

# LOCKING SYSTEMS CATALOGUE 2021



# GENERAL COMMENTS

---

## Cylinders and keys

### CYLINDER

All cylinders can be realised in the cylinder systems for which a price is indicated in the respective tables. An indicated price means "available". An indicated \* in the tables means "on request". This requires a technical clarification, please inform us before placing your order. The indicated price refers to the basic length of the cylinder.

The design of special cylinder requires a reduction of locking elements, at least with interior rim cylinders. Furthermore, we use for special cylinder types the 6-pin length grid also for 5-pin cylinders. An appropriate reference is indicated in the price table. Please ask us for further technical details.

**5-pin cylinders** = item no ...3...  
Basic length: 26,5 mm  
(including 31,5 mm without surcharge)

**6-pin cylinders** = item no ...4...  
Basic length: 30,5 mm

### KEYS

The price of each cylinder contains 3 individual keys. Additional keys are charged. In case of locking systems we produce and deliver **only the keys that are indicated in the matrix**. Therefore, please always indicate the required number of keys. Superior keys are not included in the cylinder price.

Refund of unneeded keys on request.

Please always kindly indicate, when ordering replacement cylinders for an existing master key suite, the quantity of individual differ keys that shall be delivered with the corresponding position(s). When no key quantities are indicated, the cylinders shall be delivered without keys.

When reordering cylinders or replacements to existing standard differs, cylinders will be delivered by default with 3 keys each. In case you require a different number of keys per cylinder, please indicate it in the order.



# THE GOOD FEELING OF SECURITY

---

Since 1924



## TRADITION AND INVENTIVE SPIRIT

ABUS is a global brand that has been owned by the family since the company was founded almost 100 years ago. Such a story can only be written on the basis of value-oriented, forward-looking entrepreneurship.

It all started in 1924 in the village of Volmarstein an der Ruhr. August Bremicker and his sons forged the first padlocks in the basement of his house. From the very beginning, he wanted to create products that would protect people's lives and property. So it became „August Bremicker und Söhne“ ABUS - the synonym for safety, and an internationally successful group of companies that creates trust with innovations for preventive safety technology.



# PRESENT WORLDWIDE, AT HOME IN GERMANY

## ABUS in the world



## SECURED ALL AROUND

We don't just want to give people in Germany the good feeling of security. Customers all over the world should experience what it means to trust ABUS. This is how we provide people on all continents with tailor-made security solutions. To achieve this, our German production facilities work closely with our international partners - on 25 Locations with 102 country locations. ABUS employs over 3,500 people worldwide.

Our security solutions for intelligent building security systems are used worldwide and range from door and window security systems to mechanical and electronic locking systems

to alarm systems and video surveillance. We secure buildings with an individually thought-out concept.

With our know-how, we develop the technology for tomorrow today. At the German development and production sites in Wetter, Rehe, Hege, Jahnsdorf and Affing intelligent security solutions and innovative products are created. With the help of strict material testing and simulations in modern test laboratories, the quality and durability of new developments are extensively tested before the products go into series production and reach all over the world.





# PRODUCT DIVERSITY MEETS PARTNERSHIP

---

Locking systems from ABUS



## **QUALITY "MADE IN GERMANY"**

As a specialist for master key systems in the ABUS Group, ABUS Pfaffenhain develops high-quality, innovative locking systems at its location in Jahnsdorf.

The production takes place consistently from the cylinder housing to the core pin "Made in Germany ". In this way we guarantee the highest product quality.

## **CUSTOM-MADE SOLUTIONS**

From a single-family house to a building complex: We offer single locks as well as small to very large master key systems and offer you the optimal solution for every security requirement. ABUS locking systems can be expanded at any time so that you can react flexibly to changes in the building structure.

Of course, you will also receive additional products for your locking system many years after the first order.

## **ALWAYS BY YOUR SIDE**

Our employees in the sales and field sales force support you with all questions regarding the security of your project, from the planning of the master key system to the selection of the right products.

Our customer service centre is at your side for special technical questions.

## **TRAINED WELL**

It is important to us to support you in your daily work and in sales because only together we can be successful in the market. We offer you tailor-made master key system training so that you can give your customers even more targeted advice and achieve even better sales results. Our experts in sales, locking system planning and calculation and cylinder assembly will be happy to support you.



# THE PERFECT CYLINDER FOR EACH APPLICATION

Diversity of cylinder types

## ONE KEY FOR YOUR PROPERTY

We have the right solution for every requirement. Regardless of whether you lock a security door, control an elevator or need another solution, our international range offers you the right product for every purpose.

For example, you lock the office door with the double cylinder. You can also control alarm systems with the same key thanks to the transponder in the key cap. In addition, you operate the parking barrier and can record your working hours at the same time. You can only reach sensitive areas with the elevator if your key has a locking authorization for the elevator cylinder. The knob cylinder will offer you the maximum comfort at home. With your key, you can also open the cam cylinder in the mailbox and the padlock on the basement door.

## YOUR ANCHOR

With the second key option, you can easily recode your cylinders if you lose a key. In this case, use the second key set to deactivate the lost and all previous keys. Alternatively, use the 2in1 master key system already during the construction phase: You install the master key system and use it as a building locking system. After the end of construction, hand over the second set of keys to the users, so that the first key set will be disabled and will not be able to operate the locks any more. We would be glad to advise you in detail on the various options.



Double Cylinders



Elevator Cylinders



Knob Cylinders



Locking inserts



Cam Cylinders



Oval Cylinders



Rim Cylinders



Padlocks





# SUITABLE FOR EACH DESIGN CONCEPT

---

Cylinder finishes

## **COLOUR-MATCHED**

Adapt the cylinder to your door fitting. Because even if this optically makes up the smallest part of the door, it looks more harmonious in the overall picture if all elements are colour-matched.

You can order special finishes for all master key systems and many cylinder types. The colour palette ranges from antique bronze and antique copper to various silver and gold tones to black.

You will find an excerpt of current colour finishes alongside. We are constantly expanding our range. If you shall require further finishes please contact us.



antique  
bronze



antique  
brass



antique  
copper



dark  
nickel



antique  
silver



matt  
black



silver  
black



nickel  
plated



polished  
brass



polished  
gold



satin  
chrome



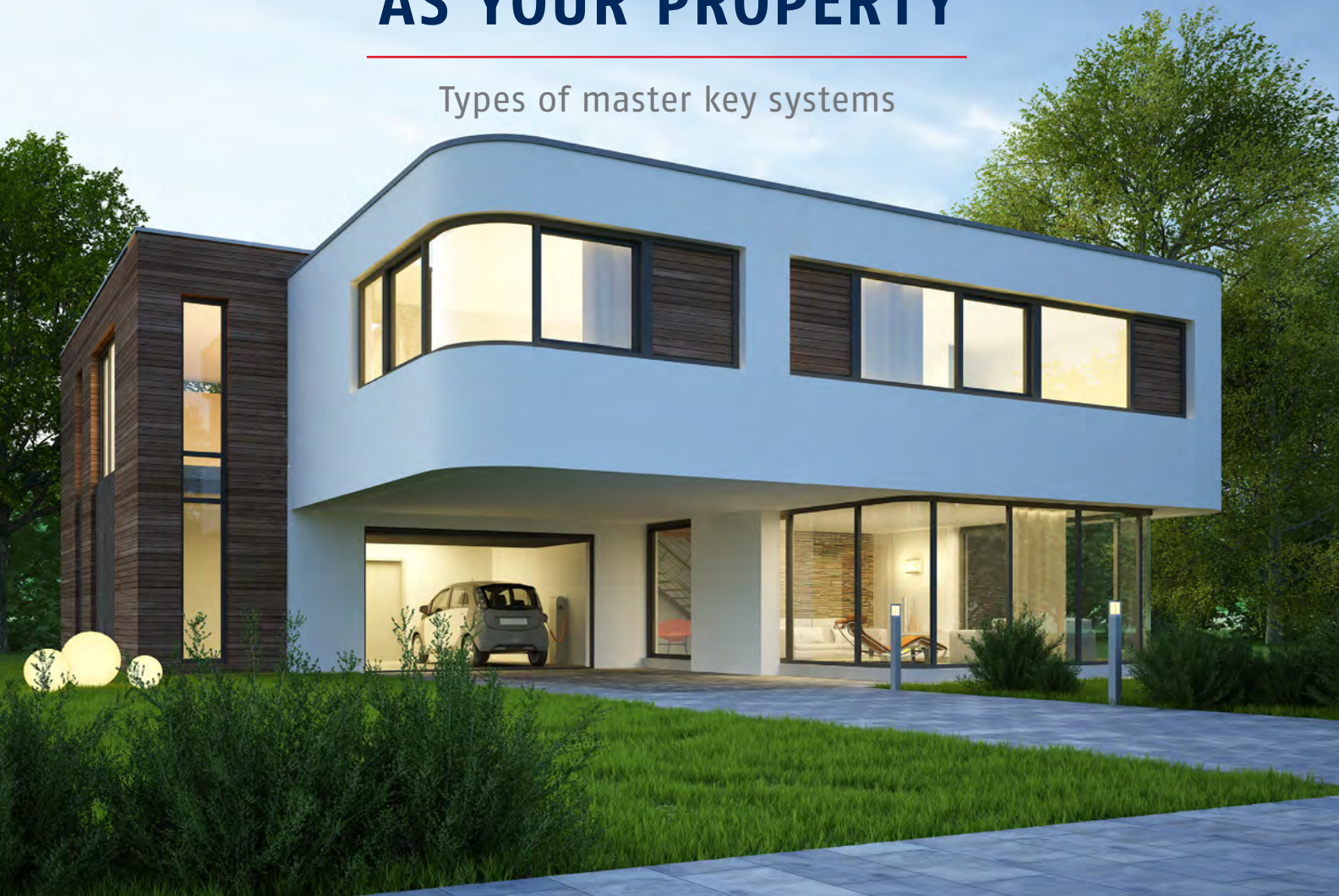
polished  
chrome



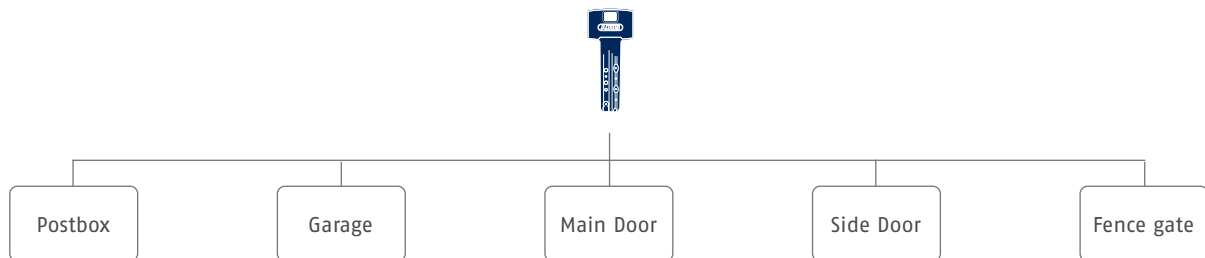


# AS INDIVIDUAL AS YOUR PROPERTY

Types of master key systems



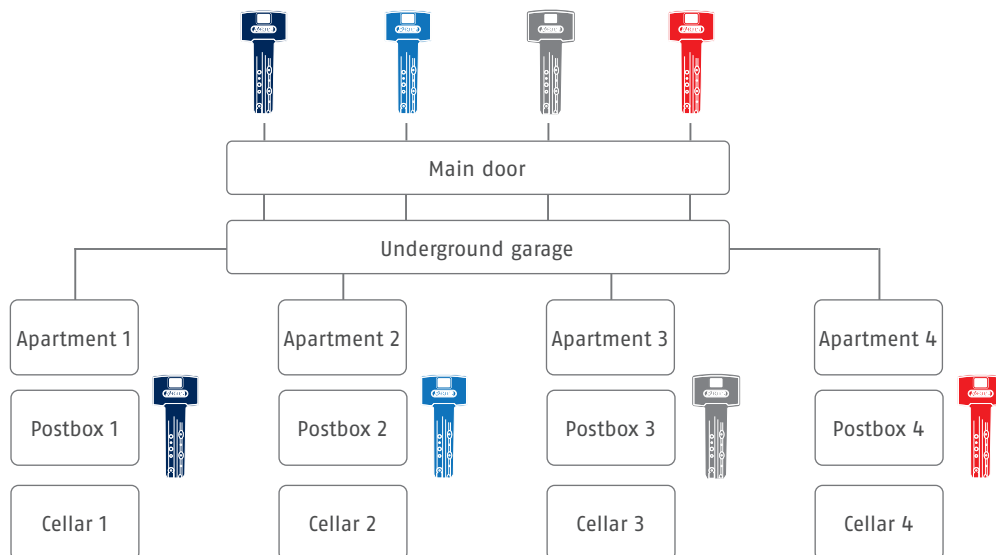
## KEYED ALIKE







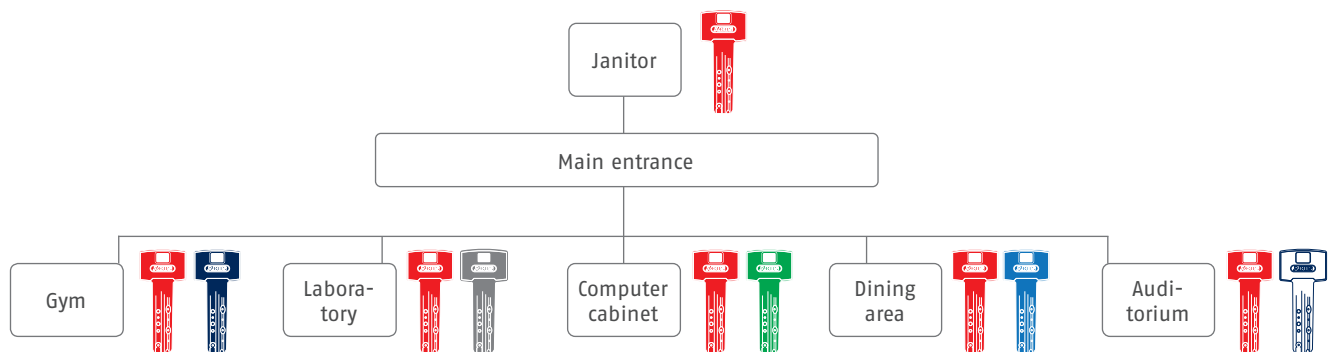
## CENTRAL KEYED SYSTEMS FOR APARTMENT BUILDINGS





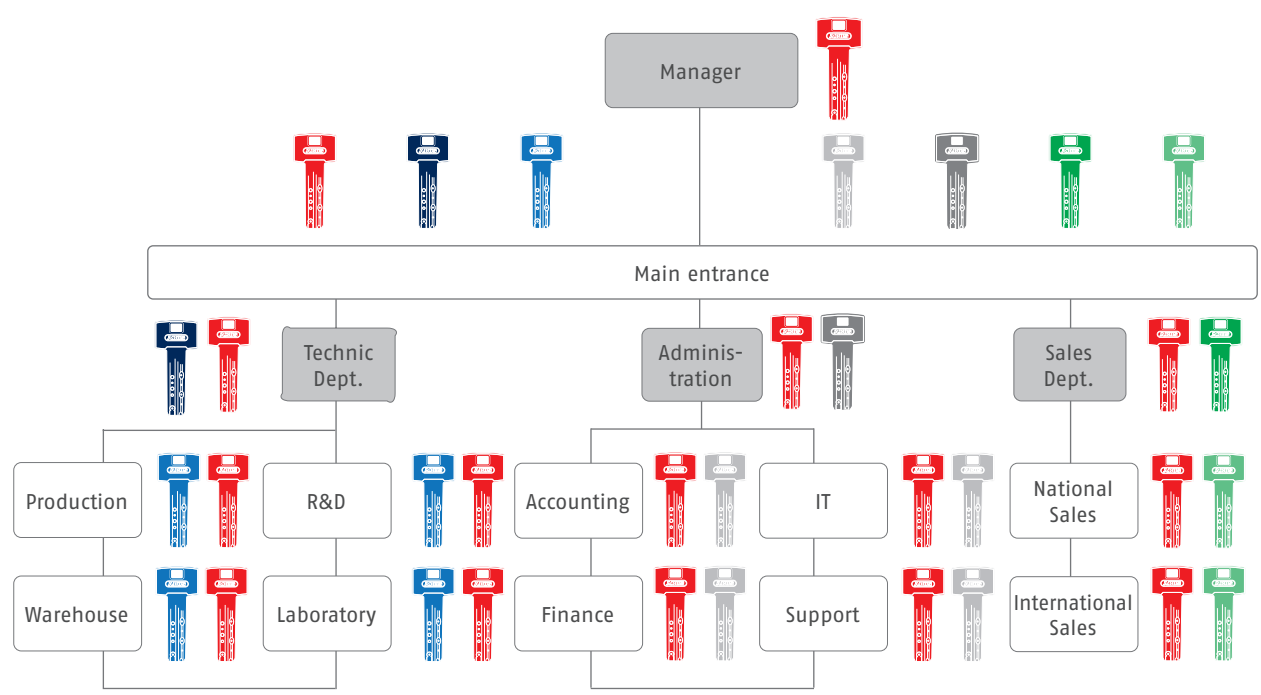


## MASTERKEYED SYSTEMS FOR THE EDUCATION SECTOR





## GRAND MASTERKEYED SOLUTIONS FOR COMMERCIAL & PUBLIC APPLICATIONS





# TRUSTED WORLDWIDE

## References

### SECURITY SOLUTIONS ALL AROUND THE WORLD

From single-family homes to schools and small businesses to hospitals, universities and prisons, customers trust us with their security needs and involve us in highly sensitive processes.

We offer customized master key systems for every building. Well-known references in Germany and abroad show industry-specific solutions and give a good feeling of security.



Messe Frankfurt, exhibition centre, Germany



Apartment Building Hamburg, Germany



Albrechtsberg castle, Germany



Gas Power Station Herdecke, Germany



Sonnenhof Rehab Clinic, Germany



Sparkasse bank Dillenburg, Germany



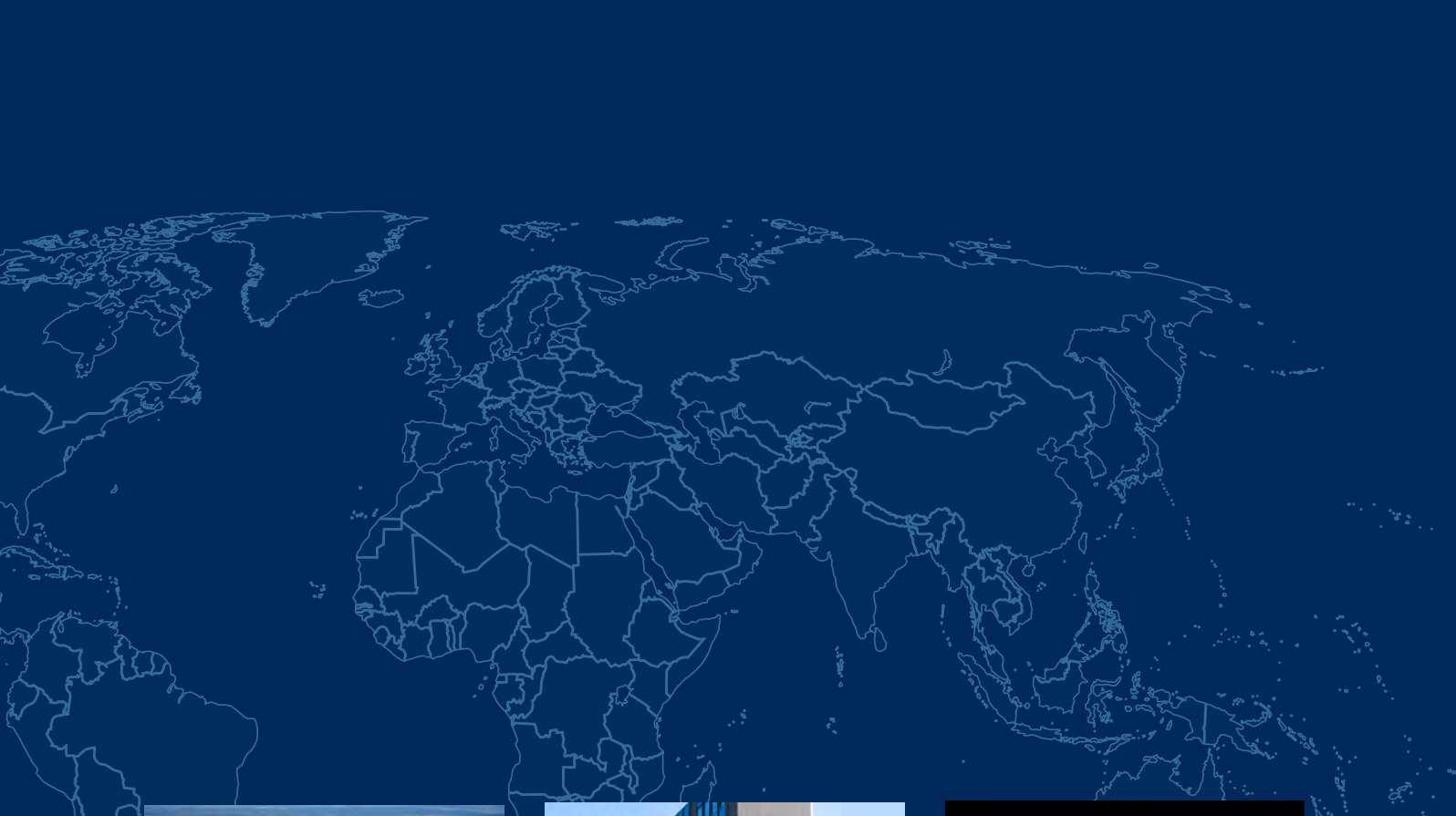
Bielefeld university, Germany



Golf- and Wellnesshotel Balmer See, Germany



Hostel Campus Tower Magdeburg, Germany



GVZ logistic centre,  
Germany



Barmer GEK Health Insurance,  
Germany



Elbe Office Building Magdeburg,  
Germany



Burj Al Arab Hotel,  
United Arab Emirates



Emirates Palace Hotel,  
United Arab Emirates



Al Zeina Housing Complex,  
United Arab Emirates



Sagrada Família Barcelona,  
Spain



School Collège Paul Langevin,  
France



Hospital Clermont-Ferrand,  
France



# ONLINE ORDERING SYSTEM WWW.OBS.ABUS.COM

---

Order and manage locking systems,  
view orders at any time and call up documents



## ONLINE ORDERING SYSTEM

Welcome to our ABUS online world!  
[www.obs.abus.com](http://www.obs.abus.com)  
 Order and manage master key systems, view order documents and track delivery dates.

The expansion of the online ordering system for your master key systems makes your business considerably easier. You can also benefit from our X-Press service for master key systems for selected systems and equipment variants.

- Register quickly and securely:
- Guaranteed data security through individual access profiles
  - Possibility to register several employees



>> OBS-login page

## MY ORDERS

View all orders and corresponding documents

Order date	Stock system	Order ref. / Commission	Order no.	Price	Net amount*	Planned date / shipping date	Status	Documents
Feb 2, 2020	Locking system Brevet 3020		NO2889/20					Order Confirmation Offer
Feb 3, 2020	Locking system Brevet 1520	(summing order Maintenance)	NO1812/20		200,80 €	Feb 16, 2020		Order Confirmation Delivery note
Jan 16, 2020	Cylinder with locking Stock #21		HS2840/20		14,20 €	Feb 21, 2020		Order Confirmation Delivery note
Jan 6, 2020	Locking system Brevet 2020	Stock #21	HE6417/20		19,55 €	Jan 16, 2020		Order Confirmation Delivery note
Jan 1, 2020	Stock goods Stock #20	Stock #20	601177/20		42,84 €	Jan 1, 2020		Order Confirmation Delivery note

\* plus VAT and postage and shipping costs if applicable  
 \*\* Orders that have recently been placed will only be visible in the overview once the order has been registered with ABUS. We ask you to be patient during this time.

>> My orders

## STATUS OF MY ORDERS

Track the status of orders at any time

- In preparation
- Dispatched
- In production
- Cancelled

## PAPERLESS MANAGEMENT OF DOCUMENTS

Get an overview of all your offers, order confirmations, delivery notes, invoices and credit notes.\*

\* Only available for direct customers.





# MASTER KEY SYSTEMS X-PRESS

## Requirements and terms of delivery

01

### Incoming orders:

- via Online-order system (OBS):  
[www.obs.abus.com](http://www.obs.abus.com)
- incoming orders weekdays  
until 12 p.m.\*

### Choose from several cylinder types (marked with ⚡ in OBS):

- Double cylinder until length 70/70 mm
- Half cylinder until length 10/70 mm
- Knob cylinder until length 70/70 mm
- Cam cylinder type 456-H24
- Padlock type 480 and VHS86TI

03

### Choose locking systems (marked with ⚡ in OBS):

- Factory profile
- Bravus.3000 and Bravus.2000
- Vitess.2000 and Vitess.1000
- Zolit.1000

02



\*To offer you our X-Press programme our team also must work "X-Press".  
Hence we kindly ask for your understanding that changes of your order cannot be included after receipt of order confirmation.



### Choose special features:

- Emergency function (GKUP)
- Free-wheel cam (PKUP)
- Cylinder finish Nickel (NI)

04

### Size and structure of master key system:

- Max. 50 cylinders per order
- Max. 5 central cylinders
- Max. 10 different group keys
- Max. 300 planned cylinder positions
- 20% reserve (planned by ABUS)
- Max. 250 keys per order

05



### Check your order:

- Press button „Check X-Press-delivery“
- Revise incompatible cylinders
- Revise mistakes in your order

06

### Our promise:

Dispatch on 3rd work day  
(Monday-Friday)





# LOCKING SYSTEMS

---

For the good feeling of security









# HIGH-END-SECURITY

---

Bravus MX Magnet



## HIGH- END SECURITY

The Bravus MX Magnet offers the highest level of security – thanks to the integrated magnet technology, SKG\*\*\* security certification as standard, technical copy protection, patent protection until 2038\* and trademark protection.

The independent SKG testing institute has certified the Bravus MX magnetic Euro profile cylinders in the highest security class, SKG\*\*\*. The magnetic cylinder also achieves the highest security level in the categories of lock security, durability, corrosion resistance, fire resistance and pick resistance.

## HIGH- END KEY COPY PROTECTION

The intelligent magnet technology and the patented Intellitec system on the key and in the cylinder effectively prevent the lock from being operated using unauthorised keys. As a result, the Bravus MX Magnet provides reliable protection against illegal 3D key copies.

The security card provides additional protection as this must be presented before additional cylinders and keys can be ordered.

## HIGH- END LOCKING CONVENIENCE

The Bravus MX Magnet keeps you on trend. The innovative shape of the key makes it almost unnoticeable in a trouser pocket. Even in the dark, you can open the door with ease using the convenient reversible key. The extra-thick cross-section key is super strong and would not snap on you. It is made of a tough, low-wearing alloy material to ensure long-term security.

## MAXIMUM FLEXIBILITY

Moving house? Installing a new door?  
Making changes to your organisational structure?  
No problem! The magnetic cylinder has a modular design and can be quickly lengthened or shortened to match the thickness of your new door, allowing you to react flexibly to changes.

## FACTS

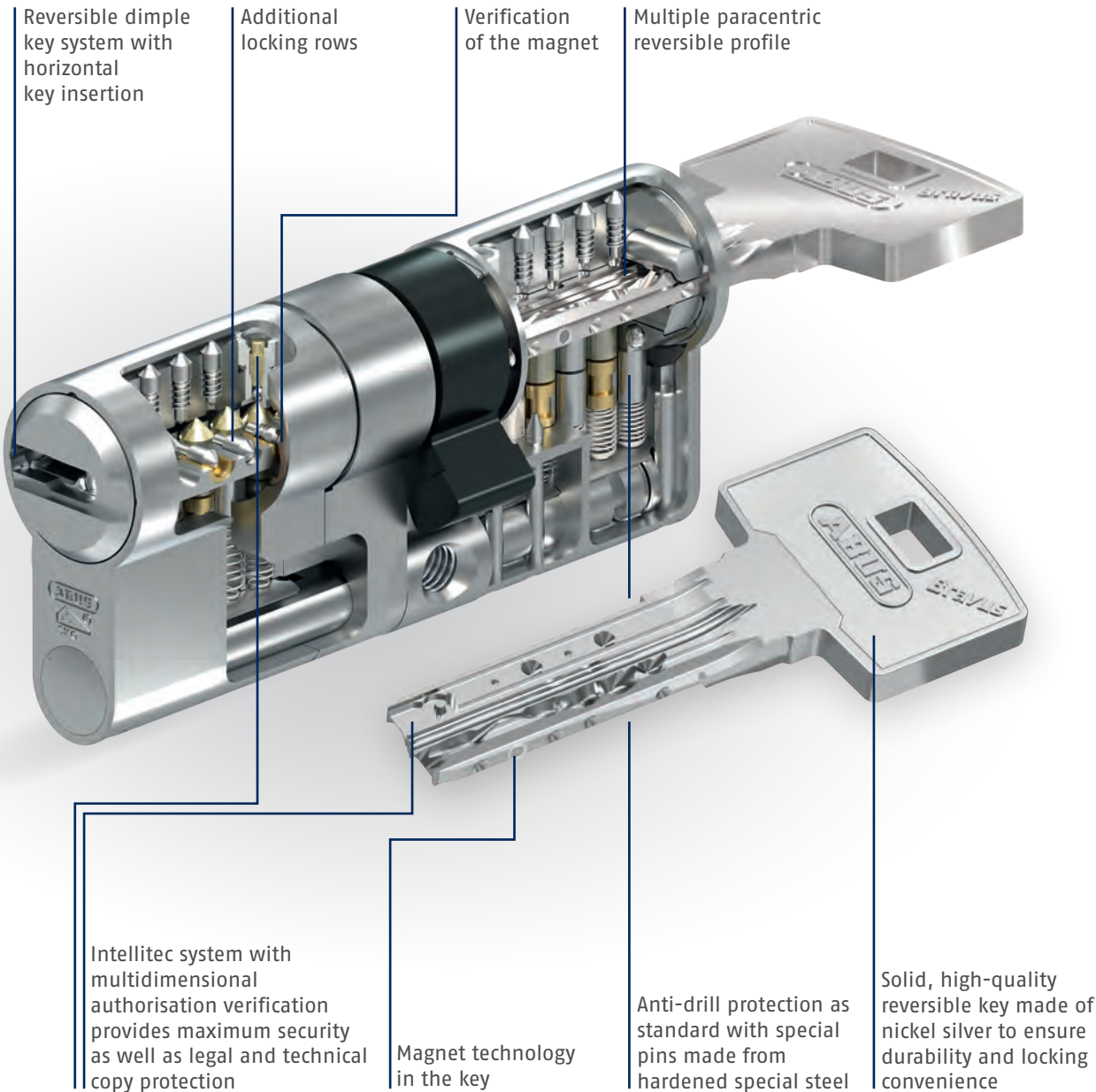
	Bravus.2500 MX	Bravus.3500 MX
1 <sup>st</sup> locking row (spring loaded)	✓	✓
2 <sup>nd</sup> locking row (spring loaded)	✓	✓
3 <sup>rd</sup> locking row		✓
Compatibility	3500 MX	2500 MX

\* pending, max. patent term to 2038



# BRAVUS.3500 MX

## In detail



# TECHNICAL DETAILS

## Overview

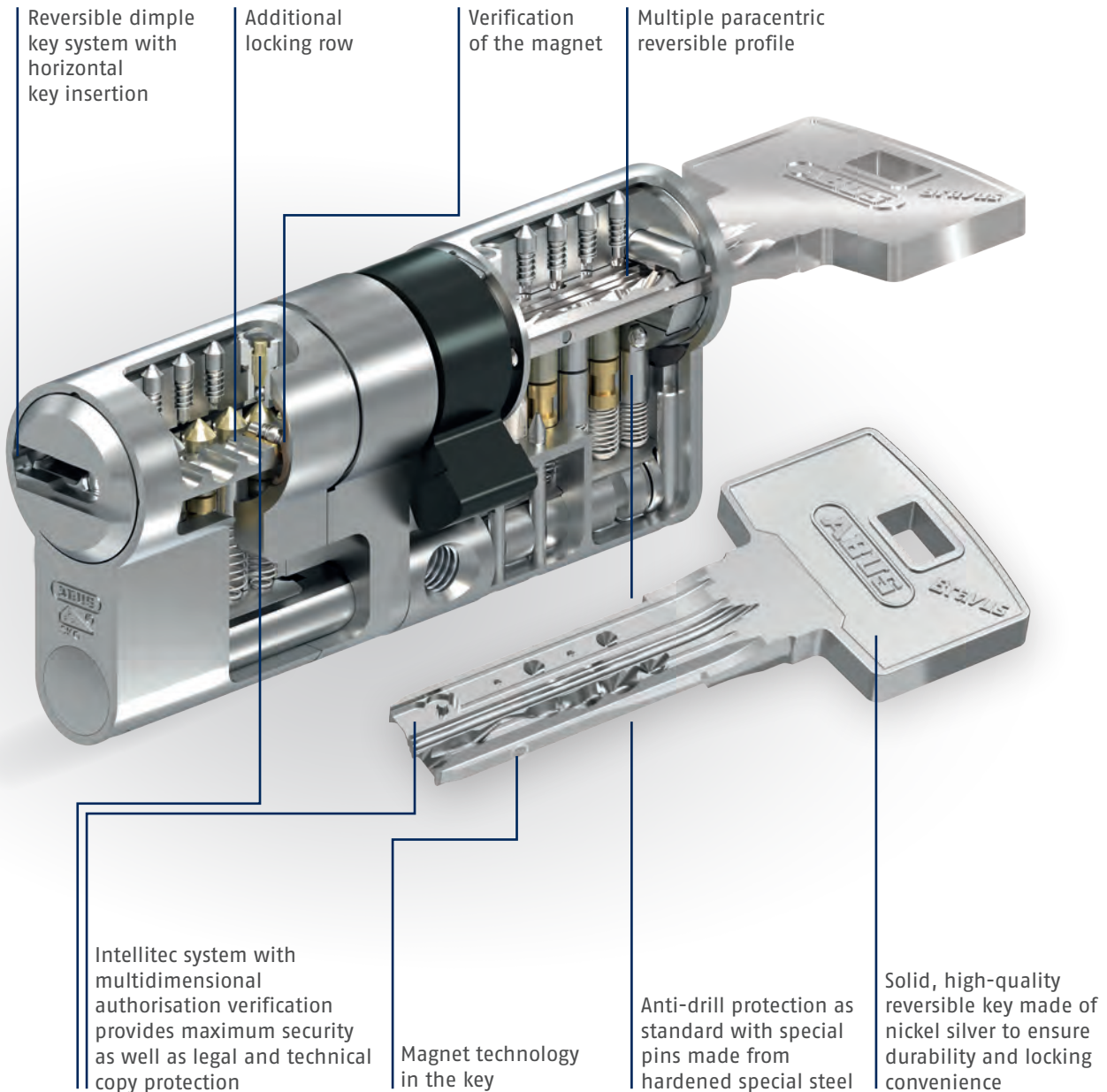
System:	Bravus.3500 MX Magnet
Key:	Multiple paracentric reversible key made from hard-wearing nickel silver, incredibly stable
Key insertion:	Horizontal
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intellitec system with multidimensional authorisation verification, magnet technology in the key and cylinder
Locking rows:	3
Total locking elements:	Up to 16
Modular design:	Standard for double, half and profile knob cylinders
Basic length:	30/30 mm in MX for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Grade B Grade D for Euro profile cylinders thanks to SKG*** certification
Fire resistance:	Grade B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards, SKG*** certification as standard for Euro profile cylinders, available for other cylinders on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* pending, max. patent term to 2038



# BRAVUS.2500 MX MAGNET

In detail



# TECHNICAL DETAILS

## Overview

System:	Bravus.2500 MX Magnet
Key:	Multiple paracentric reversible key made from hard-wearing nickel silver, incredibly stable
Key insertion:	Horizontal
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intellitec system with multidimensional authorisation verification, magnet technology in the key and cylinder
Locking rows:	2
Total locking elements:	Up to 10
Modular design:	Standard for double, half and profile knob cylinders
Basic length:	30/30 mm in MX for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Grade B Grade D for Euro profile cylinders thanks to SKG*** certification
Fire resistance:	Grade B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards, SKG*** certification as standard for Euro profile cylinders, available for other cylinders on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* pending, max. patent term to 2038



# NO COMPROMISE

---

Bravus



## MAXIMUM SECURITY

With its unique combination of maximum technical copy protection, patent protection until 2030\* and trademark protection, the Bravus system meets high security requirements. The multidimensional Intellitec verification system on the key and in the cylinder effectively prevents the lock from being operated by unauthorised keys. So Bravus provides reliable protection against illegal key copies and manipulation of the lock cylinder. The security card provides additional protection as this must be presented before additional cylinders and keys can be ordered.

## MORE CONVENIENT

The innovative shape of the key makes it almost unnoticeable in a pocket. And the convenient reversible key design makes opening doors as easy in the dark as it is in broad daylight. The modern, solid key never snaps and is made from a high-quality material for long-term security.

## AS INDIVIDUAL AS YOUR PROPERTY

From a small property to a massive building complex, ABUS offers custom master key systems based on a sophisticated modular kit. Create your own security solution specific to your building, with options for everything from cylinder types and colours to additional special features. Every cylinder is tailor-made to suit your doors and design concept. And we ensure that your master key system meets your needs in terms of hierarchies and usage conditions. Every user can even have their own individual locking authorisations.

## FUTURE- PROOF INVESTMENT

The Bravus master key system can be expanded at any time, giving you maximum flexibility through developments and changes. We can deliver expansion products for your locking system many years after installation.

