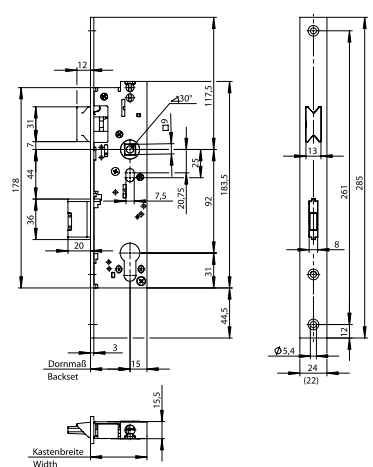




## Operating- installation and maintenance instructions Escape door systems

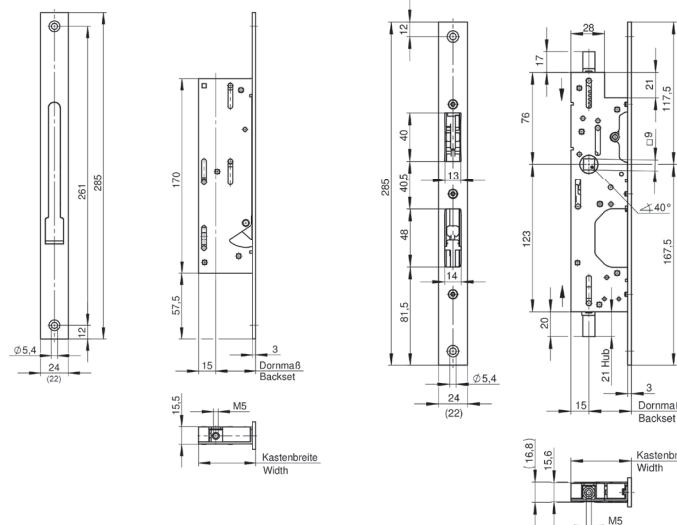
e.g. systeQ-S-ESC 6677



www.esco-online.de  
Performance description and certificates

Only hardware that has been certified with WILKA locks may be used (www.esco-online.de)

e.g. systeQ-S-ESC 6672



e.g. systeQ-S-SL-ESC 7663

### Mode of operation C - Closure enforcement (only systeQ-S-SL-ESC-7000 series)

#### Application

Suitable for door systems, which are designed to permit free access from the outside. Access to the outside is always possible - emergency exit operation.

#### Internal aspect (emergency exit side)

The internal side of the door (emergency exit side) is equipped with a lever or touch bar/push bar. The locked bolt can be retracted simultaneously with the latch via the lever or touch bar/push bar in an emergency situation.

#### External aspect

The external side of the door is equipped with a lever. In the locked mode the lever is in freewheel-function. The door can only be unlocked by key. The key has to be turned in opening direction to the stop. At that time the follower is engaged again and the door can be opened via the lever. After pulling the key off, the lever is in freewheel-function again.

#### Product advice note for the „inserted key“ function

The systeQ-S-ESC series escape door locks are equipped with the „inserted key“ function. This function allows you to also use lock cylinders with an un-defined removal position of the lock bit (mechanical or electronic knob-type cylinders, for example). The use of lock cylinders with an anti-panic function is recommended but is not essential. Depending on the particular lock cylinder used, there are different forces that need to be overcome to reset the lock bit into an uncritical position. To guarantee perfect operation, a functional check must be carried out after installing the escape door lock, fittings and lock cylinder. A basic prerequisite is the use of lock cylinders that conform to DIN 18252/EN 1303.

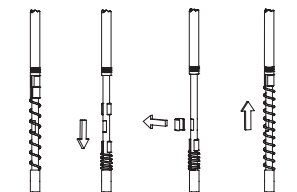
#### Advice for locking cylinder WILKA

The electronic cylinders (E203/204/207/213) can be used in series systeQ-S-(-SL)-ESC and systeQ-S-SL-EK-ESC escape door locks. Likewise the electronic anti-panic cylinders (E205/209/214/215). A functional check is required after the lock, fitting and locking cylinder have been installed.

