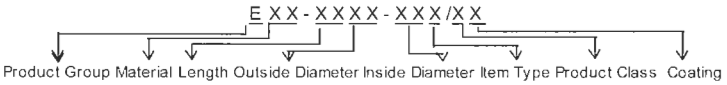
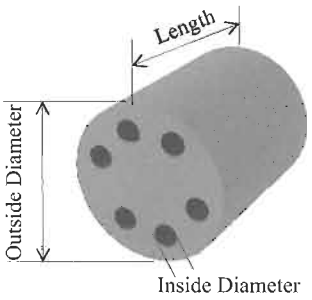
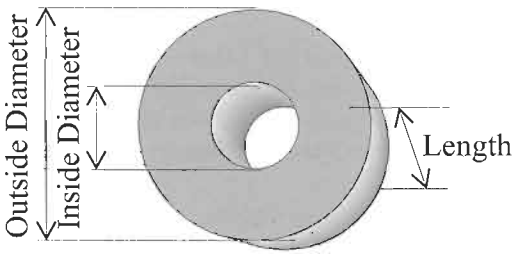
Product Group E : Bead Cores



Ferrite beads are very similar in shape to toroids. The greatest distinguishing characteristic of beads is the application in which they are used. Beads generally have a length to outside diameter ratio greater than one. The most popular uses of ferrite beads are as EMI suppressors. They can be placed over the leads of an electrical component to prevent spurious signals. This application dictates that impedance rather than inductance be controlled. Thus bead specifications will often reference inductance but have a definite impedance minimum. Beads are offered in a variety of materials and can be manufactured in any of MMG's materials in order to optimize the part for a given application.

