

SECURITY PRODUCTS











PRODUCT INNOVATIONS NEED A FIRM FOUNDATION ...

Product innovations are often the result of a process kicked off by listening to a client. Often, a client helps us recognize other clients' needs and to address the requirements of the market. SECU Sicherheitsprodukte GmbH has a long track record of research, development and manufacture in the field of high-security lock technology. The approvals we hold from the various trade associations and inspection agencies are in recognition of the high quality standards of our products. To make sure we do not falter in our resolve to maintain these standards, we have introduced a certified quality management quality management.

We build on our experience and technical know-how to find the solutions you expect from a true partner.

High quality awareness, flexible and customer-oriented.

SECU Sicherheitsprodukte GmbH

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Our locks are available in the following colors: light grey, black, silver

520 01

SELO-A Lock class 1(A)

Operator prompting is by means of symbols

SELO-BI Lock class 2(B)

Operator prompting is by means of symbols

SELO-B

Lock class 2(B) Multilingual operator prompting via the display of the input unit

SELO-BR

SECU

Lock class 2(B) Multilingual operator prompting via the display of the input unit

All-redundant design

Lock classes:

All lock models included in the SELO series are designed in compliance with VdS-specifications and their security features range from the lowest -1(A) - to the highest -4(D) - classes. This means that all requirements for VdS-approved safes in accordance with European standard EN 1143-1 with a resistance grade from I through XIII can be realized with a SELO lock in the same basic design.

Lock operation:

After entering the secret code, the lock has to be unlocked within the next five seconds. Once the five seconds have lapsed, the readiness for opening is automatically blocked. The lock is unlocked by manually turning the complete input unit. As the operator turns the unit, he or she can exert as much unlocking or locking pressure as required. As soon as the operator senses the counter-pressure produced by the bolt, he or she can interactively respond by increasing the pressure applied to the input unit. The extremely robust design thus makes the locks suitable for "rough handling" and all but eliminates the risk of operating faults.



SELO-C

Lock class 3(C) Multilingual operator prompting via the spy-proof display of the input unit All-redundant design

SELO-D

Lock class 4(D) Multilingual operator prompting via the spy-proof display of the input unit All-redundant design



- Shape, dimensions, surface:
- All locks have a round input unit which has to be turned 180° to unlock the lock after entering the secret code
- The turning position visually signals the locking status of the lock
- The input unit measures 97 mm in diameter which makes it suitable for mounting in bolt works comprising several locks with a 100 mm space between locks
- All lock modules have the same mounting dimensions and the same bolt geometry. The input unit can be bolted to the outside of the safe door using the same mounting template as, for example, mechanical combination locks. This facilitates replacement of an outdated mechanical number combination lock with one of the modern electronic locks from the SELO series. The simplest way to modernize and upgrade a safe is therefore by retrofitting a new electronic SELO lock!

MODULAR COMPONENTS

security level, the user has a wide variety of enlarged lock characteristics to assign to the lock of his choice. To begin with, there is the length of the secret code, which is userdefined. The opening delay can also be set at between o and 99 minutes by the user. In addition, all locks feature a number of time functions which allow the user to restrict the opening authorization. It is also possible to assign a name in normal lettering to each of the authorized users, which then appears in all event logs. Users can be assigned different levels of access authorization, such that a security

Manipulation security:

- The electromechanical lock module comprises two separate shock-proof blocking elements.
- The lock bolt offers a high level of resistance to mechanical back-pressing (> 7 kN).
- An emergency blocking mechanism on the inside of the lock is activated as soon as the lock shaft is forced inwards as part of an attempt at forceful opening of the lock.
- After entering the wrong secret code three times in a row or more, the lock enters a manipulation blocking function lasting a certain period of time. The next time the code is entered correctly, the user receives a message informing him about the prior manipulation attempt.
- The waiting time left of an opening delay or after the lock is blocked following a manipulation attempt is indicated on the display.
- As the input unit for opening of the lock has to be turned 180°, the status of the lock can be recognized from a distance by the position of the input unit.



