Do you want to simplify the sensor integration in your conveyor systems?

New XUY roller sensors for packet, boxes, letters on roller conveyors.

Telemecanique Sensor's **OsiSense™ XUY** photoelectric sensors are really innovative for fast and smart integration in conveyor systems.

Fast, modular & best installation time:

The sensor is mounted between rollers from the top. No more missing screws to mount your bracket and sensor.

Plug & Play : to see any package, no color effect, and no environment teaching.

Dust protection : special lenses and LED power to avoid dust accumulation

Impact resistant: unique mechanical installation embedded within the conveyor frame to prevent product damage

Full automation integration:

The sensor is compatible with zone controllers from current motorized roller manufacturers or with standard PLC platforms. Different connectors or cable wires are offered.

Typical areas of application:
- Detection of packet, boxes, pallets and letters of paper, carton or metallic material.
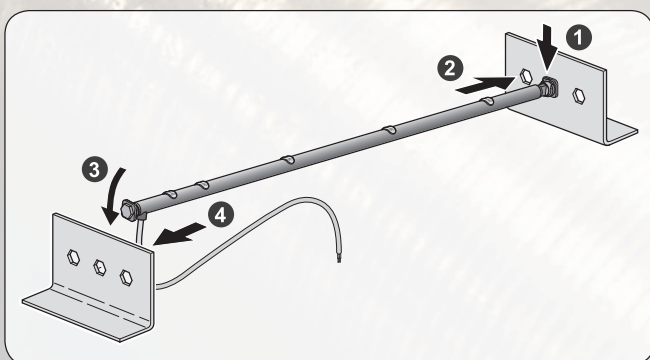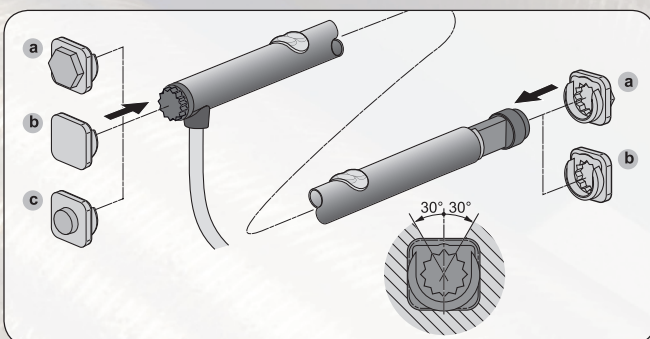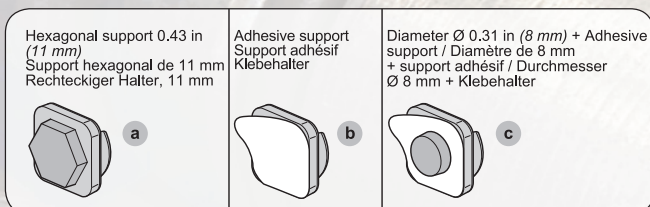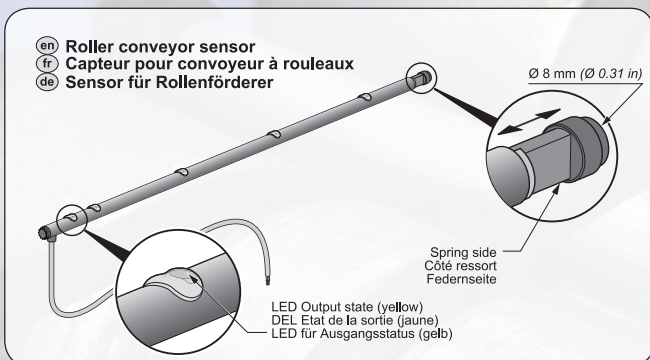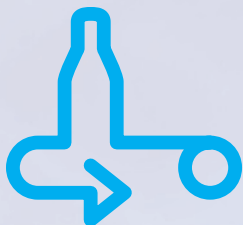
Well suited for use in:
- conveying for manufacturing facilities, warehouses, and retail distribution centers.

Watch a video and see first hand how easy the XUY Roller Sensor is to mount and operate.

