



## Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	Application
Sensor type	Inductive proximity sensor
Device application	Harsh environment application
Sensor name	XS9
Sensor design	Cylindrical M12
Size	60 mm
Body type	Single piece body
Enclosure material	Stainless steel 303
Type of output signal	Discrete
Wiring technique	3-wire
[Sn] nominal sensing distance	10 mm
Discrete output function	1 NO
Discrete output type	PNP
Electrical connection	Male connector M12, 4 pins
[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	IP69K conforming to DIN 40050 IP68 conforming to IEC 60529

## Complementary

Thread type	M12 x 1
Detection face	Frontal
Detector flush mounting acceptance	Non flush mountable
Material	Stainless steel 303
Front material	Stainless steel 303
Sensing range	> 8...15 mm
Operating zone	0...8 mm
Differential travel	1...15 % of Sr
Repeat accuracy	<= 5 % of Sr

Output circuit type	DC
Status LED	Output state: 1 LED (yellow)
Supply voltage limits	10...30 V DC
Maximum residual current	0.1 mA open state
Switching frequency	<= 400 kHz
Maximum voltage drop	<2 V (closed)
Current consumption	<= 10 mA no-load
Maximum delay first up	40 ms
Maximum delay response	0.00006 ms
Maximum delay recovery	0.015 ms
Marking	CE
Threaded length	36 mm
Height	12 mm
Length	60 mm
Net weight	0.023 kg

## Environment

Product certifications	CULus
Ambient air temperature for operation	-25...70 °C
Ambient air temperature for storage	-25...70 °C
Vibration resistance	25 gn amplitude = +/- 1 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn for 11 ms conforming to IEC 60068-2-27

## Packing Units

Package 1 Weight	0.034 kg
Package 1 Height	0.070 dm
Package 1 width	2.100 dm
Package 1 Length	1.900 dm

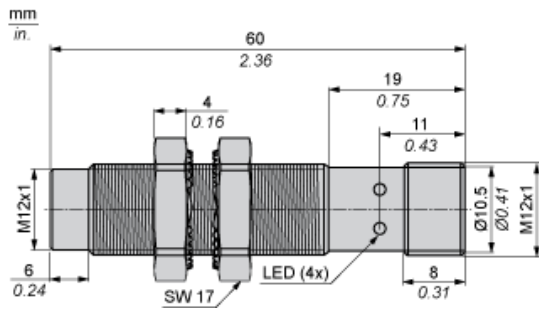
## Offer Sustainability

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>

## Contractual warranty

Warranty	18 months
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Dimensions



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Minimum Mounting Distances in mm

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Side by side



$e (1) \geq 108 \text{ mm}/4.25 \text{ in.}$

Face to face



$e (2) \geq 40 \text{ mm}/1.57 \text{ in.}$

Facing a metal object



$e (3) \geq 30 \text{ mm}/0.18 \text{ in.}$

Mounted in a metal support



$d \geq 30 \text{ mm}/0.18 \text{ in.}$

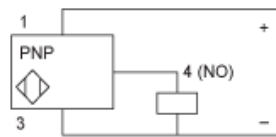
$h \geq 22 \text{ mm}/0.87 \text{ in.}$

## Wiring Schemes

M12 connector



PNP



- 1 : (+)
- 2 : Not connected
- 3 : (-)
- 4 : NO Output