

# Slow-make switching element PIT

When using the switching element, the application guidelines must be observed.

## Switching system

The double-break, slow-make switching element is equipped with one or two independent contact systems, acting as normally open or normally closed contact. The normally closed contact has forced opening.

Slow-make contacts with forced action are ideal for high switch ratings.

Up to three switching elements can be snapped to each actuator.

For the emergency-stop pushbutton use the slow-make switching element (max. 2).

### Special requirements for positive-opening auxiliary current switches

Positive opening travel	Emergency stop 12.5 mm
Minimum force	Emergency stop 50 N (actuating force at which is safely switched)
Max. travel	Emergency stop 12.5 mm

## Material

### Housing

The indicator lights/switches may be installed in enclosures with protection class 2 according to DIN EN 61140.

The enclosure must at least have enclosure class 2 according to UL50E.

### Material of contact

Hard silver and gold-silver

### Switch housing

Plastic

## Mechanical characteristics

### Terminals

PIT push-in terminal	
- max. wire cross section	1.0 mm <sup>2</sup>
- stripping length wire	8 mm
- max. number of wire	2
- max. strand cross section	0.75 mm <sup>2</sup>
- stripping strands	use stranded wires only with wire end ferrules of 8 mm length
- max. number of strands	2

Only one polarity is allowed on each side when wiring.

### Tightening torque

Screws at the plastic mounting flange max. 0.4–0.5 Nm

Screws at the metal mounting flange max. 0.25–0.3 Nm

### Actuating force

1 Normally closed 2 N

1 Normally open 3 N

### Actuating travel

approx. 5.8 mm ± 0.2 mm

### Mechanical lifetime

(with 1 switching element)

Pushbutton maintained action 1.5 million cycles of operation

Pushbutton momentary action 3 million cycles of operation

Selector switch maintained action 1.25 million cycles of operation

Selector switch momentary action 2.5 million cycles of operation

Emergency-stop switch 50 000 cycles of operation

Keylock switch maintained action 25 000 cycles of operation

Keylock switch momentary action 50 000 cycles of operation

## Electrical characteristics

### Standards

The switches comply with DIN EN 60947-1/EN IEC 60947-5-1

### Rated Insulation Voltage $U_i$

500 V, as per DIN EN 60947-5-1

### Rated impulse withstand voltage $U_{imp}$

4 kV, according to EN/IEC 60947-5-1

### Electrical life

50 000 cycles of operation

### Thermal current $I_{th}$

Max. current at continuous operation and limit temperatures which do not exceed the specified max. values.

6 A

### Switching voltage and switching current

as per EN IEC 60947-5-1

voltage	DC13	AC15
24 V	4,0 A	6,0 A
48 V		6,0 A
60 V	1,5 A	
110 V	1,0 A	
120 V		6,0 A
230 V		7,0 A

### Recommended minimum operational data

Gold-silver contacts:

Voltage 24 VDC

Current 5 mA

Hard silver contacts:

Voltage 24VDC

Current 50mA

**Protection class**

Indicators and switches, fit for mounting into devices with protection class II

**Ambient conditions**

**Storage temperature**

-40 °C ... +85 °C

**Operating temperature**

-40 °C ... +55 °C

(other temperatures on request)

**Protection degree**

IP20

**Shock resistance**

(single impacts, semi-sinusoidal)

300m/s<sup>2</sup> pulse width 11 ms, as per DIN EN 60068-2-27

**Pollution degree**

3

**Climatic resistance**

Relative humidity

10 ... 95% non-condensing

**Approvals**

**Approbations**

CB (IEC 60947-5-1)

DNV

EAC

NFF

cULus

VDE

**Conformities**

CE

CCC

UKCA