

XCMN21F2L2

Limit switch, Limit switches XC Standard, XCMN, M12 steel roller plunger, 1NC+1 NO, snap, 2 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	M12 plunger head
Material	Plastic
Body material	Plastic
Head material	Zamak
Fixing mode	By the head
Movement of operating head	Linear
Type of operator	Spring return roller plunger metal
Type of approach	Lateral approach, 2 directions
Number of poles	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Snap action

Complementary

Switch actuation	By 30° cam
Electrical connection	Fixed cable
Cable length	2 m
Cable composition	4 x 0.75 mm ²
Wire insulation material	PvR
Contacts insulation form	Zb
Positive opening	With
Positive opening minimum force	35 N
Minimum force for tripping	7 N
Maximum actuation speed	10 cm/s
Contact code designation	B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to IEC 60947-5-1 appendix A 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 508 400 V (pollution degree 3) conforming to IEC 60947-5-1 300 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 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 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 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	88 mm
Depth	16 mm
Net weight	0.095 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	IP65 conforming to IEC 60529
IK degree of protection	IK04 conforming to IEC 62262
Electrical shock protection class	Class II conforming to IEC 61140 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	CCC[RETURN]UL[RETURN]CSA
Standards	CSA C22.2 No 14 IEC 60204-1 UL 508 IEC 60947-5-1

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.0 cm
Package 1 Width	14.0 cm
Package 1 Length	18.0 cm
Package 1 Weight	200.0 g
Unit Type of Package 2	PAL
Number of Units in Package 2	320
Package 2 Height	60.0 cm
Package 2 Width	80.0 cm
Package 2 Length	320.0 cm
Package 2 Weight	65.28 kg
Unit Type of Package 3	S03
Number of Units in Package 3	40
Package 3 Height	30.0 cm
Package 3 Width	30.0 cm
Package 3 Length	40.0 cm
Package 3 Weight	8.636 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

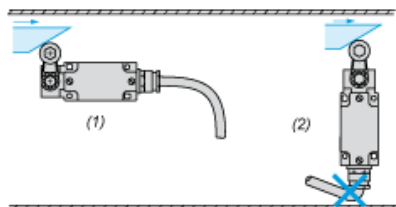
Warranty	18 months
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Technical drawings of the 1000 Series 1/2" components. The left drawing shows a side view of a component with dimensions: 3.5 mm (0.14 in) for the top section, 88 mm (3.46 in) for the main body, and 16 mm (0.63 in) for the bottom section. The right drawing shows a front view of a component with dimensions: 36 mm (1.42 in) for the top section, 52 mm (2.05 in) for the main body, and 30 mm (1.18 in) for the bottom section. The top view shows a diameter of 10.6 mm (0.42 in) and a thread of M12x1. The bottom view shows a diameter of 10.6 mm (0.42 in) and a thread of M12x1. The bottom view also shows a dimension of 30 mm (1.18 in) for the base.

- (1) External diameter 7.5 mm.
e : 8 mm max, panel cut-out Ø 12.5 mm. Fixing nut thickness 3.5 mm.

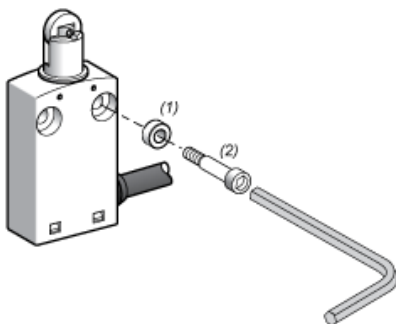
Mounting

Sweep of Connecting Cable



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

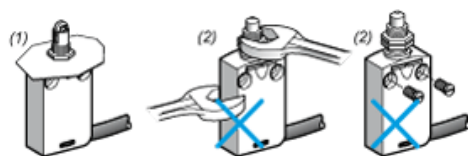
Mounting with Spacers



- (1) : 2 spacers supplied with the XCMN switch
(2) : 2 screws Ø 4mm (not included)

Panel Mounting

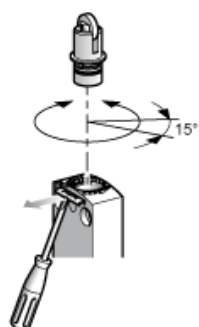
Mounting and Fixing Limit Switches by the Head



- (1) Recommended
(2) Forbidden

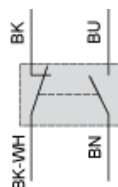
Setting-up

Plunger or Multi-directional Heads



Wiring diagram

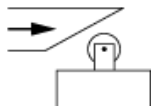
2-pole NC + NO Snap Action



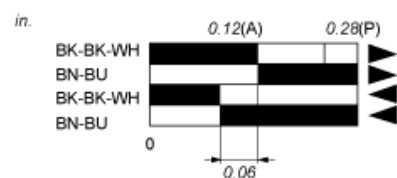
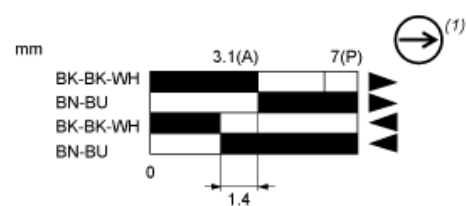
(BK) Black
(BK- Black White
WH)
(BN) Brown
(BU) Blue

Characteristics of Actuation

Switch Actuation by 30° Cam



Functionnal Diagram



■ (2)

□ (3)

▶ (4)

◀ (5)

- (P) Positive opening point
- (A) Cam displacement
- (1) NC contact with positive opening operation
- (2) Closed
- (3) Open
- (4) Tripping
- (5) Resetting
- (BK) Black
- (BK- Black White
- WH)
- (BN) Brown
- (BU) Blue