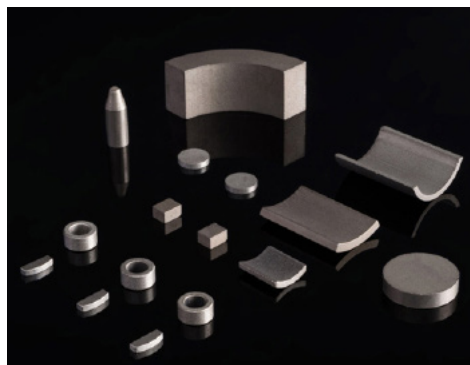


Samarium-cobalt



High performance samarium-cobalt magnets
SAOMAG is the new high performance, sintered samarium-cobalt magnet. Its main characteristic is that it can be used in high temperature applications up to 350°C. Thanks to the sintering process, these magnets reach more powerful specifications designed to meet customer requirements. After sintering, the magnets are processed to provide a variety of sizes without any moulding!
SAOMAG is the new sintered high performance magnet with low tolerances and customised solutions.

SPECIFICATIONS

Pulverised samarium and cobalt magnet
Allows a variety of shapes without the use of moulds
Maximum energy product: up to 30 MGOe
Residual induction: up to 11.5 KGs
Exact tolerance: ± 0.05 mm
Suitable for high temperature applications: up to 350°C
No coating needed thanks to its resistance to corrosion and oxidisation
Suitable for high-tech applications

APPLICATIONS

Brushless DC and AC motors
Tachogenerators
Transducers
Measuring instruments and equipment
Position sensors
Medical sector technology
Radar communications
Automotive
Propagation systems



Samarium-cobalt

Magnetic Features

	Residual Induction	Coercive force (Hcb)	Intrinsic coercive force (Hcj)	Maximum energy product (BH) max	Max. working temperature Curie Temperature (CT)	Density	Vickers Hardness	Resistivity	Br loss coefficient	Hcj loss coefficient
Code	T (KGs)	KA/m (Koe)	KA/m (Koe)	Kj/m ³	°C	g/cm ³	Mpa	Ωcm	%/°C	%/°C
SC-16	0,81-0,85 (8,1-8,5)	620-660 (7,8-8,3)	1194-1830 (15-23)	110-127 (14-16)	250 (750-800)	8,3	450-500	5-6x10 ⁻⁵	-0,05	-0,2
SC-18	0,85-0,9 (8,5-9,0)	660-700 (8,3- 8,8)	1194-1830 (15-23)	127-143 (16-18)	250 (750-800)	8,3	450-500	5-6x10 ⁻⁵	-0,05	-0,2
SC-20	0,9-0,94 (9,0-9,4)	680-725 (8,5-9,1)	1194-1830 (15-23)	150-167 (19-21)	250 (750-800)	8,3	450-500	5-6x10 ⁻⁵	-0,05	-0,2
SC-22	0,92-0,96 (9,2-9,6)	710-750 (8,9-9,4)	1194-1830 (15-23)	160-175 (20-22)	250 (750-800)	8,3	450-500	5-6x10 ⁻⁵	-0,05	-0,2
SC-24	0,96-1,00 (9,6-10,0)	730-770 (9,2-9,7)	1194-1830 (15-23)	175-190 (22-24)	250 (750-800)	8,3	450-500	5-6x10 ⁻⁵	-0,05	-0,2
SC-24L	0,95-1,02 (9,5-1,02)	557-716 (7,0-9,0)	636-955 (8-12)	175-191 (22-24)	250 (750-800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-26-L	1,02-1,05 (10,2- 10,5)	557-748 (7,0-9,4)	636-955 (8-12)	191-207 (24-26)	250 (750-800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-28L	1,03-1,08 (10,3-10,8)	557-765 (7,0-9,6)	636-955 (8-12)	207-220 (26-28)	250 (750-800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-30L	1,08-1,15 (10,8-11,5)	557-795 (7,0-10,0)	636-955 (8-12)	220-240 (28-30)	250 (750-800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-32L	1,10-1,15 (11,0-11,5)	557-810 (7,0-10,2)	636-955 (8-12)	230-255 (29-32)	250 (750-800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2

Sintered Samarium-Cobalt Magnets

	Residual induction (Br)	Coercive force (Hcb)	Intrinsic coercive force (Hcj)	Maximum energy product (BH) max	Max. working temperature Curie Temperature (CT)	Density	Vickers Hardness	Resistivity	Br loss coefficient	Hcj loss coefficient
Code	T (KGs)	KA/m (Koe)	KA/m (Koe)	Kj/m ³ MGOe	°C	g/cm ³	Mpa	Ωcm	%/°C	%/°C
SC-26M	1,02-10,5 (10,2-10,5)	750-780 (9,4-9,8)	955-1273 812-16)	191-207 (24-26)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-28M	1,03-1,08 (10,3-10,8)	756-796 (9,5-9,8)	955-1273 812-16)	207-220 (26-28)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-30M	1,08-1,10 (10,8-11,0)	788-835 (9,9-10,5)	955-1273 812-16)	220-240 (28-30)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-32M	1,10-1,13 (11,0-11,3)	811-845 (10,2-10,6)	≥1194 (≥15)	230-255 (29-32)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-24SL	0,95-1,02 (9,5-10,2)	700-750 (8,7-9,4)	≥1433 (≥18)	175-191 (22-24)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-26SL	1,02-1,05 (10,2-10,5)	750-780 (9,4- 9,8)	≥1433 (≥18)	191-207 (24-26)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-28SL	1,03-1,08 (10,3-10,8)	756-796 (9,5-10)	≥1433 (≥18)	207-220 (26-28)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-30SL	1,08-1,10 (10,8-11,0)	788-835 (9,9-10,5)	≥1433 (≥18)	220-240 (28-30)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-24H	0,95-1,02 (9,5-10,2)	700-750 (8,7-9,4)	≥1990 ≥25	175-191 (22-24)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-26H	1,02- 1,05 (10,2-10,5)	750-780 (9,4-9,8)	≥1990 ≥25	191-207 (24-26)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-28H	1,03-1,08 (10,3-10,8)	756-796 (9,5-10)	≥1990 ≥25	207-220 (26-28)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-30H	1,08-1,10 (10,8-11,0)	788-835 (9,9-10,5)	≥1990 ≥25	220-240 (28-30)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2
SC-32H	1,08-1,12 (10,8-11,2)	796-859 (10,0-10,8)	≥1990 ≥25	223-247 (28-31)	300 (800)	8,4	550-600	8-9x10 ⁻⁵	0,035	-0,2