Cable Cores for EMI Suppression

Since 1952, Fair-Rite Products Corp. has been providing the electronics industry with a variety of products to solve EMC issues.
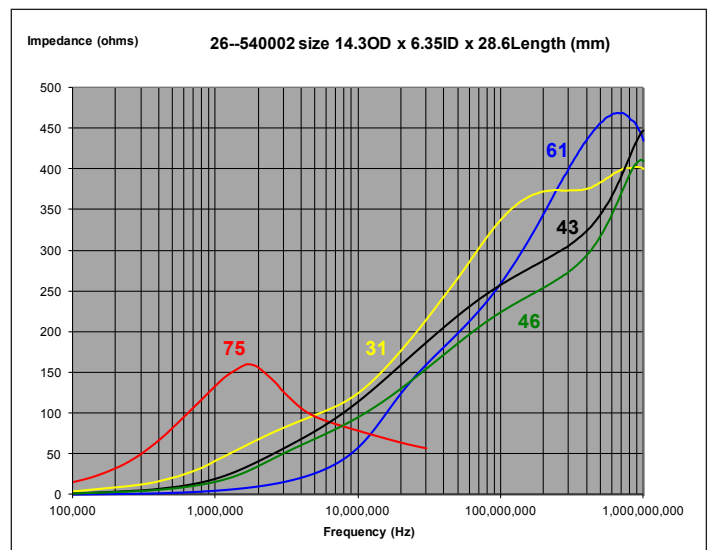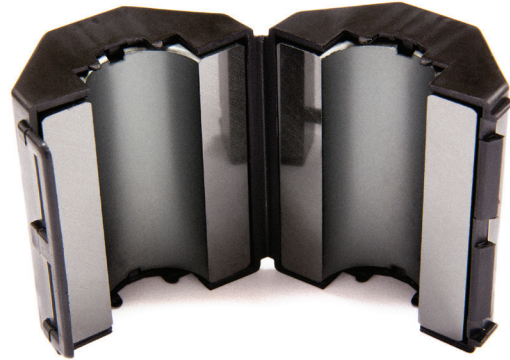
With an assortment of materials to suppress frequencies from 100 kHz into the GHz range, Fair-Rite has the spectrum covered.

From our industry-standard 43 material to our flagship 31 material to our newest 75 material, we are *Your Signal Solution*.

Fair-Rite has catalog products available to support a wide range of cable diameters – from 3.5mm (.137") up to 101.6mm (4").

To help select the correct component for your application, refer to our Technical Article "*How to Choose Ferrite Components for EMI Suppression*" at **www.fair-rite.com** or contact your local sales representative.

We can also work with you on custom cable designs!

Impedance (ohms) — 26--540002 size 14.3OD x 6.35ID x 28.6Length (mm)

Material	Composition	Frequency	
31	MnZn	1 MHz – 300 MHz	Good broadband impedance with extended low frequency
43	NiZn	20 MHz – 300 MHz	Industry standard
44	NiZn	20 MHz – 300 MHz	Improved 43 material with higher resistivity
46	MgZn	20 MHz – 300 MHz	Environmentally friendly, cost-effective alternative
61	NiZn	200 MHz – 1 GHz	Low sensitivity to temperature and DC bias
75	MnZn	100 kHz – 5 MHz	Superior low-frequency suppression

Our engineering kits are available to test materials and sizes so you can select the part that's right for you! With both Snap-It and Solid cores, you can use these on either terminated or non-terminated cables for easier test and implementation regardless of application.

Snap-It Part Number	Maximum Cable Diameter	Solid Equivalent Part	Material o = available, s = solid equivalent exists					
			31	43	44	46	61	75
04XX178181	4.10 mm (.161")	none	o	o			o^k	
04XX173951	4.90mm (.193")	26XX023002	os^k	s	o	o		
04XX164951	4.90 mm (.193")	26XX480002	os^k	s	o	os^k	os^k	
04XX181651	4.90 mm (.193")	26XX023002						os^k
04XX164251	6.30mm (.250")	26XX540002		os^k		os		
04XX164281	6.30mm (.250")	26XX540002	os^k	s	o	os^k	os^k	os^k
04XX625006	7.60 mm (.299")	26XX625002		os^k				
04XX178281	8.70 mm (.846")	26XX665702	os	os			os	os^k
04XX665806	9.20 mm (.362")	26XX665802		os^k				
04XX167251	9.85 mm (.388")	26XX626402		os^k		os		
04XX167281	9.85 mm (.388")	26XX626402	os^k	s	o	os^k	os^k	os^k
04XX164151	12.70 mm (.500")	26XX102002		os^k		os		
04XX164181	12.70 mm (.500")	26XX102002	os^k	s	o	os^k	os^k	os^k
04XX800506	12.80 mm (.504")	26XX800502		os^k				
04XX806406	15.0 mm (.591")	26XX806402		os^k				
04XX176451	18.0 mm (.709")	26XX103002	os^k	s	o	o	o	o^k
04XX173551	18.5 mm (.728")	26XX103102	o	s	o	o		
04XX177081	25.2 mm (.990")	26XX626202	os	s	o			

^{k}*Parts are available in the Kits below*

Kit Part Number	Kit Name	Description
0199000030	31 Material Snap-It Kit	Contains a range of parts to support cable diameters from 4.9mm (0.193") to 18mm (0.709").
0199000031	43 Material Snap-It Kit	Contains snap-it parts to support cable diameters from 6.3mm (0.250") to 15.0mm (0.591").
0199000032	46 Material Core and Snap-it Kit	Contains both cable cores and snap-it parts to support cable diameters from 4.9mm (0.193") to 12.7mm (0.500").
0199000033	61 Material Snap-It Kit	Contains snap-it parts to support cable diameters from 4.1mm (0.161") to 12.7mm (0.500").
0199000041	75 Material Snap-It Kit	Contains snap-it parts to support cable diameters from 4.9mm (0.193") to 18mm (0.709").