DATALOGIC - S300 SAFETY PHOTOCELL

S300-PR-5-G00-EX-SG-ST2
951451320 Through Beam Emitter Safet Sensor Type 2



- Separate safety beams, infrared
- Range 0-50 m
- Operating temperature -40 ºC...+55 ºC

PRODUCT DESCRIPTION

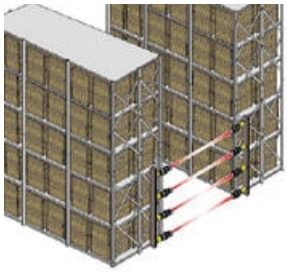
Datalogic safety photocell S300 series (transmitter-receiver couple) have been homologated to function with the control units of the SG-BWS series that together form a safety system respectively of Type 2 (PL d, SIL 2) and Type 4 (PL e, SIL 3) conforming with the EN 954-1, EN ISO 13849-1 and EN 62061 standards.

S300 safety photo cell has operating range of 0-50 (Type 2) and 0-40 m (Type 4). All models have a M12 4-pole connectors for transmitter and receiver.

S300 safety photo cells are suitable for outdoor use with temperature range from -40 ºC to +50 ºC and IP67 housing.
Defogging models with heated front glass are available for applications where sudden changes of the temperature in the nearby of the sensor are causing condensation

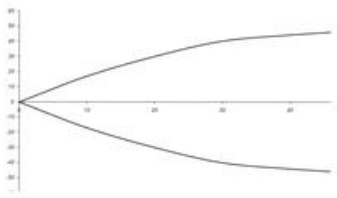
LEDs signal both the operating status and correct alignment of the safety photocells

Application

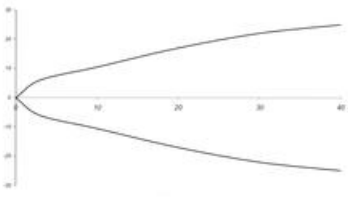
Body protection	Door control
	

TECHNICAL DATA

Detection diagrams



S300-F/G- SG-ST2



S300-F/G- SG-ST4

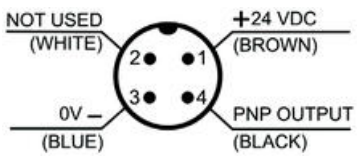
Technical Data

Supply voltage	24 V DC, stabilised
Tolerance	± 15 %
Consumption	S300...F (receiver): < 25 mA S300...G (transmitter): < 20 mA
Outputs	PNP, NC open collector
Output current	100 mA (resistive load)
Output saturation voltage	2.4 V max
Response time	1 ms
Diagnostive functions	Test input
Switching frequency	500 Hz
Type of light	IR LED 880 nm
EAA	S300 (Type 2): ± 5º / S300 (Type 4): ± 2,5º
Operating distance	0-50 m (Type 2) 0-40 m (Type 4)
Status indication	Tx: 1 led, Power ON (Green) Rx: 2 led´s, Output Led (yellow) + Stability Led (green)
Cable connection	Transmitter M12, 4-pole
	Receiver M12, 4-pole
Material housing	PBT 30% Glass fiber-reiforced, Lenses and frontal window PC
Weight	140 g
Protection class	IP67
Operating temperature	-40 °C to +55 °C
Storage temperature	-40 °C to +70 °C
Approvals	CE TÜV

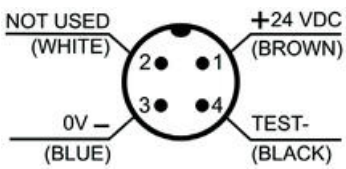
CONNECTION

Connection of S300 safety photocell

Receiver (Rx, F)



Transmitter (Tx, G)



Receiver (Rx, F), 4-pole, M12-connector			**Transmitter** (Tx, G), 4-pole, M12-connector		
1	= brown	= +24 V DC (power supply)	1	= brown	= +24 V DC (power supply)
2	= white	= not used	2	= white	= not used
3	= blue	= 0 V (power supply)	3	= blue	= 0 V (power supply)
4	= black	= PNP output	4	= black	= Test input

