

## Item description/product images



for electrics

## 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 V / 3 A.

DC13: 24 V / 3 A.

**Temperature range:**

-30 °C to +80 °C

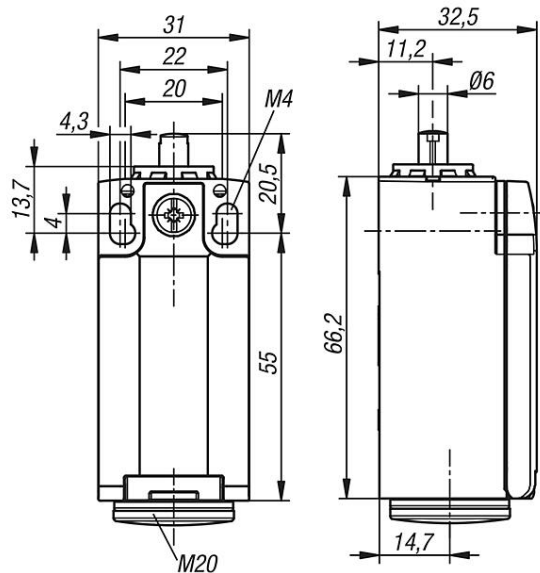
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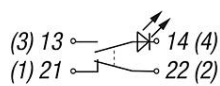


Drawings

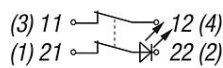


Circuit diagram:

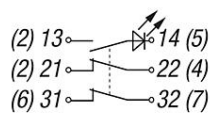
1 NO contact / 1 NC contact



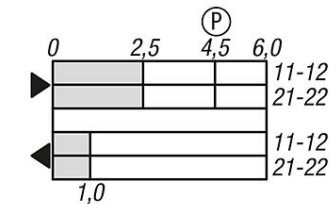
2 NC contacts



1 NO contact / 2 NC contact



Operating travel diagram:



Note on operating travel diagram:

- Closed contact
- Open contact
- Forced break path / angle
- Ⓟ

## Overview of items

Order No.	Connection type	Connection cross-section max. (mm <sup>2</sup> )	Wire strip length mm	Cable entry	No. of NC contacts
83450-1111	screw connection	0,34-1,5	5-6	M20 breakaway	1
83450-1120	screw connection	0,34-1,5	5-6	M20 breakaway	2
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/h	II Protective insulation	3
83450-1120	-	IP66/IP67	5000/h	II Protective insulation	3
83450-1121	1	IP66/IP67	5000/h	II Protective insulation	3

Order No.	Rated insulation voltage U <sub>i</sub> V	Rated impulse withstand voltage U <sub>imp</sub> kV	Thermal continuous current A
83450-1111	300	4	10
83450-1120	300	4	10
83450-1121	300	4	5

Order No.	Tightening torque Contact screws Nm	Tightening torque Mounting screws Nm	Actuation speed min. mm/min.	Actuation speed max. m/s
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