

## 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 (arc suppression) |
| Product specific application     | For hand protection                                     |
| [R] Resolution                   | 30 mm                                                   |
| [Sn] nominal sensing distance    | 3...20 m by cabling<br>0...10 m by cabling              |
| [Hp] Height protected            | 460 mm                                                  |
| Number of beams                  | 23                                                      |
| Type of start / restart          | Automatic<br>Manual                                     |
| External Device Monitoring (EDM) | Selected by wiring                                      |

## Complementary

|                                |                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Detection system               | Transmitter-receiver system                                                                                                  |
| Response time                  | 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 |
| [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<br>Power supply conforming to IEC 60204-1                                             |
| [Ie] rated operational current | 2 A                                                                                                                          |
| Current consumption            | 42 mA no-load transmitter<br>83 mA no-load receiver<br>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<br>2 dual colour LEDs receiver                                           |
| Electrical connection | 1 male connector M12 5 pins transmitter<br>1 male connector M12 8 pins receiver                         |
| Function available    | Test<br>Muting through external safety module XPSLCMUT1160<br>LED display of operating modes and faults |
| Marking               | CE                                                                                                      |
| Material              | Aluminium: casing<br>Polycarbonate: front panel<br>Polypropylene: end caps                              |
| Housing colour        | Red RAL 3000                                                                                            |
| Fixing mode           | By fixing brackets                                                                                      |
| Net weight            | 1 kg                                                                                                    |
| Offer type            | Long distance                                                                                           |

## Environment

|                                       |                                                                                                                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Directives                            | 89/655/EEC - work equipment<br>2002/96/EC - WEEE directive<br>89/336/EEC - electromagnetic compatibility<br>2002/95/EC - RoHS directive<br>98/37/EEC - machinery                       |
| Product certifications                | TÜV<br>CULus<br>CE                                                                                                                                                                     |
| Safety level (correctly wired)        | Type 4 conforming to IEC 61496-1<br>SIL 3 conforming to IEC 61508<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 |
| 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 conforming to IEC 61508                                                                                                                                             |
| Ambient air temperature for operation | -20...55 °C<br>-10...55 °C                                                                                                                                                             |
| Ambient air temperature for storage   | -35...70 °C<br>-25...70 °C                                                                                                                                                             |
| Relative humidity                     | 0...95 % without condensation                                                                                                                                                          |
| IP degree of protection               | IP65<br>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                                                                                                                             |

