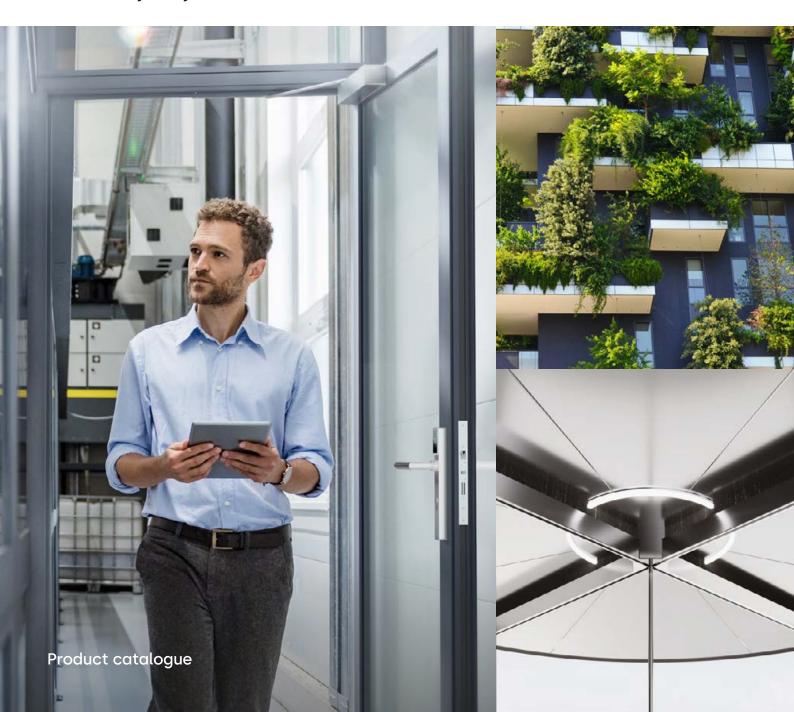


## Overview of dormakaba products

Our variety for your access



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# Advanced solutions are our passion



With over 160 years of experience with access and security in a variety of markets, we continue to innovate and deliver the best products, solutions and services to our customers around the world.

In our increasingly digitized and populated world, security is no longer a mechanical process but an integral part of the urban infrastructure. Anything from crowd management to digital protection and, more recently, hygiene and disaster preparedness can be security considerations.

With the right technologies and partners, cuttingedge access management tools can support our societies' transition into a smart and sustainable future, maximizing our security whether we need protection in crowds or clouds.

#### Our offering

Our offering includes individual products, complete solutions, and range of services, from planning and installation to ongoing operations, all designed to help increase our customers' excellence.



Access Automation Solutions (AAS)

Entrance Automation Entrance Security



Access Control
Solutions (ACS)

Escape and Rescue Lodging Systems Electronic Access & Data



Access Hardware Solutions (AHS)

Door Closers Architectural Hardware Mechanical Key Systems



Services

Consulting and Planning Implementation Commissioning Maintenance

#### Our focus sectors

We offer a bespoke range of products and solutions to many different types of buildings with many different access needs. We are there, from seamless passenger journeys at airports, through customized solutions at hospitals, to providing a safe and welcoming experience in stadiums.



Airports



Retail



Transport & Logistics



Healthcare



Banks & Finance



Industry & Manufacturing



Offices



Government & Administration



Utilities & Telecoms



Hospitality



Residential & Multi-family housing



Education



Sports & Culture

## Future with a history Providing you with the best has always been our policy

1862

Locksmith's workshop and cash register factory founded by Franz Bauer 1934

Patenting of the reversible key

2000/01

Acquisition of the Unican company

2009

Installation of the world's first electric airport gate for automated self-boarding





















1908

Dörken & Mankel KG founded

1950

Entry into the door closer business

1962

Production of the first automatic doors

2002

Entry into the mobile partition wall system business

2015

Merger of Dorma and Kaba

#### 2015/16

First cloud-based access solutions

Acquisitions in North America

#### 2017

Acquisition of the Best company in the USA

#### 2019/20

EcoVadis gold medal for sustainability management

Development of digital business ecosystems

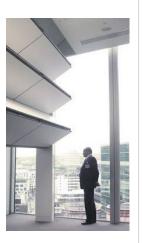
#### 2021/22

EntriWorX EcoSystem launch

Recognised as one of the most sustainable companies in Switzerland















#### Through consultation focused totally on you

You need to secure your building. With robust technology adapted to your respective needs in every detail. With comfortably adaptable systems facilitating workflow and increasing efficiency and economic feasibility. With precise and dependable solutions tailored to your needs, which you can comfortably and reliably integrate into your plans or expansion.

We provide all this from a single source. Our comprehensive consultation services enable the custom-tailored implementation of your project. Our experienced experts create a precise requirement profile based on your tasks, needs and wishes and then recommend targeted solution concepts.

We support you in cross-system planning and implementation with our fast, full-coverage and knowledgeable sales network. With dormakaba, you always have a direct contact partner with specific expertise for your entire system and its individual components – we're internally networked and work across multiple interfaces.

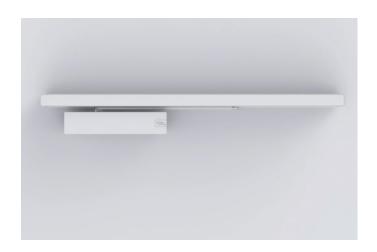
We advise and accompany you from planning to implementation – personally, cooperatively and openly. We offer you access systems which prove their worth every day in use across the globe and specialised service that's always at your side.

Architect service:
T: 0800 367 6226
(free of charge in Germany)
architekten.dach@dormakaba.com



#### Design with three letters: XEA

What we mean by XEA: The XEA design language is based on a comprehensive, standardised position, consistently taking into account our own requirement for compatibility, high quality, innovation, perfection and aesthetics as stipulated in ten points. This principle unites basic forms, colours and surface finishes in a single, uniform appearance. XEA combines dormakaba's product and corporate worlds to form a universal design that speaks a recognisable language in terms of content and visual presence.





#1

#### Recognisable details

The dormakaba design is recognisable in every product, naturally from its distinctive logo, but above all in the interplay of XEA elements.



#2

#### Intuitive symbols

All symbols used are reduced to their essential elements, but are easily recognisable and self-explanatory.



#3

#### Standardised surface finishes

The four basic colours for every product ensure that all combinations will always match. The XEA colour-coding system adds clarity.



#4

#### Clean forms

The even and two-dimensional surface finishes create a holistic form design. Radii and sharp edges contrast with and complement each other.



#5

#### **User-friendly operation**

User interfaces have a minimalist, uniform design, making them immediately recognisable.

Operation is self-explanatory.



#6

#### **Contrasting surface finishes**

The combination of light and dark, matt and glossy surface finishes creates a multi-faceted overall image. This makes individual function areas clearly recognisable.



#7

#### Strong casing

If products are equipped with an enveloping housing frame, it provides additional protection from external influences.



#8

#### Multi-layered compositions

The construction reveals its value at first glance. The quality of the material of the decorative screens impresses with a visible, solid edge.



#9

#### **LED** indicator

All applications can be learned quickly across-the-board, for example when LED light strips signal access, guide people or indicate status.



#10

#### **Customised design**

A system of materials and colours creates a broad spectrum of solutions suited to any architecture and more: individual touches are created with XEA.



# Access Hardware Solutions

#### Door solutions from a single source

Whether for barrier-free door situations with high ease of opening, individual fire protection or unparalleled systems for escape and rescue routes – dormakaba has the solution. Our custom-built product lines offer intelligent solutions for almost every situation.

## Access Hardware Solutions. Secure, reliable and long-lasting.

Easier opening and smoother closing represent an added value for every user of doors that is literally "obvious" right away. This ease of use is made possible by innovative dormakaba technology, which is used in all products in our comprehensive portfolio. Our large portfolio of access hardware solutions includes various door closer systems, a wide range of different lock cylinder designs for doors, window handles, gates, garages, mailboxes, furniture, circuits and almost every other conceivable application, as well as self-locking panic locks and panic hardware.



#### **Door Closers**



**Slide channel door closer**With Easy Open technology, as a free swing door closer or concealed door closer.



**Door closer with standard arm**Compact door closer for a wide range of door requirements.



**Floor spring**Versatile floor springs for all types of doors.

#### **Architectural Hardware**



**Door locks**Emergency-escape locks with automatic locking mechanism, mechanical or motorised, network-capable – security in both directions.



Panic hardware
Reliable and aesthetic, security latch
bolts or exit pads, standard-compliant
for public facilities.

#### Mechanical Key Systems



**Locking systems and their planning**Easy and flexible management of your locking system.



Reversible key systems

Locking cylinder with reversible key.

We've combined security and
convenience for you.



Special functions for your reversible key system – added value on request



**Serrated key systems**Secure and flexible – our locking cylinders with serrated keys.



Special functions for your serrated key system – added value on request

## Easy door opening as per DIN SPEC 1104



40% less effort, 40% easier opening – the heartshaped cam reduces the required effort to a minimum:

EASY-OPEN technology, which has been tried and tested millions of times, enables a rapidly decreasing opening torque in accordance with DIN SPEC 1104. This makes our slide channel door closers barrier-free in accordance with DIN 18040, easy to open and even able to close slowly if needed. This is convenience which makes everyday life much easier for young and old alike.



#### Door closers

#### at a glance

						Sli	Slide channel door closer					
Product	ITS 96	ITS 96 FL	TS 98 XEA	TS 97	TS 97 FL XEA	TS 93 System	TS 93 Basic	TS 99 FL	TS 92 TS 92 XEA	TS 92 Basic		
General doors (width)												
≤ 950 mm												
≤ 1,100 mm	•			•					•	•		
≤ 1,250 mm						•	•	•				
≤ 1,400 mm	•	•	•		•							
≤ 1,600 mm						•						
Double action doors												
Exterior doors, opening outwards			•			•	•					
Fire and smoke doors												
Fail-safe from 0°		•			•			•				
1-leaf	•	•	•	•	•	•	•	•	•	•		
1-leaf with electromagn. Hold open	0	0	0		0	0		0				
2-leaf	•	•*	•		•*	•		•*				
2-leaf with electromagn. Hold open	0	0*	0		0*	0		0*				
Functions												
Closing force (EN)	2-4/3- 6	3-6	1-6	2-4	3-6	2-5/5- 7	2-5	2-5	1-4	1-4		
Continuously adjustable closing force	•	•	•	•	•	•	•	•	•	•		
Continuously adjustable closing time	•	•	•	•	•	•	•	•	•	•		
Soft Flow			•									
2. closing path between 15° and 0° $$			•						•	•		
Continuously adjustable latching action	•	•	•	•	•	•	•	•				
Delayed closing			•			•						
DIN SPEC 1104 (Easy Open)	•	•	•	•	•	•	•		•	•		
Barrier-free design in accordance with DIN 18040**	•	•	•	•	•	•	•	•	•	•		
Same design for DIN-L (left-handed door) and DIN-R (right-handed door)	•	•	•	•	•	•	•	•	•	•		
Ratchet type hold-open system <sup>2</sup>	0		0	0		0	0		0	0		
Complete package with slide channel				•	•		•	•		•		
Back check			•			•	•					
Mounting plate with universal hole pattern			•	•	•	•	•	•	•	•		
Mechanical cushioned limit stay	•	•	0	•	0	0	0	0	0	0		

<sup>•</sup> Standard O Optional \*Fail-safe at active door leaf \*\*Up to EN 5 \*\*\*Electrohydraulic hold-open Issued 9/2020 1 Fail-safe via arm as from a 75° door opening angle 2 Not for fire/smoke protection



		Door closer with standard arm					Floor spring						
TS 91	TS 90 Impulse	TS 83	TS 73 V	TS 73 EMF	TS 72	TS 71	BTS 80	BTS 80 F	BTS 80 EMB	BTS 80 FLB	BTS 75 V	BTS 84	
•	•						•						
	•		•	•	•	•	•	•	•	•	•	•	
				•			•	•	•	•			
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				O <sup>1</sup>						•			
•	•	•	•	•	•	•		•	•	•			
		•	•	•	•	•		•	• ***	•			
				•					• ***				
3	3/4	3-6/7	2-4	4/5/6	2-4	3/4	3/4/6	4/5/6	4/5/6	4/5/6	1-4	2/3/4	
		•	•		•						•		
•	•	•	•	•	•	•	•	•	•	•	•	•	
•	•		•		•	•			•		•		
		0	•	•	•	•	•	•	•				
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•	•												
•	•	•	•	•	•	•	•				•	•	
0	0	0	0		0	0	•				0	0	
		•	•				•	•	•		•		
0		0	0	0	0	0							

## Slide channel door closer system

TS 98 XEA system, TS 92 XEA



The new TS 98 XEA system impresses with a new design and new functions. It offers high opening convenience for almost all single-leaf and double-leaf doors. The enhanced closing force according to EN 1–6 enables a greater range of applications. Nearly silent closing is made possible by the additional SoftFlow closing path. The system also impresses during installation, as just one closer body is required for all installation types.

#### Simply impressive:

- High opening convenience, fully controlled and low-noise closing
- One closer body for all four installation types, DIN-L/DIN-R
- Three different closing paths: 180°-15°; 15°-0°; 7°-0°
- Make all adjustments conveniently from the front
- For door leaf widths of up to 1,400 mm
- Standard backcheck and delayed closing in all installation types
- XEA design
- Additional SoftFlow closing path for nearly silent closing (15°-0°)



#### TS 98 XEA N/ TS 98 XEA EMF

- Single-leaf doors
- Electromechanical hold-open unit



#### TS 98 XEA EMR/ TS 98 XEA UBIVIS

- Single-leaf doors
- Electromechanical hold-open with incorporated smoke detector with integrated power pack



#### TS 98 XEA GSR/ TS 98 XEA GSR-EMF

- Single-leaf doors with door coordinator
- Electromechanical hold-open unit



#### TS 98 XEA GSR-EMR/ TS 98 XEA GSR-EMR without EMF

- Double-leaf doors with door coordinator
- Electromechanical hold-open with incorporated smoke detector with integrated power pack



#### TS 92 XEA

- Single-leaf doors
- Installation to full-glass doors





## Battery-operated slide channel hold-open system

#### G-Ubivis XEA





The battery-operated slide channel hold-open system with integrated smoke detector for use on fire doors.

G-Ubivis XEA is approved as a hold-open system by the German Institute for Civil Engineering (Deutsches Institut für Bautechnik, DIBt) in Berlin. Combined with approved dormakaba door closers, G-Ubivis XEA also features perfect design.

#### Simply impressive:

- Greater flexibility when upgrading hold-open systems
- No wiring for 230 V
- No dependence on other work being completed first
- As per DIN 18040 and DIN SPEC 1104/CEN/TR 15894
- Easy upgrading and installation without altering the building structure
- Attractive XEA design





#### Slide channel door closer system

#### TS 93 system

The modular slide channel door closer system in a wide range of variants for barrier-free construction.

#### Simply impressive:

- Barrier-free as per DIN 18040
- With tried-and-tested EASY OPEN technology
- For door leaf widths up to 1,600 mm, single-leaf and double-leaf doors
- High opening convenience
- Suitable/approved for emergency exits and fire doors
- Door coordinator with incorporated smoke detector with integrated power pack











#### TS 93 N/TS 93 EMF

- Single-leaf doors
- Electromechanical hold-open

#### **TS 93 EMR**

- Single-leaf doors
- Electromechanical hold-open with incorporated smoke detector with integrated power pack

#### TS 93 GSR/GSR-EMF

- Double-leaf doors with door coordinator
- Electromechanical hold-open

#### TS 93 GSR-EMR/ GSR-EMR/V

- Double-leaf doors with door coordinator
- Electromechanical hold-open with incorporated smoke detector with integrated power pack





## Slide channel door closer system

TS 92/TS 91

The universal slide channel door closer for standard doors.

#### Simply impressive:

- With tried-and-tested EASY OPEN technology
- For door widths up to 1,100 mm (TS 92, EN 1-4) or 950 mm (TS 91, EN 3)
- For single-leaf and double-leaf doors
- High opening convenience
- For emergency exits and fire doors





**TS 97** 

The smallest surface-mounted door closer with slide channel in the building business.

#### Simply impressive:

- Compact, with an installation depth of just 37 cm
- Uniform length of door closer and slide channel
- $\bullet$  For door widths up to 1,100 mm (EN 2-4)
- With tried-and-tested EASY OPEN technology
- High opening convenience
- High quality for upscale interior construction
- Quick, easy installation







#### TS 90 Impulse

The basic slide channel door closer which combines technical quality, economic feasibility and contemporary design.

#### Simply impressive:

- With tried-and-tested EASY OPEN technology
- One closer body for all four installation types, DIN-L/DIN-R
- For door widths up to 1,100 mm
- High opening convenience
- Suitable for interior doors
- Economical





#### Free-swing door closer

TS 97 FL XEA system

#### For freely movable fire and smoke doors and secure closure in the event of a fire.

The TS 97 FL XEA is the new hold-open mechanism with fail-safe from dormakaba used in conjunction with a smoke alarm system (e.g. RMZ) as a hold-open system. The TS 97 FLR-K XEA is used as a complete solution including a smoke alarm system. In both systems, the fail-safe is activated from a door opening angle of >  $0^{\circ}$ , which means the door can move freely. In the event of an alarm or power failure, the door closer will securely close the door.





For more information, visit: your local dormakaba website

#### Simply impressive:

- Adjustable closing force EN 3-6
- Barrier-free thanks to the tried-and-tested EASY OPEN technology as per DIN 18040 and DIN SPEC 1104 (CEN/TR 15894)
- Intuitive use of the door fail-safe is put into force on the first door operation irrespective of the door opening angle
- For fire and smoke doors up to 1,400 mm wide and weighing up to 180 kg
- Closing time continuously adjustable using valve
- Can be used for DIN-L and DIN-R
- Adjustable latching action for reliable door closing
- Uniform appearance in the dormakaba XEA design







#### TS 97 FL XEA

- Single-leaf doors
- Fail-safe

#### TS 97 FLR-K XEA

- Single-leaf doors with fail-safe
- Incorporated smoke detector with integrated power pack

#### TS 97 FL GSR XEA

• Double-leaf doors with door coordinator

#### TS 99 system

#### High freedom of movement for even more door widths.

The free-swing door closer enables nearly resistance-free opening of fire doors. Thanks to the fail-safe, the door is freely movable and is especially suitable for barrier-free construction as per DIN 18040 or DIN SPEC 1104, but in case of alarm only in connection with an RMZ.

Door closer TS 99 FL with the Contur design is a hold-open mechanism with fail-safe used as a hold-open system in connection with a smoke alarm system (dormakaba RMZ). In the event of an alarm or power failure, the door closer will securely close the door.





#### Simply impressive:

- High opening convenience
- For door leaf widths up to 1,250 mm, single-leaf and double-leaf doors
- Fail-safe for door angle >0°
- Adjustable closing force EN 2-5









#### TS 99 FL

- Single-leaf doors
- Fail-safe

#### **TS 99 FLR**

- Single-leaf doors with fail-safe
- Incorporated smoke detector with integrated power pack

#### TS 99 FLR-K

- Single-leaf doors with fail-safe
- Incorporated smoke detector with integrated power pack

#### TS 99 FL GSR/ FL GSR-EMF 1/ FL GSR-EMR 1

- Double-leaf doors with door coordinator
- Incorporated smoke detector with integrated power pack

#### Door closer with standard arm

TS 83

Convenience door closer with standard arm and self-regulating backcheck.

#### Simply impressive:

- For nearly every door size and application (EN 3-6 and 7)
- Also available with optimised corrosion protection for exterior doors
- Compact closer design and solid flat arm
- Broad functional scope standard and optional
- Can be used on fire and smoke doors



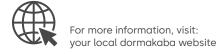


#### **TS 73 EMF**

The electrohydraulic hold-open of the TS 73 EMF makes it effortless to hold doors open at angles from 75° to 180°. The doors lock securely in the event of an alarm or power failure. The standard arm can be upgraded to convert the TS 73 EMF into a free-swing door closer.

#### Simply impressive:

- Integrated electrohydraulic hold-open function
- Hold-open point freely selectable from 75°
- Door leaf widths up to 1,400 mm
- Can be expanded into a free-swing door closer





#### TS 73 V

Versatile, compact door closer with standard arm for doors of a wide variety of different designs and constructions.

#### Simply impressive:

- Specifically for interior fire and smoke doors (EN 2-4)
- Door leaf widths up to 1,100 mm
- Adjustable closing force and speed
- One closer body for all four installation types, DIN-L/DIN-R
- Compact, timeless design





#### TS 72/TS 71

The universal door closer with a standard arm impresses with its easy, direct attachment to interior doors.

#### Simply impressive:

- Adjustable closing force EN 2-4
- Easy installation without mounting plates
- Compact design
- Economical solution for standard doors
- Adjustable latching action
- Timeless design



For more information, visit: your local dormakaba website



#### Concealed door closers

**ITS 96** 





#### Simply impressive:

#### ITS 96

- Extensive range of variants for barrier-free building as per DIN SPEC 1104
- EASY OPEN technology
- Adjustable closing force and closing time
- For door leaf widths up to 1100 mm
- Latching action can be switched on and off
- Optionally available with hold-open function

#### Simply impressive:

#### ITS 96 FL

- Fail-safe for door angle >0°
- For door leaf widths of up to 1,400 mm
- For single-leaf and double-leaf doors (at active door leaf)
- Can be combined with standard ITS 96 slide channels
- Suitable for barrier-free building in accordance with DIN 18040



#### ITS 96

- Single-leaf doors
- For standard doors and fire doors



#### ITS 96 EMF

- Single-leaf doors
- Electromechanical hold-open unit



#### ITS 96 GSR/ ITS 96 GSR-EMF

- Double-leaf doors
- Integrated door coordinator



#### ITS 96 FL

- Single-leaf and double-leaf doors
- Resistance-free opening



#### ITS 96 FL GSR/ ITS 96 FL GSR-EMF 1

- Double-leaf doors at active door leaf
- Resistance-free opening



The ITS 96 system offers an extensive range of solutions for the covered installation of door closers. EASY OPEN technology enables rapidly decreasing opening torque as per DIN SPEC 1104. With dormakaba ITS 96 door closers with EASY OPEN technology, the heart-shaped cam significantly and immediately reduces the opening torque to be overcome. This means that children, the elderly and people with disabilities in particular are able to open the door with minimal force.



#### Floor spring

#### BTS 80 system, BTS 75 V

Whether standard, narrow or wide, DIN left, DIN right or double action door – as universal floor springs, BTS 80 and BTS 75 V are designed for all types of doors. A comprehensive range of accessories ensures that they can be adapted to a wide variety of door constructions and different floor finishes. The individual functions of the floor springs fulfil a range of different requirements while offering high reliability and quality.

The BTS 80 floor spring system offers a host of functional and usage options for single-leaf and double-leaf doors. It's characterised by high opening comfort and can be used for preventive fire protection. The system can be supplemented with an electrohydraulic hold-open or fail-safe.





#### Simply impressive:

#### **BTS 80**

- Concealed installation
- For single-leaf and double-leaf doors
- For door leaf widths up to 1100 mm
- For door-leaf weights up to 300 kg
- Extensive range of variants with hold-open and fail-safe
- Easy door opening in accordance with DIN SPEC 1104

#### Simply impressive:

#### BTS 75 V

- Concealed installation
- Adjustable closing force EN 1-4
- For door leaf widths up to 1,100 mm
- Including mechanical backcheck
- Easy door opening according to German Industrial Standard (DIN) SPEC 1104
- With integrated installation level









#### BTS 80

- Preventive fire protection
- Up to 300 kg door-leaf weight

#### BTS 80 BSR, BTS 80 BSR EMB, BTS 80 BSR FLB

- Double-leaf doors
- Door coordinators

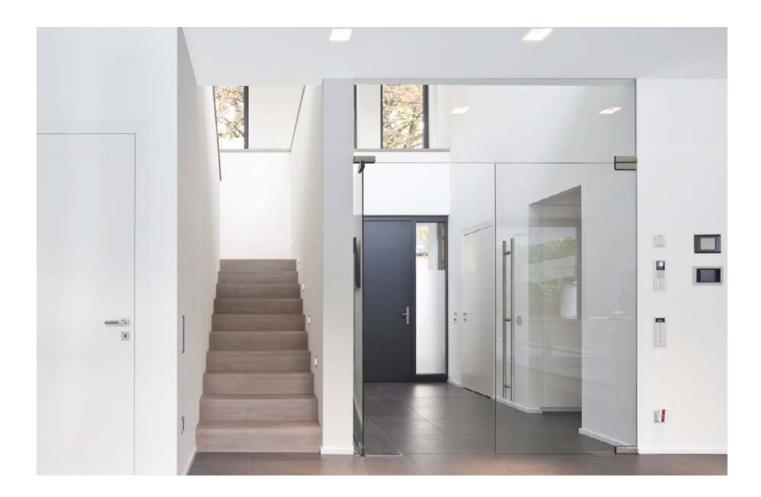
#### BTS 80, BTS 80 F, BTS 80 EMB, BTS 80 FLB

- Single-leaf doors
- Modular system

#### BTS 75 V

- Fire and smoke doors
- Up to 120 kg door-leaf weight

#### **BTS 84**



The door closer integrated into the floor, specifically for double action doors. With an overall depth of just 40 mm, only a shallow floor recess is required for installation, including for upgrading.

#### Simply impressive:

#### BTS 84

- Concealed installation
- Suitable for double action doors
- For door leaf widths up to 1,100 mm
- Adjustable closing time
- Optional hold-open at a 90° angle



## System components and accessories

## RMZ XEA and RMZ smoke detector with integrated power pack

The RMZ smoke detector with integrated power pack supplements door closer systems for preventive fire protection. It supplies connected hold-open mechanisms with 24 V direct current and deenergises them in the event of an alarm or during a power failure (release).

#### Simply impressive:

- Possibility to connect additional smoke detectors (e.g. dormakaba RM-N)
- Potential-free change-over contact
- With integrated maintenance and operation display
- Suitable for lintel mounting
- RMZ is available in XEA and Contur designs





#### G 96 GSR EMF 1 hold-open mechanism

The G 96 GSR EMF 1 hold-open mechanism allows the two leaves of a double-leaf door to be individually held open. It just makes sense: You get better economy with no reduction in security, quality or reliability!

#### Simply impressive:

- One hold-open system for two door leaves
- Barrier-free as per DIN 18040 and DIN SPEC 1104
- Suitable for doors in escape and rescue routes
- Approved by the DIBt in Berlin for use in hold-open systems
- Design freedom thanks to concealed installation
- Adjustable release force





## EM electric hold-open magnets

Hold-open mechanisms that keep fire protection terminals and smoke doors open. In case of fire, the trigger element disconnects the hold-open system as soon as the fire detector recognizes the fire.

