

Product data sheet

Specifications



inductive sensor XS1 M18, L48mm,
brass, Sn5mm, 9VDC, M12

XS1N18PC410DSCV

Main

Range of product	Telemecanique Inductive proximity sensors XS
Series name	General purpose
Sensor type	Inductive proximity sensor
Device application	Mobile equipment
Sensor name	XS1
Sensor design	Cylindrical M18
Size	51 mm
Body type	Fixed
Detector flush mounting acceptance	Flush mountable
Material	Metal
Type of output signal	Discrete
Wiring technique	4-wire
[Sn] nominal sensing distance	0.20 in (5 mm)
Discrete output function	1 NO + 1 NC
Output circuit type	DC
Discrete output type	PNP
Electrical connection	Male connector M12, 4 pins
[Us] rated supply voltage	9 V DC reverse polarity protection
Switching capacity in mA	<= 200 mA overload and short-circuit protection
IP degree of protection	IP69K DIN 40050 IP65 IEC 60529 IP67

Complementary

Safety level	SIL 2 EN/IEC 61508 PL = d EN/ISO 13849-1 SILCL 2 IEC 62061
Safety reliability data	MTTFd = 1810 years PFHd = 62.9E-9 1/h SFF = 92 % DC = 74 % with appropriate safety controller
Service life	20 year(s)

Thread type	M18 x 1
Detection face	Frontal
Front material	PPS
Operating zone	0.00...0.16 in (0...4 mm)
Differential travel	1...15% of Sr
Status LED	Output state 1 LED yellow)
Supply voltage limits	9...36 V DC
Switching frequency	<= 2000 Hz
Maximum voltage drop	<2 V closed)
Current consumption	0...10 mA no-load
Maximum delay first up	5 ms
Maximum delay response	0.15 ms
Maximum delay recovery	0.35 ms
Marking	CE
Threaded length	1.10 in (28 mm)
Length	2.01 in (51 mm)
Net weight	0.09 lb(US) (0.04 kg)

Environment

Standards	IEC 62061 EN/ISO 13849-1
Product certifications	UL TÜV E2 CSA
Ambient air temperature for operation	-40...140 °F (-40...60 °C)
Ambient air temperature for storage	-40...185 °F (-40...85 °C)
Vibration resistance	25 gn +/- 2 mm 10...55 Hz)IEC 60068-2-6
Shock resistance	50 gn 11 ms IEC 60068-2-27

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.79 in (2.000 cm)
Package 1 Width	2.95 in (7.500 cm)
Package 1 Length	4.33 in (11.000 cm)
Package 1 Weight	2.05 oz (58.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	44
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	6.17 lb(US) (2.798 kg)
Unit Type of Package 3	P06

Number of Units in Package 3	704
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	116.33 lb(US) (52.768 kg)

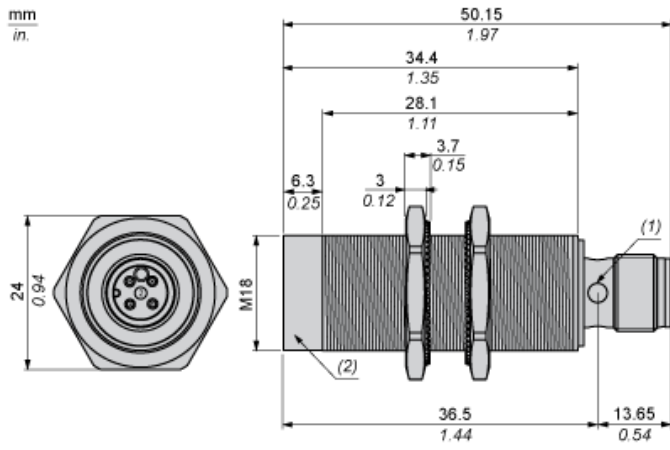
Offer Sustainability

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

Contractual warranty

Warranty	18 months
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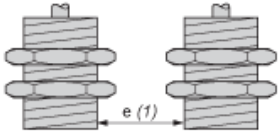
Dimensions



- (1) LED
- (2) Label

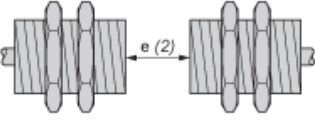
Minimum Mounting Distances

Side by side



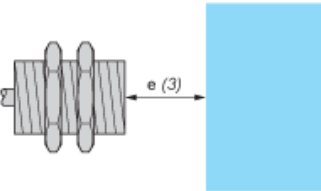
e (1) ≥ 10 mm/0.39 in.

Face to face



e (2) ≥ 60 mm/2.36 in.

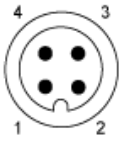
Facing a metal object



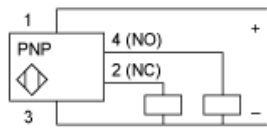
e (3) ≥ 15 mm/0.60 in

Wiring Schemes

M12 connector

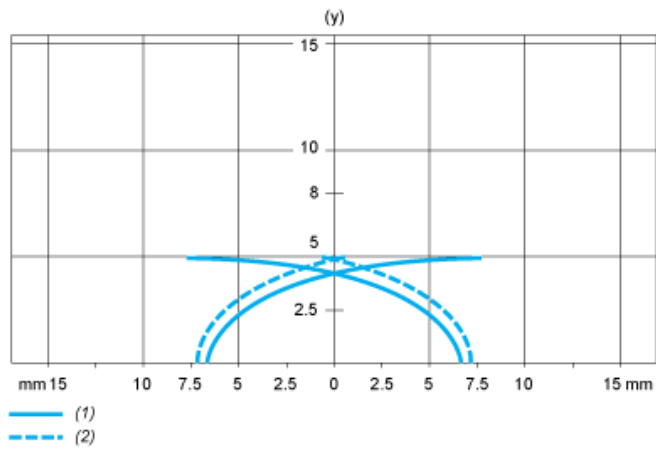


PNP 4-wire



Performance Curves

Standard Steel Target : 18x18x1 mm



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

Recommended replacement(s)