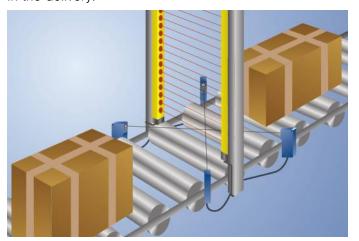
# SG4-30IE165C1



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

These safety light curtains 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**

Section	Technical Data	
Safety Field Height (SFH)         1680 mm           Resolution         30 mm           Light Source         Red Light           Opening Angle         ± 2,5 °           Electrical Data         ***           Sensor Type         Receiver           Supply Voltage         24 V DC           Current Consumption (Ub = 24 V)         300 mA           Response Time         25,8 ms           Temperature Range         -20,50 °C           Storage temperature         -25,70 °C           No. Safety Outputs (OSSDs)         2           Satety Output Voltage Drop         < 2,5 V	Optical Data	
Resolution   30 mm     Light Source   Red Light     Opening Angle   ± 2,5 °     Electrical Data     Sensor Type   Receiver     Supply Voltage   24 V DC     Current Consumption (Ub = 24 V)   300 mA     Response Time   25,8 ms     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     Number of Signal Outputs   1     Signal Output Voltage Drop   < 2,5 V     Signal Voltage Drop   < 2,5 V	Range	0,520 m
Light Source	Safety Field Height (SFH)	1680 mm
Dening Angle	Resolution	30 mm
Sensor Type	Light Source	Red Light
Sensor Type	Opening Angle	± 2,5 °
Supply Voltage         24 V DC           Current Consumption (Ub = 24 V)         300 mA           Response Time         25,8 ms           Temperature Range         -2050 °C           Storage temperature         -2570 °C           No. Safety Outputs (OSSDs)         2           Safety Output/Switching Current         300 mA           Number of Signal Outputs         1           Signal Output Voltage Drop         < 2,5 V	Electrical Data	
Current Consumption (Ub = 24 V)         300 mA           Response Time         25,8 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         25,8 ms           Temperature Range         -2050 °C           Storage temperature         -2570 °C           No. Safety Outputs (OSSDs)         2           Safety Output Voltage Drop         < 2,5 V	Supply Voltage	24 V DC
Temperature Range	Current Consumption (Ub = 24 V)	300 mA
Storage temperature   -2570 °C	Response Time	25,8 ms
No. Safety Outputs (OSSDs)         2           Safety Output Voltage Drop         < 2,5 V	Temperature Range	-2050 °C
Safety Output Voltage Drop         < 2,5 V	Storage temperature	-2570 °C
PNP Safety Output/Switching Current         300 mA           Number of Signal Outputs         1           Signal Output Voltage Drop         < 2,5 V	No. Safety Outputs (OSSDs)	2
Number of 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  Interface  RS-485  Protection Class  Mechanical Data  Housing Material  Disc Material  Degree of Protection  Safety-relevant Data  ESPE Type (EN 61496)  Safety Category (EN ISO 13849-1)  Performance Level (EN ISO 13849-1)  PFHD  Mission Time TM (EN ISO 13849-1)  Pand Protection  Restart Inhibit  Contactor Monitoring  Cascading  Fix Blanking  Floating Blanking  Reduced Resolution  Serial Communication  Control Panel No.  200 mA  Aluminum  Polycarbonate  III  Aluminum  Polycarbonate  III  Perfor  RS-485  III  Aluminum  Polycarbonate  IP67  Connection  M12 × 1; 8-pin  Safety-relevant Data  4  PP L e  PPHD  3,08 × E-8 1/h  yes  Contactor Monitoring  yes  Cascading  yes  Fix Blanking  yes  Floating Blanking  yes  Connection Table No.  28  Control Panel No.	PNP Safety Output/Switching Current	300 mA
Signal Output/Switching Current Short Circuit and Overload Protection Reverse Polarity	Number of Signal Outputs	1
Short Circuit and Overload Protection  Reverse Polarity Protection  Interface  Protection Class  III  Mechanical Data  Housing Material  Disc Material  Degree of Protection  Connection  Safety-relevant Data  ESPE Type (EN 61496)  Safety Category (EN ISO 13849-1)  Performance Level (EN ISO 13849-1)  PFHD  3,08 × E-8 1/h  Mission Time TM (EN ISO 13849-1)  Pand Protection  Hand Protection  Restart Inhibit  yes  Contactor Monitoring  Cascading  Fix Blanking  Fix Blanking  Reduced Resolution  Serial Communication  Control Panel No.  28  Control Panel No.	Signal Output Voltage Drop	< 2,5 V
