

Product data sheet

Characteristics

XUB0BPSNL2

photo-electric sensor - XUB - multi - Sn 0..20m -
12..24VDC - cable 2m

Product availability : Stock - Normally stocked in distribution facility



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	Cable
Cable length	6.56 ft (2 m)
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 XUB0BKSNL2T

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
Wire insulation material	PvR
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	2.52 in (64 mm)
Product weight	0.23 lb(US) (0.105 kg)

Environment

Product certifications	CE CSA 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

Ordering and shipping details

Category	22481 - SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	00785901678779
Nbr. of units in pkg.	1
Package weight(Lbs)	0.28000000000000003
Returnability	Y
Country of origin	ID

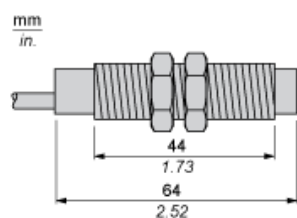
Offer Sustainability

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
California proposition 65	WARNING: This product can expose you to chemicals including:
- - - - - Substance 1	Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and
- - - - - Substance 2	Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.
- - - - - More information	For more information go to www.p65warnings.ca.gov

Contractual warranty

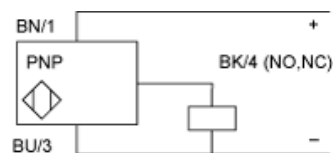
Warranty period	18 months
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Dimensions



Connections and Schemes

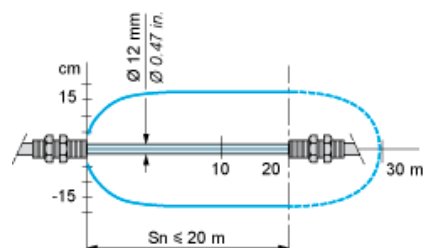
PNP



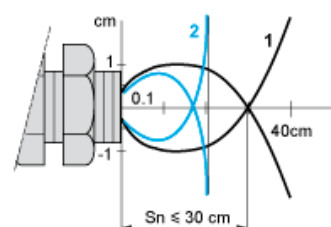
BN : Brown
BU : Blue
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)



Without Accessory (Diffuse)

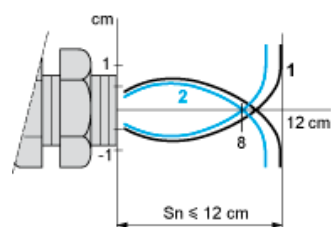


1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)

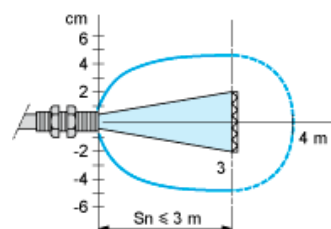


1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

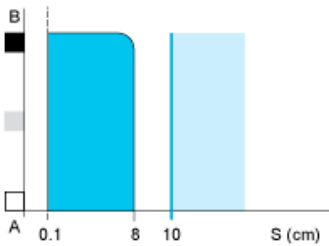
With reflector (Polarised reflex)



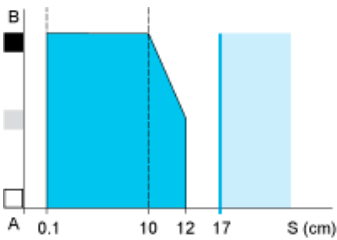
With reflector XU5C50

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

Teach Mode at Minimum



Teach Mode at Maximum

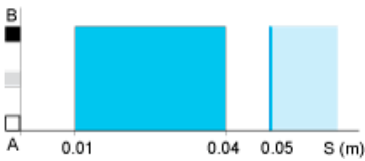


- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

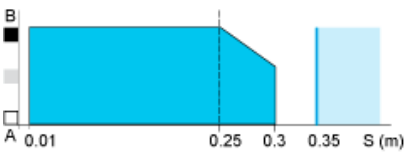
A-B : Object reflection coefficient
(1) Black 6%
(2) Grey 18%
(3) White 90%
(4) Sensing range
(5) Non sensing zone (matt surfaces)

Variation of Usable Sensing Distance

Minimum Setting



Maximum Setting



- (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)