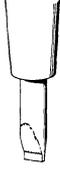| Individual parts	Part No.	Page
Adjusting screw driver (for assembly only)	B63399	340, fig. 4
Matching handle	B63399	341, fig. 6
Adjusting screw	B65659	296
Core	B65807	292
Clamps	B65808	293
Insulation washer for coil	B65808	293
Coil formers with 1 or 2 sections, 4, 5, or 6 pins	B65808	293
Core	B65807	292
Threaded sleeve	B65808	296
Insulating washer for double clad PC boards	B65808	293
Additionally available: Coil former with bent solder terminals (for litz wires)	B65808	294
Coil former for power transformers (in preparation)	B65808	295
Centering pin	B65808	296
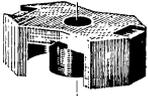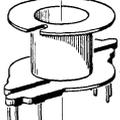
RM-6 cores complying with DIN 41 980 or IEC publication 431.
RM-6 cores are also available without center hole for use in transformers.
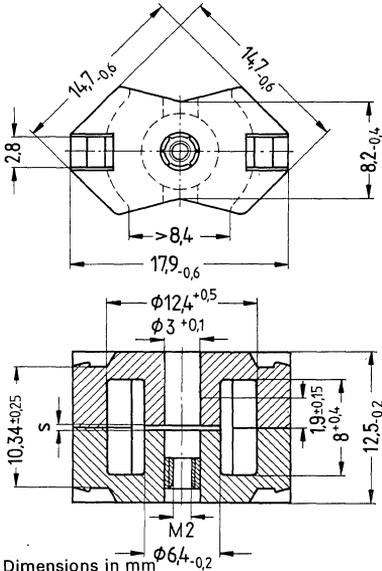
Dimensions in mm

Magnetic characteristics

	with center hole	without center hole	
Core factor $\Sigma\, l/A$ =	0.86	0.78	mm^{-1}
Effective length l_e =	26.9	28.6	mm
Effective area A_e =	31.3	36.6	mm^2
Min. core cross section[1] A_{min} =	–	31	mm^2
Effective volume V_e =	840	1050	mm^3
Approx. weight/set	4.7	5.1	g

RM core	Ordering code
without threaded sleeve	B65807–C••••–••••
with threaded sleeve (fig.)	B65807–N••••–••••
without center hole	B65807–J••••–••••

A_L value nH	tolerance	SIFERRIT material	Total air gap s in mm approx.	Effective permeability μ_e	Ordering code (PU: 500 sets)
Gapped					
◀ 40		K 1	0,80	27,4	B65807–•0040–A001
63		M 33	0,60	43,2	B65807–•0063–A033
100			0,38	68,5	B65807–•0100–A033
◀ 160			0,21	110	B65807–•0160–A058
200	± 3 % ≙ A	N 58	0,16	137	B65807–•0200–A058
250			0,11	171	B65807–•0250–A058
160			0,22	110	B65807–•0160–A048
200			0,17	137	B65807–•0200–A048
◀ 250		N 48	0,12	171	B65807–•0250–A048
◀ 315			0,08	216	B65807–•0315–A048
◀ 400			0,05	274	B65807–•0400–A048
1000	± 10 % ≙ K		0,006	685	B65807–C1000–K048
Ungapped					
120		K 1		82	B65807–C0000–R001
1700		N 47		1160	B65807–C0000–R047
2000	+30 % ≙ R	N 48		1370	B65807–C0000–R048
3100 [2]	−20	N 41		1920	B65807–J0000–R041
4300 [2]		N 30		2670	B65807–J0000–R030
6200 [2]		T 35		3850	B65807–J0000–R035
8600 [2]	+40 −30 % ≙ Y	T 38		5340	B65807–J0000–Y038
8600 [2]	+80 −0 % ≙ U	T 38		5340	B65807–J8600–U638

[1] Necessary for the calculation of the max. flux density   [2] without center hole
◀ to be preferred

Coil formers, insulating washers, and clamps B 65 808

Glass-fiber reinforced thermosetting plastic **coil formers** with 4, 5, or 6 terminal pins, complying with IEC publication 431 (DIN 41 981), suitable for automatic winding machines, flame-retardant in accordance with UL 94 V-0. Permissible soldering temperature max. 400 °C/752 °F, 2 sec (also refer to page 85, para. 8.2). For winding details refer to page 68.

