

# XCKP2102N12

Limit switch, Limit switches XC Standard, XCKP, steel roller plunger, 1NC+1 NO, snap, 1/2NPT



## 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 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 1 x 0.34...2 x 1.5 mm <sup>2</sup>  |
| Cable entry                            | 1 entry tapped for 1/2" NPT cable gland   |
| Contacts insulation form               | Zb  |
| Positive opening                       | With  |
| Positive opening minimum force         | 36 N  |
| Minimum force for tripping             | 12 N  |
| Maximum actuation speed                | 1.64 ft/s (0.5 m/s)   |
| Repeat accuracy                        | 0.1 mm on the tripping points with 1 million operating cycles   |
| Contact code designation               | A300, AC-15 (U <sub>e</sub> = 240 V), I <sub>e</sub> = 3 A 10 A EN/IEC 60947-5-1 appendix A<br>Q300, DC-13 (U <sub>e</sub> = 250 V), I <sub>e</sub> = 0.27 A EN/IEC 60947-5-1 appendix A  |
| [Ui] rated insulation voltage          | 300 VUL 508<br>500 V 3)IEC 60947-1<br>300 VCSA C22.2 No 14  |
| Maximum resistance across terminals    | 25 MOhm IEC 60255-7 category 3  |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60664<br>6 kV IEC 60947-1  |
| Short-circuit protection               | 10 A cartridge fuse gG  |
| Electrical durability                  | 5000000 Cycles, DC-13, 120 V, 4 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C<br>5000000 Cycles, DC-13, 24 V, 10 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, 48 V, 7 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C |
| Mechanical durability                  | 10000000 cycles   |

## Environment

|                                       |   |
|---------------------------------------|---|
| Shock resistance                      | 50 gn 11 ms IEC 60068-2-27  |
| Vibration resistance                  | 25 gn 10...500 Hz)IEC 60068-2-6   |
| IP degree of protection               | IP66 conforming to IEC 60529<br>IP67 conforming to IEC 60529                            |
| IK degree of protection               | IK04 EN 50102   |
| Electrical shock protection class     | Class II IEC 61140<br>Class II NF C 20-030  |
| Ambient Air Temperature for Operation | -13...158 °F (-25...70 °C)  |
| Ambient Air Temperature for Storage   | -40...158 °F (-40...70 °C)  |
| Protective treatment                  | TC  |
| Product Certifications                | CSA<br>UL<br>CCC  |
| Standards                             | UL 508<br>IEC 60204-1<br>CSA C22.2 No 14<br>IEC 60947-5-1<br>EN 60204-1<br>EN 60947-5-1 |

## Ordering and shipping details

|                   |                                  |
|-------------------|----------------------------------|
| Category          | 22418-LIMIT SWITCH,IEC,XCKP&XCKT |
| Discount Schedule | T                                |
| GTIN              | 3389110305586                    |
| Returnability     | Yes                              |
| Country of origin | US                               |

## Packing Units

|                              |                   |
|------------------------------|-------------------|
| Unit Type of Package 1       | PCE               |
| Number of Units in Package 1 | 1                 |
| Package 1 Height             | 4.13 in (10.5 cm) |
| Package 1 Width              | 1.30 in (3.3 cm)  |
| Package 1 Length             | 1.69 in (4.3 cm)  |
| Package 1 Weight             | 3.49 oz (99.0 g)  |

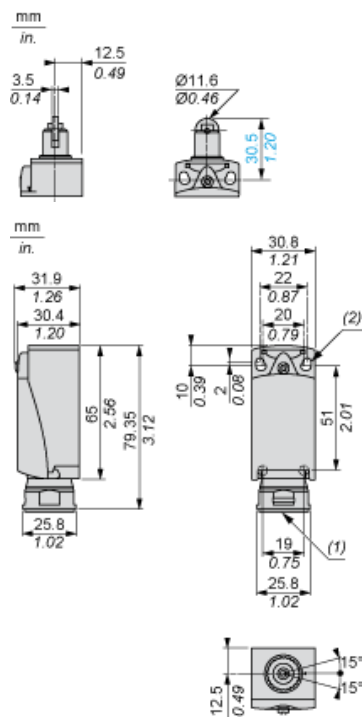
## Offer Sustainability

|                            |   |
|----------------------------|---|
| 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> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <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 1/2" NPT
- (2) 2 elongated holes  $\varnothing 4.3 \times 6.3$  mm on 22 mm centres, 2 holes  $\varnothing 4.3$  on 20 mm centres.

## Mounting with Cable Entry

### Position of Cable Gland



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

## Setting-up

### Plunger or Multi-directional Heads



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## Wiring Diagram

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2-pole NC + NO Snap Action



## 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