

Product data sheet

Specifications



Limit switch, Limit switches XC Standard, XCKN, thermoplastic plastic roller lever var.length, 1NC+1 NO, snap, M20

XCKN2145P20

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	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 variable length
Type of approach	Lateral 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	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 ²
Contacts insulation form	Zb
Positive opening	With
Positive opening minimum torque	0.15 N.m
Minimum torque for tripping	0.1 N.m
Maximum actuation speed	1.5 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 R300, DC-13 (Ue = 250 V), Ie = 0.1 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	108...157 mm
Depth	42 mm
Net weight	0.18 kg
Terminals description ISO n°1	(21-22)NC (13-14)NO

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	CSA CCC UL
Standards	IEC 60947-5-1 UL 508 CSA C22.2 No 14 IEC 60204-1 EN 60204-1 EN 60947-5-1

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	100 g
Package 1 Height	11 cm
Package 1 width	16 cm
Package 1 Length	31 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	20
Package 2 Weight	2.02 kg
Package 2 Height	11 cm

Package 2 width	16 cm
Package 2 Length	31 cm
Unit Type of Package 3	S03
Number of Units in Package 3	60
Package 3 Weight	6.92 kg
Package 3 Height	30 cm
Package 3 width	30 cm
Package 3 Length	40 cm

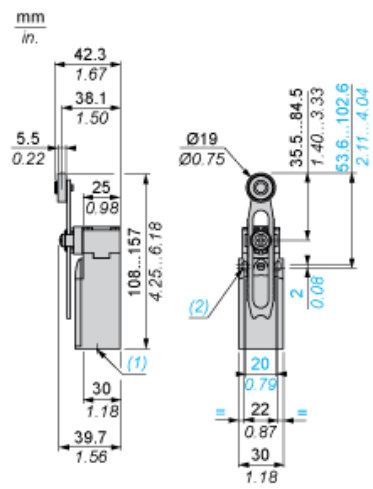
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
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 www.P65Warnings.ca.gov

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.

Mounting with Cable Entry

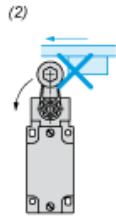
Position of Cable Gland



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

Mounting with Rotary Heads and Levers

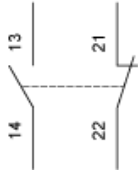
Type of Cam



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

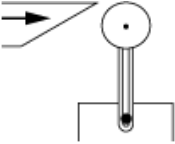
Wiring Diagram

2-pole NC + NO Snap Action

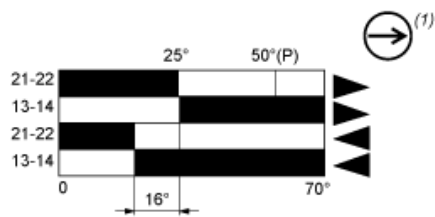


Characteristics of Actuation

Switch Actuation by 30° Cam



Functionnal Diagram



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

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