Product data sheet
Characteristics

XCMN21F0L1
limit switch XCMN - M12 metal end plunger - 1NC+1NO - 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	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 plunger metal
Type of approach	Vertical approach, 1 direction
Number of poles	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Snap action

Complementary

Switch actuation	On end
Electrical connection	Fixed cable
Cable length	1 m
Cable composition	4 x 0.75 mm²
Wire insulation material	PvR
Contacts insulation form	Zb
Positive opening	With
Positive opening minimum force	42.5 N
Minimum force for tripping	8.5 N
Minimum actuation speed	0.01 m/min
Maximum actuation speed	0.5 m/s
Contact code designation	B300, AC-15 (Ue = 240 V), Ie = 1.5 A conforming to EN/IEC 60947-5-1 appendix A R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to EN/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	IEC 60664 4 kV IEC 60947-1 4 kV
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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.
It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.
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Mechanical durability	5000000 cycles
Width	30 mm
Height	76 mm
Depth	16 mm
Net weight	0.065 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 EN 50102
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 UL CSA
Standards	CSA C22.2 No 14 EN/IEC 60947-5-1 UL 508 EN/IEC 60204-1

Packing Units

Package 1 Weight	0.128 kg
Package 1 Height	0.160 dm
Package 1 width	1.600 dm
Package 1 Length	1.200 dm

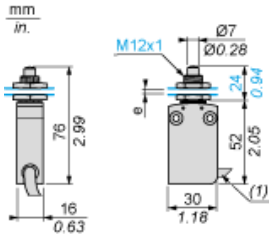
Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months

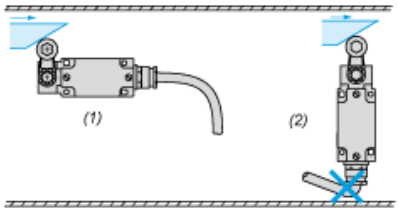
Dimensions



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

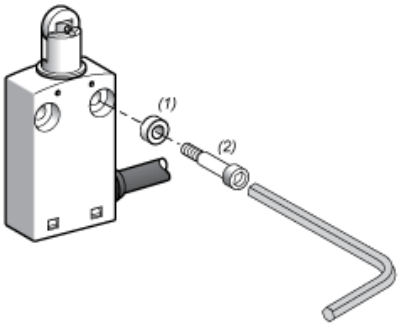
Mounting

Sweep of Connecting Cable



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

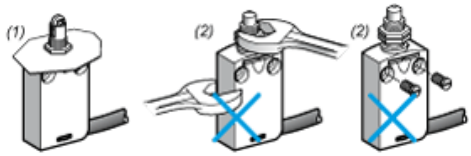
Mounting with Spacers



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

Panel Mounting

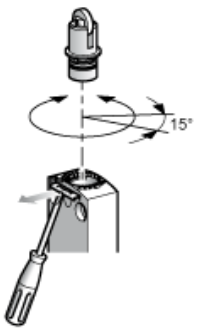
Mounting and Fixing Limit Switches by the Head



(1) Recommended
(2) Forbidden

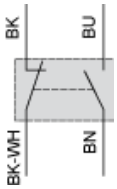
Setting-up

Plunger or Multi-directional Heads



Wiring diagram

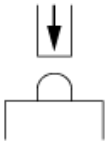
2-pole NC + NO Snap Action



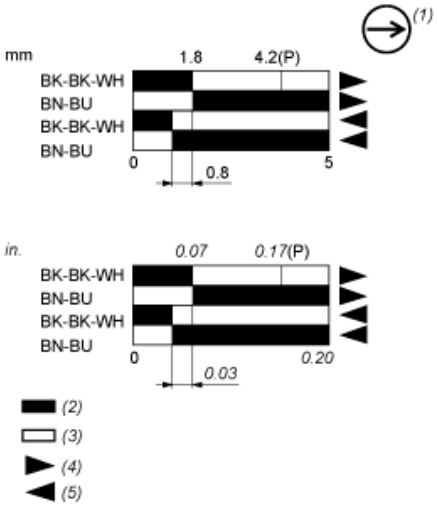
(BK) Black
(BK-WH) Black White
(BN) Brown
(BU) Blue

Characteristics of Actuation

Switch Actuation on End



Functionnal Diagram



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