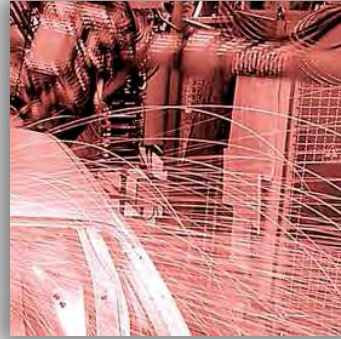


# Bolts for safety guards

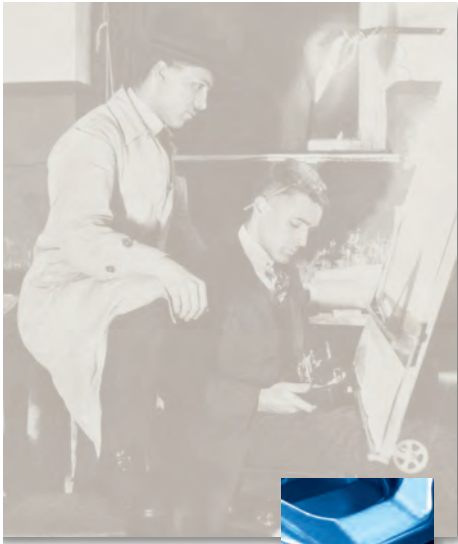


More than safety.



**EUCHNER**

# More than safety.



Emil Euchner, the company's founder and inventor of the multiple limit switch, circa 1928.



## **Around the world – the Swabian specialists in motion sequence control for mechanical and systems engineering.**

EUCHNER's history began in 1940 with the establishment of an engineering office by Emil Euchner. Since that time, EUCHNER has been involved in the design and development of switchgear for controlling a wide variety of motion sequences in mechanical and systems engineering. In 1953, Emil Euchner founded EUCHNER + Co., a milestone in the company's history. In 1952, he developed the first multiple limit switch – to this day a symbol of the enterprising spirit of this family-owned company.

## **Automation – Safety – ManMachine**

Today, our products range from electromechanical and electronic components to complex system solutions. With this wide range of products we can provide the necessary technologies to offer the right solution for special requirements – regardless of whether these relate to reliable and precise positioning or to components and systems for safety engineering in the automation sector.

EUCHNER products are sold through a world-wide sales network of competent partners. With our closeness to the customer and the guarantee of reliable solutions throughout the globe, we enjoy the confidence of customers all over the world.

## **Quality, reliability, precision**

Quality, reliability and precision are the hallmarks of our corporate philosophy. They represent concepts and values to which we feel totally committed.

At EUCHNER, quality means that all our employees take personal responsibility for the company as a whole and, in particular, for their own field of work. This individual commitment to perfection results in products which are ideally tailored to the customers' needs and the requirements of the market. After all: our customers and their needs are the focus of all our efforts. Through efficient and effective use of resources, the promotion of personal initiative and courage in finding unusual solutions to the benefit of our customers, we ensure a high level of customer satisfaction. We familiarize ourselves with their needs, requirements and products and we learn from the experiences of our customers' own customers.

**EUCHNER – More than safety.**



Quality – made by EUCHNER

## Bolts for Safety Guards

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## General

### Bolts for Safety Guards

According to EN 292-2 movable safety guards must be equipped with an interlocking device, with or without guard locking.

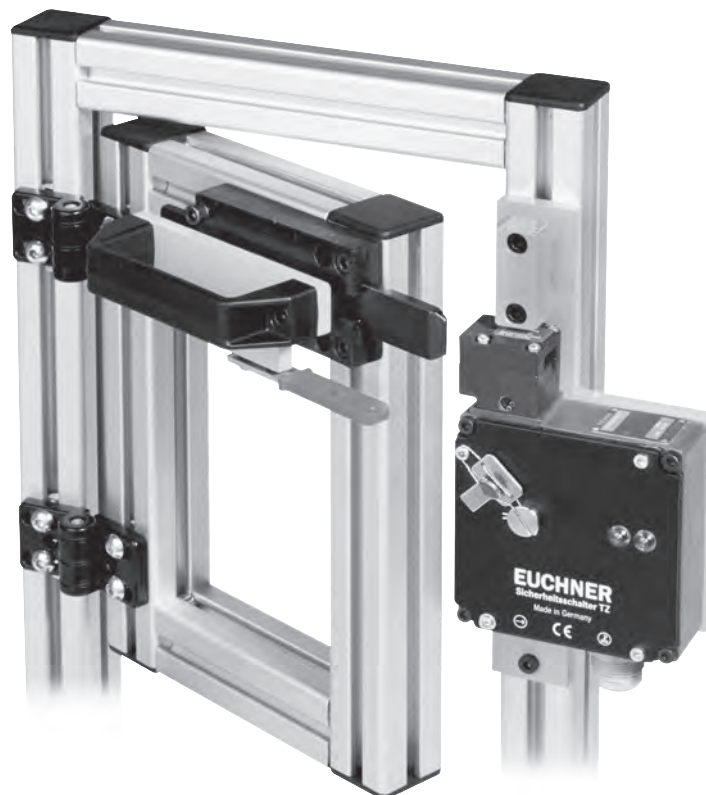
Here it must be ensured that

- ▶ dangerous machine functions are stopped as soon as the safety guard is no longer in the closed position
- ▶ dangerous machine functions are not started when the movable safety guard is closed.

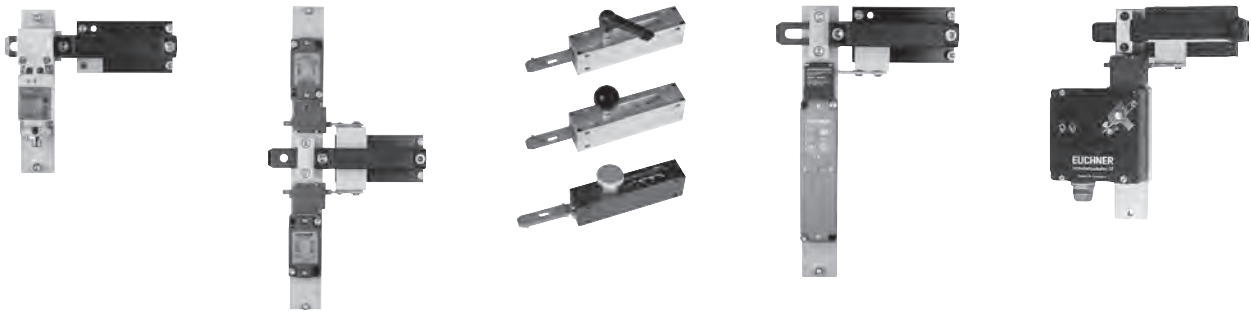
When the EUCHNER safety door bolts are opened intentionally, the actuator mounted on the handle is pulled out of the safety switch actuator head. The opening of the normally closed contacts in the safety switch fulfils the requirements of the safety standard given above and permits access to the protected space.

In addition to the **standard bolts** (see page 5), Euchner also offers **bolts with escape release** (see page 21) in accordance with the EC Machinery directive. These bolts facilitate opening of the locked safety guard from within the hazardous area to allow operating personnel to escape and prevent them being accidentally locked in the danger area.

In the past, the bolts for safety guards were commonly produced in internal company locksmiths' shops at considerable expense. However, today standard solutions are preferred for economic reasons, especially in the car industry. EUCHNER has responded to current customer demands with the introduction of the bolts for safety guards.



## Standard bolts for safety guards



## Bolts for safety guards offer important advantages:

- ▶ Bolts provide mechanical guard locking, i.e. the monitoring circuit cannot be opened unintentionally by moving the hinged door.
  - ▶ Accidental stoppage of the machine is prevented
- ▶ The actuator is accurately mechanically guided into the actuating head of the safety switch. In this way it is ensured that the actuator is correctly inserted in the head, even with incorrectly adjusted doors.
  - ▶ Damage to the safety switch is prevented
  - ▶ The actuator is protected
- ▶ If the safety doors are shaken, the force is transmitted to the mechanically strong bolt and not to the safety switch.
  - ▶ Safety switches and actuators are thus protected against damage
- ▶ By using bolts, persons who must enter hazardous areas, e.g. for servicing and setup work, can protect themselves. By attaching one or more simple padlocks to the bolt in the open position, the movable safety guards cannot be closed and thus the dangerous states cannot be triggered.
  - ▶ The operator is protected
- ▶ Standard aluminum profiles are frequently used for safety guards. The bolts are particularly easy to fit here.
  - ▶ Optimum adaptation of the bolts to the market standard
- ▶ Bolts are available for all EUCHNER safety switches
  - ▶ Extensive product range
  - ▶ Products refined in every detail

## Bolt CES-A-A

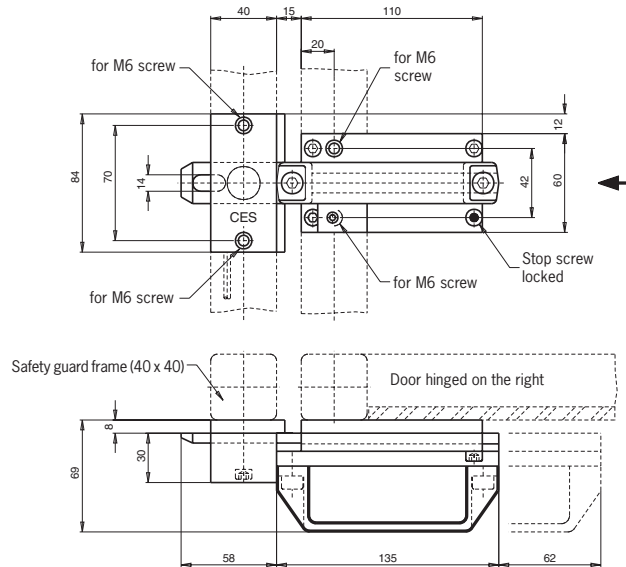
- ▶ For non-contact safety switches CES-A-ABA... and CES-A-AEA...
- ▶ In combination with read head CES-A-LNA...



### Dimension drawing

Bolt CES-A-A for doors hinged on the right or left

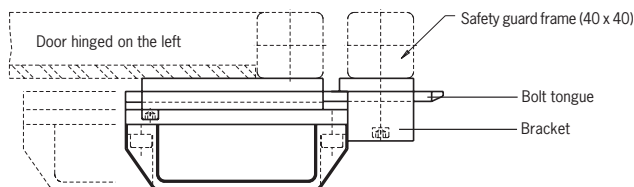
Door hinged on the right



### Features

- ▶ Easy mounting of the read head on the bracket for the bolt tongue
- ▶ Uniquely coded actuator (one-off)
  - ▶ Absolutely secure against tampering
- ▶ Ball detent mechanism in closed bolt position
  - ▶ Protection against vibration

Door hinged on the left



### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Distinctive yellow color for easy recognition
- ▶ Symmetrical design for doors hinged on the right or left
- ▶ No additional door handle necessary

### Notes

- ▶ CES actuator integrated in the bolt tongue
- ▶ Order read head and evaluation unit separately
- ▶ Other bolt types (e.g. with mechanical detent mechanism in closed bolt position) on request

### Ordering table

Article	Order No.
Bolt CES-A-A for doors hinged on the right or left	076 487

## Bolt CES-A-C

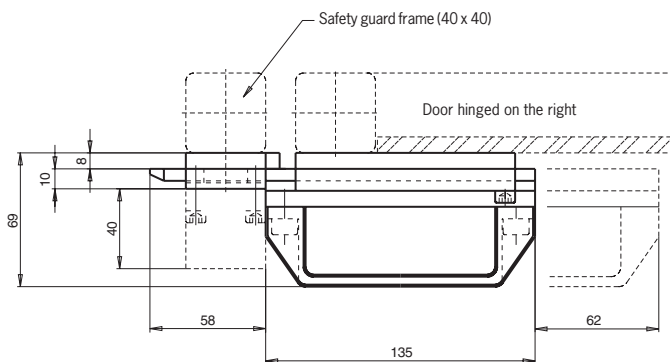
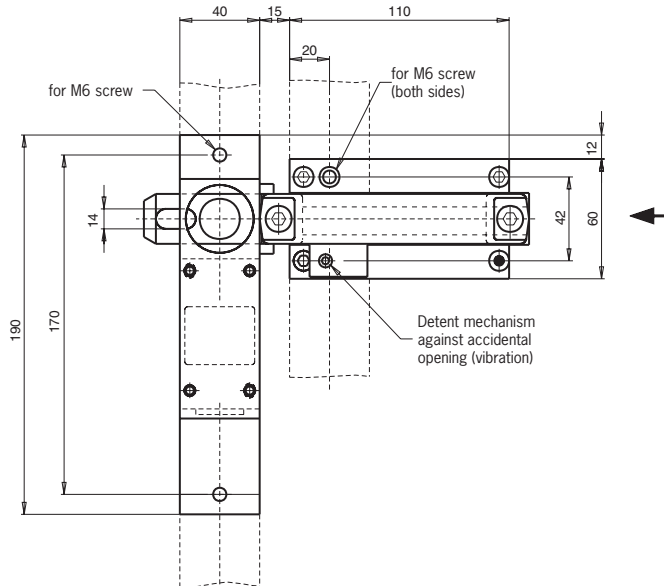
- ▶ For non-contact safety switches CES-A-C...
- ▶ Connection to safety circuit using M12 plug connector



