

Soft Ferrites

U, I cores and accessories

PRODUCT OVERVIEW AND TYPE NUMBER STRUCTURE

Product overview U, I cores

CORE TYPE	V_e (mm ³)	A_e (mm ²)	MASS (g)
U10/8/3	309	8.07	0.9
U15/11/6	1680	32.3	4
U20/16/7	3800	56	9
U25/16/6	3380	40.3	8
I25/6/6	2590	40.3	4.5
U25/20/13	9180	104	23.5
U30/25/16	17900	161	43
U33/22/9	9490	86.5	24
U46/40/28	71300	392	182
U67/27/14	35200	204	85
U80/65/32	219000	706	560
U93/52/30	217000	840	560
U93/76/16	159000	448	400
I93/28/16	115000	447	200
U93/76/30	297000	840	760
I93/28/30	175000	836	370
U100/57/25	199000	645	500
I100/25/25	158000	645	300
U126/91/20	268800	560	680

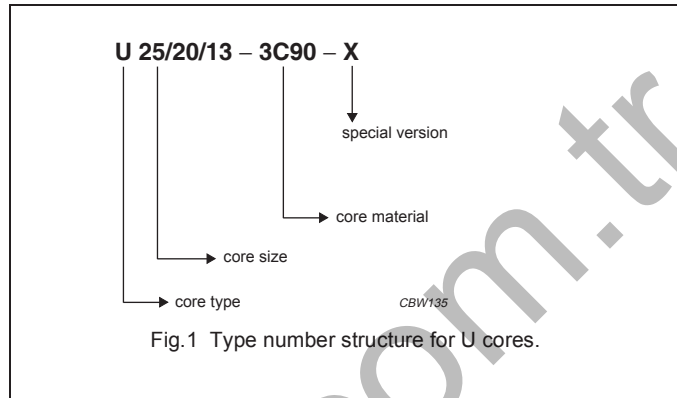


Fig.1 Type number structure for U cores.

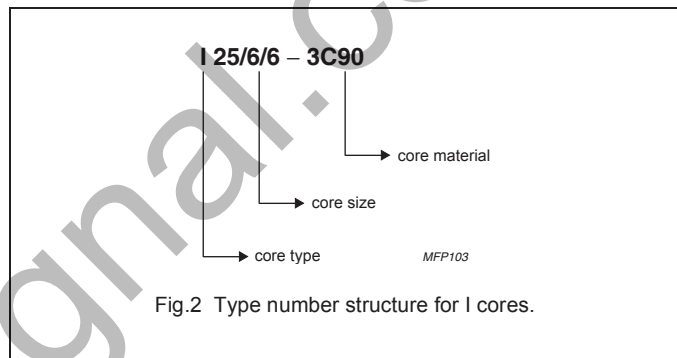


Fig.2 Type number structure for I cores.

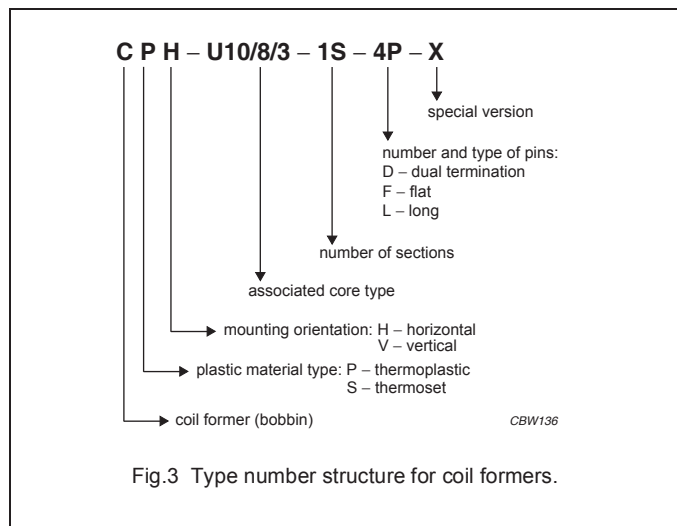
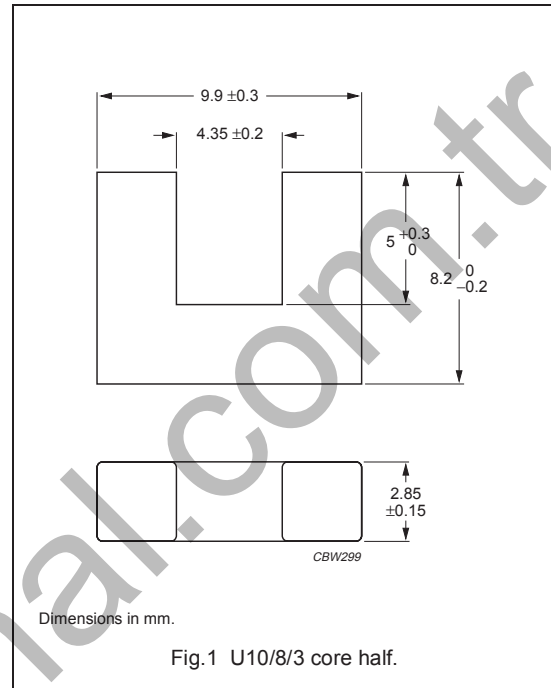


Fig.3 Type number structure for coil formers.

