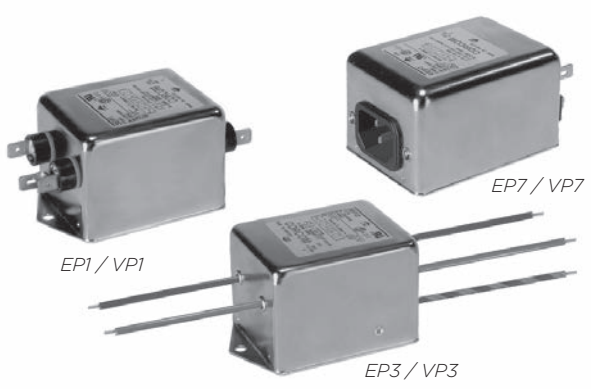
# EP / VP Series

UL Recognized
CSA Certified
VDE Approved




## EP & VP Series

- Dual stage filter offers high insertion loss
- Well suited for meeting CISPR 22 A and FCC Part 15J, Class B
- EP model meets very low leakage current requirements
- 7A and 12A versions offer optimum package size

## Ordering Information

3 EP 7 M

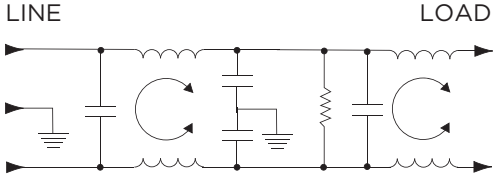
**Suffix**
M – Metric inserts *(style 7 only)*
Omit for standard or none

**Input / Output Style**
1 – .250 [6.3] spade terminals
3 – Wire leads
6 – Threaded bolt
7 – IEC inlet* *(line side)*
.250 [6.3] spade terminals
*(load side)*

**EP / VP Series**
EP – Low leakage *(<0.5 mA)*
VP – Standard *(20A only)*

**Current Rating**
3, 6, 7, 10, 12 or 20A

## Electrical Schematic




*IEC 60320-1 C14 inlet mates with C13 connector

## Specifications

**Maximum leakage current each Line to Ground:**

| | VP Models | EP Models |
|---|---|---|
| @ 120 VAC 60 Hz: | .73 mA | .21 mA |
| @250 VAC 50 Hz: | 1.27 mA | .36 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

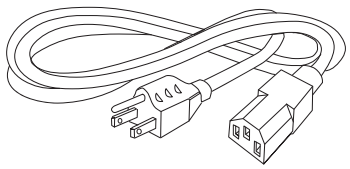
In an ambient temperature ($T_a$) higher than +40°C the maximum operating current ($I_o$) is calculated as follows: $I_o = I_r \sqrt{(85-Ta)/45}$

## Available Part Numbers

| | |
|---|---|
| 3EP1 | 10EP1 |
| 3EP3 | 10EP3 |
| 3EP7 | 12EP1 |
| 3EP7M | 12EP3 |
| 6EP1 | 20EP1 |
| 6EP3 | 20EP6 |
| 7EP1 | 20VP1 |
| 7EP3 | 20VP6 |

## Accessories

**GA400**: NEMA 5-15P to IEC 60320-1 C-13 line cord







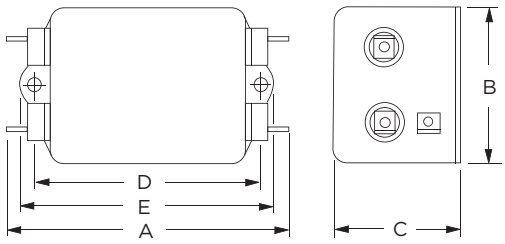
Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

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**corcom.com**

# EP / VP Series

## Case Styles

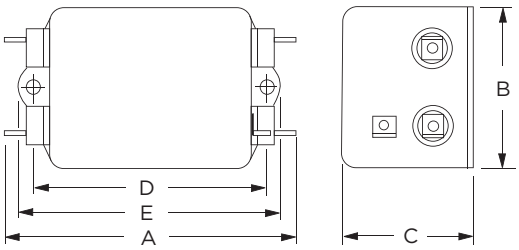
### EP1 / VP1 (1-15A)




