



S300 PR

Heavy duty sensor for outdoor applications and harsh environments

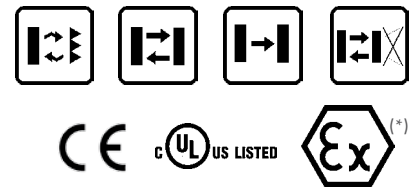
- Industrial plastic housing with IP67 mechanical protection
- Defogging system function
- Double independent timing functions with double time scale from 0-2s or 0-10s, One-Delay, Off Delay, ONE SHOT



SENSORS

APPLICATIONS

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

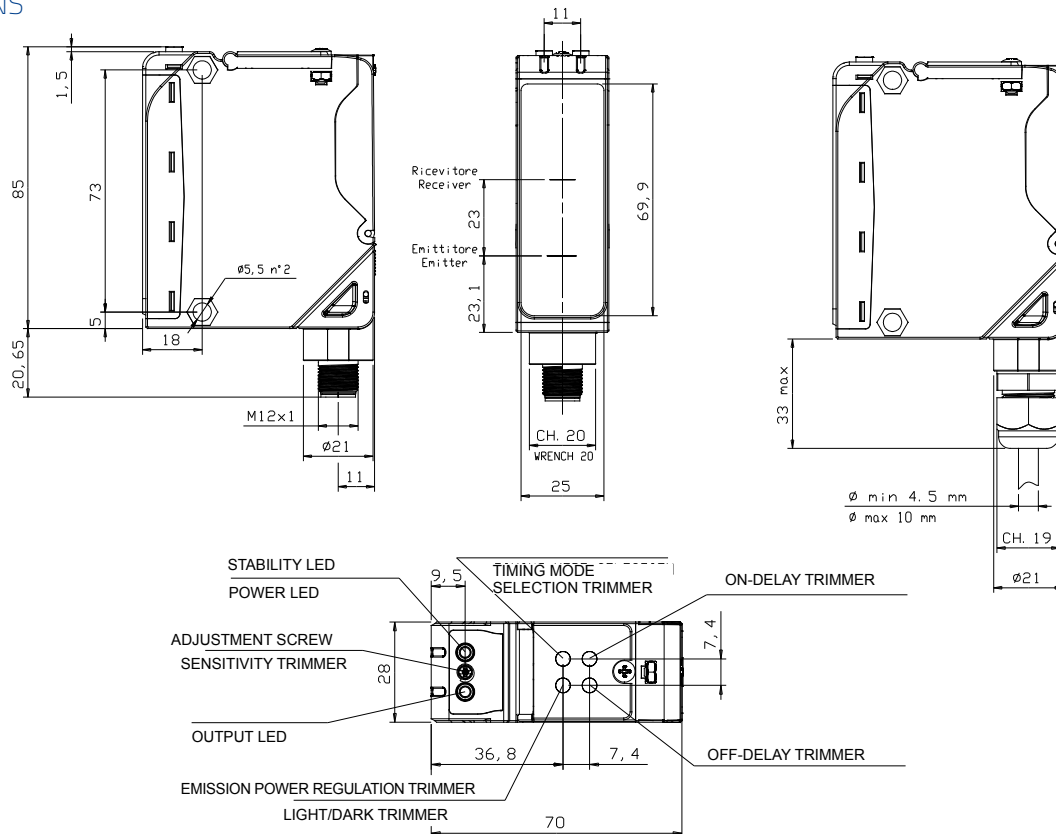


(*)DC models:
ATEX II 3DG

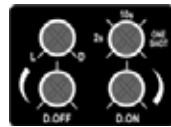
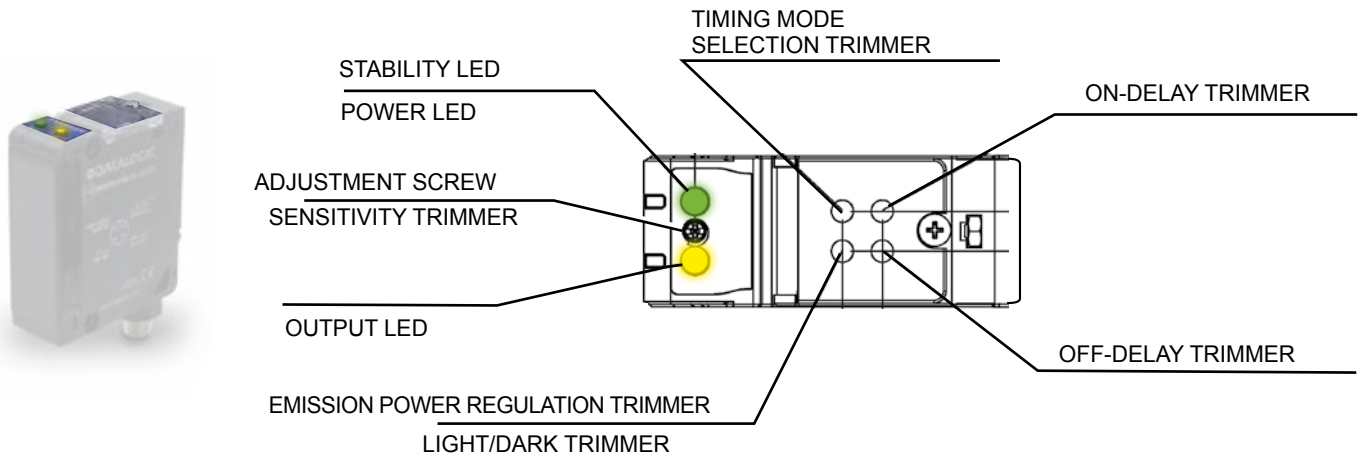
| S300 PA | | |
|-----------------------------|-----------|----------------------------|
| Through beam | | 0...60 m |
| Polarized retroreflective | | 0,1...22 m |
| Diffuse proximity | | 0,05...5 m |
| Background suppression | | 0,4...2,5 m |
| Power supply | Vdc | 10...30 V |
| | Vac | |
| | Vac/dc | 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



