

# PB Series

STRAIGHT, SNAP-IN/FLANGE MOUNT FILTER WITH IEC 60320 AC INLET SOCKET.



## FEATURES

The PB series, similar to PA and PASP series, offers filters with IEC connector providing effective equipment protection of line-to-ground noise up to 15 Amp, 250VAC. The compact design filter with low leakage current is well suited for applications that require strict national and international emission standards. These filters are also available for Medical application and offer extremely low Leakage current to comply with UL544, UL2601 and CSA22.2 standards.

A ground choke can be added to enhance the grounding ability of the circuit. Bleeder resistor can also be added to prevent excessive voltages from developing across the filter capacitors when there is no load.

## APPLICATIONS

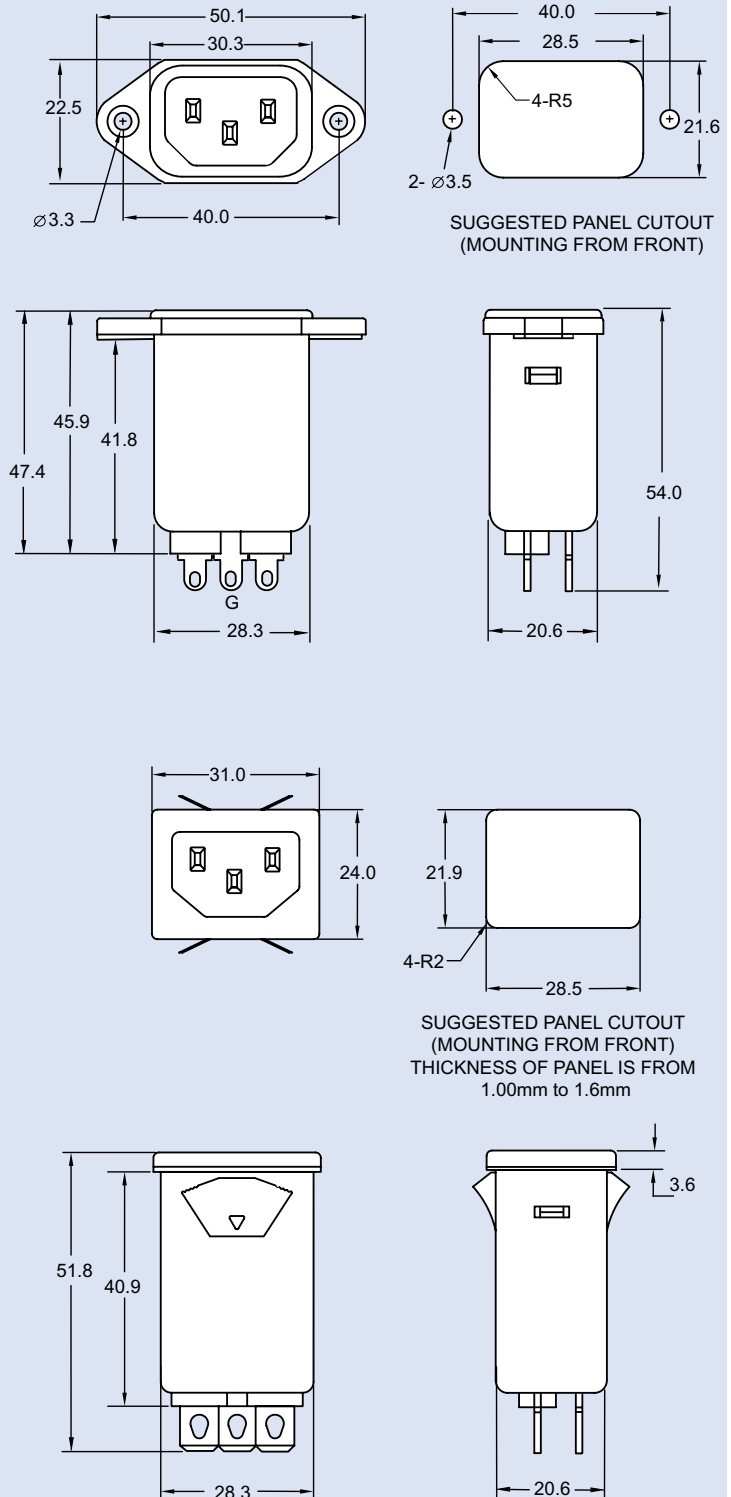
Computer & networking equipment, Measuring & control equipment, Data processing equipment, laboratory instruments, Switching power supplies, other electronic equipment.

