



S300 PR

Heavy duty sensor for outdoor applications and harsh environments

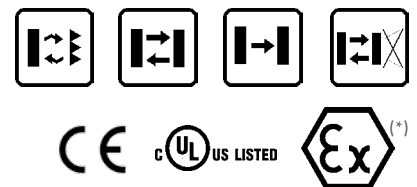
- Industrial plastic housing with IP67 mechanical protection
- Defogging system function
- Double independent timing functions with double time scale from 0-2s or 0-10s, One-Delay, Off Delay, ONE SHOT



SENSORS

APPLICATIONS

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

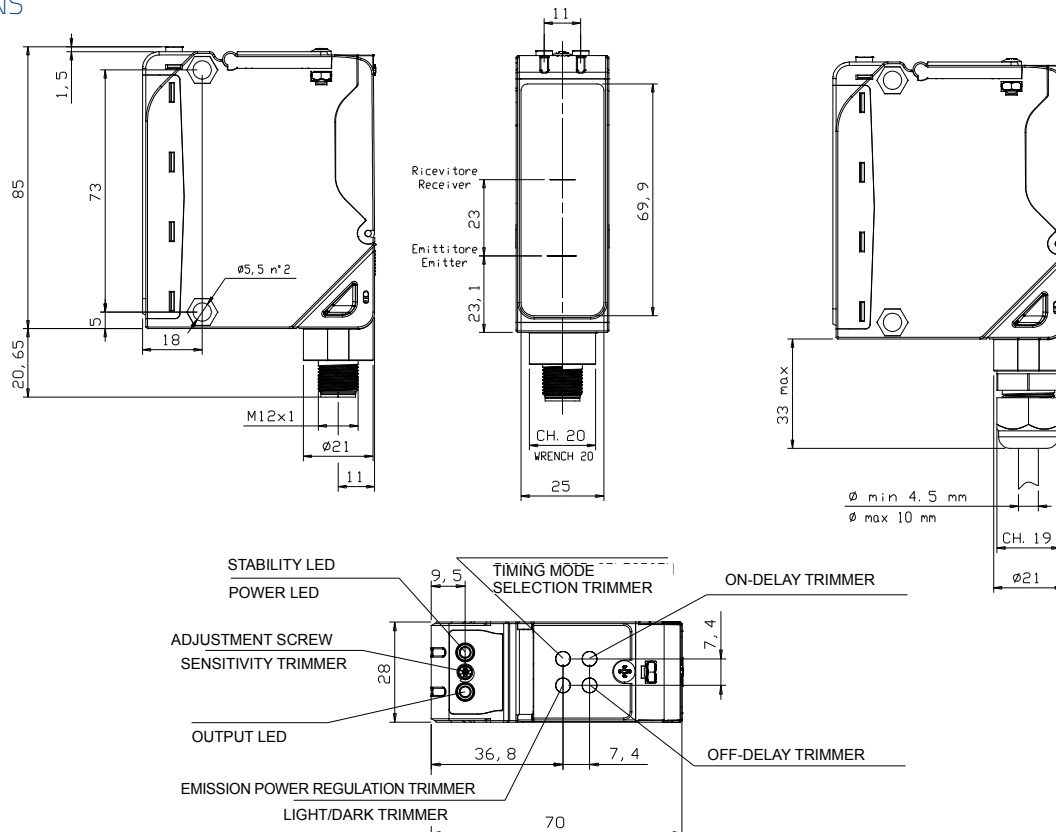


(*)DC models:
ATEX II 3DG

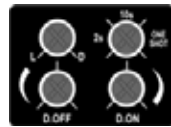
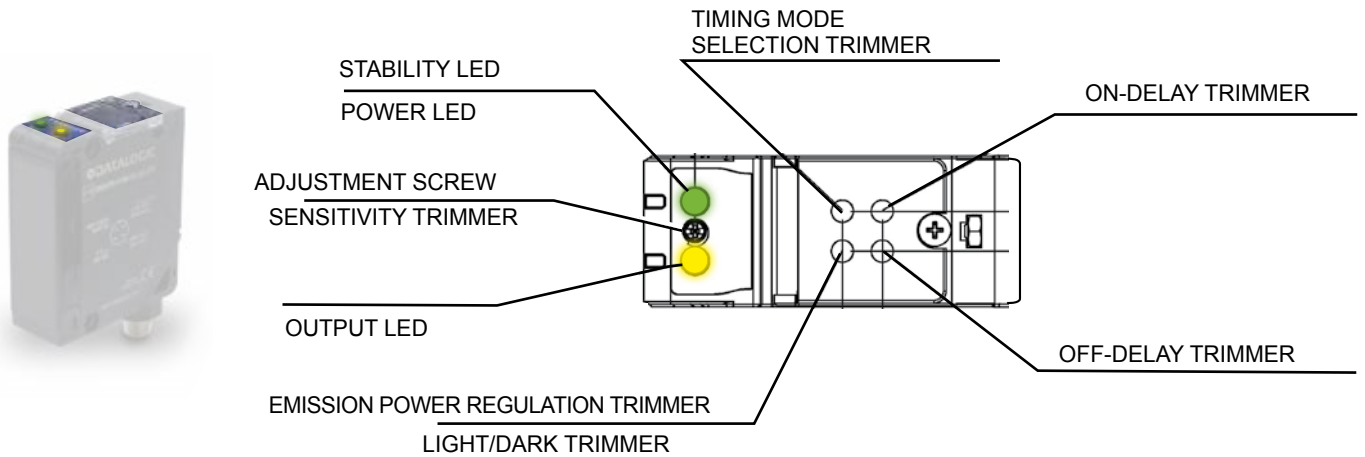
S300 PA		
Through beam		0...60 m
Polarized retroreflective		0,1...22 m
Diffuse proximity		0,05...5 m
Background suppression		0,4...2,5 m
Power supply	Vdc	10...30 V
	Vac	
	Vac/dc	24...240 Vac / 24...60 Vdc
Output	PNP	
	NPN	
	NPN/PNP	▪
	relay	▪
	other	
Connection	cable	
	connector	▪
