

XCMN2106L1

limit switch XCMN - cat's whisker - 1NC+1NO -
snap - 1 m



Main

Range of product	Telemecanique Limit switches XC Standard
Series name	Standard format
Product or component type	Limit switch
Device short name	XCMN
Sensor design	Miniature
Body type	Fixed
Head type	Multi-directional head
Material	Plastic
Body material	Plastic
Head material	Zamak
Fixing mode	By the body
Movement of operating head	Multi-directional
Type of operator	Spring return cat's whisker
Type of approach	Multi-directional approach
Number of poles	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Snap action

Complementary

Switch actuation	By any moving part
Electrical connection	Fixed cable
Cable length	1 m
Cable composition	4 x 0.75 mm ²
Wire insulation material	PvR
Contacts insulation form	Zb
Positive opening	Without
Minimum force for tripping	0.1 N
Maximum actuation speed	1 m/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	IEC 60664 4 kV IEC 60947-1 4 kV
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	5000000 cycles
Width	30 mm

Height	182 mm
Depth	16 mm
Net weight	0.08 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	IP65 conforming to IEC 60529
IK degree of protection	IK04 conforming to EN 50102
Electrical shock protection class	Class II conforming to IEC 61140 Class II 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	CCC UL CSA
Standards	EN/IEC 60204-1 UL 508 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 Weight	114 g
Package 1 Height	1.6 cm
Package 1 width	15 cm
Package 1 Length	18.2 cm
Unit Type of Package 2	S02
Number of Units in Package 2	30
Package 2 Weight	3.843 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

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

Technical drawing of a 1/2" NPT female plug. The drawing shows two views: a side view and a front view. Dimensions are given in mm and inches.

- Side View Dimensions:**
 - Total height: 182 mm (7.17 in.)
 - Bottom flange thickness: 16 mm (0.63 in.)
- Front View Dimensions:**
 - Top thread outer diameter: $\varnothing 1.2$ in.
 - Top thread pitch: $\varnothing 0.05$ in.
 - Height from top thread to center of first hole: 142 mm (5.59 in.)
 - Height from top thread to center of second hole: 40 mm (1.57 in.)
 - Distance between hole centers: 20 mm (0.79 in.)
 - Bottom flange outer diameter: 30 mm (1.18 in.)

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

Mounting

Sweep of Connecting Cable



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

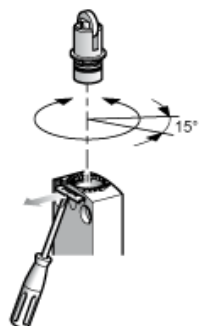
Mounting with Spacers



- (1) : 2 spacers supplied with the XCMN switch
(2) : 2 screws Ø 4mm (not included)

Setting-up

Plunger or Multi-directional Heads



Wiring diagram

2-pole NC + NO Snap Action



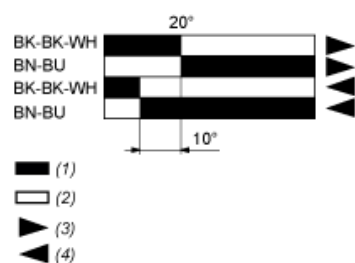
(BK) Black
(BK- Black White
WH)
(BN) Brown
(BU) Blue

Characteristics of Actuation

Switch Actuation by Any Moving Part



Functionnal Diagram



- (1) Closed
- (2) Open
- (3) Tripping
- (4) Resetting
- (BK) Black
- (BK- Black White
- WH)
- (BN) Brown
- (BU) Blue