




Magnetic ratings of the characteristics of the materials (approximate values)

NdFeB = Neodymium, iron, boron
(rare earths)

Material		Remanence Br	Intensity of the coercive field				Maximum density of the residual energy (BxH)max		Density	Maximum operating temperature	Coefficient of the residual temperature per °C	Demagnetization curves 		
			B _r		H _C		H _C							
			T	Gauss	kA/m	kOe	kA/m	kOe					KJ/m ³	10 ⁶ G·Oe
N35	<i>anisotropic</i>	N263/95.5	1.17-1.22	11700-12200	≥ 868	≥ 10.9	≥ 955	≥ 12	263-287	33-36	7.4	80	-0.12	N35
N38	<i>anisotropic</i>	N287/95.5	1.22-1.25	12200-12500	≥ 899	≥ 11.3	≥ 955	≥ 12	287-310	36-39	7.4	80	-0.12	N38
N40	<i>anisotropic</i>	N302/95.5	1.25-1.28	12500-12800	≥ 907	≥ 11.4	≥ 955	≥ 12	302-326	38-41	7.4	80	-0.12	N40
N42	<i>anisotropic</i>	N318/95.5	1.28-1.32	12800-13200	≥ 915	≥ 11.5	≥ 955	≥ 12	318-342	40-43	7.4	80	-0.12	N42
N45	<i>anisotropic</i>	N342/95.5	1.32-1.38	13200-13800	≥ 923	≥ 11.6	≥ 955	≥ 12	342-366	43-46	7.4	80	-0.12	N45
N48	<i>anisotropic</i>	N366/95.5	1.38-1.42	13800-14200	≥ 923	≥ 11.6	≥ 955	≥ 12	366-390	46-49	7.4	80	-0.12	N48
N50	<i>anisotropic</i>	N382/87.6	1.40-1.45	14000-14500	≥ 955	≥ 12.0	≥ 876	≥ 11	382-406	48-51	7.4	80	-0.12	N50
N52	<i>anisotropic</i>	N398/87.6	1.43-1.48	14300-14800	≥ 876	≥ 11.0	≥ 876	≥ 11	398-422	50-53	7.4	80	-0.12	
N54	<i>anisotropic</i>	N414/87.6	1.45-1.50	14500-15000	≥ 876	≥ 11.0	≥ 876	≥ 11	414-438	52-55	7.4	70	-0.12	
N35M	<i>anisotropic</i>	N263/111.4	1.17-1.22	11700-12200	≥ 868	≥ 10.9	≥ 1114	≥ 14	263-287	33-36	7.4	100	-0.12	N35M
N38M	<i>anisotropic</i>	N287/111.4	1.22-1.25	12200-12500	≥ 899	≥ 11.3	≥ 1114	≥ 14	287-310	36-39	7.4	100	-0.12	
N40M	<i>anisotropic</i>	N302/111.4	1.25-1.28	12500-12800	≥ 923	≥ 11.6	≥ 1114	≥ 14	302-326	38-41	7.4	100	-0.12	N40M
N42M	<i>anisotropic</i>	N318/111.4	1.28-1.32	12800-13200	≥ 955	≥ 12.0	≥ 1114	≥ 14	318-342	40-43	7.4	100	-0.12	N42M
