

# Product data sheet

Specifications



## Limit switch, Limit switches XC Standard, XCKS, thermoplastic roller lever, 1NC+1 NO, snap action, M20

XCKS131H29

### 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 M20 x 1.5 cable gland, cable outer diameter: 7...13 mm
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, clamping capacity: 1 x 0.34...2 x 1.5 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	0.01 m/min

<b>Maximum actuation speed</b>	1.5 m/s
<b>Contact code designation</b>	A300, AC-15 (Ue = 240 V), Ie = 3 A conforming to EN/IEC 60947-5-1 appendix A Q300, DC-13 (Ue = 250 V), Ie = 0.27 A conforming to EN/IEC 60947-5-1 appendix A
<b>[Ithe] conventional enclosed thermal current</b>	10 A AC
<b>[Ui] rated insulation voltage</b>	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
<b>Maximum resistance across terminals</b>	25 MOhm conforming to IEC 60255-7 category 3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60664 6 kV conforming to IEC 60947-1
<b>Short-circuit protection</b>	10 A cartridge fuse, type gG
<b>Electrical durability</b>	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
<b>Mechanical durability</b>	20000000 cycles
<b>Width</b>	40 mm
<b>Height</b>	130 mm
<b>Depth</b>	60 mm
<b>Net weight</b>	0.16 kg
<b>Terminals description ISO n°1</b>	(13-14)NO (21-22)NC

## Environment

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

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.2 cm

Package 1 Width	9.4 cm
Package 1 Length	12.8 cm
Package 1 Weight	176.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	4.39 kg

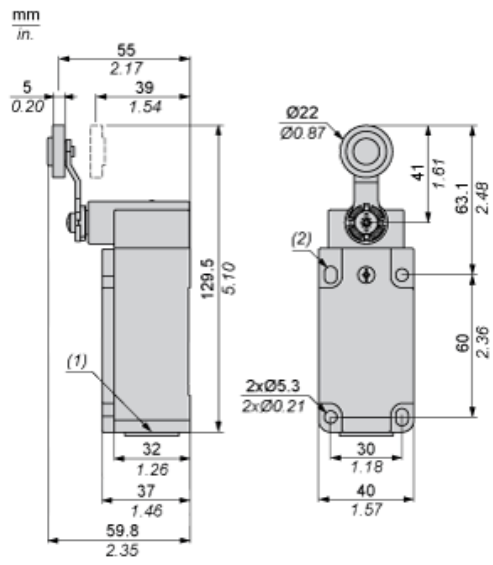
## Offer Sustainability

Sustainable offer status	Green Premium product
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>
Circularity Profile	<a href="#">End of Life Information</a>
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>

## Contractual warranty

Warranty	18 months
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Dimensions

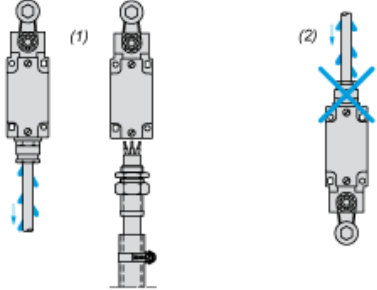


- (1) 1 tapped entry for M20 x 1.5
- (2) 2 elongated holes  $\varnothing$  5.3 x 7.3.

**Mounting with Cable Entry**

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**Position of Cable Gland**

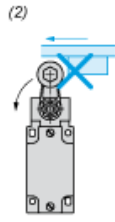
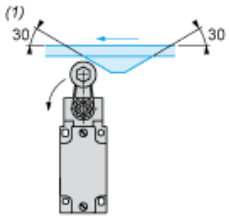


- (1) Recommended
- (2) To be avoided

**Mounting with Rotary Heads and Levers**

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**Type of Cam**

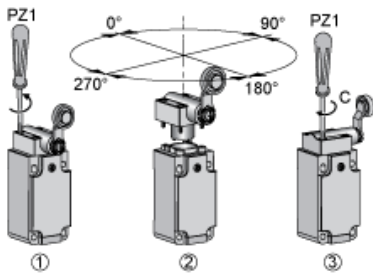


- (1) Recommended
- (2) To be avoided

**Setting-up**

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**Head Rotation Adjustment**

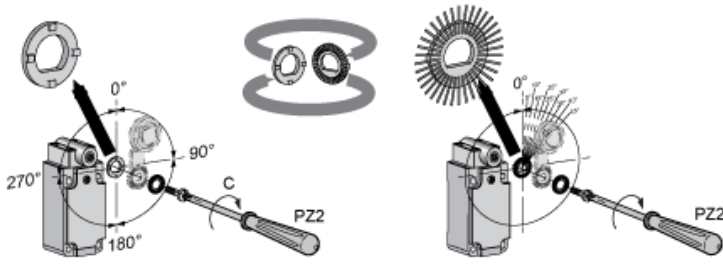


**C :** 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

**Setting-up**

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**Lever Angle Adjustment**



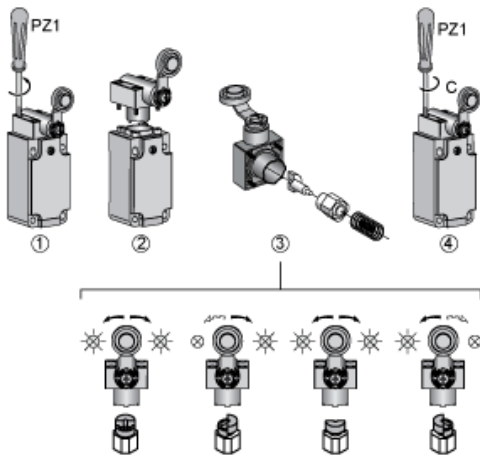
C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)



**Setting-up with Head ZCKD05**

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**Direction of Actuation Programming**

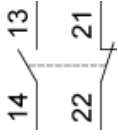


C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

**Wiring Diagram**

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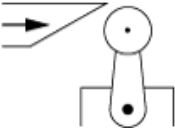
**2-pole NC + NO Snap Action**



**Characteristics of Actuation**

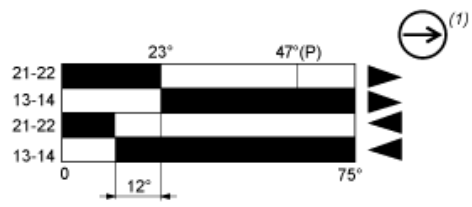
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**Switch Actuation by 30° Cam**



Functionnal Diagram

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

- (P) Positive opening point
- (1) NC contact with positive opening operation

Recommended replacement(s)