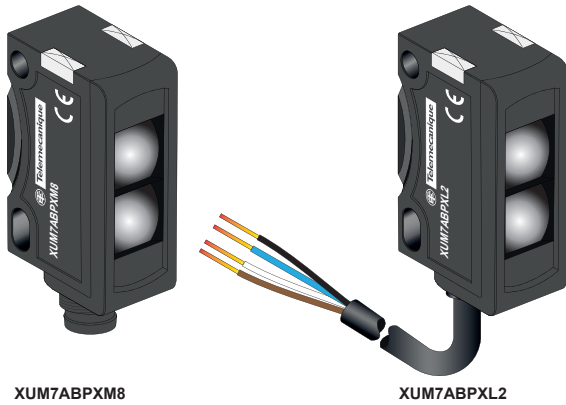


Photo-electric sensors - Miniature design



XUM7ABPXM8

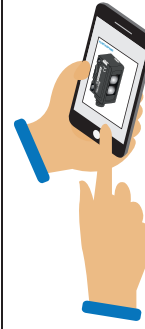
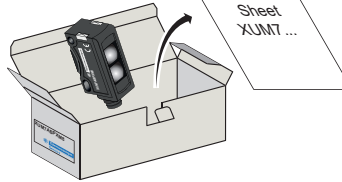
XUM7ABPXL2



Fixed Background suppression (BGS)



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.telemecaniquesensors.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.

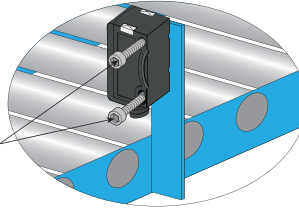
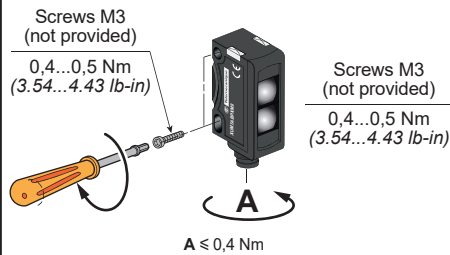
Failure to follow these instructions will result in death or serious injury.

⚠ 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 Photo-electric 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.

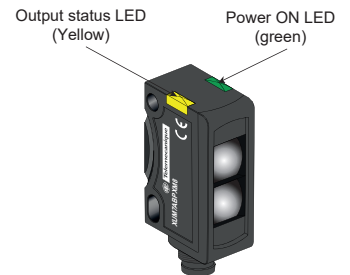
Mounting and tightening torques

**⚠ CAUTION****DEGREE OF PROTECTION DETERIORATION**

Do not apply excessive torque on the sensor during the installation process.

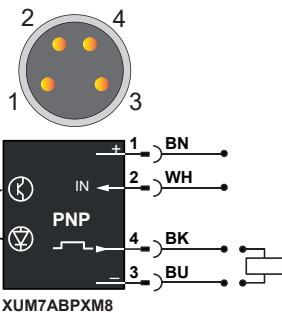
Failure to follow these instructions can result in injury or equipment damage.