N45M	<i>anisotropic</i>	N342/111.4	1.32-1.38	13200-13800	≥ 995	≥ 12.5	≥ 1114	≥ 14	342-366	43-46	7.4	100	-0.12	N45M
N48M	<i>anisotropic</i>	N366/111.4	1.37-1.43	13700-14300	≥ 1027	≥ 12.9	≥ 1114	≥ 14	366-390	46-49	7.4	100	-0.12	
N50M	<i>anisotropic</i>	N382/111.4	1.40-1.45	14000-14500	≥ 1033	≥ 13.0	≥ 1114	≥ 14	382-406	48-51	7.4	100	-0.12	
N52M	<i>anisotropic</i>	N398/111.4	1.43-1.48	14300-14800	≥ 1043	≥ 13.1	≥ 1114	≥ 14	398-422	50-53	7.4	100	-0.12	
N35H	<i>anisotropic</i>	N263/135.3	1.17-1.22	11700-12200	≥ 868	≥ 10.9	≥ 1353	≥ 17	263-287	33-36	7.4	120	-0.10	
N38H	<i>anisotropic</i>	N287/135.3	1.22-1.25	12200-12500	≥ 899	≥ 11.3	≥ 1353	≥ 17	287-310	36-39	7.4	120	-0.10	N38H
N40H	<i>anisotropic</i>	N302/135.3	1.25-1.28	12500-12800	≥ 923	≥ 11.6	≥ 1353	≥ 17	302-326	38-41	7.4	120	-0.10	N40H
N42H	<i>anisotropic</i>	N318/135.3	1.28-1.32	12800-13200	≥ 955	≥ 12.0	≥ 1353	≥ 17	318-342	40-43	7.4	120	-0.10	N42H
N45H	<i>anisotropic</i>	N342/135.3	1.32-1.37	13200-13700	≥ 973	≥ 12.3	≥ 1353	≥ 17	342-366	43-46	7.4	120	-0.10	
N48H	<i>anisotropic</i>	N366/135.3	1.37-1.42	13700-14200	≥ 995	≥ 12.5	≥ 1353	≥ 17	366-390	46-49	7.4	120	-0.10	
N50H	<i>anisotropic</i>	N382/135.3	1.40-1.45	14000-14500	≥ 1003	≥ 12.6	≥ 1353	≥ 17	382-406	48-51	7.4	120	-0.10	
N35SH	<i>anisotropic</i>	N263/159.2	1.17-1.22	11700-12200	≥ 876	≥ 11.0	≥ 1592	≥ 20	263-287	33-36	7.4	150	-0.10	N35SH
N38SH	<i>anisotropic</i>	N287/159.2	1.22-1.25	12200-12500	≥ 907	≥ 11.4	≥ 1592	≥ 20	287-310	36-39	7.4	150	-0.10	N38SH
N40SH	<i>anisotropic</i>	N302/159.2	1.25-1.28	12500-12800	≥ 939	≥ 11.8	≥ 1592	≥ 20	302-326	38-41	7.4	150	-0.10	N40SH
N42SH	<i>anisotropic</i>	N318/159.2	1.28-1.32	12800-13200	≥ 963	≥ 12.1	≥ 1592	≥ 20	318-342	40-43	7.4	150	-0.10	
N45SH	<i>anisotropic</i>	N342/159.2	1.32-1.38	13200-13800	≥ 979	≥ 12.3	≥ 1592	≥ 20	342-366	43-46	7.4	150	-0.10	N45SH
N48SH	<i>anisotropic</i>	N366/159.2	1.37-1.43	13700-14300	≥ 1011	≥ 12.7	≥ 1592	≥ 20	366-390	46-49	7.4	150	-0.10	

