Product data sheet
Characteristics

XXV18B1PAL5
Ultrasonic sensors XX, ultrasonic sensor, M18 metal, Sn 50 mm, PNP NO, cable 5 m

Main

Range of Product	Telemecanique Ultrasonic sensors XX
Sensor Type	Ultrasonic sensor
Series name	General purpose
Sensor name	XXV
Sensor design	Cylindrical M18
Detection system	Diffuse
[Sn] nominal sensing distance	0.16 ft (0.05 m) fixed
Material	Metal
Type of output signal	Discrete
Discrete output function	1 NO
Wiring Technique	3-wire
Discrete output type	PNP
[Us] rated supply voltage	12...24 V DC reverse polarity protection
Electrical connection	Cable, 16.40 ft (5 m)
[Sd] sensing range	0.01…0.16 ft (0.003…0.05 m)
Beam angle	10 °
IP degree of protection	IP67 conforming to IEC 60529

Complementary

Enclosure Material	Brass
Front material	Epoxy
Thread type	M18 x 1
Supply voltage limits	10…36 V DC
[Sa] assured operating distance	0.01…0.16 ft (0.003…0.05 m)
Maximum differential travel	0.12 in (3 mm)
Blind zone	0.00…0.12 in (0…3 mm)
Transmission frequency	360 kHz
Repeat accuracy	1.5 %
Deviation angle from 90° of object to be detected	-8…8 °
Minimum size of detected object	Cylinder diameter 2 mm 0.07 ft (0.02 m)
Status LED	Output state 1 LED yellow)
Current Consumption	15 mA
Maximum switching current	200 mA overload and short-circuit protection
Maximum voltage drop	2 V
Switching frequency	<= 80 Hz
Maximum delay first up	5 ms
Maximum delay response	4 ms
Maximum delay recovery	4 ms
Marking	CE
Threaded length	2.01 in (51 mm)
Height	0.71 in (18 mm)
Width	0.71 in (18 mm)
Depth	2.56 in (65 mm)
Net Weight	0.44 lb(US) (0.2 kg)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
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.
It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.
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Environment

Standards	IEC 60947-5-2
Product Certifications	cULus
Ambient Air Temperature for Operation	32…140 °F (0…60 °C)
Ambient Air Temperature for Storage	-40…176 °F (-40…80 °C)
Vibration resistance	+/- 2 mm 10…55 Hz)IEC 60068-2-6
Shock resistance	50 gn in all 3 axes 11 ms IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 4 IEC 61000-4-2
Resistance to electromagnetic fields	9.14 V/m (10 V/m) level 3 IEC 61000-4-3
Resistance to fast transients	1 kV level 3 IEC 61000-4-4

Ordering and shipping details

Category	22490-SENSORS-ULTRASONIC (XX5,6)
Discount Schedule	DS2
GTIN	3389119128124
Returnability	No
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.76 in (7.0 cm)
Package 1 Width	5.12 in (13.0 cm)
Package 1 Length	3.54 in (9.0 cm)
Package 1 Weight	7.04 oz (199.581 g)

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 www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Not applicable, out of EU RoHS legal scope

Contractual warranty

Warranty	18 months

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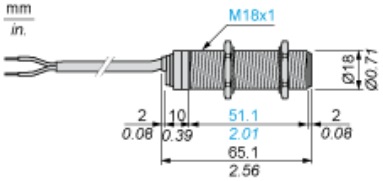
Dimensions



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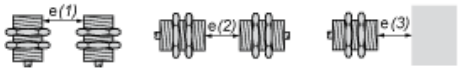
Minimum Mounting Distances



e(1) 25 mm
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e(2) 700 mm
>
e(3) 60 mm
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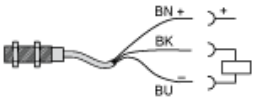
Wiring Diagram



BN Brown
BU Blue
BK Black

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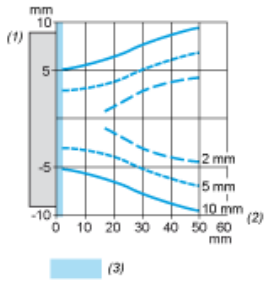
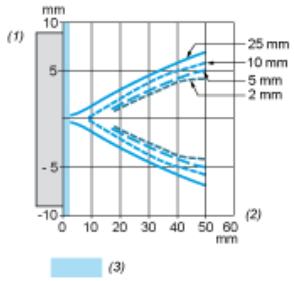
Curves

Square Object



(1) Parallel movement
(2) Distance
(3) Blind zone for diffuse sensors.

Cylindrical Object



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