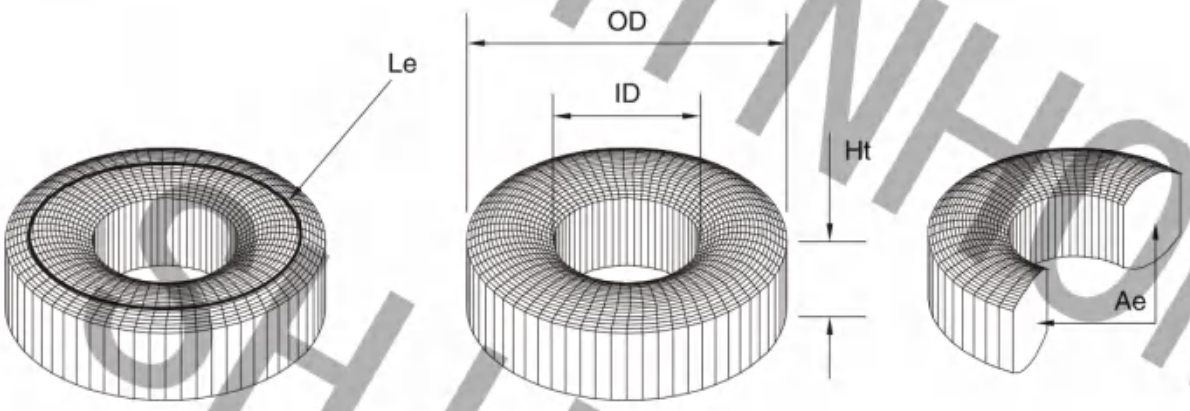
IRON POWDER CORES SERIES PRODUCTS

Cores Design

CHARACTER OF IRON POWDER CORES:



SYMBOL AND FORMULA

$$Ae=\frac{OD-ID}{2}\times Ht \qquad L=\frac{4\pi\mu_e Ae}{Le}\times N^2$$

$$Le=\frac{OD+ID}{2}\times \pi \qquad N=\sqrt{\frac{L}{A_L}} \qquad A_L=\frac{L}{N^2}$$

Ae–Core cross section area(cm^2)

Le–Effective magnetic path length(cm)

N–Winding turns

A_L–Inductance rated value (nH/N2) of one core, during frequency 10KHz and AC flus density 10 gauss(1mT)

L–Inductance

μ_e–Effective Permeability

π –3.14

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IRON POWDER CORES SERIES PRODUCTS

Property contrast

Sendust Core, MPP Core, High Flux Core

CHARACTER OF IRON POWDER CORES:

1. High saturated magnetic induction strength , it may work in large current, without saturation.

2. Stable and reliable properties, effective permeability has excellent frequency property.

3. Having good temperature property , apply to –65°C to +125°C temperature range.

4. Toroidal structure has minimum electromagnetic radiation, save shielded materials and reduce the requirement for shield work.

5. Iron powder cores have outstanding restrained and absorbed ability for noise. Its property is more than that of metal lamination and Ferrite core.

In light–adjusting circuit, adopt iron powder cores to restrict the climbing rate after set up an electric circuit and gain more ideal current rising curve, effectly remove harmful wave than metal lamination core (90 conducting angle).

In many using situation, to prevent magnetic saturation, it opens up a air–gap in Ferrite core and lamination core (Si–Fe, Ni–Fe) magnetic path to use " cut–open effect ", but it will cause additional loss and electromagnetic radiation in partial air–gap. Seeing that switch frequency to develop high frequency, strengthening sensitivity of circuit, that is not to be ignored. Using iron powder cores can avoid or greatly reduce this side effect and noise.

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IRON POWDER CORES SERIES PRODUCTS

Property contrast

Sendust Core, MPP Core, High Flux Core

CHARACTER OF IRON POWDER CORES:

Powder core Features

Cores	Features	Applications
Iron Powder Cores	· High Maximum Flux Density · Low Cost · Large Energy Storage Capacity	· Output Chokes for Switching Power Supplies · Conducted EMI Noise Filters · Pulse Transformers · DC Output/Input Filters · Light Dimmer Chokes(PFc) · Power Factor Correction Inductors · Continuous–mode Fly–back Inductors
Sendust Cores	· Core Losses Significantly Lower than Iron Powder Cores · Good DC–Bias Characteristics · Cost between Powder Iron and MPP	· Switching Regulator Inductors · In–line Noise Filters · Pulse Transformers, Fly–back Transformers · PFC Chokes
MPP Cores	· High Resistivity · Low Hysteresis and Eddy Current Losses · Excellent Inductance Stability under High DC–Bias Cindition · Good Temperature Stability	· Inductors for High Q · Low Loss Filter Circuits · Loading Coils · Transformers,Chokes and Inductors · Out–put Filter · Storage Chokes
High Flux Cores	· Excellent DC–Bias Characteristics · High Bmax of 15000Gauss Compared to MPP or Ferites · Core Losses Significantly Lower than Iron Cores · Large Energy Storage Capacity	· In–line Noise Filters · Switching Regulator Inductors · Pulse transformers, Fly–back Transgormers · PFC Chokes · Out–put Filter · Storage Chokes

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IRON POWDER CORES SERIES PRODUCTS

Toroidal Cores

MATERIAL PROPERTIES

Material Mix number	Reference Permeability (μe)	(+PPm/℃) Temp. Coef. of Perm	Permeability With DC Bias HDC=50 Oersteds @10kHz		Color Code
			% μ_0	μ effective	
–1	20	280			Blue/Cyan
–2	10	100	100	10	Red/Gray
–2/93	10	100	100	10	Gray/Red
–3	35	370			Gray/Cyan
–6	8.5	35			Yellow/Cyan
–7	9.0	30			White/Cyan
–8	35	300	91	32	Yellow/Red
–8/93	35	300	91	32	Red/Yellow
–10	6.0	150			Black/Cyan
–15	25	190			Red/White
–18	55	385	74	41	Green/Red
–26	75	825	51	38	Yellow/White
–28	22	510	91	20	Gray/Green
–30	22	510	91	20	Green/Gray
–33	33	665	84	28	Gray/Yellow
–34	33	565	84	27.7	Gray/Blue
–35	33	665	84	27.7	Yellow/Gray
–38	85	955	51	44	Gray/Black
–40	60	950	62	37	Green/Yellow
–45	100	1040	46	46	Black/Black
–52	75	650	59	44	Green/Blue
MPP	14, 26, 60, 90, 125	60			Gray
HI–FLUX	14, 26, 60, 125	140			Blue
SENDUST	14, 26, 60, 75, 90, 125	400			Black
AMORPHOUS	26, 60, 75, 90	180			Blue

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IRON POWDER CORES SERIES PRODUCTS

Toroidal Cores

THERMAL CHARACTERISTICS

Iron Powder Cores are fitted for temperature range from −65℃ to +125℃.When cores are placed in higher temperature over 150℃, it will make inductance and quality factor(Q) to perpetually decrease. Change in this character is depended on time, temperature, core size, frequency and flux density etc.

The cores are manufactured to the AL values listed; the permeability for each material is for reference only. In all cases, the AL values are based on a peak AC flux density of gauss (1mT) at a frequencecy of 10kHz.

Typical tolerance of magnetic character curve is ±10%, that of core loss curve is ±15%.

The toroidal cores are tested with a even separated single−layer winding in order to minimize leakage effects.

SURFACE COATING

Toroidal iron powder cores, manufactured by this company, is well finished with protecting paint. The minimum dielectric strength of coating is 600Vrms under 50Hz. The dielectic strength also may be increased according to the needs of customer. The surface of E−shaped and I−shaped cores are treated with antirust material. We suggest the user to carefully store the untreated products to avoid moist and rain.

SPECIAL PRODUCTS

Except for the listed size in this manual, we can manufacture special products to meet the needs of customers. The listed materials in this manual can be made cores with different height, but not increase model tool. If you have any special requirements, please contact with this company.

Our normal packing box weight is 15 to 20kg/box.

MATERIAL DESCRIPTION

−2 Material The low permeability of this material will result in a lower operating AC flux density than with other material with no additional gap−loss, it is suitable for high Frequency application.

−2/93 Material with its good linearity at high bias current is a less expensive alternative for −2 Material. It is suitable for applications that care less about the high frequency core loss.

−8 Material This material has low core loss and good linearity under high bias conditions. a good high frequency material. The highest cost material.

−8/93 Material is a less expensive alternative for −8 Material, the core loss is close to −8 Material and the linearity at high bias current is very good.

−18 Material This material has low core loss similar to the −8 Material with higher permeability and a lower cost, good saturation characteristics.

−26 Material The most popular material. It is a costeffective general purpose material that is useful in a wide varity of power conversion and line filter application.

−28 Material The good linearity, low cost, and relatively low permeability of this material make it popular in the larger sizes for high power UPS chokes.

−33 Material An inexpensive alternate to the −8 Material for applications where high frequence core loss is not critical, good linearity with high bias.

−40 Material The least expensive material, It has characteristics quite similar to the very popular −26Material, popular in the larger sizes.

−45 Material The highest permeability material. a high permeability alternate to −52 Material with slightly higher core losses.

−52 Material This material has lower core loss at high frequency and the same permeability as the −26 Material. It is very popular for new high frequency choke designs.

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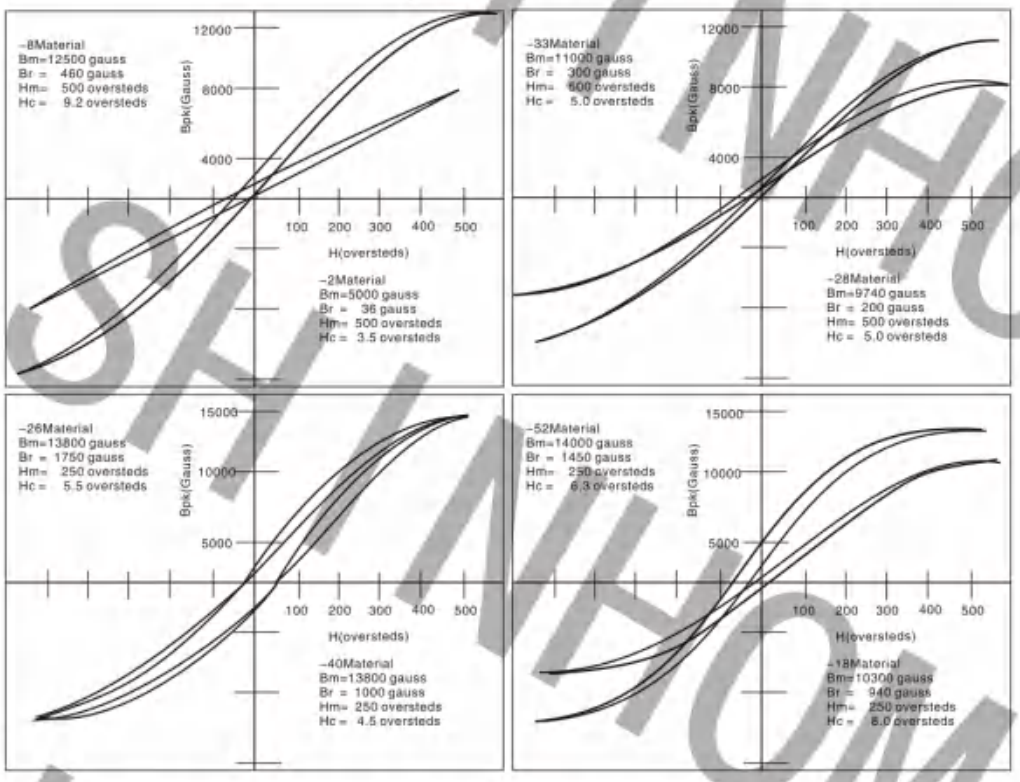
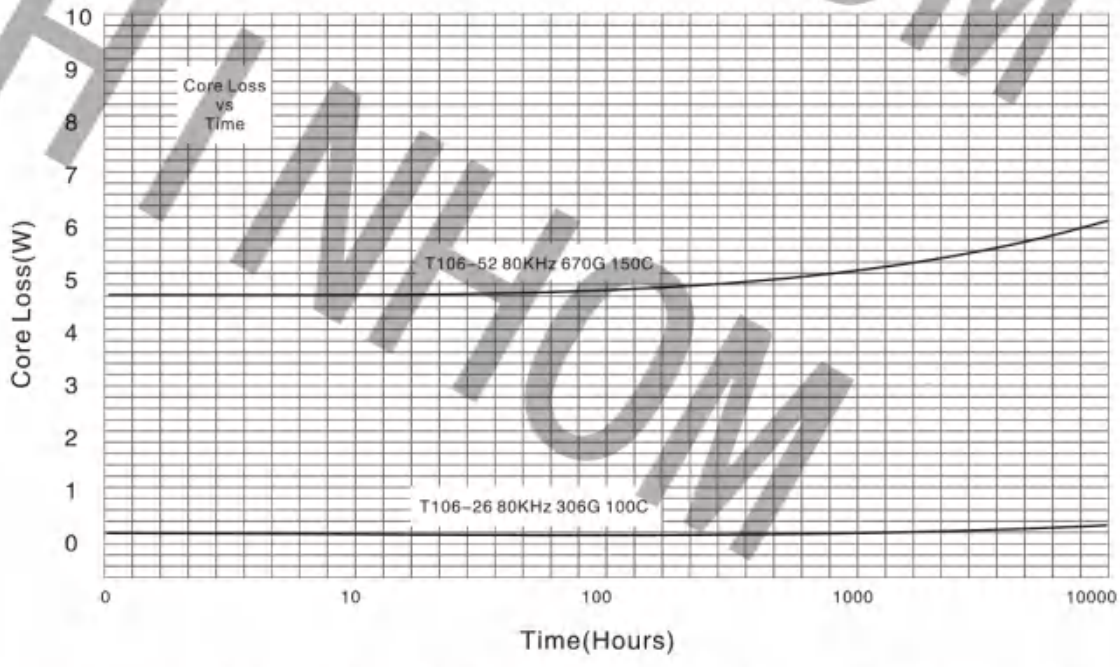
IRON POWDER CORES SERIES PRODUCTS

Magnetic Characteristics

CHARACTER OF IRON POWDER CORES:

