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Winkhaus Access Organisation

Product manual

# Winkhaus Access Organisation

## Product manual



# 1 General Information

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## 2 Electronic Access Organisation

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2.1 blueChip/blueSmart – Electronic locking systems

---

2.2 blueLine – Hardware for online access control/time management

---

2.3 Service

---

## 3 Software

---

3.1 blueControl range

---

3.2 timeControl

---

## 4 Mechanical Access Organisation

---

4.1 keyTec – Overview of systems

---

4.2 keyTec – Locking cylinders

1

2

2.1

2.2

2.3

3

3.1

3.2

4

4.1

4.2



## State of the art after more than 150 years of hard work

The new Winkhaus product manual for access organisation is right in front of you. Having seen the fruits of our work, it is with great pleasure that we present to you with this documentation a lot more than just a list of items.

Innovative product ideas, logical development and many additional usage options. And of course, our broad range of tried and tested solutions as well.

That said, we also want to demonstrate our knowhow in respect of always available solutions, in addition to our product development capabilities. And that's why we've simplified use of this product manual to a great extent. A clearly structured and revised layout now make it easier for you to gain an overview of all aspects. And our new index will make sure you always find exactly what you're looking for. And what's more, before each chapter you'll find interesting background information and descriptions of the functions and added value of our locking systems, as well as reference examples of our solutions.

All in all, this manual provides you with an indispensable reference work which opens a broad range of options to you. After all, you'll find in it 150 years of experience.

We'd be very pleased to see you using our supplementary services on the Internet and we look forward to a successful cooperation with you.

Your Winkhaus Team



# 1 General Information

- P. 06 Quality
- P. 07 Certificates / Acknowledgements / Standards
- P. 10 Locking types
- P. 11 Types of locking systems
- P. 13 Security card / Legitimation
- P. 14 Special options / Ordering options
- P. 15 Installation instructions and instructions for use
- P. 18 Service
- P. 20 Product liability
- P. 21 General terms and conditions of business

1

2

2.1

2.2

2.3

3

3.1

3.2

4

4.1

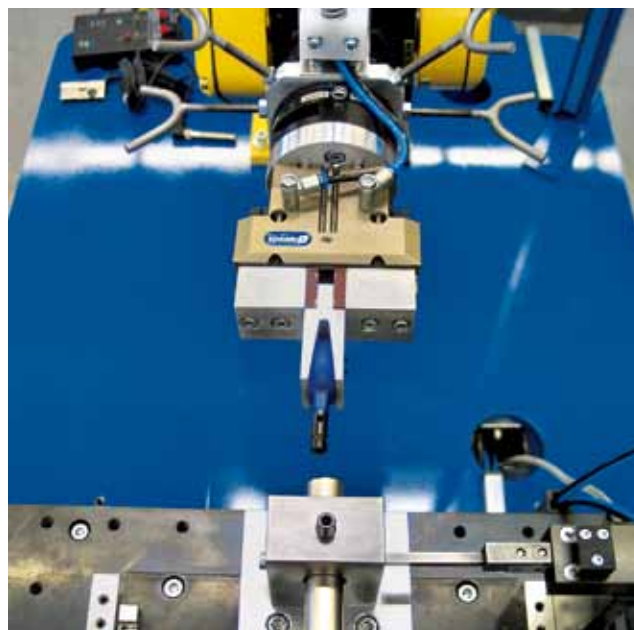
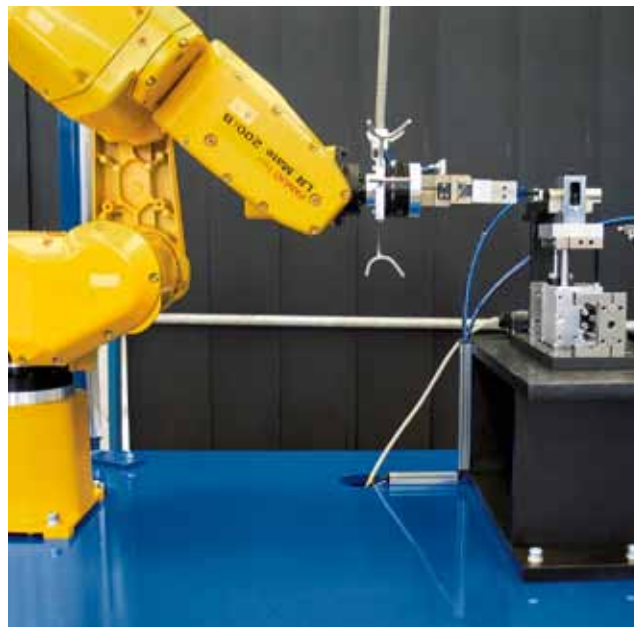
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## Quality

### Winkhaus quality management

The Winkhaus motto „Always precise“ represents quality. Our products are constantly being tested to stringent standards. This quality assurance management determines the entire workflow. The stringent requirements of DIN EN ISO 9001:2008 regulate optimum distribution of all tasks and responsibilities, with the objective of ensuring the best possible benefits for customers. In-house and external testers constantly monitor operations to ensure that our quality standards are being adhered to. Highly developed devices, such as a 6-axis robot which simulates the natural joints of the human hand, help to test our products to make sure they're appropriate for everyday use and in accordance with practice. Winkhaus has decided to exceed the expectations of its customers. We apply a constant improvement process to allow us to guarantee flawless products and services.



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# Certificates / Acknowledgements / Standards

## Standards mean order

The DIN was founded on 22 December 1917 as the Normenausschuss der deutschen Industrie (NADI, Standardisation Committee of German Industry). The results of the work of the NADI were the „German industry standards“. The DIN has been a registered organisation since 1920, and what's probably the best known standard among consumers - DIN 476 paper formats (e.g. DIN A4) - was published in 1922. In 1926, the DIN was renamed from „Standardisation Committee of German Industry“ to Deutscher Normenausschuss (DNA, German Standardisation Committee).

Nowadays, the DIN Deutsches Institut für Normung e. V., with its 81 standards committees, is the national standards body of the Federal Republic of Germany. Manufacturers, traders, consumers, craftsmen, service employers, science, technical monitoring and the State all work together to establish German industrial standards (DIN).

On a European basis this assignment is taken over by the European Committee for Standardisation (CEN). This committee is responsible for adopting European standards, e. g. DIN EN 1303 for mechanical locking cylinders. An EN standard can be specified by the German Standards Committee and defined in a national DIN standard.

These standards have to take into account the current state of the art in science and technology. These principles have resulted in general acknowledgement for DIN standards.

With the active cooperation of Winkhaus, standards such as DIN EN 1303 and DIN 18252 set the benchmark for the flawless technical operation of locking cylinders.

## DIN/EN approved locking systems

	System/type	Special feature Order variant	Classification DIN 18252/ 2006	Classification DIN EN 1303/ 2005	Classification DIN EN 1627/ 2011	Classification DIN EN 15684
<b>Mechanical</b>	keyTec AZ	DA	71BZ	1-6-0-1-0-C-4-2	RC 3	
		BS		1-6-0-1-0-C-4-2*	RC 3	
	keyTec VS/ZRV	DA	71BZ	1-6-0-1-0-C-4-2	RC 3	
		BS		1-6-0-1-0-C-4-2*	RC 3	
	keyTec RPE	in preparation				
	keyTec VS6/ZRV6	DA	82BZ	1-6-0-1-0-C-6-2	RC 4	
		BS		1-6-0-1-0-C-6-2*	RC 4	
	keyTec RAP/RAP+	in preparation				
	keyTec Titan	DA	82BZ	1-6-0-1-0-C-6-2	RC 4	
	keyTec X-tra	BS as standard		1-6-0-1-0-C-6-2*	RC 4	
<b>Electronic</b>	blueChip/blueSmart <sup>1</sup>					1-6-B-2-A-F-3-2
	blueChip/blueSmart <sup>2</sup>					1-6-B-3-A-F-3-2
	blueChip/blueSmart <sup>3</sup>					1-6-B-4-A-F-3-2

\* Attack resistance class 2 only in conjunction with anti-pulling protection fitting in compliance with EN 1906 or 18257

<sup>1</sup> For the types 01, 02, 04MK and 05.

<sup>2</sup> For the type 04.

<sup>3</sup> For the types 11, 12, 14MK, 15 and 21.

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Certificates / Acknowledgements / Standards

VdS-Schadenverhütung

The institution on security issues

VdS-Schadenverhütung (VdS damage prevention) transfers the extensive technical rulings of the German property insurer on behalf of the Gesamtverband der Deutschen Versicherungswirtschaft e. V. (GDV, the German Insurance Association). The VdS guidelines are laid down and constantly developed together with associations and authorities. Besides the experience of insurers in cases of damage, the experiences of the police with regard to relevant criminal behaviour are also incorporated into the guidelines. In addition, the VdS rules prescribe requirements for individual products. Thus the VdS guidelines provide a solid foundation for keeping the risk of break-ins to a minimum.

Certification / Acknowledgement to VdS

In the case of VdS-Schadenverhütung, products are certified on the basis of a positive test report from the VdS laboratories. This report confirms compliance of the product with technical rules, e.g. standards such as DIN, EN or ISO. VdS acknowledgement

is a special certification case. VdS acknowledgement of a product, besides the “usual” certification, confirms that the product meets the requirements of the insurers. As a rule, their demands are in excess of the technical rulings of DIN, EN or ISO and are established in the VdS guidelines.

Requirements and testing methods

VdS 2156-1

Guidelines for mechanical security systems  
Profile cylinder

VdS 2386

Guidelines for mechanical security systems  
Locking systems



VdS-approved locking systems

	System	Special features in acc. with ordered VdS model	Classification VDS 2156-1	Profile cylinder in individually secured lock	Profile cylinder for master key systems	Profile cylinder for triggering mechanism for burglar alarm systems
Mechanical	keyTec VS (from 1986)	VZ	AZ	X	X***	
	keyTec ZRV	VZ	AZ	X	X***	
	keyTec RPE			in preparation		
timeControl	keyTec VS6/ZRV6	VZ	BZ	X	X	
	keyTec RAP/RAP+			in preparation		
	keyTec Titan	VZ	BZ+	X	X	X
	keyTec X-tra	VZ	BZ+	X	X	X
Electronic	blueChip*	VZ**	BZ+	X	X	X
	blueSmart*	VZ**	BZ+	X	X	X

\* Key-operated blueChip and blueSmart cylinders.  
\*\* Certification stamp and changed release time apply only to order version VZ.  
\*\*\* Central locking systems only.

Note from VdS:

**Cylinders according to VdS (VZ):** profile cylinders must be protected with VdS class B or C burglary-resistant door plates on doors at risk from burglary. Such door plates comply with DIN 18 257, class ES 2 or ES 3.

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# Certificates / Acknowledgements / Standards

## Fire protection

The locking cylinders are suitable for use on fire and smoke protection doors.



According to the fire test to EN 1634-1 or EN 1634-2, the profile cylinders keyTec AZ/VS/VS6/ZRV/ZRV6/RAP/RAP+/RPE/RPS/TI6/X-tra, keyOne X-pert, blueChip and blueSmart are suitable for use on fire protection doors of fire resistance classes T30 to T90 (DIN EN 13501-2:2008-01).

## Explosion protection

The blueChip electronic locking system can be supplied as an optional explosion protection variant.

This equipment allows blueChip cylinders to be used in areas where there is a risk of explosion. Explosion risks are classified according to zone, device groups and categories. Therefore, the precise explosion protection specification must be indicated when placing an order.

When using blueChip cylinders with ex-protection, the guidelines of the operating permit must definitely be adhered to. The blueChip system is certified in the EC type-examination certificate: ZELM 05 ATEX 0284 X.



## Certificates / standards blueLine

The Winkhaus access control systems are being developed and produced in accordance with the applicable European standards for access control systems.

- EN 50133-1:**  
**“Access control system for security applications, part 1 System Requirements”**
- This standard describes, above all, functional requirements:
- System structure and the general requirements with regard to access control systems for security applications
  - Requirements with regard to functions
  - Establishment of ambient conditions and electromagnetic compatibility
  - Establishment of information exchange with others systems

- EN 50133-2-1:**  
**“Access control system for security applications, part 2-1: General requirements for system subparts”**
- This standard does not describe functional requirements, but the technical requirements with regard to components.

- EN 50133-7:**  
**“Access control system for security applications, part 7: Application Guidelines”**
- This standard includes rules for the planning of automatic access control systems.

All electronic devices from Winkhaus bear the mark of conformity with EMC in accordance with EN 50081-1, EN 50082-2 and EN 69050.

## Important safety information for the use of Winkhaus cylinders:

If cylinders are used on doors along escape routes and at emergency exits (anti-panic doors), the respective applicable guidelines or building regulations must be taken into consideration. Keys inserted from the inside are a safety risk since they can cause the lock to malfunction. You must follow the lock manufacturer’s specific instructions for the profile cylinder precisely. In the case of **anti-panic multi-point locks** with gear cases, only a anti-panic cylinder may be used from our Winkhaus product portfolio to ensure anti-panic doors do not become blocked. Contact us for further information.

# Locking types

## 1. Standard locking

Locking cylinders with no security card (see page 19, “Security cards”) available only in the keyOne X-pert system.



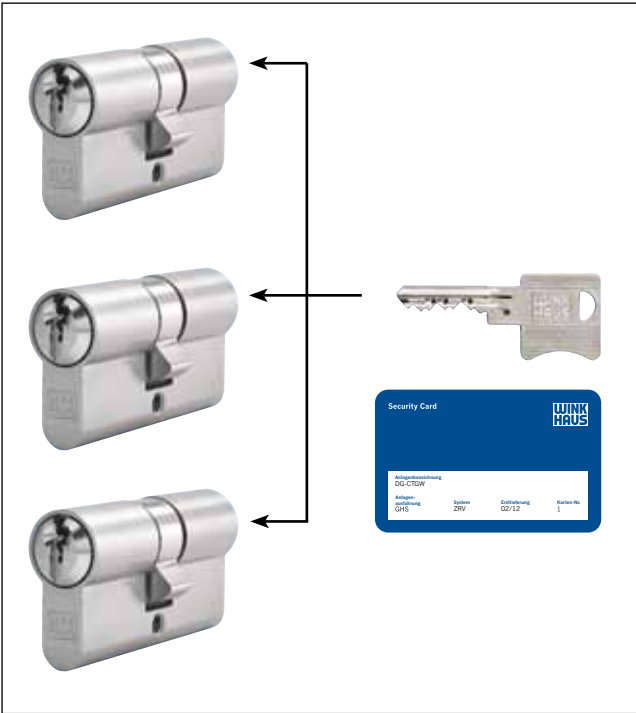
## 2. Single-secured lock

Locking cylinders available with security card in the keyTec systems AZ, VS, VS6, RPE and Xt. Suitable for single-secured locking cylinders without the hierarchical function range of a locking system. The security card serves as a legitimization for repeat orders of cylinders and keys.



## 3. Locking systems

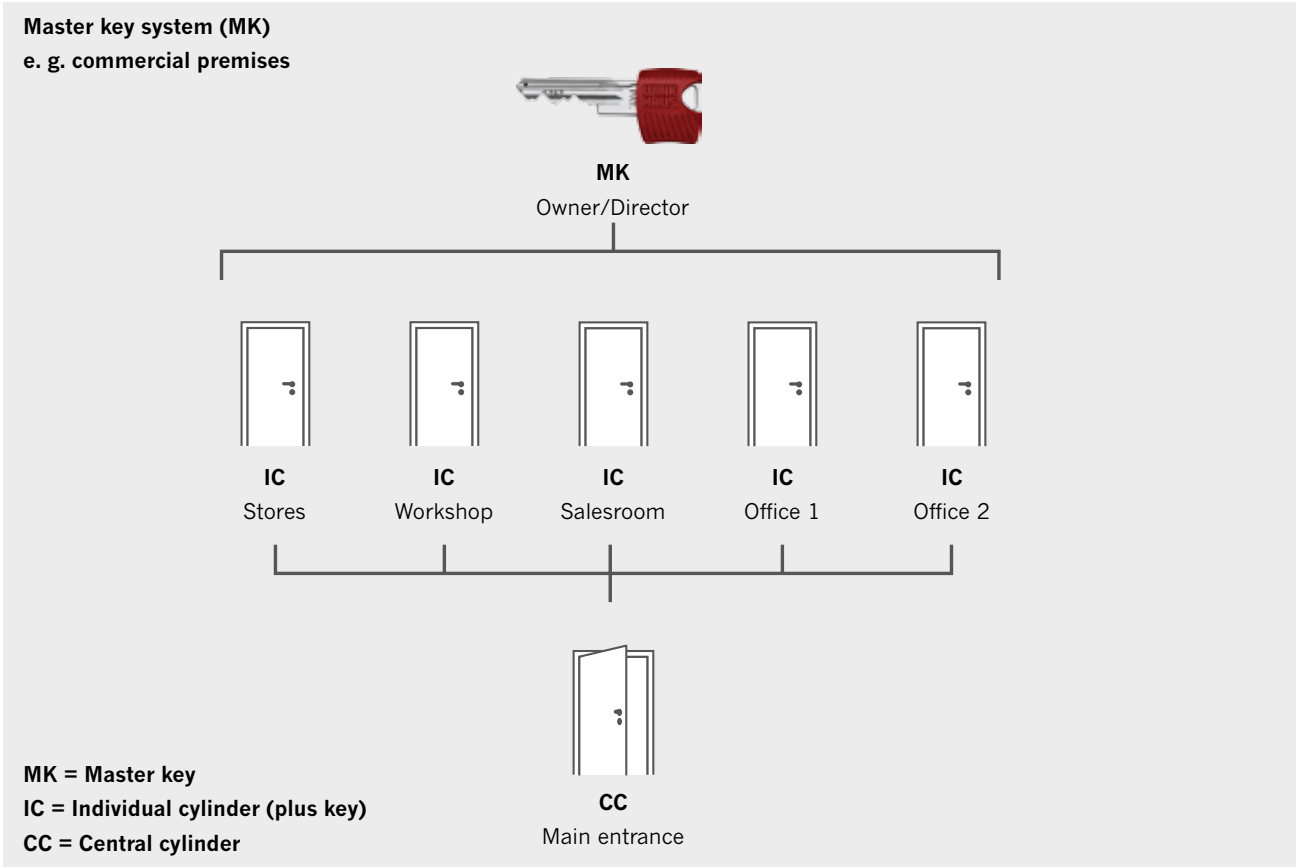
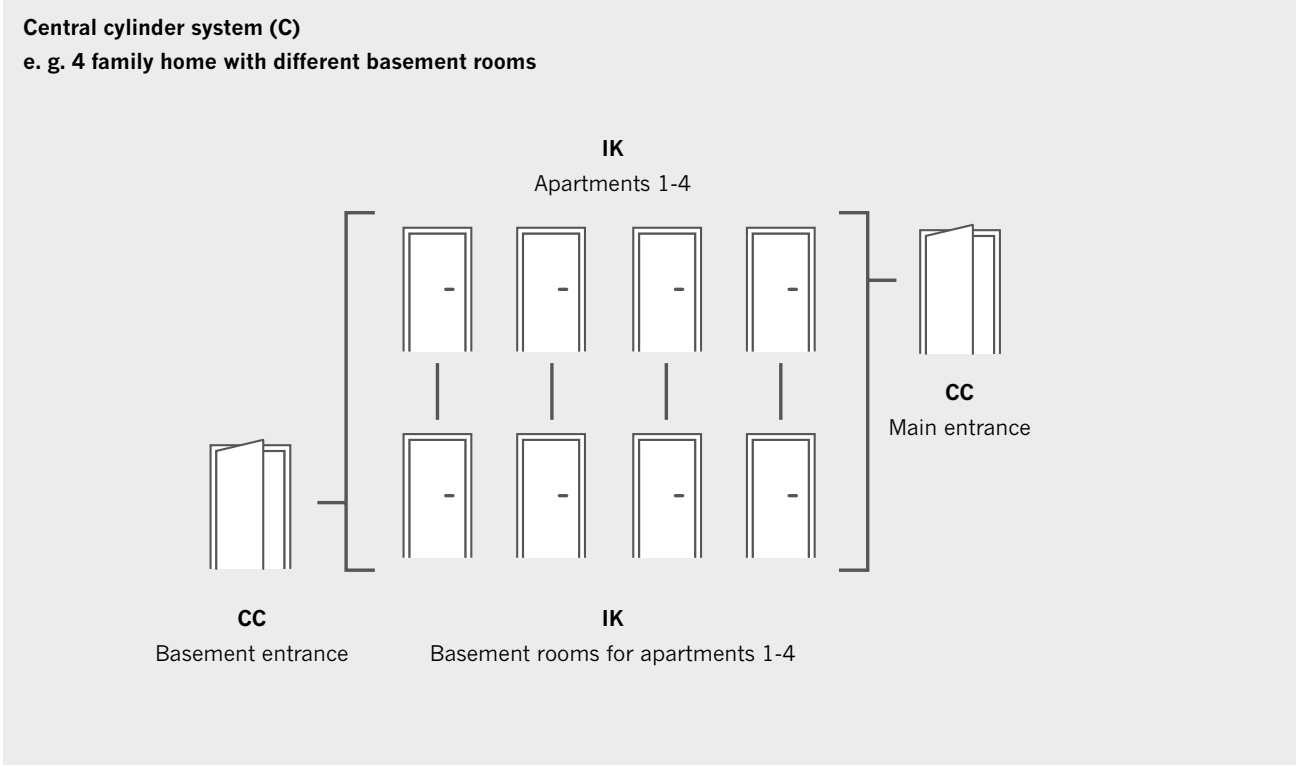
Locking cylinders available with security card in all systems keyTec AZ, ZRV, ZRV6, RAP, RAP+ and X-tra. Combination of locking cylinders and associated keys with various key profiles which are linked to one another in terms of function. A locking system does not only serve to bolt a door, but rather to assist with organisation into a corporate structure, for example. Locking authorisations can be adapted in accordance with an existing organisational chart. (See also “Locking system types” on the following page.)



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# Types of locking systems

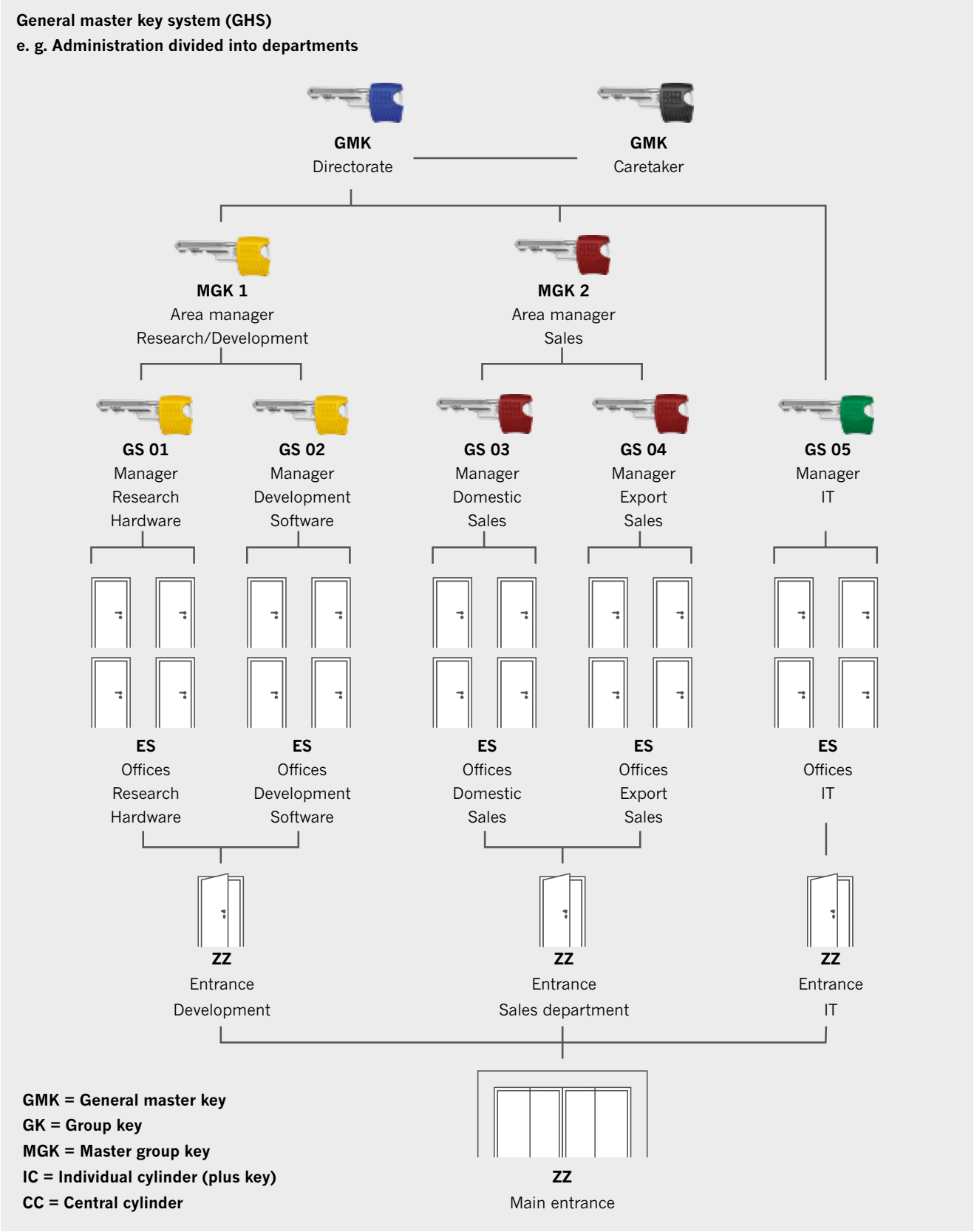
## Examples of locking system configurations



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# Types of locking systems

## Examples of locking system configurations (keyTec RAP)

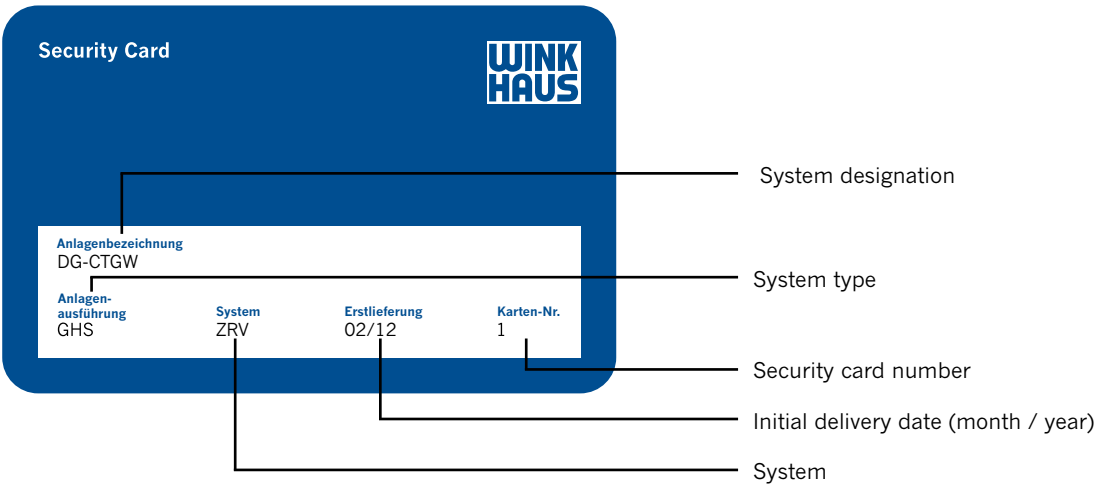


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## Security card / Legitimation

Winkhaus locking systems or single-secured locks are supplied with proof of identity in the form of a security card. The security card entitles its holder to order individual cylinders, keys, locking plans or locking plan data for the designated locking systems or single-secured locks via Winkhaus. Each security card for a Winkhaus locking system comes with a magnetic strip which contains the system data listed below. This security card permits electronic ordering and legitimation via the portier® Plan ordering programme and the Winkhaus Online Order System (OOS). For further details please go to [www.winkhaus.de](http://www.winkhaus.de)

**Example:**  
**Security card for general master key system**



### Losing your security card

If a security card is lost, you can order a replacement via your contract. These will be issued if the relevant legitimation is presented. The previous card will cease to be valid. From this time onwards, locking system orders will be possible only using the new card.



## Special options / Ordering options

for mechanical and electronic locking systems

### Scope of supply

#### Keys per cylinder

keyTec	C-systems	MK-/GMK-systems	EGS
AZ, VS, VS6	3	1	3
RAP, RAP+, ZRV	3	1	not available
ZRV6	not available	1	not available
RPE	not available	not available	3
Titan	not available	1	3
X-tra	1	1	3

Stock cylinders keyOne X-pert are delivered with 3 keys as standard. Electronic locking systems are standardly supplied without keys.

#### FZG cylinder

Certified profile cylinder with free-to-turn function for gear locks in panic door locking systems.  
According to the test guideline of the Velbert test institute (PIV). Profile cylinders and escape door locking systems are marked “FZG”.

#### Drilling protection

BS = Drilling protection, only on side A.  
Additional hard metal on side A  
in the cylinder core and in the cylinder housing.

#### Drilling and anti-pulling protection

DA = Drilling and anti-pulling protection in compliance with DIN with DIN mark.  
KP = Drilling and anti-pulling protection without a certification mark for cylinders in a customised profile (without additional stamping).  
VZ = Drilling and anti-pulling protection (blueChip and blueSmart series, changed release time) in compliance with VdS with VdS mark.

### Cylinder colour

All cylinders are supplied in standard nickel (N) finish.

### Special features

MM = Matt brass cylinder finish (no additional charge).  
MP = Polished brass cylinder finish.  
SB = Saltwater-resistant design for double cylinders and half cylinders.  
SN = Special numbering for each key or cylinder (up to 10 characters/digits)  
VK = VK = Cylinder cores with a wear-resistant special coating for double cylinders, half cylinders and knob cylinders (in nickel only).

### Key

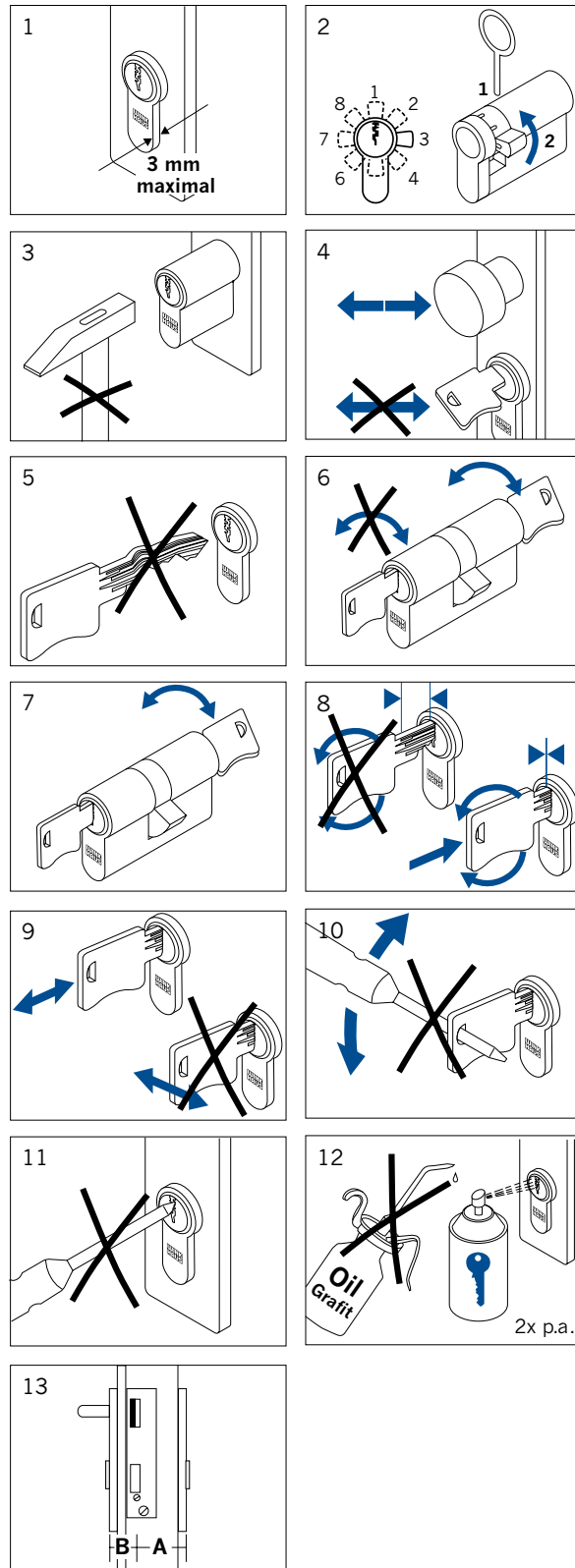
ESL = Replacement key for repeat orders.  
GFS = Anti-panic key, only in combination with cylinder type 53, with initial delivery of system.  
GHS = Grand master key with initial delivery of system.  
HS = Master key/unit with initial delivery of system.  
HST = Mechatronical key with blueChip transponder.  
HSH = Mechatronical key with blueSmart transponder.  
HSK = Mechatronical key, key with a transponder for access control/time registration, for Winkhaus or thirdparty systems.  
Transponder types: HITAG1 or EM4102 (PROX).  
Other transponder types on request.  
MSL = Additional key supplied with cylinder.

### Cylinder extensions

Total length of electronic and mechanical double cylinders up to 160 mm. Further lengths on request.

## Installation instructions and instructions for use for mechanical locking systems

- 1 Install with max. projection length of 3 mm.
- 2 Cam can be set to eight positions.  
Press in the stud with the triggering pin, turn the cam to the required position; the stud will click into place automatically.
- 3 Do not use force when inserting the cylinder.
- 4 Do not use the key to lift or shut the door.
- 5 Do not insert damaged or bent keys into the cylinder.
- 6 Standard: lockable from one side only.
- 7 Option: can also be locked from the other side when a key has been inserted and turned in the lock.
- 8 Insert the key completely in the cylinder when locking.
- 9 When removing the key, ensure you keep it straight and do not twist it.
- 10 Do not apply force when turning keys.
- 11 Do not insert foreign bodies into the keyway.
- 12 Lubricate cylinders with special care products 2 times a year; never use oil or graphite. Electronic cylinders must NOT be lubricated!
- 13 Measurement for the locking cylinder is determined from:  
A: Middle of the face plate screw to the front edge of the outside fitting.  
B: Middle of the face plate screw to the front edge of the inside fitting.



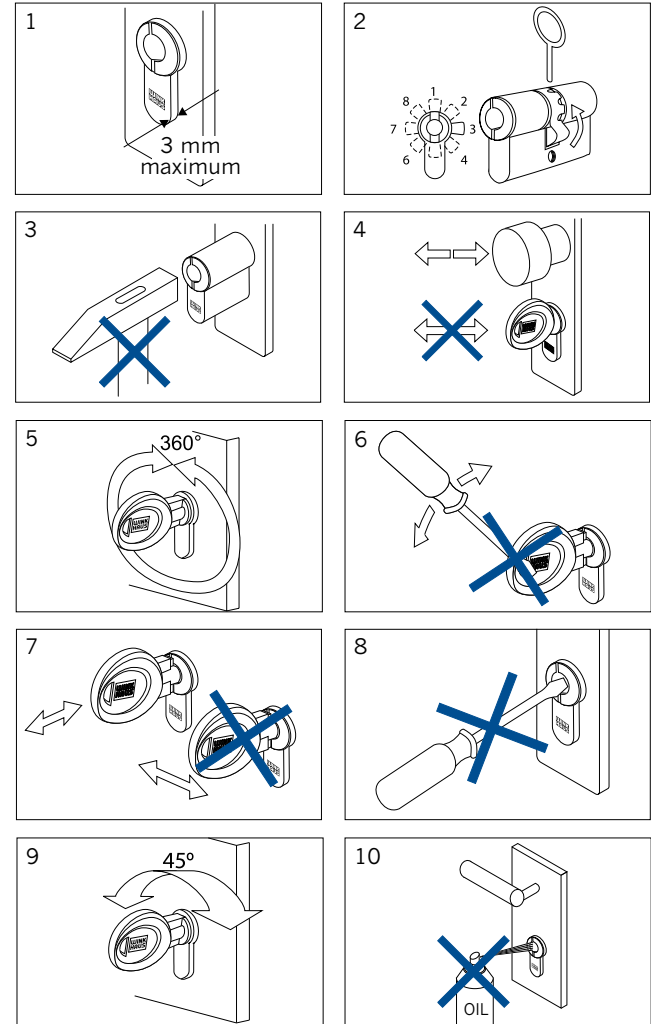
## Installation instructions and instructions for use

### for the electronic locking systems blueChip and blueSmart

- 1 Install with max. projection length of 3 mm.  
When installing the cylinder, ensure that the side with the identification plate (A side) always faces the outside.
- 2 Cam can be set to eight positions.  
Press in the stud with the triggering pin, turn the cam to the required position; the stud will click into place automatically.
- 3 Do not use force when inserting the cylinder.
- 4 Never use a electronic key to close a door or pull a door open. Always use the handle or knob to open and close the door. Never use the key to lift the door, otherwise the key may break off, or you may cause irreparable damage to the cylinder.
- 5 Insert the electronic key fully into the cylinder and then turn the key 360° in the normal way.
- 6 Never apply force to turn electronic keys.
- 7 When you remove electronic keys, keep them straight and do not twist.
- 8 Do not insert foreign bodies into the keyway.
- 9 If the key can only be turned 45° in the lock instead of completely, there are a number of reasons why this could be:
  - The key is not authorised to lock. Contact the relevant department in your company.
  - The batteries in the cylinder are dead.

