

10000

1000

100

10

0.1

0.1

10

Losses, W/cm³





Medium to High Frequency Soft Magnetic Composite [Frequency Range: 10 – 1000 kHz]

FLUXTROL 50 is a proven material for multiple applications at middle-to-high frequency. As other materials of Fluxtrol family, it is made of insulated iron powder with high temperature organic binder. It offers the highest permeability in the Fluxtrol family of high frequency magnetic materials. It has a perfect combination of physical properties: excellent machinability, good mechanical strength, magnetic permeability and thermal conductivity.

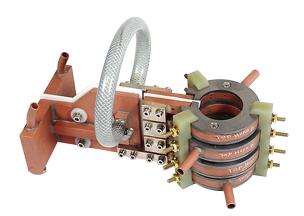
Properties	Units	FLUXTROL 50
Density ± 2%	g/cm3	6.1
Initial Permeability	None	36
Maximum Permeability	None	55
Saturation Flux Density	Т	1.2
Operating Frequency Range	kHz	10–1000
Major Frequency Range	kHz	50-500
Temperature Resistance	Centigrade	250 Long Term 300 Short Term
Thermal Conductivity	W/cm °C	0.06
Resistivity	kOhmcm	0.5

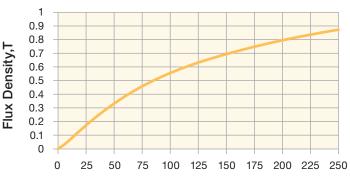
FLUXTROL 50 Losses

Pv=2.73 f^{1.125} B^{2.3}, W/cm³; f, kHz; B,T

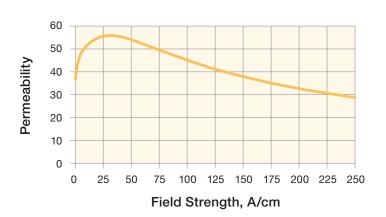
100

Frequency, kHz





Field Strength, A/cm



Each grade of Fluxtrol material has its own distinctive properties that are the most beneficial to certain application conditions, process type, coil design, frequency, etc. Contact Fluxtrol or your local distributor for more information about which material is optimal for you.

B 1.0T

B 0.75T

B 0.5T

B 0.25T

B 0.2T

B 0.1T

B 0.05T

1000

FLUXTROL 100		FERROTRON 559H			

Centre for Induction Technology

