

WINDOW TECHNOLOGY DOOR TECHNOLOGY AUTOMATIC ENTRANCE SYSTEMS BUILDING MANAGEMENT SYSTEMS

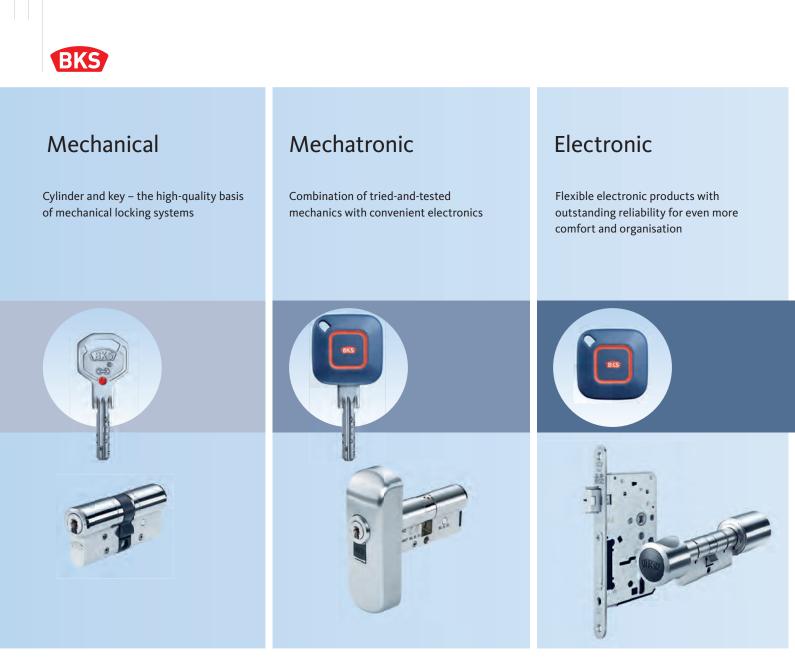


Securing technology for you



## **Cutting-edge locking systems**

The Gretsch-Unitas system worlds



Locking systems from BKS offer a variety of solutions for securing individual doors and for planning modern master key systems. Individual designs can be created conveniently, reliably and cost-effectively by combining mechanical, mechatronic and electronic locking systems.



Be clever with your combinations! **ixalo** – the electronic locking system Access to greater flexibility

Identifying

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<sup>®</sup> (MIFARE Classic<sup>®</sup>, MIFARE<sup>®</sup> DESFire<sup>®</sup> EV1) – ixalo offers a multitude of applications for individual customer requirements.

#### Copyright notice

© All illustrations and texts in this brochure are protected by copyright. Unless otherwise stated on the image, the rights belong to the Gretsch-Unitas Group. Any use of copyright protected materials without the consent of the holder of the rights is prohibited. MIFARE®, MIFARE Classic® and MIFARE® DESFire® are registered trademarks of NXP B.V.

#### Publisher

Gretsch-Unitas GmbH Baubeschläge Johann-Maus-Straße 3 - D-71254 Ditzingen Tel. + 49 (0) 71 56 3 01-0 Fax + 49 (0) 71 56 3 01-2 93 www.g-u.com

#### Table of contents

| Introduction – overall system Page                                  | 2–9   |
|---|-------|
| Identifying Page  | 10–13 |
| ixalo transponderPage   | 12    |
| LockingPage   | 14–23 |
| <ul> <li>ixalo knob cylinder – electronic cylindersPage</li> </ul>  | 16    |
| <ul> <li>janus cylinder   SE – mechatronic cylindersPage</li> </ul> | 18    |
| ixalo lock – electronic locksPage                                   | 20    |
| ixalo wall readerPage   | 22    |
| OrganisingPage  | 24-33 |
| ixalo software BKS KeyManagerPage                                   | 26    |
| ixalo programming devicePage  | 28    |
| ixalo release terminalPage  | 30    |
| ixalo wall-mounted radio modulePage                                 | 32    |
| System variantsPage   | 34    |
| More than just productsPage   | 36-39 |
| MKS planning/ordering platform, dealer networkPage                  | 36    |
| Service and building project consultingPage                         | 38    |
| Points to note – checklistPage                                      | 40    |
| Functions, product variants, software licencesPage                  | 42    |

Locking

Organising

## ixalo - the electronic locking system

Access to greater flexibility



Secure locking – which has been the core competency of BKS for more than 100 years – is also the central function of ixalo, the allencompassing 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.



ixalo transponder | SE 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

Thanks to the SE technology by BKS, the products consume a particularly low amount of energy – one of the fundamental criteria to be met by battery-operated systems. This is the only way to ensure a large number of locking cycles (up to 600,000) and long standby times (up to 10 years).

