



Technical Data | **ELS Pro**

Variants:

- ELS 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
- ELS 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: withot inside knob
- ELS Pro KL (German: „Kurz-Lang“ cylinder) reduced outside length of 27,5 mm (see cylinder lengths)
- ELS Pro GL (cylinder für glass doors) reduced inside length of 10-27,5 mm (see cylinder lengths)
- ELS Pro OI (withot inside knob) blind cylinder on the inside
- ELS Pro BS (reader on both sides) reading of transponders also on the inside
- ELS Pro KZSV (German: Kernziehschutzverlängerung)
 - for assembly in fittings with core pulling protection
 - protruding outer shaft by 8,5m
- ELS Pro CH (22 mm Swiss round profile)
- ELS Pro euroswiss profile
- ELS 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 ELS Pro is prepared for the wireless integration into an Ethernet network by means of a radio interface.

Technology:

- 125 kHz

Feature combinations:

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

Legend: X available
O not available



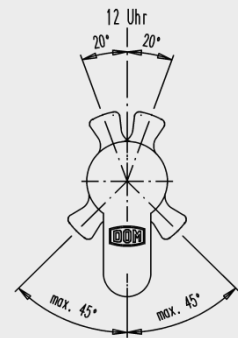
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Position of cylinder cam (only for ELS Pro EE):

- The ELS 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 $12^{00} \pm 20^\circ$ 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 50.000 locking cycles or
- up to 3 years in case of non-use
- For the online version, the corresponding values are 40.000 cycles or 2 years, respectively.

- 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: \varnothing 37,5 mm, length 44,8 mm
- Inside knob: pot metal
size: \varnothing 32 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 RAL 9003
brass

Signalling:

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



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Clutch duration:

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

Approvals and certifications:

- VdS-BZ+ approval *)
- SKG*** approval *)

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

- certification according to EN 15684 in preparation

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

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

*) 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
- SO₂ corrosion test according to VdS 2156-2 and DIN EN ISO 6988 (15 cycles with 0,2 l SO₂) in preparation

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

Administration by software:

- Programming by software via USB- RF-Stick (See datasheet of ELS 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: 125 kHz
- field strength in 10 m distance: < -6 dB µA/m
- in conformity with ETSI EN 300 330

Radio interface (online/offline):

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

- reading range: typical 3m (offline) / 3m (online)
- frequency: 868 MHz (G4 / G1-Band)
- effective radiated power: ≤ 5 mW / ≤ 25 mW
- in conformity with ETSI EN 300 220
- AES-128 Bit encryption with object specific keys

Transponder types:

- DOM Standard Tag, Design Tag, Premium Tag, ClipTag
- ISO card transponder
- other types have to be checked



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Storage of access authorisations in the device:

- supported transponders:
 - Hitag 1, Hitag 2, Hitag S
 - EM4100, EM4102, EM4150, EM4450

- storage of maximal 3.000 authorisations in the device
- identification of the transponders by their UID

Storage of access authorisations on the transponders

- supported transponder types:
 - solely available for Hitag S transponders
 - AES-128 Bit data-encryption

resp. virtual network:

- storage of max. 260 areal or 65 single authorisations

Temporal definition of authorisations:

- 31 freely definable time zones with three arbitrary time intervals per day
- free door time zone
- definition of holidays

Special functions:

- four-eyes principle
- office-function



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