



WINDOW TECHNOLOGY
DOOR TECHNOLOGY
AUTOMATIC ENTRANCE SYSTEMS
BUILDING MANAGEMENT SYSTEMS



ixalo®

DOOR TECHNOLOGY



ixalo® – the electronic locking system
RFID technology

Securing technology for you



Cutting-edge locking systems

The Gretsch-Unitas system worlds



Mechanical

Cylinder and key – the high-quality basis of mechanical locking systems



Electronic

Flexible electronic products with outstanding reliability for even more comfort and organisation



Locking systems from BKS offer a variety of solutions for securing individual doors and for planning modern master key systems. Convenience and security can be individually designed and economically implemented with the combination of mechanical and electronic locking systems.

Be clever with your combinations!

ixalo® the electronic locking system

Access to greater flexibility



There is a growing tendency towards systems that combine mechanical locking cylinders with electronic solutions. This mixture ideally combines flexibility of usage and profitability.

ixalo – the electronic locking system of BKS combines a variety of electronic products and technologies into a state-of-the-art, sustainable overall system.

Optionally equipped with BKS SE technology or with RFID technology: MIFARE® (MIFARE Classic®, MIFARE® DESFire® EV1) – ixalo offers a multitude of applications for individual customer requirements.

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Secure locking has been the core competency of BKS for more than 100 years and is also the main purpose of ixalo, the all-encompassing electronic locking system. With the modular security system, you can resolve any access problem in any project situation – also in combination with mechanical master key systems if required.

The "RFID technology" version of the system supports both MIFARE Classic® and MIFARE® DESFire® EV1 access media.

ixalo key fobs | RFID
Central access medium for the entire building. In addition to individual access rights, personal time frames can also be set.



ixalo card | RFID
Central access medium for the entire building. In addition to individual access rights, personal time frames can also be set.

The advantages

1. Energy efficient

ixalo – in the context of RFID technology, the BKS electronic locking system is impressive due to the particularly low energy consumption of its products – one of the main criteria to be met by battery-operated systems. This is the only way to ensure a very large number of locking cycles (up to 70,000).

2. Secure

Whoever opts for an electronic locking system expects outstanding reliability and a high degree of comfort. ixalo – the electronic locking system satisfies the highest security requirements of the EN 15684 standard for mechatronic locking cylinders by using extremely reliable encoding and communication mechanisms. The security is certified by the VdS.

3. Cost-effective

Locking systems are particularly cost-effective when electronic and mechanical cylinders are combined into one system. The prerequisite for this is that all cylinders and access media are managed uniformly within one software.

4. Modular

Regular changes to space utilisation concepts require a high degree of flexibility not only in terms of electronic access rights administration, but also in terms of the products themselves. Many different variants and lengths of the ixalo knob cylinder are available to order. Due to their modular construction, their overall lengths can be individually adapted on-site.

ixalo double knob cylinder readable from both sides | RFID
When doors are expected to satisfy specific requirements, this provides the solution with an authorisation check from both sides.



ixalo double knob cylinder | RFID
Controls access to entire building complexes or to individual doors.



ixalo door hardware | RFID
Design-oriented access control solution for every door.



ixalo half knob cylinder | RFID
For use e.g. in key switches.



ixalo wall reader | RFID
Opens gates, barriers or barrier-free access points.

Locking

Identifying

Organising



ixalo software BKS KeyManager | RFID
Software for administration and programming of electronic locking systems.



ixalo programming device | RFID
For extremely straightforward programming of access points and access media.



ixalo wall-mounted radio module
Networking of remotely installed access points via LAN and/or wirelessly.



ixalo release terminal | RFID
Writes current access authorisations to all access media at one central point in the building.



Photo: Getty Images



ixalo® the electronic locking system
Access to greater flexibility

"I am looking for a locking system that allows me to combine mechanical and electronic cylinders/access points flexibly with one another."

Jörg Schäfer, Facility Manager

Future-oriented locking – keys and cylinders constitute the high-quality basis for mechanical locking systems. Electronic locking systems offer convenient solutions in terms of flexibility – adaptation to modified access rights – and also security, e.g. due to secure encryption and straightforward disabling of lost access media. Particularly efficient and cost-effective solutions are characterised by a combination of both systems and their respective benefits.

ixalo® the electronic locking system

The areas of application



Electronic locking systems have become firmly established on the market. They are extremely economic to run when combined with mechanical master key systems. They offer the convenience and flexibility of a networked access control, with no wiring of doors required.

Terminal

BKS KeyManager software for administration and programming of electronic locking systems



Escape door

ixalo panic knob cylinder | RFID can also be retrofitted



Interior door

ixalo door hardware | RFID for conveniently organising access to buildings (e.g. office doors)



Barrier-free access

ixalo wall reader | RFID as convenient access control

Security system

Mechanical master key system – problem-free extension into an electronic locking system

ixalo – the electronic locking system is a secure investment as the overall system can be extended as and when the need arises in order to meet growing demands. It can be combined with existing mechanical components at any time.

