Technical Data | ENiQ® Pro V2

Variants:

- ENiQ Pro double cylinder (DC)
  - Even the standard version includes all mechanic and electronic security features: Body and core drilling protection
    Separate control electronic for actor in the core
- ENiQ Pro half cylinder (HC)
  - Outside basic length 30 mm, inside length 10 mm
  - Version “MIWE”: 90° cam range (adjustable)
    Spring return mechanism for the cam
    Cam position adjustable in 45° steps
  - Version “Haushahn" with two rear sided M4 threads
- ENiQ Pro EE double cylinder (emergency exit)
  - Application in escape and emergency routes (EN 179, EN 1125)
  - Return mechanism for the cam according to class R1 of DIN 18252:2018-05: Cam position 6 o’clock ± 30°, dead range 12 o’clock ± 15°
  - Basic length 30/30 mm
  - Version EE-IM: Inside operation by a special mechanical key
  - Version EE-OI: Without inside knob
- ENiQ Pro KL (German: „Kurz-Lang“ cylinder)
  - Inside basic length 30 mm
  - Reduced outside length of 27,5 mm (see cylinder lengths)
- ENiQ Pro V2 with slippery clutch
  - With knob K6 on the inside
  - Can be locked from the outside even if the inside knob is held
- ENiQ Pro GL (cylinder für glass doors)
  - Outside basic length 30 mm
  - Reduced inside length of 10-27,5 mm (see cylinder lengths)
- ENiQ Pro OI (without inside knob)
  - Blind cylinder on the inside
- ENiQ Pro BS (reader on both sides)
  - Basic length 30/30 mm
  - Reading of transponders also on the inside
- ENiQ Pro KZSV (German: Kernziehschutzverlängerung)
  - For assembly in fittings with core pulling protection
  - Protruding outer shaft by 8,5m
  - Shaft diameter 15 mm
- ENiQ Pro CH (22 mm Swiss round profile)
- ENiQ Pro 382 lever cylinder (e.g. for letter boxes)
  - Housing lenght 36,6 mm, for mounting holes Ø 26 × 22 mm
  - 90° turning movement, lever is blocked in end positions
  - Adjustable lever position: 4×90°
- ENiQ Pro 1328 half cylinder for swivelling lever handles
  - Chamfered locking cam with 45° turning movement
  - Automatic locking by return mechanism for the flattened cam
- ENiQ Pro 777 padlock
  - See separate data sheet

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	• ENiQ Pro PP (privacy protection) - Available for all cylinder versions - Grade 1: Anonymised storage of all access control events - Grade 2: No storage of any access control events
Technology:	• 13,56 MHz (RFID / NFC) • 2,4 GHz (BLE: Bluetooth Low Energy)
Power supply:	• Battery pack with 2 lithium cells 3,0 Volt • Type CR2 (Li-MnO_2 system)
Battery life time and data preservation:	At room temperature (+20°C): • Up to 80.000 locking cycles or • Up to 3,5 years in case of non-use or • Up to 3 years for typical 10 locking cycles per day
	Intelligent battery management: • Multilevel temperature-compensated alarm system in case of voltage drop • 10 years data preservation without battery
Time / Date:	• Clock buffering typically 1 minute (during battery change)
	• Clock drift at room temperature: ±10 minutes/year at -25°C and +65°C: –50 minutes/year
Durability:	• At least 100.000 cycles (according to EN 15684 grade 6)
Clutch duration:	• Adjustable ranging from 1 to 30 seconds • Permanent open/close mode
Signalling:	• Optical signalling by 4 multicolour LEDs • Circular lighting segments in knob cover
Cylinder length / dimensions:	• Maximum standard length 90/90 mm, higher lengths on request • Version KL with outer length of 27,5 mm • Version GL (glass door cylinder) with inner length from 10 to 27,5 mm • Extendable in 5 mm steps (Glass door cylinder: inner side in 2,5 mm steps)
	• For backset < 30 mm the application is to be checked
Knobs:	• Outside knob: stainless steel: ∅ 37,5 mm, length 44,8 mm • Inside knob: pot metal: ∅ 32,0 mm, length 30,0 mm • For double cylinder with two-side readability both knobs: stainless steel ∅ 37,5 mm, length 44,8 mm • Optional available in: black glossy powder-coated RAL9005 white glossy powder-coated RAL 9003 brass (PVD coated)
Environmental:	• Temperature: -25°C to +65°C (grade 4 of EN 15684) • Humidity: 20-99%, no condensation (grade 4 of EN 15684)

