

XCMD41F2L5EX

limit switch XCMD - roller plunger - 2NC + 2NO
- ATEX/IECEX



Main

| | |
|-------------------------------|--|
| Range of product | OsiSense ATEX D |
| 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 |
| Fixing mode | By the head |
| Movement of operating head | Linear |
| Type of operator | Steel spring return roller plunger |
| Switch actuation | By 30° cam |
| Type of approach | Lateral approach, 2 directions |
| 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 | 7 N |
| Maximum actuation speed | 0.1 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 mm ² |
| Wire insulation material | PvR |
| Positive opening minimum force | 35 N |
| Minimum actuation speed | 0.01 m/min |
| Contact code designation | C300, AC-15 (240 V, I _e = 0.75 A) conforming to EN 60947-5-1 C300, AC-15 (240 V, I _e = 0.75 A) conforming to IEC 60947-5-1 appendix A R300, DC-13 (250 V, I _e = 0.1 A) conforming to EN 60947-5-1 R300, DC-13 (250 V, I _e = 0.1 A) conforming to IEC 60947-5-1 appendix A |
| [I _{th}] conventional enclosed thermal current | 3 A AC |
| [U _i] rated insulation voltage | 300 V conforming to CSA C22.2 No 14 400 V, pollution degree: 3 conforming to IEC 60947-1 300 V conforming to UL 508 |
| Resistance across terminals | <= 25 MOhm conforming to IEC 60255-7 category 3 |
| [U _{imp}] 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 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This information 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 24 V 3 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC 5000000 cycles DC-13 48 V 2 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC 5000000 cycles DC-13 120 V 1 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC |
| 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 10...500 Hz 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 60079-0 EN/IEC 60079-31 |
| Directives | 2014/34/EU - ATEX directive |

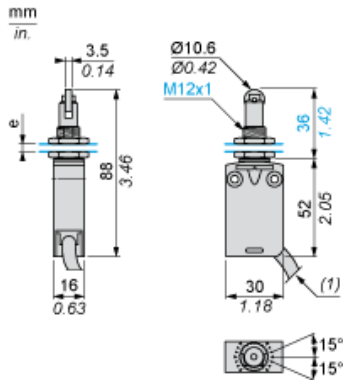
Offer Sustainability

| | |
|----------------------------------|--|
| RoHS (date code: YYWW) | Compliant - since 1001 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity |
| Product environmental profile | Available Product Environmental |
| Product end of life instructions | Available End Of Life Manual |

Contractual warranty

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

Dimensions



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

Mounting

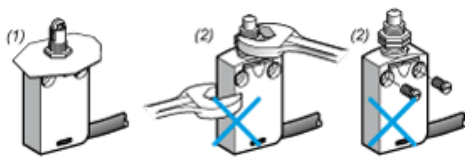
Sweep of Connecting Cable



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

Panel Mounting

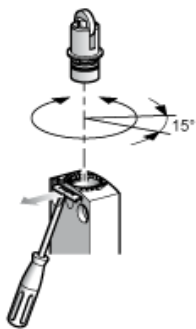
Mounting and Fixing Limit Switches by the Head



- (1) Recommended
- (2) Forbidden

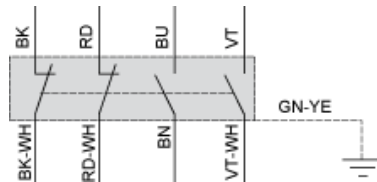
Setting-up

Plunger or Multi-directional Heads



Wiring Diagram

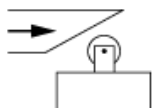
4-pole NC + NC + NO + NO Snap Action



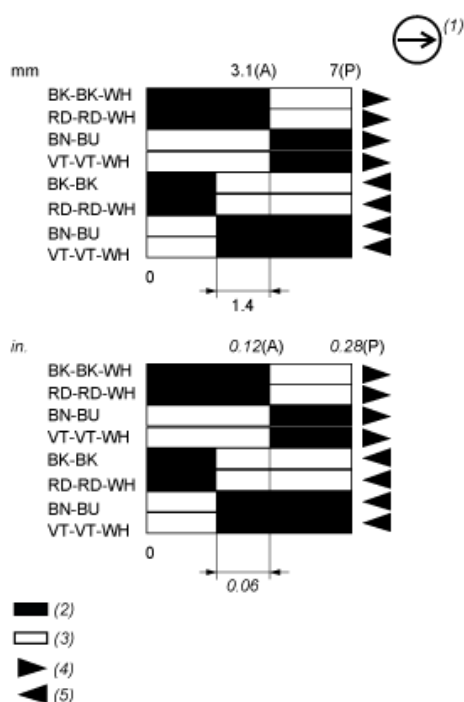
- (BK) Black
- (BK- Black White
WH)
- (RD) Red
- (RD- Red White
WH)
- (BU) Blue
- (BN) Brown
- (VT) Violet White
- (VT- Violet White
WH)
- (GN- Green Yellow
YE)

Characteristics of Actuation

Switch Actuation by 30° Cam



Functionnal 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- Black White
 WH)
- (RD) Red
- (RD- Red White
 WH)
- (BN) Brown
- (BU) Blue
- (VT) Violet
- (VT Violet White
 WH)