CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.400	mm^{-1}
V_e	effective volume	3530	mm^3
l_e	effective length	37.6	mm
A_e	effective area	93.9	mm^2
A_{min}	minimum area	77.4	mm^2
m	mass of set	≈20	g

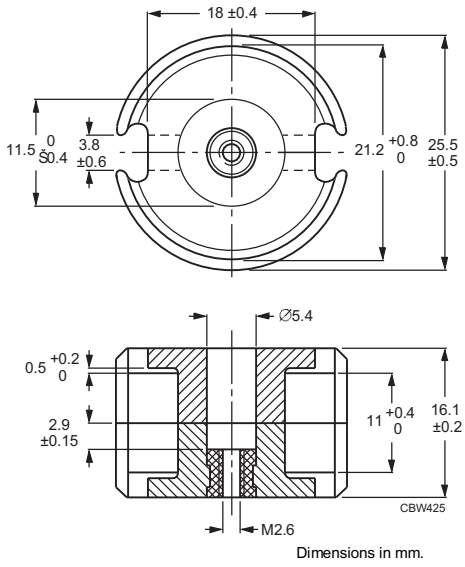


Fig.1 P26/16 core set.

Core sets for filter applications

Clamping force for A_L measurements, 200 ±50 N.

GRADE	A_L (nH)	μ_e	TOTAL AIR GAP (μm)	TYPE NUMBER (WITH NUT)	TYPE NUMBER (WITHOUT NUT)
3D3 sup	100 ±3%	≈ 32	≈ 1630	P26/16-3D3-E100/N	P26/16-3D3-E100
	160 ±3%	≈ 51	≈ 890	P26/16-3D3-E160/N	P26/16-3D3-E160
	250 ±3%	≈ 80	≈ 510	P26/16-3D3-E250/N	P26/16-3D3-E250
	2150 ±25%	≈ 685	≈ 0	Š	P26/16-3D3
3H3 sup	160 ±3%	≈ 51	≈ 940	P26/16-3H3-E160/N	P26/16-3H3-E160
	250 ±3%	≈ 80	≈ 550	P26/16-3H3-E250/N	P26/16-3H3-E250
	315 ±3%	≈ 100	≈ 420	P26/16-3H3-E315/N	P26/16-3H3-E315
	400 ±3%	≈ 127	≈ 310	P26/16-3H3-E400/N	P26/16-3H3-E400
	630 ±3%	≈ 201	≈ 180	P26/16-3H3-A630/N	P26/16-3H3-A630
	5000 ±25%	≈ 1590	≈ 0	Š	P26/16-3H3

Core sets for general purpose transformers and power applications
Clamping force for A_L measurements, 200 ±50 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3C81	160 ±3%	≈ 51	≈ 950	P26/16-3C81-E160
	250 ±3%	≈ 80	≈ 560	P26/16-3C81-A250
	315 ±3%	≈ 100	≈ 420	P26/16-3C81-A315
	400 ±3%	≈ 127	≈ 320	P26/16-3C81-A400
	630 ±3%	≈ 200	≈ 190	P26/16-3C81-A630
	6700 ±25%	≈ 2130	≈ 0	P26/16-3C81
3C91 des	6700 ±25%	≈ 2130	≈ 0	P26/16-3C91
3F3	160 ±3%	≈ 51	≈ 950	P26/16-3F3-E160
	250 ±3%	≈ 80	≈ 560	P26/16-3F3-A250
	315 ±3%	≈ 100	≈ 420	P26/16-3F3-A315
	400 ±3%	≈ 127	≈ 320	P26/16-3F3-A400
	630 ±3%	≈ 200	≈ 190	P26/16-3F3-A630
	4600 ±25%	≈ 1470	≈ 0	P26/16-3F3

Core sets of high permeability grades
Clamping force for A_L measurements, 200 ± 50 N.

