# Product data sheet Characteristics

## XUSL4E14F181N

Safety light curtain type 4, Telemecanique Safety light curtains XUSL, XUSL Finger protection, Std sensing range, Hp = 1810 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	16 M by cabling 03 m by cabling
[Hp] Height protected	1810 mm
Number of beams	180
Type of start / restart	Automatic Manual
External Device Monitoring (EDM)	Selected by wiring

#### Complementary

Complementary			
Detection system	Transmitter-receiver system		
Response time	23.5 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		
[le] 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		
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	Test Muting through external safety module XPSLCMUT1160 LED display of operating modes and faults		
Marking	CE		
Material	Aluminium: casing Polycarbonate: front panel Polypropylene: end caps		

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 interest of and is not to be used for determining suitability or flushed products for specific user applications. It is the documentation is not 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 TMSS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Housing colour	Red RAL 3000
Fixing mode	By fixing brackets
Product weight	3.3 kg
Offer type	Standard distance

## Environment

Directives	98/37/EEC - machinery 89/655/EEC - work equipment 89/336/EEC - electromagnetic compatibility			
Product certifications	cULus[RETURN]TÜV[RETURN]CE			
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 ISO 13849-1 PL = e conforming to ISO 13849-1			
Optical characteristic	Resistance to light disturbance conforming to IEC 61496-2			
Mission time	20 year(s)			
Safety reliability data	PFHd = 3.71E-8 1/h conforming to IEC 61508			
Ambient air temperature for operation	-10.000000255.0 °C -2055 °C			
Ambient air temperature for storage	-3570 °C -25.000000270.0 °C			
Relative humidity	095 % 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= 1055 Hz) conforming to IEC 61496-1			

# Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	14.5 cm
Package 1 Width	19.5 cm
Package 1 Length	194.0 cm
Package 1 Weight	6.339 kg

## Offer Sustainability

Yes	
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 www.P65Warnings.ca.gov	
sustainability@tesensors.com	

## Contractual warranty

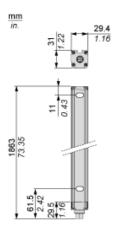
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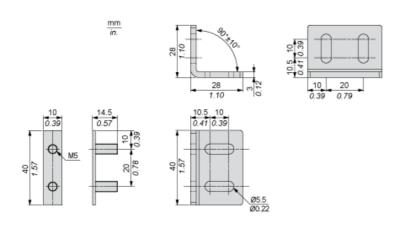
# Product data sheet Dimensions Drawings

# XUSL4E14F181N

### **Dimensions**



## **Brackets Dimensions**

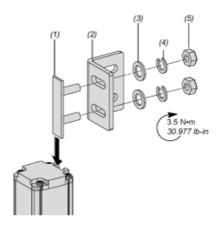


# Product data sheet **Mounting and Clearance**

# XUSL4E14F181N

## **Mounting and Clearance**





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

## Product data sheet Connections and Schema

# XUSL4E14F181N

### Wiring Diagrams

#### **Transmitter Connections**

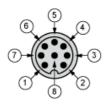


- (1) +24 Vdc
- (2) Configuration\_0
- (3) 0 Vdc
- (4) Configuration\_1
- (5) FE

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**

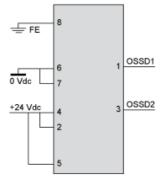


- OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration\_A
- (5) K1\_K2 Feeback/Restart
- (6) Configuration\_B
- (7) 0 Vdc
- (8) FE

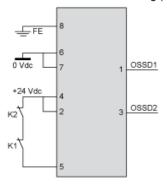
### Receiver Configurations and Operating Modes

#### **Automatic Start/Restart**

Without External Device Monitoring (EDM) feedback loop

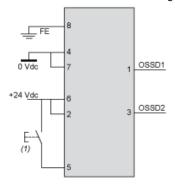


With External Device Monitoring (EDM) feedback loop



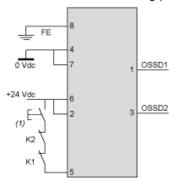
### Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



#### (1) Restart

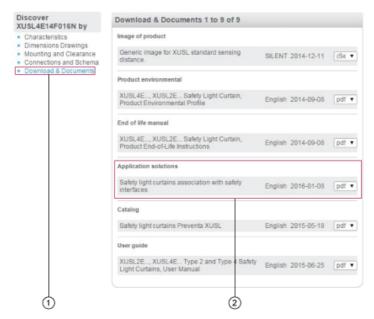
With External Device Monitoring (EDM) feedback loop



#### (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"