

Sintered AlNiCO

Manufactured by traditional foundry methods, Alnico magnets are produced from complex alloys of Aluminium, Nickel, Cobalt, Copper and Iron. Although newer generations of permanent magnet materials have higher energy levels, Alnico magnets still offer the best temperature stability of any available magnetic material, which together with its high magnetic flux density, ensures that Alnico remains the material of choice for many applications.

Sintered Alnico are made with a powdered metal process. Lower grades are isotropic, which can be magnetized in any direction. The powder metal version of Alnico allows for easier integration of features since a tool is used and the magnet is finished to near net shape.

Grade	Br		HcJ		HcB		(BH)max		D	& Change per C	Tc	Remark
	mT	Gs	kA/m	Oe	kA/M	Oe	kJ/m ³	MGOe	g/cm ³	%/K	°C	
FLN8	520	5200	43	540	40	500	8-10	1.0-1.25	6.8	-0.022	760	Isotropic
FLNG12	700	7000	43	540	40	500	12-14	1.5-1.75	7.0	-0.014	810	
FLNGT14	570	5700	78	980	76	950	14-16	1.75-2.0	7.1	-0.020	850	
FLNGT18	560	5600	90	1130	88	1100	18-22	2.25-2.75	7.2	-0.020	850	
FLNG28	1050	10500	47	590	46	580	28-33	3.5-4.15	7.2	-0.016	850	Anisotropic
FLNG34	1100	11000	51	640	50	630	34-38	4.3-4.8	7.2	-0.016	890	
FLNGT28	1000	10000	57	710	56	700	28-30	3.5-3.8	7.2	-0.020	850	
FLNGT31	780	7800	106	1130	104	1300	33-36	3.9-4.5	7.2	-0.020	850	
FLNG33J	650	6500	150	1880	136	1700	31-36	4.15-4.5	7.2	-0.020	850	
FLNGT38	800	8000	126	1580	123	1550	38-42	4.75-5.3	7.2	-0.020	850	
FLNGT42	880	8800	122	1530	120	1500	42-48	5.3-6.0	7.25	-0.020	850	