Access control

Growing demands for access rights and time frame management

Owing to the modular structure of the system, it can be installed without difficulty in any project situation. As access rights can be assigned individually and lost access media can be quickly replaced, this helps to save time and costs.

Project solutions

Manage locking rights centrally

All cylinders, with or without electronic components, can be managed consistently within one software programme using the BKS KeyManager. Modified access rights can be conveniently updated locally via the release terminals.



Building door

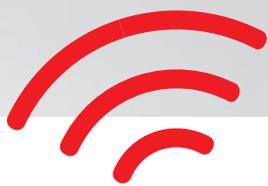
ixalo locking cylinder | RFID
controls access to entire
building complexes or to
individual doors

Gate and barrier

ixalo wall reader | RFID
the cylinder for the wall
for controlled vehicle
access

Main entrance

ixalo release terminal | RFID
for automatic updating of all
access media



Access medium

ixalo card | RFID or ixalo key fob | RFID
– convenient access which can be programmed and enabled
via the SE release terminal



ixalo® the electronic locking system
Access to greater flexibility



Photo: Getty Images



ixalo[®] the electronic locking system
Access to greater flexibility



Identifying

"I need a solution that gives our employees simple, uncomplicated and reliable access."

Karin Bezner, Project Manager

Future-oriented locking – humans should be in control of technology and not the other way round. The focus is on simplicity and clear operating logic with only one medium. New or modified access rights can be flexibly adapted at any time during operation.



• Can be supplied as card or key fob

• Available in a range of RFID technologies

• Maximum security due to strong encryption

ixalo access media Universally usable

ixalo access media can be assigned access rights for individual doors or entire door groups via the BKS KeyManager software.

A time limit can be imposed, e.g. at particular times during the day or for entire periods. The access rights can be modified and adapted at any time.

When an access medium is lost, it is simply disabled via the software, thus quickly re-establishing the security of the building.

In virtually networked "Data on Transponder" systems, the cards or key fobs are not just access media, they are also data transmitters. This means that individual access rights or different events can be

securely transmitted between access points, release terminals and the BKS KeyManager software without requiring a wired network.