High-quality raw materials, high-precision manufacturing and our many years of experience mean that you can rest assured in the knowledge that your building is secure. And the fact that the lock cylinders are developed and produced in Germany guarantees premium quality and a long service life.

## FACTS

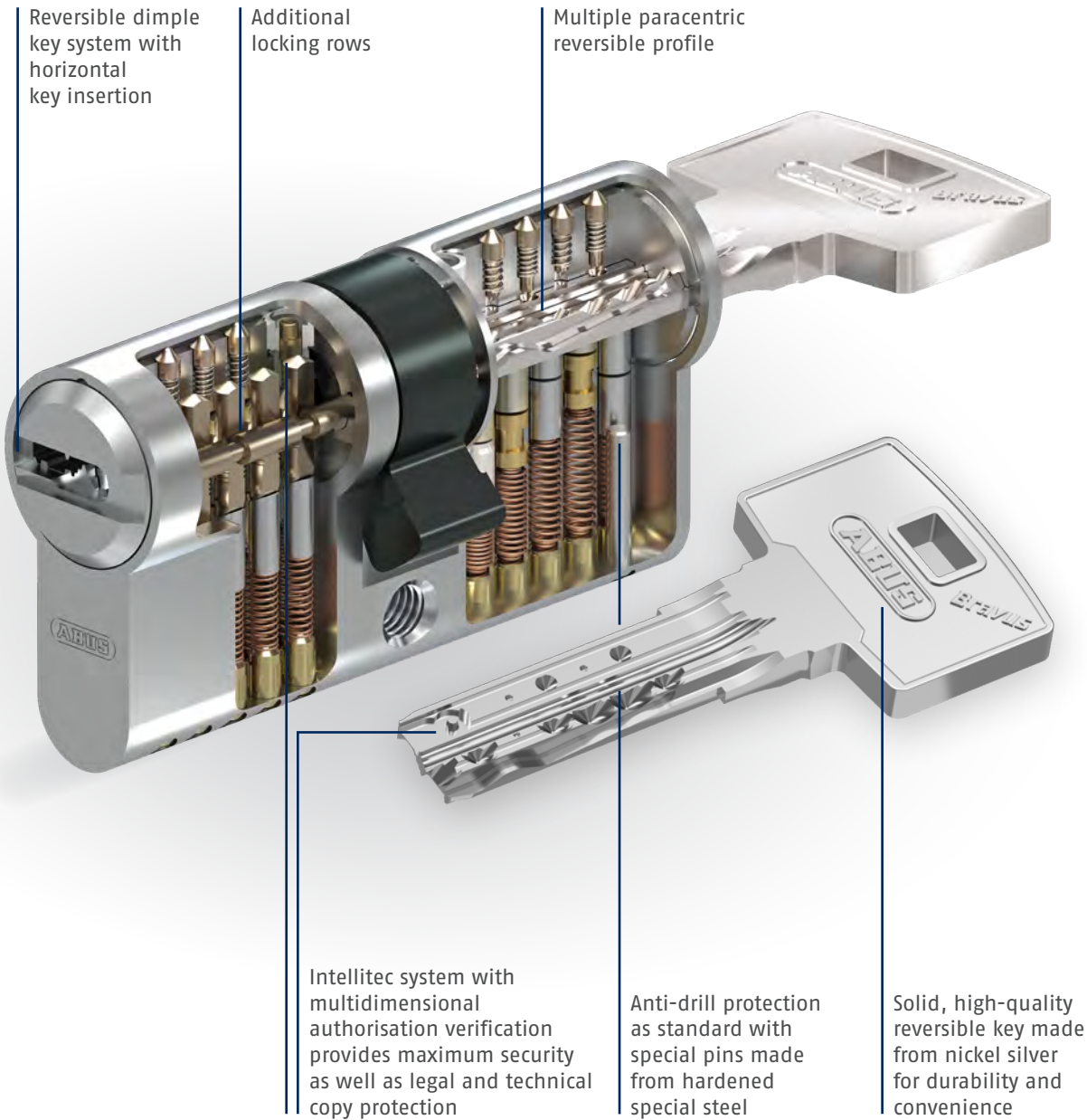
	Bravus.1000	Bravus.2000	Bravus.3000	Bravus.4000
1 <sup>st</sup> locking row (spring loaded)	✓	✓	✓	✓
2 <sup>nd</sup> locking row (spring loaded)		✓	✓	✓
3 <sup>rd</sup> locking row			✓	
3 <sup>rd</sup> locking row (spring loaded)				✓
Compatibility	2000 + 3000 2000 + 4000	1000 + 3000 1000 + 4000	1000 + 2000	1000 + 2000

\* max. patent term 2030



# BRAVUS.4000

In detail



# TECHNICAL DETAILS

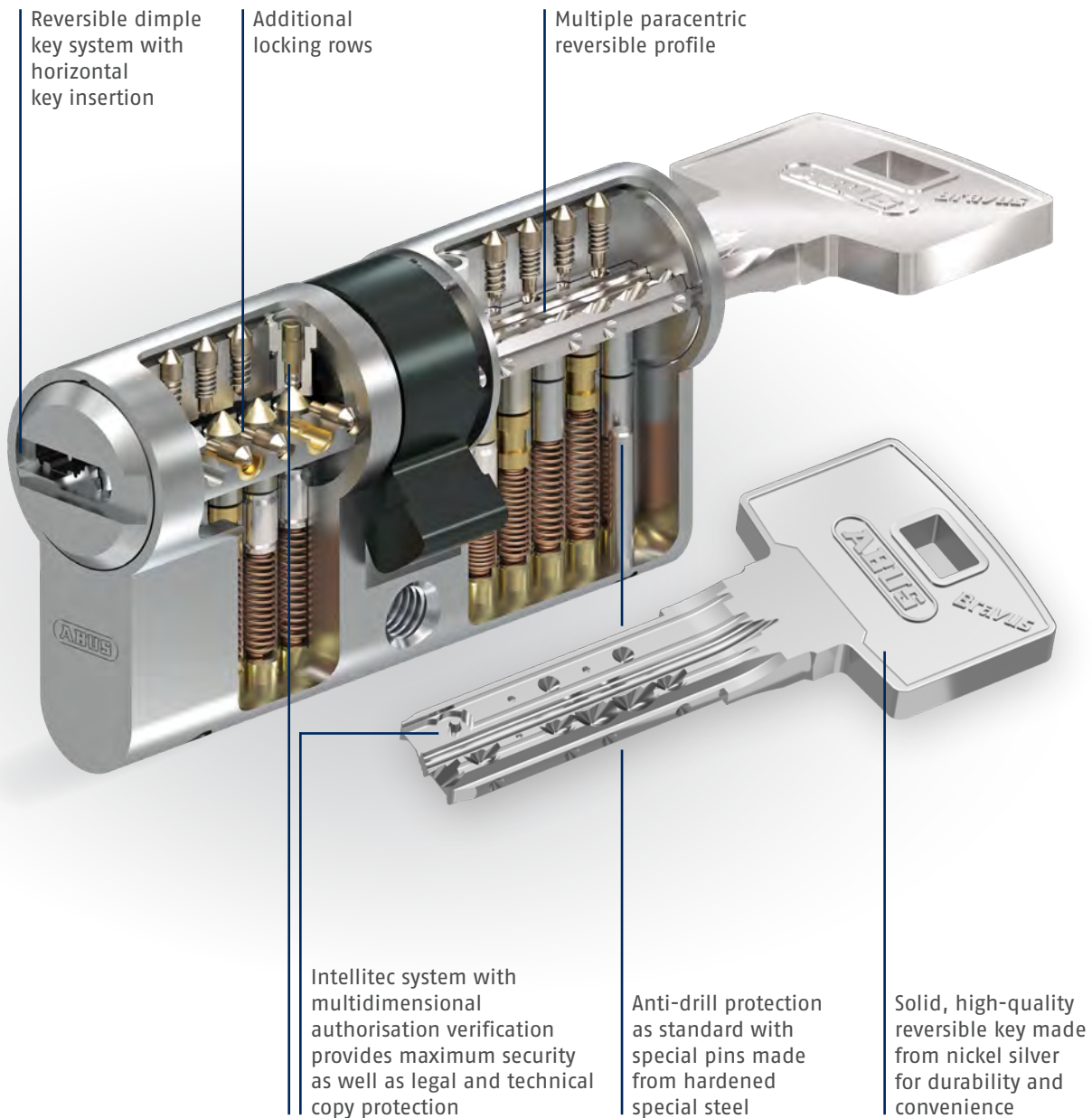
## Overview

System:	Bravus.4000
Key:	Multiple paracentric reversible key made from hard-wearing nickel silver, incredibly stable
Key insertion:	Horizontal
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intellitec system with multidimensional authorisation verification
Locking rows:	3
Total locking elements:	Up to 15
Modular design:	Optionally available
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG*** and VdS, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* max. patent term to 2030

# BRAVUS.3000

In detail





# TECHNICAL DETAILS

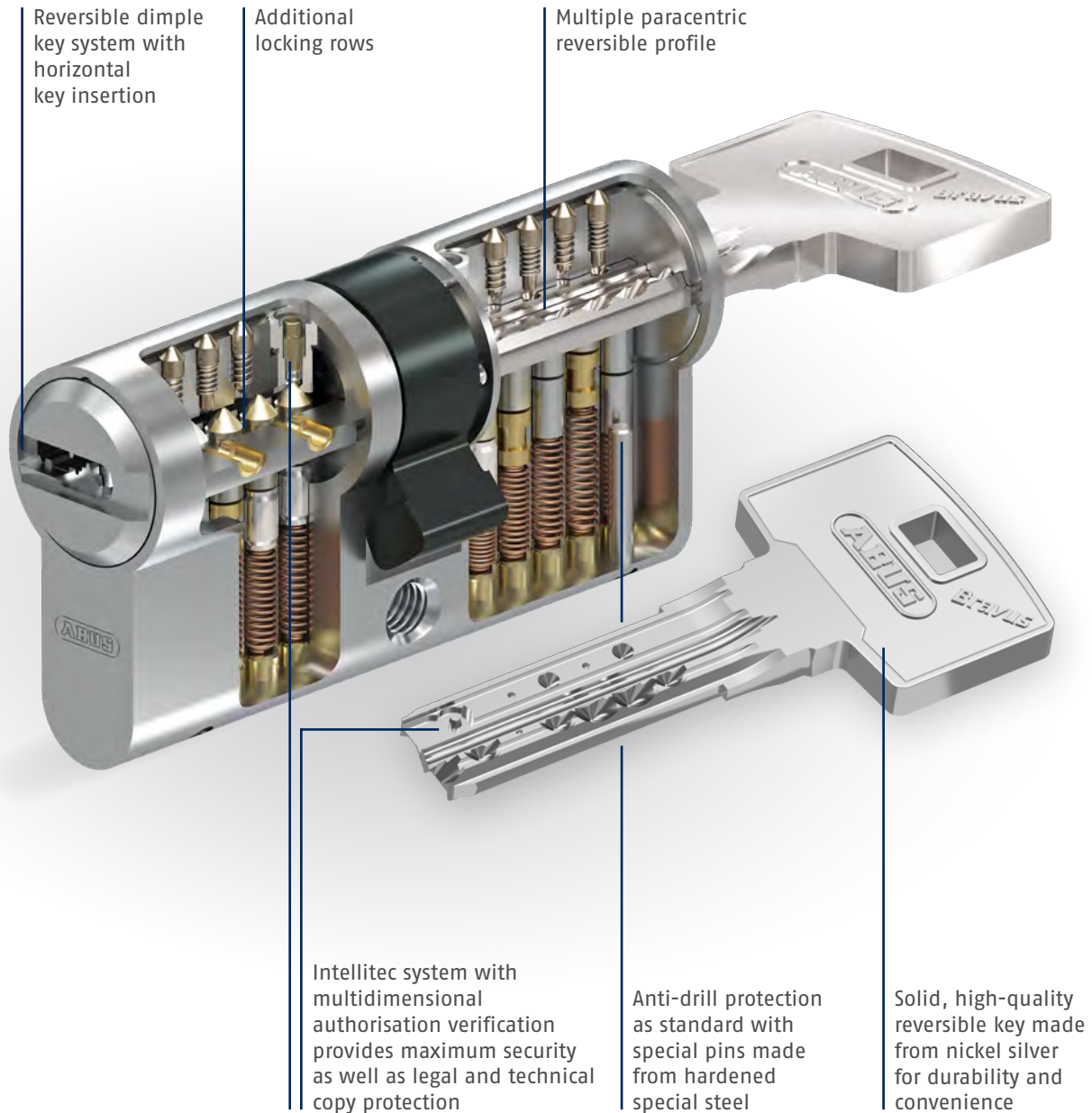
## Overview

System:	Bravus.3000
Key:	Multiple paracentric reversible key made from hard-wearing nickel silver, incredibly stable
Key insertion:	Horizontal
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intellitec system with multidimensional authorisation verification
Locking rows:	3
Total locking elements:	Up to 16
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG*** and VdS, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* max. patent term to 2030

# BRAVUS.2000

In detail





# TECHNICAL DETAILS

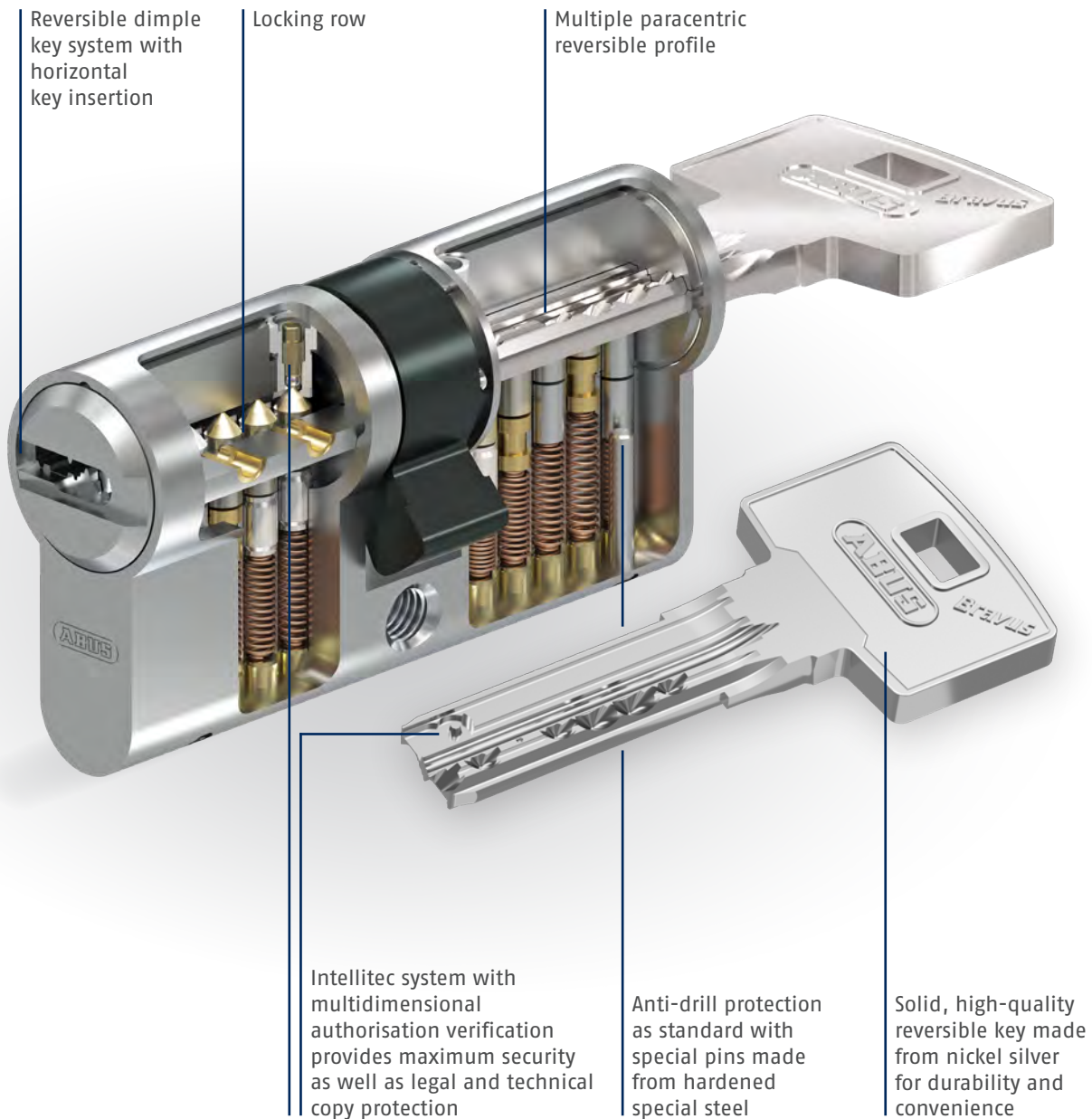
## Overview

System:	Bravus.2000
Key:	Multiple paracentric reversible key made from hard-wearing nickel silver, incredibly stable
Key insertion:	Horizontal
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intellitec system with multidimensional authorisation verification
Locking rows:	2
Total locking elements:	Up to 10
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG*** and VdS, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* max. patent term to 2030

# BRAVUS.1000

In detail





# TECHNICAL DETAILS

## Overview

System:	Bravus.1000
Key:	Multiple paracentric reversible key made from hard-wearing nickel silver, incredibly stable
Key insertion:	Horizontal
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intellitec system with multidimensional authorisation verification
Locking rows:	1
Total locking elements:	6
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG***, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* max. patent term to 2030

# FEEL SECURE AT HOME

---

Vela





## PROTECTING YOUR PRIVACY

The innovative Inspect unit inside the cylinder verifies the key's locking authorisation to prevent the door from being accessed with illegal copies. The Inspect system and the multiple paracentric reversible profile also prevent manipulation of the lock cylinder. The security card provides additional protection as it must be presented before additional cylinders and keys can be ordered. So you can feel secure in your own home.

## ONE KEY FOR YOUR ENTIRE HOME

Use just one key to open your building door, front door, letterbox, cellar and outbuildings. Lock your front door easily at night with a knob cylinder by simply turning the knob. Choose a cylinder colour that matches your existing door fittings and building concept. You can even set up individual locking authorisations for each user.

## MORE CONVENIENT

The innovative shape of the key makes it almost unnoticeable in a pocket. The modern, attractively shaped reversible key conveniently locks all doors. It is made of high-quality material for long-term security.

## FUTURE- PROOF INVESTMENT

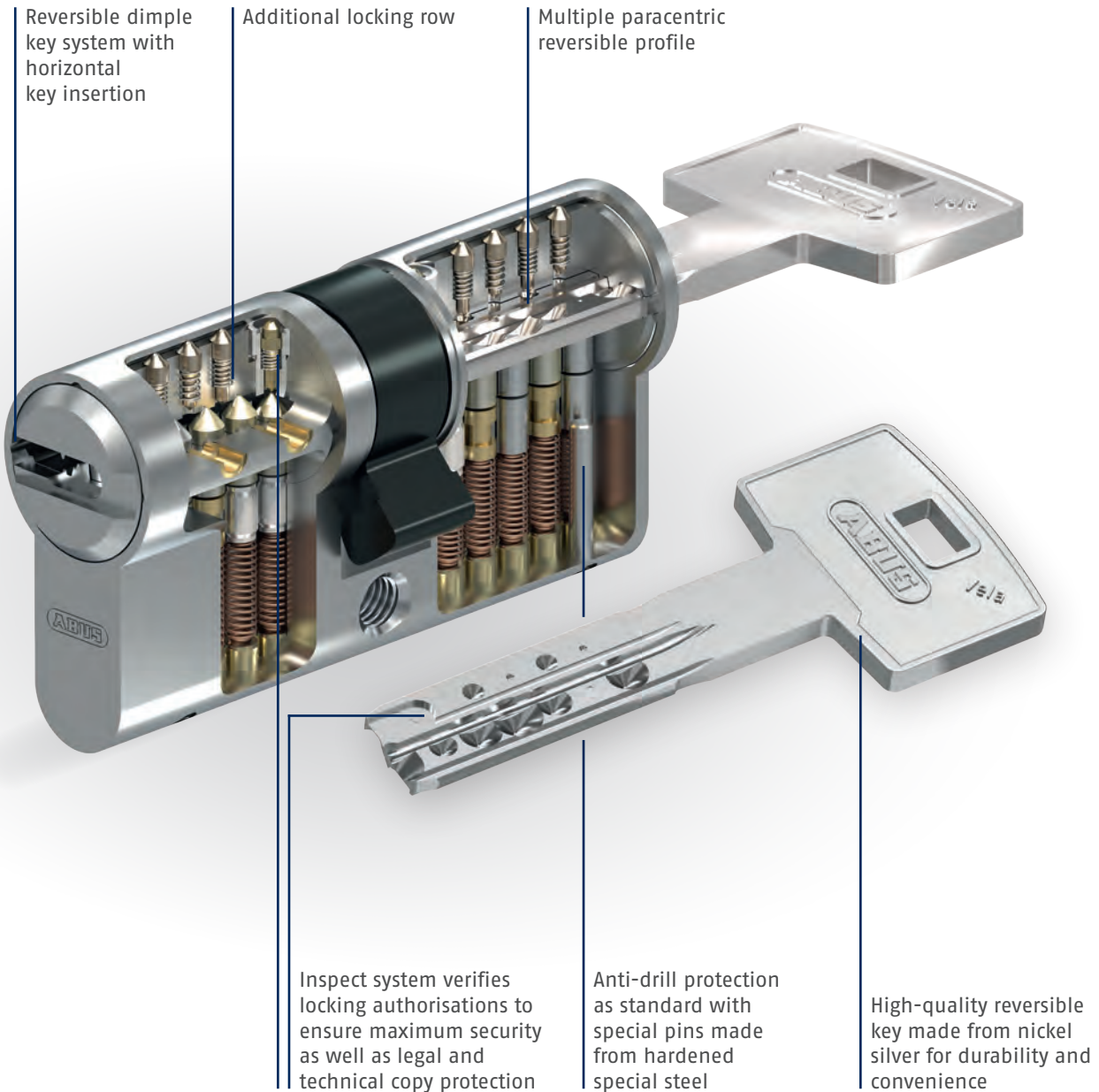
The Vela system can be expanded at any time. We can deliver expansion products for your locking system years after installation. So you can flexibly react to changes.

High-quality raw materials, high-precision manufacturing and our many years of experience mean that you can rest assured in the knowledge that your building is secure. And the fact that the lock cylinders are developed and produced in Germany guarantees premium quality and a long service life.

\* max. patent term to 2030

# VELA.2000

In detail



# TECHNICAL DETAILS

## Overview

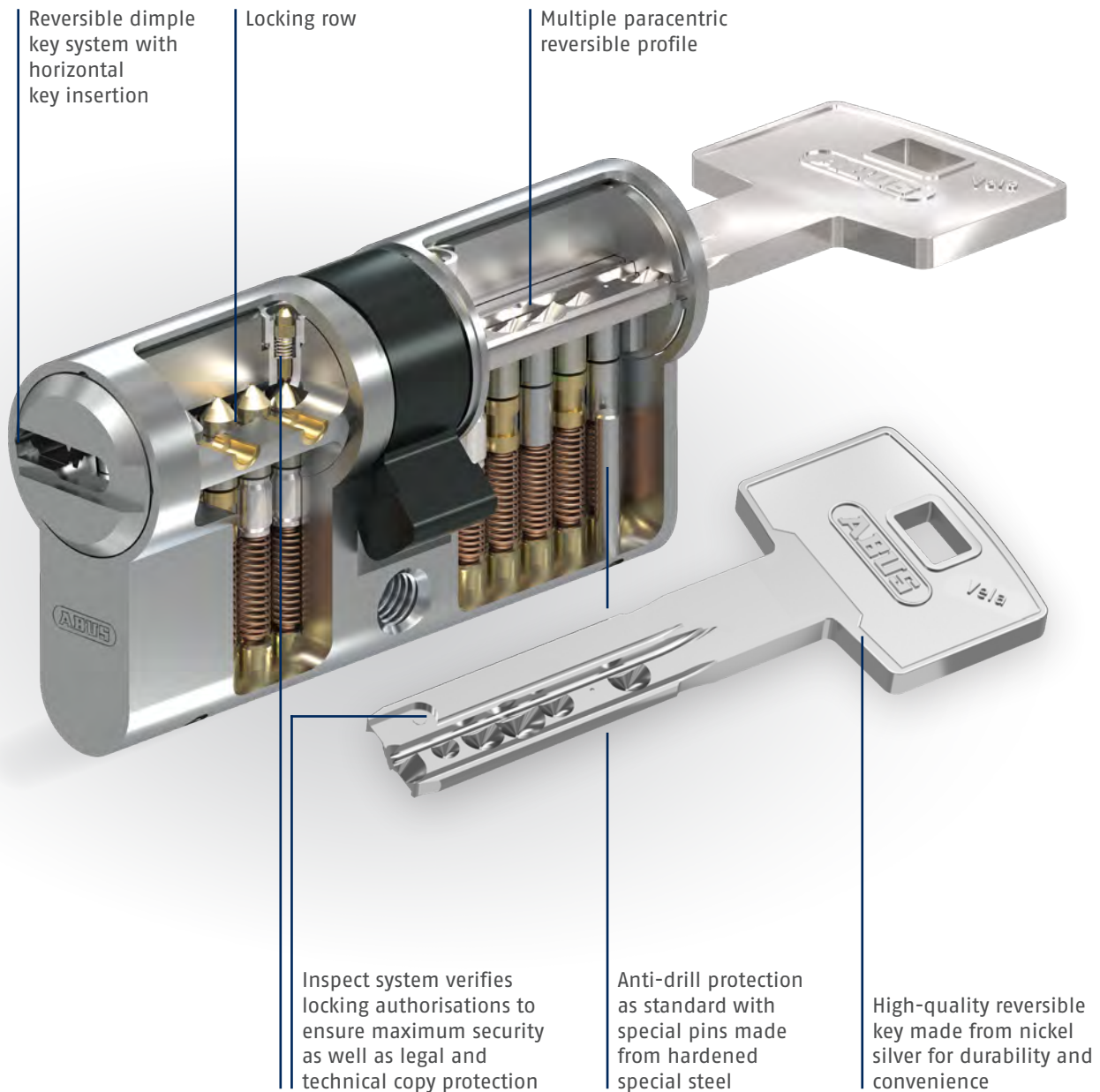
System:	Vela.2000
Key:	Multiple paracentric reversible key made from hard-wearing nickel silver
Key insertion:	Horizontal
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Inspect system
Locking rows:	2
Total locking elements:	10
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG***, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* max. patent term to 2030



# VELA.1000

In detail



# TECHNICAL DETAILS

## Overview

System:	Vela.1000
Key:	Multiple paracentric reversible key made from hard-wearing nickel silver
Key insertion:	Horizontal
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Inspect system
Locking rows:	1
Total locking elements:	6
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG***, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* max. patent term to 2030

# THE NEW STANDARD

---

X12R





## EASY TO USE THANKS TO REVERSIBLE KEY

The X12R reversible key system with horizontal key insertion offers users maximum convenience, as the state-of-the-art key has dimples and no sharp-edged cuts. The X12R cylinder is fitted with an emergency function as standard, meaning that if a key is left in one side of the lock, the door can still be locked from the other side with a second key.

## SECURITY THAT EXTENDS FAR BEYOND THE STANDARD

The X12R Euro profile cylinders are certified to SKG\*\* as standard. This means that the system meets high requirements regarding the attack resistance of the cylinder. The patented\* stop pin inside the cylinder also verifies that the key has the correct authorisation, thereby ensuring legal and technical copy protection. Special anti-drill pins made from hardened special steel prevent cylinder tampering. The security card provides additional protection as this must be presented before additional cylinders and keys can be ordered.

## AVAILABLE VERSIONS

The X12R system is available in all standard cylinder types as a coded single-differ lock and as a service cylinder. Keyed alike cylinders can be re-ordered for a lock at any time.

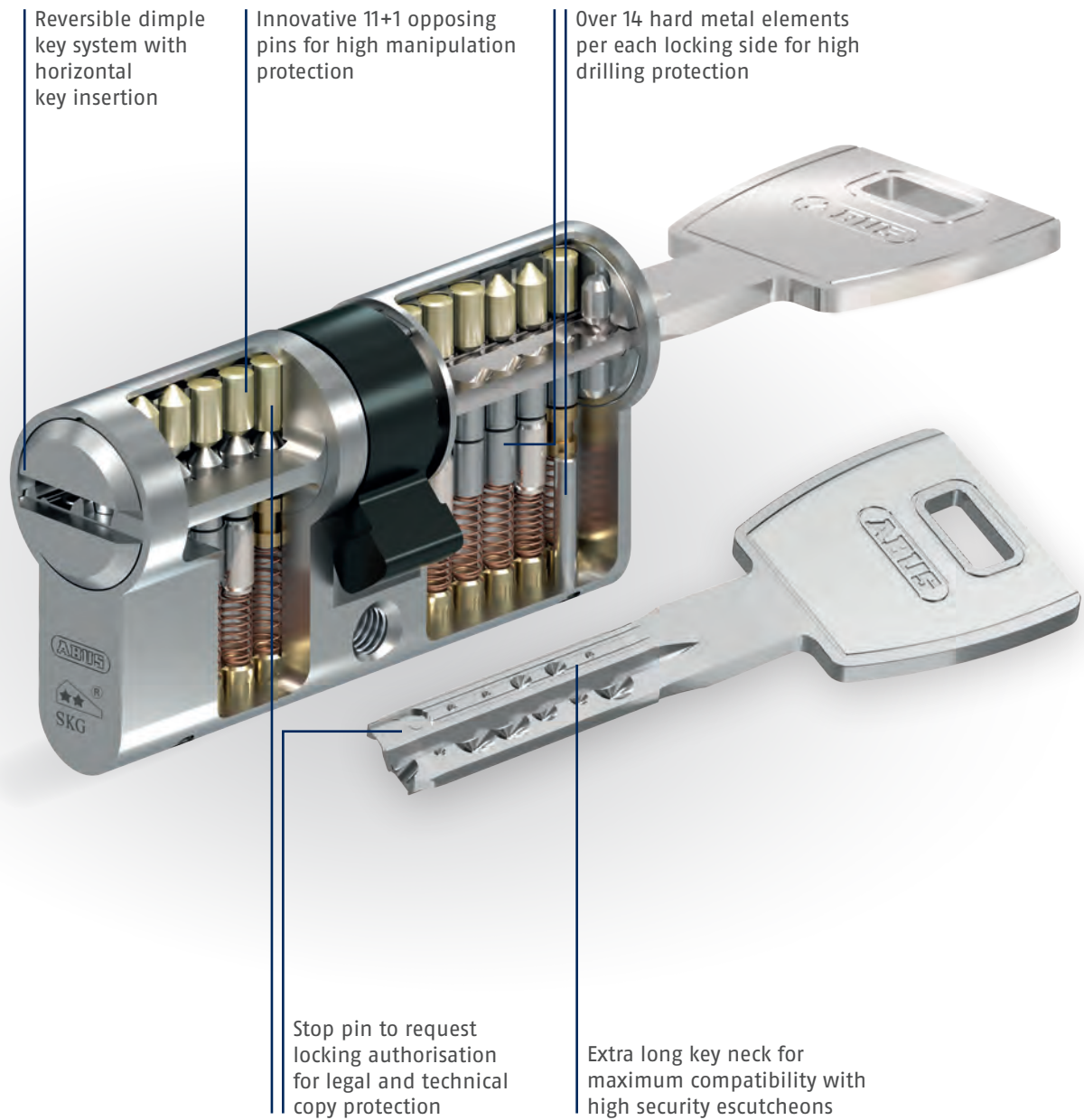
## CYLINDER EQUIPMENT

Coded single-differ locks are delivered with 5 keys as standard. Double cylinders are always equipped with an emergency function (GKUP). Service cylinders are delivered without key blanks.

\* max. patent term to 2030

# SYSTEM X12R

In detail



# TECHNICAL DETAILS

## Overview

System:	X12R
Standard features:	SKG**; increased anti-drill protection, emergency function
Key:	Multiple paracentric reversible key made from nickel-plated brass
Key insertion:	Horizontal
Patent protection:*	✓
Trademark protection:	✓
Copy protection:	Internal key stopper
Locking rows:	2
Total locking elements:	12
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments up to a maximum of 70/70 mm
Security card:	✓
Key related security:	Class 5 in accordance with DIN EN 1303, details available on request
Attack resistance:	Grade B
Fire resistance:	Grade B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303; SKG**
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* max. patent term to 2030



# WITH SECURITY AND DESIGN

---

P12RPS



## REVERSIBLE KEYS WITH A WIDE RANGE OF COLOURS

The reversible dimple key system P12RPS offers its users high locking comfort because the modern key is equipped with dimples and does not have sharp-edged cuts.

The advantage of the standard emergency function is that the door can be opened even though the keys are already inserted from one side of the cylinder. Additionally you can choose your preferred colour of the key cap from a wide range. At a glance you can see which key belongs to whom.

## SECURITY FAR ABOVE THE STANDARD

The locking system P12RPS fulfils the high requirements regarding the attack resistance of the cylinder because they are standardly equipped with SKG\*\* certificate. Moreover the patented\* stop pin requests the locking permission inside the cylinder and therefore ensures the legal and technical copyright. Due to special drill protection pins made of hardened steel as well as the standard pre-snap function the manipulation of the cylinder is more difficult. The security card offers an additional protection. Only after presentation cylinders and keys can be ordered.

## AVAILABLE VERSIONS

The system P12RPS is available as individual locking and service cylinder for all common cylinder types. Keyed-alike cylinders to existing cylinders can easily be reordered. Additionally the design key caps are available in 12 appealing colours.

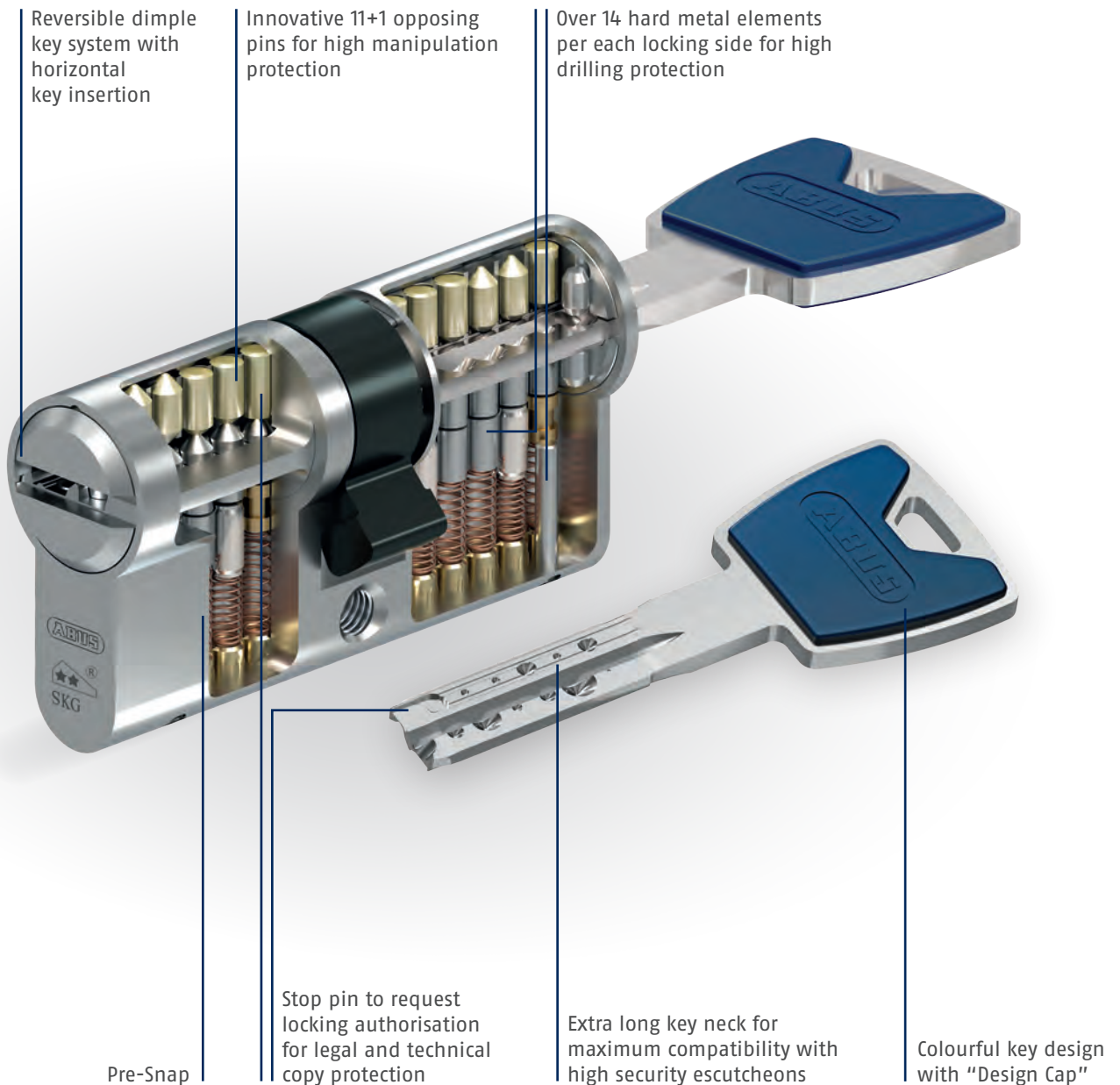
## CYLINDER EQUIPMENT

As standard we deliver individual lockings with 5 keys and the Design Cap in sapphire blue. All cylinders are equipped with pre-snap feature as standard. Double cylinders are always delivered with emergency function (GKUP). Service cylinders will be delivered without key blanks.

