# Product datasheet
## Characteristics

# XCMN2102L1
limit switch XCMN - steel roller plunger - 1NC +1NO - snap - 1 m

Price* : 27.17 GBP



## Main

| | |
|---|---|
| Range of product | OsiSense XC |
| 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 roller plunger metal |
| Type of approach | Lateral approach, 2 directions |
| Number of poles | 2 |
| Contacts type and composition | 1 NC + 1 NO |
| Contact operation | Snap action |

## Complementary

| | |
|---|---|
| Switch actuation | By 30° cam |
| Electrical connection | Fixed cable |
| Cable length | 1 m |
| Cable composition | 4 x 0.75 mm² |
| Wire insulation material | PvR |
| Contacts insulation form | Zb |
| Positive opening | With |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---|---|
| Positive opening minimum force | 35 N |
| Minimum force for tripping | 7 N |
| Maximum actuation speed | 0.5 m/s |
| Contact code designation | B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to EN/IEC 60947-5-1 appendix A<br>R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to EN/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 IEC 60664<br>4 kV 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 | 70.4 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 EN 50102 |
| 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 | CSA<br>CCC<br>UL |
| Standards | CSA C22.2 No 14<br>UL 508<br>EN/IEC 60204-1<br>EN/IEC 60947-5-1 |

## Offer Sustainability

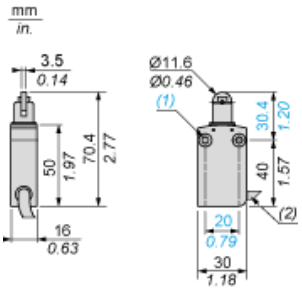
| | |
|---|---|
| Sustainable offer status | Green Premium product |
| REACh Regulation | REACh Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)<br>EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |

## Contractual warranty

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

# XCMN2102L1

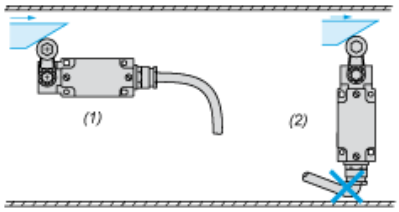
## Dimensions




(1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.
(2) External diameter 7.5 mm.

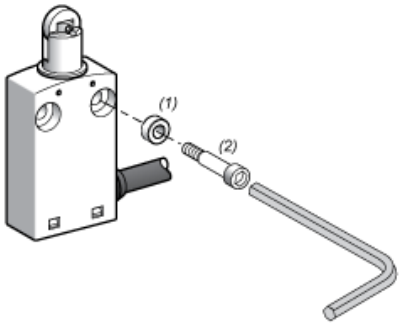
## Mounting

### Sweep of Connecting Cable




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

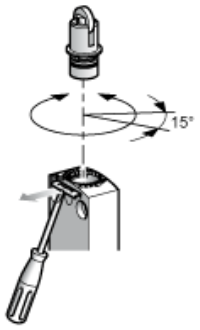
### Mounting with Spacers




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

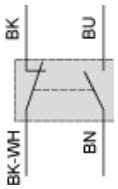
## Setting-up

### Plunger or Multi-directional Heads



## Wiring diagram

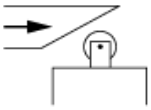
### 2-pole NC + NO Snap Action



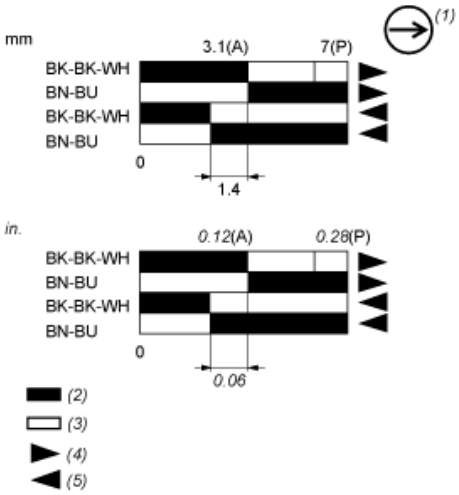

(BK) Black
(BK-WH) Black White
(BN) Brown
(BU) Blue

## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functionnal Diagram




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