Product data sheet

Specifications

Inductive proximity sensors XS, inductive sensor XS5 M12, L50mm, brass, Sn2mm, 12...24 VDC, M12

XS512B1NAM12

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	50 mm
Body Type	Fixed
Detector Flush Mounting Acceptance	Flush mountable
Material	Metal
Type Of Output Signal	Discrete
Wiring Technique	3-wire
[Sn] Nominal Sensing Distance	2 mm
Discrete Output Function	1 NO
Output Circuit Type	DC
Discrete Output Type	NPN
Electrical Connection	Male connector M12, 4 pins
[Us] Rated Supply Voltage	12...24 V DC with reverse polarity protection
Switching Capacity In Ma	<= 200 mA DC with overload and short-circuit protection
Ip Degree Of Protection	IP67 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
Status Led	Output state: 1 LED (yellow)
Supply Voltage Limits	10…36 V DC

Switching Frequency	<= 5000 Hz
Maximum Voltage Drop	<2 V (closed)
Current Consumption	<= 10 mA no-load
Maximum Delay First Up	10 ms
Maximum Delay Response	0.1 ms
Maximum Delay Recovery	0.1 ms
Marking	CE
Threaded Length	30 mm
Length	50 mm
Net Weight	0.035 kg

Environment

Product Certifications	UL CSA
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	4.200 cm
Package 1 Width	9.700 cm
Package 1 Length	6.600 cm
Package 1 Weight	27.000 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	44
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	1.497 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium^{TM} 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_2 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 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
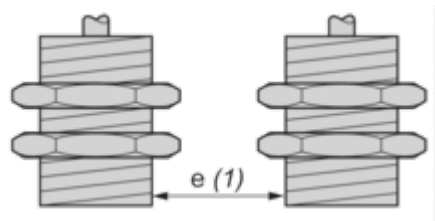
Dimensions Drawings

Dimensions
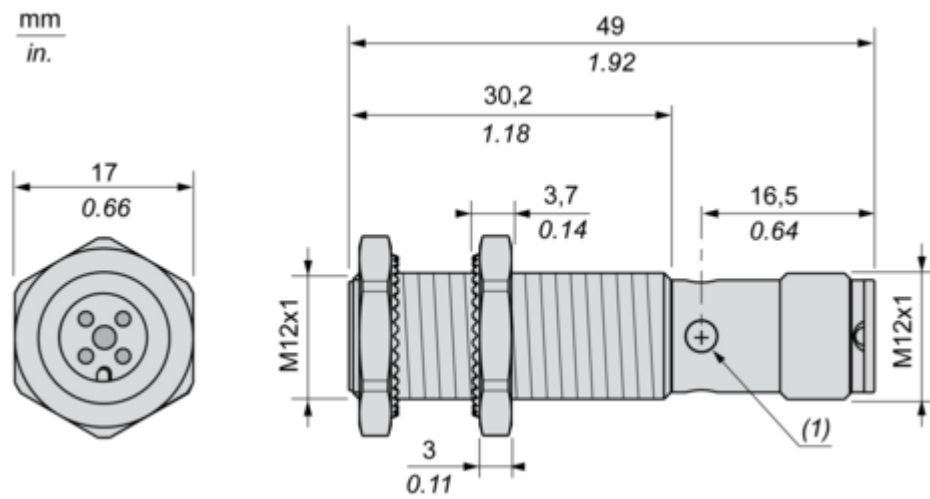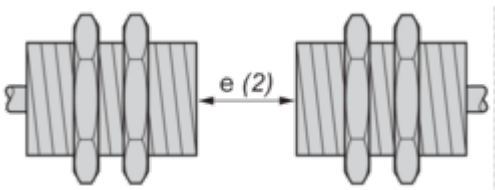

(1) : LED
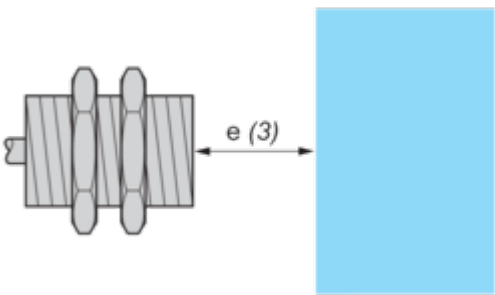
Mounting and Clearance

Minimum Mounting Distances

Side by side

e (1) ≥ 4 mm/0.16 in.
Face to face

e (2) ≥ 24 mm/0.94 in.
Facing a metal object

e (3) ≥ 6 mm/0.24 in.

Connections and Schema

Wiring Schemes
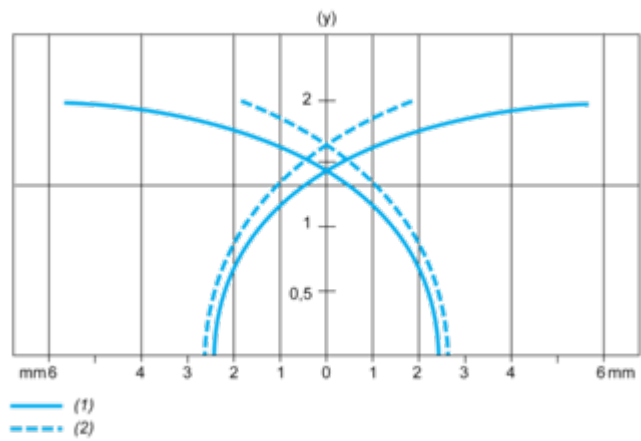
M12 connector
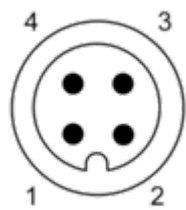
NPN
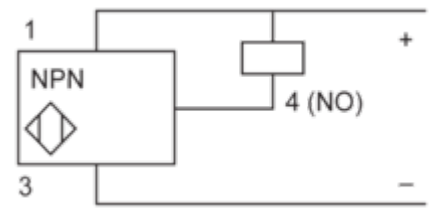
1 : (+)
2 : Not connected
3 : (-)
4 : NO Output

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