\* max. patent term to 2030

# SYSTEM P12RPS

In detail





# TECHNICAL DETAILS

## Overview

System:	P12RPS
Standard features:	SKG**; increased anti-drill protection, pre-snap, emergency function
Key:	Multiple paracentric reversible key made from nickel-plated brass with Design Cap
Key insertion:	Horizontal
Patent protection:*	✓
Trademark protection:	✓
Copy protection:	Internal key stopper
Locking rows:	2
Total locking elements:	12
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments up to a maximum of 70/70 mm
Security card:	✓
Key related security:	Class 5 in accordance with DIN EN 1303, details available on request
Attack resistance:	Grade B
Fire resistance:	Grade B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303; SKG**
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* max. patent term to 2030

# SIMPLY SECURE

---

Vitess



## HIGH SECURITY

The Vitess locking system features technical copy protection, patent protection until 2034\* and trademark protection to ensure it meets your high security requirements. The innovative Intop system and special profile design provide reliable protection against illegal key copies and manipulation effectively. The door will only open if the Intop systems in the cylinder and key match. The security card provides additional protection as this must be presented before additional cylinders and keys can be ordered.

## TAILORED SOLUTION

The Vitess intelligent locking system is precisely tailored to suit your individual needs. ABUS offers a complete, sophisticated modular kit so you can design a security solution specific to your building, customised down to the cylinder type, colour and special features. The master key system is tailor-made to meet your individual requirements. You can even create individual locking authorisations for each user.

## QUALITY "MADE IN GERMANY"

High-quality raw materials, high-precision manufacturing and our many years of experience mean that you can rest assured in the knowledge that your building is secure. The fact that the lock cylinders are developed and produced in Germany guarantees premium quality and a long service life.

## READY FOR THE FUTURE

The Vitess system can be expanded at any time, giving you maximum flexibility through developments and changes. We can deliver expansion products for your locking system many years after installation.

## FACTS

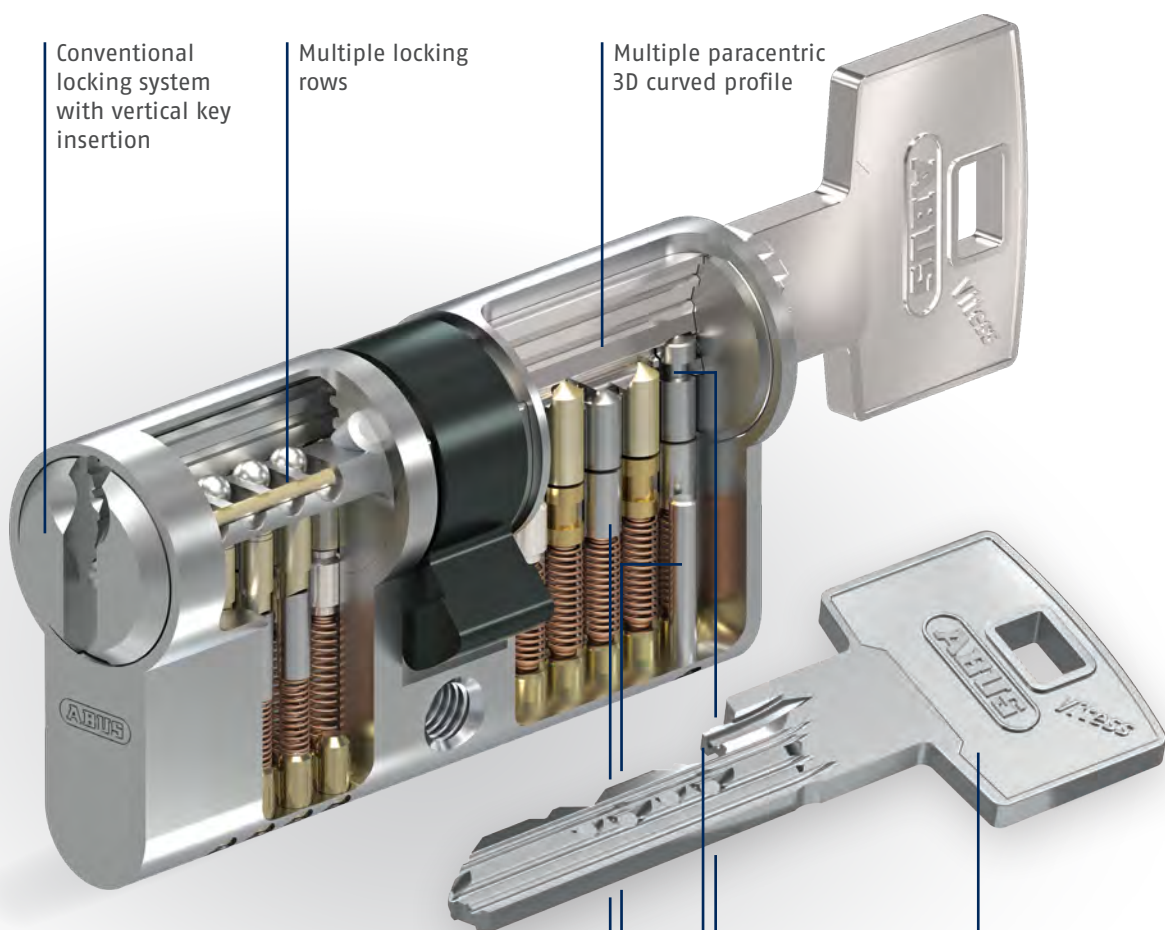
	Vitess.1000	Vitess.2000	Vitess.4000
1 <sup>st</sup> locking row (spring loaded)	✓	✓	✓
2 <sup>nd</sup> locking row		✓	
2 <sup>nd</sup> locking row (spring loaded)			✓
Compatibility	2000 or 4000	1000	1000

\* pending, max. patent term to 2034



# VITESS.4000

In detail



Conventional locking system with vertical key insertion

Multiple locking rows

Multiple paracentric 3D curved profile

Anti-drill protection as standard with special pins made from hardened special steel

Intop system provides effective security as well as legal and technical copy protection

Very stable, high-quality and long-lasting keys made from nickel silver

# TECHNICAL DETAILS

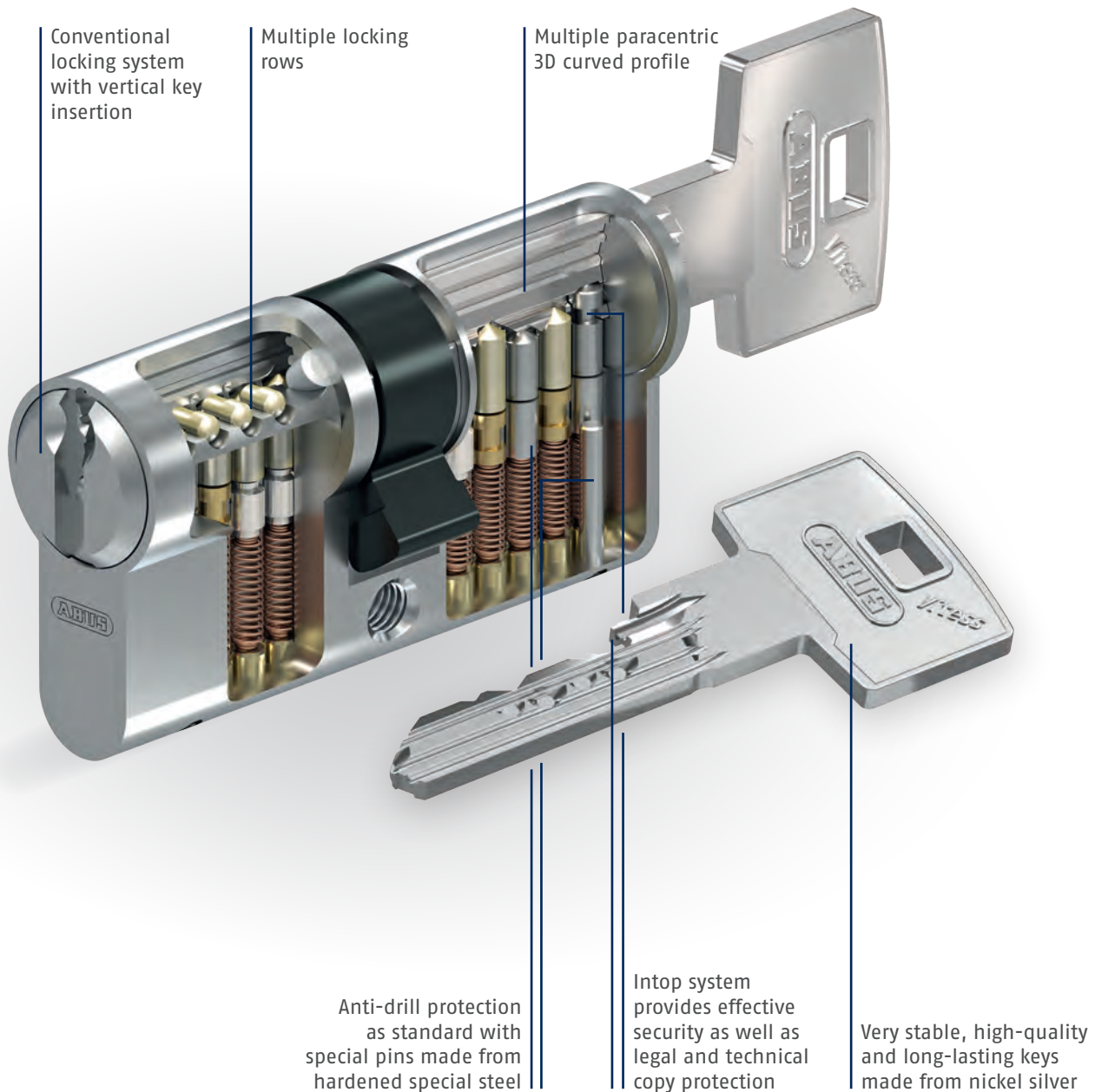
## Overview

System:	Vitess.4000
Key:	High cross-section key with 3D-curved multiple paracentric profile, made from hard-wearing nickel silver
Key insertion:	Vertical
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	The Intop system provides technical copy protection by verifying locking authorisation both inside the cylinder and on the key
Locking rows:	2
Total locking elements:	6 + 4 spring loaded coding pins
Modular design:	Optionally available in the Vitess.1000
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG***, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* pending, max. patent term to 2034

# VITESS.2000

In detail





# TECHNICAL DETAILS

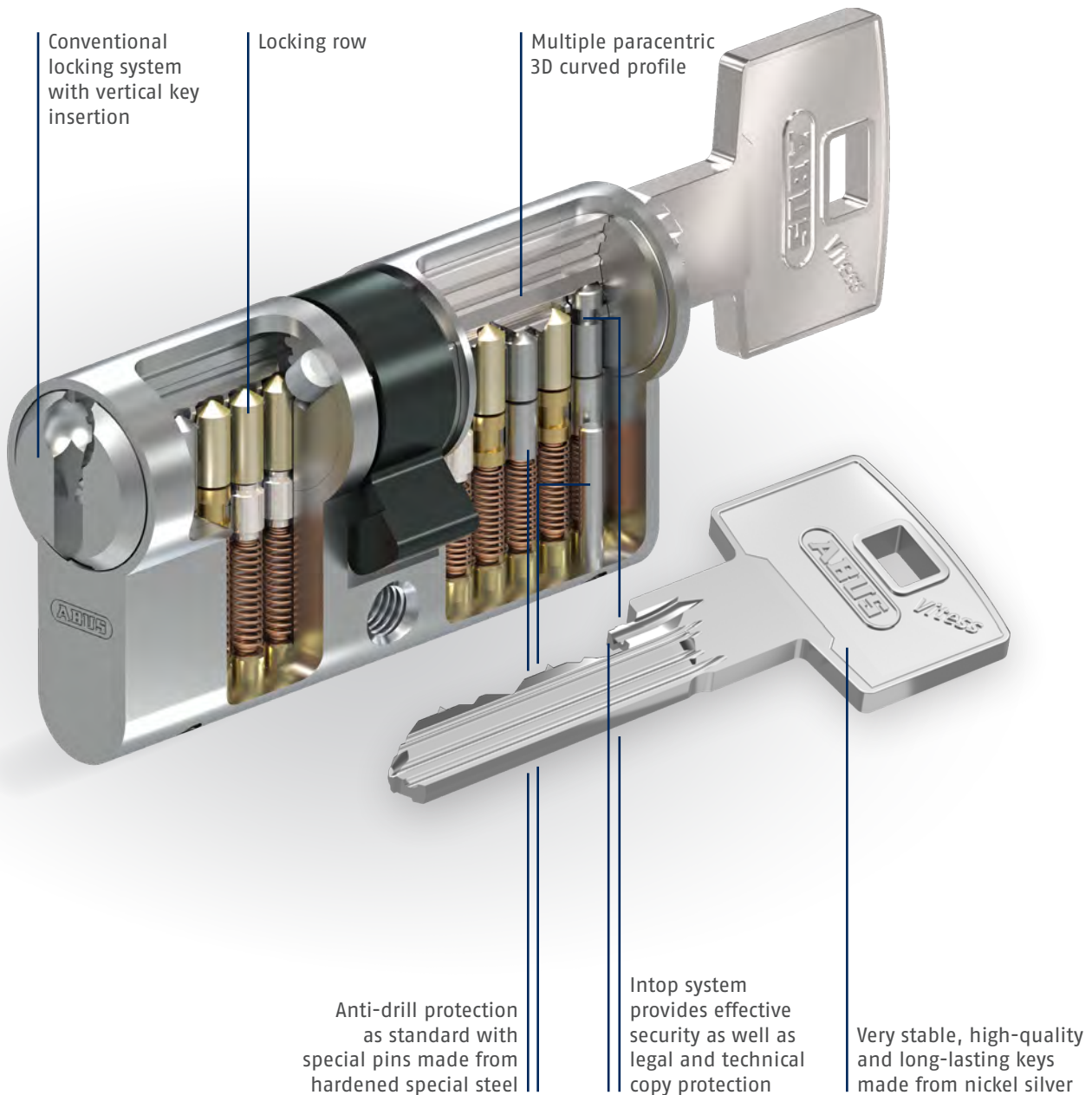
## Overview

System:	Vitess.2000
Key:	High cross-section key with 3D-curved multiple paracentric profile, made from hard-wearing nickel silver
Key insertion:	Vertical
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	The Intop system provides technical copy protection by verifying locking authorisation both inside the cylinder and on the key
Locking rows:	2
Total locking elements:	Up to 10
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG***, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* pending, max. patent term to 2034

# VITESS.1000

In detail



# TECHNICAL DETAILS

## Overview

System:	Vitess.1000
Key:	High cross-section key with 3D-curved multiple paracentric profile, made from hard-wearing nickel silver
Key insertion:	Vertical
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	The Intop system provides technical copy protection by verifying locking authorisation both inside the cylinder and on the key
Locking rows:	1
Total locking elements:	6
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG***, details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* pending, max. patent term to 2034



# THE SECURE ALL-ROUNDER

---

Zolit



## HIGH SECURITY

The Zolit locking system features technical copy protection, patent protection until 2034\* and trademark protection to ensure it meets your security requirements. The innovative Intop system protects against illegal key copies and access. The door will only open when the Intop systems in the cylinder and key match. The security card provides additional protection as this must be presented before additional cylinders and keys can be ordered.

## TAILORED SOLUTION

The Zolit intelligent locking system is precisely tailored to suit your individual needs. ABUS offers a complete, sophisticated modular kit so you can design a security solution specific to your building, customised down to the cylinder type, colour and special features. The master key system is tailor-made to meet your individual requirements. You can even create individual locking authorisations for each user.

## QUALITY "MADE IN GERMANY"

High-quality raw materials, high-precision manufacturing and our many years of experience mean that you can rest assured in the knowledge that your building is secure. The fact that the lock cylinders are developed and produced in Germany guarantees premium quality and a long service life.

## READY FOR THE FUTURE

The Zolit system can be expanded at any time, giving you maximum flexibility through developments and changes. We can deliver expansion products for your locking system many years after installation.

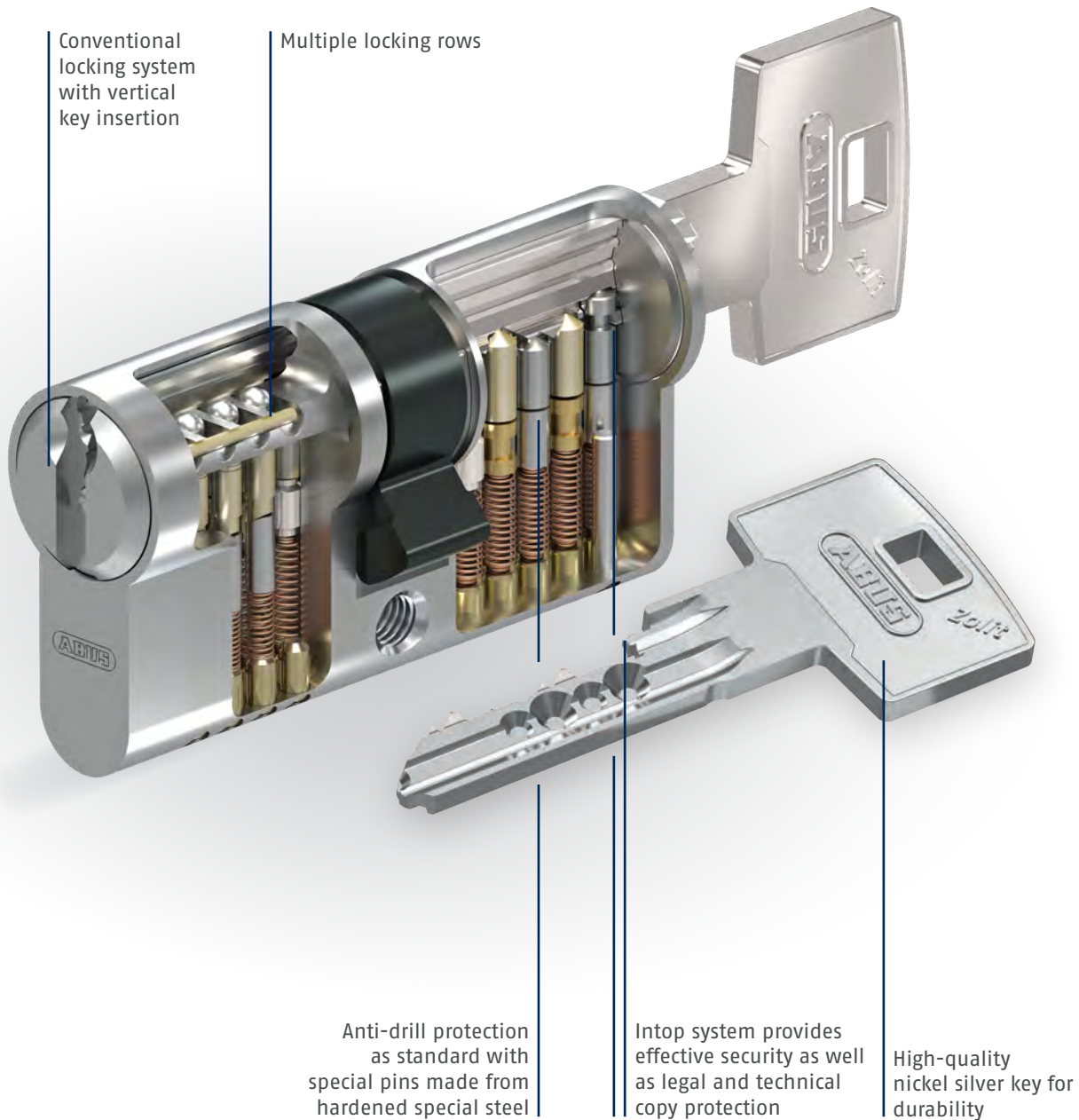
## FACTS

	Zolit.1000	Zolit.2000	Zolit.4000
1 <sup>st</sup> locking row (spring loaded)	✓	✓	✓
2 <sup>nd</sup> locking row		✓	
2 <sup>nd</sup> locking row (spring loaded)			✓
Compatibility	2000 or 4000	1000	1000

\* pending, max. patent term to 2034

# ZOLIT.4000

In detail





# TECHNICAL DETAILS

## Overview

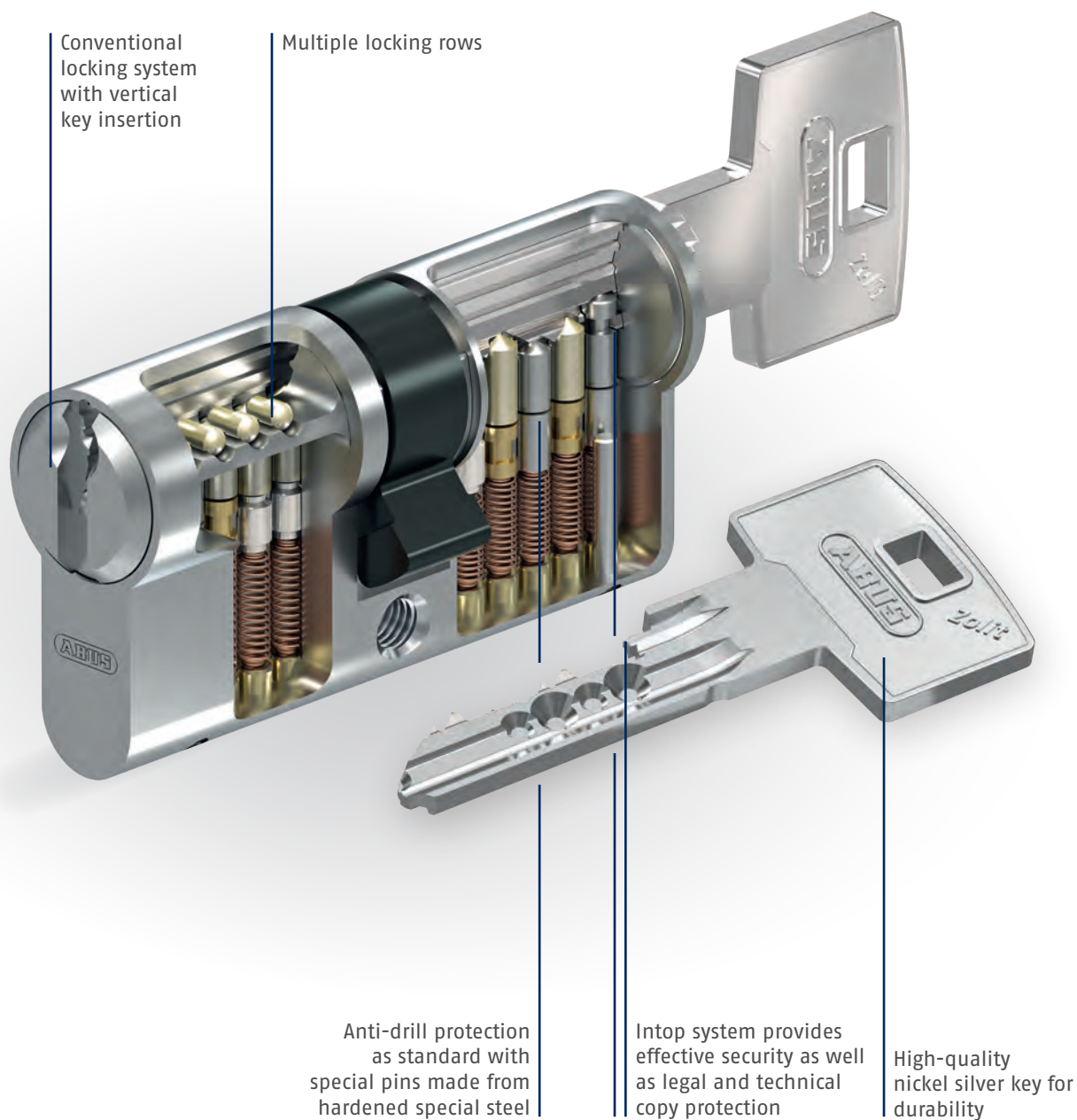
System:	Zolit.4000
Key:	Stable, multiple paracentric key made from hard-wearing nickel silver
Key insertion:	Vertical
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intop system verifies locking authorisation both inside the cylinder and on the key
Locking rows:	2
Total locking elements:	Up to 10
Modular design:	Optionally available in the Zolit.1000 MX
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG*** , details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* pending, max. patent term to 2034



# ZOLIT.2000

In detail



# TECHNICAL DETAILS

## Overview

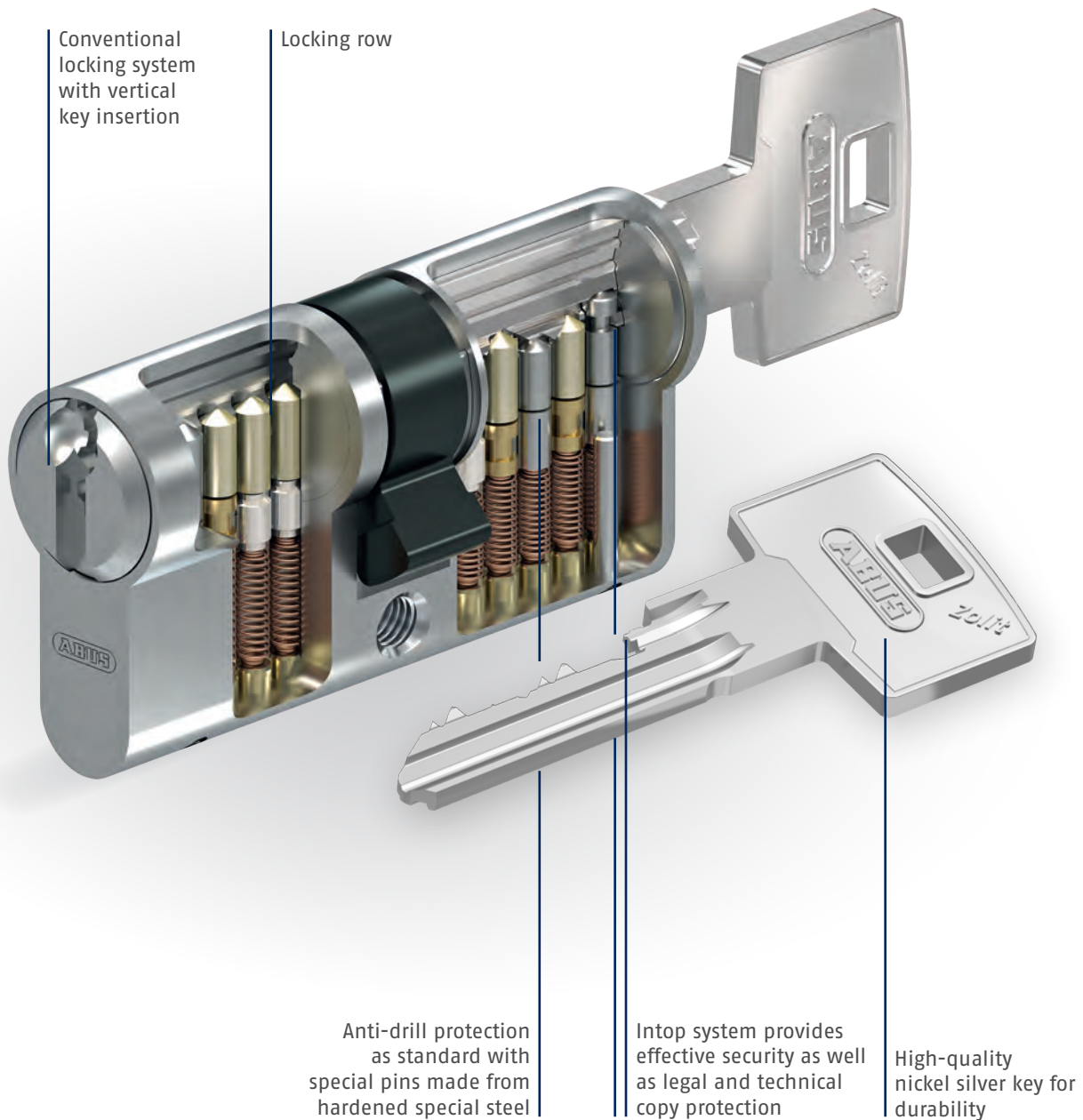
System:	Zolit.2000
Key:	Stable, multiple paracentric key made from hard-wearing nickel silver
Key insertion:	Vertical
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intop system verifies locking authorisation both inside the cylinder and on the key
Locking rows:	2
Total locking elements:	Up to 10
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG*** , details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* pending, max. patent term to 2034



# ZOLIT.1000

In detail





# TECHNICAL DETAILS

## Overview

System:	Zolit.1000
Key:	Stable, multiple paracentric key made from hard-wearing nickel silver
Key insertion:	Vertical
Patent protection*:	✓
Trademark protection:	✓
Copy protection:	Intop system verifies locking authorisation both inside the cylinder and on the key
Locking rows:	1
Total locking elements:	6
Modular design:	Optional
Basic length:	30/30 mm and 28/32 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards Optional, for example SKG*** , details available on request
Manufacturer certification:	ISO 9001
Production:	Made in Germany

\* pending, max. patent term to 2034



# SOLID SECURITY

---

S60+ and S6+



## **SOLID BASIS SECURITY**

The locking system S60+ resp. S6+ offers a solid basis security. The multiple paracentric precision profile caters for an effective picking protection.

## **CUSTOMIZED SOLUTIONS**

The locking systems S60+ and S6+ are exactly customised according to your individual requirements. ABUS offers a complete and thought-out system kit which enables you to assemble your project-specific security solutions including cylinder types, finishes and all special features available.

## **QUALITY "MADE IN GERMANY"**

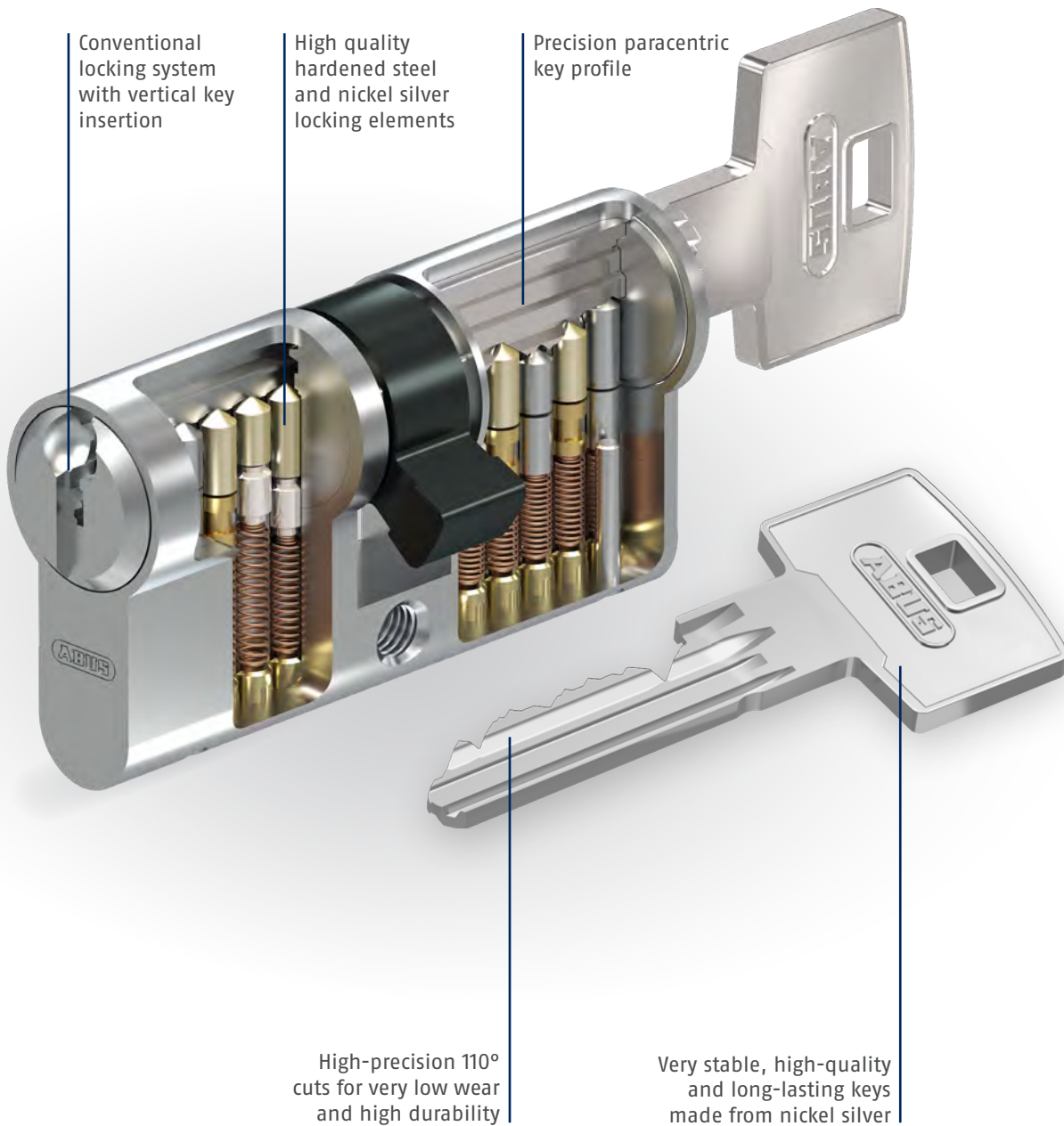
High-quality raw materials, high-precision manufacturing and our many years of experience mean that you can rest assured in the knowledge that your building is secure. The fact that the lock cylinders are developed and produced in Germany guarantees premium quality and a long service life.

## **READY FOR THE FUTURE**

The S60+ system can be extended at any time, giving you maximum flexibility through developments and changes. We can deliver extensions and replacements for your locking system many years after installation.

# S60+

## In detail





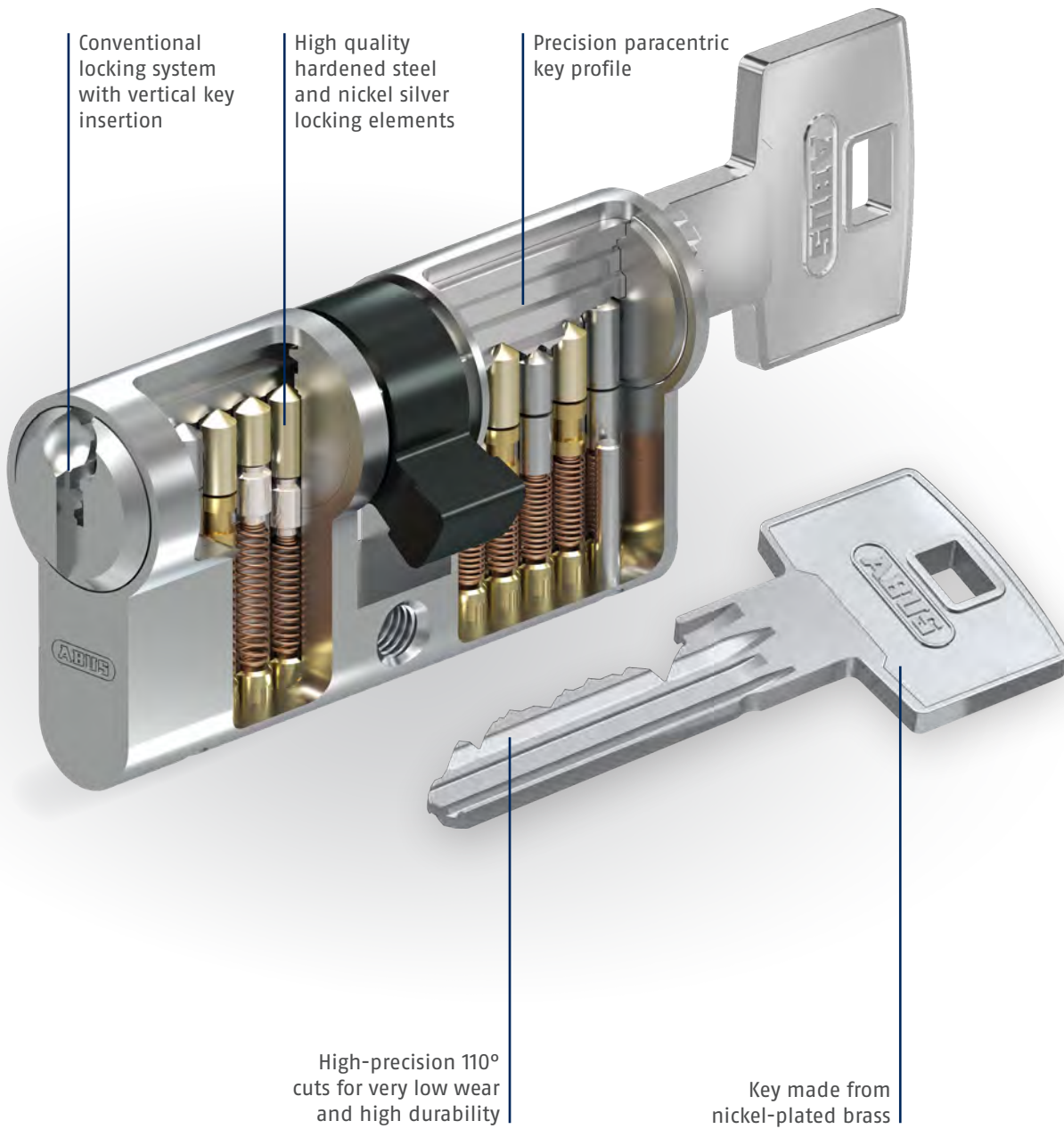
# TECHNICAL DETAILS

## Overview

System:	S60+
Key:	Multiple paracentric key made from nickel silver
Key insertion:	Vertical
Patent protection:	–
Trademark protection:	–
Copy protection:	–
Locking rows:	1
Total locking elements:	6
Modular design:	–
Basic length:	30/30 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection “BZD”
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards
Manufacturer certification:	ISO 9001
Production:	Made in Germany

# S6+

## In detail



# TECHNICAL DETAILS

## Overview

System:	S6+
Key:	Multiple paracentric key made from nickel-plated brass
Key insertion:	Vertical
Patent protection:	–
Trademark protection:	–
Copy protection:	–
Locking rows:	1
Total locking elements:	6
Modular design:	–
Basic length:	30/30 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 6 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection “BZD”
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards
Manufacturer certification:	ISO 9001
Production:	Made in Germany

# SOLID SECURITY

---

S50+ and S5+





## **SOLID BASIS SECURITY**

The locking system S50+ resp. S5+ offers a solid basis security. The multiple paracentric precision profile caters for an effective picking protection.

