

# EP/VP Series

RFI Power Line Filters  
for Switching Power Supply  
Noise Suppression



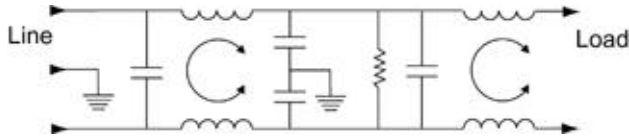
UL Recognized  
CSA Certified  
VDE Approved

## EP/VP Series

The EP/VP series of RFI filters has been developed to reduce conducted noise to acceptable limits for equipment that must comply with the requirements of CISPR in Europe and the FCC specifications in the USA.

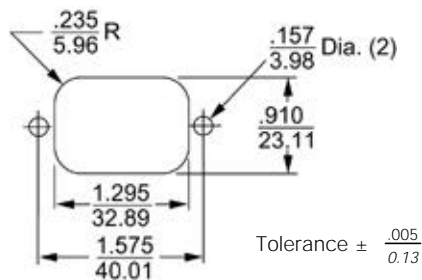
These filters provide high insertion loss for both line-to-ground and line-to-line emissions throughout the frequency range. They are particularly well suited for equipment that must meet both stringent emissions specifications (such as CISPR 22, A-level and FCC Part 15J, Class B) and the EP models meet very low leakage current requirements.

## Electrical Schematic



Resistor location for reference only.

## Recommended Panel Cutout (EP7 & EP7M)



Panel cutout (Back mount)



EP1/VP1



EP7/VP7



EP3/VP3

## Specifications

Maximum leakage current, each line-to-ground

@ 120 VAC 60 Hz:

@ 250 VAC 50 Hz:

**VP Models**

**EP Models**

.73 mA

.21 mA

1.27 mA

.36 mA

Hipot rating (one minute):

line-to-ground

line-to-line

2250 VDC

1450 VDC

Operating frequency:

50/60 Hz

Rated voltage:

120/250 VAC

Rated current:

**@ 120 VAC**

**@ 250 VAC**

3EP

3A

3A

6EP

6A

5A

10EP

10A

8A

20EP/VP

20A

20A

Maximum rated current peaks:

3EP

10A

6EP

18A

10EP

30A

20EP/VP

60A

**Minimum** insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current Rating	Frequency-MHz								
	.01	.04	.05	.15	.5	1	5	10	30

### EP

3A	1	1	10	58	65	65	66	60	25
6A,10A	1	1	10	58	65	65	66	60	25
20A	3	6	6	28	50	55	60	55	55

### VP

20A	3	2	2	42	60	65	65	55	55
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Line-to-line in 50 ohm circuit

Current Rating	Frequency-MHz								
	.01	.09	.15	.5	1	5	10	20	30

### EP1, EP3

3A	1	5	36	65	65	65	65	58	58
6A,10A	1	5	30	65	65	65	65	35	35
20A	8	17	25	60	65	65	58	58	58

### VP

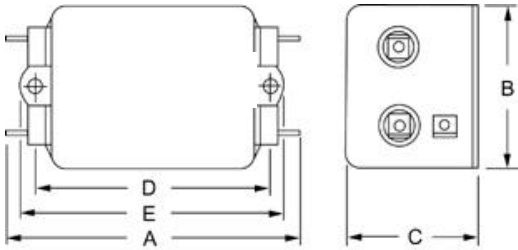
20A	8	17	25	60	65	65	58	58	58
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# Series EP/VP

## Case Styles

Metric shown in italics.

### EP1/VP1

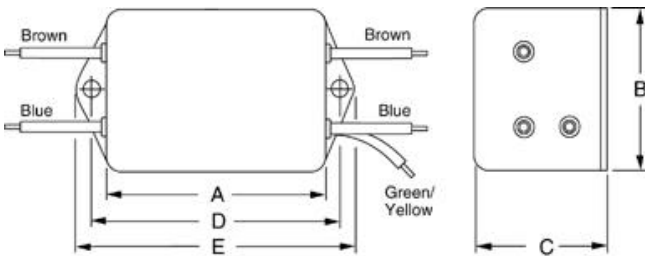


Typical dimensions

Terminals:  $\frac{.250}{6.35}$  (5) Holes:  $\frac{.07}{1.8}$  Dia.(4) Slot:  $\frac{.07 \times .16}{1.8 \times 4.1}$

Mounting holes:  $\frac{.188}{4.78}$  Dia. (2)

