# Product data sheet Characteristics

# XCMN2159L1

Limit switch, Limit switches XC Standard, XCMN, thermoplastic round rod lever 6 mm, 1NC+1 NO, snap, 1 m



### Main

Range of Product	Telemecanique Limit switches XC Standard
Series name	Standard format
Product or Component Type	Limit switch
Device short name	XCMN
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

Complementary	
Switch actuation	By any moving part
Electrical connection	Fixed cable
Cable length	3.28 ft (1 m)
Cable composition	4 x 0.75 mm²
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	B300, AC-15 (Ue = 240 V), Ie = 1.5 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 508 400 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 10500 Hz)IEC 60068-2-6
IP degree of protection	IP65 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	-13158 °F (-2570 °C)
Ambient Air Temperature for Storage	-40158 °F (-4070 °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	US1000T22413
Discount Schedule	000T
GTIN	3389110215045
Returnability	No
Country of origin	ID

### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.77 in (4.5 cm)
Package 1 Width	9.06 in (23.0 cm)
Package 1 Length	3.94 in (10.0 cm)
Package 1 Weight	5.71 oz (162.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	50
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	19.43 lb(US) (8.813 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	400
Package 3 Height	29.53 in (75 cm)
Package 3 Width	23.62 in (60 cm)
Package 3 Length	31.50 in (80 cm)
Package 3 Weight	197.98 lb(US) (89.8 kg)

### Offer Sustainability

Sustainable offer status	Green Premium product
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 www.P65Warnings.ca.gov
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

#### Contractual warranty

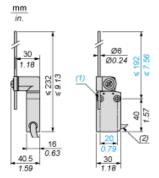
Warranty	18 months



# Product data sheet **Dimensions Drawings**

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#### **Dimensions**

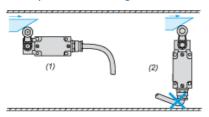


- (1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.
  (2) External diameter 7.5 mm.

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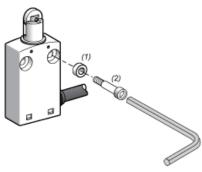
#### Mounting

#### Sweep of Connecting Cable



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

#### Mounting with Spacers

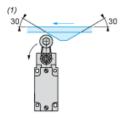


(1): 2 spacers supplied with the XCMN switch

(2): 2 screws Ø 4mm (not included)

#### Mounting with Rotary Heads and Levers

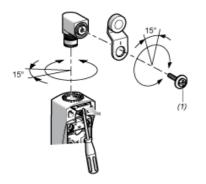
#### Type of Cam





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

#### Setting-up with Head ZCE01 and ZCE09



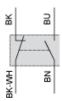
(1) Tightening torque (Min: 1) (Max: 1.5)

## Product data sheet Connections and Schema

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#### Wiring diagram

### 2-pole NC + NO Snap Action



(BK) Black

(BK- Black White WH)

(BN) Brown

(BU) Blue

# Product data sheet **Technical Description**

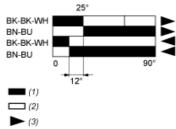
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#### **Characteristics of Actuation**

#### Switch Actuation by Any Moving Part



#### **Functionnal Diagram**



- **4**(4)
- (1) Closed
- (2) Open
- (3) Tripping (4) Resetting
- (BK) Black
- (BK- Black White
- WH)
- (BN) Brown
- (BU) Blue