#### Simply impressive:

- For surface, flush and floor mounting
- Modular system for flexible application
- Concealed cable entry
- Optimal holding force with low power consumption
- Especially suitable for wide and heavy doors



For more information, visit: your local dormakaba website



Light metal door hinges, pin hinges, door levers, pivot bearings and spindles for floor springs

Our floor and frame door closer systems are so flexible thanks to our extensive accessories that you're optimally equipped for just about every door situation.

- Light metal door levers for flush-mounted single action doors
- Pin hinges with eccentric plastic bushing
- Steel door lever, die-forged, galvanised
- Pivot bearings also available with extended shafts Timeless design







The new generation of dormakaba SVP emergency-escape locks is ideally suited for use in escape and rescue routes as well as in fire and smoke doors. Any door can be safely protected with the emergency escape function and the self-locking facility.

## Improved protection of human life:

- Emergency escape function in accordance with EN 179 and EN 1125
- Thanks to the emergency-escape function, the door can be opened in the direction of escape at any time by pressing the lever handle or the horizontal push bar

## Improved protection of property:

- Automatic locking of the doors after closing
- Can be used in suitable door systems up to resistance class
- Increased tamper protection through improved mechanical process safety

## The improved functions not only simplify the process of opening the door, but also offer installation advantages:

- Improved force transmission for problem-free opening even under difficult conditions
- Reliable locking and unlocking of motor locks through integrated power reserve module (SVP 2000 DCW® F)
- Integrated LED for status indication and error evaluation directly at the lock
- New operational modifications: DCW®, analog or CAN bus for motor lock variants

# Emergency-escape locks with automatic locking mechanism

## SVP/SVZ for single-leaf doors at a glance

Version EN 179 + EN 1125							
SVP/SVZ features	SVP 5xxx	SVP 4xxx	SVP 6xxx	SVZ 6xxx	SVP 2000 DCW®	SVP 2000 DCW® F	SVP 7000 Air
Mechanical lock	•	•					
Lever handle-controlled lock			•	•			•
Motor lock					•	•	
Access control lock				•			
Emergency escape function:	•	•	•	-	•	•	<b>●</b> 3)
Mechanical self-locking	•	•	•	•	•	•	•
Mechanical process control	•	•	•	•	•	•	•
Two-point locking	•	•	•	•	•	•	
Sabotage line		•	•	•	•	•	
Bolt monitoring		•	•	•	•	•	
Signalling of handle operation/emergency unlocking		•	•	•	•	•	
Door-open monitoring via trigger		•	•	•	•	•	
Cylinder contact		•	•	•	•	•	
External lever handle can be electrically coupled/decoupled			•	•			•
Electrical motorised unlocking					•	•	
Adjustable unlocking time					•	•	
Permanent external access is possible (permanent open) <sup>1)</sup>			•	•			•
Automatic locking mechanism can be disabled electrically (permanent door release) <sup>2)</sup>					•		
Automatic switching off of permanent open/permanent door release in case of a power failure			•	•	O <sup>2)</sup>		
Electronic sequential control (anti-tamper protection)					•	•	
Automatic reset of the release when the door fails to open			•	•	•	•	
Approval in accordance with EN 179	•	•	•		•	•	•
Approval in accordance with EN 1125	•	•	•		•	•	•

StandardO Optional

<sup>1)</sup> Permanent open function also permissible on fire and smoke doors, as the doors have a tumbler for the case of a fire

<sup>2)</sup> In combination with the power reserve module

<sup>3)</sup> In combination with SVP-S Air

# Emergency-escape locks with automatic locking mechanism

SVP 5000/SVP 4000/SVP 6000/SVZ 6000

#### **Additional functions:**

#### **SVP 4000**

• With querying of the door status

### SVP 6000 - lever handle-controlled

- Electrically activated external lever handle for authorised access
- Universal connection to 12 V DC/24 V DC
- Versions: Operating/closed-circuit current

#### ZVZ 6000 - access control lock

- Activatable internal and external lever handle
- One-piece follower
- No emergency-escape function

#### Simply impressive:

#### **SVP 5000**

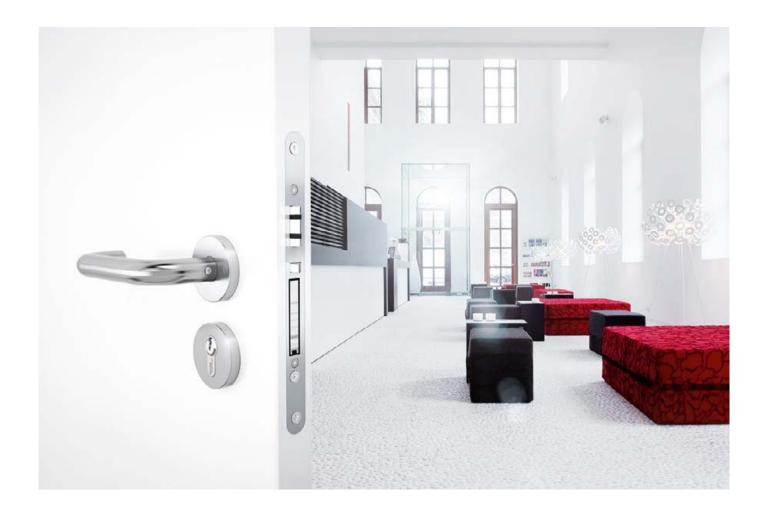
- Emergency-escape function as per EN 179 and EN 1125
- Automatic locking mechanism no need for manual locking
- Universal trip latch
- Up to resistance class RC 2 in suitable door systems



For more information, visit: your local dormakaba website







## SVP 7000 Air

Battery-operated emergency-escape lock with automatic locking mechanism and split follower for use in escape routes and for fire and smoke doors as per EN 179 and EN 1125. Thanks to the emergency-escape function, quick opening of the door is possible, while the automatic locking mechanism ensures secure lock re-engagement once the door has closed.

- Automatic relocking action
- Upgrade lock thanks to wireless installation
- Securely locked even in the event of a battery failure
- Ideal solution for integration into existing access control systems with the help of the SVP-S Air module, e.g. with the dormakaba MATRIX software
- Opening and locking of the door with a hand-held transmitter for authorised access from the side opposite the emergency-escape side
- Programming of up to 100 authorisations directly on the wireless lock
- Easy door opening according to German Industrial Standard (DIN) SPEC 1104





# Emergency-escape locks with automatic locking mechanism

## SVP 2000 DCW<sup>®</sup>/F (fire protection)

Emergency-escape motor locks for timber doors provide increased convenience thanks to motorised unlocking. Thanks to the emergency-escape function, quick opening of the door is possible from the inside. The automatic locking mechanism ensures that the door is securely locked as soon as the door closes.



#### Simply impressive:

#### SVP 2000 DCW® motorised emergency-escape lock

- LED for visual support during operation, maintenance and commissioning (e.g. operation modes and event notifications)
- Automatic relocking action
- With the DCW® bus, CAN bus and standalone operation modes
- LED status indication shows error messages, such as incorrect operating voltage, bus connection interrupted and more
- Can be used analogically without control unit (open and close only)
- Querying of the door status
- Convenient remote unlocking in combination with access control and escape route security systems
- DIN universal trip latch
- Certified as per EN 179 and EN 1125

## Additional functions:

## SVP 2000 DCW® F - for fire and smoke doors

With integrated power reserve module



Weitere Informationen finden Sie hier: your local dormakaba website



The SVI (inactive emergency-escape lock, passive door leaf) and SVA (active emergency-escape lock, active door leaf) for double-leaf doors feature an automatic locking mechanism and are an optimal addition to the existing SVP portfolio. They are ideal for use in barrier-free door applications, among many others.

Saving lives on the one hand, protecting property on the other – SVI and SVA emergency-escape locks with automatic locking mechanism can do both. Thanks to their emergency-escape function, both the active and passive door leaves can be opened at any time in the direction of escape by actuating the lever handle or horizontal push bar (certified as per EN 179 and EN 1125). Automatic locking of the doors each time they are closed offers protection against unauthorised entry. In addition to improved mechanical sequential control (SVA) for increased tamper protection, the new integrated LED in the motorised emergency-escape locks enables easy commissioning and maintenance by means of visual status indicators right at the door application.

#### Area of use:

Securing double-leaf doors that are permanent escape route doors from the inside, but may only be used by authorised persons from the outside.

## **Functional description:**

The combination of an active door leaf lock (SVA) and a passive door leaf lock (SVI) automatically locks the door every time it is closed. Both the passive and active door leaves can be opened in the direction of escape at any time in accordance with EN 179 or EN 1125.

Combination matrix SVA/SVI							
	SVI 5000	SVI 4000	SVI 2000 F				
SVA 5000	-	-	-				
SVA 4000	-	-	-				
SVA 6000	•	•	•				
SVA 2000	-	-	-				
SVA 2000 F							
● = CompatibleI	– = Not possible						

# Emergency-escape locks with automatic locking mechanism

## SVA/SVI for double-leaf doors at a glance

Features and functions of SVA/SVI lock combinations with automatic locking mechanism for double-leaf doors

		SVA active door leaf				SVI po	SVI passive door leaf		
		SVA 5000	SVA 4000	SVA 6000	SVA 2000	SVA 2000 F	SVI 5000	SVI 4,000	SVI 2000 F
Approvals	Fire and smoke doors	•	•	•	<b>●</b> 2)	•	•	•	•
	DIN EN 179/DIN EN 1125	•	•	•	•	•	•	•	•
Emergency escape functions	Door opening from inside via lever handle/push bar	•	•	•	•	•	•	•	•
	Forced closure function (C)	-	-	•	-	-	-	-	-
	Panic function (E) with knob/lever set	•	•	-	•	•	-	-	-
Unlock	From outside with key		•	•	•	•	-	-	-
	From outside via lever handle after electrical release (integration in access control systems)	-	-	•	-	-	-	-	-
	- Automatic reset of the release when the door fails to open	-	-	•	•	•	-	-	•
	<ul> <li>Adjustable unlock or relock time (programma- ble via TMS Soft®)</li> </ul>	-	-	-	•	•	-	-	-
	– Permanent door release <sup>3)</sup>	-	-	-	•	<b>●</b> <sup>5)</sup>	-	-	<b>●</b> <sup>4)</sup>
	Permanent access possible (permanent open/all bolts open) <sup>1)</sup>	-	-	•	-	-	-	=	-
	Motor lock (suitable for automatic doors)	-	-	-	•	•	-	-	•
	Automatic switching off of permanent open/ permanent door release in case of a power failure	-	-	•	O <sup>3)</sup>	O <sup>3) 5)</sup>	-	-	-
	Suitable for electronic cylinders	•	•	•	•	•	-	-	-
Monitoring	Message "Door open/closed"	-	•	•	•	•	-	-	-
	Message "Door locked/unlocked"	-	•	•	•	•	-	•	•
	Message "Handle operation/Emergency escape function"		•	•	•	•	-	•	•
	Message "Cylinder locking"	-	•	•	•	•	-	-	-
	Message "Drive dead bolt"	-	-	-	-	-	-	•	•
	Sabotage line	-	•	•	•	•	-	-	-
	DCW®/CAN bus interface	-	-	-	•	•			•
Break-in protection	Insurance-compliant locking (dual-point locking device)	•	•	•	•	•	•	•	•
	Mechanical self-locking	•	•	•	•	•	•	•	•
Mode of operation	Mechanical (without wiring)	•	-	-	-	-	•	-	-
	Mechanical with electrical monitoring	-	•	•	-	-	-	•	-
	Motorised unlocking	-	-	-	•	•	-	-	•
	External lever handle can be electrically coupled/decoupled	-	-	•	-	-	-	-	-
Miscellaneous	Mechanical process control	•	•	•	•	•	•	•	•
	Electronic sequential control	-	-	-	•	•	-	-	•

ullet = Yes - = No O = Optional

<sup>1)</sup> PERMANENT OPEN function also permissible on fire and smoke doors, as the doors have a tumbler for the case of a fire.

 $<sup>^{2)}</sup>$  For fire and smoke doors in conjunction with the PR module (emergency power buffer).

<sup>3)</sup> In fire and smoke doors not approved for permanent door release, as approval is not guaranteed in the event of a fire.

 $<sup>^{\</sup>rm 4)}\!$  Depending on the SVA lock used on the active leaf.

<sup>5)</sup> Only in combination with ED 100/250

# Emergency-escape locks with automatic locking mechanism

## SVA and SVI 5000/SVA and SVI 4000/ SVA 6000

The combination of an active door leaf lock and a passive door leaf lock automatically locks the door every time it is closed. Both the passive and active door leaves can be opened in the direction of escape at any time in accordance with EN 179 or EN 1125. Insurance-compliant lock with bolt. Product variants are available for timber and narrow stile doors and for profile and round cylinder variants depending on the product series.





#### Simply impressive:

## SVA active leaf door locks SVA 5000

• Purely mechanical lock with emergency-escape function and mechanical sequential control

## SVA 4000

- Electrically monitored emergency-escape lock
- With integrated tamper-proof detectors for monitoring latches, cylinders, handles and bolts
- Versions: Operating/closed-circuit current

## **SVA 6000**

- Electrically monitored emergency-escape lock with split follower for the electrical engagement and disengagement of the outside handle
- Status message for trip latch, bolt, cylinder locking and lever handle

#### Simply impressive:

## SVI passive door leaf locks

• A purely mechanical lock with emergency-escape function

#### SVI 4000

- Electrically monitored emergency-escape lock
- Status message for lock rod and lever handle



## SVA 2000 SVA 2000 F and SVI 2000 F (fire protection)

Emergency-escape lock with automatic locking mechanism and integrated power reserve module. Thanks to the emergency-escape function, quick opening of the door is possible from the inside. The automatic locking mechanism ensures that the door is securely locked as soon as the door closes.





#### Simply impressive:

## SVP 2000 motorised emergency-escape lock

- Integrated LED with status indication for parameterisation and maintenance/error indication
- Operation modes for the motor lock: Analogically with control unit, via DCW® or CAN bus or autonomously without control unit
- Status message for latch, bolt, cylinder locking and lever handle
- Direct connection e.g. via the integrated bus to dormakaba ED single-action door operators or SafeRoute escape route security system

## For more information, visit: your local dormakaba website

### Simply impressive:

## SVA and SVI 2000 F – for fire and smoke doors SVA 2000 F

- Smoke doors (permanent door release function excluded)
- Integrated LED with status indication for parameterisation and maintenance/error indication
- Operation modes: Analogically with control unit, via DCW® or CAN bus or autonomously without control unit

## SVI 2000 F

- Motor lock for the passive door leaf
- Status message for lock rod and lever handle
- Integrated LED with status indication for parameterisation and maintenance/error indication
- Operation modes: Analogically with control unit, via DCW® or CAN bus or autonomously without control unit
- With top and bottom rod lock systems

# Emergency-escape locks with automatic locking mechanism

M-SVP 2200 DCW<sup>®</sup>/5000/3000

The dormakaba M-SVP multipoint locking systems with automatic locking mechanism and emergency-escape function offer greater security and convenience for all common door designs in both private and commercial building applications. Thanks to the emergency-escape unlocking feature, the door can be opened from the inside at any time in case of danger by simply using the lever handle. Unlocking from the outside with a key is always possible as well. M-SVP multipoint locks are permitted for use in doors in escape routes and in fire and smoke doors.



#### Simply impressive:

## M-SVP 2000/M-SVP 2200 DCW®: motorised multipoint lock with automatic locking mechanism

- Very convenient thanks to motorised locking and unlocking, especially in combination with access control systems
- Door closes up tightly thanks to two steel hooks
- In suitable door systems, a very high level of burglary protection up to resistance class RC 3 can be achieved
- Barrier-free outfitting of doors can be implemented in combination with automatic actuators as needed
- Daytime latch locking function and permanent door release for doors with a high opening frequency
- With detectors for querying the door status
- All control components can be elegantly integrated into the door frame profile

#### M-SVP 2200 DCW®

- Integrated dormakaba DCW® system bus technology
- Two additional bolts for optimisation of the lock

## M-SVP 5000: multipoint lock with automatic locking mechanism

- Purely mechanical lock
- Can easily be upgraded without wiring
- Locking occurs automatically each time closing occurs



## M-SVP 3000: electromechanical multipoint lock with automatic locking mechanism

- Convenient thanks to motorised unlocking, especially in combination with access control systems
- Barrier-free outfitting of doors can be implemented in combination with automatic actuators as needed
- Permanent door release for doors with a high opening frequency
- Mechanical self-locking



M-SVP 2000 and M-SVP 2200 DCW® with hooks



Latch bolt in the case of M-SVP 3000 and M-SVP 5000

# Emergency-escape locks with automatic locking mechanism

## M-SVP 3500/5500

Greater security for double-leaf escape route door systems: In combination with an emergency-escape strike box, a switch lock and the self-locking shootbolts, the dormakaba M-SVP 3500 and M-SVP 5500 door latches also offer the familiar advantages of automatic multipoint locks with emergency-escape function in double-leaf building doors. They are suitable for use in double-leaf emergency exits and panic doors as well as in fire and smoke doors.

## M-SVP 3500 with strike box for double-leaf doors

#### Simply impressive:

#### M-SVP 3500

- Electromechanical multipoint lock with emergency-escape function for double-leaf doors
- Automatic locking mechanism each time closing occurs
- Convenient thanks to motorised unlocking of the active door leaf in combination with access control systems
- Permanent door release for doors with a high opening frequency
- Various feedback, such as: lever handle pressed, locked/unlocked etc.

#### M-SVP 5500

- Mechanical multipoint lock with emergency-escape function for double-leaf door systems
- Automatic locking each time closing occurs
- No wiring is required



For more information, visit: your local dormakaba website



Latch bolt in the case of M-SVP 3500 and M-SVP 5500





## Panic hardware

## PHA 2501 and PHA 2501 VB

dormakaba offers the option of ordering parts of high-grade panic door locks without major considerations regarding compatibility for single-leaf timber or narrow stile doors. Both versions, PHA 2501 and PHA 2501 VB, provide maximum security in accordance with EN 1125 with all SVP emergency-escape locks with automatic locking mechanism of the latest generation.

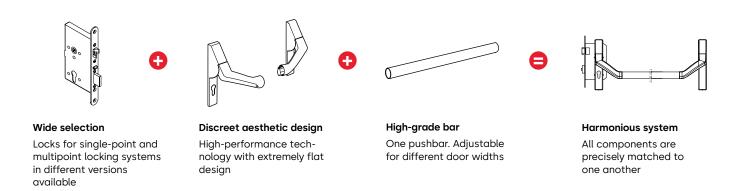
- With just four variants and dormakaba SVP locks, many common requirements as per EN 1125 can be covered (PHA 2501 for narrow stile doors in the colour silver and stainless-steel finish, PHA 2501 VB for timber doors in the colour silver and stainless-steel finish)
- Extra escape route door security, e.g. with Safe Route, is still possible without any restrictions
- Suitable for multifunctional doors, e.g. with a swing door operator, when combined with motor lock
- Intuitive operation recognised state-of-the-art escape route doors for people unfamiliar with your building





## Reliable and modular

Fitting and pushbar create an aesthetic design which can be easily seen and grasped. A high-performance panic hardware system is thus provided from a single source and suited to your needs.



## Possible combinations

Door types	Timbe	er door	Narrow	stile door
	•	3		3
Automatic locking mechanism, purely mechanical	SVP 5000	M-SVP 5000	SVP 5000	M-SVP 5000
Self-locking with feedback and monitoring functions	SVP 4000		SVP 4000	
Self-locking with connection to access control	SVP 6000	M-SVP 3000	SVP 6000	M-SVP 3000
Self-locking with connection to access control and door automation	SVP 2000 SVP 2000 F		SVP 2000 SVP 2000 F	

## Panic hardware

## PHA 2501-PC0 (SVI) and PHA 2501 VB

For double-leaf timber and narrow stile doors, dormakaba also offers all the components for a certified full emergency solution in accordance with EN 1125 from a single source. The panic hardware fittings for the active door leaf are the same here as those for a single-leaf solution, except that the passive door leaf fitting PHA2501-PC0 (SVI) is included. As a combination with all SVI and SVA emergency-escape locks with automatic locking mechanism is possible, the selection of functions is very flexible here.

- Equip double-leaf, full emergency doors in accordance with EN 1125 with just six variants and dormakaba SVI/SVA locks
- Suitable for multifunctional doors, e.g. with a swing door operator, depending on the selected SVI/SVA combination
- Recognised state-of-the-art technology for double-leaf escape route doors, e.g. for especially wide escape routes in meeting places





## Reliable and modular

The appearance of the fitting and push bar is absolutely identical to the single-leaf solution and independent of the lock combination used. This not only results in high-performance panic door locks, but a uniform aesthetic as well.



#### Wide selection

Locks for single-point and multipoint locking systems in different versions available

### Convenient accessory sets

Everything you need for installation suitable for the door situation

## High-quality panic fittings

Identical appearance for both door leaves, adaptable for different widths

#### Harmonious system

All components are precisely matched to one another

## Possible combinations

Door types	Timber door	Narrow stile door

#### Inactive door leaf

			mactive door leaf	
		Automatic locking mechanism, purely mechanical	Automatic locking mechanism with feedback and monitoring functions	Automatic locking mechanism with connection to access control and door automation
	Automatic locking mechanism, purely mechanical	SVA 5000 / SVI 5000 <b>F</b>	SVA 5000 / SVI 4000 <b>F</b>	-
leaf	Automatic locking mechanism with feedback and monitoring functions	SVA 4000 / SVI 5000	SVA 4000 / SVI 4000 <b>F</b>	
ve door	Automatic locking mechanism with connection to access control	SVA 6000 / SVI 5000	SVA 6000 / SVI 4000 <b>F</b>	-
Active	Automatic locking mechanism with connection to access control and door automation	SVA 2000 / SVI 5000	SVA 2000 / SVI 4000 <b>F</b>	SVA 2000 / SVI 2000 F F
	Automatic locking mechanism with connection to access control and door automation	SVA 2000 F / F SVI 5000	SVA 2000 F / SVI 4000	SVA 2000 F / SVI 2000 F

