XUX0AKSAT16

Photoelectric sensors XU, XUX, multi, Sn 0...40 m, 12...24 VDC, terminals





Main

| Range of product | Telemecanique Photoelectric sensors XU | |
|-------------------------------|--|--|
| Series name | General purpose multimode | |
| Electronic sensor type | Photo-electric sensor | |
| Sensor name | XUX | |
| Sensor design | Compact 92 x 71 | |
| Detection system | Multimode | |
| Material | Plastic | |
| Type of output signal | Discrete | |
| Supply circuit type | DC | |
| Wiring technique | 3-wire | |
| Discrete output function | 1 NO or 1 NC programmable | |
| Electrical connection | Screw-clamp terminals, 1 x 1.5 mm 2 or 1 x 0.75 mm 2 with adaptor | |
| Product specific application | - | |
| Emission | Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex | |
| [Sn] nominal sensing distance | 11 M polarised reflex need reflector XUZC50 40 M thru beam need a transmitter XUX0AKSAT16T 2 M diffuse 1.3 m diffuse with background suppression | |

Complementary

| Complementary | | | |
|---------------------------|---|--|--|
| Enclosure material | PBT | | |
| Lens material | PMMA | | |
| Maximum sensing distance | 15 M polarised reflex 3 M diffuse 60 M thru beam 1.3 m diffuse with background suppression | | |
| Output type | Solid state | | |
| Add on output | With alarm output, <= 100 mA with overload and short-circuit protection | | |
| Cable entry | 1 entry for M16 x 1.5 cable gland, cable outer diameter: 710 mm | | |
| Status LED | 1 LED (green) for supply 1 LED (red) for instability 1 LED (yellow) for output state | | |
| [Us] rated supply voltage | 1224 V DC with reverse polarity protection | | |
| 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 | | |
| Depth | 77 mm | | |
| Height | 92 mm | | |
| Width | 31 mm | | |
| Product weight | 0.2 kg | | |
| | | | |

Environment

| Product certifications | UL | |
|---------------------------------------|--|--|
| | CSA | |
| | CE | |
| Ambient air temperature for operation | -2555 °C | |
| Ambient air temperature for storage | -4070 °C | |
| Vibration resistance | 7 gn, amplitude = +/- 1.5 mm (f = 1055 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 | |

Packing Units

| Unit Type of Package 1 | PCE |
|------------------------------|----------|
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.2 cm |
| Package 1 Width | 9.5 cm |
| Package 1 Length | 13.0 cm |
| Package 1 Weight | 195.0 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 22 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 4.741 kg |

Offer Sustainability

| Sustainable offer status | Green Premium product | | |
|----------------------------|---|--|--|
| REACh Regulation | REACh Declaration | | |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS | | |
| Mercury free | Yes | | |
| RoHS exemption information | ₽¥Yes | | |
| Environmental Disclosure | Product Environmental Profile | | |
| Circularity Profile | ☐ End of Life Information | | |
| 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 | | |

Contractual warranty

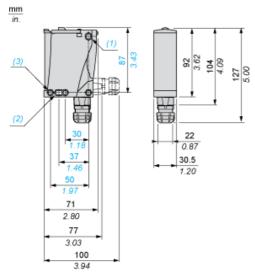
| | - |
|----------|-----------|
| Warranty | 18 months |



Product data sheet Dimensions Drawings

XUX0AKSAT16

Dimensions



- (1) Elongated hole Ø 5.5 x 7
- (2) Elongated hole Ø 5.5 x 9
- (3) Ø 5.5 hole

Product data sheet Connections and Schema

XUX0AKSAT16

Wiring Schemes

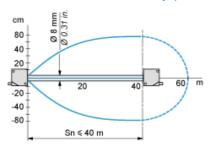
PNP/NPN DC

| M12 | | Terminals | | |
|-----|---|-----------|-----------|----------------|
| 1 | • | 1 | \oslash | + |
| 3 | • | 2 | \oslash | - |
| 4 | • | 3 | 0 | Output |
| 2 | • | 4 | \oslash | Alarm inactive |

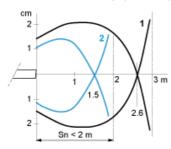
XUX0AKSAT16

Detection Curves

With Thru-beam Accessory (Thru-beam)



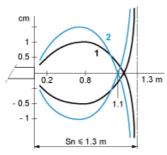
Without Accessory (Diffuse)



1: White 90% 2: Grey 18%

Object 10 x 10 cm

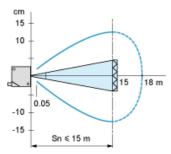
Without Accessory (Diffuse with background suppression)



1: White 90% 2: Grey 18%

Object 10 x 10 cm

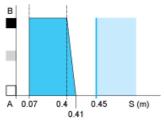
With reflector (Polarised reflex)



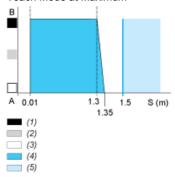
With reflector XUZC50

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

Teach Mode at Minimum



Teach Mode at Maximum



- A-B: Object reflection coefficient
 (1) Black 6%
 (2) Grey 18%
 (3) White 90%
 (4) Sensing range
 (5) Non sensing zone (matt surfaces)