

## Description



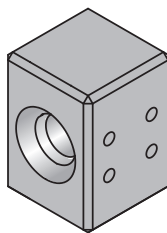
The **P-KUBE 1** safety handles are designed to install Pizzato Elettrica's FD and FG series safety switches to machine guards quickly and easily, offering an effective solution to machine designers and installers for problems relating to the mechanical precision of guard movements.

The basic principle of this series of products is a mechanical centring and stop system along the direction of movement of the door. The centring system is extremely robust and can also be used in heavy duty applications or in the presence of careless personnel.

The lock out device is used to block the door in the open position and prevent an unexpected system restart when maintenance personnel access the system.

Thanks to their adjustable design these handles can be installed on different types of doors or barriers: hinged or sliding, right or left closing, as well as on various types of profiles.

## Robustness

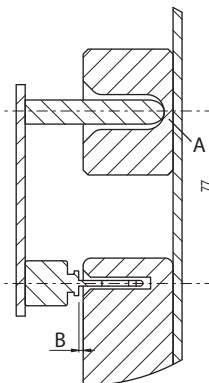


Thanks to its particular design and its special materials the safety handle can be used in heavy duty applications and with sturdy wide-ranging guards (min. 700 mm).

- Mounting system made up of robust painted brackets with thicknesses of 4 and 5 mm.
- Single-body centering block in stainless steel
- Large diameter centring pin in stainless steel
- Max. holding force of the actuator equal to 2800 N (versions with FG series switches).

- Stainless steel tamper proof bolts and screws and elastic washers (safety inserts excluded, see page 163).

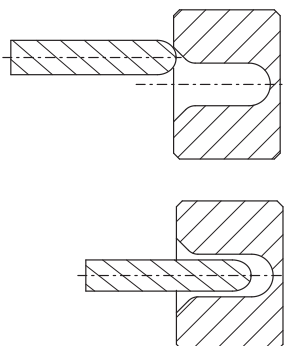
## Mechanical stop



During door closing, the metal pin is flush to the bottom of the centring block (A) before the actuator can bump against the switch housing, leaving a safe distance (B), thus avoiding possible damage.

The metal pin is always flush on surfaces that transmit the impact to the frame and not to the switch, regardless of whether the lock out device is open or closed.

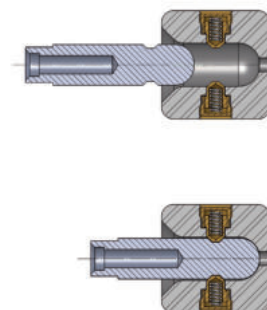
## Centring



The centering of the pin on the block (both in stainless steel) forces the alignment between actuator and switch, ensuring a proper insertion preventing any risk of collisions.

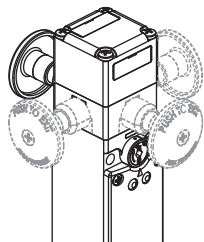
This also allows a safe re-alignment of the protection to the frame, even in case of big axial misalignments.

## Holding force of the unlocked actuator



A version of the lock out device with 100 N holding force is available on request. With this new optional feature, the handle is kept in its limit-stop closed position; a moderately energetic pull is required to open the door. This device is ideal for all applications where multiple doors are unlocked simultaneously but only one is actually opened; all unlocked doors are held in position, thereby preventing vibrations or gusts of wind from opening them.

## Escape release button (FG series)

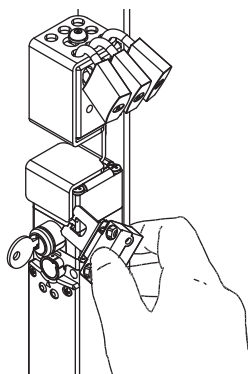


The FG series switches with actuator lock can be provided with an escape release button that, if oriented towards the inside of the machinery, allows accidentally trapped personnel to escape even during a blackout.

Pushing the button results in the same function as the auxiliary release device. To reset the switch, just return the button to its initial position.

