

# XCKN2918P20

Limit switch, Limit switches XC Standard, XCKN, thermoplastic roller lever, 2NC, 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 A                                                            |
| 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 thermoplastic                                  |
| Type of approach              | Lateral approach, 2 directions                                            |
| 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 | 2 NC                                                                      |
| Contact operation             | Snap action                                                               |

## Complementary

|                                        |                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tracks                                 | 24/40 mm                                                                                                                                                                                                                                                                                                                                                               |
| 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 torque        | 0.15 N.m                                                                                                                                                                                                                                                                                                                                                               |
| Minimum torque for tripping            | 0.1 N.m                                                                                                                                                                                                                                                                                                                                                                |
| Maximum actuation speed                | 1.5 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>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                                                                                                                                                                                                                                              |
| [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 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                                 | 108 mm                                                                                                                                                                                                                                                                                                                                                                 |

|                               |                        |
|-------------------------------|------------------------|
| Depth                         | 44.5 mm                |
| Net weight                    | 0.175 kg               |
| Terminals description ISO n°1 | (21-22)NC<br>(11-12)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]CCC[RETURN]CSA                                                                  |
| Standards                             | IEC 60204-1<br>UL 508<br>IEC 60204-1<br>CSA C22.2 No 14<br>IEC 60947-5-1<br>IEC 60947-5-1 |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 4.45 cm  |
| Package 1 Width              | 3.0 cm   |
| Package 1 Length             | 10.81 cm |
| Package 1 Weight             | 86.0 g   |
| Unit Type of Package 2       | BB1      |
| Number of Units in Package 2 | 20       |
| Package 2 Height             | 11.0 cm  |
| Package 2 Width              | 16.0 cm  |
| Package 2 Length             | 31.0 cm  |
| Package 2 Weight             | 1.73 kg  |
| Unit Type of Package 3       | S03      |
| Number of Units in Package 3 | 60       |
| Package 3 Height             | 30.0 cm  |
| Package 3 Width              | 30.0 cm  |
| Package 3 Length             | 40.0 cm  |
| Package 3 Weight             | 5.906 kg |

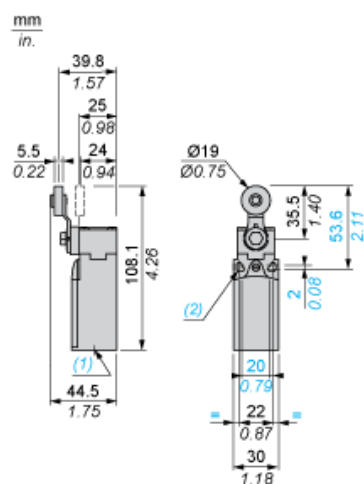
## Offer Sustainability

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



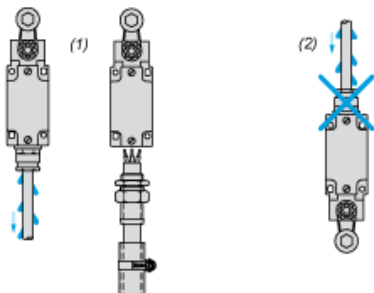
- (1) 1 tapped entry for M20 x 1.5  
(2) Ø: 2 elongated holes Ø 4.3 x 6.3 on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.

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## Mounting with Cable Entry

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### Position of Cable Gland



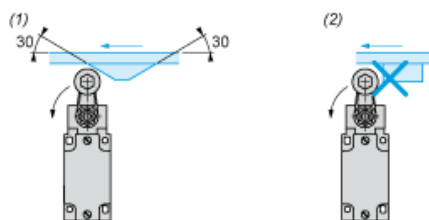
- (1) Recommended
- (2) To be avoided

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## Mounting with Rotary Heads and Levers

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### Type of Cam



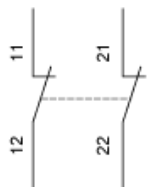
- (1) Recommended
- (2) To be avoided

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Wiring Diagram

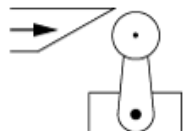
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2-pole NC + NC Snap Action

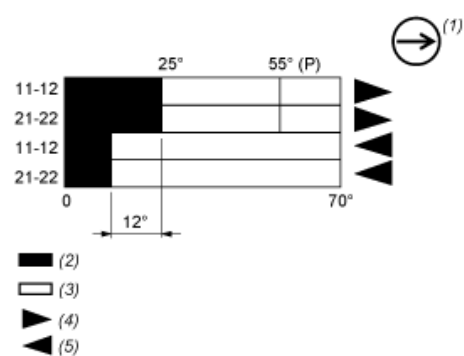


## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functionnal Diagram



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