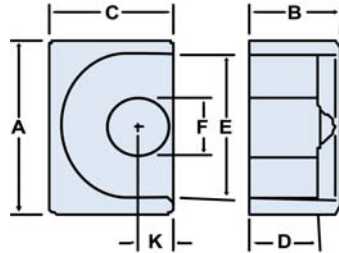


Quick Link: www.fair-rite.com/ep

EP7, EP10, EP13, EP17, EP20

EP designs reduce the effect of residual air gap upon the effective permeability of the core, hence they minimize coil volume for a given inductance. EP cores also provide a high degree of isolation from adjacent components and are advantageously used in low power devices, matching and broadband transformers.



- EP cores can be supplied with the center post gapped to a mechanical dimension or an A_L value.
- A_L value is measured at 1 kHz, $B < 10$ gauss
- Weigh indicates is per pair or set.

Legend: Symbols & Definition

Dimensions (Top numbers are in millimeters, bottom numbers are in nominal inches.)

$\Sigma \ell / A$: Core Constant, ℓ_e : Effective Path Length, A_e : Effective Cross-Sectional Area, V_e : Effective Core Volume, A_L : Inductance Factor ($\frac{L}{N^2}$)

Explanation of part numbers: Digits 1 & 2 = product class, 3 & 4 = material grade.

Dimensions

Row #	Part Number	Generic Size	A	B	C	D	E	F	K	Wt. (g) per Set
(1)	6578070121 6598070121 6595070121	EP7	9.20 ± 0.2 0.362	3.70 ± 0.2 0.146	6.40 ± 0.2 0.252	2.70 ± 0.2 0.106	7.20 min 0.283 min	3.30 ± 0.1 0.130	1.80 min 0.071 min	0.70
(2)	6578100121 6598100121 6595100121	EP10	11.50 ± 0.3 0.453	5.10 ± 0.2 0.201	7.70 ± 0.2 0.303	3.80 ± 0.2 0.150	9.40 ± 0.2 0.370	3.30 ± 0.2 0.130	1.95 min 0.077 min	1.40
(3)	6578130121 6598130121 6595130121	EP13	12.50 ± 0.3 0.492	6.50 ± 0.3 0.256	8.80 ± 0.2 0.346	4.70 ± 0.2 0.185	10.00 ± 0.3 0.394	4.40 ± 0.2 0.173	2.50 min 0.098 min	2.35
(4)	6578170121 6598170121 6595170121	EP17	18.10 ± 0.4 0.713	8.40 ± 0.4 0.331	11.00 ± 0.3 0.433	5.70 ± 0.2 0.224	12.00 ± 0.4 0.472	5.70 ± 0.2 0.224	3.45 min 0.136 min	6.00
(5)	6578200121 6598200121 6595200121	EP20	24.00 ± 0.5 0.945	10.70 ± 0.2 0.421	15.00 ± 0.4 0.591	7.20 ± 0.2 0.283	16.50 ± 0.4 0.650	8.80 ± 0.2 0.346	4.70 min 0.185 min	13.50

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Magnetic Core Parameters

Table Continued ...

Row #	Part Number	$\sum lA(\text{cm}^{-1})$	$l_e(\text{cm})$	$A_e(\text{cm}^2)$	$V_e(\text{cm}^3)$	$A_{\min}(\text{cm}^2)$	$A_L(\text{nH})$
(1)	6578070121 6598070121 6595070121	14.40	1.48	0.103	0.152	0.085	990 ±25% 1020 ±25% 1180 ±25%
(2)	6578100121 6598100121 6595100121	16.80	1.85	0.11	0.203	0.085	1000 ±25% 1050 ±25% 1200 ±25%
(3)	6578130121 6598130121 6595130121	11.80	2.32	0.197	0.457	0.148	1600 ±25% 1650 ±25% 1800 ±25%
(4)	6578170121 6598170121 6595170121	8.00	2.68	0.336	0.899	0.252	2250 ±25% 2300 ±25% 2750 ±25%
(5)	6578200121 6598200121 6595200121	4.80	3.76	0.789	2.96	0.60	4100 ±25% 4250 ±25% 5000 ±25%