

Limit switches

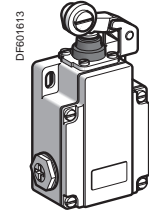
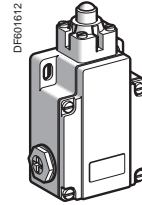
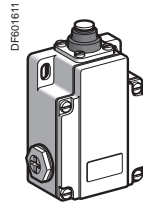
OsiSense XC Special

For material handling applications, type XC1AC

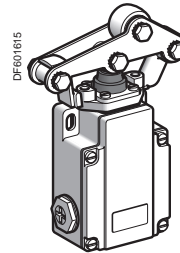
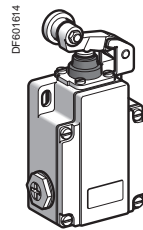
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■ XC1AC
with slow break contacts

□ With head for linear movement (plunger)



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For material handling applications, type XC1AC

Environment characteristics

| | | |
|----------------------------------|-----------------|--|
| Conformity to standards | | IEC/EN 60947-5-1, IEC 60337-1, VDE 0660-200, CSA C22-2 n° 14 |
| Product certifications | Special version | CSA 600 V (ac) HD |
| Protective treatment | Version | Standard: "TC". Special: "TH" |
| Ambient air temperature | For operation | - 25...+ 70°C |
| | For storage | - 40...+ 70°C |
| Operating position | | All positions |
| Vibration resistance | | 9 gn (10...500 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | | 95 gn (11 ms) conforming to IEC 60068-2-27 |
| Electric shock protection | | Class I conforming to IEC 60536 and NF C 20-030 |
| Degree of protection | | IP 65 conforming to IEC 60529 and NF C 20-010 |
| Mechanical durability | | 10 million operating cycles |
| Cable entry | | 3 tapped entries for n° 13 cable gland |

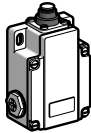
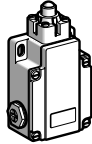


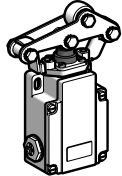
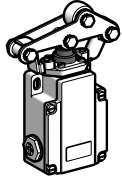
Contact block characteristics


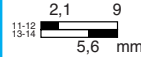
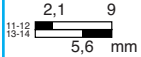
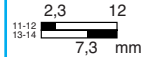
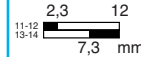
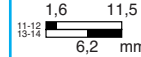
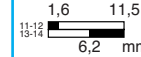

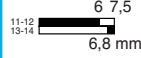
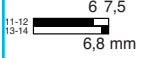
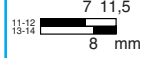
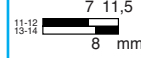
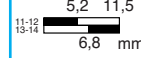
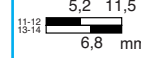

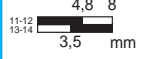
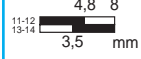
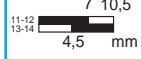
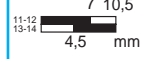
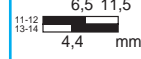
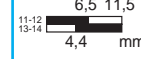



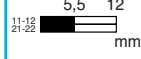
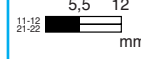



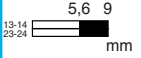
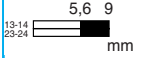


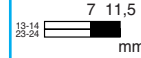
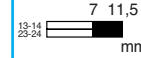

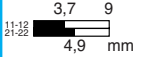
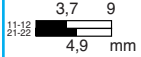
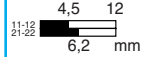
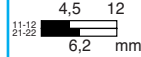
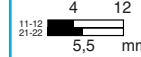
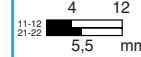