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	4.74	mm ⁻¹
V_e	effective volume	309	mm ³
l_e	effective length	38.3	mm
A_e	effective area	8.07	mm ²
A_{min}	minimum area	7.91	mm ²
m	mass of core half	≈ 0.9	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	420 ± 25%	≈ 1590	U10/8/3-3C90
3C94	470 ± 25%	≈ 1770	U10/8/3-3C94

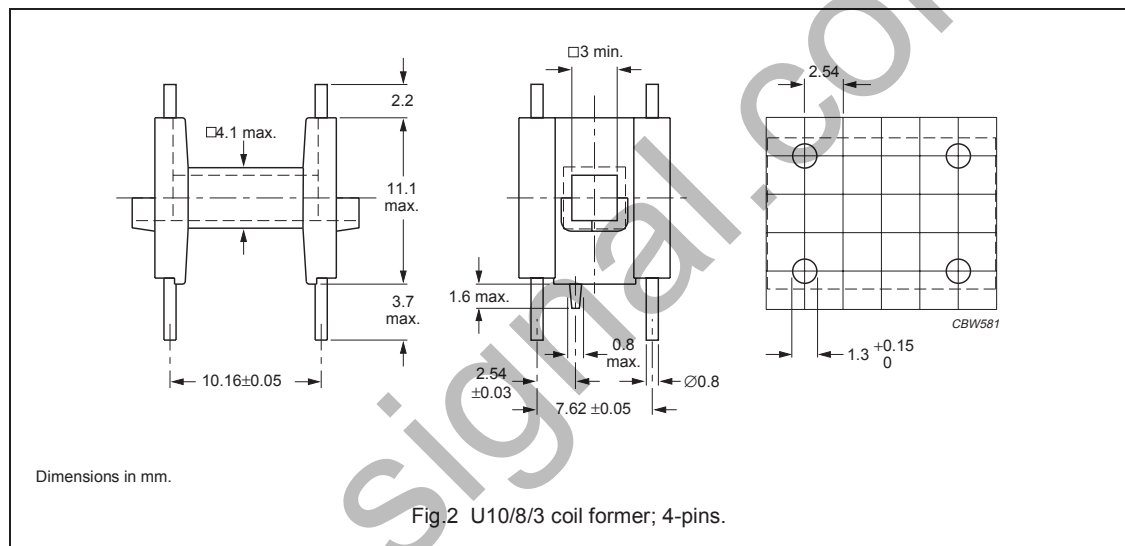
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C
3C90	≥ 320	≤ 0.04	≤ 0.04	–
3C94	≥ 320	–	≤ 0.03	≤ 0.18

COIL FORMERS

General data 4-pins U10/8/3 coil former

PARAMETER	SPECIFICATION
Coil former material	polybuteneterephthalate (PBT), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E69578(M)
Pin material	copper-tin alloy (CuSn), tin (Sn) plated
Maximum operating temperature	155 °C, "IEC 60085", class F
Resistance to soldering heat	"IEC 60068-2-20", Part 2, Test Tb, method 1B: 350 °C, 3.5 s
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1: 235 °C, 2 s



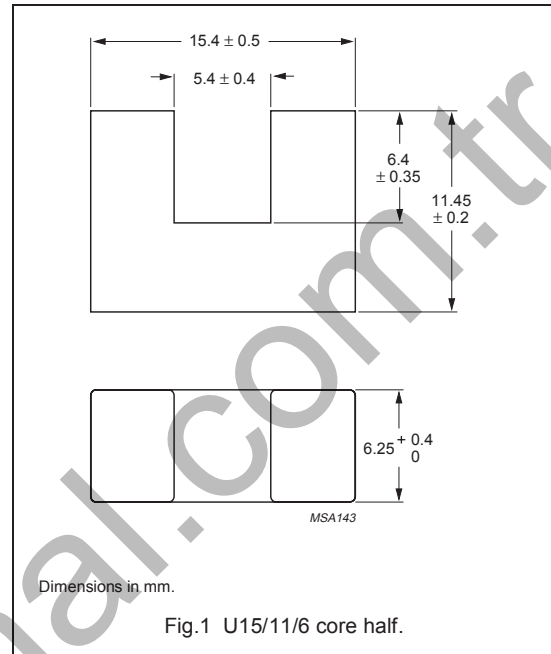
Winding data and area product for 4-pins U10/8/3 coil former

NUMBER OF SECTIONS	WINDING AREA (mm ²)	MINIMUM WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	AREA PRODUCT Ae x Aw (mm ⁴)	TYPE NUMBER
1	28	8	30	226	CPH-U10/8/3-1S-4P

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.60	mm ⁻¹
V_e	effective volume	1680	mm ³
l_e	effective length	52	mm
A_e	effective area	32.3	mm ²
m	mass of core half	≈ 4	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	1400 ±25%	≈ 1900	U15/11/6-3C90
3C94	1400 ±25%	≈ 1900	U15/11/6-3C94
3C11	2400 ±25%	≈ 3080	U15/11/6-3C11
3E27	3400 ±25%	≈ 4300	U15/11/6-3E27

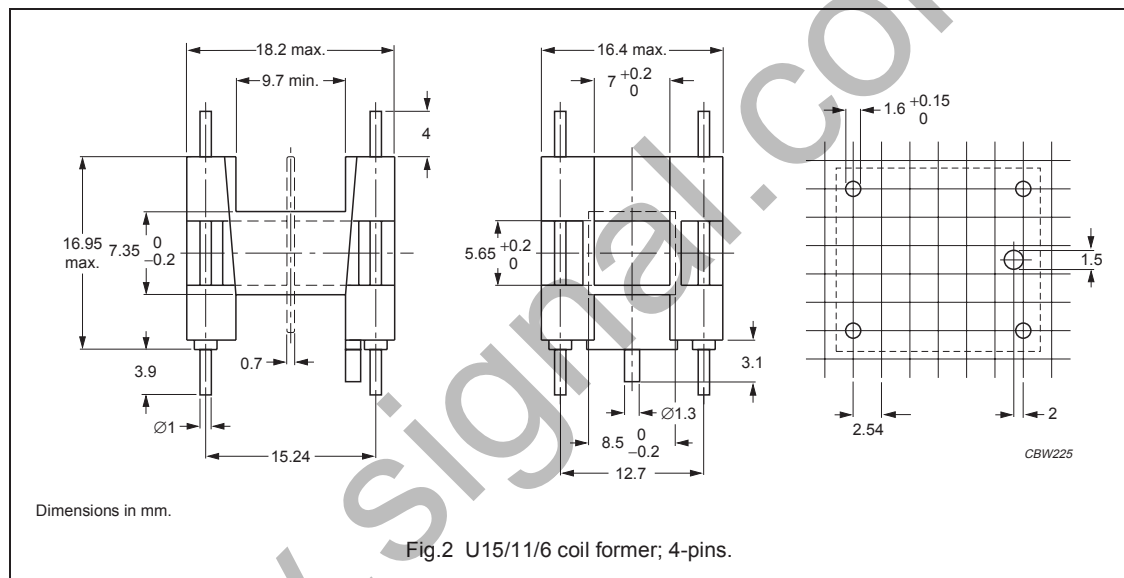
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C
3C90	≥320	≤ 0.2	≤ 0.22	–
3C94	≥320	–	≤ 0.17	≤ 1.0

