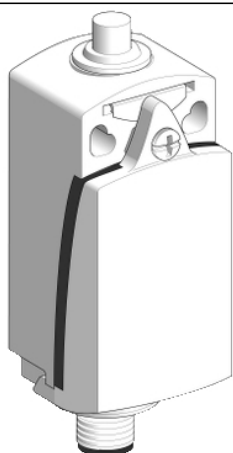


# XCKD2110M12

Limit switch, Limit switches XC Standard, XCKD, metal end plunger, 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             | XCKD  |
| Sensor design                 | Compact form B 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 plunger metal                   |
| 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, 5 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 50 V, AC-15 conforming to IEC 60947-5-1 appendix A<br>0.27 A at 50 V, DC-13 conforming to IEC 60947-5-1 appendix A   |
| [Ithe] conventional enclosed thermal current | 4 A   |
| [Ui] rated insulation voltage                | 60 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       | 0.8 kV conforming to IEC 60664<br>0.8 kV conforming to IEC 60947-1  |
| Short-circuit protection                     | 4 A cartridge fuse, type gG   |
| Electrical durability                        | 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                    | 0.19 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  |
| IK degree of protection               | IK06 conforming to IEC 62262  |
| Electrical shock protection class     | Class I conforming to IEC 61140<br>Class I 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                | UL[RETURN]CCC[RETURN]CSA  |
| Standards                             | IEC 60947-5-1<br>IEC 60204-1<br>IEC 60204-1<br>UL 508<br>CSA C22.2 No 14<br>IEC 60947-5-1 |

## Packing Units

|                              |        |
|------------------------------|--------|
| Unit Type of Package 1       | PCE    |
| Number of Units in Package 1 | 1      |
| Package 1 Height             | 3.4 cm |
| Package 1 Width              | 3.3 cm |
| Package 1 Length             | 10 cm  |
| Package 1 Weight             | 165 g  |

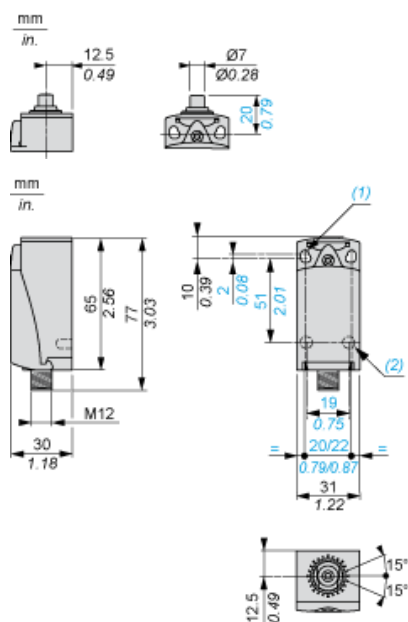
## Offer Sustainability

|  |   |
|--|---|
| Sustainable offer status                   | Green Premium product   |
| Circularity Profile                        | No need of specific recycling operations  |
| 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



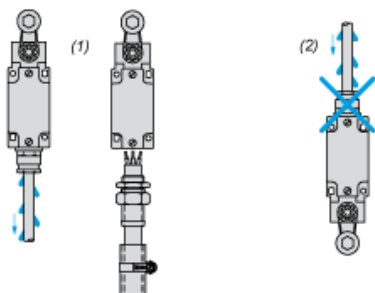
- (1) 2 elongated holes  $\varnothing 4.3 \times 6.3$  mm on 22 mm centres, 2 holes  $\varnothing 4.3$  on 20 mm centres.  
(2) 2 x  $\varnothing 3$  holes for support studs, depth 4 mm.

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## Mounting with Cable Entry

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### Position of Cable Gland



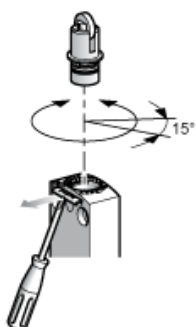
- (1) Recommended  
(2) To be avoided

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## Setting-up

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### Plunger or Multi-directional Heads



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## Wiring Diagram

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2-pole NC + NO Snap Action

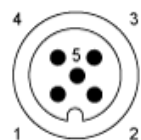


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## Connections

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### M12 Connector



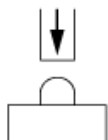
1-2 : NC

3-4 : NO

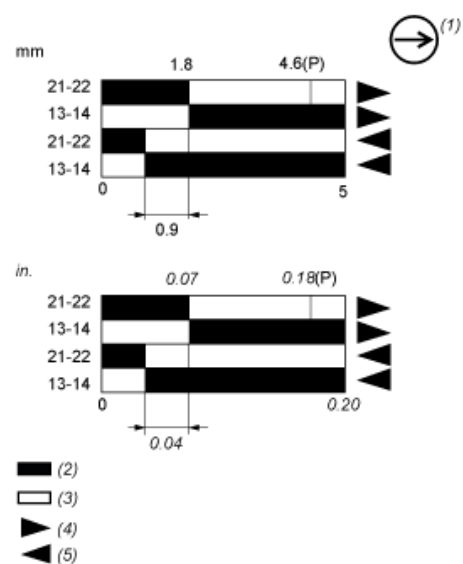
5 : Grounding

## 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