

Product datasheet

Specifications



capacitive sensor - XT1 - cylindrical M12 - stainless steel - Sn 2mm - cable 2m

XT112S1NAL2

! To be discontinued on: 30 June 2022

! To be end-of-service on: 31 December 2022

! To be discontinued

Main

| | |
|------------------------------------|--|
| Range of product | Telemecanique Capacitive proximity sensors XT |
| Sensor type | Capacitive proximity sensor |
| Product specific application | Detection of insulated or conductive materials |
| Sensor name | XT1 |
| Sensor design | Cylindrical M12 |
| Size | 50 mm |
| Body type | Fixed |
| Detector flush mounting acceptance | Flush mountable |
| Material | Stainless steel |
| Enclosure material | Stainless steel 303 |
| Type of output signal | Discrete |
| Wiring technique | 3-wire |
| [Sn] nominal sensing distance | 2 mm |
| Discrete output function | 1 NO |
| Output circuit type | DC |
| Discrete output type | NPN |
| Electrical connection | Cable |
| Cable length | 2 m |
| [Us] rated supply voltage | 24 V DC with reverse polarity protection |
| Maximum delay response | 5 ms |
| IP degree of protection | IP67 conforming to IEC 60529 IP67 conforming to IEC 60947-5-2 |

Complementary

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|---------------------------------|-------------|
| ISO thread | M12 x 1 |
| Detection face | Frontal |
| [Sa] assured operating distance | 0...1.44 mm |
| Adjustment zone | 0.5...5 mm |

| | |
|---------------------------|---|
| Differential travel | < 0.2 x Sr |
| Repeat accuracy | < 0.1 x Sr |
| Wire insulation material | PVC |
| Status LED | Output state indication: 1 LED (yellow) |
| Supply voltage limits | 12...30 V DC |
| Maximum residual current | 0.1 mA open state |
| Protection type | Short-circuit protection |
| Switching frequency | <= 300 Hz |
| Maximum voltage drop | <2 V (closed) |
| Current consumption | < 15 mA |
| Maximum delay first up | 30 ms |
| Maximum delay recovery | 5 ms |
| Maximum switching current | 200 mA |
| Marking | CE |
| Setting-up | Sensitivity by potentiometer |
| Threaded length | 37 mm |
| Length | 50 mm |
| Net weight | 0.07 kg |

Environment

| | |
|---------------------------------------|--|
| Standards | EN/IEC 60947-5-2 |
| Product certifications | cETLus |
| Ambient air temperature for operation | -25...70 °C |
| Vibration resistance | 10 gn amplitude = 1 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 30 gn for 11 ms conforming to IEC 60068-2-27 |
| Resistance to electrostatic discharge | 4 kV contact conforming to IEC 61000-4-2 8 kV air conforming to IEC 61000-4-2 |
| Resistance to electromagnetic fields | 3 V/m conforming to IEC 61000-4-3 |
| Resistance to fast transients | 2 kV conforming to IEC 61000-4-4 |

Packing Units

| | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 70.0 g |
| Package 1 Height | 1.2 cm |
| Package 1 width | 15 cm |
| Package 1 Length | 21 cm |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 70 |
| Package 2 Weight | 5.358 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 30 cm |

| | |
|------------------|-------|
| Package 2 Length | 40 cm |
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Offer Sustainability

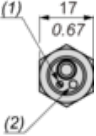
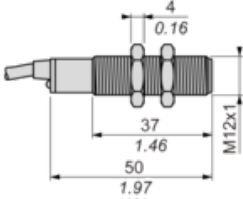
| | |
|----------------------------|--|
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |

Contractual warranty

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

Dimensions

mm
in.

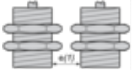


- (1) Adjustment potentiometer
- (2) LED

Setting-up

Minimum Mounting Distances (mm)

Side by side



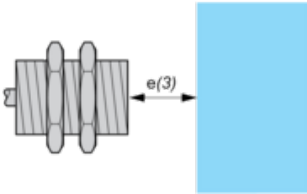
$e(1) \geq 0$

Face to face



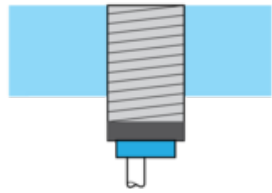
$e(2) \geq 4.4$

Facing a metal object



$e(3) \geq 4$

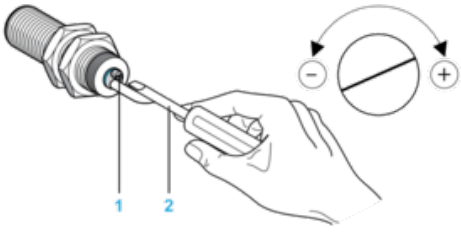
Mounted in support



Fixing nut tightening torque: 10 N.m

Adjustment

Sensitivity Adjustment

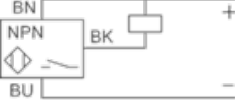


- (1) Adjustment potentiometer
- (2) Screwdriver (included with sensor)

Wiring Diagram

Pre-cabled

3-wire DC, NPN NO Output, Pre-cabled



(BU) Blue

(BN) Brown

(BK) Black