



### Main

Range of product	Preventa Safety detection
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	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
Voltage drop	<= 1.5 V closed state
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	90° to case axis
Delay response	<= 1 ms
Delay recovery	<= 1 ms
Tightening torque	24 N.m fixing nut 2 N.m connector
Function available	Built-in muting function Light or dark programmable switching
Marking	CE
Material	Case : nickel plated brass Lenses : PMMA (polymethyl methacrylate)
Product weight	0.155 kg

### Environment

Standards	EN/IEC 60825-1 EN/IEC 61496-1 EN/IEC 61496-2
Safety level	Type 2 conforming to IEC 61496-1-2 Can reach PL = c conforming to EN/ISO 13849-1 (associated with module XPSCM correctly wired)

Can reach category 2 conforming to EN/ISO 13849-1 (associated with module XPSCM correctly wired)

Ambient air temperature for operation	-25...55 °C
Safety reliability data	PFH = 4.6E-7 1/h conforming to IEC 61508 PFH = 5.5E-7 1/h conforming to IEC 61508 (with muting function)
Ambient air temperature for storage	-40...70 °C
IP degree of protection	IP67 conforming to EN/IEC 60529
Shock resistance	30 gn (3 axes : 3 times) conforming to EN/IEC 60068-2-27
Vibration resistance	7 gn (f = 10...55 Hz) conforming to EN/IEC 60068-2-6

### Offer Sustainability

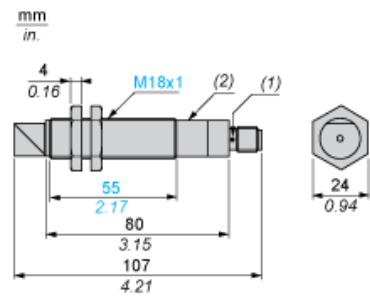
RoHS (date code: YYWW)	Compliant - since 1402 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>

### Contractual warranty

Warranty period	18 months
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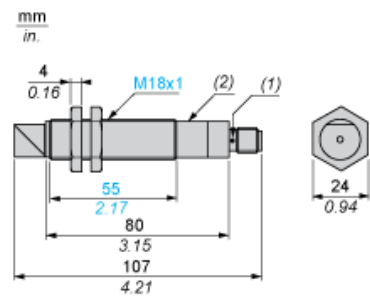
Dimensions

Receiver



- (1) LED
- (2) Potentiometer

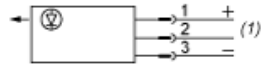
Transmitter



- (1) LED
- (2) Potentiometer

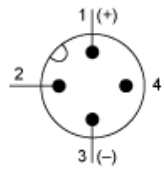
Wiring Schemes (3-wire DC)

Transmitter



(1) Test

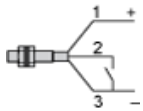
Connector Pin View



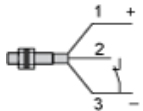
(1) (+)  
(2) Test  
(3) (-)

Beam Break Test

Beam Made

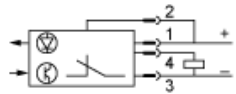


Beam Broken

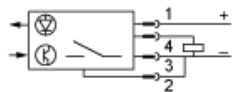


Receiver

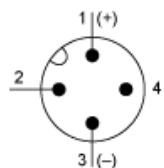
Light switching (no object present). PNP output



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 XU2S18PP340WD. On the left, under 'Discover XU2S18PP340D by', there are several links: Characteristics, Dimensions Drawings, Connections and Schema, Performance Curves, and Download & Documents (highlighted with a red box and labeled 1). The main content area is titled 'Download & Documents 1 to 8 of 8' and lists various documents. The 'System user guide' section is highlighted with a red box and labeled 2, containing the document 'Connecting to a monitoring device XU2S'.

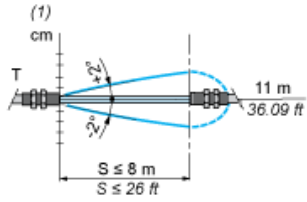
Document Title	Language	Date	Format
Preventa - Photo-electric sensors - Thru beam, pair - Ref. XU2S18PP340D	SILENT	2015-07-21	(Se ▼)
Preventa - Photo-electric sensors - Thru beam, pair - Ref. XU2S18PP340D	SILENT	2009-10-23	(Se ▼)
XU2S18...Cylindrical photo-electric sensor design 18	English	2015-07-21	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"

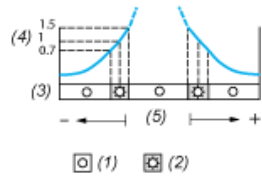
Curves

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