When the battery charge is very low, you may need to repeat the locking procedure several times. Contact the relevant department, so that the batteries in the cylinder concerned are replaced as quickly as possible.

Whatever you do, do not use undue force to lock or unlock the door.
- 10 Never apply lubricants such as grease or oil into the cylinder. The electronic locking systems does not require lubrication. Never leave a key inserted in a cylinder. Avoid inserting the key too quickly, or applying excessive force when locking. This does not make locking more effective, but **may damage the locking system instead.**

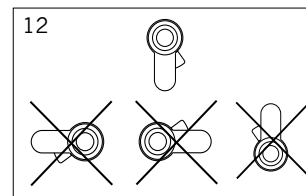
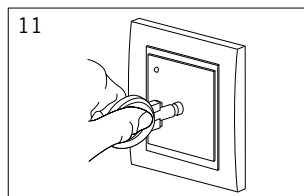


## Installation instructions and instructions for use

### for the electronic locking systems blueChip and blueSmart

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- 11 Reader (alternative to cylinder):  
Place the tip of your electronic key directly onto the centre of the reader.  
If authorised, indicator light flashes green, two short audible signals are emitted and door is opened.  
If not authorised, indicator light flashes red, a long audible signal is emitted and door remains locked.
- 12 Electronic cylinders can only be fitted into locks in the normal vertical position for profile cylinders.  
When testing the locking mechanism in the cylinder, keep in the vertical position, even if holding the cylinder in your hand.  
For special installation situations, cylinders can be supplied with the identifier /17 without active magnetic protection.  
More details are available on request.



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# Service

## All our service employees are continuously doing their utmost to avoid product complaints and to offer you our best service

Various Winkhaus departments, from construction to production and quality assurance, take care that you needn't make use of our services too often. It is not without good reason that customers world-wide confirm the high reliability of Winkhaus locking systems. But even the most sophisticated technology can cause problems. Due to natural wear and tear, for example. For this reason our service team is available every day to give professional answers to your questions.

Our interdisciplinary team of buyers, electrical engineers, precision engineers and system engineers allow us to respond to your concerns and eliminate each and every problem – quickly and without complication. The really unique thing about it is that you'll always have the same contact person who knows your systems inside out and coordinates all further steps for you. Sometimes just a brief description is enough for us to help you rectify the problem provisionally on your own using a little trick or two. And if that doesn't help, we'll send out one of our service engineers to help you directly on site.

A tip: take a look on the service pages on our website. Besides the usual answers to frequently asked questions, you'll currently find on there an extensive glossary of security and door technology terms, as well as various online contact options for our service department. And in the download area, you'll find texts for invitation to tender, brochures, documentation, software specifications and certificates to access. We'll make sure you're really never short of anything.

There is one thing you can always rely on at Winkhaus. We take care that everything is working as it is intended. Even if the personal contact with our service employees is becoming increasingly rare. What of course is regrettable.

## Service goes without saying

As far as Winkhaus is concerned, service is more than an obligation. Specialists from all company areas work at Winkhaus Service and share a single goal: happy customers. Service begins as early as the product development stage, because our development engineers work right from the outset to make sure our products are reliable, long-lived and easy to use. This service-mindedness continues throughout the manufacturing process, one-on-one customer advice, purchasing and extensive customer care for a long time after the purchase has been made. At the very heart of all our service activities is the Winkhaus Customer Care Centre. This tested and accredited service centre promises to provide customer service at an international level. Specially trained and accredited retailers, whose specialist help customers can rely on, are another important cornerstone of the efficient Winkhaus services.



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# Winkhaus – Service in all respects

## The Customer Care Center

### Service by telephone

A specialist team takes care of your questions regarding service from Monday to Thursday 08:00 to 17:00 h and Friday 08:00 to 15:00 h. No matter whether you present us with new ideas, complaints, improvement suggestions or special questions linked to our products – our experts will help you. Buyers, electrical engineers, precision engineers and system engineers competently and quickly respond to every customer question providing individual solutions.

### Service on the Internet

Winkhaus sees it as a challenge to offer its customers outstanding service 24 hours a day, seven days a week.

At <http://www.winkhaus.de>, customers, users and suppliers will find extensive information on the entire range of Winkhaus products.

In the service section of our Customer Care Center at > Service > Customer Care Center you can find tips regarding the installation, maintenance and correct use of our products. On the FAQ page, you'll find answers to frequently asked questions. As well as providing direct assistance, the Service pages on the Internet also offer lots of downloads of brochures, software descriptions or product documentation.

**Our Customer Care Center can be reached on:**

**Tel.: 0251-49 08-110**

**Fax: 0251-49 08-131**

### On-site service

Not every problem can be solved by a quick glance at the Internet or an enquiry by phone. For this reason Winkhaus is always close to their customers. Service technicians in Germany and Austria offer quick and reliable on-site service. No matter if Berlin, Dresden, Hamburg, Frankfurt/Main, Wiesbaden, Münster, Stuttgart, Wuppertal or the German-Austrian frontier area – the Winkhaus experts have short travelling distances. They can be reached via the Customer Care Center on 0251-49 08-110.



Subject to technical changes without notice.

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# Product liability

On 1 January 1990, the Product Liability Act (ProdHaftG) came into force in Germany, which is based on the EEC Directive on Product Liability of 25 July 1985. According to the German Product Liability Act (ProdHaftG), manufacturers' liability for their products (product liability) depends, amongst other things, on whether the expected level of security has been provided in accordance with the manufacturer's offer. For Winkhaus product groups, not only the following manufacturer information must be taken into account, but you should also pay attention to our installation and operating instructions for individual Winkhaus products.

## Product information for locking cylinders and keys

### 1 Locking cylinders

A locking cylinder is a generally interchangeable component in correspondingly prepared locks, fittings, equipment, doors or similar products which are typically installed in buildings. **If a cylinder is used in a different way, the user must check whether such a use is suitable.** The following manufacturer information applies to other locking cylinder types as relevant.

### 2 Product information and intended use

Each locking cylinder is supplied with at least one corresponding key to ensure it can function properly. Terms used with regard to locking cylinders and locking systems are explained and illustrated in DIN 18252, unless they are otherwise explained in documentation. You will also find basic and extended requirements for profile cylinders and pin tumblers here. The following information must be taken into consideration to ensure components are used for their intended purpose with respect to these terms and names.

- 2.1 Our locking cylinders comply with the dimensions standard DIN 18252. Our locking cylinders may only be installed in locks, fittings and other devices when such equipment is expressly designed for a locking cylinder which complies with DIN 18252. In all other cases, the manufacturer, retailer, processor or any other user of such equipment must ensure that the locking cylinder that they have selected is suitable for installation in the device in question. Statutory regulations must be observed.
- 2.2 Locking cylinders which may be exposed to force or other tampering, especially those in main doors to apartments and main entrances, may only project a maximum of 3 mm from the fitting, which is tightly enclosed around them to ensure such tampering is prevented. The extent of the burglary-resistance measures that should be taken is always dependent on individual requirements (see DIN 18252 in this respect). Such a measure is a required protection fitting in compliance with DIN 18257 which features a cylinder cover.
- 2.3 To ensure locking cylinders do not malfunction on a continuous basis, they must be installed in such a way that no outside forces can make an impact on the locking cylinder other than the intended attachment points and those forces produced when the cylinder is operated as intended. Likewise, no outside force may be transferred to the cylinder cam or in the turn direction of the locking lever once the key has been removed.
- 2.4 Special versions of lock cylinders with additional security functions must be specified for moisture-prone areas or refrigerated rooms, for places which are near to the sea or where cylinders are directly exposed to the elements and corrosive environments. **Standard locking cylinders are not suited for such conditions of use.** This also applies to locking cylinders which are intended to be used in dusty environments.
- 2.5 A locking cylinder which can be locked from both sides cannot normally be operated on one side of the cylinder if a key has already been inserted in the opposite side. However, if this should be possible, then a different locking cylinder with a suitable configuration must be selected.
- 2.6 To avoid damaging the key and to use it correctly, torque should only be applied to the key after it has been fully inserted into the keyway in the lock cylinder.
- 2.7 A locking cylinder and key form a functional unit. Liability can only be assumed if a Winkhaus locking cylinder has been operated with a key we have provided.
- 2.8 Subsequently supplied keys for cylinder locks should be tested immediately after they are received to ensure they work in the locking cylinder concerned.
- 2.9 Only use original Winkhaus parts and accessories to avoid malfunction and damage.

- 2.10 A lock cylinder's fitness for use is dependent on how often it is used, on how it is used, on impacts from the surrounding environment and on the care and maintenance provided. Lock cylinders and keys must be replaced when malfunctions occur, despite due care, especially if they occur when the key is inserted into or removed from the cylinder lock.

### 3 Misuse

Lock cylinders or keys are misused, i.e. put to a use the product was not intended for:

- 3.1 When items such as a nail, pliers, a bunch of keys or similar are used on the key bow or head to increase the torque. The keyway specifically features a narrow design, so that torque may only be applied to the head of the key directly by hand, thus ensuring the cylinder is protected against lock picking.
- 3.2 When the key is used as a handle for opening or closing the leaf of the door. A key is not suitable to be used in place of fittings, such as door knobs, pushers or handles on passageway doors.
- 3.3 When a locking cylinder is operated with a bent, damaged or unauthorised key, or one that was not originally supplied by Winkhaus.
- 3.4 When an attempt is made to operate a locking cylinder with picking tools or other tools, or a duplicate key not provided by the manufacturer.
- 3.5 When there are foreign objects in the keyway or on the key itself.
- 3.6 When the supplied care instructions are not observed.

**Winkhaus assumes no liability for misuse of its locking cylinders and/or keys, and for damage that may result from such misuse.**

### 4 Differing product performance characteristics

If our keys and/or locking cylinders are required to perform tasks which differ from the descriptions provided in our catalogues and promotional material, the required performance characteristics for the locking cylinders and/or keys concerned must be agreed with us separately in writing.

### 5. Product maintenance

Lock cylinders must be treated with the care products which we recommend at least twice a year, or more often if the cylinders are heavily used. Locking cylinders may under no circumstances be treated with resinifying agents. Only use cleaning agents which are free of corrosive substances. **If products are not strictly maintained as recommended, their usability may be affected.**

### 6. Product information

Winkhaus supplies the following documents and services to specialist dealers, key copy services, architects, planners, advisory institutions, processors and other users of our products:

- Catalogues, brochures
  - Texts for tenders, bidding documents, locking plans
  - Instructions for installation, operation and maintenance
  - Advisory services provided by us or by our field sales team
- DIN 18252 documentation can only be obtained from Beuth Verlag GmbH, Berlin.

### When selecting , installing, operating and maintaining lock cylinders:

- 6.1 Architects, planners and advisory institutions are required to request all available information about the product concerned from us and to observe all the relevant instructions and regulations which they contain.
- 6.2 Specialist retailers are required to familiarise themselves with product information and, in particular, to request all available instructions from us and to pass on such information to processors and users.
- 6.3 Processors are required to observe all product information and to specifically request all the necessary operation and maintenance manuals from us and pass them on to clients and users.

Subject to technical changes without notice.

# General terms and conditions of business of Aug. Winkhaus GmbH & Co. KG

(valid from 1 January 2013)

1

## 1. Validity of the Terms and Conditions

1.1 All our deliveries, services and offers are carried out exclusively on the basis of these General Terms and Conditions of Business. These are an integral part of all contracts which we conclude with our contract partners (hereinafter referred to as "Customer(s)") for the deliveries and services offered by us. They shall also apply to all future deliveries, services or offers to Customers, even if they are not separately agreed again.

1.2 The business conditions of the Customer or third parties are inapplicable also in cases in which we do not object to their validity in an individual case. Even if we refer to a letter which contains the business conditions of the Customer or a third party or a letter refers to such this shall not be deemed our consent to the validity of such business conditions.

## 2. Conclusion of contract and prohibition to assign

2.1 An effective contract shall be concluded only upon our written order confirmation or by manufacturing the ordered goods (hereinafter referred to as "contract").

2.2 The rights of the Customer under the contract are not assignable.

## 3. Prices

3.1 Our prices are valid ex works plus the statutory VAT as a basic principle. Prices are calculated based on the prices valid on the date of the written order confirmation. In case of delivery ex warehouse, our prices are valid ex warehouse.

## 4. Terms of payment and delay of payment

4.1 The price to be paid by the Customer is due and payable within 14 days after the date of the invoice and delivery or acceptance of the goods. Upon the expiry of the payment period the Customer is in delay. This shall not apply as long as the payment is not fulfilled for a reason for which the Customer is not liable.

4.2 In case of a delay of payment, we are entitled to:

- demand security from the Customer for further services,
- realise security furnished under the contract affected by the delay of payment at the amount of the delayed payment,
- withdraw from the contract,
- demand interest on payments in delay at the currently applicable statutory default interest rate, whereby our claim to commercial interest from the due date remains unaffected in relation to merchants (§ 353 of the German Commercial Code [HGB]),
- claim damages caused by delay which exceed the interest for delay.

4.3 The Customer may only offset a counterclaim if it is uncontested or has been declared legally valid by a court of law.

4.4 The Customer has no right of retention, unless it is based on the same contract and the counterclaims are uncontested by us or has been finally decided by a court of law.

## 5. Packing

5.1 Unless otherwise agreed, the ordered goods shall be packed according to our reasonable discretion.

## 6. Delivery

6.1 The goods ordered are delivered ex works which is also the place of performance. Upon demand and at the expense of the Customer, the goods shall be sent to a different destination (hereinafter referred to as: „sales shipment“). We reserve the right to decide on the type of dispatch, the transport route and the choice of the forwarding company, unless this is specified in a contract.

6.2 The goods are delivered at the expense of the Customer.

6.3 The risk of accidental loss and accidental deterioration of the goods passes to the Customer upon delivery at the latest. However, in the case of a sales shipment, the risk of accidental loss and accidental deterioration of the goods and the risk of delay already passes upon delivery of the goods to the forwarding agent, the carrier or the person or institution otherwise designated to execute the shipment. If a declaration of acceptance is agreed, the transfer of the risk of delivery takes place at the same time as the declaration of acceptance is made. Furthermore, the statutory provisions of the law governing contracts for work and services shall accordingly apply for an agreed declaration of acceptance. If the Customer is in delay with acceptance, this shall be deemed equivalent to delivery or acceptance.

6.4 If the Customer is in delay with acceptance, if he fails to provide assistance or cooperation or our delivery is delayed for other reasons for which the Customer is liable, we are entitled to claim damages incurred as a result thereof, including additional expenses (e.g. storage costs). For this we shall charge a lump-sum compensation of 5% of the price of the goods for which acceptance is delayed per calendar week, beginning with the time of delivery or - if there is no time of delivery - with the notification of the readiness of dispatch of the goods. Proof of greater damage and our legal claims (in particular the reimbursement of additional expenses, reasonable compensation, termination) remain unaffected; the lump sum shall, however, be offset against further monetary claims. The Customer shall be entitled to furnish proof that we did not suffer any damage at all or much less damage than the lump sum hereinbefore.

6.5 The delivery or service periods shall be understood as approximate information. They do not represent any binding commitment regarding a delivery or service deadline, unless otherwise agreed.

6.6 If we are unable to comply with binding time of delivery for reasons for which we are not liable (unavailability of the goods), we shall immediately notify the Customer hereof and notify him of the expected new time of delivery at the same time. If the goods are not available within the new delivery period, we are entitled to either withdraw from the contract in whole or in part. We shall immediately refund any payments already made by the Customer. An unavailability of the goods in this context is defined in particular as the delivery of our sub-suppliers to us not in due time if we have concluded a congruent covering transaction. Our legal rights of withdrawal and termination and the statutory provisions on handling contracts in case of an exclusion of the duty to perform (e.g. due to impossibility or unreasonableness of the work/services and/or supplementary performance) remain unaffected.

6.7 We are entitled to execute partial delivery if a contract has been concluded on several goods and this can be reasonably expected from the Customer when taking our interests into consideration.

## 7. Liability for defects

7.1 The Customer is obliged to examine the ordered goods immediately after receipt for any obvious defects, in particular for obvious short quantities or damage and to notify us of a defect in writing immediately, within 14 days after receipt of the goods at the latest, stating the nature and scope of the defect (hereinafter referred to as „notification of defects“). The dispatch of the notification of defects in due time shall be sufficient to comply with the time limit. Defects which even on careful examination cannot be discovered within this period shall be notified immediately after discovery.

7.2 Liability is excluded for any defects not notified at all or not notified in due time.

7.3 Goods for which a notification of defects has been given may only be returned after obtaining our express consent.

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Subject to technical changes without notice.

# General terms and conditions of business of Aug. Winkhaus GmbH & Co. KG

(valid from 1 January 2013)

7.4 If the ordered goods are defective, we shall remedy the defects at our discretion through supplementary performance by either repairing the goods or replacing them with goods free of defects. If deliveries contain short quantities, we shall provide a sufficient and adequate subsequent delivery.

7.5 If the supplementary performance should fail, be impossible or be unreasonable for the Customer, the Customer may reduce the price or withdraw from the contract.

7.6 We are entitled to refer the Customer to his right to reduce the price or to withdraw from the contract instead of rendering supplementary performance.

7.7 Our liability for defects does not include the customary wear and tear of the goods and such defects arising after delivery, e.g. through external influences or operating errors nor shall we accept any liability for defects if goods are treated improperly by the Customer.

7.8 Claims based on defects in quality by the Customer under this section 7 become time-barred one year after the risk passes to the Customer. The statutory provisions of limitation periods apply to construction services, the sale of construction materials and to the sale of consumer goods according to § 474 German Civil Code (BGB).

## 8. Liability for other breaches of duty

8.1 Our liability in case of any breach of contractual or non-contractual duties which does not consist in a defect or which caused a damage over and above the defect itself is based on statutory provisions, unless otherwise specified hereinafter.

8.2 We are liable for damages – irrespective of the legal grounds – only in case of wilful intent and gross negligence. In addition, we are liable for simple negligence in case of

- injury to life, physical injury or damage to health;
- a breach of an essential contractual duty. Furthermore, in this case our liability is limited to compensation of the foreseeable damage which typically occurs.

8.3 Claims of the Customer based on guarantees expressly granted by us and under the Product Liability Act remain unaffected by the regulations hereinbefore. The supply with specimens or samples is not deemed to be an expressly granted guarantee.

## 9. Software

9.1 For the delivery of software products, the Customer purchases from us merely the data carrier and obtains a non-exclusive right of unrestricted use in terms of territory and time of the software saved on the data carrier.

9.2 With regard to the relationship of the contract partners to each other, only we are entitled to the copyright, patent rights, trademark rights and all other ancillary copyrights to the software and to any objects which we permit the Customer to use or which we make accessible during the initiation and execution of the contract. Insofar as third parties have rights, we have appropriate exploitation rights.

9.3 The Customer shall not make any copies of the software or its documentation in whole or in part apart from back-up and archiving purposes. The back-up copies must, as far as technically possible, be provided with the copyright notice of the original data carrier and be stored safely. Copyright notices may not be erased, modified or suppressed. Copies no longer required shall be deleted or destroyed. The user manual and other documents provided by us may only be copied for internal purposes.

9.4 Any inadmissible use of the software by the Customer automatically results into the loss of all and any rights of use for the Customer.

9.5 In addition, the software terms of licence shall apply which shall be made available to the Customer.

## 10. Reservation of title

10.1 Our deliveries are made solely with reservation of title. We reserve ownership to the delivered goods as long as and insofar as we still have claims against the Customer under the business relationship (hereinafter referred to as “reserved goods”).

10.2 The Customer shall be entitled to process the reserved goods in the ordinary course of his business and/or to sell them to third parties with reservation of title. The Customer is prohibited from pledging or assigning our goods by way of security as long as our ownership of the goods is still reserved.

10.3 The processing or assembly of reserved goods is always conducted and arranged on our behalf without any obligations arising from this for us.

10.4 The reservation of title includes the created products through the processing, mixing or combination of our goods at their full value whereas we are considered as the manufacturer. If when processing, mixing or combining our goods with the goods of third parties their ownership continues, we acquire co-ownership according to the ratio of the invoice sums of the processed, mixed or combined goods. Furthermore, for created products the same provisions shall apply as for the reserved goods.

10.5 If our reserved goods are sold in the Customer's ordinary course of business without immediate payment or are joined with real estate (§ 946 of the German Civil Code [BGB]), the Customer hereby assigns his claim by way of security to us; we accept this assignment. The Customer is entitled and obliged to collect the claim assigned to us as long as we have not revoked this authorisation. The Customer is obliged to register the collected amounts separately and to transfer them immediately to us. The Customer shall be obliged to pay any related costs hereto.

10.6 Upon our demand, the Customer is obliged to notify his buyer of the assignment and provide us with the information and documents required to assert our rights against the buyer. We are also entitled to notify our Customer's buyer of the assignment.

10.7 If third parties claim or assert a right to the reserved goods, the Customer is obliged to immediately notify us thereof in writing.

10.8 In case of a breach of contract by the Customer, in particular if he fails to pay the purchase price, we are entitled to withdraw from the contract and demand the return of the goods based on our reservation of title and our withdrawal.

10.9 As soon as the Customer has stopped to make payment, the Customer is obliged to send us a list of the reserved goods still available, even if they have been processed and a list of claims to third-party debtors immediately after the announcement of his stopped payments.

Should the realizable value of the securities exceed the aggregate of our claims against the Customer which are to be secured by more than 10 %, we shall release fully paid goods upon the Customer's request.

Subject to technical changes without notice.

11. Transfer of ownership in case of participation of a purchasing association

If a purchasing association is involved in the legal transaction on the Customer's side in such a way that the purchasing association pays the purchase price to us and the Customer is then obliged to pay the purchase price to the purchasing association, the ownership does not pass to the Customer when the purchasing association has paid the purchase price to us but only as soon as the Customer has also fulfilled his obligation towards the purchasing association. Furthermore, all and any provisions hereinbefore shall apply accordingly.

12. Third-party proprietary rights

- 12.1 If deliveries are made based on drawings or other information provided by the Customer and third-party proprietary rights are violated as a result thereof, the Customer shall indemnify us against all third-party claims.
- 12.2 The Customer shall pay the costs required for legal defence in such a case.

13. Duty to inform, place of jurisdiction, applicable law, safety instructions

- 13.1 The Customer shall inform us of changes in ownership, the legal form of the company and any other circumstances affecting his financial conditions and of any change in address in writing without delay.

- 13.2 The exclusive place of jurisdiction in case of disputes with a Customer being a merchant, a legal entity under public law or a special public fund is the court competent for the official business location of our company.

However, we reserve the right to launch legal action against the Customer at the official business location or residence of the Customer.

- 13.3 The laws of the Federal Republic of Germany excluding the provisions of the United Nations Convention on Contracts for the International Sale of Goods (CISG) are applicable to all contracts which include these General Terms and Conditions of Business and to the General Terms and Conditions of Business themselves.

**Note on locking systems:** You have decided in favour of a high-class, modern Winkhaus organisational system which, due to its high level of functionality and technology, speaks for itself. However, we would like to point out that, depending on the amount of criminal energy applied, any locking system - whether mechanical or electronic - can be bypassed.

If you would like to know more, please contact us at [info@winkhaus.de](mailto:info@winkhaus.de) or +49 (0) 251/49 08-110.



# 1 General Information

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1

## 2 Electronic Access Organisation

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2

### 2.1 blueChip/blueSmart – Electronic locking systems

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2.1

### 2.2 blueLine – Hardware for online access control/time management

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### 2.3 Service

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2.3

## 3 Software

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3

### 3.1 blueControl range

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### 3.2 timeControl

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3.2

## 4 Mechanical Access Organisation

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### 4.1 keyTec – Overview of systems

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### 4.2 keyTec – Locking cylinders

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## The key to highly-efficient building management

Freedom and protection are basic human needs. However, they often conflict in everyday life. We often find the greatest possible latitude restricted by security measures. Winkhaus electronic access control systems show that these two requirements can be satisfied in building management.

With blueSmart, blueChip, blueLine and timeControl you can offer your customers intelligent and tailored solutions. Because the innovative technologies combine high flexibility, user-friendly hardware and software as well as many sophisticated functions for individual and customer-oriented designs. Furthermore they will win you over by a maximum of comfort and efficiency.

The electronic blueChip locking system performs a variety of tasks regarding the organisation in and outside the building. The broad performance range includes the building control as well as the car park management. The sophisticated system grows along with the customers' requirements and is modularly extendable. It is also possible to invest on it step by step and carry out retrofitting at a later time.

With blueSmart, Winkhaus is presenting the latest generation of electronic access management systems. This high-performance technology enables complex locking systems to be controlled centrally while allowing data to be transmitted locally at record speed. Optimum ease of use and cost efficiency characterise this innovative technology, which provides solutions for buildings of all sizes.

Electronic application solutions in the field of access control are indispensable for efficient and rational operating processes. For this reason offer your customers our blueLine online access control system which provides convincing overall concepts for integrated applications: the perfect solution from stand-alone systems to networking throughout entire buildings.

The Winkhaus timeControl application software ensures efficient time management. The features of this intelligent programme include high flexibility, a well-arranged user interface and a flexible wage logic. In addition, alterations can be programmed ahead of their coming into effect.



## **2.1 blueChip/blueSmart – Electronic locking systems**

P. 30	General description
P. 35	Profile double cylinder
P. 40	Profile knob cylinder
P. 43	Profile half cylinder
P. 45	Padlock
P. 46	Profile double knob cylinder
P. 48	Profile knob half cylinder
P. 50	Accessories type 6x
P. 51	EZK fittings
P. 53	Special cylinders
P. 54	blueChip TimeLine AccessPoint
P. 55	blueSmart AccessPoint
P. 56	Readers
P. 58	Identification medium
P. 60	Accessories

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# General description

## Winkhaus blueChip and blueSmart

### The dynamic locking systems

The fully electronic blueChip and blueSmart locking systems combine the accustomed functionalities of a mechanical key from Winkhaus locking systems with the flexibility of electronics. This makes them especially suitable for locking systems in dynamic organisations, or in real estate properties with frequently changing occupants. The blueChip and blueSmart systems are available for almost all current cylinder types, such as double and half cylinders, knob cylinders and double knob cylinders.

### Locking cylinders

The fully-electronic Winkhaus cylinders fit into all DIN profile cylinders that are prepared for mortise locks and key-operated switches. The electronics is protected in the profile housing (type-specific). The data of the key is checked with contact-free technology. An examination of the locking authorisation is carried out in the cylinder. As a rule, Winkhaus electronic cylinders are powered by batteries integrated into the doorknob or cylinder housing. Winkhaus offers a practical power supply solution for heavily frequented external doors. For instance, a cylinder type with an enlarged battery case or a battery pack which can be mounted in the lock recess. Cabling is not required for the door. Locking of the cylinders proceeds as with a mechanical key system, by inserting and turning the key (see also „Installation and application information“ in chapter 1).

### Keys

Winkhaus electronic keys do not contain a battery. They are robust and entirely maintenance-free. They are in accordance with the IP protection class 68 and are hence dust-proof and highly moisture-resistant. Winkhaus’ electronic keys are thus resistant to machine washing and disinfectable (sterilium). Each key comes with an electronic profile and a unique coding provided by Winkhaus. Data is transferred from the key to the cylinder by means of an (up to) 128 bit encrypted code. blueChip and blueSmart keys also serve as a means of identification with regard to Winkhaus access control and time management readers as well as EZK fittings.

### Locking plan/programming

On request, blueSmart locking systems and repeat orders for electronic locking systems are programmed according to the functions of the locking plan provided by the customer and they are supplied together with the system-specific programming and security cards. The security card is needed for legitimization when ordering extensions or replacement keys to a locking system. The programming card and the suitable software can be used to administer the locking plan and to adjust organisational details. Changes of the locking plan (authorisations, disable commands) can easily be performed via the programming device (system independent) and the programming card (system specific) or optionally via the virtual network. It is possible to assign additional group authorisations and / or individual locking rights to each key or to withdraw them. Depending on the system and the system configuration up to 2,000 locking events can be read and logged on door components.

### System splitting

The programming authorisations for electronic Winkhaus systems can be split up. This makes it possible to define administration areas such as linked areas and exclusive areas. Larger systems, which consist of several, spatially or functionally separated buildings, are managed very efficiently this way. With a TCP/IP client-server connection, the individual parts can even be administered at different locations.

# General description

## Winkhaus blueChip and blueSmart

### Time function

Cylinders with an integrated clock (time function) register every attempted locking operation with an authorised or an unauthorised key, including the date and time.

By allocating time limits for the locking rights, you can expand Winkhaus locking systems to an efficient access control management system. The user is able to define plenty of time profiles. For one time profile you can choose between different time intervals for each day of the week and for individually defined holidays and other special days.

The authorisations can be restricted in different ways: There can be time profiles for one key on each cylinder of the system, on one cylinder for each key of the system, or the time profiles can even vary from key to key and be valid only for a particular number of cylinders. Furthermore users can specify from and until which date and time a key has a locking authorisation. The Time function can subsequently be activated by means of a licence code (BC FS C5), provided that the new system was delivered on or after 1 May 2008 (prerequisite: at least blueControl version 2.1).

For blueSmart cylinders the Time function is always included.

### Energy supply

Winkhaus electronic cylinders are powered by high-performance lithium batteries. In the case of types 01, 02, 04 MK, 05 and 85, an exchange of batteries is required after max. 18 000 (blueChip) or 25 000 (blueSmart) locking events or after 6 years at the latest.

Types 11, 12, 14 MK and 15 only require a battery change after 500,000 locking transactions or 7 years.

Types 04 and 21 require a battery exchange after 200,000 locking transactions or 10 years at the latest. The electronic keys are passive media, i. e. they do not include batteries and thus they are maintenance free.

Note: If the locking event is successful only after a number of attempts, this generally indicates that the batteries need to be replaced.

On request blueSmart cylinders can report their battery status in the virtual network to the system software. This is done automatically in intervals and/or spontaneously via the keys.

### Mechanical properties

Basic length: 30 or 30/30, expandable in steps of 5 mm. The black core at the front face is made of high-quality plastic material. The brass housing has a satinised nickel finish. The cylinders, with the exception of type 85, have an 8-point adjustable cam. An adjustment is initiated by pushing in the catch button at the cam. The types 01, 11 and 21 are fitted with an adjustable, but fixed cam.

### Mechanical security

All key-operated standard cylinders are provided with VdS-compliant drilling and core extraction protection as standard. Keys are made of high-performance plastics that are usually employed in the aerospace and automobile industries.

### Ambient conditions

All cylinders comply with protection class IP 54. The cylinders type 01, 02, 04 MK, 05, 65, 62 and 85 are designed for indoor use. The ambient conditions at the installation location must correspond to the requirements of VdS Environmental Class 2. The ambient temperatures may be within the range +5 °C to +40 °C.

All cylinders type 11, 12, 14 MK, 15, 61/15 and 21 are designed for external doors. The ambient conditions at the installation location must correspond to the requirements of VdS Environmental Class 3. The cylinder type 21 even largely complies with the requirements of environmental class 4 and IP protection class 67.

The cylinder type 04 can be used on external doors. However, please avoid condensation on the inside (knob side).

blueChip and blueSmart offline readers are designed for indoor use. The ambient conditions at the installation location must correspond to the requirements of VdS Environmental Class 2. The ambient temperatures for the control unit or integrated version (BC TI, BS TI) may be within the range -10 °C to +55 °C. Offset antenna units (BC TE, BS TE) are available for applications that require increased security. These receiver units may be used at ambient temperatures of between -25 °C and +60 °C. For outdoor installation, readers with an IP 44 protection class (protection against spraying water) are available.

The electronic keys BC N and BS N comply with the IP 68 protection class and can be used within the temperature range -20 °C to +75 °C.

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# General description

## Winkhaus blueChip and blueSmart

The security standard of our electronic locking systems has been confirmed by tests conducted by independent institutes.

### VdS class BZ+

The blueChip equipment with increased pulling and drilling protection was tested for its burglary resistance by VdS Schadenverhütung. These cylinders have obtained the approval for switch devices in burglary alarm systems and comply with the criteria of VdS class BZ+.

The serial cylinders types 01, 02, 04, 04 MK, 05, 11, 12, 14 MK, 15 and 21 are supplied with VdS compliant drilling protection, but without a test stamp. To obtain the VdS-certified version it is vital to order the free VZ special equipment. VZ cylinders feature release times reduced from 5 to approx. 2 seconds compared to standard cylinders.

VdS class BZ+ cylinders with test mark: On doors that are subject to the risk of burglary, profile cylinders must be protected with VdS burglary-resistant door plates of class B or C. Such door plates conform to DIN 18257, class ES 2 or ES 3.

### Fire protection testing

Winkhaus electronic locking cylinders are suitable for use in fire protection locking systems up to fire resistance class EI290 in accordance with DIN EN 13501-2 (version dated December 2003) or T90 to DIN 4102 part 5 (version dated September 1977).

### Explosion protection

The blueChip electronic locking system can be supplied as an optional explosion protection variant.

This equipment allows blueChip cylinders to be used in areas where there is a risk of explosion. Explosion risks are classified according to zone, device groups and categories. Therefore, the precise explosion protection specification must be indicated when placing an order.

When using blueChip cylinders with ex-protection, the guidelines of the operating permit must definitely be adhered to.

The blueChip system is certified in the EC type-examination certificate: ZELM 05 ATEX 0284 X.

### Magnetic protection

All cylinders are equipped with active magnetic protection in order to safe the system from intelligent attacks with magnets.

Key-operated blueChip and blueSmart cylinders may only be installed in locks with a standard vertical position of the profile cylinder.

For special installation positions we can deliver cylinders with the identifier /17 without active magnetic protection. Details on request.

Please note that the cylinder protection mechanisms may be triggered in the event of strong shocks or extremely rapid locking. A cylinder blocked in this way can be easily reactivated by operating it again.

### CE Manufacturer's certificate

The electronic blueChip and blueSmart systems, when used correctly, meet the relevant regulations of the Act on Radio Equipment and Telecommunications Terminal Equipment, as well as the basic requirements of the guidelines R&TTE 1999/5/EG. This covers compliance with protection requirements in terms of both electromagnetic compatibility and the health and safety of the user and others.



## General description

### Winkhaus blueChip and blueSmart

#### System configuration for programming blueChip and blueSmart offline

The changes and amendments made to the locking plan are entered via the administration software.

The programming device is linked to the PC by means of a serial cable (type A4) or a USB connection cable.

When applying the software, the user must prove his usage legitimization by means of the programming card.

The programming device can save up to 20,000 locking plan alterations.

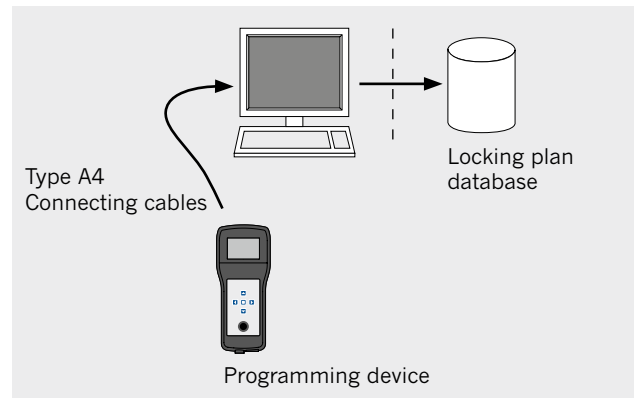
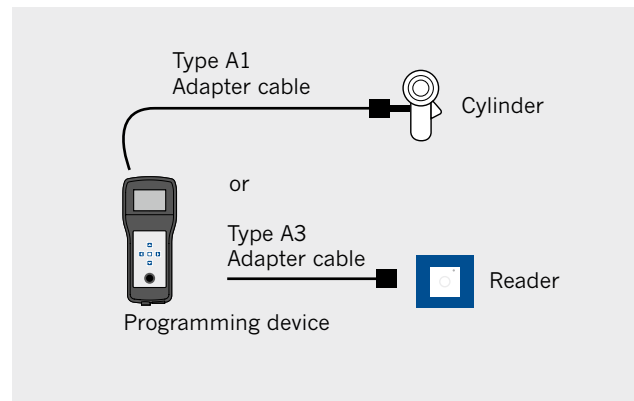
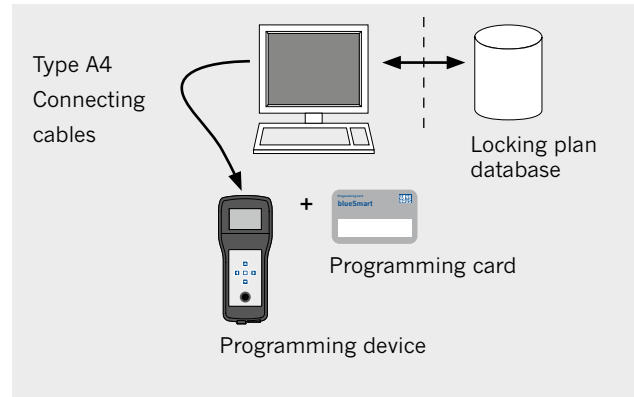
The programmer is then inserted in the cylinder by means of adapter cable A1 or attached to the reader, EZK or double knob cylinder by means of the cables A3, A5 or A6. Programming takes place automatically after startup, i.e. the individual cylinder or reader is identified automatically.