## TECHNICAL DATA

- Rated Voltage: 115/250VAC
- Rated Current: 1A, 2A, 3A, 6A, 10A, 15A
- Power Line Frequency: 50/60Hz
- Max. Leakage Current each  
Line to Ground:
  - @ 115VAC 60Hz: 0.25mA
  - @ 250VAC 50Hz: 0.45mA
  - @ 115VAC 60Hz: 2 $\mu$ A\*
  - @ 250VAC 50Hz: 5 $\mu$ A\*
- Hipot Rating (one minute)
  - Line to Ground: 2250VDC
  - Line to Line: 1450VDC
- Temperature Range: -25C to +85C

\* Medical application

## MECHANICAL DIMENSIONS (Unit: mm)



Specifications subject to change without notice. Dimensions (mm). See Appendix A for recommended power cord. See PDI full line catalog for detailed specifications on power cords.

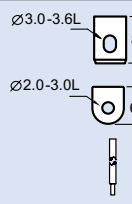
# PB Series Example & Ordering Code

PB 01 Q - 50 - 1 C

CURRENT RATING (A): = 01  
= 02  
= 03  
= 06  
= 10  
= 15\*



TERMINAL:  
6.3/0.25 QUICK CONNECT = Q  
4.0/0.187 SOLDER = S  
UL 1015, 18AWG STRANDED, 4" WIRE = W



OPTIONS:  
NO BLEEDER RESISTOR & NO GROUND CHOKE = 00  
BLEEDER RESISTOR (1/4 W, 1M) = 50  
BLEEDER RESISTOR (1/2 W, 1M) = 60  
BLEEDER RESISTOR (1/4 W, 1M) & GROUND CHOKE = 70  
BLEEDER RESISTOR (1/2 W, 1M) & GROUND CHOKE = 80  
GROUND CHOKE (100μH) = 90

COMPONENT LOCATIONS:  
STANDARD TYPE = 1  
WITHOUT C(X); C(Y) ONLY = 2+  
C(X) & C(Y) BEHIND L = 3+  
WITHOUT C(X) & C(Y) = 4+  
WITHOUT C(Y); C(X) ONLY = 1M  
WITHOUT C(Y); C(X) BEHIND L = 2M+

ATTENUATION CODE TABLE:  
**Non-Medical applications**, select Attenuation code with corresponding component values from the table.

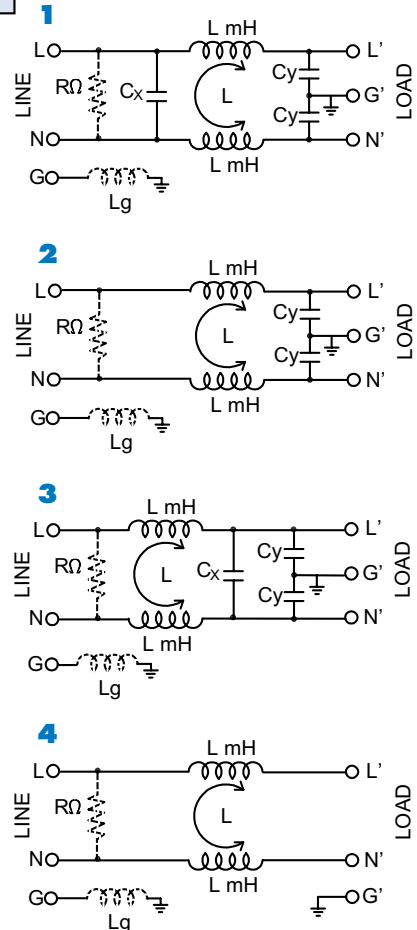
Cx (μF)	Cy (pF)	Inductance Per Current Rating (mH)					
		1A	2A	3A	6A	10A	15A
0.1	2200	6.5	3.8	2.5	0.8	0.2	0.18
0.015	3300	1.9	1.5	1.1	0.6	0.3	0.18
0.1	3300	3.7	2.7	1.8	0.8	0.3	0.18
0.1	1000	10.5	4.2	2.5	1.05	0.3	0.18
0.047	3300	4.6	3.4	2.5	0.9	0.3	0.18
0.033	3300	9.5	4.3	1.8	0.85	0.3	0.18
0.047	2200	10.5	4	1.2	0.53	0.3	0.18
0.033	2200	5	3.7	1.8	0.6	0.2	0.18
without Cx	without Cy	10.5	6.5	2.5	1.05	0.3	0.18

