



LOW MEDIUM TEMPERATURE (>120°C) SINTERED NdFeB

Leghe magnetiche a base Terre Rare con i più alti valori di energia oggi disponibili. Campi coercitivi moderati che ne limitano l'utilizzo in temperatura. Nonostante l'ottima resistenza intrinseca alla corrosione consigliamo sempre un rivestimento protettivo

Typical magnetic properties

Grade	Residual Induction (Br)		Coercivity (minimum values) (bHC)		Intrinsic Coercivity (minimum values) (jHC)		Max Energy Product (BH)max		Temperature Coefficient $\Delta \% / \cdot ^\circ\text{C}^{-1}$		Max Operating Temperature (L/D ≥ 0.7) °C
	KGs	T	KOe	KA/m	KOe	KA/m	MGOe	KJ/m3	Br	jHC	
N54	14.5 - 15.1	1.45 - 1.51	10.5	836	11	876	51 - 55	406 - 438	0.11	0.70	80
N52	14.2 - 14.8	1.42 - 1.48	10.5	836	11	876	49 - 53	422 - 490	0.11	0.70	
N50	14.0 - 14.5	1.40 - 1.45	11	876	12	955	47 - 51	406 - 470	0.11	0.70	
N48	13.7 - 14.3	1.37 - 1.43	11	876	12	955	45 - 49	390 - 450	0.11	0.70	
N45	13.2 - 13.8	1.32 - 1.38	11	876	12	955	42 - 46	366 - 420	0.11	0.70	
N42	12.9 - 13.5	1.29 - 1.35	11	876	12	955	40 - 44	350 - 400	0.11	0.70	
N40	12.6 - 13.2	1.26 - 1.32	11	876	12	955	38 - 42	334 - 380	0.11	0.70	
N38	12.2 - 13.0	1.22 - 1.30	11	876	12	955	36 - 40	318 - 360	0.11	0.70	
N35	11.7 - 12.1	1.17 - 1.21	10.8	860	12	955	33 - 35	263 - 279	0.11	0.70	
N52M	14.2 - 14.8	1.42 - 1.48	13.3	1059	14	1114	49 - 53	390 - 422	0.10	0.65	
N50M	14.0 - 14.5	1.40 - 1.45	13.1	1043	14	1114	47 - 51	374 - 406	0.10	0.65	
N48M	13.7 - 14.3	1.37 - 1.43	12.8	1019	14	1114	45 - 49	358 - 390	0.10	0.65	
N45M	13.2 - 13.8	1.32 - 1.38	12.4	987	14	1114	42 - 46	334 - 366	0.10	0.65	
N42M	12.9 - 13.5	1.29 - 1.35	12.1	963	14	1114	40 - 44	318 - 350	0.10	0.65	
N40M	12.6 - 13.2	1.26 - 1.32	11.8	939	14	1114	38 - 42	302 - 334	0.10	0.65	
N38M	12.2 - 13.0	1.22 - 1.30	11.5	915	14	1114	36 - 40	287 - 318	0.10	0.65	
N50H	14.0 - 14.5	1.40 - 1.45	12.9	1027	16	1274	47 - 51	374 - 406	0.11	0.55	120
N48H	13.7 - 14.3	1.37 - 1.43	12.7	1011	17	1353	45 - 49	358 - 390	0.11	0.55	
N46H	13.4 - 14.0	1.34 - 1.40	12.5	995	17	1353	43 - 47	342 - 374	0.11	0.55	
N44H	13.1 - 13.7	1.31 - 1.37	12.3	979	17	1353	41 - 45	326 - 358	0.11	0.55	
N42H	12.9 - 13.5	1.29 - 1.35	12.1	963	17	1353	40 - 44	318 - 350	0.11	0.55	
N40H	12.6 - 13.2	1.26 - 1.32	11.8	939	17	1353	38 - 42	302 - 334	0.11	0.55	
N38H	12.2 - 13.0	1.22 - 1.30	11.5	915	17	1353	36 - 40	287 - 318	0.11	0.55	
N35H	11.7 - 12.4	1.17 - 1.24	11.0	876	17	1353	33 - 37	263 - 295	0.11	0.55	

Note: 1. The above properties are subject to change without notice. For details about irreversible losses with temperature changes pls contact us
 2. NdFeB magnets are subjected to corrosion, then a coating is always recommended. Pls contact us for details

Other typical properties

Curie Temperature °C 312 < 380	Specific heat J/KJ °C 502	Recoil Permeability 1.05	Minimum saturation field KA/m > 2400 KOe > 30
Density g/cm3 7.5 < 7.7	Coefficient of thermal expansion 5 < 7.4 X 10-6 °C direction 0.5 < 2.8 x 10-6 °C perpendicular direction	Thermal conductivity W/m °C 8.955	Electric resistivity Ohm/m 1.4 x 10-6
Compression Strenght Mpa 1100	Tensil Strenght Mpa 80	Young's Module Mpa 160	Vickers Hardness HV 600
Flexural Strenght Mpa 250	Bending Strenght Mpa 290		

Note: The above properties are measured on samples, they are subject to change and cannot be guaranteed for any size. Pls contact us for details



MEDIUM HIGH TEMPERATURE (< 250°C) SINTERED NdFeB

Leghe a base Terre Rare con i valori di energia più alti oggi conosciuti. Gli alti valori di campo coercitivo consentono elevate temperature di lavoro. Nonostante l'ottima resistenza intrinseca alla corrosione, consigliamo sempre un rivestimento protettivo.

