

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

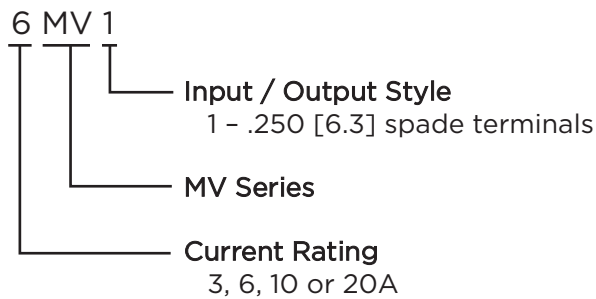
Rated Voltage (max): 250 VAC

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: $I_o = I_r \sqrt{(85-T_a)/45}$

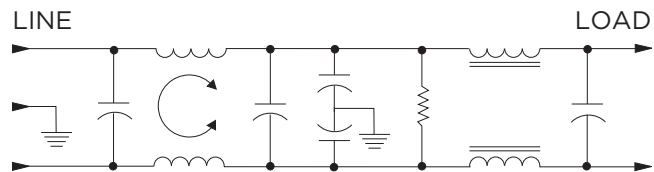
Ordering Information



Available Part Numbers

3MV1	6MV1
10MV1	20MV1

Electrical Schematic

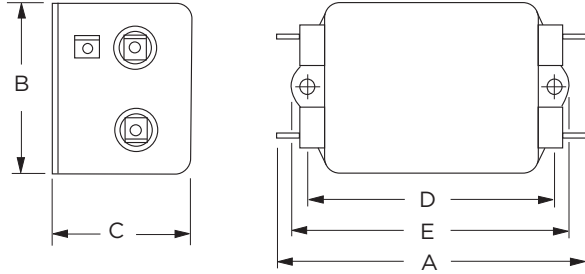


Multi-purpose Medical Filter for Power Line Noise Protection *(continued)*

MV Series

Case Styles

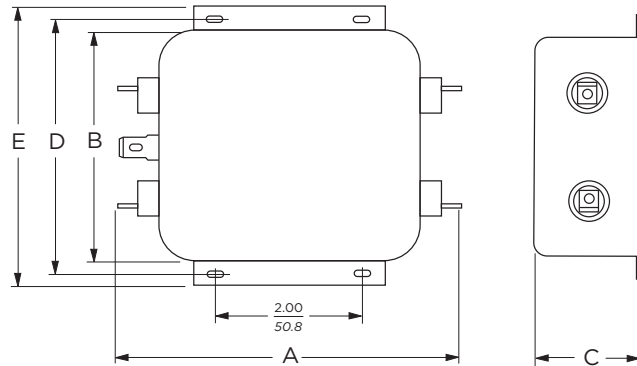
MV1 (3, 6, 10A)



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

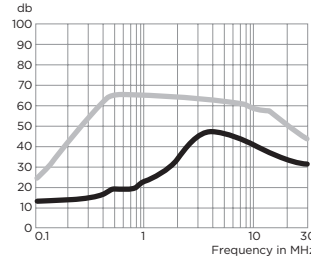
Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3MV1	3.36 <i>85.3</i>	1.82 <i>46.2</i>	1.28 <i>32.5</i>	2.375 <i>60.33</i>	2.78 <i>70.6</i>
6MV1	3.86 <i>98.0</i>	2.08 <i>52.8</i>	1.53 <i>38.9</i>	2.938 <i>74.63</i>	3.34 <i>84.8</i>
10MV1	3.86 <i>98.0</i>	2.08 <i>52.8</i>	1.53 <i>38.9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

Performance Data

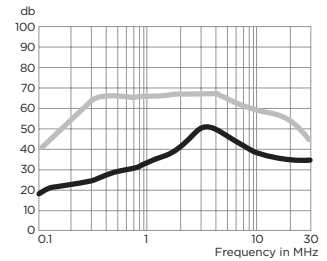
Typical Insertion Loss

Measured in closed 50 Ohm system

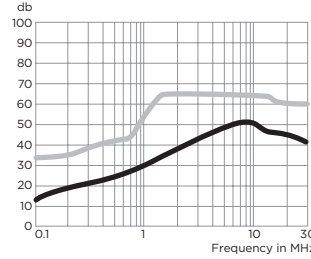
3MV



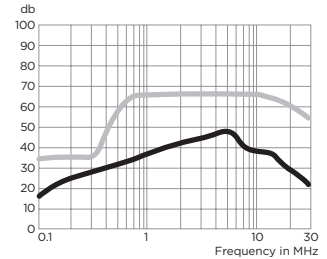
6MV



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