

Inductive proximity sensors XS for hazardous area dust, 40x40x117, Sn20 mm, 12..48VDC, NO+NC, terminals



Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	Application
Sensor type	Inductive proximity sensor
Device application	ATEX dust
Sensor name	XS8
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
[Sn] nominal sensing distance	20 mm
Type of output signal	Discrete
Wiring technique	4-wire
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 ²
[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

Complementary

Safety level	SIL 2 conforming to EN/IEC 61508 PL = d conforming to EN/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
Sensing range	> 15...40 mm
Operating zone	0...16 mm
Differential travel	3...15% of Sr
Repeat accuracy	<= 3% of Sr
Cable entry number	1 tapped entry for M20 x 1.5 cable gland (included)
Status LED	Supply on: 1 LED (green) Output state: 1 LED (yellow)
Supply voltage limits	10...58 V DC
Switching frequency	<= 300 Hz
Maximum voltage drop	<2 V (closed)
Current consumption	0...15 mA no-load
Maximum delay first up	7.5 ms

Maximum delay response	1.2 ms
Maximum delay recovery	1.8 ms
Marking	II2 D-Ex tb IIIC T85°C Db IP67
Depth	40 mm
Height	40 mm
Width	117 mm
Net weight	0.294 kg

Environment

Environmental characteristic	Hazardous location
Standards	EN/IEC 60079-0 EN/IEC 60079-31
Directives	2014/34/EU - ATEX directive
Product certifications	INERIS 16ATEX0037X[RETURN]IEC-Ex INE 16.0047X
Ambient air temperature for operation	-20...60 °C
Ambient air temperature for storage	-25...70 °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
Dust zone	Zone 21 - 22

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	14.0 cm
Package 1 Weight	244.0 g

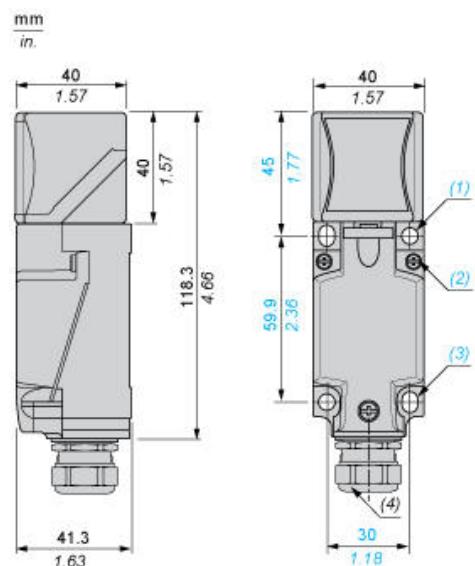
Offer Sustainability

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 www.P65Warnings.ca.gov
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

Contractual warranty

Warranty	18 months
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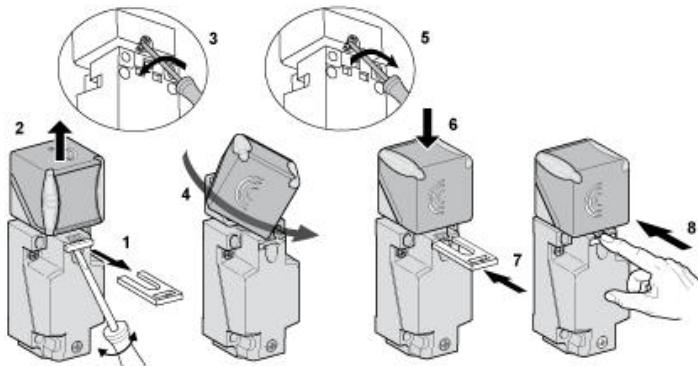
Dimensions



- (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.)
- (4) Hazardous area certified cable gland, (Tightening torque: < 4 Nm / < 35,4 lb-in.)

Mounting

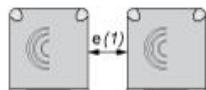
Head Positions



Setting-up Precautions

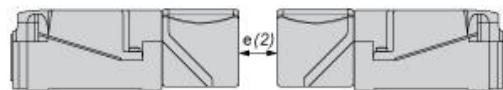
Minimum Mounting Distances (mm)

Side by Side



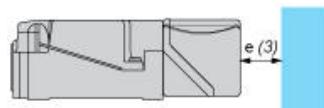
e (1) 80
≥

Face to Face



e (2) 160
≥

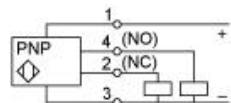
Facing a Metal Object



e (3) 60
≥

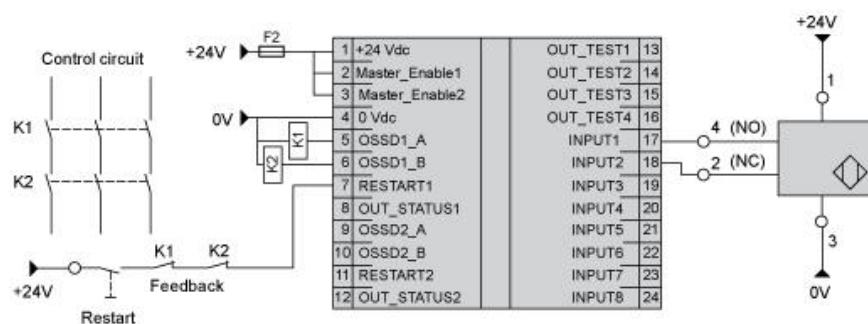
Wiring Schemes

4-Wire DC



SIL 2 Wiring Scheme

With Preventa XPSMF40 Safety PLC



SFF : (Safe Failure Fraction): 92,68 %
DC : (Diagnosis Coverage): 75,8 %