



# Arrester Systems Technical Information

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ASSA ABLOY

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Whatever you want to secure, protect, maintain –  
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Airport Zurich

ASSA ABLOY Sicherheitstechnik GmbH is your professional partner worldwide in mechanical and electro-mechanical security solutions for safety, security and convenience in buildings.

The company develops, produces and markets high-quality products and multi-purpose systems under the established IKON and effeff brand names for the private, commercial and public sectors.

ASSA ABLOY Sicherheitstechnik is considered a highly competent and reliable partner by its clients. This security company wins through due to its comprehensive know-how, state-of-the-art technology, creative ideas and innovative production processes. Besides comprehensive system solutions for the private and commercial security sectors, ASSA ABLOY Sicherheitstechnik also offers its customers a whole range of services, expert guidance and solution concepts for individual requirements and special applications.

The security expert solutions can be found in many buildings and facilities, ranging from the Olympic Stadium in Berlin through to the Nürnberger Versicherungen Arena up to the Elbe Philharmonic Hall in Hamburg. IKON and effeff products are also used worldwide – from Beijing through Dubai up to London.

# We assist you with words and deeds

Hotline Technical advice

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The experts at ASSA ABLOY Sicherheitstechnik would be pleased to advise you which electric strike model is most suitable for which installation position.

**Technical advice**

In terms of technical advice with us, you will be supported by professionals who will continue to help you on every question on technical details. Of course you can also be put into contact with specialists regarding of technical risk assessments or key accounts.

**Customer Service Sales / Order processing**

With our commercial customer services you can clarify all questions relating to your purchase order, for example the status of the order processing, the delivery date, purchase order changes, but also returns or guarantee issues. Use this simple and quick option to get information or help from our specialists. We will do that with pleasure.

**Training**

With the ASSA ABLOY Academy, we offer you a free eLearning tool. Learn whenever and wherever you want: [www.effeff.de](http://www.effeff.de) → Section **Service**.

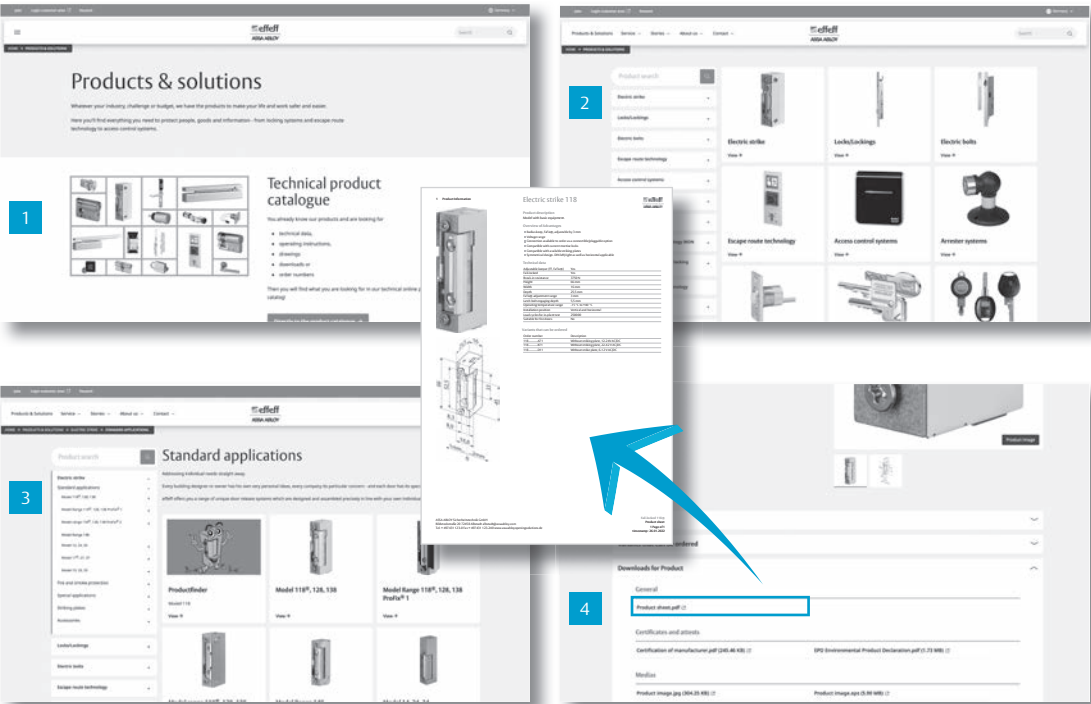
**Exhibitions**

You will find effeff at many national and international exhibitions. You can obtain the exact dates from our website: [www.effeff.de](http://www.effeff.de)

## Our product catalogue online at [www.effeff.de](http://www.effeff.de)

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- 1  
Clearly arranged layout  
according to our different  
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you navigate through our  
database ...
- 3  
... to find the model you  
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- 4  
By just clicking on  
„Download for Product“,  
you can generate a  
detailed specification  
sheet.



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### Safety is a top priority

Legislation requires fire protection and smoke control barriers to be permanently closed.

This requirement is essential, as such barriers are very effective in preventing flaming fire, dangerous smoke and fumes from spreading.

However, in places such as hotels, kindergartens, hospitals and business premises, passageways need to be unobstructed to ensure unimpeded access for visitors and employees.

### Two requirements, a single solution

How can two such conflicting requirements be met? With effeff's arrester systems.

The design is quite simple, but extremely effective. Fire protection and smoke barriers are fitted with a door closer and an arrester system. Under normal circumstances, the hold-open device, an electromagnet, holds the door open. Visitors can pass through freely and company business is not hindered by the constant opening and closing of doors while fire detectors monitor critical areas.

### Reliable protection

If a hazardous situation should arise, the fire detectors automatically detect even the tiniest concentration of smoke and fumes day and night, also at weekends and outside working hours. They then instantly transmit an alarm signal to an arrester system door control unit. This interrupts the power feed to the electromagnet

and the door closer shuts the doors completely automatically. The spread of fire and associated highly toxic smoke and fumes is thus effectively prevented.

If people are in an area where a fire is burning, they can still escape through the doors; after they leave, door closers will reliably ensure that doors are shut, so that they are impervious to smoke.

### A complete system

effeff supplies all components for a fully functional system:

- Fire detectors
- Arrester system door control unit
- Holding magnets and their counterplates
- Interrupter buttons
- Door closers\*

All components in this system are ideally matched and are carefully tested, thus guaranteeing reliable function and a long, trouble-free service life to protect both people and property effectively.

### Note:

Also see our new door closer catalogue (Item no. 2.1901-161 000 01).



# The design concept

## Why install fire protection barriers?

Fire and smoke control doors, smoke control shutters and similar structural measures are legally required fire protection barriers. In the event of a fire, they prevent poisonous fumes, smoke and fire spreading through openings in walls and ceilings, thus protecting both people and property. Fire protection and smoke control barriers must be closed at all times.

