

dormakaba mechatronic cylinder

Combining mechanics and electronics



Advantages at a glance

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 Flexibility of the access system
 Complete or partial transfer from mechanics to electronics is possible
- Combination of mechanics and electronics**
 The 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 function, the mechatronic cylinder is wirelessly connected to your access system



A versatile range

The mechatronic cylinders bridge the gap between electronic access control and the world of mechanics. They fit seamlessly into existing mechanical master key systems and can also be used on outside doors.

The mechatronic cylinder range is part of the dormakaba evolo product portfolio 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 dormakaba smart key: a high-grade, copy-protected and registered key with an integrated RFID chip, available in six clip colours.

You can upgrade existing keys from us with an electronic clip and use it for both mechanical and electronic access. Access rights on this smart 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 access rights to be controlled in terms of time and location. 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 wireless gateway. Programming is carried out directly from the PC and offers the ultimate convenience.

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

Insert the smart key into the mechatronic cylinder, and an acoustic signal indicates if access is granted or denied. Enter the desired room by turning the key and pressing the door handle as usual.

A solution for every requirement

The 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

The mechatronic cylinders are easy to program and suitable for single doors but also as part of a large-scale master key system. Choose from the following programming options:

- Authorisation directly at the door component:
 - with the programming key
 - with the system software and transfer of access rights via programming device
 - conveniently from your desk via the wireless function
- Authorisations on the access medium – programming of the door components on site is not necessary. Time-limited access rights are stored on the user key. Users can update their access rights at the terminal or reader. Optionally available with CardLink or AoC (Access on Card).

Important dormakaba 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 solution in which it is used.

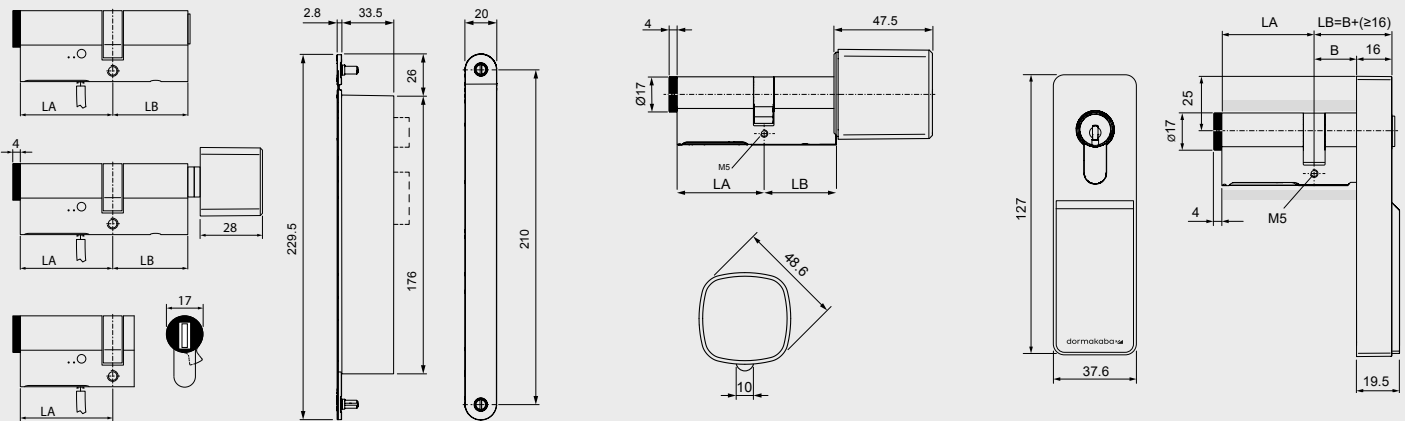


Mechatronic cylinder range, black & white, Europrofile

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
Transmission technologies	<ul style="list-style-type: none"> • LEGIC advant, ISO 14443A • MIFARE DESFire, ISO 14443A • OSS-SO Version 2021-06: LEGIC advant, MIFARE DESFire • Wireless technology: IEEE 802.15.4, 2.4 GHz 	<ul style="list-style-type: none"> • LEGIC advant, ISO 14443A • MIFARE DESFire, ISO 14443A • OSS-SO Version 2021-06: LEGIC advant, MIFARE DESFire • Wireless technology: IEEE 802.15.4, 2.4 GHz 	<ul style="list-style-type: none"> • LEGIC advant, ISO 14443A • MIFARE DESFire, ISO 14443A • OSS-SO Version 2021-06: LEGIC advant, MIFARE DESFire • Wireless technology: IEEE 802.15.4, 2.4 GHz
Versions	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Europrofile, Swiss round profile • Type: compact cylinder • Surface finishes: nickel-plated, brass matt, chrome-plated matt 	<ul style="list-style-type: none"> • Europrofile, Swiss round profile • Types: double and thumbturn cylinders • Surface finish: nickel-plated • Mechanical functions: freewheel function, priority
Dimensions	<ul style="list-style-type: none"> • Cylinder length from 42/30 mm, further lengths in 5 mm steps • Max. cylinder length: 202 mm • Thumbturn: Ø 36 x 29 mm • Thumbturn small: Ø 30 x 27 mm 	<ul style="list-style-type: none"> • Cylinder length from 42/30 mm, further lengths in 5 mm steps • Max. cylinder length: 202 mm • Thumbturn: Ø 48.6 x 47.5 mm 	<ul style="list-style-type: none"> • Cylinder length from 42/30 mm, further lengths in 5 mm steps • Max. cylinder length: 202 mm • Surface fixed housing: 37.6 x 127 x 19.5 mm (W x H x T) • Thumbturn: Ø 36 x 29 mm
Power supply	<ul style="list-style-type: none"> • Battery: 2 x AA lithium or alkaline • External: 12 to 24 V DC 	<ul style="list-style-type: none"> • Battery: 1 x CR2 lithium 	<ul style="list-style-type: none"> • Battery: 1 x CR2 lithium
Environment/ service life	<ul style="list-style-type: none"> • Temperature: -25 °C to +70 °C • Protection type: IP40 • Lithium battery life at 20°C: up to 140,000 cycles or 3 years 	<ul style="list-style-type: none"> • Temperature: -25 °C to +70 °C • Protection type: IP41 • Lithium battery life at 20°C: up to 40,000 cycles or 2 years 	<ul style="list-style-type: none"> • Temperature: -25 °C to +70 °C • Protection type: IP41 • Lithium battery life at 20°C: up to 40,000 cycles or 2 years
Certificates	<ul style="list-style-type: none"> • EN 15684: 1 6 B 1 F F 3 2/1* • Fire resistance: EN 1634-1: 30 Min. 	<ul style="list-style-type: none"> • EN 15684: 1 6 B 1 F F 3 2/1* • Fire resistance: EN 1634-1: 30 Min. 	<ul style="list-style-type: none"> • EN 15684: 1 6 B 1 F F 3 2/1* • Fire resistance: EN 1634-1: 70 Min.
	* Cylinder with pulling protection: Grade 2, without pulling protection: Grade 1		



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

Compact cylinder

Surface fixed version: double cylinder

Further details and order information can be found in the relevant dormakaba catalogue or system description. Subject to technical changes without prior notice. Version 08/2024. © dormakaba.

Any questions? We will be happy to assist you.