

# Product data sheet

Specifications



inductive sensor XS1 M5 - L28mm  
- brass - Sn1mm - 5..24VDC - cable  
10m

XS1N05NA310L2

⚠ Discontinued

## Main

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| Range of product                   | Telemecanique Inductive proximity sensors XS         |
| Series name                        | General purpose                                      |
| Sensor type                        | Inductive proximity sensor                           |
| Device application                 | -                                                    |
| Sensor name                        | XS1                                                  |
| Sensor design                      | Cylindrical M5                                       |
| Size                               | 28 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      | 1 mm                                                 |
| Discrete output function           | 1 NO                                                 |
| Output circuit type                | DC                                                   |
| Discrete output type               | NPN                                                  |
| Electrical connection              | Cable                                                |
| Cable length                       | 10 m                                                 |
| [Us] rated supply voltage          | 5...24 V DC                                          |
| Switching capacity in mA           | <= 100 mA with overload and short-circuit protection |
| IP degree of protection            | IP67 conforming to IEC 60529                         |

## Complementary

|                    |                     |
|--------------------|---------------------|
| Thread type        | M5 x 0.5            |
| Detection face     | Frontal             |
| Front material     | PPS                 |
| Enclosure material | Nickel plated brass |

|                                 |                              |
|---------------------------------|------------------------------|
| <b>Operating zone</b>           | 0...0.8 mm                   |
| <b>Cable composition</b>        | 3 x 0.11 mm <sup>2</sup>     |
| <b>Wire insulation material</b> | PvR                          |
| <b>Status LED</b>               | Output state: 1 LED (yellow) |
| <b>Supply voltage limits</b>    | 5...30 V DC                  |
| <b>Switching frequency</b>      | <= 5000 Hz                   |
| <b>Maximum voltage drop</b>     | <2 V (closed)                |
| <b>Current consumption</b>      | <= 10 mA no-load             |
| <b>Maximum delay first up</b>   | 5 ms                         |
| <b>Maximum delay response</b>   | 1 ms                         |
| <b>Maximum delay recovery</b>   | 1 ms                         |
| <b>Marking</b>                  | CE                           |
| <b>Threaded length</b>          | 24 mm                        |
| <b>Length</b>                   | 28 mm                        |

## Environment

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

## Packing Units

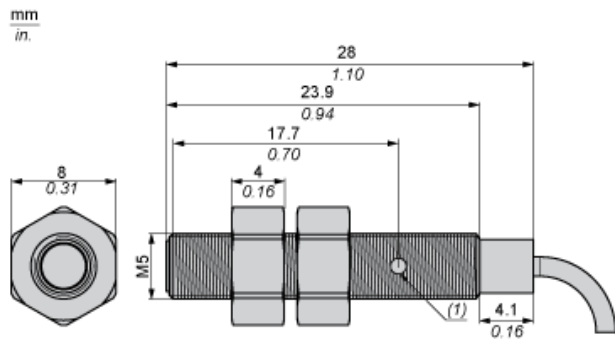
|                         |          |
|-------------------------|----------|
| <b>Package 1 Weight</b> | 0.153 kg |
| <b>Package 1 Height</b> | 0.450 dm |
| <b>Package 1 width</b>  | 0.800 dm |
| <b>Package 1 Length</b> | 1.480 dm |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|

Dimensions

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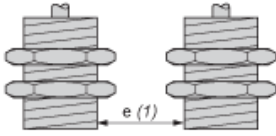


(1) LED

**Minimum Mounting Distances in mm**

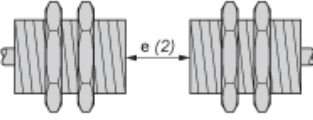
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Side by side



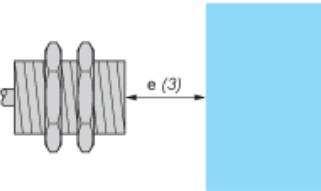
**e (1) ≥ 2 mm/0.79 in.**

Face to face



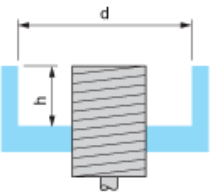
**e (2) ≥ 12 mm/0.47 in.**

Facing a metal object



**e (3) ≥ 3 mm/0.12 in.**

Mounted in a metal support



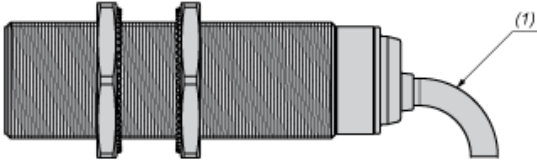
**d ≥ 5 mm/0.17 in.**

**h ≥ 0 mm/0 in.**

Tightening torque : 1.6 N.m. (values obtained with washers mounted)

**Mounting**

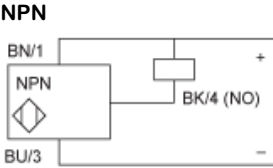
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(1) Bending cable: 4 x external cable diameter

**Wiring Schemes**

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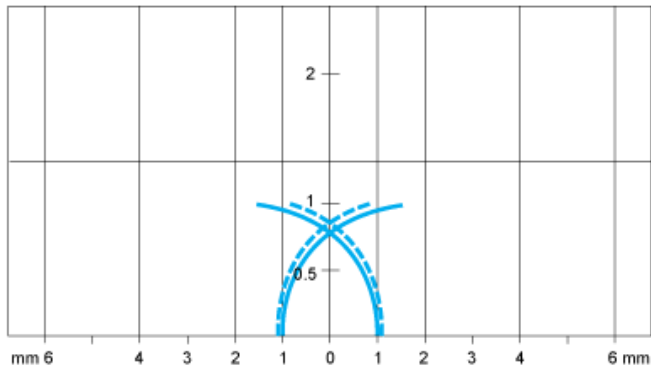


- BU :** Blue
- BN :** Brown
- BK :** Black

**Performance Curves**

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**Standard Steel Target (mm) : 5x5x1**



- Pick-up points
- - - Drop-out points (object approaching from the side)
- (y) Sensing distance in mm

**Recommended replacement(s)**

XS1N05NA310L2 is replaced by the following product range:



**Inductive and capacitive sensors XS & XT**

Inductive and capacitive proximity sensors

Products: 1398