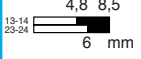
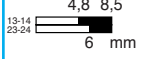
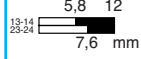
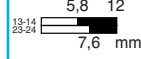
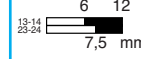
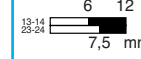
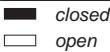
| Conventional thermal current | | 10 A | | | | | | | | | | | | | | | | |
|-------------------------------------|--|---|--------------------|--|--|--|-----------|----|-----|-----|--------------------------------|-----|-----|------|--------------------------------|-----|-----|-----|
| Rated insulation voltage | Slow break contact blocks | 500 V ~ and 600 V ⋮ conforming to IEC 60947-5-1, NF C 20-040 ~ and 600 V ⋮ conforming to CSA C22-2 n° 14 | | | | | | | | | | | | | | | | |
| Resistance across terminals | | ≤ 8 mΩ | | | | | | | | | | | | | | | | |
| Minimum tripping force | | XC1AC1●1 : 33 N, XC1AC1●6 : 23 N, XC1AC1●7 : 29 N | | | | | | | | | | | | | | | | |
| Terminal referencing | | Conforming to CENELEC EN 50013 | | | | | | | | | | | | | | | | |
| Short-circuit protection | | 10 A cartridge fuse type gG (gl) | | | | | | | | | | | | | | | | |
| Electrical durability | | <ul style="list-style-type: none"> ■ Conforming to IEC 60947-5-1 Appendix C ■ Utilisation categories AC-15 and DC-13 ■ Maximum operating rate: 3600 operating cycles/hour ■ Load factor: 0.5 | | | | | | | | | | | | | | | | |
| | | Slow break contact blocks | | | | | | | | | | | | | | | | |
| | AC supply 50/60 Hz ~  inductive circuit | <table border="1"> <thead> <tr> <th colspan="4">Power broken in VA</th> </tr> <tr> <th>Voltage V</th> <th>48</th> <th>110</th> <th>230</th> </tr> </thead> <tbody> <tr> <td>For 1 million operating cycles</td> <td>450</td> <td>900</td> <td>1900</td> </tr> <tr> <td>For 3 million operating cycles</td> <td>170</td> <td>350</td> <td>430</td> </tr> </tbody> </table> | Power broken in VA | | | | Voltage V | 48 | 110 | 230 | For 1 million operating cycles | 450 | 900 | 1900 | For 3 million operating cycles | 170 | 350 | 430 |
| Power broken in VA | | | | | | | | | | | | | | | | | | |
| Voltage V | 48 | 110 | 230 | | | | | | | | | | | | | | | |
| For 1 million operating cycles | 450 | 900 | 1900 | | | | | | | | | | | | | | | |
| For 3 million operating cycles | 170 | 350 | 430 | | | | | | | | | | | | | | | |
| | DC supply ⋮  inductive circuit | <table border="1"> <thead> <tr> <th colspan="4">Power broken in W</th> </tr> <tr> <th>Voltage V</th> <th>48</th> <th>110</th> <th>230</th> </tr> </thead> <tbody> <tr> <td>For 1 million operating cycles</td> <td>100</td> <td>100</td> <td>95</td> </tr> <tr> <td>For 3 million operating cycles</td> <td>35</td> <td>40</td> <td>33</td> </tr> </tbody> </table> | Power broken in W | | | | Voltage V | 48 | 110 | 230 | For 1 million operating cycles | 100 | 100 | 95 | For 3 million operating cycles | 35 | 40 | 33 |
| Power broken in W | | | | | | | | | | | | | | | | | | |
| Voltage V | 48 | 110 | 230 | | | | | | | | | | | | | | | |
| For 1 million operating cycles | 100 | 100 | 95 | | | | | | | | | | | | | | | |
| For 3 million operating cycles | 35 | 40 | 33 | | | | | | | | | | | | | | | |


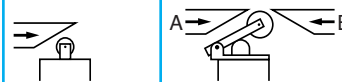
Limit switches

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For material handling applications, type XC1AC
Complete switches with slow break contacts

| Type of head | Plunger | | | | | |
|------------------|---|---|---|--|---|---|
| |  |  |  |  |  |  |
| Type of operator | End plunger | End ball bearing plunger | Roller lever plunger | Offset roller lever plunger | Reinforced roller lever plunger | Needle bearing mounted roller lever plunger |

