

ABLOY® SMARTDISC

A Revolution In Industrial Locking



The latest micro-electronics raises **ABLOY®** industrial locking products to a completely new level.

ABLOY® SMARTDISC - INTELLIGENT SECURITY

New **ABLOY® SMARTDISC** technology revolutionises industrial locking by combining proven mechanical locking solutions with low-power electronics. The mechanical lock guarantees physical security, whilst the micro-electronics provide flexibility and a unique electronic key code for every lock. **ABLOY® SMARTDISC** makes it possible to log information such as the date and time of opening as well as the names and holders of keys used. Event information can be collected from both keys and locks.

With **ABLOY® SMARTDISC**, it is easy to control passage rights, and should a key be lost, the system can be recoded easily. A key can be programmed to operate for a defined period of time, so keys can be issued to temporary workers or subcontractors without jeopardizing overall security.

ABLOY® SMARTDISC TECHNOLOGY

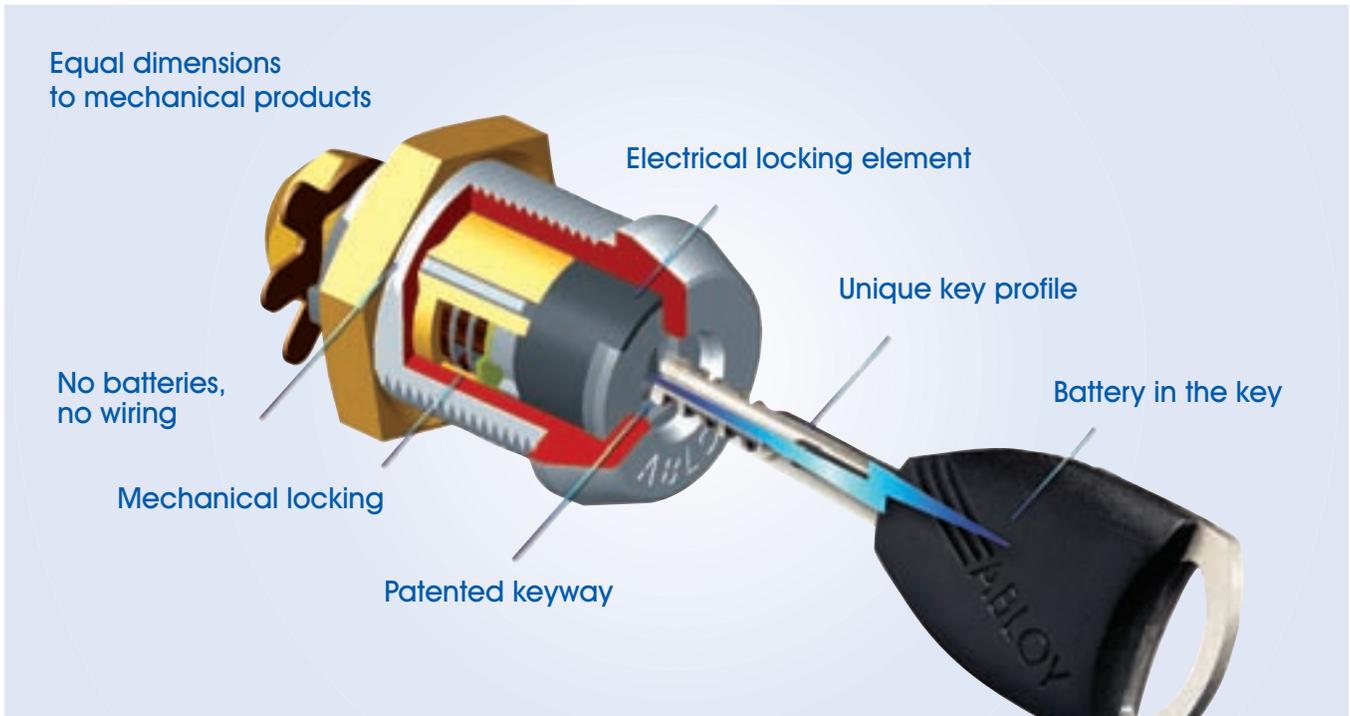
ABLOY® SMARTDISC micro-electronics makes it possible to incorporate the very latest technology in keys and cylinders. A total of several billion unique identification codes can be used.

INDUSTRIAL LOCKS AND **ABLOY® SMARTDISC**

The result of integrating new electronic technology with the existing mechanical **ABLOY®** industrial locks is **ABLOY® SMARTDISC**, a new, intelligent high-security industrial lock.



