

HS CORES

CSC has released its new HS series of iron alloy powder cores.

The 14,000 gauss saturation level of HS cores exhibits similar DCB characteristics to High Flux cores. HS cores with a permeability of 19 μ and 26 μ show outstanding DCB performance for high current applications such as UPS. In particular, the core losses of HS19 μ and 26 μ are significantly lower than any other material including those of MPP cores.

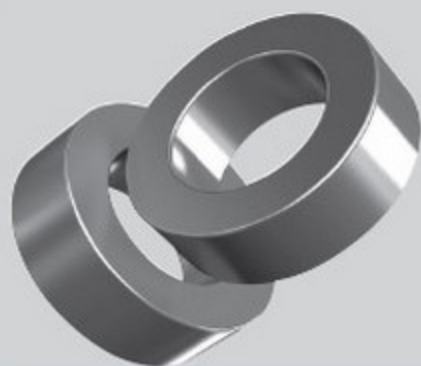
HS cores with 19 μ and 26 μ are excellent solutions for applications requiring a high level of efficiency such as UPS, ESS and other industrial uses

HS cores over 60 μ have better DC bias characteristics and lower core losses than Sendust cores. They offer an economical solution for applications requiring a high level of efficiency including high power desktop PCs, server PCs, automotive parts and solar power components. A much improved alternative to amorphous cores, HS cores present excellent thermal properties with no thermal aging effects like other soft magnetic powder cores. Finished HS cores are coated with a dark blue epoxy.

TOLERANCE OF AL VALUE

Core Size	HS
OD035 ~ OD078	NA
OD096 ~ OD1625	±8%

TOROIDAL POWDER CORES



Features

- Low core loss at high currents
- Good DC Bias characteristics
- Affordable prices

Applications

- Desktop PCs, Server PCs
- Automotive parts, Solar Power
- UPS and ESS



PART NO.	Before Finish Dimensions			After Finish Dimensions			Path length (cm)	Cross Section Area [cm ²]	AL value (nH/N ²) ±8%			
	OD(mm) MAX	ID(mm) MIN	HT(mm) MAX	OD(mm) MAX	ID(mm) MIN	HT(mm) MAX			026μ	060μ	075μ	090μ
HS096	9.65	4.78	3.18	10.29	4.27	3.81	2.18	0.0752	11	25	32	38
HS097	9.65	4.78	3.96	10.29	4.27	4.57	2.18	0.0945	14	32	40	48
HS102	10.16	5.08	3.96	10.80	4.57	4.57	2.38	0.1000	14	32	40	48
HS112	11.18	6.35	3.96	11.90	5.89	4.72	2.69	0.0906	11	26	32	38
HS127	12.70	7.62	4.75	13.46	6.99	5.51	3.12	0.114	12	27	34	40
HS166	16.51	10.16	6.35	17.4	9.53	7.11	4.11	0.192	15	35	43	52
HS172	17.27	9.65	6.35	18.03	9.02	7.11	4.14	0.232	19	43	53	64
HS203	20.32	12.7	6.35	21.1	12.07	7.11	5.09	0.226	14	32	41	49
HS229	22.86	13.97	7.62	23.62	13.39	8.38	5.67	0.331	19	43	54	65
HS234	23.57	14.4	8.89	24.3	13.77	9.7	5.88	0.388	22	51	63	76
HS270	26.92	14.73	11.18	27.7	14.1	11.99	6.35	0.654	32	75	94	113
HS330	33.02	19.94	10.67	33.83	19.3	11.61	8.15	0.672	28	61	76	91
HS343	34.29	23.37	8.89	35.2	22.6	9.83	8.95	0.454	16	38	47	57
HS358	35.81	22.35	10.46	36.7	21.5	11.28	8.98	0.678	24	56	70	84
HS400	39.88	24.13	14.48	40.7	23.3	15.37	9.84	1.072	35	81	101	121
HS467	46.74	24.13	18.03	47.6	23.3	18.92	10.74	1.99	59	135	169	202
HS468	46.74	28.7	15.24	47.6	27.9	16.13	11.63	1.34	37	86	107	128
HS508	50.8	31.75	13.46	51.7	30.9	14.35	12.73	1.25	32	73	91	109
HS571	57.15	26.39	15.24	58	25.6	16.1	12.5	2.29	60	138	172	206
HS572	57.15	35.56	13.97	58	34.7	14.86	14.3	1.444	33	75	94	112
HS610	62	32.6	25	63.1	31.37	26.27	14.37	3.675	83	192	240	288
HS740	74.1	45.3	35	75.2	44.07	36.27	18.38	5.04	89	206	257	309
HS777	77.8	49.23	12.7	78.9	48	13.97	20	1.77	30	68	85	102
HS778	77.8	49.23	15.9	78.9	48	17.02	20	2.27	37	85	107	128

