Product name : Holding magnet for galvanizing plant 51 x 47/90 / N

PERFORMANCE PARAMETERS

Manufacturer	Enes Magnesy
External diameter	51 [mm]
Height	47 [mm]
overall height together with eye	90 [mm]
Magnet type	Neodymium
Maximal hoisting capacity	30 [kg]

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 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)
- material, of which a backing plate is made (the higher carbon proportion in steel, the smaller pull force)
- surface of a backing plate (the smoother the surface, the bigger pull force)
- direction of acting of detaching force (the biggest pull force is obtained with perpendicular acting of detaching force)
- 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)
- working temperature (in temperature of 80°[C] pull force can be lower of up to 20 per cent)

Magnetic field in geometrical center of the magnetic pole surface	0,35 [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
With the eye	yes
Weight	770 [g]

Holding magnet (waterproof) is closed in a housing made of AlSi 304 acid-proof steel with external thread M8. There is a neodymium magnet inside. He has 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.

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 **80oC**.

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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.

Height including an eye: 90 mm