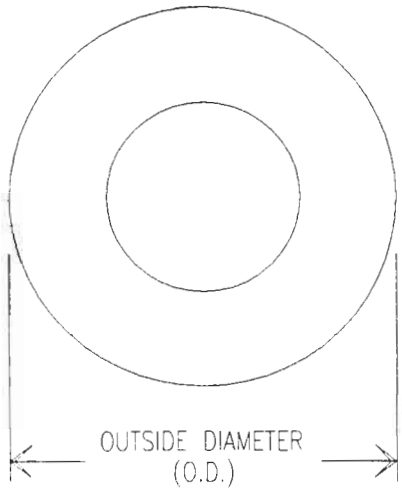
Core Part No.	Units	Length	Outside Diameter	Inside Diameter	C_1 (cm)	L_o (cm)	A_o (cm)	V_o (cm)
E__-1420-100/1	in	0.039	0.070	0.035	91.5	0.3872	0.00423	0.00164
	mm	0.991	1.778	0.889				
E__-3D4N-290/1	in	0.118	0.163	0.079	28.9	0.8860	0.03061	0.02712
	mm	2.997	4.140	2.007				
E__-3K4N-1S0/1	in	0.125	0.163	0.062	20.5	0.7718	0.03770	0.02909
	mm	3.175	4.140	1.575				
E__-3K4N-1T0/1	in	0.125	0.163	0.063	20.8	0.7790	0.03742	0.02915
	mm	3.175	4.140	1.600				
E__-3N3Y-0X0/1	in	0.128	0.138	0.032	13.2	0.4859	0.03674	0.01785
	mm	3.251	3.505	0.813				
E__-383Y-1E0/1	in	0.113	0.138	0.049	21.1	0.6278	0.02969	0.01864
	mm	2.870	3.505	1.245				
E__-7V4N-2G0/1	in	0.275	0.163	0.086	14.1	0.9289	0.06603	0.06133
	mm	6.985	4.140	2.184				
E__-EAAQ-5C0/1	in	0.500	0.375	0.187	7.1	2.0711	0.29128	0.60326
	mm	12.700	9.525	4.750				
E__-EAEA-870/1	in	0.500	0.500	0.287	8.9	2.9843	0.33486	0.99933
	mm	12.700	12.700	7.290				
E__-X5G2-750/1	in	1.125	0.562	0.250	2.7	2.9108	1.07232	3.12131
	mm	28.575	14.275	6.350				
E__-6R3Y-1C0/1	in	0.236	0.138	0.047	9.7	0.6126	0.06295	0.03856
	mm	5.994	3.505	1.194				
E__-4K5Q-1F0/1	in	0.160	0.200	0.050	11.2	0.7375	0.06613	0.04877
	mm	4.064	5.080	1.270				
E__-8F5Q-2V0/1	in	0.400	0.200	0.100	8.9	1.1062	0.12399	0.13716
	mm	10.160	5.080	2.540				
E__-754N-1S0/1	in	0.250	0.163	0.062	10.2	0.7718	0.07540	0.05819
	mm	6.350	4.140	1.575				
E__-3N3Y-1C0/1	in	0.128	0.138	0.047	17.9	0.6126	0.03414	0.02092
	mm	3.251	3.505	1.194				
E__-3N3Y-1G0/1	in	0.128	0.138	0.051	19.4	0.6426	0.03310	0.02127
	mm	3.251	3.505	1.295				
E__-3N3Y-1S0/1	in	0.128	0.138	0.062	24.2	0.7188	0.02976	0.02139
	mm	3.251	3.505	1.575				
E__-4K4Q-1F0/1	in	0.160	0.200	0.050	11.2	0.7375	0.06613	0.04877
	mm	4.064	5.080	1.270				
E__-4K5Q-2V0/1	in	0.160	0.200	0.100	22.3	1.1062	0.04960	0.05486
	mm	4.064	5.080	2.540				
E__-4Y3Y-0X0/1	in	0.173	0.138	0.032	9.8	0.4859	0.04966	0.02413
	mm	4.394	3.505	0.813				
E__-5Q64-400/1	in	0.200	0.214	0.140	29.1	1.3709	0.04703	0.06448
	mm	5.080	5.436	3.556				
E__-755F-2H0/1	in	0.250	0.190	0.087	12.7	1.0003	0.07897	0.07899
	mm	6.350	4.826	2.210				
E__-755F-2K0/1	in	0.250	0.190	0.090	13.2	1.0196	0.07700	0.07850
	mm	6.350	4.826	2.286				
E__-758X-1F0/1	in	0.250	0.312	0.050	5.4	0.8699	0.16098	0.14004
	mm	6.350	7.925	1.270				
E__-9C3Y-0X0/1	in	0.327	0.138	0.032	5.2	0.4859	0.09387	0.04561
	mm	8.306	3.505	0.813				
E__-AQ3Y-1G0/1	in	0.375	0.138	0.051	6.6	0.6426	0.09697	0.06231
	mm	9.525	3.505	1.295				
E__-B96R-106/1	in	0.394	0.236	0.035	8.5	0.0888	0.01040	0.00092
	mm	10.008	5.994	0.889				
E__-BF60-1H0/1	in	0.400	0.210	0.052	4.4	0.7698	0.17376	0.13376
	mm	10.160	5.334	1.321				
E__-BF75-250/1	in	0.400	0.250	0.075	5.1	1.0294	0.20040	0.20628
	mm	10.160	6.350	1.905				
E__-CH5Q-1S0/1	in	0.437	0.200	0.062	4.8	0.8398	0.17374	0.14590
	mm	11.100	5.080	1.575				
E__-EAAK-3K0/1	in	0.500	0.370	0.125	4.6	1.6347	0.35856	0.58614
	mm	12.700	9.398	3.175				