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NdFeB = Neodymium, iron, boron
(rare earths)

Material		Remanence Br	Intensity of the coercive field				Maximum density of the residual energy (BxH)max		Density	Maximum operating temperature	Coefficient of the residual temperature per °C	Demagnetization curves		
			B _r		H _C		(B x H) max.							
			T	Gauss	kA/m	kOe	kA/m	kOe					KJ/m ³	10 ⁶ G·Oe
N28UH	anisotropic	N207/199	1.04-1.08	10400-10800	≥ 764	≥ 9.6	≥ 1990	≥ 25	207-231	26-29	7.4	180	-0.10	N28UH
N30UH	anisotropic	N223/199	1.08-1.13	10800-11300	≥ 812	≥ 10.2	≥ 1990	≥ 25	223-247	28-31	7.4	180	-0.10	N30UH
N33UH	anisotropic	N247/199	1.13-1.17	11300-11700	≥ 852	≥ 10.7	≥ 1990	≥ 25	247-271	31-34	7.4	180	-0.10	N33UH
N35UH	anisotropic	N263/199	1.17-1.22	11700-12200	≥ 860	≥ 10.8	≥ 1990	≥ 25	263-287	33-36	7.4	180	-0.10	
N38UH	anisotropic	N287/199	1.22-1.25	12200-12500	≥ 899	≥ 11.3	≥ 1990	≥ 25	287-310	36-39	7.4	180	-0.10	
N40UH	anisotropic	N302/199	1.25-1.28	12500-12800	≥ 939	≥ 11.8	≥ 1990	≥ 25	302-326	38-41	7.4	180	-0.10	
N42UH	anisotropic	N318/199	1.28-1.32	12800-13200	≥ 936	≥ 12.1	≥ 1990	≥ 25	318-342	40-43	7.4	180	-0.10	
N45UH	anisotropic	N342/199	1.32-1.38	13200-13800	≥ 979	≥ 12.3	≥ 1990	≥ 25	342-366	43-46	7.4	180	-0.10	
N28EH	anisotropic	N207/238.8	1.04-1.108	10400-10800	≥ 780	≥ 9.8	≥ 2388	≥ 30	207-231	26-29	7.4	200	-0.10	N28EH
N30EH	anisotropic	N223/238.8	1.08-1.13	10800-11300	≥ 812	≥ 10.2	≥ 2388	≥ 30	223-247	28-31	7.4	200	-0.10	N30EH
N33EH	anisotropic	N247/238.8	1.13-1.17	11300-11700	≥ 836	≥ 10.5	≥ 2388	≥ 30	247-271	31-34	7.4	200	-0.10	
N35EH	anisotropic	N263/238.8	1.17-1.22	11700-12200	≥ 876	≥ 11.0	≥ 2388	≥ 30	263-287	33-36	7.4	200	-0.10	
N38EH	anisotropic	N287/238.8	1.22-1.25	12200-12500	≥ 899	≥ 11.3	≥ 2388	≥ 30	287-310	36-39	7.4	200	-0.10	
N40EH	anisotropic	N302/238.8	1.25-1.28	12500-12800	≥ 923	≥ 11.6	≥ 2388	≥ 30	302-326	38-41	7.4	200	-0.10	
N42EH	anisotropic	N318/238.8	1.28-1.32	12800-13200	≥ 931	≥ 11.7	≥ 2388	≥ 30	318-342	40-43	7.4	200	-0.10	
N28AH	anisotropic	N207/262.4	1.04-1.08	10400-10800	≥ 787	≥ 9.9	≥ 2624	≥ 33	207-231	26-29	7.4	230	-0.10	
N30AH	anisotropic	N223/262.4	1.08-1.13	10800-11300	≥ 819	≥ 10.3	≥ 2624	≥ 33	223-247	28-31	7.4	230	-0.10	
N33AH	anisotropic	N247/262.4	1.13-1.17	11300-11700	≥ 843	≥ 10.6	≥ 2624	≥ 33	247-271	31-34	7.4	230	-0.10	
N35AH	anisotropic	N263/262.4	1.17-1.22	11700-12200	≥ 876	≥ 11.0	≥ 2624	≥ 33	263-287	33-36	7.4	230	-0.10	
N38AH	anisotropic	N287/262.4	1.22-1.25	12200-12500	≥ 899	≥ 11.3	≥ 2624	≥ 33	287-310	36-39	7.4	230	-0.10	
N40AH	anisotropic	N302/262.4	1.25-1.28	12500-12800	≥ 923	≥ 11.6	≥ 2624	≥ 33	302-326	38-41	7.4	230	-0.10	

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SmCo = Samarium, cobalt
(rare earths)

