

As the world's leading producer of Amorphous and Nanocrystalline foils, Metglas, Inc. continues to expand alloy compositions suitable for the most demanding applications. Our newest foil, FT-3W, offers a fully amorphous precursor ribbon that is capable of being heat treated into a nanocrystalline state with excellent soft magnetic properties. This foil is offered at increased width of up to 5.6" (142mm) to meet the growing demand for wider core applications.



New FT-3W Alloy Composition

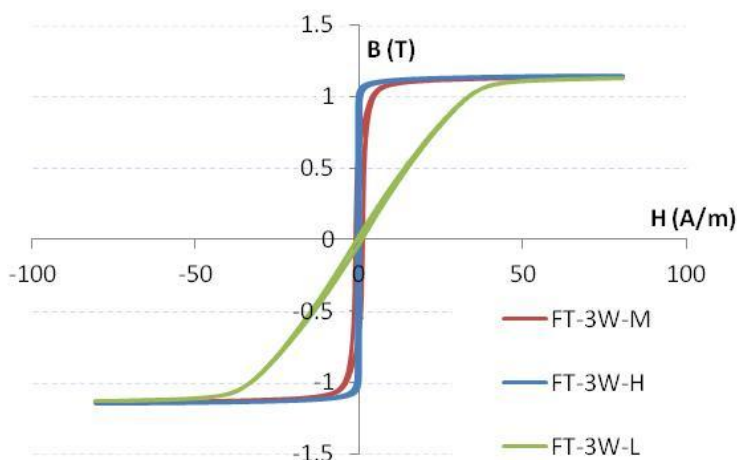
Alloy Name	Nominal Composition	Density g/cm	Main Features
FT-3W	Fe-Si-B-Nb-Cu	7.3	High permeability, near-zero magnetostriction

Nominal Magnetic Properties

Type	B _m (T)	B _r /B _m (%)	H _c (A/m)	μ _i (10kHz)	μ _i (100kHz)	λ _s (x10 ⁻⁶)	Heat Treatment
FT-3W-M	1.18	60	1	74,000	15,000	<1	No Field
FT-3W-L	1.18	3	1	16,500	14,000	<1	Transverse Field
FT-3W-H	1.18	80	1	6,000	3,600	<1	Longitudinal Field

Note: B_m, B_r and H_c measured at H_m = 800 A/m. μ_i is measured at H_m = 0.05 A/m. Properties measured on 20.3 mm wide slit strands near edges and center of cast width. Results depend on core size, anneal cycle and field strength.

Nominal DC B-H Curves



Nominal Mechanical Properties

Width (mm)	Computed Average Thickness (μm)	Lamination Factor (%)
142.2	17	70