

Product data sheet

Characteristics

XS9C4A2A2N12

inductive sensor XS9 40x40x117 - PBT - Sn25 mm - 12..24VDC - terminals



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 mm ²
[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
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[RETURN]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	14.5 cm
Package 1 Width	5.0 cm
Package 1 Length	5.0 cm
Package 1 Weight	244.0 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)
Mercury free	Yes
RoHS exemption information	 Yes
Circularity Profile	No need of specific recycling operations

Contractual warranty

Warranty	18 months
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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 elongated holes 5,4 x 7,4 mm / 0.21 x 0.29 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in".

Mounting

Head Positions



Setting-up Precautions

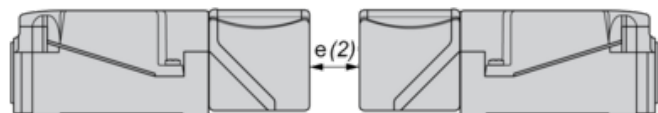
Minimum Mounting Distances (mm)

Side by Side



$$e(1) \geq 120$$

Face to Face



$$e(2) \geq 240$$

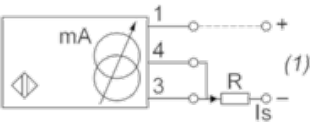
Facing a Metal Object



$$e(3) \geq 90$$

Wiring Schemes

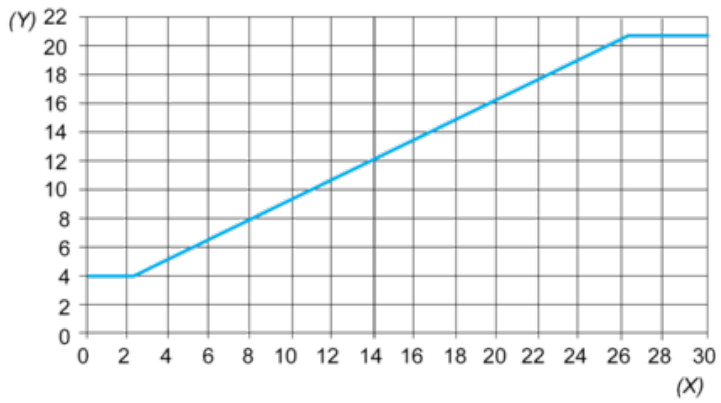
2-Wire



(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	$R \leq 82 \, \Omega$
24 V	4...20 mA	$R \leq 560 \, \Omega$

Analogue Outputs



(Y) Output current (mA)
(X) Sensing distance (mm)