COIL FORMERS

General data 4-pins U15/11/6 coil former

PARAMETER	SPECIFICATION
Coil former material	polyethyleneterephthalate (PET), glass-reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E69578 (M)
Pin material	copper-tin alloy (CuSn), tin (Sn) plated
Maximum operating temperature	155 °C, "IEC 60085", class F
Resistance to soldering heat	"IEC 60068-2-20", Part 2, Test Tb, method 1B: 350 °C, 3.5 s
Solderability	"IEC 60068-2-20", Part 2, Test Ta, method 1: 235 °C, 2 s



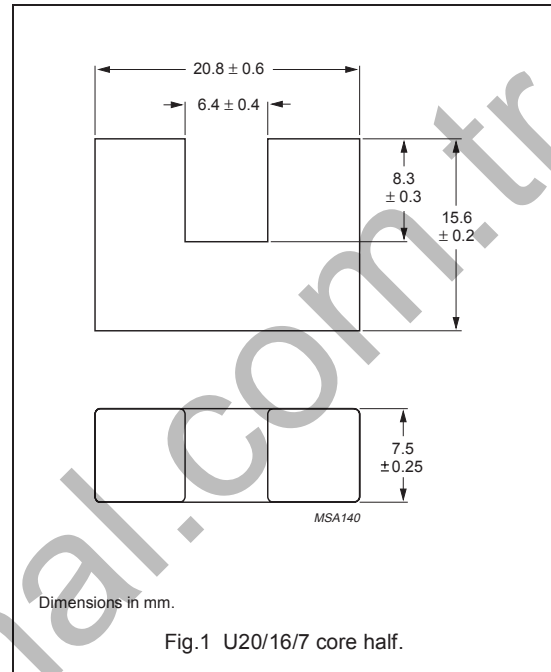
Winding data and area product for 4-pins U15/11/6 coil former

NUMBER OF SECTIONS	WINDING AREA (mm ²)	MINIMUM WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	AREA PRODUCT Ae x Aw (mm ⁴)	TYPE NUMBER
1	38.7	9.7	46.6	1250	CPH-U15/11/6-1S-4P
2	2 x 17.9	2 x 4.45	46.6	2 x 578	CPH-U15/11/6-2S-4P

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.21	mm ⁻¹
V_e	effective volume	3800	mm ³
l_e	effective length	68	mm
A_e	effective area	56	mm ²
m	mass of core half	≈ 9	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	1900 ±25%	≈ 1950	U20/16/7-3C90
3C94	1900 ±25%	≈ 1950	U20/16/7-3C94
3C11	3100 ±25%	≈ 3000	U20/16/7-3C11
3E27	4800 ±25%	≈ 4600	U20/16/7-3E27

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C
3C90	≥320	≤ 0.46	≤ 0.48	–
3C94	≥320	–	≤ 0.36	≤ 2.3

U, I cores and accessories

U25/16/6
(376U250)

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)	2.07	mm ⁻¹
V_e	effective volume	3380	mm ³
l_e	effective length	83.6	mm
A_e	effective area	40.3	mm ²
m	mass of core half	≈ 8.0	g

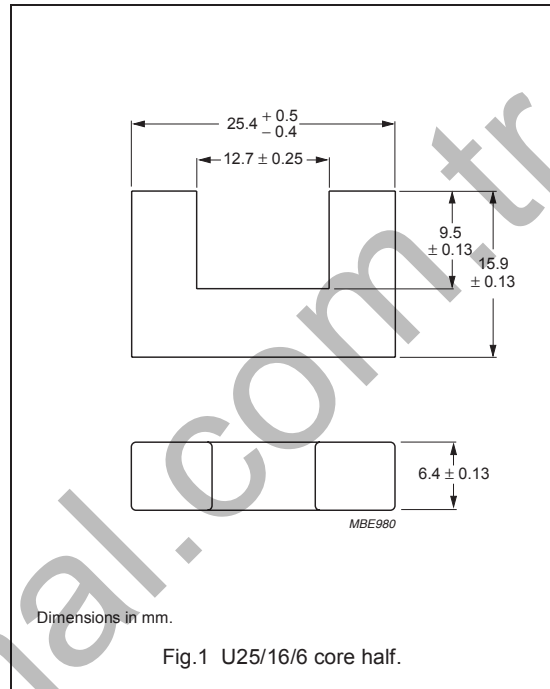


Fig.1 U25/16/6 core half.

Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C81	1400 ±25%	≈ 2300	U25/16/6-3C81
3C90	1200 ±25%	≈ 2300	U25/16/6-3C90
3C91 <small>des</small>	1400 ±25%	≈ 2300	U25/16/6-3C91
3C94	1200 ±25%	≈ 2300	U25/16/6-3C94
3C11	2050 ±25%	≈ 3380	U25/16/6-3C11
3E27	2500 ±25%	≈ 4130	U25/16/6-3E27

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at			
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B̂ = 200 mT; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C	f = 100 kHz; B̂ = 200 mT; T = 100 °C	f = 400 kHz; B̂ = 50 mT; T = 100 °C
3C81	≥320	≤ 0.78	–	–	–
3C90	≥320	≤ 0.4	≤ 0.4	–	–
3C91	≥320	–	≤ 0.23 ⁽¹⁾	≤ 1.6 ⁽¹⁾	–
3C94	≥320	–	≤ 0.3	≤ 2.0	–

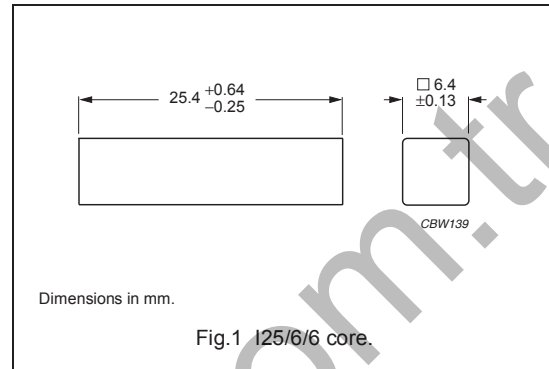
Note

1. Measured at 60 °C.

CORE SETS

Effective core parameters measured in combination with U25/16/6

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)	1.59	mm ⁻¹
V_e	effective volume	2590	mm ³
l_e	effective length	64.3	mm
A_e	effective area	40.3	mm ²
m	mass of I core	≈ 4.5	g

**Core halves**

A_L measured in combination with "U25/16/6".

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C81	1750 ±25%	≈ 2210	I25/6/6-3C81
3C90	1500 ±25%	≈ 1900	I25/6/6-3C90
3C91 ^{des}	1750 ±25%	≈ 2210	I25/6/6-3C91
3C94	1500 ±25%	≈ 1900	I25/6/6-3C94
3C11	2500 ±25%	≈ 3160	I25/6/6-3C11
3E27	3000 ±25%	≈ 3800	I25/6/6-3E27

Properties of core sets under power conditions

Measured in combination with "U25/16/6".

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C
3C81	≥320	≤ 0.6	–	–
3C90	≥320	≤ 0.3	≤ 0.3	–
3C91	≥320	–	≤ 0.18 ⁽¹⁾	≤ 1.2 ⁽¹⁾
3C94	≥320	–	≤ 0.23	≤ 1.6

Note

1. Measured at 60 °C.

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.85	mm ⁻¹
V_e	effective volume	9180	mm ³
l_e	effective length	88.2	mm
A_e	effective area	104	mm ²
m	mass of core half	≈ 23.5	g

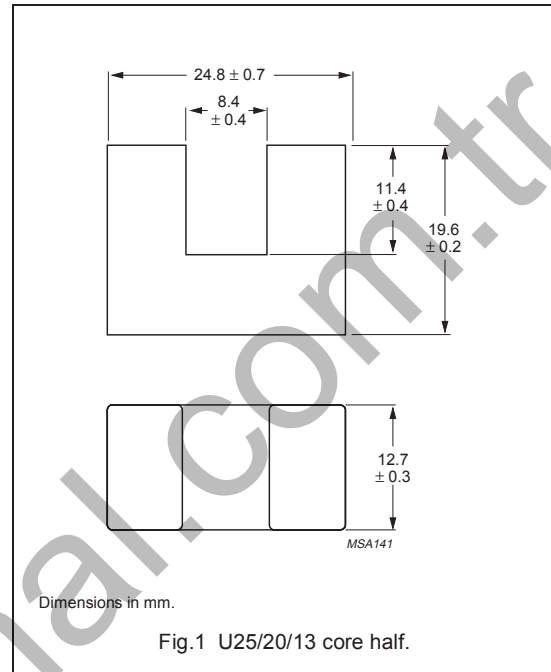


Fig.1 U25/20/13 core half.

Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	2900 ±25%	≈ 2000	U25/20/13-3C90
3C94	2900 ±25%	≈ 2000	U25/20/13-3C94
3C11	5000 ±25%	≈ 3400	U25/20/13-3C11
3E27	6300 ±25%	≈ 4300	U25/20/13-3E27

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C
3C90	≥320	≤ 1.1	≤ 1.2	–
3C94	≥320	–	≤ 0.9	≤ 5.5

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.690	mm ⁻¹
V_e	effective volume	17900	mm ³
l_e	effective length	111	mm
A_e	effective area	161	mm ²
m	mass of core half	≈ 43	g

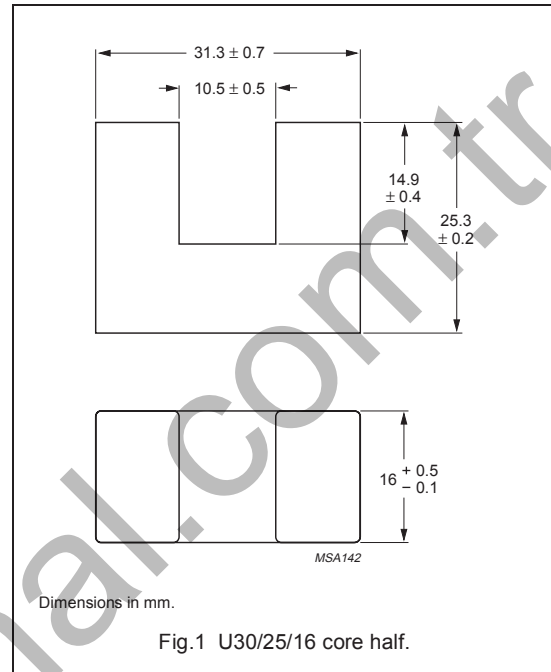


Fig.1 U30/25/16 core half.

Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	3700 ±25%	≈ 2030	U30/25/16-3C90
3C94	3700 ±25%	≈ 2030	U30/25/16-3C94

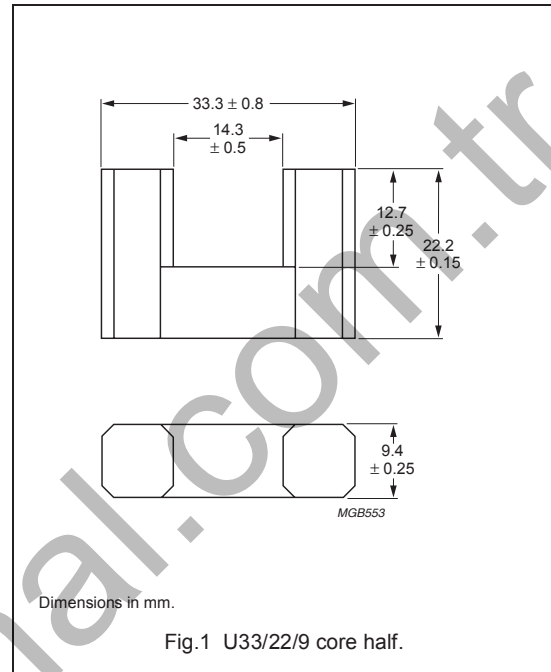
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C
3C90	≥ 320	≤ 2.2	≤ 2.3	–
3C94	≥ 320	–	≤ 1.8	≤ 11

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	1.27	mm ⁻¹
V_e	effective volume	9490	mm ³
l_e	effective length	110	mm
A_e	effective area	86.5	mm ²
m	mass of core half	≈ 24	g



Dimensions in mm.

Fig.1 U33/22/9 core half.

Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C81	2300 ±25%	≈ 2320	U33/22/9-3C81
3C91 <small>des</small>	2300 ±25%	≈ 2320	U33/22/9-3C91

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C
3C81	≥320	≤ 2.2	–	–
3C91	≥320	–	≤ 0.57 ⁽¹⁾	≤ 4.3 ⁽¹⁾

Note

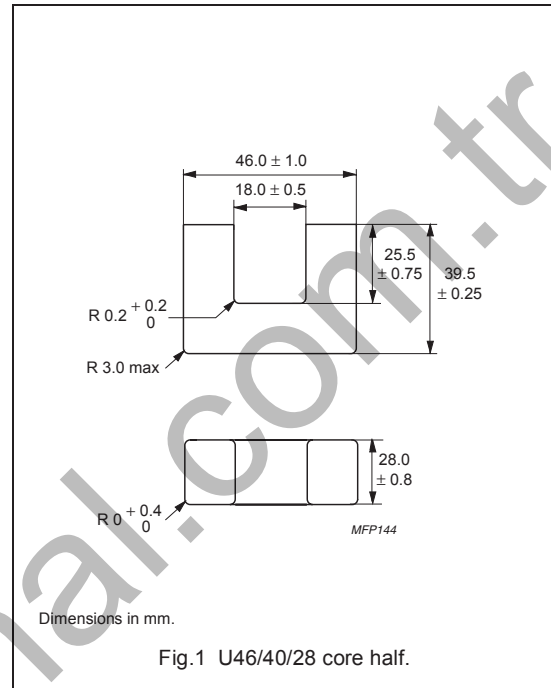
Note

1. Measured at 60 °C.

U CORES

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.464	mm ⁻¹
V_e	effective volume	71300	mm ³
l_e	effective length	182	mm
A_e	effective area	392	mm ²
A_{min}	minimum area	392	mm ²
m	mass of core half	≈ 182	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	6000 ± 25 %	≈ 2215	U46/40/28-3C90
3F3	5100 ± 25 %	≈ 1880	U46/40/28-3F3

Cores can be gapped on request in one leg.

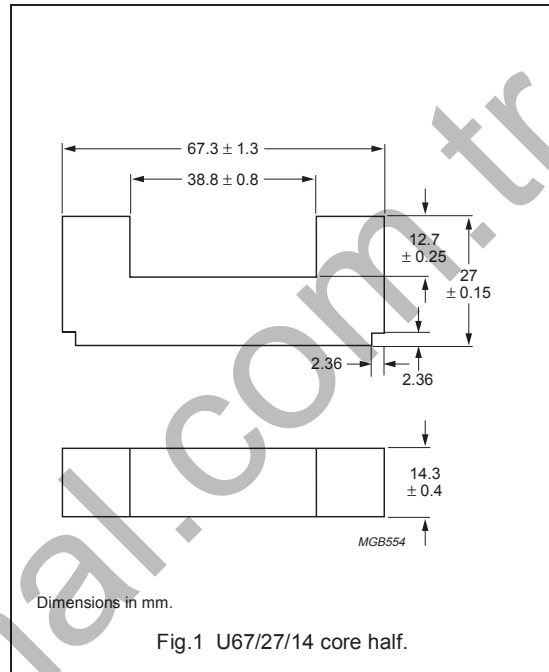
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C	f = 100 kHz; B̂ = 200 mT; T = 100 °C	f = 400 kHz; B̂ = 50 mT; T = 100 °C
3C90	≥ 320	≤ 9.6	≤ 45	–
3F3	≥ 320	≤ 9.6	–	≤ 45

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.850	mm ⁻¹
V_e	effective volume	35200	mm ³
l_e	effective length	173	mm
A_e	effective area	204	mm ²
m	mass of core half	≈ 85	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C81	3800 ±25%	≈ 2570	U67/27/14-3C81
3C91 <small>des</small>	3800 ±25%	≈ 2570	U67/27/14-3C91

