

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, 8A, 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 μ A*
 - @ 250VAC 50Hz: 5 μ A*

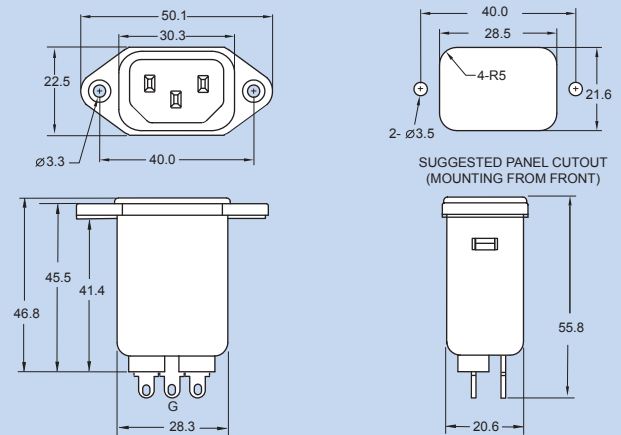
- Hipot Rating (one minute)
 - Line to Ground: 2250VDC
 - Line to Line: 1450VDC

- Temperature Range: -25C to +85C

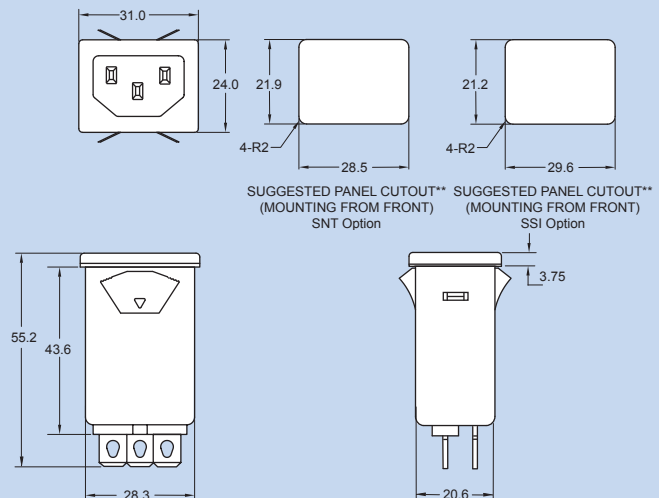
* Medical application; ** Thickness of Panel is from 1.00mm to 1.6mm

MECHANICAL DIMENSIONS (Unit: mm)

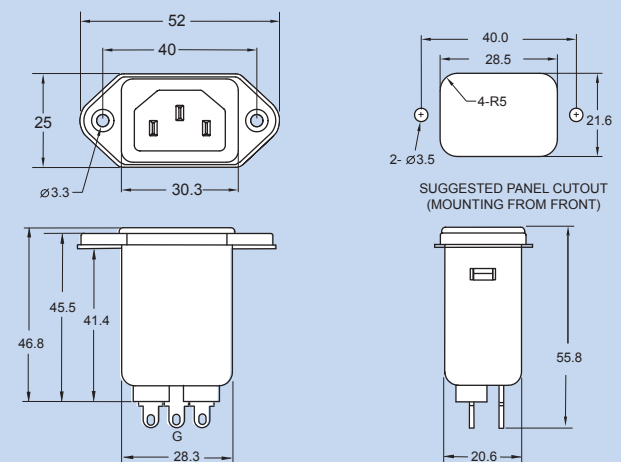
FLANGE MOUNT



SNAP-IN (SNT)



FLANGE MOUNT (B)




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

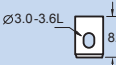
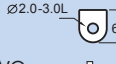
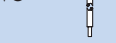
PB 01 Q - 50 - 1 C

CURRENT RATING (A):

| |
|-------|
| = 01 |
| = 02 |
| = 03 |
| = 06 |
| = 08 |
| = 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 & 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 | 8A | 10A | 15A | |
| 0.1 | 2200 | 6.5 | 3.8 | 2.5 | 0.8 | 1.05 | 0.2 | 0.2 | = A |
| 0.015 | 3300 | 1.9 | 1.5 | 1.1 | 0.6 | * | 0.3 | 0.2 | = B |
| 0.1 | 3300 | 3.7 | 2.7 | 1.8 | 0.8 | 1.05 | 0.3 | 0.2 | = C |
| 0.1 | 1000 | 10.5 | 4.2 | 2.5 | 1.05 | * | 0.3 | 0.2 | = D |
| 0.047 | 3300 | 4.6 | 3.4 | 2.5 | 0.9 | * | 0.3 | 0.2 | = E |
| 0.033 | 3300 | 9.5 | 4.3 | 1.8 | 0.85 | * | 0.3 | 0.2 | = F |
| 0.047 | 2200 | 10.5 | 4.0 | 1.2 | 0.53 | * | 0.3 | 0.2 | = G |
| 0.033 | 2200 | 5.0 | 3.7 | 1.8 | 0.6 | * | 0.2 | 0.2 | = H |
| without Cx | without Cy | 10.5 | 6.5 | 2.5 | 1.05 | * | 0.3 | 0.2 | = I |
| 0.22 | 2200 | 6.5 | 4.0 | 2.5 | 0.8 | 1.05 | 0.3 | 0.2 | = J ⁺ |
| 0.22 | 3300 | 6.5 | 4.0 | 2.5 | 0.8 | 1.05 | 0.3 | 0.2 | = K ⁺ |