The escape release button can be rotated and is available with different lengths. It is fixed to the switch by means of a screw allowing the installation of the switch both inside and outside the guards.

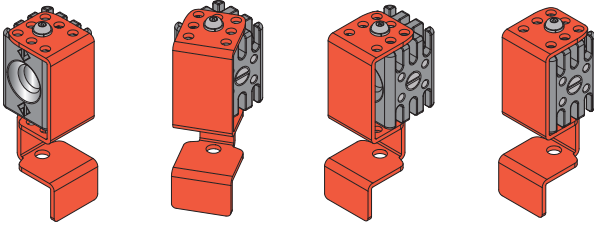
## Impossible to bypass with a separate actuator



As soon as the lock out device has been actuated and locked, the slot in the switch for the actuator is no longer accessible.

If an operator is in possession of a second, separate actuator, he is not able to bypass blocking of the device and actuate the switch.

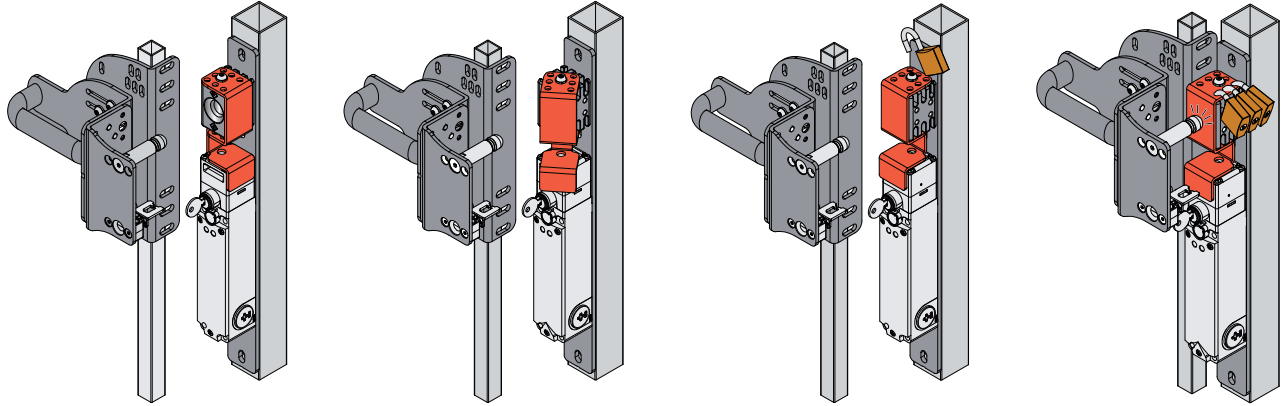
**Lock out device**



With a single operation, the lock out device enables the closure of both the centring hole and the slot for the actuator present in the switch, thus making the mechanical closure of the door and the electrical commutation of the switch contacts impossible.

The lock out device moves the red cover so that the holes in the cover do not coincide with the holes in the underlying metal block. This ensures that it is not possible to put a padlock on the device when it is open.

Up to 10 padlocks with a shackle diameter of up to 5 mm can be used.



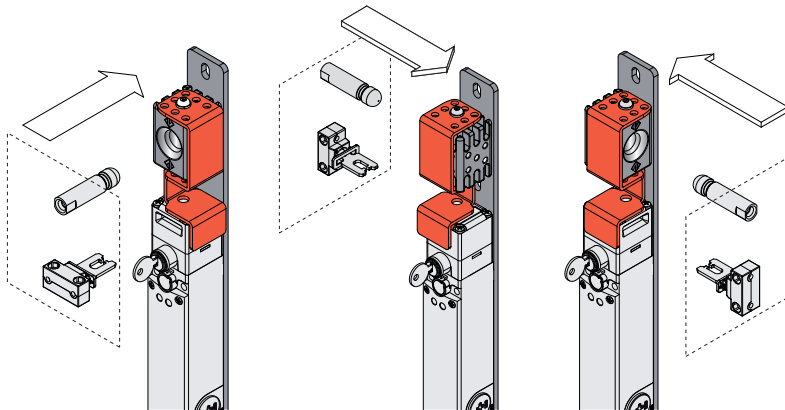
Lock out device open. Safety switch is accessible.

