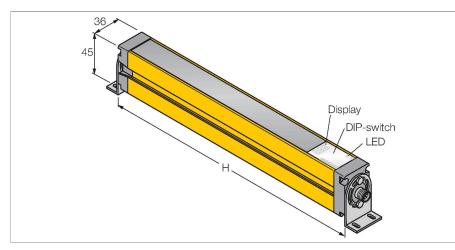


# SLSP30-1500Q85 Light Screen for Machine Safety Applications – Emitter/ Receiver Pair



#### Technical data

ID no. $3071269$ Optical dataLight screenFunctionLight screenLight typeIRWavelength950 nmOptical resolution30 mmRange $10018000 \text{ mm}$ Scan field $1500 \text{ mm}$ Number of beams $100$ With muting functionnoScan CodeAdjustableElectrical data $0perating voltage$ Qperating voltage $2028 \text{ VDC}$ Residual ripple $< 10 \% U_{ss}$ DC rated operational current $\le 375 \text{ mA}$ No-load current $\le 275 \text{ mA}$ Max. current safe output $0.5 \text{ mA}$ Short-circuit protectionyes	Туре	SLSP30-1500Q85		
FunctionLight screenLight typeIRWavelength950 nmOptical resolution30 mmRange10018000 mmScan field1500 mmNumber of beams100With muting functionnoScan CodeAdjustableElectrical data $2028$ VDCQerating voltage $2028$ VDCResidual ripple< 10 % U <sub>ss</sub> DC rated operational current< 375 mA	ID no.	3071269		
Light typeIRLight typeIRWavelength950 nmOptical resolution30 mmRange10018000 mmScan field1500 mmNumber of beams100With muting functionnoScan CodeAdjustableElectrical data $2028 \text{ VDC}$ Residual ripple< 10 % U <sub>ss</sub> DC rated operational current $\leq 375 \text{ mA}$ No-load current $\leq 275 \text{ mA}$ Max. current safe output0.5 mAShort-circuit protectionyes	Optical data			
Wavelength950 nmOptical resolution30 mmRange10018000 mmScan field1500 mmNumber of beams100With muting functionnoScan CodeAdjustableElectrical data $2028 \text{ VDC}$ Residual ripple< 10 % Usst	Function	Light screen		
Optical resolution $30 \text{ mm}$ Range $10018000 \text{ mm}$ Scan field $1500 \text{ mm}$ Number of beams $100$ With muting functionnoScan CodeAdjustableElectrical data $2028 \text{ VDC}$ Residual ripple $< 10 \% \text{ U}_{ss}$ DC rated operational current $\leq 375 \text{ mA}$ No-load current $\leq 275 \text{ mA}$ Max. current safe output $0.5 \text{ mA}$ Short-circuit protectionyes	Light type	IR		
Range10018000 mmScan field1500 mmNumber of beams100With muting functionnoScan CodeAdjustableElectrical data $2028 \text{ VDC}$ Residual ripple< 10 % U <sub>ss</sub> DC rated operational current≤ 375 mANo-load current≤ 275 mAMax. current safe output0.5 mAShort-circuit protectionyes	Wavelength	950 nm		
Scan field1500 mmNumber of beams100With muting functionnoScan CodeAdjustableElectrical data $2028$ VDCOperating voltage $2028$ VDCResidual ripple< 10 % Uss	Optical resolution	30 mm		
Number of beams100With muting functionnoScan CodeAdjustableElectrical data $2028$ VDCOperating voltage $2028$ VDCResidual ripple $< 10 \% U_{ss}$ DC rated operational current $\leq 375$ mANo-load current $\leq 275$ mAMax. current safe output $0.5$ mAShort-circuit protectionyes	Range	10018000 mm		
With muting functionnoScan CodeAdjustableElectrical data $2028 \text{ VDC}$ Operating voltage $2028 \text{ VDC}$ Residual ripple $< 10 \% \text{ U}_{ss}$ DC rated operational current $\leq 375 \text{ mA}$ No-load current $\leq 275 \text{ mA}$ Max. current safe output $0.5 \text{ mA}$ Short-circuit protectionyes	Scan field	1500 mm		
Scan CodeAdjustableElectrical dataOperating voltage2028 VDCResidual ripple< 10 % Uss	Number of beams	100		
Electrical dataOperating voltage2028 VDCResidual ripple< 10 % Uss	With muting function	no		
Operating voltage2028 VDCResidual ripple< 10 % Uss	Scan Code	Adjustable		
Residual ripple< 10 % UssDC rated operational current≤ 375 mANo-load current≤ 275 mAMax. current safe output0.5 mAShort-circuit protectionyes	Electrical data			
DC rated operational current     ≤ 375 mA       No-load current     ≤ 275 mA       Max. current safe output     0.5 mA       Short-circuit protection     yes	Operating voltage	2028 VDC		
No-load current   ≤ 275 mA     Max. current safe output   0.5 mA     Short-circuit protection   yes	Residual ripple	< 10 % U <sub>ss</sub>		
Max. current safe output   0.5 mA     Short-circuit protection   yes	DC rated operational current	≤ 375 mA		
Short-circuit protection yes	No-load current	≤ 275 mA		
· · · · ·	Max. current safe output	0.5 mA		
Reverse polarity protection yes	Short-circuit protection	yes		
	Reverse polarity protection	yes		
Output function 2 x NC (normally closed), 2 × PNP	Output function	2 x NC (normally closed), 2 × PNP		
Current output 0500 mA	Current output	0500 mA		
Number of safe semiconductor outputs 2	Number of safe semiconductor outputs	2		
Response time typical < 27 ms	Response time typical	< 27 ms		
With restart interlock yes	With restart interlock	yes		
Blanking function yes	Blanking function	yes		

