

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 0...2 m by cabling
Height protected	310 mm
Number of beams	30
Type of start	Manual Automatic
Control type	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 ($\lambda = 950 \text{ nm}$)
[Us] rated supply voltage	24 V DC (+/- 20 %)
Supply	Power supply must meet requirements of IEC 61496-1 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) 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
Voltage drop	<= 0.5 V
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	AWG 22 unshielded cable of 10 m
Ohmic cable resistance	55.31 mOhm
Function available	Muting through external safety module XPSLCMUT1160 LED display of operating modes and faults Anti-condensation system Test
Marking	CE
Material	Tube : PMMA (polymethyl methacrylate) Sealing plug : stainless steel AISI 316L 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	Without heating system

Environment

Directives	98/37/EEC - machinery 2002/96/EC - WEEE directive 89/336/EEC - electromagnetic compatibility 2002/95/EC - RoHS directive 89/655/EEC - work equipment
Product certifications	CULus CE TÜV
Safety level	SIL 3 conforming to IEC 61508 Type 4 conforming to IEC 61496-1 SILCL 3 conforming to IEC 62061 Category 4 conforming to EN/ISO 13849-1 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	-10...55 °C 14...131 °F
Ambient air temperature for storage	-25...70 °C -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 Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

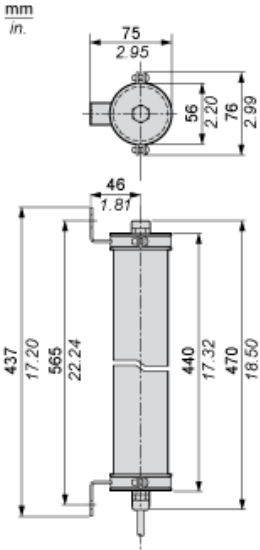
Reference not containing SVHC above the threshold

Product environmental profile	Available Product environmental
Product end of life instructions	Available End of life manual

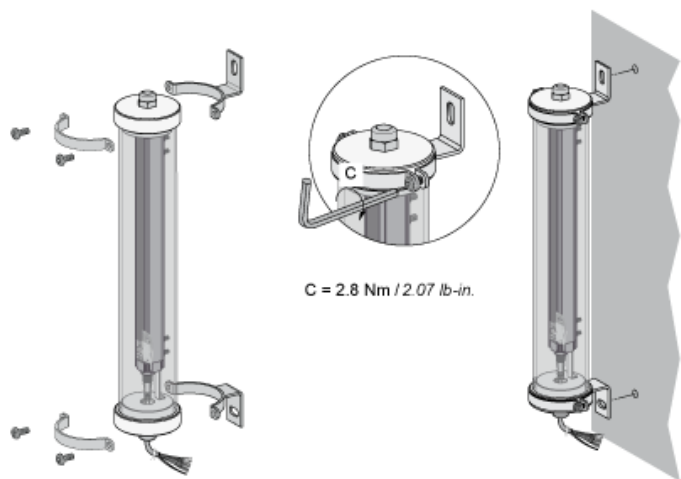
Contractual warranty

Warranty period	18 months
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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

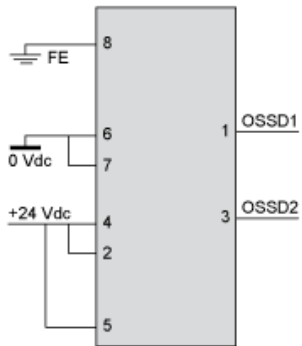
Yellow/Green (or Red): Functional Earth

For configuration_A and configuration_B, please refer to receiver configuration and operating modes

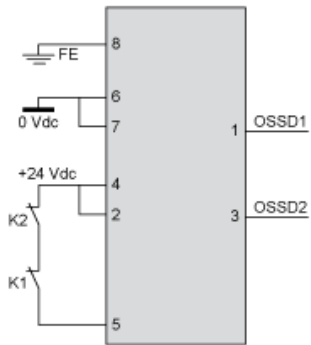
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

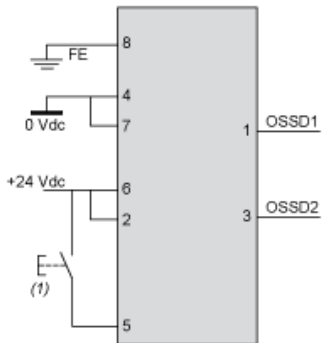


With External Device Monitoring (EDM) feedback loop



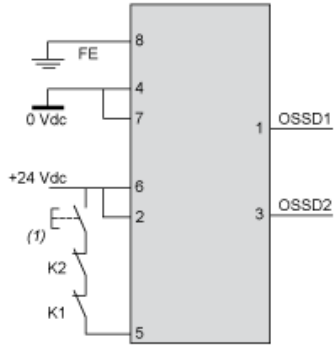
Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

Connecting to a Safety Interface

The screenshot shows a product page for XUSL4E14F016N. On the left, a navigation menu lists: Characteristics, Dimensions Drawings, Mounting and Clearance, Connections and Schema, and Download & Documents. The 'Download & Documents' item is highlighted with a red box and labeled with a circled '1'. On the right, the 'Download & Documents 1 to 8 of 8' section lists various documents. The 'System user guide' entry, titled 'Safety light curtains association with safety interfaces', is highlighted with a red box and labeled with a circled '2'. Other documents include 'Image of product', 'Product environmental', 'End of life manual', 'Catalog', and 'User guide'.

- 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"