## Mechanical key systems

## at a glance

Medium and lorge Medium and lorge Small and medium One key for everything (door cylinder, letterbox, furniture etc.)  One key for everything (door cylinder, letterbox, furniture etc.)  Tumbler prin pairs (per cylinder side)  Max. 20 active tumbler pin pairs (per cylinder side)  Max. 20 active tumbler pin pairs in 85 possible positions  Max. 20 active tumbler pin pairs in 44 possible positions  Max. 12 active tumbler pin pairs in 45 possible positions  Max. 12 active tumbler pairs in 45 possible positions  Max. 12 active tumbler pin pairs in 45 possible positions  Max. 12 active tumbler pin pairs in 45 possible positions		Serrated key system – wo	Serrated key system – works and specialist partner system			
Medium and lorge  Medium and lorge  Froil and modum  One key for everything (door cylinder, letterbox, furniture etc.)  Tumbler prin poirs (per cylinder side)  Max. 20 active tumbler pin poirs, plus cross element  Max. 22 active tumbler pin poirs in 85 possible positione  Max. 22 active tumbler pin poirs in 85 possible positione  Max. 23 active tumbler pin poirs in 85 possible positione  Max. 14 active tumbler pin poirs in 85 possible positione  Max. 15 active tumbler pin poirs in 85 possible positione  Max. 16 active tumbler pin poirs in 93 possible positione  Max. 16 active tumbler pin poirs in 93 possible positione  Max. 18 active tumbler pin poirs in 93 possible positione  Max. 19 active tumbler pin poirs in 93 possible positione  Max. 19 active tumbler pin poirs in 93 possible positione  Max. 19 active tumbler pin poirs in 93 possible positione  Max. 19 active tumbler pin poirs in 93 possible positione  Max. 19 active tumbler pin poirs in 93 possible positione  Max. 19 active tumbler pin poirs in 93 possible positione  Max. 19 active tumbler pin poirs in 93 possible positione  Max. 19 active tumbler pin poirs in 93 possible positione  Clossification in 84 possible positione  Max. 19 active pin poirs in 93 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95 possible positione  Max. 19 active pin poirs in 95		Five pins and optional	Six pins and optional			
Small and medium One key for everything (door cylinder, letterbox, furniture etc.)  One key for everything (door cylinder, letterbox, furniture etc.)  Tumbler pin poirs (per cylinder side) Mox. 20 active tumbler pin poirs in 85 possible positions Mox. 22 active tumbler pin poirs in 85 possible positions Mox. 22 active tumbler pin poirs in 85 possible positions Mox. 16 active tumbler pin poirs in 84 possible positions Mox. 16 active tumbler pin poirs in 84 possible positions Increased key copy protection thenks to moving element European patent* – potent term  2032 2032 European patent* – potent term  European patent* – potent term  European patent* – potent term  Classification key in accordance with EN 1303.2015-08/DIN 18252.2018-05  Stundard version  Option with increased drilling and pulling protection ((AM version))  Option with increased drilling and pulling protection ((AM version))  Option with increased drilling and pulling protection ((AM version))  Option with increased drilling and pulling protection ((AM version))  Option with sea insert mounting screens (1811 version)  Option with sea insert mounting screens (1811 versi	Suitable for locking systems:					
Small and medium  One key for everything (door orylinder, letterbox, furniture etc.)  Tumbler series  Tumbler series  Wax. 20 active tumbler pin pairs, plus cross element  Max. 20 active tumbler pin pairs, plus cross element  Max. 20 active tumbler pin pairs in 35 passible positions  Max. 20 active tumbler pin pairs in 35 passible positions  Max. 20 active tumbler pin pairs in 35 passible positions  Max. 20 active tumbler pin pairs in 35 passible positions  Max. 20 active tumbler pin pairs in 32 passible positions  Max. 20 active tumbler pin pairs in 32 passible positions  Increased key copy protection thenks to moving element  European patent* – potent term  2032	Complex		•			
One key for everything (door cylinder, letterbox, furniture etc.)  Tumbler pin poirs (per cylinder side)  Mox. 20 active tumbler pin poirs, plus cross element  Mox. 22 active tumbler pin poirs in 85 possible positions  Mox. 10 active tumbler pin poirs in 85 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 32 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions  Mox. 10 active tumbler pin poirs in 46 possible positions	Medium and large	•				
Tumbler pelies  Tumbler pilip poirs (per cylinder side)  Max. 20 active tumbler pin poirs in 85 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 25 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Increased key copy protection thanks to moving element  European patent* – patent term  2032  2032  Brand protection with figurative mark  Classification key in accordance with EN 1303:2015-08/DIN 18252:2018-05  Stondard version  1/6/0/B/0/C/5/C  1/6/0/B/0/C/5/C  1/6/0/B/0/C/5/C  Option with two insert mounting screws (851 version)  Classification in accordance with VSS – VSS classes b/WZ/WZ+  O O O  Option with two insert mounting screws (851 version)  Classification in accordance with VSS – VSS classes b/WZ/WZ+  O O O  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested i	Small and medium					
Tumbler pin poirs (per cylinder side)  Max. 20 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 23 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 16 active tumbler pin poirs in 45 possible positions  Max. 18 active tumbler pin poirs in 45 possible positions  Max. 18 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumbler pin poirs in 45 possible positions  Max. 22 active tumber pin poirs in 45 possible positions  Max. 22 active tumber pin poirs in 45 possible positions  Max. 22 active tumber pin poirs in 45 possible positions  Max. 22 active tumber pin poirs in 45 possible positions  Max. 22 active tumber pin poirs in 45 possible positions  Max. 22 active tumber pin poirs in 45 possible positions  Max. 24 active tumber pin poirs in 45 possible positions  Max. 26 active tumber pin poirs in 45 possible positions  Max. 26 active tumber pin poirs in 45 possible positions  Max. 26 active tumber pin poirs in 45 possible positions  Max. 26 act	One key for everything (door cylinder, letterbox, furniture etc.)	•	•			
Max. 20 active tumbler pin pairs, plus cross element  Max. 22 active tumbler pin pairs in 85 possible positions  Max. 16 active tumbler pin pairs in 44 possible positions  Max. 16 active tumbler pin pairs in 44 possible positions  Max. 16 active tumbler pin pairs in 32 possible positions  Increased key copy protection thanks to moving element  European patrix − patrix + patrix	Tumbler series					
Max. 22 active tumbler pin pairs in 85 passible positions  Max. 16 active tumbler pin pairs in 44 possiblo positions  Max. 16 active tumbler pin pairs in 32 possible positions  Increased key copy protection thanks to moving element  European potent* – potent term  European potent* – potent term  2032 2032  Brand protection with figurative mark  Classification key in accordance with EN 1303:2015-08/DIN 18252:2018-05  Standard version 1/6/08/07/5/5/C 1/6/08/07/5/5/C 1/6/08/07/5/6/C  Option with two insert mounting screws (851 version)  Option with increased drilling and pulling protection (LMA version) 1/6/08/07/5/D 1/6/08/07/5/D 1/6/08/07/6/C  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection - cylinder tested in accordance with EN 1634-1 and E	Tumbler pin pairs (per cylinder side)					
Max. 22 active tumbler pin poirs in 44 possible positions  Max. 16 active tumbler pin poirs in 32 possible positions  Increased key copy protection thanks to moving element  European patent* − patent term  2032 2032  European patent term  2032 2032  European patent* − patent term  2032 2032  European patent term  2032 203	Max. 20 active tumbler pin pairs, plus cross element					
Max. 16 active tumbler pin pairs in \$2\$ possible positions  Increased key copy protection thanks to moving element  European patent* − patent term  2032 2032 8 rand protection with figurative mark  Classification key in accordance with EN 1303:2015-08/DIN 18252:2018-05  Standard version  1/6/0/B/0/C/5/C 1/6/0/B/0/C/6/C  Option with two insert mounting screws (BS1 version)  Option with increased drilling and pulling protection (LAM version)  1/6/0/B/0/C/5/D 1/6/0/B/0/C/5/D 1/6/0/B/0/C/6/D  Classification in accordance with VdS − VdS classes B/BZ/BZ+  ○ ○ ○ Fire protection − cylinder tested in accordance with EN 1634-1 and EN 1634-2  ● ● Key shapes  Standard key shapes  Square bow  Optional key shapes  Square bow  Square bow  RFID clip  RFID clip  RFID clip  Colours as optional orientation aid  Mini clip colours  5 5 5 15 11 11 11 11 11 11 11 11 11 11	Max. 22 active tumbler pin pairs in 85 possible positions					
Increased key copy protection thanks to moving element  European patent* – patent term  2032 2032  Brand protection with figurative mark  Classification key in accordance with EN 1303:2015-08/DIN 18252:2018-05  Standard version  1/6/0/B/0/C/5/C  Option with two insert mounting screws (BS1 version)  Option with increased drilling and pulling protection (LAM version)  1/6/0/B/0/C/5/D  1/6/0/B/0/	Max. 22 active tumbler pin pairs in 44 possible positions					
Increased key copy protection thanks to moving element  European patent* – patent term  2032 2032  Brand protection with figurative mark  Classification key in accordance with EN 1303:2015-08/DIN 18252:2018-05  Standard version  1/6/0/B/0/C/5/C  Option with two insert mounting screws (BS1 version)  Option with increased drilling and pulling protection (LAM version)  1/6/0/B/0/C/5/D  1/6/0/B/0/	Max. 16 active tumbler pin pairs in 32 possible positions					
European patent* - patent term 2032 2032  Brand protection with figurative mark  Classification key in accordance with EN 1303:2015-08/DIN 18252:2018-05  Standard version Option with two insert mounting screws (BS1 version) Option with two insert mounting screws (BS1 version) Option with increased drilling and pulling protection (LAM version)  Classification in accordance with V4S − V4S classes B/BZ/BZ+  □ □ ○ Fire protection − cylinder tested in accordance with EN 1634-1 and EN 1634-2  ■ ■ ○ ○ ○ Fire protection − cylinder tested in accordance with EN 1634-1 and EN 1634-2  ■ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○						
Remain protection with figurative mark  Classification key in accordance with EN 1303:2015-08/DIN 18252:2018-05  Standard version  1/6/0/B/0/C/5/C  Option with two insert mounting screws (BS1 version)  Option with increased drilling and pulling protection (LAM version)  Classification in accordance with V45 – V455 classes B/BZ/BZ+  O O O Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection in accordance with EN 1634-1 and EN 1634-2  Fire protection in accordance with EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protection – cylinder End EN 1634-1 and EN 1634-2  Fire protect		2032	2032			
Classification key in accordance with EN 1303:2015-08/DIN 18252:2018-05  Standard version 1/6/08/DIC/5/C 1/6/08/DIC/5/C Option with two insert mounting screws (B51 version)  Option with increased drilling and pulling protection (LAM version) 1/6/08/DIC/5/D 1/6/08/DIC/6/D Classification in accordance with Vd5 – VdS classes B/8Z/BZ+		•	•			
Standard version 1/6/0/B/0/C/5/C 1/6/0/B/0/C/6/C Option with two insert mounting screws (BS1 version) 1/6/0/B/0/C/5/D 1/6/0/B/0/C/6/D Option with increased drilling and pulling protection (LAM version) 1/6/0/B/0/C/5/D 1/6/0/B/0/C/6/D Classification in accordance with VdS - VdS classes B/BZ/BZ+ © © © Fire protection - cylinder tested in accordance with EN 1634-1 and EN 1634-2 ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●						
Option with increased drilling and pulling protection (LAM version)  Classification in accordance with VdS − VdS classes B/BZ/BZ+  ○ ○ ○  Fire protection − cylinder tested in accordance with EN 1634-1 and EN 1634-2  Expanses  Standard key shapes  Square bow  Square bow  Square bow  Square bow  Cobinnal key shapes  Colours as optional orientation aid  Mini clip colours  Englip colours  11 11  11 11  Trend key clip colours  Smart key clip colours  Large key clip colours  Bric clip colours  Bric clip colours  Smart key clip colours  Bric clip colours  Bric clip colours  Smart key clip colours  Bric clip colours  Bric clip colours  Smart key clip colours  Bric clip colours  B	Standard version	1/6/0/B/0/C/5/C	1/6/0/B/0/C/6/C			
Option with increased drilling and pulling protection (LAM version)  Classification in accordance with VdS − VdS classes B/BZ/BZ+  ○ ○ ○  Fire protection − cylinder tested in accordance with EN 1634-1 and EN 1634-2  Expanses  Standard key shapes  Square bow  Square bow  Square bow  Square bow  Cobinnal key shapes  Colours as optional orientation aid  Mini clip colours  Englip colours  11 11  11 11  Trend key clip colours  Smart key clip colours  Large key clip colours  Bric clip colours  Bric clip colours  Smart key clip colours  Bric clip colours  Bric clip colours  Smart key clip colours  Bric clip colours  Bric clip colours  Smart key clip colours  Bric clip colours  B	Option with two insert mounting screws (BS1 version)					
Classification in accordance with VdS − VdS classes B/BZ/BZ+         O         O           Fire protection − cylinder tested in accordance with EN 1634-1 and EN 1634-2         ●         ●           Key shapes         Square bow         Square bow           Square bow         Square bow         Square bow           Optional key shapes         Square bow         Trend key Metal bow RFID clip           Mini clip colours         5         5           Large clip colours         11         11           Metal clip colours         6         6           Metal clip colours         3 + neutral         3 + neutral           Smart key clip colours         6         6           Storage key clip colours         6         6           Special functions** available (excerpt shown below)         SUZ/BAZ         SUZ/BAZ           Modification to access permission         SUZ/BAZ         SUZ/BAZ           Time-limited access (SAT)         O         O           Thermally insulated locking cylinder (TIC)         O         O	- <del>-</del>	1/6/0/B/0/C/5/D	1/6/0/B/0/C/6/D			
Key shapes     Square bow     Square bow       Optional key shapes     Trend key Metal bow Metal bow Metal bow RFID clip     Trend key Metal bow Metal bow RFID clip       Colours as optional orientation aid     Standard Metal Colours       Mini clip colours     5     5       Large clip colours     11     11       Trend key clip colours     6     6       Metal clip colours     3 + neutral     3 + neutral       Smart key clip colours     Smart key clip colours     6     6       RFID clip colours - integration into electronic systems     6     6     6       Special functions** available (excerpt shown below)       Modification to access permission     SUZ/BAZ     SUZ/BAZ       Time-limited access (SAT)     Thermally insulated locking cylinder (TIC)     O     O       Cylinder lockable on both sides (BSZ)     O     O	Classification in accordance with VdS – VdS classes B/BZ/BZ+	0	0			
Standard key shapes  Square bow Square bow Optional key shapes  Trend key Metal bow RFID clip RFID clip RFID clip  Colours as optional orientation aid  Mini clip colours  Say Standard key shapes  In a special polours  Say Standard key shapes  Square bow Square bow RFID clip RFID clip RFID clip RFID clip RFID clip RFID clip Standard key shapes  Standard key shapes  Standard key shapes  Standard key shapes Standard key shape	Fire protection – cylinder tested in accordance with EN 1634-1 and EN 1634-2	•	•			
Optional key shapes  Trend key Metal bow RFID clip colours  Smart key clip colours  Large key clip colours  RFID clip colours	Key shapes					
Colours as optional orientation aid     Metal bow RFID clip     Metal bow RFID clip       Mini clip colours     5     5       Large clip colours     11     11       Trend key clip colours     6     6       Metal clip colours     3 + neutral     3 + neutral       Smart key clip colours	Standard key shapes	Square bow	Square bow			
Mini clip colours  Large clip colours  11 11  Trend key clip colours  6 6  Metal clip colours  3 + neutral  3 + neutral  Smart key clip colours  Large key clip colours  Large key clip colours  RFID clip colours – integration into electronic systems  6 6  Special functions** available (excerpt shown below)  Modification to access permission  SUZ/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O  O	Optional key shapes	Metal bow	Metal bow			
Large clip colours  11 11  Trend key clip colours 6 6  Metal clip colours 3 + neutral 3 + neutral  Smart key clip colours  Large key clip colours  RFID clip colours – integration into electronic systems 6 6  Special functions** available (excerpt shown below)  Modification to access permission  SUZ/BAZ  SUZ/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O O O	Colours as optional orientation aid					
Trend key clip colours  Metal clip colours  Smart key clip colours  Large key clip colours  Large key clip colours  RFID clip colours – integration into electronic systems  Special functions** available (excerpt shown below)  Modification to access permission  Suz/BAZ  Suz/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O  O	Mini clip colours	5	5			
Metal clip colours  Smart key clip colours  Large key clip colours  RFID clip colours – integration into electronic systems  Special functions** available (excerpt shown below)  Modification to access permission  SUZ/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  3 + neutral  6  6  Colours  6  Colours  6  Colours  7  SUZ/BAZ  SUZ/BAZ  SUZ/BAZ  OO  OO  OO	Large clip colours	11	11			
Smart key clip colours  Large key clip colours  RFID clip colours – integration into electronic systems 6 6 6  Special functions** available (excerpt shown below)  Modification to access permission  SUZ/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O O	Trend key clip colours	6	6			
Large key clip colours  RFID clip colours – integration into electronic systems  6 6  Special functions** available (excerpt shown below)  Modification to access permission  SUZ/BAZ  SUZ/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O  O	Metal clip colours	3 + neutral	3 + neutral			
RFID clip colours – integration into electronic systems  Special functions** available (excerpt shown below)  Modification to access permission  SUZ/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  6  6  8  VIZ/BAZ  SUZ/BAZ  SUZ/BAZ  O  O	Smart key clip colours					
Special functions** available (excerpt shown below)  Modification to access permission  SUZ/BAZ  SUZ/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O  O	Large key clip colours					
Modification to access permission  SUZ/BAZ  SUZ/BAZ  Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O O O	RFID clip colours – integration into electronic systems	6	6			
Time-limited access (SAT)  Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O O	Special functions** available (excerpt shown below)					
Thermally insulated locking cylinder (TIC)  Cylinder lockable on both sides (BSZ)  O O	Modification to access permission	SUZ/BAZ	SUZ/BAZ			
Cylinder lockable on both sides (BSZ)	Time-limited access (SAT)					
	Thermally insulated locking cylinder (TIC)					
Emergency opening with emergency key function (GF)	Cylinder lockable on both sides (BSZ)	0	0			
	Emergency opening with emergency key function (GF)	0	0			

• Standard O Optional \*Not valid in all countries – for more details, see worldwide.espacenet.com. \*\*Special functions are to be checked with regard to their combinate

	Reversible key	Reversible key specialist partner systems			
gemini plus	quattro plus	penta	penta cross	expert plus	expert cross
	•	•			
	<u> </u>		•	•	
•					•
•	•	•	•	•	•
3	4	5	5	4	4
	·	ŭ .			•
			• 78 possible positions		• 40 possible positions
		•			
	•			•	
•					
			•		•
2033	2033	2033	2036	2033	2036
•	•	•	•	•	•
1/6/0/B/0/C/6/B	1/6/0/B/0/C/6/B	1/6/0/B/0/C/6/B	1/6/0/B/0/C/6/B	1/6/0/B/0/C/6/B	1/6/0/B/0/C/6/B
1/6/0/B/0/C/6/C	1/6/0/B/0/C/6/C	1/6/0/B/0/C/6/C	1/6/0/B/0/C/6/C	1/6/0/B/0/C/6/C	1/6/0/B/0/C/6/C
1/6/0/B/0/C/6/D	1/6/0/B/0/C/6/D	1/6/0/B/0/C/6/D	1/6/0/B/0/C/6/D	1/6/0/B/0/C/6/D	1/6/0/B/0/C/6/D
0	0	0	0	0	0
•	•	•	•	•	•
Smart key clip, blue	Smart key clip, blue	Smart key clip, black	Smart key clip, black	Smart key clip, blue	Smart key clip, blue
Large key Long bow RFID clip	Large key Long bow RFID clip	Large key Long bow RFID clip	Large key Long bow RFID clip	Large key Long bow RFID clip	Large key Long bow RFID clip
12	12	12	12	12	12
12	12	12	12	12	12
6	6	6	6	6	6
				· · · · · · · · · · · · · · · · · · ·	
BAZ	BAZ	BAZ	BAZ	BAZ	BAZ
	0			0	
0	0	0	0	0	0
0	0	0	0	0	0
 O O					

sility with one another and the availability of cylinder types.

# Access management Cleverly solved with a locking system

Regardless of whether it's a serrated or reversible key system, a locking system gives you a comprehensive solution for ensuring access security. Based on your requirements, you generate a solution that's suitable for you – regardless of whether it's "one key for everything", a residential building system or a simple or complex locking system. You'll also benefit from our large selection of types. Integrate furniture cylinders, key switches or lift controls into your locking system, for example.



### Same-key locking cylinders, or "one key for everything".

Used in single-family homes, for example.

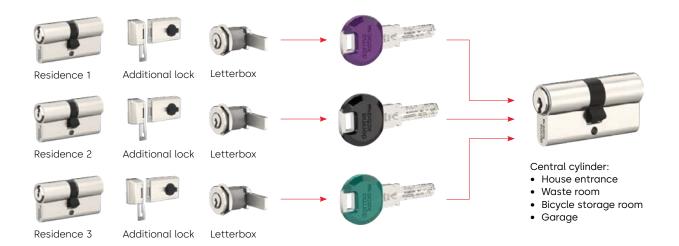
All, or only selected, locking cylinders can be opened with the same key. This simplifies handling and allows for a smaller key ring.

Locking cylinders or doors



#### Central locking systems

Used in residential complexes, for example. Several different individual keys can lock central locking cylinders. There are also individual locks which can only be locked with one key.

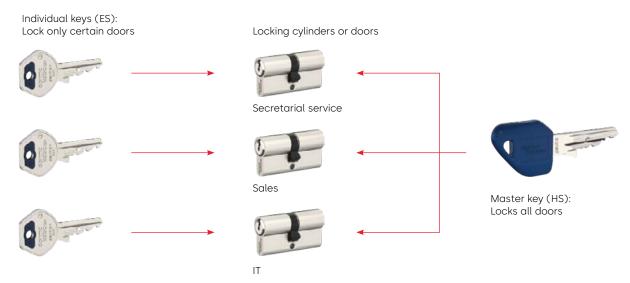


With the **manager locking system** special type, the central and common areas of several buildings (locking systems) spread out in different locations can be locked with just a single key (manager key).

### Master key systems

Used in office buildings and schools, for example.

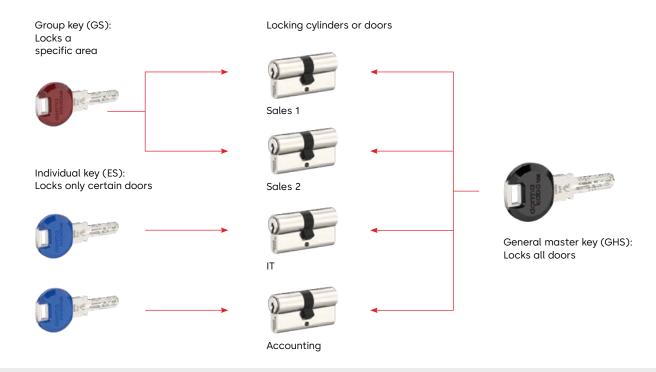
There are single-locking cylinders, as well as one or more higher-level keys (master keys) which lock all the cylinders of the system.



## General master key systems

Used in large office buildings or at universities, for example.

The functions of a master key system are expanded with general master keys, master group keys and group keys.





- Double cylinder DZ DKZ Thumbturn cylinder HZ Half cylinder VHZ Padlock cylinder AZ Rim cylinder BMZ Cam cylinder MZ Furniture cylinder MAS Furniture stop lock • SZ Switch cylinder
  - \*Different types are available depending on the locking system

# Mechanical key cylinders Serrated key system

## dormakaba pextra+



Security locking cylinder with extra protection. In the dormakaba pextra+ locking system, key security is increased significantly with a key profile. The profile is created using an elaborate milling process and makes manipulation considerably more difficult. dormakaba pextra+ is the premium locking system from dormakaba in conventional toothed-key applications and is suitable for complex and large locking systems with high security requirements.

- Locking cylinders can be selected with five, six or seven tumbler pins for even greater decoding protection
- Improved insertion of the key into the key slot thanks to an angled taper
  in the barrel.
- Steel elements in the cylinder housing and barrel offer increased protection against drilling out
- Key copy protection thanks to optional active pin in the cylinder
- Patent term until 2032
- Optional security elements for even greater protection and useful special functions
- Integration into electronic systems with RFID clip (can also be retrofitted)
- Available as works or partner system
- Environmental product declarations (EPDs) available





## Reversible key system

## dormakaba gemini plus

dormakaba gemini plus helps you to get started with the reversible key class – on a high level. The standard design offers a high degree of protection against common break-in methods such as picking and bumping. If needed, additional security elements can increase burglary protection. The system is especially suitable for private residences (one key for everything) or for small companies with a small or medium locking system.

## Simply impressive:

- Three radially arranged pin rows
- Up to 16 active tumbler pin pairs
- A total of 32 possible tumbler positions
- Patent term until 2033
- Suitable for small and medium locking systems
- Modular system structure for economical adaptation to new requirements
- Optional security elements for even greater protection and useful special functions
- Integration into electronic systems with RFID clip (can also be retrofitted)
- Environmental product declarations (EPDs) available
- from your desk





## Reversible key system

## dormakaba quattro plus

The four radially arranged pin rows offer extra security and increased protection against common break-in methods.

The mechanical locking cylinder offers time-limited access through the SAT special function. This is particularly suitable for sophisticated applications and medium to large locking systems.

- 4 radially-arranged pin rows
- Up to 22 active tumbler pin pairs
- A total of 44 possible tumbler positions
- Patent term until 2033
- Suitable for large locking systems
- Modular system structure for economical adaptation to new requirements
- Optional security elements for even greater protection and useful special functions
- SAT (secure access temporary) special function
- Integration into electronic systems with RFID clip (can also be retrofitted)
- Environmental product declarations (EPDs) available





## Reversible key system

## dormakaba penta

With its five radially arranged pin rows, this locking cylinder ensures a high degree of security. It enables use in especially complex and sophisticated locking systems. A wide variety of different types, such as furniture and switch cylinders, can also be integrated into the locking system. Planning of your locking system is flexible thanks to the keylink planning method. It makes adjustments and expansions possible later on.



#### Simply impressive:

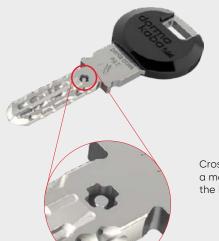
- Five radially arranged tumbler series
- Up to 22 active tumbler pin pairs (20 with cross)
- A total of 85 possible tumbler positions (78 with cross)
- penta patent term until 2033
- penta cross patent term until 2036
- penta cross with additional active element for high copy protection
- Suitable for large and complex locking systems
- Modular system structure for economical adaptation to new requirements
- Optional security elements for even greater protection and useful special functions
- Structured planning and organization of complex locking systems with keylink
- Integration into electronic systems with RFID clip (can also be retrofitted)
- Environmental product declarations (EPDs) available



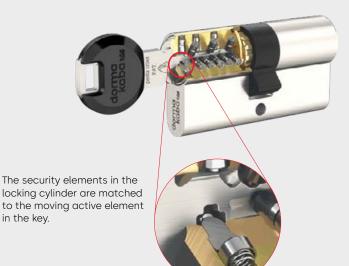
For more information, visit: your local dormakaba website

## High-level copy protection – penta cross

In the penta cross system, there is a cross-shaped recess with a moving active element in the key, which represents increased 3D copy protection. When the key is inserted, the movement of the active element is queried by security elements matched to it in the locking cylinder. The matching lock cylinder can only be locked and unlocked when the moving active element is present in the key.



Cross-shaped recess with a moving active element in the key



# Easy and flexible management of your locking system

## dormakaba keylink

#### Flexible

Mechanical locking systems planned with dormakaba keylink are adaptable and expandable. Whilst classically planned systems could hardly be changed, or only with lots of effort and at high cost, organisational changes at the company are now easier to solve with keylink.

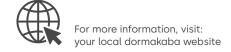
The locking system can be adapted to the new conditions, and this can be done with little organisational effort and at a manageable cost, as the locking cylinders of the system don't need to be replaced.



#### Easy

The mechanical locking system can be planned with dormakaba keylink quickly and easier than ever before, which makes it easier for those in charge to make statements and decisions on the feasibility of expansions later on. This represents extra planning and investment security. With keylink, access management can very easily be controlled with a computer by the person in charge of security at the company – this also applies to key organisation, i.e. the issuance of new keys if access permissions have changed or if new employees join the company.

- Future-oriented planning method for the dormakaba penta mechanical locking system
- Planning based on company organisation and room zones
- Access permissions can be adapted as needed through new key issuance
- Flexible expandability of the locking system
- Consistently high security standard in every expansion stage
- Joint planning for different properties is possible
- Offers extra planning and investment security



# Locking cylinders straight from your specialist partner

Our patented cylinder systems are available either as works or specialist partner systems.

Whereas the works systems (e.g. gemini, quattro and penta) are only produced at our works, our partner systems (e.g. pextra+ or expert plus) can be obtained directly from authorised specialist partners.

By investing in a specialised key milling machine and following corresponding training and certification, our specialist partners are able to assemble the cylinders and mill the key blanks themselves.

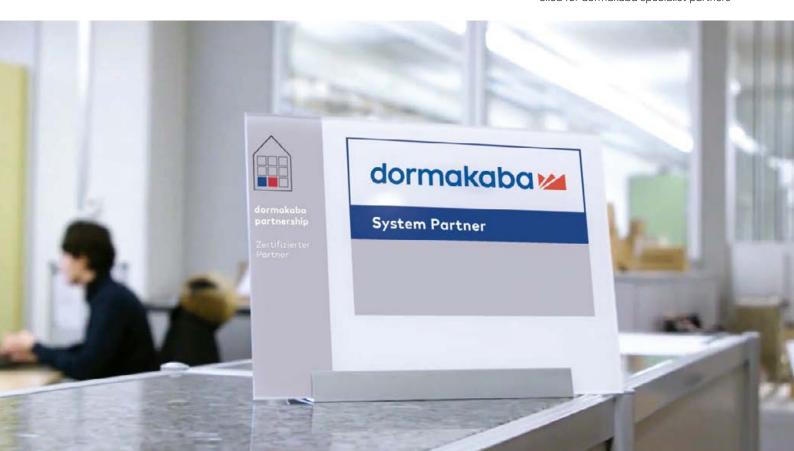
The keys and key blanks of our patented partner systems aren't available anywhere else. Our authorised specialist partners obtain the cylinder components and key blanks directly from the factory using a specific dealer code. A duplicate key is then created from the patented key blank. Keys can only be reordered through identification with the security card or the proof of identity method agreed upon in the respective individual case.

Key milling machines aren't able to create a duplicate key from our key blank until approval has been granted by dormakaba through the transfer of a password to the partner. For dormakaba expert, only machines from two manufacturers in the market are currently able to produce our technically sophisticated

keys from the key blanks and comply with the required measurement tolerances in the micrometre range. If these tolerances aren't met, the key won't lock. The entire process, from development and manufacture of a new key milling machine to commissioning by the partner, is contractually defined with the manufacturers of the key milling machines.



Futura Pro key milling machine from Silca for dormakaba specialist partners



## Reversible key system

## dormakaba expert plus & expert cross

The dormakaba expert plus and expert cross reversible key systems can be customised for the customer on site by authorised specialist dealers. This means that the specialist partners are the only contact partners for key copies using a special dealer code. The expert plus system offers a high level of protection and convenient operation for serial cylinder systems or medium to large master key systems. This makes it ideal for securing and organising access for private homes, apartments or small and medium-sized businesses. The mechanical locking cylinder offers time-limited access through the SAT special function.



