# Product datasheet

Specifications



## Photoelectric sensors XU, photo electric sensor, XUB, emitter, laser, 12...24 VDC, M12

XUBLBKCNM12T

Discontinued on: 01 November 2020

Discontinued

XUBLBKCNM12T has not been replaced. Please contact your customer care centre for more information.

## Main

| | |
|---|---|
| **Range of product** | Telemecanique Photoelectric sensors XU |
| **Series name** | Application material handling |
| **Electronic sensor type** | Photo-electric sensor transmitter |
| **Sensor name** | XUB |
| **Sensor design** | Cylindrical M18 |
| **Detection system** | Thru beam |
| **Material** | Metal |
| **Supply circuit type** | DC |
| **Wiring technique** | 3-wire |
| **Electrical connection** | 1 male connector M12, 4 pins |
| **Product specific application** | - |
| **Emission** | Red laser thru beam class 1 670 nm conforming to IEC 60825-1 |
| **[Sn] nominal sensing distance** | 0…100 m thru beam need a receiver |

## Complementary

| | |
|---|---|
| **Enclosure material** | Nickel plated brass |
| **Lens material** | PMMA |
| **Add on input** | Test by emission breaking |
| **Status LED** | 1 LED (green) for supply on |
| **[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** | <= 1500 Hz |
| **Maximum voltage drop** | <1.5 V (closed state) |
| **Current consumption** | 25 mA no-load |
| **Maximum delay first up** | 80 ms |
| **Maximum delay response** | 0.4 ms |

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

| | |
|---|---|
| **Maximum delay recovery** | 0.4 ms |
| **Diameter** | 18 mm |
| **Length** | 66 mm |
| **Net weight** | 0.06 kg |

## Environment

| | |
|---|---|
| **Product certifications** | UL<br>CE<br>CSA |
| **Ambient air temperature for operation** | -10…45 °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** | IP67 double insulation conforming to IEC 60529 |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Weight** | 60.0 g |
| **Package 1 Height** | 3.6 cm |
| **Package 1 width** | 7 cm |
| **Package 1 Length** | 13 cm |
| **Unit Type of Package 2** | S01 |
| **Number of Units in Package 2** | 15 |
| **Package 2 Weight** | 1.117 kg |
| **Package 2 Height** | 15 cm |
| **Package 2 width** | 15 cm |
| **Package 2 Length** | 40 cm |

## 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)<br>EU RoHS Declaration |
| **Mercury free** | Yes |
| **RoHS exemption information** | Yes |
| **Environmental Disclosure** | Product Environmental Profile |
| **Circularity Profile** | End of Life Information |

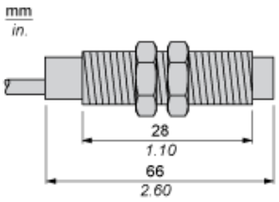
## Contractual warranty

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

# Product datasheet XUBLBKCNM12T

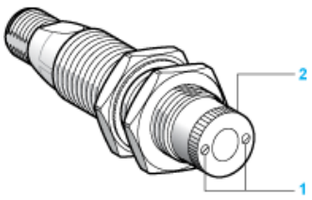
Dimensions Drawings

## Dimensions



## Mounting

### Adjustment



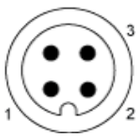

**(1)** Adjust the focusing point of the laser beam by rotating the serrated sleeve
**(2)** Located on the face of the sensor. Re-tighten fixing screws

# Product datasheet XUBLBKCNM12T

Connections and Schema

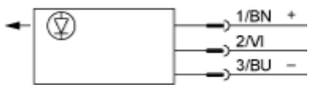
## Wiring Schemes

### M12 Connector




**1 :** (+)
**2 :** Beam break input
**3 :** (-)

### Transmitter



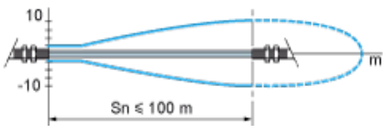

**BN :** Brown
**BU :** Blue
**Input 2/VN:** not connected: beam made, connected to (-): beam broken

# Product datasheet XUBLBKCNM12T

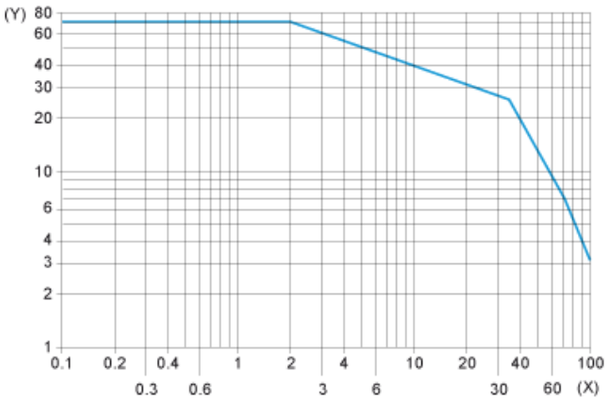
Performance Curves

## Curves

### Detection Curve (Set to Infinity)

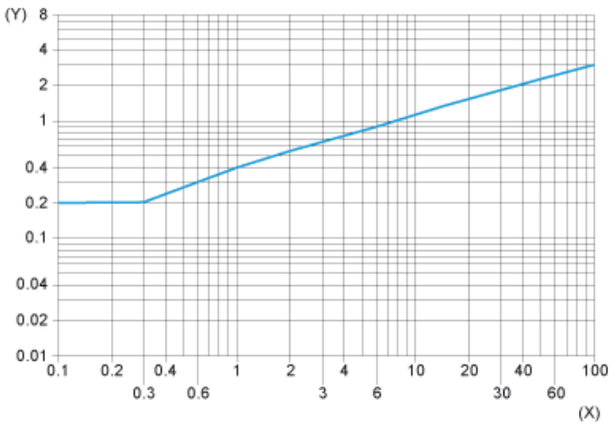



### Excess Gain Curve



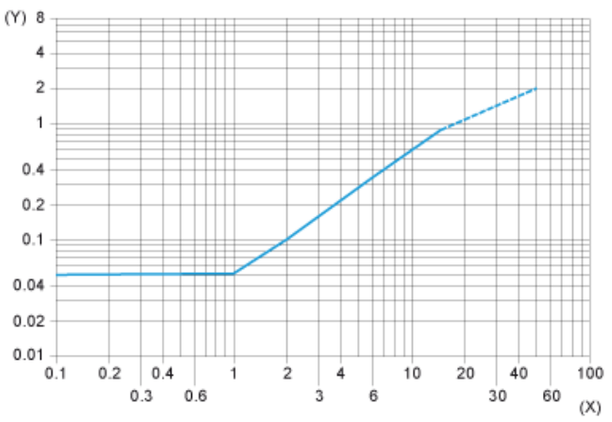

**(X)** Distance (m)
**(Y)** Gain

### Standard Curve




**(X)** Distance focusing point (m)
**(Y)** Minimum size of the object to be detected (mm)

### Detection Limit Curve




**(X)** Distance focusing point (m)
**(Y)** Minimum size of the object to be detected (mm)