

# XCMH2159L1

## XCMH Limit Switches Miniature Plastic Plastic rod 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	Rotary head
Material	Plastic
Body material	Plastic
Head material	Zamak
Fixing Mode	By the body
Movement of operating head	Rotary
Type of operator	Spring return round rod lever thermoplastic round rod 6 mm, L = 200 mm
Type of approach	Lateral 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	3.28 ft (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	4.92 ft/s (1.5 m/s)
Contact code designation	C300, AC-15 (Ue = 240 V), Ie = 0.75 A IEC 60947-5-1 appendix A R300, DC-13 (Ue = 250 V), Ie = 0.1 A IEC 60947-5-1 appendix A
[Ui] rated insulation voltage	300 V 3)UL 508 300 V 3)IEC 60947-5-1 300 V 3)CSA C22.2 No 14
Maximum resistance across terminals	25 MOhm IEC 60255-7 category 3
[Uimp] rated impulse withstand voltage	4 KV IEC 60664 4 kV IEC 60947-1
Short-circuit protection	6 A cartridge fuse gG
Electrical durability	5000000 Cycles, DC-13, 120 V, 1 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C 5000000 Cycles, DC-13, 24 V, 3 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C 5000000 cycles, DC-13, 48 V, 2 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C
Mechanical durability	5000000 cycles
Width	1.18 in (30 mm)
Height	9.13 in (232 mm)
Depth	0.63 in (16 mm)
Net Weight	0.18 lb(US) (0.08 kg)

## Environment

Shock resistance	25 gn 18 ms IEC 60068-2-27
Vibration resistance	5 gn 10...500 Hz)IEC 60068-2-6
IP degree of protection	IP66 conforming to IEC 60529 IP67 conforming to IEC 60529
IK degree of protection	IK04 conforming to IEC 62262
Electrical shock protection class	Class II IEC 61140 Class II NF C 20-030
Ambient air temperature for operation	-13...158 °F (-25...70 °C)
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Protective treatment	TC
Product Certifications	UL[RETURN]CCC[RETURN]CSA
Standards	UL 508 CSA C22.2 No 14 IEC 60947-5-1 IEC 60204-1

## Ordering and shipping details

Category	22413-LIMIT SWITCH, IEC, MINIATURE
Discount Schedule	T
GTIN	3389119651707
Returnability	No

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.97 in (5.000 cm)
Package 1 Width	5.51 in (14.000 cm)
Package 1 Length	9.45 in (24.000 cm)
Package 1 Weight	4.44 oz (126.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	50
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	15.48 lb(US) (7.022 kg)

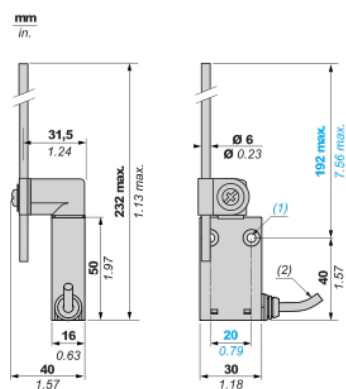
## Offer Sustainability

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>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
For all Reach Rohs enquiries contact us at	<a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>

## Contractual warranty

Warranty	18 months
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## Dimensions



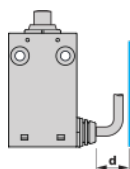
- (1) 2 fixing holes  $\varnothing$  4.2 mm (0.16 in.), counterbored  $\varnothing$  8 mm by 4 mm deep (counterbored  $\varnothing$  0.32 in. by 0.16 in. deep).  
(2) Cable external diameter: 4.2 mm (0.16 in.)

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## Mounting and Clearance

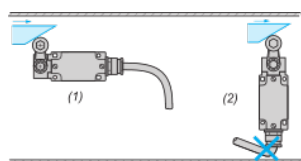
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### Mounting: distance required for connection



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

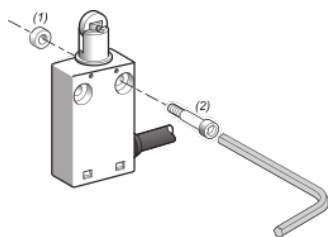
### Sweep of Connecting Cable



(1) : Recommended

(2) : To be avoided

### Mounting with Spacers



(1) : 2 spacers supplied with the switch

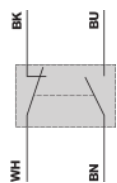
(2) : 2 screws Ø 4mm (not included)

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## Wiring diagram

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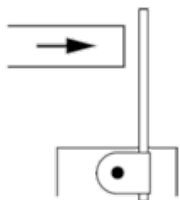
### 2-pole NC + NO snap action



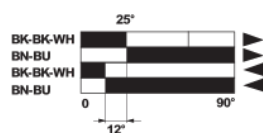
(BK) Black  
(WH) White  
(BN) Brown  
(BU) Blue

## Characteristics of Actuation

### Switch Actuation by Any Moving Part



## Functional Diagram



- (1) Closed
- (2) Open
- (3) Tripping
- (4) Resetting

(1) Closed

(2) Open

(3) Tripping

(4) Resetting

(BK) Black

(BK-WH) Black White

(BN) Brown

(BU) Blue