



Main

Range of product	OsiSense XU
Series name	Application
Electronic sensor type	Photo-electric sensor
Sensor name	XUY
Sensor design	Roller sensor
Detection system	Diffuse
Material	Metal
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP or NPN
Discrete output function	1 NO or 1 NC programmable
Electrical connection	1 remote male connector M12, 4 pins
Cable length	0.3 m
Product specific application	Conveyor system
Emission	Infrared
[Sn] nominal sensing distance	0.1 m diffuse

Complementary

Enclosure material	Aluminium
Lens material	Polycarbonate
Cover material	PVC
Pulse frequency	1 kHz
Output type	Solid state
Status LED	1 LED color: yellow for output signal
[Us] rated supply voltage	24 V DC with reverse polarity protection
Supply voltage limits	18...30 V DC
Switching capacity in mA	100 mA (overload and short-circuit protection)
Switching frequency	500 Hz
Maximum voltage drop	<2 V at 100 mA (closed state)
Current consumption	< 35 mA no-load

Maximum delay response	1 ms
Diameter	12 mm
Length	410 mm
Net weight	0.065 kg

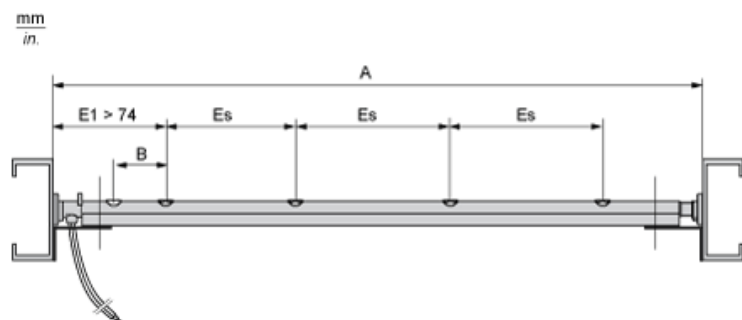
Environment

Product certifications	CCSAus CE
Ambient air temperature for operation	-10...55 °C
Ambient air temperature for storage	-20...80 °C
IP degree of protection	IP50 conforming to IEC 60529

Contractual warranty

Warranty	18 months
----------	-----------

Dimensions



Dimensions in mm

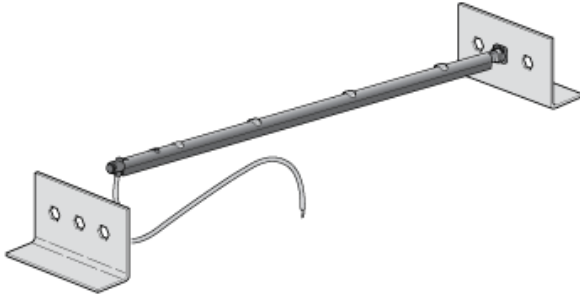
A	B	ES
410	29	108

Dimensions in in.

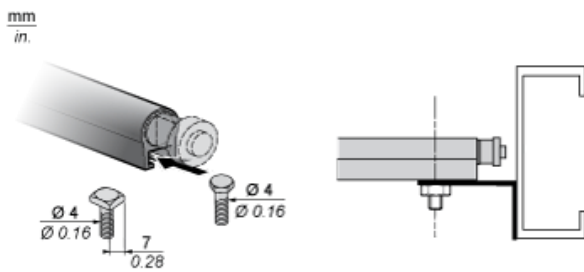
A	B	ES
16.14	1.14	4.25

Mounting

Mounting on the Sides Hexagonal Supports (2 of Each Support are Supplied with the Sensor)

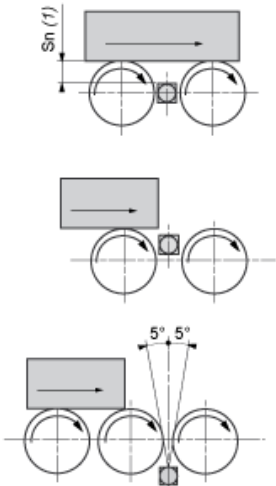


Mounting Underneath (Brackets, Screws and Nuts not Supplied)



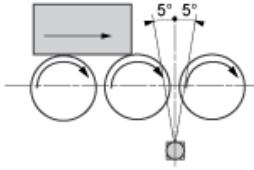
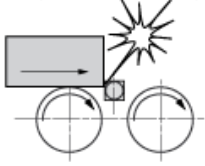
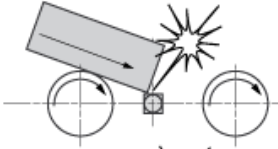
Mounting Precautions

