

Limit switch, Limit switches XC Standard,  
XCMD, steel roller plunger, 1NC+1 NO, snap,  
M12



**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	Plug-in body
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	Male connector M12, 4 pins
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
[Ie] rated operational current	1 A at 24 V, DC-13 conforming to EN/IEC 60947-5-1 appendix A 3 A at 24 V, AC-14
[Ithe] conventional enclosed thermal current	4 A
[Ui] rated insulation voltage	36 V (pollution degree 3) conforming to IEC 60947-5-1
Maximum resistance across terminals	25 mOhm conforming to IEC 60255-7 category 3
[Uimp] rated impulse withstand voltage	0.8 KV conforming to IEC 60664 0.8 KV conforming to IEC 60947-1
Short-circuit protection	4 A cartridge fuse, type gG
Electrical durability	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
Mechanical durability	10000000 cycles
Width	30 mm
Height	80 mm
Depth	21 mm
Net weight	0.09 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 IP69 conforming to IEC 60529
IK degree of protection	IK04 conforming to EN 62262
Electrical shock protection class	Class III conforming to IEC 61140 Class III 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	cURus[RETURN]CCC
Standards	UL 508 CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60204-1

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3 cm
Package 1 Width	7 cm
Package 1 Length	17 cm
Package 1 Weight	140 g
Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	5.482 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>

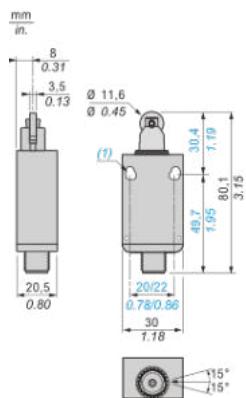
## Contractual warranty

Warranty	18 months
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Dimensions

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(1) : 2 elongated holes Ø 4.3 x 6.3 mm on 22 mm centers or 2 holes Ø 4.3 on 20 mm centers.

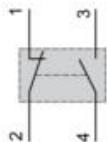
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Connections and Schema

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Wiring Diagram

2-pole NC + NO Snap Action

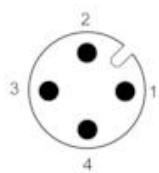


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Connections and Schema

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M12 Connector



1 : NC

2 : NC

3 : NO

4 : NO

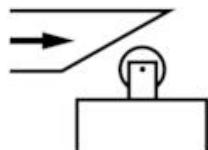
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## Technical Description

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### Characteristics of Actuation

Switch Actuation by 30°cam

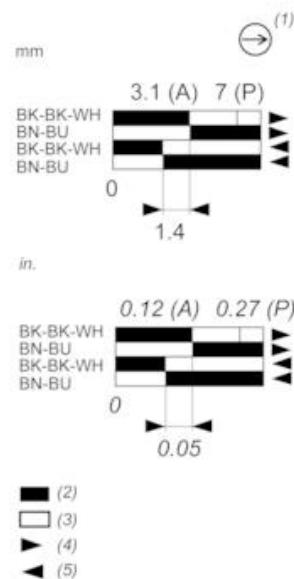


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## Technical Description

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### Functional Diagram, Travel Distance



(P) : Positive opening point

(A) : Cam displacement

(1) : NC contact with positive opening operation

(2) : Closed

(3) : Open

(4) : Tripping

(5) : Resetting

BK : Black

WH : White

BU : Blue

BN : Brown