#### Striking plate cut for locking devices (active leaf)

Minimum thickness of material  
1.5 mm according to EN 179  
3 mm according to EN 1125

#### Spring force can be adjusted by changing the number of sleeves



All shot bolts must be mounted securely in the connecting piece of the lock. Only the upper shot bolt rod (systeQ 9650) can be rotated slightly out of the connecting piece of the lock for adjustment purposes without compromising its function.

length mm	door mm	sleeves
900-1150	2000-2250	—
1150-1400	2250-2500	1
1400-1650	2500-2750	2
1650-1900	2750-3000	3
1900-2150	3000-3250	4
2150-2400	3250-3500	5

### Mode of operation B - Change-over function

#### Application:

Suitable for door systems, which are designed to permit free access from the inside and the outside of a building for specific periods but additionally must not be accessible from the outside for designated periods. Access to the outside can always be obtained; emergency exit is not compromised even when the door is locked (emergency exit operation).

#### Internal aspect (emergency exit side):

The internal side of the door (emergency exit side) is equipped with a lever or panic bar. Activation of the lever or panic bar causes the latch and the locked bolt to retract. The door can now be opened.

#### External aspect with security bolt in the locked position:

The external side of the door is equipped with a lever. When the bolt is engaged the follower is in non-operational mode. When the bolt is retracted the follower remains in the non-operational mode. The follower is switched to operational mode only after the key has been operated. The door can now be opened using the lever. The security bolt can always be locked using the key.

### Mode of operation E - Transmission function

#### Application:

Suitable for door systems, where unauthorized external access must be prevented thus maintaining security. Access to the outside can always be obtained; emergency exit is not compromised even when the door is locked (emergency exit operation).

#### Internal aspect (emergency exit side):

The internal side of the door (emergency exit side) is equipped with a lever or panic bar. The locked bolt can be retracted simultaneously with the latch via the lever or panic bar in an emergency situation. In the unlocked mode the latch can be retracted by means of the lever, panic bar or key. The lock can be locked and unlocked by means of a key.

#### External aspect:

The external side of the door is equipped with a fixed door knob. In the unlocked mode the latch can be retracted by means of the key. The lock can be locked and unlocked by means of a key.

### Mode of operation D - Transit function

#### Application:

Suitable for door systems, which are designed to permit free access from the inside and the outside of a building for specific periods. To prevent opening of the door after the panic release has been activated the bolt has to be moved into the locked position by means of the key. Access to the outside can always be obtained; emergency exit is not compromised even when the door is locked (emergency exit operation).

#### Internal aspect (emergency exit side):

The internal side of the door (emergency exit side) is equipped with a lever or panic bar. The locked bolt can be retracted simultaneously with the latch via the lever or panic bar in an emergency situation. The lock can be locked and unlocked by means of a key.

#### External aspect:

The external side of the door is equipped with a lever. In the unlocked mode the latch can be retracted by means of the lever. The lock can be locked and unlocked by means of a key. After a panic release has been activated from the internal side the latch can be retracted from the external side using the lever. The lever is non-operational while the door is in the locked mode.

screw.  
8. Check proper functioning of locking device.  
9. During mounting the shoot bolts the locking torque has to be 5-8 Nm.

All legal regulations regarding the use of the locking device on fire doors remain fully valid and applicable.

Before an emergency exit door locking mechanism is fitted to a fire or smoke protection door, the fire protection door certification, against which the exit door locking mechanism is inspected, should be checked to ensure the exit door locking mechanism is suitable for this specific door.

The locking system complies with fire rating EI60 (T60) for double-leaf steel and aluminum doors.

Before assembling an exit locking mechanism to a door, the door should be checked to ensure correct mounting and no signs of warping. It is advisable to check the door frame permits operation of the locking mechanism, i.e. whether existing hinges and interlocking leaves allow for simultaneous opening of both leaves or to check whether the distance between the door leaves complies with the distance stipulated by the exit door locking mechanism manufacturer or whether the control elements do not hinder each other.

Assembly instructions should be followed carefully when fitting exit door locking mechanisms.

Suitable mounting options for exit door locking mechanisms assembly are self-tapping countersunk machine screws (ST 4.8) and countersunk screws (M5) in conjunction with suitable blind rivet nuts. The right length of screws should be selected so they ensure firm positioning and do not hinder the locking function.

A variety of assembly methods may be required when fitting exit door locking mechanisms to wooden, metal or full-glass doors. Through-screws may be used for dependable assembly (reinforcements and rivets are also permitted for emergency exit locking mechanisms), as long as they do not damage the panic door locking mechanism or hinder its operation.

The exit door locking mechanism control element should usually be fitted at a height of between 900mm and 1100mm above the surface of the floor of a closed door. If the majority of the building's users are small children, a reduction in the height of the control element should be accounted for.

