# EAO – Your Expert Partner for **Human Machine Interfaces**

### 82-5151.1134.B001 Illuminated pushbutton 19mm stainless-steel, momentary

#### 82-5151.1134.B001 Illuminated pushbutton 19 mm stainless-steel, momentary 24V Green LED On/Off



Configuration Number: 82-10-001249

Mounting

Mounting cut-out Ø 19 mm Design flush

**Front** 

Front dimension Ø 22 mm round Front shape Front ring shape flush Front bezel material Stainless steel

**Other Attributes** 

LED Operating voltage 24 V AC/DC 0.018 kg Weight Operation current 10 mA

Operating-/Indication part

Lens optics opaque Lens material Stainless steel

Lens profile flat with ISO71 On/Off symbol

Lens illumination ring Ilumination Lens colour Stainless steel

**IP-Rating** 

Front protection IP65, IP67, IK10

**Connection Method** 

Terminal Solder, plug-in 2.8 x 0.5 mm

**Actuator** 

Switching action Momentary

Switching element

Switching current 5 A Contact material Silver Contacts 1 C

Switching system Snap-action switching element

Switching voltage Typical switch ratings 250 V AC 1A@24VDC, 0.5A@220VAC

Illumination

Illumination Ring with green LED

**Function** 

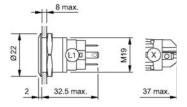
Illuminated pushbutton

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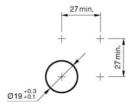
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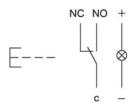
#### **Dimensions**



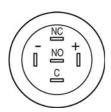
#### **Mounting cut-outs**



#### 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

#### **Actuating travel**

3 mm

#### **Mechanical lifetime**

Pushbutton momentary 1 Mio. cycles of operation Pushbutton maintain 500 000 cycles of operation

#### Resistance to heat of soldering

Hand-soldering max. 260 °C, 3 sek.

#### **Electrical characteristics**

#### Rated Operational Voltage U

250 VAC

#### Rated Insulation Voltage U

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 VAC/DC    | ±10%      | 15 mA   | 0.1 W       |
| 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)

Switch rating AC cos\phi 0.3 service categorie AC-15

| Voltage |     | Current |
|---------|-----|---------|
| 24      | VAC | 1 A     |
| 110     | VAC | 1 A     |
| 220     | VAC | 0.5 A   |

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

| Voltage |            | Current |
|---------|------------|---------|
| 24      | VDC        | 0.7 A   |
| 110     | VDC        | 0.2 A   |
| 220     | <b>VDC</b> | 0.1 A   |

#### Switch rating UL 508 (Silver contacts)

| Swite   | ch ratin | ig AC cosφ 0.75 0. |
|---------|----------|--------------------|
| Voltage |          | 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                    |
|         | FO A            | _ ^                         |

Current 50 mA 5<sub>m</sub>A

#### Conventional free air thermal current I,

The maximum current in continuous operation and at ambient temperature must not exeed 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