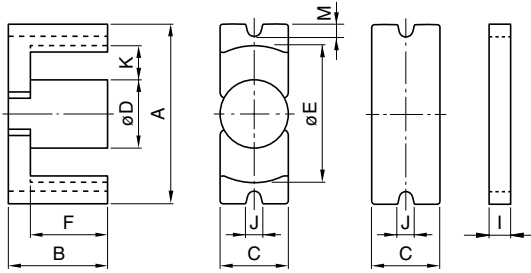


EIC Series

EIC CORE

CORE SHAPES AND DIMENSIONS/CHARACTERISTICS



PRODUCT IDENTIFICATION

PE22 EIC 90 × 55 × 30
(1) (2) (3) (4) (5)

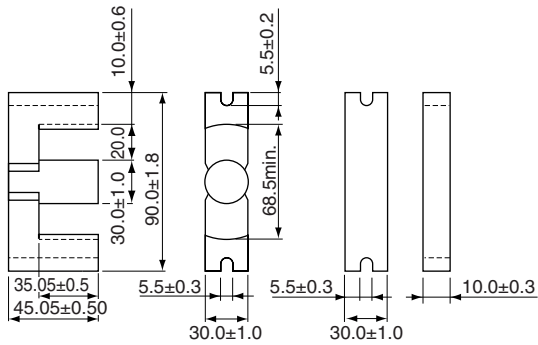
- (1) Material name
- (2) Shape
- (3) Dimension A
- (4) Dimension B+l
- (5) Dimension C

Part No.	AL*(nH/N ²) ±25%	Dimensions (mm)											
		A	B+l	C	øD	øE	F	I	M	J	K		
PE22 EIC70×46×16	5550												
PC40 EIC70×46×16	6810	70.0±1.7	46.25±1.0	16.4±0.5	16.4±0.5	43.3min.	22.75±0.5	11.75±0.5	5.2	4.75	14.1		
PE90 EIC70×46×16	6514												
PE22 EIC90×55×30	8350												
PC40 EIC90×55×30	10365	90.0±1.8	55.0±1.0	30.0±1.0	30.0±1.0	68.5min.	35.5±0.5	10.0±0.35	5.5	6.0	20.0		
PE90 EIC90×55×30	9914												
PE22 EIC120×65×30	8890												
PC40 EIC120×65×30	11085	120.0±2.0	65.5±1.3	30.0±1.0	30.0±1.0	93.3min.	35.5±0.5	15.0±0.65	5.5	6.0	32.5		
PE90 EIC120×65×30	10603												

*Measuring condition: T=23°C, f=1kHz, H_m=0.4A/m

Part No.	Core factor					Weight (g)
	C ₁ (mm ⁻¹)	C ₂ ×10 ⁻² (mm ⁻³)	A _e (mm ²)	l _e (mm)	V _e (mm ³)	
PE22 EIC70×46×16						188
PC40 EIC70×46×16	0.3479	0.1173	297	103	30601	188
PE90 EIC70×46×16						191
PE22 EIC90×55×30						469
PC40 EIC90×55×30	0.2422	0.0388	624	151	94432	469
PE90 EIC90×55×30						479
PE22 EIC120×65×30						747
PC40 EIC120×65×30	0.2319	0.0292	794	184	146310	747
PE90 EIC120×65×30						763

EIC90X55X30



Parameter

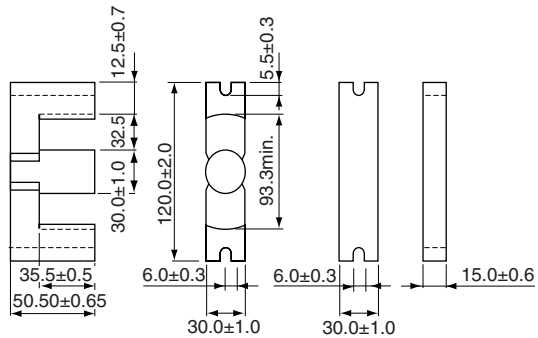
Parameter	Symbol	Unit	Value
Core constant	C_1	mm ⁻¹	0.2422
	$C_2 \times 10^{-2}$	mm ⁻³	0.0388
Effective magnetic path length	ℓ_e	mm	151
Effective cross-sectional area	A_e	mm ²	624
Effective core volume	V_e	mm ³	94432
Cross-sectional center leg area	A_c	mm ²	707
Minimum cross-sectional area	$A_{min.*}$	mm ²	586B*
Winding cross-sectional area	A_{cw}	mm ²	710
Weight(approx.)	g		469

* The symbol followed A min. value shows minimum cross-sectional area part.
C is center pole part, L is outer pole part, B is the back part.

Part No.	AL-value*(nH/N ²)	Calculated output power(kW) (forward converter mode)
PE22 EIC90X55X30	8350±25%	1.8(100kHz)
PC40 EIC90X55X30	10365±25%	1.9(100kHz)
PE90 EIC90X55X30	9914±25%	—

* AL-value: T=23°C, f=1kHz, Hm=0.4A/m

EIC120X65X30



Parameter

Parameter	Symbol	Unit	Value
Core constant	C_1	mm ⁻¹	0.2319
	$C_2 \times 10^{-2}$	mm ⁻³	0.0292
Effective magnetic path length	ℓ_e	mm	184
Effective cross-sectional area	A_e	mm ²	794
Effective core volume	V_e	mm ³	146310
Cross-sectional center leg area	A_c	mm ²	707
Minimum cross-sectional area	$A_{min.*}$	mm ²	707C*
Cross-sectional winding area of core	A_{cw}	mm ²	1154
Weight(approx.)	g		747

* The symbol followed A min. value shows minimum cross-sectional area part.
C is center pole part, L is outer pole part, B is the back part.

Part No.	AL-value*(nH/N ²)	Calculated output power(kW) (forward converter mode)
PE22 EIC120X65X30	8890±25%	2.8(100kHz)
PC40 EIC120X65X30	11085±25%	2.9(100kHz)
PE90 EIC120X65X30	10603±25%	—

* AL-value: T=23°C, f=1kHz, Hm=0.4A/m

• Available customize core like this. Please specify when ordering.