

Illuminated keypads with LEDs

Our illuminated keypads are ideal for certain application areas. The key feature of these keypads is that the individual keys are completely lit. A distinction is made between the two different types of technology involved: LED technology and electroluminescent technology.

With LED technology, the luminous intensity remains constant, whereas in the case of electroluminescent film it is subject to a half-life period (see diagram on subsequent pages).

The same design options are available as for the "standard keypads" (e.g. with embossing, etc.). The keypads can be equipped with additional LEDs as an option.



Example of an illuminated keypad

Technical data

Contact material

Switching element

Min. operating force

Max. operating force

Switching voltage

Switching current

Switching capacity

Contact resistance

Insulation resistance

Dielectric strength

Electrostatic dielectric strength

Endurance

Bounce time

Operating temperature

Storage temperature

Air humidity

Degree of protection

Minimum bending radius of connecting lead

Options

LEDs

Current consumption:

Standard LED colour:

Possible alternative LED colours:

Silver conductive paste applied using the screen printing technique, graphite printed onto contact surfaces

Snap disc (metal dome)

3 to 5 N (other values possible, if front foil is embossed or if inserts are going to be used over the keys.)

50 N

Min. 100 mV AC/DC, max. 25 V AC/42 V DC

Max. 100 mA

Max. 0.6 W

Depends on the length of the printed conductor

Between adjacent conductors and across open contacts > 106 Ω

Between any terminals and across open contacts U = 300 V

Between all other interconnected terminals and a metal support plate U = 500 V

Ustat > 10 kV

> 10⁶ operating cycles

< 3 ms

-20°C to +55°C

-30°C to +70°C

65% at +60°C indoors

IP 65 (from the front) on request

1.5 mm

Various SMD components and resistors available on request

Depends on the number of illuminated keys

White

Blue/yellow/green/orange/red