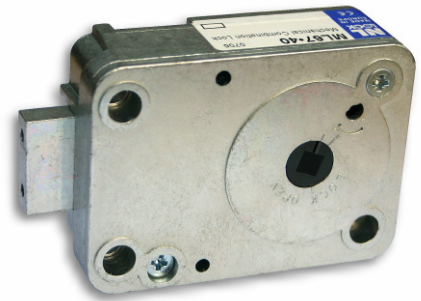


Mechanical Lock



ML67-40 Technical Manual

CHARACTERISTICS

The ML 67•40 is a manipulation proof 3-wheel Combination Lock with new features and is very easy to mount. The lock has the standard foot prints (66,7x41mm) and can be mounted in all four directions. (RH, LH, VU, VD)

Measurements: 85 mm x 61 mm, x 29 mm. Lock bolt: 25 mm x 8mm with two M4 holes on the bolt head. Bolt Travel 8 mm.

The lock needs no Spline key. It works with a square 6x6mm shaft as the spindle. Two optional sliders can be inserted to make a 3-way locking system.

Mechanical Dials

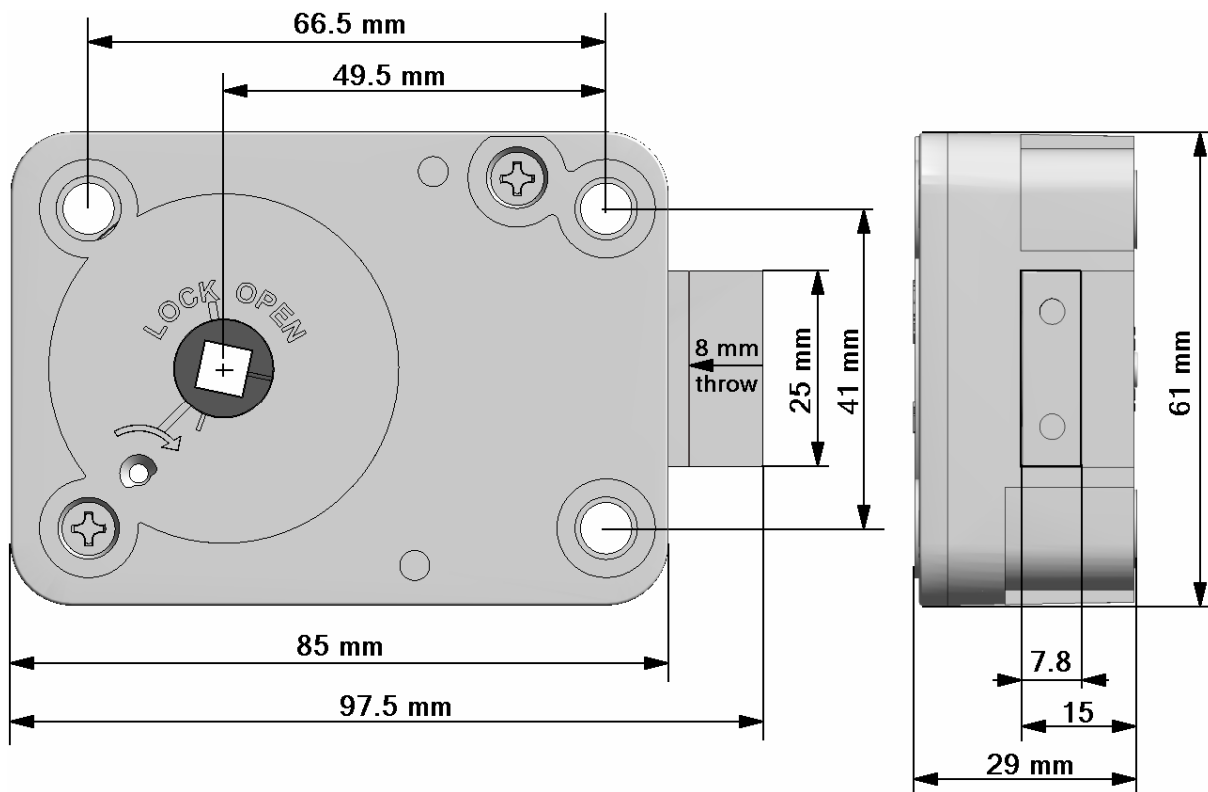
This mechanical lock compatible with the following NL LOCK dials:

