

Compression Bonded Neodym (NdFeB)

Material Grade



Main Properties	Remanence		Coercive Force		Intrinsic Coercive Force		Max. Energy Product		Rev.Temp.Coef. of Induction / Coercivity		Working Temperature
	Br		HcB		HcJ		BH max		α (Br) %/°C	α (HcJ) %/°C	
Grade	Typical mT	Typical Gauss	min kA/m	min Oersted	min kA/m	min Oersted	Typical kJ/m ³	Typical MGOe			
BNC-2	300-400	3000-4000	160-240	2000-3000	480-640	6000-8000	16-24	2-3	-0.11	-0.4	120
BNC-4	400-500	4000-5000	240-320	3000-4000	560-720	7000-9000	32-44	4-5.5	-0.11	-0.4	120
BNC-6	500-600	5000-6000	320-400	4000-5000	480-640	6000-8000	48-60	6-7.5	-0.11	-0.4	120
BNC-8	600-680	6000-6800	360-440	4500-5500	640-800	8000-10000	64-72	8-9	-0.11	-0.4	150
BNC-8H	600-650	6000-6500	400-480	5000-6000	1120-1280	14000-16000	60-68	7.5-8.5	-0.11	-0.4	160
BNC-8L	600-680	6000-6800	400-480	5000-6000	900-1120	11000-14000	64-72	8-9	-0.11	-0.4	160
BNC-9	600-680	6000-6800	400-480	5000-6000	640-800	8000-10000	68-72	8.5-9	-0.11	-0.4	150
BNC-10	680-730	6800-7300	400-480	5000-6000	640-800	8000-10000	76-84	9.5-10.5	-0.11	-0.4	150
BNC-12	710-750	7100-7500	440-520	5500-6500	720-800	9000-10000	84-96	10.5-12	-0.11	-0.4	150
BNC-12L	720-760	7200-7600	400-480	5000-6000	480-640	6000-8000	84-96	10.5-12	-0.11	-0.4	150

* The material data shown above represent properties that may vary due to product shape and size.

Injection Bonded Neodym (NdFeB) Material Grade



Main Properties	Remanence		Coercive Force		Intrinsic Coercive Force		Max. Energy Product		Rev.Temp.Coef. of Induction / Coercivity		Working Temperature
	Br		HcB		HcJ		BH max		α (Br) %/°C	α (HcJ) %/°C	
Grade	Typical mT	Typical Gauss	min kA/m	min Oersted	min kA/m	min Oersted	Typical kJ/m ³	Typical MGOe			
BNI-3	200-300	2000-3000	160-240	2000-3000	480-640	6000-8000	12-24	1.5-3	-0.12	-0.4	120°-160°
BNI-4	350-450	3500-4500	240-320	3000-4000	560-720	7000-9000	24-36	3-4.5	-0.12	-0.4	120°-160°
BNI-5	450-520	4500-5200	320-360	4000-4500	560-720	7000-9000	36-44	4.5-5.5	-0.12	-0.4	120°-160°
BNI-5H (PPS)	480-520	4800-5200	400-480	5000-6000	880-1040	11000-13000	36-44	4.5-5.5	-0.12	-0.4	150°- 180°
BNI-6	500-550	5000-5500	320-440	4000-5500	640-800	8000-10000	44-52	5.5-6.5	-0.12	-0.4	120°-160°
BNI-7	540-640	5400-6400	320-400	4000-5000	640-800	8000-10000	52-60	6.5-7.5	-0.12	-0.4	120°-160°
BNI-8	640-740	6400-7400	400-480	5000-6000	640-800	8000-10000	68-76	8.5-9.5	-0.12	-0.4	120°-160°

Typical Physical Properties of Bonded Neodym

Property	um	value
Density	kg/m ³	5.6 x 10 ³
Tensile Strength	Mpa	37
Compressive Strength	Mpa	80 - 120
Electrical Resistivity	Ω m	20
Thermal Expansion Coefficient	10-6/°C	10 -30
Curie Temperature	°C	300 - 450

Bonded Ferrite

Material Grade



Main Properties	Remanence		Coercive Force		Intrinsic Coercive Force		Max. Energy Product		Rev.Temp.Coef. of Induction / Coercivity		Working Temperature
	Br		HcB		HcJ		BH max				
Grade	Typical mT	Typical Gauss	min kA/m	min Oersted	min kA/m	min Oersted	Typical kJ/m ³	Typical MGOe	α (Br) %/°C	α (HcJ) %/°C	maximum °C
YN1T	63-83	630-830	50-70	630-880	175-210	2200-2640	0.8-1.2	0.1-0.15	-0.2	+0.27	120°C
YN4H	135-155	1350-1550	85-105	1050-1070	175-210	2200-2640	3.2-4.5	0.4-0.56	-0.2	+0.27	120°C
YN4TH	150-180	1500-1800	95-120	950-1200	180-230	2260-2890	3.8-5.5	0.48-0.69	-0.2	+0.27	120°C
YN6T	180-220	1800-2200	120-140	1200-1400	175-200	2200-2510	5.0-7.0	0.63-0.88	-0.2	+0.27	120°C
YN10	220-240	2200-2400	145-165	1450-1650	190-225	2390-2830	9.2-10.6	1.15-1.33	-0.2	+0.27	120°C
YN10H	220-250	2200-2500	150-200	1500-2000	190-220	2390-2760	9.2-11.0	1.15-1.38	-0.2	+0.27	120°C
YN11	230-250	2300-2500	160-185	1600-1850	225-260	2830-3270	10.0-12.0	1.25-1.50	-0.2	+0.27	120°C
YN12	240-250	2400-2500	140-160	1400-1600	200-230	2510-2890	11.4-13.6	1.43-1.70	-0.2	+0.27	120°C
YN13	250-270	2500-2700	175-195	1750-1950	200-230	2510-2890	11.5-14.5	1.44-1.81	-0.2	+0.27	120°C
YN15	270-290	2700-2900	175-190	1750-1900	200-230	2510-2890	14.5-16.0	1.81-2.0	-0.2	+0.27	120°C
YN18	290-320	2900-3200	155-205	1550-2050	160-210	2010-2640	16.0-20.0	2.0-2.50	-0.2	+0.27	120°C

Typical Physical Properties

Property	um	value
Density	kg/m ³	3.5 x 10 ³
Bending Strength	Mpa	30 - 80
Compressive Strength	Mpa	80 - 120
Electrical Resistivity	Ω m	0.01
Thermal Expansion Coefficient	10 ⁻⁶ /°C	30 - 50
Curie Temperature	°C	450