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. |

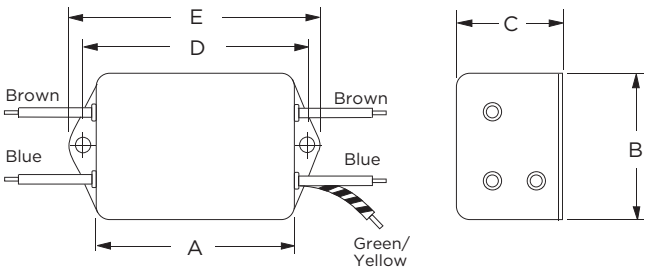
### 20EP1 / VP1




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. |

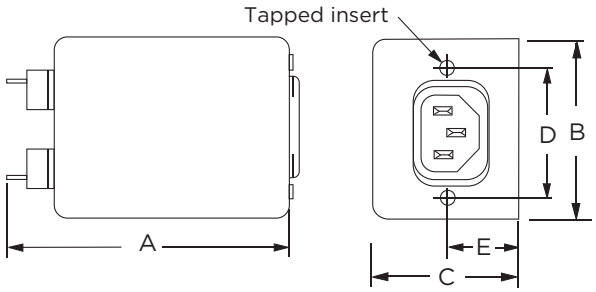
### EP3




Typical Dimensions:

| | |
|---|---|
| Wire leads (5): | 4.0 [*101.6*] Min, AWG18 |
| Mounting Holes (2): | .188 [4.78] Dia. |

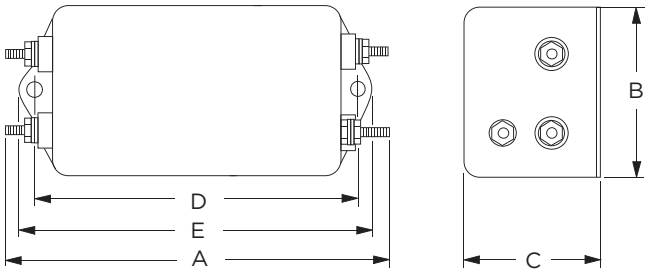
### EP7 & EP7M




Typical Dimensions:

| | |
|---|---|
| Load Terminals (2): | .250 [*6.3*] with .07 [*1.8*] Dia. hole |
| Line Inlet (1): | IEC 60320-1 C14 |
| EP7 Tapped Inserts (2): | 6-32 x 1/4 |
| EP7M Tapped Inserts (2): | M3 x .5 |

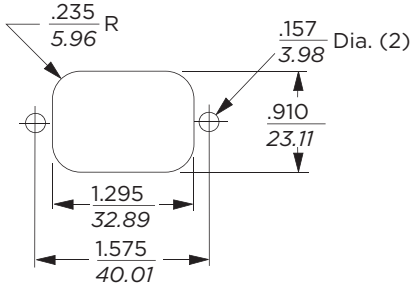
### 20EP6 / VP6




Typical Dimensions:

| | |
|---|---|
| Terminals (5): | 8-32, Torque 18 lbf-in. [*2.03* N-m] max. ± 2 [*.22*] |
| Mounting Holes (2): | .188 [4.78] Dia. |

## Recommended Panel Cutout




Tolerance ± .005 [0.13]



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# EP / VP Series

## Case Dimensions

| Part No. | A (max) | B (max) | C (max) | D ± .015 ± .38 | E (max) |
|---|---|---|---|---|---|
| 3EP1 | **3.85** *97.8* | **2.07** *52.6* | **1.78** *45.2* | **2.938** *74.63* | **3.35** *85.1* |
| 3EP3 | **2.56** *65.0* | **2.07** *52.6* | **1.78** *45.2* | **2.938** *74.63* | **3.35** *85.1* |
| 3EP7/7M | **3.21** *81.5* | **2.25** *57.2* | **1.78** *45.2* | **1.575** *40.01* | **0.63*** *12.1** |
| 6EP1 | **6.62** *168.1* | **2.07** *52.6* | **2.28** *57.9* | **5.625** *142.88* | **6.03** *153.2* |
| 6EP3 | **5.33** *135.4* | **2.07** *52.6* | **2.28** *57.9* | **5.625** *142.88* | **6.03** *153.2* |
| 7EP1 | **4.79** *121.7* | **2.07** *52.6* | **1.53** *38.9* | **3.947** *10.25* | **4.33** *109.98* |
| 7EP3 | **3.50** *88.9* | **2.07** *52.6* | **1.53** *38.9* | **3.947** *100.25* | **4.33** *109.98* |
| 10EP1 | **6.62** *168.1* | **2.07** *52.6* | **2.78** *70.6* | **5.625** *142.88* | **6.03** *153.2* |
| 10EP3 | **5.35** *135.9* | **2.03** *52.6* | **2.78** *70.6* | **5.625** *142.88* | **6.03** *153.2* |
| 12EP1 | **4.97** *126.2* | **1.78** *45.2* | **1.78** *45.2* | **4.063** *103.20* | **4.46** *113.28* |
| 12EP3 | **3.624** *92.05* | **1.78** *45.2* | **1.78** *45.2* | **4.063** *103.20* | **4.46** *113.28* |
| 20EP1/VP1 | **4.95** *125.7* | **1.8** *45.7* | **1.8** *45.7* | **4.063** *103.20* | **4.47** *113.5* |
| 20EP6/VP6 | **5.09** *127.3* | **1.78** *45.2* | **1.78** *45.2* | **4.063** *103.20* | **4.46** *113.3* |

