

Limit switch, Limit switches XC Standard,
XCPR, steel roller plunger, 2NC, snap, M20



Main

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|-------------------------------|---------------------------------------------------------------------------|
| 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 M20 x 1.5 cable gland, cable outer diameter: 7...13 mm |
| Number of poles | 2 |
| Contacts type and composition | 1 NC + 1 NC |
| Contact operation | Snap action |

Complementary

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|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation | By 30° cam |
| Electrical connection | Screw-clamp terminals, clamping capacity: 1 x 0.34...2 x 1.5 mm ² |
| 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 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 508 500 V (pollution degree 3) conforming to EN 60947-1 300 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 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 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 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 |

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| Depth | 30 mm |
| Net weight | 0.115 kg |
| Terminals description ISO n°1 | (21-22)NC (11-12)NC |

Environment

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|---------------------------------------|-----------------------------------------------------------------------------------------|
| 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 IP67 conforming to IEC 60529 |
| IK degree of protection | IK04 conforming to EN 50102 |
| Overvoltage category | Class II conforming to IEC 61140 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 | CSA C22.2 No 14 EN 60204-1 UL 508 IEC 60947-5-1 EN 60947-5-1 IEC 60204-1 |

Packing Units

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|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 19.3 cm |
| Package 1 Width | 5.5 cm |
| Package 1 Length | 6.0 cm |
| Package 1 Weight | 137.0 g |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 40 |
| Package 2 Height | 30.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 6.079 kg |

Offer Sustainability

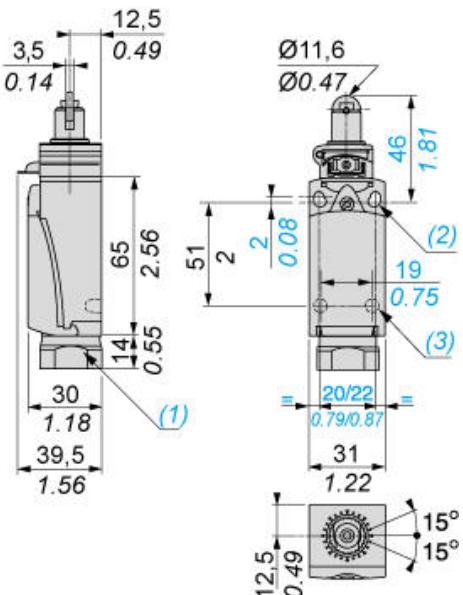
| | |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status | Green Premium product |
| 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 www.P65Warnings.ca.gov |
| For all Reach Rohs enquiries contact us at | sustainability@tesensors.com |

Contractual warranty

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| Warranty | 18 months |
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Dimensions

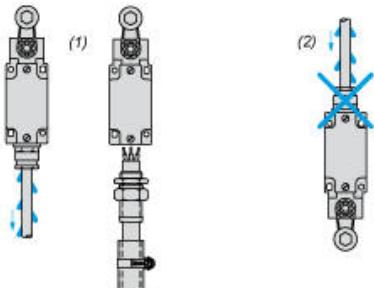
$\frac{\text{mm}}{\text{in.}}$



- (1) Tapped entry for M20 x 1.5
- (2) 2 elongated holes Ø 4.3 x 6.3 mm on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.
- (3) 2 x Ø 3 holes for support studs, depth 4 mm

Mounting with Cable Entry

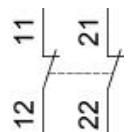
Position of Cable Gland



(1) Recommended
(2) To be avoided

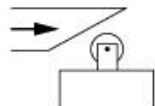
Wiring Diagrams

2-pole NC + NC Snap Action

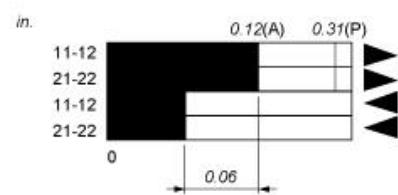
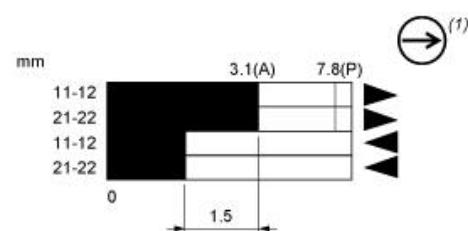


Characteristics of Actuation

Switch Actuation by 30° Cam



Functional Diagram



- (2)
- (3)
- (4)
- ◀ (5)

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