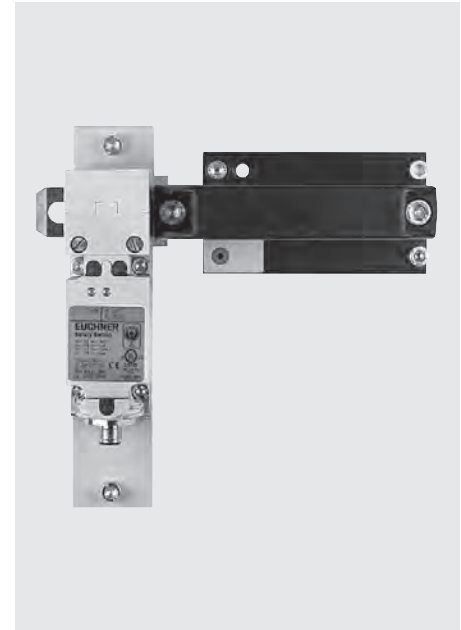
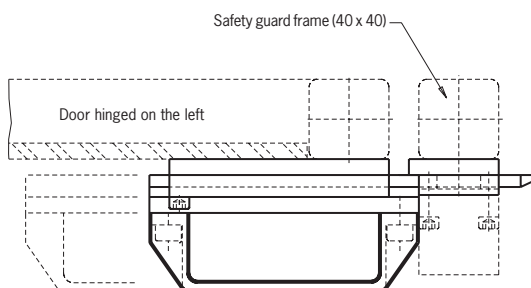
### Dimension drawing

Bolt CES-A-C for doors hinged on the right or left

Door hinged on the right



Door hinged on the left



### Features

- ▶ Easy mounting of the read head on the bracket for the bolt tongue
- ▶ Uniquely coded actuator (one-off)
  - ▶ Absolutely secure against tampering
- ▶ Ball detent mechanism in closed bolt position
  - ▶ Protection against vibration

### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Distinctive yellow color for easy recognition
- ▶ Symmetrical design for doors hinged on the right or left
- ▶ No additional door handle necessary

### Notes

- ▶ CES actuator integrated in the bolt tongue
- ▶ Order read head and evaluation unit separately
- ▶ Other bolt types (e.g. with mechanical detent mechanism in closed bolt position) on request

### Ordering table

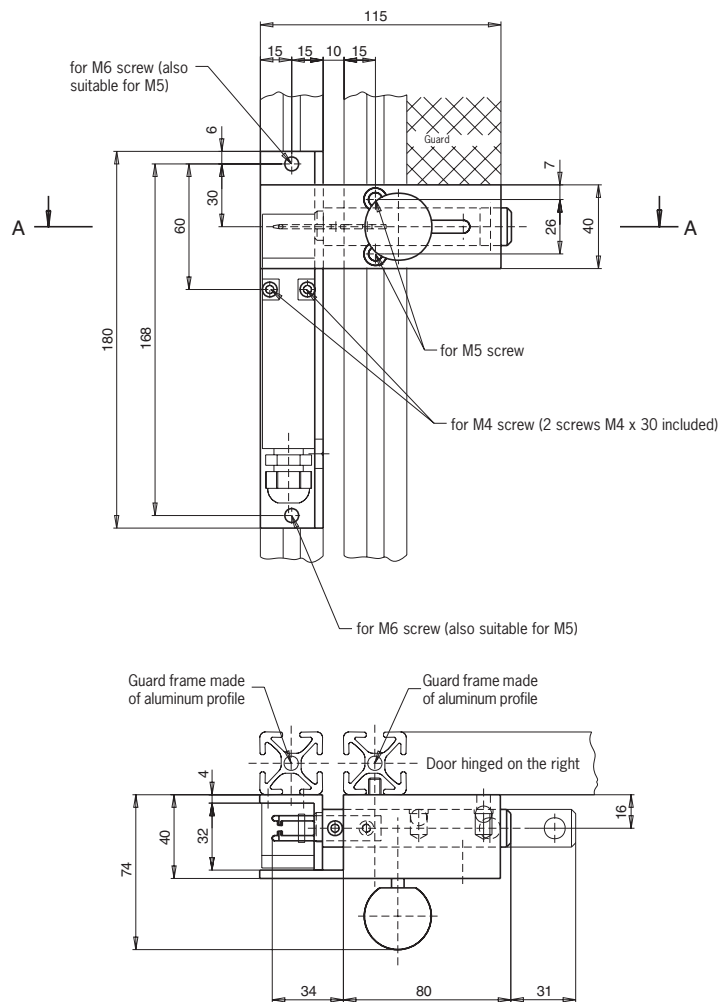
Article	Order No.
Bolt CES-A-C for doors hinged on the right or left	082 220

## Bolt NM

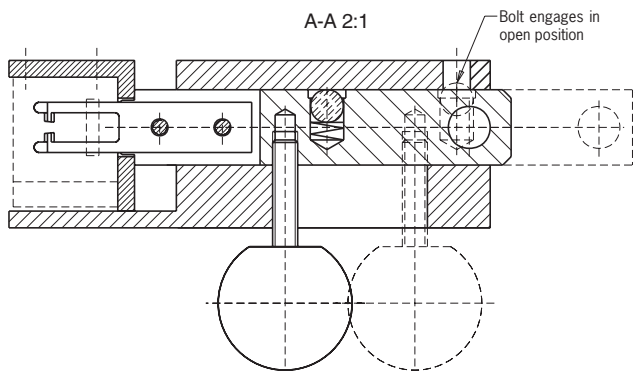
- For safety switches NM..VZA

### Dimension drawing

**Bolt NM for doors hinged on the right or left**  
(Diagram shows door hinged on the right)



### Section A-A



### Features

- Easily fitted to standard aluminum profiles and machine covers with screw connection
- Distinctive yellow color for easy recognition
- Symmetrical design for doors hinged on the right or left
- No additional door handle necessary
- Bolt with detent mechanism in opened position
- Through hole on the bolt permits attachment of padlocks

### Notes

- Actuator and switch bracket included
- Please order safety switch separately

### Ordering table

Article	Order No.
<b>Bolt NM</b> for doors hinged on the left or right, actuator and switch bracket included	077 233
<b>Switch bracket NM</b> individual	077 245

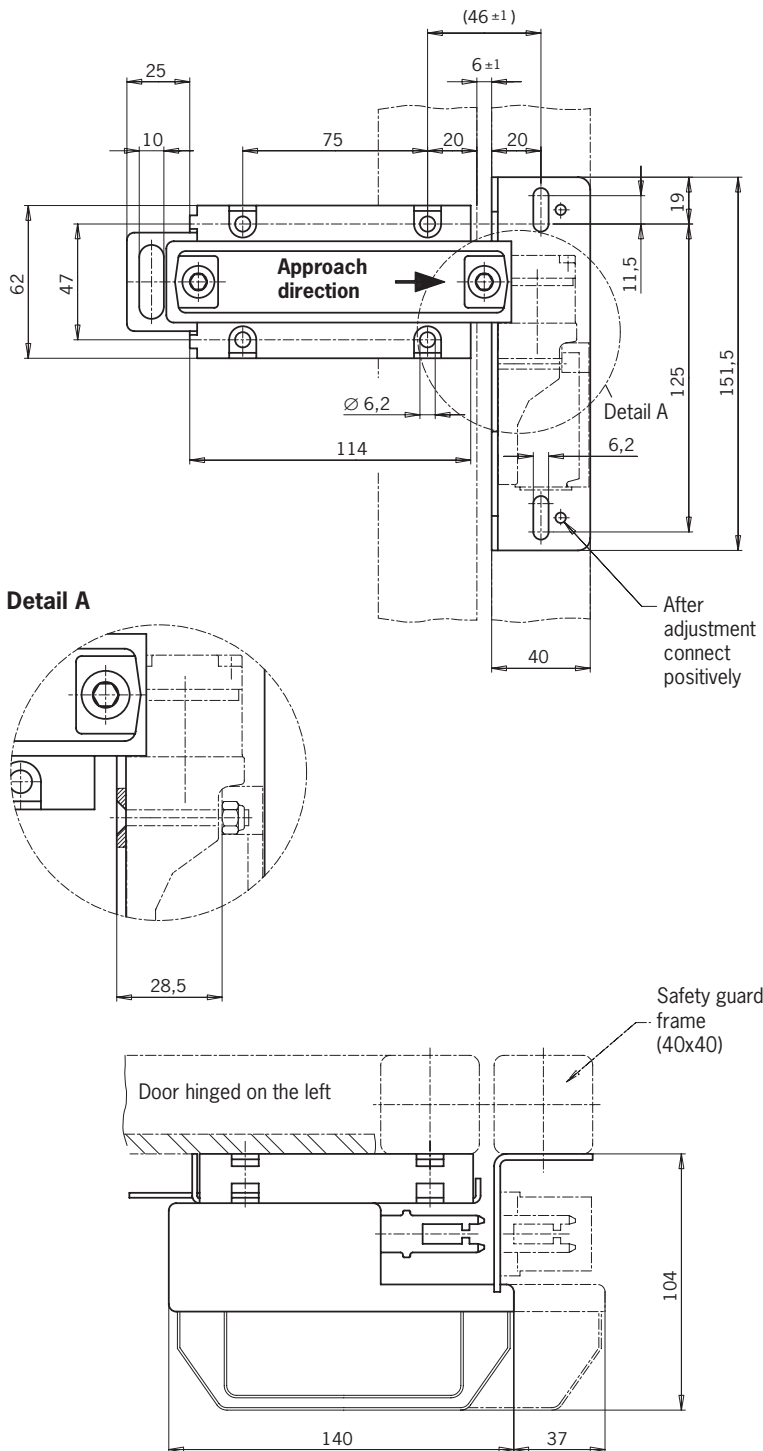


## Bolt NP

► For safety switches NP...AS

### Dimension drawing

Bolt NP for doors hinged on the right or left



### Features

- Easily fitted to standard aluminum profiles and machine covers with screw connection
- Distinctive yellow color for easy recognition
- Symmetrical design for doors hinged on the right or left
- No additional door handle necessary
- Automatic detent mechanism when bolt is moved to the locked position (only on **1 NP/TP bolt** version)
- Detent mechanism prevents unintentional opening of the hinged door
- Slot on the bolt permits attachment of padlocks
- Identical bolt for **NP...AS** and **TP...A** safety switches

### Notes

- **NP** switch bracket is only suitable for type series **NP...AS**
- Actuator included
- Please order safety switch and switch bracket separately

