

Light Barriers series IRL/ILN/ILD-108-S/E

ILN-108-S/E-GD

Housing M30

ILD-108-S/E-GD



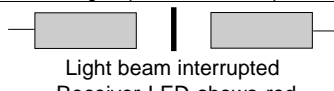
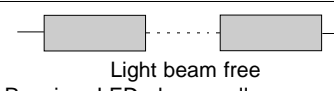
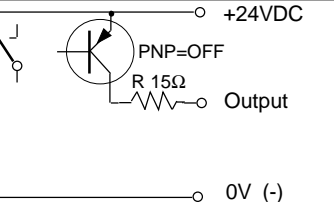
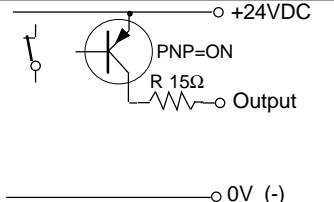


II 3G Ex nA IIB T4 Gc
II 3D Ex tc IIIA T135°C Dc IP67

- Series ILN: Applicable in Ex-Zones 2, 22
- Good alignment by 3-color LED at the rear side
- Short response time
- Robust light barrier for industrial applications
- PNP output



0158

II 2G Ex d IIC T6 Gb
II 2D Ex tb IIIB T90°C Db IP67

| Technical Data | Type | IRL-108-S/E | ILN-108-S/E-GD | ILD-108-S/E-GD |
|--|------|-------------|---|--|
| Designation | | | I...-108-S: Emitter / I...-108-E: Receiver | |
| Type of Ex protection, Gas, at 94/9/EC | -- | -- | II 3G Ex nA IIB T4 Gc | II 2G Ex d IIC T6 Gb |
| Type of Ex protection, Dust, at 94/9/EC | -- | -- | II 3D Ex tc IIIA T135°C Dc IP67 | II 2D Ex tb IIIB T90°C Db IP67 |
| Applicable in Ex Zones | -- | -- | 2, 22 | 1, 2, 21, 22 |
| Range | | | 80m | |
| Minimum detectable object size | | | 22mm (avoid mirror effects) | |
| Light source | | | Infrared 880nm | |
| Directional angle (measured at a distance of 10m) | | | Emitter: appr.10° / Receiver: appr.12° | |
| Response time, frequency | | | 5ms, 100Hz | |
| Supply voltage | | | 24 VDC +15% | |
| Current consumption, emitter | | | 45mA | |
| Current consumption, receiver | | | 40mA | |
| Maximum power dissipation | | | Emitter: 1.26W / Receiver: 0.7W | |
| Output | | | PNP, 100mA, short circuit protected | |
| Housing | | | M30, brass, nickel plated | |
| Enclosure rating at EN 60529 | | IP65 | IP67 | IP67 |
| Maximum ambient working temperature T _{amb} | | | -20°C < T _{amb} < +50°C | |
| Storage temperature range | | | -20°C ... +70°C | |
| Vibration and shock resistance | | | Vibration: 30g over 20Hz to 2kHz. Shock: 100g for 3ms | |
| Connection cable, receiver | | | 3/4+PE x 0.5mm ² , shielded, TPU, leads numbering marked, length: 10m | |
| Connection cable, emitter | | | 2/3+PE x 0.5mm ² , shielded, TPU, leads numbering marked, length: 10m | |
| Socket, type IRL/ILN-108-S/E-(GD)-S39 | | | Binder, type 423, 5 terminals, not for new applications | -- |
| Socket, type IRL/ILN-108-S/E-(GD)-S99 | | | Lumberg M12, type RSFM 5, 5 terminals | -- |
| Accessories, included, all types | | | - 4 nuts M30 (or 2 clamps M30 optional) | |
| Accessories, included, only ILN-.. S39 and S99 | | | - 2x Safety lock device, mount at the cable connection, for locking the connection. (black synthetic device). - 2x Warning plate "WARNING - Explosion Hazard - Do Not Disconnect While Circuit Is Live Unless Area Is Known To Be Non-Hazardous", self-sealing, for gluing on the cable connector. - 2x Protection cap for the sensor socket. | |
| Accessories, not included, for IRL/ILN-.. S39 | | | - Connector housing, Binder series 423, 5 terminals | |
| Accessories, not included, for IRL/ILN-.. S99 | | | - Cordset Lumberg, RKTS 5-298/xx or RKWTH 5-298/xx | |
| Options | | | - ILD-108-S/E-OP: With limited optical radiant power at EN 60079-28. II 2(1)G Ex d [op is Ga] IIC T6 Gb, II 2(1)D Ex tb [op is Da] IIIB T100°C Db IP67 Optical radiant power can be effective into Zones 0, 20 - I...-108-S-DI: Emitter with disable input DI, for polling emitters - I...-108-E-VA: With integrated pollution indication output "VA", PNP type - IRL-108-S/E S39: Not for new applications! Socket Binder type 423 - ILN-108-S/E S39: Not for new applications! Socket Binder type 423 - I...-108-S/E S94: Lenses special luted - IRL-108-S/E S99: Socket M12, 5 terminals - ILN-108-S/E S99: Socket M12, 5 terminals, Ex Zones 2, 22 - Cable length up to 100m, on request | |
| LED indication Output function | | |  Light beam interrupted Receiver LED shows red |  Light beam free Receiver LED shows yellow or green |
| Wiring diagram for cable devices: Receiver: Emitter: | | |  +24VDC PNP=OFF R 15Ω Output 0V (-) |  +24VDC PNP=ON R 15Ω Output 0V (-) |
| 1: +24VDC 1: +24VDC 2: 0V 2: 0V 3: Output 3: DI (optional) 4: VA-Output -- yell.-green: PE yell.-green: PE white: Cable shield white: Cable shield | | | | |
| Alignment and controlling by LED indication (LED at the rearside of the receiver) | | | LED red: Light beam interrupted - not aligned LED yellow: polluted lenses - badly aligned LED green: Light beam free - well aligned | |
| ATEX related designations: CE 0158 Manufacturer with address Electrical data according to the chart Type ILD-108-S/E-GD:  II 2G Ex d IIC T6 Gb, II 2D Ex tb IIIB T90°C Db IP67 EC certification number: BVS 10 ATEX E 130 X Type ILN-108-S/E-GD:  II 3G Ex nA IIB T4 Gc, II 3D Ex tc IIIA T135°C Dc IP67 Declaration by manufacturer at 94/9/EC TA: -20°C < T _{amb} < +50°C Date of construction: Numeral 5 to 8 of the serial number (Year/Week) (X designation of the certification number: Fibre optics must only be applied with sensors with certificated limited optical power) | | | | |