Spring steel **clamps** (tinned) with ground terminal.

4 pins   **5 pins**   **6 pins**

Clamp[1]
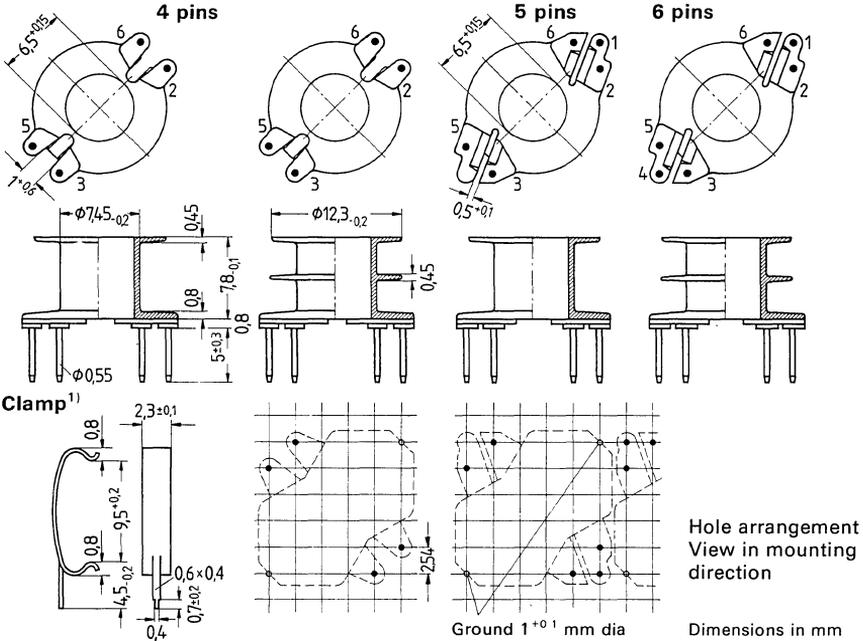
Hole arrangement
View in mounting
direction

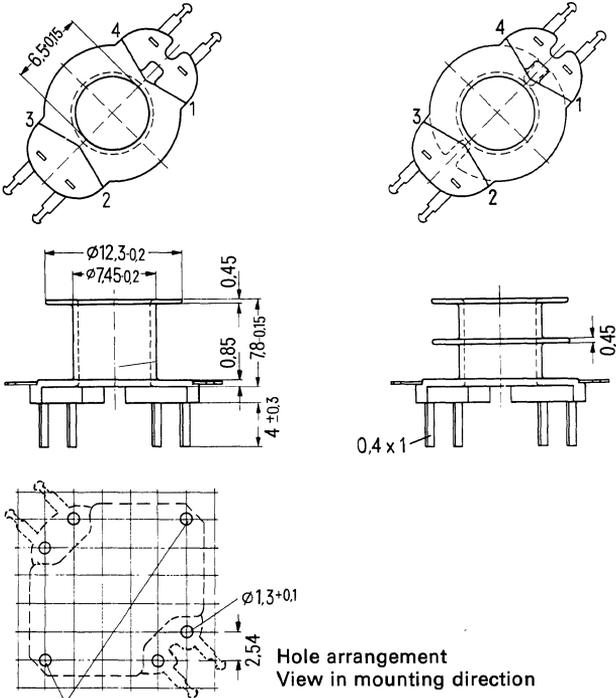Ground 1 $^{+0\,1}$ mm dia   Dimensions in mm

