

## Master Key Systems

Customized Access Management

# Mechanical key systems Keep your keys under control

With a mechanical key system, you control your keys and access rights, providing quick access to all rooms within the premises and saving key replacement costs. As infrastructure grows exponentially, so does the need to support this development with adequate security systems. Increased access points result in multiple locks that require efficient security management. This is where the dormakaba master key systems come in, by enabling access according to our customers' requirements and using entry restrictions to their advantage.

A master key system is a key plan whereby selected keys can open a number of pre-defined doors. It extensively analyses and assesses our customers' requirements. Moreover, it can deliver solutions for even the most complex access management challenges and helps maintain better control, saves key replacement costs and is convenient, as there are a lower number of keys in circulation. It also provides quick access to all rooms within the premises, e.g. for security staff and management personnel. This is not only convenient but can save lives in case of emergency.





Your trustworthy partner for smart access solutions

### Penta cross

# Swiss Engineering Art for even more security



#### Moving secure cross element

The active element is in a cross shaped recess in the key and therefore cannot be fully and correctly copied. Should the active element be removed from the key, the key can no longer be used and it cannot be copied anymore.

#### Secure

Penta cross is perfectly suitable for use in apartment buildings and in all kind of build-ings in which the key holders often change, and an overview of the key holders is easily lost. Penta cross increases the security of lock cylinders and master key systems, as illegal copying of keys is made extremely difficult. Duplicate keys are only available from dormakaba and its authorised dealers against presentation of the security card which identifies you as the legitimate owner of the lock

cylinder or master key system.

#### Patent

Penta cross is protected by an international patent. This means that key blanks are not available for retail sale. The Pan-European brand protection for the key is unlimitedly valid.

#### Convenient

The reversible key is ergonomic and easy to use, as it can be inserted top and bottom wise. With 12 different key clip colours to chose from, everyone finds his or her favourite colour. The coloured clips can also be used to assist in organisation. This way you can recognise at a glance which key belongs to whom and where it locks.

#### **Specification**

Material - nickel silver, very wear resistant

- Three key types available: Smart Key Curved Clip (CC) Large Key Clip (LK) Armour bow (LR)
- VdS BZ drilling and pulling protection with anti-pulling pin (ZS) in the cylinder housing when used together with security door hardware
- European patent EP 2890856 B1 valid until 2033 (key)
- PCT application (cross) when granted valid until 2036
- The symbol Mountain Peak is a registered brand of the dormakaba group



Upgradable to RFID Smart Key

## **Expert plus**

# Reversible master key system for personal security and convenience



## The security lock cylinder system with extra protection and a long key patent life

#### Advantages at a glance:

- PCT-application; Patent valid until
- Key blanks are not available for retail sale
- Duplicate keys only issued with correct authorisation
- The key can be inserted either way
- A single key can be used to open a variety of different locks
- High protection against opening by the bumping method and against drilling
- Can be upgraded to an electronic access control systems with transponder clip
- Unique key codes for dormakaba authorised dealers

#### **Expert Plus Key Features**

- 4 rows 22 pins
- 907 billion combinations
- · Patent to 2033
- Reversible Key Technology
- Suitable for complex Master Key systems
- Anti Pick/Anti Impression Anti Bump/Anti Drill
- · Modular Core Technology
- · Stainless Steel Pins
- · Keys made from Nickel Silver
- Pin design allows for smooth key entry
- Key Issue Protection keys only available from dormakaba
- Many different finishes available
- Many cylinder functions available (including)
  - Double Cyl, Single Cyl, Cylinder/ Turn
  - SAT Function
- 3 in 1 construction key
- LAM Reinforced Cylinder

