

Inductive proximity sensors XS, inductive sensor XS9 40x40x117, PBT, Sn25 mm, 12...24 VDC, 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 <sup>2</sup>
[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 M20 x 1.5 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]JUL
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 Height	5.0 cm
Package 1 Width	5.0 cm
Package 1 Length	14.5 cm
Package 1 Weight	244.0 g

## Offer Sustainability

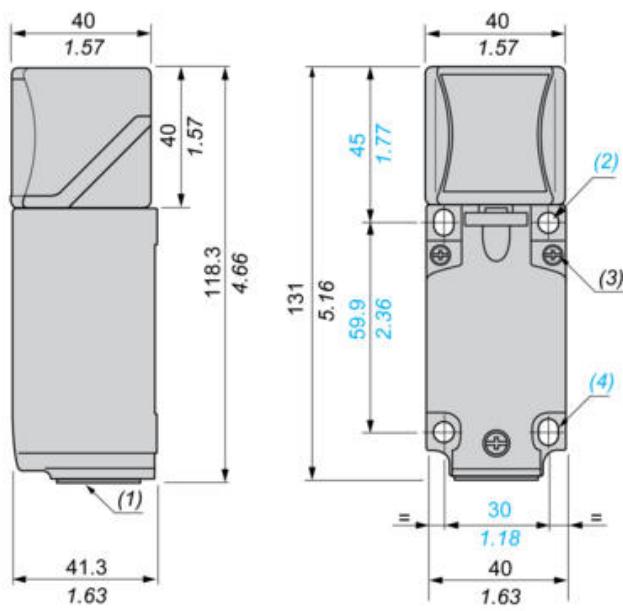
Sustainable offer status	Green Premium product
Circularity Profile	No need of specific recycling operations
California proposition 65	WARNING: This product can expose you to chemicals including: Diisobutyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
For all Reach Rohs enquiries contact us at	<a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>

## Contractual warranty

Warranty	18 months
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Dimensions

mm  
in.



(1) : M20 x 1.5 cable gland.

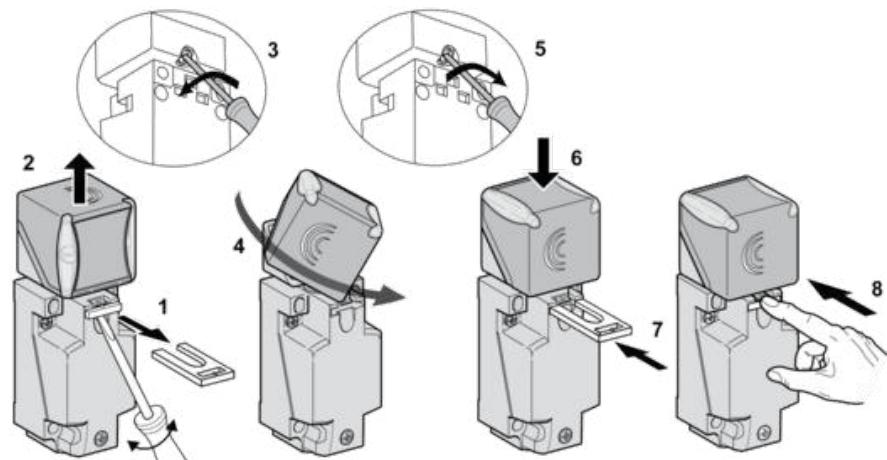
(2) : 2 holes Ø 5,45 mm / Ø 0,21 in. Tightening torque: < 1,5 Nm / < 13,3 lb-in.

(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

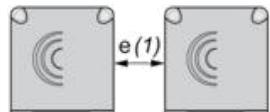
### Head Positions



## Setting-up Precautions

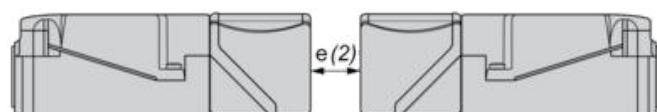
### Minimum Mounting Distances (mm)

Side by Side



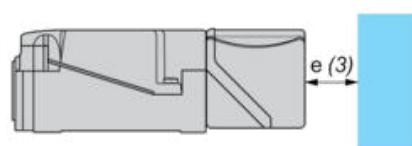
$e (1) \geq 120$

Face to Face



$e (2) \geq 240$

Facing a Metal Object



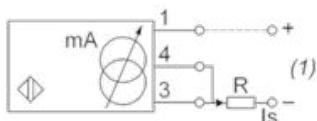
$e (3) \geq 90$

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## Wiring Schemes

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### 2-Wire



(1) Output current

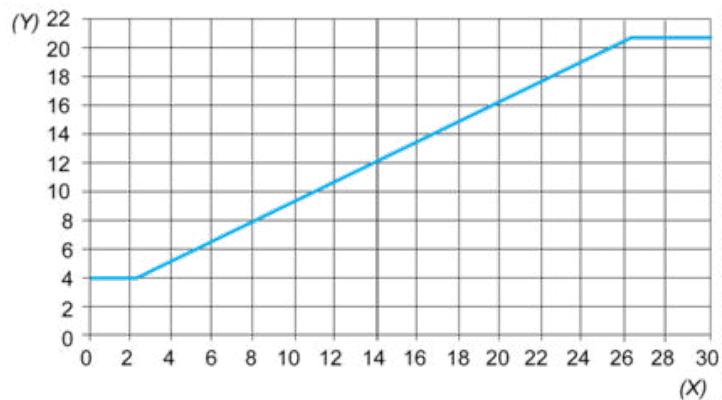
Ensure a minimum of 10 V between the + and the - (terminal 3) of the sensor

	Output current	Load impedance value
12 V	4...20 mA	$R \leq 82 \Omega$
24 V	4...20 mA	$R \leq 560 \Omega$

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Analogue Outputs

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(Y) Output current (mA)

(X) Sensing distance (mm)