Ferrite Cores

Short Form Catalog

MAGNETICS®

Index

Applications & Materials

Ferrites are dense, homogenous ceramic structures made by mixing iron oxide with oxides or carbonates of one or more metals such as zinc, manganese, nickel or magnesium. They are pressed, then fired in a kiln at 1093° C, and machined as needed to meet various operational requirements. Ferrite parts can be easily and economically molded into many different geometries. Many diverse materials are available, providing many choices of desirable electrical and mechanical properties.

Magnetics' ferrite cores are manufactured for a wide variety of applications. Magnetics has the leading MnZn ferrite materials for power transformers, power inductors, wideband transformers, common mode chokes and many other applications.

ADVANTAGES OF MAGNETICS' FERRITES

- The widest range of toroid sizes in power and high permeability materials
- Superior toroid coatings available in several options
- Standard gapping to precise inductance or mechanical dimension: wide range of coil former and assembly hardware available
- The full range of standard planar E and I cores
- Rapid prototyping capability for new development

FERRITE APPLICATION AREAS

APPLICATIONS	DESIRED PROPERTIES	PREFERRED MATERIALS	AVAILABLE SHAPES
Broadband Transformers	Low loss, high μ. Good frequency response.	J, W	Pot cores, toroids, E, U & I cores, RM, EP cores
Common Mode Chokes	Very high μ (permeability).	J, W	Toroids
Converter and Inverter Transformers	Low losses, high saturation.	F, L, P, R	Toroids, E, U, & I cores, pot cores, RS cores, Planar cores
Differential Inductors	Low losses, high temperature stability, good stability across load conditions.	F, P, R	Pot cores, EP cores, E-cores, RM cores, Planar cores, PQ cores
Narrow Band Transformers	Moderate Q, high μ, high stability.	F, J	Pot cores, toroids, RM, EP
Noise Filters	High μ, good frequency response.	J, W	Toroids
Power Inductors	Low losses at high flux densities and temperatures. High saturation. Good stability across load conditions.	F, L, P, R	Pot cores, E cores, PQ cores, RM cores, Planar cores
Power Transformers	High μ and low losses at high flux densities and temperatures. High saturation. Low existing currents.	F, L, P, R	Ungapped pot cores, E, U & I cores toroids, EP cores, RS cores, DS cores, PQ cores, Planar cores
Pulse Transformers	High μ, low loss, high V set product.	J, W	Toroids
Telecom Inductors	Low losses, high temperature stability, good stability across load conditions.	F, P, R	Pot cores, EP cores, E cores, RM cores, Planar cores

			INDUCTORS & POWER TRANSFORMERS				EMI/RFI FILTERS & BROADBAND TRANSFORMERS	
MATERIAL			**L**	**R**	**P**	**F**	**J**	**W**
Initial Permeability	μ_i	—	900 ± 20%	2,300 ± 25%	2,500 ± 25%	3,000 ± 20%	5,000 ± 20%	10,000 ± 30%
Maximum Usable Frequency (50% roll-off)	f	MHz	<6	<1.5	<1.2	<1.3	<1	<0.25
Relative Loss Factor	$\frac{\tan \delta}{\mu_{iac}}$	10^{-6}				<8 (100kHz)	<20 (100kHz)	<7 (10kHz)
Curie Temperature	Tc	˚C	>300	>230	>230	>210	>140	>125
Flux Density @ 1,194 A/m (15 Oe)	Bm	G mT		5,000 500	5,000 500	4,900 490	4,300 430	4,300 430
Remanence	Br	G mT		1,100 110	1,100 110	1,200 120	1,000 100	800 80
Power Loss (PL) Sine Wave, in mW/cm3 (typical)	25kHz 200mT (2,000G)	@25˚C @60˚C @100˚C @120˚C		130 85 70 85	120 90 95 130	90 160 240		
	100kHz 100mT (1,000G)	@25˚C @60˚C @100˚C @120˚C		140 100 70 90	125 90 125 165	100 180 225		
	500kHz 50mT (500G)	@25˚C @60˚C @100˚C @120˚C	100	375 300 250 300	300 250 275 350			
Available In:								
Toroids			X	X	X	X	X	X
E, I Cores			X	X	X	X	X	X
EFD Cores			X	X	X	X	X	
ETD Cores			X	X	X	X		
EER Cores			X	X	X	X		
EC Cores				X	X	X		
U, I, UR Cores			X	X	X	X	X	X
Planar E, I Cores			X	X	X	X		
ER Cores			X	X	X	X		
PQ Cores			X	X	X	X		
Pot Cores			X	X	X	X	X	X
RS/DS Cores			X	X	X	X	X	X
RM Cores			X	X	X	X	X	X
EP Cores			X	X	X	X	X	X

Toroids

2.54mm – 9.53mm

TOROIDS

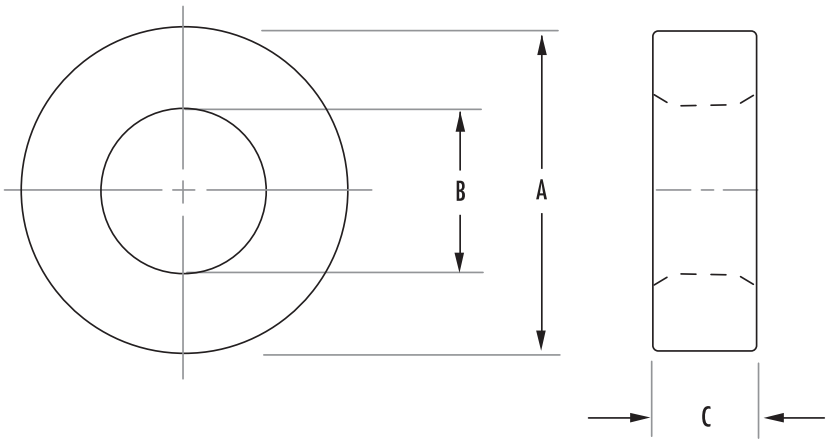
Ferrite toroids offer high magnetic efficiency as there is no air gap, and the cross sectional area is uniform. Available in many sizes (O.D.s from 2.54 mm to 140 mm) and materials (permeabilities ranging from 900 to 10,000), this section lists common sizes. For additional sizes contact Magnetics Sales.

Toroid mounts and headers are available in a range of sizes.

Typical applications for high permeability toroids (J and W materials) include common mode chokes, broadband transformers, pulse transformers and current transformers. L, R, P and F material toroids are excellent choices for high frequency transformers. Special sizes in J material are available for Ground Fault Interrupter applications.

		AVAILABLE COATINGS			NOMINAL A_L (MH/1000T)					
SIZE	ORDERING CODE	V	Y	Z	L	R	P	F	J	W
2.54 x 1.27 x 1.27	0_40200TC		X			400	454	525	875	1,750
3.51 x 1.83 x 1.27	0_40301TC		X			380	410	495	825	1,650
3.94 x 2.24 x 1.27	0_40502TC		X			340	368	440	735	1,470
3.94 x 2.24 x 2.54	0_40503TC		X			670	716	885	1,475	2,950
4.83 x 2.29 x 1.27	0_40401TC		X			440	474	570	950	1,900
4.83 x 2.29 x 2.54	0_40402TC		X			870	948	1,140	1,900	3,800
5.84 x 3.05 x 1.52	0_40601TC		X		178	450	488	585	980	1,960
5.84 x 3.05 x 3.18	0_40603TC		X		372	940	1,020	1,225	2,040	4,080
7.62 x 3.18 x 4.78	0_40705TC		X		751	1,920	2,088	2,505	4,175	8,350
9.53 x 5.59 x 7.11	0_40907TC		X	X	683	1,730	1,884	2,260	3,765	7,530
9.53 x 4.75 x 3.18	0_41003TC		X	X	399	1,000	1,095	1,314	2,196	4,392
9.53 x 4.75 x 4.78	0_41005TC		X	X	599	1,510	1,650	1,980	3,308	6,616

		MAGNETIC DATA					
SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	V_e (mm³)	Window Area (cm²)	WaAc (cm⁴)	Weight (grams each)
2.54 x 1.27 x 1.27	0_40200TC	5.5	0.77	4.3	0.01	0.000077	0.03
3.51 x 1.83 x 1.27	0_40301TC	7.65	1.03	7.87	0.02	0.0002	0.04
3.94 x 2.24 x 1.27	0_40502TC	9.2	1.05	9.7	0.03	0.0003	0.05
3.94 x 2.24 x 2.54	0_40503TC	9.2	2	19	0.03	0.0006	0.1
4.83 x 2.29 x 1.27	0_40401TC	10.2	1.5	15.7	0.04	0.0006	0.09
4.83 x 2.29 x 2.54	0_40402TC	10.2	3.1	31.5	0.04	0.001	0.17
5.84 x 3.05 x 1.52	0_40601TC	13	2	26.7	0.07	0.001	0.14
5.84 x 3.05 x 3.18	0_40603TC	13	4.3	56	0.07	0.003	0.3
7.62 x 3.18 x 4.78	0_40705TC	15	9.9	149	0.07	0.007	0.9
9.53 x 5.59 x 7.11	0_40907TC	22.7	13.7	310	0.24	0.03	1.6
9.53 x 4.75 x 3.18	0_41003TC	20.7	7.3	151	0.17	0.12	0.82
9.53 x 4.75 x 4.78	0_41005TC	20.7	10.9	227	0.17	0.01	1.2



HOW TO ORDER

0	J	4	14	06	TC	XX

Coating code
Ferrite core material
Used for all ferrite types
Approximate diameter in mm
Approximate height in mm
Toroid core
Special specification code

COATING CODES

0 – Bare core
V – Nylon coating
Y – Parylene C®
Z – Epoxy coating

SPECIAL SPECIFICATION CODES

CC – Color coded

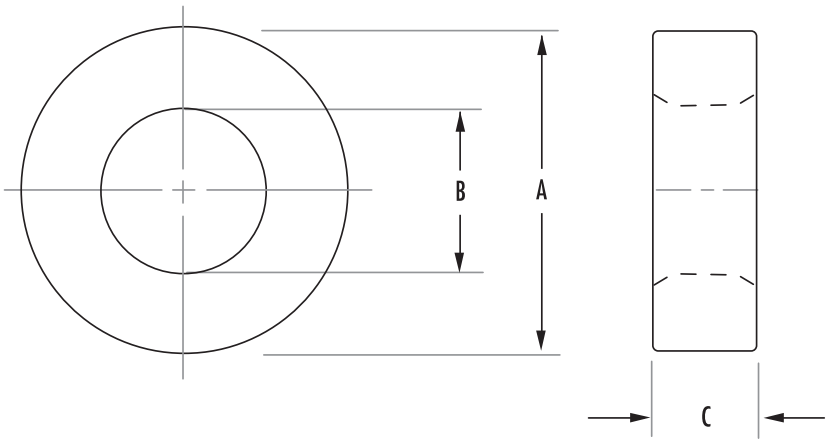
	DIMENSIONS IN MM		
ORDERING CODE	A	B	C
0_40200TC	2.54	1.27	1.27
0_40301TC	3.46	1.78	1.27
0_40502TC	3.94	2.24	1.27
0_40503TC	3.94	2.24	2.54
0_40401TC	4.83	2.29	1.27
0_40402TC	4.83	2.29	2.54
0_40601TC	5.84	3.05	1.52
0_40603TC	5.84	3.05	3.18
0_40705TC	7.62	3.18	4.78
0_40907TC	9.53	5.59	7.11
0_41003TC	9.53	4.75	3.18
0_41005TC	9.53	4.75	4.78

Toroids

12.7mm – 15.9mm

		AVAILABLE COATINGS			NOMINAL A_L (MH/1000T)					
SIZE	ORDERING CODE	V	Y	Z	L	R	P	F	J	W
12.7 x 5.16 x 6.35	**0_41206TC**	X	X	X	1,029	2,600	2,820	3,384	5,640	11,280
12.7 x 8.14 x 3.15	**0_41303TC**	X	X	X	255	680	745	894	1,488	2,976
12.7 x 8.14 x 3.89	**0_41304TC**	X	X	X	311	850	865	1,116	1,860	
12.7 x 8.14 x 5.08	**0_41305TC**	X	X	X	407	1,090	1,190	1,430	2,380	4,760
12.7 x 8.14 x 6.35	**0_41306TC**	X	X	X	508	1,360	1,485	1,782	2,968	5,936
12.7 x 7.14 x 5.08	**0_41405TC**	X	X	X	526	1,320	1,440	1,730	2,890	5,780
12.7 x 7.14 x 6.35	**0_41406TC**	X	X	X	658	1,660	1,805	2,166	3,612	7,224
12.7 x 7.14 x 4.78	**0_41407TC**	X		X	495	1,240	1,356	1,630	2,715	5,430
12.7 x 7.14 x 7.62	**0_41410TC**	X		X	790	1,990	2,162	2,595	4,335	8,675
13.6 x 7.01 x 3.51	**0_41435TC**	X		X						4,520
13.2 x 7.37 x 3.96	**0_41506TC**			X	415	1,020	1,111	1,334	2,295	4,590
14 x 8.99 x 5	**0_41450TC**	X		X	399	990	1,080	1,290	2,160	4,320
15.9 x 9.07 x 4.7	**0_41605TC**	X		X	475	1,260	1,375	1,650	2,760	5,520
15.9 x 9.07 x 9.4	**0_41610TC**	X		X	950	2,450	2,660	3,200		10,600

		MAGNETIC DATA					
SIZE	ORDERING CODE	l_e (mm)	A_e (mm^2)	V_e (mm^3)	Window Area (cm^2)	WaAc (cm^4)	Weight (grams each)
12.7 x 5.16 x 6.35	**0_41206TC**	25	22	550	0.2	0.04	3.3
12.7 x 8.14 x 3.15	**0_41303TC**	31.7	7.1	226	0.49	0.03	1.2
12.7 x 8.14 x 3.89	**0_41304TC**	31.7	8.7	276		0.045	
12.7 x 8.14 x 5.08	**0_41305TC**	31.7	11.4	361	0.49	0.05	1.9
12.7 x 8.14 x 6.35	**0_41306TC**	31.7	14	451.0	0.49	0.07	2.4
12.7 x 7.14 x 5.08	**0_41405TC**	29.5	13.7	405		0.054	
12.7 x 7.14 x 6.35	**0_41406TC**	29.5	17.1	507	0.4	0.06	2.7
12.7 x 7.14 x 4.78	**0_41407TC**	29.5	12.9	381	0.4	0.05	1.9
12.7 x 7.14 x 7.62	**0_41410TC**	30.8	42.2	1302	0.4	0.07	
13.6 x 7.01 x 3.51	**0_41435TC**	30.1	11.2	336	0.38	0.04	
13.2 x 7.37 x 3.96	**0_41506TC**	30.6	11.2	343	0.42	0.04	1.9
14 x 8.99 x 5	**0_41450TC**	35	12.3	430	0.63	0.07	2.2
15.9 x 9.07 x 4.7	**0_41605TC**	37.2	15.6	580	0.62	0.09	2.8
15.9 x 9.07 x 9.4	**0_41610TC**	37.2	31.2	1,164	0.62	0.18	



HOW TO ORDER

0	J	4	14	06	TC	XX

Coating code
Ferrite core material
Used for all ferrite types
Approximate diameter in mm
Approximate height in mm
Toroid core
Special specification code

COATING CODES

0 – Bare core
V – Nylon coating
Y – Parylene C®
Z – Epoxy coating

SPECIAL SPECIFICATION CODES

CC – Color coded

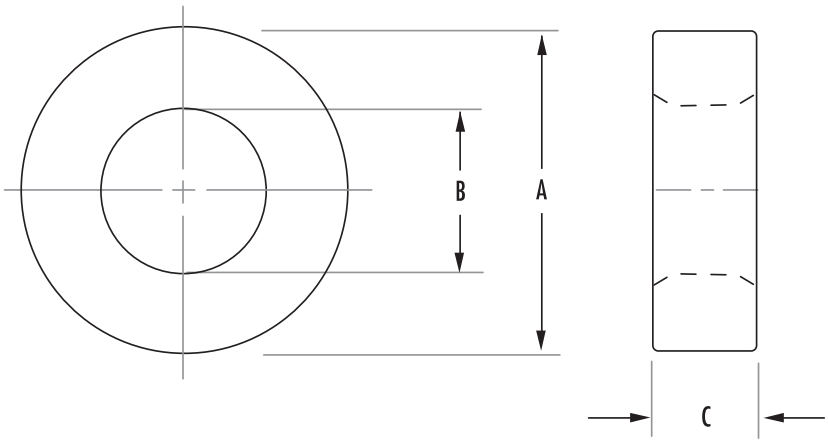
	DIMENSIONS IN MM		
ORDERING CODE	A	B	C
0_41206TC	12.7	5.16	6.35
0_41303TC	12.7	8.14	3.15
0_41304TC	12.7	8.14	3.89
0_41305TC	12.7	8.14	5.08
0_41306TC	12.7	8.14	6.35
0_41405TC	12.7	7.14	5.08
0_41406TC	12.7	7.14	6.35
0_41407TC	12.7	7.14	4.78
0_41410TC	12.7	7.14	7.62
0_41435TC	13.6	7.01	3.51
0_41506TC	13.2	7.37	3.96
0_41450TC	14	8.99	5
0_41605TC	15.9	9.07	4.7
0_41610TC	15.9	9.07	9.4

Toroids

18.4mm – 32mm

		AVAILABLE COATINGS			NOMINAL A_L (MH/1000T)					
SIZE	ORDERING CODE	V	Y	Z	L	R	P	F	J	W
18.4 x 9.75 x 10.3	**0_41809TC**	X		X	1,177	2,810	3,050	3,660	6,115	12,200
20.6 x 12.7 x 6.35	**0_42106TC**	X		X	553	1,380	1,500	1,680	2,800	5,600
20.6 x 12.7 x 8.89	**0_42109TC**	X		X	774	1,930	2,100	2,520	4,200	8,400
22.1 x 13.7 x 6.35	**0_42206TC**	X		X	547	1,380	1,510	1,812	3,020	6,040
22.1 x 13.7 x 7.9	**0_42207TC**	X		X	680	1,720	1,875	2,250	3,700	7,400
22.1 x 13.7 x 12.7	**0_42212TC**	X		X	1,093	2,770	3,020	3,624	6,040	12,080
25.3 x 15.4 x 7.66	**0_42507TC**	X		X	705	1,800	1,958	2,348	3,913	7,825
25.3 x15.4 x 7.66	**0_42508TC**	X		X	891	2,220	2,420	2,900	4,830	9,660
26.9 x 14.2 x 12.2	**0_42712TC**	X		X		3,610	3,920	4,710	7,650	15,300
29 x 19 x 7.43	**0_42908TC**	X		X		1,450	1,585	1,902	3,170	6,340
29 x 19 x 15.2	**0_42915TC**			X		2,960	3,222	3,868	6,447	12,894
31 x 19.1 x 12.74	**0_43113TC**			X		2,850	3,100	3,720	6,200	12,400
32 x 15 x 4.5	**0_43205TC**			X		1,480	1,610	1,930	3,220	6,440

		MAGNETIC DATA					
SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	V_e (mm³)	Window Area (cm²)	WaAc (cm⁴)	Weight (grams each)
18.4 x 9.75 x 10.3	**0_41809TC**	41.4	43.1	1,783	0.74	0.3	9.9
20.6 x 12.7 x 6.35	**0_42106TC**	50.3	24.6	1,238	1.27	0.29	5.4
20.6 x 12.7 x 8.89	**0_42109TC**	50	34	1,733	1.27	0.41	8.1
22.1 x 13.7 x 6.35	**0_42206TC**	54.1	26.2	1,417	1.48	0.37	6.4
22.1 x 13.7 x 7.9	**0_42207TC**	54.2	32.5	1,763	1.48	0.46	8.5
22.1 x 13.7 x 12.7	**0_42212TC**	54.1	52.3	2,834	1.48	0.75	13.5
25.3 x 15.4 x 7.66	**0_42507TC**	61.5	37.1	2,284	1.89	0.7	11.6
25.3 x15.4 x 7.66	**0_42508TC**	61.5	48	2,981	1.89	0.89	14.9
26.9 x 14.2 x 12.2	**0_42712TC**	60.2	73.2	4,410	1.57	1.08	
29 x 19 x 7.43	**0_42908TC**	73.2	37	2,679	2.84	1.02	12.9
29 x 19 x 15.2	**0_42915TC**	73.2	74.9	5,481	2.84	2.1	27.6
31 x 19.1 x 12.74	**0_43113TC**	75.4	73.6	5,547	2.83	2.11	29.3
32 x 15 x 4.5	**0_43205TC**	67.2	36.4	2,451	0.345	.61	12.9



HOW TO ORDER

0	J	4	22	06	TC	XX

Coating code
Ferrite core material
Used for all ferrite types
Approximate diameter in mm
Approximate height in mm
Toroid core
Special specification code

