

## Electric bolts Technical information





About us.

Whatever you want to secure, protect, maintain - we have technology you require.





Arsenal Stadium, London



Court of Justice, Antwerpen



Emirates Towers, Dubai



Airport Zurich

Breaking new grounds, implementing new technologies, developing new ideas. Founded in 1936, the company effeff based in Albstadt became the market leader in the field of door control systems by following a consistent strategy. After starting the electric strike production in 1947, a comprehensive product range has been gradually developed, which enables effeff to offer suitable solutions for every door.

February 1st, 2000, effeff joined the ASSA ALBOY Group based in Stockholm, Sweden and merged at the beginning of 2005 with IKON GmbH Präzisionstechnik, Berlin who also belong to the group to become ASSA ABLOY Sicherheitstechnik GmbH.

IKON and effeff, both renowned and well-established brands within the market remain under ASSA ABLOY Sicherheitstechnik GmbH as do the production sites of Berlin and Albstadt and a sales office in Ratingen.

ASSA ABLOY is the leading manufacturer and supplier of mechanical and electromechanical locks and related products worldwide. Our customers benefit from the extensive know-how of the largest international group of companies, meeting every requirement in terms of total security and comfort throughout the world.

### We assist you with words and deeds

**Hotline Technical advice** 

+49 7431 123-381

**Hotline Sales/order processing** 

+49 7431 123-700

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 the matter of technical advice, with us you will be supported by professionals whowill continue to help you on every question on technical details. Of course you can also be put into contact with specialists for questions of detail in the matter of technical risk assessment or key accounts.

### Sales advice/order processing

With our commercial customer services you can deal with all questions to do with 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.

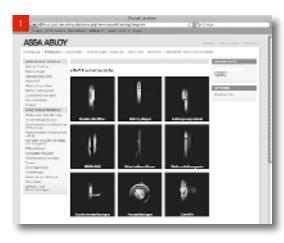
### **Trade fairs**

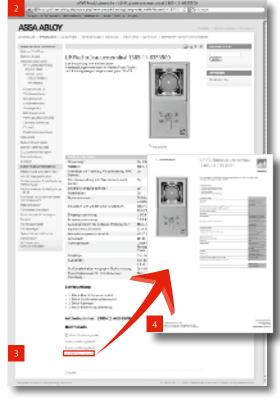
You will find effeff at many national and international trade fairs. You can obtain the exact dates from our website www.assaabloy.de

## Our product catalogue online at www.effeff.com

Fast and up-to-date comprehensive product information at any time

- Clearly arranged layout according to our different product areas...
- the submenu will help you navigate through our database...
- to find the model you need.
- By just clicking on the article, you can generate a detailed specification sheet.





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## TECHNILOCK L4







### Features at a glance:

- Electromechanical door bolt for use in high security zones
- Extremely high resistance to attempted intrusion and manipulation.
- Areas of application: Prisons, banks, police and military building, embassies, hospitals, jewellers etc.
- · Reliable impact security.
- · Destruction-resistant up to 50,000 N.
- · Extensive alarm and monitoring functions.
- · Programmable alarm contact.
- · Programmable unlocking time.
- Expanded functionality: Two extra functions secure the daily operation even in the case of a power cut or a malfunction and emergency locking if there is a failure.
  - The control latch enables locking in any operational state.
- The cylinder function can be used for manual locking.
- Integrated error memory and an undervoltage display facilitate fault removal. Functional failures can be retraced quickly on-site for repairs for rapid error analysis, high availability, short breakdown times.
- 80N preload at open-circuit or closed-circuit current always ensure reliable unlocking. Ease of use with revolving door drives. Barrier doors (air pressure) or doors with high sealing pressure can also be safely unlocked.
- Integrated micro-processor control: No extra external control required
   Control possibilities: Access control, central control and monitoring panels, freely programmable controls, radio remote control etc.
- The completely new construction reduces the power input and self-heating of the L4 easily enabling use in wood and thermally insulated profiles.
- Expanded lock plate range: The wide selection offers a matching lock plate for every door and every application
- · Horizontal and vertical installation in the frame.
- When installed horizontally only downward locking possible.
- · Vertical installation in the door leaf.
- · Can be installed in protected outer area.
- Compatible with the L3 and M4 ranges: Simple exchange possible.
- A clip on relay board provides floating outputs (M4 compatible)

## TECHNILOCK® L4



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### TECHNILOCK® Model 844L4A bolt with many advantages

Electro-mechanical door bolt for use in high security areas

Please note:

Striking plate has to be ordered separatly.

Technical attributes	
Break-in resistance	50 000 N (destruction resi-
	stance)
Bolt throw	20 mm
Operating temperature range	-20 °C to +60 °C
Spacing between faceplate and striking plate	Min. 2 mm to max. 5,5 mm
Bolt position monitoring contacts - max. switching current (0 V, open collector)	25 mA / 30 V DC
Door position monitoring contact - max. switching current (0 V, open collector)	25 mA / 30 V DC
Rated operating voltage	24 V DC, stabilised
Rated operating voltage tolerance range	±10%
Rated current consumption 24 V DC	4.5 A (0.5 s)

Feature	Order no.
Backset 30 mm, fail-locked with S-latch, Euro profile cylinder	844L430ESE
Backset 35 mm, fail-locked with S-latch, Euro profile cylinder	844L435ESE
Backset 40 mm, fail-locked with S-latch, Euro profile cylinder	844L440ESE
Backset 60 mm, fail-locked with S-latch, Euro profile cylinder	844L460ESE
Backset 30 mm, fail-unlocked, Euro profile cylinder	844L430ESA
Backset 35 mm, fail-unlocked, Euro profile cylinder	844L435ESA
Backset 40 mm, fail-unlocked, Euro profile cylinder	844L440ESA
Backset 60 mm, fail-unlocked, Euro profile cylinder	844L460ESA

Suitable striking plates	Lenght max.	Width max.	Depth max.	Order no.
Striking plate L4 standard	265 mm	34 mm	3 mm + 3 mm**	844L4SBL101
Striking plate L4 standard, LAP, DIN L	265 mm	34 mm + 28 mm*	3 mm + 3 mm**	844L4SBL204
Striking plate L4 standard, LAP, DIN R	265 mm	34 mm + 28 mm*	3 mm + 3 mm**	844L4SBL205
Striking plate L4 adjustable	265 mm	34 mm	3 mm + 18 mm**	844L4SBL301
Striking plate L4 adjustable, LAP DIN L	265 mm	34 mm + 28 mm*	3 mm + 18 mm**	844L4SBL404
Striking plate L4 adjustable, LAP DIN R	265 mm	34 mm + 28 mm*	3 mm + 18 mm**	844L4SBL405