B-H CURVES





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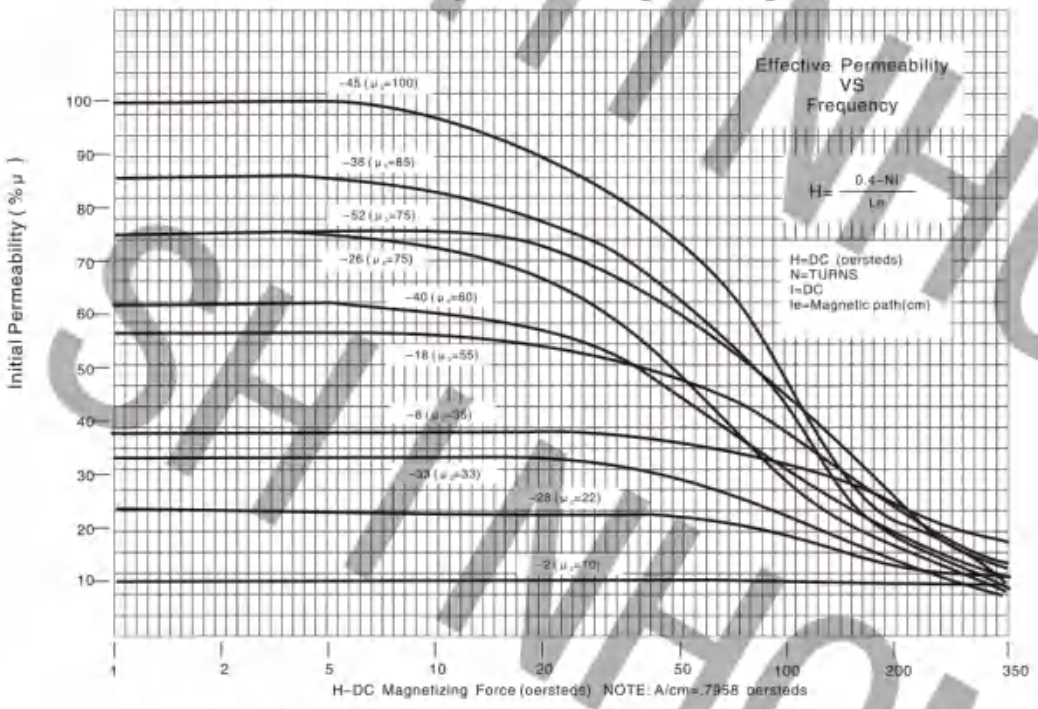
IRON POWDER CORES SERIES PRODUCTS

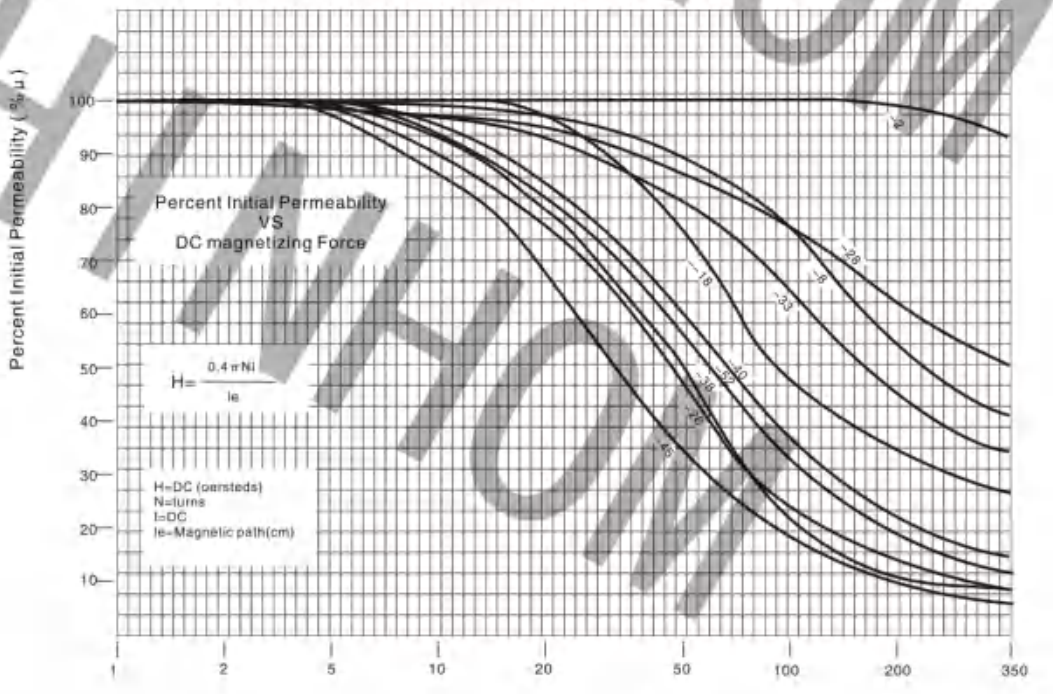
Magnetic Characteristics

CHARACTER OF IRON POWDER CORES:

Initial Permeability VS DC Magnetizing Force



Percent Initial Permeability VS DC Magnetizing Force



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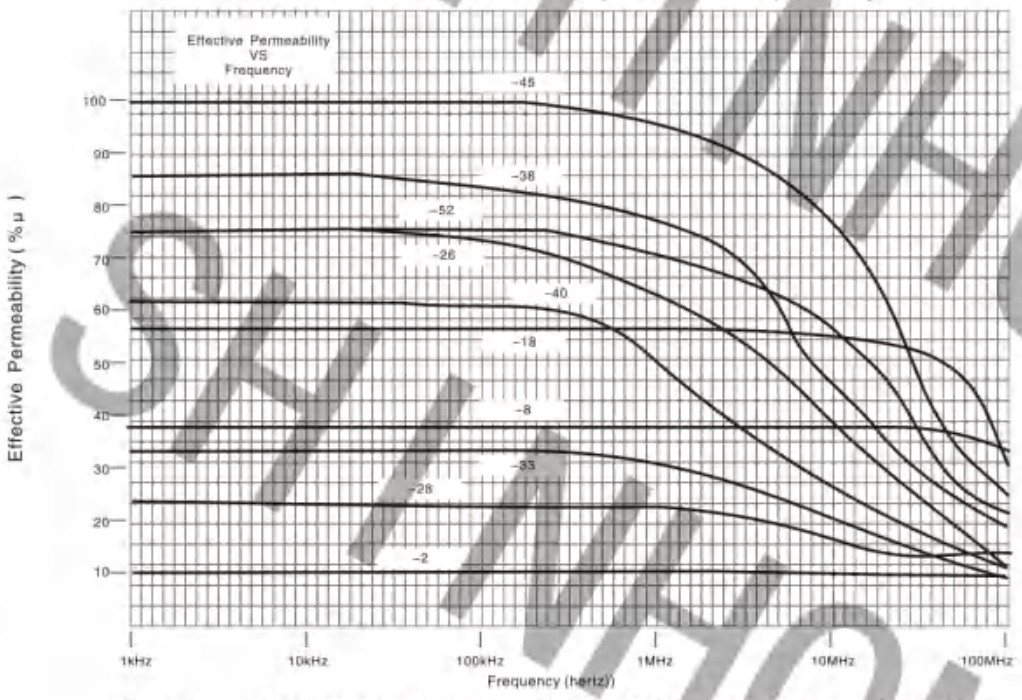
IRON POWDER CORES SERIES PRODUCTS

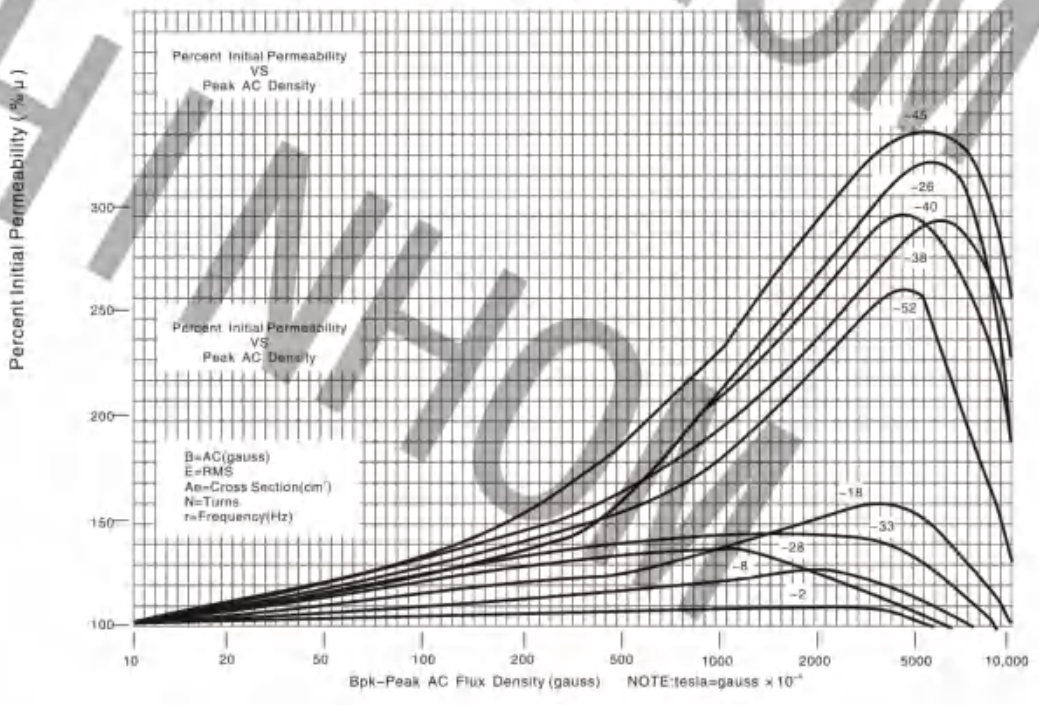
Magnetic Characteristics

CHARACTER OF IRON POWDER CORES:

Effective Permeability VS Frequency



Percent Initial Permeability VS Peak AC Flux Desity



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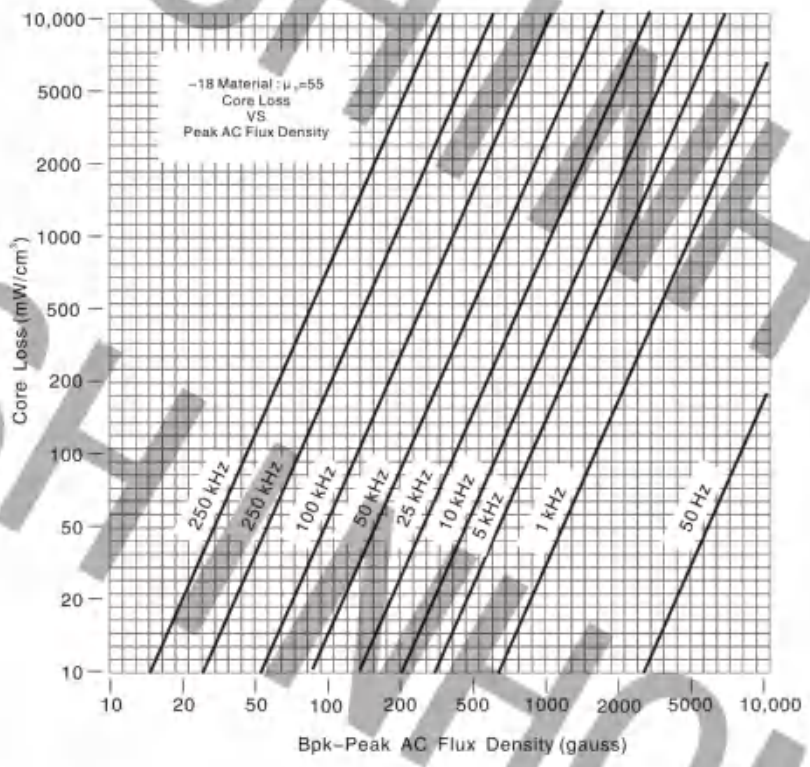
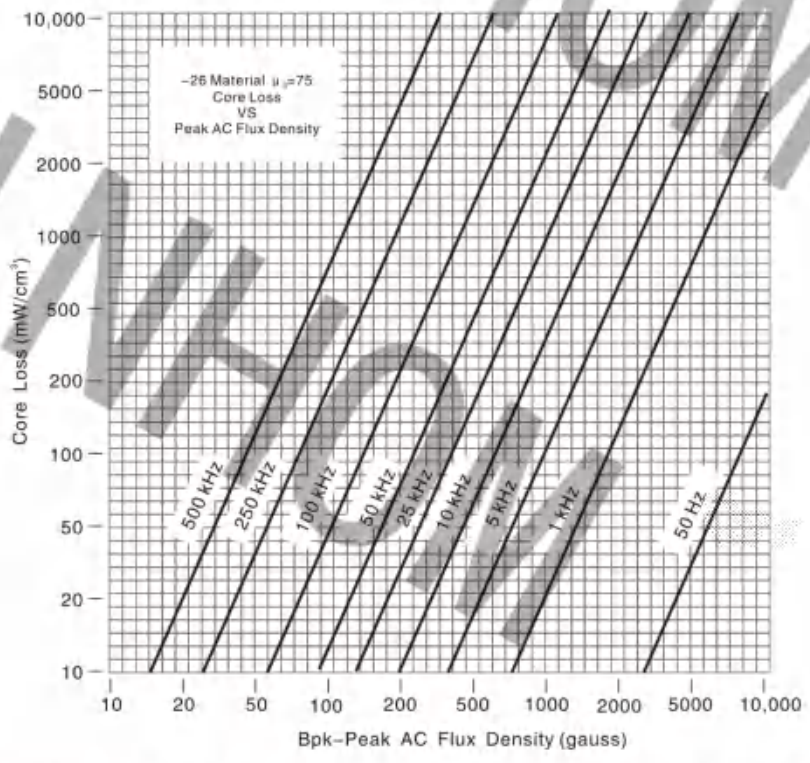
IRON POWDER CORES SERIES PRODUCTS

Magnetic Characteristics

CHARACTER OF IRON POWDER CORES:





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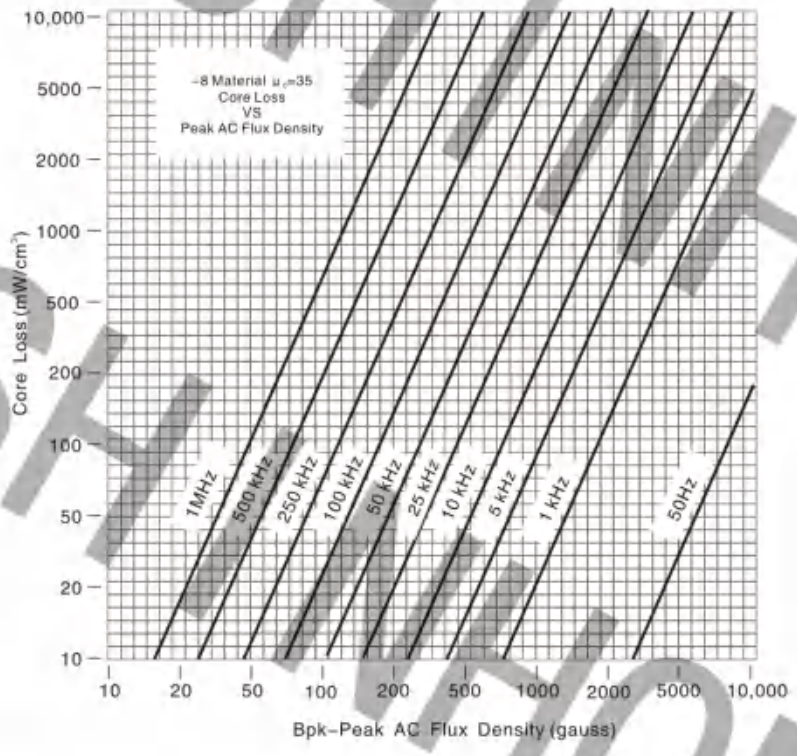
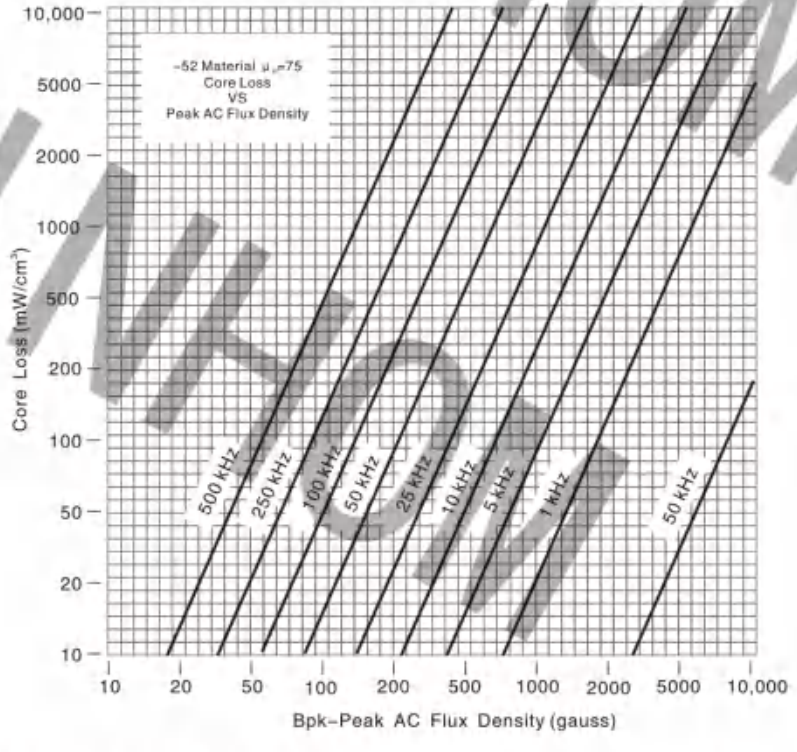
IRON POWDER CORES SERIES PRODUCTS

Magnetic Characteristics

CHARACTER OF IRON POWDER CORES:





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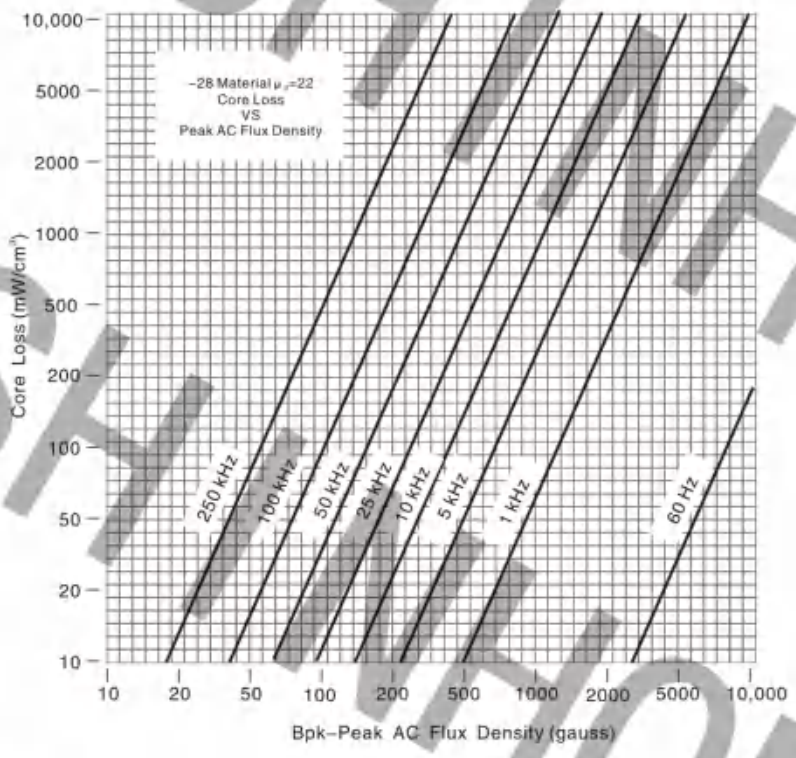
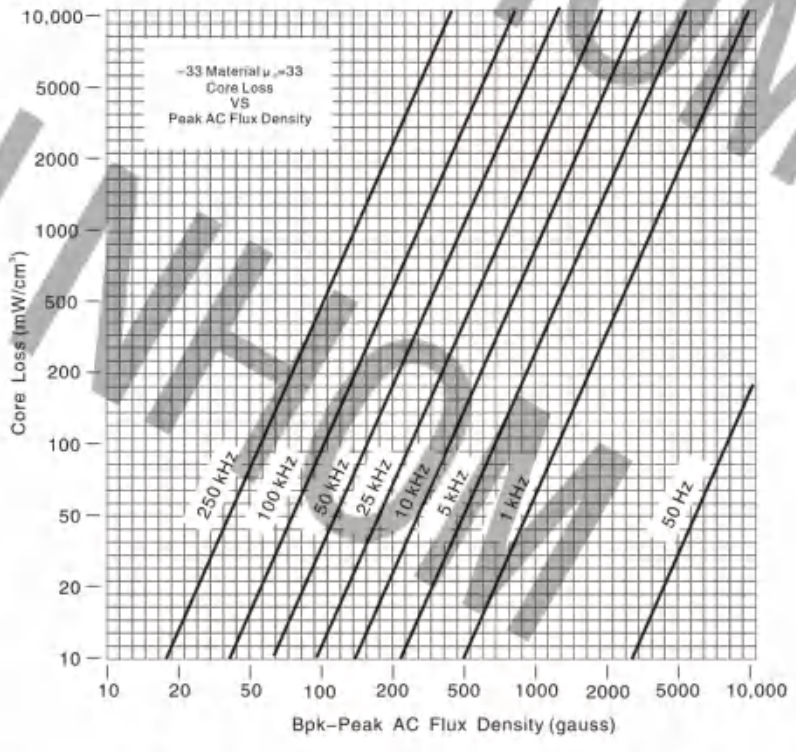
IRON POWDER CORES SERIES PRODUCTS

Magnetic Characteristics

CHARACTER OF IRON POWDER CORES:



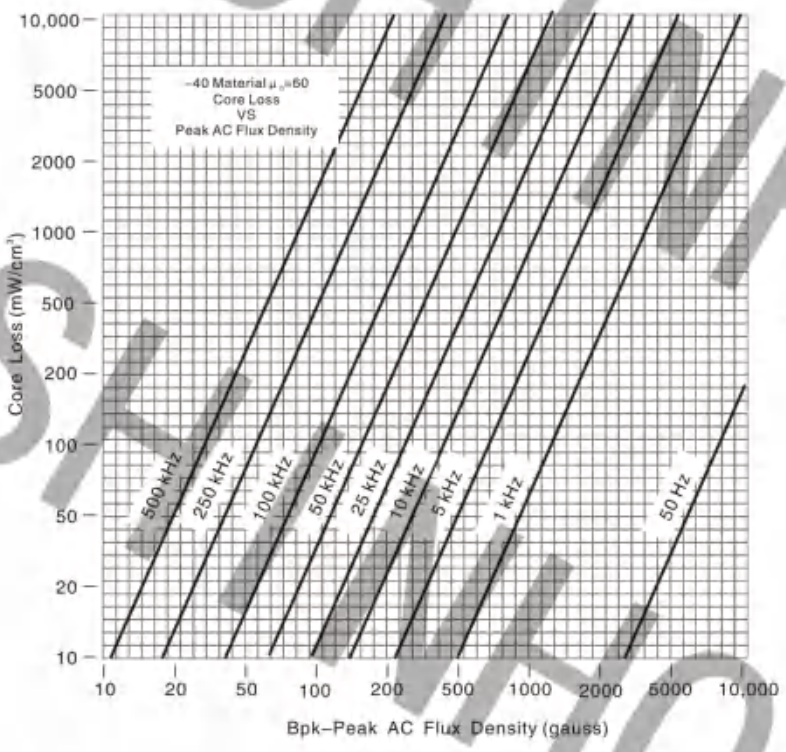


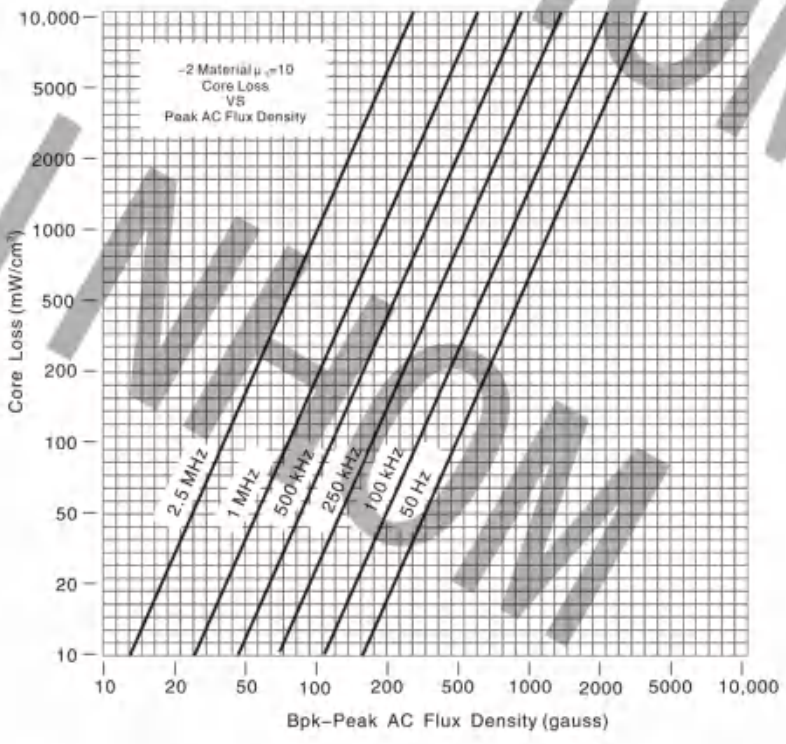
SHINHOM

IRON POWDER CORES SERIES PRODUCTS

Magnetic Characteristics

CHARACTER OF IRON POWDER CORES:



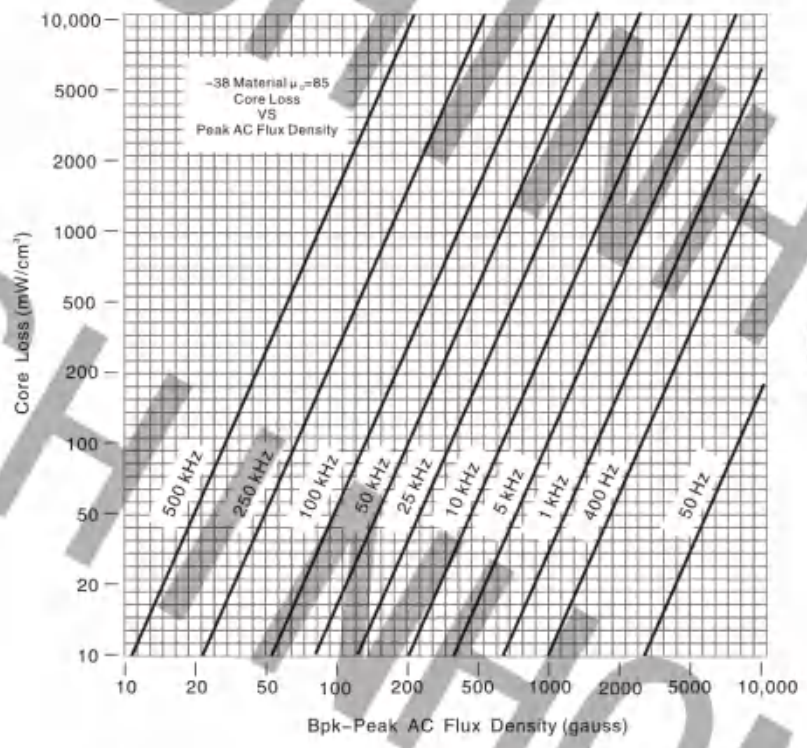


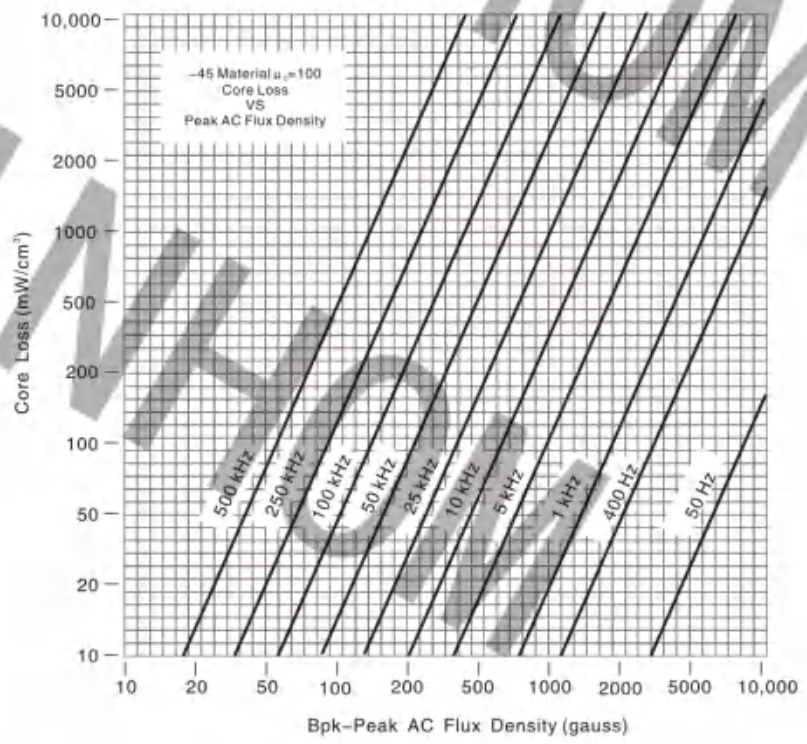
SHINHOM

IRON POWDER CORE SERIES PRODUCTS

Magnetic Characteristics

CHARACTER OF IRON POWDER CORES:





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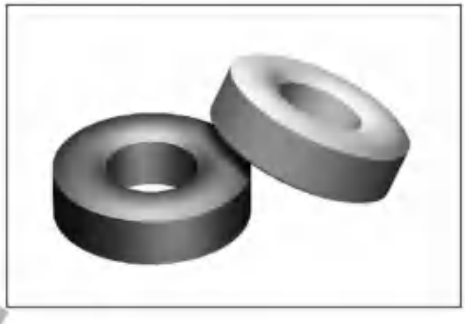
IRON POWDER CORE SERIES PRODUCTS

