

## Main

|                                       |  |
|---------------------------------------|--|
| Range of product                      | Preventa Safety detection  |
| Product or component type             | Safety light curtain type 4  |
| Device short name                     | XUSL4E   |
| Output type                           | 2 safety outputs OSSD solid-state PNP (integrated arc suppression) |
| Product specific application          | For finger protection  |
| Minimum object diameter for detection | 14 mm  |
| [Sn] nominal sensing distance         | 1...5 m by cabling<br>0...2 m by cabling                           |
| Height protected                      | 310 mm   |
| Number of beams                       | 30   |
| Type of start                         | Automatic<br>Manual  |
| Control type                          | Selected by wiring   |

## Complementary

|                                |  |
|--------------------------------|--|
| Detection system               | Transmitter-receiver system  |
| Response time                  | 5.5 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 | +/- 2.5 ° 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 61496-1<br>Power supply must meet requirements of IEC 60204-1   |
| [Ie] rated operational current | 2 A  |
| Current consumption            | 42 mA no-load (transmitter)  |

|                        |   |
|------------------------|---|
|                        | 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  |
| Voltage drop           | <= 0.5 V  |
| Maximum power          | 10 W  |
| 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          | AWG 22 unshielded cable of 10 m   |
| Ohmic cable resistance | 55.31 mOhm  |
| Function available     | Muting through external safety module XPSLCMUT1160<br>LED display of operating modes and faults<br>Anti-condensation system<br>Test |
| Marking                | CE  |
| Material               | Tube : PMMA (polymethyl methacrylate)<br>Sealing plug : stainless steel AISI 316L<br>Cable : PVC (polyvinyl chloride)               |
| Housing colour         | RAL 3000 : red  |
| Fixing mode            | By fixing brackets  |
| Product weight         | 3.56 kg   |
| Offer type             | Standard distance   |
| Provided equipment     | With heating system   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Directives                            | 98/37/EEC - machinery<br>2002/96/EC - WEEE directive<br>89/655/EEC - work equipment<br>89/336/EEC - electromagnetic compatibility<br>2002/95/EC - RoHS directive                       |
| Product certifications                | CE<br>TÜV<br>cULus   |
| Safety level                          | SIL 3 conforming to IEC 61508<br>Type 4 conforming to IEC 61496-1<br>SILCL 3 conforming to IEC 62061<br>Category 4 conforming to EN/ISO 13849-1<br>PL = e conforming to EN/ISO 13849-1 |
| Environmental characteristic          | Resistance to light disturbance conforming to EN/IEC 61496-2   |
| Service life                          | 20 yr  |
| Safety reliability data               | PFHd = 8.20E-9 1/h conforming to IEC 61508   |
| Ambient air temperature for operation | -13...131 °F<br>-25...55 °C  |
| Ambient air temperature for storage   | -25...70 °C<br>-13...158 °F  |
| Relative humidity                     | <= 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  |

## Offer Sustainability

|                          |   |
|--------------------------|---|
| Sustainable offer status | Green Premium product   |
| RoHS (date code: YYWW)   | Compliant - since 1425 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                    | Reference not containing SVHC above the threshold   |

Reference not containing SVHC above the threshold

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|----------------------------------|--|
| Product environmental profile    | Available<br><a href="#">Product environmental</a> |
| Product end of life instructions | Available<br><a href="#">End of life manual</a>    |

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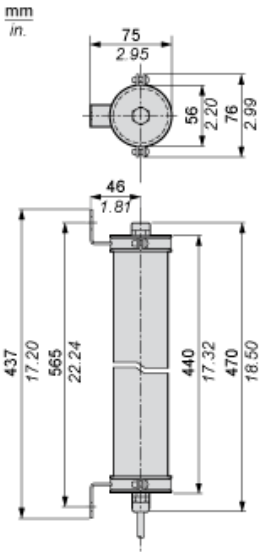
### Contractual warranty

