

Original operating manual:
Photoelectric proximity switch IRS/IRN/IRD--OFX/OVA(-OP)**
IRD--OFX/OVA-OP**

IECEX BVS 14.0108X


 II 2(1)G
II 2(1)D

 IECEX markings
Ex d [op is Ga] IIC T6 Gb
Ex tb [op is Da] IIIB T100°C Db IP67

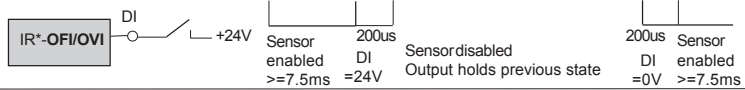
Housing M30
IRN--OFX/OVA-OP**

 ATEX designation:
II 3(2)G Ex nA [op is Gb] IIB T4 Gc
II 3(2)D Ex tc [op is Db] IIIA T135°C Dc IP67

- Also for using with certificated fibre optics
- IRD: ATEX and IECEX certificated
- Types IRD: For use in Ex Zones (0), 1, 2, (20), 21, 22 optical radiation can operate into Ex Zones 0, 20
- Types IRN; For use in Ex Zones (1), 2, (21), 22 optical radiation can operate into Ex Zones 1, 21
- Robust sensor for industrial applications

| Type | IRS-**-OFX/OVA | IRN-**-OFX/OVA-OP | IRD-**-OFX/OVA-OP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|---|--------|---|----|---|--------|---|-----------------------------|---|-------------------------------|---|----|--------------|--------------|-------|---|----------|---------|--------|---|----|---|--------|---|-----------------------------|---|-------------------------------|---|----|--------------|--------------|-------|--|
| Technical Data | OFX = output function selectable by polarity of the supply voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Range (on white paper A4, 80g) | **I = Range in dm 021/041/101/151. 0.2m to 1.5m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type of Ex protection, Gas, according to 2014/34/EU | NONE | II 3(2)G Ex nA [op is Gb] IIB T4 Gc | II 2(1)G Ex d [op is Ga] IIC T6 Gb | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type of Ex protection, Dust, according to 2014/34/EU | NONE | II 3(2)D Ex tc [op is Db] IIIA T135°C Dc IP67 | II 2(1)D Ex tb [op is Da] IIIB T100°C Db IP67 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| For use in Ex Zones | Not for Ex zones | Zones (1), 2, (21), 22 | Zones (0), 1, 2, (20), 21, 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum radiant intensity | NOT LIMITED | <=5mW/mm ² | <=5mW/mm ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum radiant power | NOT LIMITED | <=35mW | <=15mW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Light source | Infrared 870nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Optical angle (at nominal range) | appr. 10° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Response time | 5ms (1ms, on request) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power up delay time | 500ms | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supply voltage | 24 VDC +10% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Absolute maximum supply voltage | Um = 30VDC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current consumption | maximum 60mA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum power dissipation | 1.68W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output | Push-Pull, 100mA, short circuit protected | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input, only types IR*-**-OFI/OVI(-OP) (Disable Input) | PNP compatible, Ri 10kΩ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Housing | M30, yellow brass, type Ms58, nickel plated | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enclosure rating, according to EN 60529 | IP54 | IP67 | IP67 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Working temperature range Tamb | -20°C up to +50°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storage temperature range | -30°C ... +70°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shock and vibrating resistance | Vibration: 30g over 20Hz to 2kHz. Shock:50g for each direction (X, Y, Z) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pollution degree, according to EN 60664-1:2007 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Device designation, according to EN 60947-5-2 | R3A30AP1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electrical connection cable | 3+PE x 0.5mm ² , shielded, TPU, leads numbering marked, length: 3m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electrical connection cable, types IR*-**-OVA/OVI(-OP) | 4+PE x 0.5mm ² , shielded, TPU, leads numbering marked, length: 3m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electrical connection cable, types IR*-**-OVI(-OP) | 5+PE x 0.5mm ² , shielded, TPU, leads numbering marked, length: 3m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Socket for types IRS/IRN-**-***-OP-S099 | Socket M12, Lumberg type RSF, 5 terminals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accessories, all types | - 2 nuts M30 (optional 1 clamp on demand) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accessories, types IRN/IRD-**-***-OP(-S***) | - 1x Spare safety screw with packing ring for potentiometer sealing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accessories, only type IRN-**-***-OP-S099 | - 1x Safety lock device, mount at the cable connection, for locking the connection. (black synthetic device) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - 1x Warning plate "Do not open/close when supply voltage connected", self-sealing, for gluing on the cable connector. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | - 1x Protection cap for the sensor socket. