

## 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   |

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

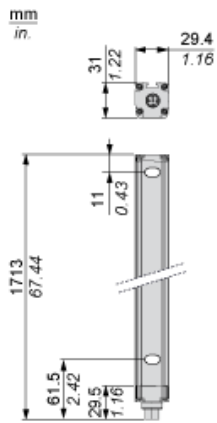
## Offer Sustainability

|                                  |   |
|----------------------------------|---|
| 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>                                 |

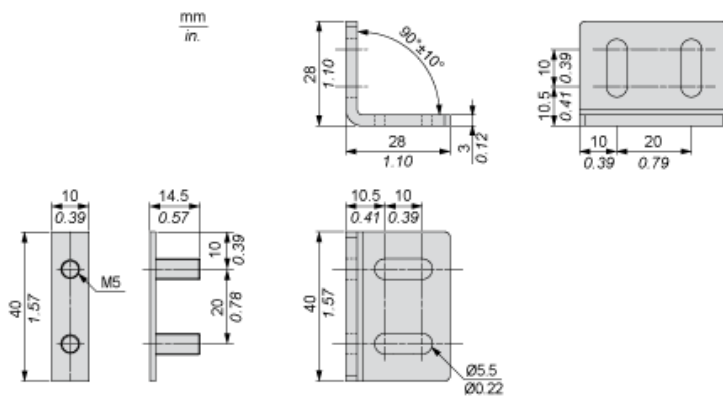
## Contractual warranty

|        |           |
|--------|-----------|
| Period | 18 months |
|--------|-----------|

Dimensions



Brackets Dimensions



Mounting and Clearance



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

Wiring Diagrams

Transmitter Connections

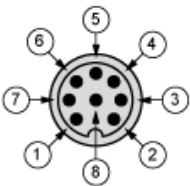


- (1) +24 Vdc
- (2) Configuration\_0
- (3) 0 Vdc
- (4) Configuration\_1
- (5) FE

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

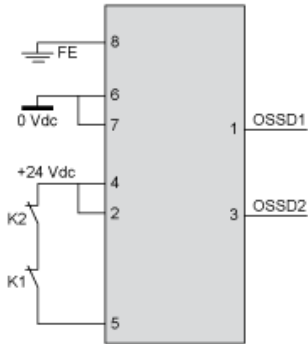
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop



With External Device Monitoring (EDM) feedback loop



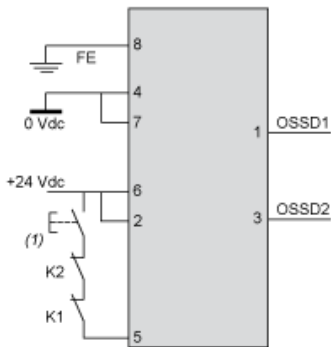
### Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

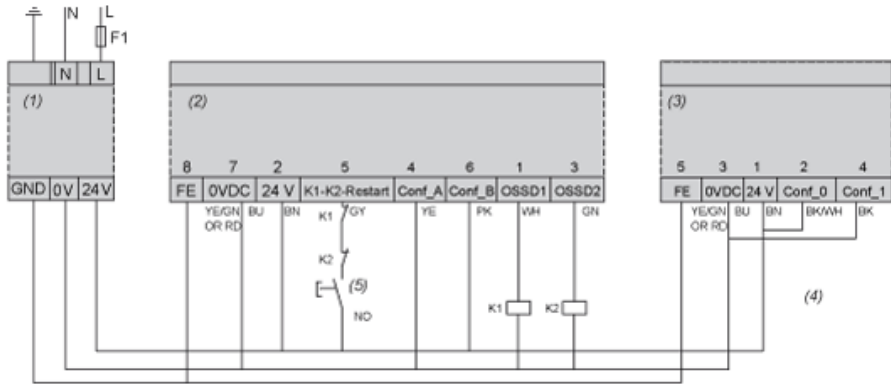
### Connection Schematics

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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