

# XCKD2128P16

Limit switch, Limit switches XC Standard, XCKD, thermoplastic plastic roller lev plunger H or V, 1NC+1 NO, snap, M16



## 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                     | 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 lever plunger thermoplastic |
| Type of approach              | Lateral or vertical approach, 1 direction        |
| 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>                                                                                                                                                                                                                                                                                                       |
| Cable entry                            | 1 entry tapped for M16 x 1.5 cable gland, cable outer diameter: 4...8 mm                                                                                                                                                                                                                                                                                                           |
| Contacts insulation form               | Zb                                                                                                                                                                                                                                                                                                                                                                                 |
| Positive opening                       | With                                                                                                                                                                                                                                                                                                                                                                               |
| Positive opening minimum force         | 18 N                                                                                                                                                                                                                                                                                                                                                                               |
| Minimum force for tripping             | 6 N                                                                                                                                                                                                                                                                                                                                                                                |
| Maximum actuation speed                | 1 m/s                                                                                                                                                                                                                                                                                                                                                                              |
| Repeat accuracy                        | 0.1 mm on the tripping points with 1 million operating cycles                                                                                                                                                                                                                                                                                                                      |
| Contact code designation               | A300, AC-15 (Ue = 240 V), Ie = 3 A, Ithe = 10 A conforming to EN 60947-5-1<br>A300, AC-15 (Ue = 240 V), Ie = 3 A, Ithe = 10 A conforming to IEC 60947-5-1 appendix A<br>Q300, DC-13 (Ue = 250 V), Ie = 0.27 A conforming to EN 60947-5-1<br>Q300, DC-13 (Ue = 250 V), Ie = 0.27 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                                                                                                                                                                                                                                                          |
| Maximum resistance across terminals    | 25 MOhm conforming to IEC 60255-7 category 3                                                                                                                                                                                                                                                                                                                                       |
| [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, DC 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, DC 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, DC conforming to IEC 60947-5-1 appendix C |
| Mechanical durability                  | 15000000 cycles                                                                                                                                                                                                                                                                                                                                                                    |

|                               |                        |
|-------------------------------|------------------------|
| Width                         | 31 mm                  |
| Height                        | 65 mm                  |
| Depth                         | 30 mm                  |
| Net weight                    | 0.195 kg               |
| Terminals description ISO n°1 | (21-22)NC<br>(13-14)NO |

## Environment

|                                       |                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| Shock resistance                      | 50 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               | IP66 conforming to IEC 60529<br>IP67 conforming to IEC 60529                            |
| IK degree of protection               | IK06 conforming to EN 50102                                                             |
| Electrical shock protection class     | 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                | CSA[RETURN]CCC[RETURN]UL                                                                |
| Standards                             | IEC 60947-5-1<br>CSA C22.2 No 14<br>UL 508<br>EN 60947-5-1<br>EN 60204-1<br>IEC 60204-1 |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 3.400 cm  |
| Package 1 Width              | 4.500 cm  |
| Package 1 Length             | 10.500 cm |
| Package 1 Weight             | 179.000 g |
| Unit Type of Package 2       | S01       |
| Number of Units in Package 2 | 26        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 15.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 4.874 kg  |

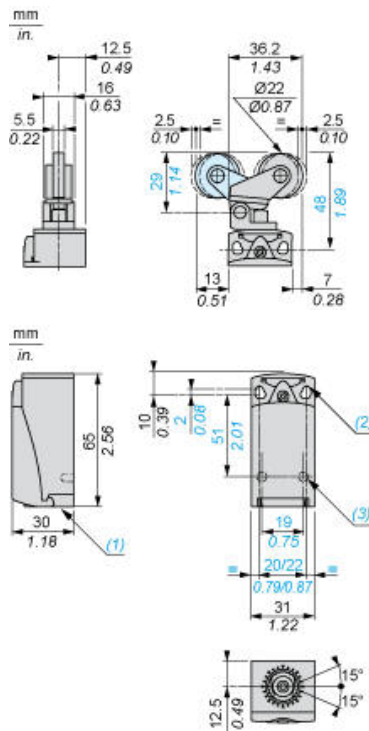
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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 |
|----------|-----------|

## Dimensions



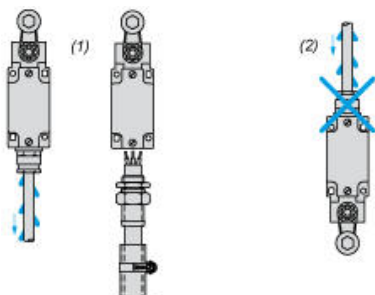
- (1) Tapped entry for M16 x 1.5
- (2) 2 elongated holes  $\varnothing 4.3 \times 6.3$  mm on 22 mm centres, 2 holes  $\varnothing 4.3$  on 20 mm centres.
- (3) 2 x  $\varnothing 3$  holes for support studs, depth 4 mm.

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## Mounting with Cable Entry

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### Position of Cable Gland



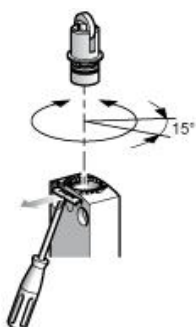
- (1) Recommended
- (2) To be avoided

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## Setting-up

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### Plunger or Multi-directional Heads

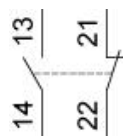


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Wiring Diagram

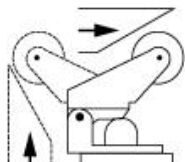
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2-pole NC + NO Snap Action

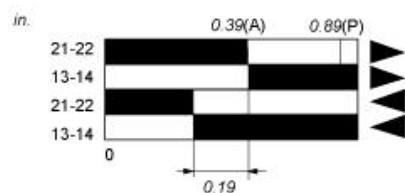
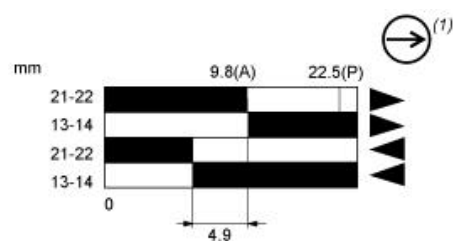


## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functionnal Diagram



■ (2)

□ (3)

▶ (4)

◀ (5)

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