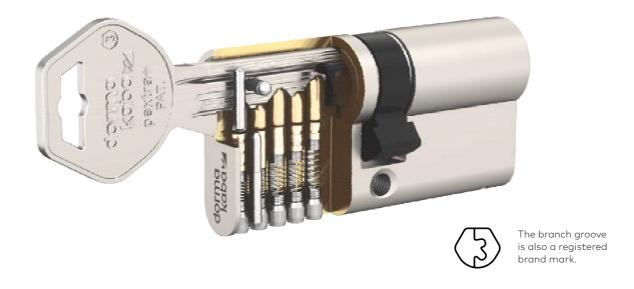
- RFID/Legic Key Head
- Many different cylinder/lock types available
  - EN Standard
  - ANSI Standard
  - Padlocks
  - Rim/Surface mounted cylinders
  - Furniture Locks/Cylinders
  - Key Switch Cylinders
- Camlock cylinders
- Key deposit tubes
- Made in Europe



Upgradable to RFID Smart Key

## pExtra+

## Even more protection



#### **Profile and Active Pin**

The new, improved and patented branch groove is manufactured on CNC controlled machine tools for highest accuracy. The branch groove cannot be copied on conventional key milling machines. The optional active probe (blocking) pin verifies the presence of the branch groove in the key. If the original branch groove is not milled on the key, the blocking pin prevents the key from being completely turned in the lock cylinder in both directions.

## Beyond conventional mechanical security

pextra+ lock cylinders are available with some 20 additional special functions which provide additional security and convenience for a wide range of applications.

#### Special functions at a glance

- Additional picking protection
- Barrel pulling protection
- · Cylinder blind on one side
- · Cam with relative movement
- Free wheel cam for gear operated and panic locks

- Cylinder with occupied indicator
- Housing reinforced with steel shims against pulling for EN 1303 attack resistance grade 2
- Personnel key
- · Shear break-off against snapping
- · Side locking elements
- Self changeable cylinder with one or two change keys
- Weather protection cap against filth and moisture
- · Sea water resistant barrel
- Wear resistant barrel
- Cogwheel cams with 10 or 18 teeth

#### **International Certifications Europe**

- EN1303 Key Related Security Grade 6 for cylinders with 6 pins with blocking pin
- EN1303 Attack Resistance Grade 2 with appropriate door furniture or steel reinforcement shims
- DIN18252 grade 71 for 5 pins or grade 82 for 6 and 7 pin cylinders

## Mechanical cylinders for all applications

Cylinders are available in many profiles and lock types which are available and serial and master key system cylinders.

- Euro profile double, single and thumb turn cylinders
- Nordic oval profile cylinders
- · Union oval profile cylinders
- · Australian oval profile cylinders
- Rim cylinders for surface mounted door locks
- · Screw-in cylinders
- · Furniture and cabinet locks
- · Cam locks
- · Key switch cylinders
- Elevator control cylinders
- Padlocks
- Bible cylinders
- · Portal double and single cylinders
- · Window and door handles
- · Key deposits and key storage

Further details and order information can be found in the relevant dormakaba catalogues or system descriptions.

## **Applications**

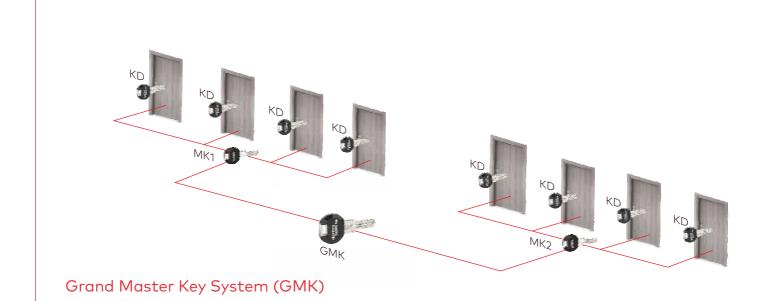
## Increased security with master key systems