COATING CODES

0 – Bare core
V – Nylon coating
Y – Parylene C®
Z – Epoxy coating

SPECIAL SPECIFICATION CODES

CC – Color coded

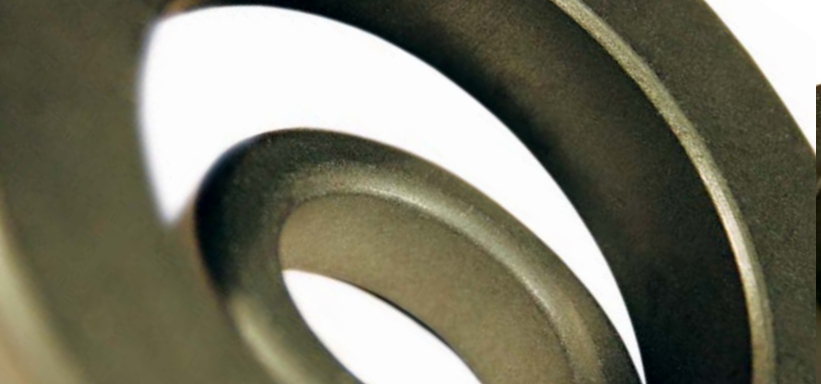
	DIMENSIONS IN MM		
ORDERING CODE	A	B	C
0_41809TC	18.4	9.75	10.3
0_42106TC	20.6	12.7	6.35
0_42109TC	20.6	12.7	8.89
0_42206TC	22.1	13.7	6.35
0_42207TC	22.1	13.7	7.9
0_42212TC	22.1	13.7	12.7
0_42507TC	25.34	15.45	7.66
0_42508TC	25.34	15.45	10
0_42712TC	26.9	14.2	12.2
0_42908TC	29	19	7.43
0_42915TC	29	19	15.2
0_43113TC	30.83	19.06	12.74
0_43205TC	32	15	4.5

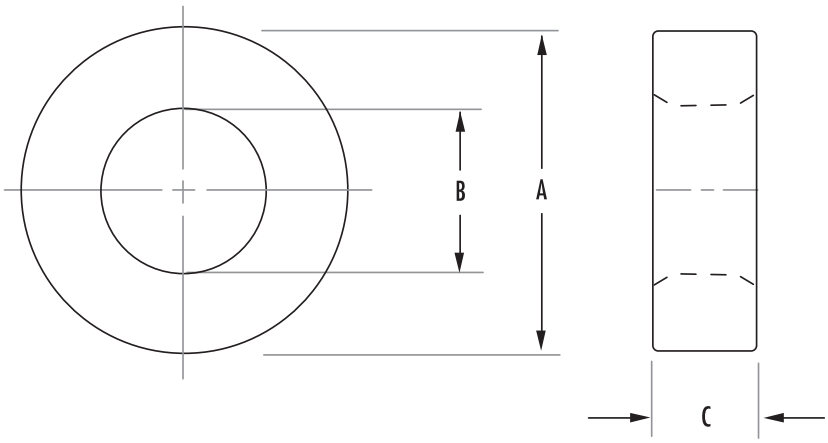
Toroids

36mm – 61mm

		AVAILABLE COATINGS			NOMINAL A_L (MH/1000T)					
SIZE	ORDERING CODE	V	Y	Z	L	R	P	F	J	W
36 x 23 x 10	**0_43610TC**			X		2,030	2,210	2,726	4,543	9,085
36 x 23 x 15	**0_43615TC**			X		3,100	3,366	4,040	6,736	13,400
38 x 19 x 6.35	**0_43806TC**			X		2,020	2,200	2,640	4,400	8,800
38.1 x 19 x 12.7	**0_43813TC**			X		3,850	4,185	5,020	8,365	16,700
38.1 x 19 x 25.4	**0_43825TC**			X		8,060	8,762	10,040	16,730	33,400
41.8 x 26.2 x 18	**0_44015TC**			X		3,867	4,204	5,040	8,408	16,816
44.3 x19 x 15.9	**0_44416TC**			X		5,360	5,830	7,000	11,600	23,200
46.9 x 27 x 15	**0_44715TC**			X		3,700	4,030	4,840	8,075	16,100
49.1 x 33.8 x 15.9	**0_44916TC**			X		2,710	2,950	3,540	5,900	11,800
49.1 x 31.8 x 15.9	**0_44920TC**			X		2,790	3,032	3,640	6,065	12,130
49.1 x 31.8 x19.05	**0_44925TC**			X		3,420	3,718	4,460	7,435	14,870
49.1 x 33.8 x 31.3	**0_44932TC**			X		5,430	5,900	7,080	11,800	23,600
61 x 41.8 x 19.05	**0_46019TC**								7,100	

		MAGNETIC DATA					
SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	V_e (mm³)	Window Area (cm²)	WaAc (cm⁴)	Weight (grams each)
36 x 23 x 10	**0_43610TC**	89.6	63.9	5,731	4.15	2.61	29.4
36 x 23 x 15	**0_43615TC**	89.6	95.9	8,596	2.85	3.93	44
38 x 19 x 6.35	**0_43806TC**	82.9	58.3	4,644	2.85	1.62	26.4
38.1 x 19 x 12.7	**0_43813TC**	82.9	115.6	9,452	2.85	3.27	51.7
38.1 x 19 x 25.4	**0_43825TC**	82.8	231	19,304	2.85	6.58	103.4
41.8 x 26.2 x 18	**0_44015TC**	103	138	14,205	5.4	7.45	68.9
44.3 x19 x 15.9	**0_44416TC**	84	189	16,770	2.85	5.33	80.8
46.9 x 27 x 15	**0_44715TC**	110	145.5	16,063	5.72	8.12	84
49.1 x 33.8 x 15.9	**0_44916TC**	127	118	15,010	8.99	10.4	75.3
49.1 x 31.8 x 15.9	**0_44920TC**	123	119	14,700	7.94	9.45	74.6
49.1 x 31.8 x19.05	**0_44925TC**	123.2	161.8	19,927	7.94	11.6	91
49.1 x 33.8 x 31.3	**0_44932TC**	127	236	30,000	8.99	21.2	150.6
61 x 41.8 x 19.05	**0_46019TC**	157.6	180.5	28.453		24.0	





HOW TO ORDER

0	J	4	22	06	TC	XX

Coating code
Ferrite core material
Used for all ferrite types
Approximate diameter in mm
Approximate height in mm
Toroid core
Special specification code

COATING CODES

0 – Bare core
V – Nylon coating
Y – Parylene C®
Z – Epoxy coating

SPECIAL SPECIFICATION CODES

CC – Color coded

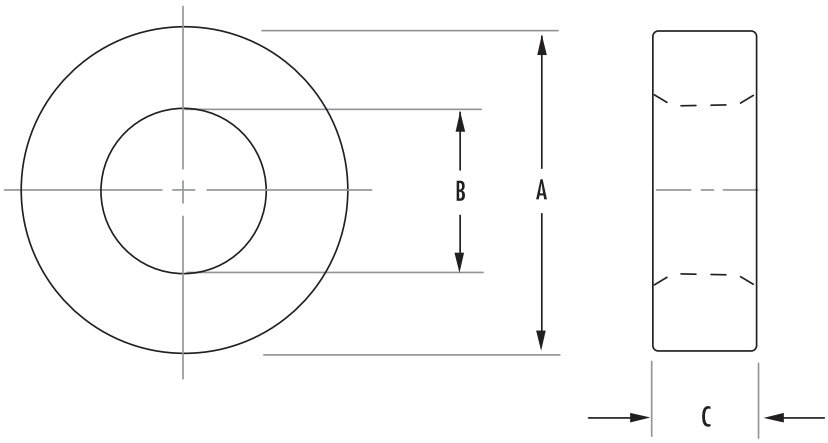
	DIMENSIONS IN MM		
ORDERING CODE	A	B	C
0_43610TC	36	23	10
0_43615TC	36	23	15
0_43806TC	38	19	6.35
0_43813TC	38.1	19	12.7
0_43825TC	38.1	19	25.4
0_44015TC	41.8	26.2	18
0_44416TC	44.3	19	15.9
0_44715TC	46.9	27	15
0_44916TC	49.1	33.8	15.9
0_44920TC	49.1	31.8	15.9
0_44925TC	49.1	31.8	19.05
0_44932TC	49.1	33.8	31.3
0_46019TC	60.9	41.8	19.1

Toroids

61mm – 140mm

		AVAILABLE COATINGS			NOMINAL A_L (MH/1000T)					
SIZE	ORDERING CODE	V	Y	Z	L	R	P	F	J	W
61 x 35.6 x 12.7	**0_46113TC**			X		3,140	3,491	4,107	6,845	13,690
63 x 38 x 24.5	**0_46325TC**			X						21,056
63 x 38 x 24.5	**0_46326TC**			X		5,770	6,270	7,530	12,500	
73.7 x 38.9 x 12.5	**0_47313TC**			X		3,700	4,024	4,880	8,140	16,280
73.7 x 38.9 x 25.2	**0_47325TC**			X		7,470	8,050	9,760	16,280	
85.7 x 55.5 x 12.7	**0_48613TC**			X		2,510	2,726	3,310	5,520	11,040
85.7 x 55.5 x 25.26	**0_48625TC**			X		5,040	5,480	6,570	10,960	
85.7 x 55.5 x 25.24	**0_48626TC**			X						18,760
102 x 65.8 x 15	**0_49715TC**			X		3,025	3,464	3,945	6,575	11,178
107 x 65 x 18	**0_49718TC**			X		4,127	4,486	5,383	8,972	15,252
107 x 65 x 25	**0_49725TC**			X		5,732	6,230	7,477	9,346	21,184
140 x 106 x 25	**0_49740TC**			X		3,200	3,477	4,173	6,955	11,823

		MAGNETIC DATA					
SIZE	ORDERING CODE	l_e (mm)	A_e (mm^2)	V_e (mm^3)	Window Area (cm^2)	WaAc (cm^4)	Weight (grams each)
61 x 35.6 x 12.7	**0_46113TC**	145	156	22,500	9.93	15.5	117.3
63 x 38 x 24.5	**0_46325TC**	152	300	45,598	11.3	34.4	231
63 x 38 x 24.5	**0_46326TC**	152	300	45,598	11.3	34.4	231
73.7 x 38.9 x 12.5	**0_47313TC**	165	210	34,771	11.9	25.2	177
73.7 x 38.9 x 25.2	**0_47325TC**	165	423	70,009		50.1	
85.7 x 55.5 x 12.7	**0_48613TC**	214.9	188.8	40,582	24.2	45.2	203
85.7 x 55.5 x 25.6	**0_48625TC**	215	375	80,717		90.0	
85.7 x 55.5 x 25.4	**0_48626TC**	215	377	81,165		90.0	
102 x 65.8 x 15	**0_49715TC**	255.3	267.2	68,821	34	90.8	334
107 x 65 x 18	**0_49718TC**	259.31	320.27	96,013	33.2	106	466
107 x 65 x 25	**0_49725TC**	259.31	514.3	133,351	33.2	170.7	647
140 x 106 x 25	**0_49740TC**	381.50	422.30	161,086	88.2	372.5	781



HOW TO ORDER

0	J	4	97	40	TC	XX

Coating code
Ferrite core material
Used for all ferrite types
Approximate diameter in mm
Approximate height in mm
Toroid core
Special specification code

COATING CODES

0 – Bare core
V – Nylon coating
Y – Parylene C®
Z – Epoxy coating

SPECIAL SPECIFICATION CODES

CC – Color coded

	DIMENSIONS IN MM		
ORDERING CODE	A	B	C
0_46113TC	61	35.6	12.7
0_46325TC	63	38	24.5
0_46326TC	63	38	24.5
0_47313TC	73.7	38.9	12.5
0_47325TC	73.7	38.9	25.2
0_48613TC	85.7	55.5	12.7
0_48625TC	85.7	55.5	25.26
0_48626TC	85.7	55.5	25.24
0_49715TC	102	65.8	15
0_49718TC	107	65	18
0_49725TC	107	65	25
0_49740TC	140	106	25

E, I Cores

12mm – 35mm

E CORES

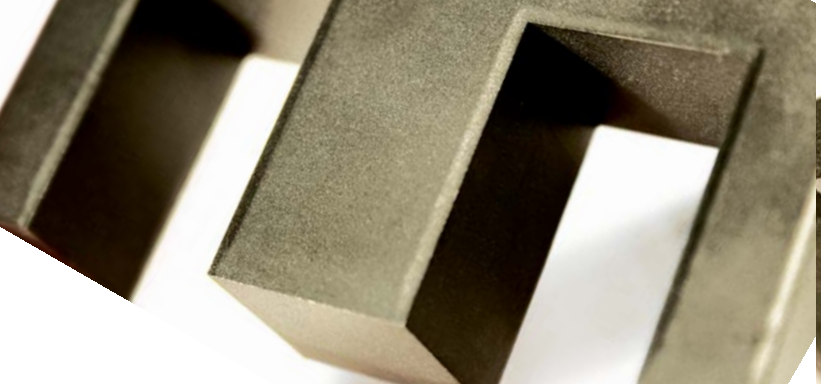
E cores are less expensive than pot cores, and have the advantage of simple bobbin winding plus easy assembly. E cores do not, however, offer self-shielding. Lamination size E cores are available to fit commercially offered bobbins previously designed to fit the strip stampings of standard lamination sizes. Metric and DIN sizes are also available. E cores can be pressed to different thicknesses, providing a selection of cross-sectional areas. Bobbins for these different cross sections are available.

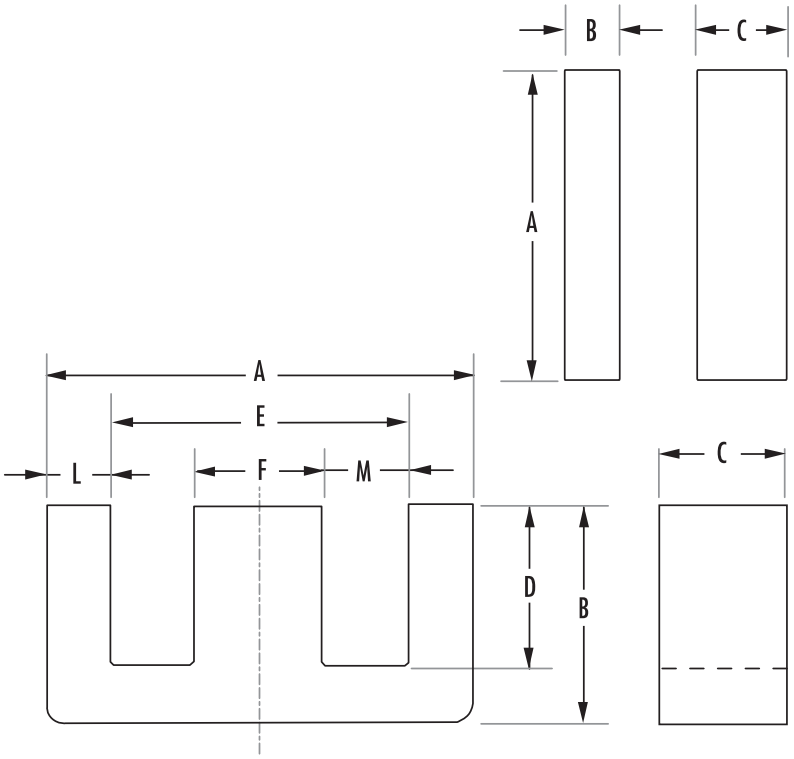
E cores can be mounted in different directions and, if desired, provide a low profile. Printed circuit bobbins are available for low profile mounting.

Typical applications for E cores include differential, power and telecom inductors, as well as, broadband, power, converter and inverter transformers.

		NOMINAL A_L (MH/1000T)					
TYPE/SIZE	ORDERING CODE	L	R	P	F	J	W
E 9/4/2	**0_40904EC**	280	493		650	1,040	
Lam E2829	**0_41203EC**	350	587		770	1,367	
Lam E2829	**0_41205EC**	700		1,600	1,950		
Lam E3233	**0_41707EC**	520	1,013	1,100	1,300	1,900	
Lam EI187	**0_41808EC**	550	1,153	1,253	1,500	2,500	4,293
Lam EI187	**0_41810EC**	1,000	2,300	2,500	3,000	5,000	8,600
Lam E2425	**0_42510EC**	800	1,767	1,920	2,300	3,700	
EF25	**0_42513EC**	900	1,900	2,491	2,460	4,000	
Lam EL2425	**0_42515EC**	540	1,153	1,253	1,500	2,400	
Lam 2425I	**0_42515IC**		1,760	1,913	2,290	3,667	
Lam E2425	**0_42520EC**	1,600	3,533	3,840	4,600	7,400	13,813
E 25/12/11	**0_42526EC**		2,800	3,784	4,068	5,951	
Lam EL2425	**0_42530EC**	1,070	2,307	2,507	3,000	4,800	
DIN 30/7	**0_43007EC**	920	2,060	2,240	2,700	3,800	8,200
Lam E2627	**0_43009EC**	1,400	2,893	3,147	3,780	5,893	
Lam EI375	**0_43515EC**		2,667	2,907	3,500	5,813	10,653
E 35/20/9	**0_43520EC**		1,947	2,120	2,555	4,240	

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	A min (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
E 9/4/2	**0_40904EC**	15.6	5.0	3.6	78		0.5
Lam E2829	**0_41203EC**	27.8	10.1	10.1	279	0.001	1.3
Lam E2829	**0_41205EC**	27.7	20.2	20	558	0.03	2.6
Lam E3233	**0_41707EC**	30.4	16.6	12.6	505	0.03	3
Lam EI187	**0_41808EC**	39.9	22.6	22.1	900	0.07	4.4
Lam EI187	**0_41810EC**	40.1	45.5	45.4	1,820	0.15	8.5
Lam E2425	**0_42510EC**	49	39.5	37	1,930	0.16	9.5
EF25	**0_42513EC**	57.8	51.8	51.8	2,990	0.24	16
Lam EL2425	**0_42515EC**	73.5	78.4	39.7	2,950	0.42	15
Lam 2425	**0_42515IC**	48.1	40.1	39.7	1,930	0.32	10
Lam E2425	**0_42520EC**	48	76.8	76.8	3,760	0.21	19
E 25/12/11	**0_42526EC**	57.5	78.4	78.4	4,500	0.51	36
Lam EL2425	**0_42530EC**	73.5	80.2	79.4	5,900	0.84	30
DIN 30/7	**0_43007EC**	67	60	49	4,000	0.5	20
Lam E2627	**0_43009EC**	61.9	83.2	83.2	5,150	0.74	26
Lam EI375	**0_43515EC**	69.3	87	87	5,590	0.85	33
E 35/20/9	**0_43520EC**	94.3	90.6	90.5	8,540	1.68	42





HOW TO ORDER

OR 4 30 07 EC XX

- Standard core
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate height in mm
- Geometry code/gap code
- Special specification code

SHAPE CODE

0 – Standard

GEOMETRY CODE

EC – ETD, EC, ER, EER, EFD, planar and lamination sizes

GAP CODE

Note – Any practical gap is available

Cores are sold per piece (for sets multiply by 2). Gapped pieces are normally packed separately from ungapped pieces. If desired in sets, this must be specified.