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at		
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C	f = 100 kHz; \hat{B} = 200 mT; T = 100 °C
3C81	≥320	≤ 8.1	–	–
3C91	≥320	–	≤ 2.1 ⁽¹⁾	≤ 16 ⁽¹⁾

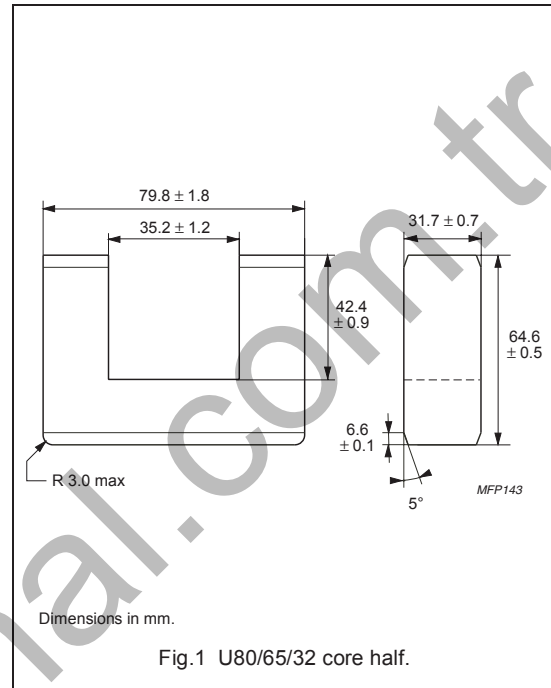
Note

1. Measured at 60 °C.

U CORES

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.439	mm ⁻¹
V_e	effective volume	219000	mm ³
l_e	effective length	310	mm
A_e	effective area	706	mm ²
A_{min}	minimum area	704	mm ²
m	mass of core half	≈ 560	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	6000 ± 25 %	≈ 2095	U80/65/32-3C90
3F3	5340 ± 25 %	≈ 1865	U80/65/32-3F3

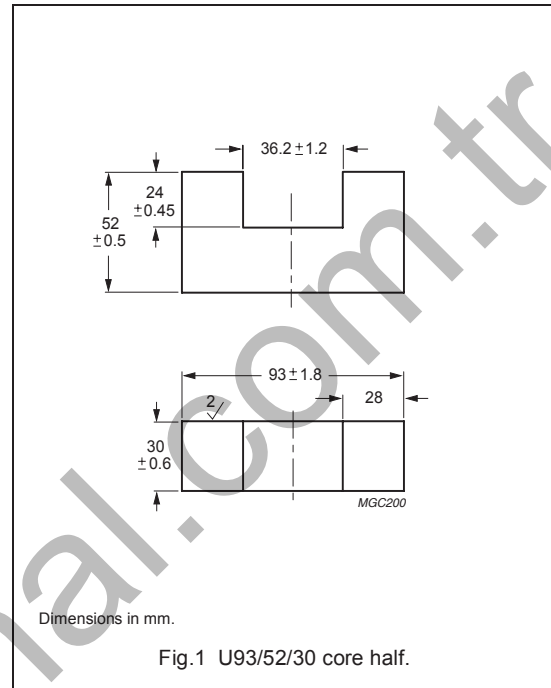
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C
3C90	≥ 320	≤ 30	≤ 32
3F3	≥ 320	–	≤ 34

U CORES

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.307	mm ⁻¹
V_e	effective volume	217 000	mm ³
l_e	effective length	258	mm
A_e	effective area	840	mm ²
m	mass of core half	≈ 560	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	8700 ± 25%	≈ 2100	U93/52/30-3C90
3C94	8700 ± 25%	≈ 2100	U93/52/30-3C94

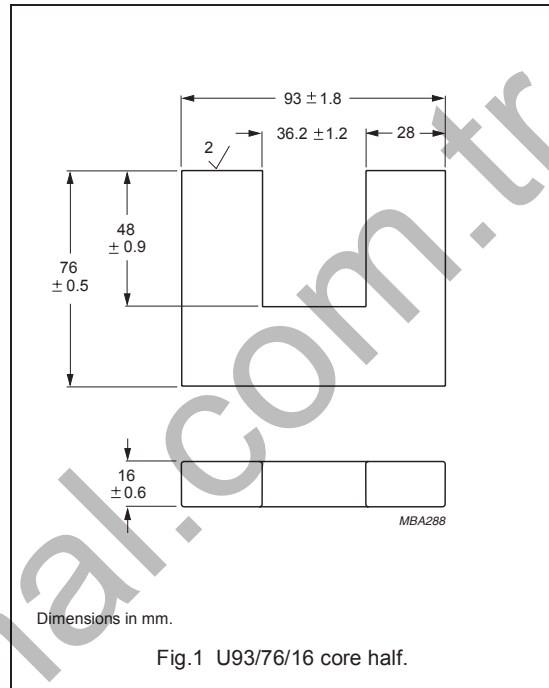
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C
3C90	≥ 320	≤ 28	≤ 38
3C94	≥ 320	–	≤ 30

U CORES

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.790	mm ⁻¹
V_e	effective volume	159000	mm ³
l_e	effective length	354	mm
A_e	effective area	448	mm ²
m	mass of core half	≈ 400	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	3400 ±25%	≈ 2200	U93/76/16-3C90
3C94	3400 ±25%	≈ 2200	U93/76/16-3C94