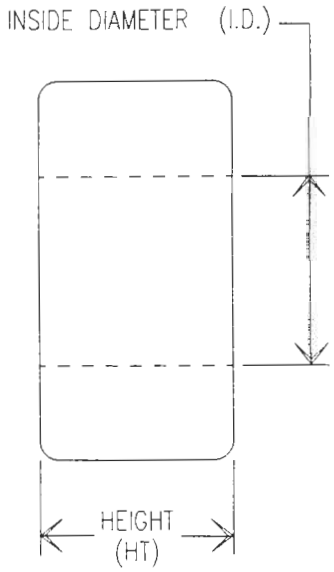




CORE P/N	Init perm	F31	F01	FA1	F52	F53	FB2	F82	FTA
	Znorm	15	120	370	850	1050	2000	5000	10000
		17	72	575	75	75	150	220	270
E_ _-1420-100/1	A_L	2.1	16.5	50.8	116.8	144.2	274.7	686.8	1373.6
	Z Typical	0.2	0.8	6.3	0.8	0.8	1.6	2.4	3.0
E_ _-3D4N-290/1	A_L	6.5	52.1	160.7	369.1	456.0	868.6	2171.4	4342.8
	Z Typical	0.6	2.5	19.9	2.6	2.6	5.2	7.6	9.3
E_ _-3K4N-1S0/1	A_L	9.2	73.7	227.2	521.9	644.6	1227.9	3069.8	6139.5
	Z Typical	0.8	3.5	28.1	3.7	3.7	7.3	10.7	13.2
E_ _-3K4N-1T0/1	A_L	9.1	72.5	223.4	513.2	634.0	1207.6	3018.9	6037.9
	Z Typical	0.8	3.5	27.6	3.6	3.6	7.2	10.6	13.0
E_ _-3N3Y-0X0/1	A_L	14.3	114.1	351.7	808.0	998.1	1901.1	4752.9	9505.7
	Z Typical	1.3	5.4	43.5	5.7	5.7	11.3	16.6	20.4
E_ _-383Y-1E0/1	A_L	8.9	71.3	220.0	505.3	624.3	1189.1	2972.6	5945.3
	Z Typical	0.8	3.4	27.2	3.5	3.5	7.1	10.4	12.8
E_ _-7V4N-2G0/1	A_L	13.4	107.2	330.6	759.4	938.1	1786.9	4467.3	8934.6
	Z Typical	1.2	5.1	40.9	5.3	5.3	10.7	15.6	19.2
E_ _-EAAQ-5C0/1	A_L	26.5	212.1	654.1	1502.6	1856.2	3535.6	8839.0	17678.1
	Z Typical	2.4	10.1	80.9	10.5	10.5	21.1	30.9	38.0
E_ _-EAEA-870/1	A_L	21.2	169.2	521.8	1198.8	1480.9	2820.7	7051.8	14103.7
	Z Typical	1.9	8.1	64.5	8.4	8.4	16.8	24.7	30.3
E_ _-X5G2-750/1	A_L	69.5	555.7	1713.3	3935.9	4862.0	9261.0	23152.6	46305.2
	Z Typical	6.3	26.5	211.8	27.6	27.6	55.3	81.0	99.5
E_ _-6R3Y-1C0/1	A_L	19.4	155.0	477.9	1097.9	1356.2	2583.3	6458.2	12916.4
	Z Typical	1.7	7.4	59.1	7.7	7.7	15.4	22.6	27.7
E_ _-4K5Q-1F0/1	A_L	16.9	135.2	417.0	958.0	1183.4	2254.1	5635.3	11270.6
	Z Typical	1.5	6.5	51.6	6.7	6.7	13.4	19.7	24.2
E_ _-BF5Q-2V0/1	A_L	21.1	169.1	521.3	1197.5	1479.3	2817.6	7044.1	14088.2
	Z Typical	1.9	8.1	64.4	8.4	8.4	16.8	24.7	30.3
E_ _-754N-1S0/1	A_L	18.4	147.3	454.3	1043.7	1289.3	2455.8	6139.5	12279.0
	Z Typical	1.7	7.0	56.2	7.3	7.3	14.7	21.5	26.4
E_ _-3N3Y-1C0/1	A_L	10.5	84.1	259.2	595.5	735.6	1401.1	3502.7	7005.5
	Z Typical	0.9	4.0	32.0	4.2	4.2	8.4	12.3	15.0