MD70-60 	MD60-60 	MD40-60  METAL	1780  METAL	1789  METAL
KL10-60 	KL15-60 			
ST20-60 	ST30-60 	ST35-60 	2090MC  METAL	

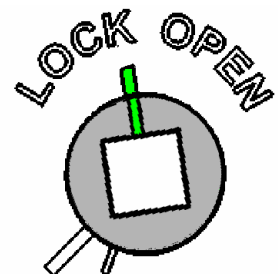
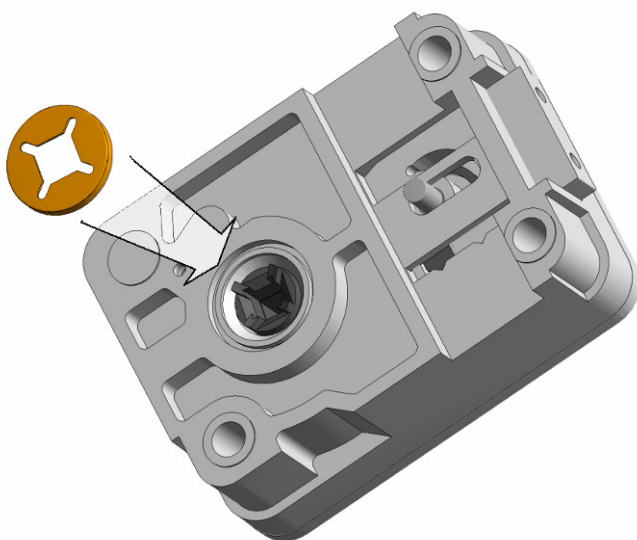
Matching boltwork handles and accessories are available as well. For more information, please read the technical description and mounting instruction of the dial and ring assembly.

Due to the square shaft the lock is **not** compatible with dials that have a round, threaded spindle.

