Specifications



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

XUBLAPCNM12

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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	e 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	1224 V DC with reverse polarity protection			
Supply voltage limits	1030 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			

Maximum delay first up 80 ms Maximum delay response 0.4 ms Setting-up With sensitivity adjustment Net weight 0.678 kg Kit composition Transmitter + receiver XUBLAKCNM12T + XUBLAPCNM12R Environment Froduct certifications CE CSA Ambient air temperature for operation Ambient air temperature for of -1045 °C SA Vibration resistance 7 gn, amplitude = +i. 0.75 mm (i = 1055 +tz) conforming to EC 60088-2-6 Shock resistance 30 gn (dursion = 11 ms) conforming to IEC 60088-2-27 IP degree of protection PST conforming to IEC 60529 (dauble insulation) Packing Units Unit Type of Package 1 Number of Units in Package 1 PCE Number of Units in Package 1 1 Package 1 Weight 3.4 cm Package 1 Height 3.4 cm Package 1 Length 12.8 cm Unit Type of Package 2 So2 Number of Units in Package 3 So m Package 2 Height 15 cm Package 2 Height 15 cm Offer Sustainability Sustainabilo offer status Creen Premium product REACh Regulation REACh Besteration Mercury free Yes ROHS exemption information Ves Environmental Disclosure Product Environmental Profile						
Maximum delay response 0.4 ms Maximum delay recovery 0.4 ms Setting-up With sensitivity adjustment Not weight 0.078 kg Kit composition Transmither + receiver XUBLAKCNM12T + XUBLAPCNM12R Environment Product certifications CE CSA UL Ambient air temperature for cSA UL Ambient air temperature for apperature for storage Vibration resistance 7 gm. amplitude = +/- 0.76 mm (f = 1056 Hz) conforming to IEC 00088-2-6 Shock resistance 30 gm (duraton = 11 ms) conforming to IEC 00088-2-7 IP degree of protection IP67 conforming to IEC 80529 (double insulation) Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Weight 3.4 cm Package 1 Length 12.8 cm Unit Type of Package 2 S02 Number of Units in Package 2 36 Package 2 Weight 2.500 kg Package 2 Weight 15 cm Package 2 Height 15 cm Package 2 Height 16 cm Package 2 Height 17 cm Package 2 Height 17 cm Package 2 Height 18 cm Unit Type of Package 2 S02 Number of Units in Package 3 S02 Number of Units in Package 4 S02 Number of Units in Package 5 S02 Number of Units in Package 8 S02 Number of Units in Package 9 S02 Number of Units in Package 9 S02 Number of Units in Package 1 Length 15 cm Package 2 Height 15 cm Package 2 Length 40 cm Offer Sustainability Sustainabile offer status Green Premium product REACh Regulation REACh Declaration But Ref Sustainability Sustainabile offer status Green Premium product REACh Regulation REACh Declaration Mercury free Yes Ref Sexemption Information Yes Environmental Disclosure Product Product out of EU RoHS legal scope) Environmental Disclosure Product RoHS Profile	Maximum power consumption in W	1 W				
Maximum delay recovery Setting-up With sensitivity adjustment Not weight 0.078 kg Kit composition Transmitter + receiver XUBLAKCNM12T + XUBLAPCNM12R Environment Product certifications CE CSA UL Ambient air temperature for operation Ambient air temperature for storage Vibration resistance 7 gn, amplitude = +/- 0.75 mm (f = 1055 Hz) conforming to IEC 60088.2-6 Shock resistance 30 gn (duration = 11 ms) conforming to IEC 60088.2-7 IP degree of protection IP67 conforming to IEC 80529 (double insulation) Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 3.4 cm Package 1 Length 12.8 cm Unit Type of Package 2 S02 Number of Units in Package 3 Package 2 Weight 2.508 kg Package 2 Weight 30 cm Package 2 Length 40 cm Offer Sustainability Sustainable offer status Green Premium product REACh Regulation REACh Regulation REACh Regulation Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Mercury free Reschedential Product Reteriornemental Disclosure Product Environmental Profile	Maximum delay first up	80 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 -1045 °C -20	Maximum delay response	0.4 ms				
Not weight 0.078 kg Kit composition Transmitter + receiver XUBLAKCNM12T + XUBLAPCNM12R Environment Product certifications CE CSA UL Ambient air temperature for operation Ambient air temperature for storage 4070 °C Storage Vibration resistance 7 gn. amplitude = +i- 0.75 mm (f = 1055 Hz) conforming to IEC 80088-2-6 Shock resistance 30 gn (duration = 11 ms) conforming to IEC 80088-2-27 IP degree of protection IP67 conforming to IEC 80529 (double insulation) Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Weight 53 0 g Package 1 Height 7 cm Package 1 Length 12.8 cm Unit Type of Package 2 S02 Number of Units in Package 3 Package 2 Weight 2.509 kg Package 2 Weight 15 cm Package 2 Length 10 cm Offer Sustainability Sustainable offer status Green Premium product REACh Declaration EU ROHS Directive Pro-active compliance (Product out of EU ROHS legal scope) EU ROHS Directive Pro-active compliance (Product out of EU ROHS legal scope) EU ROHS Directive Pro-active compliance (Product out of EU ROHS legal scope) EU ROHS Directive Product Environmental Profile	Maximum delay recovery	0.4 ms				
Kit composition Transmitter + receiver XUBLAKCNM12T + XUBLAPCNM12R Environment Product certifications CE CSA UI. Ambient air temperature for operation Ambient air temperature for operation Ambient air temperature for storage Vibration resistance 7 gn. amplitude = +/-0.75 mm (f = 1055 Hz) conforming to IEC 60068-2-6 Shock resistance 30 gn (duration = 11 ms) conforming to IEC 60068-2-7 IP degree of protection IP87 conforming to IEC 60529 (double insulation) Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Weight 3.4 cm Package 1 Height 3.4 cm Package 1 Length 12.8 cm Unit Type of Package 2 So2 Number of Units in Package 3 Package 2 Height 15 cm Package 2 Height 15 cm Offer Sustainability Sustainability Sustainability Sustainability Sustainability REACh Declaration Mercury free Yes ROHS exemption information Ves Environmental Disclosure Product Environmental Profile	Setting-up	With sensitivity adjustment				