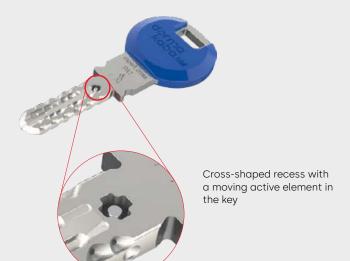
#### Simply impressive:

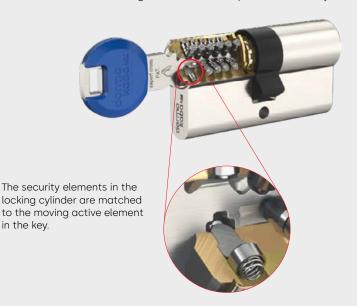
- 4 radially-arranged pin rows
- Up to 22 active tumbler pin pairs (20 with cross)
- A total of 44 tumbler positions (40 with cross)
- expert plus patent term until 2033
- expert cross patent term until 2036
- Suitable for serial cylinder systems and medium to medium-large locking systems
- Modular system structure for economical adaptation to new requirements
- Optional security elements for even greater protection and useful special functions
- SAT (secure access temporary) special function available
- Integration into electronic systems with RFID clip (can also be retrofitted)
- Environmental product declarations (EPDs) available



## High-level copy protection – expert cross

In the expert cross system, there is a cross-shaped recess with a moving active element in the key, which represents increased 3D copy protection. When the key is inserted, the movement of the active element is queried by security elements matched to it in the locking cylinder. The matching lock cylinder can only be locked and unlocked when the moving active element is present in the key.





# Serrated key systems Choose the form and function of the serrated keys.









Standard key with angular bow and lateral blocking element as well as optional mini clip **Trend key** with colour clip for ergonomic opening

**Metal bow key** for easier operation with multiple locking systems or deep roses **Key with RFID transponder clip** for integration into electronic systems for access control

## Colours as optional orientation aid





For the **standard key**, there are eleven colours for large clips and five colours for mini clips.

**Trend key** is available in dark blue, light blue, red, green, yellow and black.



The **metal bow key** is delivered without a coloured part as standard. Red, green and black parts are also available as an orientation aid.



In the case of **RFID transponder clips**, six coloured ring elements make orientation easier.

## Reversible key systems Choose the form and function of the reversible keys.



Standard key with black clip for penta and penta cross as well as blue clip for all other reversible key systems



Key with large key clip



Key with long bow



Key with RFID transponder clip for integration into electronic systems for access control

## Colours as optional orientation aid



For the **standard key**, there are smart key clips in 12 colours.



The **key with a large key clip** is also available in 12 colours.



In the case of **RFID transponder clips**, six coloured ring elements make orientation easier.



## Refined surface finishes



Uniform black for serrated and reversible key systems

Colours and surface finishes have always been playing a significant role. This is why mechanical locking cylinders from dormakaba are available in a wide variety of different surface finish versions. Nickel-plated and bare brass are the standard surface finishes. The black locking cylinder was added to our range as BKM, matt black, and is based on RAL colour 9005. Depending on the customer's needs and wishes, the various different surface finishes can be combined within a locking system.

## Surface finishes



- 01 NI | Bare nickel\*
- 03 CR | Standard chrome
- NIC | Chemically nickel-plated
- CRP | Chrome-plated, polished
- MS | Bare brass\* 02
- 06 MP | Polished brass
- 07 BH | Light brown
- 80 BM | Medium brown
- 09 BD | Dark brown
- BKM | Matt black

\*Standard surface finishes

Colours are representative only and not available for all cylinder types or thumbturns. There may be some slight colour differences between the reversible key and serrated key systems in some cases.

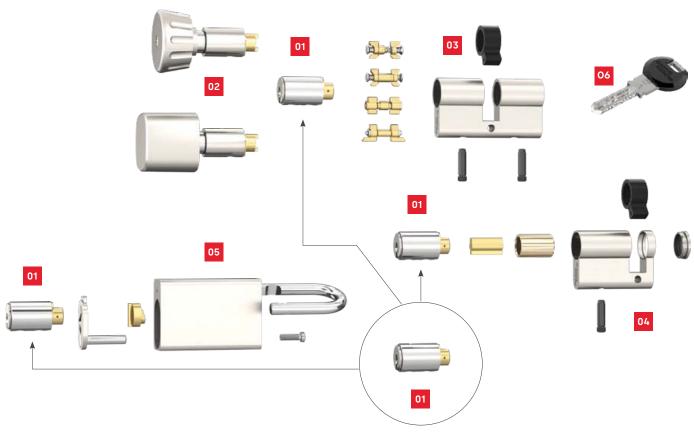
# Modular design. Maximum flexibility. Reversible key systems

#### Quick and cost-effective adaptation

Reversible key systems offer high investment security, even if requirements change over time. A modular, forward-compatible system design enables quick and easy conversion of the cylinder to other lengths and types. The existing lock cylinder can be adapted to a new length with little effort, for example for a new entrance door, or can be fitted with an elegant thumbturn knob.

#### Sustainably economical

The heart of the system are modular exchangeable inserts which can easily be used in all cylinder types, e.g. half cylinders, thumbturn cylinders, rim cylinders, furniture cylinders, padlocks and cam cylinders. Combination with cylinder housings of different lengths (complete housings), couplings and tappet hubs opens up nearly limitless options for the conversion of an access solution which has already been provided to the customer.



#### 01

The modular insert contains the locking authorisation for the keys and can be integrated into all reversible key cylinder types

#### 02

A thumbturn can very easily be retrofitted

## 03

Different housing lengths of the double cylinder make easy length conversion possible

#### በፈ

Half-cylinder with an insert

#### 05

Padlock with an insert

#### 06

Key with locking authorisation as per the locking plan

# Added value for your locking system Useful special functions

Depending on the requirement, you can supplement your custom locking solution with one of our many special functions. These functions offer you added value in both functionality and utility. For details on this, see the **Special functions for serrated keys and Special functions for reversible keys** brochures.

# Need a key change? No reason to replace the cylinder

## Self-changing cylinder (SUZ)

#### Your requirements:

You don't want to replace all the cylinders if a key is lost or a renter moves out with the key. Or perhaps you'd like to block access to tradespeople following completion of the building phase.

## How it works:

There are three generations of key for the self-changing cylinder (or two generations in the case of SUZ1). The cylinder lock can therefore be changed up to two times. Turning the key of the subsequent generation in the cylinder prevents the previously used key from being able to unlock anymore. No additional tools or keys are required here.



# (1. Gorbrætton

## Key of the first generation



## Key of the second generation

By inserting it and turning it 360°, the keys of the first generation lose their locking authorisation.



## Key of the third generation

By inserting it and turning it 360°, the keys of the second and first generations lose their locking authorisation.



#### Locking cylinder

The conversion procedure doesn't require a separate conversion key – there's no need to replace the locking cylinder.

## Simply impressive:

- Lock can be changed up to two times
- No special conversion key is required
- "Old" key can no longer be used straight after conversion of the cylinder
- Locking cylinder doesn't need to be replaced when a renter moves out or if a key is lost
- Reduces both costs and effort
- An option for responding to a lost key, enabling control of your locking system
- Available for serrated key systems only



For more information, visit: your local dormakaba website

## Need to change an access permission? A conversion key makes it possible!

## Building-phase function (BAZ)









S2

All keys have access permission





U1

Conversion key U1 is used: Pin combination in the cylinder is modified



Cylinder







S1 had its access permission withdrawn



Cylinder



Conversion key U2 is used: Pin combination in the cylinder is modified







Cylinder

S1 and S2 no longer have access permission

#### Your requirements:

Following completion of the building phase, you would like to withdraw access from the tradespeople and dispense with the need for a provisional locking system. Or perhaps you'd like to quickly change the access permission due to a key being lost, without having to replace all the cylinders.

#### How it works:

For the BAZ cylinders, there are up to three generations of keys and a corresponding conversion key. A one-time conversion of the cylinder with the conversion key terminates the permission of the first key. Only the key of the subsequent generation will then work.

#### Simply impressive:

- Lock can be changed up to two times
- · Locking cylinder doesn't need to be replaced when a renter moves out or if a key is lost
- Reduces both costs and effort
- An option for responding to a lost key, enabling control of your locking system
- Increased security conversion keys must be destroyed



For more information, visit: your local dormakaba website

# Access for service personnel? Easy with the turn of a key!

## Secure access temporary (SAT)

#### Your requirements:

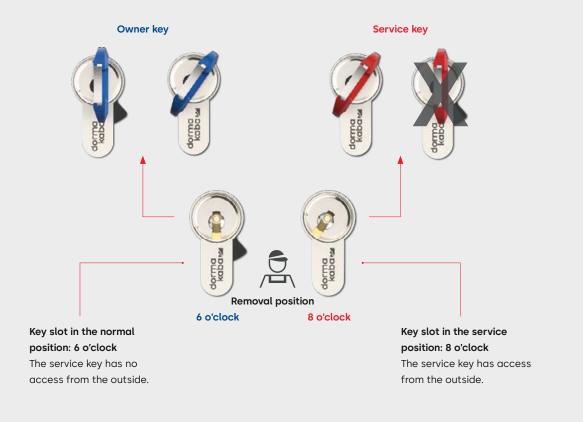
You'd like to grant time-limited access to third persons, e.g. cleaning personnel, dog sitters/babysitters or neighbours while on holiday.

#### How it works:

There's one owner key and one service key. If the owner key is removed from the SAT locking cylinder in the 8 o'clock position – by the house owner, for example – the door can also be unlocked with the service key. If the owner key is removed in the 6 o'clock position (vertical position), the door can't be opened with the service key from the outside. If the service function is active and the door is locked with the service key from the inside, the owner can still unlock the door from the outside even if the service key is located in the cylinder on the inside. They always have access.

- Purely mechanical solution with owner and service keys
- Owner key grants or withdraws the service key locking authorisation
- Time-limited access, as locking authorisation occurs with a key turn
- Service key can be given additional locking authorisations within a locking plan
- Available exclusively for the quattro plus and expert plus systems





# Damp and cold outside? Everything's dry inside.

## Thermally insulated cylinder (TIC)

#### Your requirements:

You'd like to prevent water condensation forming inside the locking cylinder on the doors of passive houses. Or perhaps there are locks in your locking system which are exposed to especially harsh weather.

#### How it works:

The separation of outside and inside using plastic components ensures thermal insulation. Water condensation formation on the inside of the door can't occur even in extreme cold. A foam rubber seal on the outside of the cylinder protects against draught and driving rain.

## Simply impressive:

- Protection against water condensation and ice forming on the inside of the cylinder
- Protection against driving rain on the outside and greater protection against draught
- Ideal for passive houses, pergola doors and side doors
- Secure and guaranteed access, even in outside temperatures down to -20 °C
- Available with the lockable-on-both-sides function or with a thumbturn
- Available for reversible key systems only





## Heavy use, corrosion, dust or insects? No problem.

## Special designs

#### Your requirements:

You experience unusual environmental influences or have especially high demands on the locking cylinder and would therefore like additional protection for your locking cylinders.

#### How it works:

For a variety of different environmental influences, we offer dust and spraywater protection (SSW) and dust and insect protection (SIS). For those located near the sea, we recommend the seawater-resistant version (SWF). In the case of special stresses or if corrosion is expected, the chemically nickel-plated version (NIC) is a good fit.



# Attack coming from the outside? Strong resistance from the inside.

## Safety versions

#### Your requirements:

Depending on the door situation, you have different safety requirements when it comes to burglary protection.



Locking cylinder with increased drilling protection (BS)

#### How it works:

dormakaba locking cylinders offer good basic protection thanks to the use of high-quality materials. Configure your locking cylinder with different safety features like the VdS version, drilling protection, the slat version, a predetermined breaking point or pulling protection in the case of serrated key systems.



Serrated key system with slat version and reversible key system with increased drilling and pulling protection (BZ-LAM)

## Left your key inserted on the inside? No problem!

## Cylinder lockable on both sides (BSZ)

#### Your requirements:

You'd like to be able to unlock doors even if a key is still inserted on the opposite side, e.g. in the case of inadvertent closing of the front door.

#### How it works:

The double cylinder makes it possible to unlock the door from one side using an authorised key if a key is inserted and turned to any position on the opposite side. The inserted key turns at the same time. This function is ensured on both sides of the double cylinder.



Outside of the door

Inside of the door

# Locked from the inside? Not an obstacle in case of emergency.

## Emergency key function (GF)



#### Your requirements:

You'd like to be able to unlock doors in an emergency or dangerous situation, even though a key is inserted on the inside. In every other case, the private sphere has to be guaranteed, e.g. in the case of doors in supervised residence halls.

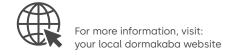
#### How it works:

The double cylinder makes it possible to unlock the door from one side if a key is inserted on the other side and turned to any position, but not with a standard key. Only a specially managed and registered emergency and danger key will do.

- Emergency key function is available for reversible and serrated keys as well as for locking systems and individual locks
- Locking cylinders are inspected for fire protection as per EN 1634-1 or EN 1634-2 and meet high safety requirements
- Emergency opening with electronic door fittings such as dormakaba c-lever









# Access Automation Solutions

Entrance systems perform several functions in a building. They enable easy, secure access and regulate traffic and access to sensitive areas. They can also help to save energy in the building, as the doors close reliably. Automatic door systems from dormakaba are characterised by their design, variety, security and comfort.

# Access Automation Solutions For smooth access in life and at work, with security and comfort for everyone.

Whether it's in office buildings, public business/event centres, airports, banks, retail chains or sport stadiums, our automatic doors enable convenient access and optimise traffic throughout. The products also support controlled and straightforward access to protected areas. Whether you're entering a lobby, boarding an aircraft, coming to work, entering a fitness studio or going to a concert.



## **Entrance Automation**



**Swing door operators** 

From electromechanical support for manual opening to remote-operated automatic mechanisms.





entrance situation. Transparency and efficient flow of people.



#### Sliding door operators

For all standard and escape route applications, space-saving, quiet, long-lasting and maintenance-friendly.



#### **Revolving doors**

High traffic capacity, avoidance of draughts.

## **Entrance Security**



## Security revolving doors, security turnstiles and personal interlocks

Suitable for security level. Separation sensors, access control, bullet- and burglary-resistant.



#### Tripod turnstiles and other turnstiles

Access control, robust and weather-proof for outside use, elegant for inside use, with digital integration.



## Sensor barriers and sensor-controlled passages

Diverse modular design variants for contactless access control indoors.



#### **Swing doors**

Supplemental to our half-height access systems, for material transport or as barrier-free access.



### Pedestrian guiding bars and reader posts

Guidance of people, access control and ID card organisation for our half-height access systems.



## System components and accessories for entrance systems

Activators with automatic feedback, security sensors for door leaf opening.

## Swing door operators

## at a glance



	ED 100	ED 250	PORTEO
Dimensions (H x W x D) (mm)	685 x 70 x 130	685 x 70 x 130	530 x 60 x 80
Dimensions with incorporated smoke detector with integrated power pack (mm)	735 x 70 x 130	735 x 70 x 130	
Use in fire protection	•	•	
Number of door leaves	1 and 2	1 and 2	1
Max. power consumption (watts)	120	240	
Closing force EN 1154	EN 2-4 continuously adjustable	EN 4-7 continuously adjustable	
Max. door-leaf weight up to 300 mm lintel depth (kg)	160 depending on the door width	300 depending on the door width	100 with max. 1,100 mr door-leaf width
Max. door-leaf weight from 301 to 500 mm lintel depth (kg)		160	
Door-leaf width (mm)	700-1,100	700-1,600	700-1,100
Opening speed from 0-90° (seconds)	4 <sup>1)</sup> -12	3 <sup>1)</sup> -12	5-10
Closing speed from 90–0° (seconds)	5 <sup>1)</sup> -21	4 <sup>1)</sup> -21	5-10
Axle extension (mm)	20/30/60	20/30/60/90	
Slide channel lintel depth (mm)	+/- 30	+/- 30	
Slide channel CPD lintel depth (mm)	30-60	30-60	
Standard arm lintel depth (mm)	0-300	0-500	
Standard arm lintel depth for fire protection (mm)	0-300	0-350	

#### Standard

<sup>1)</sup> Automatically limited depending on door-leaf weight as per EN16005 or DIN 18650, BS 7036-4 and ANSI 156.19 in low-energy operation mode. Max. speeds are only achieved with the full-energy operation mode, a low door-leaf weight and a learned opening angle of min. 95°.

## ED 100/250



Single-action door operators for single-leaf and double-leaf doors up to 1,600 mm door-leaf width and max. 400 kg door weight

The modern ED 100/ED 250 single-action door operators are easy to operate and nonetheless very flexible. The operator has compact dimensions and can be easily adapted to individual requirements thanks to its modular structure. Despite its strength, the operator is so quiet during operation that it's hardly noticeable. The modern control system is designed in such a way that it can be adapted to the needs of the user and compensate for changing conditions in the environment, which achieves very high system availability.

- Active wind-load control in automatic mode
- Integrated smoke detector
- **New:** Technically revised arm system with XEA design and multiple toothing
- **New:** Fire and smoke doors up to 1,600 mm door width (EN 7)
- Temperature management program reliable operation with a long service life
- Power Assist opening support barrier-free opening as per DIN 18040, DIN SPEC 1104
- With environmental product declaration (EPD)



# Swing door operators

## **ED ESR 1/2**



Single-action door operator for double-leaf doors, fully automated active door leaf with all ED-100/250 functions, passive door leaf without automatic function.

- Minimum dimension of just 7 cm in height
- Passive door leaf can be opened manually, supported by the Power Assist function
- Passive door leaf can be held open if required
- System can also be used as a hold-open system
- Use up to EN 6 (no fire protection requirement up to 3,200 mm)
- Approved for fire and smoke doors



## **PORTEO**



The especially quiet PORTEO single-action door operator is especially suitable for use on doors without any special requirements thanks to its small dimensions. In Power Assist mode, the PORTEO can considerably reduce the force required to open the door so the door can easily be opened manually.

- Easy to retrofit
- One version for four installation options: transom or door-leaf fixing pull and push side
- Minimal dimensions: 60 mm x 530 mm x 80 mm (H x W x D)
- Nearly silent movement
- Easy installation thanks to plug & go function
- GGT-tested



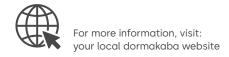
# Automatic sliding doors

## ST PRO Green/ST PRO Green RC2/RC3



The ST PRO Green automatic sliding door has a thermally separated profile system. In combination with double or triple glazing, particularly low UD values (heat transfer coefficient) of up to 1.0 can be achieved (value depends on glass used and door size). The new operator generation ES PROLINE with a dormakaba Direct Drive motor and energy-saving power supply unit operates extremely efficiently. The long service life (1.5 million cycles) contributes to sustainability far beyond the standard requirement. As a complete system, the door ensures a better energy balance in buildings.

- Extremely low UD values
- 1-leaf and 2-leaf sliding doors
- For use in escape routes and emergency exits
- Energy-efficient ES PROLINE sliding door operator
- Designer internal cover with fully integrated security sensors (sensor casing)
- Highly efficient double and triple glazing
- Tested and certified
- ST PRO Green RC2 with burglary resistance RC2/ ST PRO Green RC3 with burglary resistance RC3



## ST FLEX



The ST FLEX automatic sliding door with the FLEX profile system creates a transparent look thanks to narrow visible widths. Convenience and barrier-free design achieve a welcoming atmosphere. Together with doors from the ST FLEX family (ST FLEX Green and ST FLEX SECURE), a harmonious overall appearance is created.

- Slim profile cross-sections
- Security secondary closing edge made of rubber
- Suitable for ISO glass with a thickness of 22 mm and single-pane glass with a thickness of 8 mm/10 mm
- Above-floor and floor-integrated guide rail possible
- Can also be supplied as a telescopic sliding door
- Flexibly adaptable to the requirements of the building

# Automatic sliding doors

## ST FLEX Green

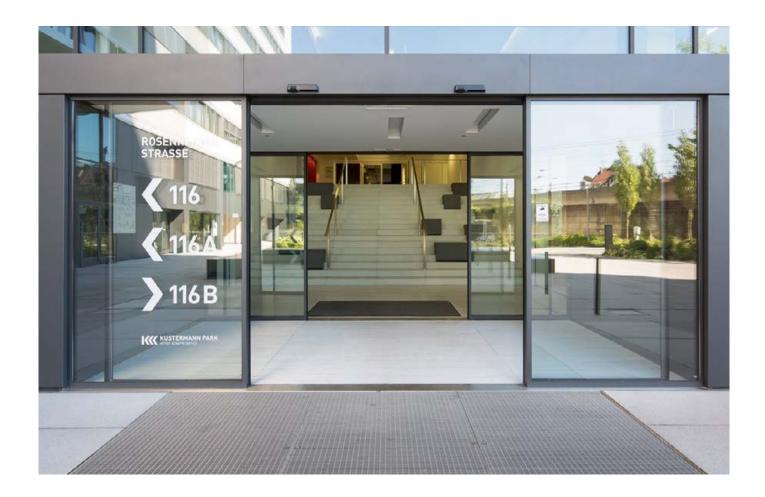


The automatic ST FLEX Green is an energy-saving sliding door with an environmental product declaration (EPD). It meets the guideline values of German Energy Saving Ordinance EnEV 2016 and features extremely slim profiles and improved thermal separation.

- Complies with German Energy Saving Ordinance EnEV 2016
- $\bullet~$  UD values from 1.4 to max. 1.8 W/m $^2 K$
- Minimised visible widths of the profiles
- Certified thermal insulation values in accordance with DIN EN ISO 10077
- Sustainable, energy-saving solution
- With environmental product declaration (EPD)



## ST FLEX SECURE



Burglary and vandalism protection with unobtrusive appearance are the key features of the FLEX SECURE sliding door. Classes of burglary protection WK2/RC2 are certified by a test report according to EN 1627 et seq. In combination with the ST FLEX and ST FLEX Green door types, transparent, barrier-free entrance solutions are easy to implement.

- Certified burglary protection classes WK2/RC2
- Visually attractive, slim profiles
- Solid four-point locking device on main closing edge
- Universal prying protection for door leaf
- Floor-integrated guide rail for a stable floor connection
- Tested versions with or without side screen



# Automatic sliding doors

## TST FLEX/TST FLEX Green

Telescopic sliding doors of the FLEX profile system offer large clearance widths with high transparency of the door elements. Together with other doors of the FLEX family, even especially challenging building solutions can be implemented. The energy-efficient TST FLEX Green version features improved thermal separation and ensures outstanding heat insulation as a final building step in combination with ISO glasses.

- Telescopic mechanism ensures greater access with the same system width
- Slim FLEX profile system for transparent entrances
- Secondary closing edge with rubber security profile
- Suitable for ISO glass with a thickness of 22 mm
- Same profiles as with ST FLEX sliding door





## ST PURE

Automatic sliding door with full-glass door leaves (frameless).

#### Simply impressive:

- Full-glass door leaves without door profiles
- Specifically for inside applications
- Door-leaf holder with modest dimensions
- Door installation types with and without side screen/fanlight are possible





## **ST MANET**

Automatic sliding door with full-glass door leaves and stainless steel holders (frameless).

- High-quality stainless steel single-point fixing for the door leaves.
- Door leaves without door profiles for max. transparency
- For high-quality interior construction
- Doors with and without side screen/fanlight are possible





# Automatic sliding doors

## SST FLEX



Swivelling door leaves and side screens can allow for very large access widths in case of emergency. In automatic mode, the break-out sliding door works like a standard sliding door.

- Slim profile in the FLEX system
- Automatic mode corresponds to that of conventional sliding doors
- Door leaves and side screens can be swivelled open manually in case of emergency
- Escape route width corresponds approximately to the entire door width
- Enables the transport of bulky objects



## FFT FLEX Green



The FFT FLEX Green bi-folding door is especially suitable where there is limited lateral building space. It enables clear passage widths of up to 2.4 m and clear passage heights of up to 2.5 m. This door is characterized by exceptionally good thermal insulation together with very quiet and dynamic running.

- Large clear passage widths
- Especially narrow profiles
- High energy efficiency
- UD value calculation
- Quiet and dynamic running
- For escape and rescue routes
- With environmental product declaration (EPD)



# Sliding door operators

## **ES PROLINE**



ES PROLINE is the new generation of sliding door operators. A modern, durable and energy-efficient system for nearly all requirements in the area of automatic sliding doors. Thanks to the sensors integrated into the cover, ES PROLINE also meets the requirements on design for use in modern buildings.

- Door-leaf weights up to 400 kg can be implemented without problems
- Tested and certified for 1.5 million operating cycles (50% longer service life)
- Especially energy-efficient thanks to energy-saving power supply unit
- Integrated communication module enables the reading of status messages and control using a smartphone
- Approved for use in escape and rescue routes
- Can be used for nearly every dormakaba profile system



## **ES 200**



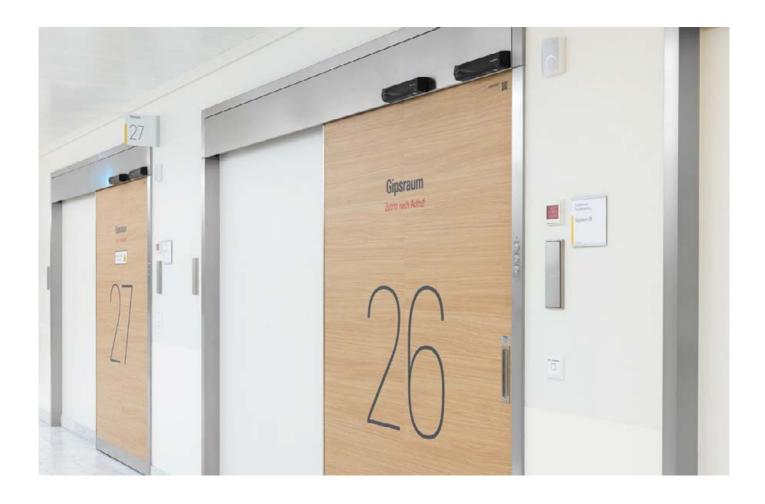
Modular sliding door operator with different operator heights. Additional modules and options enable custom-tailored solutions for automatic sliding doors. Testing as per DIN 18650/EN 16005 ensures high-level security.

- Operator heights of 100 mm, 150 mm and 200 mm are possible
- ES 200 2D escape route operator
- Parameterisation directly at the control unit or via hand terminal
- Special function modules for special requirements
- Uniform basic mechanisms with all types
- Noise-insulated, interchangeable track profile
- Optionally available as operator for telescopic sliding doors for standard and escape route applications



# Sliding door operators

ES 400



Sliding door operator for hospitals/clinics or flush mounting, single-leaf (ES 410) and double-leaf (ES 420).

- Laterally connected drive unit, either right or left
- Tested as per DIN 18650/EN 16005
- Interlock operation with up to three operators possible
- Self-teaching Optional configuration with computer
- Push & go operation



## CS 80 MAGNEO



Automatic sliding door operator for single-leaf and double-leaf interior doors.

- Dimensions: 62/75 mm height, 60 mm depth
- Max. leaf weight of 80 kg
- Easy installation and commissioning
- Tested as per DIN 18650/EN 16005
- Optimal barrier-free opening convenience
- Adjustable speeds and hold-open times



## Automatic curved sliding door

## **BST/FBST**



With dormakaba curved sliding door systems, entrance areas can be interestingly and individually designed:

curved half-circles, full-circles, ovals, double-segments – so much is possible. With max. leaf weights of 130 kg each with the BST variant or max. 110 kg with the FBST escape and rescue route variant, access widths from 1,000 to 2,500 mm can be implemented. Thanks to their design variety and great variability, curved sliding doors offer an abundance of design options.

