

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 hand protection |
| [R] Resolution | 1.18 in (30 mm) |
| [Sn] nominal sensing distance | 0...12 m by cabling 0...4 m by cabling |
| [Hp] Height protected | 18.11 in (460 mm) |
| Number of beams | 16 |
| 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 | 2.25 lb(US) (1.02 kg) |
| Offer type | Standard distance |
| Topology | Daisy chain master |

Environment

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|---------------------------------------|--|
| Directives | 89/336/EEC - electromagnetic compatibility 98/37/EEC - machinery 2002/95/EC - RoHS directive 89/655/EEC - work equipment 2002/96/EC - WEEE directive |
| Product certifications | CE TÜV CULus |
| 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 IEC 61508 |
| Ambient air temperature for operation | -22...131 °F (-30...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

| | |
|------------------|------------------------|
| Package 1 Weight | 6.80 lb(US) (3.083 kg) |
| Package 1 Height | 1.450 dm |
| Package 1 width | 2.000 dm |
| Package 1 Length | 5.550 dm |

Offer Sustainability

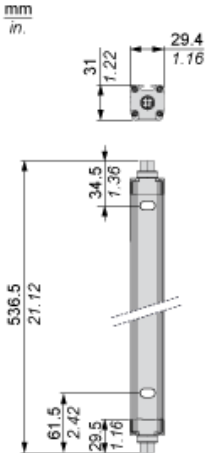
| | |
|--------------------------|-----------------------------------|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |

| | |
|----------------------------|---|
| 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

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|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



Brackets Dimensions



Mounting and Clearance

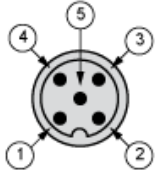


- (1) Insert
- (2) Bracket
- (3) Washer
- (4) Spring washer
- (5) Nut

Wiring Diagrams

Transmitter Connections

Master primary connector at the bottom

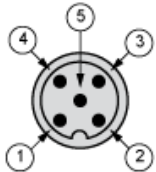


- (1) +24 Vdc
- (2) Configuration_0
- (3) 0 Vdc
- (4) Configuration_1
- (5) FE

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 |

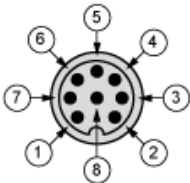
Master secondary connector at the top



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

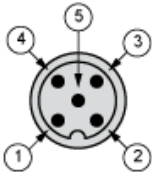
Receiver Connections

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

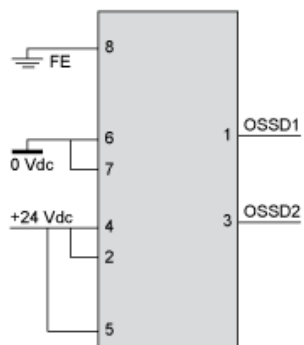


- (1) +24 Vdc
- (2) Master/Slave_A
- (3) 0 Vdc
- (4) Master/Slave_B
- (5) FE

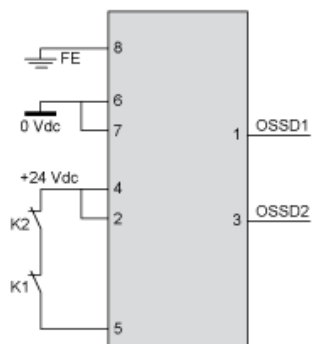
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

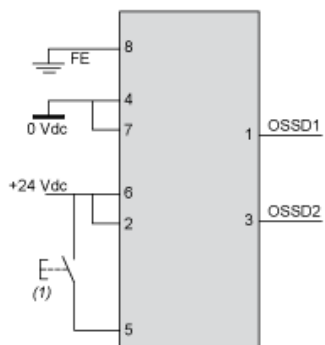


With External Device Monitoring (EDM) feedback loop



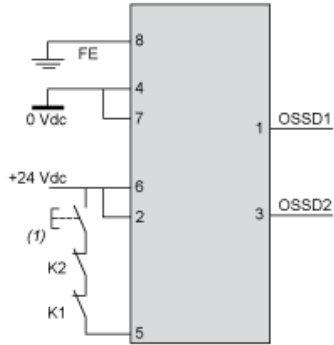
Manual Start/Restart

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 documentation. 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 circled number 1. A vertical line connects this link to the "Download & Documents 1 to 9 of 9" section on the right. This section contains several document entries. The "Application solutions" entry, titled "Safety light curtains association with safety interfaces", is highlighted with a red box and a circled number 2. A vertical line connects this entry to the "Application solutions" section in the list below.

| Download & Documents 1 to 9 of 9 | | | |
|---|-------------------|------------|-------|
| 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"