<sup>\* =</sup> lug spreads on 28mm. Total width 62mm

<sup>\*\* =</sup> material thickness + buildup if standard: buildup of magnets if adjustable buildup deabolt box

Replacement striking plates L4-M4	Lenght max.	Width max.	Depth max.	Order no.
Striking plate L4-M4 standard	255 mm	37 mm	6 mm	844L4SBLM01
Striking plate L4-M4 standard, LAP, DIN L	255 mm	37 mm + 26,5 mm*	6 mm	844L4SBLM204
Striking plate L4-M4 Standard, LAP, DIN R	255 mm	37 mm + 26,5 mm*	6 mm	844L4SBLM205
Striking plate L4-M4 adjustable	255 mm	37 mm	3 mm + 18 mm**	844L4SBLM301
Striking plate L4-M4 adjustable, LAP DIN L	255 mm	37 mm + 26,5 mm*	3 mm + 18 mm**	844L4SBLM404
Striking plate L4-M4 adjustable, LAP DIN R	255 mm	37 mm + 26,5 mm*	3 mm + 18 mm**	844L4SBLM405

<sup>\* =</sup> lug spreads on 26,5 mm. Total width 63,5 mm

<sup>\*\* =</sup> material thickness + surface housing incl. 3 mm striking plate spacer

## TECHNILOCK® L4 Accessories

### Board model 844ZBP1

For direct mounting on L4. Board has two potentialfree contacts available.

Technical attributes	
contact	Potential-free
Feature	Order no.
Board	844ZBP100

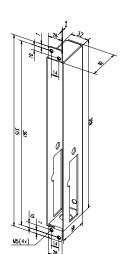


### Spacer plate, model 844L4ZBD1

for striking plates

Technical attributes	
Material thickness	0.5 mm
Feature	Order no.
Spacer plate	844L4ZBD100

**Technical attributes** 



### Bolt casing, model 844L4RGK30

35 mm backset is illustrated

Backset	30, 35, 40, 60 mm
Feature	Order no.
Backset 30 mm	844L4RGK3001
Backset 35 mm	844L4RGK3501
Backset 40 mm	844L4RGK4001
Backset 45 mm	844L4RGK4501
Backset 60 mm	844I 4RGK6001



### Striking plate box, model 844L4SBK

Compatible with the TECHNILOCK® L4 bolt.

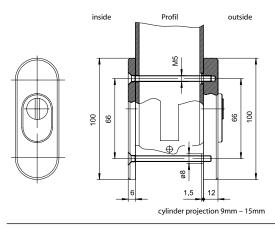
Technical attributes	
Compatible with:	TECHNILOCK® L4
Feature	Order no.

## TECHNILOCK® L4 Accessories



### Security rosette, model 844SX63

Security rosette for use with TECHNILOCK® L4.



Technical attributes	
Version	With core drawback protector
Cylinder type	Euro profile cylinder
Surface	Matt, nickel-plated

Feature	Order no.
Security escutcheon	844SX63



### Power supply, model 844PS24

Fully electronic, voltage stabilized power supply designed for connection to model L4 door bolt. This sheet steel encased power supply is intended for mounting on standard rails. Tandem operation of 2 door bolts possible.

The power supply has a charger for lead/acid rechargeable batteries with automatic changeover for a power outage.

Technical attributes	
Height	112 mm
Width	170 mm
Depth	88,5 mm
Input voltage	230 V AC
Rated operating voltage tolerance range	± 10%
Output voltage	24 V DC, stabilised
Separate output (accessories)	Max. 3.3 A

Feature	Order no.
Power supply	844PS24D52



### Power supply, model 1003-24-4

Power supply with LED operating and overload indicators to operate a TECHNILOCK® bolt.

Technical attributes	
Height	66,5 mm
Width	93 mm
Length	140 mm
Sub-units	8
Input operating voltage	230 V AC
Rated operating voltage tolerance range	±10%
Output voltage	24 V DC, stabilised
Output current	4 A

Feature	Order no.
Power supply	1003-24-400

## Door bolt model 843 Secure, convenient and compact

### Secure, convenient and compact

When a conventional lock with a mechanical locking system doesn't meet requirements with regard to security or convenience, a door deadbolt as a supplementary locking device is often the best solution. effeff door deadbolts are also recommendable as an additional security measure due to their compact design. The effeff door deadbolt range includes models which are suitable for use in both private and commercial buildings. The many different installation types and slim designs enable these deadbolts to be fitted to nearly all types of doors, from standard doors through to glass doors.

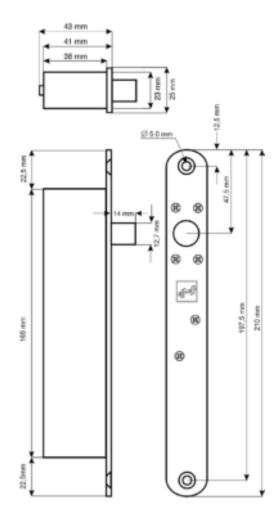
### Areas of use:

- banks
- · IT areas
- · laboratories
- · experimentation rooms
- · museums
- · power plants
- · industrial plants
- · doors to security rooms
- apartments
- · residential units



### Door deadbolt model 843

The door bolt is available in fail-unlocked or faillocked versions. Alternatively, it is also convertible. Striking plate is not included in the delivery complement. A striking plate with magnet for detecting door status is absolutely necessary for this door bolt's functionality.



Technical attributes	
Bolt diameter	12,7 mm
Bolt throw	14 mm
Length	165 mm
Width	23 mm
Height	13 mm
Shear strength	10000 N
Installation position	Vertical and horizontally (clo-
	sed downwards only)
Mounting method	Installation and mount (also
	possible on glass doors)
Rated operating voltage	12 V DC to 24 V DC
Rated operating voltage tolerance range	-10% to +15%
Switch-on current	1,050 mA (12V) / 900 mA
	(24V)
Holding current (after 300 ms)	210 mA (12V) / 80 mA (24V)
Door contact	Max. 25 V AC/DC, 200 mA
Deadbolt position contact	Max. 25 V AC, 1 A, 25 V DC,
	500 mA

Feature	Order no.
Fail-unlocked	843-1Q41
Fail-locked	843-1-30Q41

## Door bolt model 843 Accessories



### Striking plate, model 843-3

Matching for door bolt 843.

