

Technical Data

ENiQ[®] Pro Padlock

General:

- Padlock without forced closing

Technology:

- 13,56 MHz Mifare

Material:

- Housing: Solid brass, surface matt chrome plated
- Bottom plate: Polyamide (PA66)
- Shackle: Steel (10B21), surface brilliant chrome plated
- Knob of cylinder: Stainless steel 1.4305

Durability:

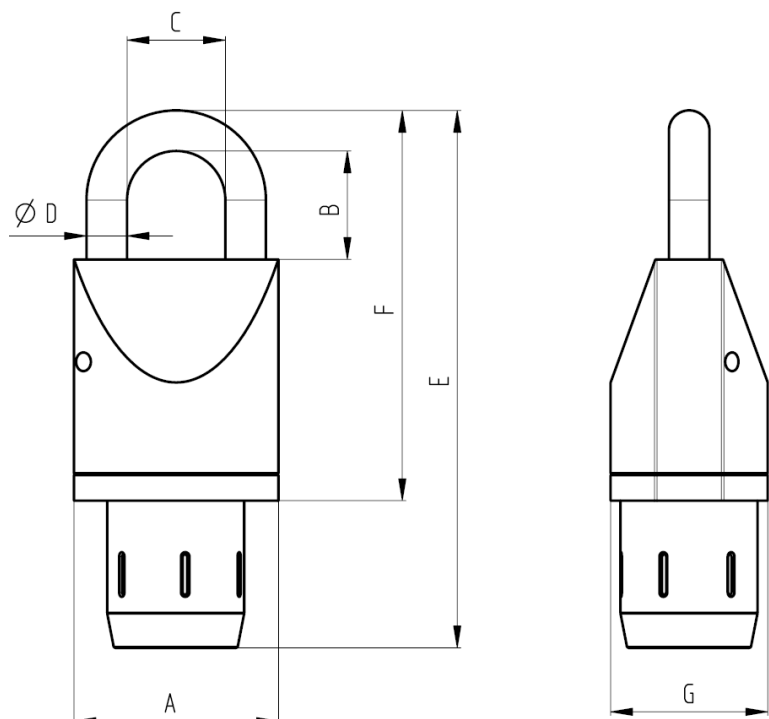
- Padlock: at least 10.000 cycles
(according to DIN EN 12320, class 1)
- Cylinder: at least 100.000 cycles
(according DIN EN 1303 and EN 15684 grade 6)

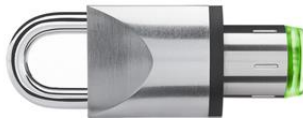
Mechanical strength:

- Strength of shackle:
 - Tensile strength: ≥ 15 kN (Ch. 5.5.5, DIN EN 12320)
 - Torsional strength: ≥ 200 Nm (Ch. 5.5.6, DIN EN 12320)
 - Cutting strength: ≥ 25 kN (Ch. 5.5.7, DIN EN 12320)
- Impact resistance of padlock housing and shackle:
 - tested with 5 shocks at -20°C
(falling mass of 1.250 g from a height of 800 mm)

Dimensions:

- Width $A = 56$ mm
- Thickness $G = 43$ mm
- Length without knob $F = 109$ mm
- with knob $E = 150$ mm
- Shackle diameter $D = 11,1$ mm
- Inner shackle height $B = 30$ mm
- Inner shackle width $C = 27$ mm





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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 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

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

Certifications of cylinder:

- VdS-BZ+ approval
- SKG*** approval (certificate no. 442-393.04/05)
- certification according to EN 15684 (PIV test report 49-2/15)

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

Certifications of padlock:

- Certified according to DIN EN 12320 (PIV test report 51-2/15):

Digit	1	2	3	4
Padlock ENiQ Pro	1	1	3	3

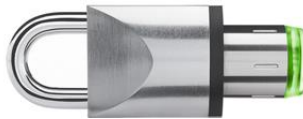
Environmental:

- Padlock in combination with ENiQ Pro cylinder:
 - Temperature: -25°C to +65°C
 - Humidity: 20-96% no condensation
 - Protection class: IP65
 - anticorrosive according to class 3 DIN EN 12320 (salt spray test 96 h)
- Locking cylinder:
 - Temperature: -25°C to +65°C (class 4 EN 15684)
 - Humidity: 20-99% no condensation (class 4 EN 15684)
 - Protection class: IP66 (knob), IP65 (complete cylinder)
 - anticorrosive according to class 3 DIN EN 1670 (salt spray test 96 h)

Administration by software:

- Programming by ENiQ AccessManagement software via USB-RF-Stick (See datasheet of ENiQ AccessManagement)
- Storage of max. 5 programming cards





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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 μ A/m
- in conformity with ETSI EN 300 330

- supports passive transponders according to ISO 14443 A

- encryption
 - Mifare DESFire EV1: AES-128 Bit
 - Mifare Classic: 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 a DOM 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

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:

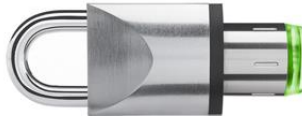
- supported transponders:
 - Mifare DESFire / DESFire EV1 2k, 4k, 8k
 - Mifare Classic 1k, 4k
 - Mifare Plus S/X 2k, 4k
 - Mifare Ultralight / Ultralight C

- 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



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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.