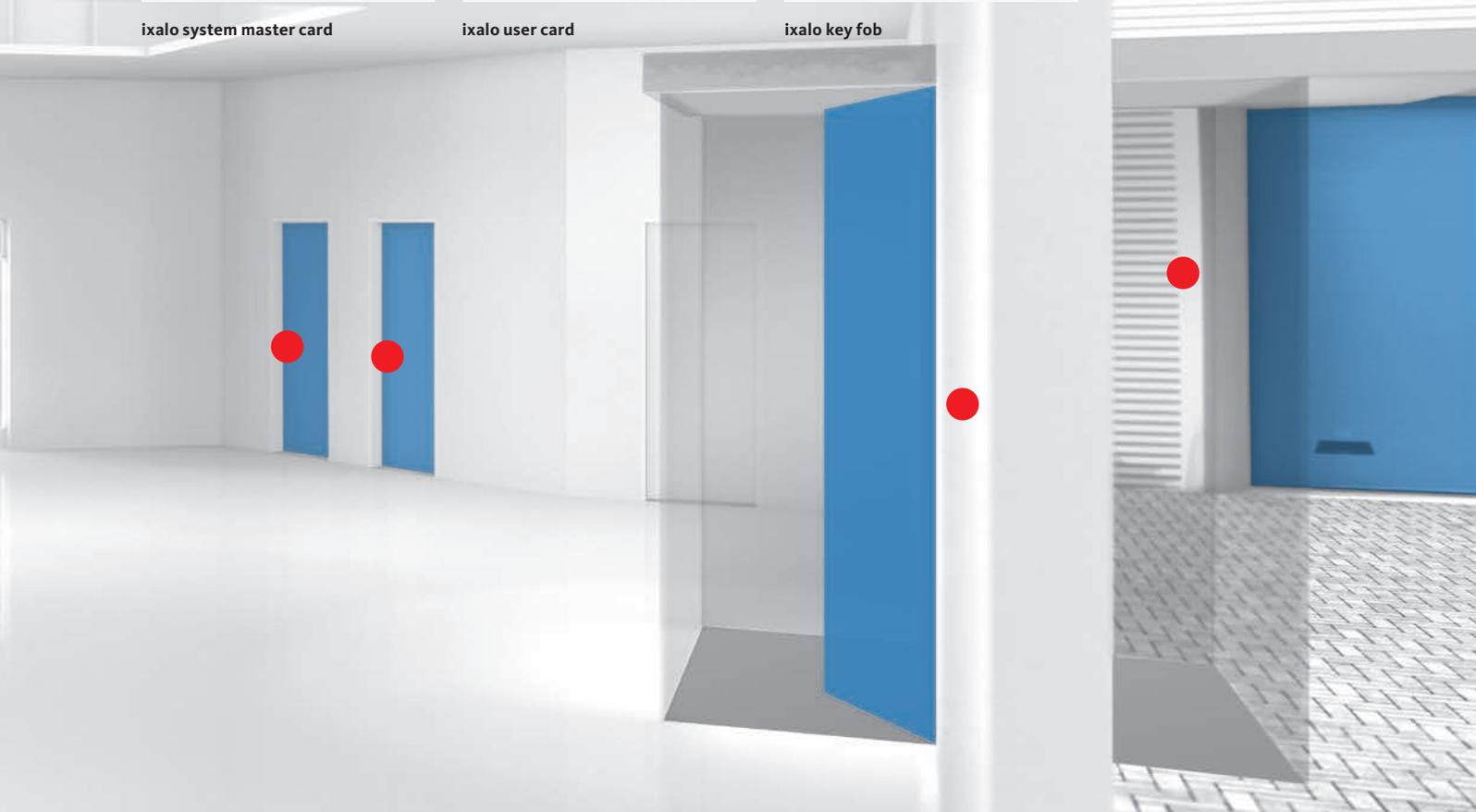
ixalo system master card



ixalo user card



ixalo key fob



Features and benefits of ixalo access media:

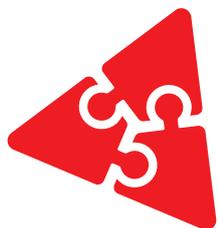
- Retrofittable to existing BKS master key systems
- Consecutive numbering of IDs for simple and fast recording in the BKS KeyManager software
- Different RFID technologies are available
 - MIFARE Classic®
 - MIFARE® DESFire®
 - Available as card or key fob in different versions
- The following data can be written to transponders with the "Data on Transponder" version
 - authorisation data
 - periods of validity
 - events
 - programming jobs
 - service information

Optional:

- Card layout can be individually designed



Photo: Getty Images



ixalo® the electronic locking system
Access to greater flexibility



Locking

"One step ahead in the market as design and function are no longer mutually exclusive."

Marcel Niesler, Facility Manager

Future-oriented locking – the electronic locking system by BKS is an impressive all-round system solution. This modular locking system is based on the ixalo cylinders, ixalo door hardware and ixalo wall reader together with the ixalo access media and BKS KeyManager software.

Alongside their modern, contemporary design, the products also provide the flexibility required by modern construction management. ixalo access points can be tailored at any time to suit the respective door configuration. For example, both the outer and inner cylinder body lengths can be modified at a later date on the ixalo cylinders, as can the lever handle direction on ixalo door hardware.



● Long battery life

● Modular design

● Full scope of functions in the standard version

Perfect and flexible combinations

ixalo knob cylinders can be combined with every mechanical master key system from BKS or other manufacturers. This is why they are eminently suitable for retrofitting.

ixalo panic double knob cylinder

Some panic locks place very high demands on knob cylinders. The ixalo panic double knob cylinder is designed precisely for such cases.

ixalo half knob cylinder

With the ixalo half knob cylinder you can electronically secure key switches, escape door terminals or elevators and organise access optimally. The knob can be detached for installation in different situations.



ixalo double knob cylinder



ixalo panic double knob cylinder



ixalo half knob cylinder



ixalo double knob cylinder, readable from both sides



Features and benefits of ixalo knob cylinders:

- High energy efficiency: 70,000 locking cycles
- Visual signalling of access authorisation
- Large event recorder (can be deactivated)
- Many special functions (daytime release, double-check principle, intruder detection system function, etc.)
- Contactless programming with programming device, card or via radio
- Different RFID technologies
 - MIFARE Classic®
 - MIFARE® DESFire®

Optional versions:

- Special lengths > 80/80 mm
- Panic version (ixalo panic double knob cylinder)
- VdS BZ+ (outstanding security – testing by VdS underway)
- SKG*** (outstanding security – testing by SKG underway)
- Weather-protected version (IP65)
- Online version with integrated radio module
- Readable from both sides



● Very easy operation

● Design-oriented access control solution

● Also suitable for use on doors in escape and rescue routes (EN 179/EN 1125)

Convenient to use – flexible installation options

The ixalo door hardware fits seamlessly into the modular overall system and provides a very convenient solution for access organisation. The orientation of the lever handle can be reversed at any time to DIN left or DIN right thus offering outstanding flexibility on-site during installation.

