

Limit switch, Limit switches XC Standard,  
XCMD, M12 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	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	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	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
[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
[Uiimp] 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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither TMSS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4 cm
Package 1 Width	20 cm
Package 1 Length	20 cm
Package 1 Weight	525 g
Unit Type of Package 2	S03
Number of Units in Package 2	20
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	11.234 kg
Unit Type of Package 3	P06
Number of Units in Package 3	160
Package 3 Height	77 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	84 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Diisobutyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
For all Reach RoHS enquiries contact us at	<a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>

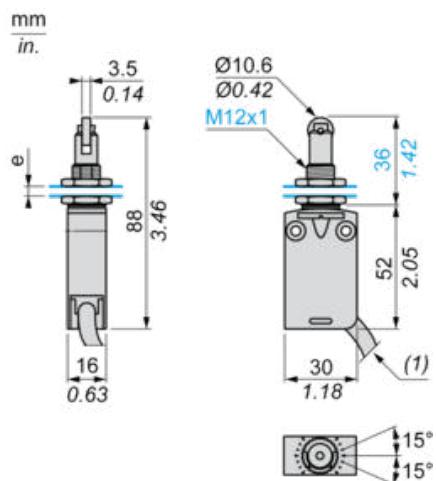
## Contractual warranty

Warranty	18 months
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Dimensions

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(1) External diameter of cable 7.5 mm.

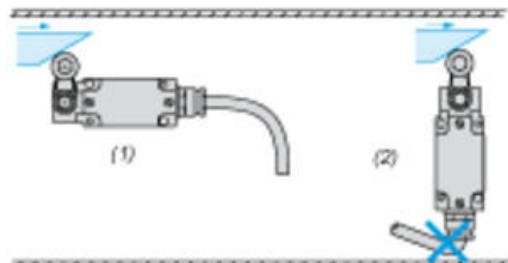
e : 8 mm max, panel cut-out Ø 12.5 mm.

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## Mounting

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### Sweep of Connecting Cable



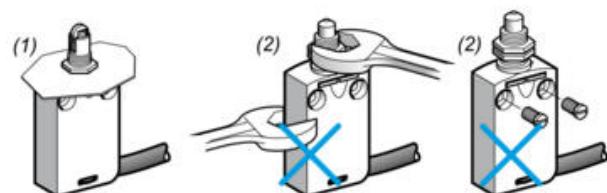
- (1) Recommended  
(2) To be avoided

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## Panel Mounting

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### Mounting and Fixing Limit Switches by the Head



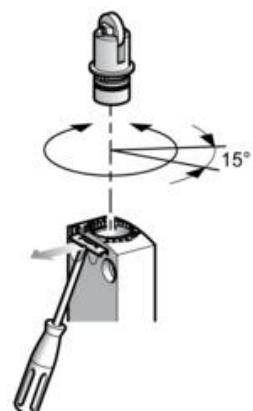
- (1) Recommended  
(2) Forbidden

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## Setting-up

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### Plunger or Multi-directional Heads

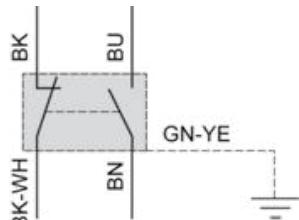


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Wiring Diagram

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2-pole NC + NO Snap Action



(BK) Black

(BK-WH) Black White

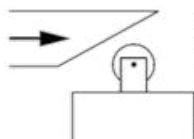
(BU) Blue

(BN) Brown

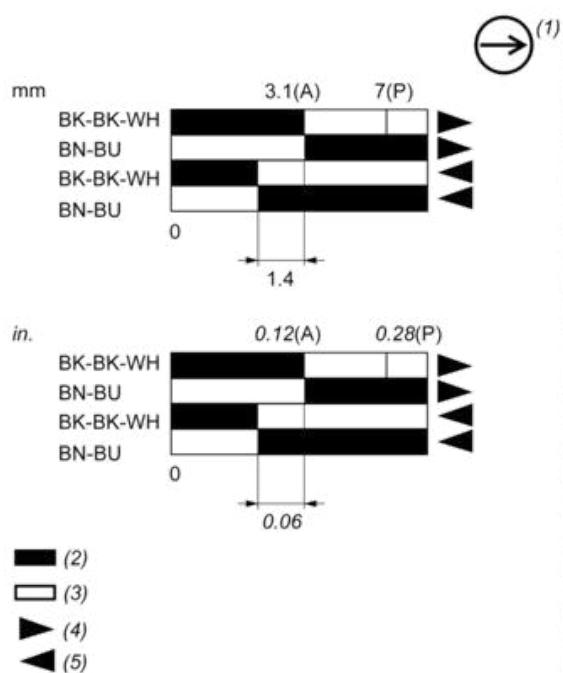
(GN-YE) Green Yellow

## Characteristics of Actuation

## Switch Actuation by 30° Cam



## Functional Diagram



(P) Positive opening point

(A) Cam displacement

### (1) NC contact with positive opening operation

(2) Closed

(2) Close

(3) Open

- (4) Flipping
- (5) Resetting

(5) Resettl  
(BK) Black

(BK) Black

(BLU) Blue

(BU) Blue