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

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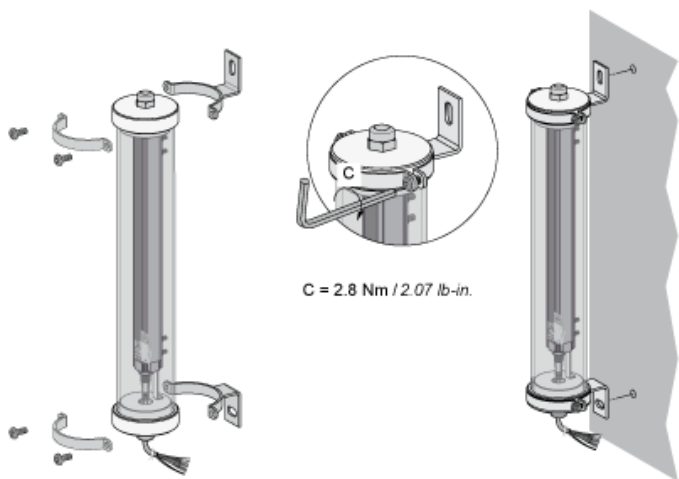
Dimensions



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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

Yellow: 0 Vdc (Heating system)

Red: +24 Vac/Vdc (Heating system)

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

Black: 0 Vdc (Heating system)

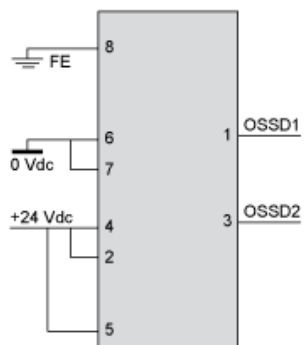
Violet: 24 Vac/Vdc (Heating system)

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

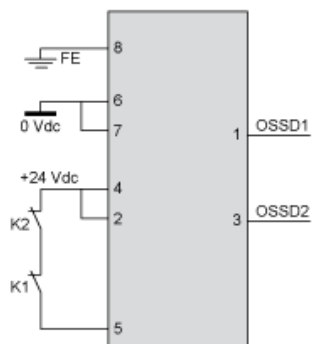
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

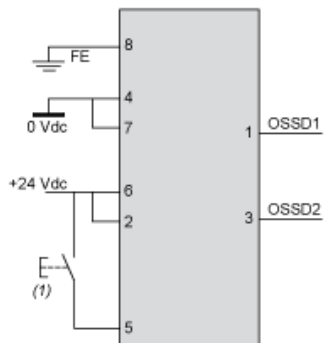


With External Device Monitoring (EDM) feedback loop



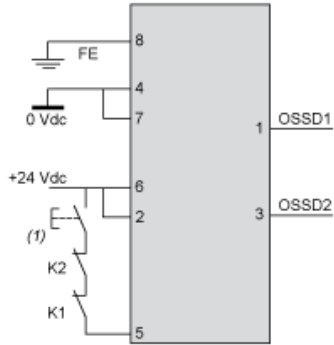
Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



(1) Restart

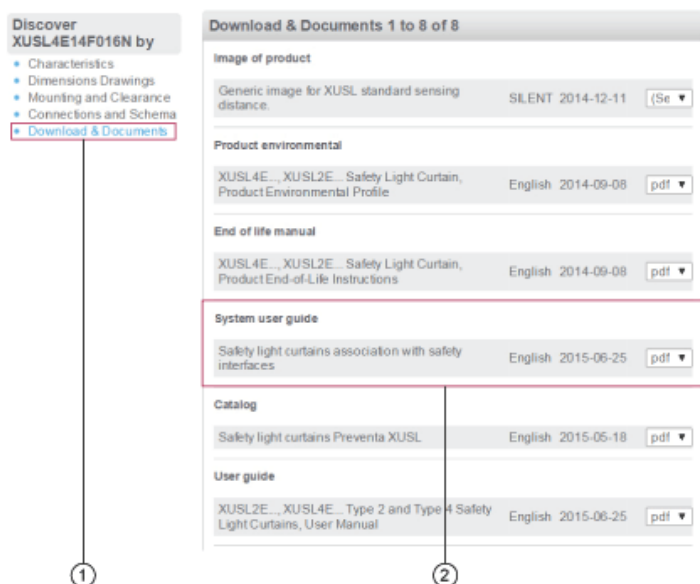
With External Device Monitoring (EDM) feedback loop



(1) Restart



Connecting to a Safety Interface



- 1 : Click on Download & Documents
- 2 : Click on System user guide

To have all connection schematics concerning our safety module, select "download and document" and download the file "Safety light curtains association with safety interfaces"