Environment Product certifications CE CSA UL Ambient air temperature for operation Ambient air temperature for operation Ambient air temperature for storage -1045 °C	Net weight	0.078 kg				
Product certifications CE CSA UL Ambient air temperature for operation Ambient air temperature for storage Vibration resistance 7 gn. amplitude = ++- 0.75 mm (f = 1055 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 Package 1 Height 3.4 cm Package 1 Height 7 cm Package 1 Length 12.8 cm Unit Type of Package 2 S02 Number of Units in Package 2 S02 Number of Units in Package 2 S02 Number of Units in Package 3 S5 Package 2 Height 15 cm Package 2 Height 30 cm Package 2 Length 40 cm Offer Sustainability Sustainable offer status Green Premium product REACh Declaration BU ROHS Declaration Mercury free Yes ROHS exemption information Yes Environmental Disclosure Product Environmental Profite	Kit composition	Transmitter + receiver XUBLAKCNM12T + XUBLAPCNM12R				
CSA UL Ambient air temperature for operation Ambient air temperature for operation Ambient air temperature for storage Vibration resistance 7 gn. amplitude = +/- 0.75 mm (f = 1055 Hz) conforming to IEC 60088-2-6 Shock resistance 30 gn (duration = 11 ms) conforming to IEC 60088-2-7 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 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 S02 Number of Units in Package 2 S02 Number of Units in Package 2 S04 Package 2 Weight 2.509 kg Package 2 Height 15 cm Package 2 Height 30 cm Package 2 Weight 30 cm Offer Sustainability Sustainable offer status Green Premium product 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	Environment					
Ambient air temperature for storage Vibration resistance 7 gn. amplitude = +/- 0.75 mm (f = 1055 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 Height 12.8 cm Unit Type of Package 2 S02 Number of Units in Package 2 S04 Package 2 Weight 2.598 kg Package 2 Weight 15 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 exemption information Yes Environmental Disclosure Product Environmental Profile	Product certifications	CSA				
Vibration resistance 7 gn, amplitude = +/- 0.75 mm (f = 1055 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 Height 7 cm Package 1 Length 12.8 cm Unit Type of Package 2 S02 Number of Units in Package 2 S02 Number of Units in Package 3 35 Package 2 Weight 2.509 kg Package 2 Weight 15 cm Package 2 Height 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 Froduct Environmental Disclosure Product Environmental Profile	Ambient air temperature for operation	-1045 °C				
Shock resistance 30 gn (duration = 11 ms) conforming to IEC 60088-2-27 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 Length 12.8 cm Unit Type of Package 2 S02 Number of Units in Package 2 S02 Number of Units in Package 2 35 Package 2 Weight 2.509 kg Package 2 Height 15 cm Package 2 Height 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 Directive Product Environmental Profile Environmental Disclosure Product Environmental Profile	Ambient air temperature for storage	-4070 °C				
P degree of protection IP67 conforming to IEC 60529 (double insulation)	Vibration resistance	7 gn, amplitude = +/- 0.75 mm (f = 1055 Hz) conforming to IEC 60068-2-6				
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 S02 Number of Units in Package 2 35 Package 2 Weight 2.509 kg Package 2 Weight 15 cm Package 2 width 30 cm Package 2 width 30 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	Shock resistance	30 gn (duration = 11 ms) conforming to IEC 60068-2-27				
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 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	IP degree of protection	IP67 conforming to IEC 60529 (double insulation)				
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 Height 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 exemption information Yes Environmental Disclosure Product Environmental Profile	Packing Units					
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 Height 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	Unit Type of Package 1	PCE				
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 vidth 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	Number of Units in Package 1	1				
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	Package 1 Weight	63.0 g				
Package 1 Length 12.8 cm Unit Type of Package 2 502 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	Package 1 Height	3.4 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	Package 1 width	7 cm				
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	Package 1 Length	12.8 cm				
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)	Unit Type of Package 2	S02				
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	Number of Units in Package 2	35				
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	Package 2 Weight	2.509 kg				
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	Package 2 Height	15 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	Package 2 width	30 cm				
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	Package 2 Length	40 cm				
REACh Regulation 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	Offer Sustainability					
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	Sustainable offer status	Green Premium product				
Mercury free Yes RoHS exemption information Yes Environmental Disclosure Product Environmental Profile	REACh Regulation	REACh Declaration				
RoHS exemption information Yes Environmental Disclosure Product Environmental Profile	EU RoHS Directive					
Environmental Disclosure Product Environmental Profile	Mercury free	Yes				
	RoHS exemption information	Yes				
Circularity Profile End of Life Information	Environmental Disclosure	Product Environmental Profile				
	Circularity Profile	End of Life Information				