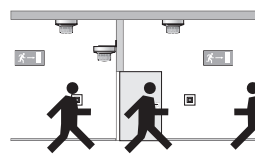
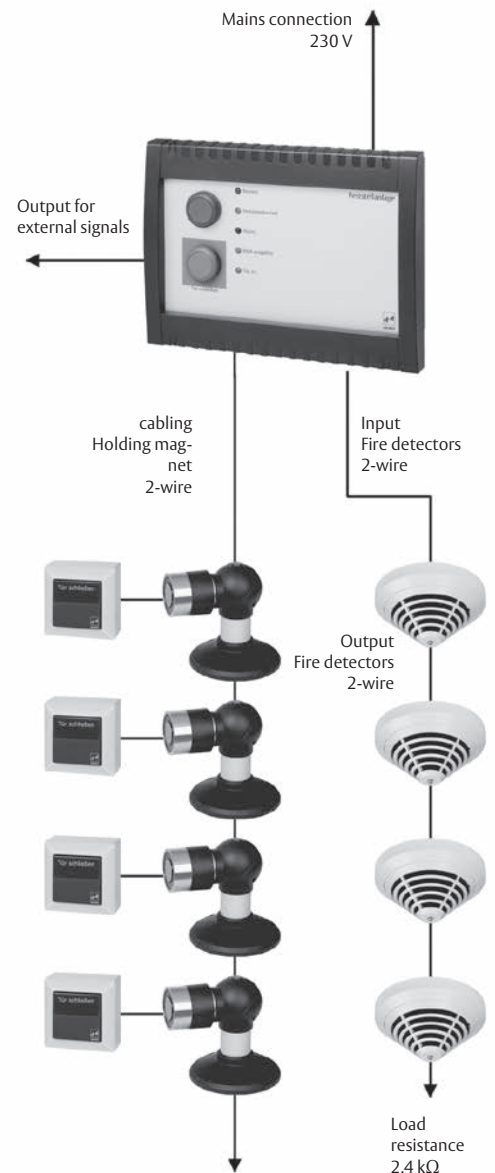
**The disadvantage:** closed doors hinder the movement of people and goods.

**The danger:** fire protection and smoke control barriers are propped open by doorstops or similar, meaning that the barriers will no longer serve their purpose in the event of fire, resulting in a risk to life.

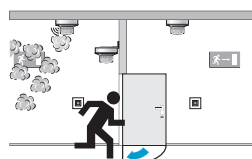
**The solution:** effeff arrester systems hold fire and smoke control barriers open, allowing people and goods to pass through unhindered. In the event of an emergency, when a fire breaks out, fire protection and smoke control barriers are securely closed, thus ensuring that their protective function comes into effect.

## The operating principle

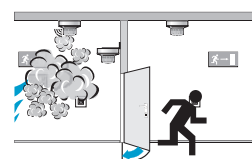
Fire protection barriers must be self-closing. However, to ensure that people and goods can pass through unhindered, arrester systems hold such barriers open when in a normal operating state. If a fire should break out, fire detectors identify high concentrations of smoke gas. Doors are then released and close automatically.



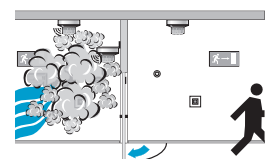
Fire protection and smoke control barriers are held open when in a normal operating state. People and goods may pass through unhindered.



If a fire breaks out, the magnets are switched off and the fire protection and smoke control barriers close.



Fire compartments are closed.



Escape routes remain free of smoke.

### The components

Arrester systems for fire barriers basically consist of several components:

- **The hold-open devices (holding magnets),** which hold the doors open during normal operations. These devices release doors in the event of an alarm or if triggered manually.
- **Fire detectors,** which mainly comprise optical smoke detectors. These devices monitor the concentration of smoke gas in an area. If the concentration increases, fire detectors switch to alarm status. Another method used is the monitoring of room temperature, using heat detectors. If the room temperature reaches or exceeds 54°C in a short space of time, the detectors switch to alarm status.
- The **arrester system door control unit** as the main power and activation device. This unit receives signals from fire detectors and evaluates them; in the event of an alarm or if the integrated release switch is activated, the arrester system door control unit cuts the power supply to the magnets. Doors can now close securely and thus seal off the rest of the building.
- The **manual release buttons,** installed right next to doors and used to close doors manually. If this button is pressed, the power circuit to magnets is interrupted and the door is closed.

### Arrester system planning and installation

Arrester systems for fire protection barriers must have a national technical approval. effeff arrester systems are approved by the DIBt, the German Institute for Structural Engineering. They hold System Approval no. Z -6.5-2122.

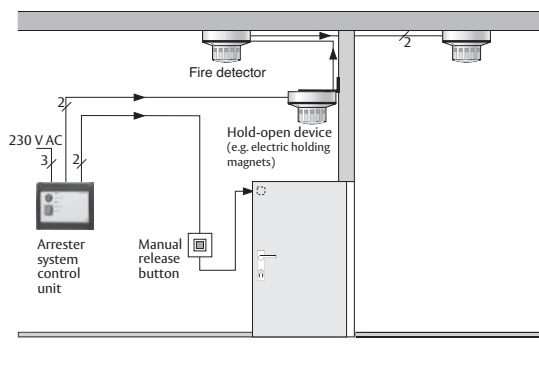
The following devices are approved for use with the system. You may only use these devices in conjunction with an arrester system for fire protection barriers:

• **Arrester system control unit:**  
Model 92020-10

• **Fire detectors:**  
Smoke Detector Model 60060  
Heat Detector Model 60061  
(see adjacent table with compatible smoke detectors)

• **Hold-open device:**  
Electric holding magnets  
Model 830-3 (holding force: 300 N)  
Model 830-5 (holding force: 500 N)  
Model 830-8 (holding force: 800 N)  
Model 830-12 (holding force: 1200 N)  
The system approval also covers the electric holding magnets in Model Series 837/838/858.

• **Manual release button:**  
Model 1316  
Model 1317



# Components

## Overview of compatible smoke detectors

Manufacturer	Type	Identifier
BOSCH	Optical smoke detector	FCP-0320
	Rate-of-rise heat detector	FCH-T320-FSA
	Optical smoke detector	0300
	Rate-of-rise heat detector	T300/FSA
Siemens	Optical smoke detector	FDOOT241-9
	Smoke detector	SDF200
	Heat detector	SDT210
	Smoke detector	DO1101A
	Heat detector	DT1101
Esser (Honeywell)	Optical smoke detector	Series 9000 / 761362
	Rate-of-rise heat detector	Series 9000 / 761262
	Each with a detector base	Series 9000 / 781590
Apollo	Opt. smoke detector Series S65	55000-317DBT
	Heat detector	55000-122DBT
	Each with a detector base	45681-200
Detectomat	Optical smoke detector	CT3000 O
	Optical smoke detector	CT3002 O
ASSA ABLOY	Smoke detector (design identical to BOSCH FCP-0320)	60060
	Heat detector (design identical to BOSCH FCH-T320-FSA)	60061
	Optical smoke detector	60030
	Heat detector	60101

## Guide rails with integrated, electromagnetic hold-open mode

Manufacturer	Type	Identifier
ASSA ABLOY	Overhead guide rail	Model G-E (single-leaf door)
	Overhead guide rail (hold-open function on both sides)	Model G-CO-E (two-leaf door)
	Overhead guide rail (hold-open function on active leaf)	Model G-CO-E1 (two-leaf door)
	Concealed guide rail	Model G880 (single-leaf door)
	Concealed guide rail (hold-open function on both sides)	Model G882 (two-leaf door)
	Concealed guide rail (hold-open function on active leaf)	Model G884 (two-leaf door)

Approval status available on request.

