

Product data sheet

Characteristics

XCMD21F2L15

limit switch XCMD - M12 steel roller plunger -
1NC+1NO - snap - 15 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 roller plunger metal |
| 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 | Removable cable connector |
| Cable length | 15 m |
| Cable composition | 5 x 0.75 mm ² |
| 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 | 10 cm/s |
| Contact code designation | B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to EN/IEC 60947-5-1 appendix A 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 508 400 V (pollution degree 3) conforming to IEC 60947-5-1 300 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 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 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 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 |



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 IP67 conforming to IEC 60529 IP68 conforming to IEC 60529 |
| IK degree of protection | IK06 conforming to EN 62262 |
| Overvoltage category | Class I conforming to IEC 61140 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]CSA[RETURN]CCC |
| Standards | UL 508 EN/IEC 60204-1 CSA C22.2 No 14 EN/IEC 60947-5-1 |

Packing Units

| | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 1.6 cm |
| Package 1 Width | 25 cm |
| Package 1 Length | 30 cm |
| Package 1 Weight | 1.325 kg |

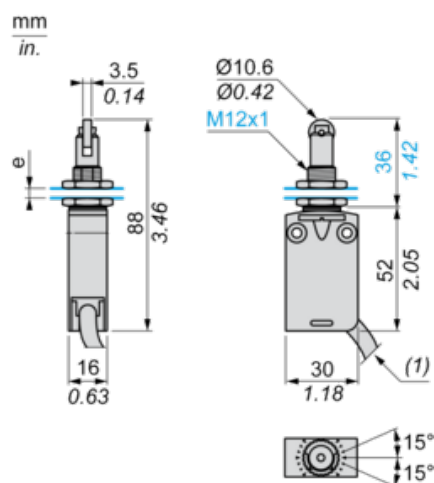
Offer Sustainability

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

Contractual warranty

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

Dimensions

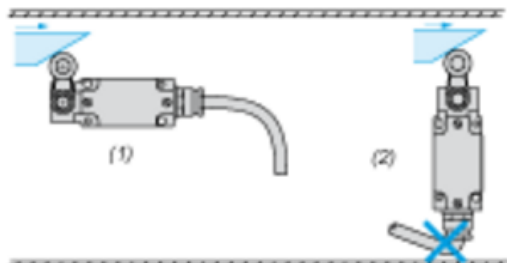


(1) External diameter of cable 7.5 mm.

e : 8 mm max, panel cut-out Ø 12.5 mm.

Mounting

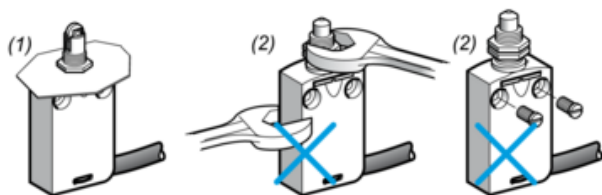
Sweep of Connecting Cable



- (1) Recommended
(2) To be avoided

Panel Mounting

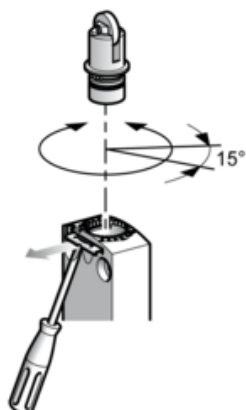
Mounting and Fixing Limit Switches by the Head



- (1) Recommended
(2) Forbidden

Setting-up

Plunger or Multi-directional Heads



Wiring Diagram

2-pole NC + NO Snap Action



(BK) Black

(BK-WH) Black White

(BU) Blue

(BN) Brown

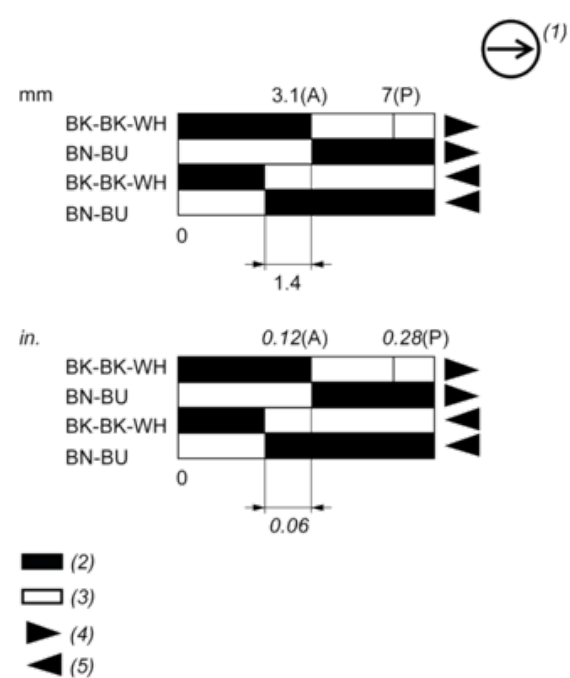
(GN-YE) Green Yellow

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

(4) Tripping

(5) Resetting

(BK) Black

(BK-WH) Black White

(BU) Blue

(BN) Brown