Product data sheet

Specifications



Limit switch, Limit switches XC Standard, XCMD, M12 metal end plunger, 1NC+1 NO, snap, 1 m

XCMD21F0L1

Product availability : Stock - Normally stocked in distribution facility

Price* : 51.10 USD

Main

Range of Product	Telemecanique Limit switches XC Standard
Series name	Standard format
Product or Component Type	Limit switch
Device short name	XCMD
Sensor design	Miniature
Body type	Fixed
Head type	M12 plunger head
Material	Metal
Body Material	Zamak
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	Removable cable connector
Cable length	3.28 ft (1 m)
Cable composition	5 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

* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: 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

Minimum actuation speed	0.01 m/min
Maximum actuation speed	1.64 ft/s (0.5 m/s)
Contact code designation	B300, AC-15 (Ue = 240 V), Ie = 1.5 A EN/IEC 60947-5-1 appendix A R300, DC-13 (Ue = 250 V), Ie = 0.1 A EN/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	10000000 cycles
Width	1.18 in (30 mm)
Height	1.97 in (50 mm)
Depth	0.63 in (16 mm)
Net Weight	0.43 lb(US) (0.195 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 IP68 conforming to IEC 60529
IK degree of protection	IK06 EN 62262
Overvoltage category	Class I IEC 61140 Class I 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	CCC CSA UL
Standards	UL 508 EN/IEC 60204-1 EN/IEC 60947-5-1 CSA C22.2 No 14

Ordering and shipping details

Category	22413-LIMIT SWITCH, IEC, MINIATURE
Discount Schedule	T
GTIN	3389110220018
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Package 1 Height	0.63 in (1.6 cm)
Package 1 Width	5.91 in (15.0 cm)
Package 1 Length	5.12 in (13.0 cm)
Package 1 Weight	6.56 oz (186.0 g)
Unit Type of Package 2	PAL
Number of Units in Package 2	440
Package 2 Height	23.62 in (60.0 cm)
Package 2 Width	31.50 in (80.0 cm)
Package 2 Length	173.23 in (440.0 cm)
Package 2 Weight	208.56 lb(US) (94.6 kg)
Unit Type of Package 3	S03
Number of Units in Package 3	55
Package 3 Height	11.81 in (30.0 cm)
Package 3 Width	11.81 in (30.0 cm)
Package 3 Length	15.75 in (40.0 cm)
Package 3 Weight	23.78 lb(US) (10.788 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
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

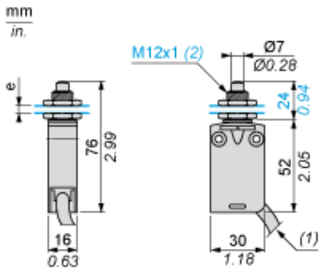
Contractual warranty

Warranty	18 months

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Dimensions Drawings

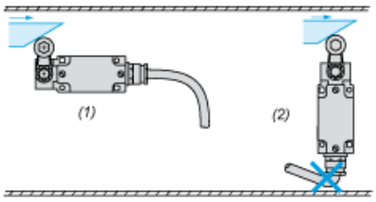
Dimensions



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

Mounting

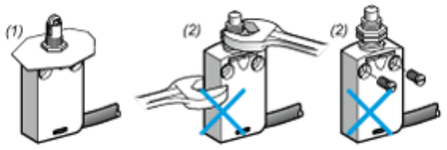
Sweep of Connecting Cable



(1) Recommended
(2) To be avoided

Panel Mounting

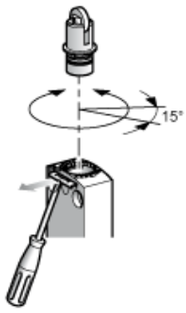
Mounting and Fixing Limit Switches by the Head



(1) Recommended
(2) Forbidden

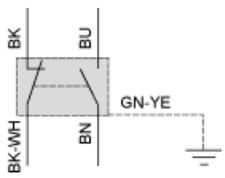
Setting-up

Plunger or Multi-directional Heads



Wiring Diagram

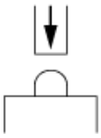
2-pole NC + NO Snap Action



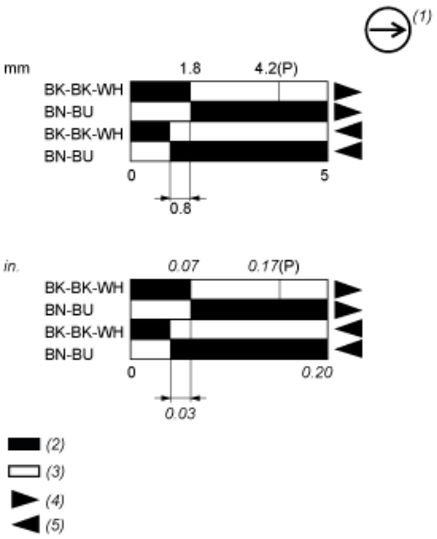
(BK) Black
(BK-WH) Black White
(BU) Blue
(BN) Brown
(GN-YE) Green Yellow

Characteristics of Actuation

Switch Actuation on End



Functional 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
(BU) Blue
(BN) Brown