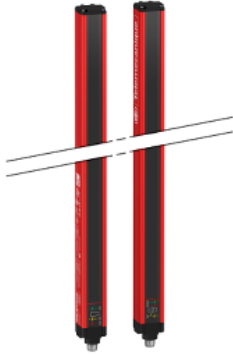


# Product data sheet

Specifications



## Safety light curtain type 4, Telemecanique Safety light curtains XUSL, XUSL Finger protection, Std sensing range, Hp = 460 mm, R=14 mm

XUSL4E14F046N

### 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...6 m by cabling 0...3 m by cabling
[Hp] Height protected	460 mm
Number of beams	45
Type of start / restart	Manual Automatic
External Device Monitoring (EDM)	Selected by wiring

### Complementary

Detection system	Transmitter-receiver system
Response time	7.5 ms
Kit composition	adjustable mounting bracket(s) 1 receiver(s) 1 transmitter(s) 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 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

<b>Output circuit type</b>	DC
<b>Maximum voltage drop</b>	<0.5 V
<b>Local signalling</b>	1 multi-colour LED transmitter 2 dual colour LEDs receiver
<b>Electrical connection</b>	1 male connector M12 5 pins transmitter 1 male connector M12 8 pins receiver
<b>Function available</b>	Test Muting through external safety module XPSLCMUT1160 LED display of operating modes and faults
<b>Marking</b>	CE
<b>Material</b>	Aluminium: casing Polycarbonate: front panel Polypropylene: end caps
<b>Housing colour</b>	Red RAL 3000
<b>Fixing mode</b>	By fixing brackets
<b>Net weight</b>	1 kg
<b>Offer type</b>	Standard distance

## Environment

<b>Directives</b>	89/655/EEC - work equipment 89/336/EEC - electromagnetic compatibility 98/37/EEC - machinery
<b>Product certifications</b>	TÜV cULus CE
<b>Safety level (correctly wired)</b>	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
<b>Optical characteristic</b>	Resistance to light disturbance conforming to EN/IEC 61496-2
<b>Mission time</b>	20 year(s)
<b>Safety reliability data</b>	PFHd = 1.52E-8 1/h conforming to IEC 61508
<b>Ambient air temperature for operation</b>	-10...55 °C -20...55 °C
<b>Ambient air temperature for storage</b>	-25...70 °C -35...70 °C
<b>Relative humidity</b>	0...95 % without condensation
<b>IP degree of protection</b>	IP65 IP67
<b>Shock resistance</b>	10 gn for 16 ms conforming to IEC 61496-1
<b>Vibration resistance</b>	0.35 +/- 0.05 mm (f= 10...55 Hz) conforming to IEC 61496-1

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	14.2 cm
<b>Package 1 Width</b>	19.8 cm
<b>Package 1 Length</b>	54.6 cm
<b>Package 1 Weight</b>	1.896 kg
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	50 cm

Package 2 Width	60 cm
Package 2 Length	80 cm
Package 2 Weight	25.5 kg

## Offer Sustainability

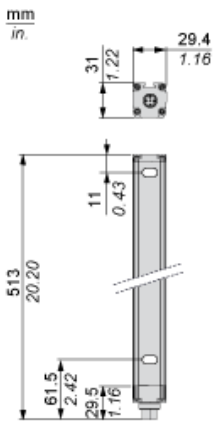
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
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>

## Contractual warranty

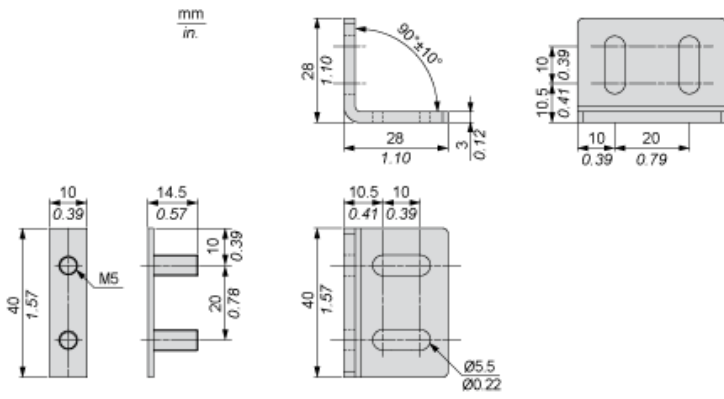
Warranty	18 months
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Dimensions