Reverse Polarity Protection   yes	Signal Output/Switching Current	200 mA
Interface	Short Circuit and Overload Protection	yes
Protection Class	Reverse Polarity Protection	yes
Mechanical Data         Aluminum           Disc Material         Polycarbonate           Degree of Protection         IP67           Connection         M12 × 1; 8-pin           Safety-relevant Data         Safety-relevant Data           ESPE Type (EN 61496)         4           Safety Category (EN ISO 13849-1)         9L e           PFHD         3,08 × E-8 1/h           Mission Time TM (EN ISO 13849-1)         20 a           Function         yes           Hand Protection         yes           Restart Inhibit         yes           Contactor Monitoring         yes           Fix Blanking         yes           Floating Blanking         yes           Reduced Resolution         yes           Serial Communication         yes           Connection Table No.         28           Control Panel No.         54	Interface	RS-485
Housing Material  Disc Material  Polycarbonate  Pegree of Protection  IP67  Connection  M12 × 1; 8-pin  Safety-relevant Data  ESPE Type (EN 61496)  Safety Category (EN ISO 13849-1)  Performance Level (EN ISO 13849-1)  PFHD  3,08 × E-8 1/h  Mission Time TM (EN ISO 13849-1)  Punction  Hand Protection  Hand Protection  Restart Inhibit  yes  Contactor Monitoring  yes  Fix Blanking  Floating Blanking  Reduced Resolution  Serial Communication  Connection Table No.  28  Control Panel No.	Protection Class	III
Disc 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           Mission Time TM (EN ISO 13849-1)         20 a           Function           Hand Protection         yes           Restart Inhibit         yes           Contactor Monitoring         yes           Fix Blanking         yes           Floating Blanking         yes           Reduced Resolution         yes           Serial Communication         yes           Connection Table No.         28           Control Panel No.         \$4	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           Mission Time TM (EN ISO 13849-1)         20 a           Function           Hand Protection         yes           Restart Inhibit         yes           Contactor Monitoring         yes           Fix Blanking         yes           Floating Blanking         yes           Reduced Resolution         yes           Serial Communication         yes           Connection Table No.         28           Control Panel No.         54	Housing Material	Aluminum
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           Mission Time TM (EN ISO 13849-1)         20 a           Function         yes           Hand Protection         yes           Restart Inhibit         yes           Contactor Monitoring         yes           Fix Blanking         yes           Floating Blanking         yes           Reduced Resolution         yes           Serial Communication         yes           Connection Table No.         28           Control Panel No.         54	Disc 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 × E-8 1/h           Mission Time TM (EN ISO 13849-1)         20 a           Function         yes           Hand Protection         yes           Restart Inhibit         yes           Contactor Monitoring         yes           Fix Blanking         yes           Floating Blanking         yes           Reduced Resolution         yes           Serial Communication         yes           Connection Table No.         28           Control Panel No.         S4	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  Mission Time TM (EN ISO 13849-1) 20 a  Function  Hand Protection yes  Restart Inhibit yes  Contactor Monitoring yes  Fix Blanking yes  Floating Blanking yes  Reduced Resolution yes  Serial Communication yes  Connection Table No. 28  Control Panel No. 54	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         Mission Time TM (EN ISO 13849-1)       20 a         Function         Hand Protection       yes         Restart Inhibit       yes         Contactor Monitoring       yes         Cascading       yes         Fix Blanking       yes         Floating Blanking       yes         Reduced Resolution       yes         Serial Communication       yes         Connection Table No.       28         Control Panel No.       S4	Safety-relevant Data	
