



Technical Data ENiQ® Pro V2

Variants:

- ENiQ Pro V2 double cylinder and half cylinder
- 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 V2 EE double cylinder (emergency exit) application in escape and emergency routes where a well-defined cylinder cam position is required
 - EE-IM: operation by special mechanical key from inside
 - EE-OI: withot inside knob
- ENiQ Pro V2 KL (German: „Kurz-Lang“ cylinder) reduced outside length of 27.5 mm (see cylinder lengths)
- ENiQ Pro V2 GL (cylinder für glass doors) reduced inside length of 10-27.5 mm (see cylinder lengths)
- ENiQ Pro V2 OI (withot inside knob) blind cylinder on the inside
- ENiQ Pro V2 BS (reader on both sides) reading of transponders also on the inside
- ENiQ Pro V2 KZSV (German: Kernziehschutzzerlängerung)
 - for assembly in fittings with core pulling protection
 - protruding outer shaft by 8.5mm
- ENiQ Pro V2 CH (22 mm Swiss round profile)
- ENiQ Pro V2 382 lever cylinder (e.g. for letter boxes)
 - length 31.8 mm, for mounting holes $\varnothing 26 \times 22$ mm
 - 90° turning movement with self-holding end positions
 - adjustable lever position: 4×90°

Technology:

- 13.56 MHz Mifare
- 2.4 GHz (BLE: Bluetooth Low Energy)

Feature combinations:

Variants	Code	DZ	HZ	EE	KL	GL	OI	BS	KZSV	CH
<u>D</u> ouble <u>c</u> ylinder	DC			X	X	X	X	X	X	X
<u>H</u> alf <u>c</u> ylinder	HC			O	O				X	X
EE (<u>E</u> mergency <u>E</u> xits)	EE				O	O	X	O	X	X
<u>S</u> hort- <u>L</u> ong	KL					O	X	O	X	X
<u>G</u> las door cylinder	GL							O	X	X
with <u>o</u> t inside knob	OI								X	X
Reader on <u>b</u> oth <u>s</u> ides	BS								X	X
core pulling protection	KZSV									X
<u>S</u> wiss round profile	CH									

Legend: X available
O not available



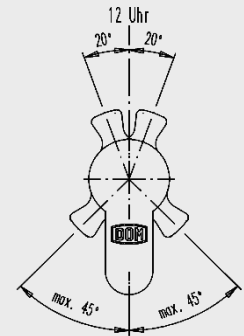
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Position of cylinder cam (only for ENiQ Pro V2 EE):

- The ENiQ Pro V2 EE has a spring driven reset mechanism to turn the cylinder cam to a fixed position.
- Due to the cylinder construction the reset mechanism does not work within the angular dead centers $12^{00} \pm 20^{\circ}$ and $6^{00} \pm 45^{\circ}$.

! For the version IM the correct resetting function of the cam is only ensured in case of unplugged key.



Power supply:

- Battery pack with 2 lithium cells 3.0 Volt
- Type CR2 (Li-MnO₂ 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 by typical 10 locking cycles per day
- Multilevel temperature compensated battery warning system
- 10 years data preservation without battery

Time / Date:

- Buffering typically 1 minute (in case of 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 DIN EN 1303 and EN 15684 grade 6)

Clutch duration:

- Adjustable ranging from 1 to 30 seconds
- Permanent open/close mode

Signalling:

- Optical signalling by 4 multicolour LEDs (moving light effect)
- Circular lighting segments in knob cover

Cylinder length:

- Max. 80/80 mm, higher lengths on request
- Glass door cylinder with inner length from 10 to 27.5 mm
- Version KL with outer length 27.5 mm
- Extendable in 5 mm steps
(glass door cylinder: inner side in 2.5mm steps)
- For backset < 30 mm the application is to be checked

Knobs:

- Outside knob: stainless steel, size: \varnothing 37.5 mm, length 44.8 mm
- Inside knob: pot metal, size: \varnothing 30.1 mm, length 30 mm
- For double cylinder with two-side readability both knobs: stainless steel, size: \varnothing 37.5 mm, length 44.8 mm
- Optional available in: black glossy powder-coated RAL9005
white glossy powder-coated RAL9003
brass



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Approvals and certifications:

- VdS-BZ+ approval, certificate M116308
- SKG*** approval (certificate no. 442-393.04/05)
Both not for Swiss round cylinder and not for 382 lever cylinder
- Test fire resistance T90 (ift 18-001080-PR02)
(not for 382 lever cylinder)

- Certification according to EN 15684 (PIV test report 49-4/18)

	Stelle	1	2	3	4	5	6	7	8
ENiQ Pro V2		1	6	B	4	A	F	3	2

- Tested as free-wheeling cylinder according to test directive FZG, version 2010_01 of PIV in preparation

Environmental:

- Temperature: -25°C to +65°C (class 4 EN 15684)
- Humidity: 20-99% no condensation (class 4 EN 15684)
- Protection class (PIV test report 44-3/15)
 - IP66 (outside knob) for all variants
 - IP 65 (complete Europrofile cylinder, all variants)
- Anticorrosive according to DIN EN 1670 class 3 and grade 4 of EN 15684
- SO₂ corrosion test according to VdS 2156-2 and DIN EN ISO 6988 (15 cycles with 0.2 l SO₂)
- According to VdS guideline 2156-2 the ENiQ Pro V2 cylinder is designed for a weatherproof installation.

Programming:

Programming via NFC/BLE-with the following prerequisites:

- ENiQ App (NFC/BLE) (see datasheet ENiQ App)
- ENiQ Software via BLE Stick (see datasheet 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: AES-128 Bit
Mifare Classic: Crypto-1
- Additionally AES-128 Bit encryption with object specific keys

Bluetooth Low Energy (BLE)

- Communication range: up to approx. 10 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
- Signature / Authentication: Poly1305-128 Bit



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Transponder types:

- DOM Standard Tag, Premium Plus Tag, ClipTag
- ISO card transponder
- Other types have to be checked

Storage of access authorisations in the device:

- Supported transponders:
 - Mifare DESFire / DESFire EV1 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:
 - Mifare DESFire EV1 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:

0 ⁰⁰	1 ⁰⁰	2 ⁰⁰	3 ⁰⁰	...	20 ⁰⁰	21 ⁰⁰	22 ⁰⁰	23 ⁰⁰
█	█	█	█	...	█	█	█	█
- 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



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