### Ordering table

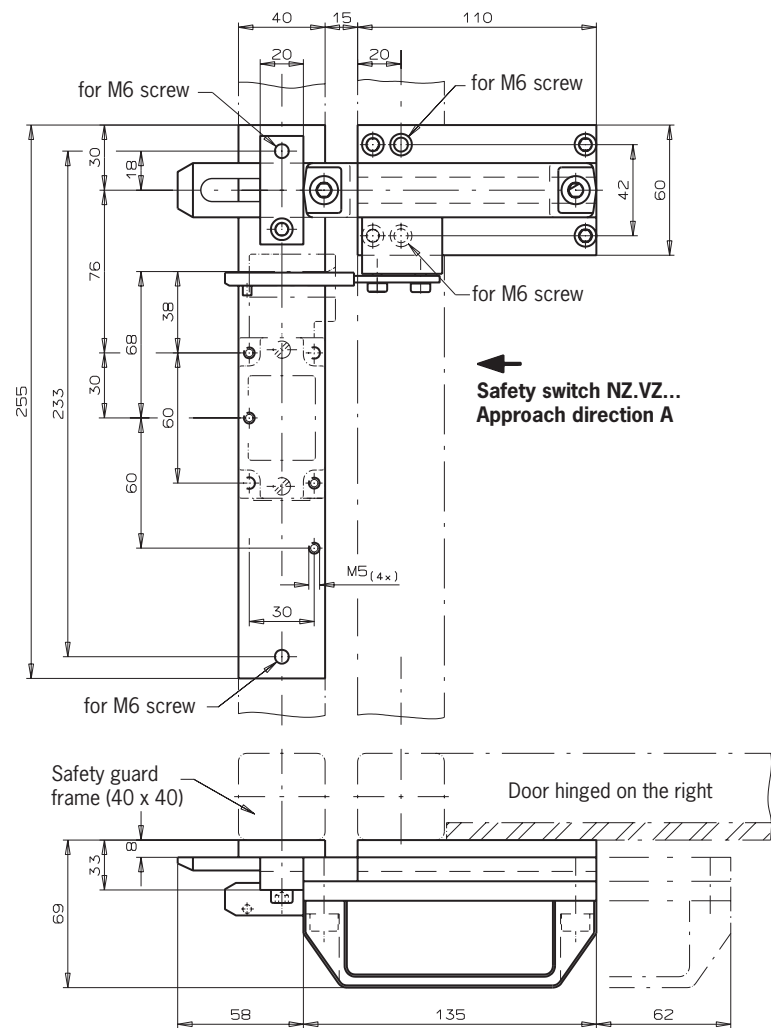
Article	Order No.
<b>Bolt 0 NP/TP</b> without detent mechanism	073 535
<b>Bolt 1 NP/TP</b> with detent mechanism, 1 x detent mechanism when closed	073 536
<b>Switch bracket NP</b>	073 538

## Bolt NZ..

- ▶ For safety switches of type series NZ.VZ and NZ.VZ.VS

### Dimension drawing

Bolt NZ-A for doors hinged on the right



### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Easy to use
- ▶ Distinctive yellow color for easy recognition
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

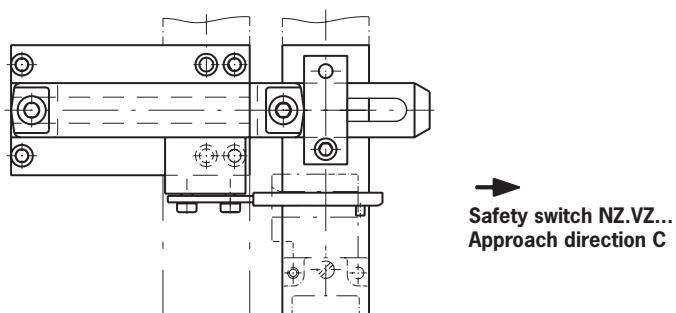
### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

Article	Order No.
<b>Bolt NZ-A</b>	
for doors hinged on the right	057 734
<b>Bolt NZ-C</b>	
for doors hinged on the left	057 735

Bolt NZ-C for doors hinged on the left

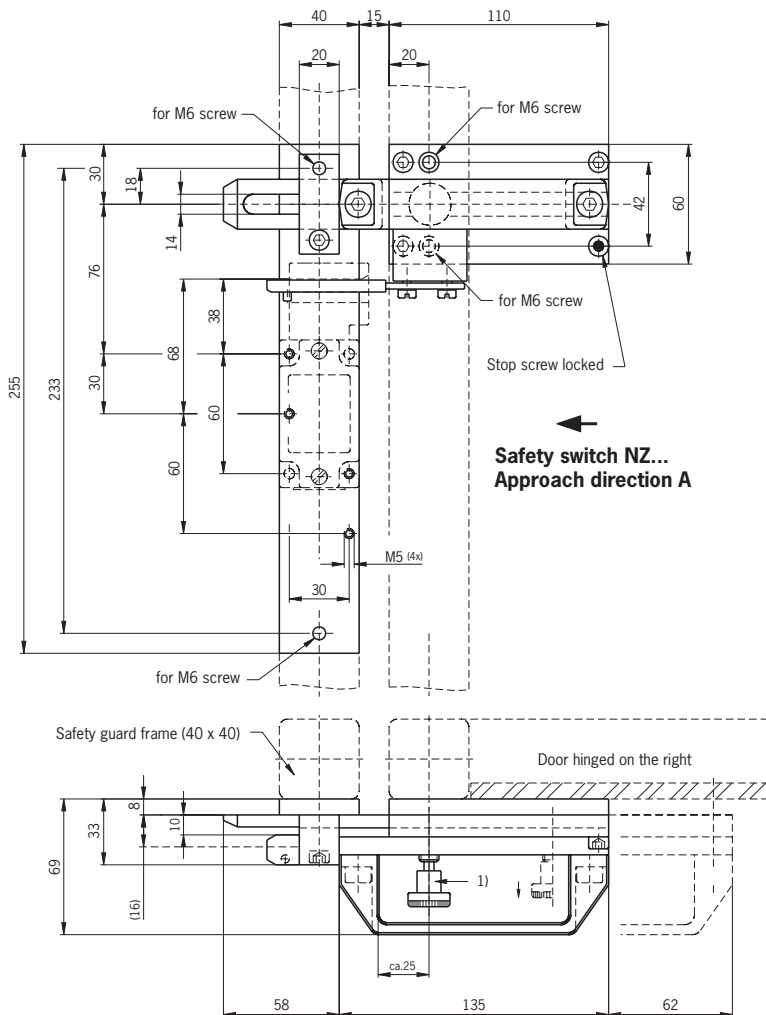


## Bolt NZ..

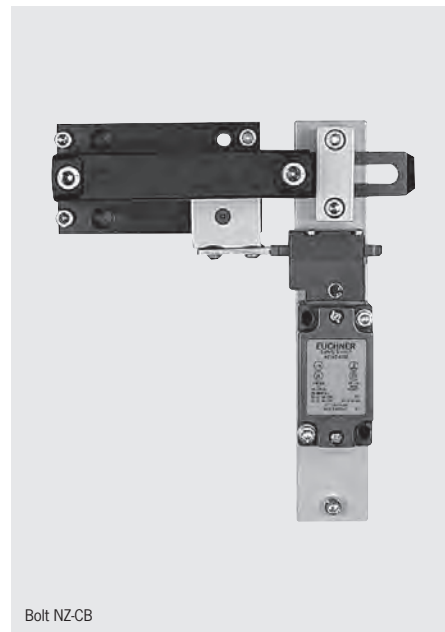
- ▶ For safety switches series NZ.VZ and NZ.VZ.VS
- ▶ Bolt NZ-B with ball detent mechanism
- ▶ Bolt NZ-R2 with detent knob

## Dimension drawing

Bolt NZ-AR2 for doors hinged on the right



1) Bolt with detent mechanism  
 When the bolt is open, the knob engages and prevents unintended closing.  
 When the bolt is closed, the knob engages and prevents unintended opening.  
 Unlocked by pulling the detent knob upward.



## Features

- ▶ Bolt **NZ-B** engages in open and closed position
  - ▶ Prevents accidental opening and closing of the bolt
- ▶ Bolt **NZ-R2** engages in open and closed position. Unlocked by pulling the detent knob upward

## Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Easy to use
- ▶ Distinctive yellow color for easy recognition
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

## Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

## Ordering table

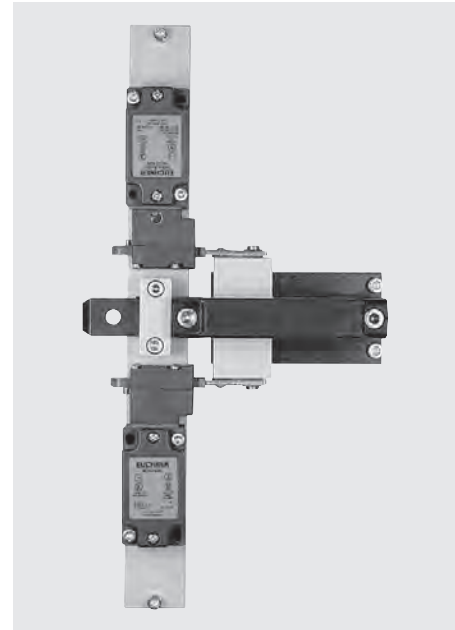
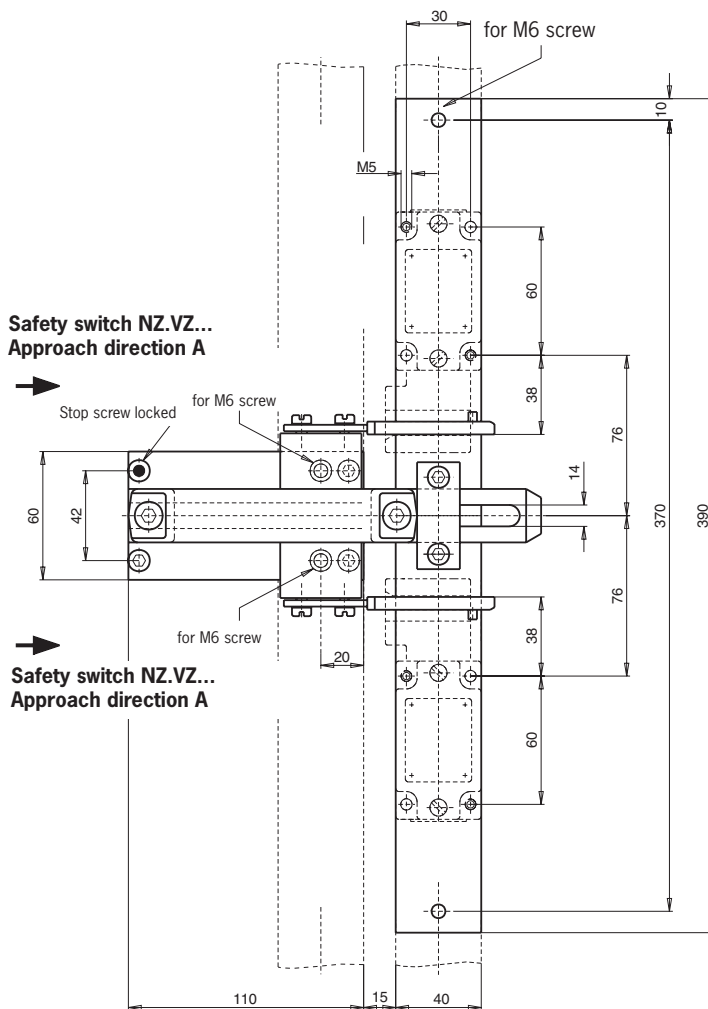
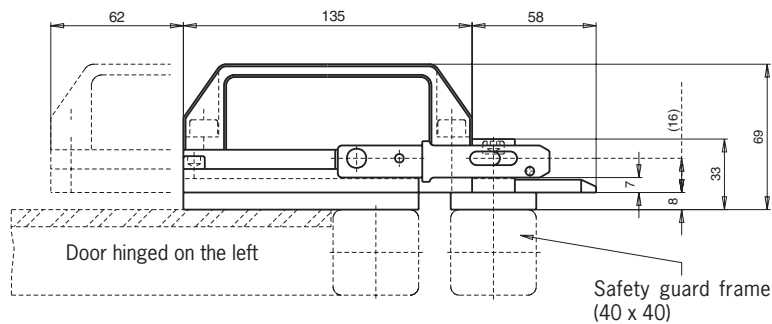
Article	Order No.
<b>Bolt NZ-AB</b> for doors hinged on the right	083 890
<b>Bolt NZ-CB</b> for doors hinged on the left	083 892
<b>Bolt NZ-AR2</b> for doors hinged on the right	078 455
<b>Bolt NZ-CR2</b> for doors hinged on the left	078 456

## Bolt NZ-AC

- For 2 safety switches of type series NZ.VZ on one bolt

### Dimension drawing

**Bolt NZ-AC (without escape release)**  
for doors hinged on the right or left



### Features

- One bolt for 2 safety switches
  - A higher safety category (e.g. category 4) is achieved
- Bolt can be used for doors hinged on the left or right

