

XUM0APSA2

Photoelectric sensors XU, XUM, multi, Sn
0...10 m, 12...24 VDC, cable 2 m



Main

| | |
|-------------------------------|---|
| Range of product | Telemecanique Photoelectric sensors XU |
| Series name | General purpose multimode |
| Electronic sensor type | Photo-electric sensor |
| Sensor name | XUM |
| Sensor design | Miniature |
| Detection system | Multimode |
| Material | Plastic |
| 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 10 M thru beam need a transmitter XUM0AKSAL2T 0.1 M diffuse with background suppression 0.4 m diffuse |

Complementary

| | |
|---------------------------|---|
| Enclosure material | PBT |
| Lens material | PMMA |
| Maximum sensing distance | 14 M thru beam 4 M polarised reflex 0.1 M diffuse with background suppression 0.55 m diffuse |
| Output type | Solid state |
| Add on output | With alarm output, 50 mA |
| 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 |
| 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 | 100 ms |
| Maximum delay response | 2 ms |
| Maximum delay recovery | 2 ms |
| Setting-up | Self-teaching |
| Depth | 20 mm |
| Height | 34 mm |
| Width | 12 mm |
| Net weight | 0.05 kg |

Environment

| | |
|---------------------------------------|--|
| Product certifications | UL[RETURN]CE[RETURN]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 |

Packing Units

| | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.2 cm |
| Package 1 Width | 9.6 cm |
| Package 1 Length | 13.2 cm |
| Package 1 Weight | 96.0 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 22 |
| Package 2 Height | 15 cm |
| Package 2 Width | 30 cm |
| Package 2 Length | 40 cm |
| Package 2 Weight | 2.609 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 352 |
| Package 3 Height | 75 cm |
| Package 3 Width | 60 cm |
| Package 3 Length | 80 cm |
| Package 3 Weight | 49 kg |

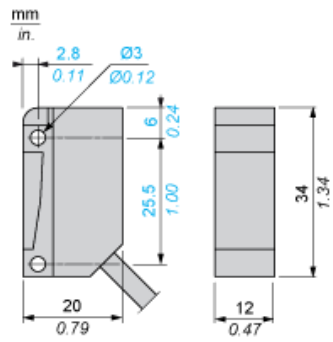
Offer Sustainability

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

Contractual warranty

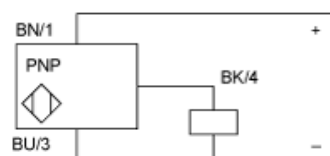
| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



Wiring Schemes

Receiver, PNP Output



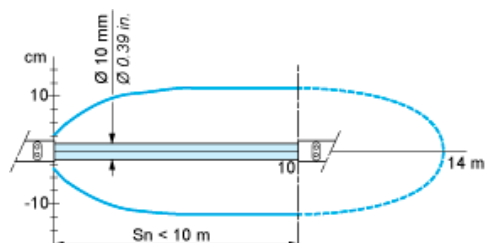
BN : Brown

BU : Blue

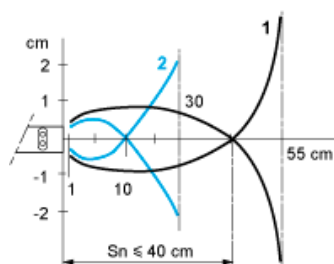
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)

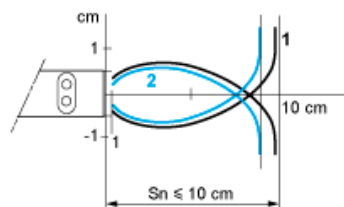


Without Accessory (Diffuse)



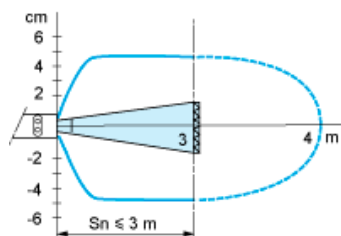
1 : White 90%
2 : Grey 18%
Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)



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

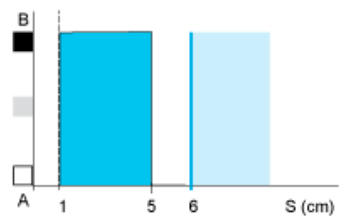
With reflector (Polarised reflex)



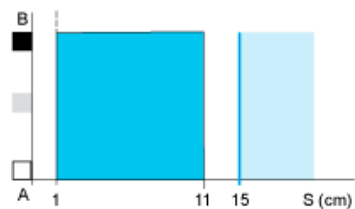
With reflector XU50

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

Teach Mode at Minimum



Teach Mode at Maximum



- (1) Black
- (2) Grey
- (3) White
- (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)