

## Strong and reliable, safety with a lot of comfort

With ICS you boost the convenience of your system, can rely on planning and investment security as well as the durability and long service life of the system. ICS is a stable reversible key system that is so powerful that sufficient locking system reserves can be taken into account during the planning stage. ICS is ideal for locking systems with complex structures, e.g. in office buildings, schools or student residences.

ICS offers different locking technologies for high protection: the proven curve system, the durable length profile and the distinctive track system with internal recesses.

The ICS key has increased copy protection and can hardly be copied even with modern 3-D printing processes.

## Basic length

- from 31/31 mm
- measured from the middle of cam
- extension 5 mm per side
- The knob is always located on the inside of the cylinder.

## Technical characteristics

- modular design (SYMO)
- the scanning takes place in five tracks through 13 spring-loaded locking elements and the durable length profile
- 2 lateral pin rows with 10 undivided locking pins scan the curves on the key sides
- 1 central row of pins with 3 track pins checks the internal, concealed recesses on the narrow sides of the key
- combination of divided and undivided locking elements
- querying the locking authorisation on the key in four levels
- locking authorisation check at up to 15 key positions and one reversible key profile
- drilling protection: hardened HSS steel pins in the cylinder core, hardened steel ball and 1st locking element made of hardened steel
- pulling protection through chrome-nickel connecting axle
- breakaway protection
- picking and scanning protection through specially shaped locking pins
- impact key protection
- cam movement 360 degrees, cam trigger position 30 degrees (right from the knob side)
- width of cam: 9,3 mm
- certified according to DIN EN 1303:2015 160B0C6D (locking security class 6, attack resistance class 2)
- patent protection until 2029

## Execution

- reversible key system with vertical key insertion
- cylinder body: brass matt nickel plated, cylinder core: base material brass
- lockable from the outside with key, inside with knob
- combination with electronic locking system possible

## Options / Special equipment

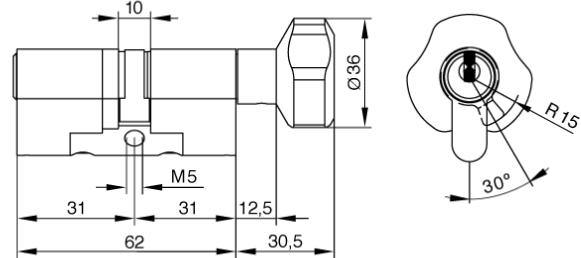
- different cylinder finishes \*
- different knob designs, standard form AK (optional: KK, GK or X1K)
- weather protection \*
- seawater version \*
- wear-resistant nickel silver core

## Operational area

- for tubular frame door or full leaf door, security doors
- for mortise locks directed for profile cylinders
- office building, hotels & service stations, residences
- schools, libraries, associations, student residences and nursing homes

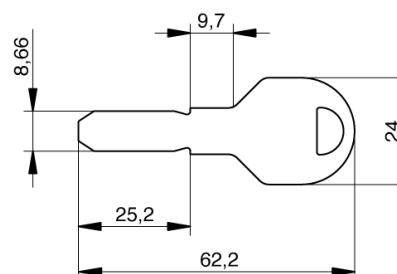
## Scope of delivery

- knob cylinder incl. 3 or more keys
- mounting screw M5 x 70
- security card



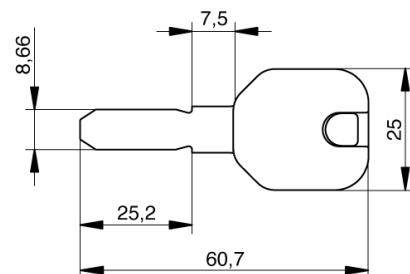
## Key

- key thickness: 3 mm
- reversible key made of special resistant nickel silver alloy
- patented concealed curve guidance and optimized curve on the key
- easy key insertion through specially developed key chamfers
- three equally long incisions on the back of the key do not allow any conclusions to be drawn about the depth of the incisions, thus making illegal production of the key almost impossible, even with the most modern 3D printing processes
- high security against decryption
- very resistant, low wear
- high comfort through functional, rounded shape
- optional: ergonomic design key \*, key with coloured dot \*, key with extended key neck \*



