

XUM8APXBL2

Photoelectric sensors XU, miniature, background suppression, Smax=0.30 m, PNP, cable 2 m



Main

| | |
|-------------------------------|---|
| 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 |
| 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 | 6.56 ft (2 m) |
| Emission | Red LED diffuse with background suppression |
| [Sn] nominal sensing distance | 0.66 ft (0.20 m) |

Complementary

| | |
|---------------------------|--|
| Enclosure Material | PBT |
| Lens material | PMMA |
| Maximum sensing distance | 0.98 ft (0.30 m) |
| Output Type | Solid state |
| Wire insulation material | PVC |
| Status LED | Stability 1 LED green) Output state 1 LED orange) |
| [Us] rated supply voltage | 12...24 V DC 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 | <2 V closed state) |
| Current consumption | 30 mA no-load |
| Maximum delay first up | 100 ms |
| Maximum delay response | 0.5 ms |
| Maximum delay recovery | 0.5 ms |
| Setting-up | Sensitivity by potentiometer |
| Depth | 1.06 in (27 mm) |
| Height | 1.30 in (33 mm) |
| Width | 0.39 in (10 mm) |
| Net Weight | 0.14 lb(US) (0.063 kg) |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Environment

| | |
|---------------------------------------|--|
| Product Certifications | CULus CE UKCA |
| Ambient Air Temperature for Operation | -22...131 °F (-30...55 °C) |
| Ambient Air Temperature for Storage | -40...158 °F (-40...70 °C) |
| Relative humidity | 35...95 % |
| Immunity to ambient light | 40000 Lux sunlight 10000 lux incandescent light |
| Vibration resistance | 9 gn +/- 1.5 mm 10...500 Hz)for every axis IEC 60068-2-6 |
| Shock resistance | 100 gn 11 ms) for every axis IEC 60068-2-27 |
| IP degree of protection | IP67 IEC 60529 IP65 IEC 60529 |

Ordering and shipping details

| | |
|-------------------|------------------------------|
| Category | 22481-SENSORS, PHOTOELECTRIC |
| Discount Schedule | DS2 |
| GTIN | 3389110974874 |
| Returnability | Yes |
| Country of origin | JP |

Packing Units

| | |
|------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 0.59 in (1.500 cm) |
| Package 1 Width | 7.09 in (18.000 cm) |
| Package 1 Length | 9.65 in (24.500 cm) |
| Package 1 Weight | 1.76 oz (50.000 g) |
| Unit Type of Package 2 | S04 |
| Number of Units in Package 2 | 160 |
| Package 2 Height | 11.81 in (30.000 cm) |
| Package 2 Width | 15.75 in (40.000 cm) |
| Package 2 Length | 23.62 in (60.000 cm) |
| Package 2 Weight | 21.67 lb(US) (9.830 kg) |

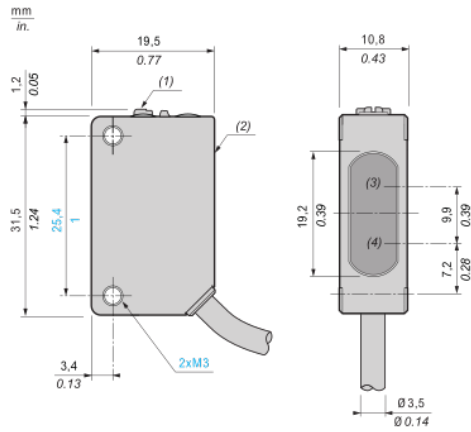
Offer Sustainability

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

Contractual warranty

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

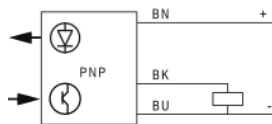
Dimensions



- (1) : Setting potentiometer (sensitivity)
- (2) : Setting potentiometer (output)
- (3) : Reception
- (4) : Transmission

Connection and schema

Wiring diagram



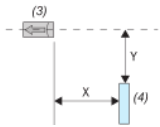
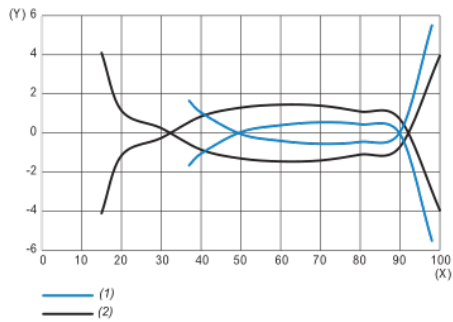
BN (Brown) : (+)

BK (Black) : OUT/Output

BU (Blue) : (-)

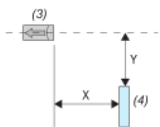
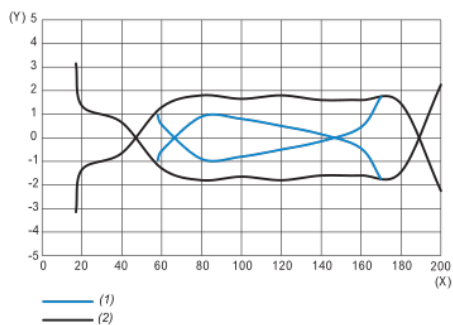
Detection curves

Lateral displacement (preset 100 mm)



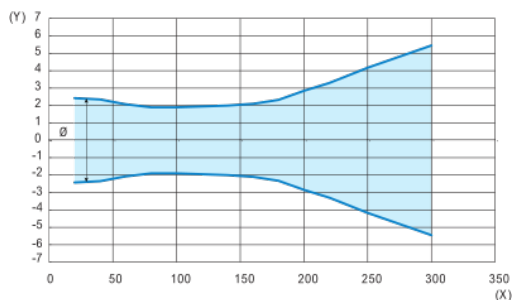
- (1) : Black paper 6 % remission
- (2) : White paper 90 % remission
- (3) : Sensor
- (4) : Object (200 mm square white and black mat paper)
- (X) : Sensing distance (mm)
- (Y) : Lateral displacement (mm)

Lateral displacement (preset 200 mm)



- (1) : Black paper 6 % remission
- (2) : White paper 90 % remission
- (3) : Sensor
- (4) : Object (200 mm square white and black mat paper)
- (X) : Sensing distance (mm)
- (Y) : Lateral displacement (mm)

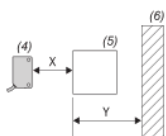
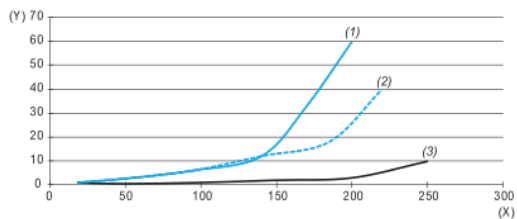
Light beam diameter



(X) : Sensing distance (mm)

(Y) : Light beam diameter (mm)

Minimum distance between the object to detect and white background



(1) : Min. distance black object (6%)/white background (90%) (mm)

(2) : Min. distance grey object (18%)/white background (90%) (mm)

(3) : Min. distance white object (90%)/white background (90%) (mm)

(4) : Sensor

(5) : Object

(6) : Background

(X) : Distance sensor/object (mm)

(Y) : Min. distance object/background (mm)