

# 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)

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## 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

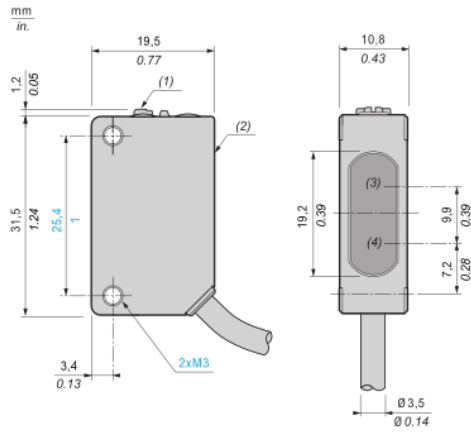
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.50 in (1.27 cm)
Package 1 Width	5.00 in (12.7 cm)
Package 1 Length	6.00 in (15.24 cm)
Package 1 Weight	0.11 lb(US) (0.05 kg)
Unit Type of Package 2	S04
Number of Units in Package 2	160
Package 2 Height	11.81 in (30 cm)
Package 2 Width	15.75 in (40 cm)
Package 2 Length	23.62 in (60 cm)
Package 2 Weight	21.63 lb(US) (9.81 kg)
Package 3 Height	59.06 in (150 cm)

## Offer Sustainability

REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>

## Dimensions



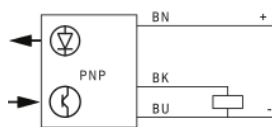
- (1) : Setting potentiometer (sensitivity)
- (2) : Setting potentiometer (output)
- (3) : Reception
- (4) : Transmission

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## Connection and schema

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### Wiring diagram



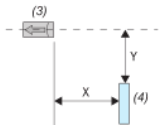
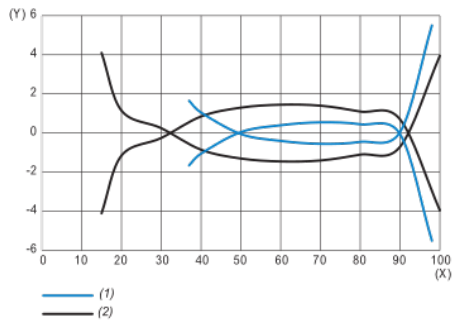
BN (Brown) : (+)

BK (Black) : OUT/Output

BU (Blue) : (-)

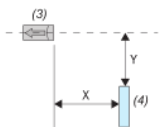
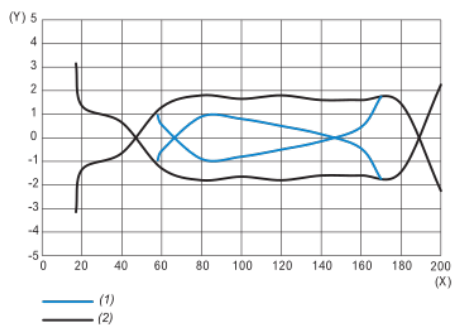
Detection curves

Lateral displacement (preset 100 mm)



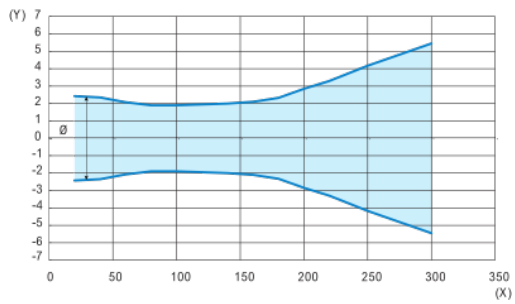
- (1) : Black paper 6 % remission
- (2) : White paper 90 % remission
- (3) : Sensor
- (4) : Object (200 mm square white and black mat paper)
- (X) : Sensing distance (mm)
- (Y) : Lateral displacement (mm)

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)

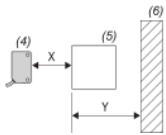
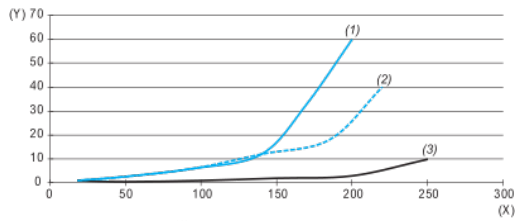
## Light beam diameter



(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)