

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...6 m by cabling 0...3 m by cabling
Height protected	1660 mm
Number of beams	165
Type of start	Automatic Manual
Control type	Selected by wiring

Complementary

Detection system	Transmitter-receiver system
Response time	22 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 ($\lambda = 950 \text{ nm}$)
[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)
Function available	Muting through external safety module XPSLCMUT1160 LED display of operating modes and faults Test
Marking	CE
Material	Front panel : polycarbonate End caps : polypropylene Casing : aluminium
Housing colour	RAL 3000 : red
Fixing mode	By fixing brackets
Product weight	3 kg
Offer type	Standard distance

Environment

Directives	89/336/EEC - electromagnetic compatibility 2002/96/EC - WEEE directive 2002/95/EC - RoHS directive 98/37/EEC - machinery 89/655/EEC - work equipment
Product certifications	TÜV cULus CE
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 = 3.48E-8 1/h conforming to IEC 61508
Ambient air temperature for operation	14...131 °F -10...55 °C
Ambient air temperature for storage	-13...158 °F -25...70 °C
Relative humidity	<= 95 % without condensation
IP degree of protection	IP65 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

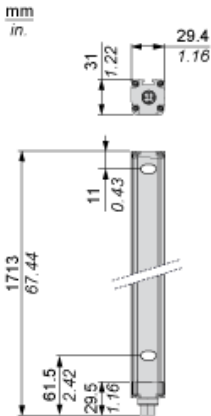
Offer Sustainability

Sustainable offer status	Green Premium product
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

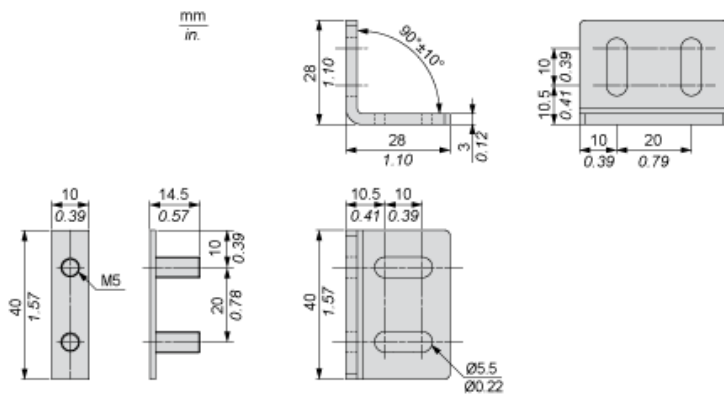
Contractual warranty

Warranty period	18 months
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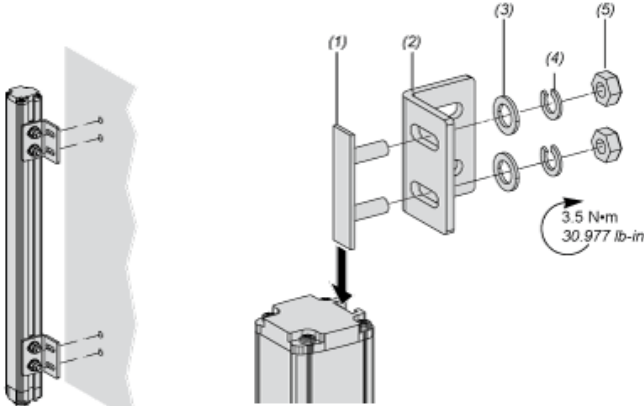
Dimensions



Brackets Dimensions



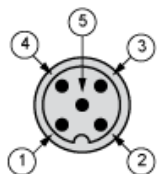
Mounting and Clearance



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

Wiring Diagrams

Transmitter Connections

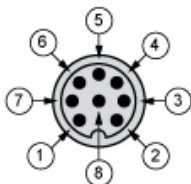


- (1) +24 Vdc
- (2) Configuration_0
- (3) 0 Vdc
- (4) Configuration_1
- (5) FE

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

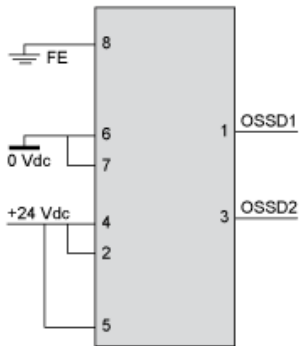


- (1) OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration_A
- (5) K1_K2 Feedback/Restart
- (6) Configuration_B
- (7) 0 Vdc
- (8) FE

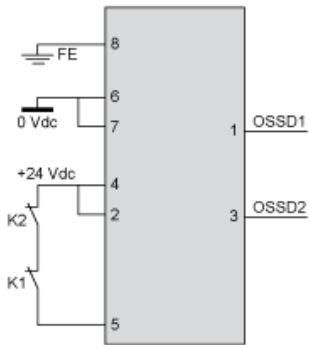
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

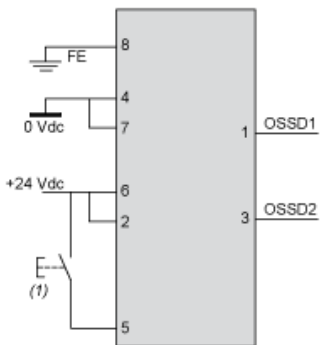


With External Device Monitoring (EDM) feedback loop



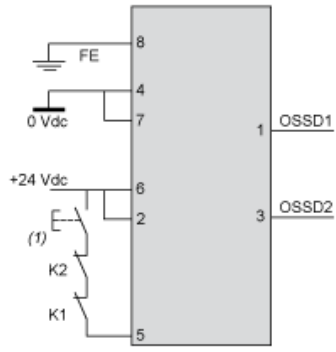
Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

Connecting to a Safety Interface

The screenshot shows a product page for XUSL4E14F016N. On the left, under 'Discover XUSL4E14F016N by', there is a list of categories: Characteristics, Dimensions Drawings, Mounting and Clearance, Connections and Schema, and Download & Documents. The 'Download & Documents' link is highlighted with a red box and labeled with a circled '1'. A vertical line connects this link to the 'Download & Documents 1 to 8 of 8' section on the right. This section contains several document entries. 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'. Below this, there are entries for 'Catalog' and 'User guide'.

Section	Document Title	Language	Date	Action
Image of product	Generic image for XUSL standard sensing distance.	SILENT	2014-12-11	(Se ▼)
Product environmental	XUSL4E..., XUSL2E... Safety Light Curtain, Product Environmental Profile	English	2014-09-08	pdf ▼
End of life manual	XUSL4E..., XUSL2E... Safety Light Curtain, Product End-of-Life Instructions	English	2014-09-08	pdf ▼
System user guide	Safety light curtains association with safety interfaces	English	2015-06-25	pdf ▼
Catalog	Safety light curtains Preventa XUSL	English	2015-05-18	pdf ▼
User guide	XUSL2E..., XUSL4E... Type 2 and Type 4 Safety Light Curtains, User Manual	English	2015-06-25	pdf ▼

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"