

# XCMN2102L1

Limit switch, Limit switches XC Standard, XCMN, steel roller plunger, 1NC+1 NO, 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	Plunger head
Material	Plastic
Body material	Plastic
Head material	Zamak
Fixing mode	By the body
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	Fixed cable
Cable length	1 m
Cable composition	4 x 0.75 mm <sup>2</sup>
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	0.5 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	4 kV IEC 60664 4 kV 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	5000000 cycles
Width	30 mm
Height	70.4 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	CSA CCC UL
Standards	CSA C22.2 No 14 UL 508 EN/IEC 60204-1 EN/IEC 60947-5-1

## Packing Units

Package 1 Weight	0.116 kg
Package 1 Height	0.200 dm
Package 1 width	1.300 dm
Package 1 Length	1.300 dm

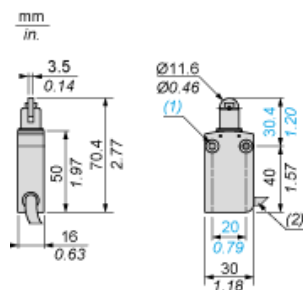
## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

## Contractual warranty

Warranty	18 months
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## Dimensions



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

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## Mounting

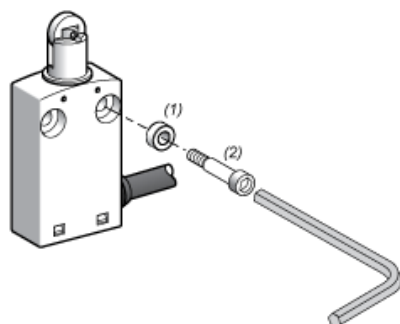
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### Sweep of Connecting Cable



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

### Mounting with Spacers



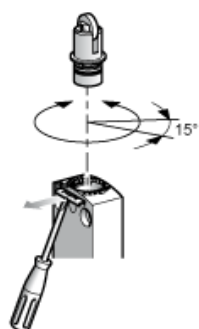
- (1) : 2 spacers supplied with the XCMN switch  
(2) : 2 screws Ø 4mm (not included)

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## Setting-up

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### Plunger or Multi-directional Heads



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## Wiring diagram

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### 2-pole NC + NO Snap Action



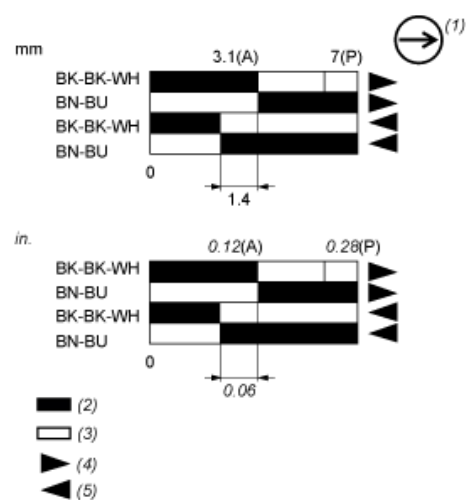
(BK) Black  
(BK- Black White  
WH)  
(BN) Brown  
(BU) Blue

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