

# 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 230VAC Red LED



#### 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

LED Illumination	LED Illumination
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
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#### Connection Method

Terminal	Solder 2.8 x 0.5 mm
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#### Actuator

Switching action	Momentary
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#### 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	1A @24V, 0.5A @230VAC

#### Illumination

Illumination	Ring with red LED
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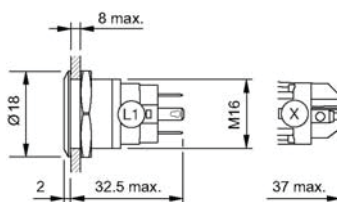
#### Function

Illuminated pushbutton
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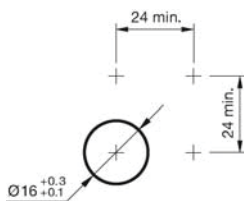
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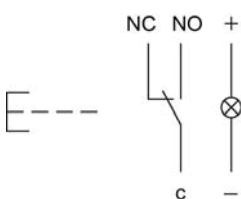
## Dimensions



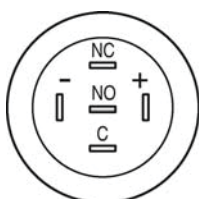
## Mounting cut-outs



## Wiring diagram



## Component layout



## Legend

Switching action: B = Momentary

Contacts: C = Changeover

## 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 ... 7N  
Terminals                                      Soldering / plug-in terminals 2.8 x 0.5mm  
Screw terminal

### Electrical properties

Rated insulation voltage                    250VAC  
Conventional thermal current            5A  
Electrical life                                > 50000 cycles (full load)  
Service category                            AC-15 (cosφ0.3) and DC-13 (according to IEC 60947-5-1)

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

### Switching element

Contact resistance                        ≤ 50 mΩ, according to IEC 60512-2  
Isolation resistance                       > 1000 MΩ, according to IEC 60512-3  
Dielectric strength                        1500VAC, according to IEC 60947-5

### Environmental conditions

Storage temperature                       -40°C ... +80°C  
Operating temperature                    -30°C ... +70°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

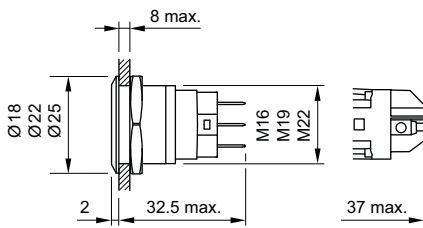
## Series 82 | Vandal-Resistant Pushbutton

### Dimensions

Side view

Solder/plug-in terminal

Screw terminal

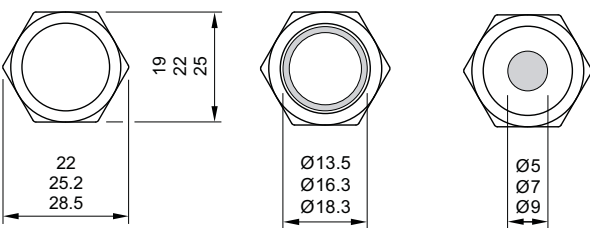


Front view

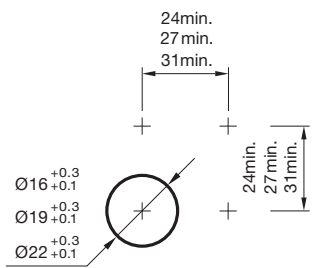
Non-illuminated

Ring illuminated

Central dot illuminated



### Mounting cut-outs

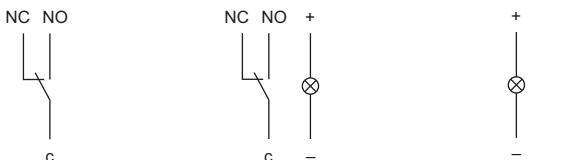


### Wiring diagram

Pushbutton

Illuminated pushbutton

Indicator



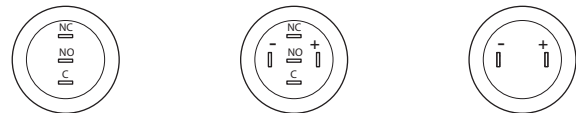
### Terminals

#### Solder/plug-in terminal

Pushbutton

Illuminated pushbutton

Indicator



#### Screw terminal

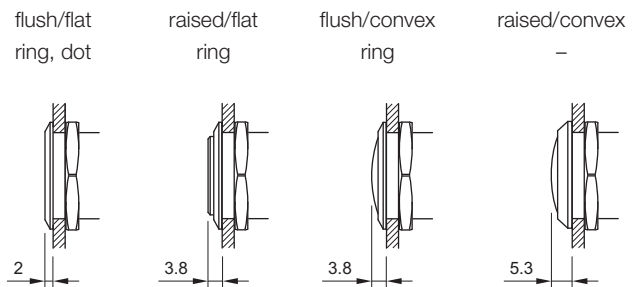
Pushbutton

Illuminated pushbutton

Indicator



### Bezel profile/Lens profile/Illumination



### LED illumination

- Red
- Green
- Yellow
- Blue
- White

LED, series resistor and polarity protection are built in.

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