General technical data series 96

Snap-action switching element

Switching system

Single-break, self-cleaning, snap-action switching element with tactile feel of operation.

Material

Lens Euro-Style

ABS/PC or ABS, self-extinguishing

Housing

Polyester, self-extinguishing

Material of contact

Gold-plated on nickel

Mechanical characteristics

Terminals

PCB terminal

Actuating force

Actuating force 1.4 N ±0.3 N

Actuating travel

Lead distance 1.0 mm ±0.3 mm Total distance 1.7 mm ±0.5 mm

Mechanical lifetime

≥5 million operations, as per IEC 60512-5-9a

Rebound time

≤2.5 ms

Electrical characteristics

Contact resistance

Starting value (initial) ≤100 mΩ, as per IEC 60512-2-2b

Isolation resistance

≥1012 Ω between contacts at 100 VDC, as per IEC 60512-2-3a

Capacity

Between contacts ≤1 pF

Electrical life

≥5 x 100.000 operations at 30 VDC, 100 mA, as per IEC 60512-5, test 9c

Conventional free air thermal current I_{th2}

100 mA

Switch rating

Electric strength

 $500~\text{VAC},\,50~\text{Hz},\,1~\text{min.}$ between all terminals and earth, as per IEC 60512-2-11

Environmental conditions

Storage temperature

-40 °C ... +85 °C

Service temperature

-25 °C ... +85 °C

Front protection

IP 67, as per IEC 60529

Shock resistance

(single impacts, semi-sinusoidal) ≥30 g for 11 ms as per IEC 60512-4-3

Vibration resistance

(sinusoidal)

10 g at 10 Hz ... 2000 Hz, amplitude 0.75 mm, as per IEC 60512-4-4