

EAO – Your Expert Partner for Human Machine Interfaces

82-4551.1114 - Illuminated pushbutton 16 mm Aluminium, momentary

82-4551.1114 - Illuminated pushbutton 16 mm Aluminium, momentary 24V 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	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
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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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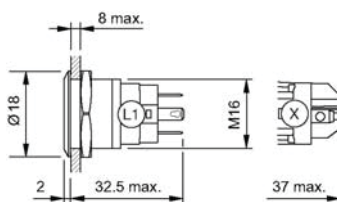
Function

Illuminated pushbutton

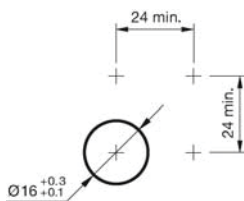
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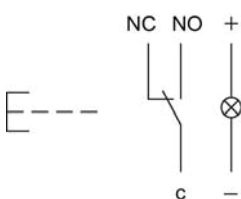
Dimensions



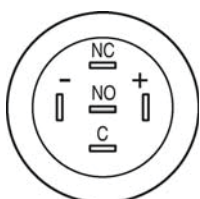
Mounting cut-outs



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

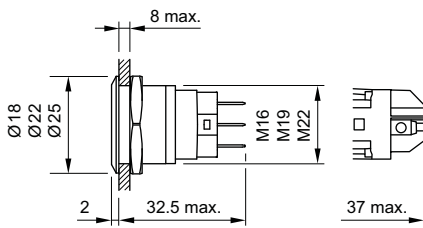
Series 82 | Vandal-Resistant Pushbutton

Dimensions

Side view

Solder/plug-in terminal

Screw terminal

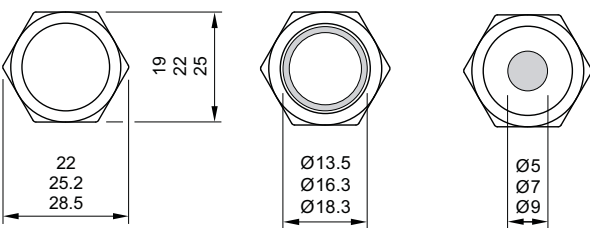


Front view

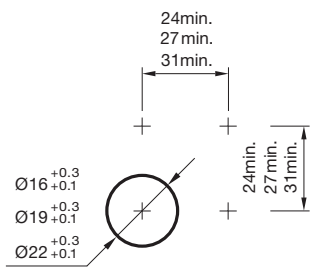
Non-illuminated

Ring illuminated

Central dot illuminated



Mounting cut-outs

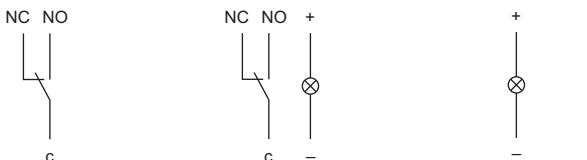


Wiring diagram

Pushbutton

Illuminated pushbutton

Indicator



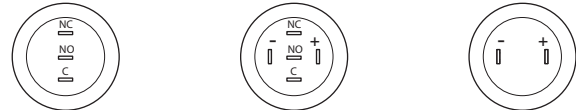
Terminals

Solder/plug-in terminal

Pushbutton

Illuminated pushbutton

Indicator



Screw terminal

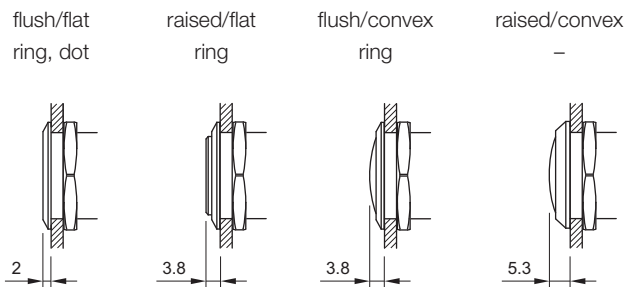
Pushbutton

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