

Photo-electric sensors - Miniature design



XUMRAWAYM8



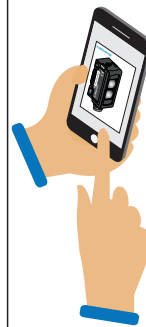
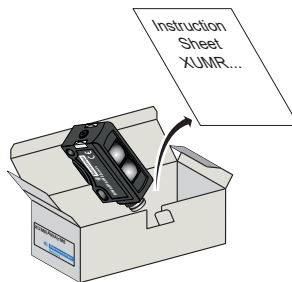
XUMRAWAYP015



Contrast



Package Content (Example)



<http://qr.tesensors.com/XU0020>

Scan the code to access this Instruction Sheet in different languages and all the product information or you can visit our website at: www.tesensors.com

We welcome your comments about this document. You can reach us through the customer support page on your local website.

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before servicing equipment.
- Do not connect this device to AC power.
- The power voltage must not exceed the rated range.

Failure to follow these instructions will result in death or serious injury.

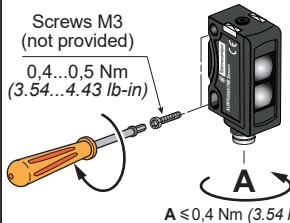
WARNING

IMPROPER SETUP OR INSTALLATION

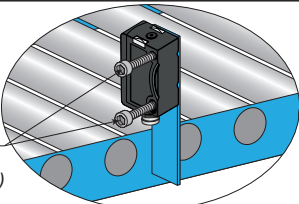
- This equipment must only be installed and serviced by qualified personnel.
- Read, understand, and follow the compliance below, before installing the XU Photo-electric sensor.
- Do not tamper with or make alterations on the unit.
- Comply with the wiring and mounting instructions.
- Check the connections and fastening during maintenance operations.
- The proper functioning of the XU photoelectric sensor and its operating line must be checked regularly and according to the application (for example number of operations, level of environmental pollution, etc.).

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Mounting and tightening torques

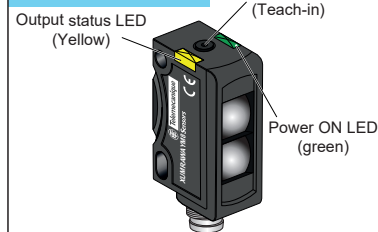


Screws M3 (not provided)
0,4...0,5 Nm
(3.54...4.43 lb-in)

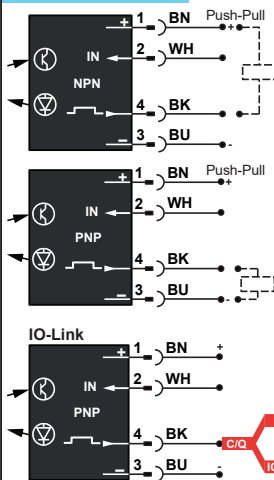

CAUTION

DEGREE OF PROTECTION DETERIORATION
Do not apply excessive torque on the sensor during the installation process.
Failure to follow these instructions can result in injury or equipment damage.

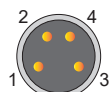
LEDs and settings



Wiring diagrams

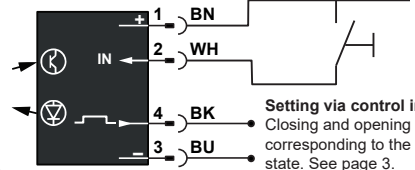


M8 Connector 4 pins



- 1: (+)
- 2: IN
- 3: (-)
- 4: Q/IO-Link

Remote teach-in



Setting via control input IN:
Closing and opening time corresponding to the button state. See page 3.

CAUTION

INOPERABLE EQUIPMENT DUE TO CYBER ATTACK ON IO-LINK

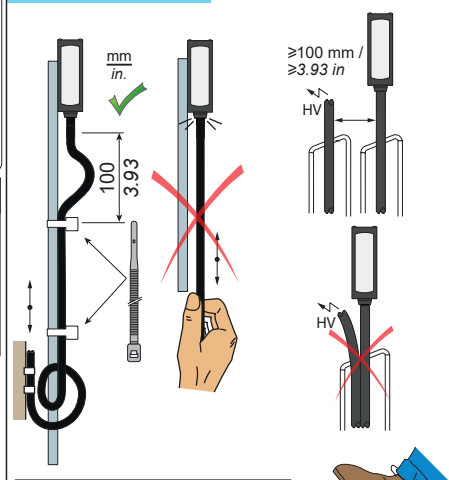
- Apply external cybersecurity protection on IO-Link Master device.
- Download IO-Link Description files only from these web servers:
<https://tesensors.com/global/en/support/iolink> or
<https://ioddfinder.io-link.com/#/>

Failure to follow these instructions can result in injury or equipment damage.

