



S300 PR

Heavy duty sensor for outdoor applications and harsh environments

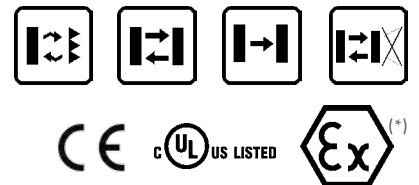
- Industrial plastic housing with IP67 mechanical protection
- Defogging system function
- Double independent timing functions with double time scale from 0-2s or 0-10s, One-Delay, Off Delay, ONE SHOT



SENSORS

APPLICATIONS

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

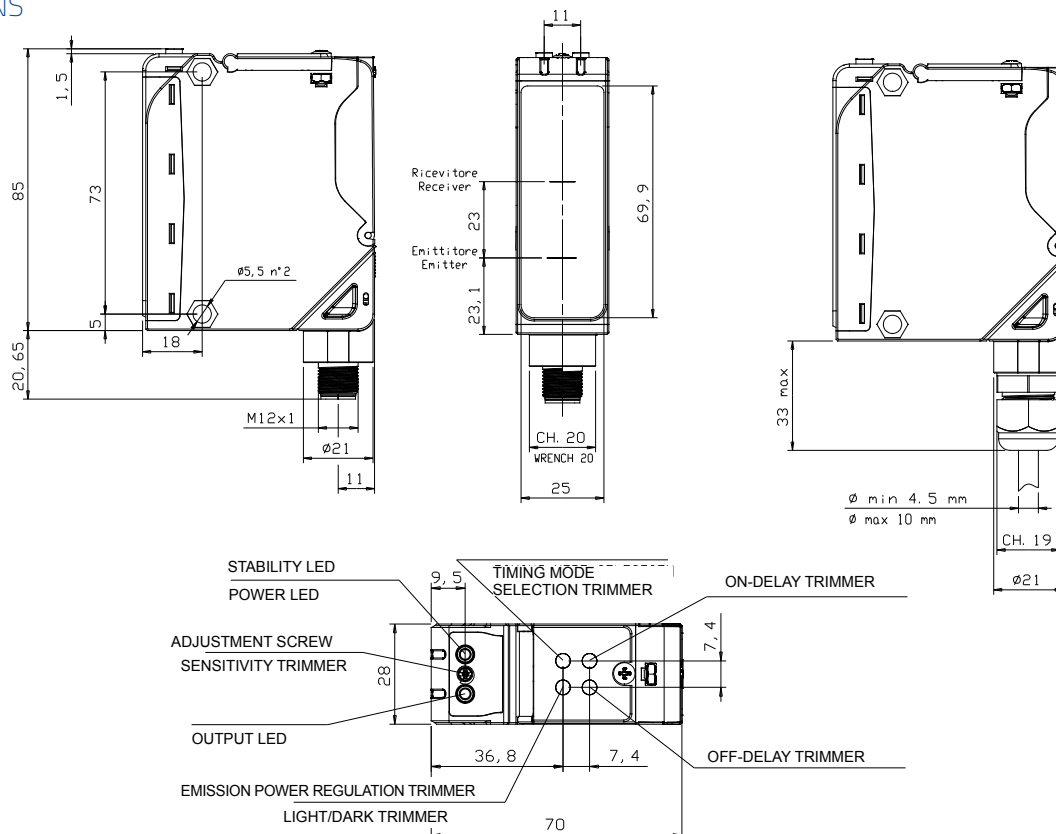


(*)DC models:
ATEX II 3DG

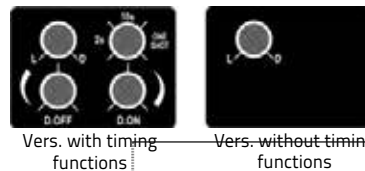
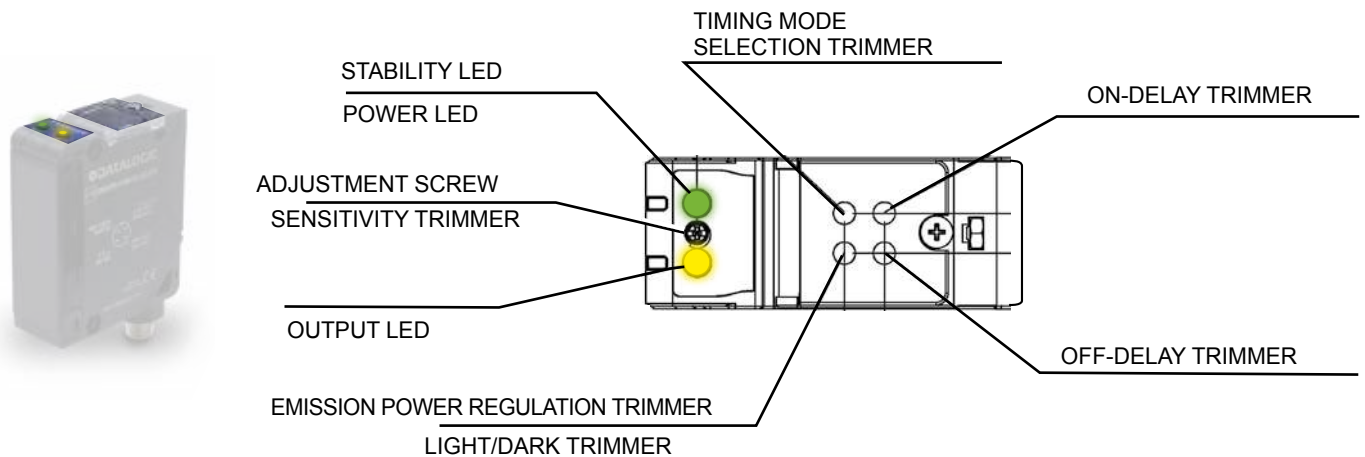
S300 PA		
Through beam		0...60 m
Polarized retroreflective		0,1...22 m
Diffuse proximity		0,05...5 m
Background suppression		0,4...2,5 m
Power supply	Vdc	10...30 V
	Vac	
	Vac/dc	24...240 Vac / 24...60 Vdc
Output	PNP	
	NPN	
	NPN / PNP	▪
	relay	▪
	other	
Connection	cable	
	connector	▪
	pig-tail	
Approximate 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) versions with timing functions: time base selection and one shot trimmer/ON DELAY trimmer/OFF DELAY trimmer (mod. S300...x06)
Light emission	yellow OUTPUT LED (excl. mod. S300...G) green STABILITY LED, POWER LED (mod. S300...G)
Setting	PNP or NPN open collector (mod. S300...2/5); Electromechanical SPDT 250 Vac/30 Vdc (mod. S300...1)
