

# XCKD2106M12

limit switch XCKD - cat's whisker - 1NC+1NO -  
snap - M12



## Main

|                               |                             |
|-------------------------------|-----------------------------|
| Range of product              | OsiSense XC                 |
| 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                 |
| Contacts 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<br>0.27 A at 50 V, DC-13 conforming to EN/IEC 60947-5-1 appendix A                                                                                                                     |
| [Ithe] conventional enclosed thermal current | 4 A                                                                                                                                                                                                                                                 |
| [Ui] rated insulation voltage                | 60 V degree of pollution 3 conforming to IEC 60947-1                                                                                                                                                                                                |
| Resistance across terminals                  | <= 25 MOhm conforming to IEC 60255-7 category 3                                                                                                                                                                                                     |
| [Uimp] rated impulse withstand voltage       | 0.8 kV conforming to IEC 60664<br>0.8 kV conforming to IEC 60947-1                                                                                                                                                                                  |
| Short circuit protection                     | 4 A by gG cartridge fuse                                                                                                                                                                                                                            |
| Electrical durability                        | 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<br>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 |
| Mechanical durability                        | 5000000 cycles                                                                                                                                                                                                                                      |
| Width                                        | 31 mm                                                                                                                                                                                                                                               |
| Height                                       | 65 mm                                                                                                                                                                                                                                               |
| Depth                                        | 30 mm                                                                                                                                                                                                                                               |
| Product weight                               | 0.185 kg                                                                                                                                                                                                                                            |
| Terminals description ISO n°1                | (13-14)NO<br>(21-22)NC                                                                                                                                                                                                                              |

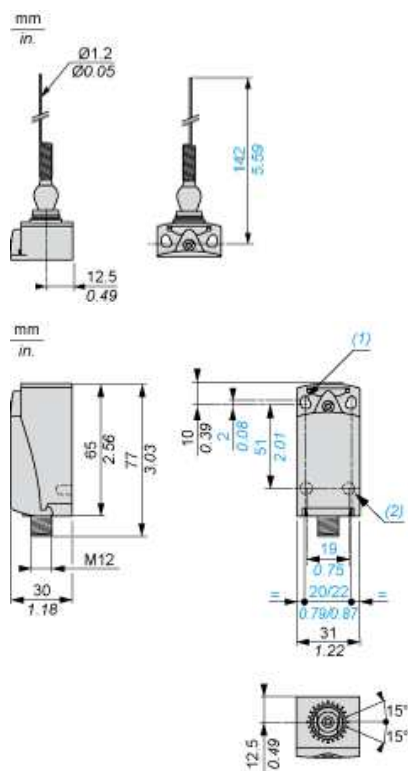
## Environment

|                                            |                                                                                         |
|--------------------------------------------|-----------------------------------------------------------------------------------------|
| Shock resistance                           | 50 gn (duration = 11 ms) conforming to IEC 60068-2-27                                   |
| Vibration resistance                       | 25 gn (f = 10...500 Hz) conforming to IEC 60068-2-6                                     |
| IK degree of protection                    | IK06 conforming to EN 50102                                                             |
| Class of protection against electric shock | Class I conforming to IEC 61140<br>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<br>CSA<br>UL                                                                        |
| Standards                                  | EN 60204-1<br>EN 60947-5-1<br>IEC 60204-1<br>IEC 60947-5-1<br>UL 508<br>CSA C22.2 No 14 |

## Offer Sustainability

|                                  |                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                                 |
| RoHS (date code: YYWW)           | Compliant - since 1002 - <a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold                                     |
| Product end of life instructions | Need no specific recycling operations                                                 |

## Dimensions



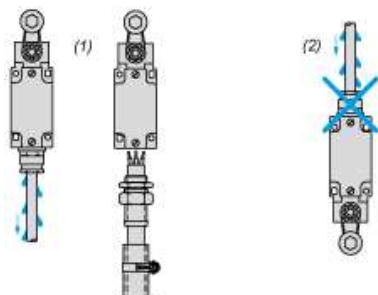
- (1) 2 elongated holes  $\varnothing 4.3 \times 6.3$  mm on 22 mm centres, 2 holes  $\varnothing 4.3$  on 20 mm centres.  
(2) 2 x  $\varnothing 3$  holes for support studs, depth 4 mm.

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## Mounting with Cable Entry

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### Position of Cable Gland



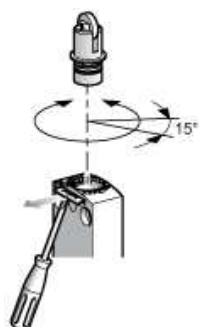
- (1) Recommended
- (2) To be avoided

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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

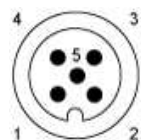


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## Connections

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### M12 Connector



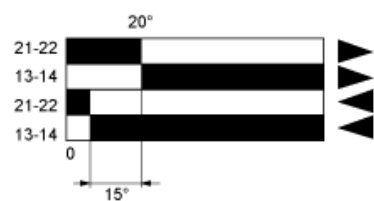
1-2 : NC  
3-4 : NO  
5 : Grounding

## Characteristics of Actuation

### Switch Actuation by Any Moving Part



## Functionnal Diagram



- (1) Closed
- (2) Open
- (4) Tripping
- (5) Resetting

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- (2) Open
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