



### 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	Pre-cabled
Line of sight type	Along case axis
Delay response	<= 1 ms
Delay recovery	<= 1 ms
Cable outer diameter	5 mm
Cable length	5 m
Cable composition	3 x 0.34 mm <sup>2</sup> for transmitter 4 x 0.34 mm <sup>2</sup> for receiver
Tightening torque	24 N.m fixing nut
Function available	Built-in muting function Light or dark programmable switching
Marking	CE
Material	Case : nickel plated brass Lenses : PMMA (polymethyl methacrylate)
Product weight	0.485 kg

### Environment

Standards	EN/IEC 60825-1 EN/IEC 61496-1 EN/IEC 61496-2
Safety level	Can reach PL = c conforming to EN/ISO 13849-1 (associated with module XP-SCM correctly wired) Can reach category 2 conforming to EN/ISO 13849-1 (associated with module XPSCM correctly wired) Type 2 conforming to IEC 61496-1-2
Ambient air temperature for operation	-25...55 °C
Safety reliability data	PFH = 5.5E-7 1/h conforming to IEC 61508 (with muting function) PFH = 4.6E-7 1/h conforming to IEC 61508
Ambient air temperature for storage	-40...70 °C

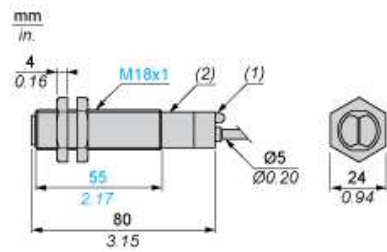
IP degree of protection	IP67 conforming to EN/IEC 60529
Shock resistance	30 gn (3 axes : 3 times) conforming to EN/IEC 60068-2-27
Vibration resistance	7 gn (f = 10...55 Hz) conforming to EN/IEC 60068-2-6

### Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1005 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold

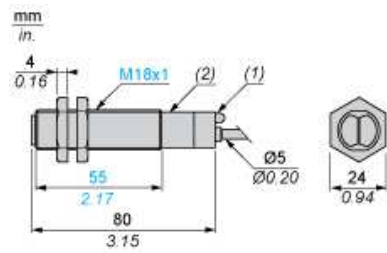
Dimensions

Receiver



- (1) LED
- (2) Potentiometer

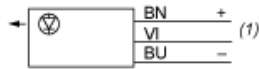
Transmitter



- (1) LED
- (2) Potentiometer

## Wiring Schemes (3-wire DC)

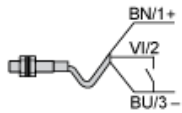
### Transmitter



BU : Blue  
BN : Brown  
VI : Violet  
(1) Test

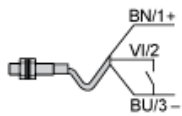
### Beam Break Test

Beam Made



BU : Blue  
BN : Brown  
VI : Violet

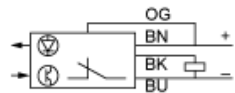
Beam Broken



BU : Blue  
BN : Brown  
VI : Violet

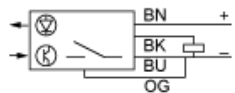
### Receiver

Light switching (no object present). PNP output



BN : Brown  
BU : Blue  
BK : Black  
OG : Orange

Dark switching (no object present). PNP output



BN : Brown  
BU : Blue  
BK : Black  
OG : Orange

## Connecting to a Safety Module

**Discover**  
XU2S18PP340D by

- Characteristics
- Dimensions Drawings
- Connections and Schema
- Performance Curves
- Download & Documents

①

**Download & Documents 1 to 8 of 8**

**CAD**

Preventa - Photo-electric sensors - Thru beam, pair - Ref. XU2S18PP340D	SLENT 2015-07-21	(Se ▼)
Preventa - Photo-electric sensors - Thru beam, pair - Ref. XU2S18PP340D	SLENT 2009-10-23	(Se ▼)

**Instruction sheet**

XU2S18 - Cylindrical photo-electric sensor design 18	English 2015-07-21	pdf ▼
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**Product environmental**

XUB - XU1 - to XUB - Photoelectric Sensor, Product Environmental profile	English 2012-03-19	pdf ▼
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**End of life manual**

XUB - and XU1 - to XUB - Photoelectric Sensors, Product End-of-life Instructions	English 2012-02-20	pdf ▼
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**System user guide**

Connecting to a monitoring device XU2S	English 2015-06-08	pdf ▼
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**Catalog**

Safety light curtains Preventa XUSL	English 2015-05-18	pdf ▼
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**Image of product**

Security light curtain XU2S	SLENT 2015-07-21	(Se ▼)
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②

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

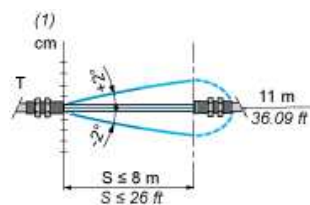
To have all connection schematics concerning our safety module, select "download and document" and download the file "Connecting to a monitoring device XU2S"

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Curves

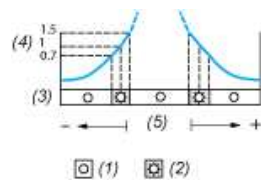
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Infrared Detection Curve



(1)  $\varnothing$  of beam

Verification of Correct Operation



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