Telemecanique™
Sensors

en **Roller conveyor sensor**
fr **Capteur pour convoyeur à rouleaux**
de **Sensor für Rollenförderer**

Ø 8 mm *(Ø 0.31 in)*

Spring side
Côté ressort
Federnseite

LED Output state (yellow)
DEL Etat de la sortie (jaune)
LED für Ausgangsstatus (gelb)

Hexagonal support 0.43 in *(11 mm)* Support hexagonal de 11 mm Rechteckiger Halter, 11 mm	Adhesive support Support adhésif Klebehalter	Diameter Ø 0.31 in *(8 mm)* + Adhesive support / Diamètre de 8 mm + support adhésif / Durchmesser Ø 8 mm + Klebehalter
a	b	c

30°, 30°

①
②
③
④

Benefits

Fast and simple installation:

- No tools needed
- Easy mounting from the top
- Gain of 50% in installation and adjustment
- 3 mounting solutions (Hexagonal 7/16", Ø 8 mm, or adhesive supports)

Full detection :

- No package color effecting sensor performance due to reliable infra-red sensing technology
- Easy direction adjustment, every 30°
- Full length detection from multiple sensors embedded within the sensor housing
- Convex lens to avoid dust accumulation

Characteristics

OsiSense™ XUY Roller Sensor

- Number of sensors: from 1 to 6 alongside the tube
- Detection mode: diffuse infrared
- Sensing distance up to 100 mm
- Dimension: Ø 12 mm, from 200 to 900 mm
- Material case / lens: aluminum / PMMA
- 3 mounting solutions with spring effect:
  - Hexagonal 7/16"
  - Ø 8 mm
  - Adhesive part
- Supply voltage: 24 V DC
- Connection: M12, 4 pins connector or cable
- Output: PNP/NPN, NO/NC programmable
- Switching frequency: 500 Hz
- Operating temperature: -10°C to to 50°C
- Degree of protection: IP 40 (IP 65 on request)

Please contact Telemecanique Sensors for other length of conveyor lengths (200 to 900mm)
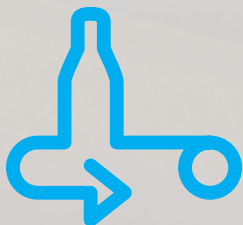
Product Specification
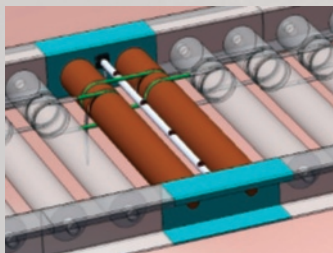
OsiSense™ XUY
XUY415N4HL2
XUY415N4HL03M12

roller conveyor sensor
PNP/NPN, NO/NC by cabling
cable 2m or remote M12 connector

Mechanical Caracteristics:

Dimension (width)	415 mm, from 200 to 900 upon request
Number of sensors	4 (number of sensors is determined by the overall conveyor width)
Diameter (case)	12mm
Sensor pitch	84 mm
Connection	M12 4 pins connector or cable
Mounting	Hexagonal 7/16", Ø 8mm or adhesive
Material　　　　　Case	Aluminium and PA
Lens	PC

Detection performances:

Detection mode	Diffuse infrared
Nominal sensing distance	100 mm
Minimum object size	85 mm
Maximum flow rate	60 m/mn

Electrical Caracteristics:

Voltage limits	18 to 36 Volts DC (including ripples)
Current consumption	35 mA
Output LED	yellow
Switching capacity	100 mA with overload and short circuit protection
Switching frequency	500 Hz

Environmental characteristics:

Operating temperature	-10°C to 50°C
IP class	IP40 (IP65 upon request)