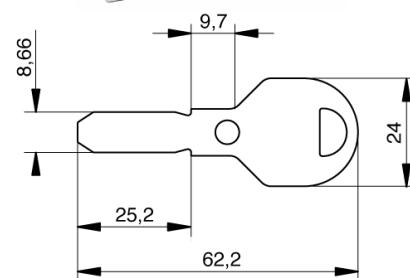
### Key with design cap

- colours: black, blue and red, yellow, green and white
- material thickness design cap: 7,2 mm
- plastic caps for special design requirements for the keys
- ergonomic design and high quality for better haptics
- easy optical differentiation
- simple management of locking systems through colour assignment
- consecutive numbering of the key (key with the same locking authorisation receives a consecutive number)
- use exclusively for EVVA keys
- **factory assembly, subsequent opening and retrofitting is not possible**



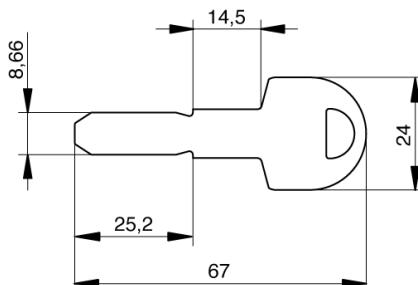
### Key with coloured dot

- colours: red, blue, green, yellow, brown, black, violet, pink
- with countersunk colour dot on the key neck
- for optical differentiation
- colour dot may differ from the image on the website



### Key with extended key neck

- specially shaped key
- for use with armoured fittings



## Technical details

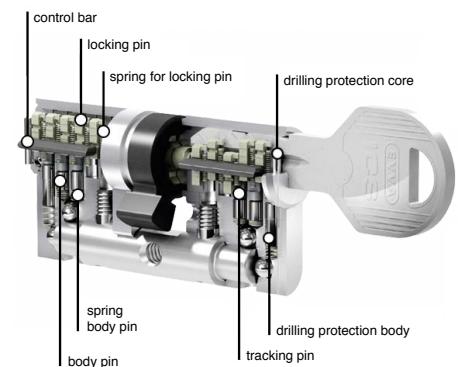
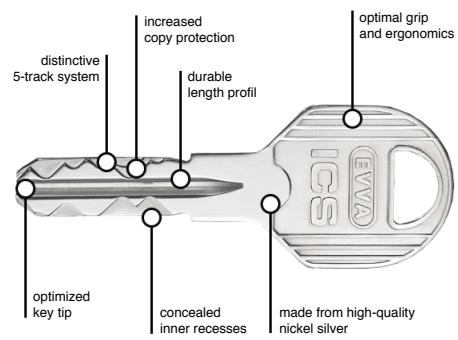
The reversible key system ICS (Inside Code System) offers high protection thanks to the unique combination of three different locking technologies:

- the specially shaped, resistant length profile
- the tried-and-tested curve system that scans the locking authorisation
- The improved pin system: this consists of concealed, internal recesses on the ICS key body - this is unique worldwide! This makes unauthorised key copies almost impossible.
- security card

The scanning takes place in five tracks through 13 spring-loaded locking elements and the durable length profile, thus ensuring a high level of safety.

## Modular design (SYMO)

The ICS cylinders are manufactured in modular design (SYMO) and are therefore more than flexible. With the modular system, the cylinder length can be subsequently adjusted by a specialist or a specific function (e.g. lockable on both sides) can be assigned to the cylinder. This allows you to benefit from flexible solutions and reduce your time and cost expenditure. The cylinder lengths can be changed in 5 mm increments.



## Locking cylinder security

The innovative technologies of the ICS cylinder offer sustainable protection against illegal opening methods:

- **Picking and scanning protection**

Divided and undivided query elements prevent the query positions from being detected. Opening the ICS cylinder with locking tools becomes practically impossible. The fictitious opening positions of the lateral system rows virtually exclude scanning of the ICS cylinder.

- **Drilling protection**

The chrome vanadium elements in the ICS cylinder protect it from destructive opening techniques. Additional security elements offer high resistance to attack.

- **Pulling protection**

The chrome vanadium pins in the cylinder core, together with the steel bar in the Euro profile, provide standard, standard-compliant pulling protection.

- **Impact key protection**

With this complicated opening method, burglar professionals use a so-called impact key to try to bring the query positions in the cylinder into the correct position.

\* this selection extends the delivery time