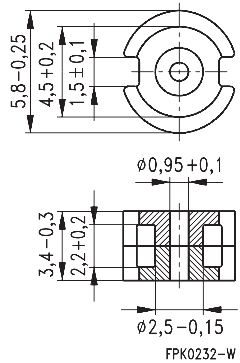
P 5,8 × 3,3

Core **B65501**

- Pot cores are supplied in sets



Magnetic characteristics (per set)

$\Sigma l/A$ = 1,68 mm^{-1}
l_e = 7,9 mm
A_e = 4,7 mm^2
V_e = 37 mm^3

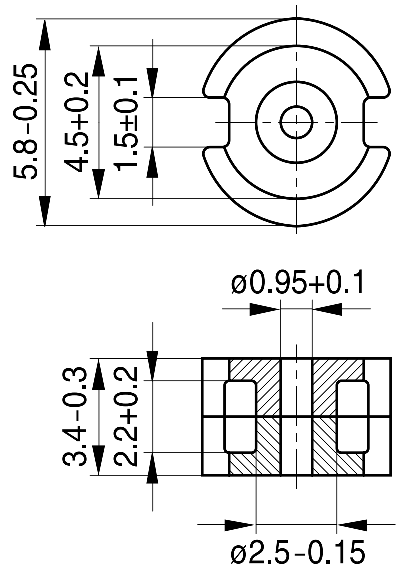
Approx. weight 0,2 g/set

Ungapped [1]

Material	A_L value nH	μ_e	Ordering code -D with center hole
M33	350 + 30/– 20 %	470	B65501-D-R33
N26	800 + 40/– 30 %	1070	B65501-D-Y26

1) Gapped pot cores on request

- With center hole



Magnetic characteristics (per set)

$\Sigma l/A$ = 1.68 mm^{-1}
l_e = 7.9 mm
A_e = 4.7 mm^2
V_e = 37 mm^3

Approx. weight: 0.2 g/set

Mode of delivery: Sets
Packing: Standard styrofoam tray (size 200 mm x 300 mm)

Material	A_L value [1)] [nH]	μ_e	Air gap [mm]	Ordering code [2)]
N48	800 +40% / -30%	1070	—	B65501D0000Y048

1) Measurement parameter: f = 10 kHz / B = 0.25 mT / 100 turns / room temperature

