

Main

Range of product	Telemecanique Safety light curtains XUSL
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 finger protection
[R] Resolution	0.55 in (14 mm)
[Sn] nominal sensing distance	3.28...19.69 ft (1...6 m) by cabling 0.00...9.84 ft (0...3 m) by cabling
[Hp] Height protected	12.20 in (310 mm)
Number of beams	30
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	1.59 lb(US) (0.72 kg)
Offer type	Standard distance
Topology	Daisy chain master

Environment

Directives	2002/95/EC - RoHS directive 98/37/EEC - machinery 89/655/EEC - work equipment 2002/96/EC - WEEE directive 89/336/EEC - electromagnetic compatibility
Product certifications	CE CULus TÜV
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 = 8.20E-9 1/h IEC 61508
Ambient air temperature for operation	-4...131 °F (-20...55 °C) 14...131 °F (-10...55 °C)
Ambient air temperature for storage	-13...158 °F (-25...70 °C) -31...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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	3.53 lb(US) (1.6 kg)
Package 1 Height	5.31 in (13.5 cm)
Package 1 width	7.68 in (19.5 cm)
Package 1 Length	15.75 in (40 cm)

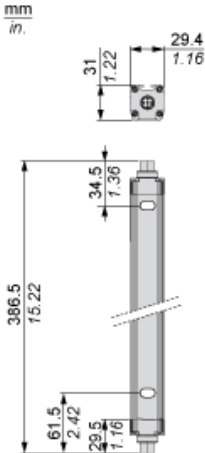
Offer Sustainability

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
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months
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Dimensions



Mounting and Clearance

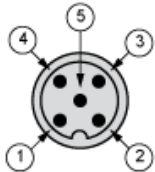


- (1) Insert
- (2) Bracket
- (3) Washer
- (4) Spring washer
- (5) Nut

Wiring Diagrams

Transmitter Connections

Master primary connector at the bottom

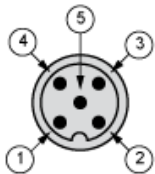


- (1) +24 Vdc
- (2) Configuration_0
- (3) 0 Vdc
- (4) Configuration_1
- (5) FE

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

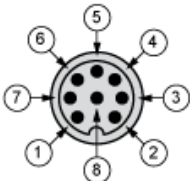
Master secondary connector at the top



- (1) +24 Vdc
- (2) Master/Slave_A
- (3) 0 Vdc
- (4) Master/Slave_B
- (5) FE

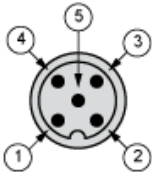
Receiver Connections

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

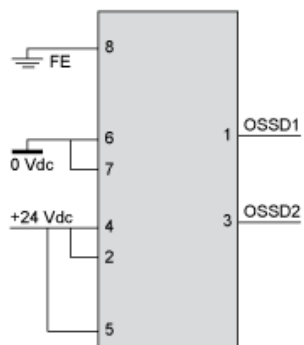


- (1) +24 Vdc
- (2) Master/Slave_A
- (3) 0 Vdc
- (4) Master/Slave_B
- (5) FE

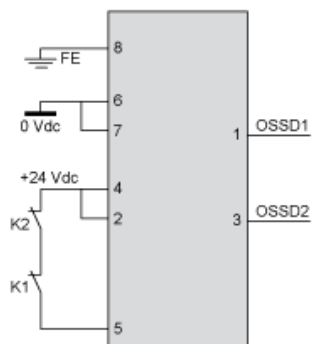
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

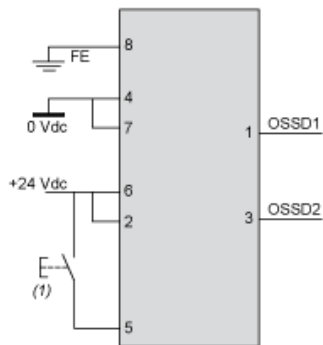


With External Device Monitoring (EDM) feedback loop



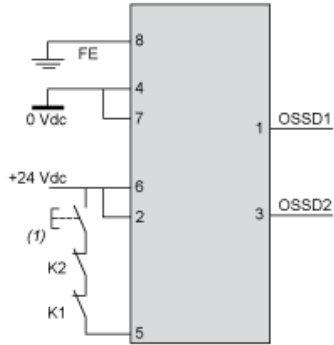
Manual Start/Restart

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 data. On the left, a sidebar titled "Discover XUSL4E14F016N by" contains a list of categories: Characteristics, Dimensions Drawings, Mounting and Clearance, Connections and Schema, and Download & Documents. The "Download & Documents" link is highlighted with a red box and a line pointing to a circled "1". The main content area is titled "Download & Documents 1 to 9 of 9" and lists various documents. The "Application solutions" section is highlighted with a red box, and a line points from a circled "2" to the "Safety light curtains association with safety interfaces" document.

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"