



Ringkern-Material 18 und 26

General Material Properties						
Material Mix No.	Reference Permeability (μ_0)	Temp. Coef. of Perm. (+ppm/°C)	Coef of Lin. Expan. (+ppm/°C)	Material Density (g/cm ³)	Relative Cost	Color Code
-18	55	385	12	6.6	2.8	Green/Red
-26	75	825	10	7.0	1.2	Yellow/White

Core Loss Comparison (mW/cm ³)							Permeability with DC BIAS	
Material Mix No.	60 Hz @5000G	1KHz @1500G	10KHz @500G	50KHz @225G	100KHz @140G	500KHz @50G	H _{DC} = 50 Oerstedes % μ_0	$\mu_{\text{effective}}$
-18	168	80	53	43	36	26	74%	40.7
-26	42	56	65	90	88	124	51%	38.3

Magnetic Tolerance

Material (Mix No.)	-18	-26
A _L Tolerance	±10%	±10%

Material Applications

Typical Application	Material Mix No.	
	-18	-26
Light Dimmer Chokes		X
60 Hz Differential-mode EMI Line Chokes		X
DC Chokes: <50KHz or low Et/N		X
DC Chokes: ≥50KHz or higher Et/N	X	X
Power Factor Correction Chokes: <50KHz		X
Power Factor Correction Chokes: ≥50KHz	X	X

-18 Material This material has low core loss similar to the -8 material with higher permeability and a lower cost. Good DC saturation characteristics

-26 Material The most popular material. It is a cost-effective general purpose material that is useful in a wide variety of power conversion and line filter applications.



