

Product data sheet

Specifications



Inductive proximity sensors XS, inductive sensor XS6 M12, L62mm, brass, Sn4mm, 12...48 VDC, M12

XS612B1PBM12

Main

| | |
|------------------------------------|---|
| Range of product | Telemecanique Inductive proximity sensors XS |
| Series name | General purpose |
| Sensor type | Inductive proximity sensor |
| Device application | Mobile equipment |
| Sensor name | XS6 |
| Sensor design | Cylindrical M12 |
| Size | 62 mm |
| Body type | Fixed |
| Detector flush mounting acceptance | Flush mountable |
| Material | Metal |
| Type of output signal | Discrete |
| Wiring technique | 3-wire |
| [Sn] nominal sensing distance | 4 mm |
| Discrete output function | 1 NC |
| Output circuit type | DC |
| Discrete output type | PNP |
| Electrical connection | Male connector M12, 4 pins |
| [Us] rated supply voltage | 12...48 V DC with reverse polarity protection |
| Switching capacity in mA | <= 200 mA DC with overload and short-circuit protection |
| IP degree of protection | IP67 conforming to IEC 60529 IP69K conforming to DIN 40050 |

Complementary

| | |
|--------------------|---------------------|
| Thread type | M12 x 1 |
| Detection face | Frontal |
| Front material | PPS |
| Enclosure material | Nickel plated brass |
| Sensing range | > 2.5...4 mm |
| Operating zone | 0...3.2 mm |

| | |
|------------------------|------------------------------|
| Differential travel | 1...15% of Sr |
| Status LED | Output state: 1 LED (yellow) |
| Supply voltage limits | 10...58 V DC |
| Switching frequency | <= 2500 Hz |
| Maximum voltage drop | <2 V (closed) |
| Current consumption | <= 10 mA no-load |
| Maximum delay first up | 10 ms |
| Maximum delay response | 0.2 ms |
| Maximum delay recovery | 0.2 ms |
| Marking | CE |
| Threaded length | 42 mm |
| Length | 62 mm |
| Net weight | 0.02 kg |

Environment

| | |
|---------------------------------------|---|
| Product certifications | E2 CSA UL |
| Ambient air temperature for operation | -25...70 °C |
| Ambient air temperature for storage | -40...85 °C |
| Vibration resistance | 25 gn amplitude = +/- 2 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 50 gn for 11 ms conforming to IEC 60068-2-27 |

Packing Units

| | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 2.7 cm |
| Package 1 Width | 6.6 cm |
| Package 1 Length | 9.6 cm |
| Package 1 Weight | 29.0 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 44 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 1.804 kg |

Offer Sustainability

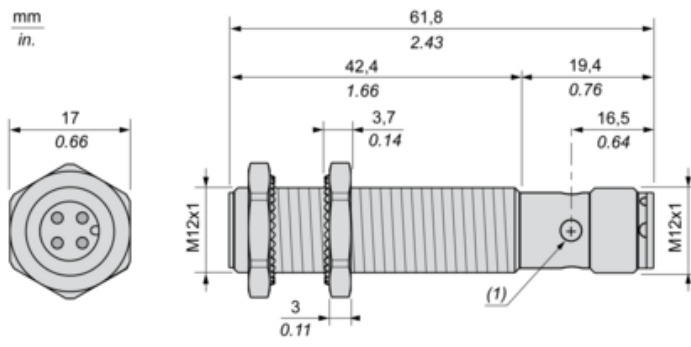
| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |

| | |
|----------------------------------|---|
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |

Contractual warranty

| | |
|-----------------|-----------|
| Warranty | 18 months |
|-----------------|-----------|

Dimensions



(1) : LED

Minimum Mounting Distances

Side by side



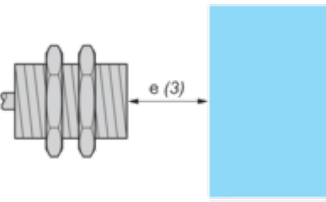
$e (1) \geq 8 \text{ mm}/0.31 \text{ in.}$

Face to face



$e (2) \geq 48 \text{ mm}/1.89 \text{ in.}$

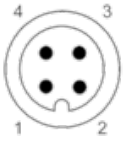
Facing a metal object



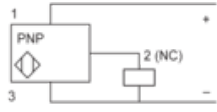
$e (3) \geq 12 \text{ mm}/0.47 \text{ in.}$

Wiring Schemes

M12 connector



PNP



1 : (+)

2 : NC Output

3 : (-)

4 : Not connected

Recommended replacement(s)