

# Product data sheet

Specifications



## Limit switch, Limit switches XC Standard, XCKP, steel roller plunger, 2NC, snap, M16

XCKP2902P16

### Main

Range of product	Telemecanique Limit switches XC Standard
Series name	Standard format
Product or component type	Limit switch
Device short name	XCKP
Sensor design	Compact form C CENELEC EN 50047
Body type	Fixed
Head type	Plunger head
Material	Plastic
Body material	Plastic
Head material	Zamak
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
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 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 force	36 N
Minimum force for tripping	12 N
Minimum actuation speed	0.01 m/min
Maximum actuation speed	1.64 ft/s (0.5 m/s)
Repeat accuracy	0.1 mm on the tripping points with 1 million operating cycles

<b>Contact code designation</b>	A300, AC-15 (Ue = 240 V), Ie = 3 A 10 A EN/IEC 60947-5-1 appendix A Q300, DC-13 (Ue = 250 V), Ie = 0.27 A EN/IEC 60947-5-1 appendix A
<b>[Ui] rated insulation voltage</b>	300 VUL 508 500 V 3)IEC 60947-1 300 VCSA C22.2 No 14
<b>Maximum resistance across terminals</b>	25 MOhm IEC 60255-7 category 3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60664 6 kV IEC 60947-1
<b>Short-circuit protection</b>	10 A cartridge fuse gG
<b>Electrical durability</b>	5000000 cycles, DC-13, 120 V, 4 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C 5000000 cycles, DC-13, 24 V, 10 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C 5000000 cycles, DC-13, 48 V, 7 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C
<b>Mechanical durability</b>	10000000 cycles
<b>Width</b>	1.22 in (31 mm)
<b>Height</b>	2.56 in (65 mm)
<b>Depth</b>	1.18 in (30 mm)
<b>Net weight</b>	0.21 lb(US) (0.095 kg)
<b>Terminals description ISO n°1</b>	(21-22)NC (13-14)NO

## Environment

<b>Shock resistance</b>	50 gn 11 ms IEC 60068-2-27
<b>Vibration resistance</b>	25 gn 10...500 Hz)IEC 60068-2-6
<b>IP degree of protection</b>	IP66 IEC 60529 IP67 IEC 60529
<b>IK degree of protection</b>	IK04 EN 50102
<b>Electrical shock protection class</b>	Class II IEC 61140 Class II NF C 20-030
<b>Ambient air temperature for operation</b>	-13...158 °F (-25...70 °C)
<b>Ambient air temperature for storage</b>	-40...158 °F (-40...70 °C)
<b>Protective treatment</b>	TC
<b>Product certifications</b>	UL CSA CCC
<b>Standards</b>	IEC 60947-5-1 EN 60204-1 CSA C22.2 No 14 EN 60947-5-1 IEC 60204-1 UL 508

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	1.30 in (3.3 cm)
<b>Package 1 Width</b>	1.54 in (3.9 cm)
<b>Package 1 Length</b>	3.94 in (10.0 cm)
<b>Package 1 Weight</b>	2.82 oz (80.0 g)

## Offer Sustainability

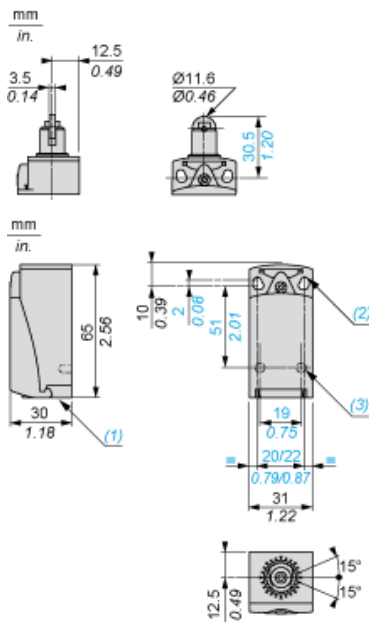
<b>Sustainable offer status</b>	Green Premium product
---------------------------------	-----------------------

<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>

## Contractual warranty

<b>Warranty</b>	18 months
-----------------	-----------

**Dimensions**

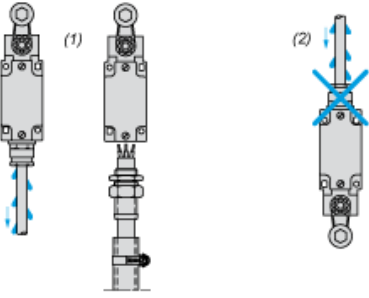


- (1) Tapped entry for M16 x 1.5
- (2) 2 elongated holes Ø 4.3 x 6.3 mm on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.
- (3) 2 x Ø 3 holes for support studs, depth 4 mm.

**Mounting with Cable Entry**

---

**Position of Cable Gland**

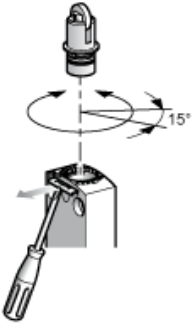


- (1) Recommended
- (2) To be avoided

**Setting-up**

---

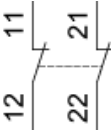
**Plunger or Multi-directional Heads**



**Wiring Diagram**

---

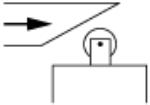
**2-pole NC + NC Snap Action**



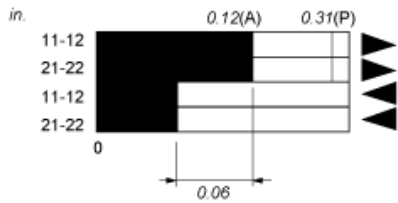
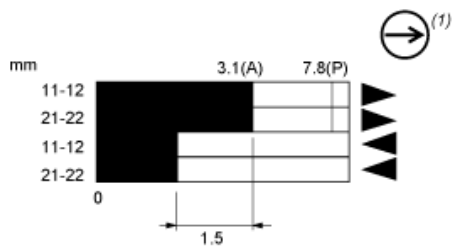
**Characteristics of Actuation**

---

**Switch Actuation by 30° Cam**



Functionnal Diagram



- (2)
- (3)
- ▶ (4)
- ◀ (5)

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

Recommended replacement(s)