

## Product name: Holding magnet for diver 120x120x24 / N

## PERFORMANCE PARAMETERS

Manufacturer	Enes Magnesy
Length	120 [mm]
Width	120 [mm]
Height	24 [mm]
overall height together with eye	70 [mm]
Magnet type	Neodymium
Maximal hoisting capacity	230 [kg]
Maximum working temperature	≤ 80 °[C]
Housing	stainless steel, AISI 304 / EN 1.4301, approved for contact with food
water-resistant	yes
Waterproof	class IP67
with easier detachment	yes
Handling mode	manual use
With the eye	yes
Weight	3.1 [kg]

The maximum slide force: above the 80 [kG]. The maximum allowed pull force by perpendicular acting of detaching force: approx. 230 [kG].

Holding magnets for divers are used for suspension loads on steel vertical walls e.g. ship's boards. By dint of the hermetically closed in a housing made of acid-proof steel the holding magnet is seawater-proof. The 165 mm long side-lever (handle) make the separation from attracted steel element easy.

In the holding magnet sintered <u>neodymium magnets</u> (NdFeB) were used. The maximal working temperature for holding magnets involving neodymium magnets is **80oC**.

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,

30 [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.

## **TECHNICAL DRAWING**

