

Limit switch, Limit switches XC Standard,  
XCKN, thermoplastic plastic roller lever plung.  
Hor, 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 form E  |
| 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 lever plunger thermoplastic                          |
| Type of approach              | Lateral approach, 1 direction   |
| 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   |
| Positive opening minimum force          | 10 N   |
| Minimum force for tripping              | 6 N  |
| Maximum actuation speed                 | 1 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  |
| [Uiimp] 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                                  | 94 mm  |
| Depth                                   | 30 mm  |

|                               |                        |
|-------------------------------|------------------------|
| Net weight                    | 0.145 kg               |
| Terminals description ISO n°1 | (13-14)NO<br>(21-22)NC |

## Environment

|                                       |   |
|---------------------------------------|---|
| Shock resistance                      | 45 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]CSA[RETURN]CCC  |
| Standards                             | IEC 60204-1<br>CSA C22.2 No 14<br>IEC 60947-5-1<br>IEC 60947-5-1<br>IEC 60204-1<br>UL 508 |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 3.048 cm |
| Package 1 Width              | 3.048 cm |
| Package 1 Length             | 9.398 cm |
| Package 1 Weight             | 68.04 g  |
| Unit Type of Package 2       | BB1      |
| Number of Units in Package 2 | 20       |
| Package 2 Height             | 11 cm    |
| Package 2 Width              | 12.8 cm  |
| Package 2 Length             | 17 cm    |
| Package 2 Weight             | 1.42 kg  |
| Unit Type of Package 3       | S02      |
| Number of Units in Package 3 | 80       |
| Package 3 Height             | 15 cm    |
| Package 3 Width              | 30 cm    |
| Package 3 Length             | 40 cm    |
| Package 3 Weight             | 6.135 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: Diisobutyl 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>  |

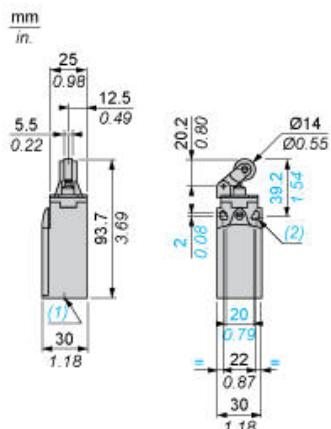
## Contractual warranty

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

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Dimensions

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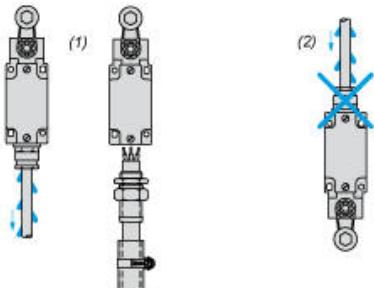
(1) 1 tapped entry for M20 x 1.5  
(2) Ø: 2 elongated holes Ø 4.3 x 6.3 on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.

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Mounting with Cable Entry

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Position of Cable Gland



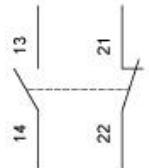
(1) Recommended  
(2) To be avoided

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Wiring Diagram

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2-pole NC + NO Snap Action

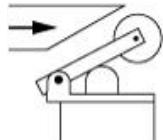


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### Characteristics of Actuation

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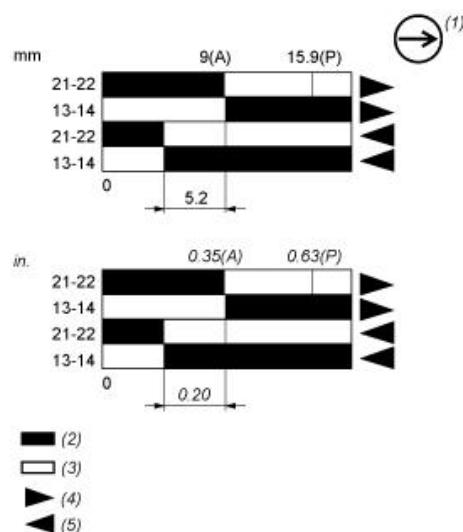
#### Switch Actuation by 30° Cam



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### Functional Diagram

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