Bundesamt
für Sicherheit in der
Informationstechnik

VdS

Critical
Entities
Resilience

SECURITY
MADE IN GERMANY
SINCE 1883

STUV

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PYLOCX®

The access control system for the critical infrastructure

PY KEY

ENERGY SUPPLIERS

WATER SUPPLIERS

TELECOMMUNICATIONS

PYLOCX®
Access control for the critical infrastructure

PYLOCX® 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.

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Bundesamt für Sicherheit in der Informationstechnik

Critical Entities Resilience

VdS

Battery-free locking components

PYLOCX® does not need batteries, because the energy comes from the **PY**KEY® when opening.

Incomparably resilient

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

Crisis-resistant & Blackfall-proof

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

BSI-, VdS- & CER-compliant

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

Highest data and cyber protection.

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

Access via one-time code

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

PYLOCX®
Overview of system components & designations —

PYLOCX®
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 **PY**KEY® is used to enter the **PY**CODE®. The **PY**KEY® supplies the **PY**LOCX® 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 **PY**CODE®, which is provided to match the **PY**KEY® and **PY**LOCX®.

PYSUITE®
Management software

The **PY**SUITE® software manages the **PY**LOCX® system components and generates the **PY**CODE® either on-premise or in the cloud.

PYGUARD®
Door and sensor guard

Is the door properly closed? **PY**GUARD® reports the door or sensor status live to **PY**SUITE® and **PY**APP® via LTE, LTE-M or 450 MHz.

PYAPP®
Security-App

If you have been authorized to do so, the valid **PY**CODE® for the **PY**LOCX® 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 authorization 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 PYLOCX®: 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 **PYLOCX®** system.

**PYLOCX®
@ 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 authorizations.

On-premise or Access-as-a-Service

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

Integration with other access systems

Integrate **PY**LOCX® 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 **PY**SUITE® on-premise or host it yourself, there are no ongoing fees. This way, with **PY**LOCX® you always have full control and transparency over costs.

PYLOCX®
Data protection

Note the GPDR 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 **PY**KEY® (and not the **PY**APP®) 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® – Open locks easily and reliably

PYLOCX® **Authorizations**

Authorizations are assigned in the **PY**SUITE® software. Assign a **PY**KEY® to a person or organization and define which locks they are allowed to open. You can also define whether the **PY**CODE® must always request this information by telephone, or whether it can be accessed using the **PY**APP®.

Manual **PY**CODE® query by Access Manager
typical for non-organisational users

❶ Request a **PY**CODE® by phone, in person or by text message

❷ Enter the **PY**CODE® in **PY**KEY® and open the lock

PYCODE® query with online authorization
typical for own staff

❶ Conveniently retrieve **PY**CODE® yourself by using **PY**APP®

❷ Transfer **PY**CODE® to **PY**KEY® and open the lock

PYKEY®
4-eyes principle

For more safety or occupational safety!

Do you want only 2 people to have access at the
same time in particularly sensitive areas?

No problem!

Each **PY**LOCX® can be configured in such a way that
two different **PY**KEY®s and **PY**CODE®s are required
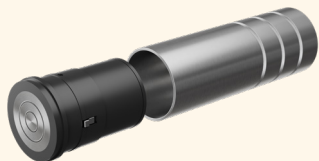in succession to open the lock.

Safety first!

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PYLOCX® as a key safe or retrofit locking mechanism

VdS

PYLOCX® **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 PYLOCX® technology
- various tube lengths

PYLOCX® **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

PYLOCX®
for manhole covers

PYLOCX® **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

PYLOCX®
# **for distribution cabinets**

PYLOCX® **Swing-handle lock**

Swing-handle lock with integrated **PY**LOCX® 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

PYLOCX® for
local network stations
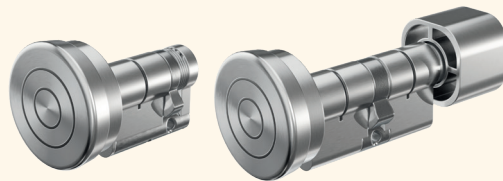
PYLOCX® **Safety profile cylinder**

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

PYLOCX®
for security doors

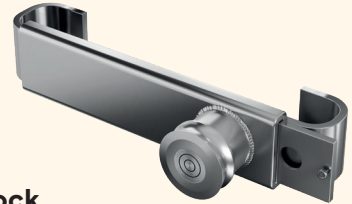## **PY**LOCX® **Security fitting**

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

PYLOCX®
for containers

PYLOCX® **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

PYLOCX® for fence / gate systems

PYLOCX® **Padlock**

High-security electronic padlock made of solid stainless steel with integrated **PY**LOCX® 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 **PY**GUARD® 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 **PY**SUITE®, **PY**APP® 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 **PY**BOX® 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 **PY**BOX® 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:

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