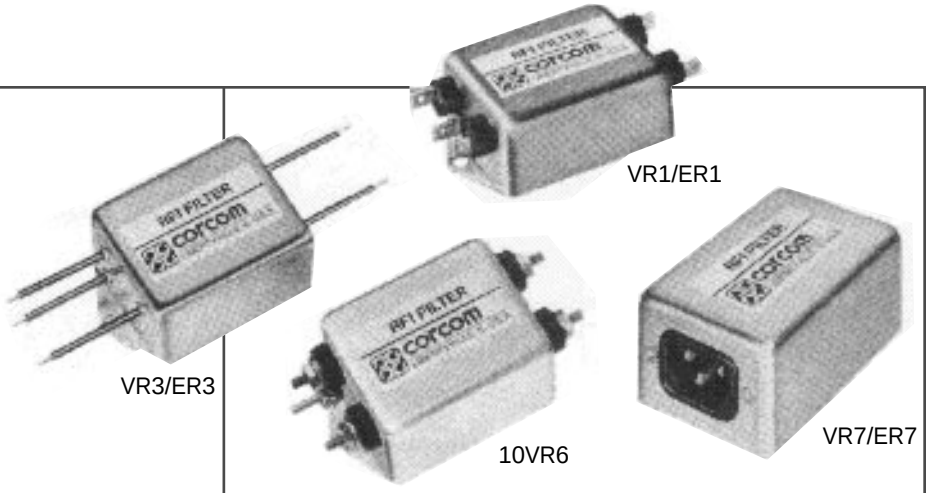
R Series

Two-Stage General Purpose RFI Power Line Filter

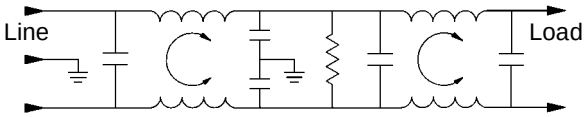


UL Recognized
CSA Certified
VDE Approved
SEV Approved*

R Series

Corcom's dual T section RFI power line filters provide premium performance at moderate cost. They are well suited for low impedance loads where noisy RFI environments are present. They control pulsed, continuous and/or intermittent interference, insuring protection of your equipment from power line noise in addition to protecting the line from equipment noise. The R series dual T type provides low leakage current without deterioration of insertion loss characteristics and at a competitive cost. The ER models meet the very low leakage current requirements of SEV, VDE portable equipment, and (120 Volt) UL544 nonpatient medical equipment.

Electrical Schematic



Resistor location for reference only.

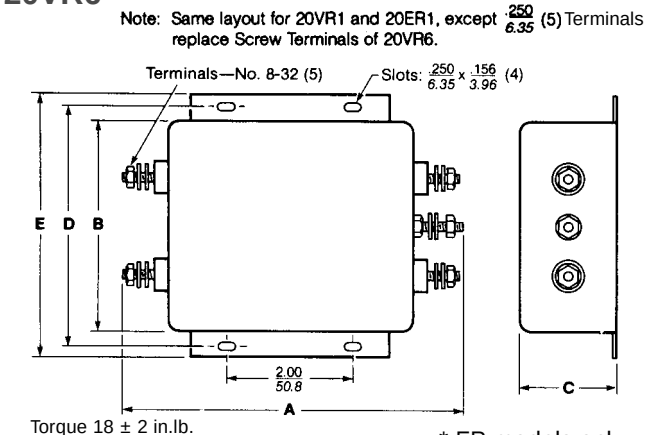
Line Cord

Line Cord No. GA400:
7 1/2 foot, 3-conductor line cord to mate with R7 models.

Case Style

Metric shown in italics.

20VR6



Torque 18 ± 2 in.lb.

* ER models only.

