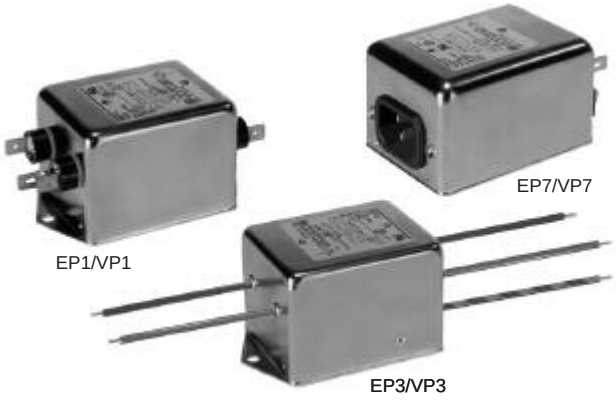
EP/VP Series



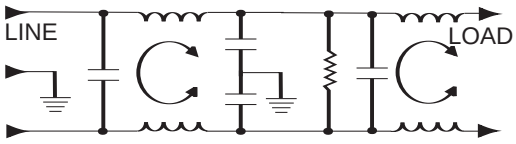
UL Recognized
CSA Certified
VDE Approved

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 to better 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.

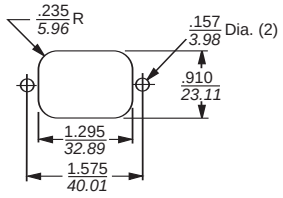
Tyco Electronics Corcom Products has extended the EP Series of Power Line Filters by adding a 7 Amp and 12 Amp versions to the existing 3, 6, 10, and 20 Amp product offering. The new filters offer higher performance in a smaller package at a lower price than the existing 6 Amp and 10 Amp versions. The smaller package size and comparable performance is a better match to Schaffner's FN 2070 Series. The new filters are RoHS compliant.

Electrical Schematic



Resistor location for reference only.

Recommended Panel Cutout



Panel Cutout (back mount)

Tolerance ±.005 [*0.13*]

Specifications

Maximum leakage current,each line-to-ground

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

Hipot rating (one minute):

line-to-ground	2250 VDC
line-to-line	1450 VDC

Operating frequency: 50/60 Hz

Rated voltage (max.): 250 VAC

Rated current:

3EP	3A	10EP	10A
6EP	6A	12EP	12A
7EP	7A	20EP/VP	20A

Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current Rating	Frequency–MHz .01	.05	.15	.5	1	5	10	30
EP								
3A	1	10	58	65	65	66	60	25
6A,10A	1	10	58	65	65	66	60	25
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								
20A	3	2	42	60	65	65	55	55

Line-to-line in 50 ohm circuit

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

Catalog 1654001
Revised 05-07

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.

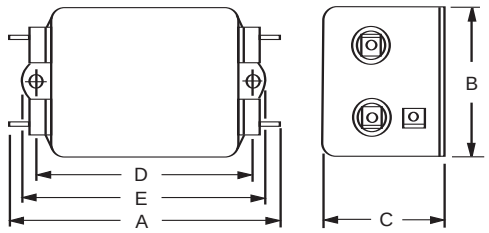
USA Cust. Svc.: 1-800-468-2023
CORCOM Prods: 1-847-680-7400
Germany: 49-89-6089-0

www.corcom.com
www.tycoelectronics.com

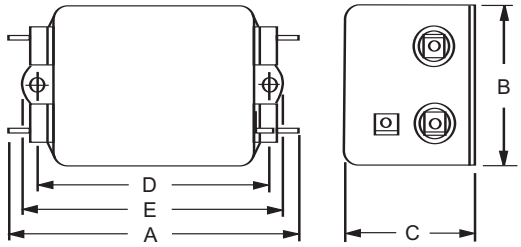
EP/VP Series

Case Styles

EP1/VP1 (1-15 Amp version)

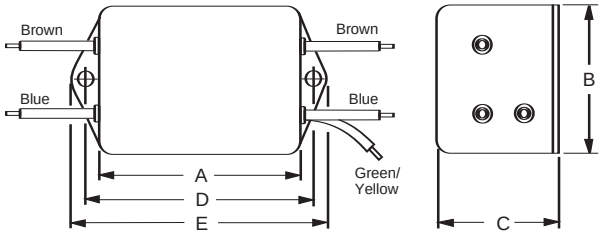


20EP1/VP1



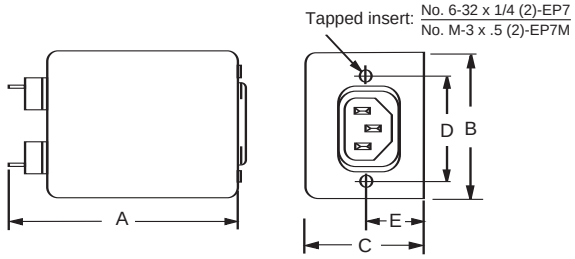
Typical dimensions:
Terminals: .250 [*6.35*] (5) Holes: .07 [*1.8*] Dia.(4)
Mounting Holes: .188 [*4.78*] Dia. (2) Slot: .07 x .16 [*1.8 x 4.1*]

EP3



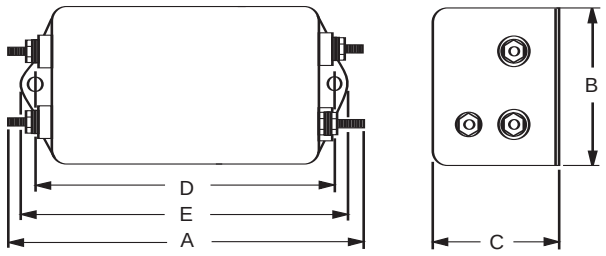
Typical dimensions:
Wire leads: 4.0 [*101.6*] Min. Mounting Holes: .188 [*4.78*] Dia.(2)

EP7 & EP7M (with metric insert)



Typical dimensions:
Terminals: .250 [*6.35*] (3) Holes: .07 [*1.8*] Dia.(2)

20EP/VP6



Terminals: No. 8-32 (5) Torque: 18 ± 2 in.lb

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, 3EP7M	**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** *100.25*	**4.33** *109.98*
7EP3	**3.50** *88.9*	**2.07** *52.6*	**1.53** *38.6*	**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*	**2.07** *52.6*	**2.78** *70.6*	**5.625** *142.88*	**6.03** *153.2*
12EP1	**4.97** *126.2*	**2.25** *57.2*	**1.78** *45.2*	**4.063** *103.20*	**4.46** *113.28*
12EP3	**3.624** *92.05*	**2.25** *57.15*	**1.78** *45.2*	**4.063** *103.20*	**4.46** *113.28*
20EP1, 20VP1	**4.95** *125.7*	**2.27** *57.7*	**1.8** *45.7*	**4.063** *103.2*	**4.47** *113.5*
20EP6, 20VP6	**5.09** *127.3*	**2.25** *57.2*	**1.78** *45.2*	**4.063** *103.2*	**4.46** *129.3*

† ±.02 [±.5]

Part Numbers

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

Line Cord No. GA400
7 1/2 foot, 3-conductor line cord.

Catalog 1654001
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