#### 2. Secure

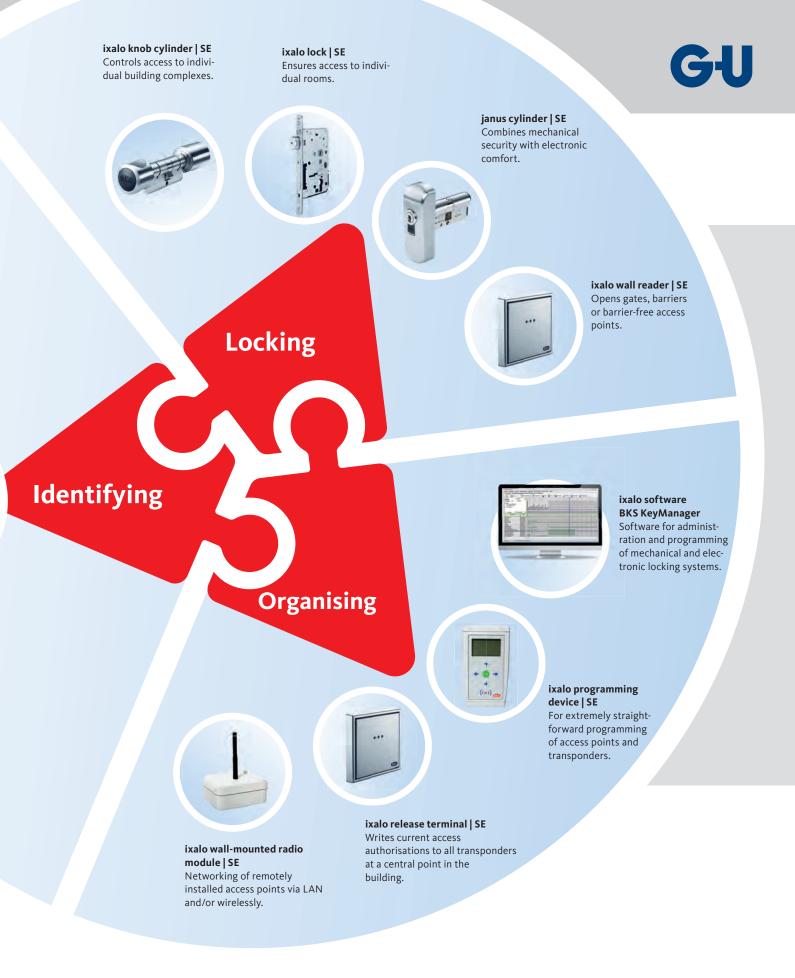
Whoever opts for an electronic locking system can expect outstanding security in addition to a high degree of comfort. ixalo – the electronic locking system satisfies the highest security requirements of the EN 15684 standard for mechatronic locking cylinders by using extremely reliable encoding and 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, keys and transponders are managed uniformly within one software.

#### 4. Visually appealing

Convenient operation and individual door design does not necessarily have to be mutually exclusive. With the ixalo lock | SE, the emphasis is on compact, visually appealing security as the entire system technology is integrated into the lock. Any door hardware can be chosen.









ixalo – the electronic locking system Access to greater flexibility



## "I am looking for a locking system that allows me to combine mechanical, mechatronic 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 comfortable solutions in terms of flexibility – modification of changed access rights – and security, e.g. due to secure encoding and straightforward disabling of lost keys. 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

## BKS

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



#### 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 transponders or keys 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.





#### Access medium

ixalo transponder | SE – convenient access which can be programmed and enabled via the ixalo release terminal



ixalo – the electronic locking system Access to greater flexibility







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.

## ixalo transponder

Universal access medium



#### ixalo transponder Universal access medium

Regardless of whether you use mechanical, mechatronic or electronic locking cylinders – with an ixalo transponder from BKS you can lock every type of cylinder of any BKS master key system. Different cylinders can be combined in a cost-effective overall system. And without having to sacrifice comfort, as only one locking device is required for all cylinders. In virtually networked "Data on Transponder" systems, the ixalo transponders 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 without the need for a wired network. There is also a considerable cost advantage when retrofitting an existing mechanical BKS master key system with ixalo transponders as not all existing keys automatically need to be replaced.