# Arrester System Control Unit Model 92020-10



## Arrester System Control Unit Model 92020-10

Tripping device with integrated power supply. The arrester system control unit forms the core piece of the overall arrester system. This unit receives signals from fire alarms, evaluates them and then the arrester devices are activated as required.

### Max. Number of magnets attachable

	Model 92020-10
Model 830-3	up to 10
Model 830-5	up to 10
Model 830-8	up to 10
Model 830-12	up to 5
Model 837...	up to 7
Model 838...	up to 5
Model 858...	up to 2

Technical attributes	
Approvals	DIBT (German Institute for Structural Engineering) approval Z -6.5-2122
Height	175 mm
Width	240 mm
Depth	90 mm
Number of fire detectors which can be connected	10
Relay outputs	2 x potential-free 24V / 30W
Operating temperature range	0 to +40 °C
Class of protection	IP 30
Material housing	Plastic
Lower section of casing	Signal grey, similar to RAL7004
Upper section of casing	Graphite grey, similar to RAL7024
Supply voltage	230 V AC/ 50 Hz
Input operating voltage	24 V DC
Output voltage detector	12 or 24 V DC, switchable depending on detector type
Output voltage arrester components	24V DC
Max. output current (arrestor components & ext. units)	about 650 mA / 24V DC

Feature	Order no.
Smoke protection switch	9 2 0 2 0 - 1 0 - - - - 0 0



### Which fire detector is suitable for each particular room?

According to the system approval, you may use two different types of fire detector in effeff arrester systems:

- Optical Smoke Detector Model 60060
- Heat detector, Rate-of-Rise Heat Detector 60061

The type of detector that you use depends on the probable, hypothetical origin of a fire and how it would likely spread.

Almost all fires start with an incipient stage. Long before a fire becomes fully developed, it can be detected due to the smoke and fumes that it produces. In the case of arrester systems for fire protection and smoke control barriers, **optical smoke detectors** are used almost exclusively, since they are able to reliably detect smoke and fume particles in the air.

Only use heat detectors by way of exception in:

- Rooms where dust, smoke, steam and aerosols are produced, as smoke detectors can be triggered during normal operations in such places.

**Examples:**

woodworking facilities, kitchens and similar

- Rooms where a fire may start with a short incipient stage or none at all.

**Examples:**

ignition of solvent vapours, liquids and similar

### Tip Choose smoke detectors before heat detectors

You should always use smoke detectors wherever you can.

Smoke detectors are mandatory in arrester systems for fire barriers along escape routes and in arrester systems for smoke control doors.

# Smoke Detector Model 60060



## Smoke Detector Model 60060

Optical smoke detector with base to connect directly to the smoke protection switch. Optical smoke detector with an integrated visual alarm indicator.

Technical attributes	
Detector type	Optical smoke detector
Class of protection	IP 30
Housing material	Plastic, ABS
Colour	White, similar to RAL 9010 / matt surface
Dimensions with base	Diameter: 120 mm; height: 63.5 mm
Operating temperature range	-20 °C to +65 °C
Wiring in the detector	Surface and flush mount
Operating voltage	8.5V DC to 33V DC

Feature	Order no.
Smoke detector	6 0 0 6 0 - - - - - 0 0



## Heat Detector Model 60061

Rate-of-rise / fixed temperature heat detectors with integrated alarm indicator and base connected to the smoke protection switch. Heat detectors for detecting fires with a fast rise in temperature. The temperature gauge activates alarm status when the maximum temperature exceeds 54°C (fixed temperature) or the temperature rises a specific amount within a specified time period (rate-of-rise).

Technical attributes	
Detector type	Fixed temperature / rate-of-rise
Class of protection	IP 30
Housing material	Plastic, ABS
Colour	White, similar to RAL 9010 / matt surface
Dimensions with base	Diameter: 120 mm; height: 63.5 mm
Operating temperature range	-20 °C to +50 °C
Wiring in the detector	Surface and flush mount

Feature	Order no.
Heat detector	6 0 0 6 1 - - - - - 0 0



## Angle Bracket Model 60004

Angle bracket to install fire detectors on lintels.

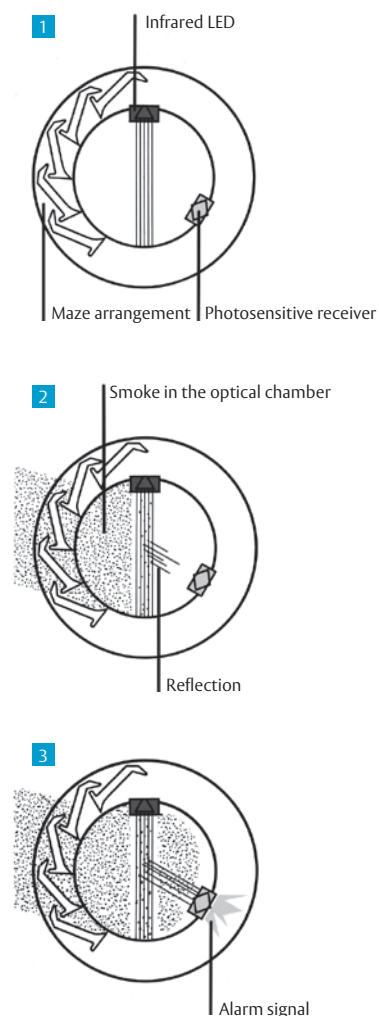
Technical attributes	
Height	40 mm
Width	103 mm
Depth	113 mm
Material	Stainless steel

Feature	Order no.
Stainless steel, complete with fastening screws	6 0 0 0 4 - - - - - 0 0

# Fitting and installation

## Fire detectors

How does a fire detector work?



### How they work

Optical smoke detectors use light-sensing technology to identify the presence of smoke. The inside of a smoke detector is similar to a maze, thus preventing any light from entering from the outside. Generated as a series of pulses, the light beam is reflected by any smoke which gets inside the detector and is directed at a light-sensitive sensor. This incidence of light causes the current to increase. If the threshold value is exceeded, smoke is detected, thus triggering an alarm signal.

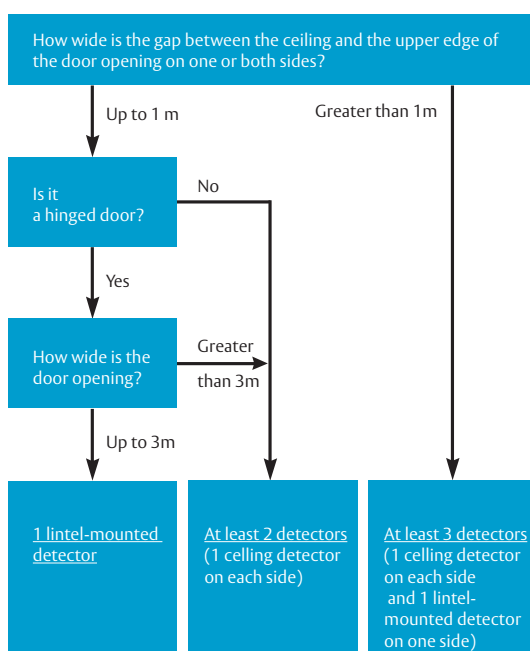
Optical smoke detectors respond to incipient fires with larger, bright smoke particles at a very early stage. They offer a particular advantage, as they are quickly activated in the event of an incipient fire involving plastics, flaming fires fuelled by plastics and flammable liquid fires with smoke emission.

