EAO – Your Expert Partner for Human Machine Interfaces

82-5153.1133 - Illuminated pushbutton 19 mm stainless-steel, momentary

82-5153.1133 - Illuminated pushbutton 19 mm stainless-steel, momentary 12V Green LED



Configuration Number: 82-10-000980

Mounting

Mounting cut-out Design

Front

Front dimension Front shape Front ring shape Front bezel material

Other Attributes

LED Operating voltage Weight Operation current

Operating-/Indication part

Lens optics Lens material Lens profile Lens illumination Lens colour

IP-Rating Front protection

Connection Method Terminal

renninai

Actuator Switching action

Switching element

Switching current Contact material Contacts Switching system Switching voltage Typical switch ratings

Illumination

Function Illuminated pushbutton Ø 19 mm flush

Ø 22 mm round flush Stainless steel

12 V AC/DC 0.018 kg 10 mA

opaque Stainless steel flat ring llumination Stainless steel

IP65, IP67, IK10

Solder, plug-in 2.8 x 0.5 mm

Momentary

5 A Gold-plated silver 1 C Snap-action switching element 250 V AC 1A@24VDC, 0.5A@220VAC

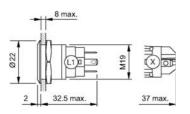
Ring with green LED



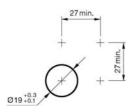
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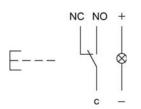
Dimensions



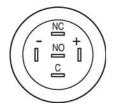
Mounting cut-outs



Wiring diagram



Component layout



Legend

Switching action: B = Momentary Contacts: C = Changeover



Indicator, Pushbutton, Illuminated pushbutton

Switching system

Snap-action changeover contact normally closed / normally open. Switching function momentary or maintain.

Material

Housing

Stainless-steel Stainless-steel chrome-coloured Brass gold-coloured Aluminium natural anodized

Terminal housing

Polyamide 66 (PA66)

Contact material

Silver alloy Silver contacts gold-plated

Mechanical characteristics

Mounting cut-out

Ø 16 mm +0.3/+0.1 mm Ø 19 mm +0.3/+0.1 mm Ø 22 mm +0.3/+0.1 mm

Terminals

Soldering/plug-in terminals 2.8 x 0.5 mm Screw terminal

Tightening torque

5 Nm min. - 12 Nm max. for fixing nut

Actuating force 4 ... 7 N

4 ... / IN

Actuating travel 3 mm

Mechanical lifetime

Pushbutton momentary Pushbutton maintain

Resistance to heat of soldering

Hand-soldering max. 260 °C, 3 sek.

1 Mio. cycles of operation

500 000 cycles of operation

Electrical characteristics

Rated Operational Voltage \mathbf{U}_{e} 250 VAC

Rated Insulation Voltage \mathbf{U}_{i} 250 V

Illumination

LED red, green, blue, yellow and white LED and series resistor with polarity protection are built in. LED-Voltage Tolerance Current Consumption 6 V/AC/DC +10 % 15 mA 0.1W

U VAO/DO	±10 /0	IUTIA	0.1 VV
12 VAC/DC	±10%	14 mA	0.17W
24 VAC/DC	±10%	10 mA	0.24W
110 VAC	±10%	2 mA	0.22W
230 VAC	±10%	1.3 mA	0.29W

Contact resistance

 $<\!50~m\Omega$

Electrical life

50 000 cycles of operation (full load)

Switch rating IEC 60947-5-1 (Silver contacts)

	0	
24	VAC	1 A
110	VAC	1 A
220	VAC	0.5 A

Switch rating DC service categorie DC-13 (Silver contacts)

vollage		Current
24	VDC	0.7 A
110	VDC	0.2 A
220	VDC	0.1 A

Switch rating UL 508 (Silver contacts)

Swite	ch ratin	g AC cos
Volta	ge	Current
120	VAC	5 A
240	VAC	3 A

Switch rating DC Voltage Current 24 VDC 1 A

Recommended minimum operational data

according to DIN EN 60947-5-4

	Silver contacts	Silver contacts gold-plated
Voltage	17 VAC/DC	1 VAC/DC
Current	50 m A	5mA

Conventional free air thermal current $\mathbf{I}_{\rm th}$

5 A

The maximum current in continuous operation and at ambient temperature must not exceed the quoted maximum values.

Electrical strength

1500 VAC, 50 Hz 1 min. between life terminals and ground

Isolation resistance

500 VDC at min. 10 $M\Omega$ according to IEC 60512-2

82 Technical data

Environmental conditions

Storage temperature -40 °C ... +80 °C

Operating temperature -30 °C ... +70 °C

Front protection IP 65 and IP 67, as per IEC 60529

Impact resistance IK 10, as per IEC 62262

Shock resistance max. 500 m/s2 according to IEC 60068-2-27

Degree of pollution 2, as per EN IEC 60947-1

Vibration resistance 10 ... 500 Hz, amplitude 1.5 mm p-p according to IEC 60068-2-6

EAO reserves the right to alter specifications without further notice.

Climate resistance Damp heat, 21 days according to IEC 60512-11

Stainless steel and alumimium versions: Saline mist, 96 hours according to IEC 60512-11

Brass versions: Saline mist, 24 hours according to IEC 60512-11

Approvals

Approbations

CB UL C UL CCC

Declaration of conformity CE