Product data sheet

Specifications



Inductive proximity sensors XS, inductive sensor XS9 40x40x117, PBT, Sn25 mm, 12...24 VDC, terminals

XS9C4A2A2N12

Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	-
Sensor name	XS9
Sensor design	Form 40 x 40 x 117
Size	117 mm
Body type	Fixed
Detector flush mounting acceptance	Non flush mountable
Material	Plastic
Enclosure material	PBT
Type of output signal	Analogue
Wiring technique	2-wire
[Sn] nominal sensing distance	25 mm
Output circuit type	DC
Analogue output range	4...20 mA
Electrical connection	Screw-clamp terminals, 4 x 1.5 mm²
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
IP degree of protection	IP67 conforming to IEC 60529 IP65 conforming to IEC 60529 IP69K conforming to DIN 40050

Complementary

Detection face	5 positions turret head
Front material	PBT
Operating zone	2…27 mm
Linearity error	<= 3% of Sr
Maximum output current drift	5 %
Cable entry number	1 tapped entry for 1/2" NPT cable gland

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

Status LED	Output state: 1 LED (yellow)
Supply voltage limits	12…36 V DC
Current consumption	0...4 mA no-load
Maximum delay first up	7.5 ms
Maximum delay response	6 ms
Maximum delay recovery	6 ms
Marking	CE
Height	40 mm
Length	40 mm
Width	117 mm
Net weight	0.244 kg

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 EN 60068-2-27

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	244.0 g
Package 1 Height	14.5 cm
Package 1 width	5 cm
Package 1 Length	5 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
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 www.P65Warnings.ca.gov

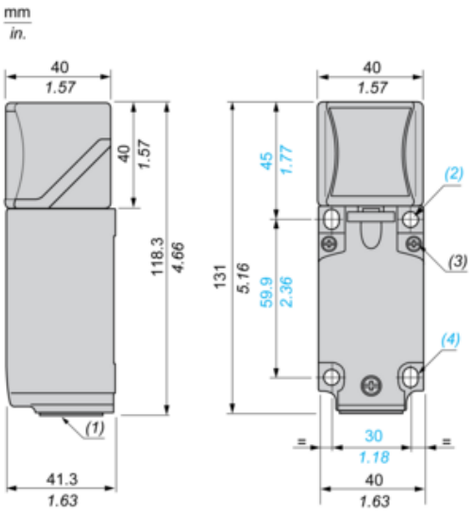
Contractual warranty

Warranty	18 months

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Dimensions Drawings

Dimensions



(1) : 1/2" NPT cable gland.

(2) : 2 holes Ø 5,45 mm / Ø 0.21 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in.

(3) : 3 screws M3,5. Tightening torque: < 1,2 Nm / < 10.6 lb-in.

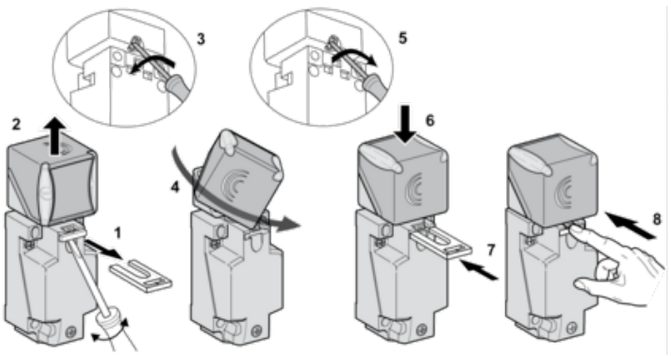
(4) : 2 alongated holes 5,4 x 7,4 mm / 0.21 x 0.29 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in".

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Mounting and Clearance

Mounting

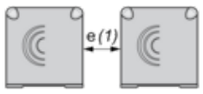
Head Positions



Setting-up Precautions

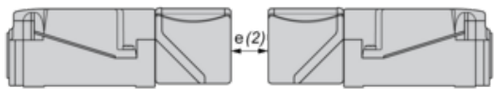
Minimum Mounting Distances (mm)

Side by Side



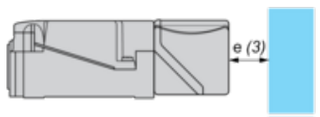
e (1) ≥ 120

Face to Face



e (2) ≥ 240

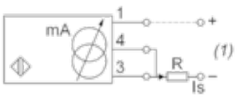
Facing a Metal Object



e (3) ≥ 90

Wiring Schemes

2-Wire

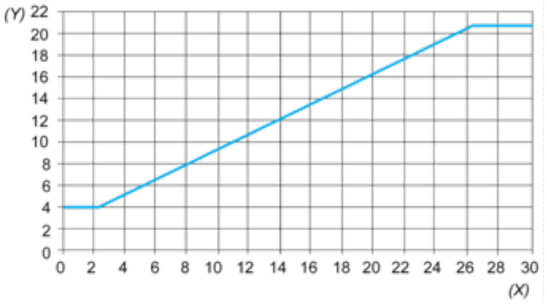


(1) Output current

Ensure a minimum of 10 V between the + and the - (terminal 3)of the sensor

	Output current	Load impedance value
12 V	4...20 mA	R ≤ 82 Ω
24 V	4...20 mA	R ≤ 560 Ω

Analogue Outputs



(Y) Output current (mA)

(X) Sensing distance (mm)