Technical attributes	
Height	210 mm
Width	25 mm
Depth	3 mm
Material	Stainless steel

Feature	Order no.
Long, included magnet	843-335



### Surface housing, model 843-4

Matching to door bolt 843-1 or striking plate 843-3. The housing is delivered without bolt.

Technical attributes	
Height	225 mm
Width	46,5 mm
Depth	27,4 mm
Material	Stainless steel

Feature	Order no.
Masonry box for surface-mounted	843-435
fitting	

### Screening plate, model 843-7

To cover the bonding surface when mounted on glass

Matching for 843-3.

Technical attributes	
Height	225 mm
Width	46,5 mm
Depth	0,7 mm
Material	Stainless steel

Feature	Order no.
Screening plate	843-735



### Striking plate, model 843-2

Matching for door bolts 843 and 843Zy.

Technical attributes	
Height	80 mm
Width	25 mm
Depth	3 mm
Material	Stainless steel

Feature	Order no.
Short, included magnet	843-235



### Adhesive set, model 760-843

Set for adhesive bonding of the 843-4 masonry box.

Technical attributes	
Use	Adhesive mount
Feature	Order no.
165 x 46 mm	760-84300

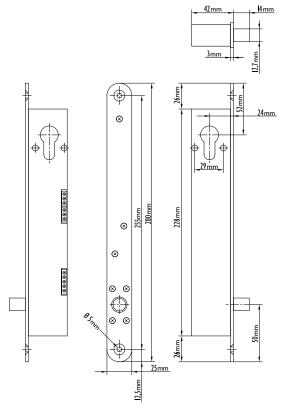
## Door bolt model 843ZY



### Door bolt model 843ZY

This variant also offers a mechanical unlocking function by way of its Euro profile cylinder perforation. The door bolt is locked in the no-power condition (fail-locked mode).

Striking plate is not included in delivery complement. A striking plate with magnet for detecting door status is absolutely necessary for this door bolt's functionality.



Technical attributes	
Bolt diameter	12,7 mm
Bolt throw	14 mm
Length	228 mm
Width	22 mm
Height	39 mm
Shear strength	10000 N
Installation position	Vertical and horizontally (clo-
	sed downwards only)
Mounting method	Installation and mount (also
	possible on glass doors)
Rated operating voltage	12 V DC to 24 V DC
Rated operating voltage tolerance	-10% to +15%
range	
Switch-on current	1,050 mA (12V) / 900 mA
	(24V)
Holding current (after 300 ms)	210 mA (12V) / 80 mA (24V)
Door contact	Max. 25 V AC/DC, 200 mA
Deadbolt position contact	Max. 25 V AC, 1 A, 25 V DC,
	500 mA
Profil cylinder contact	Max. 25 V AC, 1 A, 25 V DC,
	500 mA

Feature	Order no.
Fail-locked	843ZY-1Q41

## Door bolt model 843ZY Accessories



### Striking plate, model 843ZY-3

Matching for door bolt 843Zy.

Technical attributes	
Height	280 mm
Width	25 mm
Depth	3 mm
Material	Stainless steel

Feature	Order no.
Long, included magnet	843ZY-335



### Surface housing, model 843Zy-4-1

For surface-mount installation of door bolt 843Zy-1. Supplied without bolt.

Technical attributes	
Height	295 mm
Width	47 mm
Depth	27,4 mm
Material	Stainless steel

Feature	Order no.
Masonry box with profile cylinder drill holes	843ZY-4-135
Masonry box without profile cylinder drill holes	843ZY-4-235

### Screening plate, model 843Zy-7

To cover the bonding surface when mounted on glass surfaces.

Technical attributes	
Height	295 mm
Width	47 mm
Depth	0,7 mm
Material	Stainless steel

Feature	Order no.
Screening plate	843ZY-735



### Striking plate, model 843-2

Matching for door bolts 843 and 843Zy.

Technical attributes	
Height	80 mm
Width	25 mm
Depth	3 mm
Material	Stainless steel

Feature	Order no.
Short, included magnet	843-235



### Adhesive set, model 760-843ZY

Set for adhesive mounting of masonry box 843-ZY-4x.

Technical attributes	
Use	Adhesive mount
Feature	Order no.
295 x 46 mm	760-843ZY00

## Door bolt, model 843/843ZY Accessories



### Transformer rectifier model 1001-24

Transformers with integrated rectifiers and power adapters for electric strikes, door bolts, motorized bolts, holding magnets, access control systems and door control systems.

Technical attributes	
Width	105 mm
Height	70 mm
Depth	73 mm
Sub-units	6
Mounting method	Surface-mounted / standard
	rail
Overload protection	thermal circuit breaker
Rated operating voltage secundary	24 V AC and DC/DC = 50%
	ripple
Rated current consumption	1 A / 1.5 A max. 10 s

Feature	Order no.
Supply voltage 24 V AC/DC	1001-24-100



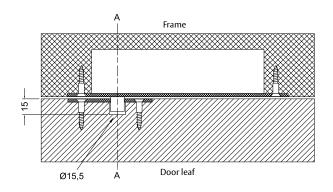
### Transformer rectifier model 1001-12

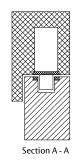
Transformers with integrated rectifiers and power adapters for electric strikes, door bolts, motorized bolts, holding magnets, access control systems and door control systems.

105 mm
70 mm
73 mm
6
Surface-mounted / standard
rail
thermal circuit breaker
12 V AC and DC/DC = 50%
ripple
1 A / 1.5 A max. 10 s

Feature	Order no.
Supply voltage 12 V AC/DC	1001-12-100

## Door bolt model 843/843ZY Mounting tips

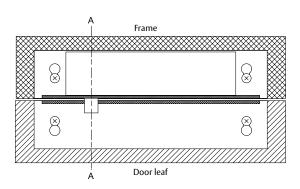


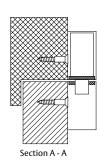


### Installation of electric bolt in frame profile

The illustration shows the installed electric bolt and the short striking plate in a closed door. The bolt engages in the striking plate and door is locked. In order for the bolt to securely lock the door, it must engage in the striking plate without obstruction.