E_ _-3N3Y-1G0/1	A_L	9.7	77.7	239.5	550.3	679.8	1294.9	3237.1	6474.3
	Z Typical	0.9	3.7	29.6	3.9	3.9	7.7	11.3	13.9
E_ _-3N3Y-1S0/1	A_L	7.8	62.4	192.5	442.3	546.4	1040.8	2602.0	5204.0
	Z Typical	0.7	3.0	23.8	3.1	3.1	6.2	9.1	11.2
E_ _-4K4Q-1F0/1	A_L	16.9	135.2	417.0	958.0	1183.4	2254.1	5635.3	11270.6
	Z Typical	1.5	6.5	51.6	6.7	6.7	13.4	19.7	24.2
E_ _-4K5Q-2V0/1	A_L	8.5	67.6	208.5	479.0	591.7	1127.1	2817.6	5635.3
	Z Typical	0.8	3.2	25.8	3.4	3.4	6.7	9.9	12.1
E_ _-4Y3Y-0X0/1	A_L	19.3	154.2	475.4	1092.0	1349.0	2569.5	6423.8	12847.6
	Z Typical	1.7	7.4	58.8	7.7	7.7	15.3	22.5	27.6
E_ _-5Q64-400/1	A_L	6.5	51.7	159.6	366.5	452.8	862.5	2156.1	4312.3
	Z Typical	0.6	2.5	19.7	2.6	2.6	5.1	7.5	9.3
E_ _-755F-2H0/1	A_L	14.9	119.1	367.1	843.4	1041.9	1984.5	4961.3	9922.6
	Z Typical	1.3	5.7	45.4	5.9	5.9	11.8	17.4	21.3
E_ _-755F-2K0/1	A_L	14.2	113.9	351.2	806.8	996.7	1898.4	4746.0	9491.9
	Z Typical	1.3	5.4	43.4	5.7	5.7	11.3	16.6	20.4
E_ _-758X-1F0/1	A_L	34.9	279.1	860.6	1977.0	2442.2	4651.8	11629.6	23259.1
	Z Typical	3.1	13.3	106.4	13.9	13.9	27.8	40.7	50.0
E_ _-9C3Y-0X0/1	A_L	36.4	291.4	898.5	2064.1	2549.8	4856.8	12142.1	24284.1
	Z Typical	3.3	13.9	111.1	14.5	14.5	29.0	42.5	52.2
E_ _-AQ3Y-1G0/1	A_L	28.5	227.6	701.8	1612.2	1991.6	3793.5	9483.8	18967.6
	Z Typical	2.6	10.9	86.8	11.3	11.3	22.6	33.2	40.7
E_ _-B96R-106/1	A_L	21.0	168.2	518.6	1191.5	1471.8	-	-	-
	Z Typical	3.6	15.3	122.4	16.0	16.0	-	-	-
E_ _-BF60-1H0/1	A_L	42.6	340.5	1049.7	2411.5	2978.9	5674.2	14185.5	28370.9
	Z Typical	3.8	16.3	129.8	16.9	16.9	33.9	49.7	60.9
E_ _-BF75-250/1	A_L	36.7	293.6	905.4	2080.0	2569.4	4894.1	12235.4	24470.7
	Z Typical	3.3	14.0	111.9	14.6	14.6	29.2	42.8	52.6
E_ _-CH5Q-1S0/1	A_L	39.0	312.1	962.2	2210.5	2730.6	5201.2	13003.1	26006.2
	Z Typical	3.5	14.9	119.0	15.5	15.5	31.0	45.5	55.9
E_ _-EAAK-3K0/1	A_L	41.4	330.8	1020.1	2343.5	2894.9	5514.1	13785.3	27570.6
	Z Typical	3.7	15.8	126.1	16.5	16.5	32.9	48.3	59.2

