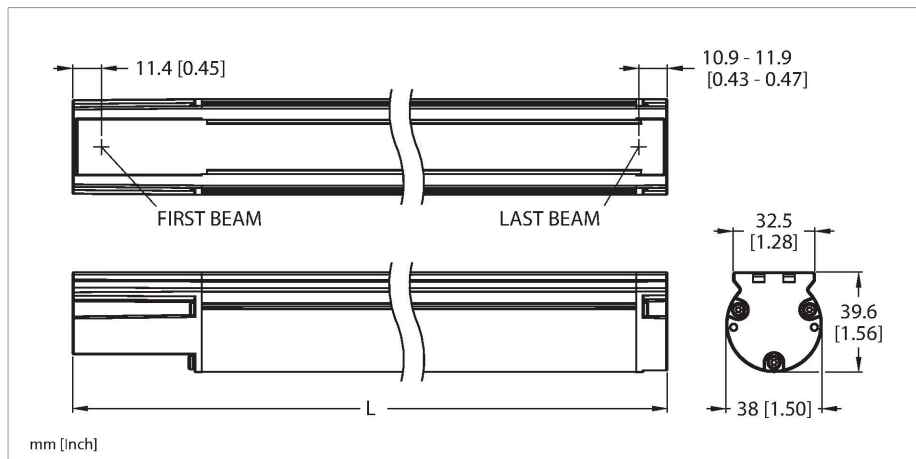# S4BR14-300-S
Safety Light Curtain –   Receiver
Type 4, Resolution 14 mm, Scan Field Height 300 mm, Range 12 m

Technical data

Type	S4BR14-300-S
ID	3812365
Optical data	
Function	Light screen
Light type	IR
Optical resolution	14 mm
Range	100…12000 mm
Scan field	300 mm
With muting function	Yes
Scan Code	Adjustable
Electrical data	
Operating voltage U_B	20.4…27.6 VDC
Residual ripple	< 10 % U_{ss}
DC rated operating current I_e	≤ 100 mA
No-load current	≤ 100 mA
Max. current safe output	500 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	2 x OSSD, NO contact
Number of safe semiconductor outputs	2
Insulation class	III
Response time typical	< 11.5 ms
With restart interlock	no
Blanking function	yes

Features

- Resolution 14 mm
- Scan field height 300 mm
- Range 12 m
- Intuitive setting via DIP switches
- Protection class IP65
- Operating voltage 24 VDC ± 15 %
- 2 redundant OSSD safety outputs
- 1 external device monitoring input
- 1 weak beam strength output
- 2-color status indicator
- 3-color zone status indicator
- Removable Disconnect (RD) connector
- The safety light curtain is supplied without the mounting and connection accessories required for operation
- Type 4 (IEC 61496-1, -2)
- Safety Integrity Level SIL 3 (IEC 61508)
- Performance Level PL e (EN ISO 13849)
- Safety category 4 (EN ISO13849)
- Safety data can only be found in the associated manual or the associated Sistema library

Functional principle

The S4B safety light curtain has a cascading function that automatically detects connected light curtains and greatly reduces and simplifies installation work. Color-coded wiring harnesses minimize the risk of installation errors and allow easy and fast replacement after damage.
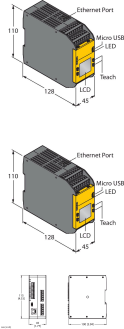The 14-mm and 30-mm resolutions and fast response times offer a high level of protection and minimize safety risks. The integrated zone indicator simplifies commissioning and maintenance by indicating the alignment status and identifying blocked areas. In addition, the weak beam signal supports

Technical data

Mechanical data

Design	With display, S4B
Dimensions	312 x 38 x 39.6 mm
Housing material	Aluminum/plastic/die-cast zinc, Anodized AL
Lens	plastic, Acrylic
Cascadable	Yes
Electrical connection	Connection cable
Number of cores	8
Ambient temperature	55…+-20 °C
Relative humidity	95 %
Protection class	IP65
Switching state	2-color LED, Red/green

Tests/approvals

Vibration resistance	Acc. to IEC 61496-1 (Class 3M4) incl. vibration (30 cycles) at 5…150 Hz at 3.5-mm amplitude and 1-g acceleration
Shock test	Acc. to IEC 61496-1 (Class 3M4) incl. 15 g at 6 ms (600 cycles)
Approvals	CE, cULus listed

predictive maintenance, thereby reducing costly downtimes.
The S4B product series supports muting using mute arm kits. These enable objects to pass through the safety light curtain without causing an interruption. In addition, flexible mounting options offer a high degree of freedom during installation.

Accessories

Dimension drawing	Type	ID	
	S4BA-MBK-11	3816220	S4B end cap mounting bracket with ±15° rotation (includes 2 mounting brackets)
	S4BA-MBK-16	3812590	S4B mounting bracket with ±15° rotation (includes 2 mounting brackets)
	DES4-M51-D	3815669	S4B Removeable Disconnect (RD) M12 × 1 5-pin connection cable (includes 1 connection cable)
	DES4-M81-D	3814475	S4B Removeable Disconnect (RD) M12 × 1 8-pin connection cable for EDM (includes 1 connection cable)
	XS26-2DE	3085064	Programmable and expandable safety controller
	SC26-2DE	3085068	Programmable safety controller
	SC10-2ROE	3806222	Programmable safety controller | relay hybrid