

# XCKS149H7

Limit switch, Limit switches XC Standard,  
XCKS, elastomer roller lever Ø 50 mm, 1NC+1  
NO, snap, 1/2NPT



## Main

|                               |   |
|-------------------------------|---|
| Range of product              | Telemecanique Limit switches XC Standard                                    |
| Series name                   | Standard format   |
| Product or component type     | Limit switch  |
| Device short name             | XCKS  |
| Sensor design                 | -   |
| 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 elastomer variable length, roller diameter 50 mm |
| Type of approach              | Lateral approach, 1 or 2 programmable direction                             |
| Cable entry                   | 1 entry tapped for 1/2" NPT 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  |
| Number of steps                              | 1   |
| Positive opening                             | Without   |
| Minimum torque for tripping                  | 0.1 N.m   |
| Minimum actuation speed                      | 0.01 m/min  |
| Maximum actuation speed                      | 1.5 m/s   |
| Contact code designation                     | A300, AC-15 (Ue = 240 V), Ie = 3 A conforming to EN/IEC 60947-5-1 appendix A<br>Q300, DC-13 (Ue = 250 V), Ie = 0.27 A conforming to EN/IEC 60947-5-1 appendix A   |
| [Ithe] conventional enclosed thermal current | 10 A AC   |
| [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, inductive load type, 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, inductive load type, 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, inductive load type, 48 V, 7 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C |

|                               |                        |
|-------------------------------|------------------------|
| Mechanical durability         | 20000000 cycles        |
| Width                         | 50 mm                  |
| Height                        | 133...188 mm           |
| Depth                         | 65 mm                  |
| Net weight                    | 0.18 kg                |
| Terminals description ISO n°1 | (13-14)NO<br>(21-22)NC |

## Environment

|                                       |   |
|---------------------------------------|---|
| Shock resistance                      | 40 gn for 11 ms conforming to IEC 60068-2-27  |
| Vibration resistance                  | 20 gn (f= 10...500 Hz) conforming to IEC 60068-2-6  |
| IP degree of protection               | IP67 conforming to IEC 60529<br>IP66 conforming to IEC 60529  |
| IK degree of protection               | IK05 conforming to EN 50102   |
| Electrical shock protection class     | Class II conforming to IEC 61140<br>Class II conforming to NF C 20-030                                      |
| 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                | CCC[RETURN]UL[RETURN]CSA  |
| Standards                             | IEC 60947-5-1<br>UL 508<br>EN 60204-1<br>CSA C22.2 No 14<br>IEC 60204-1<br>CENELEC EN 50041<br>EN 60947-5-1 |

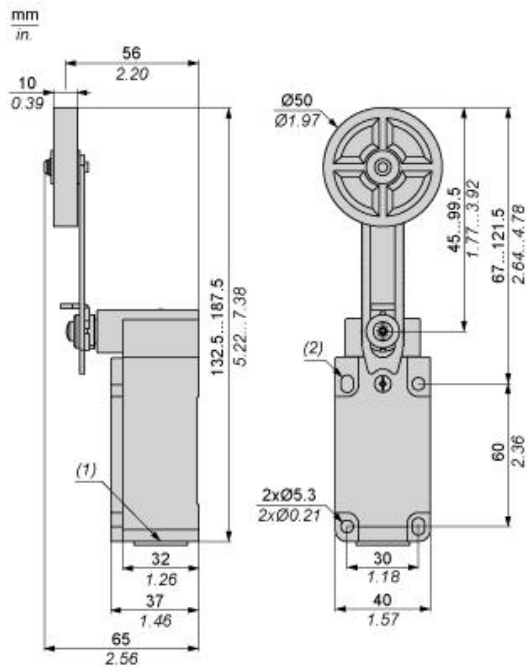
## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 5.59 cm  |
| Package 1 Width              | 15.24 cm |
| Package 1 Length             | 8.89 cm  |
| Package 1 Weight             | 0.21 kg  |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 12       |
| Package 2 Height             | 15 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 2718 g   |
| Unit Type of Package 3       | P06      |
| Number of Units in Package 3 | 192      |
| Package 3 Height             | 70 cm    |
| Package 3 Width              | 60 cm    |
| Package 3 Length             | 80 cm    |
| Package 3 Weight             | 48488 g  |

## 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>  |

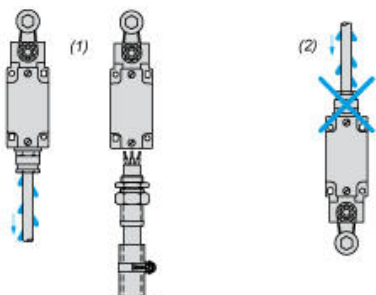
## Dimensions



- (1) 1 tapped entry for 1/2NPT gland
- (2) 2 elongated holes Ø 5.3 x 7.3.

## Mounting with Cable Entry

### Position of Cable Gland



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

## Mounting with Rotary Heads and Levers

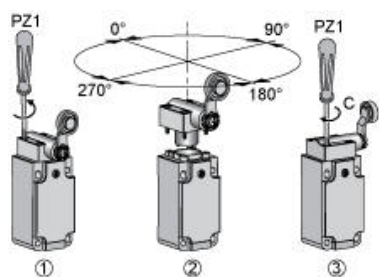
### Type of Cam



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

## Setting-up

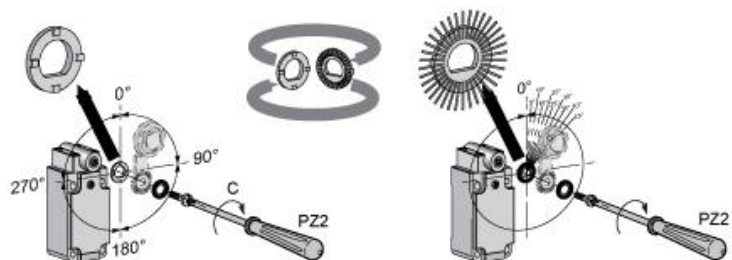
### Head Rotation Adjustment



C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

## Setting-up

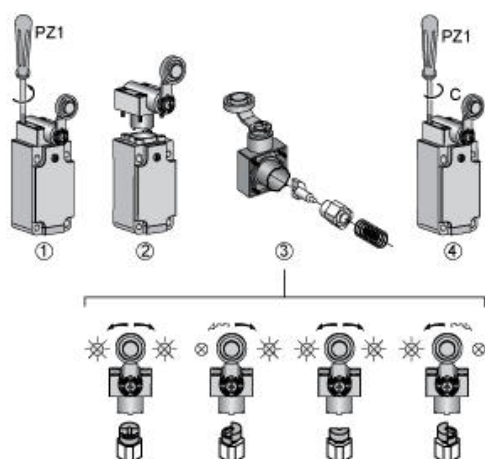
## Lever Angle Adjustment



C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

## Setting-up with Head ZCKD05

### Direction of Actuation Programming



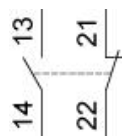
C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

---

## Wiring Diagram

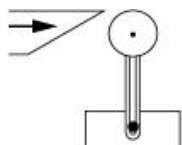
---

2-pole NC + NO Snap Action

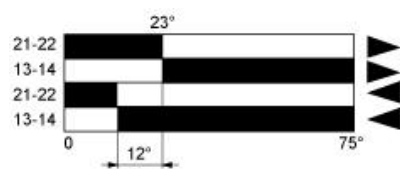


## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functionnal Diagram



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

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