Performance Level (EN ISO 13849-1)         PL e           PFHD         3,08 × E-8 1/h           Mission Time TM (EN ISO 13849-1)         20 a           Function         Hand Protection           Hand Protection         yes           Restart Inhibit         yes           Contactor Monitoring         yes           Cascading         yes           Fix Blanking         yes           Floating Blanking         yes           Reduced Resolution         yes           Serial Communication         yes           Connection Table No.         28           Control Panel No.         S4	ESPE Type (EN 61496)	4
PFHD         3,08 × E-8 1/h           Mission Time TM (EN ISO 13849-1)         20 a           Function           Hand Protection         yes           Restart Inhibit         yes           Contactor Monitoring         yes           Cascading         yes           Fix Blanking         yes           Floating Blanking         yes           Reduced Resolution         yes           Serial Communication         yes           Connection Table No.         28           Control Panel No.         \$4	Safety Category (EN ISO 13849-1)	4
Mission Time TM (EN ISO 13849-1)  Function  Hand Protection  Restart Inhibit  Contactor Monitoring  Cascading  Fix Blanking  Floating Blanking  Reduced Resolution  Serial Communication  Connection Table No.  28  Control Panel No.	Performance Level (EN ISO 13849-1)	PL e
Function  Hand Protection yes  Restart Inhibit yes  Contactor Monitoring yes  Cascading yes  Fix Blanking yes  Floating Blanking yes  Reduced Resolution yes  Serial Communication yes  Connection Table No. 28  Control Panel No. \$4	PFHD	3,08 × E-8 1/h
Hand Protection yes Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Floating Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. \$4	Mission Time TM (EN ISO 13849-1)	20 a
Restart Inhibit yes Contactor Monitoring yes Cascading yes Fix Blanking yes Floating Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. \$4	Function	
Contactor Monitoring yes Cascading yes Fix Blanking yes Floating Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4	Hand Protection	yes
Cascading yes Fix Blanking yes Floating Blanking yes Reduced Resolution yes Serial Communication yes  Connection Table No. 28 Control Panel No. \$4	Restart Inhibit	yes
Fix Blanking yes Floating Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4		yes
Floating Blanking yes Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4	Cascading	yes
Reduced Resolution yes Serial Communication yes Connection Table No. 28 Control Panel No. S4		yes
Serial Communication yes  Connection Table No. 28  Control Panel No. S4		yes
Connection Table No. 28 Control Panel No. \$4		yes
Control Panel No.	Serial Communication	yes
	Connection Table No.	
Suitable Connection Equipment No.	Control Panel No.	
Suitable Connection Equipment No.	Suitable Connection Equipment No.	88 88s
Suitable Mounting Technology No. 700	Suitable Mounting Technology No.	700
Suitable Serial Interface Plug No.	Suitable Serial Interface Plug No.	11

### **Suitable Emitter**

SG4-30IS165C1

## **Complementary Products**

Laser Alignment Tool SZ0-LAH1
Muting Indicator SM0-00CA000C1
Path-Folding Mirror Z2UG004

Protection Column with Path-Folding Mirror SZ000EU215NN01

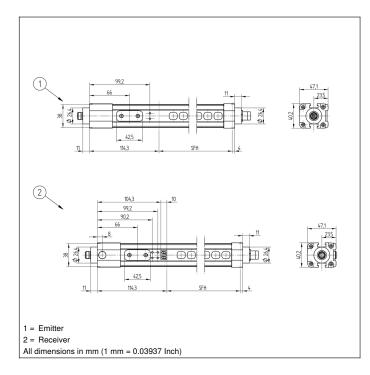
Protection Column with Protective Screen SZ000EG215NN01

Safety Relay SG4-00VA000R2, SR4B3B01S, SR4D3B01S

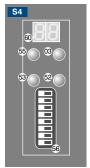
Software

Software wsafe





## Ctrl. Panel



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