Indicators	100 mA (mod. S300...2/5) 3 A max. (mod. S300...1)
Output	2,4 V max.
Output current	1 ms (mod. S300...2/5-B/C/F/G) 2 ms (mod. S300...2/5-M) 20 ms (mod. S300...1)
Saturation voltage	500 Hz (mod. S300...2/5-/B/C/F/G) 250 Hz (mod. S300...2/5-M) 25 Hz (mod. S300...1)
Response time	terminal block, M12 4-pole connector (only DC mod.)
Switching frequency	500 Vac, 1 min between electronics and housing >20 MΩ, 500 Vdc between electronics and housing class 2 (mod. S300...2/5) IP67 (IEC/EN60529)/cable gland EN50262 according to EN 60947-5-2
Connection	0,5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)
Dielectric strength	11 ms (30 G) 6 shock for every axis (EN60068-2-27)
Insulating resistance	PBT 30% glass fiber-reinforced frontal window and lens in PC
Electrical protection	-40 ... 55 °C
Mechanical protection	-40 ... 70 °C
Ambient light rejection	
Vibrations	
Shock resistance	
Housing material	
Lens material	
Operating temperature	
Storage temperature	
Weight	140 g (mod. S300...2/5), 150 g (mod. S300...1)

DIMENSIONS

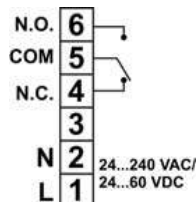


INDICATORS AND SETTINGS

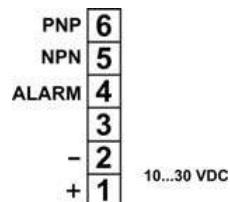


CONNECTIONS

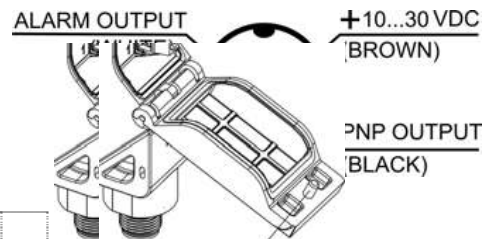
AC MODELS



DC MODELS

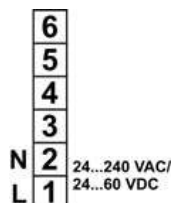


M12 CONNECTOR (only DC models)

