



Automation Products

# Pilot devices The complete range

Power and productivity  
for a better world™

**ABB**

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## Ordering details

### **Minimum ordering quantities and multiples**

Orders on smaller quantities than minimum order quantity will be automatically changed to minimum order quantity (=packing qty) and order on non-multiple quantities will be automatically changed to multiple quantities.

The products described in this catalogue can be subject to change (design, dimensions, technical data, etc.) without prior notice.



# 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 and 30 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 equipments, 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 environments 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.





# - think ABB

## Complete range

The ABB Pilot Device family is divided into two ranges; the **Modular range** that includes operators, holders, contact blocks and accessories that can be combined with high flexibility. The **Compact range** that have all functions built-in in one single unit.

## Fast and easy to install

All pilot devices are easy to install. Spring-loaded tabs ensure that actuators and legend plates are in correct position. Same actuator can be used in both notched and round holes.

## Flexible-Functional-Aesthetic

The pilot devices have an aesthetic and functional design - Tight, withstanding even the toughest environment. No additional protective boots are needed. Large text and push area, clear and visible markings for quick and easy handling. Different choices of bezels - black plastic or metal. Grey plastic as accessory. Contacts are provided with wiping action. The tips of the contacts rub against each other each time the contacts close, thus forcing dust and oxide to the side. The NC block has positive opening for high performance in safety circuits.

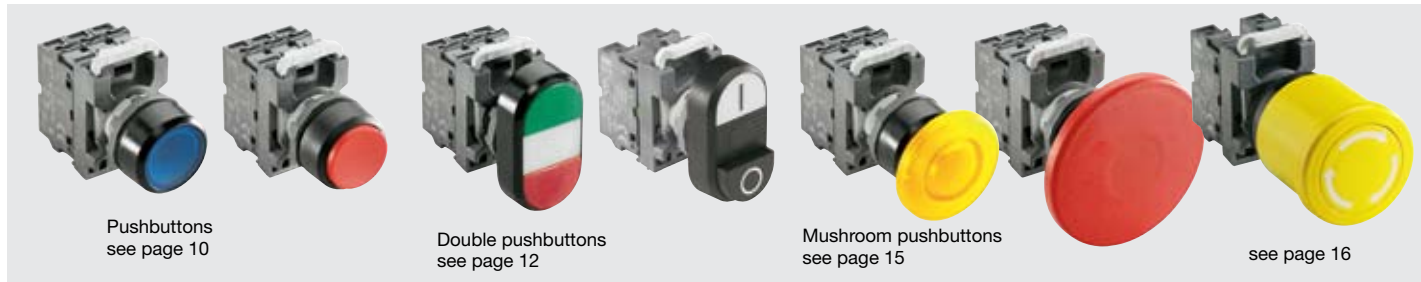
## Worldwide availability

ABB is represented in over 100 countries. Our pilot devices meets all major international and national standards.



# Pilot devices - The whole range

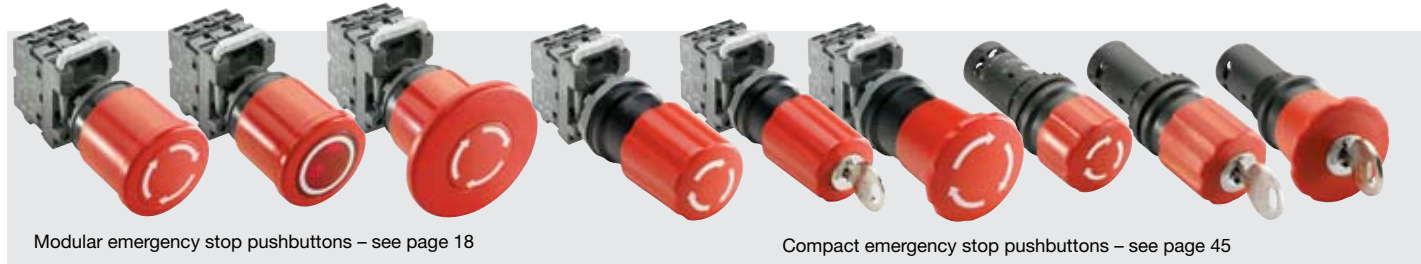
## Modular Range Pilot Devices, 22 mm



## Additional products



## Emergency stops in Modular and Compact range



## Accessories

Modular range – see page 31  
Compact range – see page 48  
Legend plates – see page 65



## Pilot devices, 30 mm

See page 36 (Adaptors)



# Pilot devices - The whole range



## Compact Range Pilot Devices, 22 mm



## Machine stops in Modular and Compact range



## Enclosures & Stations

See page 55 – 63



## Signal Towers & Signal Beacons

See page 121



# Pilot devices

## Customer specific marking online



Possibility to order customer specific marked operators on line  
– See <http://bolSERVICE.it.abb.com/pilot-devices>



It's now possible to create a customer specific marking online using a five step marking tool:

### How to do

Visit <http://bolSERVICE.it.abb.com/pilot-devices>

- Step 1 Find your product by typing the type or order code.
- Step 2 Choose between text or symbol marking.
- Step 3 Choose your preferred marking layout.
- Step 4 Type marking or choose any of our 3000 symbols including the ISO 7000 library.
- Step 5 Order the product by the **reference number** + order code provided on the site.