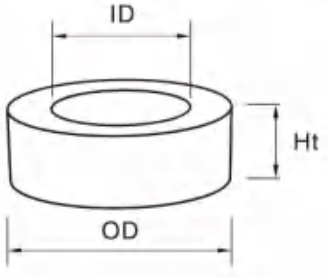
Toroidal Cores



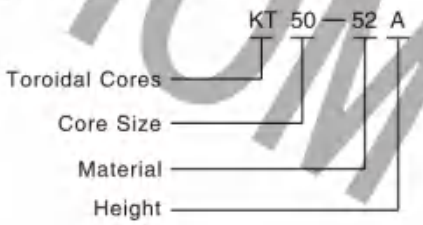
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT25-1	7.0	6.48	3.05	2.44	1.50	.037	.055
KT25-2	3.4	6.48	3.05	2.44	1.50	.037	.055
KT25-2/93	3.4	6.48	3.05	2.44	1.50	.037	.055
KT25-3	10.0	6.48	3.05	2.44	1.50	.037	.055
KT25-6	2.7	6.48	3.05	2.44	1.50	.037	.055
KT25-7	2.9	6.48	3.05	2.44	1.50	.037	.055
KT25-8	10.0	6.48	3.05	2.44	1.50	.037	.055
KT25-8/93	10.0	6.48	3.05	2.44	1.50	.037	.055
KT25-10	1.9	6.48	3.05	2.44	1.50	.037	.055
KT25-15	8.5	6.48	3.05	2.44	1.50	.037	.055
KT25-18	17.0	6.48	3.05	2.44	1.50	.037	.055
KT25-26	24.5	6.48	3.05	2.44	1.50	.037	.055
KT25-40	20.5	6.48	3.05	2.44	1.50	.037	.055
KT25-45	31.0	6.48	3.05	2.44	1.50	.037	.055
KT25-52	23.0	6.48	3.05	2.44	1.50	.037	.055
KT26-8	24.0	6.73	2.67	4.83	1.47	.090	.133
KT26-18	41.5	6.73	2.67	4.83	1.47	.090	1.33
KT26-26	57.0	6.73	2.67	4.83	1.47	.090	1.33
KT26-45	77.0	6.73	2.67	4.83	1.47	.090	1.33
KT26-52	56.0	6.73	2.67	4.83	1.47	.090	1.33
KT30-1	8.5	7.8	3.84	3.25	1.84	.060	.110
KT30-2	4.3	7.80	3.84	3.25	1.84	.060	.110
KT30-2/93	4.3	7.80	3.84	3.25	1.84	.060	.110
KT30-3	14.0	7.8	3.84	3.25	1.84	.060	.110
KT30-6	3.6	7.8	3.84	3.25	1.84	.060	.110
KT30-7	3.7	7.8	3.84	3.25	1.84	.060	.110

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

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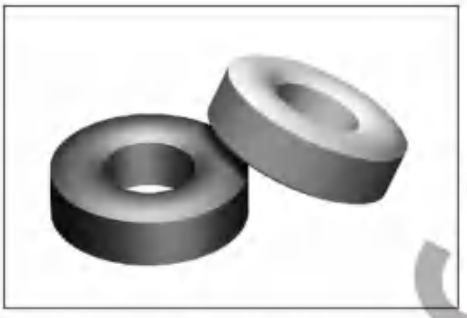


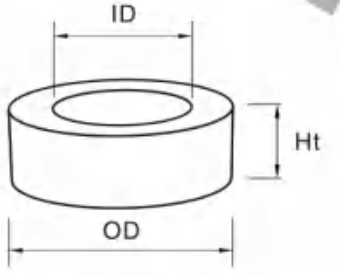
IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores

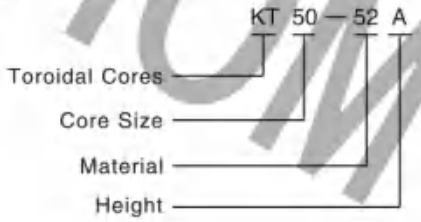
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT30-10	2.5	7.8	3.84	3.25	1.84	.060	.110
KT30-15	9.3	7.8	3.84	3.25	1.84	.060	.110
KT30-8	14.0	7.80	3.84	3.25	1.84	.060	.110
KT30-8/93	14.0	7.80	3.84	3.25	1.84	.060	.110
KT30-18	22.0	7.80	3.84	3.25	1.84	.060	.110
KT30-26	33.5	7.80	3.84	3.25	1.84	.060	.110
KT30-40	28.0	7.80	3.84	3.25	1.84	.060	.110
KT30-45	40.5	7.80	3.84	3.25	1.84	.060	.110
KT30-52	30.5	7.80	3.84	3.25	1.84	.060	.110
KT37-1	8.0	9.53	5.21	3.25	2.31	.064	.147
KT37-2	4.0	9.53	5.21	3.25	2.31	.064	.147
KT37-2/93	4.0	9.53	5.21	3.25	2.31	.064	.147
KT37-3	12.0	9.53	5.21	3.25	2.31	.064	.147
KT37-6	3.0	9.53	5.21	3.25	2.31	.064	.147
KT37-7	3.2	9.53	5.21	3.25	2.31	.064	.147
KT37-8	12.0	9.53	5.21	3.25	2.31	.064	.147
KT37-8/93	12.0	9.53	5.21	3.25	2.31	.064	.147
KT37-10	2.5	9.53	5.21	3.25	2.31	.064	.147
KT37-15	9.0	9.53	5.21	3.25	2.31	.064	.147
KT37-18	19.0	9.53	5.21	3.25	2.31	.064	.147
KT37-26	28.5	9.53	5.21	3.25	2.31	.064	.147
KT37-40	24.5	9.53	5.1	3.25	2.31	.064	.147
KT37-45	34.0	9.53	5.21	3.25	2.31	.064	.147
KT37-52	26.0	9.53	5.21	3.25	2.31	.064	.147
KT38-2	7.4	9.53	4.45	4.83	2.18	.114	.248
KT38-2/93	7.4	9.53	4.45	4.83	2.18	.114	.248

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

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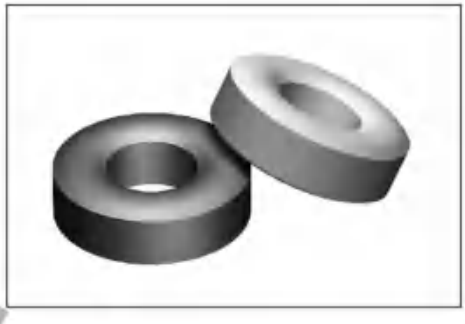
IRON POWDER CORE SERIES PRODUCTS

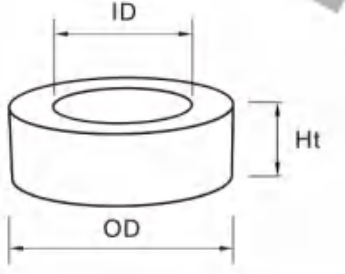
Toroidal Cores



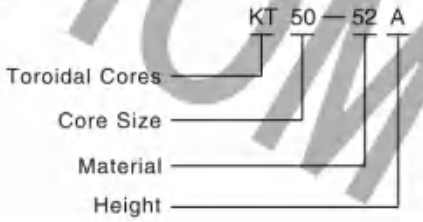
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT38-8	20.0	9.53	4.45	4.83	2.18	.114	.248
KT38-8/93	20.0	9.53	4.45	4.83	2.18	.114	.248
KT38-18	36.0	9.53	4.45	4.83	2.18	.114	.248
KT38-26	49.0	9.53	4.45	4.83	2.18	.114	.248
KT38-40	41.5	9.53	4.45	4.83	2.18	.114	.248
KT38-45	65.0	9.53	4.45	4.83	2.18	.114	.248
KT38-52	49.0	9.53	4.45	4.83	2.18	.114	.248
KT44-1	10.5	11.2	5.82	4.04	2.68	.099	.266
KT44-2	5.2	11.2	5.82	4.04	2.68	.099	.266
KT44-2/93	5.2	11.2	5.82	4.04	2.68	.099	.266
KT44-3	18.0	11.2	5.82	4.04	2.68	.099	.266
KT44-6	4.2	11.2	5.82	4.04	2.68	.099	.266
KT44-7	4.6	11.2	5.82	4.04	2.68	.099	.266
KT44-8	18.0	11.2	5.82	4.04	2.68	.099	.266
KT44-8/93	18.0	11.2	5.82	4.04	2.68	.099	.266
KT44-10	3.3	11.2	5.82	4.04	2.68	.099	.266
KT44-15	16.0	11.2	5.82	4.04	2.68	.099	.266
KT44-18	25.5	11.2	5.82	4.04	2.68	.099	.266
KT44-26	37.0	11.2	5.82	4.04	2.68	.099	.266
KT44-40	31.0	11.2	5.82	4.04	2.68	.099	.266
KT44-45	46.5	11.2	5.82	4.04	2.68	.099	.266
KT44-52	35.0	11.2	5.82	4.04	2.68	.099	.266
KT44-52D	70.0	11.2	5.82	8.59	2.68	.212	.567
KT50-1	10.0	12.7	7.70	4.83	3.19	.112	.358
KT50-2	4.9	12.7	7.70	4.83	3.19	.112	.358
KT50-2/93	4.9	12.7	7.70	4.83	3.19	.112	.358

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

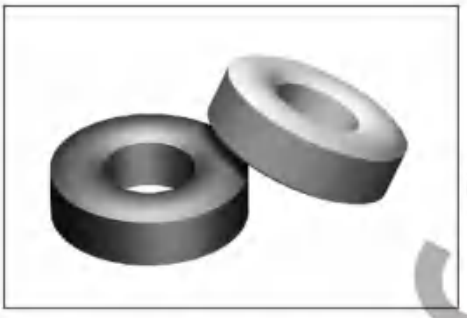


TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM



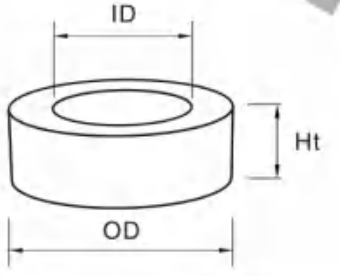
IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores

STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT50-3	17.5	12.7	7.70	4.83	3.19	.112	.358
KT50-6	4.0	12.7	7.70	4.83	3.19	.112	.358
KT50-7	4.3	12.7	7.70	4.83	3.19	.112	.358
KT50-8	17.5	12.7	7.70	4.83	3.19	.112	.358
KT50-8/93	17.5	12.7	7.70	4.83	3.19	.112	.358
KT50-10	3.1	12.7	7.70	4.83	3.19	.112	.358
KT50-15	13.5	12.7	7.70	4.83	3.19	.112	.358
KT50-18	24.0	12.7	7.70	4.83	3.19	.112	.358
KT50-26	33.0	12.7	7.70	4.83	3.19	.112	.358
KT50-38	37.5	12.7	7.70	4.83	3.19	.112	.358
KT50-40	29.5	12.7	7.70	4.83	3.19	.112	.358
KT50-45	44.0	12.7	7.70	4.83	3.19	.112	.358
KT50-52	33.0	12.7	7.70	4.83	3.19	.112	.358
KT50-8B	23.0	12.7	7.70	6.35	3.19	.148	.471
KT50-8B/93	23.0	12.7	7.70	6.35	3.19	.148	.471
KT50-18B	32.0	12.7	7.70	6.35	3.19	.148	.471
KT50-26B	43.5	12.7	7.70	6.35	3.19	.148	.471
KT50-38B	49.5	12.7	7.70	6.35	3.19	.148	.471
KT50-40B	38.5	12.7	7.70	6.35	3.19	.148	.471
KT50-45B	58.0	12.7	7.70	6.35	3.19	.148	.471
KT50-52B	43.5	12.7	7.70	6.35	3.19	.148	.471
KT50-8C	28.3	12.7	7.70	8.51	3.19	.200	.637
KT50-26C	61.0	12.7	7.70	8.51	3.19	.200	.637
KT50-26D	72.0	12.7	7.70	9.53	3.19	.223	.771
KT50-40D	59.0	12.7	7.70	9.53	3.19	.223	.771
KT50-52D	66.0	12.7	7.70	9.53	3.19	.223	.771

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.

KT 50 — 52 A

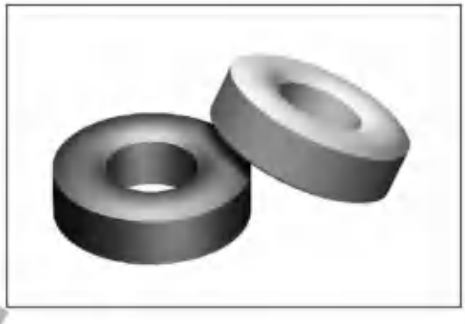
- KT — Toroidal Cores
- 50 — Core Size
- 52 — Material
- A — Height

Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

IRON POWDER CORE SERIES PRODUCTS

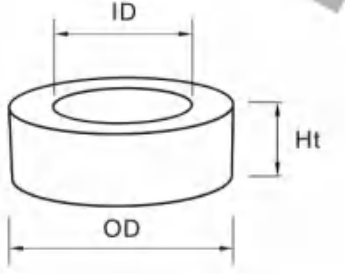
Toroidal Cores



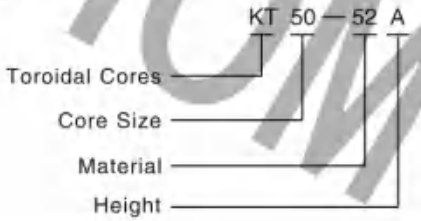
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT51-2B	13.8	12.7	5.08	6.35	2.79	.223	.622
KT51-6B	10.2	12.7	5.08	6.35	2.79	.223	.622
KT51-8C	37.0	12.7	5.08	6.35	2.79	.223	.622
KT51-8/93	37.0	12.7	5.08	6.35	2.79	.223	.622
KT51-18C	55.0	12.7	5.08	6.35	2.79	.223	.622
KT51-26C	83.0	12.7	5.08	6.35	2.79	.223	.622
KT51-40C	67.0	12.7	5.08	6.35	2.79	.223	.622
KT51-52C	75.0	12.7	5.08	6.35	2.79	.223	.622
KT60-2	6.5	15.2	8.53	5.94	3.74	.187	.699
KT60-2/93	6.5	15.2	8.53	5.94	3.74	.187	.699
KT60-8	19.0	15.2	8.53	5.94	3.74	.187	.699
KT60-8/93	19.0	15.2	8.53	5.94	3.74	.187	.699
KT60-18	34.5	15.2	8.53	5.94	3.74	.187	.699
KT60-26	50.0	15.2	8.53	5.94	3.74	.187	.699
KT60-40	41.5	15.2	8.53	5.94	3.74	.187	.699
KT60-52	47.0	15.2	8.53	5.94	3.74	.187	.699
KT60-26D	97.0	15.2	8.53	11.9	3.74	.374	1.40
KT60-52D	94.0	15.2	8.53	11.9	3.74	.374	1.40
KT68-1	11.5	17.5	9.40	4.83	4.23	.179	.759
KT68-2	5.7	17.5	9.40	4.83	4.23	.179	.759
KT68-2/93	5.7	17.5	9.40	4.83	4.23	.179	.759
KT68-3	19.5	17.5	9.40	4.83	4.23	.179	.759
KT68-6	4.7	17.5	9.40	4.83	4.23	.179	.759
KT68-7	5.2	17.5	9.40	4.83	4.23	.179	.759
KT68-8	19.5	17.5	9.40	4.83	4.23	.179	.759
KT68-8/93	19.5	17.5	9.40	4.83	4.23	.179	.759

