

## Product data sheet

### Characteristics

# XCKN2903P20

Limit switch, Limit switches XC Standard, XCKN, plastic roller plunger, 2NC, snap, M20



### Main

Range of product	Telemecanique Limit switches XC Standard
Series name	Standard format
Product or component type	Limit switch
Device short name	XCKN
Sensor design	Compact
Body type	Fixed
Head type	Plunger head
Material	Plastic
Body material	Plastic
Head material	Plastic
Fixing mode	By the body
Movement of operating head	Linear
Type of operator	Spring return roller plunger plastic at 90°
Type of approach	Traverse approach, 2 directions
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	2 NC
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
Positive opening	With
Positive opening minimum force	20 N
Minimum force for tripping	12 N
Maximum actuation speed	0.3 m/s
Contact code designation	A300, AC-15 (Ue = 240 V), Ie = 3 A, Ithe = 10 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
[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
[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, 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, 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, 48 V, 7 W, operating rate <60 cyc/mn, load factor: 0.5 conforming to IEC 60947-5-1 appendix C
Mechanical durability	10000000 cycles

Width	30 mm
Height	85 mm
Depth	30 mm
Net weight	0.145 kg
Terminals description ISO n°1	(21-22)NC (11-12)NC



## Environment

Shock resistance	45 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	IP65 conforming to IEC 60529
IK degree of protection	IK04 conforming to EN 50102
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 60204-1 CSA C22.2 No 14 EN 60947-5-1 UL 508 EN 60204-1 IEC 60947-5-1

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3 cm
Package 1 Width	3 cm
Package 1 Length	8.5 cm
Package 1 Weight	61 g
Unit Type of Package 2	CAR
Number of Units in Package 2	20
Package 2 Height	3 cm
Package 2 Width	3 cm
Package 2 Length	8.5 cm
Package 2 Weight	1.299 kg
Unit Type of Package 3	S02
Number of Units in Package 3	80
Package 3 Height	15 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	5.72 kg

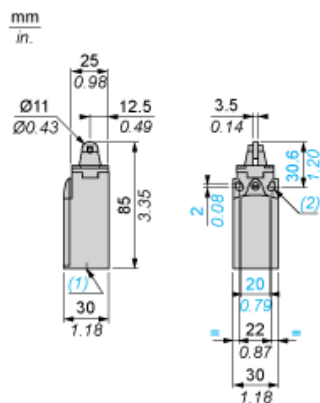
## Offer Sustainability

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)
Mercury free	Yes
RoHS exemption information	 <a href="#">Yes</a>
Circularity Profile	No need of specific recycling operations

## Contractual warranty

Warranty	18 months
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## Dimensions



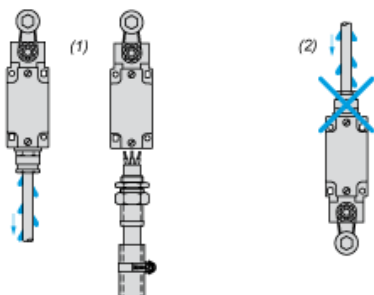
- (1) 1 tapped entry for M20 x 1.5  
(2) Ø: 2 elongated holes Ø 4.3 x 6.3 on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.

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## Mounting with Cable Entry

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### Position of Cable Gland



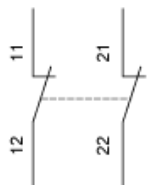
- (1) Recommended  
(2) To be avoided

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## Wiring Diagram

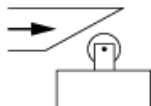
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### 2-pole NC + NC Snap Action

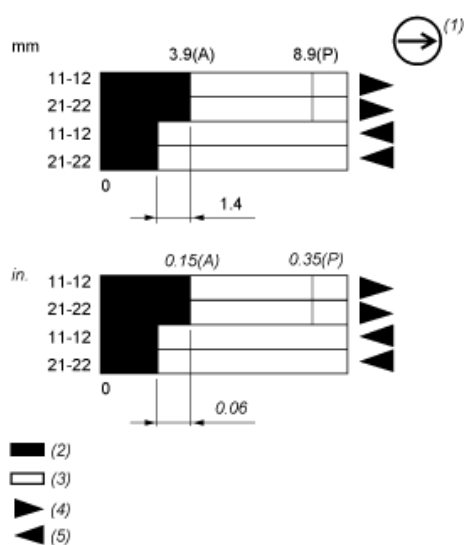


## Characteristics of Actuation

### 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