

# Product data sheet

Specifications



**Limit switch, Limit switches XC Standard, XCMD, thermoplastic plastic roller lever var.length, 1C/O, snap, M12**

XCMD2145M12

**Product availability : Stock - Normally stocked in distribution facility**

**Price\* : 69.40 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	Plug-in body
Head type	Rotary head
Material	Metal
Body Material	Zamak
Head material	Zamak
Fixing Mode	By the body
Movement of operating head	Rotary
Type of operator	Spring return roller lever thermoplastic variable length
Type of approach	Lateral approach, 2 directions
Number of poles	1
Contacts type and composition	1 C/O
Contact operation	Snap action

## Complementary

Switch actuation	By 30° cam
Electrical connection	Male connector M12, 4 pins
Contacts insulation form	Za
Positive opening	Without
Minimum force for tripping	0.1 N
Maximum actuation speed	4.92 ft/s (1.5 m/s)
[Ie] rated operational current	1.5 A 240 V, AC-15 EN/IEC 60947-5-1 appendix A 0.1 A 250 V, DC-13 EN/IEC 60947-5-1 appendix A

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

<b>[I<sub>the</sub>] conventional enclosed thermal current</b>	3 A
<b>[U<sub>i</sub>] rated insulation voltage</b>	250 V 3)IEC 60947-5-1
<b>Maximum resistance across terminals</b>	25 mOhm IEC 60255-7 category 3
<b>[U<sub>imp</sub>] rated impulse withstand voltage</b>	2.5 kV IEC 60664 2.5 kV IEC 60947-1
<b>Short-circuit protection</b>	4 A cartridge fuse gG
<b>Electrical durability</b>	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 5000000 cycles, DC-13, 120 V, 1 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C
<b>Mechanical durability</b>	10000000 cycles
<b>Width</b>	1.18 in (30 mm)
<b>Height</b>	1.97 in (50 mm)
<b>Depth</b>	0.63 in (16 mm)
<b>Product Weight</b>	0.30 lb(US) (0.135 kg)

## Environment

<b>Shock resistance</b>	25 gn 18 ms IEC 60068-2-27
<b>Vibration resistance</b>	5 gn 10...500 Hz)IEC 60068-2-6
<b>IP degree of protection</b>	IP66 conforming to IEC 60529 IP67 conforming to IEC 60529 IP68 conforming to IEC 60529
<b>IK degree of protection</b>	IK06 EN 62262
<b>Electrical shock protection class</b>	Class I IEC 61140 Class I NF C 20-030
<b>Ambient Air Temperature for Operation</b>	-13...158 °F (-25...70 °C)
<b>Ambient Air Temperature for Storage</b>	-40...158 °F (-40...70 °C)
<b>Protective treatment</b>	TC
<b>Product Certifications</b>	CCC UL CSA
<b>Standards</b>	EN/IEC 60204-1 CSA C22.2 No 14 EN/IEC 60947-5-1 UL 508

## Ordering and shipping details

<b>Category</b>	22413-LIMIT SWITCH, IEC, MINIATURE
<b>Discount Schedule</b>	T
<b>GTIN</b>	3389110221527
<b>Returnability</b>	Yes
<b>Country of origin</b>	ID

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	1.42 in (3.6 cm)
<b>Package 1 Width</b>	4.13 in (10.5 cm)

<b>Package 1 Length</b>	2.05 in (5.2 cm)
<b>Package 1 Weight</b>	5.11 oz (145.0 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	50
<b>Package 2 Height</b>	5.91 in (15.0 cm)
<b>Package 2 Width</b>	11.81 in (30.0 cm)
<b>Package 2 Length</b>	15.75 in (40.0 cm)
<b>Package 2 Weight</b>	16.78 lb(US) (7.612 kg)
<b>Unit Type of Package 3</b>	PAL
<b>Number of Units in Package 3</b>	800
<b>Package 3 Height</b>	23.62 in (60.0 cm)
<b>Package 3 Width</b>	31.50 in (80.0 cm)
<b>Package 3 Length</b>	314.96 in (800.0 cm)
<b>Package 3 Weight</b>	2243.43 lb(US) (1017.6 kg)