	pig-tail	
Approximate 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)
Consumption (output current excluded)	red LED 660 nm (mod. S300..B) IR LED 880 nm (mod. S300...C/G/M)
Light emission	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)
Setting	versions with timing functions: time base selection and one shot trimmer/ON DELAY trimmer/OFF DELAY trimmer (mod. S300...x06) 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	140 g (mod. S300...2/5), 150 g (mod. S300...1)
Weight	

DIMENSIONS



INDICATORS AND SETTINGS



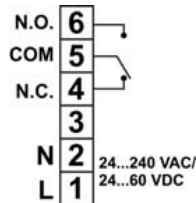
Vers. with timing functions



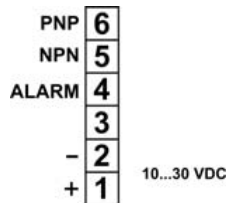
Vers. without timing functions

CONNECTIONS

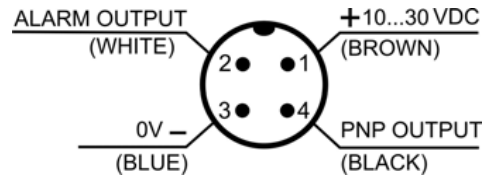
AC MODELS



DC MODELS

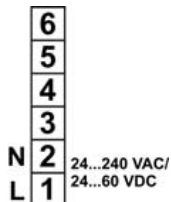


M12 CONNECTOR (only DC models)