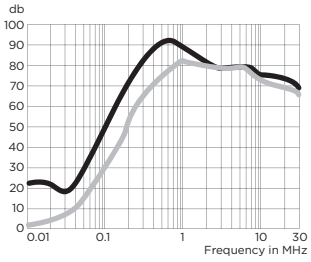
*±0.02 [0.5]

## Performance Data

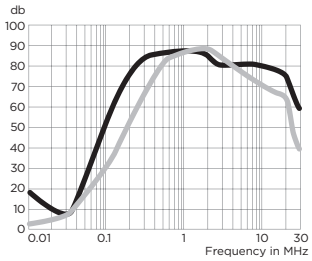
### Typical Insertion Loss

Measured in closed 50 Ohm system

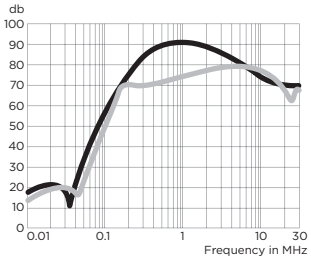
**3EP**



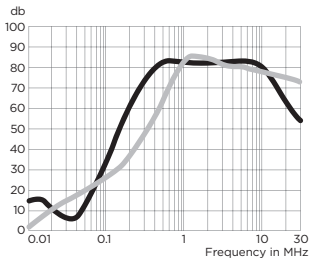

**6EP**




**7EP**

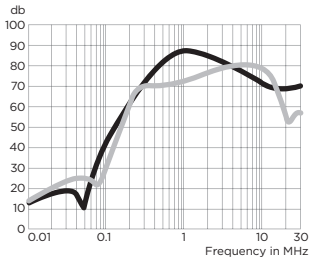



**10EP**

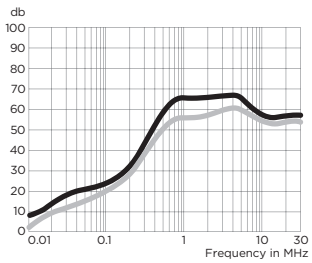



### Typical Insertion Loss *(continued)*

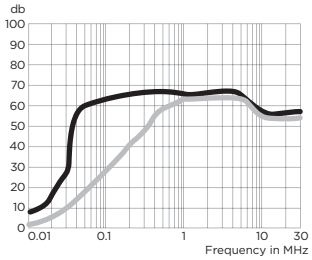
**12EP**




**20EP**




**20VP**




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 .01 | .05 | .15 | .5 | 1 | 5 | 10 | 30 |
|---|---|---|---|---|---|---|---|---|
| **EP Models** | | | | | | | | |
| 3A | 12 | 10 | 58 | 65 | 65 | 66 | 62 | 30 |
| 6, 10A | 10 | 15 | 60 | 65 | 65 | 65 | 60 | 35 |
| 7A | 15 | 28 | 63 | 75 | 78 | 75 | 75 | 55 |
| 12A | 12 | 7 | 52 | 68 | 70 | 70 | 70 | 45 |
| 20A | 3 | 6 | 28 | 50 | 55 | 60 | 55 | 55 |
| **VP Models** | | | | | | | | |
| 20A | 3 | 2 | 42 | 60 | 65 | 65 | 55 | 55 |

Differential Mode / Symmetrical (Line to Line)

| Current Rating | Frequency – MHz .01 | .05 | .15 | .5 | 1 | 5 | 10 | 30 |
|---|---|---|---|---|---|---|---|---|
| **EP Models** | | | | | | | | |
| 3A | 1 | 3 | 36 | 65 | 65 | 65 | 58 | 58 |
| 6, 10A | 1 | 3 | 30 | 65 | 65 | 65 | 65 | 35 |
| 7A | 10 | 13 | 55 | 65 | 68 | 70 | 65 | 50 |
| 12A | 11 | 7 | 43 | 70 | 70 | 70 | 65 | 45 |
| 20A | 8 | 25 | 60 | 65 | 65 | 58 | 58 | 58 |
| **VP Models** | | | | | | | | |
| 20A | 8 | - | 25 | 60 | 65 | 65 | 58 | 58 |





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