

# XCMD2102L5

Limit switch, Limit switches XC Standard, XCMD, steel roller plunger, 1NC+1 NO, snap, 5 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	Plunger head
Material	Metal
Body material	Zamak
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	Removable cable connector
Cable length	5 m
Cable composition	5 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
[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

## 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 EN 62262
Overvoltage category	Class I
Ambient air temperature for operation	-25...70 °C
Product certifications	CSA UL
Standards	EN 60947-5-1 UL 508 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	3.0 cm
Package 1 Width	20.0 cm
Package 1 Length	20.0 cm
Package 1 Weight	506.0 g
Unit Type of Package 2	P06
Number of Units in Package 2	160
Package 2 Height	60.0 cm
Package 2 Width	80.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	93.884 kg
Unit Type of Package 3	S03
Number of Units in Package 3	20
Package 3 Height	30.0 cm
Package 3 Width	30.0 cm
Package 3 Length	40.0 cm
Package 3 Weight	10.826 kg

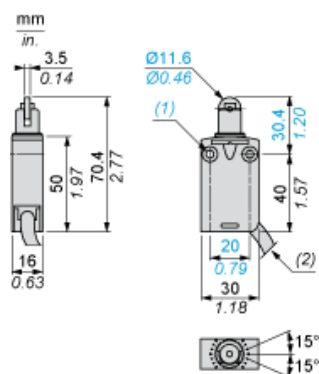
## Offer Sustainability

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



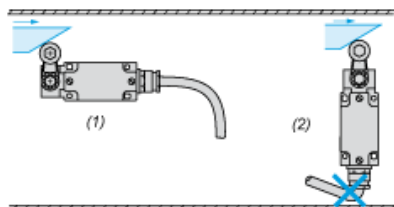
- (1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.  
(2) External diameter of cable 7.5 mm.

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## Mounting

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### Sweep of Connecting Cable



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

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## Setting-up

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### Plunger or Multi-directional Heads



## Wiring Diagram

### 2-pole NC + NO Snap Action



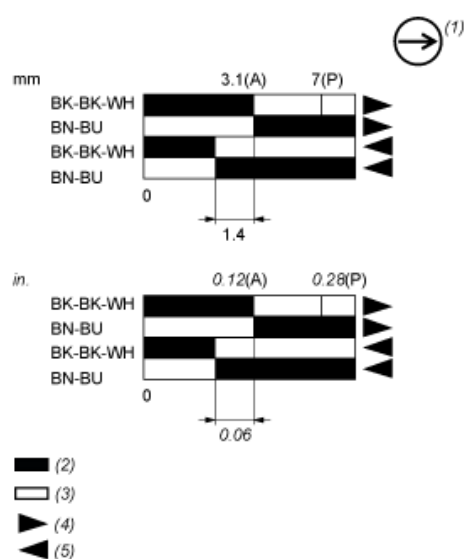
(BK) Black  
(BK- Black White  
WH)  
(BU) Blue  
(BN) Brown  
(GN- Green Yellow  
YE)

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