Product data sheet
Characteristics

XS1N05PA311S
inductive sensor XS1 M5 - L41mm - stainless - Sn0.8mm - 5..24VDC - M8

Main

Range of product	OsiSense XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	-
Sensor name	XS1
Sensor design	Cylindrical M5
Size	41 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 NO
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 IEC 60529

Complementary

Thread type	M5 x 0.5
Detection face	Frontal
Front material	PPS
Enclosure material	Stainless steel 303

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Operating zone	0.00…0.02 in (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	<= 10 mA no-load
Maximum delay first up	5 ms
Maximum delay response	1 ms
Maximum delay recovery	1 ms
Marking	CE
Threaded length	0.94 in (24 mm)
Height	0.39 in (10 mm)
Length	1.65 in (42 mm)
Net weight	0.03 lb(US) (0.015 kg)

Environment

Product certifications	UL CSA
Ambient air temperature for operation	-13…158 °F (-25…70 °C)
Ambient air temperature for storage	-40…185 °F (-40…85 °C)
Vibration resistance	25 gn +/- 2 mm 10…55 Hz)IEC 60068-2-6
Shock resistance	50 gn 11 ms IEC 60068-2-27

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	0.85 oz (24 g)
Package 1 Height	1.61 in (4.1 cm)
Package 1 width	2.56 in (6.5 cm)
Package 1 Length	3.74 in (9.5 cm)
Unit Type of Package 2	BAG
Number of Units in Package 2	1
Package 2 Weight	0.85 oz (24 g)
Package 2 Height	0.24 in (0.6 cm)
Package 2 width	7.87 in (20 cm)
Package 2 Length	5.91 in (15 cm)
Unit Type of Package 3	S02
Number of Units in Package 3	44
Package 3 Weight	3.09 lb(US) (1.402 kg)
Package 3 Height	5.91 in (15 cm)
Package 3 width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)

Offer Sustainability

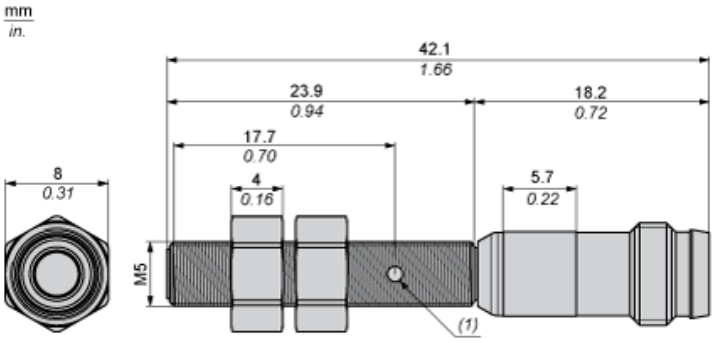
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months

XS1N05PA311S

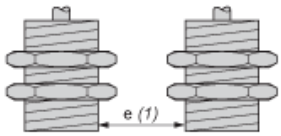
Dimensions



(1) LED

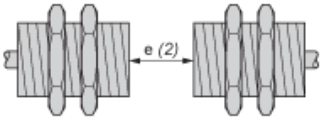
Minimum Mounting Distances in mm

Side by side



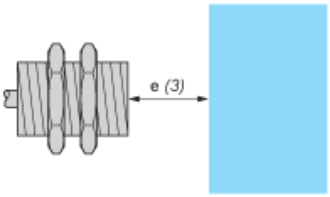
e (1) ≥ 2 mm/0.79 in.

Face to face



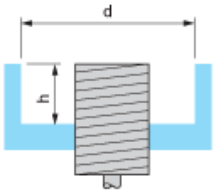
e (2) ≥ 12 mm/0.47 in.

Facing a metal object



e (3) ≥ 3 mm/0.12 in.

Mounted in a metal support

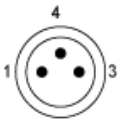


d ≥ 5 mm/0.17 in.
h ≥ 0 mm/0 in.

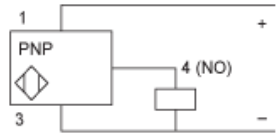
Tightening torque : 2.2 N.m. (values obtained with washers mounted)

Wiring Schemes

M8 Connector

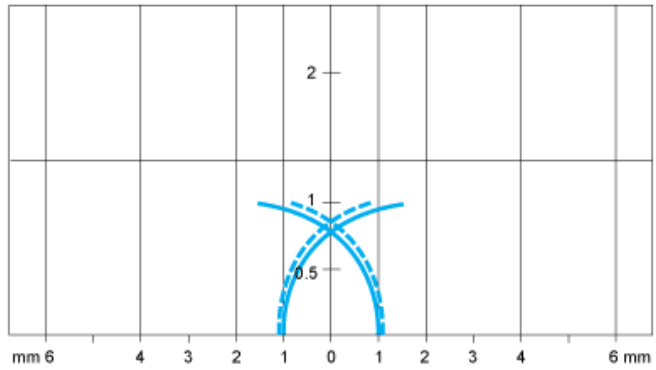


PNP



Performance Curves

Standard Steel Target (mm) : 5x5x1



Pick-up points
Drop-out points (object approaching from the side)
(y) Sensing distance in mm