Product name : Magnet in housing, diameter 16 mm, with hole for countersunk screw head, neodymium

PERFORMANCE PARAMETERS

External diameter	16 [mm]
Aperture diameter for head of a screw	6,6 [mm]
Internal diameter	3,5 [mm]
Height	4,5 [mm]
Magnet type	Neodymium
Maximal hoisting capacity	6 [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)

Coating	Nickel-plated (NiCuNi)
Maximum working temperature	≤ 80 °[C]
With a central hole for the screw head	yes
Weight	5,5 [g]

Holding magnets are simple magnetic circuits composited of a magnet and a steel housing. Because of that, in the holding magnets both magnet poles are used (one works directly, and the second saturates the housing, which also act on the attracted element), they are characterized by a relatively high pull force parallel to significantly reducing of the operating range.

In the holding magnet sintered neodymium magnet was used. Max. working temperature for holding magnets involving neodymium magnets is **80°[C].**

You will find attached a dimensional drawing of the holding magnet.

TECHNICAL DRAWING