

XUK8TAE2MM12

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



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 |

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Environment

| | |
|---------------------------------------|--|
| Product certifications | Ecolab[RETURN]cULus[RETURN]CE |
| Ambient air temperature for operation | -20...50 °C, UL certified[RETURN]-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 |

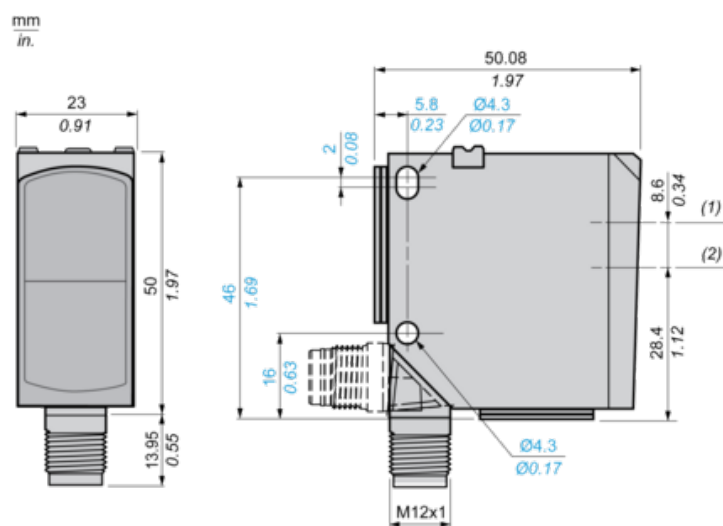
Offer Sustainability

| | |
|--|---|
| 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 |
| For all Reach Rohs enquiries contact us at | sustainability@tesensors.com |

Contractual warranty

| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

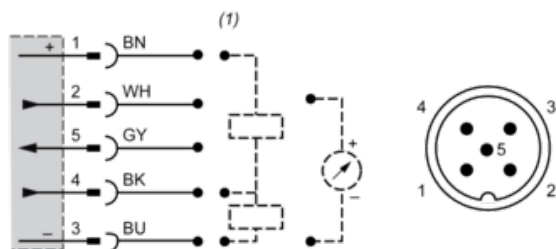
Dimensions



- (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)

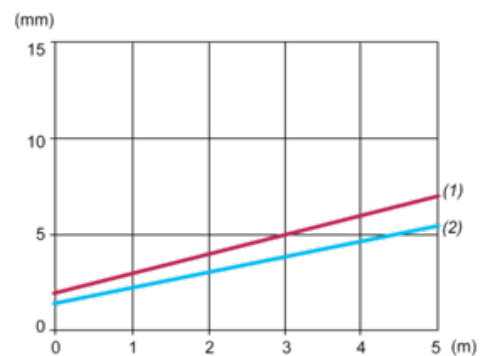
4 : Q/IO-Link (BK: Black)

5 : IN (GY: Grey)

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

Curves

Size of light spot (typical)



(1) Vertical (y)

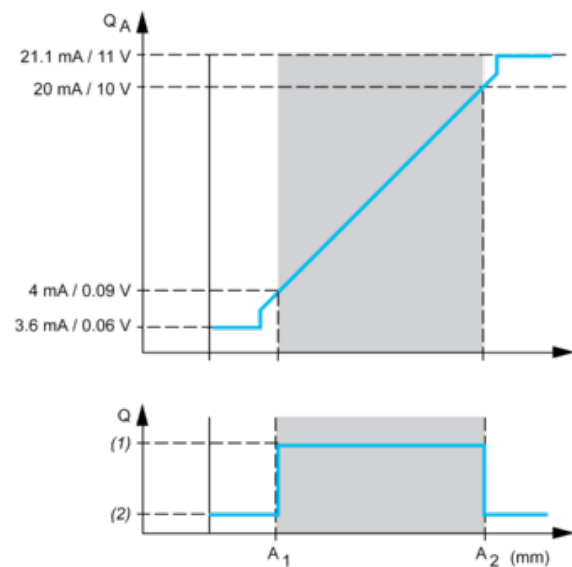
(2) Horizontal (x)

0...15 mm : Size

0...5 m : Distance

Curves

Output characteristic curve



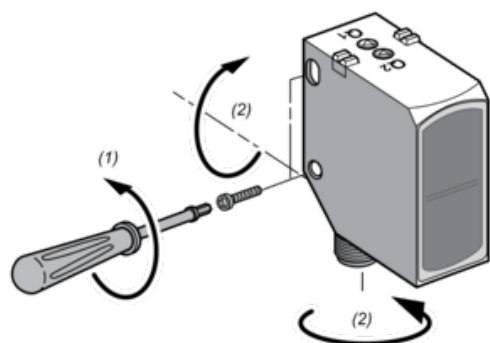
QA : Analogue output

Q : Switching output

(1) High

(2) Low

Mounting



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

(2) < 1 Nm (8.85 lb-in)