

# Product data sheet

Specifications



## Limit switch, Limit switches XC Standard, XCKD, cat's whisker, 1NC +1 NO, snap, M12

XCKD2106M12

### Main

Range of product	Telemecanique Limit switches XC Standard
Series name	Standard format
Product or component type	Limit switch
Device short name	XCKD
Sensor design	Compact
Body type	Fixed
Head type	Multi-directional head
Material	Metal
Body material	Zamak
Head material	Zamak
Fixing mode	By the body
Movement of operating head	Multi-directional
Type of operator	Spring return cat's whisker
Type of approach	Multi-directional approach
Number of poles	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Snap action

### Complementary

Switch actuation	By any moving part
Electrical connection	Male connector M12, 5 pins
Contacts insulation form	Zb
Positive opening	Without
Minimum torque for tripping	0.13 N.m
Maximum actuation speed	1 m/s
Repeat accuracy	0.1 mm on the tripping points with 1 million operating cycles
[Ie] rated operational current	3 A at 50 V, AC-15 conforming to EN/IEC 60947-5-1 appendix A 0.27 A at 50 V, DC-13 conforming to EN/IEC 60947-5-1 appendix A
[Ithe] conventional enclosed thermal current	4 A

<b>[Ui] rated insulation voltage</b>	60 V (pollution degree 3) conforming to IEC 60947-1
<b>Maximum resistance across terminals</b>	25 MOhm conforming to IEC 60255-7 category 3
<b>[Uimp] rated impulse withstand voltage</b>	0.8 kV conforming to IEC 60664 0.8 kV conforming to IEC 60947-1
<b>Short-circuit protection</b>	4 A cartridge fuse, type gG
<b>Electrical durability</b>	5000000 cycles, DC-13, 24 V, 10 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, 48 V, 7 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C
<b>Mechanical durability</b>	5000000 cycles
<b>Width</b>	31 mm
<b>Height</b>	65 mm
<b>Depth</b>	30 mm
<b>Net weight</b>	0.185 kg
<b>Terminals description ISO n°1</b>	(21-22)NC (13-14)NO

## Environment

<b>Shock resistance</b>	50 gn for 11 ms conforming to IEC 60068-2-27
<b>Vibration resistance</b>	25 gn (f= 10...500 Hz) conforming to IEC 60068-2-6
<b>IK degree of protection</b>	IK06 conforming to EN 50102
<b>Electrical shock protection class</b>	Class I conforming to IEC 61140 Class I conforming to NF C 20-030
<b>Ambient air temperature for operation</b>	-25...70 °C
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Protective treatment</b>	TC
<b>Product certifications</b>	UL CCC CSA
<b>Standards</b>	UL 508 EN 60204-1 IEC 60947-5-1 EN 60947-5-1 IEC 60204-1 CSA C22.2 No 14

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	3.3 cm
<b>Package 1 Width</b>	6.35 cm
<b>Package 1 Length</b>	14.73 cm
<b>Package 1 Weight</b>	0.32 kg
<b>Unit Type of Package 2</b>	S01
<b>Number of Units in Package 2</b>	12
<b>Package 2 Height</b>	15 cm
<b>Package 2 Width</b>	15 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	2.394 kg

## Offer Sustainability

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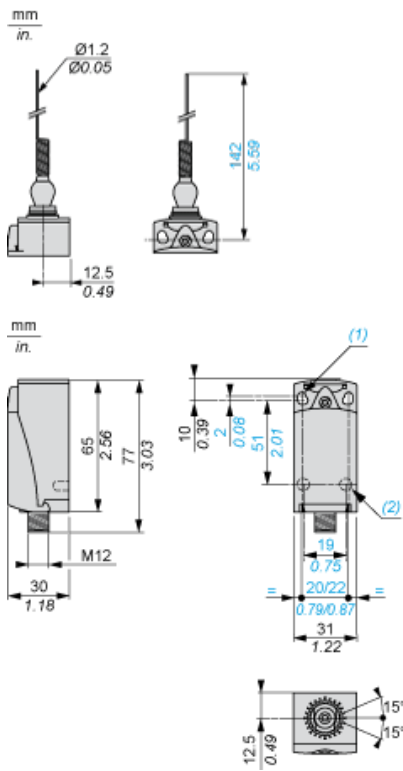
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>California proposition 65</b>	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>

## Contractual warranty

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<b>Warranty</b>	18 months
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Dimensions

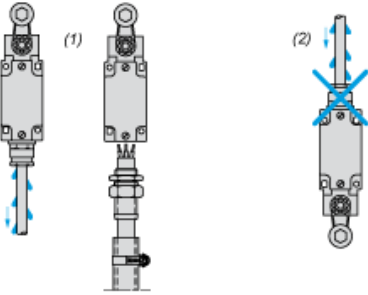


- (1) 2 elongated holes  $\varnothing 4.3 \times 6.3$  mm on 22 mm centres, 2 holes  $\varnothing 4.3$  on 20 mm centres.  
 (2) 2 x  $\varnothing 3$  holes for support studs, depth 4 mm.

**Mounting with Cable Entry**

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**Position of Cable Gland**



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

**Setting-up**

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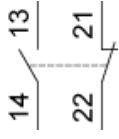
**Plunger or Multi-directional Heads**



**Wiring Diagram**

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**2-pole NC + NO Snap Action**



**Connections**

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**M12 Connector**



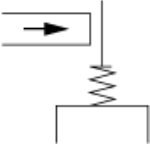
- 1-2 : NC
- 3-4 : NO
- 5 : Grounding



**Characteristics of Actuation**

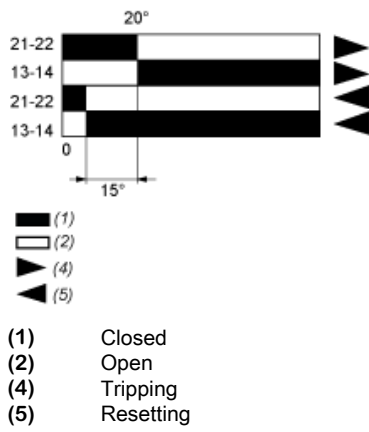
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**Switch Actuation by Any Moving Part**



Functionnal Diagram

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Recommended replacement(s)