

Magnetic Properties of Neodymium Radial Rings

Grade	Residual Induction Typical	Coercive Force Typical	Intrinsic Coercive Force Minimum	Max Energy Product Reference	Max Operation Temperature	Temp Coefficient of Br
	Br	Hcb	Hcj	BH Max	Max Temp	α Br
	kGs	kOe	kOe	MGOe	°C	%/°C
N35	12.1	≥10.9	≥12	35	≤80	-0.11
N38	12.5	≥11.3	≥12	38	≤80	-0.11
N40	12.8	≥11.4	≥12	40	≤80	-0.11
N42	13.1	≥11.5	≥12	42	≤80	-0.11
N45	13.5	≥11.5	≥12	45	≤80	-0.11
N35M	12.0	≥10.9	≥14	35	≤100	-0.11
N38M	12.4	≥11.3	≥14	38	≤100	-0.11
N40M	12.8	≥11.6	≥14	40	≤100	-0.11
N42M	13.1	≥12.0	≥14	42	≤100	-0.11
N45M	13.5	≥12.5	≥14	45	≤100	-0.11
N35H	12.1	≥10.9	≥17	35	≤120	-0.11
N38H	12.5	≥11.3	≥17	38	≤120	-0.11
N40H	12.8	≥11.6	≥17	40	≤120	-0.11
N42H	13.1	≥12.0	≥17	42	≤120	-0.11
N45H	13.5	≥12.0	≥17	45	≤120	-0.11
N35SH	12.1	≥11.0	≥20	35	≤150	-0.11
N38SH	12.5	≥11.4	≥20	38	≤150	-0.11
N40SH	12.8	≥11.6	≥20	40	≤150	-0.11
N33UH	11.6	≥10.7	≥25	33	≤180	-0.11
N35UH	12.1	≥10.8	≥25	35	≤180	-0.11

All listed values are approximate and should be used as a reference only. Magnetic or physical characteristics should be verified before selecting a magnet material.

Physical Properties of Neodymium Radial Rings

Bending Strength	150 Mpa
Compressive Strength	200 Mpa
Coefficient of Thermal Expansion	-1x10-6/°C(20~100°C ⊥C) 1-2x10-6/°C(20~100°C C)
Curie Temperature	310°C
Density	7.2-7.8 g/cm ³
Relative Permeability	1.05 μr
Resistivity	125~155 μΩ • cm
Specific Heat	0.55 J/g • °C
Temp Coefficient of H_{cj}	-0.60 %/ °C
Thermal Conductivity	4.8W/m • °C
Vickers Hardness	460~750 Hv
Young's Modulus	152 Gpa

All listed values are approximate and should be used as a reference only. Magnetic or physical characteristics should be verified before selecting a magnet material.