

S300 PR




HEAVY DUTY SENSOR FOR OUTDOOR APPLICATIONS AND HARSH ENVIRONMENTS

- Industrial plastic housing with IP67 mechanical protection
- Defogging system function
- Double independent timing functions with double time scale from 0-2s or 0-10s, One-Delay, Off Delay, ONE SHOT



APPLICATIONS

- Packaging end of line, palletizers
- Outdoor or indoor gates control
- Automotive plants
- Automated warehousing

(*)DC models:
ATEX II 3DG

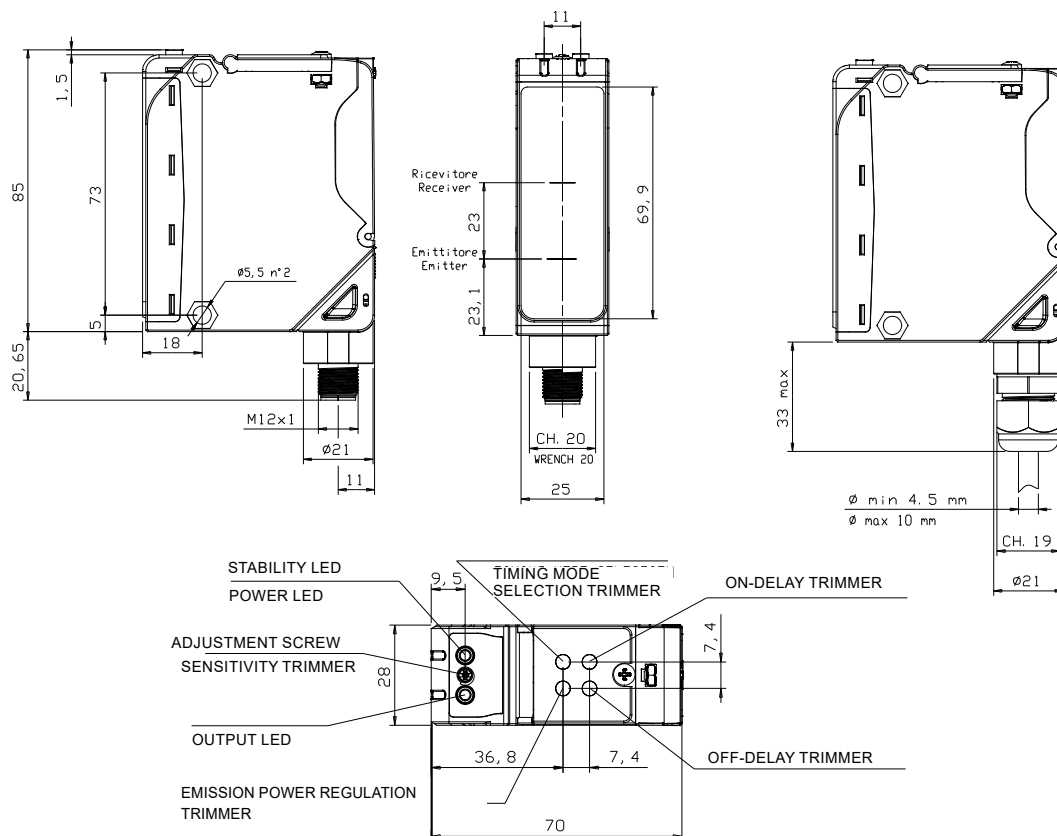
S300 PA

Through beam		0...60 m
Polarized retroreflective		0,1...22 m
Diffuse proximity		0,05...5 m
Background suppression		0,4...2,5 m
Power supply	Vdc	10...30 V
	Vac	
	Vac/dc	24...240 Vac/24...60 Vdc
Output	PNP	
	NPN	
	NPN/PNP	•
	relay	•
	other	
Connection	cable	
	connector	•
	pig-tail	
Approximate dimensions (mm)		25x100x70
Housing material		PBT
Mechanical protection		IP67

