

XUB0SNSNM12

Photoelectric sensors XU, photo electric sensor, XUB, multi, Sn 0...20 m, 12...24 VDC, M12



Main

Range of product	Telemecanique Photoelectric sensors 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	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	3 M polarised reflex need reflector XUZC50 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

Package 1 Weight	0.073 kg
Package 1 Height	0.420 dm
Package 1 width	0.960 dm
Package 1 Length	0.650 dm

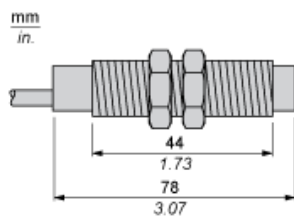
Offer Sustainability

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

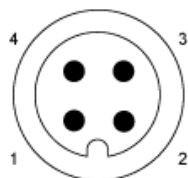
Warranty	18 months
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Dimensions



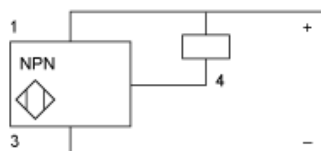
Wiring Schemes

M12 Connector



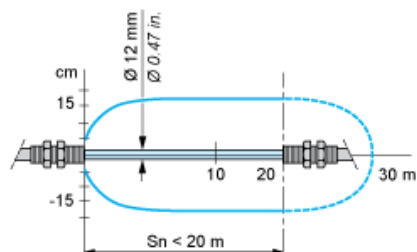
- 3 : (-)
- 1 : (+)
- 4 : OUT/Output
- 2 : Not connected

NPN

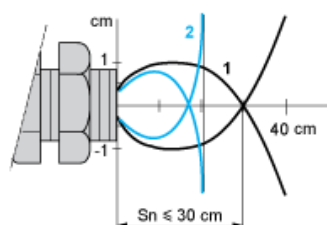


Detection Curves

With Thru-beam Accessory (Thru-beam)



Without Accessory (Diffuse)

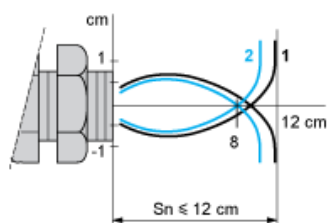


1 : White 90%

2 : Grey 18%

Object: 10 x 10 cm

Without Accessory (Diffuse with Background. Suppression)

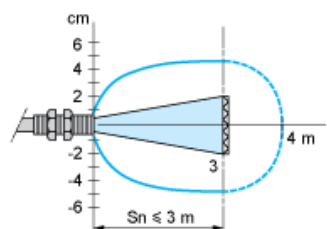


1 : White 90%

2 : Grey 18%

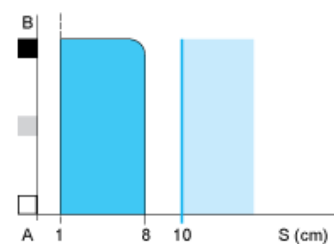
Object: 10 x 10 cm

With Reflector XU50 (Polarised Reflex)

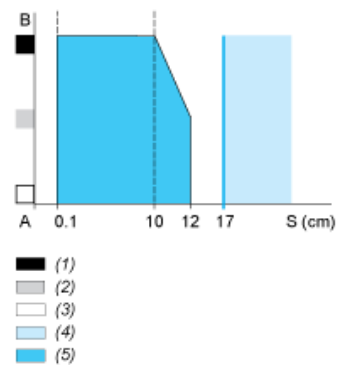


Variation of Usable Sensing Distance S_u (Without Accessory, with Adjustable Background Suppression)

Teach mode at minimum



Teach mode at maximum



A-B : Object reflection coefficient

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