# 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

# **Product data sheet**

Specifications

Main



# Photoelectric sensors XU, XUM, BGS, Sn 0.3 m, 12...24 VDC, cable 2 m

XUM8APCNL2

| Range of product | Telemecanique Photoelectric sensors XU |
|------------------|--|
| Series name      | General purpose single mode            |

Electronic sensor type Photo-electric sensor

Sensor name XUM

Sensor design Miniature

**Detection system** Diffuse with background suppression

Plastic **Material** 

Type of output signal Discrete

DC Supply circuit type

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** Red diffuse with background suppression

[Sn] nominal sensing distance 0.3 m diffuse with background suppression

# Complementary

| ,                         |  |
|---------------------------|--|
| Enclosure material        | PBT  |
| Lens material             | PC   |
| Maximum sensing distance  | 0.3 m diffuse with background suppression                      |
| Output type               | Solid state  |
| Wire insulation material  | PVC  |
| Status LED                | 1 LED (yellow) for output state<br>1 LED (red) for instability |
| [Us] rated supply voltage | 1224 V DC  |
| Supply voltage limits     | 1030 V DC  |
| Switching capacity in mA  | <= 100 mA (overload and short-circuit protection)              |

| Marrian and an Singh on | 30 ms                          |
|-------------------------|--------------------------------|
| Maximum delay first up  | 30 His                         |
| Maximum delay response  | 1 ms                           |
| Maximum delay recovery  | 1 ms                           |
| Setting-up              | Without sensitivity adjustment |
| Depth                   | 27 mm                          |
| Height                  | 38 mm                          |
| Length                  | 11 mm                          |
| Width                   | 12 mm                          |
| Net weight              | 0.08 kg                        |

# **Environment**

| Product certifications                | UL<br>CSA<br>CE   |
|---------------------------------------|---|
| Ambient air temperature for operation | -2555 °C  |
| Ambient air temperature for storage   | -3070 °C  |
| Immunity to ambient light             | 3000 lux natural light<br>3000 lux incandescent light   |
| Vibration resistance                  | 7 gn, amplitude = +/- 1.5 mm (f = 1055 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 IP65 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 g     |
| Package 1 Height             | 3.657 cm |
| Package 1 width              | 7.694 cm |
| Package 1 Length             | 8.287 cm |
| Unit Type of Package 2       | CAR      |
| Number of Units in Package 2 | 48       |
| Package 2 Weight             | 3.161 kg |
| Package 2 Height             | 14 cm    |
| Package 2 width              | 29.3 cm  |
| Package 2 Length             | 39.5 cm  |

# Offer Sustainability

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

| 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 |
|---------------------------|---|
|                           |   |

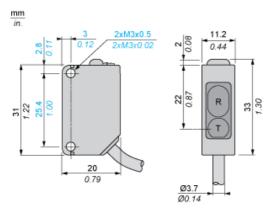
# **Contractual warranty**

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

# XUM8APCNL2

Dimensions Drawings

### **Dimensions**

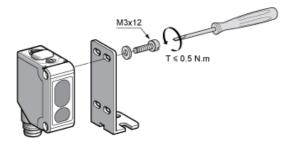


R: Reception T: Transmission

# XUM8APCNL2

Mounting and Clearance

### Mounting

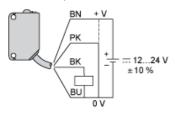


# XUM8APCNL2

Connections and Schema

### Wiring Schemes

### **PNP Output**



(-) BU: Blue
(+) BN: Brown
(OUT) BKBtack
(MODE) FKnk
Note: This scheme is represented in "background suppression" mode, cabling of pink (PK) wire to 0 V

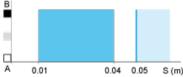
# XUM8APCNL2

**Performance Curves** 

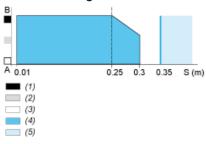
### **Detection Curves**

### Variation of Usable Sensing Distance

# **Minimum Setting**



### **Maximum Setting**



A-B : Object reflection coefficient

(1) (2) (3) (4) (5) Black 6% Grey 18% White 90% Sensing range

Non sensing zone (matt surfaces)