



Kaba mechatronic cylinder

Combining mechanics and electronics

A versatile range

Our mechatronic cylinders bridge the gap between electronic access control and the world of mechanics. The mechatronic cylinders fit seamlessly in to existing mechanical master key systems. For example, they can be optimally used on outside doors.

The mechatronic cylinder range is part of the Kaba evolvo product family and supports current RFID technologies.

Losing keys is no problem

In no time, you can benefit from the security and flexibility of a programmable master key system. This, by using the Kaba smart key: a high-performance, copy-protected and registered key with RFID chip, with six clip colours available. Existing Kaba keys can be upgraded with an electronic clip and be used for both mechanical and electronic

access. Access rights on this intelligent key can be changed very quickly. Lost keys are simply revoked, which means it is no longer necessary to replace the cylinder.

Smart electronics

The system solution allows for the time and location of access to be controlled. It is also possible to programme services from third parties, such as cash-free payment at vending machines or time registration.

Wireless function

The optional version with wireless establishes a radio connection to the central access system via the Kaba wireless gateway. Programming is carried out directly from the PC and offers the ultimate convenience.

Advantages at a glance

- **Flexibility of the access system**
Complete or partial transfer from mechanics to electronics is possible
- **Combination of mechanics and electronics**
The Kaba smart key combines the two worlds: one key opens all doors as usual
- **Double security**
The door will only open if the mechanical key milling and the electronic data in the RFID clip match
- **Wireless function**
Convenient programming from your desk: with the wireless solution, the mechatronic cylinder is wirelessly linked to your access solution



Overview of versions



Surface fixed version – electronic module on the inside of the door.

Surface fixed version – design on the door

The surface fixed version has an impressively elegant design. It is the ideal solution for fire doors or emergency exit doors. The mechatronic cylinder can be used wherever electronic access control is required, because no changes need to be made to the door. In this version, the robust metal housing is simply secured to the inside of the door on the cylinder. You can choose between the mechatronic cylinder with thumbturn or double cylinder. The battery is integrated into the housing. When changing the battery, you can easily open the plastic cover using the multitool and replace the battery.



Compact cylinder – electronic module in the internal knob.

Compact version – quickly installed

In the compact cylinder, the mechatronic cylinder and electronics form one unit. Existing lock cylinders can be easily and quickly replaced with a mechatronic cylinder with electronic authorisation check. From the inside, the door can be conveniently opened and closed using the knob. The metal knob can be removed when changing the battery.



Mechatronic cylinder – outside view. The electronic module is integrated into the door leaf in the forend version.

Forend version – high performance

The forend version of the mechatronic cylinder has a discrete appearance on the door, but this hides high-performance electronics. It is best used on doors in the entrance area and on important access point doors. The cylinder is connected to the electronics module via a flexible cable. The module with the battery compartment is installed in the door leaf like a mortise lock. Two commercial batteries allow for to 140,000 door movements. The optional wireless solution communicates with the online access solution and reports each change at the door.

Features

Intuitive to use

The Kaba smart key is inserted into the mechatronic cylinder. An acoustic signal indicates if access is granted or denied. Entrance to the desired room is gained by turning the key and pressing the door handle as usual.

A solution for every requirement

Our mechatronic cylinders can be installed on all doors, inside or in weatherproof outside areas. Depending on customer requirements, door monitoring or an electrical connection to a door opener is possible with the additional module. The surface fixed version is a functional design element on the door and allows easy installation on fire or emergency escape doors.

Scalable application

Suitable for single doors but also as part of a large-scale master key system, choose among various programming options:

- Manual programming: easiest programming option, carried out directly at the relevant entrance using master keys.
- Using the programming device: change access rights with the Kaba evolo Manager (KEM) on a PC and transfer the data via programming device.
- Using CardLink: time-limited access rights are stored on the user key. Users can pick up their new authorisation at the terminal and there is no need to reprogramme the doors concerned.
- Using the wireless function: authorisations can be transferred to the access components from the comfort of your own desk.

