

# Product data sheet

Specifications



## Inductive proximity sensors XS, inductive sensor XS6 M12, L54mm, brass, Sn4mm, 12...48 VDC, cable 2 m

XS612B1PAL2

### Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	Mobile equipment
Sensor name	XS6
Sensor design	Cylindrical M12
Size	54 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	4 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...48 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
Sensing range	> 2.5...4 mm

<b>Operating zone</b>	0...3.2 mm
<b>Differential travel</b>	1...15% of Sr
<b>Cable composition</b>	3 x 0.34 mm <sup>2</sup>
<b>Wire insulation material</b>	PvR
<b>Status LED</b>	Output state: 1 LED (yellow)
<b>Supply voltage limits</b>	10...58 V DC
<b>Switching frequency</b>	<= 2500 Hz
<b>Maximum voltage drop</b>	<2 V (closed)
<b>Current consumption</b>	<= 10 mA no-load
<b>Maximum delay first up</b>	10 ms
<b>Maximum delay response</b>	0.2 ms
<b>Maximum delay recovery</b>	0.2 ms
<b>Marking</b>	CE
<b>Threaded length</b>	42 mm
<b>Length</b>	54 mm
<b>Net weight</b>	0.075 kg

## Environment

<b>Product certifications</b>	UL E2 CSA
<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>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	78 g
<b>Package 1 Height</b>	4.1 cm
<b>Package 1 width</b>	9.6 cm
<b>Package 1 Length</b>	13.1 cm
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	352
<b>Package 2 Weight</b>	48.112 kg
<b>Package 2 Height</b>	77 cm
<b>Package 2 width</b>	60 cm
<b>Package 2 Length</b>	80 cm
<b>Unit Type of Package 3</b>	S03
<b>Number of Units in Package 3</b>	44
<b>Package 3 Weight</b>	4.112 kg
<b>Package 3 Height</b>	30 cm

Package 3 width	30 cm
Package 3 Length	40 cm

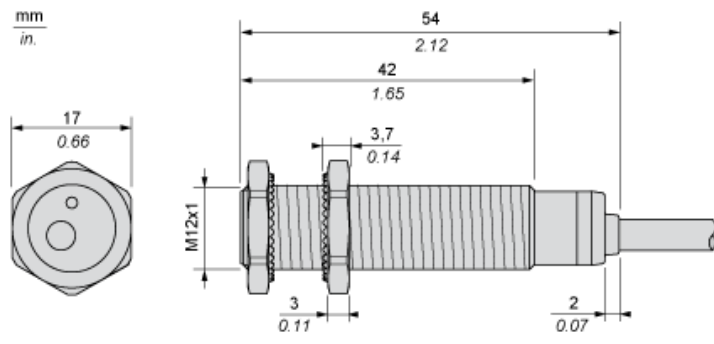
## Offer Sustainability

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
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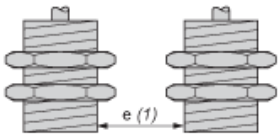
Dimensions



**Minimum Mounting Distances**

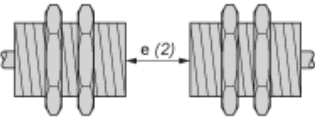
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Side by side



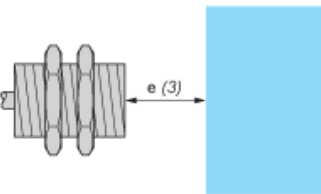
**e (1) ≥ 8 mm/0.31 in.**

Face to face



**e (2) ≥ 48 mm/1.89 in.**

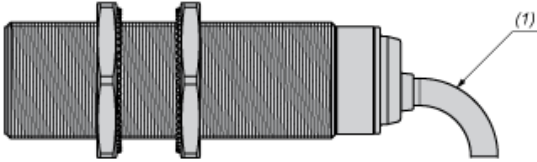
Facing a metal object



**e (3) ≥ 12 mm/0.47 in.**

**Mounting**

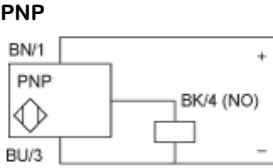
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(1) Bending cable: 4 x external cable diameter

**Wiring Schemes**

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