LEDs and settings



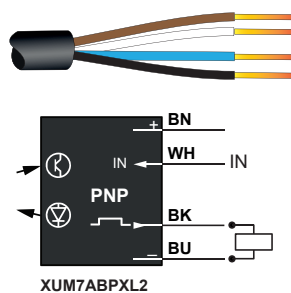
Wiring diagrams

M8 Connector - 4 pins

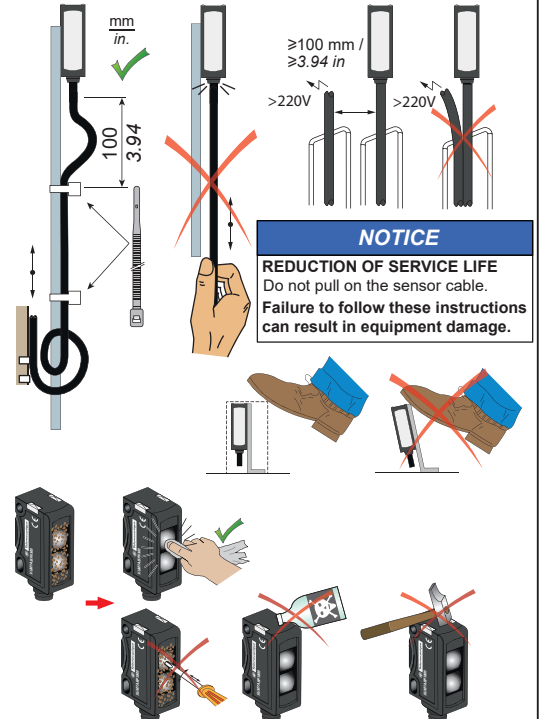


Control input IN
(switching function Q):
+ = NC
- = NO
Open = NO

2 m Cable - 4 wires

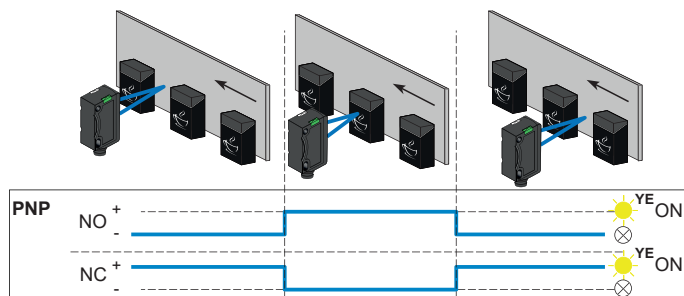


Mounting, wiring and maintenance precautions

**NOTICE**

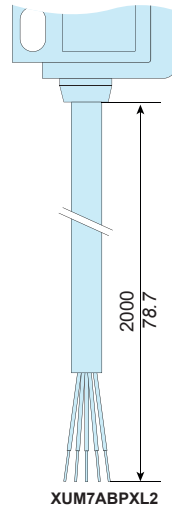
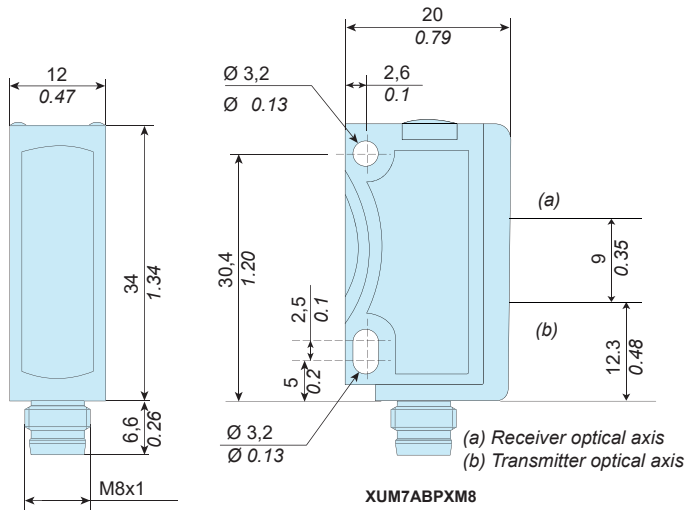
REDUCTION OF SERVICE LIFE
Do not pull on the sensor cable.
Failure to follow these instructions can result in equipment damage.