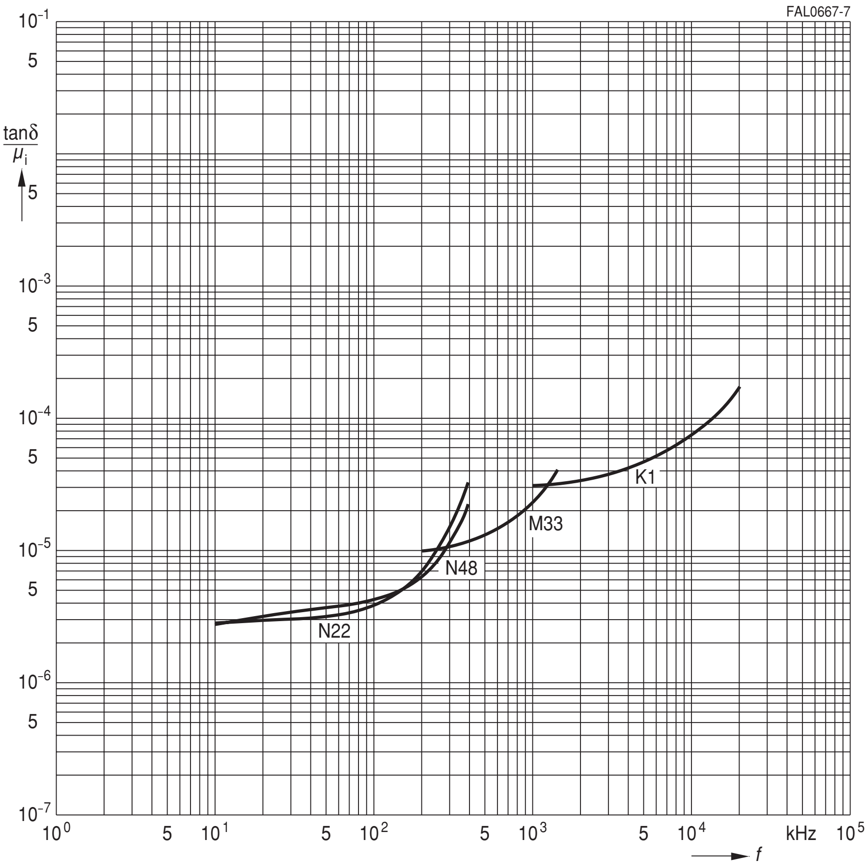
2) Gapped pot cores on request

2 Material properties

Preferred application			Resonant Circuit inductors			Inductors for line attenuation	
Material			K 1	M 33[1]	N 48	K 10	K 8
Base material			NiZn	MnZn	MnZn	NiZn	NiZn
Color code (adjuster)			violet	white	—	—	—
	Symbol	Unit					
Initial permeability (T = 25 °C)	μ_i		80 ± 25 %	750 ± 25 %	2300 ± 25 %	800 ± 25 %	860 ± 25 %
Meas. field strength Flux density (near saturation) (f = 10 kHz)	H B_S (25 °C) B_S (100 °C)	A/m mT mT	5000 310 280	2000 400 310	1200 420 310	5000 320 240	1200 340 240
Coercive field strength (f = 10 kHz)	H_c (25 °C) H_c (100 °C)	A/m A/m	380 350	80 65	26 19	40 25	40 25
Optimum frequency range	f_{min} f_{max}	MHz	1,5 … 12	0,2 … 1,0	0,01 … 0,1	0,1 … 1	0,1 … 0,5
Relative loss factor at f_{min} at f_{max}	$\tan \delta/\mu_i$	10^{-6} 10^{-6}	< 40 < 120	< 12 < 20	< 4 < 6	< 15 < 60	< 20 < 30
Hysteresis material constant	η_B	10^{-6}/mT	< 36	< 1,8	< 0,4	< 5	< 4,5
Curie temperature	T_C	°C	> 400	> 200	> 170	> 150	> 150
Relative temperature coefficient at 25 ... 55 °C at 5 ... 25 °C	α_F	10^{-6}/K	2 … 8 7 … 1	0,5 … 2,6 —	0,3 … 1,3 0,3 … 1,3	— —	— —
Mean value of α_F at 25 ... 55 °C		10^{-6}/K	4	1,6	0,70	10,0	9,2
Density (typical values)		kg/m^3	4650	4500	4700	5000	5100
Disaccommodation factor at 25 °C	DF	10^{-6}	20	8	2	—	—
Resistivity	ρ	Ωm	10^5	5	3	10^5	10^5
Core shapes			RM, P, Toroid, P core half	RM, P, Toroid, Double-aperture, P core-half	RM, P	Toroid, Double-aperture	Toroid
Other material properties (graphs) see page			50	57	70	55	54

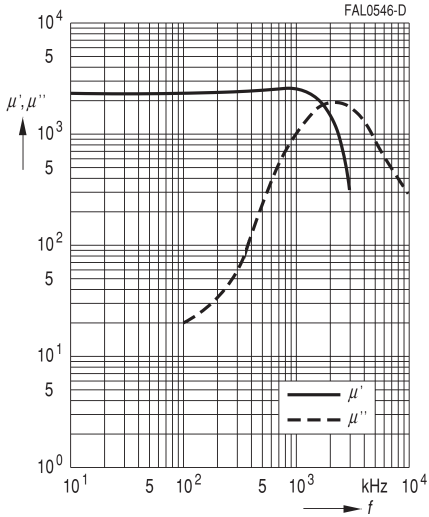
1) For threaded cores μi = 600 ± 20%

Relative loss factor versus frequency
(measured with ring cores, measuring flux density $\hat{B} \leq 0,25$ mT)

