

Inductive proximity sensors XS, inductive sensor XS8 40x40x117, PBT, Sn40 mm, 12...48 VDC, M12



Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	Mobile equipment
Sensor name	XS8
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	Discrete
Wiring technique	4-wire
[Sn] nominal sensing distance	40 mm
Discrete output function	1 NO + 1 NC
Output circuit type	DC
Discrete output type	PNP
Electrical connection	Male connector M12, 4 pins
[Us] rated supply voltage	12...48 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

Safety level	SIL 2 conforming to IEC 61508 PL = d conforming to ISO 13849-1 SILCL 2 conforming to IEC 62061
Safety reliability data	MTTFd = 1546 years PFHd = 7.4E-8 1/h SFF = 92 % DC = 75 % with appropriate safety controller
Detection face	5 positions turret head
Front material	PBT
Operating zone	0...32 mm
Differential travel	3...15% of Sr
Repeat accuracy	<= 3% of Sr
Status LED	Supply on: 1 LED (green) Output state: 1 LED (yellow)
Supply voltage limits	10...58 V DC
Switching frequency	<= 200 Hz
Maximum voltage drop	<2 V (closed)
Current consumption	0...15 mA no-load
Maximum delay first up	7.5 ms
Maximum delay response	1.4 ms

Maximum delay recovery	2.5 ms
Marking	CE
Height	40 mm
Length	40 mm
Width	129 mm
Net weight	0.244 kg

## Environment

Product certifications	E2[RETURN]CSA[RETURN]UL[RETURN]CCC[RETURN]TÜV
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	14.300 cm
Package 1 Width	5.000 cm
Package 1 Length	5.000 cm
Package 1 Weight	275.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	14
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.212 kg

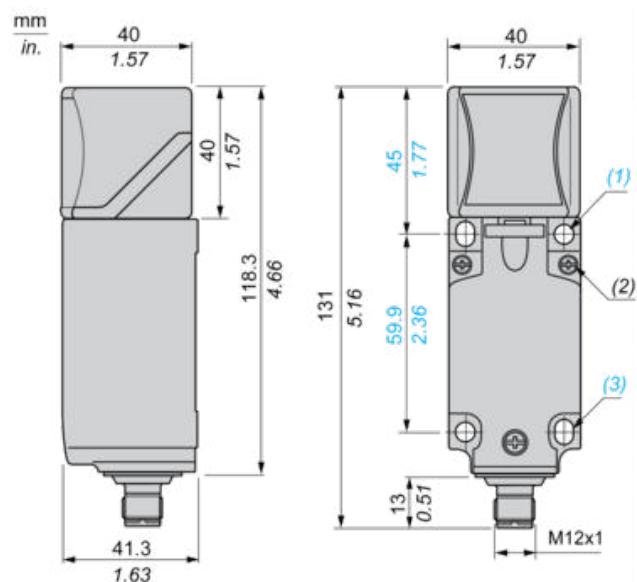
## Offer Sustainability

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	sustainability@tesensors.com

## Contractual warranty

Warranty	18 months
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## Dimensions



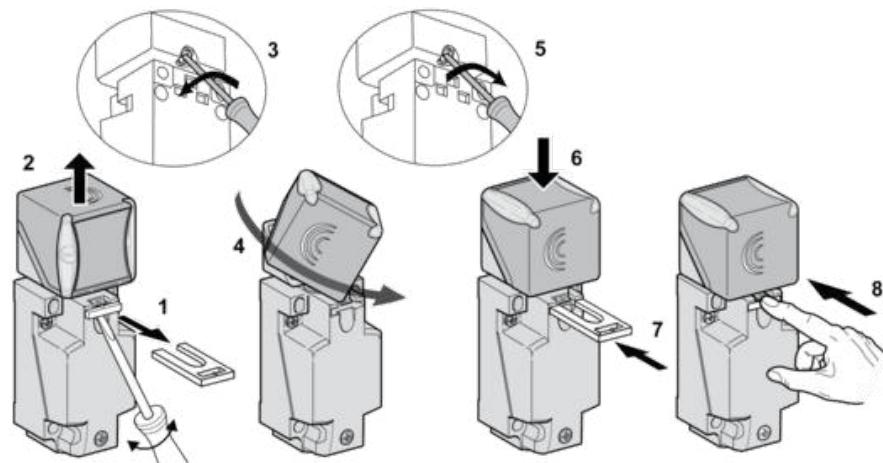
(1) 2 holes Ø 5,45 mm / Ø 0.21 in. (Tightening torque: < 1,5 Nm / < 13.3 lb-in.)

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

(3) 2 elongated holes 5,4 x 7,4 mm / 0.21 x 0.29 in. (Tightening torque: < 1,5 Nm / < 13.3 lb-in.)

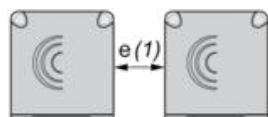
## Mounting

### Head Positions



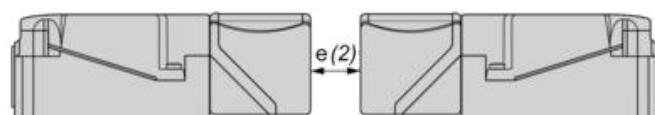
### Setting-up Precautions

#### Side by Side



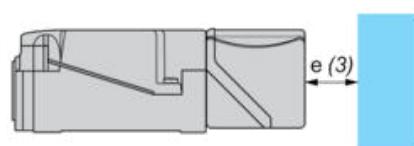
$e(1) \geq 160$

#### Face to Face



$e(2) \geq 320$

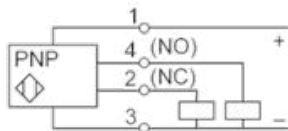
#### Facing a Metal Object



$e(3) \geq 120$

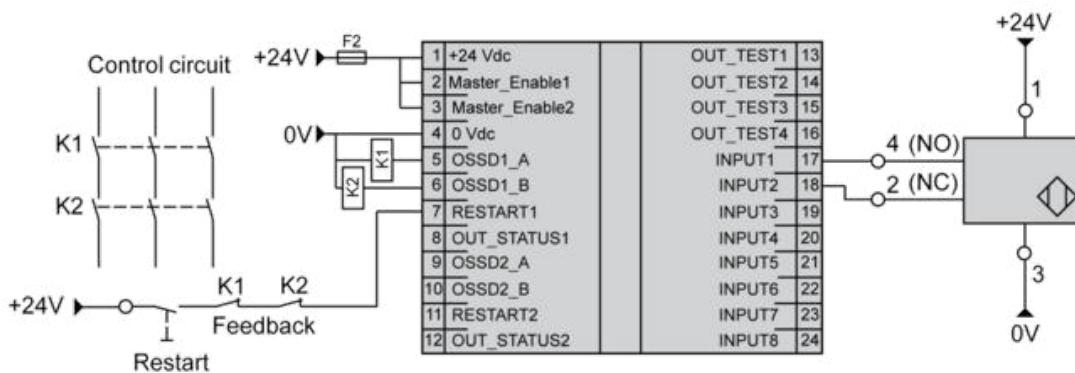
## Wiring Schemes

### 4-Wire DC



### SIL 2 Wiring Scheme

With Preventa XPSMF40 Safety PLC



SFF : (Safe Failure Fraction): 92,68 %

DC : (Diagnosis Coverage): 75,8 %