

# XT512B1PAL2

Capacitive proximity sensors XT, cylindrical  
M12, brass, 3-wire, Sn 2mm, 24 V DC, cable  
2m, 1 NO



## Main

Range of product	Telemecanique Capacitive proximity sensors XT
Product or component type	Sensor
Sensor type	Capacitive proximity sensor
Product specific application	Detection of insulated or conductive materials
Sensor name	XT5
Sensor design	Cylindrical M12
Size	63 mm
Body type	Fixed
Detector flush mounting acceptance	Flush mountable
Material	Nickel copper alloy
Enclosure material	Nickel copper alloy
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	PNP
Electrical connection	Cable
Cable length	2 m
[Us] rated supply voltage	24 V DC with reverse polarity protection
Maximum delay response	15 ms
IP degree of protection	IP67 conforming to IEC 60529 IP65 conforming to IEC 60529

## Complementary

ISO thread	M12 x 1
Detection face	Frontal
Front material	PBT
[Sa] assured operating distance	0...1.44 mm
Adjustment zone	0.5...5 mm
Differential travel	< 0.2 x Sr
Repeat accuracy	< 0.1 x Sr
Wire insulation material	PVC
Status LED	Output state indication: 1 LED (yellow)
Supply voltage limits	12...30 V DC
Maximum residual current	0.1 mA open state
Protection type	Short-circuit protection
Switching frequency	<= 40 Hz
Maximum voltage drop	<2.5 V (closed)
Current consumption	< 15 mA
Maximum delay first up	300 ms
Maximum delay recovery	15 ms

Maximum switching current	200 mA
Marking	CE
Setting-up	Sensitivity by potentiometer
Threaded length	40 mm
Length	63 mm
Net weight	0.07 kg

## Environment

Standards	IEC 60947-5-2 UL 61010-1
Product certifications	cULus
Ambient air temperature for operation	-25...70 °C
Electrical insulation class	Class III conforming to IEC 61140
Vibration resistance	10 gn amplitude = 1 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	4 kV contact conforming to IEC 61000-4-2 8 kV air conforming to IEC 61000-4-2
Resistance to electromagnetic fields	3 V/m conforming to IEC 61000-4-3
Resistance to fast transients	2 kV conforming to IEC 61000-4-4

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.500 cm
Package 1 Width	12.000 cm
Package 1 Length	14.000 cm
Package 1 Weight	82.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	80
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	6.931 kg

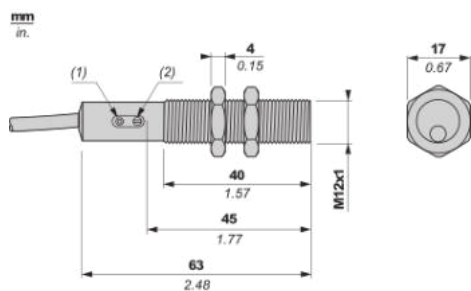
## Offer Sustainability

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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
For all Reach Rohs enquiries contact us at	<a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>

## Contractual warranty

Warranty	18 months
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## Dimensions



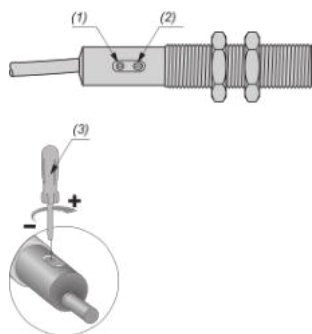
- (1) Output status LED (yellow)
- (2) Adjustment potentiometer (sensitivity)

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## Mounting and Clearance

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### Sensitivity adjustment



- (1) Adjustment potentiometer
- (2) LED
- (3) Adjustment using suitable screwdriver (included with sensor)

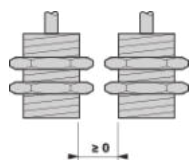
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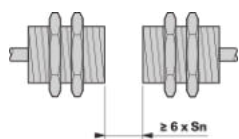
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### Minimum Mounting Distances

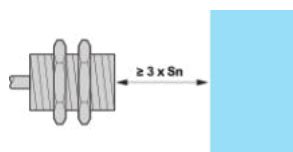
Side by side



Face to face



Facing a Metal Object



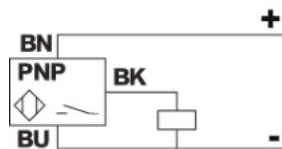
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## Connections and schema

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### Wiring diagram

3-wire DC, PNP, NO output, pre-wired



BU: Blue

BN: Brown

BK: Black