

## Product data sheet

### Characteristics

# XCMD25F0L5

limit switch XCMD - M12 metal end plunger -  
1NC+1NO - slow - 5 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                           | 5 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 EN/IEC 60947-5-1 appendix A<br>R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to EN/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                                                                                                                                           |

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 Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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

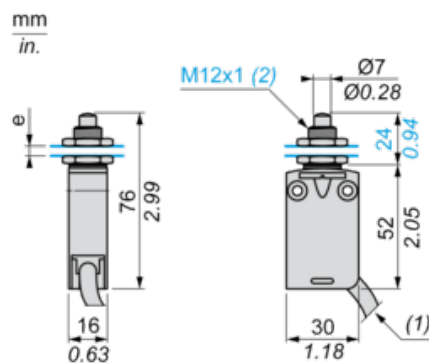
## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type of Package 1       | PCE |
| Number of Units in Package 1 | 1   |

## Contractual warranty

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

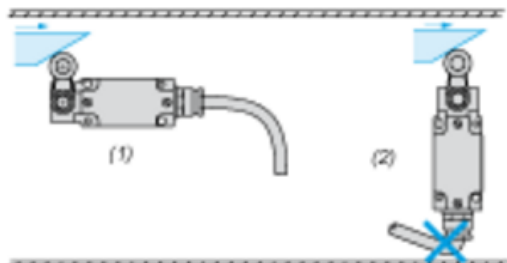
## Dimensions



- (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

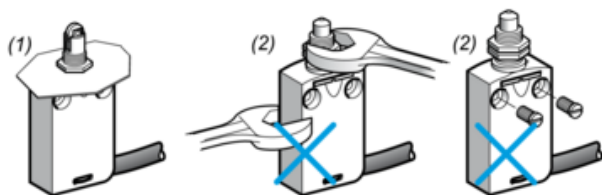
### Sweep of Connecting Cable



- (1) Recommended  
(2) To be avoided

## Panel Mounting

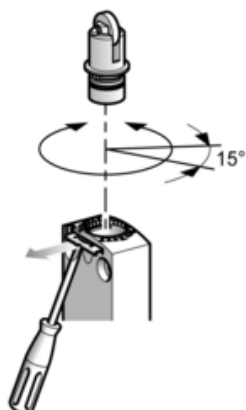
### Mounting and Fixing Limit Switches by the Head



- (1) Recommended  
(2) Forbidden

## Setting-up

### Plunger or Multi-directional Heads

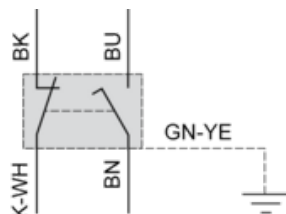


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## Wiring Diagram

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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

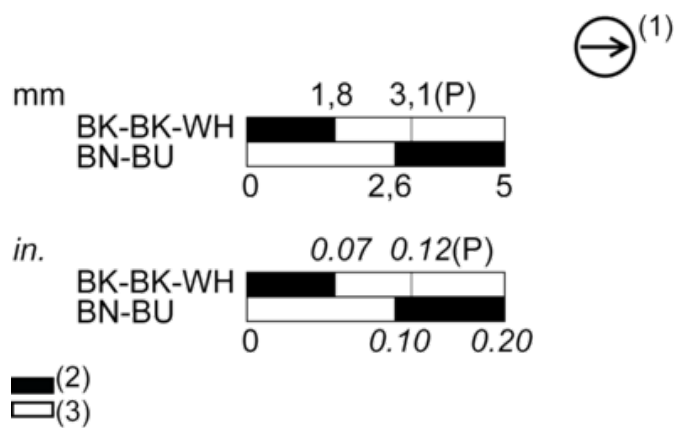
(GN-YE) Green Yellow

## 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