

MAGNETIC PROPERTIES OF CORROSION STABLE SERIES (20°C)

version Dec 2025

Grade	Remanence		Normal coercivity		Intrinsic coercivity	Energy density		Temperature coefficient				Max. operating temp. °C
	Br mT		Hcb kA/m		Hcj kA/m	BH(max) kJ/m3		20~100℃		20~150℃		
	min	typ	min	typ	min	min	typ	Tc(Br) typ	Tc(Hcj) typ	Tc(Br) typ	Tc(Hcj) typ	
N30/S	1080	1120	819	849	955	220	237	0,12	0,78			80
N33/S	1140	1170	860	883	955	246	259	0,12	0,78			80
N35/S	1170	1220	880	920	955	259	281	0,12	0,78			80
N38/S	1220	1260	920	945	955	281	300	0,12	0,78			80
N40/S	1260	1300	935	945	955	300	319	0,12	0,78			80
N42/S	1300	1330	935	945	955	323	338	0,12	0,78			80
N45/S	1330	1370	935	945	955	338	358	0,12	0,78			80
N48/S	1370	1410	935	945	955	358	380	0,12	0,78			80
N50/S	1390	1430	935	945	955	366	387	0,12	0,78			80
N52/S	1420	1450	935	945	955	382	398	0,12	0,78			80
N54/S	1440	1470	935	945	955	393	409	0,12	0,78			80
N56/S	1460	1490	935	945	955	404	421	0,12	0,78			80
N58/S	1475	1500	855	865	875	412	426	0,12	0,78			70
N60/S*	1495	1520	775	785	796	423	438	0,12	0,78			60
N30M/S	1080	1120	819	849	1114	220	237	0,12	0,72			100
N33M/S	1140	1170	860	883	1114	246	259	0,12	0,72			100
N35M/S	1170	1220	883	920	1114	259	281	0,12	0,72			100
N38M/S	1220	1260	920	950	1114	281	300	0,12	0,72			100
N40M/S	1260	1300	950	981	1114	300	319	0,12	0,72			100
N42M/S	1300	1330	981	1003	1114	323	338	0,12	0,72			100
N45M/S	1330	1370	1003	1033	1114	338	358	0,12	0,72			100
N48M/S	1370	1410	1033	1064	1114	358	380	0,12	0,72			100
N50M/S	1390	1430	1048	1079	1114	366	387	0,12	0,72			100
N52M/S	1420	1450	1071	1094	1114	382	398	0,12	0,72			100
N54M/S	1440	1470	1091	1104	1114	393	409	0,12	0,72			100
N56M/S	1460	1490	1015	1025	1035	404	421	0,12	0,72			90
N58M/S	1475	1500	1015	1025	1035	412	426	0,12	0,72			90
N30H/S	1080	1120	819	849	1353	220	237	0,12	0,66	0,12	0,60	120
N33H/S	1140	1170	864	887	1353	246	259	0,12	0,66	0,12	0,60	120
N35H/S	1170	1220	887	925	1353	259	281	0,12	0,66	0,12	0,60	120
N38H/S	1220	1260	925	955	1353	281	300	0,12	0,66	0,12	0,60	120
N40H/S	1260	1300	955	985	1353	300	319	0,12	0,66	0,12	0,60	120
N42H/S	1300	1330	985	1008	1353	323	338	0,12	0,66	0,12	0,60	120
N44H/S	1320	1350	1000	1023	1353	333	348	0,12	0,66	0,12	0,60	120
N46H/S	1350	1380	1023	1046	1353	348	364	0,12	0,66	0,12	0,60	120
N48H/S	1370	1410	1038	1069	1353	358	380	0,12	0,66	0,12	0,60	120
N50MH/S	1390	1430	1050	1081	1274	368	389	0,12	0,66	0,12	0,60	110
N50H/S	1390	1430	1053	1084	1353	368	389	0,12	0,66	0,12	0,60	120
N52MH/S	1420	1450	1073	1096	1274	384	400	0,12	0,66	0,12	0,60	110
N52H/S	1420	1450	1076	1099	1353	384	400	0,12	0,66	0,12	0,60	120
N54H/S	1440	1470	1091	1114	1353	395	411	0,12	0,66	0,12	0,60	120
N56H/S	1460	1490	1107	1129	1353	406	423	0,12	0,66	0,12	0,60	120
N58H/S*	1475	1500	1118	1137	1353	414	428	0,12	0,66	0,12	0,60	120

Important notice: Dimensions and shape of the magnet, in combination with required manufacturing processes, may cause the magnetic and physical characteristics to vary from typical values. Therefore, all data presented in this document are for general reference only and should not be relied upon to represent standard characteristics, nor are they guaranteed upon use. Bakker Magnetics reserves the right to change information in this document, including magnet performance standards, specifications, and characteristics without notice.

