

Injection-Molded Ferrite

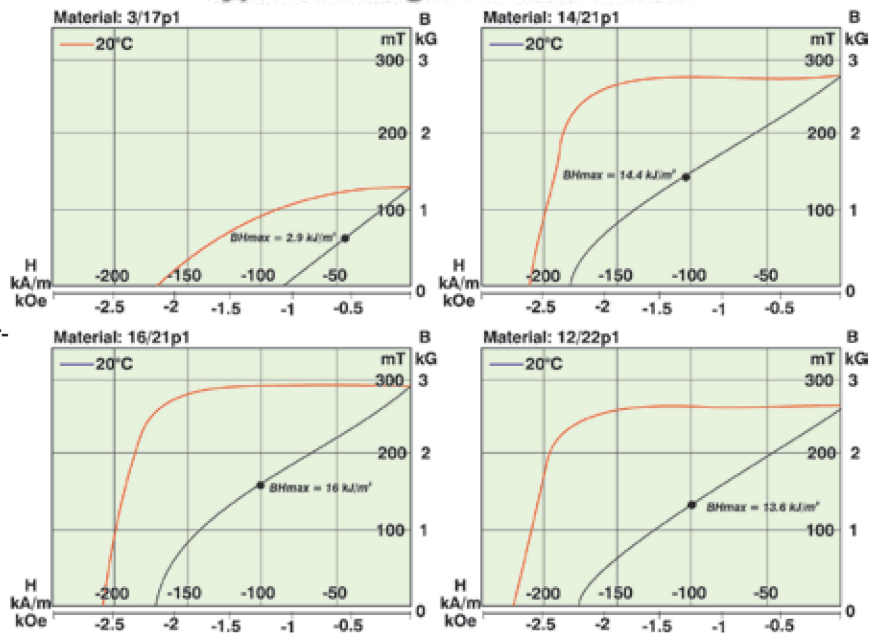
- Ideal for large production runs
- May be molded into complex shapes
- May be molded onto shafts or be attached to other components
- Tolerances as tight as 0.01 mm
- Impact and chemical resistant
- Energy Products to 16 kJ/m³ (2 MGOe)
- Isotropic and Anisotropic Grades
- Neodymium hybrids can increase performance
- Co-Injected Assemblies



Typical Properties of Injection-Molded Ferrite

Property	Units	3/17p1	12/22p1	14/21p1	16/21p1	14/22p1
Energy Product BH _{max}	kJ/m ³ MGOe	2.9 0.36	12 1.5	14.4 1.8	16 2	14.4 1.8
Remanence B _r	mT Gauss	130 1300	260 2600	278 2780	287 2870	275 2750
Coercivity H _c	kA/m Oe	86 1080	175 2200	179 2250	179 2250	187 2350
Intrinsic Coercivity H _{ci}	kA/m Oe	173 2170	225 2830	215 2700	207 2600	223 2800
Temperature Coefficient of B _r (20 - 70°C)	%/°C	-0.2	-0.2	-0.2	-0.2	-0.2
Temperature Coefficient of H _c (20 - 70°C)	%/°C	0.3	0.3	0.3	0.3	0.3
Maximum Operating Temperature T _{max}	°C	140	150	150	150	120
Permeability	mT/kA/m G/Oe	1.45 1.15	1.3 1.05	1.3 1.05	1.3 1.05	1.3 1.05
Density	g/cm ³	3.4	3.4	3.5	3.6	3.4

Typical Demagnetization Curves



Magnet Applications' injection-molded Ferrite offers design engineers near limitless shape and magnetization possibilities. Its high tensile strength allows injection-molded components to withstand high rotational forces, and it offers both excellent chemical and impact resistance. Isotropic grades can be magnetized in any direction: axial, radial or multi-polar. Anisotropic grades are magnetically oriented in a preferred direction during the molding process, and offer higher energy products.

Additionally, we have had success with new hybrids of Neodymium Iron Boron and Ferrite, offering our customers an even broader range of choices.

We offer complete engineering assistance, prototyping services, fabrication and inventory stocking. Call our sales staff today to discuss your application.

Typical Magnetization Patterns

