



**Product name : Cased NdFeB magnet 42,5x20,5x12 / N**

## PERFORMANCE PARAMETERS

Length	42,5 [mm] +0,1/-0,1
Width	20,5 [mm] +0,1/-0,1
Height	12 [mm] +0,1/-0,1
magnetizing direction along dimension	12 [mm]
Grade	N38
Magnet type	Neodymium
Maximal hoisting capacity	24 [kg]
The pull force was measured by using metal sheet 10 [mm] thick, acting with perpendicular detaching force. With the force acting on the sliding off, the lifting capacity of the magnet will be 5 times smaller. The air gap comprised between the metal sheet and a magnet causes reduction in the pull force.	
Magnetic field in geometrical center of the magnetic pole surface	0,35 [T]
Maximum working temperature	≤ 80 °[C]
For flat magnets and magnets mounted in the open magnetic circuit working temperature may be insignificantly lower. For high magnets and magnets mounted in the closed magnetic circuit working temperature equals max. working temperature for a given material. Curie's temperature is ~ 310°C. Temperature coefficient of remanence TK(Br: approx. ~0,12 %/°[C]. Temperature coefficient of coercivity TK(Hc): approx. -0,6 %/°[C].	
Housing	stainless steel, AISI 304 / EN 1.4301, approved for contact with food
water-resistant	yes
Waterproof	class IP67
Weight	100 [g]
Sintered neodymium magnets are brittle (fragile). A neodymium magnet without housing could break after an impact with another strong magnet.	
All the numbers quoted were obtained as a result of tests with one specific item in a room temperature and are intended to serve for comparison of practical magnetic properties of magnets offered by the shop.	

## MAGNETIC PROPERTIES OF MATERIAL GRADE N38

density	~7,5 [g/cm3]
Vickers hardness (HV)	~600 [kg/mm2]
resistivity	~144 [uOhm x cm]

