

Main

Range of product	Preventa Safety detection
Product or component type	Safety light curtain type 4
Device short name	XUSL4E
Output type	2 safety outputs OSSD solid-state PNP (arc suppression)
Product specific application	For hand protection
[R] Resolution	30 mm
[Sn] nominal sensing distance	0...12 m by cabling 0...4 m by cabling
[Hp] Height protected	460 mm
Number of beams	23
Type of start / restart	Automatic Manual
External Device Monitoring (EDM)	Selected by wiring

Complementary

Detection system	Transmitter-receiver system
Response time	7.5 ms
Kit composition	adjustable mounting bracket(s) 1 receiver(s) 1 transmitter(s) 1 user guide with certificate of conformity on CD-ROM
[EAA] effective aperture angle	2.5 ° at 3 m
Emission	IR LED 950 nm
[Us] rated supply voltage	24 V DC +/- 20 %
Supply	Power supply conforming to IEC 61496-1 Power supply conforming to IEC 60204-1
[Ie] rated operational current	2 A
Current consumption	42 mA no-load transmitter 83 mA no-load receiver 42 mA transmitter

	900 mA with maximum load receiver
Output current limits	0.4 A for safety outputs OSSD
Output voltage	24 V
Output circuit type	DC
Maximum voltage drop	<0.5 V
Local signalling	1 multi-colour LED transmitter 2 dual colour LEDs receiver
Electrical connection	1 male connector M12 5 pins transmitter 1 male connector M12 8 pins receiver
Function available	Test Muting through external safety module XPSLCMUT1160 LED display of operating modes and faults
Marking	CE
Material	Aluminium: casing Polycarbonate: front panel Polypropylene: end caps
Housing colour	Red RAL 3000
Fixing mode	By fixing brackets
Net weight	1 kg
Offer type	Standard distance

Environment

Directives	89/655/EEC - work equipment 89/336/EEC - electromagnetic compatibility 2002/96/EC - WEEE directive 98/37/EEC - machinery 2002/95/EC - RoHS directive
Product certifications	CULus TÜV CE
Safety level (correctly wired)	Type 4 conforming to IEC 61496-1 SIL 3 conforming to IEC 61508 SILCL 3 conforming to IEC 62061 Category 4 conforming to EN/ISO 13849-1 PL = e conforming to EN/ISO 13849-1
Optical characteristic	Resistance to light disturbance conforming to EN/IEC 61496-2
Mission time	20 year(s)
Safety reliability data	PFHd = 9.47E-9 1/h conforming to IEC 61508
Ambient air temperature for operation	-30...55 °C -10...55 °C
Ambient air temperature for storage	-35...70 °C -25...70 °C
Relative humidity	0...95 % without condensation
IP degree of protection	IP65 IP67
Shock resistance	10 gn for 16 ms conforming to IEC 61496-1
Vibration resistance	0.35 +/- 0.05 mm (f= 10...55 Hz) conforming to IEC 61496-1

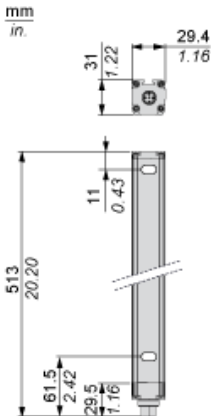
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile

Contractual warranty

Warranty	18 months
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Dimensions



Brackets Dimensions



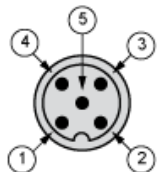
Mounting and Clearance



- (1) Insert
- (2) Bracket
- (3) Washer
- (4) Spring washer
- (5) Nut

Wiring Diagrams

Transmitter Connections

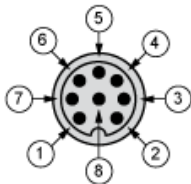


- (1) +24 Vdc
- (2) Configuration_0
- (3) 0 Vdc
- (4) Configuration_1
- (5) FE

Transmitter configurations and operating modes

	High range option	Low range option	Transmitter in Test state	Forbidden wiring
Pin 4 : Configuration_1	24 V	0 V	0 V	24 V
Pin 2 : Configuration_0	0 V	24 V	0 V	24 V

Receiver Connections



- (1) OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration_A
- (5) K1_K2 Feedback/Restart
- (6) Configuration_B
- (7) 0 Vdc
- (8) FE

Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop



With External Device Monitoring (EDM) feedback loop



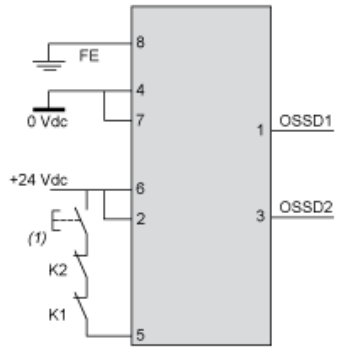
Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

Connecting to a Safety Interface

The screenshot shows a web interface for product documentation. On the left, a 'Discover' sidebar lists categories: Characteristics, Dimensions Drawings, Mounting and Clearance, Connections and Schema, and Download & Documents. A red box highlights 'Download & Documents' with a circled '1' and a line pointing to the main content area. The main content area is titled 'Download & Documents 1 to 9 of 9' and contains several sections: 'Image of product', 'Product environmental', 'End of life manual', 'Application solutions', 'Catalog', and 'User guide'. The 'Application solutions' section is highlighted with a red box and a circled '2', with a line pointing to the document 'Safety light curtains association with safety interfaces'.

Section	Document Title	Language	Date	Format
Image of product	Generic image for XUSL standard sensing distance.	SILENT	2014-12-11	(Se) ▼
Product environmental	XUSL4E..., XUSL2E... Safety Light Curtain, Product Environmental Profile	English	2014-09-08	pdf ▼
End of life manual	XUSL4E..., XUSL2E... Safety Light Curtain, Product End-of-Life Instructions	English	2014-09-08	pdf ▼
Application solutions	Safety light curtains association with safety interfaces	English	2016-01-08	pdf ▼
Catalog	Safety light curtains Preventa XUSL	English	2015-05-18	pdf ▼
User guide	XUSL2E..., XUSL4E... Type 2 and Type 4 Safety Light Curtains, User Manual	English	2015-06-25	pdf ▼

- 1 : Click on Download & Documents
- 2 : Click on Application solutions

To have all connection schematics concerning our safety module, select "download and document" and download the file "Safety light curtains association with safety interfaces"