### Installation in wall openings

#### Fire detector monitored areas

Several fire detectors are usually required to ensure optimum monitoring. Fire detectors feature a limited detection area up to 4 metres in diameter. You must take special care to ensure that the whole width of an opening is monitored in certain structural layouts. You must use more detectors for very high ceilings or for door openings (hinged doors) which are wider than 3 metres.

How many fire detectors are required?

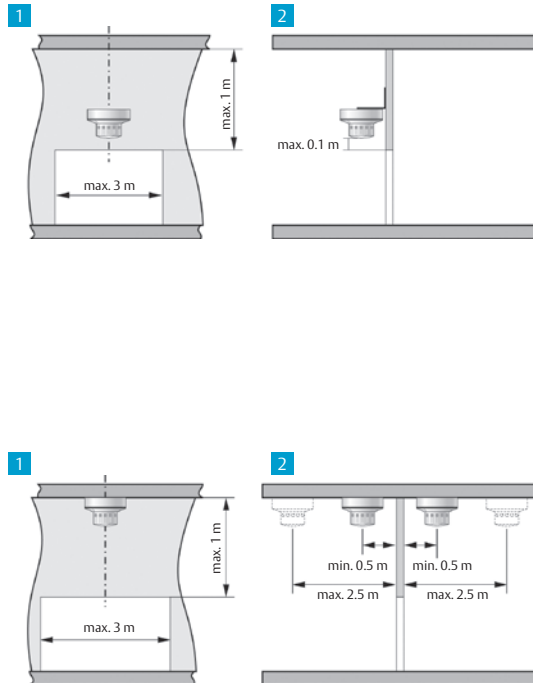


### Number of fire detectors

The required number of fire detectors and their correct installation depend on structural conditions. The diagram on the left shows how you can quickly and easily calculate the required minimum number of detectors.

# Fitting and installation

## Fire detectors



### Installation dimensions and required distances

The distance between the ceiling and the upper edge of the door opening is up to 1 m and the door in question is a hinged door with a clearance width up to 3 m.

- You need at least one lintel-mounted detector on one side or the other.

You should always fit a lintel-mounted detector in an upright position. Use Mounting Bracket order no. 60004 if required.

It is best to fit the lintel-mounted detector in the centre, directly above the opening and at a maximum of 0.1 m from the upper edge of the door opening.

The distance between the ceiling and the upper edge of the door opening is up to 1 m and the door in question is a sliding or roll-up door or a hinged door with a clearance width over 3 m.

- You need at least 2 detectors, that is, 1 ceiling detector on each side.

Always mount ceiling detectors on a fire-rated ceiling, i.e. on the first jointless, smoke-proof ceiling. Always install it where you may first expect the largest concentration of smoke gas.

Always mount detectors in a vertical position above the wall opening.

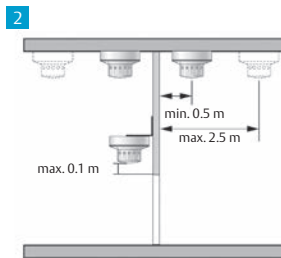
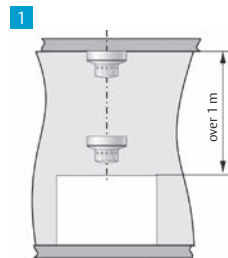
The distance to the wall containing the opening must be at least 0.5 m and may be a maximum of 2.5 m.

### Note

- Fire detectors which are installed in a different way or in positions other than those indicated here, may be connected, but are not valid as required detectors as defined by DIBt in its communications.
- If openings are wider than 4 m, they must feature more fire detectors.

# Fitting and installation

## Fire detectors



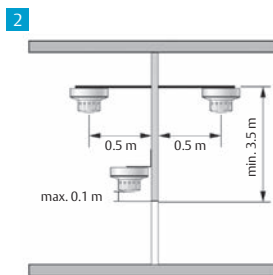
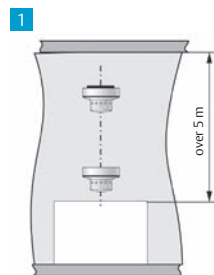
If the distance between the ceiling and the upper edge of the door opening is greater than 1 m, the type of door is irrelevant.

- You need at least 3 detectors, that is to say, 1 ceiling detector on each side and one lintel-mounted detector on one side. Always fit lintel-mounted detectors in the upright position.

Use Mounting Bracket order no. 60004 if required. It is best to fit the lintel-mounted detector in the centre, directly over the opening and at a maximum of 0.1 m from the upper edge of the door opening. Always mount ceiling detectors on a fire-rated ceiling, i.e. on the first jointless, smoke-proof ceiling. Always mount them where you may first expect the largest concentration of smoke gas.

Always fit detectors in a vertical position above the wall opening.

The distance to the wall containing the opening must be at least 0.5 m and may be a maximum of 2.5 m.



The gap between the upper edge of the door opening and the ceiling is greater than 5 m.

- You need at least 3 detectors, that is to say, 1 ceiling detector on each side and one lintel-mounted detector. Ceiling detectors may be installed on cantilever arms 0.5 m long. You must attach these cantilever arms at least 3.5 m above the upper edge of the door opening. The specifications for lintel-mounted detectors remain the same.

Always fit lintel-mounted detectors in the upright position.

Use Mounting Bracket order no. 60004 if required. It is best to fit lintel-mounted detectors in the centre, directly above the opening and at a maximum of 0.1 m from the upper edge of the door opening.

### Note

- Fire detectors which are installed in a different way or in positions other than those indicated here, may be connected, but are not valid as required detectors as defined by DIBt in its communications.
- If openings are wider than 4 m, they must feature more fire detectors.



### Holding magnets

effeff's comprehensive range of holding magnets may be used in almost all types of applications. Whether you require holding magnets to be fitted to the wall or in the floor with corresponding spacers, effeff is your expert partner worldwide.

The use of door closers with integrated hold-open devices instead of holding magnets is only permitted if an approval for a system with an arrester system control unit has been issued.

### Holding magnets with diodes

All holding magnets in the 830 Series, with the exception of Model 830xxC (connecting wires), are fitted with a suppressor diode to protect electronic components connected upstream.

### Holding magnets and their counterplates

are made of special soft magnetic iron. This guarantees the best possible holding force with low power consumption and low remanent magnetism.

You must therefore order holding magnets and their counterplates together at the same time.

The holding forces indicated on the following pages are approximate values for the respective rated voltage. The surfaces on holding magnets and their counterplates are nickel-plated.

Holding magnets can also be combined with an installation box and spacers.

### Installation made easy

Counter holding plates are basically greater in diameter than their corresponding holding magnet. This makes them easier to fit into position opposite holding magnets, as any tolerance variations are compensated thanks to the larger size of counterplates.

### A major advantage for you

All magnets can be used as electrically powered hold-open devices for door closer sizes EN 3-7.

