



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 ² for transmitter 4 x 0.34 mm ² 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 61496-2
-----------	----------------------------------

EN/IEC 61496-1

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

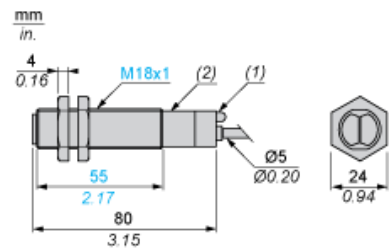
Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 1005 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold

Contractual warranty

Warranty period	18 months
-----------------	-----------

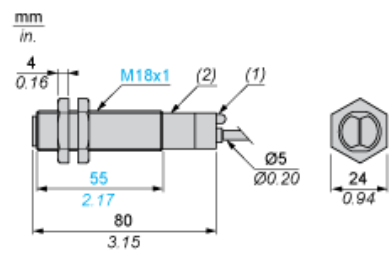
Dimensions

Receiver



- (1) LED
- (2) Potentiometer

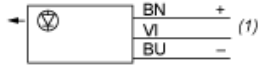
Transmitter



- (1) LED
- (2) Potentiometer

Wiring Schemes (3-wire DC)

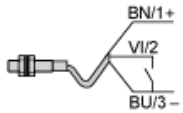
Transmitter



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

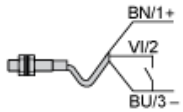
Beam Break Test

Beam Made



BU : Blue
BN : Brown
VI : Violet

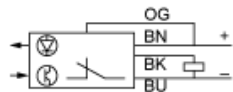
Beam Broken



BU : Blue
BN : Brown
VI : Violet

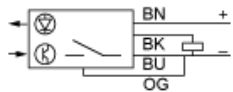
Receiver

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

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'. On the right, under 'Download & Documents 1 to 8 of 8', there are 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'. Within the 'System user guide' category, the document 'Connecting to a monitoring device XU2S' is highlighted with a red box.

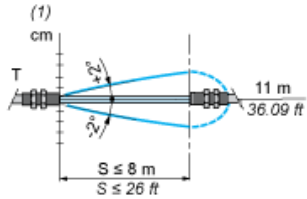
Document Title	Language	Date	Format
Preventa - Photo-electric sensors - Thru beam, pair - Ref. XU2S18PP340D	SILENT	2015-07-21	(Se)
Preventa - Photo-electric sensors - Thru beam, pair - Ref. XU2S18PP340D	SILENT	2009-10-23	(Se)
XU2S18...Cylindrical photo-electric sensor design 18	English	2015-07-21	pdf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

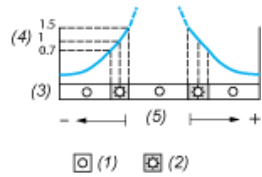
Curves

Infrared Detection Curve



(1) \varnothing of beam

Verification of Correct Operation



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