

# XCMD2502L3

Limit switch, Limit switches XC Standard, XCMD, steel roller plunger, 1NC+1 NO, slow, 3 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                     | 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 plunger metal       |
| Type of approach              | Lateral approach, 2 directions           |
| Number of poles               | 2                                        |
| Contacts type and composition | 1 NC + 1 NO                              |
| Contact operation             | Slow-break                               |

## Complementary

|                                        |                                                                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation                       | By 30° cam                                                                                                                                                                                                                     |
| Electrical connection                  | Removable cable connector                                                                                                                                                                                                      |
| Cable length                           | 9.84 ft (3 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         | 35 N                                                                                                                                                                                                                           |
| Minimum force for tripping             | 7 N                                                                                                                                                                                                                            |
| Maximum actuation speed                | 1.64 ft/s (0.5 m/s)                                                                                                                                                                                                            |
| Contact code designation               | B300, AC-15 (Ue = 240 V), Ie = 1.5 A EN/IEC 60947-5-1 appendix A<br>R300, DC-13 (Ue = 250 V), Ie = 0.1 A EN/IEC 60947-5-1 appendix A                                                                                           |
| [Ui] rated insulation voltage          | 300 V 3)UL 508<br>400 V 3)IEC 60947-5-1<br>300 V 3)CSA C22.2 No 14                                                                                                                                                             |
| Maximum resistance across terminals    | 25 mOhm IEC 60255-7 category 3                                                                                                                                                                                                 |
| [Uimp] rated impulse withstand voltage | 4 kV IEC 60664<br>4 kV IEC 60947-1                                                                                                                                                                                             |
| Short-circuit protection               | 6 A cartridge fuse gG                                                                                                                                                                                                          |
| Electrical durability                  | 5000000 Cycles, DC-13, 120 V, 1 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C<br>5000000 Cycles, DC-13, 24 V, 3 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, 48 V, 2 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C |
| Mechanical durability                  | 10000000 cycles                                                                                                                                                                                                                |
| Width                                  | 1.18 in (30 mm)                                                                                                                                                                                                                |
| Height                                 | 1.97 in (50 mm)                                                                                                                                                                                                                |

|            |                       |
|------------|-----------------------|
| Depth      | 0.63 in (16 mm)       |
| Net Weight | 0.77 lb(US) (0.35 kg) |

## Environment

|                                       |                                                                                              |
|---------------------------------------|----------------------------------------------------------------------------------------------|
| Shock resistance                      | 25 gn 18 ms IEC 60068-2-27                                                                   |
| Vibration resistance                  | 25 gn 10...500 Hz)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 EN 62262                                                                                |
| Overvoltage category                  | Class I IEC 61140<br>Class I NF C 20-030                                                     |
| Ambient Air Temperature for Operation | -13...158 °F (-25...70 °C)                                                                   |
| Ambient Air Temperature for Storage   | -40...158 °F (-40...70 °C)                                                                   |
| Protective treatment                  | TC                                                                                           |
| Product Certifications                | UL<br>CSA                                                                                    |
| Standards                             | UL 508<br>EN 60947-5-1<br>IEC 60947-5-1<br>CSA C22.2 No 14                                   |

## Ordering and shipping details

|                   |                                    |
|-------------------|------------------------------------|
| Category          | 22413-LIMIT SWITCH, IEC, MINIATURE |
| Discount Schedule | T                                  |
| GTIN              | 3389110301212                      |
| Returnability     | Yes                                |
| Country of origin | ID                                 |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Number of Units in Package 1 | 1                        |
| Package 1 Height             | 0.98 in (2.5 cm)         |
| Package 1 Width              | 7.48 in (19.0 cm)        |
| Package 1 Length             | 7.48 in (19.0 cm)        |
| Package 1 Weight             | 11.92 oz (338.0 g)       |
| Unit Type of Package 2       | PAL                      |
| Number of Units in Package 2 | 240                      |
| Package 2 Height             | 23.62 in (60.0 cm)       |
| Package 2 Width              | 31.50 in (80.0 cm)       |
| Package 2 Length             | 94.49 in (240.0 cm)      |
| Package 2 Weight             | 178.84 lb(US) (81.12 kg) |
| Unit Type of Package 3       | S03                      |
| Number of Units in Package 3 | 30                       |
| Package 3 Height             | 11.81 in (30.0 cm)       |
| Package 3 Width              | 11.81 in (30.0 cm)       |
| Package 3 Length             | 15.75 in (40.0 cm)       |
| Package 3 Weight             | 23.64 lb(US) (10.723 kg) |

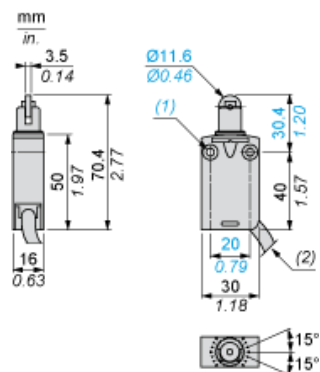
## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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> |
| 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 |
|----------|-----------|

## Dimensions



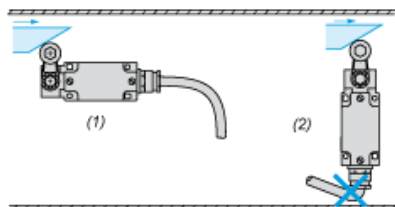
- (1) 2 fixing holes  $\varnothing 4.2$  mm, counterbored  $\varnothing 8$  mm by 4 mm deep.  
(2) External diameter of cable 7.5 mm.

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## Mounting

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### Sweep of Connecting Cable



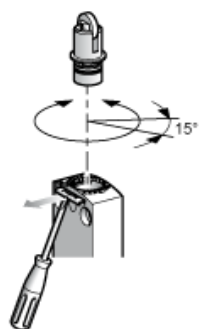
- (1) Recommended
- (2) To be avoided

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## Setting-up

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### Plunger or Multi-directional Heads

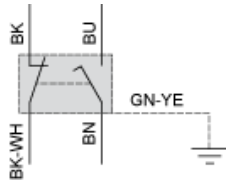


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## Wiring Diagram

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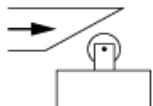
2-pole N/C + N/O Break before Make, Slow Break



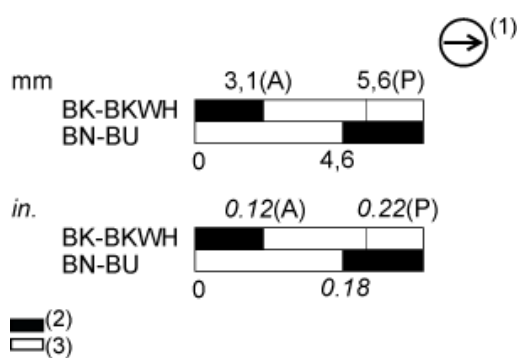
(BK) Black  
(BK- Black White  
WH)  
(BU) Blue  
(BN) Brown  
(GN- Green Yellow  
YE)

## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functional Diagram



- (P) Positive opening point
- (A) Cam displacement
- (1) NC contact with positive opening operation
- (2) Closed
- (3) Open
- (BK) Black
- (BK- Black White
- WH)
- (BU) Blue
- (BN) Brown

# Mouser Electronics

Authorized Distributor

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