

# XCKD39H2P16EX

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



## 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   |
| Body type                     | Fixed   |
| Head type                     | M18 plunger head  |
| Material                      | Metal   |
| Fixing mode                   | By the head   |
| 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 mm <sup>2</sup> |
| 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    | 10 N  |
| Maximum actuation speed       | 0.5 m/s   |
| IP degree of protection       | IP66 conforming to IEC 60529<br>IP67 conforming to IEC 60529                  |

## Complementary

|  |  |
|--|--|
| Body material                                | Zamak  |
| Head material                                | Zamak  |
| 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 IEC 60947-5-1<br>B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to IEC 60947-5-1 appendix A<br>R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1<br>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<br>400 V (pollution degree 3) conforming to IEC 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       | 4 KV conforming to IEC 60664<br>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<br>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<br>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

|                                       |  |
|---------------------------------------|--|
| 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<br>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[RETURN]IEC-Ex INE 17.0020X                        |
| Standards                             | IEC 60079-31<br>IEC 60079-0  |
| Directives                            | 2014/34/EU - ATEX directive  |

## Packing Units

|                              |            |
|------------------------------|------------|
| Unit Type of Package 1       | PCE        |
| Number of Units in Package 1 | 1          |
| Package 1 Height             | 29.700 cm  |
| Package 1 Width              | 4.900 cm   |
| Package 1 Length             | 19.800 cm  |
| Package 1 Weight             | 276.000 g  |
| Unit Type of Package 2       | S03        |
| Number of Units in Package 2 | 12         |
| Package 2 Height             | 30.000 cm  |
| Package 2 Width              | 30.000 cm  |
| Package 2 Length             | 40.000 cm  |
| Package 2 Weight             | 3.732 kg   |
| Unit Type of Package 3       | P12        |
| Number of Units in Package 3 | 96         |
| Package 3 Height             | 45.000 cm  |
| Package 3 Width              | 80.000 cm  |
| Package 3 Length             | 120.000 cm |
| Package 3 Weight             | 41.856 kg  |

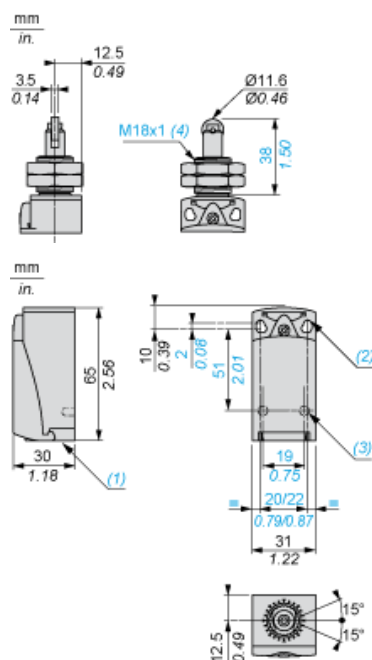
## Offer Sustainability

|  |   |
|--|---|
| 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) 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.
- (4) Fixing nut thickness 3.5 mm.

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## Mounting with Cable Entry

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### Position of Cable Gland



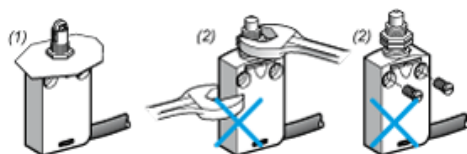
- (1) Recommended
- (2) To be avoided

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## Panel Mounting

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### Mounting and Fixing Limit Switches by the Head



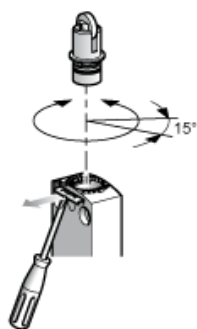
- (1) Recommended
- (2) Forbidden

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## Setting-up

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### Plunger or Multi-directional Heads

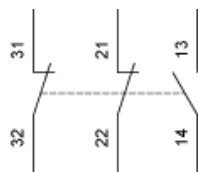


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## Wiring Diagram

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3-pole NC + NC + NO Snap Action

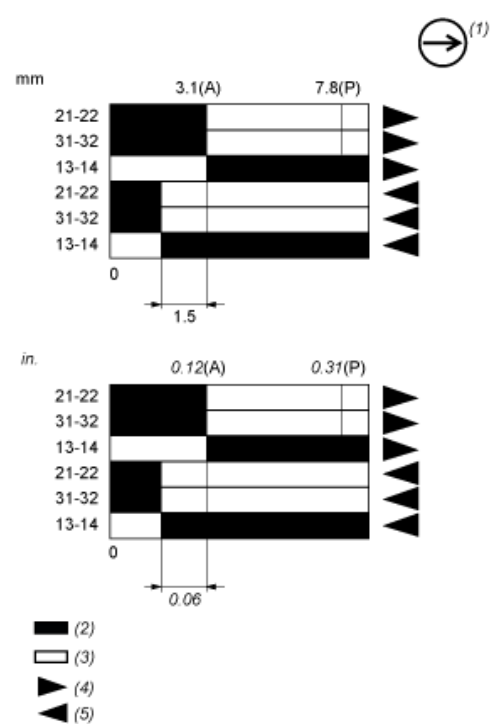


## Characteristics of Actuation

### 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