

Product data sheet

XUB0BPSNL2

Photoelectric sensor XUB, metal, multimode, 12...24 VDC, cable 2 m, NO/NC

Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	General purpose multimode
Sensor name	XUB
Electronic sensor type	Photo-electric sensor
Sensor design	Cylindrical M18
Product specific application	Not applicable
ETIM classification	ETIM 9 - EC002716 - Through beam photoelectric sensor
Material	Metal
Lens material	PMMA
Enclosure material	Nickel plated brass
[Sn] nominal sensing distance	3-3 m polarised reflex need reflector XUZC50, 20-20 m thru beam need a transmitter XUB0BKSNL2T, 0.12-0.12 m diffuse with background suppression, 0.3-0.3 m diffuse
Maximum sensing distance	0.12 m diffuse with background suppression, 0.4 m diffuse, 30 m thru beam, 4.5 m polarised reflex
Wiring technique	3-wire
Diameter	18 mm
Detection system	Multimode
Line of sight type	Axial
Delay response	2 ms
Indivisible sale quantity	1

Complementary

Sensing range	> 0...20 m
Electrical connection	Cable
Cable length	2 m
Supply voltage limits	10-36 V DC
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Supply circuit type	DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Maximum voltage drop	<1.5 V (closed state)

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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Current consumption	35 mA no-load
Emission	Infrared diffuse, infrared diffuse with background suppression, infrared thru beam, red polarised reflex
Setting-up	Self teaching
Output type	Solid state
Type of output signal	Discrete
Add on output	Without
Discrete output type	PNP
Discrete output function	1 NO or 1 NC programmable
Switching frequency	250 Hz
Status LED	1 LED (green) for supply, 1 LED (red) for instability, 1 LED (yellow) for output state
Delay first up	200 ms
Delay recovery	2 ms
Length	64 mm
Product weight	0.105 kg

Environment

IP degree of protection	IP65 double insulation conforming to IEC 60529, IP67 double insulation conforming to IEC 60529
Ambient air temperature for storage	-40...70 °C
Shock resistance	30 gn (duration = 11 ms) conforming to IEC 60068-2-27
Vibration resistance	7 gn, amplitude = +/- 1.5 mm (f = 10-55 Hz) conforming to IEC 60068-2-6

Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Warranty

Warranty	18 months

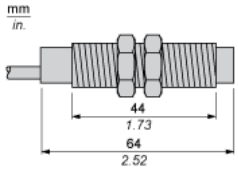
Packing Units

Country of origin	ID (Indonesia)
Unit type of package 1	PCE
Number of units in package 1	1
New Package 1 GTIN-13	3666916033654
Package 1 height	4.2 cm
Package 1 width	9.7 cm
Package 1 length	13.2 cm
Package 1 weight	0.105 kg
Unit type of package 2	S02

Number of units in package 2	22
New Package 2 GTIN 14	13666916033651
Package 2 height	15 cm
Package 2 width	30 cm
Package 2 length	40 cm
Package 2 weight	3.315 kg
Unit type of package 3	CAR
Number of units in package 3	1
New Package 3 GTIN 14	23666916033658
Package 3 height	4.2 cm
Package 3 width	9.7 cm
Package 3 length	13.2 cm
Package 3 weight	0.13 kg

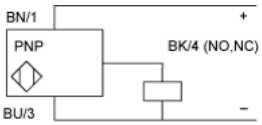
Technical Drawings

Dimensions



Connections and Schemes

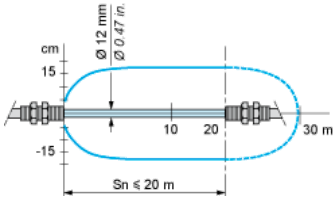
PNP



- BN : Brown
- BU : Blue
- BK : Black

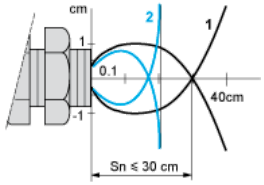
Detection Curves

With Thru-beam Accessory (Thru-beam)



Detection Curves

Without Accessory (Diffuse)

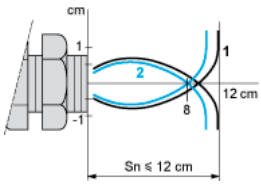


- 1 : White 90%
- 2 : Grey 18%

Object 10 x 10 cm

Detection Curves

Without Accessory (Diffuse with background suppression)



- 1 : White 90%
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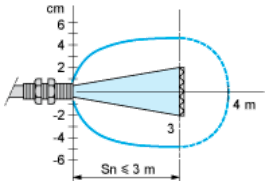
Object 10 x 10 cm

Detection Curves

With reflector (Polarised reflex)



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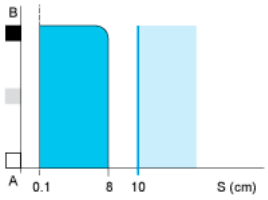
With reflector XUZC50

Detection Curves

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



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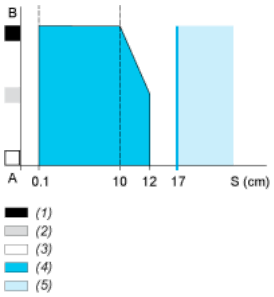
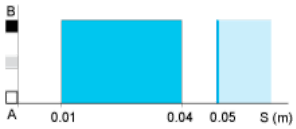


- 1 : White 90%
- 2 : Grey 18%
- 1 : White 90%
- 2 : Grey 18%
- A-B : Object reflection coefficient
- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

Detection Curves

Variation of Usable Sensing Distance



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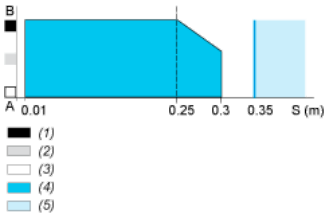

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