

# XCMD25F0L1

Limit switch, Limit switches XC Standard, XCMD, M12 metal end plunger, 1NC+1 NO, slow, 1 m



## 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                     | Fixed                                    |
| Head type                     | M12 plunger head                         |
| Material                      | Metal                                    |
| Body material                 | Zamak                                    |
| Head material                 | Zamak                                    |
| Fixing mode                   | By the head                              |
| 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             | Slow-break                               |

## Complementary

|  |   |
|--|---|
| Switch actuation                       | On end  |
| Electrical connection                  | Removable cable connector   |
| Cable length                           | 1 m   |
| Cable composition                      | 5 x 0.75 mm <sup>2</sup>  |
| Wire insulation material               | PvR   |
| Contacts insulation form               | Zb  |
| Positive opening                       | With  |
| Positive opening minimum force         | 42.5 N  |
| Minimum force for tripping             | 8.5 N   |
| Minimum actuation speed                | 6 m/min   |
| Maximum actuation speed                | 0.5 m/s   |
| Contact code designation               | B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to IEC 60947-5-1 appendix A<br>R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1 appendix A  |
| [Ui] rated insulation voltage          | 300 V (pollution degree 3) conforming to UL 508<br>400 V (pollution degree 3) conforming to IEC 60947-5-1<br>300 V (pollution degree 3) 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<br>4 kV conforming to IEC 60947-1  |
| Short-circuit protection               | 6 A cartridge fuse, type gG   |
| Electrical durability                  | 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<br>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 | 0.195 kg |

## Environment

|                                       |  |
|---------------------------------------|--|
| Shock resistance                      | 25 gn for 18 ms conforming to IEC 60068-2-27   |
| Vibration resistance                  | 25 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 IEC 62262   |
| Overvoltage category                  | 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[RETURN]CCC[RETURN]UL   |
| Standards                             | UL 508<br>CSA C22.2 No 14<br>IEC 60204-1<br>IEC 60947-5-1                                    |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 2.0 cm  |
| Package 1 Width              | 13.0 cm |
| Package 1 Length             | 13.0 cm |
| Package 1 Weight             | 186.0 g |

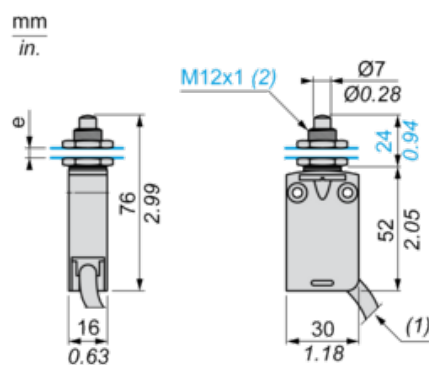
## Offer Sustainability

|  |   |
|--|---|
| 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

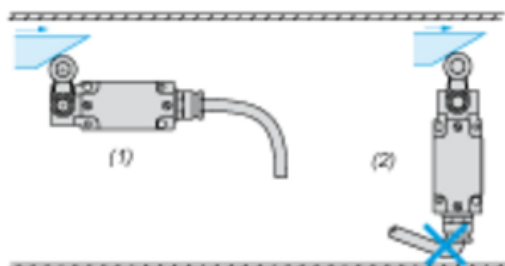
|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Dimensions



## Mounting

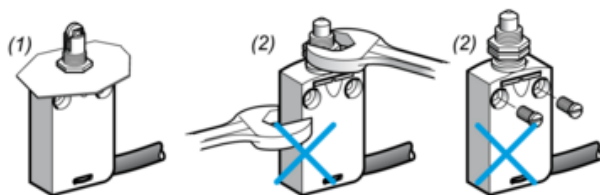
### Sweep of Connecting Cable



- (1) Recommended  
(2) To be avoided

## Panel Mounting

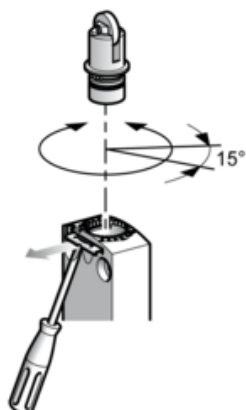
### Mounting and Fixing Limit Switches by the Head



- (1) Recommended  
(2) Forbidden

## Setting-up

### Plunger or Multi-directional Heads

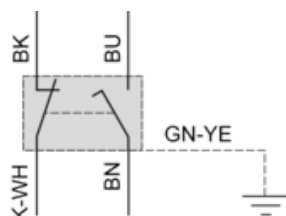


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## Wiring Diagram

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2-pole N/C + N/O Break before Make, Slow Break



(BK) Black

(BK-WH) Black White

(BU) Blue

(BN) Brown

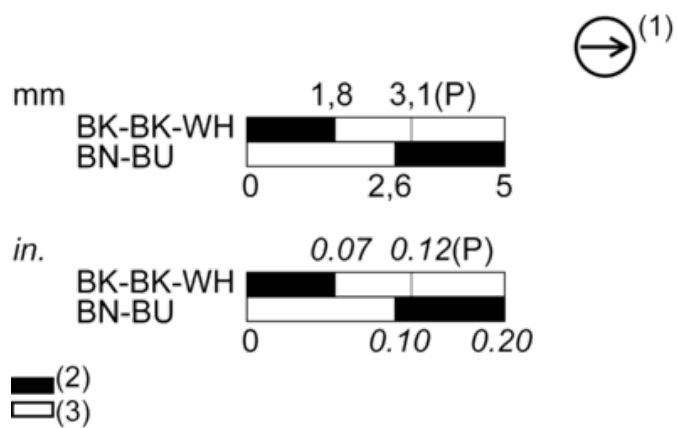
(GN-YE) Green Yellow

## Characteristics of Actuation

### Switch Actuation on End



## Functional Diagram



(P) Positive opening point

(1) NC contact with positive opening operation

(2) Closed

(3) Open

(BK) Black

(BK-WH) Black White

(BU) Blue

(BN) Brown