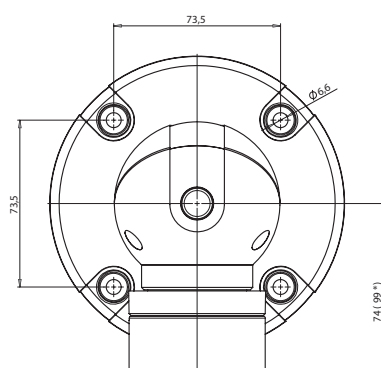
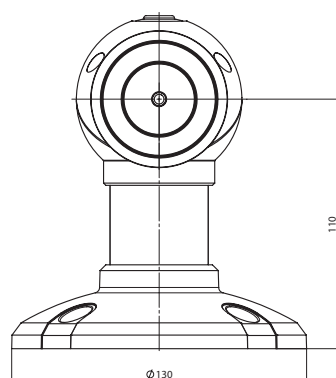


# Magnet Model 830 BW1/U/D/UD



## Magnet Model 830 BW1/U/D/UD

Holding magnet with spacer convertible for wall or floor mount. Optionally with integrated interrupter pushbutton and with integrated shock absorber to ensure door comes to a gentle stop.



\* Version with damping unit

Technical attributes	
Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Floor spacing	110 mm
Wall clearance without shock absorbers	190 mm
Wall clearance with shock absorber	215 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

Feature	Order no.
Holding force = 300N	8 3 0 - 3 B W 1 - - - - F 9 0
Holding force = 500N	8 3 0 - 5 B W 1 - - - - F 9 0
Holding force = 800N	8 3 0 - 8 B W 1 - - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 B W 1 - - - - F 9 0

300N holding force with interrupter pushbutton	8 3 0 - 3 B W 1 U - - - F 9 0
500N holding force with interrupter pushbutton	8 3 0 - 5 B W 1 U - - - F 9 0
800N holding force with interrupter pushbutton	8 3 0 - 8 B W 1 U - - - F 9 0
1,200N holding force with interrupter pushbutton	8 3 0 1 2 B W 1 U - - - F 9 0

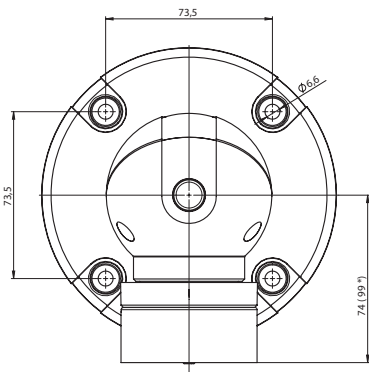
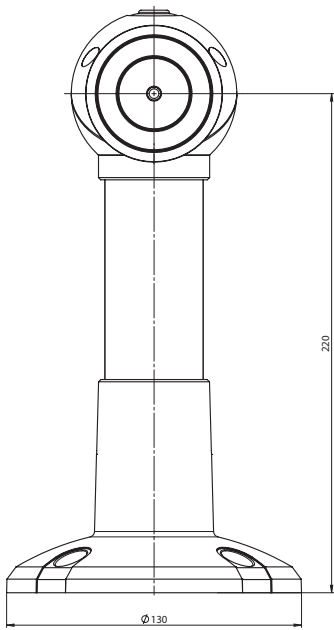
300N holding force with shock absorber	8 3 0 - 3 B W 1 - D - - F 9 0
500N holding force with shock absorber	8 3 0 - 5 B W 1 - D - - F 9 0
800N holding force with shock absorber	8 3 0 - 8 B W 1 - D - - F 9 0
1,200N holding force with shock absorber	8 3 0 1 2 B W 1 - D - - F 9 0

300N holding force with interrupter pushbutton & shock absorber	8 3 0 - 3 B W 1 U D - - F 9 0
500N holding force with interrupter pushbutton & shock absorber	8 3 0 - 5 B W 1 U D - - F 9 0
800N holding force with interrupter pushbutton & shock absorber	8 3 0 - 8 B W 1 U D - - F 9 0
1,200N holding force with interrupter pushbutton & shock absorber	8 3 0 1 2 B W 1 U D - - F 9 0

# Magnet Model 830 BW2/U/D/UD



**Magnet Model 830 BW2/U/D/UD**  
Holding magnet with spacer convertible for wall or floor mount. Optionally with integrated interrupter pushbutton and with integrated shock absorber to ensure door comes to a gentle stop.



\* Version with damping unit

Technical attributes	
Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Floor spacing	220 mm
Wall clearance without shock absorbers	300 mm
Wall clearance with shock absorber	325 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

Feature	Order no.
Holding force = 300N	8 3 0 - 3 B W 2 - - - F 9 0
Holding force = 500N	8 3 0 - 5 B W 2 - - - F 9 0
Holding force = 800N	8 3 0 - 8 B W 2 - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 B W 2 - - - F 9 0

300N holding force with interrupter pushbutton	8 3 0 - 3 B W 2 U - - - F 9 0
500N holding force with interrupter pushbutton	8 3 0 - 5 B W 2 U - - - F 9 0
800N holding force with interrupter pushbutton	8 3 0 - 8 B W 2 U - - - F 9 0
1,200N holding force with interrupter pushbutton	8 3 0 1 2 B W 2 U - - - F 9 0

300N holding force with shock absorber	8 3 0 - 3 B W 2 - D - - F 9 0
500N holding force with shock absorber	8 3 0 - 5 B W 2 - D - - F 9 0
800N holding force with shock absorber	8 3 0 - 8 B W 2 - D - - F 9 0
1,200N holding force with shock absorber	8 3 0 1 2 B W 2 - D - - F 9 0

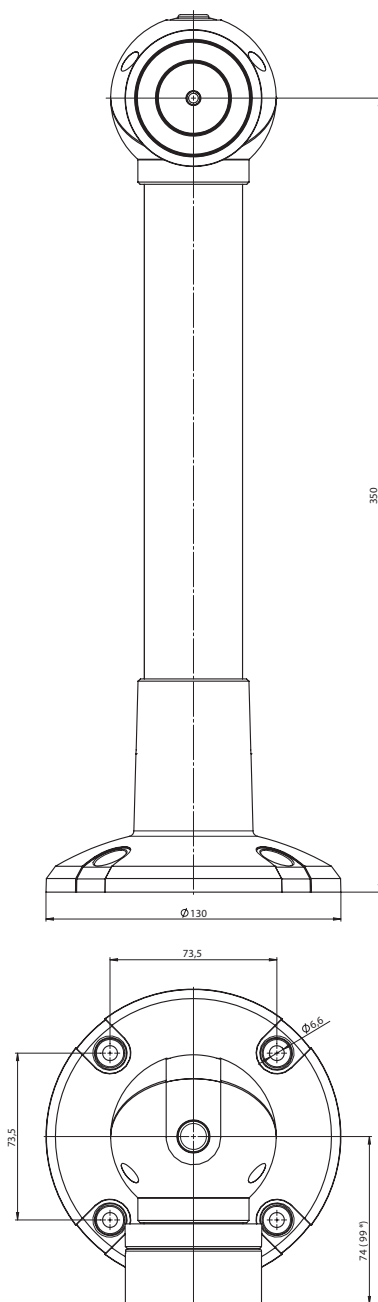
300N holding force with interrupter pushbutton & shock absorber	8 3 0 - 3 B W 2 U D - - F 9 0
500N holding force with interrupter pushbutton & shock absorber	8 3 0 - 5 B W 2 U D - - F 9 0
800N holding force with interrupter pushbutton & shock absorber	8 3 0 - 8 B W 2 U D - - F 9 0
1,200N holding force with interrupter pushbutton & shock absorber	8 3 0 1 2 B W 2 U D - - F 9 0

# Magnet Model 830XXBW3/U/D/UD



## Magnet Model 830XXBW3/U/D/UD

Holding magnet with spacer convertible for wall or floor mount. Optionally with integrated interrupter pushbutton and with integrated shock absorber to ensure door comes to a gentle stop.



