# Product data sheet
## Characteristics

# XCKJ10513A
## Limit switch, Limit switches XC Standard, XCKJ, steel roller lever, 1NC+1 NO, snap action, 7/8"

## Main

| | |
|---|---|
| Range of product | Telemecanique Limit switches XC Standard |
| Series name | Standard format |
| Product or component type | Limit switch |
| Device short name | XCKJ |
| Sensor design | Form A conforming to CENELEC EN 50041 |
| Body type | Fixed |
| Head type | Rotary head |
| Material | Metal |
| Body material | Zamak |
| Head material | Zamak |
| Fixing mode | By the body |
| Movement of operating head | Rotary |
| Type of operator | Spring return roller lever metal |
| Type of approach | Lateral approach, 1 or 2 programmable direction |
| Number of poles | 2 |
| Contacts type and composition | 1 NC + 1 NO |
| Contact operation | Snap action |

## Complementary

| | |
|---|---|
| Switch actuation | By 30° cam |
| Electrical connection | Male connector 7/8", 5 pins |
| Contacts insulation form | Zb |
| Number of steps | 1 |
| Positive opening | With |
| Positive opening minimum torque | 0.5 N.m |
| Minimum torque for tripping | 0.25 N.m |
| Maximum actuation speed | 1.5 m/s |
| [Ie] rated operational current | 0.27 A at 250 V, DC-13 conforming to EN/IEC 60947-5-1 appendix A<br>3 A at 240 V, AC-15 conforming to EN/IEC 60947-5-1 appendix A |
| [Ithe] conventional enclosed thermal current | 6 A |
| [Ui] rated insulation voltage | 300 V conforming to UL 508<br>300 V conforming to CSA C22.2 No 14<br>250 V (pollution degree 3) conforming to IEC 60947-1 |
| Maximum resistance across terminals | 25 MOhm conforming to IEC 60255-7 category 3 |
| [Uimp] rated impulse withstand voltage | IEC 60664 6 kV<br>IEC 60947-1 6 kV |
| Short-circuit protection | 6 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<br>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<br>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 | 30000000 cycles |
| Width | 40 mm |
| Height | 94 mm |

| | |
|---|---|
| Depth | 44 mm |
| Net weight | 0.49 kg |
| Terminals description ISO n°1 | (21-22)NC<br>(13-14)NO |

## Environment

| | |
|---|---|
| Shock resistance | 50 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 | IP66 conforming to IEC 60529 |
| IK degree of protection | IK07 conforming to EN 50102 |
| Overvoltage category | Class I conforming to IEC 61140<br>Class I 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 | CCC<br>UL<br>CSA |
| Standards | CSA C22.2 No 14<br>IEC 60947-5-1<br>EN 60204-1<br>CENELEC EN 50041<br>IEC 60204-1<br>EN 60947-5-1<br>UL 508 |

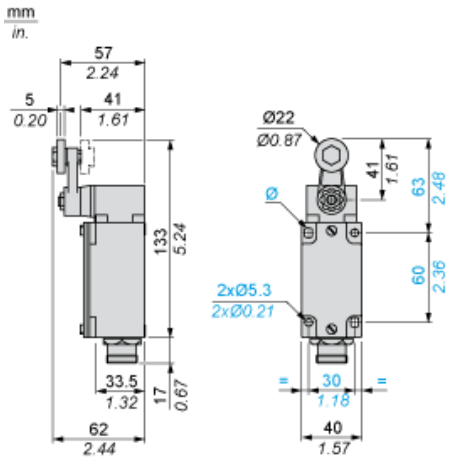
## Packing Units

| | |
|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 550 g |
| Package 1 Height | 5.5 cm |
| Package 1 width | 6 cm |
| Package 1 Length | 19 cm |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 18 |
| Package 2 Weight | 10.2 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 cm |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 288 |
| Package 3 Weight | 158.4 kg |
| Package 3 Height | 77 cm |
| Package 3 width | 80 cm |
| Package 3 Length | 60 cm |

