



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

Material Mix No.	Core Loss Comparison (mW/cm^3)						Permeability with DC BIAS	
	60 Hz @5000G	1KHz @1500G	10KHz @500G	50KHz @225G	100KHz @140G	500KHz @50G	$H_{DC} = 50$ Oersted	% 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	$\pm 10\%$	$\pm 10\%$

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: $\geq 50\text{KHz}$ or higher Et/N	X	X
Power Factor Correction Chokes: <50KHz		X
Power Factor Correction Chokes: $\geq 50\text{KHz}$	X	X

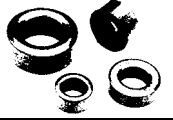
-18 Material This material has low core loss similar to the -8 material with higher permeability and a lower cost. Good DC saturation characteristics

-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.



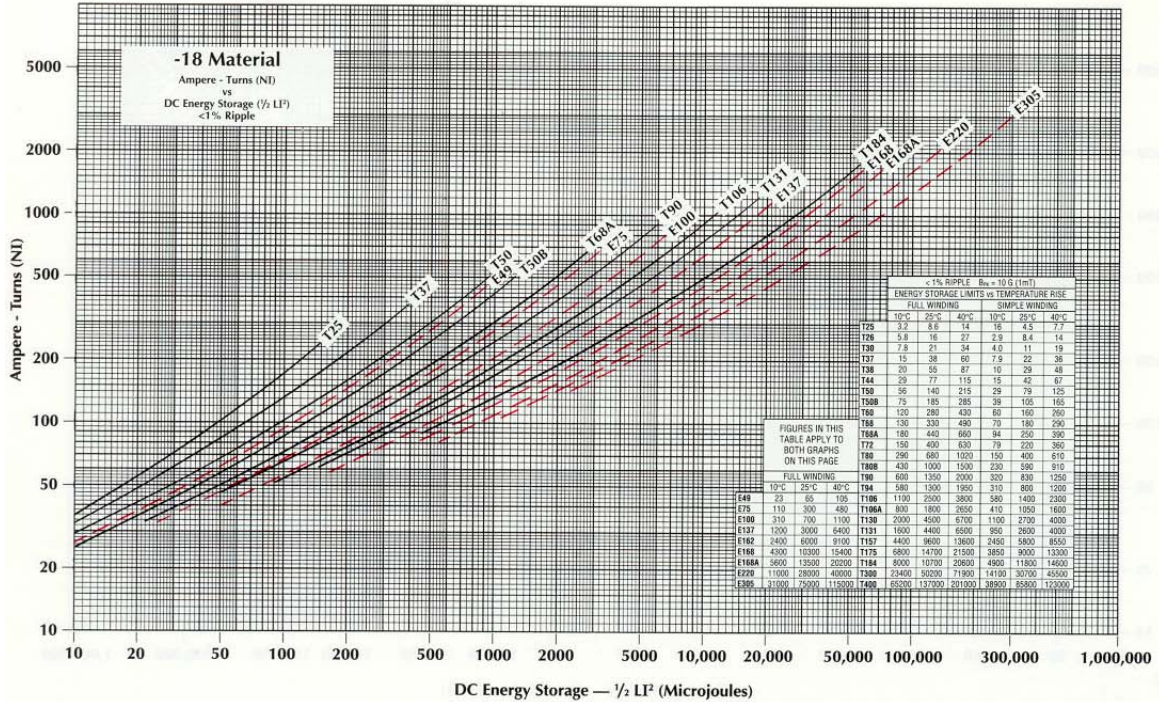
Ringkern-Material 18

