

# Product data sheet

## Characteristics

# XS9C4A1PCN12

inductive sensor XS9 40x40x117 - PBT - Sn20 mm - 12..24VDC - terminals



## Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	Factor 1 (Fe/Nfe) Welding machine
Sensor name	XS9
Sensor design	Form 40 x 40 x 117
Size	117 mm
Body type	Fixed
Detector flush mounting acceptance	Flush mountable
Material	Plastic
Enclosure material	PBT
Type of output signal	Discrete
Wiring technique	4-wire
[Sn] nominal sensing distance	20 mm
Discrete output function	1 NO + 1 NC
Output circuit type	DC
Discrete output type	PNP
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
Switching capacity in mA	<= 200 mA with overload and short-circuit 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	0...16 mm
Differential travel	3...15% of Sr
Repeat accuracy	<= 3% of Sr
Electromagnetic compatibility	Immunity to magnetic fields - test level: 250 mT
Cable entry number	1 tapped entry for 1/2" NPT cable gland
Status LED	Supply on: 1 LED (green) Output state: 1 LED (yellow)
Supply voltage limits	10...36 V DC
Switching frequency	<= 250 Hz
Maximum voltage drop	<2 V (closed)
Current consumption	0...30 mA no-load
Maximum delay first up	15 ms
Maximum delay response	2.5 ms

Maximum delay recovery	2.5 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 EN 60068-2-27

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	14.7 cm
Package 1 Width	5.0 cm
Package 1 Length	5.0 cm
Package 1 Weight	244.0 g

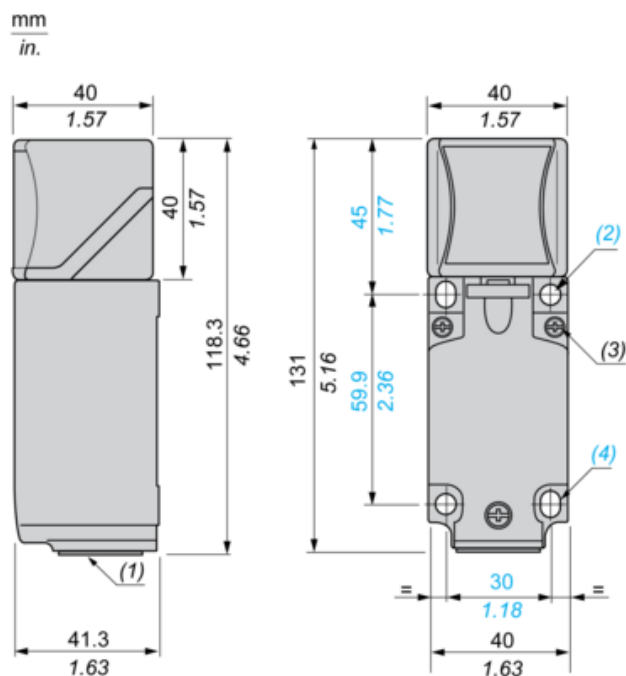
## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	 <a href="#">Yes</a>
Circularity Profile	No need of specific recycling operations

## Contractual warranty

Warranty	18 months
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## Dimensions



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

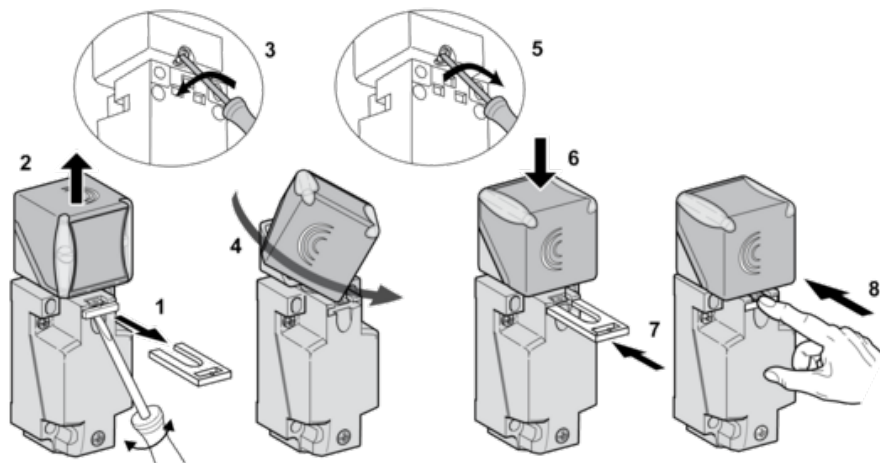
(2) : 2 holes Ø 5,45 mm / Ø 0.21 in. Tightening torque: < 1,5 Nm / < 13.3 lb-in.

(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".

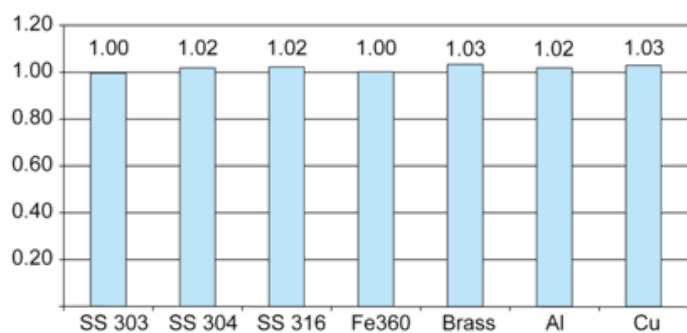
## Mounting

### Head Positions



## Setting-up

### Sensing Distance Correction Factor



SS : Stainless steel

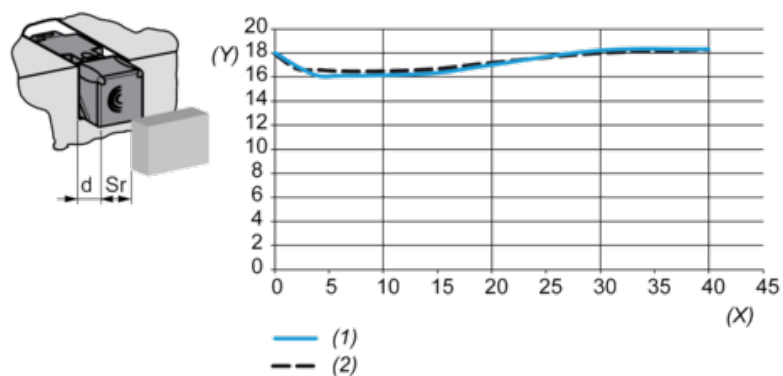
Fe : Steel

Al : Aluminium

Cu : Copper

## Setting-up

### Operating Distance (According to the Sensor's Level of Flush Mounting)



- (y) Sensing distance (Sr) mm
- (x) Sensing face/frame distance (d) mm
- (1) Flush mounted in aluminium
- (2) Flush mounted in Fe360

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## Wiring Schemes

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### 4-Wire DC