Fire protection doors, escape and rescue routes

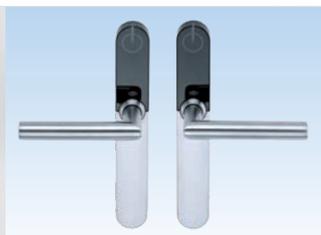
Special doors also need to be considered when planning an access system. This is why ixalo door hardware has been designed from the very outset for the hardware to be used on fire protection doors and emergency and escape doors. ixalo door hardware is approved according to EN 1634 and EN 179/EN 1125.

Can be combined with BKS WDL hardware range

ixalo door hardware can be used in conjunction with different lever handle models of the mechanical WDL door hardware range. To meet individual requirements, many design-oriented door hardware variants can be obtained in combination with the relevant WDL lever handle series.



ixalo door hardware – lever handle set



ixalo door hardware – readable from both sides



Range of lever handle designs: BELCANTO, DIRIGENT, RONDO



Features and benefits of the ixalo door hardware:

- High level of energy efficiency: 120,000 locking cycles/ standard battery pair
- Suitable for fire protection doors
- Can be adjusted for RH/LH use – also retrospectively
- Visual and acoustic signalling of access authorisation
- Many special functions (daytime release, double-check principle, burglar alarm system function and others)
- Different RFID technologies
 - MIFARE Classic®
 - MIFARE® DESFire®

Optional versions:

- Online version
- Different hole configurations for the cover plate
 - no holes
 - PC72 or PC92 profile cylinder hole
 - CHRC74, CHRC78 or CHRC94 Swiss round cylinder hole
- Half set, ixalo door hardware with electronics on both sides



- Contactless programming
- Can connect online to BKS KeyManager via bus
- Compact access control next to the door

Opens gates, barriers or barrier-free access points

Many buildings are not always accessed by traditional doors: there are roller shutters, car park barriers, elevators, or barrier-free entrances. With ixalo wall readers, you can operate these access points with the same access medium as the electronic cylinders used within the master key system.

The wall reader releases motor-driven locks, electric strikes, swing-door drives or sliding doors to authorised access media; at predefined times, if desired.



ixalo wall reader



ixalo wall reader 2



Features and benefits of ixalo wall reader:

- Controlled activation of BKS motor-driven locks and multi-point locks such as SECURY Automatic with A-opener, swing-door drives, car park barriers
- Large event recorder (can be deactivated)
- Contactless programming with programming device, or online via bus
- Electronics securely accommodated in the interior (in conjunction with an external reader)



Photo: Getty Images



ixalo® the electronic locking system
Access to greater flexibility



Organising

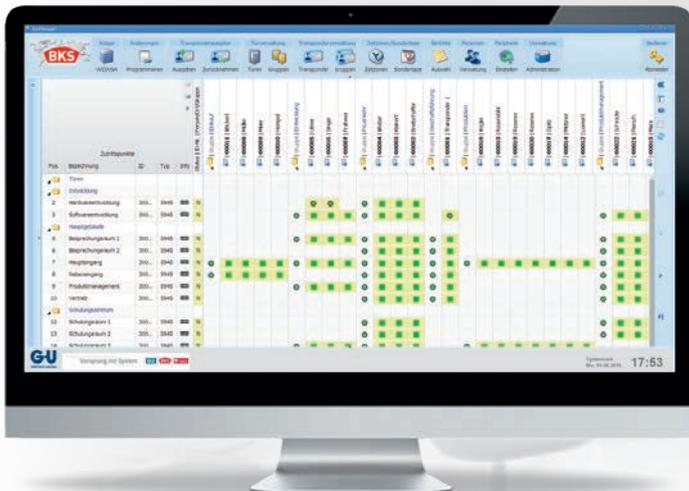
"I require a software which enables me to flexibly control and manage my access organisation at all times – for both mechanical and electronic access points."

Roland Weisse, Facility Service

Flexible organisation – different access solutions are required for each project. Modular software, efficient system variants and different access products such as cylinders, electronic door hardware, wall readers can be combined to produce solutions tailored to individual requirements. This guarantees convenient access organisation that can be easily adapted to new requirements at any time.



● Intuitive and straightforward operation



● Coherent management of mechanical/ electronic cylinders and door hardware

● Always up-to-date due to regular updates

Control and overview

Throughout the years, the BKS KeyManager, constantly refined in collaboration with our customers, has proven itself a competent administration software for master key systems. The BKS KeyManager is a perfect role model for the trend of combining mechanical, mechatronic and electronic cylinders in one cost-effective overall system.

Programming and administration

All cylinders and door hardware can be managed consistently within one software programme using the BKS KeyManager. Thanks to the intuitive software interface, the access points can easily be programmed, time-limited authorisations can be assigned and numerous special functions can be activated.