#### Features and benefits of ixalo transponders:

- Retrofittable to existing BKS master key systems without labour intensive key exchange
- Multifunctional LED indicates active authorisations and battery level
- Active transponder for minimal cylinder battery consumption
- Long service life of battery: up to 200,000 locking cycles or 10 years standby per standard battery
- Easy battery change
- Consecutive numbering of IDs for simple and fast recording in the ixalo software BKS KeyManager

- In the "Data on Transponder" version, transponders can be written with
  - Authorisation data
  - Periods of validity
  - Events
  - Programming jobs
  - Service information

#### **Optional versions:**

Explosion-protected







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."

**Matthias Reimer, Architect** 

Future-oriented locking – unlike conventional electronic hardware solutions, a wide range of hardware can be combined with the ixalo lock as the entire system technology is integrated into the lock. This gives designers the design and aesthetic freedom they require.

## ixalo knob cylinder

**Electronic cylinder** 



#### 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 ideal 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 panic double knob cylinder

ixalo double knob cylinder

Installation situation

ixalo half knob cylinder



#### Features and benefits of ixalo knob cylinders:

- High energy efficiency: up to 350,000 locking cycles or 10 years standby per standard battery
- Electronic release on both sides (no unauthorised operation of the inner knob)
- Large event recorder (can be deactivated)
- Many special functions (daytime release, double-check principle, intruder detection system function, etc.)
- Contactless programming with programming device, transponder or via radio control
- Freely definable time frames, holidays and vacation durations

#### **Optional versions:**

- Special lengths > 80 mm/80 mm
- Panic version (ixalo panic double knob cylinder)
- VdS BZ (highest level of security certified by VdS)
- SKG\*\*\* (highest level of security certified by SKG)
- Weather-protected version (IP65)
- Online version with integrated radio module

janus<sup>®</sup> cylinder | SE

Mechatronic cylinder



## Secure mechanics – flexible electronics

Provided with an additional electronic security feature, the proven janus mechanical cylinder system can be implemented especially flexibly. In terms of its outward appearance, the janus cylinder | SE is barely distinguishable from a purely mechanical cylinder. It is therefore suitable e.g. for areas where there is a risk of vandalism, in schools for instance. On the inside, the cylinder is protected by its robust rosette.

## Highest level of energy efficiency

Its remarkably energy-efficient functioning principle allows for a very high number of locking cycles per inserted standard battery. This is a decisive criterion where battery-operated systems are concerned.

#### **Outstanding security**

Based on mechanical janus cylinder, the janus cylinder | SE combines the positive characteristics of a mechanical cylinder with the comfort of an electronic cylinder without this being outwardly identifiable as such.











janus cylinder | SE

External view janus cylinder | SE

Installation of a janus cylinder | SE



#### Features and benefits of janus cylinders | SE:

- The highest level of energy-efficiency: up to 600,000 locking cycles, or 10 years standby per standard battery
- Double security with mechanical and electronic security
- Large event recorder (can be deactivated)
- Contactless programming with programming device, transponder or via radio control
- Freely definable time frames, holidays and vacation durations
- Ideally suited for vandalism risk areas

#### **Optional versions:**

- Special lengths > 80 mm/80 mm
- Online version with integrated radio module
- VdS BZ (highest level of security certified by VdS)
- SKG\*\*\* (highest level of security certified by SKG)
- Cylinder cover for BKS security hardware
- Explosion-protected

ixalo lock The lock as locking cylinder



#### Design freedom at the door

In contrast with electronic hardware solutions, with the ixalo lock the choice of hardware – e.g. tried-and-tested quality BKS hardware or other manufacturers – and therefore the door design is unlimited. Convenient operation and individual design of doors need not be mutually exclusive.

## Compact visually appealing security

Electronics, reader and battery are securely integrated into the lock – instead of external hardware – thus protecting them from unauthorised access. The door is always locked thanks to the integrated automatic latchbolt (except when daytime release is desired). Easy use and high security have been efficiently combined.