Coil former Number of sections	Useful winding cross section A_N		Average length of turn l_N	A_R value[2]	Approx. weight	Number of pins	Ordering code (PU: 500)
	of one section mm^2	total mm^2	mm	μΩ	g		
						4	B65808–A1004–D001
1	15	15		69	0,4	5	B65808–A1005–D001
			30			6	B65808–A1006–D001
						4	B65808–A1004–D002
2	7	14		73	0,6	5	B65808–A1005–D002
						6	B65808–A1006–D002
Clamp (approx. weight 0.12 g; ordering code for each clamp, two required)							B65808–C2002–X000
Insulating washer for double clad PCBs							B65808–B2005–X000
Insulating washer between core and coil							B65808–A5000–X000
Drawing details for the assembly of mounting devices							C61407–A3–A2

[1] Pressure per clamp pair: 45 ... 60 N.   [2] $R_{Cu} = A_R \cdot N^2$ (dc resistance = A_R · number of turns^2)

Coil formers B 65 808–J...

Glass-fiber reinforced polyterephthalate **coil formers** with special solder terminals for litz wires, flame-retardant in accordance with UL 94 V-0. Permissible soldering temperature max. 400 °C/ 752 °F, 2 sec (refer to page 85, para. 8.2).
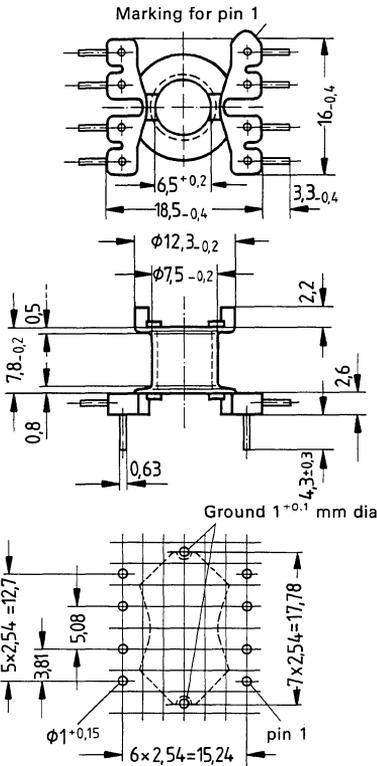For winding details refer to page 68.

Hole arrangement
View in mounting direction

Ground $1^{+0.1}$ dia

Dimensions in mm

Number of sections	Useful winding cross section A_N mm²	Average length of turn l_N mm	A_R value[1] μΩ	Approx. weight g	Number of pins	Ordering code (PU: 500)
1	15	30	69	0.5	4	B65808–J1003–T001
2	14		73	0.65	4	B65808–J1003–T002

[1] $R_{Cu} = A_R \cdot N^2$ (dc resistance = A_R · number of turns²)

Coil former for power transformers B 65 808 (in preparation)

Glass-fiber reinforced polyterephthalate **coil former** with 8 terminal pins, flame-retardant in accordance with UL 94 V-0. Permissible soldering temperature max. 400 °C/752 °F, 2 sec (also refer to page 85, para. 8.2).
For winding details refer to page 68.

Hole arrangement
View in mounting direction
(Intermediate spacing
should be considered!)

Dimensions in mm

Number of sections	Useful winding cross section A_N		Average length of turn l_N	A_R value[1]	Approx. weight	Number of pins	Ordering code (PU: 200)
	of one section mm^2	total mm^2	mm	$\mu\Omega$	g		
1	15	15	30	6	2	8	B65808–A1508–T001

[1] $R_{Cu} = A_R \cdot N^2$ (dc resistance = $A_R \cdot$ number of turns^2)

