

Multi-purpose Medical Filter for Power Line Noise Protection

MV Series



UL Recognized
CSA Certified
VDE Approved



MV Series

- Multi-purpose medical filter
- Improved Line to Ground performance
- A good solution to emission or immunity problems
- Meets leakage current requirements of UL2601 for health care equipment

Specifications

Maximum leakage current each Line to Ground:
 @ 120 VAC 60 Hz: .07 mA
 @ 250 VAC 50 Hz: .13 mA

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

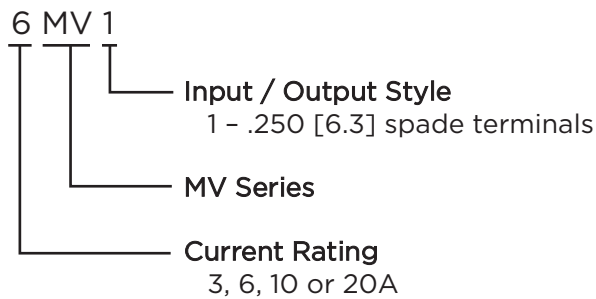
Rated Voltage (max): 250 VAC

Operating Frequency: 50/60 Hz

Rated Current: 3 to 20A

Operating Ambient Temperature Range (at rated current I_r): -10°C to +40°C
 In an ambient temperature (T_a) higher than +40°C the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{(85-T_a)/45}$

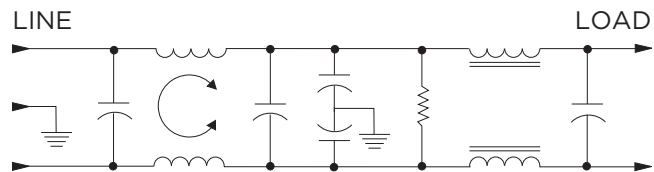
Ordering Information



Available Part Numbers

3MV1	6MV1
10MV1	20MV1

Electrical Schematic

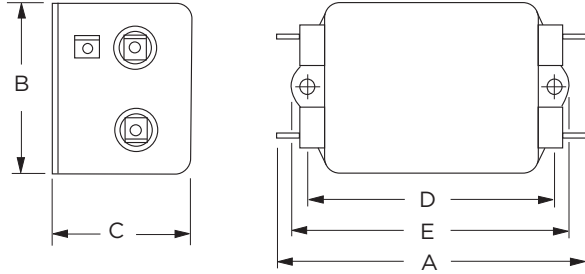


Multi-purpose Medical Filter for Power Line Noise Protection *(continued)*

MV Series

Case Styles

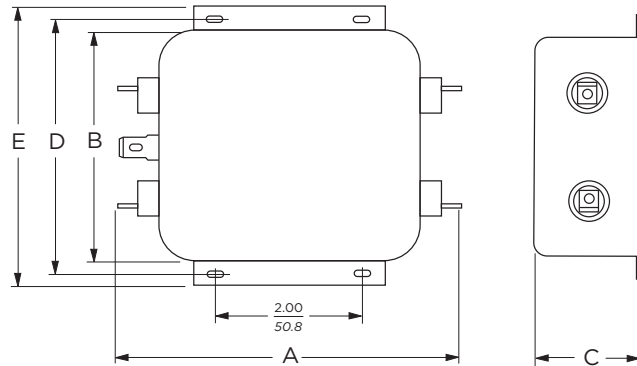
MV1 (3, 6, 10A)



Typical Dimensions:

- Line/Load Terminals (4): .250 [6.3] with .07 [1.8] Dia. hole
- Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot
- Mounting Holes (2): .188 [4.78] Dia.

20MV1



Typical Dimensions:

- Line/Load Terminals (4): .250 [6.3] with .07 [1.8] Dia. hole
- Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot
- Mounting Holes (2): .188 [4.78] Dia.

Case Dimensions

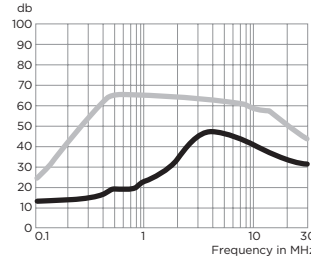
Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3MV1	3.36 85.3	1.82 46.2	1.28 32.5	2.375 60.33	2.78 70.6
6MV1	3.86 98.0	2.08 52.8	1.53 38.9	2.938 74.63	3.34 84.8
10MV1	3.86 98.0	2.08 52.8	1.53 38.9	2.938 74.63	3.34 84.8
20MV1	5.23 132.8	3.38 85.9	1.53 38.9	3.75 95.25	4.20 106.7

Performance Data

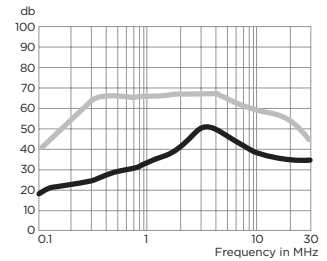
Typical Insertion Loss

Measured in closed 50 Ohm system

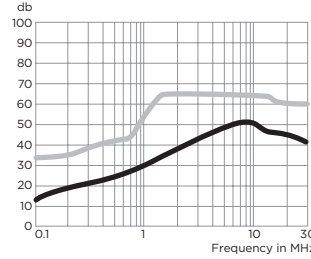
3MV



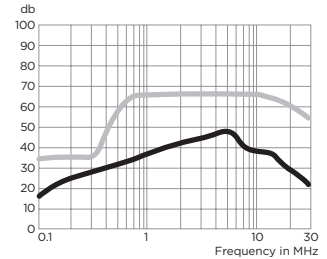
6MV



10MV



20MV



— Common Mode / Asymmetrical (L-G)
- - - Differential Mode / Symmetrical (L-L)

Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency – MHz							
	.15	.5	1	2	5	10	20	30
3A	14	19	20	30	46	40	34	31
6A	19	27	30	38	50	40	35	35
10A	15	25	26	34	46	50	44	42
20A	18	30	34	34	46	40	36	20

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz							
	.15	.5	1	2	5	10	20	30
3A	33	65	65	65	65	60	53	50
6A	40	65	65	65	65	60	57	55
10A	33	65	65	65	65	65	55	55
20A	25	65	65	65	65	60	57	45