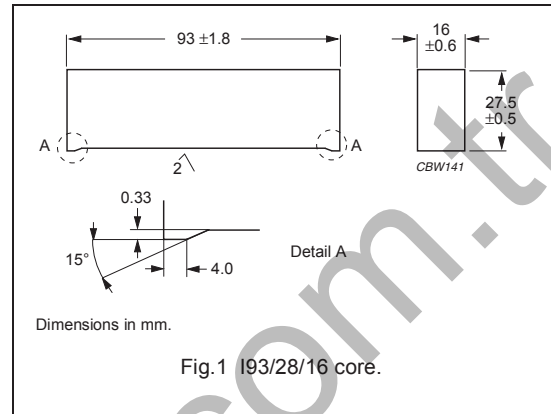
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; \hat{B} = 200 mT; T = 100 °C	f = 100 kHz; \hat{B} = 100 mT; T = 100 °C
3C90	≥ 320	≤ 20	≤ 23
3C94	≥ 320	–	≤ 18

CORE SETS

Effective core parameters in combination with U93/76/16

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(I/A)$	core factor (C1)	0.576	mm ⁻¹
V_e	effective volume	115000	mm ³
l_e	effective length	258	mm
A_e	effective area	447	mm ²
m	mass of core	≈ 200	g



Core data

A_L measured in combination with "U93/76/16".

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	4600 ±25%	≈ 2100	I93/28/16-3C90
3C94	4600 ±25%	≈ 2100	I93/28/16-3C94

Properties of core sets under power conditions

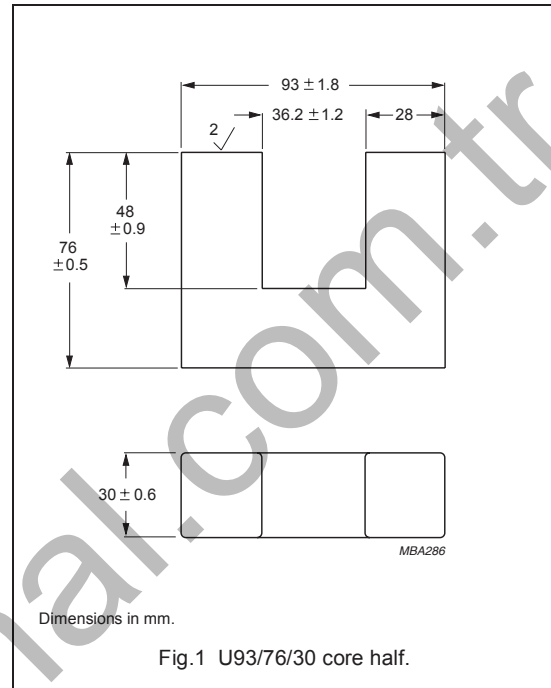
Measured in combination with "U93/76/16".

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B = 200 mT; T = 100 °C	f = 100 kHz; B = 100 mT; T = 100 °C
3C90	≥320	≤ 15	≤ 16
3C94	≥320	–	≤ 13

U CORES

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.421	mm ⁻¹
V_e	effective volume	297 000	mm ³
l_e	effective length	354	mm
A_e	effective area	840	mm ²
m	mass of core half	≈ 760	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	6400 ±25%	≈ 2200	U93/76/30-3C90
3C94	6400 ±25%	≈ 2200	U93/76/30-3C94

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; Ḃ = 200 mT; T = 100 °C	f = 100 kHz; Ḃ = 100 mT; T = 100 °C
3C90	≥ 320	≤ 40	≤ 52
3C94	≥ 320	–	≤ 39

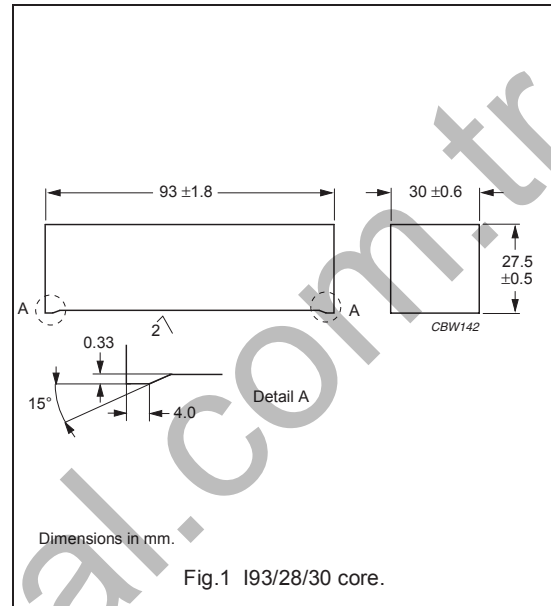
CORE SETS

Effective core parameters in combination with U93/52/30

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.251	mm ⁻¹
V_e	effective volume	175000	mm ³
l_e	effective length	210	mm
A_e	effective area	836	mm ²
m	mass of core	≈ 370	g

Effective core parameters in combination with U93/76/30

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.307	mm ⁻¹
V_e	effective volume	217000	mm ³
l_e	effective length	258	mm
A_e	effective area	840	mm ²
m	mass of core	≈ 370	g



Core data

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	10700 ±25% ⁽¹⁾	≈ 2150	I93/28/30-3C90
	8700 ±25% ⁽²⁾	≈ 2150	
3C94	10700 ±25% ⁽¹⁾	≈ 2150	I93/28/30-3C94
	8700 ±25% ⁽²⁾	≈ 2150	

Notes

1. Measured in combination with "U93/52/30".
2. Measured in combination with "U93/76/30".

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B = 200 mT; T = 100 °C	f = 100 kHz; B = 100 mT; T = 100 °C
3C90	≥330	≤ 24 ⁽¹⁾	≤ 31 ⁽¹⁾
	≥330	≤ 28 ⁽²⁾	≤ 38 ⁽²⁾
3C94	≥330	–	≤ 24 ⁽¹⁾
	≥330	–	≤ 30 ⁽²⁾

