



# MCS

The innovative system for unique security

**MCS** | unique technology for complex requirements



*Magn*

The MCS security technology was developed in close cooperation with technical universities and uses magnetic force. EVVA is the only manufacturer, that produces this type of high-security magnetic locking systems.

The magnetic technology of the MCS key guarantees the highest level of key copying protection. Complex master key systems can be realised with a practically limitless range of variations. Despite the versatile technology the system is highly wear resistant. The permanent magnets also have a long durability under extreme conditions.

**MCS benefits at a glance**

- › for locking systems with a complex structure
- › with unique magnetic technology
- › always delivered in modular version (SYMO)

# *Magnetic Code System*

» *Magnetic technology unique all over the world for the highest security level and demanding requirements* ◀

## **MCS** | unparalleled security

MCS is ideal for locking systems with high demands on versatility and security. In particular in buildings where highly sensitive, irreplaceable values and the public interest have to be protected. This includes large hospitals, government buildings, airports, research institutions, infrastructure, national banks and embassies.

EVVA plans extensive expansion capabilities without reducing the security offered by the system.

### **Projects implemented with MCS**

In cooperation with qualified EVVA partners, EVVA has been fitting security technology in a wide variety of buildings throughout Europe for decades. Benefit from this experience:

### **General Hospital (AKH) | Vienna**

The Vienna General Hospital is the university clinic for the city of Vienna. As one of the largest hospitals in Europe, AKH Vienna relies on the MCS system from EVVA. A total of 63,977 MCS cylinders were installed.

