

Product data sheet

Specifications



Limit switch, Limit switches XC Standard, XCMD, steel roller plunger, 1NC+1 NO, snap, M12

XCMD2102M12

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 roller lever thermoplastic |
| Type of approach | Lateral approach, 2 directions |
| Number of poles | 2 |
| Contacts type and composition | 1 NC + 1 NO |
| Contact operation | Snap action |

Complementary

| | |
|---|--|
| Switch actuation | By 30° cam |
| Electrical connection | Male connector M12, 4 pins |
| Contacts insulation form | Zb |
| Positive opening | With |
| Positive opening minimum force | 35 N |
| Minimum force for tripping | 7 N |
| Maximum actuation speed | 0.5 m/s |
| [I _e] rated operational current | 1 A at 24 V, DC-13 conforming to EN/IEC 60947-5-1 appendix A |
| [I _{th} e] 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 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 |
| Mechanical durability | 10000000 cycles |
| Width | 30 mm |
| Height | 50 mm |
| Depth | 16 mm |
| Net weight | 0.09 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 IP69 conforming to IEC 60529 |
| IK degree of protection | IK04 conforming to EN 62262 |
| Electrical shock protection class | Class III conforming to IEC 61140 Class III 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 CCC CSA |
| Standards | UL 508 CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60204-1 |

Packing Units

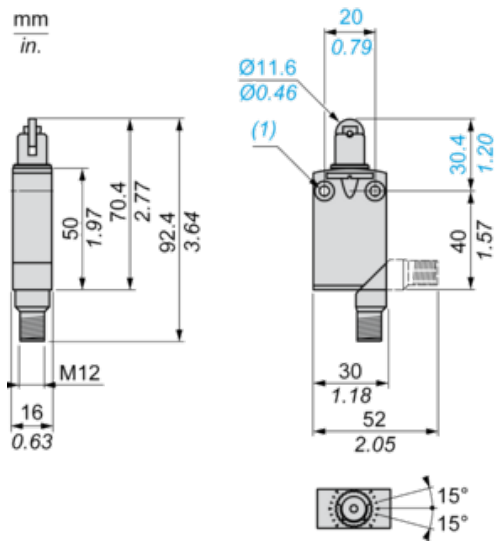
| | |
|-------------------------------------|--------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 1.7 cm |
| Package 1 Width | 7.1 cm |
| Package 1 Length | 5.3 cm |
| Package 1 Weight | 90 g |

Offer Sustainability

| | |
|-----------------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |

| | |
|----------------------------------|---|
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| 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 www.P65Warnings.ca.gov |
| Contractual warranty | |
| Warranty | 18 months |

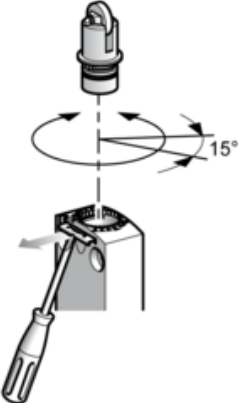
Dimensions



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

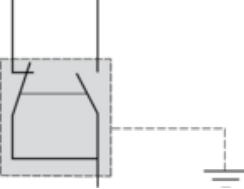
Setting-up

Plunger or Multi-directional Heads



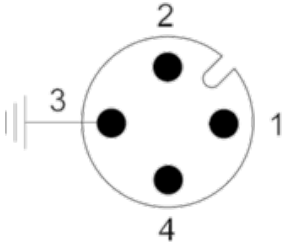
Wiring Diagram

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



Wiring Diagram

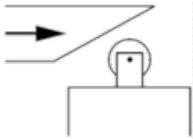
4-pin, M12, 3A-250V



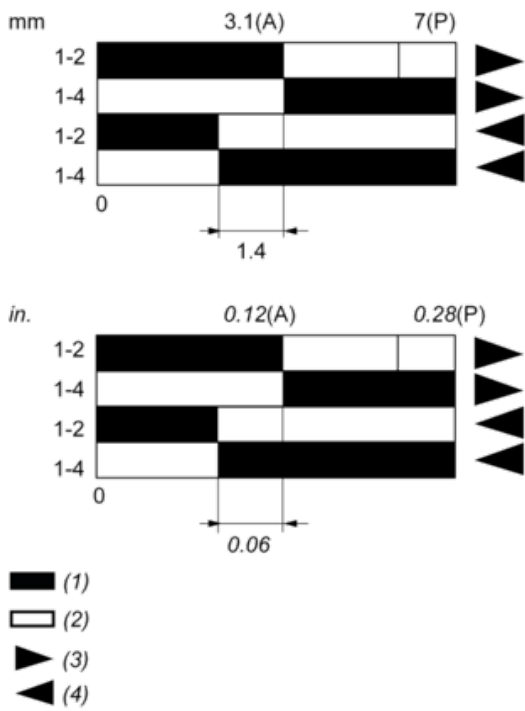
- 1 : Common
- 2 : NC
- 3 : Grounding
- 4 : NO

Characteristics of Actuation

Switch Actuation by 30° Cam



Functional Diagram



- (P) Positive opening point
- (A) Cam displacement
- (1) Closed
- (2) Open
- (3) Tripping
- (4) Resetting

Recommended replacement(s)