

www.pylocx.info



Bundesamt
für Sicherheit in der
Informationstechnik



Critical
Entities
Resilience

**SECURITY
MADE IN GERMANY
SINCE 1883**



STUV

PYLOCX®

**The access control system
for the critical infrastructure**



ENERGY SUPPLIERS

WATER SUPPLIERS

TELECOMMUNICATIONS

PYLOCK®

Access control for the critical infrastructure



PYLOCK® was developed, tested and certified for the German Federal Office for Information Security (BSI) to fulfil the special security requirements in the field of critical infrastructure, in particular the CER (Critical Entities Resilience) Directive of the European Union.



Battery-free locking components

PYLOCK® does not need batteries, because the energy comes from the **PYKEY®** when opening.



Incomparably resilient

PYLOCK® withstands extremes – whether heat, cold or urban vandalism.



Crisis-resistant & Blackfall-proof

PYLOCK® continues to work even when the mobile phone or power grid has failed.



BSI-, VdS- & CER-compliant

PYLOCK® is VdS- and BSI-approved and fulfils the European Union's critical infrastructure protection directive.



Highest data and cyber protection

PYLOCK® is GDPR compliant. Sensitive data can be hosted on local servers.



Access via one-time code

PYLOCK® uses a secure one-time code. This means that every access is controlled and documented.

PYLOCK®

Overview of system components & designations



PYLOCK® Battery-free locking components

Choose from a variety of battery-free locking solutions. VdS and BSI tested. Suitable for your application.

PYKEY® Mobile keyboard

The **PYKEY®** is used to enter the **PYCODE®**. The **PYKEY®** supplies the **PYLOCK®** with energy up to 1,000 times and is rechargeable via USB.

PYCODE® Cryptic one-time code

Every locking process requires an 8-10 digit unique code, the **PYCODE®**, which is provided to match the **PYKEY®** and **PYLOCK®**.

PYSUITE® Management software

The **PYSUITE®** software manages the **PYLOCK®** system components and generates the **PYCODE®** either on-premise or in the cloud.

PYGUARD® Door and sensor guard

Is the door properly closed? **PYGUARD®** reports the door or sensor status live to **PYSUITE®** and **PYAPP®** via LTE, LTE-M or 450 MHz.

PYAPP® Security-App

If you have been authorised to do so, the valid **PYCODE®** for the **PYLOCK®** to be opened will be displayed within seconds.

PYCODE®

What makes the one-time code so secure?

In conventional RFID/NFC locking systems, the user's authorisation is stored in a chip key, an RFID card or an NFC mobile phone. If you want to immediately revoke an authorisation, this requires a blacklist that has to be transferred to the lock on site.

Not with PYLOCK®: The one-time code is newly generated for each locking operation. Thus, the loss of a **PYKEY®** does not pose a security risk, because without the matching **PYCODE®**, the **PYKEY®** is inoperable. Therefore, a blacklist is not required for the **PYLOCK®** system.

PYLOCK®
@ YouTube



PYSUITE® Management software



High-performance Access suite

PYSUITE® is a multi-client and multi-admin software that allows you to conveniently manage and monitor doors, users, locks, sensors and authorisations.



On-premise or Access-as-a-Service

The choice is yours:
the security-critical data of the **PYSUITE®** software is stored either in your own data centre or on our cloud security servers.



Integration with other access systems

Integrate **PYLOCKX®** into existing access control systems or use existing RFID cards (e.g. Mifare®) for identification. This simplifies system administration.



No unlimited compulsory fees

If you install **PYSUITE®** on-premise or host it yourself, there are no ongoing fees. This way, with **PYLOCKX®** you always have full control and transparency over costs.



PYLOCKX® Data protection



Note the GDPR and German Works Constitution Act!

If persons outside the organisation (e.g. technicians from external service companies) are to use a mobile phone app to open doors, their conscious and uncoerced consent to data storage is usually required. Furthermore, the storage of events could be subject to approval in accordance with the German Works Constitution Act (BetrVG).

Recommendation: Use only the **PYKEY®** (and not the **PYAPP®**) with people outside the organisation. This way you avoid having to obtain an individual declaration of consent from external persons and do not risk violating data protection. We would be happy to advise you on this.