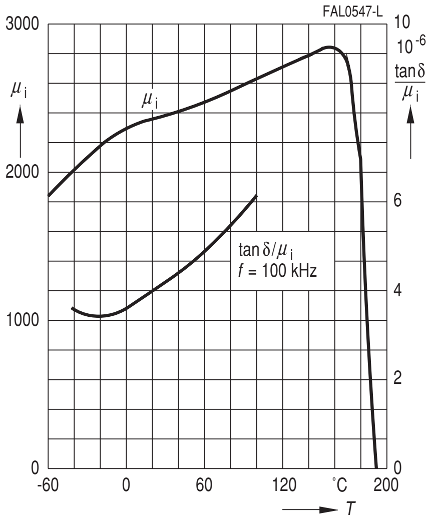


N 48

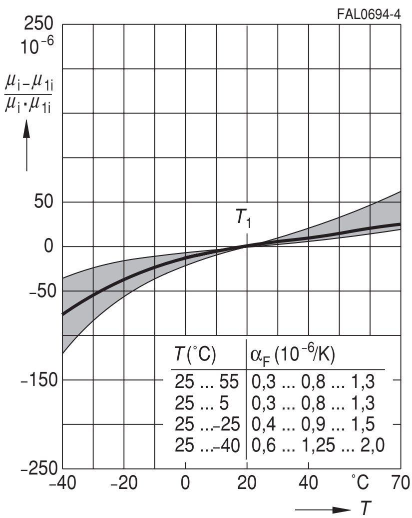
Complex permeability
versus frequency
(measured on R10 toroids, $\hat{B} \leq 0{,}25$ mT)



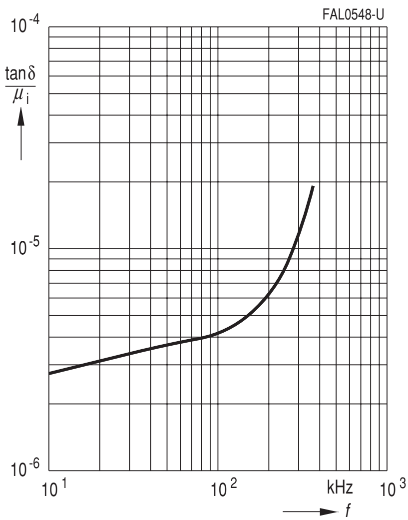
Initial permeability μ_i and relative loss factor
$\tan \delta/\mu_i$ versus temperature
(measured on R10 toroids, $\hat{B} \leq 0{,}25$ mT)



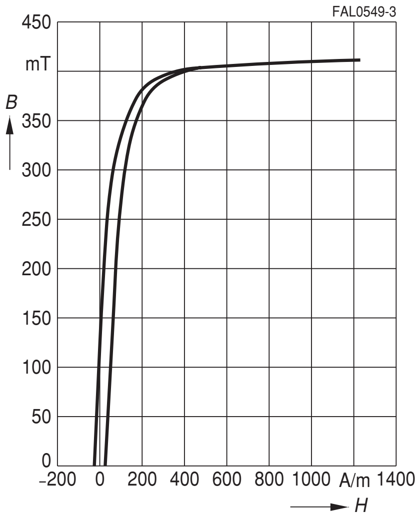
Permeability factor versus temperature
(measured on P and RM cores,
$\hat{B} \leq 0{,}25$ mT), $\mu_i \approx 2300$



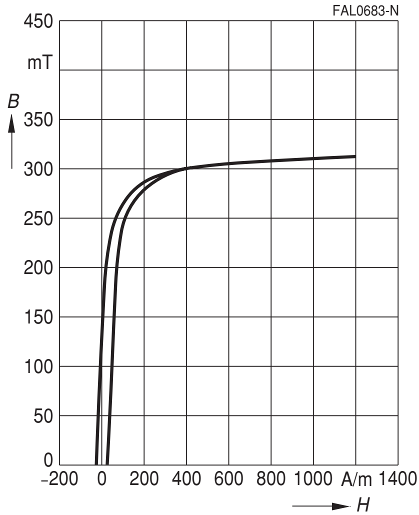
Relative loss factor $\tan \delta/\mu_i$
versus frequency
(measured on R29 toroids)



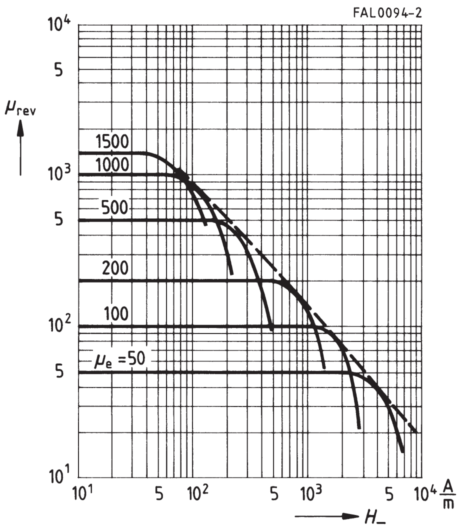
Dynamic magnetization curves
(typical values)
(f = 10 kHz, T = 25 °C)



Dynamic magnetization curves
(typical values)
(f = 10 kHz, T = 100 °C)



DC magnetic bias
(measured on ETD cores, typical values)
($\hat{B} \leq$ 0,25 mT, f = 10 kHz, T = 25 °C)



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