



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	0.39 ft (0.12 m) diffuse with background suppression

Complementary

Enclosure Material	Nickel Plated Brass
Lens material	PMMA
Maximum sensing distance	0.39 ft (0.12 m)
Output Type	Solid state
Add on output	Without
Status LED	1 LED yellow/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
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	0.71 in (18 mm)
Length	3.74 in (95 mm)
Net Weight	0.17 lb(US) (0.075 kg)

Environment

Product Certifications	UL CE CSA
Ambient air temperature for operation	-13...131 °F (-25...55 °C)
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Vibration resistance	7 gn +/- 1.5 mm 10...55 Hz) IEC 60068-2-6
Shock resistance	30 gn 11 ms) IEC 60068-2-27
IP degree of protection	IP67 IEC 60529

Ordering and shipping details

Category	22481-SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	3389110736625
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.57 in (4.0 cm)
Package 1 Width	2.52 in (6.4 cm)
Package 1 Length	3.94 in (10.0 cm)
Package 1 Weight	2.96 oz (84.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	22
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	5.91 in (15.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	4.45 lb(US) (2.02 kg)

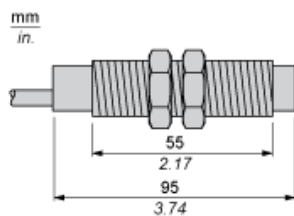
Offer Sustainability

Sustainable offer status	Green Premium product
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
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Contractual warranty

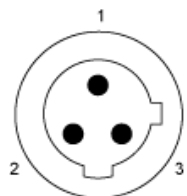
Warranty	18 months
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Dimensions



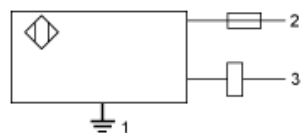
Wiring Schemes

Connector



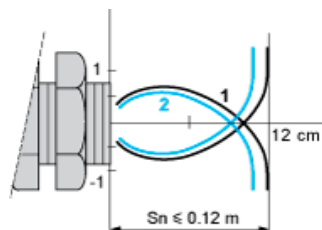
- 1 : Grounding
- 2 : AC/DC
- 3 : AC/DC

2-wire AC or DC



Detection Curves

Diffuse System with Adjustable Background Suppression



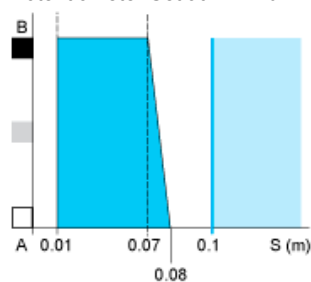
1 : White 90%

2 : Grey 18%

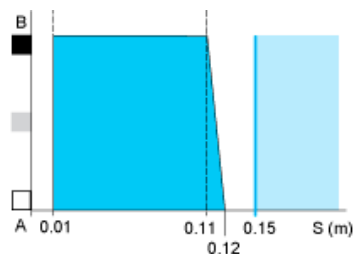
Object 10 x 10 cm

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)

Mouser Electronics

Authorized Distributor

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[Telemecanique Sensors:](#)

[XU8M18MA230K](#)