Specifications

	VR Models	ER Models
Maximum leakage current, each line-to-ground		
@ 120 VAC 60 Hz:	.4 mA	.21 mA
@ 250 VAC 50 Hz:	.7 mA	.36 mA

Hipot rating (one minute):	
line-to-ground	2250 VDC
line-to-line	1450 VDC
Operating frequency:	50/60 Hz
Rated voltage:	120/250 VAC

Rated current:	@120 VAC	@ 250 VAC
1VR/1ER	1A	1A
2VR/2ER	2A	2A
3VR/3ER	3A	3A
5VR/5ER	5A	5A
10VR/10ER	10A	8A
10VR6	10A	8A
20VR/20ER	20A	16A
20VR6	20A	16A

Minimum insertion loss in dB:
Line-to-ground in 50 ohm circuit

Current Rating	Frequency–MHz .15	.5	1	5	10	30
VR Models						
1A, 3A	30	65	65	65	65	65
2A, 5A, 10A, 20A	5	44	60	65	65	60
ER Models						
1A, 3A	25	60	65	65	65	65
2A, 5A, 10A, 20A	2	35	51	63	60	50

Line-to-line in 50 ohm circuit

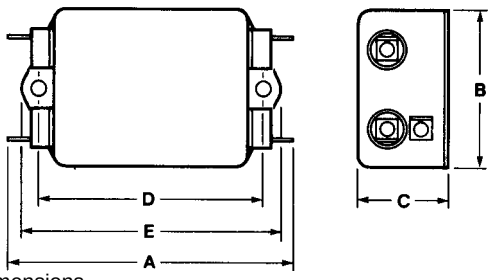
Current Rating	Frequency–MHz .15	.5	1	5	10	30
VR, ER Models						
1A, 3A	–	–	65	60	54	46
2A, 5A, 10A, 20A	–	–	35	60	57	45

corcom
Libertyville, IL (847) 680-7400

Case Styles

Metric shown in italics.

R1

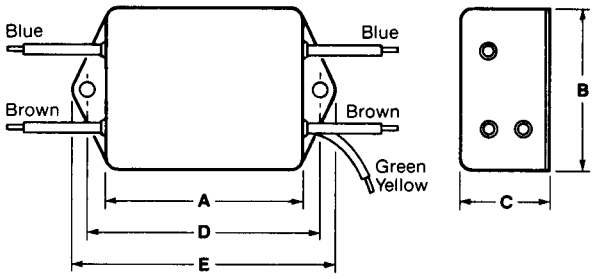


Typical dimensions

Terminals: .250 / *6.35* (5) Holes: .07 / *1.8* Dia.(4) Slot: .07 x .16 / *1.8 x 4.1*

Mounting holes: .188 / *4.78* Dia. (2)

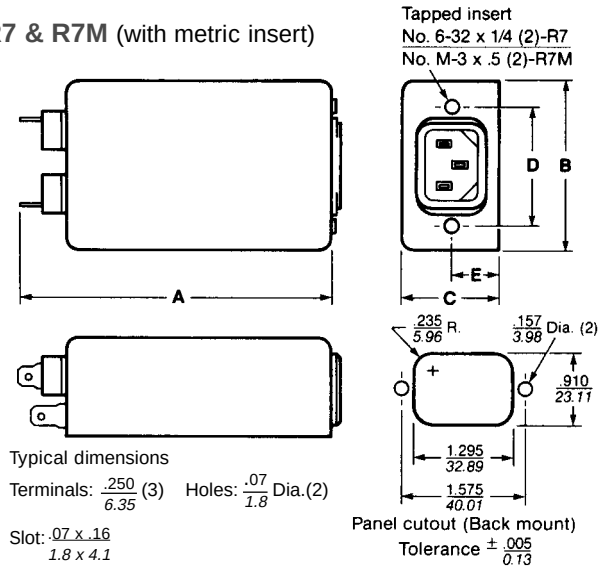
R3



Typical dimensions

Wire leads: 4.0 / *101.6* Min. Mounting holes: .188 / *4.78* Dia. (2)

