

3-WHEEL MANIPULATIONRESISTANT MECHANICAL COMBINATION LOCK ML 67-40



VdS Class 2, EN1300 Class B, UL Group 2M, DNV

ML67-40

Is compatible with following dials from NL Lock range



• DATA SHEET

Mechanics

Opening	manually
Locking	manually
Blocking element	3 Wheels
Mounting dimensions	standard

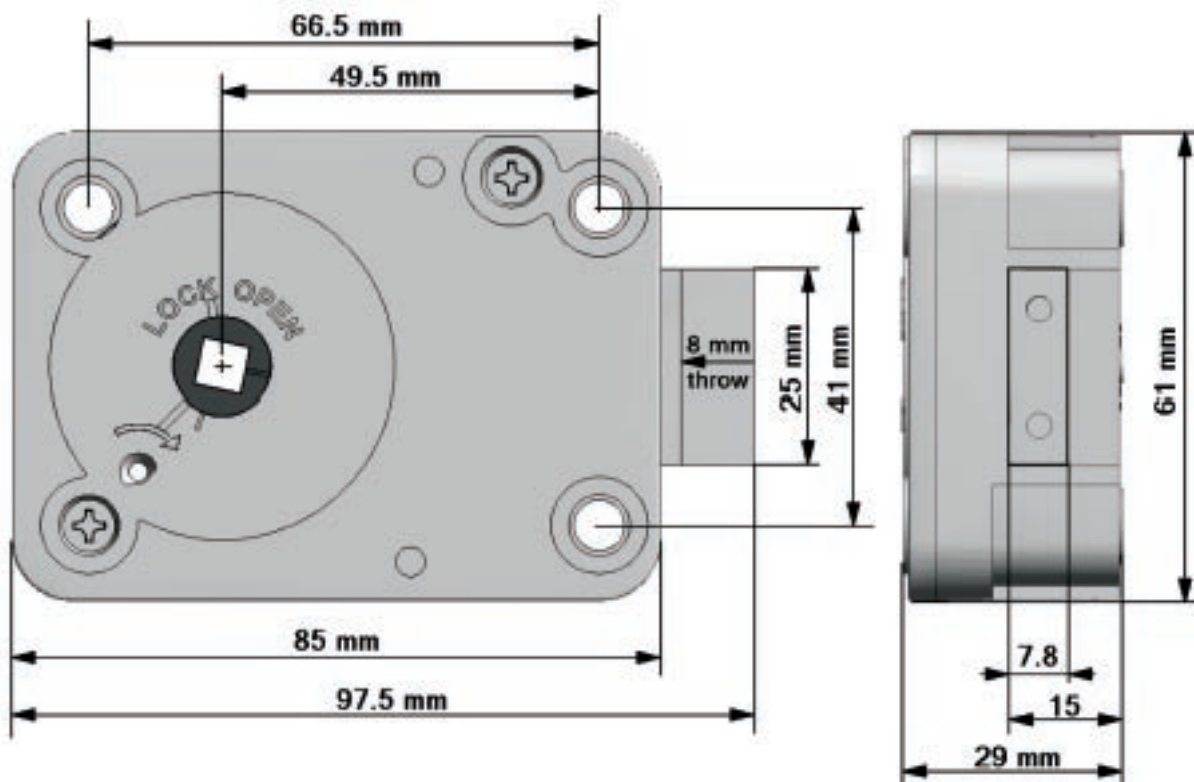
Certifications

VdS	Class 2
EN1300	Class B
UL	Group 2M*
DNV	✓

*pending

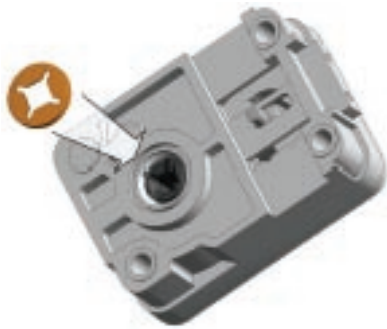
ML 67•40 is a manipulation resistant 3-wheel Combination Lock with new features and is very easy to mount. The lock has the standard foot prints (66,7x41 mm) and can be mounted in all four directions. (RH, LH, VU, VD)

Measurements: 85mm x 61mm, x 29mm. Lock bolt: 25mm x 8mm. The lock needs no Spline key. It works with a square 6x6mm shaft as a spindle. Two optional sliders can be inserted to make a 3-way locking system. The lock is delivered with metric (M6) mounting screws as well as imperial screws (1/4-20).



