

KESO 4000

The patented security system KESO 4000S Omega



A brand on the road to success

Sustainable synergies: KESO and ASSA ABLOY

Security is a powerful word. It not only encompasses an endless range of technologies but also emotional aspects that we deal with every single day. Quality, a professional partnership and perfect solutions are always required.

The KESO brand and the Swedish ASSA ABLOY group stand by their promise and aim to constantly fulfil and exceed the high requirements established by their customers and partners.

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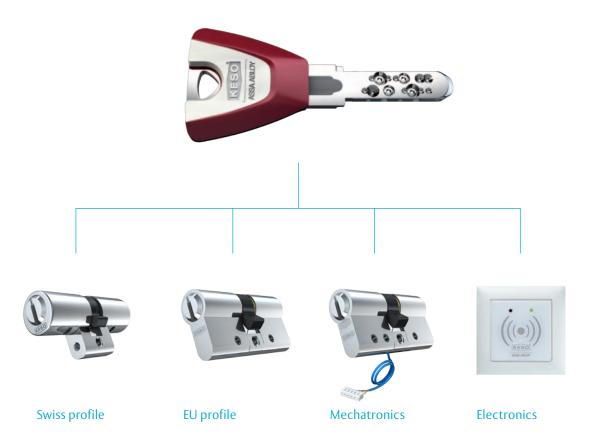


The new dimension

Swiss quality for the long term

Thanks to ongoing developments, a holistic product philosophy and the expert knowledge of our development department, we can continue to guarantee the compatibility and modularity of all systems in the future.

International partnerships and ASSA ABLOY guarantee technological transfer in all areas. KESO relies on legendary Swiss quality and ensures long-term sustainability.



KESO 4000 for diverse planning processes

- Increased line shift for enhanced permutation capabilities
- Excellent line shiftment for greater combinatorics
- Wide range of permutations thanks to more drilling picture variations
- Profiled shoulder
- Modular technology in the EU profile

- Complete range incl. mechatronics
- Closed key channel
- Drilling, tear-off and pull protection
- Colour cap keys also available in the long and extra-long versions in 19 models
- KESO 4000S Omega with interactive locking pin
- Patent valid until 2023

The KESO principle ensures sustainability

Small components, great efficiency

Today, KESO is the brand that combines highquality mechanical locking systems with state-ofthe-art, high-tech electronics. These benefits are evident not only in relation to private home doors but also right through to complex systems in large companies. The precise determination of requirements and the careful alignment of all systems are key to the secure use on an everyday basis. This is where the expertise of KESO specialists comes into its own.