Adjusting devices B 65659

Adjusting screw (a, b, c) B65659–E0∗∗∗–X∗∗∗, consisting of a SIFERRIT tube core on which a glass-fiber reinforced polyterephthalate thread is molded and a spring crown serving as core brake;

fits:

glass-fiber reinforced 11 polyamide **threaded sleeve** (d) B65808–L3002–X000
Centering pin (e) B65808–A2008–X000 as mounting aid for RM core centering.
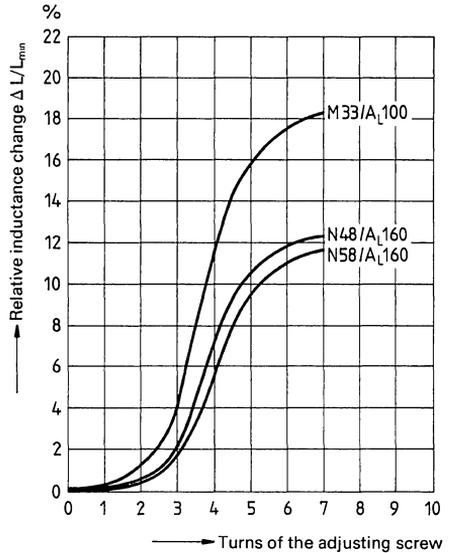**Adjusting screw driver** B63399–B0004–X000
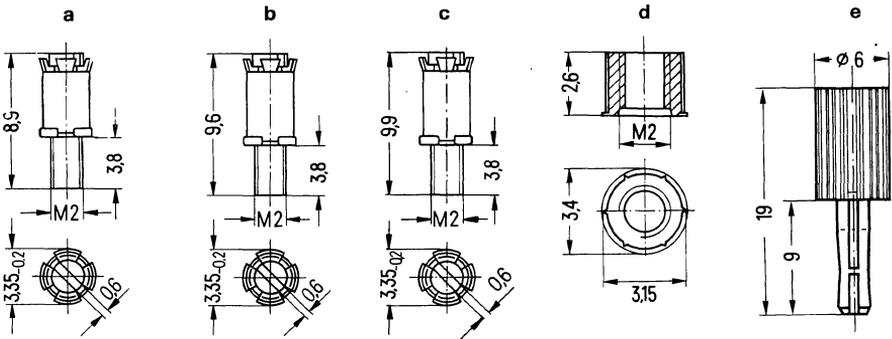
Dimensions in mm

RM-6 core B65807		Adjusting screw					
Material	A_L value nH	Part	Tube core		Color code	**Ordering code** (PU: 500)	
			dia x length	Material			
K 1	40	a	2,6 x 3,7	Si 1	white	B65659–E0001–X101	
M 33	63						
	100	c	2,82 x 4,4		brown	B65659–E0004–X101	
N 48, N 58	160	a	2,6 x 3,7	K 1	green	B65659–E0001–X001	
N 58	200				red	B65659–E0001–X023	
	250	b	2,75 x 4,4		black	B65659–E0003–X023	
N 48	200 250	a	2,6 x 3,7	N 22	red	B65659–E0001–X023	
	315	b	2,75 x 4,4		black	B65659–E0003–X023	
	400	c	2,82 x 4,4		yellow	B65659–E0004–X023	

Inductance adjustment curves

Adjusting screw B65659–E0001–X101
color code white

Turns of the adjusting screw

M33/A$_L$63

K1/A$_L$40
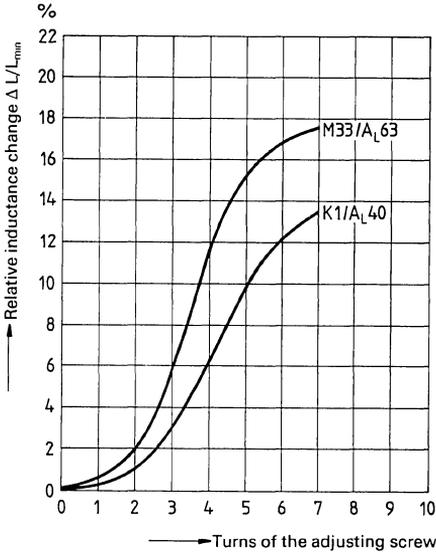
Adjusting screw B65659–E0004–X101
color code brown