### Features

- Easily fitted to standard aluminum profiles and machine covers with screw connection
- Distinctive yellow color for easy recognition
- Robust version for heavy doors
- No additional door handle necessary
- Slot on the bolt permits attachment of padlocks

### Notes

- Actuator included
- Please order safety switch separately
- The function of the NZ-ACF bolt with escape release is the same as the function of the NZ/TZ-ACF bolt (see page 26)

### Ordering table

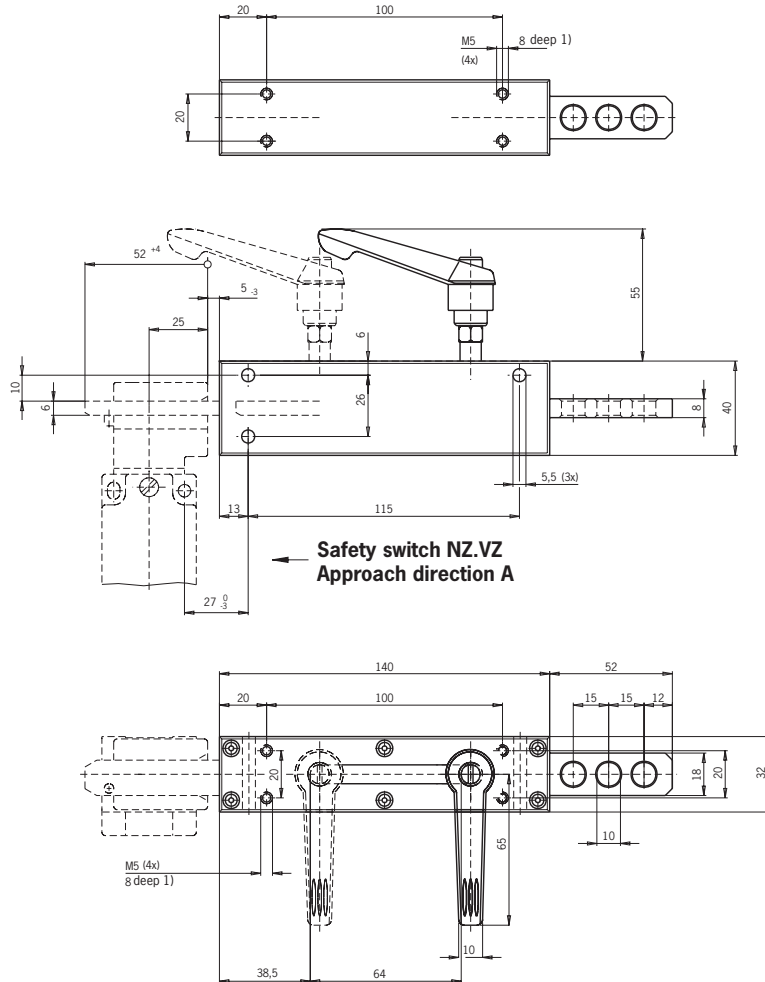
Article	Order No.
<b>Bolt NZ-AC</b> <b>(without escape release)</b> for doors hinged on the right or left	076 188
<b>Bolt NZ-ACF</b> <b>(with escape release)</b> for doors hinged on the right or left	091 368

## Bolt NZ/TZ-G.

- ▶ For safety switches of type series NZ.VZ, NZ.VZ.VS and TZ...
- ▶ Bolt with hand lever

### Dimension drawing

Bolt NZ/TZ-G1 for doors hinged on the right or left



1) Bolt fastening



Bolt NZ/TZ-G2

### Features

- ▶ The hand lever can be permanently set to 20 rotary positions (in 18° increments)
- ▶ On bolt **NZ/TZ-G1**, actuating pin on bottom
  - ▶ Safety switch fastened as shown in illustration
- ▶ On bolt **NZ/TZ-G2**, actuating pin on top
  - ▶ Safety switch fastened rotated by 180°
- ▶ After the door is opened, the actuator is automatically withdrawn into the bolt by a built-in return spring
  - ▶ The operator is protected
  - ▶ When the door is open there is no risk of injury due to protruding actuator
  - ▶ The actuator is protected
  - ▶ When hinged doors are closed it is ensured that the actuator is not used as an end stop

### Features

- ▶ Three holes enable padlocks to be attached

### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

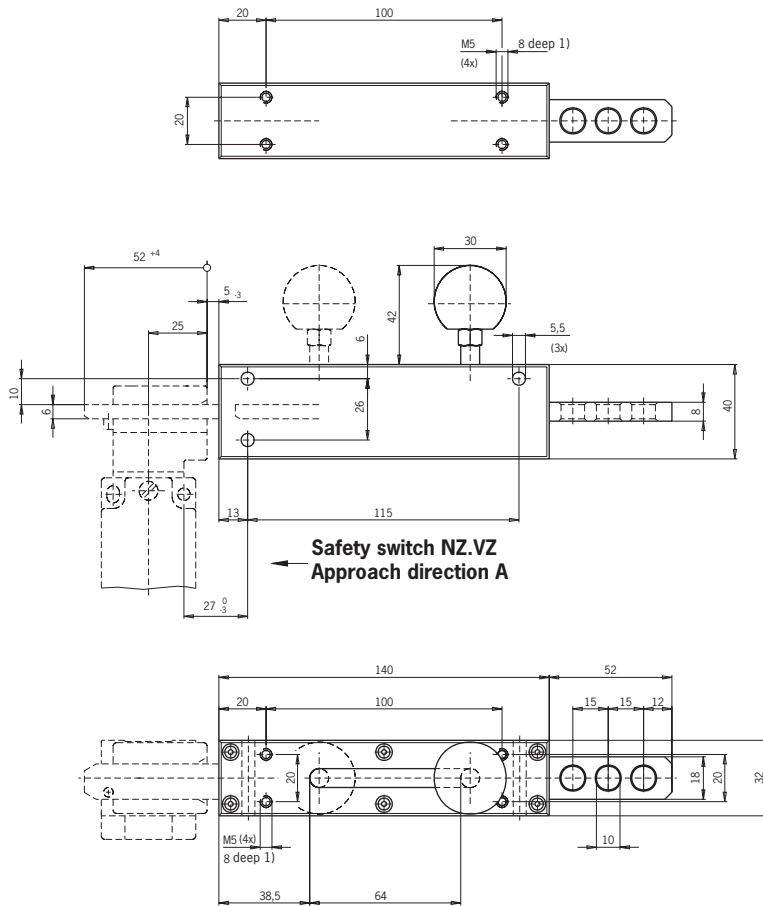
Article	Order No.
<b>Bolt NZ/TZ-G1</b> for doors hinged on the right or left actuating pin on bottom	028 358
<b>Bolt NZ/TZ-G2</b> for doors hinged on the right or left actuating pin on top	028 360

## Bolt NZ/TZ-S.

- ▶ For safety switches series NZ.VZ, NZ.VZ.VS and TZ...
- ▶ Bolt with ball handle

### Dimension drawing

Bolt NZ/TZ-S1 for doors hinged on the right and left



1) Bolt fastening



Bolt NZ/TZ-S2

### Features

- ▶ On bolt **NZ/TZ-S1**, actuating pin on bottom
  - ▶ Safety switch fastened as shown in illustration
- ▶ On bolt **NZ/TZ-S2**, actuating pin on top
  - ▶ Safety switch fastened rotated by 180°
- ▶ After the door is opened, the actuator is automatically withdrawn into the bolt by a built-in return spring
  - ▶ The operator is protected
  - ▶ When the door is open there is no risk of injury due to protruding actuator
  - ▶ The actuator is protected
  - ▶ When hinged doors are closed it is ensured that the actuator is not used as an end stop

### Features

- ▶ Three holes enable padlocks to be attached

### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

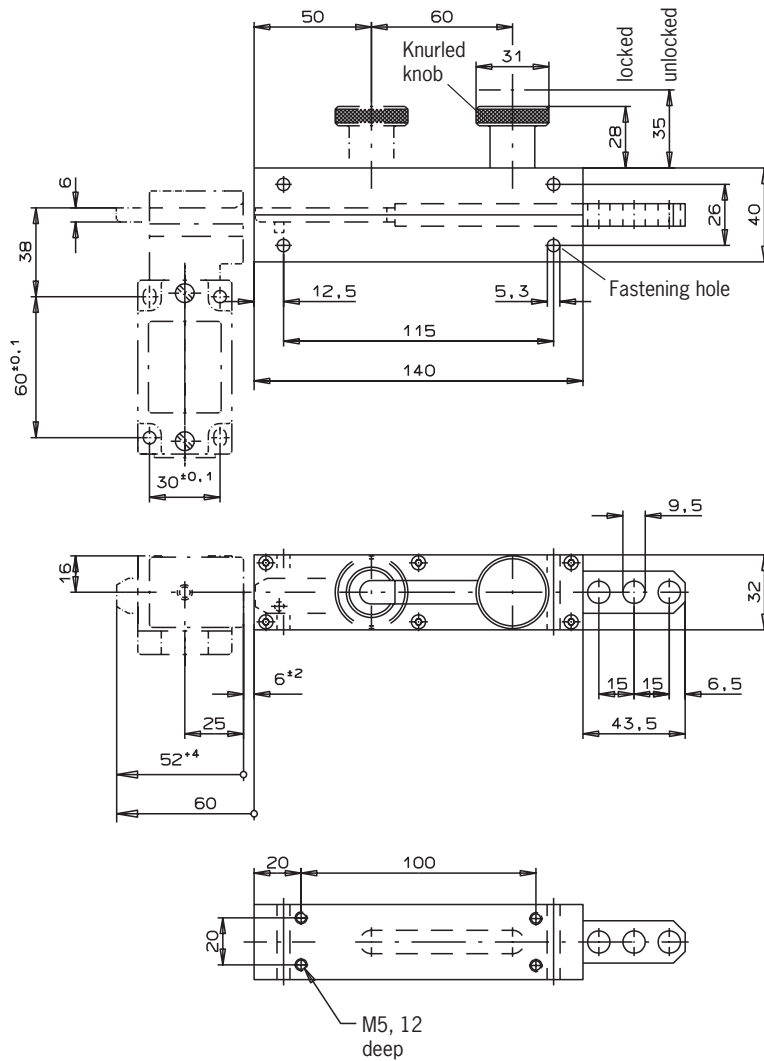
Article	Order No.
<b>Bolt NZ/TZ-S1</b> for doors hinged on the right or left actuating pin on bottom	028 357
<b>Bolt NZ/TZ-S2</b> for doors hinged on the right or left actuating pin on top	028 359

## Bolt NZ/TZ-Z

- ▶ For safety switches series NZ.VZ, NZ.VZ.VS and TZ...
- ▶ Bolt with knurled knob

### Dimension drawing

Bolt NZ/TZ-Z for doors hinged on the right or left



### Features

- ▶ Bolt knob engages in open and closed position. The actuator can be inserted in the safety switch by pulling the knurled knob

### Features

- ▶ Three holes enable padlocks to be attached

### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

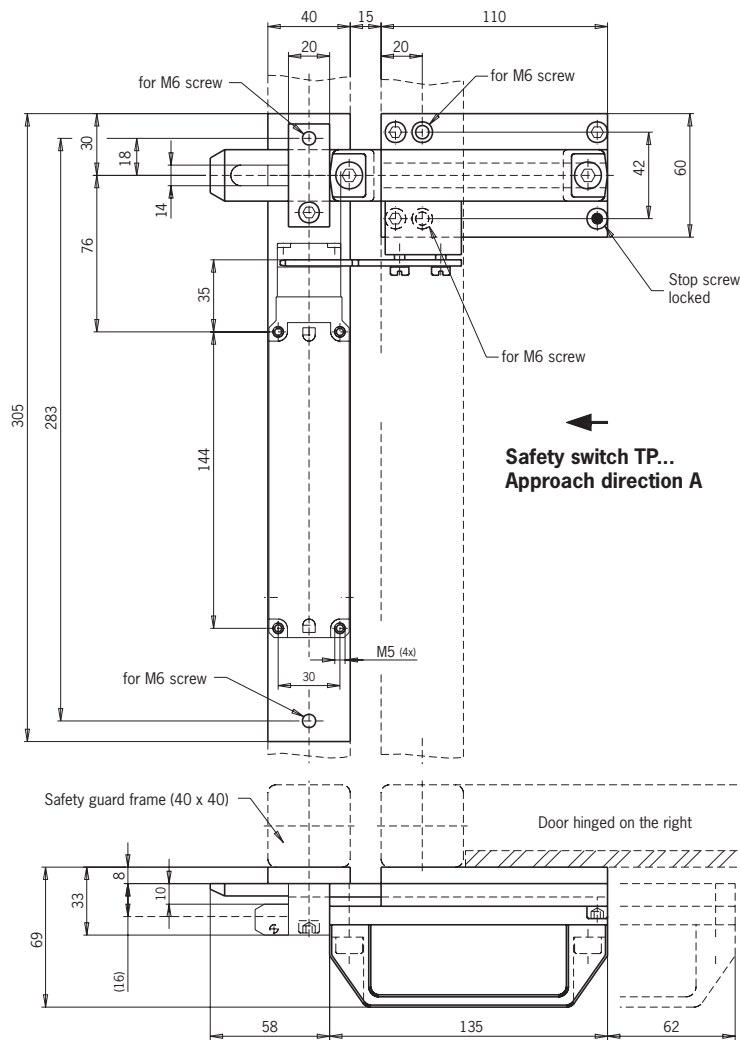
Article	Order No.
Bolt NZ/TZ-Z for doors hinged on the right or left	057 770

## Bolt TP

- ▶ For safety switches series TP..
- ▶ For safety switches series GP..

