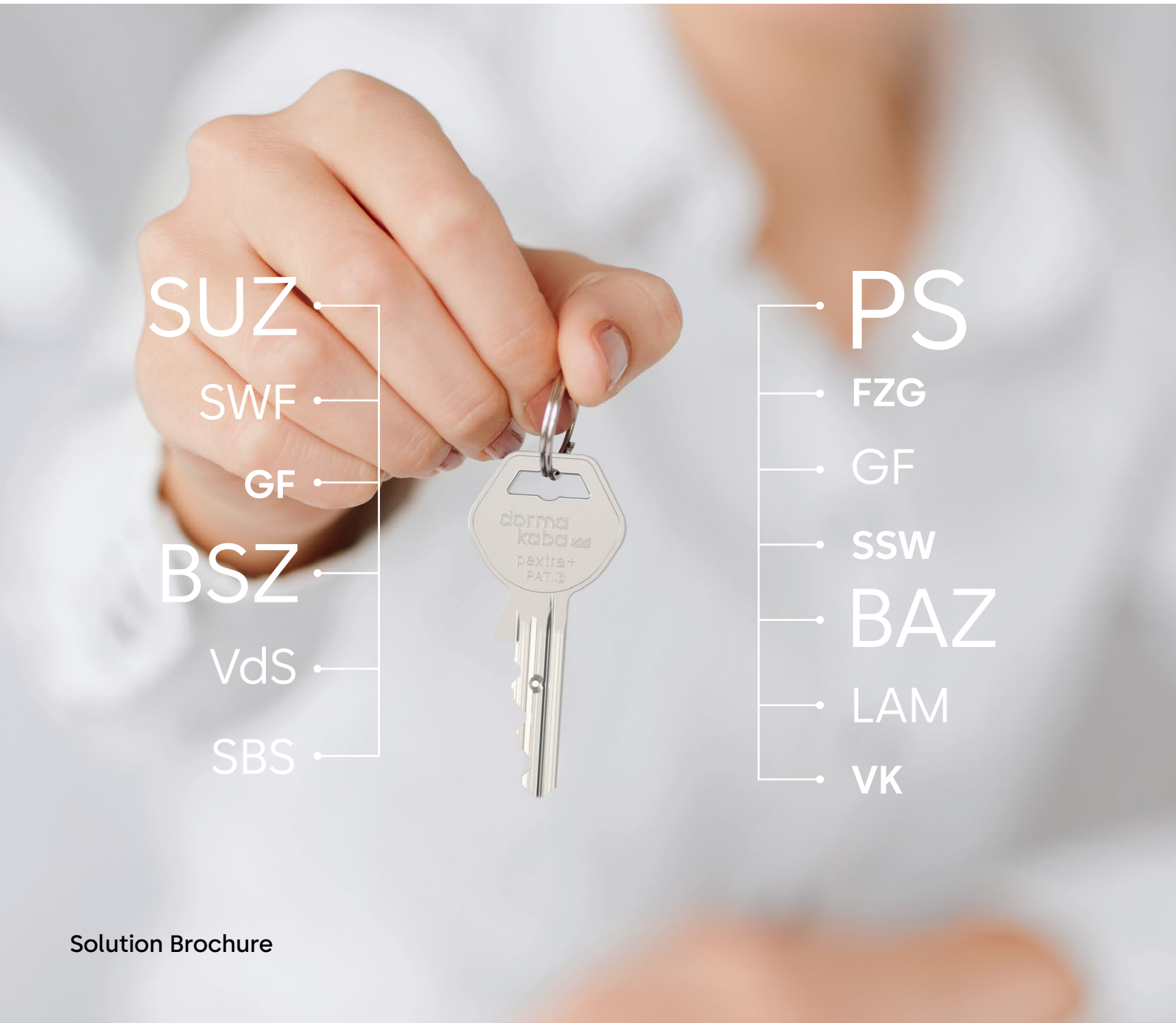
dormakaba

Optional added value

Special functions serrated key system by dormakaba



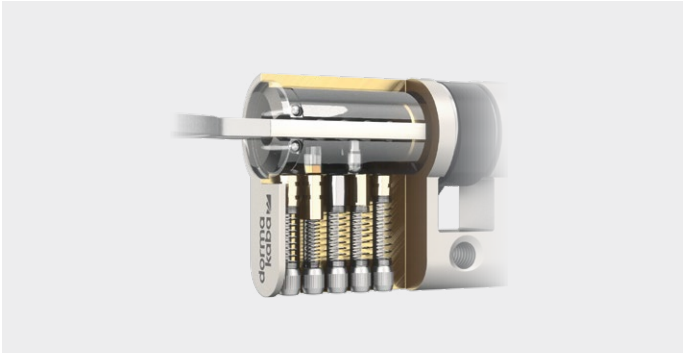
Solution Brochure

Do you have particular requirements for your master key system?

We have the right special functions for you

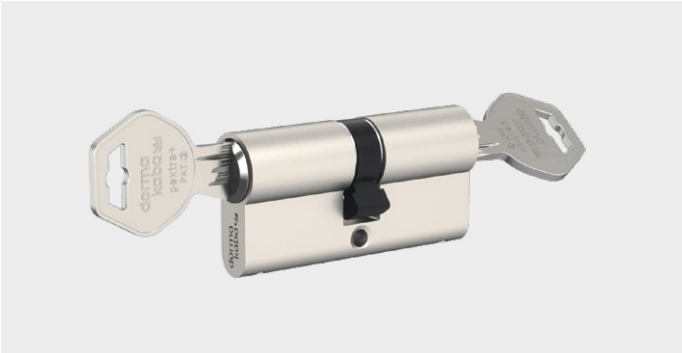
dormakaba serrated key systems meet very high security requirements and can be used flexibly in different types of master key systems. If you have very specific requirements for the complete master key system or individual doors, take a look at our comprehensive range of special functions and special designs – to obtain just as much added value as you wish.

Access options



- **Self-changeable cylinder** (SUZ):
- **Construction phase function** (BAZ)
- **Lock cylinder with personnel key** (PS)

Greater convenience



- **Lock cylinder with key override on both sides** (BSZ)
- **Cylinder with Cogwheel Cam** (ZR)