BIG TOROIDAL CORES



Features

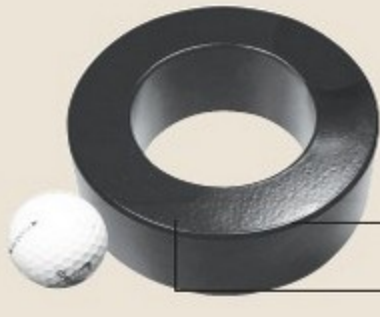
- Low core loss at high currents
- Good DC Bias characteristics
- Affordable prices

Applications

- Below 26 μ : UPS, power inductors for large currents
- Over 60 μ : PFC or output chokes server PCs, industrial powers



■ Product Identification



HS 1013 060

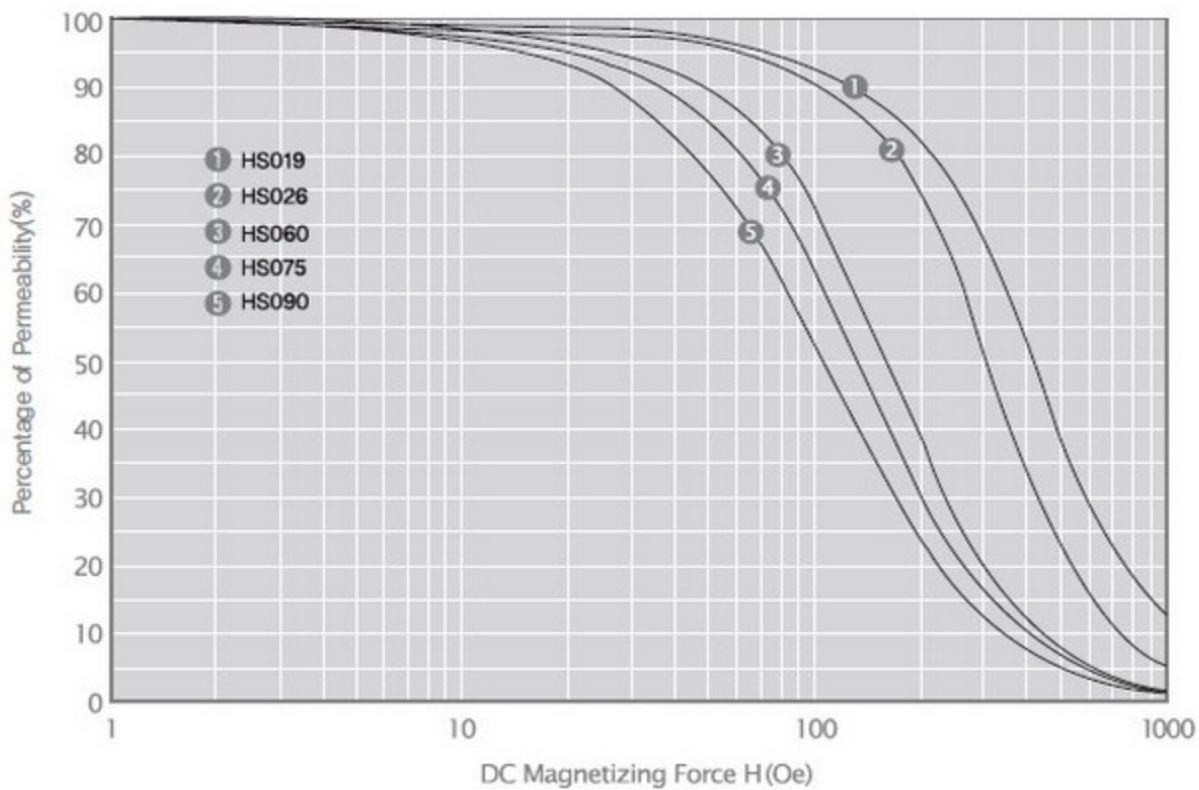
Permeability : 60 μ Available Perm : 19, 26, 60, 75, 90 μ