Solutions for private homes, banks and industry through to football stadiums





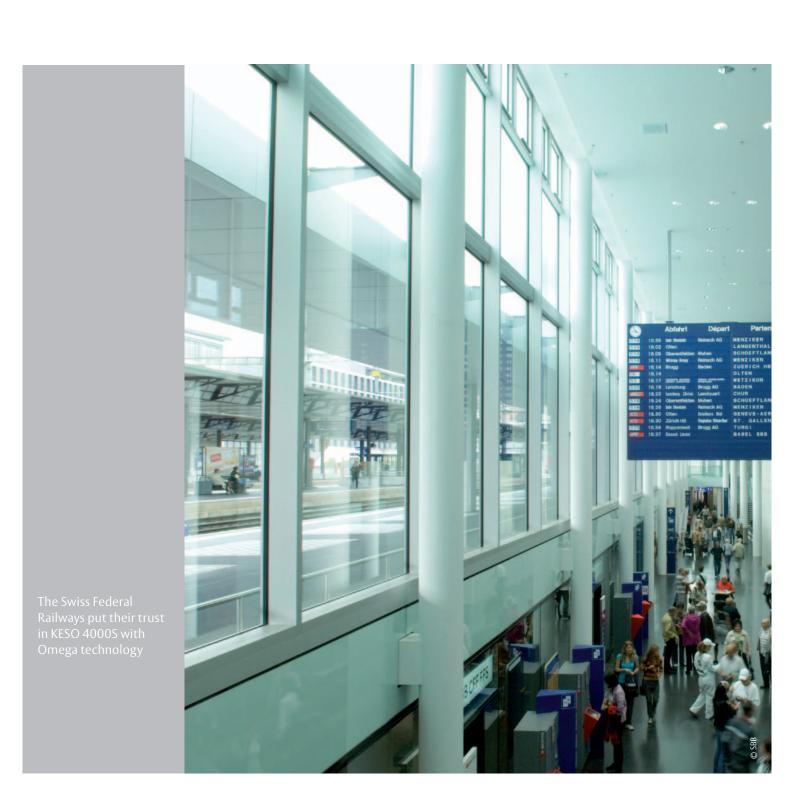




A good reference is the best sales argument

High levels of footfall demand the highest security. KESO therefore offers specially developed solutions for all sector-specific requirements. We guarantee years of operational readiness at low cost and simple, practical operation. A small excerpt from the current KESO reference list:

- Victorinox AG, Ibach-Schwyz
- Swiss Federal Railways, Bern
- Cantonal police, Schwyz
- Transco (Energy), Abu Dhabi, U.A.E.
- HSH Nordbank Arena, HamburgUniversity Hospital, Basel
- Schiphol Airport, Amsterdam



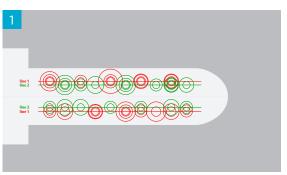
Tradition-based expertise with patent protection until 2023

The KESO 4000 stands out clearly from existing systems and offers an almost endless number of locking options. More drill patterns and greater line displacement make far greater combinatorics possible. Together with the profiled shoulder,

KESO 4000 is a premium-quality precision masterpiece.

The mechatronic range is also available in this system and is also patented.

- 1. Shifting of the drilling lines for greater permutations
- 2. Patented front profile
- 3. Hardened steel bolts as standard
- 4. Cylinder pins in several designs
- 5. Available with standard Sidra (diecast) or Stainless Steel (CrNi) housings
- 6. Module cylinders in EU profile











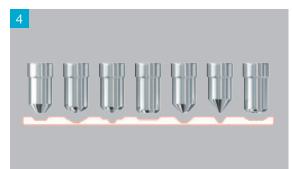














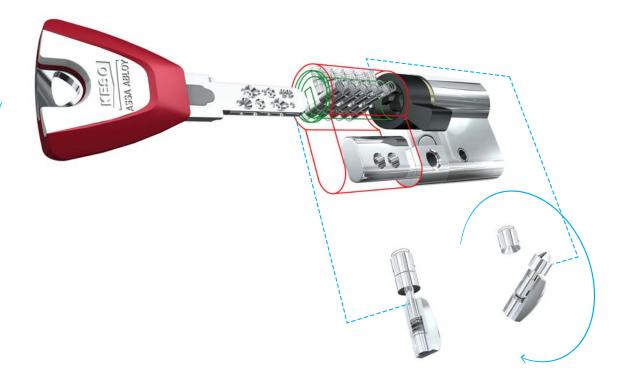
VdS class A & BZ+. Drilling protection, Tear-off protection, **Pulling protection**

KESO 4000S Omega, interactive protection against copying

Protection against copying in the key and the cylinder

The technology integrated into the KESO Omega key has to be activated by the integrated, corresponding mechanism in the cylinder lock during the opening function. This mechanism with interactive pins in the top edges of the key considerably increases copy protection for the key.

The soft 'click' of the Omega bolts when inserting the key demonstrates the precision and security of the technology.