Protection against burglary

- **Lock cylinder according to VdS** (VdS)
- **Steel reinforcement shims version** (LAM)
- **Sacrificial Cut** (SBS)

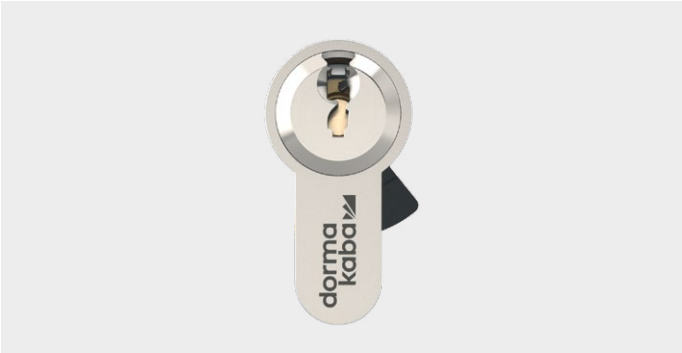
Safety in an emergency

- **Freewheel cylinder for gear-operated locks in panic doors** (FZG)
- **Emergency override key system** (GF)

Longer service life

- **Dust and weather protection** (SSW)
- **Seawater-resistant version** (SWF)
- **Wear-resistant version** (VK)

Special switch solutions



- **Relative cam movement** (FL)

Access options

Need to change the keys?
No cylinder replacement necessary.
Self-changeable cylinder (SUZ)

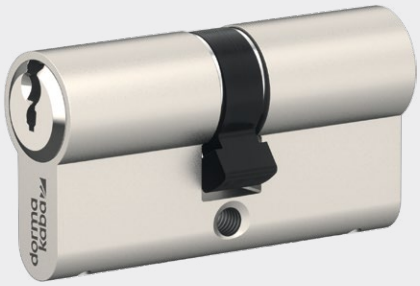
Your requirements:
You don't want to have to immediately replace all the cylinders when a key is lost or a tenant moves out and takes the key with them. Or, for example, you no longer wish to allow tradespeople access after completion of the construction phase.