Features and benefits provided by the BKS KeyManager (version 5.0):

- Uniform administration and programming of mechanical, mechatronic and electronic cylinders, door hardware and wall readers via one user interface.
- Straightforward administration of all issued access media
- Display and printing of mechanical and electronic access authorisations
- Network-capable (client/server application)
- Electronic acknowledgement of receipt by means of signature pad
- Scalable range of functions via powerful software modules
- Modern browser interface
- Access rights can be administered using mobile devices (e.g. tablets)
- Software updates are installed centrally on the web server instead of each individual client

ixalo® programming device

Contact-free access updating



- Two devices rolled into one: service device and programming device



- Can be used for several locking systems at the same time

- With large display and programmed checklist

Convenient programming device instead of a heavy laptop

The ixalo programming device uses non-contact data transfer and can also be operated by persons who have no product or software training. This means that a security firm or caretaker can for example also update data for individual doors when on-site. When checking through the doors, a convenient checklist of the doors to be programmed is displayed.

Cost-effective maintenance

In addition to the programming function, the ixalo programming device can also be used as a servicing device and significantly simplify the maintenance of an electronic master key system. Battery level, firmware status and other service parameters are read out contact-free from built-in ixalo cylinders or wall readers.



Features and benefits provided by the ixalo programming device:

- Programming of ixalo access points
 - indication of programming progress
 - acoustic signaling (e.g. when programming is complete)
 - checklist display (designations of doors yet to be programmed)
- Can be used as a programming device for writing to access media
- Reading of access point events
- Multi-function display operated by means of function keys
- Usable as a service device
 - contactless querying of cylinder battery levels
 - resetting of the low-battery warning
- Functions can be extended by carrying out firmware updates via BKS KeyManager software



Access authorisations that are always up-to-date

With the "Data on Transponder" system version, continuous exchange of data between the software and the cylinders is always reliably guaranteed by the interaction between all access media and the release terminal.

Modified access rights of the access media can be conveniently updated locally via the release terminals.

The validity of an access medium can be extended using a release terminal (e.g. for 24 hours). If an access medium is disabled in the BKS KeyManager, the validity can no longer be extended at the release terminal. This means that the access medium will automatically be disabled after this 24 hour time period has elapsed at the latest.



ixalo release terminal pro



ixalo release terminal 2 pro



● Conveniently update the authorisations of access media

● Extend the validity of access media

● Read events from access media



Features and benefits of ixalo release terminals:

- Validity ("daytime rights") of access media can be updated
- Output relay can be used for release (e.g. turnstile)
- (Access) authorisations of access media can be updated
- Access media events can be read out (e.g. battery charge level of cylinders)
- Flexible connection via LAN and RS-485 bus

ixalo® wall-mounted radio module

Access networking via LAN or radio control



• No wiring of doors required

• Use of existing LAN infrastructure possible

• Very easy operation

Convenient programming

If access rights are updated in the BKS KeyManager software, these changes must be transmitted to the ixalo access points (e.g. ixalo cylinder). The ixalo wall-mounted radio modules make this particularly convenient as it takes place automatically.

The cylinders and the electronic door hardware are connected wirelessly to the ixalo

wall-mounted radio modules that in turn guarantee secure exchange of data with the BKS KeyManager.

In contrast to conventional access control systems it is not necessary to wire the individual doors.

Depending on the local circumstances, several doors can be connected to one wall-mounted radio module.

The ixalo wall-mounted radio modules are easy to integrate into an existing Ethernet network which means it is also possible to incorporate access points or doors that are far away.



Features and benefits of ixalo wall-mounted radio modules:

- Once entered in the BKS KeyManager, authorisation changes are directly updated wirelessly in the cylinders or in the door hardware
- Special functions such as the connection of intruder detection systems can be implemented
- With the online version, up to 64 ixalo knob cylinders and ixalo door hardware can be connected per wall module
- Use of existing LAN infrastructure possible
- Battery statuses of ixalo knob cylinders and ixalo door hardware (online version) are monitored automatically

The system variants for programming access authorisations

Efficient solutions for every requirement



Because the size and organisation of every project is different, customised solutions can only be implemented with varied, intelligent system concepts and versatile product variants. Three efficient systems can be selected with the ixalo electronic locking system in RFID technology:

Organising



OFF LINE

An ideal entry-level system

An offline system can be installed and brought into operation very quickly.

ON LINE

Convenience in programming

The focus of the online system is on programming convenience. Once entered in the BKS KeyManager, changes to access rights are updated automatically in the cylinders and door hardware via the network or radio control – also over long distances.



or

or

Installation:

- Straightforward installation
- No wiring required

Convenience:

- Doors are programmed on-site using a programming device

Master key system size:

- For small and medium-scale master key systems

Advantages:

- An ideal entry-level system
- Easy to install

The following are required as a minimum requirement:

ixalo master card
ixalo card or key fob
ixalo cylinder
BKS KeyManager
ixalo software licence

Installation:

- Wiring of wall-mounted radio modules is required

Convenience:

- Central authorisation allocation via BKS KeyManager software
- Networking possible via various, also existing, transmission paths (LAN, bus, radio control)

Master key system size:

- For medium-scale and large master key systems

Advantages:

- Very easy operation

The following are required as a minimum requirement:

ixalo master card
ixalo card or key fob
ixalo cylinder
ixalo programming device
BKS KeyManager, ixalo software licence, online software licence, wall-mounted radio module (e.g. EBKFM Ethernet bus coupler with radio module)

DATA ON TRANSPONDER

For every master key system size

Combines the advantages of offline and online master key systems within one system.



