



MuMETAL® CORE APPLICATIONS

These cores are widely used for highly accurate power measurement in power distribution systems, railway networks and large pieces of energy consuming industrial equipment.

Common Commercial Applications:

- ultra- sensitive transformers (especially pulse transformers)
- ultra-sensitive magnetic amplifiers where low loss is mandatory
- Power Supplies
- Radar Installations
- Current Transformers
- Jet Engine Controls
- Motor Control
- Power supply sensing
- Position sensing
- Energy meters

MuMETAL® CORE MAGNETIC PROPERTIES

Relative Permeability at H = 0.4 A/m:

Strip Thickness		MuMETAL type	MuMETAL plus type	Super MuMETAL type
inches	[mm]			
.008	[0,20]	55,000	65,000	85,000

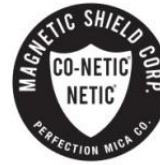
* Other guarantees may be given to meet specific customer requirements

SIZE RANGE & DIMENSIONAL SPECIFICATIONS

Size Range of MuMETAL® Cores:

Strip Thickness		Min. Inside Diameter		Maximum Height		Minimum Height	
inches	[mm]	inches	[mm]	inches	[mm]	inches	[mm]
.008	[0,20]	1.00	[25]	1.00	[25]	.20	[5]
		1.20	[30]	1.57	[40]	.20	[5]
		2.00	[50]	2.00	[50]	.20	[5]
		2.00	[50]	1.57	[40]	.25	[6,35]
		2.75	[70]	2.00	[50]	.25	[6,35]

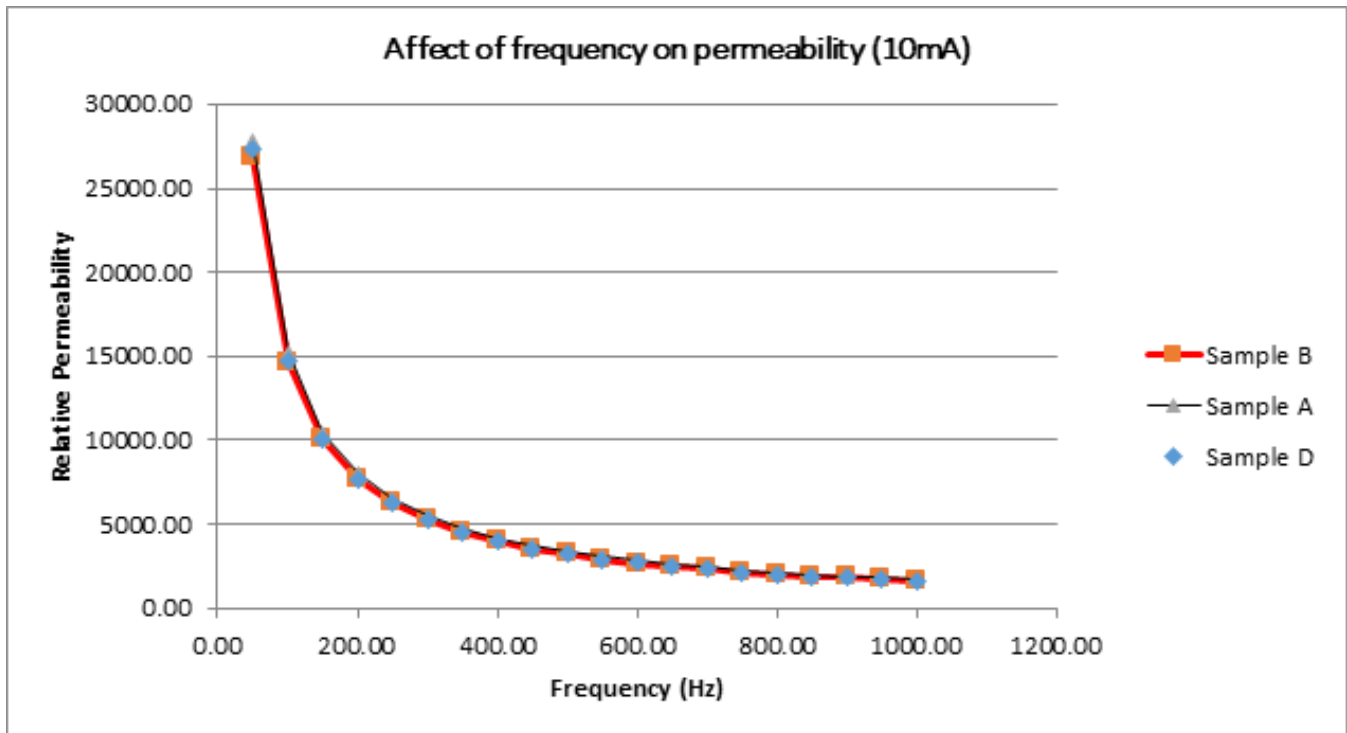
[MuMETAL® Toroidal Cores](#) fabricated using .004" [0,1mm] thick foil are available by custom quotation. Core maximum outside diameter is 35.5" [900mm]. However, cores may be supplied up to 47.25" [1200mm] diameter with reduced magnetic performance, subject to a minimum build-up limitation of 5% of the diameter. Where cores are required with greater height they can be supplied in two or more sections.