GRADE	A_L (nH)	μ_e	AIR GAP (μm)	TYPE NUMBER
3E27	12000 ±25%	≈ 3820	≈ 0	P26/16-3E27

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	f = 400 kHz; $\hat{B}$ = 50 mT; T = 100 °C
3C81	≥320	≤ 0.82	Š	Š	Š
3C91	≥315	–	≤ 0.21(1)	≤ 1.6(1)	Š
3F3	≥315	–	≤ 0.4	–	≤ 0.65

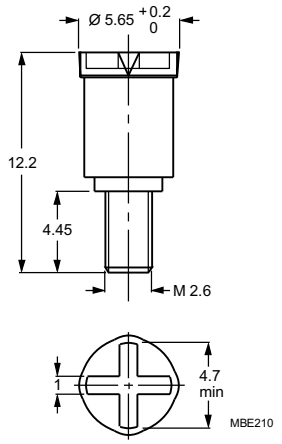
Note

1. Measured at 60 °C.

INDUCTANCE ADJUSTERS

General data

PARAMETER	SPECIFICATION
Material of head and thread	polypropylene (PP), glass fibre reinforced
Maximum operating temperature	125 °C



Dimensions in mm.

Fig.2 P26/16 inductance adjuster.

Inductance adjuster selection chart sup (applies to all types)

GRADE	A_L (nH)	TYPES FOR LOW ADJUSTMENT	$\Delta L/L$ (1)	TYPES FOR MEDIUM ADJUSTMENT	$\Delta L/L$ (1)	TYPES FOR HIGH ADJUSTMENT	$\Delta L/L$ (1)
3H3	63	Š	Š	Š	Š	ADJ-P26-RED	25
	100	Š	Š	Š	Š	ADJ-P26-RED	22
	160	Š	Š	ADJ-P26-RED	15	Š	Š
	250	ADJ-P26-RED	10	Š	Š	ADJ-P26-BROWN	23
	315	ADJ-P26-RED	8	Š	Š	ADJ-P26-BROWN	18
	400	ADJ-P26-RED	6	ADJ-P26-BROWN	13	ADJ-P26-GREY	25
	630	ADJ-P26-BROWN	8	ADJ-P26-GREY	16	Š	Š
	1000	ADJ-P26-BROWN	5	ADJ-P26-GREY	9	Š	Š
	1600	Š	Š	ADJ-P26-GREY	5	Š	Š
3D3	100	Š	Š	Š	Š	ADJ-P26-RED	21
	160	Š	Š	ADJ-P26-RED	14	Š	Š
	250	ADJ-P26-RED	9	Š	Š	ADJ-P26-GREY	35
	400	Š	8	ADJ-P26-GREY	17	Š	Š

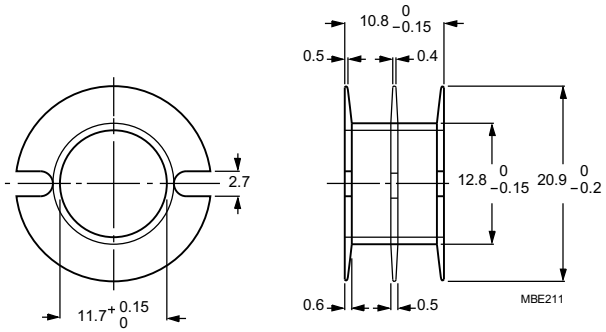
Note

1. Maximum adjustment range.

COIL FORMERS

General data for CP-P26/16 coil former

PARAMETER	SPECIFICATION
Coil former material	polybutyleneterephtalate (PBT), glass reinforced, flame retardant in accordance with “UL 94V-0”; UL file number E45329 (R)
Maximum operating temperature	155 °C, “IEC 60085”, class F



Dimensions in mm.