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

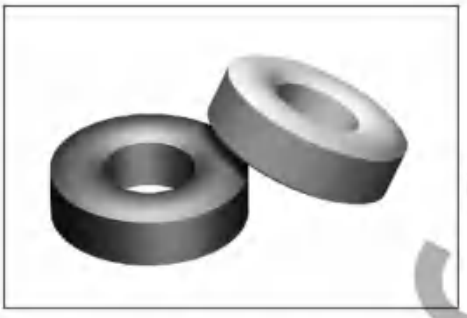


TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM



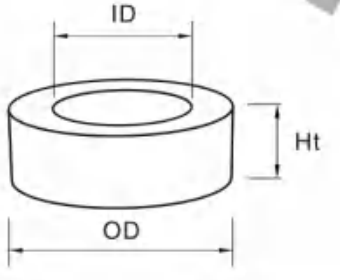
IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores

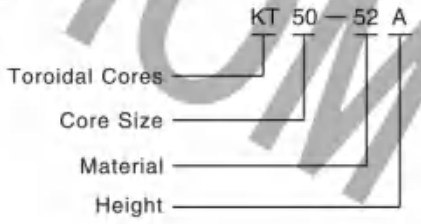
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT68-10	3.2	17.5	9.40	4.83	4.23	.179	.759
KT68-15	18.0	17.5	9.40	4.83	4.23	.179	.759
KT68-18	29.0	17.5	9.40	4.83	4.23	.179	.759
KT68-26	43.5	17.5	9.40	4.83	4.23	.179	.759
KT68-38	45.0	17.5	9.40	4.83	4.23	.179	.759
KT68-40	35.0	17.5	9.40	4.83	4.23	.179	.759
KT68-45	53.0	17.5	9.40	4.83	4.23	.179	.759
KT68-52	40.0	17.5	9.40	4.83	4.23	.179	.759
KT68-2A	7.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-2A/93	7.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-8A	26.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-8A/93	26.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-18A	39.5	17.5	9.40	6.35	4.23	.242	1.03
KT68-26A	58.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-38A	61.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-40A	47.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-45A	71.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-52A	54.0	17.5	9.40	6.35	4.23	.242	1.03
KT68-2D	11.4	17.5	9.40	9.53	4.23	.358	1.52
KT68-26D	87.0	17.5	9.40	9.53	4.23	.358	1.52
KT68-40D	70.0	17.5	9.40	9.53	4.23	.358	1.52
KT68-52D	80.0	17.5	9.40	9.53	4.23	.358	1.52
KT72-2	36.0	18.3	7.11	6.60	4.01	.349	1.40
KT72-2/93	12.8	18.3	7.11	6.60	4.01	.349	1.40
KT72-3	12.8	18.3	7.11	6.60	4.01	.349	1.40
KT72-7	9.5	18.3	7.11	6.60	4.01	.349	1.40

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.

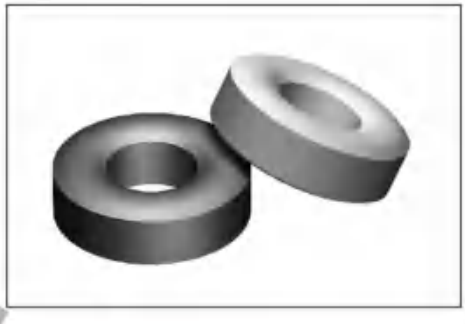


Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

IRON POWDER CORE SERIES PRODUCTS

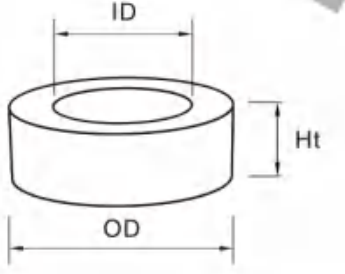
Toroidal Cores



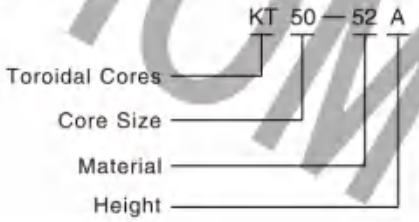
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT72-8	36.0	18.3	7.11	6.60	4.01	.349	1.40
KT72-8/93	36.0	18.3	7.11	6.60	4.01	.349	1.40
KT72-18	60.0	18.3	7.11	6.60	4.01	.349	1.40
KT72-26	90.0	18.3	7.11	6.60	4.01	.349	1.40
KT72-40	71.0	18.3	7.11	6.60	4.01	.349	1.40
KT72-52	82.0	18.3	7.11	6.60	4.01	.349	1.40
KT80-1	11.5	20.2	12.6	6.35	5.14	.231	1.19
KT80-2	5.5	20.2	12.6	6.35	5.14	.231	1.19
KT80-2/93	5.5	20.2	12.6	6.35	5.14	.231	1.19
KT80-3	18.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-6	4.5	20.2	12.6	6.35	5.14	.231	1.19
KT80-7	5.5	20.2	12.6	6.35	5.14	.231	1.19
KT80-8	18.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-8/93	18.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-10	3.2	20.2	12.6	6.35	5.14	.231	1.19
KT80-15	17.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-18	31.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-26	46.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-38	48.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-40	39.5	20.2	12.6	6.35	5.14	.231	1.19
KT80-45	56.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-52	42.0	20.2	12.6	6.35	5.14	.231	1.19
KT80-8B	29.5	20.2	12.6	9.53	5.14	.347	1.78
KT80-8B/93	29.5	20.2	12.6	9.53	5.14	.347	1.78
KT80-18B	46.5	20.2	12.6	9.53	5.14	.347	1.78

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

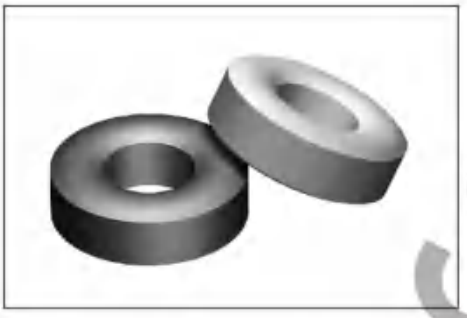


TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM



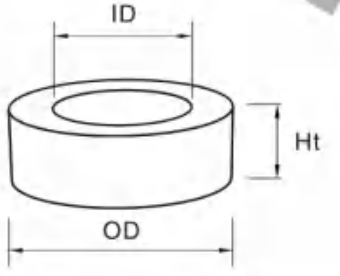
IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores

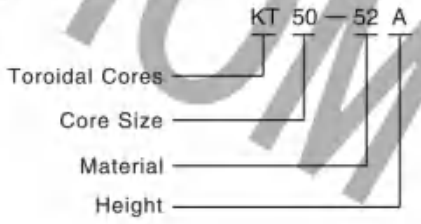
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT80-26B	71.0	20.2	12.6	9.53	5.14	.347	1.78
KT80-38B	72.0	20.2	12.6	9.53	5.14	.347	1.78
KT80-40B	59.0	20.2	12.6	9.53	5.14	.347	1.78
KT80-45B	84.0	20.2	12.6	9.53	5.14	.347	1.78
KT80-52B	63.0	20.2	12.6	9.53	5.14	.347	1.78
KT80-26D	92.0	20.2	12.6	12.7	5.14	.453	2.33
KT80-40D	79.0	20.2	12.6	12.7	5.14	.453	2.33
KT80-52D	83.0	20.2	12.6	12.7	5.14	.453	2.33
KT90-8	30.0	22.9	14.0	9.53	5.78	.395	2.28
KT90-8/93	30.0	22.9	14.0	9.53	5.78	.395	2.28
KT90-18	47.0	22.9	14.0	9.53	5.78	.395	2.28
KT90-26	70.0	22.9	14.0	9.53	5.78	.395	2.28
KT90-38	73.0	22.9	14.0	9.53	5.78	.395	2.28
KT90-40	57.0	22.9	14.0	9.53	5.78	.395	2.28
KT90-45	85.0	22.9	14.0	9.53	5.78	.395	2.28
KT90-52	64.0	22.9	14.0	9.53	5.78	.395	2.28
KT94-1	16.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-2	8.4	23.9	14.2	7.92	5.97	.362	2.16
KT94-2/93	8.4	23.9	14.2	7.92	5.97	.362	2.16
KT94-3	24.8	23.9	14.2	7.92	5.97	.362	2.16
KT94-6	7.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-8	25.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-8/93	25.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-10	5.8	23.9	14.2	7.92	5.97	.362	2.16
KT94-15	20.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-18	42.0	23.9	14.2	7.92	5.97	.362	2.16

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.

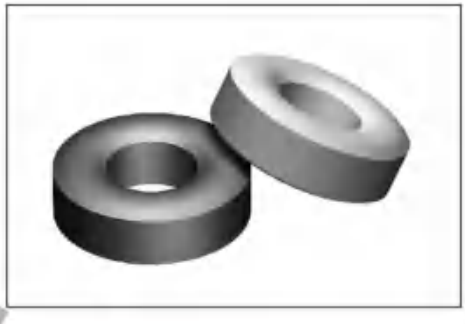


Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

IRON POWDER CORE SERIES PRODUCTS

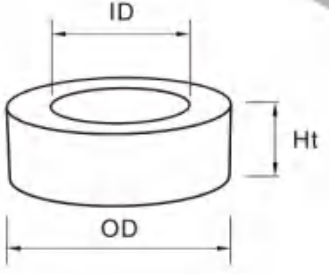
Toroidal Cores



STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT94-26	60.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-38	65.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-40	49.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-45	76.0	23.9	14.2	7.92	5.97	.362	2.16
KT94-52	57.0	23.9	14.2	7.92	5.97	.362	2.16
KT106-1	32.5	26.9	14.5	11.1	6.49	.659	4.28
KT106-2	13.5	26.9	14.5	11.1	6.49	.659	4.28
KT106-2/93	13.5	26.9	14.5	11.1	6.49	.659	4.28
KT106-3	45.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-6	11.6	26.9	14.5	11.1	6.49	.659	4.28
KT106-7	13.3	26.9	14.5	11.1	6.49	.659	4.28
KT106-8	45.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-8/93	45.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-15	34.5	26.9	14.5	11.1	6.49	.659	4.28
KT106-18	70.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-26	93.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-28	30.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-33	40.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-38	108.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-40	81.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-45	125.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-52	95.0	26.9	14.5	11.1	6.49	.659	4.28
KT106-18A	49.0	26.9	14.5	7.92	6.49	.461	3.00
KT106-26A	67.0	26.9	14.5	7.92	6.49	.461	3.00
KT106-40A	58.0	26.9	14.5	7.92	6.49	.461	3.00
KT106-52A	67.0	26.9	14.5	7.92	6.49	.461	3.00

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



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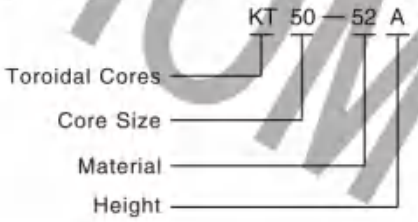
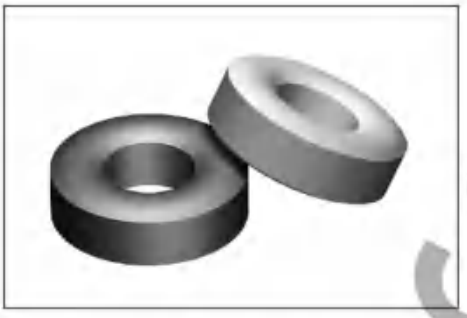


Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM



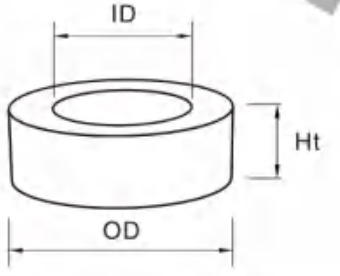
IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores

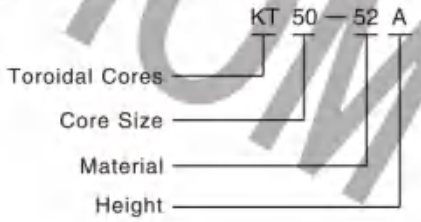
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT106-18B	91.0	26.9	14.5	14.6	6.49	.858	5.57
KT106-26B	124.0	26.9	14.5	14.6	6.49	.858	5.57
KT106-40B	106.0	26.9	14.5	14.6	6.49	.858	5.57
KT106-52B	124.0	26.9	14.5	14.6	6.49	.858	5.57
KT124-26	58.0	31.6	18.0	7.11	7.75	.459	3.55
KT130-1	20.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-2	11.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-2/93	11.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-3	35.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-6	9.6	33.0	19.8	11.1	8.28	.698	5.78
KT130-7	10.3	33.0	19.8	11.1	8.28	.698	5.78
KT130-8	35.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-8/93	35.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-15	25.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-18	58.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-26	81.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-28	25.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-33	33.5	33.0	19.8	11.1	8.28	.698	5.78
KT130-38	90.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-40	69.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-45	105.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-52	79.0	33.0	19.8	11.1	8.28	.698	5.78
KT130-26A	41.0	33.0	19.8	5.72	8.28	.361	2.99
KT130-40A	34.0	33.0	19.8	5.72	8.28	.361	2.99
KT131-8	52.5	33.0	16.3	11.1	7.72	.885	6.84
KT131-8/93	52.5	33.0	16.3	11.1	7.72	.885	6.84

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.

