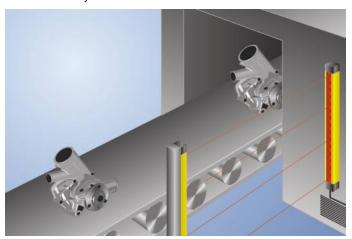
Safety Light Array Body Protection

SB4-30IE090C1



- **Completely integrated electronics**
- Fix blanking, reduced resolution, cascading, muting
- Serial interface

These safety light arrays are distinguished by their compact design. They are also equipped with numerous auxiliary functions, allowing for adaptation to the respective application in a highly individualized fashion. The adequate mounting angle BEF-SET-33 is included in the delivery.



Technical Data

Optical Data 0,520 m Range 0,520 m Beam Distance 300 mm Number of Beams 4 Light Source Red Light Opening Angle ± 2,5 ° Electrical Data Electrical Data Sensor Type Receiver Supply Voltage 21,626,4 V DC Current Consumption (Ub = 24 V) 300 mA Response Time 10 ms Temperature Range -2050 °C Storage temperature -2570 °C No. Safety Outputs (OSSDs) 2 Safety Outputs (OSSDs) 2 Safety Output Voltage Drop < 2,5 V PNP Safety Outputs (SWitching Current 300 mA Signal Output Voltage Drop < 2,5 V Signal Output Voltage Drop <	Technical Data	
Beam Distance 300 mm Number of Beams 4	Optical Data	
Number of Beams	Range	0,520 m
Light Source Red Light Opening Angle ± 2,5 ° Electrical Data Sensor Type Receiver Supply Voltage 21,626,4 V DC Current Consumption (Ub = 24 V) 300 mA Response Time 10 ms Temperature Range -2050 °C Storage temperature -2570 °C No. Safety Outputs (OSSDs) 2 Safety Output Voltage Drop < 2,5 V	Beam Distance	300 mm
Dening Angle	Number of Beams	4
Sensor Type	Light Source	Red Light
Sensor Type Receiver Supply Voltage 21,626,4 V DC Current Consumption (Ub = 24 V) 300 mA Response Time 10 ms Temperature Range -2050 °C Storage temperature -2570 °C No. Safety Outputs (OSSDs) 2 Safety Output Voltage Drop < 2,5 V	Opening Angle	± 2,5 °
Supply Voltage 21,626,4 V DC Current Consumption (Ub = 24 V) 300 mA Response Time 10 ms Temperature Range -2050 °C Storage temperature -2570 °C No. Safety Outputs (OSSDs) 2 Safety Output Voltage Drop < 2,5 V	Electrical Data	
Current Consumption (Ub = 24 V) 300 mA Response Time 10 ms Temperature Range -2050 °C Storage temperature -2570 °C No. Safety Outputs (OSSDs) 2 Safety Output Voltage Drop < 2,5 V	Sensor Type	Receiver
Response Time	Supply Voltage	21,626,4 V DC
Temperature Range -2050 °C Storage temperature -2570 °C No. Safety Outputs (OSSDs) 2 Safety Output Voltage Drop <2,5 V PNP Safety Output/Switching Current 300 mA Signal Outputs 1 Signal Output Voltage Drop <2,5 V Signal Output/Switching Current 200 mA Short Circuit and Overload Protection yes Reverse Polarity Protection yes Interface RS-485 Protection Class III Mechanical Data Housing Material Aluminum Disk Material Polycarbonate IP67 Connection M12 × 1; 8-pin Safety-relevant Data ESPE Type (EN 61496) 4 Safety Category (EN ISO 13849-1) PL e PFHD 3,08 × E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function Body Protection yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Suitable Mounting Technology No. 88 8 88s Suitable Mounting Technology No. 700	Current Consumption (Ub = 24 V)	300 mA
Storage temperature -2570 °C No. Safety Outputs (OSSDs) 2 Safety Output Voltage Drop < 2,5 V	Response Time	10 ms
No. Safety Outputs (OSSDs) 2 Safety Output Voltage Drop < 2,5 V	Temperature Range	-2050 °C
Safety Output Voltage Drop PNP Safety Output/Switching Current Signal Outputs Signal Output Voltage Drop < 2,5 V Signal Output Voltage Drop < 2,5 V Signal Output/Switching Current 200 mA Short Circuit and Overload Protection Reverse Polarity Protection Interface RS-485 Protection Class III Mechanical Data Housing Material Disk Material Degree of Protection Pefor Connection Safety-relevant Data ESPE Type (EN 61496) Safety Category (EN ISO 13849-1) Performance Level (EN ISO 13849-1) PFHD Service Life TM (EN ISO 13849-1) Puber Protection Body Protection Body Protection Sestart Inhibit Contactor Monitoring Cascading Fix Blanking Reduced Resolution Serial Communication Connection Table No. Suitable Mounting Technology No. 888 888 Suitable Mounting Technology No.	Storage temperature	-2570 °C
PNP Safety Output/Switching Current Signal Outputs Signal Output Voltage Drop Signal Output/Switching Current Signal Output/Switching Current Signal Output/Switching Current Short Circuit and Overload Protection Reverse Polarity Protection Interface Protection Class III Mechanical Data Housing Material Disk Material Degree of Protection IP67 Connection Safety-relevant Data ESPE Type (EN 61496) Safety Category (EN ISO 13849-1) Performance Level (EN ISO 13849-1) Performance Life TM (EN ISO 13849-1) Punction Body Protection Restart Inhibit Contactor Monitoring Cascading Fix Blanking Reduced Resolution Serial Communication Connection Table No. Suitable Connection Technology No. 700	No. Safety Outputs (OSSDs)	2
