



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 NC
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
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	CSA[RETURN]CE[RETURN]UL
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 Height	4.1 cm
Package 1 Width	9.4 cm
Package 1 Length	6.5 cm
Package 1 Weight	86.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	11
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.171 kg

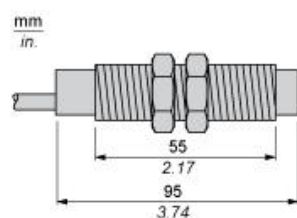
Offer Sustainability

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
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

Contractual warranty

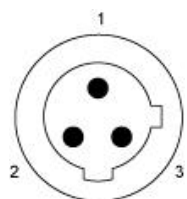
Warranty	18 months
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Dimensions



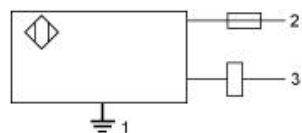
Wiring Schemes

Connector



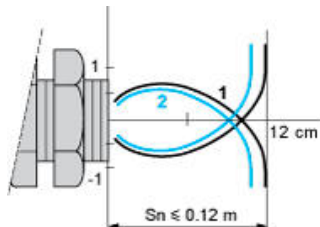
- 1 : Grounding
- 2 : AC/DC
- 3 : AC/DC

2-wire AC or DC



Detection Curves

Diffuse System with Adjustable Background Suppression



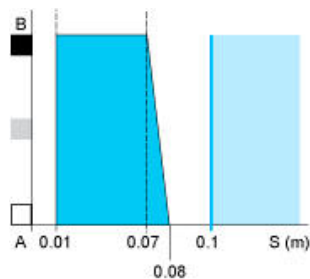
1 : White 90%

2 : Grey 18%

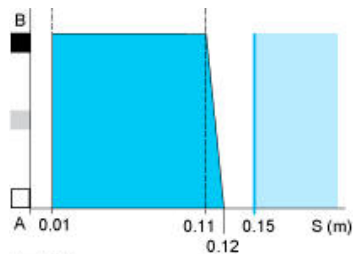
Object 10 x 10 cm

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)