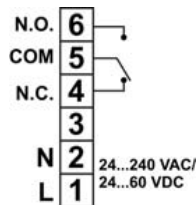
Vers. with timing functions



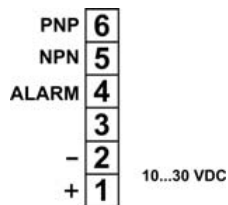
Vers. without timing functions

CONNECTIONS

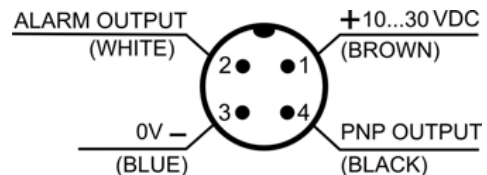
AC MODELS



DC MODELS

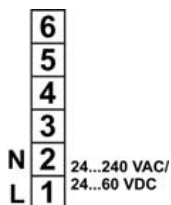


M12 CONNECTOR (only DC models)

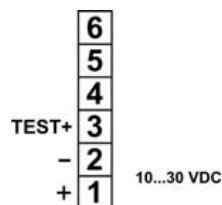


Through beam emitter

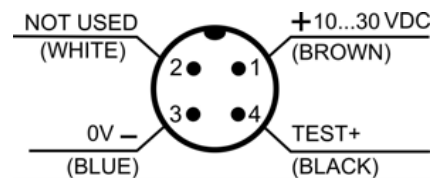
AC MODELS



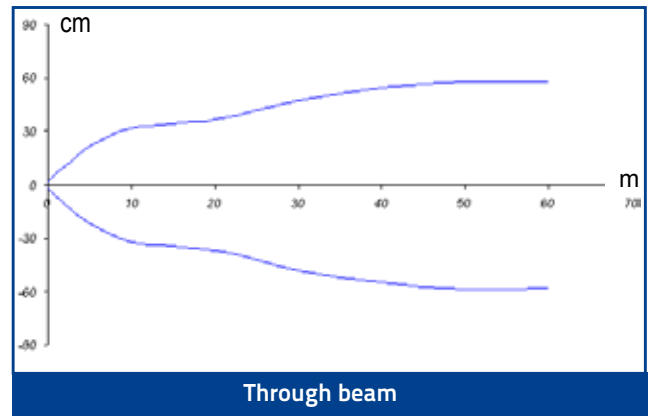
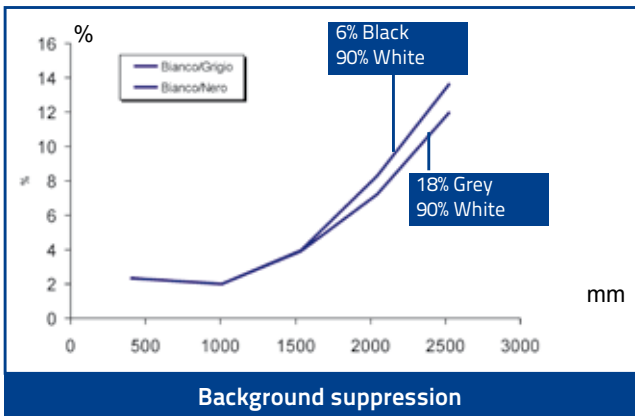
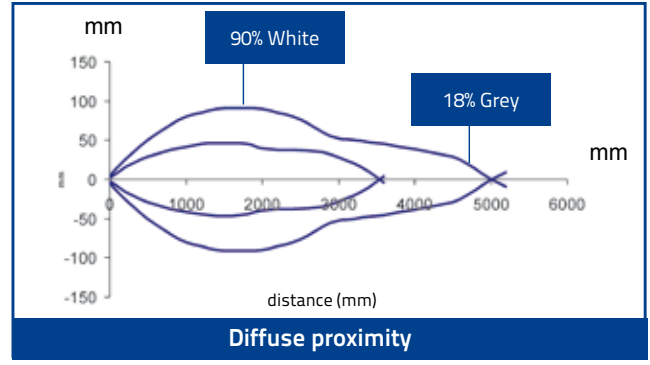
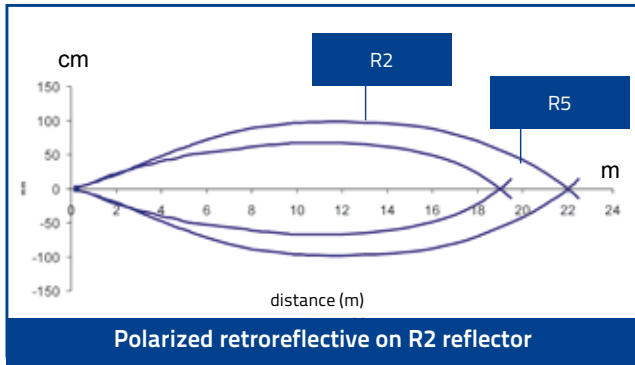
DC MODELS