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Function

COMMUNICATING WITH THE SELO LOCK

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Communication:

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Prog

- The much improved communication between lock and user is one of the main characteristics of this lock series. For our new SELO locks we have used different means of indicating the lock condition and the anticipated next entries indicated by the lock. Communication has been improved to a degree that by far exceeds the extent achieved on high-security locks thus far.
- Besides the visual signals for every day use, even lock type SELO-A on the lowest security level has a separate, multicolored LED-display to notify the operator of special conditions, such as an opening delay or blocked operation following a manipulation attempt, to indicate the battery condition, the successful entry into the programming mode and to report a service requirement. Each time a key is pressed, an LED lights up briefly to acknowledge the action. Whenever the lock is ready for opening or if access is refused, this is indicated by the universally understood colors of a traffic light.
- The lock types in the higher security categories feature an LCD consisting of four lines of plain text messages. Depending on the lock type, these messages appear in one of up to twelve different languages to help the user operate the lock. Three of the four lines are reserved for the communication between the user and the lock itself. All suggested entries, instructions, explanations and status messages can be displayed in easily understood fashion in the first three lines of the display unit. Besides indicating the battery condition, the fourth line serves to show the active functions of the input keys positioned below it by means of symbols.

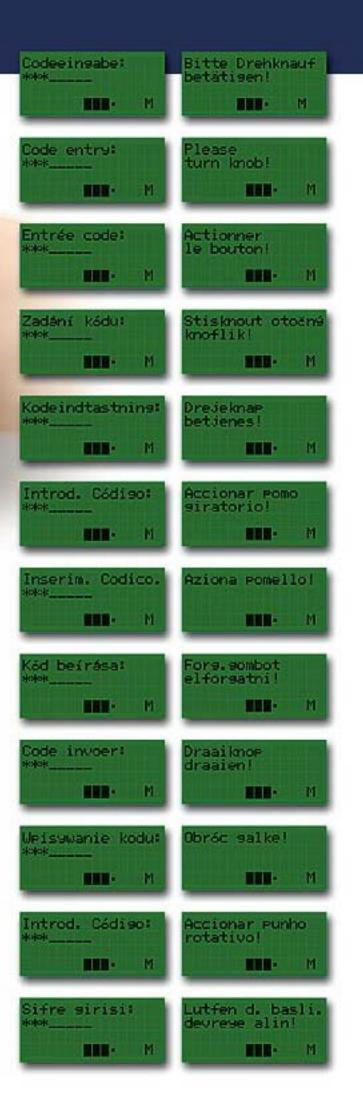
Operators:

Authorization to open a SELO locks can be assigned to several operators at a time who are each given their own access code. At least one user has to be granted the level of authority of a system administrator and is then capable of changing the various lock parameters, and add or subtract the access slots for the other users. The maximum number of possible users depends on the type of SELO lock and on the number of figures of the secret codes, and ranges from 5 to 50 users.

Reliability of operation:

In compliance with VdS-specifications, locks to classes 3(C) and 4(D) come in all-redundant design. This means that all electrical components determining the lock functions, for example the cable from the input unit to the lock interior and the printed circuit boards bearing the safety parameters of the lock, come in pairs. The advantage of this is that it is always possible to operate the lock using the redundant, i.e. secondary, system and open the safe undamaged by a service technician in the highly unlikely event of a technical fault of the primary system. The SELO lock series further includes an all-redundant lock version to lock class 2(B) (type SELO-BR).

With the operating method selected for our new lock series, the keypad cable is not moved when the input unit is being turned to open the safe, and therefore remains unaffected by flexural strain, on the lock model with the cable running through the safe door.





