



ISEO, SECURING YOUR WORLD

Cylinders, keys and
access control systems



ISEO[®] 50 that's
amore.



EVERY 2 MINUTES A HOUSE IS BURGLIED

According to the Italian statistical institute Istat, approximately 250,000 home burglaries were reported to the authorities in Italy in 2015.

The greatest number of burglaries over the last decade was registered in 2014, with a 60% increase over the two year period from 2008 to 2009.

The biggest increase has been seen in major cities, where on average a home is burgled once every two minutes. This equates to an average of a burglary every two minutes nationally, and 25 burglaries per day in every major city.

To understand what the most effective protecting solutions are, we need to focus on the three main techniques used in residential burglaries. Some techniques leave evident damage as violent attacks is needed on the lock **DRILLING**. Others are however more imperceptible and noiseless, and most of the time, leaving no marks on the lock. Therefore proving burglary to insurance companies become more difficult. In this second type of attack, bumping and picking are the most common practices.

BUMPING: a special modified key (bumping key) is inserted into the plug profile. The skilled burglar applies blows on the key head to release the locking mechanism.

PICKING: a chisel is inserted into the plug profile. The repeated picking action, managed by expert hands, can release the lock mechanism.

In all mentioned cases if you equip your door with a good closing system, providing security cylinder and key, you can limit risks of inconvenience.

ISEO PROTECTS **YOUR** WORLD.



HOW TO CHOOSE THE **RIGHT** CYLINDER

Security of your home and personal belongings depends from a cylinder assuring good resistance against brutal attacks:



RESISTANCE AGAINST DRILLING



RESISTANCE AGAINST PULLING



RESISTANCE AGAINST MANIPULATION

In addition, to increase door protection against forced entries, it is worthwhile to install a good protective rose, which represent a real barrier between lock and the outside.

Security of your home means having a protected key which avoid undesired duplicates.

ISEO helps in avoiding risks of unwelcomed cloning in **two ways**:



ONE UNIQUE KEY, HAVING PERSONALIZED PROTECTED PROFILE AND TECHNICAL PATENTED SOLUTION



THE CORRESPONDING PROPERTY CARD, WHICH HAS TO BE PRESENTED AT SPECIALIZED DEALERS' WHEN ASKING FOR A DUPLICATE. PROPERTY CARD AIMS TO IDENTIFY KEY OWNER.

DOMESTIC BURGLARY IN EU

Percentage difference over values for 2012

2012	2013	2014	2015	2016
237.355	251.422	255.886	234.726	214.053

+6%

+8%

-1%

-10%

While figures reveal in improvement in recent years, the total number of burglaries is still very high, with a total of almost two million cases over the past decade.

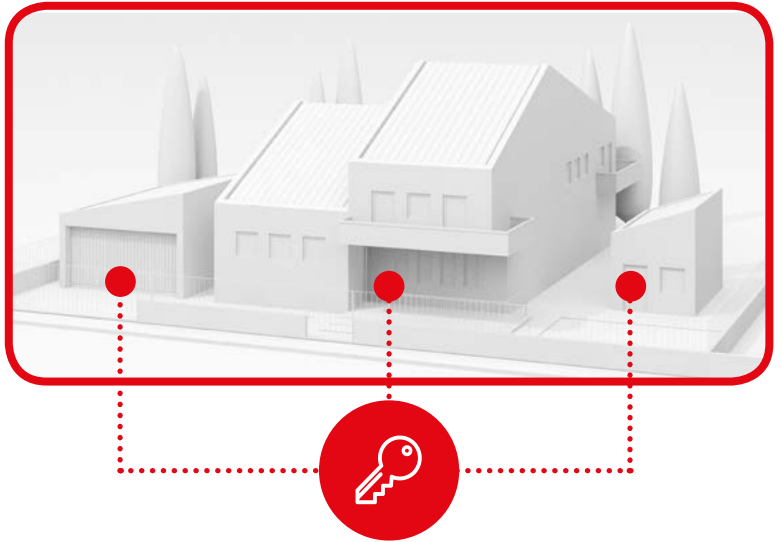
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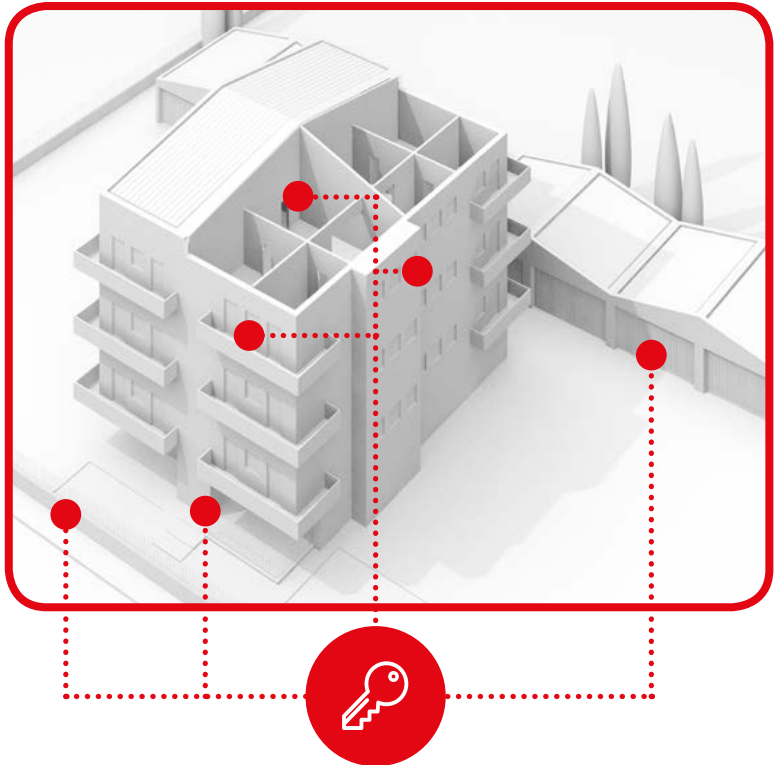
DO YOU LIVE IN A SINGLE HOUSE?

