

# Product data sheet

Specifications



## Photoelectric sensors XU, XU8, BGS, 90°, Sn 0.12 m, 24...240VAC/DC, cable 5 m

XU8M18MB230WL5

⚠ To be discontinued

### Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	General purpose single mode
Electronic sensor type	Photo-electric sensor
Sensor name	XU8
Sensor design	Cylindrical M18
Detection system	Diffuse with background suppression
Material	Metal
Line of sight type	90° lateral
Type of output signal	Discrete
Supply circuit type	AC/DC
Wiring technique	2-wire
Discrete output function	1 NC
Electrical connection	Cable
Cable length	5 m
Product specific application	-
Emission	Infrared diffuse with background suppression
[Sn] nominal sensing distance	0.12 m diffuse with background suppression

### Complementary

Enclosure material	Nickel plated brass
Lens material	PMMA
Maximum sensing distance	0.12 m
Output type	Solid state
Add on output	Without
Wire insulation material	PvR
Status LED	1 LED (yellow) for output state
[Us] rated supply voltage	24...240 V AC/DC
Supply voltage limits	20...264 V AC/DC

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

<b>Maximum residual current</b>	1.5 mA open state
<b>Switching capacity in mA</b>	10...200 mA (to be used with 0.4 A quick-blow fuse in series with the load)
<b>Switching frequency</b>	<= 25 Hz
<b>Maximum voltage drop</b>	<6 V (closed state)
<b>Maximum delay first up</b>	300 ms
<b>Maximum delay response</b>	20 ms
<b>Maximum delay recovery</b>	20 ms
<b>Setting-up</b>	Sensitivity adjustment
<b>Diameter</b>	18 mm
<b>Length</b>	97 mm

## Environment

<b>Product certifications</b>	UL CSA CE
<b>Ambient air temperature for operation</b>	-25...55 °C
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Vibration resistance</b>	7 gn, amplitude = +/- 1.5 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	30 gn (duration = 11 ms) conforming to IEC 60068-2-27
<b>IP degree of protection</b>	IP67 double insulation conforming to IEC 60529

## Packing Units

<b>Package 1 Weight</b>	0.001 kg
<b>Package 1 Height</b>	0.010 dm
<b>Package 1 width</b>	0.010 dm
<b>Package 1 Length</b>	0.020 dm

## Offer Sustainability

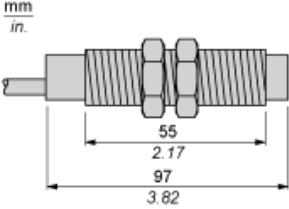
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>California proposition 65</b>	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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

<b>Warranty</b>	18 months
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**Dimensions**

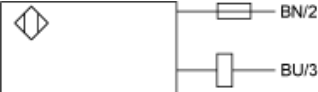
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**Wiring Schemes**

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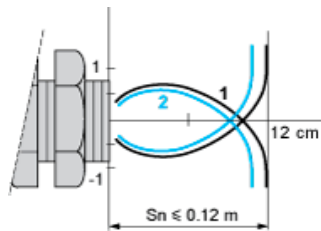
**2-wire AC or DC**



**BU :** Blue  
**BN :** Brown

**Detection Curves**

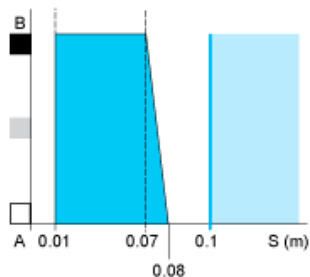
**Diffuse System with Adjustable Background Suppression**



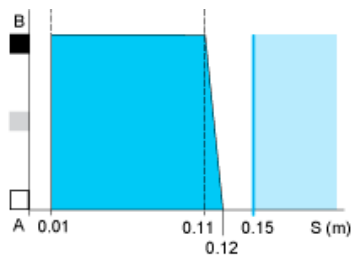
- 1 : White 90%
  - 2 : Grey 18%
- Object 10 x 10 cm

**Variation of Usable Sensing Distance  $S_u$**

**Potentiometer Set at Minimum**



**Potentiometer Set at Maximum**



- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

- A-B : Object reflection coefficient
- (1) Black 6%
  - (2) Grey 18%
  - (3) White 90%
  - (4) Sensing range
  - (5) Non sensing zone (matt surfaces)