Closing of the lock out device.

Lock out device closed. Padlock insertion.

Lock out device locked. Padlock locked. Safety switch is not accessible.

**Turnable centring block**

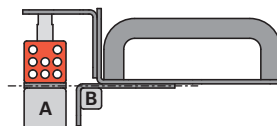
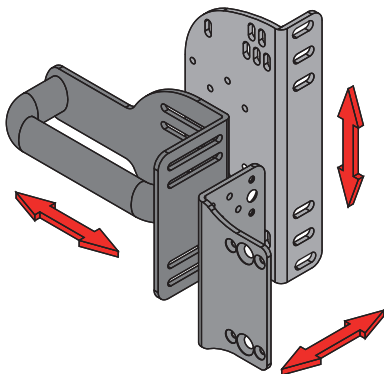


Thanks to its symmetrical design, the lock out device can be installed on hinged and sliding doors, with both right and left closing, while still retaining its centring function and allowing for the attachment of multiple padlocks.

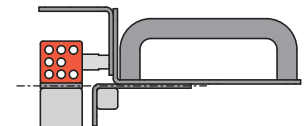
**Flexibility and installation on different profiles**

The slots of the three brackets applied on the door allow to carry out independent adjustments on 3 axes, providing an extremely easy installation and avoiding any modification of the existing protection structure. Thanks to these adjustments the handle can be installed on door profiles with different dimensions, from 40x40 mm to 60x60 mm (A) on the jamb and from 20x20 mm to 40x40 mm (B) on the door. The brackets are bolted together by means of anti-tampering screws.

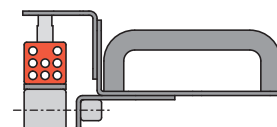
Thanks to its vertical design, the bracket containing the safety switch and the lock out device does not protrude beyond the jamb's profile.



