F50S.311.SD Key tube cylinder with short knob

System-level description

The patented, award winning iLOQ S50 locking system offers advanced security and convenient access sharing capabilities for master-key locking environments.

The iLOQ F50S key safe lock cylinder enables usage of the iLOQ S50 locking system in key safe applications where typically a third-party organization, like fire service or a telecommunication company, needs to have access to the premises/buildings using their own key. The key to the premises is placed in wall mounted key safe tubes, which the organizations can open using their mobile phones as a key.

The lock harvests electricity wirelessly from NFC field, which enables using phone not only as a key but also as a power source thus the lock is completely battery free. As no batteries and no electric wiring are required, the locks are maintenance free and environmentally friendly green solution that eliminates work, costs, waste and harm associated with battery powered or cabled solutions.

The lock doesn't have a keyway due to the contactless NFC operation. It is designed to be used in harsh environments where the locks are exposed to dust, moisture and varying temperature conditions ranging from extremely cold to hot weather.

The phone as a key enables flexible access sharing with time restrictions and audit trail reporting over the air. The security level is kept high and security gaps caused by lost key can be eliminated completely without costly change of locks and keys. The lock fits into German 38 mm key safe tubes.

Feature summary

- battery-free programmable electromechanical key tube lock cylinder for iLOQ S50 locking system
- Compatible with German 38 mm key safe tubes
- Two different reader knob lengths available
- NFC-powered: no batteries or external power source required for the lock
- Opening with NFC enabled Android/iOS-smartphone or iLOQ K55S Key Fob
- Secured using powerful AES-256 encryption and mutual authentication
- Compatible with European EN15684 standard
- Initial programming with PC and iLOQ P55S.1 admin fob in connection to server
- Access right list for access groups
- Blocklist for individual lost keys
- Internal audit trail record with time stamp (can be configured on/off)
- Supports time restrictions
- Can be configured to require online opening authentication
- Re-programming with keys (Android/iOS phone or K55S Key Fob)
- Firmware updateable
- NFC 13,56 MHz Load modulation (ASK) ISO/IEC 14443A, no transmitter

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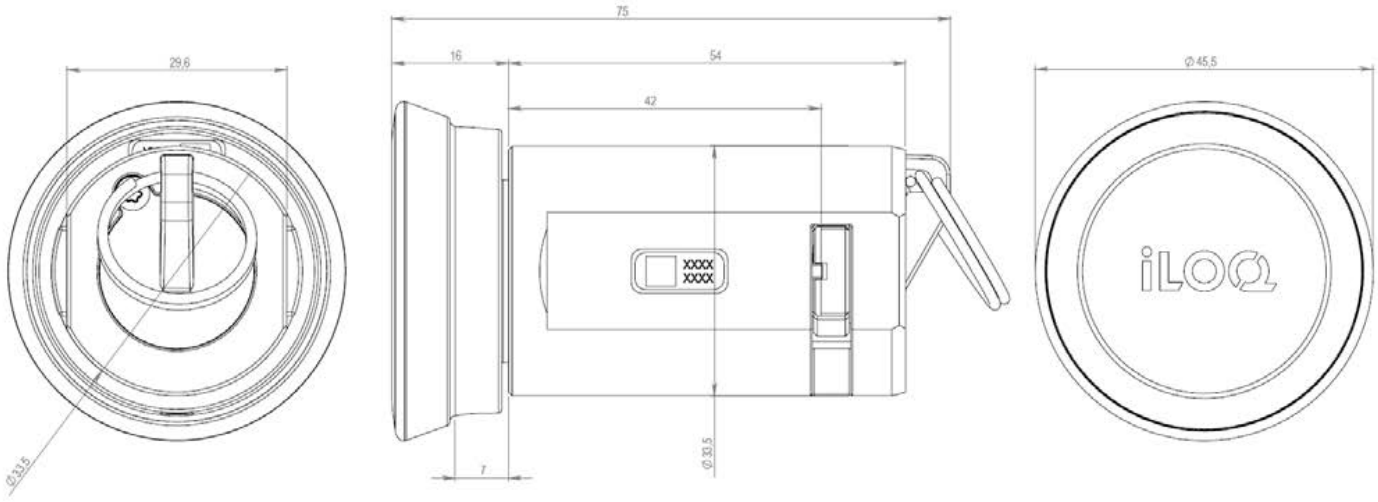
Dimensional drawing



Memory capacity

Number of access rights	210
Number of blocklisted keys	500
Number of time slots	10
Size of event log	500

Technical data

Ingress protection rating	IP55
Lockable without key	X
Reader type	Short key tube reader
Surface treatment	Not applicable
Maximum temperature	80°C
Minimum temperature	-40°C
Attack resistance (EN 15684:2013-01)	Class 0
Category of use (EN 15684:2013-01)	Class 1
Durability (EN 15684:2013-01)	Grade 5
Electronic key related security (EN 15684:2013-01)	Class F
Environmental resistance (EN 15684:2013-01)	Class 4
Fire/smoke resistance (EN 15684:2013-01)	Class 0
Mechanical key related security (EN 15684:2013-01)	Grade A
System management (EN 15684:2013-01)	Grade 3

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