



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	PMMA
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 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 Weight	30 g
Package 1 Height	3.7 cm
Package 1 width	4.7 cm
Package 1 Length	11 cm
Unit Type of Package 2	S01
Number of Units in Package 2	24
Package 2 Weight	872 g
Package 2 Height	15 cm
Package 2 width	15 cm
Package 2 Length	40 cm

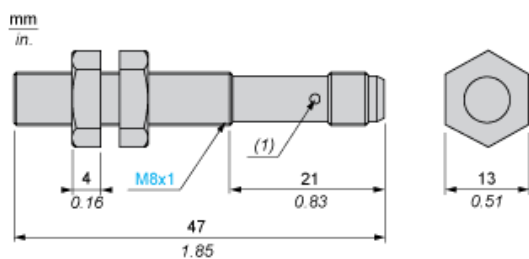
Offer Sustainability

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
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

Contractual warranty

Warranty	18 months
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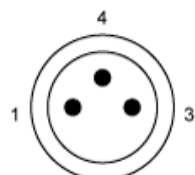
Dimensions



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

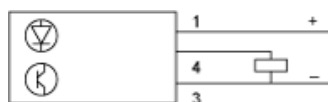
Wiring Schemes

M8 Connector

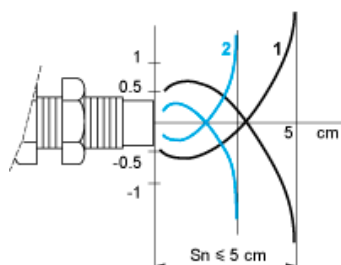


- 1 : (+)
- 3 : (-)
- 4 : OUT or test

PNP

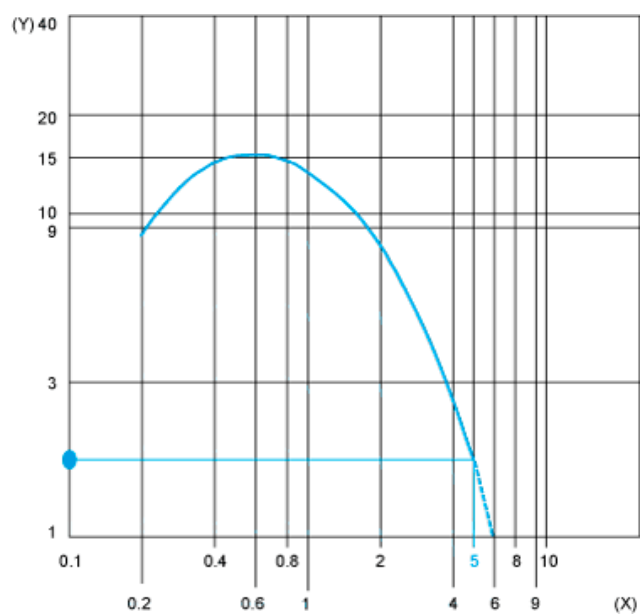


Detection Curves

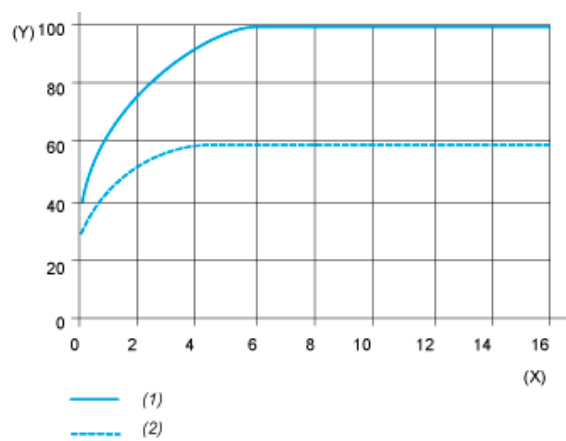


1 : White 90%
2 : Grey 18%
Object 5 x 5 cm

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