## Product data sheet Characteristics

## XCMD21F0C12

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



#### 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	Plug-in body
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

Complementary	
Switch actuation	On end
Electrical connection	Male connector M12, 5 pins
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	1.64 ft/s (0.5 m/s)
[le] rated operational current	0.22 A 50 V, DC-13 EN/IEC 60947-5-1 appendix A 3 A 50 V, AC-15 EN/IEC 60947-5-1 appendix A
[Ithe] conventional enclosed thermal current	4 A
[Ui] rated insulation voltage	60 V 3)IEC 60947-5-1
Maximum resistance across terminals	25 mOhm IEC 60255-7 category 3
[Uimp] rated impulse withstand voltage	0.8 KV IEC 60664 0.8 kV IEC 60947-1
Short-circuit protection	4 A cartridge fuse gG
Electrical durability	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	0.22 lb(US) (0.1 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	IP66 conforming to IEC 60529 IP67 conforming to IEC 60529 IP68 conforming to IEC 60529
IK degree of protection	IK06 EN 62262
Electrical shock protection class	Class I IEC 61140 Class I 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	CSA UL CCC
Standards	UL 508 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60204-1

## Ordering and shipping details

Category	22413-LIMIT SWITCH, IEC, MINIATURE	
Discount Schedule	Т	
GTIN	3389110221398	
Nbr. of units in pkg.	1	
Package weight(Lbs)	3.77 oz (107.0 g)	
Returnability	No	
Country of origin	ID	

## Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	0.67 in (1.7 cm)	
Package 1 width	2.09 in (5.3 cm)	
Package 1 Length	3.03 in (7.7 cm)	
Unit Type of Package 2	S02	
Number of Units in Package 2	50	
Package 2 Weight	12.91 lb(US) (5.855 kg)	
Package 2 Height	5.91 in (15 cm)	
Package 2 width	11.81 in (30 cm)	
Package 2 Length	15.75 in (40 cm)	

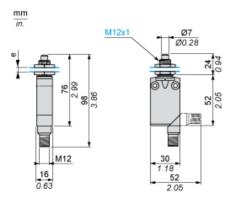
## Offer Sustainability

oner odetamasmy	
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) EPEU RoHS  Declaration
Mercury free	Yes
RoHS exemption information	€Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Warranty 18 months

# XCMD21F0C12

#### **Dimensions**



e: 8 mm max, panel cut-out  $\varnothing$  12.5 mm, fixing nut thickness 3.5 mm.

## XCMD21F0C12

### **Panel Mounting**

## Mounting and Fixing Limit Switches by the Head



- (1) Recommended
- (2) Forbidden

### Setting-up

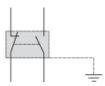
### Plunger or Multi-directional Heads



## XCMD21F0C12

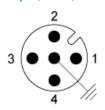
## Wiring Diagram

2-pole NC + NO Snap Action + Integral M12 5-pin Connector



### Wiring Diagram

5-pin, M12, 4A-60V



1 - NC

2: 3- NO

4:

5: Grounding

## Product data sheet **Technical Description**

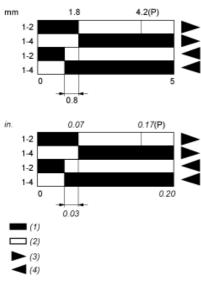
# XCMD21F0C12

#### **Characteristics of Actuation**

#### Switch Actuation on End



### **Functional Diagram**



- (P) Positive opening point
- Closed (1)
- Open
- Tripping
- (4) (5) Resetting