

SM MAGNETICS

Magnetic Properties for Soft Magnetic Materials

Grade	Intermediate species	Level	Thickness/Diameter (mm)	$U_{0.4}$	U_m	H_c	B_s
				mH/m(Min)		A/m(Max)	T(Min)
1J50		II	0.10-0.19	3.8	43.8	12	1.5
	Cold rolled strip		0.20-0.34	4.4	56.3	10.4	
			0.35-0.50	5	65	8.8	
			0.51-1.00	5	50	10	
			1.10-2.50	3.8	44	12	
	Hot Rolled (forged) Flat	—	3~22	3.1	31.3	14.4	1.5
	Hot Rolled (forged) Bars	—	8~100	3.1	31.3	14.4	1.5
Grade	Intermediate species	Level	Thickness/Diameter (mm)	$U_{0.8}$	U_m	H_c	B_s
				mH/m(Min)		A/m (Max)	T(Min)
1J79		I	0.10-0.19	28	190	1.2	0.75
	Cold rolled strip		0.20-0.34	31	250	1.2	
			0.35-1.00	38	280	1	
			1.10-2.50	31	230	1.2	
	Hot Rolled (forged) Flat	—	3~22	25	125	2.4	
	Hot Rolled (forged) Bars	—	8~100	25	125	2.4	
1J79C		—	—	37.5	125	1.6	
	Cold rolled strip						
1J85		I	0.20-0.34	50	225	1.2	0.7
	Cold rolled strip		0.35-1.00	62.5	312.5	0.8	
			1.10-2.50	50	187.5	1.2	
			2.51-3.00	43.8	150	1.4	
	Hot Rolled (forged) Flat	—	3~22	37.5	125	1.6	
	Hot Rolled (forged) Bars	—	8~100	37.5	125	1.6	
1J85C		—	—	50	125	1.6	0.68
1J95		—	—	50	125	1.6	0.55
	Cold rolled strip						

FeNi Soft Magnetic Alloy

Anti-corrosion Soft Magnetic Alloy	Grade	Magnetic induction					Remanence induction			Um	Hc
		B240	B400	B800	B2400	B3200	Br240	Br2400	Br3200	mH/m(Min)	A/m(Max)
	T(Min)					T(Max)					
	1J117	0.9	—	1	—	1.25	—	—	—	—	80
	Cr17NiTi	—	0.9	1	1.2	—	—	0.95	—	3.75	80
	Grade	Level	Magnetic Induction								Coercive Force
			B400	B800	B1600	Br2400	B8000			Hc	
			T(Min)								A/m(Max)
	1J21	I		1.8	2.00	2.1	2.3	2.4	-	80	
II			1.8	2.00	2.1	2.3	2.4	-	48		
1J22	-		1.6	1.8	1.0	2.1	2.2	2.2	128		
FeCoV Magnetic Hysteresis Alloy	Grade	Intermediate Species	Level	B(m) : 1.23±0.02T		B(m) : 1.36±0.02T		B(m) : 1.42±0.02T			
				Hm	Pro	Hm	Pro	Hm	Pro		
				(A/m)	(105erg/cm3Hz)	(A/m)	(105erg/cm3Hz)	(A/m)	(105erg/cm3Hz)		
	2J4	Cold Rolled Strip	I		≤4400	≥1.44	≤4800	≥1.65	≤5200	≥1.85	
				II	5174A/m			9552A/m			
			Br		Hc	Pro	Br	Hc	Pro		
			(T)		(A/m)	(105erg/cm3Hz)	(T)	(A/m)	(10 ⁵ erg/cm ³ Hz)		
		≥1.1	≥3582	≥1.8	≥1.1	≥3582	≥2.6				
High Permeability Soft Magnetic Alloy	Grade	Intermediate Species	Level	Thickness/Diameter (mm)	U _{0.001}	Um	Hc	Br			
					mH/m(Min)		A/m(Max)	T(Max)			
	S1J81A	Cold Rolled Strip	--	--	50	150	1	0.4			
Hot Rolled Bar		--	--	40	150	1	0.4				