

# Product data sheet

Specifications



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

XS9C4A2A1N12

### 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	3-wire
[Sn] nominal sensing distance	0.98 in (25 mm)
Output circuit type	DC
Analogue output range	0...10 V
Electrical connection	Screw-clamp terminals, 4 x 1.5 mm <sup>2</sup>
[Us] rated supply voltage	24 V DC reverse polarity protection
IP degree of protection	IP67 IEC 60529 IP65 IEC 60529 IP69K DIN 40050

### Complementary

Detection face	5 positions turret head
Front material	PBT
Operating zone	0.08...1.06 in (2...27 mm)
Linearity error	<= 3% of Sr
Maximum output current drift	5 %
Cable entry number	1 tapped entry 1/2" NPT cable gland

Status LED	Output state 1 LED yellow)
Supply voltage limits	15...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	1.57 in (40 mm)
Length	1.57 in (40 mm)
Width	4.61 in (117 mm)
Net weight	0.54 lb(US) (0.244 kg)

## Environment

Product certifications	CSA UL
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 msEN 60068-2-27

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.60 in (14.22 cm)
Package 1 Width	2.00 in (5.08 cm)
Package 1 Length	2.00 in (5.08 cm)
Package 1 Weight	0.55 lb(US) (0.25 kg)

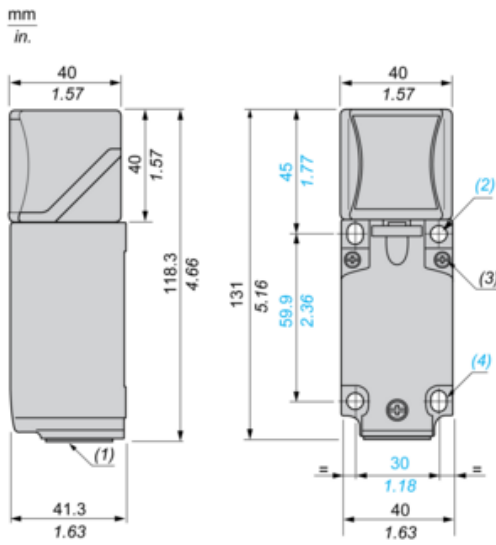
## Offer Sustainability

Sustainable offer status	Green Premium product
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>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Contractual warranty

Warranty	18 months
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Dimensions

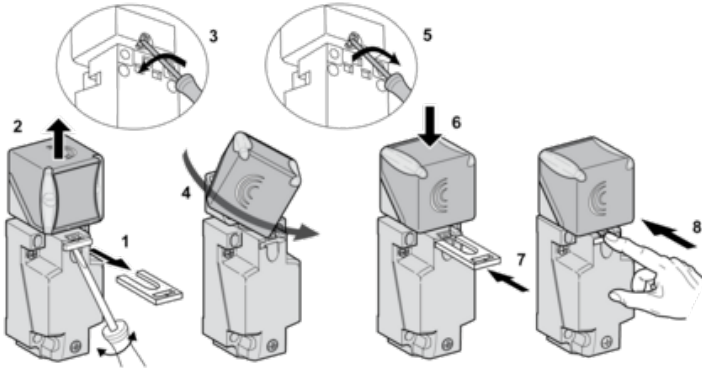


- (1) : 1/2" NPT cable gland.
- (2) : 2 holes  $\varnothing$  5,45 mm /  $\varnothing$  0.21 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in.
- (3) : 3 screws M3,5. Tightening torque: < 1,2 Nm / < 10.6 lb-in.
- (4) : 2 elongated holes 5,4 x 7,4 mm / 0.21 x 0.29 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in".

**Mounting**

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**Head Positions**

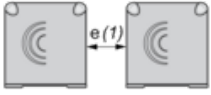


**Setting-up Precautions**

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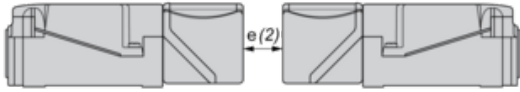
**Minimum Mounting Distances (mm)**

Side by Side



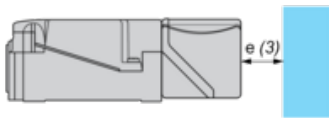
$e(1) \geq 120$

Face to Face



$e(2) \geq 240$

Facing a Metal Object

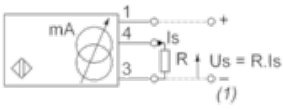


$e(3) \geq 90$

**Wiring Schemes**

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**3-Wire**



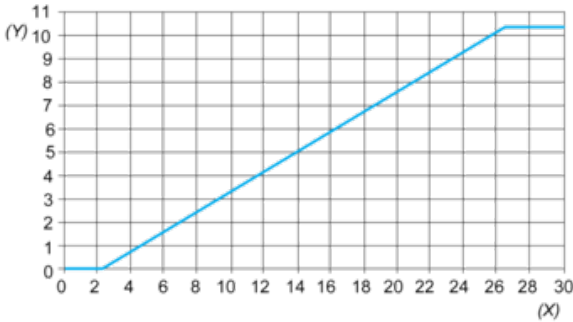
**(1) Output voltage**

Ensure a minimum of 5 V between the + and the sensor output (terminal 4)

	Output current	Load impedance value	Output voltage	Load impedance value
12 V	0...10 mA	$R \leq 630 \Omega$	-	-
24 V	0...10 mA	$R \leq 1500 \Omega$	0...10 V	$R = 1000 \Omega$

**Analogue Outputs**

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

**Recommended replacement(s)**