

# XCMN2110L2

Limit switch, Limit switches XC Standard, XCMN, metal end plunger, 1NC+1 NO, snap, 2 m



## Main

|                               |                                          |
|-------------------------------|------------------------------------------|
| Range of product              | Telemecanique Limit switches XC Standard |
| Series name                   | Standard format                          |
| Product or component type     | Limit switch                             |
| Device short name             | XCMN                                     |
| Sensor design                 | Miniature                                |
| Body type                     | Fixed                                    |
| Head type                     | Plunger head                             |
| Material                      | Plastic                                  |
| Body material                 | Plastic                                  |
| Head material                 | Zamak                                    |
| Fixing mode                   | By the body                              |
| Movement of operating head    | Linear                                   |
| Type of operator              | Spring return plunger metal              |
| Type of approach              | Vertical approach, 1 direction           |
| Number of poles               | 2                                        |
| Contacts type and composition | 1 NC + 1 NO                              |
| Contact operation             | Snap action                              |

## Complementary

|                                        |                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation                       | On end                                                                                                                                                                                                                                                                                                                                                                |
| Electrical connection                  | Fixed cable                                                                                                                                                                                                                                                                                                                                                           |
| Cable length                           | 2 m                                                                                                                                                                                                                                                                                                                                                                   |
| Cable composition                      | 4 x 0.75 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                              |
| Wire insulation material               | PvR                                                                                                                                                                                                                                                                                                                                                                   |
| Contacts insulation form               | Zb                                                                                                                                                                                                                                                                                                                                                                    |
| Positive opening                       | With                                                                                                                                                                                                                                                                                                                                                                  |
| Positive opening minimum force         | 42.5 N                                                                                                                                                                                                                                                                                                                                                                |
| Minimum force for tripping             | 8.5 N                                                                                                                                                                                                                                                                                                                                                                 |
| Minimum actuation speed                | 0.01 m/min                                                                                                                                                                                                                                                                                                                                                            |
| Maximum actuation speed                | 0.5 m/s                                                                                                                                                                                                                                                                                                                                                               |
| Contact code designation               | B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to IEC 60947-5-1 appendix A<br>R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1 appendix A                                                                                                                                                                                                            |
| [Ui] rated insulation voltage          | 300 V (pollution degree 3) conforming to UL 508<br>400 V (pollution degree 3) conforming to IEC 60947-5-1<br>300 V (pollution degree 3) conforming to CSA C22.2 No 14                                                                                                                                                                                                 |
| Maximum resistance across terminals    | 25 MOhm conforming to IEC 60255-7 category 3                                                                                                                                                                                                                                                                                                                          |
| [Uimp] rated impulse withstand voltage | 4 KV conforming to IEC 60664<br>4 kV conforming to IEC 60947-1                                                                                                                                                                                                                                                                                                        |
| Short-circuit protection               | 6 A cartridge fuse, type gG                                                                                                                                                                                                                                                                                                                                           |
| Electrical durability                  | 5000000 Cycles, DC-13, 120 V, 1 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 Cycles, DC-13, 24 V, 3 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, 48 V, 2 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C |
| Mechanical durability                  | 5000000 cycles                                                                                                                                                                                                                                                                                                                                                        |

|            |         |
|------------|---------|
| Width      | 30 mm   |
| Height     | 60 mm   |
| Depth      | 16 mm   |
| Net weight | 0.08 kg |