Switching mode for object

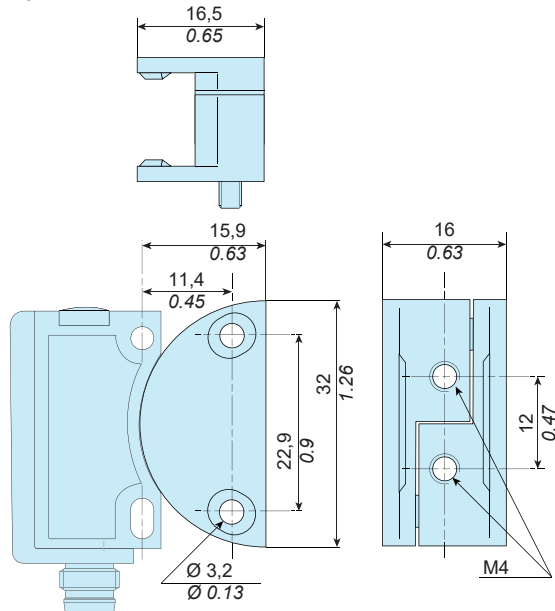


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Dimensions

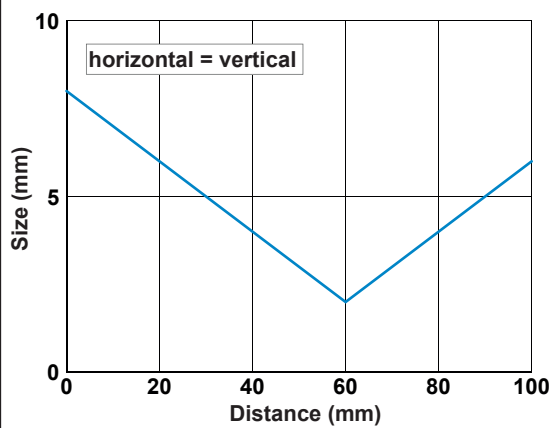
$$\frac{\text{mm}}{\text{in.}}$$
$$1 \text{ mm} = 0.0394 \text{ in.}$$


XUZARM



Curves

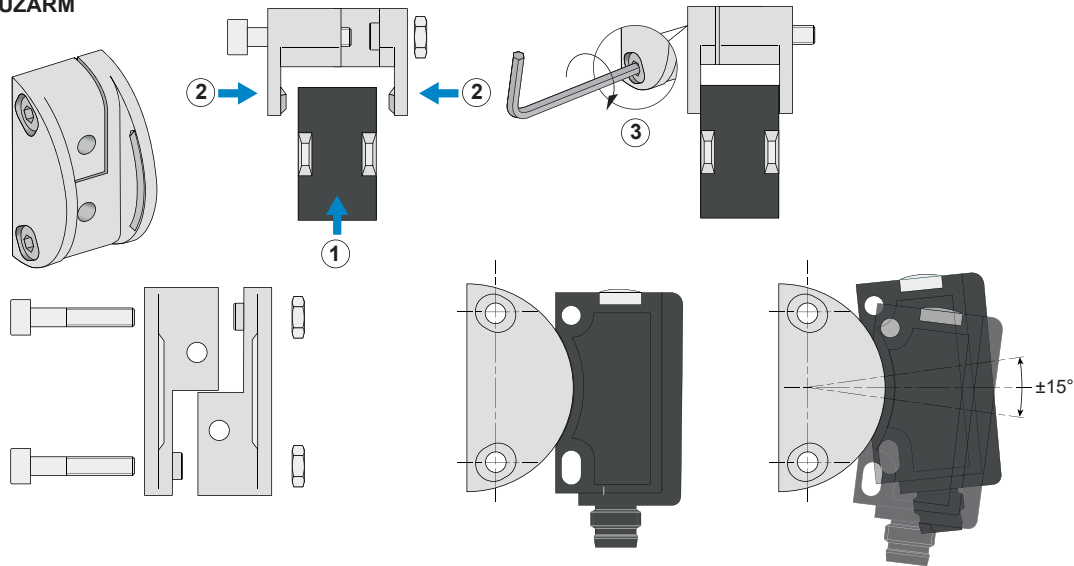
Light spot size



Accessories

Dovetail clamp mounting for flexible adjustment (to order separately)

XUZARM



Pre-wired connectors (examples)

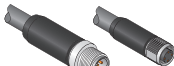
PVC cable for general use
PUR cable for severe industrial environments

Jumper



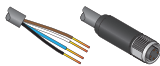
M8 - 4 pins plug
M8 - 4 pins socket
XZCR2609P2Y1 1m PUR
XZCR2609P2Y2 2m PUR

