



Main

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| Range of product | OsiSense 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 | PNP |
| Discrete output function | 1 NO or 1 NC programmable |
| Electrical connection | Cable |
| Cable length | 2 m |
| Product specific application | - |
| Emission | Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex |
| [Sn] nominal sensing distance | 3 M polarised reflex need reflector XUZC50 20 M thru beam need a transmitter XUB0AKSNL2T 0.12 M diffuse with background suppression 0.3 m diffuse |

Complementary

| | |
|---------------------------|---|
| Enclosure material | PBT |
| Lens material | PMMA |
| Maximum sensing distance | 0.12 M diffuse with background suppression 0.4 M diffuse 30 M thru beam 4.5 m polarised reflex |
| Output type | Solid state |
| Add on output | Without |
| Wire insulation material | PvR |
| Status LED | 1 LED (green) for supply 1 LED (red) for instability 1 LED (yellow) for output state |
| [Us] rated supply voltage | 12...24 V DC with 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 | 18 mm |

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|----------------|----------|
| Length | 64 mm |
| Product weight | 0.095 kg |

Environment

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| Product certifications | UL CE CSA |
| Ambient air temperature for operation | -25...55 °C |
| Ambient air temperature for storage | -40...70 °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 | IP65 double insulation conforming to IEC 60529 IP67 double insulation conforming to IEC 60529 |

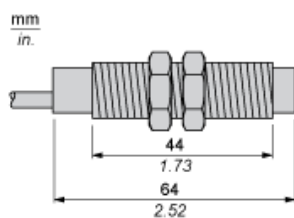
Offer Sustainability

| | |
|----------------------------|--|
| Sustainable offer status | Green Premium product |
| 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 |
| Circularity Profile | End Of Life Information |

Contractual warranty

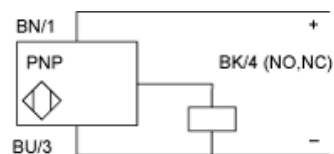
| | |
|----------|-----------|
| Warranty | 18 months |
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Dimensions



Connections and Schemes

PNP



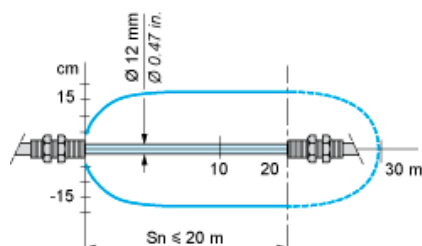
BN : Brown

BU : Blue

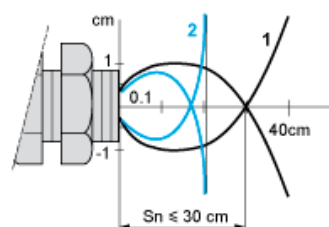
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)



Without Accessory (Diffuse)

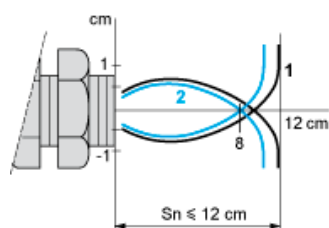


1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)

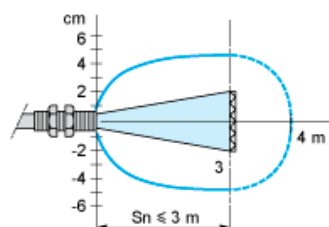


1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

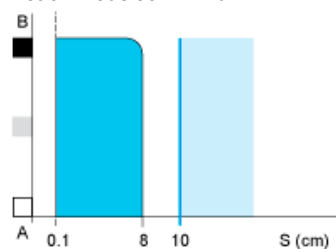
With reflector (Polarised reflex)



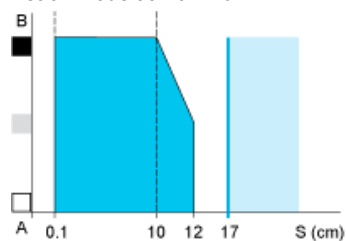
With reflector XUZY50

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

Teach Mode at Minimum



Teach Mode at Maximum



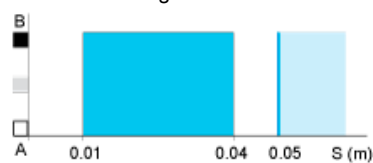
- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

A-B : Object reflection coefficient

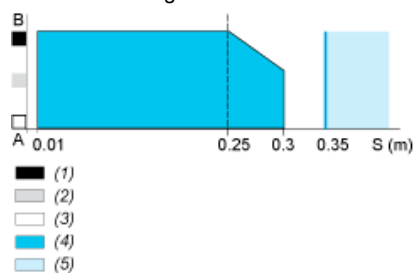
- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

Variation of Usable Sensing Distance

Minimum Setting



Maximum Setting



A-B : Object reflection coefficient

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