

### 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)
[Sn] nominal sensing distance	0...12 m by cabling 0...4 m by cabling
[Hp] Height protected	510 mm
Number of beams	2
Space between beams	500 mm
Type of start / restart	Manual Automatic
External Device Monitoring (EDM)	Selected by wiring

### Complementary

Detection system	Transmitter-receiver system
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	1.1 kg
Offer type	Standard distance
Topology	Daisy chain master

## Environment

Directives	89/655/EEC - work equipment 2002/96/EC - WEEE directive 98/37/EEC - machinery 89/336/EEC - electromagnetic compatibility 2002/95/EC - RoHS directive
Product certifications	TÜV CULus 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 = 6.89E-9 1/h conforming to IEC 61508
Ambient air temperature for operation	-30...55 °C 14...131 °F
Ambient air temperature for storage	-13...158 °F -35...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	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
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>

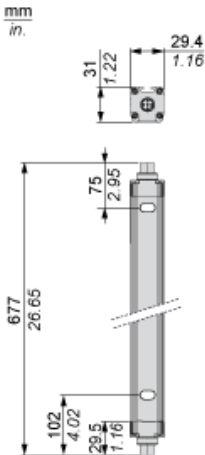
## Contractual warranty

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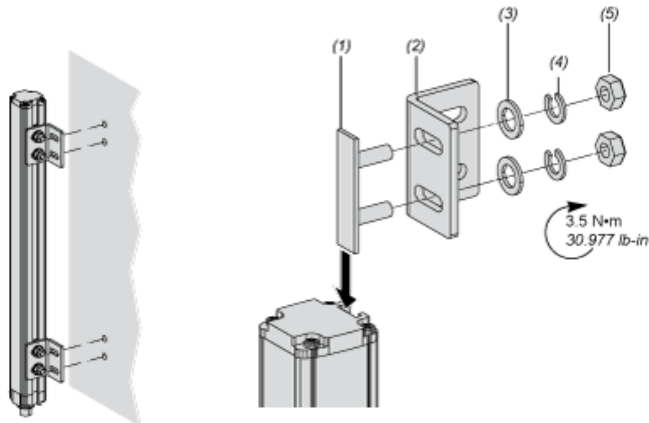
Warranty	18 months
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Dimensions



Mounting and Clearance

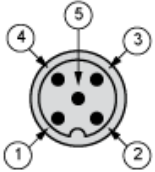


- (1) Insert
- (2) Bracket
- (3) Washer
- (4) Spring washer
- (5) Nut

## Wiring Diagrams

### Transmitter Connections

Master primary connector at the bottom

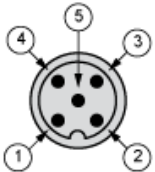


- (1) +24 Vdc
- (2) Configuration\_0
- (3) 0 Vdc
- (4) Configuration\_1
- (5) FE

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

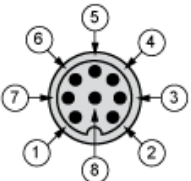
Master secondary connector at the top



- (1) +24 Vdc
- (2) Master/Slave\_A
- (3) 0 Vdc
- (4) Master/Slave\_B
- (5) FE

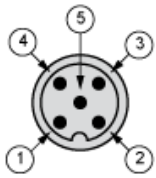
### Receiver Connections

Master primary connector at the bottom



- (1) OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration\_A
- (5) K1\_K2 Feedback/Restart
- (6) Configuration\_B
- (7) 0 Vdc
- (8) FE

Master secondary connector at the top



- (1) +24 Vdc
- (2) Master/Slave\_A
- (3) 0 Vdc
- (4) Master/Slave\_B
- (5) FE

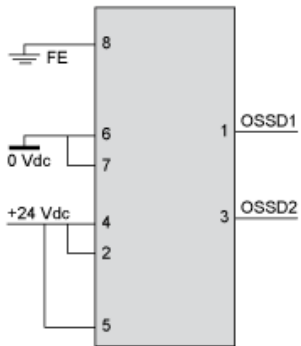
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Receiver Configurations and Operating Modes

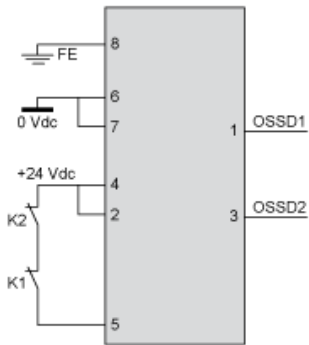
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Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

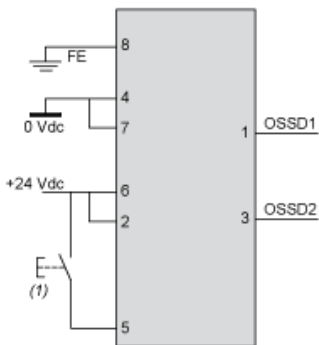


With External Device Monitoring (EDM) feedback loop



Manual Start/Restart

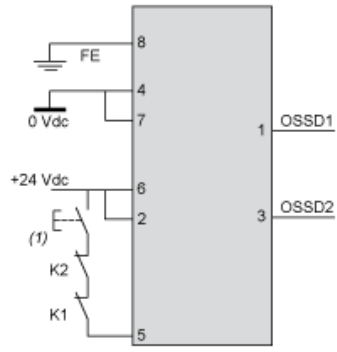
Without External Device Monitoring (EDM) feedback loop



(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 line leading to a circled '1'. 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 line leads to a circled '2'.

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"