

# XCPR2102N12

Limit switch, Limit switches XC Standard, XCPR, steel roller plunger, 1NC+1 NO, snap, 1/2NPT



## Main

|                               |                                          |
|-------------------------------|------------------------------------------|
| Range of product              | Telemecanique Limit switches XC Standard |
| Series name                   | Standard format                          |
| Product or component type     | Limit switch                             |
| Device short name             | XCPR                                     |
| Sensor design                 | Compact                                  |
| Reset                         | With                                     |
| Body type                     | Fixed                                    |
| Head type                     | Plunger head                             |
| Material                      | Plastic                                  |
| Body material                 | Plastic                                  |
| Head material                 | Zamak                                    |
| 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 1/2" NPT cable gland  |
| 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         | 36 N                                                                                                                                                                                                                                                                                                                                                                   |
| Minimum force for tripping             | 12 N                                                                                                                                                                                                                                                                                                                                                                   |
| Maximum actuation speed                | 0.5 m/s                                                                                                                                                                                                                                                                                                                                                                |
| Repeat accuracy                        | 0.1 mm on the tripping points with 1 million operating cycles                                                                                                                                                                                                                                                                                                          |
| 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 EN 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                                                                                                                                                                                                                                                                                                                           |
| [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 |
| Width                                  | 31 mm                                                                                                                                                                                                                                                                                                                                                                  |

|                               |                        |
|-------------------------------|------------------------|
| Height                        | 65 mm                  |
| Depth                         | 30 mm                  |
| Net weight                    | 0.115 kg               |
| Terminals description ISO n°1 | (13-14)NO<br>(21-22)NC |

## 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               | IP66 conforming to IEC 60529<br>IP67 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                | UL[RETURN]CSA                                                                           |
| Standards                             | IEC 60947-5-1<br>EN 60204-1<br>CSA C22.2 No 14<br>UL 508<br>IEC 60204-1<br>EN 60947-5-1 |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 11.8 cm |
| Package 1 Width              | 3.1 cm  |
| Package 1 Length             | 3.1 cm  |
| Package 1 Weight             | 116.0 g |

## 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 <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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## Mounting with Cable Entry

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### Position of Cable Gland



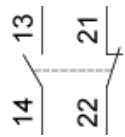
- (1) Recommended  
(2) To be avoided

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## Wiring Diagrams

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2-pole NC + NO Snap Action

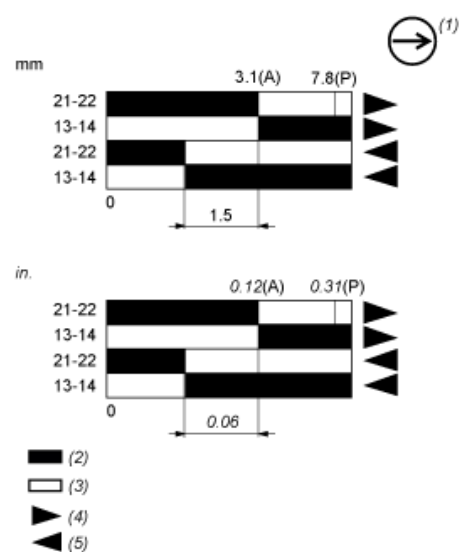


## Characteristics of Actuation

### 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  
(4) Tripping  
(5) Resetting