

# Product data sheet

Specifications



## Photoelectric sensors XU, XUK, diffuse Sn 5 m 1out IOLINK or auto PNP/NPN, 1out 4.20 mA

XUK8TAE2MM12

### 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	Analogue + discrete
Wiring technique	5-wire
Discrete output type	IOLINK PNP or NPN
Discrete output function	1 NO or 1 NC programmable
Analogue output range	4...20 mA
Electrical connection	1 male connector M12, 5 pins
Product specific application	Distance measurement on object
Emission	Red laser diffuse distance sensor class 1 conforming to IEC 60825-1
[Sn] nominal sensing distance	5 m diffuse distance sensor

### Complementary

Enclosure material	ABS/PC
Lens material	PMMA
Maximum sensing distance	5 m diffuse distance sensor
Output type	Analog
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	18...30 V DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Switching frequency	<= 500 Hz

Maximum voltage drop	<2 V
Current consumption	<= 60 mA no-load
Maximum delay first up	300 ms
Maximum delay response	1.2 ms
Maximum delay recovery	1.2 ms
Setting-up	Using teach button or remote teaching
Depth	50 mm
Height	50 mm
Width	23 mm
Net weight	0.035 kg

## Environment

Product certifications	Ecolab cULus CE
Ambient air temperature for operation	-20...50 °C, UL certified -40...60 °C
Ambient air temperature for storage	-40...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 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	3.0 cm
Package 1 Width	6.0 cm
Package 1 Length	9.0 cm
Package 1 Weight	56.0 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	1.785 kg

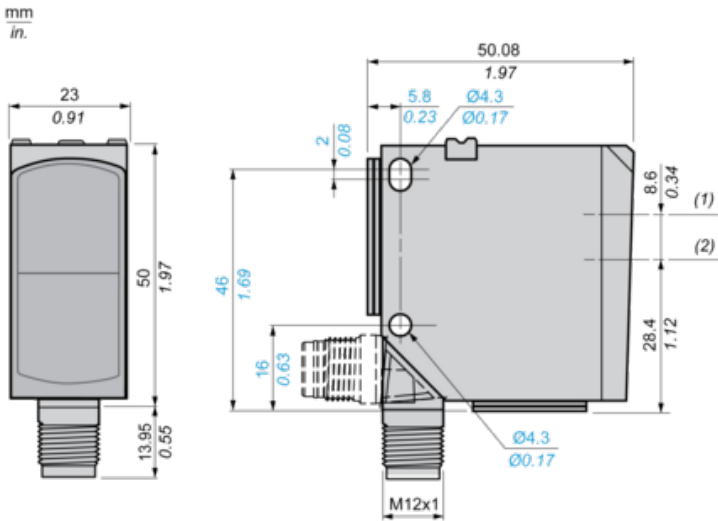
## Offer Sustainability

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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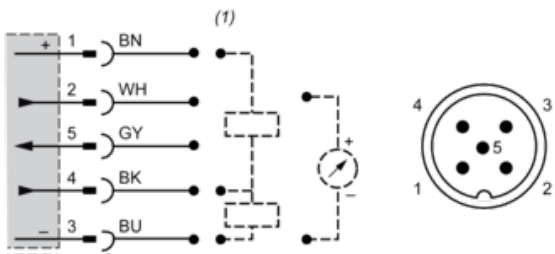
Dimensions



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

Connections and Schema

Connector Wiring

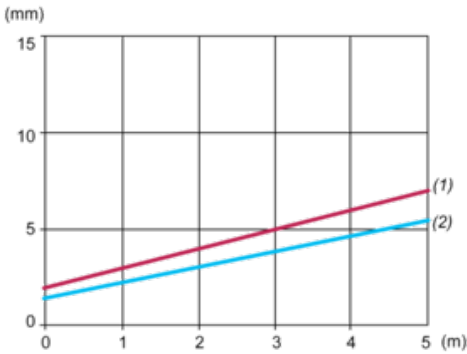


- (1) Auto-detect
- 1 : + UB (BN: Brown)
- 2 : QA (WH: White)
- 3 : -UB (BU: Blue)
- 4 : Q/IO-Link (BK: Black)
- 5 : IN (GY: Grey)

**Note :** In OI-Link mode, a 4-pin cable must be used.

Curves

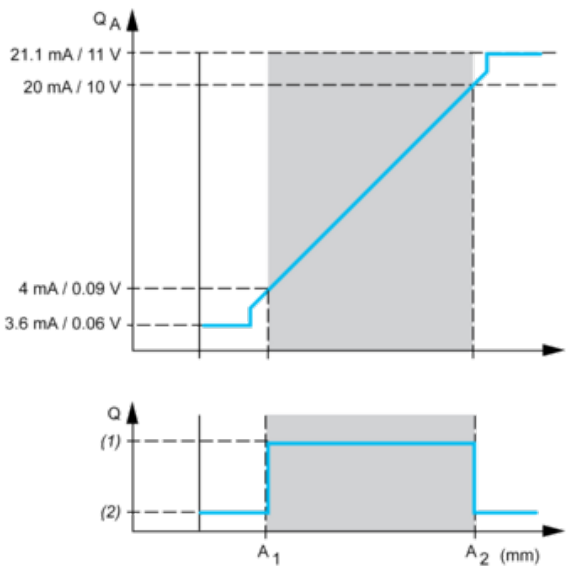
Size of light spot (typical)



(1) Vertical (y)  
(2) Horizontal (x)  
0...15 mm : Size  
0...5 m : Distance

Curves

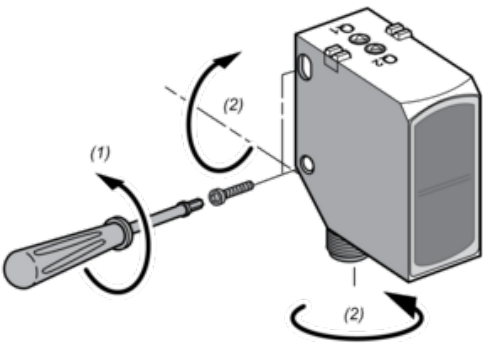
Output characteristic curve



QA : Analogue output  
Q : Switching output  
(1) High  
(2) Low

Mounting

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- (1) < 1,5 Nm (13 lb-in)
- (2) < 1 Nm (8.85 lb-in)

Recommended replacement(s)