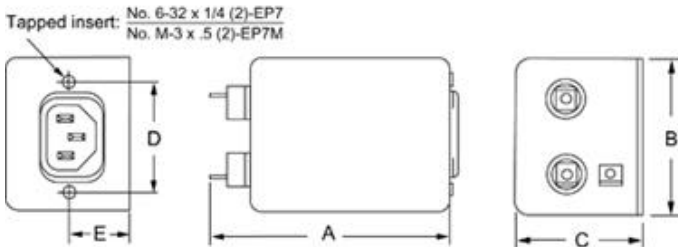
### EP3



Typical dimensions

Wire leads  $\frac{4.0}{101.6}$  Min. Mounting holes:  $\frac{.188}{4.78}$  Dia. (2)

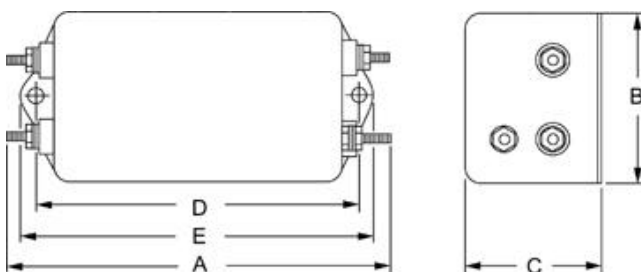
### EP7 & EP7M (with metric insert)



Typical dimensions

Terminals:  $\frac{.250}{6.35}$  (3) Holes:  $\frac{.07}{1.8}$  Dia.(2) Slot:  $\frac{.07 \times .16}{1.8 \times 4.1}$

### 20EP/VP6



Terminals: No. 8-32 (5)

## Case Dimensions

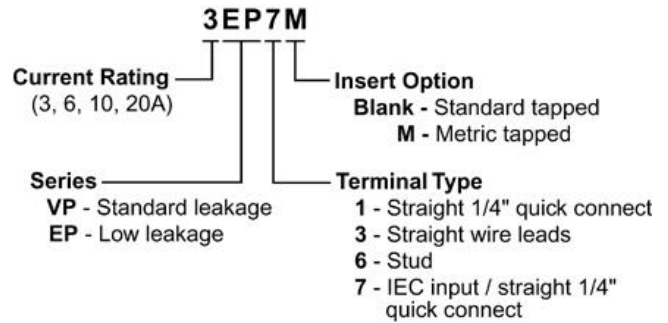
Metric shown in italics.

Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3EP1	$\frac{3.85}{97.8}$	$\frac{2.07}{52.6}$	$\frac{1.78}{45.2}$	$\frac{2.938}{74.63}$	$\frac{3.35}{85.1}$
3EP3	$\frac{2.56}{65.0}$	$\frac{2.07}{52.6}$	$\frac{1.78}{45.2}$	$\frac{2.938}{74.63}$	$\frac{3.35}{85.1}$
3EP7	$\frac{3.21}{81.5}$	$\frac{2.25}{57.2}$	$\frac{1.78}{45.2}$	$\frac{1.575}{40.01}$	$\frac{0.63}{12.1}$
3EP7M	$\frac{3.21}{81.5}$	$\frac{2.25}{57.2}$	$\frac{1.78}{45.2}$	$\frac{1.575}{40.01}$	$\frac{0.63}{12.1}$ †
6EP1	$\frac{6.62}{168.1}$	$\frac{2.07}{52.6}$	$\frac{2.28}{57.9}$	$\frac{5.625}{142.88}$	$\frac{6.03}{153.2}$ †
6EP3	$\frac{5.33}{135.4}$	$\frac{2.07}{52.6}$	$\frac{2.28}{57.9}$	$\frac{5.625}{142.88}$	$\frac{6.03}{153.2}$
10EP1	$\frac{6.62}{168.1}$	$\frac{2.07}{52.6}$	$\frac{2.78}{70.6}$	$\frac{5.625}{142.88}$	$\frac{6.03}{153.2}$
10EP3	$\frac{5.35}{135.9}$	$\frac{2.07}{52.6}$	$\frac{2.78}{70.6}$	$\frac{5.625}{142.88}$	$\frac{6.03}{153.2}$
20EP1, 20VP1	$\frac{4.95}{125.7}$	$\frac{2.27}{57.7}$	$\frac{1.8}{45.7}$	$\frac{4.063}{103.2}$	$\frac{4.47}{113.5}$
20EP6, 20VP6	$\frac{5.09}{127.3}$	$\frac{2.25}{57.2}$	$\frac{1.78}{45.2}$	$\frac{4.063}{103.2}$	$\frac{4.46}{129.3}$

†  $\pm .188$   
 $\pm 4.78$

## Ordering Information

Consult your local Corcom sales representative for pricing.



## Available Part Numbers

3EP1	10EP1
3EP3	10EP3
3EP7	20EP1
3EP7M	20EP6
6EP1	20VP1
6EP3	20VP6

Line Cord No. GA400