Product data sheet
Characteristics

XUB0BPSNM12
photo-electric sensor - XUB - multi - Sn 0..20m - 12..24VDC - M12



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	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	9.84 Ft (3 m) polarised reflex need reflector XUZC50 65.62 Ft (20 m) thru beam need a transmitter XUB0BKSNM12T 0.39 Ft (0.12 m) diffuse with background suppression 0.98 ft (0.3 m) diffuse

Complementary

Enclosure material	Nickel plated brass
Lens material	PMMA
Maximum sensing distance	0.39 Ft (0.12 m) diffuse with background suppression 1.31 Ft (0.4 m) diffuse 98.43 Ft (30 m) thru beam 14.76 ft (4.5 m) polarised reflex
Output type	Solid state
Add on output	Without
Status LED	1 LED green)supply 1 LED red)instability 1 LED yellow)output state
[Us] rated supply voltage	12...24 V DC 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	0.71 in (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	3.07 in (78 mm)
Net Weight	0.12 lb(US) (0.055 kg)

Environment

Product certifications	CSA CE UL
Ambient air temperature for operation	-13…131 °F (-25…55 °C)
Ambient air temperature for storage	-40…158 °F (-40…70 °C)
Vibration resistance	7 gn +/- 1.5 mm 10…55 Hz) IEC 60068-2-6
Shock resistance	30 gn 11 ms) IEC 60068-2-27
IP degree of protection	IP65 double insulation IEC 60529 IP67 double insulation IEC 60529 IP69K double insulation DIN 40050

Ordering and shipping details

Category	22481 - SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	00785901821656
Nbr. of units in pkg.	1
Package weight(Lbs)	0.15 lb(US) (0.07 kg)
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.65 in (4.2 cm)
Package 1 width	2.64 in (6.7 cm)
Package 1 Length	3.78 in (9.6 cm)
Unit Type of Package 2	S01
Number of Units in Package 2	22
Package 2 Weight	4.00 lb(US) (1.814 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	5.91 in (15 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

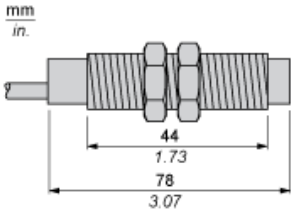
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP) and Diisononyl phthalate (DINP) which is known to the State of California to cause Carcinogen and Reproductive harm. For more information go to www.p65warnings.ca.gov
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

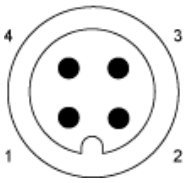
XUB0BPSNM12

Dimensions



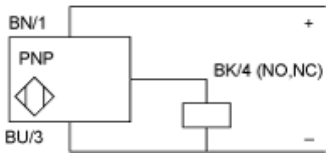
Wiring Schemes

M12 Connector



1 : (+)
2 : Beam break input (1)
3 : (-)
4 : OUT/Output
(1) Beam break input on thru-beam transmitter only

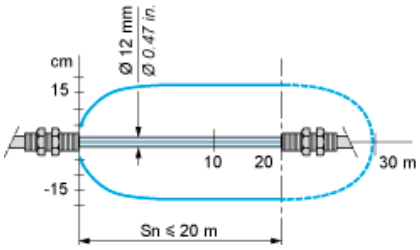
Receiver, PNP Output



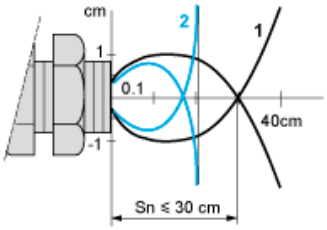
BN : Brown
BU : Blue
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)



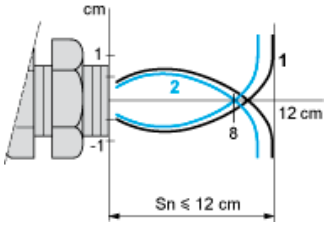
Without Accessory (Diffuse)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

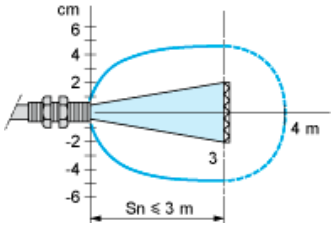
Without Accessory (Diffuse with background suppression)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

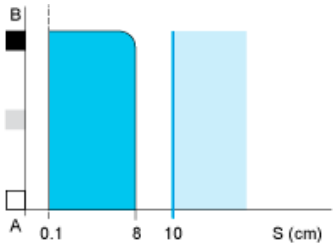
With reflector (Polarised reflex)



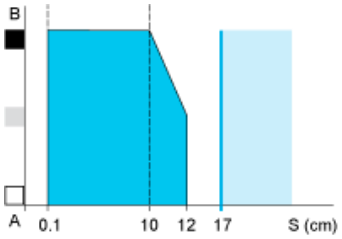
With reflector XUZC50

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

Teach Mode at Minimum



Teach Mode at Maximum

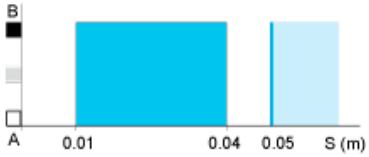




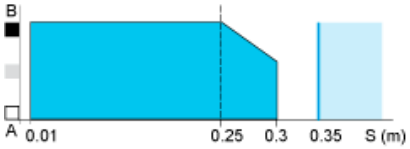
A-B : Object reflection coefficient
(1) Black 6%
(2) Grey 18%
(3) White 90%
(4) Sensing range
(5) Non sensing zone (matt surfaces)

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)