The programming device indicates whether the programming was successful or not.

After all programming processes have been completed, the data from the programming device is read back into the PC. The software indicates the status of the programming actions. The locking plan database is synchronised accordingly. In this way the system documentation is always up to date and complete.

#### Logging in the offline system

The cylinders and readers can be read out by means of a programming device. The procedure is the same as for programming. After that the programming device is connected to the PC and the read out data is transferred to the software. The administration software provides a file for data exportation in an XLS format, for instance, which can be used for MS Excel.



## General description

### Winkhaus blueSmart

#### System description blueSmart Virtual Network

blueSmart is the next generation of electronic access management system. This high-performance technology enables complex locking systems to be controlled centrally while allowing data to be transmitted locally. Optimum ease of use and cost efficiency characterise this innovative technology, which provides solutions for buildings of all sizes.

The central computer/client is used to administer the people's access rights. They can even be restricted with regard to time and place. The locking system is integrated into the Winkhaus software family. Offline programming of individual locking cylinders by means of the programming device can be dropped almost completely.

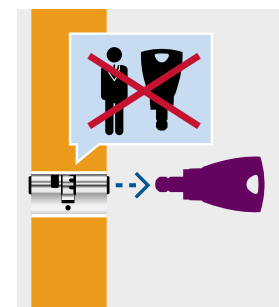
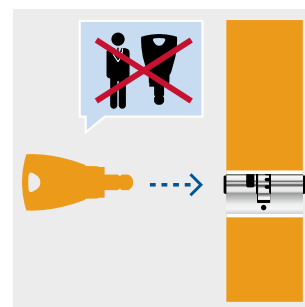
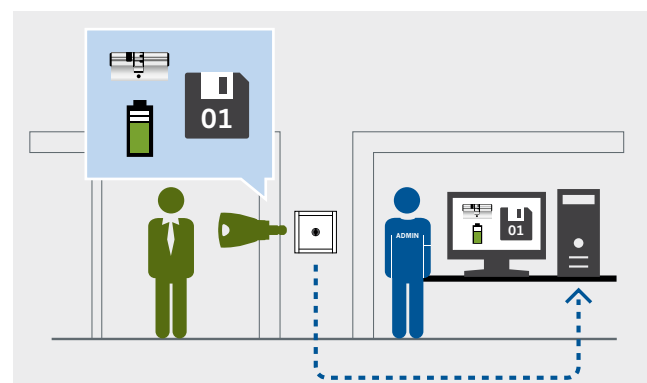
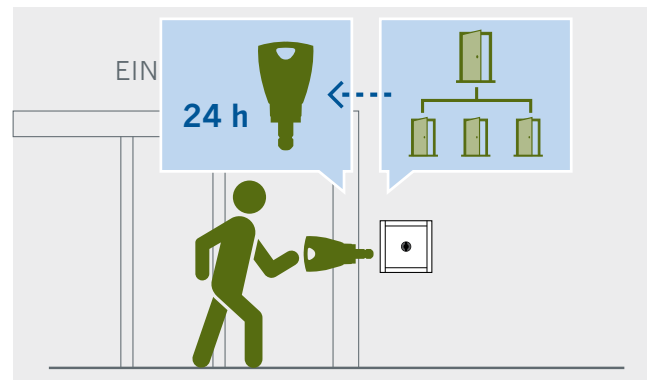
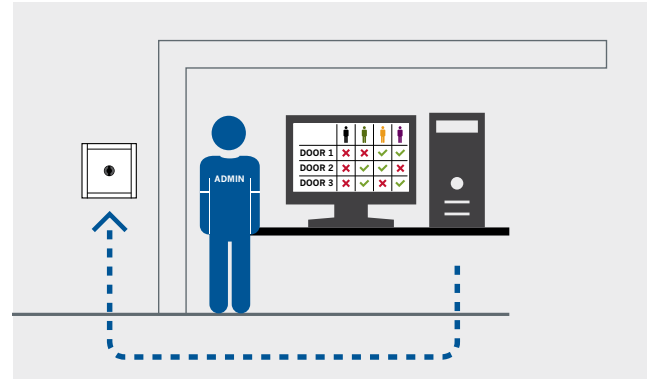
The system enters individual access authorisations on the central AccessPoint (BS TA, BS TA ZI or BS TA ZE). Before starting their workday, each employee retrieves their user profile updated on a daily basis (e.g. with 24 hours validity) onto their blueSmart identification medium. The system also ensures new authorisations, disabled accesses or function changes on doors (office mode, permanent release, release time, battery indication interval) can be communicated at short notice.

The information important for controlling the system, e.g. battery service lives of individual cylinders, locking transactions or command acknowledgements, are logged and saved on a central server.

The electronic components in the system communicate with one another via a virtual network. Data is exchanged within the system during normal key use applying wireless communication, unnoticed by users.

The key featuring a high-capacity memory chip stores the programmed access authorisations as well as commands intended to cause key blockings, for instance due to a lost key. These commands are relayed to the cylinders along the way during the normal locking process.

A cylinder is able to convey these commands to other keys independently. This viral data transmission process enables locking commands to be disseminated at an unusually high speed.



Subject to technical changes without notice.



# Profile double cylinder

## Type 01

### Areas of application

- Indoors
- VdS environmental class 2 and IP 54 at +5 °C to 40 °C
- Doors which have to be closed electronically from both sides in a controlled fashion
- Standard doors

### Properties

- Minimum length: 30,7 mm / 32,4 mm
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- Delivery inc. lithium cells
- Up to 18,000 (for BC) and 25,000 (for BS) locking transactions or up to 6 years standby
- Time function (blueChip option, blueSmart series)
- Logging function  
In case of time function with date and time display
- For further information, see “General description”

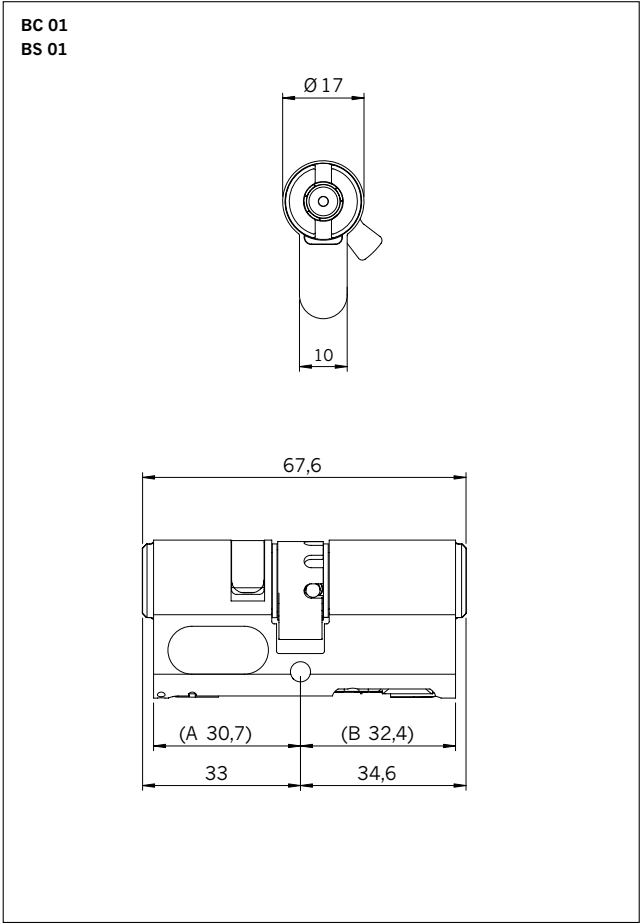
### Available extensions

- Starting at 35.7 mm on A and B side, with increments of 5 mm on each side

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

Can be operated with:



Subject to technical changes without notice.

General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

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Overview of  
systems

keyTec –  
Locking cylinders



# Profile double cylinder

## Type 05

### Areas of application

- Indoors
- VdS environmental class 2 and IP 54 at +5 °C to 40 °C
- Doors which do not have to be locked and controlled electronically from the inside, e.g. office doors

### Properties

- Minimum length: 30,7 mm/30,7 mm
- One side (A side) checked electronically, can be closed on the B side with any BC/BS key
- Outside part of cylinder core on the B side rotates along with the A side when operated.
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- Delivery inc. lithium cells
- Up to 18,000 (for BC) and 25,000 (for BS) locking transactions or up to 6 years standby
- Time function (blueChip option, blueSmart series)
- Logging function  
In case of time function with date and time display
- For further information, see “General description”

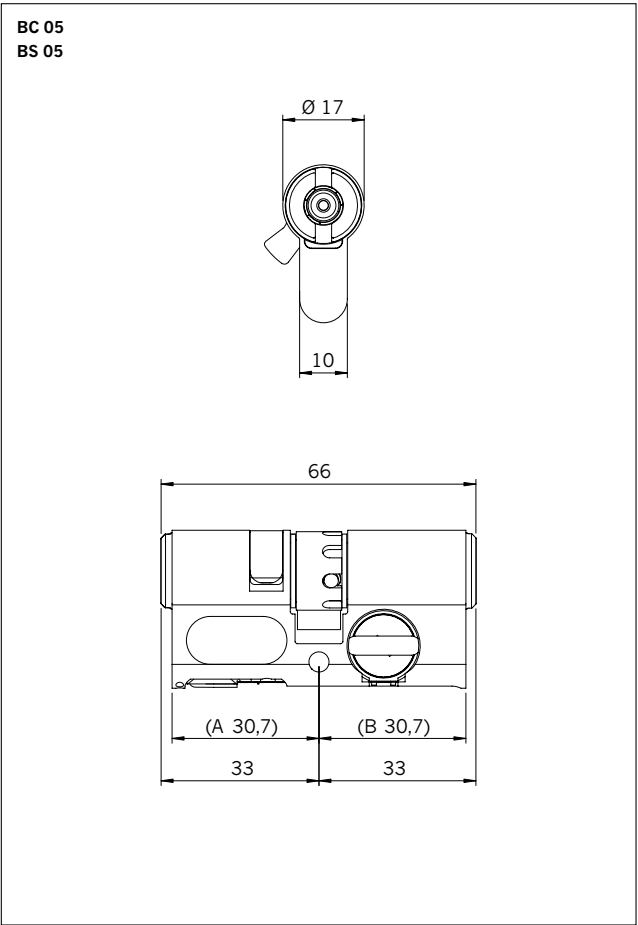
### Available extensions

- On both sides, with increments of 5 mm on each side

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

#### Can be operated with:



Subject to technical changes without notice.



# Profile double cylinder

## Type 11

### Areas of application

- In doors in outdoor facades
- VdS environmental class 3 and IP 54
- Highly frequented doors

### Properties

- Minimum length: 30,7 mm / 32,4 mm
- Electronically controlled from both sides
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- Serially- connected power supply cable
- Supply voltage 7–16 V DC, power consumption with 12 V max. 20 mA
- Up to 500,000 locking transactions or up to 7 years standby
- Delivery inc. battery pack and 0.5 m connection line
- Time function (blueChip option, blueSmart series)
- Logging function  
In case of time function with date and time display
- For further information, see “General description”

### Available extensions

- Starting at 35.7 mm on A and B side, with increments of 5 mm on each side

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

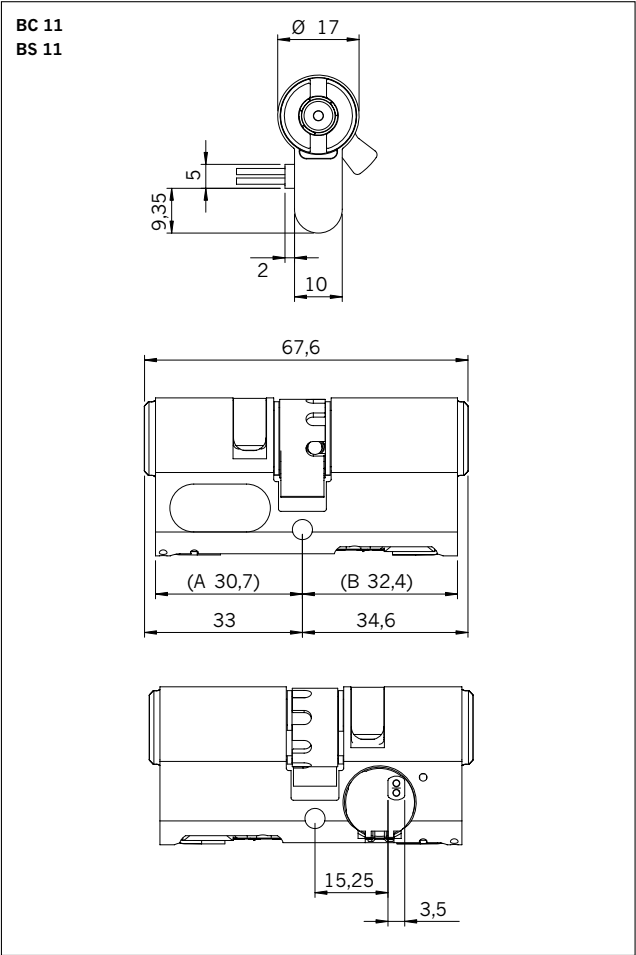
Can be operated with:



Only blueChip



Only blueSmart



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General  
Information



Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

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systems

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# Profile double cylinder

## Type 21

### Areas of application

- Inside and outside
- VdS environmental class 4 and IP 67
- Highly frequented doors
- Garden gates

### Properties

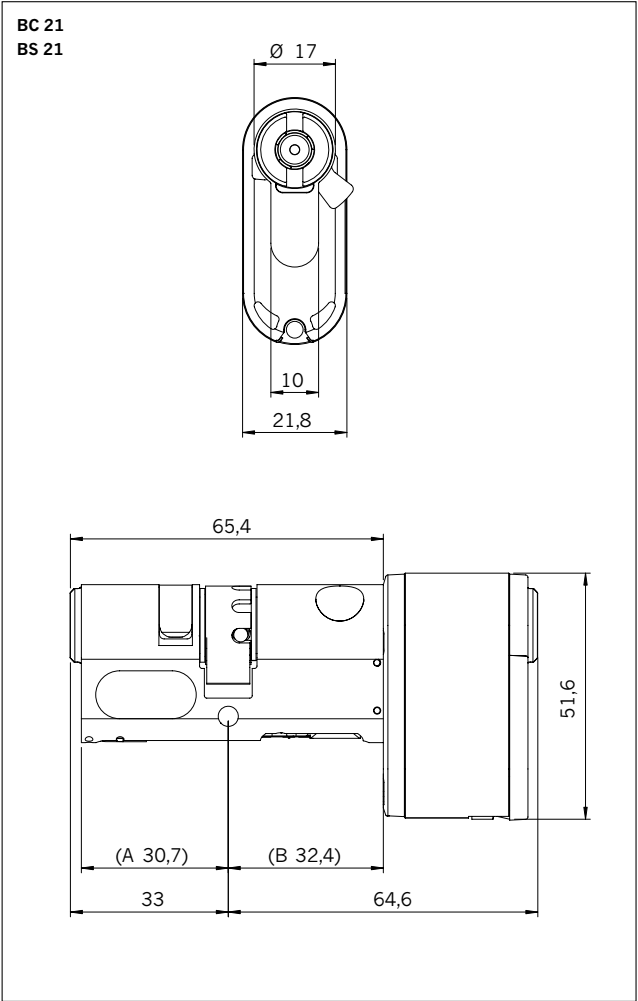
- Battery case on the interior side of the cylinder including powerful batteries with long service life
- Minimum length: 30,7 mm / 32,4 mm
- Electronically controlled from both sides
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- Delivery inc. lithium cells
- Up to 200,000 locking transactions or up to 10 years standby
- Time function (blueChip option, blueSmart series)
- Logging function  
In case of time function with date and time display
- For further information, see “General description”

### Available extensions

- Starting at 35.7 mm on A and B side, with increments of 5 mm on each side

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127



### Can be operated with:

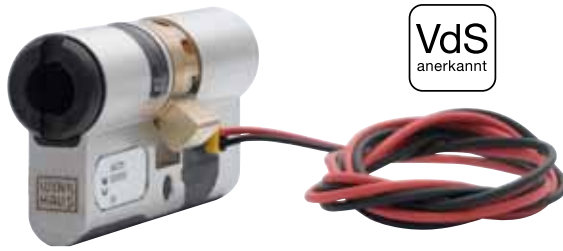


Only blueChip



Only blueSmart

Subject to technical changes without notice.



## Profile double cylinder

## Type 15

## Areas of application

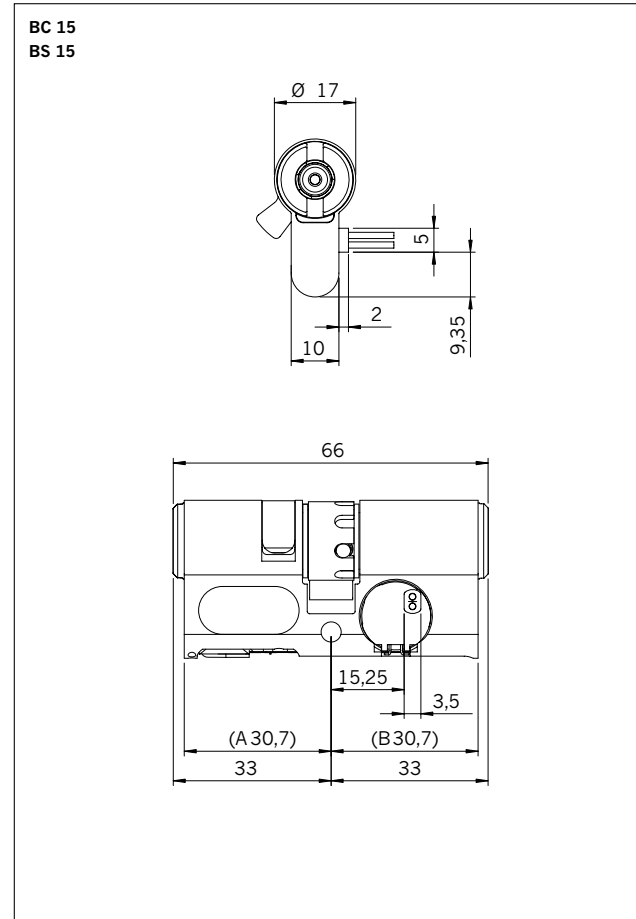
- Inside and outside
- VdS environmental class 3 and IP 54
- Highly frequented doors
- Doors which do not have to be controlled electronically from the inside

## Properties

- Minimum length: 30,7 mm/30,7 mm
  - One side (A side) checked electronically, can be closed on the B side with any BC/BS key
  - Outside part of cylinder core on the B side rotates along with the A side when operated
  - VdS class BZ+ series configuration, but without testing certificate
  - Easily adjustable cylinder cam
  - Serially- connected power supply cable
  - Supply voltage 7–16 V DC, power consumption with 12 V max. 20 mA
  - Up to 500,000 locking transactions or up to 7 years standby
  - Delivery inc. battery pack and 0.5 m connection line
  - Time function (blueChip option, blueSmart series)
  - Logging function
- In case of time function with date and time display
- For further information, see “General description”

## Available extensions

- On both sides, with increments of 5 mm on each side



## System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

**Can be operated with:**



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General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

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systems

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Locking cylinders



# Profile knob cylinder

## Type 04

### Areas of application

- Inside and outside
- Avoid condensation on knob side
- IP 54
- Highly frequented doors

### Properties

- Minimum length: 30,7 mm / 30,7 mm
- Electronically controlled from one side
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- Knob material PVC
- Delivery inc. lithium cells
- Up to 200,000 locking transactions or up to 10 years standby
- Time function (blueChip option, blueSmart series)
- Logging function
  - In case of time function with date and time display
- For further information, see “General description”

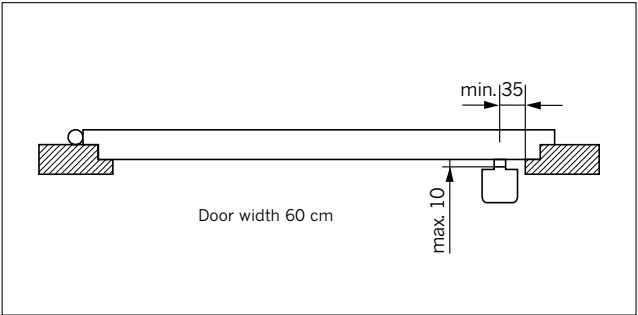
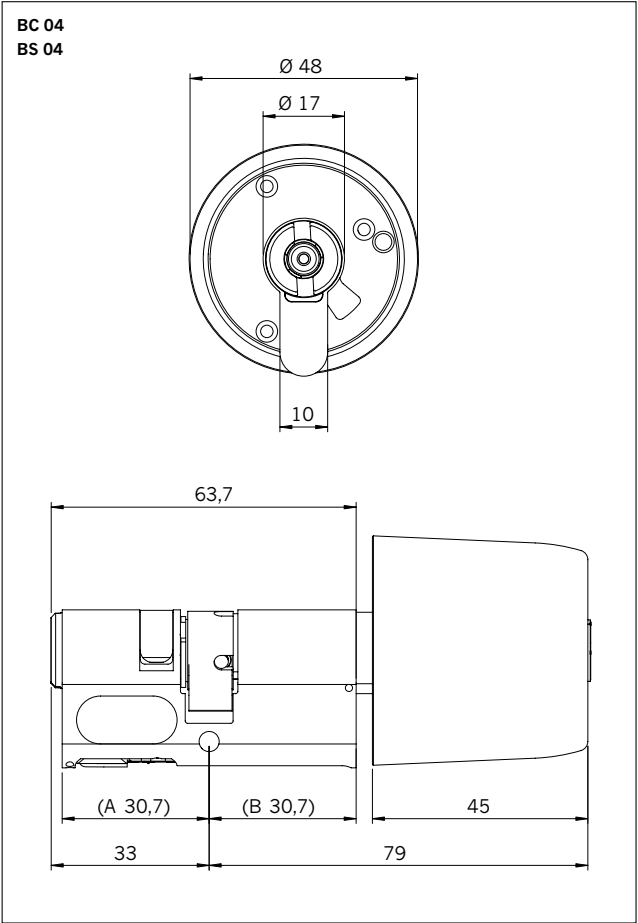
### Available extensions

- On both sides, with increments of 5 mm on each side

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

#### Can be operated with:



Subject to technical changes without notice.



# Profile knob cylinder

## Type 04 MK

### Areas of application

- Indoors
- VdS environmental class 2 and IP 54 at +5 °C to 40 °C
- Standard doors

### Properties

- Minimum length: 30,7 mm/30,7 mm
- Electronically controlled from one side
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- The doorknob is mechanically always ready to close, doorknob made of brass and nickel-plated
- Delivery inc. lithium cells
- Up to 18,000 (for BC) and 25,000 (for BS) locking transactions or up to 6 years standby
- Time function (blueChip option, blueSmart series)
- Logging function
- In case of time function with date and time display
- For further information, see “General description”

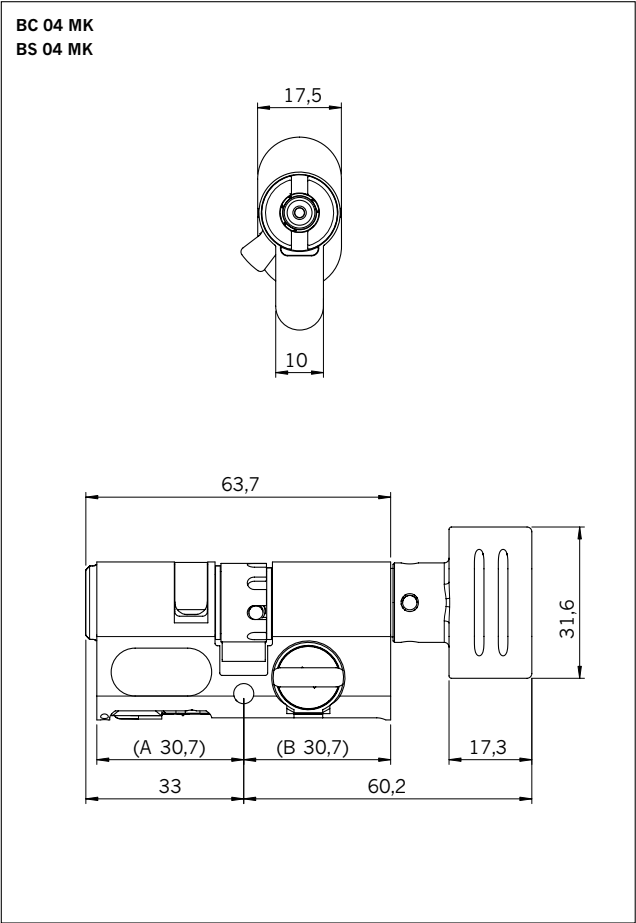
### Available extensions

- On both sides, with increments of 5 mm on each side

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

Can be operated with:



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General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

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# Profile knob cylinder

with anti-barricade function  
Type 04 S10 MK

## Areas of application

- Indoors
- VdS environmental class 2 and IP 54 at +5 °C to 40 °C
- Standard doors
- Anti-barricade function

## Properties

- Anti-barricade function

Function description:

### Scenario 1: normal state

The door is unlocked and can be accessed from the outside and inside.

### Scenario 2: amok state

The door is locked with the knob from the inside and can only be opened from outside by using the authorised key.

### Scenario 3: Pupils are playing a trick on the teacher

The door knob is blocked from the inside (to play a trick). Nevertheless the door can be opened from the outside with an authorised key.

- Other properties such type 04 MK
- For further information, see “General description”.

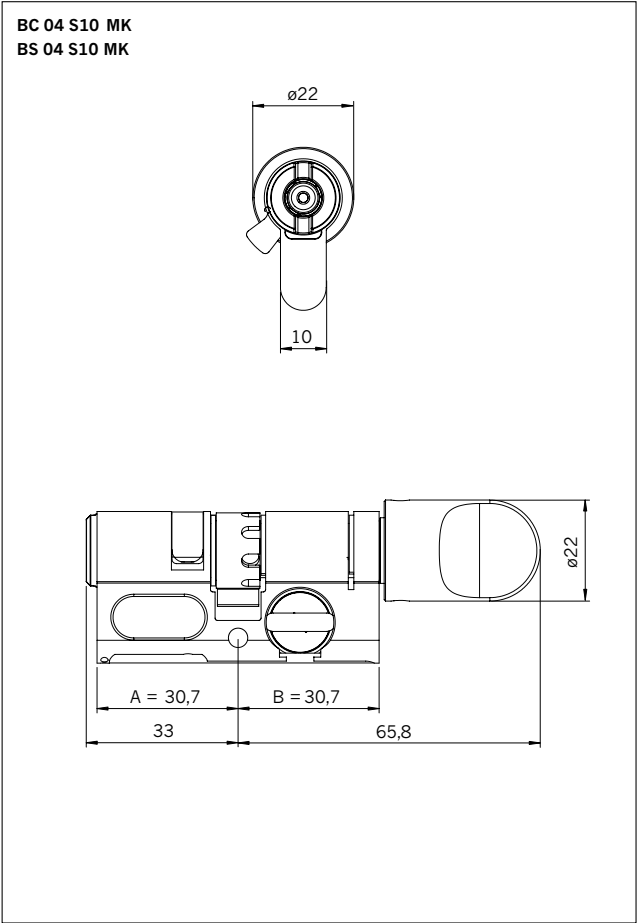
## Available extensions

- On both sides, with increments of 5 mm on each side

## System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

### Can be operated with:



Subject to technical changes without notice.



# Profile knob cylinder

## Type 14 MK

### Areas of application

- Inside and outside
- VdS environmental class 3 and IP 54
- Highly frequented doors

### Properties

- Minimum length: 30,7 mm/30,7 mm
- Electronically controlled from one side
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- Serially- connected power supply cable
- Supply voltage 7–16 V DC, power consumption with 12 V max. 20 mA
- Delivery inc. battery pack and 0.5 m connection line
- The doorknob is mechanically always ready to close, doorknob made of brass and nickel-plated
- Up to 500,000 locking transactions or up to 7 years standby
- Time function (blueChip option, blueSmart series)  
In case of time function with date and time display
- For further information, see “General description”

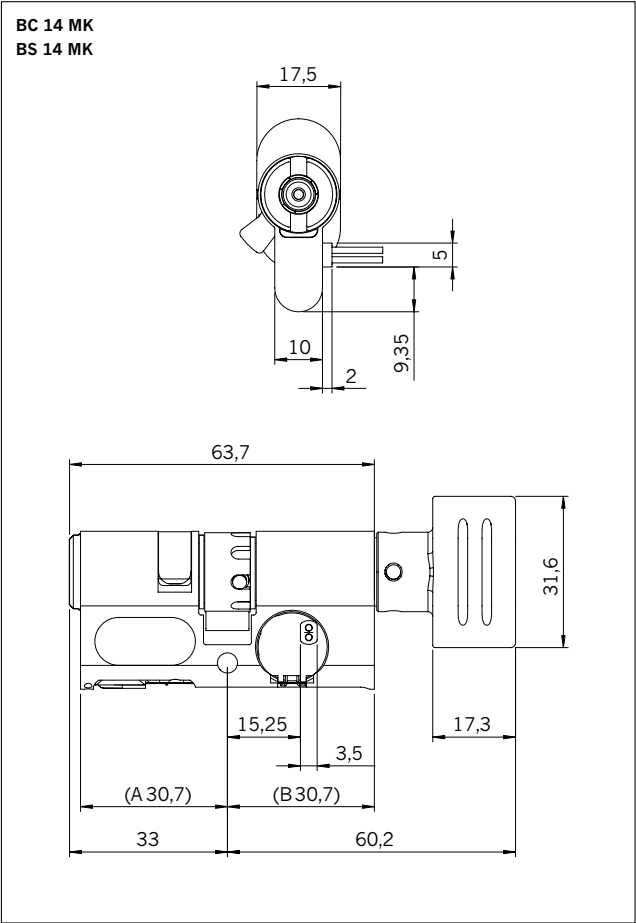
### Available extensions

- On both sides, with increments of 5 mm on each side

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

Can be operated with:



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General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

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Overview of  
systems

keyTec –  
Locking cylinders



# Profile half cylinder

## Type 02

### Areas of application

- Indoors
- VdS environmental class 2 and IP 54 at +5 °C to 40 °C
- Key switch
- Switching systems
- Elevator switch
- Emergency terminal

### Properties

- Minimum length: 30,7 mm
- Electronic control
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- Delivery inc. lithium cells
- Up to 18,000 (for BC) and 25,000 (for BS) locking transactions or up to 6 years standby
- Time function (blueChip option, blueSmart series)
- Logging function
- In case of time function with date and time display
- For further information, see “General description”

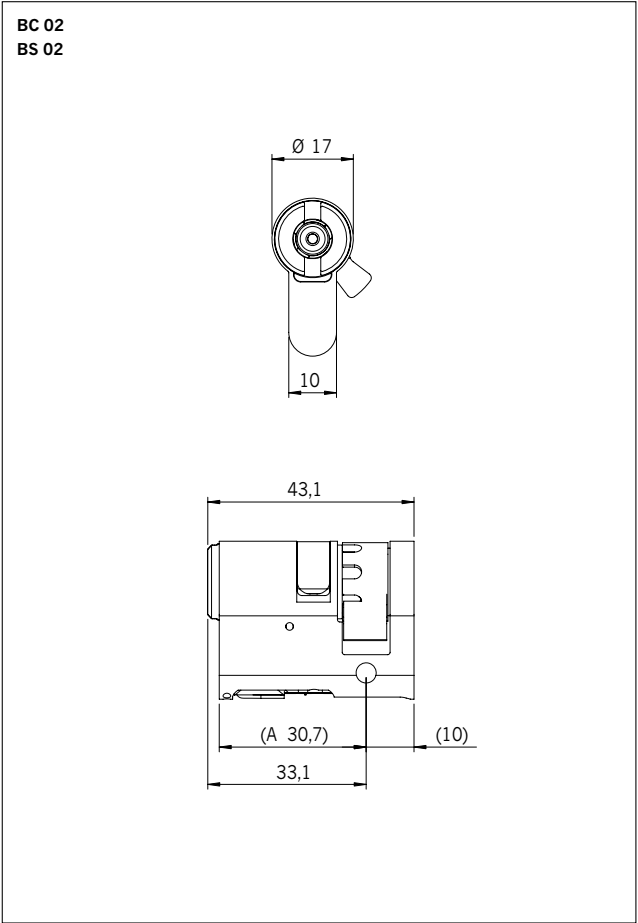
### Available extensions

- With increments of 5 mm

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

#### Can be operated with:



Subject to technical changes without notice.



# Profile half cylinder

## Type 12

### Areas of application

- Inside and outside
- VdS environmental class 3 and IP 54
- Highly frequented key switches
- Block locks: please contact us!

### Properties

- Minimum length: 30,7 mm
- Electronic control
- VdS class BZ+ series configuration, but without testing certificate
- Easily adjustable cylinder cam
- Serially- connected power supply cable
- Supply voltage 7–16 V DC, power consumption with 12 V max. 20 mA
- Up to 500,000 locking transactions or up to 7 years standby
- Delivery inc. battery pack and 0.5 m connection line
- With external power supply
- Time function (blueChip option, blueSmart series)
- Logging function  
In case of time function with date and time display
- For further information, see “General description”

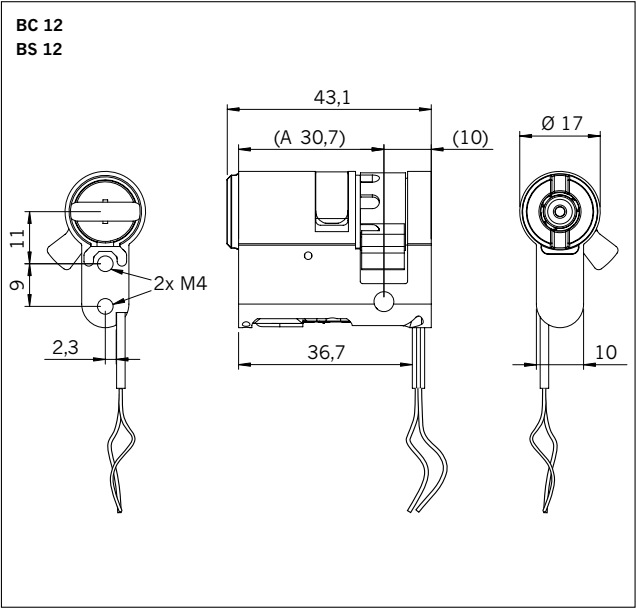
### Available extensions

- With increments of 5 mm

### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

Can be operated with:



Subject to technical changes without notice.

General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

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systems

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Locking cylinders



# Padlock

## Type 85

### Areas of application

- Inside and out, to be connected outdoors only using a power adapter
- IP 54
- Medicine cupboards, filing cabinets, containers

### Properties

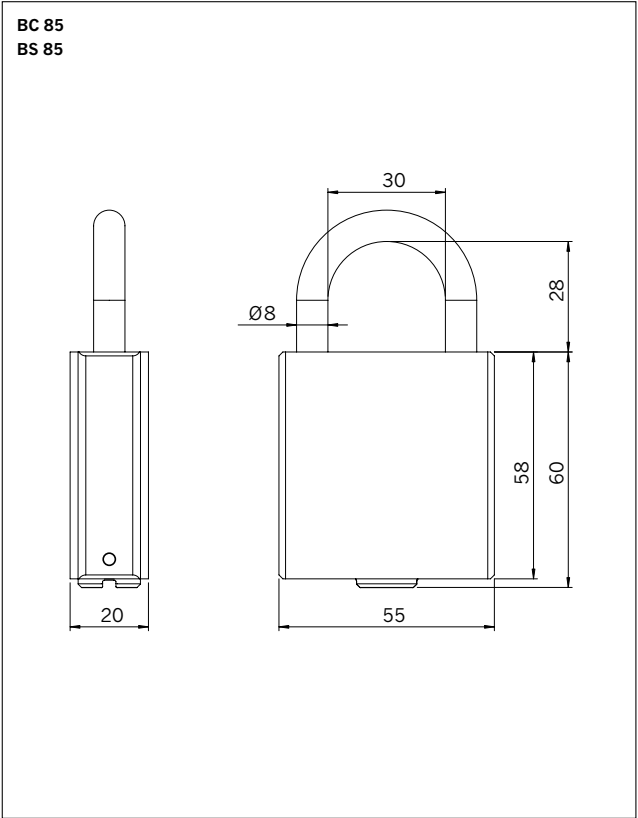
- Electronic control
- Steel shackle, 28 mm (optionally type 85Z6, 64 mm)
- Bracket and housing made of stainless steel
- Delivery inc. lithium cells
- Up to 18,000 (for BC) and 25,000 (for BS) locking transactions or up to 6 years standby
- Logging function
- For further information, see “General description”

### Note

- Padlock with no active magnetic protection

### Optionally available

- Type 85/3 with automatic locking
- Type 85Z6 with shackle height 64 mm



### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

#### Can be operated with:



Subject to technical changes without notice.