Principle of operation:
There are three generations of keys for the self-changeable lock cylinder. The lock cylinder keying can be changed up to two times. Turning a next-generation key in the lock cylinder means that the previously used key is no longer able to unlock the door. No additional tools or keys are required for this.

1st generation keys

2nd generation keys
When inserted and rotated 360°, the 1st generation keys lose their locking authorization.

3rd generation keys
When inserted and rotated 360°, the 2nd generation keys lose their locking authorization.



Lock cylinder
No replacement necessary.
The conversion process does not require a separate conversion key.

Controlled access for tradespersons? Yes, but only during the construction phase.

Construction phase function (BAZ)

Your requirements:
You want to allow tradespersons controlled access to different building areas or rooms during the construction phase. After completion of the construction phase, only the tenants or owners should have access, without having to change the lock cylinder.

Principle of operation:
For tradespersons, there is a construction phase key.
By adjusting the lock cylinder once using a special conversion key, the authorization of the construction phase key expires. Then, only the tenant's or owner's key will work. This saves having to use a temporary master key system during the construction period.

All keys have access permission

Conversion key UA is used: Pin constellation in the lock cylinder is modified

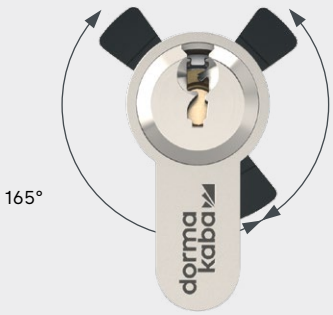
A access permission has been withdrawn

Staff access? Yes, as long as it's not locked.

Cylinder with personnel key (PS)

Your requirements:
You want to grant staff access to certain areas or rooms, for example, during business hours. Otherwise, staff may not open the doors.

Principle of operation:
The personnel key only activates the latch of the conversion lock and only opens a door if it has been previously unlocked – e.g. at the start of business. The lock bolt can only be operated/the door can only be opened and closed with an owner's key. Required: doors with a rigid knob or fixed handle element.



Only the lock latch is operated with the personnel key.

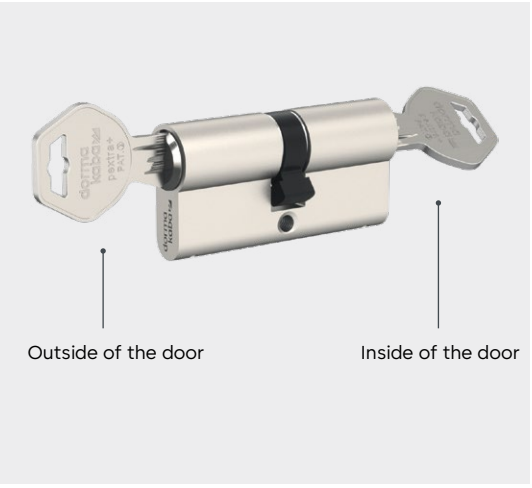
The owner's key, however, can fully operate the lock cylinder (lock bolt and latch operation).

Greater convenience

Key left in the lock? Not a problem!
Lock cylinder with key override on both sides (BSZ)

Your requirements:
You want to be able to open doors even if a key is still inserted on the opposite side, e.g. if the front door shuts unintentionally.

Principle of operation:
If a key is inserted on one side of the door, the double cylinder enables the door to be unlocked from the opposite side by another authorized key, regardless of the rotation of the first key, which turns with it. This function is guaranteed to work on both sides of the double cylinder.



Multiple locking function? It's quite straightforward.
Cylinder with Cogwheel Cam (ZR)

Your requirements:
You want to make locking and unlocking with special multipoint locks even more convenient.

Principle of operation:
With a cylinder with cogwheel cam, the cam is designed like a pinion – that is, similar to a gear. These cams are necessary to keep the force exerted on the key to a minimum, especially in the case of multipoint locks.

Protection against burglary

Worried about burglary? Trust in security.
Lock cylinder according to VdS

Your requirements:
You require a high level of security at selected doors and want intruder protection certified according to VdS.

