Product data sheet
Characteristics

XXV18B1NAL2
Ultrasonic sensor - M18 metal - Sn 50mm - NPN NO - cable 2m

Green Premium™

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	0.16 ft (0.05 m) fixed
Material	Metal
Type of output signal	Discrete
Discrete output function	1 NO
Wiring technique	3-wire
Discrete output type	NPN
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Electrical connection	Cable, 6.56 ft (2 m)
[Sd] sensing range	0.01…0.16 ft (0.003…0.05 m)
Beam angle	10 °
IP degree of protection	IP67 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	0.24 lb(US) (0.11 kg)

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/yd (10 V/m) level 3 IEC 61000-4-3
Resistance to fast transients	1 kV level 3 IEC 61000-4-4

Packing Units

Package 1 Weight	3.84 oz (108.862 g)

Offer Sustainability

Sustainable offer status	Green Premium product
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
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months