IO-Link data tables and IODD files are online:
Scan the 2D code, above

Pin	Signal	Definition
1	+	+ 24 Vdc
2	IN	+ = NO - = NC Open = NO
3	-	0 Vdc
4	Q	Switching signal (SIO)
	C	Communication IO-Link

Wiring precaution



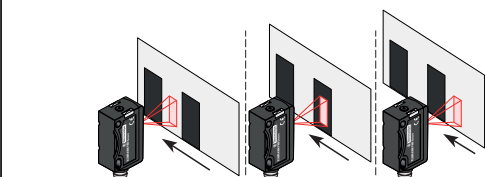
NOTICE

REDUCTION OF SERVICE LIFE

Do not pull on the sensor cable.

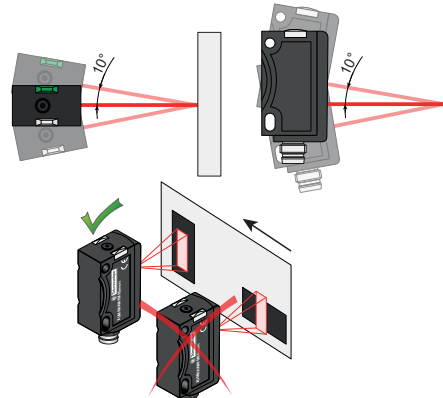
Failure to follow these instructions can result in equipment damage.

Switching mode for object



PNP	NO +	NC -	YE ON
NO +	NC -	YE ON	YE ON
NC -	NO +	YE ON	YE ON
NO +	NC -	YE ON	YE ON

Recommended Alignment - Distance - Orientation



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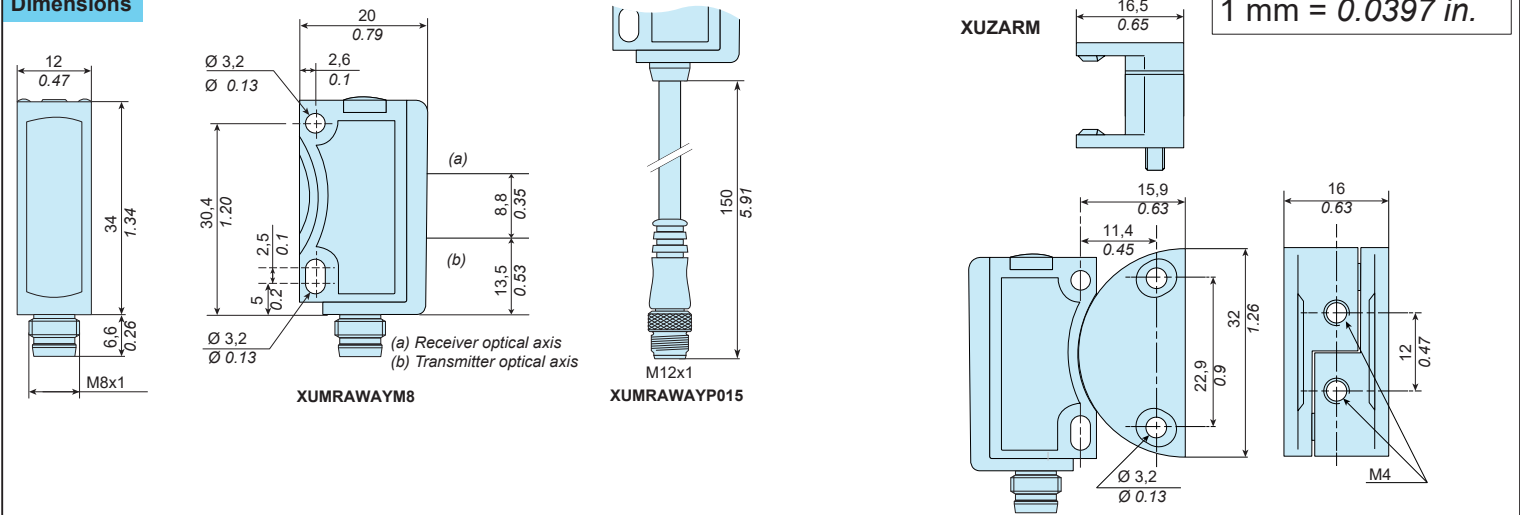


Manufacturer :
TMSS France
Tour Egho, 2 avenue Gambetta
92400 Courbevoie
France



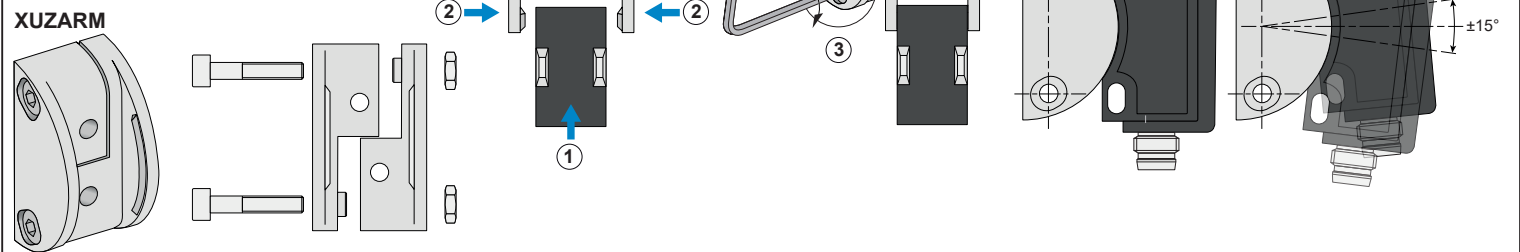
UK Representative :
Yageo TMSS UK Limited
2 North Park Road, Harrogate,
HG1 5PA
United Kingdom

