# Product datasheet

Specifications



## photo-electric sensor - XUA - diffuse - Sn 0.05m - 12..24VDC - cable 2m

XUAH0515

## 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** | Cable |
| **Cable length** | 2 m |
| **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 mm² |
| **Wire insulation material** | PvR |
| **Cable outer diameter** | 3.5 mm |
| **Status LED** | 1 LED (yellow) for output state |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---|---|
| **[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** | 47 mm |
| **Net weight** | 0.015 kg |

## Environment

| | |
|---|---|
| **Product certifications** | CE<br>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** | IP65 conforming to IEC 60529 |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Weight** | 50.0 g |
| **Package 1 Height** | 3.5 cm |
| **Package 1 width** | 9 cm |
| **Package 1 Length** | 11 cm |
| **Unit Type of Package 2** | S01 |
| **Number of Units in Package 2** | 24 |
| **Package 2 Weight** | 1.39 kg |
| **Package 2 Height** | 15 cm |
| **Package 2 width** | 15 cm |
| **Package 2 Length** | 40 cm |

## Offer Sustainability

| | |
|---|---|
| **REACh Regulation** | REACh Declaration |
| **EU RoHS Directive** | Pro-active compliance (Product out of EU RoHS legal scope)<br>EU RoHS Declaration |
| **Mercury free** | Yes |
| **RoHS exemption information** | Yes |

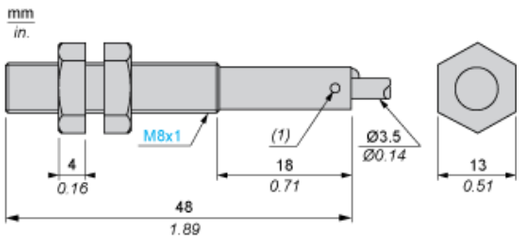
## Contractual warranty

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

# Product datasheet XUAH0515

Dimensions Drawings

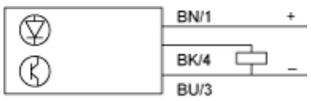
## Dimensions




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

## Wiring Schemes

### PNP

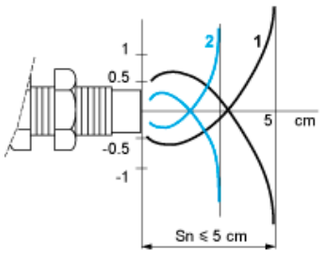



**BN :** Brown
**BU :** Blue
**BK :** Black

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Performance Curves

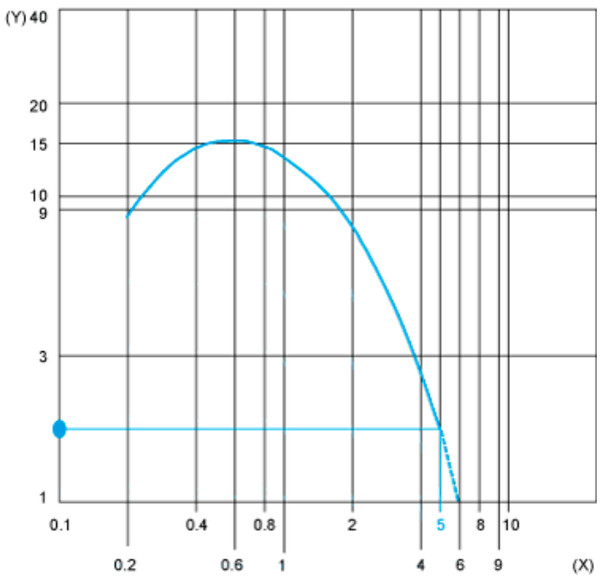
## Detection Curves




**1 :** White 90%
**2 :** Grey 18%

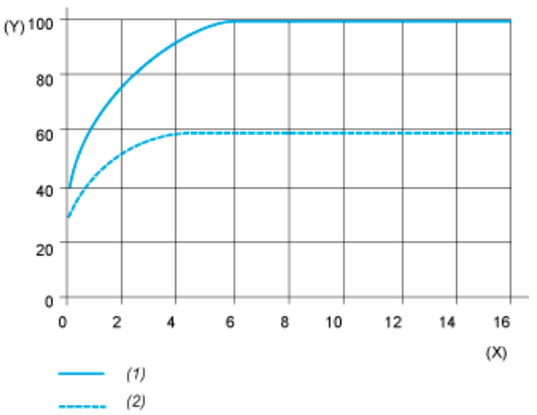
Object 5 x 5 cm

## 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 ≤ 25% of Sn