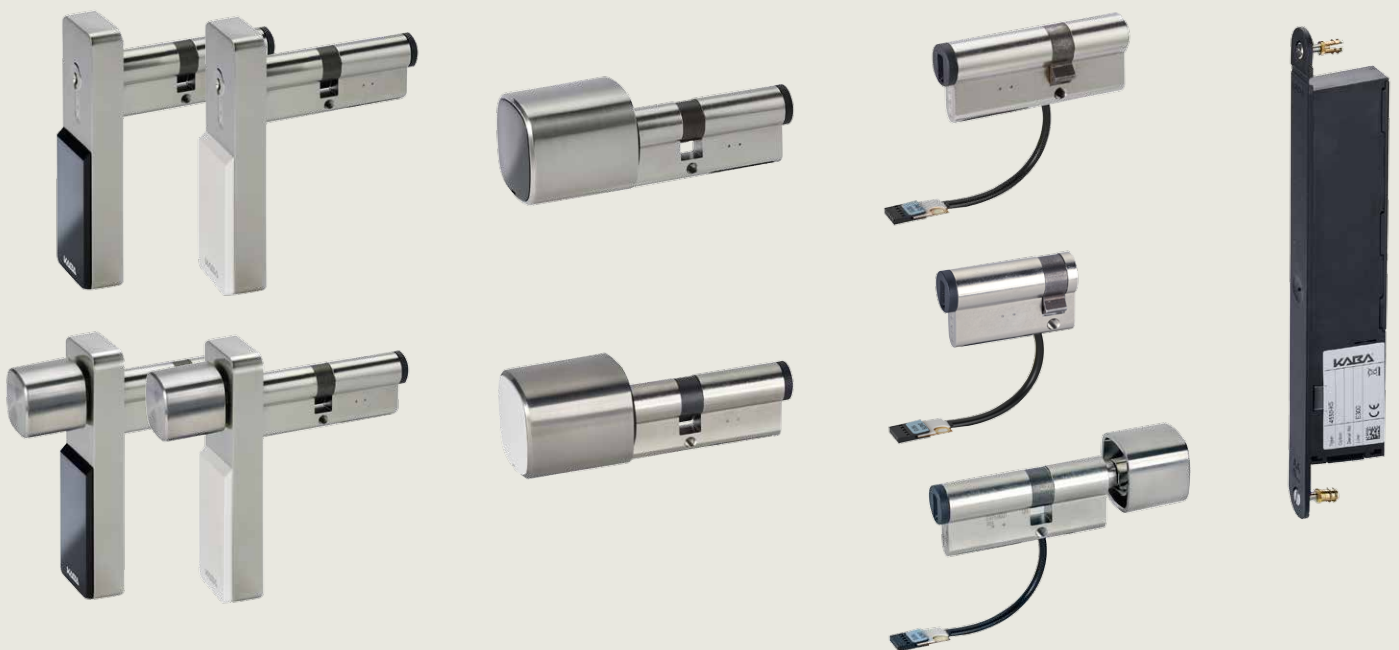
Important Kaba evolo features

- Unlimited number of media can be managed
- Event memory for up to 2000 door movements (can be deactivated)
- 15 configurable time profiles, each with 12 time windows
- 20 holiday periods and 64 special days
- Time-limited granting of user rights (validation)

A universal product range

Our portfolio includes other products in the same premium design which can be combined and integrated into our standalone or online systems - made to meet our customer's requirements.

Note: The range of available functions depends on the system context in which it is used.



