Pushbutton and Illuminated pushbutton

Switching system

Short-travel switching system with 2 independent contact points and tactile operation.

Guarantees reliable switching even of very light loads. Fitted with 1 normally open contact.

Material

Lens

Polycarbonate (PC)

Front bezel

Thermoplastic Elastomer (TPE)

Thermoplastic Polyester (PBT)

Material of contact

Gold (Au)

Switching element

Thermoplastic Polyester (PET, PBT) and Polyacetale (POM)

Actuator housing

Thermoplastic Polyester (PBT)

Mechanical characteristics

Tightening torque

Fixing screw 40 Ncm recommended Fixing nut max. 50 Ncm

Actuating force

2.7 N ±1 N measured at the switching element 5 N measured at the lens

Actuating travel

Switching element 0.4 mm

Rebound time

 $< 1 \, \text{ms}$

Resistance to heat of soldering

260°C, 5s, as per IEC 60068-2-20

Mechanical lifetime

≥ 1 Million operations as per IEC 60512-5-9a

Electrical characteristics

Contact resistance

Starting value (initial) $\leq 100 \,\mathrm{m}\Omega$ as per IEC 60512-2-2b

Isolation resistance

 $\geq 10^{9} \Omega$ between all terminals at 100 VDC, as per IEC 60512-2-3a

Electrical life

 \geq 500 000 operations at 42 VDC, 50 mA as per IEC 60512-5-9c. When attention is paid to the direction of current flow from terminal 3/4 to 1/2 the electrical life can be prolonged.

Electrostatic discharge (ESD)

15kV

Switch rating

Switching voltage min. 50 mV AC/DC

max. 42 V AC/DC

Switching current min. 10 µA AC/DC

max. 100 mA AC/DC

Power rating max. 2W

Electric strength

500 VAC, 50 Hz, 1 min, as per IEC 60512-2-4a

Environmental conditions

Storage temperature

-40°C ... +80°C

Operating temperature

-25°C...+70°C

Front protection

Switching element IP 40 (fluxproof to DIN 41640 Part 84) front IP 67 or IP 40

Shock resistance

(semi-sinusoidal)

max. 500 m/s², pulse width 11 ms, 3-axis, as per EN IEC 60068-2-27

Vibration resistance

(sinusoidal)

max. 100 m/s² at 10 Hz... 500 Hz, 10 cycles, 3-axis, as per EN IEC 60068-2-6

Approvals

Declaration of conformity

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