## Contractual warranty

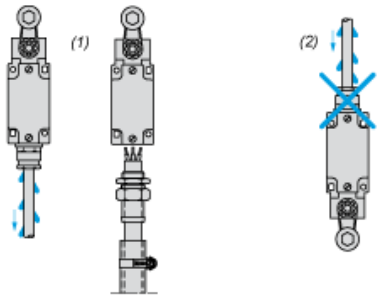
| | |
|---|---|
| Warranty | 18 months |

## Dimensions


mm
in.
57
2.24
5
0.20
41
1.61
133
5.24
33.5
1.32
17
0.67
62
2.44
Ø22
Ø0.87
41
1.61
63
2.48
Ø
60
2.36
2xØ5.3
2xØ0.21
30
1.18
40
1.57

## Mounting with Cable Entry

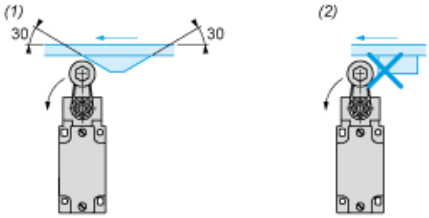
### Position of Cable Gland




(1) Recommended
(2) To be avoided

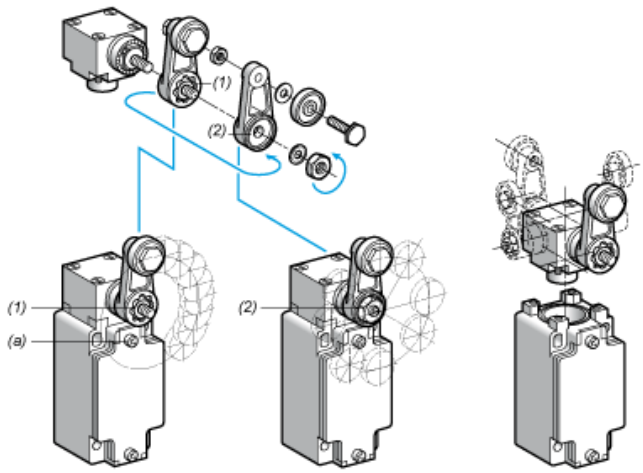
## Mounting with Rotary Heads and Levers

### Type of Cam




(1) Recommended
(2) To be avoided

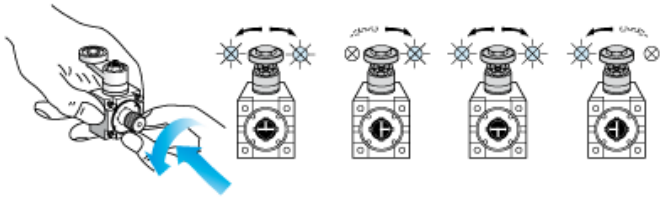
## Setting-up with Lever Head




(1) 5° steps throughout 360° / Tightening torque (Min : 1) (Max : 1.5)
(2) 45° steps throughout 360° / Tightening torque (Min : 1) (Max : 1.5)
(a) Tightening torque (Min : 1) (Max : 1.5)

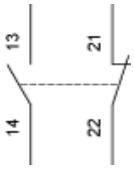
## Setting-up with Head ZCKE05

## Direction of Actuation Programming



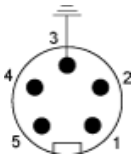
## Wiring Diagram

### 2-pole NC + NO Snap Action




## Wiring Diagram

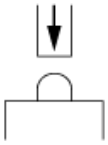
### Connections



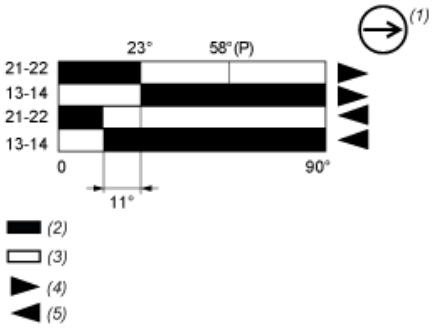

1 : 21
2 : 22
3 : Grounding
4 : 14
5 : 13

## Characteristics of Actuation

### Switch Actuation on End



## Functionnal Diagram




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