

## 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 °C...+55 °C



### 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.

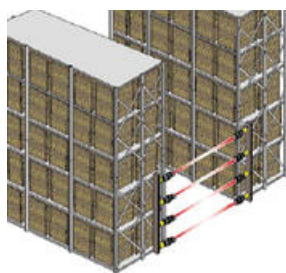
S300 safety photo cells are suitable for outdoor use with temperature range from -40 °C to +50 °C and IP67 housing.

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

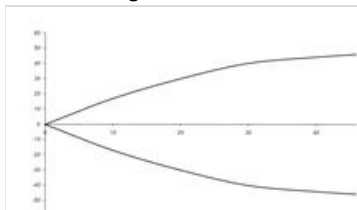


Door control

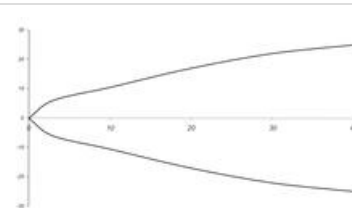


## TECHNICAL DATA

### Detection diagrams




S300-F/G- SG-ST2

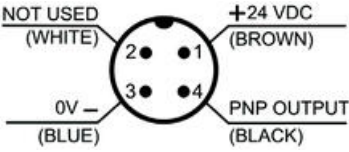
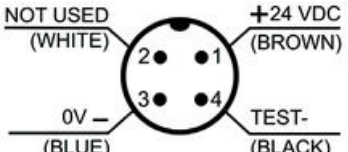


S300-F/G- SG-ST4

## 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
Diagnostic functions	Test input
Switching frequency	500 Hz
Type of light	IR LED 880 nm
EAA	S300 (Type 2): ± 5° / S300 (Type 4): ± 2,5°
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-reinforced, 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	

## CONNECTION

<b>Connection of S300 safety photocell</b>		
<b>Receiver (Rx, F)</b>		<b>Transmitter (Tx, G)</b>
		
<b>Receiver (Rx, F), 4-pole, M12-connector</b>		<b>Transmitter (Tx, G), 4-pole, M12-connector</b>
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
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**NOTE !**

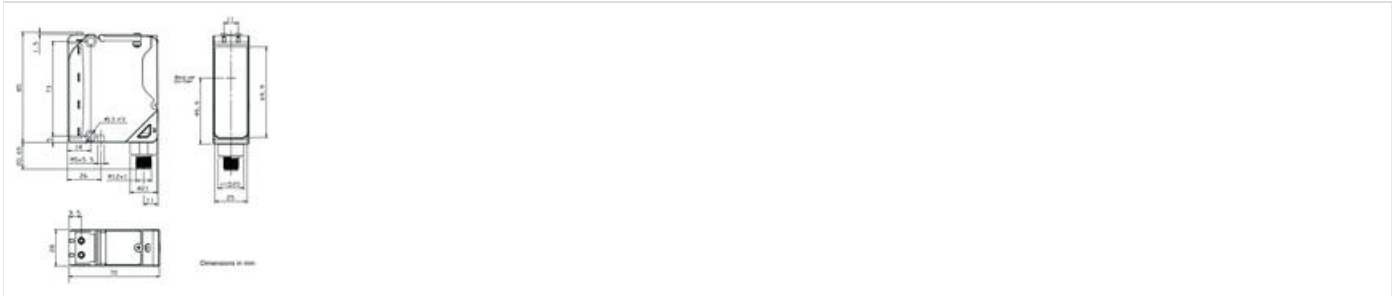
THE SAFETY PHOTOCELLS ARE CERTIFIED AND MUST BE USED ONLY WITH SAFETY CONTROL UNITS SG-BWS-T4 AND SG-BWS-T4-MT SERIES. NEITHER TECHNICAL AND FUNCTIONING COMPATIBILITY NOR CERTIFICATIONS ARE GUARANTEE IF USING THEM WITH OTHER BRAND CONTROL UNITS OR OLD/OBSOLETE DATALOGIC AUTOMATION CONTROL UNITS

**MANUAL**

**S300 safety photocell**

S300 safety photocell, eng

**DIMENSIONS**



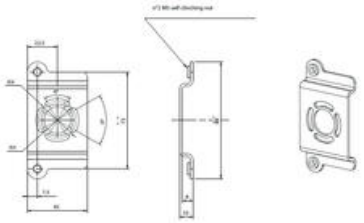
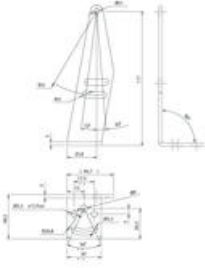
**ORDER NUMBERS & ACCESSORIES**

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

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**Accessories**

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

	
Mounting bracket ST-5099	Mounting bracket ST-5100

Order no.	Description
<b>Brackets</b>	
ST-5099	Mounting bracket, ROTATIVE, (4 pcs. / kit)
ST-5100	Mounting bracket, standard (4 pcs. / kit)
<b>Cables</b>	
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
<b>Control units</b>	
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)