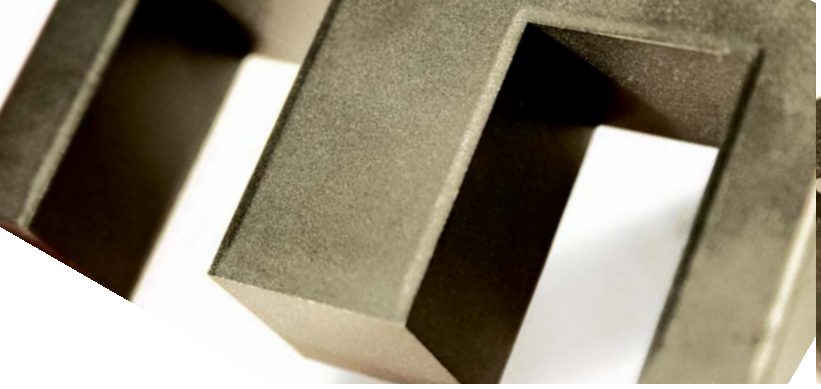
	DIMENSIONS IN MM							
TYPE/SIZE	A	B	C	D	E	F	L	M
E 9/4/1	9 ± 0.4	4.06 ± 0.25	1.91 ± 0.13	2.03 min	4.85 min	1.91 ± .013	1.91 ± 0.25	1.57 ± 0.25
Lam E2829	12.7 ± 0.25	5.69 ± 0.18	3.18 ± 0.13	3.96 min	9.19 min	3.18 ± 0.08	1.57 nom	3.05 min
Lam E2829	12.7 ± 0.25	5.69 ± 0.18	6.4 ± 0.15	3.96 min	9.19 min	3.2 ± 0.13	1.57 ref	3.05 min
Lam E3233	16.8 ± .38	7.11 ± 0.18	3.56 ± 0.12	3.94 min	10.4 min	3.56 ± 0.13	2.79 nom	3.63 min
Lam EI187	19.1 ± .4	8.1 ± 0.13	4.75 ± 0.2	5.7 ± 0.13	14.33 ± 0.33	4.75 ± 0.2	2.38 nom	4.79 nom
Lam EI187	19.13 ± .4	8.1 ± 0.18	9.53 ± 0.13	5.7 min	14 min	4.75 ± 0.2	2.38 ref	4.89 ref
Lam E2425	25.4 ± .6	9.65 ± 0.2	6.35 ± 0.25	6.4 min	18.8 min	6.25 ± 0.25	3.3 nom	6.1 min
EF25	25 + 0.8/-0.7	12.8 + 0/-0.4	7.5 + 0/-0.6	8.7 + 0.6/-0	17.5 + 0.9	7.5 + 0/-0.5	3.55 ref	5.35 ref
Lam EL2425	25.4 ± 0.38	15.9 ± 0.25	6.35 ± 0.25	12.6 min	18.8 min	6.35 ± 0.13	3.12 ± 0.13	6.4 ± 0.25
Lam 2425I	26.4 ± 0.38	3.18 ± 0.12	7.37 ± 0.25					
Lam E2425	25.4 ± 0.6	9.65 ± 0.2	12.7 ± 0.25	6.4 min	18.8 min	6.35 ± 0.25	3.6 max	6.1 min
E 25/12/11	25 + 0.8/-0.7	12.8 + 0/-0.5	11 + 0/-0.5	8.7 + 0.5/-0	17.5 + 1/-0	7.5 + 0/-0.5	3.53 ref	5.37 ref
Lam EL2425	25.4 ± 0.38	15.9 ± 0.25	12.7 ± 0.25	12.6 min	18.8 min	6.35 ± 0.13	3.12 ± 0.13	6.4 ± 0.25
DIN 30/7	30.8 + 0/-1.4	15.01 ± 0.2	7.3 ± 0/-0.5	9.71 + 0.5/-0	19.5	7.2 + 0/-0.5	5.65 nom	6.15 nom
Lam E2627	30.95 ± 0.5	13.1 ± 0.25	9.4 ± 0.3	8.5 min	21.41 min	9.4 ± 0.13	4.29 nom	6.0 min
Lam EI375	34.2 ± 0.6	14.1 ± 0.15	9.3 ± 0.25	9.8 ± 0.13	25.5 min	9.3 ± 0.2	4.7 max	8.0 min
E 35/20/9	34.9 ± 0.38	20.62 ± 0.25	9.53 ± 0.18	15.6 min	25.1 min	9.53 ± 0.25	4.75 ± 0.25	7.95 nom

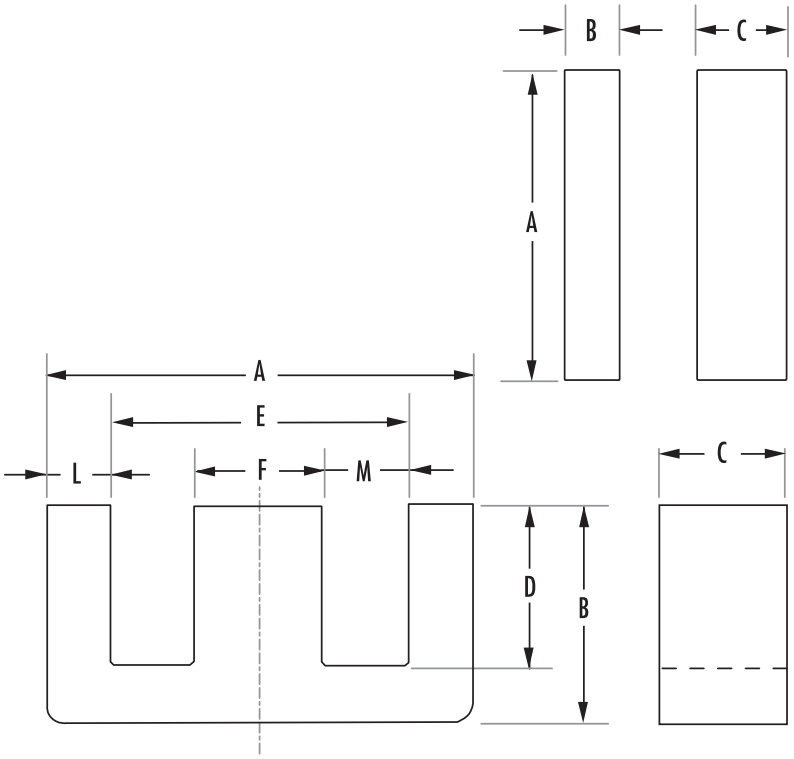
E, I Cores

40mm – 100mm

		NOMINAL A_L (MH/1000T)					
TYPE/SIZE	ORDERING CODE	L	R	P	F	J	W
Metric E40	**0_44011EC**		4,000	4,347	5,200	7,293	
E 42/21/9	**0_44016EC**		2,667	2,907	3,495	5,647	
DIN 42/15	**0_44020EC**		4,600	5,000	6,000	9,700	
DIN 42/15 I	**0_44020IC**		6,253	6,806			
DIN 42/20	**0_44022EC**		5,533	6,013	7,600	10,613	
E 42/32/20	**0_44033EC**		4,000	4,709	5,562	8,727	
Lam EI121	**0_44317EC**		3,900	4,240	5,900	9,800	18,293
Lam EI625	**0_44721EC**		5,360	5,827	8,300		
DIN 55/21	**0_45528EC**		6,293	6,840	8,220		
DIN 55/25	**0_45530EC**		7,520	8,173	9,800		
Lam EI75	**0_45724EC**		8,093	8,800	10,400	14,580	24,000
Metric E60	**0_46016EC**		5,733	6,240	6,590		
E 65/32/27	**0_46527EC**		8,600	10,984			
E 71/33/32	**0_47133EC**		10,800	11,600	13,400		
F11	**0_47228EC**		5,960	6,480			
Metric E80	**0_48020EC**		4,673	5,080			
E100	**0_49928EC**		6,227	6,773			

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	A min (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
Metric E 40	**0_44011EC**	76.7	127	114	9,780	1.39	49
E 42/21/9	**0_44016EC**	98.4	107	106	10,500	2.08	52
DIN 42/15	**0_44020EC**	97	178	175	17,300	3.55	87
DIN 42/15 I	**0_44020IC**	67.1	177	176	11,900	2.26	60
DIN 42/20	**0_44022EC**	97	233	233	22,700	4.59	114
E 42/32/20	**0_44033EC**	145	236	234	34,200	4.48	164
Lam EI121	**0_44317EC**	77	149	142	11,500	1.48	57
Lam EI625	**0_44721EC**	88.9	234	226	20,800	2.77	103
DIN 55/21	**0_45528EC**	124	353	345	44,000	9.91	212
DIN 55/25	**0_45530EC**	123	420	411	52,000	11.8	255
Lam EI75	**0_45724EC**	107	337	337	36,000	69.34	179
Metric E60	**0_46016EC**	110	248	240	27,200	7.16	135
E 65/32/27	**0_46527EC**	147	540	530	79,000	25.9	410
E 71/33/32	**0_47133EC**	149	683	676	102,000	38.1	260
F11	**0_47228EC**	137	368	363	50,300	14.8	264
Metric E80	**0_48020EC**	184	392	392	72,300	30.8	357
E100	**0_49928EC**	274	738	692	202,000	156	970





HOW TO ORDER

OR 4 72 28 EC XX

- Standard core
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate height in mm
- Geometry code/gap code
- Special specification code

SHAPE CODE

0 – Standard

GEOMETRY CODE

EC – ETD, EC, ER, EER, EFD, planar and lamination sizes

GAP CODE

Note – Any practical gap is available

Cores are sold per piece (for sets multiply by 2). Gapped pieces are normally packed separately from ungapped pieces. If desired in sets, this must be specified.

	DIMENSIONS IN MM							
TYPE/SIZE	A	B	C	D	E	F	L	M
Metric E40	40.01 ± 0.51	17 ± 0.31	10.69 ± 0.31	10 min	27.6 min	10.7 ± 0.31	5.99 ± 0.25	8.86 nom
E 42/21/9	42.15 ± 0.85	21.1 ± 0.2	9 ± 0.25	14.9 min	29.5 min	11.95 ± 0.25	5.94 ± 0.13	8.9 ± 0.25
DIN 42/15	43 + 0/-1.7	21 ± 0.2	15.2 + 0/-0.6	14.8 + 0.6/-0	29.5 + 1.4/-0	12.2 + 0/-0.5	6.75 nom	8.65 nom
DIN 42/15 I	43 + 0/-1.7	5.9 ± 0.2	15.2 + 0/-0.6					
DIN 42/20	43 + 0/-1.7	21 ± 0.2	20 + 0/-0.8	14.8 + 0.6/0	29.5 + 1.4/-0	12.2 + 0/-0.5	6.75 nom	8.65 nom
E 42/32/20	42 + 1/-0.7	32.8 + 0/-0.4	20 + 1/-0.8	26 + 1/-0	29.5 + 1.4/-0	12.2 + 0/-0.5	5.98 ref	9.13 ref
Lam EI121	40.6 ± 0.65	16.6 ± 0.2	12.4 ± 0.3	10.4 min	28.6 min	12.45 ± 0.25	6.33 max	7.95 min
Lam EI625	46.9 ± 0.8	19.6 ± 0.2	15.6 ± 0.25	12.1 min	32.4 ± 0.65	15.6 ± 0.25	7.54 nom	7.87 min
DIN 55/21	56.2 + 0/-2.1	27.5 ± 0.3	21 + 0/-0.8	18.5 + 0.8/-0	37.5 + 1.5/-0	17.2 + 0/-0.5	9.35 ref	10.15 ref
DIN 55/25	56.2 + 0/-2.1	27.6 ± 0.38	24.61 ± 0.38	18.5 min	37.5 min	17.2 + 0/-0.5	9.35 ref	10.15 ref
Lam EI75	56.1 ± 1	23.6 ± 0.25	18.8 ± 0.25	14.6 ± 0.13	38.1 min	18.8 ± 0.25	9.5 nom	9.03 nom
Metric E60	59.99 ± 0.78	22.3 ± 0.3	15.62 ± 0.38	13.8 min	44 min	15.62 ± 0.38	7.7 ± 0.25	14.49 ± 0.25
E 65/32/27	65 + 1.5/-1.2	32.8 + 0/-0.6	27.4 + 0/-0.8	22 + 0.8/-0	44.2 + 1.8/-0	20 + 0/-0.7	10.4 nom	12.1 min
E 71/33/32	70.5 ± 1	33.2 + 0/-0.5	32 + 0/-0.8	21.9 + 0.7/-0	48 + 1.5/-0	22 + 0/-0.7	11.25 nom	13.0 nom
F11	72.4 ± 0.76	27.9 ± 0.33	19 ± 0.33	17.8 min	52.6 min	19 ± 0.38	9.53 ± 0.38	16.9 min
Metric E80	80 ± 1.6	38.1 ± 0.3	19.8 ± 0.4	28.2 ± 0.3	59.1 min	19.8 ± 0.4	11.25 nom	19.45 min
E100	100.3 ± 2.0	59.4 ± 0.47	27.5 ± 0.5	46.85 ± 0.38	72 min	27.5 ± 0.5	13.75 ± 0.38	22.65 ± 0.5

EFD Cores

EFD CORES

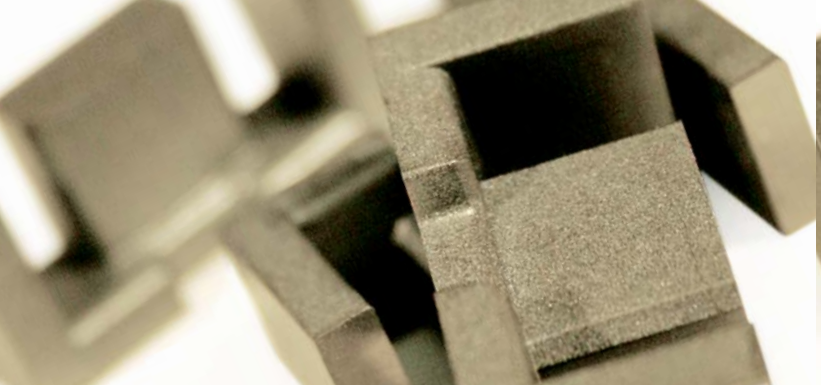
The industry standard economical flat design of EFD cores offers excellent space utilization for transformers or inductors. The optimized cross-sectional area is ideal for very flat compact transformer applications.

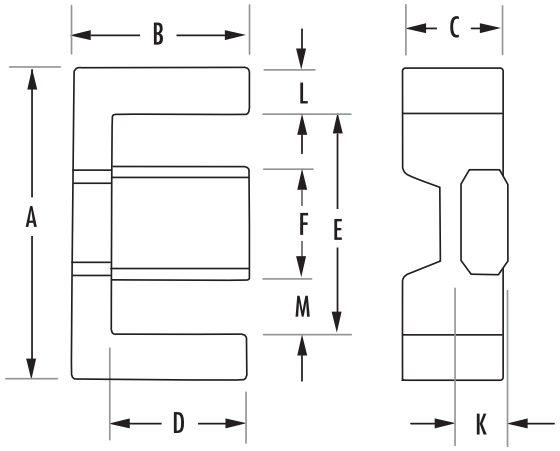
Hardware accessories are available.

EFD cores are ideal for compact transformers and inductor applications.

		NOMINAL A_L (MH/1000T)				
TYPE/SIZE	ORDERING CODE	L	R	P	F	J
EFD 10	**0_41009EC**	280	585	622	698	923
EFD 12	**0_41212EC**	380	760	800	844	2,600
EFD 15	**0_41515EC**	400	893	973	1,170	1,933
EFD 20	**0_42019EC**	650	1,300	1,633	1,881	2,696
EFD 25	**0_42523EC**	1,000	2,093	2,280	2,730	4,507
EFD 30	**0_43030EC**	1,000	2,200	2,695		4,668

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	A min (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
EFD 10	**0_41009EC**	23.7	7.2	6.5	171	0.004	0.9
EFD 12	**0_41212EC**	28.5	11.4	10.7	325	0.01	1.8
EFD 15	**0_41515EC**	34	15	12.2	510	0.02	2.8
EFD 20	**0_42019EC**	47	31	29	1,460	0.093	7
EFD 25	**0_42523EC**	57	58	55	3,300	0.23	16.2
EFD 30	**0_43030EC**	68	69	66	4,700	0.36	24





HOW TO ORDER

OR 4 15 15 EC XX

- Standard core
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate width (per set) in mm
- Geometry code/gap code
- Special specification code

GEOMETRY CODE

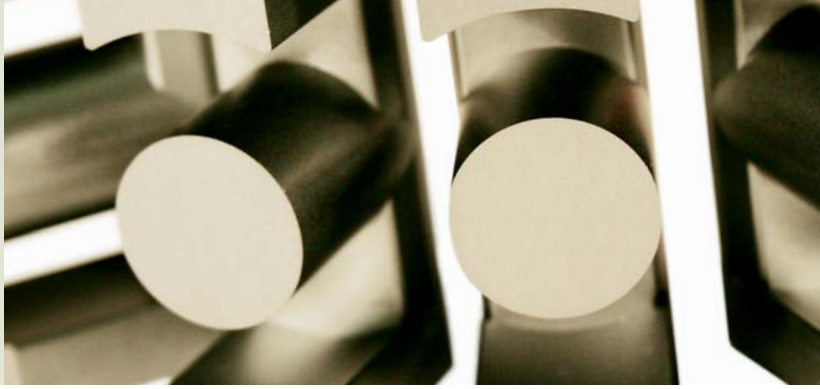
EC – All E cores including ETD, EC, ER, EER, EFD, planar and lamination sizes.

GAP CODE

Note – Any practical gap available

	DIMENSIONS IN MM								
TYPE/SIZE	A	B	C	D	E	F	K	L	M
EFD 10	10.5 ± 0.3	5.2 ± 0.1	2.7 ± 0.1	3.75 ± 0.15	7.65 ± 0.25	4.55 ± 0.15	4.45 ± 0.05	1.43 ref	1.55 ref
EFD 12	12.5 ± 0.3	6.2 ± 0.1	3.5 ± 0.1	4.55 ± 0.15	9 ± 0.25	5.4 ± 0.15	2 ± 0.1	1.75 ref	1.8 ref
EFD 15	15 ± 0.4	7.5 ± 0.15	4.65 ± 0.15	5.5 ± 0.25	11 ± 0.35	5.3 ± 0.15	2.4 ± 0.1	2 nom	2.85 no
EFD 20	20 ± 0.55	10 ± 0.15	6.65 ± 0.15	7.7 ± 0.25	15.4 ± 0.5	8.9 ± 0.2	3.6 ± 0.15	2.3 ref	3.25 ref
EFD 25	25 ± 0.66	12.5 ± 0.15	9.1 ± 0.2	9.1 min	18.1 min	11.4 ± 0.2	5.2 ± 0.15	3.15 ± 0.2	3.65 ± 0.2
EFD 30	30 ± 0.8	15 ± 0.15	9.1 ± 0.2	11.2 ± 0.3	22.4 ± 0.75	14.6 ± 0.25	4.9 ± 0.15	3.8 ref	3.9 ref

ETD Cores



ETD CORES

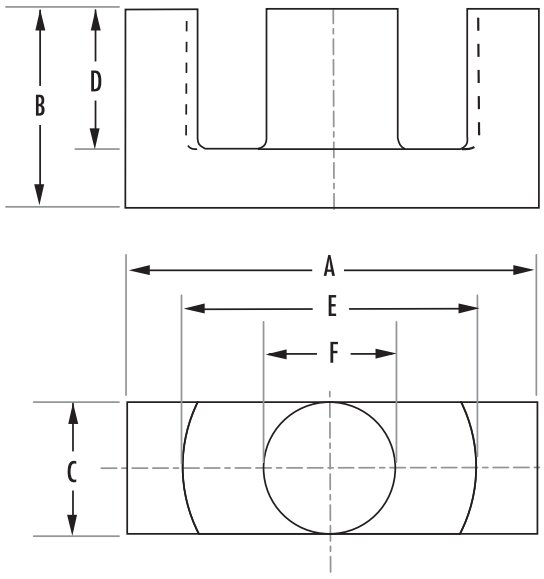
ETD cores are an economical choice for transformers or inductors. ETDs offer a round centerpost for minimum winding resistance. Also, dimensions are optimized for power transformer efficiency.

Hardware accessories are available.

Typical applications of Magnetics ETD cores include differential inductors and power transformers.

		NOMINAL A_L (MH/1000T)			
TYPE/SIZE	ORDERING CODE	L	R	P	F
ETD 29	**0_42929EC**	1,100	2,250	2,843	
ETD 34	**0_43434EC**		2,707	2,933	3,600
ETD 39	**0_43939EC**		2,973	3,227	4,050
ETD 44	**0_44444EC**		3,667	4,000	4,950
ETD 49	**0_44949EC**		4,093	4,440	5,400
ETD 54	**0_45454EC**		5,200	6,281	7,400
ETD 59	**0_45959EC**		5,747	6,240	7,500

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
ETD 29	**0_42929EC**	72	76	71	5,470	0.73	28
ETD 34	**0_43434EC**	78.6	97.1	91.6	7,640	1.21	40
ETD 39	**0_43939EC**	92.2	125	123	11,500	2.21	60
ETD 44	**0_44444EC**	103	173	172	17,800	3.75	94
ETD 49	**0_44949EC**	114	211	209	24,000	5.83	124
ETD 54	**0_45454EC**	127	280	280	35,500	9.45	180
ETD 59	**0_45959EC**	139	368	360	51,500	13.7	248



HOW TO ORDER

OR	4	39	39	EC	XX
Standard core					
Ferrite core material					
	Used for all ferrite types				
		Approximate length in mm			
			Approximate width (per set) in mm		
				Geometry code/gap code	
					Special specification code

GEOMETRY CODE

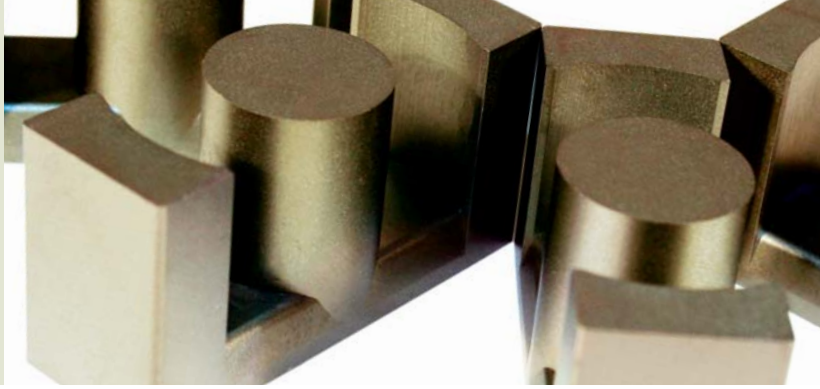
EC – All E cores including ETD, EC, ER, EER, EFD, planar and lamination sizes.

GAP CODE

Note – Any practical gap available

	DIMENSIONS IN MM					
TYPE/SIZE	A	B	C	D	E	F
ETD 29	30.6 + 0/-1.6	15.8 ± 0.2	9.8 + 0/-6	11 ± 0.3	22 + 1.4/-0	9.8 + 0/-0.6
ETD 34	35 + 0/-1.6	17.3 ± 0.2	11.1 + 0/-0.6	11.8 + 0/-0.6	25.6 + 1.4/-0	11.1 + 0/-6
ETD 39	40 + 0/-1.8	19.8 ± 0.2	12.8 + 0/-0.6	14.2 + 0.8/-0	29.3 + 1.6/-0	12.8 + 0/-0.6
ETD 44	45 + 0/-0.2	22.3 ± 0.2	15.2 + 0/-0.6	16.1 + 0.8/-0	32.5 + 1.6/-0	15.2 + 0/-0.6
ETD 49	49.8 + 0/-2.2	24.7 ± 0.2	16.7 + 0/-0.6	17.7 + 0.8/-0	36.1 + 1.8/-0	16.7 + 0/-0.6
ETD 54	54.5 ± 1.3	27.6 ± 0.2	18.9 ± 0.4	20.2 ± 0.4	41.2 ± 1.1	18.9 ± 0.4
ETD 59	59.8 ± 1.3	31 ± 0.2	21.65 ± 0.45	22.1 min	44.7 ± 1.09	21.65 ± 0.45

EER Cores



EER CORES

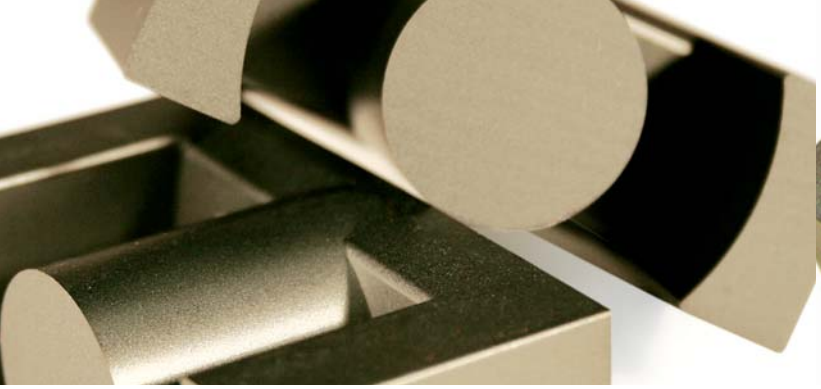
EER cores are an economical choice for transformers and inductors. The round centerpost offers the advantage of a shorter winding path length than the winding around a square centerpost of equal area.