Turns of the adjusting screw

M33/A$_L$100

N48/A$_L$160
N58/A$_L$160

Adjusting screw B65659–E0001–X023
color code red

Turns of the adjusting screw

N48/A$_L$160

N48/A$_L$200
N58/A$_L$200
N48/A$_L$250
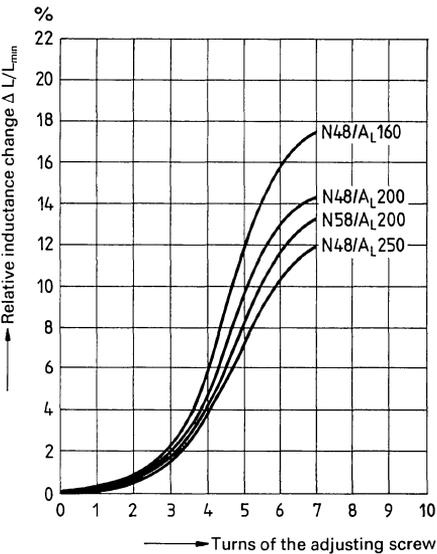
Adjusting screw B65659–E0001–X001
color code green

Turns of the adjusting screw

N48/A$_L$160
N58/A$_L$160

N58/A$_L$200
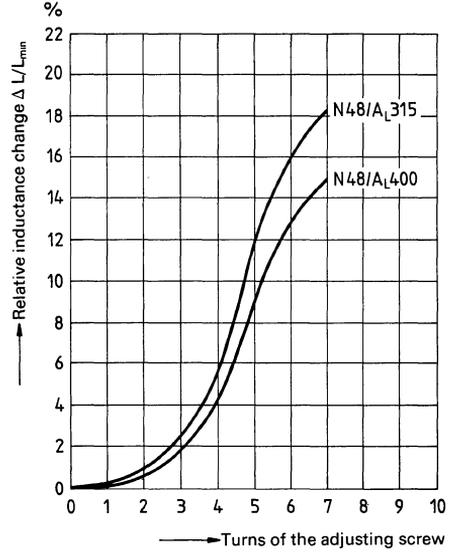
0 ≙ at least one turn engaged.

297
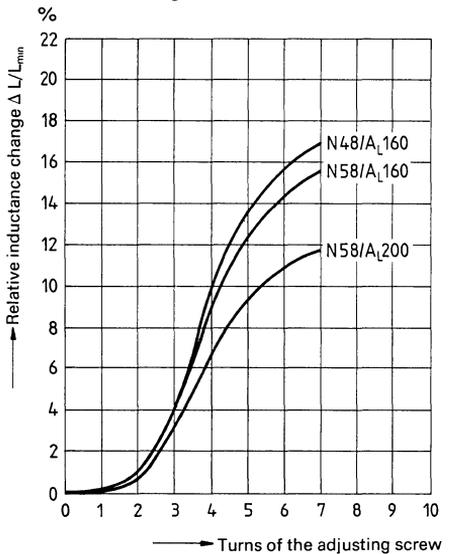
Inductance adjustment curves

Adjusting screw B65659–E0003–X023
color code black
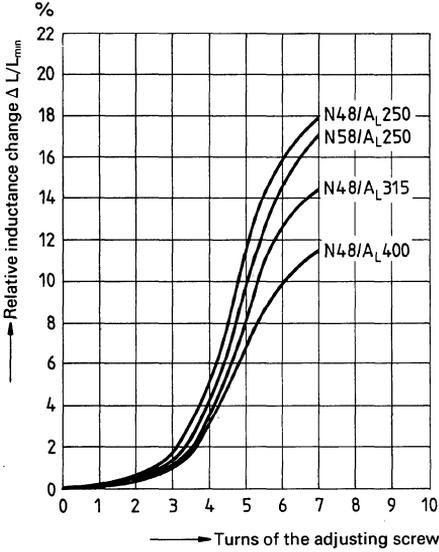
Adjusting screw B65659–E0004–X023
color code yellow