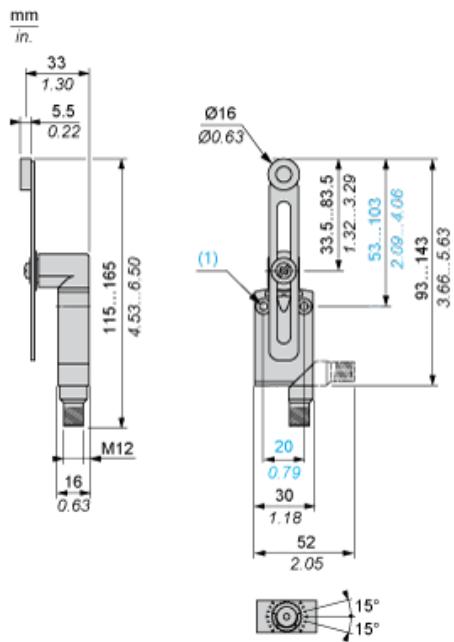
## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Diisobutyl 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
<b>REACh Regulation</b>	<a href="#">REACh Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>

## Contractual warranty

<b>Warranty</b>	18 months
-----------------	-----------

## Dimensions

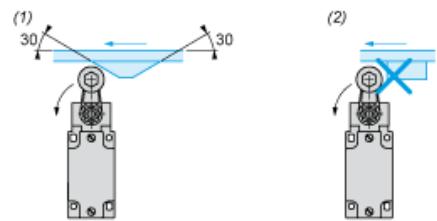


(1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.

### Mounting with Rotary Heads and Levers

---

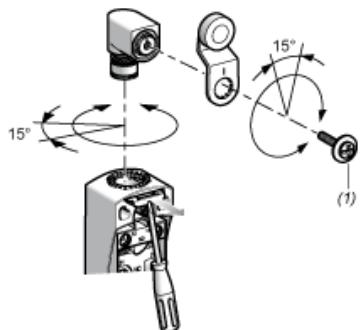
#### Type of Cam



(1) Recommended  
(2) To be avoided

### Setting-up with Head ZCE01 and ZCE09

---

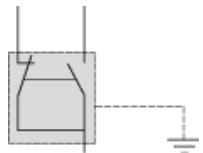


(1) Tightening torque (Min : 1) (Max : 1.5)

**Wiring Diagram**

---

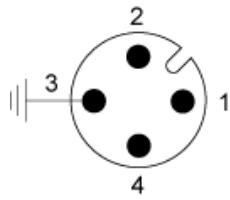
Single-pole CO Snap Action + Integral M12 4-pin Connector



**Wiring Diagram**

---

4-pin, M12, 3A-250V

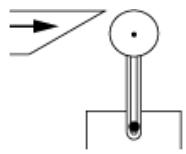


1 :	Common
2 :	NC
3 :	Grounding
4 :	NO

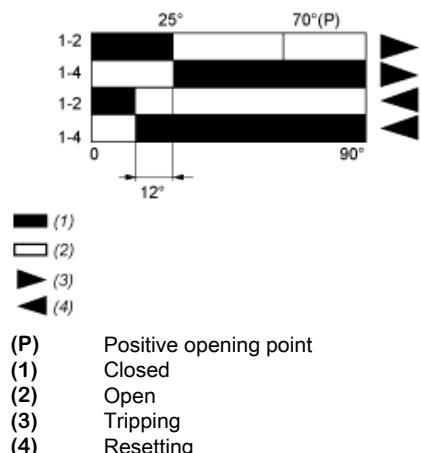
**Characteristics of Actuation**

---

**Switch Actuation by 30° Cam**



### Functional Diagram



### Recommended replacement(s)