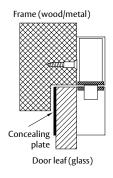
The main lock and / or door closer are necessary to ensure the required position of the door leaf.





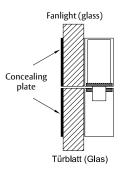
### Surface mounting of electric bolt and long striking plate in stainless steel housing

For surface mounting, the electric bolt and the long striking plate are mounted in a housing. The housing with the electric bolt is e.g. secured on the front of the frame and the housing with the striking plate on the door leaf.



### Mounting on glass doors with frame

When mounting the electric bolt on glass doors, the housing for the bolt is attached to the door frame in the same manner as for surface mounting the housing. However, the housing with the long striking plate is directly glued to the door leaf using the special glue. The self-adhesive counter plate is also glued to the door leaf on the opposite side A to improve the appearance.



### Mounting on glazed doors

When mounting on glazed doors, both housings are glued directly to the glass surfaces using the special

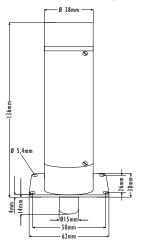
A self-adhesive counter plate is glued to the glass on the opposite sides to improve the appearance.

## Door bolts 1841, 3841 and 1842

### Accessories



### Door bolt model 1841, fail-locked version



Door bolt as additional locking element to main lock.

The door deadbolts are designed for interior use and should be fitted (vertically) at the top of the door frame. Locking is performed by a13 mm extension locking bolt. Suitable for revolving and swing doors.

Technical attributes	
Version	Fail-locked
Diameter lock deadbolt	15 mm
Lock bolt throw	13 mm
Overhang when lock bolt drawn in	1 mm
Installation position	vertical
Diameter	38 mm
Monitoring contact	24 V / 1 A
Rated current consumption	0.8 A (12V) / 0.5 A (24V)

Feature	Order no.
12 V DC	1841-1E91
24 V DC	1841-1F91
12 V DC, with monitoring	1841-1RRE91
24 V DC, with monitoring	1841-1RRF91

### Door bolt model 3841, fail-unlocked version



Door bolt as additional locking element to main lock.

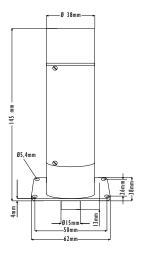
The door deadbolts are designed for interior use and should be fitted (vertically) at the top of the door frame. Locking is performed by a13 mm extension locking bolt. Suitable for revolving and swing doors.

Fail-unlocked
15 mm
13 mm
1 mm
vertical
38 mm
24 V / 1 A
0.8 A (12V) / 0.5 A (24V)

Feature	Order no.
12 V DC	3841-1E91
24 V DC	3841-1F91
12 V DC, with monitoring	3841-1RRE91
24 V DC, with monitoring	3841-1RRF91



### Door deadbolt model 1842 with lockable latch



Door bolt as additional locking element to main lock.

The door deadbolts are designed for interior use and should be fitted (vertically) at the top of the door frame. Locking is performed by a13 mm extension locking bolt. Controllable via access controls.

Technical attributes	
Version	Fail-locked
Installation position	vertical
Diameter	38 mm
Monitoring contact	24 V / 1 A
Current consumption	0.8 A (12V) / 0.5 A (24V)

Feature	Order no.
12 V DC	1842-1E91
24 V DC	1842-1F91
12 V DC, with monitoring	1842-1RRE91
24 V DC, with monitoring	1842-1RRF91

### Door bolts 1841, 3841 and 1842 Accessories



### Matching part model 840-2

For use on revolving doors with door bolts 1841(RR) and 3841(RR).

Technical attributes	
Height	43 mm
Width	24 mm
Depth	32 mm

Feature	Order no.
Single	840-200



### Matching part model 845-2

For use on swing doors with door bolts 1841(RR) and 3841(RR).

Technical attributes	
Height	43 mm
Width	32 mm
Depth	20 mm

Feature	Order no.
Dual	845-200



### Surface housing for surface-mount installation, model

Matching for models 1841(RR), 3841(RR) and 1842(RR). The casing can be combined with matching part 848-2. Door bolt mounting screws are included in the delivery complement.

Technical attributes	
Height	48 mm
Width	73 mm
Depth	174 mm
Material housing	Aluminium, anodised in natural
	colour.
Feature	Order no.
Masonry housing	848-100
Mortise latch bolt lock	848-200



### Transformer rectifier model 1001-24

Transformers with integrated rectifiers and power adapters for electric strikes, door bolts, motorized bolts, holding magnets, access control systems and door control systems.

Technical attributes	
Width	105 mm
Height	70 mm
Depth	73 mm
Sub-units	6
Mounting method	Surface-mounted / standard rail
Overload protection	thermal circuit breaker
Rated operating voltage secundary	24 V AC and DC/DC = 50% ripple
Rated current consumption	1 A / 1.5 A max. 10 s

Feature	Order no.
Supply voltage 24 V AC/DC	1001-24-100



### Transformer rectifier model 1001-12

Transformers with integrated rectifiers and power adapters for electric strikes, door bolts, motorized bolts, holding magnets, access control systems and door control systems.

Technical attributes	
Width	105 mm
Length	70 mm
Height	73 mm
Sub-units	6
Mounting method	Surface-mounted / standard rail
Overload protection	thermal circuit breaker
Rated operating voltage secundary	12 V AC and DC/DC = 50% ripple
Rated current consumption	1 A / 1.5 A max. 10 s

Feature	Order no.
Supply voltage 12 V AC/DC	1001-12-100

## Motorized door bolts Model 5523

If you wish to combine high security with remote monitoring, effeff offers additional motor bolts that are operated by an integrated 12V electromotive gear unit. The effeff locking mechanisms are available with a motor bolt, double bolt or with motorized power cam bolt.

As the effeff motor bolts meet the high security requirements, they are suitable for use in banks, data centres, power stations, laboratories and of course, also for apartments and residential complexes.

Either as an individual solution or in complex systems, the control of the locking mechanisms leaves nothing to be desired and is possible via control panels, door code systems or access control systems. In particular in dangerous situations, entrances and exits can be opened or closed reliably according to the specific requirements.

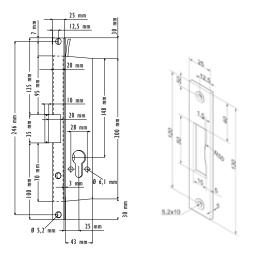
#### Note:

Motorized power bolts are used together with normal locks as an additional locking mechanism to ensure maximum security.



