

Product data sheet

Specifications



Limit switch, Limit switches XC Standard, XCMD, M12 steel roller plunger, 1NC+1 NO, snap, 1 m

XCMD21F2L1

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	1 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 IEC 60947-5-1 appendix A R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1 appendix A

Disclaimer: 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

[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
Net Weight	0.205 kg

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 IEC 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	CSA UL CCC
Standards	UL 508 IEC 60204-1 IEC 60947-5-1 CSA C22.2 No 14

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	1.6 cm
Package 1 Width	16.0 cm
Package 1 Length	14.0 cm
Package 1 Weight	193.0 g
Unit Type Of Package 2	PAL
Number Of Units In Package 2	440
Package 2 Height	60.0 cm

Package 2 Width	80.0 cm
Package 2 Length	440.0 cm
Package 2 Weight	94.6 kg
Unit Type Of Package 3	S03
Number Of Units In Package 3	55
Package 3 Height	30.0 cm
Package 3 Width	30.0 cm
Package 3 Length	40.0 cm
Package 3 Weight	11.208 kg

Contractual warranty

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

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.


[Learn more about Green Premium >](#)


[Guide to assess a product's sustainability >](#)



RoHS/REACH

Well-being performance

 Mercury Free

 RoHS Exemption Information [Yes](#)

Certifications & Standards

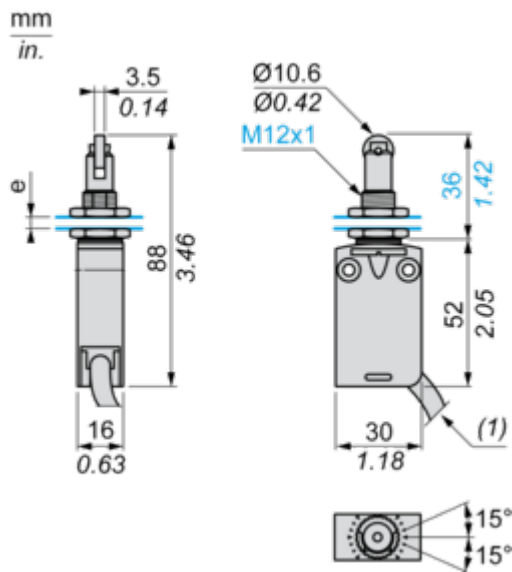
Reach Regulation [REACH Declaration](#)

Eu RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope)

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 Diisodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Dimensions Drawings

Dimensions

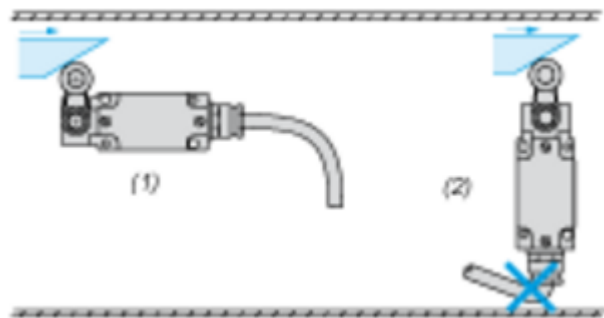


(1) External diameter of cable 7.5 mm.
e : 8 mm max, panel cut-out \varnothing 12.5 mm.

Mounting and Clearance

Mounting

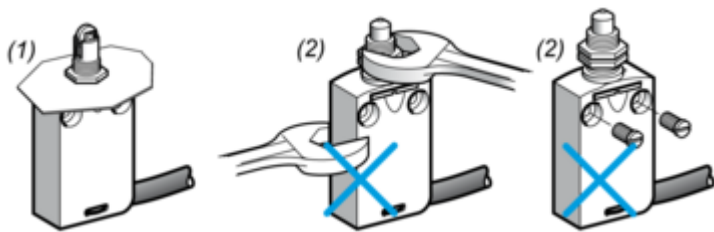
Sweep of Connecting Cable



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

Panel Mounting

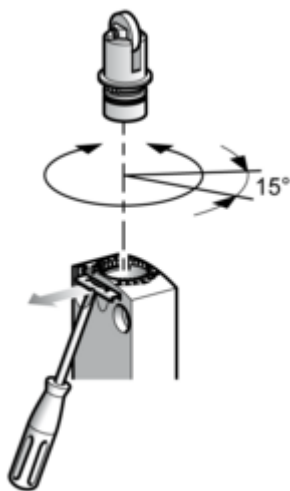
Mounting and Fixing Limit Switches by the Head



- (1) Recommended
- (2) Forbidden

Setting-up

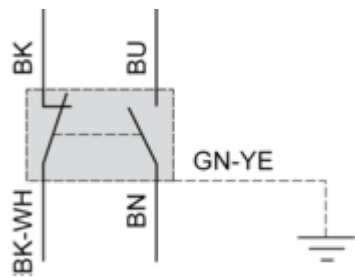
Plunger or Multi-directional Heads



Connections and Schema

Wiring Diagram

2-pole NC + NO Snap Action

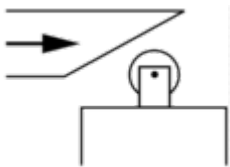


- (BK) Black
- (BK-WH) Black White
- (BU) Blue
- (BN) Brown
- (GN-YE) Green Yellow

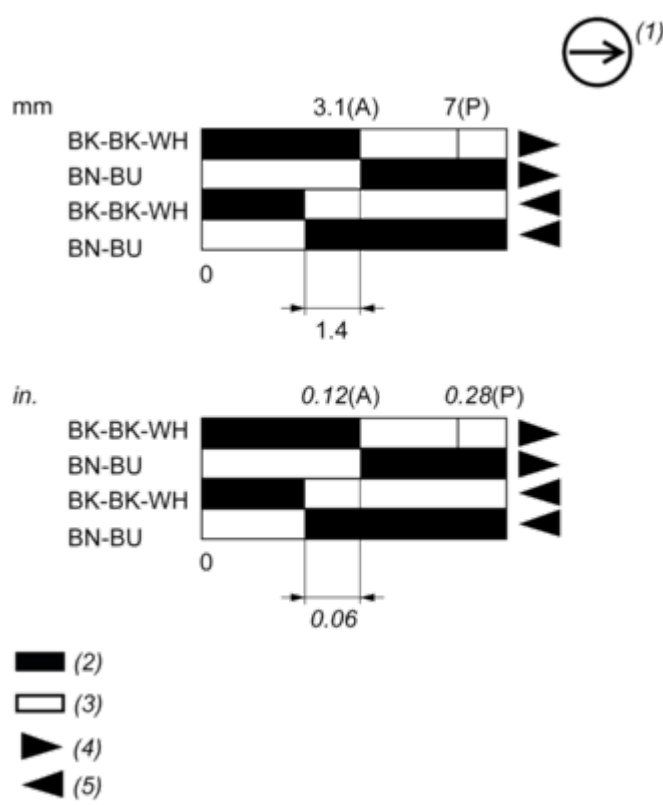
Technical Description

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