Relative inductance change $\Delta L/L_{min}$

Turns of the adjusting screw

Curves: N48/A$_L$250, N58/A$_L$250, N48/A$_L$315, N48/A$_L$400

Relative inductance change $\Delta L/L_{min}$

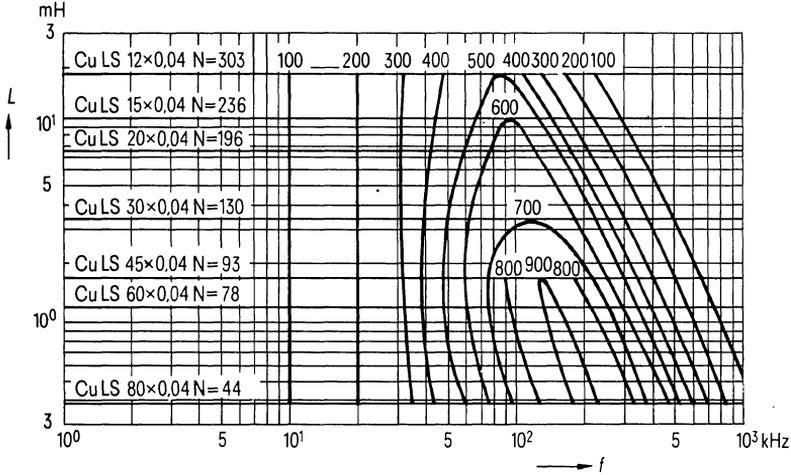Turns of the adjusting screw

Curves: N48/A$_L$315, N48/A$_L$400

0 $\hat{=}$ at least one turn engaged.

ISO-Q curves
Material N 58

1-section winding with RF litz wire
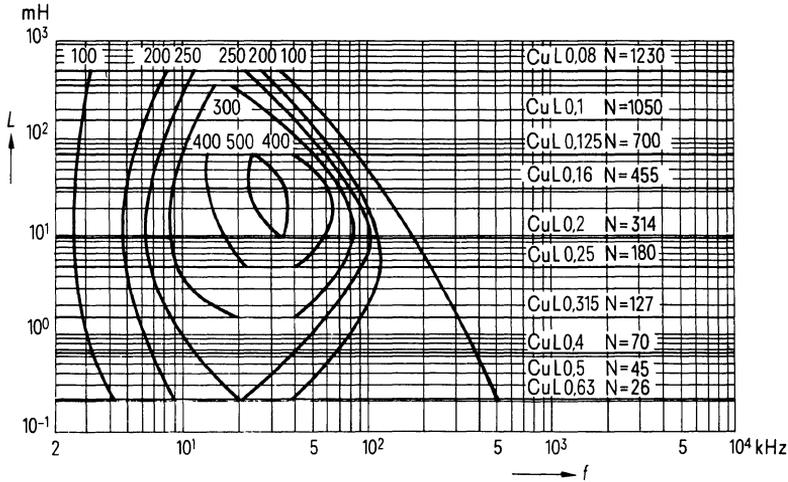Flux density in the core $\bar{B} < 1$ mT

N 58
$A_L = 200$ nH

ISO-Q curves
Material N 48

1-section winding with enamel copper wire
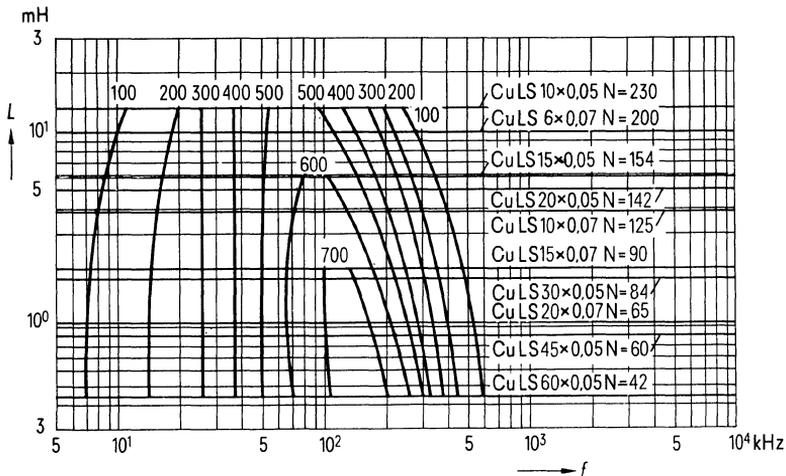Flux density in the core $\bar{B} < 1$ mT