### Motorized bolt, model 5523 for mortise fitting

Locking and unlocking is either motorized or mechanical via cylinders. The motor bolt can only be installed vertically, i.e. normally at the side in the door leaf. The bolt is delivered complete with striking plate.

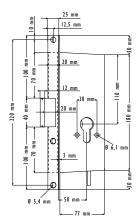


Technical attributes	
Operating temperature range	-10 °C to +50 °C
Class of protection	IP 20
Connecting cable	4 m
Lateral shear load	Up to 5000 N
Resistance force to prevent bolt from being pushed back	2000 N
Installation position	vertical
Rated operating voltage	12 V DC (only for operation
	with appropriate effeff control)
Rated current consumption	1,2 A

Feature	Order no.
Backset 25 mm	55231025E91

### Note:

Available special bolt lengths from 30 to max. 45 mm in steps of 5 mm.



### Motorized bolt, model 5523 for mortise fitting

Locking and unlocking is either motorized or mechanical via cylinders. The motor bolt can only be installed vertically, i.e. normally at the side in the door

The bolt is delivered complete with striking plate.

Technical attributes	
Operating temperature range	-10 °C to +50 °C
Class of protection	IP 20
Connecting cable	4 m
Lateral shear load	Up to 5000 N
Resistance force to prevent bolt from being pushed back	4000 N
Rated operating voltage	12 V DC (only for operation
	with appropriate effeff control)
Rated current consumption	1,2 A

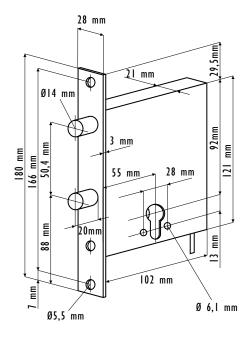
Feature	Order no.
Backset 50 mm	55231050E91

## Motorized dual deadbolt Model 5525



### Motorized twin bolt, model 5525 for mortise fitting

Motorized dual deadbolts are used where very high mechanical reliability is required. Dual deadbolts are extended and retracted by electric motor. Mechanical operation with the cylinder is only intended for emergencies such as power failure or other faults. Electric mode is only available again once unlocking has been mechanically reset.



Technical attributes	
Operating temperature range	-10 °C to +50 °C
Class of protection	IP 20
Connecting cable	4 m
Lateral shear load	Up to 5000 N
Resistance force to prevent bolt from being pushed back	2000 N
Bolt throw	20 mm
Mounting method	vertical
Cylinder type	Euro profile cylinder
Rated operating voltage	12 V DC (only for operation
	with appropriate effeff control)
Rated current consumption	0,3 A

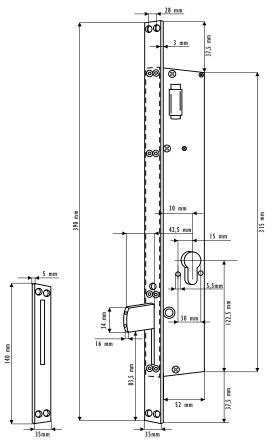
Feature	Order no.
Backset 55 mm	55251055E91

## Motorized power cam bolt Model 5540



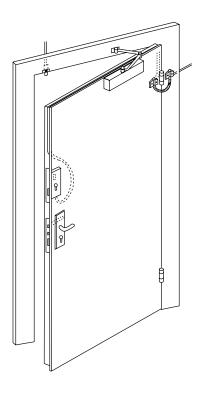
### Motorized power cam bolt, model 5540-30

The effeff motorised power cam bolt 5540-30 is designed for metal and wooden doors Its very sturdy design with its particularly solid cam bolt also secures locking on doors with a large rebate clearance. The deadbolt is operated either with an electric motor via switching device 5516-14 or 5517-12, or mechanically using the Euro profile cylinder in the



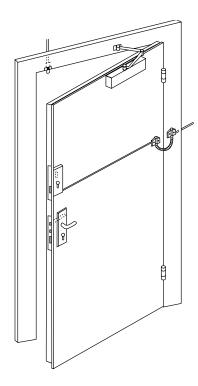
Technical attributes	
Operating temperature range	-10 °C to +50 °C
Class of protection	IP 20
Connecting cable	4 m
Lateral shear load	Up to 10 000 N
Cylinder perforation	Euro profile cylinder
Shutter time	0,3 sec.
Unlocking time	1.0 s
Installation position	vertical and horizontal
Bolt throw	42,5 mm
Rated operating voltage	12 V DC (only for operation
	with appropriate effeff control)
Rated current consumption	300 mA

Feature	Order no.
Backset 30 mm	5540-30E91



### **Mounting version 1**

The cable can be laid in the door fold. A duct is milled in wood doors and a wood cover strip can be used to improve the appearance.



### **Mounting version 2**

For metal doors, we recommend installing a protective conduit in the door leaf so that the connecting cable can be exchanged at all times during service work. The following modifications are only possible for fire doors and must be realized during manufacture.

## Motor bolts Matrix

Accessories	5522/23	5525   5526	5540-30
Door contract 10405	•	•	•
Cable connector 10318	•	•	•
Cable connector 10312-10 or 10312-20	•	•	•
Cable connector 10314-10 or 10314-20	•	•	•

### For use with external actuation and display possibilities (e.g. AC systems)

Connection for 1 motor bolt

Switching device 5512-13	•	•	-
Switching device 5517-12	-	-	•
Current consumption 1001-12-1-00	•	•	•
Operating consoles without control electronics 5514-12	•	•	•
Time switch 2032-10	•	•	•
Connection possibilities for 2 motor bolts			
Door control device 5516-14	•	•	•
Current consumption 1003-12-200	-	•	•
Current consumption 1003-12-400	•	_	-
Time switch 2032-10	•	•	•

- = suitable= not suitable

## Motorized bolt switching device Model 5512-13



### Motorized bolt switching device, model 5512-13

The 5512-13 motorized bolt switching device is used to monitor and control effeff motorized bolt models 5523/5525.