## Cost-efficient retrofitting of existing doors

The ixalo lock is sized to DIN lock case dimensions. This ensures it is easy to retrofit into existing doors. The lock has been certified based on DIN 4102 and EN 1634 as acceptable for use in smoke and fire protection doors.











ixalo lock

ixalo lock with profile cylinder

ixalo lock without profile cylinder

#### Features and benefits of ixalo locks:

- The ixalo lock communicates directly with the transponder without a detour via an externally wired reader
- Event recorder
- Extremely long battery life: 400,000 locking cycles or 10 years standby per standard battery
- Approved for use in fire protection doors and escape doors
- Outstanding security due to electronics and actuator being integrated into the lock instead of the external electronic hardware
- Many special functions (daytime release, double-check principle, burglar alarm system function and others)

#### **Optional versions:**

((

- Online version with integrated radio module (868 MHz)
- Combination with the WDL hardware range by BKS: for use in sheet-steel doors

## ixalo wall readers

The cylinder for the wall



#### 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 mechatronic or electronic cylinders used within the master key system. The wall reader releases motordriven locks, electric strikes, swing-door drives or sliding doors to authorised transponders; at predefined times, if desired.





#### Features and benefits of ixalo wall reader:

- Controlled activation of BKS motor-driven locks and multipoint 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, transponder or online via bus
- Electronics securely accommodated in the interior (in conjunction with an external reader)







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, locks, 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.

### ixalo software

**BKS KeyManager for access administration** 



#### **Control and overview**

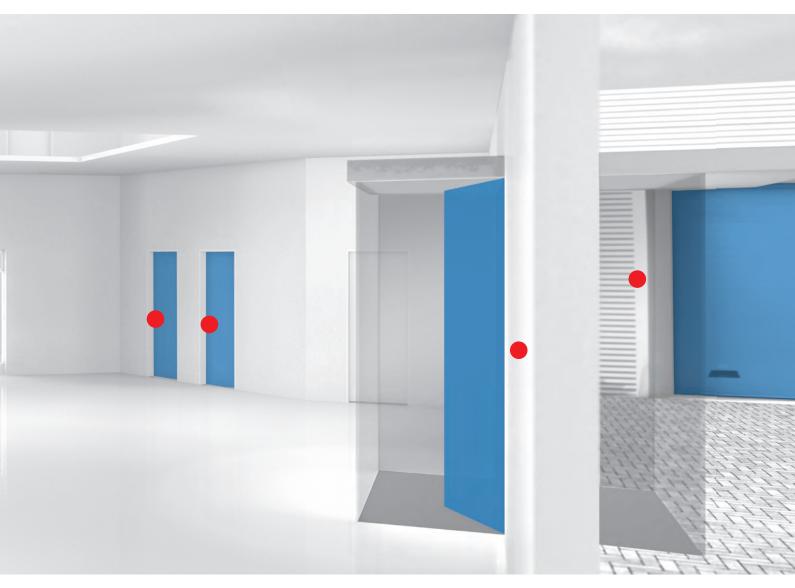
Throughout the years, the BKS KeyManager, constantly refined in collaboration with our customers, has proven itself a competent administration software for master key systems. The BKS KeyManager does full justice to the trend of combining mechanical, mechatronic and electronic cylinders in one cost-effective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

## Programming and administration

All cylinders, with or without electronic components, can be managed consistently within one software programme using the BKS KeyManager. The intuitive user interface enables convenient programming of cylinders, from simple YES/NO programming through to timecontrolled authorisations and special functions.







#### Features and benefits of the BKS KeyManager:

- Uniform administration and programming of mechanical, mechatronic and electronic cylinders and wall readers via one user interface.
- Administration of distributed keys and transponders
- Display and printing of mechanical and electronic access authorisations
- Networkable (client/server)
- Electronic acknowledgement of receipt by means of signature pad
- Scaleable range of functions via powerful software modules

