



**Product name : Holding magnet (waterproof) 60 x 33 / 84 / N**

## PERFORMANCE PARAMETERS

Manufacturer	Enes Magnesy
Length	60 [mm]
Width	33 [mm]
Height	84 [mm]
Height with threaded	51 [mm]
Thread type	external, M10
Magnet type	Neodymium
Maximal hoisting capacity	70 [kg]
<p>The pull force given refers to hoisting capacity measured in optimal conditions, by using as a backing plate a sheet made of low-carbon steel, 10 [mm] thick, of smooth surface and with the force acting perpendicularly, in room temperature.</p> <p>Notice: the pull force given should be treated as only a comparative value. An actual pull force depends on the following factors:</p> <ul style="list-style-type: none"><li>• air gap (a distance) between holding magnet and an backing plate (in some conditions even a very narrow gap, i.e. 0,5 [mm] can result in decrease in pull force by a half)</li><li>• material, of which a backing plate is made (the higher carbon proportion in steel, the smaller pull force)</li><li>• surface of a backing plate (the smoother the surface, the bigger pull force)</li><li>• direction of acting of detaching force (the biggest pull force is obtained with perpendicular acting of detaching force)</li><li>• thickness of a backing plate (the backing plate cannot be too thin, because in such case part of magnetic flux is not used for closing of a magnetic circuit)</li><li>• working temperature (in temperature of 80°C pull force can be lower of up to 20 per cent)</li></ul>	
Magnetic field in geometrical center of the magnetic pole surface	0,45 [T]
Maximum working temperature	≤ 80 °[C]
Housing	stainless steel, AISI 304 / EN 1.4301, approved for contact with food
water-resistant	yes
Waterproof	class IP67
Weight	600 [g]

**The maximum pull force: ~70 [kg]**

**Holding magnet (waterproof) is closed in a housing made of AISi 304 acid-proof steel with external thread M8. There is a neodymium magnet inside. Thanks to a relatively high pull force, it is ideal for securely hold both small and large and heavy elements. It also may be used to move small steel details**

**from one place to another. The solid construction ensures long-term use.**

Magnetic field on surface of the magnetic pole is  $\sim 0,450$  [T].

In the holding magnet sintered neodymium magnets (NdFeB) with wide range of activity were used. The maximum working temperature for holding magnets involving neodymium magnets is **80°C**.

The pull force given refers to hoisting capacity measured in optimal conditions, by using as a backing plate a sheet made of low-carbon steel, 10 [mm] thick, of smooth surface and with the force acting perpendicularly, in room temperature.

**Notice:** the pull force given should be treated as only a comparative value. An actual pull force depends on the following factors:

- air gap (a distance) between holding magnet and an attracted element
- material, of which an attracted element is made (the higher carbon proportion in steel, the smaller pull force)
- surface of an attracted element (the smoother the surface, bigger the pull force)
- direction of acting of detaching force (the biggest pull force is obtained with perpendicular acting of detaching force)
- thickness of an attracted element (the element cannot be too thin, because in such case part of magnetic flux is not used for closing of a magnetic circuit)
- working temperature.

We generally recommend individual checking of the holding magnet in any specific working conditions.

Weight of the holding magnet:  $\sim 0,6$  [kg]