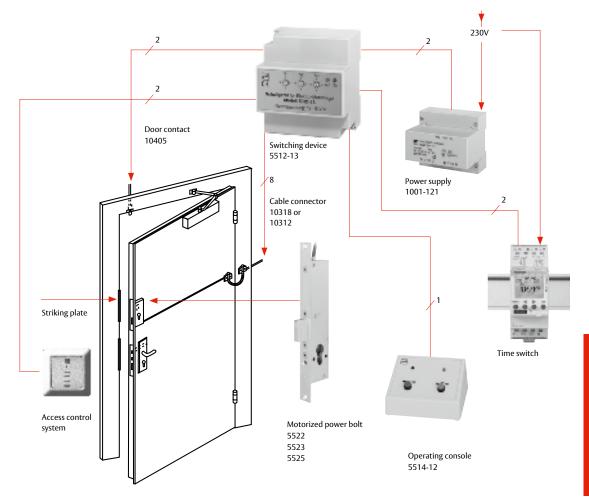
Door contract required (e.g. model 10405)

Technical attributes	
Class of protection	IP 20
Operating temperature range	0 °C to +40 °C
Storage temperature	-20 °C to +60 °C
Height	98 mm
Width	88 mm
Depth	63 mm
Sub-units	5
Colour	RAL 7035
Mounting method	Surface-mounted / standard rail
Input voltage	12 V - 16 V AC/ DC or 12 V DC
	stabilised
Rated current consumption	1.2 A (5523) / 0.3 A (5525,
	5526)
Signal output (locked/unlocked)	12 V DC max. 100 mA, non-
	isolated

Feature	Order no.
Switching device	5512-13E60

### **Functional illustration:**

Remote operation via operating console with optical display of locking status



### **Attention:**

The length of the connection leads from the operating console to the motor bolt should not exceed 40 m. Minimum cross-section 0.75mm<sup>2</sup> CU.

## Motorized cam bolt switching device Model 5517-12



### Motorized cam bolt switching device, model 5517-12

The 5517-12 motorized cam bolt switching device is used to monitor and control doors with effeff motorized cam bolt model 5540/-30.

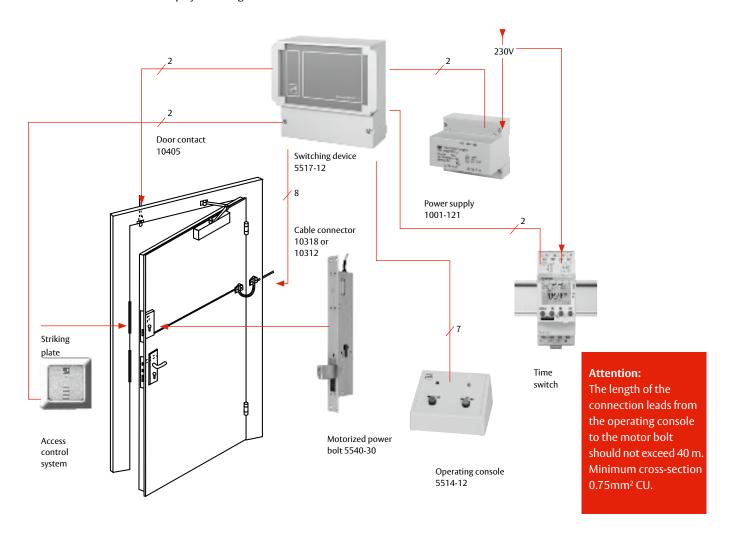
Door contract required (e.g. model 10405)

Technical attributes	
Class of protection	IP 20
Operating temperature range	0 °C to +40 °C
Storage temperature	-20 °C to +60 °C
Height	160 mm
Width	166 mm
Depth	81 mm
Colour	RAL 7035 (light grey)
Input voltage	12 V AC/DC
Power input for switching device	160 mA
Power input for motorized power	1 A
bolt 5540-30	
Signal output (locked/unlocked)	24 V / 1 A

Feature	Order no.
Switching device	5517-12E60

#### **Functional illustration:**

Remote operation via operating console with optical display of closing status



## Motorized bolt door control device Model 5516-14



### Door control device, model 5516-14

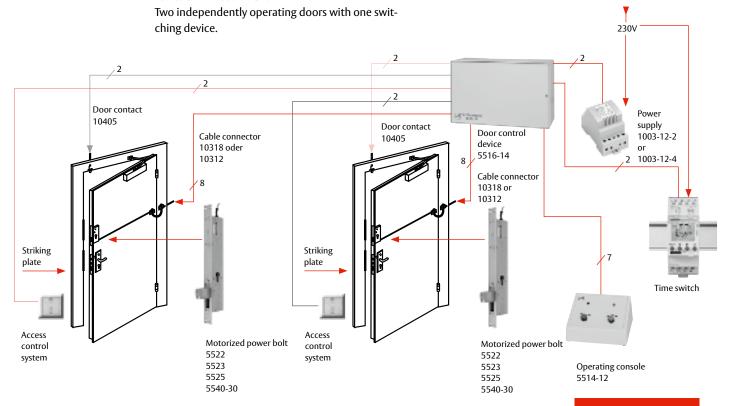
Door control device 5516-14 is used to monitor and control two effeff motorized bolts.

Necessary door contacts (e.g. model 10405).

Technical attributes	
Protection rating	Safety extra-low voltage
Class of protection	IP 20
Operating temperature range	0 °C to +40 °C
Storage temperature	-20 °C to +60 °C
Height	187 mm
Width	300 mm
Depth	125 mm
Colour	RAL 7035 (light grey)
Input voltage	12 V - 16 V ±10% AC or 12 V
	±10% DC
Rated power input for switching device	400 mA
Rated power input for motorized bolt	1.2 A (5523) / 0.3 A (5525,
	5526, 5540-30)
Signal output (locked/unlocked)	24 V / 1 A

Feature	Order no.
Door control system	5516-14F60

### **Functional illustration:**



### **Attention:**

The length of the connection leads from the operating console to the motor bolt should not exceed 40 m. Minimum cross-section 0.75mm<sup>2</sup> CU.

## Motorized door bolts Accessories



### Operating panel for manual control model 5514-12

Control unit without control electronics for connection to switching device 5512-13. Optical indication of locked condition. Open / Closed buttons for manual operation of the motorized bolt.

Technical attributes	
Class of protection	IP 20
Operating temperature range	0 °C to +40 °C
Storage temperature	-20 °C to +60 °C
Colour	RAL 7035 (light grey)
Height	53 mm
Width	106 mm
Depth	100 mm

Feature	Order no.
Operating desk	5514-1293E60



### Transformer rectifier model 1001-12

Transformers with integrated rectifiers and power adapters for electric strikes, door bolts, motorized bolts, holding magnets, access control systems and door control systems.