### Dimension drawing

Bolt TP-A for doors hinged on the right



### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Easy to use
- ▶ Distinctive yellow color for easy recognition
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

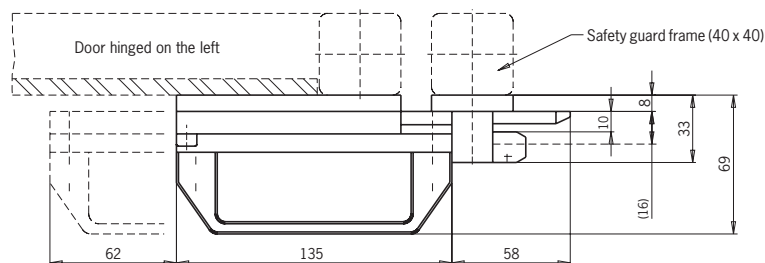
### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

Article	Order No.
<b>Bolt TP-A</b> for doors hinged on the right	084 430
<b>Bolt TP-C</b> for doors hinged on the left	084 432

Bolt TP-C for doors hinged on the left



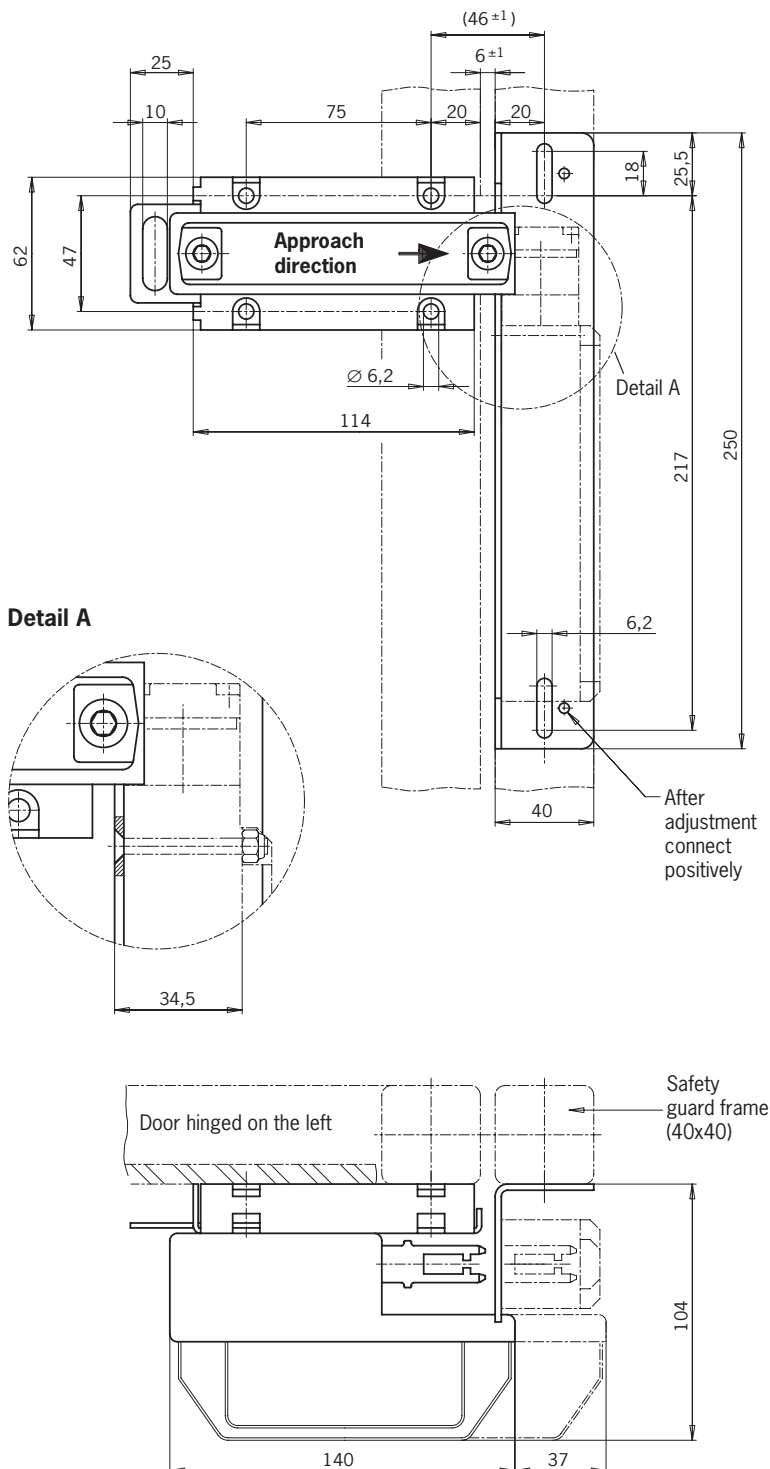


## Bolt TP

► For safety switches series TP...A

### Dimension drawing

Bolt TP for doors hinged on the right or left



### Features

- Easily fitted to standard aluminum profiles and machine covers with screw connection
- Distinctive yellow color for easy recognition
- Symmetrical design for doors hinged on the right or left
- No additional door handle necessary
- Automatic detent mechanism when bolt is moved to the locked position (only on bolt **1 NP/TP** version)
- Detent mechanism prevents unintentional opening of the hinged door
- Slot on the bolt permits attachment of padlocks

### Notes

- Switch bracket **TP** is only suitable for series **TP...A**
- Identical bolt for safety switches series **NP...AS** and **TP...A**
- Actuator included
- Please order safety switch and switch bracket separately

### Ordering table

Article	Order No.
<b>Bolt 0 NP/TP</b> without detent mechanism	073 535
<b>Bolt 1 NP/TP</b> with detent mechanism, 1 x detent mechanism when closed	073 536
<b>Switch bracket TP</b>	073 539

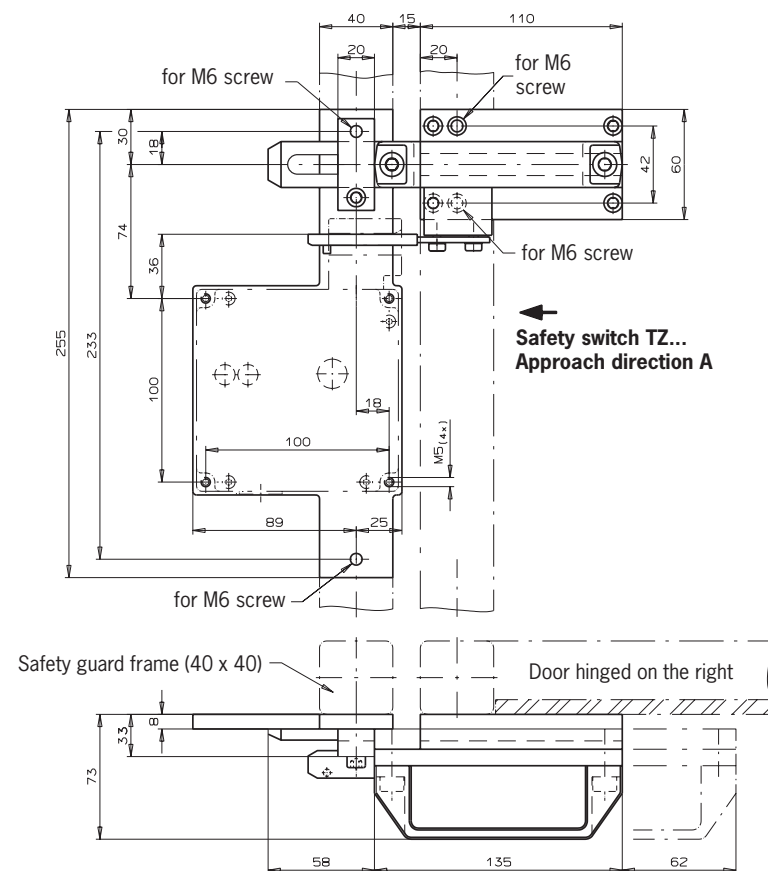


## Bolt TZ..

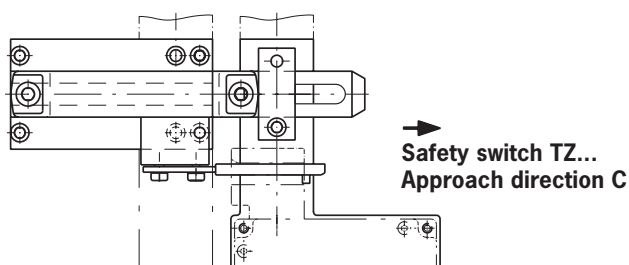
- ▶ For safety switches series TZ...

### Dimension drawing

#### Bolt TZ-A for doors hinged on the right



#### Bolt TZ-C for doors hinged on the left



### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Easy to use
- ▶ Distinctive yellow color for easy recognition
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

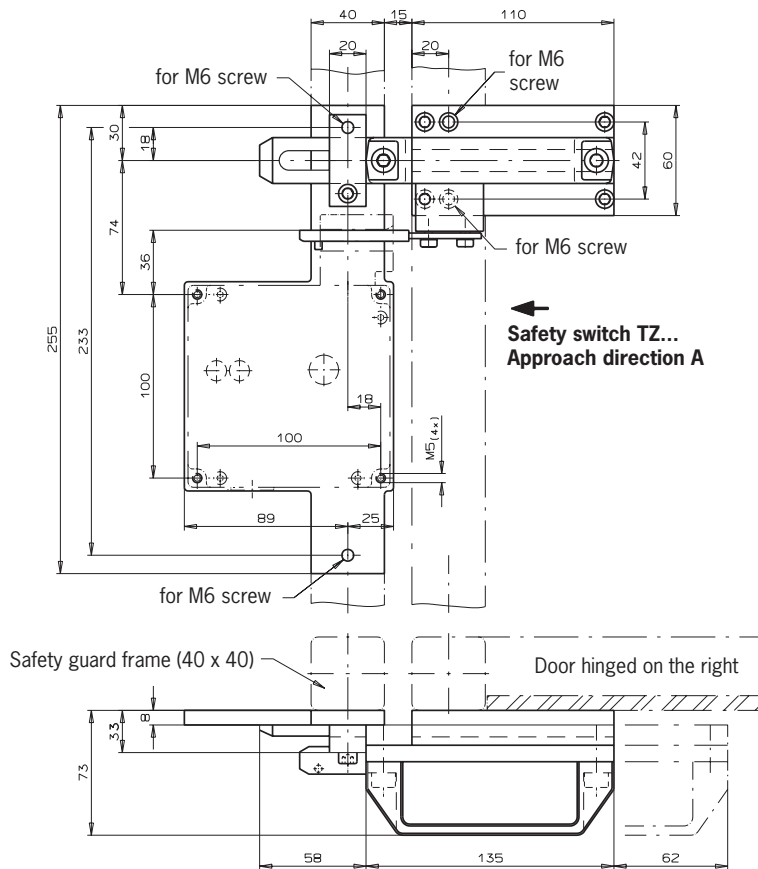
Article	Order No.
<b>Bolt TZ-A</b> for doors hinged on the right	057 736
<b>Bolt TZ-C</b> for doors hinged on the left	057 737

