Product data sheet
Characteristics

XX9V3A1F1M12
ultrasonic sensor cylindrical M30 - Sn 1 m - 0..10 V - M12 connector

Main

Range of product	OsiSense XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX9
Sensor design	Cylindrical M30
Detection system	Diffuse
[Sn] nominal sensing distance	1 m adjustable with remote teach push-button
Material	Plastic
Type of output signal	Analogue
Wiring technique	4-wire
Analogue output function	0...10 V
[Us] rated supply voltage	15...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 4 pins
[Sd] sensing range	0.1...1 m
Beam angle	7 °
IP degree of protection	IP67 conforming to IEC 60529

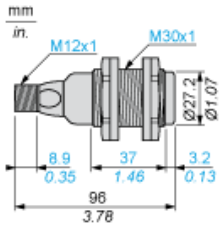
Complementary

Enclosure material	Valox
Front material	Epoxy
Thread type	M30 x 1.5
Supply voltage limits	10...28 V DC
[Sa] assured operating distance	0.1...1 m (teach mode)
Blind zone	0...100 mm
Transmission frequency	180 kHz
Repeat accuracy	0.9 %
Deviation angle from 90° of object to be detected	-5...5 °
Minimum size of detected object	Cylinder diameter 50.8 mm 1 m
Status LED	1 LED (dual colour) for setting-up assistance 1 LED (green) for supply on 1 LED (yellow) for output state
Current consumption	60 mA
Maximum switching capacity	2 kOhm overload and short-circuit protection
Setting-up	Slope selection using teach button
Delay first up	1200 ms
Delay response	250 ms
Delay recovery	250 ms
Marking	CE
Threaded length	37 mm
Height	96 mm
Width	30 mm
Product weight	0.09 kg

Environment

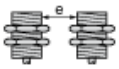
Standards	IEC 60947-5-2
Ambient air temperature for operation	0...70 °C
Ambient air temperature for storage	-40...80 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 10...55 Hz
Shock resistance	30 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	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

Dimensions



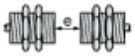
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

Face to face

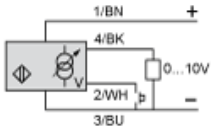


e > 4 x Sn

Wiring Diagram

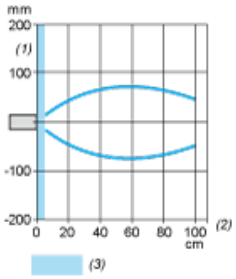
4-Wire Type

(1) (+)
(2) Return signal or teach
(3) (-)
(4) Output signal



BN Brown
WH White
BU Blue
BK Black

Curves



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