Technical attributes	
Width	105 mm
Length	70 mm
Height	73 mm
Sub-units	6
Mounting method	Surface-mounted / standard rail
Overload protection	thermal circuit breaker
Rated operating voltage secundary	12 V AC and DC/DC = 50%
	ripple
Rated current consumption	1 A / 1.5 A max. 10 s

Feature	Order no.
Supply voltage 12 V AC/DC	1001-12-100



### Digital time switch model 2032

Timer switches are practical control devices with a wide range of time settings for automatic locking and unlocking of doors. The timer system enables the door strike mode to be switched on and off automatically as the timer controls the door strike via a permanent contact. Microcomputer, with combined daily and weekly program.

42 freely programmable memory locations.

Technical attributes	
Mounting method	Surface-mounted/distributor
	installation
Class of protection	IP 20
Width	35,8 mm
Height	90 mm
Depth	68,5 mm
Sub-units	2
Shortest switching interval	1 Min.
Power reserve	10 years
Memory locations	56 freely programmable
	locations
Supply voltage	230 V AC
Potential-free changeover contact	Max. 16 A / 250 V AC

Feature	Order no.
Day and week schedule	2032-1000

## Motorized door bolts Accessories



### Power supply, model 1003-12-2

There is a suitable power supply unit for each type of use. The individual power supply units stand out due to their constant output voltage during fluctuations in mains voltage and load alternation.

Technical attributes	
Mounting method	Surface-mounted / top hat rail
Overload protection	Electronic
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 00
Protection rating	II/Insulation protection
Housing	Plastic
Casing colour	RAL 7035
Dimensions:	66.5 / 93 / 52.5 mm (H/W/D)
Sub-units	2
Input voltage	100-240 V AC
Output voltage	12 V DC (regulated)
Output current	2 A

Feature	Order no.
Power supply	1003-12-200



### Power supply, model 1003-12-4

There is a suitable power supply unit for each type of use. The individual power supply units stand out due to their constant output voltage during fluctuations in mains voltage and load alternation.

Technical attributes	
Mounting method	Surface-mounted / top hat rail
Overload protection	Electronic
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 00
Protection rating	II/Insulation protection
Housing	Plastic
Casing colour	RAL 7035
Dimensions:	66.5 / 93 / 140 mm (H/W/D)
Sub-units	8
Input voltage	100-240 V AC
Output voltage	12 V DC (regulated)

Feature	Order no.
Power supply	1003-12-400



### Conical contact model 10405.11

It is characterized particularly by its hardwearing design with steel ball and screw thread for flexible setting to a wide range of different door geometries.

Technical attributes	
Max. contact rating	25 V / 1 A
Class of protection	IP 40
Response path	1 mm
Adjustment path	13 mm
Diameter	18 mm
Type of connection	Screw terminals
Life span	1 M switching cycles
Contact type	Change-over contact

Feature	Order no.
Angular face plate	10405.1100
Radius faceplate	10405.11R00



### Cable transition model 10318

For power transmission from the door to door leaf, with plastic fixing caps. The wires are drawn through a flexible, rust-proof metal hose.

Technical attributes	
Version	Suitable for wires up to 7 mm outside diameter
Feature	Order no.

Length 18 cm

10318-----00

## Motorized door bolts Accessories



### Mounting set model 10313

For cable transition 10312-10 in wooden doors/frames

Technical attributes	
Version	For short cable transitions
Width	25 mm

Feature	Order no.
For timber structures	1031300



#### Cable transition model 10312-10

Suitable for feeding cables with installation casing on one side for wood, metal and PVC profiles.

Technical attributes	
Installation dish	Onesided
Material housing	Stainless steel
Material spiral hose	Stainless steel
Max. cable diameter	7 mm
Max. permissible horizontal rotation	100 mm
Length	330 mm
Width	25 mm
Depth	17 mm

Feature	Order no.
Short model	10312-1000



### Concealed cable transition model 10312-20

For feeding cable with integrated cable tracking and installation casing on one side.

Integration system for wooden, metal and PVC profiles

Technical attributes	
Installation dish	Onesided
Material housing	Stainless steel
Material spiral hose	Stainless steel
Max. cable diameter	7 mm
Max. permissible horizontal rotation	200 mm
Length	519 mm
Width	24 mm
Depth	49,5 mm

Feature	Order no.
Long version	10312-2000



### Concealed cable transition model 10314-10

With integrated break-proof flex cable, clamp-plug connection technology and installation casing on one side suitable for wood, metal and PVC profiles.

Technical attributes	
Installation dish	Onesided
Material housing	Stainless steel
Material spiral hose	Stainless steel
Signal transmission	10-pin
Max. permissible horizontal rotation	100 mm
Continuous function load cycles	500,000 cycles (at max. elongation and 180 degree turn)
Length	297 mm
Width	25 mm
Depth	17 mm
Rated operating voltage	24 V
Operating voltage tolerance range	+20%
Max. current consumption	1 A 100% ED, 4 A max. 1 sec. 10% ED
Contact resistance per signal	0,21 Ohm

Feature	Order no.
Short model	10314-1000

## Motorized door bolts Accessories



### Concealed cable transition model 10314-20-20

With integrated break-proof flex cable, clamp-plug connection technology and installation casing on both sides.

Installation system for minimal room dimensions and unobstructed movement. This system is particularly suitable for door systems with reduced spacing for hinges and inside hinges.

The advantage of this fitting type is being able to position the door flush with the frame (0 mm reveal when door is closed). Minimal gaps for door rotation, as with inside hinges, for instance, do not result in the door jamming.

Technical attributes	
Installation dish	Two-sided
Material housing	Stainless steel
Material spiral hose	Stainless steel
Signal transmission	10-pin
Continuous function load cycles	500,000 cycles (at max. elonga-
	tion and 180 degree turn)
Max. permissible horizontal rotation	200 mm
Length	519 mm
Width	24 mm
Depth	17,5 mm
Rated operating voltage	24 V
Operating voltage tolerance range	+ 20%
Max. current consumption	1 A 100% ED, 4 A max. 1 sec.
	10% ED
Contact resistance per signal	0,35 Ohm

Feature	Order no.
Long version	10314-20-2000

## Electromechanical spring bolt Model 909X10

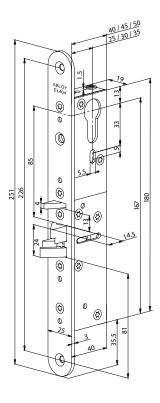


### Electromechanical spring bolt, model 909X10

Used on swing doors which have less security requirements for locking and produce no pre-load due to door sealing.