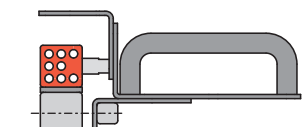
Hinged door and jamb frontally aligned



Hinged door and jamb frontally aligned



Hinged door and jamb axially aligned



Sliding door and jamb axially aligned

## Code structure

**Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

### VF AP-P11A-200P

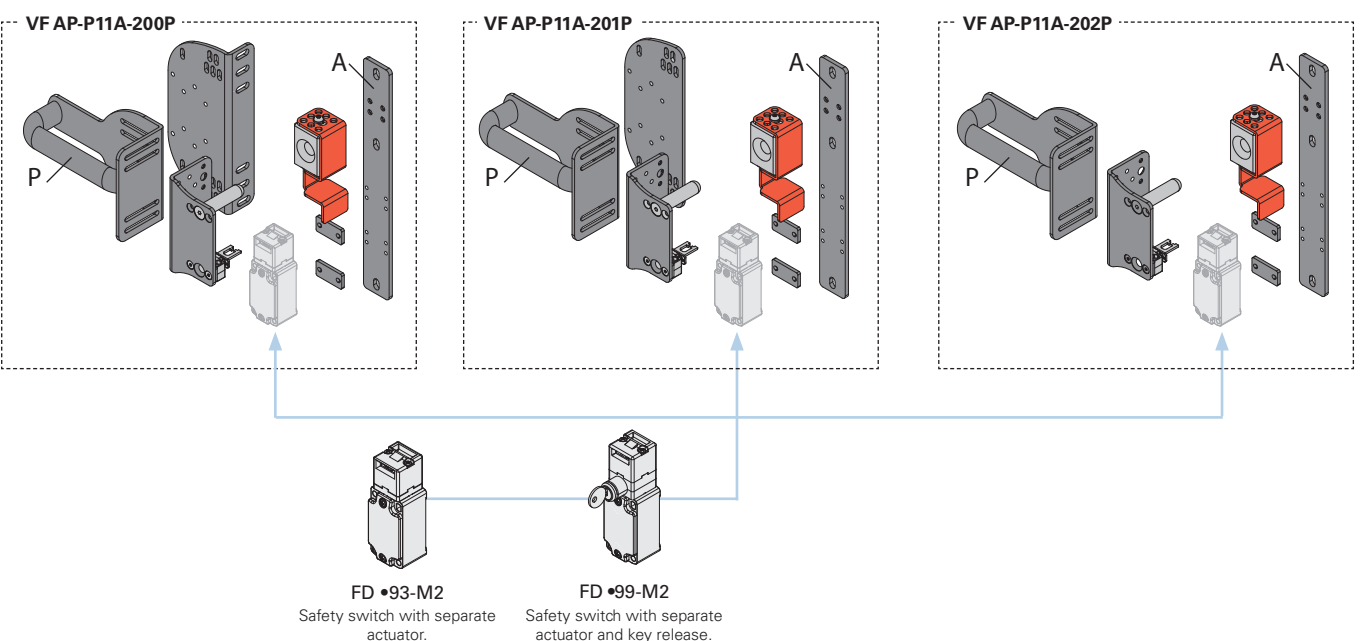
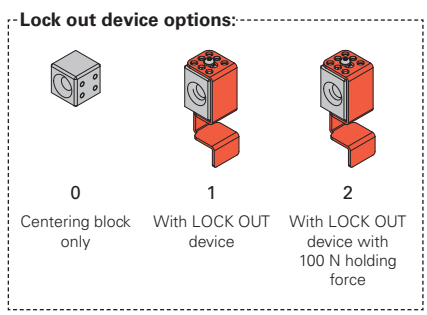
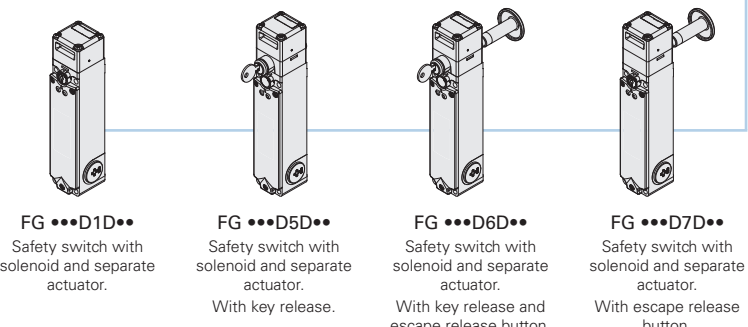
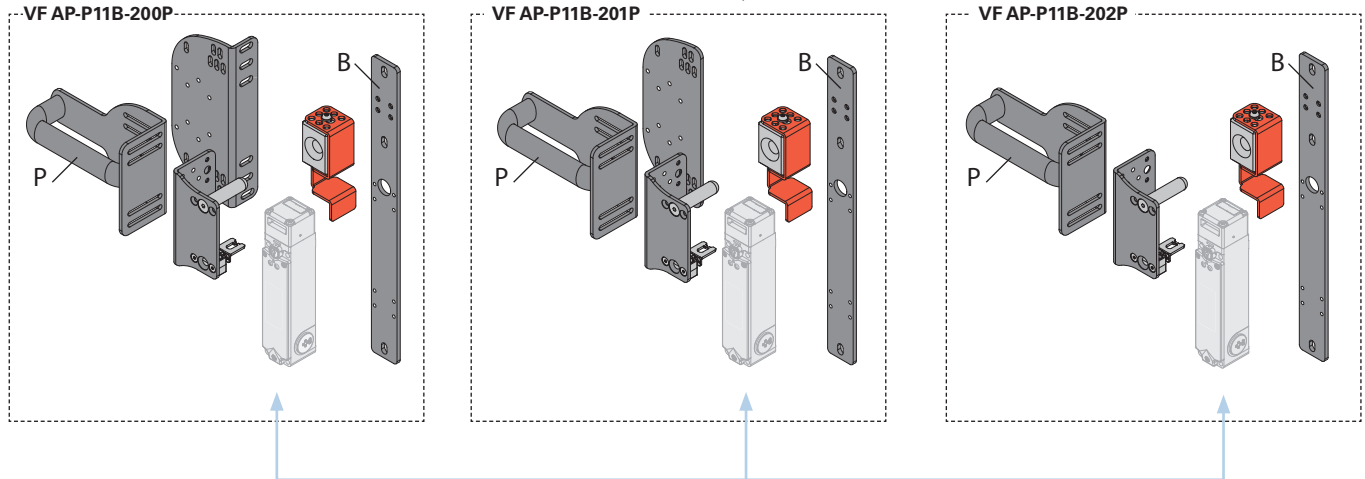
| LOCK OUT device |  |
|-----------------|--|
| 0               | Centering block only                     |
| 1               | LOCK OUT device                          |
| 2               | LOCK OUT device with 100 N holding force |