# Profile double knob cylinder

## Type 61/15

### Areas of application

- Inside and outside
- VdS environmental class 2 and IP 54 for -20 °C to 60 °C
- Card solutions
- Panic door multi-point gear locking systems to EN 1125/EN 179 with imperative free-to-turn function FZG
- Combination of mechanical and electronic Winkhaus locking systems

### Properties

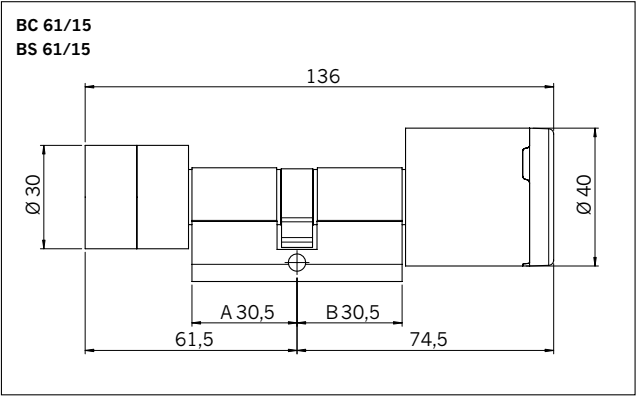
- Minimum length: 30,5 mm / 30,5 mm
- Electronically controlled from both sides, control on interior side (B side)
- FZG approval
- VdS equipment class B (optionally), has been filed
- Delivery inc. lithium cells (2 x CR2)
- Up to 20,000 locking transactions or up to 4 years standby
- Time function (blueChip option, blueSmart series)
- Logging function  
In case of time function with date and time display
- Can be used from software version 3.5 (blueChip) or 4.0 (blueSmart) from the blueControl range
- Special programming device required (item no. 496 929 2)
- For further information, see “General description”

### Available extensions

- Starting at 30.5 mm, with increments of 5 mm on each side

### Additional accessories

- Power adapter A (498 063 4) for emergency opening of the A side in case the battery is empty. Supplied with disassembly tool for logo cover (496 988 1)



### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

Can be operated with:



Subject to technical changes without notice.



General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

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systems

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Locking cylinders



# Profile double knob cylinder

## Type 65

### Areas of application

- Inside and outside
- VdS environmental class 2 and IP 54 for -20 °C to 60 °C
- Card solutions
- Mult-point gear locking systems
- Optionally as SR variant with automatic reset of the cam to 5 – 7 h
- Combination of mechanical and electronic Winkhaus locking systems

### Properties

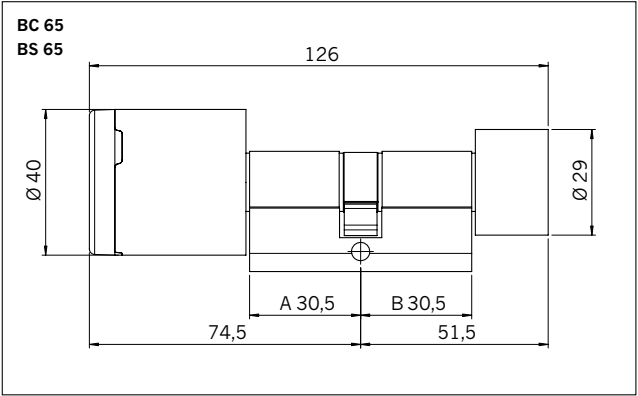
- Minimum length: 30,5 mm / 30,5 mm
- Electronically controlled from one side
- Delivery inc. lithium cells (2 x CR2)
- Up to 20,000 locking transactions or up to 4 years standby
- Time function (blueChip option, blueSmart series)
- Logging function
  - In case of time function with date and time display
- Can be used from software version 3.5 (blueChip) or 4.0 (blueSmart) from the blueControl range
- Special programming device required (item no. 496 929 2)
- For further information, see “General description”

### Available extensions

- Starting at 30.5 mm, with increments of 5 mm on each side
- Standard length A or B side up to 70 mm, SR variant A or B up to 50 mm

### Optional accessories for type 65 (not SR variant)

- Replacement housing, reversible A = B (496 868 5)
- Electronic replacement knob blueSmart (497 865 0)
- Electronic replacement knob blueChip (496 866 6)
- Mechanical replacement knob (496 494 1)



### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

### Can be operated with:



Only blueChip



Only blueSmart



Subject to technical changes without notice.



# Profile knob half cylinder

## Type 62

### Areas of application

- Indoors
- VdS environmental class 2 and IP 54 for -20 °C to 60 °C
- Card solutions
- Mult-point gear locking systems
- Key switch
- Elevator switch
- Combination of mechanical and electronic Winkhaus locking systems

### Properties

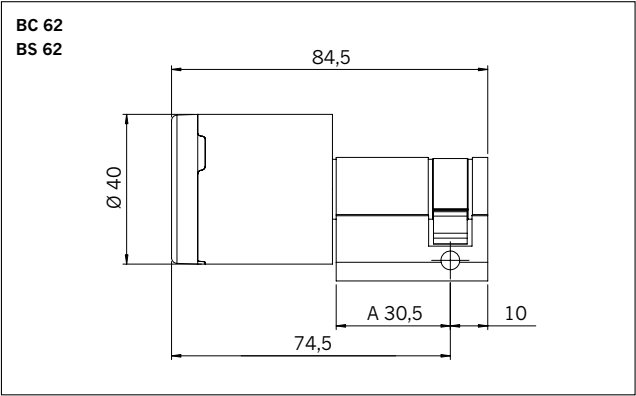
- Minimum length: 30,5 mm
- Electronic control
- Delivery inc. lithium cells (2 x CR2)
- Up to 20,000 locking transactions or up to 4 years standby
- Time function (blueChip option, blueSmart series)
- Logging function
  - In case of time function with date and time display
- Can be used from software version 3.5 (blueChip) or 4.0 (blueSmart) from the blueControl range
- Special programming device required (item no. 496 929 2)
- For further information, see “General description”

### Available extensions

- Starting at 30.5 mm, with increments of 5 mm on each side (standard A length up to 45 mm)

### Optional accessories for type 62

- Replacement housing (496 868 6)
- Electronic replacement housing blueSmart (497 865 0)
- Electronic replacement knob blueChip (496 866 6)



### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

Can be operated with:



Subject to technical changes without notice.

## Accessories

### Types 62, 65 and 61/15

#### Programming device (496 929 2)

##### Areas of application

- For programming all BC/BS components

##### Properties

- Same features as standard programming device, but additionally compatible with cylinders type 62, 65 and 61/15



#### Replacement dismounting card (497 863 9) for knob module

##### Areas of application

- For disassembly of the electronic knob module

##### Properties

- Before using the card, make sure to read it in by the software
- The initial dismounting card is delivered free of charge when a new locking system is ordered



#### Power adapter for knob module (496 494 0)

##### Areas of application

- For emergency opening when battery is empty
- For type 61/15 side A see optional accessories on page 47



##### Properties

- If the battery of the cylinder is defective or empty, it is possible to carry out an emergency opening using the power adapter and an authorised key
- Supplied with the logo cover disassembly tool (496 988 1)

#### Disassembly tool for logo cover (496 988 1)

##### Areas of application

- For disassembly of the logo cover on the electronic knob module

##### Properties

- Imperatively needed for battery replacement
- Included in the power adapter scope of delivery

#### Replacement cable Type A6 (496 932 8)

##### Areas of application

- Replacement adapter cable for connecting the programming device to the 6X series cylinder (double knob cylinder). Cable length 0.75 m.

#### Battery changing tool for knob module (496 490 8)

##### Areas of application

- For removal of the knob cover in order to replace the battery

##### Properties

- The knob cover can be removed by means of the battery changing tool in order to replace the batteries in the cylinder (see installation and operating instructions for blueChip/blueSmart).

##### General instructions:

- Attention: Dismounting cylinders with two mechanical knobs from the door is not possible!
- Two electronic knobs per cylinder are only possible from a housing length of 65 mm or more.

##### Important to know before using the dismounting card:

We would like to draw your attention to the fact that it is of utmost importance for the security of the system to import the data of the enclosed dismounting card to the administration software. Only after this procedure it will be possible to block the dismounting card via the Winkhaus software in case of loss. Please understand that Aug. Winkhaus GmbH & Co. KG will not assume any liability for manipulation and any costs arising from a non-observance of this note.



# Door fitting with electronic access control

## blueChip and blueSmart EZK door handles

### Areas of application

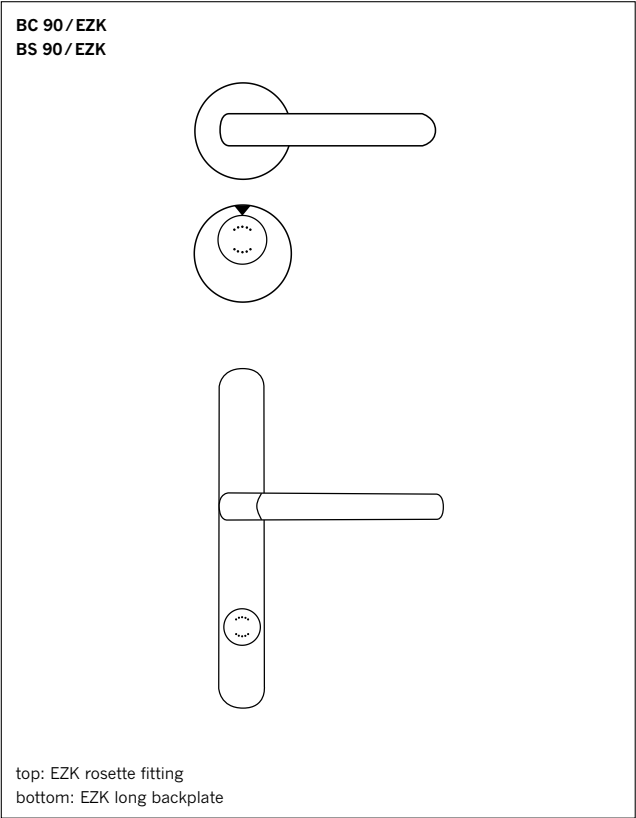
- Indoors
- Card solutions
- Framed doors
- Hotel

### Properties

- Door handle sets to EN 1906
- FH approval for fire protection doors
- In case of framed door: optionally with FH approval and adapter plate
- Electronically controlled from one side
- Supply includes lithium battery cells
- Up to 40,000 locking transactions or 4 years standby
- Standard 8 mm square, optionally 7 mm or, in case of FH approval, 9 mm
- Permanent release is optionally available
- Available in aluminium and stainless steel surfaces
- Time function (blueChip option, blueSmart series)
- A large variety of FSB designs are available (see next page)

### Possible door thickness

- Door thickness from 36 mm to 125 mm
- Different door thicknesses on demand



### System comparison

	blueChip	blueSmart
Time function	optionally	Series
Virtual network	x	x
Events log	200	2.000
Status message of battery status	–	x
Viral command conveyance	–	x
System size, doors and keys	64.000	195.000
Time profiles per identification medium	1	3
Maximum number of time profiles	64	127

### Can be operated with:



Subject to technical changes without notice.

## EZK door handles

### 2578

#### Design 1078

- Aluminium
- Stainless steel



### 2570

#### EN 179

#### Design 1070

- Aluminium
- Stainless steel



### 2515

#### Design 1015

- Aluminium
- Stainless steel



### 2576

#### Design 1076

- Aluminium
- Stainless steel
- Brass PvD



### 2523

#### EN 179

#### Design 1023

- Aluminium
- Stainless steel
- Brass PvD



### 2607

#### Design 1107

- Aluminium
- Stainless steel



### 2600 40

- Aluminium
- Stainless steel

2600 4004 right  
2600 4005 left



### Strike boxes 4223

- Aluminium
- Stainless steel

4223 45 right  
4223 55 left



### 2600 30

- Aluminium
- Stainless steel

2600 3004 right  
2600 3005 left



### Strike boxes 4220

- Aluminium
- Stainless steel

4220 45 right  
4220 55 left



**Note:** Full glass lock case is supplied without EZK.  
Other models on request.

Subject to technical changes without notice.

# Special cylinders

## blueChip and blueSmart

### Profile half cylinder

#### Type 00/6

Similar to type 02, but without key check. Cylinder doesn't contain any electronic components.

This cylinder can be locked with a dummy key.

#### Type 02/17

Similar to type 02, but without active magnetic protection. For horizontal installation, for instance.

#### Type 22/17

Profile half cylinder with battery case on the inner side for long service life. Without active magnetic protection, e. g. for horizontal installation.

#### Type 12/17

Similar to type 12, but without active magnetic protection. For horizontal installation, for instance.

#### Type 02Z49

Similar to type 02, but with different cam position.

Cam position 6:00 h when the key is removed, cam paths from 6:00 to 3:00 h and from 6:00 to 9:00 h due to free movement.

#### Type 12Z49

Similar to type 12, but with different cam position.

Cam position 6:00 h when the key is removed, cam paths from 6:00 to 3:00 h and from 6:00 to 9:00 h due to free movement.

#### Type 02Z68

Similar to type 02, but with different cam position.

Cam position 10:30 h when the key is removed, cam paths from 10:30 to 5:30 h and from 10:30 to 1:30 h due to free movement.

#### Type 12Z68

Similar to type 12, but with different cam position.

Cam position 10:30 h when the key is removed, cam paths from 10:30 to 5:30 h and from 10:30 to 1:30 h due to free movement.

#### Type 02Z72

Similar to type 02, but with different cam position.

Cam position 12:00 h when the key is removed, cam paths from 12:00 to 9:00 h and from 12:00 to 3:00 h due to free movement.

#### Type 12Z72

Similar to type 02, but with different cam position.

Cam position 12:00 h when the key is removed, cam paths from 12:00 to 9:00 h and from 12:00 to 3:00 h due to free movement.

### Profile double cylinder

#### Type 00/7

Similar to type 05, but without key check. Cylinder doesn't contain any electronic components. This cylinder can be locked with a dummy key.

#### Type 01/17

Similar to type 01, but without active magnetic protection. For horizontal installation, for instance.

#### Type 05/17

Similar to type 05, but without active magnetic protection. For horizontal installation, for instance.

#### Type 11/17

Similar to type 11, but without active magnetic protection. For horizontal installation, for instance.

#### Type 21/17

Similar to type 21, but without active magnetic protection. For horizontal installation, for instance.

### Profile knob cylinder

#### Type 00/8

Similar to type 04 MK, but without key check. Cylinder doesn't contain any electronic components. This cylinder can be locked with a dummy key.

#### Type 04/17

Similar to type 04, but without active magnetic protection. For horizontal installation, for instance.

### Measuring and testing cylinder (500 936 0)

To ascertain the length, free-to-turn function and switch paths for switch cylinders. Set consists of double and half cylinder.

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4.2

# blueChip TimeLine AccessPoint

## Type BC TA

### Upload terminal for using the virtual blueChip network

#### Areas of application

- For internal and external areas (Siedle Vario module, IP44, housing module optionally available)
- Temperature range from -25 °C to +60 °C
- Main entrances, motorised locking systems, electric door openers

#### Properties

- Assignment of authorisations (updated daily) for access that is limited with regard to time and place
- Programming is enabled by RS485 interface to the PC
- Contactless reading and writing of blueChip keys, cards, key fobs and HST keys (metronic keys)
- Nominal voltage 12 V AC/DC
- External power supply 8 to 16 V DC or RMS AC
- Power consumption max. 150 mA at 8 V; 100 mA at 12 V; 80 mA at 16 V
- Integrated relay contact (normal open, common) switching in case of locking authorisation (BC TA ZI)
- Offset relay contact as security variant (BC TA ZE)
- Switching current max.: 0.7 at +20 °C; 0.5 at +60 °C
- Switching voltage: 30 V DC; 20 V AC

#### Properties of door control module (BC TA ZE)

- Offset relay contact (normal open, common) switching in case of locking authorisation
- For controlling E openers, barriers etc.
- Nominal voltage 12 V AC/DC or 8 to 16 V DC or RMS AC
- Power consumption max. 50 mA
- Installation: e. g. flush-mounted socket
- Dimensions: 42 mm x 42 mm x 25 mm

#### Prerequisites

- blueIntras Control Basic or blueIntras Control software from version 2.5
- TimeLine software module
- COM Server as an option

#### Can be operated with:



BC TA/BC TA ZI

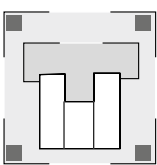


Siedle Vario design,  
white, IP 44

BC TA ZE  
Receivers



Door relay



Siedle Vario design,  
white, IP 44

Subject to technical changes without notice.

# blueSmart AccessPoint

## Type BS TA

### Upload terminal for use of the virtual blueSmart network

#### Areas of application

- For internal and external areas (Siedle Vario module, IP44, housing module optionally available)
- Temperature range from -25 °C to +60 °C
- Main entrances, motorised locking systems, electric door openers

#### Properties

- Programming is enabled by RS485 interface to the PC
- Contactless reading and writing of blueSmart keys, cards, key fobs and HSH keys (metronic keys)
- Nominal voltage 12 V AC/DC
- External power supply 8 to 16 V DC or RMS AC
- Power consumption max. 200 mA
- Integrated relay contact (normal open, common) switching in case of locking authorisation (BS TA ZI)
- Offset relay contact as security variant (BS TA ZE)
- Switching current max.: 0.7 at +20 °C; 0.5 at +60 °C
- Switching voltage: 30 V DC; 20 V AC

#### Properties of door control module (BS TA ZE)

- Offset relay contact (normal open, common) switching in case of locking authorisation
- For controlling E openers, barriers etc
- Nominal voltage 12 V AC/DC or 8 to 16 V DC or RMS AC
- Power consumption max. 50 mA
- Installation: e. g. flush-mounted socket
- Dimensions: 42 mm x 42 mm x 25 mm

#### Prerequisites

- blueControl Professional or blueControl Start Virtual (BCS-V)
- Software module for blueControl Professional
  - blueLine Start or blueLine
  - Virtual Network
- COM Server as an option

#### Can be operated with:

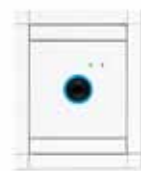


BS TA/BS TA ZI

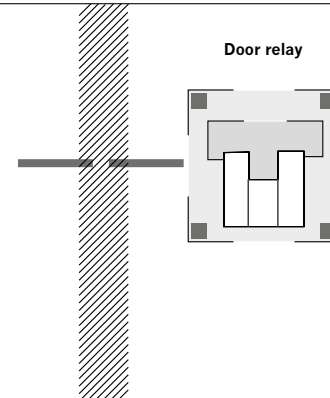


Siedle Vario design,  
white, IP 44

BS TA ZE  
Receivers



Door relay



Siedle Vario design,  
white, IP 44



# Readers with integrated control unit

## Control unit with relay activation

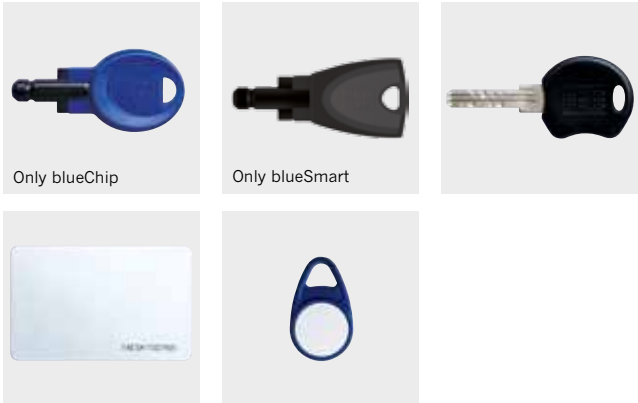
### Areas of application

- For indoor use (Surface mounted or flush-mounted housing modules for bticino, Gira Siedle or Elcom are optionally available.)
- Temperature range of -10 °C to +55 °C
- Motorised locking systems
- Turnstiles
- Parking barriers
- Electric door openers

### Properties

- Contactless reading of electronic keys, cards and mechatronical keys
- A relay contact is released when locking authoration is indicated
- External power supply 8 V–16 V AC/DC, zero signal and active current 80 mA
- Breaking capacity, relay: 1 A/30 V
- Plastic housing for incorporation in standard flush-mounted wall outlets
- Other switch designs on request
- Time function (blueChip option, blueSmart series)
- Single entry and permanent release (optinal) possible
- For further information, see “General description”

### Can be operated with:



BC TI BD  
BS TI BD



bticino-Light design,  
blue/white, IP20

BC TI GD  
BS TI GD



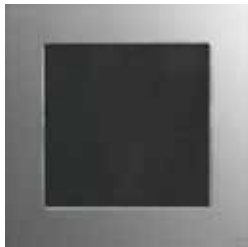
Gira Event design,  
blue/white, IP20

BC TI SD  
BS TI SD



Siedle Vario module,  
white\*, IP44  
\* Other colours available on request

BC TI EL  
BS TI EL



Elcom Modesta module,  
stainless steel, IP44

Subject to technical changes without notice.

## Readers with external control unit

### Separate control and receiver units

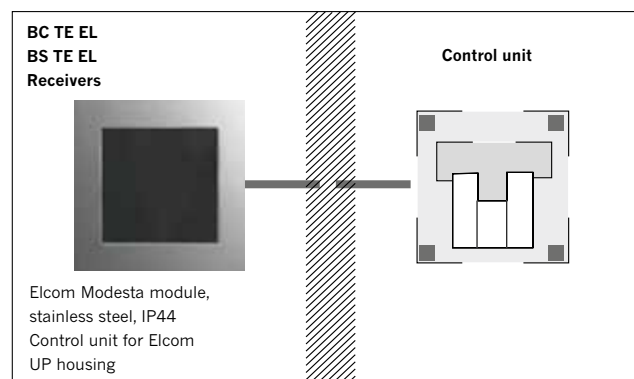
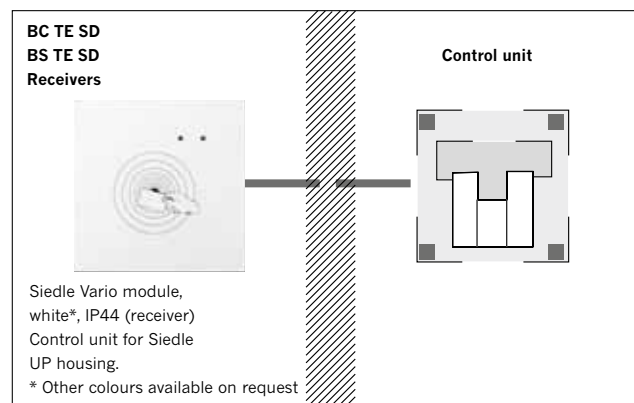
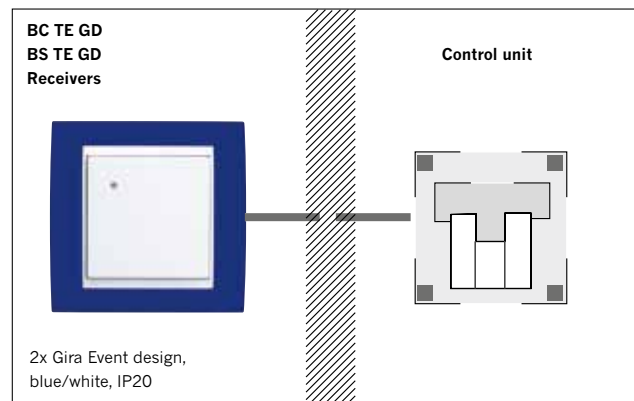
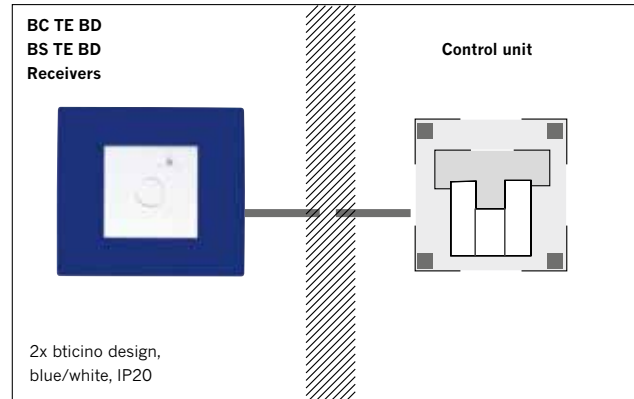
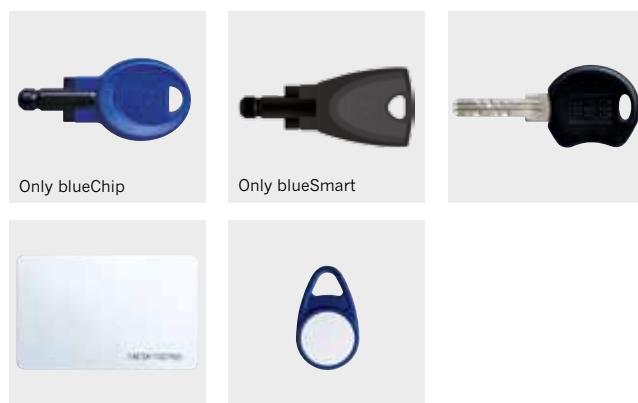
#### Areas of application

- For inside areas (surface or flush-mounted housing modules for bticino or Gira optionally available) and outside areas (surface or flush-mounted housing modules for Siedle or Elcom optionally available)
- Temperature range from –10 °C to +55 °C (control unit), from –25 °C to +60 °C (receiver)
- Motorised locking systems
- Turnstiles
- Parking barriers
- Electric door openers

#### Properties

- Contactless reading of electronic keys, cards and mechatronical keys
- Enhanced security due to spatial separation of receiver and control electronics
- A relay contact is released when locking authority is indicated
- External power supply 8 V–16 V AC/DC, zero signal and active current 80 mA
- Breaking capacity, relay: 1 A/30 V
- Plastic housing for incorporation in standard flush-mounted wall outlets
- Other switch designs on request
- Time function (blueChip option, blueSmart series)
- Single entry and permanent release (optimal) possible
- For further information, see “General description”

#### Can be operated with:



#### Note:

The control unit and reader must be no more than 2 metres apart.

Subject to technical changes without notice.

# Identification media

## blueChip

### blueChip key BC N



#### Areas of application

The blueChip key is an identification medium for blueChip cylinders, blueChip readers, EZK and Winkhaus access control and time management readers. Key authentication via a challenge-response procedure. Each key is programmed with an electronic profile and a unique coding provided by Winkhaus. Each key is assigned exclusively to one system.

Thanks to IP 68 protection class and a temperature range of -20 °C to +75 °C (further ranges on request) the BC N key is versatile in use (e. g. fire brigade safe). For further information, see “General description”.

- BC N blue
- BC N/TSW jet black RAL 9005
- BC N/RRT ruby red RAL 3003
- BC N/RGB rape yellow RAL 1021
- BC N/MGR mint green RAL 6029

### blueChip key BC NZ

Like blueChip key BC N, also with integrated additional transponder for control of other manufacturers’ readers. Only available in jet black; other technologies and designs on request. Customer release on third-party readers is necessary.

#### Transponder types

- T03 MIFARE
- T04, T13 LEGIC Prime
- T07 HITAG 1
- T09 EM4102



#### BC Logo

The blueChip key can be provided with an individual logo on request.

### Transponder key BC HT



Equipped with a mechanical key in the systems AZ, VS, VS6, ZRV, ZRV6, RAP, RAP+, Titan and X-tra, with integrated Temic transponder (blueChip) for control of EZK and blueChip readers. This key is an example of the Mechatronic principle – the functional link between mechanical and electronic.

### blueChip identification card BC K



Contact-free, readable ID card for all Intras blueChip readers, white, imprinted with system number.

**Note:** Avoid mechanical stress on the cards. Protective covers can be supplied to protect them.

### blueChip key fob BC SA



Contact-free, readable key fob for all Intras blueChip readers, blue, other colours on request, imprinted with system number.

## Identification media

### blueSmart

#### blueSmart key BS N



#### Areas of application

The blueSmart key is an identification medium for blueSmart cylinders, blueSmart readers, EZK and Winkhaus access control and time management readers.

The key does not need a battery and thus it is entirely maintenance free. Thanks to IP 68 protection class and a temperature range of -20 °C to +75 °C (further ranges on request) the BS N key is versatile in use (e. g. fire brigade safe). It is available in many different colours. For further information, see “General description”.

BS N anthracite  
BS N/WHB Winkhaus blue RAL 5010  
BS N/RRT ruby red RAL 3003  
BS N/RGB rape yellow RAL 1021  
BS N/MGR mint green RAL 6029

#### blueSmart premium key BS P

The blueSmart premium key is the visual highlight among identification media. This key is excellently suited to differentiate individual user groups in a locking system.



#### blueSmart key with additional transponder BS NZ

The blueSmart key with additional transponder houses a transponder in the key bow for controlling readers of other manufacturers. Only available in premium key design.

#### Transponder types

T03 MIFARE  
T04, T13 LEGIC Prime  
T06 Temic (blueChip)  
T07 HITAG 1  
T09 EM4102  
Other technologies on request



#### Transponder key BS HH



Mechanical key in the keyTec systems AZ, VS, VS6, ZRV, ZRV6, RAP, RAP+, Titan and X-tra, with integrated transponder (blueSmart) for control of blueSmart EZK, readers and double knob cylinders. This key is an example of the Mechatronic principle – the functional link between mechanical and electronic.

#### blueSmart identification card BS K



Contact-free, readable ID card for any blueSmart EZK, readers and double-knob cylinders, white, imprinted with system number.

**Note:** Avoid mechanical stress on the cards. Protective covers can be supplied to protect them.

#### blueSmart key fob BS SA



Contact-free, readable key fob for all blueSmart EZKs, readers and double knob cylinders, blue, other colours on request, imprinted with system number.

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# Accessories

## Programming device (279 833 5)

A universal programming device for any programming and service assignment with an additional power adapter function.

**Note:**

For cylinders of the 6x series please use the programming device BCP NG 61 (496 929 2).

**Properties**

- Programming and service for all system components, the required adapters are included in the scope of delivery.
- Compatible with all software tools: data exchange to the PC takes place either by USB (type A, cable included) or via RS232 interface (Sub D-9 connector, not applicable to programming device BCP NG 61)
- Delivery includes adapter cables type A1, type A5 and, depending on the equipment, type A6 for programming the components
- Ergonomic: The robust and intuitively operated keypad is used to navigate in a software menu that is shown in a graphic display. Background illumination makes this very legible even under adverse lighting conditions.
- Powerful: Dynamic memory management allows up to 20000 changes to locking plans to be transferred or the results from up to 400 cylinders to be read
- The device is supplied with a long-range power supply adapter and batteries (4 AA NiMH cells). The operating time with fully charged cells (charge time: generally 8 hours) is sufficient for a long working day (12 hours)
- Integrated real-time clock for time synchronisation of Time components (referenced via a PC)
- Integrated power adapter function: When the battery is low, cylinders are powered so that opening may take place using an authorised key
- Investment security: This device is a development of our own and communicates directly with a standard Windows PC. Therefore, it is independent of the product life cycles of hand-held computers, for example. Updating the device software where appropriate can easily be carried out via the data interfaces
- Robust plastic housing: Height 53 mm, width 84 mm, length 180 mm
- Permissible ambient temperatures: -10 °C to +55 °C
- Protection class IP 20, prevent condensation



Subject to technical changes without notice.

## Accessories

### Power supplies

#### Flush-mounted power supply unit (199 757 8)

For external power supply of BS cylinder and readers.

#### Plug-in power supply unit (197 176 5)

For external power supply of BS cylinder and readers.

### Cable

#### Replacement adapter cable type A1 (177 318 7)

For connecting the programming device to the cylinder, length 0.75 m.

#### Replacement adapter cable type A1 L, long (211 086 1)

For connecting the programming device to the cylinder, length 1.5 m.

#### Serial connection cable RS232 type A4 (177 321 6)

For connecting the programming device to the PC, length 0.5 m.

#### Adapter cable type (248 786 1)

For connecting the programming device to the EZK and reader, length 0.75 m.

#### Power supply cable type Z450 (493 270 5)

For BC/BS 11, BC/BS 12, BC/BS 14 MK and BC/BS 15, length 4.5 m.

#### Power supply cable BC Z30 (247 406 6)

For BC 11, 12, 14MK and 15. ATTENTION: only suitable for version 1.2 with plug design.

#### Power supply cable AKZ 605 (108 241 5)

For BC 11K. ATTENTION: only suitable for version 1.1.

#### Retaining clip HAKLBC11K (212 274 9)

For BC 11K and BC 11. ATTENTION: only for versions 1.1 and 1.2 with plug design.

### Batteries

Please exclusively use replacement battery packs that have been approved for the application and cylinder version in question. Using a wrong combination of cylinders and batteries may entail shorter service lives of the batteries. When using batteries, please observe the manufacturer's disposal instructions. Batteries must not be disposed of with the regular household garbage.

#### External battery pack BC EB (199 219 5)

For cylinders BC/BS 11, BC/BS 12, BC/BS 14 MK, BC/BS 15.

#### Replacement battery set (CR1220) (199 219 5)

For BC/BS 01, BC/BS 02, BC/BS 05, BC/BS 04 MK, BC/BS 85.

#### Replacement battery set 90 (296 959 5)

For BC/BS 90 and EZK.

#### Replacement battery set 04 (296 951 0)

For BC/BS 04 (black door knob).

#### Replacement battery set 21 (493 423 3)

For BC/BS 21.

### Surface-/flush-mounted housing

#### bticino surface-mounted housing (213 943 6)

Light design.

#### Gira surface-mounted housing (190 967 1)

Event design.

#### Gira AP spacer frame, black (494 222 1)

Spacer frame for increasing the standard frame height of the surface-mounted Gira housing (190 967 1) enabling easy installation of Winkhaus readers.

#### Siedle flush-mounted housing (1 module unit) (181 456 7)

Design Vario.

#### Siedle surface-mounted housing (1 module unit) (181 426 8)

Vario design.

#### Elcom flush-mounted housing (1 module unit) (493 427 8)

Modesta design.

#### Elcom surface-mounted housing (1 module unit) (493 863 6)

Modesta design.

Subject to technical changes without notice.

# Accessories

## Cards

Replacement programming card BS T (498 134 5)

Replacement security card BS S (498 134 9)

## EZK

EZK emergency battery, 9 volt (176 844 1)

EZK cable for emergency power supply (277 245 1)

EZK connecting cable (294 942 1) between handle and electronics, distance 92

EZK connecting cable (492 934 7) between handle and electronics, distance 112

EZK connecting cable (298 732 1) between handle and electronics, distance 132

EZK Verbindungskabel (492 934 8) between handle and electronics, distance 200

## Hotel application

Programming adapter (296 582 6)

For programming the Hotel ID card by means of programming device BCP-NG.

blueSmart hotel ID card (498 695 7)  
identification card for hotel applications

## Miscellaneous

Rainproof rosette for locking cylinders (493 596 1)  
plastic, grey.

Protective cover for ID cards (493 410 6)

Subject to technical changes without notice.







# 1 General Information

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## 2 Electronic Access Organisation

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2

### 2.1 blueChip/blueSmart – Electronic locking systems

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2.1

### 2.2 blueLine – Hardware for online access control/time management

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2.2

### 2.3 Service

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2.3

## 3 Software

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### 3.1 blueControl range

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3.1

### 3.2 timeControl

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3.2

## 4 Mechanical Access Organisation

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### 4.1 keyTec – Overview of systems

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4.1

### 4.2 keyTec – Locking cylinders

4.2



## Key-ready total concepts for integrated solutions

Peep – peep – peep – peep – peep. Tone by tone, the British secret agent inputs the key combination that a nameless scientist has just used to open the electronically secured laboratory door. He's just about to input the same code and thwart the plans of the villains. At the same time, the young woman walked into her small apartment and foolishly forgot to close the door behind her. Well, so what? When all's said and done, what we see in films and on TV isn't really all that close to real life, is it?

The fact that the staff at the head office of Ufa Film AG in Berlin had paid some detailed attention to the function and technology of doors had less to do with the attention to detail of the director than with the old, mechanical locking system in the building. At the time, they'd reached the limits of their capacity and couldn't proceed any further. When yet another vital group key went missing, the company started looking for a flexible follow-up solution.

The almost unlimited flexibility of Winkhaus access control systems really won over the business management team at Ufa. We worked together with the customer to produce a custom systemwide concept for their five-floor building complex. 363 blueChip cylinders and 15 access card readers ensure economical operation of Ufa's head office.