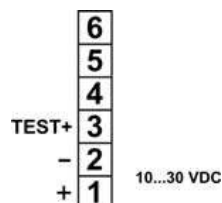


Through beam emitter

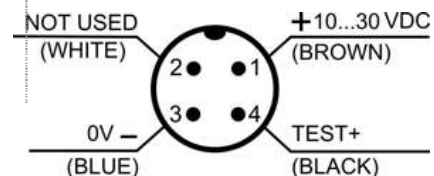
AC MODELS



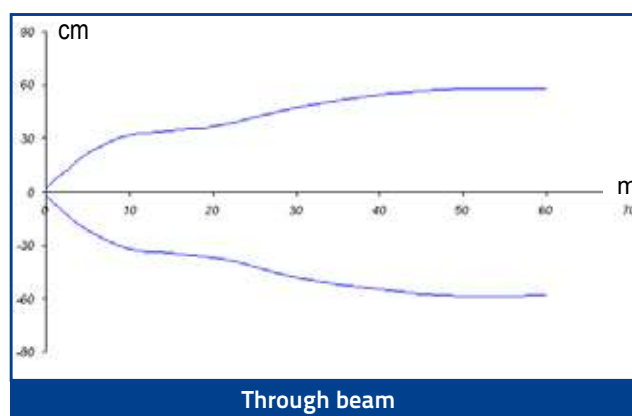
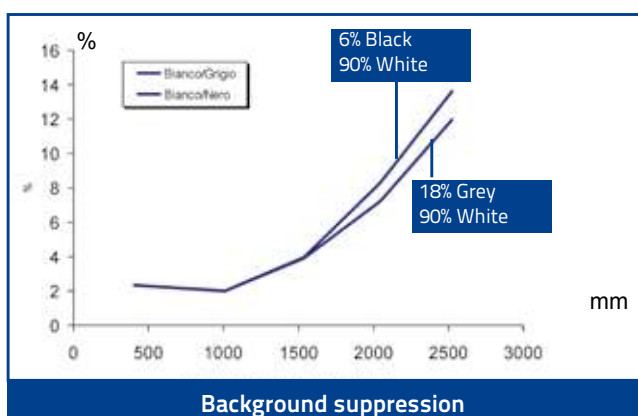
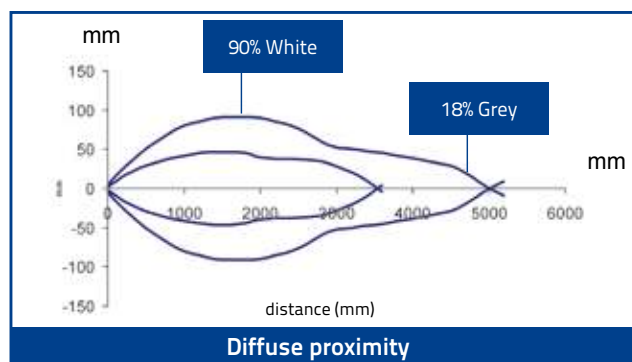
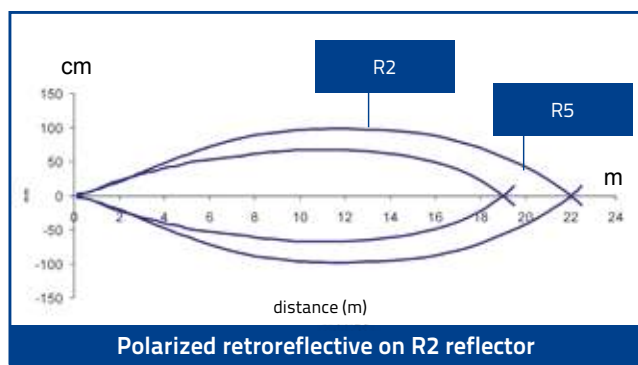
DC MODELS



M12 CONNECTOR (only DC models)



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
			Timing, sensitivity and D/L trimmers; defogging function	S300-PR-1-B06-RX-M	951451060
Diffused proximity	NPN/PNP	Vdc - Terminal block	Sensitivity and D/L trimmers	S300-PR-2-C01-OC	951451070
			Timing, sensitivity and D/L trimmers	S300-PR-2-C06-OC	951451080
		Vdc - M12 Connector	Sensitivity and D/L trimmers	S300-PR-5-C01-OC	951451090
			Timing, sensitivity and D/L trimmers	S300-PR-5-C06-OC	951451100
	Relay	Vac - Terminal block	Sensitivity and D/L trimmers	S300-PR-1-C01-RX	951451110
			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
Through beam receiver	NPN/PNP	Vdc - Terminal block	Sensitivity and D/L trimmers	S300-PR-2-F01-OC	951451210
			Timing, sensitivity and D/L trimmers	S300-PR-2-F06-OC	951451220
		Vdc - M12 Connector	Sensitivity and D/L trimmers	S300-PR-5-F01-OC	951451230
			Timing, sensitivity and D/L trimmers	S300-PR-5-F06-OC	951451240
	Relay	Vac - 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
			Timing, sensitivity and D/L trimmers; defogging function	S300-PR-1-F06-RX-M	951451270
Through beam emitter	-	Vdc - Terminal block	Emission power regulation trimmer	S300-PR-2-G00-EX	951451280
		Vdc - M12 Connector		S300-PR-5-G00-EX	951451290
		Vac - Terminal block		S300-PR-1-G00-EX	951451300
				Defogging function	S300-PR-1-G00-EX-M
Background suppression	NPN/PNP	Vdc - Terminal block	Sensitivity and D/L trimmers	S300-PR-2-M01-OC	951451140
			Timing, sensitivity and D/L trimmers	S300-PR-2-M06-OC	951451150
		Vdc - M12 Connector	Sensitivity and D/L trimmers	S300-PR-5-M01-OC	951451160
			Timing, sensitivity and D/L trimmers	S300-PR-5-M06-OC	951451170
	Relay	Vac - Terminal block	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