Installation:

- Straightforward installation
- Only release terminals are wired

Convenience:

- Changes to authorisations are transmitted automatically via the release terminal
- Networked solution without having to wire every door
- Lost access media are automatically deactivated

Master key system size:

- For small and medium-scale master key systems

Advantages:

- Easy to install
- Very easy operation

The following are required as a minimum requirement:

ixalo master card
ixalo card or key fob
ixalo cylinder
ixalo programming device
BKS KeyManager, ixalo software licence, Data on Transponder software licence, also recommended: release terminal with EBK Ethernet bus coupler

Locking



Identifying



Cutting-edge locking systems

More than just products



Our products are protected by patents and have to meet high quality standards. This enables us to guarantee their safety and reliability the world over.

Online processing ensures error-free data transmission, reduced material planning expense, shortened procurement times in addition to continuous updating of the entire system around the clock.

MKS MasterKeySystem

MKS is the internet-based planning and ordering platform for master key systems. A number of useful functionalities make it easier to work out the entire master key system and then ensure trouble-free processing of your order.

Together with the mobile security card reader, MKS offers unique advantages in extending existing master key systems and reordering keys and cylinders.

Service email: mks@bks.de

Features and benefits provided by MKS:

- Planning and ordering of master key systems with mechanical, mechatronic and electronic locking cylinders
- Extensions of existing master key systems
- Ordering of registered key bittings
- Reordering of keys and cylinders
- Key combination records for download
- Master key system data for use in the BKS KeyManager
- Key identifications
- Plausibility check





Along with the outstanding quality of their mechanical, mechatronic and electronic cylinders, BKS offers a comprehensive range of services in the field of planning, administration and reordering of individual keys, cylinders and master key systems.



Peace of mind with high-quality production



Future-proof with patent protection

Regional dealer network

We are everywhere you need us! Our comprehensive network of BKS specialist dealers guarantees competent advice and reliable service on all aspects of your master key system.

BKS retailer search in the Internet

For a list of BKS specialist dealers in your region, visit: www.g-u.com

Securing technology for you



Cutting-edge locking systems

Service and building project consulting



Our building project consulting services for architects, planners, builders and general contractors

Competent advice at the project planning stage guarantees you will receive a solution tailored to your project. Short distances and fast, reliable service make technical and cost-optimised solutions possible, perfectly in tune with your application.



Photo: Getty Images

Advice right from the planning stage

The advantages for you and your clients

Together with you, we will work out the necessary requirements in relation to the desired functionality, if required, and create an individual overall concept. Convenience and security are given the highest priority when it comes to opening and locking doors.

In this case we not only concentrate on the individual product, but design a complete solution, taking into account multiple equipment interfaces.

Building security, protection of life and valuables, barrier freedom and ease of use are often at opposites in terms of individual requirements. We will find the optimal solution for you.



Photo: Getty Images



Photo: Getty Images

Tailor-made solutions
for any project

DOOR ENGINEERING – the cross-trade planning service for planners and architects

The importance of door engineering is often underestimated during overall planning. Architectural, design and organisational guidelines as well as fire protection, security, barrier freedom and appropriate escape route requirements make doors a cross-trade, complex construction element. The "craft of the door" becomes a highly intricate planning task.

The GU project team provides advisory services based on functional models and derives solutions to problems. The solutions take the necessary standards and the conceptions and requirements of the planners into consideration and are documented using clear door configuration lists.

Service email: objektberatung@g-u.de

The Tender-Text-Manager – software for architects and planners

With the Tender-Text-Manager, we offer an online tool enabling you to easily create complete BOQs and to dynamically compile complete tenders, and communicate these in digital form.

Service email: ausschreibungstexte@g-u.de

Checklist | RFID

What to look out for when selecting an electronic locking system.



The most important criteria when deciding on the right electronic locking system are obvious. On battery-powered systems, aspects such as the service life of the cylinder battery play a crucial role in minimising the costs incurred for changing batteries. This applies in particular to medium-sized and large master key systems.

