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

# 82-4551.1124 - Illuminated pushbutton 16 mm Aluminium, momentary

# 82-4551.1124 - Illuminated pushbutton 16 mm Aluminium, momentary 24V Blue 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

Operating voltage 24 V AC/DC Weight 0.018 kg
Operation current 10 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 blue LED

# **Function**

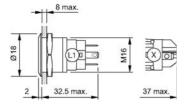
Illuminated pushbutton

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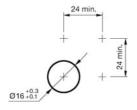
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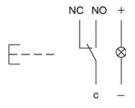
# **Dimensions**



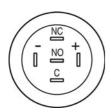
# **Mounting cut-outs**



# 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 ... 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 (cos\phi0.3) 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 °C ... +80 °C Operating temperature -30 °C ... +70 °C

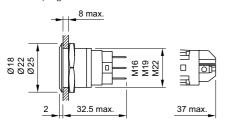
Operating humidity 45% ... 85 % RH (no condensation)
Front protection IP65, IP67, according to IEC60529
Impact resistance IK10, according to IEC 62262
Approvals CE, CB, UL, C UL, CCC

# **Dimensions**

Side view

Solder/plug-in terminal

Screw terminal

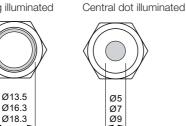


Front view

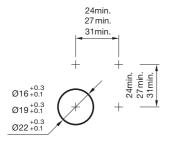
Non-illuminated



Ring illuminated



# Mounting cut-outs

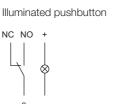


19 22 25

# Wiring diagram









# **Terminals**

# Solder/plug-in terminal

Pushbutton

Illuminated pushbutton Indicator







# Screw terminal

Pushbutton

Illuminated pushbutton Indicator



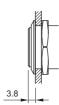
flush/flat



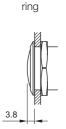


# Bezel profile/Lens profile/Illumination

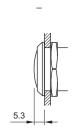
ring, dot ring



raised/flat



flush/convex



raised/convex

# **LED** illumination

- 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       |
| 12VAC/DC   | ±10%      | 14 mA   | 0.17W       |
| 24 V AC/DC | ±10%      | 10 mA   | 0.24W       |
| 110 VAC    | ±10%      | 2mA     | 0.22W       |
| 230 VAC    | ±10%      | 1.3 mA  | 0.29W       |

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