



WEBSITE

# S300-SG-ST

## HEAVY DUTY SAFETY SENSOR FOR HARSH ENVIRONMENTS AND LONG DISTANCES.



Photoelectric safety sensor to be used in combination with safety units SG-BWS

- Emitter-receiver photocells with test input
- Type 2 and Type 4 models

- Standard M12 connectors
- Infrared emission
- Distances reaching 40 m, 50 m
- Plastic rectangular format







## CODE DESCRIPTION

**S300 - P R - 5 - G 0 0 - EX - M - SG - ST2**

series	<b>S300</b>	Photoelectric sensor
housing	<b>P</b>	Plastic housing
emission	<b>R</b>	Radial LED emission
connector	<b>5</b>	M12-4 pins round connector
optic function	<b>F</b>	Through Beam Receiver
	<b>G</b>	Through Beam Emitter
distance	<b>0</b>	Standard distance
adjustments	<b>0</b>	no adjustment
I/O type	<b>EX</b>	Emitter w/ TEST input (only DC)
	<b>OC</b>	Opto Coupled Output
defogging function	<b>...</b>	Absent
	<b>M</b>	Defogging
safety	<b>SG</b>	Safety sensor when connected with SG-BWS units
type	<b>ST2</b>	Type 2
	<b>ST4</b>	Type 4

## TECHNICAL SPECIFICATIONS

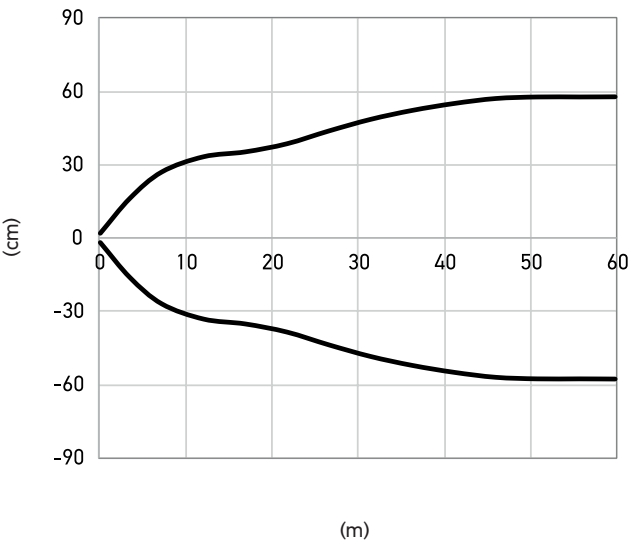
	S300-PR-5-F/G00-**-*-SG-ST2		S300-PR-5-F/G00-**-*-SG-ST4	
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GENERAL DATA				
Operating principle	Emitter, Receiver			
	°C			
Control units to be used	SG-BWS-T4 Series			
MONITORED AREA				
Nominal sensing distance	0 ... 50 m		0 ... 40 m	
Controlled height				
EMISSION DATA				
Emission	LED Infrared			
Effective beam angle	≤ ±5 °		≤ ±2.5 °	
SAFETY PARAMETERS				
Type	2		4	
INPUT/OUTPUT				
Output type	PNP			
HMI/UI				
LED indicators	Green (Power ON)			
ELECTRICAL DATA				
Supply voltage	24 Vdc ±15%			
MECHANICAL DATA				
Dimensions	105.6 x 25 x 70 mm			
Material	Plastic - PBT / PC			
Housing material	PBT Fiber Glass reinforced			
Active part material	PMMA			
Connections	M12 M12 plug			
CERTIFICATIONS				
Shocks	16 ms (10 G) 1,000 shocks per axis (EN 60068-2-29)			
Vibrations	Width 0.35 mm, frequency 10 ... 55Hz; 20 sweep per axis, 1 octave/min (EN 60068-2-6)			
ENVIRONMENTAL DATA				
Operating Temperature	-40 ... 55 °C (Without freeze)			
Storage temperature max.	-40 ... 70 °C			
Mechanical Protection	IP67			
Shocks and vibrations	IEC60068-2-6			
Ambient light immunity	according to EN 60947-5-2 : 2020			

AVAILABLE MODELS

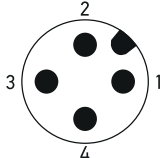
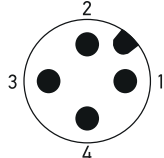
Type	Functions	Nominal sensing distance	Model
2	Emitter	LED Infrared Emitter 0 ... 50 m	<b>S300-PR-5-G00-EX-SG-ST2</b> (951451320)
4		LED Infrared Emitter 0 ... 40 m	<b>S300-PR-5-G00-EX-SG-ST4</b> (951451360)
2	Emitter with defogging	LED Infrared Emitter 0 ... 50 m	<b>S300-PR-5-G00-EX-M-SG-ST2</b> (951451330)
4		LED Infrared Emitter 0 ... 40 m	<b>S300-PR-5-G00-EX-M-SG-ST4</b> (951451370)
2	Receiver	n/a Receiver 0 ... 50 m	<b>S300-PR-5-F00-OC-SG-ST2</b> (951451340)
4		n/a Receiver 0 ... 40 m	<b>S300-PR-5-F00-OC-SG-ST4</b> (951451380)
2	Receiver with defogging	n/a Receiver 0 ... 50 m	<b>S300-PR-5-F00-OC-M-SG-ST2</b> (951451350)
4		n/a Receiver 0 ... 40 m	<b>S300-PR-5-F00-OC-M-SG-ST4</b> (951451390)

RESPONSE DIAGRAMS

S300-PR-\* -F\*\*-\*\*; S300-PR-\* -G\*\*-\*\* Through beam



CONNECTIONS

S300-PR-5-G00-EX-**-ST* (Emitter)				S300-PR-5-F00-OC-**-ST* (Receiver)			
 MALE M12 4 pins Safety Single Beam Emitter	1	Brown	24 Vdc	 MALE M12 4 pins Safety Single Beam Receiver	1	Brown	24 Vdc
	2	White	NOT USED		2	White	NOT USED
	3	Blue	0 V		3	Blue	0 V
	4	Black	Test		4	Black	PNP 100 mA

## ACCESSORIES TO BE ORDERED SEPARATELY

	Model	Description	Article code
Cables	CS-A1-02-U-03	Cable M12 4 poles axial female unshielded 3m UL 2464	95ASE1120
	CS-A1-02-U-05	Cable M12 4 poles axial female unshielded 5m UL 2464	95ASE1130
	CS-A1-02-U-10	Cable M12 4 poles axial female unshielded 10m UL 2464	95ASE1140
	CS-A1-02-U-15	Cable M12 4 poles axial female unshielded 15m UL 2464	95ASE1150
	CS-A1-02-U-25	Cable M12 4 poles axial female unshielded 25m UL 2464	95ASE1160
Mounting brackets	ST-5099	ST-5099 = Fixing bracket S300	95ACC2830
	ST-5100	ST-5100 = Fixing bracket S300	95ACC2840

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