

# XCMD2102C12

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, 5 pins
Contacts insulation form	Zb
Positive opening	With
Positive opening minimum force	35 N
Minimum force for tripping	7 N
Maximum actuation speed	1.64 ft/s (0.5 m/s)
[Ie] rated operational current	0.22 A 50 V, DC-13 EN/IEC 60947-5-1 appendix A 3 A 50 V, AC-15 EN/IEC 60947-5-1 appendix A
[Ithe] conventional enclosed thermal current	4 A
[Ui] rated insulation voltage	60 V 3) IEC 60947-5-1
Maximum resistance across terminals	25 mOhm IEC 60255-7 category 3
[Uimp] rated impulse withstand voltage	0.8 kV IEC 60664 0.8 kV IEC 60947-1
Short-circuit protection	4 A cartridge fuse gG
Electrical durability	5000000 Cycles, DC-13, 24 V, 3 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C 5000000 cycles, DC-13, 48 V, 2 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C
Mechanical durability	10000000 cycles
Width	1.18 in (30 mm)
Height	1.97 in (50 mm)
Depth	0.63 in (16 mm)
Net Weight	0.20 lb(US) (0.09 kg)

## Environment

Shock resistance	25 gn 18 ms IEC 60068-2-27
Vibration resistance	5 gn 10...500 Hz)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
Electrical shock protection class	Class I IEC 61140 Class I NF C 20-030
Ambient air temperature for operation	-13...158 °F (-25...70 °C)
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Protective treatment	TC
Product Certifications	CSA[RETURN]UL[RETURN]CCC
Standards	CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60204-1 UL 508

## Ordering and shipping details

Category	US1000T22413
Discount Schedule	000T
GTIN	3389110221312
Returnability	Yes
Country of origin	US

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.67 in (1.7 cm)
Package 1 Width	2.80 in (7.1 cm)
Package 1 Length	2.05 in (5.2 cm)
Package 1 Weight	3.25 oz (92.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	11.25 lb(US) (5.105 kg)
Unit Type of Package 3	PAL
Number of Units in Package 3	800
Package 3 Height	23.62 in (60.0 cm)
Package 3 Width	31.50 in (80.0 cm)
Package 3 Length	314.96 in (800.0 cm)
Package 3 Weight	2243.43 lb(US) (1017.6 kg)

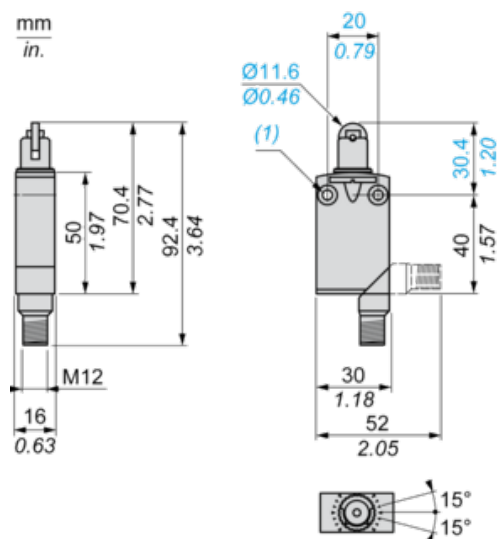
## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl 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



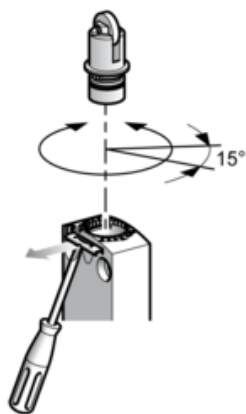
(1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.

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## Setting-up

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### Plunger or Multi-directional Heads

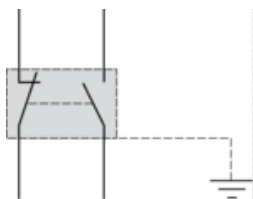


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## Wiring Diagram

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2-pole NC + NO Snap Action + Integral M12 5-pin Connector

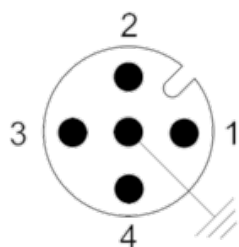


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## Wiring Diagram

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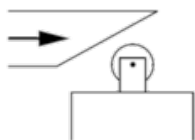
5-pin, M12, 4A-60V



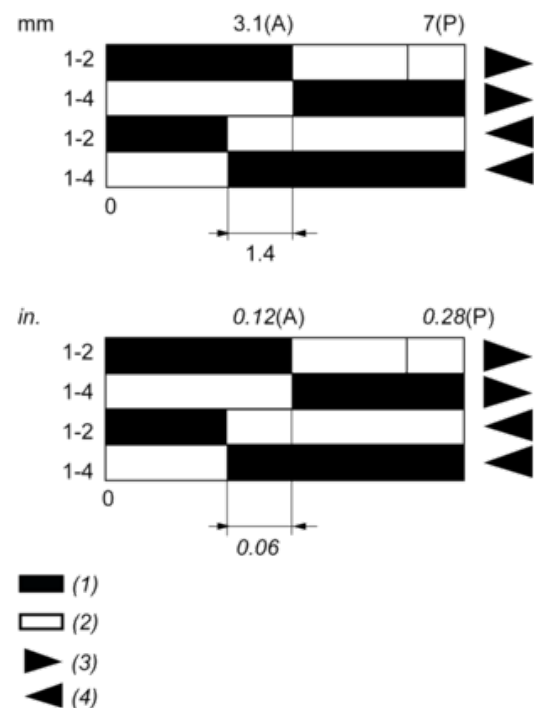
1 - 2 : NC  
3 - 4 : NO  
5 : Grounding

## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functional Diagram



(P) Positive opening point

(A) Cam displacement

(1) Closed

(2) Open

(3) Tripping

(4) Resetting