# Product datasheet Characteristics

# XCKN2103P20





# Main

Main	
Range of product	OsiSense XC
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: 0.280.51 in (713 mm)
Number of poles	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Snap action

## Complementary

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Switch actuation	By 30° cam
Electrical connection	Screw-clamp terminals, clamping capacity: 1 x 0.342 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	0.98 ft/s (0.3 m/s)
Contact code designation	R300, DC-13 (Ue = 250 V, Ie = 0.1 A) conforming to EN/IEC 60947-5-1 appendix A A300, AC-15 (Ue = 240 V, Ie = 3 A) , Ithe = 10 A conforming to EN/IEC 60947-5-1 appendix A
[Ui] rated insulation voltage	500 V degree of pollution 3 conforming to IEC 60947-1 300 V conforming to UL 508 300 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	1000000 cycles
Width	1.18 in (30 mm)
Height	3.35 in (85 mm)
Depth	1.18 in (30 mm)
Product weight	0.32 lb(US) (0.145 kg)
Terminals description ISO n°1	(13-14)NO (21-22)NC



## Environment

shock resistance	50 gn (duration = 11 ms) conforming to IEC 60068-2-27
vibration resistance	25 gn (f = 10500 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	-13158 °F (-2570 °C)
ambient air temperature for storage	-40158 °F (-4070 °C)
protective treatment	TC
product certifications	CCC CSA UL
standards	EN 60204-1 EN 60947-5-1 IEC 60204-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14

# **Offer Sustainability**

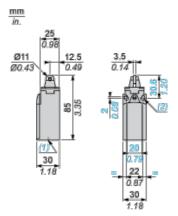
Green Premium product	Green Premium product
Compliant - since 0953 - Schneider Electric declaration of conformity	Compliant - since 0953 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Need no specific recycling operations	Need no specific recycling operations
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and	e Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and
Di-isodecyl phthalate (DIDP), which is known to the Stat of California to cause birth defects or other reproductive harm.	eDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.
For more information go to www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov

## Contractual warranty

Warranty period	
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18 months

## Dimensions



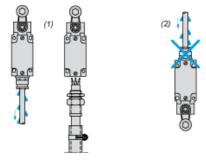
(1) 1 tapped entry for M20 x 1.5

(2) Ø: 2 elongated holes Ø 4.3 x 6.3 on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.

# Mounting with Cable Entry



#### **Position of Cable Gland**



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

## **Wiring Diagram**

## 2-pole NC + NO Snap Action

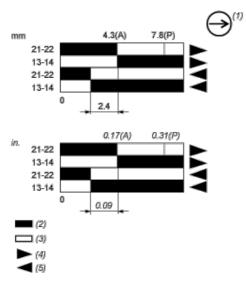


## **Characteristics of Actuation**

### 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

