

# XCKM110H7

Limit switch, Limit switches XC Standard, XCKM, metal end plunger, 1NC+1 NO, snap action, 1/2NPT



## Main

|                               |                                           |
|-------------------------------|-------------------------------------------|
| Range of product              | Telemecanique Limit switches XC Standard  |
| Series name                   | Standard format                           |
| Product or component type     | Limit switch                              |
| Device short name             | XCKM                                      |
| Body type                     | Fixed                                     |
| Head type                     | Plunger head                              |
| Material                      | Metal                                     |
| Body material                 | Zamak                                     |
| Fixing mode                   | By the body                               |
| Movement of operating head    | Linear                                    |
| Type of operator              | Spring return plunger metal               |
| Type of approach              | Vertical approach, 1 direction            |
| Cable entry                   | 3 entries 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                                          | On end                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Electrical connection                                     | Screw-clamp terminals, clamping capacity: 1 x 0.34...2 x 1.5 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                      |
| Contacts insulation form                                  | Zb                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Number of steps                                           | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Positive opening                                          | With                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Positive opening minimum force                            | 45 N                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Minimum force for tripping                                | 15 N                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Minimum actuation speed                                   | 0.01 m/min                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Maximum actuation speed                                   | 0.5 m/s                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Repeat accuracy                                           | 0.05 mm on the tripping points with 1 million operating cycles                                                                                                                                                                                                                                                                                                                                                                                    |
| Contact code designation                                  | A300, AC-15 (U <sub>e</sub> = 240 V), I <sub>e</sub> = 3 A conforming to IEC 60947-5-1 appendix A<br>Q300, DC-13 (U <sub>e</sub> = 250 V), I <sub>e</sub> = 0.27 A conforming to IEC 60947-5-1 appendix A                                                                                                                                                                                                                                         |
| [I <sub>the</sub> ] conventional enclosed thermal current | 10 A AC                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [U <sub>i</sub> ] 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                                                                                                                                                                                                                                                                                                                         |
| Maximum resistance across terminals                       | 25 MOhm conforming to IEC 60255-7 category 3                                                                                                                                                                                                                                                                                                                                                                                                      |
| [U <sub>imp</sub> ] 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, inductive load type, 120 V, 4 W, operating rate <60 cyc/<br>mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 Cycles, DC-13, inductive load type, 24 V, 7 W, operating rate <60 cyc/<br>mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, inductive load type, 48 V, 10 W, operating rate <60 cyc/<br>mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C |
| Mechanical durability                                     | 20000000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Width                                                     | 64 mm                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                               |                        |
|-------------------------------|------------------------|
| Height                        | 64 mm                  |
| Depth                         | 30 mm                  |
| 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                                                              |
| IK degree of protection               | IK05 conforming to IEC 62262                                                              |
| Electrical shock protection class     | Class I conforming to IEC 61140<br>Class I 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[RETURN]CCC                                                                  |
| Standards                             | IEC 60204-1<br>UL 508<br>IEC 60947-5-1<br>IEC 60204-1<br>CSA C22.2 No 14<br>IEC 60947-5-1 |

## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type of Package 1       | PCE |
| Number of Units in Package 1 | 1   |

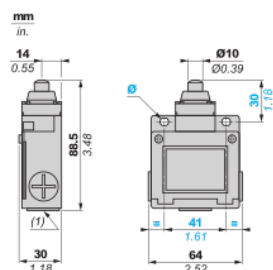
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>                                                                                                                                                                                                                                                                                                    |

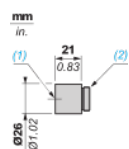
## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Dimensions



- (1) Tapped entry for 1/2" NPT  
Ø : 2 elongated holes Ø 5.2 x 6.2



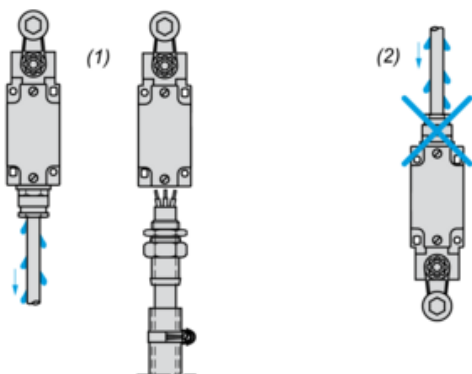
- (1) Tapped entry for 1/2" NPT conduit  
(2) Pg 11 threaded sleeve

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## Mounting with Cable Entry

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### Position of Cable Gland



(1) Recommended

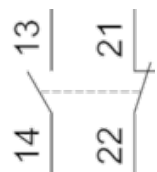
(2) To be avoided

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## Wiring Diagram

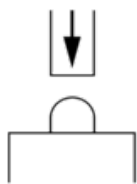
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2-pole NC + NO Snap Action

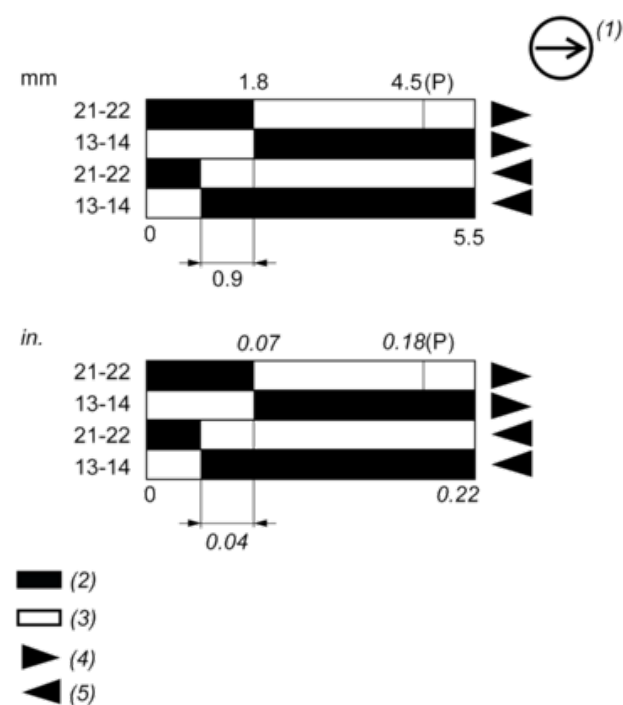


## Characteristics of Actuation

### Switch Actuation on End



## Functionnal Diagram



(P) Positive opening point

(1) NC contact with positive opening operation

(2) Closed

(3) Open

(4) Tripping

(5) Resetting