#### Private homes & apartment buildings

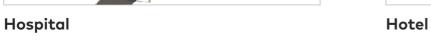


#### **Business offices and departments**





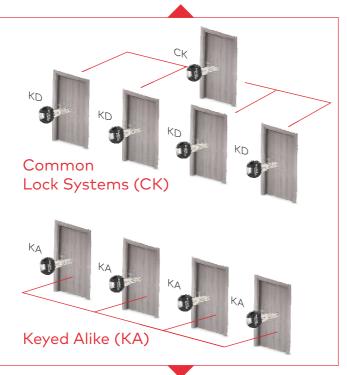






#### **Education**

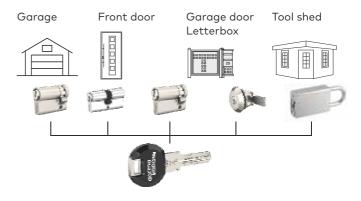






Train and metro stations

## One key for all Cylinder key that locks



#### dormakaba High Security Cylinders

- Patented Key System
- Protection against Illegal / Duplicate Keys
- Anti Pick, Anti Bumping & Anti Drilling
  Features
- 807 Trillion (Penta Cross) & 907 Billion (Expert Plus) Key Coding combinations
- Key of Nickel Silver for Long lasting
- Special Functions Possible 1two3(3 Lives), SAT, Priority, Classroom Function, Dust Protection Function Etc
- International Certification Kitemark (UK), GOST (Russia), Mountain Peak Design & Certification
- Upgradeable to an electronic access control systems with RFID transponder in the key head
- One Platform for various Lock Types (Mortice locks, Cam Locks, Furniture Locks, Pad Locks etc)

Lock Cylinders that can do more than just lock/unlock doors



## **Functions**

Functions	Available systems	Applications
Self changing cylinder – the cylinder with 3 lives		
"The system with three lives."  A standard cylinder has its authorised keys. If you lose a key or you want to change the authorisation – security will be lost, as this lost key or this unwanted person will still be able to open the lock, e.g. after the construction phase of building contractors should no longer have access to the site. In such cases you are forced to change all cylinders in the building. dormakaba has the solution: With the BAZ/SUZ-function you can modify the cylinders and block the unwanted or lost keys! This can be done at the end of the construction phase or with new tenants. And this can be done twice – so you are protected for 2 key changes! You do not need to purchase new cylinders thus have a cost-saving solution.	all reversible and serrated key systems	<ul><li> Home</li><li> Apartment buildings</li><li> Office</li></ul>
Double key override function		
"Never be locked out again"	• all reversible	• Home
Sometimes it happens (voluntary or not) that the key is left in the lock. With a standard cylinder you will not be able to open the lock from the outside, because the left key on the inside is blocking the cylinder – dormakaba has the solution!  The BSZ-function enables you to open the cylinder in any way at any time – also when a key is left in the lock on one side you can always open on the other side. So you cannot be locked out.	and serrated key systems	<ul> <li>Apartment buildings</li> <li>Office</li> <li>Metro station</li> <li>Education</li> <li>Hospital</li> <li>Hotel</li> <li>Theatre/Cinema</li> </ul>
Secure Access Temporary – SAT		
<u> </u>		
In the normal (vertical) key removal position the cylinder can only be operated from the outside by the proprietor key. In the service position the lock cylinder can be opened and locked from the outside and inside by the service and proprietor keys.	dormakaba expert plus only	<ul><li> Home</li><li> Apartment buildings</li><li> Small business</li></ul>
Pě.		
Keyway in normal Keyway in service position: 6 o'clock position: 8 o'clock		

