Emergency stops
Award winning design

Emergency stops
Choosing the right emergency stop device is vital in order to increase the safety for your personnel and equipment. ABB has a very wide range of emergency stops which all fulfill the IEC 60947-5-5 standard for emergency stop devices.

Best product award
Our emergency stop series was awarded "Best product" by the well-known magazine P&A, in the category "Ex-shutz & sicherheit" voted by the magazine's readers.

Modular range
Includes operators, holder, contact blocks, LED blocks and accessories that can be combined with high flexibility.

Compact range
Features an all-in-one design.

Accessories
• Emergency stop shroud
• Enclosures
• Legend plates

Contact us

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Power and productivity
for a better world™

ABB

Panorama

Pilot devices
Product overview

Power and productivity
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Unique benefits from ABB´s pilot devices

Fast and easy installation
All of ABB's pilot devices are easy to install. Spring-loaded tabs ensure that actuators and legend plates are kept in their correct positions. Our actuators can be used in both notched and round holes and with the modular snap-on design, we provide one of the fastest assemblies on the market.

L-mark - Customer specific markings made easy
With the L-mark system, custom marking your pilot devices has never been easier, or more fun. In addition to engraving legend plates, we can now laser engrave our entire pilot device offering. With a unique reference number for every marking ordered on the L-mark webpage, reordering is simple and you can be sure to receive the preferred marking every time. Choose from our library of markings or customize your own.

Long-lasting contact function
With a wiping action, the contact blocks for both the compact and the modular devices are kept clean. While operating, the moving contact rolls over and slides sideways when touching the fixed contact. This ensures a long-lasting and clean contact function also in low-energy applications. With the long service life of our pilot devices, fewer replacements are required and you ultimately save time and money.

For more information visit:
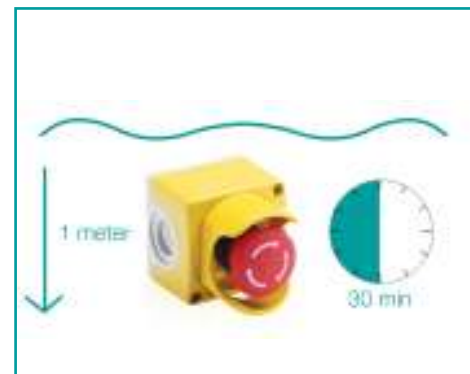http://bolservices.it.abb.com/pilot-devices

Tough and robust according to IP69K
The IP69K certification was initially developed for applications that need regular intensive cleaning (dump trucks, cement mixers, etc.). ABB`s compact pilot devices are ceritified according to IP69K meaning you do not have to worry about treating them rough. Spray them with water or leave them out in the snow. They will stay reliable and functional.

Waterproof according to IP67
ABB's pilot devices are perfect for tough environments where a waterproof enclosure is required. Our entire compact line and parts of the modular line are approved according to IP67. The products are protected against the effects of temporary immersion in water, one meter down, for up to 30 minutes.

Modular range
Designed for flexibility and quick assembly

Modular range pilot devices, 22 mm

Pushbuttons
flush and extended buttons,
maintained and momentary,
illuminated and non-illuminated

Mushroom pushbuttons
Ø 40 mm and Ø 60 mm, momentary,
illuminated and non-illuminated

Key operated selector switches
2 and 3 position, several key codes

Pilot lights
with integrated LED blocks, Ba9
sockets for LEDs or filament bulbs

Double pushbuttons
with two flush buttons
or with extended lower button.
Illuminated or non-illuminated

Selector switches
2 and 3 position short and long handle
maintained and momentary, illuminated
and non-illuminated

Toggle switches
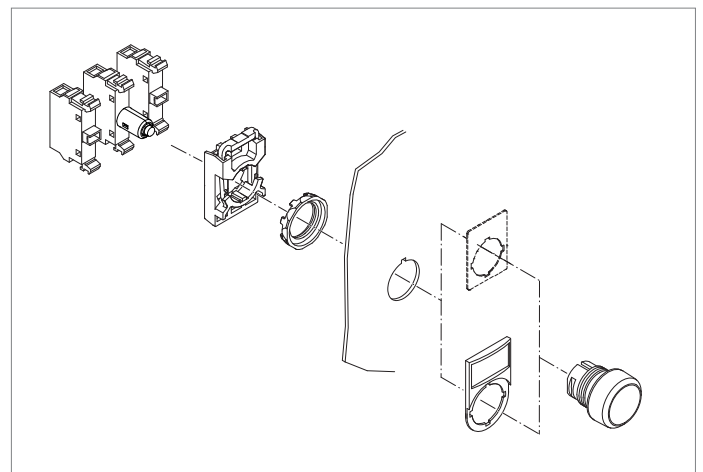2 and 3 position maintained
and momentary

Joysticks
with and without latching function, 2
and 4 position, maintained and spring
return

Modular range – The flexible range
- Made for tough environments
- Wiping action secures contact function
- IP66, UL type 1, 3R, 4, 4X, 12 and 13
- Fast and easy installing
- Widest range of integraded LEDs

ABB´s extensive modular range is well-known for its flexibility
and robustness. A few high-quality, basic components, can
be combined to configure a large number of different devices
– all with the same high quality, meeting your exact needs.

In addition to traditional operators like pushbuttons, selector
switches, emergency stops and pilot lights, ABB also offers a
wide range of special function devices such as machine
stops, joysticks, toggle switches, buzzers, definite purpose
pushbuttons, potentiometers and reset buttons.