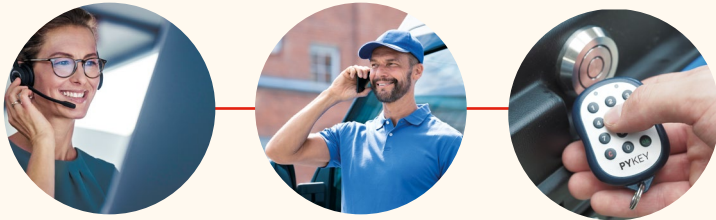
PYKEY® – Opens locks easily and reliably

PYLOCK® Authorisations

Authorisations are assigned in the **PYSUITE®** software. Assign a **PYKEY®** to a person or organisation and define which locks they are allowed to open. You can also define whether the **PYCODE®** must always request this information by telephone, or whether it can be accessed using the **PYAPP®**.

Manual PYCODE® query by Access Manager

typical for non-organisational users



1 Request a **PYCODE®** by phone, in person or by text message

2 Enter the **PYCODE®** in **PYKEY®** and open the lock

PYCODE® query with online authorisation

typical for own staff



1 Conveniently retrieve **PYCODE®** yourself by using **PYAPP®**

2 Transfer **PYCODE®** to **PYKEY®** and open the lock

PYKEY® 4-eyes principle

For more safety or occupational safety!

Do you want only two people to have access at the same time in particularly sensitive areas?

No problem!

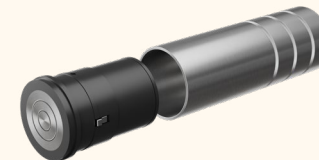
Each **PYLOCK®** can be configured in such a way that two different **PYKEY®**s and **PYCODE®**s are required in succession to open the lock.

Safety first!





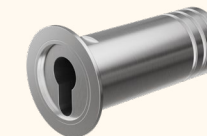
PYLOCKX® as a key safe or retrofit locking mechanism



PYLOCKX® Key safe

Electronic key safe/deposit box with VdS and BSI certification. Locking insert with Ø 61.5 mm.

- flush stainless steel contact point
- highly protected against vandalism and weather
- optional opening monitoring
- battery-free **PYLOCKX®** technology
- various tube lengths



PYLOCKX® Lock inserts for existing key cabinets

Ø Lock inserts	e.g. suitable for key safes
33 mm	ABLOY® KD-2XX, IKON® 8074, KRUSE® MASTIFF®
35 mm	IKON® 177/178, 9M39/40
46 mm / 67 mm	Kruse® PZ Key safe
58 mm	IKON® 176/179, 9M37/38

PYLOCK® for manhole covers



PYLOCK® Manhole lock

Self-closing lock insert for shaft covers from all major manufacturers (e.g. HUBER®, HAILO®, etc.)
Direct replacement for cylinder lock inserts.

- IP65, high corrosion protection
- suitable for shaft covers up to RC3 according to DIN EN 1627 in class D400
- suitable for insert parts in Ex zone 1
- different variants: Ø 35/40 mm, with/without flange

Examples of use



Manhole cover,
type SD2, rainproof



Shaft cover
SD4 RC3 tested



Manhole cover,
type SD 7 load bearing



PYLOCK® for distribution cabinets



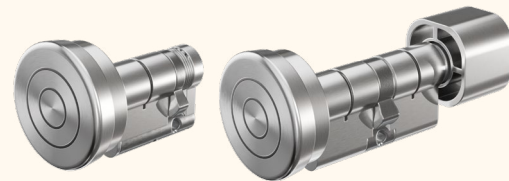
PYLOCK® Swing-handle lock

Swing-handle lock with integrated PYLOCK® security half cylinder.

- Electronic cylinder with solid stainless steel knob
- Swing-handle made of weatherproof zinc die-cast
- Resistance class 2
- Suitable for all hole sizes
- For indoor and outdoor use, IP68
- Existing swing-handles can be replaced



PYLOCK® for local network stations



VdS



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PYLOCK® Safety profile cylinder

VdS and BSI-approved electronic cylinder for high security requirements and extreme ambient conditions from -40 °C to +60 °C. Vandal-resistant stainless steel knob. Available versions:

- Half cylinders, double cylinders and knob cylinders
- Europrofile, Swiss round profile

PYLOCK® for security doors

PYLOCK® Security fitting

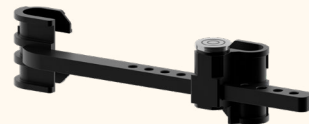
Battery-free electronic security hardware, optionally with or without mechanical emergency locking with profile cylinder.