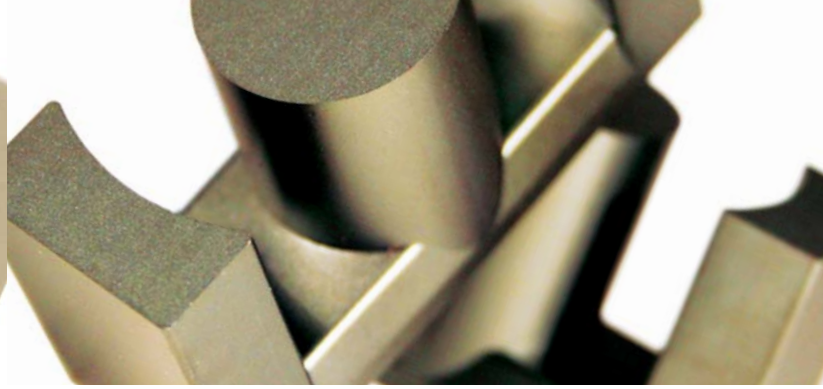
Hardware accessories are available.

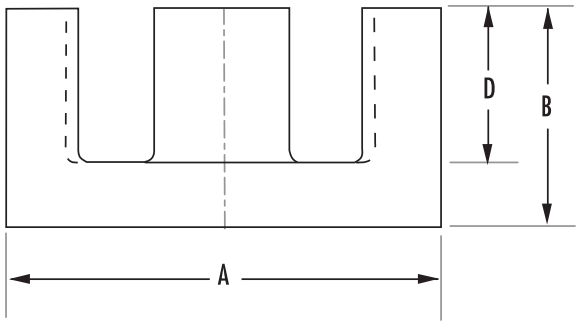
Differential inductors and power transformers are typical applications of Magnetics EER cores.

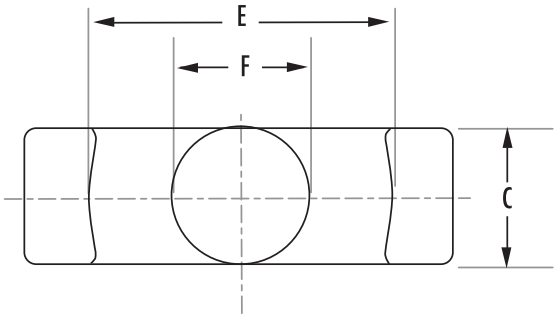
		NOMINAL A_L (MH/1000T)			
TYPE/SIZE	ORDERING CODE	L	R	P	F
EER 28/14/11	**0_42814EC**	1,340	2,700	3,352	3,896
EER 28/16/11	**0_42817EC**	1,150	2,500	2,913	3,400
EER 35L	**0_43521EC**		2,693	2,960	3,550
EER 40/22/13	**0_44013EC**		3,300	3,520	
EER 42	**0_44216EC**		3,840	4,173	
EER 48/18/17	**0_44818EC**		6,400	6,850	7,950
EER 48/21/21	**0_44821EC**		5,700	7,059	8,274
EER 53/18/18	**0_45418EC**		6,100	6,500	7,440

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
EER 28/14/11	**0_42814EC**	64	81.4	77	5,260	0.89	28
EER 28/16/11	**0_42817EC**	75.5	81.4	77	6,142	0.912	32
EER 35L	**0_43521EC**	90.8	107	100	9,710	1.91	49
EER 40/22/13	**0_44013EC**	98	149	139	14,600	3.18	74
EER 42	**0_44216EC**	98.7	175	166	17,300	3.55	106
EER 48/18/17	**0_44818EC**	86	232	223	19,900	4.08	102
EER 48/21/21	**0_44821EC**	100	255	248	25,500	5.84	128
EER 53/18/18	**0_45418EC**	91.8	250	240	23,000	4.75	122









HOW TO ORDER

OR	4	42	16	EC	XX
Standard core					
Ferrite core material					
	Used for all ferrite types				
		Approximate length in mm			
			Approximate height or width in mm		
				Geometry code/gap code	
					Special specification code

GEOMETRY CODE

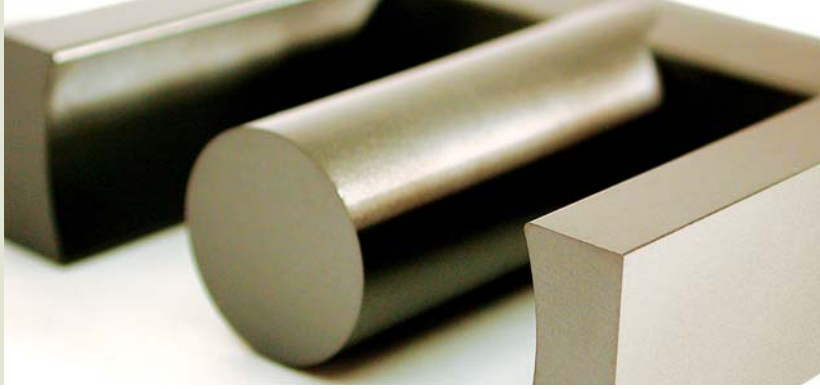
EC – All E cores including ETD, EC, ER, EER, EFD, planar and lamination sizes.

GAP CODE

Note – Any practical gap available

	DIMENSIONS IN MM					
TYPE/SIZE	A	B	C	D	E	F
EER 28/14/11	28.55 ± 0.55	14 ± 0.2	11.4 ± 0.35	9.75 ± 0.4	21.75 ± 0.5	9.9 ± 0.2
EER 28/16/11	28.55 ± 0.55	16.7 ± 0.25	11.4 ± 0.35	12.65 ± 0.4	21.75 ± 0.5	9.9 ± 0.25
EER 35L	35 ± 0.65	20.7 ± 0.2	11.4 ± 0.35	14.75 ± 0.35	26.15 ± 0.55	11.3 ± 0.25
EER 40/22/13	40 ± 0.7	22.4 ± 0.2	13.4 ± 0.35	15.45 ± 0.35	29.6 ± 0.6	13.3 ± 0.25
EER 42	42.1 ± 0.81	21.6 ± 0.2	14.7 ± 0.3	15.6 min	31 ± 0.58	14.7 ± 0.3
EER 48/18/17	48 ± 1	18 ± 0.2	17.6 ± 0.4	11.45 ± 0.25	36.8 ± 0.8	17.6 ± 0.4
EER 48/21/21	48 ± 1	21.2 + 0/-0.4	21 + 0.3/-0.5	14.7 + 0.7/-0	38 + 0.5/-0.8	18 ± 0.3
EER 53/18/18	53.5 ± 1	18.3 ± 0.2	17.95 ± 0.35	11.1 ± 0.3	40.65 ± 0.85	17.9 ± 0.4

EC Cores



EC CORES

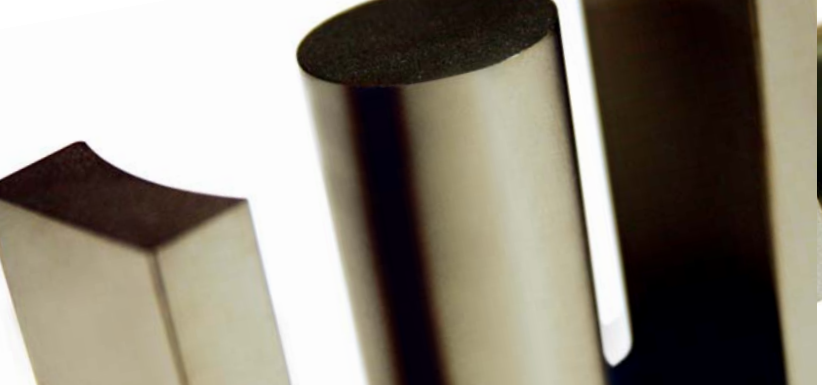
A cross between a pot core and an E core, EC cores have a round center post that provides a wide opening on each side, and therefore, minimum winding resistance. The long legs support low leakage inductance designs.

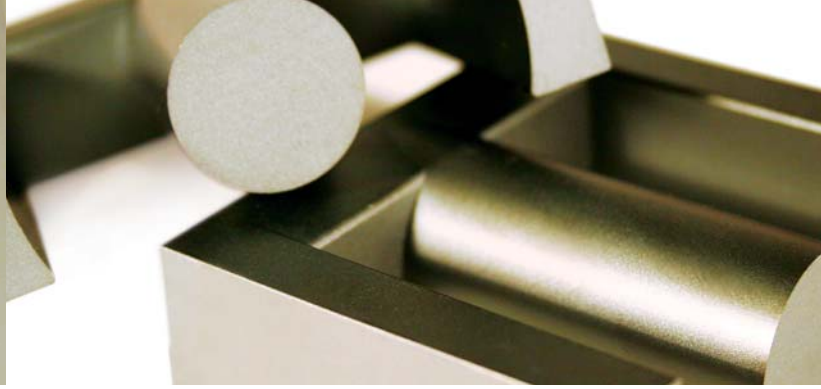
EC cores have standard channels for clamping assemblies. Plain bobbins, printed circuit bobbins and clamps are available for most sizes.

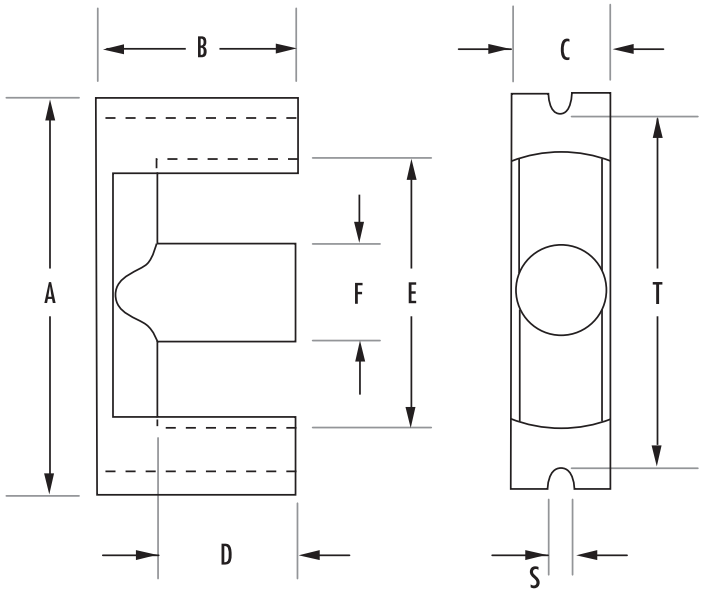
Magnetics EC cores are typically used in differential inductor and power transformer applications.

		NOMINAL A_L (MH/1000T)		
TYPE/SIZE	ORDERING CODE	R	P	F
EC 35	**0_43517EC**	2,213	2,400	3,000
EC 41	**0_44119EC**	3,473	3,200	3,700
EC 52	**0_45224EC**	3,867	4,200	5,040
EC 70	**0_47035EC**	4,413	4,800	5,760

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	A min (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
EC 35	**0_43517EC**	77.4	84.3	71	6,530	0.83	36
EC 41	**0_44119EC**	89.3	121	106	10,800	1.67	52
EC 52	**0_45224EC**	105	180	141	18,800	3.87	111
EC 70	**0_47035EC**	144	279	211	40,100	13.4	253







HOW TO ORDER

O	R	4	70	35	EC	XX

- Standard core
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate width in mm
- Geometry code/gap code
- Special specification code

GEOMETRY CODE

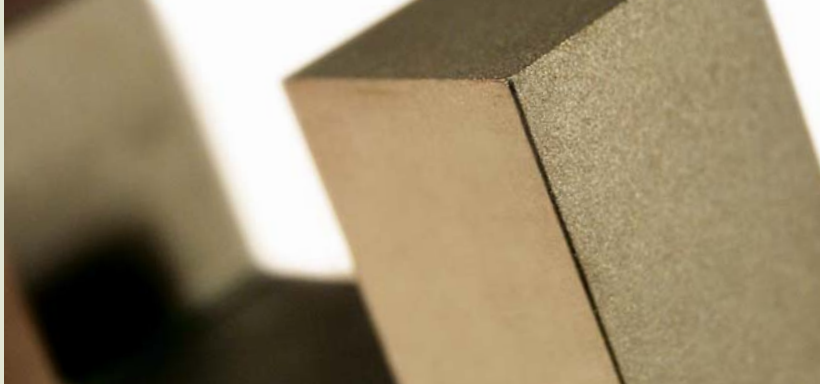
EC – All E cores including ETD, EC, ER, EER, EEM, EFD, planar and lamination sizes.

GAP CODE

Note – Any practical gap available

	DIMENSIONS IN MM							
TYPE/SIZE	A	B	C	D	E	F	S	T
EC 35	34.5 ± 0.8	17.3 ± 0.15	9.5 ± 0.3	12.3 ± 0.4	22.75 ± 0.55	9.5 ± 0.3	2.75 ± 0.25	28.5 ± 0.8
EC 41	40.6 ± 1.0	19.5 ± 0.15	11.6 ± 0.3	13.9 ± 0.4	27.7 ± 0.7	11.6 ± 0.3	3.25 ± 0.25	33.6 ± 1
EC 52	52.2 ± 1.3	24.2 ± 0.15	13.4 ± 0.35	15.9 ± 0.4	33 ± 0.9	13.4 ± 0.35	3.75 ± 0.25	44 ± 1.3
EC 70	70 ± 1.7	34.5 ± 0.15	16.4 ± 0.4	22.75 ± 0.45	44.5 ± 1.2	16.4 ± 0.4	4.75 ± 0.25	59.6 ± 1.7

U, I, UR Cores



U CORES

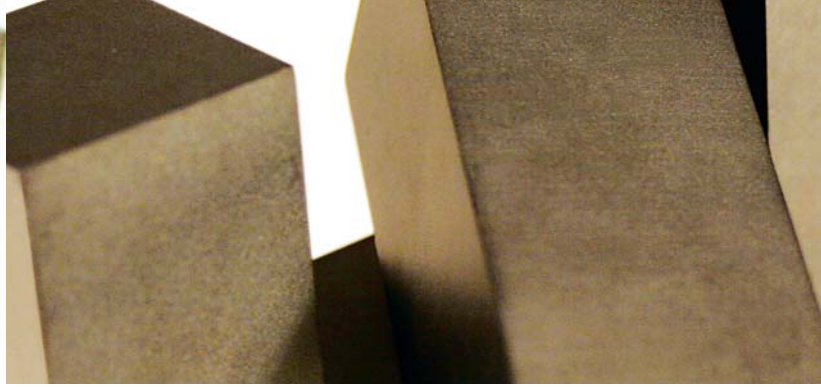
U shape cores are ideal for higher power operation in tight spaces or unusual form factors. The long legs of a U core support low leakage inductance designs and facilitate superior voltage isolation.

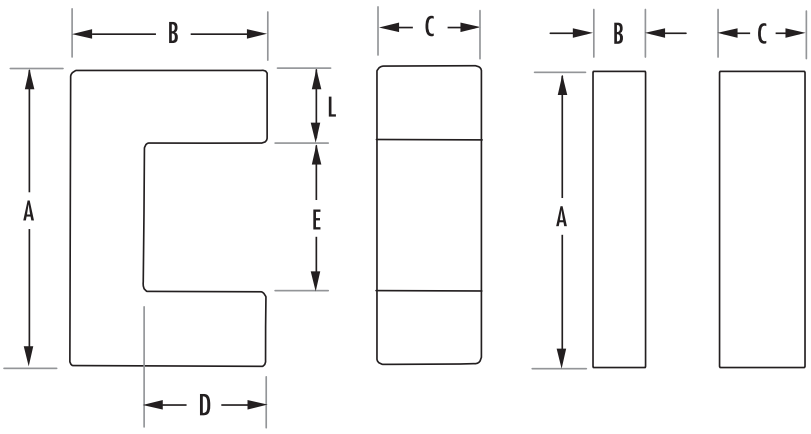
U/I combinations facilitate economical assembly.

U cores are ideal for power transformer applications.

		NOMINAL A_L (MH/1000T)				
TYPE/SIZE	ORDERING CODE	L	R	P	F	J
U 11/6	0_41106UC		1,027	1,120	1,010	
I 11/6	0_41106IC		1,027	1,022	1,150	
U 22/20	0_42220UC			1,360		
U 25/12	0_42512UC		1,907		2,480	4,400
U 26/3/7	0_42515UC		1,107	1,333	1,600	2,507
I 25/6/6	0_42516IC		1,480	2,907	1,770	
U 25/16/12	0_42530UC		2,093	2,280	2,740	4,860
UR 41/21/11	0_44119UC		1,627	1,773	2,130	
UR 41/21	0_44121UC		1,880	2,047		
UR 41/25	0_44125UC		1,600	1,747	2,105	
UR 41/30	0_44130UC		1,400	1,520	1,830	
UR 57	0_45716UC		2,600	3,061	3,622	
UR 59	0_45917UC		3,027	3,274	3,881	
UR 64	0_46420UC		3,787	4,098	4,864	
U 93/16	0_49316UC		3,400	5,191	6,173	9,924
I 93/16	0_49316IC		4,600			10,600
U 126/20	0_49920UC		3,000	3,572	4,265	6,967
U 101/25	0_49925UC		4,533	4,920	6,500	
I 101/25	0_49925IC		5,707	6,200	7,440	

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	A min (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
U 11/6	0_41106UC	29.2	12	11.5	350	0.02	1.8
I 11/6	0_41106IC	24.6	11.5	11.5	283	0.01	1.5
U 22/20	0_42220UC	95.8	39.7	39.7	4,130	0.91	19
U 25/12	0_42512UC	68.9	80	80	4,170	0.67	29
U 26/3/7	0_42515UC	83.4	40.4	40.4	3,370	0.63	17
I 25/6/6	0_42516IC	64.3	40.3	40.3	2,590	0.32	13
U 25/16/12	0_42530UC	83.4	80.8	80.8	6,740	1.27	34
UR 41/21/11	0_44119UC	121.2	91.1	80.5	11,000	2.86	54
UR 41/21	0_44121UC	115.2	114.3	105.4	13,172	3.09	55
UR 41/25	0_44125UC	134.4	113.1	105.4	15,196	4.44	64
UR 41/30	0_44130UC	154.8	112.1	105.4	17,346	5.88	75
UR 57	0_45716UC	163	171	171	27,900	9.6	140
UR 59	0_45917UC	189	210	210	39,700	15.5	198
UR 64	0_46420UC	210	290	290	61,000	22	320
U 93/16	0_49316UC	258	447	447	115,000	86	800
I 93/16	0_49316IC	258	447	447	115,000	76	200
U 126/20	0_49920UC	480	560	560	268,800	221	1,360
U 101/25	0_49925UC	308	645	645	199,000	975	168
I 101/25	0_49925IC	245	645	645	158,000	324	102





U CORE

I CORE

HOW TO ORDER

0 F 4 22 20 UC XX

- Standard core
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate width in mm
- Geometry code
- Special specification code

SHAPE CODE

0 – Standard

GEOMETRY CODE

U, UR – U core
I – I cores

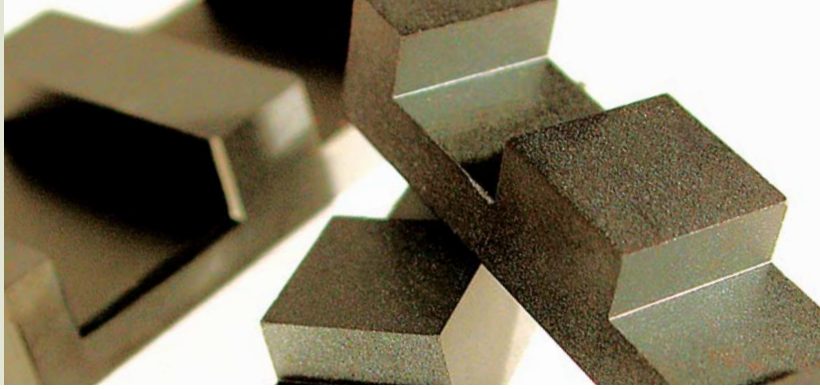
Cores are sold per piece (for sets multiply by 2). If desired in sets, this must be specified.

* UR cores have round legs. Visit *www.mag-inc.com* for drawings.