## Bolt TZ..

- ▶ For safety switches series TZ...
- ▶ Stainless steel bolt, 1.4301

### Dimension drawing

Bolt TZ-A for doors hinged on the right



Identical to bolt TZ-A, however without yellow coating

### Features

- ▶ Suitable for use in the chemical and food-stuff industries
- ▶ Screw material stainless steel V2A
- ▶ Handle material polypropylene
- ▶ Slide strip material polyethylene

### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Easy to use
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

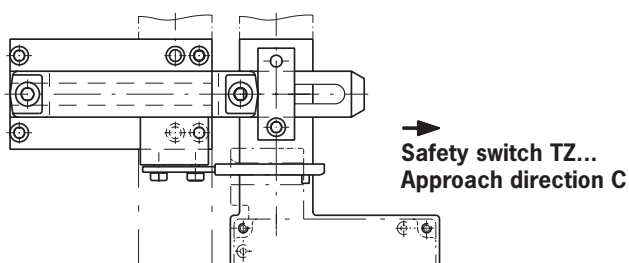
### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

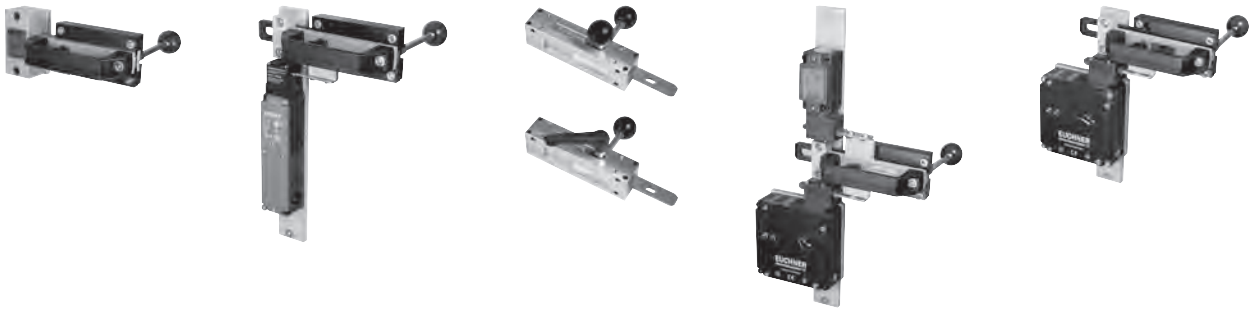
### Ordering table

Article	Order No.
<b>Bolt TZ-A-NIRO</b> for doors hinged on the right	079 798
<b>Bolt TZ-C-NIRO</b> for doors hinged on the left	079 799

Bolt TZ-C for doors hinged on the left



## Bolts with escape release from the danger area



### Bolts with escape release offer the following important advantages:

- ▶ Bolts with escape release allow the operator to open the closed safety guard and escape from the danger area.
  - ▶ The operator is protected in an emergency

If there is a risk that someone may be accidentally locked in an accessible danger area, the EU Machinery directive stipulates: „Machinery must be designed, constructed or fitted with a means of preventing an exposed person from being enclosed within it or, if that is impossible, with a means of summoning help“.

In the case of safety switches with a guard locking, the German trade association recommends the use of a manually operated escape release in accordance with BGI 575. With the escape release, the guard-locking device can be disabled from the inside in case of danger. The escape release for the safety switch must be within easy reach inside the danger area and must be operable without the need for any other tools.

Figure 1 shows a TZ... safety switch in combination with a TZ-F bolt with escape release. With this combination, the escape release can be operated by means of a pushbutton (Figure 1, A) and a lever (Figure 1, B).

With the pushbutton pulled out, the safety switch functions normally and the interlocking process can be triggered by the operator. If there is someone on the hazardous area and the door is accidentally closed and locked, the operator could be at serious risk.

By pressing the pushbutton (escape release, Figure 2, 1), the person locked in can trigger the safety switch's mechanical release. The solenoid monitoring contacts are positively opened. The safety circuit is interrupted and a command to stop the machine operation is triggered.

A lever (Figure 2, 2) facilitates removal of the actuator from the safety switch so that the exit door can be opened from within the danger area.

In order to prevent anyone being locked into the danger area, the following precautions can be taken when using the TZ-F bolt.

- ▶ Pushbutton with lock (Figure 1, A)

The pushbutton (escape release) on the safety switch can only be reset using the related key. The key is only to be accessible for authorized personnel. In this way misuse of the escape release is prevented.

- ▶ Padlock (Figure 3, C)

The bolt tongue has a slot which holds up to three padlocks. When service work is being carried out, the doors cannot be locked thus the machine cannot be started by third parties.

- ▶ Detent knob (Figure 3, D)

Operators with a tendency to monitor the processes closely and on occasion enter the machine pose a high level of risk.

In order to take positive action to prevent anyone locking themselves in a danger area, the actuator can only be inserted in the safety switch from the outside while pulling the detent knob.

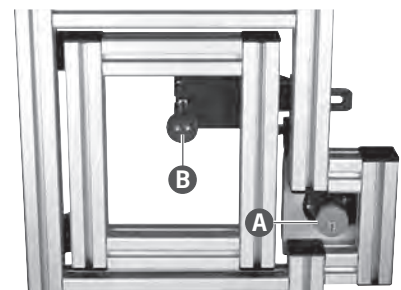


Figure 1: Safety switch with bolt (rear view)

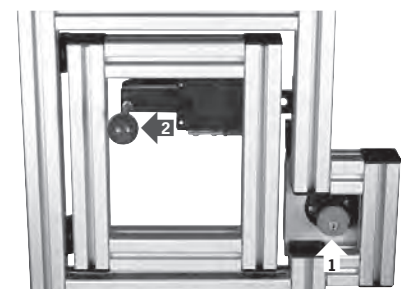


Figure 2: Pushbutton and lever activated

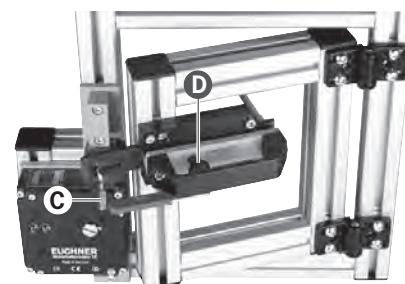


Figure 3: Padlock and detent knob

## Bolt CES-A-A/F

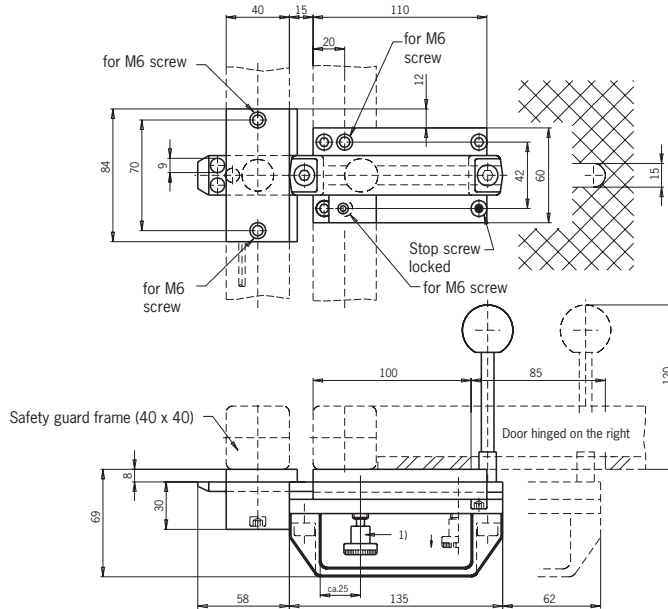


- ▶ For non-contact safety switches series CES-A-ABA... and CES-A-AEA...
- ▶ Lever for escape release from the danger area
- ▶ In combination with read head CES-A-LNA...

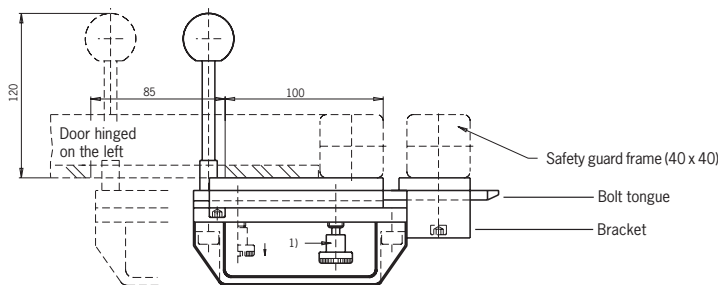
### Dimension drawing

Bolt CES-A-A/F for doors hinged on the right or left

#### Door hinged on the right



#### Door hinged on the left



1) Bolt with detent mechanism  
When the bolt is open, the knob engages preventing unintended closing.  
Unlocked by pulling the detent knob upward.



### Features

- ▶ Easy mounting of the read head on the bracket for the bolt tongue
- ▶ Uniquely coded actuator (one-off)
  - ▶ Absolutely secure against tampering
- ▶ Bolt with detent mechanism
  - ▶ When the bolt is open, the knob engages preventing unintended closing
- ▶ Ball detent mechanism in closed bolt position
  - ▶ Protection against vibration

### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Distinctive yellow color for easy recognition
- ▶ Symmetrical design for doors hinged on the right or left
- ▶ No additional door handle necessary

### Notes

- ▶ CES actuator integrated in the bolt tongue
- ▶ Order read head and evaluation unit separately

### Ordering table

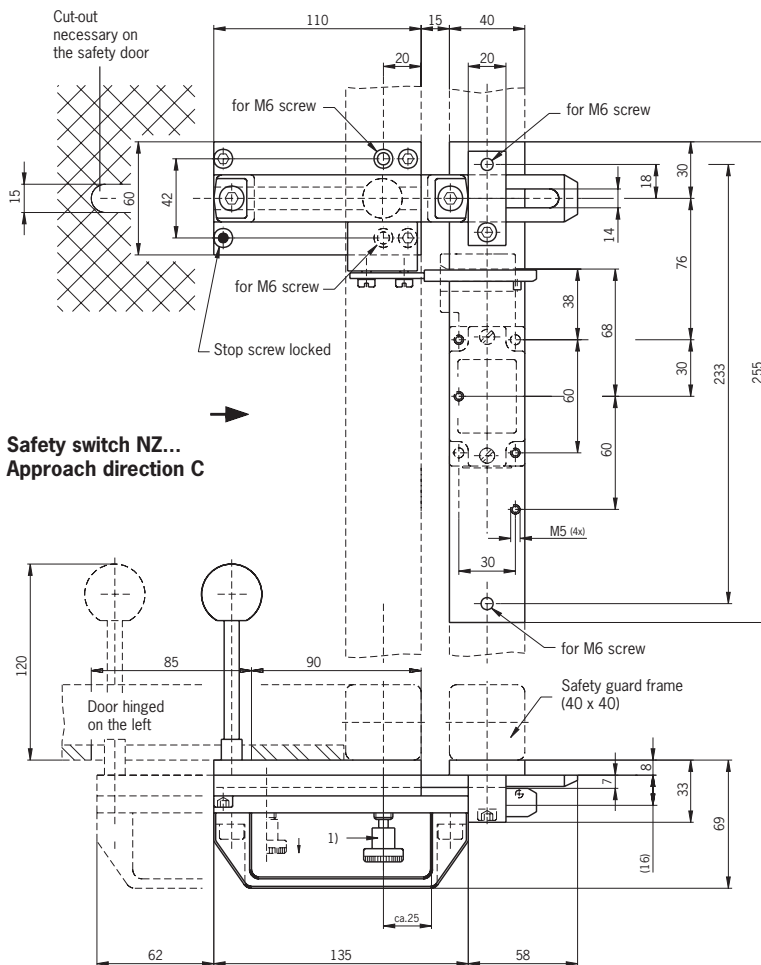
Article	Order No.
<b>Bolt CES-A-A/F</b> for doors hinged on the right or left	086 173

## Bolt NZ-.F

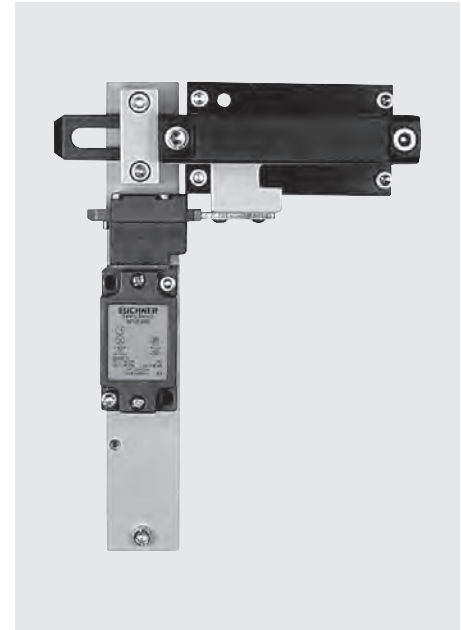
- ▶ For safety switches series NZ.VZ
- ▶ Lever for escape release from the danger area

### Dimension drawing

#### Bolt NZ-CF for doors hinged on the left



- 1) Bolt with detent mechanism  
When the bolt is open, the knob engages to prevent unintended closing.  
Unlocked by pulling the detent knob upward.