| Grip |              |
|------|--------------|
| P    | plastic grip |
| M    | metal grip   |
| Z    | without grip |

| Mounting bracket supplied for installation |                                   |
|--|-----------------------------------|
| A  | FD •••••                          |
| B  | FG •••••••••                      |
| Z  | without plate (B) for FG brackets |
| Y  | without plate (A) for FD brackets |

| Plate configuration |   |
|---------------------|---|
| 200                 | Configuration with adjustable "L" plate for door profiles   |
| 201                 | Configuration with adjustable plain plate for door profiles |
| 202                 | Configuration without adjustable plate for door profiles    |

Note: the handle is supplied complete with switch actuator as well as fastening screws for the grip, the switch, the actuator, and between the plates.

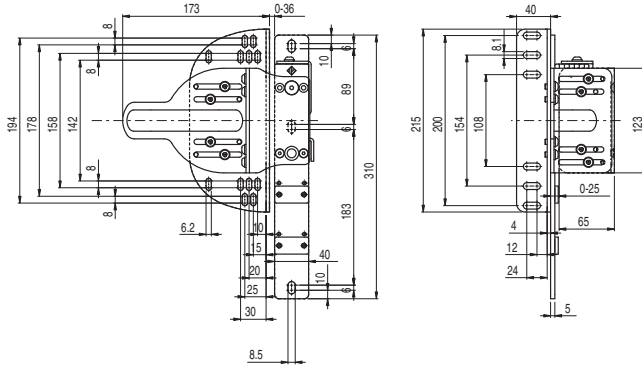


→ article sold separately

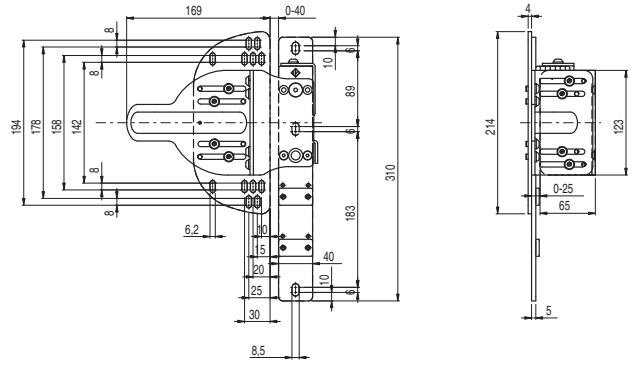
For articles and options of the FG series switches see page 107.  
For articles and options of the FD series switches see page 15.