Using one unique key, you can open all accesses of your house, having on each door the right cylinder according to specific security needs. For instance, entrance door require maximum security and can be equipped with R90 cylinder, having highest security performances against brutal attack. Instead, for your boiler room, cellar or gate you may use R9 cylinder having medium security level.



DO YOU LIVE IN A MULTI APARTMENT HOUSE?

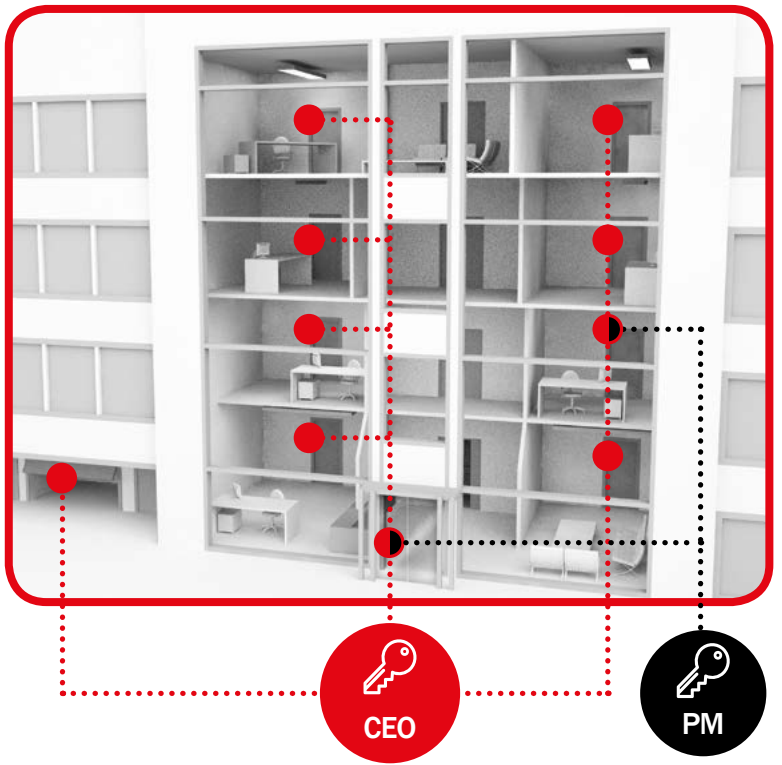
Using the same key, you can open the common entrances like main front door and gate, and your private doors, like apartment entrance door, garage and cellar. Each homeowner cannot open other exclusive doors. Cylinders installed in private entrance doors and main front door may be of different security levels, based on the single needs of the specific room. For private entry door, we suggest to install high security cylinder like ISEO R50 or R90.



DO YOU NEED TO PROTECT A COMMERCIAL PREMISE OR PUBLIC BUILDING?

