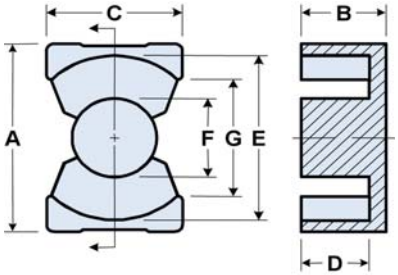
PQ Cores

Quick Link: *www.fair-rite.com/pq*

PQ20/16, PQ20/20, PQ26/20, PQ26/25, PQ32/20, PQ32/30, PQ35/35, PQ40/40, PQ50/50

PQ cores were developed for use in power applications. The large surface area to volume of the core aids in heat dissipation. PQ cores are employed both in filter and transformer designs for switch mode power supplies.



- PQ cores can be supplied with the centerpost gapped to a mechanical dimension or an A_L value.
- A_L value is measured at 1 kHz, B < 10 gauss.
- Weight indicated 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	G	Wt. (g) per Set
(1)	6678211621 6698211621 6695211621	PQ20/16	20.50 ± 0.4 0.807	8.00 ± 0.15 0.315	14.00 ± 0.4 0.551	5.00 ± 0.15 0.197	18.00 ± 0.4 0.709	8.80 ± 0.2 0.346	12.00 min 0.472 min	13.00
(2)	6678212021 6698212021 6695212021	PQ20/20	20.50 ± 0.4 0.807	10.20 ± 0.15 0.402	14.00 ± 0.4 0.551	7.00 ± 0.15 0.276	18.00 ± 0.4 0.709	8.80 ± 0.2 0.346	12.00 min 0.472 min	16.00
(3)	6678272021 6698272021 6695272021	PQ26/20	26.50 ± 0.5 1.043	10.10 ± 0.15 0.398	19.00 ± 0.4 0.748	5.75 ± 0.15 0.226	22.50 ± 0.4 0.886	12.00 ± 0.3 0.472	15.50 min 0.610 min	30.00
(4)	6678272521 6698272521 6695272521	PQ26/25	26.50 ± 0.5 1.043	12.50 ± 0.15 0.492	19.00 ± 0.4 0.748	8.05 ± 0.15 0.317	22.50 ± 0.4 0.886	12.00 ± 0.3 0.472	15.50 min 0.610 min	36.00
(5)	6678322121 6698322121 6695322121	PQ32/20	32.00 ± 0.6 1.260	10.25 ± 0.15 0.404	22.00 ± 0.4 0.866	5.75 ± 0.15 0.226	27.50 ± 0.5 1.083	13.45 ± 0.3 0.530	19.00 min 0.748 min	43.00
(6)	6678323121 6698323121 6695323121	PQ32/30	32.00 ± 0.6 1.260	15.15 ± 0.15 0.596	22.00 ± 0.4 0.866	10.65 ± 0.15 0.419	27.50 ± 0.5 1.083	13.45 ± 0.3 0.530	19.00 min 0.748 min	57.00
(7)	6678353621 6698353621 6695353621	PQ35/35	35.10 ± 0.6 1.382	17.40 ± 0.2 0.685	26.00 ± 0.5 1.024	12.50 ± 0.2 0.492	32.00 ± 0.5 1.260	14.35 ± 0.25 0.565	23.50 min 0.925 min	73.00
(8)	6678404121 6698404121 6695404121	PQ40/40	40.50 ± 0.9 1.594	19.88 ± 0.13 0.783	27.93 ± 0.53 1.100	14.75 ± 0.15 0.581	36.40 min 1.433 min	14.70 ± 0.30 0.579	27.20 min 1.071 min	97.00
(9)	6678505021 6698505021 6695505021	PQ50/50	50.00 ± 0.8 1.969	25.00 ± 0.15 0.984	32.00 ± 0.6 1.260	18.10 ± 0.25 0.713	44.00 ± 0.7 1.732	20.00 ± 0.4 0.787	32.00 min 1.260 min	195.00

Magnetic Core Parameters

Table Continued ...

Row #	Part Number	$\sum \ell/A (cm^{-1})$	ℓ_e(cm)	$A_e(cm^2)$	$V_e(cm^3)$	$A_{min}(cm^2)$	A_L(nH)
(1)	6678211621 6698211621 6695211621	6.00	3.69	0.615	2.27	0.601	3430 ±25% 3430 ±25% 3880 ±25%
(2)	6678212021 6698212021 6695212021	7.20	4.52	0.625	2.526	0.608	2920 ±25% 2920 ±25% 3500 ±25%
(3)	6678272021 6698272021 6695272021	3.72	4.48	1.203	5.385	1.131	5510 ±25% 5510 ±25% 6500 ±25%
(4)	6678272521 6698272521 6695272521	4.59	5.40	1.177	6.359	1.131	4670 ±25% 4670 ±25% 6000 ±25%
(5)	6678322121 6698322121 6695322121	3.27	5.373	1.642	8.821	1.404	6000 ±25% 6000 ±25% 7900 ±25%
(6)	6678323121 6698323121 6695323121	4.59	7.53	1.642	12.37	1.401	4500 ±25% 4500 ±25% 6500 ±25%
(7)	6678353621 6698353621 6695353621	4.82	8.82	1.83	16.13	1.617	4900 ±25% 5100 ±25% 6200 ±25%
(8)	6678404121 6698404121 6695404121	5.23	10.36	1.98	20.50	1.70	4300 ±25% 4300 ±25% 5850 ±25%
(9)	6678505021 6698505021 6695505021	3.59	11.47	3.19	36.63	3.142	6720 ±25% 6720 ±25% 8000 ±25%