**Dimensional drawings**

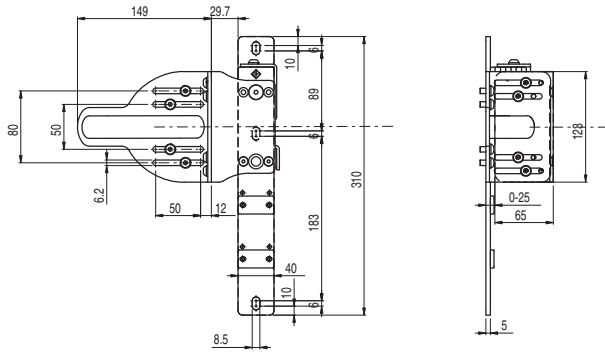
Safety handle VF AP-P1•A-200•



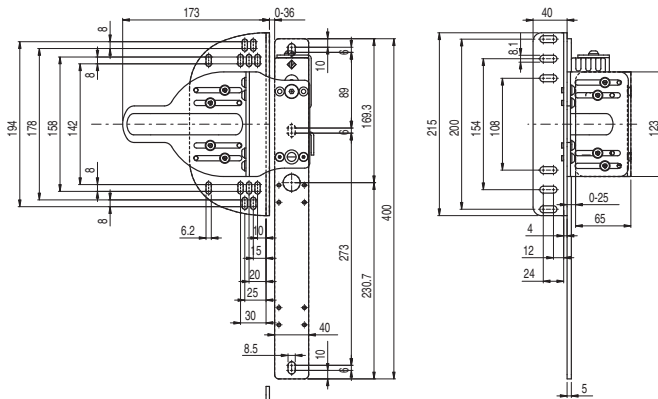
Safety handle VF AP-P1•A-201•



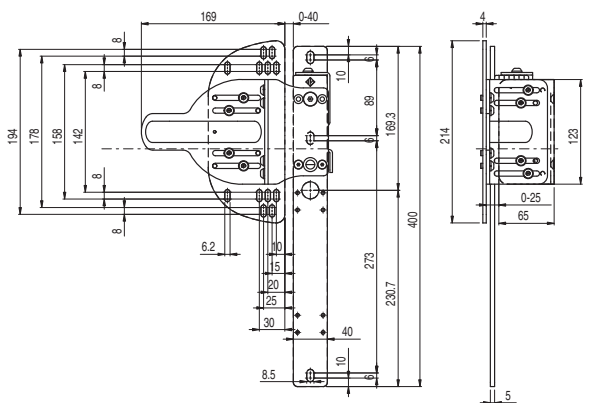
Safety handle VF AP-P1•A-202•



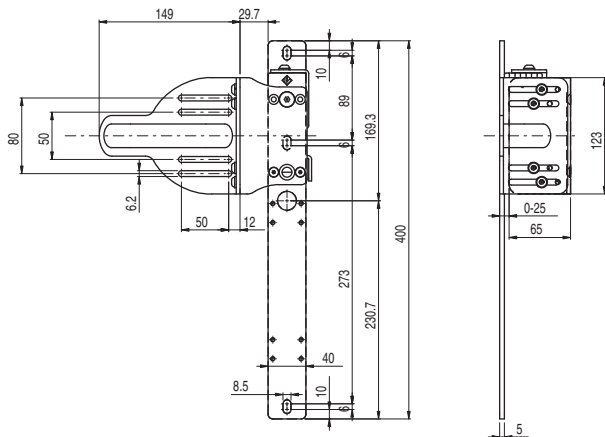
Safety handle VF AP-P1•B-200•



Safety handle VF AP-P1•B-201•



Safety handle VF AP-P1•B-202•



All values in the drawings are in mm

Accessories See page 321

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

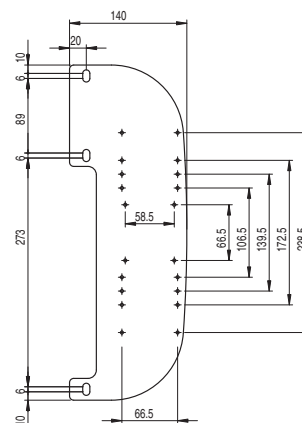
## Accessories

## Profiled plate



Profiled plate to be installed under the fixing plate of the switch. Suitable for both right and left mounting and provided with holes, this plate can be used for the installation of housings for the Pizzato Elettrica EROUND line panel buttons (by means of common self-threading screws available on the market).

| Article    | Description            |
|------------|------------------------|
| VF AP-C001 | Profiled lateral plate |



