# XCKS502

Limit switch, Limit switches XC Standard, XCKS, steel roller plunger, 1NC+1 NO, slow break, Pg13



#### Main

| Range of Product              | Telemecanique Limit switches XC Standard                    |
|-------------------------------|---|
| Series name                   | Standard format   |
| Product or Component<br>Type  | Limit switch  |
| Device short name             | XCKS  |
| Sensor design                 | Form C CENELEC EN 50041                                     |
| Body type                     | Fixed   |
| Head type                     | Plunger head  |
| Material                      | Plastic   |
| Body Material                 | Plastic   |
| Head material                 | Plastic   |
| Fixing Mode                   | By the body   |
| Movement of operating head    | Linear  |
| Type of operator              | Spring return roller plunger metal                          |
| Type of approach              | Lateral approach, 2 directions                              |
| Cable entry                   | 1 entry tapped for Pg 13.5 cable gland 0.350.47 in (912 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 1 x 0.52 x 2.5 mm <sup>2</sup>   |
| Contacts insulation form                     | Zb   |
| Number of steps                              | 1  |
| Positive opening                             | With   |
| Positive opening minimum force               | 20 N   |
| Minimum force for tripping                   | 12 N   |
| Minimum actuation speed                      | 6 m/min  |
| Maximum actuation speed                      | 1.64 ft/s (0.5 m/s)  |
| Contact code designation                     | A300, AC-15 (Ue = 240 V), le = 3 A EN/IEC 60947-5-1 appendix A Q300, DC-13 (Ue = 250 V), le = 0.27 A EN/IEC 60947-5-1 appendix A   |
| [Ithe] conventional enclosed thermal current | 10 A AC  |
| [Ui] rated insulation voltage                | 300 VUL 508<br>500 V 3)IEC 60947-1<br>300 VCSA C22.2 No 14   |
| Maximum resistance across terminals          | 25 MOhm IEC 60255-7 category 3   |
| [Uimp] rated impulse withstand voltage       | 6 KV IEC 60664<br>6 kV IEC 60947-1   |
| Short-circuit protection                     | 10 A cartridge fuse gG   |
| Electrical durability                        | 5000000 Cycles, DC-13, inductive, 120 V, 4 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C 5000000 Cycles, DC-13, inductive, 24 V, 10 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive, 48 V, 7 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C |
| Mechanical durability                        | 15000000 cycles  |

| Width                         | 1.57 in (40 mm)        |  |
|-------------------------------|------------------------|--|
| Height                        | 4.61 in (117 mm)       |  |
| Depth                         | 1.46 in (37 mm)        |  |
| Net Weight                    | 0.29 lb(US) (0.133 kg) |  |
| Terminals description ISO n°1 | (13-14)NO<br>(21-22)NC |  |

#### Environment

| Shock resistance                      | 50 gn 11 ms IEC 60068-2-27  |
|---------------------------------------|---|
| Vibration resistance                  | 25 gn 10500 Hz)IEC 60068-2-6  |
| IP degree of protection               | IP67 conforming to IEC 60529<br>IP66 conforming to IEC 60529  |
| IK degree of protection               | IK05 EN 50102   |
| Electrical shock protection class     | Class II IEC 61140<br>Class II NF C 20-030  |
| Overvoltage category                  | Class II IEC 61140<br>Class II NF C 20-030  |
| Ambient Air Temperature for Operation | -13158 °F (-2570 °C)  |
| Ambient Air Temperature for Storage   | -40158 °F (-4070 °C)  |
| Protective treatment                  | TC  |
| Product Certifications                | CCC<br>UL<br>CSA  |
| Standards                             | CENELEC EN 50041<br>EN 60947-5-1<br>IEC 60204-1<br>UL 508<br>EN 60204-1<br>IEC 60947-5-1<br>CSA C22.2 No 14 |

# Ordering and shipping details

| 0 11 0                |                                  |
|-----------------------|----------------------------------|
| Category              | 22417-LIMIT SWITCH, IEC, CLASSIC |
| Discount Schedule     | Т                                |
| GTIN                  | 3389110646948                    |
| Nbr. of units in pkg. | 1                                |
| Package weight(Lbs)   | 3.95 oz (112.0 g)                |
| Returnability         | No                               |
| Country of origin     | ID                               |
|                       |                                  |

#### **Packing Units**

| Unit Type of Package 1       | PCE                    |  |
|------------------------------|------------------------|--|
| Package 1 Height             | 1.57 in (4 cm)         |  |
| Package 1 width              | 2.36 in (6 cm)         |  |
| Package 1 Length             | 5.12 in (13 cm)        |  |
| Unit Type of Package 2       | S02                    |  |
| Number of Units in Package 2 | 36                     |  |
| Package 2 Weight             | 9.89 lb(US) (4.487 kg) |  |
| Package 2 Height             | 5.91 in (15 cm)        |  |
| Package 2 width              | 11.81 in (30 cm)       |  |
| Package 2 Length             | 15.75 in (40 cm)       |  |

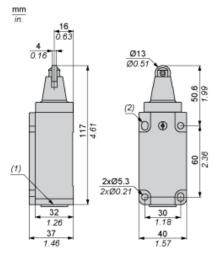
# Offer Sustainability

| 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 www.P65Warnings.ca.gov |
| REACh Regulation           | ☑ REACh Declaration   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS  Declaration   |
| Mercury free               | Yes   |
| RoHS exemption information | ₫Yes  |
| Environmental Disclosure   | Product Environmental Profile   |
| Circularity Profile        | End Of Life Information   |

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

# XCKS502

#### **Dimensions**

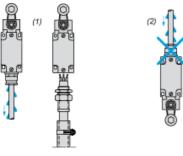


- 1 tapped entry for Pg 13.5 cable gland 2 elongated holes Ø 5.3 x 7.3. (1) (2)

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# Mounting with Cable Entry

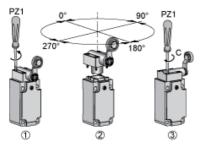
#### Position of Cable Gland



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

#### Setting-up

#### **Head Rotation Adjustment**



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

# Product data sheet Connections and Schema

# XCKS502

# Wiring Diagram

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

# Product data sheet Technical Description

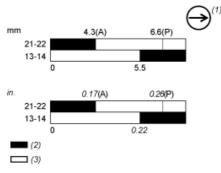
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#### **Characteristics of Actuation**

#### Switch Actuation by 30° Cam



#### Functionnal Diagram



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