

XUB0SNSWM12

photo-electric sensor - XUB - multi - 90° - Sn
0..7m - 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	90° lateral
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	NPN
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	1.5 M polarised reflex need reflector XUZC50 7 M thru beam need a transmitter XUB0SKSWM12T 0.11 M diffuse with background suppression 0.2 m diffuse

Complementary

Enclosure material	Stainless steel : 304 CU
Lens material	PMMA
Maximum sensing distance	2 M polarised reflex 0.11 M diffuse with background suppression 0.3 M diffuse 10 m thru beam
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	92 mm

Environment

Product certifications	CSA CE UL
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

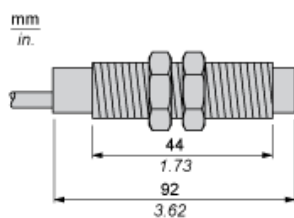
Packing Units

Package 1 Weight	0.076 kg
Package 1 Height	0.420 dm
Package 1 width	0.960 dm
Package 1 Length	0.650 dm

Contractual warranty

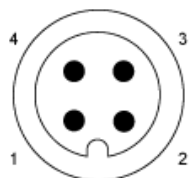
Warranty	18 months
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Dimensions



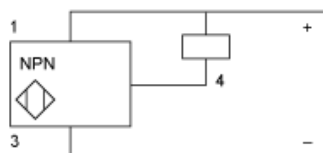
Wiring Schemes

M12 Connector



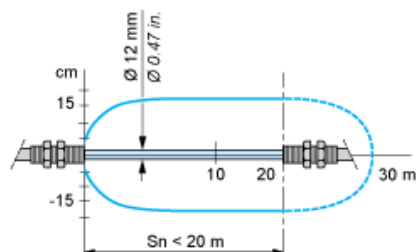
- 3 : (-)
- 1 : (+)
- 4 : OUT/Output
- 2 : Not connected

NPN

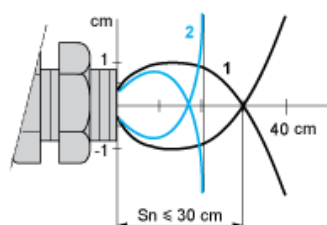


Detection Curves

With Thru-beam Accessory (Thru-beam)



Without Accessory (Diffuse)

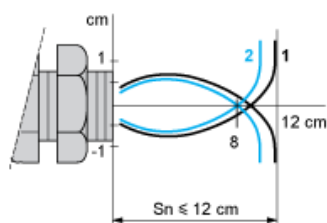


1 : White 90%

2 : Grey 18%

Object: 10 x 10 cm

Without Accessory (Diffuse with Background. Suppression)

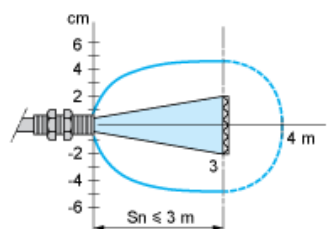


1 : White 90%

2 : Grey 18%

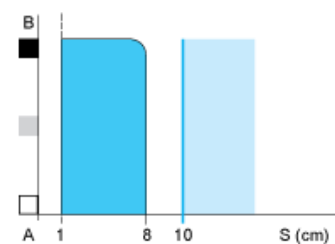
Object: 10 x 10 cm

With Reflector XU50 (Polarised Reflex)

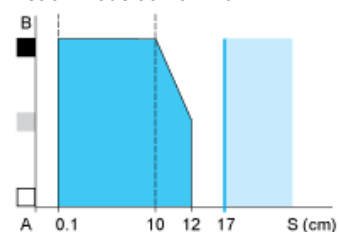


Variation of Usable Sensing Distance S_u (Without Accessory, with Adjustable Background Suppression)

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)