N 48
$A_L = 315$ nH

ISO-Q curves
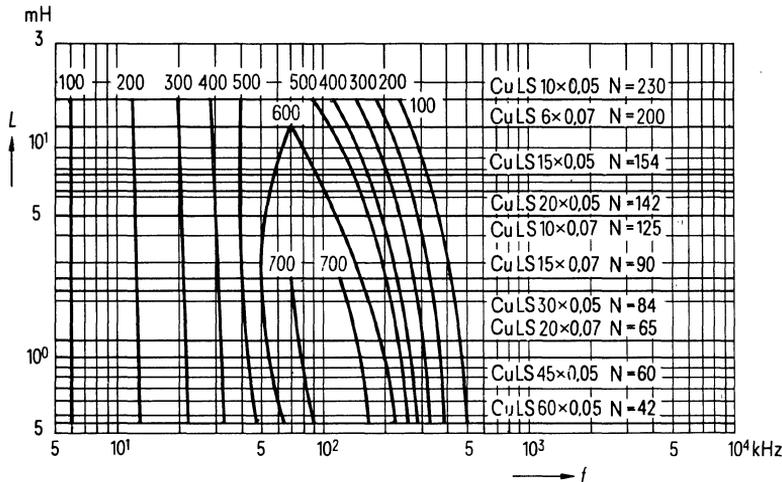Material N 48

1-section winding with RF litz wire
Flux density in the core $\hat{B} < 1$ mT

mH

L

N 48
$A_L = 250$ nH

100 200 300 400 500 500 400 300 200 CuLS 10×0,05 N = 230
100 CuLS 6×0,07 N = 200
600 CuLS 15×0,05 N = 154
CuLS 20×0,05 N = 142
CuLS 10×0,07 N = 125
700 CuLS 15×0,07 N = 90
CuLS 30×0,05 N = 84
CuLS 20×0,07 N = 65
CuLS 45×0,05 N = 60
CuLS 60×0,05 N = 42

$5 \quad 10^1 \quad 5 \quad 10^2 \quad 5 \quad 10^3 \quad 5 \quad 10^4$ kHz

$\longrightarrow f$

1-section winding with RF litz wire
Flux density in the core $\hat{B} < 1$ mT

mH

L

N 48
$A_L = 315$ nH

100 200 300 400 500 500 400 300 200 CuLS 10×0,05 N = 230
600 100 CuLS 6×0,07 N = 200
CuLS 15×0,05 N = 154
CuLS 20×0,05 N = 142
CuLS 10×0,07 N = 125
700 700 CuLS 15×0,07 N = 90
CuLS 30×0,05 N = 84
CuLS 20×0,07 N = 65
CuLS 45×0,05 N = 60
CuLS 60×0,05 N = 42

$5 \quad 10^1 \quad 5 \quad 10^2 \quad 5 \quad 10^3 \quad 5 \quad 10^4$ kHz

$\longrightarrow f$

Q factor characteristics
Material N 48

L (mH) for		Turns	Wire; RF litz wire	Number of sections
A_L = 250 nH	A_L = 315 nH			
22,5	28,3	300	0,20 CuL	1
12,1	15,2	220	6 x 0,07 CuLS	1
4,55	5,73	135	20 x 0,05 CuLS	1

