

## Material Properties At-a-Glance

### Cast AlNiCo Permanent Magnets

#### Material Properties

Premium Material Grade	Residual Induction Br Gauss	Coercivity HcB Oe	Maximum Energy Product (BH)max MGOe
	TYP	TYP	TYP
Tri-AlNiCo-2	7200	500	1.55
Tri-AlNiCo-3	6000	500	1.2
Tri-AlNiCo-5	6800	380	1.13
	12000	600	4.65
	12500	600	5
Tri-AlNiCo-5	12500	650	5.5
	13000	700	6.5
Tri-AlNiCo-5DG	13000	700	6.5
Tri-AlNiCo-5-7	13500	740	7.5
Tri-AlNiCo-6	10000	720	3.5
Tri-AlNiCo-8HC	7000	1400	4.5
Tri-AlNiCo-8	5800	1250	2.2
	8000	1250	4
	8000	1380	5
Tri-AlNiCo-9	9000	1380	7.5
	10500	1400	9

NOTES: 1. Finished magnet size and shape may limit magnetic properties.  
2. Design evaluation services are available.

#### Physical Properties

Characteristics	Mark	Unit	
Temperature Coefficient	K	% / °C	-0.01~ -0.03
Curie Temperature	Tc	°C	750 ~ 820
Density	P	gr /cm <sup>3</sup>	7.3
Vickers Hardness	HRc	D.P.N.	45 ~ 60
Electrical Resistivity	R	μΩ• cm	50~ 75
Coefficient of Thermal Expansion (0~200°C)	C//	10 <sup>-6</sup> /°C	11~ 13.5