\* Version with damping unit

### Technical attributes

Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Floor spacing	350 mm
Wall clearance without shock absorbers	430 mm
Wall clearance with shock absorber	455 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

### Feature

### Order no.

Holding force = 300N	8 3 0 - 3 B W 3 - - - - F 9 0
Holding force = 500N	8 3 0 - 5 B W 3 - - - - F 9 0
Holding force = 800N	8 3 0 - 8 B W 3 - - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 B W 3 - - - - F 9 0

300N holding force with interrupter pushbutton	8 3 0 - 3 B W 3 U - - - F 9 0
500N holding force with interrupter pushbutton	8 3 0 - 5 B W 3 U - - - F 9 0
800N holding force with interrupter pushbutton	8 3 0 - 8 B W 3 U - - - F 9 0
1,200N holding force with interrupter pushbutton	8 3 0 1 2 B W 3 U - - - F 9 0

300N holding force with shock absorber	8 3 0 - 3 B W 3 - D - - F 9 0
500N holding force with shock absorber	8 3 0 - 5 B W 3 - D - - F 9 0
800N holding force with shock absorber	8 3 0 - 8 B W 3 - D - - F 9 0
1,200N holding force with shock absorber	8 3 0 1 2 B W 3 - D - - F 9 0

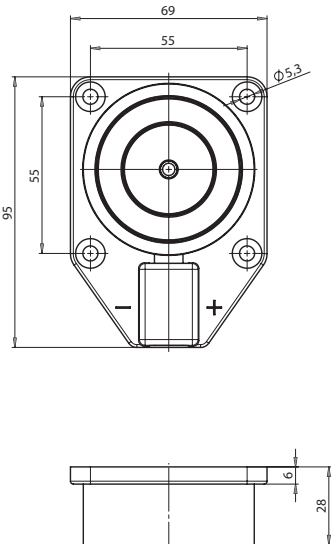
300N holding force with interrupter pushbutton & shock absorber	8 3 0 - 3 B W 3 U D - - F 9 0
500N holding force with interrupter pushbutton & shock absorber	8 3 0 - 5 B W 3 U D - - F 9 0
800N holding force with interrupter pushbutton & shock absorber	8 3 0 - 8 B W 3 U D - - F 9 0
1,200N holding force with interrupter pushbutton & shock absorber	8 3 0 1 2 B W 3 U D - - F 9 0

# Magnet Model 830 A



## Magnet Model 830 A

Holding magnets with mounting plate and concealed connecting terminal



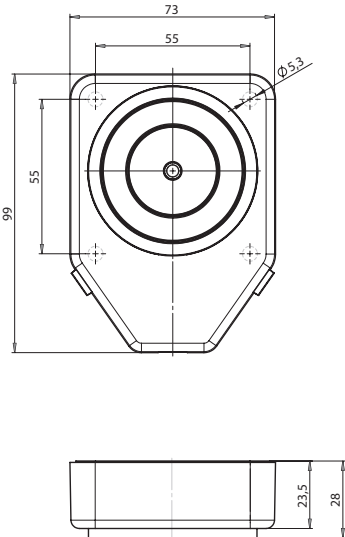
Technical attributes	
Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Diameter	60 mm
Height	95 mm
Width	69 mm
Depth	28 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

Feature	Order no.
Holding force = 300N	8 3 0 - 3 A - - - - F 9 0
Holding force = 500N	8 3 0 - 5 A - - - - F 9 0
Holding force = 800N	8 3 0 - 8 A - - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 A - - - - F 9 0



## Magnet Model 830 IS/U

Holding magnets in plastic housing for surface mount, with optional interrupter pushbutton



Technical attributes	
Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Height	99 mm
Width	73 mm
Depth	28 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

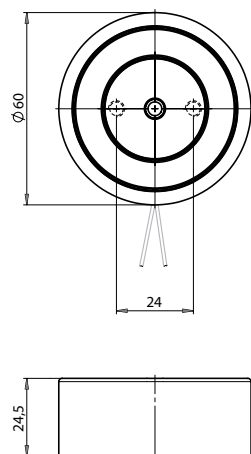
Feature	Order no.
Holding force = 300N	8 3 0 - 3 I S - - - - F 9 0
Holding force = 500N	8 3 0 - 5 I S - - - - F 9 0
Holding force = 800N	8 3 0 - 8 I S - - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 I S - - - - F 9 0
	-
300N holding force with interrupter pushbutton	8 3 0 - 3 I S U - - - F 9 0
500N holding force with interrupter pushbutton	8 3 0 - 5 I S U - - - F 9 0
800N holding force with interrupter pushbutton	8 3 0 - 8 I S U - - - F 9 0
1,200N holding force with interrupter pushbutton	8 3 0 1 2 I S U - - - F 9 0

# Magnet Model 830 C



## Magnet Model 830 C

Holding magnet with cable connection which can be wired to the side or rear. Fastened at rear with 2 x M5 for spacers or substructure provided by customer.



### Technical attributes

Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Diameter	60 mm
Depth	24,5 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

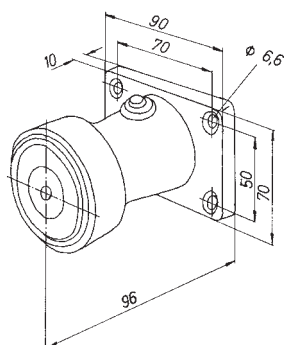
### Feature

Feature	Order no.
Holding force = 300N	8 3 0 - 3 C - - - - F 9 0
Holding force = 500N	8 3 0 - 5 C - - - - F 9 0
Holding force = 800N	8 3 0 - 8 C - - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 C - - - - F 9 0



## Magnet Model 830 IGW/U

Holding magnet in aluminium housing for wall mount, with optional interrupter pushbutton



### Technical attributes

Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Height	70 mm
Width	90 mm
Depth	96 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

### Feature

Feature	Order no.
Holding force = 300N	8 3 0 - 3 I G W - - - F 9 0
Holding force = 500N	8 3 0 - 5 I G W - - - F 9 0
Holding force = 800N	8 3 0 - 8 I G W - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 I G W - - - F 9 0

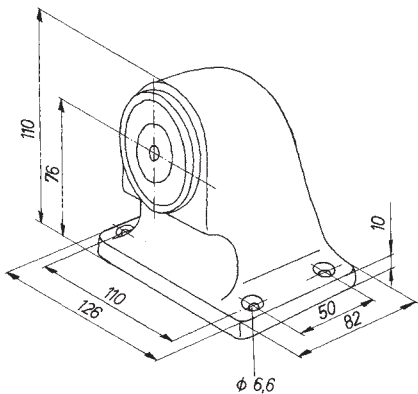
300N holding force with interrupter pushbutton	8 3 0 - 3 I G W U - - - F 9 0
500N holding force with interrupter pushbutton	8 3 0 - 5 I G W U - - - F 9 0
800N holding force with interrupter pushbutton	8 3 0 - 8 I G W U - - - F 9 0
1,200N holding force with interrupter pushbutton	8 3 0 1 2 I G W U - - - F 9 0