| References of complete switches | | | | | | |
|---|---|---|---|--|---|---|
| Single-pole CO slow break ZC1AZ11 |  XC1AC111  | XC1AC115  | XC1AC116  | XC1AC118  | XC1AC117  | XC1AC119  |
| 2-pole NC + NO break before make, slow break ZC1AZ12 |  XC1AC121  | XC1AC125  | XC1AC126  | XC1AC128  | XC1AC127  | XC1AC129  |
| 2-pole NO + NC make before break ZC1AZ13 |  XC1AC131  | XC1AC135  | XC1AC136  | XC1AC138  | XC1AC137  | XC1AC139  |
| 2-pole NC + NC simultaneous, slow break ZC1AZ14 |  XC1AC141  | XC1AC145  | XC1AC146  | XC1AC148  | XC1AC147  | XC1AC149  |
| 2-pole NO + NO simultaneous, slow break ZC1AZ15 |  XC1AC151  | XC1AC155  | XC1AC156  | XC1AC158  | XC1AC157  | XC1AC159  |
| 2-pole NC + NC staggered, slow break ZC1AZ16 |  XC1AC161  | XC1AC165  | XC1AC166  | XC1AC168  | XC1AC167  | XC1AC169  |
| 2-pole NO + NO staggered, slow break ZC1AZ17 |  XC1AC171  | XC1AC175  | XC1AC176  | XC1AC178  | XC1AC177  | XC1AC179  |
| Weight (kg) | 0.530 | 0.530 | 0.595 | 0.595 | 0.870 | 0.870 |
| Contact operation |  | | | | | |

| Complementary characteristics | | |
|-------------------------------|--|---|
| Switch actuation | On end | By 30° cam |
| Type of actuation |  |  |
| Maximum actuation speed | 0.5 m/s | 1 m/s (direction A), 0.5 m/s (direction B) (1) |
| Cable entry | 3 tapped entries for n° 13 (DIN Pg 13.5) cable gland, clamping capacity 9 to 12 mm (2 entries fitted with blanking plug) | |
| Connection | Screw terminals. Clamping capacity: min. 1 x 0.5 mm ² , max. 1 x 2.5 mm ² | |

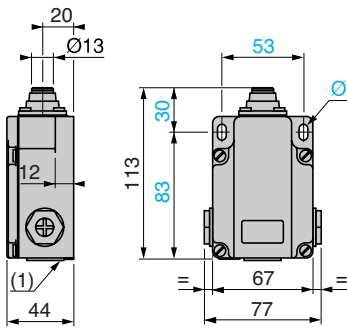
(1) For a 45° cam the maximum actuation speed becomes 0.5 m/s and for a 15° cam, 1 m/s.

Limit switches

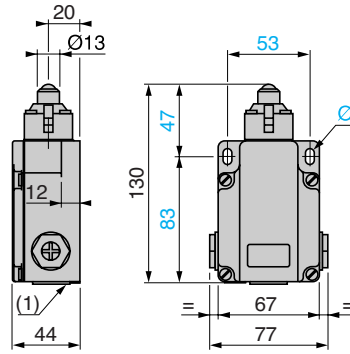
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Complete switches with slow break contacts

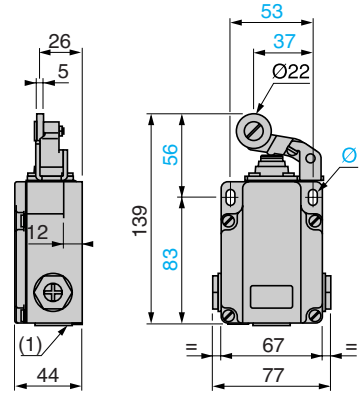
XC1AC1●1



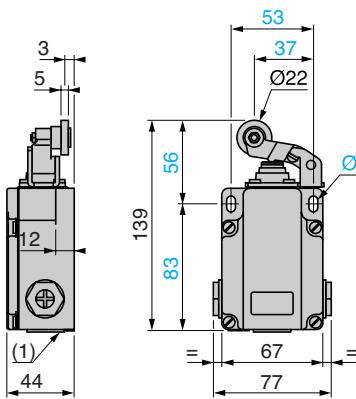
XC1AC1●5



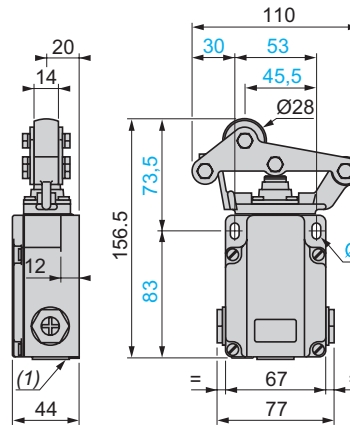
XC1AC1●6



XC1AC1●8



XC1AC1●7, XC1AC1●9



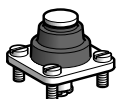
(1) 3 tapped entries for n° 13 cable gland or ISO 20 with adaptor DE9RA1620.
Ø: 2 elongated holes Ø 6.5 x 10.

