

## Description

## Product description:

The position switches are used for position detection and position monitoring of moving parts on machines and systems. All position switches have forced break NC contacts in accordance with IEC 60947-5-1.

## Material:

Housing fibreglass reinforced plastic.
Contacts (electrical) silver.
Thrust pin plastic (Drive type B acc. to EN 50047).

## Note:

Complete position switch in compact design. The plastic housing is equipped with a hinged and captive housing cover. The cover can be flipped opened with a screwdriver and closed again without tools. An M20x1.5 aperture is provided to pass the cables through. The cables are connected with screw terminals.

The position switch is equipped with a thrust pin actuator. Depending on the approach situation, this can be replaced by another actuator as required.

Certificates / Standards met:
CE, cULus, CCC, EAC.
EN 60947-5-1, EN ISO 13849-1.

## Technical data:

Mounting position: arbitrary.
Service life: 20 years.Mechanical life: 10,000,000 operating cycles.
NC contact forced break: acc. to EN 60947-5-1.
Forced break force: >40 N.

Conditional rated short-circuit current acc. to EN 60947-5-1: 400 A.

Utilisation category acc. to IEC/EN60947-5-1:
AC15: $240 \mathrm{~V} / 3 \mathrm{~A}$.
DC13: $24 \mathrm{~V} / 3 \mathrm{~A}$.

## Temperature range:

$-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$.



1 NO contact/ 1 NC contact


2 NC contacts
(3) 11012 (4)
(1) 21

1 NO contact / 2 NC contact

Operating travel diagram:


Note on operating travel diagram:
$\square$ Closed contact
$\square$ Open contact
(P) Forced break path / angle
(2) 130
(2) $21 \square \square 22(4)$
(6) $31 \backsim 32$ (7)

Overview of items

| Order No. | Connection <br> type | Connection <br> cross-section <br> max. $\left(\mathrm{mm}^{2}\right)$ | Wire strip length <br> mm | Cable entry | No. of NC contacts |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $83450-1111$ | screw connection | $0,34-1,5$ | $5-6$ | M20 breakaway |  |
| $83450-1120$ | screw connection | $0,34-1,5$ | $5-6$ | M20 breakaway | 1 |
| $83450-1121$ | screw connection | $0,34-1,5$ | $5-6$ | M20 breakaway | 2 |


| Order No. | No. of NO contacts | Safety rating | Switching frequency | Protection class | Contamination level |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $83450-1111$ | 1 | IP66/IP67 | $5000 / \mathrm{h}$ | II Protective insulation |  |
| $83450-1120$ | - | IP66/P67 | $5000 / \mathrm{h}$ | II Protective insulation | 3 |
| $83450-1121$ | 1 | IP66/P67 | $5000 / \mathrm{h}$ | II Protective insulation | 3 |


| Order No. Rated insulation voltage |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Ui <br> $V$ | Rated impulse withstand voltage <br> Uimp <br> kV | Thermal continuous <br> current <br> A |
| $83450-1111$ | 300 | 4 | 10 |
| $83450-1120$ | 300 | 300 | 4 |
| $83450-1121$ |  | 4 | 10 |


| Order No. | Tightening torque <br> Contact screws <br> $N m$ | Tightening torque <br> Mounting screws <br> $N m$ | Actuation speed <br> $m i n$. | Actuation speed <br> $m m / m i n$. |
| :---: | :---: | :---: | :---: | :---: |
| $83450-1111$ | $0,6-0,8$ | 1,2 | 10 | 0,5 |
| $83450-1120$ | $0,6-0,8$ | 1,3 | 10 | 0,5 |
| $83450-1121$ | $0,6-0,8$ | 1,4 | 10 | 0,5 |