Signal Outputs 1 Signal Output Voltage Drop < 2,5 V	Safety Output Voltage Drop	< 2,5 V
Signal Output Voltage Drop Signal Output/Switching Current Short Circuit and Overload Protection Reverse Polarity Protection Protection Class III Mechanical Data Housing Material Disk Material Degree of Protection Safety-relevant Data ESPE Type (EN 61496) Safety Category (EN ISO 13849-1) Performance Level (EN ISO 13849-1) PerhD Service Life TM (EN ISO 13849-1) Posses Estart Inhibit Contactor Monitoring Cascading Fix Blanking Reduced Resolution Suitable Connection Technology No. 888 888 Suitable Mounting Technology No.	PNP Safety Output/Switching Current	300 mA
Signal Output/Switching Current Short Circuit and Overload Protection Reverse Polarity Protection Interface RS-485 Protection Class IIII Mechanical Data Housing Material Disk Material Degree of Protection Pegree of Protection Safety-relevant Data ESPE Type (EN 61496) Safety Category (EN ISO 13849-1) Performance Level (EN ISO 13849-1) PerhD Service Life TM (EN ISO 13849-1) Polycarbonate Function Body Protection Restart Inhibit Pesses Contactor Monitoring Pesses Serial Communication Control Panel No. Suitable Connection Technology No. 700	Signal Outputs	1
Signal Output/Switching Current Short Circuit and Overload Protection Reverse Polarity Protection Interface RS-485 Protection Class IIII Mechanical Data Housing Material Disk Material Degree of Protection Pegree of Protection Safety-relevant Data ESPE Type (EN 61496) Safety Category (EN ISO 13849-1) Performance Level (EN ISO 13849-1) PerhD Service Life TM (EN ISO 13849-1) Polycarbonate Function Body Protection Restart Inhibit Pesses Contactor Monitoring Pesses Serial Communication Control Panel No. Suitable Connection Technology No. 700	Signal Output Voltage Drop	< 2,5 V
Reverse Polarity Protection yes Interface RS-485 Protection Class III Mechanical Data Housing Material Aluminum Disk Material Polycarbonate Degree of Protection IP67 Connection M12 × 1; 8-pin Safety-relevant Data ESPE Type (EN 61496) 4 Safety Category (EN ISO 13849-1) PL e PFHD 3,08 × E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function Body Protection yes Restart Inhibit yes Contactor Monitoring yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. Control Panel No. Suitable Connection Technology No. Suitable Mounting Technology No. Todo		200 mA
Interface	Short Circuit and Overload Protection	yes
Protection Class Mechanical Data Housing Material Disk Material Degree of Protection Pegree of Protection Safety-relevant Data ESPE Type (EN 61496) Safety Category (EN ISO 13849-1) Performance Level (EN ISO 13849-1) PFHD Service Life TM (EN ISO 13849-1) Body Protection Sestart Inhibit Contactor Monitoring Cascading Fix Blanking Reduced Resolution Serial Communication Connection Table No. Control Panel No. Suitable Connection Technology No. IP67 Aluminum Alumin	Reverse Polarity Protection	yes
Mechanical DataAluminumDisk MaterialPolycarbonateDegree of ProtectionIP67ConnectionM12 x 1; 8-pinSafety-relevant DataESPE Type (EN 61496)4Safety Category (EN ISO 13849-1)4Performance Level (EN ISO 13849-1)PL ePFHD3,08 x E-8 1/hService Life TM (EN ISO 13849-1)20 aFunctionyesBody ProtectionyesRestart InhibityesContactor MonitoringyesFix BlankingyesReduced ResolutionyesSerial CommunicationyesConnection Table No.28Control Panel No.88Suitable Connection Technology No.700	Interface	RS-485
Housing Material	Protection Class	III
Disk Material Polycarbonate Degree of Protection IP67 Connection M12 × 1; 8-pin Safety-relevant Data ESPE Type (EN 61496) 4 Safety Category (EN ISO 13849-1) 4 Performance Level (EN ISO 13849-1) PL e PFHD 3,08 × E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. 88 Suitable Connection Technology No. 700	Mechanical Data	
Degree of Protection IP67 Connection M12 × 1; 8-pin Safety-relevant Data ESPE Type (EN 61496) 4 Safety Category (EN ISO 13849-1) 4 Performance Level (EN ISO 13849-1) PL e PFHD 3,08 × E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function yes Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. 88 Suitable Connection Technology No. 700	Housing Material	Aluminum
