

## Main

|                                  |  |
|----------------------------------|--|
| Range of product                 | Preventa Safety detection  |
| Product or component type        | Safety light curtain type 2  |
| Device short name                | XUSL2E   |
| Output type                      | 2 safety outputs OSSD solid-state PNP (integrated arc suppression) |
| Product specific application     | For hand protection  |
| [R] Resolution                   | 30 mm  |
| [Sn] nominal sensing distance    | 0...4 m by cabling<br>0...12 m by cabling                          |
| [Hp] Height protected            | 1660 mm  |
| Number of beams                  | 83   |
| Type of start / restart          | Automatic<br>Manual  |
| External Device Monitoring (EDM) | Selected by wiring   |

## Complementary

|                                |  |
|--------------------------------|--|
| Detection system               | Transmitter-receiver system  |
| Response time                  | 21 ms  |
| Kit composition                | 1 user guide with certificate of conformity on CD-ROM<br>1 transmitter(s)<br>1 receiver(s)<br>Adjustable mounting bracket(s) |
| [EAA] effective aperture angle | +/- 5 ° at 3 m   |
| Emission                       | IR LED ( $\lambda = 950 \text{ nm}$ )  |
| [Us] rated supply voltage      | 24 V DC (+/- 20 %)   |
| Supply                         | Power supply must meet requirements of IEC 60204-1<br>Power supply must meet requirements of IEC 61496-1                     |
| [Ie] rated operational current | 2 A  |
| Current consumption            | 900 mA with maximum load (receiver)<br>42 mA (transmitter)<br>83 mA no-load (receiver)<br>42 mA no-load (transmitter)        |
| Output current limits          | 0.4 A for safety outputs OSSD  |
| Output voltage                 | 24 V   |
| Output circuit type            | DC   |
| Voltage drop                   | $\leq 0.5 \text{ V}$   |
| Local signalling               | 2 dual colour LEDs (receiver)<br>1 multi-colour LED (transmitter)  |
| Electrical connection          | 1 male connector M12 8 pins (receiver)<br>1 male connector M12 5 pins (transmitter)  |
| Function available             | LED display of operating modes and faults<br>Muting through external safety module XPSLCMUT1160<br>Test                      |
| Marking                        | CE   |
| Material                       | End caps : polypropylene<br>Front panel : polycarbonate<br>Casing : aluminium  |
| Housing colour                 | RAL 3000 : red   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                |                    |
|----------------|--------------------|
| Fixing mode    | By fixing brackets |
| Product weight | 3 kg               |
| Offer type     | Standard distance  |

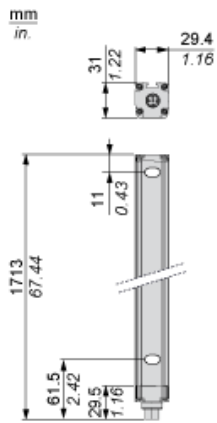
## Environment

|                                       |  |
|---------------------------------------|--|
| Directives                            | 89/336/EEC - electromagnetic compatibility<br>2002/96/EC - WEEE directive<br>2002/95/EC - RoHS directive<br>98/37/EEC - machinery<br>89/655/EEC - work equipment                       |
| Product certifications                | CE<br>CULus<br>TÜV   |
| Safety level (correctly wired)        | PL = d conforming to EN/ISO 13849-1<br>Category 2 conforming to EN/ISO 13849-1<br>SILCL 2 conforming to IEC 62061<br>SIL 2 conforming to IEC 61508<br>Type 2 conforming to IEC 61496-1 |
| Optical characteristic                | Resistance to light disturbance conforming to EN/IEC 61496-2   |
| Mission time                          | 20 yr  |
| Safety reliability data               | PFHd = 8.35E-8 1/h conforming to IEC 61508   |
| Ambient air temperature for operation | -10...55 °C<br>14...131 °F   |
| Ambient air temperature for storage   | -25...70 °C<br>-13...158 °F  |
| Relative humidity                     | <= 95 % without condensation   |
| IP degree of protection               | IP67<br>IP65   |
| Shock resistance                      | 10 gn for 16 ms conforming to IEC 61496-1  |