## ixalo programming device

Contact-free access updating



#### Convenient programming device instead of a heavy laptop

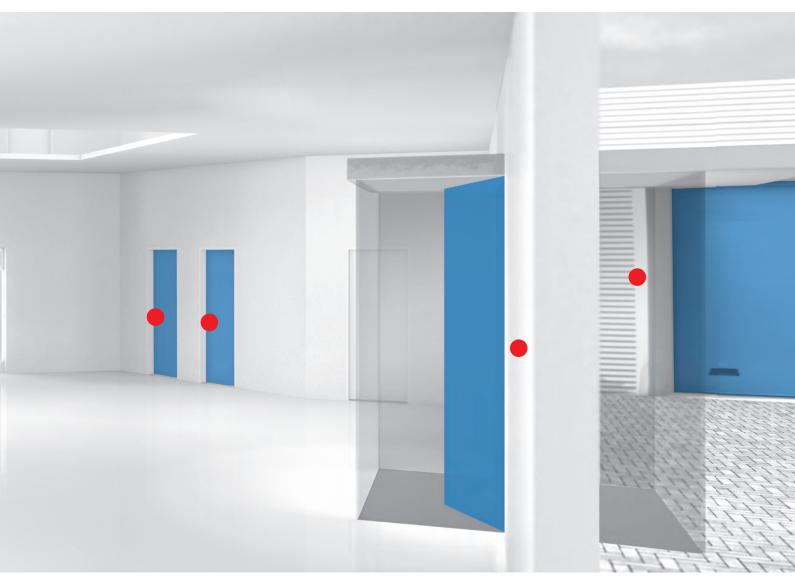
The ixalo programming device uses non-contact data transfer and can also be operated by persons who have no product or software training. This means that a security firm or caretaker can for example also update data for individual doors when on-site. When checking through the doors, a convenient checklist 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 charge level, firmware status and other service parameters are read out contact-free from built-in ixalo cylinders or locks.







#### Features and benefits of ixalo programming devices:

- Programming of ixalo access points (ixalo cylinder, ixalo wall reader, ixalo lock)
  - 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 station for writing to ixalo transponders
- Reading of ixalo access point events
- Multi-function display operated by means of function keys

- Can be used as a service tool
  - Contactless querying of cylinder and lock battery levels
  - Resetting of the low-battery warning
- Functions can be extended by carrying out firmware updates via BKS KeyManager software

### ixalo release terminal

Updating access rights



## 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 transponders and the release terminal.

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





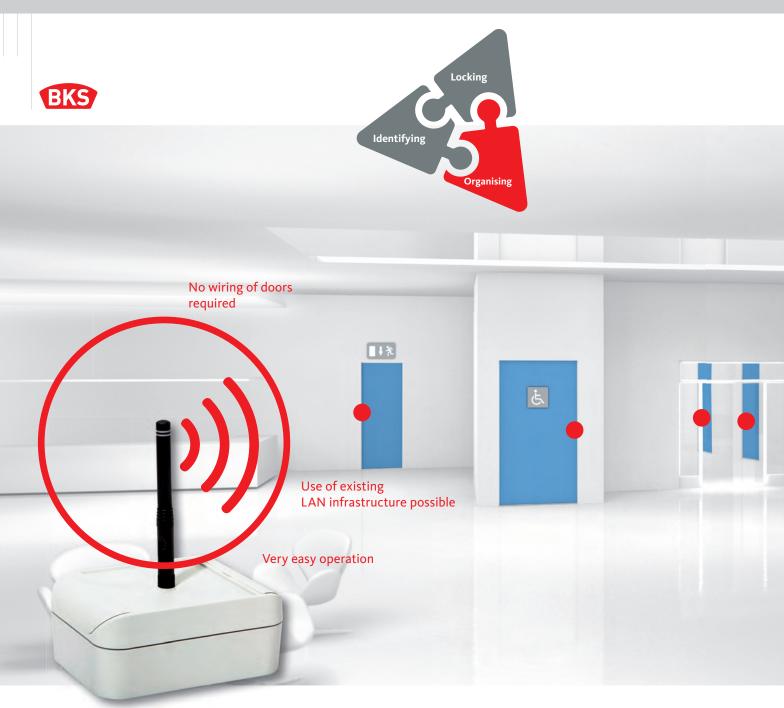


#### Features and benefits of ixalo release terminals:

- Validity ("daytime rights") of transponders can be updated
- Output relay can be used for release (e.g. turnstile)
- Access authorisation of the transponder can be updated
- Transponder 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