Compact range and additionals products
All in one design

Compact range pilot devices, 22 mm

Pushbuttons
flush and extended buttons,
momentary and maintained,
illuminated and non-illuminated

Selector switches
2 or 3 position, short handle,
maintained and momentary

Pilot lights
with integrated LED
or Ba9 sockets

Compact mushroom
mushrooms in several colors
with heavy duty design

Additional products

Heavy duty pushbuttons
with 30 mm mounting hole

Buzzers
wide range of voltages, both
continuous and pulsing sound,
illuminated and non-illuminated,
different colors

Reset pushbuttons
flush or extended button,
with or without shaft

Potentiometers
with or without resistor,
5 ohm, 10 ohm and 50 ohm

Compact range – The competitive alternative to traditional modular series
- Robust all-in-one design
- Wiping action secures contact function
- IP66 and IP67
- IP69K
- UL type 1, 3R, 4, 4X, 12, 13
- Fast mounting
- Pilot lights with integrated LED as an option
- Low built-in depth

The compact range is an "all-in-one" alternative to
traditional modular products. Very price competitive, without
compromising reliability or quality.

The all-in-one design makes everything easier; all functionality
condensed into one single unit means each item has an
individual ordering number. This simplifies selection and
ordering of the product. The compact range includes
pushbuttons, selector switches, emergency stops and pilot
lights and has the same front design as our modular range,
allowing for combinations between the two.

Segments and applications required IP67 and IP69K rating
- Food processing
- Pharmaceutical
- Petrochemical
- Waste treatment
- Bottling
- Trucking/transportation
- Water/waste water processing

Emergency stops
Award winning design

Emergency stops in modular and compact range

Modular range - Emergency stops
Ø 30 mm, Ø 40 mm, Ø 60 mm, twist release, pull release,
key release, illuminated and non-illuminated

Compact range - Emergency stops
Ø 30 mm and Ø 40 mm, twist release, pull release
and key release

Emergency stops

The emergency stops are designed for tough industrial
environments. These robust pieces are approved according
to IEC 60947-5-5 and meets protection degree IP66 (C-type
IP67 and IP69K) on the front side and IP20 on the terminal
side. They are also approved according to UL type 1, 3R,
4, 4X, 12 and 13. This competetive and wide range was
awarded the "Best Product" award by the readers of the well-
known German magazine P&A.

Emergency stop test IEC60947-5-5	
Durability test	6050 cycles. This is not a test of mechanical life. The product has a mechanical life of 100 000 operations.
Robustness	Test force, 113 N applied in three axes
Conditioning	Heat and cold, moist, dry and salty atmosphere
Shock	15 g shock (equivalent to 150 m/s^2)
Vibration	2 h at max. acc. 50 m/s^2, 10 - 500 Hz
Opening test	Impulse voltage test at 2 500 V
Latching test	With 1.6 kg hammer
Resetting test	Pulling force < 50 N, turning torque < 1 Nm
Impact test	Three strikes with 1.6 kg hammer
Electrical tests	Acc. to utilization category AC15 and DC13
Contacts with positive opening operation	Acc.to annex K § 5.2

Machine stops

The mushroom machine stops have the same design as the
emergency stop, except for the color. The products have
passed the same tests but do not, due to the black color,
fulfill the requirements for emergency stop pushbuttons.
Machine stops are used by customers when a robust and
reliable stop is needed but an emergency stop is not required.

Machine stops - Modular range
Ø 30 mm and Ø 40 mm, twist release,
pull release and key release.

Machine stops - Compact range
Ø 30 mm and Ø 40 mm, twist release,
pull release and key release.

Other offerings

Signal towers and signal beacons

Wide range with a number of
functions with light and sound

Accessories and pilot devices, 30 mm

Wide range of accessories

Enclosures and stations

Plastic enclosures - Modular range
Up to five base mounted contact blocks/operator,
available in yellow and grey

Plastic enclosures - Compact range
1-seat , IP69K, available in yellow and grey

A solution for every signaling field

The modular 70 mm signal tower system offers a wide range
of optical and audible elements in all common voltages.
A bayonet mechanism allows the components to be
mechanically and electrically connected within seconds. Up
to 5 signaling elements can be combined per station and
the protection degree is IP54. The vandal proof design of
the signal beacons mean they can withstand all mechanical
and natural challenges indoors and outdoors. The protection
degree is IP65.

Enclosures for modular and compact range
Plastic (1, 2, 3, 4, 6-seat)
- Rear mounted contact blocks (DIN-rail)
- Up to 5 blocks/actuator
- UL type: 1, 3R, 4, 4X, 12 and 13. IP 66

Metallic (1, 2, 3, 4, 6-seat)
- IP 66, 67, 69K
- Aluminium

Compact plastic 1-seat
- UL type: 1, 3R, 4, 4X, 12 and 13. IP 66, 67, 69K
- One of the smallest on the market

To make both the modular and compact range even more flexible

ABB offers a wide range of accessories such as
- Legend plates and text caps with or without text or symbols
- Protective covers and membranes
- Shrouds
- Bezels
- Widest range of integraded LEDs on the market
- Gold plated contact blocks
- Double contact blocks
- Adaptors for assembly of 22 mm pilot devices in 30 mm
  diameter holes, available in plastic and metal versions
- Assembly tools and lamp changing tools
- DIN-rail adaptors
- Blanking plugs

Contact blocks/lamp blocks

ABB has the widest range of lamp blocks with integrated
LEDs on the market. The micro switch blocks are perfect for
low-energy applications such as PLC, and perform down to 3
VDC, 1 mA and with minimal contact bouncing.