When managing public buildings (businesses, hospitals, schools, administrative offices, etc.), other factors gain primary importance such as access to emergency openings, protection against unauthorized copying of keys, permissions management. At the same time, many people must be enabled to share access without sacrificing security. Flexibility of ISEO products perfectly meets these requirements as hierarchical levels of access can be easily managed. For example, in a company the Production Manager will have access to all the doors of his department and the warehouse but will not have access to the offices of the Commercial Department, Financial Office and to the Chief Executive Office.

A cylinder with maximum security needs to be installed in specific accesses to protect goods or confidential information, while for the common doors even a medium security cylinder may be used.



ISEO CYLINDERS, THE **HEART** OF YOUR SECURITY

ISEO cylinders are the heart of the security of your doors and offer you a wide range of features to protect you home and belongings.

From the basic cylinders to the top range for high security requirement, ISEO ensures resistance to external attacks, reliability and durability.

To give you immediate awareness of the level of protection, ISEO classifies cylinders according to 4 criteria. For each criteria, ISEO has defined a specific score (up to 5) and highlighted proper technical solutions fulfilling the criteria requirements.



ATTACK RESISTANCE

Resistance against external violent attacks and manipulation techniques.



KEY SECURITY

Measures key differs possibilities and security of the key.



MULTI LEVEL

Customization of one unique master key system with cylinder having different levels of security.



INTEGRATION WITH ELECTRONICS

Possibility of merging mechanical solutions together with electronic solution to assure maximum flexibility level together with high security performances.

F9000

MECHATRONIC CYLINDER

SECURED FLEXIBILITY



WITH THE **F9000 MECHATRONIC CYLINDER**, THE CSF SYSTEM ATTAINS UNPRECEDENTED LEVELS OF SECURITY.

A UNIQUE **PERSONALITY**.

- Electronic technology offers the flexible management of keys, access rights and events, whereas the mechanical technology used is compatible with the mechanical cylinders of the CSF, allowing for mixed installations with varying levels of security.
- The key is unique and cannot be duplicated. **F9000** keys feature a highly shock and water resistant casing containing the electronics of the system, and a nickel silver metal shank suitable for cylinders with protection device.
- The security of the building also depends on data security; ISEO uses tried and tested encryption and network security technology.
- The patented contactless data transfer system ensures greater protection against dust, corrosion and electrostatic discharges.

ENDLESS POSSIBILITIES OF **EXTENSION**.

- The electronic architecture allows for simple future expansion. Access can be managed via time slots or programmed times.
- All access events are traceable, even in case of unauthorised access. Whenever a key is inserted in an **F9000** cylinder, the system logs the date, time and name of the access door are logged.

AN UNEXPECTED **SIMPLICITY**.

- Installed just like any mechanical cylinder, and with the same simple maintenance. The **F9000** key offers a similar user experience as a mechanical key, as the electronic functions do not interfere with the mechanical action of opening the lock.
- The modular solution offers total flexibility for installing cylinders.
- The key has its own internal power source and requires no wiring. The cylinder is powered by the battery of the mechatronic key, ensuring superior protection against dust contamination and water spray (IP66).



**THE F9000 MECHATRONIC CYLINDER AND KEY ARE
MANAGED BY THE FLEX SYSTEM AND ISEO V364
ACCESS MANAGEMENT SYSTEM.**

- Flex is an advanced offline access management software system for residential buildings and light commercial applications such as bed & breakfasts, shops, small offices, business and professional studios. FLEX is installed quickly on any PC, and features a user interface for quickly and intuitively managing keys and mechatronic cylinders of the F9000 family.
- With **V364** system access rights can be programmed easily and then transferred to **F9000** keys using a smartphone (F9000 ON key) or online readers (Validators).

CERTIFICATIONS

ATEX EX II 2 G EX IB IIB T4
DIN EN 1303:2015

DIN EN 15684:2013-01
VDS BZ+

R50 Extra

ATTACK RESISTANCE

- Grade D
- Drilling resistance: anti drilling devices in body and plugs
- Bumping resistance: certified bump resistant pins and counter pins

KEY RELATED SECURITY

- Grade 6: min. 100.000 differs
- Patent protected key against illegal duplication
- Property Card
- Nickel silver key with long neck
- Ergonomic key head in plastic material or metal

MULTILEVEL MKS

- 11 pins biting system to manage master key suites



CERTIFICATIONS

DIN EN 1303:2015 A2P* BSI* SKG*** MPA TESTED



R11 Progress

ATTACK RESISTANCE

- Grade D
- Drill resistant, with a special drilling protection device consisting of two pins in the plug and one dowel in the cylinder body.
- Bumping resistance: with pins and counter-pins offering certified resistance to manipulation.
- Tear-resistant, with special tear-resistant device incorporated in cylinder body.