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accessories, optional for the types IR*(-OP)-S099 | - Single ended cordset, types RKTS 5-298/xx or RKWTH 5-298/xx, Lumberg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accessories, not included, only IRS-**-O**S125 | - Spare safety screw with packing ring for potentiometer sealing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Options | - Cable length: Up to 100m, on request. Designation: IR*-**-***(-OP)/K:??m - IR*-**-OVA(-OP): With additional pollution indication output "VA", only PNP type - IR*-**-OFI(-OP): With emitter disable input "DI" - IR*-**-OVI(-OP): With additional pollution indication output "VA" and with emitter disable input "DI" - IRD-041-***-OP-S095: With additional optic, type AD-4-W 15, cable length: 10m - IRD-041-***-OP-S097: Response time: 150us, cable length: 5m - IRS/IRN-**-***-OP-S099: Socket M12, Lumberg RSF 5, 5 pins - IRS-021/041-***-S125: Potentiometer with dust proof screwing. (IRS-021-OFX-S125: Range = 180mm+5%) - IR*-**-***(-OP)-S268: 1kHz switching frequency - IR*-021-***(-OP)-S269: 10kHz switching frequency - IRS/IRN-021-***(-OP)-S270: Socket M12, Lumberg RSF 5, 5 pins, response time: 500us - IR*-021-***(-OP)-S271: With wide optical angle 22° - IRD-101-OP-OP: Output only PNP, function: Output=ON if sensor detects light | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Function and LED display | Light barrier Beam not interrupted Proximity switch reflection detected, LED=ON | Light barrier Beam interrupted Proximity switch no reflection detected, LED=OFF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Function at standard connection of the supply voltage: | <table border="1"> <thead> <tr> <th>Wire No.</th> <th>Pin-No.</th> </tr> </thead> <tbody> <tr><td>+24VDC</td><td>1</td></tr> <tr><td>0V</td><td>3</td></tr> <tr><td>Output</td><td>4</td></tr> <tr><td>Pollution indication output</td><td>2</td></tr> <tr><td>Disable input (only DI types)</td><td>5</td></tr> <tr><td>PE</td><td>yellow-green</td></tr> <tr><td>Cable shield</td><td>white</td></tr> </tbody> </table> | Wire No. | Pin-No. | +24VDC | 1 | 0V | 3 | Output | 4 | Pollution indication output | 2 | Disable input (only DI types) | 5 | PE | yellow-green | Cable shield | white | <table border="1"> <thead> <tr> <th>Wire No.</th> <th>Pin-No.</th> </tr> </thead> <tbody> <tr><td>+24VDC</td><td>1</td></tr> <tr><td>0V</td><td>3</td></tr> <tr><td>Output</td><td>4</td></tr> <tr><td>Pollution indication output</td><td>2</td></tr> <tr><td>Disable input (only DI types)</td><td>5</td></tr> <tr><td>PE</td><td>yellow-green</td></tr> <tr><td>Cable shield</td><td>white</td></tr> </tbody> </table> | Wire No. | Pin-No. | +24VDC | 1 | 0V | 3 | Output | 4 | Pollution indication output | 2 | Disable input (only DI types) | 5 | PE | yellow-green | Cable shield | white | |
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| +24VDC | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0V | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pollution indication output | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disable input (only DI types) | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PE | yellow-green | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cable shield | white | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wire No. | Pin-No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| +24VDC | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0V | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pollution indication output | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disable input (only DI types) | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PE | yellow-green | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cable shield | white | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Function on reversed polarity of the supply voltage: | <table border="1"> <thead> <tr> <th>Wire No.</th> <th>Pin-No.</th> </tr> </thead> <tbody> <tr><td>+24VDC</td><td>2</td></tr> <tr><td>0V</td><td>1</td></tr> <tr><td>Output</td><td>3</td></tr> <tr><td>Pollution indication output</td><td>4</td></tr> <tr><td>Disable input (only DI types)</td><td>5</td></tr> <tr><td>PE</td><td>yellow-green</td></tr> <tr><td>Cable shield</td><td>white</td></tr> </tbody> </table> | Wire No. | Pin-No. | +24VDC | 2 | 0V | 1 | Output | 3 | Pollution indication output | 4 | Disable input (only DI types) | 5 | PE | yellow-green | Cable shield | white | <table border="1"> <thead> <tr> <th>Wire No.</th> <th>Pin-No.</th> </tr> </thead> <tbody> <tr><td>+24VDC</td><td>2</td></tr> <tr><td>0V</td><td>1</td></tr> <tr><td>Output</td><td>3</td></tr> <tr><td>Pollution indication output</td><td>4</td></tr> <tr><td>Disable input (only DI types)</td><td>5</td></tr> <tr><td>PE</td><td>yellow-green</td></tr> <tr><td>Cable shield</td><td>white</td></tr> </tbody> </table> | Wire No. | Pin-No. | +24VDC | 2 | 0V | 1 | Output | 3 | Pollution indication output | 4 | Disable input (only DI types) | 5 | PE | yellow-green | Cable shield | white | |
| Wire No. | Pin-No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| +24VDC | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0V | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pollution indication output | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disable input (only DI types) | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PE | yellow-green | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cable shield | white | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| +24VDC | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0V | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pollution indication output | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disable input (only DI types) | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PE | yellow-green | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cable shield | white | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Devices with pollution indication output "VA". Types: IR*-**-OVA/OVI(-OP). LED indication and output function: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

