



**Product name : Holding magnet for welder KMW-3 140x140x24 / F**

## PERFORMANCE PARAMETERS

Manufacturer	Enes Magnesy
Length	140 [mm]
Width	140 [mm]
Height	24 [mm]
Magnet type	Ferrite
Maximal hoisting capacity	40 [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>	
fixing details angle	45; 90; 135
Maximum working temperature	250 °[C]
handling mode	ręczny
Number of axis to attach details	2
Weight	1,3 [g]

**The maximum pull force: ~40 [kg]**

**Holding magnet for welder is used to hold steel elements during welding works, keeping at the same time the angle of 30°, 45°, 60°, 90°, 135°, 150°.**

**Highly regarded among welders, eliminate the need to hold a workpiece with hand, resulting in "two hands free". Additionally this holding magnet thanks to a relatively high pull force is ideal for securely hold both small and large and heavy elements. After installing a snap-hook 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 ferrite magnets were used. The maximum working temperature for holding magnets

involving ferrite magnets is **250°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, 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.*

Weight of the holding magnet: ~1,3 [kg]