### **Features:**

- · Adjustable backset, 25/30/35 mm.
- · Fail-unlocked/fail-locked function reversible.
- · double action latch locking signal via micro switch.



Technical attributes	
Operating temperature range	-20 °C to +60 °C
Striking plate length	152 mm
Width of the striking plate	38 mm
Striking plate depth	3 mm
Face plate length	251 mm
width face plate	25 mm
Face plate depth	3 mm
Latch bolt range	14.5 mm
Installation position	At right angel
Rated operating voltage	12-24 V DC stab.
Rated operating voltage tolerance range	+15% - 10%
Microswitch power rating	24 V DC / 0.4 A
Current consumption at 12 V	Switch-on current 550 mA,
	operating current 110 mA
Current consumption at 24 V	Switch-on current 270 mA,
	operating current 110 mA

Feature	Order no.
Spring bolt lock	909X101PZG41



Connecting cable, model 909-10-KAB Matches electromechanical spring bolt 909-10.

Technical attributes	
Number of wires	9-wire
Length	6 m
Feature	Order no.
Connecting cable	909-10-KAB00

Power supply, model 1003-24-1 Technical informatio s. p. 31

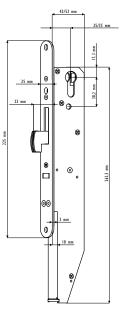
Feature	Order no.
Power supply	1003-24-100

## Electromechanical hook bolt Model 909-20



#### Electromechanical hook bolt model 909-20

Used in sliding doors which must be electromechanically locked, or as a supplementary locking device on swing doors.



Backset 25 mm, 24 V fail-locked 909-20251PZ-F41 Backset 35 mm, 24 V fail-locked 909-20351PZ-F41

30 mm with flat connector

-20 °C to +60 °C

279 mm

25 mm

3 mm

225 mm

25 mm

3 mm

22 mm

+/- 15%) 700 mA

154 x 32 x 22 mm

24 V DC / 200 mA

24 V DC stabilised (ripple

- · Motorized locking and unlocking
- · With hooked cam bolt
- · Manual locking/unlocking possible by means of Euro profile cylinder
- · With integrated door contact

- · Motorized lock control (in delivery complement):
- surface mount plastic housing, IP 40, 190 x 110 x 45 mm (W x H x D)
- monitoring (door open/closed, bolt out/in, cylinder)
- temporary/continuous unlock,

Technical attributes

Striking plate length Width of the striking plate

Striking plate depth

Face plate length

width face plate

Face plate depth

Locker size striking plate

Rated operating voltage

Rated current consumption Microswitch power rating

Bolt throw

Operating temperature range

Connecting cable

- relock time (adjustable, 1 ... 21 s)



### Connecting cable, model 909-20-KAB

Matches electromechanical hook bolt 909-20.

rechnical attributes	
Number of wires	16-pin
Length	6 m

Feature	Order no.
Connection lead	909-20-KAB00



### Power supply, model 1003-24-1

There is a suitable power supply unit for each type of use. The individual power supply units stand out due to their constant output voltage during fluctuations in mains voltage and load alternation.

Technical attributes	
Mounting method	Surface-mounted / top hat rail
Overload protection	Electronic
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 00
Protection rating	II/Insulation protection
Material housing	Plastic
Casing colour	RAL 7035
Dimensions:	68.5   93   52.5 mm (H/W/D)
Sub-units	3
Rated operating voltage	100-240 V AC
Output voltage	24 V DC (regulated)
Output current	1 A

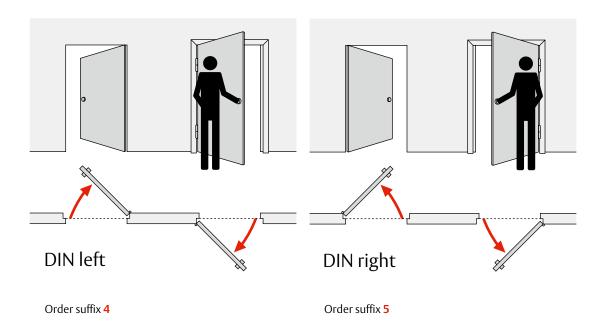
Feature	Order no.
Power supply	1003-24-100

## Motor bolt **Explanation**

### How to differentiate between Version A and B

### General rule:

Observe the door from the side on which the door hinges are visible. This is the side to which the door is opened. The DIN definition of the door strike or striking plate refers to the DIN table. For doors with two leaves, the DIN direction of the leaf that opens is decisive.



33 Electric bolts

# Order form Please copy formular, complete and fax it back to ASSA ABLOY!



### ASSA ABLOY

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Branch	
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ASSA ABLOY Sicherheitstechnik GmbH Bildstockstraße 20 72458 Albstadt GERMANY Tel. +49 7431 123-700 Fax +49 7431 123-258 export@assaabloy.de

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.

## 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 vourself.

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 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



### 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 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

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.





Originally part of the ZEISS IKON AG company founded in 1926, IKON is ASSA ABLOY's most successful brand for locking and security technology in Germany. The IKON brand offers state-of-the-art products and solutions at the cutting edge of technology. The brand product range includes high-quality mechanical and mechatronic locking cylinders, auxiliary locks and security devices, door fittings and door closers. They provide active burglary protection and safeguard both people and property.



ASSA ABLOY

Founded as a precision engineering and electrical engineering workshop in 1936, effeff is a global leading brand for electromechanical locking and unlocking devices.

Electric strikes, electric bolts, security locks, access control systems and escape route technology are among the effeff brand products which today provide security and convenience in over 75 countries throughout the world.

ASSA ABLOY Sicherheitstechnik GmbH is the professional partner worldwide in mechanical and electromechanical 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** is the world's leading manufacturer and supplier of door opening solutions, meeting tough enduser demands for safety, security and convenience.

ASSA ABLOY Sicherheitstechnik GmbH Bildstockstraße 20 72458 Albstadt GERMANY albstadt@assaabloy.de Tel. +497431 123-700 Fax +497431 123-258 www.assaabloy.de