IR***-**I-OFI/OVI(-OP)** (with optional Disable Input)
 Uin: 18V-28VDC, DI=+24V=Disable
 Response time: <=200us
 Hold time: >=7.5ms, DI = 0V=Enable



Dimensions: 30, 115, 80, M30 x 1.5

Connection layout: LED, Potentiometer with dustproof packing screw

| | IRN/IRD ^{**I} -***-OP | IRS-02I/04I-***-S125: |
|--------|--------------------------------|-----------------------|
| +24VDC | 1 | 1 |
| 0V | 2 | 2 |
| Output | 3 | 3 |
| VA | - | 4 |
| DI | - | 5 |
| PE | yellow-green | yellow-green |

Dimensions: 13, 30, 85, 50, M30 x 1.5

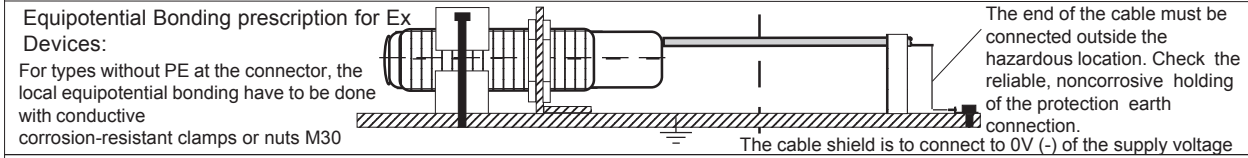
Connection layout: Socket M12 5 terminals, LED for the socket, Potentiometer, IRN: with dustproof packing screw

| | IRN/S ^{-*} -OFX-S099 | IRN/S ^{-*} -OFI/OVI-S099 |
|---------|-------------------------------|-----------------------------------|
| 1/brown | +24VDC | +24VDC |
| 2/white | NC | DI or VA |
| 3/blue | 0V | 0V |
| 4/black | Output | Output |
| 5/grey | PE | PE |

Dimensions: 30, 85, 50, M30 x 1.5

Connection layout: LED, Potentiometer

| | IRS ^{-**I} -OFX | IRS ^{-**I} -OFI/OVI |
|--------|--------------------------|------------------------------|
| +24VDC | 1 | 1 |
| 0V | 2 | 2 |
| Output | 3 | 3 |
| VA | - | 4 |
| DI | - | 5 |
| PE | yellow-green | yellow-green |



Ex related markings:

CE 1258
 Type IRD^{-**I}-***-OP: II 2(1)G Ex d [op is Ga] IIC T6 Gb
 Type IRN^{-**I}-***-OP: II 2(1)D Ex tb [op is Da] IIB T100°C Db IP67
 II 3(2)G Ex nA [op is Gb] IIB T4 Gc
 II 3(2)D Ex tc [op is Db] IIIA T135°C Dc IP67

Electrical data according to the chart
 EC certification No: BVS 10 ATEX E 130 X DEKRA & IECEx 14.0108X
 EC certification No: BVS 10 ATEX E 130 X DEKRA & IECEx 14.0108X
 ATEX declaration by manufacturer according to the ATEX directive 2014/34/EU
 ATEX declaration by manufacturer according to 2014/34/EU
 Date of production: Numerals 5 to 8 of the serial number (year/calendar week)

Tamb: -20°C up to +50°C
 (X designation of the certification number: Fibre optics must only be applied with sensors with certificated limited optical power)

Operating Manual / EU - Declaration of Conformity:

Operating Manual:
 Ex protection:
 General prescriptions for all Ex devices:
 It is necessary to take into consideration the valid international and national rules and regulations (EN 60079-14). The maximum input voltage Um=30VDC must not be exceeded. The local equipotential bonding have to be done. The protective earth (PE) terminal is solid connected with the housing. The cable have to be protected against damages. To connect cables inside hazardous locations only use certificated Ex housings. All cable terminals must be connected outside hazardous locations. Use only original manufactured fibre optics and additional optical lenses, other additional optical lenses are not allowed in hazardous locations.
 Type IRD^{-**I}-***-OP(-S^{***}): Applicable in Ex zones 1, 2, 21, 22. The limited optical radiation can operate into hazardous locations 0 or 20 over certificated fibre optics or through a viewing glass.
 Type IRN^{-**I}-***-OP(-S^{***}): Only applicable in Ex zones 2, 22. The limited optical radiation can operate into hazardous locations 1 or 21 over certificated fibre optics or through a viewing glass.
 Type IRN^{-**I}-***-OP-S099: Only applicable in Ex zones 2, 22. The limited optical radiation can operate into hazardous locations 1 or 21 over certificated fibre optics or through a viewing glass.
 Types IRN^{-**I}-***-OP-S099:
 Do not separate the connector when the supply voltage is connected to the cable. When installing the sensor, the safety lock device must be fitted at the cable connector. The additional adhesive warning label must be fixed to the connector housing at the connection cable. Lumberg cordsets RKTS 5-298/xx (Straight type) or RKWTH 5-298/xx (Right angle type) are allowed ONLY. It is necessary to take into consideration the mounting prescription of the connector manufacturer. In dusty locations, the socket protection cap must be fitted, when the connection cable is not connected.
General mounting prescriptions
 Do not exceed the maximum ratings. The electrical connections must be exactly as shown in the connection diagram. The cable shield must be connected short. The cable shield should be connected to the protection earth, large-surfaced. Connection cables must not be installed parallel to high voltage cables.
Function
 The sensor works basically as proximity switch on diffuse optical reflections. If the sensor detects reflected light, the output switches to 0V and the LED lights ON. If no reflected light will be recognized, the output switches to +24VDC and the LED goes out. The load can be connected to +24VDC or 0V.
Function at inversely connection of the supply voltage
 The sensor works basically as proximity switch on diffuse optical reflections. If the sensor detects reflected light, the output switches to +24VDC and the LED lights ON. If no reflected light will be recognized, the output switches to 0V and the LED goes out. The load can be connected to +24VDC or 0V.
Optional pollution indication output "VA", series IR^{-I}-OVA/OVI(-OP)**
 The devices with pollution indication output has a 3-color LED. The VA output will be activated by polluted lenses or reduced optical input signal. If only reduced optical input signal will be detected, the LED shows yellow and the pollution indication output will be activated. If no light can be detected the pollution indication outputs is switched OFF and the LED shows red. If strong light is detected only the standard output is switched ON or OFF, the pollution indication output is switched OFF and the LED shows green.
