

# Product data sheet

Specifications



Photoelectric sensors XU, photo electric laser sensor, XUK, background suppression, Sn 0,8 m -10...30 VDC M12

XUK8LAPPNM12

## Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application assembly Application material handling
Electronic sensor type	Photo-electric sensor
Sensor name	XUK
Sensor design	Compact 50 x 50
Detection system	Diffuse with background suppression
Material	Plastic
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	4-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	Red laser diffuse with background suppression class 1
[Sn] nominal sensing distance	0.8 m diffuse with background suppression

## Complementary

Enclosure material	ABS/PC
Lens material	PMMA
Maximum sensing distance	0.8 m diffuse with background suppression
Output type	Solid state
Add on input	External teach
Status LED	1 LED (yellow) for output state 1 LED (green/yellow) for supply on/output state
[Us] rated supply voltage	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	<= 250 Hz

Maximum voltage drop	<2 V
Current consumption	<= 30 mA no-load
Maximum delay first up	300 ms
Maximum delay response	0.5 ms
Maximum delay recovery	0.5 ms
Setting-up	Using teach button or remote teaching
Depth	50 mm
Height	50 mm
Width	23 mm
Product weight	0.035 kg

## Environment

Product certifications	cULus Ecolab CE
Ambient air temperature for operation	-20...50 °C, UL certified -20...60 °C discrete output
Ambient air temperature for storage	-20...80 °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	IP67 conforming to IEC 60529 IP69K conforming to DIN 40050

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.8 cm
Package 1 Width	9.0 cm
Package 1 Length	6.0 cm
Package 1 Weight	52.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	28
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.708 kg

## Offer Sustainability

REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

Contractual warranty

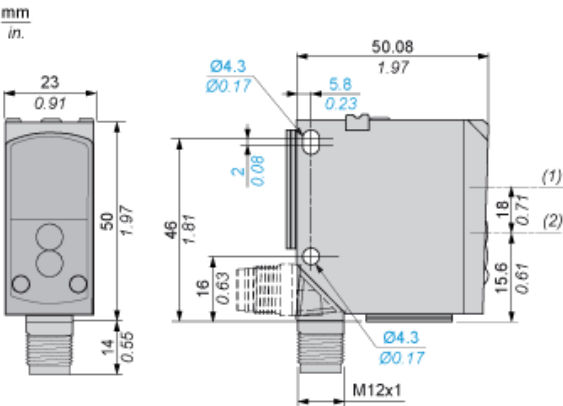
Warranty	18 months
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# Product data sheet

## Dimensions Drawings

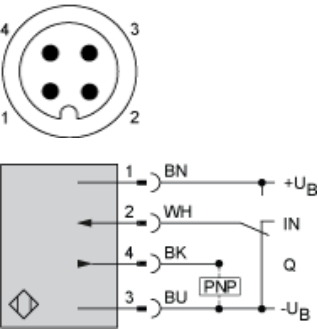
**XUK8LAPPNM12**

## Dimensions



- (1) Receiver optical axis
- (2) Transmitter optical axis

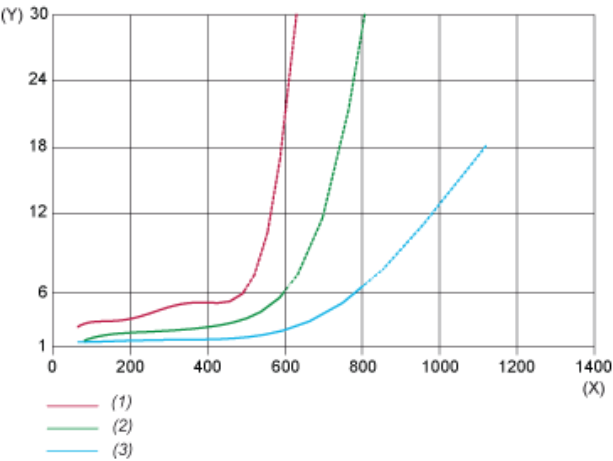
Wiring Schemes Using M12 Connector



- 1 : (+)
- 2 : +UB = NC, -UB = NO, not connected = NO
- 3 : (-)
- 4 : Output
- BN : Brown
- WH : White
- BU : Blue
- BK : Black
- +UB : External teach
- UB : Pushbutton locking

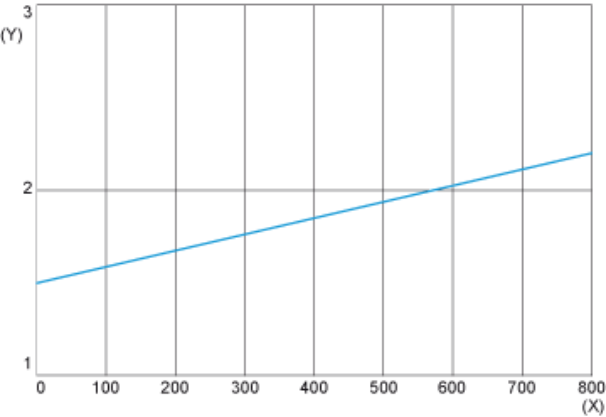
Curves

Scanning Properties



- (X) Detection distance (mm)
- (Y) Distance (%)
- (1) Black/white 6%/90%
- (2) Grey/white 18%/90%
- (3) White/white 90%/90%

Size of Luminous Point



- (X) Distance (mm)
- (Y) Size (mm)

Recommended replacement(s)