

# SCHMERSAL Tech Briefs: Emergency Stop Buttons



BDF100-NH-G-ST



BDF100-NHK-G-ST



E-STOP 201

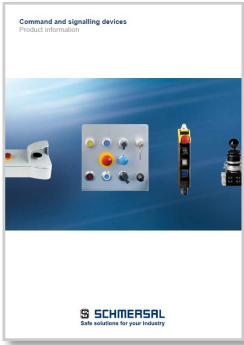


ESTOP-MBGAC311



E-STOP KIT

## Available Literature



Command and Signaling Devices  
94 pages, print or PDF



Whitepaper:  
Emergency Stop Devices  
Visit our website for a PDF Copy

## Overview

According to OSHA, ANSI and relevant ISO regulations every machine is required to have a means to immediately remove all hazardous energy in the event of an emergency. In most all industrial machines this is achieved by the use of an Emergency Stop (E-Stop) pushbutton.

NFPA79 and ISO 13850 detail the physical characteristics of a push button E-Stop, which will include a RED mushroom operator head with YELLOW background. It must also be self-latching, meaning that once actuated the Emergency Stop will remain in the actuated state until a voluntary and deliberate action is performed, such as twisting and/or pulling of the palm button for reset. In addition, this resetting of the E-Stop alone should not resume operation; instead a second deliberate action is needed, such as the pressing of a RESET button.

OSHA and standards such as IEC 60204-1 state that an Emergency Stop must be readily accessible to the operator. This means that every operator station or any area of the machine worked on which is considered part of the normal operating procedure needs a means for an emergency stop. It should be unobstructed and easily accessible without having to reach over, under or around to actuate.

## Complete E-STOP KIT

The E-STOP KIT includes all the components necessary for a panel-mounted emergency stop pushbutton. They are delivered in a single box.

It includes:

- A 40 mm diameter aluminum operator head with mounting block.
- Two 1 NO & 1 NC contact blocks.
- A spring element for latching and reset function.
- A round yellow metal plate with adhesive on the back.



## Various Models

Schmersal offers a number of complete E-Stop pushbutton kits that satisfy all relevant requirements. They include the operator, contact blocks, and enclosure.

### BDF100-NH-G-ST

*E-Stop without protective collar*

### BDF100-NHK-G-ST

*E-Stop with protective collar*

### E-STOP201

*Plastic pushbutton in plastic enclosure (pre-assembled)*

**ADRR40RT** 40mm button

**CLP101** 1NC contact (x2)

**MBKAC311YE** Enclosure

*Additional contact blocks available:*

**CLP101** 1NC contact  
**CLP110** 1NO contact

### E-STOP-MBGAC311

*Metal pushbutton in metal enclosure (kit)*

**EDRR50RT** 50mm button

**EF220.1** 2NC contact

**EFR** Spring element

**MBGAC311YE** Enclosure

*Additional contact blocks available:*

**EF220.2** 2NC  
**EF303.2** 1NO/1NC

### E-STOP KIT

*Metal pushbutton for panel mounting (kit)*

**EDRR40RT** 40mm button

**EF303.1** 1NO/1NC contact

**EF303.2** 1NO/1NC contact

**EFR** Spring Element

**MDP8.2** Yellow plate

### Compatible Safety Controllers

**SRB-E-201LC** **SRB-E-322ST**

**SRB-E-201ST** **SRB-E-402ST**

**SRB-E-301ST** **SRB-301MC**

**SRB-E-212ST**

## Contact

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## IP69K Rated E-Stop

Schmersal offers an E-Stop pushbutton that meets IP69K sealing requirements ... tolerating high temperature (up to 175°F) steam or water wash downs at pressures up to 1450 psi. The NDRR50RT offers a 50 mm wide, thermoplastic head and modular contact block system.

This E-Stop is ideal for applications where hygienic conditions are critical (food processing, medical equipment, meat packaging and pharmaceutical manufacturing). It was specifically designed with smooth surfaces to reduce the accumulation of process substances, dirt and/or bacteria.