## **CUSTOMIZED SOLUTIONS**

The locking systems S50+ and S5+ are exactly customised according to your individual requirements. ABUS offers a complete and thought-out system kit which enables you to assemble your project-specific security solutions including cylinder types, finishes and all special features available.

## **"MADE IN GERMANY" QUALITY**

High-quality raw materials, high-precision manufacturing and our many years of experience mean that you can rest assured in the knowledge that your building is secure. The fact that the lock cylinders are developed and produced in Germany guarantees premium quality and a long service life.

## **READY FOR THE FUTURE**

The S50+ and S5+ systems can be extended at any time, giving you maximum flexibility through developments and changes. We can deliver extensions and replacements for your locking system many years after installation.

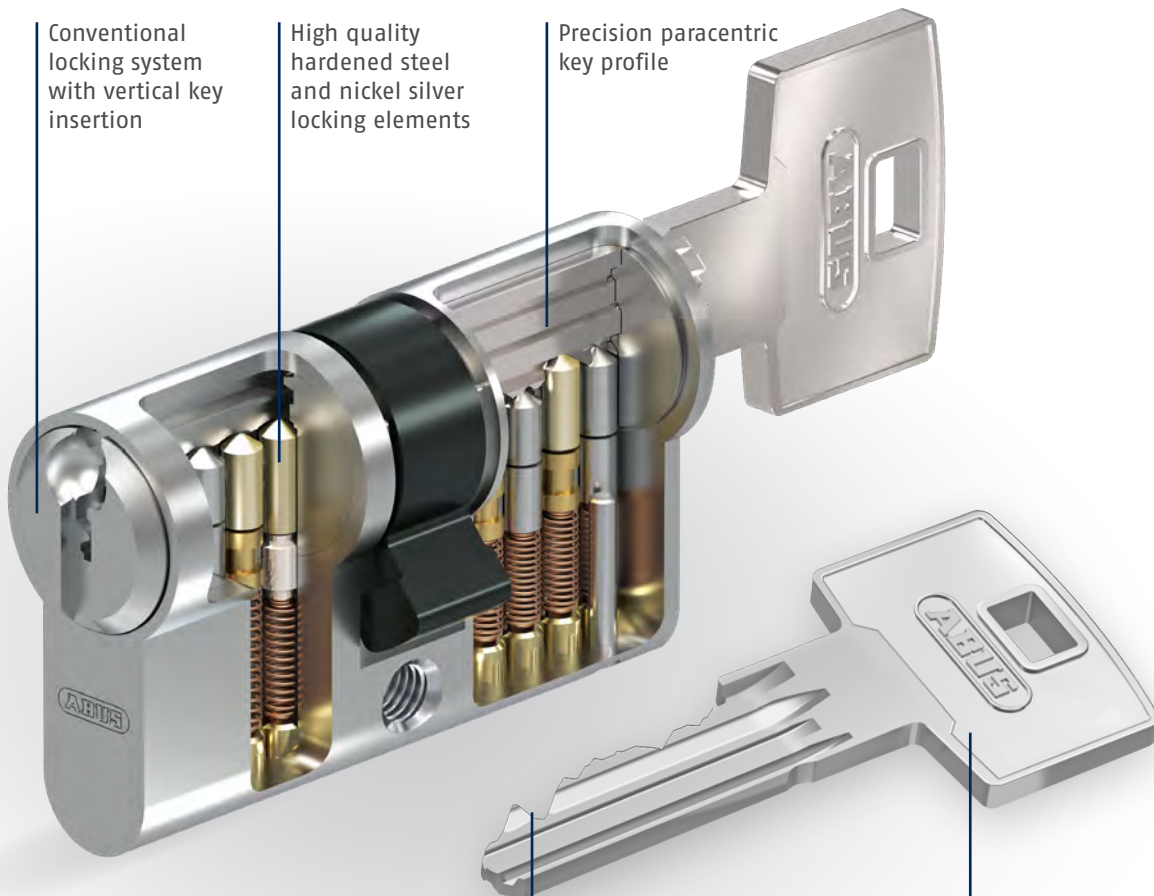
# S50+

## In detail

Conventional locking system with vertical key insertion

High quality hardened steel and nickel silver locking elements

Precision paracentric key profile



High-precision 110° cuts for very low wear and high durability

Very stable, high-quality and long-lasting keys made from nickel silver

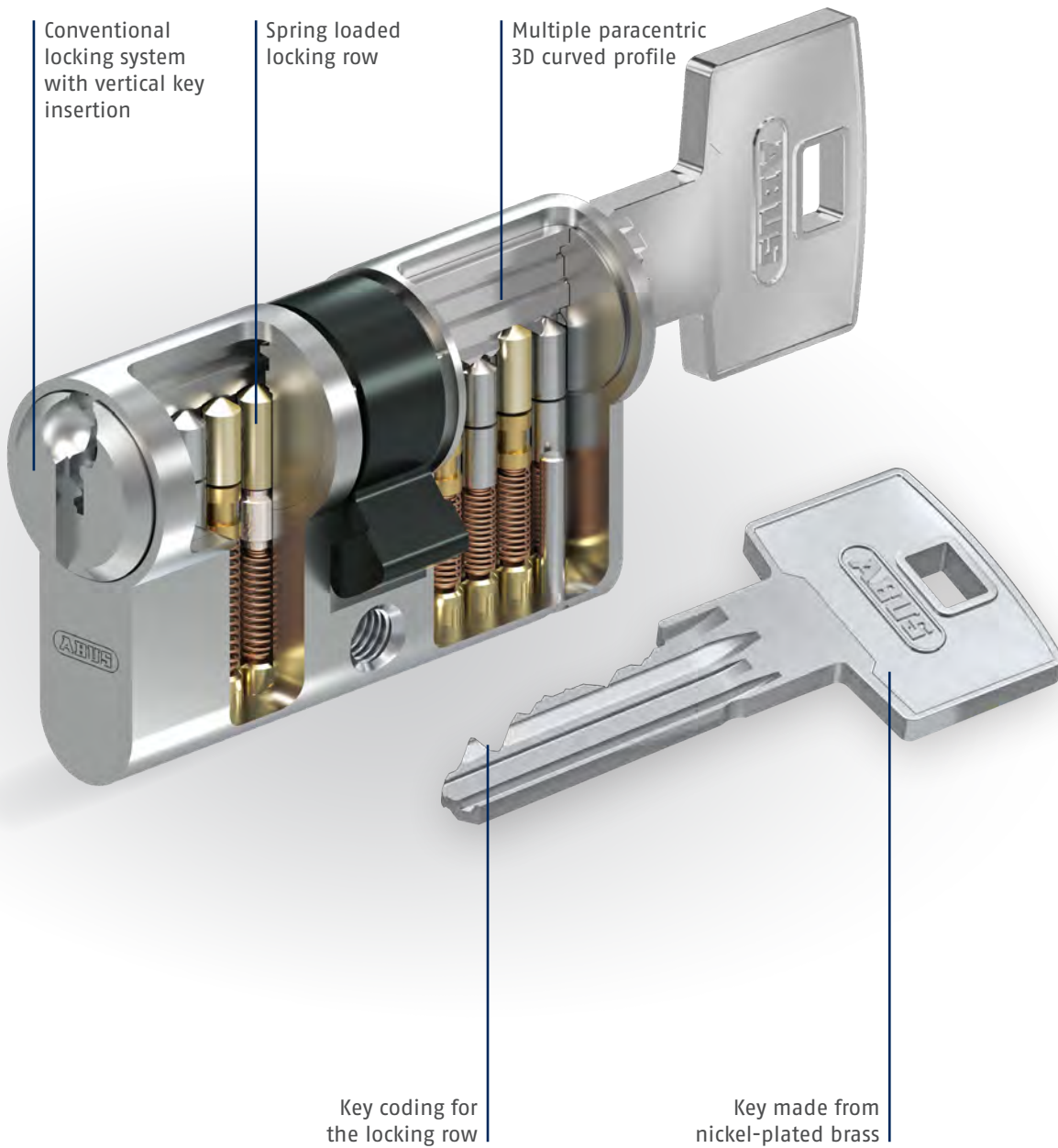
# TECHNICAL DETAILS

## Overview

System:	S50+
Key:	Stable, multiple paracentric key made from hard-wearing nickel silver
Key insertion:	Vertical
Patent protection:	–
Trademark protection:	–
Copy protection:	–
Locking rows:	1
Total locking elements:	5
Modular design:	–
Basic length:	26/26 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 4 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection "BZD"
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards
Manufacturer certification:	ISO 9001
Production:	Made in Germany

# S5+

## In detail





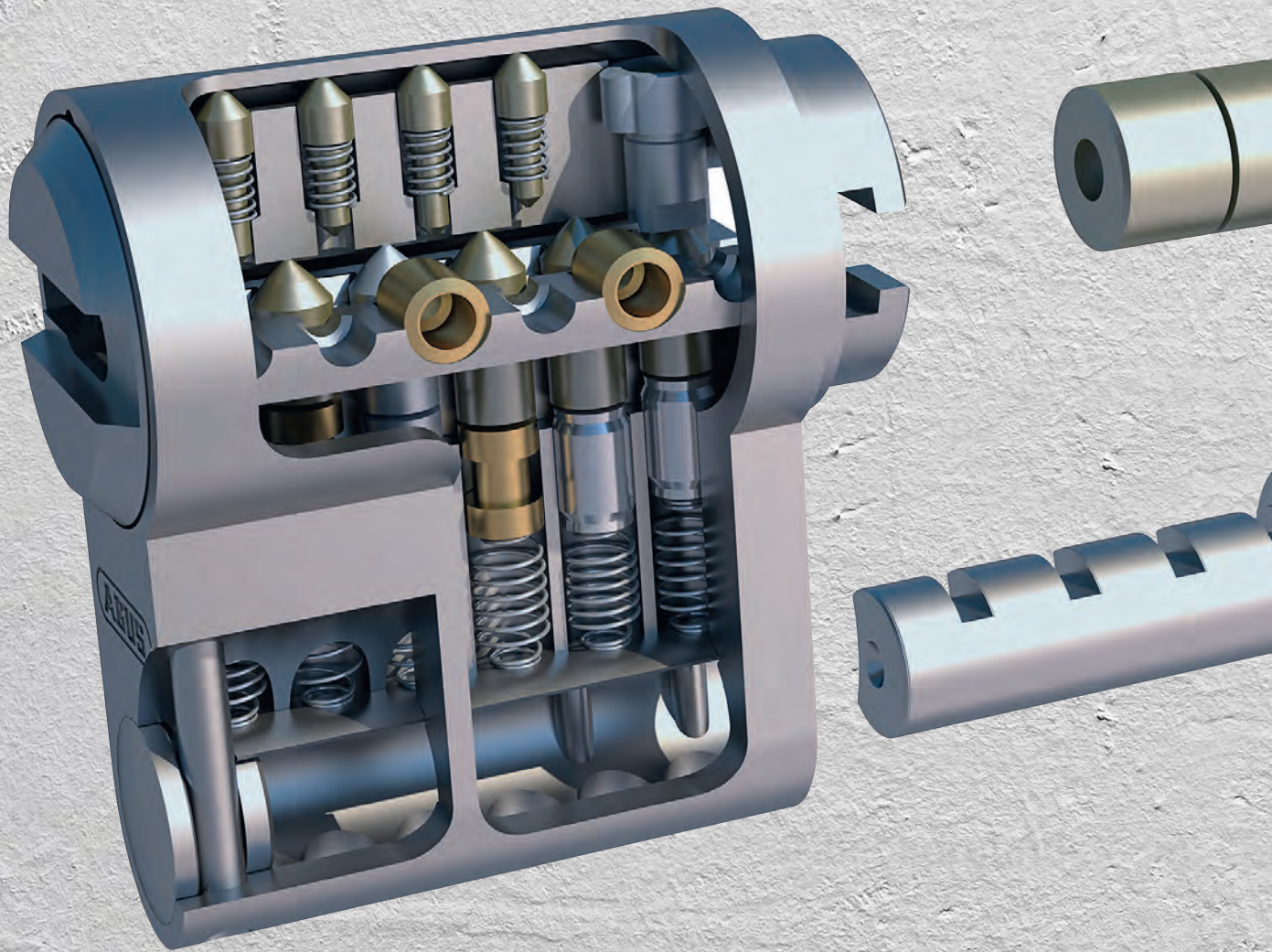
# TECHNICAL DETAILS

## Overview

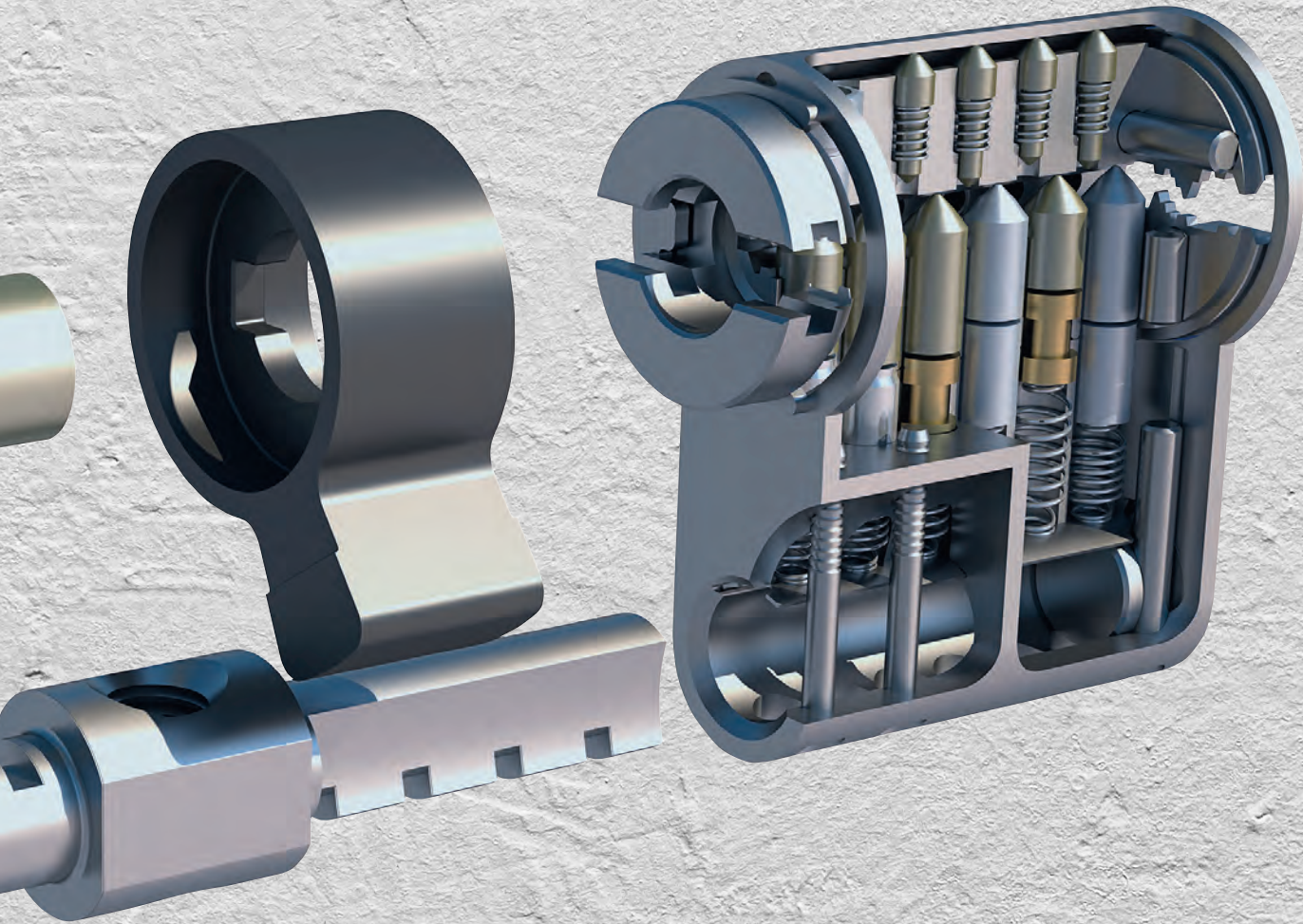
System:	S5+
Key:	Multiple paracentric key made from nickel-plated brass
Key insertion:	Vertical
Patent protection:	–
Trademark protection:	–
Copy protection:	–
Locking rows:	1
Total locking elements:	5
Modular design:	–
Basic length:	26/26 mm for Euro profile double cylinders
Length increments:	Extensions available in 5 mm increments
Security card:	✓
Key related security:	Class 4 in accordance with DIN EN 1303, details available on request
Attack resistance:	Class B Class D if special features anti-drill and extraction protection “BZD”
Fire resistance:	Class B, T90
Product certification:	Certified to DIN 18252 and DIN EN 1303 standards
Manufacturer certification:	ISO 9001
Production:	Made in Germany

# MODULAR MX SYSTEM OPTIONS

Secure, simple, quick. MX







MODULAR MX



# MODULAR MX SYSTEM OPTIONS

Secure, simple, quick. MX

**NEW**

Now for  
ALL SYSTEMS  
available!



## TECHNICAL DETAILS

- Available as double cylinder and knob cylinder up to 200 mm length in total
- Available as half cylinder up to 160/10 mm
- Standard finish nickel, other finishes available
- Basic length of 5- and 6-pin systems: 30/30 mm

## HIGHLIGHTS

- React quickly to building features
- Future-proof investment:
  - stay flexible with modular and re-fit your cylinder's length within seconds
- Conversion to other lengths in just a few steps and without additional tools
- Increased anti-pull protection as standard thanks to the modular threaded bore hole made of stainless steel
- Increased protection against drilling as standard thanks to hardened steel pins and a stainless steel anti-drill inlay
- Modular can be conveniently supplied in different formats:
  - As keyed-alike sets, where you just set the length of the cylinder
  - As fully finished cylinders, ordered to length
  - As service cylinders that you can pin yourself
- Available in factory profile or individual profile
- Can be used in master-keyed suites



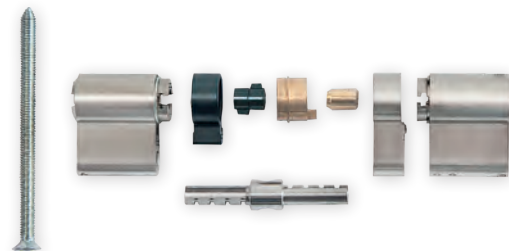


# MODULAR HAS NEVER BEEN THIS EASY

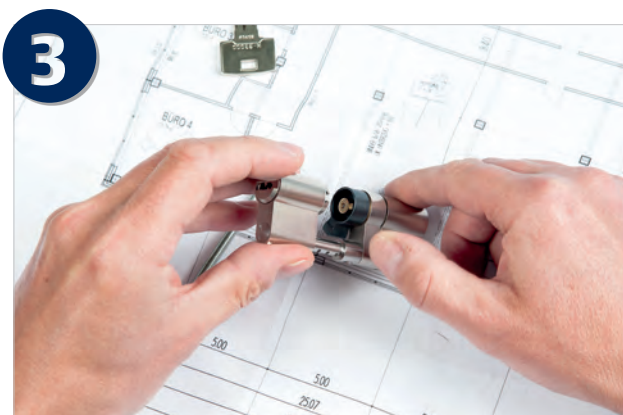
A new cylinder length in only three steps



Insert the forend screw, turn 90° to release both ends of the cylinder and disassemble the module, cam and coupling for later use.



Extend the cylinder to the desired length using the housing, core and key extension sets.



Re-insert coupling, cam and extended module and then turn forend screw back 90° to its original position to fix the cylinder. Done!

# TECHNICAL INFORMATION

---

Cylinder series and accessories







# TECHNICAL INFORMATION

---

## Solutions and special features

### TAILORED SOLUTIONS

We provide customised solutions to meet any requirement, from family homes to building complexes. In a master key system, different cylinder types and designs can be combined, and opened with a single key. Select the right cylinder design for you from our wide range of products:

- Euro profile cylinders in a compact, modular design
- Cam and mortice cylinders
- Rim cylinders
- Padlocks
- Lift and switch cylinders
- Oval cylinders
- Special cylinders
- Pressure cylinders
- Furniture cylinders

### INDIVIDUAL REQUIREMENTS

You can also equip your cylinder with various special features to meet your specific requirements. For example:

- Free-wheel function
- Separate rotation locking system
- Secondary or construction key features
- Anti-drill protection
- Pre-snap protection
- Seawater resistance
- Cylinder finishes
- Certifications
- Locking cam designs
- Door knob designs and colours
- Cam and rim cylinder rosettes
- Cam designs for cam cylinders
- Locking bolts for mortice cylinders
- Tail pieces

Further details can be found in the section "Special features and accessories".



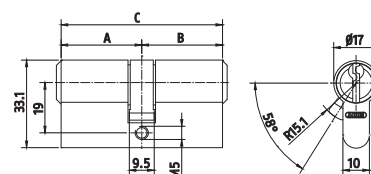
# CYLINDER ASSORTMENT SPECIFICATIONS

## Euro profile cylinder

### Profile double cylinder | Cylinder type 310 / 410



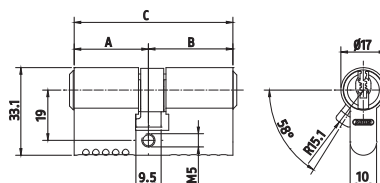
- Specification:
- Basic length cylinder (size C):  
5 pins – 53 mm, 6 pins – 61 mm
- Options:
- Different kinds of cams, couplings and special features available



### Profile double cylinder as short version "-KV" | Cylinder type 410-KV



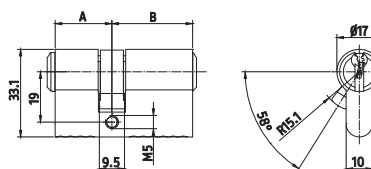
- Specification:
- Basic length cylinder (size C):  
6 pins – 60 mm
  - Left size always 28,5 mm,  
right size 32,5 mm
- Options:
- Right size 37,5 ; 42,5 or 47,5 mm;  
other lengths on request



### Profile double cylinder as extra short length "-SL" | Cylinder type 310-SL / 410-SL



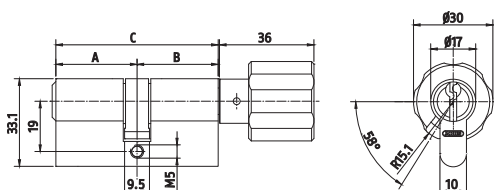
- Specification:
- Special length (Size A, B): 5 pins – 21,5 mm  
(1st locking element is dropped)
  - Special length (Size A, B): 6 pins – 21,5 mm  
(1st and 2nd locking elements are dropped)  
or 26,5 mm (1st locking element is dropped)
  - The key sticks out of the profile channel
- Options:
- other lengths on request



### Profile knob cylinder | Cylinder type 330 / 430



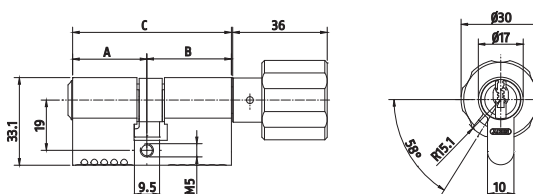
- Specification:
- Basic length cylinder (size C):  
5 pins – 53 mm, 6 pins – 61 mm
  - Standard knob: shape Z, Nickel Pearl
- Options:
- Different cams, coupling functions,  
for example with anti-barricade  
(key has priority) and special features available



### Profile knob cylinder as short version "-KV" | Cylinder type 430-KV



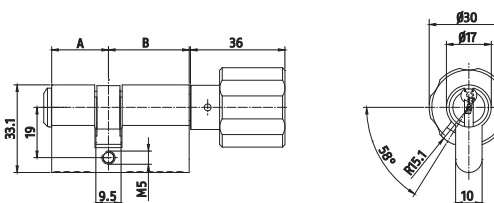
- Specification:
- Left size always 28,5 mm,  
right size 32,5 mm
  - Standard knob: shape Z, Nickel Pearl
- Options:
- Right size 37,5; 42,5 or 47,5 mm;  
other lengths on request



### Profile knob cylinder as extra short length "-SL" | Cylinder type 330-SL / 430-SL



- Specification:
- Special length (size A): 5 pins – 21,5 mm  
(1st locking element is dropped)
  - Special length (size A): 6 pins – 21,5 mm  
(1st and 2nd locking elements are dropped)  
or 26,5 mm (1st locking element is dropped)
  - Knob only available on side B
  - The key sticks out of the profile channel
  - Standard knob: shape Z, Nickel Pearl



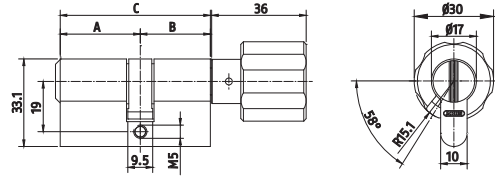
# CYLINDER ASSORTMENT SPECIFICATIONS

## Profile knob bathroom cylinder indicating "Engaged" | Cylinder type 391-11 / 491-11



**Specification:**

- Basic length cylinder (size C):  
5 pins – 53 mm, 6 pins – 61 mm
- Standard knob: shape Z, Nickel Pearl
- free 360° turning

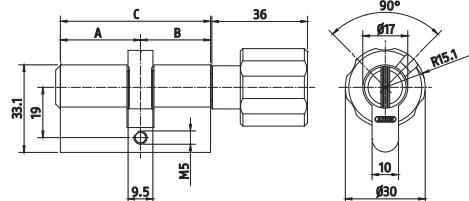


## Profile knob bathroom cylinder indicating "Engaged" | Cylinder type 397 / 497



**Specification:**

- Basic length cylinder (size C):  
5 pins – 53 mm, 6 pins – 61 mm
- Standard knob: shape Z, Nickel Pearl
- Limited turning movement 90°
- To install the cylinder, a needle can be used to temporarily disengage the 90° turning limit

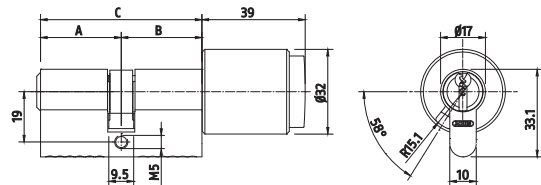


## Profile cylinder with pressure knob | Cylinder type 330-DK / 430-DK



**Specification:**

- Basic length cylinder (size C):  
5 pins – 53 mm, 6 pins – 61 mm
- Exterior diameter of the knob, without grip: 32 mm
- Cam can only be turned when button is pressed and held

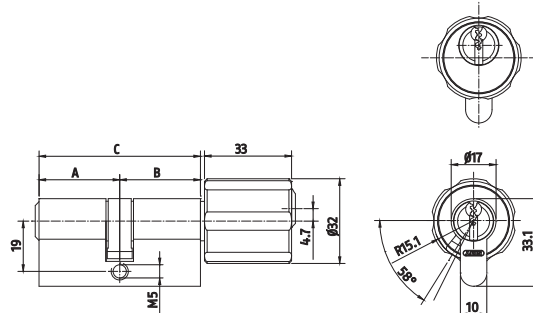


## Profile knob cylinder with lockable knob | Cylinder type 330-AK / 430-AK



**Specification:**

- Basic length cylinder (size C):  
5 pins – 53 mm, 6 pins – 61 mm
- Knob with 32 mm exterior diameter and six recessed grooves
- The corresponding key shall be used to activate / deactivate the knob in order to operate the cylinder.

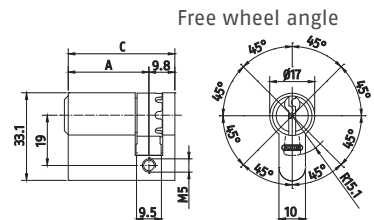


## Half cylinder with 8-fold adjustable cam | Cylinder type 352 / 452



**Specification:**

- Basic length cylinder (size C):  
5 pins – 36,3 mm, 6 pins – 40,3 mm
- Cylinders are supplied from the factory with the cam mounted at the 7 o'clock position which can be adjusted to different positions in steps of 45° (8-fold adjustable)

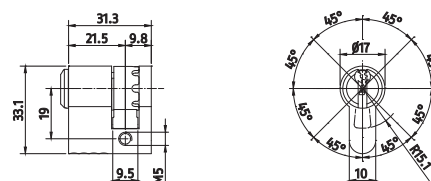


## Profile half cylinder as extra short length "-SL" | Cylinder type 352-SL / 452-SL



**Specification:**

- Special length: 5-pins - 21,5 mm (1st locking element is dropped)
- Special length: 6-pins - 21,5 mm (1st and 2nd locking elements are dropped) or 26,5 mm (1st locking element is dropped)
- The key sticks out of the profile channel



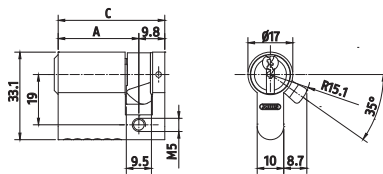
# CYLINDER ASSORTMENT SPECIFICATIONS

## Profile half cylinder with automatically lockable cam | Cylinder type 352-FE / 452-FE



**Specification:**

- Basic length cylinder (size C):  
5 pins – 36,3 mm, 6 pins – 40,3 mm
- The key is only necessary to unlock and operates the cam
- Locking can be done without key, because of the special shape and suspension of the cam it locks automatically

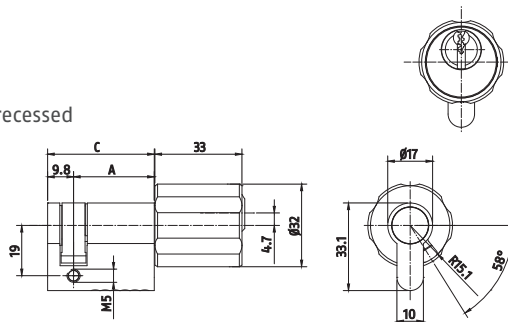


## Profile half cylinder with lockable knob | Cylinder type 350-AK / 450-AK



**Specification:**

- Basic length cylinder (size C):  
5 pins – 36,3 mm, 6 pins – 40,3 mm
- Knob with 32 mm exterior diameter and six recessed grooves
- The corresponding key shall be used to activate / deactivate the knob in order to operate the cylinder.

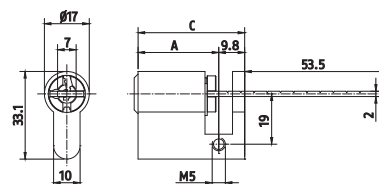


## Profile half cylinder with tail piece | Cylinder type 352-S01 / 452-S01



**Specification:**

- Basic length cylinder (size C):  
5 pins – 36,3 mm, 6 pins – 40,3 mm
  - With tail piece 70 mm
- Options:**
- Tail piece 70 mm or 150 mm reinforced
  - Tail piece 70 mm, turned by 90°



# CYLINDER ASSORTMENT SPECIFICATIONS

## Cam cylinder, Mortice cylinder

### Cam cylinder $\varnothing$ 18 mm | Cylinder type 356-H18 / 456-H18

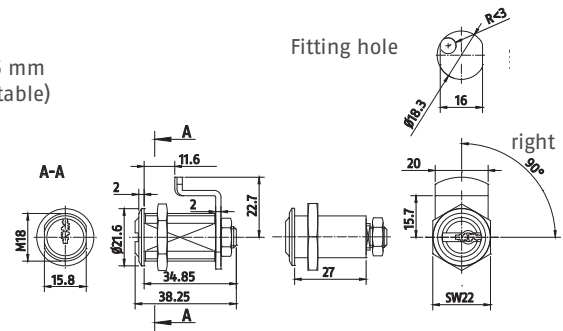


**Specification:**

- Overall length cylinder: 5/6 pins – 34,85 mm
- Locking movement 90° clockwise (adaptable)
- Key only removable in locking position
- Cam is adjustable per 360° in 45° steps

**Options:**

- Locking movement 180° on request, please indicate on your order
- Rosettes for fitting
- Only available for system Integral



### Cam cylinder $\varnothing$ 24 mm | Cylinder type 356-H24 / 456-H24

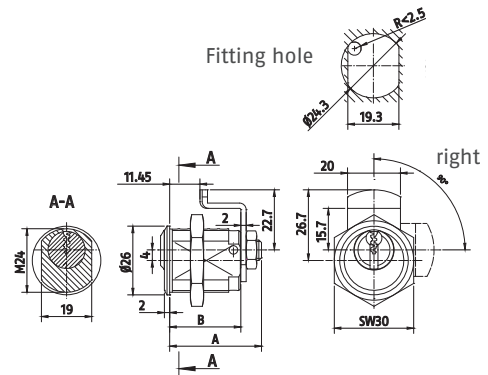


**Specification:**

- Overall length cylinder:  
5 pin cylinder – A=31 mm, B=23,2 mm;  
6 pin cylinder – A=34,7 mm, B=26,9 mm
- Locking movement 90°, clockwise
- Key only removable in locking position
- Cam is adjustable 360° in 45° steps
- Slight deviations regarding the sizes in systems Bravus and Vela

**Options:**

- Change of direction (90° counterclockwise) possible, please indicate on your order
- Rosettes for fitting



### Cam cylinder $\varnothing$ 27 mm | Cylinder type 356-H27 / 456-H27

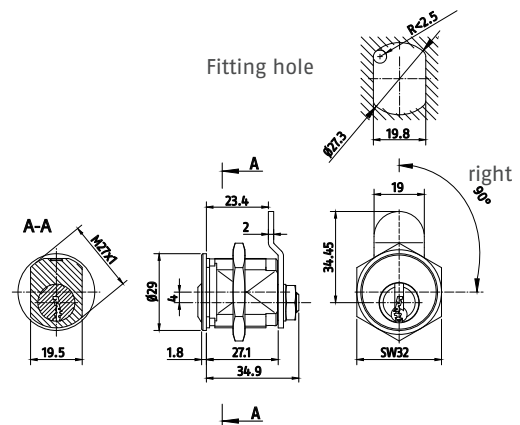


**Specification:**

- Total length cylinder: 34,9 mm
- Locking movement 90°, clockwise
- Key can only be removed in locking position
- Cam is adjustable 360° in 45° steps

**Options:**

- Change of direction (90° counterclockwise) possible, please indicate on your order





# CYLINDER ASSORTMENT SPECIFICATIONS

## Mortice cylinder $\varnothing$ 29,2 mm | Cylinder type 356-SR1 / 456-SR1

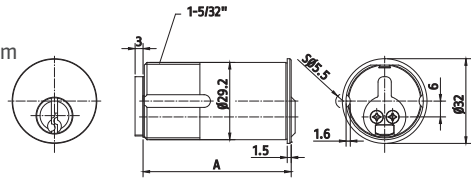


**Specification:**

- Standard length (size A): 5/6 pin cylinders – 30 mm
- With thread  $\varnothing$ 29,2 x 1-5/32"
- Standard cam 50SZU\_SZ07

**Options:**

- Further lengths: 35, 42, 50, 58 and 66 mm
- Different cams



## Mortice cylinder with extra wide collar $\varnothing$ 29,2 mm | Cylinder type 356-SR3 / 456-SR3

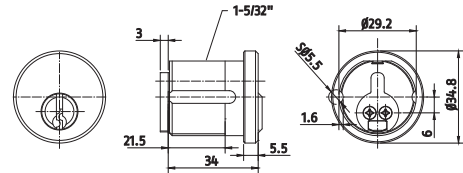


**Specification:**

- Housing length: 5/6 pin cylinder – 34 mm
- With thread  $\varnothing$ 29,2 x 1-5/32"
- Standard cam 50SZU\_SZ01

**Options:**

- Different cams



## Mortice cylinder with extra wide collar $\varnothing$ 29,2 mm | Cylinder type 356-SR5 / 456-SR5

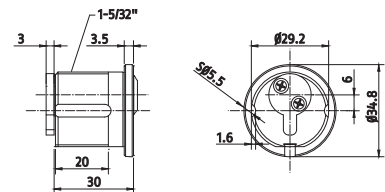


**Specification:**

- Housing length: 5/6 pin cylinder 30 mm
- With thread  $\varnothing$ 29,2 x 1-5/32"
- Standard cam 50SZU\_SZ01

**Options:**

- Different cams



## Mortice cylinder $\varnothing$ 31 mm | Cylinder type 356-SR2 / 456-SR2

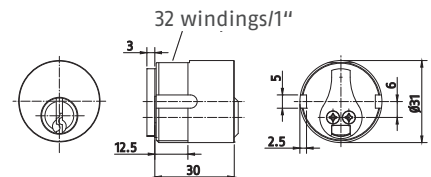


**Specification:**

- Housing length: 5/6 pin cylinder – 30 mm
- With thread  $\varnothing$ 31 x 32G/1"
- Standard cam 50SZU\_SZ02