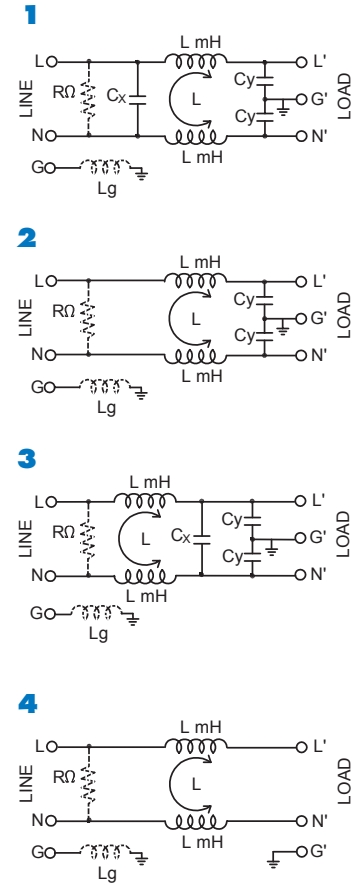
Medical applications, select Attenuation code with corresponding component values from the table.

| Cx (µF) | Inductance Per Current Rating (mH) | | | | | | | |
|---------|------------------------------------|-----|-----|------|------|-----|-----|------|
| | 1A | 2A | 3A | 6A | 8A | 10A | 15A | |
| 0.1 | 6.5 | 3.8 | 2.5 | 0.8 | 1.05 | 0.2 | 0.2 | = M1 |
| 0.015 | 1.9 | 1.5 | 1.1 | 0.6 | * | 0.3 | 0.2 | = M2 |
| 0.1 | 3.7 | 2.7 | 1.8 | * | * | 0.3 | * | = M3 |
| 0.047 | 4.6 | 3.4 | 2.5 | 0.9 | * | 0.3 | 0.2 | = M4 |
| 0.033 | 9.5 | 4.3 | 1.8 | 0.85 | * | 0.3 | 0.2 | = M5 |
| 0.22 | 6.5 | 4.0 | 2.5 | 0.8 | 1.05 | 0.3 | 0.2 | = M6 |
| 0.047 | 10.5 | 4 | 1.2 | 0.53 | * | * | * | = M7 |
| 0.033 | 5 | 3.7 | * | 0.6 | * | 0.2 | * | = M8 |

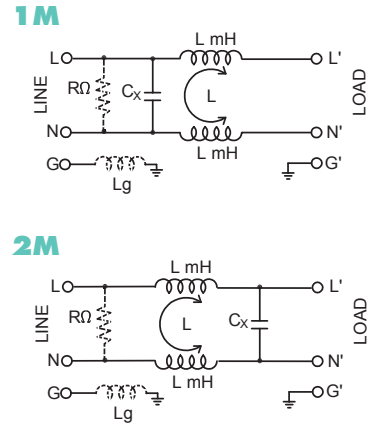
TYPE OF MOUNTING:

| | |
|---------------------------|---------|
| STANDARD FLANGE MOUNT | = BLANK |
| SPECIAL FLANGE MOUNT | = B |
| SNAP-IN TABS - TOP BOTTOM | = SNT |
| SNAP-IN TABS - SIDE | = SSI |

SCHEMATICS



MEDICAL SCHEMATICS



⁺ Contact PDI for attenuation numbers
^{*} Contact PDI for availability
⁺⁺ N/A for 15A
^{*} 15A for UL, cUL; 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 | 5 | 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.

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 |
| | M4 | 1A | 36 | 41 | 43 | 37 | 32 | 28 | 8 | 23 | 34 | 60 | 53 |
| 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 |
| M5 | | 1A | 32 | 37 | 40 | 35 | 29 | 23 | 3 | 15 | 25 | 74 | 58 |
| | 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 |
| | M8 | 1A | 32 | 36 | 37 | 28 | 19 | 11 | 1 | 14 | 26 | 53 | 42 |
| 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 |

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