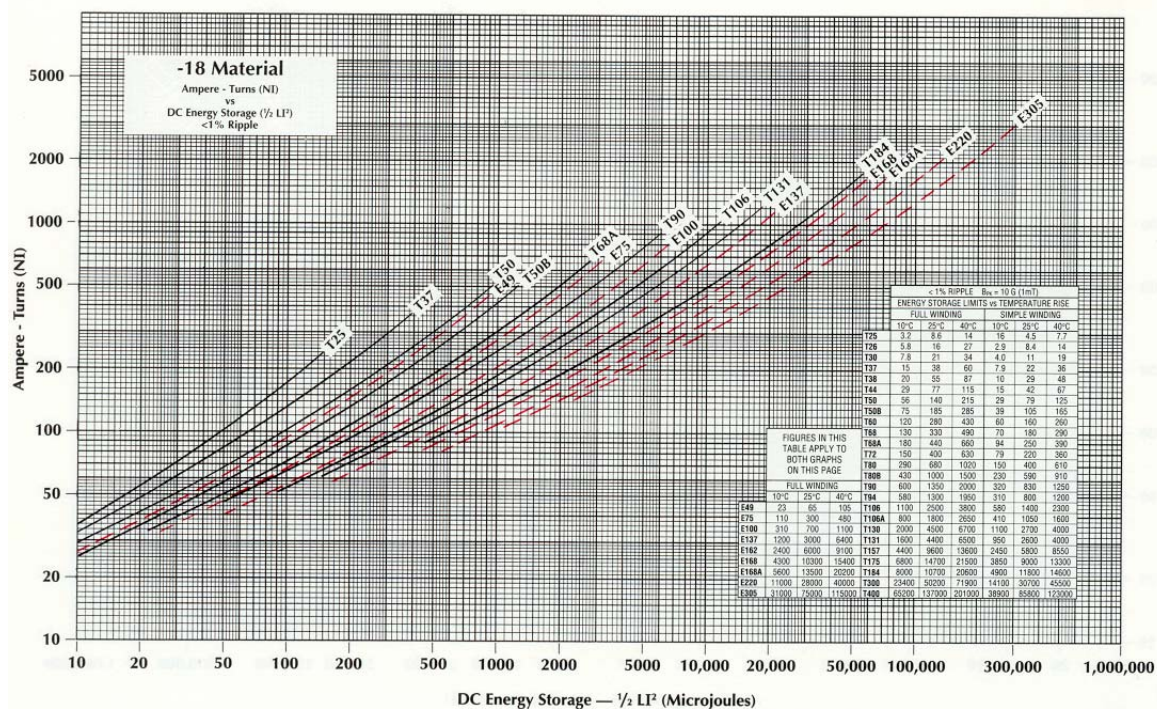
Ringkern-Material 18

Type	$A_L \text{ nH/N}^2$	OD (mm)	ID (mm)	Ht (mm)
T16-18	9,5	4,06	1,98	1,52
T20-18	13,0	5,08	2,24	1,78
T25-18	17,0	6,48	3,05	2,44
T30-18	22,0	7,80	3,84	3,25
T37-18	19,0	9,53	5,21	3,25
T44-18	25,5	11,2	5,82	4,04
T50-18	24,0	12,7	7,70	4,83
T50-18B	32,0	12,7	7,70	6,35
T60-18	34,5	15,2	8,53	5,94
T68-18	29,0	17,5	9,40	4,83
T68-18A	39,5	17,5	9,40	6,35
T80-18	31,0	20,2	12,6	6,35
T80-18B	46,5	20,2	12,6	9,53
T90-18	47,0	22,9	14,0	9,53
T94-18	42,0	23,9	14,2	7,92
T106-18	70,0	26,9	14,5	11,1
T106-18A	49,0	26,9	14,5	7,92
T106-18B	91,0	26,9	14,5	14,6
T130-18	58,0	33,0	19,8	11,1
T157-18	73,0	39,9	24,1	14,5
T184-18	116,0	46,7	24,1	18,0
T200-18	67,0	50,8	31,8	14,0
T225-18	67,0	57,2	35,6	14,0
T250-18	177,0	63,5	31,8	25,4
T300-18	58,0	77,2	49,0	12,7
T400-18	96,0	102,0	57,2	16,5

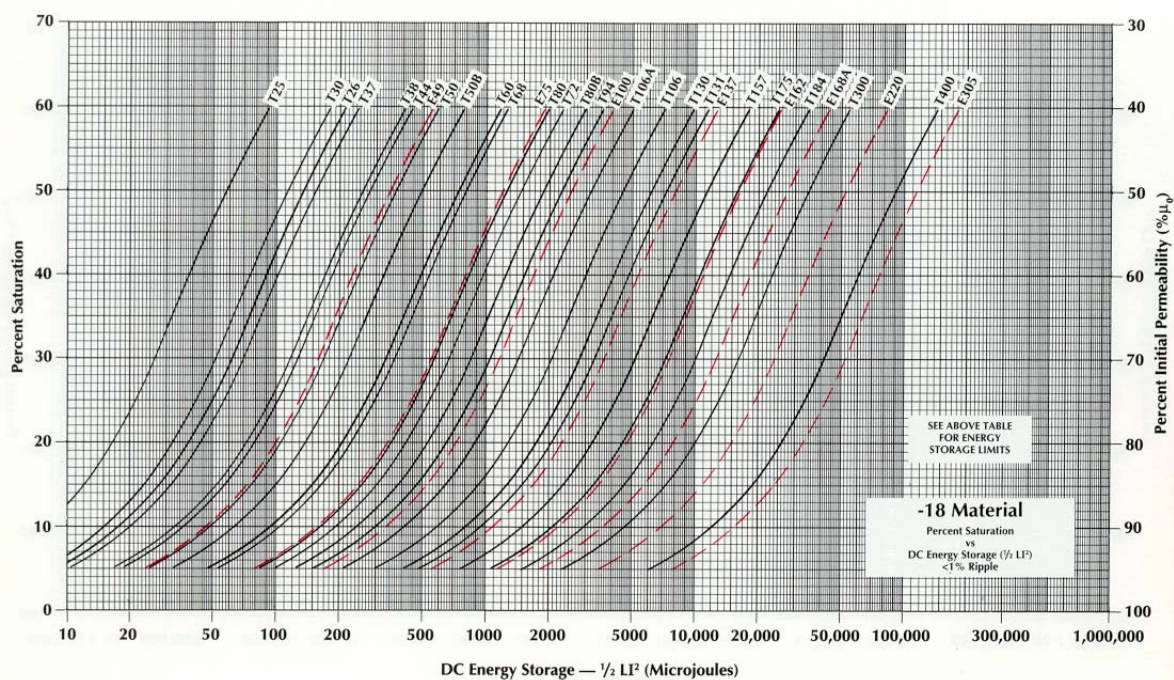


Ringkern-Material 18

DC APPLICATIONS



QUICK REFERENCE A_L VALUES FOR -18 MATERIAL																
PART NO.	T25	T26	T30	T37	T38	T44	T50	T50B	T60	T68	T72	T80	T80B	T94	T106	T106A
A_L VALUE	17.0	41.5	22.0	19.0	36.0	25.5	24.0	32.0	34.5	29.0	60.0	31.0	46.5	42.0	70.0	49.0
PART NO.	T130	T131	T157	T175	T184	T300	T400									
A_L VALUE	58.0	79.0	73.0	82.0	116	58.0	96.0									





