

# EAO – Your Expert Partner for Human Machine Interfaces

## 82-6161.2000 - Pushbutton 22 mm stainless-steel

### 82-6161.2000 - Pushbutton 22 mm stainless-steel



Configuration Number: 82-10-000097

#### Mounting

Mounting cut-out	Ø 22 mm
Design	flush

#### Front

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

#### Other Attributes

Weight	0.020 kg
--------	----------

#### Operating-/Indication part

Lens optics	opaque
Lens material	Stainless steel
Lens colour	Stainless steel
Lens profile	flat (raised)
Lens illumination	non-illuminative

#### IP-Rating

Front protection	IP 65, IP 67
------------------	--------------

#### Connection Method

Terminal	Solder / plug-in 2.8 x 0.5 mm
----------	-------------------------------

#### Actuator

Switching action	Maintained
------------------	------------

#### Switching element

Switching current	3 A
Contact material	Silver
Contacts	1 C
Switching system	Snap-action switching element
Switching voltage	240 V AC/DC

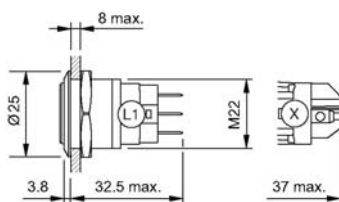
#### Function

Pushbutton
------------

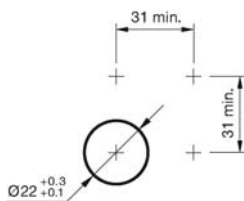
# EAO – Your Expert Partner for Human Machine Interfaces

82-6161.2000 - Pushbutton 22 mm stainless-steel

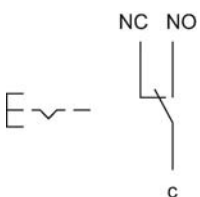
## Dimensions



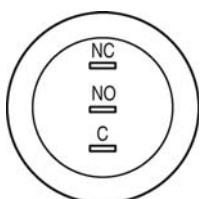
## Mounting cut-outs



## Wiring diagram



## Component layout



## Legend

Switching action: C = Maintained

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 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 MΩ according to IEC 60512-2

## 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/s<sup>2</sup> 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 aluminium 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.*

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [EAO manufacturer](#):*

Other Similar products are found below :

[01-151.022](#) [01-951.6](#) [02-072.001](#) [61-0029.0](#) [61-221.50D](#) [61-2601.0/D](#) [61-2607.0/D](#) [61-2701.0/D](#) [61-8520.12](#) [61-8640.11](#) [704.012.618](#)  
[704.032.218](#) [704.062.5](#) [704.122.018](#) [704-6012](#) [704.902.3](#) [704-9051](#) [704.918.5](#) [704.942.5](#) [70-911.0](#) [EUS-704.000.7](#) [82-4151.2144](#) [82-](#)  
[4153.1000](#) [84-8001.5640](#) [84-8510.0040](#) [95-900.005](#) [14-136.025K](#) [200-4001-00](#) [22-212.011](#) [92-440.000](#) [95-900.009](#) [96-932.5](#) [22-225.011](#)  
[22-901.2](#) [31-426.036](#) [45-2134.4F10.000](#) [45-2231.22E0.000](#) [45-280X.1C90.003](#) [45-2C37.1920.000](#) [45-2T00.10E0.000](#) [51-401.036K](#) [31-953.3](#)  
[31-955.4](#) [41-461.036](#) [41-908.5/5](#) [45-1131.3150.000.101](#) [45-2231.31H0.000](#) [45-2234.4FH0.000](#) [45-50J.1400](#) [51-155.025D](#)