Jumper



M12 - 4 pins plug
M8 - 4 pins socket
XZCR1509041J1 1m PUR
XZCR1509041J2 2m PUR

Cable

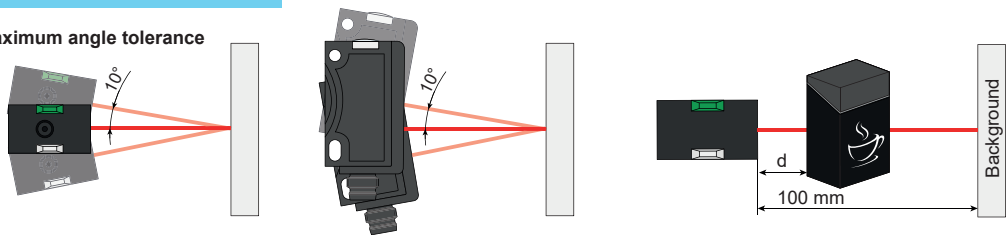


M8 - 4 pins socket
4 wires
XZCP0941L2 2m PUR
XZCP0941L5 5m PUR

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

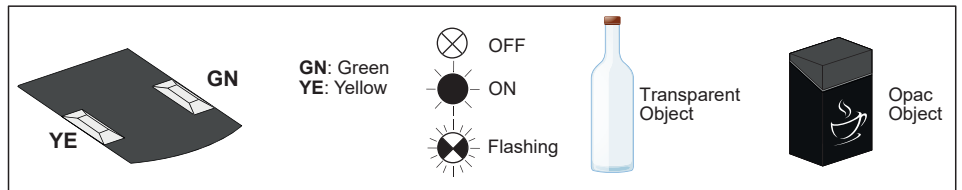
Sensors position adjustment

Maximum angle tolerance

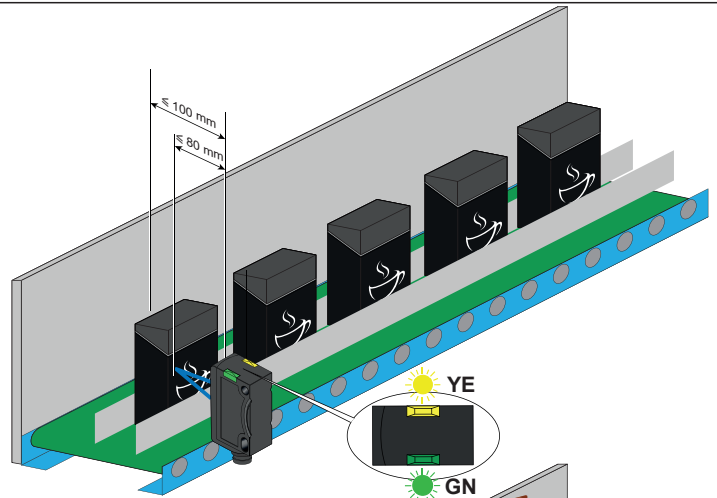
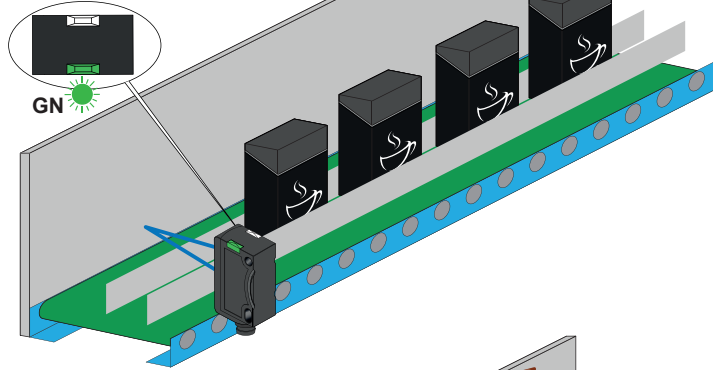


Reference material	Detection range «d»
White (90 %)	0...80 mm / 0...3.15 in.
Grey (18 %)	0...80 mm / 0...3.15 in.
Black (6 %)	1...80 mm / 0.04...3.15 in.