Flux density
in the core
$\hat{B} < 2$ mT
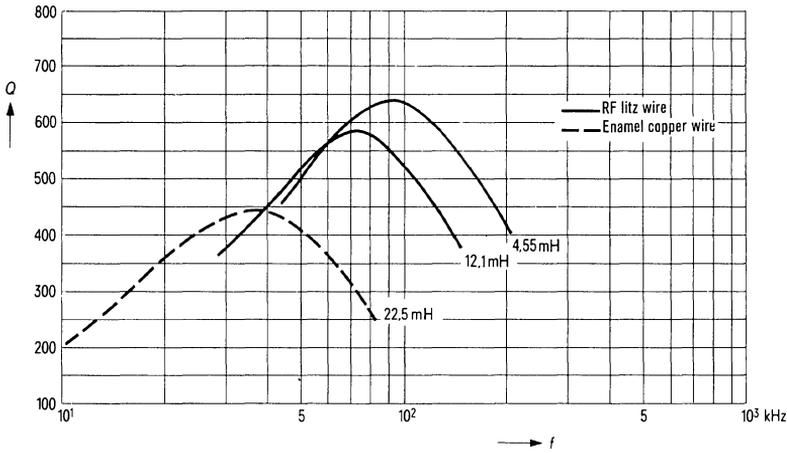
N 48
A_L = 250 nH
(typical values)
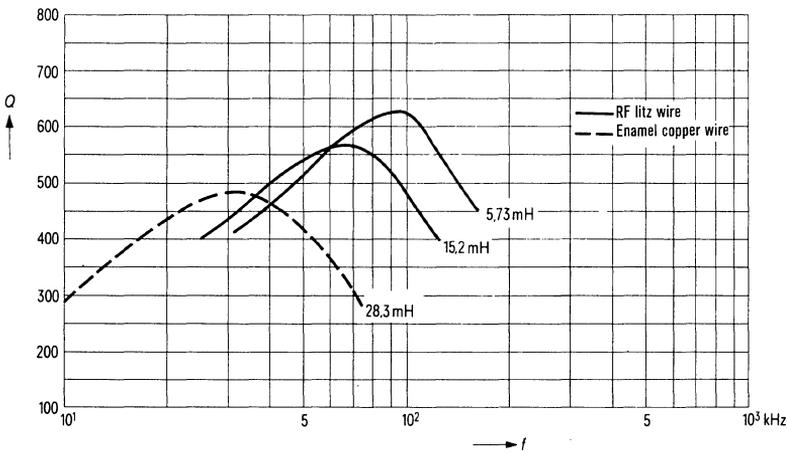
N 48
A_L = 315 nH
(typical values)

Q factor characteristics

Material M 33

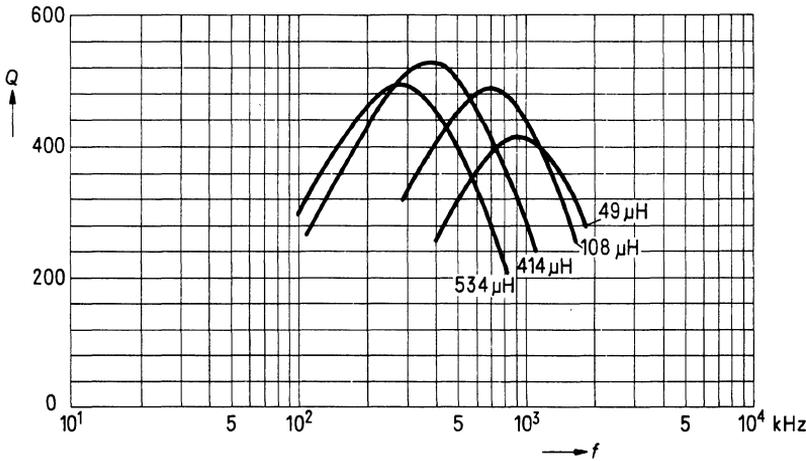| L (μH) for		Turns	RF litz wire	Number of	$\emptyset^*$
A_L = 63 nH	A_L = 100 nH			sections	mm
534	847	92	45 x 0,04 CuLS	1	–
414	657	81	45 x 0,04 CuLS	2	–
108	168	41	45 x 0,04 CuLS	2	9,8
49	75	27	45 x 0,04 CuLS	2	10,6

Pad of polystyrene
tape up to the
diameter $\emptyset^*$ (valid
for all sections)

Flux density
in the core
$\hat{B} < 2$ mT

M 33
A_L = 63 nH
(typical values)

M 33
A_L = 100 nH
(typical values)