- Versatile in use
- High opening convenience
- Large selection of modular components and operation modes
- Adjustable speeds
- Optionally available with escape and rescue route (FBST)
- Type-tested and certified as per DIN 18650/EN 16005



# Revolving doors

Thanks to their enclosed design, revolving doors ensure that energy is saved to the maximum extent possible when people enter and leave a building. By eliminating draughts normally associated with opening doors, the interior near the revolving door can be optimally used for reception or seating areas. An optimum flow of visitors and employees is assured as people can pass in and out of the building at the same time.

- Large selection of modular components and operation modes
- Double-leaf to quadruple-leaf variants
- With or without night shield with a wide variety of different locking options
- Manual, equipped with automatic positioning mechanism
- Servo-supported or automatic revolving doors



# Revolving doors

## at a glance







	KTV 3/KTV 4	KTV ATRIUM FLEX	KTC 2
Туре	Standard revolving door	Full-glass revolving door	Open-plan revolving door
Diameter (mm)	2,000-3,800	2,000-3,000	3,000-5,400
Volume of people/minute <sup>2)</sup>	22-46	22-39	28-58
Operating modes			
Manual	•	•	
Automatic positioning system	•	•	
Servo mode	•	•	
automatic	•	•	•
Number of leaves	3 and 4	3 and 4	2
With integrated sliding door			•
Resistance class			
Escape route suitability <sup>3</sup>	0		
Glass ceiling		•	
Showcase			0
Pedestrian flow control			
Bullet- and burglary-resistant			

- Standard O Optional
- 1) Depending on the number of leaves
- 2) Depending on the diameter and number of leaves 3) Depending on the locally applicable requirements







KTC 3/KTC 4	Geryon RDR	Geryon SRD
Open-plan revolving door	Individual revolving door	Security revolving door
3,600, 4,200, 4,800, 5,400, 6,000/6,200 <sup>1)</sup>	2,100-3,700	1,400-3,600
31–73	16-28	16-28
		•
		•
	•	•
•	•	•
3 and 4	3 and 4	3 and 4
	RC 2 and RC 3	RC 2 and RC 3
•		0
		0
0		
		0
		0

# Revolving doors

## KTV 3/KTV 4

Manual, power-supported or fully automatic triple-leaf and quadruple-leaf revolving doors up to 3.8 m in diameter.

#### Simply impressive:

- Planning reliability thanks to the upgrading options of the operator system
- Direct drive enables high running smoothness and positioning precision
- Versatile equipment options
- Twin-brush system for especially low air exchange and reduced heat loss
- Triple-leaf and quadruple-leaf versions
- Type-tested and certified as per DIN 18650/EN 16005
- Night shield with RC2
- Environmental product declaration (EPD) available





## KTV ATRIUM FLEX

Full-glass revolving doors with three and four door leaves, with glass ceiling, direct drive in the ceiling.

- Non-visible operator and control technology
- Operation modes: manual, servomatic and automatic positioning control
- Type-tested and certified as per DIN 18650/EN 16005





## KTC 2

Double-leaf open-plan revolving doors with integrated automatic ST FLEX sliding door.

## Simply impressive:

- High opening convenience
- Adjustable speeds
- Maximum possible flexibility thanks to operation either as a revolving door or sliding door as desired
- Integrated night shield
- Integrated automatic sliding door, dormakaba operator system
- Type-tested and certified as per DIN 18650/EN 16005
- Environmental product declaration (EPD) available





## KTC 3/KTC 4

Automatic triple-leaf and quadruple-leaf open-plan revolving doors up to 6.2 m in diameter.

- High throughput
- Adjustable speeds
- Triple-leaf and quadruple-leaf versions with or without showcase
- Type-tested and certified as per DIN 18650/EN 16005
- Environmental product declaration (EPD) available





# Revolving doors with increased safety equipment

## Geryon RDR-E01

Triple-leaf and quadruple-leaf revolving doors with especially flexible equipment options for the implementation of specific customer requirements.

#### Simply impressive:

- With laminated safety glass 8 filling, alternatively with metal panelling
- Option: Push button for use by disabled persons
- Models with resistance class RC2
- Protective sensors as per EN 16005 are possible





## Geryon RDR-C01

Versatile standard system with optional burglary resistance up to RC3 and expanded options.

- Expanded range of options compared to RDR-E01
- With laminated safety glass 8 filling, alternatively with metal panelling
- Transparent full-glass systems with ultra-slim profiles
- Option: disabled access push button for use by disabled persons
- Models with resistance classes RC2 and RC3
- Protective sensors as per EN 16005





## Geryon RDR-C03

Safety and convenience for users thanks to automated starting and the escape route function (even in the standard version).

#### Simply impressive:

- Toughened safety glass (TSG), including break-out symbols for adhering to the door leaves
- Two bar locks for locking the door-leaf cross above and below





## Geryon RDR-S01

With glass ceiling comprised of two laminated safety glass segments.

- Transparent full-glass systems with ultra-slim profiles
- Deadbolt lock, prepared for on-site profile cylinder





# Security revolving doors



The Geryon product family includes security revolving doors and security turnstiles. Security revolving doors are suitable for both indoor use and entrances.

- People cannot be locked in thanks to the lock limiting point
- Protective sensors as per EN 16005
- IR sensors as standard
- Models with resistance classes RC2 and RC3
- Full-glass systems with floor-integrated drive unit
- Optional scales installation, weight limits or actual weight
- Optional night lock
- Optional optical separation via SRD Vision



## Geryon SRD-E01

The system can optionally be supplied with resistance class RC2.

#### Simply impressive:

- With glass filling, alternatively with metal panelling
- Rigid T40 door-leaf cross, optional retractable T56 door-leaf cross
- Customer-specific separation level adjustable using various different sensor technologies



## Geryon SRD-C01

The Geryon SRD-C01 security revolving door is covered in metal as standard, but can be supplied with a glass cover. RC3 is available as an option. Optional bullet-resistant version.

- Visible surfaces made of stainless steel
- Optional glazing
- Optional weight monitoring or contact mat



# Security revolving doors

## Geryon SRD-S01



The Geryon SRD-S01 security revolving door is a full-glass system optionally available with resistance class RC2. Especially suitable for representative environments.

- With glass filling
- Full-glass system, no metal panelling
- With glass filling and ultra-slim profiles
- Laminated safety glass ceiling
- T25 without centre column or profile, glazing made of TSG
- Single-zone contact mat(s) monitor(s) the blocked segment(s), control unit installed under floor



## Geryon STS-S02



Security turnstile for controlled access.

- People cannot be locked in thanks to the lock limiting point
- With laminated safety glass 8 filling
- Aluminium sheet dust-tight at top
- Control unit integrated into system
- Two maintenance doors in lower ceiling panel
- Blocking element made of lightweight rectangular metal profiles
- Bars optionally available as stainless steel bent tubes or acrylic glass elements



## Personal interlocks

## at a glance







Standard systems	PIL-S01	PIL-C01	PIL-M01
Structure			
External diameter (mm)	1,020, 1,120, 1,220, 1,320, 1,420, 1,520, 1,620	1,020, 1,220	
External dimension			Depends on combination
Upper part length (mm)			800-2,000
Clear passage width (mm)	520, 580, 650, 710, 780, 840, 910	550, 680	800-1,200
Total height (mm)	2,300	2,400	2,330
Clear passage height (mm)	2,100	2,100	2,100
Upper body part (mm)	200	300	230
Body			
Side screens with glass filling, alternatively with metal panelling	•		
Side screens with steel substructure with metal panelling		•	
Upper part with dust-tight cover and ceiling panel contains control unit and monitoring elements			•
Resistance class			
With RC 2	0		0
RC 3 or RC 4			0
With WK 2 or WK 3		0	
Indoors			
Includes black rubber coating	•		
Includes lighting		•	
With surface lighting button as relaying element			•
Exterior door/interior door			
Swing door, folding leaf, sliding door, fire door or on site			0
Sliding doors			
Made of lightweight metal profiles with curved glass, profile-level outside	•		
Made of lightweight metal profiles with curved glass, profile-level outside. Version corresponds to selected resistance class		•	



The electronically monitored Orthos security interlocks meet the highest security requirements and offer optimal security for the sensitive areas of a building.

The Orthos product family includes all types of personal interlocks, whether round or angular, for individual passage and interlocks with multiple door systems one after another which can only be passed in one direction.

- Contact mats for high security
- Additional security thanks to scales installation, weight limit or actual weight
- Resistance classes RC2, RC3 and up to RC4 for cubic interlocks
- PMA release switch in the interlock opens exterior door
- Optional door leaf and bi-folding doors and automatic locking device
- Optional fire door
- Optional escape route function
- Optional bullet- and burglary-resistance
- Elegant glass systems
- Smooth, low-noise running

## Personal interlocks

## Orthos PIL-S01

Versatile round personal interlock.

- With glass filling, alternatively with metal panelling
- Interior space with surface lighting button as relaying element
- Includes single-zone contact mat with black rubber coating
- Light curtain for contactless security





## Orthos PIL-C01

Versatile round personal interlock, including LED lighting.

- With steel substructure with metal panelling
- Made of lightweight metal profiles with curved glass, profile-level outside
- Accompanying safety bumpers on the main closing edges





## Personal interlocks

### Orthos PIL-M01



Versatile cubic personal interlock.

- Upper body part with dust-tight cover and ceiling panel includes control unit and monitoring elements
- Optional (interior and exterior door): swing door, bi-folding door, sliding door or fire door
- Interior space with surface lighting button as relaying element
- ETS 21 CAN bus control unit integrated into the system
- Installation of the drum walls on finished floor



## Orthos PIL-M02

Ensures secure access in case of a large number of people in one direction.

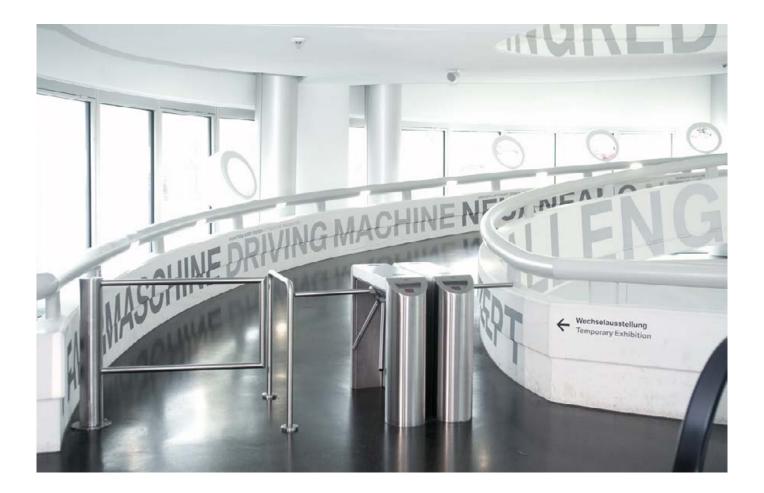
The door detects and impedes access attempts in the unauthorised direction.

- Detection of objects thrown through (optional)
- High degree of modularity
- No access from above required: control units installed in drum wall
- Sensors not dependent on ambient light
- Open ceiling structure (easy integration into existing smoke detector and sprinkler systems)





## Tripod turnstiles



To free up the reception personnel, half-height tripod turnstiles handle access control in entrances to office and administration buildings, industrial plants, banks, government facilities and many sport and recreational facilities. They're fast, reliable and easy to operate.

- Retractable bars and automatic resetting
- Modular individual and multiple setup
- Convenient passage thanks to a servo-positioning drive
- Minimal energy consumption thanks to a low-energy operator
- Safe passage thanks to a low-energy operator
- Suitable for setup in the open
- With additional equipment, suitable for setup in escape and emergency routes
- Barrier-free solutions in combination with automatic swing doors with a matching design
- Motorised movement; servo-positioning drive/ two directions electrically controlled





#### **Kerberos TPB-L06**

Three-arm double tripod turnstile with housing and stands in a single unit.



#### **Kerberos TPB-E01**

Three-arm tripod turnstile with housing and stands in a single unit.



#### **Kerberos TPB-L07**

Three-arm tripod turnstile with housing and stand in a single unit.



#### **Kerberos TPB-S03**

Three-arm tripod turnstile with housing, stands and flange plate.



#### **Kerberos TPB-M04**

Three-arm tripod turnstile with integrated payment machine and optional receipt printer.

## Half-height turnstiles



Half-height Charon turnstiles are suitable for sophisticated interior design thanks to a large number of design variants. In representative entrance areas, VIP rooms and when entering executive suites, these stylish turnstiles control visitor and employee flows in combination with swing doors. All systems can be combined with time registration systems and ID card readers, including contactless and biometric systems.



For more information, visit: your local dormakaba website

- Smooth, low-noise running
- Movement is motorised: servo-positioning drive in two directions, electrically controlled
- Movement is motorised
- Low power consumption
- Elegant, transparent design
- Space-saving, even with multiple setup
- Convenient passage thanks to a servo-positioning drive
- Barrier-free solutions with automatic swing doors with a corresponding design
- Swing doors suitable for setup in escape and emergency routes
- Design variety for glass leaves, guiding elements and push bars
- Height can be adjusted up to 1,200 mm upon request



#### **Charon HTS-E01**

Turnstile with three stainless steel bent-tube blocking elements.



#### Charon HTS-E03

Turnstile with three high glass elements and stainless steel push bars.



#### Charon HTS-M01

Turnstile with swing door, high glass elements and stainless steel push bars. Turnstile with 180° turn cycle for person separation and transport opening as soon as the turnstile and swing door are opened together at 90°.



#### Charon HTS-L01

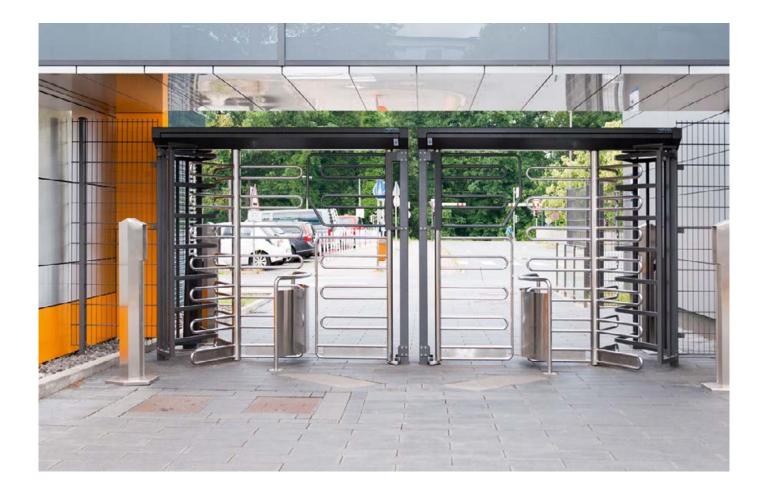
Turnstile with three rod-shaped stainless steel blocking bars each, blocking element made of stainless steel sheeting with posts for security against unauthorised passage in the blocked segment.



#### Charon HTS-L02

Double-turnstile with three rod-shaped blocking bars each, three each made of stainless steel.

## **Turnstiles**



#### Versatility

The Kentaur product family is designed to be modular. Double-leaf, triple-leaf and quadruple-leaf systems with bars or bent tubes can be combined with one another. Variants with a bicycle door, integrated door, escape route function and resistance class RC2 are available. The roofs fit on all single systems, multiple systems and space-saving double systems.

- People cannot be locked in thanks to the lock limiting point
- Versions available with an integrated bicycle door, swing door for barrier-free access or material transport
- Turnstile column and bars made of robust stainless steel
- Rotation speed adjusts to the person
- Low-energy operator
- Behaviour in the event of a power failure can be freely selected
- Can be used in areas with aggressive environmental influences
- Integrated, configurable random generator
- Second identification for additional security possible
- Spacing at the shearing edges is dimensioned in such a way that there is no risk of injury
- Suitable for max. snow load of 4.28 kN/m², which is snow-load zone 3 as per DIN EN 1991-1-3
- Suitable for max. wind load of 108 km/h, which is wind-load zone 4 as per DIN EN 1991-1-4





#### **Kentaur FTS-E01**

Turnstile separation segments: 180°, each with rod-shaped stainless steel blocking bars, shiny.



#### **Kentaur FTS-E04**

Turnstile separation elements, resistance class RC2: 120°, with rod-shaped blocking bars made of stainless steel, shiny, with bent blocking tubes made of steel.



#### **Kentaur FTS-L04**

Turnstile separation segments: 90°, each with rod-shaped stainless steel blocking bars, shiny.



#### Kentaur FTS-E05

Turnstile separation segments: 120°, each with rod-shaped steel blocking bars, hot-dip galvanised.



#### **Kentaur FTS-E02**

Turnstile separation segments: 120°, each with rod-shaped stainless steel blocking bars, shiny.

## **Turnstiles**





#### **Kentaur FTS-E06**

Double-turnstile separation segments: 120°, each with rod-shaped stainless steel blocking bars, shiny. Minimal space required thanks to meshing door-leaf crosses.



#### Kentaur FTS-L01

Double-turnstile separation segments: 90°, with rod-shaped stainless steel blocking bars, steel centre section and stainless steel panelling at the front sides, satin finish, minimal space required thanks to meshing door-leaf crosses.



#### **Kentaur FTS-M01**

Turnstile separation segments: 120°, with rod-shaped stainless steel blocking bars, shiny. Half-height, made of bent stainless steel tube with sheet-metal filler, automatic bicycle door.



#### Kentaur FGE-M01

Swing door for barrier-free person passage and material transport.



#### **Kentaur FTS-M05**

Turnstile separation segments: 180°, with rod-shaped stainless steel blocking bars, shiny. Integrated swing door with rod-shaped blocking bars and a circumferential frame. With steel filler bars and climb-over safeguard. The system features an escape route function.

## Sensor barriers

## Argus 40

The compact model has everything an elegant sensor interlock needs.

#### Simply impressive:

- With a length of just 1,200 mm, this interlock is also suitable for tight installation situations
- Impresses with its high-quality materials and functional basic configuration
- Optionally, panels can close the open body in the centre of the profile
- A compact sensor interlock with a puristic look



your local dormakaba website



## Argus 60

The interlock becomes a real highlight in the foyer. The 1,650-mm-long variant of the sensor interlock offers more options than the Argus 40.

- Increase in the security level
- Additional sensor via strip running vertically to horizontal protection sensor strip
- Light strip on handrail
- Ambient downlights
- Highly transparent door leaves
- Optionally, the door leaves can be elevated in comparison to the standard variant





## Argus 80

A consistently high-quality design: The interlock has an especially solid and stylish appearance, as the upper part and the vertical frame parts are seamlessly formed as one piece (full-cast layer) on the front and back. The shimmering metal has the effect of an "endless" handrail here. The full-cast layer extends the interlock by only 1 cm.

#### Simply impressive:

- Extensive colour combinations
- Chase
- Ambient downlights
- Can be customised
- Highly transparent door leaves
- Optionally, the door leaves can be elevated in comparison to the standard variant





## Argus V60

With a housing depth of only 240 mm, the Argus V60 is a full-performance sensor interlock ideal for use where space is limited. The reader units can be installed the same way as other versions of the Argus product range.

- Sophisticated, elegant design
- Compact design for minimal space requirements
- Available in many material and colour combinations
- High level of security and user acceptance





## Sensor barriers

## Argus Air airport solution



The Argus Air eGates from dormakaba enable a secure, smooth and reliable process for access to the secure areas of an airport. The sensors only permit access to authorised persons, thus enabling reliable person separation and automated passenger procedures while ensuring high security.

- Comprehensive access control solution for gates, boarding and lounges
- Quick passenger flow into the access areas without waiting
- Controlled access for authorised passengers
- Frees up the security personnel, who can then dedicate themselves to other tasks
- Easy integration into the existing airport infrastructure
- Maximum security thanks to the optional integration of modern biometric systems
- Low failure-detection rate despite different sizes and shapes of carry-on luggage





## Argus HSB-M03 boarding pass check and self-boarding





Half-height sensor interlock designed as an electronic gate for boarding card checking and self-boarding. Supports the airport and ground personnel in ensuring controlled access to the secure area and keeping the boarding process smooth and steady.

- Integrated boarding card reader and display for passenger information
- System detects boarding card misuse (e.g. double use)
- System can reduce queues and improve service, as passengers are able to go through the automatic gates and the ground personal can take care of passengers who need help
- Compatible with all biometric systems
- Ideal for airports





## Swing doors



The swing doors are designed similarly as the half-height access systems from dormakaba. They ideally supplement the access systems, making them suitable for material transport or barrier-free access.

All automatic swing doors can be connected to access control systems.



- Adaptable design
- Transparent and ultra-slim elements made of stainless steel and glass
- Ideal supplement for tripod turnstiles, half-height turnstiles, sensor interlocks, goods transport and barrier-free access
- Convenient passage thanks to a servo-drive
- Smooth, silent running
- System opens even under load
- System locks in every position
- Separation of drive and locking forces
- Minimal energy consumption
- Suitable for use in escape and rescue routes
- Easy installation to finished floors



Charon HSD-E01

Half-height swing door with rectangular blocking element



#### Charon HSD-E03

Half-height swing door with glass element, TSG, 10 mm top edge, 900 mm door leaf



#### Charon HSD-E06

Half-height swing door with glass element, TSG, 10 mm top edge, max. 1,800 mm door leaf



#### Charon HSD-L01

Manual half-height swing door with rectangular blocking element



#### Charon HSD-L06

Half-height swing door with transparent polycarbonate; wall mounting



#### Charon HSD-L07

Manual half-height swing door with rectangular blocking element, including door closer and anti-prying protection for strike latch



#### Charon HSD-L08

Manual half-height swing door with escape route function and blocking element with access opening for children

## Pedestrian guiding bars

#### **PGB**

#### Simply impressive:

- Available with or without glass filling
- Easy installation to finished floors
- Suitable for outside setup
- Made of AISI 304 stainless steel, satin finish
- Optionally available with knee rail or knee rail with TSG glass filling





## Reader posts

#### **CRP**

- Prepared for on-site installation of a Legic LA-PP antenna and a dormakaba AM control unit
- Can be adapted to different reader systems
- Presence detection for unreadable cards
- Easy installation to finished floors
- Weather protection hood for outside setup (CRP-M02, CRP-M03)
- Made of AISI 304 stainless steel





**PGB-E01**Pedestrian guiding bars



**PGB-S01**Pedestrian guiding bars as variable full-glass barrier system with two end posts



#### CRP-E01

Reader post with aluminium spacer, 80 mm x 35 mm, in RAL 9006, with cable hole for on-site reader panel (surface mounting)



#### CRP-E03

Post with removable inspection opening for installation of on-site components, max. installation dimensions 170 mm x 140 mm x 150 mm (H x W x D)



#### CRP-C01

Reader post with angled head (30°). Installed components are to be checked in each individual case



#### CRP-M01

Reader post for the control and return of ID cards with protective sleeve and clip holder. Integrated card return tray, signal system and lockable collecting container



#### CRP-M02

Reader post for the control and return of ID cards with protective sleeve and clip holder. Integrated card return tray, signal system and lockable collecting container



#### CRP-M03

Reader post for the control and return of ID cards with protective sleeve and clip holder. Integrated card return tray, signal system and lockable collecting container. At car and lorry height

# System components and accessories for entrance systems

## Push buttons and switches

#### Mechanical activators

#### Simply impressive:

- Manual activation for opening a door
- Large-sized push buttons also enable activation with an elbow
- Stainless steel push buttons are suitable in cases of special hygiene requirements







## Program switch

#### **Program switch**

#### Simply impressive:

- Controlling up to five different functions of the automatic door: off, automatic, exit only (shop closing), partial open (winter opening), permanently open
- Actuation can occur mechanically with a thumbturn or key or electronically with a push button





## LED touch key

#### Activator, electronic with optical feedback

- Effortless operation by touching the surface
- Visual feedback
- Glass version for use in hygienic areas
- Water-proof and impact-resistant







### Radar motion detectors

#### Activators for contactless opening

#### Simply impressive:

- Activation occurs without contact and without being known
- Creation of barrier-free access points



## Safety curtain

Contactless safeguarding of the door-leaf movement of automatic sliding and special doors

#### Simply impressive:

- Monitors opening. Should a person remain in the detection area, opening is stopped
- Invisible infrared light curtain
- Reflection evaluation
- Automatic learning of ambient conditions



## Combination sensor (security and radar activation)

Combination unit for activation by a radar motion sensor and securing of the door-leaf movement. Especially suitable for automatic sliding and special doors

#### Simply impressive:

- Security against unauthorised use via a number code or additional push button (electronic variants)
- · Additional error indication of the program switches for sliding doors in escape and rescue routes

## Laser scanner and infrared sensor strips

#### Safety sensors

- Securing of the access area
- Securing of the main closing edge
- Protection of the secondary closing edge (consider remaining risk)
- For automatic single-action doors as per DIN 18650/EN 16005





# Access Control Solutions

Managing escape and rescue routes, access permissions, working hours, stay and check-out is now easier than ever – thanks to the smooth interaction of digital components with intelligent access management solutions.

# Access Control Solutions Know what's going on in day-to-day operations: who, what, where and when.

Stay and check-out, access control and time registration, their overview and evaluation need a smart overall concept. With integrated electronics and digital network connection, small and large companies as well as private households gain new possibilities. Time-accurate management of access authorizations from the underground car park to the top floor is clear and secure in every detail. In addition to individual access control, our escape and rescue route systems provide additional building security by protecting human life on the one hand and property on the other.

#### **Electronic Access & Data**



Electronic cylinder

Modern, standalone-operation cylinders can easily be reprogrammed in the blink of an eye.



Access media and ID cards

Make access digital with smart key, access card, transponder or smartphone app.



Access control for small and medium-sized companies

Comprehensive access management, economical for any company size.



Electronic door fittings and door locks

Keyless access with RFID ID card or smartphone app. Integrated door fitting design.



Access control for large companies

Precisely configurable modules for efficient organisation and greater security.



Access control for micro-companies and private residences

Control all access permissions with a smartphone and functional app.



Access readers and peripherals

Efficient readers and access managers at every access point, indoors and outdoors.



Access control for SAP systems

Access management and time registration for optimised processes thanks to dormakaba and SAP.



#### Time registration

Intuitive operating elements for time registration, access control and employee communication



#### Production data acquisition

Intelligent management of machine utilisation and stock, quality and service data.



#### Solutions for ERP systems

Easy integration, registration and evaluation of dormakaba terminals into your ERP system.



#### Interface solutions for third-party systems

Easy integration, registration and evaluation of dormakaba terminals into your ERP system.

#### **Escape and Rescue Systems**



#### Technology and functional principles

Security concepts based on RFID, biometrics or smartphone apps.