ADVANCED TECHNOLOGY



UNIQUE BENEFITS

Secure

Easy to update

- Lost keys can easily be deleted
- Easy to change passage rights and time-related rights

Classification

- Mechanical locking guarantees physical security
- Unique electronic key code

Cannot be copied

- DES secure software - 64 bit
- Altering code, bi-directional communication

Easy

Installation

- As for mechanical cylinders
- No drilling or machining
- No additional wires or power units

System planning

- Like a mechanical masterkeyed system
- No cables, no need to plan everything beforehand

Easy to use

- Just like a mechanical lock and key

Flexible

Easy to extend

- New keys or locks can easily be added to the locking system

Easy to change

- Passage rights and validity time
- Keys with temporary validity

Audit trails

- from both lock and key

Quick changes

- Information on keys
- Key status (active, stolen, lost)

Cost effective

Inexpensive

- Compared to other electronic solutions
- Based on mechanical locks or power units

Changes at reasonable cost

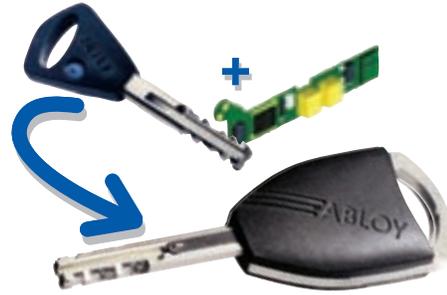
- Systems can be built up gradually
- No need to rekey the locks if a key is lost, since the key concerned can be deleted

Secure life cycle

- Targeted security levels can be maintained

ABLOY® SMARTDISC - UPDATED SECURITY

ABLOY® SMARTDISC can be used wherever you can use mechanical **ABLOY®** products - cam locks, padlocks and cabinet locks - just upgrade the mechanical locks to the new **ABLOY® SMARTDISC**. Typical applications are medicine cabinets, parking meters, vending machines, mail boxes and utility boxes.



MEDICINE CABINETS

Thefts of narcotic drugs are an increasing problem in healthcare organizations. The new **ABLOY® SMARTDISC** technology makes it easy to control access rights and monitor the opening of medicine cabinets.

- Audit trails:** A record of key use is easily available
- Temporary keys:** Keys can be validated for a specific time only
- Separate system:** **ABLOY® SMARTDISC** is a cost-effective way of building a separate system for medicine cabinets. As no cabinet modification is required, old mechanical locks can easily be replaced with new **ABLOY® SMARTDISC**

VENDING MACHINES

ABLOY® SMARTDISC makes it possible to monitor the refilling and servicing of vending machines.

- Route management:** Audit trail list makes route planning easy and flexible.
- Key management:** Key management and a programmable system keep the locking system secure - lost keys are no longer a risk.



SHOWCASES

Thefts of valuable items can be an internal problem in jewellery shops, museums etc. The security risk associated with giving temporary workers access to showcases can be avoided with the help of the time-related opening rights offered by **ABLOY® SMARTDISC**.

- Audit trails:** A record of the key use is easily available.
- Temporary keys:** Keys can be made valid for a specific time period.





MAIL BOXES

Mail must be collected punctually and it needs to be possible to validate collection times.

- 1 **Time-related rights:** Make it possible to monitor whether mail and money collection takes place at specific times.
- 1 **Route planning:** Rush hours and specific locations can be avoided when audit trails are used in the planning of collection routes.

PARKING METERS

ABLOY® SMARTDISC allows the monitoring of parking meter services and money collection, helping to minimize potential losses of revenue.

- 1 **Audit trail:** New **ABLOY® SMARTDISC** technology enables the following of where, when and by whom a particular key has been used.
- 1 **Route management:** Using audit trail information, routes can be planned in a way that makes money collection most efficient.
- 1 **Key validity:** Each key can be individually programmed to operate for a precise time period.



CONTAINERS

It is often vital to know who has had access to cargo during transportation. In some cases the authorities even require that transportation be closely monitored.

- 1 **Follow up:** **ABLOY® SMARTDISC** makes it easy to control the times when containers can be opened and locked.
- 1 **Key management:** Subcontractors can be issued with keys which have limited access rights.

UTILITY BOXES

With the help of **ABLOY® SMARTDISC** it is possible to prevent the unauthorized use of power or control equipment, which may result in significant economic loss or serious accident.

- 1 **Individual access rights:** A flexible system can be built by individually programming each user's key to suit their own specific needs.
- 1 **Flexible security:** Subcontractors can hold keys without jeopardizing the overall system. Key operation time and access at different locking points is easy to monitor.



