

# XCKS531

Limit switch, Limit switches XC Standard, XCKS, thermoplastic roller lever, 1NC+1 NO, slow break, Pg13



## Main

Range of product	Telemecanique Limit switches XC Standard
Series name	Standard format
Product or component type	Limit switch
Device short name	XCKS
Sensor design	Form A conforming to CENELEC EN 50041
Body type	Fixed
Head type	Rotary head
Material	Plastic
Body material	Plastic
Head material	Plastic
Fixing mode	By the body
Movement of operating head	Rotary
Type of operator	Spring return roller lever thermoplastic
Type of approach	Lateral approach, 1 or 2 programmable direction
Cable entry	1 entry tapped for Pg 13.5 cable gland, cable outer diameter: 9...12 mm
Number of poles	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Slow-break, break before make

## Complementary

Switch actuation	By 30° cam
Electrical connection	Screw-clamp terminals, clamping capacity: 1 x 0.5...2 x 2.5 mm <sup>2</sup>
Contacts insulation form	Zb
Number of steps	1
Positive opening	With
Positive opening minimum torque	0.15 N.m
Minimum torque for tripping	0.1 N.m
Minimum actuation speed	6 m/min
Maximum actuation speed	1.5 m/s
Contact code designation	A300, AC-15 (U <sub>e</sub> = 240 V), I <sub>e</sub> = 3 A conforming to EN/IEC 60947-5-1 appendix A Q300, DC-13 (U <sub>e</sub> = 250 V), I <sub>e</sub> = 0.27 A conforming to EN/IEC 60947-5-1 appendix A
[I <sub>the</sub> ] conventional enclosed thermal current	10 A AC
[U <sub>i</sub> ] rated insulation voltage	300 V conforming to UL 508 500 V (pollution degree 3) conforming to IEC 60947-1 300 V conforming to CSA C22.2 No 14
Maximum resistance across terminals	25 MOhm conforming to IEC 60255-7 category 3
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV conforming to IEC 60664 6 kV conforming to IEC 60947-1
Short-circuit protection	10 A cartridge fuse, type gG
Electrical durability	5000000 Cycles, DC-13, inductive load type, 120 V, 4 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C 5000000 Cycles, DC-13, inductive load type, 24 V, 10 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 48 V, 7 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C

Mechanical durability	20000000 cycles
Width	40 mm
Height	130 mm
Depth	60 mm
Net weight	0.16 kg
Terminals description ISO n°1	(13-14)NO (21-22)NC

## Environment

Shock resistance	50 gn for 11 ms conforming to IEC 60068-2-27
Vibration resistance	25 gn (f= 10...500 Hz) conforming to IEC 60068-2-6
IP degree of protection	IP67 conforming to IEC 60529 IP66 conforming to IEC 60529
IK degree of protection	IK05 conforming to EN 50102
Electrical shock protection class	Class II conforming to IEC 61140 Class II conforming to NF C 20-030
Overvoltage category	Class II conforming to IEC 61140 Class II conforming to NF C 20-030
Ambient air temperature for operation	-25...70 °C
Ambient air temperature for storage	-40...70 °C
Protective treatment	TC
Product certifications	UL[RETURN]CCC[RETURN]CSA
Standards	EN 60947-5-1 CENELEC EN 50041 CSA C22.2 No 14 EN 60204-1 IEC 60947-5-1 UL 508 IEC 60204-1

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.100 cm
Package 1 Width	9.600 cm
Package 1 Length	13.200 cm
Package 1 Weight	175.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.295 kg

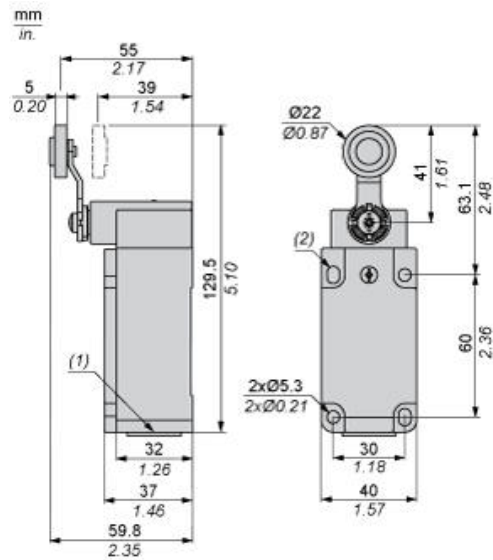
## Offer Sustainability

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>
For all Reach Rohs enquiries contact us at	<a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>

