

# Product data sheet

Specifications



inductive sensor XS1 M12, L44mm, brass, Sn2mm, 12..24VDC, cable 2m

XS112BLNAL2

## Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Sensor name	XS1
Sensor design	Cylindrical M12
Size	44 mm
Body type	Fixed
Enclosure material	Nickel plated brass
Type of output signal	Discrete
Wiring technique	3-wire
[Sn] nominal sensing distance	2 mm
Discrete output function	1 NO
Discrete output type	NPN
Electrical connection	Cable
Cable length	2 m
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Switching capacity in mA	<= 200 mA with overload and short-circuit protection
IP degree of protection	IP67 conforming to IEC 60529

## Complementary

ISO thread	M12 x 1
Detection face	Frontal
Detector flush mounting acceptance	Flush mountable
Material	Metal
Front material	PBT
Operating zone	0...1.6 mm
Differential travel	1...15% of Sr
Output circuit type	DC

Cable composition	3 x 0.14 mm²
Wire insulation material	PVC
Status LED	Output state: 1 LED (yellow)
Supply voltage limits	10...36 V DC
Switching frequency	<= 2500 Hz
Maximum voltage drop	<2 V (closed)
Current consumption	<= 10 mA no-load
Maximum delay first up	15 ms
Maximum delay response	0.1 ms
Maximum delay recovery	0.15 ms
Marking	CE
Threaded length	31 mm
Length	44 mm
Net weight	0.07 kg

### Environment

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

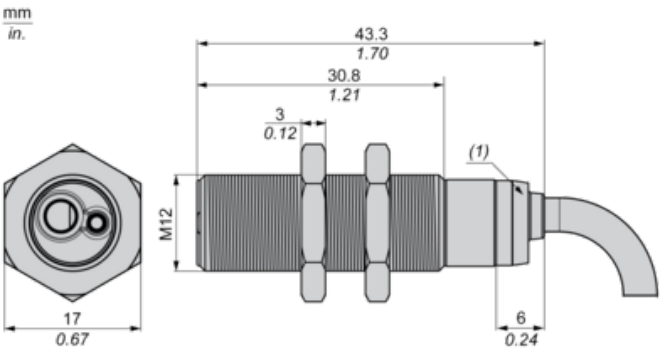
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.0 cm
Package 1 Width	11.0 cm
Package 1 Length	14.0 cm
Package 1 Weight	71.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	36
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	2.995 kg

### Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

Circularity Profile		<a href="#">End of Life Information</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>	
Contractual warranty		
Warranty	18 months	

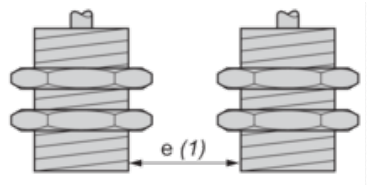
Dimensions



(1) LED

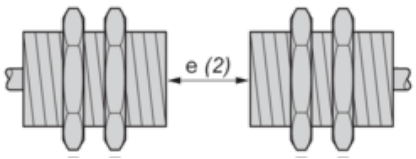
Minimum Mounting Distances

Side by side



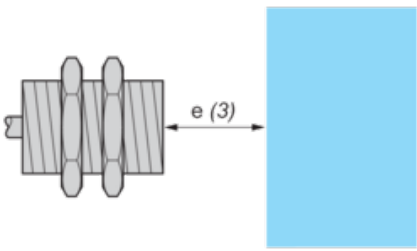
$e\ (1) \geq 4\text{ mm}/0.16\text{ in.}$

Face to face



$e\ (2) \geq 24\text{ mm}/0.94\text{ in.}$

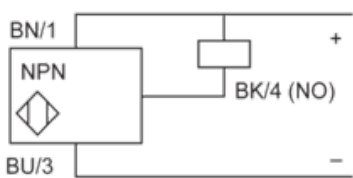
Facing a metal object



$e\ (3) \geq 6\text{ mm}/0.24\text{ in.}$

Wiring Schemes

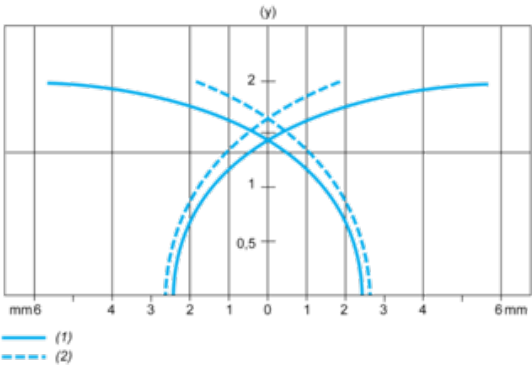
NPN



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

Performance Curves

Standard Steel Target : 12x12x1 mm



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

Recommended replacement(s)