

# XCKN2149P20

Limit switch, Limit switches XC Standard, XCKN, plastic roller lever  $\tilde{\sim}$  50 var.length, 1NC +1 NO, snap, M20



## Main

|                               |                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------|
| Range of product              | Telemecanique Limit switches XC Standard                                        |
| Series name                   | Standard format                                                                 |
| Product or component type     | Limit switch                                                                    |
| Device short name             | XCKN                                                                            |
| Sensor design                 | Compact                                                                         |
| Body type                     | Fixed                                                                           |
| Head type                     | Rotary head                                                                     |
| Material                      | Plastic                                                                         |
| Body material                 | Plastic                                                                         |
| Head material                 | Plastic                                                                         |
| Fixing mode                   | By the body                                                                     |
| Movement of operating head    | Rotary                                                                          |
| Type of operator              | Spring return roller lever thermoplastic variable length, roller diameter 50 mm |
| Type of approach              | Lateral approach, 2 directions                                                  |
| Cable entry                   | 1 entry tapped for M20 x 1.5 cable gland, cable outer diameter: 7...13 mm       |
| Number of poles               | 2                                                                               |
| Contacts type and composition | 1 NC + 1 NO                                                                     |
| Contact operation             | Snap action                                                                     |

## Complementary

|                                        |                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation                       | By 30° cam                                                                                                                                                                                                                                                                                                                                                             |
| Electrical connection                  | Screw-clamp terminals, clamping capacity: 1 x 0.34...2 x 1.5 mm <sup>2</sup>                                                                                                                                                                                                                                                                                           |
| Contacts insulation form               | Zb                                                                                                                                                                                                                                                                                                                                                                     |
| Positive opening                       | With                                                                                                                                                                                                                                                                                                                                                                   |
| Minimum torque for tripping            | 0.1 N.m                                                                                                                                                                                                                                                                                                                                                                |
| Maximum actuation speed                | 1.5 m/s                                                                                                                                                                                                                                                                                                                                                                |
| Contact code designation               | A300, AC-15 (Ue = 240 V), Ie = 3 A, Ithe = 10 A conforming to IEC 60947-5-1 appendix A<br>R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1 appendix A                                                                                                                                                                                                  |
| [Ui] rated insulation voltage          | 300 V conforming to UL 508<br>500 V (pollution degree 3) conforming to IEC 60947-1<br>300 V conforming to CSA C22.2 No 14                                                                                                                                                                                                                                              |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60664<br>6 kV conforming to IEC 60947-1                                                                                                                                                                                                                                                                                                         |
| Short-circuit protection               | 10 A cartridge fuse, type gG                                                                                                                                                                                                                                                                                                                                           |
| Electrical durability                  | 5000000 Cycles, DC-13, 120 V, 4 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>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                  | 10000000 cycles                                                                                                                                                                                                                                                                                                                                                        |
| Width                                  | 30 mm                                                                                                                                                                                                                                                                                                                                                                  |
| Height                                 | 133...173 mm                                                                                                                                                                                                                                                                                                                                                           |
| Depth                                  | 48 mm                                                                                                                                                                                                                                                                                                                                                                  |

|                               |                        |
|-------------------------------|------------------------|
| Net weight                    | 0.2 kg                 |
| Terminals description ISO n°1 | (13-14)NO<br>(21-22)NC |