	DIMENSIONS IN MM					
TYPE/SIZE	**A**	**B**	**C**	**D**	**E**	**L**
U 11/6	10.85 ± 0.2	4.19 ± 0.13	6.3 ± 0.13	2.24 ± 0.13	7.19 ± 0.2	1.83 ± 0.13
I 11/6	10.8 ± 0.2	1.83 ± 0.12	6.3 ± 0.13			
U 22/20	22.1 ± 0.38	20.6 ± 0.38	6.27 ± 0.18	13.98 min	9.5 ± 0.38	6.27 ± 0.18
U 25/12	25.4 ± 0.5	12.9 ± 0.4	12.7 ± 0.4	6.35 min	12.8 ref	6.3 ± 0.13
U 26/3/7	25.4 ± 0.51	15.9 ref	6.35 ± 0.12	9.27 min	12.7 ref	6.35 + 0/-0.1
I 25/6/6	25.4 + 0.64/-0.51	6.35 ± 0.13	6.35 ± 0.13			
U 25/16/12	25.4 ± 0.51	15.9 ref	12.7 ± 0.25	9.27 min	12.7 ref	6.35 ± 0.12
UR 41/21/11	41.78 ± 0.81	20.6 ± 0.13	11.94 ± 0.25	11.1 ± 0.2	18.8 ± 0.56	
UR 41/21	41.78 ± 0.81	25.4 ± 0.13	11.94 ± 0.25	15.9 ± 0.2	18.8 ± 0.56	
UR 41/25	41.78 ± 0.81	25.4 ± 0.13	11.94 ± 0.25	15.9 ± 0.2	18.8 ± 0.56	
UR 41/30	41.78 ± 0.11	30.5 ± 0.3	11.94 ± 0.25	20.8 min	18.8 ± 0.56	
*UR 57	57.65 ± 1.7	28.6 + 0/-0.4	15.9 ± 0.4	15.5 + 1/-0	27.8 ± 0.9	15.9 + 0.4 dia.
*UR 59	59.34 ± 1.75	35.8 ± 0.4	17 ± 0.4	21.5 ± 0.8	26.5 ± 0.1	17 + 0.4 dia.
*UR 64	64 ± 1.95	40.5 ± 0.2	24 ± 0.3	26.5 ± 0.4	24.1 ± 0.9	20 ± 0.4 dia.
U 93/16	93 ± 1.8	76 ± 0.5	16 ± 0.6	48 ± 0.9	36.2 ± 1.2	28.4 ref
I 93/16	93 ± 1.8	27.5 ± 0.5	16 ± 0.6			
U 126/20	126 ± 4	91 ± 1	20 ± 0.6	63 ± 2	70 ± 2	28 ref
U 101/25	101.6 ± 1.5	57.1 ± .4	25.4 ± 0.6	31.7 ± 0.75	50.8 ± 1	25.4 ± 0.8
I 101/25	101.6 ± 1.5	25.4 ± 0.4	25.4 ± 0.6			

Planar E, I Cores

14mm – 36mm



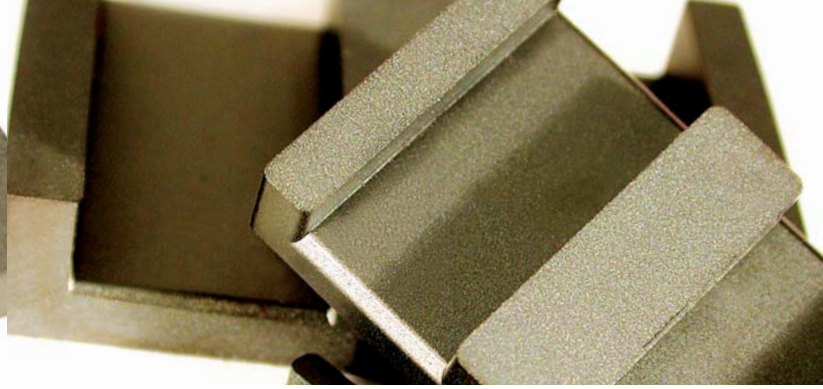
PLANAR E, I CORES

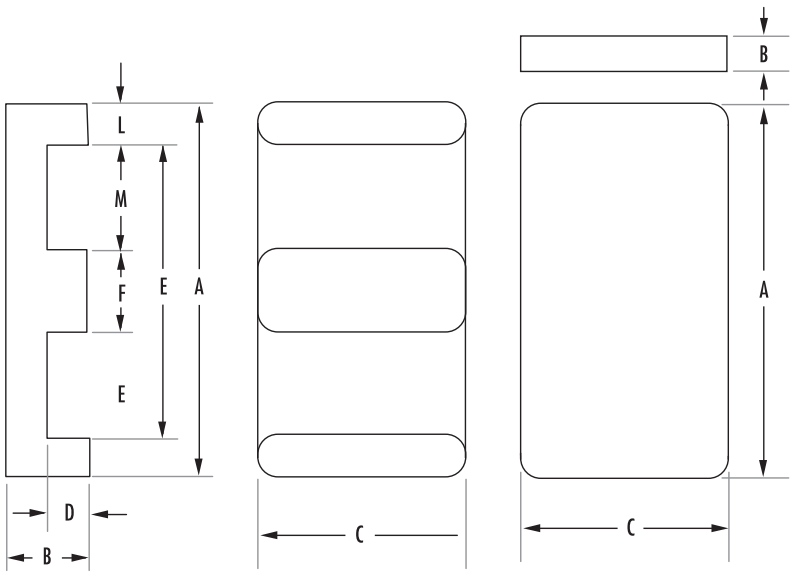
Planar E cores are offered in all of the IEC standard sizes, as well as a number of other sizes. The leg length and window height (B and D dimensions) are adjustable for specific applications without new tooling. This permits the designer to adjust the final core specification to exactly accommodate the planar conductor stack height, with no wasted space. Clips and clip slots are available in many cases, which is especially useful for prototyping. I-cores are also offered standard, permitting further flexibility in design. E-I planar combinations are useful to allow practical face bonding in high volume assembly, and for making gapped inductor cores where fringing losses must be carefully considered due to the planar construction.

Differential inductors and DCDC, ACDC converter are typical applications for planar cores.

		NOMINAL A_L (MH/1000T)			
TYPE/SIZE	ORDERING CODE	L	R	P	F
E 14/2.5/15	**0_41425EC**	780	1,653	1,595	1,765
E 14 C	**C_41434EC**	600	1,327	1,399	1,563
I 14 C	**C_41434IC**	780	1,504	1,580	1,749
E 18 C	**C_41805EC**	1,500	3,244	3,430	3,853
I 18 C	**C_41805IC**	1,800	3,606	3,801	4,241
E 18	**F_41805EC**	1,550	3,244	3,430	3,853
I 18	**F_41805IC**	1,800	3,641	3,837	4,278
E 22/4/7	**0_42107EC**		3,448	3,173	3,810
I 22/4/7	**0_42107IC**	1,480			
E 22 C	**C_42216EC**	2,300	5,066	5,387	6,131
I 22 C	**C_42216IC**	2,900	5,956	6,506	7,327
E 22	**F_42216EC**	2,400	5,066	5,387	6,131
I 22	**F_42216IC**	2,900	6,207	6,568	
E 32 C	**C_43208EC**		6,521	6,918	7,834
I 32 C	**C_43208IC**		7,321	7,745	8,711
E 32	**F_43208EC**	3,200	6,700	6,918	8,744
I 32	**F_43208IC**	3,700	7,321	7,745	8,711
E 36/6/18	**0_43618EC**		6,678	7,090	8,039
I 36/3/18	**0_43618IC**		7,303	7,736	8,729

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
E 14/2.5/15	**0_41425EC**	16.7	14.7	14.7	244	0.009	1.2
E 14 C	**C_41434EC**	20.7	14.66	14.66	304	0.01	1.5
I 14 C	**C_41434IC**	16.4	14.2	11.4	230	0.009	1.2
E 18 C	**C_41805EC**	24.2	40.1	39.9	972	0.06	4.9
I 18 C	**C_41805IC**	20.3	39.5	35.9	830	0.03	4.1
E 18	**F_41805EC**	24.2	40.1	39.9	972	0.06	4.7
I 18	**F_41805IC**	20.3	40.1	39.9	813	0.03	3.9
E 22/4/7	**0_42107EC**	25.7	37.1	36	960	0.05	4.2
I 22/4/7	**0_42107IC**	22.7	35.7	33.5	809	0.37	
E 22 C	**C_42216EC**	32.3	76	73.1	2,451	0.24	11.9
I 22 C	**C_42216IC**	26.1	80.4	72.5	2,100	0.12	10.4
E 22	**F_42216EC**	32.5	78.5	76	2,550	0.24	12.4
I 22	**F_42216IC**	25.8	80.6	80.6	2,080	0.12	10.1
E 32 C	**C_43208EC**	41.4	130	130	5,380	0.24	
I 32 C	**C_43208IC**	35.1	130	130	4,560	0.12	
E 32	**F_43208EC**	41.4	130	130	5,380	0.66	26
I 32	**F_43208IC**	35.1	130	130	4,560	0.33	22
E 36/6/18	**0_43618EC**	42.4	135	135	5,750	0.55	28
I 36/3/18	**0_43618IC**	37.4	135	135	5,060	0.27	25





E CORE I CORE

HOW TO ORDER

C R 4 14 34 EC XX

- Shape code
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate width in mm
- Geometry code/gap code
- Special specification code

SHAPE CODE

0 – Standard
C – Planar E core with clip recesses
F – Planar E core option: no clip recesses

GEOMETRY CODE

EC – All E cores including ETD, EC, ER, EER, EFD, planar and lamination sizes
IC – I cores

GAP CODE

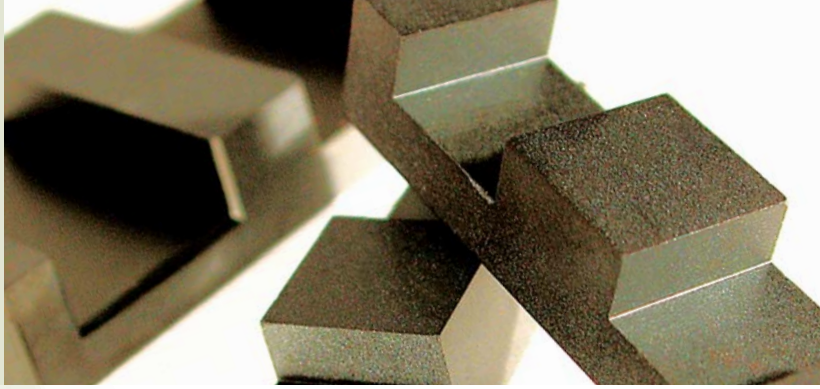
Note – Any practical gap available

Cores are sold per piece (for sets multiply by 2). Gapped pieces are normally packed separately from ungapped pieces. If desired in sets, this must be specified.

	DIMENSIONS IN MM							
TYPE/SIZE	A	B	C	D	E	F	L	M
E 14/2.5/15	14 ± 0.3	2.5 ± 0.1	5 ± 0.1	1 ± 0.1	11 ± 0.25	3 ± 0.1	1.5 ref	4 ref
E 14 C	14 ± 0.3	3.5 ± 0.1	5 ± 0.15	1.91 min	10.5 min	3 ± 0.1	1.5 ref	4 ref
I 14 C	14 ± 0.3	1.8 ± 0.05	5 ± 0.15	1.5 ± 0.1	2.5 + 2/-0			
E 18 C	18 ± 0.35	4 ± 0.1	10 ± 0.2	2 ± 0.1	14 ± 0.3	4 ± 0.1	2 ref	5 ref
I 18 C	18 ± 0.35	2.4 ± 0.5	10 ± 0.2	2 ± 0.1	2.5 + 2/-0			
E 18	18 ± 0.35	4 ± 0.1	10 ± 0.2	2 ± 0.1	13.7 min	4 ± 0.1	2 ref	5 ref
I 18	18 ± 0.41	2.39 ± 0.1	10 ± 0.2					
E 22/4/7	21.8 ± 0.4	3.91 ± 0.8	7.8 ± 0.5	1.73 ± 0.2	16.8 ± 0.3	5 ± 0.2	2.5 ± 0.12	5.89 ± 0.25
I 22/4/7	21.8 ± 0.4	2.3 ± 0.2	7.8 ± 0.3					
E 22 C	21.8 ± 0.4	5.7 ± 0.1	15.8 ± 0.3	3.2 ± 0.1	16.8 ± 0.4	5 ± 0.1	2.5 ref	5.9 ref
I 22 C	21.8 ± 0.4	2.9 ± .05	15.8 ± 0.3	2.5 ± 0.1	2.9 + 0.2/-0			
E 22	21.8 ± 0.4	5.72 ± 0.12	15.8 ± 0.3	3.05 min	16.1 min	5.08 ± 0.12	2.5 ref	5.9 ref
I 22	21.8 ± 0.4	2.95 ± 0.1	15.8 ± 0.3					
E 32 C	31.75 ± 0.64	6.35 ± 0.13	20.32 ± 0.41	3.18 ± 0.2	24.9 min	6.35 ± 0.13	3.18	9.27
I 32 C	31.75 ± 0.64	3.18 ± 0.13	20.32 ± 0.41					
E 32	31.75 ± 0.64	6.35 ± 0.13	20.32 ± 0.41	3.18 ± 0.2	24.9 min	6.35 ± 0.13	3.18	9.27
I 32	31.75 ± 0.64	3.18 ± 0.13	20.32 ± 0.41					
E 36/6/18	35.56 ± 0.5	6.35 ± 0.13	17.8 ± 0.4	2.41 min	27.2 min	7.62 ± 0.18	3.81 ± 0.13	10.16 ± 0.25
I 36/3/18	36.58 ± 0.51	3.81 ± 0.25	18.29 ± 0.38					

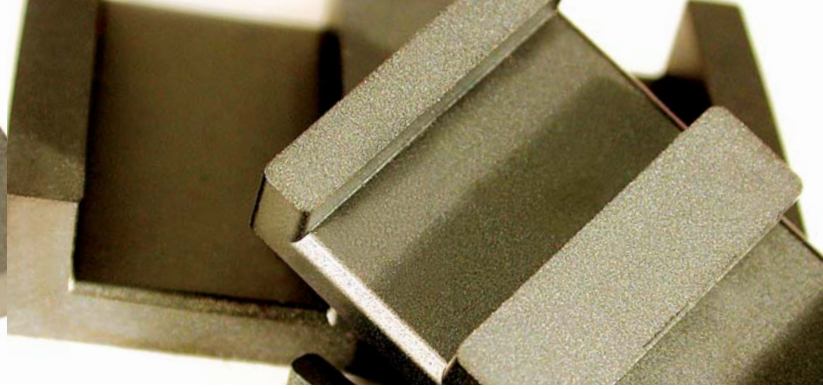
Planar E, I Cores

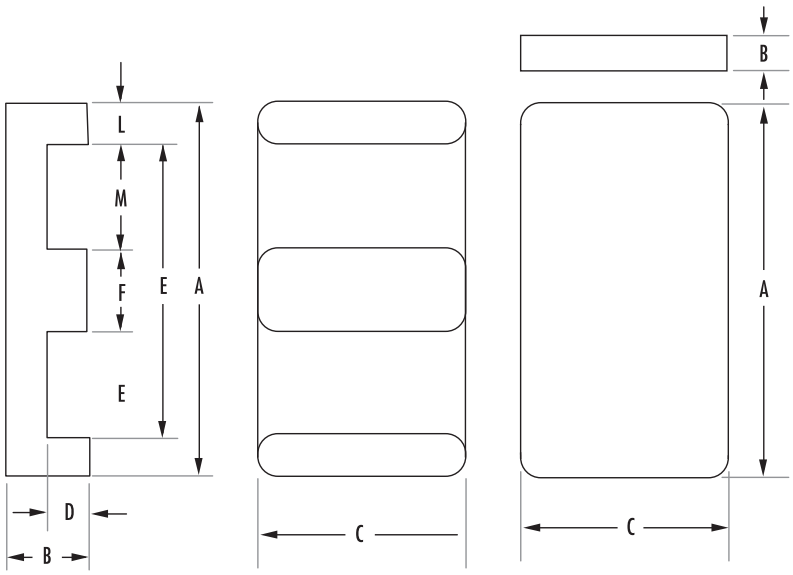
38mm – 102mm



		NOMINAL A_L (MH/1000T)				
TYPE/SIZE	ORDERING CODE	L	R	P	F	J
E 38	F_43808EC	3,880	7,867	8,354	9,490	
I 38	F_43808IC	4,600	9,028	9,566	9,028	
E 40/8/10	0_44008EC		4,233	4,504	5,134	7,130
I 40/4/10	0_44008IC		4,744	5,035	5,706	8,026
E 43/8/28	0_44308EC		8,560	9,150	11,172	
I 43/4/28	0_44308IC		10,133		11,849	
E 43	F_44310EC		8,266	8,803	10,450	
I 43	F_44310IC		10,631	10,130	11,489	
E 58 C	C_45810EC		8,498	9,073	10,427	
I 58 C	C_45810IC		9,821	10,457	11,941	
E 58	F_45810EC		8,498	9,073	10,427	
I 58	F_45810IC		9,970	10,457	11,941	
E 64 C	C_46410EC		14,618	15,599	17,901	
I 64 C	C_46410IC		16,139	17,189	19,639	
E 64	F_46410EC		16,154	15,599	17,901	
I 64	F_46410IC		18,098	17,245	19,699	
E 102	0_49938EC		9,810	9,997	11,697	

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
E 38	F_43808EC	52.4	194	194	10,200	1.56	50.9
I 38	F_43808IC	43.7	194	194	8,460	0.78	42.5
E 40/8/10	0_44008EC	51.9	101	95.1	5,220	0.66	26
I 40/4/10	0_44008IC	43.8	99.5	95.1	4,360	0.32	21
E 43/8/28	0_44308EC	57.5	227	227	13,100	2.18	64
I 43/4/28	0_44308IC	50.4	229	229	11,500	1.09	54
E 43	F_44310EC	61.1	229	229	18,900	2.68	70.6
I 43	F_44310IC	50.4	229	229	11,500	1.34	58
E 58 C	C_45810EC	80.6	308	308	24,600	8.36	119
I 58 C	C_45810IC	67.7	310	310	20,800	4.18	101
E 58	F_45810EC	80.6	308	308	24,600	8.36	119
I 58	F_45810IC	67.7	310	310	20,800	4.18	101
E 64 C	C_46410EC	80.2	516	516	41,400	10.4	195
I 64 C	C_46410IC	64.9	511	511	35,539	5.2	172
E 64	F_46410EC	80.2	516	516	41,400	10.4	200
I 64	F_46410IC	69.6	511	511	35,539	5.2	172
E 102	0_49938EC	148	540	525	79,800	46	400





E CORE

I CORE

HOW TO ORDER

C R 4 64 10 EC XX

Shape code
Ferrite core material
Used for all ferrite types
Approximate length in mm
Approximate width in mm
Geometry code/gap code
Special specification code

SHAPE CODE

0 – Standard
C – Planar E core with clip recesses
F – Planar E core option: no clip recesses

GEOMETRY CODE

EC – All E cores including ETD, EC, ER, EER, EFD, planar and lamination sizes
IC – I cores

GAP CODE

Note – Any practical gap available

Cores are sold per piece (for sets multiply by 2). Gapped pieces are normally packed separately from ungapped pieces. If desired in sets, this must be specified.

	DIMENSIONS IN MM							
TYPE/SIZE	A	B	C	D	E	F	L	M
E 38	38.1 ± 0.76	8.26 ± 0.13	25.4 ± 0.51	4.45 ± 0.13	30.23 min	7.62 ± 0.15	3.81	11.43
I 38	38.1 ± 0.76	3.81 ± 0.13	25.4 ± 0.51					
E 40/8/10	40.65 ± 0.5	8.51 ± 0.25	10.7 ± 0.25	4.06 ± 0.25	30.45 ± 0.3	10.15 ± 0.15	5.1 ref	10.15 ref
I 40/4/10	40.64 ± 0.51	4.45 ± 0.25	10.7 ± 0.25					
E 43/8/28	43.2 ± 0.9	8.51 ± 0.25	27.9 ± 0.6	4.19 min	34.7 min	8.1 ± 0.2	4.7 max	13.2 min
I 43/4/28	43.2 ± 0.9	4.1 ± 0.13	27.9 ± 0.6					
E 43	43.2 ± 0.9	9.53 ± 0.13	27.9 ± 0.6	5.4 ±0.13	34.7 min	8.1 ± 0.2	4.7 max	13.2 min
I 43	43.2 ± 0.9	4.1 ± 0.13	27.9 ± 0.6					
E 58 C	58.42 ± 1.2	10.54 ± 0.2	38.1 ± 0.8	6.35 min	50 min	8.1 ± 0.2	3.7 ref	21.4 ref
I 58 C	58.42 ± 1.2	4.1 ± 0.12	38.1 ± 0.8					
E 58	58.42 ± 1.2	10.54 ± 0.2	38.1 ± 0.78	6.35 min	50 min	8.1 ± 0.2	3.7 ref	21.4 ref
I 58	58.42 ± 1.2	4.1 ± 0.12	38.1 ± 0.8					
E 64 C	64 ± 0.76	10.2 ± 0.1	50.8 ± 0.81	5.03 min	53.16 min	10.16 ± 0.18	5.08 ± 0.12	21.8 ± 0.25
I 64 C	64.01 ± 1.21	5.08 ± 0.13	5.08 ± 1.02					
E 64	64 ± 0.76	10.2 ± 0.1	50.8 ± 0.81	5.03 min	53.16 min	10.16 ± 0.18	5.08 ± 0.12	21.8 ± 0.25
I 64	64.01 ± 1.27	5.08 ± 0.13	50.8 ± 1.02					
E 102	102 ± 1	20.3 ± 0.25	37.5 ± 0.4	13.3 ± 0.25	86 ± 1	14 ± 0.25	8 ref	36 ref

ER Cores

ER CORES

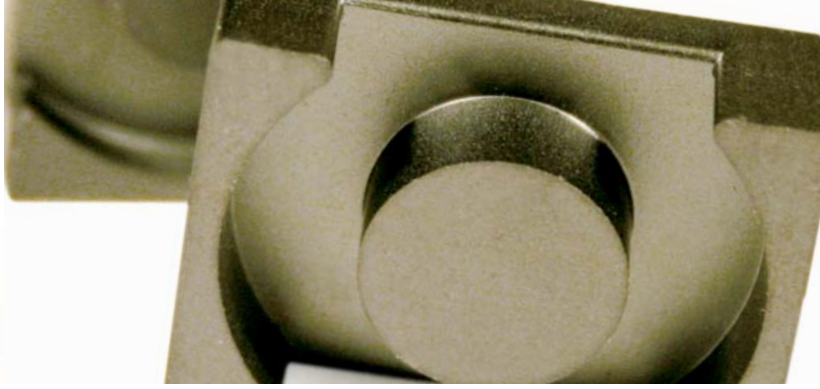
ER cores are a cross between E cores and pot cores. The round centerpost of the ER core offers minimal winding resistance. In addition, they offer better space utilization and shielding than with rectangular center leg planar cores. When compared with non-planar cores, ERs offer minimal height and better thermal performance.

