

# Product data sheet

Specifications



Inductive proximity sensors XS,  
inductive sensor XS5 M12, L53mm,  
brass, Sn2mm, 12...48 VDC, cable 2  
m

XS512B1DAL2

## Main

Range Of Product	Telemecanique Inductive proximity sensors XS
Series Name	General purpose
Sensor Type	Inductive proximity sensor
Device Application	-
Sensor Name	XS5
Sensor Design	Cylindrical M12
Size	54 mm
Body Type	Fixed
Detector Flush Mounting Acceptance	Flush mountable
Material	Metal
Type Of Output Signal	Discrete
Wiring Technique	2-wire
[Sn] Nominal Sensing Distance	2 mm
Discrete Output Function	1 NO
Output Circuit Type	DC
Electrical Connection	Cable
Cable Length	2 m
[Us] Rated Supply Voltage	12...48 V DC
Switching Capacity In Ma	1.5...100 mA DC with overload and short-circuit protection
Ip Degree Of Protection	IP68 double insulation conforming to IEC 60529 IP69K conforming to DIN 40050

## Complementary

Thread Type	M12 x 1
Detection Face	Frontal
Front Material	PPS
Enclosure Material	Nickel plated brass
Operating Zone	0...1.6 mm
Differential Travel	1...15% of Sr
Cable Composition	2 x 0.34 mm²
Wire Insulation Material	PVC

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Status Led	Output state: 1 LED (yellow)
Supply Voltage Limits	10...58 V DC
Maximum Residual Current	0.5 mA open state
Switching Frequency	<= 4000 Hz
Maximum Voltage Drop	<4 V (closed)
Maximum Delay First Up	10 ms
Maximum Delay Response	0.2 ms
Maximum Delay Recovery	0.2 ms
Marking	CE
Threaded Length	42 mm
Length	53 mm
Net Weight	0.075 kg

## Environment

Product Certifications	CSA UL CCC
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	3.500 cm
Package 1 Width	10.800 cm
Package 1 Length	12.000 cm
Package 1 Weight	73.000 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	44
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	3.949 kg

## Contractual warranty

Warranty	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



RoHS/REACH

## Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

## Certifications & Standards

Reach Regulation [REACH Declaration](#)

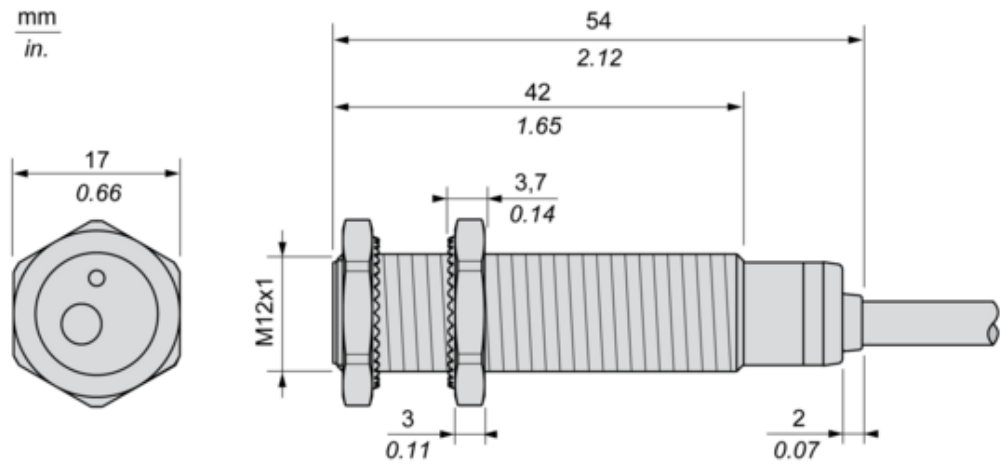
Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)

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 Diisodecyl 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](http://www.P65Warnings.ca.gov)

Dimensions Drawings

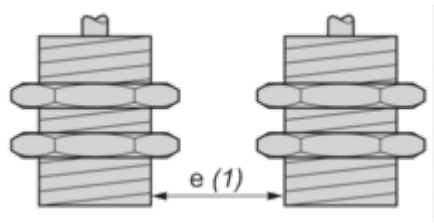
Dimensions



Mounting and Clearance

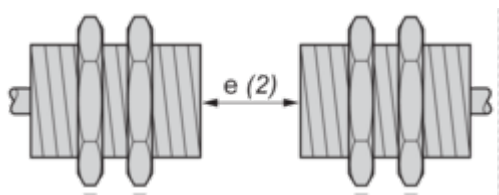
Minimum Mounting Distances

Side by side



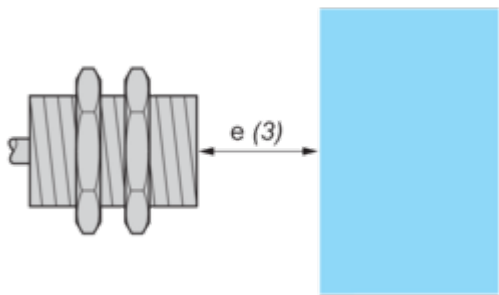
$e (1) \geq 4 \text{ mm}/0.16 \text{ in.}$

Face to face



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

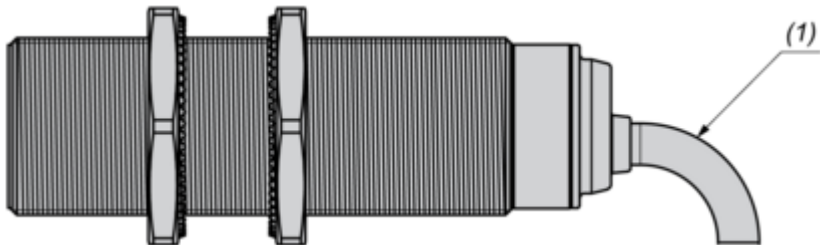
Facing a metal object



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

Mounting

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(1) Bending cable: 4 x external cable diameter

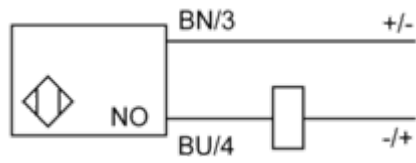
Connections and Schema

Wiring Schemes

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2-Wire Non-polarised

NO output

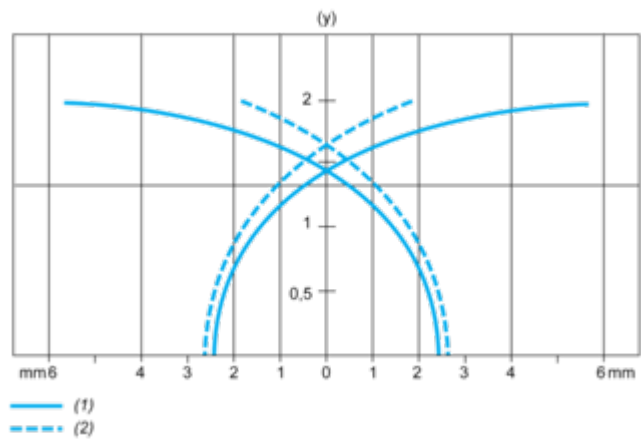


**BU** : Blue  
**BN** : Brown

Performance Curves

Performance Curves

Standard Steel Target : 12x12x1 mm



- (1) Pick-up points
- (2) Drop-out points (object approaching from the side)
- (y) Sensing distance in mm