



Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application assembly
Electronic sensor type	Photo-electric sensor
Sensor name	XUA
Sensor design	Cylindrical M8
Detection system	Diffuse
Material	Metal
Line of sight type	Axial
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP
Discrete output function	1 NO
Electrical connection	1 male connector M8, 3 pins
Product specific application	-
Emission	Infrared diffuse
[Sn] nominal sensing distance	0.05 m diffuse

Complementary

Enclosure material	Nickel plated brass
Lens material	Polyamide
Maximum sensing distance	0.06 m
Output type	Solid state
Add on output	Without
Cable composition	3 x 0.14 mm ²
Wire insulation material	PvR
Cable outer diameter	3.5 mm
Status LED	1 LED (yellow) for output state
[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 (overload and short-circuit protection)
Switching frequency	<= 1000 Hz
Maximum voltage drop	<1 V (closed state)
Current consumption	<= 25 mA no-load
Maximum delay first up	20 ms
Maximum delay response	0.5 ms
Maximum delay recovery	0.5 ms
Setting-up	Without sensitivity adjustment
Diameter	8 mm
Length	48 mm
Net weight	0.5 kg

Environment

Product certifications	CE[RETURN]cULus
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-30...70 °C
Vibration resistance	7 gn, amplitude = +/- 1 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 IP65 conforming to IEC 60529

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.4 cm
Package 1 Width	6.8 cm
Package 1 Length	9.6 cm
Package 1 Weight	28.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	24
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	872.0 g

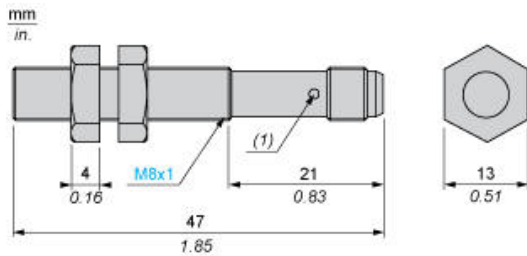
Offer Sustainability

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
----------	-----------

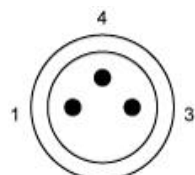
Dimensions



(1) LED, 4 viewing ports at 90°
Note Fixing nut tightening torque : <2N.m

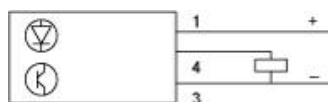
Wiring Schemes

M8 Connector

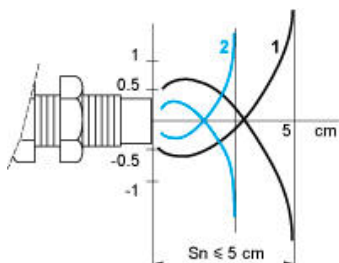


- 1 : (+)
- 3 : (-)
- 4 : OUT or test

PNP



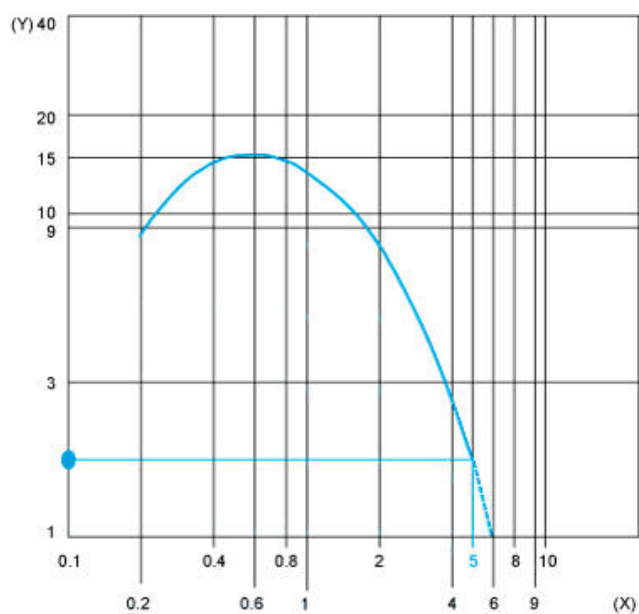
Detection Curves



1 : White 90%
2 : Grey 18%

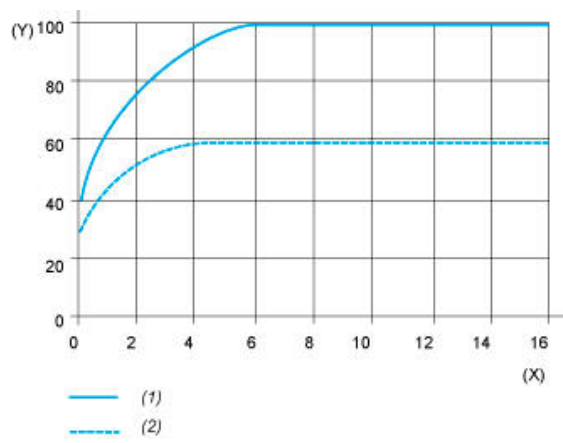
Object 5 x 5 cm

Excess Gain Curves (Ambient temperature: $\pm 25^\circ\text{C}$)



(Y) Gain
(X) Distance (m)

Object 5 x 5 cm, White 90%



(1) White

(2) Grey

(Y) Variation of sensing distance S_n

(X) Side of square object (cm)

Detection differential (H) when object approaches from the front: $H \leq 25\%$ of S_n