The key to your world

- 1. **Mechatronic key** with Ω : 40.812.010
- 2. **Colour cap key** with Ω: 40.970.010
- 3. Long key with Ω : 40.810.010

Extra-long key with Ω : 40.811.010

4. **Trapeze key** with Ω: 40.100.010

Round key with Ω : 40.102.010





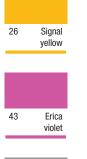




The colour caps ensure that keys can be identified quickly and easily. The precise design is far superior to conventional pull-on caps and has a pleasant feel.

KESO colour caps are available for mechatronic keys, trapeze keys, extra-long keys and long keys. The mechatronic keys can be fitted with MIFAR or LEGIC chips.

Ordering example for a 4000S Ω colour cap key Ruby: Article number: 40.970.010.33









54



green





Yellow

green







blue



Pastel

blue



Black grey only for the mechatronics keys 40.810 - 812

Moss

green

65

Double cylinder CHBasic length:
41.015/32.5/32.5
Additional lengths:
in 5 mm increments





Double cylinder EU Basic length: CrNi 41.215/30.0/30.0 Sidra 41.415/30.0/30.0 Extendible in 5 mm increments

Thumbturn cylinder CH Basic length: 41.019/32.5/32.5 Additional lengths: in 5 mm increments





Thumbturn cylinder EU Basic length: CrNi 41.219/30.0/30.0 Sidra 41.419/30.0/30.0 Extendible in 5 mm increments

Half cylinder CH
Basic length:
41.012/32.5
Additional lengths:
in 5 mm increments





Half cylinder EU
Basic length:
CrNi 41.214/30.0
Sidra 41.414/30.0
(total length 40 mm)
Extendible in 5 mm
increments





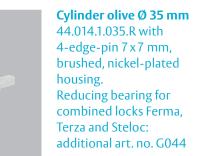


Multilock option gearwheel at 41.015 art. E223MT at 41.019 art. E225MT at 41.215/41.415 art. E222MT at 41.219/41.419 art. E224MT Optionally available with gearwheel cam, f.e. Multilock

Mechanical cylinders and locks

Cylinder olive Ø 47 mm 44.007.1.035.R with 4-edge-pin 7 x 7 mm, brushed, nickel-plated housing.
Reducing bearing for combined locks Ferma, Terza and Steloc: additional art. no. G044





Rim cylinder, centric 42.007 incl. escutcheon, mounting plate and mounting screws





Rim cylinder, eccentric 42.010, nickel-plated brass incl. escutcheon, mounting plate and mounting screws

Window handle, angular 44.009 (160 mm) Angular version with 4-edge-pin 7 x 7 mm, brushed, nickel-plated housing





Window handle 44.119 (155 mm) Rounded version with 4-edge-pin 7 x 7 mm, matte, nickel-plated housing

T-handle cylinder 44.001.1.035.R with 4-edge-pin 7 x 7 mm, brushed, nickel-plated housing. Reducing bearing for combined locks Ferma, Terza and Stelco: additional art. no. G044





Switch cylinder Ø 32 mm 46.019.00.1E Nickel-plated brass. Rotation movement handled by switch element

Switch cylinder 22 Ø 22 mm 46.052.304 Withdrawable position for key 4x90° Matte, nickel-plated brass. Rotation movement handled by switch element.





Switch cylinder, multiple withdrawal Ø 32 mm 46.052.104 Withdrawable position for key 4x90° Matte, nickel-plated brass. Rotation movement handled by switch element.

Padlock

42.037.xxx

.R25 = 25 mm stainless

.025 = 25 mm hardened

.R50 = 50 mm stainless

.050 = 50 mm hardened

.R70 = 70 mm stainless

.R10 = 100 mm stainless

.220 = with wire

(length: 45 cm)





Universal cylinder 43.031.025.20 with universal bolt, locking cylinder for letter boxes and changing room lockers. Bolt available in different offsets and lengths.

Dead lock

43.074.025 R Furniture lock left, right for drawer or covers. Accessories: corner strike plate Art. no. G252, Escutcheon art. no. G006





Dead lock 43.084.025, D = 30 R Furniture lock left, right for drawer or covers in backset of 30 to 60 mm. Accessories: Escutcheon art. no.

