

Technical Data **ELS Guard**

Guard Versions:



Guard Slimline Width: 40 mm		Guard Wideline Width: 56 mm	
• Length:	253.0 mm		
• Height:	20.0 mm	Outside cover, without handle	
	11.5 mm	Inside cover, without handle	

Guard Compact Versions:



Guard Compact Slimline Width: 40 mm		Guard Compact Wideline Width: 56 mm	
• Length:	133.0 mm	Outside covers and inside cover Slimline, without cylinder rose	
	72.0 mm	Cylinder rose Slimline	
	56.0 mm	Cylinder and handle rose Wideline	
• Height:	20.0 mm	Outside cover, without handle	
	11.5 mm	Inside handle covers, without handle	
	8.0 mm	Cylinder roses	

Technology:

- 125 kHz Hitag

Interaxis dimension:
(distance handle ↔ cylinder)

• Guard:	Between 55 and 92 mm
• Guard Compact:	≥ 64 mm Slimline
	≥ 56 mm Wideline

Application:

- Electronically controlled handle on the outside
- Interior handle is always operable
- Suitable for doors with high frequency of use which are subject to frequent violent usage
- Category of use: grade 4 according to EN 1906 / prEN 16867

Installation:

- Different installation types
- Screwing through the door from the inside
 - Screw-on installation

Door leaf thickness:

- 36-106 mm, increment in 10 mm steps



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Fixation points:

- Adjustable by vertically movable threaded sleeves or screws
- Guard:

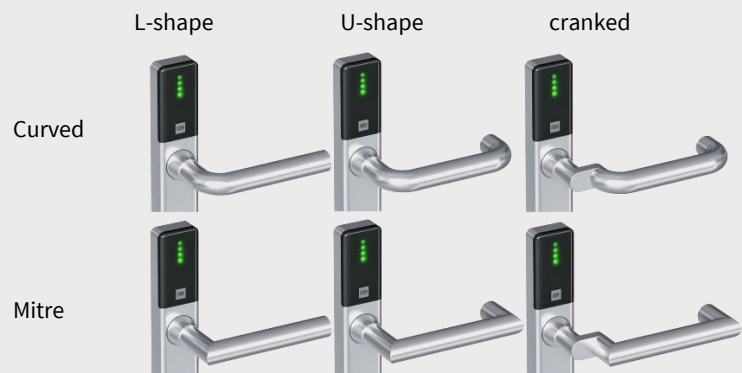
- Upper fixation point:	min. 65.0 mm	max. 84.0 mm
- Middle fixation point:	min. 21.5 mm	max. 25.0 mm
- Lower fixation point:	min. 112.0 mm	max. 139.0 mm
- Guard Compact:

- Upper fixation point:	min. 65.0 mm	max. 84.0 mm
- Middle fixation point:		21.5 mm
- Wideline: Horizontal distance of fixation points		38.0 mm
- Slimline: Vertical distance of fixation points		50.0 mm

Backset:

- Slimline versions (width of escutcheon 40 mm):
For backset < 25 mm the application has to be checked
- Wideline versions (width of escutcheon 56 mm):
For backset < 35 mm the application has to be checked

Handle types:



	Max. dimensions: Height (incl. cover) x Width (only handle)		
Outside	86.3 x 130 mm	86.3 x 140 mm	97.8 x 160 mm
Inside	78.3 x 130 mm	78.3 x 140 mm	89.8 x 160 mm

- Handle can be adjusted to DIN-L/DIN-R doors on site

Handle spindle:

- 9 mm (with adapters 7 / 8 / 8,5 / 10 mm are possible)

Handle movement:

- Maximum angle: 45°, upward handle movement possible
- Rest position can be corrected by $\pm 7^\circ$

Durability:

- ≥ 200.000 cycles (grade 7 of EN 1906 and prEN 16867)

Environmental influences:

- Temperature: -25°C to +65°C
- Relative humidity: 20% to 99%, no condensation
- Anticorrosive according to DIN EN 1670 class 3 (salt spray test, 96 hours), grade 3 according to EN 1906
- Protection class: IP 54
- Environmental resistance according to grade 4 of prEN 16867 (in preparation)



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Approvals and certifications:

- Suitable for doors in escape in panic routes according to EN 179 and EN 1125 (in preparation)
- Suitable for fire protection and smoke protection doors T90 (according to grade B of EN 1906 and prEN 16867)

prEN 16867	1 Category of use	2 Durability	3 Door mass	4 Fire & smoke doors	5 Safety	6 Environmental resistance	7 Credential related security	8 Security: Attack resistance	9 Security: Related to EN1906
grade	4	7	-	B	1	4	D	0	-

EN 1906	1 Category of use	2 Durability	3 Door mass	4 Fire & smoke doors	5 Safety	6 Corrosion resistance	7 Security: Attack resistance	8 Execution type	9
grade	4	7	-	B	1	3	1	A	-

Surface and colours:

- All visible metal parts: satin stainless steel
- Plastic cover:
 - signal white (similar RAL 9003)
 - jet black (similar RAL 9005)
 - graphite grey (similar RAL 7024)

Signalling:

- Optical signalling by 4 multicolour LEDs (moving light effect)
- Additional acoustic signalling (can be disabled)

Clutch duration:

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

Power supply:

- 2 pcs. Lithium AAA cells, 1,5 Volts
- Recommended battery: Energizer Ultimate Lithium
- Correct operation is not guaranteed for other battery types

Battery life time and data preservation:

At room temperature (+20°C):

- Up to 50.000 locking cycles or
- Up to 4 years stand-by time in case of non-use
- Up to 3.5 years by typical 10 locking cycles per day

Intelligent battery management:

- Multilevel temperature compensated battery warning system
- 10 year data preservation without battery

Time / Date:

- Buffering during battery change: typically 1 minute
- Clock drift at room temperature: ± 10 minutes/year
at -25°C and +70°C: -50 minutes/year

Programming:

Programming via RF 868 MHz with the following prerequisites:

- ELS mobile or ELS Software, with USB-RF-Stick (see separate datasheets of ELS mobile and ELS Software)
- Storage of max. 5 programming cards

Events:

- Ring buffer for the latest 2.000 events



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Inductive transponder interface:

- Reading range: up to 3 cm
- Frequency: 125 kHz
- Field strength in 10 m distance: <math>< -6 \text{ dB } \mu\text{A/m}</math>
- In conformity with ETSI EN 300 330

Radio interface:

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

- Communication range: typical 3m (offline) / 10m (online)
- Frequency: 868 MHz (G4 / G1 band)
- Effective radiated power: $\leq 5 \text{ mW} / \leq 25 \text{ mW}$
- Conformity to 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 Tag, ClipTag
- ISO card transponder
- Other types have to be checked

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 zones
- Definition of holidays

Special functions:

- Four-eyes principle
- Office function