

# Product datasheet

Specifications



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

Local distributor code: 389859244 XCKD2102P16

EAN Code : 3389110196887

### Main

|                               |   |
|-------------------------------|---|
| Range of product              | Telemecanique Limit switches XC Standard      |
| Series name                   | Standard format                               |
| Product or component type     | Limit switch                                  |
| Device short name             | XCKD  |
| Sensor design                 | Compact form C conforming to CENELEC EN 50047 |
| Body type                     | Fixed   |
| Head type                     | Plunger head                                  |
| Material                      | Metal   |
| Body material                 | Zamak   |
| 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 60947-5-1<br>A300, AC-15 (Ue = 240 V), Ie = 3 A, Ithe = 10 A conforming to 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, DC 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, DC 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, DC 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>                             | 0.185 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>               | IK06 conforming to EN 50102   |
| <b>Electrical shock protection class</b>     | Class I conforming to IEC 61140<br>Class I 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>UL<br>CSA  |
| <b>Standards</b>                             | IEC 60947-5-1<br>CSA C22.2 No 14<br>IEC 60204-1<br>EN 60204-1<br>UL 508<br>EN 60947-5-1 |

## 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>              | 5.0 cm  |
| <b>Package 1 Length</b>             | 11.8 cm |
| <b>Package 1 Weight</b>             | 166.0 g |
| <b>Unit Type of Package 2</b>       | S01     |

|                                     |          |
|-------------------------------------|----------|
| <b>Number of Units in Package 2</b> | 22       |
| <b>Package 2 Height</b>             | 15.0 cm  |
| <b>Package 2 Width</b>              | 15.0 cm  |
| <b>Package 2 Length</b>             | 40.0 cm  |
| <b>Package 2 Weight</b>             | 3.918 kg |

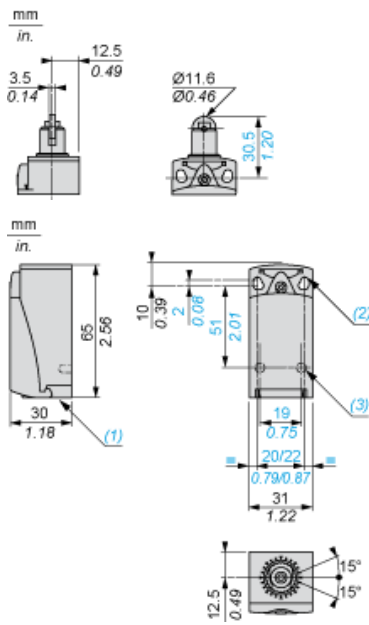
## Offer Sustainability

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

## Contractual warranty

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|

**Dimensions**

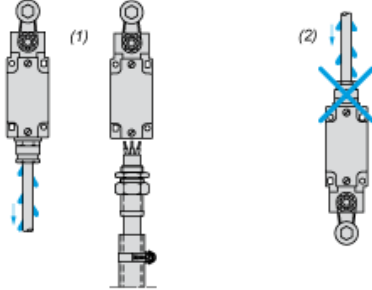


- (1) Tapped entry for M16 x 1.5
- (2) 2 elongated holes Ø 4.3 x 6.3 mm on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.
- (3) 2 x Ø 3 holes for support studs, depth 4 mm.

**Mounting with Cable Entry**

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**Position of Cable Gland**

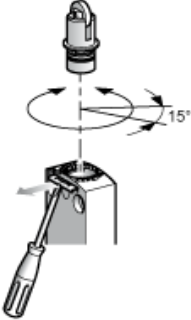


- (1) Recommended
- (2) To be avoided

**Setting-up**

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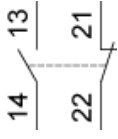
**Plunger or Multi-directional Heads**



**Wiring Diagram**

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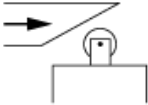
**2-pole NC + NO Snap Action**



**Characteristics of Actuation**

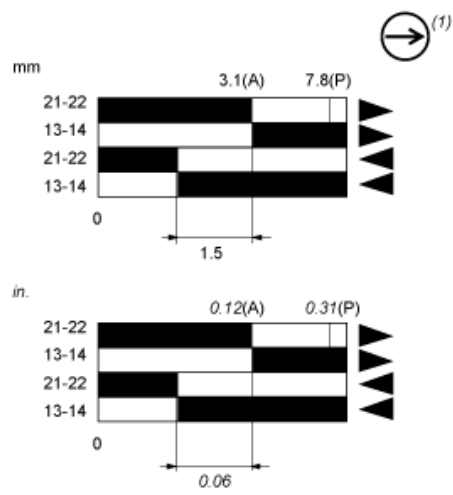
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**Switch Actuation by 30° Cam**





**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)**