Type	A_L 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



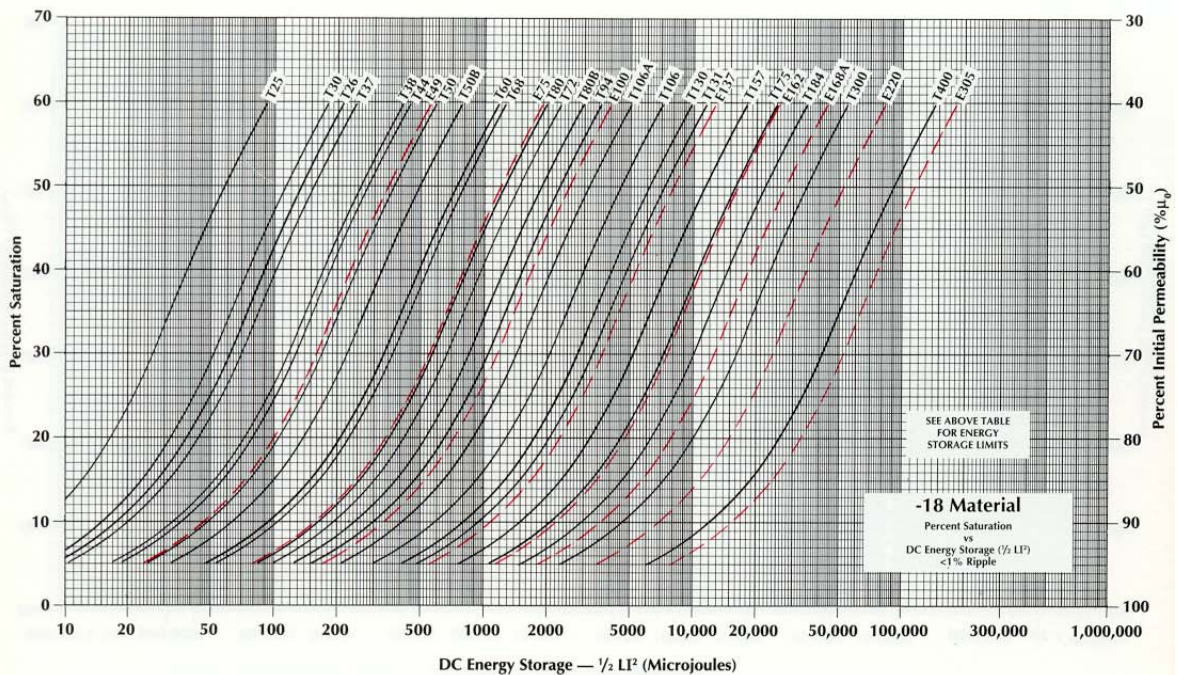
Ringkern-Material 18

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	T130	T131	T137	T157	T175	
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	58.0	79.0	73.0	82.0		
PART NO.	T184	T300	T400																			
A_L VALUE	116	58.0	96.0																			





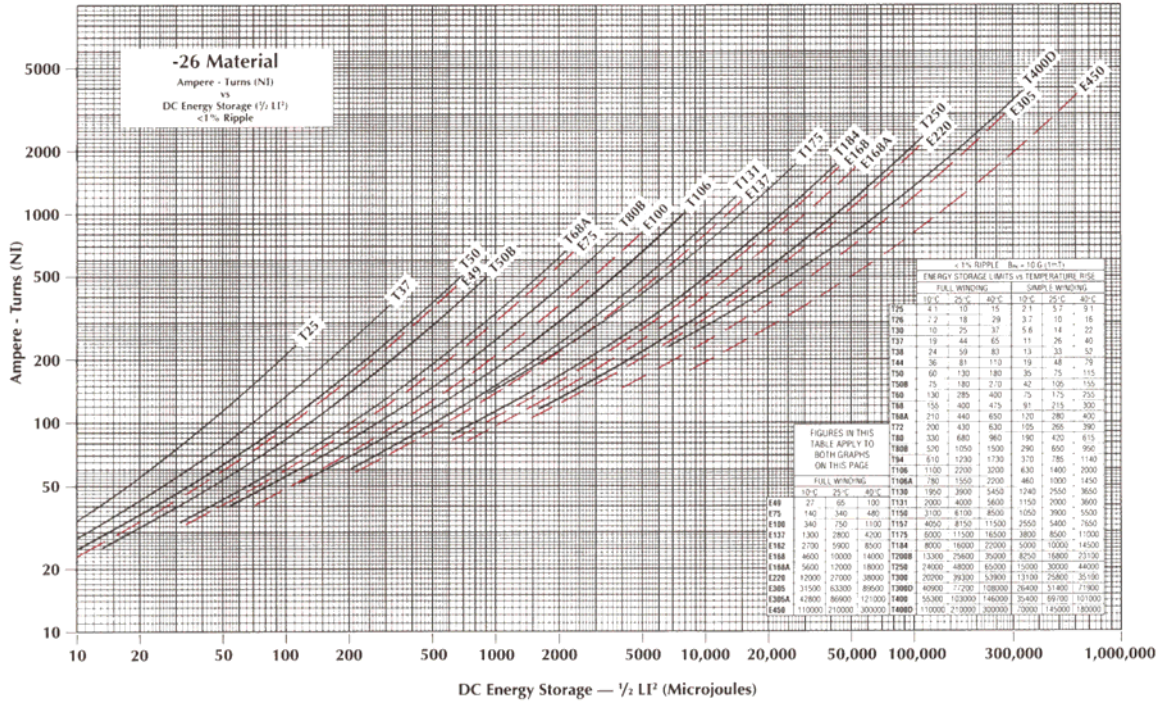
Ringkern-Material 26

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_L VALUES FOR -26 MATERIAL

PART NO.	T25	T26	T30	T37	T38	T44	T50	T50B	T60	T68	T72	T80	T80B	T94	T106	T106A	T130	T131	T150	T157
A _L 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	60.0	93.0	67.0	81.0	116	96.0	100

PART NO.	T175	T184	T200B	T250	T300	T300D	T400	T400D
A _L VALUE	105	169	160	242	80	160	131	262