G006

Dead lock with thumbturn

42.064
Bolt lock, doublerotation, feed 21 mm.
Lock case silver-grey.
Convertible left/right.
Incl. outer cylinder
42.045





Dead lock 43.030.025 C For screw-in or embedding. Left or right for doors and drawers. Backset 20 mm

Universal mounting cylinder

Basic length: 43.008.025 For furniture, switches, etc. Can be combined with a large number of actuators and cams.





Push cylinder
12mm stroke
43.040.027.12
Keyless locking
43.040.Z27.12
Key not removable
in unlocked position
43.040.A27.12
Unlocking and locking
with key

Mechatronics for greater convenience and control

KESO i-handle HS

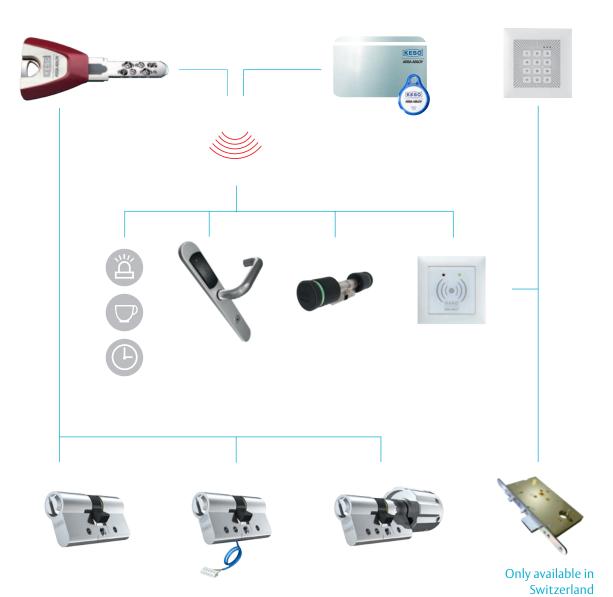


Modern electronic components add a new dimension to tailor-made security. Existing systems can be retrofitted at any time while logical designs for integration purposes also take into account the cost factor. The popular mechanical precision cuttings

in the mechatronic versions are supplemented by electronic functions such as immediate locking in the event of a lost key or the programming of temporally-restricted access rights.

The key opens mechanical, mechatronic and contact-free systems.

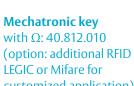
Two RFID technologies can be integrated into the key, which can therefore also control third-party products such as alarm systems, coffee machines and time recordings.



Main mechatronics range

KESO k-entry® Standard software K.719 Upgrade Net 16 K.720 Upgrade NOK K.724

For managing and programming locking systems.





Programmer PPG V2 K.536 For programming identification media and mechatronic products.

customized application)





Keycard 10.953 (option: additional RFID)

Key tags 10.993 (option: additional RFID)

Mechatronic double cylinder EuroSwiss Basic length: 41.53F/30.0/30.0 Additional lengths: at 5 mm increments (requires electronics EG.707)





Mechatronic double cylinder EU Basic length: 41.43F/30.0/30.0 Additional lengths: at 5 mm increments (requires electronics EG.707)











Mechatronic thumbturn cylinder EU Basic length (60 mm without knob) 41.43G/30.0/30.0 Additional lengths: at 5 mm increments (requires electronics EG.707)



BS electronic faceplate Short: EG.707.PTB.01.10.02 EG.707.PTB.02.10.02 8000 memory per electronic system

Mechatronic Knob EuroSwiss

Integrated electronics Basic length (60 mm without knob) 41.53H/30.0/30.0KT Additional lengths: at 5 mm increments 8000 memory per electronic system

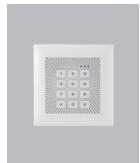


Mechatronic Knob EU

Integrated electronics Basic length (60 mm without knob) 41.43H/30.0/30.0KT Additional lengths: at 5 mm increments 8000 memory per electronic system



