Product data sheet
Characteristics

XUB0APSNM12
photo-electric sensor - XUB - multi - Sn 0..20m - 12..24VDC - M12

Product availability : Stock - Normally stocked in distribution facility

Price* : 115.00 USD



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	Plastic
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	0.39 ft (0.12 m) diffuse with background suppression 0.98 ft (0.3 m) diffuse 9.84 ft (3 m) polarised reflex need reflector XUZC50 65.62 ft (20 m) thru beam need a transmitter XUB0AKSNM12T

Complementary

Enclosure material	PBT
Lens material	PMMA
Maximum sensing distance	0.39 ft (0.12 m) diffuse with background suppression

Disclaimer: 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

	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 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
Voltage drop	1.5 V (closed state)
Current consumption	35 mA (no-load)
Delay first up	< 200 ms
Delay response	< 2 ms
Delay recovery	< 2 ms
Setting-up	Self-teaching
Diameter	0.71 in (18 mm)
Length	3.07 in (78 mm)
Product weight	0.1 lb(US) (0.045 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, 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

Ordering and shipping details

Category	22481 - SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	00785901678700
Nbr. of units in pkg.	1
Package weight(Lbs)	0.10000000000000001
Returnability	Y
Country of origin	ID

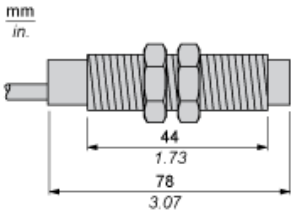
Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0814 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold

Contractual warranty

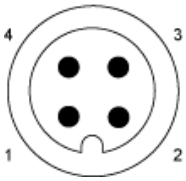
Warranty period	18 months

Dimensions



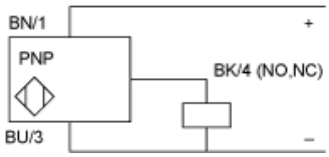
Wiring Schemes

M12 Connector



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

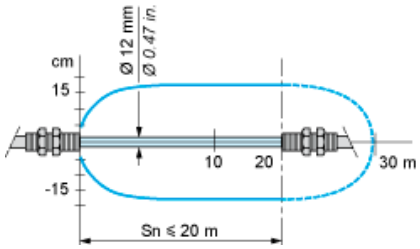
Receiver, PNP Output



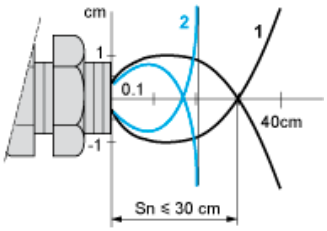
BN : Brown
BU : Blue
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)



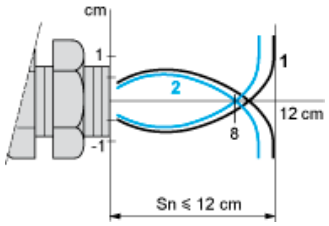
Without Accessory (Diffuse)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

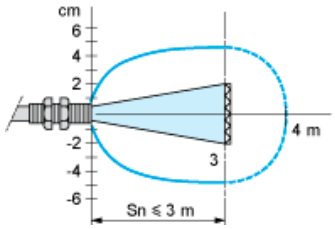
Without Accessory (Diffuse with background suppression)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

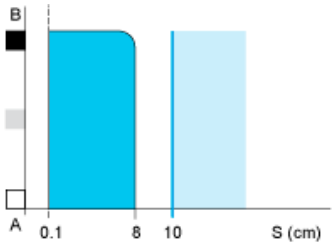
With reflector (Polarised reflex)



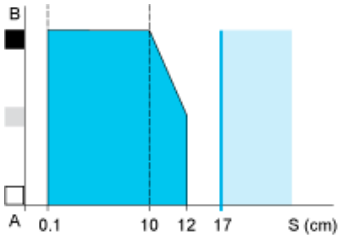
With reflector XUZC50

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

Teach Mode at Minimum



Teach Mode at Maximum

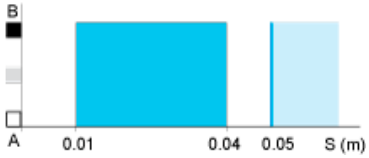




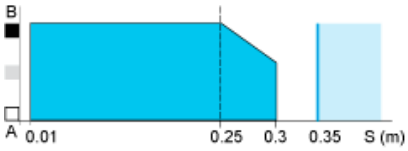
A-B : Object reflection coefficient
(1) Black 6%
(2) Grey 18%
(3) White 90%
(4) Sensing range
(5) Non sensing zone (matt surfaces)

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)