

# XCMD2110C12

limit switch XCMD - metal end plunger - 1NC  
+1NO - 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 IEC 60664<br>0.8 kV 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                                                                                                                                                                                                                                     |

## 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

|                  |          |
|------------------|----------|
| Package 1 Weight | 0.085 kg |
| Package 1 Height | 0.160 dm |
| Package 1 width  | 0.610 dm |
| Package 1 Length | 0.530 dm |

## Offer Sustainability

|                            |                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                |
| 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 |
|----------|-----------|



Technical drawings of the 1000 Series 1/2" components. The left drawing shows a side view of a component with dimensions: 16 (0.63), 50 (1.97), 60 (2.36), 82 (3.23), and M12. The right drawing shows a side view of a component with dimensions: 20 (0.79), Ø7, Ø0.28, 20 (0.79), 40 (1.57), 30 (1.18), 52 (2.05), and a callout (1) pointing to a feature.

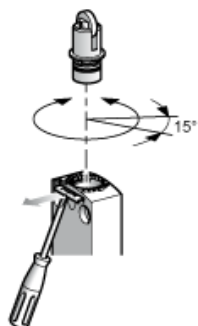
- (1) 2 fixing holes  $\varnothing$  4.2 mm, counterbored  $\varnothing$  8 mm by 4 mm deep.

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## Setting-up

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### Plunger or Multi-directional Heads

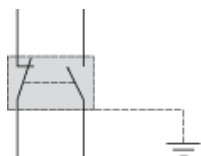


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## Wiring Diagram

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

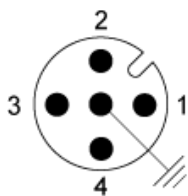


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## Wiring Diagram

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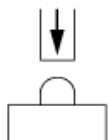
5-pin, M12, 4A-60V



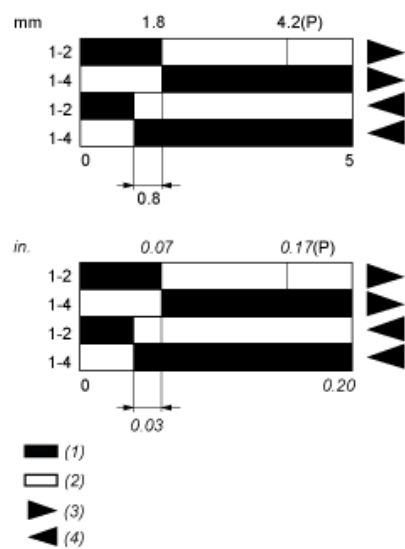
- 1 - NC
- 2 :
- 3 - NO
- 4 :
- 5 : Grounding

## Characteristics of Actuation

### Switch Actuation on End



## Functional Diagram



- (P) Positive opening point  
(1) Closed  
(2) Open  
(4) Tripping  
(5) Resetting