Product data sheet
Characteristics

XXBV1A1PAM12
Ultrasonic sensor - 18x33x60+M18 - relfex - Sn 0.5m NC - M12

Product Life Status : END OF COMMERCIALIZATION

TODAY
FEB 22, 2021

End of Commercialization
NOV 03, 2020

End of Standard Service
NOV 30, 2021

Main

Range of product	OsiSense XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XXB
Sensor design	Flat form 18 x 33 x 60 + cylindrical M18
Detection system	Reflex
[Sn] nominal sensing distance	0.5 m adjustable with remote teach push-button
Material	Plastic
Type of output signal	Discrete
Discrete output function	1 NO
Wiring technique	4-wire
Discrete output type	PNP
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 4 pins
[Sd] sensing range	0…0.508 m
Beam angle	12 °
IP degree of protection	IP67 conforming to IEC 60529

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Complementary

Enclosure material	Valox
Front material	Epoxy
Supply voltage limits	10…28 V DC
[Sa] assured operating distance	0…0.508 m (teach mode)
Maximum differential travel	2.5 mm
Blind zone	0…165 mm
Transmission frequency	300 kHz
Repeat accuracy	1.27 %
Deviation angle from 90° of object to be detected	-7…7 °
Minimum size of detected object	Cylinder diameter 2.5 mm at 0.15 m Flat bar 1 mm wide at 0.15 m
Status LED	Supply on/output state: 1 LED (green/yellow)
Current consumption	40 mA

Maximum switching current	100 mA with overload and short-circuit protection
Maximum voltage drop	1 V
Switching frequency	<= 40 Hz
Maximum delay first up	100 ms
Maximum delay response	10 ms
Maximum delay recovery	10 ms
Marking	CE
Height	44 mm
Width	18 mm
Depth	60 mm

Environment

Standards	IEC 60947-5-2
Product certifications	UL
Ambient air temperature for operation	-20…65 °C
Ambient air temperature for storage	-40…80 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 (f = 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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	58 g
Package 1 Height	6.6 cm
Package 1 width	4.1 cm
Package 1 Length	9.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	30
Package 2 Weight	2.308 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

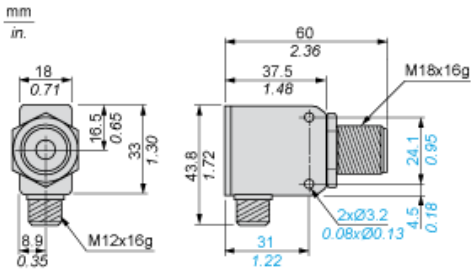
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes

Contractual warranty

Warranty	18 months

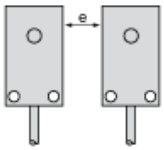
Dimensions Drawings

Dimensions



Minimum Mounting Distances

Side by side

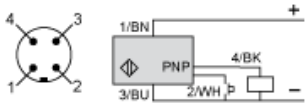


e : respect the distances indicated on the detection curves

Wiring Diagram

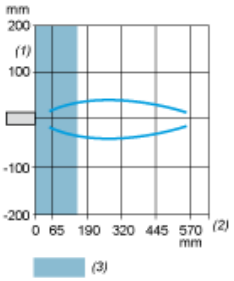
3-Wire Type

NO outputs, PNP



(1) (+)
(2) Teach input (WH)
(3) (-)
(4) Output
BN Brown
WH White
BU Blue
BK Black

Curves



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