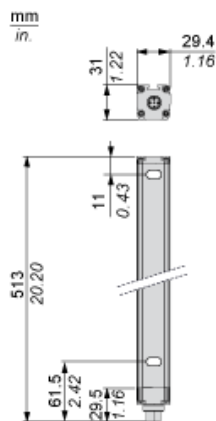
## Offer Sustainability

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

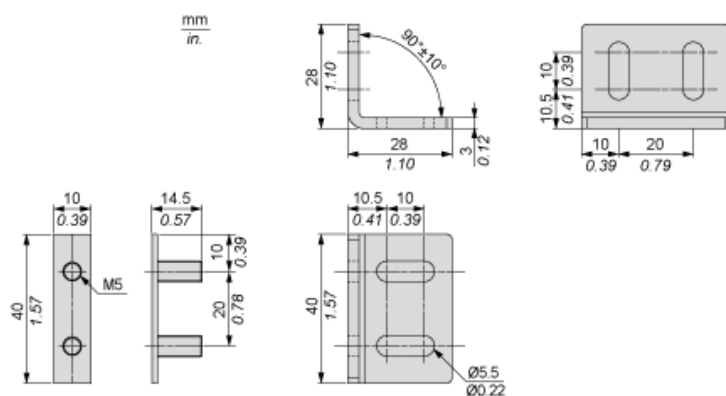
Contractual warranty

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

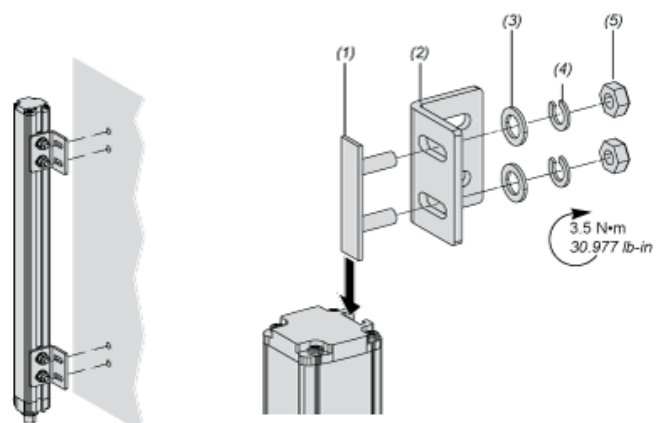
Dimensions



Brackets Dimensions



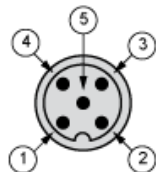
Mounting and Clearance



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

Wiring Diagrams

Transmitter Connections

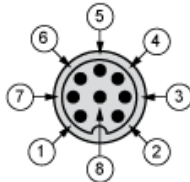


- (1) +24 Vdc
- (2) Configuration\_0
- (3) 0 Vdc
- (4) Configuration\_1
- (5) FE

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

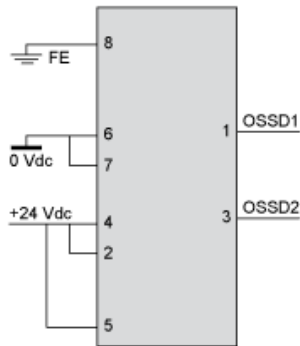


- (1) OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration\_A
- (5) K1\_K2 Feeback/Restart
- (6) Configuration\_B
- (7) 0 Vdc
- (8) FE

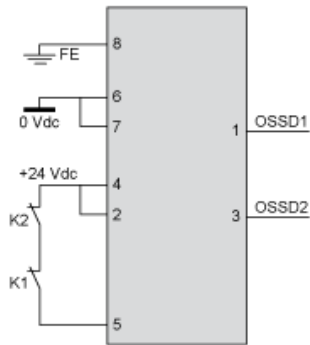
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

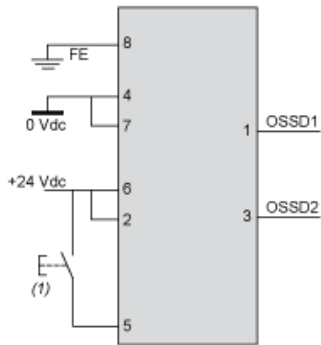


With External Device Monitoring (EDM) feedback loop



Manual Start/Restart

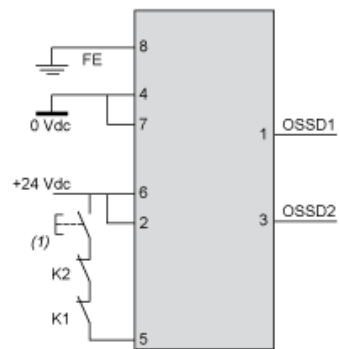
Without External Device Monitoring (EDM) feedback loop



(1) Restart

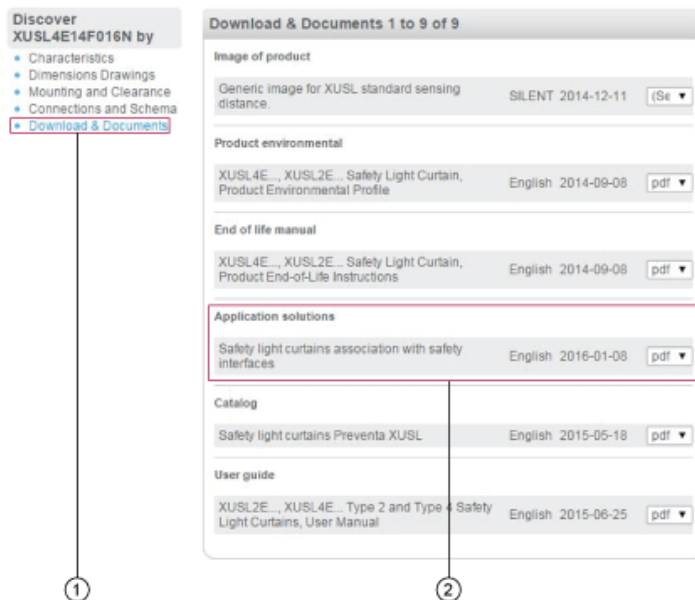


With External Device Monitoring (EDM) feedback loop



(1) Restart

## 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"