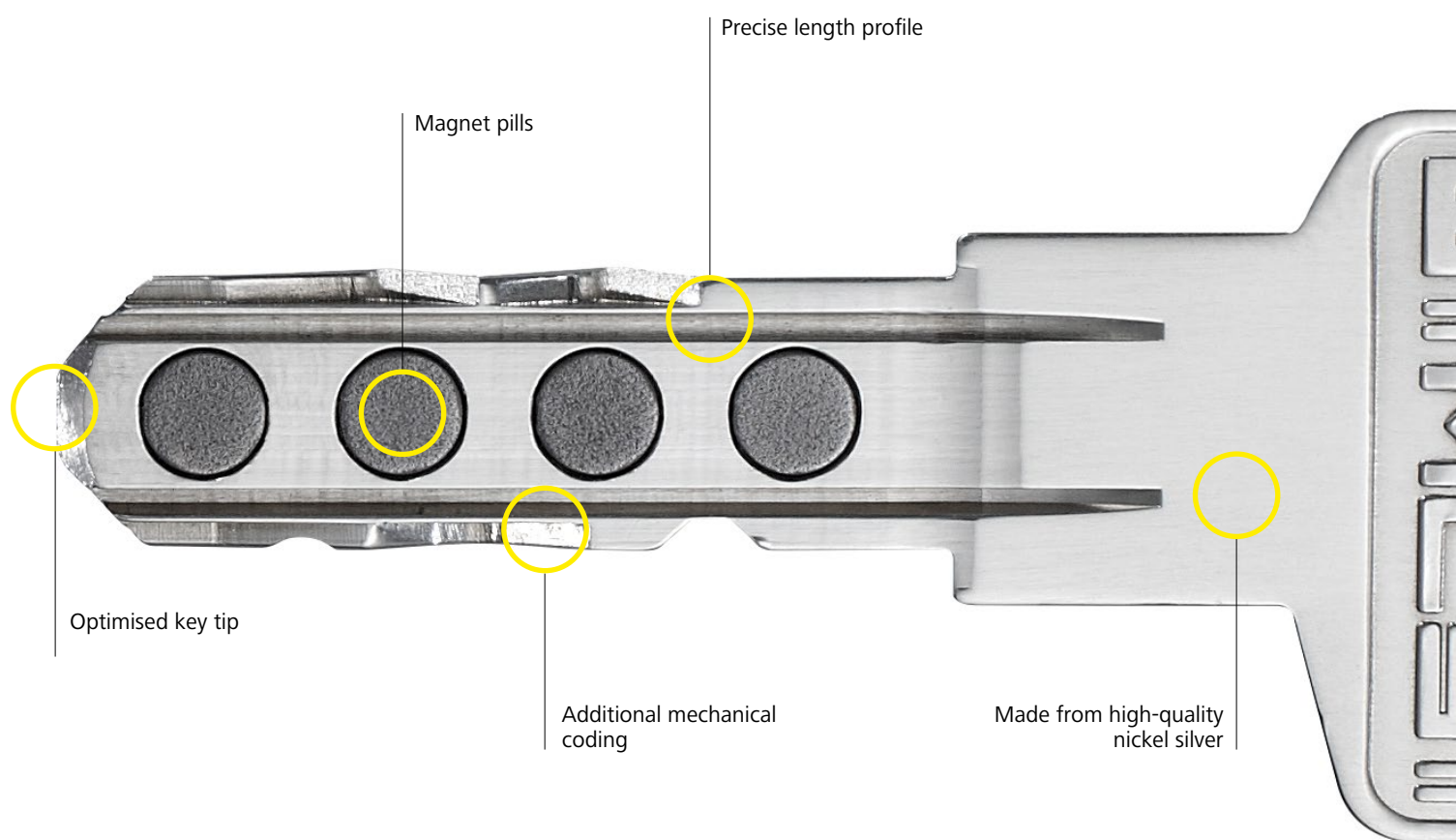
### **Airport | Vienna**

73 airlines, 174 destinations worldwide – Vienna airport is one of Europe's hubs. Particularly for flights to Eastern Europe and the Near East. The highly sensitive infrastructure is protected by a total of 14,620 MCS cylinders.

More references are available at [www.evva.com](http://www.evva.com)



# MCS key | magnetic technology in elegant design



## One key | many features

The MCS key combines two technologies for triple security: One magnetic and two mechanical codings.

The eight-stage magnetic key scanning takes place via the four magnet pills permanently magnetised in different magnetic alignments on either sides. The mechanical coding also achieves unparalleled security with the precise length profile and the additional mechanical coding. Outstanding wear resistance is guaranteed by the magnetic fields, which bring the magnet rotors into locking position without contact or friction.

Added bonus: Each MCS key is unique thanks to the wide range of variations. The permanent magnets made from samarium cobalt-5 guarantee high wear resistance. They cannot be re-magnetised by any conventional means.

The original MCS key is produced exclusively by EVVA and is only available from EVVA partners.

Optimal grip and ergonomics



#### The ergonomic design key bow

MCS keys are optionally available with the new, ergonomic and high-quality design key bow. The attractive design is available in black, red and blue.

#### Benefits

- › Easier to distinguish the keys
- › Simple management of locking systems thanks to colour allocation
- › High quality for improved haptics



## EVVA | Unique security

EVVA is constantly investing in research and is always working to develop new key technologies. This means that EVVA is always able to meet the increasing requirements for security and organisation.

The unique technology of the MCS system offers four different levels of protection against key copying, illegal copy keys and key manipulations:

#### Increased security with the EVVA security card

Duplicate keys, duplicate cylinders and locking plans are only available at an authorised EVVA partner and only with relevant proof of legitimacy, i.e. the EVVA security card.

#### Legal protection through patent protection

Commercial manufacturing of EVVA keys takes place exclusively at EVVA. All EVVA products are only available from authorised EVVA partners.

EVVA prevents MCS keys from being produced without authorisation by adding patented features on the key. EVVA can take legal action if it is discovered that a key copy has been commercially produced without authorisation.

#### Optimal technical protection

The technical features, such as the permanent magnetisation of the MCS key, require extensive specialist knowledge and specialist machinery for production. Illegal manufacture is, therefore, virtually impossible.

#### Technological protection

Thanks to the combination of two technologies (magnetic and mechanical), the MCS cannot be copied using production machines available on the market.