Material					Remanence Br		Intensity of the pcoercive field				Maximum density of the residual energy (BxH) max		Density	Curie temperature	Maximum operating temperature	Coefficient of the residual temperature per °C	Demagnetization curves
					Br		BHc		JHc		(B x H) max.						
					mT ± 30	Gauss ± 300	kA/m	Oe	kA/m	Oe	KJ/m³	10 ⁶ G·Oe					
Sm18/18-5	anisotropic	SmCo5	XG18/18	Sm136/136	860	8600	664 ±24	8300 ±300	1360	17000	136	17	8.3	750	250	- 0.05	
Sm18/20-5	anisotropic	SmCo5	XG18/20	Sm136/152	860	8600	664 ±24	8300 ±300	1520	19000	136	17	8.3	750	250	- 0.05	
Sm18/25-5	anisotropic	SmCo5	XG18/25	Sm136/200	860	8600	664 ±24	8300 ±300	2000	25000	136	17	8.3	750	250	- 0.05	
Sm20/18-5	anisotropic	SmCo5	XG20/18	Sm152/136	900	9000	688 ±24	8600 ±300	1360	17000	152	19	8.3	750	250	- 0.05	
Sm20/20-5	anisotropic	SmCo5	XG20/20	Sm152/152	900	9000	688 ±24	8600 ±300	1520	19000	152	19	8.3	750	250	- 0.05	
Sm22/18-5	anisotropic	SmCo5	XG22/18	Sm168/128	950	9500	720 ±32	9000 ±400	1280	16000	168	21	8.3	750	250	- 0.05	
Sm22/20-5	anisotropic	SmCo5	XG22/20	Sm168/152	950	9500	720 ±32	9000 ±400	1520	19000	168	21	8.3	750	250	- 0.05	
Sm24/15-5	anisotropic	SmCo5	XG24/15	Sm184/104	1000	10000	760 ±32	9500 ±400	1040	13000	184	23	8.3	750	250	- 0.05	
Sm24/18-5	anisotropic	SmCo5	XG24/18	Sm184/120	1000	10000	760 ±32	9500 ±400	1200	15000	184	23	8.3	750	250	- 0.05	
Sm26/16-17	anisotropic	Sm2Co17	XG26/16	Sm200/112	1080	10800	784 ±40	9800 ±500	1120	14000	200	25	8.4	825	300	- 0.04	Sm26/16-17
Sm26/20-17	anisotropic	Sm2Co17	XG26/20	Sm200/144	1080	10800	784 ±40	9800 ±500	1440	18000	200	25	8.4	825	300	- 0.04	
Sm26/25-17	anisotropic	Sm2Co17	XG26/25	Sm200/176	1080	10800	784 ±40	9800 ±500	1760	22000	200	25	8.4	825	300	- 0.04	
Sm28/16-17	anisotropic	Sm2Co17	XG28/16	Sm216/104	1100	11000	800 ±48	10000 ±600	1040	13000	216	27	8.4	825	300	- 0.04	
Sm28/20-17	anisotropic	Sm2Co17	XG28/20	Sm216/136	1100	11000	800 ±48	10000 ±600	1360	17000	216	27	8.4	825	300	- 0.04	
Sm28/25-17	anisotropic	Sm2Co17	XG28/25	Sm216/176	1100	11000	800 ±48	10000 ±600	1760	22000	216	27	8.4	825	300	- 0.04	
Sm30/15-17	anisotropic	Sm2Co17	XG30/15	Sm232/104	1130	11300	760 ±48	9500 ±600	1040	13000	232	29	8.4	825	300	- 0.04	
Sm30/18-17	anisotropic	Sm2Co17	XG30/18	Sm232/128	1130	11300	760 ±48	9500 ±600	1280	16000	232	29	8.4	825	300	- 0.04	
Sm32/12-17	anisotropic	Sm2Co17	XG32/12	Sm248/80	1150	11500	760 ±48	9500 ±600	800	10000	248	31	8.4	825	300	- 0.04	
Sm32/15-17	anisotropic	Sm2Co17	XG32/15	Sm248/104	1150	11500	760 ±48	9500 ±600	1040	13000	248	31	8.4	825	300	- 0.04	

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HF = Ferrite

Material			Remanence B_r		Intensity of the pcoercive field				Maximum density of the residual energy (BxH) max		Density $\frac{g}{cm^3}$	Curie temperature $^{\circ}C$	Maximum operating temperature $^{\circ}C$	Coefficient of the residual temperature per $^{\circ}C$ %	Demagnetization curves 
			B_r		$B H_C$		$J H_C$		$(B \times H) \max.$						
			mT	Gauss	kA/m	Oe	kA/m	Oe	KJ/m ³	10 ⁶ G·Oe					
HF8/22	isotropic	Y10T	220	2200	140	1760	230	2890	8	1.1	4.8	450	250	- 0.20	HF8/22
HF22/15	anisotropic		360	3600	144	1800	150	1885	22	2.8	4.8	450	250	- 0.20	HF22/15
HF24/16	anisotropic	Y25	365	3650	175	2200	180	2260	24	3.0	5.0	450	250	- 0.20	HF24/16
HF24/23	anisotropic	Y26H	365	3650	230	2890	240	3010	24	3.0	4.8	450	250	- 0.20	
HF26/15	anisotropic	Y30	385	3850	159	2000	161	2020	28	3.5	4.8	450	250	- 0.20	
HF26/24	anisotropic	Y28BH	380	3800	240	3010	250	3140	27	3.4	4.8	450	250	- 0.20	HF26/24
HF28/16	anisotropic	Y30	400	4000	155	1940	160	2000	28	3.5	5.0	450	250	- 0.20	
HF28/26	anisotropic	Y30BH	395	3950	260	3250	260	3250	28	3.5	4.8	450	250	- 0.20	HF28/26
HF30/16	anisotropic	Y35	400	4000	170	2135	170	2135	30	3.8	4.8	450	250	- 0.20	
HF30/28	anisotropic	Y35BH	400	4000	290	3640	320	4020	30	3.8	4.8	450	250	- 0.20	

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Magnetic ratings of the characteristics of the materials (approximate values)

AlNiCo = aluminium, nickel, cobalt
S. = sintered

Material	Remanence Br		Intensity of the pcoercive field				Maximum density of the residual energy (BxH) _{max}		Density g/cm ³	Curie temperature °C	Maximum operating temperature °C	Coefficient of the residual temperature per °C %	Demagnetization curves 			
	B _r		B H _c		J H _c		(B x H) max.									
	mT	Gauss	kA/m	Oe	kA/m	Oe	KJ/m ³	10 ⁶ G·Oe								
AlNiCo10/4	isotropic	LN10	AlNiCo3	600	6000	40	500	–	–	10	1.25	7.0	750	450	–0.03	
AlNiCo13/5	isotropic	LNG13	AlNiCo2	680	6800	48	600	–	–	13	1.63	7.0	750	450	–0.03	
AlNiCo18/5	anisotropic	LNG18	AlNiCo4	900	9000	48	600	–	–	18	2.25	7.3	850	500	–0.03	
AlNiCo37/5	anisotropic	LNG37	AlNiCo5	1200	12000	48	600	–	–	37	4.63	7.3	850	500	–0.02	
AlNiCo40/5	anisotropic	LNG40	AlNiCo5	1250	12500	48	600	–	–	40	5.00	7.3	850	500	–0.02	AlNiCo40/5
AlNiCo44/5	anisotropic	LNG44	AlNiCo5	1250	12500	52	650	–	–	44	5.50	7.3	850	500	–0.02	
AlNiCo52/5.5	anisotropic	LNG52	AlNiCo5DG	1300	13000	56	700	–	–	52	6.50	7.3	850	500	–0.02	
AlNiCo60/6	anisotropic	LNG60	AlNiCo5-7	1330	13300	60	750	–	–	60	7.50	7.3	850	500	–0.02	
AlNiCo30/6	anisotropic	LNGT30	AlNiCo6	1100	11000	56	700	–	–	30	3.75	7.3	850	500	–0.02	
AlNiCo32/10	anisotropic	LNGT32	AlNiCo8	800	8000	100	1250	–	–	32	4.00	7.3	850	500	–0.03	
AlNiCo38/11	anisotropic	LNGT38	AlNiCo8	800	8000	110	1380	–	–	38	4.75	7.3	850	500	–0.03	
AlNiCo48/12	anisotropic	LNGT48	AlNiCo8HE	900	9000	120	1500	–	–	48	6.00	7.3	850	500	–0.03	
AlNiCo60/11	anisotropic	LNGT60	AlNiCo9	900	9000	110	1380	–	–	60	7.50	7.3	850	500	–0.03	
AlNiCo88/12	anisotropic	LNGT88	AlNiCo9	1100	11000	115	1450	–	–	88	11.00	7.3	850	500	–0.03	
AlNiCo36/14	anisotropic	LNGT36J	AlNiCo8HC	700	7000	140	1750	–	–	36	4.50	7.3	850	500	–0.03	
AlNiCo52/14	anisotropic	LNGT52J	AlNiCo8HC	850	8500	140	1750	–	–	52	6.50	7.3	850	500	–0.03	
AlNiCo8/4	isotropic	FLN8	S.AlNiCo3	500	5000	40	500	–	–	9	1.13	7.0	760	450	–0.02	
AlNiCo12/5	isotropic	FLNG12	S.AlNiCo2	700	7000	48	600	–	–	12	1.50	7.0	810	450	–0.015	
AlNiCo18/9	isotropic	FLNGT18	S.AlNiCo7	600	6000	90	1130	–	–	18	2.20	7.0	860	450	–0.02	
AlNiCo34/5	anisotropic	FLNG34	S.AlNiCo5	1200	12000	48	600	–	–	34	4.25	7.3	890	450	–0.015	
AlNiCo37/5	anisotropic	FLNG37	S.AlNiCo5	1250	12500	48	600	–	–	37	4.62	7.3	890	450	–0.015	
AlNiCo28/6	anisotropic	FLNGT28	S.AlNiCo6	1050	10500	56	700	–	–	28	3.50	7.3	850	450	–0.02	
AlNiCo38/12	anisotropic	FLNGT38	S.AlNiCo8	800	8000	120	1500	–	–	38	4.75	7.3	850	450	–0.02	
AlNiCo42/12	anisotropic	FLNGT42	S.AlNiCo8	880	8800	120	1500	–	–	42	5.25	7.3	820	450	–0.02	
AlNiCo33/14	anisotropic	FLNGT33J	S.AlNiCo8HC	700	7000	140	1750	–	–	33	4.13	7.3	850	450	–0.025	