**Options:**

- Different cams



# CYLINDER ASSORTMENT SPECIFICATIONS

## Rim cylinder for rim locks

### Rim cylinder $\varnothing$ 25 mm | Cylinder type 356-25 / 456-25

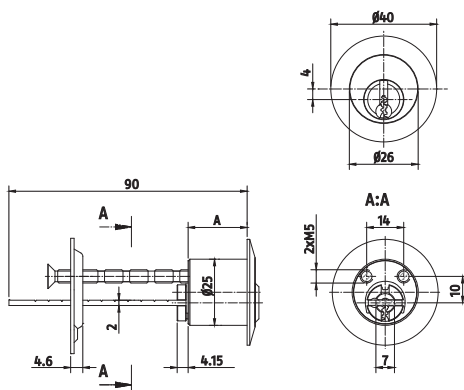


**Specification:**

- Housing length 5-pins - 21 mm, 6-pins - 24,8 mm
- With tail piece 70 mm (can be cut to length)
- With rosette  $\varnothing$ 40 mm, fixing plate and two fixing screws M5x60

**Options:**

- Tail piece 70 mm or 150 mm reinforced
- Tail piece 70 mm, turned by 90°



### Rim cylinder $\varnothing$ 29,6 mm | Cylinder type 356-29,6 / 456-29,6

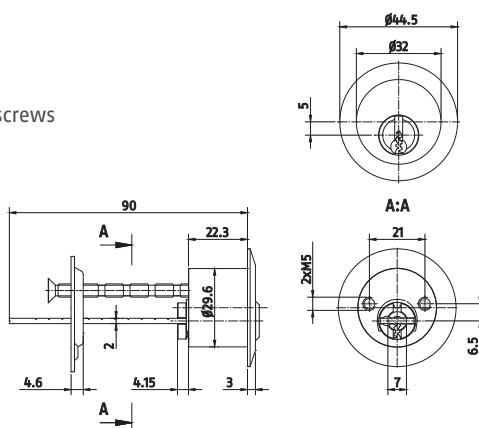


**Specification:**

- Housing length 5-/6-pins - 24,8 mm
- With tail piece 70 mm (can be cut to length)
- With rosette  $\varnothing$ 44,5 mm, fixing plate, two fixing screws M5x60, two wood screws M2,7x16

**Options:**

- Tail piece 70 mm or 150 mm reinforced
- Tail piece 70 mm, turned by 90°



### Rim cylinder $\varnothing$ 29,6 mm "Ö" | Cylinder type 356-Ö / 456-Ö



**Specification:**

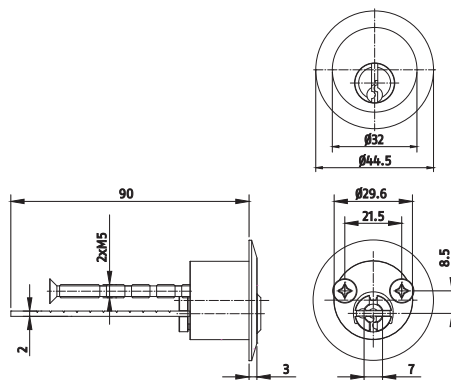
- Housing length 5-/6-pins - 24,8 mm
- With tail piece 70 mm (can be cut to length)
- With rosette  $\varnothing$  44,5 mm, two fixing screws M5x60

**Options:**

- Tail piece 70 mm or 150 mm reinforced
- Tail piece 70 mm, turned by 90°

Also available as set:

456-Ö + 456-L02 = 456-Ö1



### Rim cylinder $\varnothing$ 28 mm "AR" | Cylinder type 356-AR1 / 456-AR1

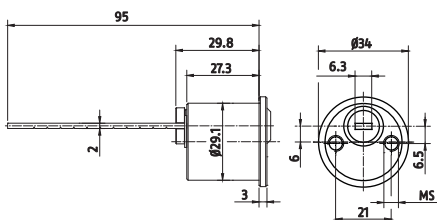


**Specification:**

- Housing length 5-/6-pins - 30,3 mm
- With tail piece 70 mm (can be cut to length)

**Options:**

- Tail piece 70 mm or 150 mm reinforced
- Tail piece 70 mm, turned by 90°



# CYLINDER ASSORTMENT SPECIFICATIONS

## Rim cylinder $\varnothing$ 28 mm "A" for ABUS rim locks series 70XX | Cylinder type 356-A / 456-A



### Specification:

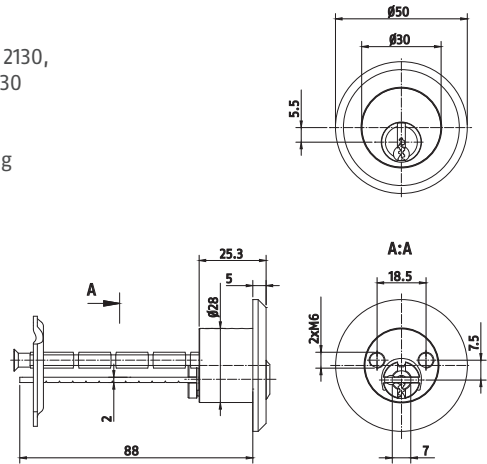
- Suitable for ABUS rim locks No. 2010, 2030, 2110, 2130, 4010, 4030, 7010, 7025, 7030, 7035, 9010 and 9030
- Housing length 5/6-pins – 25,3 mm
- With tail piece 70 mm (can be cut to length)
- With rosette  $\varnothing$ 50 mm, fixing plate and two fixing screws M6x80

### Options:

- Tail piece 70 mm or 150 mm reinforced
- Tail piece 70 mm, turned by 90°

Also available as set:

- 456-A + 456-A01 = 456-A1
- 456-A + 456-A02 = 456-A2
- 456-A + 456-A03 = 456-A4



## Rim cylinder $\varnothing$ 24 mm "A3" for ABUS rim locks series 75XX and 80XX | Cylinder type 356-A3 / 456-A3

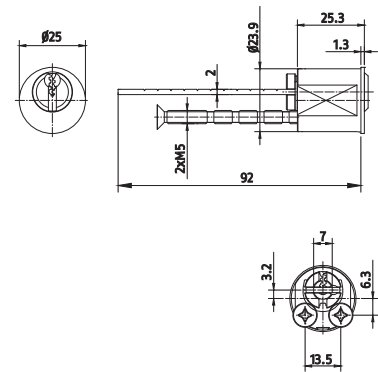


### Specification:

- Suitable for ABUS rim locks No. 7510 and 7530, 8010 and 8030
- Total length 5/6 pins - 25,3 mm
- With tail piece 70 mm (can be cut to length)
- No rosette available
- With two fixing screws M5x60

### Options:

- Tail piece 70 mm or 150 mm reinforced
- Tail piece 70 mm, turned by 90°



## Rim cylinder exterior "C01" | Cylinder type 356-C01 / 456-C01



### Specification:

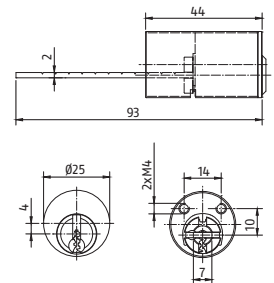
- Suitable for respective CISA rim locks
- With tail piece 70 mm (can be cut to length)
- With tube 44 mm

### Options:

- Tail piece 70 mm or 150 mm reinforced
- Tail piece 70 mm, turned by 90°
- Tube available in the lengths 40, 50, 60, 70, 80 and 90 mm

Also available as set:

- 456-C01 + 456-C02 = 456-C
- 456-C01 + 456-C03 = 456-C2



## Rim cylinder exterior $\varnothing$ 29 mm "I1" | Cylinder type 356-I1 / 456-I1



### Specification:

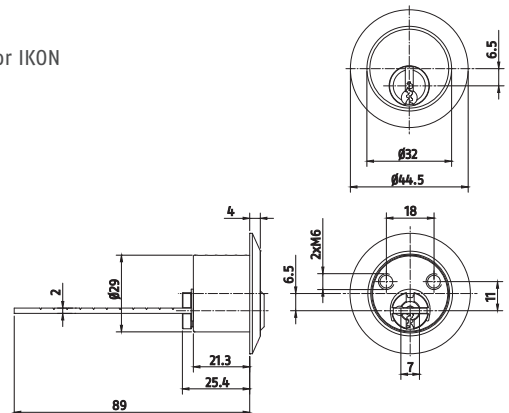
- Suitable for rim locks of IKON - replacement for IKON circular cylinder 5063
- With tail piece 70 mm (can be cut to length)
- With rosette  $\varnothing$  44,5 mm

### Options:

- Tail piece 70 mm or 150 mm reinforced
- Tail piece 70 mm, turned by 90°

Also available as set:

- 456-I1 + 456-I2 = 456-I



# CYLINDER ASSORTMENT SPECIFICATIONS

## Rim cylinder "L01" | Cylinder type 356-L01 / 456-L01



**Specification:**

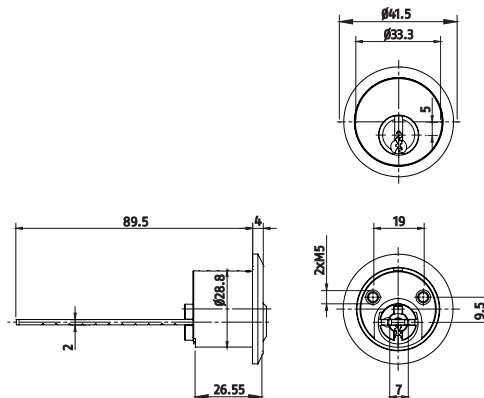
- As exterior cylinder for Lips locks
- Only available with increased drill protection
- With tail piece 70 mm (can be cut to length)

**Options:**

- Further tail pieces on demand

Also available as set:

456-L01 + 456-L02 = 456-L



## Rim cylinder "Y01" Ø 28,8 mm | Cylinder type 356-Y01 / 456-Y01

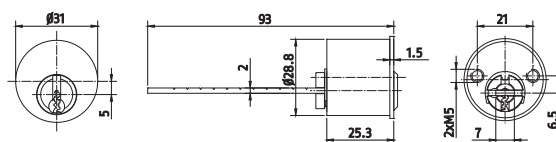


**Specification:**

- Suitable for rim locks from Yale as exterior cylinder
- With tail piece 70 mm (can be cut to length)

Also available as set:

456-Y01 + 456-Y02 = 456-Y

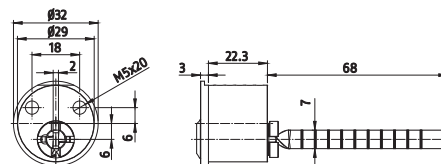


## Rim cylinder Ø 28 mm "E1" | Cylinder type 356-E1 / 456-E1



**Specification:**

- As exterior cylinder for EWA rim locks
- Tail piece 70 mm, vertical (can be cut to length)

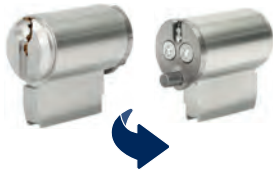




# CYLINDER ASSORTMENT SPECIFICATIONS

## Interior cylinders for rim locks

### Interior cylinder | Cylinder type 392-A01 - only 5 pin

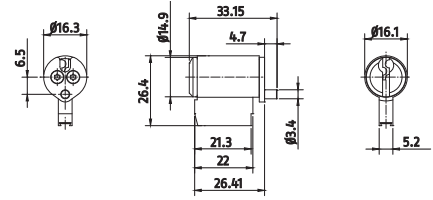


**Specification:**

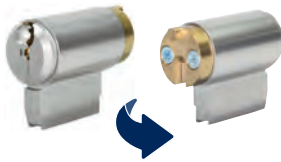
- Locking insert as interior cylinder for ABUS rim locks no. 4025 and 4035
- Available on request in the 6 pin systems Bravus, Z14, Y14 and Y14 Deltus with only 5 locking elements
- The rim locks have to be custom fitted at the factory (Surcharge)

Also available as set:

356-A + 392-A01 = 356-A1



### Interior cylinder | Cylinder type 392-A02 / 492-A02

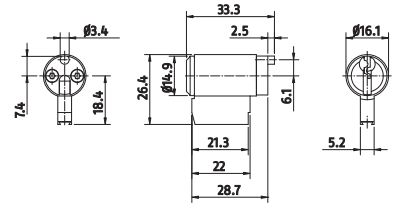


**Specification:**

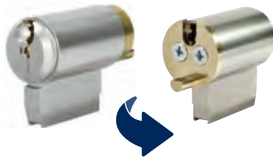
- Locking insert as interior cylinder for ABUS rim locks no. 9025 and 9035
- Available on request in the 6 pin systems Bravus, Z14, Y14 and Y14 Deltus with only 5 locking elements
- The rim locks have to be custom fitted at the factory (Surcharge)

Also available as set:

356-A + 392-A02 = 356-A2



### Interior cylinder | Cylinder type 392-A03 / 492-A03

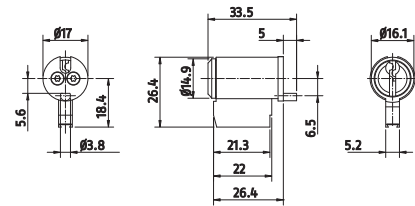


**Specification:**

- Locking insert as interior cylinder for ABUS rim locks no. 7025 and 7035
- Available on request in the 6 pin systems Bravus, Z14, Y14 and Y14 Deltus with only 5 locking elements
- The rim locks have to be custom fitted at the factory (Surcharge)
- For the 7000-series rim locks with plastic housing another tappet is necessary. Please contact us.

Also available as set:

356-A + 392-A03 = 356-A4



### Interior rim cylinder "C02" | Cylinder type 356-C02 / 456-C02

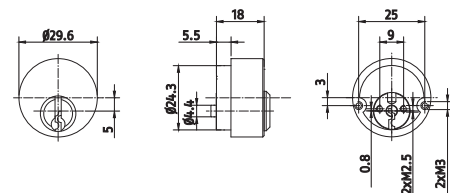


**Specification:**

- Suitable for respective CISA rim locks
- Tappet is not included in delivery
- Restricted use in key systems due to reduced overall length

Also available as set:

456-C01 + 456-C02 = 456-C



### Interior rim cylinder "C03" | Cylinder type 356-C03 / 456-C03

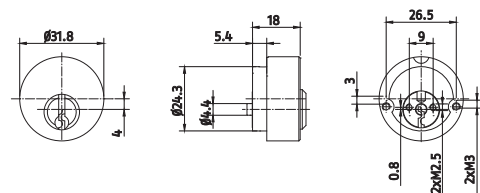


**Specification:**

- Suitable for respective CISA rim locks
- Tappet is not included in delivery
- Restricted use in key systems due to reduced overall length

Also available as set:

456-C01 + 456-C03 = 456-C2



# CYLINDER ASSORTMENT SPECIFICATIONS

## Rim cylinder $\varnothing$ 23 mm "CA1" | Cylinder type 356-CA1 / 456-CA1

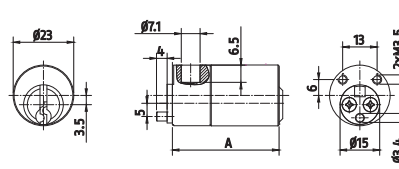


**Specification:**

- For respective ABUS locks No. 36961,33404, 53235 and 33398
- Total length 5/6 pins – 30 mm
- Within the Bravus levels, small differences in the dimension possible

**Options:**

- Housing available in lengths up to 90 mm in steps of 5 mm



## Rim cylinder $\varnothing$ 23 mm "CA2" | Cylinder type 356-CA2 / 456-CA2

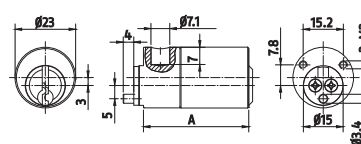


**Specification:**

- Suitable for City / Covers rim locks
- Basic length 5/6 pins - 30 mm
- Within the Bravus levels, small differences in the dimension possible

**Options:**

- Housing available in lengths up to 90 mm in steps of 5 mm

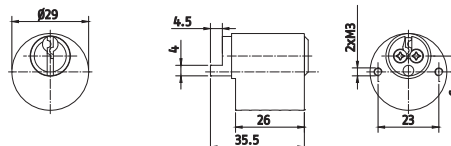


## Interior rim cylinder $\varnothing$ 29 mm "I2" | Cylinder type 356-I2 / 456-I2



**Specification:**

- Suitable for IKON rim locks
- Also available as set:  
456-I1 + 456-I2 = 456-I

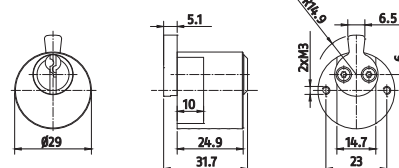


## Rim cylinder $\varnothing$ 29 mm "I3" | Cylinder type 356-I3 / 456-I3



**Specification:**

- Suitable for IKON rim locks
- Cam position at 12 o'clock

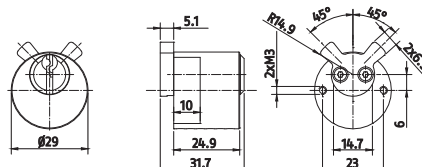


## Interior rim cylinder $\varnothing$ 29 mm "I4" | Cylinder type 356-I4 / 456-I4



**Specification:**

- Suitable for IKON rim locks
- With two cams which are arranged in an angle of  $45^\circ$  each, starting at 12 o'clock

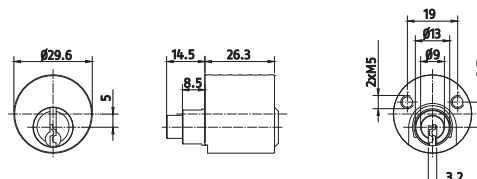


## Rim cylinder "L02" | Cylinder type 356-L02 / 456-L02



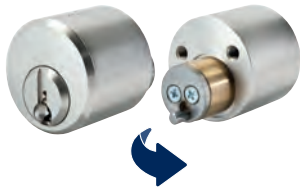
**Specification:**

- As interior cylinder for Lips rim locks
- Also available as set  
456-L01 + 456-L02 = 456-L  
456-Ö + 456-L02 = 456-Ö1



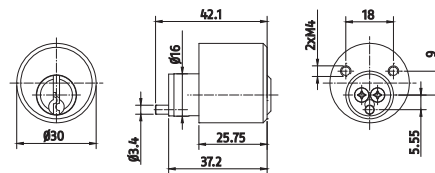
# CYLINDER ASSORTMENT SPECIFICATIONS

## Rim cylinder $\varnothing$ 30 mm "W1" | Cylinder type 356-W1 / 456-W1



Specification:

- Suitable for respective Wilka rim locks model 2524
- Housing length 5/6 pins - 25,75 mm



## Rim cylinder "Y02" | Cylinder type 356-Y02 / 456-Y02

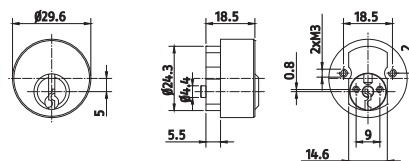


Specification:

- Suitable for rim locks from Yale as interior cylinder
- Tappet not included in delivery
- Restricted use in key systems due to the short length.

Also available as set:

456-Y01 + 456-Y02 = 456-Y



# CYLINDER ASSORTMENT SPECIFICATIONS

## Rim cylinder sets

### Cylinder set "A1" | Cylinder type 356-A1 / 456-A1

Exterior and interior cylinders as set:  
356-A + 392-A01 = 356-A1

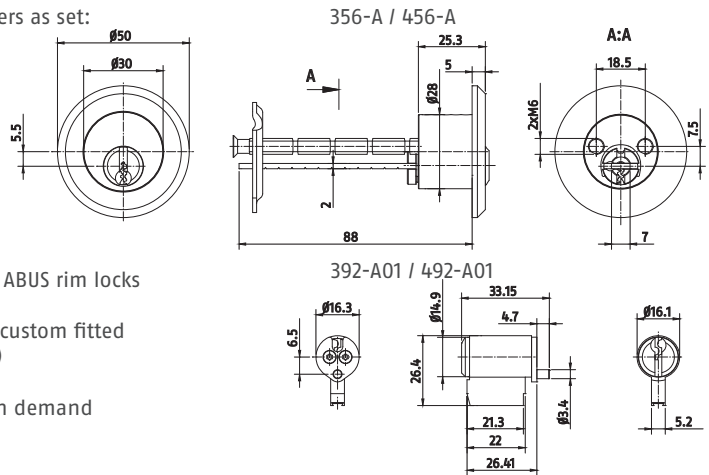


Specification:

- Together with additional ABUS rim locks no. 4025 and 4035
- The rim locks have to be custom fitted at the factory (Surcharge)

Options:

- Interior cylinder 6 pin on demand



### Cylinder set "A2" | Cylinder type 356-A2 / 456-A2

Exterior and interior cylinders as set:  
356-A + 392-A02 = 356-A2

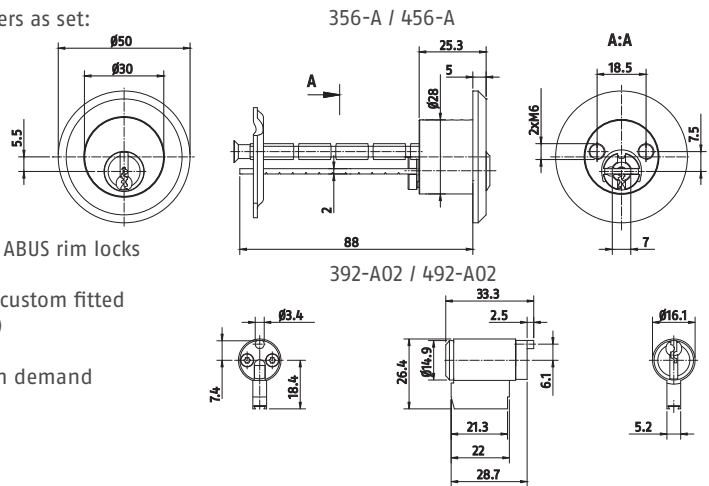


Specification:

- Together with additional ABUS rim locks no. 9025 and 9035
- The rim locks have to be custom fitted at the factory (Surcharge)

Options:

- Interior cylinder 6 pin on demand



### Cylinder set "A4" | Cylinder type 356-A4 / 456-A4

Exterior and interior cylinders as set:  
356-A + 392-A03 = 356-A4

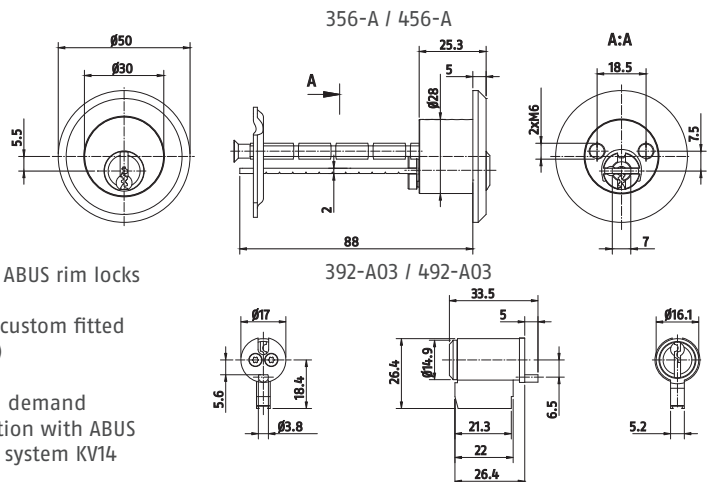


Specification:

- Together with additional ABUS rim locks no. 7025 and 7035
- The rim locks have to be custom fitted at the factory (Surcharge)

Options:

- Interior cylinder 6 pin on demand
- VdS-certified in combination with ABUS rim lock no. 7025 only in system KV14



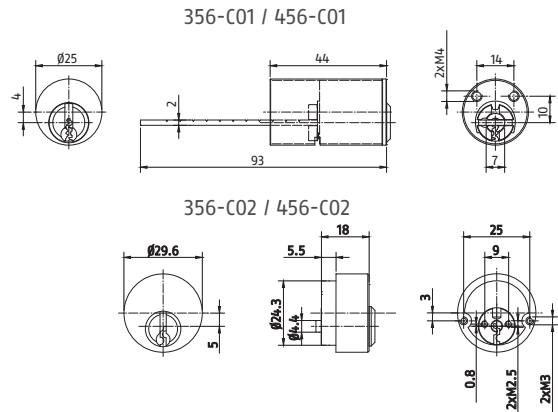


# CYLINDER ASSORTMENT SPECIFICATIONS

## Cylinder set "C" | Cylinder type 356-C / 456-C



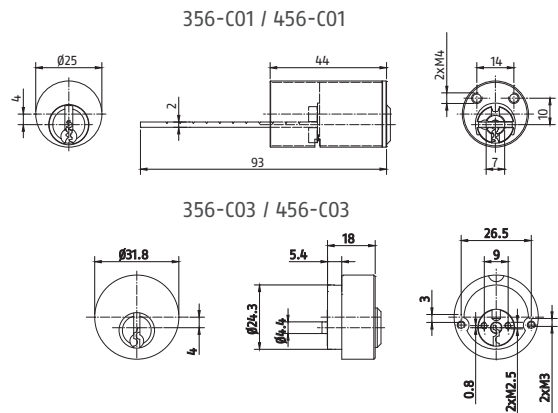
Exterior and interior cylinders as set:  
 456-C01 + 456-C02 = 456-C  
 Specification:  
 • Suitable for respective CISA locks



## Cylinder set "C2" | Cylinder type 356-C2 / 456-C2



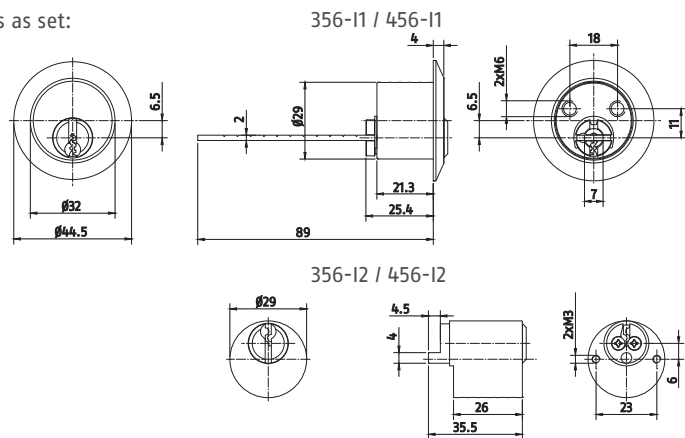
Exterior and interior cylinders as set:  
 456-C01 + 456-C03 = 456-C2  
 Specification:  
 • Suitable for respective CISA locks



## Cylinder set "I" | Cylinder type 356-I / 456-I



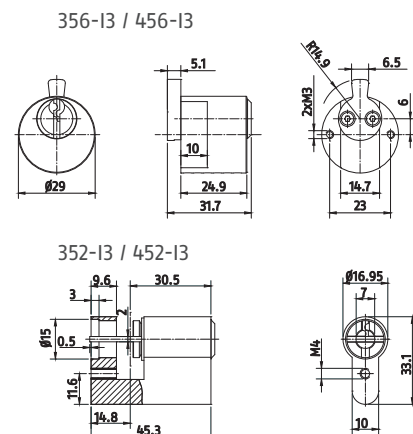
Exterior and interior cylinders as set:  
 456-I1 + 456-I2 = 456-I  
 Specification:  
 • Suitable for IKON locks



## Cylinder set "I5" | Cylinder type 356-I5 / 456-I5



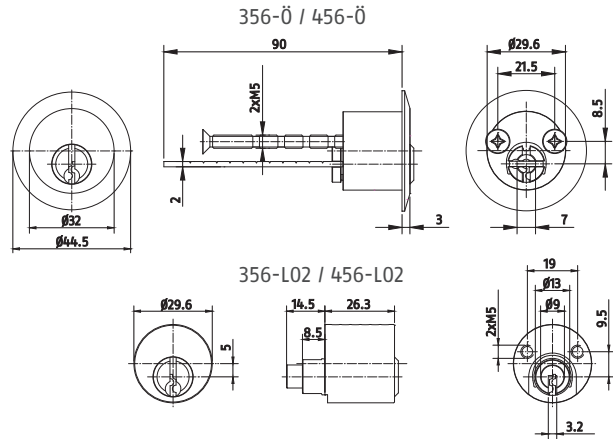
Exterior and interior cylinders as set:  
 456-I3 + 452-I3 = 456-I5  
 Specification:  
 • Suitable for IKON locks



# CYLINDER ASSORTMENT SPECIFICATIONS

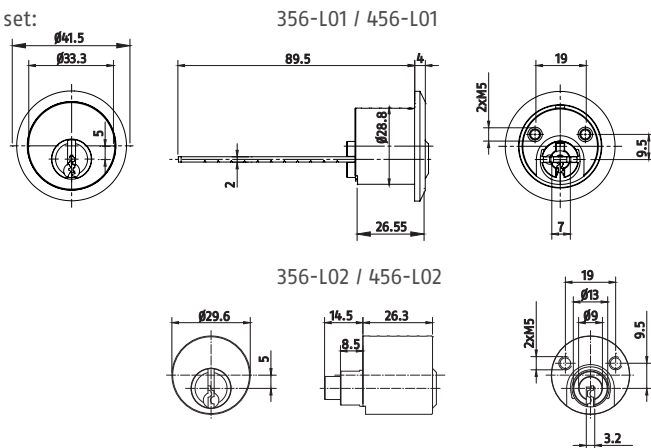
## Cylinder set "Ö1" | Cylinder type 356-Ö1 / 456-Ö1

Exterior and interior cylinders as set:  
456-Ö + 456-L02 = 456-Ö1



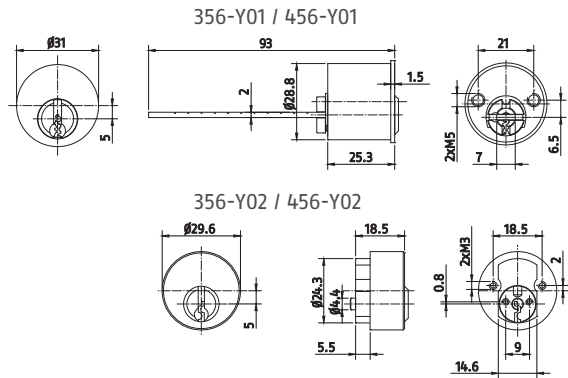
## Cylinder set "L" | Cylinder type 356-L / 456-L

Exterior and interior cylinders as set:  
456-L01 + 456-L02 = 456-L  
Specification:  
• Suitable for Lips locks



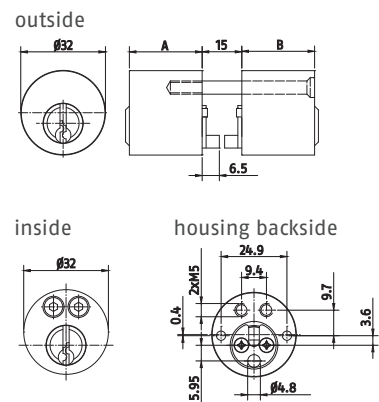
## Cylinder set "Y" | Cylinder type 356-Y / 456-Y

Exterior and interior cylinders as set:  
456-Y01 + 456-Y02 = 456-Y  
Specification:  
• Suitable for Yale locks



## Cylinder set Ø 32 mm "B1" | Cylinder type 356-B1 / 456-B1

Specification:  
• Suitable for mortise locks BKS - replacement for BKS circular cylinder 3107  
• Standard length for interior and exterior cylinder:  
5-pins - 26,5 mm,  
6-pins - 31,5 mm  
• Including 2 fixing screws M5  
Options:  
• Maximum housing length 56,5 mm,  
in 5 mm steps



# CYLINDER ASSORTMENT SPECIFICATIONS

## Cylinder set $\varnothing$ 32 mm "B2" | Cylinder type 356-B2 / 456-B2



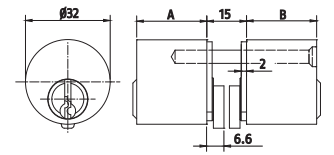
### Specification:

- Suitable for BKS mortise locks - replacement for BKS circular cylinder 3177
- Standard length for interior and exterior cylinder:
  - 5 pins - 26,5 mm,
  - 6-pins - 31,5 mm
- Including 2 fixing screws M5

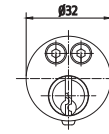
### Options:

- Maximum housing length 56,5 mm, in 5 mm steps
- Special fixing set with spacer available

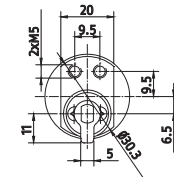
outside



inside



housing backside



# CYLINDER ASSORTMENT SPECIFICATIONS

## Padlocks and locking inserts for padlocks

### Padlock | Cylinder type 380 / 480

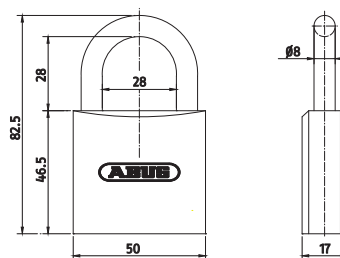


**Specification:**

- Housing: Chrome-plated brass
- With hardened steel shackle NANO PROTECTED™ height 28 mm

**Options:**

- Shackle: Steel 48, 64, 80 mm
- Shackle: Chromium-nickel steel 28, 48, 64, 80 mm



### Shackles and special features for padlocks ...380 / ...480

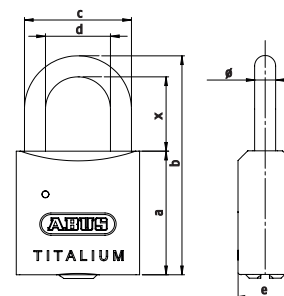
Description		Item no.:
Padlock shackle in hardened steel	48 mm	SG48
	64 mm	SG64
	80 mm	SG80
Padlock shackle in chrome-nickel steel	28 mm	CN28
	48 mm	CN48
	64 mm	CN64
	80 mm	CN80
Anti-theft device for assembly with chain		50HLS11
Anti-theft device for assembly with steel rope		50HLS13
Anti-theft devices cannot be fitted to existing padlocks. Chains and steel ropes are not included in delivery.		

### Padlock | Cylinder type 480-TI



**Specification:**

- Solid lock body made from TITANIUM™ special aluminium – high security with low weight
- With hardened steel shackle NANO PROTECTED™
- Shackle double bolted



### Variations of padlocks ...480-TI

Description	a	b	c	d	e	x	Ø	Item no.:
Padlock: width 45 mm	46,7 mm	82,7 mm	40,4 mm	24,6 mm	20,5 mm	28,1 mm	7,9 mm	...480-TI45
Padlock: width 50 mm	48 mm	92,4 mm	44,1 mm	25,1 mm	23 mm	34,8 mm	9,5 mm	...480-TI50
Padlock: width 60 mm	48,7 mm	91,7 mm	47,4 mm	25,2 mm	28 mm	31,9 mm	11,1 mm	...480-TI60

### Locking insert for ABUS Padlock 83 | Cylinder type 392-V83 / 492-V83

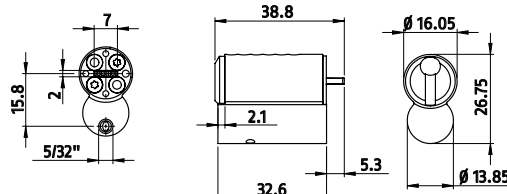


**Specification:**

- In combination with ABUS padlock series 83
- A custom fitting at the factory is not necessary. Can be easily retrofitted.

**Options:**

- Available with or without padlock





# CYLINDER ASSORTMENT SPECIFICATIONS

## ABUS Padlock 83 for locking insert 392-V83 /492-V83 | Item 50VHS04\_...

**Specification:**

- In combination with locking insert ...392-V83 / ...492-V83
- Patented Z-bar allows padlock to be easily converted from non-key-retaining to key-retaining (key can only be removed when the padlock is locked)
- Patented shackle change system (shackle can be changed within only a few seconds by using tool MHA24)



Z-bar

**Options:**

- Further shackle types on request

### Selectable shackle options for Padlocks 83

Order example for ABUS Padlock 83AL/45 with brass shackle with a height of 50 mm: 50VHS04\_V22 with BH83=E050 (shackle height option)

VHS	83AL/45			83/50			83WP/IB/53	83WP/53	83WP
	Brass	Hardened Steel	Stainless Steel	Brass	Hardened Steel	Stainless Steel	Stainless Steel	Hardened Steel	Hardened Steel
19	M019	S019	E019	---	---	---	E019	S019	---
25	M025	S025	E025	M025	S025	E025	---	---	---
28	---	---	---	---	---	---	E028	S028	---
36	---	---	---	---	---	---	---	---	S036
38	M038	S038	E038	M038	S038	E038	---	---	---
50	M050	S050	E050	M050	S050	E050	---	---	---
63	---	---	---	---	---	---	E063	S063	S063
75	M075	S075	E075	M075	S075	E075	E075	S075	---
100	M100	S100	E100	M100	S100	E100	E100	S100	S100
125	---	---	---	---	---	---	E125	S125	---

Marked shackle options are standard.