The horizontal push bar should be fitted so that the longest possible length of bar is effectively used. In addition, when fitting exit door locking mechanisms, in particular to doors with graded surfaces, any possible safety risk, e.g. finger jamming or clothes getting caught, should be avoided as far as possible.

If the exit door locking mechanisms are to be fitted to glass doors, it is very important that the glass sections are made of safety glass or laminated safety glass.

Before fitting door seals (e.g. profile seals, floor seals) ensure they do not hinder the correct operation of the exit door locking mechanism.

A rod guidance (art. systeQ 9644) is recommended for door elements above 2500 mm.

The right size of exit door locking mechanism and components must be selected for the door element to be constructed and compliant with the values stipulated in these assembly instructions.

Any fitted lock keepers or cladding must comply with EN 179 and/or EN 1125.

In the event exit door locking mechanisms and door closers are to be fitted to double leaf doors with a rebated central joint, a door closing coordinator device in compliance with EN 1158 should be fitted to ensure the correct door closing sequence. This recommendation is mandatory for fire and smoke protection doors.

To retain the door in the closed position, no other devices should be fitted other than the locking mechanisms stipulated in EN 179 and/or EN 1125. This not exclude door closer fitting.

In the event a door closer is fitted to return the door to the closed position, care should be taken to ensure the door movement is not hindered by children, elderly and disabled persons.

On the inside of the door, immediately above or on the control element itself, if there is sufficient flat surface for the labelling, a sign labelled 'Push bar to open' (EN179), 'Press down on bar to open' (EN 1125) or a diagram should be fitted. The diagram should cover a minimum surface area of 8000mm², and the colours should be white on a green background. Once fitted, the arrow should point to the actuating element.

The leaves and the frame of the door element must be made of sufficiently sturdy materials (e.g. welded steel or aluminum profile). Make sure that any deformation in the door element is kept to a minimum to ensure that the locking element will work properly.

The leaf dimensions in the door elements produced may not exceed 3500 mm in height, 1600 mm in width or 400 kg in weight.

Key-operated half- or double cylinders as well as mechanical or electronic knob cylinder (with or without key operation) have no effect on the lock's panic door function (even when the key is inserted). Only the knob of a mechanical or electronic knob cylinder can affect the push bar's functioning, depending on the knob shape and size. Some push bars pose the risk of pinch or shearing points. That's why it's important to keep a clearance of at least 10mm between the outside of the knob up to the lever arm or other activating fitting.

In order to ensure serviceability in accordance with this document, the following routine maintenance inspections should be carried at least once a month:

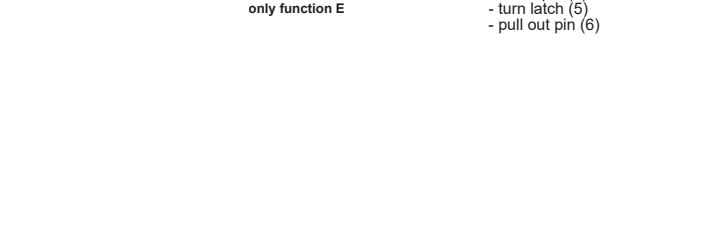
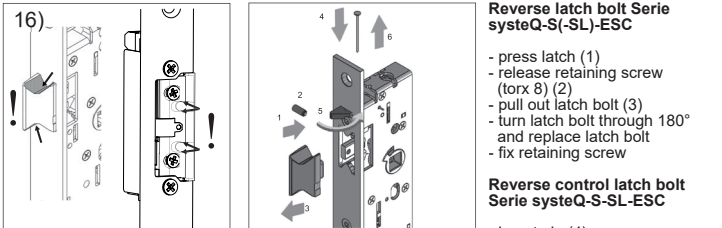
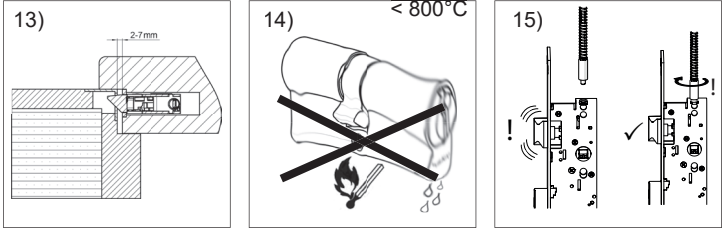
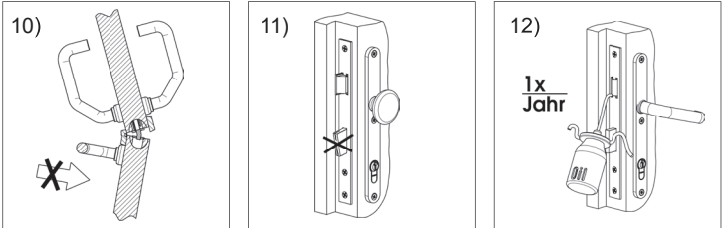
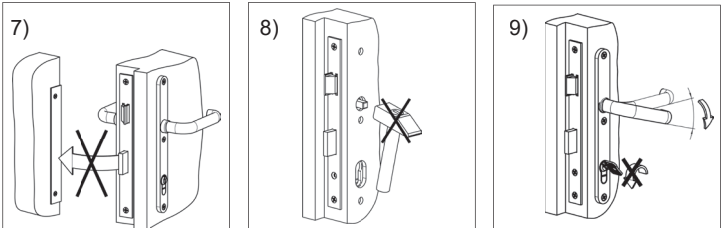
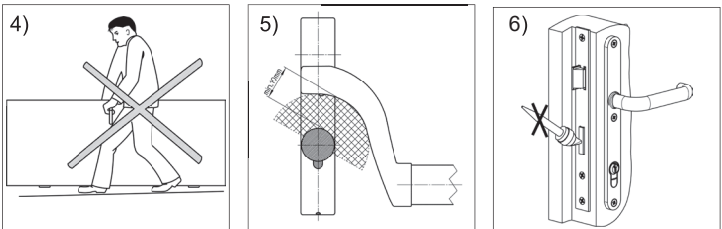
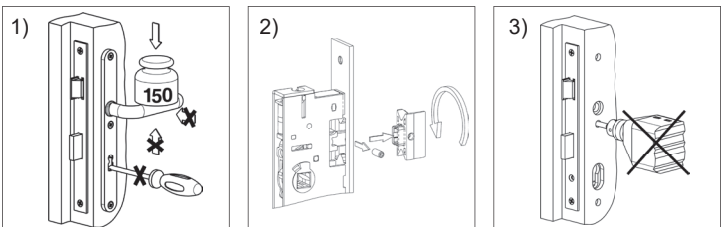
- Inspection and actuation of the exit door locking mechanism to ensure all locking mechanism components are in satisfactory working order; the actuation forces required to release the exit door locking mechanism should be measured and logged with a force gauge.
- Ensure the lock keepers are not blocked or impeded.
- Check the exit door locking mechanism is lubricated in accordance with the instructions.
- Check no additional locking devices have been subsequently added to the door.
- Carry out regular checks to ensure all components comply with the original parts specifications delivered with the installation.
- Carry out regular checks to ensure the control element is properly secured, and measure the actuation forces required to release the exit door locking mechanism using a force gauge. Check the actuation forces have not significantly altered when compared with readings logged during initial installation.

As products featuring standards EN179:2008 and/or EN1125:2008 are

no different, from a technical point of view, to those featuring standards EN179:2001 and/or EN1125:2001, the new classification is also applicable to the latter. Further information and performance descriptions concerning the construction products see: www.esco-online.com

### General notes

- No pressure must be applied to handle against its operating direction. In operating direction the pressure must not exceed a maximum of 150 N. The lock must only be operated with the appropriate key. Don't apply any other tools!
- Attention: Turn latch bolt only by using function E or solid follower respectively.
- No drilling through the lock while it is installed.
- Don't use handle for carrying the door.
- If a knob-type cylinder is used, then the expansion space between the knob and cross bar must be at least 10 mm.
- Dead bolt and latch bolt are not to be varnished.
- Lock dead bolt only when door is shut.
- The handle must not be forced into the follower.
- Handle and key must not be operated at the same time.
- Double doors must not be forced open by using the inactive leaf.
- The lock has to be exchanged as soon as signs of force become visible.
- Locks have to be greased at least once per year (not resin oil).
- The distance between forend and striking plate must be 2 - 7 mm. Furthermore the distance of lock latch and top shoot bolt to the top (xxxZ) has to be identical.
- Cylinders have to be consist of a material, which is melting above 800° C!
- Only after the shoot bolt mount the latch bolt is under tension
- When using electric strikes, which are manufactured by effeff and Profix II design, we recommend using non-gumming grease (do not use any oil!) on the latch bolt guide of the lock latch and the taper of the electric strike prior to commissioning in conjunction with the emergency door series systeQ-S(-SL)-ESC.