Inner area UP edizio due K.557/UP
Outer area UP K.558/UP
Controls unlocking systems and manages
8000 codes
Prerequisite:
KESO Access Point



KESO i-turn

Double door knob with integrated electronic system. Basic length (60 mm without knob) 21.43V/30.0/30.0.KT Additional lengths: at 5 mm increments 8000 memory per electronic system



Internal use: K.550 UP edizio due External use: K.549 UP (IP55) Enables contact-free identification Prerequisite: KESO Access Point



KESO i-handle S

EG.711
Mechatronic escutcheon solution
for contact-free
unlocking.
KESO i-handle HS

EG.712 For tubular frame and exterior doors



EG.716.000.00.SA DIN rail electronics 8000 memory per electronic system



KESO Spray

G.992/56/10
For taking care of mechatronic and mechanical cylinder locks.
Protects against

corrosion, lubricates and is non-sticky.

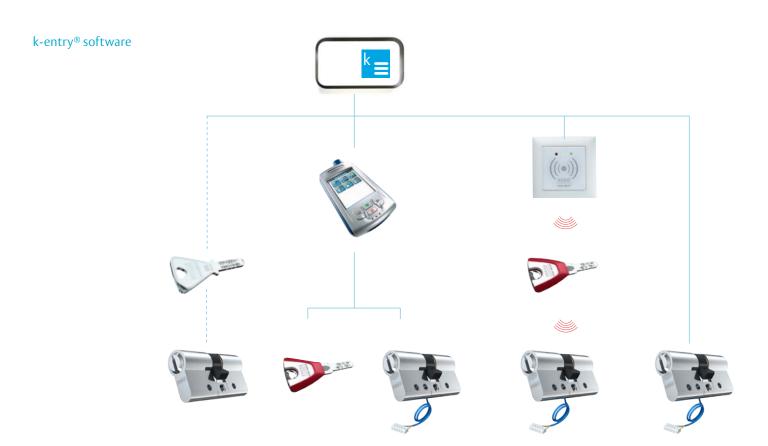


KESO k-entry®, the organisation, programming and networking software

KESO k-entry® manages, programmes and controls users, keys, cylinders and doors

The KESO management software k-entry® combines mechanical, mechatronic and electronic locking systems in an organisational network. It is the ideal system for building operators that keep many expansion and integration options open. KESO k-entry® enables you to manage mechanical systems, programme offline

mechatronic solutions or control networked systems online. "Network-on-key" can also be used to wirelessly control networks via a key. The key, keycard or key tag therefore becomes a data carrier and transfers the information from the software to offline or stand-alone systems.



Mechanics Manage mechanical systems.

Stand-alone Manage and programme mechatronic and electronic locking system technology with the aid of a KESO PPG II device.

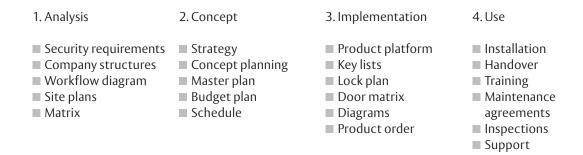
Network-on-Key Manage and programme mechatronic and electronic locking system technology via data carrier (e.g. KESO mechatronic key).

Online Manage, programme and control mechatronic and electronic locking system technology via Ethernet.

Planning of masterkey systems

Project planning advice for masterkey systems

When implementing masterkey systems, a designcentred approach provides greater security. From the analysis to the specific use, all factors are carefully reviewed in cooperation with customers and planners. A clear overview and the adherence to costs are guaranteed throughout the process. KESO specialists are available at all times and offer a broad range of expertise in planning, project planning and maintenance.