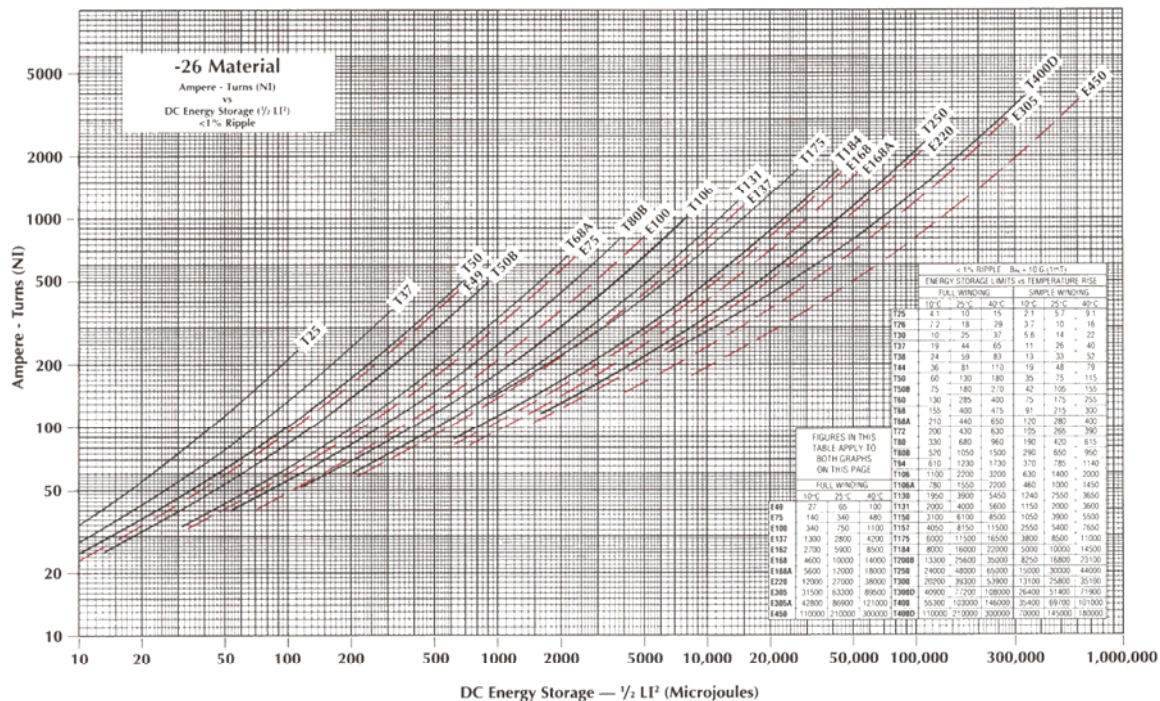
Ringkern-Material 26

Type	A _L nH/N ²	OD (mm)	ID (mm)	Ht (mm)
T16-26	14,5	4,06	1,98	1,52
T20-26	18,5	5,08	2,24	1,78
T25-26	24,5	6,48	3,05	2,44
T30-26	33,5	7,80	3,84	3,25
T37-26	28,5	9,53	5,21	3,25
T44-26	37,0	11,2	5,82	4,04
T50-26	33,0	12,7	7,70	4,83
T50-26B	43,5	12,7	7,70	6,35
T50-26D	72,0	12,7	7,70	9,53
T60-26	50,0	15,2	8,53	5,94
T60-26D	97,0	15,2	8,53	11,9
T68-26	43,5	17,5	9,40	4,83
T68-26A	58,0	17,5	9,40	6,35
T68-26D	87,0	17,5	9,40	9,53
T80-26	46,0	20,2	12,6	6,35
T80-26B	71,0	20,2	12,6	9,53
T80-26D	92,0	20,2	12,6	12,7
T90-26	70,0	22,9	14,0	9,53
T94-26	60,0	23,9	14,2	7,92
T106-26	93,0	26,9	14,5	11,1
T106-26A	67,0	26,9	14,5	7,92
T106-26B	124,0	26,9	14,5	14,6
T130-26	81,0	33,0	19,8	11,1
T157-26	100,0	39,9	24,1	14,5
T184-26	169,0	46,7	24,1	18,0
T200-26	92,0	50,8	31,8	14,0
T200-26B	160,0	50,8	31,8	25,4
T225-26	98,0	57,2	35,6	14,0
T225-26B	160,0	57,2	35,7	25,4
T250-26	242,0	63,5	31,8	25,4
T300-26	80,0	77,2	49,0	12,7
T400-26	131,0	102,0	57,2	16,5
T400-26D	262,0	102,0	57,2	33,0
T520-26	149,0	132,0	78,2	20,3



Ringkern-Material 26

DC APPLICATIONS



QUICK REFERENCE A _i VALUES FOR -26 MATERIAL													
PART NO.	T25	T26	T30	T37	T38	T44	T50	T50B	T60	T68	T72	T80	T80B
A _i VALUE	24.5	57.0	33.5	28.5	49.0	37.0	33.0	43.5	50.0	43.5	90.0	46.0	71.0
PART NO.	T94	T106	T106A	T130	T131	T150	T157						
A _i VALUE	60.0	93.0	67.0	81.0	116	96.0	100						
PART NO.	T175	T184	T200B	T250	T300	T300D	T400	T400D					
A _i VALUE	105	169	160	242	80	160	131	262					

