# Pilot devices, 22 mm

## Compact range



**The compact range is a most competitive choice for customers with high requirements of cost efficiency, easy to use and reliable products.**

### General construction

- ”All-in-one function”
- One order code =one complete function
- Easy mounting
- Less stock keeping
- Broad range of accessories
- Same front design as for the modular range.
- Robust actuators in clear colors with large text and push area

### Technical advantages

- High degree of protection: IP 66
- One or two built-in electrically separated contacts (1NO, 1NC, 2NO, 2NC or 1NC & 1NO)
- Contacts with wiping action
- Low built-in depth

### Operators

- Pushbuttons, non-illuminated
- Emergency stop pushbuttons, non-illuminated, twist, pull or key release
- Machine stop pushbuttons, non-illuminated, twist, pull or key release
- Selector switches, non-illuminated, 2 or 3 position

### Pilot lights

- Ba 9s base for filament bulbs or LED
- Pilot light with integrated LED







# When you think Pilot Devices

## Part of comprehensive program

The ABB Pilot Devices are part of the comprehensive ABB program of high quality Low Voltage Products and Systems for buildings, industries and OEM's. Much of this is sold through external channel partners such as distributors, system integrators and panel builders. Our products meet all essential national and international standards.



ABB offers a modern range of Control products such as contactors, soft starters, DOL & Y/D starters and a wider range of electronic relays, switches and sensors.

## Pilot Devices

ABB offers a complete range of 22 mm Pushbuttons, Emergency Stops, Selector Switches and Signalling units. These are complemented with enclosures and a wide range of accessories.

The main advantages are the robustness and the fast and easy installation ensuring cost efficiency for our customers. The ABB Pilot Devices are suitable for all types of industrial environments, indoor as well as outdoor. Other sectors of common usage include trucks, buses, trains and official buildings.

## Made for tough industrial environments

Can be used in many different applications by OEMs, panel builders, contractors, etc.
For industrial machines and equipment, control panels and control stations
For emergency circuits, alarm and signal equipment, traction equipments, hoists and lifts, door openers, etc

## The important link

Pushbuttons and pilot lights – the world's simplest devices. They are used to make and break a circuit, pass on a message or control an operation: in short, to be a link between man and machine.
A pushbutton has to be sturdy and reliable, suitable for all environ-ments and adaptable to widely differing requirements. Further, it should be easy to fit or set up. You will find all these features in ABB's Pilot Devices.





## Mechanical life

**Operators**

| | |
|---|---|
| Pushbuttons with flush or extended button, selector switch | 500 000 operations |
| Emergency stop pushbutton | 50 000 operations |

## Temperature

| | |
|---|---|
| Ambient temperature during operation | -25 to +70 °C |
| Storage temperature | -40 to +85 °C |

## Tightening torque

| | |
|---|---|
| Locking nut, M22 | Min. 2 Nm<br>Max. 2.3 Nm |

## Contacts

| **Ratings as per UL, CSA, NEMA** | **C300** | **R300** |
|---|---|---|
| Rated insulation voltage | 250 V | 250 V |
| Rated thermal current | 2.5 A | 1 A |
| Rated operational current | | |
| at 120 V | 1.5 A | |
| 125 V | | 0.22 A |
| 240 V | 0.75 A | |
| 250 V | | 0.11 A |

| **Ratings as per IEC 60947-5-1** | |
|---|---|
| Rated insulation voltage, $U_i$ | 300 V |
| Rated thermal current, $I_{th}$ | 5 A |
| Rated operational current, $I_e$ utilisation category AC-15 | |
| at 120 V | 1.5 A |
| 240 V | 1 A |
| Rated operational current, $I_e$, utilzation category DC-13, | |
| at 24 V | 0.3 A |
| 125 V | 0.2 A |

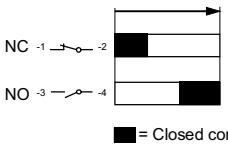
| **Short circuit protection** | |
|---|---|
| Max. fuse at 1 kA | 16 A ordinary<br>10 A delayed |

| **Tightening torque** | |
|---|---|
| Compact pushbutton & selector switch | 0.8 Nm (M3) |
| Compact pilot light | 0.9 Nm (M3.5) |
| Compact emergency stop pushbutton | 0.8 Nm (M3) |