#### SafeRoute

Secure door management in one system. Easy opening in an emergency, protection against misuse on a day-to-day basis.



#### **Electric strikes**

Electronically controlled strikes unlock doors depending on the situation. Universal technology for upgrading.

#### **Lodging Systems**



#### Access control systems

Our locking systems are supported by reliable access management solutions – from the cost-effective FDU Ilco reception unit to the modern Ambiance software solution, which leaves nothing to be desired with regard to flexibility and scalability.



#### **Mobile Access solutions**

Easy guest and employee access with a smartphone. Based on our highly secure Legic platform for the creation of secure Bluetooth keys.



#### **Electronic hotel locks**

dormakaba offers a broad range of lock solutions for a wide variety of different hotels. From simple physical access with an RFID lock to wireless online systems or interfaces to intelligent room and energy management systems – we've got the entire offering range covered.



#### Outside access

Access control with an external reader, for lifts, car park access points and doors with electronic control units.

# Electronic cylinders and door fittings

## at a glance

	Digital cylinder	Mechatronic cylinder	c-lever pro	c-lever compact	c-lever air	Cabinet lock
Supported technologies and standards						
LEGIC (advant & prime)	•	•	•	•	•	•
MIFARE (DESFire & Classic)	•	•	•	•	•	•
OSS-SO	•	_	•	•	•	•
NFC (Near Field Communication)	•	_	•	•	•	•
Bluetooth®	•	-	•	•	•	-
Power supply						
Battery	•	•	•	•	•	•
External power supply (optional)	-	• (faceplate version)	•	-	-	-
Service life of battery: door cycles (use at 20 °C)	Up to 50,000 cycles or 2 years	Faceplate version: Up to 140,000 cycles or 3 years Compact and sur- face fixed version: Up to 40,000 cycles or 2 years	Up to 150,000 cycles or 3 years	Up to 60,000 cycles or 3 years	Up to 120,000 cycles or 3 years	Up to 50,000 cycles or 5 years
Functions and options						
CardLink	•	•	•	•	•	•
Mobile Access	•	_	•	•	•	-
Wireless	•	•	•	•	•	-
Wireless + door monitoring	-	<ul><li>(faceplate version)</li></ul>	•	_	-	_
TouchGo	-	_	•	_	_	_
Lever handle/knob models	-	_	13	4	4	_
Design awards	•	•	•	_	•	_
Surface finishes and colours						
Nickel-plated (stainless steel look)	•	•	•	•	•	-
Polished brass	•	•	On request	_	-	-
Brass, matt	-	•	On request	_	-	_
Black	•	•	On request	_	-	-
Matt chrome-plated	•	•	On request	_	-	-
Bronze look (on request)	•	•	-	-	-	-
Antenna cover, black	•	•	•	•	•	-
Antenna cover, white	•	•	•	•	•	-
Cylinder profiles						
European profile, 17 mm	•	•	•	-	•	-
Swiss round profile, 22 mm	•	•	•		•	
Scandinavian oval	•	•	•	_	-	-
Australian oval	•	_	•	_	-	-
IP class of protection	IP56 (outside)	IP41 IP40 (faceplate version)	IP 55 (outside)	IP 54 (outside)	IP 54 (outside)	IP52

	Digital cylinder	Mechatronic cylinder	c-lever pro	c-lever compact	c-lever air	Cabinet lock
Certifications						
Fitting/cylinder standards	EN 15684	EN 15684	EN 16867 and EN 1906	EN 16867 and EN 1906	EN 16867	-
Fire protection	EN 1634-2: T90	EN 1634-1 to T60	Up to T90	Up to T90	Up to T90	-
Burglary resistance	EN 1627: min. RC4	EN 1627: min. RC4	EN 1627: max. RC2	-	-	-
Escape route	EN 179/EN 1125	EN 179/EN 1125	EN 179/EN 1125	EN 179/EN 1125	EN 179	_
Pulling and drilling protection	VdS class BZ+ (optional)	EN 15684	_	-	-	-
CE	•	•	•	•	•	•
Dimensions						
Cylinder length A/B side/ fitting dimensions (specifications in mm)	From 25/20, extensions in 5-mm increments, max. cylinder length: 220	From 42/30, extensions in 5-mm increments, max. cylinder length: 202	Wide version: 53.6 x 298 x 21 Narrow version: 39.8 x 298 x 21	54.7 x 122.8 x 21.9	Wide version: 52 x 180 x 10.5 Narrow version: 40 x 282 x 11.5	125 x 100 x 25
Environmental product declaration						
EPD	• (in preparation)	• (in preparation)	•	• (in preparation)	● (in preparation)	-
System compatibility						
exos 9300	•	•	•	•	•	•
MATRIX PRO	•	•	•	•	•	•
EACM	•	•	•	•	•	•
jay cloud	•	•	•	•	•	•
exivo	•	•	•	•	•	•
MATRIX ONE	•	•	•	•	•	•
evolo Manager (KEM)	•	•	•	•	•	•
evolo smart	•	_	•	•	•	_
resivo	•	•	•	•	•	-
Application						
Furniture	•	•	_	_	-	•
Private living	•	•	•	•	•	•
Micro-companies	•	•	•	•	•	•
Small and medium-sized companies	•	•	•	•	•	•
Large companies	•	•	•	•	•	•
Note:		r details and order in		pends on the system e vant dormakaba EAD		i.

## Electronic cylinder

## dormakaba digital cylinders



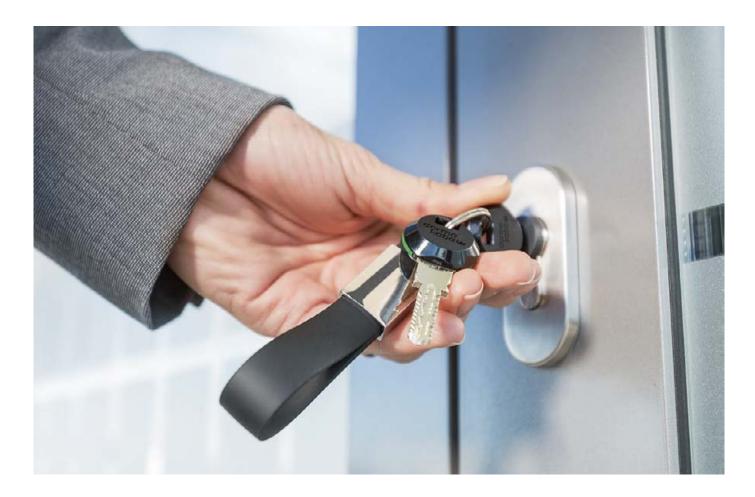
The locking devices with optical and acoustic signals enable precise control of access in space and time. The modular design with removable knobs enables extraordinarily easy installation. In addition to the standard version, the product portfolio includes dual, half- and anti-panic cylinders.

- Can be used for any door either inside or outside if weather-protected
- Electronics operate reliably, even at extreme temperatures
- Suitable for fire doors
- Increased drilling protection for greater security
- Available in Euro profile 17 mm, Swiss round profile, oval profile and ANSI
- With black or white front
- Cylinder surface finishes of Inox look, polished brass, matt chrome-plated and black available
- Modular construction length can be adapted on site
- Supports the Mobile Access function users can gain access permissions on their smartphones using the dormakaba app





## Mechatronic cylinder



The locking system combining a mechanical cylinder with electronic access control fits seamlessly into existing mechanical locking systems. Optimal for use with exterior doors, for example. The dormakaba smart key, which is outfitted with an RFID chip, can open equipped doors both mechanically and electronically.

#### Simply impressive:

- Flexible access system: complete or partial transition from mechanical to electronic possible
- Unique range: a broad and dynamic spectrum of award-winning access components
- Available in a variety of profile variants, such as Euro profile,
   Swiss round profile and Scandinavian oval profile
- Plastic cap available in black and white
- Wireless solution networks the mechatronic cylinders with the access solution, enabling convenient programming from your desk





For more information, visit: your local dormakaba website

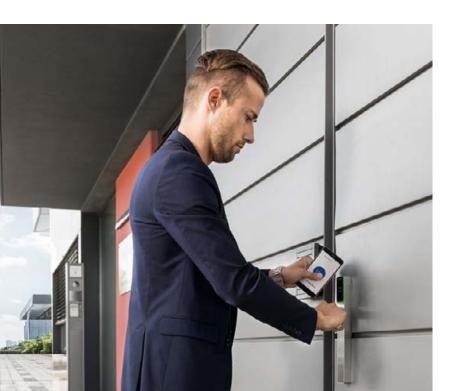
## Electronic door fittings and door locks

## dormakaba c-lever pro

Electronic fitting solutions for need-based access control at exterior doors or doors with increased security needs. Easy, flexible control of access permissions, either in standalone, wireless or online operation. High-grade materials satisfy the highest demands in terms of robustness, weather resistance and security.

- For inside or weather-protected outside areas
- Directly on doors made of wood, plastic or metal
- Solutions for burglary and fire protection as well as escape and rescue routes
- Versatile operating variants: standalone, wireless and online
- Access either with card, key fob, key with RFID or smartphone
- Supports Mobile Access users can gain access permissions on their smartphones using the dormakaba app
- TouchGo function: hands free; the transponder stays in the pocket
- Suitable for use on escape route doors as per the requirements of DIN EN 179 using certified device combinations







## dormakaba c-lever compact

Electronic fitting solutions for use in office, administration and retail areas. Access permissions can be easily and flexibly controlled – either in standalone or wireless operation. Upon presentation of a valid access medium, a green light appears on the digital light unit and the door can be opened as usual with the lever handle.

- Independent of the lock and fitting
- Easy, wireless installation even in reversed position
- Versatile operating variants: Standalone, wireless or online with RFID or smartphone
- Supports the Mobile Access function the door can be opened with a smartphone
- Suitable for use in escape route doors as per the requirements of DIN EN 179 using certified device combinations
- Ideal for retrofitting, as wiring isn't needed thanks to the use of batteries integrated into the housing
- Universally compatible and award-winning products with one-of-a-kind component variety, such as readers, digital and mechatronic cylinders and more







# Electronic door fittings and door locks

### dormakaba c-lever air

Electronic fitting as flat as a normal door fitting. The technology isn't located in the fitting itself, but rather in the lever handle. The c-lever air will live up to your highest aesthetic and functional standards. Its slim design has already been awarded multiple design prizes. The c-lever air fitting can be integrated into all system solutions from dormakaba and supports modern RFID technology.







- Flattest electronic fitting
- For interior doors, for example on design-oriented architecture, in modern offices and in museums and galleries
- Ideal for retrofitting, as wiring isn't needed thanks to the use of batteries integrated into the lever handle
- Versatile operating variants: standalone, wireless and online
- Supports the Mobile Access function the door can be opened with a smartphone
- Suitable for use in escape route doors as per the requirements of DIN EN 179 using certified device combinations



## dormakaba cabinet Lock 21 10



Electronic lock solution for clothes cabinets, lockers and furniture. Secure access to important documents, valuables and materials using electronic access control. After presenting a valid access medium at the cabinet door, the door opens automatically.

- Lock is mounted inside the cabinet no control element to interfere with the design of the furniture door
- Integratable seamless integration into the system environment with digital cylinders, electronic fittings, readers and mechatronic cylinders
- Easy programming for permanent or temporary access
- Long-life battery at least five years of operation
- Alarm in the event of attempted break-in
- Slim design fits many different types of office furniture and drawers
- Diverse areas of application: clothes closets or material storage cabinets, safety deposit/post boxes, office furniture, medicine cabinets and patient lockers



# Access readers and peripherals Registration units

at a glance











	Registration unit 90 00	Registration unit 90 01	Registration unit 90 02	Registration unit 90 03	Registration unit 90 04
reader					
PIN keyboard	-	_	•	_	_
MRD	•	•	•	•	•
NFC	•	•	•	•	•
BLE	-	•	_	_	_
Interfaces					
Coaxial connection	•	•	•	•	•
Design/installation					
Surface-mounted cable feed	-	•	•	-	•
Flush-mounted cable feed	•	•	•	•	•
Door frame installation	-	-	_	•	•
IP class of protection	IP20	IP40/IP54	IP40/IP54	IP40/IP54	IP66
Certifications					
CE	•	•	•	•	•
FCC	•	•	•	•	•
UL 60950	•	•	•	•	•



# Access readers and peripherals Registration units

# dormakaba registration unit 90 00

The unit can be installed in custom or on-site housings. The component fits into many European switch covers (e.g. Jung, Gira, Merten and Feller). We offer customised installation types for Siedle

#### Simply impressive:

- Together with dormakaba control units and remote readers, forms a secure access solution with convenient identification of the user
- Freedom of selection for the appearance (designer housings or on-site provided housings) and read/write properties
- Installation inside and outside

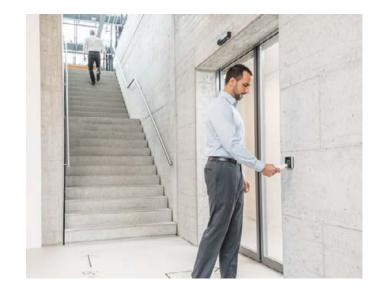




# dormakaba registration unit 90 01

The unit secures and controls access to buildings and rooms together with the control units and remote readers, where it's installed separately from the control unit.

- Encrypted communication
- Central light symbol and acoustic signal notify the visitor of the access decision
- Supports the LEGIC prime and advant as well as MIFARE Classic and DESFire RFID standards
- Reader offers the Mobile Access function via BLE
- Contemporary, award-winning design with high gloss
- Scratch-proof glass surface
- Available in black or white





# dormakaba registration unit 90 02



dormakaba registration unit 90 02 with wear-free PIN keypad for access points with increased security requirements can be used indoors or in protected outdoor areas. PIN keypad operation is supported by "Guide by Light".

- Secure access solution with PIN keypad
- Integrated tamper switch
- Works with Online, Mobile Access, CardLink and Access-on-Card modes
- Suitable for retrofits, existing wiring can be used
- Award-winning, elegant, featuring scratchproof glass surface





# Access readers and peripherals Registration units

# dormakaba registration unit 90 03

The registration unit 90 03 is slim, small and suitable for direct installation on door frames and any kind of fittings.

#### Simply impressive:

- Extremely slim dimensions for installation to door profiles or fittings
- Supports the LEGIC and MIFARE RFID standards
- Surface mounting, even on metal





# dormakaba Erfassungseinheit 90 04

The dormakaba registration unit 90 04 stands out due to its slim, compact design. It can be directly installed on metal, wooden or plastic door frames. Watertight and weather-resistant, the device is also well suited for outdoor use.

- Fits on the smallest areas, direct integration into the
- Water-proof and weather-resistant
- Easy to install cable can easily be laid in the door frame, the cable outlet is encapsulated
- · Award-winning, elegant, featuring scratchproof glass surface





# Wireless gateway

# dormakaba Wireless Gateway 90 40

The Wireless Gateway 90 40 connects wireless door components to the access system. It wirelessly transmits new access permissions to the doors. The data is secured using state-of-the-art encryption technology. Cable-free door components are seamlessly integrated into the access system this way.

- High security wireless communication is encrypted with AES
- Convenient programming from your desk door and status information are displayed automatically
- Easy installation thanks to PoE (Power-over-Ethernet), the gateway doesn't need an additional power supply
- Expandable the range between the gateway and door components can be enlarged using up to eight wireless extenders





# Access readers and peripherals

# Compact and remote readers

at a glance



	Compact reader 91 04	Compact reader 91 10	Compact reader 91 12	Remote reader 91 15	Remote reader 91 25	Terminal 96 00 – functional type 91 20
reader						
MRD (Multi RFID device)	•	•	•	•	•	•
Mobile Access (NFC)	•	•	•	•	•	•
Mobile Access (BLE)	•	-	•	-	-	
Interfaces						
RS-485	•	•	•	•	•	_
Coaxial connection for registration unit	-	_	_	1	2	_
Ethernet	-	_	_	-	-	•
Digital IOs						
Number of inputs	2	2	2	2	4	4 1
Number of relay outputs	1	1	1	1	3	2 1
Input for tamper switch	-	-	1	-	1	1
Power supply						
10-34 V DC	•	•	•	•	•	_
Power-over-Ethernet (PoE)	-	_	_	-	-	•
Design/installation						
Surface-mounted cable feed	•	•	•	-	_	•
Flush-mounted cable feed	•	•	•	-	-	•
Top hat rail mounting	_	_		•	•	_
IP class of protection	IP54/66	IP40/54	IP66	IP20	IP20	IP30/54/65
Certifications						
CE	•	•	•	•	•	•
FCC	•	•	•	•	•	•
UL 60950	•	•	•	•	•	-
UL 294	•	•	•	-	-	-
UL 62368-1	_	_	_	-	_	•

Only in combination with the options for the add-on I/O or the separate I/Os for the 9600-K6

# Compact reader

# dormakaba compact reader 91 04



The slim access reader integrates smoothly into any building structure. Hold a card, keyring or RFID key to the reader and enter – the reader signals authorisation both visually and audibly. The slim design enables installation directly to metal, wood and plastic door frames.

- For door frame installation as an organisation reader or access reader in combination with access control in protected areas
- Water-proof and weather-resistant
- Supported RFID technologies: LEGIC prime/advant or MIFARE Classic/DESFire
- Works with Online, Mobile Access, CardLink, Access-on-Card, Wireless and Standalone modes
- Available with integrated Bluetooth® for Mobile Access
- Easy and quick installation with quickwire technology
- Contemporary, slim and robust design
- Available in black or white





# Access readers and peripherals Compact reader

# dormakaba compact reader 91 10

Compact readers can be used universally in all access solutions. Used with a control unit, the readers are always online and ensure increased security. They're especially well-suited for access within an organisation. Users identify themselves in a contactless manner using their RFID card on the compact reader. The reader checks and interprets the acquired data and then makes a decision regarding access.

#### Simply impressive:

- Wall mounting
- Central light symbol and audible signal notify the visitor of the access decision
- Supports the LEGIC prime and advant as well as MIFARE Classic and DESFire RFID standards
- Easy and quick installation with quickwire technology
- Contemporary, award-winning design with high gloss
- Available in black or white



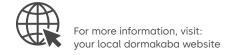


# dormakaba compact reader 91 12

Compact reader 91 12 is suitable for access points at which PIN verification is also required for security reasons.

- Wall mounting
- Central light symbol and audible signal notify the visitor of the access decision
- Supports the LEGIC prime and advant as well as MIFARE Classic and DESFire RFID standards
- Reader offers the Mobile Access function via BLE
- Easy and quick installation with quickwire technology
- Contemporary, award-winning design with high gloss
- Available in black or white





#### Remote reader

### dormakaba remote reader 91 15

Remote reader 91 15 is intended for single access points and offers the advantage that the registration unit and door control are separate. This means it's suitable for installation in protected inside areas to control an access point which is located in an unprotected outdoor area.

#### Simply impressive:

- Tamper-proof installation in the protected interior
- Absolute design freedom thanks to the option to choose the registration unit
- Works with dormakaba Online, CardLink, Access-on-Card and Standalone modes
- Expandable, as combination with various different dormakaba access systems is possible
- Use: exterior doors and gates, automatic doors, lifts, garage doors, parking barriers, entrance areas, motorised locks





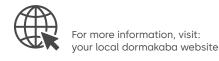
For more information, visit: your local dormakaba website

### dormakaba remote reader 91 25

Remote reader 91 25 is a powerful access control unit suitable for sophisticated access points where a high level of security is required. It monitors access points of a wide variety of different types.

- Variety of functions comprehensive door control units possible (on/off configuration)
- Flexibly expandable the number of inputs and outputs can be increased using dormakaba extension modules 90 30 and 90 31
- Tamper-proof remote reader is installed in the secure interior
- Turnstiles, personal interlocks, exterior doors and gates, automatic doors, lifts, parking barriers, entrance areas, motorised locks





# Access readers and peripherals Biometric readers

#### dormakaba biometric reader 91 50

The dormakaba biometric reader 91 50 guarantees unique, legally compliant and convenient access control. It combines the reliable RFID and fingerprint ID procedures with a comfortable keyboard. The reader, with its high-quality biometric sensor, can be used for biometric identification as well as for verification.

#### Simply impressive:

- Unique identification of persons
- Biometric features can't be forgotten, lost, stolen or passed on to third parties
- No "punching in for a friend"
- Legal certainty who gained access, when and where?
- Data protection fully ensured through non-reconstructable fingerprints





### dormakaba biometric reader 91 60

The powerful biometric reader 91 60 can be easily integrated into building structures and enables up to 30,000 users to be identified. It has a modern design with a large LCD touchscreen with fast response times. The embedded web server enables on-device learning, terminal configuration, and retrieval of transaction logs. For scenarios requiring the use of contactless cards, the biometric reader 91 60 also offers several RFID standards.

- Reliable facial recognition
- High level of security
- Mask and temperature check
- · Easy to train staff
- Versatile installation options







# Access readers and peripherals

# Access control units

at a glance



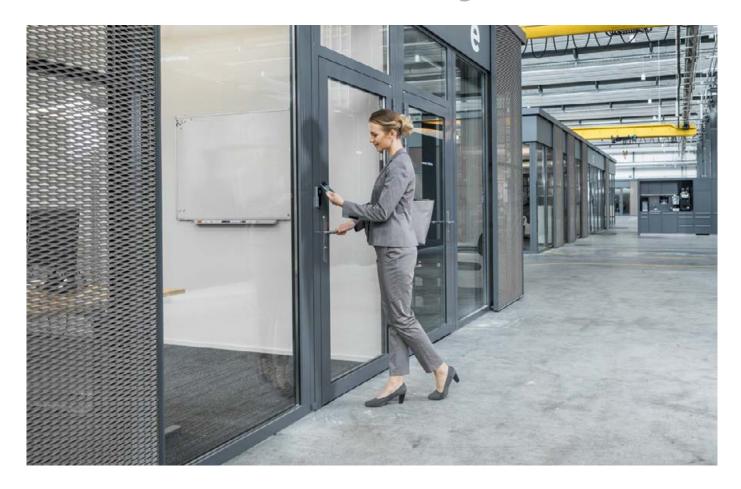




	Access manager 92 00	Access manager 92 30	Access manager 92 90
reader			
Integrated reader based on multi-RFID device	2	2	-
Total number of possible readers per access manager	Up to 15 KCP readers/ up to 16 subterminals	2	16
Mobile Access	•	•	•
Interfaces			
RS485 party line	•	•	•
RS232 for peripheral components	2	1	1
Coaxial connections for registration units	2	2	=
Digital IOs			
Number of inputs (monitored)	4 (4)	4 (4) + tamper switch	18 (16) + tamper switch
Number of relay outputs	3	3	16
Hardware options			
Upgradable with additional I/O modules	•	-	_
Passive RS485 interface	•	•	•
Active RS485 interface	-	-	•
Software options			
Memory option 2,000/8,000	•	•	•
Memory option 10,000/40,000	•	•	•
Memory option 50,000/100,000	•	•	•
Memory option 120,000			
AVISO	•	•	•
CardLink/Access-on-Card	•	•	•
Data encryption	•	•	•
Number of readers	2/4/8	2	2/4/8/16
Power supply			
PoE	-	•	=
110/230 V AC	-	-	•
12/24 V DC	● (12/24 V)	● (24 V)	● (24 V)
Design/installation			
	Top hat rail installation	Surface-mounted housing for installation indoors	Wall-mounted housing, rack-mounted housing (19")
Certifications			
UL 294 approval	•	•	•
CE	•	•	•
FCC	•	•	•
UL 60950	•	•	•

### Access control units

# dormakaba access manager 92 00



The dormakaba access manager 92 00, with its flexible and expandable design, offers extensive installation options. It can be installed locally as a single device near an access point, in electrical cabinets or centrally with extended input/output modules. It manages and controls up to 12 doors, depending on the system solution.

- Autonomously using its own decision-making logic and local data storage
- Flexible in use for access control, door monitoring and activation of alarm systems
- Easy integration into existing systems
- Easy to configure commissioning and configuration over a web interface





# Access readers and peripherals Access control units

# dormakaba access manager 92 30

dormakaba access manager 92 30 is optimised for single access points. Quick and easy installation at each door reduces the installation effort and costs. Power can be supplied entirely via PoE so additional power supply can be avoided.

#### Simply impressive:

- Minimal wiring work required, modern IT infrastructure can be used
- Efficient installation quick and easy, no need for an electrician
- Comprehensive door control units support for all door configurations seen in practice
- Easy integration into existing systems
- Autonomously using its own decision-making logic and local data storage





For more information, visit: your local dormakaba website

# dormakaba access manager 92 90

A central, efficient control unit for complex access control units. The access manager is available as in-wall as well as IT rack design. It's especially suitable for building situations where a central wiring infrastructure is already available.

- Central access control for multiple access points and complex tasks
- Robust wall or rack housing, unambiguous connection concept, connection of up to 16 readers
- Consideration of individual customer requirements (AVISO) and flexible expansion options
- Fast commissioning and easy configuration using an Internet browser







# CardLink update terminal

### dormakaba terminal 96 05

dormakaba terminal 96 05 is a versatile access terminal. The 4" touch screen supports the user during operation and can also display company messages and personal information. Thanks to its compact design and simple installation concept, the terminal can be superbly integrated into modern architecture.

- Supports common RFID readers
- Dust- and watertight as per IP65 class of protection
- Stable housing and robust glass screen (optional)
- Freely configurable user interface (e.g. using your corporate design)
- Integration of company-relevant apps
- Network integration and power supply via Power-over-Ethernet (PoE)





# Access readers and peripherals Peripherals

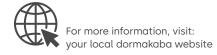
dormakaba desktop reader 91 08



The dormakaba desktop reader 91 08 is used to read and write RFID media in the form of cards, smart keys and key fobs used in time registration and access control. The desktop reader is connected to a computer over its USB port. The device is automatically detected and installed by Windows.

- Easy reading and writing of RFID media as per the ISO 15693 and ISO 14443A standards
- Equally suitable for cards, smart keys and key fobs
- Unique person identification
- Transfer of the security key to the system or peripheral components





### dormakaba interface 90 10

The dormakaba interface 90 10 can be connected to the access control unit. Up to two readers can be integrated into a dormakaba access control system with a Wiegand interface. Additional functions like multiple digital inputs and relays, for door monitoring and control, for example, are available as standard.

#### Simply impressive:

- Enables the easy integration of third-party hardware into a dormakaba access control system
- Connection of up to two readers, such as Wiegand or magnetic strip readers
- Door monitoring and control as an additional function





# dormakaba extension modules 90 30 and 90 31

Extension modules 90 30 and 90 31 are used if more digital inputs or relay outputs are required at the control unit than are available, e.g. for lift control or for window monitoring. Installation is done by simply plugging it in at the control unit. Thanks to monitored inputs, module 90 31 offers increased security.

