

# XCMH2107L1

## XCMH Limit Switches Miniature Plastic Spring lever with plastic end NC + NO Snap L1



### Main

|                               |                                                 |
|-------------------------------|-------------------------------------------------|
| Range of product              | Telemecanique Limit switches XC Standard        |
| Series name                   | Standard format                                 |
| Product or component type     | Limit switch                                    |
| Device short name             | XCMH                                            |
| Sensor design                 | Miniature                                       |
| Body type                     | Fixed                                           |
| Head type                     | Multi-directional head                          |
| Material                      | Plastic                                         |
| Body material                 | Plastic                                         |
| Head material                 | Zamak                                           |
| Fixing mode                   | By the body                                     |
| Movement of operating head    | Multi-directional                               |
| Type of operator              | Spring return spring rod with thermoplastic end |
| Type of approach              | Multi-directional approach                      |
| Number of poles               | 2                                               |
| Contacts type and composition | 1 NC + 1 NO                                     |
| Contact operation             | Snap action                                     |

### Complementary

|                                        |                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch actuation                       | By any moving part                                                                                                                                                                                                                                                                                                                                                    |
| Electrical connection                  | Fixed cable                                                                                                                                                                                                                                                                                                                                                           |
| Cable length                           | 1 m                                                                                                                                                                                                                                                                                                                                                                   |
| Cable composition                      | 4 x 0.34 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                              |
| Wire insulation material               | PvR                                                                                                                                                                                                                                                                                                                                                                   |
| Contacts insulation form               | Zb                                                                                                                                                                                                                                                                                                                                                                    |
| Positive opening                       | Without                                                                                                                                                                                                                                                                                                                                                               |
| Minimum force for tripping             | 0.1 N                                                                                                                                                                                                                                                                                                                                                                 |
| Maximum actuation speed                | 1 m/s                                                                                                                                                                                                                                                                                                                                                                 |
| Contact code designation               | C300, AC-15 (Ue = 240 V), Ie = 0.75 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 appendix A                                                                                                                                                                                                           |
| [Ui] rated insulation voltage          | 300 V (pollution degree 3) conforming to UL 508<br>300 V (pollution degree 3) conforming to IEC 60947-5-1<br>300 V (pollution degree 3) 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, 120 V, 1 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 Cycles, DC-13, 24 V, 3 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C<br>5000000 cycles, DC-13, 48 V, 2 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C |
| Mechanical durability                  | 5000000 cycles                                                                                                                                                                                                                                                                                                                                                        |
| Width                                  | 30 mm                                                                                                                                                                                                                                                                                                                                                                 |
| Height                                 | 168 mm                                                                                                                                                                                                                                                                                                                                                                |
| Depth                                  | 16 mm                                                                                                                                                                                                                                                                                                                                                                 |
| Net weight                             | 0.085 kg                                                                                                                                                                                                                                                                                                                                                              |

## Environment

|                                       |                                                                        |
|---------------------------------------|------------------------------------------------------------------------|
| Shock resistance                      | 25 gn for 18 ms conforming to IEC 60068-2-27                           |
| Vibration resistance                  | 5 gn (f= 10...500 Hz) conforming to IEC 60068-2-6                      |
| IP degree of protection               | IP66 conforming to IEC 60529<br>IP67 conforming to IEC 60529           |
| IK degree of protection               | IK04 conforming to IEC 62262                                           |
| Electrical shock protection class     | Class II conforming to IEC 61140<br>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                | CSA[RETURN]CCC[RETURN]UL                                               |
| Standards                             | CSA C22.2 No 14<br>IEC 60947-5-1<br>IEC 60204-1<br>UL 508              |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 1.500 cm  |
| Package 1 Width              | 16.500 cm |
| Package 1 Length             | 17.000 cm |
| Package 1 Weight             | 82.000 g  |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 20        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 2.152 kg  |

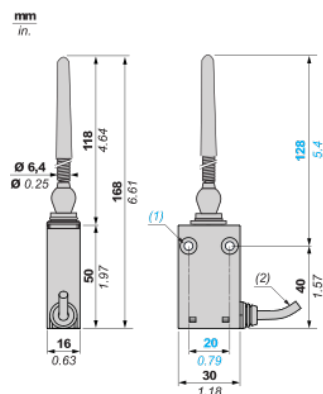
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WEEE                                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins                                                                                                                                                                                                                                                       |
| 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

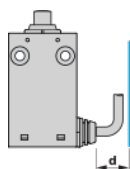


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## Mounting and Clearance

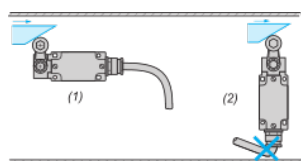
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### Mounting: distance required for connection



d : min.15 mm/min.0.59 in.

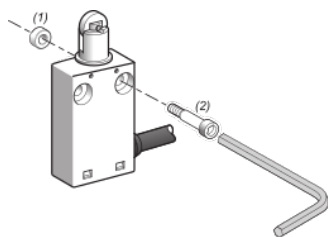
### Sweep of Connecting Cable



(1) : Recommended

(2) : To be avoided

### Mounting with Spacers



(1) : 2 spacers supplied with the switch

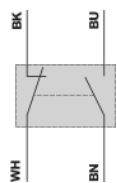
(2) : 2 screws Ø 4mm (not included)

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Wiring diagram

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2-pole NC + NO snap action



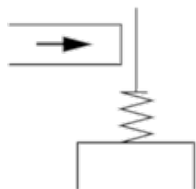
(BK) Black  
(WH) White  
(BN) Brown  
(BU) Blue

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## Characteristics of Actuation

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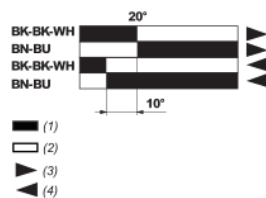
### Switch Actuation by Any Moving Part



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## Functional Diagram

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(1) Closed

(2) Open

(3) Tripping

(4) Resetting

(BK) Black

(BK-WH) Black White

(BN) Brown

(BU) Blue