**Medical applications**, select Attenuation code with corresponding component values from the table.

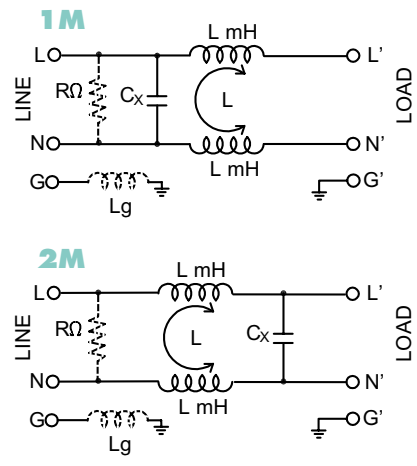
Cx (μF)	Inductance Per Current Rating (mH)					
	1A	2A	3A	6A	10A	15A
0.1	6.5	3.8	2.5	0.8	0.2	0.18
0.015	1.9	1.5	1.1	0.6	0.3	0.18
0.1	3.7	2.7	1.8	0.8	0.3	0.18
0.1	10.5	4.2	2.5	1.05	0.3	0.18
0.047	4.6	3.4	2.5	0.9	0.3	0.18
0.033	9.5	4.3	1.8	0.85	0.3	0.18
0.047	10.5	4	1.2	0.53	0.3	0.18
0.033	5	3.7	1.8	0.6	0.2	0.18

TYPE OF MOUNTING:  
FLANGE MOUNT = BLANK  
SNAP-IN TABS - TOP BOTTOM = SNT  
SNAP-IN TABS - SIDE = SSI

## SCHEMATICS



## MEDICAL SCHEMATICS



\*Contact PDI for attenuation numbers  
\*15A for UL, CSA; 10A for CE, VDE



# PB Series Attenuation Tables

## Non-Medical Applications\*

Insertion loss in dB (50 Ohm circuit)

Attenuation Code	Current Rating	Comm. Mode(L-G) in MHz					Diff. mode(L-L) in MHz						
		.15	.5	1	5	10 30	.15	.5	1	5	10 30		
A	1A	34	38	40	32	26	11	8	25	37	71	62	12
	2A	29	32	55	48	49	51	8	23	34	68	64	14
	3A	28	36	39	45	48	39	8	19	27	58	65	15
	6A	18	24	28	44	50	47	8	18	26	43	51	31
	10A	8	14	18	33	41	39	8	18	25	29	38	31
	15A	7	14	19	34	40	38	7	17	23	39	47	27
B	1A	25	31	33	30	25	14	1	4	12	50	64	16
	2A	24	28	20	53	54	55	1	4	13	53	57	16
	3A	19	22	24	27	27	22	1	3	8	48	59	31
	6A	15	24	30	44	52	40	1	4	8	36	52	28
	10A	11	18	23	39	49	37	1	4	8	26	46	24
	15A	7	15	20	38	46	37	1	4	8	25	48	28
C	1A	29	33	47	53	57	41	8	23	35	73	58	14
	2A	28	37	44	52	56	41	8	19	27	74	59	17
	3A	25	33	46	53	57	44	8	19	29	63	62	13
	6A	19	29	36	49	55	46	8	18	23	50	54	24
	10A	11	19	24	41	53	36	8	18	24	51	46	25
	15A	7	15	21	37	46	36	7	17	23	39	48	27
D	1A	36	41	41	49	49	46	8	23	33	62	62	32
	2A	36	41	41	49	49	46	8	23	33	62	62	32
	3A	28	35	37	41	42	42	8	19	28	56	57	17
	6A	21	28	31	41	44	41	8	18	25	45	48	29
	10A	12	16	19	45	37	41	8	18	24	52	53	30
	15A	7	13	16	28	32	37	7	17	24	32	32	30
E	1A	32	39	55	55	56	52	3	14	25	75	63	24
	2A	29	34	46	56	58	49	3	15	27	67	59	21
	3A	28	38	44	51	58	39	3	12	20	66	57	18
	6A	18	25	31	49	56	47	3	11	17	55	59	32
	10A	11	19	24	40	50	40	3	12	17	48	46	29
	15A	7	14	20	39	45	37	3	11	17	50	46	29
F	1A	36	41	62	54	50	36	1	11	22	64	70	29
	2A	32	39	56	56	58	58	1	10	21	76	62	23
	3A	23	29	35	53	52	40	1	9	17	66	65	33
	6A	19	29	35	51	54	49	2	8	13	47	57	28
	10A	11	19	25	40	51	39	2	9	14	46	51	29
	15A	4	15	21	36	44	38	1	8	14	50	46	26
G	1A	36	41	59	54	54	47	3	15	26	68	71	32
	2A	31	37	47	51	49	40	3	14	24	69	63	26
	3A	20	25	28	44	49	42	3	12	19	61	57	27
	6A	14	19	22	39	48	41	3	11	17	48	50	33
	10A	11	17	22	36	42	38	3	11	17	39	55	27
	15A	4	14	19	34	40	38	3	12	17	38	42	28
H	1A	32	34	52	44	44	41	1	14	25	60	66	21
	2A	29	32	56	49	50	45	1	12	24	67	62	14
	3A	23	27	30	49	52	46	1	9	17	59	69	30
	6A	16	20	24	42	51	42	1	8	14	58	52	33
	10A	11	17	22	36	41	40	2	8	14	37	54	27
	15A	4	14	19	33	39	39	1	8	14	48	42	28
I	1A	36	42	43	37	31	36	1	2	5	17	23	33
	2A	30	37	39	29	22	27	1	1	3	14	21	13
	3A	28	35	37	28	22	31	1	1	2	11	18	12
	6A	21	29	32	31	27	17	1	1	1	7	12	23
	10A	11	16	18	18	17	14	1	1	1	S	3	9
	15A	6	12	15	16	15	11	1	1	1	1	3	6