Lock type	SELO-A	SELO-BI	SELO-B	SELO-BR	SELO-C	SELO-D
ECB•S - lock class	А	В	В	В	С	D
EN 1300 - lock class	А	В	В	В	С	D
VdS - lock class	1	2	2	2	3	4
Number of locks for safes in resistance grade	1x up to grade II	1 x up to grade III 2 x up to grade V	1 x up to grade III 2 x up to grade V	1 x up to grade III 2 x up to grade V	2 x up to grade X 3 x for grade XI and grade XII	2 x up to grade XIII
All-redundant	no	no	no	yes	yes	yes
Display unit indicating symbols	yes	yes				
Alphanumerical display, 4 lines			yes	yes	yes	yes
Illuminated display unit			yes	yes	yes	yes
Spy-proof display	no	no	no	no	yes	yes
Code entry procedure	num. keys	num. keys	num. keys	num. keys	cursor- controlled	cursor- controlled
Blocked operation indicated by means of	LED plus symbol	LED plus symbol	plain text plus indi- cation of time left	plain text plus indi- cation of time left	plain text plus indi- cation of time left	plain text plus indi- cation of time left
Battery condition indicated by means of	LED plus Symbol	LED plus symbol	4 levels, symbol	4 levels, symbol	4 levels, symbol	4 levels, symbol
Date and time	no	no	yes	yes	yes	yes
Logging of operating events		last 1000 events	last 1000 events	last 1000 events	last 1000 events	last 1000 events
Indication language	symbols	symbols	up to 12	up to 4	up to 4	up to 4
Number of system administrators	1	1	1 but extendable to additional administrators	1 but extendable to additional administrators	1 but extendable to additional administrators	1 but extendable to additional administrators
Maximum number of users	up to 9	up to 5	up to 50	up to 50	up to 10	up to 33
Plain text user names			yes	yes	yes	yes
Code length	6	6	7 or 8	7 or 8	7 or 8	8
Opening delay	0 - 99 min.	0 - 99 min.	0 - 99 min.	0 - 99 min.	0 - 99 min.	0 - 99 min.
Access timer with 8 time windows each	no	no	2	2	2	2
Blocked calendar	no	no	yes	yes	yes	yes
Opening by means of two- or three person control	no	no	freely selectable	freely selectable	freely selectable	freely selectable
Remote blocking	no	optional	optional	optional	optional	optional
Silent alarm	no	optional	optional	optional	optional	optional



Time, date:

The lock models with an LCD come with built-in time and date functions. All time-related functions, e.g. opening delay, access timer for defining time windows in connection with lock opening authorization or calendar functions are based on the lock's ability to generate the time and date. The change from winter to summer time and vice versa can be set to occur automatically.

Logging of operating events:

SELO locks with an LCD feature a manipulation-resistant log of the last 1000 events, including the time and date each took place. For a quick evaluation, the events can be displayed on the LCD in block-wise fashion. With the necessary optional supplementary hardware, the data recordings can be transmitted to any computer.

LOCK FUNCTIONS AND TECHNICAL DETAILS

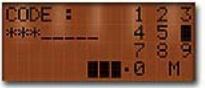
Data input procedure:

- The keypad consists of high-quality, slightly raised and therefore comfortable to use keys. In addition to numerical figures, keys are marked with alphanumerical characters to facilitate memorization of number codes and for entering plain text information.
- Depending on the lock type and security level, the procedure for entering the secret code varies.
 Besides the standard method of entering the code by pressing a string of figures, locks on the higher security levels offer the possibility of spy-proof data input. This innovative input procedure is cursor-controlled and prevents unauthorized persons from deducing the secret code from the keys pressed. Every input is acknowledged by a visual signal.

- Keypads are easily cleaned.



- The displays of lock models SELO-C and SELO-D are shielded. A special optical filter system makes it impossible for a person standing behind the user to look past his shoulders to read what is written on the display. The information can only be seen by the person standing directly in front of the display.



Power supply:

All locks have a battery compartment for three inexpensive, standard Mignon LR6 Alkaline (AA) batteries which can be accessed from the outside to replace the batteries. As a result of the special energy saving measures incorporated in the lock design, one set of batteries should normally last between three and four years. It is not necessary to supply the locks with electricity by means of a power pack. Locks are supplied with the first set of batteries. To fit new batteries or remove depleted batteries, the input unit can be turned to a comfortable position to facilitate the operation.

The battery condition is signaled on all lock models. Even if depleted batteries are not replaced for some time, there is no danger of input data being lost.





A PARTNER YOU CAN TRUST

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