

Product data sheet

Specifications



Photoelectric sensors XU, XU2, thru beam, 90°, Sn 15 m, 12...24 VDC, M12

XU2N18NP341WD

Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application food and beverage
Electronic sensor type	Photo-electric sensor
Sensor name	XU2
Sensor design	Cylindrical M18
Detection system	Thru beam
Material	Stainless steel
Line of sight type	90° lateral
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	NPN
Discrete output function	1 NO or 1 NC programmable
Electrical connection	1 male connector M12, 4 pins
Product specific application	-
Emission	Infrared thru beam
[Sn] nominal sensing distance	15 m thru beam

Complementary

Enclosure material	Stainless steel : 304 CU
Lens material	PMMA
Maximum sensing distance	20 m
Output type	Solid state
Add on output	Without
Add on input	Breaking test + programming
Status LED	1 LED (green) for supply on 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	<= 500 Hz
Maximum voltage drop	<1.5 V (closed state)
Current consumption	<= 50 mA no-load
Maximum delay first up	15 ms
Maximum delay response	1 ms
Maximum delay recovery	1 ms
Setting-up	Without sensitivity adjustment
Diameter	18 mm
Length	88 mm
Product weight	0.13 kg
Kit composition	Transmitter + receiver

Environment

Product certifications	CE CSA UL
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-40...70 °C
Vibration resistance	25 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	4.5 cm
Package 1 Width	8.2 cm
Package 1 Length	13.3 cm
Package 1 Weight	121.0 g

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
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

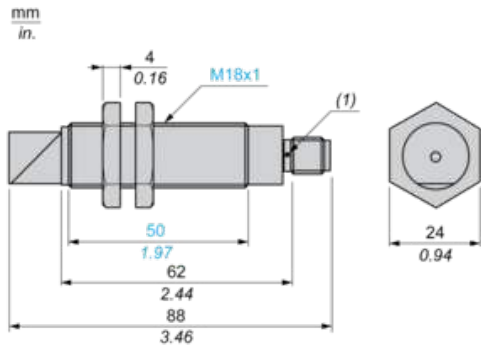
Contractual warranty

Warranty

18 months

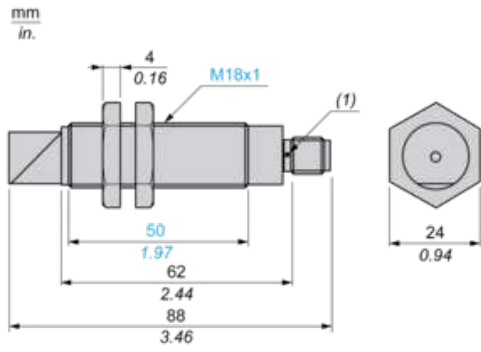
Dimensions

Transmitter's Dimensions



(1) LED

Receiver's Dimensions



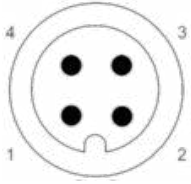
(1) LED

Mounting and Clearance

Fixing nut tightening torque: < 15 N.m
Connector tightening torque: 2 N.m

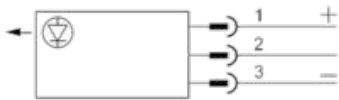
Wiring Schemes

M12 Connector

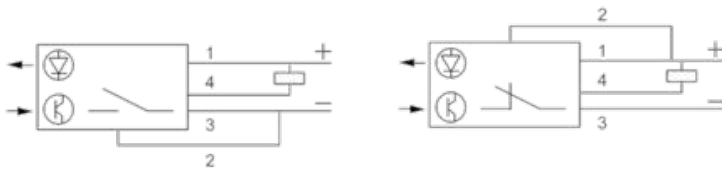


- 3 : (-)
- 1 : (+)
- 4 : OUT/Output
- 2 : Prog or beam break input (transmitter only)

Transmitter



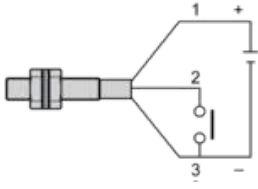
3-wire, NPN NO or NC Programmable Function



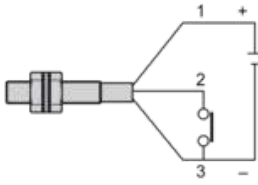
Wiring Schemes

Beam Break Input on Thru-beam Transmitter

Beam made



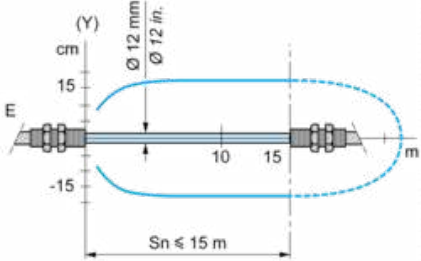
Beam broken



2 : Beam break input

Detection Curves

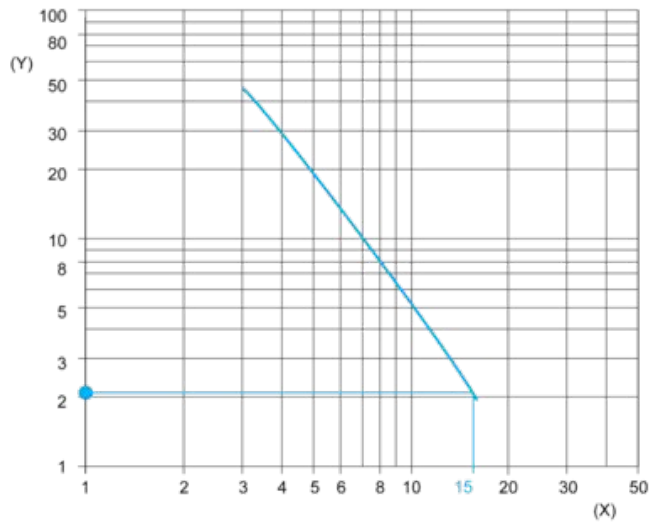
Thru-beam System



(y) Ø of beam

Excess Gain Curves (Ambient Temperature: + 25° C)

Thru-beam System



(y) Gain

(x) Distance (m)

Recommended replacement(s)