Typical magnetic properties

Grade	Residual Induction (Br)		Coercitivity (minimum values) (bHC)		Intrinsic Coercitivity (minimum values) (jHC)		Max Energy Product (BH)max		Temperature Coefficient $\Delta \% / \cdot ^\circ\text{C}^{-1}$		Max Operating Temperature (L/D \geq 0.7)
	KGs	T	KOe	KA/m	KOe	KA/m	MGOe	KJ/m3	Br	jHC	°C
N48SH	13.7 - 14.3	1.37 - 1.43	12.7	1011	20	1592	45 - 49	358 - 390	0.10	0.50	150
N46SH	13.4 - 14.0	1.34 - 1.40	12.5	995	20	1592	43 - 49	342 - 374	0.10	0.50	
N44SH	13.1 - 13.7	1.31 - 1.37	12.3	979	20	1592	41 - 45	326 - 358	0.10	0.50	
N42SH	12.9 - 13.5	1.29 - 1.35	12.1	963	20	1592	40 - 44	318 - 350	0.10	0.50	
N40SH	12.6 - 13.2	1.26 - 1.32	11.8	939	20	1592	38 - 42	302 - 334	0.10	0.50	
N38SH	12.2 - 12.9	1.22 - 1.29	11.5	915	20	1592	36 - 40	287 - 318	0.10	0.50	
N35SH	11.7 - 12.4	1.17 - 1.24	11.0	876	20	1592	33 - 37	263 - 295	0.10	0.50	
N33SH	11.4 - 12.1	1.14 - 1.21	10.7	852	20	1592	31 - 35	247 - 279	0.10	0.50	
N42UH	12.9 - 13.5	1.29 - 1.35	12.1	963	25	1900	40 - 44	318 - 350	0.095	0.50	180
N40UH	12.6 - 13.2	1.26 - 1.32	11.8	939	25	1900	38 - 42	302 - 334	0.095	0.50	
N38UH	12.2 - 12.9	1.22 - 1.29	11.5	915	25	1900	36 - 40	287 - 318	0.095	0.50	
N35UH	11.7 - 12.4	1.17 - 1.24	11.0	876	25	1900	33 - 37	263 - 295	0.095	0.50	
N33UH	11.4 - 12.1	1.14 - 1.21	10.7	852	25	1900	31 - 35	247 - 279	0.095	0.50	
N30UH	10.8 - 11.6	1.08 - 1.16	10.2	812	25	1900	28 - 32	223 - 255	0.095	0.50	
N40EH	12.6 - 13.2	1.26 - 1.32	11.8	939	30	2388	38 - 42	302 - 334	0.095	0.50	200
N38EH	12.2 - 12.9	1.22 - 1.29	11.5	915	30	2388	36 - 40	287 - 318	0.095	0.50	
N35EH	11.7 - 12.4	1.17 - 1.24	11.0	876	30	2388	33 - 37	263 - 295	0.095	0.50	
N33EH	11.4 - 12.1	1.14 - 1.21	10.7	851	30	2388	31 - 35	247 - 279	0.095	0.50	
N30EH	10.8 - 11.5	1.08 - 1.15	10.2	812	30	2388	28 - 32	223 - 255	0.095	0.50	
N35AH	11.7 - 12.4	1.17 - 12.4	11.0	876	35	2786	33 - 37	263 - 295	0.090	0.045	230
N33AH	11.4 - 12.1	1.14 - 12.1	10.7	852	35	2786	31 - 35	247 - 279	0.090	0.045	
N30AH	10.8 - 11.5	1.08 - 1.15	10.2	812	35	2786	28 - 32	223 - 255	0.090	0.045	
N28AH	10.4 - 11.2	1.04 - 1.12	9.7	772	35	2786	26 - 30	207 - 239	0.090	0.045	
N28ZH	10.4 - 11.1	1.04 - 1.11	9.7	772	40	3184	26 - 30	207 - 239	0.090	0.045	

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2. NdFeB magnets are subjected to corrosion, then a coating is always recommended. Pls contact us for details

Other typical properties

Curie Temperature	Specific heat	Recoil Permeability	Minimum saturation field
°C	J/KJ °C	1.05	KA/m > 2400
312 < 380	502		KOe > 30
Density	Coefficient of thermal expansion	Thermal conductivity	Electric resistivity
g/cm3	5 < 7.4 X 10-6 °C direction	W/m °C	Ohm/m
7.5 < 7.7	0.5 < 2.8 x 10-6 °C perpendicular direction	8.955	1.4 x 10-6
Compression Strenght	Tensil Strenght	Young's Module	Vickers Hardness
Mpa	Mpa	Mpa	HV
1100	80	160	600
Flexural Strenght	Bending Strenght		
Mpa	Mpa		
250	290		

Note: The above properties are measured on samples, they are subject to change and cannot be guaranteed for any size. Pls contact us for details