R7 & R7M (with metric insert)



Typical dimensions

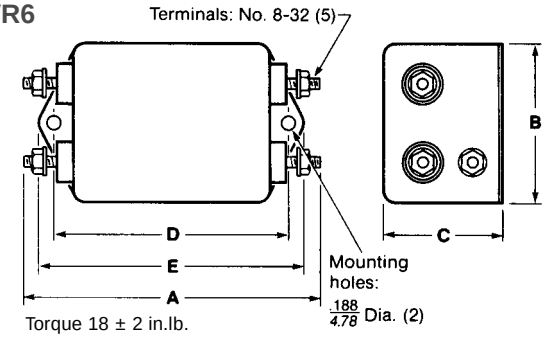
Terminals: .250 / *6.35* (3) Holes: .07 / *1.8* Dia.(2)

Slot: .07 x .16 / *1.8 x 4.1*

Panel cutout (Back mount)

Tolerance ± .005 / *0.13*

10VR6



Torque 18 ± 2 in.lb.

Case Dimensions

Metric shown in italics.

Part No.	A (max)	B (max)	C (max)	D ± .015 / *± .38*	E (max)	
1VR1, 1ER1	3.35	1.81	1.16	2.375	2.78	
2VR1, 2ER1	*85.1*	*46.0*	*29.5*	*60.33*	*70.6*	
1VR3, 1ER3	2.07	1.81	1.16	2.375	2.78	
2VR3, 2ER3	*52.6*	*46.0*	*29.5*	*60.33*	*70.6*	
3VR1, 3ER1	3.85	2.07	1.16	2.938	3.35	
5VR1, 5ER1	*97.8*	*52.6*	*29.5*	*74.63*	*85.1*	
3VR3, 3ER3	2.56	2.07	1.16	2.938	3.35	
5VR3, 5ER3	*65.0*	*52.6*	*29.5*	*74.63*	*85.1*	
3VR7, 3VR7M	4.33	2.25	1.28	1.575	0.64	†
3ER7, 3ER7M	*110.0*	*57.2*	*32.5*	*40.01*	*16.3*	
5VR7, 5VR7M	4.33	2.25	1.28	1.575	0.64	†
5ER7, 5ER7M	*110.0*	*57.2*	*32.5*	*40.01*	*16.3*	
10VR1, 10ER1	3.85	2.07	1.53	2.938	3.35	
	97.8	*52.6*	*38.9*	*74.63*	*85.1*	
10VR3, 10ER3	2.56	2.07	1.53	2.938	3.35	
	65.0	*52.6*	*38.9*	*74.63*	*85.1*	
10VR6	3.96	2.07	1.53	2.938	3.35	
	100.6	*52.6*	*38.9*	*74.63*	*85.1*	
10VR7, 10VR7M	*4.33*	*2.25*	*1.53*	*1.575*	*0.88*	†
10ER7, 10ER7M	*110.0*	*57.2*	*38.9*	*40.01*	*22.4*	
20VR1, 20ER1	5.23	3.37	1.53	3.75	4.2	
	132.8	*85.6*	*38.9*	*95.25*	*106.7*	
20VR6	5.34	3.37	1.53	3.75	4.2	
	135.6	*85.6*	*38.9*	*95.25*	*106.7*	

† **±.02** / ***±.5***

Pricing

Consult your local Corcom sales representative for pricing.

Part No.	Part No.	Part No.
1VR1	10VR3	3ER7M
1VR3	10VR6	5ER1
2VR1	10VR7	5ER3
2VR3	10VR7M	5ER7
3VR1	20VR1	5ER7M
3VR3	20VR6	10ER1
3VR7	1ER1	10ER3
3VR7M	1ER3	10ER7
5VR1	2ER1	10ER7M
5VR3	2ER3	20ER1
5VR7	3ER1	
5VR7M	3ER3	Line Cord:
10VR1	3ER7	No. GA400