated ≤ 60 mA No-load current ≤ 100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical <25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Light type	IR
Range 1007000 mm Scan field 970 mm Number of beams 97 With muting function no Scan Code Adjustable Electrical data Operating voltage 2028 VDC Residual ripple <10 % U₂ѕ DC rated operational current ≤60 mA Current consumption non-actuated ≤60 mA No-load current ≤100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical <25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Wavelength	850 nm
Scan field 970 mm Number of beams 97 With muting function no Scan Code Adjustable Electrical data Operating voltage 2028 VDC Residual ripple <10 % U _{ss} DC rated operational current ≤ 60 mA Current consumption non-actuated ≤ 60 mA No-load current ≤ 100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical <25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Optical resolution	14 mm
Number of beams 97 With muting function no Scan Code Adjustable Electrical data 2028 VDC Residual ripple < 10 % U₂s	Range	1007000 mm
With muting function no Scan Code Adjustable Electrical data 2028 VDC Residual ripple < 10 % U₂₅	Scan field	970 mm
Scan Code Adjustable Electrical data 2028 VDC Residual ripple < 10 % U₅s	Number of beams	97
Electrical data Operating voltage 2028 VDC Residual ripple < 10 % U₅s	With muting function	no
Operating voltage 2028 VDC Residual ripple < 10 % U₂₅ѕ	Scan Code	Adjustable
Residual ripple < 10 % U₅s	Electrical data	
DC rated operational current ≤ 60 mA Current consumption non-actuated ≤ 60 mA No-load current ≤ 100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical < 25.5 ms	Operating voltage	2028 VDC
Current consumption non-actuated ≤ 60 mA No-load current ≤ 100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical < 25.5 ms	Residual ripple	< 10 % U _{ss}
No-load current ≤ 100 mA Short-circuit protection yes Reverse polarity protection yes Response time typical < 25.5 ms	DC rated operational current	≤ 60 mA
Short-circuit protection yes Reverse polarity protection yes Response time typical < 25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Current consumption non-actuated	≤ 60 mA
Reverse polarity protection Response time typical < 25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	No-load current	≤ 100 mA
Response time typical < 25.5 ms Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Short-circuit protection	yes
Blanking function yes Mechanical data Design Rectangular, EZ-Screen LP Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Reverse polarity protection	yes
Mechanical dataDesignRectangular, EZ-Screen LPDimensions $26 \times 28 \times 969 \text{ mm}$ Housing materialMetal, AL, Yellow polyester	Response time typical	< 25.5 ms
DesignRectangular, EZ-Screen LPDimensions26 x 28 x 969 mmHousing materialMetal, AL, Yellow polyester	Blanking function	yes
Dimensions 26 x 28 x 969 mm Housing material Metal, AL, Yellow polyester	Mechanical data	
Housing material Metal, AL, Yellow polyester	Design	Rectangular, EZ-Screen LP
	Dimensions	26 x 28 x 969 mm
Lens plastic, Acrylic	Housing material	Metal, AL, Yellow polyester
	Lens	plastic, Acrylic



Features

- Electrical connection via RDLP-8 with open end or via DELPE-8 with male M12 × 1, 8-pin
- Protection class IP65
- Flat housing without blind zone
- Scan code adjustable via DIP switch
- Operating voltage: 24 VDC ± 15 %
- Resolution 14 mm
- Scan field 970 mm (L1)
- Personnel safety Cat 4, PL e acc. to EN ISO 13849-1:2008
- ■Type 4 according to IEC 61496-1,-2
- ■SIL 3 to IEC 61508

Wiring diagram



Functional principle

The high-resolution safety light curtain is emitter and receiver in one without blind zone. As the system is synchronized optically, wiring between emitter and receiver is redundant. The safety switching outputs of the receiver are directly connected to a load relay (e.g. IM-TA9A) and trigger an immediate stop of the dangerous machine cycle. The switching device with 2-channel monitoring, diverse redundant designed and mutual processor control, complies with the personnel safety category PLe acc. to ISO 13849-1.



Technical data

Cascadable	No		
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 ENISO 13849-1:2008, SIL 3 acc. to IEC 61508		

Accessories

LPA-MBK-11	3082841	LPA-MBK-12	3082842
	Mounting bracket, retainer for closure caps, 14-ga. steel, galvanized, black, 360 ° sensor rotation, incl.2 pcs. with screw set		Mounting bracket, side mounting, 14-ga. steel, galvanized, black, +10°/-30° sensor rotation, incl.1 pcs. with screw set
LPA-MBK-20	3082853	LPA-MBK-22	3082844
	Mounting bracket, wall mounting, 12-ga. steel, galvanized, black, in combination with LPA-MBK-11/ -12/ -13, incl. 1 pcs. and screw set		Mounting bracket, wall mounting, 14-ga. steel, galvanized, black, in combination with LPA-MBK-11, incl. 2 pcs. and screw set

Accessories

Dimension drawing	Туре	ID	
	RDLP-815D	3080792	Connection cable, PVC, yellow, length: 4.57 m, RD connector for direct connection to the light screen
	RDLP-825D	3080793	Connection cable, PVC, yellow, length: 7.62 m, RD connector for direct connection to the light screen
	RDLP-850D	3080794	Connection cable, PVC, yellow, length: 15.2 m, RD connector for direct connection to the light screen
	RDLP-875D	3080795	Connection cable, PVC, yellow, length: 22.9 m, RD connector for direct connection to the light screen
	DELPE-81D	3080811	Connection cable, PVC, yellow, length: 0.31 m, RD connector for direct connection on male M12 x 1, 8-pin,
	DELPE-83D	3080812	Connection cable, PVC, yellow, length: 0.91 m, RD connector for direct connection on male M12 x 1, 8-pin,
	DELPE-88D	3080813	Connection cable, PVC, yellow, length: 2.44 m, RD connector for direct connection on male M12 x 1, 8-pin,
	DELPE-815D	3080814	Connection cable, PVC, yellow, length: 4.57 m, RD connector for direct connection on male M12 x 1, 8-pin,
	DELPE-825D	3080815	Connection cable, PVC, yellow, length: 7.62 m, RD connector for direct connection on male M12 x 1, 8-pin,



Dimension drawing	Туре	ID	
	DELPE-850D	3080816	Connection cable, PVC, yellow, length: 15.2 m, RD connector for direct connection on male M12 x 1, 8-pin,
	DELPE-875D	3080817	Connection cable, PVC, yellow, length: 22.9 m, RD connector for direct connection on male M12 x 1, 8-pin,
	DELPE-8100D	3080818	Connection cable, PVC, yellow, length: 30.5 m, RD connector for direct connection on male M12 x 1, 8-pin,
	CSB-M1280M1280	3075375	Y-piece, PVC, yellow, with male M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female M12 x 1, 8-pin
	CSB-M1281M1281	3073252	Y-piece, PVC, yellow, length: 0.3 m with male, M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female, M12 x 1, 8-pin
	CSB-M1288M1281	3073253	Y-piece, PVC, yellow, length: 2.5 m with male, M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female, M12 x 1, 8-pin
	CSB-M12815M1281	3073254	Y-piece, PVC, yellow, length: 4.6 m with male, M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female, M12 x 1, 8-pin
	CSB-M12825M1281	3073255	Y-piece, PVC, yellow, length: 7.6 m with male, M12 x 1, 8-pin on 2 x 0.3 m cable, PVC, yellow, with female, M12 x 1, 8-pin