# Magnet Model 830 IGB/U



## Magnet Model 830 IGB/U

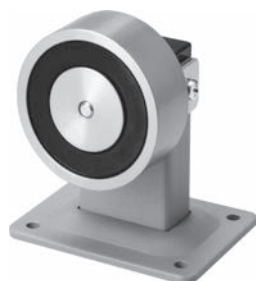
Holding magnet in aluminium housing for floor mount, with optional interrupter pushbutton



Technical attributes	
Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Height	110 mm
Width	126 mm
Depth	82 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

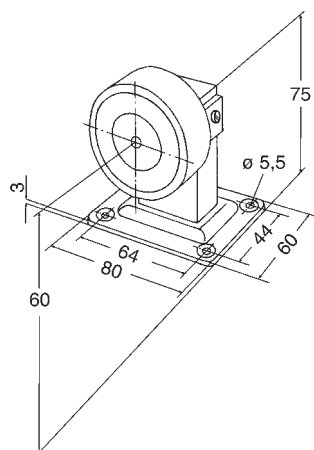
Feature	Order no.
Holding force = 300N	8 3 0 - 3 I G B - - - F 9 0
Holding force = 500N	8 3 0 - 5 I G B - - - F 9 0
Holding force = 800N	8 3 0 - 8 I G B - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 I G B - - - F 9 0
Holding force = 300N	8 3 0 - 3 I G B U - - - F 9 0
Holding force = 500N	8 3 0 - 5 I G B U - - - F 9 0
Holding force = 800N	8 3 0 - 8 I G B U - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 I G B U - - - F 9 0

# Magnet Model 830 BWK/U



## Magnet Model 830 BWK/U

Holding magnets with spacers. Convertible for wall or floor mount, with optional interrupter pushbutton



### Technical attributes

Operating temperature range	0 to +50 °C
Class of protection	IP 40
Certified in compliance with	EN 1155
Wall spacing	98 mm
Floor spacing	60 mm
Supply voltage	24 V DC
Current consumption at 24 V	Model 830-3: 300 N / 20 mA; Model 830-5: 500 N / 25 mA; Model 830-8: 800 N / 45 mA; Model 83012: 1,200 N / 105 mA
Continuous duty	100 % ED

### Feature

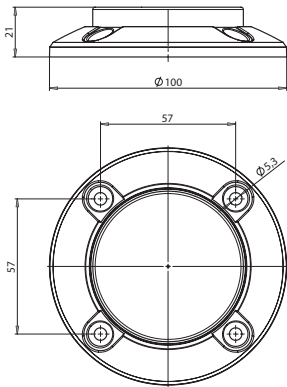
Feature	Order no.
Holding force = 300N	8 3 0 - 3 B W K - - - F 9 0
Holding force = 500N	8 3 0 - 5 B W K - - - F 9 0
Holding force = 800N	8 3 0 - 8 B W K - - - F 9 0
Holding force = 1,200N	8 3 0 1 2 B W K - - - F 9 0

300N holding force with interrupter pushbutton	8 3 0 - 3 B W K U - - - F 9 0
500N holding force with interrupter pushbutton	8 3 0 - 5 B W K U - - - F 9 0
800N holding force with interrupter pushbutton	8 3 0 - 8 B W K U - - - F 9 0
1,200N holding force with interrupter pushbutton	8 3 0 1 2 B W K U - - - F 9 0

# Counter-Holding Plate 830-H1



**Counter-Holding Plate 830-H1**  
Counter-holding plate, movable

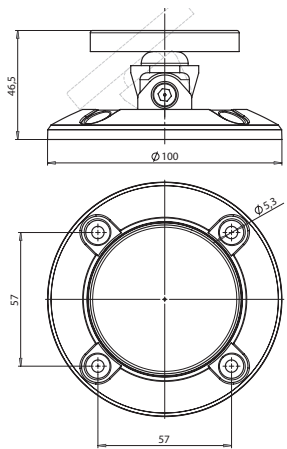


Technical attributes	
Height	21 mm
Diameter	100 mm

Feature	Order no.
Counter-Holding Plate H1	8 3 0 - - H 1 - - - - - 0 0



**Counter-Holding Plate 830-H2**  
Holder strike plate on mounting plate adjustable to extreme angle positions between door and holding magnet.



Technical attributes	
Height	46,5 mm
Diameter	100 mm

Feature	Order no.
Counter-Holding Plate H2	8 3 0 - - H 2 - - - - - 0 0

# Interrupter Button Model 1316-10



## Interrupter Button Model 1316-10

Surface-mounted interrupter pushbutton with red actuator field, labelled 'Close door'. For controlling fail-unlocked components, such as holding magnets and fail-unlocked strikes, and as a manual switch / control for arrester systems. Changeover contact switch unit.

Technical attributes	
Switching element	Changeover contact with neutral terminal
Width	85 mm
Height	85 mm
Depth	47 mm

Feature	Order no.
Surface-mounted	1 3 1 6 - 1 0 - - - - - 0 0



## Interrupter Button Model 1317-10

Flush-mounted interrupter pushbutton with red actuator field, labelled 'Close door'. For controlling fail-unlocked components, such as holding magnets and fail-unlocked strikes, and as a manual switch / control for arrester systems. Changeover contact switch unit.

Technical attributes	
Switching element	Changeover contact with neutral terminal
Width	80.5 mm
Height	80.5 mm
Depth	11 mm

Feature	Order no.
Flush-mounted	1 3 1 7 - 1 0 - - - - - 0 0

# Regulations and guidelines

## Marking of closing area

You are required to mark fire protection barrier closing areas. This is done by applying colour markings to the floor and ceiling; if it is not possible to mark floors and ceilings, you can attach signs to the fire protection barriers. Signs are not subject to any requirements regarding their design, but we recommend signs with a red border and a minimum size of about 300 x 150 mm to ensure that they are clearly visible.

### Example:



Order code

**2.1506-00060400**

## Acceptance procedure and testing for hold-open devices

### Testing intervals

Arrester systems for fire protection barriers must be inspected on a regular basis. Inspections include:

- Compliance test by authorised specialists after installation
- Monthly inspections by the operator
- Annual inspections by a specialist or a trained person

The operator is responsible for arranging for such tests to be carried out. A record must be made of each test. Inform the operator of the requirements for these tests.

### The compliance test

When an arrester system has been installed ready for use, a compliance test must be performed to check that it functions properly and it has been installed according to regulations. Manufacturers of tripping and hold-open devices must inform operators of testing requirements. The operator is responsible for arranging for tests to be carried out.

The DIBt states that effeff arrester systems may only be tested for acceptance by:

- effeff specialists, or
- Specialists from an appointed test centre, or
- Specialists authorised by effeff.

**The compliance test must include the following items as a minimum:**

1. The devices installed in the arrester system must be the same as the devices specified in the approval document.
2. The labelling on the installed devices must be the same as the labelling specified in the approval document.
3. The devices must be tested to check that they all work together as a single unit in accordance with the approval documentation. The verification test must involve the triggering of the system by hand and by simulating the type of fire which the detectors are designed to detect.
4. A test must be performed to verify whether the barrier is able to close of its own accord when the arrester is fully operational (e.g. by removing a detector or when power is disconnected).

