

Product data sheet

Specifications



Limit switch, Limit switches XC Standard, XCMD, plunger, 2NC + 2 NO, ATEX/IECEX

XCMD41F0L5EX

Main

| | |
|-------------------------------|--|
| Range of product | Telemecanique Limit switches XC Standard |
| Series name | Standard format |
| Product or component typee | Limit switch |
| Device short name | XCMD |
| Sensor design | Miniature |
| Body type | Fixed |
| Head type | M12 plunger head |
| Material | Metal |
| Fixing mode | By the head |
| Movement of operating head | Linear |
| Type of operator | Spring return plunger metal |
| Switch actuation | On end |
| Type of approach | Vertical approach, 1 direction |
| Electrical connection | Fixed cable |
| Number of poles | 4 |
| Contacts type and composition | 2 x (1 NC + 1 NO) |
| Contacts insulation form | Zb |
| Contact operation | Snap action |
| Number of steps | 1 |
| Positive opening | With |
| Minimum force for tripping | 8.5 N |
| Maximum actuation speed | 0.5 m/s |
| IP degree of protection | IP66 conforming to IEC 60529 IP67 conforming to IEC 60529 |

Complementary

| | |
|---------------|-------|
| Body material | Zamak |
| Head material | Zamak |
| Cable length | 5 m |

| | |
|--|--|
| Cable composition | 9 x 0.34 mm² |
| Wire insulation material | PvR |
| Positive opening minimum force | 42.5 N |
| Minimum actuation speed | 0.01 m/min |
| Contact code designation | R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to EN 60947-5-1 R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1 appendix A C300, AC-15 (Ue = 240 V), Ie = 0.75 A conforming to EN 60947-5-1 C300, AC-15 (Ue = 240 V), Ie = 0.75 A conforming to IEC 60947-5-1 appendix A |
| [Ithe] conventional enclosed thermal current | 3 A AC |
| [Ui] rated insulation voltage | 300 V conforming to UL 508 400 V (pollution degree 3) conforming to IEC 60947-1 300 V conforming to CSA C22.2 No 14 |
| Maximum resistance across terminals | 25 MOhm conforming to IEC 60255-7 category 3 |
| [Uimp] rated impulse withstand voltage | 4 kV conforming to IEC 60664 4 kV conforming to IEC 60947-1 |
| Short-circuit protection | 6 A cartridge fuse, type gG |
| Electrical durability | 5000000 cycles, DC-13, inductive load type, 24 V, 3 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 48 V, 2 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 120 V, 1 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C |
| Mechanical durability | 10000000 cycles |
| Marking | II2 D-Ex tb IIIC T85°C Db IP66/67 |
| Width | 30 mm |
| Height | 50 mm |
| Depth | 16 mm |

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 |
| Electrical shock protection class | Class I conforming to IEC 61140 Class I conforming to NF C 20-030 |
| Ambient air temperature for operation | -20...60 °C |
| Protective treatment | TC |
| Dust zone | Zone 21 - 22 |
| Product certifications | INERIS 04ATEX0014X IEC-Ex INE 17.0020X |
| Standards | EN/IEC 60079-31 EN/IEC 60079-0 |
| Directives | 2014/34/EU - ATEX directive |

Packing Units

| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 23.0 cm |
| Package 1 Width | 5.0 cm |
| Package 1 Length | 19.0 cm |
| Package 1 Weight | 506.0 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) |
| 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 |

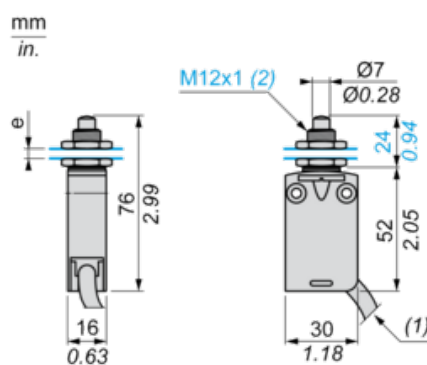
Contractual warranty

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

Dimensions Drawings

XCMD41F0L5EX

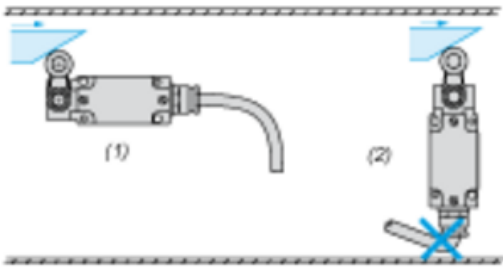
Dimensions



- (1) External diameter of cable 7.5 mm.
(2) Fixing nut thickness 3.5 mm.
e : 8 mm max, panel cut-out Ø 12.5 mm.