Each of their staff - more than 300 of them - now has a personal identification medium programmed with the unique access rights of each individual. Linking the access control system to the building control system already present also permits the heating, air conditioning and also the lighting in individual offices to be controlled individually via the identmedium. In addition, interfaces for video monitoring and burglary alarm systems were acquired which can be managed centrally and simply using the Winkhaus blueIntras Control software solution.

All in all, the building can now be run significantly more efficiently. We have yet to find out whether the Winkhaus integrated solution also influences key scenes in the film!



## **2.2 blueLine – Hardware for online access control/time management**

- P. 70 Introduction/Short description
- P. 72 Access control centres
- P. 74 Accessories for access control centres
- P. 77 Biometric access control
- P. 78 Time recording terminal
- P. 79 Identification media for readers
- P. 82 Accessories
- P. 83 Standalone system

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2.1

2.2

2.3

3

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## blueLine – Hardware for access control/time management

On the basis of decades of experience and expertise in the „mechanical security technology“ field, Winkhaus has set its course early on towards mechatronic and electronic access control and time management systems.

### Innovative technologies

Security with simultaneous flexibility are something which every company would like to possess. However, these terms do essentially contradict one another, and implementation is something which only a very few manage to achieve. But this is precisely where the special strengths of Winkhaus come into play, optimising both aspects in parallel by means of state-of-the-art technologies.

At the same time, system solutions developed with ergonomics in mind make considerable contributions to reduction of running operating costs.

### Full system integration guaranteed

Existing or new, it doesn't matter – various technologies and system solutions are combined at Winkhaus to form an integrative access control and time management system.

All Winkhaus products and services combine security and flexibility in this way.

This presents a perfect security system for objects of any size – from standalone systems to networking throughout entire buildings.

### Combined identification technologies

At Winkhaus, the aspect of the usability of ident media is highly valued due to differing onsite conditions and individual usage habits. Different ident technologies can be integrated in a carrier. This permits the user to control, monitor and manage different applications using just one medium (card, key or keyhanger): from the locking system via time recording to meeting room reservations or canteen settlements.

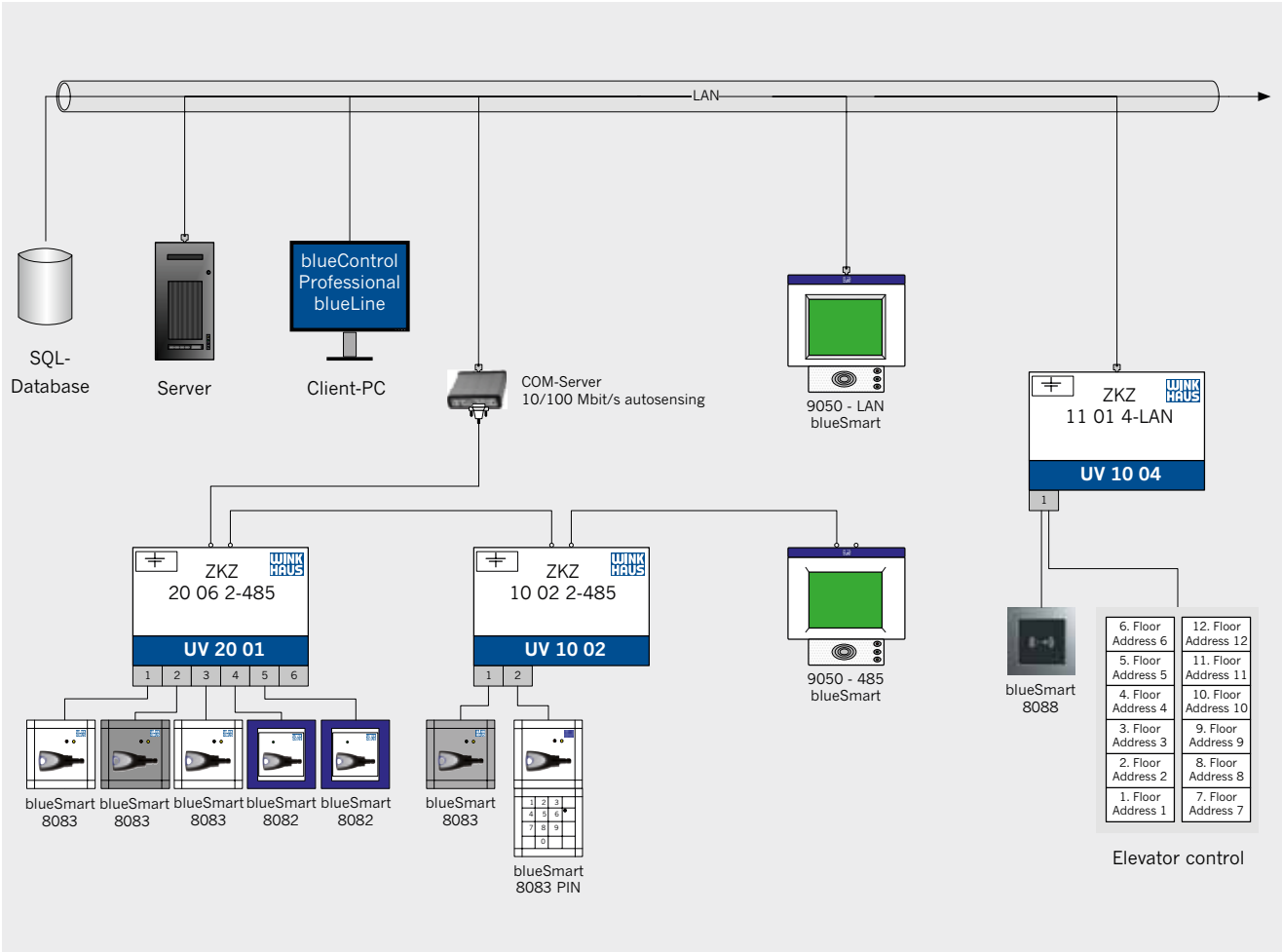
All access, time and consumption data can be transferred inhour or externally to other software applications via standardised interfaces.

### Consultancy and service

Experience, continuity, innovation and persistence are all terms which guarantee the futureproofing of investments right now. Highly qualified teams of experts in Münster and at the service support points provide knowledgeable consultancy services for the creation of individual security concepts. It goes without saying here that we offer reliable service and an extensive range of services.

Configuration ZK/ZM

Examples of system overviews (configuration plans)



Subject to technical changes without notice.

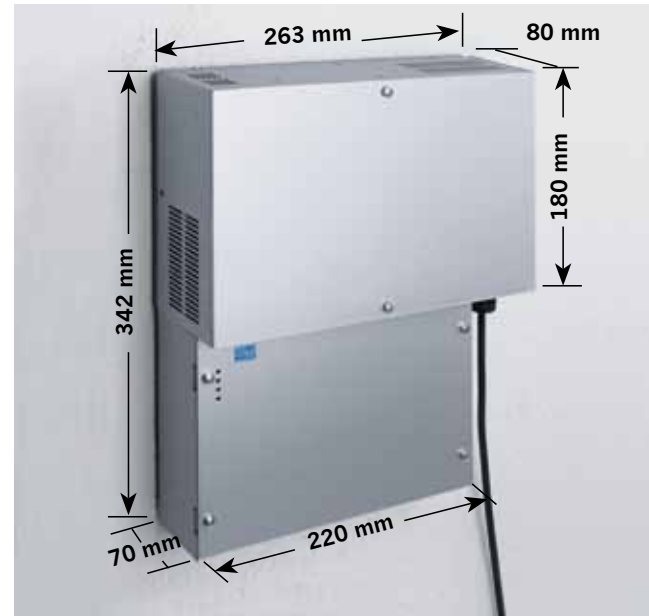


## Access control centres (ZKZ)

The Winkhaus access control centre (ZKZ) does everything a modern access control system is required to achieve. At these centres, 2, 4, 6 or up to 8 access readers can be connected, or doors monitored, depending on the extension level selected. Access control rights are arranged and managed via software. As the ZKZ operates completely offline, the decision to release a door and to control all connected components can be made independently of the network. Optional implementation of an integratable COM server allows the centres to be integrated directly into existing Ethernet networks (LANs). With the implementation and networking of a number of access control centres, you can install a maximum of 1 800 doors which can be managed via a collective system.

### Features

- Intelligent control unit for connection of up to 8 badge readers, inc. door control
- Control unit, 100 % standalone-capable
- Connection to the superior access control centre (ÜZKZ) using intrasControl or blueControl Professional software via RS485, RS232 interfaces or an Ethernet interface
- Connection options for: door relay, alarm relay (time-controlled), door acknowledgement contact, door handle contact, bolt contact
- Storage capacity for up to 1 000 employee master records (can be extended if so required)
- Logging buffer for 1 000 events (can be extended if so required)
- Up to 256 time profiles, subdivision as required (smallest time unit 15 minutes), per day (Mon.–Sun., 2x feastdays, 1x special day)
- Plug connector for direct contact to router
- Separate microprocessor (16-bit), integrated system monitoring (Watchdog)
- Flash program memory for adaptation/updating of software via remote maintenance
- Software-side reader addressing
- Connection of access readers via RS485 interface (at a distance of 500 m)
- Integrated sabotage contact
- Quartz controlled real-time clock/calendar
- Long-term data retention via integrated lithium battery
- 12 relay outputs (each with openers and closers)
- 16 optocoupler inputs
- 16-digit LED display in the housing, integrated for operating states and ZKZ status



- Acoustic fault message optional
- Integrated power supply adapted for powering electronics, badge readers and door openers (12 V DC)
- Power supply: 230 V AC
- Integrated emergency power supply (optional)
- Galvanic separation of the RS485 interface (host), overvoltage protection of min. 8 kV
- CE-tested, EMC-compatible in accordance with EN 50081-1, EN 50082-2, EN 69050
- Protection type: IP20

### Dimensions

See illustrations

### Connectable reader

Winkhaus access reader with RS485 interface:

- For contact-free chipcards (MIFARE, LEGIC, EM4102/UNIQUE, HITAG, blueChip, blueSmart)

## Access control centres (ZKZ)

### Applications

	ZKZ 10 02 2- (181 368 7)	ZKZ 11 04 1- (181 362 8)	ZKZ 14 04 4- (199 683 1)	ZKZ 20 06 2- (254 243 6)	ZKZ 20 08 2- (277 783 3)	ZKZ 25 00 2- (254 244 4)
<b>Interfaces (Standard)</b>	RS485	RS485	RS485	RS485	RS485	RS485
<b>Interfaces (Optional)</b>	RS232 LAN	– LAN	– LAN	– LAN	– LAN	– LAN
<b>Reader</b>	2	1	4	6	8	0
<b>Control</b>	2 doors	Elevator (12 floors)	4 doors	6 doors	8 doors	I/O
<b>Time profiles</b>	16	16	16	16/256	16	–
<b>Master records (Standard)</b>	1.000	1.000	1.000	1.000	1.000	–
<b>Master records Max. extension</b>	40.000	20.000	20.000	100.000	40.000	–
<b>Sub-distributor</b>	UV 10 02	UV 10 04	UV 10 04	UV 20 01	UV 20 01	UV 20 01
<b>Miscellaneous</b>		Potential-free contacts for elevator control	Linking to EMA for sharp/fuzzy switching			I/O-ZKZ with 16 input terminals and 12 output terminals

### Examples of applications for access control centre

#### Sports centre ZKZ

Control of building technology (lighting, heating, climate) as a function of attendance/absence bookings.

Automatic switchoff at the end of defined periods. Special switching for competition operation. Settlement for utilisation periods as a function of user groups (clubs).

#### Parking lot control

Allocation of parking lot pools and counting function in accordance with cars in/cars out. Control of display devices (traffic lights, display) for showing parking lot capacity. VIP function for free entry.

#### Connection to burglar alarm systems

Control of a burglary alarm system (EMA) for sharp/fuzzy switching via the log on the access reader with PIN code keypad (max. 2 per ZKZ). Blocking of defined access readers in the event of sharp switched EMA.

#### Meeting room management (BRM)

Access permitted to meeting rooms which were reserved using the Winkhaus „Intras-BRM“ software package.

#### Control tasks

Access control centre for querying up to 16 digital input terminals (optocouplers) and output of 12 output terminals (potential-free contacts).

## Accessories for Access control centres (ZKZ)

### UV 10 02 (181 373 2)

Router for all ZKZ, with 2 readers. Direct connection to the ZKZ via D-SUB plug connector. LED status indicator, with integrated sabotage contact.

### UV 10 04 (181 359 9)

As UV 10 02, but for all ZKZ with 4 or 6 readers. Direct connection to the ZKZ via D-SUB plug connector. LED status indicator, with integrated sabotage contact, 132 inscribed terminal screws.

### UV 20 01 (254 245 2)

Router for all ZKZ types 2xx. Direct connection to the ZKZ via 96-pole multipole connector. Integrated sabotage contact, LED status indicator, 180 inscribed terminal screws.

### COM-Server

Supplementary module for data exchange (integrated COM server) between Winkhaus PC software and the ZKZ via an Ethernet network. Will be integrated in the ZKZ. Contact is established via an RJ45 connector.

### Emergency power supply 2.1 Ah (181 376 7)

For all ZKZ, for maintaining full functionality during a power-out. Will be integrated in the ZKZ. Bridging time, depending on the connected peripheral units and reader types.

Subject to technical changes without notice.


Access control reader

Description

For its intelligent access systems, Winkhaus offers card readers in a variety of housings and protection types for contactless reading of electronic keys, cards, key fobs and mechatronic keys (BC HT, BS HH, HSK). With RS 485 interface for connection to a Winkhaus access control centre (ZKZ). All readers are available CE-tested and EMC-compatible in accordance with EN 50081-1, EN 50008-2, R&TTE 1999/5/EC.

Carrier frequency

125 kHz: blueChip, blueSmart, PROX, HITAG  
13,56 MHz: MIFARE/DESfire, EV1

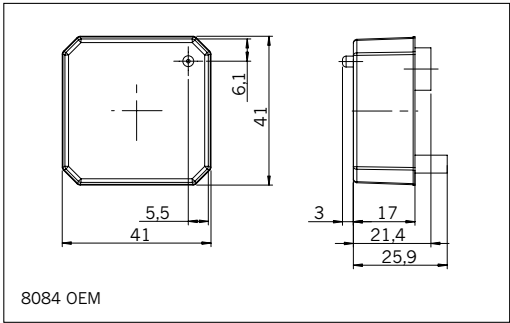
				
	Type 8081	Type 8082	Type 8083	Type 8088
LED/Piezo signal	3 / yes	1 / yes	2 / yes	2 / yes
Manual assembly	Inside	Inside	Inside/Outside	Inside/Outside
Version	Surface-mounted	Surface/flush-mounted	Surface/flush-mounted	Surface/flush-mounted
Carrier frequency	125 kHz/13.56 MHz	yes/yes	yes/yes	yes/no
Extension with PIN code keyboard	no	no	yes	yes
Design	Winkhaus	BD bticino light GD Gira-Event	Siedle-Vario	Elcom Modesta

8084 OEM

Access reader for installation into third-party housings. Please note that the module is unclosed! Signalling provided by LED and piezoelectric speaker. Connection to an access control centre (ZKZ) and integration into Winkhaus systems blueChip, blueSmart, PROX or HITAG (125 kHz).

LEGIC S1

ID card reader for contactless and segmented LEGIC identification cards in credit card format or as key fob. Connection to an access control centre (ZKZ) and integration into Winkhaus systems Legic (13,56 MHz).



Can be operated with:



Subject to technical changes without notice.

## Door manager

The Winkhaus door manager IntrasTürManager (ITM) is an access control reader featuring an integrated, intelligent control unit for one door. The ITM is used in inside areas to authorise door release using ID media and a door surveillance system. The door manager is an online component and is included in the Winkhaus access control system with intrasControl/blue Control Professional software via an integrated interface. This intelligent control unit with its own controller, memory and real-time clock functions as a fully stand-alone device.

### IntrasTürManager PROX (493 740 0)

Access reader with integrated control unit for one door. In switch range (Gira Event design, reader module in white, cover frame in opaque blue; other colours on request). For installation in inside areas. Signalling provided by LED and piezoelectric speaker. For contactless chip cards (EM4102/UNIQUE transponder) in credit card format or as key fob.

### IntrasTürManager blueChip (493 737 9)

Access reader with integrated control unit for one door. In switch range (Gira Event design, reader module in white, cover frame in opaque blue; other colours on request). For installation in inside areas. Signalling provided by LED and piezoelectric speaker. For contactless blueChip keys, key fobs or identification cards (Temic transponder).

### IntrasTürManager blueSmart (497 835 4)

Access reader with integrated control unit for one door. In switch range (Gira Event design, reader module in white, cover frame in opaque blue; other colours on request). For installation in inside areas. Signalling provided by LED and piezoelectric speaker. For contactless blueSmart keys, key fobs or identification cards.

### IntrasTürManager HITAG (493 740 1)

Access reader with integrated control unit for one door. In switch range (Gira Event design, reader module in white, cover frame in opaque blue; other colours on request). For installation in inside areas. Signalling provided by LED and piezoelectric speaker. For contactless chip cards (HITAG1 transponder) in credit card format or as key fob.

### IntrasTürManager MIFARE (493 740 2)

Access reader with integrated control unit for one door. In switch range (Gira Event design, reader module in white, cover frame in opaque blue; other colours on request). For installation in inside areas. Signalling provided by LED and piezoelectric speaker. For contactless chip cards (Mifare 1k transponder) in credit card format or as key fob.



Subject to technical changes without notice.

# Biometric access control

## Properties

Winkhaus offers a specially developed finger scan terminal for highly secure areas. It uses your unique fingerprint for identification purposes. For this, specific characteristics of up to two fingerprints from one individual are recorded on a PC and stored either in the finger scan reader or a contact-free MIFARE chip-card.

When accessing a secure area, the person in question identifies themselves at the terminal by means of the identity card, initially. Instead of using a PIN code or a personal password, they then have to identify themselves by means of their own fingerprint. Only then will they be permitted access. To prevent incorrect operation, Winkhaus has also integrated interactive language output into the biometry reader.

### FP 8081 (208 232 9)

Stand-alone access control reader with fingerprint sensor for surface-mounted, inside installation. Download of biometric data via RS232 interface. Examination of the applied finger against stored biometric information. With potential-free contact to release the door.

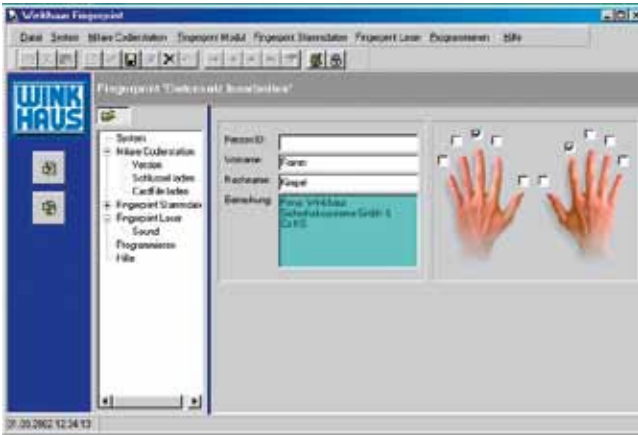
### blueChip FP 8081 (208 233 7)

Stand-alone access control reader with fingerprint sensor and integrated blueChip reader for surface-mounted installation in inside areas. Download of biometric data via RS232 interface. Registration via blueChip key for access to biometric data. Examination of the applied finger against stored biometric information. With potential-free contact to release the door.

### MIFARE FP 8081 (193 316 1)

Access control reader with fingerprint sensor for surface-mounted installation in indoor areas. For contact-free chipcards (MIFARE transponder) in credit card format or as a keyhanger, in connection with the biometric characteristics. Zum Anschluss an ZKZ über RS485- Schnittstelle.

Can be operated with:



### Intras Bio Access (208 428 7)

Software program for reading biometric finger data via a connected fingerprint reading station or a fingerprint reader and transfer of the biometry data to a standalone fingerprint reader.

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Time recording terminal

Properties

One important component of modern time management systems are highly developed terminals which also have to take over multifunctional tasks. Winkhaus, with its Intrac 9050 blue-Line touchscreen terminal, has developed a high-end device to fully meet both the current and the future-oriented requirements of its users. The Intrac 9050 is a multifunctional time recording terminal which can be operated directly via the colour display. For example, the user makes a choice via the logging type or information query directly on „screen“. The software used uses easy-to-understand pictograms to facilitate a dialogue between the system and the user, allowing functions such as „In“, „Out“ or „On business“ to be called with just the touch of a finger.



	9050	9050 OEM	9050 SAP
Interface (standard)	RS485	LAN	LAN
Interface (optional)	RS232 LAN	–	–
Host system	timeControl	Third-party system	timeControl SAP
Identification media	PROX (EM4102) blueChip (TEMIC) blueSmart HITAG 1 MIFARE LEGIC	PROX (EM4102) blueChip (TEMIC) blueSmart HITAG 1 MIFARE LEGIC	PROX (EM4102) blueChip (TEMIC) blueSmart HITAG 1 MIFARE LEGIC
Combination terminal for door opening	Yes	No	No
Connection of an access reader	Yes	No	No
Master records (standard)	500	500	500
Master records, max. extension	3.000	3.000	3.000
Logging buffer (standard)	2.000	2.000	2.000
Logging buffer, max. extension	6.000	6.000	6.000
Power supply	Integr. power supply adapter (230 V)	Integr. power supply adapter (230 V)	Integr. power supply adapter (230 V)
USV (optional)	Yes	Yes	Yes
Manual assembly	Indoors/surface-mounted	Indoors/surface-mounted	Indoors/surface-mounted

Can be operated with:



Subject to technical changes without notice.

# Identification media for readers

## Cards

### Identification card

#### Intras PROX-K (181 524 4)

Contact-free readable identity card (EM 4102/UNIQUE transponder) in a credit card format for all Intras PROX readers. Expanded identification number (8-byte number), black, white, without inscription.

#### Intras PROX-S (181 523 6)

Contact-free readable identity card (EM 4102/UNIQUE transponder) as a keyhanger for all Intras PROX readers. Expanded identification number (8-byte number), keyhanger available in a variety of different colours (standard colour: Blue).

#### blueChip BC K (175 987 9)

Contact-free, readable identity card, in a credit card format for all Intras blueChip readers. Blank, white, imprinted with sequential ID numbers.

#### blueSmart BS K (498 121 7)

Contact-free, readable identity card, in a credit card format for all Intras blueSmart readers. Blank, white, imprinted with sequential ID numbers.

#### Intras HITAG-K (181 528 7)

Contact-free, readable identity card, in a credit card format for all Intras HITAG readers. White, imprinted with a sequential identification number.

#### Intras HITAG-S (181 520 1)

Contact-free readable identity card as a keyhanger for all Intras HITAG readers, imprinted with a sequential identification number. Available in a variety of colours (standard colour: Blue).

#### Intras MIFARE (181 519 9)

Contact-free, readable identity card, in a credit card format for all Intras MIFARE readers. Imprinted with an identification number. White, without any further imprint, with overlay.

#### Intras LEGIC-K (181 518 1)

Contact-free, readable identity card in a credit card format for all Intras LEGIC readers. White, imprinted with a sequential identification number. Blank, white, without any further imprint.

#### Intras LEGIC-S (181 517 2)

Contact-free, readable identity card as a keyhanger for all Intras LEGIC readers. Available in a variety of colours (standard colour: Blue).

### Hybrid cards

#### MIFARE/PROX (493 329 4)

Contact-free, readable identity card in a credit card format with MIFARE and PROX transponder technology on one card.

#### MIFARE/HITAG 1 (493 427 7)

Contact-free, readable identity card in a credit card format with MIFARE and HITAG 1 transponder technologies on one card.

#### MIFARE/blueChip (493 257 1)

Contact-free, readable identity card in a credit card format with MIFARE and blueChip transponder technologies on one card.

#### MIFARE/blueSmart (499 572 3)

Contact-free, readable identity card in a credit card format with MIFARE and blueSmart transponder technologies on one card.

**Note:** Avoid mechanical stress on the cards. Protective covers can be supplied to protect them.

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## Identification media for readers

### blueChip

#### blueChip Schlüssel BC N



##### Areas of application

The blueChip key is an identification medium for blueChip cylinders, blueChip readers, EZK and Winkhaus access control and time management readers. Key authentication via a challenge-response procedure. Each key is programmed with an electronic profile and a unique coding provided by Winkhaus. Each key is assigned exclusively to one system.

Thanks to IP 68 protection class and a temperature range of -20 °C to +75 °C (further ranges on request) the BC N key is versatile in use (e. g. fire brigade safe). For further information, see “General description”.

BC N blue  
BC N/TSW jet black RAL 9005  
BC N/RRT ruby red RAL 3003  
BC N/RGB rape yellow RAL 1021  
BC N/MGR mint green RAL 6029

#### blueChip key BC NZ

Like blueChip key BC N, also with integrated additional transponder for control of other manufacturers' readers.

Only available in jet black; other technologies and designs on request. Customer release on third-party readers is necessary.

##### Transponder types

T03 MIFARE  
T04, T13 LEGIC Prime  
T07 HITAG 1  
T09 EM4102



#### BC Logo

The blueChip key can be provided with an individual logo on request.

#### Transponder key HSK



For mechanical keyTec systems AZ, VS, VS6, ZRV, ZRV6, RAP, RAP+, Titan and X-tra. Transponder keys, optionally with T01 EM4102, T02 HITAG1, T04 LEGIC, T08 HITAG2.

#### Transponder key BC HT



Equipped with a mechanical key in the systems AZ, VS, VS6, ZRV, ZRV6, RAP, RAP+, Titan and X-tra, with integrated Temic transponder (blueChip) for control of EZK and blueChip readers. This key is an example of the Mechatronic principle – the functional link between mechanical and electronic.

#### blueChip key fob BC SA



Contact-free, readable key fob for all Intras blueChip readers, blue, other colours on request, imprinted with system number.

## Identification media for readers

### blueSmart

#### blueSmart key BS N



#### Areas of application

The blueSmart key is an identification medium for blueSmart cylinders, blueSmart readers, EZK and Winkhaus access control and time management readers.

The key does not need a battery and thus it is entirely maintenance free. Thanks to IP 68 protection class and a temperature range of -20 °C to +75 °C (further ranges on request) the BS N key is versatile in use (e. g. fire brigade safe). It is available in many different colours. For further information, see “General description”.

BS N anthracite  
BS N/WHB Winkhaus blue RAL 5010  
BS N/RRT ruby red RAL 3003  
BS N/RGB rape yellow RAL 1021  
BS N/MGR mint green RAL 6029

#### blueSmart premium key BS P

The blueSmart premium key is the visual highlight among identification media. This key is excellently suited to differentiate individual user groups in a locking system.



#### blueSmart key with additional transponder BS NZ

The blueSmart key with additional transponder houses a transponder in the key bow for controlling readers of other manufacturers. Only available in premium key design.

#### Transponder types

T03 MIFARE  
T04, T13 LEGIC Prime  
T06 Temic (blueChip)  
T07 HITAG 1  
T09 EM4102  
Other technologies on request



#### Transponder key BS HH



Mechanical key in the keyTec systems AZ, VS, VS6, ZRV, ZRV6, RAP, RAP+, Titan and X-tra, with integrated transponder (blueSmart) for control of blueSmart EZK, readers and double knob cylinders. This key is an example of the Mechatronic principle – the functional link between mechanical and electronic.

#### blueSmart key fob BS SA



Contact-free, readable key fob for all blueSmart EZKs, readers and double knob cylinders, blue, other colours on request, imprinted with system number.

#### BS Logo

The blueSmart key can be provided with an individual logo on request.

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## Hardware accessories

### Interface converter W85 01 (181 531 6)

Interface converter for the conversion of RS232 to RS485 interfaces, for connecting time recording terminals and ZKZs to an IBM-compatible PC; galvanic separation.

### Interface converter W85 02 (181 541 2)

Interface converter for the conversion of RS232 to RS485 interfaces, for connecting time recording terminals and ZKZs to remote units; galvanic separation.

### PROX LS reading station (181 548 0)

External reading station with RS232 interface for connection to the PC. For data read-in from contact-free Intras PROX identity cards.

### HITAGx reading station (185 665 2)

External reading station with RS232 interface for connection to the PC. For reading in contact-free chipcards with HITAG transponder, inc. PC software.

X=1: HITAG1, x=2: HITAG2. Intras PROX identity cards.

### MIFARE coding station (185 666 1)

External coding/reading station for contact-free chipcards (MIFARE transponder), with RS232 interface, for connection to the PC. Including processing software.

### Reading station Fingerprint LS FP (193 317 9)

External fingerprint reading station with RS232 interface to connect to the PC. For reading in and testing the biometric characteristics of the finger.

### COM-Server Mini: 232-1 (181 543 9)

For data exchange between PC and the terminals at remote locations via an Ethernet network. Tabletop unit with an RS232 interface.

Ethernet interface: BCN 10BaseT, RJ45.

Dimensions: (W x D x H) 115 x 110 x 34 mm.

### COM-Server Mini: 485-1 (181 546 3)

For data exchange between PC and the terminals via an Ethernet network. Tabletop unit with an RS232 interface (DB9).

Ethernet interface: BCN 10BaseT, RJ45.

Dimensions: (W x D x H) 115 x 110 x 34 mm.

### 9050 RS232 (181 423 3)

RS232 interface to connect directly to the PC or a modem (analogue/ISDN) in the outside location.

### 9050 USV (181 422 5)

Battery, including charging function, for time management terminal to ensure it is fully functional for up to two hours.

### COM-Server MOXA 485 (500 666 1)

for TCP/IP (10/100 Mbit) communication between ComTask (included in Winkhaus software) and the Winkhaus hardware with RS485 interface (DB9).

### COM-Server MOXA WLAN (500 845 7)

e. g. COM Server MOXA 485, but with additional WLAN support.

### Interface converter RS232/485 (500 717 6)

for connecting upload readers with a max. cable length of 100 m.

### GSM Module for AccesPoint (500 719 2)

for communication between ComTask (included in the Winkhaus software) and the upload reader via GSM connection.

### Modem MicroLink 56K (186 090 0)

for communication between ComTask (included in the Winkhaus software) and remote station, such as GSM module.

# Intras 1200 access control





## Application range

- Standalone reader

## Properties

The Intras 1200 system components offer inexpensive entry into electronic access control.

For additional functions, such as the use of timezones, the readers can always be connected to Intras access control software via the supplied RS485 interface.

				
	IZL 1081	IZL 1082	IZL 1083	IZL 1084
Identification media	PROX (EM4102) blueChip (TEMIC)	PROX (EM4102) blueChip (TEMIC)	PROX (EM4102) blueChip (TEMIC)	PROX (EM4102) blueChip (TEMIC)
Master records	1.000	1.000	1.000	1.000
Programming	Programming identity cards or software	Programming identity cards or software	Programming identity cards or software	Programming identity cards or software
Visual signalling	3 LED	–	2 LED	2 LED
Acoustic signalling	Piezo	Piezo	Piezo	Piezo
Design	Winkhaus	Gira	Siedle	Siedle
Control unit	Integrated	Separately located	Integrated	Separately located
Manual assembly	Inside Surface-mounted	Inside Surface/flush-mounted	Inside/Outside Surface/flush-mounted	Inside/Outside Surface/flush-mounted
Power supply	8 –13 V DC	8 –13 V DC	8 –13 V DC	8 –13 V DC
Time profiles	16	16	16	16
Logging buffer	150	150	150	150

Subject to technical changes without notice.

# Access control/time management accessories

## Siedle surface-mounted housing (181 426 8)

Siedle surface-mounted housing (1 module unit), Vario design. Available in white; other colours on request.

## Siedle flush-mounted housing (181 456 7)

Siedle flush-mounted housing (1 module unit), Vario design. Available in white; other colours on request.

## Siedle surface-mounted housing (2) (181 452 4)

Siedle surface-mounted housing (2 module units), Vario design. Available in white; other colours on request.

## Siedle flush-mounted housing (2) (181 447 9)

Siedle flush-mounted housing (2 module units), Vario design. Available in white; other colours on request.

## Elcom flush-mounted housing (493 427 8)

Elcom flush-mounted housing (1 module unit), Modesta design, stainless steel. Surface-mounted design on request.

## Elcom flush-mounted housing (2) (493 428 1)

Elcom flush-mounted housing (2 module units), Modesta design, stainless steel. Surface-mounted design on request.

## Gira surface-mounted housing (190 967 1)

Gira surface-mounted housing, Event design. Available in white; other colours on request.

## Gira AP spacer frame, black (494 222 1)

Spacer frame for increasing the standard frame height of the surface-mounted Gira housing (190 967 1) enabling easy installation of Winkhaus readers.

## bticino surface-mounted housing (213 943 6)

bticino surface-mounted housing, Light design. Available in white; other colours on request.

## Switch power adapter for top hat rail fitting (193 271 5)

AC/DC switch control for voltage supply of up to 4 IZL inc. 12 V DC door opener, power supply adapter 12 V/2.5 A for DIN rail.

## Power supply unit with housing (211 156 4)

Switch power supply unit for the voltage supply of up to 4 IZL with 12 V DC door opener in compact metal housing with screw terminals (12 V DC/3A).

## Intras 1200 data cable (229 814 6)

Data cable for connection between PC/laptop and IZL reader.





# 1 General Information

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## 2 Electronic Access Organisation

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### 2.1 blueChip/blueSmart – Electronic locking systems

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### 2.2 blueLine – Hardware for online access control/time management

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### 2.3 Service

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## 3 Software

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### 3.1 blueControl range

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### 3.2 timeControl

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## 4 Mechanical Access Organisation

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### 4.1 keyTec – Overview of systems

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### 4.2 keyTec – Locking cylinders

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2.3 Service

P. 90 Contracts and services

1

2

2.1

2.2

2.3

3

3.1

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# Service

## Contracts/Services

Winkhaus’s extensive service concept and skilled, professional staff enable it to offer comprehensive solutions covering everything from planning to system launch.

### Range of services at client’s premises

- Guidance on organisation and system analysis
- Programming according to functional requirements
- Installation and initial operation
- System integration
- User training

### Software maintenance contract

- For the entire blueControl range
- Optionally with hotline
- Updates are supplied on a regular basis
- Price reduction for upgrades

### Servicing contract

- For locking systems of any size
- Annual battery replacement on request
- Fixed reaction times on request
- For blueChip, blueSmart and blueLine systems

### Training

- User training and introduction courses for 3–5 persons for the systems blueChip, blueSmart and blueLine
- Individual customer training courses are available

### Installation

- Installation and commissioning of the blueChip, blueSmart and blueLine systems
- Settlement is possible as rate per day or per hour

### Manual assembly

- Fitting of the ordered electronic components
- Settlement is possible as rate per day or per hour

### Miscellaneous services

- Helpdesk hotline in case of problems
- Guidance on organisation and system analysis
- Technical specifications for documenting the scope of performance
- Online service with remote maintenance



Transport/travel cost calculation based on departure from centre of the nearest city amongst those listed below to the place of installation:

Berlin	Hamburg	Münster
Bremen	Hanover	Nuremberg
Cottbus	Kassel	Osnabrück
Dresden	Cologne	Regensburg
Erfurt	Leipzig	Rostock
Essen	Magdeburg	Saarbrücken
Frankfurt am Main	Mannheim	Stuttgart
Frankfurt (Oder)	Munich	Villingen-Schwenningen

Subject to technical changes without notice.





# 1 General Information

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## 2 Electronic Access Organisation

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### 2.1 blueChip/blueSmart – Electronic locking systems

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### 2.2 blueLine – Hardware for online access control/time management

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### 2.3 Service

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## 3 Software

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### 3.1 blueControl range

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### 3.2 timeControl

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## 4 Mechanical Access Organisation

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### 4.1 keyTec – Overview of systems

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### 4.2 keyTec – Locking cylinders

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## However, it's mostly the hard facts that recommend a specific software package

- Efficient planning, management and organisation of locking systems and time management
- One medium for all applications
- Open system architecture for integration into existing IT environments
- Interfaces for direct data communication e.g. with video monitoring, burglary alarm system, Parking lot management
- Integration into e.g. wage and salary programs and the „Fidelio“ hotel booking system
- Clear reduction in costs
- More time for the really important things





## 3.1 blueControl range

- P. 98 Winkhaus administration software
- P. 99 Software variants for blueChip and blueSmart systems
- P. 100 Software variants for blueChip and online installations
- P. 101 Extensions
- P. 102 Additional modules
- P. 105 Survey table
- P. 106 System requirements
- P. 107 Intras BioAccess

1

2

2.1

2.2

2.3

3

3.1

3.2

4

4.1

4.2

# Winkhaus administration software

## General description

Winkhaus offers its customers optimal solutions using future-oriented software modules which it develops itself. They are the linking joint between the individual systems. No matter if you choose electronic locking systems, blueLine access control, timeControl time management or a combination of these: With a single software you are able to plan, administer and organise all systems. These products, modular in structure, guarantee users individual framework conditions during design. Including intuitive operation and user friendliness. Winkhaus guarantees its business partners security and continuity in product development, as well as comprehensive consultancy.

### High integrability

The open system architecture also makes an easy integration into existing IT structures possible. Various interfaces will furthermore assure direct communications, for instance with video surveillance or building control systems. This means that nothing hinders a full optimisation of your access organisation anymore.