Simulated example step 5:

**The marking is finished - Step 5**

To order please contact your local sales organization.  
Order with: Order code or Type code + Reference number.

Order code: MPD1-11R-L

Reference number: MUE979

**Note! Both Order code + reference number must be included in order.**



## 22 mm Pilot devices

Modular range



### General construction

- Snap-on feature reduces installation time
- Bezels: Black plastic, chrome metal
- Contact block holder features rear mounting with quick-release locking mechanism for high security
- Buttons available in several colors
- Engraved text caps available
- Custom-specific markings on request

### Contact blocks

- Quick-mount, quick-release contact block holder for fast and easy assembly
- NO & NC contact blocks are color coded for easy identification:  
Green = NO, Red = NC
- Silver tipped contacts
- Wiping action for high reliability



At operation the moving contact rolls over and moves sideways when touching the fixed contact. This feature ensures a good clean contact function in critical applications.

- Low energy gold plated contact blocks
- Base mounted contact blocks which snap onto a 35 mm DIN rail or into a plastic enclosure
- Contact block holder for three or five blocks in a single row





## 22 mm Pilot devices

Compact range



The compact range is a new competitive choice for customers with high requirements of cost efficient, 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: Nema 4x
- 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
- Selector switches, non-illuminated, 2 or 3 position

### Pilot lights

- Ba 9s base for bulbs (6-130 V) or LED (12-230 V DC, 24-230 V AC)
- Pilot light with integrated LED (12-250 VDC, 24-415 V AC)





## 22 mm Pilot devices

Assembled stations and enclosures



### Assembled stations

There are assembled stations of two types:

In **plastic enclosures** and in **metallic enclosures**

Both types of enclosures are available in 1, 2-, 3-, 4- or 6-seat.

### Plastic enclosures

Of polycarbonate.

Degree of protection: IP 66, CSA/UL Type 1, 3R, 4, 4X, 12, 13

### Metallic enclosures

Of metal and stainless steel.

Degree of protection: CSA/UL Type 12 and 4X



#### Fixed legend plates

- Of silvergrey aluminium for:
  - pushbuttons
  - two-position selector switches
  - three-position selector switches
  - toggle switches
  - customer selected text
- Of black/white plastic. Text on one side or both sides:
  - with customer selected text

#### Special legend plates

- For emergency stop pushbuttons
- Legend plate with or without customer selected text
- Legend plate holders with inserts of brushed aluminium on black plastic. With or without text or symbol for:
  - pushbuttons
  - two-position selector switch
  - three position selector switch
  - customer selected text

#### For plastic enclosures:

- Legend plate holders with inserts of brushed aluminium on black plastic. With or without text or symbol for pushbuttons
- Legend plates of silvergrey aluminium For 1- 2-, 3- 4- or 6-seat plastic enclosures With or without text or symbol for:
  - pushbuttons

#### Text caps

- For illuminated pushbuttons (flush or extended) and pilot lights with or without text or symbol or with customer selected text



## Pilot devices

Signal Towers K70  
Signal Beacons KSB



**Signal Towers K70 and Signal Beacons KSB offers the customer a wide range of signal elements in all voltages and a solution for every signalling field.**

- Permanent light
- Strobe light
- Flashing light
- Audible
- LED Permanent light
- LED Flashing light
- LED Rotating light

### Signal Towers K70

- Fast mounting of signal elements using bayonet fixing
- Easy changing of bulbs for each module without tools
- Flexibility of signal element combination
- Up to 5 elements possible/up to 10 elements with bracket for 2-sided mounting
- Flashing light elements can be mounted in each module
- Up to 5 flashing light elements possible
- High protection rating optical and audible signal elements with IP 54, Nema 2,5
- LED elements for long life

### Signal Beacons KSB

- Vandal-proof design withstands every mechanical and natural challenge both indoors and outdoors
- High protection rating IP 65, Nema 4x
- Cap consists of high impact polycarbonate (up to 20 J)
- Bulb change via inside of control box