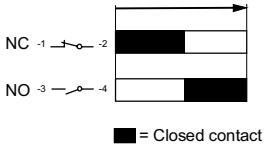
| **Terminals** | |
|---|---|
| Plus-minus Pozidriv No. 2 | |
| Compact pushbutton | |
| Compact selector switch | |
| Compact emergency stop | |
| Connectable area | min. 1 x 0.5 mm²/1 x AWG22<br>max. 2 x 1.5 mm²/2 x AWG14 |
| Compact pilot light | |
| Connectable area | min. 1 x 0.5 mm²/1 x AWG20<br>max. 2 x 2.5 mm²/2 x AWG14 |

**Make-and-break contacts**

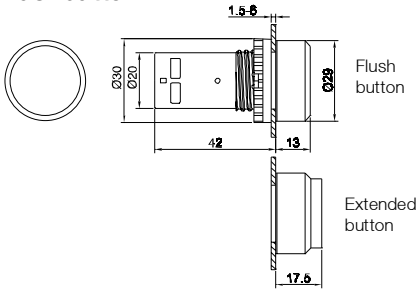
Compact pushbutton



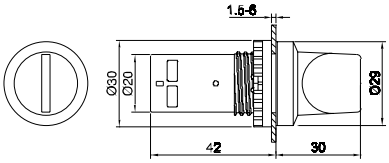

Compact emergency stop pushbutton



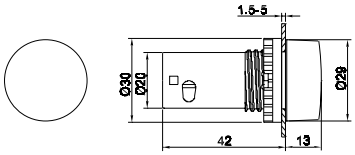
## Pushbutton




## Selector switch

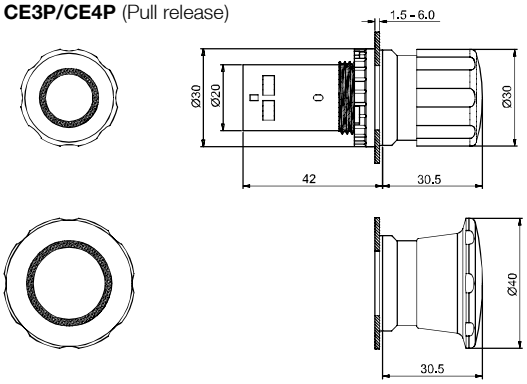



## Pilot light

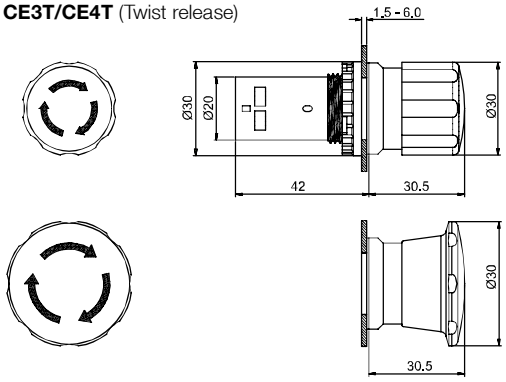



## Emergency stop pushbuttons

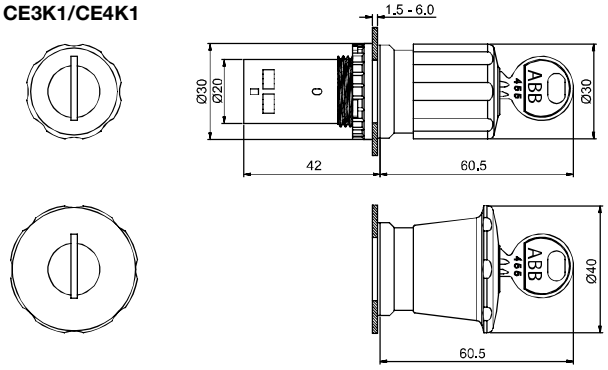
**CE3P/CE4P** (Pull release)




**CE3T/CE4T** (Twist release)




**CE3K1/CE4K1**




Drilling plans for compact pushbuttons, selector switches, pilot lights and emergency stop pushbuttons. See page 82