### Multi-purpose Medical Filter for Power Line Noise Protection

# **MV Series**



UL Recognized CSA Certified VDE Approved



### **MV Series**

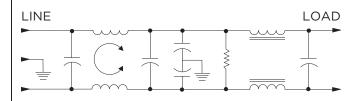
- Multi-purpose medical filter
- Improved Line to Ground performance
- A good solution to emission or immunity problems
- Meets leakage current requirements of UL2601 for health care equipment

## Specifications

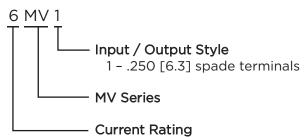
Maximum leakage current each Line to Ground:							
@ 120 VAC 60 Hz:	.07 mA						
8							
@250 VAC 50 Hz:	.13 mA						
Hipot rating (one minute):							
Line to Ground:	2250 VDC						
Line to Line:	1450 VDC						
Rated Voltage (max):	250 VAC						
Operating Frequency:	50/60 Hz						
Rated Current:	3 to 20A						
Ratea current.	5 to 20A						
<b>Operating Ambient Temperature Ran</b>	ge						
(at rated current Ir):	-10°C to +40°C						
In an ambient temperature (T <sub>a</sub> ) hig	gner than +40°C						
the maximum operating current (L)	is calculated as						

the maximum operating current ( $I_0$ ) is calculated as follows:  $I_0 = I_T \sqrt{(85-Ta)/45}$ 

## **Electrical Schematic**



## **Ordering Information**



3, 6, 10 or 20A

### Available Part Numbers

3MV1	6MV1
10MV1	20MV1

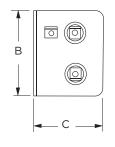


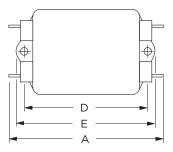
#### Multi-purpose Medical Filter for Power Line Noise Protection (continued)

# **MV Series**

### **Case Styles**

MV1 (3, 6, 10A)



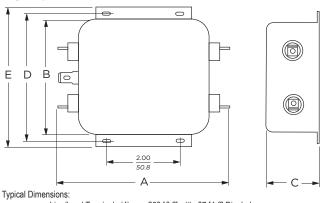


.250 [6.3] with .07 [1.8] Dia. hole .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

Typical Dimensions:

Line/Load Terminals (4): Ground Terminal (1): Mounting Holes (2):

## 20MV1



.188 [4.78] Dia.

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

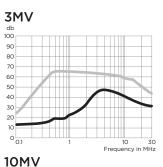
### **Case Dimensions**

Part No.	A (max)	B (max)	C (max)	<b>D</b> <u>± .015</u> ± .38	E (max)
<b>ZN 4) /1</b>	3.36	1.82	1.28	2.375	2.78
3MV1	85.3	46.2	32.5	60.33	70.6
6MV1	3.86	2.08	1.53	2.938	3.34
	98.0	52.8	38.9	74.63	84.8
1014/1	3.86	2.08	1.53	2.938	3.34
10MV1	98.0	52.8	38.9	74.63	84.8
2014/1	5.23	3.38	1.53	3.75	4.20
20MV1	132.8	85.9	38.9	95.25	106.7

## Performance Data

## **Typical Insertion Loss**

Measured in closed 50 Ohm system



db 100

90

80

70

60

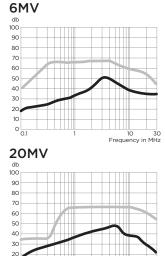
50

40

30

20

10



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

30

10

0

## Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current	Frequency – MHz							
Rating	.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	Frequency – MHz							
 Rating	.15	.5	1	2	5	10	20	30
ЗA	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

Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.