OD : 101.6mm, Height 13.6mm

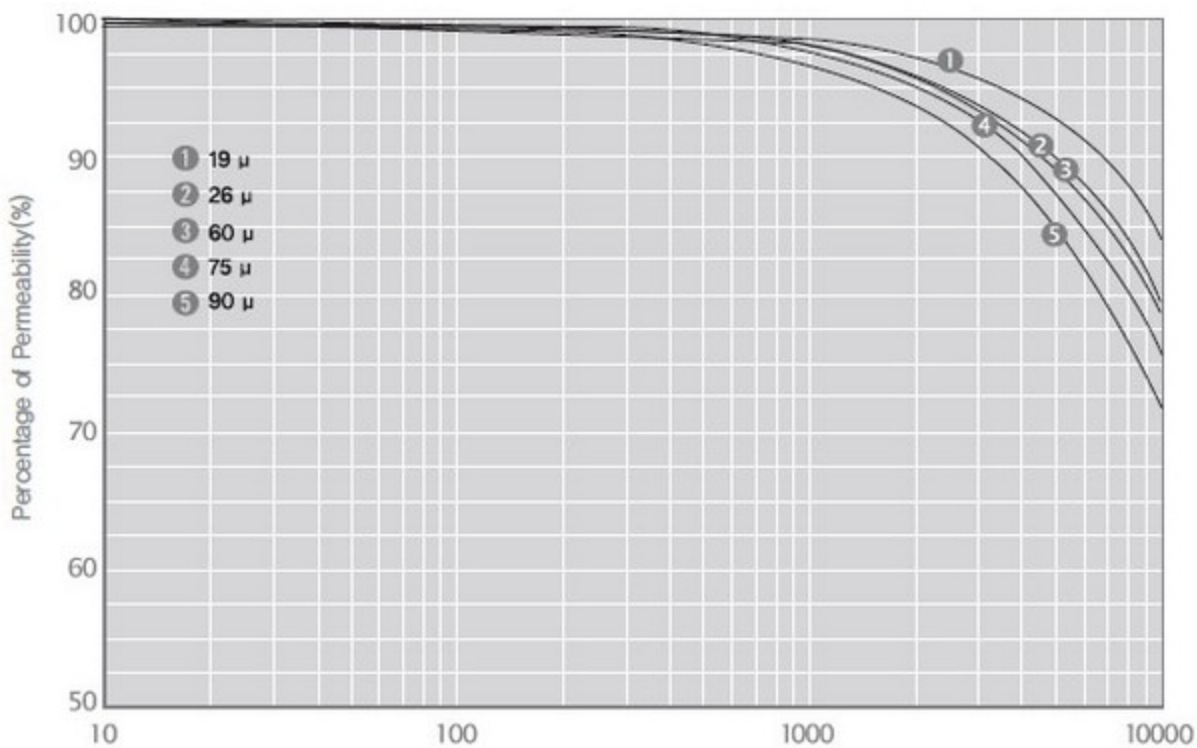
HS Core

PART NO.	Before Finish Dimensions			After Finish Dimensions			Path length (cm)	Cross Section Area [cm ²]	AL value (nH/N ²) \pm 8%		
	OD(mm) MAX	ID(mm) MIN	HT(mm) MAX	OD(mm) MAX	ID(mm) MIN	HT(mm) MAX			019 μ	026 μ	060 μ
HS1013	101.6	57.2	13.6	103.1	55.7	14.9	24.27	2.972	29	40	92
HS1016	101.6	57.2	16.5	103.1	55.7	17.8	24.27	3.522	35	48	112
HS1027	101.6	57.2	27.2	103.1	55.7	28.5	24.27	5.944	58	80	184
HS1033	101.6	57.2	33.0	103.1	55.7	34.3	24.27	7.044	70	96	224
HS1320	132.5	78.6	20.3	134.2	77.0	21.7	32.42	5.347	39	54	124
HS1325	132.5	78.6	25.4	134.2	77.0	26.8	32.42	6.710	49	68	156
HS1333	132.5	78.6	33.0	134.2	77.0	34.4	32.42	8.717	64	88	202
HS1340	132.5	78.6	40.6	134.2	77.0	42.0	32.42	10.694	79	108	248
HS1625	165.0	88.9	25.4	167.2	86.9	27.3	38.65	9.460	58	80	

