

EAO – Your Expert Partner for Human Machine Interfaces

82-4161.1000 - Pushbutton 16 mm stainless-steel

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Configuration number : 82-10-000016

Mounting

Mounting cut-out Ø 16 mm
Design flush mount

Front

Front shape round
Front ring shape flush
Front dimension Ø 18 mm
Front bezel material Stainless-steel

Other Attributes

Weight 0.018 kg

Operating-/Indication part

Lens optics opaque
Lens material Stainless steel
Lens colour Stainless steel
Lens profile flat raised lens
Lens illumination non-illuminated

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 Max Thermal Ith2
Contact material Silver
Contacts 1 C
Switching system Snap-action switching element
Switching voltage 250 V AC
Typical switch rating 0.7A@24VDC, 0.5A@220VAC

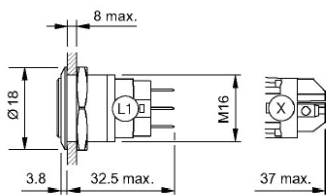
Function

Pushbutton

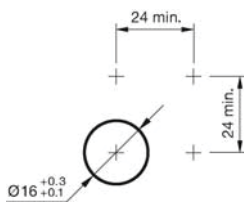
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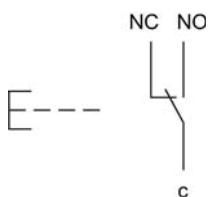
Dimensions



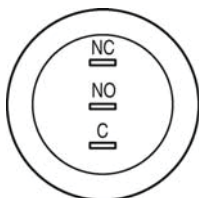
Mounting cut-outs



Wiring diagram



Component layout



Legend

Switching action: B = Momentary
Contacts: C = Changeover

Pushbutton
Switching system

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

Material
Housing

Stainless-steel polished or brushed
Brass nickel-plated or galvanically gold-plated

Terminal housing

Polyamide 66 (PA66)

Contact material

Silver alloy

Mechanical characteristics
Mounting cut-out

Ø19 mm +0.3/+0.1 mm

Terminals

Soldering terminals 2.8 x 0.5 mm

Tightening torque

5 Nm min. – 12 Nm max. for fixing nut

Actuating force

3 ... 6 N

Actuating travel

Pushbutton momentary 2.5 mm
Pushbutton maintain 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 260 °C, 3 sek.

Electrical characteristics
Rated Operational Voltage U_o

250 VAC

Rated Insulation Voltage U_i

250 V

Illumination

LED red, green, blue, yellow, orange and white
LED and series resistor with polarity protection are built in.

Voltage	Current
3.5 VDC	15 mA
6 VAC/DC	15 mA
12 VAC/DC	14 mA
24 VAC/DC	10 mA
110 VAC	2 mA
230 VAC	1.3 mA

Contact resistance

<50 mΩ

Electrical life

100 000 cycles of operation

Switch rating IEC 60947-5-1

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

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

Switch rating UL 508

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

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

2500 VAC, 50 Hz 1 min. between life terminals and ground
1000 VAC, 50 Hz 1 min. between life terminals

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 09, 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

Pushbutton

Vibration resistance

10 ... 55 Hz, amplitude 1.5 mm p-p according to IEC 60068-2-6

Climate resistance

Damp heat, 21 days according to IEC 60512-11

Saline mist, 96 hours according to IEC 60512-11

Approvals

Approbations

CB

UL

CCC

Declaration of conformity

CE