

# Two hand device

# JSTD20



## Approvals



## JSTD20 for:

Presses  
Punching machines  
Cutting machines

## Features:

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

## Conventional Two hand device

The conventional JSTD20 Two hand device utilises a welded steel housing. Two operating pushbuttons are protected by over hand flanges. Between these pushbuttons there is space for a 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 easy to assemble for quick and easy installation. The device can be mounted directly on the machine, on the Jokab Safety fencing system or on the JSTS30 floor mount. For use with movable Two hand devices the JSTS31 floor mount, which is provided with a distance ring to fulfil the requirements of EN 574, is recommended. The JSTD20 is available with or without emergency stop pushbutton.

### Highest level of safety

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

tion of both operating pushbuttons within 0.5 seconds (two hand device type III C according to EN 574 and category 4 according to EN 954-1). 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.

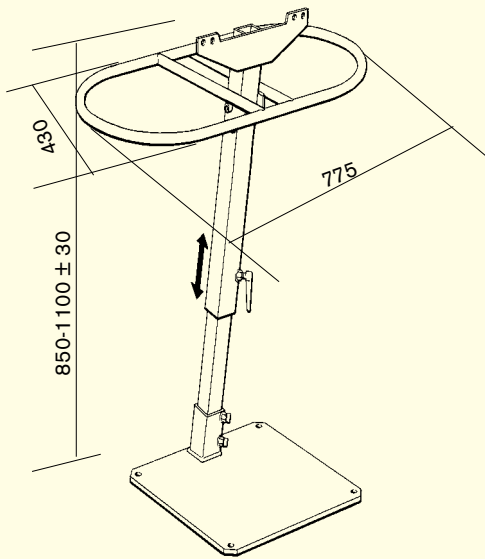
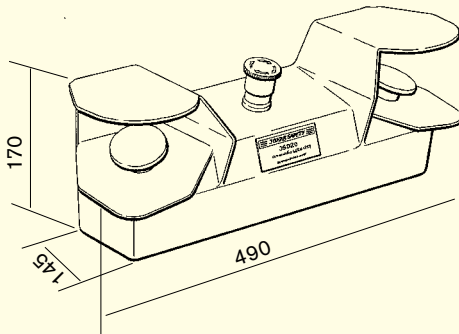
The new JSTD20 is equipped with a new type of large over hand flanges according to EN 574. These prevent unintended activation by for instance a knee or elbow.

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 relay's reaction time, the use of the JOKAB SAFETY Smart Stopping analyser is recommended.

## Technical data - JSTD20

mm



<b>Manufacturer</b>	JOKAB SAFETY AB, Sweden
<b>Ordering data</b>	JSTD20A, JSTD20B, JSTS30, JSTS31
<b>Weight</b>	JSTD20: 6.4 Kg JSTS30: 20 Kg JSTS31: 23 Kg
<b>Colour</b>	Black housing, Black pushbuttons, Black floor stand.
<b>Temperature</b>	-10°C...+70°C (Operating) -20°C...+70°C (Storing)
<b>Material</b>	Housing: 3mm Steel Gasket: Rubber Pushbuttons: Plastic

### Operating pushbuttons

Diameter	60 mm
Operating force	Approx. 9N
Operating distance	3,5±1mm
Mechanical life	10 <sup>6</sup> operations

### Emergency pushbutton (JSTD20B only)

Diameter	40 mm
Operating force	40N
Mechanical life	3 x 10 <sup>5</sup> 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. section 2.5mm<sup>2</sup>.

### Contact material

silver alloy on brass

### Ingress protection

IP65

### Standards

EN 418, EN 574, EN 954-1, EN 999,

EN 60947-1, EN 60947-5-1.

## Connection example - JSTD20

The Two hand device is intended for use with 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.

