

Product data sheet

Specifications



Inductive proximity sensors XS, inductive sensor XS1 M12, L50mm, brass, Sn2mm, 12...24 VDC, cable 2 m

XS1M12AB120

Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	Application
Sensor type	Inductive proximity sensor
Electrical circuit type	Analog output
Sensor name	XS1
Sensor design	Cylindrical M12
Size	54 mm
Body type	Fixed
Detector flush mounting acceptance	Flush mountable
Material	Metal
Type of output signal	Analogue
Wiring technique	2-wire
[Sn] nominal sensing distance	2 mm
Discrete output function	1 NC
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	M12 x 1
Detection face	Frontal
Front material	PPS
Enclosure material	Nickel plated brass
Operating zone	0.2...2 mm
Repeat accuracy	<= 3% of Sr

Linearity error	+/- 2 mA
Cable composition	3 x 0.34 mm²
Wire insulation material	PvR
Supply voltage limits	10...36 V DC
Switching frequency	<= 1500 Hz
Current consumption	4 mA no-load
Maximum output current drift	10 %
Marking	CE
Threaded length	42 mm
Height	12 mm
Length	50 mm
Net weight	0.075 kg

Environment

Product certifications	UL CSA
Ambient air temperature for operation	-25...70 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.4 cm
Package 1 Width	11.2 cm
Package 1 Length	11.8 cm
Package 1 Weight	85.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	2.175 kg

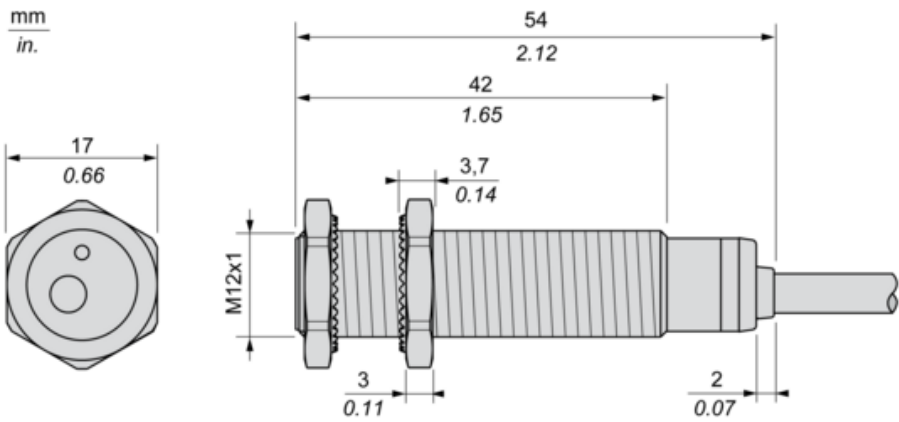
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
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 www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months
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Dimensions



Minimum Mounting Distances

Side by side



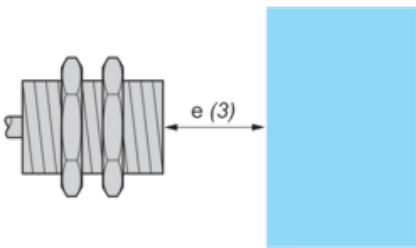
$e\ (1) \geq 4\text{ mm}/0.16\text{ in.}$

Face to face



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

Facing a metal object



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

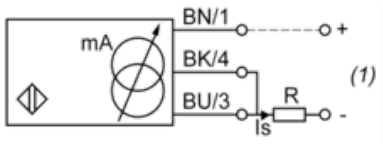
Mounting



(1) Bending cable: 4 x external cable diameter

Wiring Schemes

2-Wire connection

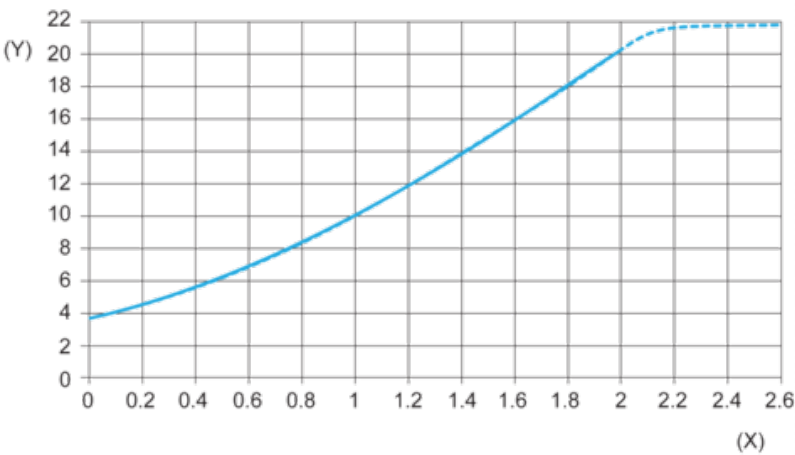


(1) Output current

- 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) Is (mA)
(X) Sensors - object distance (mm)

Recommended replacement(s)