

## Magnetic Properties of SAMARIUM–COBALT Magnets

Materials	Grades	Remanence		Coercive Force		Intrinsic Coercivity		Maximum Energy Product		Curie Temp.	Maximum Working Temp.	Temp. Coefficient of Br	Temp. Coefficient of Hcj
		Br		Hcb		Hcj		(BH) max		TC	TW		
		T	KGS	KA/m	Koe	KA/m	Koe	KJ/m	Mgoe	°C	°C	%°C	%°C
1:5 SmCo <sub>5</sub>	YX-16	0.81-0.85	8.1-8.5	620-660	7.8-8.3	1194-1830	15-23	110-127	14-16	750	250	-0.05	-0.3
	YX-18	0.85-0.9	8.5-9.0	660-770	8.3-8.8	1194-1830	15-23	127-143	16-18	750	250	-0.05	-0.3
	YX-20	0.9-0.94	9.0-9.4	680-725	8.5-9.1	1194-1830	15-23	150-167	19-21	750	250	-0.05	-0.3
	YX-22	0.92-0.96	9.2-9.6	710-750	8.9-9.4	1194-1830	15-23	160-175	20-22	750	250	-0.05	-0.3
	YX-24	0.96-1.0	9.6-10.0	730-770	9.2-9.7	1194-1830	15-23	175-190	22-24	750	250	-0.05	-0.3
	YX-20S	0.9-0.94	9.0-9.4	680-725	8.5-9.1	1433-1830	18-23	143-160	18-20	750	250	-0.045	-0.28
	YX-22S	0.92-0.96	9.2-9.6	710-750	8.9-9.4	1433-1830	18-23	160-175	20-22	750	250	-0.045	-0.28
2:17 Sm <sub>2</sub> Co <sub>17</sub>	YXG-24H	0.95-1.02	9.5-10.2	700-750	8.7-9.4	≥1990	≥25	175-191	22-24	800	350	-0.03	-0.2
	YXG-26H	1.02-1.05	10.2-10.5	750-780	9.4-9.8	≥1990	≥25	191-207	24-26	800	350	-0.03	-0.2
	YXG-28H	1.03-1.08	10.3-10.8	756-796	9.5-10	≥1990	≥25	207-220	26-28	800	350	-0.03	-0.2
	YXG-30H	1.08-1.10	10.8-11.0	788-835	9.9-10.5	≥1990	≥25	220-240	28-30	800	350	-0.03	-0.2
	YXG-24	0.95-1.02	9.5-10.2	700-750	8.7-9.4	≥1433	≥18	175-191	22-24	800	300	-0.03	-0.2
	YXG-26	1.02-1.05	10.2-10.5	750-780	9.4-9.8	≥1433	≥18	191-207	24-26	800	300	-0.03	-0.2
	YXG-28	1.03-1.08	10.3-10.8	756-796	9.5-10	≥1433	≥18	207-220	26-28	800	300	-0.03	-0.2
	YXG-30	1.08-1.10	10.8-11.0	788-835	9.9-10.5	≥1433	≥18	220-240	28-30	800	300	-0.03	-0.2
	YXG-26M	1.02-1.05	10.2-10.5	750-780	9.4-9.8	955-1273	12-16	191-207	24-26	800	300	-0.03	-0.2
	YXG-28M	1.03-1.08	10.3-10.8	756-796	9.5-10.0	955-1273	12-16	207-220	26-28	800	300	-0.03	-0.2
	YXG-30M	1.08-1.10	10.8-11.0	788-835	9.9-10.5	955-1273	12-16	220-240	28-30	800	300	-0.03	-0.2
	YXG-28L	1.02-1.08	10.2-10.8	413-716	5.2-9.0	438-796	5.5-10	207-220	26-28	800	250	-0.03	-0.2
	YXG-30L	1.08-1.15	10.8-11.5	413-716	5.2-9.0	438-796	5.5-10	220-240	28-30	800	250	-0.03	-0.2