Functions	Available systems	Applications
Classroom function		
The innovative design of the restrictive movement cylinder ensures the door is guarded against being locked from within the room. The cylinder also guarantees that authorised key operation from the external side is maintained even if the internal thumbturn is being held by the occupant in an attempt to prevent access.	all reversible and serrated key systems	<ul><li>Education</li><li>Hospital</li><li>Hotel</li><li>Theatre/Cinema</li></ul>
Emergency override key function		
For hotels, guesthouses, retirement homes, boarding schools, schools, etc., where, on the one hand, the personal sphere is guaranteed, but at the same time the greatest security must be available for emergencies. The emergency key override function also fulfills the lockout function desired in hotel complexes. The advantage is that with the special emergency key from the outside can still be opened, even if there is a key on the inside and is twisted. Thus, the access is guaranteed at any time in an emergency. The emergency function can only be installed on one side and the emergency override key must be ordered separately.	all reversible and serrated key systems	<ul> <li>Apartment buildings</li> <li>Office</li> <li>Metro station</li> <li>Education</li> <li>Hospital</li> <li>Hotel</li> <li>Theatre/Cinema</li> </ul>
Extreme protection – increased burglary protection		
High end security Pulling and drilling protection To protect your home from burglaries, you should switch to the latest technologies. The housing of this lock cylinder is strengthened with steel reinforcement plates for an additional pulling protection (fig. 2). The version with steel reinforcement plates is certified in accordance with BS EN 1303:2015-08 attack resistance grade D. Hardened steel pins in the insert and housing ensure an additional protection against drilling (fig. 1). These highly secure cylinders are certified in accordance with VdS B, BZ for individual locking and locking systems.	all reversible and serrated key systems	<ul> <li>Home</li> <li>Apartment buildings</li> <li>Office</li> <li>Metro station</li> <li>Education</li> <li>Hospital</li> <li>Hotel</li> <li>Theatre/Cinema</li> </ul>

Functions	Available systems	Applications
Padlock		
Integrated into your master key system you can also use padlocks with your key.  Different types are available.	all reversible and serrated key systems	<ul><li> Home</li><li> Apartment buildings</li><li> Education</li></ul>
Duplo function		
Access to specific door  Cylinders have two types of keys. One key operates the latch of the lock and the other key operates the latch and the deadbolt. When deadbolt is withdrawn, the key that operates the latch will work. When deadbolt is engaged, the key that operates the latch will not work.	all reversible     and serrated     key systems     – lock with     interchangeable     function     required	<ul> <li>Apartment buildings</li> <li>Office</li> <li>Metro station</li> <li>School</li> <li>Hospital</li> <li>Hotel</li> <li>Theatre/Cinema</li> </ul>
Protection mechanism against dust, weather and insects		
If required you can protect the outside of the cylinder and extend the mechanical life. Choose from different options – the insert dust and weather protection cap or the full cylinder protection device, whose spring loaded plates are pushed open when inserting the key and spring closed when the key is retracted.	all reversible and serrated key systems	<ul> <li>Home</li> <li>Office</li> <li>Metro station</li> <li>Education</li> <li>Hospital</li> <li>Hotel</li> <li>Theatre/Cinema</li> </ul>
Thermally insulated cylinder – TIC		
Cold outside – dry inside  The construction provides protection against condensation on the inside of the door (even in extremely cold outside temperatures). In addition, it protects against rain and reduces draft through the cylinder.	all reversible key systems	• Home
Furniture cylinders		
Different furniture locks and cylinders for applications within furniture. Whether you want to lock your files, personal documents or valuables securely. With your individual key from the master key system you have always access.	all reversible and serrated key systems	<ul> <li>Home</li> <li>Apartment buildings</li> <li>Office</li> <li>Metro station</li> <li>Education</li> <li>Hospital</li> <li>Hotel</li> <li>Theatre/Cinema</li> </ul>





Dorma and Kaba joining forces

#### Access Solutions



Door Hardware



Interior Gl



Entrance System



Lodging Systems



Safe Locks



Electronic Access & Data - EAD

dormakaba India Private Limited Plot No. 48/3, Mahindra World City 8th Avenue, Anjur Village Chengalpattu District Tamil Nadu 603 002. INDIA T +91 44 67 400 200

**SERVICE TOLL FREE** 1800 121 6414



Mechanical Key



Servic

**Wall Solutions** 