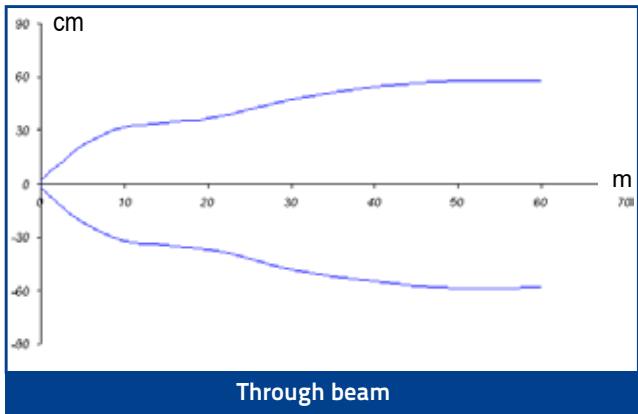
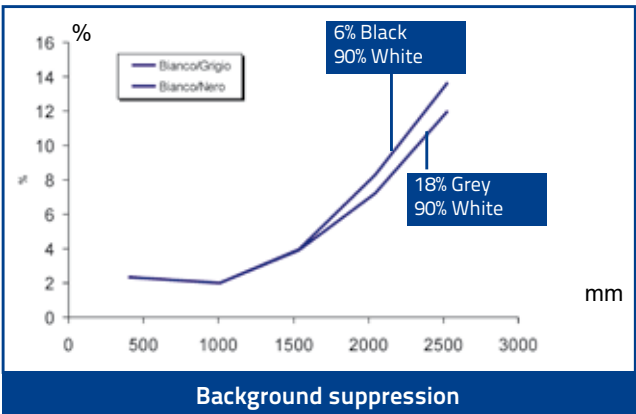
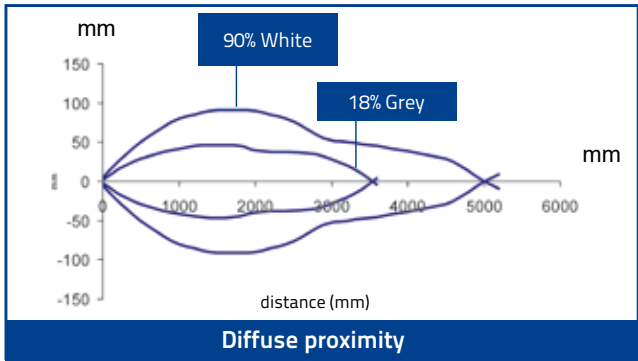
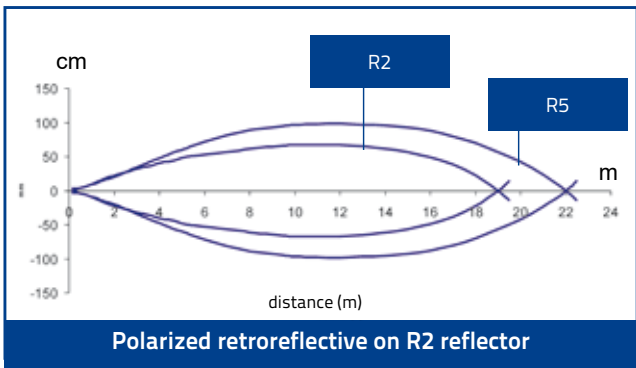
TECHNICAL DATA

Power supply	10 ... 30 Vdc (mod. S300...2/5) 24...240 Vac/24...60 Vdc (mod. S300...1)
Ripple	10% max. 30 mA max. (mod. S300...2/5-B/C) 35 mA max. (mod. S300...2/5-M) 25 mA max. (mod. S300...2/5-F) 20 mA max. (mod. S300...2/5-G) 3 VA max. (mod. S300...1) red LED 660 nm (mod. S300...B) IR LED 880 nm (mod. S300...C/G/M)
Consumption (output current excluded)	sensitivity trimmer, DARK/LIGHT trimmer (mod. S300...F/C/B) 15 turns adjustment screw/DARK/LIGHT trimmer (mod. S300...M) emission power regulation trimmer (mod. S300...G)
Light emission	versions with timing functions: time base selection and one shot trimmer/ON DELAY trimmer/OFF DELAY trimmer (mod. S300...x06)
Setting	yellow OUTPUT LED (excl. mod. S300...G) green STABILITY LED, POWER LED (mod. S300...G)
Indicators	PNP or NPN open collector (mod. S300...2/5); Electromechanical SPDT 250 Vac/30 Vdc (mod. S300...1)
Output	100 mA (mod. S300...2/5) 3 A max. (mod. S300...1)
Output current	2,4 V max.
Saturation voltage	1 ms (mod. S300...2/5-B/C/F/G) 2 ms (mod. S300...2/5-M) 20 ms (mod. S300...1)
Response time	500 Hz (mod. S300...2/5-B/C/F/G) 250 Hz (mod. S300...2/5-M) 25 Hz (mod. S300...1)
Switching frequency	terminal block, M12 4-pole connector (only DC mod.)
Connection	500 Vac, 1 min between electronics and housing
Dielectric strength	>20 MΩ, 500 Vdc between electronics and housing
Insulating resistance	class 2 (mod. S300...2/5)
Electrical protection	IP67 (IEC/EN60529)/cable gland EN50262
Mechanical protection	according to EN 60947-5-2
Ambient light rejection	0,5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)
Vibrations	11 ms (30 G) 6 shock for every axis (EN60068-2-27)
Shock resistance	PBT 30% glass fiber-reinforced
Housing material	frontal window and lens in PC
Lens material	-40 ... 55 °C
Operating temperature	-40 ... 70 °C
Storage temperature	
Weight	140 g (mod. S300...2/5), 150 g (mod. S300...1)

