

# EAO – Your Expert Partner for Human Machine Interfaces

## 82-5551.1116 - Illuminated pushbutton 19 mm Aluminium, momentary

**82-5551.1116 - Illuminated pushbutton 19 mm  
Aluminium, momentary 230VAC Red LED**



### Mounting

|                  |         |
|------------------|---------|
| Mounting cut-out | Ø 19 mm |
| Design           | flush   |

### Front

|                      |           |
|----------------------|-----------|
| Front dimension      | Ø 22 mm   |
| Front shape          | round     |
| Front ring shape     | flush     |
| 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 |
|------------------|---------------|

### Connection Method

|          |                     |
|----------|---------------------|
| Terminal | Solder 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 | 1A @24V, 0.5A @230VAC         |

### Illumination

|              |                   |
|--------------|-------------------|
| Illumination | Ring with red LED |
|--------------|-------------------|

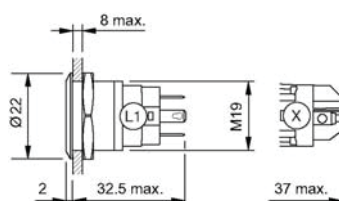
### Function

|                        |
|------------------------|
| Illuminated pushbutton |
|------------------------|

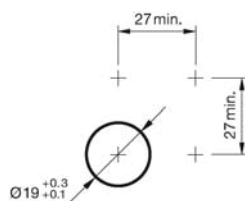
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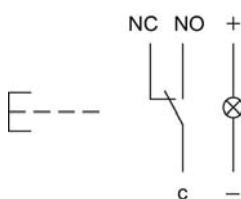
## Dimensions



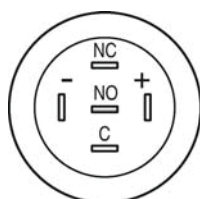
## Mounting cut-outs



## 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

Ø 16mm, Ø 19mm, Ø 22mm

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

### Switching element

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

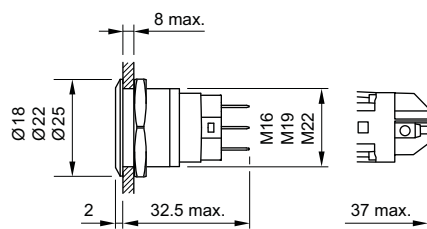
## Series 82 | Vandal-Resistant Pushbutton

### Dimensions

Side view

Solder/plug-in terminal

Screw terminal

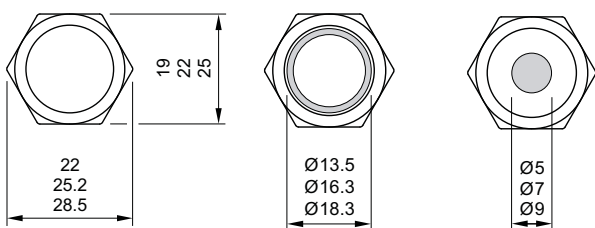


Front view

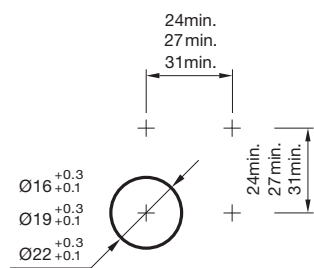
Non-illuminated

Ring illuminated

Central dot illuminated



### Mounting cut-outs

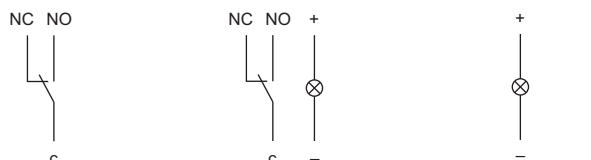


### Wiring diagram

Pushbutton

Illuminated pushbutton

Indicator



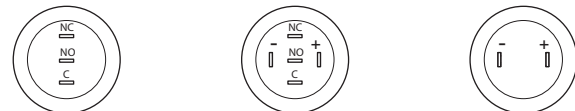
### Terminals

Solder/plug-in terminal

Pushbutton

Illuminated pushbutton

Indicator



Screw terminal

Pushbutton

Illuminated pushbutton

Indicator



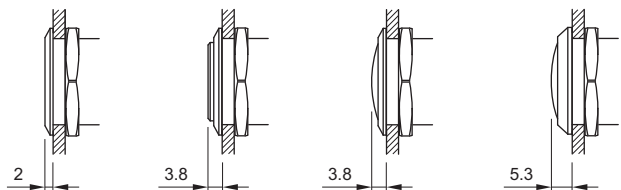
### Bezel profile/Lens profile/Illumination

flush/flat  
ring, dot

raised/flat  
ring

flush/convex  
ring

raised/convex  
-



### LED illumination

- Red
- Green
- Yellow
- Blue
- White

LED, series resistor and polarity protection are built in.

| 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      |