### Connection to third-party systems

An individual profile can be created for each identification medium, with which lighting, heating or air conditioning facilities can be automatically regulated for the defined room, both when entering or when leaving a building. This means that Winkhaus Software also provides you with a reliable solution, for assuring a cost-efficient use of energy.

### Administration software for blueChip systems

With the blueIntras Control software Winkhaus succeeded in combining the previously separate systems of offline locking installations and the networked electronic access control in a single software. The customer request of having a universal solution for all applications has thus come true. The blueChip key can be used to operate electronic locking cylinders as well as the contactless reader technology for access, time registration, car parks or canteens. With regard to authorisation assignment, the user refers to a hierarchical structure that can be identical to his known structure of organisation and building. The graphic illustration helps to keep the overview which renders the software particularly user-friendly.

The blueIntrasControl software package can be installed under current Windows operating systems as a client-server application. The open system architecture can be integrated in the existing IT environment with no problems. All data is stored in a SQL-database and is compatible with any other application thanks to extensive import and export functions. Interfaces for direct data communication with video monitoring, the burglary alarm sys-

tem, the parking lot management or the canteen service are on offer. General Tooltips provide all program functions and input fields such as the detailed online help. The modular software structure allows comprehensive extensions to be integrated in the Winkhaus system at any time as required. Appropriate software programs are available for all kinds of things depending on the use of the various components from the Winkhaus range of electronic locking systems or blueLine systems.

### Administration software for blueSmart systems

The new blueSmart access management technology is controlled centrally. It transfers information rapidly with no cables without the user noticing. In addition, the blueSmart administration software called blueControl Professional (BC Pro) incorporates existing systems such as building control technology, time recording or alarm and energy management. In this respect the BC Pro software is by no means inferior to the blueChip versions blueControl and blueIntras Control. These blueSmart benefits meet the rising requirements in operating convenience and cost effectiveness.

In the building blueSmart can optionally use a virtual network with the electronic door components communicating with each other and processing and conveying information. The starting point of data communication is the AccessPoint which is the only component that has an online connection to the computer and the administration software.

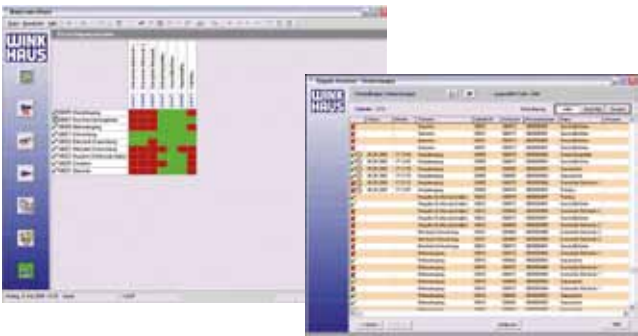
blueControl Professional has a modular structure. In its standard version it covers all offline functions provided by the basic blueControl software. If special functions, e. g. "online" or "virtual network" are required in addition to the offline range of functions, the system can easily be extended by means of additional modules. Apart from the comprehensive BC Pro leaving nothing to be desired, also beginners will find the suitable options. The blueControl Start (BCS) package known from the blueChip system simplifies the offline start also for blueSmart. In addition, there will be a starter package including AccessPoint and programming device called blueControl Start Virtual Network (BCS-V). The market launch is planned for May 2012. This software package is particularly suited for small to medium sized systems, facilitating the virtual networking with blueSmart.

# Software variants for blueChip and blueSmart systems

## Description

### blueControl Start (BCS) for blueSmart

blueControl Start does not only include the software, it is supplied as a package including the programming device. The software package was specially developed for dealers and small-to-medium-sized companies. The high user friendliness, the intuitive user interface and a comprehensive range of standard functions are the basis of blueControl Start. Coupled with the option to administer several locking systems (BCS-H) this software is also of major interest to dealers. Especially dealers providing administrative services on request of their customers will benefit from the simple handling of blueControl Start. This package is available in two versions: as BCS-S for final users and BCS-H for retailers (including the option to administrate five locking systems , extendable on request). The size of the locking system to be administered is restricted to max. 300 keys and max. 100 offline door components. This is also true of each single locking system managed in the retailers' version. Optionally the software can be upgraded to a more comprehensive blueControl version.



### blueControl Start virtual network (BCS-V) for blueSmart

blueControl Start virtual network is a starter package including administration software, 1 blueSmart AccessPoint and 1 programming device. The AccessPoint is the interface between the administration software and the virtual network. Optionally max. 1 additional AccessPoint can be administered. The virtual network functions are substantially reduced compared to the functional range of the more comprehensive blueControl Professional software. The size of the system to be administered is restricted to max. 300 keys and max. 100 offline door components which are virtually networked. Contrary to the BCS offline software, there is no BCS-V dealer's version. In addition to the BCS-V including an AccessPoint for uploading system data, we can offer the BCS-VE version featuring an offset relay module to control a door. This version enables the control of a motorised lock or a car park barrier and it allows the switch relay

of the access authorisation to be coupled directly. Un upgrade to blueControl Professional is possible as an option. The BCS-V software can only be used for blueSmart.  
Note: Functional range of virtual network is limited (max. two AccessPoints).

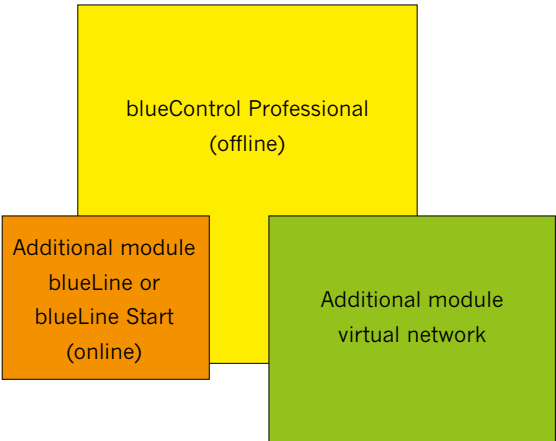


### blueControl (BC BC) for blueChip

Program for convenient administration and alteration of blueChip locking systems in connection with the use of time profiles for time-limited authorisation of blueChip keys on the Time cylinders. The standard version is suitable for the administration of up to 1000 employees. Optionally expandable.

### blueControl Professional (BC Pro) for blueSmart

Programme for the convenient administration and alteration of blueSmart locking systems. Standardly the functions of blueControl Professional are identical to those of its sister product blueControl known from the blueChip series. The difference only shows in case the BC Pro is extended by components from the module kit. For instance, to benefit fully from the blueSmart functions of the virtual network, the blueControl Professional software is expanded with two additional modules. On the one side, the online compatibility is provided by the blueLine Start extension module with up to 6 access readers or AccessPoints. If more than 6 readers are used you need the additional blueLine module. On the other hand, the Virtual Network software module is required to activate the blueSmart function in the virtual network.



Subject to technical changes without notice.

# Software variants for blueChip and online installations

## Description

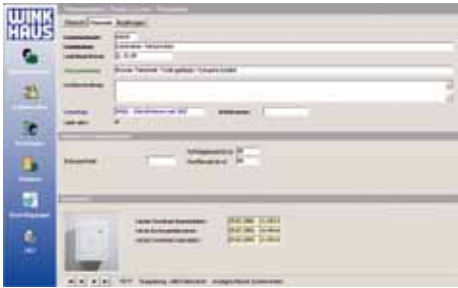
### blueIntras Control Basic (BIC-B, 245 372 4)

With blueIntras Control Basic, electronic blueChip cylinders and electronic online access control (up to 6 TimeLine AccessPoints or access readers) can be administered in a joint data base and user interface.



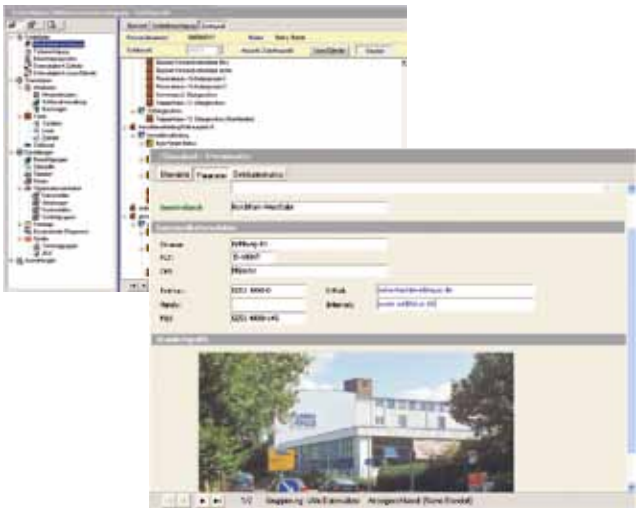
### intrasControl (IC, 234 851 1)

intrasControl is an extensive access control solution with multi location capability, running under Windows, for the control and management of up to 1 800 access readers and 100 000 identification cards or employees. Entry into software operation takes place via a flexible, user friendly interface, combined with a high degree of parameterisation and performance capability which is easy to understand even for inexperienced users. intrasControl supports all Winkhaus access control components and can provide a basis for later extensions.



### blueIntras Control (BIC, 234 811 5)

blueIntrasControl is able to administer the electronic blueChip locking system and one comprehensive electronic blueLine access control system in one joint system solution.



# Extensions

## Winkhaus administration software

### For BC BC, BC Pro, BIC-B, BIC and IC

#### Client licence (234 520 5)

SQL database licence for each additional client.

#### Master data extension (278 394 2)

Extension of master database by 500 persons each time. Can be extended to up to 100 000 employees.

#### Client control (234 559 8)

Separation of access rights according to selected employee groups, building parts and identification cards or keys. Only users with the relevant authorisations can use the software to access the organisational and building structures released to them.

#### Data import/export (242 624 1)

Export interfaces for master records and booking data in various file formats (DOC, TXT, HTM, PDF, XLS, MDB, DBF, etc.). Import interfaces for master records from import files in various file formats (TXT, DOC, HTM, XLS, MDB, DBF, XML, WK1, WQ1, etc.).

### For BC Pro in conjunction with blueLine, BIC and IC

#### Communications server (COM Task) (244 349 7)

Expansion of another communications server for an additional 59 access control readers.

### For BC Pro

#### blueLine Start (497 864 7)

Windows-based software extension, multi-user capable online access control solution for controlling and administering up to 6 access readers or blueSmart AccessPoints and max. 1,000 identification cards/employees.

#### blueLine (497 864 8)

Windows-based software extension, multi-user capable and comprehensive online access control solution for controlling and administering up to 1,800 access readers or blueSmart AccessPoints and 100,000 identification cards/employees.

### For BCS-V

#### Software module Protocol function (498 741 8)

For logging locking events in the virtual network.

#### Software module Data Protection (500 851 8)

For complete deactivation of logging activity.

#### Additional module Master Data Extension (500 338 0)

For administration of max. 700 employees and 350 doors.

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# Additional modules

## Winkhaus administration software

### For BC BC, BC Pro, BIC-B and BIC

#### Software module: mechanical (293 463 2)

Integration and management of mechanical cylinders and mechanical keys.

#### Software module: TimeLine (492 913 3)

Software module for blueIntras Control Basic / blueIntras Control for the administration and control of the blueChip TimeLine AccessPoint. Not available as an additional module for BC Pro.

#### Software module: Virtual Network (497 864 9)

Software module exclusively for BC Pro for administering and controlling the blueSmart AccessPoint and for using the virtual network.

#### Remote control (493 433 3)

Software extension for remote control of programming device from a central position to various external places via TCP/IP. Prerequisite: administration software located centrally, 1 x COM server and 1 x programming device at remote location.

#### Software module: Hotel (493 316 9)

Software module to control hotel-specific functions.

#### Hotel Interface Fidelio (493 849 4)

Interface to Fidelio. Prerequisite: Hotel software module.

#### Hotel Interface Protel (493 849 5)

Interface to Protel. Prerequisite: Hotel software module.

#### Hotel Interface FOS (493 318 0)

Interface to third-party system. Prerequisite: technical feasibility, hotel software module.

#### System administration (493 423 6)

Software module for retailers to manage additional blueChip/ blueSmart systems. Product includes licence for five systems; can be extended without limits. Prerequisite: software blueControl Start (BCS-H) , blueControl (BC BC) or blueControl Professional (BC Pro).

Subject to technical changes without notice.

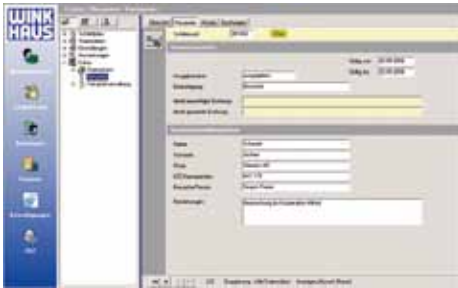
# Additional modules

## Winkhaus administration software

### For BIC, IC and BC Pro in connection with blueLine

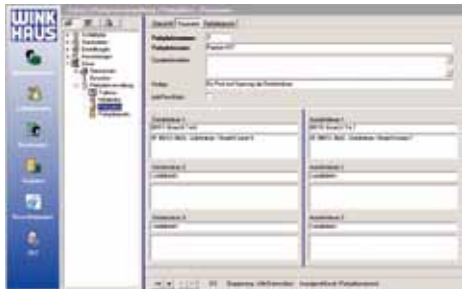
#### Visitor management (284 794 2)

For Secretariat, Entrance, Foyer, Counter area: this module is used to manage guests and regular visitors, as well as their vehicles. Visitors are allocated to the relevant host within the company. Visitor identification cards can be supplied for areas to which guests are also given access. The integrated print function allows visitor permits and visitor cards to be handed out. The history shows at all times which guests were in the building at what times, and what visitor identification cards were issued. This makes it possible to find out with ease which identification cards were not handed back.



#### Parking facility management (275 913 3)

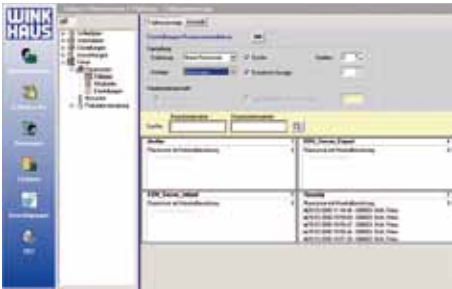
Parking lot management permits the checking of entry authorisation and querying of parking lot occupation via access control. Therefore, free access to the parking lot is permitted only for authorised individuals, as long as there are free parking spaces. The definition of various parking lot pools for specific user groups permits greater differentiation of general users. The integrated parking lot display allows the operator to remain informed at all times about current occupation rates in the individual areas. Where necessary, parking charges can be calculated depending on duration, time and type. Pre-requisite: at least 1 entry and 1 exit reader.



Parking lot control can be extended by means of automatic numberplate recognition. The numberplate recognition system supplies the numberplate read via an XML dataset (IP communication) and this information is compared with the master records under intrasControl. If a corresponding access authorisation is located, the access barrier is raised so that the vehicle may enter.

#### Room zones (275 910 9)

Different room zones and allocation of the entry/exit reader can be defined here. The room zone type is used to establish how the room zones are to be controlled via the software. Passageways and minimum or maximum occupancy are determined using room zone control. The room zone display allows the user to view the current occupancy of the individual zones at all times. Pre-requisite: at least 1 entry and 1 exit reader.



#### Software module: combinatorics (493 423 4)

Software module for intrasControl/blueIntras Control to control the I/O ZKZ using logical interconnections (SPS functions).

#### Image comparison (181 300 3)

With registration to an access control reader, the passport picture provided for the identification number is called up and displayed on any client PC. Additional linking of a live image can, for example, allow visual comparison of the identity of the person, and that person may then be permitted access on an individual basis.

#### Monitoring of time of presence (493 471 5)

A maximum stay duration may be provided for freely definable security areas. If the individual in question exceeds the prescribed stay duration, an entry appears in the employee display and an alarm notification is issued to the alarm management system. Pre-requisite: at least 1 entry and 1 exit reader.



## Additional modules

### Winkhaus administration software

#### For BIC, IC and BC Pro in connection with blueLine

##### Stay time registration (234 823 8)

The stay times in the building can be reported, to include the total times per employee. The stay times can be exported into MS Excel for processing. Pre-requisite: at least 1 entry and 1 exit reader.

##### Alarm management (181 351 3)

The “Alarm management” software module allows the system and alarm notifications of the connected access control systems to be recorded centrally. The various notification types can be passed on to third-party systems in order of priority. Thus, for example, a security official can be informed automatically of a door which is no longer closed properly by SMS (Short Message Service) on his mobile phone. This guarantees the security of the building round the clock without security staff having to stay in the building. Data exchange with TCP/IP.

##### Conference room management (194 469 5)

Meeting room management allows users to utilise their room capacities more efficiently. Any meeting rooms can be defined in the software, and these can then be provided with specific room data such as size, number of seats and technical equipment. The software module allows authorised individuals to select a meeting room to meet their needs and to reserve it for a specified time. If the meeting room has been secured via an access control reader, the access authorisation is assigned with the reservation. Additional functions such as catering services, company car reservation and submission of chargeable services to SAP can be handled by this software package with no problems.

##### Interface to Siemens HiMed (493 471 7)

Between Winkhaus and Siemens HiMed is an interface for data exchange with regard to parking lot authorisation and settlement of parking charges under HiMed.

##### Interface to building control systems (247 611 7)

Presence/absence booking for building management technology (for controlling lighting, climate, heating systems or other system) in the relevant building parts (e.g. offices) can be provided.

##### TCP/IP interface to third-party systems (493 471 6)

Access reports (logging, alarms, door states, etc.) can be selected in the access software and reported to a third-party system. These datasets are transferred directly to the connected third-party system by TCP/IP. This allows anti-panic management, copy settlement and canteen systems or refuelling systems to be connected to intrasControl.

##### Automatic import/export (275 911 7)

Automatic exchange of data with third-party systems for items such as personnel and registration data.

##### IntrasTime SAP interface (276 812 8)

Certified interface for data exchange between SAP HR system and IntrasTime.

# Survey table

## Software variants and combination possibilities

	BCS	BCS-V	BC BC	BIC-B	BIC	BC Pro	IC
<b>Employees and doors</b>							
Employees/keys	300	300 expandable	1.000 expandable	1.000 expandable	1.000 expandable	1.000 expandable	1.000 expandable
Offline components (cylinders, readers, EZK)	100	100 expandable	practically unlimited	practically unlimited	practically unlimited	practically unlimited	
Access readers or AccessPoints/ max. number		● 2		● 6	● 1.800	●* 1.800	● 1.800
Cylinders without Time function (not BS)	●		●	●	●		
Cylinders with Time function	●	●	●	●	●	●	
Time profile cylinders	16	16	64	64	64	127	
Time profiles reader				256	256	256*	256
<b>Extensions</b>							
Client licence			●	●	●	●	●
Master records			●	●	●	●	●
Client control			●		●	●	●
Data import/export			●	●	●	●	●
blueLine/blueLine Start						●	
<b>Extract from additional modules</b>							
Visitor management			●		●	●	●
Parking lot management					●	●*	●
Room zone control					●	●*	●
Image comparison					●	●*	●
Monitoring of time of presence					●	●*	●
Virtual Network						●*	
Alarm management					●	●*	●
Conference room management					●	●*	●
Interface to Siemens HiMed					●	●*	●
System management	●(only BCS-H)		●	●	●	●	
TimeLine				●	●		
TCP/IP interface to third-party systems				●	●	●*	●
Hotel function			●	●	●	●	

\* only in conjunction with the blueLine extension module

Subject to technical changes without notice.

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# Survey table

## Software variants and combination possibilities

	BCS	BCS-V	BC BC	BIC-B	BIC	BC Pro	IC
Electronic Access Organisation	Properties						
	Restricted functions for virtual network						
	Optionally full functions of the virtual network are available						
Electronic locking systems	Client server system						
	Import and/or export functions						
	Depiction of the building structure						
Online access control/ time management	SQL data bases						
	Multi-language user navigation						
	Visualisation of tables						
Service	Administration of more than 1,000 persons						
	Unlimited number of doors						
	Integration of various transponder systems						
Software	System access via password,						
	programming card,						
	optionally chip card reader						
blueControl range	Full revision capability						
	Tooltips						
	Integrierte Onlinehilfe						
timeControl	Integrated online help						
	Assignment of authorisations directly from the matrix						
	Reading back the programming data						
Mechanical Access Organisation	Storage of transactions carried out						
	Communication via LAN (TCP/IP), RS485, RS232, ISDN and GSM modem						
	Door-related yearly calendar						
keyTec – Overview of systems	Settable release and monitoring time						
	Double access refusal can be adjusted						
	Visual door state display						
keyTec – Locking cylinders	Administration of blueChip offline components						
	Administration of blueSmart offline components (BC and BS not in the same system)						

\* only in conjunction with the blueLine extension module

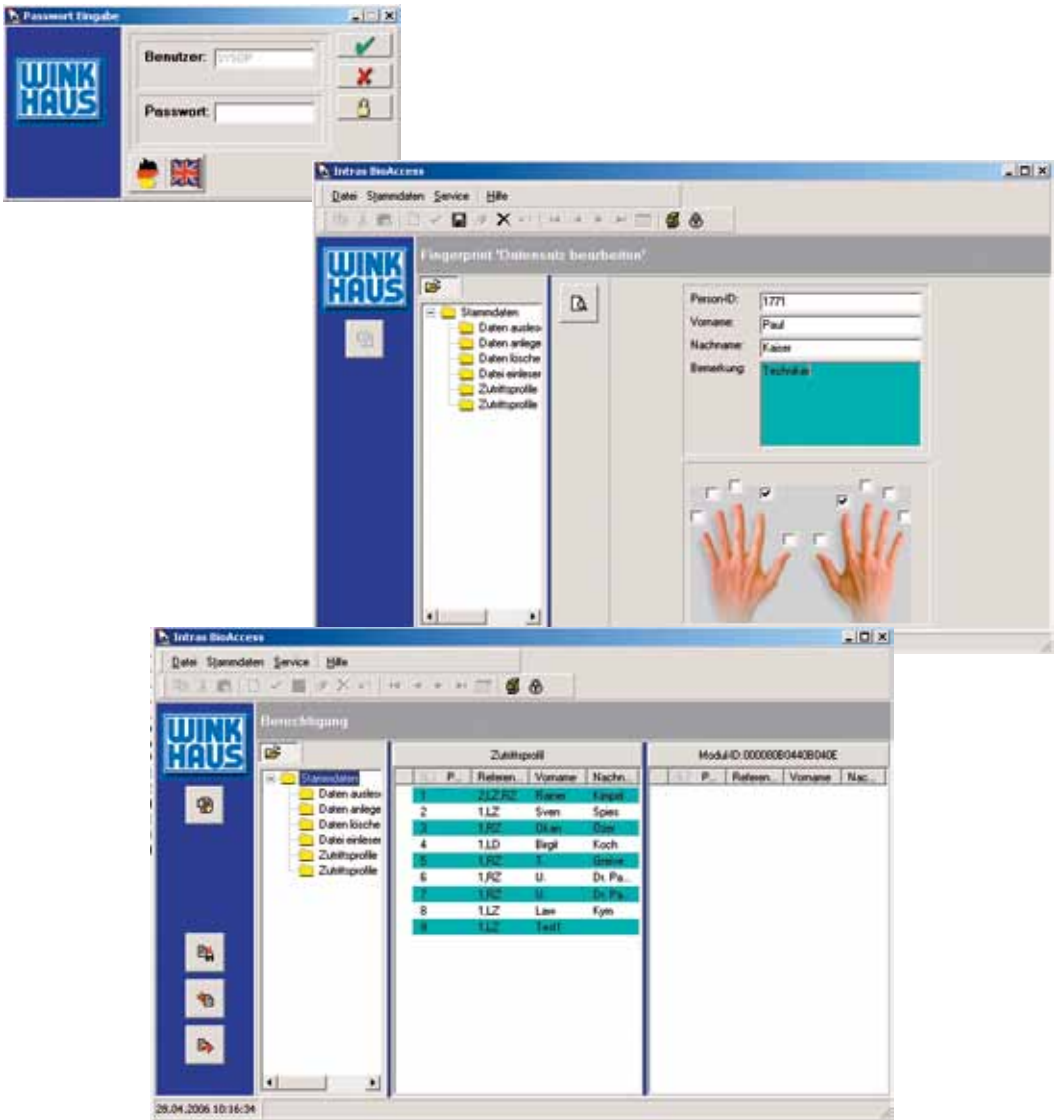
- System requirements:
- At least Pentium III, 2.0 GHz, 1024 MB RAM and 500 MB available hard disc
  - 10 Mbit network bandwidth for Client PC
  - Software running on Windows XP, Vista, 7 oder 8

# Intras BioAccess

This software running under Windows permits input of biometric finger data via a connected fingerprint read station or a fingerprint reader. Two different fingerprints can be provided for each individual. This biometric data can be expanded upon by adding first names, surnames and notes. This dataset can then be transferred to the reader.

With a MIFARE fingerprint reader (8081 FP MIFARE), the data is written directly to the MIFARE identification card.

- Features
- Runs under Windows XP, Vista, 7 oder 8
  - Program activation password-protected
  - Language (German, English) can be changed when the program is launched
  - Allocation of individuals to various access profiles
  - Access profiles can be saved and loaded into the fingerprint reader
  - Tooltips for all program functions
  - Integrated online help





# 1 General Information

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## 2 Electronic Access Organisation

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### 2.1 blueChip/blueSmart – Electronic locking systems

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### 2.2 blueLine – Hardware for online access control/time management

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### 2.3 Service

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## 3 Software

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### 3.1 blueControl range

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### 3.2 timeControl

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## 4 Mechanical Access Organisation

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### 4.1 keyTec – Overview of systems

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### 4.2 keyTec – Locking cylinders

4.2



## 3.2 timeControl

P. 112 Time management

P. 113 Additional modules (only Professional version)

P. 114 Additional web module (only for Professional version)

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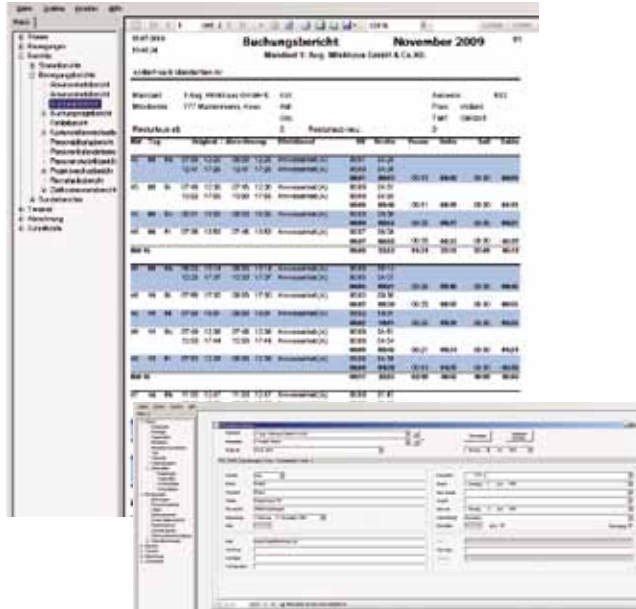
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# timeControl

## Time management



### Performance features of timeControl Start (496 644 1) and timeControl Professional (496 644 3)

- Software package for recording flexitimes, fixed working hours, set shift times, part-times, seasonal and annual working times and partial retirement.
- Administration of up to 200 employee master data
- Platform up to 64 bit, independent of Windows version
- MS SQL Server data base (express version will do)
- Network licence for as many users as required
- Multi-user enabled
- Data transfer to external programmes (wage&salary/HR)
- Structural and transparent menu configuration with tree structure
- Online and Tooltip help
- "GDPdU" interface for tax audits of tax authorities
- Password-protected access procedure up to form level
- Authentification is possible via Windows as well as directly via the time registration.
- Flexible wage logic for complex wage conditions, company agreements and company wages
- Extensive and convenient correction options with automatic back settlement to any period requested
- Automatic holiday generation (all Federal States)
- Any amount of day programmes
- Any number of weekly schedules desired
- Any number of shift plans desired
- Shift calendar, automatic shift recognition
- Freely definable, any number of reasons for absence desired
- Personal calendar for employees as yearly overview with absence records
- Comprehensive, freely parameterizable bonuses with and without evaluation of additional labour costs
- Absence management with holiday calculation and illness statistics
- Very comprehensive reporting system
- Output of all lists on screen, printer or via automatic e-mail forwarding
- Reading of staff data with integrated ASCII or SQL interface

### Performance features only for timeControl Professional

- timeControl Professional can optionally be extended by employee master records and additional modules (see following pages)

Flexible flexitime systems – wide-spread these days – put high demands on electronic time management systems. The multi-functional Winkhaus timeControl range offers the best solution with the software versions Start and Professional. This ensures constant transparency and efficient human resources management, both for the management as well as for employees. The timeControl software module manages the recording of flexitimes, set shift times, part-times, seasonal times and partial retirement in real time. Convenient correction options with automatic back-settlement to any period are set components of the software, as are information tables for displaying employee status.

The modern, established and tried and tested timeControl time management system is distinguished by its user friendliness and security from manipulation. Its modular structure also offers a high degree of security for your investment, as this system can be adapted easily to fit in with changes in organisation structure. In addition timeControl permits seamless integration with the most widely used wage and salary software as well as with Winkhaus systems for electronic locking and access control.

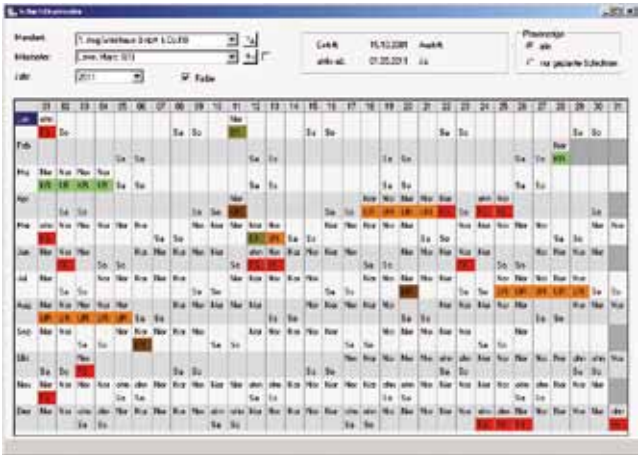
Subject to technical changes without notice.

# timeControl Professional

## Additional modules

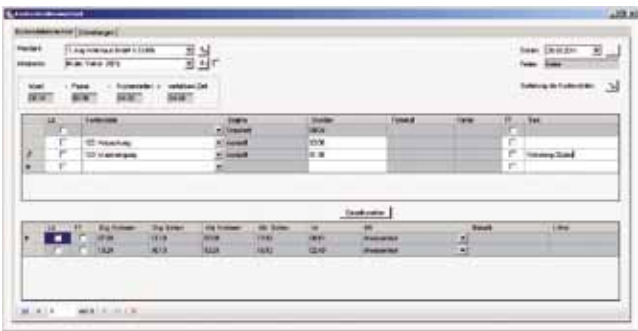
### Shift calendar (496 645 1)

Additionally, the time registration provides a calendar for each employee. This shift calendar shows the absence times and the planned / the complete daily models. Moreover it allows the user to carry out direct rescheduling of shifts. The shifts can also be indicated and revised in the group calendar.



### Change of cost centre (496 645 2)

If employees are working for different cost centres, this additional module is used to assign the change of cost centres to the employees according to the working times. Cost centre changes can be indicated and evaluated in the reports. In conjunction with the additional module “web PC clock” employees can directly enter the cost centres using the virtual terminal.



### Change of cost centre including projects (496 645 3)

Apart from the change of cost centres, it is also possible to create and evaluate time entries for different projects. In conjunction with the additional module “web PC clock” employees can directly enter the cost centres and projects using the virtual terminal.

### iTerminal Server (496 644 5)

The Terminal server is needed for using the additional module iTerminal APP. The server verifies and handles the entries and inquiries of authorised iPhones.

### iTerminal APP (496 644 6)

This iPhone App enables employees to clock in, clock out or register official absence. Entering cost centres and different projects is possible as well. In this way paper chaos is effectively prevented, everything is accurately and quickly settled via the App.

Logistics companies can benefit from the flexible and optimised automatic location system to plan and carry out tours and order transactions.

### Rate settlement (service) (496 644 7)

In the context of rate settings all the required settlement rules are adjusted according to the industry-wide collective agreement and/or to internal company agreements. The number of different payment models is unlimited. Depending on the payment model, users can define any number of posting keys and wage types desired. Due to the rate setting it is possible to ascertain additional labour costs for shiftwork, night work and extra work. Additional labour costs can be distinguished according to holiday, weekdays and week-end work. Different holiday premiums are possible. Flexible working times require special settlement rules which can be implemented without any restrictions (time surcharges as well as several accounts, e. g. leisure time and flexitime, can be administered in parallel). For implementing the rate setting, it must be incorporated while a protocol is established.

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# timeControl Professional

## Additional web modules

The user can benefit from varied additional modules as online applications. The configuration and adjustment of employee authorisations is carried out by the web portal administrator.

Various roles can be defined to administer access rights. Any specific role can be assigned to an employee or a group of employees.

By activating any web module desired, employees are automatically offered the possibility to access their own registrations and absence times via the reporting system on the PC.

### Advantages of the web modules:

- No installation on workstations needed, as access is provided by a web browser
- Can be used at any workstation
- Every employee can use the login to log on to the system with their own password

### Online PC clock / Virtual terminal (496 645 0)

Virtual terminal taking over the functions of a conventional terminal. For instance, the browser-capable PC clock can be accessed on the workstations using the Internet Explorer or Firefox without having to install the time registration function.



The entry is performed by a mouse-click on a button or via the keyboard (e. g. to Start Work) after entering the password. This entry is instantly submitted to the server (online) and then the accounts are evaluated.

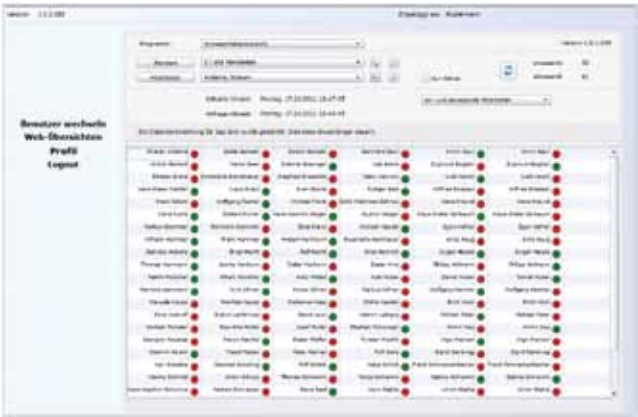
By means of the enquiry button it is also possible to have up to 4 time accounts displayed (e. g. remaining leave days, reduction of flexitime working hours, overtime account etc).

In conjunction with the modules for project time registration and change of cost centre, the virtual terminal can also be used to enter order times.

### Web tableau (496 644 9)

Tableau working as an attendance board (red and green). Ideally suited for use on reception or in-house switchboard to indicate all present employees.

The displayed information can be configured for the tableau and assigned to different employees.



### Online application processing system (496 644 8)

The online application processing system can be used as a paperless means to apply for half or full-day posting keys such as leave, business trips, training courses etc. It can be displayed via the webbrowser ( e. g. Internet Explorer, Firefox).



The authorisation levels are specified in the web portal. It is possible for different employees/groups/departments to have different superiors. A request can pass up to 5 levels before it is released. After authorisation the request is instantly transferred to the time registration system and is then recorded. The application processing system is an alternative to the paper vacation forms.

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## 2.2



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## 3.2

## 4

## 4.1

## 4.2

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# 1 General Information

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1

## 2 Electronic Access Organisation

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2

### 2.1 blueChip/blueSmart – Electronic locking systems

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2.1

### 2.2 blueLine – Hardware for online access control/time management

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2.2

### 2.3 Service

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2.3

## 3 Software

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3

### 3.1 blueControl range

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3.1

### 3.2 timeControl

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3.2

## 4 Mechanical Access Organisation

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4

### 4.1 keyTec – Overview of systems

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4.1

### 4.2 keyTec – Locking cylinders

4.2





## Our system recommendations for secure locking

In some ways, door technology is like the international shares market. On the one hand, you have tempting offers that can offer you high returns in the short term but which involve taking massive risks. And on the other, you have the stable options. Solid values which are always increasing in value, albeit slowly. Completely without risk, and with no scope for risky speculation.

At Winkhaus, we've been focusing on reliability for more than 150 years now. Here, we place as much value on the use of top quality materials as on honed technology. Even if this means we can't sell our products quite as cheaply as others. The long service life, the secure planning and the guarantees which we can ensure thanks to our supreme precision in manufacturing and quality control, pay for themselves in the long run.

Our tip: No matter what kind of systems you recommend to your customers, make sure you recommend Winkhaus keyTec locking systems, secure in the long term.





