

# XCKM521H29

Limit switch, Limit switches XC Standard, XCKM, thermoplastic roller lever plunger, 1NC +1 NO, slow, M20



## 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 roller lever plunger thermoplastic                            |
| Type of approach              | Lateral approach, 1 direction                                               |
| Cable entry                   | 3 entries 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 NO                                                                 |
| Contact operation             | Slow-break, break before make                                               |

## Complementary

|                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation                                         | By 30° cam                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Electrical connection                                    | Screw-clamp terminals, clamping capacity: 1 x 0.5...2 x 2.5 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                           |
| Contacts insulation form                                 | Zb                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Number of steps                                          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Positive opening                                         | With                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Positive opening minimum force                           | 24 N                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Minimum force for tripping                               | 8 N                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Minimum actuation speed                                  | 6 m/min                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Maximum actuation speed                                  | 1.5 m/s                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Contact code designation                                 | A300, AC-15 (U <sub>e</sub> = 240 V), I <sub>e</sub> = 3 A conforming to EN/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 EN/IEC 60947-5-1 appendix A                                                                                                                                                                                                                       |
| [I <sub>th</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 IEC 60664<br>6 kV 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/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/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/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                  |
| Net weight                    | 0.3 kg                 |
| Terminals description ISO n°1 | (21-22)NC<br>(13-14)NO |

## Environment

|                                       |                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| Shock resistance                      | 50 gn for 11 ms conforming to EN/IEC 60068-2-27                                         |
| Vibration resistance                  | 25 gn (f= 10...500 Hz) conforming to EN/IEC 60068-2-6                                   |
| IP degree of protection               | IP66 conforming to EN/IEC 60529                                                         |
| IK degree of protection               | IK05 conforming to EN 50102                                                             |
| 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                | CSA<br>UL<br>CCC                                                                        |
| Standards                             | IEC 60947-5-1<br>EN 60947-5-1<br>EN 60204-1<br>CSA C22.2 No 14<br>IEC 60204-1<br>UL 508 |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Weight             | 310 g     |
| Package 1 Height             | 3.3 cm    |
| Package 1 width              | 6.5 cm    |
| Package 1 Length             | 14.8 cm   |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 32        |
| Package 2 Weight             | 10.383 kg |
| Package 2 Height             | 15 cm     |
| Package 2 width              | 30 cm     |
| Package 2 Length             | 40 cm     |

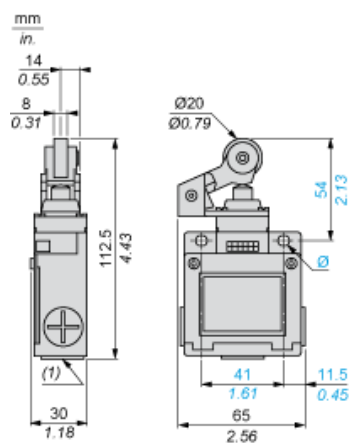
## Offer Sustainability

|                            |                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Mercury free               | Yes                                                                                                                                                                                  |
| RoHS exemption information |  <a href="#">Yes</a>                                                                              |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a>                                                    |

## Contractual warranty

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

## Dimensions



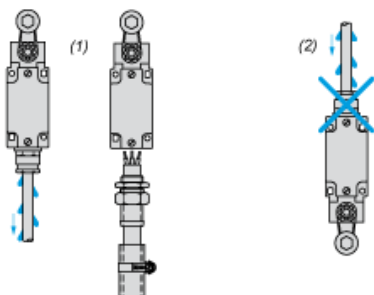
- (1) 3 tapped entries M20 x 1.5  
Ø : 2 elongated holes Ø 5.2 x 6.2

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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

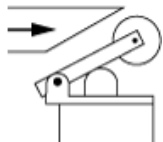
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2-pole N/C + N/O Break before Make, Slow Break

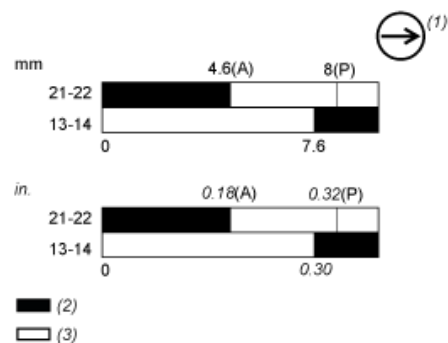


## Characteristics of Actuation

### 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