

Product data sheet

Specifications



Inductive proximity sensors XS, inductive sensor XS6 M12, L54mm, brass, Sn4mm, 12...48 VDC, cable 2 m

XS612B1NAL2

Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	Mobile equipment
Sensor name	XS6
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	3-wire
[Sn] nominal sensing distance	4 mm
Discrete output function	1 NO
Output circuit type	DC
Discrete output type	NPN
Electrical connection	Cable
Cable length	2 m
[Us] rated supply voltage	12...48 V DC with reverse polarity protection
Switching capacity in mA	<= 200 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
Sensing range	> 2.5...4 mm

Operating zone	0...3.2 mm
Differential travel	1...15% of Sr
Cable composition	3 x 0.34 mm ²
Wire insulation material	PvR
Status LED	Output state: 1 LED (yellow)
Supply voltage limits	10...58 V DC
Switching frequency	<= 2500 Hz
Maximum voltage drop	<2 V (closed)
Current consumption	<= 10 mA no-load
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	54 mm
Net weight	0.075 kg

Environment

Product certifications	E2 CSA UL
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 Weight	60 g
Package 1 Height	1.983 cm
Package 1 width	9.387 cm
Package 1 Length	9.859 cm
Unit Type of Package 2	S03
Number of Units in Package 2	44
Package 2 Weight	4.301 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

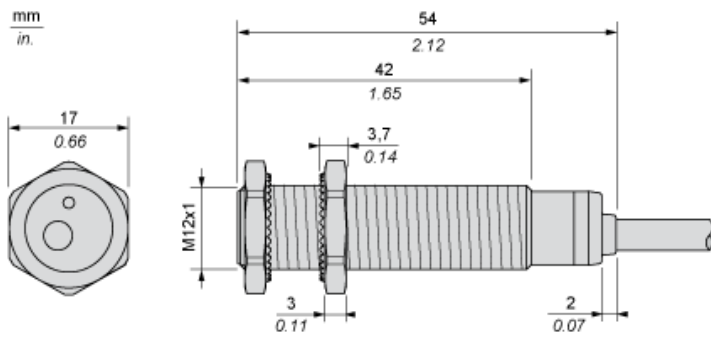
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)

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

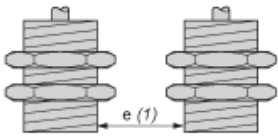
Warranty	18 months
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Dimensions



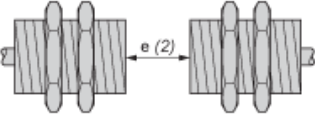
Minimum Mounting Distances

Side by side



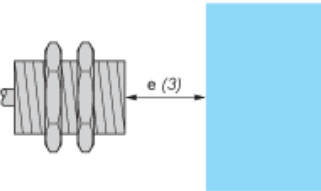
$e (1) \geq 8 \text{ mm}/0.31 \text{ in.}$

Face to face



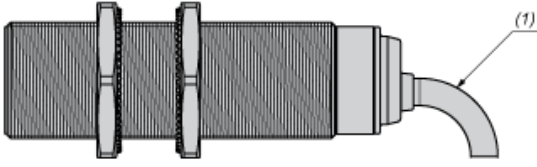
$e (2) \geq 48 \text{ mm}/1.89 \text{ in.}$

Facing a metal object



$e (3) \geq 12 \text{ mm}/0.47 \text{ in.}$

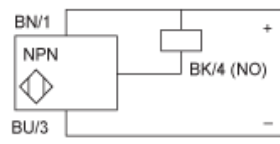
Mounting



(1) Bending cable: 4 x external cable diameter

Wiring Schemes

NPN



- BU :** Blue
- BN :** Brown
- BK :** Black