Principle of operation:
VdS-certified lock cylinders provide maximum resistance to mechanical attacks. Lock cylinders according to VdS have hardened anti-drilling pins in the barrel and in the housing and, optionally, increased pulling protection (addition Z) in combination with a security fitting. VdS A and VdS AZ are achieved with five pins; VdS B and VdS BZ with six pins.

Attack from outside? Strong resistance from inside.
Steel reinforcement shims version (LAM)

Your requirements:
You want intruder protection for selected doors that meets the highest requirements of DIN EN 1303 – Attack Resistance Grade D.

Principle of operation:
Hardened steel shims in the lock cylinder effectively reinforce the housing yoke and provide significantly increased pulling protection.

Tearing off the lock cylinder? That won't get them anywhere.
Sacrificial Cut (SBS)

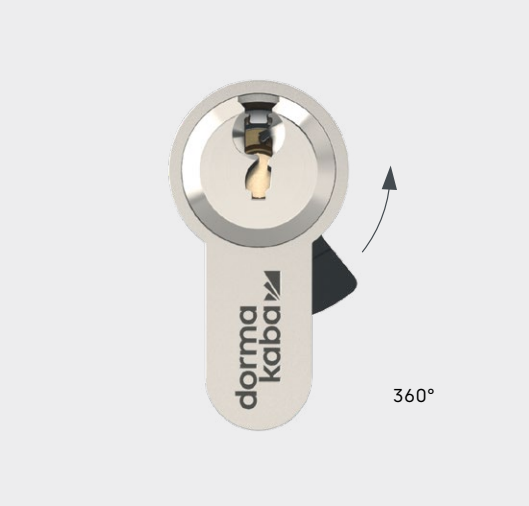
Your requirements:
You want to increase the burglar resistance of doors on which no protective hardware can be installed, thereby complying with the highest Attack Resistance Grade D according to DIN EN 1303.

Principle of operation:
The cylinder housing is manufactured with a pre-defined cut, so that the cylinder will break off cleanly between two pins in the event of a break-in attempt. The other pins remain in the housing. Burglars do not have an attack surface on which to use tear-off tools and the door can still be locked with an authorised key.

Security in an emergency

A rush to the panic door? The path is clear.

Freewheel cylinder (FZG) for gear-operated locks in panic doors



Your requirements:
You want to be sure that panic doors will open easily and reliably if something happens.

Principle of operation:
For panic door locks, it is important to consider the special requirements placed on the lock cylinder. These requirements are specified in the certificates of constancy of performance for each lock type and absolutely must be met. The FZG version of the lock cylinder ensures that the lock cylinder cam can always be rotated freely once the key has been withdrawn, even if pressure is applied to the lock cylinder cam during this process.

Locked from the inside? Not an obstacle in an emergency.

Emergency override key system (GF)

Your requirements:
You want to be able to unlock doors in an emergency or in dangerous situations, even if a key is inserted on the inside. In all other cases, privacy should be guaranteed, for example, doors in residential homes and assisted living accommodation.

Principle of operation:
If a key is inserted on one side of the door, the double cylinder enables the door to be unlocked from the opposite side, regardless of the rotation of the inserted key. A default key cannot be used for this, rather, a separately managed and registered emergency override key.

Longer service life

Lots of dust in the air? But not in the cylinder.
Dust and weather protection (SSW)

Your requirements:
You want to protect locks from external influences in areas exposed to significant environmental stresses, such as dust or splash water.

Principle of operation:
Cylinders with dust and weather protection are equipped with two pivoted, spring-mounted plastic shims on the front. Hard-wearing plastic shims keep out dust and splash water and their shape makes it easy to insert the key.

Door lock near the sea? No rust in sight.
Seawater-resistant version (SWF)

Your requirements:
You want to protect lock cylinders against corrosion caused by seawater.

Principle of operation:
This special design uses components made of corrosion-resistant materials such as brass, bronze and stainless steel. This complies with the highest EN 1670 class (corrosion resistance class 5, 480-hour salt spray test) and produces locking cylinders with an exceptionally high resistance to corrosion.