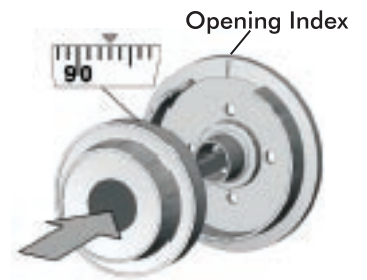
Mechanical combination locks have been around since the mid-1800s and have not changed much in their design. Current locks consist of three or four, wheels, a lever, bolt, and a cam that accepts a threaded dial spindle which must be “splined” together with a spline key. Splining, or mis-splining, of a mechanical combination lock has been the subject of numerous articles over the last 30 years, as correct splining is critical in order to avoid accidentally setting the combination in the “forbidden zone.” Changing the lock design to eliminate splining entirely is the most significant change to the new mechanical combination lock being introduced by Nick Gartner, founder of La Gard, and most recently Lock Technology BV. While still consisting of three wheels, a lever and bolt, Gartner’s lock cam is not threaded and is not splined with a key together with the dial spindle.

Figure 1



The new Mechanical Combination lock’s cam accepts a 6mm square shaft with cut-off points and has a star washer in the lock shaft hole (see figure 1). With the introduction of a square shaft, the lock can be mounted in any of the four positions (RH,LH,VU,VD), without removing the lock cover, making it the first truly sealed lock. To mount the lock and mate the dial, with the lock in the OPEN position (bolt retracted), the dial is held so that the number 93 (approximately) is lined up on the dial’s Opening index (Figure 2), then the shaft pushed into the lock with a slight bit of pressure. The shaft cannot be pulled out as it is held with the star washer.

Figure 2

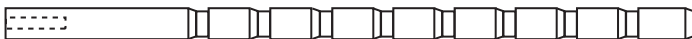


ML67-40 advantages comparing with other Mechanical Combination Locks

1. Forbidden Zone: Avoiding forbidden zone problems because of not splining, the forbidden zone is smaller on the ML67-40. While current locks use 0-20 as the forbidden zone for the third number of the combination, 0-10 is recommended range on the new lock.

2. Square Dial Shaft: The cut-off length of the shaft is not as critical as on the threaded spindle. “No Spy” dials from NL Lock come standard with a detachable square shaft with cut-off points (little steps) (Figure 3). When the shaft is cut to length, the cut-off points create a chamfered area (unlike the threaded spindles that must be deburred after cutting). The square chamfered area creates a positive location into the star washer then through the cam.

Figure 3



3. Space saving with shipment: As the shaft is shipped detached from the dial, it does not take up extra space as occurs with dials shipped with the spindles already pressed in the dials. To attach the shaft to the dial takes few seconds.

4. Significant reduction of the installation time: ML67-40 can be installed quickly and easily. Not having to remove the back cover saves time. No errors are caused by mis-splining or by having a loose or incorrect spline key.

5. Auxiliary Bolts: There are optional auxiliary bolts for three-way locking, which are not found on any other currently manufactured locks. (Figure 4)

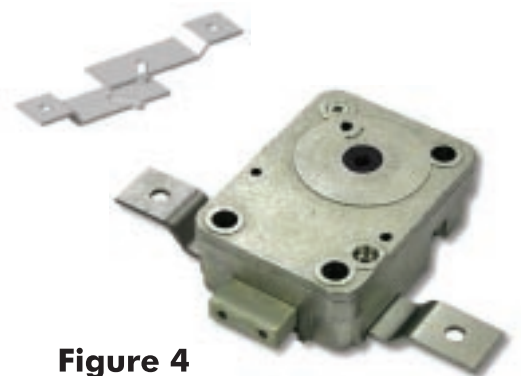


Figure 4

KG is a Swedish company with more than 30 years of experience in high-security locks business. KG Group's **GROUP** product line includes mechanical and electronic locks for all kind of safes, ATM machines, vaults and other value storage units.

To our customers we are offering concept solutions based on customers actual requirements and, if necessary, installation, service and maintenance of locks. New software and advanced electronics claims greater knowledge and continuous competence development of our crew in order to satisfy customer's needs and wishes.



• KG Group, Stockholm, Sweden



Founder and CEO of the company, Mr. Kurt Y. Lönnqvist, has been active in lock business for more than 35 years ; amongst other things as a president of the both Swedish and European Locksmith federations.

Company policy

KG Group is committed to understand, define and meet the quality needs and expectations of all our customers. It is KG Group's philosophy that quality has to be an integral part of each phase and every segment irrespective of if it's manufacturing, sales or a service, culminating in a long term with high product reliability. Our products shall be of agreed quality both in terms of a function and finish. Our deliveries shall be made on time and the quality and quantity supplied shall be in accordance with all agreed standards and specifications.

KG Group believes that our customers deserve only the best of care.

Let us take full responsibility.