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

# 82-6151.1136 - Illuminated pushbutton 22 mm stainless-steel, momentary

**82-6151.1136 - Illuminated pushbutton 22 mm stainless-steel, momentary, 230VAC Green LED**



Configuration Number: 82-10-000386

## Mounting

| | |
|---|---|
| Mounting cut-out | Ø 22 mm |
| Design | flush |

## Front

| | |
|---|---|
| Front dimension | Ø 25 mm |
| Front shape | round |
| Front ring shape | flush |

## Other Attributes

| | |
|---|---|
| LED operating voltage | 230 V AC |
| Weight | 0.018 kg |
| Operation current | 1.3 mA |

## Operating-/Indication part

| | |
|---|---|
| Lens optics | opaque |
| Lens material | Stainless steel |
| Lens profile | flat |
| Lens illumination | riing llumination |
| 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 | 3A |
| Contact material | Silver |
| Contacts | 1 C |
| Switching system | Snap-action switching element |
| Switching voltage | 250 V AC |
| Typical switch ratings | 1A@24VDC, 0.5A@220VAC |

## Illumination

| | |
|---|---|
| Illumination | Ring with green LED |

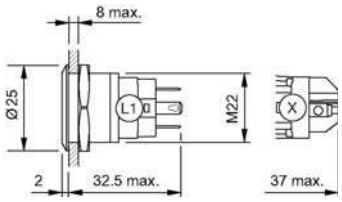
## Function

Illuminated pushbutton

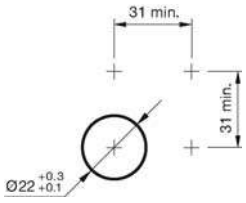
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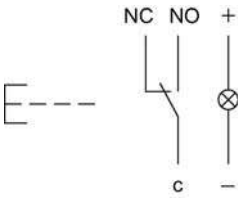
## Dimensions



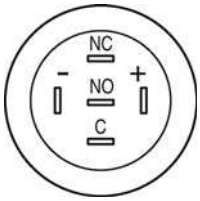

## Mounting cut-outs




## 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 $U_e$**
250 VAC

**Rated Insulation Voltage $U_i$**
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 VAC/DC | ±10 % | 15 mA | 0.1 W |
| 12 VAC/DC | ±10 % | 14 mA | 0.17 W |
| 24 VAC/DC | ±10 % | 10 mA | 0.24 W |
| 110 VAC | ±10 % | 2 mA | 0.22 W |
| 230 VAC | ±10 % | 1.3 mA | 0.29 W |

**Contact resistance**
<50 mΩ

**Electrical life**
50 000 cycles of operation (full load)

**Switch rating IEC 60947-5-1 (Silver contacts)**
Switch rating AC cosφ 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 VDC | 0.1 A |

**Switch rating UL 508 (Silver contacts)**
Switch rating AC cosφ 0.75 … 0.8)

| 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 |
| Current | 50 mA | 5 mA |

**Conventional free air thermal current $I_{th}$**
5 A
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 MΩ 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

**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

*EAO reserves the right to alter specifications without further notice.*