Product name : D5 x 18 / AlNiCo5 / LNG37 - AlNiCo magnet

PERFORMANCE PARAMETERS

External diameter	5 [mm] +0,1/-0,1
Height	18 [mm] +0,1/-0,1
Magnetizing direction along dimension	18 [mm]
Direction of magnetization along the height means that one circular surface of a magnet makes the N-pole, while the other – opposite – circular surface refers to the S-pole.	
Grade	LNG37
Magnet type	AlNiCo
Magnetic field in geometrical center of the magnetic pole surface	0,049 [T]
Maximum working temperature	525 °[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 ~ 860°[C]. Temperature coefficient of remanence TK(Br): approx. -0,02 [%/°C]. Temperature coefficient of coercivity TK(HcJ): approx. +0,02 [%/°C].	
Magnetic moment	276,45
Weight	2,63 [g]
AlNiCo Magnets may be used in water.	
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 LNG37

remanence B_r	1,2 [T]
coercivity H_cJ	min. 955 [kA/m]
energy product $(BH)_{max}$	37 [kJ/m^3]
Magnetic properties of a particular material, together with its shape, volume, max. working temperature and direction of magnetization have influence on practical magnetic properties of a magnet.	
As an example, you will find attached a graph of a course of the II quadrant of magnetic hysteresis loop for a material grade LNG37.	

PHYSICAL PROPRIETIES

density	~7,3 [g/cm3]

TECHNICAL DRAWING