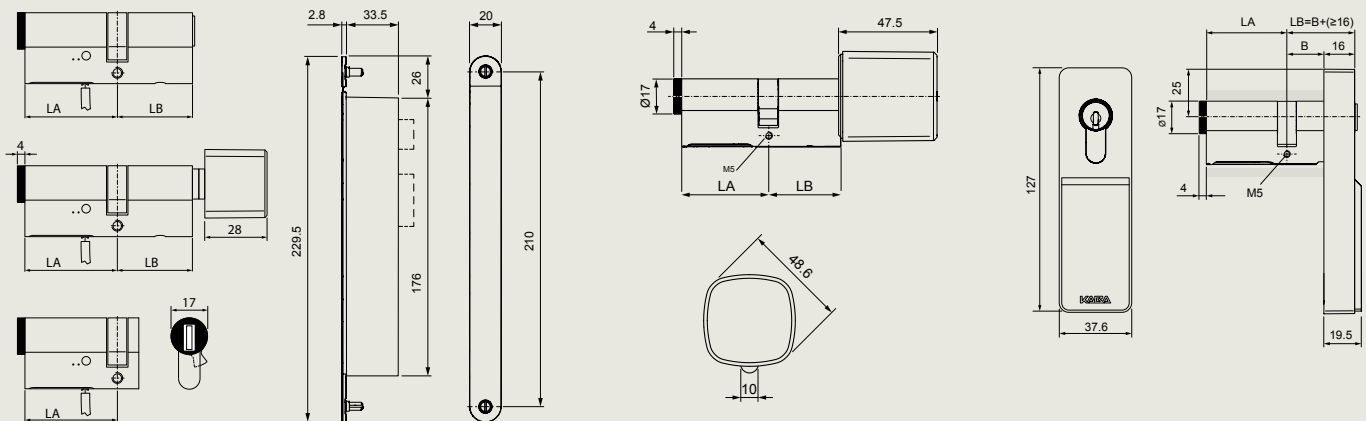
Mechatronic cylinder range, black & white, Europrofile

Surface fixed versions with mechanical locking by key or thumbturn knob inside, compact cylinder and forend cylinder with e-module (from left to right)

Specification overview

	Forend version	Compact version	Surface fixed version
Supported technologies	LEGIC (advant & prime) MIFARE (DESFire & Classic)	LEGIC (advant & prime) MIFARE (DESFire & Classic)	LEGIC (advant & prime) MIFARE (DESFire & Classic)
Versions	Europrofile, Swiss round profile, Scandinavian oval Types: double, single and thumbturn cylinders Surface finishes: nickel-plated, polished brass and various special colours Mechanical functions: freewheel function, priority	Europrofile, Swiss round profile Type: compact cylinder Surface finishes: nickel-plated, polished brass, dull chrome-plated	Europrofile, Swiss round profile Types: double and thumbturn cylinders Surface finishes: nickel-plated, polished brass, dull chrome-plated Mechanical functions: freewheel function, priority
Dimensions	Cylinder length from 42/30 mm Further lengths in 5 mm steps Max. cylinder length: 202 mm Thumbturn: $\varnothing 36 \times 29$ mm	Cylinder length from 42/30 mm Further lengths in 5 mm steps Max. cylinder length: 202 mm Thumbturn: $\varnothing 48.6 \times 47.5$ mm	Cylinder length from 42/30 mm Further lengths in 5 mm steps Max. cylinder length: 202 mm Surface fixed housing: $37.6 \times 127 \times 19.5$ mm (W x H x T) Thumbturn: $\varnothing 36 \times 29$ mm
Power supply	Battery: 2 x AA lithium or alkaline External: 12 to 24 V DC	Battery: 1 x CR2 lithium	Battery: 1 x CR2 lithium
Environment/ service life	Temperature: -25°C to $+70^{\circ}\text{C}$ Protection type: IP40 Lithium battery life at 20°C : up to 140,000 cycles or 3 years	Temperature: -25°C to $+70^{\circ}\text{C}$ Protection type: IP41 Lithium battery life at 20°C : up to 40,000 cycles or 2 years	Temperature: -25°C to $+70^{\circ}\text{C}$ Protection type: IP41 Lithium battery life at 20°C : up to 40,000 cycles or 2 years
Radio interface	IEEE 802.15.4	IEEE 802.15.4	IEEE 802.15.4
Certificates	EN 15684 (pending)	EN 15684 (pending) Fire safety: EN 1634-2: 30 min.	EN 15684 (pending) Fire safety: EN 1634-2: 95 min. (pending)

Further details and order information can be found in the relevant Kaba evolo catalogue or system description.



Forend cylinder: double, thumbturn and single version, e-module

Compact cylinder

Surface fixed version double cylinder design