## Environment

|                                       |                                                                        |
|---------------------------------------|------------------------------------------------------------------------|
| Shock resistance                      | 25 gn for 18 ms conforming to IEC 60068-2-27                           |
| Vibration resistance                  | 5 gn (f= 10...500 Hz) conforming to IEC 60068-2-6                      |
| IP degree of protection               | IP65 conforming to IEC 60529                                           |
| IK degree of protection               | IK04 conforming to IEC 62262                                           |
| Electrical shock protection class     | Class II conforming to IEC 61140<br>Class II conforming to NF C 20-030 |
| Ambient air temperature for operation | -25...70 °C                                                            |
| Ambient air temperature for storage   | -40...70 °C                                                            |
| Protective treatment                  | TC                                                                     |
| Product certifications                | UL[RETURN]CCC[RETURN]CSA                                               |
| Standards                             | UL 508<br>CSA C22.2 No 14<br>IEC 60947-5-1<br>IEC 60204-1              |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 2.0 cm   |
| Package 1 Width              | 17.0 cm  |
| Package 1 Length             | 18.0 cm  |
| Package 1 Weight             | 173.0 g  |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 40       |
| Package 2 Height             | 30.0 cm  |
| Package 2 Width              | 30.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 7.716 kg |
| Unit Type of Package 3       | PAL      |
| Number of Units in Package 3 | 80       |
| Package 3 Height             | 60.0 cm  |
| Package 3 Width              | 80.0 cm  |
| Package 3 Length             | 80.0 cm  |
| Package 3 Weight             | 74.0 kg  |

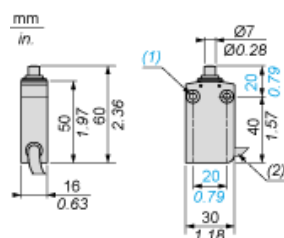
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status                   | Green Premium product                                                                                                                                                                                                                                                                                                                                                             |
| 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

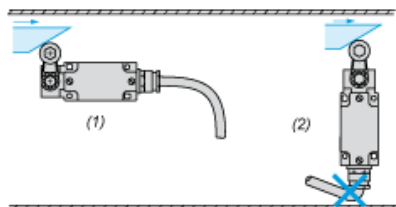
|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Dimensions



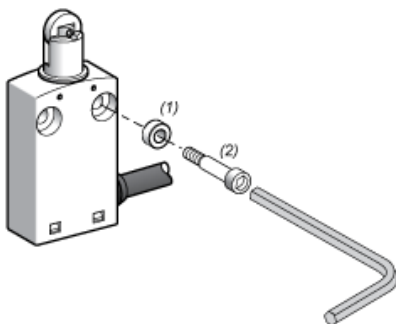
## Mounting

### Sweep of Connecting Cable



- (1) : Recommended  
(2) : To be avoided

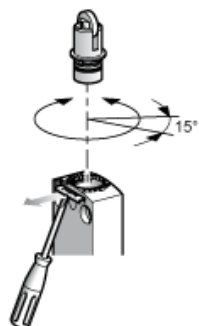
### Mounting with Spacers



- (1) : 2 spacers supplied with the XCMN switch  
(2) : 2 screws Ø 4mm (not included)

## Setting-up

### Plunger or Multi-directional Heads

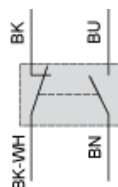


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## Wiring diagram

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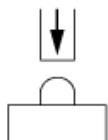
### 2-pole NC + NO Snap Action



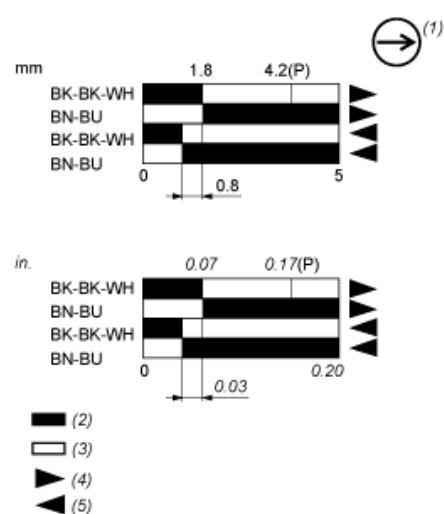
(BK) Black  
(BK- Black White  
WH)  
(BN) Brown  
(BU) Blue

## Characteristics of Actuation

### Switch Actuation on End



## Functionnal Diagram



- (P) Positive opening point  
 (1) NC contact with positive opening operation  
 (2) Closed  
 (3) Open  
 (4) Tripping  
 (5) Resetting  
 (BK) Black  
 (BK- Black White  
 WH)  
 (BN) Brown  
 (BU) Blue