### Classification of locking mechanisms

CE	esco Metallbausysteme GmbH Dieselstraße 2 D-71254 Ditzingen
0432-CPR-0005-02-01	2014
EN 179:2008	3 7 7 B 1 3 5 1 A B
0432-CPR-0005-01-01	2014
EN 1125:2008	3 7 7 B 1 3 2 W A/B B

EN 179 + EN 1125  
Locking mechanism for single-leaf doors, function B + C + D + E

CE	esco Metallbausysteme GmbH Dieselstraße 2 D-71254 Ditzingen
0432-CPR-0005-02-01	2014
EN 179:2008	3 7 7 B 1 3 5 1 A A
0432-CPR-0005-01-01	2014
EN 1125:2008	3 7 7 B 1 3 2 W A/B A

EN 179 + EN 1125, Locking mechanism for single- and double-leaf doors, function B + C + D + E

CE	esco Metallbausysteme GmbH Dieselstraße 2 D-71254 Ditzingen
0432-CPR-0005-02-01	2014
EN 179:2008	3 7 7 B 1 3 5 1 C
0432-CPR-0005-01-01	2014
EN 1125:2008	3 7 7 B 1 3 2 W A/B C

EN 179 + EN 1125 Locking mechanism for double-leaf doors outwardly opening: inactive leaf only

CE	WILKA Schließtechnik GmbH Mettmannstr. 58-64 42549 Velbert Germany
0432-CPR-0005-03	2015
EN 12209:2003/AC:2005	3 S 9 1 0 F 3 B A 2 0

EN 12209 Devices (latch and dead bolt lock), active leaf only

CE	WILKA Schließtechnik GmbH Mettmannstr. 58-64 42549 Velbert Germany
0432-CPR-0005-03	2015
EN 12209:2003/AC:2005	3 S 9 1 0 F 3 B B 2 0

EN 12209 Devices (latch and dead bolt lock), active leaf only

CE	WILKA Schließtechnik GmbH Mettmannstr. 58-64 42549 Velbert Germany
0432-CPR-0005-03	2015
EN 12209:2003/AC:2005	3 S 9 1 0 F 3 B 0 2 0

EN 12209 Devices (latch lock), active leaf only

Attention: Refurbishment forend locks are not according to EN 12209

The following series of electric working current door strikes may be deployed in the case of P-series striking plates for e-openers:

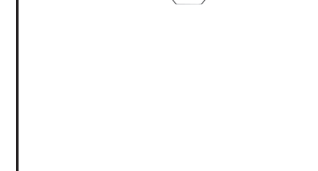
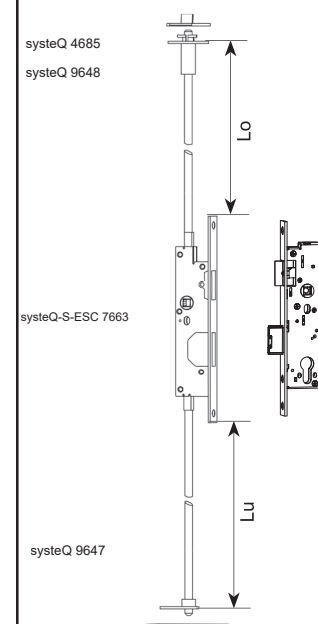
Fire rated / Smoke protected:  
IST FT200, FT201, FT501, FT501, R7000, R7001  
effeff 142, 143, 131 Dorma 117, 447

Not fire rated / Not smoke protected:  
IST A7000 effeff 119, 118

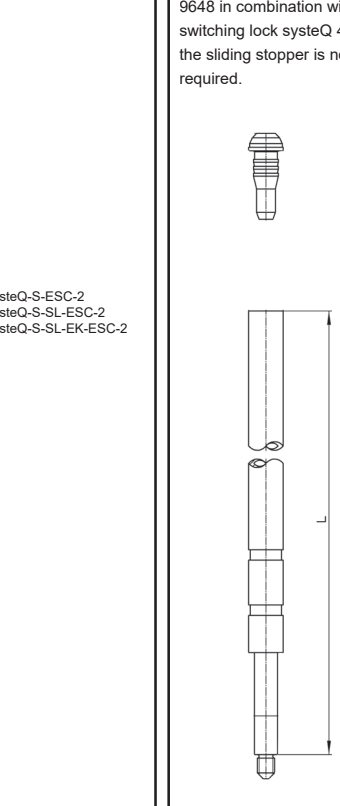
When using the above-mentioned E-opener without fire protection approval, the fourth digit of the classification code changes to 'zero'. The examined combinations may be used only with the following along-examination and certified accessories (status quo see www.esco-online.com):  
switching lock systeQ 4685, snap latch systeQ-S 4686, snap latch, spring loaded systeQ-S 4687, floor keeps 9651 and 9652, shoot bolts systeQ 9647, systeQ 9648, systeQ 9649, systeQ 9650, systeQ 9671, systeQ 9677  
P-series striking plates, P-series striking plates for E-openers, shoot bolt guide 9653, shoot bolt guide systeQ 9644, stone sleeve 9685