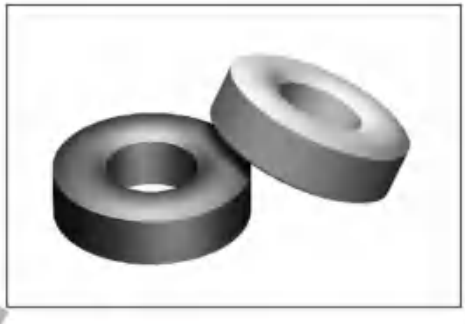


Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

IRON POWDER CORE SERIES PRODUCTS

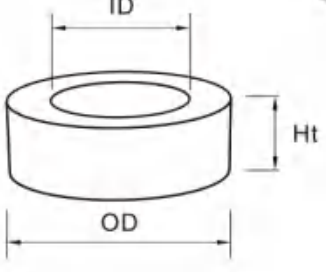
Toroidal Cores



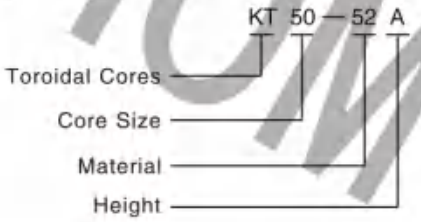
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT131-18	79.0	33.0	16.3	11.1	7.72	.885	6.84
KT131-26	116.0	33.0	16.3	11.1	7.72	.885	6.84
KT131-33	46.5	33.0	16.3	11.1	7.72	.885	6.84
KT131-40	93.0	33.0	16.3	11.1	7.72	.885	6.84
KT131-52	108.0	33.0	16.3	11.1	7.72	.885	6.84
KT132-26	103.0	33.0	17.8	11.1	7.96	.805	6.41
KT132-40	83.0	33.0	17.8	11.1	7.96	.805	6.41
KT132-52	95.0	33.0	17.8	11.1	7.96	.805	6.41
KT141-26	75.0	35.9	22.4	10.5	9.14	.674	6.16
KT141-40	60.0	35.9	22.4	10.5	9.14	.674	6.16
KT141-52	69.0	35.9	22.4	10.5	9.14	.674	6.16
KT150-26	96.0	38.4	21.5	11.1	9.38	.887	8.31
KT150-40	78.0	38.4	21.5	11.1	9.38	.887	8.31
KT150-52	89.0	38.4	21.5	11.1	9.38	.887	8.31
KT150-26A	66.0	38.4	21.5	8.26	9.38	.657	6.16
KT150-38A	74.5	38.4	21.5	8.26	9.38	.657	6.16
KT150-45A	84.0	38.4	21.5	8.26	9.38	.657	6.16
KT157-1	32.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-2	14.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-2/93	14.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-3	42.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-6	11.5	39.9	24.1	14.5	10.1	1.06	10.7
KT157-8	42.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-8/93	42.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-18	73.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-26	100.0	39.9	24.1	14.5	10.1	1.06	10.7

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

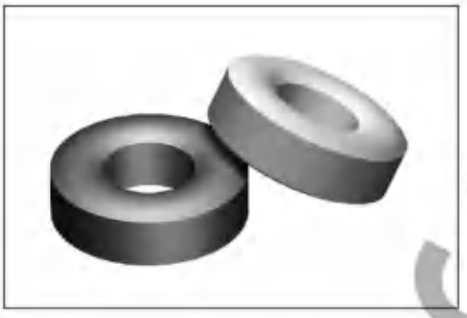


TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM



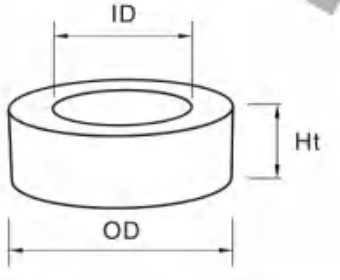
IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores

STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT157-28	31.5	39.9	24.1	14.5	10.1	1.06	10.7
KT157-33	43.5	39.9	24.1	14.5	10.1	1.06	10.7
KT157-38	112.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-40	86.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-45	130.0	39.9	24.1	14.5	10.1	1.06	10.7
KT157-52	99.0	39.9	24.1	14.5	10.1	1.06	10.7
KT175-2	15.0	44.5	27.2	16.5	11.2	1.34	15.0
KT175-6	12.5	44.5	27.2	16.5	11.2	1.34	15.0
KT175-18	82.0	44.5	27.2	16.5	11.2	1.34	15.0
KT175-26	105.0	44.5	27.2	16.5	11.2	1.34	15.0
KT175-40	90.0	44.5	27.2	16.5	11.2	1.34	15.0
KT175-52	105.0	44.5	27.2	16.5	11.2	1.34	15.0
KT184-1	50.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-2	24.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-2/93	24.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-3	72.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-6	19.5	46.7	24.1	18.0	11.2	1.88	21.0
KT184-8	72.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-8/93	72.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-18	116.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-26	169.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-28	51.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-33	70.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-40	143.0	46.7	24.1	18.0	11.2	1.88	21.0
KT184-52	159.0	46.7	24.1	18.0	11.2	1.88	21.0
KT200-1	25.0	50.8	31.8	14.0	13.0	1.27	16.4

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



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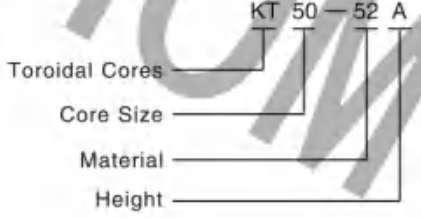
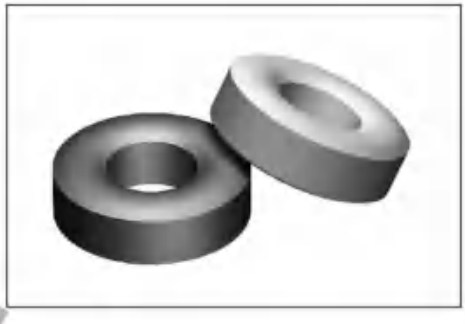


Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

IRON POWDER CORE SERIES PRODUCTS

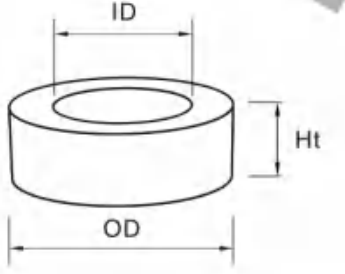
Toroidal Cores



STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT200-2	12.0	50.8	31.8	14.0	13.0	1.27	16.4
KT200-2/93	12.0	50.8	31.8	14.0	13.0	1.27	16.4
KT200-3	42.5	50.8	31.8	14.0	13.0	1.27	16.4
KT200-6	10.0	50.8	31.8	14.0	13.0	1.27	16.4
KT200-7	10.5	50.8	31.8	14.0	13.0	1.27	16.4
KT200-8	42.5	50.8	31.8	14.0	13.0	1.27	16.4
KT200-8/93	42.5	50.8	31.8	14.0	13.0	1.27	16.4
KT200-18	67.0	50.8	31.8	14.0	13.0	1.27	16.4
KT200-26	92.0	50.8	31.8	14.0	13.0	1.27	16.4
KT200-33	37.0	50.8	31.8	14.0	13.0	1.27	16.4
KT200-40	79.0	50.8	31.8	14.0	13.0	1.27	16.4
KT200-52	92.0	50.8	31.8	14.0	13.0	1.27	16.4
KT200-2B	21.8	50.8	31.8	25.4	13.0	2.32	30.0
KT200-2B/93	21.8	50.8	31.8	25.4	13.0	2.32	30.0
KT200-8B	78.5	50.8	31.8	25.4	13.0	2.32	30.0
KT200-8B/93	78.5	50.8	31.8	25.4	13.0	2.32	30.0
KT200-18B	120.0	50.8	31.8	25.4	13.0	2.32	30.0
KT200-26B	160.0	50.8	31.8	25.4	13.0	2.32	30.0
KT200-40B	142.0	50.8	31.8	25.4	13.0	2.32	30.0
KT200-52B	155.0	50.8	31.8	25.4	13.0	2.32	30.0
KT201-18	164.0	50.8	24.1	22.2	11.8	2.81	33.2
KT201-26	224.0	50.8	24.1	22.2	11.8	2.81	33.2
KT201-40	194.0	50.8	24.1	22.2	11.8	2.81	33.2
KT201-52	224.0	50.8	24.1	22.2	11.8	2.81	33.2
KT224-26C	155.0	57.2	31.8	19.1	14.0	2.31	32.2
KT224-52C	155.0	57.2	31.8	19.1	14.0	2.31	32.2

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



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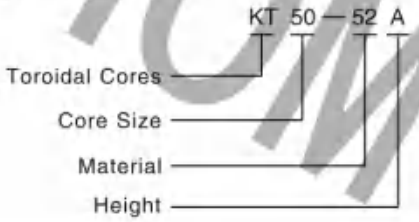
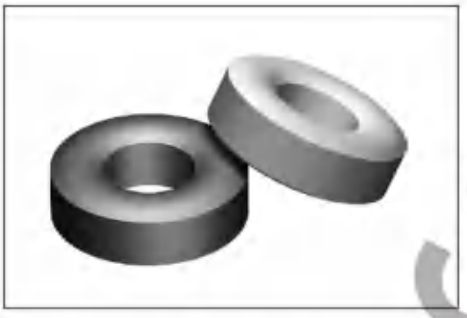


Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM



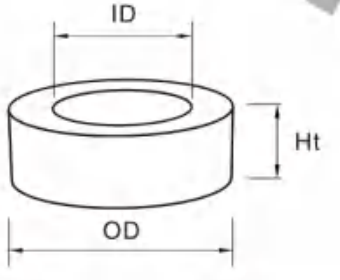
IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores

STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT225-2	12.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-2/93	12.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-3	42.5	57.2	35.7	14.0	14.6	1.42	20.7
KT225-6	10.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-8	42.5	57.2	35.7	14.0	14.6	1.42	20.7
KT225-8/93	42.5	57.2	35.7	14.0	14.6	1.42	20.7
KT225-18	67.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-26	98.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-28	28.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-33	37.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-40	78.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-52	92.0	57.2	35.7	14.0	14.6	1.42	20.7
KT225-2B	21.5	57.2	35.7	25.4	14.6	2.59	37.8
KT225-26B	160.0	57.2	35.7	25.4	14.6	2.59	37.8
KT225-52B	155.0	57.2	35.7	25.4	14.6	2.59	37.8
KT249-26	203.0	63.5	35.7	25.4	15.6	3.36	52.3
KT249-52	203.0	63.5	35.7	25.4	15.6	3.36	52.3
KT250-18	177.0	63.5	31.8	25.4	15.0	3.84	57.4
KT250-26	242.0	63.5	31.8	25.4	15.0	3.84	57.4
KT250-40	194.0	63.5	31.8	25.4	15.0	3.84	57.4
KT250-52	242.0	63.5	31.8	25.4	15.0	3.84	57.4
KT300-2	11.4	77.2	49.0	12.7	19.8	1.68	33.4
KT300-2/93	11.4	77.2	49.0	12.7	19.8	1.68	33.4
KT300-8	37.0	77.2	49.0	12.7	19.8	1.68	33.4
KT300-8/93	37.0	77.2	49.0	12.7	19.8	1.68	33.4
KT300-18	58.0	77.2	49.0	12.7	19.8	1.68	33.4

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



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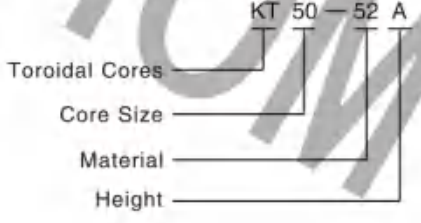
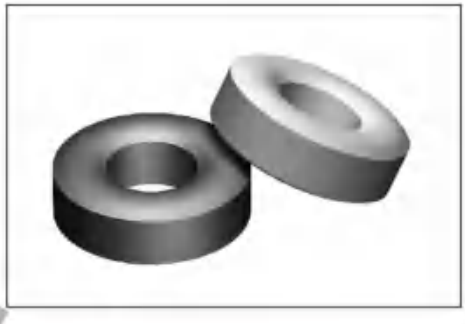


Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

IRON POWDER CORE SERIES PRODUCTS

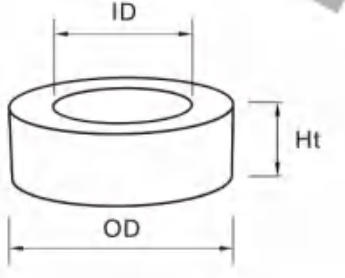
Toroidal Cores



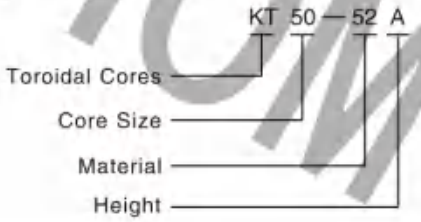
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT300-26	80.0	77.2	49.0	12.7	19.8	1.68	33.4
KT300-28	23.0	77.2	49.0	12.7	19.8	1.68	33.4
KT300-33	34.5	77.2	49.0	12.7	19.8	1.68	33.4
KT300-40	71.0	77.2	49.0	12.7	19.8	1.68	33.4
KT300-52	80.0	77.2	49.0	12.7	19.8	1.68	33.4
KT300-2D	22.8	77.2	49.0	25.4	19.8	3.38	67.0
KT300-2D/93	22.8	77.2	49.0	25.4	19.8	3.38	67.0
KT300-26D	160.0	77.2	49.0	25.4	19.8	3.38	67.0
KT300-28D	46.0	77.2	49.0	25.4	19.8	3.38	67.0
KT300-33D	69.0	77.2	49.0	25.4	19.8	3.38	67.0
KT300-40D	142.0	77.2	49.0	25.4	19.8	3.38	67.0
KT300-52D	160.0	77.2	49.0	25.4	19.8	3.38	67.0
KT400-2	18.0	102	57.2	16.5	25.0	3.46	86.4
KT400-2/93	18.0	102	57.2	16.5	25.0	3.46	86.4
KT400-8	60.0	102	57.2	16.5	25.0	3.46	86.4
KT400-8/93	60.0	102	57.2	16.5	25.0	3.46	86.4
KT400-18	96.0	102	57.2	16.5	25.0	3.46	86.4
KT400-19	96.0	102	57.2	16.5	25.0	3.46	86.4
KT400-26	131.0	102	57.2	16.5	25.0	3.46	86.4
KT400-28	40.5	102	57.2	16.5	25.0	3.46	86.4
KT400-30	40.5	102	57.2	16.5	25.0	3.46	86.4
KT400-33	55.0	102	57.2	16.5	25.0	3.46	86.4
KT400-34	55.0	102	57.2	16.5	25.0	3.46	86.4
KT400-35	55.0	102	57.2	16.5	25.0	3.46	86.4
KT400-40	115.0	102	57.2	16.5	25.0	3.46	86.4
KT400-52	131.0	102	57.2	16.5	25.0	3.46	86.4

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

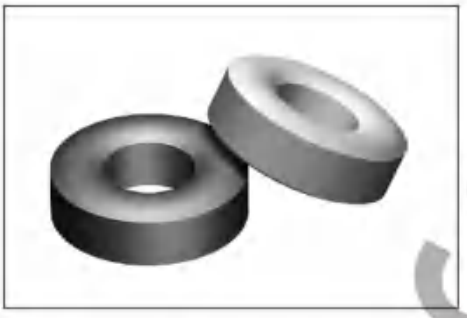


TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM



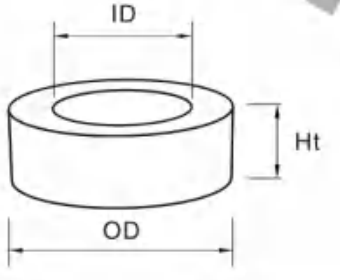
IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores

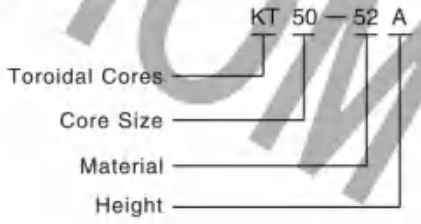
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT400-26B	205.0	102	57.2	25.4	25.0	5.35	133
KT400-2D	36.0	102	57.2	33.0	25.0	6.85	171
KT400-2/93D	36.0	102	57.2	33.0	25.0	6.85	171
KT400-14D	45.5	102	57.2	33.0	25.0	6.85	171
KT400-26D	262.0	102	57.2	33.0	25.0	6.85	171
KT400-28D	81.0	102	57.2	33.0	25.0	6.85	171
KT400-30D	81.0	102	57.2	33.0	25.0	6.85	171
KT400-33D	110.0	102	57.2	33.0	25.0	6.85	171
KT400-34D	110.0	102	57.2	33.0	25.0	6.85	171
KT400-35D	110.0	102	57.2	33.0	25.0	6.85	171
KT400-40D	230.0	102	57.2	33.0	25.0	6.85	171
KT520-2	20.0	132	78.2	20.3	33.1	5.24	173
KT520-2/93	20.0	132	78.2	20.3	33.1	5.24	173
KT520-8	65.0	132	78.2	20.3	33.1	5.24	173
KT520-8/93	65.0	132	78.2	20.3	33.1	5.24	173
KT520-26	149.0	132	78.2	20.3	33.1	5.24	173
KT520-28	45.0	132	78.2	20.3	33.1	5.24	173
KT520-30	45.0	132	78.2	20.3	33.1	5.24	173
KT520-33	65.0	132	78.2	20.3	33.1	5.24	173
KT520-34	65.0	132	78.2	20.3	33.1	5.24	173
KT520-35	65.0	132	78.2	20.3	33.1	5.24	173
KT520-40	119.0	132	78.2	20.3	33.1	5.24	173
KT520-52	137.0	132	78.2	20.3	33.1	5.24	173
KT520-28D	90.0	132	78.2	40.6	33.1	10.5	347
KT520-30D	90.0	132	78.2	40.6	33.1	10.5	347
KT520-33D	130.0	132	78.2	40.6	33.1	10.5	347

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.

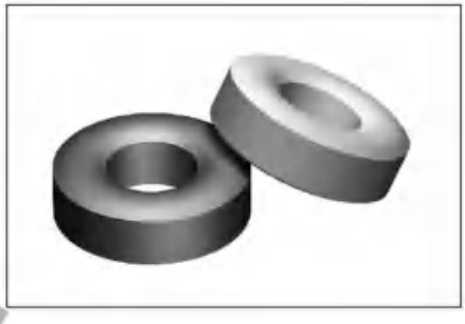


Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

IRON POWDER CORE SERIES PRODUCTS

Toroidal Cores



STANDARD SPECIFICATIONS

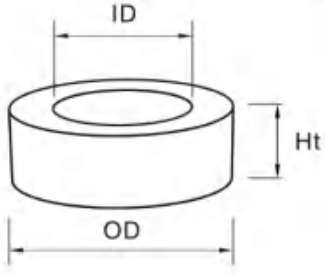
Part Number	A_L nH/N²	OD mm	ID mm	HT mm	Le cm	Ae cm²	V cm³
KT520-34D	130.0	132	78.2	40.6	33.1	10.5	347
KT520-35D	130.0	132	78.2	40.6	33.1	10.5	347
KT520-40D	240.0	132	78.2	40.6	33.1	10.5	347
KT650-2	58.0	165	88.9	50.8	39.9	18.4	734
KT650-2/93	58.0	165	88.9	50.8	39.9	18.4	734
KT650-8	200.0	165	88.9	50.8	39.9	18.4	734
KT650-8/93	200.0	165	88.9	50.8	39.9	18.4	734
KT650-26	434.0	165	88.9	50.8	39.9	18.4	734
KT650-28	127.0	165	88.9	50.8	39.9	18.4	734
KT650-30	127.0	165	88.9	50.8	39.9	18.4	734
KT650-33	191.0	165	88.9	50.8	39.9	18.4	734
KT650-34	191.0	165	88.9	50.8	39.9	18.4	734
KT650-35	191.0	165	88.9	50.8	39.9	18.4	734
KT650-40	376.0	165	88.9	50.8	39.9	18.4	734
KT650-52	405.0	165	88.9	50.8	39.9	18.4	734

SIZE TOLERANCE(mm)

Part No.	OD	ID	Ht
KT25-KT38	±0.40	±0.40	±0.50
KT44-KT72	±0.50	±0.50	±0.50
KT80-KT141	±0.50	±0.50	±0.65
KT150-KT225	±0.60	±0.60	±0.75
KT249-KT300	±0.75	±0.75	±0.75
KT400-KT650	±1.3	±1.3	±1.3

The listed tolerance includes coating

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.

KT 50 — 52 A

- KT: Toroidal Cores
- 50: Core Size
- 52: Material
- A: Height

Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

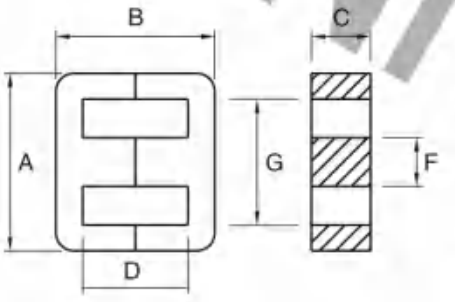
IRON POWDER CORE SERIES PRODUCTS

E Type Cores

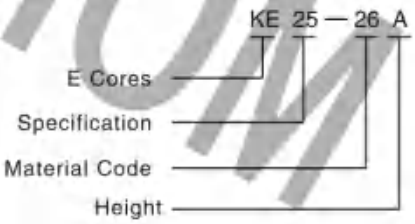
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	A mm	B mm	C mm	D mm	F mm	G mm	Le cm	Ae cm²	V cm³	W cm²
KE13-8	20.5	12.7	11.1	3.18	7.93	3.18	9.53	2.86	.101	.288	.252
KE13-18	29.0	12.7	11.1	3.18	7.93	3.18	9.53	2.86	.101	.288	.252
KE13-26	38.0	12.7	11.1	3.18	7.93	3.18	9.53	2.86	.101	.288	.252
KE13-52	38.0	12.7	11.1	3.18	7.93	3.18	9.53	2.86	.101	.288	.252
KE16-8	30.5	16.4	16.3	4.62	12.0	4.62	11.3	3.98	.224	.861	.399
KE16-26	58.0	16.4	16.3	4.62	12.0	4.62	11.3	3.98	.224	.861	.399
KE16-40	51.0	16.4	16.3	4.62	12.0	4.62	11.3	3.98	.224	.861	.399
KE16-52	56.0	16.4	16.3	4.62	12.0	4.62	11.3	3.98	.224	.861	.399
KE19-2	14.5	19.1	16.1	4.75	11.6	4.75	14.3	4.20	.226	.936	.551
KE19-8	33.5	19.1	16.1	4.75	11.6	4.75	14.3	4.20	.226	.936	.551
KE19-26	64.0	19.1	16.1	4.75	11.6	4.75	14.3	4.20	.226	.936	.551
KE19-28	27.5	19.1	16.1	4.75	11.6	4.75	14.3	4.20	.226	.936	.551
KE19-40	55.0	19.1	16.1	4.75	11.6	4.75	14.3	4.20	.226	.936	.551
KE19-52	59.0	19.1	16.1	4.75	11.6	4.75	14.3	4.20	.226	.936	.551
KE20-26	49.0	20.1	22.5	3.56	16.1	6.35	13.9	5.24	.225	1.18	.605
KE20-8A	38.0	20.2	19.9	5.84	14.0	5.84	14.6	4.84	.333	1.63	.613
KE20-26A	73.0	20.2	19.9	5.84	14.0	5.84	14.6	4.84	.333	1.63	.613
KE20-52A	73.0	20.2	19.9	5.84	14.0	5.84	14.6	4.84	.333	1.63	.613
KE25-8	51.0	25.4	25.4	7.29	17.5	7.29	17.7	6.08	.548	3.38	.908
KE25-26	96.0	25.4	25.4	7.29	17.5	7.29	17.7	6.08	.548	3.38	.908
KE25-52	96.0	25.4	25.4	7.29	17.5	7.29	17.7	6.08	.548	3.38	.908
KE25-2A	21.0	25.4	19.1	6.35	12.7	6.35	19.1	5.08	.403	2.05	.806
KE25-8A	48.0	25.4	19.1	6.35	12.7	6.35	19.1	5.08	.403	2.05	.806
KE25-18A	65.0	25.4	19.1	6.35	12.7	6.35	19.1	5.08	.403	2.05	.806
KE25-26A	92.0	25.4	19.1	6.35	12.7	6.35	19.1	5.08	.403	2.05	.806
KE25-40A	81.0	25.4	19.1	6.35	12.7	6.35	19.1	5.08	.403	2.05	.806

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM

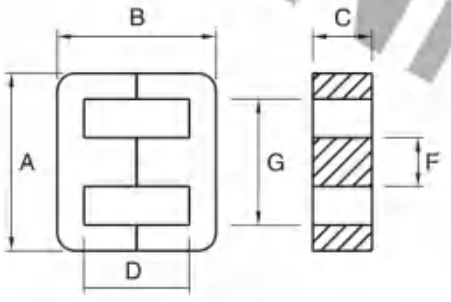
IRON POWDER CORE SERIES PRODUCTS

E Type Cores

STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	A mm	B mm	C mm	D mm	F mm	G mm	Le cm	Ae cm²	V cm³	W cm²
KE25-52A	85.0	25.4	19.1	6.35	12.7	6.35	19.1	5.08	.403	2.05	.806
KE26-2	53.0	25.9	19.1	14.1	8.89	6.35	19.4	3.93	.895	2.36	.581
KE26-8	116.0	25.9	19.1	14.1	8.89	6.35	19.4	3.93	.895	2.36	.581
KE30-26	90.0	30.1	30.1	7.06	19.9	7.06	19.9	7.14	.498	4.60	1.27
KE30-40	80.0	30.1	30.1	7.06	19.9	7.06	19.9	7.14	.498	4.60	1.27
KE30-52	90.0	30.1	30.1	7.06	19.9	7.06	19.9	7.14	.498	4.60	1.27
KE32-26	134.0	31.8	30.8	9.60	21.2	9.60	22.5	7.45	.922	6.82	1.37
KE32-33	63.5	31.8	30.8	9.60	21.2	9.60	22.5	7.45	.922	6.82	1.37
KE32-40	113.0	31.8	30.8	9.60	21.2	9.60	22.5	7.45	.922	6.82	1.37
KE35-2	32.0	34.9	29.1	9.53	19.6	9.53	25.4	7.40	.907	6.72	1.55
KE35-8	67.0	34.9	29.1	9.53	19.6	9.53	25.4	7.40	.907	6.72	1.55
KE35-18	100.0	34.9	29.1	9.53	19.6	9.53	25.4	7.40	.907	6.72	1.55
KE35-26	134.0	34.9	29.1	9.53	19.6	9.53	25.4	7.40	.907	6.72	1.55
KE35-28	50.5	34.9	29.1	9.53	19.6	9.53	25.4	7.40	.907	6.72	1.55
KE35-40	113.0	34.9	29.1	9.53	19.6	9.53	25.4	7.40	.907	6.72	1.55
KE35-52	131.0	34.9	29.1	9.53	19.6	9.53	25.4	7.40	.907	6.72	1.55
KE37-18	112.0	37.0	34.8	10.8	24.1	10.8	26.3	8.50	1.17	9.89	1.84
KE37-26	146.0	37.0	34.8	10.8	24.1	10.8	26.3	8.50	1.17	9.89	1.84
KE37-52	146.0	37.0	34.8	10.8	24.1	10.8	26.3	8.50	1.17	9.89	1.84
KE41-8	105.0	41.3	34.1	12.7	21.4	12.7	28.6	8.41	1.61	13.6	1.70
KE41-18	149.0	41.3	34.1	12.7	21.4	12.7	28.6	8.41	1.61	13.6	1.70
KE41-26	210.0	41.3	34.1	12.7	21.4	12.7	28.6	8.41	1.61	13.6	1.70
KE41-28	78.0	41.3	34.1	12.7	21.4	12.7	28.6	8.41	1.61	13.6	1.70
KE41-40	175.0	41.3	34.1	12.7	21.4	12.7	28.6	8.41	1.61	13.6	1.70
KE41-52	199.0	41.3	34.1	12.7	21.4	12.7	28.6	8.41	1.61	13.6	1.70
KE43-2	43.5	42.8	42.2	15.0	30.7	12.0	30.7	10.4	1.81	18.5	2.87

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.

