Product data sheet
Characteristics

XXA18B1AM12
Ultrasonic sensor cyl. 90 deg M18 - Sn=1m - analog 4-20mA - SYNC - connector M12

Main

Range of product	OsiSense XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XXA
Sensor design	Cylindrical M18
Detection system	Diffuse (with 90° head)
[Sn] nominal sensing distance	1 m adjustable with remote teach push-button
Material	Metal
Type of output signal	Analogue
Wiring technique	4-wire
Analogue output function	4...20 mA
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 5 pins
[Sd] sensing range	0.105...1 m
IP degree of protection	IP67 IP65 conforming to IEC 60529

Complementary

Enclosure material	Nickel plated brass
Front material	Epoxy Rubber Resin
Supply voltage limits	10...30 V DC
Function available	With synchronisation mode Software configurable
[Sa] assured operating distance	0.105...1 m (teach mode)
Blind zone	105 mm
Transmission frequency	200 kHz
Repeat accuracy	0.1 %
Deviation angle from 90° of object to be detected	-7...7 °
Minimum size of detected object	Cylinder diameter 1 mm at 600 mm
Status LED	1 LED (green) for echo state

Disclaimer: 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

	1 LED (yellow) for output state
Current consumption	30 mA
Maximum switching capacity	250 Ohm with 12 V DC overload and short-circuit protection 850 Ohm with 24 V DC
Voltage drop	<= 2 V
Setting-up	Configurator software Teach mode
Delay first up	<= 180 ms
Delay recovery	<= 100 ms
Marking	CE
Threaded length	45 mm
Height	18 mm
Width	18 mm
Depth	79 mm
Product weight	0.055 kg

Environment

Standards	EN/IEC 60947-5-2 UL 508 CSA C22.2 No 14
Product certifications	CULus Ecolab RCM EAC E2
Ambient air temperature for operation	-25...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

Offer Sustainability

RoHS (date code: YYWW)	Compliant - since 1810 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference contains SVHC above the threshold - Go to CaP for more details Go to CaP for more details
Product end of life instructions	Available