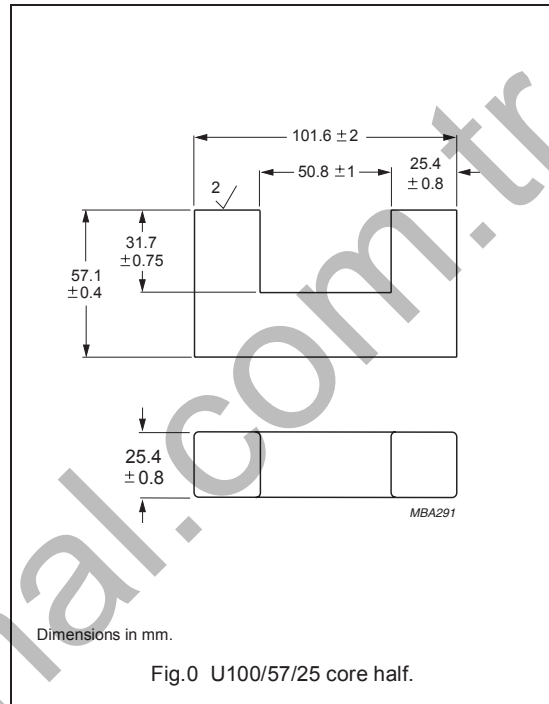
Notes

1. Measured in combination with "U93/52/30".
2. Measured in combination with "U93/76/30".

U CORES

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.478	mm ⁻¹
V_e	effective volume	199 000	mm ³
l_e	effective length	308	mm
A_e	effective area	645	mm ²
m	mass of core half	≈ 500	g



Core halves

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	5500 ±25%	≈ 2200	U100/57/25-3C90
3C94	5500 ±25%	≈ 2200	U100/57/25-3C94

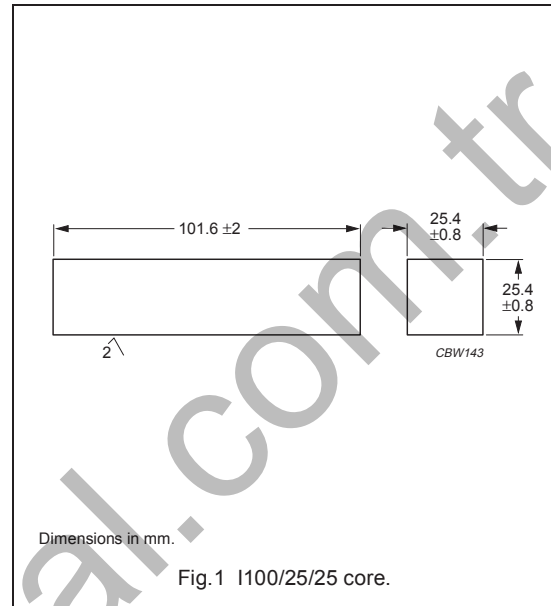
Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; Ḃ = 200 mT; T = 100 °C	f = 100 kHz; Ḃ = 100 mT; T = 100 °C
3C90	≥ 320	≤ 26	≤ 32
3C94	≥ 320	–	≤ 26

CORE SETS

Effective core parameters in combination with U100/57/25

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.379	mm ⁻¹
V_e	effective volume	158000	mm ³
l_e	effective length	245	mm
A_e	effective area	645	mm ²
m	mass of core	≈ 300	g

**Core data**

A_L measured in combination with "U100/57/25".

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	6700 ±25%	≈ 2150	I100/25/25-3C90
3C94	6700 ±25%	≈ 2150	I100/25/25-3C94

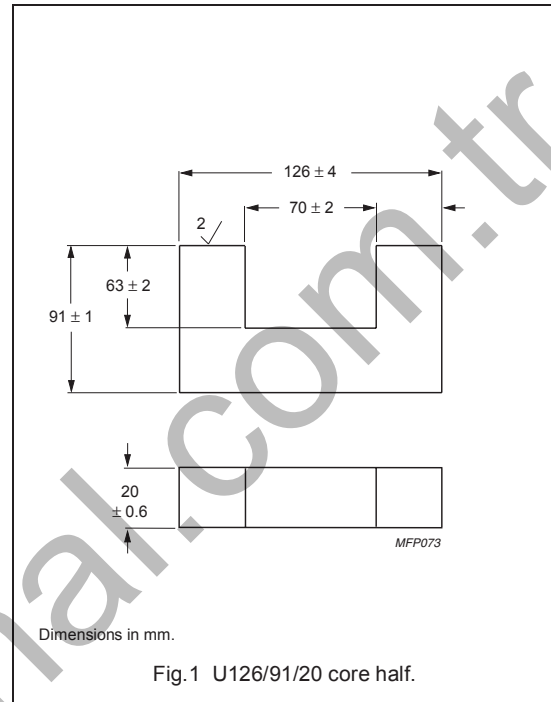
Properties of core sets under power conditions

Core loss measured in combination with "U100/57/25".

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B̂ = 200 mT; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C
3C90	≥ 330	≤ 21	≤ 25
3C94	≥ 330	–	≤ 21

U CORES**Effective core parameters**

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.857	mm ⁻¹
V_e	effective volume	268800	mm ³
l_e	effective length	480	mm
A_e	effective area	560	mm ²
A_{min}	minimum area	560	mm ²
m	mass of core half	≈ 680	g

**Core halves**

A_L measured on a combination of 2 U cores.

GRADE	A_L (nH)	μ_e	TYPE NUMBER
3C90	3000 ± 25 %	≈ 2050	U126/91/20-3C90
3C94	3000 ± 25 %	≈ 2050	U126/91/20-3C94

Properties of core sets under power conditions

GRADE	B (mT) at	CORE LOSS (W) at	
	H = 250 A/m; f = 25 kHz; T = 100 °C	f = 25 kHz; B̂ = 200 mT; T = 100 °C	f = 100 kHz; B̂ = 100 mT; T = 100 °C
3C90	≥ 320	≤ 35	≤ 40
3C94	≥ 320	–	≤ 32