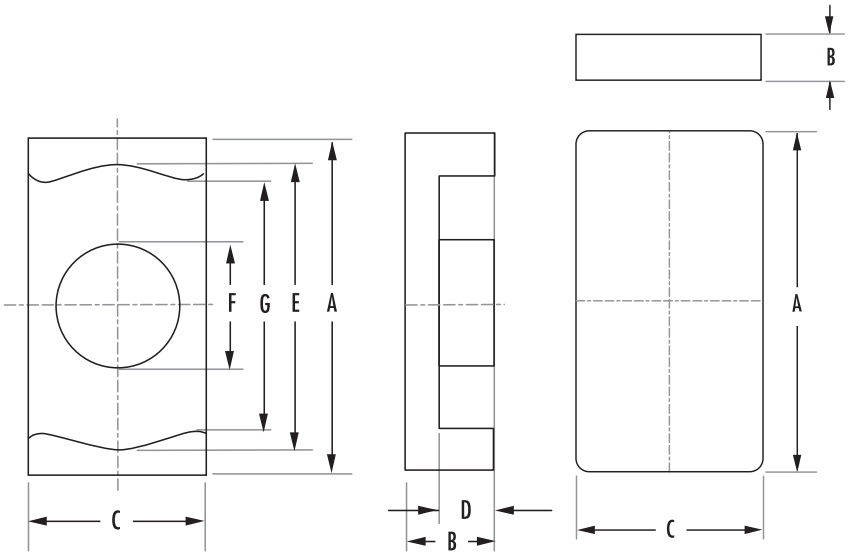
E/I combinations facilitate economical assembly. Surface mount accessories are available.

Typical applications of ER cores include differential inductors and power transformers.

		NOMINAL A_L (MH/1000T)			
TYPE/SIZE	ORDERING CODE	L	R	P	F
ER 9/5	**0_40906EC**	525	973	1,053	1,270
ER 11/6	**0_41126EC**	725	1,400	1,690	1,780
ER 12.5/8.5	**0_41308EC**	950	1,700	1,800	1,950
I 12.5/8.5	**0_41308IC**	1,000	1,800	1,900	2,000
ER 14.5/6	**0_41426EC**	850	1,600	1,700	1,850
ER 18/3/10	**0_41826EC**	1,300		2,770	3,104
ER 32/6/25	**0_43225EC**		6,950	7,350	8,200
ER 20/7/14 C	**C_42014EC**	1,100	3,788		
I 20/7/14 C	**C_42014IC**	2,150	4,500	4,900	5,500
ER 20/7/14	**F_42014EC**	1,600	3,788	4,026	4,575
I 20/7/14	**F_42014IC**	2,150	4,479	4,740	5,338
ER 23/3/12	**0_42313EC**	1,850	3,800	4,030	4,540
ER 25/5.5/18	**0_42517EC**	3,300	7,021	7,447	8,427
I 25/2/18	**0_42517IC**	3,300	7,021	7,447	8,427
ER 25/8/18	**0_42521EC**	2,300	5,440	5,801	6,649
ER 30/8/20	**0_43021EC**	2,400	5,465	5,841	6,729
I 30/2.5/20	**0_43021IC**	3,200	6,550	7,784	8,850

		MAGNETIC DATA				
SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	A min (mm²)	V_e (mm³)	Weight (grams per set)
ER 9/5	**0_40906EC**	14.2	8.47	7.6	120	1
ER 11/6	**0_41126EC**	14.7	11.9	10.3	174	1
ER 12.5/8.5	**0_41308EC**	17.5	19.9	19.2	348	2
I 12.5/8.5	**0_41308IC**	15.9	19.8	19.2	315	1
ER 14.5/6	**0_41426EC**	19	17.6	17.3	333	2
ER 18/3/10	**0_41826EC**	22.1	30.2	30.1	667	3
ER 32/6/25	**0_43225EC**	38.2	141	38.2	5,400	
ER 20/7/14 C	**C_42014EC**	33.2	59	55	1,960	
I 20/7/14 C	**C_42014IC**	25.1	59.8	55	1,500	
ER 20/7/14	**F_42014EC**	33.2	59	55	1,960	
I 20/7/14	**F_42014IC**	25.5	57.3	52.5	1,460	
ER 23/3/12	**0_42313EC**	26.6	50.2	50	1,340	6.4
ER 25/5.5/18	**0_42517EC**	26.4	89.7	82.8	2,370	16.4
I 25/2/18	**0_42517IC**	26.4	89.7	82.8	2,370	13.1
ER 25/8/18	**0_42521EC**	41.4	100	95	4,145	22.0
ER 30/8/20	**0_43021EC**	46	108	95	4,970	26.4
I 30/2.5/20	**0_43021IC**	36.2	108	95	3,910	20.8





ER CORE

I CORE

HOW TO ORDER

0 R 4 09 06 EC XX

- Shape code
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate depth in mm
- Geometry code/gap code
- Special specification code

SHAPE CODE

0 – Standard
C – Planar E core with clip recesses
F – Planar E core option: no clip recesses

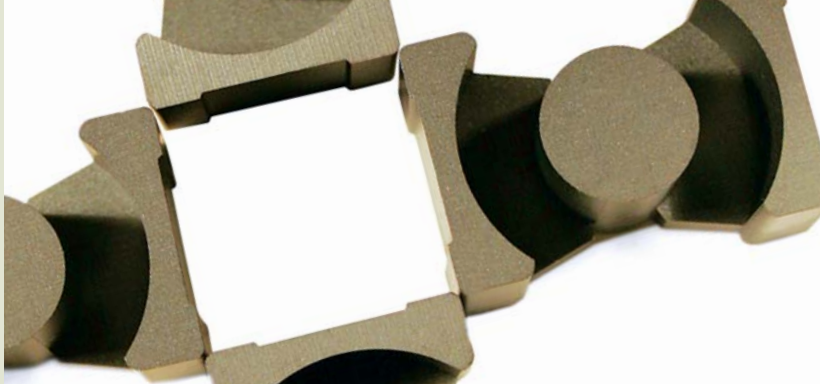
GEOMETRY CODE

EC – All E cores including ETD, EC, ER, EER, EFD, planar and lamination sizes.

IC – I cores

	DIMENSIONS IN MM						
TYPE/SIZE	A	B	C	D	E	F	G
ER 9/5	9.5 + 0/-0.3	2.45 ± .05	5 + 0/-0.2	1.6 + 0.15/-0	7.5 + 0.25/-0	3.5 + 0/-0.2	7.1 + 0.2/-0
ER 11/6	11 + 0/-0.35	2.45 ± 0.05	6 + 0/-0.2	1.5 + 0.15/-0	8.7 + 0.3/-0	4.25 + 0/-0.25	8 + 0/-0.25
ER 12.5/8.5	12.8 ± 0.3	2.85 ± 0.8	8.7 ± 0.25	1.75 ± 0.13	11.2 ± 0.3	5 ± 0.15	9.05 ± 0.3
I 12.5/8.5	12.8 ± 0.3	1.1 ± 0.1	8.7 ± 0.25				
ER 14.5/6	14.7 + 0/-0.4	2.95 ± 0.5	6.8 + 0/-0.2	1.55 + 0.2/-0	11.6 + 0.4/-0	4.8 + 0/-0.2	
ER 18/3/10	18 ± 0.35	3.15 ± 0.1	9.7 ± 0.2	1.6 ± 0.1	15.6 ± 0.3	6.2 ± 0.15	13.5 min
ER 32/6/25	32.1 + 0.55/-0.45	6 ± 0.13	25.4 ± .4	2.9 + 0/-0.25	27.2 ± 0.4	12.4 ± 0.15	27.2 ± 0.4
ER 20/7/14 C	20 ± 0.35	6.8 ± 0.1	14 ± 0.3	4.6 ± 0.15	18 ± 0.35	8.8 ± 0.15	12.86 ± 0.35
I 20/7/14 C	20 ± 0.35	2.3 ± 0.05	14 ± 0.3	1.9 ± 0.1	3 ± 0.1		
ER 20/7/14	20 ± 0.35	6.8 ± 0.1	14 ± 0.3	4.6 ± 0.15	18 ± 0.35	8.8 ± 0.15	12.86 ± 0.35
I 20/7/14	20 ± 0.35	1.9 ± 0.05	14 ± 0.3				
ER 23/3/12	23.2 ± 0.45	3.6 ± 0.1	12.5 ± 0.25	1.6 ± 0.1	20.2 ± 0.4	8	17.5 min
ER 25/5.5/18	25 ± 0.4	5.6 ± 0.1	18 ± 0.3	2.75 ± 0.15	22 ± 0.4	11 ± 0.2	15.2 ± 0.7
I 25/2/18	25 ± 0.4	2.3 ± 0.05	18 ± 0.3				
ER 25/8/18	25 ± 0.4	8 ± 0.1	18 ± 0.3	5.15 ± 0.15	22 ± 0.4	11 ± 0.2	15.2 ± 0.7
ER 30/8/20	30 ± 0.4	8 ± 0.15	20 ± 0.3	5.3 ± 0.2	26 ± 0.4	11 ± 0.2	19.45 ± 0.4
I 30/2.5/20	30 ± 0.4	2.7 ± 0.1	20 ± 0.3				

PQ Cores



PQ CORES

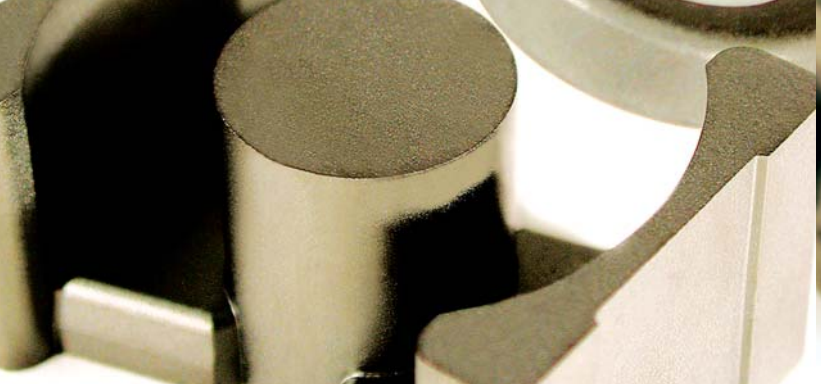
PQ cores are designed specifically for switched mode power supplies. This design provides an optimized ratio of volume to winding area and surface area. As a result, both maximum inductance and winding area are possible with a minimum core size. The cores provide maximum power output with minimum assembled transformer weight and volume, in addition to taking up a minimum amount of area on the printed circuit board.

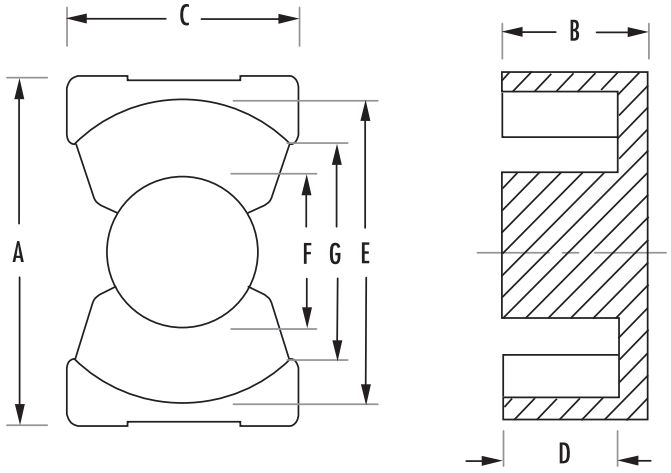
Assembly with printed circuit bobbins and one piece clamps is simplified. This efficient design provides a more uniform cross-sectional area; thus cores tend to operate with fewer hot spots than with other designs.

Typical applications include power transformers and power inductors.

		NOMINAL A_L (MH/1000T)			
TYPE/SIZE	ORDERING CODE	L	R	P	F
PQ 20/16	**0_42016UG**	1,650	3,587	3,907	4,690
PQ 20/20	**0_42020UG**	1,300	2,947	3,213	3,860
PQ 26/10	**0_42610UG**	3,900	7,733	8,413	8,080
PQ 26/14	**0_42614UG**	2,700	5,613		7,335
PQ 26/20	**0_42620UG**	2,640	5,560	6,053	7,270
PQ 26/25	**0_42625UG**	2,200	4,600	5,000	6,010
PQ 32/12	**0_43214UG**		6,867	7,467	8,960
PQ 32/20	**0_43220UG**		6,640	7,213	8,875
PQ 32/30	**0_43230UG**		4,667	5,080	6,100
PQ 35/35	**0_43535UG**		4,813	5,240	7,347
PQ 40/40	**0_44040UG**		4,267	4,640	5,580
PQ 50/50	**0_45050UG**		7,400	8,195	9,639

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
PQ 20/16	**0_42016UG**	37.6	61.9	59.1	2,330	0.15	13
PQ 20/20	**0_42020UG**	45.7	62.6	59.1	2,850	0.23	15
PQ 26/10	**0_42610UG**	29.4	105	93.8	3,090	0.09	15
PQ 26/14	**0_42614UG**	33.3	86.4	70.9	2,880	0.17	14
PQ 26/20	**0_42620UG**	45	121	109	5,470	0.39	31
PQ 26/25	**0_42625UG**	54.3	120	108	6,530	0.59	36
PQ 32/12	**0_43214UG**	34.4	109	92	3,750	0.3	21
PQ 32/20	**0_43220UG**	55.9	169	142	9,440	0.8	42
PQ 32/30	**0_43230UG**	74.7	167	142	12,500	1.6	55
PQ 35/35	**0_43535UG**	86.1	190	162	16,300	3.1	73
PQ 40/40	**0_44040UG**	102	201	175	20,500	5	95
PQ 50/50	**0_45050UG**	113	328	314	37,100	8.52	195





HOW TO ORDER

O	P	4	20	16	UG	XX

- Standard core
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate width (per set) in mm
- Geometry code/gap code
- Special specification code

GAP CODE

UG – Ungapped
Note – Any practical gap available

	DIMENSIONS IN MM								
TYPE/SIZE	A	B	2B	C	D	2D	E	F	G
PQ 20/16	21.3 ± 0.4	8.1 ± 0.1	16.2 ± 0.2	14 ± 0.4	5.15 ± 0.15	10.3 ± 0.3	18 ± 0.4	8.8 ± 0.2	12 min
PQ 20/20	21.3 ± 0.4	10.1 ± 0.1	20.2 ± 0.2	14 ± 0.4	7.15 ± 0.15	14.3 ± 0.3	18 ± 0.4	8.8 ± 0.2	12 min
PQ 26/10	27.2 ± 0.45	5.1 ± 0.1	10.2 ± 0.2	19 ± 0.45	1.2 min	2.39 min	22.05 min	12.2 max	15.5 min
PQ 26/14	27.2 ± 0.45	5.94 ± 0.1	11.9 ± 0.2	19 ± 0.45	3.4 min	6.7 min	22.05 min	12.2 max	15.5 min
PQ 26/20	27.3 ± 0.46	10.1 ± 0.13	20.2 ± 0.25	19 ± 0.45	5.75 ± 0.15	11.5 ± 0.3	22.5 ± 0.45	12 ± 0.2	15.5 min
PQ 26/25	27.3 ± 0.46	12.35 ± 0.13	24.7 ± 0.25	19 ± 0.45	8.05 ± 0.15	16.1 ± 0.3	22.5 ± 0.46	12 ± 0.2	15.5 min
PQ 32/12	33 ± 0.5	5.94 ± 0.1	11.9 ± 0.2	22 ± 0.5	3.4 min	6.7 min	27 min	13.75 max	19 min
PQ 32/20	33 ± 0.5	10.3 ± 0.13	20.6 ± 0.25	22 ± 0.5	5.75 ± 0.15	11.5 ± 0.3	27.5 ± 0.5	13.5 ± 0.25	19 min
PQ 32/30	33 ± 0.5	15.15 ± 0.13	30.3 ± 0.25	22 ± 0.5	10.65 ± 0.15	21.3 ± 0.3	27.5 ± 0.5	13.5 ± 0.25	19 min
PQ 35/35	36.1 ± 0.6	17.35 ± 0.13	34.7 ± 0.25	26 ± 0.5	12.5 ± 0.15	25 ± 0.3	32 ± 0.5	14.4 ± 0.25	23.5 min
PQ 40/40	41.5 ± 0.9	19.9 ± 0.15	39.8 ± 0.3	28 ± 0.6	14.75 ± 0.2	29.5 ± 0.4	37 ± 0.6	14.9 ± 0.3	29 ± 1
PQ 50/50	51 ± 0.7	25 ± 0.25	50 ± 0.5	32 ± 0.6	18.05 ± 0.3	36.1 ± 0.6	44 ± 0.7	20 ± 0.35	32 min

Pot Cores

POT CORES

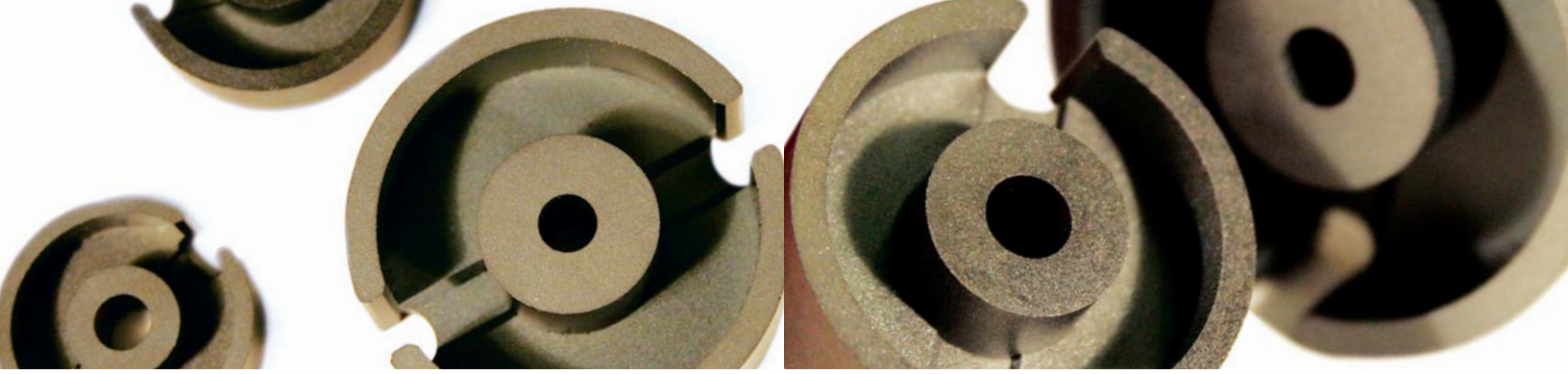
The pot core shape is a convenient means of adjusting the ferrite structure to meet the specific requirements of an application. Both high circuit Q and good temperature stability of inductance can be obtained with these cores. Pot cores, when assembled, nearly surround the wound bobbin. This self-shielded geometry isolates the winding from stray magnetic fields or effects from other surrounding circuit elements.

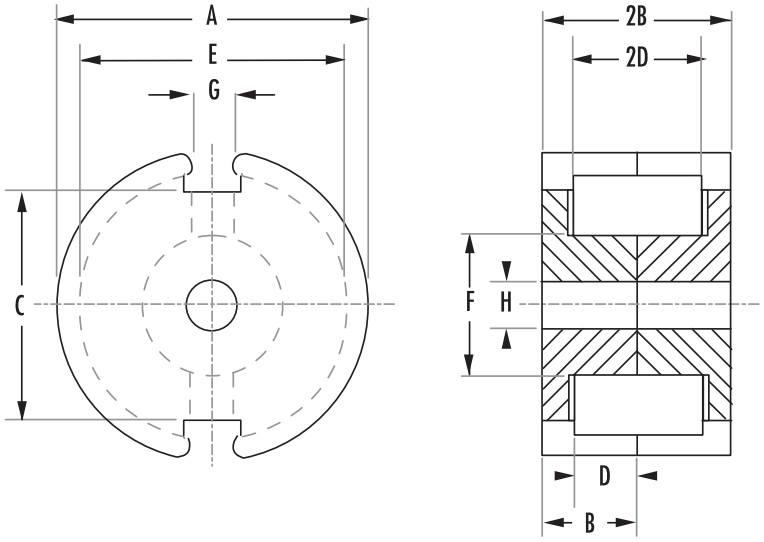
Both plain and printed circuit bobbins are available, as are mounting and assembly hardware.

Typical applications for pot cores include; differential inductors, power transformers, power inductors, converter and inverter transformers, filters, both broadband and narrow transformers and telecom inductors.