# MCS cylinders | magnetic technology with mechanical function



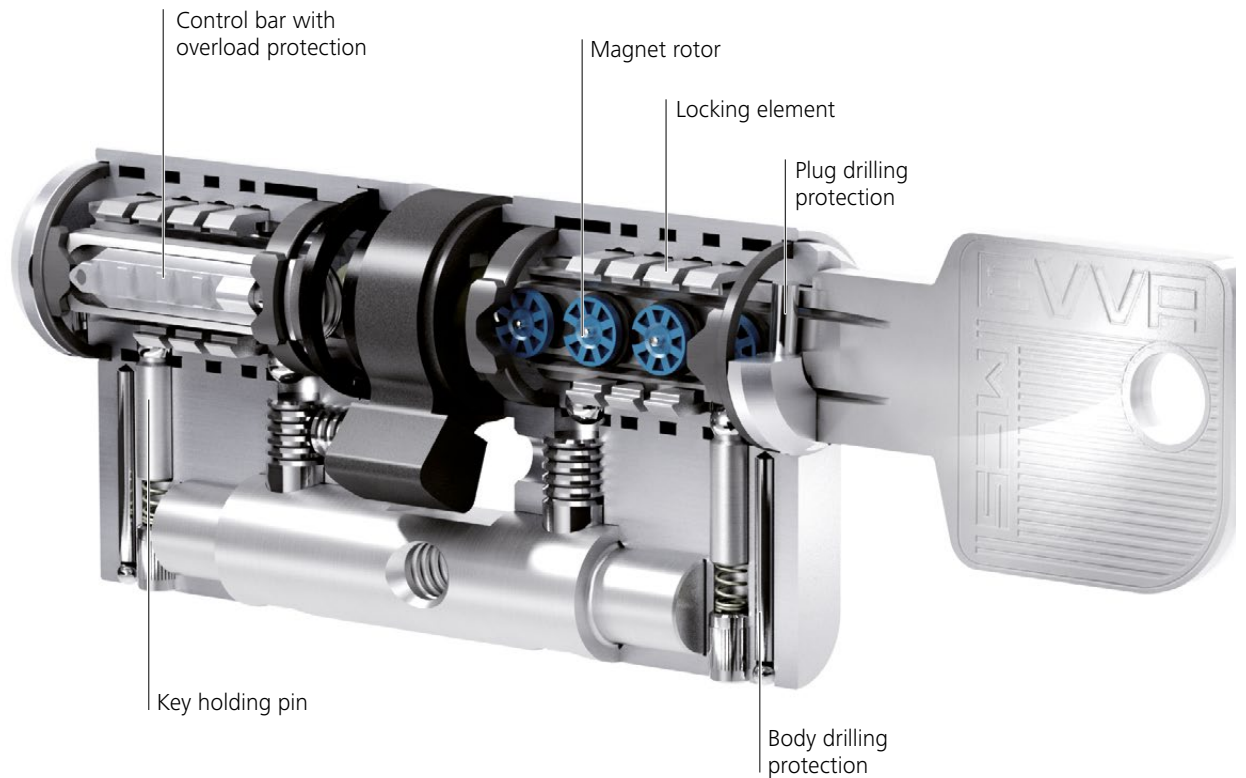
Modular version (SYMO)

## One cylinder | many details

The MCS cylinder contains eight freely rotating magnet rotors to the left and right of the key channel, which the four magnet pills of the MCS key are assigned to. The magnet rotors are brought into a locking position using the locking-authorized key. The mechanic bars above these assign the locking authorisation. The special feature of the MCS System: Each magnetic field interacts with the other fields, guaranteeing optimal security. The additional mechanical coding of the MCS key also brings the springless locking elements into position.

The MCS cylinder is produced in modular version (SYMO) and can therefore be adapted to the relevant door situation directly on-site. The MCS cylinder can also be customized with specific functions on-site (e.g. external key override).

This saves time and money!




## In any situation | more protection

The innovative technology of the MCS cylinder offers lasting protection against illegal opening methods:

### Picking and scanning protection

The freely rotating magnetic motors of the MCS cylinder are separate from the key channel and can therefore not be scanned or manipulated. This means that the magnetic coding in the MCS cylinder cannot be scanned.

### Drilling protection

The hard metal elements in the MCS cylinder plug offer effective protection against drilling.

### Plug pulling protection

The hard metal elements and the modular version (SYMO) offer effective protection against pulling and ripping attempts.



### MCS cylinder options

Different options and requirements are often called for within a locking system.

The MCS options make it possible: External key override cylinder functions; SOS function; dust protection; cogwheel cam and much more.

The international MCS certifications and country-specific models mean that the products can be used throughout Europe:

