



Main

Range of product	OsiSense XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XXV
Sensor design	Cylindrical M18
Detection system	Diffuse
[Sn] nominal sensing distance	0.05 m fixed
Material	Metal
Type of output signal	Discrete
Discrete output function	1 NC
Wiring technique	3-wire
Discrete output type	NPN
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 4 pins
[Sd] sensing range	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	0.003...0.05 m
Maximum differential travel	3 mm
Blind zone	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 at 0.02 m
Status LED	Output state: 1 LED (yellow)
Current consumption	15 mA

Maximum switching current	200 mA with 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	51 mm
Height	18 mm
Width	18 mm
Depth	75 mm
Net weight	0.05 kg

Environment

Standards	IEC 60947-5-2
Product certifications	CULus
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-40...80 °C
Vibration resistance	+/- 2 mm conforming to IEC 60068-2-6 (f = 10...55 Hz)
Shock resistance	50 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 4 conforming to IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m level 3 conforming to IEC 61000-4-3
Resistance to fast transients	1 kV level 3 conforming to IEC 61000-4-4

Packing Units

Package 1 Weight	77.111 g
Package 1 Height	6.858 cm
Package 1 width	4.318 cm
Package 1 Length	9.652 cm

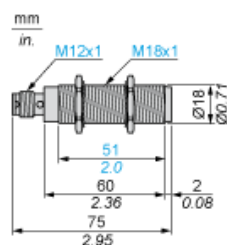
Offer Sustainability

REACH Regulation	 REACH Declaration
EU RoHS Directive	Not applicable, out of EU RoHS legal scope

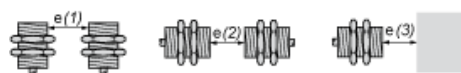
Contractual warranty

Warranty	18 months
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Dimensions



Minimum Mounting Distances



e(1) 25 mm

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e(2) 700 mm

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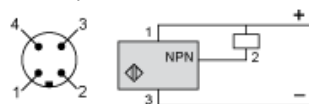
e(3) 60 mm

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Wiring Diagram

3-Wire Type

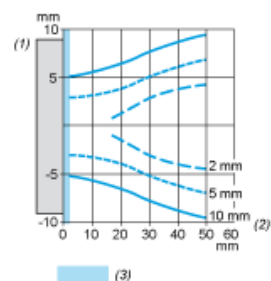
NC outputs, NPN



- (1) (+)
- (3) (-)

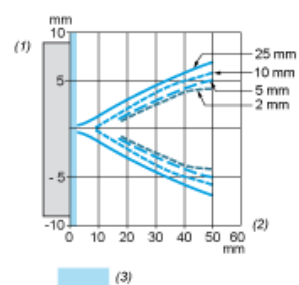
Curves

Square Object



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

Cylindrical Object



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