

## Product data sheet

### Characteristics

# XCMD2131L1

Limit switch, Limit switches XC Standard, XCMD, thermoplastic plastic roller lever ball bearing, 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	XCMD
Sensor design	Miniature
Body type	Fixed
Head type	Rotary head
Material	Metal
Body material	Zamak
Head material	Zamak
Fixing mode	By the body
Movement of operating head	Rotary
Type of operator	Spring return roller lever thermoplastic ball bearing mounted
Type of approach	Lateral approach, 2 directions
Number of poles	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Snap action

### Complementary

Tracks	10/50 mm
Switch actuation	By 30° cam
Electrical connection	Removable cable connector
Cable length	1 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	0.5 N
Minimum force for tripping	0.1 N
Maximum actuation speed	1.5 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 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	0.22 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 EN 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	CCC[RETURN]CSA[RETURN]UL
Standards	EN/IEC 60947-5-1 EN/IEC 60204-1 UL 508 CSA C22.2 No 14

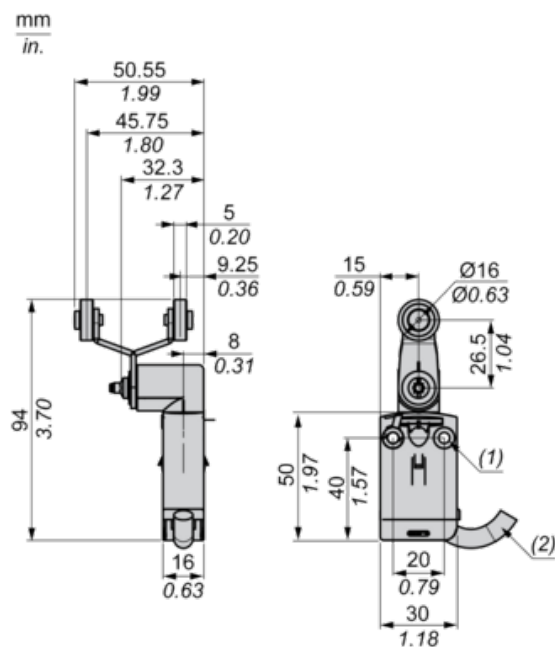
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

## Contractual warranty

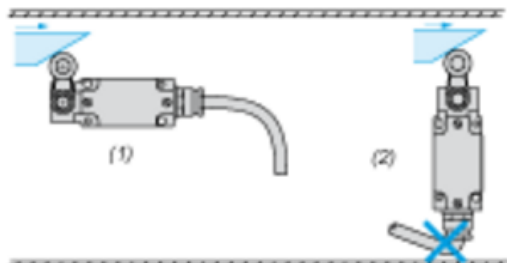
Warranty	18 months
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## Dimensions



## Mounting

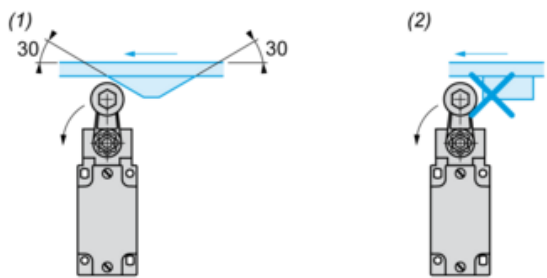
### Sweep of Connecting Cable



- (1) Recommended  
(2) To be avoided

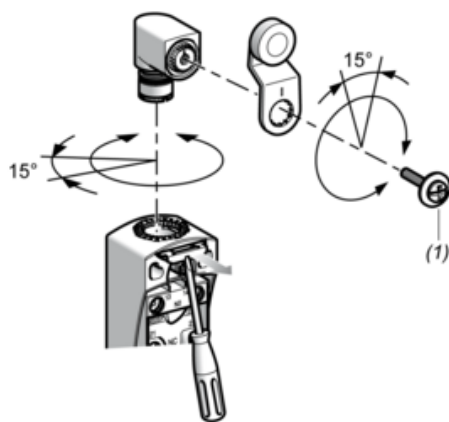
### Mounting with Rotary Heads and Levers

#### Type of Cam



- (1) Recommended  
(2) To be avoided

### Setting-up with Head ZCE01 and ZCE09



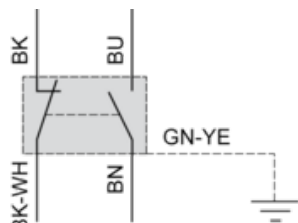
- (1) Tightening torque (Min : 1) (Max : 1.5)

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## Wiring Diagram

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### 2-pole NC + NO Snap Action



(BK) Black

(BK-WH) Black White

(BU) Blue

(BN) Brown

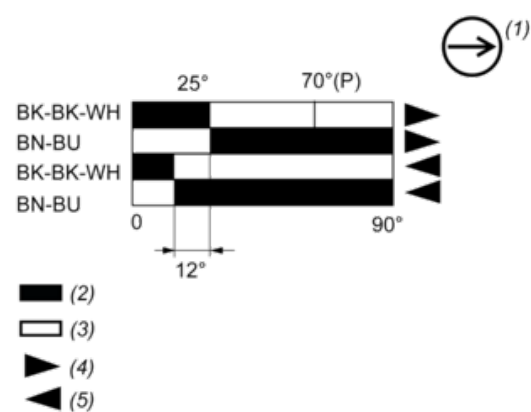
(GN-YE) Green Yellow

## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functional Diagram



(P) Positive opening point

(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