XUY roller sensor conveyor

A

E₁   Eₛ   Eₛ   Eₛ   E₂

51,5
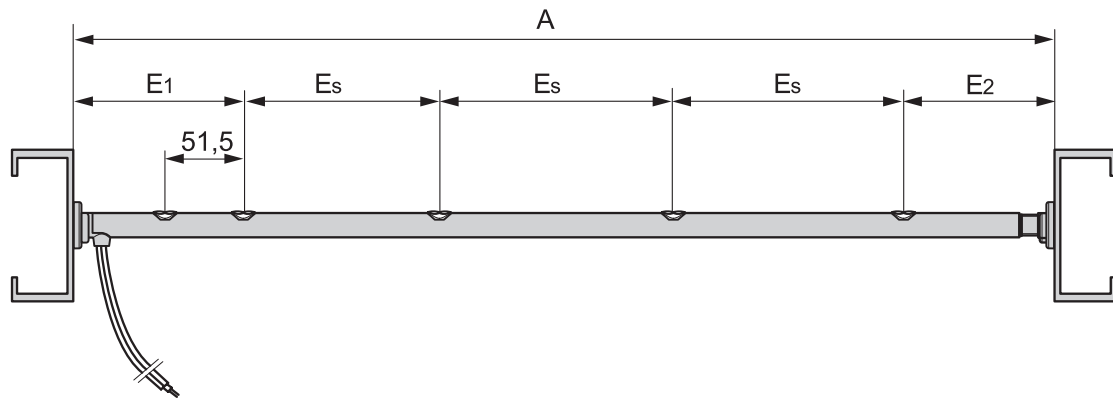
Catalog Number Configuration

XUY 415 N 4 H L2

Reference	A	# of Sensors	Es	E1	E2
XUY415N4HL2	415	4	84	100	63
	200-240	1	n.a.		90<E2<120
	245-325	2	84	100<E1<120	60<E2<120
	330-410	3			
	415-490	4			
	495-575	5			
	580-660	6			
	665-755	3	168	190<E1<210	60<E2<210
	760-900	4			

Functions additional main (A..Z)	No Additional function	N
	Timer *	T
	ZPA function (zero pressure accumulation) *	Z

Mounting Style	Hexagonal 7/16"	H
	Adhesive part	A
	Diameter 8mm	D

Cabling Cabling material Cabling length	M 12x1 (D)	M	1	2		
	Cable 0,3 m	L	0	3		
	Cable 2 m	L	2			
	Cable 5 m	L	5			
	Connector M 12 with 0,31 m cable	L	0	3	M	1	2

For this example, XUY415.. is available for any conveyor width from 414 to 418 mm (-1, +3 mm)

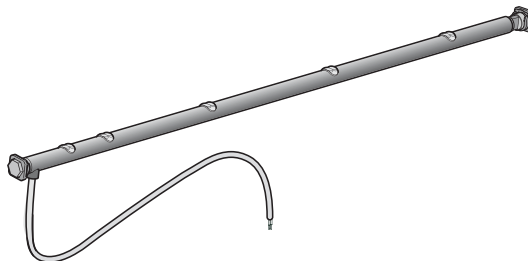* Future capability. Call local field sales office for more information and availability.

Important Note: Not all configurations may be possible.

Photo-electric sensors
OsiSense XU Application, conveying series
For detecting packages on a roller conveyor
DC supply, solid-state output

Nominal sensing distance (Sn)	0.1 m	
Function	NO/NC programmable	
Connection	PNP + NPN	
Cabling	Pre-cabled, L = 2 m	Remote M12 connector, L = 0.3 m

References

4-wire	XUY 415N4HL2 (1)	XUY 415N4HL03M12 (1)
Weight (kg)	0.075	0.065

Characteristics

Product certifications		CE
Type of transmission		Infrared
Operating mode		Diffuse
Nominal sensing distance		100 mm (white paper)
Differential travel		< 25%
Degree of protection	Conforming to IEC 60529	IP 40 (IP 65 on request)
Ambient air temperature	For operation	- 10…+ 55°C
	For storage	- 20…+ 80°C
Vibration resistance	Conforming to EN/IEC 60068-2-8	For X, Y and Z: 1 mm from 10 to 42 Hz 7 gn from 42 to 55 Hz 30 mm at resonant frequency or 55 Hz
Shock resistance	Conforming to EN/IEC 60068-2-27	For X, Y and Z: 10 gn for 11 ms
Material	Case	Aluminium and PA
	Lenses	PC
Rated supply voltage		24 V with protection against reverse polarity
Voltage limits (including ripple)		18…30 V of rated operational voltage
Switching capacity		100 mA with overload and short-circuit protection
Voltage drop, closed state		⩽ 2 V
Power consumption		⩽ 35 mA
Maximum switching frequency		500 Hz
Delay		1 ms response 1 ms recovery
Indicator lights	Output state	1 yellow LED
Detection accuracy		2 mm at 2m/s

References of accessories
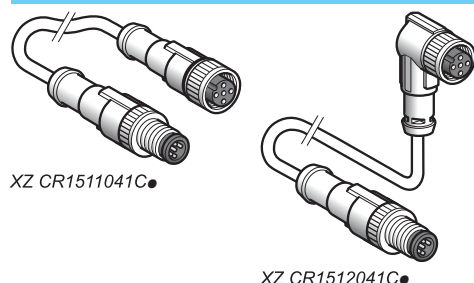
XZ CR1511041C●

XZ CR1512041C●

Designation	Length m	Reference	Weight kg
M12-M12 jumper cables			
4-pin, straight connector	1	**XZ CR1511041C1**	0.065
	2	**XZ CR1511041C2**	0.095
4-pin, elbowed connector	1	**XZ CR1512041C1**	0.065
	2	**XZ CR1512041C2**	0.095

(1) These sensors are adapted for use on a 414-418 mm wide conveyor frame (-1, + 3 mm).
Mounting accesory included with this sensor is for 7/16" hexagonal frame.
Please consult Sensor Competency Center for any additional sizes, configurations, mounting,
or other requirements.