\*This table applies to schematic 1 only. Visit our website or contact PDI for other schematic attenuation numbers.

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## Medical Applications\*

Insertion loss in dB (50 Ohm circuit)

Attenuation Code	Current Rating	Comm. Mode(L-G) in MHz					Diff. mode(L-L) in MHz						
		.15	.5	1	5	10 30	.15	.5	1	5	10 30		
M1	1A	34	38	39	32	16	21	9	26	37	62	51	11
	2A	29	32	34	30	19	16	8	23	34	60	48	13
	3A	28	35	37	28	22	19	8	19	28	52	44	12
	6A	18	22	24	27	25	18	8	18	26	52	45	27
	10A	8	13	15	17	16	14	8	18	25	32	28	24
	15A	7	12	15	16	14	11	7	17	24	41	32	23
M2	1A	25	31	33	30	24	21	1	5	14	41	46	17
	2A	23	27	28	29	24	23	1	5	14	45	58	15
	3A	19	22	24	27	27	20	1	4	10	39	50	34
	6A	15	21	24	23	21	17	1	4	9	30	49	28
	10A	11	16	18	17	16	12	1	4	8	26	45	24
	15A	7	13	15	16	14	11	1	3	7	26	39	23
M3	1A	29	33	34	30	20	16	8	24	35	58	45	15
	2A	28	35	37	28	22	24	8	20	29	61	48	15
	3A	25	33	58	51	56	41	8	20	30	57	47	13
	6A	19	26	29	28	25	14	8	18	26	46	43	22
	10A	11	16	18	18	16	12	8	18	24	47	36	24
	15A	7	13	15	16	14	11	7	17	24	41	32	23
M4	1A	36	41	43	37	32	28	8	23	34	60	53	30
	2A	31	37	39	35	29	22	8	22	32	66	55	22
	3A	28	35	37	28	21	21	8	20	29	54	44	14
	6A	22	28	31	30	27	16	8	18	26	43	43	26
	10A	12	16	18	20	19	15	8	18	24	49	42	27
	15A	7	13	15	16	14	11	7	17	24	41	32	23
M5	1A	32	37	40	35	29	23	3	15	25	74	58	21
	2A	29	33	34	30	16	21	3	16	27	57	50	20
	3A	28	35	37	28	22	23	3	13	22	59	48	16
	6A	18	23	25	27	26	20	3	12	19	48	49	30
	10A	11	16	18	18	17	14	3	11	17	42	38	27
	15A	7	13	15	16	14	11	3	11	17	43	30	22
M6	1A	36	41	43	37	31	25	1	12	23	54	57	28
	2A	32	37	40	36	30	22	1	11	22	63	59	24
	3A	23	27	28	31	30	30	1	10	19	61	52	32
	6A	19	26	29	29	25	17	1	8	15	39	45	25
	10A	11	16	18	18	17	14	2	8	14	42	34	25
	15A	4	13	15	16	14	11	1	8	14	48	29	21
M7	1A	36	41	43	37	32	28	3	16	27	64	60	31
	2A	31	37	40	36	29	25	3	15	25	80	60	25
	3A	20	24	25	26	24	23	3	12	21	47	42	22
	6A	14	17	19	22	22	19	3	11	18	43	35	29
	10A	11	16	18	18	16	12	3	11	17	48	34	23
	15A	7	13	15	16	14	11	7	17	24	41	32	23
M8	1A	32	36	37	28	19	11	1	14	26	53	42	16
	2A	29	33	34	31	20	17	1	13	24	61	50	14
	3A	23	26	28	31	30	31	1	9	19	54	53	29
	6A	16	19	21	24	24	21	2	8	15	56	38	33
	10A	11	16	18	18	17	14	2	8	14	41	34	25
	15A	7	13	15	16	14	11	7	17	24	41	32	23

\*This table applies to schematic 1M only. Visit our website or contact PDI for other schematic attenuation numbers.