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PF = plasto-ferrite
PN = Plastoneodymium

Material			Remanence Br		Intensity of the pcoercive field				Maximum density of the residual energy (BxH) max		Density	Curie temperature	Maximum operating temperature	Coefficient of the residual temperature per °C	Demagnetization curves
			B _r		B _{Hc}		J _{Hc}		(B x H) max.						
			mT	Gauss	kA/m	Oe	kA/m	Oe	KJ/m ³	10 ⁶ G·Oe					
PF3/20	isotropic	ME10	135	1350	92	1150	200	2500	3	0.40	3.40		80	-0.20	
PF4/16	isotropic	NF04	150	1500	96	1200	160	2000	4	0.55	3.70		70	-0.20	
PF5/15	isotropic	NF06	165	1650	104	1300	152	1900	6	0.70	3.70		70	-0.20	
PF7/18	semi-anisotropic	NF07	200	2000	112	1400	184	2300	7	0.85	3.70		70	-0.20	
PF9/18	semi-anisotropic	NF09	220	2200	136	1700	184	2300	9	1.05	3.70		70	-0.20	
PF10/19	anisotropic	NF10	230	2300	160	2000	192	2400	10	1.25	3.70		70	-0.20	
PF10/20	anisotropic	FX4	240	2400	168	2100	200	2500	10	1.30	3.70		100	-0.20	
PF11/19	anisotropic	NF11	240	2400	168	2100	192	2400	11	1.40	3.75		70	-0.20	
PF12/20	anisotropic	NF12	250	2500	176	2200	200	2500	12	1.55	3.75		70	-0.20	
PN60/72	isotropic	R8	600	6000	360	4500	720	9000	60	7.50	5.5	-	120	-0.11	
PN52/67	isotropic	R7	520	5200	340	4300	670	8500	52	6.50	4.8	-	120	-0.11	
PN44/63	isotropic	R6	480	4800	290	3700	630	8000	44	5.50	4.7	-	120	-0.11	
PN36/62	isotropic	R5	450	4500	250	3200	620	7800	36	4.50	4.7	-	120	-0.11	
PN28/54	isotropic	R4	350	3500	210	2700	540	6800	28	3.50	4.4	-	120	-0.11	
PN20/38	isotropic	R3	350	3500	170	2100	380	4800	20	2.50	4.0	-	120	-0.11	
PN12/15	isotropic	R2	250	2500	120	1500	150	2000	12	1.50	3.3	-	120	-0.11	
PN36/35	isotropic	RE5	550	5500	200	2500	350	4500	36	4.50	4.9	-	100	-0.17	
PN28/35	isotropic	RE4	450	4500	200	2500	350	4500	28	3.50	4.5	-	100	-0.17	
PN20/28	isotropic	RE3	350	3500	170	2100	280	3500	20	2.50	4.1	-	100	-0.16	
PN13/15	isotropic	RE2	250	2500	120	1500	150	2000	12	1.50	3.5	-	100	-0.16	



Follow the link from the materials field marked in red

Fat printed materials are used with products in store!

Typical values

For acceptance within specified limits, a 100% or batch sampling inspection must be agreed upon.

Overview –
All chapter



Magnetic ratings of the characteristics of the materials (approximate values)

