

# Product datasheet

Specifications



## limit switch XCKP - steel roller plunger - 1NC+1NO - snap - M16

Local distributor code: 387027913 XCKP2102P16

EAN Code : 3389110201765

### Main

|                               |   |
|-------------------------------|---|
| Range of product              | Telemecanique Limit switches XC Standard      |
| Series name                   | Standard format                               |
| Product or component type     | Limit switch                                  |
| Device short name             | XCKP  |
| Sensor design                 | Compact form C conforming to CENELEC EN 50047 |
| 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          | Screw-clamp terminals, clamping capacity: 1 x 0.34...2 x 1.5 mm <sup>2</sup>              |
| Cable entry                    | 1 entry tapped for M16 x 1.5 cable gland, cable outer diameter: 4...8 mm                  |
| Contacts insulation form       | Zb  |
| Positive opening               | With  |
| Positive opening minimum force | 36 N  |
| Minimum force for tripping     | 12 N  |
| Maximum actuation speed        | 0.5 m/s   |
| Repeat accuracy                | 0.1 mm on the tripping points with 1 million operating cycles                             |
| Contact code designation       | A300, AC-15 (Ue = 240 V), Ie = 3 A, Ithe = 10 A conforming to EN/IEC 60947-5-1 appendix A |

|   |  |
|---|--|
| <b>[Ui] rated insulation voltage</b>          | 300 V conforming to UL 508<br>500 V (pollution degree 3) conforming to IEC 60947-1<br>300 V conforming to CSA C22.2 No 14  |
| <b>Maximum resistance across terminals</b>    | 25 MOhm conforming to IEC 60255-7 category 3   |
| <b>[Uimp] rated impulse withstand voltage</b> | 6 kV conforming to IEC 60664<br>6 kV conforming to IEC 60947-1   |
| <b>Short-circuit protection</b>               | 10 A cartridge fuse, type gG   |
| <b>Electrical durability</b>                  | 5000000 cycles, DC-13, 120 V, 4 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, 10 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, 7 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C |
| <b>Mechanical durability</b>                  | 10000000 cycles  |
| <b>Width</b>                                  | 31 mm  |
| <b>Height</b>                                 | 65 mm  |
| <b>Depth</b>                                  | 30 mm  |
| <b>Net weight</b>                             | 0.095 kg   |
| <b>Terminals description ISO n°1</b>          | (21-22)NC<br>(13-14)NO   |

## Environment

|  |   |
|--|---|
| <b>Shock resistance</b>                      | 50 gn for 11 ms conforming to IEC 60068-2-27  |
| <b>Vibration resistance</b>                  | 25 gn (f= 10...500 Hz) conforming to IEC 60068-2-6                                      |
| <b>IP degree of protection</b>               | IP66 conforming to IEC 60529<br>IP67 conforming to IEC 60529                            |
| <b>IK degree of protection</b>               | IK04 conforming to EN 50102   |
| <b>Electrical shock protection class</b>     | Class II conforming to IEC 61140<br>Class II conforming to NF C 20-030                  |
| <b>Ambient air temperature for operation</b> | -25...70 °C   |
| <b>Ambient air temperature for storage</b>   | -40...70 °C   |
| <b>Protective treatment</b>                  | TC  |
| <b>Product certifications</b>                | CCC<br>CSA<br>UL  |
| <b>Standards</b>                             | EN 60204-1<br>IEC 60947-5-1<br>UL 508<br>CSA C22.2 No 14<br>EN 60947-5-1<br>IEC 60204-1 |

## Packing Units

|                                     |        |
|-------------------------------------|--------|
| <b>Unit Type of Package 1</b>       | PCE    |
| <b>Number of Units in Package 1</b> | 1      |
| <b>Package 1 Height</b>             | 3.0 cm |
| <b>Package 1 Width</b>              | 3.6 cm |
| <b>Package 1 Length</b>             | 9.2 cm |
| <b>Package 1 Weight</b>             | 79.0 g |
| <b>Unit Type of Package 2</b>       | S02    |
| <b>Number of Units in Package 2</b> | 77     |

|                  |         |
|------------------|---------|
| Package 2 Height | 15.0 cm |
| Package 2 Width  | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 6.45 kg |

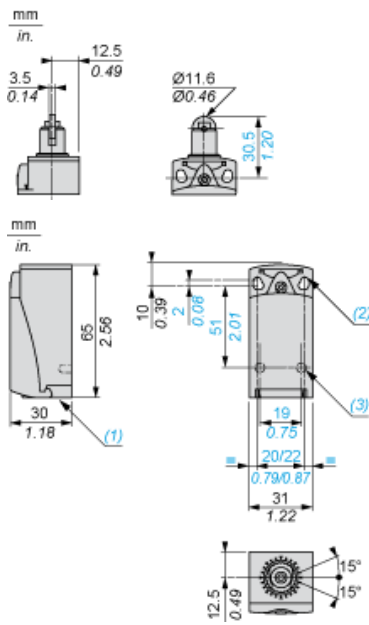
## Offer Sustainability

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

## Contractual warranty

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

**Dimensions**

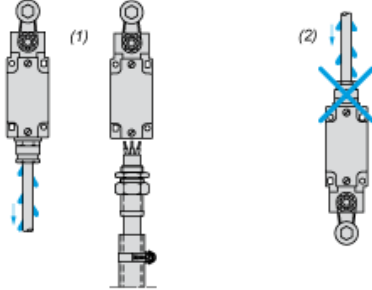


- (1) Tapped entry for M16 x 1.5
- (2) 2 elongated holes Ø 4.3 x 6.3 mm on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.
- (3) 2 x Ø 3 holes for support studs, depth 4 mm.

**Mounting with Cable Entry**

---

**Position of Cable Gland**



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

**Setting-up**

---

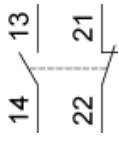
**Plunger or Multi-directional Heads**



**Wiring Diagram**

---

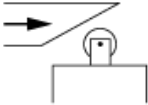
**2-pole NC + NO Snap Action**



**Characteristics of Actuation**

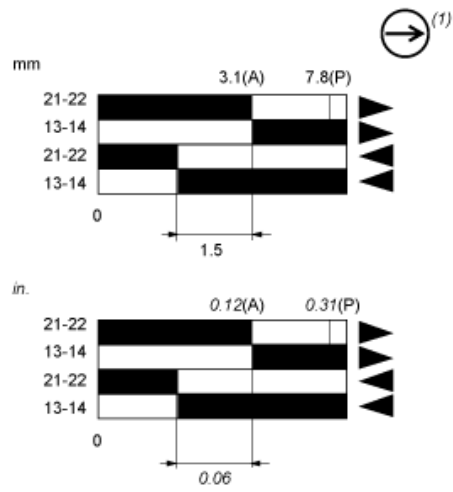
---

**Switch Actuation by 30° Cam**





**Functionnal Diagram**



- (2)
- (3)
- ▶ (4)
- ◀ (5)

- (P) Positive opening point
- (A) Cam displacement
- (1) NC contact with positive opening operation
- (2) Closed
- (3) Open
- (4) Tripping
- (5) Resetting

**Recommended replacement(s)**