

Inductive proximity sensors XS for hazardous area dust, inductive sensor analog, M18, Sn5mm, 12...24 VDC, cable 2 m



Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	Application
Sensor type	Inductive proximity sensor
Device application	ATEX dust
Sensor name	XS1
Sensor design	Cylindrical M18
Size	18 mm
Body type	Fixed
Detector flush mounting acceptance	Flush mountable
Material	Metal
Enclosure material	Nickel plated brass
[Sn] nominal sensing distance	5 mm
Type of output signal	Analogue
Wiring technique	2-wire
Output circuit type	DC
Analogue output range	4...20 mA
Electrical connection	Cable
Cable length	2 m
[Us] rated supply voltage	12...24 V DC
IP degree of protection	IP67 conforming to IEC 60529

Complementary

Thread type	M18 x 1
Detection face	Frontal
Front material	PPS
Sensing range	> 4...8 mm
Operating zone	0.5...5 mm
Repeat accuracy	<= 3% of Sr
Linearity error	+/- 2 mA
Cable composition	3 x 0.34 mm ²
Wire insulation material	PVC
Supply voltage limits	10...38 V DC
Switching frequency	<= 500 Hz
Current consumption	4 mA no-load
Maximum output current drift	10 %
Marking	II2 D-Ex tb IIIC T90°C Db IP67
Threaded length	44 mm
Length	53 mm

Environment

Environmental characteristic	Hazardous location
Standards	EN/IEC 60079-0 EN/IEC 60079-31
Directives	94/9/EC - ATEX directive
Product certifications	INERIS 04ATEX0022
Ambient air temperature for operation	-20...60 °C
Dust zone	Zone 21 - 22

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.0 cm
Package 1 Width	4.0 cm
Package 1 Length	9.5 cm
Package 1 Weight	160.0 g

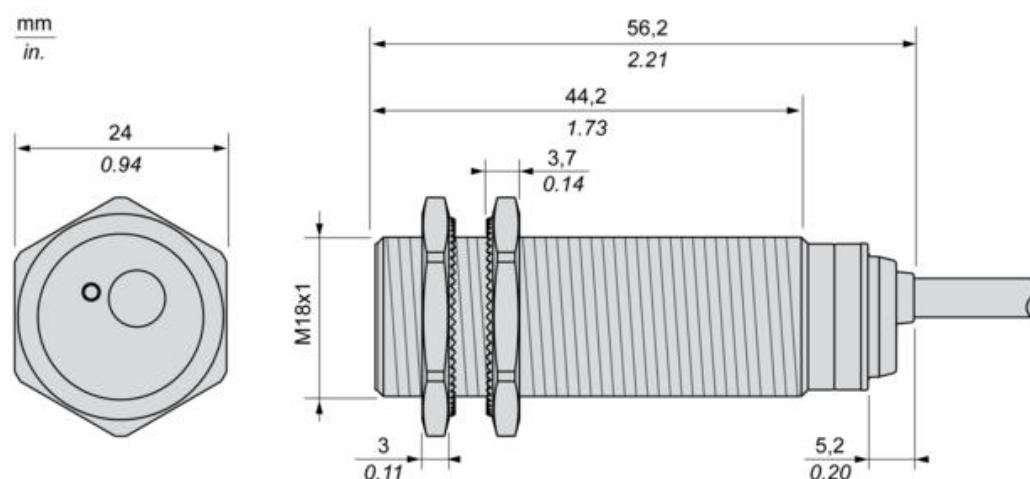
Offer Sustainability

Sustainable offer status	Green Premium product
Circularity Profile	 End of Life Information
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

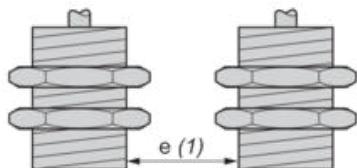
Warranty	18 months
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Dimensions



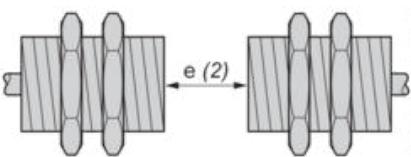
Minimum Mounting Distances

Side by side



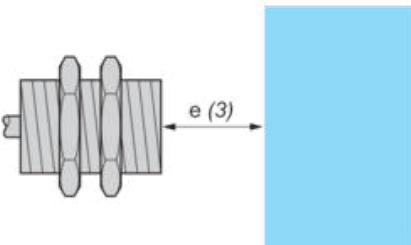
$e (1) \geq 10 \text{ mm/0.39 in.}$

Face to face



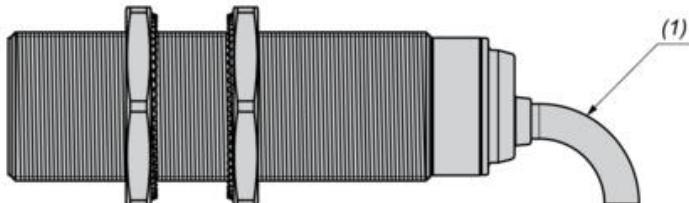
$e (2) \geq 60 \text{ mm/2.36 in.}$

Facing a metal object



$e (3) \geq 15 \text{ mm/0.60 in}$

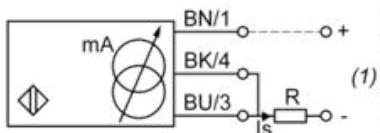
Mounting



(1) Bending cable: 4 x external cable diameter

Wiring Schemes

2-Wire connection



(1) Output current

BN : Brown

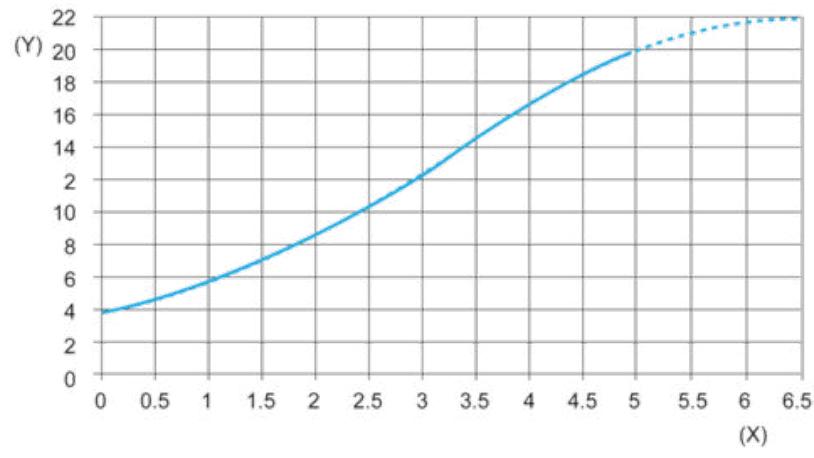
BK : Black

BU : Blue

	Output current	Load impedance value
12 V	4...20 mA	$R \leq 8.2 \Omega$
24 V	4...20 mA	$R \leq 470 \Omega$

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

Output Curves



(Y) I_s (mA)

(X) Sensors - object distance (mm)