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- Protection class: IP66 (outside knob) for all variants
  IP 65 (complete Europrofile cylinder, all variants)
  PIV test report 44-3/15
  (no IP classification for versions 1328, 382 and HC “MIWE”)

- Anticorrosive according to DIN EN 1670 grade 3 and grade 4 of EN 15684
- SO_2 corrosion test: VdS 2156-2 / DIN EN ISO 6988 (15 cycles with 0,2 l SO_2)

Approvals and certifications:

- Approved by German VdS: grade BZ+, certificate M116308
- SKG*** approval
- Not for the variants: Swiss round cylinder
  Half cylinder type “MIWE”
  382 lever cylinder
  1328 half cylinder for swivelling lever handles
  777 padlock

- Fire resistance test T90 (ift test reports 15-003428-PR01 and 18-002163-PR01)
  Tested with two-wing steel door, refer to HPS 18-001080-PR02)

- Tested as free-wheeling cylinder according to test directive FZG,
  version 2010_01 of German PIV, test report 20-8/15 (not for EE version)

- Certification according to EN 15684 (PIV test reports 49-2/15)

Digit	1	2	3	4	5	6	7	8
Grade	1	6	B	4	A	F	3	2

- The two grades „F“ for the credential related security (6th digit) and
  „2“ for the attack resistance (8th digit)
  allow according to EN 1627 the installation in burglary-resistant doors up to resistance class RC4 without separate test

Programming:

Programming via NFC/BLE-with the following prerequisites:
- ENiQ App (NFC/BLE) (see datasheet ENiQ App)
- ENiQ Software via BLE Stick
  (see separate datasheet of ENiQ AccessManagement Software)
- Storage of max. 5 programming cards

Events:

- Ring buffer for the latest 2.000 events

Inductive transponder interface:

- Reading range: up to 3 cm
- Frequency: 13.56 MHz
- Field strength in 10 m distance: < 42 dB µA/m
- In conformity with ETSI EN 300 330

- Supports passive transponders (ISO 14443 A)

- Encryption:
  - Mifare DESFire EV1 / EV2 / EV3: AES-128 Bit
  - Mifare Classic: Crypto-1 encryption
- Additionally AES-128 Bit encryption with object specific keys

Bluetooth Low Energy (BLE):

- Communication range: typical 15 m
- Frequency: 2.4 GHz
- Transmission power: < 20 dBm
- Conformity to ETSI EN 300 330

- Key exchange: Curve25519–256 Bit (elliptical curve)
- Encryption: XSALSA20–256 Bit

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	• Signature / Authentication: Poly1305-128 Bit • Bluetooth version: 5.0 (≥ Firmwareversion 4.3)
Transponder types:	• All actual DOM transponder types • Other types or transponder from other suppliers have to be checked
Storage of access authorisations in the device:	• Supported transponders: - DESFire EV1 / EV2 / EV3 2k, 4k, 8k - Mifare Classic 1k, 4k - Mifare Plus S/X 2k, 4k - Mifare Ultralight / Ultralight C
	• Storage of maximal 5.000 authorisations in the device • Identification of the transponders by their UID or by other unique data
Storage of access authorisations on the transponders:	• Supported transponder types: - DESFire EV1 / EV2 / EV3 2k, 4k, 8k - Mifare Classic 1k
	• Other data on the transponder: - „Blacklist“ with blocked transponders - Authorisation period, weekly schedule at the device
Weekly and day’s schedules:	• Storage of max. 256 weekly / day’s schedules per device
	• Each weekly schedule points to 10 arbitrary day’s schedules (7 week days and 3 special days for holidays):

1	2	3	4	5	6	7	8	9	10
Mon	Tue	Wed	Thu	Fri	Sat	Sun	holiday / vacation		
DS1	DS2	DS3	DS4	DS5	DS6	DS7	DS8	DS1	DS2

• Each day’s schedule consists of 96 time slots of 15 minutes, in each case definable as authorised or unauthorised:

000	100	200	300	...	2000	2100	2200	2300
				...				

• access rights of the weekly / day’s schedules:
- # 0: no access (unauthorised)
- # 1: access with no time-limits, active special functions may limit access
- ## 2-254: freely definable
- # 255: access with no time-limits, active special functions are ignored

• Permanent-open and permanent-close weekly schedules
• Office function

Holidays:	• Storage of maximum 256 holidays or vacation periods per device • Definition of 3 different kinds of holidays/vacations • Begin / end as from / to date

All data correspond to the actual development status and are subject to change at any time without notice.