

XUB0SPSNM12

photo-electric sensor - XUB - multi - Sn 0..20m
- 12..24VDC - M12



Main

Range of product	OsiSense XU
Series name	Application food and beverage multimode
Electronic sensor type	Photo-electric sensor
Sensor name	XUB
Sensor design	Cylindrical M18
Detection system	Multimode
Material	Stainless steel
Line of sight type	Axial
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP
Discrete output function	1 NO or 1 NC programmable
Electrical connection	1 male connector M12, 4 pins
Product specific application	-
Emission	Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex
[Sn] nominal sensing distance	3 M polarised reflex need reflector XUZY50 20 M thru beam need a transmitter XUB0SKSNM12T 0.12 M diffuse with background suppression 0.3 m diffuse

Complementary

Enclosure material	Stainless steel : 304 CU
Lens material	PMMA
Maximum sensing distance	0.12 M diffuse with background suppression 0.4 M diffuse 30 M thru beam 4.5 m polarised reflex
Output type	Solid state
Status LED	1 LED (green) for output state 1 LED (red) for supply on 1 LED (yellow) for stability
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Supply voltage limits	10...36 V DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Switching frequency	<= 250 Hz
Maximum voltage drop	<1.5 V (closed state)
Current consumption	35 mA no-load
Maximum delay first up	200 ms
Maximum delay response	2 ms
Maximum delay recovery	2 ms
Setting-up	Self-training
Diameter	18 mm
Length	78 mm
Net weight	0.055 kg






Environment

Product certifications	CSA UL CE
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-40...70 °C
Vibration resistance	7 gn, amplitude = +/- 1.5 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn (duration = 11 ms) conforming to IEC 60068-2-27
IP degree of protection	IP65 double insulation conforming to IEC 60529 IP67 double insulation conforming to IEC 60529 IP69K double insulation conforming to DIN 40050

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	72 g
Package 1 Height	6.6 cm
Package 1 width	9.2 cm
Package 1 Length	4.4 cm
Unit Type of Package 2	S01
Number of Units in Package 2	22
Package 2 Weight	1.805 kg
Package 2 Height	15 cm
Package 2 width	15 cm
Package 2 Length	40 cm

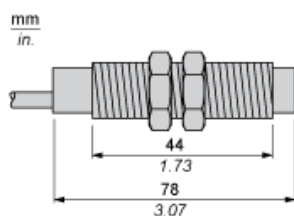
Offer Sustainability

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

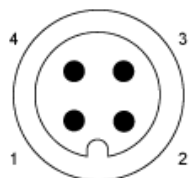
Warranty	18 months
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Dimensions



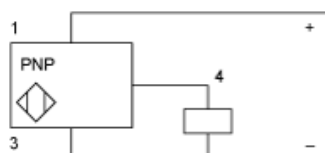
Wiring Schemes

M12 Connector



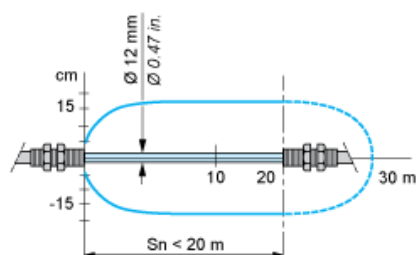
- 3 : (-)
- 1 : (+)
- 4 : OUT/Output
- 2 : Not connected

PNP

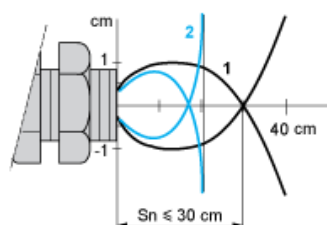


Detection Curves

With Thru-beam Accessory (Thru-beam)



Without Accessory (Diffuse)

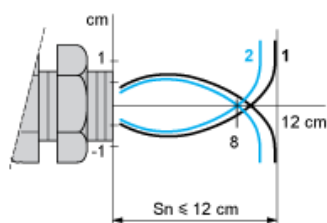


1 : White 90%

2 : Grey 18%

Object: 10 x 10 cm

Without Accessory (Diffuse with Background. Suppression)

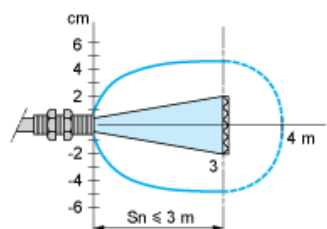


1 : White 90%

2 : Grey 18%

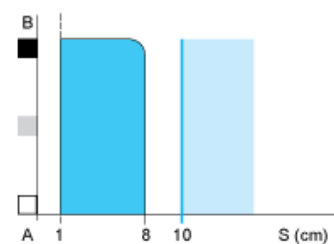
Object: 10 x 10 cm

With Reflector XU50 (Polarised Reflex)

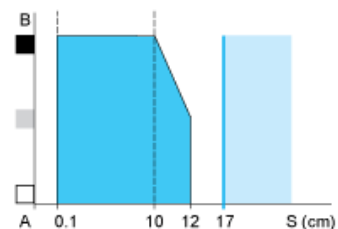


Variation of Usable Sensing Distance S_u (Without Accessory, with Adjustable Background Suppression)

Teach mode at minimum



Teach mode at maximum



- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

A-B : Object reflection coefficient

- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)