Product data sheet
Characteristics

XUB0BNSWL2
photo-electric sensor - XUB - multi - 90° - Sn 0..7m - 12..24VDC - cable 2m



Main

Range of product	OsiSense XU
Series name	General purpose multimode
Electronic sensor type	Photo-electric sensor
Sensor name	XUB
Sensor design	Cylindrical M18
Detection system	Multimode
Material	Metal
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	Cable
Cable length	2 m
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 XUB0BKSWL2T 0.11 M diffuse with background suppression 0.2 m diffuse

Complementary

Enclosure material	Nickel plated brass
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
Add on output	Without
Wire insulation material	PvR
Status LED	1 LED (green) for supply 1 LED (red) for instability 1 LED (yellow) for output state
[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-teaching
Diameter	18 mm

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.
It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.
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Length	78 mm
Net weight	0.11 kg

Environment

Product certifications	UL CSA 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

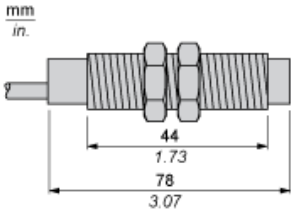
Packing Units

Package 1 Weight	0.142 kg
Package 1 Height	1.300 dm
Package 1 width	0.410 dm
Package 1 Length	0.950 dm

Contractual warranty

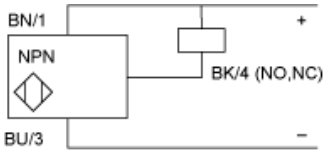
Warranty	18 months

Dimensions



Connections and Schemes

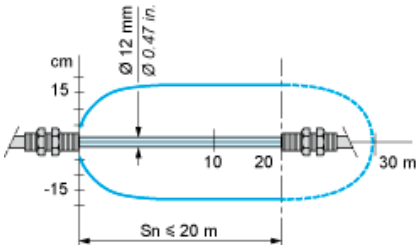
NPN



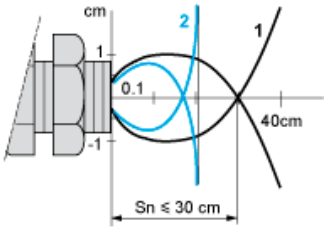
BN : Brown
BU : Blue
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)



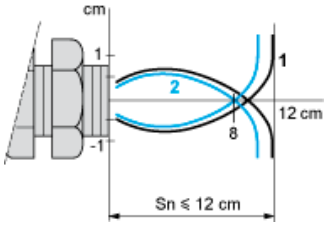
Without Accessory (Diffuse)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

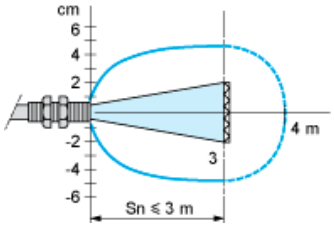
Without Accessory (Diffuse with background suppression)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

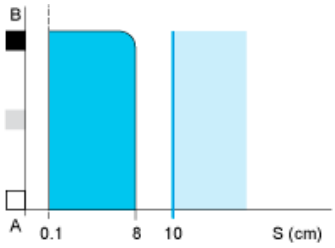
With reflector (Polarised reflex)



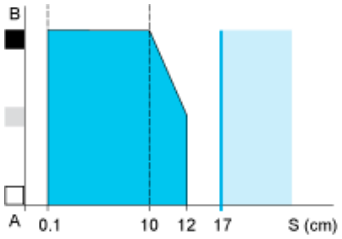
With reflector XUZC50

Variation of Usable Sensing Distance Su (Without accessory, with adjustable background suppression)

Teach Mode at Minimum



Teach Mode at Maximum

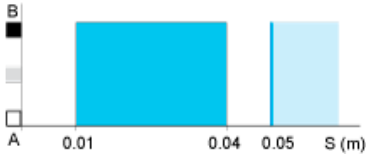




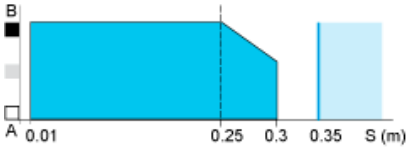
A-B : Object reflection coefficient
(1) Black 6%
(2) Grey 18%
(3) White 90%
(4) Sensing range
(5) Non sensing zone (matt surfaces)

Variation of Usable Sensing Distance

Minimum Setting



Maximum Setting





A-B : Object reflection coefficient
(1) Black 6%
(2) Grey 18%
(3) White 90%
(4) Sensing range
(5) Non sensing zone (matt surfaces)