

Product data sheet

Specifications



Limit switch, Limit switches XC Standard, XCKD, roller plunger, 2NC + NO, ATEX/IECEx

XCKD3902P16EX

Main

| | |
|-------------------------------|---|
| Range of product | Telemecanique Limit switches XC Standard |
| Series name | Standard format |
| Product or component type | Limit switch |
| Device short name | XCKD |
| Sensor design | Compact form C conforming to CENELEC EN 50047 |
| Body type | Fixed |
| Head type | Plunger head |
| Material | Metal |
| Fixing mode | By the body |
| Movement of operating head | Linear |
| Type of operator | Spring return roller plunger steel |
| Switch actuation | By 30° cam |
| Type of approach | Lateral approach, 2 directions |
| Electrical connection | Screw-clamp terminals, clamping capacity: 1 x 0.34...2 x 0.75 mm² |
| Cable entry number | 1 tapped entry for M16 x 1.5 cable gland (included) 4...8 mm |
| Number of poles | 3 |
| Contacts type and composition | 2 NC + 1 NO |
| Contacts insulation form | Zb |
| Contact operation | Snap action |
| Number of steps | 1 |
| Positive opening | With |
| Minimum force for tripping | 12 N |
| Maximum actuation speed | 0.5 m/s |
| IP degree of protection | IP66 conforming to IEC 60529 IP67 conforming to IEC 60529 |

Complementary

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|---------------|-------|
| Body material | Zamak |
| Head material | Zamak |

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|--|--|
| Positive opening minimum force | 36 N |
| Minimum actuation speed | 0.01 m/min |
| Contact code designation | B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to EN 60947-5-1 B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to IEC 60947-5-1 appendix A R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to EN 60947-5-1 R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1 appendix A |
| [Ithe] conventional enclosed thermal current | 6 A AC |
| [Ui] rated insulation voltage | 300 V conforming to UL 508 400 V (pollution degree 3) conforming to IEC 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 | 4 kV conforming to IEC 60664 4 kV conforming to IEC 60947-1 |
| Short-circuit protection | 6 A cartridge fuse, type gG |
| Electrical durability | 5000000 cycles, DC-13, inductive load type, 120 V, 2 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 24 V, 4 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 48 V, 3 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C |
| Mechanical durability | 10000000 cycles |
| Marking | II2 D-Ex tb IIIC T85°C Db IP66/67 |
| Width | 31 mm |
| Height | 65 mm |
| Depth | 30 mm |

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 |
| Electrical shock protection class | Class I conforming to IEC 61140 Class I conforming to NF C 20-030 |
| Ambient air temperature for operation | -20...60 °C |
| Protective treatment | TC |
| Dust zone | Zone 21 - 22 |
| Product certifications | INERIS 04ATEX0014X IEC-Ex INE 17.0020X |
| Standards | EN/IEC 60079-31 EN/IEC 60079-0 |
| Directives | 2014/34/EU - ATEX directive |

Packing Units

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|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 9 cm |
| Package 1 Width | 9.5 cm |
| Package 1 Length | 15.5 cm |
| Package 1 Weight | 231 g |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 10 |

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|------------------|----------|
| Package 2 Height | 30 cm |
| Package 2 Width | 30 cm |
| Package 2 Length | 40 cm |
| Package 2 Weight | 2.782 kg |

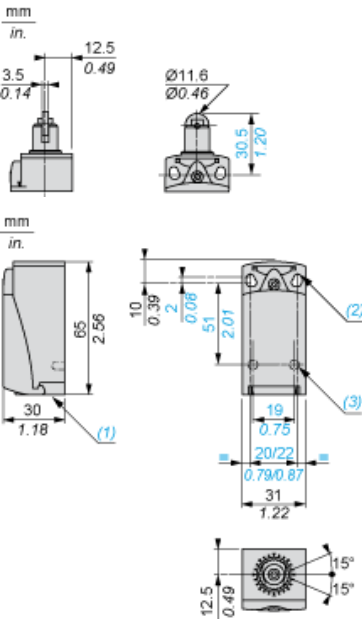
Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| 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 www.P65Warnings.ca.gov |

Contractual warranty

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| Warranty | 18 months |
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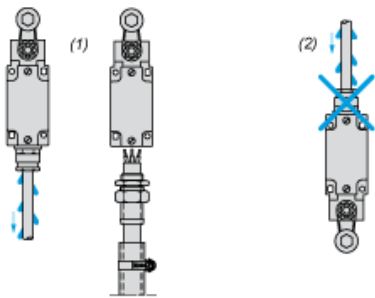
Dimensions



- (1) Tapped entry for M16 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

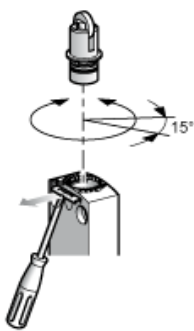
Position of Cable Gland



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

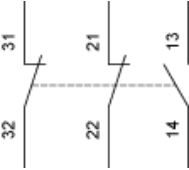
Setting-up

Plunger or Multi-directional Heads



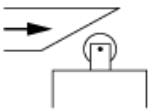
Wiring Diagram

3-pole NC + NC + NO Snap Action



Characteristics of Actuation

Switch Actuation by 30° Cam

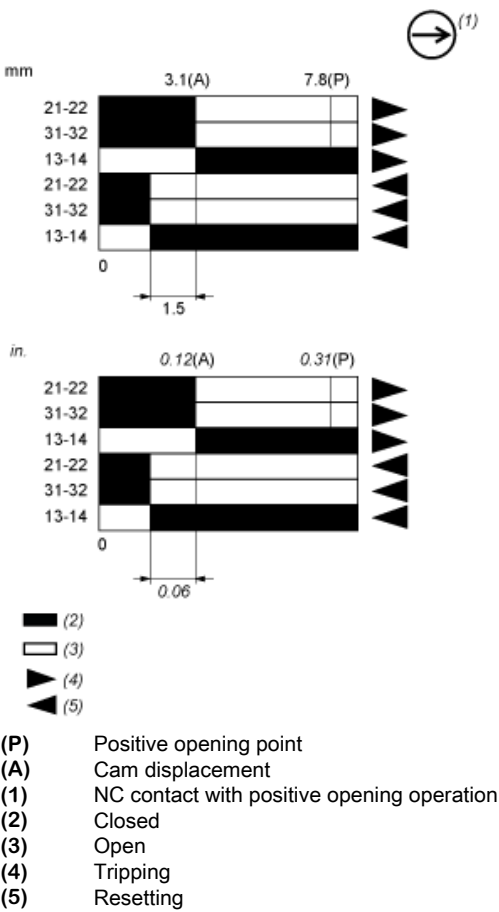


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Technical Description

XCKD3902P16EX

Functionnal Diagram



Recommended replacement(s)