

# XCMD2110C12

Limit switch, Limit switches XC Standard, XCMD, 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             | 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              |
| 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               | 42.5 N   |
| 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               | 0.22 A at 50 V, DC-13 conforming to EN/IEC 60947-5-1 appendix A<br>3 A at 50 V, AC-15 conforming to EN/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 60947-5-1  |
| 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, 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 |
| Mechanical durability                        | 10000000 cycles  |
| Width  | 30 mm  |
| Height                                       | 50 mm  |
| Depth  | 16 mm  |
| Net weight                                   | 0.085 kg   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither TWSS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## 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                | CSA<br>CCC<br>UL   |
| Standards                             | UL 508<br>EN/IEC 60204-1<br>EN/IEC 60947-5-1<br>CSA C22.2 No 14                              |

## Packing Units

|                              |        |
|------------------------------|--------|
| Unit Type of Package 1       | PCE    |
| Number of Units in Package 1 | 1      |
| Package 1 Height             | 1.6 cm |
| Package 1 Width              | 5.3 cm |
| Package 1 Length             | 6.1 cm |
| Package 1 Weight             | 85.0 g |
| Unit Type of Package 2       | S01    |
| Number of Units in Package 2 | 50     |
| Package 2 Height             | 15 cm  |
| Package 2 Width              | 15 cm  |
| Package 2 Length             | 40 cm  |
| Package 2 Weight             | 4.7 kg |
| Unit Type of Package 3       | P06    |
| Number of Units in Package 3 | 1600   |
| Package 3 Height             | 75 cm  |
| Package 3 Width              | 60 cm  |
| Package 3 Length             | 80 cm  |
| Package 3 Weight             | 158 kg |

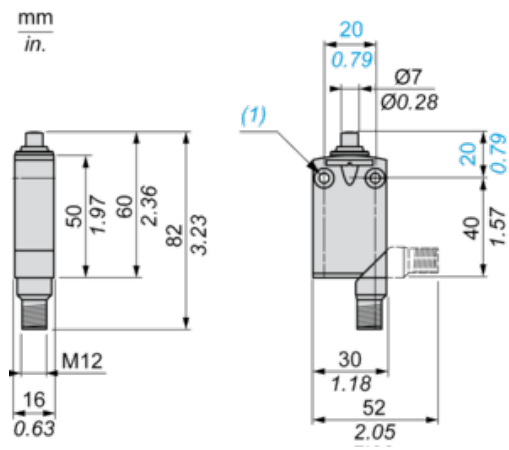
## Offer Sustainability

|  |   |
|--|---|
| Sustainable offer status                   | Green Premium product   |
| Environmental Disclosure                   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile                        | <a href="#">End of Life Information</a>   |
| 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



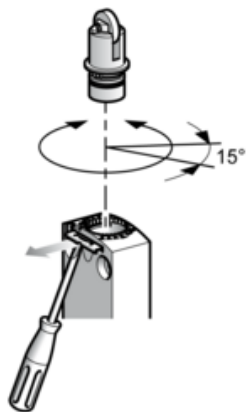
(1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.

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## Setting-up

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### Plunger or Multi-directional Heads

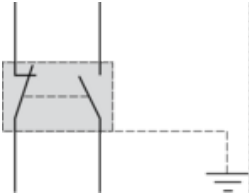


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## Wiring Diagram

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2-pole NC + NO Snap Action + Integral M12 5-pin Connector

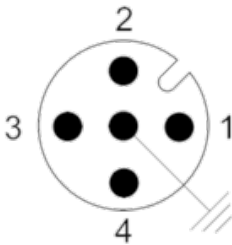


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## Wiring Diagram

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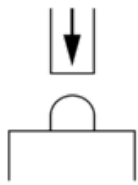
5-pin, M12, 4A-60V



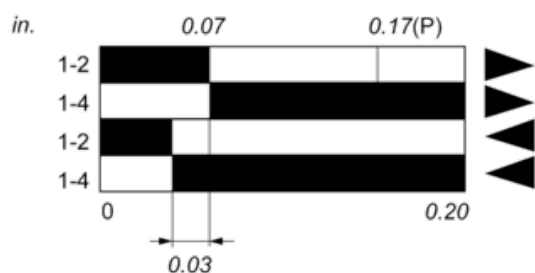
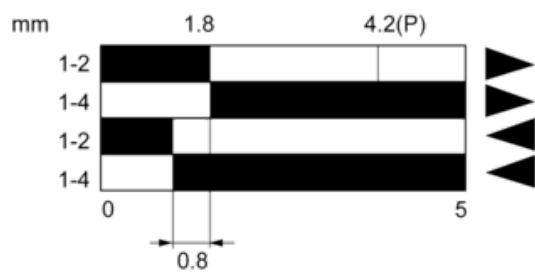
- 1 - 2 : NC
- 3 - 4 : NO
- 5 : Grounding

Characteristics of Actuation

Switch Actuation on End



Functional Diagram



- (1)
- (2)
- ▶ (3)
- ◀ (4)

(P) Positive opening point

- (1) Closed
- (2) Open
- (4) Tripping
- (5) Resetting