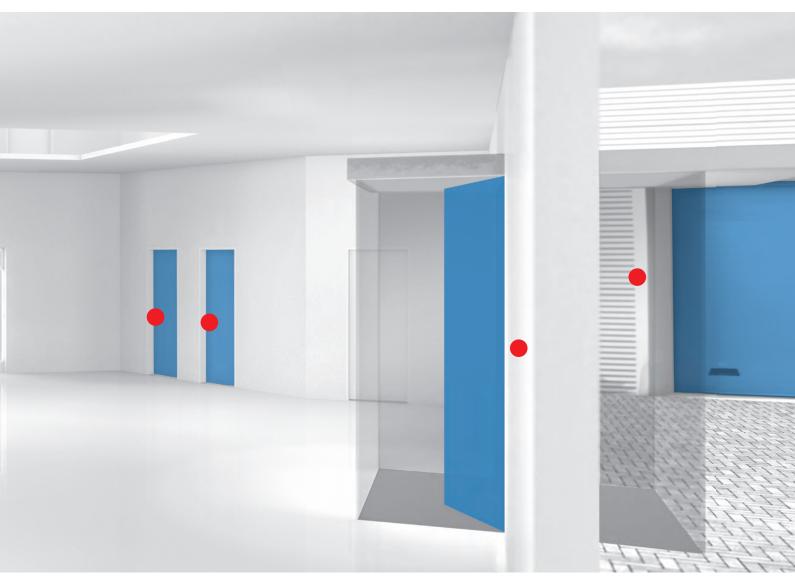
#### **Convenient programming**

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 or locks 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 wallmounted 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 and locks
- Special functions such as the connection of intruder detection systems can be implemented
- Up to 64 ixalo knob cylinders/locks can be connected per wall module in the online version.
- Use of existing LAN infrastructure possible
- Battery charge levels of ixalo knob cylinders/locks (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 SE technology:

#### Organising



#### An ideal entry-level system

An offline system can be installed and used very quickly.



#### **Programming comfort**

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

or



or

 Wiring of wall-mounted radio modules is required

#### **Convenience:**

Installation:

- 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

bus interface)

#### At least the following are required: ixalo transponder ixalo cylinder online ixalo programming device BKS KeyManager ixalo software licence ixalo software licence online ixalo wall-mounted radio module

(e.g. EBKFM radio control Ethernet

#### Master key system size:

programming device

For small and medium-scale master key systems

Doors are programmed on-site using a

#### Advantages:

Installation:

**Convenience:** 

Straightforward installation

No wiring required

- An ideal entry-level system
- Easy to install

## At least the following are required:

ixalo transponder ixalo cylinder ixalo programming device BKS KeyManager ixalo software licence





also recommended: ixalo release terminal

with EBK Ethernet bus interface

## **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.





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:

01 RAPSGV 06 STIFTE BKS-HS-An

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
- Repeat order of keys and cylinders
- Key combination records for download
- Master key system data for use in the BKS KeyManager (version 3.0 and higher)
- Key identifications
- Plausibility check



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

> Security through quality manufacturing



#### **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** 





Future-proof with patent protection

## **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.



12

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 closing doors.

Ŀ,

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.





#### 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.

#### 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.

for any project

## Check list | SE

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. In a battery operated system, for example, the battery life of cylinders plays a critical role in keeping follow-up costs for battery changes low, especially for mid-scale 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**

#### **Cost-effective solution**

□ An electronic locking system can be ordered in combination with mechanical cylinders within one master key system

#### Operating comfort, reliability and security

□ Transponders and cylinders/wall readers use contactless communication

#### **Different cylinder types**

□ In addition to standard double knob cylinders, mechatronic cylinders are available that can be operated like mechanical cylinders and can be used e.g. in areas at risk of vandalism

#### Combination of transponder and mechanical keys

- □ Transponders can be clipped on to mechanical keys
- Only one locking medium must be carried on the bunch of keys for mechanical and electronic cylinders
- Existing keys of a mechanical master key system can be replaced inexpensively in the event of extension

#### 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 transponders

#### **Economic 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 degree of security

Master key system identification allocation at the factory combined with master key system password that can be freely defined by the customer

#### Fast commissioning

□ Transponders are consecutively numbered so that they do not have to be programmed individually

#### Special versions with Ex-protection

□ Ex-protected versions of cylinders and transponders are also available

#### 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, the software can also manage mechanical master key systems

#### **Fast commissioning**

□ A master key system file with all cylinder/door data such as door designation and technical characteristics is included in the delivery of a master key system – for fast commissioning of a system

#### Convenient acknowledgement/confirmation of receipt

□ The distribution of transponders/keys 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/transponders

 Performed via the intuitively operated locking scheme matrix or list view

#### 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 transponder



#### Cylinder

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

 Very long service life of cylinder batteries (up to 350,000 locking cycles or more per battery)

#### Operating reliability also with infrequent use

□ Long standby times (up to 10 years) for remote or rarely used doors

#### Simple maintenance

Use of customary batteries instead of special batteries for cylinders/transponders

#### Electronics on the secure interior side

□ The evaluating electronics are integrated into the knob on the inside and are therefore protected

#### **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 generally scans electronically on both sides
- Unauthorised operation from the inside is not possible