### Features

- ▶ Bolt with detent mechanism
- ▶ When the bolt is open, the knob engages to prevent unintended closing

### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Distinctive yellow color for easy recognition
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

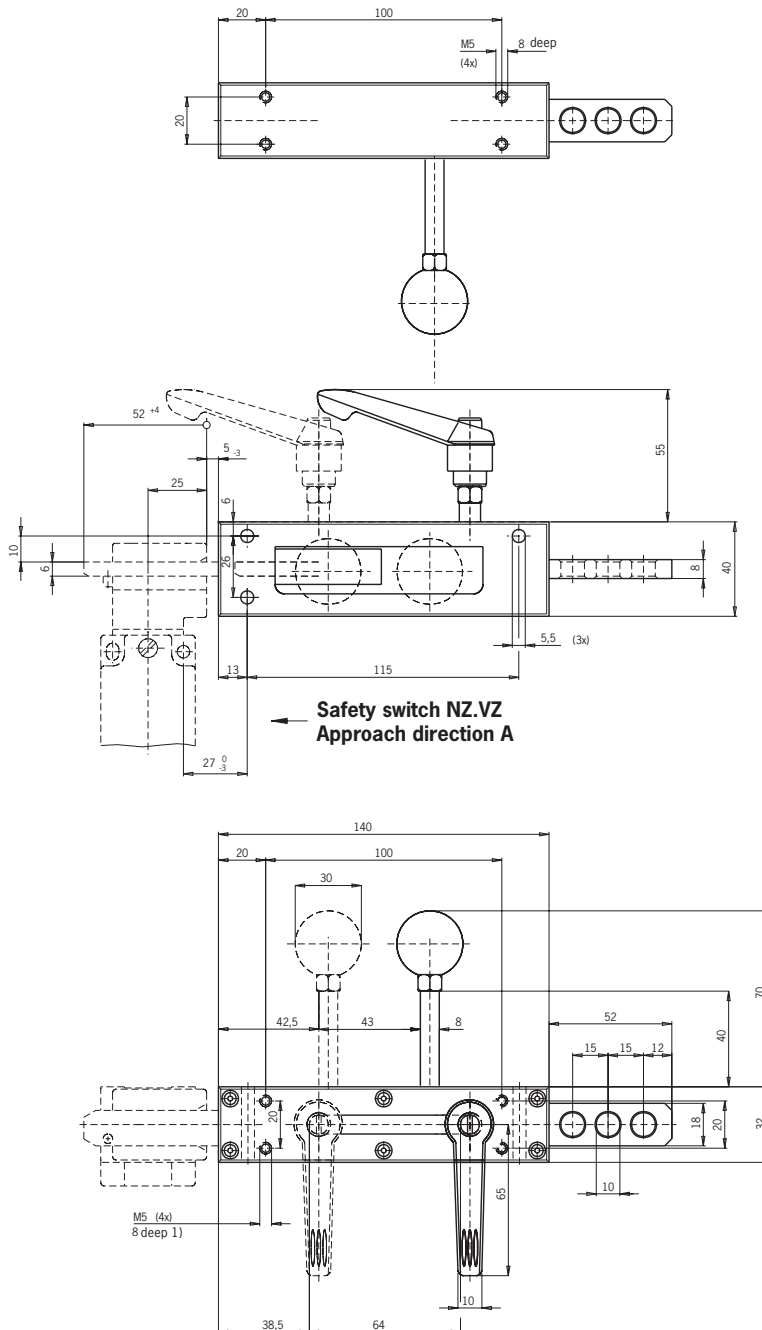
Article	Order No.
<b>Bolt NZ-AF</b> for doors hinged on the right	078 451
<b>Bolt NZ-CF</b> for doors hinged on the left	078 452

## Bolt NZ/TZ-G1/.F

- ▶ For safety switches series NZ.VZ, TZ...-C1684, TZ...-C1815 and TZ...-C1828
- ▶ Lever for escape release from the danger area
- ▶ Bolt with hand lever

### Dimension drawing

Bolt NZ/TZ-G1/AF for doors hinged on the right



1) Bolt fastening



### Features

- ▶ The hand lever can be permanently set to 20 rotary positions (in 18° increments)
- ▶ After the door is opened, the actuator is automatically withdrawn into the bolt by a built-in return spring
  - ▶ The operator is protected
  - When the door is open there is no risk of injury due to protruding actuator
  - ▶ The actuator is protected
  - When hinged doors are closed it is ensured that the actuator is not used as an end stop

### Features

- ▶ The lever for the escape release only enables the doors to be **opened** from inside the danger area
- ▶ Three holes enable padlocks to be attached

### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

Article	Order No.
<b>Bolt NZ/TZ-G1/AF</b> for doors hinged on the right	079 788
<b>Bolt NZ/TZ-G1/CF</b> for doors hinged on the left	079 787

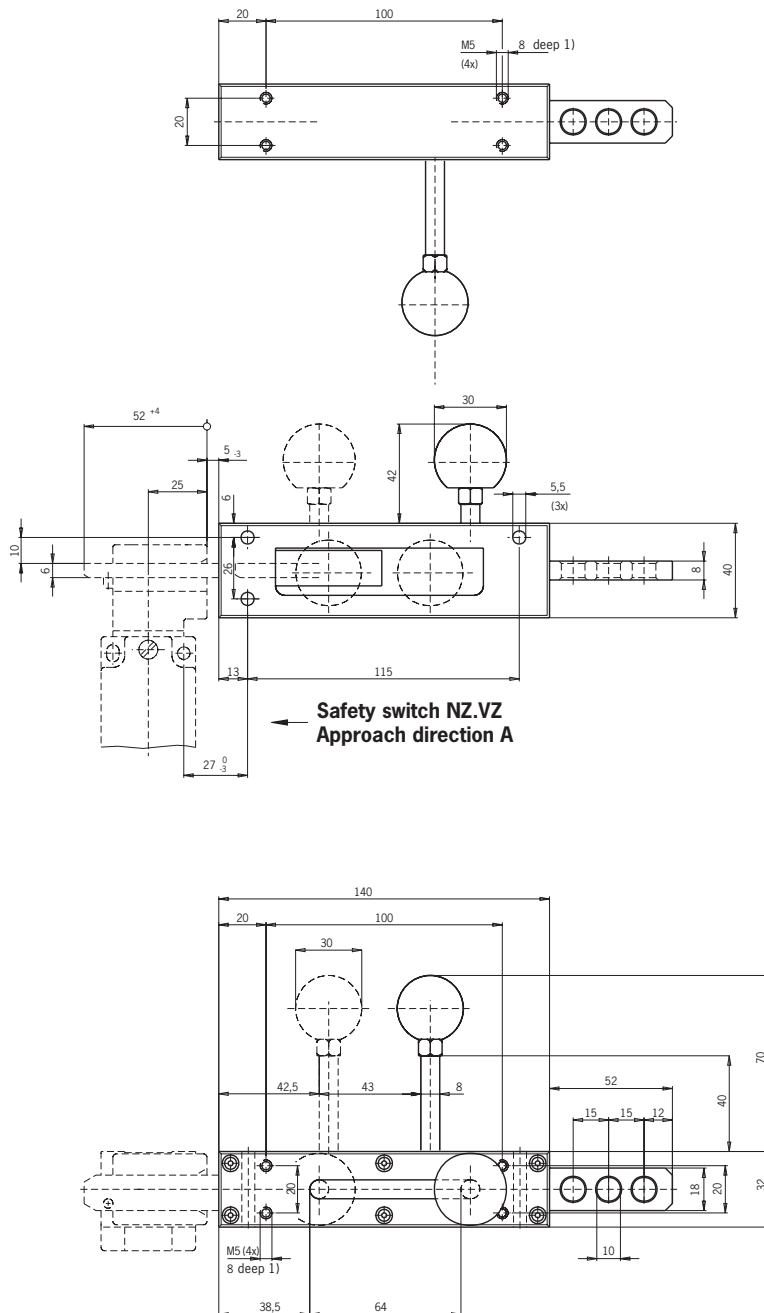


## Bolt NZ/TZ-S1/.F

- ▶ For safety switches series NZ.VZ, TZ...-C1684, TZ...-C1815 and TZ...-C1828
- ▶ Lever for escape release from the danger area
- ▶ Bolt with ball handle

### Dimension drawing

Bolt NZ/TZ-S1/AF for doors hinged on the right



### Features

- ▶ After the door is opened, the actuator is automatically withdrawn into the bolt by a built-in return spring
- ▶ The operator is protected  
When the door is open there is no risk of injury due to protruding actuator
- ▶ The actuator is protected  
When hinged doors are closed it is ensured that the actuator is not used as an end stop

### Features

- ▶ The lever for the escape release only enables the doors to be **opened** from inside the danger area
- ▶ Three holes enable padlocks to be attached

### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

Article	Order No.
<b>Bolt NZ/TZ-S1/AF</b> for doors hinged on the right	079 786
<b>Bolt NZ/TZ-S1/CF</b> for doors hinged on the left	079 785

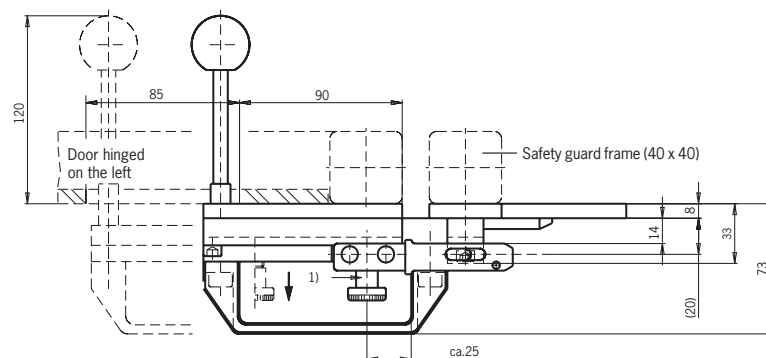
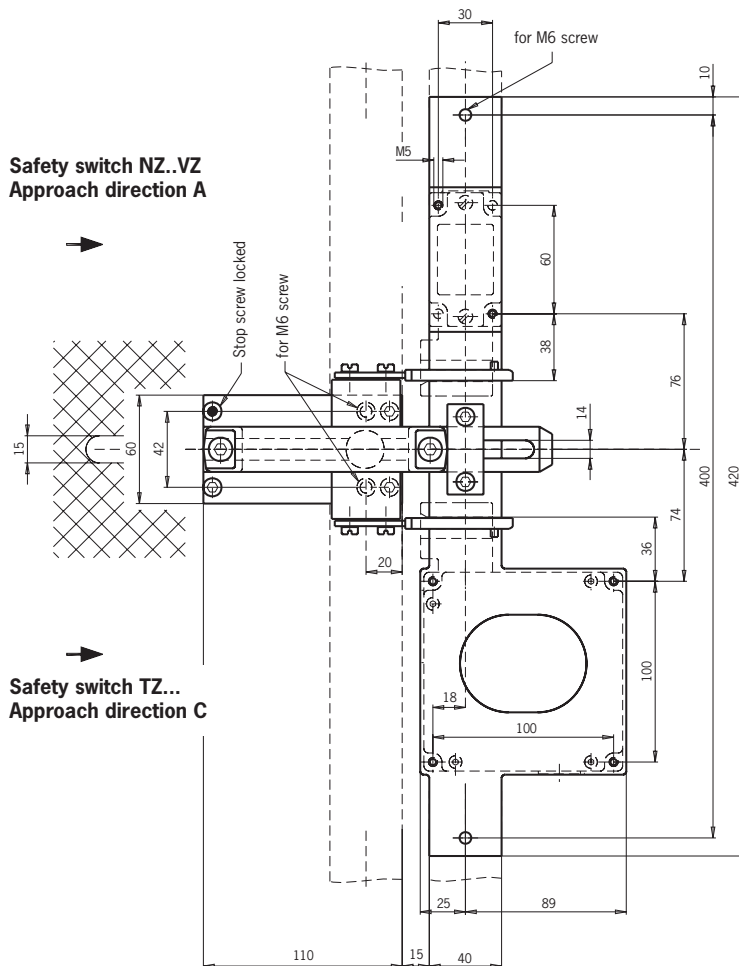
1) Bolt fastening

## Bolt NZ/TZ-ACF

- ▶ For safety switches series NZ.VZ, TZ...-C1684, TZ...-C1815, TZ...-C1828 and NZ.VZ
- ▶ Bolt for 2 safety switches (NZ and TZ)
- ▶ Lever for escape release from the danger area

### Dimension drawing

Bolt NZ/TZ-ACF for doors hinged on the left



- 1) Bolt with detent mechanism  
When the bolt is open, the knob engages to prevent unintended closing.  
Unlocked by pulling the detent knob upward.