MMG/NEOSID (CANADA) LIMITED
FERRRITE BEADS AND SLEEVES





The use of electronic circuits for data communications, computation, power transformation, and other purposes has made it necessary for diverse circuits to work in close proximity. Often parasitic oscillations interfere with adjoining circuits or other nearby equipment.

Beads made from ferrite are the most economical and versitile EMI/RFI attenuators. Generally a bead or sleeve tnreaded on a wire or lead, acts as a lossy suppressor at very high frequencies.

At these high frequencies the bead provides a series impedance that converts the high frequency signals into heat through magnetic losses. These losses have little or no effect on the lower frequencies at which the circuit is operating.

EMI/RFI suppression may be the most popular use for Neosid's beads, however these parts are still used in various RF circuits. If our F16 ferrite is not suitable for a particular RF application, please contact the factory, as all of Neosid's sizes can be manufactured in our F25 and F29 materials. Call for availability.

MMG/NEOSID (CANADA) LIMITED FERRITE BEADS AND SLEEVES

PART NUMBER	O.D. inches	I.D. inches	HT inches	MAT'L	AL VALUE nH
30T0075035	.075	.035	.055	F13	132
31T0075035	.075	.035	.055	F14	45
32T0075035	.075	.035	.055	F16	25
38T0075035	.075	.035	.055	F19	203
24T0075035	.075	.035	.055	F302	66
30T0075028	.075	.028	.125	F13	376
31T0075028	.075	.028	.125	F14	128
32T0075028	.075	.028	.125	F16	72
38T0075028	.075	.028	.125	F19	578
24T0075028	.075	.028	.125	F302	188
30T0105040	.105	.040	.140	F13	414
31T0105040	.105	.040	.140	F14	141
32T0105040	.105	.040	.140	F16	80
38T0105040	.105	.040	.140	F19	638
24T0105040	.105	.040	.140	F302	207
30T0140050	.140	.050	.130	F13	407
31T0140050	.140	.050	.130	F14	137
32T0140050	.140	.050	.130	F16	78
38T0140050	.140	.050	.130	F19	626
24T0140050	.140	.050	.130	F302	203
30T0140060	.140	.060	.130	F13	343
31T0140060	.140	.060	.130	F14	116
32T0140060	.140	.060	.130	F16	66
38T0140060	.140	.060	.130	F19	528
24T0140060	.140	.060	.130	F302	172
30T0140185	.140	.060	.185	F13	489
31T0140185	.140	.060	.185	F14	165
32T0140185	.140	.060	.185	F16	94
38T0140185	.140	.060	.185	F19	752
24T0140185	.140	.060	.185	F302	244
30T0150125	.150	.040	.125	F13	478
31T0150125	.150	.040	.125	F14	162
32T0150125	.150	.040	.125	F16	92
38T0150125	.150	.040	.125	F19	735
24T0150125	.150	.040	.125	F302	239
30T0150335	.150	.040	.335	F13	1281
31T0150335	.150	.040	.335	F14	434
32T0150335	.150	.040	.335	F16	246
38T0150335	.150	.040	.335	F19	1970
24T0150335	.150	.040	.335	F302	640

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MMG/NEOSID (CANADA) LIMITED FERRITE BEADS AND SLEEVES

PART NUMBER	.OD inches	.I.D inches	HT. inches	MAT'L	AL VALUE nH
30T0160050	.160	.050	.185	F13	640
31T0160050	.160	.050	.185	F14	216
32T0160050	.160	.050	.185	F16	123
38T0160050	.160	.050	.185	F19	985
24T0160050	.160	.050	.185	F302	320
30T0160060	.160	.060	.125	F13	375
31T0160060	.160	.060	.125	F14	127
32T0160060	.160	.060	.125	F16	72
38T0160060	.160	.060	.125	F19	576
24T0160060	.160	.060	.125	F302	188
30T0160080	.160	.080	.125	F13	275
31T0160080	.160	.080	.125	F14	93
32T0160080	.160	.080	.125	F16	53
38T0160080	.160	.080	.125	F19	423
24T0160080	.160	.080	.125	F302	138
30T0187150	.187	.080	.150	F13	397
31T0187150	.187	.080	.150	F14	134
32T0187150	.187	.080	.150	F16	76
38T0187150	.187	.080	.150	F19	611
24T0187150	.187	.080	.150	F302	198
30T0187005	.187	.080	.500	F13	1323
31T0187005	.187	.080	.500	F14	448
32T0187005	.187	.080	.500	F16	255
38T0187005	.187	.080	.500	F19	2035
24T0187005	.187	.080	.500	F302	622
30T0187007	.187	.080	.750	F13	1985
31T0187007	.187	.080	.750	F14	671
32T0187007	.187	.080	.750	F16	382
38T0187007	.187	.080	.750	F19	3054
24T0187007	.187	.080	.750	F302	992
30T0187085	.187	.080	.850	F13	2250
31T0187085	.187	.080	.850	F14	761
32T0187085	.187	.080	.850	F16	433
38T0187085	.187	.080	.850	F19	3461
24T0187085	.187	.080	.850	F302	1125
30T0187002	.187	.080	1.00	F13	2646
31T0187002	.187	.080	1.00	F14	896
32T0187002	.187	.080	1.00	F16	509
38T0187002	.187	.080	1.00	F19	4070
24T0187002	.187	.080	1.00	F302	1323

