

Safeball™ Two-Hand Control Devices

Ergonomic approach

Safeball is a completely new approach to the design of one and two-hand safety devices. Instead of the conventional approach using ordinary push buttons and non-ergonomic protection for unintentional activation, a “hands on” approach has been developed.

Unique design

Safeball consists of a spherical ball containing two embedded push button switches, one on each side of the ball. By using this push button configuration, the risk of unintentional activation is minimized and the device is simple and ergonomic to use. Safeball can be utilized for either one-hand (one Safeball) or two-hand (two Safeballs) applications. In either application, and in order to meet the required level of safety, the Safeball switches are monitored by specified/certified ABB JOKAB SAFETY relays or Pluto safety PLC.

Two-hand control device

- Two-hand machine control device uses two Safeballs, each with two internal push buttons.
- Utilizing two push buttons in each device provides a double safety function for each hand eliminating the “stuck button” common failure found in conventional palm button stations or the false “on” from contaminants on optical style buttons.
- The safety controller provides a dual and supervised safety function and requires input activation within 0.5 seconds in order to start the machine.
- The safety controller also checks that all four push buttons have returned to deactivated positions before a new machine start is allowed.
- The JSBR4 safety relay or Pluto safety PLC provides a stop signal if one or more buttons are released.

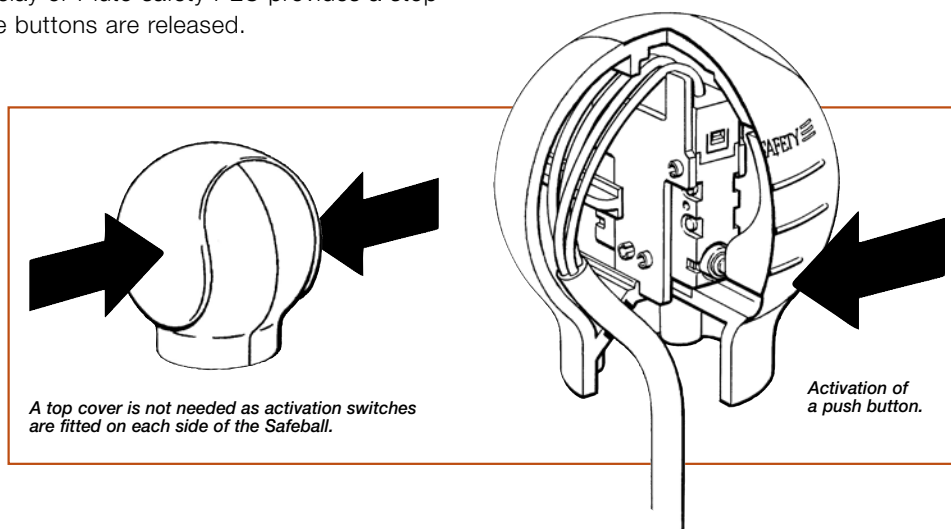


Note: Before installation, necessary risk assessment must be made to determine suitability of this type of control.

One-hand devices should only be used when the operator cannot reach into a hazardous area with a free hand or on less dangerous machines.

One-hand control devices

- Safeball is a practical method of providing a one-hand machine control device.
- Easily activated by the machine operator.
- When used as a one-hand device, the safeball is designed to be connected and monitored by an ABB JOKAB SAFETY RT6, RT7 or RT9 safety relay—or Pluto safety PLC in order to achieve the highest level[®] of safety.



A top cover is not needed as activation switches are fitted on each side of the Safeball.

Activation of a push button.

JSTD25 Two-hand control station with Safeball

With a JSTD25 you have a prepared two-hand station that is easy to install, while utilizing the good ergonomics of the Safeball. There are several variants to meet differing needs. All versions are capable of meeting the highest level^① of safety and are supplied with the internal connections made to simplify installation.

JSTD25A/B/D/E for fixed installation

JSTD25A, B, D and E are supplied with two Safeballs mounted on steel housing and replace a traditional two-hand device. They are available with an emergency stop button and ball joint fixtures for the Safeballs. Three 22mm openings are prepared on the top for buttons or signal lamps. A hatch is supplied for wire routing in the base and securing holes for mounting on the rear. The Safeballs are connected to terminal blocks for the user to connect the external wiring through one of the two inlet alternatives (underneath or at the rear).



JSTD25A Two-hand control unit with 2 Safeballs



JSTD25B Two-hand control unit with 2 Safeballs and emergency stop button



JSTD25D Two-hand control unit with two Safeballs mounted with two JSM C5 ball and socket table mounts



JSTD25E Two-hand control unit mounted with two JSM C5 ball and socket table mounted Safeballs and emergency stop button

Safeball features

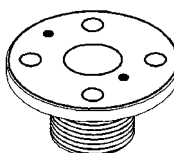
- Ergonomic design
- Low activation force
- Flexible mounting
- Several grip possibilities
- Highest safety level (category 4)
- Two channel switching in each hand

Safeball accessories

JSM C5 angled ball joint for installation of a Safeball on a table or a steel housing. Included on JSTD25D and JSTD25E (see above).



JSNA-SB adapter for mounting Safeball in any opening designed to hold standard 22 mm or 30 mm devices.



JSTS31 Stand with spacer ring for JSTD25A-E

JSTS30 Stand without spacer ring for JSTD25A-E

Adjustable height 850-1100 mm



ABB Inc.

ABB JOKAB SAFETY Products
6471 Commerce Drive
Westland, MI US 48185
Phone: 888-282-2123
Fax: 800-565-9302
Web: www.jokabsafetyna.com

^① See web site for detailed list of third party approvals for standards and regulations.

Power and productivity
for a better world™