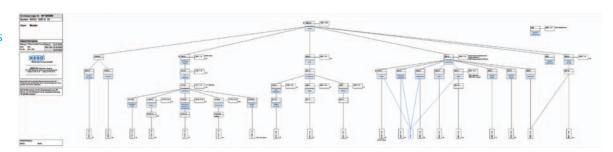


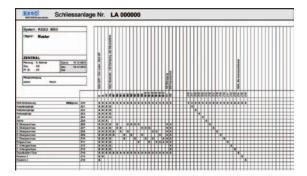
Planning and ordering masterkey systems

Thanks to the use of a second drilling line, conventional locks become plannable systems with two-dimensional hierarchies. When implementing complex systems, consideration is given not only to the company structures, but also to the work

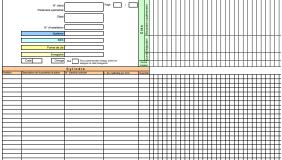
processes. Specialists refer to a concept diagram when planning on the basis of company structures and a master plan when planning on the basis of work processes. The system 4000S Omega combines both dimensions.

The locking system concept diagram serves as the basis for system implementation.





The master plan summarises all the interfaces from various key groups.

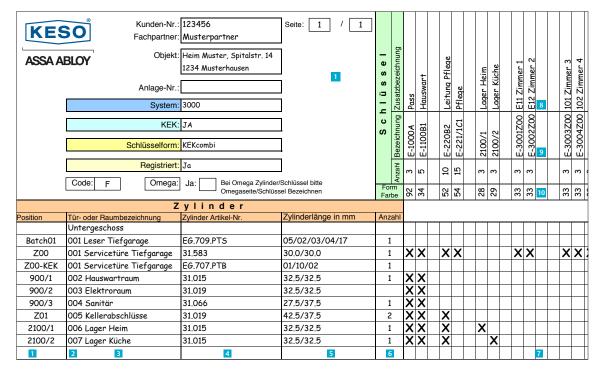


By combining the concept diagram and the master plan, the lock plan is created – the entire system.

Planning and ordering masterkey systems is fairly simple. The process is shown in the sample plan below. All the doors are listed horizontally; the vertical columns are for the keys.

More information about planning of masterkey systems can be obtained at KESO training courses or from your specialist.

Lock plans can be downloaded from www. assaabloy.ch



■ Header data (system no. if expanding existing systems)

KEK: mechatronics yes/no

Key shape: colour cap, trapeze, round, long or extra-long

Registered: yes/no

Code: determined from the system complexity.

Omega: yes/no

- The position is married to the lock ■. The cylinder is labelled with the position (max. 10 characters).
- The door or room name acts as help text for the installation location (max. 25 characters).
- Cylinder article no. comprising the system/model, article and length

41.015/32.5/32.5

A and B lengths per 32.5 m (from centre of locking cam) Article (CH-round double cylinder) System/model (KESO 4000S Omega assembly cylinder)

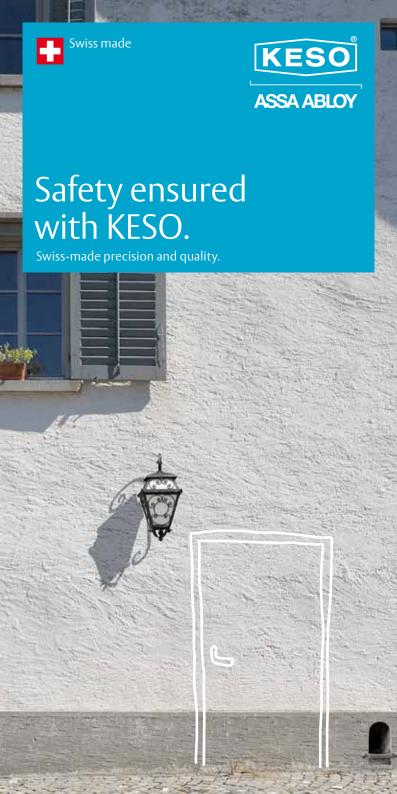
S Cylinder length A/B (32.5/32.5) from centre of locking cam in mm. With thumbturn cylinders, the lock side is side A

- Number of required cylinders
- **The matrix: cylinders that have to be opened with a key must be labelled here with an X**
- Additional name acts as help text for the distribution of keys
- Number of required keys and their names
- Colour of colour cap keys see page xx (for keys without a colour cap, leave blank)

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and

ASSA ABLOY

8.01.108/en 1.20



KESO creates security.