MMG/NEOSID (CANADA) LIMITED FERRITE BEADS AND SLEEVES

PART NUMBER	.OD inches	.I.D inches	HT. inches	MAT'L	AL VALUE nH
30T0200250	.200	.062	.250	F13	869
31T0200250	.200	.062	.250	F14	294
32T0200250	.200	.062	.250	F16	167
38T0200250	.200	.062	.250	F19	1338
24T0200250	.200	.062	.250	F302	435
30T0200312	.200	.062	.312	F13	1085
31T0200312	.200	.062	.312	F14	367
32T0200312	.200	.062	.312	F16	209
38T0200312	.200	.062	.312	F19	1669
24T0200312	.200	.062	.312	F302	543
30T0200440	.200	.062	.440	F13	1529
31T0200440	.200	.062	.440	F14	518
32T0200440	.200	.062	.440	F16	294
38T0200440	.200	.062	.440	F19	2353
24T0200440	.200	.062	.440	F302	765
30T0205080	.205	.095	.150	F13	363
31T0205080	.205	.095	.150	F14	123
32T0205080	.205	.095	.150	F16	70
38T0205080	.205	.095	.150	F19	560
24T0205080	.205	.095	.150	F302	180
30T0235250	.240	.125	.250	F13	520
31T0235250	.240	.125	.250	F14	176
32T0235250	.240	.125	.250	F16	100
38T0235250	.240	.125	.250	F19	800
24T0235250	.240	.125	.250	F302	260
30T0235500	.240	.125	.500	F13	1040
31T0235500	.240	.125	.500	F14	352
32T0235500	.240	.125	.500	F16	200
38T0235500	.240	.125	.500	F19	1600
24T0235500	.240	.125	.500	F302	520
30U0312312	.312	.100	.312	F13	1060
31U0312312	.312	.100	.312	F14	359
32U0312312	.312	.100	.312	F16	204
38U0312312	.312	.100	.312	F19	1632
24U0312312	.312	.100	.312	F302	530
30U0560500	.560	.250	.500	F13	1264
31U0560500	.560	.250	.500	F14	428
32U0560500	.560	.250	.500	F16	243
38U0560500	.560	.250	.500	F19	1945
24U0560500	.560	.250	.500	F302	632

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MMG/NEOSID (CANADA) LIMITED FERRITE BEADS AND SLEEVES

PART NUMBER	O.D. inches	I.D. inches	HT. inches	MAT'L	AL VALUE nH
30U0560011	.560	.250	1.125	F13	2843
31U0560011	.560	.250	1.125	F14	963
32U0560011	.560	.250	1.125	F16	547
38U0560011	.560	.250	1.125	F19	4374
24U0560011	.560	.250	1.125	F302	1422
30U0560501	.560	.312	.500	F13	939
31U0560501	.560	.312	.500	F14	318
32U0560501	.560	.312	.500	F16	180
38U0560501	.560	.312	.500	F19	1445
24U0560501	.560	.312	.500	F302	470
30U0560751	.560	.312	.750	F13	1408
31U0560751	.560	.312	.750	F14	477
32U0560751	.560	.312	.750	F16	271
38U0560751	.560	.312	.750	F19	2167
24U0560751	.560	.312	.750	F302	705
30U0560111	.560	.312	1.125	F13	2113
31U0560111	.560	.312	1.125	F14	715
32U0560111	.560	.312	1.125	F16	406
38U0560111	.560	.312	1.125	F19	3251
24U0560111	.560	.312	1.125	F302	1056
30V0740001	.745	.205	1.00	F13	3754
31V0740001	.745	.205	1.00	F14	1271
32V0740001	.745	.205	1.00	F16	722
38V0740001	.745	.205	1.00	F19	5775
24V0740001	.745	.205	1.00	F302	1877
30V0740015	.745	.205	1.50	F13	5630
31V0740015	.745	.205	1.50	F14	1900
32V0740015	.745	.205	1.50	F16	1080
38V0740015	.745	.205	1.50	F19	8660
24V0740015	.745	.205	1.50	F302	2815
30V0740002	.745	.205	2.00	F13	7500
31V0740002	.745	.205	2.00	F14	2540
32V0740002	.745	.205	2.00	F16	1440
38V0740002	.745	.205	2.00	F19	11550
24V0740002	.745	.205	2.00	F302	3750