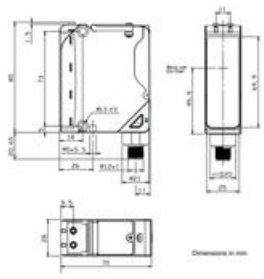
NOTE !
THE SAFETY PHOTOCELLS ARE CERTIFIED AND MUST BE USED ONLY WITH SAFETY CONTROL UNITS SG-BWS-T4 AND SG-BWS-T4-MT SERIES. NEITHER TECHNICAL AND FUNCTIONING COMPATIBILITY NOR CERTIFICATIONS ARE GUARANTEE IF USING THEM WITH OTHER BRAND CONTROL UNITS OR OLD/OBSOLETE DATALOGIC AUTOMATION CONTROL UNITS

MANUAL

S300 safety photocell

S300 safety photocell, eng

DIMENSIONS



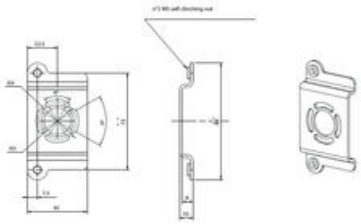
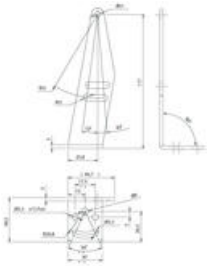
ORDER NUMBERS & ACCESSORIES

Order no.	Description	Range (m)
S300-PR-5-G00-EX-SG-ST2	Safety photocell S300, Transmitter, 10/30 VDC, Type 2	0 - 50
S300-PR-5-F01-OC-SG-ST2	Safety photocell S300, Receiver, 10/30 VDC, Type 2	0 - 50
S300-PR-5-G00-EX-M-SG-ST2	Safety photocell S300 defogging (heated lenses), Transmitter, 10/30 VDC, Type 2	0 - 50
S300-PR-5-F01-OC-M-SG-ST2	Safety photocell S300 defogging (heated lenses), Receiver, 10/30 VDC, Type 2	0 - 50
S300-PR-5-G00-EX-SG-ST4	Safety photocell S300, Transmitter, 10/30 VDC, Type 4	0 - 40
S300-PR-5-F01-OC-SG-ST4	Safety photocell S300, Receiver, 10/30 VDC, Type 4	0 - 40
S300-PR-5-G00-EX-M-SG-ST4	Safety photocell S300 defogging (heated lenses), Transmitter, 10/30 VDC, Type 4	0 - 40
S300-PR-5-F01-OC-M-SG-ST4	Safety photocell S300 defogging (heated lenses), Receiver, 10/30 VDC, Type 4	0 - 40

THE SAFETY PHOTOCELLS LISTED ABOVE ARE CERTIFIED AND MUST BE USED ONLY WITH SAFETY CONTROL UNITS SG-BWS-T4 AND SG-BWS-T4-MT SERIES. NEITHER TECHNICAL AND FUNCTIONING COMPATIBILITY NOR CERTIFICATIONS ARE GUARANTEE IF USING THEM WITH OTHER BRAND CONTROL UNITS OR OLD/OBSOLETE DATALOGIC AUTOMATION CONTROL UNITS

Accessories

S300 safety photocells do not include brackets, see below for bracket options

	
Mounting bracket ST-5099	Mounting bracket ST-5100

Order no.	Description
Brackets	
ST-5099	Mounting bracket, ROTATIVE, (4 pcs. / kit)
ST-5100	Mounting bracket, standard (4 pcs. / kit)
Cables	
CS-A1-02-U-05	Cable, M12, straight, 5 metres, female, 4-pole
CS-A1-02-U-15	Cable, M12, straight, 15 metres, female, 4-pole
CS-A1-02-U-25	Cable, M12, straight, 25 metres, female, 4-pole
Control units	
SG-BWS-T4	Control unit for 1-4 safety photo cell couple, 24 VDC, 2 PNP (safety output)
SG-BWS-T4-MT	Control unit with double muting, 24 VDC, 2 NO (safety relay output)