Mounting

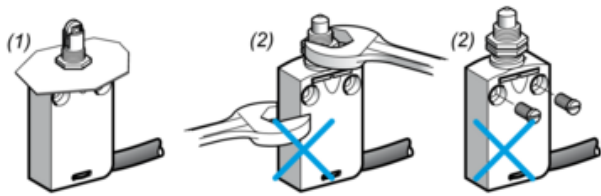
Sweep of Connecting Cable



- (1) Recommended
- (2) To be avoided

Panel Mounting

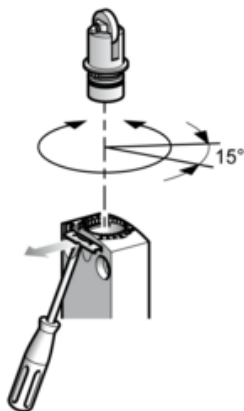
Mounting and Fixing Limit Switches by the Head



- (1) Recommended
- (2) Forbidden

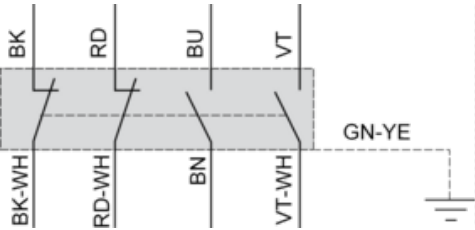
Setting-up

Plunger or Multi-directional Heads



Wiring Diagram

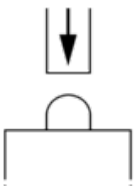
4-pole NC + NC + NO + NO Snap Action



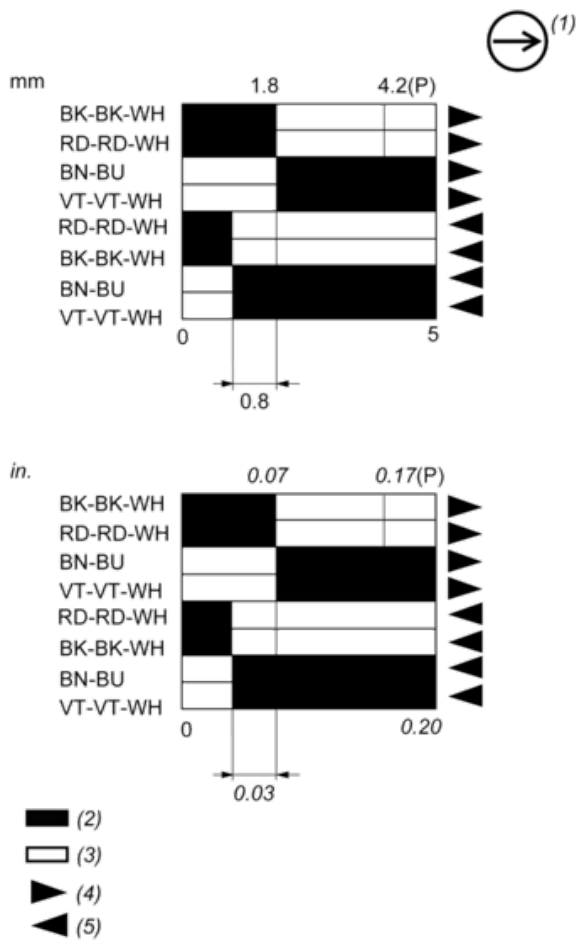
- (BK) Black
- (BK-WH) Black White
- (RD) Red
- (RD-WH) Red White
- (BU) Blue
- (BN) Brown
- (VT) Violet White
- (VT-WH) Violet White
- (GN-YE) Green Yellow

Characteristics of Actuation

Switch Actuation on End



Functional Diagram



- (P) Positive opening point
- (1) NC contact with positive opening operation
- (2) Closed
- (3) Open
- (4) Tripping
- (5) Resetting
- (BK) Black
- (BK-WH) Black White
- (RD) Red
- (RD-WH) Red White
- (BN) Brown
- (BU) Blue
- (VT) Violet
- (VT WH) Violet White

Recommended replacement(s)