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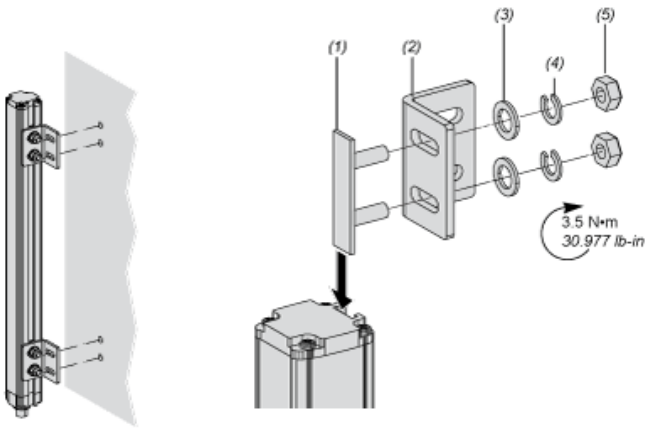


Brackets Dimensions



Mounting and Clearance

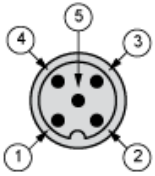
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- (1) Insert
- (2) Bracket
- (3) Washer
- (4) Spring washer
- (5) Nut

**Wiring Diagrams**

**Transmitter Connections**

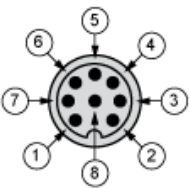


- (1) +24 Vdc
- (2) Configuration\_0
- (3) 0 Vdc
- (4) Configuration\_1
- (5) FE

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**

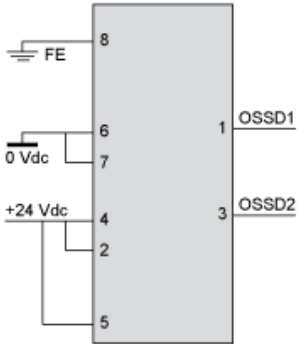


- (1) OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration\_A
- (5) K1\_K2 Feedback/Restart
- (6) Configuration\_B
- (7) 0 Vdc
- (8) FE

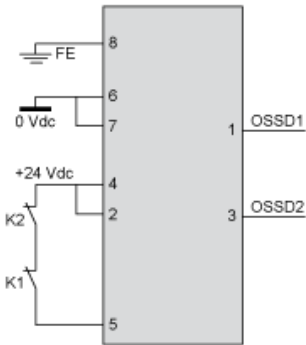
**Receiver Configurations and Operating Modes**

**Automatic Start/Restart**

Without External Device Monitoring (EDM) feedback loop

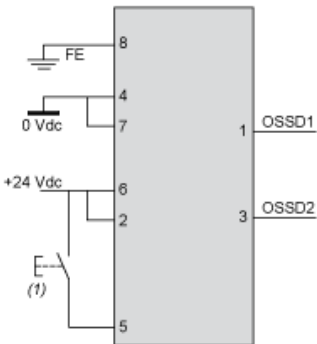


With External Device Monitoring (EDM) feedback loop



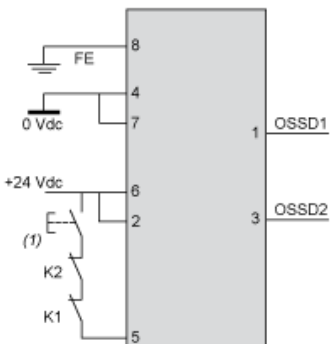
**Manual Start/Restart**

Without External Device Monitoring (EDM) feedback loop



(1) Restart

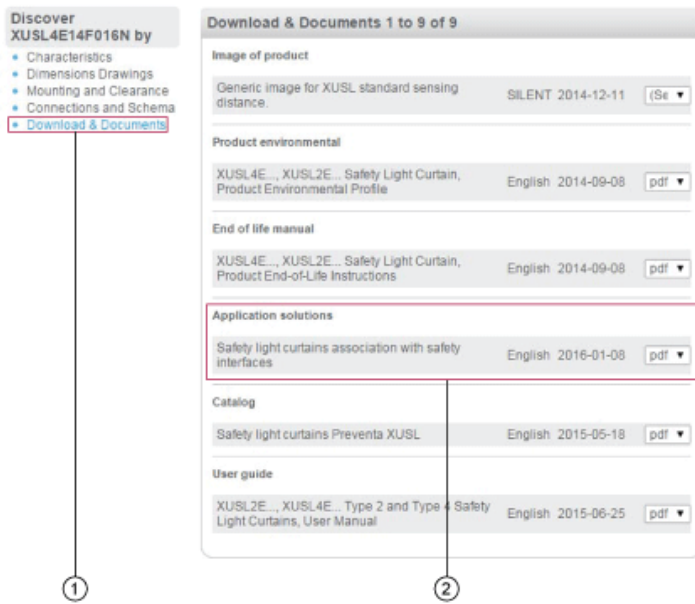
With External Device Monitoring (EDM) feedback loop



(1) Restart



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"

Recommended replacement(s)