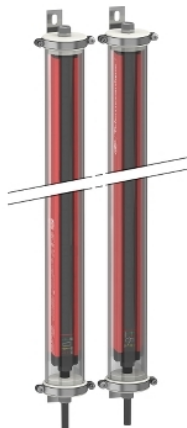


# XUSL4E14F031NWC

Safety light curtain type 4, Telemecanique  
Safety light curtains XUSL, XUSL Finger IP69K  
w/o Heating, Std Sensing Range, Hp = 310  
mm, R=14 mm



## Main

|                                  |   |
|----------------------------------|---|
| Range of product                 | Telemecanique Safety light curtains XUSL                |
| 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 finger protection                                   |
| [R] Resolution                   | 14 mm   |
| [Sn] nominal sensing distance    | 1...5 M by cabling<br>0...2 m by cabling                |
| [Hp] Height protected            | 310 mm  |
| Number of beams                  | 30  |
| Type of start / restart          | Automatic<br>Manual                                     |
| External Device Monitoring (EDM) | 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 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<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 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                                  |

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 TWISS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                    |  |
|--------------------|--|
| 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         | 3.56 kg  |
| Offer type         | Standard distance  |
| Provided equipment | Without heating system   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Directives                            | 89/655/EEC - work equipment<br>89/336/EEC - electromagnetic compatibility<br>98/37/EEC - machinery   |
| Product certifications                | Ecolab[RETURN]CE[RETURN]cULus[RETURN]TÜV   |
| 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 = 8.20E-9 1/h conforming to IEC 61508   |
| Ambient air temperature for operation | -20...55 °C<br>14...131 °F   |
| Ambient air temperature for storage   | -13...158 °F<br>-30...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 Height             | 13.5 cm  |
| Package 1 Width              | 19.5 cm  |
| Package 1 Length             | 40.0 cm  |
| Package 1 Weight             | 4.343 kg |

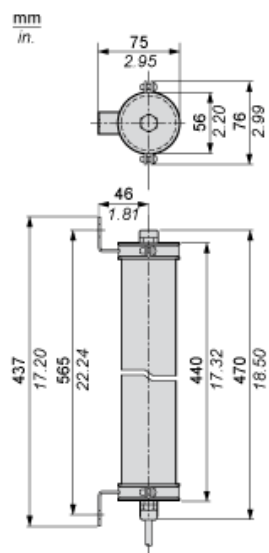
## Offer Sustainability

|  |   |
|--|---|
| Sustainable offer status                   | Green Premium product   |
| Toxic heavy metal free                     | Yes   |
| California proposition 65                  | WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>  |

## Contractual warranty

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

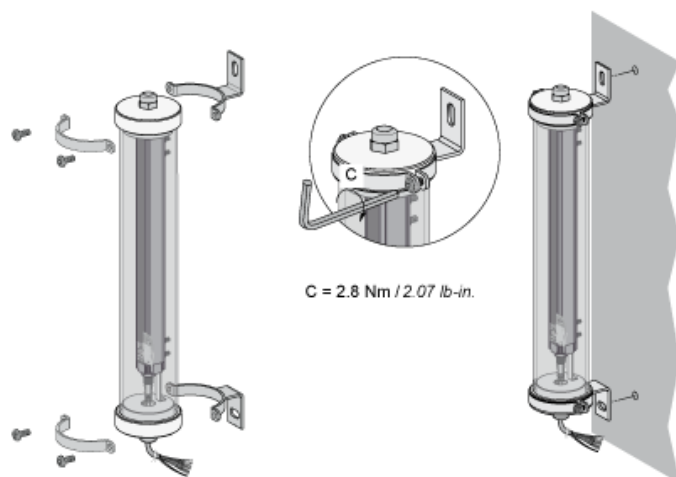
## Dimensions



---

Mounting and Clearance

---



## Wiring Diagrams

### 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

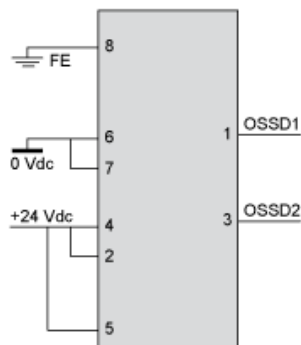
Yellow/Green (or Red): Functional Earth

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

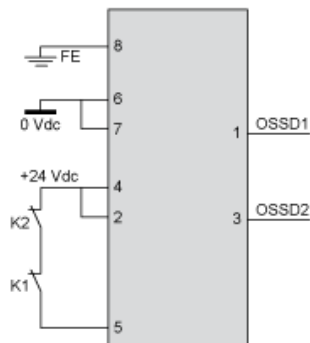
## Receiver Configurations and Operating Modes

### 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



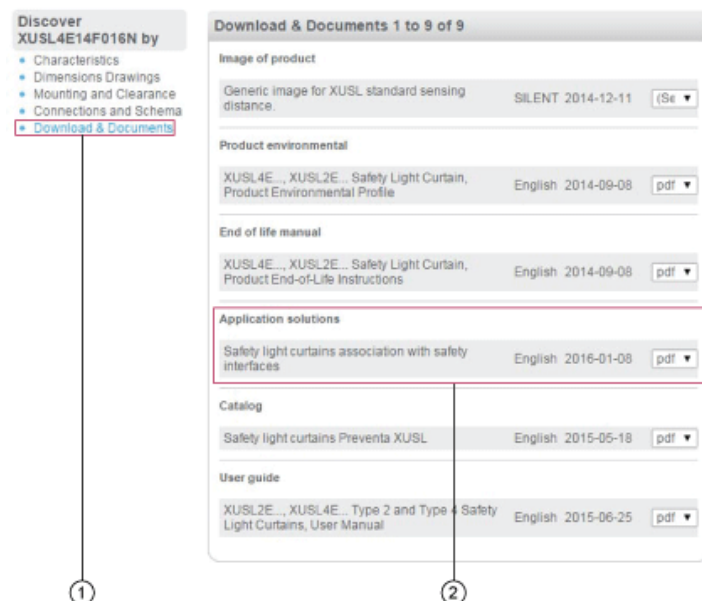
(1) Restart

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"