Dimensions



Accessories

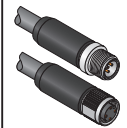
Dovetail clamp mounting for flexible adjustment
(to order separately)



Pre-wired connectors (examples)

PVC cable for general use
PUR cable for severe industrial environments

Jumper
M8 - 4 pins plug
M8 - 4 pins socket



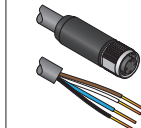
XZCPB1141L2 2m PUR
XZCPB1141L5 5m PUR

Jumper
M12 - 4 pins plug
M8 - 4 pins socket



XZCR2711037T1 1m PUR
XZCR2711037T2 2m PUR

M8 - 4 pins socket 4 wires

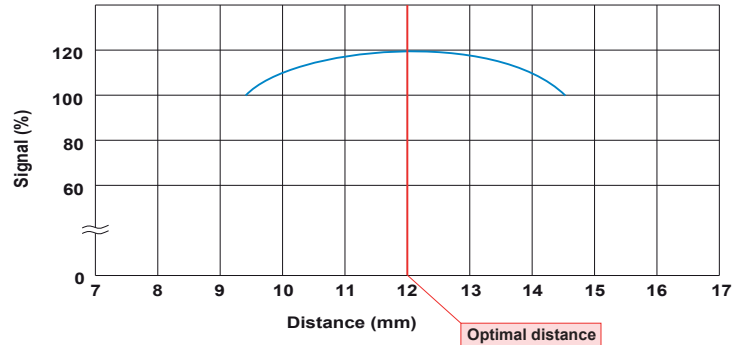


XZCR2705037R1 1m PUR
XZCR2705037R2 2m PUR

For other cables (angled or length) visit our website: Tesensors.com

Curves

Signal process



Setting

The sensor has 2 different Teach-in modes.

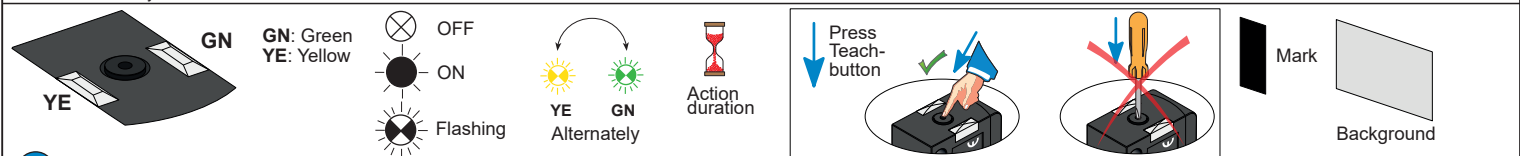
A. Standard Teach-in (STI): is suited for nearly all applications. Setting is performed for the mark and the background (see illustration A).

The switching output will be active for the first taught attribute (mark or background), for the factory setting NO/NC via teach-in.

B. Dynamic Teach-in (DTI): is suited for setting the sensor in the running process (see illustration B).

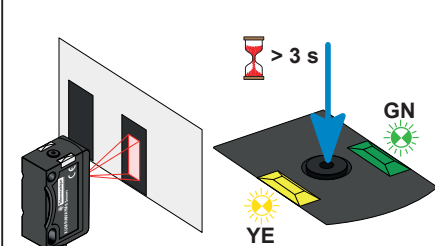
The sensor has 3 different **Switching NO/NC** setting options (see illustration C):

- 1: NO/NC via teach-in in series
- 2: Sensor always NO
- 3: Sensor always NC



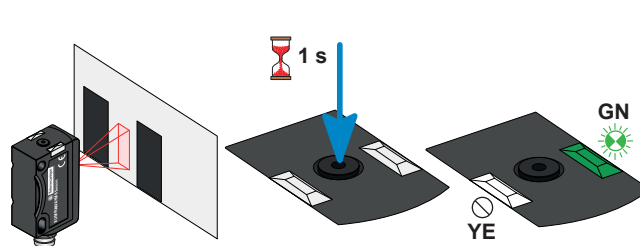
A Standard Teach-in (STI)

Step 1: Teach-in Mark



Press teach button > 3 s
until green and yellow LED flash at the same time.

Step 2: Teach-in Background



Press teach button 1s
The green LED flashes & the sensor beam flashes 3 times as described on the right side

