Technical Data | ENiQ® Pro

Variants:

- ENiQ Pro 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 EE double cylinder (emergency exit)
  application in escape and emergency routes with locks demanding a well-defined cylinder cam position
  Also available as following versions:
  - EE-IM: operation by special mechanical key from inside
  - EE-OI: without inside knob

- ENiQ Pro KL (German: „Kurz-Lang" cylinder)
  reduced outside length of 27,5 mm (see cylinder lengths)

- ENiQ Pro GL (cylinder für glass doors)
  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)
  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

- ENiQ Pro CH (22 mm Swiss round profile)
- ENiQ Pro euroswiss profile

- ENiQ Pro PP (privacy protection)
  no storage of individual-related events

- Intelligent transponders:
  Authorisations can be stored on the transponder (instead in the device).

- Online-Funktion:
  The ENiQ Pro is prepared for the wireless integration into an Ethernet network by means of a radio interface.

Technology:

- 13,56 MHz Mifare

Feature combinations:

Variants	Code	DZ	HZ	EE	KL	GL	OI	BS	KZSV	EU-CH	CH
Double cylinder	DC			x	x	x	x	x	x	x	x
Half cylinder	HC			o	o				x	x	x
EE (Emergency Exits)	EE				o	o	x	o	x	x	o
Short-Long	KL					x	x	o	x	x	x
Glas door cylinder	GL							o	x	x	x
without inside knob	OI								x	x	x
Reader on both sides	BS								x	x	x
core pulling protection	KZSV									x	x
Euroswiss profile	EU-CH										
Swiss round profile	CH										

Legend: x available
o not available

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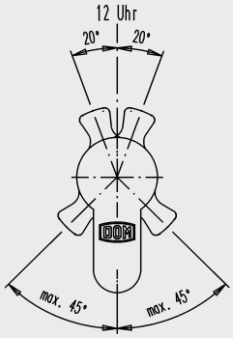
Position of cylinder cam (only for ENiQ Pro EE):

- The ENiQ Pro 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 $12^{00} \pm 20°$ and $6^{00} \pm 45°$.

! 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-MnO_2 system)

Battery life time and data preservation:

at room temperature (+20°C):
- up to 100.000 locking cycles or
- up to 3 years in case of non-use

- multilevel alarm system in case of voltage drop
- 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 +70°C: –50 minutes/year

Durability:

- at least 100.000 cycles
  (according DIN EN 1303 and EN 15684 grade 6)

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: ∅ 37,5 mm, length 44,8 mm
- Inside knob: pot metal
  size: ∅ 32 mm, length 30 mm
- for double cylinder with two-side readability
  both knobs: stainless steel
  size: ∅ 37,5 mm, length 44,8 mm
- optional available in: black glossy powder-coated RAL9005
  white glossy powder-coated RAL 9003
  brass

Signalling:

- optical signalling (red/green/blue)
- circular lighting segments in knob cover

Clutch duration:

- adjustable ranging from 1 to 30 seconds
- permanent open/close mode

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Approvals and certifications:

- VdS-BZ+ approval *)
- SKG*** approval (certificate no. 442-393.04/05) *)

- Test fire resistance T90 (ift test report 15-000580) *)

- certification according to EN 15684 (PIV test report 49-2/15)

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

- tested as free-wheeling cylinder according to test directive FZG, version 2010_01 of PIV (test report 20-8/15)

*) VdS and SKG approval as well as fire resistance test T90 shall not apply to the Swiss round cylinder ENiQ Pro CH

Environmental:

- Temperature: -25°C to +70°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
- SO_2 corrosion test according to VdS 2156-2 and DIN EN ISO 6988 (15 cycles with 0,2 l SO_2) in preparation

- According to VdS guideline 2156-2 the ENiQ Pro cylinder is designed for a weatherproof installation.

Administration by software:

- Programming by ENiQ AccessManagement software via USB-RF-Stick (See datasheet of ENiQ Pro AccessManagement)
- 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 according to ISO 14443 A

- encryption
  - Mifare DESFire EV1: AES-128 Bit
  - Mifare Classik: Crypto-1 encryption
- additionally:
  AES-128 Bit encryption with object specific keys

Radio interface (online/offline):

For offline programming by a DOM USB-RF-stick or for the online connection to an ENiQ RF-NetManager:

- reading range: typical 3m (offline) / 10m (online)
- frequency: 868 MHz (G4 / G1-Band)
- effective radiated power: ≤ 5 mW / ≤ 25 mW
- in conformity with ETSI EN 300 220

- 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

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.