Who invented it?

People seek security and protection more than ever before. KESO locking technology makes security tangible.

Complete systems interact to open up a broad range of possibilities to secure a wide variety of building types..

More than 330 patents and sales in over 25 countries attest to KESO's expertise. Thanks to over 40 years of experience and the extensive know-how of the Swiss development department, KESO always delivers top Swiss-quality.

The Richterswil site on Lake Zurich includes development, production and assembly.









Exclusive expertise. Quality included.

The various locking systems are expandable at any time and satisfy all security requirements.

KESO security cylinders are manufactured in chrome-nickel steel or Sidra metal to premium Swiss quality standards while the barrel is made of chrome-nickel steel, or forged, if required. Even the high-precision tumbler pins are made of hardened steel (HRc 62 - Fasif 1).

Standards EN 1303 and DIN 18 252 are the basis for VdS certification:

VdS class A

Basic designs of all standard KESO cylinders are in compliance with VdS class A

VdS class B+

KESO mechatronic cylinders in the KEK Genie model range are in compliance with VdS class B+

VdS Class BZ(+)

KESO cylinders featuring the ABS option or extraction protection rotors are in compliance with VdS class BZ(+)

Optimum level of security thanks to different options.

Basic drilling pro-

is included in the standard design.

tection (Fasif 1)

- 1. VdS certification for all products.
- 2. Enhanced antidrilling, pull-out and cut-off protection optionally available.





KESO 4000S Omega system. Makes Europe more secure.



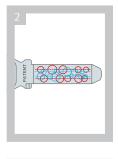
KESO 4000S Omega for patented security. The KESO 4000S Omega system is clearly a cut above other systems. Greatly enhanced life spans, security standards and combinatorics based on cutting-edge technology.

This precision master piece offers premium quality security for locking systems of every size.

- Key with profiled stop position (patent valid until 2023)
- Basic drilling protection included
- Increased drilling, extraction and snapping protection optionally available.
- Comprehensive product range.
- Interactive KESO Omega Technology is already standard
- 1. Patented front profile in detail.
- 2. Enhanced combinatorics thanks to optimised drill hole distances.
- 3. Omega technology is standard in the KESO 4000S Omega system.
- 4. Compatible with mechatronic components.









KESO 2000S Omega system. Maximum versatility, optimum efficiency.



KESO 2000S Omega for versatile security systems. With the time-tested modular system KESO 2000S versatility knows no bounds. An extensive range and varied cylinder designs ensure KESO 2000S can be used in custom-made and complex systems. All KESO 2000S Omega systems are supplied with standard Omega technology.

- Optimum product range.
- Basic drilling protection included
- Increased drilling, extraction and snapping protection optionally available.
- Unlimited use due to a wide range of cylinder designs.
- Interactive KESO Omega technology is standard in the 2000S Omega System
- 1. The modular system fits all door thicknesses.
- 2. Up to 15 tumbler pins of hardened steel in three rows for basic anti-drilling protection as a standard feature
- 3. Optimum versatility also regarding shape. An oval cylinder is shown here as an example.





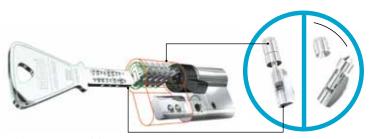


KESO Omega: interactive mechanics in the key.

KESO Omega is a standard feature in the 4000S Omega system.

The KESO Omega key for systems 4000 and 2000 includes an integrated pin with a spring to activate the corresponding Omega bolts in the cylinder.