Connection M12 x 1; 8-pin Safety-relevant Data ESPE Type (EN 61496) 4 Safety Category (EN ISO 13849-1) 4 Performance Level (EN ISO 13849-1) PL e PFHD 3,08 x E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function yes Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. 84 Suitable Connection Technology No. 700	Disk Material	Polycarbonate
Safety-relevant Data ESPE Type (EN 61496) 4 Safety Category (EN ISO 13849-1) 4 Performance Level (EN ISO 13849-1) PL e PFHD 3,08 x E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function yes Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4 Suitable Connection Technology No. 88 Suitable Mounting Technology No. 700	Degree of Protection	IP67
ESPE Type (EN 61496) 4 Safety Category (EN ISO 13849-1) 4 Performance Level (EN ISO 13849-1) PL e PFHD 3,08 × E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4 Suitable Connection Technology No. 700	Connection	M12 × 1; 8-pin
Safety Category (EN ISO 13849-1) 4 Performance Level (EN ISO 13849-1) PL e PFHD 3,08 × E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. \$4 Suitable Connection Technology No. 88 Suitable Mounting Technology No. 700	Safety-relevant Data	
Performance Level (EN ISO 13849-1) PL e PFHD 3,08 x E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4 Suitable Connection Technology No. 88 Suitable Mounting Technology No. 700	ESPE Type (EN 61496)	4
PFHD 3,08 × E-8 1/h Service Life TM (EN ISO 13849-1) 20 a Function Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. \$4 Suitable Connection Technology No. 88 Suitable Mounting Technology No. 700	Safety Category (EN ISO 13849-1)	4
Service Life TM (EN ISO 13849-1) 20 a Function yes Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4 Suitable Connection Technology No. 88 Suitable Mounting Technology No. 700	Performance Level (EN ISO 13849-1)	PL e
Function Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. Control Panel No. Suitable Connection Technology No. Suitable Mounting Technology No.	PFHD	3,08 × E-8 1/h
Body Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4 Suitable Connection Technology No. 88 Suitable Mounting Technology No. 700	Service Life TM (EN ISO 13849-1)	20 a
Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking Reduced Resolution Serial Communication yes Connection Table No. Control Panel No. Suitable Connection Technology No. Suitable Mounting Technology No.	Function	
Contactor Monitoring yes Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4 Suitable Connection Technology No. 88 Suitable Mounting Technology No. 700	Body Protection	yes
Cascading yes Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4 Suitable Connection Technology No. 88 88s Suitable Mounting Technology No. 700	Restart Inhibit	yes
Fix Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4 Suitable Connection Technology No. 88 Suitable Mounting Technology No. 700	Contactor Monitoring	yes
Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. \$4 Suitable Connection Technology No. 88 88s Suitable Mounting Technology No. 700	Cascading	yes
Serial Communication yes Connection Table No. Control Panel No. Suitable Connection Technology No. Suitable Mounting Technology No. 700	Fix Blanking	yes
Connection Table No. Control Panel No. Suitable Connection Technology No. Suitable Mounting Technology No. 28 S4 S4 S0 S700	Reduced Resolution	yes
Control Panel No. Suitable Connection Technology No. Suitable Mounting Technology No. Too	Serial Communication	yes
Control Panel No. Suitable Connection Technology No. Suitable Mounting Technology No. Too	Connection Table No.	28
Suitable Connection Technology No. 88 88s Suitable Mounting Technology No. 700		
Suitable Mounting Technology No. 700		
Junable Jenai Interiace i lug No.	Suitable Serial Interface Plug No.	11

Suitable Emitter

SB4-30IS090C1

Complementary Products

Muting Indicator SM0-00CA000C1 Path-Folding Mirror Z2UG003 Protection Column with Path-Folding Mirror SZ000EU170NN01

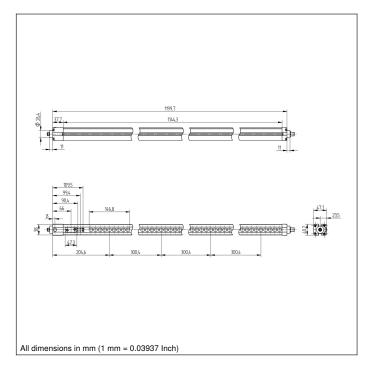
Protection Column with Protective Screen SZ000EG170NN01

Safety Relay SG4-00VA000R2, SR4B3B01S, SR4D3B01S

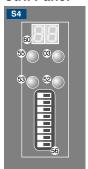
Software

Software wsafe





Ctrl. Panel



- 03 = Error Indicator
- 20 = Enter Button
- 52 = OSSD ON
- 53 = OSSD OFF
- 55 = Blanking
- 56 = Dip-Switch
- 60 = Display











