



Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	Mobile equipment
Sensor name	XS1
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	4-wire
[Sn] nominal sensing distance	2 mm
Discrete output function	1 NO + 1 NC
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 with overload and short-circuit protection
IP degree of protection	IP68 conforming to IEC 60529 IP65

Complementary

Safety level	SIL 2 conforming to IEC 61508 PL = d conforming to ISO 13849-1 SILCL 2 conforming to IEC 62061
Safety reliability data	MTTFd = 1810 years PFHd = 62.9E-9 1/h SFF = 92 % DC = 74 % with appropriate safety controller
Service life	20 year(s)
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	4 x 0.22 mm ²
Wire insulation material	PVC
Status LED	Output state: 1 LED (yellow)
Supply voltage limits	9...36 V DC
Switching frequency	<= 5000 Hz
Maximum voltage drop	<2 V (closed)
Current consumption	0...10 mA no-load
Maximum delay first up	5 ms

Maximum delay response	0.1 ms
Maximum delay recovery	0.1 ms
Marking	CE
Threaded length	25 mm
Length	37 mm
Net weight	0.07 kg

Environment

Standards	IEC 62061 ISO 13849-1
Product certifications	TÜV[RETURN]E2[RETURN]JUL[RETURN]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 Height	4.200 cm
Package 1 Width	9.500 cm
Package 1 Length	13.200 cm
Package 1 Weight	81.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	2.117 kg

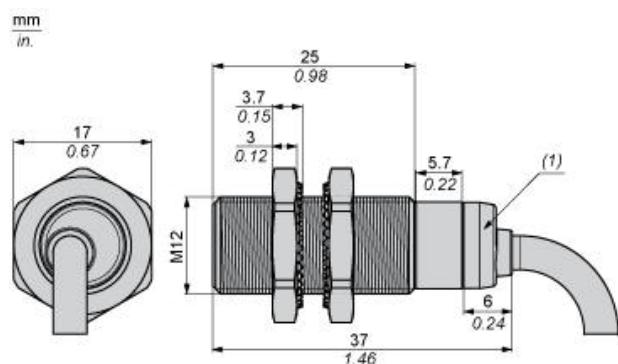
Offer Sustainability

Sustainable offer status	Green Premium product
Circularity Profile	 End of Life Information
California proposition 65	WARNING: This product can expose you to chemicals including: Diisobutyl 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
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

Contractual warranty

Warranty	18 months
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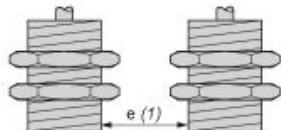
Dimensions



(1) LED

Minimum Mounting Distances

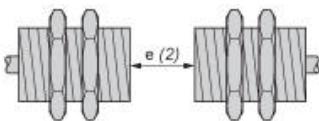
Side by side



$e (1)$ 4 mm/0.16 in.

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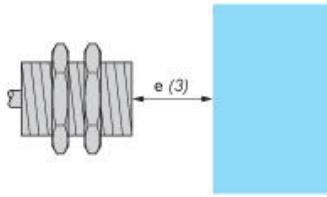
Face to face



$e (2)$ 24 mm/0.94 in.

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Facing a metal object

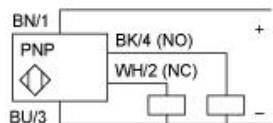


$e (3)$ 6 mm/0.24 in.

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Wiring Schemes

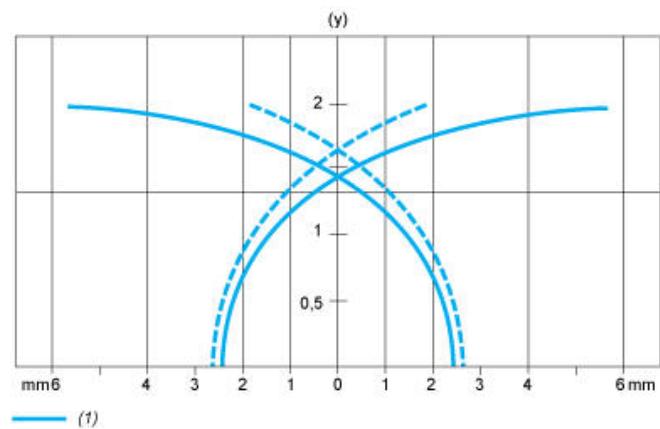
PNP 4-wire



BU : Blue
BN : Brown
BK : Black
WH : White

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