

# XS1M12AB120EX

Inductive proximity sensors XS ATEX D,  
inductive sensor analog, M12, Sn2mm, 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 M12
Size	12 mm
Body type	Fixed
Detector flush mounting acceptance	Flush mountable
Material	Metal
Enclosure Material	Nickel Plated Brass
[Sn] nominal sensing distance	0.08 in (2 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	6.56 ft (2 m)
[Us] rated supply voltage	12...24 V DC
IP degree of protection	IP67 conforming to IEC 60529

## Complementary

Thread type	M12 x 1
Detection face	Frontal
Front material	PPS
Sensing range	> 0...0.1 in (> 0...2.5 mm)
Operating zone	0.01...0.08 in (0.2...2 mm)
Repeat accuracy	<= 3% of Sr
Linearity error	+/- 2 mA
Cable composition	3 x 0.34 mm <sup>2</sup>
Wire insulation material	PvR
Supply voltage limits	10...38 V DC
Switching frequency	<= 1500 Hz
Current consumption	4 mA no-load
Maximum output current drift	10 %
Marking	II2 D-Ex tb IIIC T90°C Db IP67
Threaded length	1.65 in (42 mm)
Length	1.97 in (50 mm)

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## Environment

Environmental characteristic	Hazardous location
Standards	EN/IEC 60079-0 EN/IEC 60079-31
Directives	94/9/EC - ATEX directive
Product Certifications	INERIS 04ATEX0022X
Ambient Air Temperature for Operation	-4...140 °F (-20...60 °C)
Dust zone	Zone 21 - 22

## Ordering and shipping details

Category	22486-SENSORS, PROXIMITY
Discount Schedule	DS2
GTIN	3389110954265
Nbr. of units in pkg.	1
Package weight(Lbs)	4.94 oz (140.0 g)
Returnability	No
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	5.12 in (13 cm)
Package 1 width	1.57 in (4 cm)
Package 1 Length	3.74 in (9.5 cm)

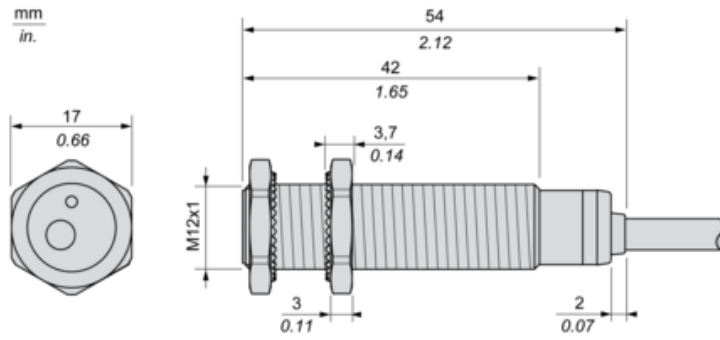
## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl 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>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

## Contractual warranty

Warranty	18 months
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Dimensions

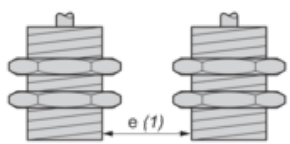


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Minimum Mounting Distances

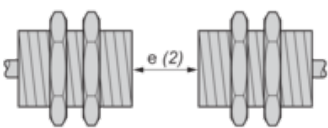
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Side by side



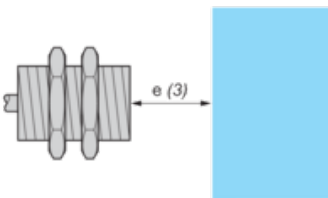
$e (1) \geq 4 \text{ mm}/0.16 \text{ in.}$

Face to face



$e (2) \geq 24 \text{ mm}/0.94 \text{ in.}$

Facing a metal object

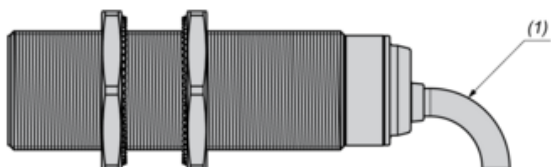


$e (3) \geq 6 \text{ mm}/0.24 \text{ in.}$

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Mounting

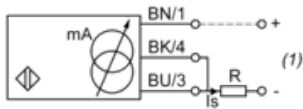
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(1) Bending cable: 4 x external cable diameter

Wiring Schemes

2-Wire connection



(1) Output current

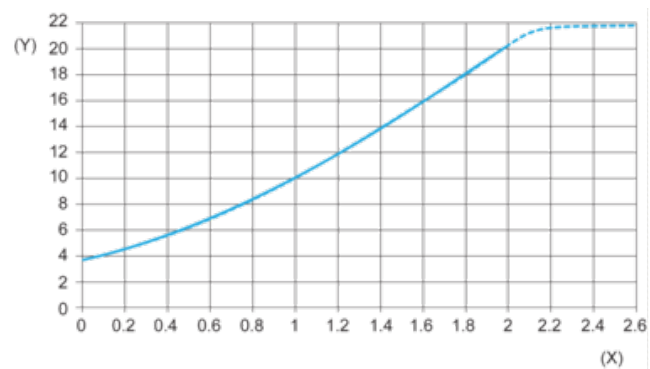
BN : Brown

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)

# Mouser Electronics

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