This mechanical system considerably increases copying protection. As the owner, you always have control over all copies of keys as key blanks are not available on the free market.



Convincing KESO Omega technology due to the interactive pins on the key's upper side.

KESO product range. More options – more freedom.

KESO locking technology offers a wide range of possible applications. Gates, garages and outbuildings can be secured just as easily as main entrances, front doors, mail boxes or communal spaces – all using the same key if required.

- 1. Standard double cylinders for all door thicknesses.
- 2. Thumb turn cylinders.
- 3. Half cylinders, for vacation residence doors, for instance.
- 4. Cam locks for use in cabinets or mail boxes.
- 5. Padlocks in various sizes.
- 6. Rim cylinder for dead locks or garage doors.













- 1. Cylinder olive in various sizes for cupboard doors.
- 2. T-handle for cupboard doors.
- 3. Window handle.
- 4. Switch cylinder used as electrical actuator.
- 5. Push cylinder also optionally locks without a key.
- 6. Dead lock with thumb turn for engaging lock.
- 7. Interior / exterior cylinder for special locks (CISA).
- 8. Cylinder for knob locks, such as Meroni.

















Home or business. Perfectly secure.

Solutions for your home.

KESO security components enable you to secure doors, gates, windows and much more. Moreover, you can use the same key for everything.

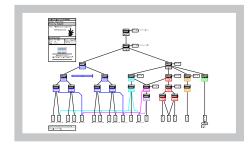


Whether you are a major service provider or a small business, KESO will provide the most secure solution.





Complex locking systems require a conceptual approach. Ask your specialized dealer.



KESO reversible key. The key to your world.

Typically Swiss: the reversible key.

Over 45 years ago, KESO's innovations significantly contributed to shaping the reversible key technology, a milestone in precision mechanics used throughout the world today.

The KESO key is available in different versions and lengths, also with colour cap if required.

KESO keys in three basic designs: round, trapezoid and long, also available with extralong key stop.



Colour cap keys also come with long or extra long bows. KESO 4000S Omega long key shown as an example.



Spoilt for choice: eighteen colours for your key cap. The trapezoid key series is shown here.



KESO Change Code. KESO short cylinders.

Mechanical marvel for greater flexibility.

KESO Change Code is a purely mechanical locking design with up to three programmable lock configurations.

■ KESO Change Code ensures greater security in the event of key loss (the change to the lock configuration is mechanically based).

KESO Euro Change Code for three lock configurations in one cylinder. Contact your dealer for more details.



The special solution for quality design.

Short cylinders offer maximum compact KESO locking technology.

KESO short cylinders: practical, perfectly shaped design in different colours (available only with 2000SK system); starting at an overall length of only 28 mm.

KESO short cylinders for glass doors and other narrow style profile doors (such as aluminium and PVC).



KESO mechatronics. Fusion of mechanics and electronic intelligence.

Mechatronic cylinders combine mechanical security with electronic intelligence. Only after both systems have verified the access rights, access is granted.

Specific access rules can be defined, movements are logged in the system, lost keys can be blocked and access restriction reduces risks.

- Enhanced tailor-made security
- Time-restricted access control
- Lost keys are blocked
- Automatic locking of doors
- Compatible with mechanical systems
- 1. KESO KEK Genie cylinder.
- 2. The new KESO KEK Genie Knob; solution with no wiring thanks to integrated standard batteries
- 3. Contactless control provided by RFID.
- 4. The KESO KEK Combi Key in detail.









Modern electronic components add a new dimension to tailor-made security.

Existing systems can be retrofitted at any time by using suitable identification media, such as a KEK Combi key, keycard or tag.

Logical designs for integrating mechatronic security components also take into account the cost factor.

- 1. KESO KEK i-handle, the intelligent door handle set.
- 2. Identification media KESO tag and KESO keycard.
- 3. The motorised cylinder for automatic locking.
- 4. KESO reader for contactless access control.













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