# XCMD21F2L2

Limit switch, Limit switches XC Standard, XCMD, 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	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 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

Complementary		
Switch actuation	By 30° cam	
Electrical connection	Removable cable connector	
Cable length	2 m	
Cable composition	5 x 0.75 mm²	
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	10000000 cycles	
Width	30 mm	

Height	50 mm	
Depth	16 mm	
Environment		
Environment Shock resistance	25 as for 19 mg conforming to IEC 60069-2-27	
	25 gn for 18 ms conforming to IEC 60068-2-27	
Vibration resistance	5 gn (f= 10500 Hz) conforming to 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 conforming to IEC 62262	
Overvoltage category	Class I conforming to IEC 61140 Class I conforming to NF C 20-030	
Ambient air temperature for operation	-2570 °C	
Ambient air temperature for storage	-4070 °C	
Protective treatment	TC	
Product certifications	UL[RETURN]CSA[RETURN]CCC	
Standards	IEC 60947-5-1 CSA C22.2 No 14 UL 508 IEC 60204-1	
Glandards	UL 508	
Packing Units	UL 508 IEC 60204-1	
Packing Units Unit Type of Package 1	UL 508 IEC 60204-1 PCE	
Packing Units Unit Type of Package 1 Number of Units in Package 1	UL 508 IEC 60204-1 PCE 1	
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height	UL 508 IEC 60204-1  PCE  1 3 cm	
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width	UL 508 IEC 60204-1  PCE  1 3 cm 15 cm	
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length	UL 508 IEC 60204-1  PCE  1 3 cm 15 cm 18 cm	
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width	UL 508 IEC 60204-1  PCE  1 3 cm 15 cm	
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length	UL 508 IEC 60204-1  PCE  1 3 cm 15 cm 18 cm	
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight	UL 508 IEC 60204-1  PCE  1 3 cm 15 cm 18 cm	
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Offer Sustainability	UL 508 IEC 60204-1  PCE  1  3 cm  15 cm  18 cm  279 g	

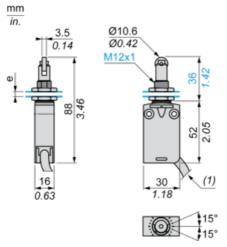
Contractadi Warranty		
Warranty	18 months	



# Product data sheet Dimensions Drawings

# XCMD21F2L2

#### **Dimensions**

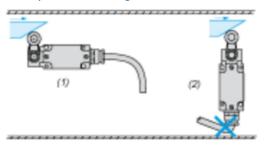


- (1) External diameter of cable 7.5 mm.
- e : 8 mm max, panel cut-out  $\varnothing$  12.5 mm.

# XCMD21F2L2

#### Mounting

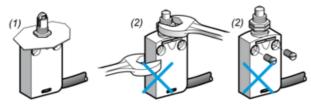
#### **Sweep of Connecting Cable**



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

#### **Panel Mounting**

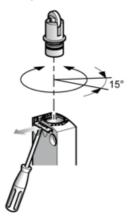
#### Mounting and Fixing Limit Switches by the Head



- (1) Recommended
- (2) Forbidden

#### Setting-up

#### Plunger or Multi-directional Heads

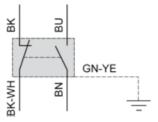


## Product data sheet Connections and Schema

# XCMD21F2L2

### Wiring Diagram

### 2-pole NC + NO Snap Action



(BK) Black

(BK-WH) Black White

(BU) Blue

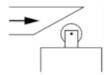
(BN) Brown

(GN-YE) Green Yellow

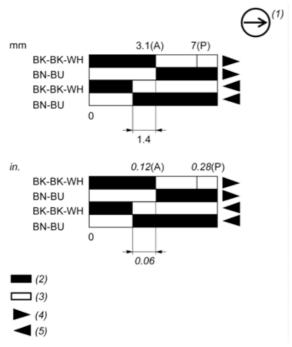
# XCMD21F2L2

#### **Characteristics of Actuation**

#### Switch Actuation by 30° Cam



#### **Functional Diagram**



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