## 4.1 keyTec – Overview of systems

P. 122 System properties

P. 124 Comparison of locking systems

1

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2.1

2.2

2.3

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3.1

3.2

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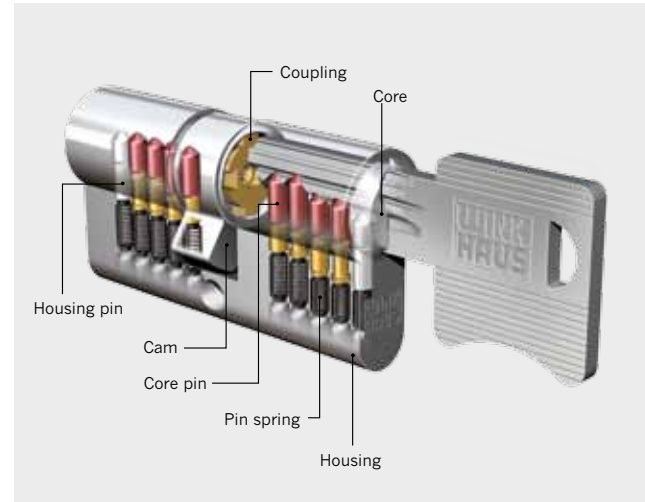
4.1

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## System properties

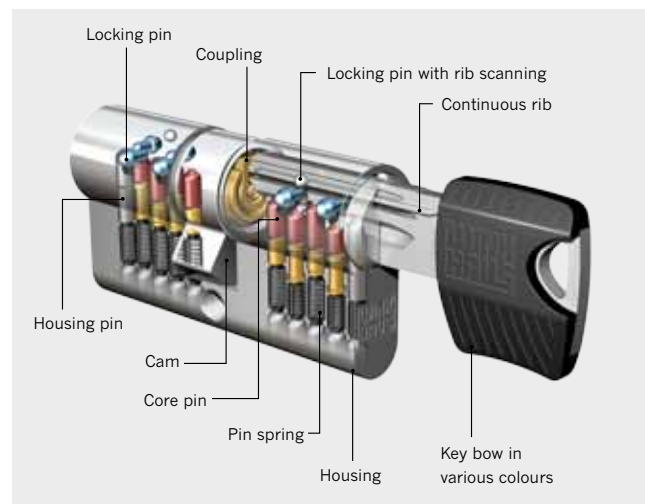
### keyTec AZ

Locking cylinder system for individually-secured cylinders and locking installations in accordance with DIN 18252 and EN 1303 with separate profile systems between central lock and (general) master key systems; 5 pin tumblers per side, standard picking protection thanks to special pins, multiple paracentric key profiles, core pins made of hardened steel, decoding protection by means of pilot pins, drilling protection via hardened anti-corrosive steel pins, key guide fortified by special cylinder cores, single-part cam made of sintered steel, non-toxic and protected against corrosion, ergonomic nickel silver keys.



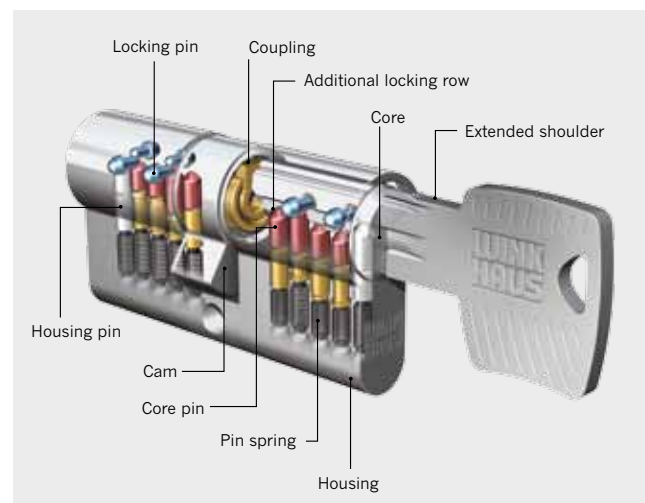
### keyTec RPE

Locking cylinder system for individually-secured cylinders in Winkhaus works profile or customer profile according to DIN 18252 and EN 1303; 5 spring-loaded massive pin tumblers on each side, up to 8 springlessly controlled radial pins, locking ball with rib scanning, standard picking protection thanks to special pins, multiple paracentric key profiles, core pins made of hardened steel, drilling protection via hardened, stainless steel pins, key guide fortified by special cylinder cores, keys with high-grade plastic caps, caps in various colours, optimised tip of the key for improved insertion, excellent combination possibilities with protective fittings due to an extended 13 mm shoulder of the key.



### keyTec ZRV/ZRV6

Locking cylinder system for locking installations with security card, 5 (ZRV) or 6 (ZRV6) spring-loaded massive pin tumblers on each side, in compliance with EN 1303/DIN 18252 with separate profile systems between central lock (ZRV) and (general) master key systems, up to 8 (ZRV) or 10 (ZRV6) additional lateral pins controlled without springs. An extra locking row on the key serves for checking two different technical features in the locking cylinder, multiple paracentric key profiles, ergonomic keys made of nickel silver, standard picking protection thanks to special pins, standard drilling protection via hardened anti-corrosive steel pins in the first row, 13 mm shoulder of the key, other features see VS/VS6.

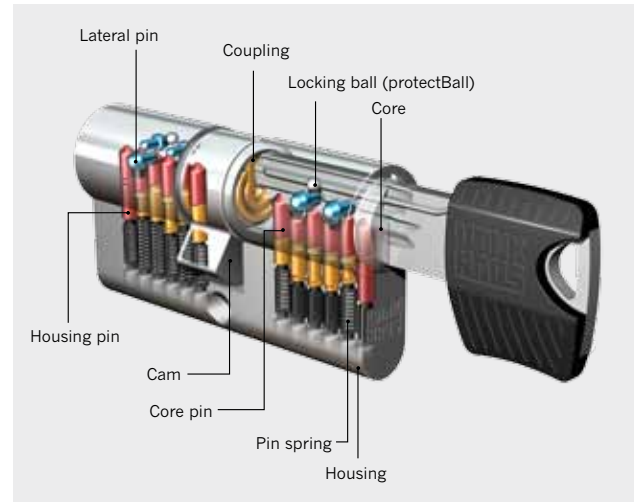


Subject to technical changes without notice.

## System properties

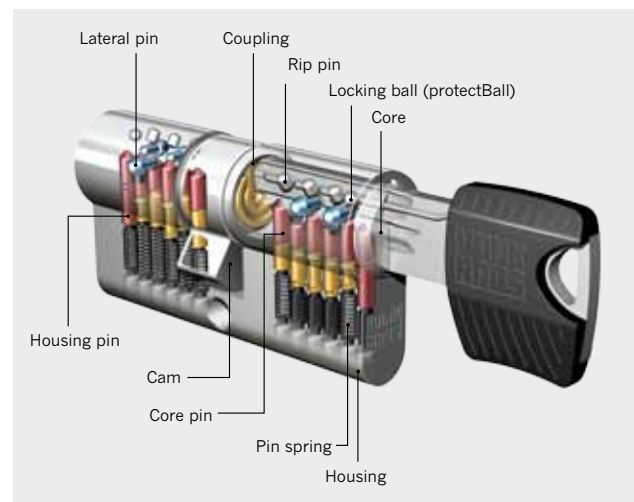
### keyTec RAP **NEW!**

Locking cylinder system for locking installations with security card, 6 spring-loaded massive pin tumblers in compliance with DIN 18252 and EN1303, with separate profile systems between central lock and (general) master key systems. Up to 10 additional lateral pins per side controlled without springs, locking ball with rib check, standard picking protection thanks to special pins, multiple paracentric key profiles, core pins made of hardened steel, drilling protection via hardened anti-corrosive steel pins, key guide fortified by special cylinder cores, keys with high-quality plastic cap, caps in different colours, optimised tip of the key for improved insertion, excellent combination possibilities with protective fittings due to an extended 13 mm shoulder of the key.



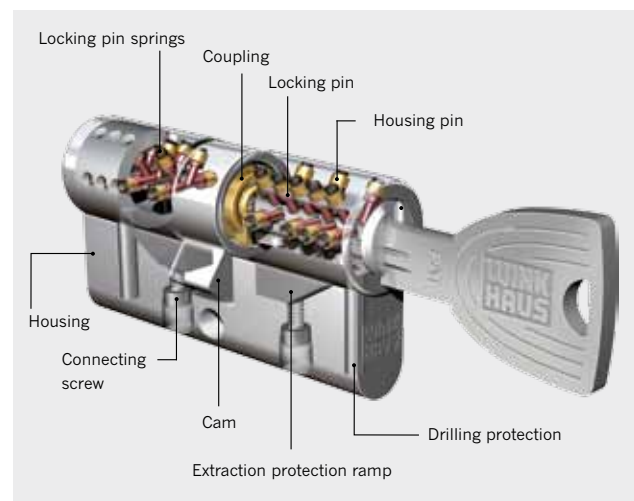
### keyTec RAP+ **NEW!**

Locking cylinder system for locking installations with security card, 6 spring-loaded massive pin tumblers in compliance with DIN 18252 and EN1303, with separate profile systems between central lock and (general) master key systems. Up to 10 additional lateral pins per side controlled without springs and up to 7 extra rib pins, locking ball with rib check, standard picking protection thanks to special pins, multiple paracentric key profiles, core pins made of hardened steel, drilling protection via hardened anti-corrosive steel pins, key guide fortified by special cylinder cores, keys with high-quality plastic cap, caps in different colours, optimised tip of the key for improved insertion, excellent combination possibilities with protective fittings due to an extended 13 mm shoulder of the key.



### Reverse key system keyTec X-tra (Xt)










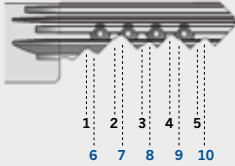


Locking cylinder system for individually-secured cylinders and locking installations in accordance with valid standard, separate profile systems between central lock and (general) master key systems with up to 20 radially arranged locking pins in 4 rows per side. A variable longitudinal profile system prevents the insertion of unauthorised keys. Unauthorised opening attempts with common tools will be countered with an effective block. Series drilling protection and extraction protection ramp, modular cylinder structure for subsequent length alteration, key guide fortified by special cylinder cores, single-part cam made of sintered steel, non-toxic and protected against corrosion, ergonomic nickel silver keys, excellent combination possibilities with protective fittings due to an extended 13 mm shoulder of the key.



Subject to technical changes without notice.

# Comparison of Locking Systems

keyTec AZ, ZRV, ZRV6, RAP, RAP+, X-tra

	 keyTec AZ	 keyTec ZRV
Locking profile	Separate profiles for central lock systems and (general) master key systems and individually-secured cylinders.	Separate profiles for central lock systems and (general) master key systems.
Pin tumblers	 5 pin tumblers. Hardened steel pins in the front row.	 5 pin tumblers. Hardened steel pins in the front row.
Key channel profile	 Multiple paracentric profiles and secure barrier areas over the entire profile system.	 Multiple paracentric profiles and secure barrier areas over the entire profile system.
Lateral pins		 Up to 8 springlessly controlled radial pins.
Special feature		 Two locking rows on one key for doubling the locking secret.
Transponder key	 Compatible with Winkhaus electronic access control systems. Compatibility with systems by other manufacturers possible, subject to verification.	

Subject to technical changes without notice.

 <b>keyTec ZRV6</b>	 <b>keyTec RAP/RAP+</b>	 <b>keyTec X-tra</b>
Profiles for (general) master key systems	Separate profiles for central lock systems and (general) master key systems.	Separate profiles for central lock systems and (general) master key systems and individually-secured cylinders.
 6 pin tumblers. Hardened steel pins in the front row.	 6 pin tumblers. Hardened steel pins in the front row.	 Up to 20 radially arranged pins in 4 rows per side.
 Multiple paracentric profiles and secure barrier areas over the entire profile system.	 Multiple paracentric profiles and secure barrier areas over the entire profile system.	 A variable longitudinal profile system prevents the insertion of unauthorised keys.
 Up to 10 springlessly controlled radial pins.	 Up to 10 springlessly controlled radial pins.	
 Two locking rows on one key for doubling the locking secret. 1 2 3 4 5 6 7 8 9 10 11 12	 (1) protectBall with rib check. (2) Up to 7 additional rib pins (RAP+). 1 2	 Modular cylinder structure, standard drilling and extraction protection.
		



# 1 General Information

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1

## 2 Electronic Access Organisation

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2

### 2.1 blueChip/blueSmart – Electronic locking systems

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2.1

### 2.2 blueLine – Hardware for online access control/time management

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2.2

### 2.3 Service

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2.3

## 3 Software

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3

### 3.1 blueControl range

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3.1

### 3.2 timeControl

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3.2

## 4 Mechanical Access Organisation

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4

### 4.1 keyTec – Overview of systems

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4.1

### 4.2 keyTec – Locking cylinders

4.2





## 4.2 keyTec – Locking cylinders

P. 130 Profile double cylinder

P. 139 Profile half cylinder

P. 144 Profile knob cylinder

P. 147 Lever cylinder

P. 149 Padlock

P. 150 Round cylinder

P. 153 Multiplan System

P. 154 Furniture locks

P. 156 Special cylinders

1

2

2.1

2.2

2.3

3

3.1

3.2

4

4.1

4.2

General  
Information



Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

keyTec –  
Overview of  
systems

keyTec –  
Locking cylinders

Areas of application

- Inside and outside
- Standard doors

Properties

- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

Available extensions

- On one side or both sides, with increments of 5 mm on each side

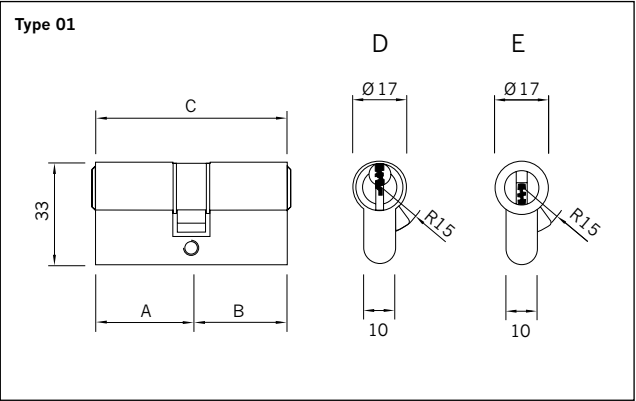
Note

- Not suitable for use in anti-panic multi-point locking systems

Profile double cylinder

Type 01

Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	30,3	60,6	D
RPE	5	30,3	30,3	60,6	D
VS/ZRV	5	30,3	30,3	60,6	D
VS6/ZRV6	6	32,5	32,5	65,0	D
RAP/RAP+	6	30,7	30,7	61,4	D
Ti6	6	32,5	32,5	65,0	D
Xt	up to 20/WS	30,2	30,2	60,4	E

Dimensions in mm

WS = Reversible key system

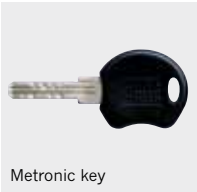
Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	–

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



# Profile double cylinder (FZG)

## Type 01/15

### Areas of application

- Escape doors with anti-panic multi-point locking systems which require a freely rotatable cam

### Properties

- (FZG) Certified free-to-turn cylinder for gear locks in panic door locking systems. According to the test guideline of the Velbert test institute (PIV). Profile cylinders and escape door locking systems are marked “FZG”.
- For anti-panic multi-point locking systems
- Cam, freely rotatable through 360°
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

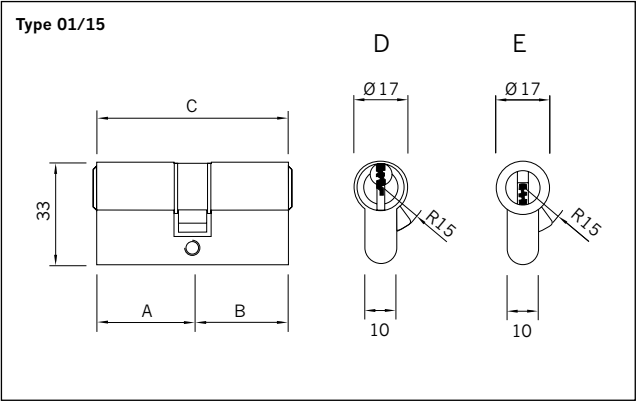
### Available extensions

- On one side or both sides, with increments of 5 mm on each side

### Note

- Functionally, keys can be turned empty up to 355°

### Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	30,3	60,6	D
RPE	5	30,3	30,3	60,6	D
VS/ZRV	5	30,3	30,3	60,6	D
VS6/ZRV6	6	32,5	32,5	65,0	D
RAP/RAP+	6	30,7	30,7	61,4	D
Ti6	6	32,5	32,5	65,0	D
Xt	up to 20/WS	30,2	30,2	60,4	E

Dimensions in mm  
WS = Reversible key system

### Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	–

Can be operated with:



General  
Information



Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

keyTec –  
Overview of  
systems

keyTec –  
Locking cylinders

Areas of application

- Inside and outside
- Entry doors
- Front doors of apartments

Properties

- Lockable from both sides
- Can also be locked from the other side when a turned key is inserted there
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

Available extensions

- On one side or both sides, with increments of 5 mm on each side

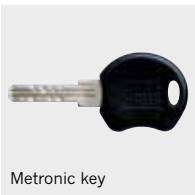
Note

- Functionally, keys can be turned empty up to 355°
- Not suitable for use in anti-panic multi-point locking systems

Can be operated with:



Mechanical key

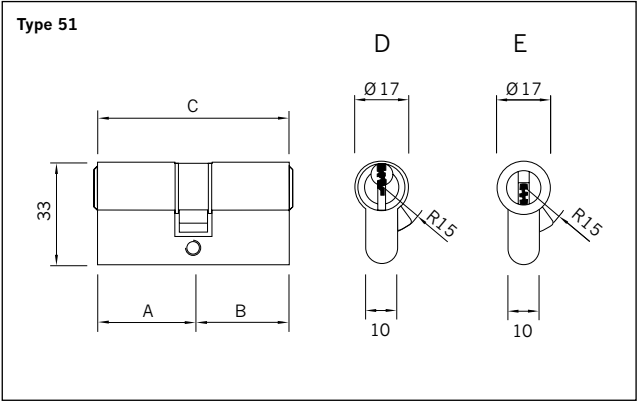


Metronic key

Profile double cylinder

Type 51

Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	30,3	60,6	D
RPE	5	30,3	30,3	60,6	D
VS/ZRV	5	30,3	30,3	60,6	D
VS6/ZRV6	6	32,5	32,5	65,0	D
RAP/RAP+	6	30,7	30,7	61,4	D
Ti6	6	32,5	32,5	65,0	D
Xt	up to 20/WS	30,2	30,2	60,4	E

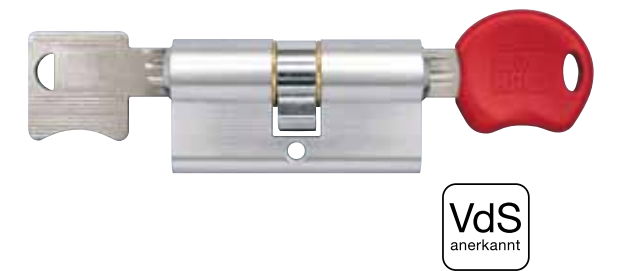
Dimensions in mm

WS = Reversible key system

Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	–

Subject to technical changes without notice.



# Profile double cylinder

## Type 53

### Areas of application

- Inside and outside
- Residential homes, old people’s homes, hospitals
- Supervised accommodation

### Properties

- Lockable from both sides with anti-panic key
- Danger key systems
- Can only be locked with an anti-panic key when a turned key is inserted on the other side
- For use only in HS and GHS systems
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

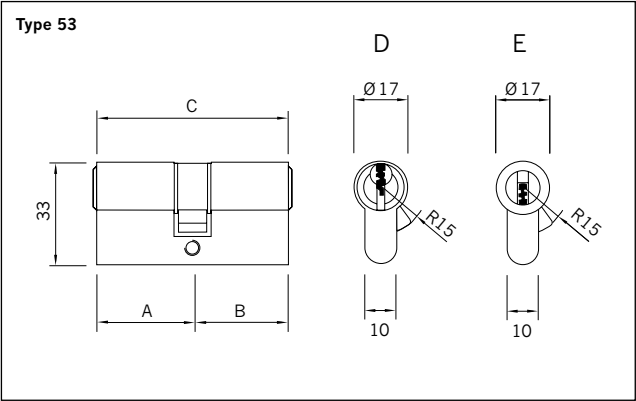
### Available extensions

- On one side or both sides, with increments of 5 mm on each side

### Note

- Functionally, keys can be turned empty up to 355°
- Not suitable for use in anti-panic multi-point locking systems
- In the X-tra system the anti-panic key does not include reversibility
- When planning a locking system it is very important to take into account the danger key system from the start because it cannot be integrated subsequently.

### Minimum lengths for cylinders



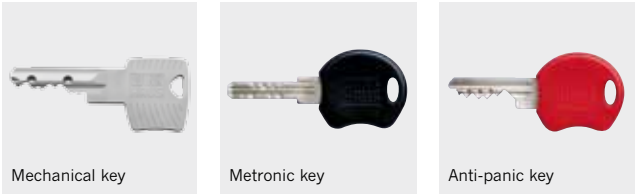
keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	30,3	60,6	D
VS	5	30,3	30,3	60,6	D
VS6	6	32,5	32,5	65,0	D
Ti6	6	32,5	32,5	65,0	D
Xt	up to 20/WS	30,2	30,2	60,4	E

Dimensions in mm  
WS = Reversible key system

### Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	
AZ	x	–	x	
VS	x	x	x	
VS6	x	x	x	
Ti6	x	x	x	
Xt	–	x	Series	

Can be operated with:



Subject to technical changes without notice.

General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

keyTec –  
Overview of  
systems

keyTec –  
Locking cylinders



Areas of application

- Standard doors with asymmetric dimensions

Properties

- Asymmetric
- Lockable from both sides
- Can also be locked from the other side when a turned key is inserted there
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

Available extensions

- One-sided (side B) by 5 mm or 10 mm

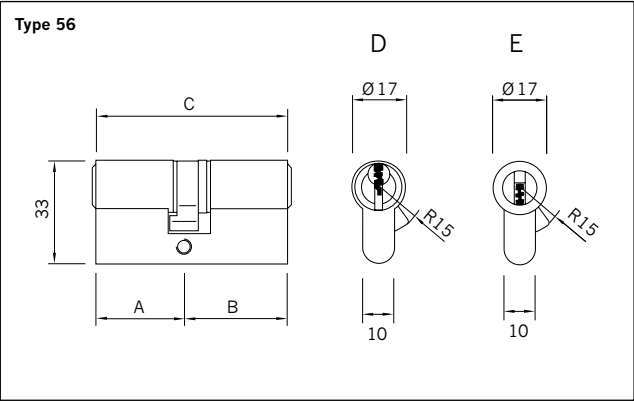
Note

- Functionally, keys can be turned empty up to 355°
- Not suitable for use in anti-panic multi-point locking systems

Profile double cylinder

Type 56

Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	27,8	32,8	60,6	D
RPE	5	27,8	32,8	60,6	D
VS/ZRV	5	27,8	32,8	60,6	D
VS6/ZRV6	6	30,0	35,0	65,0	D
Ti6	6	30,0	35,0	65,0	D

Dimensions in mm

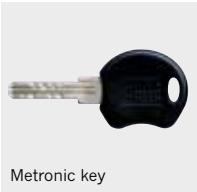
Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
Ti6	x	x	x	–

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



# Profile double cylinder (FZG)

Type 06/15

## Areas of application

- Asymmetric escape doors with anti-panic multi-point locking systems which require a freely rotatable cam

## Properties

- (FZG) Certified free-to-turn cylinder for gear locks in panic door locking systems. According to the test guideline of the Velbert test institute (PIV). Profile cylinders and escape door locking systems are marked “FZG”.
- For anti-panic multi-point locking systems
- Asymmetric
- Cam, freely rotatable through 360°
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

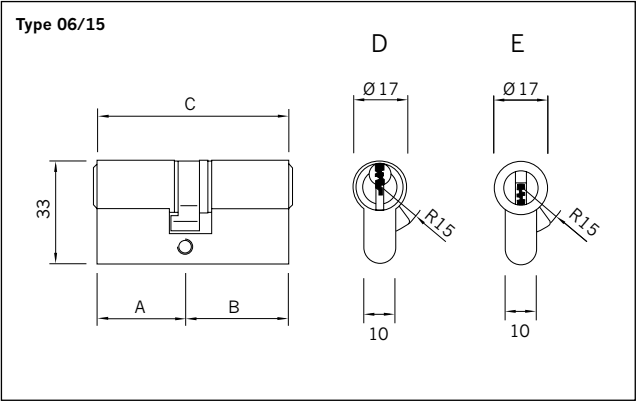
## Available extensions

- One-sided (side B) by 5 mm or 10 mm

## Note

- Functionally, keys can be turned empty up to 355°

## Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	27,8	32,8	60,6	D
RPE	5	27,8	32,8	60,6	D
VS/ZRV	5	27,8	32,8	60,6	D
VS6/ZRV6	6	30,0	35,0	65,0	D
Ti6	6	30,0	35,0	65,0	D

Dimensions in mm

## Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
Ti6	x	x	x	–

Can be operated with:



Mechanical key

Metronic key

Subject to technical changes without notice.





Areas of application

- Standard doors with asymmetric dimensions

Properties

- Lockable from both sides
- Asymmetric
- Can also be locked from the other side when a turned key is inserted there
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

Available extensions

- One-sided (side B) by 5 mm or 10 mm

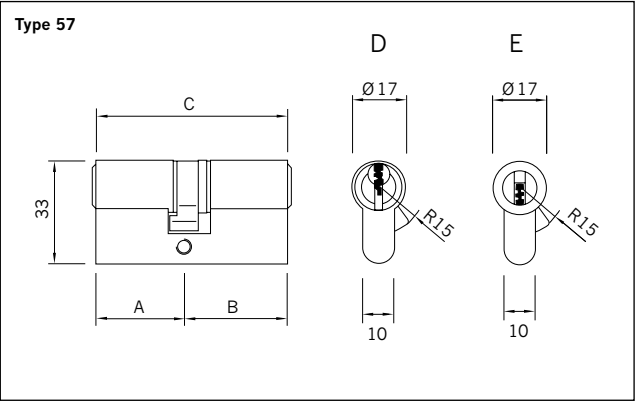
Note

- Functionally, keys can be turned empty up to 355°
- Not suitable for use in anti-panic multi-point locking systems

Profile double cylinder

Type 57

Minimum lengths for cylinders



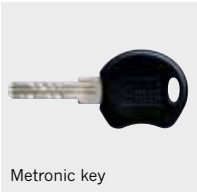
keyTec	Number of pins	A	B	C	Profile
AZ	5	27,8	34,8	62,6	D
RPE	5	27,8	34,8	62,6	D
VS/ZRV	5	27,8	34,8	62,6	D
RAP/RAP+	6	28,2	35,2	63,4	D
Xt	up to 20/WS	27,4	34,6	62,0	E

Dimensions in mm  
WS = Reversible key system

Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Xt	–	x	Series	–

Can be operated with:



Subject to technical changes without notice.



# Profile double cylinder

## Type 71

### Areas of application

- Doors with little thickness

### Properties

- Short cylinders
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

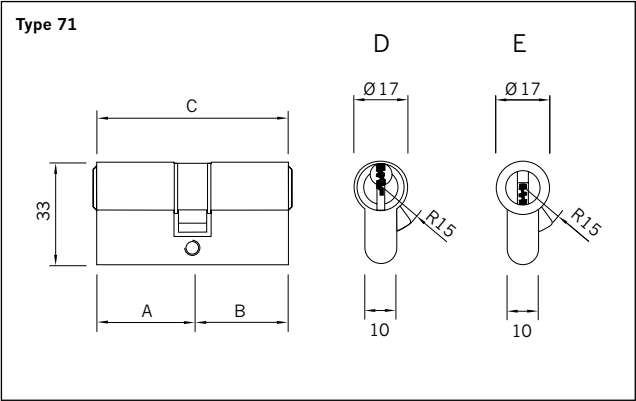
### Available extensions

- On one side (side B, not Xt) with increments of 5 or 10 mm

### Note

- Not suitable for use in anti-panic multi-point locking systems

### Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	27,3	27,3	54,6	D
RPE	5	27,3	27,3	54,6	D
VS/ZRV	5	27,3	27,3	54,6	D
VS6/ZRV6	6	29,5	29,5	59,0	D
RAP/RAP+	6	28,2	28,2	56,4	D
Ti6	6	29,5	29,5	59,0	D
Xt	up to 20/WS	27,4	27,4	54,8	E

Dimensions in mm  
WS = Reversible key system

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



## Profile double cylinder

### Type 77

#### Areas of application

- Standard doors with asymmetric dimensions

#### Properties

- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

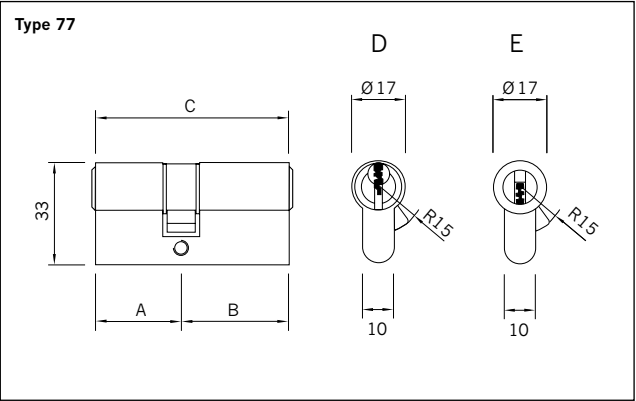
#### Available extensions

- One-sided (side B) by 5 mm or 10 mm

#### Note

- Not suitable for use in anti-panic multi-point locking systems

#### Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	27,3	35,3	62,6	D
RPE	5	27,3	35,3	62,6	D
VS/ZRV	5	27,3	35,3	62,6	D
RAP/RAP+	6	28,2	35,2	63,4	D
Xt	up to 20/WS	27,4	34,6	62,0	E

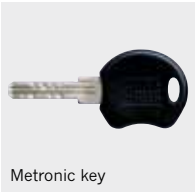
Dimensions in mm

WS = Reversible key system

#### Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



# Profile half cylinder

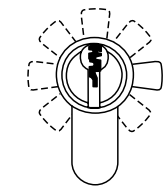
## Type 02

### Areas of application

- Mortise locks
- Garage door locks
- Key switch

### Properties

- Easily adjustable cylinder cam



- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

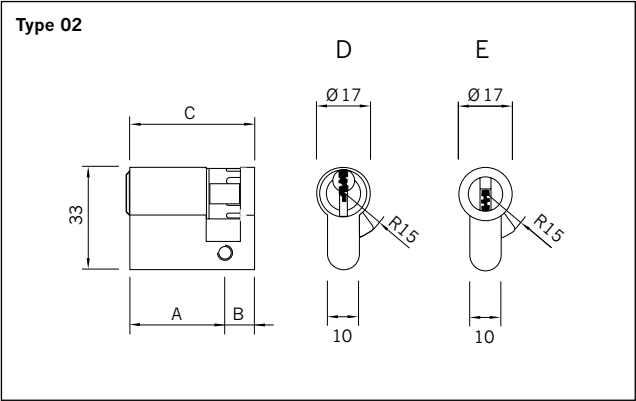
### Available extensions

- On one side, with increments of 5 mm or 10 mm

### Note

- Not suitable for use in anti-panic multi-point locking systems

### Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	9,2	39,5	D
RPE	5	30,3	9,2	39,5	D
VS/ZRV	5	30,3	9,2	39,5	D
VS6/ZRV6	6	32,5	9,2	41,7	D
RAP/RAP+	6	30,7	9,2	39,9	D
Ti6	6	32,5	9,2	41,7	D
Xt	up to 20/WS	30,2	9,2	39,4	E

Dimensions in mm  
WS = Reversible key system

### Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	x

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



Profile half cylinder (FZG)

Type 02/15

Areas of application

- Escape doors with anti-panic multi-point locking systems which require a freely rotatable cam

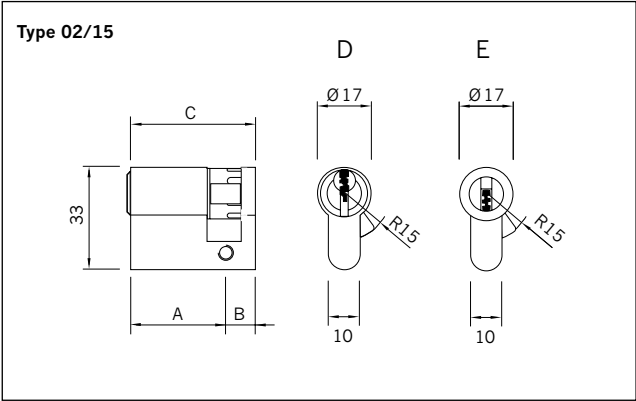
Properties

- (FZG) Certified free-to-turn cylinder for gear locks in panic door locking systems. According to the test guideline of the Velbert test institute (PIV). Profile cylinders and escape door locking systems are marked “FZG”.
- For anti-panic multi-point locking systems
- Cam, freely rotatable through 360°
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

Available extensions

- On one side, with increments of 5 mm or 10 mm

Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	10,0	40,3	D
RPE	5	30,3	10,0	40,3	D
VS/ZRV	5	30,3	10,0	40,3	D
VS6/ZRV6	6	32,5	10,0	42,5	D
RAP/RAP+	6	30,7	10,0	40,7	D
Ti6	6	32,5	10,0	42,5	D
Xt	up to 20/WS	30,2	9,2	39,4	E

Dimensions in mm

WS = Reversible key system

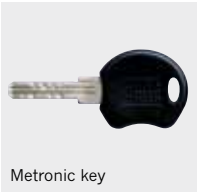
Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	x

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



# Profile half cylinder

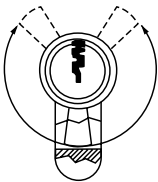
## Type 02/Z13

### Areas of application

- Special passenger elevators

### Properties

- Cylinder attachment also possible on the rear (2x hole M4)
- Supplied as standard in cam position 6:00 h, also available upon request at 10:30 h (02/Z13A) or 1:30 h (02/Z13B)



- Switch cylinder
- With earthing screw M4
- Reinforced key guide via special cylinder cores
- Brass cylinder cam

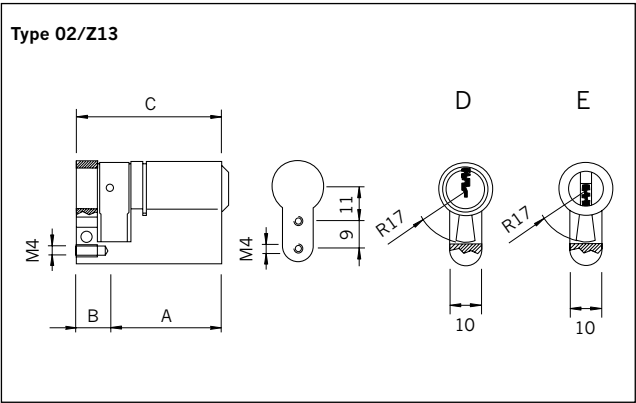
### Available extensions

- On one side, with increments of 5 mm or 10 mm

### Note

- Not suitable for use in anti-panic multi-point locking systems

### Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	35,3	11,9	47,2	D
RPE	5	35,3	11,9	47,2	D
VS/ZRV	5	35,3	11,9	47,2	D
VS6/ZRV6	6	37,5	11,9	49,4	D
RAP/RAP+	6	35,7	11,9	47,6	D
Ti6	6	37,5	11,9	49,4	D
Xt	up to 20/WS	35,2	11,9	47,1	E

Dimensions in mm  
WS = Reversible key system

### Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	x

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.

