# Product data sheet
## Characteristics

# XUX0AKSAT16

photo-electric sensor - XUX - multi - Sn 0..40m - 12..24VDC - terminals



## Main

| | |
|---|---|
| Range of product | OsiSense 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 mm² or 1 x 0.75 mm² with adaptor |
| Product specific application | - |
| Emission | Infrared diffuse<br>Infrared diffuse with background suppression<br>Infrared thru beam<br>Red polarised reflex |
| [Sn] nominal sensing distance | 2 m diffuse<br>1.3 m diffuse with background suppression<br>40 m thru beam need a transmitter XUX0AKSAT16T<br>11 m polarised reflex need reflector XUZC50 |

## Complementary

| | |
|---|---|
| Enclosure material | PBT |
| Lens material | PMMA |
| Maximum sensing distance | 15 m polarised reflex<br>3 m diffuse<br>60 m thru beam<br>1.3 m diffuse with background suppression |
| Output type | Solid state |

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| | |
|---|---|
| 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: 7...10 mm |
| Status LED | 1 LED (green) for supply<br>1 LED (red) for instability<br>1 LED (yellow) for output state |
| [Us] rated supply voltage | 12...24 V DC with reverse polarity protection |
| Switching capacity in mA | <= 100 mA (overload and short-circuit protection) |
| Switching frequency | <= 250 Hz |
| Voltage drop | <= 1.5 V (closed state) |
| Current consumption | <= 35 mA (no-load) |
| Delay first up | < 200 ms |
| Delay response | < 2 ms |
| 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 | CSA<br>CE<br>UL |
| 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<br>IP67 double insulation conforming to IEC 60529 |

## Offer Sustainability

| | |
|---|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant  - since  0914  -  Schneider Electric declaration of conformity<br>Schneider Electric declaration of conformity |
| REACh | Reference not containing SVHC above the threshold<br>Reference not containing SVHC above the threshold |

## Contractual warranty

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

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# XUX0AKSAT16

## Dimensions



mm
in.
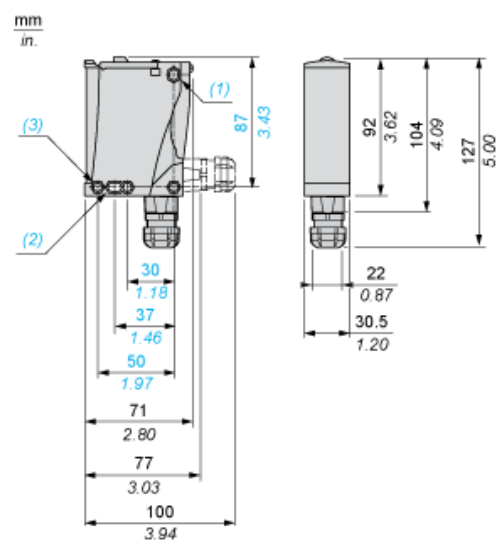
(1)   Elongated hole Ø 5.5 x 7
(2)   Elongated hole Ø 5.5 x 9
(3)   Ø 5.5 hole

## Wiring Schemes

### PNP/NPN DC

| M12 | | Terminals | | |
|---|---|---|---|---|
| 1 | | 1 | | + |
| 3 | | 2 | | - |
| 4 | | 3 | | Output |
| 2 | | 4 | | Alarm inactive |

# XUX0AKSAT16

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## With Thru-beam Accessory (Thru-beam)
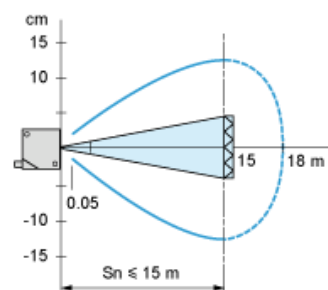
## Without Accessory (Diffuse)
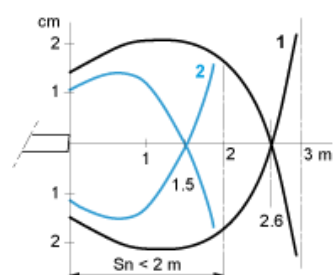


1 :    White 90%
2 :    Grey 18%
Object 10 x 10 cm

## Without Accessory (Diffuse with background suppression)

1 :    White 90%
2 :    Grey 18%
Object 10 x 10 cm
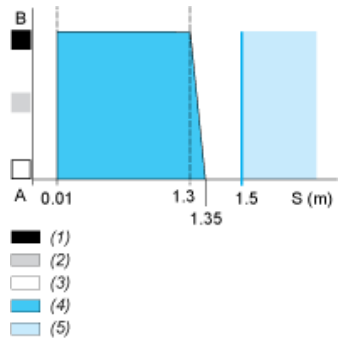
## With reflector (Polarised reflex)



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)