

Two hand device

JSTD20



Conventional Two hand device

The conventional JSTD20 Two hand device utilises a welded steel housing. Two operating pushbuttons are protected by over hand guards. Between these pushbuttons there is space for an emergency pushbutton and two extra controls or indication lamps. Below each of the operating pushbuttons is one normally open and one normally closed contact. To start and run the machine both pushbuttons must be activated within 0.5 seconds. If one or both pushbuttons are released a stop signal is given to the machine, and all contacts must return to their deactivated positions before a new start is allowed.

The design is robust and can withstand harsh environments and long use. The pushbuttons and contact blocks are simple to assemble for quick and easy installation. The device can be mounted directly on the machine, on the ABB Jokab Safety fencing system or on the JSTS30 floor mount. For use with portable Two hand devices the JSTS31 floor mount, which is provided with a spacer ring to fulfill the requirements of EN 574, is recommended. The JSTD20 is available with or without an emergency stop pushbutton.

Highest level of safety

Correct connection to a ABB Jokab Safety JSBR4 safety relay or Pluto Safety PLC ensures the highest level of safety with dual and supervised safety function and requires input

Approvals



JSTD20 for:

- Presses
- Punching machines
- Cutting machines
- Fixtures

Features:

- Durable material
- With or without emergency stop pushbutton
- Fulfils requirements of EN 574
- Highest level of safety

activation of both operating pushbuttons within 0.5 seconds (two hand device type III C in accordance with EN 574). If the emergency pushbutton is installed it should be provided with two normally closed contacts and be connected to a separate safety relay, e.g. from the RT series or Pluto.

Why use a Two hand device?

A two hand device can be used when it is necessary to ensure that the operator is outside and must be prevented from reaching into the hazardous area. If the operator decides, after the start signal has been given to the machine, to make an 'after grasp' i.e. try to adjust the part that has been placed inside the machine, then a dual stop signal is given to the machine.

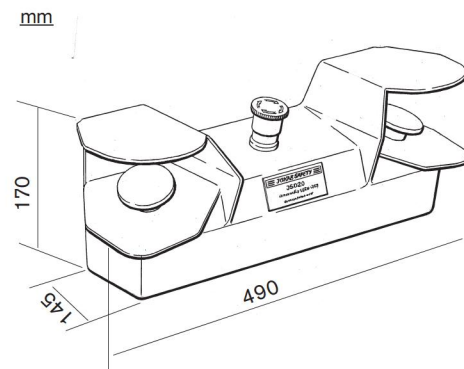
The new JSTD20 is equipped with a new type of large over hand guards in accordance with EN 574. These prevent unintended activation by for instance a knee or elbow.

A Two hand device only protects the operator using it. Large machines operated by several operators can be equipped with one control for each operator.

To calculate the correct safety distance, which depends on the machine's stopping time including the response time of the relay, the use of the ABB Jokab Safety Smart Stopping analyser is recommended.

Technical data - JSTD20	
Manufacturer	ABB AB/Jokab Safety, Sweden
Article number/ ordering number	2TLJ020007R2000 JSTD20A 2TLJ020007R2100 JSTD20B 2TLJ020007R2200 JSTD20C
Weight	JSTD20: 6.4 Kg JSTS30: 20 Kg JSTS31: 23 Kg
Colour	Black housing, Black pushbut- tons, Black floor stand.
Temperature	-10°C...+70°C (Operating) -20°C to +70°C (storage)
Safety level EN ISO 13849-1 EN 954-1	Upp till kat. 4/PL e Upp till kat. 4
Material	Housing: 3mm Steel Gasket: Rubber Pushbuttons: Plastic
Operating pushbuttons	
Diameter	60 mm
Operating force	Approx. 9N
Operating distance	3.5±1 mm
Mechanical life	10 ⁶ operations
Emergency pushbutton (JSTD20B only)	
Diameter	40 mm
Operating force	40N
Mechanical life	3 x 10 ⁵ operations
Contacts	Mechanically separated contact blocks
Operating pushbuttons	1 NO + 1 NC
Emergency pushbuttons	2 x NC
Isolation voltage	690V rms
Contact resistance	20 mohm

Rated current	10A
Utilisation categories	AC 15 240V 3A DC 13 240V 0.27A
Cabling	screw clamp terminals, 1 or 2 wires with max. cross-section 2.5 mm ² .
Contact material	silver alloy on brass
Protection class:	IP 65
Conformity:	EN 418, EN 574, EN 954-1, EN ISO 13849, EN 60947-1, EN 60947-5-1, EN 999



JSTD20A – Two hand device, without emergency stop
JSTD20B – Two hand device, with emergency stop
JSTD20C – Only housing, no buttons

Connection example - JSTD20

The Two hand device is intended for use with ABB Jokab Safety's JSBR4 safety relay (or Pluto Safety PLC) to ensure the highest level of safety. The JSBR4 ensures that all contacts have returned to their deactivated positions before a new start is allowed. The safety relay also requires that all contacts are activated within 0.5 seconds. The JSBR4 gives a stop signal if one or both of the pushbuttons are released.