- Versatile in use with various different control units
- Increased security
- Thanks to monitored inputs (90 31), tamper alarms can be generated
- Easy installation
- The number of I/Os is easy to expand thanks to plug-in modules





# Access and ID media

# at a glance







	Access cards	Key fob	Smart key
Multi-application/ Technology	RFID chip	RFID chip	RFID chip
Main applications	<ul> <li>Access</li> <li>Operational data and time registration</li> <li>Payment</li> <li>Follow-me printing and copying</li> </ul>	<ul> <li>Access</li> <li>Operational data and time registration</li> <li>Payment</li> <li>Follow-me printing and copying</li> </ul>	<ul> <li>Access</li> <li>Operational data and time registration</li> <li>Payment</li> <li>Follow-me printing and copying</li> </ul>
Unique features	Custom-printable with colour, logo, personnel number, photo etc.	<ul><li>Sturdy and robust</li><li>Printable with logo, text, number</li></ul>	<ul> <li>Checks electronic authorisation plus mechanical permutation (EU cylinder)</li> <li>Colour chips for better tracking</li> </ul>
Security	<ul> <li>Non-viewable security encryption</li> <li>Additional combination with PIN code or biometrics possible</li> </ul>	<ul> <li>Non-viewable security encryption</li> <li>Additional combination with PIN code or biometrics possible</li> </ul>	<ul> <li>Non-viewable security encryption</li> <li>Additional combination with PIN code or biometrics possible</li> <li>Doors can only be opened with the smart key if the RFID chip and key are authorised</li> </ul>
In case of loss	Rights can be withdrawn electronically (no security gap)	Rights can be withdrawn electronically (no security gap)	Rights can be withdrawn electronically (no security gap)







withdrawn (to prevent gap in security) –

see building-phase function

TouchGo transponder	Smartphone (Mobile Access)	Mechanical key
<ul><li>RFID chip</li><li>Resistive Capacitive Identification</li></ul>	<ul> <li>Using the dormakaba Mobile Access app</li> <li>Near Field Communication</li> <li>Bluetooth®</li> </ul>	Permutation
Mainly at facilities where access must be quick and smooth yet controlled, such as senior residences, care facilities and hospitals	<ul> <li>Access</li> <li>Operational data and time registration</li> </ul>	Simple to complex locking systems     Emergency opening with emergency key function (GF)
<ul> <li>Only needs to be carried, not used</li> <li>Combination of RFID and RCID</li> </ul>	<ul> <li>No media hand-off</li> <li>Mobile Access can be integrated into company apps</li> <li>TapGo function</li> </ul>	<ul> <li>High level of compatibility within a dormakaba locking plan</li> <li>Forward-looking keylink planning method</li> <li>Colours as optional orientation aid</li> </ul>
<ul> <li>Non-viewable security encryption</li> <li>Additional combination with PIN code or biometrics possible</li> </ul>	<ul> <li>End-to-end encryption:         the access data themselves are         encrypted, so smartphones can't         access them</li> <li>Smartphone can be protected with         a PIN code or fingerprint</li> </ul>	<ul> <li>Large number of different cylinder types</li> <li>Patented security system</li> <li>Copy protection</li> <li>High level of security through compliance with relevant standards, such as EN 1303 and DIN 18252</li> <li>Encoded drilling patterns – the decoding positions of the tumblers aren't visible on the key</li> </ul>
Rights can be withdrawn electronically (no security gap)	Rights can be withdrawn electronically (no security gap)	In case of loss, cylinder must be replaced or rights can be mechanically

# Access media and ID cards

# Smart key

Whether it's time registration or electronic or mechanical access control, the dormakaba smart key is the key that connects everything. With additional electronic identification, mechanical locking systems are made more secure and ID cards unnecessary. Thanks to its small dimensions, it fits in any pocket.





#### Simply impressive:

- Reduced administrative work through the management of a medium
- Can be integrated into all dormakaba systems, whether they're mechanical, mechatronic or electronic
- Existing clip keys can easily be upgraded or retrofit
- Individual identification of the key clips with easily exchangeable colour markings



#### Access cards

RFID identification medium with programmable time and room authorisations and a flat, lightweight design.







# Key fob

RFID key fobs are available in different shapes and colours. Practical in use, they're easily recognised on a key ring.





## TouchGo media

Practical TouchGo transponder in the form of a key fob. The transponder can unlock doors without having to be taken out of a trouser or jacket pocket. Available in white and black, also as a card holder or wristband.





# Smartphone app (Mobile Access)

With Mobile Access, smartphones become access media. Access is possible with or without time limitation.



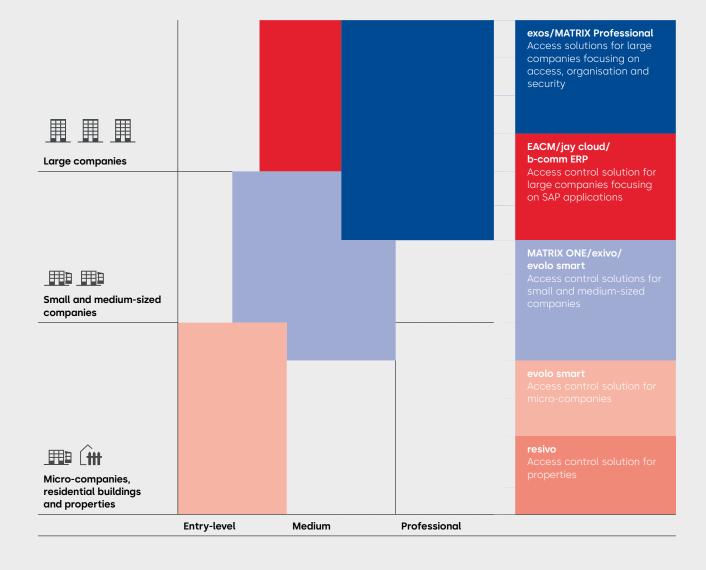




For more information, visit: your local dormakaba website

# Solutions for access control

Access and data acquisition solutions for a variety of applications, both office and private: Our products offer you full product-compatibility and interoperability, while the software is precisely tailored to your needs.



A holistic access control system comprised of different hardware and software components matched to your needs.



The effectively available scope of system functions depends in each case on the system context in which the product is used. The figure shows an example system structure.

# Access control for large companies

## dormakaba exos 9300





dormakaba exos 9300 is a comprehensive, modular access management system. With this solution, all access permissions are flexibly coordinated across locations – From simple door control via wirelessly integrated door components to complex interlock control with monitoring. Mechanical doors and locking systems can also be integrated for a holistic solution at any time.

#### Simply impressive:

- Uniform processes and efficient sequences thanks to the integration and management of all mechanical, mechatronic and electronic access points in one system
- High flexibility thanks to the effortless use of your existing media, access readers and door components
- Integration and linking of intrusion, alarm and video systems
- Lowering of infrastructure and personnel costs thanks to the seamless integration of the system into your own IT sphere and connection to ERP systems
- Easy expansion thanks to a modular and scalable system structure

#### dormakaba exos 9300

- Authorisation management
- Visitors
- Master key system management
- Contractors
- ID cards and media
- Online cabinet lock
- Tenants
- Car park management
- Key depot
- Access



### **MATRIX Professional**





A modular access control system for access control, time registration and time management with the option of escape route control. The system can be scaled to meet nearly every security need and fit any application size. It can be implemented for simple door control with a locking plan as well as for the mapping of complex security situations, for example with lift control, interlock management or high-security conditions.

#### Simply impressive:

- Manages up to 300,000 ID cards/people
- Ergonomic, browser-based interface
- Exact coordination to customer requirements
- Configurable interfaces to parent systems

#### **MATRIX Professional Options**

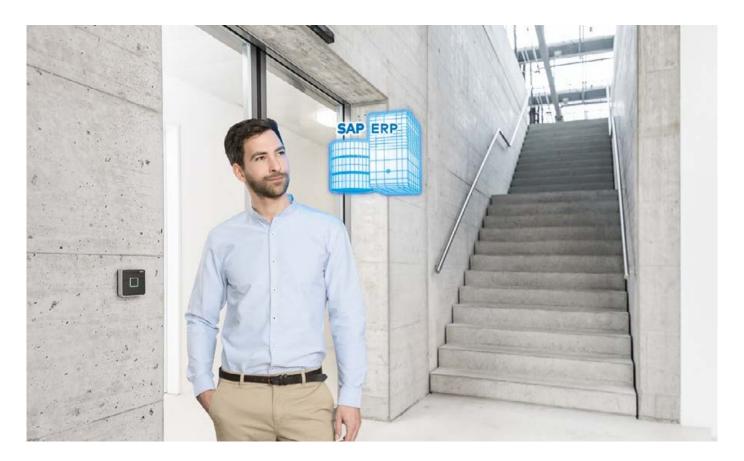
MATRIX Professional can be precisely adapted to individual needs thanks to its modular construction and option management. License management also enables subsequent expansion, such as tenant management for data and peripherals, TMS coupling for escape route control, integration manager for coupling with third-party systems, visitor and external company management and Mobile Access.



# Access control for ERP systems

## dormakaba EACM





OnPremise organisation of access, time registration and media management in the SAP system. Whether it's access to premises, buildings or security-critical areas, whether it's time registration, media management or additional solutions for production data acquisition or visitor and external company management: manage and control everything very conveniently using SAP in a central system with dormakaba EACM.

#### Simply impressive:

Access control

- Definition of room zones and access profiles
- Increased security thanks to monitoring and transparent documentation of all movement in security-critical areas

#### Personnel management

- Easy centralised and decentralised assignment of permissions
- Overview of all permissions and procedures

#### Device management:

- Overview of installed access components and time registration terminals
- Information on the status of the system, each individual door and the results

#### Media management

- Secure and transparent management of access media
- Easy media handling, from the issuance of new media or a replacement ID card until its return



#### dorma kaba

# dormakaba jay cloud



The dormakaba jay cloud time and access solution organises access permissions of employees at the company according to their position. This allows you to control employee access permissions directly and in real time from SAP SuccessFactors Employee Central. The data are saved in the cloud here, which gives you an overview and optimal data up-to-dateness at all times.

- Greater security and transparency while reducing corporate management costs
- Integration of access processes and time registration into the existing management environment in the HR field
- Reduction in work by using a cloud solution: secure, transparent and scalable at all times
- Optimal data up-to-dateness
- Access from anywhere means extreme flexibility for employees



# Access control for ERP systems

## dorma kaba

# dormakaba b-comm for Workday

With b-comm for Workday, your time registration software from Workday becomes even more powerful. The comprehensive platform for time registration offers a large number of functions available for Workday. Thanks to seamless integration, your HR, planning and financial processes are simplified.

- The entire integration process occurs securely and seamlessly over Workday standard web services
- Realtime validation using data acquisition solutions which are available at all times
- Validation data: employee data, organisation data, service recording
- Transaction data: time and attendance, production data acquisition (labour time only), absence management, absence requests (holiday requests)





# Access control for small and medium-sized companies

#### dormakaba exivo

Centralised, easy access control using the web-based exivo platform. Doors are secured and monitored with electronic and wireless locking components. Operation using access media ensures maximum flexibility and a high degree of security, as the access permissions of each individual medium can always be changed or withdrawn. All other doors are secured as usual with keys and mechanical locking systems, which can also be managed with exivo.



#### Simply impressive:

- Easy planning and configuration as well as commissioning on site without special software or servers
- Convenient operation thanks to intuitive rights assignment and modification
- Location-independent access over the Internet and control via smartphone, tablet or computer
- Easy billing and full transparency thanks to consistent, plannable monthly costs
- Easy expansion of the system, can be retrofit for every door and other access points
- Immediate availability of updates thanks to the automatic update function
- Easy service request in case of failure



For more information, visit: your local dormakaba website

#### dormakaba MATRIX ONE

Simple, secure and browser-based access solution for small and medium-sized companies. The out-of-the-box solution is rolled out in no time, and the modern interface ensures intuitive operation.



- Quick and easy commissioning
- Controlled and secure management from anywhere with access functions, door status monitoring and notification actions, interface to an intruder detection system, alarm monitor and camera, visitor management
- Support for the Offline, Access-on-Card and Online operation modes
- Reliable granting and denying of access, online in seconds or via remote access
- Free choice of operation modes



## dormakaba evolo Manager

The flexible, wireless turn-key solution from individual doors to the management of all access points of a system. Whether it's inside or outside, for employees, visitors or delivery persons – evolo is an easy-to-program access system.

Digital access components are standalone-operated and can therefore be installed into nearly any door quickly and easily. Existing mechanical locking systems are easily managed as well and supplemented with evolo digital components.



#### Simply impressive:

- Modular design and expandable at any time
- Quick and easy assignment of access permissions
- Large number of access media can be programmed
- Comprehensive: setup of max. 512 groups for group authorisations
- Issuance of individual permissions with personal time frames
- Permissions with defined start and expiry times, e.g. for visitors
- Gapless security, even if an access medium is lost
- Practical lift control up to 49 storeys can be operated with just one reader in the cabin (can also be used for letterboxes)
- Supports the Mobile Access function the door can be opened with a smartphone



#### dormakaba CheckIn

The user-friendly and efficient software for daily management and programming of guest cards.

- User-friendly software for efficient check in/check out, available in many languages
- Battery-operated door elements are quick and easy to install
- Additional guest cards are quickly and easily duplicated
- Guest cards which are not returned automatically lose their permission, blocked using a service medium if lost while visiting
- Guest cards can be reused any number of times
- Easy integration: Mechanical keys can also be managed with the software





# Access control for micro-companies and private residences

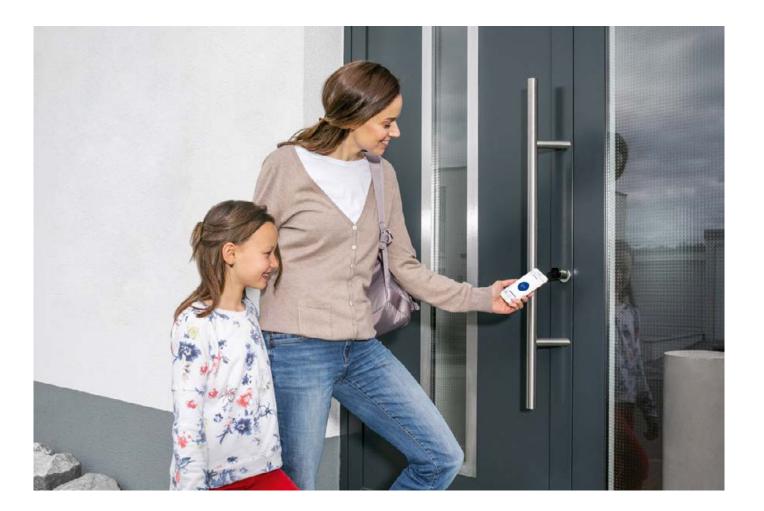
## dormakaba evolo smart



The evolo smart app controls who is given access to your door. For this, you do not need any additional hardware to program the door components. Access to the door is either with a physical medium (card or key chip) or a smartphone (a so-called digital key). Digital keys can be purchased, managed and allocated in the evolo smart app.

- Quick and convenient programming of access permissions via app
- Easy to delete and add access media and permissions.
- Setup of time-limited access permissions
- For private residences and micro-companies with up to 50 users
- Access via smartphone, cards or key rings
- Smartphone: no need to hand over physical media
- Independent: evolo smart runs offline





# Access control solutions for properties

### dormakaba resivo



resivo by dormakaba is a future-oriented, cloud-based access management system. It offers significant advantages for property administrators, building owners and tenants compared to conventional mechanical locking systems. No more worrying about lost or stolen keys. Flat hand-offs are easier and more convenient for the tenant. resivo saves time by simplifying the procedures for granting access to delivery persons, service providers and craftspeople. Tenants themselves decide who should have access to their flat and when – also remotely. resivo unlocks a whole new dimension of building utilization packed with advantages.

- No need for physical key hand-off during a tenant change
- Access control via an intuitive app for property administrators and tenants
- Lean digital processes and no longer any need to replace cylinders after key loss
- Smart functions can reduce vacancy rates and generate added value
- Tenants decide for themselves who should have access to their premises and when
- New and existing properties can be outfitted and updated as required





# Time registration

## dormakaba terminal 96 00



The ideal solution for getting started in time registration, access control and employee communication with a compact design. The user interface is freely configurable and can, for example, be designed to have your company's look – with your choice of colours, your own icons, background images and customerspecific apps. Thanks to additional options like CardLink, the functional scope can be expanded as needed and offline door components can easily be integrated, for example.

- Bright 4" touchscreen
- Supports common RFID media
- Dust- and watertight as per IP65 class of protection
- Sturdy housing and robust glass screen (optional)
- Network integration and power supply via Power-over-Ethernet (PoE)
- Easy commissioning thanks to one-click installation
- Integrated loudspeaker





### dormakaba terminal 97 00



Modern, easy time registration, intelligent access management and targeted employee communication in a single solution. The user interface can be freely configured. You can adapt the display to your corporate identity, featuring your own background images, colours, signal tones, apps and (multimedia) content. Additional options like biometric readers and cameras round out the system, which can be flexibly adapted to a company's individual needs.

- Bright 7" touchscreen
- Energy-saving function
- Supports common RFID media
- Power supply options: 230 V AC, 24 V DC and Power-over-Ethernet (PoE)
- Integrated microphone and loudspeaker
- Video function
- WiFi and mobile communication connection
- Network integration via Ethernet port
- Easy commissioning thanks to one-click installation





# **Operational Data Recording**

### **B-eco terminal**

For all data acquisition tasks, the B-eco terminal offers a user-friendly solution via RFID, stripe card reader or biometric fingerprint identification and through the acquisition of job data using barcode CCD scanners.



#### Simply impressive for production data acquisition:

- Process and job monitoring in real time
- Optimisation of individual work processes
- Easy personnel deployment planning
- Basic data for post-calculation

#### Simply impressive for production data acquisition:

- More efficient payroll accounting
- Automated accounting processes
- Work time accounting down to the minute





## Interface solutions for third-party systems

## **B-COMM** communication software

The B-COMM integration platform for fast and efficient management of terminal systems and related functional areas, regardless of the computer or operating system platforms. The software enables the creation and management of tenants and communication channels, job processing and data exchange with partner applications.







## Technology and functional principles

### ARIOS-2

The ARIOS-2 security concept ensures consistently secure RFID applications throughout the entire lifecycle of your access and time registration recording solutions. dormakaba offers additional sophisticated mechanisms that make your access control and time registration even more secure compared to common MIFARE solutions.





## Technology and functional principles

## dormakaba TouchGo



The electronic locking system with the TouchGo function eliminates the need to search for keys. Simply touching the door handle is sufficient, and the lock detects whether the person is authorised to enter. It also doesn't matter whether the TouchGo user medium is located in a bag or jacket, or on a belt.

- Free hands your hand is your key
- Increased security and private sphere access for authorised persons only
- Access permission checking using RCID technology developed by dormakaba – simply touching the metal receiver electrode (such as a door handle) is sufficient
- Transponder is optionally available as a key ring, card holder or wristband





## CardLink/Access on Card (AoC)

Users receive their access permissions on update readers directly onto their ID cards. The update readers are fitted at central locations, e.g. at the staff entrance, in the lift area or in the cafeteria. This process keeps operating costs low.



For more information, visit: your local dormakaba website



## Biometric systems

With its easy handling, high user acceptance and optimal data protection, biometric access control is very impressive. There is no scope for security risks due to ID cards being lost or given to someone else. And it goes without saying that it is highly cost-efficient.

- Unique identification of persons
- Selection between identification (biometrics instead of ID cards) or verification (biometrics as a supplement to ID cards)
- Easy, secure and convenient operation
- Biometric features can't be forgotten, lost, stolen or passed on to third parties
- Legal certainty who gained access, when and where
- Data protection fully ensured through non-reconstructable fingerprints
- Hygienic access solution using face recognition and body temperature measurement
- Verification of mask wearing





## Technology and functional principles

### **Mobile Access**



With Mobile Access, doors with and without a connection to the network are integrated into the access solution – easy, efficient and secure. Access permissions can very easily be imparted to employees, guests or service providers. This simplifies processes, as the issuance and return of access media are no longer required. In addition to security, user convenience plays a big role here. Access permissions for outlying rooms and infrastructure systems aren't granted until they're needed on site. A project manager can simply request the required access permission and receive it immediately on their smartphone by making a call, for example.

- Use of a smartphone as an access medium
- Can be combined with dormakaba online and standalone components
- Access permissions are transferred to the smartphone over a secure platform
- Door status and access events are transferred to the dormakaba access solution

### Wireless



The Wireless function links the online and standalone spheres and networks the digital components. The wireless access components are comfortably controlled and maintained from your desk: There's no need for on-site programming. You have full access to the door components from your computer.

- Programming at your desk means high operational convenience
- Increase in security for outlying doors: no gaps in security thanks to the immediate transfer (e.g. withdrawal of permission in case of ID card loss)
- Information on door status and access events (time/location/medium)
- Secure and cost-effective expansion of all dormakaba access solutions with the Wireless function
- Quick, efficient planning and execution of maintenance and updates
- Less administration and time required



## Escape and Rescue Systems

### SafeRoute

#### Save lives, protect valuables

With regard to safety, doors in escape and rescue routes pose an enormous challenge as they have to meet contrasting requirements – protecting people's lives on the one hand, while protecting property on the other. With escape routes, building regulations require doors to be easily opened from

inside without external tools. At the same time, insurers, police and facility operators require the most secure lock possible against misuse and break-ins. Our escape route security systems monitor, control and release the door in case of an emergency.





## STV 2xx Electromagnetic door locking device

STV 5xx Electromechanical door locking device for concealed frame installation



#### **Basic components**





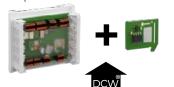
#### SCU-UP as master

Individual components



#### SCU DR as master

Top hat rail mounting and individual components



STL-G (slave)







#### SafeRoute control unit SCU as a master

With the inserted licence card, an SCU becomes the control and monitoring centre (master). A master can monitor and control up to four escape route doors depending on the licence type. Each connected escape route door needs at least one emergency button with a connected key switch and an electric door locking device. Power supply for individual components is supplied from any point in the DCW® bus, e.g. through an STL-G with integrated power supply unit or an external power supply unit like PSU-24, NT 24-1.5s or USV-24 3.

#### Example selection\* of optional components

#### SVP 2xxx DCW® M-SVP 22xx DCW®

Motorised emergencyescape lock with automatic locking mechanism



STL-G (slave)

#### SCU-UP (Slave)

Additional emergency buttons and ST key switches



#### STV-A adapter Door locking devices without DCW® bus

(certifications as per the German Directive for Electrical Locking Systems on Escape Route Doors (EltVTR) or FN 13637 must be observed)



#### LON or LAN network adaptors

e.g. as SLAN-DR version





#### STD-UP touchscreen display

Supplement to key switch, simple access control or as "downcounter" for emergency open delay



#### ST xx DCW® Additional key switches



#### SIO-DR I/O module DCW<sup>®</sup>

Expansion for connection of analogue actuators and sensors



#### SCMC 20

Panel module insert for security-related switch-off from a control centre



#### TMS Soft®

Configuration and management software for Windows computers for control and monitoring of escape route door systems With interfaces to external door management systems (e.g. OPC and ESPA).

<sup>\*</sup> The complete list of possible components can be found at www.dormakaba.com/saferoute/downloads.

## Escape and Rescue Systems SafeRoute: control, operation and release

## STL-G surface-mounted terminal

The STL-G door terminal is comprised of the SCU-TL components with emergency button and key switch in a surface-mounted housing. Together with an electrical locking device, the STL-G door terminal fulfils the requirements of EN 13637 and the German Directive for Electrical Locking Systems on Escape Route Doors (EltVTR).

Together with a licence card, the STL-G becomes a control and monitoring panel (master). Without a licence card, the STL-G door terminal can be used as an additional door terminal for an escape route door as a "slave" in a group.

- Combination of all components required for control and operation in a robust housing with lightweight metal frame
- With the attractive XEA design, available as standard in 12 colour combinations and special colours
- Easy installation thanks to hinged housing and the same mounting points as the previous product
- System-wide uniform wiring with 4-lead DCW® bus technology
- Variants available with or without integrated power supply unit







## SCU-UP flush-mounted control unit/ emergency button

Flush-mounted unit with integrated emergency button as a System 55 insert for use as a control unit (master) or emergency button (slave). As delivered, the SCU-UP functions as an emergency button with a plugged-in licence card like the SCU-UP for the control unit.

#### Simply impressive:

- Integrated emergency button
- Functional scope of the control unit is selected using a new licence model
- Integrated light ring for visual support during commissioning, operation and service
- Simple alarm reset via non-locking emergency button
- Audible and visual alarm
- System-wide uniform wiring with 4-lead DCW® bus technology
- Common flush-mounted combinations are available as supply sets



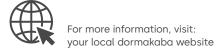


## SCU-DR control unit for top hat rail mounting

The SCU-DR is a control unit for installation on a top hat rail TS35 as per EN 50022 with 4-lead DCW® bus technology. Can be used in a switch cabinet or dormakaba NT-G, NT-G1 or NT-G2 power supply unit housings. Integrated I/O module with four inputs and outputs. For operation, an SLI licence card (from Basic version onwards) and at least one emergency button are required, e.g. the SCU-UP flush-mounted unit or the STL-G surface-mounted terminal.

- Functional scope of the control unit is selected using a new licence model
- Four inputs and outputs each for the integration of external sensors/actuators (integrated I/O module)
- Functions can be configured with TMS Soft (depending on the selected licence)
- Mounted on TS35 top hat rail as per EN 50022
- System-wide uniform wiring with 4-lead DCW® bus technology



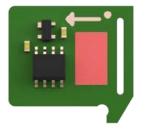


## Escape and Rescue Systems SafeRoute: control, operation and release

## SafeRoute SLI licence cards

The scope of functions of a SafeRoute escape route security system is determined through pluggable licence cards that remain in the SCU control unit during operation. There are currently three types of licence cards: Mini, Basic and Standard.

Applications offer additional flexibility: Special functions can be subsequently loaded with them, e.g. multi-door control for using just a single SCU control unit for up to four doors, interlock control, extended logic functions and the option of a delayed release by up to 15 seconds as per EN 13637.



- Automatic relocking action
- Upgrade lock thanks to wireless installation
- Securely locked even in the event of a battery failure
- Ideal solution for integration into existing access control systems with the help of the SVP-S Air module, for example, with the dormakaba MATRIX software
- Opening and locking of the door with a hand-held transmitter for authorised access from the side opposite the emergencyescape side
- Programming of up to 100 permissions directly on the wireless lock
- Easy door opening according to German Industrial Standard (DIN) SPEC 1104



## SafeRoute: locking and unlocking

## STV 100 door locking devices

Electromechanical door locking device (closed-circuit current principle) for attaching to the frame lintel. Connection to the SCU exclusively via 4-lead DCW® bus. The STV 1xx door locking device opens without jamming and without delay. The maximum locking force corresponds to the German directive for Electrical Locking Systems on Escape Route Doors (EltVTR) and EN 13637 Class 3.