## ABUS Padlock 83AL/40 | Item 50VHS04\_VH...

**Further colour variations:**

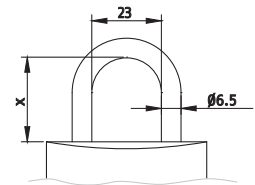


**Specification:**

- Shackle of special steel alloy with NANO PROTECTED™ plating, height 38 mm
- Ultra light, colour anodized aluminium lock body
- Lock insert not included
- Not suitable for outside use

**Options:**

- In the finishes brush, yellow, green, blue, red or black



## ABUS Padlock 83AL/45 | Item 50VHS04\_VH22

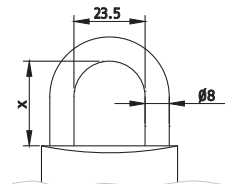


**Specification:**

- Standard shackle hardened steel, height 25 mm
- Titanium alloy body
- Lock insert not included
- Limited suitability for outside use

**Options:**

- x = 19, 25, 38, 50, 75, 100 mm
- Shackle hardened steel, stainless steel or brass



## ABUS Padlock 83/50 | Item 50VHS04\_VH02

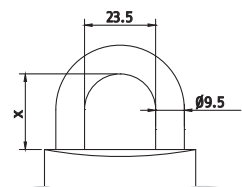


**Specification:**

- Standard shackle hardened steel, height 25 mm
- Chrome plated solid brass body
- Lock insert not included
- Limited suitability for outside use

**Options:**

- x = 25, 38, 50, 75, 100 mm
- Shackle hardened steel, stainless steel or brass



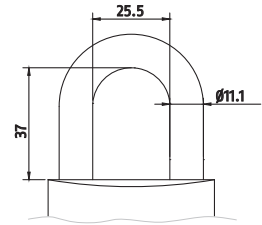
# CYLINDER ASSORTMENT SPECIFICATIONS

## ABUS Padlock 83/55 | Item 50VHS04\_VH03



**Specification:**

- Standard shackle hardened steel, height 37 mm
- NANO chrome plated, hardened solid steel body
- Lock insert not included
- Limited suitability for outside use

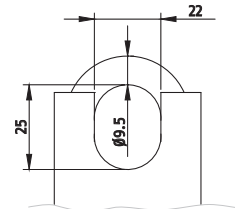


## ABUS Padlock 83CS/50 | Item 50VHS04\_VH04



**Specification:**

- Standard shackle hardened steel, height 25 mm
- Chrome plated solid brass body
- Lock insert not included
- Limited suitability for outside use

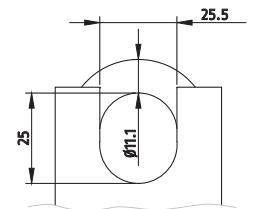


## ABUS Padlock 83CS/55 | Item 50VHS04\_VH05



**Specification:**

- Standard shackle hardened steel, height 25 mm
- NANO chrome plated, hardened solid steel body
- Lock insert not included
- Limited suitability for outside use

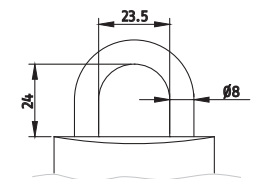


## ABUS Padlock 83WPCS/53 | Item 50VHS04\_VH06



**Specification:**

- Standard shackle hardened steel, height 24 mm
- Solid steel body and cylinder protection cover
- Lock insert not included
- Limited suitability for outside use



## ABUS Padlock 83WP/53 | Item 50VHS04\_VH07

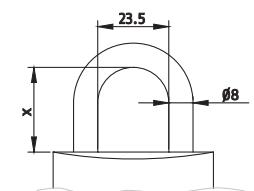


**Specification:**

- Standard shackle stainless steel, height 28 mm
- 100% corrosion resistance due to brass body sheathing and cylinder cover
- Lock insert not included
- Very robust, recommended for outside use

**Options:**

- x = 19, 28, 63, 75, 100, 125 mm, stainless steel



## ABUS Padlock 83WP/53 | Item 50VHS04\_VH08

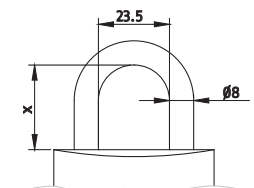


**Specification:**

- Standard shackle hardened steel, height 28 mm
- Solid steel body and cylinder protection cover
- Lock insert not included
- Very robust, recommended for outside use

**Options:**

- x = 19, 28, 63, 75, 100, 125 mm



# CYLINDER ASSORTMENT SPECIFICATIONS

## ABUS Padlock 83WP/63 | Item 50VHS04\_VH09

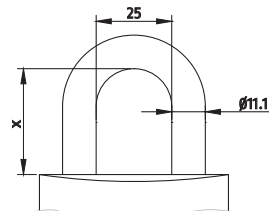


### Specification:

- Standard shackle extremely hardened steel, height 36 mm
- Solid steel body and cylinder protection cover
- Lock insert not included
- Very robust, recommended for outside use

### Options:

- x = 36, 63, 100 mm



## Profile half cylinder for padlock ABUS 86TI/45 and 86TI/55 | Cylinder type 352-VHS86 / 452-VHS86

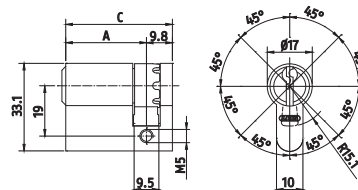


### Specification:

- Profile half cylinder 30/10
- Cylinder is only used for VHS86TI/55 with forced locking

### Options:

- VHS86TI/55 without forced locking, must be indicated on the order (Usage of pressure piece 50DAS20)

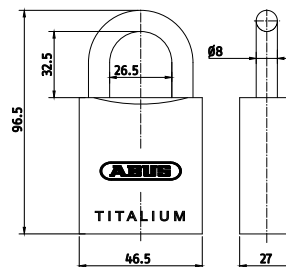


## ABUS padlock for profile half cylinder | Item 86TI/45



### Specification:

- In combination with profile half cylinder 352-VHS86 / 452-VHS86
- Solid lock body made from TITANIUM™ alloy - high security with low weight
- Hardened steel shackle with NANO PROTECT™ coating
- Lock insert not included
- Key retaining

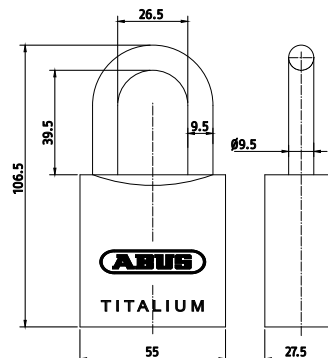


## ABUS padlock for profile half cylinder | Item 86TI/55



### Specification:

- In combination with profile half cylinder 352-VHS86 / 452-VHS86
- Solid lock body made from TITANIUM™ alloy - high security with low weight
- Hardened steel shackle with NANO PROTECT™ coating
- Lock insert not included
- Can be set as key-retaining or non key-retaining (according to cam position)

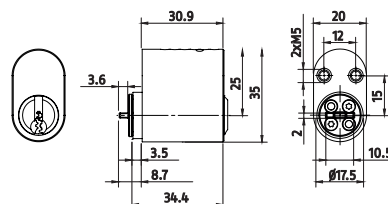


## Oval cylinder for ABUS padlock Rock 60 and Rock 80 | Cylinder type 357-2 / 457-2



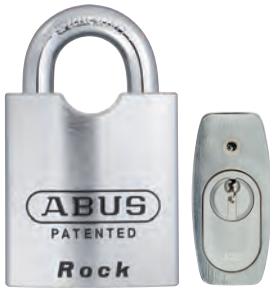
### Specification:

- Housing length 30,9 mm
- An assembly into the padlock at the factory is recommended
- Ideal: Sending in the padlock



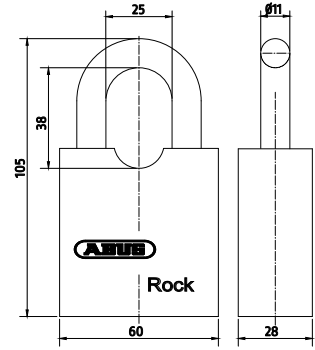
# CYLINDER ASSORTMENT SPECIFICATIONS

## ABUS padlock for oval cylinder | Item Rock 60



**Specification:**

- In combination with oval cylinder 357-2 / 457-2
- Lock insert not included
- Surcharge for assembling the cylinder into the padlock

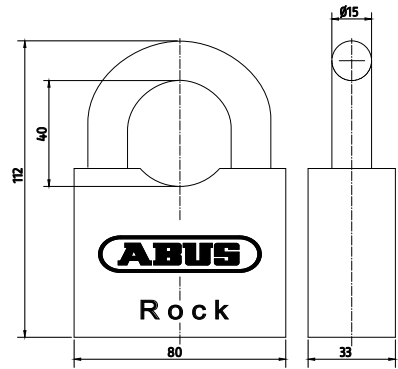


## ABUS padlock for oval cylinder | Item Rock 80



**Specification:**

- In combination with oval cylinder 357-2 / 457-2
- Lock insert not included
- Surcharge for assembling the cylinder into the padlock
- Bravus and Vela with different cylinder protection cover (50VHSET04)



## Padlock with interior square no. 8 | Item 481

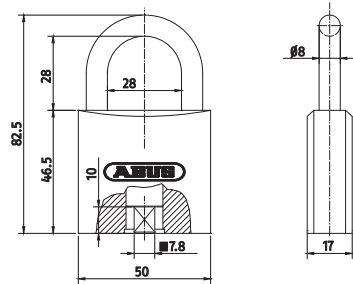


**Specification:**

- Housing: Chrome-plated brass
- With hardened steel shackle NANO PROTECTED™, height 28 mm
- Delivery without square key

**Options:**

- Shackle: hardened steel 48, 64, 80 mm
- Shackle: Chromium- nickel steel 28, 48, 64, 80 mm



## Padlock with interior triangle no. 7 | Item 483

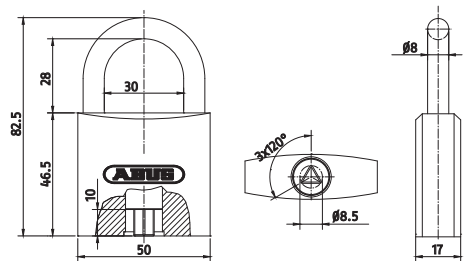


**Specification:**

- Housing: Chrome-plated brass
- With hardened steel shackle NANO PROTECTED™, height 28 mm
- Delivered without triangular wrench

**Options:**

- Shackle: hardened steel 48, 64, 80 mm
- Shackle: Chromium- nickel steel 28, 48, 64, 80 mm



## Padlock with fire brigade knob according to DIN 3223 | Item 482

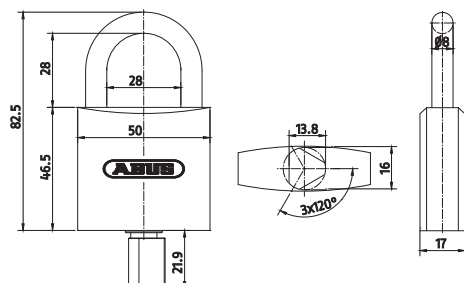


**Specification:**

- Housing: Chrome-plated brass
- With hardened steel shackle NANO PROTECTED™, height 28 mm
- With higher torque turning resistance to help prevent misuse
- Delivered without key

**Options:**

- Shackle: hardened steel 48, 64, 80 mm
- Shackle: Chromium- nickel steel 28, 48, 64, 80 mm





# CYLINDER ASSORTMENT SPECIFICATIONS

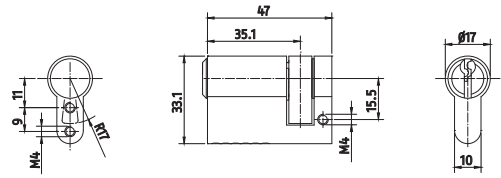
## Lift and switch cylinders

### Half cylinder for "Haushahn" lifts | Cylinder type 350-AZ / 450-AZ



**Specification:**

- Total length cylinder: 5/6-stiftig – 47 mm
- Cylinder includes a special cam with 17mm turn locking radius
- Two threaded screw holes on the back side for fitting

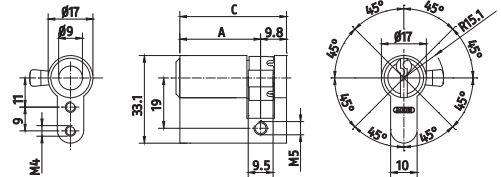


### Profile half cylinder for lift and switch cylinders | Cylinder type 352-AS / 452-AS



**Specification:**

- Basic length cylinder (size C): 5 pins – 36,3 mm, 6 pins – 40,3 mm
- Cam is delivered in 7 o'clock position and can be adjusted in all position of 45° steps (8-fold adjustability)
- Two threaded screw holes on the back side for fitting

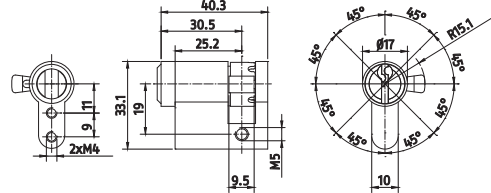


### Profile half cylinder for lift switch | Cylinder type 352-AZ / 452-AZ



**Specification:**

- Overall length cylinder: 5/6 pins – 40,3 mm
- Supplied with cam in 7 o'clock position and the user can put it in any position in 45° steps (8-fold adjustable)
- Two threaded screw holes on the back side for fitting
- After fitting, the body of cylinder is concealed
- Restricted use in locking systems

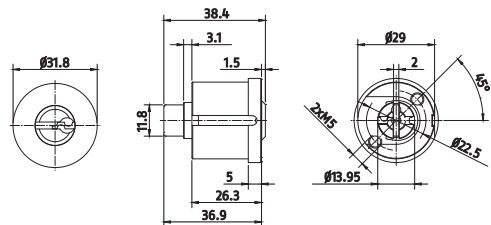


### Rim cylinder for "Schindler" lifts Ø 29 mm | Cylinder type 356-AZ1 / 456-AZ1



**Specification:**

- Total length cylinder: 5/6-stiftig – 26,3 mm
- Especially designed for lifts of the brand "Schindler"

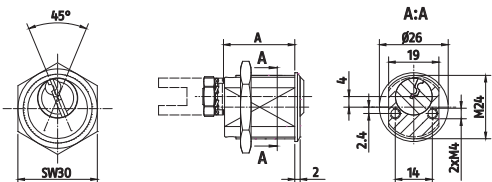


### Switch cylinder Ø 24 mm | Cylinder type 356-S / 456-S



**Specification:**

- Total length cylinder: 5-pins - 22,7 mm, 6-pins - 26,7 mm
  - Locking movement 45°, key can be removed in both locking positions
  - Restricted use for locking systems
- Options:
- Adapter on request



# CYLINDER ASSORTMENT SPECIFICATIONS

## Key-operated switch cylinder $\varnothing$ 24 mm | Cylinder type 356-ES1 / 456-ES1

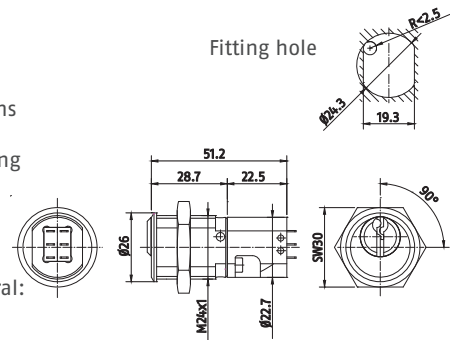


### Specification:

- Overall length of cylinder  
5/6 pins – 26,7 mm
- 2 switches (changers) each with soldered connections  
(1 opener, 1 closer) 250 V-AC/5A and V-DC/5A
- Locking movement 90°, key only removable in closing position
- Slight deviations regarding the sizes in systems  
Bravus.2000 and Bravus.3000

### Options:

- Item no. 356-ES1-S01 or 456-ES1-S01 in system Integral:  
Locking movement 90°, two positions for removing  
the key

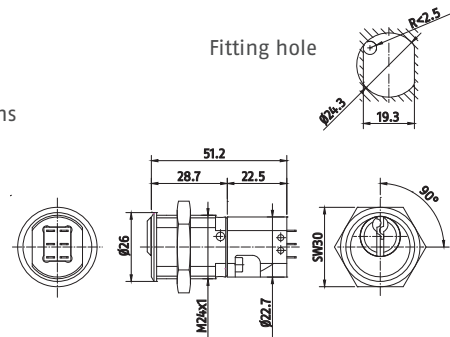


## Key-operated switch cylinder $\varnothing$ 24 mm rebounded | Cylinder type 356-ES2 / 456-ES2



### Specification:

- Overall length of cylinder  
5/6 pins – 26,7 mm
- 2 switches (changers) each with soldered connections  
(1 opener, 1 closer) 250 V-AC/5A and V-DC/5A
- Locking movement 90°, rebounded, key only  
removable in closing position
- Slight deviations regarding the sizes in systems  
Bravus.2000 and Bravus.3000



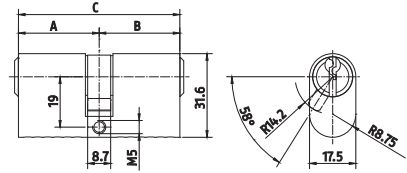
# CYLINDER ASSORTMENT SPECIFICATIONS

## Oval cylinder

### Oval double cylinder | Cylinder type 317 / 417



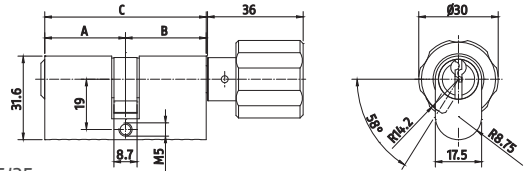
- Specification:
- „British oval“
  - Basic length cylinder (size C): 5/6 pins – 61 mm
  - With special cam
- Options:
- Available up to a length of 81 mm (30/30, 35/35, 40/40 mm), other lengths on request



### Oval knob cylinder | Cylinder type 337 / 437



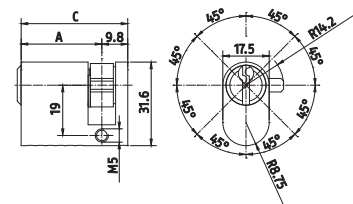
- Specification:
- „British oval“
  - Basic length cylinder (size C): 5/6 pins – 61 mm
  - Standard knob: shape Z, Nickel Pearl
  - With special cam
- Options:
- Available up to a length of 81 mm (30/30, 35/35, 40/40 mm), other lengths on request



### Oval half cylinder with 8-fold adjustable cam | Cylinder type 357 / 457



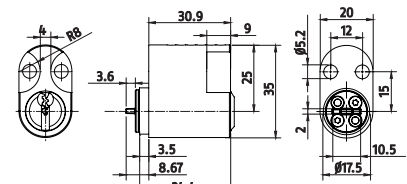
- Specification:
- „British oval“
  - Basic length cylinder (size C): 5/6 pins – 40,3 mm
  - Cam is delivered in 7 o'clock position and can be adjusted in all positions in steps of 45° (8-position adjustability)
  - With special cam
- Options:
- Available up to a length of 50,3 mm (30/10, 35/10, 40/10 mm), other lengths on request



### Interior Scandinavian oval cylinder | Cylinder type 357-1 / 457-1



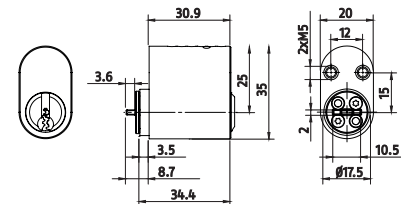
- Specification:
- Housing length: 5/6 pins – 30,9 mm
- Options:
- Housing also available with 5 or 10 mm extensions
  - 60 mm tail piece



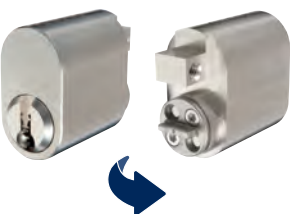
### Exterior Scandinavian oval cylinder | Cylinder type 357-2 / 457-2



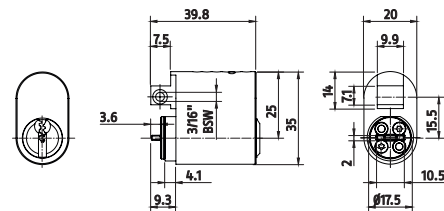
- Specification:
- Housing length: 5/6 pins – 30,9 mm
- Options:
- Housing also available with 5 or 10 mm extension modules
  - 60 mm tail piece



### Oval cylinder for Norwegian rim locks | Cylinder type 357-M1 / 457-M1



- Specification:
- For Norwegian rim locks, e.g. as replacement for Trioing 5520
  - Housing length: 5/6 pins – 39,8 mm
  - With tail piece 3,5 mm



# CYLINDER ASSORTMENT SPECIFICATIONS

## Oval cylinder with knob | Cylinder type 457-MK

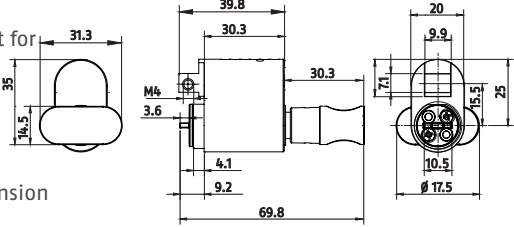


**Specification:**

- For Norwegian rim locks, e.g. as replacement for Trivving 5542
- Housing length: 39,8 mm
- Standard knob: shape 0, brass nickel-plated
- With tail piece 3,5 mm

**Options:**

- Housing also available with 5 or 10 mm extension
- 60 mm tail piece



## Interior oval cylinder with knob | Cylinder type 457-1K

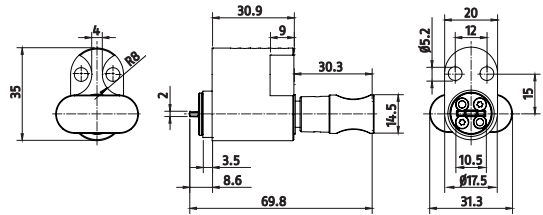


**Specification:**

- Standard knob: shape 0, brass nickel-plated
- With tail piece 3,5 mm

**Options:**

- Housing also available with 5 or 10 mm extension
- 60 mm tail piece

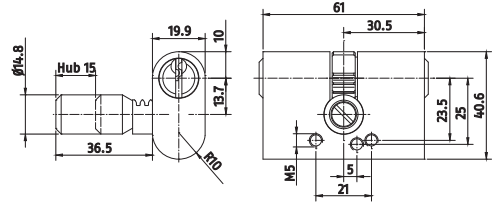


## Oval double cylinder, bolt lock version | Cylinder type 317-RS / 417-RS



**Specification:**

- As an independent combination of bolt lock and cylinder, e.g. for special window/door locking
- Housing length: 5/6 pins – 61 mm



## Oval half cylinder, bolt lock version | Cylinder type 357-RS / 457-RS



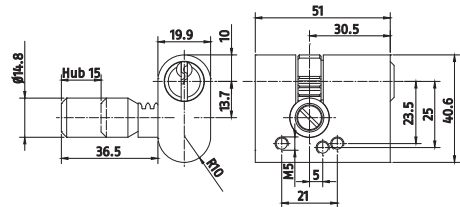
**Specification:**

- As an independent combination of bolt lock and cylinder, e.g. for special window/door locking

- Housing length: 5/6 pins – 51 mm

**Options:**

- Housing length: 5/6 pins – 56 mm

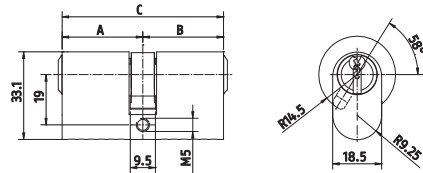


## Oval double cylinder | Cylinder type 314 / 414



**Spezifikation:**

- „Belgian Oval“
- Only available as 6-pinned cylinder





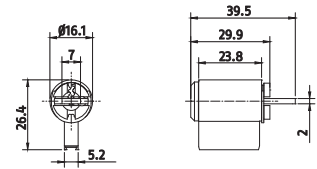
# CYLINDER ASSORTMENT SPECIFICATIONS

## Key-In-Knob / Lever, deadbolt cylinders – Special cylinder range

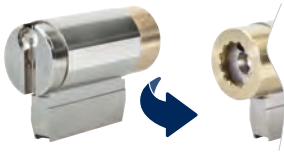
### Key-in-Knob/Lever ANSI cylinder | Cylinder type 392-8 / 492-8



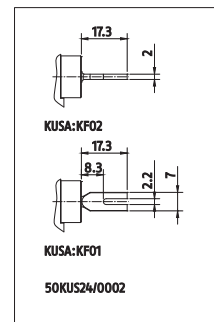
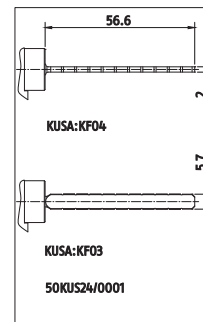
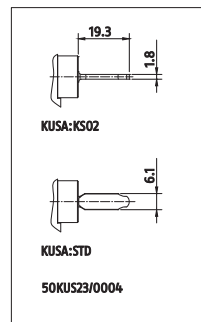
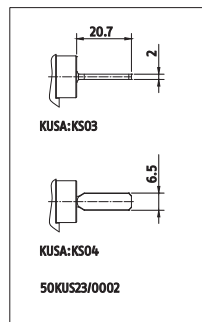
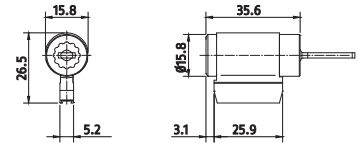
- Specification:
- With 10 mm tail piece, horizontal execution



### Key-in-Knob/Lever ANSI cylinder (AU) | Cylinder type 392-15 / 492-15



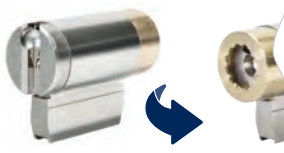
- Specification:
- With variable tail piece (horizontal or vertical assembly possible)
  - Suitable e.g. for Brava 8221, Brava 361/362



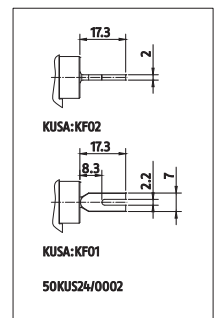
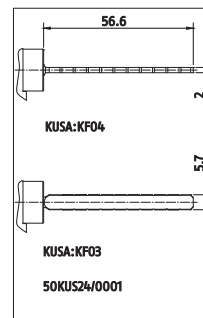
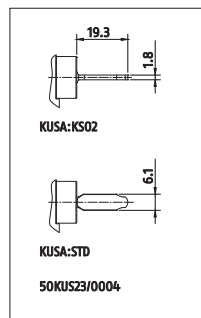
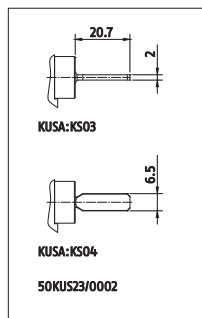
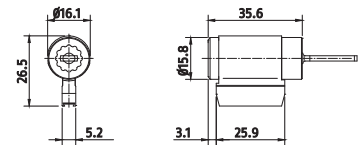
with free-wheel function 180°

with free-wheel function 180°

### Key-in-Knob/Lever ANSI cylinder (CAN) | Cylinder type 392-16 / 492-16



- Specification:
- With variable tail piece (horizontal or vertical assembly possible)



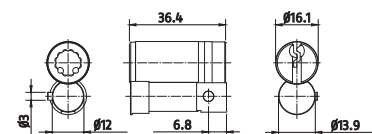
with free-wheel function 180°

with free-wheel function 180°

### Locking insert, system "LFIC" | Cylinder type 392-LFIC / 492-LFIC

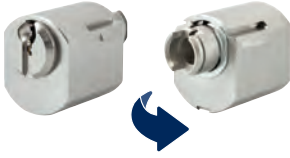


- Specification:
- Replaces Schlage large shapeat IC core
  - Allow the immediate re-keying of a lock without the time and expense of re-pinning cylinders
  - The replacement core is installed or replaced with the use of a control key (not included)

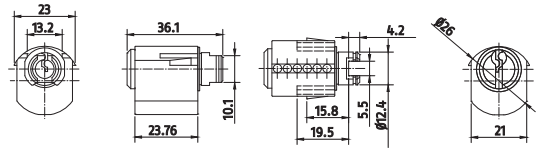


# CYLINDER ASSORTMENT SPECIFICATIONS

## Locking insert, system "ME" | Cylinder type 356-ME / 456-ME



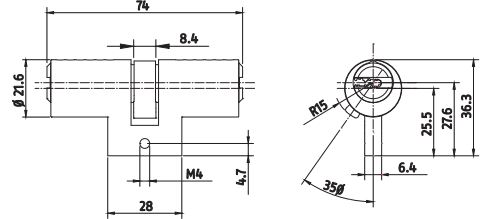
- Specification:
- Key-in-knob cylinder for „Meroni P875“ type locks
  - Housing length of cylinder: 5/6 pins – 23,76 mm
  - Locking function 360°



## Profile double cylinder system "Blockout" | Cylinder type 418-BT2



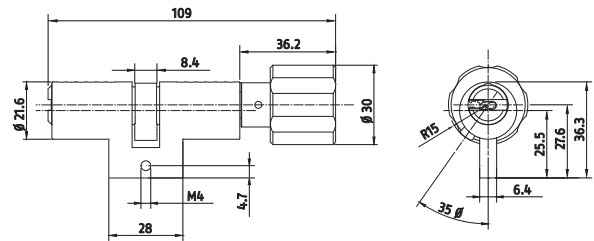
- Specification:
- Suitable for „Blockout“-type mortice locks
  - Housing length of cylinder: 6 pins – 74 mm
  - Only for Bravus and Vela



## Profile knob cylinder system "Blockout" | Cylinder type 438-BT2



- Specification:
- Suitable for „Blockout“-type mortice locks
  - Housing length of cylinder: 6 pins – 74 mm
  - Only for Bravus and Vela
  - Standard knob: Shape Z, aluminium anodized, finish Nickel-Pearl

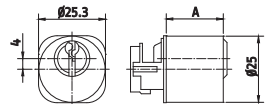


## Furniture cylinder

### Furniture cylinder | Cylinder type 356-MZ / 456-MZ



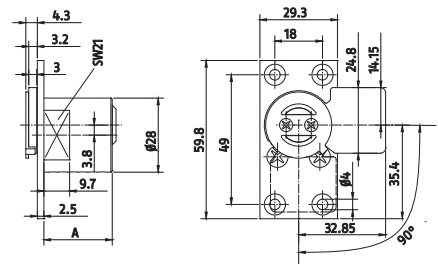
- Specification:
- Suitable for bolt and espagnolette locks in office furniture and cupboards
  - Fitting diameter 25 mm
  - Housing length (size A): 5 pin cylinder – 21,5 mm, 6 pin cylinder – 25,3 mm
- Options:
- With rosette  $\varnothing$  33,4 mm
  - Suitable range of „ASS“ furniture locks available



### Furniture cylinder | Cylinder type 356-MZ1 / 456-MZ1



- Specification:
- Suitable for bolt and espagnolette locks in office furniture and cupboards
  - Fitting diameter 25 mm
  - Housing length (size A): 5 pin cylinder – 21,5 mm, 6 pin cylinder – 25,3 mm
  - Locking movement of 360° at 90° turning
  - movement of the cam (free-wheel function)
  - Key can be removed in both positions of the bolt (shifted 90°)



# CYLINDER ASSORTMENT SPECIFICATIONS

## Pressure cylinder

### Pressure cylinder | Cylinder type 356-D30 / 456-D30

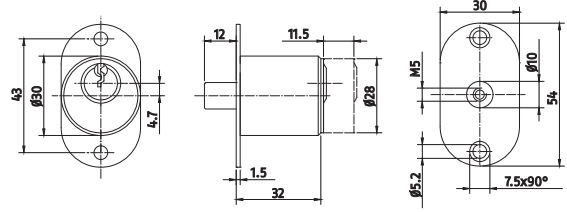


**Specification:**

- Maximum protrusion of the 10mm lock bolt: 11,5 mm
- Fitting diameter 30 mm
- With rosette of  $\varnothing$  40 mm
- Can be locked without key with pressure on the cylinder, opening is only possible with the corresponding key
- Key can be removed immediately after opening

**Options:**

- Key retaining

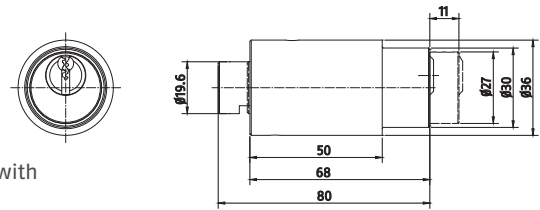


### Pressure cylinder | Cylinder type 356-D36 / 456-D36



**Specification:**

- For trailer hitch (lorry)
- Maximum protrusion of the 20mm lock bolt: 11 mm
- Fitting diameter 36 mm
- Can be locked without key with pressure on the cylinder, opening is only possible with the corresponding key
- Key can be removed immediately after opening



### Pressure cylinder system "Fichet", short variant | Cylinder type 456-FI01

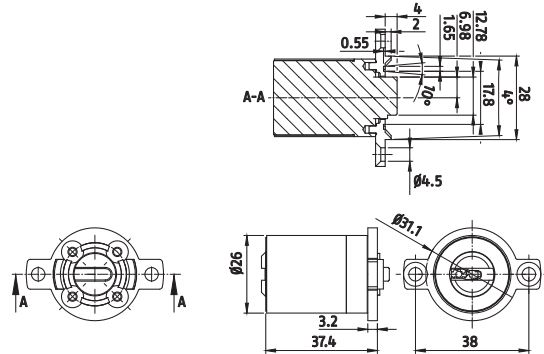


**Specification:**

- Suitable for „Fichet“-type mortice locks
- Fitting diameter 26 mm
- Length 456-FI01: 39 mm
- Only for Bravus and Vela

**Also available as set:**

- 456-FI01 + 456-FI02 = 456-FI1
- 456-FI01 + 456-FI01 = 456-FI2



### Pressure cylinder system "Fichet", long variant | Cylinder type 456-FI02

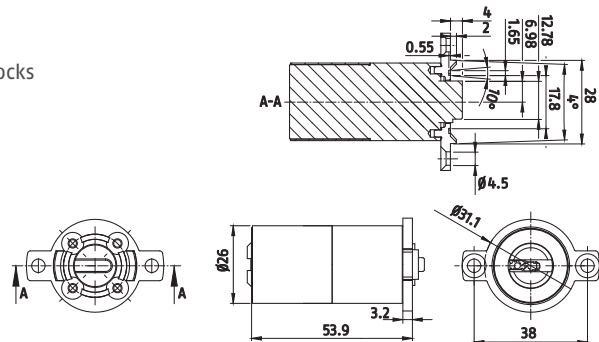


**Specification:**

- Suitable for „Fichet“-type mortice locks
- Fitting diameter 26 mm
- Length 456-FI02: 55 mm
- Only for Bravus and Vela

**Also available as set:**

- 456-FI01 + 456-FI02 = 456-FI1
- 456-FI02 + 456-FI02 = 456-FI3



# CYLINDER ASSORTMENT SPECIFICATIONS

## Euro profile cylinder with variable locking inserts

### Euro profile double and half cylinder with variable locking inserts | Cylinder type 391XX / 491XX



Specification:

- Item number 391XX / 491XX is defined with two X variables, X stands for the function of the locking insert and has to be replaced by an acronym or abbreviation for each cylinder side separately
- Total length double cylinder (size C): 5 pins - 53 mm, 6 pins - 61 mm
- Total length half cylinder (size C): 5 pins - 36,3 mm, 6 pins - 40,3 mm
- Delivery without matching tool for opening

Order example:

491XX 30-30\_K\_IA48

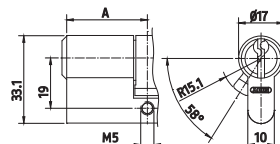
Double cylinder, 6 pins, exterior side with knob, length 30,5 mm  
interior side with interior square no. 8, length: 30,5 mm

#### Variable cylinder side for cylinder type 391X / 491X → A



Specification:

- keyed side

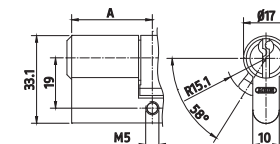


#### Variable cylinder side for cylinder type 391X / 491X → M



Specification:

- cylinder side for profiled construction key

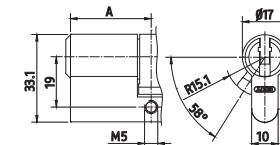


#### Variable cylinder side for cylinder type 391X... / 491X... → U



Specification:

- cylinder side for universal construction key

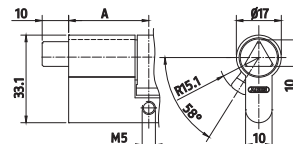


#### Variable cylinder side for cylinder type 391X... / 491X... → AA30



Specification:

- With exterior triangle no. 10

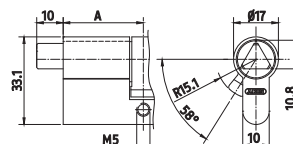


#### Variable cylinder side for cylinder type 391X... / 491X... → AA31



Specification:

- With exterior triangle no. 11

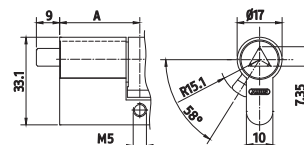


#### Variable cylinder side for cylinder type 391X... / 491X... → AA37



Specification:

- With exterior triangle no. 7

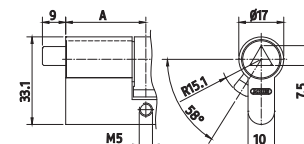


#### Variable cylinder side for cylinder type 391X... / 491X... → AA38



Specification:

- With exterior triangle no. 8

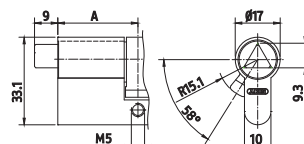


#### Variable cylinder side for cylinder type 391X... / 491X... → AA39



Specification:

- With exterior triangle no. 9



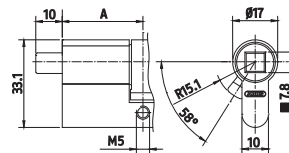


# CYLINDER ASSORTMENT SPECIFICATIONS

## Variable cylinder side for cylinder type 391X... / 491X... → AA48



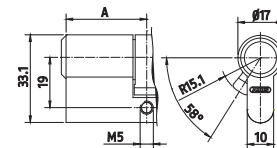
- Specification:
- With exterior square no. 8



