

# XCKS539

limit switch XCKS - elastomer roller lever Ø50 mm - 1NC+1NO - slow - Pg13



## 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 roller diameter 50 mm              |
| Type of approach              | Lateral approach, 1 or 2 programmable direction                         |
| Cable entry                   | 1 entry tapped for Pg 13.5 cable gland, cable outer diameter: 9...12 mm |
| Number of poles               | 2                                                                       |
| Contacts type and composition | 1 NC + 1 NO                                                             |
| Contact operation             | Slow-break, break before make                                           |

## Complementary

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation                                          | By 30° cam                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Electrical connection                                     | Screw-clamp terminals, clamping capacity: 1 x 0.5...2 x 2.5 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                                   | 6 m/min                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Maximum actuation speed                                   | 1.5 m/s                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Contact code designation                                  | A300, AC-15 (U <sub>e</sub> = 240 V), I <sub>e</sub> = 3 A conforming to EN/IEC 60947-5-1 appendix A<br>Q300, DC-13 (U <sub>e</sub> = 250 V), I <sub>e</sub> = 0.27 A conforming to EN/IEC 60947-5-1 appendix A                                                                                                                                                                                                                       |
| [I <sub>th</sub> e] conventional enclosed thermal current | 10 A AC                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [U <sub>i</sub> ] 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                                                                                                                                                                                                                                                                                                                                                                                          |
| [U <sub>imp</sub> ] rated impulse withstand voltage       | IEC 60664 6 kV<br>IEC 60947-1 6 kV                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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                        | 144 mm                 |
| Depth                         | 67 mm                  |
| Net weight                    | 0.175 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               | 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<br>UL<br>CSA                                                                                            |
| Standards                             | CENELEC EN 50041<br>IEC 60204-1<br>UL 508<br>CSA C22.2 No 14<br>EN 60204-1<br>EN 60947-5-1<br>IEC 60947-5-1 |

## Packing Units

|                  |          |
|------------------|----------|
| Package 1 Weight | 0.179 kg |
| Package 1 Height | 0.550 dm |
| Package 1 width  | 1.500 dm |
| Package 1 Length | 0.900 dm |

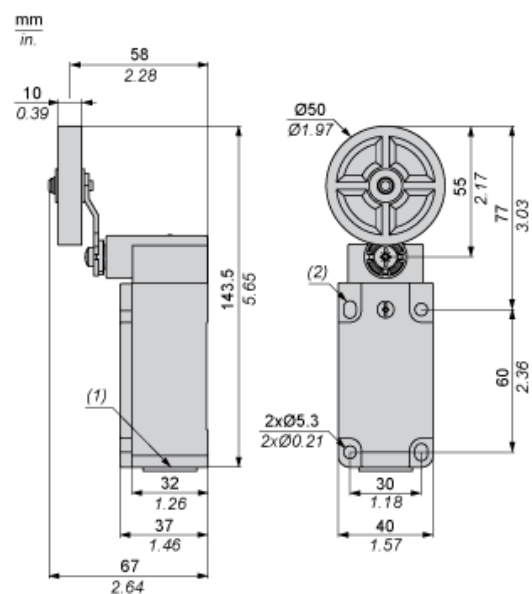
## Offer Sustainability

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

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Dimensions



- (1) 1 tapped entry for Pg 13.5 cable 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



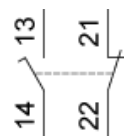
C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

---

Wiring Diagram

---

2-pole NC + NO Break Before Make, Slow Break



---

## Characteristics of Actuation

---

### Switch Actuation by 30° Cam



---

## Functionnal Diagram

---