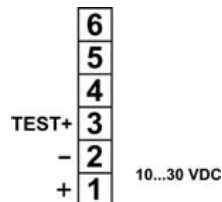


Through beam emitter

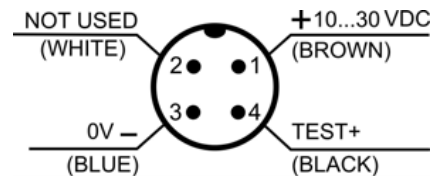
AC MODELS



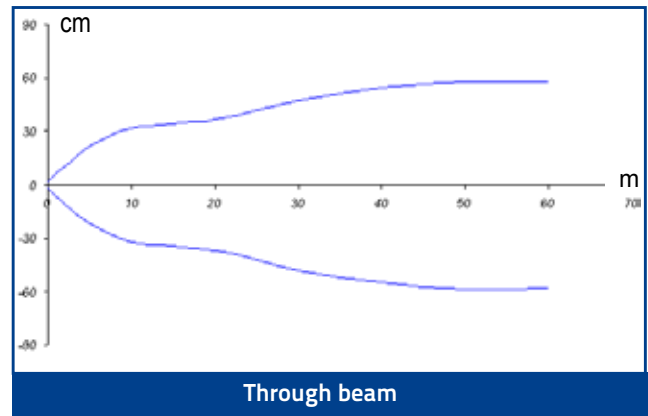
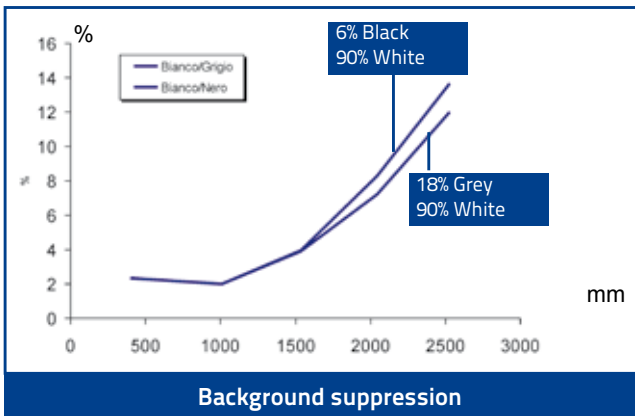
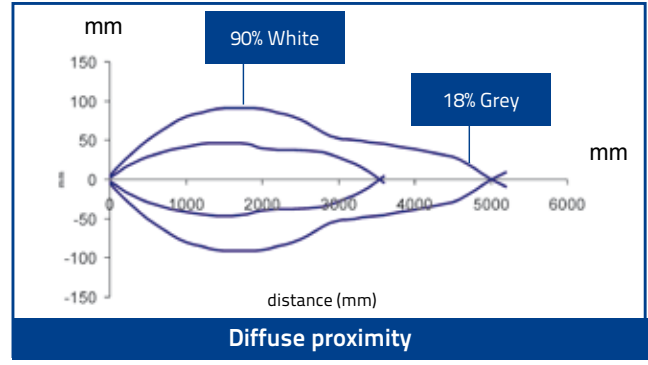
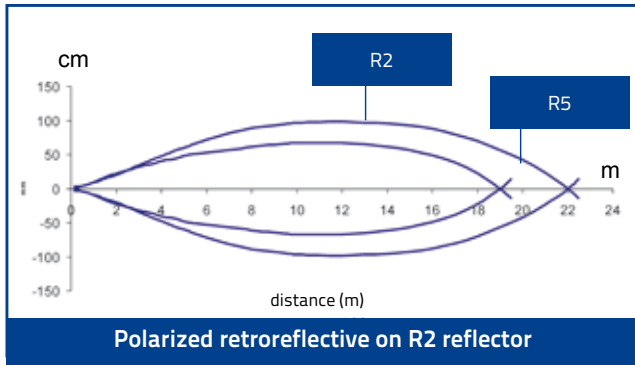
DC MODELS



M12 CONNECTOR (only DC models)