Sensors with disable input "DI", types IR^{-I}-OFI/OVI(-OP):**
 If several sensors are installed close to another, it is necessary to use sensors with disable input. By using the disable input DI, each sensor can be controlled in a short reaction time. If only one sensor is activated in the same time, a mutual influence is precluded
 DI= 0V or not connected = emitter enabled
 DI= High (24VDC) = emitter disabled
 For a correct function the sensor must be enabled for at minimum >= 7.5ms (DI=0V). If the DI input will be disabled, the outputs holds the previous output status from the last enabled time. The DI input is PNP compatible.
Optical range
 The nominal range is defined on white paper A4, 80g. The range will be influenced by the color, kind of surface and shape of the object.
Fibre optics
 For efficiently detection solutions look for our multiple program of fibre optics, also for high temperature areas. Fibre optics for Ex zones must only be driven by sensors series IRN and IRD.
Maintenance
 Protect the sensor and the optional fibre optics against pollution. If the fibre optics or the sensor lenses are contaminated, clean with alcohol. Do not use aggressive solvents. Optical fibres can be destroyed by strong solvents. Equipment must only be repaired or serviced by the manufacturer.
General safety instructions
 Series IRN^{-**I}-***-OP-S099: "WARNING - EXPLOSION HAZARD - WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES. DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS". The mounting of the sensor in dusty locations without fixed cordset or protection cap results in a high ignition risk. The sensors must not be used for Accident-Prevention! In worst case the output can change to any state! When installing and operating with the sensor, it is necessary to take into consideration the relevant international and other national regulations: EN 60079-14, ATEX 118a, single directive 1999/92/EC.
 The sensor and the fibre optic are conform to the following standards: IEC/EN 60079-0:2012 + A11:2013, IEC/EN 60079-1:2007, EN 60079-15:2010, IEC/EN 60079-28:2007, IEC/EN 60079-31:2010, EN 60529:2014, EN 60950-1:2006; EN 61000-4-2 to EN 61000-4-6, EN 61000-6-1/-2, EN 61000-6-4, ATEX directive: 2014/34/EU, Machine directive: 2006/42/EC, EMC directive: 2014/30/EU, RoHS directive: 2011/65/EU.
General Notes, disposal
 We reserve the right to modify our equipment. Our equipment is designed such way, that it has the least possible adverse effect on the environment. It neither emit or contain any damaging or siliconized substances and use a minimum of energy and resources. No longer usable or irreparable units must be disposed of in accordance with local waste disposal regulations.
EU-Declaration of conformity:
 IECEx certification, types IRD: Certification number: BVS 14.0108X.
 ATEX certification, types IRD: II 2(1)G Ex d [op is Ga] IIC T6 Gb, II 2(1)D Ex tb [op is Da] IIB T100°C Db IP67. EC-Certification No. BVS 10 ATEX E 130 X, DEKRA EXAM GmbH, Zertifizierungsstelle, Carl-Beyling-Haus, Dinendahlstrasse 9, D-44809 Bochum, Ident number: 0158.
 ATEX certification, types IRN: II 3(2)G Ex nA [op is Gb] IIB T4 Gb, II 3(2)D Ex tc [op is Db] IIIA T135°C Dc IP67. Declaration by manufacturer according to the ATEX directive 2014/34/EU and the test report No. BVS PP 10-2233 EG, for Ex op is. ATEX certification of quality type production of Ex devices at the ATEX directive 2014/34/EU, CE 1258, Eurofins. Certification No: SEV 21 ATEX 4580. The conformity of the devices with the EC standards and directives and the EC-type examination certificate and the observation of the Quality Safety System ISO 9001:2015 with the ATEX module "Production", declares:
 Pablo Ledergerber, Matrix Elektronik AG

IRD-xxI-OFX-OP-IECEX_e4/2023-02-23/MP

Tippkemper - Matrix GmbH
 Meegeener Str. 43 D-51491 Overath
 Tel.: +49 2206 9566-0 Fax -19
 info@tippkemper-matrix.com

Matrix Elektronik AG (Manufacturer)
 Kirchweg 24 CH-5420 Ehrendingen
 Tel.: +41 56 20400-20 Fax -29
 info@matrix-elektronik.com