

Product data sheet

Specifications



Inductive proximity sensors XS, inductive sensor XS5 M12, L35mm, brass, Sn2mm, 12...24 VDC, cable 2 m

XS512B1PAL2

Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	-
Sensor name	XS5
Sensor design	Cylindrical M12
Size	37 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	2 mm
Discrete output function	1 NO
Output circuit type	DC
Discrete output type	PNP
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 DC with overload and short-circuit protection
IP degree of protection	IP68 double insulation 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
Operating zone	0...1.6 mm

Differential travel	1...15% of Sr
Cable composition	3 x 0.34 mm ²
Wire insulation material	PvR
Status LED	Output state: 1 LED (yellow)
Supply voltage limits	10...36 V DC
Switching frequency	<= 5000 Hz
Maximum voltage drop	<2 V (closed)
Current consumption	<= 10 mA no-load
Maximum delay first up	10 ms
Maximum delay response	0.1 ms
Maximum delay recovery	0.1 ms
Marking	CE
Threaded length	25 mm
Height	12 mm
Length	35 mm
Net weight	0.075 kg

Environment

Product certifications	UL CSA
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 Weight	93 g
Package 1 Height	4.2 cm
Package 1 width	9.6 cm
Package 1 Length	13.2 cm
Unit Type of Package 2	S03
Number of Units in Package 2	44
Package 2 Weight	4.805 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	PAL
Number of Units in Package 3	352
Package 3 Weight	53.56 kg
Package 3 Height	60 cm
Package 3 width	80 cm

Package 3 Length	352 cm
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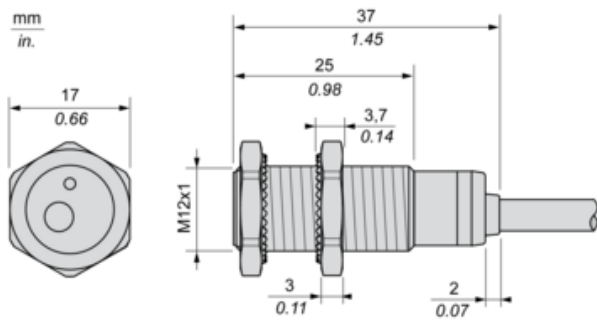
Offer Sustainability

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
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Dimensions



Minimum Mounting Distances

Side by side



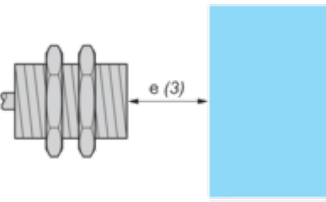
$e (1) \geq 4 \text{ mm}/0.16 \text{ in.}$

Face to face



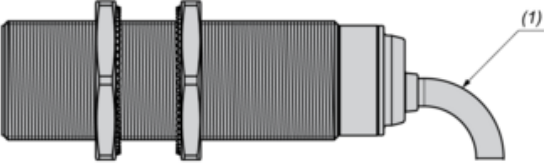
$e (2) \geq 24 \text{ mm}/0.94 \text{ in.}$

Facing a metal object



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

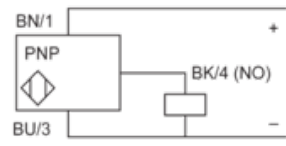
Mounting



(1) Bending cable: 4 x external cable diameter

Wiring Schemes

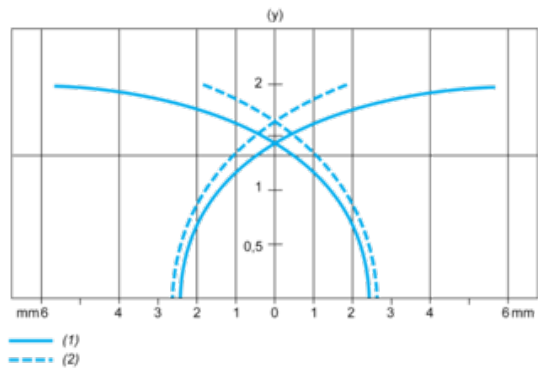
PNP



- 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