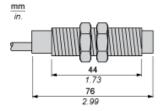
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Warranty 18 months

XUBLAPCNM12

Dimensions Drawings

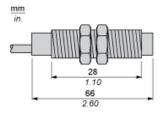
Dimensions



XUBLAPCNM12

Dimensions Drawings

Dimensions

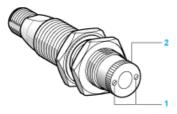


XUBLAPCNM12

Mounting and Clearance

Mounting

Adjustment



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

XUBLAPCNM12

Connections and Schema

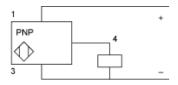
Wiring Schemes

M12 Connector

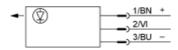


1: 2: 3: 4: Beam break input (-) OUT/Output

PNP



Transmitter



Brown Blue

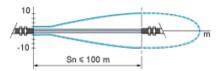
Input 2/VNot connected: beam made, connected to (-): beam broken

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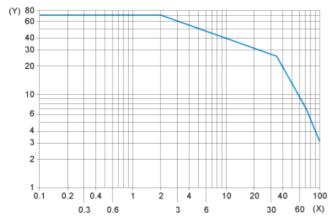
Performance Curves

Curves

Detection Curve (Set to Infinity)

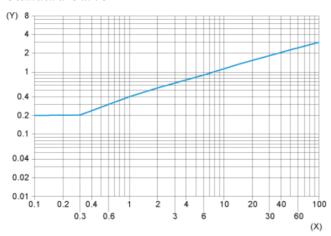


Excess Gain Curve



(X) (Y) Distance (m) Gain

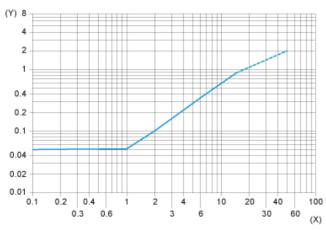
Standard Curve



Distance focusing point (m)

(X) (Y) Minimum size of the object to be detected (mm)

Detection Limit Curve



Distance focusing point (m)

Minimum size of the object to be detected (mm)