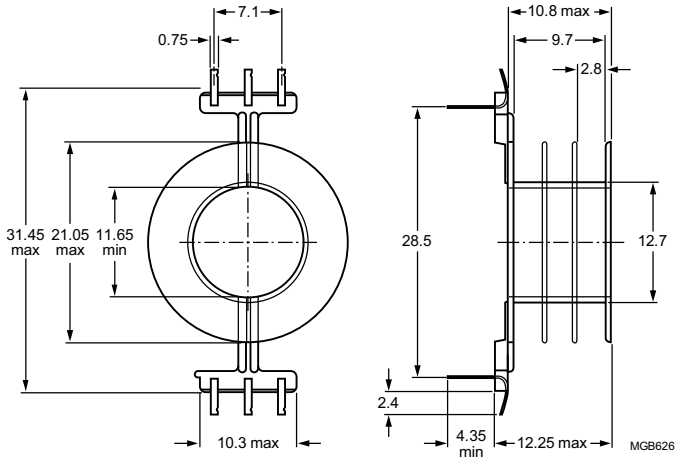
Fig.3 Coil former CP-P26/16.

Winding data and area product for CP-P26/16 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	37.1	9.3	52.6	3480	CP-P26/16-1S
2	2 × 17.5	2 × 4.35	52.6	2 x 1640	CP-P26/16-2S
3	3 × 11	3 × 2.7	52.6	3 x 1030	CP-P26/16-3S

General data 6-pins P26/16 coil former for PCB mounting

PARAMETER	SPECIFICATION
Coil former material	polyamide (PA6.6), glass reinforced, flame retardant in accordance with "UL 94V-0"; UL file number E41938(M)
Maximum operating temperature	130 °C, "IEC 60085", class B
Pin material	copper-zinc alloy (CuZn), tin (Sn) plated
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



Dimensions in mm.

Fig.4 P26/16 coil former for PCB mounting; 6-pins.

Winding data and area product for 6-pins P26/16 coil former for PCB mounting

NUMBER OF SECTIONS	MINIMUM WINDING AREA (mm^2)	NOMINAL WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	MINIMUM LENGTH OF PINS (mm)	AREA PRODUCT Ae x Aw (mm^4)	TYPE NUMBER
1	36.7	9.7	52.7	4.4	3450	CPV-P26/16-1S-6PD
1	36.7	9.7	52.7	6.8	3450	CPV-P26/16-1S-6PDL
2	2 × 16.6	2 × 4.5	52.7	4.4	2 x 1560	CPV-P26/16-2S-6PD
2	2 × 16.6	2 × 4.5	52.7	6.8	2 x 1560	CPV-P26/16-2S-6PDL
3	3 × 10.3	3 × 2.8	52.7	4.4	3 x 967	CPV-P26/16-3S-6PD(1)
3	3 × 10.3	3 × 2.8	52.7	6.8	3 x 967	CPV-P26/16-3S-6PDL(1)

