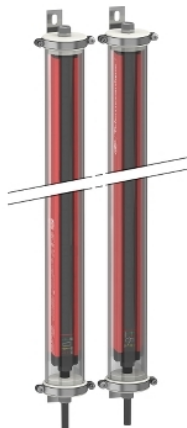


# XUSL4E14F031NWH

Safety light curtain type 4, Telemecanique  
Safety light curtains XUSL, XUSL Finger IP69K  
with 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 0...2 m by cabling
[Hp] Height protected	310 mm
Number of beams	30
Type of start / restart	Automatic 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) 1 receiver(s) 1 transmitter(s) 1 user guide with certificate of conformity on CD-ROM Silicone o-ring(s) 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 Power supply conforming to IEC 60204-1
[Ie] rated operational current	2 A
Current consumption	42 mA no-load transmitter 83 mA no-load receiver 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
Maximum Heating system power consumption	10 W
Local signalling	1 multi-colour LED transmitter 2 dual colour LEDs receiver
Electrical connection	1 male connector M12 5 pins transmitter 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 Muting through external safety module XPSLCMUT1160 LED display of operating modes and faults Anti-condensation system
Marking	CE
Material	PMMA (polymethyl methacrylate): tube Stainless steel AISI 316L: sealing plug 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	With heating system

## Environment

Directives	98/37/EEC - machinery 89/655/EEC - work equipment 89/336/EEC - electromagnetic compatibility
Product certifications	CE[RETURN]Ecolab[RETURN]cULus[RETURN]TÜV
Safety level (correctly wired)	Type 4 conforming to IEC 61496-1 SIL 3 conforming to IEC 61508 SILCL 3 conforming to IEC 62061 Category 4 conforming to EN/ISO 13849-1 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	-30...55 °C -25...55 °C
Ambient air temperature for storage	-30...70 °C -25...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

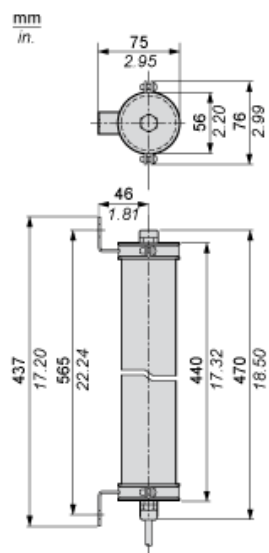
## Offer Sustainability

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
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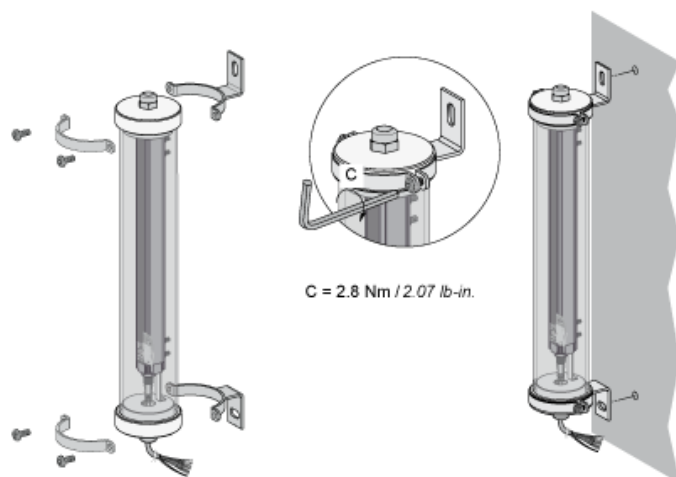
## Dimensions



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Mounting and Clearance

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## Wiring Diagrams

### 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)

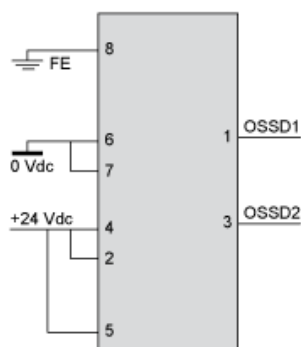
Violet: 24 Vac/Vdc (Heating system)

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

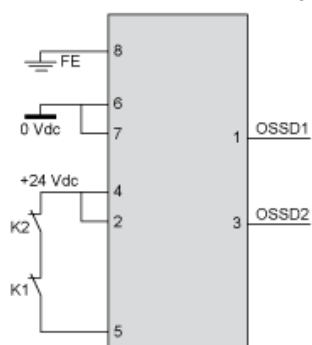
## Receiver Configurations and Operating Modes

### 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



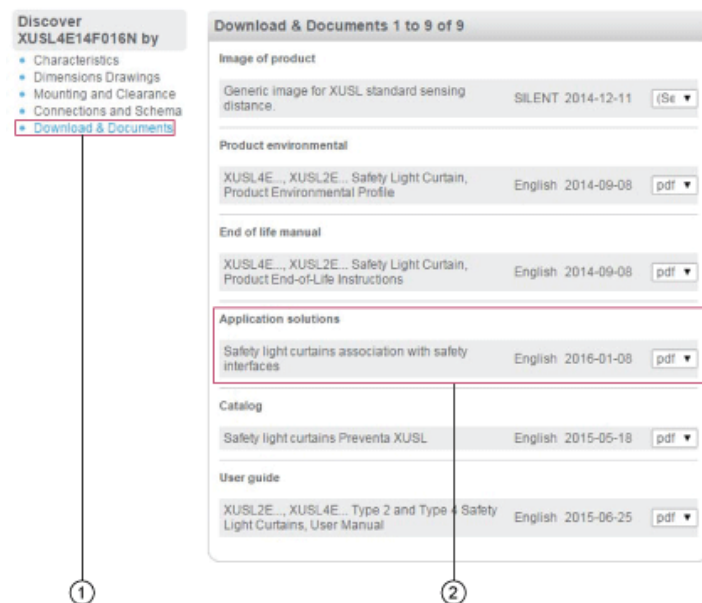
(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

## Connecting to a Safety Interface



1 : Click on Download & Documents

2 : Click on 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"