



TECHNICAL DATASHEET

Ferrite Magnets

Ceramic permanent magnets for robust, cost-effective, high-volume applications.



Ningbo Empire New Material Co.,Ltd
Ningbo Empire Imp&Exp; Co.,Ltd.
#2432 East BaiZhang Road, Ningbo,China
WhatsApp: +8613805876186
Website: empiremagnets.com

Technical Data 1

Application	Typical Spec	Why this material
DC / appliance motors	Y30 / Y30BH	Low cost and robust high-volume performance
Loudspeakers	Y25 / Y30	Large magnet volume at economical cost
Magnetic separators	Y40 anisotropic	Higher ferrite energy for large field structures
Automotive sensing / small motors	Y30BH	Temperature-stable and corrosion-resistant
Consumer / crafts	Y10T isotropic	Low-cost geometry with flexible magnetization direction

Technical Data 2

Type	Orientation	Relative performance	Magnetization flexibility	Best fit
Isotropic	No preferred particle orientation	Lower	Can be magnetized in multiple directions	Cost-critical, multipole, consumer applications
Anisotropic	Particles aligned during pressing	Higher	Preferred direction fixed by manufacturing	Motors, speakers, separators
Wet-pressed anisotropic	Field-oriented slurry pressing	Highest mainstream ferrite performance	Preferred direction fixed	Higher-performance motor segments / rings

Technical Data 3

Grade	Br mT (kGs)	Hcb kA/m (kOe)	Hcj kA/m (kOe)	(BH)max kJ/m3 (MGOe)
Y8T	200-235 (2.0-2.35)	125-160 (1.57-2.01)	210-280 (2.64-3.52)	6.5-9.5 (0.8-1.2)
Y10T	200-235 (2.0-2.35)	128-160 (1.61-2.01)	210-280 (2.64-3.52)	6.4-9.6 (0.8-1.2)
Y20	320-380 (3.2-3.8)	135-190 (1.70-2.39)	140-195 (1.76-2.45)	18.0-22.0 (2.3-2.8)
Y22H	310-360 (3.1-3.6)	220-250 (2.76-3.14)	280-320 (3.52-4.02)	20.0-24.0 (2.5-3.0)
Y23	320-370 (3.2-3.7)	170-190 (2.14-2.39)	190-230 (2.39-2.89)	20.0-25.5 (2.5-3.2)
Y25	360-400 (3.6-4.0)	135-170 (1.70-2.14)	140-200 (1.76-2.51)	22.5-28.0 (2.8-3.5)
Y26H	360-390 (3.6-3.9)	220-250 (2.76-3.14)	225-255 (2.83-3.20)	23.0-28.0 (2.9-3.5)
Y26H-1	360-390 (3.6-3.9)	200-250 (2.51-3.14)	225-255 (2.83-3.20)	23.0-28.0 (2.9-3.5)
Y26H-2	360-380 (3.6-3.8)	263-288 (3.30-3.62)	318-350 (4.00-4.40)	24.0-28.0 (3.0-3.5)
Y27H	370-400 (3.7-4.0)	205-250 (2.58-3.14)	210-255 (2.64-3.20)	25.0-29.0 (3.1-3.6)
Y28	370-400 (3.7-4.0)	175-210 (2.20-2.64)	180-220 (2.26-2.76)	26.0-30.0 (3.3-3.8)
Y28H-1	380-400 (3.8-4.0)	240-260 (3.02-3.27)	250-280 (3.14-3.52)	27.0-30.0 (3.4-3.8)
Y28H-2	360-380 (3.6-3.8)	271-295 (3.41-3.71)	382-405 (4.80-5.09)	26.0-30.0 (3.3-3.8)
Y30	370-400 (3.7-4.0)	175-210 (2.20-2.64)	180-220 (2.26-2.76)	26.0-30.0 (3.3-3.8)
Y30BH	380-390 (3.8-3.9)	223-235 (2.80-2.95)	231-245 (2.90-3.08)	27.0-30.0 (3.4-3.8)
Y30H-1	380-400 (3.8-4.0)	230-275 (2.89-3.46)	235-290 (2.95-3.64)	27.0-32.0 (3.4-4.0)
Y30H-2	395-415 (3.95-4.15)	275-300 (3.46-3.77)	310-335 (3.90-4.21)	27.0-32.5 (3.4-4.1)
Y32	400-420 (4.0-4.2)	160-190 (2.01-2.39)	165-195 (2.07-2.45)	30.0-33.5 (3.8-4.2)
Y32H-1	400-420 (4.0-4.2)	190-230 (2.39-2.89)	230-250 (2.89-3.14)	31.5-35.0 (4.0-4.4)
Y40	440-460 (4.4-4.6)	290-330 (3.64-4.15)	280-330 (3.52-4.15)	~38-42 (~4.8-5.3)

Technical Data 4

Characteristic	Symbol / Unit	Reference Value
Density	g/cc	4.9-5.1
Vickers hardness	Hv	400-700
Compression strength	N/mm2	680-720
Specific heat capacity	J/kg- deg C	795-855
Electrical resistivity	uohm-cm	~1 x 1010
Curie temperature	deg C	~450
Rev. temp. coeff. Br	%/ deg C	~-0.2
Rev. temp. coeff. Hci	%/ deg C	~+0.27

Engineering note

Values are reference specifications unless explicitly stated as guaranteed on a quotation or approved drawing. Final grade, geometry, tolerance, coating, magnetization, operating temperature and validation requirements must be confirmed for the actual application.