Limit switches

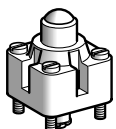
OsiSense XC Special

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Replacement parts

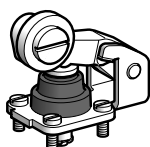
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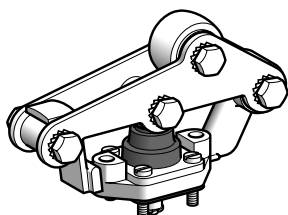
ZC1AC001



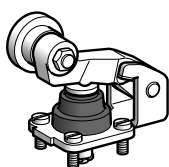
ZC1AC005



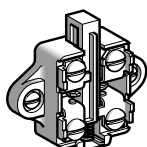
ZC1AC006



ZC1AC007
ZC1AC009



ZC1AC008



ZC1AZ1

Plunger heads

| Type of operator | Maximum actuation speed | Type of actuation | Reference | Weight kg |
|---|--|-------------------|-----------|-----------|
| For actuation on end | | | | |
| End plunger | 0.5 m/s | | ZC1AC001 | 0.035 |
| For actuation by 30° cam | | | | |
| End ball bearing plunger | 0.5 m/s | | ZC1AC005 | 0.050 |
| Roller lever plunger | 1 m/s (direction A) 0.5 m/s (direction B) | | ZC1AC006 | 0.100 |
| Reinforced roller lever plunger | 1 m/s (direction A) 0.5 m/s (direction B) | | ZC1AC007 | 0.375 |
| Offset roller lever plunger | 1 m/s (direction A) 0.5 m/s (direction B) | | ZC1AC008 | 0.100 |
| Needle bearing mounted roller lever plunger | 1 m/s (direction A) 0.5 m/s (direction B) | | ZC1AC009 | 3.380 |

Contact blocks

| Type of contact | Scheme | Reference | Weight kg |
|---------------------------|--------|-----------|-----------|
| CO, single-pole | | ZC1AZ11 | 0.040 |
| NC + NO break before make | | ZC1AZ12 | 0.045 |
| NO + NC make before break | | ZC1AZ13 | 0.040 |
| NC + NC simultaneous | | ZC1AZ14 | 0.045 |
| NO + NO simultaneous | | ZC1AZ15 | 0.045 |
| NC + NC staggered | | ZC1AZ16 | 0.040 |
| NO + NO staggered | | ZC1AZ17 | 0.040 |

Adaptation plate

| Description | Reference | Weight kg |
|--|-----------|-----------|
| Mounting plate (For replacing an old version type RN-67522 limit switch by an XC1AC limit switch) | ZC1AZ8 | 3.380 |

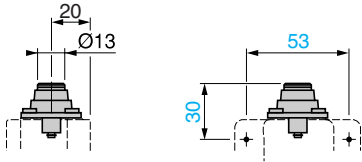
Limit switches

OsiSense XC Special

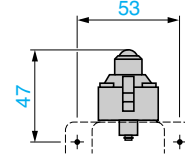
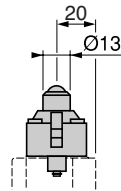
For material handling applications, type XC1AC
Replacement parts

Dimensions

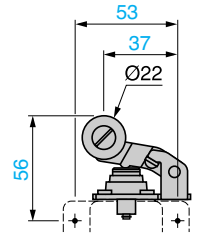
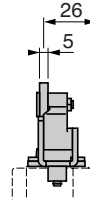
ZC1AC001



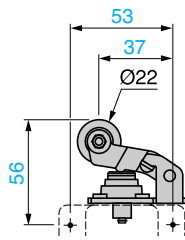
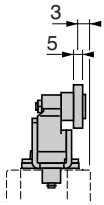
ZC1AC005



ZC1AC006



ZC1AC008



ZC1AC007, ZC1AC009