**Note**

Fire protection barriers are designed to save lives. That is why the requirements below are extremely important:

1. Fire protection barriers must be in good working order. They must operate smoothly and must be able to close automatically without any hindrance. They must not be obstructed by any obstacles and must not scrape on the floor, wall or ceiling.
2. Fire protection barrier closing areas must be kept clear at all times. No objects may be left within such areas. No objects may hang down into closing areas. Ensure that no objects can fall into closing areas.

Once the compliance test is complete, the operator must attach a compliance test sign to the wall next to the barrier.

Successful completion of the compliance test is recorded in the acceptance test protocol.

Feststellanlage		ASSA ABLOY
Abnahme durch:	<input type="text"/>	
	<input type="text"/>	
Datum der Abnahme:	<input type="text"/>	
	Monat / Jahr	

Order code

**2.1502-00560500**

**Periodical inspection**

The operator must ensure that the arrester system is operational at all times and must check that it functions correctly at least once a month.

The operator is also obliged to arrange maintenance and a test at least once a year to ensure that all devices work together properly as a unit, free of any faults, unless a shorter period is indicated in the approval documentation.

Tests and maintenance may be performed by a specialist or a suitably trained person only\*.

A record must be made of the date, scope and results of periodical inspections. Such records must be kept on file at the operator's premises.

Order code

**2.1502-00040000**



\* effeff organises a professional training programme which qualifies participants to test and maintain arrester systems.

You can find our current seminar programme at:  
**[www.assaabloy.com/de](http://www.assaabloy.com/de)**

Customer-No.:  
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ASSA ABLOY  
Sicherheitstechnik GmbH  
Bildstockstraße 20  
72458 Albstadt  
GERMANY  
Tel. +49 7431 123-700  
export@assaabloy.de

Order Date:

Order Number	Pce.

Urgent orders can also  
be placed via email:

As a proven supplier of door release systems, ASSA ABLOY is known for reliable and prompt deliveries. We offer you twomethods of ordering: You can fax us the completed form or send us details of your requirements via email to the following address: **export@assaabloy.de**

Quotations and deliveries are made in accordance with our conditions of delivery and payment.

In the future we'll also meet the demands for technical advances and innovations. We therefore reserve the right to make design modifications.

Illustrations may thus also vary from the actual products.

Despite the greatest of care, printing errors or mistakes may be made.

ASSA ABLOY accepts no responsibility in such cases and will not enter into any obligations of any kind.

No responsibility is taken for the correctness of any safety regulations reproduced.

## Our products – quality, know-how and innovation



### Electric strikes

With electric strikes, you can unlock a door at the push of a button – without needing to go to the actual door yourself.

effeff electric strikes offer high standards of security and convenience and a suitable electric strike for every installation location. This we can guarantee worldwide as effeff takes into consideration both national and international rules and regulations.

effeff wins over with its certified and security electric strikes due to its sophisticated solutions for smoke protection doors, fire protection doors and doors along escape routes. Our wide range for high security areas

provides solutions for glass doors, sliding doors and clean room doors as well as for explosive areas or seal door systems.

- Standard electric strikes
- Smoke and fire protection electric strikes
- Escape door electric strikes
- Special electric strikes
- Accessories



### MEDIATOR

Entrance doors to apartment buildings – an issue which is always causing problems. Some people always lock the door, others never do.

With MEDIATOR, ASSA ABLOY Sicherheitstechnik now offers a simple, yet brilliant solution:

This innovative system ensures doors always lock automatically as soon as they close due to the self-locking escape door lock and an effeff linear electric strike.

The door can also be opened for visitors from inside apartments using the electric strike.

MEDIATOR can do much more than this, however.

It also ensures doors can be opened from the inside at any time using the door handle, even when doors are locked.

This means everyone can leave the building in the event of an emergency, whether they have a key or not.

Apartment block entrance doors can be retrofitted with MEDIATOR quickly and easily at a very reasonable price.



### Security locks

“Security lock” is the most accurate description of effeff locks. Security provides protection against intrusion, thus ensuring people and valuables are safe from harm. effeff lock products provide such comprehensive protection for you and your property. With their anti-panic function and self-locking systems, effeff’s security locks guarantee maximum mechanical security combined with maximum convenience for users.

- Mechanical security locks
- Microswitch security locks
- Motorized security locks
- Electric security locks
- Multipoint security locks
- Accessories



### Access control

Whether the main or side entrance, strongroom, development department or laboratory, there are certain areas in buildings which need to be locked at all times.

Access control systems regulate access to protected areas, limiting entrance to authorised groups of people without needlessly disrupting their day-to-day business.

A straightforward solution for greater security, effeff access control systems protect and control buildings, individual rooms or other security-relevant areas.

We supply a comprehensive range of different technolo-

gies, devices and systems, which can be tailored to meet respective specific security needs.

effeff access control systems meet our clients’ individual requirements and are used in private and public buildings, the health sector, leisure facilities, industrial facilities and production plants.

- Access control door fittings
- Access control systems



### Escape route technology

effeff's escape route systems fully comply with requirements for uncompromising personal safety and maximum protection for property.

You can depend on effeff's expertise and reliability in emergency situations. Our escape route systems guarantee safe operation of escape route doors, even though under normal circumstances doors may have integrated automatic locking systems or can only be opened by authorised users. Safer use of escape routes is assured at all times in the event of an emergency. effeff electric escape door control systems provide protection and safety in places such as department

stores, schools, kindergartens, office buildings, airports and exhibition halls.

We also supply ideal solutions for specific uses such as restricted areas in hospitals.

- Escape door locking systems
- Escape door monitoring



### Electric bolt

effeff electric deadbolts are a reliable complement to locks and strikes used for specific requirements.

They can be fitted to special doors such as swing doors or sliding doors, where they are often used as an additional locking device. Where doors are locked with an integrated monitoring contact, the locking status can be monitored, meaning, for instance, a system or machine can only start up if the door concerned is securely locked.

The bolt is suitable for a wide variety of uses, ranging from mere drawers through to doors in lifts and high security areas.

- Door dead bolts
- High security dead bolts
- Motorized dead bolts
- Cabinet locks



### Electric holding magnets

A large selection of electric holding magnets is an important part of effeff's locking systems range.

The effeff range includes authorised models for locking escape route doors as well as standard magnets.

Thanks to low-noise operation and the benefits of retro-fitting, magnets are highly suitable as additional locking devices in doors.

- Electric magnets for inside and outside doors
- Electric magnets for escape door applications
- Electric magnets for holding doors open
- Accessories



### Arrester systems

Whether the main or side entrance, strongroom, development department or laboratory, there are certain areas in buildings which need to be locked at all times. Access control systems regulate access to protected areas, limiting entrance to authorised groups of people without needlessly disrupting their day-to-day business. A straightforward solution for greater security, effeff access control systems protect and control buildings, individual rooms or other security-relevant areas.

We supply a comprehensive range of different technologies, devices and systems, which can be tailored to meet respective specific security needs.

effeff access control systems meet our clients' individual requirements and are used in private and public buildings, the health sector, leisure facilities, industrial facilities and production plants.

- Access control door fittings
- Access control systems

The ASSA ABLOY Group is the global leader in access solutions. Every day we help people feel safe, secure and experience a more open world.

**ASSA ABLOY**  
Opening Solutions

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