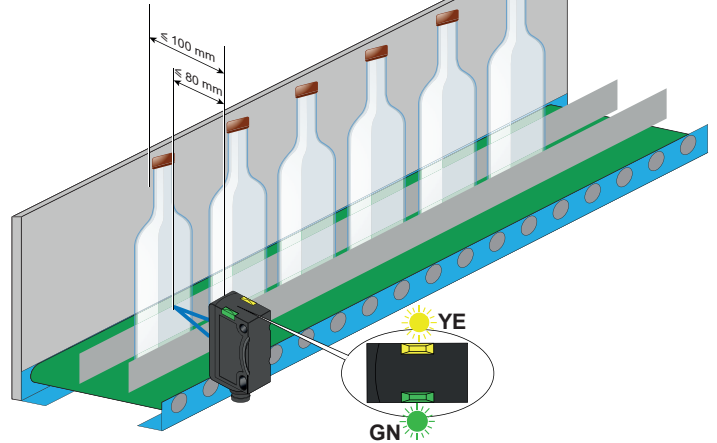
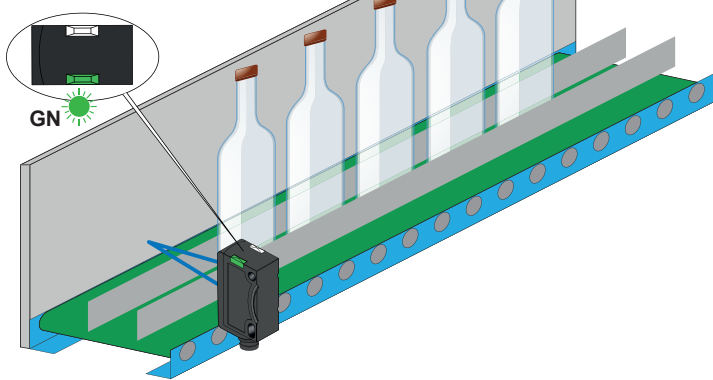
Detection



1- For object detection (even dark)



2- For transparent detection



Characteristics

Certification	CE - UKCA - cULus - Ecolab
Sensing distance	0...80 mm / 0...3.15 in. (Reference material: white, 90 % reflectivity)
Setting	Fixed focus without Teach-in
Detection light beam	LED, blue, 450 nm - Risk group 2 according to EN62471
Hysteresis	~ 1% (Based on scanning distance)
Switching output Q	PNP (NO or NC)
Control input IN (switching function Q):	+ = NC - = NO Open = NO
Current consumption	≤ 30 mA
Switching capacity	≤ 100 mA
Switching frequency	≤ 1000 Hz
First-up delay	< 300ms
Response time	500 μs
Recovery time	< 300ms
Ambient Temperature	Operating : - 20...+60 °C (-4...+140 °F) - UL : - 20...+50 °C (-4...+122 °F) Storage : - 20...+80 °C (-4...+176 °F)
Power Voltage	Rated operational voltage: 12...24 Vdc Operating range: 10...30 Vdc (including ripple p-p 10% maximum)
Product protection	Power supply : Reverse polarity protection Output: Short circuit protection
Protection against electric shocks	☐ Protection class II
Degree of protection	IP67 conforming to IEC 60529 , IP69K conforming to DIN 40050-9
Vibration resistance	Conforming to EN 60947-5-2
Shock resistance	Conforming to EN 60947-5-2
Material	Housing: ABS, Front and Lens: PMMA



Risk group 2

CAUTION

EYE INJURY DUE TO HAZARDOUS OPTICAL RADIATION

- Do not stare at the beam.
 - Avoid any eye contact with the beam.
- Failure to follow these instructions can result in injury or equipment damage.



Manufacturer :
TMSS France
Tour Echo - 2 avenue Gambetta
92400 Courbevoie
France



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