## Contractual warranty

Warranty	18 months
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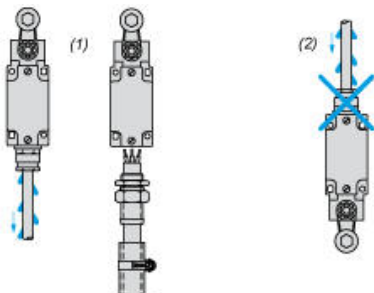
## Dimensions



- (1) 1 tapped entry for Pg 13.5 cable gland  
(2) 2 elongated holes Ø 5.3 x 7.3.

## Mounting with Cable Entry

### Position of Cable Gland



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

## Mounting with Rotary Heads and Levers

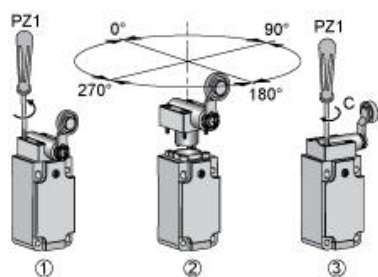
### Type of Cam



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

## Setting-up

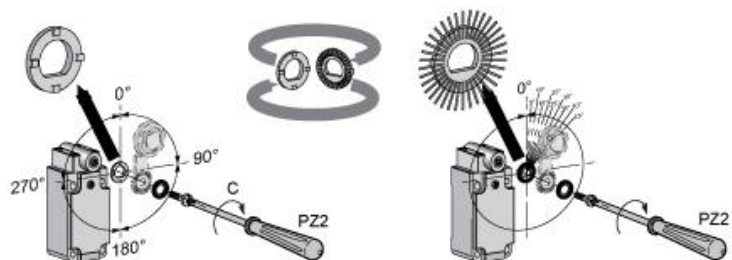
### Head Rotation Adjustment



C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

## Setting-up

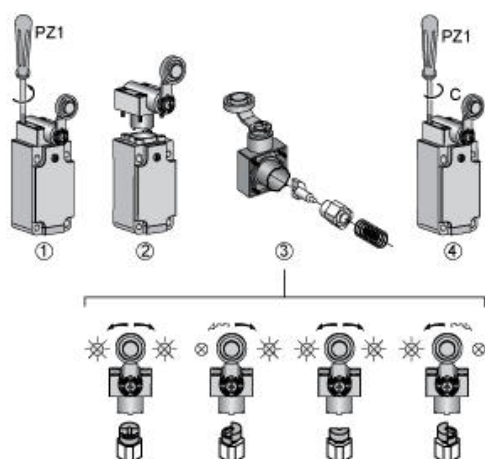
## Lever Angle Adjustment



C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

## Setting-up with Head ZCKD05

### Direction of Actuation Programming



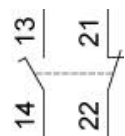
C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

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## Wiring Diagram

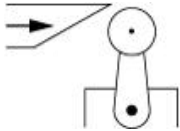
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2-pole NC + NO Break Before Make, Slow Break

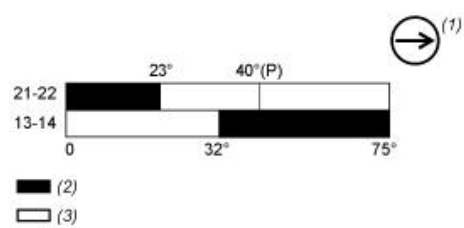


## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functionnal Diagram



- (P) Positive opening point  
(1) NC contact with positive opening operation  
(2) Closed  
(3) Open