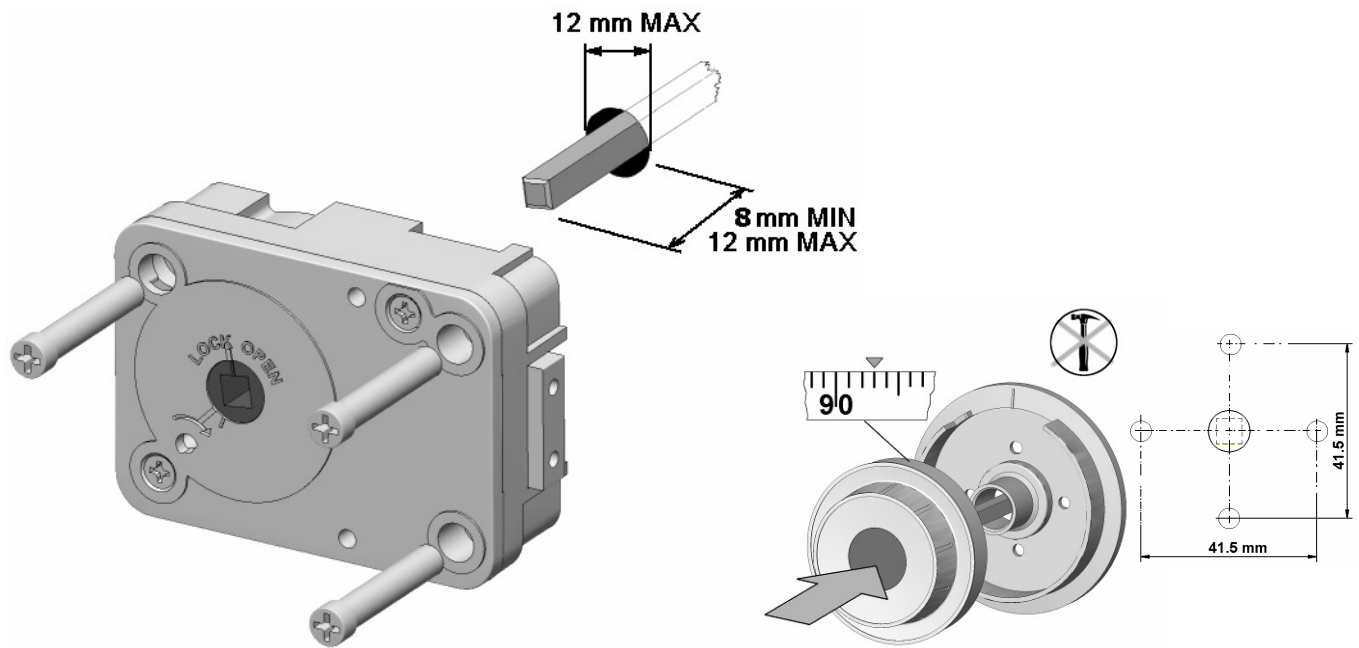
DIMENSIONS / MOUNTING INSTRUCTION



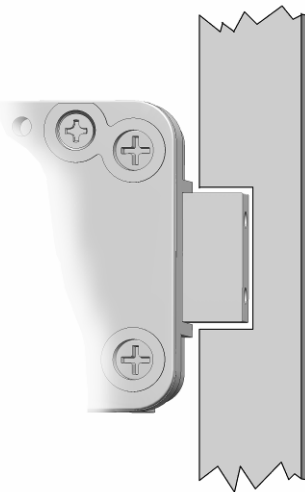
The Lock is delivered with the Bolt retracted and ready for mounting. Do not move the cam (part with square hole) or the bolt. During installation the **bolt must stay in retracted position and the cam lined up as shown below.**



Put the Star-Washer on the four posts on the cam, located beneath the lock.




Only use the delivered 3 mounting screws (M6 or US 1/4 20G BSW) and fasten as usual. (Torque approximately 3,5 Nm). With the lock in OPEN-position (bolt retracted) hold the dial in a way that approximately "93" is on top and push it with some pressure into the lock. **The shaft cannot be pulled out.**



Turn Dial LEFT to extend the bolt. The bolt must slide easily to the end position and should not be restricted by the bolt work

Delivered Factory Code is „50“.

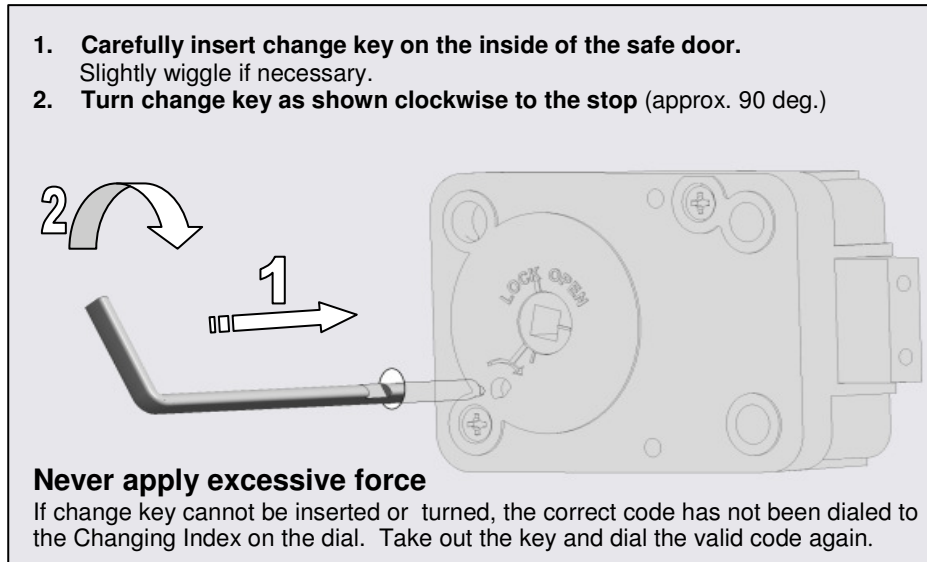
4x  Turn LEFT and pass "50" three times and stop exactly on "50" on the Opening index the fourth time.