KE 25 — 26 A

- KE: E Cores
- 25: Specification
- 26: Material Code
- A: Height

Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM SHINHOM

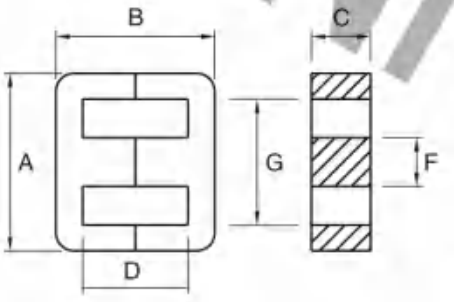
IRON POWDER CORE SERIES PRODUCTS

E Type Cores

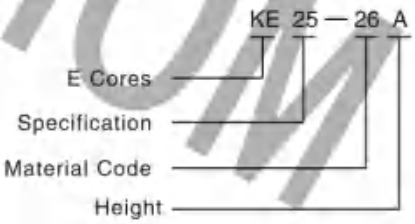
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	A mm	B mm	C mm	D mm	F mm	G mm	Le cm	Ae cm²	V cm³	W cm²
KE43-8	97.0	42.8	42.2	15.0	30.7	12.0	30.7	10.4	1.81	18.5	2.87
KE43-18	135.0	42.8	42.2	15.0	30.7	12.0	30.7	10.4	1.81	18.5	2.87
KE43-26	195.0	42.8	42.2	15.0	30.7	12.0	30.7	10.4	1.81	18.5	2.87
KE43-28	73.0	42.8	42.2	15.0	30.7	12.0	30.7	10.4	1.81	18.5	2.87
KE43-40	163.0	42.8	42.2	15.0	30.7	12.0	30.7	10.4	1.81	18.5	2.87
KE43-52	179.0	42.8	42.2	15.0	30.7	12.0	30.7	10.4	1.81	18.5	2.87
KE43-2A	55.0	42.8	42.2	20.0	30.7	12.0	30.7	10.4	2.41	24.6	2.87
KE43-8A	116.0	42.8	42.2	20.0	30.7	12.0	30.7	10.4	2.41	24.6	2.87
KE43-18A	170.0	42.8	42.2	20.0	30.7	12.0	30.7	10.4	2.41	24.6	2.87
KE43-26A	232.0	42.8	42.2	20.0	30.7	12.0	30.7	10.4	2.41	24.6	2.87
KE43-28A	85.0	42.8	42.2	20.0	30.7	12.0	30.7	10.4	2.41	24.6	2.87
KE43-33A	110.0	42.8	42.2	20.0	30.7	12.0	30.7	10.4	2.41	24.6	2.87
KE43-40A	196.0	42.8	42.2	20.0	30.7	12.0	30.7	10.4	2.41	24.6	2.87
KE43-52A	230.0	42.8	42.2	20.0	30.7	12.0	30.7	10.4	2.41	24.6	2.87
KE47-8	144.0	47.4	39.4	15.7	24.2	15.7	31.8	9.53	2.48	23.3	1.93
KE47-18	213.0	47.4	39.4	15.7	24.2	15.7	31.8	9.53	2.48	23.3	1.93
KE47-26	265.0	47.4	39.4	15.7	24.2	15.7	31.8	9.53	2.48	23.3	1.93
KE47-28	115.0	47.4	39.4	15.7	24.2	15.7	31.8	9.53	2.48	23.3	1.93
KE47-40	240.0	47.4	39.4	15.7	24.2	15.7	31.8	9.53	2.48	23.3	1.93
KE47-52	265.0	47.4	39.4	15.7	24.2	15.7	31.8	9.53	2.48	23.3	1.93
KE56-2	69.0	56.1	55.4	20.8	38.3	17.3	38.6	13.2	3.60	47.7	4.09
KE56-8	143.0	56.1	55.4	20.8	38.3	17.3	38.6	13.2	3.60	47.7	4.09
KE56-18	196.0	56.1	55.4	20.8	38.3	17.3	38.6	13.2	3.60	47.7	4.09
KE56-26	275.0	56.1	55.4	20.8	38.3	17.3	38.6	13.2	3.60	47.7	4.09
KE56-28	107.0	56.1	55.4	20.8	38.3	17.3	38.6	13.2	3.60	47.7	4.09
KE56-33	136.0	56.1	55.4	20.8	38.3	17.3	38.6	13.2	3.60	47.7	4.09

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

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IRON POWDER CORE SERIES PRODUCTS

E Type Cores

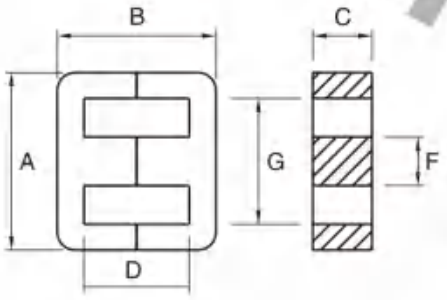
STANDARD SPECIFICATIONS

Part Number	A_L nH/N²	A mm	B mm	C mm	D mm	F mm	G mm	Le cm	Ae cm²	V cm³	W cm²
KE56-40	240.0	56.1	55.4	20.8	38.3	17.3	38.6	13.2	3.60	47.7	4.09
KE56-52	262.0	56.1	55.4	20.8	38.3	17.3	38.6	13.2	3.60	47.7	4.09
KE57-8	173.0	56.9	47.6	18.9	29.0	18.9	38.1	11.5	3.58	40.8	2.78
KE57-18	240.0	56.9	47.6	18.9	29.0	18.9	38.1	11.5	3.58	40.8	2.78
KE57-26	325.0	56.9	47.6	18.9	29.0	18.9	38.1	11.5	3.58	40.8	2.78
KE57-28	139.0	56.9	47.6	18.9	29.0	18.9	38.1	11.5	3.58	40.8	2.78
KE57-40	290.0	56.9	47.6	18.9	29.0	18.9	38.1	11.5	3.58	40.8	2.78
KE57-52	325.0	56.9	47.6	18.9	29.0	18.9	38.1	11.5	3.58	40.8	2.78
KE77-2	75.0	77.5	77.5	23.7	53.8	23.7	53.8	18.5	5.62	104	8.10
KE77-8	156.0	77.5	77.5	23.7	53.8	23.7	53.8	18.5	5.62	104	8.10
KE77-18	222.0	77.5	77.5	23.7	53.8	23.7	53.8	18.5	5.62	104	8.10
KE77-26	287.0	77.5	77.5	23.7	53.8	23.7	53.8	18.5	5.62	104	8.10
KE77-30	124.0	77.5	77.5	23.7	53.8	23.7	53.8	18.5	5.62	104	8.10
KE77-34	150.0	77.5	77.5	23.7	53.8	23.7	53.8	18.5	5.62	104	8.10
KE77-40	255.0	77.5	77.5	23.7	53.8	23.7	53.8	18.5	5.62	104	8.10
KE77-52	287.0	77.5	77.5	23.7	53.8	23.7	53.8	18.5	5.62	104	8.10
KE77-26A	382.0	77.5	77.5	31.6	53.8	23.7	53.8	18.5	7.49	139	8.10
KE77-28A	165.0	77.5	77.5	31.6	53.8	23.7	53.8	18.5	7.49	139	8.10
KE77-40A	339.0	77.5	77.5	31.6	53.8	23.7	53.8	18.5	7.49	139	8.10
KE77-52A	382.0	77.5	77.5	31.6	53.8	23.7	53.8	18.5	7.49	139	8.10

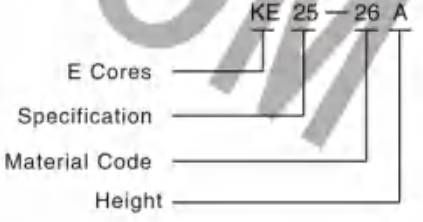
Size tolerance

Part Number	A	B	C	D	F	G
KE13-KE30	±0.25	±0.25	±0.12	±0.17	±0.12	±0.17
KE32-KE41	±0.37	±0.37	±0.17	±0.25	±0.17	±0.25
KE43-KE57	±0.37	±0.37	±0.25	±0.25	±0.17	±0.25
KE77	±0.75	±0.75	±0.37	±0.50	±0.37	±0.50

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

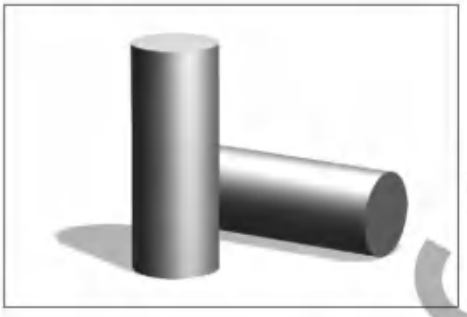


TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

SHINHOM



IRON POWDER CORE SERIES PRODUCTS

Cylinder Type Cores

STANDARD SPECIFICATIONS

Part Number	A_L nH/N^2	OD inch/mm	L inch/mm
KP3.45 × 19.7	7.6	.136/3.45	.775/19.7
KP4.83 × 19.1	12.5	.190/4.83	.750/19.1
KP6.35 × 19.1	16.0	.250/6.35	.750/19.1
KP6.35 × 25.4	16.0	.250/6.35	1.000/25.4
KP6.48 × 31.8	15.0	.255/6.48	1.250/31.8
KP6.48 × 38.1	14.5	.255/6.48	1.500/38.1
KP7.95 × 25.4	20.0	.313/7.95	1.000/25.4
KP7.95 × 31.8	20.0	.313/7.95	1.250/31.8
KP7.95 × 47.6	18.0	.313/7.95	1.875/47.6
KP9.53 × 25.4	25.5	.375/9.53	1.000/25.4
KP9.53 × 31.8	26.5	.375/9.53	1.250/31.8
KP9.53 × 38.1	25.0	.375/9.53	1.500/38.1
KP9.53 × 44.5	22.5	.375/9.53	1.750/44.5
KP12.7 × 25.4	30.0	.500/12.7	1.000/25.4
KP12.7 × 31.8	34.5	.500/12.7	1.250/31.8
KP12.7 × 38.1	33.0	.500/12.7	1.500/38.1
KP12.7 × 44.5	32.0	.500/12.7	1.750/44.5
KP12.7 × 50.8	31.0	.500/12.7	2.000/50.8
KP15.9 × 31.8	37.5	.625/15.9	1.250/31.8
KP15.9 × 38.1	41.5	.625/15.9	1.500/38.1
KP19.1 × 38.1	45.0	.750/19.1	1.500/38.1
KP19.1 × 60.3	49.5	.750/19.1	2.375/60.3
KP25.4 × 50.8	80.0	1.000/25.4	2.000/50.8

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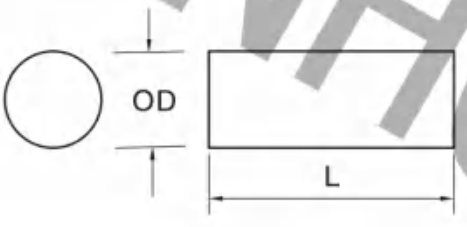


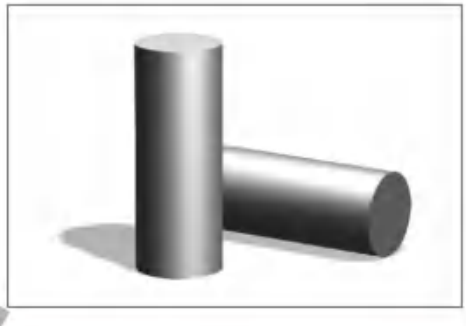
TYPICAL PART No.

KP 3.45 × 19.7

- KP — Plain Cores
- 3.45 — OD(mm)
- 19.7 — L(mm)

IRON POWDER CORE SERIES PRODUCTS

Cylinder Type Cores



TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

Size tolerance (mm)

Part Number	OD		L
KP3.45 – KP25.4	+0.00	–0.15	±0.50

APPLICATION FOR CYLINDER CORES

According to the following formula, It may be calculated out inductance and required coil turns of plain cores.

Single-layer winding

$$L=\frac{\mu_e(r\,N)^2}{9r+10i}$$

$$N=\frac{1}{r}\left(\frac{\mu_e(rN)^2}{9r+10i}\right)^{1/2}$$

Multilayer winding

$$L=\frac{(0.8)\,\mu_e(r\,N)^2}{6r+9i+10\,b}$$

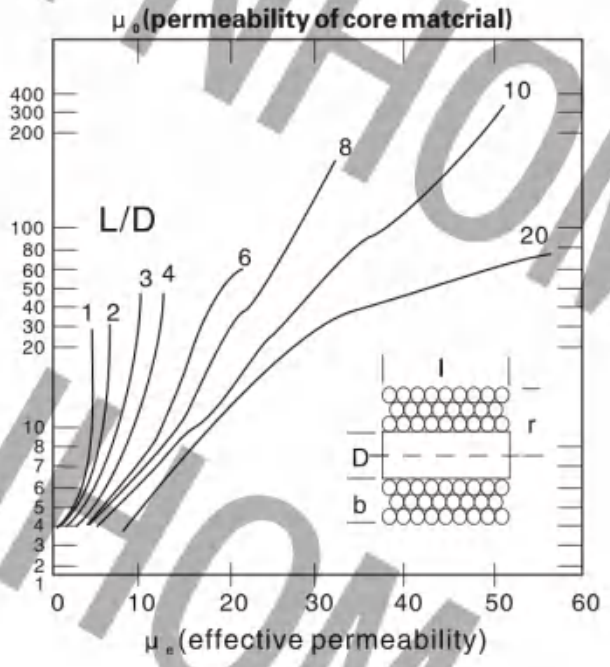
$$N=\frac{1}{r}\left(\frac{L(6r+9i+10b)}{(0.8)(\mu_e)}\right)^{1/2}$$

In formula:
L=Inductance(uH)
μ_e=Effective permeability of core
N=Coil turns
r=Radius of coil
D=Diameter of core
l=length of coil/core
b=winding height of coil

Le: Mean Magetic Path Length

Ae: Cross Section Area

Ve: Core Volume



Shown by curves in the above figure, effective permeability (μ_e)of a cylinder winding core is a function of material initial permeability(μ_0) except for function (l/D) of comparing length with diameter of core coil.

The calculating method of curves is gained from 95% cylinder core length of coil single layer winding, also may be calculated out the similar effective permeability for core of multilayer winding.

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IRON POWDER CORE SERIES PRODUCTS

Drum Type Cores

STANDARD SPECIFICATIONS

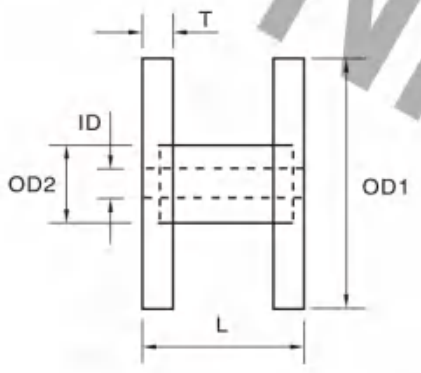
Part Number	A_L nH/N²	OD1 mm	OD2 mm	ID mm	T mm	L mm	Window cm²
DR36.1 × 23.8 × 12.7	85	36.10	12.70	4.37	3.96	23.80	1.84
DR36.1 × 33.3 × 12.7	60	36.10	12.70	4.37	3.96	33.30	2.95
DR46.9 × 31.8 × 15.9	100	46.90	15.90	5.56	4.75	31.80	3.43
DR46.9 × 41.3 × 15.9	80	46.90	15.90	5.56	4.75	41.30	4.90
DR63.5 × 34.9 × 19.1	130	63.50	19.10	6.60	4.75	34.90	5.66
DR63.5 × 47.6 × 19.1	95	63.50	19.10	6.60	4.75	47.60	8.49

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

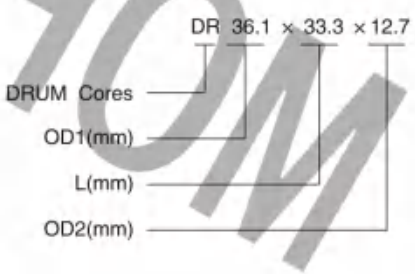
Size tolerance (mm)

Part Number	OD1	OD2		ID		L	T
DR36.1 – DR63.5	±0.5	+0.00	−0.15	+0.15	−0.00	±0.50	±0.20

A_L Value listed is approtimate and is for indication only.
It provides other shape for high current choke to be accepted
few electromagnetic radiation,also has best eff−ect
for the jointed ring of high power loudspeaker.



TYPICAL PART No.



Le: Mean Magetic Path Length
Ae: Cross Section Area
Ve: Core Volume

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