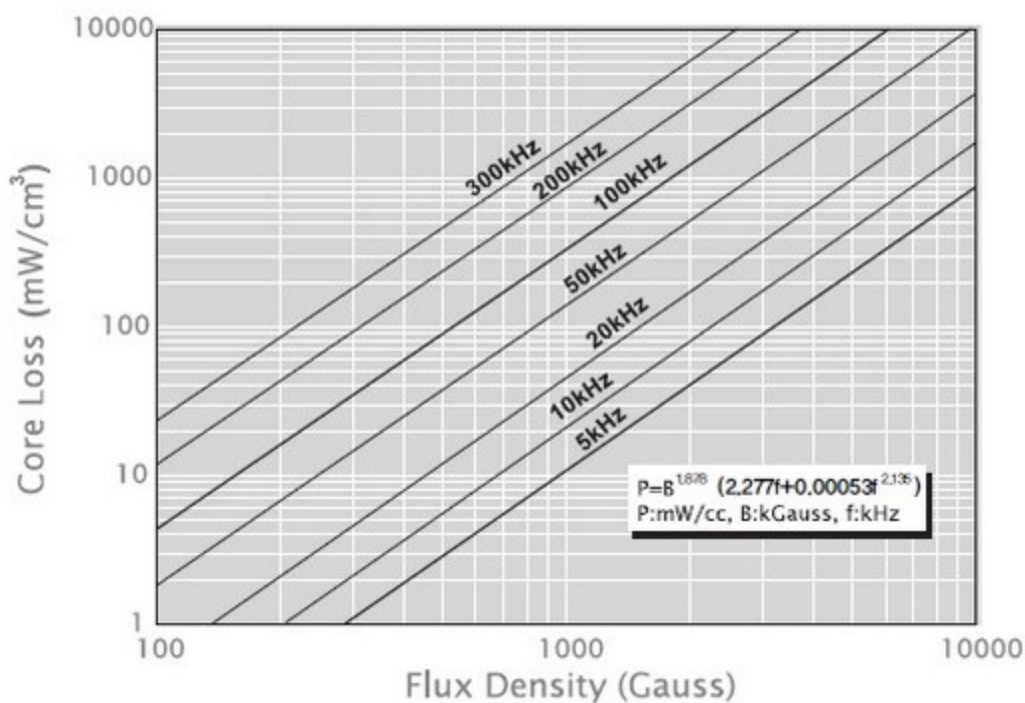
■ Permeability vs DC Bias Curves



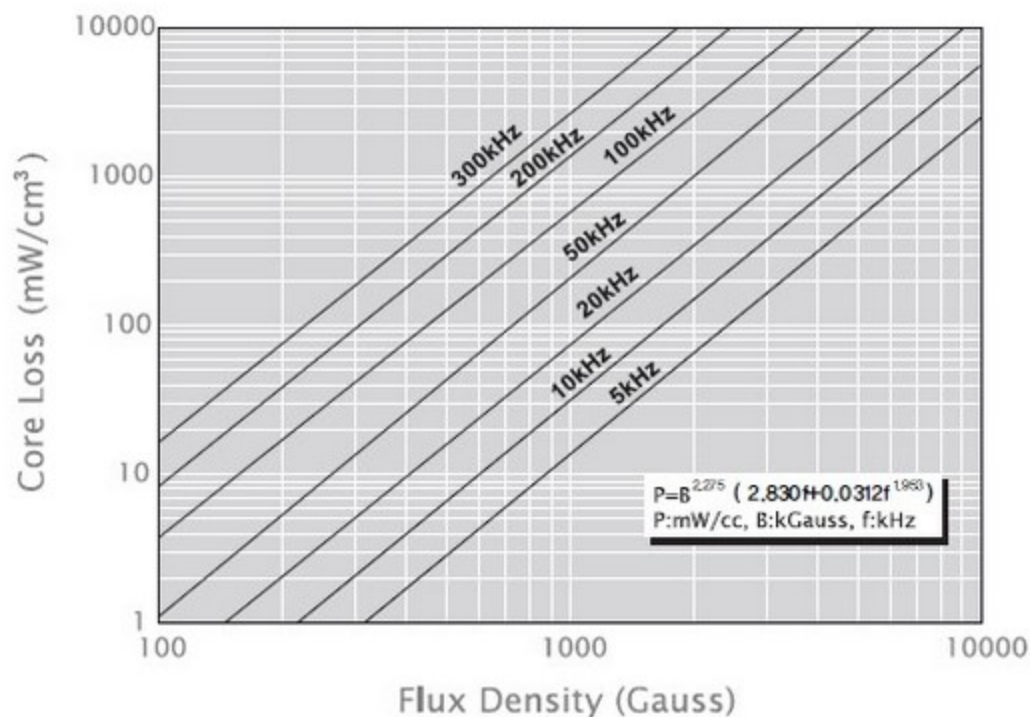
■ Permeability vs Frequency Curve



■ Core Loss 19, 26u



■ Core Loss 60u



ISO/TS 16949
KS Q/ISO 14001
OHSAS 18001



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