- Opens immediately without jamming
- · Protected from manipulation via tamper switch
- Robust coated metal housing
- Integrated contacts for monitoring the active/inactive status
- Approved as per the German Directive for Electrical Locking Systems on Escape Route Doors (EltVTR) and certified as per
- Suitable for retrofitting (depending on the door design used)





## Escape and Rescue Systems SafeRoute: locking and unlocking

## STV 200 door locking devices

Electromagnetic door locking device (closed-circuit principle) for attaching to the frame lintel. Connection to the SCU exclusively via 4-lead DCW® bus. The STV 2xx door locking device opens without jamming or delay. The maximum locking force corresponds to the German Directive for Electrical Locking Systems on Escape Route Doors (EltVTR) and EN 13637 Class 3.

#### Simply impressive:

- Opens immediately without jamming
- Protected from manipulation via tamper switch
- Robust coated metal housing
- Approved as per the German Directive for Electrical Locking Systems on Escape Route Doors (EltVTR) and certified as per EN 13637
- Suitable for retrofitting (depending on the door design)





## STV 500 door locking devices

Thanks to the electromechanical door locking device for concealed frame installation for doors in escape routes, the STV 500 not only provides the door with visual elegance, but is also not prone to vandalism.

- Jam-free unlocking irrespective of loads
- Adjustable latch
- Concealed frame installation for vandalism protection
- With DCW® bus technology
- Integrated monitoring contacts
- Approved according to the German Directive for Electrical Locking Systems on Escape Route Doors (EltVTR) and in accordance with the specifications of EN 13637





## STV-A universal adapter

The adapter enables the integration of analog locking devices without a DCW® bus interface into SafeRoute (dormakaba TV 100, TV 200, TV 500, TV 550). The integration of suitable equipment from third-party manufacturers as per the German Directive for Electrical Locking Systems on Escape Route Doors (EltVTR)/EN 13637 is also possible (corresponding approvals and certificates are to be complied with).

#### Simply impressive:

• Its small size makes it especially suitable for installation in profile frames







## Escape and Rescue Systems SafeRoute: networking and remote control

## SLON-DR network adapter

Enables linking of SafeRoute SCU control units to LON networks as well as visualisation and configuration via TMS Soft. The connection is established on the RS232 interface of the SCU control unit (master). The SLI Basic licence card is the minimum requirement.

#### Simply impressive:

 Networking of up to 12 doors over a single SLON module is possible (depending on the building conditions and system configuration)





## **SLAN-DR** network adapter

Enables linking of the SafeRoute SCU control unit to the LAN TCP/IP network as well as visualisation and configuration via TMS Soft. The connection is established on the RS232 interface of the SCU control unit (master). The SLI Basic licence card is the minimum requirement.

- Up to four self-sufficient doors can be networked over a single SLAN module (depending on the building conditions and system configuration)
- An SLAN module connected via RS232 is only required on the control unit (master)
- Use of existing infrastructure
- Familiar network administration





## Visualise and control doors from a control centre without a computer

### Panel controls



With the panel systems, individual doors, door groups and spatial sections can be monitored and controlled in real time. Depending on the requirements, a panel system can be assembled individually. Additional functions can be enabled by using panel extensions and connecting external control devices.

- Central control and monitoring of SafeRoute escape route doors
- Central activation of individual doors and sections, e.g. from a permanently staffed control room
- Specific opening of individual doors
- Definition of door groups or door sections
- Blocking or delaying releases after pressing the emergency button on site (protection against misuse of escape routes)
- Connection via LON or LAN network



## **Electric strikes**

## at a glance



	Basic series							
	Basic XS	Basic	Basic 448 Lucky	Basic Safe	Basic Radius	Basic Radius Safe	Basic Small	
General doors	•	•	•	•	•	•		
Doors with thermo-profiles							•	
Smoke doors								
Fire doors								
Symmetrical housing	•	•	•	•	•	•		
Asymmetrical housing							•	
Can be used for DIN-L and DIN-R	•	•	•	•	•	•		
Radius latch	•				•	•		
Closed-circuit current version	0			•		•		
Operating current version	•	•	•		•		•	
Closed-circuit current/operating current switchable								
Unlocking function (E)	•	•			•		•	
Locking function (A)		•			•			
Feedback contact (RR)	0	•	•	•	•	•		
Easy Adapt latch guide	0	0	•	0				
Tamper switch								

• Standard O Optional







Smoke	Smoke series		DES :	DES series			Fire series	
Smoke	Smoke 448 Lucky	DES 72x	DES 731	DES 300	DES 400	Fire 447	Fire 448 Lucky	
		•	•					
•	•					•	•	
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## Electric strikes Basic series

## XS, Small, Safe, Radius, Basic 448 Lucky

Electric strikes enable easy, controlled access and secure keeping of general doors closed. Since this can be installed in any position and is largely adjustable, installation and upgrading are much easier.

#### Simply impressive:

- DIN-L-/DIN-R-neutral installation
- Can be delivered in 6-12 V, 12 V and 24 V versions
- Adjustable latch to compensate for installation tolerances
- Versions with door release, locking and feedback contact
- Integrated overvoltage protection
- Available in different sizes





### **Smoke series**

## Smoke, Smoke 448 Lucky

With its smoke protection clearance in any position, the Smoke electric strike has a wide range of applications in releasing smoke doors. "Smoke" smoke door strikes are available for all common operating voltages.

- Smoke protection clearance in any position
- DIN-L-/DIN-R-neutral installation
- Can be delivered in 6-12 V, 12 V and 24 V versions
- Adjustable latch to compensate for installation tolerances
- Version with feedback contact
- Integrated overvoltage protection





### **DES** series

## DES 72x, DES 731, DES 300, DES 400

The DES security door opener offers a universal solution for doors with high security requirements. Its high holding force, extensive monitoring functions and the corresponding accessories enable the convenient and appropriate application for a wide range of building conditions without problems.

#### Simply impressive:

- High holding force of approx. 13,000 N
- Adjustable closed-circuit or operating current
- Variant with monitoring function for latch and door position as well as tamper switch
- Operating voltage 12/24 V DC
- Stainless steel latch
- DIN-L/DIN-R installation





### Fire series

## Fire 447, Fire 448 Lucky

Electric fire door strike with fire protection clearance in any position.

- Fire protection clearance in any position
- DIN-L-/DIN-R-neutral installation
- Can be delivered in 6-12 V, 12 V and 24 V versions
- Adjustable latch to compensate for installation tolerances
- Version with feedback contact
- Integrated overvoltage protection





## Access control systems

### Ambiance access control software

dormakaba's latest software solution for our Saflok systems, Ambiance, covers the widest variety of requirements for access control in hotels. Users of the software can comfortably manage all access permissions for guests and employees thanks to web-based software architecture and configurable permissions. Many interfaces to common property management systems (PMS) are already available.

#### Simply impressive:

- Bluetooth support
- Web-based clients
- Expanded reporting options, e.g. for key management
- Reading out of the event memory of the locking system
- Creation of access keys with special authorisations





For more information, visit: your local dormakaba website



## Ilco management system – FDU reception station

Organise all your access control needs in a single centralised unit. With its reception function and employee access management, the FDU Ilco management system provides all the tools you need to effectively use your Ilco locking systems.

- Creates key cards
- Records information to key cards
- · Lock programming
- Lock maintenance
- Auditing/reading out of events at the locking system





## **Mobile Access solutions**

### BLE hotel door locks

With dormakaba's convenient, reliable and secure solution for the mobile access of guests and employees, digital keys can be automatically provided on mobile devices using Bluetooth Low Energy (BLE) communication technology so that, for example, guests can always locate their room straight away while the personnel at the reception are freed up and the physical contact between the guest and personnel is reduced to a minimum. All dormakaba RFID locks of the latest generation support mobile access and can be configured accordingly; existing installations can often be retrofit.



## Activation with LEGIC Connect

#### **LEGIC Connect**

dormakaba's solution for mobile access is based on our LEGIC Connect platform, which is provided through a high-security data centre.

## Mobile access via app

#### App solutions

There are three ways to implement mobile access via app: either your hotel already has its own app, you use the booking app of a third-party provider or you simply use the free, easy-to-use dormakaba BlueSky app. In all these cases, guests can comfortably receive and use digital keys on their compatible end device.

#### BlueSky

BlueSky is a simple, but functional, solution for all users who don't wish to invest in the development of their own app or enter into a partnership with a third-party provider or who wish to first discover the possibilities of mobile access for themselves. The app is available for iOS and Android smartphones.



## Electronic hotel locks

### Saffire LX

The Saffire LX hotel lock combines advanced technology with modern, elegant design. The comprehensive equipment regarding security and flexibility leaves nothing to be desired. Saffire LX is already equipped with Bluetooth technology, for example, ex works. In combination with our associated software solutions, mobile access can be implemented easily and securely in this way.

#### Simply impressive:

- RFID lock, pre-equipped for mobile access
- · Minimalistic design
- Suitable for new construction projects and conversion work
- Online operation optional (Zigbee)
- · NFC-compatible
- Compatible with the Saflok Ambiance access management system





### Confidant RFID

Thanks to its discreet, modern design, Confidant RFID ideally fits into nearly every hotel environment. The combination of contactless RFID technology and elegant aesthetics positively rounds out the stay of your guests and makes no compromises when it comes to durability. This modern locking system can be combined with the dormakaba Ambiance access management software (Saflok version) or our FDU Ilco management system (Ilco version). Confidant RFID is also available in the form of various different kits:

#### Confidant RFID kit 1

Exterior fitting only – for the retrofitting of existing locking systems while retaining the interior fitting and mortise lock

#### Confidant RFID kit 2

Exterior and interior fittings – for the retrofitting of existing locking systems while retaining the mortise lock

#### Confidant RFID kit 3

Exterior and interior fittings with mortise lock – for conversions or new buildings. Confidant RFID supports the dormakaba solution for mobile access via BLE (optional), which enables guests to use their mobile device as a key (Saflok version).

#### Simply impressive:

- RFID lock, mobile access available as an option (only in comb. with the Saflok version) NFC-compatible
- Suitable for both new buildings/ conversions and retrofit projects
- Online operation optional (Zigbee, only in comb. with the Saflok version)
- Compatible with the Ilco and Saflok access management systems



For more information, visit: your local dormakaba website



### 790/RT+

Hotel keys 790 and RT+ are based on a robust electronic full-coverage fitting with contactless RFID technology. This user-friendly, extremely durable lock is compatible with the dormakaba Saflok and Ilco access management systems. The 790 version can be combined with the FDU Ilco management system, whereas the RT+ variant is to be operated with the Saflok Ambiance access control software. The locks of the RT+ series support the dormakaba solution for mobile access with BLE, which enables guests to use their mobile device as a key.

#### Simply impressive:

- RFID lock, pre-equipped for mobile access (RT+ series)
- For new buildings and retrofit projects
- Online operation optional (RT+ only)
- Easy retrofitting of 790 (Ilco) to RT+ (Saflok)





## SR3 (concierge) for guest rooms

The Saflok SR3 is a flexible RFID wall-installation module for users who place the highest value on an elegant, custom design for their guest rooms. By installing the SR readers behind suitable custom-designed cover panels, you give access to guest rooms in your hotel a very special flavour. At the same time, you can also freely design the lever handles and interlock buttons on the doors in this way. The SR3 is a minimalistic solution which replaces the use of a fitting or RFID reader on the door. The SR3 installation module supports the dormakaba solution for mobile access via BLE (optional), which enables guests to use their mobile device as a key.

- RFID wall-installation module, mobile access available as an option
- NFC-compatible
- Customised design
- Installation behind a customer-specific cover plate
- Online operation optional (Zigbee)
- Compatible with the Saflok access management system





## **Outside access**

## Peripheral devices (card readers)

With our peripheral devices, you expand your building protection beyond just door access. High-frequency access areas such as entrances, lifts, multi-storey car parks and other special monitoring areas are ideally integrated into the security concept of your building with our card readers.

- Guests can use mobile devices as room keys
- NFC-compatible
- Access control also controls access to lifts, car parks and other doors with an electric strike or electrical control unit







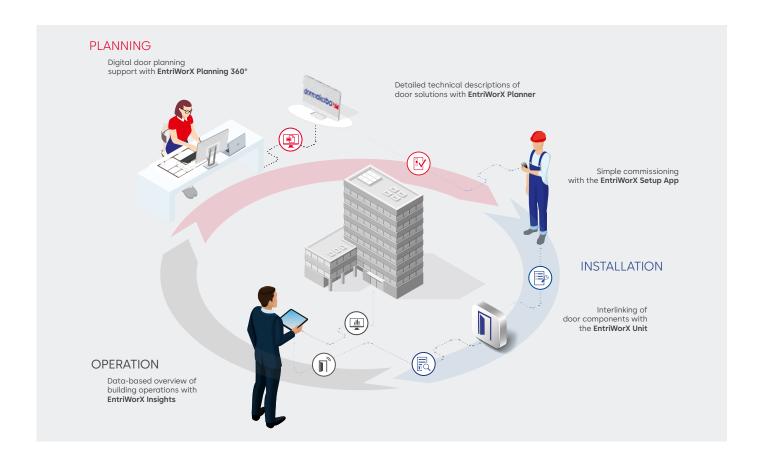


## EntriWorX EcoSystem

#### One single EcoSystem for everyone.

Improving productivity, collaboration and planning security: EntriWorX, the EcoSystem for planning, installing and operating door systems. Ideal for architects, planners, installers, facility management and anyone involved in the building construction process and building lifecycle. A digital environment for collaborative working. All planning documents and access information is accessible online to everyone involved.

# One EcoSystem for everyone Productively plan, install and operate access solutions.



#### **Planning**

#### **Efficient planning**

EntriWorX Planning 360°, the web-based collaboration software, simplifies not only the design planning but also communication among all those involved in the planning and implementation of generating the door list. Time constraints, building regulations, safety requirements and ambitious customer needs are easily handled. The technical and operational design plans can be mapped and adapted as needed, for instance by security advisers, installers or by dormakaba itself using the EntriWorX Planner.

The tool works with predefined templates, which are then provided in the data cloud.

#### Installation

#### Faster commissioning

Installation is aided by the user-friendly **EntriWorX Setup App**.

The commissioning process is carried out step by step via smartphone or tablet. Installation errors can be systematically detected and corrected.

The core of the system is the compact hardware **EntriWorX Unit**, which significantly reduces the number of components and wiring required for the installation.

The intelligent controls save valuable installation time and increase productivity.

#### Operation

#### All data at a glance, any time

Facility management nowadays works with digital tools and processed performance information:

- Control of room occupancy and people traffic
- Monitoring and analysis of door operation data
- Doors report malfunctions independently
- Maintenance and repairs according to actual requirements of the door
- Integration with API interfaces

EntriWorX Insights provides more transparency and efficiency and makes it possible to operate door systems pro-actively based on historical data.

## **EntriWorX Planning**

#### Digitized and collaborative door planning

For design planning: EntriWorX Planning 360°

- Open BIM ready, Autodesk-Revit and IFC files, 2D CAD formats.
- Complex situations and interdependencies can be visualized in 3D.
- Effective issue management via standard interfaces such as BCF.
- Easy import and export of door lists.

For installation planning: EntriWorX Planner

- Planning with functional door models from predefined door templates.
- Implementation compliant with standards and building regulations.
- Visualization of access and security zones including component list and connection diagrams.
- Development of technical and operational design planning.

### **EntriWorX Installation**

#### Digitized door installation and commissioning

The central core: EntriWorX Unit

- One single device ensures that all function data are exchanged.
- Reduced complexity thanks to easy wiring of the dormakaba components.
- Simple collaboration of different components (even from third-party providers).
- Time-saving installation due to reduced components and less wiring.

The installation app: EntriWorX Setup App

- Commissioning is done step-by-step with a smartphone or tablet.
- Malfunctions can be localized digitally.
- Complete documentation like specifications, wiring diagrams, floor plans and connection diagrams, technical drawings for production, component lists and installation videos can be accessed via the EntriWorX Setup App.

## **EntriWorX Operation**

#### Efficient building management thanks to access to digital doors

Occupancy Insights: EntriWorX Insights

Room occupancy in real time:

- Precise sensor technology.
- The data can be analyzed from anywhere via the cloud.
- Suitable for all doors and open access points.
- Intuitive displays show the current room occupancy.
- Time-saving installation due to reduced components and less wiring.

#### Remote Support: EntriWorX Supported Service

- 24/7 dormakaba service support.
- Monitoring and proactive maintenance that's always on task.
- We keep watch and manage so you can focus where it counts.

Door Insights: EntriWorX Insights

Detect faults immediately:

- Interruptions can be prevented proactively.
- Cloud-based data management.
- Integration of door data into existing monitoring, via the API interface.
- Thanks to IoT and "Always On", the operation, maintenance and repairs are adapted to current needs and do not adhere to any predefined maintenance schedule.

All data in your system: EntriWorX Integrate

- Integration of door data into smart building operations systems
- Holistic insights across eco-systems to maximize the value of door insights

## Our services.

## For your peace of mind.

We take care of safe access to your building: from planning to installation to ongoing operations – and beyond.

#### Increase the product longevity

With over 150 years of experience as a manufacturer, we contribute our unique expertise to ensure the smooth operation of your access points: for automatic doors, access control, door hardware and everything related to the door.

#### Operate building solutions securely

Secure access and a positive user experience throughout the site are a top priority for owners, users and investors – whether it's hotels, hospitals, shops, airports or offices.



## Your service benefits at a glance:



**Quick help** – we provide quick, hassle-free assistance in case of malfunctions.



**More cost-effectiveness** – regular maintenance increases the product longevity of your systems and thus saves time and money.



**High level of security** – through regular maintenance, we actively prevent potential malfunctions, downtimes and, therefore, danger.



**Legal certainty** – We provide competent support in fulfilling your obligations as a building operator.



**Maximum comfort** – smooth people flow for a positive user experience.



**Increased building value** – utilise modernisation for even greater convenience, efficiency and sustainability.

#### Installation

Everything from a single source: as the manufacturer, we also carry out installation and commissioning.

#### Modernisation and upgrades

Ensure the long-term functionality, security and protection of your access solutions.



#### Training

We offer you comprehensive specialist training courses and webinars.

#### Original replacement parts

A perfect fit and high level of availability for maximum service life.



#### dormakaba Services.

Everything for your security.



#### Maintenance

Regular maintenance, checks and documentation.

#### Repair

We'll get you up and running again. We solve problems quickly and easily.



#### Updates and consulting

We advise you on system solutions and keep your software secure.

#### Comprehensive service.

We support you in all building phases and throughout the entire product lifecycle. You can contact us 24/7 in the event of malfunctions.

#### Maintenance contract security.

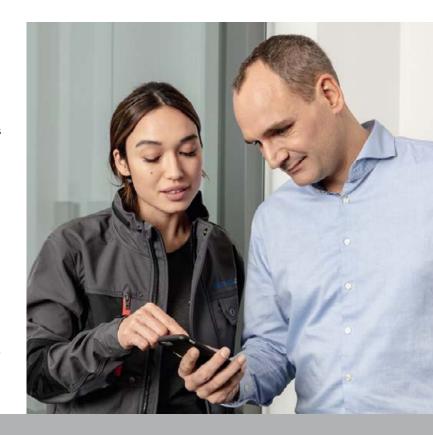
As a maintenance customer, you benefit from regular checks and thus from fewer malfunctions and greater reliability. You also receive exclusive conditions and individual modernisation proposals.

#### The greatest possible cybersecurity & compliance.

In addition to your hardware, we also keep your software for access and time up to date. This ensures that your systems work smoothly and remain protected from cyber attacks.

#### Intelligent maintenance of the future.

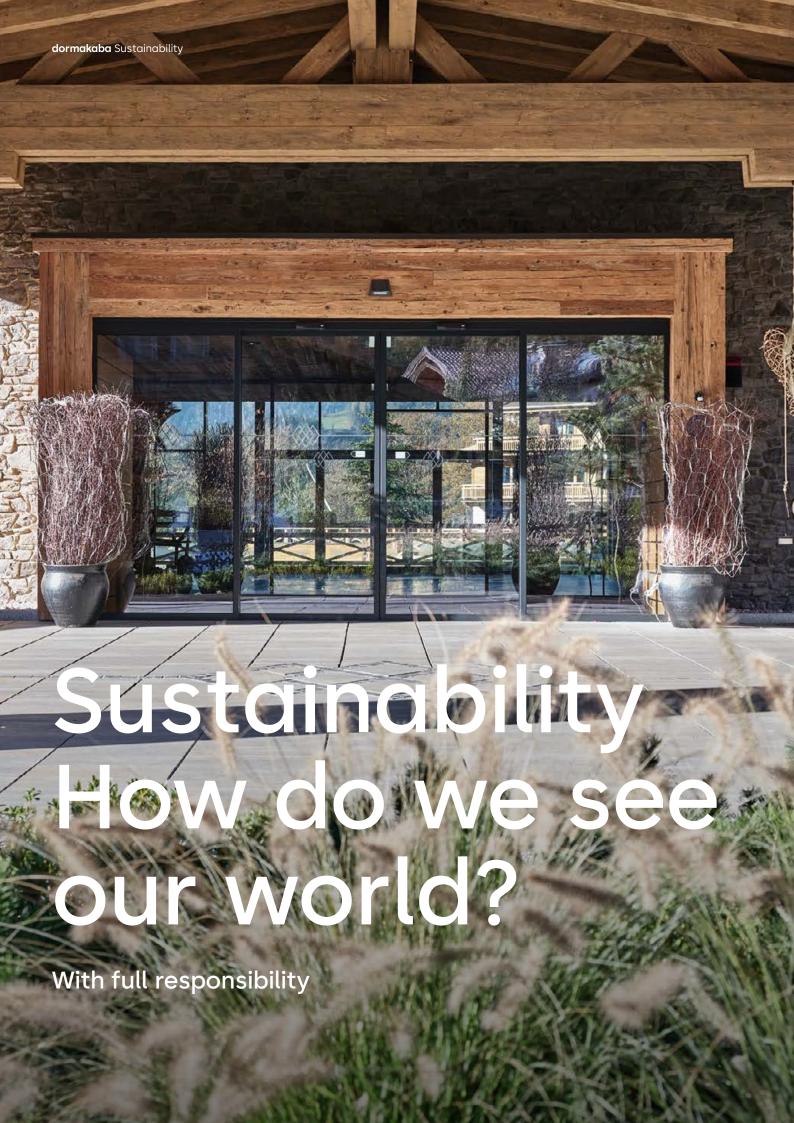
We're driving digitalisation in service and developing tools that enable comprehensive data analysis and thus even more on-demand maintenance. Would you like to learn more?





Contact us.

We're here for you. dormakaba.com/service





Sustainability is something that can be built in. Throughout our entire value-creation chain, we harmonise economic, ecological and social responsibility. The result: The future is already contained within all our solutions today.

An environmental product declaration (EPD) is a prevalent industry standard developed as per international standards ISO 14025, 14040, 14044 and European standard EN 15804. EPDs create transparency throughout the entire life cycle of a product. With an EPD, environmental impacts on the level of the product or product group can be documented. As part of our commitment to contributing to environmentally friendly buildings, we became a member of the German Institute of Building and the Environment (IBU), our partner in creating EPDs, in 2010.

More information on our commitment to sustainability and our EPDs from the product areas

- Door hardware
- Entrance systems
- Electronic access & data
- Mechanical key systems

#### can be found here:

www.dormakabagroup.com/en/sustainability



#### Sustainability as a factor for success.

If you'd like to be a trusted industry leader, you have to utilise transparent reporting and recognised product declarations. With us, you know you get longevity in every regard. To continually improve ourselves, we seek open and transparent dialog with every stakeholder group – that means you.

#### Certification and declaration.

We know how important the environment is. Building certification systems are an important factor in the global construction industry. We support the requirements of the building certification systems by providing an extensive portfolio.

#### Plan with an eye to the future.

Today, sustainable construction requires flexible product solutions. With our module access solutions, you're not only able to save resources, but also improve the wellbeing of the people who use the buildings.

#### The pleasure of saving energy.

Thanks to our well-thought-out product systems, barrier-freedom can be combined with thermal separation. For instance, automatic sliding doors have excellent insulation values thanks to improved thermal separation of the profiles. Reducing energy consumption is sustainability in practice.

## Strategic framework for sustainability





#### People

We enable our employees to reach their full potential



#### **Planet**

We're opening the doors up wide for a low-CO<sub>2</sub> recycling economy



#### **Partnerships**

We work together to promote sustainable development beyond our own front doors

## Our contribution to the UN goals for sustainable development

Purpose

Essential topics

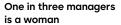
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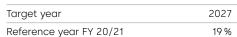
Contribution to SDGs

We create a fair, integrative and safe corporate culture which enables our employees to be successful.

We offer them a workplace where they can continually develop, contribute their ideas openly and be proud of their accomplishments.

- Fair employment
- Training/education
- Diversity and inclusion
- Work safety and health protection













Purpose

Essential topics

Key objective

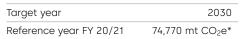
Contribution to SDGs

We develop innovative and resourceefficient solutions for the recycling economy and do our part for a climate-resilient future. We offer longlasting, energy-efficient products which help our customers to achieve their own sustainability goals.

- Recycling economy and materials
- Compliance with environmental regulations

Energy and emissions

Reduction in operating emissions by 42% in accordance with a 1.5° future







Reducing the emissions of the value-creation chain for purchased goods and services, as well as with the use of purchased products by 25%

Target year	2030
Reference year FY 19/20	1,197,848 mt CO <sub>2</sub> e*

All new product developments and optimisations are covered by our recycling approach

Target year	2023

\*Reference year FY 2019/2020 in accordance with validation of the Science-Based Targets Initiative

#### Purpose

Essential topics

Key objective

Contribution to SDGs

We lead with a good example and are committed to advancing more environmentally friendly practices and supporting the protection of human rights together with our partners. With our secure access solutions, we're also contributing to the health and safety of people. We work together with partners to raise awareness of the safe handling of our products.

- Human rights
- Customer health and safety
- Development of our own sustainable supply chain

External evaluation of all high-risk suppliers with regard to their sustainability management or terminating cooperation should participation be lacking







#### **Our Sustainability Commitment**

We are committed to foster a sustainable development along our entire value chain in line with our economic, environmental and social responsibilities toward current and future generations. Sustainability at product level is an important, future-oriented approach in the field of construction. In order to give quantified disclosures of a product's environmental impact through its entire life cycle, dormakaba provides Environmental Product Declarations (EPD), based on holistic life cycle assessments.

www.dormakaba.com/sustainability



#### Our offering

#### **Access Automation Solutions**

Entrance Automation Entrance Security



#### **Access Control Solutions**

Electronic Access & Data Escape and Rescue Systems Lodging Systems



#### **Access Hardware Solutions**

Door Closers Architectural Hardware Mechanical Key Systems



#### Services

Technical Support Installation and commissioning Maintenance and Repair



#### **Key & Wall Solutions**

Key Systems Movable / Sliding Walls



#### Safe Locks

Electronic Safe Locks Mechanical Safe Locks Boltworks and Accessories



#### Glass systems

Manual door systems Glass fittings Horizontal Sliding Walls



WN 05513051532, EN, 04/23, Subject to change without notice

