

## ALNICO

Alnico magnets are named after the alloy they are made of, namely **Aluminium, Nickel and Cobalt** (Al-Ni-Co).

Like the latter, they are mainly used in very specific scientific and technical fields.

They have the highest maximum operating temperature among permanent magnets – up to **650 °C**, making them the only candidates for very high temperature applications.

In contrast, their force is rather small compared to NdFeB or SmCo magnets, and they are more susceptible to demagnetization when in contact with very intense magnetic fields.

Despite these limitations, Alnico remains a material often preferred over ferrite, as it offers greater force of attraction, together with very high maximum operating temperature and great adaptability in terms of the shapes achievable. Being mainly made by casting, in fact, it is possible to make magnets with very complex shapes.

The main fields in which Alnico is used range from the manufacture of **relays, sensors, laboratory equipment, magnetic boards, loudspeakers, guitar pick-ups**, etc.

This alloy is differentiated according to the percentages of the elements that compose it, and classified in turn with different numbers (Alnico 1, 2, 3, 5, 8, ...).

Contact us to get quick feedback on prices, availability and customized products.

You can view and download the technical drawings of each product by clicking on the respective code, highlighted in blue.

**All measures are in millimeters (mm).**

TYPE	Br - kG	bHc	BH max	g/cm3	T max
ALNICO 5	12,5	600 - 660	4,8 - 5,5	7,3	650
ALNICO 5 DG	12,8 - 13,5	650 - 720	5,3 - 6,3	7,3	650
ALNICO 8	8,5 - 9,5	1500 - 1700	5,5 - 6,5	7,3	650
ALNICO 8 H	7,5 - 8,3	1700 - 1900	5,5 - 6,5	7,3	650
ALNICO 9	10 - 11	1350 - 1500	9 - 11	7,3	650

The force values given in the tables are the result of dynamometric tests performed with a 10 mm thick iron plate.  
Any variations from this standard in the use may change the actual performance of the magnet.

**It is always recommended to perform specific tests according to your application.**