Economically, it is always sensible to supplement the locking system with mechanical cylinders and be able to administer it using one item of software. The most important aspects are summarised in the following table to help you make an informed decision:

Comprehensive system

An economical solution

- An electronic locking system can be ordered in combination with mechanical cylinders in a master key system

Operating comfort, reliability and security

- Access media and cylinders/wall readers as well as electronic door hardware use contactless communication

Availability of different system versions for different applications

- Offline version as affordable entry-level system
- Online version via radio control for convenient assignment of authorisation
- It must be possible to combine offline and online products within one master key system
- Virtual networking via writable access media

Economical online solution

- With wall-mounted radio modules, several cylinders with integrated radio module can be connected

Easy, fast commissioning of networked systems

- Automatic configuration of wireless components

High level of security

- Master key system identifier assigned ex works in combination with a master key system password that can be freely defined by the end client

Fast commissioning

- Access media are consecutively numbered so that they do not have to be programmed individually

Reduced network costs with the online system

- Wall-mounted radio modules can be networked via LAN or alternatively via RS-485 bus

Software

Electronics and mechanics in one software

- In addition to programming and managing electronic cylinders and door hardware, the software can also manage mechanical master key systems

Modern browser interface

- Access rights can be managed using mobile devices (e.g. tablets)

Central server updates

- Web-based architecture means that updates on individual clients are no longer required
- It is possible to log in via the user interface of every workstation in the network

Fast commissioning

- When a master key system is delivered, it comes with a master key system file detailing all cylinder/door data, such as the door designation and technical features – this allows the system to be commissioned quickly

Convenient acknowledgement/confirmation of receipt

- The distribution of access media can be signed via the signature pad and archived electronically

Password-protected event query

- The "double-check principle" control function is available

Straightforward programming of cylinders and access media

- Performed via the intuitively operated locking scheme matrix

Straightforward installation with internal database

- Stand-alone installations can be performed without external SQL data bases

Networkable

- Client/Server operation is possible

Scope of functions can be extended in a modular fashion

- Online module for integration of cylinders that are suitable for radio transmission, bus interfaces and radio modules
- Client module for administration of several clients within a master key system
- Data on Transponder module for virtual networking of cylinders via the card or key fob

Cylinders

Low operating/maintenance costs as battery rarely needs to be replaced

- Very long service life of cylinder batteries (up to 70,000 locking cycles or more per battery)

Modular design

- The length of the cylinder body can subsequently still be adjusted

Simple maintenance

- Use of customary batteries instead of special batteries for cylinders

Convenient battery change

- Cylinder does not have to be removed

Battery in the cylinder

- An external energy supply via cable or in a separate milling in the door is not required for a high number of locking cycles

Complete products

- No limitation of cylinder functions (event storage and time frames are included in the basic equipment)

Location-independent function

- No restrictions in relation to the installation location of the cylinder (e.g. turned through 180°)

Effective prevention of door misuse

- The double knob cylinder optionally reads electronically from both sides

Cylinders for panic locks

- Approved variants for panic locks, which require defined cam positions

Easy-to-mount half knob cylinders

- Knob can be removed for installation

Certified security

- VdS BZ+, SKG***

Electronic door hardware

Fire protection doors

- The door hardware is approved for use on fire protection doors

Panic doors

- The door hardware can be used on emergency and escape doors (EN 179/EN 1125)
- The door hardware can be used with push bars or touch bars

Lever handle direction

- The lever handle direction can subsequently be changed over at any time on-site with no need for special tools

Energy management

- Thanks to the energy-efficient control method used for the door hardware 2 standard batteries (CR2) are sufficient for up to 120,000 locking operations

Programming device

Programming of cylinders

- Programming and event querying is contactless

Service and maintenance

- Programming device with service functions for maintenance work (e.g. contactless cylinder battery level querying)

Verification of time and date

- Time and date of the programming device can be checked using the integrated display

Versatile use

- Programming device can be implemented as a desktop device for programming/reading the access media

Access media

Existing MIFARE® access media

- Existing MIFARE Classic® or MIFARE® DESFire® media can be used (provided there is sufficient memory space on the media)

Combinations

Functions and product variants



ixalo double knob cylinder | RFID

	SL	VK	VdS	SKG	O	DoT	WS	HZ	F	ES	ZZ	OI
Special lengths > 80/80 mm (SL)	-	-	●	●	●	●	●	-	●	●	●	●
Extended external plug (VK)	-	-	-	-	-	-	-	-	-	-	-	-
VdS-BZ+ and approval (VdS) <i>under preparation</i>	●	-	-	-	●	●	●	●	●	●	●	●
SKG*** approval (SKG) <i>under preparation</i>	●	-	-	-	●	●	●	●	●	●	●	●
Online (O)	●	-	●	●	-	●	●	●	●	●	●	●
Data on Transponder (DoT)	●	-	●	●	●	-	●	●	●	●	●	●
Weather-proof version (WS)	●	-	●	●	●	●	-	●	●	●	●	●
Half cylinder version (HZ)	-	-	●	●	●	●	●	-	●	●	●	●
Approved for fire protection doors (F)	●	-	●	●	●	●	●	●	-	●	●	●
Event recorder (ES)	●	-	●	●	●	●	●	●	●	-	●	●
Time frame management (ZZ)	●	-	●	●	●	●	●	●	●	●	-	●
Without inside knob (OI)	●	-	●	●	●	●	●	●	●	●	●	-