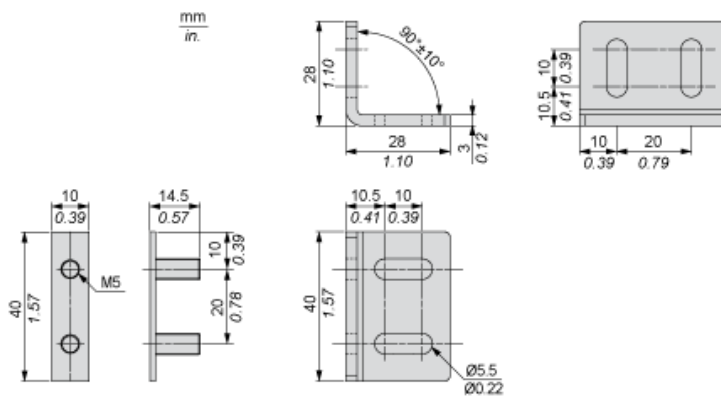
## Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 1425 - <a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold                                     |
| Product environmental profile    | Available <a href="#">Download Product Environmental</a>                              |
| Product end of life instructions | Available <a href="#">Download End Of Life Manual</a>                                 |

Dimensions



Brackets Dimensions



Mounting and Clearance



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

Wiring Diagrams

Transmitter Connections

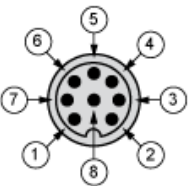


- (1) +24 Vdc
- (2) Configuration\_0
- (3) 0 Vdc
- (4) Configuration\_1
- (5) FE

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

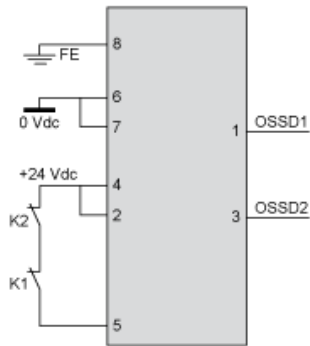
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

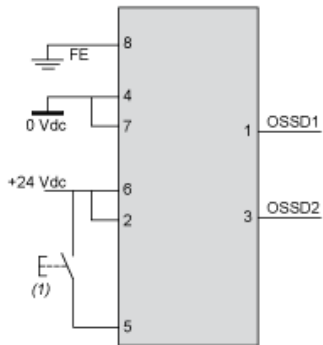


With External Device Monitoring (EDM) feedback loop



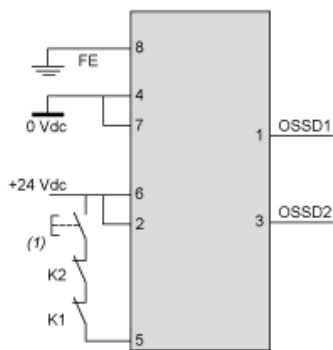
### Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

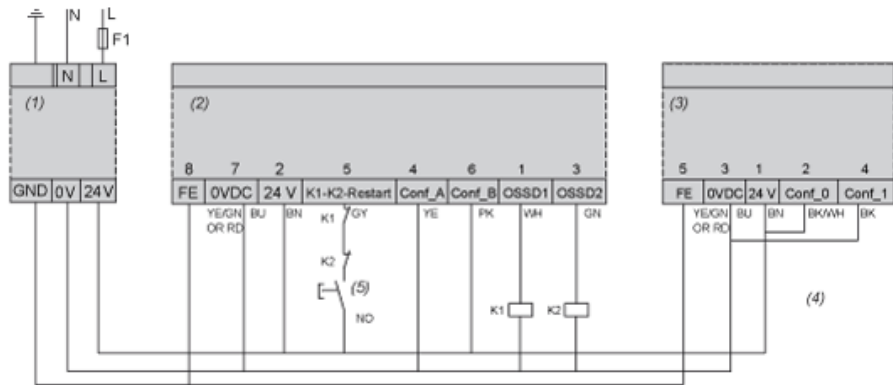
### Connection Schematics

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#### Standalone Application

XUSL2E light curtains are conforming to Type 2 (IEC 61496-1), SIL2 (IEC 61508) - SILCL2 (IEC 62061) and PLd- Cat.2 (EN ISO 13849-1:2008)

Example of wiring diagram with manual start, external device monitoring and low range



- (1) Power supply
- (2) XUSL Receiver
- (3) XUSL transmitter
- (4) Low range
- (5) Start

The contactors K1/K2 must have :

- \* Normally closed mirror contact, according to IEC 60947-4-1 for power contactors
- \* Linked contacts (or force guided contacts), according to IEC 60947-5-1 or EN 50205 for auxiliary contactors or control relays