#### **Cylinders for panic locks**

 Authorised variants for panic locks that require defined locking cam positions

#### Easy-to-mount half knob cylinders

 $\hfill\square$  Knob can be removed for installation

#### **Certified security**

□ VdS BZ, SKG\*\*\*, Ex-protection certifications exist

#### Backup power supply for a double knob cylinder

 External power supply is available via an external backup power supply module

#### Lock or hardware

#### No design restrictions

Unrestricted selection of hardware design

#### Electronics in the secure inside area

□ The evaluating electronics are in the lock in the door and not in the outside hardware

#### Straightforward battery replacement

□ The battery can be replaced without removing the lock or hardware

#### Locking cylinder

□ A locking cylinder can also be used. Its use is monitored and logged.

#### **Programming device**

#### Programming of cylinder

□ 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 transponders

#### Transponder

#### **Display of access authorisation**

Multifunction LED in the transponder signals authorisation rights on a cylinder/wall reader

#### **Battery level check**

□ It is possible to check the battery level using integrated visual signaling

#### **Extremely low battery consumption**

□ Up to 200,000 locking cycles per standard battery

#### Long battery life with infrequent use

□ Standby time is up to 10 years

#### Integrated event recorder (with Data on Transponder)

- □ Up to 500 events can be saved
- □ Transmission of battery charge levels of cylinders or locks

## Large data storage for access authorisations (with Data on Transponder)

□ Clip group and/or up to 64,000 individual doors can be saved

## Combinations

Functions and product variants



#### ixalo knob cylinder | SE

|  | SB | VK | VdS | SKG | 0 | DoT | Ti | WS | HZ | F | ES | ZZ |
|--|----|----|-----|-----|---|-----|----|----|----|---|----|----|
| Special lengths > 80/80 (SL)           | -  | •  | •   | •   | • | •   | •  | •  | -  | • | •  | •  |
| Extended external plug (VK)            | •  | -  | •   | •   | • | •   | •  | -  | -  | • | •  | •  |
| VdS BZ approval (VdS)                  | •  | •  | -   | -   | • | •   | -  | •  | -  | • | •  | •  |
| SKG*** approval (SKG)                  | •  | •  | -   | -   | • | •   | -  | •  | -  | • | •  | •  |
| Online (O)                             | •  | •  | •   | •   | - | •   | •  | •  | •  | • | •  | •  |
| Data on Transponder (DoT)              | •  | •  | •   | •   | • | -   | •  | •  | •  | • | •  | •  |
| Internal push-button (Ti)              | •  | •  | -   | -   | • | •   | -  | -  | -  | • | •  | •  |
| Weather-proof version (WS)             | •  | -  | •   | •   | • | •   | -  | -  | •  | • | •  | •  |
| Half cylinder version (HZ)             | -  | -  | -   | -   | • | •   | -  | •  | -  | - | •  | •  |
| Approved for fire protection doors (F) | •  | •  | •   | •   | • | •   | •  | •  | -  | - | •  | •  |
| Event recorder (ES)                    | •  | •  | •   | •   | • | •   | •  | •  | •  | • | -  | •  |
| Time frame management (ZZ)             | •  | •  | •   | •   | • | •   | •  | •  | •  | • | •  | -  |

1

| ixalo panic double knob cylinder   SE  |    |   |     |    |    |   |    |    |  |  |  |
|--|----|---|-----|----|----|---|----|----|--|--|--|
|  | VK | 0 | DoT | Ti | WS | F | ES | ZZ |  |  |  |
| Extended external plug (VK)            | -  | • | •   | -  | -  | • | •  | •  |  |  |  |
| Online (O)                             | •  | - | •   | -  | •  | • | •  | •  |  |  |  |
| Data on Transponder (DoT)              | •  | • | -   | -  | •  | • | •  | •  |  |  |  |
| Internal push-button (Ti)              | -  | - | -   | -  | -  | - | -  | -  |  |  |  |
| Weather-proof version (WS)             | -  | • | •   | -  | -  | • | •  | •  |  |  |  |
| Approved for fire protection doors (F) | •  | • | •   | -  | •  | - | •  | •  |  |  |  |
| Event recorder (ES)                    | •  | • | •   | -  | •  | • | -  | •  |  |  |  |
| Time frame management (ZZ)             | •  | • | •   | -  | •  | • | •  | -  |  |  |  |