## Variable cylinder side for cylinder type 391X... / 491X... → BLIS



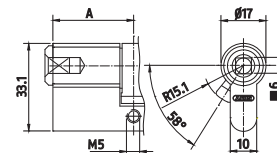
- Specification:
- With dummy/blind core on one side



## Variable cylinder side for cylinder type 391X... / 491X... → II46



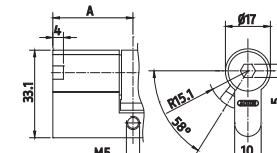
- Specification:
- With interior square no. 6



## Variable cylinder side for cylinder type 391X... / 491X... → II65



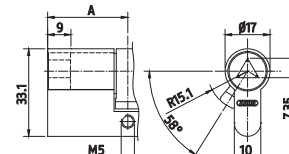
- Specification:
- With interior hexagon no. 5



## Variable cylinder side for cylinder type 391X... / 491X... → IA37



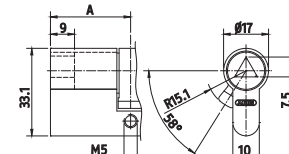
- Specification:
- With interior triangle no. 7



## Variable cylinder side for cylinder type 391X... / 491X... → IA38



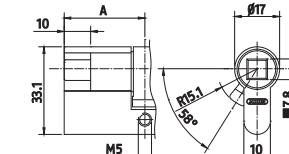
- Specification:
- With interior triangle no. 8



## Variable cylinder side for cylinder type 391X... / 491X... → IA48



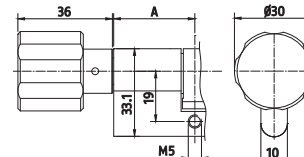
- Specification:
- With interior square no. 8



## Variable cylinder side for cylinder type 391X... / 491X... → K



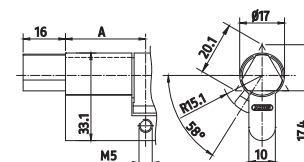
- Specification:
- With knob (always on the right side)



## Variable cylinder side for cylinder type 391X... / 491X... → L



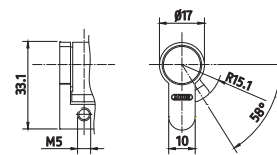
- Specification:
- With fire brigade knob (always on the right side)



## Variable cylinder side for cylinder type 391X... / 491X... → H



- Specification:
- With half cylinder 9,8 mm



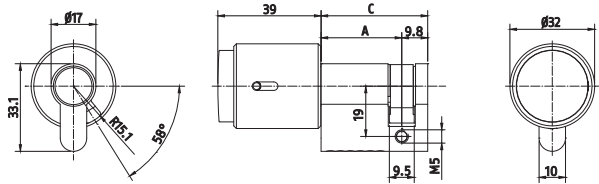
# CYLINDER ASSORTMENT SPECIFICATIONS

## Special cylinders without keys / locking function

### Profile half cylinder with pressure knob | Cylinder type 450-DK



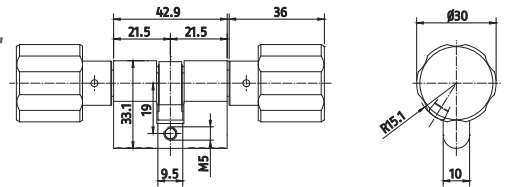
- Specification:
- Basic length cylinder (size C): 6 pins – 40,3 mm
  - Exterior diameter of the knob, without grip: 32 mm
  - Cam can only be turned when button is pressed and held



### Knob cylinder in extra short lengths, knob on both sides "-SL" | Cylinder type 391KK-SL



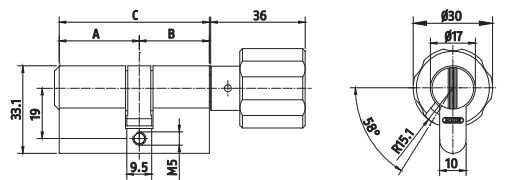
- Specification:
- Special length: 21,5 mm / 21,5 mm
  - Standard knob: shape Z, aluminium anodized, finish Nickel Pearl
- Options:
- Different knob shapes and finishes, except types K, S and O
  - brass-finish and chrome



### Profile knob bathroom cylinder indicating "Engaged" | Cylinder type 391-11 / 491-11



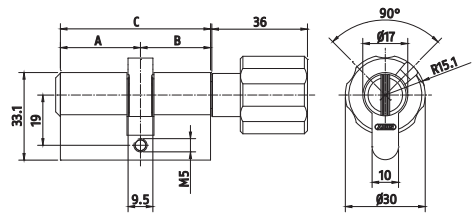
- Specification:
- Basic length cylinder (size C): 5 pins – 53 mm, 6 pins – 61 mm
  - Standard knob: shape Z, Nickel Pearl
  - free 360° turning



### Profile knob bathroom cylinder indicating "Engaged" | Cylinder type 397 / 497



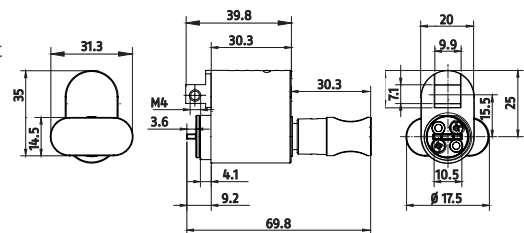
- Specification:
- Basic length cylinder (size C): 5 pins – 53 mm, 6 pins – 61 mm
  - Standard knob: shape Z, Nickel Pearl
  - Limited turning movement 90°
  - To install the cylinder, a needle can be used to temporarily disengage the 90° turning limit



### Oval Norwegian cylinder with knob | Cylinder type 457-MK



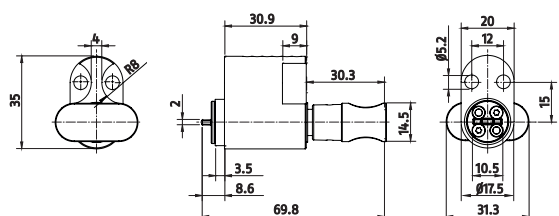
- Specification:
- For respective rim locks, e.g. as replacement for Trioing 5542
  - Housing length: 39,8 mm
  - Standard knob: shape O, brass nickel-plated
  - With tail piece 3,5 mm
- Options:
- Housing with 5 or 10 mm extension
  - 60 mm tail piece



### Interior Scandinavian oval cylinder with knob | Cylinder type 457-1K



- Specification:
- Housing length: 30,9 mm
  - Standard knob: shape O, brass nickel-plated
  - With tail piece 3,5 mm
- Options:
- Housing with 5 or 10 mm extension
  - 60 mm tail piece

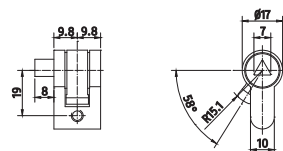


# CYLINDER ASSORTMENT SPECIFICATIONS

## Short cylinder with exterior triangle no. 7 | Cylinder type 491-2



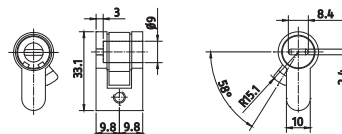
- Specification:
- Basic length 9,8/9,8 mm



## Tail piece-operated Euro profile cylinder insert | Cylinder type 491-3



- Specification:
- Basic length 9,8/9,8 mm

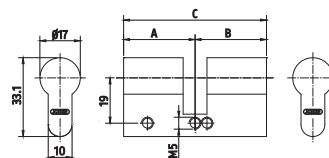


## Blind / Dummy cylinder

### Compact euro profile blind/dummy cylinder | Cylinder type 493-...



- Specification:
- Longer sizes have several installation screw holes for flexible fitting in different door thicknesses. Please refer to table below
  - Material: Titanium
  - Suitable for the use in T90 fire doors, test certificate on demand.



Fitting possibilities for each length	Total length	Item no.:
10/25	35	493-35
10/30	40	493-40
10/35	45	493-45
10/40, 25/25	50	493-50
10/45, 27,5/27,5	55	493-55
10/50, 25/35, 30/30	60	493-60
10/55, 25/40, 35/30	65	493-65
10/60, 25/45, 35/35, 30/40	70	493-70
10/65, 25/50, 35/40, 45/30	75	493-75
10/70, 25/55, 35/45, 30/50, 40/40	80	493-80
10/75, 25/60, 35/50, 45/40, 55/30	85	493-85
10/80, 25/65, 35/55, 45/45, 30/60, 40/50	90	493-90
10/85, 25/70, 35/60, 45/50, 55/40, 65/30	95	493-95
10/90, 25/75, 35/65, 45/55, 30/70, 40/60, 50/50	100	493-100
10/95, 25/80, 35/70, 45/60, 55/50, 65/40, 75/30	105	493-105
10/100, 25/85, 35/75, 45/65, 55/55, 30/80, 40/70, 50/60	110	493-110
10/105, 25/90, 35/80, 45/70, 55/60, 65/50, 75/40, 85/30	115	493-115
10/110, 25/95, 35/85, 45/75, 55/65, 30/90, 40/80, 50/70, 60/60	120	493-120

## TECHNICAL INFORMATION - SPECIAL FEATURES

		Bravus.3500 MX	Bravus.2500 MX	Bravus.4000	Bravus.3000	Bravus.2000	Bravus.1000	Vela.2000	Vela.1000	Vitess.4000	Vitess.2000	Vitess.1000	Zolit.4000	Zolit.2000	Zolit.1000	
Emergency function	GKUP	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Free-wheel cam when key is taken out	PKUP	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Profile cylinders with free-wheel cam for gear locks in emergency exits	ZKUP	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Cylinders with obliged decoupling of knob	ZKU2   ZKU3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Profile cylinders with attack resistance class D acc. to EN1303	BZD	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Cylinders with separate rotation locking	FSWS	x	x	---	x	x	x	*	x	---	*	x	---	*	x	
Cylinder with secondary key set system	FZSS	x	x	---	x	x	x	x	x	*	x	x	*	x	x	
Half cylinder with limited free-wheel function	GF	x	x	*	*	*	*	*	*	x	x	x	x	x	x	
Pre-snap function	BR09	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Drill protection - standard	BS01	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Drill protection - strong drill protection	BS04	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Salt-water resistance	SA01	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
VdS approved cylinders	VdS A	x	x	x	x	x	---	---	---	---	---	---	---	---	---	
VdS approved sets (rim lock and cylinder)	VdS Home	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
SKG** approved cylinders	SKG**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
SKG*** approved cylinders	SKG***	x	x	x	x	x	x	x	x	*	*	*	x	*	*	
SSF3 approved cylinders	SSF3	---	---	x	x	x	x	x	x	x	x	x	x	x	x	
SSF4 approved cylinders	SSF4	---	---	x	x	x	---	---	---	x	---	---	---	---	---	
Cylinder finishes		x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Cylinders with two locking sides in system MX		x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Special numbering cylinder	SN...	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

Special features for the marked systems are only in modular system MX available.

Please find the technical information for the special features on the next pages.

This overview is a rough orientation for the feasibility of a cylinder construction.

It may happen that special features are not realisable for certain cylinder constructions and need to be clarified before the order.



# TECHNICAL INFORMATION - SPECIAL FEATURES

	S60+	S6+	S50+	S5+	X12R	P12RPS	Integral	Wavy Line pro	Wavy Line	Y14 Deltus	XV14 Deltus	Y14	XV14	Z14	XZ14	V14	XV14	KV14	W14	XW14	KW14	Standard	X14	K14	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	x	x	x	x	---	---	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	x	x	---	---	---	---	*	x	*	x	*	x	*	x	*	x	x	x	*	*	*	x	x	x	
	x	x	x	x	---	---	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	x	x	x	x	*	*	---	x	---	---	---	---	x	---	x	---	x	x	---	x	x	x	x	x	
	x	x	x	x	---	---	---	---	---	x	x	x	x	x	x	x	x	---	x	x	---	x	x	---	
	x	x	x	x	x	x	---	---	---	x	x	x	x	x	x	x	x	x	---	---	*	x	x	*	
	x	x	x	x	---	---	x	x	---	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	x	x	x	x	---	---	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	---	
	x	x	x	x	x	x	x	x	*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	---	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	x	---	x	---	---	---	---	---	---	
	*	*	x	x	x	x	x	*	---	x	x	x	x	x	x	x	x	x	x	*	x	x	*	x	
	x	x	*	*	---	---	*	x	---	*	*	x	*	---	*	x	*	*	*	*	*	*	x	*	*
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	x	x	x	x	---	---	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	



Price overview of further systems available as download.

## TECHNICAL INFORMATION - SPECIAL FEATURES

<b>Emergency function – GKUP</b>
<ul style="list-style-type: none"><li>• Only for double cylinders</li><li>• It allows the cylinder to be operated from one side even if a key is inserted on the other side of the cylinder, e.g. in front doors, emergency doors</li></ul>
<b>Order example: 410-3030 GKUP</b>
<b>Free-wheel cam when key is taken out – PKUP</b>
<ul style="list-style-type: none"><li>• Only for double and half cylinders in mortice locks with panic function or multipoint locking</li><li>• For all systems incl. emergency function</li><li>• When the keys are taken off on both sides the cylinder cores are not linked torque proof with the cam</li><li>• Does not correspond to the „Prüfrichtlinie für Profilzylinder mit Freilauffunktion für Getriebebeschlossler in Fluchttürverschlüssen“ edition 2010-01 of the „Gütergemeinschaft Schlösser und Beschläge e.V.“</li></ul>
<b>Order example: 410-3030 PKUP</b>
<b>Profile cylinders with free-wheel cam for gear locks in emergency exits (FZG) – ZKUP</b>
<ul style="list-style-type: none"><li>• Free-wheel function for profile double cylinders in emergency exits with gear locks tested according to PIV directive (Prüfinstitut Schlösser und Beschläge Velbert, Prüfbericht 20-51/15)</li><li>• Definition according to DIN 18252: The cam of the profile cylinder can be turned freely when the key is taken out</li><li>• starting at lengths 35-35 (system Bravus starting at lengths 30-30); only applicable to 6-pin systems</li></ul>
<b>Order example: 410-3030 ZKUP</b>
<b>Cylinders with obliged decoupling of knob – ZKU2   ZKU3</b>
<ul style="list-style-type: none"><li>• Only for knob cylinders</li><li>• Used in public buildings, schools, kindergarten</li><li>• By inserting the key on the outside the knob is not able to lock on the inside</li><li>• ZKU2 - any knob shape and finish (standard version: shape Z, Nickel Pearl)</li><li>• ZKU3 - with red knob, shape L, polyamide (Anti Amok)</li></ul>
<b>Order example: 430-3030 ZKU2</b>
<b>Profile cylinders with attack resistance class D acc. to EN1303 – BZD</b>
<ul style="list-style-type: none"><li>• For doors which need a special protection</li><li>• Two additional hardened steel pins are inserted in the housing and core on each cylinder side</li><li>• Only for double cylinders 6 pin system</li></ul>
<b>Order example: B2L410-3030 BZD</b>
<b>Cylinders with separate rotation locking – FSWS</b>
<ul style="list-style-type: none"><li>• Used when certain sets of keys only get a limited locking function</li><li>• With two sets of keys</li><li>• The first key only operates the latch, the second key operates the latch and the bolt</li><li>• Limited use in locking systems</li></ul>
<b>Order example: 410-3030 FSWS</b>
<b>Cylinder with secondary key set system (2in1 cylinder/construction key) – FZSS</b>
<ul style="list-style-type: none"><li>• After a loss of keys they are no longer authorized to open the cylinder (without change of the cylinder) or if a locking system is already assembled during the construction phase and after the completion of the building the keys of the builder should no longer be authorized to open the cylinders (without change of the cylinder)</li><li>• With two sets of keys</li><li>• After loss of the 1st set of keys the 2nd set is used and can revoke the locking authority of all keys of the 1st set permanently</li><li>• Limited use in locking systems</li></ul>
<b>Order example: 410-3030 FZSS</b>
<b>Half cylinder with limited free-wheel function – GF</b>
<ul style="list-style-type: none"><li>• Only for half cylinders</li><li>• To limit the rotation of the cam in case of a single-rotating locking (360° rotation of the key)</li><li>• The free-wheel function is defined in clockwise direction</li><li>• Possible free-wheel angles of 90°, 180°, 240° and 270°</li></ul>
<b>Order example: 452-3010 GF 180°</b>
<b>Pre-snap function – BR09</b>
<ul style="list-style-type: none"><li>• Only for double cylinders, half cylinders and knob cylinders</li><li>• For the controlled breaking of the cylinder at a predetermined breaking point in case of missing or inadequate security plate</li><li>• For an improved thermal separation of the outer shell of the building. Only 15 % energy loss in comparison to cylinders without pre-snap function</li><li>• Combinations with other special features can be restricted</li></ul>
<b>Order example: 410-3030 BR09</b>

## TECHNICAL INFORMATION - SPECIAL FEATURES

<b>Drill protection – as standard – BS01</b>		
<ul style="list-style-type: none"> <li>• Hardened steel pins in housing and core per closing side for Euro profile cylinders</li> <li>• Resistance class B according to DIN EN 1303</li> <li>• Drilling protection on special cylinders on request</li> </ul>		
<b>Drill protection – strong drill protection – BS04</b>		
<ul style="list-style-type: none"> <li>• Profile cylinders: all systems, special cylinders: on demand</li> <li>• For doors which need a special protection</li> <li>• Two additional hardened steel pins in the housing and core plus one steel pin on the face of the housing on each locking side</li> </ul>		
<b>Order example: 410-3030 BS04</b>		
<b>Salt-water resistance – SA01</b>		
<ul style="list-style-type: none"> <li>• For the use in maritime climate or saline atmosphere</li> <li>• Housing, cores and knob in brass, nickel-plated</li> <li>• Protection measures against corrosion for all functional parts</li> <li>• Combinations with other special features can be restricted</li> <li>• The special feature has been tested in climate and salt mist test according to DIN 50021SS regarding corrosion resistance</li> </ul>		
<b>Order example: 410-3030 SA01</b>		
<b>VdS approved cylinders – VdS A</b>		
<ul style="list-style-type: none"> <li>• Together with double cylinders and half cylinders</li> <li>• For particular demands on the cylinders by insurance companies</li> <li>• Special components for protection against unlocking attempts and against attacks with metal-cutting tools in accordance with VdS 2156-1</li> <li>• Cylinders are labelled with logo and number of recognitions</li> <li>• Combinations with other special features can be restricted</li> </ul>		
<b>Order example: B2L410-3030 VdS A</b>		
The current status of VdS recognition is available on request.		
<b>VdS approved sets (rim lock and cylinder) – VdS Home</b>		
<ul style="list-style-type: none"> <li>• For circular cylinder set system ABUS 4 (KV356-A4) and exterior circular cylinder system ABUS (KV356-A) in combination with rim lock 7025/7010</li> <li>• For circular cylinder set system ABUS 3 (V356-A5) and exterior circular cylinder system ABUS (V356-A) in combination with rim lock 7525/7510</li> <li>• For particular demands on the cylinders by insurance companies</li> <li>• Systems V14 and KV14 approved as burglary-resistant door protection for retrofitting</li> <li>• Limited use in locking systems</li> <li>• Combinations with other special features can be restricted</li> </ul>		
<b>Order example: KV356-A4</b>		
The current status of VdS recognition is available on request.		
<b>SKG approved cylinders – SKG ★★   SKG ★★★</b>		
<ul style="list-style-type: none"> <li>• For profile double-, half- and knob cylinders, ...456-L and ...456-29,6</li> <li>• For particular demands on the resistance of the cylinders</li> <li>• Use of additional hardened drill protection elements in housing and core per locking side</li> <li>• Cylinders are marked at the front face with SKG logo</li> <li>• Can be used in locking systems, combinations with other special features can be restricted</li> <li>• Also available for cylinders in modular design MX</li> </ul>		
<b>Order example: B3L410-SKG ★★★</b>		
<b>SSF3 and SSF4 approved cylinders – SSF3   SSF4</b>		
<ul style="list-style-type: none"> <li>• For profile double-, half- and knob cylinders, ...457-1 and -2, ...456-470-1 and -2</li> <li>• For particular demands on the resistance of the cylinders</li> <li>• Use of additional hardened drill protection elements in housing and core per locking side</li> <li>• Also available for cylinders in modular design MX</li> </ul>		
<b>Order example: B2L457-2-SSF3</b>		
<b>Cylinders with two locking sides</b>		
<ul style="list-style-type: none"> <li>• Pinned with different codes</li> <li>• As of now we produce cylinders with two different locking sides in modular version MX</li> </ul>		
<b>Special numbering cylinder – SN...</b>		
<ul style="list-style-type: none"> <li>• Not possible on all products</li> </ul>	<ul style="list-style-type: none"> <li>without surcharge</li> <li>SN02</li> <li>SN04</li> </ul>	<ul style="list-style-type: none"> <li>up to 9 characters (incl. key system no.)</li> <li>from 10 to max. 12 characters with surcharge</li> <li>more than 12 characters only on request</li> </ul>

## TECHNICAL INFORMATION - SPECIAL FEATURES

### Cylinder finishes

- For individual requirements on the design
- To create an unique appearance of the cylinder and the fitting
- Surfaces galvanized
- only in modular version if the cylinder has another finish apart from nickel plated brass (NI) and polished brass (MS)
- Possible finishes:



NI	nickel plated
BROA	antique bronze
MSA	antique brass
CUA	antique copper
NIA	dark nickel
SIA	antique silver
MASW	black matt
SISW	black silver
MS	brass
AUPO	polished gold
CR	satin chrome
CRGL	polished chrome

Order example: 410-3030 CR



# TECHNICAL INFORMATION - ACCESSORIES

## Combi Cap - for retrofitting



White Nacre Rose



Red Light green Light blue



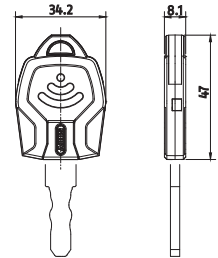
Light grey Black Assembly kit

### Specification:

- Material: plastic
- Available in various colours and colour combinations for all ABUS Pfaffenhain-systems
- Please note this cap cannot be supplied ready-assembled from the factory. Retrofit only.
- For the use with transponders (optional) to operate electronic products
- Later opening of the key cap is possible at any time, e.g. for the change of a transponder

### Attention:

Please mind the packaging units as per below.



Description	Item no.
<p><b>Complete solution:</b></p> <p>Pack of 10 pcs. main body with assembly kit and spacers                      - Please indicate the colour for main body and assembly kit as well as the key system-  <b>Order example:</b> COMCAP01-nacre main body; red assembly kit; system Integral</p>	COMCAP01
<p><b>Single parts:</b></p> <p>Pack of 10 pcs. basic body                      - Please indicate the colour - <b>Order example:</b> 50SKHG01-nacre</p> <p>Pack of 10 pcs. assembly kit consists of clip and filling piece                      - Please indicate the colour - <b>Order example:</b> 50SKMK01-light blue                      When using the filling piece, the cap can be used as RFID-TAG (without key)</p> <p>Pack of 10 pcs. spacer for compensation of key thickness of 0,5 mm                      For keys of the systems Z14 and Integral.</p> <p>Pack of 10 pcs. spacer for compensation of key thickness of 1,0 mm                      For keys of the systems Vela, Vitess, Zolit, S60+, S6+, S50+, S5+, Standard, V14, Y14, Y14 Deltus, W14 and Wavy Line.</p> <p>Keys of the system Wavy Line pro and Bravus do not require the spacer.</p>	<p>50SKHG01</p> <p>50SKMK01</p> <p>50SAB03-0,5</p> <p>50SAB03-1,0</p>

## Transponders for Combi Caps



Description	Item no.
Transponder EM4200, diameter 17 mm, frequency 125 kHz	50TSP07
Transponder EM4200, diameter 27 mm, frequency 125 kHz	50TSP09
Transponder Mifare 1k classic, diameter 17 mm, frequency 13,56 kHz	50TSP08
Transponder Mifare 1k classic, diameter 27 mm, frequency 13,56 kHz	50TSP10
Transponder Mifare 8k Desfire EV1, diameter 17 mm, frequency 13,56 kHz (for wAppLoxx)	50TSP12

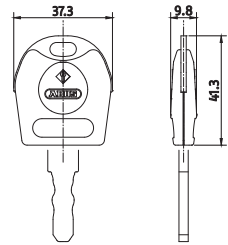
# TECHNICAL INFORMATION - ACCESSORIES

## Skuni Cap - Plastic key cap with metal reinforcement



**Specification:**

- Material: plastic / nickel silver
- Available in various colours and colour combinations for all ABUS Pfaffenhain systems
- Due to the special construction, this cap is factory supplied only
- For the use with transponders (optional) to operate electronic products
- Please note that, once the cap is fitted and supplied, it cannot be disassembled or modified



**Order example:**

50TAG01-red V14 = Key Cap red, without transponder, system V14 or  
 50TAG01-TP01-red/blue Std. = Key Cap red/blue, with Transponder EM4200, system Standard

Description	Item no.
Key cap completely assembled Please indicate the colour. Available colours: white, yellow, red, green, blue, black	50TAG01...

## RFID Tags for Key Caps Skuni Cap



Description	Item no.
RFID tag (PET) EM4200, diameter 17 mm, frequency: 125 kHz	TP01
RFID tag (PET) Mifare 1k classic, diameter 17 mm, frequency: 13,56 kHz	TP02
RFID tag (PET) HITAG 2, diameter 17 mm, frequency: 125 kHz	TP05
Mifare 8k Desfire EV1, diameter 17 mm, frequency 13,56 kHz (for wAppLoxx)	TP06

## Pro Cap coloured key caps - fully assembled at the factory or supplied in packs for retrofitting

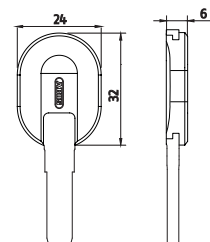


**Specification:**

- Material: plastic
- Available in various colours for Bravus and Bravus MX Magnet
- Caps available both fully assembled at the factory or as packs for retrofit

**Attention:**

Please mind the packaging units as per below. Caps can only be serviced (assembled / disassembled) outside the factory by using the special tool item no. MHS077 and separate key blanks.



**Order example:**

SKAP08-yellow B2L = Pro Cap yellow, without transponder, system B2L

Description	Item no.
Key cap completely assembled	SK06...
Pack of 10 key caps in one colour. for retrofitting	SKAP08...
Please indicate the colour. Available colours: yellow, orange, ruby, turquoise, light blue, sapphire blue, reseda green, umbra grey, black	

# TECHNICAL INFORMATION - ACCESSORIES

## Design Cap - for retrofitting



**Specification:**

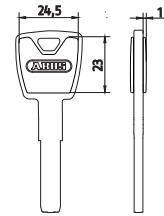
- Material: plastic
- Available in various colours and colour combinations for P12RPS system
- Can be easily retrofitted

**Attention:**

Please mind the packaging units as per below.

**Order example:**

50SKHG04-orange = Design caps orange



Description	Item no.
Pack of 50 key caps in one colour (for 25 keys). Please indicate the colour. Available colours: yellow, orange, strawberry red, ruby, violet, lilac, turquoise, light blue, sapphire blue, reseda green, umbra grey, black	50SKHG04...

## Key Cap - for retrofitting

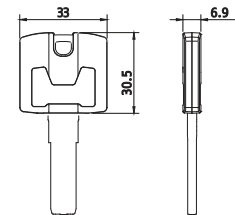


**Specification:**

- Material: plastic with metal insert for attachment of key ring
- Available in various colours and colour combinations for all ABUS Pfaffenhain systems
- Fitting at the factory not necessary, can be easily retrofitted
- The caps can be disassembled and replaced at any stage
- Subsequent opening of the key cap is possible, but not without damaging it
- Not suitable for use with transponders
- Locking mechanism number and embossing are visible

**Order example:**

KEYCAP01BG-red = Plastic key caps red



Description	Item no.
Set of 10 key caps for 10 conventional keys and/or reversible keys contains: 20 x cap halves, 10 x metal reinforcements for the keyring and 20 x windows Please indicate the colour. Available colours: white, yellow, coral, pink, red, green, capri blue, dark blue, silver, black	KEYCAP01BG...
Using the windows contained in the set:  50SKFE01BG – for keys with a thickness of 3,5 mm: Bravus, Wavy Line pro  50SKFE02BG – for keys with a thickness of 2,6 mm: Vela, Vitess, Zolit, S50+, S5+, Wavy Line, Y14 Deltus, Y14, V14, W14, Standard	

## Plastic key caps SKKR to clip - for a simple visual identification

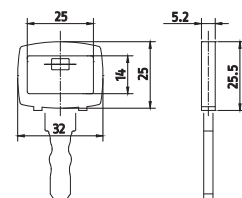


**Specification:**

- Material: plastic
- Available in various colours and colour combinations for all ABUS Pfaffenhain systems (except system Wavy Line pro and Bravus)
- Fitting at the factory not necessary, can be easily retrofitted
- The caps can be disassembled and replaced at any stage

**Order example:**

SKKR-red, V14 = Plastic key caps to clip, red, system V14

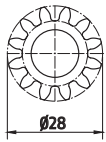
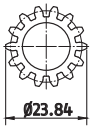
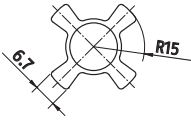
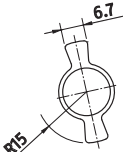
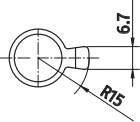
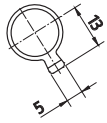
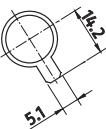
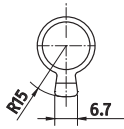

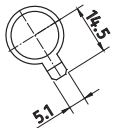
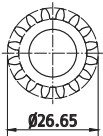
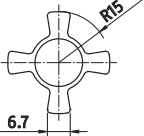
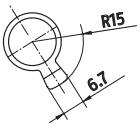
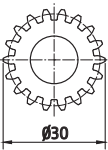


Description	Item no.
Please indicate the colour. Available colours: white, yellow, red, green, blue, black	SKKR...



# TECHNICAL INFORMATION - ACCESSORIES

## Cams for profile cylinders

<p><b>...SB02</b> b=7,5 mm</p>  <p>12 teeth cog</p>	<p><b>...SB03</b> b=7,2 mm</p>  <p>14 teeth cog</p>	<p><b>...SB04</b> b=8,1 mm</p>  <p>Quadruple cam for ABUS PR2000 ... PR2500</p>
<p><b>...SB05</b> b=8,7 mm</p>  <p>Double cam (Biffar)</p>	<p><b>...SB06</b> b=8,7 mm</p>  <p>Block lock 90°</p>	<p><b>...SB07</b> b=8,7 mm</p>  <p>Spain</p>
<p><b>...SB08</b> b=8,7 mm</p>  <p>British oval cylinder</p>	<p><b>...SB10</b> b=8,7 mm</p>  <p>Cam with 6 o'clock position</p>	<p><b>...SB11</b> b=7,7 mm</p>  <p>10 teeth cog</p>
<p><b>...SB12</b> b=8,7 mm</p>  <p>Belgium</p>	<p><b>...SB13</b> b=8,5 mm</p>  <p>16 teeth cog</p>	<p><b>...SB14</b> b=8,7 mm</p>  <p>Quadruple cam for door bar</p>
<p><b>...STD/...SB15</b> b=8,7 mm (STD) b=7,6 mm (SB15)</p>  <p>Standard ...STD for ABUS PR1400 - PR1900</p>	<p><b>...SB16</b> b=8,5 mm</p>  <p>18 teeth cog</p>	

b = Cam width  
Image installed cylinder

Other cam shapes on demand.



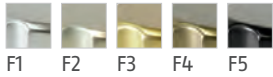
# TECHNICAL INFORMATION - ACCESSORIES

## Knob finishes

Knob: standard version									
									
Silver matt (shape Z)		Silver matt (shape 0)							
Knob material: brass									
	NIA		BRA		MA		CUA		SA
Dark nickel		Antique bronze		Antique brass		Antique copper		Antique silver	
	NI		AP0		CR		CRG		SSW
Nickel plated		Polished gold		Satin chrome		Polished chrome		Black silver	
	MASW								
Black matt									
Knob material: anodised aluminium									
	F1		F2		F3		F4		F5
Aluminium		Nickel silver		Brass polished		Bronze		Antique bronze	
Knob material: Polyamide									
	LP01		LP06		LP08		LP09		LP14
White		Green		Black		Brown		Yellow	
	LP20		LP21		LP30		LP33		LP50
Dark grey		Light Grey		Dark red		Red		Dark blue	
	LP52		LP60		LP62		LP92		
Blue		Dark green		Brown-olive		Anthracite			
Knob material: Stainless steel									
	EPO								
Stainless steel polished									

# TECHNICAL INFORMATION - ACCESSORIES

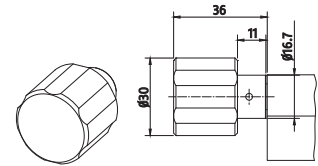
## Knob shapes and finishes | Item no.: 50KNN Z...



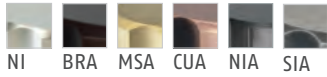
F1 F2 F3 F4 F5

Specification:  
• Knob shape Z

**Order example:**  
50KNN ZF1: Knob shape Z, finish F1



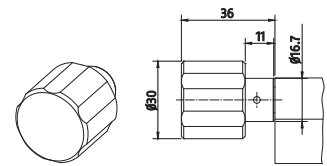
## Knob shapes and finishes | Item no.: 50KNN Z...



NI BRA MSA CUA NIA SIA

Specification:  
• Knob shape Z

**Order example:**  
50KNN ZNI: Knob shape Z, finish Nickel



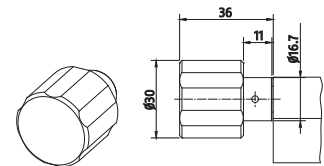
## Knob shapes and finishes | Item no.: 50KNN Z...



EPO

Specification:  
• Knob shape Z

**Order example:**  
50KNN ZEPO: Knob shape Z, Stainless steel polished



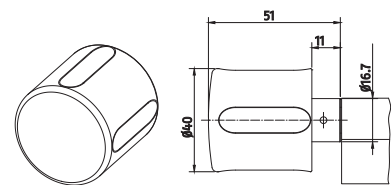
## Knob shapes and finishes | Item no.: 50KNN 2...



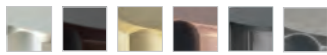
F1 F2 F3 F4 F5

Specification:  
• Knob shape 2

**Order example:**  
50KNN 2F2: Knob shape 2, finish F2



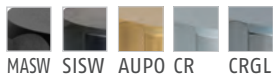
## Knob shapes and finishes | Item no.: 50KNN 2...



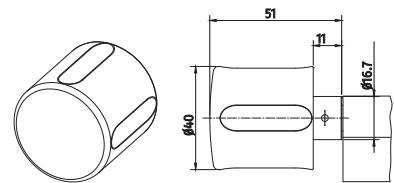
NI BRA MSA CUA NIA SIA

Specification:  
• Knob shape 2

**Order example:**  
50KNN 2CR: Knob shape 2, Chrome



MASW SISW AUPO CR CRGL



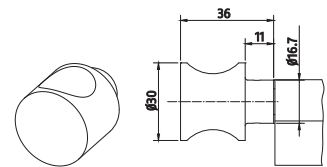
## Knob shapes and finishes | Item no.: 50KNN H...



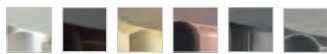
F1 F2 F3 F4 F5

Specification:  
• Knob shape H

**Order example:**  
50KNN HF5: Knob shape H, finish F5



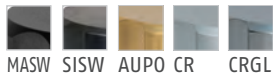
## Knob shapes and finishes | Item no.: 50KNN H...



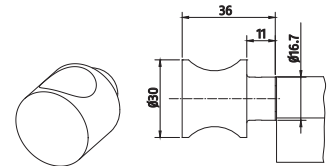
NI BRA MSA CUA NIA SIA

Specification:  
• Knob shape H

**Order example:**  
50KNN HAUPO: Knob shape H, polished gold



MASW SISW AUPO CR CRGL



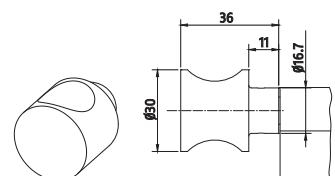
## Knob shapes and finishes | Item no.: 50KNN H...



EPO

Specification:  
• Knob shape H

**Order example:**  
50KNN HEPO: Knob shape H, Stainless steel polished



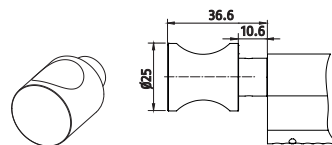
## Knob shapes and finishes | Item no.: 50KNN K...

## TECHNICAL INFORMATION - ACCESSORIES



Specification:  
• Knob shape K

**Order example:**  
50KNN KNI: Knob shape K, finish nickel

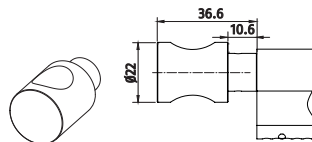


### Knob shapes and finishes | Item no.: 50KNN S...



Specification:  
• Knob shape S

**Order example:**  
50KNN SCR: Knob shape S, finish chrome

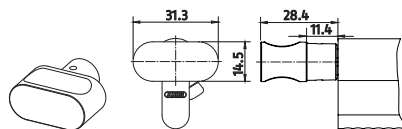


### Knob shapes and finishes | Item no.: 50KNN O...



Specification:  
• Knob shape O

**Order example:**  
50KNN ONI: Knob shape O, finish nickel

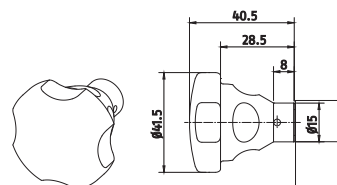


### Knob shapes and finishes | Item no.: 50KNN PA...



Specification:  
• Knob shape P

**Order example:**  
50KNN PAF1: Knob shape P, finish F1

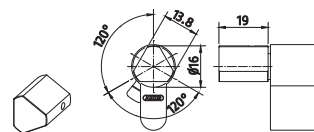


### Knob shapes and finishes | Item no.: 50KFW01...



Specification:  
• Knob shape "fire brigade"  
• 50KFW01...