Recommended mounting



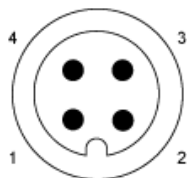
(1) $S_n \leq 100 \text{ mm}$

Not recommended



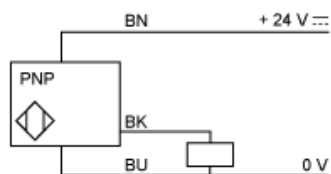
Wiring Schemes

M12 Connector



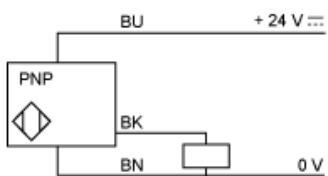
- 1 : Brown
- 2 : White (disconnected)
- 3 : Blue
- 4 : Black

PNP, NO Output



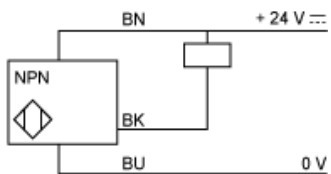
- BN : Brown
- BU : Blue
- BK : Black

PNP, NC Output



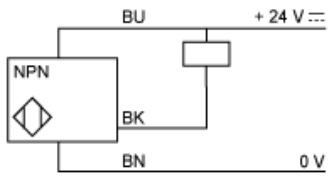
- BN : Brown
- BU : Blue
- BK : Black

NPN, NC Output



- BN : Brown
- BU : Blue
- BK : Black

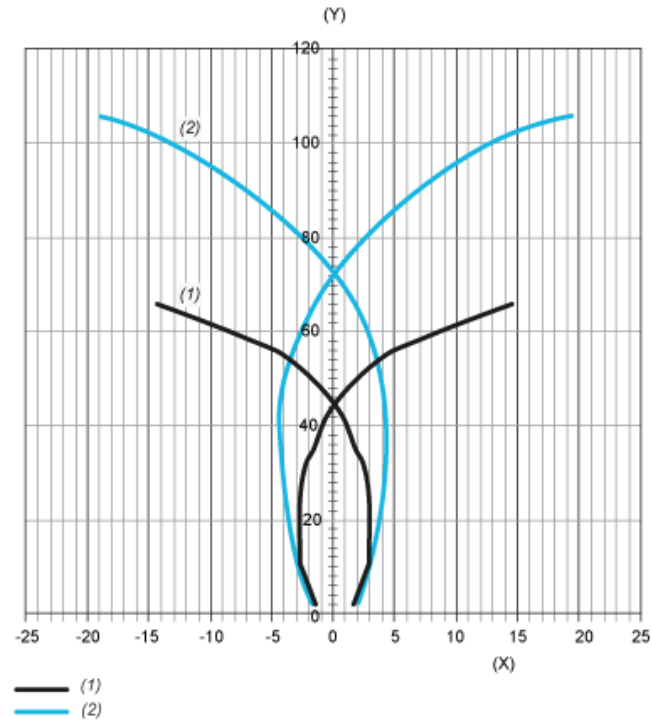
NPN, NO Output



BN : Brown
BU : Blue
BK : Black

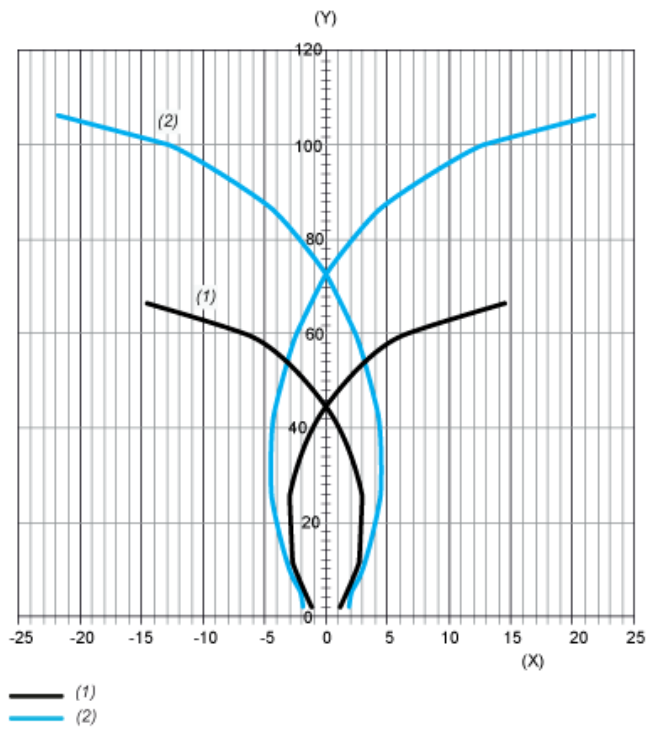
Detection Curves

Conveyor Axis - Load Running Direction



- (1) Black 6%
- (2) White 92%
- (x) Distance between the target and the optical axis in mm
- (y) Distance between the target and the sensor in mm

Roller Axis - Direction at Right-angles to Load Running



- (1) Black 6%
- (2) White 92%
- (x) Distance between the target and the optical axis in mm
- (y) Distance between the target and the sensor in mm