General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

keyTec –  
Overview of  
systems

keyTec –  
Locking cylinders

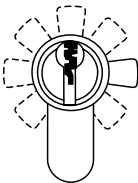


Areas of application

- Key switches, e.g. in passenger elevators, which have to be attached on the rear
- Contact cylinders

Properties

- Easily adjustable cylinder cam



- Cylinder attachment also possible on the rear (2x hole M4)
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

Available extensions

- On one side, with increments of 5 mm or 10 mm

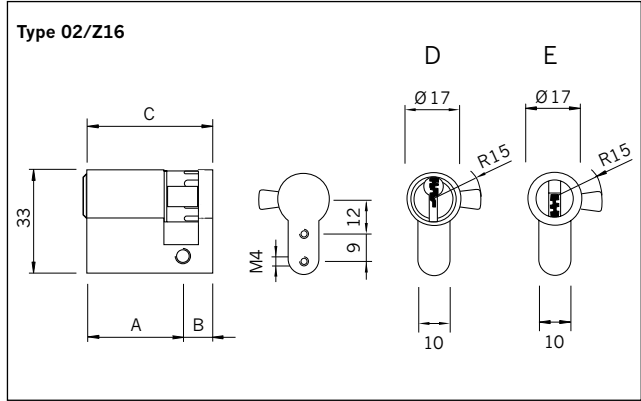
Note

- Not suitable for use in anti-panic multi-point locking systems

Profile half cylinder

Type 02/Z16

Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	9,2	39,5	D
RPE	5	30,3	9,2	39,5	D
VS/ZRV	5	30,3	9,2	39,5	D
VS6/ZRV6	6	32,5	9,2	41,7	D
RAP/RAP+	6	30,7	9,2	39,9	D
Ti6	6	32,5	9,2	41,7	D
Xt	up to 20/WS	30,2	9,2	39,4	E

Dimensions in mm

WS = Reversible key system

Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	
AZ	x	–	x	
RPE	in preparation	in preparation	x	
VS/ZRV	x	x	x	
VS6/ZRV6	x	x	x	
RAP/RAP+	in preparation	in preparation	x	
Ti6	x	x	x	
Xt	–	x	Series	

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



# Profile half cylinder

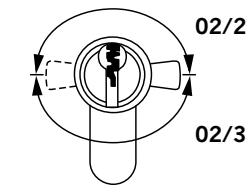
## Type 02/2, 02/3

### Areas of application

- Key switch with special cam path

### Properties

- 02/02: locking path 360°, cam path 180° (top), 9:00 – 3:00 h
- 02/03: locking path 360°, cam path 180° (bottom), 3:00 – 9:00 h



- Key can be withdrawn in “open” and “closed” positions
- Reinforced key guide via special cylinder cores
- Brass cylinder cam

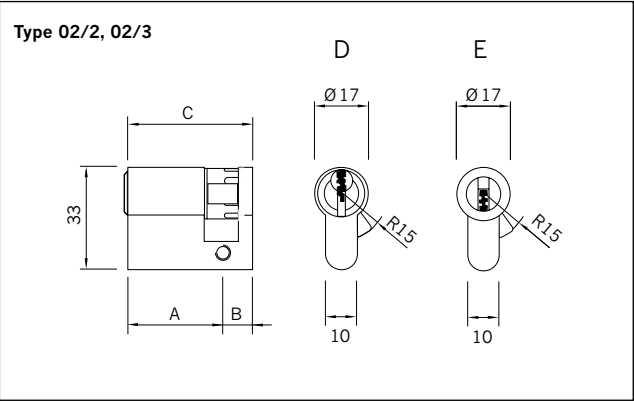
### Available extensions

- On one side, with increments of 5 mm or 10 mm

### Note

- Not suitable for use in anti-panic multi-point locking systems

### Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	9,2	39,5	D
RPE	5	30,3	9,2	39,5	D
VS/ZRV	5	30,3	9,2	39,5	D
VS6/ZRV6	6	32,5	9,2	41,7	D
RAP/RAP+	6	30,7	9,2	39,9	D
Ti6	6	32,5	9,2	41,7	D
Xt	up to 20/WS	30,2	9,2	39,4	E

Dimensions in mm  
WS = Reversible key system

### Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	x

Can be operated with:



Mechanical key

Metronic key

Subject to technical changes without notice.



General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

keyTec –  
Overview of  
systems

keyTec –  
Locking cylinders



## Profile knob cylinder

### Type 04

#### Areas of application

- Indoors
- Entrance doors

#### Properties

- Outside: locking cylinder; inside: doorknob
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

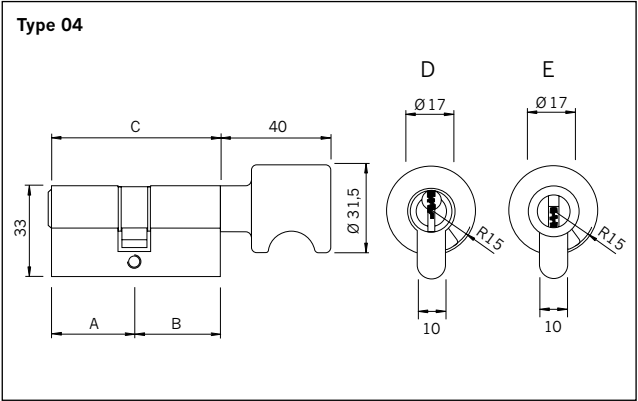
#### Available extensions

- With increments of 5 mm or 10 mm

#### Note

- Functionally, keys can be turned empty up to 355°
- Not suitable for use in anti-panic multi-point locking systems

#### Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	30,3	60,6	D
RPE	5	30,3	30,3	60,6	D
VS/ZRV	5	30,3	30,3	60,6	D
VS6/ZRV6	6	32,5	32,5	65,0	D
RAP/RAP+	6	30,7	30,7	61,4	D
Ti6	6	32,5	32,5	65,0	D
Xt	up to 20/WS	30,2	30,2	60,4	E

Dimensions in mm

WS = Reversible key system

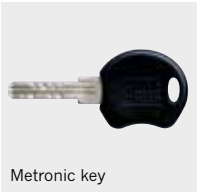
#### Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	x

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



# Profile knob cylinder

with anti-barricade function  
Type 04/S10

## Areas of application

- Internal/external doors, e. g. in schools with “amok function” requirement

## Properties

- Anti-barricade function

Function description:

### Scenario 1: normal state

The door is unlocked and can be accessed from the outside and inside.

### Scenario 2: amok state

The door is locked with the knob from the inside and can only be opened from outside by using the authorised key.

### Scenario 3: Pupils are playing a trick on the teacher

The door knob is blocked from the inside (to play a trick). Nevertheless the door can be opened from the outside with an authorised key.

- Outside: locking cylinder; inside: doorknob
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

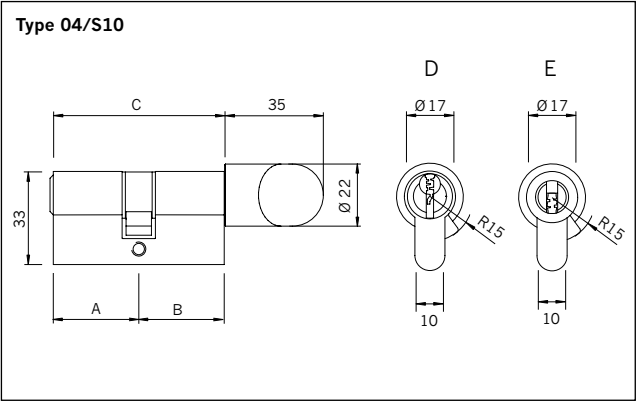
## Available extensions

- With increments of 5 mm or 10 mm

## Note

- Functionally, keys can be turned empty up to 355°
- Not suitable for use in anti-panic multi-point locking systems

## Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	30,3	30,3	60,6	D
RPE	5	30,3	30,3	60,6	D
VS/ZRV	5	30,3	30,3	60,6	D
VS6/ZRV6	6	32,5	32,5	65,0	D
RAP/RAP+	6	30,7	30,7	61,4	D
Ti6	6	32,5	32,5	65,0	D
Xt	up to 20/WS	30,2	30,2	60,4	E

Dimensions in mm  
WS = Reversible key system

Can be operated with:



General  
Information



Electronic  
Access  
Organisation

Areas of application

- Indoors
- Entrance doors with asymmetric dimensions

Electronic  
locking systems

Properties

- Asymmetric
- Outside: locking cylinder; inside: doorknob
- Reinforced key guide via special cylinder cores
- Sintered steel cylinder cam

Online  
access control/  
time management

Available extensions

- One-sided (side B), with increments of 5 mm or 10 mm

Service

Note

- Functionally, keys can be turned empty up to 355°
- Not suitable for use in anti-panic multi-point locking systems

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

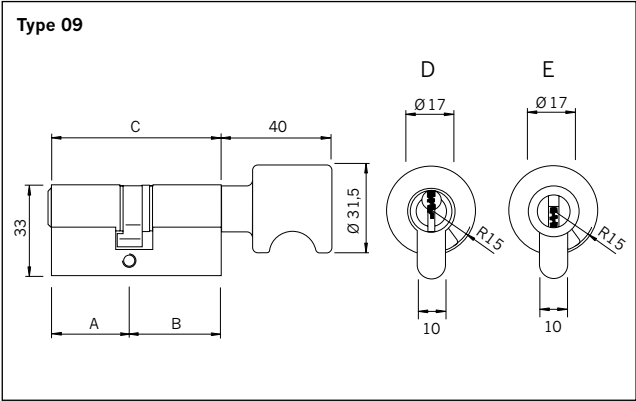
keyTec –  
Overview of  
systems

keyTec –  
Locking cylinders

Profile knob cylinder

Type 09

Minimum lengths for cylinders



keyTec	Number of pins	A	B	C	Profile
AZ	5	27,8	32,8	60,6	D
RPE	5	27,8	32,8	60,6	D
VS/ZRV	5	27,8	32,8	60,6	D
VS6/ZRV6	6	30,0	35,0	65,0	D
RAP/RAP+	6	28,2	35,2	63,4	D
Ti6	6	30,0	35,0	65,0	D
Xt	up to 20/WS	27,4	34,6	62,0	E

Dimensions in mm

WS = Reversible key system

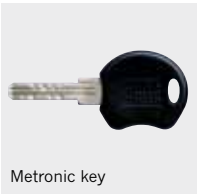
Special equipment/Options

keyTec	DA = drilling and anti-pulling protection in accordance with DIN	VZ = drilling and anti-pulling protection in accordance with VdS	BS = drilling protection	SB = Sea water resistant design
AZ	x	–	x	x
RPE	in preparation	in preparation	x	x
VS/ZRV	x	x	x	x
VS6/ZRV6	x	x	x	x
RAP/RAP+	in preparation	in preparation	x	x
Ti6	x	x	x	–
Xt	–	x	Series	x

Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



# Lever cylinder

## Lever switch cylinder

Type 28, 28/1

### Areas of application

- Letterboxes
- Cupboards

### Properties

- Suitable up to door thickness 18 mm
- With safety plate
- Reinforced key guide via special cylinder cores

### Type 28

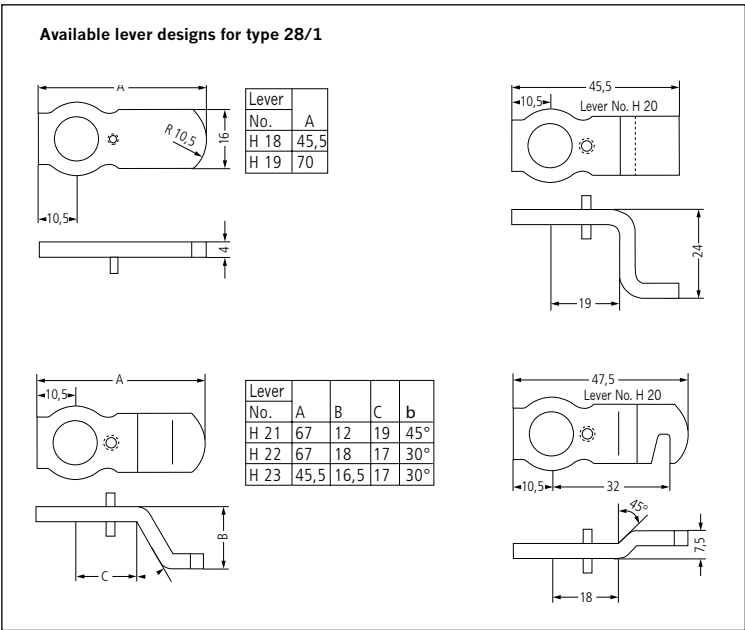
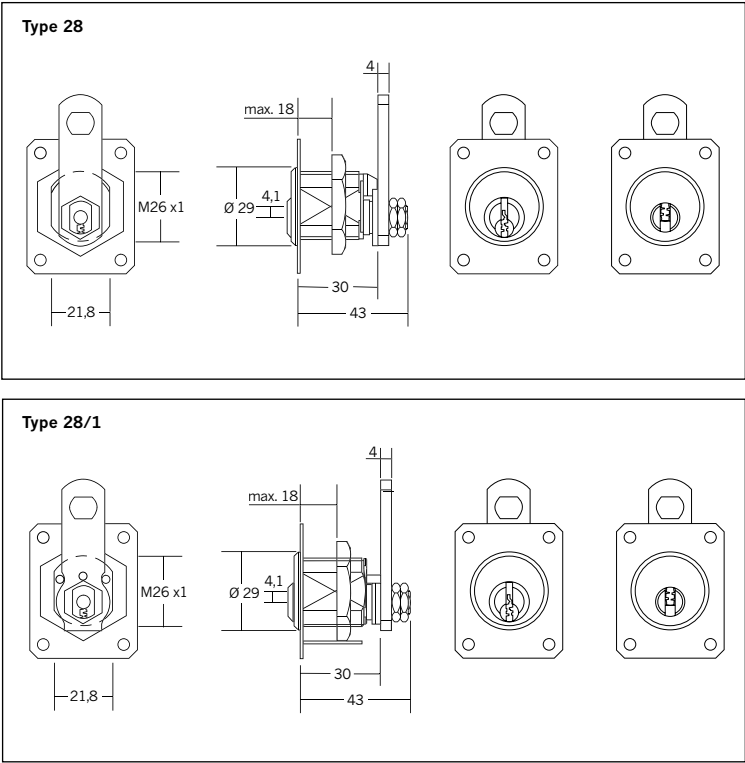
- Key path 90°
- Lever path 90°
- Key can be withdrawn in “closed” position
- Adjustable right and left
- Standard delivery with lever H16

### Type 28/1

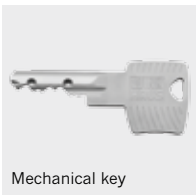
- Key path 360°
- Lever path 90°
- Key can be withdrawn in “open” or “closed” position
- Standard delivery with lever H19

### Available systems

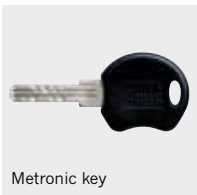
keyTec AZ, VS, RPE, VS6, ZRV, ZRV6, Ti6, RAP, RAP+, Xt



Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.

General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

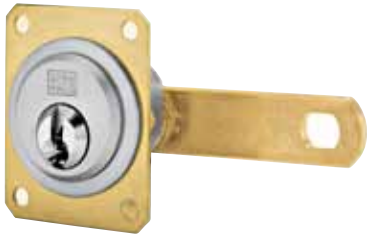
blueControl  
range

timeControl

Mechanical  
Access  
Organisation

keyTec –  
Overview of  
systems

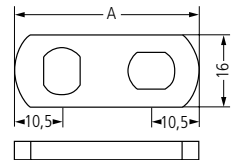
keyTec –  
Locking cylinders



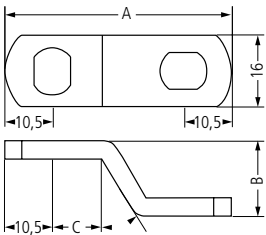
Lever cylinder  
Lever switch cylinder

Type 28, 28/1

Available lever designs, locking path A–H, for type 28

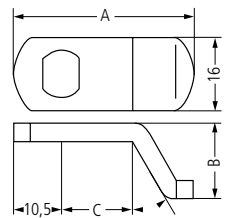


Lever No.	A
H 1	35
H 13	41
H 14	45,5
H 15	55
H 16	70

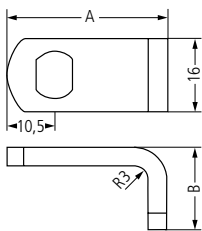


Lever No.	A	B	C	b
H 4	67	10	19	45°
H 5	64	18	17	30°
H 7	67	12	19	45°

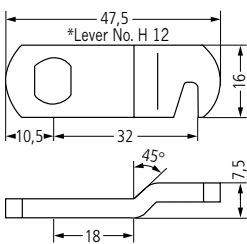
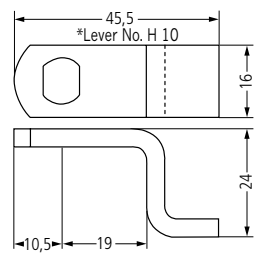
Available lever designs, locking paths A, D, G, F



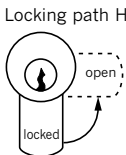
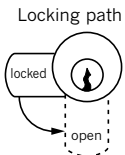
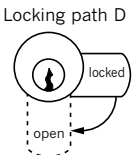
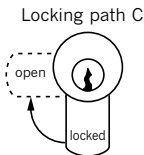
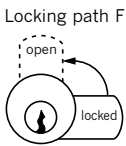
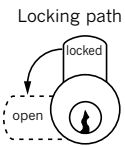
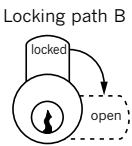
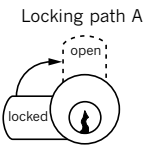
Lever No.	A	B	C	b
H 2	45,5	16,5	17	30°
H 17	41	16,5	17	30°
H 11	38,5	7	14,4	45°



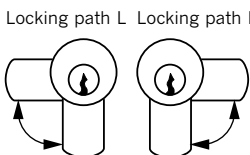
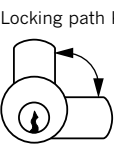
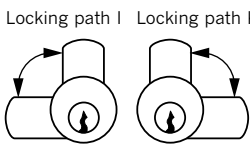
Lever No.	A	B
H 3	35	25
H 6	37,5	26,5
H 8	35	18
H 9	33	27
H 37	35	22,5



Locking paths for lever cylinder type 28 (locking path A–H)



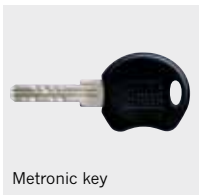
Type 28/1 (Locking path I–M)



Can be operated with:



Mechanical key



Metronic key

Subject to technical changes without notice.



## Padlock

Type 85, 85/1, 85/3, 85/4

### Areas of application

- Inside and outside
- Medicine cupboards
- Filing cabinets

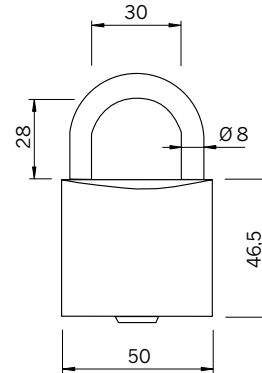
### Properties

- Shackle made of stainless steel
- Cylinder colour brass
- Housing colour brass matt
- Reinforced key guide via special cylinder cores
- Types 85/3 and 85/4 with automatic locking;  
key removal possible only when shackle is closed
- Types 85 and 85/3 with shackle height 28.0 mm
- Types 85/1 and 85/4 with shackle height 64.0 mm

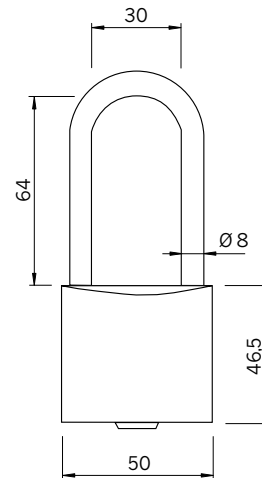
### Available systems

keyTec AZ, VS, RPE, VS6, ZRV, ZRV6, Ti6, RAP, RAP+, Xt

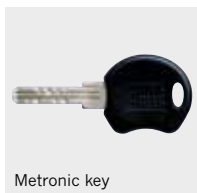
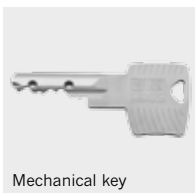
Type 85, 85/3



Type 85/1, 85/4



Can be operated with:



General  
Information

Electronic  
Access  
Organisation

Electronic  
locking systems

Online  
access control/  
time management

Service

Software

blueControl  
range

timeControl

Mechanical  
Access  
Organisation

keyTec –  
Overview of  
systems

keyTec –  
Locking cylinders



# Round cylinder

Type 27, 27/9, 27/10  
Type 39/6, 39/9, 39/10

## Areas of application

- Type 27 exterior cylinder, type 39 interior cylinder
- Cabinet locks

## Properties

- Suitable for door thickness 40-75 mm
- Type 27 Ø 32 mm, Type 39 Ø 25 mm
- With mounting plate and screws
- Reinforced key guide via special cylinder cores

## Instruction on types 27/9 and 27/10

- Note deviations in external diameter and thread dimensions

## Available systems

keyTec AZ, VS, RPE, VS6, ZRV, ZRV6, Ti6, RAP, RAP+, Xt

### For Winkhaus cabinet locks

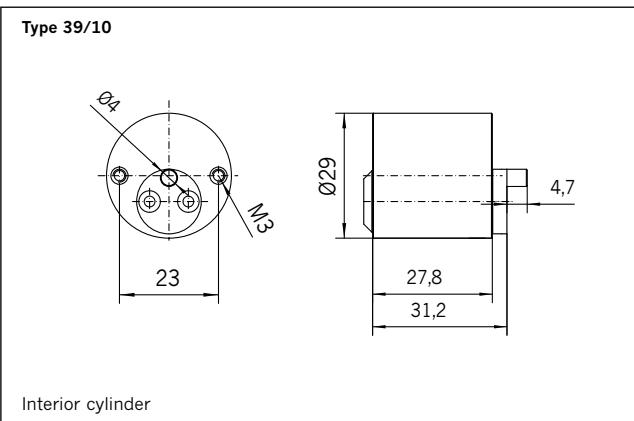
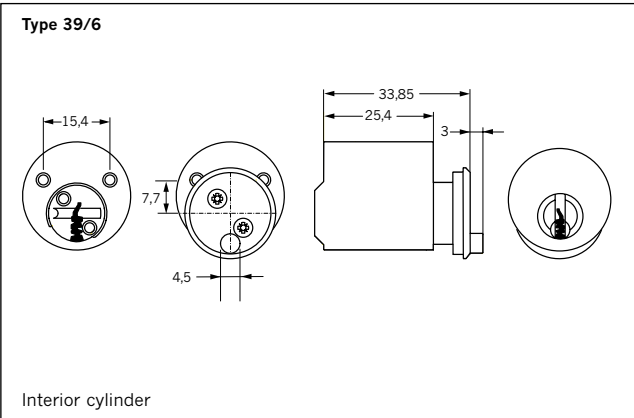
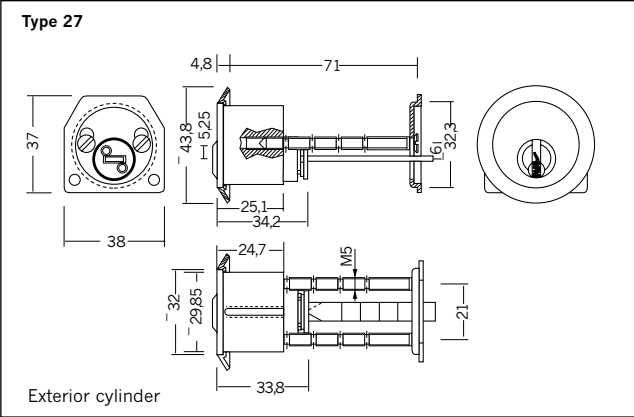
Type 27 and 39/6

### For ABUS cabinet locks

Type 27/9

### For IKON cabinet locks

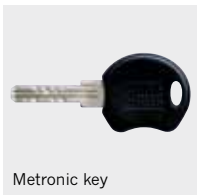
Type 27/10 and 39/10



## Can be operated with:

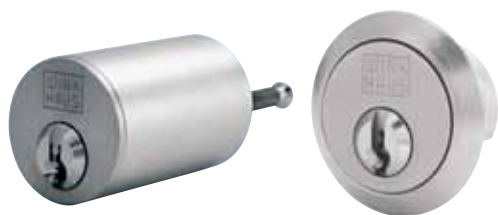


Mechanical key



Metronic key

Subject to technical changes without notice.



## Round cylinder

Type 27/1 , 27/2

### Areas of application

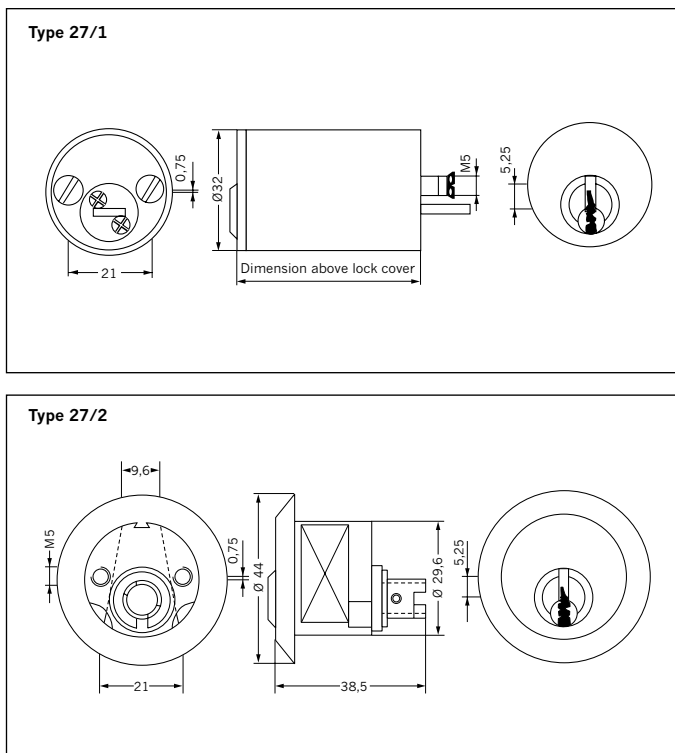
- Cabinet rim locks
- Type 27/1 exterior cylinder with tube
- Type 27/2 contact cylinder for elevators

### Properties

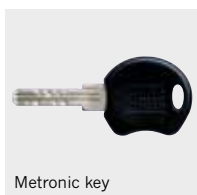
- Type 27/1 suitable for door thickness 40–75 mm
- With mounting plate and screws
- Reinforced key guide via special cylinder cores

### Available systems

keyTec AZ, VS, RPE, VS6, ZRV, ZRV6, Ti6, RAP, RAP+, Xt



Can be operated with:



Subject to technical changes without notice.



www.winkhaus.de

## Multiplan system (MS)



















### Type 00/...

#### Properties

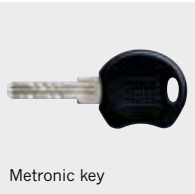
- Surface N = Brass, matt nickel-plated
- Cylinders without key operation

#### Available extensions

- On one side or both sides, with increments of 5 mm on each side

	Type	Basic length A/B in mm	Outside	Inside
<b>Profile double cylinder</b> Both sides are blind.	Type 00/0	30,5/30,5		
<b>Profile double cylinder</b> Outer side with hexagon, inner side blind.	Type 00/2	30,5/30,5		
<b>Profile double cylinder</b> Both sides with hexagon.	Type 00/3	30,5/30,5		
<b>Profile knob cylinders</b> Outer side with hexagon, inner side with knob.	Type 00/4	30,5/30,5		
<b>Profile knob cylinders</b> Outer side with display, inner side with knob.	Type 00/5	30,5/30,5		
<b>Profile short cylinder</b> Both sides are blind. Available extensions, one-sided (on side B) by 5 or 10 mm.	Type 00/11	27,5/27,5		
<b>Profile short cylinder</b> Asymmetrical, both sides are blind. Available extensions, one-sided (on side B) by 5 or 10 mm.	Type 00/12	27,5/35,0		
<b>Profile knob half cylinder</b> Interior side with knob. Available extensions, one-sided (on side B) by 5 or 10 mm.	Type 00/Z1	30,0/10,0		
<b>Profile half cylinder</b> Inner side blind. Colour: nickel.	Type 00/Z2	30,3/10,0		
<b>Profile knob cylinders</b> Inner side with knob, outer side blind.	Type 00/Z4	30,5/30,5		

Can be operated with:



Subject to technical changes without notice.

# Lock range for furniture

## Type 36/...

### Type 36/001 - Espagnolette rim lock, 40 mm backset

#### Properties

- Surface-mounted
- Stable zinc diecast housing, nickel-plated
- With plug coupling for cylinder installation, depending on model
- Cylinder and knobs can be retrofitted
- Rotary rod Ø 8,0 mm
- Including accessories and keep, suitable for left-hand and right-hand use

### Type 36/003 - Espagnolette rim lock, 25 mm backset

#### Properties

- Surface-mounted
- Stable zinc diecast housing, nickel-plated
- With plug coupling for cylinder installation, depending on model
- Cylinder and knobs can be retrofitted
- Rotary rod Ø 6,0 mm
- Including accessories and keep, suitable for left-hand and right-hand use

### Type 36/10, 36/21, 36/02, 36/09 Cylinders and knobs

#### Properties

- Doorknobs which can be retrofitted, with integrated furniture cylinder, turn knobs without cylinder and permanent knobs in these designs are matt nickel-plated
- Furniture cylinder with reinforced key guide by means of special cores

#### Rotary rod, nickel-plated (18493)

Ø 8 mm, 200 cm, continuous, for 36/001

#### Rotary rod, nickel-plated (207 737 8)

Ø 6 mm, 200 cm, continuous, for 36/003.

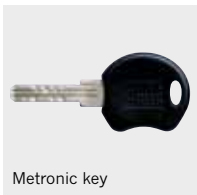
#### Available systems

keyTec AZ, VS, VS6, ZRV, ZRV6, Ti6, RAP, RAP+, Xt

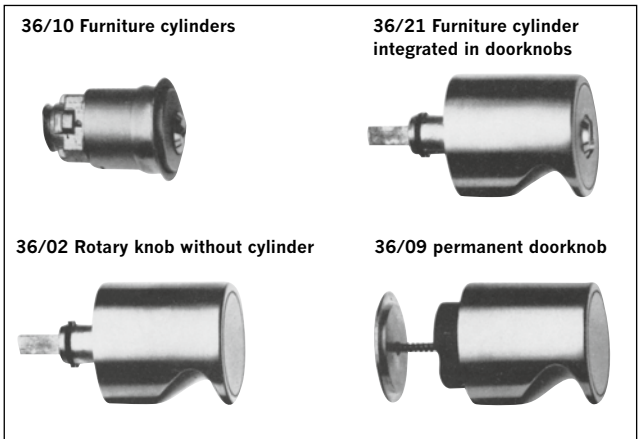
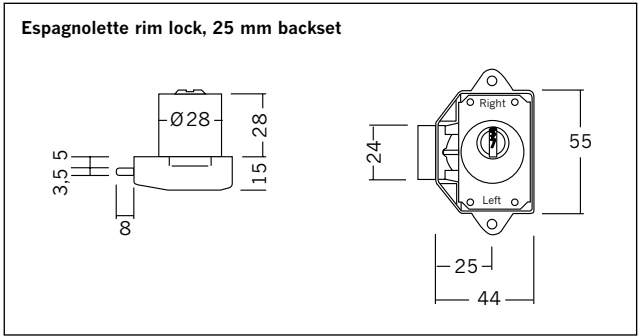
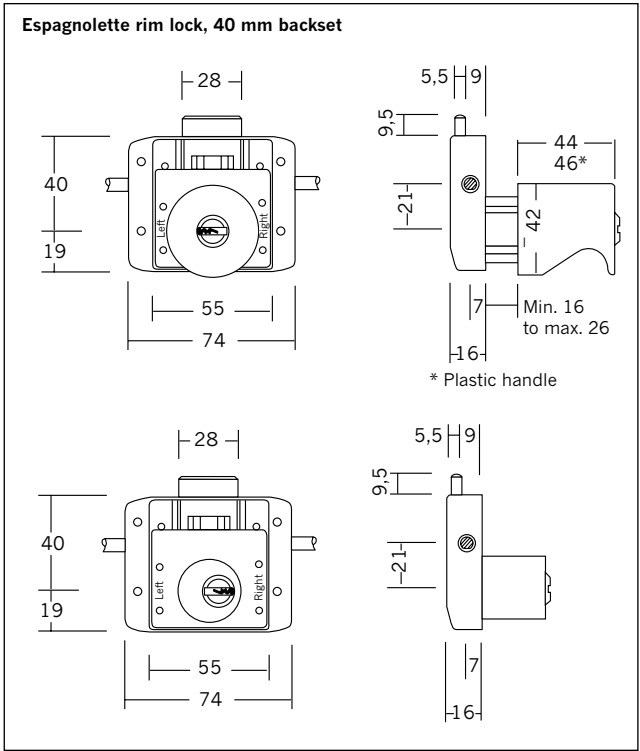
#### Can be operated with:



Mechanical key



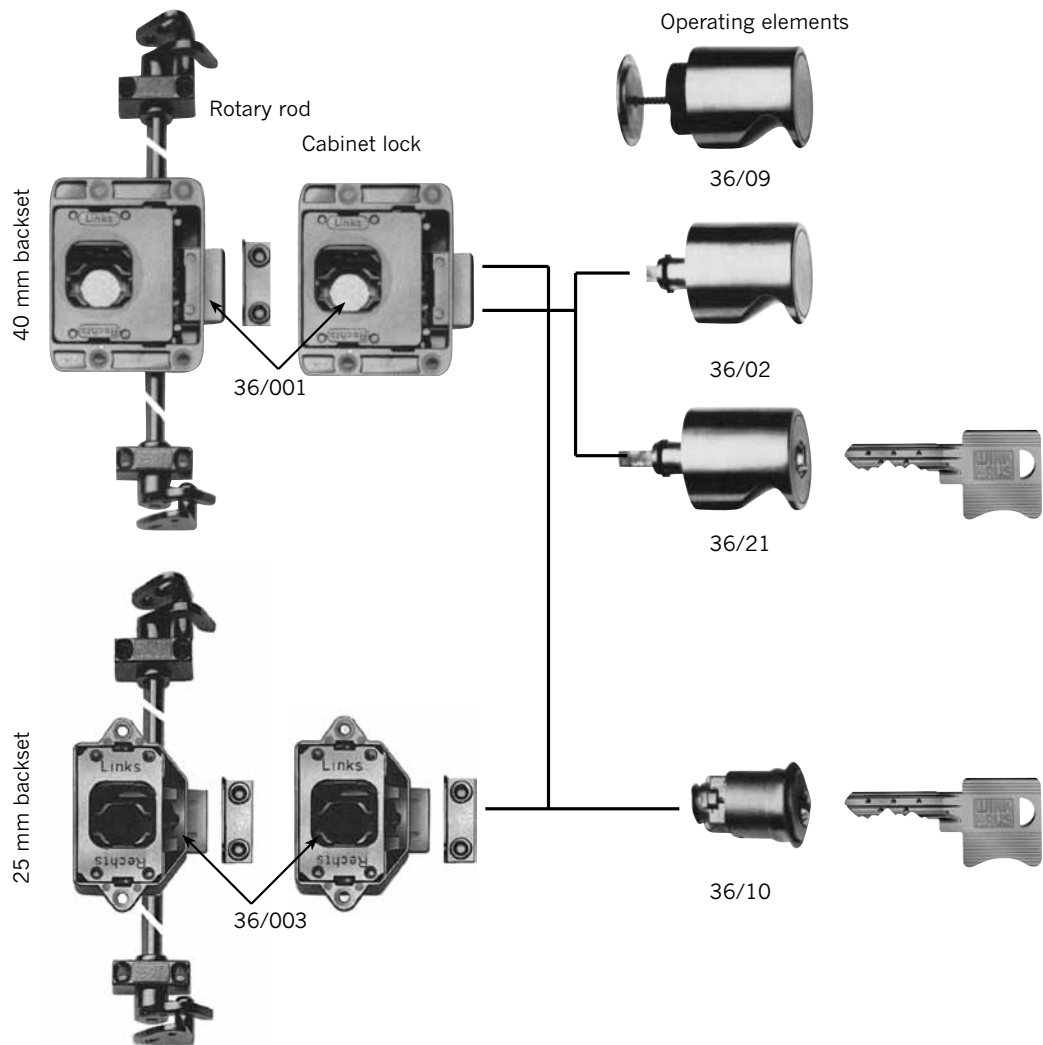
Metronic key



Subject to technical changes without notice.

# Lock range for furniture

Possible combinations Type 36/...



# Special cylinders

keyTec AZ, ZRV, ZRV6, Ti6, RAP, RAP+

## Profile half cylinder

### Type 02/1

Half cylinder with 2 x M3 threaded holes on the reverse side of the housing.

### Type 02 Z46

Half cylinder with 2 x M4 threaded holes on the reverse side of the housing; for lift and key switches of the company Schäfer.

## Profile knob cylinder

### Type 04 S1

Knob cylinder for HEWI plastic knob Ø 32 mm or Ø 52 mm.  
Knob axle for knob Ø 10 mm. HEWI knobs must be provided.

### Type 04 S7

Knob cylinder for motorised Fliether lock.

### Type 04 Z29

Knob cylinder with cam for motorised lock KESO MOZY-Eco.

### Type 04 Z37

Knob cylinder for motorised lock CEMO 2000 of the company CES or WILKA MZ02; B side available from 35 mm.

## Round cylinder

### Type 27 S3

External round cylinder for Gege dead lock (GEGE series 1270) and Wilka rim lock.

### Type 28 Z9

Round cylinder with microswitch for cam switch type V760 supplied by the company Kraus und Naimer.

## Profile double cylinder

### Type 51 Z1

Double cylinder with fixed R1 locking pinion, 10 teeth, width 9.5 mm.

### Type 51 Z3

Double cylinder without locking pins, with ball catch on A and B side.

### Type 51 Z9

Double cylinder with fixed R4 locking pinion, 18 teeth, width 9.5 mm.

### Type 51 Z10

Double cylinder for Biffar entrance doors with double cam. Only available in standard lengths.

### Type 51 Z11

Double cylinder with fixed R5 locking pinion, 10 teeth, width 7.5 mm.

## Measuring and testing cylinder (500 936 0)

To ascertain the length, free-to-turn function and switch paths for switch cylinders. Set consists of double and half cylinder.