Product datasheet

Specifications



Photoelectric sensors XU, XU8, BGS, Sn 0.12 m, 24...240VAC/DC, 1/2"

XU8M18MA230K

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	Axial
Type of output signal	Discrete
Supply circuit type	AC/DC
Wiring technique	2-wire
Discrete output function	1 NO
Electrical connection	1 male connector 1/2"20 UNF, 3 pins
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
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
Maximum residual current	1.5 mA open state
Switching capacity in mA	10...200 mA (to be used with 0.4 A quick-blow fuse in series with the load)
Switching frequency	<= 25 Hz

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

Maximum voltage drop	<6 V (closed state)
Maximum delay first up	300 ms
Maximum delay response	20 ms
Maximum delay recovery	20 ms
Setting-up	Sensitivity adjustment
Diameter	18 mm
Length	95 mm
Net weight	0.075 kg

Environment

Product certifications	UL CE CSA
Ambient air temperature for operation	-25…55 °C
Ambient air temperature for storage	-40…70 °C
Vibration resistance	7 gn, amplitude = +/- 1.5 mm (f = 10…55 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 conforming to IEC 60529

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	84.0 g
Package 1 Height	4 cm
Package 1 width	6.4 cm
Package 1 Length	10 cm
Unit Type of Package 2	S01
Number of Units in Package 2	22
Package 2 Weight	2.02 kg
Package 2 Height	15 cm
Package 2 width	15 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months

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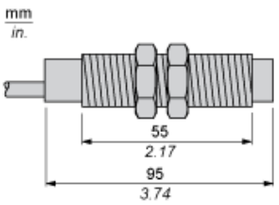
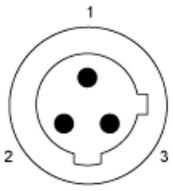
Dimensions Drawings

Dimensions



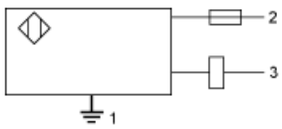
Wiring Schemes

Connector



1 : Grounding
2 : AC/DC
3 : AC/DC

2-wire AC or DC



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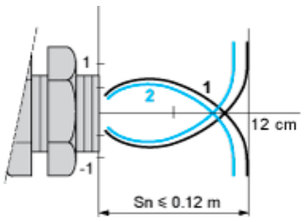
Performance Curves

Detection Curves

Diffuse System with Adjustable Background Suppression

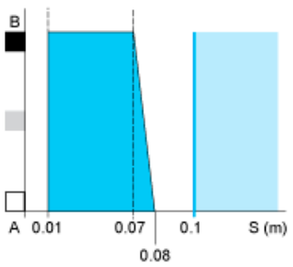


1 : White 90%
2 : Grey 18%

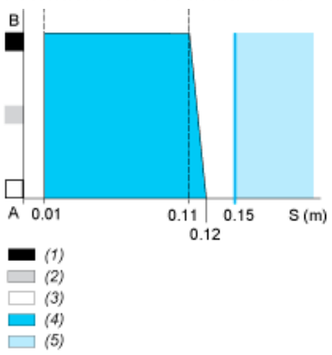
Object 10 x 10 cm

Variation of Usable Sensing Distance Su

Potentiometer Set at Minimum



Potentiometer Set at Maximum



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