M12 CONNECTOR (only DC models)



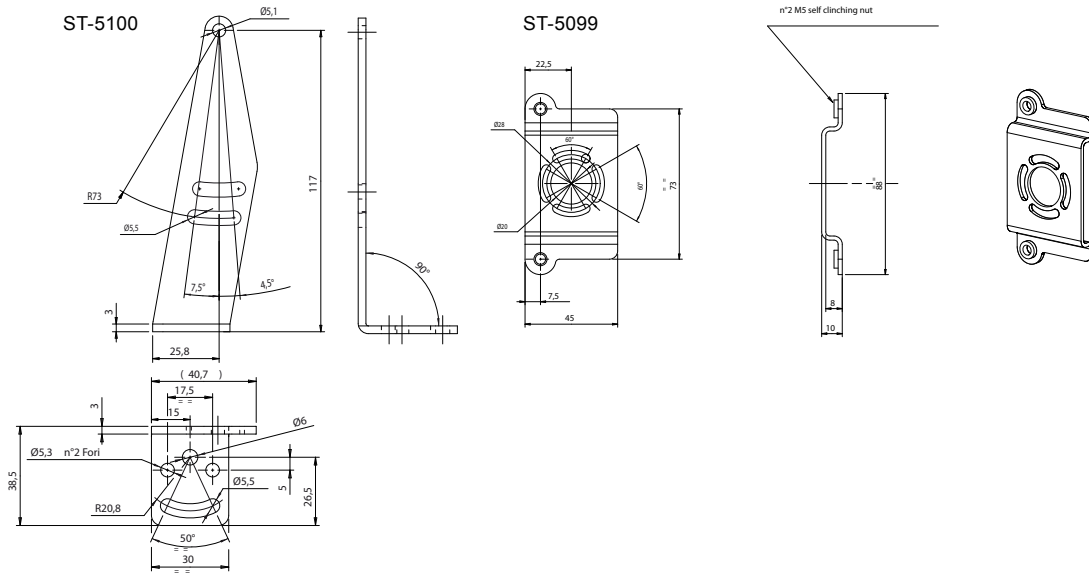
DETECTION DIAGRAMS



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 |
| | 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 | 951451310 | | |
| 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 | |

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 |
| | | 3 m | CS-A2-02-G-03 | 95A251360 |
| | | 5 m | CS-A2-02-G-05 | 95A251240 |
| Radial M12 Connector | 4-pole, grey, P.V.C. | 7 m | CS-A2-02-G-07 | 95A251245 |
| | | 10 m | CS-A2-02-G-10 | 95A251260 |
| | | 2 m | CS-A2-02-R-02 | 95A251550 |
| | | 5 m | CS-A2-02-R-05 | 95A251570 |
| Axial M12 Connector | 4-pole, shielded, 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, shielded, black, P.V.C. | 25 m | CV-A1-22-B-25 | 95ACC2090 |
| | | 3 m | CV-A2-22-B-03 | 95ACC1540 |
| | | 5 m | CV-A2-22-B-05 | 95ACC1550 |
| | | 10 m | CV-A2-22-B-10 | 95ACC1560 |
| Axial M12 Connector | 4-pole, U.L., black, P.V.C. | 3 m | CS-A1-02-U-03 | 95ASE1120 |
| | | 5 m | CS-A1-02-U-05 | 95ASE1130 |
| | | 10 m | CS-A1-02-U-10 | 95ASE1140 |
| | | 15 m | CS-A1-02-U-15 | 95ASE1150 |
| Radial M12 Connector | 4-pole, black | 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 |