Combination possible 
Combination not possible –

| janus cylinder   SE                          |       |     |     |   |     |    |   |    |    |    |  |  |
|--|-------|-----|-----|---|-----|----|---|----|----|----|--|--|
|  | SB    | VdS | SKG | 0 | DoT | WS | F | ES | EX | ZZ |  |  |
| Special lengths > 80/80 (SL)                 | -     | •   | •   | • | •   | -  | • | •  | •  | •  |  |  |
| VdS BZ approval (VdS)                        | •     | -   | -   | • | •   | -  | • | •  | -  | •  |  |  |
| SKG*** approval (SKG)                        | •     | -   | -   | • | •   | -  | • | •  | -  | •  |  |  |
| Online (O)                                   | •     | •   | •   | - | •   | -  | • | •  | -  | •  |  |  |
| Data on Transponder (DoT)                    | •     | •   | •   | • | -   | -  | • | •  | •  | •  |  |  |
| Weather-proof version (WS)                   | -     | -   | -   | - | -   | -  | - | -  | -  | -  |  |  |
| Approved for fire protection doors (F)       | •     | •   | •   | • | •   | -  | - | •  | •  | •  |  |  |
| Event recorder (ES)                          | •     | •   | •   | • | •   | -  | • | -  | •  | •  |  |  |
| Explosion protected version (EX)             | •     | -   | -   | - | •   | -  | • | •  | -  | •  |  |  |
| Time frame management (ZZ)                   | •     | •   | •   | • | •   | -  | • | •  | •  | -  |  |  |
| Combination possible  Combination not possil | ble – |     |     |   |     |    |   |    |    |    |  |  |

Software licences and product characteristics



| Master key system manageme                   | nt  |  |   |  |  |  |  |  |  |  |
|--|---|--|---|--|--|--|--|--|--|--|
| Management module                            |   | With this module you can manage mechanical, mechatronic and electronic master key systems. Distributed keys and transponders as well as installed cylinders 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 mast only manage the keys/cylinders and | er key systems into different clients. Each c<br>programme the ixalo transponders/ixalo a  | lient (e.g. tenant of an office building) can<br>ccess points allocated to him/her. |  |  |  |  |  |  |  |
| Programming of the electronic                | locking system  |  |   |  |  |  |  |  |  |  |
|  | Max. number of transponders   | Max. number of access points<br>(cylinders or wall readers)  | Management module included (mechanics)  |  |  |  |  |  |  |  |
| Software licence   SE<br>free                | 25  | 5  | No  |  |  |  |  |  |  |  |
| Software licence   SE<br>standard            | 1000  | 100  | No  |  |  |  |  |  |  |  |
| Software licence   SE<br>professional        | Unlimited   | Unlimited  | No  |  |  |  |  |  |  |  |
| Software licence   SE<br>standard plus       | 1000  | 100  | Yes   |  |  |  |  |  |  |  |
| Software licence   SE<br>professional plus   | Unlimited   | Unlimited  | Yes   |  |  |  |  |  |  |  |
| Extra licences                               |   | ·  |   |  |  |  |  |  |  |  |
| Software licence   SE<br>online              | This licence permits the connection                                     | of online products, e.g. ixalo cylinders   SE  | with integrated radio module.   |  |  |  |  |  |  |  |
| Software licence   SE<br>Data on Transponder | This licence enables the programmir                                     | ng of products via virtual networks.   |   |  |  |  |  |  |  |  |



Certified in accordance with EN 1303 - Building hardware -Locking cylinders for locks - Requirements and test methods





Certified in accordance with





Certified in accordance with EN 15684 – Locks and building hardware, mechatronic locking cylinders, requirements, test methods

CE marking



Suitable for use on fire protection doors



VdS



Online system variant

In SKG version, testing

In VdS version, testing

Offline system variant

underway

underway





System variant Data on Transponder



Emergency exit devices in accordance with EN 179

Panic locks in accordance with EN 1125



**RFID** 



**RFID** technology

Explosion-protected



Available in SE technology



WINDOW TECHNOLOGY DOOR TECHNOLOGY AUTOMATIC ENTRANCE SYSTEMS BUILDING MANAGEMENT SYSTEMS

Gretsch-Unitas GmbH Baubeschläge Johann-Maus-Str. 3 71254 Ditzingen Germany Tel. + 49 (0) 71 56 3 01-0 Fax + 49 (0) 71 56 3 01-77980 BKS GmbH Heidestr. 71 42549 Velbert Germany Tel. + 49 (0) 20 51 2 01-0 Fax + 49 (0) 20 51 2 01-9733

www.g-u.com