Plastic-bound neodymium magnets, tool – pressed

Material	Remanance Br		Intensity of the pcoercive field				Maximum density of the residual energy (BxH) max		Density	Maximum operating temperature	Coefficient of the residual temperature per °C		
	B _r		B H _C		J H _C		(B x H) max.						
	mT	Gauss	kA/m	Oe	kA/m	Oe	KJ/m ³	10 ⁶ G·Oe	$\frac{g}{cm^3}$	°C	%		
BNP-6	isotropic	N44/60p	550	5500	285	3600	600	7500	44	5.5	5.5	100	- 0.13
BNP-8L	isotropic	N56/71.5p	600	6000	360	4500	715	9000	56	7	5.6	110	- 0.13
BNP-8	isotropic	N64/64p	620	6200	385	4800	640	8000	64	8	5.8	120	- 0.13
BNP-8SR	isotropic	N64/88p	620	6200	410	5200	880	11000	64	8	5.8	150	- 0.13
BNP-8H	isotropic	N64/119p	610	6100	410	5200	1190	15000	64	8	5.9	125	- 0.07
BNP-9	isotropic	N70/64p	650	6500	400	5000	640	8000	70	8.8	5.8	120	- 0.12
BNP-10	isotropic	N76/64p	680	6800	420	5300	640	8000	76	9.5	5.8	120	- 0.11
BNP-11	isotropic	N80/68p	700	7000	445	5600	680	8500	80	10	5.8	120	- 0.11
BNP-11L	isotropic	N78/52p	700	7000	400	5000	520	6500	78	9.8	5.8	110	- 0.11
BNP-12	isotropic	N84/52p	740	7400	420	5300	520	6500	84	10.5	5.8	110	- 0.08

Typical values

For acceptance within specified limits, a 100% or batch sampling inspection must be agreed upon.

Overview –
All chapter



Table for the selection of permanent magnets according to application

Application	Rare earths SmCo / NdFeB				Ferrite HF			Alnico alloys AlNiCo				plasto-ferrite PF		
	Disc, ring	Pot	Sandwich	Foil	Disc, ring	Pot	Sandwich	Bar	Pot	U-shaped	Sandwich	Foil	Profile	Sandwich
	11, 12, 24	21, 22	23	15	13, 24	21, 22	23	14	21, 22	14	23	15	15	23
Adhesive magnet to keep documents in place	○	●			●	○	○		○	○		○	○	
in shape of labels or plates					○							○	●	
for light objects of up to several grams	○	●		○	●	●	○		○	○		○	○	
for heavy objects of up to several kilos	○	●	●	●	○	●	●		●	●	●			○
for particularly heavy objects	○	●					●		●	●	●			○
objects for conveyors			○	○			●			○	●			○
for labelling (storage, cars, etc.)		●										○	○	
Pull-type magnet for attraction across wider distances	●				●			○		●				
for collecting and separate steel	●				○	○	○	○		●				
as door locks	○	○		○		○	●		●	○	○		○	●
as searching magnet	○							○	○	○				
Electric measuring devices	●									●				
Electric engines and generators	●			○	●							○		
Operating of switches sensitive to magnetic fields	●			●	●			●		●				
Microphones and loudspeakers	○	○		○	●			○						
Magnetic fixation of work-pieces for machining		○	○	○			○		○		●			
Switchable magnetic systems for the fixation and keeping in place	●						○			○	●			
Magnetic clutches	●				●					○				
Magnetic repulsion systems	●			●	○									
Magnetic bearings and suspensions	●			○	○									
Compass needle								●						

Overview – All chapter



Table for the selection of permanent magnets according to their properties

Properties:	Chapter	Rare earths SmCo / NdFeB				Ferrite HF			Alnico alloys AlNiCo				plasto-ferrite PF		
		Disc, ring	Pot	Sandwich	Foil	Disc, ring	Pot	Sandwich	Bar	Pot	U-shaped	Sandwich	Foil	Profile	Sandwich
		11, 12, 24	21, 22	23	15	13, 24	21, 22	23	14	21, 22	14	23	15	15	23
Maximum force and minimum volume		●	●	●	●		○	○		○					○
Suitable for repulsive force		●			●	○									
Soft and flexible					●								●	●	
Machinable	trough cutting				○								●	●	
	turning, milling				○					○		○	○	○	○
	grinding	●	●	●		●	●	●	●	●	●	●			○
Stainless, corrosion-resistant		● *	○ *	○ *		●	○		○		○		●	●	
Electrically insulating						●							●	●	
Magnetisable for different polar separations					●	●							●	●	
Suitable for high surrounding temperatures		● *				○	○		●	○	●	○			
Particularly temperature resistant		● *	○		○				●	●	●	●			
Particularly cost effective		●	●			●	○	○					●	●	○
for magnetic systems: Subsequent magnetising	necessary								□	□	□	□			
for magnetic systems: Subsequent magnetising	not necessary	□	□	□	□	□		□					□	□	□

* Please also note the information concerning the corrosion behavior of rare earth magnets on pages 52-9 in the chapter on information about magnet materials.