## Environment

|                                       |                                                                                           |
|---------------------------------------|-------------------------------------------------------------------------------------------|
| Shock resistance                      | 15 gn for 11 ms conforming to IEC 60068-2-27                                              |
| Vibration resistance                  | 25 gn (f= 10...500 Hz) conforming to IEC 60068-2-6                                        |
| IP degree of protection               | IP65 conforming to IEC 60529                                                              |
| IK degree of protection               | IK04 conforming to IEC 62262                                                              |
| Overvoltage category                  | Class II conforming to IEC 61140<br>Class II 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                | UL[RETURN]CCC[RETURN]CSA                                                                  |
| Standards                             | IEC 60947-5-1<br>UL 508<br>IEC 60947-5-1<br>IEC 60204-1<br>CSA C22.2 No 14<br>IEC 60204-1 |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 11.0 cm |
| Package 1 Width              | 16.0 cm |
| Package 1 Length             | 30.7 cm |
| Package 1 Weight             | 110.0 g |
| Unit Type of Package 2       | BB1     |
| Number of Units in Package 2 | 20      |
| Package 2 Height             | 11.0 cm |
| Package 2 Width              | 16.0 cm |
| Package 2 Length             | 30.7 cm |
| Package 2 Weight             | 2.2 kg  |
| Unit Type of Package 3       | P06     |
| Number of Units in Package 3 | 480     |
| Package 3 Height             | 80.0 cm |
| Package 3 Width              | 80.0 cm |
| Package 3 Length             | 60.0 cm |
| Package 3 Weight             | 67.1 kg |

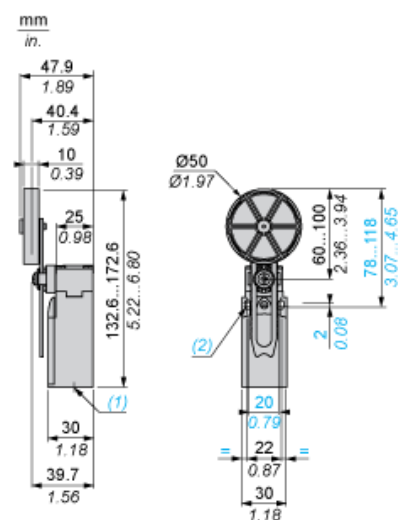
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status                   | Green Premium product                                                                                                                                                                                                                                                                                                                                                            |
| Circularity Profile                        | No need of specific recycling operations                                                                                                                                                                                                                                                                                                                                         |
| 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 Diisodecyl 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 |
|----------|-----------|

## Dimensions

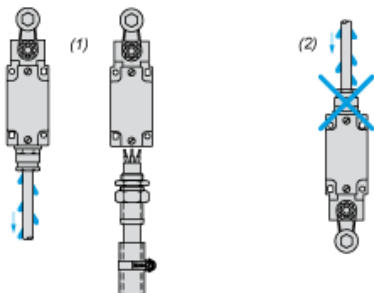


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## Mounting with Cable Entry

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### Position of Cable Gland



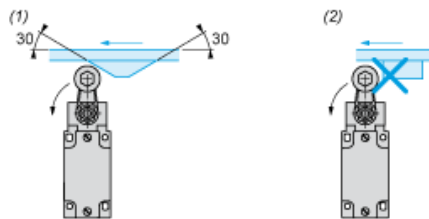
- (1) Recommended
- (2) To be avoided

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## Mounting with Rotary Heads and Levers

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### Type of Cam



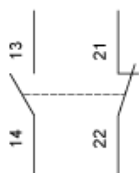
- (1) Recommended
- (2) To be avoided

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Wiring Diagram

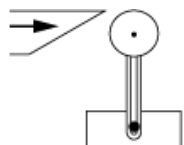
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2-pole NC + NO Snap Action

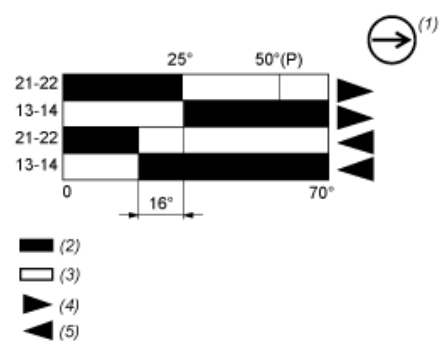


## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functionnal Diagram



- (P) Positive opening point  
 (1) NC contact with positive opening operation  
 (2) Closed  
 (3) Open  
 (4) Tripping  
 (5) Resetting