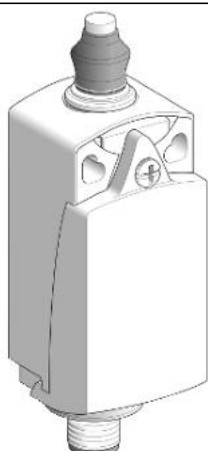


# XCKP2111M12

Limit switch, Limit switches XC Standard, XCKP, metal end plunger with nitrile boot, 1NC +1 NO, snap, M12



## 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  |
| 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 with nitrile boot |
| 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                        | Male connector M12, 4 pins   |
| Contacts insulation form                     | Zb   |
| Positive opening                             | With   |
| Positive opening minimum force               | 45 N   |
| Minimum force for tripping                   | 15 N   |
| Minimum actuation speed                      | 0.01 m/min   |
| Maximum actuation speed                      | 0.5 m/s  |
| Repeat accuracy                              | 0.1 mm on the tripping points with 1 million operating cycles  |
| [Ie] rated operational current               | 3 A at 240 V, AC-15 conforming to IEC 60947-5-1 appendix A<br>0.27 A at 250 V, DC-13 conforming to IEC 60947-5-1 appendix A  |
| [Ithe] conventional enclosed thermal current | 3 A  |
| [Ui] rated insulation voltage                | 300 V conforming to UL 508<br>300 V conforming to CSA C22.2 No 14<br>250 V (pollution degree 3) conforming to IEC 60947-1  |
| Maximum resistance across terminals          | 25 MOhm conforming to IEC 60255-7 category 3   |
| [Uimp] rated impulse withstand voltage       | 2.5 kV conforming to IEC 60664<br>2.5 kV conforming to IEC 60947-1   |
| Short-circuit protection                     | 4 A cartridge fuse, type gG  |
| Electrical durability                        | 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 |
| Mechanical durability                        | 15000000 cycles  |
| Width  | 31 mm  |

|                               |                        |
|-------------------------------|------------------------|
| Height                        | 65 mm                  |
| Depth                         | 30 mm                  |
| Net weight                    | 0.1 kg                 |
| Terminals description ISO n°1 | (13-14)NO<br>(21-22)NC |

## Environment

|                                       |   |
|---------------------------------------|---|
| Shock resistance                      | 50 gn for 11 ms conforming to IEC 60068-2-27  |
| Vibration resistance                  | 25 gn (f= 10...500 Hz) conforming to IEC 60068-2-6  |
| IP degree of protection               | IP66 conforming to IEC 60529<br>IP67 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                | CCC[RETURN]UL[RETURN]CSA  |
| Standards                             | CSA C22.2 No 14<br>IEC 60947-5-1<br>IEC 60204-1<br>IEC 60947-5-1<br>UL 508<br>IEC 60204-1 |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 10.5 cm  |
| Package 1 Width              | 4.4 cm   |
| Package 1 Length             | 3.3 cm   |
| Package 1 Weight             | 82.0 g   |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 66       |
| Package 2 Height             | 15.0 cm  |
| Package 2 Width              | 30.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 5.867 kg |

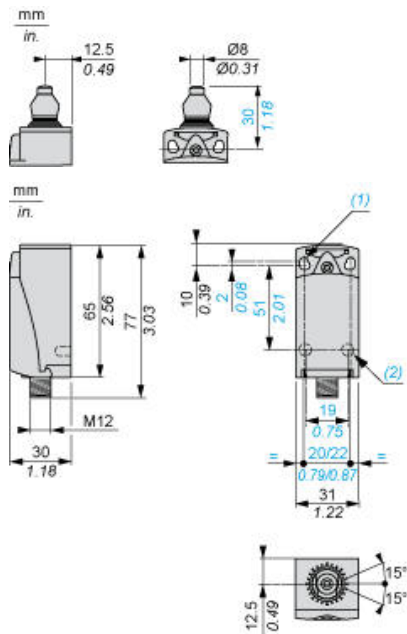
## Offer Sustainability

|  |   |
|--|---|
| 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 |
|----------|-----------|

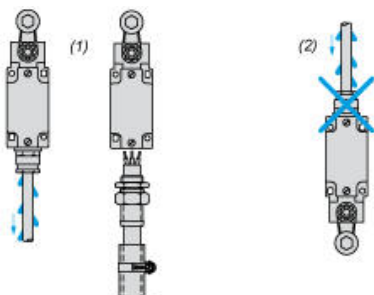
## Dimensions



- (1) 2 elongated holes  $\varnothing 4.3 \times 6.3$  mm on 22 mm centres, 2 holes  $\varnothing 4.3$  on 20 mm centres.  
(2) 2 x  $\varnothing 3$  holes for support studs, depth 4 mm.

## Mounting with Cable Entry

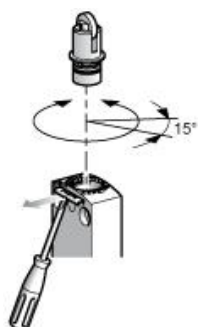
### Position of Cable Gland



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

## Setting-up

### Plunger or Multi-directional Heads

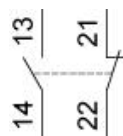


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## Wiring Diagram

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2-pole NC + NO Snap Action

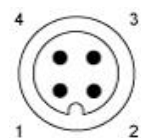


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## Connections

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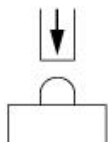
M12 Connector



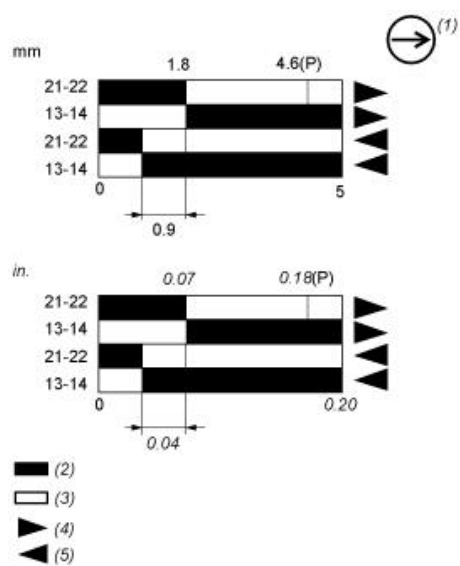
1-2 : NC  
3-4 : NO

## 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