Photo-electric sensors
OsiSense XU Application, conveying series
For detecting packages on a roller conveyor
DC supply, solid-state output
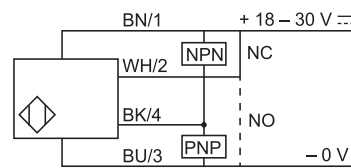
Connections

M12 connector

Pin n°/colour
1 BN: Brown
2 WH: White
3 BU: Blue
4 BK: Black

PNP + NPN
Programmable, NO or NC output

4-wire

3-wire
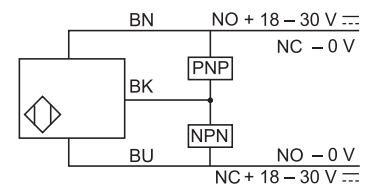
Dimensions (mm)

A	Sensor	Es	E1	E2
415	x 4	84	100	63
200…240	x 1	–	100 <E1<120	90 <E2<120
245…235	x 2	84		60 <E2<120
330…410	x 3			
415…490	x 4			
495…575	x 5			
580…660	x 6			
665…755	x 3	168	190 <E1<210	60 <E2<210
760…900	x 4			60 <E1<210
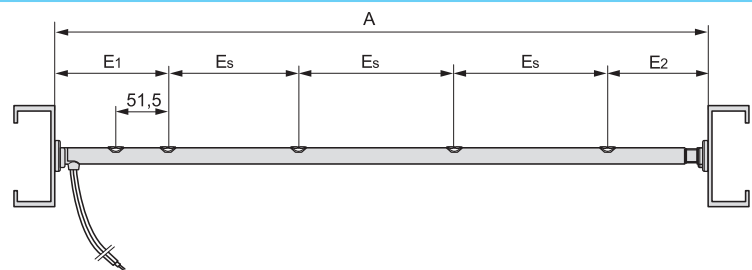
Mounting

Parts for mounting the sensor
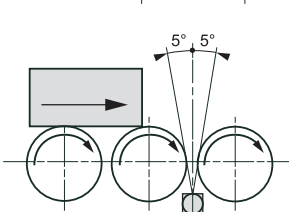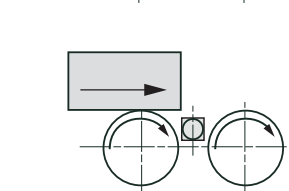(included with the sensor)

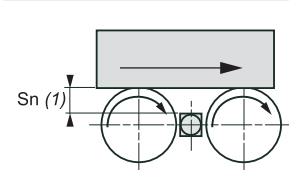**7/16" (11 mm) hexagonal frame**
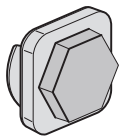
Adhesive frame
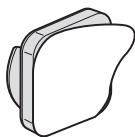
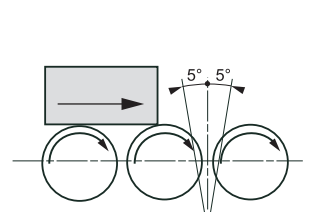**Ø 8mm frame, with adhesive mounting**
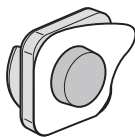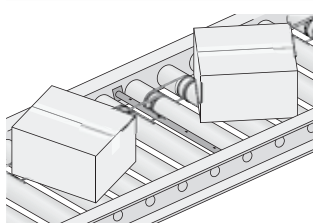

Mounting precautions

Recommended mounting

Not recommended

Sn *(1)*
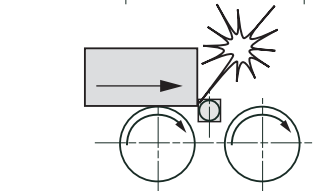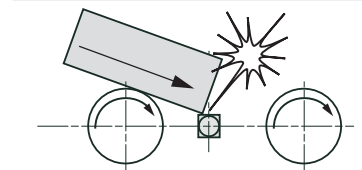
(1) Sn ≤ 100 mm

Application example

Package detection - sensor mounted between motorized rollers

> Put our sensing experience to work for you.

For application assistance or more information about Schneider Electric sensing solutions, please contact the Schneider Electric Sensor Competency Center at 1-800-435-2121 or visit **www.SESensors.com.**

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