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

82-4551.1116 - Illuminated pushbutton 16 mm Aluminium, momentary

82-4551.1116 - Illuminated pushbutton 16 mm Aluminium, momentary



Mounting

Design flush
Mounting cut-out Ø 16 mm

Front

Front shape round
Front ring shape flush
Front dimension Ø 18 mm
Front bezel material Aluminium

Other Attributes

Operating voltage 230 V AC Weight 0.018 kg
Operation current 1.3 mA

Operating-/Indication part

Lens optics opaque
Lens material Aluminium
Lens profile flat
Lens illumination illuminative
Lens colour natural anodized

IP-Rating

Front protection IP 67 / IK 10

Connection Method

Terminal Solder 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 250 V AC

Illumination

Illumination Ring with red LED

Function

Illuminated pushbutton

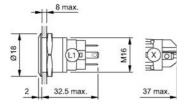
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Stand: 27.10.2014

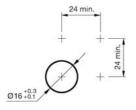
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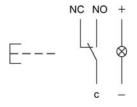
Dimensions



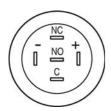
Mounting cut-outs



Wiring diagram



Component layout



Legend

Switching action: B = Momentary Contacts: C = Changeover

Series 82 | Vandal-Resistant Pushbutton



EAO, the expert partner for Human Machine Interfaces, offers a range of attractive, vandal-resistant pushbuttons for applications in harsh environments. With their robust metal housings, these innovatively designed switches are protected to IK10 impact resistance and IP67 sealing requirements which makes them ideal for use in exposed public areas as well as other aggressive environments. The switches are available with momentary or maintained action, and with a choice of central dot or ring illumination.

Main features

- Vandal resistance: Impact resistant to IK10, sealed to IP67 standard
- Long service life: > one million cycles of operation
- Optional illumination with daylight readable LEDs
- Metal housing with attractive design
- Excellent tactile switching action

Typical applications

- Access control, security systems
- Exposed public areas: Ticketing machines, vending machines, public kiosks
- Industrial: Machinery and factory equipment
- Lifting and Moving: Elevators and people movers

Mounting cut-out

Ø16mm, Ø19mm, Ø22mm

Materials

- Stainless steel SUS 304
- Stainless steel chrome coloured
- Brass gold coloured
- Aluminium (natural anodised), other colours on request

Switching system

Switching element Snap-action switching element Contact arrangement NO/NC (changeover)

Switching action Momentary or maintained

Contact material Silver alloy

Mechanical properties

Mechanical lifetime > 1 million cycles of operation

Actuation force 4 ... 7 N

Terminals Soldering/plug-in terminals 2.8 x 0.5 mm

Screw terminal

Electrical properties

Rated insulation voltage 250 VAC Conventional thermal current 5 A

Electrical life > 50 000 cycles (full load)

Service category AC-15 (cosφ0.3) and DC-13 (according to

IEC 60947-5-1)

| | 24 V | 110V | 220V | 240 V | |
|----|-------|-------|-------|-------|--|
| AC | 1 A | 1 A | | 0.5A | |
| DC | 0.7 A | 0.2 A | 0.1 A | | |

Switching element

Contact resistance $\leq 50 \,\mathrm{m}\Omega$, according to IEC 60512-2 Isolation resistance $> 1000 \,\mathrm{M}\Omega$, according to IEC 60512-3 Dielectric strength 1500 VAC, according to IEC 60947-5

Environmental conditions

Storage temperature $-40\,^{\circ}\text{C} \dots +80\,^{\circ}\text{C}$ Operating temperature $-30\,^{\circ}\text{C} \dots +70\,^{\circ}\text{C}$

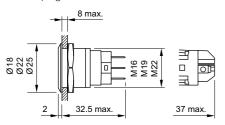
Operating humidity 45% ... 85% RH (no condensation)
Front protection IP65, IP67, according to IEC60529
Impact resistance IK10, according to IEC 62262
Approvals CE, CB, UL, C UL, CCC

Dimensions

Side view

Solder/plug-in terminal

Screw terminal



Front view

Non-illuminated

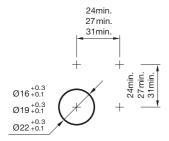


Ring illuminated





Mounting cut-outs

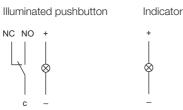


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Wiring diagram

| Pushbutton | | | | | |
|------------|--|--|--|--|--|
| NC NO | | | | | |





Terminals

Solder/plug-in terminal

Pushbutton

Illuminated pushbutton Indicator







Screw terminal

Pushbutton

Illuminated pushbutton Indicator







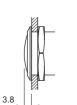
Bezel profile/Lens profile/Illumination

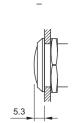
3.8

flush/flat ring, dot









raised/convex

LED illumination

- Green
- Yellow
- Blue
- White

LED, series resistor and polarity protection are built in.

| Voltage | Tolerance | Current | Consumption |
|------------|-----------|---------|-------------|
| 6VAC/DC | ±10% | 15mA | 0.1 W |
| 12VAC/DC | ±10% | 14mA | 0.17W |
| 24 V AC/DC | ±10% | 10mA | 0.24W |
| 110 VAC | ±10% | 2mA | 0.22W |
| 230 VAC | ±10% | 1.3mA | 0.29W |

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