

## Main

|                                  |  |
|----------------------------------|--|
| Range of product                 | Telemecanique Safety light curtains XUSL                                     |
| Product or component type        | Safety light curtain type 2  |
| Device short name                | XUSL2E   |
| 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    | 9.84...32.81 ft (3...10 m) by cabling<br>0.00...9.84 ft (0...3 m) by cabling |
| [Hp] Height protected            | 29.92 in (760 mm)  |
| Number of beams                  | 38   |
| Type of start / restart          | Automatic<br>Manual  |
| External Device Monitoring (EDM) | Selected by wiring   |

## Complementary

|                                |  |
|--------------------------------|--|
| Detection system               | Transmitter-receiver system  |
| Response time                  | 11 ms  |
| Kit composition                | adjustable mounting bracket(s)<br>1 receiver(s)<br>1 transmitter(s)<br>1 user guide with certificate of conformity on CD-ROM<br>silicone o-ring(s)<br>1 PVC cable(s) |
| [EAA] effective aperture angle | 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<br>Power supply conforming to IEC 60204-1   |
| [Ie] rated operational current | 2 A  |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                |   |
|--------------------------------|---|
| Current consumption            | 42 mA no-load transmitter<br>83 mA no-load receiver<br>42 mA transmitter<br>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<br>2 dual colour LEDs receiver   |
| Electrical connection          | 1 male connector M12 5 pins transmitter<br>1 male connector M12 8 pins receiver   |
| Type of cable                  | Unshielded cable AWG 22 32.81 ft (10 m)   |
| Ohmic cable resistance (per m) | 55.31 mOhm  |
| Function available             | Test<br>Muting through external safety module XPSLCMUT1160<br>LED display of operating modes and faults<br>Anti-condensation system |
| Marking                        | CE  |
| Material                       | PMMA (polymethyl methacrylate) tube<br>Stainless steel AISI 316L sealing plug<br>PVC (polyvinyl chloride): cable                    |
| Housing colour                 | Red RAL 3000  |
| Fixing mode                    | By fixing brackets  |
| Net weight                     | 11.13 lb(US) (5.05 kg)  |
| Offer type                     | Standard distance   |
| Provided equipment             | Without heating system  |

## Environment

|                                       |  |
|---------------------------------------|--|
| Directives                            | 98/37/EEC - machinery<br>2002/95/EC - RoHS directive<br>89/336/EEC - electromagnetic compatibility<br>89/655/EEC - work equipment<br>2002/96/EC - WEEE directive |
| Product certifications                | CE<br>Ecolab<br>CULus<br>TÜV   |
| Safety level (correctly wired)        | Type 2 IEC 61496-1<br>Category 2 EN/ISO 13849-1<br>SIL 1 IEC 61508<br>SILCL 1 IEC 62061<br>PL = c 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 = 4.57E-8 1/h IEC 61508   |
| Ambient air temperature for operation | 14...131 °F (-10...55 °C)<br>-22...131 °F (-30...55 °C)  |
| Ambient air temperature for storage   | -22...158 °F (-30...70 °C)<br>-13...158 °F (-25...70 °C)   |
| Relative humidity                     | 0...95 % without condensation  |
| IP degree of protection               | IP69K  |
| 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             | 13.59 lb(US) (6.166 kg) |

|                  |                   |
|------------------|-------------------|
| Package 1 Height | 5.31 in (13.5 cm) |
| Package 1 width  | 7.68 in (19.5 cm) |
| Package 1 Length | 33.46 in (85 cm)  |

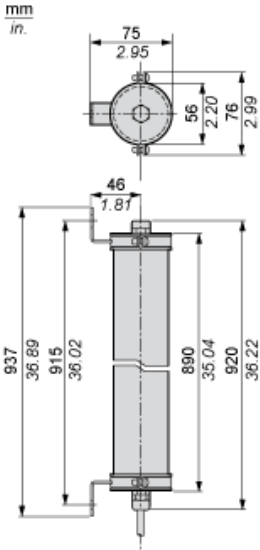
### Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><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

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

Dimensions



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Mounting and Clearance

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## Wiring Diagrams

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### Transmitter Pre-wired

Brown: +24 Vdc

White: Configuration\_0

Blue: 0 Vdc

Green or Black: Configuration\_1

Grey: Functional Earth

Pink: Not connected

### Receiver pre-wired

White: Output signal switching device 1

Brown: +24 Vdc

Green: Output signal switching device 2

Yellow: Configuration\_A

Grey: K1\_K2 Feedback/Restart

Pink: Configuration\_B

Blue: 0 Vdc

Yellow/Green (or Red): Functional Earth

For configuration\_A and configuration\_B, please refer to receiver configuration and operating modes

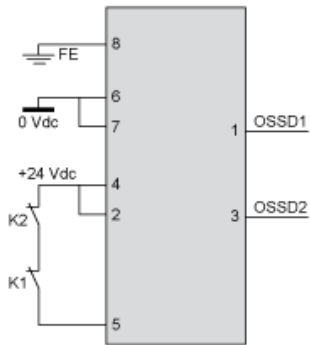
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

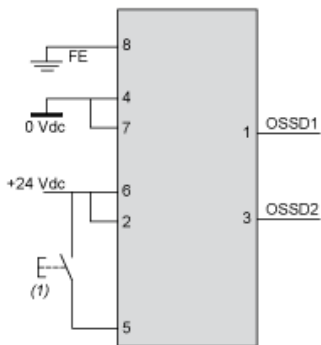


With External Device Monitoring (EDM) feedback loop



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



- 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"