**Order example:**  
50KFW01NI: Knob shape "Fire brigade", finish nickel



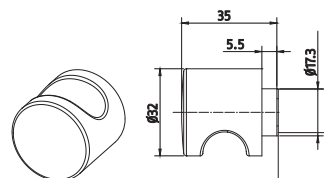
### Knob shapes and finishes | Item no.: 50KNN LP...



Specification:  
• Knob shape L

• Finishes:  
LP01 white  
LP06 green  
LP08 black  
LP09 brown  
LP14 yellow  
LP20 dark drey  
LP21 light grey  
LP30 dark red  
LP33 red  
LP50 dark blue  
LP52 blue  
LP60 dark green  
LP62 brown-olive  
LP92 anthracite

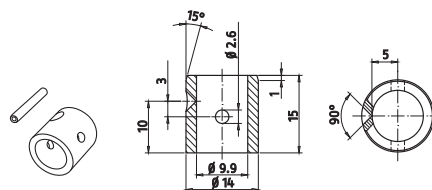
**Order example:**  
50KNN LP01: Knob shape L, colour white



### Adapter set for knob | Item no.: 50KNT04BG



Specification:  
• Adapter set for Secvest-Key  
• 50KNT04BG



### Cam shapes for cam cylinders | Item no.: 50HEB...

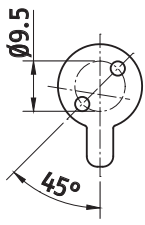
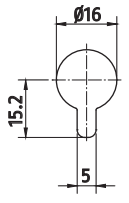
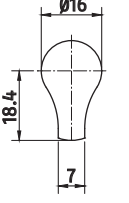
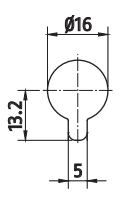
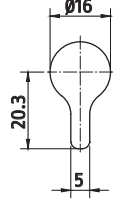
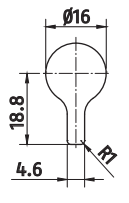
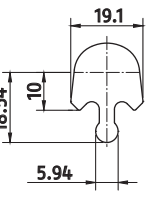
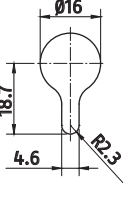
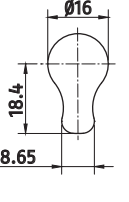
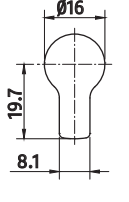
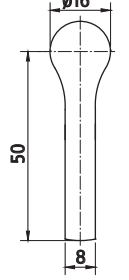
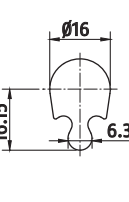
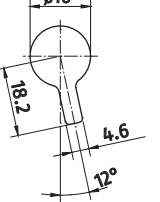
# TECHNICAL INFORMATION - ACCESSORIES

<p><b>Item no.: 50HEB00 L22A</b></p>	<p><b>Item no.: 50HEB00 L22B</b></p>	<p><b>Item no.: 50HEB00 L21D</b></p>	<p><b>Item no.: 50HEB00 L24H</b></p>
<p><b>Item no.: 50HEB00 L36F</b></p>	<p><b>Item no.: 50HEB00 L37J</b></p>	<p><b>Item no.: 50HEB00 L37L</b></p>	<p><b>Item no.: 50HEB00 L37M</b></p>
<p><b>Item no.: 50HEB00 L43G</b></p>	<p><b>Item no.: 50HEB00...</b></p> <ul style="list-style-type: none"> <li>..L25C → A=25mm</li> <li>..L30C → A=30mm</li> <li>..L35C → A=35mm</li> <li>..L38C → A=38mm</li> <li>..L40C → A=40mm</li> <li>..L45C → A=45mm</li> <li>..L58C → A=58mm</li> <li>..L65C → A=65mm</li> <li>..L80C → A=80mm</li> </ul>	<p><b>Item no.: 50HEB00...</b></p> <ul style="list-style-type: none"> <li>..L30E → A=30mm</li> <li>..L35E → A=35mm</li> <li>..L38E → A=38mm</li> <li>..L40E → A=40mm</li> <li>..L45E → A=45mm</li> </ul>	<p><b>Item no.: 50HEB28</b></p>
<p><b>Item no.: 50HEB01</b></p>	<p><b>Item no.: 50HEB00...</b></p> <ul style="list-style-type: none"> <li>..L36K → A=36mm</li> <li>..L31K → A=31mm</li> </ul>	<p><b>Item no.: 50HEB29</b></p>	<p><b>Item no.: 50HEB26</b></p> <p>for key garage</p>

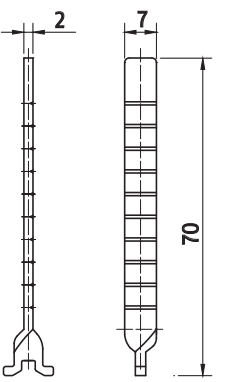
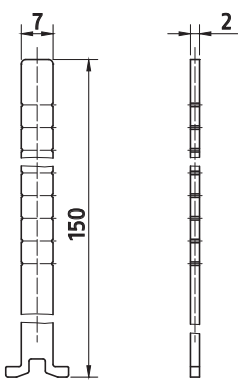
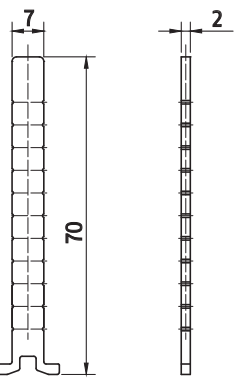
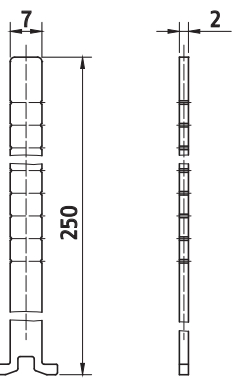
Cams for mortice cylinders | Item no.: 50SZUB...



# TECHNICAL INFORMATION - ACCESSORIES

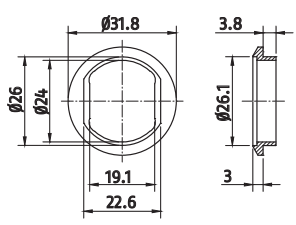
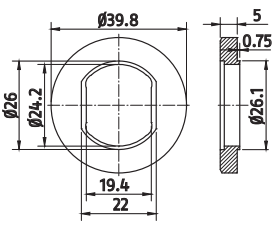
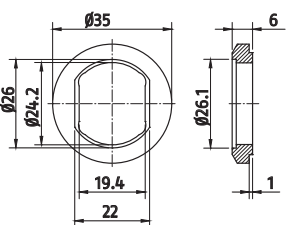
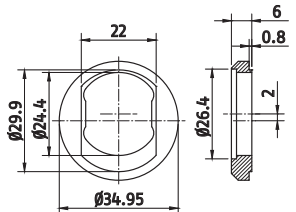
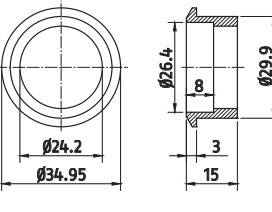
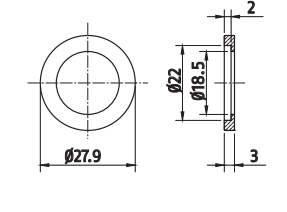
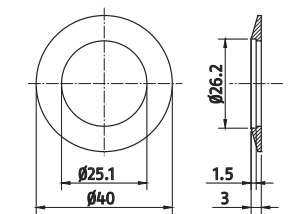
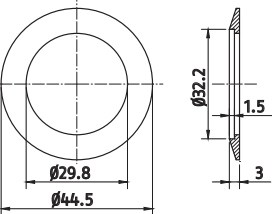
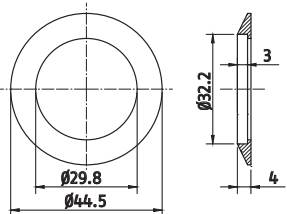
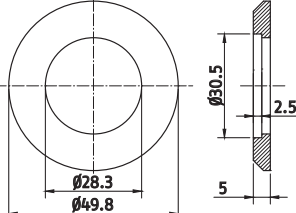
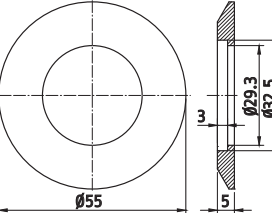
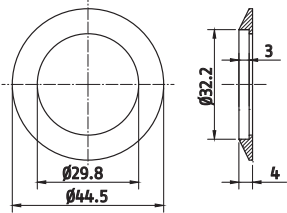
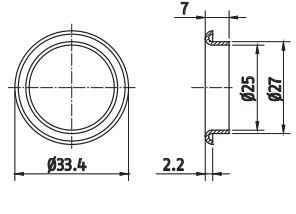
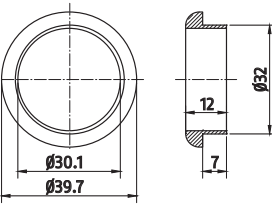
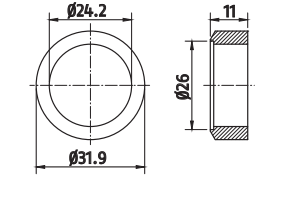
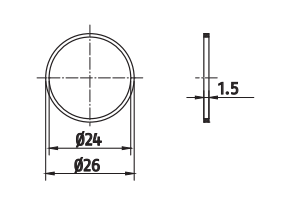
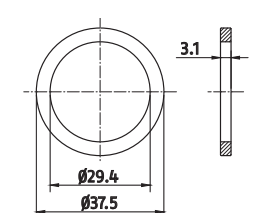
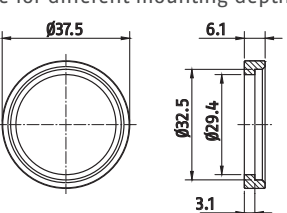
Mounting					
 <p>Other cam shapes on demand.</p>					
Item no.: 50SZUBSZ01	Item no.: 50SZUBSZ02	Item no.: 50SZUBSZ03	Item no.: 50SZUBSZ04	Item no.: 50SZUBSZ05	Item no.: 50SZUBSZ06
					
Item no.: 50SZUBSZ07	Item no.: 50SZUBSZ08	Item no.: 50SZUBSZ09	Item no.: 50SZUBSZ10	Item no.: 50SZUBSZ11	Item no.: 50SZUBSZ12
					

## Tail pieces for rim cylinders | Item no.: 50KUS...

Item no.: 50KUS07 twisted	Item no.: 50KUS11 overlength XL	Item no.: 50KUS18 high strength	Item no.: 50KUS20 overlength XXL
			

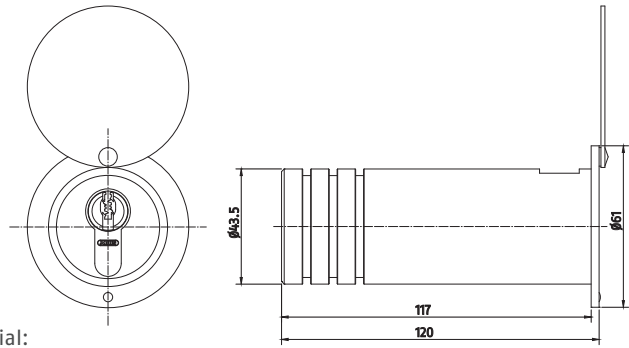
## Rosettes for cam-, furniture-, pressure- and rim cylinders | Item no.: 50ROS...

# TECHNICAL INFORMATION - ACCESSORIES

<p><b>Item no.: 50ROS05</b> For cam cylinder <math>\varnothing</math> 24 mm</p> 	<p><b>Item no.: 50ROS06</b> For cam cylinder <math>\varnothing</math> 24 mm</p> 	<p><b>Item no.: 50ROS08</b> For cam cylinder <math>\varnothing</math> 24 mm</p> 
<p><b>Item no.: 50ROS09</b> For rim cylinder <math>\varnothing</math> 25 mm</p> 	<p><b>Item no.: 50ROS014</b> For rim cylinder <math>\varnothing</math> 29,6 mm</p> 	<p><b>Item no.: 50ROS019</b> For rim cylinder <math>\varnothing</math> 29,6 mm</p> 
<p><b>Item no.: 50ROS03</b> For rim cylinder "A"</p> 	<p><b>Item no.: 50ROS04</b> For rim cylinder "LW01"</p> 	<p><b>Item no.: 50ROS07</b> For rim cylinder "Ruko 1607"</p> 
<p><b>Item no.: 50ROS15</b> For furniture cylinder</p> 	<p><b>Item no.: 50ROS18</b> For pressure cylinder</p> 	<p><b>Item no.: 50ROS07</b> Spacer for cam cylinder <math>\varnothing</math> 24 mm</p> 
<p><b>Item no.: 50ROS01</b> For furniture cylinder</p> 	<p><b>Item no.: 50ROS02</b> For pressure cylinder</p> 	<p><b>Item no.: 50ROS10</b> Spacer for cam cylinder <math>\varnothing</math> 24 mm</p> 
<p><b>Item no.: 50ROS17</b> Spacer for cam cylinder <math>\varnothing</math> 24 mm</p> 	<p><b>Item no.: 50ROS16</b> Spacer for mortice cylinder</p> 	<p><b>Item no.: 50ROS21</b> For mortice cylinders as replacement rosette for different mounting depths</p> 

Key strongbox for half cylinder | Item no.: 453-01 with cover

## TECHNICAL INFORMATION - ACCESSORIES

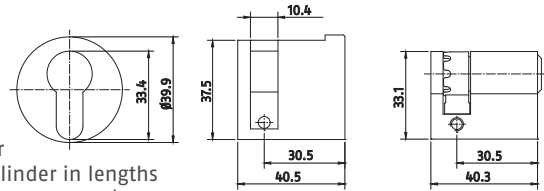


**Specification:**

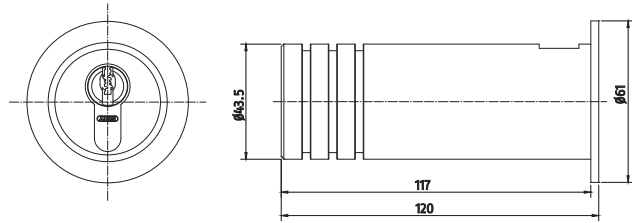
- Cylinder tube material: stainless steel
- Material cylinder housing: brass, chromium-plated
- Length: 120 mm

**Attention:**

Delivered without half cylinder  
Please order the profile half cylinder in lengths 31/10 (5-pin system) or 30/10 (6-pin system).  
Please indicate if required with cover.



### Key strongbox for half cylinder | Item no.: 453-01 without cover

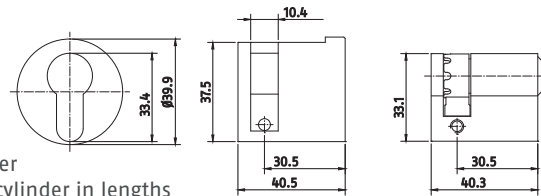


**Specification:**

- Cylinder tube material: stainless steel
- Material cylinder housing: brass, chromium-plated
- Length: 120 mm

**Attention:**

Delivered without half cylinder  
Please order the profile half cylinder in lengths 31/10 (5-pin system) or 30/10 (6-pin system).  
Please indicate if required without cover.



### Weather protection rosettes | Item no.: 50RSR01

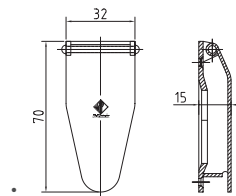


**Specification:**

- Material: Galvanised steel - Item no.: 50RSR01

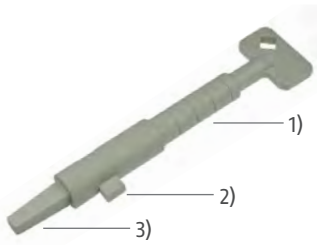
**Order example:**

50RSR01: Galvanised steel weather protection rosettes



### Cylinder length measuring and installation tool | Item no.: HW-BSMMS01

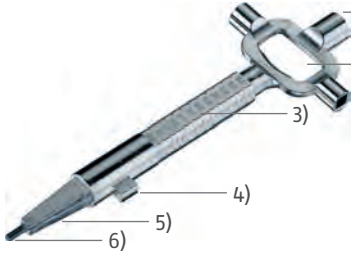
## TECHNICAL INFORMATION - ACCESSORIES



Specification:

- Material: plastic
- 1) scale to measure the required cylinder length
- 2) Euro-profile mortice lock opening tool
- 3) Multi-sized (6 - 8 mm) tool for retracting sash lock latches

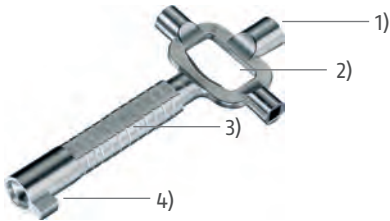
### Cylinder length measuring and installation tool | Item no.: HW-BSMMS02



Specification:

- Material: metal
- 1) Square pin lock key 6/7/8 mm
- 2) Bottle opener
- 3) Two-sided scale 22/75 and 25/75 to measure the required cylinder lengths
- 4) Euro-profile mortice lock opening tool
- 5) Multi-sized (6 - 8 mm) tool for retracting sash lock latches
- 6) Hexagonal key 3 mm

### Cylinder length measuring and installation tool | Item no.: HW-BSMMS03



Specification:

- Material: metal
- 1) Square pin lock key 6/7/8 mm
- 2) Bottle opener
- 3) Two-sided scale 22/75 and 25/75 to measure the required cylinder lengths
- 4) Euro-profile mortice lock opening tool

### Cylinder length measuring tool | Item no.: HW-ZML01



Specification:

- Material: Plastic

### Lubricant spray non-greasing | Item no.: MHA07



Specification:

- Content size: 50 ml



# PRODUCT, GUARANTEE AND LIABILITY INFORMATION

## 1. Product information and intended use

A locking cylinder in line with this definition is a component which is generally replaceable in specially designed locks, clasps, devices, doors and related products. Other locking cylinder models must be handled analogously. In order to be used properly, a locking cylinder is assigned at least one key. Unless otherwise explained, terms relating to locking cylinders and locking systems are defined and/or illustrated in DIN 18252 / EN 1303. With respect to these terms, the following must be taken into consideration for intended use:

- 1.1 Locking cylinders can only be fitted into locks, clasps, devices, etc. unconditionally if these locking cylinders are subject to a standard (e.g. DIN 18252) and these locks, clasps, devices, etc. are exclusively designed for locking cylinders based on this standard. In all other cases, the manufacturer, processor or user of these keys, clasps, devices, etc. must be certain that the locking cylinder they have selected is suitable for fitting and for the intended use.
- 1.2 For safety reasons, locking cylinders may not protrude more than 3 mm from the protective clasp in which they are held. The level of burglary prevention measures is based on the requirements defined (see DIN 18252 / EN 1303).
- 1.3 The locking cylinders must be fitted such that there are no external forces acting on the locking cylinder other than at the designated fixing points and during normal use. Equally, when the key is withdrawn, there must be no external forces transferred to the locking bit or the locking lever in the direction of rotation. This is guaranteed in particular by accurate alignment of locks and clasps to each other. The fixing screw for attaching the locking cylinder must not be tightened to greater than 1.2 Nm (= hand-tightened).
- 1.4 Specially designed locking cylinders must be specified for damp and cold rooms, if subjected to direct weathering, close to the sea and when used in aggressive environments which accelerate corrosion. The same applies to locking cylinders which are used in particularly dusty environments.
- 1.5 Normally, a profile cylinder with two locking sides cannot be operated with a key if a key is already inserted in the opposite side of the cylinder. But if this function is required, a locking cylinder with appropriate functionality (emergency and danger function) should be selected.
- 1.6 If the key is used properly, the torque is only transferred to the key if a key is inserted fully into the key channel of the locking cylinder as far as it will go.
- 1.7 The locking cylinder and key together form a functional unit. Our guarantee applies exclusively to our original products.
- 1.8 Any additional keys we provide for locking cylinders must be checked for proper functionality in the relevant locking cylinder immediately on receipt.

## 2. Misuse

Misuse - i.e. non-intended use of the product - of the locking cylinder or key shall be deemed to have occurred if:

- 2.1 A tool such as a nail, tongs, keyring or similar is applied to the key bow or key head in order to increase the torque. In the interests of locking safety, the key channel and therefore the key shaft are deliberately kept as slim as possible so that the torque can only be transferred directly by hand onto the key head. The use of key caps specific to ABUS Pfaffenhain (e.g. the Combi Cap and the Skuni Cap) is allowed.
- 2.2 The key is used as a handle to move the door leaf. The key is not designed to replace the clasp in passageway doors (using the head, latch, handle, etc.).
- 2.3 The locking cylinder is operated with a key which is forged, bent, dirty, damaged or improperly duplicated.
- 2.4 An attempt is made to actuate the locking cylinder with unlocking tools, aids or other non-original copy keys.
- 2.5 There are foreign bodies in the key channel or on the key itself or the care instructions have not been complied with.

## 3. Product specifications

If the product specifications are not set out in our catalogues, brochures, specifications documents, etc., the requirements for the individual locking cylinders must be agreed with us. Standard DIN 18252 / EN 1303 „Locking cylinders for door locks“ can provide guidance here.

This standard defines the basic requirements and additional requirements for profile cylinder with single-row pin holders. The content of the norm can also be applied analogously to other locking cylinders. The usability of locking cylinders depends among other things on how often they are used, how they are used, on ambient conditions and care. Locking cylinders and keys must be replaced if, despite proper care, problems arise, especially when inserting or withdrawing the key.

## 4. Product maintenance

Locking cylinders must be treated with the care products we recommend (e.g. PS88) at least twice a year - or more, depending on frequency of use. Resinous products must not be used on locking cylinders. Only detergents which do not contain ingredients which accelerate corrosion must be used. Please do not use graphite! Always avoid using different care products (e.g. PS88) when caring for a locking cylinder as this could under some circumstances cause not insignificant malfunctioning.

## 5. Information and instruction duties

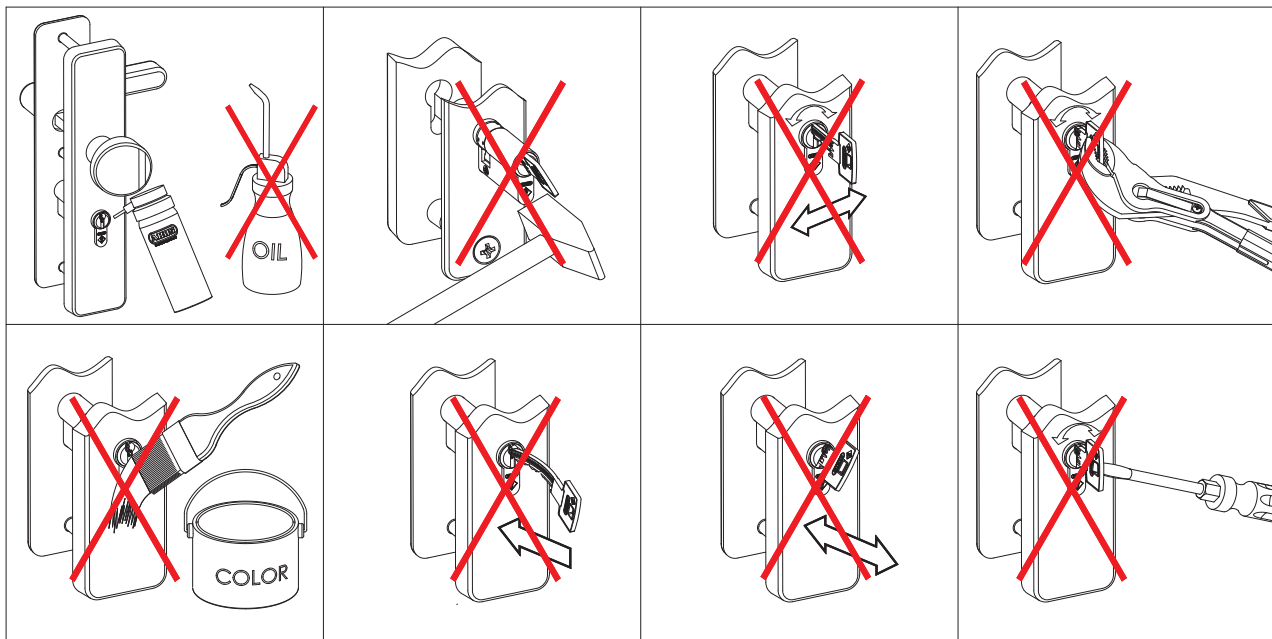
The following documents and services are available to specialist retailers, locksmiths, architects, planners, advisory bodies, fitters and users to assist in the fulfilment of their information and instruction duties in line with the Product Liability Act:

- Catalogues, brochures
- Invitation to tender texts, quotation documents, locking plans
- DIN 18252 (sold exclusively by Beuth Verlag GmbH, Berlin)
- EN 1303 (sold exclusively by the European Committee for Standardization, Brussels)
- Fitting, operation and care instructions.

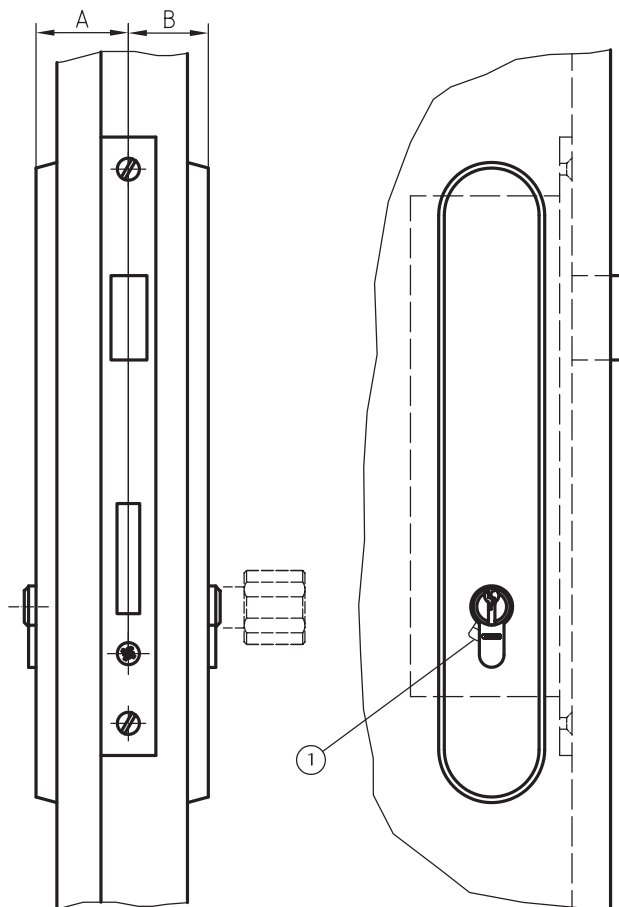
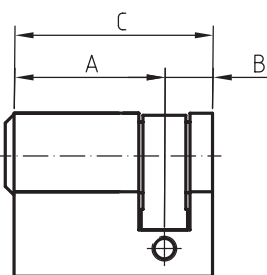
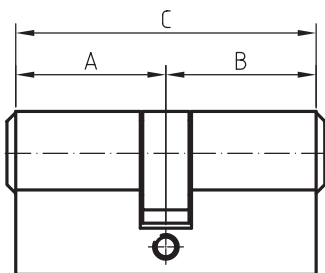
For selecting locking cylinders and for fitting, operation and care:

- 5.1 Architects, planners and advisory bodies are bound to request and comply with all the necessary product information from us.
- 5.2 Specialist retailers are bound to comply with the product information and instructions in the catalogues and price lists and especially to request any necessary instructions from us and pass them on to fitters and users.
- 5.3 Fitters are bound to comply with the product information and especially to request operating and care instructions from us and pass them on to clients and users.

## MAINTENANCE INSTRUCTIONS



For the assembly of profile cylinders we recommend our assembly tool MHA09.  
The fixing screw for the fixation of the cylinder can only be tightened with max. 1,2 Nm (= hand-tight).



A - Exterior length  
B - Interior length

① The cam should point towards the door hinges when the key is removed.

# TERMS AND CONDITIONS

## 1. General

- 1.1 The following terms and conditions shall apply to all business relations between the customer and us, unless otherwise expressly agreed in writing.
- 1.2 Our offers are subject to change and only take effect through our order confirmation or when we dispatch the ordered goods to the customer. The confirmation of receipt of an order does not constitute a legally binding acceptance of the customer's offer. Drawings, illustrations, dimensions, weights or other performance data are only binding if this is expressly agreed in writing. Deviations customary in the trade which are made on the basis of legal regulations or represent technical improvements, are permissible, provided that they do not impair usability for the contractually intended purpose.

## 2. Delivery

- 2.1 The delivery time is only considered to be agreed as an estimate. It shall commence on the date of dispatch of the order confirmation and shall be deemed to have been complied with if the goods have left our factory at the agreed time or, if the order cannot be dispatched, the customer has been notified that the shipment is ready for dispatch. In the event of a delay in delivery, a reasonable grace period shall be set. Partial deliveries are permissible to a reasonable extent.
- 2.2 If we are prevented from fulfilling our delivery obligation due to the occurrence of unforeseeable, extraordinary events which we were unable to avert despite exercising reasonable care according to the circumstances of the individual case, e.g. official interventions, operational disruptions, force majeure, epidemics, global pandemics affecting the supply chain, delay in the delivery of raw materials, etc., the delivery period shall be extended to a reasonable extent. If delivery or performance becomes impossible due to the aforementioned events, we shall be released from our delivery obligation without the customer being able to withdraw from the contract or claim damages.
- 2.3 Unless otherwise expressly agreed, delivery "ex works" is agreed. If delivery "ex works" has been agreed, risk shall transfer to the customer as soon as the shipment has been handed over to the person carrying out the transport or has left our warehouse for the purpose of dispatch.

## 3. Pricing

- 3.1 Unless otherwise expressly agreed, our prices are "ex works" and do not include packaging. This will be invoiced separately.
- 3.2 In cases of drop shipment, where the customer agrees with us on the direct delivery of the goods ordered by them to his customer, we charge an additional €9.90 net per delivery.
- 3.3 For the execution of small and very small orders, pro rata costs will be charged according to the valid price list.
- 3.4 Orders for which fixed prices have not been expressly agreed shall be invoiced at the prices applicable on the day of delivery.
- 3.5 The prices of the objects of purchase do not include VAT. Changes in the VAT rate entitle both parties to adjust the price accordingly.
- 3.6 If a significant change in price factors, e.g. the prices of input materials, wages and salaries, underlying exchange rates, etc., occurs in the case of fixed prices within the framework of longer-term contracts, we may demand that the prices be revised by way of negotiation.

## 4. Terms of payment

- 4.1 Our invoices must be paid within 10 days of the invoice date with a 2% discount or within 30 days net. We grant a 3% discount for SEPA direct debit mandates and prepayment. Invoice amounts of EUR 25 or less are due immediately without deduction. Insofar as an invoice settled with a credit note was settled with a deduction for a discount, we shall be entitled to make a corresponding discount deduction from the amount of the credit note.
- 4.2 The customer is obliged to check our invoice immediately upon receiving it. The customer must declare any objections in writing to us within six weeks of receiving the invoice. After expiry of this period, the invoice shall be deemed accepted.
- 4.3 In the event of overdue payment, we shall be entitled to charge interest on arrears in accordance with § 288 BGB.
- 4.4 We are entitled to set off payments made by the customer against the customer's older debts first and will inform the customer of the type of set-off made. If costs and interest have already been incurred, we shall be entitled to set off the payment first against the costs, then against the interest and finally against the main performance.
- 4.5 A payment shall only be deemed to have been made when we have access to the sum. In the case of cheques, payment shall only be deemed to have been made when the cheque is cashed.
- 4.6 If, after conclusion of the contract, there is a considerable risk to the claim to the remuneration to which we are entitled, we shall be entitled to demand payment in advance or the provision of security and to refuse delivery until our claims have been met.

## 5. Return of goods

- 5.1 Goods may only be returned if they have been expressly agreed with us in the individual case. The return must be made in the original packaging and carriage paid.
- 5.2 For all returns of goods, we charge a flat processing fee of 25% of the customer's product purchase price. If the cost of reprocessing is higher, this will be charged separately.
- 5.3 Custom-made products as well as defective and damaged products are generally excluded from return. This also applies to products which we may no longer have in our range or which we have modified.

## 6. Retention of title

- 6.1 The goods shall remain our property until full payment of all claims arising from the business relationship. The inclusion of individual claims in a current account as well as the striking of a balance and recognition of such shall not affect the retention of title.

- 6.2 The customer is entitled to sell the goods delivered by us in the ordinary course of business as long as they fulfil their obligations from the business relationship with us. However, they may neither pledge the reserved goods nor assign them as security. The customer is required to secure our rights on credit when reselling the goods subject to retention of title.

- 6.3 The customer is obliged to treat the item with care; in particular, they are obliged to insure it adequately at replacement value against fire, water and theft damage at their own expense. If maintenance and inspection work is required, the purchaser must carry this out in good time at their own expense.

- 6.4 We are entitled to demand the surrender of the reserved goods at any time if the customer is in default of payment.

- 6.5 If the customer sells goods subject to retention of title on credit, they hereby assign to us in advance the claims resulting from this resale, and we accept this assignment. The customer is entitled to collect these claims as long as they meet their obligations towards us. At our request, the customer is obliged to specify third-party debtors and to notify them of the assignment.

- 6.6 We undertake to release the securities to which we are entitled under the above provisions at our discretion at the customer's request to the extent that their value exceeds the claims to be secured by 20%.

- 6.7 The customer shall inform us without delay of any enforcement measures by third parties against the goods subject to retention of title or against claims assigned to us or other securities, and shall hand over the documents necessary for an intervention.

## 7. Warranty and liability

- 7.1 Visible defects are to be notified in writing immediately upon receipt of the delivery; hidden defects are to be notified immediately upon discovery.

- 7.2 In the event that the purchased item is defective, we shall first have the right to subsequent performance, whereby we may refuse the subsequent performance alternative chosen by the customer under the conditions of Section 439 (3) of the German Civil Code (BGB). If we refuse both types of supplementary performance in accordance with § 439 (3) BGB or if the supplementary performance has failed or is unreasonable for the customer, the customer shall be entitled to further claims for damages instead of performance and withdrawal. Rectification shall be deemed to have failed after the second unsuccessful attempt, unless something else arises in particular from the nature of the item or the defect or the other circumstances. In the event of a merely negligent breach of duty by us or our vicarious agents, the customer's claim for damages instead of performance shall be limited to the foreseeable damage typical for the contract.

- 7.3 No warranty is given for damage caused by unsuitable or improper use, faulty assembly or commissioning by the customer or third parties, natural wear and tear, faulty or negligent handling or maintenance, unsuitable operating materials or replacement materials, defective installation work, chemical, electrochemical or electrical influences or other influences (e.g. water, frost, heat). Our warranty obligation shall also not apply if the customer or a third party carries out repairs or changes or effects damage causally related to the defect claimed without our consent.

- 7.4 The warranty period is one year from delivery of the purchased item.

- 7.5 Our technical application advice, both verbal and written, as well as suggestions, calculations, project planning, etc. are only intended to explain to the customer the best possible use of our products. It does not release the customer from their obligation to satisfy themselves by their own examination of the suitability of our products for the purpose intended by them.

- 7.6 Complaints of any kind can only be considered if they are made in writing within 10 days of receipt of the consignment, in the case of defects that are not immediately apparent immediately after they become apparent, but no later than within 6 months of receipt. In the event of failure to notify defects in good time, any warranty claim shall be excluded.

- 7.7 Unless otherwise expressly agreed, claims for damages by the customer against us are excluded, irrespective of the legal grounds, in particular for breach of duties arising from the contractual obligation and from unauthorised actions. This shall not apply in the case of intent, gross negligence (by owners, legal representatives or executive employees) or fraudulent intent, or in the case of liability under the Product Liability Act or due to culpable injury to life, limb or health, or due to culpable breach of material contractual obligations. Unless another of the aforementioned cases applies, the claim for damages for the breach of material contractual obligations shall, however, be limited to the foreseeable damage typical for the contract.

## 8. Property rights

- 8.1 The proposals, offers, illustrations, drawings, calculations and other documents made by us in any form are our intellectual property and must therefore be treated as confidential. They may only be brought to the attention of third parties with our consent.

- 8.2 The operating items produced by us on behalf of the customer for the manufacture of the subject matter of the contract, in particular tools, devices, documents, etc., shall remain our property even if the contractual relationship ends and shall only be delivered to the customer upon termination of the contract if they have been invoiced separately.

- 8.3 The customer shall be solely liable if rights, in particular industrial property rights of third parties, are infringed by the execution of their order.

## 9. Place of performance and jurisdiction

- 9.1 The place of performance for all obligations arising from the contractual relationship is Wetter/Ruhr.

- 9.2 All contractual and non-contractual claims shall be governed exclusively by German law to the exclusion of the UN Convention on Contracts for the International Sale of Goods. The conflict of laws shall not apply. The place of jurisdiction for all disputes arising from the contractual relationship shall be Wetter/Ruhr, insofar as the customer is a registered trader, a legal entity under public law or a special fund under public law.





**ABUS | Pfaffenhain GmbH**  
**abus.com**

---

Fabrikstraße 1  
09387 Jahnsdorf  
Germany  
Tel: +49 3 72 96-713 0  
Fax: +49 3 72 96-713 750  
vertrieb@abus-pfaffenhain.de