

XUB0ANSNM12

Photoelectric sensors XU, XUB, multi, Sn 0...20 m, 12...24 VDC, M12



Main

| | |
|-------------------------------|--|
| Range of Product | Telemecanique Photoelectric sensors XU |
| Series name | General purpose multimode |
| Electronic sensor type | Photo-electric sensor |
| Sensor name | XUB |
| Sensor design | Cylindrical M18 |
| Detection system | Multimode |
| Material | Plastic |
| Line of sight type | Axial |
| Type of output signal | Discrete |
| Supply circuit type | DC |
| Wiring Technique | 3-wire |
| Discrete output type | NPN |
| Discrete output function | 1 NO or 1 NC programmable |
| Electrical connection | 1 male connector M12, 4 pins |
| Product Specific Application | - |
| Emission | Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex |
| [Sn] nominal sensing distance | 9.84 Ft (3 m) polarised reflex need reflector XUZC50 65.62 Ft (20 m) thru beam need a transmitter XUB0AKSNM12T 0.39 Ft (0.12 m) diffuse with background suppression 0.98 ft (0.3 m) diffuse |

Complementary

| | |
|---------------------------|---|
| Enclosure Material | PBT |
| Lens material | PMMA |
| Maximum sensing distance | 0.39 Ft (0.12 m) diffuse with background suppression 1.31 Ft (0.4 m) diffuse 98.43 Ft (30 m) thru beam 14.76 ft (4.5 m) polarised reflex |
| Output Type | Solid state |
| Add on output | Without |
| Status LED | 1 LED green)supply 1 LED red)instability 1 LED yellow)output state |
| [Us] rated supply voltage | 12...24 V DC reverse polarity protection |
| Supply voltage limits | 10...36 V DC |
| Switching capacity in mA | <= 100 mA overload and short-circuit protection) |
| Switching frequency | <= 250 Hz |
| Maximum voltage drop | <1.5 V closed state) |
| Current consumption | 35 mA no-load |
| Maximum delay first up | 200 ms |
| Maximum delay response | 2 ms |
| Maximum delay recovery | 2 ms |
| Setting-up | Self-teaching |
| Diameter | 0.71 in (18 mm) |
| Length | 3.07 in (78 mm) |
| Net Weight | 0.10 lb(US) (0.045 kg) |

Environment

| | |
|---------------------------------------|---|
| Product Certifications | CSA[RETURN]CE[RETURN]UL |
| Ambient Air Temperature for Operation | -13...131 °F (-25...55 °C) |
| Ambient Air Temperature for Storage | -40...158 °F (-40...70 °C) |
| Vibration resistance | 7 gn +/- 1.5 mm 10...55 Hz) IEC 60068-2-6 |
| Shock resistance | 30 gn 11 ms) IEC 60068-2-27 |
| IP degree of protection | IP65 double insulation IEC 60529 IP67 double insulation IEC 60529 IP69K double insulation DIN 40050 |

Ordering and shipping details

| | |
|-------------------|------------------------------|
| Category | 22481-SENSORS, PHOTOELECTRIC |
| Discount Schedule | DS2 |
| GTIN | 3389110148305 |
| Returnability | Yes |
| Country of origin | ID |

Packing Units

| | |
|------------------------------|------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 1.65 in (4.2 cm) |
| Package 1 Width | 2.60 in (6.6 cm) |
| Package 1 Length | 3.62 in (9.2 cm) |
| Package 1 Weight | 1.55 oz (44.0 g) |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 22 |
| Package 2 Height | 5.91 in (15.0 cm) |
| Package 2 Width | 5.91 in (15.0 cm) |
| Package 2 Length | 15.75 in (40.0 cm) |
| Package 2 Weight | 2.76 lb(US) (1.254 kg) |

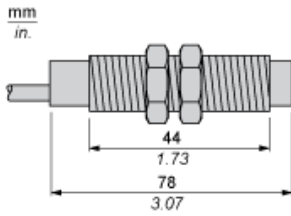
Offer Sustainability

| | |
|--|---|
| Sustainable offer status | Green Premium product |
| 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 |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| For all Reach Rohs enquiries contact us at | sustainability@tesensors.com |

Contractual warranty

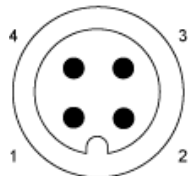
| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



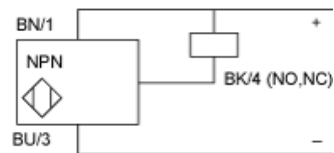
Wiring Schemes

M12 Connector



- 1 : (+)
- 2 : Beam break input (1)
- 3 : (-)
- 4 : OUT/Output
- (1) Beam break input on thru-beam transmitter only

Receiver, NPN Output



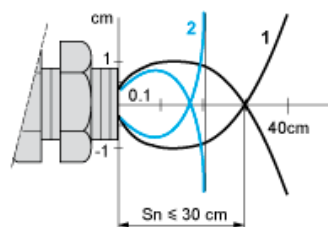
- BN : Brown
- BU : Blue
- BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)

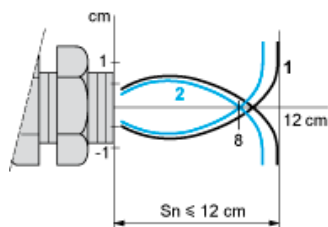


Without Accessory (Diffuse)



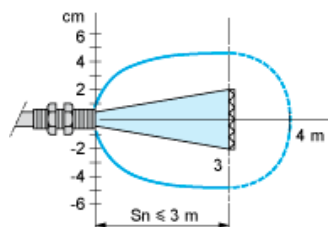
1 : White 90%
2 : Grey 18%
Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)



1 : White 90%
2 : Grey 18%
Object 10 x 10 cm

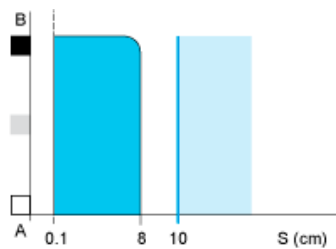
With reflector (Polarised reflex)



With reflector XUZC50

Variation of Usable Sensing Distance S_u (Without accessory, with adjustable background suppression)

Teach Mode at Minimum



Teach Mode at Maximum



- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

A-B : Object reflection coefficient

- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

Variation of Usable Sensing Distance

Minimum Setting



Maximum Setting



- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

A-B : Object reflection coefficient

- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)