Product data sheet
Characteristics

XX630S1HCM12
ultrasonic sensor cylindrical M30 - Sn=1m - NO +NC PNP sync - M12

Main

Range of product	OsiSense XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX6
Sensor design	Cylindrical M30
Detection system	Diffuse
[Sn] nominal sensing distance	1 m adjustable with teach push-button
Material	Metal
Type of output signal	Discrete
Discrete output function	1 NC + 1 NO
Wiring technique	5-wire
Discrete output type	PNP
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 5 pins
[Sd] sensing range	0.051...0.991 m
Beam angle	10 °
IP degree of protection	IP65 conforming to IEC 60529

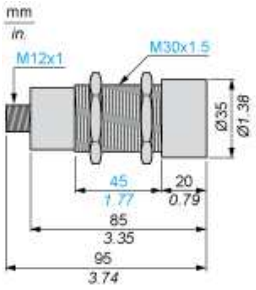
Complementary

Enclosure material	Stainless steel 303
Front material	Silicone
Thread type	M30 x 1.5
Supply voltage limits	10...28 V DC
Function available	With synchronisation mode
[Sa] assured operating distance	0.051...0.991 m (teach mode)
Maximum differential travel	2.5 mm
Blind zone	0...51 mm
Transmission frequency	200 kHz
Repeat accuracy	0.9 %
Deviation angle from 90° of object to be detected	-7...7 °
Minimum size of detected object	Cylinder diameter 1.6 mm 0.635 m
Status LED	1 LED (green/red (flashing)) for setting-up assistance
Current consumption	50 mA
Maximum switching current	100 mA with overload and short-circuit protection
Voltage drop	< 1 V
Switching frequency	<= 10 Hz
Delay first up	720 ms
Delay response	20 ms
Delay recovery	20 ms
Marking	CE
Threaded length	45 mm
Height	35 mm
Width	35 mm
Depth	85 mm
Product weight	0.091 kg

Environment

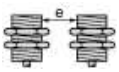
Standards	IEC 60947-5-2
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-40...80 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 10...55 Hz
Shock resistance	30 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	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



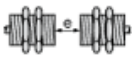
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

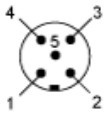
Face to face



e > 4 x Sn

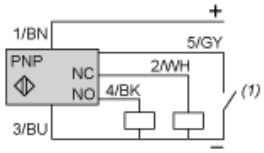
Wiring Diagram

Connector



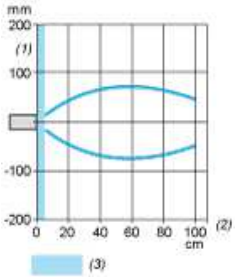
(1) (+) Brown
(2) NO output (White)
(3) (-) Blue
(4) NO output (Black)
(5) Synchronisation (Grey)

NO + NC Outputs, PNP



BN Brown
WH White
BU Blue
BK Black
GY Grey
(1) Open = burst
Close = no burst

Curves



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