Due to installation tolerances it is possible that the code may have shifted up to two numbers up or down. This shifting is normal and will be eliminated once the code is re-set. If the lock does not open on "50", try to open at „48“ then "49", "51" or "52".

Also due to these tolerances it is important to re-set the code after installation.

With door open, turn the bolt work and lock to locked position.
Dial the code at which the lock opened on the **CHANGING INDEX**.

Example: If the lock opens at "49".
4 x LEFT until "49" stops exactly at the Changing Index



Change Keys




If installers use the same change key to set up several locks, it is important to inspect the change key regular basis.

If the change key is bend or shows signs of wear it needs to be replaced. Otherwise the new code will not be set exactly as dialed.

Now dial your factory code using the **CHANGING INDEX**.

* We suggest to set the code to 10-20-30 as that matches the user instruction **NL LOCK** provides.

The last number must be higher than 10. Each number has to be at least 4 increments apart from the others. For example: 49-45-41 and not 51-52-53.

- 4 x  Turn LEFT, pass first code number three times and stop exactly on the number on the **Changing Index** the fourth time.
- 3 x  Turn RIGHT, pass second code number twice and stop exactly on the number on the **Changing Index** the third time.
- 2 x  Turn LEFT, pass third code number once and stop exactly on the number on the **Changing Index** the second time.

When turning the dial, if a number is passed, start over at the beginning.

After the new Code is completely entered, **turn change key LEFT and remove it.**
The new Code is installed.

Try the new code several times (using Opening Index) before closing the door!

DATA SHEET

Mechanics	
Opening	manually
Locking	manually
Blocking element	3 Wheels
Mounting dimensions	standard
Certifications	
VdS	Class 2
EN1300	Class B
UL	Group 2M
DNV	158-2 Listed
IMP	Klasa B

What if ...

...accidentally the cam got moved before installation?

As long as the code has not been changed with the change key, the lock can be prepared for mounting following the steps below:

1. Hold the lock so that you look at the cover and the bolt is to the right.
2. Turn the cam clockwise minimum 4 complete turns and stop when the cam is lined up as shown in figure 1.
3. Turn cam counterclockwise until lock opens. The cam should be lined up with the "LOCK OPEN" line on the cover (see figure 2).

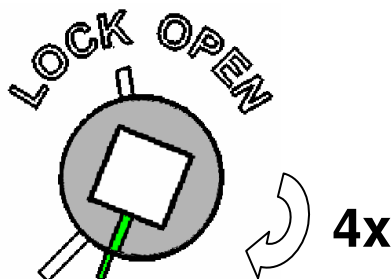


figure 1

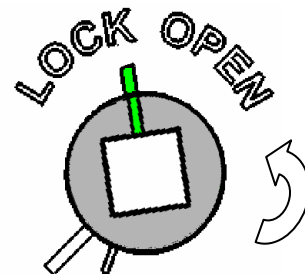


figure 2

...the dial is hard to turn or the dial is rubbing on the dial plate?

Loosen the screw that holds the shaft in the dial and pull out the dial slightly. Then tighten the screw hand tight. Do not over tighten as that will pull the dial back in. Use liquid threadlocker like Loctite™ if required.