

# Catalogue: Rare Earth & Other Magnets

Material Code		MBN-10B	MBN-11A	MBN-11B	LNG40	LNG44	
Composition		NdFeB / Epoxy (Compression)			AlNiCo 5		
Orientation		Isotropic			Anisotropic		
Magnetic properties [min/max]	Test piece	as block					
	Residual induction Br	[mT]	650 / 750	670 / 770	700 / 800	1,220	1,225
		[G]	6,500 / 7,500	6,700 / 7,700	7,000 / 8,000	12,200	12,250
	Coercive force Hcb	[kA/m]	438 / 485	450 / 505	370 / 426	48	52
		[Oe]	5,500 / 6,100	5,650 / 6,350	4,650 / 5,350	600	650
	Intrinsic coercive force Hcj	[kA/m]	716 / 812	700 / 780	517 / 597	---	---
		[Oe]	9,000 / 10,200	8,800 / 9,800	6,500 / 7,500	---	---
Maximum energy product (BH)max	[kJ/m <sup>3</sup> ]	72 / 88	80 / 96	76 / 92	40	44	
	[MG-Oe]	9.0 / 11.0	10.0 / 12.0	9.5 / 11.5	5.0	5.5	
Physical properties [min/max]	Heat resistance	[°C]	150	150	150	500	500
	Temperature coefficient ΔBr/Br	[%/°C]	-0.10 / -0.13	-0.10 / -0.13	-0.10 / -0.13	-0.02	-0.02
	Curie temperature	[°C]	350 / 360	350 / 360	350 / 360	890	890

N35	N40	N45H	N48M	YXG-24	YXG-28
NdFeB				SmCo	
Anisotropic				Anisotropic	
as block					
1,170 / 1,220	1,250 / 1,280	1,320 / 1,380	1,360 / 1,430	950 / 1,020	1,030 / 1,080
11,700 / 12,200	12,500 / 12,800	13,200 / 13,800	13,600 / 14,300	9,500 / 10,200	10,300 / 10,800
≥ 870	≥ 910	≥ 955	≥ 1,030	690 / 750	760 / 800
≥ 10,900	≥ 11,400	≥ 12,000	≥ 12,900	8,700 / 9,400	9,500 / 10,000
≥ 960	≥ 960	≥ 1,350	≥ 1,110	≥ 1,430	≥ 1,430
≥ 12,000	≥ 12,000	≥ 17,000	≥ 14,000	≥ 18,000	≥ 18,000
260 / 290	300 / 330	340 / 370	370 / 390	175 / 190	210 / 220
33 / 36	38 / 41	43 / 46	46 / 49	22 / 24	26 / 28
80	80	120	100	300	300
-0.10 / -0.12	-0.10 / -0.12	-0.10 / -0.12	-0.10 / -0.12	-0.03	-0.03
300 / 330	300 / 330	300 / 330	300 / 330	800	800