

# XCKD2145P16

Limit switch, Limit switches XC Standard, XCKD, thermoplastic plastic roller lever variable length, 1NC+1 NO, snap, M16



## Main

Range of Product	Telemecanique Limit switches XC Standard
Series name	Standard format
Product or Component Type	Limit switch
Device short name	XCKD
Sensor design	Compact
Body type	Fixed
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	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Snap action

## Complementary

Switch actuation	By 30° cam
Electrical connection	Screw-clamp terminals 1 x 0.34...2 x 1.5 mm <sup>2</sup>
Cable entry	1 entry tapped for M16 x 1.5 cable gland 0.16...0.31 in (4...8 mm)
Contacts insulation form	Zb
Positive opening	With
Positive opening minimum torque	2.21 lbf.in (0.25 N.m)
Minimum torque for tripping	0.89 lbf.in (0.1 N.m)
Maximum actuation speed	4.92 ft/s (1.5 m/s)
Repeat accuracy	0.1 mm on the tripping points with 1 million operating cycles
Contact code designation	A300, AC-15 (Ue = 240 V), Ie = 3 A 10 A EN 60947-5-1 A300, AC-15 (Ue = 240 V), Ie = 3 A 10 A IEC 60947-5-1 appendix A Q300, DC-13 (Ue = 250 V), Ie = 0.27 A EN 60947-5-1 Q300, DC-13 (Ue = 250 V), Ie = 0.27 A IEC 60947-5-1 appendix A
[Ui] rated insulation voltage	300 VUL 508 500 V 3)IEC 60947-1 300 VCSA C22.2 No 14
Maximum resistance across terminals	25 MOhm IEC 60255-7 category 3
[Uimp] rated impulse withstand voltage	6 kV IEC 60664 6 kV IEC 60947-1
Short-circuit protection	10 A cartridge fuse gG
Electrical durability	5000000 Cycles, DC-13, 120 V, 4 W 60 cyc/mn 0.5, DC IEC 60947-5-1 appendix C 5000000 Cycles, DC-13, 24 V, 10 W 60 cyc/mn 0.5, DC IEC 60947-5-1 appendix C 5000000 cycles, DC-13, 48 V, 7 W 60 cyc/mn 0.5, DC IEC 60947-5-1 appendix C
Mechanical durability	10000000 cycles

Width	1.22 in (31 mm)
Height	2.56 in (65 mm)
Depth	1.18 in (30 mm)
Product Weight	0.52 lb(US) (0.235 kg)
Terminals description ISO n°1	(21-22)NC (13-14)NO

## Environment

Shock resistance	50 gn 11 ms IEC 60068-2-27
Vibration resistance	25 gn 10...500 Hz)IEC 60068-2-6
IP degree of protection	IP66IEC 60529 IP67IEC 60529
IK degree of protection	IK06 EN 50102
Electrical shock protection class	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 UL CSA
Standards	UL 508 EN 60947-5-1 IEC 60204-1 CSA C22.2 No 14 EN 60204-1 IEC 60947-5-1

## Ordering and shipping details

Category	22418-LIMIT SWITCH,IEC,XCKP&XCKT
Discount Schedule	T
GTIN	3389110197433
Returnability	No
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.34 in (3.4 cm)
Package 1 Width	1.97 in (5.0 cm)
Package 1 Length	5.12 in (13.0 cm)
Package 1 Weight	7.58 oz (215.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	21
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	5.91 in (15.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	10.47 lb(US) (4.751 kg)

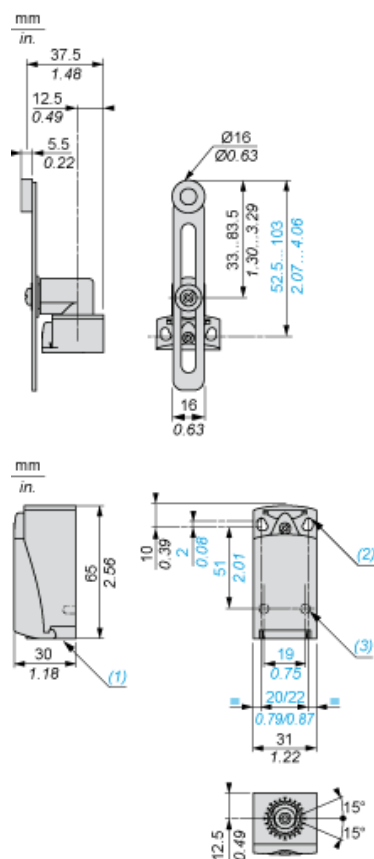
## Offer Sustainability

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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Contractual warranty

Warranty	18 months
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## Dimensions



- (1) Tapped entry for M16 x 1.5
- (2) 2 elongated holes Ø 4.3 x 6.3 mm on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.
- (3) 2 x Ø 3 holes for support studs, depth 4 mm.

## Mounting with Cable Entry

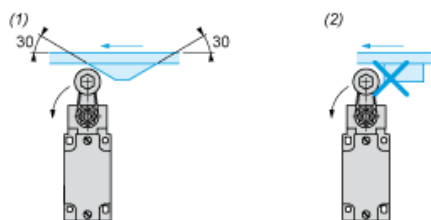
### Position of Cable Gland



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

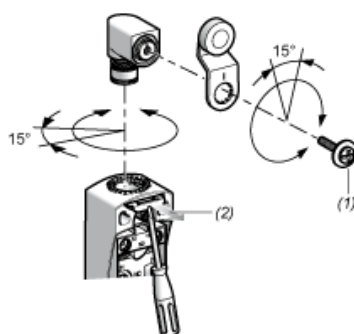
## Mounting with Rotary Heads and Levers

### Type of Cam



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

## Setting-up with Head ZCE01 and ZCE09



- (1) Tightening torque (Min : 1) (Max : 1.5)
- (2) Tightening torque (Min : 0.8) (Max : 1.2)

Wiring Diagram

2-pole NC + NO Snap Action



### Switch Actuation by 30° Cam

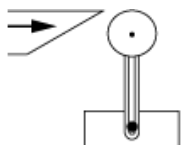


Figure 1 is a schematic diagram of the experimental setup. It shows a horizontal bar with four segments labeled 21-22, 13-14, 21-22, and 13-14. The segments are divided into two groups: (1) black and (2) white. The angles 25°, 70°, and 90° are indicated. A 12° angle is also shown. A legend indicates: (1) black, (2) white, (4) black triangle, (5) white triangle.

- (1) Closed
- (2) Open
- (4) Tripping
- (5) Resetting