- suitable for 7/8/9 mm socket
- suitable for 72, 82 or 92 mm distance
- made of rustproof stainless steel
- for indoor & outdoor IP68
- for fire doors EI60
- EN16867





PYLOCKX® for containers



PYLOCKX® Container lock

Electronic container lock ideal for construction, maritime and security containers. Protected against weather and corrosion. No assembly required: simply hang on the container locking rods.

- The distance between the door rods is adjustable
- Locking system made of V4A stainless steel
- High protection against break-ins and corrosion
- VdS and SCM certification in preparation

PYLOCKX® for fence / gate systems



PYLOCKX® Padlock

High-security electronic padlock made of solid stainless steel with integrated **PYLOCKX®** locking system. Vandal-resistant stainless steel knob. Very high corrosion resistance.

- selectable bow height from 25 to 75 mm
- selectable bow thickness: 8 or 11 mm
- selectable bow material: stainless steel or molybdenum
- EN16864

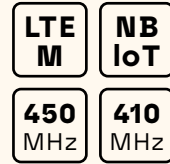


PYGUARD® for doors & sensors

PYGUARD® Door and sensor guard

The **PYGUARD®** monitor reliably reports any change in the status of a door or a connected sensor to the PYSUITE® software using an LTE-M, NB-IoT, 410/450 Mhz network module.

- Integrated reed contact
- Sabotage and battery monitoring
- Input for external impulse/changeover contact (e.g. for gas/fault detector)
- incl. LTE-M/NB-IOT/410~450 MHz module
- Monitoring in the **PYSUITE®**, **PYAPP®** or by a 24-hour emergency call centre
- Battery-powered for up to 5 years
- Optional: 230 V mains connection with battery
- Optional: external antenna



PYBOX® for secure supply chains

PYBOX® Security box

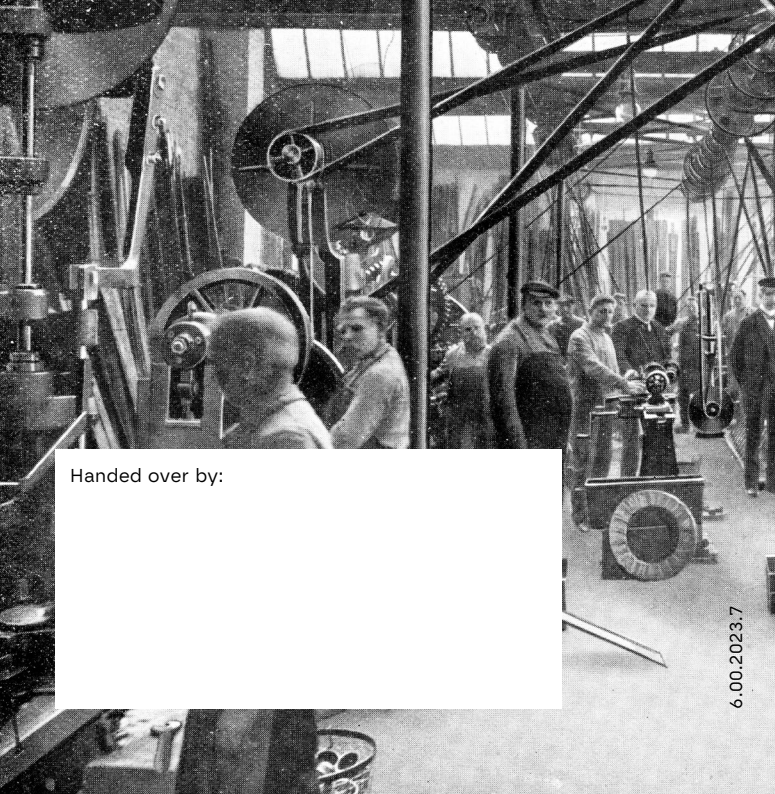
The **PYBOX®** protects highly sensitive data carriers, expensive IT components, valuables and documents from unauthorised access and is used thousands of times over in the secure supply chain of smart meter gateways. The **PYBOX®** is the world's first security box to be certified by the German Federal Office for Information Security (BSI).

- VdS-approved locking system
- six different box sizes
- made of high-impact plastic or aluminium



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Handed over by:

6.00.2023.7

**SECURITY
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SINCE 1883**



Steinbach and Vollmann
Over 140 years of
innovative lock and security technology.

Steinbach & Vollmann GmbH

Parkstraße 11
42579 Heiligenhaus
Germany

..... T: +49 (0) 20 56 14-0
..... E: info@stuv.de
..... www.stuv.de