ABLOY® SMARTDISC PRODUCT RANGE

CABINET LOCKS



Model	Dimensions (mm)	A	Door thickness (mm)	Type of bolt
OFH201E		25.5	0.5-25	flat
OFH202E		21	0.5-21	spring latch
Model	Dimensions	Type of bolt		
OFH400E		flat		
OFH403E		spring latch		

CAM LOCKS



Model	Dimensions	Material of cylinder housing	T-handle lock CLH291E
CLH100E		brass	<p>Material and finish:</p> <ul style="list-style-type: none"> • Cylinder housing: chrome-plated steel • Cylinder face: case-hardened chrome-plated steel • Latch: nickel-plated steel
CLH104E		brass	
CLH105E		steel	
CLH200E		brass	
CLH201E		steel	
CLH203E		brass	
Cam turns: 90° or 180° in all models. Key removable in locked position only			

MICRO SWITCH LOCKS



Model	EPH400E	EPH401E
Key removable	On and off positions	Off position
Dimensions (mm)		
Circuit diagram		
Microswitch:	Honeywell 1SX1-H58 for contacting with AMP 0.058 inch (1.47 mm) reseatables	
Oper. range:	-54° to +120°C	

PADLOCKS



Model	PLH330E	PLH340E	PLH350E
Dimensions (mm)			
Shackle diameter (mm)	8	10	14
Body material	Brass	Case-hardened steel	Case-hardened steel
Shackle material	Case-hardened boron steel		
Shackle heights (mm)	25 or 50		

ABLOY® SMARTDISC KEYS

There are three different kinds of key for **ABLOY® SMARTDISC**: a user key with timer, a programming key and a programming master key.



The User key with timer can operate up to 1000 codes. Every key has a clock function.



Each system has its own Programming key and password. The Programming key is not a User key, it is only for the programming of locks and transmitting information.



The Programming masterkey is only used to create the programming keys.

ABLOY® SMARTDISC SOFTWARE

ABLOY® SMARTDISC software is used for the programming of individual keys and locks by the system administrator.

Key management is one of the most important aspects of a complete security system. Since it allows the definition of individual access rights for different users, **ABLOY® SMARTDISC** software allows you to maintain the highest possible levels of security within a system.

ABLOY® SMARTDISC software is also a useful tool for route planning and monitoring locking systems as it allows the uploading of audit trails from both locks and keys. Each audit trail displays all the information collected: dates and times of opening as well as the name of the locks and keys used.

Locking systems and the **ABLOY® SMARTDISC** software are protected by individual PIN codes.



Keys and locks can be individually programmed.



The programming device transmits information between locks, keys and software.



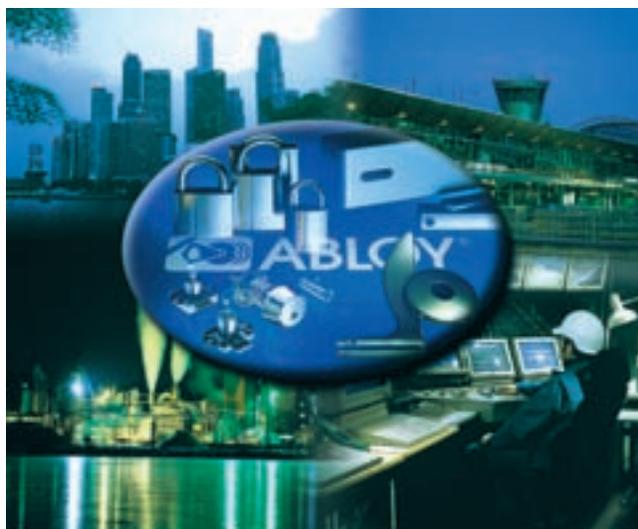
ABLOY® SMARTDISC software is flexible and easy to use.

ABLOY® – the sign for security



The quality and environmental systems used by Abloy Oy guarantee that customers can be certain of **ABLOY®** quality in every field. We received our first Quality System Certificate - SFS-EN ISO 9001 - in 1989. Just eight years later, Abloy Oy was one of the first companies in Finland to be granted an SFS-EN-ISO 14001 Environmental System Certificate.

Our products are designed and manufactured not only to provide high levels of security, but also to be reliable, user-friendly and aesthetically pleasing. **ABLOY®** is your sign for security.



ABLOY® is a registered trademark of Abloy Oy, one of the leading manufacturers of locks, locking systems and architectural hardware and the world's leading developer of products in the field of electromechanical lock technology.

The unique **ABLOY®** detainer disc cylinder mechanism has several advantages over conventional locking mechanisms. Ever since its invention in 1907, it has been a symbol of high security and superior performance.

Our range consists of electromechanical locks, cam locks, padlocks, office furniture locks, rim locks, lock cases, cylinders for different types of mortice locks, door closers, door automatics and architectural hardware. **ABLOY®** locking solutions for every application are available from our world-wide network of distributors.

Customer-oriented development, combined with our long experience and extensive security expertise, mean that **ABLOY®** security solutions employ the very latest technology to meet your needs.



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