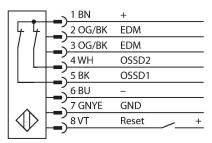


#### Features

Emitter with test function, male M12 × 1, 5-
pin
Receiver with male M12 × 1, 8-pin
Blanking function
Protection class IP65
Adjustment via DIP switch

- Operating voltage 24 VDC +-15 %
- Resolution 30 mm
- Scan field 1500 mm
- All devices incl. 2 EZA-MBK-11 mounting brackets; 900 mm devices and longer additionally incl. 1 EZA-MBK-12
- 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







#### Technical data

Mechanical data		
Design	Rectangular, EZ-Screen	
Dimensions	45 x 36 x 1569 mm	
Housing material	Metal, AL, Yellow polyester	
Lens	plastic, Acrylic	
Cascadable	no	
Electrical connection	Connectors, M12 × 1	
Ambient temperature	0+50 °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, cULus listed	

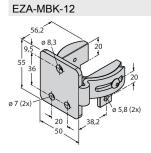
## **Functional principle**

The high-resolution safety light screen for personnel protection consists of an emitter and a receiver. The system is optically synchronized, making the wiring between emitter and receiver redundant. The receiver's safety switching outputs are directly connected to a load relay and trigger an immediate stop of the dangerous machine cycle. Personnel safety degree type 4 acc. to IEC 61496 is fulfilled through 2 channel monitoring of the switching device and the multiple-redundant construction with mutual processor control.

#### Accessories

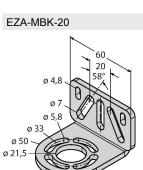
# EZA-MBK-11

3071470 Mounting bracket, steel, blackfinished, for EZ-ARRAY and EZ-SCREEN standard and cascade 14 & 30 mm



3071756

Mounting bracket, steel, blackfinished, for EZ-ARRAY and EZ-SCREEN standard and cascade 14 & 30 mm



3072587

Mounting bracket, steel, blackfinished, for EZ-ARRAY and EZ-SCREEN standard 14 & 30 mm



## Accessories

	_		
Dimension drawing	Туре	ID no.	
	QDE-815D	3070883	Connection cable for safety light screens, PVC, yellow, length 4.57 m, female connection, M12 x 1, 8-pin
	QDE-825D	3070884	Connection cable for safety light screens, PVC, yellow, length 7.62 m, female connection, M12 x 1, 8-pin
	QDE-850D	3070885	Connection cable for safety light screens, PVC, yellow, length 15.3 m, female connection, M12 x 1, 8-pin
=1/5 M/2×1	QDE-875D	3071466	Connection cable for safety light screens, PVC, yellow, length 22.9 m, female connection, M12 x 1, 8-pin
	QDE-8100D	3071467	Connection cable for safety light screens, PVC, yellow, length 30.5 m, female connection, M12 x 1, 8-pin
	QDE-515D	3070880	Connection cable for safety light screens, PVC, yellow, length 4.57 m, female connection, M12 x 1, 5-pin
	QDE-525D	3070881	Connection cable, PVC, yellow, length: 2.44 m, female M12 x 1 - male M12, 8- pin
	QDE-550D	3070882	Connection cable for safety light screens, PVC, yellow, length 15.3 m, female connection, M12 x 1, 5-pin
	QDE-575D	3071464	Connection cable, PVC, yellow, length: 22.9 m, female M12 x 1, 5-pin
	QDE-5100D	3071465	Connection cable for safety light screens, PVC, yellow, length 30.5 m, female connection, M12 x 1, 5-pin
	DEE2R-81D	3072205	Connection cable, PVC, yellow, length: 0.31 m, female M12 x 1 - male M12, 8- pin
	DEE2R-83D	3072206	Connection cable, PVC, yellow, length: 0.91 m, female M12 x 1 - male M12, 8- pin
	DEE2R-88D_	3072635	Connection cable, PVC, yellow, length: 2.44 m, female M12 x 1 - male M12, 8-
	DEE2R-815D	3072207	pin Connection cable, PVC, yellow, length: 4.57 m, female M12 x 1 - male M12, 8- pin
	DEE2R-825D	3072208	Connection cable, PVC, yellow, length: 7.62 m, female M12 x 1 - male M12, 8- pin
	DEE2R-850D	3072209	Connection cable, PVC, yellow, length: 15.2 m, female M12 x 1 - male M12, 8- pin
	DEE2R-875D	3072210	Connection cable, PVC, yellow, length: 22.9 m, female M12 x 1 - male M12, 8-pin