

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 mm²
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

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 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= 10500 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	

Class I conforming to IEC 61140 Class I conforming to NF C 20-030

UL[RETURN]CSA[RETURN]CCC

-25...70 °C

-40...70 °C

UL 508 EN/IEC 60204-1

CSA C22.2 No 14 EN/IEC 60947-5-1

TC

Packing Units

Overvoltage category

Protective treatment

Product certifications

Standards

Ambient air temperature for operation

Ambient air temperature for storage

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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) EVEL RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	₫Yes	

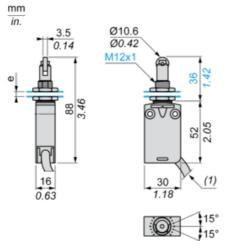
Contractual warranty

Warranty 18 mon	
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Product data sheet Dimensions Drawings

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Dimensions

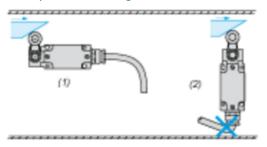


- (1) External diameter of cable 7.5 mm.
- e : 8 mm max, panel cut-out Ø 12.5 mm.

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Mounting

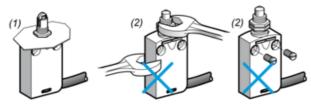
Sweep of Connecting Cable



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

Panel Mounting

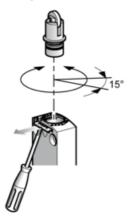
Mounting and Fixing Limit Switches by the Head



- (1) Recommended
- (2) Forbidden

Setting-up

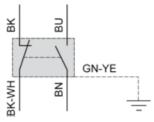
Plunger or Multi-directional Heads



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Wiring Diagram

2-pole NC + NO Snap Action



(BK) Black

(BK-WH) Black White

(BU) Blue

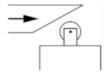
(BN) Brown

(GN-YE) Green Yellow

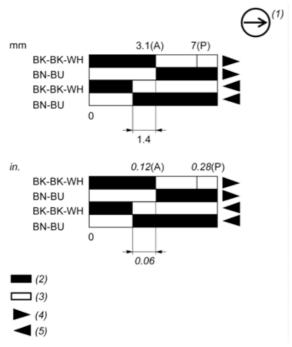
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Characteristics of Actuation

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