		NOMINAL A_L (MH/1000T)					
TYPE/SIZE	ORDERING CODE	L	R	P	F	J	W
PC 7/4	**0_40704UG**		886	964	1,200	2,257	4,286
PC 9/5	**0_40905UG**		1,013	1,100	1,365	2,727	6,029
PC 11/7	**0_41107UG**		1,533	1,667	2,000	3,900	9,000
PC 11/9	**0_41109UG**		1,467	1,573	1,900		
PC 14/8	**0_41408UG**		2,053	2,240	2,800	5,073	8,400
PC 18/11	**0_41811UG**		3,067	3,333	4,000	7,500	12,000
PC 18/14	**0_41814UG**		3,076	3,268	3,350	5,088	
PC 22/13	**0_42213UG**		4,040	4,400	4,900	9,100	16,000
PC 26/16	**0_42616UG**		5,213	5,667	6,350	11,700	20,000
PC 28/23	**0_42823UG**				7,000		
PC 30/19	**0_43019UG**		6,680	7,267	8,100	15,100	28,140
PC 36/22	**0_43622UG**		8,700	9,467	10,200	17,500	32,667
PC 42/29	**0_44229UG**		9,200	10,000	12,000		40,000

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
PC 7/4	**0_40704UG**	9.9	7	5.9	69	0.001	0.5
PC 9/5	**0_40905UG**	12.5	10.1	8	126	0.002	1
PC 11/7	**0_41107UG**	15.5	16.2	13.2	251	0.006	1.8
PC 11/9	**0_41109UG**	16.2	16.3	13.2	264	0.008	1.9
PC 14/8	**0_41408UG**	19.8	25.1	19.8	495	0.02	3.2
PC 18/11	**0_41811UG**	25.8	43.3	36	1,120	0.07	7.3
PC 18/14	**0_41814UG**	29.3	42.6	36	1,248	0.103	6.0
PC 22/13	**0_42213UG**	31.5	63.4	50.9	2,000	0.18	13
PC 26/16	**0_42616UG**	37.6	93.9	77.4	3,530	0.39	20
PC 28/23	**0_42823UG**	48.1	128	101	6,160	0.71	
PC 30/19	**0_43019UG**	45.2	137	116	6,190	0.73	34
PC 36/22	**0_43622UG**	53.2	202	172	10,700	1.53	57
PC 42/29	**0_44229UG**	68.6	265	214	18,200	3.69	104





HOW TO ORDER

O P 4 14 08 UG XX

- Standard pot core
- Ferrite core material
- Used for all ferrite types
- Approximate diameter in mm
- Approximate height (per set) in mm
- Geometry code/gap code
- Special specification code

GAP CODE

UG – Ungapped
Note – Any practical gap available

	DIMENSIONS IN MM									
TYPE/SIZE	A	B	2B	C	D	2D	E	F	G	H
PC 7/4	7.24 ± 0.15	2.08 ± 0.05	4.16 ± 0.1	4.72 nom	1.4 min	2.79 min	5.74 min	3 max	1.52 min	1.09 ± 0.05
PC 9/5	9.3+0/-0.3	2.7+0/-0.15	5.4+0/-0.3	6.5 ± 0.25	1.8+0.15/-0	3.6+0.3/-0	7.5+0.25/-0	3.9+0/-0.2	2 ± 0.2	2.04+0.06/-0
PC 11/7	11.1 ± 0.2	3.25 ± 0.05	6.5 ± 0.1	6.8 ± 0.25	2.2+0.15/-0	4.4+0.3/-0	9+0.4/-0	4.7+0/-0.2	2.2 ± 0.3	2.1 ± 0.1
PC 11/9	11.28+0/-0.4	3.43 ± 0.08	6.86 ± 0.16	7.54 ± 0.2	2.48 ± 0.08	4.96 ± 0.16	9 + 0.4/-0	4.7 + 0/-0.2	1.8 + 0.3/-0	2 + 0.08/-0
PC 14/8	14.3+0/-0.5	4.2 ± 0.05	8.4 ± 0.1	9.5 ± 0.3	2.8+0.2/-0	5.6+0.4/-0	11.6+0.4/-0	6+0/-0.2	2.7+1.2/-0	3+.1/-0
PC 18/11	18 ± 0.4	5.3 ± 0.05	10.6 ± 0.1	13.4 ± 0.3	3.7 ± 0.1	7.4 ± 0.2	15.15 ± 0.25	7.45 ± 0.15	3.8 ± 0.6	3.1 ± 0.1
PC 18/14	18 ± 0.4	7.1 ± 0.2	14.2 ± 0.4	11.84 ± 0.25	5.05 + 0.2/-0	10.1 + 0.4/-0	14 + 0.4/-0	7.4 + 0/-0.3	3.6 + 0.3/-0	3.1 ± 0.8
PC 22/13	22+0/-0.8	6.7 ± 0.1	13.4 ± 0.2	15 ± 0.4	4.6+0.2/-0	9.2+.4/-0	17.9+0.6/-0	9.4+0/-0.3	3.8 ± 0.6	4.4+0.3/-0
PC 26/16	25.5 ± 0.5	8.05 ± 0.1	16.1 ± 0.2	18 ± 0.4	5.5 min	11 min	21.6 ± 0.4	11.3 ± 0.2	3.8 ± 0.6	5.5 ± 0.1
PC 28/23	27.71 ± 0.4	11.43 ± 0.15	22.86 ± 0.3	19.69 nom	8.15 min	16.3 min	22 min	12.88 max	3.81 min	5.56 ± 0.1
PC 30/19	30 ± 0.5	9.45 ± 0.05	18.9 ± 0.1	20.5 ± 0.5	6.5 min	13 min	25.4 ± 0.4	13.3 ± 0.2	4.3 ± 0.6	5.5 ± 0.1
PC 36/22	35.5 ± 0.6	10.95 ± 0.05	21.9 ± 0.1	26.2 ± 0.6	7.3 min	14.6 min	30.4 ± 0.5	15.9 ± 0.3	4.9 ± 0.6	5.55 ± 0.15
PC 42/29	42.4 ± 0.7	14.7 ± 0.05	29.4 ± 0.1	32 ± 0.7	10.15 min	20.3 min	36.3 ± 0.7	17.4 ± 0.3	5.1 ± 0.6	5.55 ± 0.15

RS-DS Cores

RS-DS CORES

Slab cores are modified pot cores with the sides removed. The slabs can be paired with one round half of a standard pot core (RS combination) or two slabs can be paired together for a double slab (DS combination).

The RS geometry offers all the advantages of pot cores for filter applications, plus many additional features for power applications.

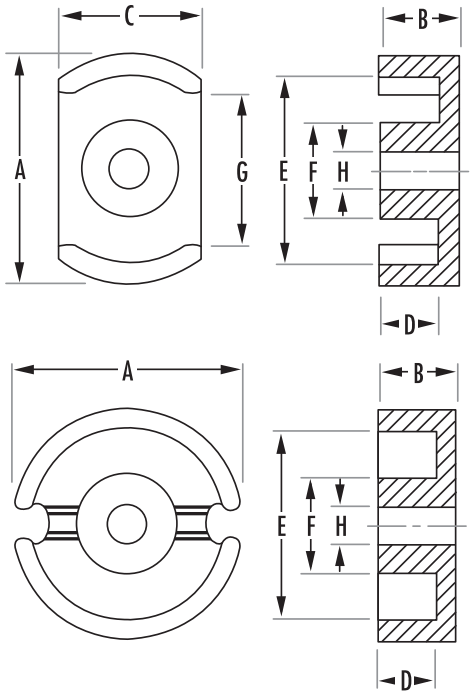
DS cores accommodate large size wire and assist in removing heat from the assembly.

Both plain and printed circuit bobbins are available for both types of cores.

Typical applications for RS-DS combinations include; low and medium power transformers, switched-mode power supplies, and converter and inverter transformers.

		NOMINAL A_L (MH/1000T)					
TYPE/SIZE	ORDERING CODE	L	R	P	F	J	W
DS 14/08	D_41408UG		1,653	1,800	2,474	3,260	3,260
HS 14/08	H_41408UG		1,533	1,667	1,990	4,107	7,043
RS 14/08	S_41408UG		1,760	1,913	2,274	4,500	7,643
DS 18/11	D_41811UG		3,038	3,236	3,697	5,174	7,386
HS 18/11	H_41811UG		2,666	2,827	3,197	5,140	5,899
RS 18/11	S_41811UG		2,942	3,112	3,498	5,760	
DS 23/11	D_42311UG		3,440	3,747	4,460	8,400	16,064
HS 23/11	H_42311UG		3,200	3,460	4,170	7,853	14,021
RS 23/11	S_42311UG		3,687	4,013	5,200	7,875	16,071
DS 23/18	D_42318UG		2,907	3,160	3,800	6,347	10,000
HS 23/18	H_42318UG		2,600	2,820	3,350	5,333	10,000
RS 23/18	S_42318UG		3,066	3,333	4,000	6,400	12,000
DS 26/16	D_42616UG		3,827		5,000	8,093	13,000
HS 26/16	H_42616UG		3,630		4,600	8,107	13,000
RS 26/16	S_42616UG		4,360	4,733	5,300	8,933	15,714
DS 30/19	D_43019UG		4,440	4,827	5,800	9,493	15,000
HS 30/19	H_43019UG		4,227		5,525	9,507	15,000
RS 30/19	S_43019UG		5,533	6,027	6,700	11,147	18,571
DS 36/22	D_43622UG		5,400	5,827	6,360	9,000	
HS 36/22	H_43622UG			5,400	6,050	8,550	
RS 36/22	S_43622UG		9,944	7,580		13,400	26,500
DS 42/29	D_44229UG		6,500	7,000			
RS 42/29	S_44229UG		8,300	8,900			

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
DS 14/08	D_41408UG	22.6	24.6	23.5	556	0.020	3.4
HS 14/08	H_41408UG	20.6	21	19.2	433	0.017	2.6
RS 14/08	S_41408UG	20.2	23	19.2	460	0.019	2.8
DS 18/11	D_41811UG	29.1	40	36.3	1,167	0.068	7.1
HS 18/11	H_41811UG	37.2	31	28.7	1,070	0.053	6.6
RS 18/11	S_41811UG	27.2	40.6	32.9	1,110	0.054	6.8
DS 23/11	D_42311UG	26.8	51.2	37.8	1,370	0.08	10
HS 23/11	H_42311UG	27	48.2	37.8	1,300	0.075	9.1
RS 23/11	S_42311UG	28.6	61	53.6	1,740	0.09	11.65
DS 23/18	D_42318UG	39.9	58	40.7	2,310	0.21	13
HS 23/18	H_42318UG	40.1	53.4	40.7	2,130	0.19	12.1
RS 23/18	S_42318UG	41.6	62.2	53.6	2,590	0.22	17.4
DS 26/16	D_42616UG	38.9	77	62.7	3,000	0.28	15
HS 26/16	H_42616UG	39	72.1	62.7	2,810	0.26	14.4
RS 26/16	S_42616UG	38.3	82.6	62.7	3,180	0.39	20
DS 30/19	D_43019UG	46.2	117	96	5,410	0.6	22
HS 30/19	H_43019UG	46.1	111	96	5,110	0.56	21
RS 30/19	S_43019UG	45.6	123	96	5,610	0.63	30.95
DS 36/22	D_43622UG	56.9	162	140	9,250	1.22	37
HS 36/22	H_43622UG	57.6	157	140	9,030	1.18	
RS 36/22	S_43622UG	55.4	179.5	140	9,944	1.35	
DS 42/29	D_44229UG	76	232	211	17,600	3.18	78
RS 42/29	S_44229UG	72.3	244	211	17,641	3.35	



HOW TO ORDER

S P 4 23 11 UG XX

- Shape code
- Ferrite core material
- Used for all ferrite types
- Approximate diameter in mm
- Approximate height (per set) in mm
- Geometry code/gap code
- Special specification code

SHAPE CODE

D – DS Core with solid centerpost
H – DS Core with center hole
S – RS Core

GAP CODE

UG – Ungapped
Note – Any practical gap available

	DIMENSIONS IN MM									
TYPE/SIZE	A	B	2B	C	D	2D	E	F	G	H
DS 14/08	14.05± 0.25	4.15± 0.08	8.3 ± 0.15	9.4 ± 0.15	2.9 ± 0.1	5.8 ± 0.2	11.8 ± 0.2	5.9 ± 0.1	7.6 min	
HS 14/08	14 ± 0.25	4.24+0/-0.13	8.48+0/-0.28	9.4 ± 0.15	2.8 min	5.58 min	11.6 min	5.99 max	7.6 min	3.1 ± 0.08
RS 14/08	14 ± 0.25	4.24+0/-0.13	8.48+0/-0.28	9.4 ± 0.15	2.8 min	5.58 min	11.6 min	5.99 max	7.6 min	3.1 ± 0.08
DS 18/11	18 ± 0.4	5.3	10.6 ± 0.15	11.9 ± 0.2	3.7	7.4 ± 0.2	15.15 ± 0.25	7.45 ± 0.15	11.2 min	
HS 18/11	18 ± 0.4	5.3	10.6 ± 0.15	11.9 ± 0.2	3.7	7.4 ± 0.2	15.15 ± 0.25	7.45 ± 0.15	11.2 min	3.1 ± 0.1
RS 18/11	18 ± 0.4	5.3 ± 0.13	10.6 ± 0.15	11.9 ± 0.2	3.7 ± 0.1	7.4 ± 0.2	15.15 ± 0.25	7.45 ± 0.15	11.2 min	3.1 ± 0.1
DS 23/11	22.86± 0.46	5.54± 0.13	11.08± 0.26	15.24± 0.25	3.63 min	7.26 min	17.93 min	9.9 max	13.21 min	
HS 23/11	22.86± 0.46	5.54± 0.13	11.08± 0.26	15.24± 0.25	3.63 min	7.26 min	17.93 min	9.9 max	13.21 min	5.1 ± 0.1
RS 23/11	22.9± 0.45	5.5± 0.13	11.± 0.25	15.2± 0.25	3.75± 0.13	7.5 ± 0.25	18.3 ± 0.35	9.7 ± 0.2	13.2 min	5.1 ± 0.1
DS 23/18	22.86±0.46	9 ± 0.18	18± 0.36	15.24±0.25	6.93 min	13.86 min	17.93 min	9.9 max	13.21 min	
HS 23/18	22.86±0.46	9 ± 0.18	18 ± 0.36	15.24±0.25	6.93 min	13.86 min	17.93 min	9.9 max	13.2 min	5.08 ± 0.1
RS 23/18	22.9±0.45	9 ± 0.18	18 ± 0.35	15.25±0.25	7.2 ± 0.18	14.4 ± 0.35	18.3 ± 0.35	9.7 ± 0.2	13.2 min	5.1 ± 0.1
DS 26/16	25.5±0.51	8.05 ± 0.1	16.1 ± 0.2	17.09 nom	5.51 min	11.02 min	21.21 min	11.48 max	15.5 min	
HS 26/16	25.5 ± 0.51	8.05 ± 0.1	16.1 ± 0.2	17.09 nom	5.51 min	11.02 min	21.21 min	11.48 max	15.5 min	5.56 ± 0.1
RS 26/16	25.5 ± 0.51	8.05 ± 0.1	16.1 ± 0.2	17.09 nom	5.51 min	11.02 min	21.21 min	11.48 max	15.5 min	5.56 ± 0.1
DS 30/19	30 ± 0.51	9.4 ± 0.1	18.8 ± 0.2	20.32±0.25	6.5 min	13 min	25 min	13.51 max	15.49 min	
HS 30/19	30 ± 0.51	9.4 ± 0.1	18.8 ± 0.2	20.32±0.25	6.5 min	13 min	25 min	13.51 max	15.49 min	5.56 ± 0.1
RS 30/19	30 ± 0.51	9.4 ± 0.1	18.8 ± 0.2	20.32±0.25	6.5 min	13 min	25 min	13.51 max	15.49 min	
DS 36/22	35.61 ± 0.51	10.85 ± 0.125	21.7 ± 0.25	23.85 nom	7.29 min	14.58 min	29.9 min	16.1 max	20.3 min	
HS 36/22	35.61 ± 0.51	10.85 ± 0.125	21.7 ± 0.25	23.85 nom	7.29 min	14.58 min	29.9 min	16.1 max	20.3 min	5.56 ± 0.1
RS 36/22	35.61 ± 0.51	10.9 ± 0.075	21.8 ± 0.15	23.85 min	7.4 ± 0.1	14.8 ± 0.2	29.9 min	16.1 max	20.3 min	
DS 42/29	42.4 ± 0.71	14.8 ± 0.2	29.6 ± 0.4	28.4 nom	10.21 min	20.42 min	35.61 min	17.7 max	25.0 min	
RS 42/29	42.4 ± 0.71	14.8 ± 0.2	29.6 ± 0.4	28.4 nom	10.21 min	20.42 min	35.61 min	17.7 max	25.0 min	

RM Cores

RM CORES

RM cores are square-designed cores that offer all the magnetic and mechanical advantages of pot cores, plus the added feature of maximizing magnetic performance while minimizing PC board space.

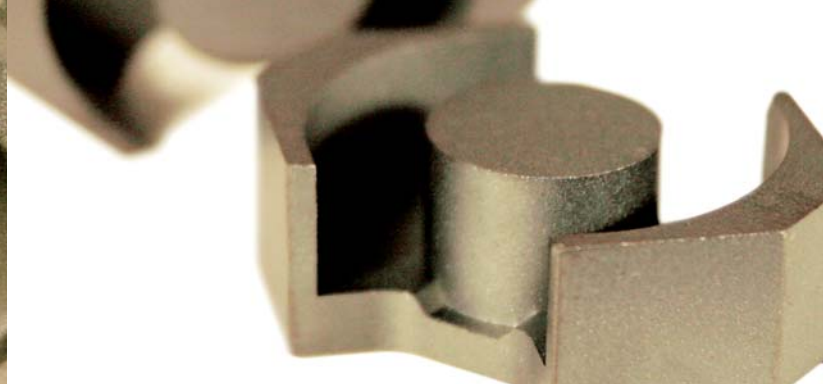
Easy to assemble and adaptable to automation, completed units provide at least 40% savings in mounting area compared to a similar size pot core assembly.

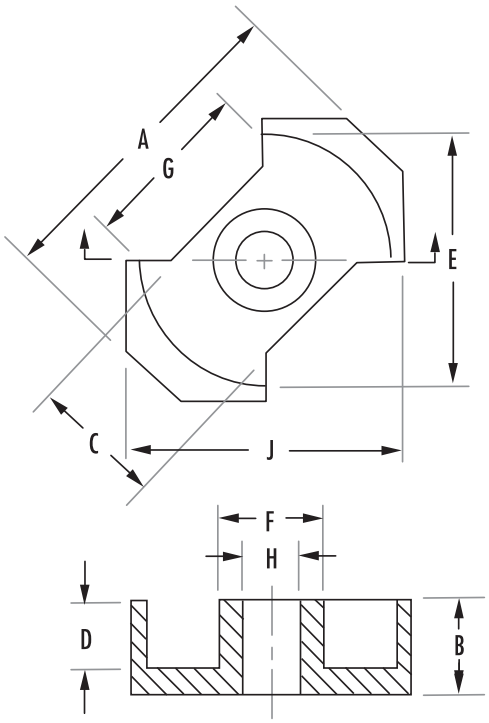
Printed circuit bobbins or plain bobbins are available.

Typical applications include differential inductors, power inductors, filter inductors, telecom inductors and broadband transformers.

