

# Product data sheet

## Characteristics

# XCKN2908P20

limit switch XCKN - spring rod lever nitrile boot  
- 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                                                                   |
| Body type                     | Fixed                                                                     |
| Head type                     | Multi-directional head                                                    |
| Material                      | Plastic                                                                   |
| Body material                 | Plastic                                                                   |
| Head material                 | Plastic                                                                   |
| Fixing mode                   | By the body                                                               |
| Movement of operating head    | Multi-directional                                                         |
| Type of operator              | Spring return spring rod                                                  |
| Type of approach              | Multi-directional approach                                                |
| 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

|                                        |                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation                       | By any moving part                                                                                                                                                                                                                                                                                                                                                     |
| 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                       | Without                                                                                                                                                                                                                                                                                                                                                                |
| Minimum torque for tripping            | 0.13 N.m                                                                                                                                                                                                                                                                                                                                                               |
| Maximum actuation speed                | 1 m/s                                                                                                                                                                                                                                                                                                                                                                  |
| Contact code designation               | A300, AC-15 (Ue = 240 V), Ie = 3 A, Ithe = 10 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                                                                                                                                                                                           |
| [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                  | 5000000 cycles                                                                                                                                                                                                                                                                                                                                                         |
| Width                                  | 30 mm                                                                                                                                                                                                                                                                                                                                                                  |

|                               |                        |
|-------------------------------|------------------------|
| Height                        | 183 mm                 |
| Depth                         | 30 mm                  |
| Net weight                    | 0.175 kg               |
| Terminals description ISO n°1 | (11-12)NC<br>(21-22)NC |

## Environment

|                                       |                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| Shock resistance                      | 10 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 EN 50102                                                             |
| 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                | CSA[RETURN]UL[RETURN]CCC                                                                |
| Standards                             | CSA C22.2 No 14<br>EN 60204-1<br>UL 508<br>EN 60947-5-1<br>IEC 60947-5-1<br>IEC 60204-1 |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 3 cm     |
| Package 1 Width              | 3 cm     |
| Package 1 Length             | 18.26 cm |
| Package 1 Weight             | 81 g     |

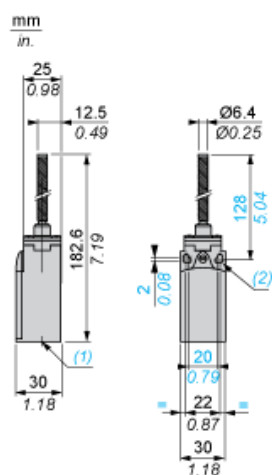
## Offer Sustainability

|                            |                                                                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration |
| Mercury free               | Yes                                                                                                                                                                  |
| RoHS exemption information |  Yes                                                                              |

## 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



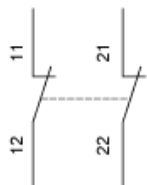
- (1) Recommended  
(2) To be avoided

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Wiring Diagram

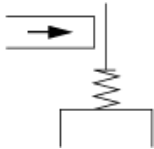
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2-pole NC + NC Snap Action



## Characteristics of Actuation

### Switch Actuation by Any Moving Part



## Functionnal Diagram