### Adjusting the length of the bolts / SL = forend length

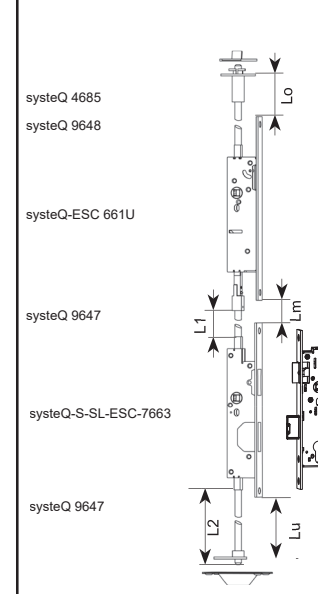
Art.Nr.	SL	285 mm
systeQ 9648	L = Lo + 40 mm	
systeQ 9647	L = Lu + 41 mm	



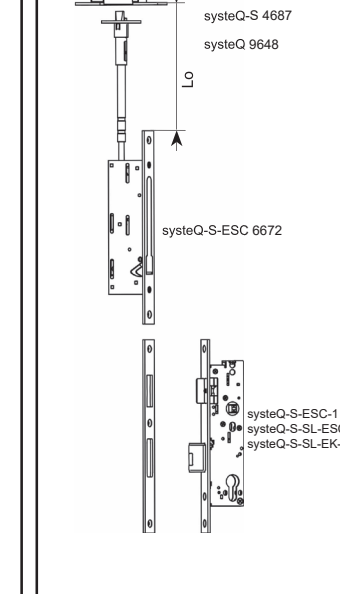
Art.Nr.	SL	285 mm
systeQ 9648	L = Lo + 38 mm	



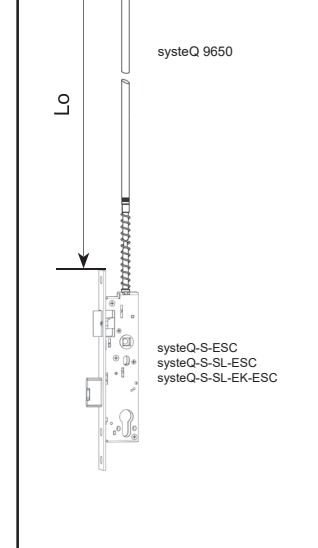
Art.Nr.	SL	285 mm
systeQ 9648	L = Lo + 58 mm	
systeQ 9647	L <sub>1</sub> = L <sub>m</sub> + 41 mm	
systeQ 9671	L <sub>1</sub> = 205 mm	
systeQ 9647	L <sub>2</sub> = Lu + 41 mm	



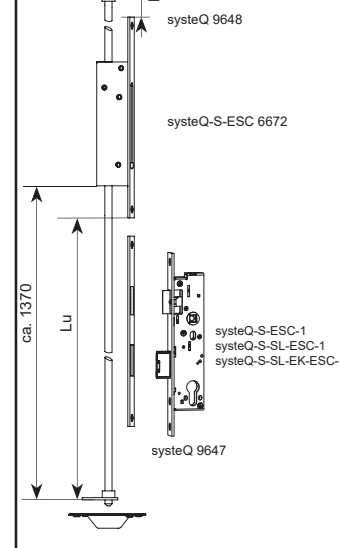
Art.Nr.	SL	285 mm
systeQ 9648	L = Lo + 38 mm	



Art.Nr.	SL	285 mm
systeQ 9650	L = Lo + 54 mm	



Art.Nr.	SL	285 mm
systeQ 9648	L = Lo + 77 mm	
systeQ 9647	L = Lu + 82 mm	



Leaving technical details.

The instructions and directions should be passed to the end user by the installer and kept reliably up to the end of the working life.