Product datasheet

Specifications



photo-electric sensor - XUB - thru beam - laser - Sn 100m - 12..24VDC - M12

XUBLAPCNM12

Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application material handling
Electronic sensor type	Photo-electric sensor
Sensor name	XUB
Sensor design	Cylindrical M18
Detection system	Thru beam
Material	Plastic
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
Emission	Red laser class 1 670 nm conforming to IEC 825-1
[Sn] nominal sensing distance	100 m

Complementary

Enclosure material	PBT
Lens material	PMMA
Blind zone	0 mm
Output type	Solid state
Status LED	Supply on and teaching: 1 LED (green) Stability: 1 LED (red) Output state and alignment aid: 1 LED (yellow)
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Supply voltage limits	10…30 V DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Switching frequency	1500 Hz
Maximum voltage drop	<1.5 V (closed state)
Current consumption	25 mA no-load

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

Maximum power consumption in W	1 W
Maximum delay first up	80 ms
Maximum delay response	0.4 ms
Maximum delay recovery	0.4 ms
Setting-up	With sensitivity adjustment
Net weight	0.078 kg
Kit composition	Transmitter + receiver XUBLAKCNM12T + XUBLAPCNM12R

Environment

Product certifications	CE CSA UL
Ambient air temperature for operation	-10…45 °C
Ambient air temperature for storage	-40…70 °C
Vibration resistance	7 gn, amplitude = +/- 0.75 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	IP67 conforming to IEC 60529 (double insulation)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	63.0 g
Package 1 Height	3.4 cm
Package 1 width	7 cm
Package 1 Length	12.8 cm
Unit Type of Package 2	S02
Number of Units in Package 2	35
Package 2 Weight	2.509 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
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

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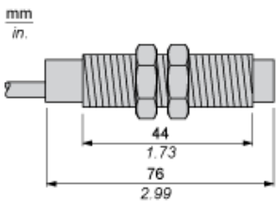
Dimensions Drawings

Dimensions



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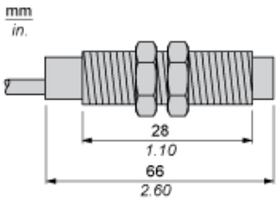
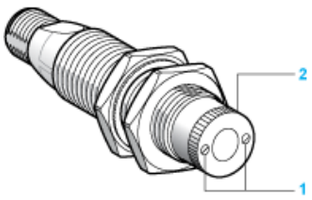
Dimensions Drawings

Dimensions



Mounting

Adjustment



(1) Adjust the focusing point of the laser beam by rotating the serrated sleeve
(2) Located on the face of the sensor. Re-tighten fixing screws

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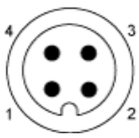
Connections and Schema

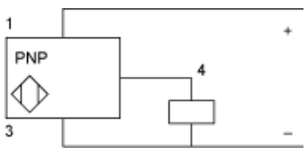
Wiring Schemes

M12 Connector

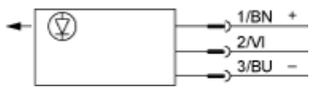


1 : (+)
2 : Beam break input
3 : (-)
4 : OUT/Output

PNP



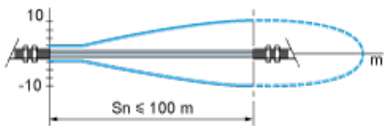
Transmitter



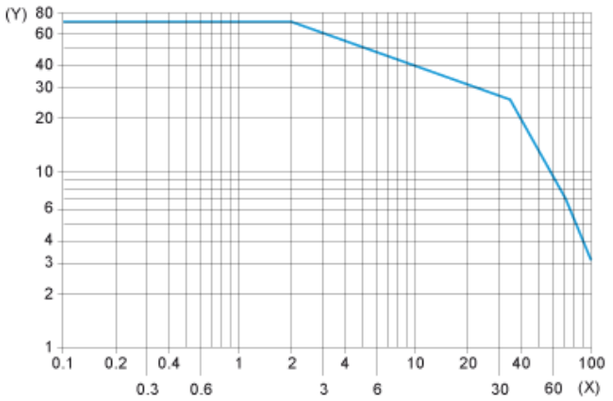
BN : Brown
BU : Blue
Input 2/VI: not connected: beam made, connected to (-): beam broken

Curves

Detection Curve (Set to Infinity)

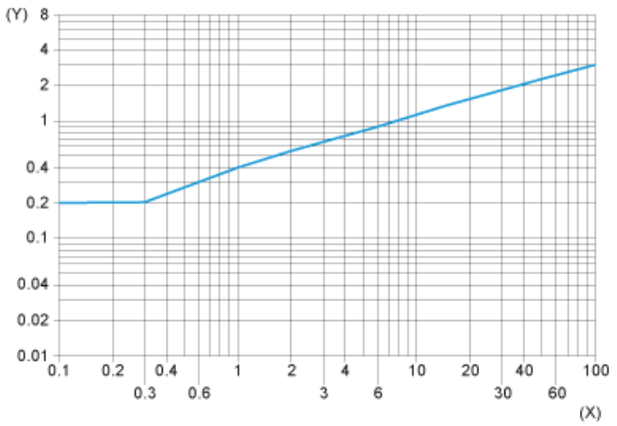


Excess Gain Curve



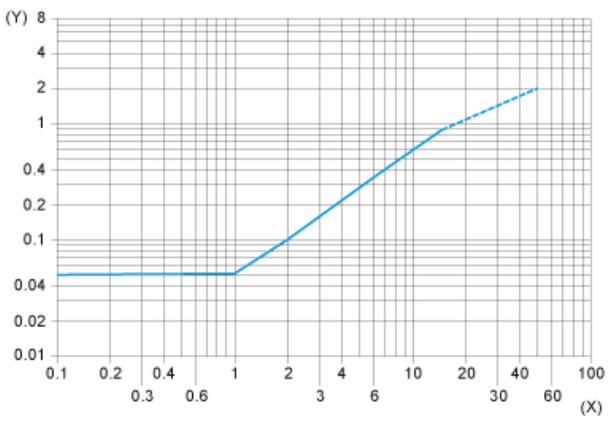
(X) Distance (m)
(Y) Gain

Standard Curve



(X) Distance focusing point (m)
(Y) Minimum size of the object to be detected (mm)

Detection Limit Curve



(X) Distance focusing point (m)
(Y) Minimum size of the object to be detected (mm)