



## Main

Range of product	Telemecanique Safety light curtains XUSL
Product or component type	Safety thru-beam pair photo-electric sensors
Device short name	XU2S
Output type	1 safety outputs OSSD PNP
[Sn] nominal sensing distance	26.25 ft (8 m)

## Complementary

Detection system	Transmitter-receiver system
[Us] rated supply voltage	12...24 V DC 10...30 V reverse polarity protection
Current consumption	<= 35 mA no-load
Maximum voltage drop	<1.5 V closed)
Switching capacity in mA	<= 100 mA overload and short-circuit protection)
Switching frequency	500 Hz maximum
Electrical connection	1 male connector M12 4 pins
Line of sight type	Along case axis
Maximum delay response	1 ms
Maximum delay recovery	1 ms
Tightening torque	212.42 lbf.in (24 N.m) fixing nut 17.70 lbf.in (2 N.m) connector
Function available	Built-in muting function Light or dark programmable switching
Marking	CE
Material	Nickel plated brass case PMMA (polymethyl methacrylate) lenses
Net weight	0.34 lb(US) (0.155 kg)

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

## Environment

Standards	EN/IEC 61496-1 EN/IEC 61496-2 EN/IEC 60825-1
Safety level	Can reach PL = c associated with module XPSCM correctly wired EN/ISO 13849-1 Can reach category 2 associated with module XPSCM correctly wired EN/ISO 13849-1 Type 2 IEC 61496-1-2
Ambient air temperature for operation	-13...131 °F (-25...55 °C)
Safety reliability data	PFH = 5.5E-7 1/h with muting function IEC 61508 PFH = 4.6E-7 1/h IEC 61508
Ambient air temperature for storage	-40...158 °F (-40...70 °C)
IP degree of protection	IP67 EN/IEC 60529
Shock resistance	30 gn 3 axes : 3 times EN/IEC 60068-2-27
Vibration resistance	7 gn 10...55 Hz)EN/IEC 60068-2-6

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	5.71 oz (162 g)
Package 1 Height	1.65 in (4.2 cm)
Package 1 width	3.78 in (9.6 cm)
Package 1 Length	5.28 in (13.4 cm)

## Offer Sustainability

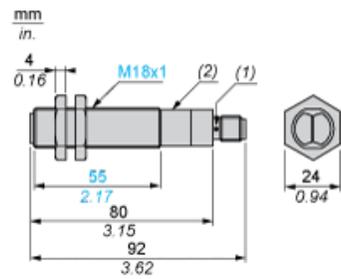
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>

## Contractual warranty

Warranty	18 months
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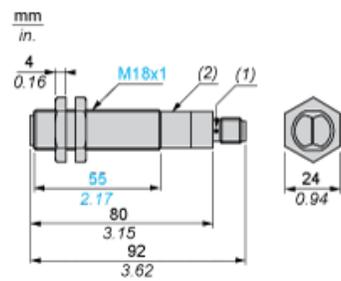
Dimensions

Receiver



- (1) LED
- (2) Potentiometer

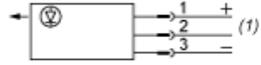
Transmitter



- (1) LED
- (2) Potentiometer

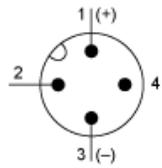
Wiring Schemes (3-wire DC)

Transmitter



(1) Test

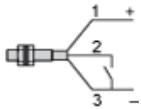
Connector Pin View



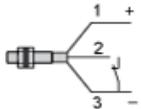
(1) (+)  
(2) Test  
(3) (-)

Beam Break Test

Beam Made

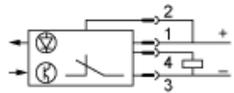


Beam Broken

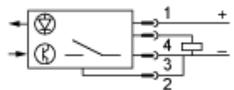


Receiver

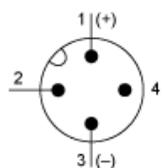
Light switching (no object present). PNP output



Dark switching (no object present). PNP output



Connector Pin View



(1) (+)  
(2) Programming  
(3) (-)  
(4) Output

## Connecting to a Safety Module

The screenshot shows a product page for XU2S18PP340D. On the left, under 'Discover XU2S18PP340D by', there is a list of categories: Characteristics, Dimensions Drawings, Connections and Schema, Performance Curves, and Download & Documents. The 'Download & Documents' link is highlighted with a red box and a circled '1' below it. On the right, the 'Download & Documents 1 to 8 of 8' section is shown. It contains several document categories: CAD, Instruction sheet, Product environmental, End of life manual, System user guide, Catalog, and Image of product. The 'System user guide' category is highlighted with a red box and a circled '2' below it. Within this category, the document 'Connecting to a monitoring device XU2S' is highlighted with a red box.

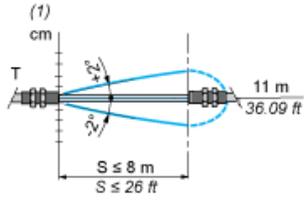
Document Title	Language	Date	Format
Preventa - Photo-electric sensors - Thru beam, pair - Ref. XU2S18PP340D	SILENT	2015-07-21	(Se ▼)
Preventa - Photo-electric sensors - Thru beam, pair - Ref. XU2S18PP340D	SILENT	2009-10-23	(Se ▼)
XU2S18...Cylindrical photo-electric sensor design 18	English	2015-07-21	pdf ▼
XUB...XU1...to XU9...Photoelectric Sensor, Product Environmental profile	English	2012-03-19	pdf ▼
XUB...and XU1...to XU9...Photoelectric Sensors, Product End-of-life Instructions	English	2012-02-20	pdf ▼
Connecting to a monitoring device XU2S	English	2015-06-08	pdf ▼
Safety light curtains Preventa XUSL	English	2015-05-18	pdf ▼
Security light curtain XU2S	SILENT	2015-07-21	(Se ▼)

- 1 : Click on Download & Documents
- 2 : Click on System user guide

To have all connection schematics concerning our safety module, select "download and document" and download the file "Connecting to a monitoring device XU2S"

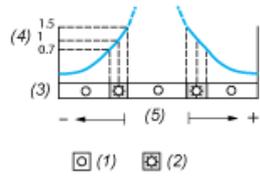
Curves

Infrared Detection Curve



(1)  $\emptyset$  of beam

Verification of Correct Operation



- (1) LED off
- (2) LED on
- (3) Red LED
- (4) Signal level
- (5) Optimum alignment