## Adhesive labels for escape release button



Polycarbonate yellow adhesive, rectangular, 300x32 mm, red inscription. It has to be fixed on the internal part of the jamb and helps finding the escape release button.

| Article       | Description and language |     |
|---------------|--------------------------|-----|
| VF AP-A1AGR01 | PREMERE PER USCIRE       | ita |
| VF AP-A1AGR02 | PUSH TO EXIT             | eng |
| VF AP-A1AGR04 | ZUM ÖFFNEN DRÜCKEN       | deu |
| VF AP-A1AGR05 | POUSSER POUR SORTIR      | fra |
| VF AP-A1AGR06 | PULSAR PARA SALIR        | spa |
| VF AP-A1AGR07 | НАЖАТЬ ДЛЯ ВЫХОДА        | rus |
| VF AP-A1AGR08 | NACISNAĆ ABY WYJŚĆ       | pol |
| VF AP-A1AGR09 | PRESSIONAR PARA SAIR     | por |




## Safety inserts set



Set with 3 x 1/4" hexagonal safety inserts. Connection DIN 3126, C 6.35. Hex mount with hole.

The P-KUBE 1 safety handle is provided with tamper-proof screws. Therefore all 3 safety inserts of the set are required.

Article composition VF AP-K01:

| Qty | Description   | ⊕    | Length |
|-----|---|------|--------|
| 1   | Hexagonal insert 1/4"  for M5 screws | 3 mm | 25 mm  |
| 1   | Hexagonal insert 1/4"  for M6 screws | 4 mm | 25 mm  |
| 1   | Hexagonal insert 1/4"  for M8 screws | 5 mm | 25 mm  |

Complete housings for profiled plate



ES AC32010

| Description   | Features  | Diagram |
|---|---|---------|
| <b>Button - 1NO</b><br>E2 1PU2R421L35<br>Contacts<br>1x E2 CF10G2V1 | flush, spring-return, green<br>pos. 2   pos. 3   pos. 1<br>/   1NO   /      |         |
| <b>Button - 1NC</b><br>E2 1PU2S321L1<br>Contacts<br>1x E2 CF01G2V1  | projecting, spring-return, red<br>pos. 2   pos. 3   pos. 1<br>/   1NC ⊖   / |         |



ES AC32043

| Description   | Features   | Diagram |
|---|--|---------|
| <b>Indicator light</b><br>E2 1LA210<br>LED unit<br>E2 LF1A2V1     | white<br>White LED, 12 ... 30 Vac/dc                                   |         |
| <b>Button - 1NO</b><br>E2 1PU2R4210<br>Contacts<br>1x E2 CF10G2V1 | flush, spring-return, green<br>pos. 2   pos. 3   pos. 1<br>/   1NO   / |         |



ES AC33076

| Description   | Features   | Diagram |
|---|--|---------|
| <b>Illuminated button - 1NO</b><br>E2 1PL2R2210<br>LED unit<br>E2 LF1A2V1<br>Contacts<br>1x E2 CF10G2V1 | flush, spring-return, white<br>White LED, 12 ... 30 Vac/dc<br>pos. 2   pos. 3   pos. 1<br>/   LED   1NO  |         |
| <b>Illuminated button - 1NO</b><br>E2 1PL2R5210<br>LED unit<br>E2 LF1A2V1<br>Contacts<br>1x E2 CF10G2V1 | flush, spring-return, yellow<br>White LED, 12 ... 30 Vac/dc<br>pos. 2   pos. 3   pos. 1<br>/   LED   1NO |         |
| <b>Emergency button Ø 40 mm- 2NC</b><br>E2 1PER24531  | rotary release, Ø 40 mm, red   |         |
| <b>Label with shaped hole</b><br>VE TF32G5700<br>Contacts<br>2x E2 CF01G2V1                             | yellow, 30x60 mm rectangular, no engraving<br>pos. 2   pos. 3   pos. 1<br>1NC ⊖   /   1NC ⊖              |         |