Frequent unlocking and locking? Don't worry, this will not scratch the lock cylinder.
Chemically nickel-plated cylinder barrel (VK)

Your requirements:
Certain locks in your master key system are locked and unlocked very frequently. You want these cylinders to function properly for a long period of time despite this heavy use.

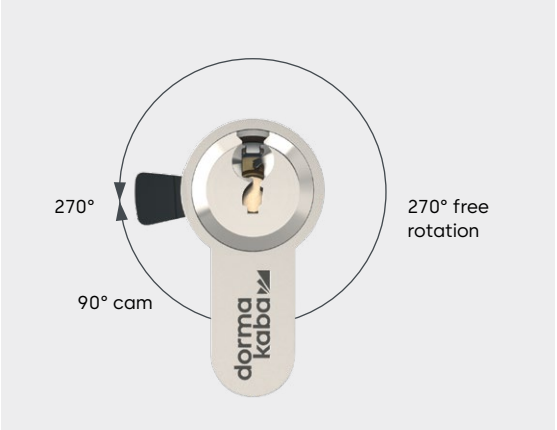
Principle of operation:
The cylinder barrels are coated with a layer of nickel and hardened as a result of a chemical reaction. This layer significantly reduces wear on the key canal in the cylinder barrel, thus extending its service life.

Special switch solutions

Send an impulse in any position.
Relative cam movement (FL)

Your requirements:
You want to use keys and cylinders for special switching or contact solutions, such as calling a lift.

Principle of operation:
For cylinders with relative movement, the key can be rotated a full 360°, while the cam only performs a relative movement (90° in the example). The relative movement can be configured differently.



Possible combinations of special functions

The table below gives an overview of the possible special functions, how they may be combined with each other and the available cylinder types.

Combination options for cylinder types	Order code	SUZ	BAZ	PS	BSZ	ZR	FZG	GF	FL	SSW	SWF	VK	VDSA	VDSAZ	VDSB	VDSBZ	LAM	AS	SBS
Double cylinder	**DZ**	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
Single cylinder	**HZ**	•	•			•	•		•	•	•	•	•	•				•	•
Thumbturn	**DKZ**	•	•			•	•			•	•	•					•		•
Combination options for special functions																			
Self-adjustable lock cylinder – twice adjustable without separate key	**SUZ**			•	•	•	•	•	•	•	•	•					•	•	•
Construction time function – change keying 1	**BAZ**			•	•	•	•	•	•	•	•	•					•	•	•
Cylinder with personnel key	**PS**	•	•			•				•	•	•					•	•	•
Double key override	**BSZ**	•	•			•				•		•	•	•	•	•	•	•	•
Cogwheel cam	**ZR**	•	•	•	•			•		•		•	•	•	•	•	•	•	•
Freewheel cylinder for gear-operated locks	**FZG**	•	•							•	•	•					•	•	•
Emergency key function	**GF**	•	•			•				•		•					•	•	•
Relative cam movement	**FL**	•	•							•	•	•	•	•	•	•		•	•
Combination options for dust and whether protection																			
Dust and splash protection	**SSW**	•	•	•	•	•	•	•	•			•						•	
Seawater resistant	**SWF**	•	•	•			•		•			•							•
Chemically nickel plated	**VK**	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
Combination options for increased burglary protection																			
VdS certified: drilling protection class A	**VDSA**				•	•			•			•							
VdS certified: drilling protection class AZ	**VDSAZ**				•	•			•			•							
VdS certified: drilling protection class B	**VDSB**				•	•			•			•							
VdS certified: pulling and drilling protection class BZ	**VDSBZ**				•	•			•			•							
Steel reinforcement plate	**LAM**	•	•	•	•	•	•	•				•							•
Protected against pulling	**AS**	•	•	•	•	•	•	•		•		•							
Sacrificial Cut	**SBS**	•	•	•	•	•	•	•	•		•	•					•		

- Combination possible

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

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dormakaba.com

dormakaba
International Holding AG
Hofwisenstrasse 24
CH-8153 Rümlang
T +41 44 818 90 11
info@dormakaba.com
dormakaba.com