

# XCMD2111M12

Limit switch, Limit switches XC Standard, XCMD, metal end plunger with nitrile boot, 1C/O, snap, M12



## Main

|                               |                                                 |
|-------------------------------|-------------------------------------------------|
| Range of product              | Telemecanique Limit switches XC Standard        |
| Series name                   | Standard format                                 |
| Product or component type     | Limit switch                                    |
| Device short name             | XCMD                                            |
| Sensor design                 | Miniature                                       |
| Body type                     | Plug-in body                                    |
| 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 with elastomer boot |
| Type of approach              | Vertical approach, 1 direction                  |
| Number of poles               | 1                                               |
| Contacts type and composition | 1 C/O                                           |
| Contact operation             | Snap action                                     |

## Complementary

|                                              |                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation                             | On end                                                                                                                                                                                                                                                                                                                                                                |
| Electrical connection                        | Male connector M12, 4 pins                                                                                                                                                                                                                                                                                                                                            |
| Contacts insulation form                     | Za                                                                                                                                                                                                                                                                                                                                                                    |
| Positive opening                             | Without                                                                                                                                                                                                                                                                                                                                                               |
| Minimum force for tripping                   | 8.5 N                                                                                                                                                                                                                                                                                                                                                                 |
| Minimum actuation speed                      | 0.01 m/min                                                                                                                                                                                                                                                                                                                                                            |
| Maximum actuation speed                      | 0.5 m/s                                                                                                                                                                                                                                                                                                                                                               |
| [Ie] rated operational current               | 1.5 A at 240 V, AC-15 conforming to EN/IEC 60947-5-1 appendix A<br>0.1 A at 250 V, DC-13 conforming to EN/IEC 60947-5-1 appendix A                                                                                                                                                                                                                                    |
| [Ithe] conventional enclosed thermal current | 3 A                                                                                                                                                                                                                                                                                                                                                                   |
| [Ui] rated insulation voltage                | 250 V (pollution degree 3) conforming to IEC 60947-5-1                                                                                                                                                                                                                                                                                                                |
| 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, 24 V, 3 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, 2 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, 120 V, 1 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C |
| Mechanical durability                        | 10000000 cycles                                                                                                                                                                                                                                                                                                                                                       |
| Width                                        | 30 mm                                                                                                                                                                                                                                                                                                                                                                 |
| Height                                       | 50 mm                                                                                                                                                                                                                                                                                                                                                                 |
| Depth                                        | 16 mm                                                                                                                                                                                                                                                                                                                                                                 |
| Net weight                                   | 0.085 kg                                                                                                                                                                                                                                                                                                                                                              |

## Environment

|                                       |                                                                                              |
|---------------------------------------|----------------------------------------------------------------------------------------------|
| Shock resistance                      | 25 gn for 18 ms conforming to IEC 60068-2-27                                                 |
| Vibration resistance                  | 5 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<br>IP68 conforming to IEC 60529 |
| IK degree of protection               | IK06 conforming to EN 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                | CCC[RETURN]CSA[RETURN]UL                                                                     |
| Standards                             | UL 508<br>CSA C22.2 No 14<br>EN/IEC 60947-5-1<br>EN/IEC 60204-1                              |

## Packing Units

|                              |        |
|------------------------------|--------|
| Unit Type of Package 1       | PCE    |
| Number of Units in Package 1 | 1      |
| Package 1 Height             | 1.8 cm |
| Package 1 Width              | 5.2 cm |
| Package 1 Length             | 7.0 cm |
| Package 1 Weight             | 90.0 g |

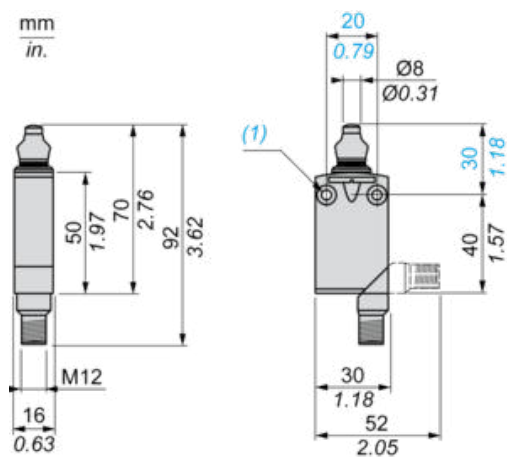
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>                                                                                                                                                                                                                                                                                                    |

## Contractual warranty

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

## Dimensions



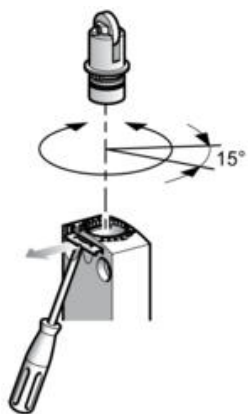
(1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.

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## Setting-up

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### Plunger or Multi-directional Heads

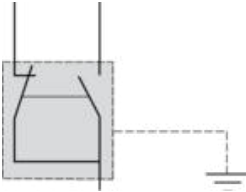


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## Wiring Diagram

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### Single-pole CO Snap Action + Integral M12 4-pin Connector

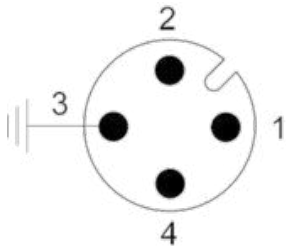


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## Wiring Diagram

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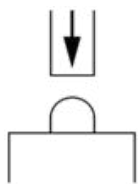
### 4-pin, M12, 3A-250V



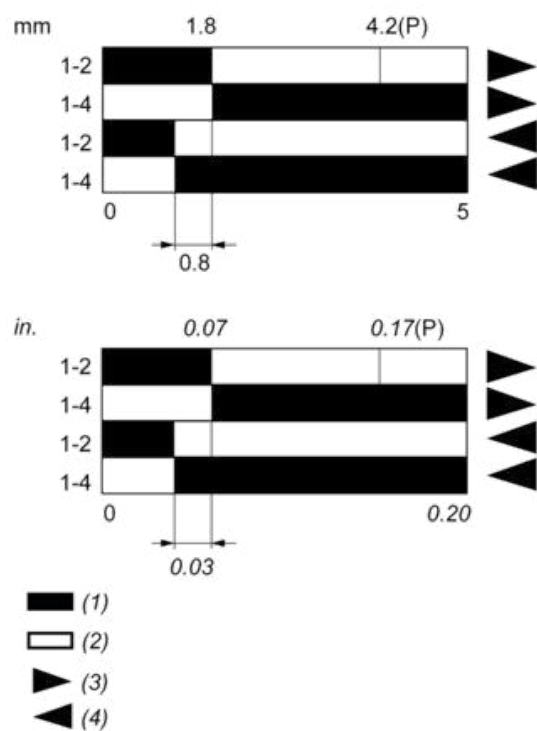
- 1 : Common
- 2 : NC
- 3 : Grounding
- 4 : NO

## Characteristics of Actuation

### Switch Actuation on End



## Functional Diagram



(P) Positive opening point

(1) Closed

(2) Open

(4) Tripping

(5) Resetting