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Grade	Remanence		Normal coercivity		Intrinsic coercivity	Energy density		Temperature coefficient				Max. operating temp. °C
	Br mT		Hcb kA/m		Hcj kA/m	BH(max) kJ/m3		20~100℃		20~150℃		
	min	typ	min	typ	min	min	typ	Tc(Br) typ	Tc(Hcj) typ	Tc(Br) typ	Tc(Hcj) typ	
N30SH/S	1080	1120	822	853	1592	220	237	0,115	0,62	0,12	0,56	150
N33SH/S	1140	1170	868	891	1592	246	259	0,115	0,62	0,12	0,56	150
N35SH/S	1170	1220	891	929	1592	259	281	0,115	0,62	0,12	0,56	150
N38SH/S	1220	1260	929	959	1592	281	300	0,115	0,62	0,12	0,56	150
N40SH/S	1260	1300	959	990	1592	300	319	0,115	0,62	0,12	0,56	150
N42SH/S	1300	1330	990	1013	1592	323	338	0,115	0,62	0,12	0,56	150
N44SH/S	1320	1350	1005	1028	1592	333	348	0,115	0,62	0,12	0,56	150
N46SH/S	1350	1380	1028	1051	1592	348	364	0,115	0,62	0,12	0,56	150
N48SH/S	1370	1410	1043	1074	1592	358	380	0,115	0,62	0,12	0,56	150
N50SH/S	1390	1430	1058	1089	1592	370	391	0,115	0,62	0,12	0,56	150
N52SH/S	1420	1450	1081	1104	1592	386	402	0,115	0,62	0,12	0,56	150
N54SH/S	1440	1470	1097	1119	1592	397	413	0,115	0,62	0,12	0,56	150
N56SH/S*	1460	1490	1112	1135	1592	408	425	0,115	0,62	0,12	0,56	150
N28UH/S	1040	1080	796	826	1989	204	220	0,110	0,58	0,115	0,52	180
N30UH/S	1080	1120	826	857	1989	220	237	0,110	0,58	0,115	0,52	180
N33UH/S	1140	1170	872	895	1989	246	259	0,110	0,58	0,115	0,52	180
N35UH/S	1170	1220	895	934	1989	259	281	0,110	0,58	0,115	0,52	180
N38UH/S	1220	1260	934	964	1989	281	300	0,110	0,58	0,115	0,52	180
N40UH/S	1260	1300	964	995	1989	300	319	0,110	0,58	0,115	0,52	180
N42UH/S	1300	1330	995	1018	1989	323	338	0,110	0,58	0,115	0,52	180
N44UH/S	1320	1350	1010	1033	1989	333	348	0,110	0,58	0,115	0,52	180
N46UH/S	1350	1380	1033	1056	1989	348	364	0,110	0,58	0,115	0,52	180
N48UH/S	1370	1410	1048	1079	1989	358	380	0,110	0,58	0,115	0,52	180
N50UH/S*	1390	1430	1064	1094	1989	371	393	0,110	0,58	0,115	0,52	180
N28EH/S	1040	1080	796	826	2387	204	220	0,105	0,54	0,110	0,48	200
N30EH/S	1080	1120	826	857	2387	220	237	0,105	0,54	0,110	0,48	200
N33EH/S	1140	1170	872	895	2387	246	259	0,105	0,54	0,110	0,48	200
N35EH/S	1170	1220	895	934	2387	259	281	0,105	0,54	0,110	0,48	200
N38EH/S	1220	1260	934	964	2387	281	300	0,105	0,54	0,110	0,48	200
N40EH/S	1260	1300	964	995	2387	300	319	0,105	0,54	0,110	0,48	200
N42EH/S	1300	1330	995	1018	2387	323	338	0,105	0,54	0,110	0,48	200
N44EH/S*	1320	1350	1010	1033	2387	333	348	0,105	0,54	0,110	0,48	200
N28AH/S	1040	1080	796	826	2787	204	220	0,105	0,50	0,110	0,45	220
N30AH/S	1080	1120	826	857	2787	220	237	0,105	0,50	0,110	0,45	220
N33AH/S	1140	1170	872	895	2787	246	259	0,105	0,50	0,110	0,45	220
N35AH/S	1170	1220	895	934	2787	259	281	0,105	0,50	0,110	0,45	220
N38AH/S	1220	1260	934	964	2787	281	300	0,105	0,50	0,110	0,45	220

- Remark:
- 1) The max working temperature is only for reference, is depended on the circuit the magnet is operating in.
 - 2) Customers are recommended to consult us on application involving temperature near to max working temperature.
 - 3) When $B/\mu_0 \cdot H=1$, the magnet is operated at mentioned max. working temperature, the irreversible losses less than 5% is guaranteed.
 - 4) "L" means GBD process.
 - 5) "CE" means containing Cerium in magnet, min.order quantity reaches 500kgs
 - 6) /S means corrosion stable material, weight loss after 7 days PCT less than 3mg/cm².
 - 7) /ST means corrosion stable material + thermal stable material (with defined Hcj value at high temp.) Weight loss after 7 days PCT less than 3mg/cm².
 - 8) * is under development.