KEY RELATED SECURITY

- Grade 6: min. 100.000 differs
- Patent protected key against illegal duplication
- Property Card
- Nickel silver key with long neck
- **Ergonomic key head in dark red plastic**
- **Blanks available from authorised ISEO centres only**
- **Configurable with 5 keys or with 5 master keys + 1 construction key**



CERTIFICATIONS

EN 1303:2015 BSI* SKG**



R7 Extra

ATTACK RESISTANCE

- Grade D
- Drilling resistance: anti drilling devices in body and plug
- Bumping resistance: certified bump resistant pins and counter pins

KEY RELATED SECURITY

- Grade 6: min 100.000 differs
- Code Card to get a high quality duplicate
- Metal key head with possibility to add a plastic cap, included in packaging

MULTILEVEL MKS

- 11 pins biting system to manage master key suites



CERTIFICATIONS

DIN EN 1303:2015 BSI* SKG*** MPA TESTED

IMP CERTIFICATE CLASS C



R6 Plus

SPECIFIC KEY ARRANGEMENT FOR HOUSES "UNDER CONSTRUCTION"

ATTACK RESISTANCE

- Grade 0
- Standard security level:
6 pins key biting system in stainless steel
- Picking resistance thanks to brass mushroom shaped counter pins
- Drilling resistance thanks to additional inserts positioned on both sides of the cylinder body

KEY RELATED SECURITY

- Grade 5: min. 30.000 differs
- Reversible brass nickel coated key
- Code numbering on key neck
- Metal key head with possibility to add a plastic cap, included in packaging
- 5 owners' keys and one construction key
- Code Card to get a high quality duplicate



CERTIFICATIONS

DIN EN 1303:2015 MPA TESTED

R6 SPI PATENTED



Patented
until 2036

ISEO Ultimate Access Technologies introduces the innovative R6 SPI locking system, which is designed to manage accesses with simplicity and safety.

CYLINDER

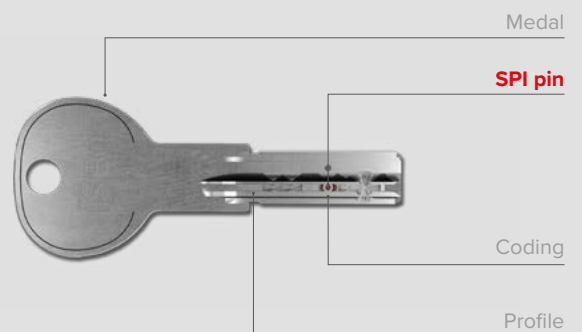
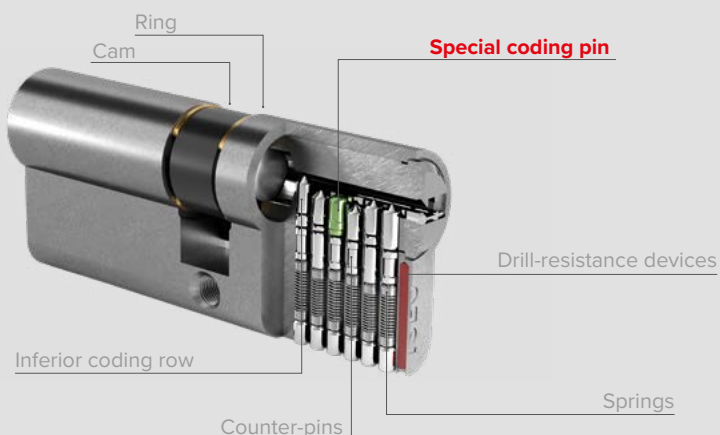
Features

Inside the R6 SPI cylinder it is present a special coding PIN which interacts with the coding SPI pin of the key: after insertion, the key pin is able to lower the insertions of the cylinder and unlocks it.

KEY

Features

The SPI pin, works to prevent unauthorized duplication of the key: this pin is installed on both sides of the key-lance, protected against accidental blows.



F3



Features F3

- 1 Body made of brass
- 2 Barrel made of brass
- 3 Pins made of brass
- 4 Anti-allowance pins made of brass
- 5 Cam made of sinterized steel
- 6 Key made of brass and nickel plating carried out after key cutting