		NOMINAL A_L (MH/1000T)					
TYPE/SIZE	ORDERING CODE	L	R	P	F	J	W
RM 4 N	**N_41110UG**	560	1,125	1,191	1,333	1,752	3,518
RM 4	**R_41110UG**		920	1,000	1,200	1,973	3,000
RM 5 N	**N_41510UG**	900	1,720	1,867	2,100	4,133	6,000
RM 5	**R_41510UG**		1,720	1,867	2,100	4,133	6,000
RM 6 N	**N_41812UG**	1,230	2,387	2,600	3,080	6,707	8,600
RM 6	**R_41812UG**		2,187	2,333	2,800	5,973	7,714
RM N LP	**N_41912UG**	1,250	2,213	2,400	2,880	6,707	8,600
RM LP	**R_41912UG**		1,987	2,169	2,600	5,387	7,714
RM 7 N	**N_42013UG**	1,450	3,058	3,244	3,675	5,001	9,571
RM 8 N	**N_42316UG**	1,700	2,700	2,933	5,210	8,000	12,200
RM 8	**R_42316UG**		2,347	2,560	3,500	6,960	10,600
RM 10 N	**N_42819UG**	2,200	4,047	4,400	5,500		16,000
RM 12 N	**N_43723UG**		4,600	5,000	6,000	11,800	22,600
RM 14 N	**N_44230UG**		7,000	7,540	8,782	13,096	20,735

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
RM 4 N	**N_41110UG**	23.3	13.8	11.5	322	0.010	1.5
RM 4	**R_41110UG**	20.6	10.8	7.9	222	0.008	1.6
RM 5 N	**N_41510UG**	23.2	24.8	18.1	574	0.02	3.3
RM 5	**R_41510UG**	21.4	21	13.9	449	0.02	3
RM 6 N	**N_41812UG**	27.5	38	31.2	1,040	0.05	5.4
RM 6	**R_41812UG**	25.6	32	22.6	819	0.05	5.1
RM N LP	**N_41912UG**	29.2	37	31.2	1,090	0.05	5.1
RM LP	**R_41912UG**	27	31	22.6	837	0.05	4.8
RM 7 N	**N_42013UG**	30	44.1	39.6	1,325	0.14	6
RM 8 N	**N_42316UG**	38.4	63	55.4	2,440	0.15	13
RM 8	**R_42316UG**	35.5	52	36.9	1,850	0.15	10.4
RM 10 N	**N_42819UG**	44.6	96.6	89.1	4,310	0.44	23
RM 12 N	**N_43723UG**	56.6	146	125	8,340	1.02	42
RM 14 N	**N_44230UG**	70	198	168	13,900	1.72	70





HOW TO ORDER

R P 4 15 10 UG XX

- Shape code
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate height (per set) in mm
- Geometry code/gap code
- Special specification code

SHAPE CODE

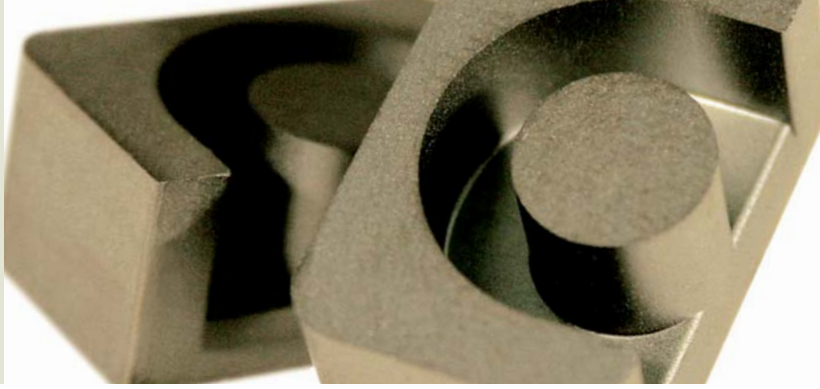
N – RM Core with solid centerpost
R – RM Core with center hole

GAP CODE

UG – Ungapped
Note – Any practical gap available

	DIMENSIONS IN MM										
TYPE/SIZE	A	B	2B	C	D	2D	E	F	G	H	J
RM 4 N	11+0/-0.5	5.2 ± 0.05	10.4 ± 0.1	4.6+0/-0.2	3.5+0.2/-0	7+0.4/-0	7.95+0.4/-0	3.9+0/-0.2	5.8 min		9.8+0/-0.4
RM 4	11.8 max	5.2 ± 0.05	10.4 ± 0.1	4.45 nom	3.61 ± 0.1	7.21 ± 0.2	8.15 ± 0.2	3.8 ± 0.1	5.79 ref	2.05±0.05	9.6 ± 0.2
RM 5 N	14.6+0/-0.6	5.2 ± 0.05	10.4 ± 0.1	6.8+0/-0.4	3.25 ± 0.1	6.5 ± 0.2	10.2+0.4/-0	4.9+0/-0.2	6 min		12.3+0/-0.5
RM 5	14.9 max	5.2 ± 0.05	10.4 ± 0.1	6.6 nom	3.25 ± 0.1	6.5 ± 0.2	10.4±0.2	4.8 ± 0.1	6.71 nom	2.05±0.05	12.05±0.25
RM 6 N	17.9+0/-0.7	6.2 ± 0.05	12.4 ± 0.1	7+0/-0.4	4 + 0.2/-0	8 + 0.4/-0	12.4+0.5/-0	6.4+0/-0.2	5.85 nom		14.7+0/-0.6
RM 6	18.3 max	6.2 ± 0.05	12.4 ± 0.1	7.4 nom	4.1 ± 0.1	8.2 ± 0.2	12.65±0.25	6.25 ± 0.15	5.85 nom	3.05±0.05	14.4 ± 0.3
RM N LP	18.3 max	6.2 ± 0.05	12.4 ± 0.1	8.2 nom	4.1 ± 0.1	8.2 ± 0.2	12.65±0.25	6.25 ± 0.15	9 nom		14.4 ± 0.3
RM LP	18.3 max	6.2 ± 0.05	12.4 ± 0.1	8.2 nom	4.1 ± 0.1	8.2 ± 0.2	12.65±0.25	6.25 ± 0.15	9 nom	3.05±0.05	14.4 ± 0.3
RM 7 N	20.3+0/-0.8	6.7 ± 0.05	13.4 ± 0.1		4.2+0.25/-0	8.4+0.5/-0	14.75+0.6-0	7.25+0/-0.3	9.3 min		17.2+0/-0.7
RM 8 N	23.2+0/-0.9	8.2 ± 0.05	16.4 ± 0.1	11+0/-0.5	5.5 ± 0.1	11 ± 0.2	17+0.6/-0	8.55+0/-0.3	9.5 min		19.7+0/-0.8
RM 8	23.2 max	8.2 ± 0.05	16.4 ± 0.1	10.8 nom	5.53±0.13	11.05 ± 0.25	17.35 ± 0.35	8.4 ± 0.15	11.7 nom	4.5 ± 0.1	19.3 ± 0.4
RM 10 N	28.5+0/-1.3	9.3 ± 0.05	18.6 ± 0.1	13.5+0/-0.5	6.2+0.3/-0	12.4+0.6/-0	21.2+0.9/-0	10.9+0/-0.4	10.9 min		24.7+0/-1.1
RM 12 N	37.4+0/-1.3	12.25±0.05	24.5 ± 0.1	16.1+0/-0.5	8.4+0.3/-0	16.8+0.6/-0	24.9+1.1/-0	12.8+0/-0.4	12.9 min		29.8+0/-1.1
RM 14 N	42.2+0/-1.4	15.05±0.05	30.1 ± 0.1	19+0/-0.6	10.4+0.3/-0	20.8+0.6/-0	29+1.2/-0	15+0/-0.6	17 nom		34.8+0/-1.3

EP Cores



EP CORES

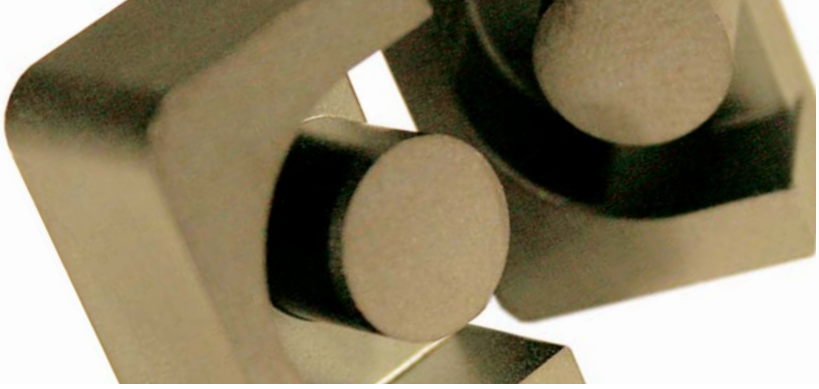
EP cores are round center-post cubical shapes which enclose the coil completely except for the printed circuit board terminals. This particular shape minimizes the effect of air gaps formed at mating surfaces in the magnetic path and provides a larger volume ratio to total space used. EP cores provide excellent shielding.

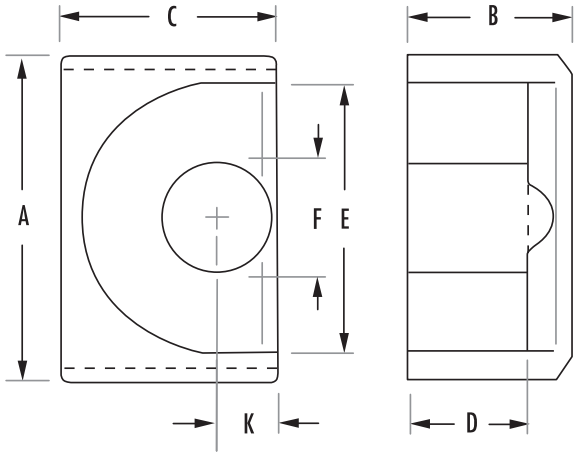
Printed circuit bobbins, surface mount bobbins and mounting clamp assemblies are available.

Typical applications for EP cores include differential and telecom inductors and power transformers.

		NOMINAL A_L (MH/1000T)					
TYPE/SIZE	ORDERING CODE	L	R	P	F	J	W
EP 7	**P_40707UG**	590	1,080	1,173	1,240	2,573	5,143
EP 10	**P_41010UG**	530			1,200	2,467	4,800
EP 13	**P_41313UG**	760	1,533	1,667	2,000	3,733	7,143
EP 17	**P_41717UG**	1,120		2,600	3,100	5,867	11,429
EP 20	**P_42120UG**	1,930	4,227	4,600	5,000	9,600	19,286

		MAGNETIC DATA					
TYPE/SIZE	ORDERING CODE	l_e (mm)	A_e (mm²)	Amin (mm²)	V_e (mm³)	WaAc (cm⁴)	Weight (grams per set)
EP 7	**P_40707UG**	15.5	10.7	8.55	165	0.003	1.4
EP 10	**P_41010UG**	19.3	11.3	8.55	215	0.01	2.8
EP 13	**P_41313UG**	24.2	19.5	14.9	472	0.03	5.1
EP 17	**P_41717UG**	29.5	33.7	25.5	999	0.08	11.6
EP 20	**P_42120UG**	41.1	78.7	60.8	3,230	0.24	27.6





HOW TO ORDER

P J 4 10 10 UG XX

- Shape code
- Ferrite core material
- Used for all ferrite types
- Approximate length in mm
- Approximate height (per set) in mm
- Geometry code/gap code
- Special specification code

SHAPE CODE

P – EP Core

GAP CODE

UG – Ungapped
Note – Any practical gap available

	DIMENSIONS IN MM								
TYPE/SIZE	A	B	2B	C	D	2D	E	F	K
EP 7	9.2 ± 0.2	3.7 ± 0.5	7.4 ± 0.1	6.35 ± 0.15	2.5 min	5.0 min	7.2 min	3.4 max	1.7 ± 0.1
EP 10	11.5 ± 0.3	5.15 ± 0.1	10.3 ± 0.2	7.6 ± 0.2	3.6 min	7.2 min	9.2 min	3.45 max	1.85 ± 0.1
EP 13	12.8 + 0/-0.6	6.45 ± 0.08	12.9 ± 0.16	9 + 0/-0.4	4.5 + 0.2/-0	9 + 0.4/-0	9.7 + 0.6/-0	4.5 + 0/-0.3	2.4 ± 0.1
EP 17	18 ± 0.4	8.4 ± 0.1	16.8 ± 0.2	11 ± 0.25	5.7 ± 0.15	11.4 ± 0.3	12 ± 0.4	5.7 ± 0.18	3.3 ± 0.2
EP 20	24 ± 0.5	10.7 ± 0.1	21.4 ± 0.2	15 ± 0.35	7.2 ± 0.15	14.4 ± 0.3	16.5 ± 0.4	8.8 ± 0.25	4.5 ± 0.2

Hardware

HARDWARE

SIZE	TYPE	P/N
0200	TC	SMC03016A
		SMC06018A
		SMH05025A
		SMH07058A
0301	TC	SMC03016A
		SMC06018A
		SMH05025A
		SMH07058A
0401	TC	SMC06018A
		SMH05025A
		SMH07058A
0402	TC	SMC06018A
		SMH05025A
		SMH07058A
0502	TC	SMC06018A
		SMH05025A
		SMH07058A
0503	TC	SMC06018A
		SMH05025A
		SMH07058A
0601	TC	SMC06018A
		SMH07058A
0603	TC	SMC06018A
		SMH07058A
0704	PC	00B070401
0705	TC	SMH07058A
0707	EP	0AC070716
		0BC070712
		PCB07076B
		SMB07076A
0905	PC	00B090501
		00C090511
0906	ER	00C09061A
		SMB09068A
1009	EFD	00C1009B1
		PCB1009B1
1010	EP	00C10102A
		PCB10108A
		SMB10108A
		PCB101081
1107	PC	00B110701
		00B1107A2
		00C110711
1110	RM	00C111012
		PCB11104A
1208	EFD	00B120801
1212	EFD	00C1212B1
		PCB1212B1
1313	EP	0AC131316
		0BC131314
		PCB1313TB
		SMB1313TA
1406	TC	TVB22066A
		TVH22064A
1407	TC	TVB22066A
		TVH22064A
1408	PC	00B140801
		00B140802
		00C140811
		00W140815
		PCB140811
		PCB140812
		PCB140821
		PCB140822
		PCB140861
		PCB1408S1
		TBA140800
		TCA1408B1
		TCA1408C3
1434	P-EC	00C143420
1450	TC	TVB22066A
		TVH22064A
1506	TC	TVB22066A
		TVH22064A
1510	RM	00C111012
		PCB15104A
		PCB15104B
		PCB151061
		PCB151081
		TBP151000
		TCF1510R1
1515	EFD	00C15151A
		PCB15158A
		SMB1515TA
		00C1515B1
		PCB1515B1
1605	TC	TVB22066A
		TVH22064A
1717	EP	00C17172A
		PCB17178A
1805	P-EC	00C180520
1808	EC	00B180801
		PCB1808B1
1809	TC	TVB2206A
		TVH22064A
1810	EC	00B18100A
1811	PC	00B181101
		00B181102
		00B181103
		00C181111
		00W181118
		PCB181111
		PCB181112
		PCB181121
		PCB181122
		TCA1811B1
1812	RM	00C181211
		PCB181241
		PCB181261
		TBA181201
		TCA1812C2
		TVH22064A
		TVH25074A
1912	RM	00C181211
		PCB181241
		PCB181261
		TBA181201
		TCA1812C2
2016	EP	00C201612
		PCB2016FB
2019	EFD	00C2019B1
		PCB20119B1
2020	PQ	PCB2020FB
2106	PQ	TVB22066A
		TVB2908TA
		TVH22064A
		TVH25074A
2109	TC	TVB22066A
		TVB2908TA
		TVH22064A
		TVH25074A
2120	EP	0AC212016
		0BC212016
		PCB2120TB
2206	TC	TVB22066A
		TVB2908TA
		TVH22064A
		TVH25074A
2207	TC	TVB22066A
		TVB2908TA
		TVH22064A
		TVH25074A
2212	TC	TVB22066A
		TVB2908TA
		TVH22064A
		TVH25074A
2213	PC	00B221301
		00B221302
		00B221303
		00C221314
		00W221324
		0PC221314
		PCB221311
		PCB221312
		PCB221321
		PCB221322
		TBP221300
		TBP2213A0
		TCF2213B1
2216	P-EC	00C221620
2311	RS/DS	PCB2311T1
2316	RM	00C231615
		PCB231651
		PCB231652
		PCB231681
2318	RM	PCB2318T1
2507	TC	TVB2908TA
		TVH22064A
		TVH25074A
2508	TC	TVB2908TA
		TVH22064A
		TVH25074A
2510	EC	00B251001
		PCB2510V1
		PCB2510V2
2515	EC-IC	00B251501
2520	EC	PCB2520TA
2523	EFD	00C25231A
		PCB2523TA
		00C2523B1
		PCB2523B1
2616	PC	00B261601
		00B261602
		00B261603
		00C261614
		0PC261614
		PCB261611
		PCB261612
		PCB262613
		PCB261621
		PCB261622
		PCB2616TA
		TBP669000
		TCF2800B1
2620	PQ	00C262012
		PCB2620LA
2625	PQ	00C262512
		PCB2625LA
2819	RM	00C281916
		PCB2819L1
2823	PC	00B282301
2908	TC	TVB2908TA
		TVB3610FA
		TVH25074A
2915	TC	TVB2908TA
		TVB3610FA
		TVH25074A
2929	ETD	00C2929B1
		PCB2929B1
3007	EC	PCB3007T1
3009	EC	PCB3009LA
3019	RS/DS	00B301901
		00B301902
		00B301903
		00C301917
		PCB301911
		PCB301921
		PCB3019T1
		TBP669000
		TCF2800B1
3030	EFD	00C3030B1
		PCB3030B1
3113	TC	TVB2908TA
		TVB3610FA
3205	TC	TVB3610FA
		TVH38134A
3220	PQ	00C322017
		PCB3220B1
3230	PQ	00C323017
		PCB3230B1
3434	ETD	00C343416
		PCB3434FB
		PCB343414
3515	EC	00B351501
		PCB3515M1
		PCB3515M2
		PCB3515L2
3517	EC	00B351701
		0AC35171
		0CC351700
		PCH351701
3521	EER	PCB3521LA
3535	PQ	00C353517
		PCB3535LA
3610	TC	TVH38134A
3615	TC	TVB3610FA
		TVH38134A
3622	PC	00B362201
		00B362202
		00C362200
		00C362217
		PCB362211
		PCB3622L1
		TBP669000
		TCF2800B1
3723	RM	PCB3723L1
3806	TC	TVB3610FA
		TVH38134A
3813	TC	TVB3610FA
		TVH38134A
		TVH49164A
3825	TC	TVB3610FA
		TVH38134A
		TVH49164A
3939	ETD	00C393916
		PCB3939SB
4015	TC	TVH49164A
4020	EC-IC	00B402011
		PCB4020M1
4022	EC	PCB4022M1
4040	PQ	00C404017
		PCB4040FA
4119	EC	00B411901
		0AC411919
		0BC411940
		0CC411900
		PCB411901
		PCH411901
4216	EER	PCB4216FA
4229	PC	00B422901
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		00C422917
		PCB4229L1
		TBP669000
		TCF2800B1
		TCF4000B1
4317	EC	00B431701
		PCB4317M1
4416	TC	TVH49164A
4444	ETD	00C444416
		PCB444418
		PCB4444WB
4715	TC	TVH49164A
4721	EC	PCB4721M1
4916	TC	TVH49164A
4920	TC	TVH49164A
4925	TC	TVH49164A
4932	TC	TVH49164A
4949	ETD	00C494916
		PCB494920
		PCB4949WA
5224	EC	0AC522423
		0BC522440
		0CC522400
		PCB522401
		PCH522401
		00B5224B1
5454	ETD	00C5454B1
		PCB5454B1
5528	EC	00B5528B1
		PCB5528WB
5530	EC	PCB5530FA
5724	EC	00B572401
		PCB5724M1
5810	EC-IC	00C581001
		00C581002
5959	ETD	00C595916
		PCB5959AA
6113	TC	TVH49164A
		TVH61134A
6326	TC	TVH49164A
		TVH61134A
6410	EC-IC	00C641001
		00C641002
6527	EC-IC	00B652701
7035	EC	00B703501
		0AC703531
		0BC703540
		PCB703501
		PCH703501
7228	EC	00B722801
8020	EC	00B802001
		00B802002

Other Products from Magnetics

POWDER CORES

Powder cores are excellent as low loss inductors for switched-mode power supplies, switching regulators and noise filters. Most core types can be shipped immediately from stock.

Kool Mμ® powder cores have a higher energy storage capacity than MPP cores and are available in five permeabilities from 26μ through 125μ. Kool Mμ toroids are available in sizes identical to MPP cores, and extremely large (>4.0" or 101.6 mm) toroids/shapes are possible with interlocking Kool Mμ segments. This material is also available in a number of E-core sizes. Permeability for Kool Mμ E-cores is from 26 to 90 and sizes are tooled ranging from the EF 12.6 to the 160LE size. Kool Mμ blocks and U cores are also available.

Molypermalloy powder cores (MPP) are available in ten permeabilities ranging from 14 through 550, and have guaranteed inductance limits of ±8%. Insulation on the cores is a high dielectric strength finish not affected by normal potting compounds and waxes. Thirty sizes include I.D.s from 0.070" (1.78 mm) to 1.938" (49.2 mm) and O.D.s from 0.140" (3.56 mm) to 3.063" (77.8 mm). Standard cores include either temperature stabilized (as wide as -65° C at 125° C for stable operation) or standard stabilization.

High Flux powder cores have a much higher energy storage capacity than MPP cores and are available in six permeabilities from 26μ through 160μ. High Flux cores are available in sizes identical to MPP cores.

Magnetics XFLUX™ distributed air gap cores are made from 6.5% silicon iron powder. A true high temperature material, with no thermal aging, XFLUX™ offers lower losses than powder iron cores and superior DC Bias performance. The soft saturation of XFLUX™ material offers an advantage over ferrite cores. XFLUX™ cores are ideal for low and medium frequency chokes where inductance at peak is critical.

MPP THINZ® are extremely low height (<1 mm) self-shielded power inductor cores, allowing finished inductor heights in the 1.5 mm to 2 mm range. THINZ come in 5 sizes with O.D.s ranging from 3.05 mm through 78 mm and four permeabilities: 125μ, 160μ, 200μ and 250μ.

For further information view the Powder Cores Design Manual at *www.mag-inc.com.*

STRIP WOUND CORES

Tape wound cores are made from high permeability alloys of nickel-iron, grain oriented silicon-iron. The alloys are known as Orthonol®, Alloy 48, Square Permalloy 80, Supermalloy and Magnesil®. Cores are available in more than 50 standard sizes. For a wide range of frequency applications, materials are produced in thicknesses from 1/2 mil(0.013 mm) through 14 mils (0.356 mm). Cases are robust nylon boxes, rated for 200° C continuous operation and 2000 voltage minimum breakdown.

Applications include: magnetic amplifiers, reactors, regulators, static magnetic devices and current transformers.

Miniature Tape Wound Bobbin Cores are manufactured from Permalloy 80 and Orthonol ultra-thin tape (0.000125" to 0.001" thick). They are available in widths from 0.031" to 0.250" (wider on special request). Wound on non-magnetic stainless steel bobbins, core diameters are available down to 0.050", with flux capacities as low as several maxwells.

Magnetics' sophisticated pulse test equipment reproduces most test programs and can measure accurately in the millivolt-microsecond region.

Applications include: magnetometers, flux gates, oscillators, inverters and magnetic amplifiers.

For further information view the Strip Wound Cores Catalog at *www.mag-inc.com.*

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