

# XCKS102H7

Limit switch, Limit switches XC Standard, XCKS, steel roller plunger, 1NC+1 NO, snap, 1/2NPT



## 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 C conforming to CENELEC EN 50041
Body type	Fixed
Head type	Plunger head
Material	Plastic
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Fixing mode	By the body
Movement of operating head	Linear
Type of operator	Spring return roller plunger metal
Type of approach	Lateral approach, 2 directions
Cable entry	1 entry tapped for 1/2" NPT 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 force	20 N
Minimum force for tripping	12 N
Minimum actuation speed	0.01 m/min
Maximum actuation speed	0.5 m/s
Contact code designation	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
[Ithe] conventional enclosed thermal current	10 A AC
[Ui] 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
[Uimp] 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	15000000 cycles
Width	40 mm
Height	117 mm
Depth	37 mm
Net weight	0.133 kg
Terminals description ISO n°1	(21-22)NC (13-14)NO

## Environment

Shock resistance	40 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	IEC 60947-5-1 UL 508 CENELEC EN 50041 EN 60947-5-1 IEC 60204-1 CSA C22.2 No 14 EN 60204-1

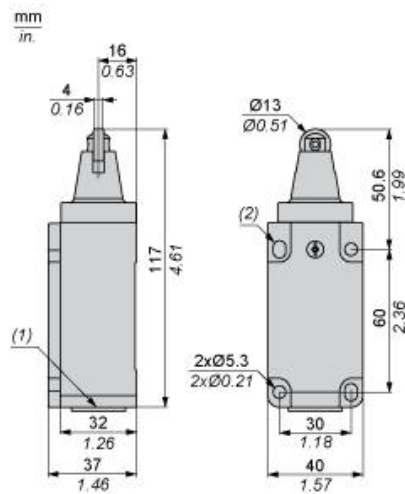
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.9624 cm
Package 1 Width	5.9436 cm
Package 1 Length	12.8778 cm
Package 1 Weight	0.113 kg
Unit Type of Package 2	S02
Number of Units in Package 2	30
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	3804 g
Unit Type of Package 3	P06
Number of Units in Package 3	480
Package 3 Height	70 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	65864 g

## 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>

## Dimensions



- (1) 1 tapped entry for 1/2NPT gland  
(2) 2 elongated holes Ø 5.3 x 7.3.

## Mounting with Cable Entry

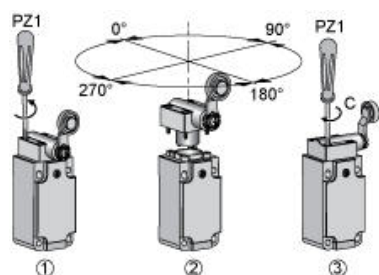
### Position of Cable Gland



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

## Setting-up

### Head Rotation Adjustment



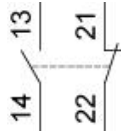
C : 1 Nm (+/- 20%) / 8.85 lb-in (+/- 20%)

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Wiring Diagram

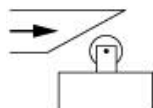
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2-pole NC + NO Snap Action

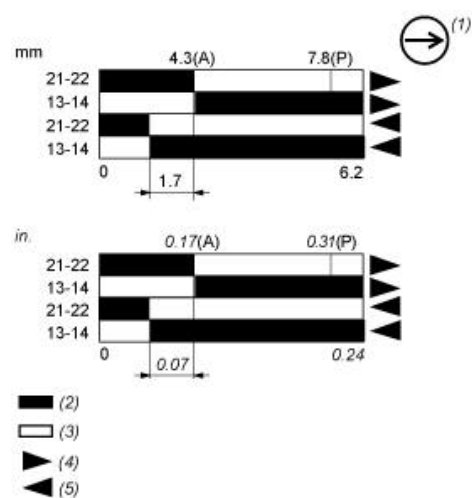


## Characteristics of Actuation

### Switch Actuation by 30° Cam



## Functionnal Diagram



- (P) Positive opening point  
(A) Cam displacement  
(1) NC contact with positive opening operation  
(2) Closed  
(3) Open  
(4) Tripping  
(5) Resetting