### Features

- ▶ One bolt for 2 safety switches (NZ and TZ with guard locking)
  - ▶ A higher safety category (e.g. category 4) is achieved
- ▶ Bolt with detent mechanism
  - ▶ When the bolt is open, the knob engages to prevent unintended closing

### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Distinctive yellow color for easy recognition
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

### Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

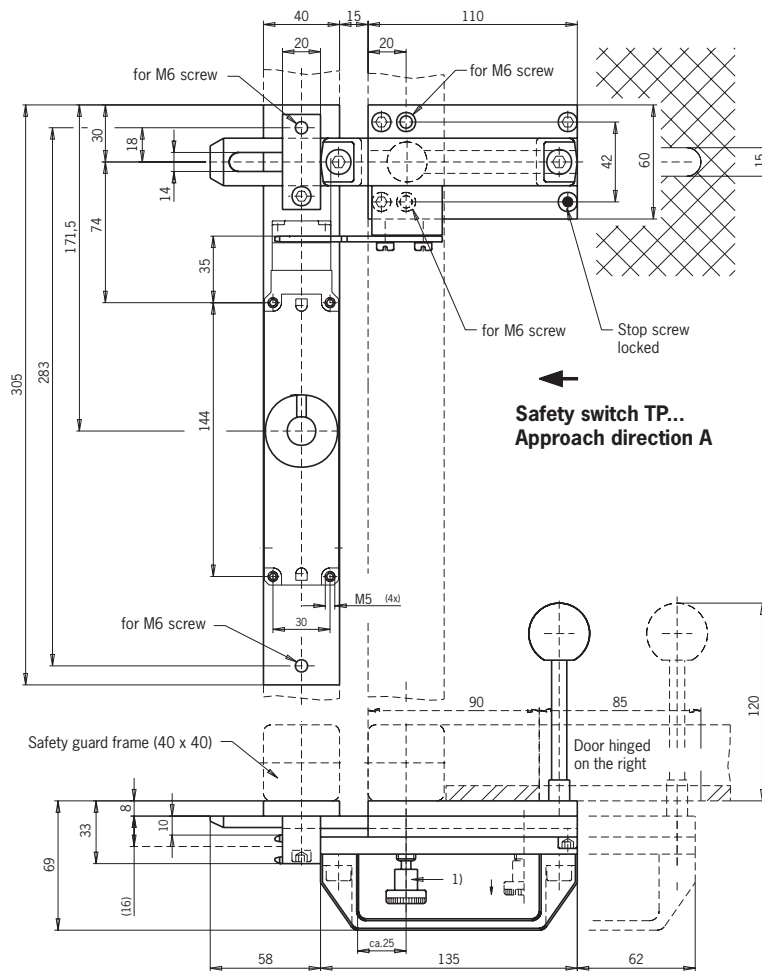
Article	Order No.
Bolt NZ/TZ-ACF for doors hinged on the right or left	083 900

## Bolt TP-.F

- ▶ For safety switches with escape release TP...A.-C1743
- ▶ Lever for escape release from the danger area

### Dimension drawing

Bolt TP-AF for doors hinged on the right



- 1) Bolt with detent mechanism  
When the bolt is open, the knob engages to prevent unintended closing.  
Unlocked by pulling the detent knob upward.



### Features

- ▶ Bolt with detent mechanism
- ▶ When the bolt is open, the knob engages to prevent unintended closing

### Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Distinctive yellow color for easy recognition
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

### Notes

- ▶ The bolt is only suitable for safety switches series TP...A
- ▶ Actuator included
- ▶ Please order safety switch separately

### Ordering table

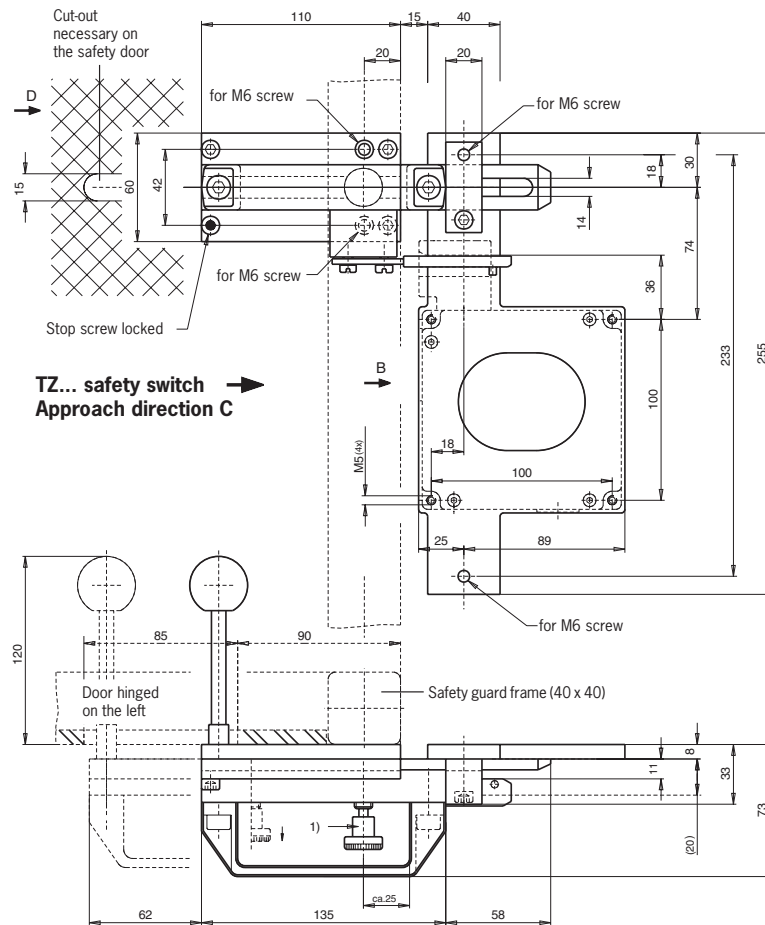
Article	Order No.
<b>Bolt TP-AF</b>	
for doors hinged on the right	086 186
<b>Bolt TP-CF</b>	
for doors hinged on the left	086 188

## Bolt TZ-F

- ▶ For safety switches series TZ...-C1684, TZ...-C1815 and TZ...-C1828 with escape release
- ▶ Lever for escape release from the danger area

## Dimension drawing

Bolt TZ-CF for doors hinged on the left



1) Bolt with detent mechanism  
When the bolt is open, the knob engages to prevent unintended closing.  
Unlocked by pulling the detent knob upward.



## Features

- ▶ Bolt with detent mechanism
- ▶ When the bolt is open, the knob engages to prevent unintended closing

## Features

- ▶ Easily fitted to standard aluminum profiles and machine covers with screw connection
- ▶ Distinctive yellow color for easy recognition
- ▶ Robust version for heavy doors
- ▶ No additional door handle necessary
- ▶ Slot on the bolt permits attachment of padlocks

## Notes

- ▶ Actuator included
- ▶ Please order safety switch separately

## Ordering table

Article	Order No.
<b>Bolt TZ-AF</b>	
for doors hinged on the right	076 200
<b>Bolt TZ-CF</b>	
for doors hinged on the left	076 199

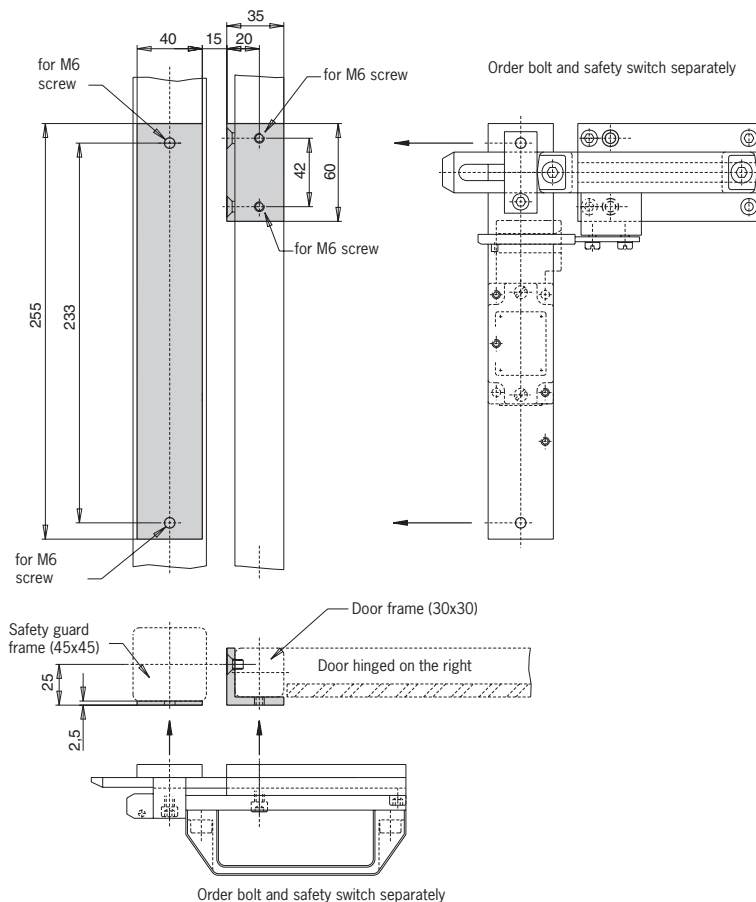
## Accessories

### Adapter NZ/TZ..

- ▶ For bolts for safety switches series NZ..., TZ...
- ▶ In combination with Bosch EcoSafe 45x45, 30x30

### Dimension drawing

(Adapter set in gray)



### Features

- ▶ Using the adapter set the bolts **NZ...** and **TZ...** can be fastened to aluminum profiles (Bosch EcoSafe)
- ▶ The adapter set is only suitable for protection cross-beams 45x45 mm in combination with safety doors 30x30 mm
- ▶ Simple screw mounting
- ▶ Symmetrical design for doors hinged on the right or left

### Notes

- ▶ 4 fastening screws for bracket included
- ▶ Order bolt and safety switch separately

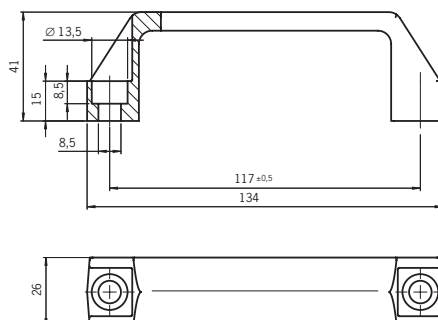
### Ordering table

Article	Order No.
Adapter NZ/TZ 45/30	079 033

### Bolt handle

- ▶ Replacement handle for EUCHNER bolts

### Dimension drawing



### Features

- ▶ Material: plastic, reinforced polypropylene (PP)
- ▶ Color: black, mat
- ▶ Temperature resistance up to 100 °C

### Notes

- ▶ Screws not included

### Ordering table

Article	Order No.
Bolt handle/V5 (qty. 5 per packet)	093 500