

XUM8APXBM8

Photoelectric sensors XU, miniature, background suppression, Smax=0.30 m, PNP, connector M8



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	Male connector M8, 4 pins
Emission	Red LED diffuse with background suppression
[Sn] nominal sensing distance	0.20 m

Complementary

Enclosure material	PBT
Lens material	PMMA
Maximum sensing distance	0.30 m
Output type	Solid state
Status LED	Stability: 1 LED (green) Output state: 1 LED (orange)
[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 with 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	27 mm
Height	44 mm
Width	10 mm
Product weight	0.01 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	-30...55 °C
Ambient air temperature for storage	-40...70 °C
Relative humidity	35...95 %
Immunity to ambient light	40000 Lux sunlight 10000 lux incandescent light
Vibration resistance	9 gn, amplitude = +/- 1.5 mm (f = 10...500 Hz) for every axis conforming to IEC 60068-2-6
Shock resistance	100 gn (duration = 11 ms) for every axis conforming to IEC 60068-2-27
IP degree of protection	IP67 conforming to IEC 60529 IP65 conforming to IEC 60529

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2 cm
Package 1 Width	9 cm
Package 1 Length	12 cm
Package 1 Weight	12 g

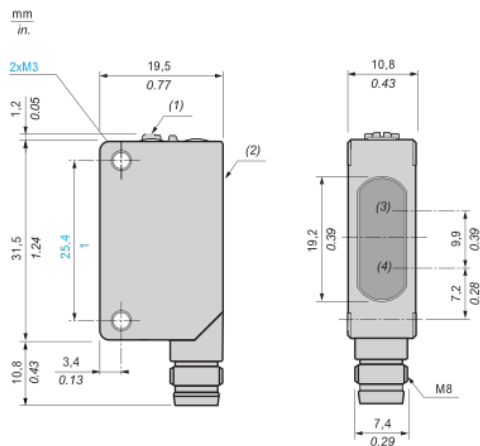
Offer Sustainability

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
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
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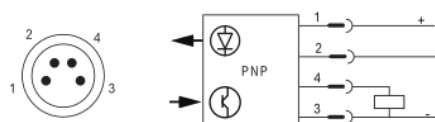
Dimensions



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

Connection and schema

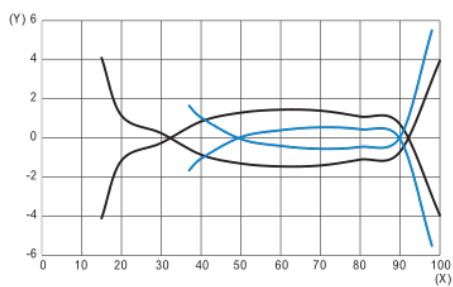
Wiring diagram



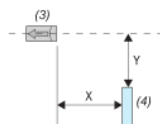
- 1 : (+)
- 2 : Not connected
- 3 : (-)
- 4 : OUT/Output

Detection curves

Lateral displacement (preset 100 mm)

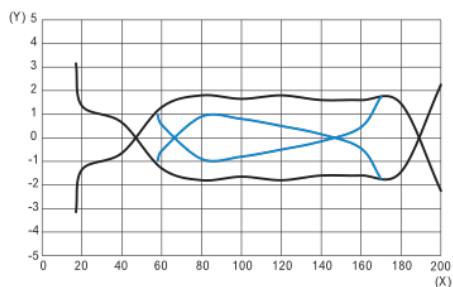


(1)
(2)

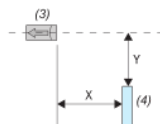


- (1) : Black paper 6 % remission
- (2) : White paper 90 % remission
- (3) : Sensor
- (4) : Object (200 mm square white and black mat paper)
- (X) : Sensing distance (mm)
- (Y) : Lateral displacement (mm)

Lateral displacement (preset 200 mm)

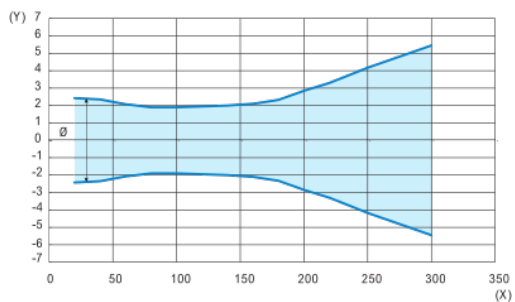


(1)
(2)



- (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)

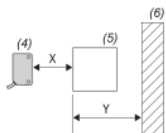
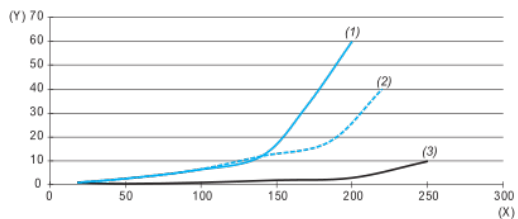
Light beam diameter



(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)