

## **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

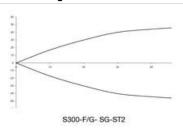


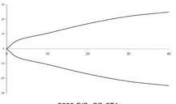
Door control



# **TECHNICAL DATA**

## **Detection diagrams**





S300-F/G- SG-ST4

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Technical Data		
Supply voltage	24 V DC, stabilised	
Tolerance	± 15 %	
Consumption	S300F (receiver): < 25 mA S300G (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): ± 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-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	(€€	

# **CONNECTION**

## Connection of S300 safety photocell

Receiver (Rx, F)	Transmitter (Tx, G)	
NOT USED  (WHITE)  2	NOT USED (WHITE)  2	

Receiver (Rx, F), 4-pole, M12-connector		Tran	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!

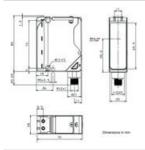
THE SAFETY PHOTOCELLS ARE CERTIFIED AND MUST BE USED ONLY WITH SAFETY CONTROL UNITS SG-BWS-T4 AND SG-BWS-T4-MT SERIES. NEITHER TECHNICAL AND FUNCTIONING COMPATIBILITY NOR CERTIFICATIONS ARE GUARANTEE IF USING THEM WITH OTHER BRAND CONTROL UNITS OR OLD/OBSOLETE DATALOGIC AUTOMATION CONTROL UNITS

## **MANUAL**

S300 safety photocell

S300 safety photocell, eng

## **DIMENSIONS**



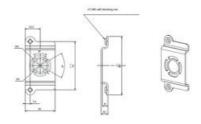
# **ORDER NUMBERS & ACCESSORIES**

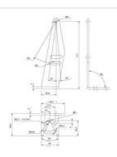
Order no.	Description	Range (m)
S300-PR-5-G00-EX-SG-ST2	Safety photocell S300, Transmitter, 10/30 VDC, Type 2	0 - 50
S300-PR-5-F01-OC-SG-ST2	Safety photocell S300, Receiver, 10/30 VDC, Type 2	0 - 50
S300-PR-5-G00-EX-M-SG-ST2	Safety photocell S300 defogging (heated lenses), Transmitter, 10/30 VDC, Type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

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### Accessories

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





Mounting bracket ST-5099 Mou
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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)