Combination possible ● Combination not possible -

ixalo panic double knob cylinder | RFID

	SL	VK	VdS	SKG	O	DoT	WS	F	ES	ZZ	OI
Special lengths > 80/80 mm (SL)	-	-	●	●	●	●	●	●	●	●	●
Extended external plug (VK)	-	-	-	-	-	-	-	-	-	-	-
VdS-BZ+ and approval (VdS) <i>under preparation</i>	●	-	-	-	●	●	●	●	●	●	●
SKG*** approval (SKG) <i>under preparation</i>	●	-	-	-	●	●	●	●	●	●	●
Online (O)	●	-	●	●	-	●	●	●	●	●	●
Data on Transponder (DoT)	●	-	●	●	●	-	●	●	●	●	●
Weather-proof version (WS)	●	-	●	●	●	●	-	●	●	●	●
Approved for fire protection doors (F)	●	-	●	●	●	●	●	-	●	●	●
Event recorder (ES)	●	-	●	●	●	●	●	●	-	●	●
Time frame management (ZZ)	●	-	●	●	●	●	●	●	●	-	●
Without inside knob (OI)	●	-	●	●	●	●	●	●	●	●	-

Combination possible ● Combination not possible -

ixalo double knob cylinder | RFID | readable from both sides

	SL	VK	VdS	SKG	O	DoT	WS	F	ES	ZZ	OI
Special lengths > 80/80 mm (SL)	-	●	●	●	●	●	●	●	●	●	●
Extended external plug (VK)	●	-	●	●	●	●	●	●	●	●	●
VdS-BZ+ and approval (VdS) <i>under preparation</i>	●	●	-	-	●	●	●	●	●	●	●
SKG*** approval (SKG) <i>under preparation</i>	●	●	-	-	●	●	●	●	●	●	●
Online (O)	●	●	●	●	-	●	●	●	●	●	●
Data on Transponder (DoT)	●	●	●	●	●	-	●	●	●	●	●
Weather-proof version (WS)	●	●	●	●	●	●	-	●	●	●	●
Approved for fire protection doors (F)	●	●	●	●	●	●	●	-	●	●	●
Event recorder (ES)	●	●	●	●	●	●	●	●	-	●	●
Time frame management (ZZ)	●	●	●	●	●	●	●	●	●	-	●

Combination possible ● Combination not possible -

ixalo software licences RFID			
Master key system management			
Management module	With this module you can manage mechanical, mechatronic and electronic master key systems. All distributed access media, installed cylinders and door hardware are appropriately recorded e.g., to give evidence to insurance companies in the event that keys are lost.		
Client module	This module allows splitting of master key systems into different clients. Each client (e.g., tenant of an office building) can only manage the keys/cylinders and program the cards/access points allocated to him/her.		
Software licence RFID Multiple-station client/server licence	A client/server installation of the BKS KeyManager can be carried out using this licence.		
Software licence RFID One additional user	The licence allows one more operator to be added to a BKS KeyManager installation.		
Software licence RFID Five additional users	The licence allows five more operators to be added to a BKS KeyManager installation.		
Programming of the electronic locking system			
	Max. number of access media	Max. number of access points (cylinders, door hardware or wall readers)	Management module included (mechanics)
Software licence RFID free	25	5	No
Software licence RFID standard	1000	100	No
Software licence RFID professional	Unlimited	Unlimited	No
Software licence RFID standard plus	1000	100	Yes
Software licence RFID professional plus	Unlimited	Unlimited	Yes
Extra licences			
Software licence RFID online	This licence permits the connection of online products, e.g. cylinder with radio module.		
Software licence RFID Data on Transponder	This licence enables the programming of products via virtual networks.		
Software licence RFID MIFARE® DESFire®	This licence allows MIFARE® DESFire® access media to be programmed and administered, in addition to MIFARE Classic® access media.		

	Certified in accordance with EN 1303 – Building hardware – Locking cylinders for locks – Requirements and test methods		In SKG version, testing underway		Emergency exit devices in accordance with EN 179
	Certified in accordance with DIN 18252 – Profile cylinders for door locks – Terminology, dimensions, requirements and marking		In VdS version, testing underway		Panic exit devices in accordance with EN 1125
	Certified in accordance with EN 15684 – Building hardware, mechatronic locking cylinders, requirements, test methods		Offline system variant		Available in RFID technology
	CE marking		Online system variant		Available in SE technology
	Suitable for use on fire protection doors		System variant Data on Transponder		



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Although we have made every attempt to ensure the information provided here is accurate, it is non-binding. It should be adapted to the respective construction projects, usage and specific on-site demands.

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