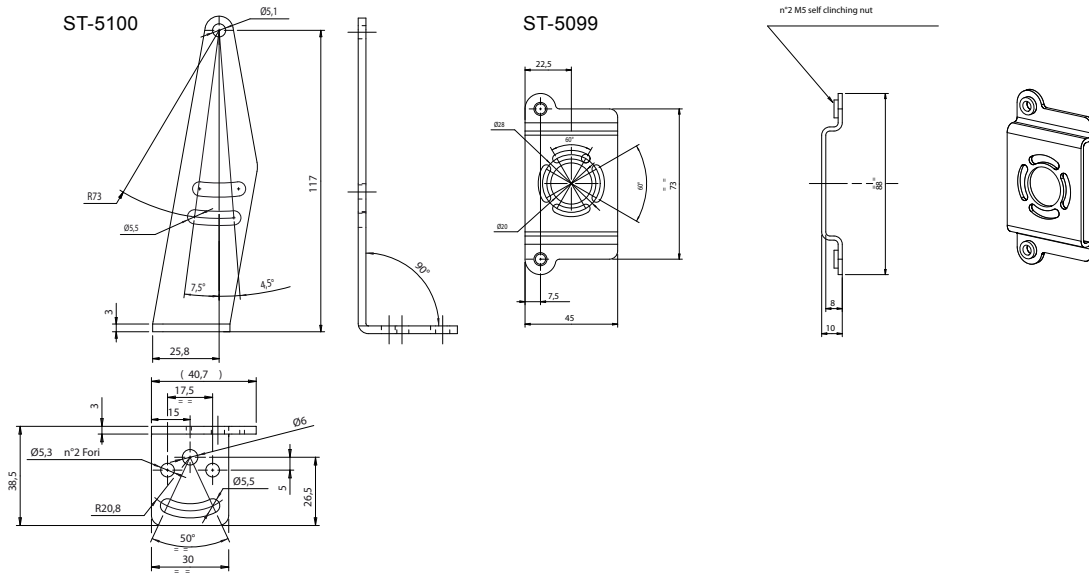
DETECTION DIAGRAMS



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		
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	
	NPN/PNP	Vdc - Terminal block	Timing, sensitivity and D/L trimmers; defogging function	S300-PR-1-C06-RX-M	951451130		
			Sensitivity and D/L trimmers	S300-PR-2-F01-OC	951451210		
			Timing, sensitivity and D/L trimmers	S300-PR-2-F06-OC	951451220		
			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
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		

ACCESSORIES



MODEL	DESCRIPTION	ORDER No.
ST-5099	mounting BRACKET	95ACC2830
ST-5100	mounting BRACKET	95ACC2840

CABLES

TYPE	DESCRIPTION	LENGTH	MODEL	ORDER No.		
Axial M12 Connector	4-pole, grey, P.V.C.	3 m	CS-A1-02-G-03	95A251380		
		5 m	CS-A1-02-G-05	95A251270		
		7 m	CS-A1-02-G-07	95A251280		
		10 m	CS-A1-02-G-10	95A251390		
Radial M12 Connector	4-pole, P.U.R.	2 m	CS-A1-02-R-02	95A251540		
		5 m	CS-A1-02-R-05	95A251560		
		Radial M12 Connector	4-pole, grey, P.V.C.	3 m	CS-A2-02-G-03	95A251360
				5 m	CS-A2-02-G-05	95A251240
7 m	CS-A2-02-G-07			95A251245		
10 m	CS-A2-02-G-10			95A251260		
Axial M12 Connector	4-pole, shielded, black, P.V.C.	2 m	CS-A2-02-R-02	95A251550		
		5 m	CS-A2-02-R-05	95A251570		
		Radial M12 Connector	4-pole, U.L., black, P.V.C.	3 m	CV-A1-22-B-03	95ACC1480
				5 m	CV-A1-22-B-05	95ACC1490
10 m	CV-A1-22-B-10			95ACC1500		
15 m	CV-A1-22-B-15			95ACC2070		
Radial M12 Connector	4-pole, black	25 m	CV-A1-22-B-25	95ACC2090		
		3 m	CV-A2-22-B-03	95ACC1540		
		5 m	CV-A2-22-B-05	95ACC1550		
Axial M12 Connector	4-pole, U.L., black, P.V.C.	10 m	CV-A2-22-B-10	95ACC1560		
		3 m	CS-A1-02-U-03	95ASE1120		
		5 m	CS-A1-02-U-05	95ASE1130		
		10 m	CS-A1-02-U-10	95ASE1140		
Radial M12 Connector	4-pole, black	15 m	CS-A1-02-U-15	95ASE1150		
		25 m	CS-A1-02-U-25	95ASE1160		
		Connector- not cabled	CS-A1-02-B-NC	G5085002		
		Connector- not cabled	CS-A2-02-B-NC	G5085003		

