

Product datasheet

Specifications



photo-electric sensor - XUA - diffuse - Sn 0.05m - 12..24VDC - M8

XUAH0515S

Main

| | |
|-------------------------------|--|
| Range of product | Telemecanique Photoelectric sensors XU |
| Series name | Application assembly |
| Electronic sensor type | Photo-electric sensor |
| Sensor name | XUA |
| Sensor design | Cylindrical M8 |
| Detection system | Diffuse |
| Material | Metal |
| 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 |
| Electrical connection | 1 male connector M8, 3 pins |
| Product specific application | - |
| Emission | Infrared diffuse |
| [Sn] nominal sensing distance | 0.05 m diffuse |

Complementary

| | |
|---------------------------|---|
| Enclosure material | Nickel plated brass |
| Lens material | PMMA |
| Maximum sensing distance | 0.06 m |
| Output type | Solid state |
| Add on output | Without |
| Cable composition | 3 x 0.14 mm ² |
| Wire insulation material | PvR |
| Cable outer diameter | 3.5 mm |
| Status LED | 1 LED (yellow) for output state |
| [Us] rated supply voltage | 12...24 V DC with reverse polarity protection |

| | |
|--------------------------|---|
| Supply voltage limits | 10...30 V DC |
| Switching capacity in mA | <= 100 mA (overload and short-circuit protection) |
| Switching frequency | <= 1000 Hz |
| Maximum voltage drop | <1 V (closed state) |
| Current consumption | <= 25 mA no-load |
| Maximum delay first up | 20 ms |
| Maximum delay response | 0.5 ms |
| Maximum delay recovery | 0.5 ms |
| Setting-up | Without sensitivity adjustment |
| Diameter | 8 mm |
| Length | 48 mm |
| Net weight | 0.5 kg |

Environment

| | |
|---------------------------------------|---|
| Product certifications | CE cULus |
| Ambient air temperature for operation | -25...55 °C |
| Ambient air temperature for storage | -30...70 °C |
| Vibration resistance | 7 gn, amplitude = +/- 1 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 | IP67 conforming to IEC 60529 IP65 conforming to IEC 60529 |

Packing Units

| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.4 cm |
| Package 1 Width | 6.8 cm |
| Package 1 Length | 9.6 cm |
| Package 1 Weight | 28.0 g |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 24 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 15.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 872.0 g |

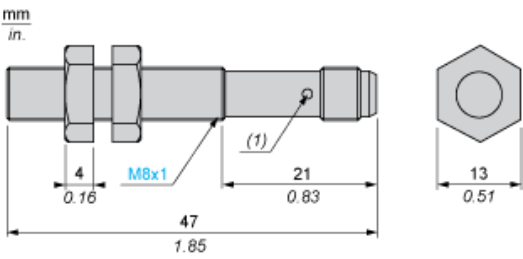
Offer Sustainability

| | |
|----------------------------|---|
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |

Contractual warranty

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

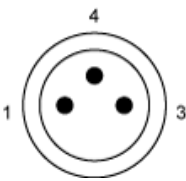
Dimensions



(1) LED, 4 viewing ports at 90°
Note : Fixing nut tightening torque : <2N.m

Wiring Schemes

M8 Connector

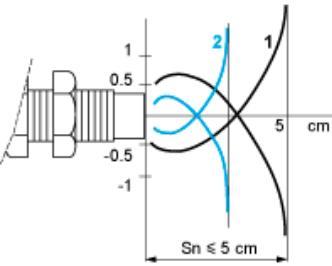


- 1 : (+)
- 3 : (-)
- 4 : OUT or test

PNP

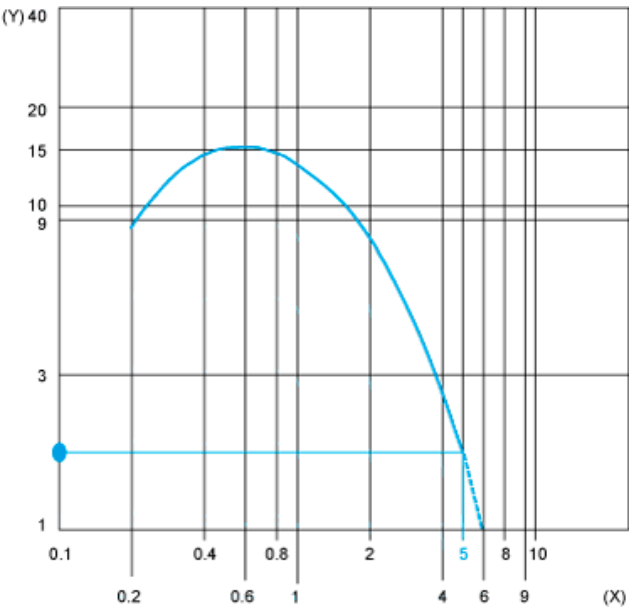


Detection Curves

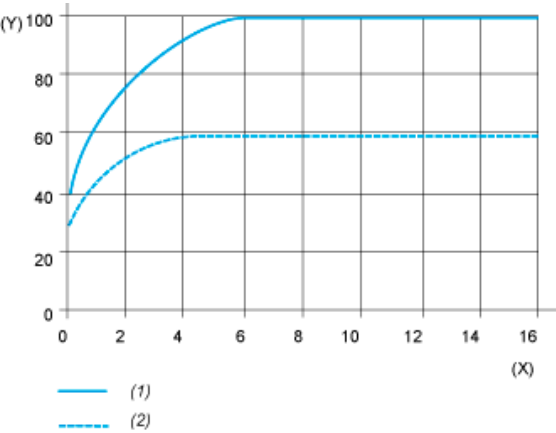


1 : White 90%
2 : Grey 18%
Object 5 x 5 cm

Excess Gain Curves (Ambient temperature: ± 25 °C)



(Y) Gain
(X) Distance (m)
Object 5 x 5 cm, White 90%



(1) White
(2) Grey
(Y) Variation of sensing distance Sn
(X) Side of square object (cm)
Detection differential (H) when object approaches from the front: $H \leq 25\%$ of Sn

Recommended replacement(s)