DIMENSIONAL TOLERANCES BY SIZE:

Outside Diameter		Tolerance +/-		Inside Diameter		Tolerance +/-		Height Tolerance +/-	
inches	[mm]	inches	[mm]	inches	[mm]	inches	[mm]	inches	[mm]
>1 to 2	>[25] to [50]	.031	[0,80]	>1 to 2	>[25] to [50]	.020	[0,50]	.020	[0,50]
>2 to 6	>[50] to [150]	.049	[1,25]	>2 to 6	>[50] to [150]	.031	[0,80]	.031	[0,80]
6 to 11.8	[150] to [300]	.079	[2,00]	>6 to 11.8	>[150] to [300]	.059	[1,50]	.059	[1,50]
>11.8 to 19.7	[300] to [500]	.120	[3,00]	>11.8 to 19.7	[300] to [500]	.098	[2,50]	.098	[2,50]
>19.7 to 27.6	[500] to [700]	.160	[4,00]	>19.7 to 27.6	[500] to [700]	.140	[3,50]	.140	[3,50]

FREQUENCY vs. PERMEABILITY*



*Data is typical of a core sample O.D. 1.38in, I.D. 0.39in and should not be construed as maximum or minimum values for specification or final design.

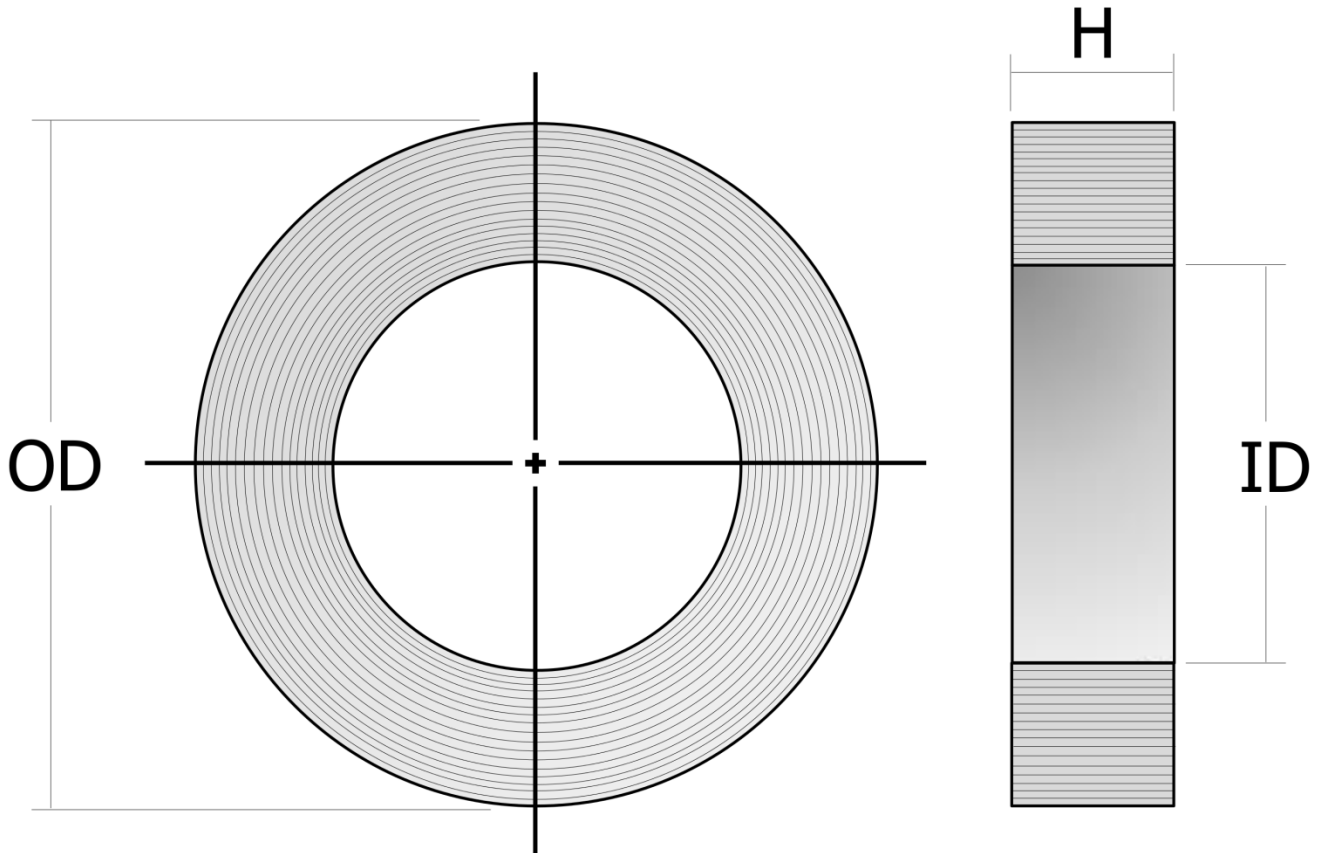
MAGNETIC & MATERIAL PROPERTIES (after anneal)

Contact us for final product specifications at shields@magnetic-shield.com



REQUEST FOR QUOTATION

To request a quote please specify your required Inside Diameter, Outside Diameter, Height and target permeability below and submit to our technical sales team at shields@magnetic-shield.com



Outside Diameter (OD): _____

Inside Diameter (ID): _____

Height (H): _____

Target Permeability: _____