DIMENSIONS



DETECTION DIAGRAMS



MODEL SELECTION AND ORDER INFORMATION

OPTIC FUNCTION	OUTPUT	CONNECTION	SETTING	MODEL	ORDER NO.
Polarized retroreflective	NPN/PNP	Vdc - Terminal block	Sensitivity and D/L trimmers	S300-PR-2-B01-OC	951451000
			Timing, sensitivity and D/L trimmers	S300-PR-2-B06-OC	951451010
		Vdc - M12 Connector	Sensitivity and D/L trimmers	S300-PR-5-B01-OC	951451020
			Timing, sensitivity and D/L trimmers	S300-PR-5-B06-OC	951451030
	Relay	Vac - Terminal block	Sensitivity and D/L trimmers	S300-PR-1-B01-RX	951451040
			Timing, sensitivity and D/L trimmers	S300-PR-1-B06-RX	951451050
Diffused proximity	NPN/PNP	Vdc - Terminal block	Timing, sensitivity and D/L trimmers; defogging function	S300-PR-1-B06-RX-M	951451060
			Sensitivity and D/L trimmers	S300-PR-2-C01-OC	951451070
		Vdc - M12 Connector	Timing, sensitivity and D/L trimmers	S300-PR-2-C06-OC	951451080
			Sensitivity and D/L trimmers	S300-PR-5-C01-OC	951451090
	Relay	Vac - Terminal block	Timing, sensitivity and D/L trimmers	S300-PR-5-C06-OC	951451100
			Sensitivity and D/L trimmers	S300-PR-1-C01-RX	951451110
Through beam receiver	NPN/PNP	Vdc - Terminal block	Timing, sensitivity and D/L trimmers	S300-PR-1-C06-RX	951451120
			Timing, sensitivity and D/L trimmers; defogging function	S300-PR-1-C06-RX-M	951451130
		Vdc - M12 Connector	Sensitivity and D/L trimmers	S300-PR-2-F01-OC	951451210
			Timing, sensitivity and D/L trimmers	S300-PR-2-F06-OC	951451220
	Relay	Vac - Terminal block	Sensitivity and D/L trimmers	S300-PR-5-F01-OC	951451230
			Timing, sensitivity and D/L trimmers	S300-PR-5-F06-OC	951451240
Through beam emitter	-	Vdc - Terminal block	Sensitivity and D/L trimmers	S300-PR-1-F01-RX	951451250
			Timing, sensitivity and D/L trimmers	S300-PR-1-F06-RX	951451260
		Vdc - M12 Connector	Timing, sensitivity and D/L trimmers; defogging function	S300-PR-1-F06-RX-M	951451270
			Sensitivity and D/L trimmers	S300-PR-2-G00-EX	951451280
	-	Vac - Terminal block	Emission power regulation trimmer	S300-PR-5-G00-EX	951451290
			Emission power regulation trimmer	S300-PR-1-G00-EX	951451300
Background suppression	NPN/PNP	Vdc - Terminal block	Defogging function	S300-PR-1-G00-EX-M	951451310
			Sensitivity and D/L trimmers	S300-PR-2-M01-OC	951451140
		Vdc - M12 Connector	Timing, sensitivity and D/L trimmers	S300-PR-2-M06-OC	951451150
			Sensitivity and D/L trimmers	S300-PR-5-M01-OC	951451160
	Relay	Vac - Terminal block	Timing, sensitivity and D/L trimmers	S300-PR-5-M06-OC	951451170
			Sensitivity and D/L trimmers	S300-PR-1-M01-RX	951451180
			Timing, sensitivity and D/L trimmers	S300-PR-1-M06-RX	951451190
			Timing, sensitivity and D/L trimmers; defogging function	S300-PR-1-M06-RX-M	951451200