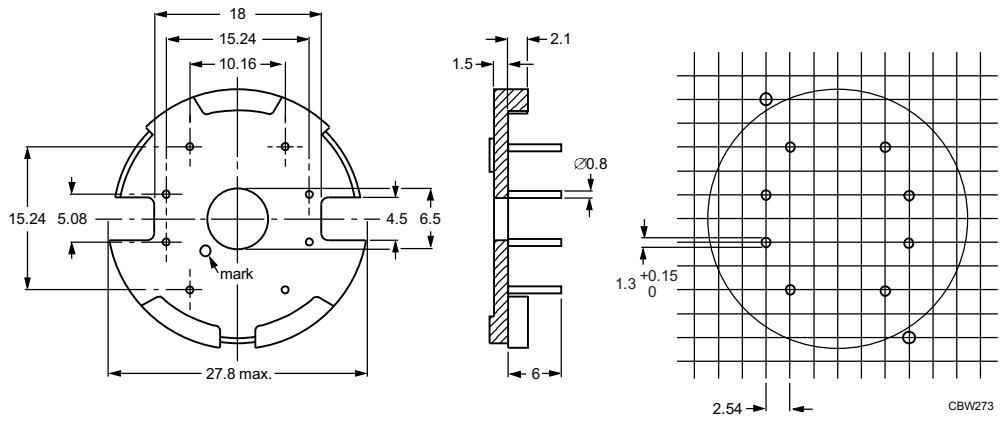
Note

1. In accordance with "UL 94-HB".

MOUNTING PARTS

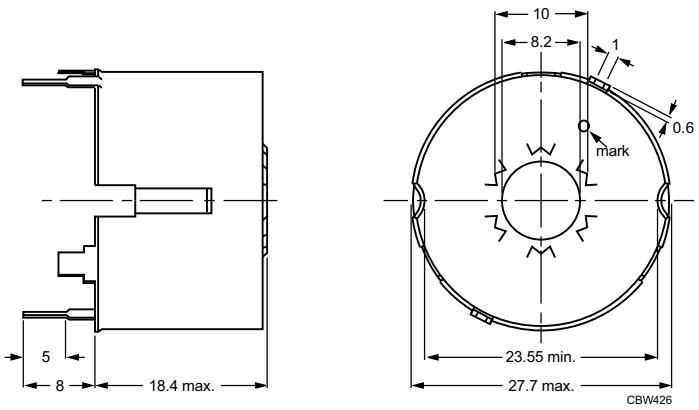
General data

ITEM	REMARKS	FIGURE	TYPE NUMBER
Tag plate	material: phenolformaldehyde (PF), glass reinforced	5	TGP-P26/16-C
	flame retardant: in accordance with “UL 94V-0”; UL file number E41429		
	maximum operating temperature: 180 °C, “IEC 60085”, class H		
	pins: copper-tin alloy (CuSn), tin (Sn) plated		
	resistance to soldering heat in accordance with “IEC 60068-2-20”, Part 2, Test Tb, method 1B: 350 °C, 3.5 s		
	solderability in accordance with “IEC 60068-2-20”, Part 2, Test Ta, method 1: 235 °C, 2 s		
Container	copper-zinc alloy, tin (Sn) plated	6	CON-P26/16
	earth pins: presoldered		
Spring	CrNi-steel	7	SPR-P26/16
	spring force: ≈200 N when mounted		
Clamp	spring steel, tin-plated	8	CLM/TP-P26/16



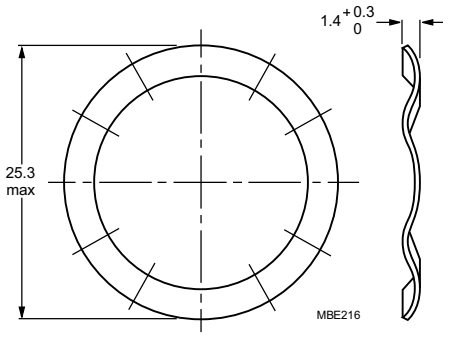
Dimensions in mm.

Fig.5 Tag plate: TGP-P26/16-C.



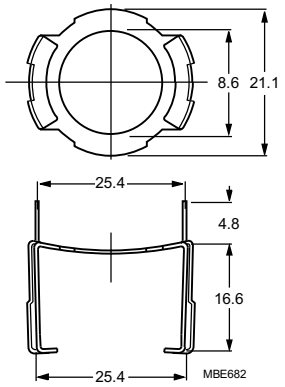
Dimensions in mm.

Fig.6 P26/16 container.



Dimensions in mm.

Fig.7 P26/16 spring.



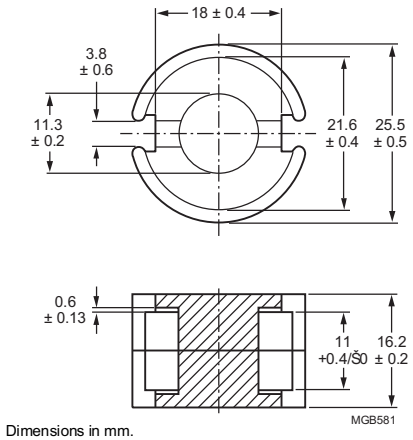
Dimensions in mm.

