

Product data sheet

Specifications



Inductive proximity sensors XS,
inductive sensor XS1 M5, L42mm,
stainless, Sn0.8mm, 5..24VDC, M8

XS1N05PB311S

Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	-
Sensor name	XS1
Sensor design	Cylindrical M5
Size	42 mm
Body type	Fixed
Detector flush mounting acceptance	Flush mountable
Material	Stainless steel
Type of output signal	Discrete
Wiring technique	3-wire
[Sn] nominal sensing distance	0.8 mm
Discrete output function	1 NC
Output circuit type	DC
Discrete output type	PNP
Electrical connection	Male connector M8, 3 pins
[Us] rated supply voltage	5...24 V DC
Switching capacity in mA	<= 100 mA with overload and short-circuit protection
IP degree of protection	IP67 conforming to IEC 60529

Complementary

Thread type	M5 x 0.5
Detection face	Frontal
Front material	PPS
Enclosure material	Stainless steel 303
Operating zone	0...0.6 mm
Status LED	Output state: 1 LED (yellow)

Supply voltage limits	5...30 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	1 ms
Maximum delay recovery	1 ms
Marking	CE
Threaded length	24 mm
Length	42 mm

Environment

Product certifications	CSA UL
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	2.2 cm
Package 1 Width	5.7 cm
Package 1 Length	15.1 cm
Package 1 Weight	12 g
Unit Type of Package 2	S01
Number of Units in Package 2	18
Package 2 Height	15 cm
Package 2 Width	15 cm
Package 2 Length	40 cm
Package 2 Weight	622 g

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

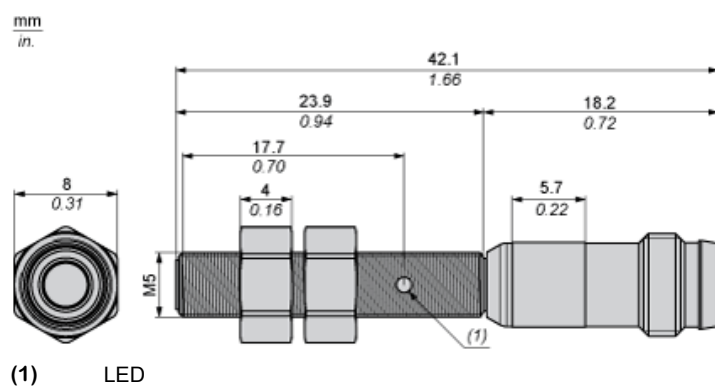
Contractual warranty

Warranty	18 months
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Dimensions Drawings

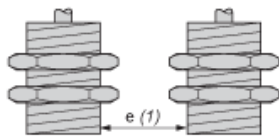
XS1N05PB311S

Dimensions



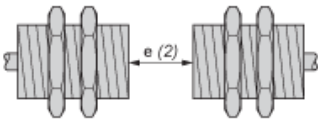
Minimum Mounting Distances in mm

Side by side



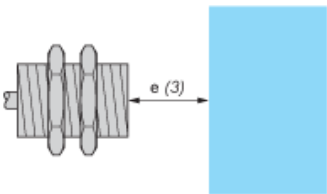
$e\ (1) \geq 2\text{ mm}/0.79\text{ in.}$

Face to face



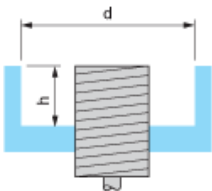
$e\ (2) \geq 12\text{ mm}/0.47\text{ in.}$

Facing a metal object



$e\ (3) \geq 3\text{ mm}/0.12\text{ in.}$

Mounted in a metal support



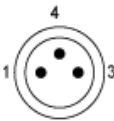
$d \geq 5\text{ mm}/0.17\text{ in.}$

$h \geq 0\text{ mm}/0\text{ in.}$

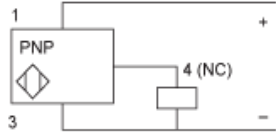
Tightening torque : 2.2 N.m. (values obtained with washers mounted)

Wiring Schemes

M8 Connector

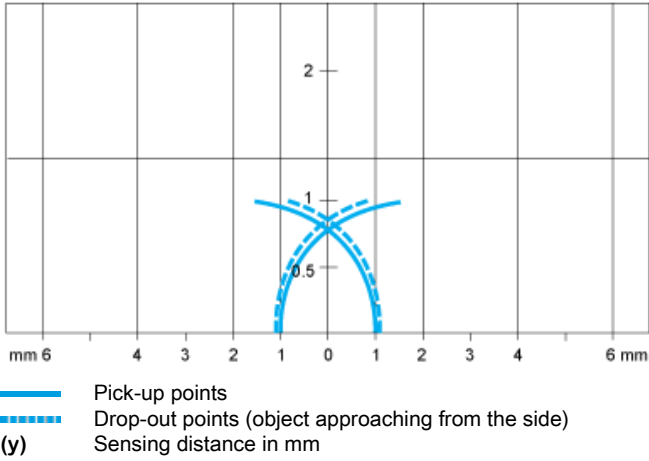


PNP



Performance Curves

Standard Steel Target (mm) : 5x5x1



Recommended replacement(s)