Fig.8 Clamp: CLM/TP-P26/16.

CORE SETS

Effective core parameters

SYMBOL	PARAMETER	VALUE	UNIT
$\Sigma(l/A)$	core factor (C1)	0.360	mm^{-1}
V_e	effective volume	4370	mm^3
l_e	effective length	39.6	mm
A_e	effective area	110	mm^2
A_{min}	minimum area	87.0	mm^2
m	mass of set	≈ 21	g



Dimensions in mm.

Fig.1 P26/16/I core set.

Core sets for general purpose transformers and power applications

Clamping force for A_L measurements, 50 ±20 N.

GRADE	A_L (nH)	μ_e	TOTAL AIR GAP (μm)	TYPE NUMBER
3C81	250 ±3%	≈ 72	≈ 660	P26/16/I-3C81-E250
	315 ±3%	≈ 90	≈ 500	P26/16/I-3C81-A315
	400 ±3%	≈ 115	≈ 380	P26/16/I-3C81-A400
	630 ±3%	≈ 180	≈ 230	P26/16/I-3C81-A630
	1000 ±3%	≈ 286	≈ 130	P26/16/I-3C81-A1000
	7000 ±25%	≈ 2010	≈ 0	P26/16/I-3C81
3C91 des	7000 ±25%	≈ 2010	≈ 0	P26/16/I-3C91
3F3	250 ±3%	≈ 72	≈ 660	P26/16/I-3F3-E250
	315 ±3%	≈ 90	≈ 500	P26/16/I-3F3-A315
	400 ±3%	≈ 115	≈ 380	P26/16/I-3F3-A400
	630 ±3%	≈ 180	≈ 230	P26/16/I-3F3-A630
	1000 ±3%	≈ 286	≈ 130	P26/16/I-3F3-A1000
	5250 ±25%	≈ 1505	≈ 0	P26/16/I-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; 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	≤ 1.0	Š	Š	Š
3C91	≥315	–	≤ 0.22(1)	≤ 1.6(1)	Š
3F3	≥315	–	≤ 0.48	–	≤ 0.83

Note

1. Measured at 60 °C.

BOBBINS AND ACCESSORIES

Coil formers, winding data and mounting parts are equal to those of “P26/16”, but “area product” is different.

Winding data and area product (for P26/16/I) for CP-P26/16 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	37.1	9.3	52.6	4080	CP-P26/16-1S
2	2 × 17.5	2 × 4.35	52.6	2 x 1925	CP-P26/16-2S
3	3 × 11	3 × 2.7	52.6	3 x 1210	CP-P26/16-3S

Winding data and area product (for P26/16/I) for 6-pins P26/16 coil former for PCB mounting

NUMBER OF SECTIONS	MINIMUM WINDING AREA (mm^2)	NOMINAL WINDING WIDTH (mm)	AVERAGE LENGTH OF TURN (mm)	MINIMUM LENGTH OF PINS (mm)	AREA PRODUCT Ae x Aw (mm^4)	TYPE NUMBER
1	36.7	9.7	52.7	4.4	4040	CPV-P26/16-1S-6PD
1	36.7	9.7	52.7	6.8	4040	CPV-P26/16-1S-6PDL
2	2 × 16.6	2 × 4.5	52.7	4.4	2 x 1830	CPV-P26/16-2S-6PD
2	2 × 16.6	2 × 4.5	52.7	6.8	2 x 1830	CPV-P26/16-2S-6PDL
3	3 × 10.3	3 × 2.8	52.7	4.4	3 x 1130	CPV-P26/16-3S-6PD(1)
3	3 × 10.3	3 × 2.8	52.7	6.8	3 x 1130	CPV-P26/16-3S-6PDL(1)

Note

1. In accordance with “UL 94-HB”.