



# RF Power Line Penetration Filters for shielded enclosures (FCP-11, -12, -22, -23)

## HIGHLIGHTS

This series of Power Line Penetration Filters can be mounted through the outer wall of a shielded enclosure. The filters are RFI secure and supplied with threaded nipple. Filters supplied with bleeder resistor to prevent shock hazard.

Filters are also available with surge arresters

## These Filters are available in four series

**FCP-11: (60Hz)**

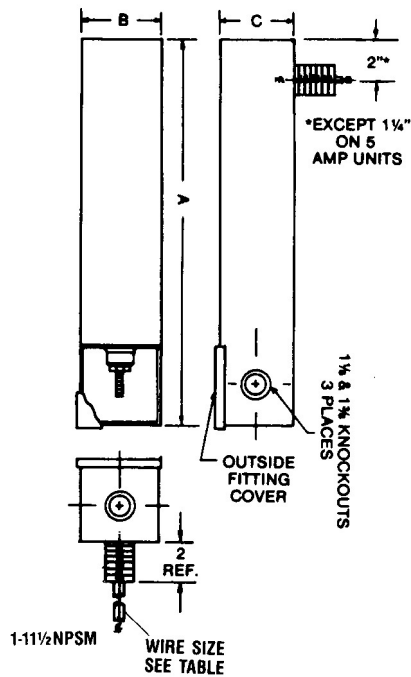
**FCP-12: (400Hz)** 100dB attenuation from 100 kHz to 10 GHz measured per MIL-STD-220A full load

**FCP-22: (60Hz)**

**FCQ-22: (60Hz)** attenuation from 9 kHz to 10 GHz measured per MIL-STD-220A full load.

**FCP-23: (400Hz)**

100dB attenuation from 14 kHz to 10 GHz measured per MIL-STD-220A full load.



FCP-11 Series 60 Hz  
FCP-12 Series available for 400 Hz

Part No	Current (AMP S)	Line to Ground Voltage		Frequency (Hz)	Dimensions (Inches)			AWG	APPR WT (LBS)
		VAC	VDC		A	B	C		
FCP-11-5	5	277	600	0-60	9	4	4	10	10
FCP-11-20	20	277	600	0-60	20	4	4	10	15
FCP-11-2x20	2x20	277	600	0-60	24	7	4	10	15
FCP-11-30	30	277	600	0-60	20	4	4	10	20
FCP-11-2x30 *	2x30	277	600	0-60	20	7	4	10	30
FCP-11-4x30 **	4x30	277	600	0-60	20	14	4	10	30
FCP-11-60	60	277	600	0-60	24	4	4	6	25
FCP-11-60	60	277	600	0-60	24	4	4	6	25
FCP-11-100	100	277	600	0-60	29	4 1/2	4 1/2	2	30
FCP-11-200	200	277	600	0-60	31	8	5 1/2	4/0	60
FCP-11-225	225	277	600	0-60	31	8	5 1/2	4/0	60
FCS-4x200***	200	277	600	0-60	34	24	5 1/2	4/0	60

\*Dual filters may be used in 3 phase systems up to 480 volts phase to phase

\*\*Special Filter 100dB from 14kHz to 13GHz

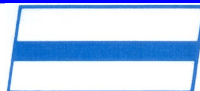
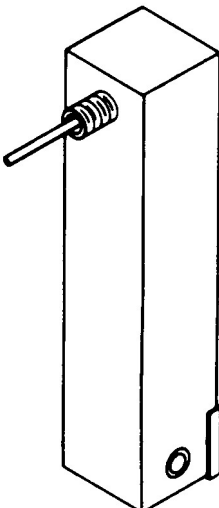
\*\*\*Special Filter 100dB from 30MHz to 13GHz

FCP-22 Series 60Hz

FCP-23 Series available for 400Hz

FCP-22-25	25	277	600	0-60	20	4	4	10	20
FCP-22-30	30	277	600	0-60	20	4	4	10	20
FCP-22-4x30	4x30	277	600	0-60	20	16	4	10	60
FCP-22-50	50	277	600	0-60	24	4	4	6	25
FCP-22-75	75	277	600	0-60	24	4	4	6	25
FCP-22-100	100	277	600	0-60	29	4 1/2	4 1/2	2	30
FCP-22-150	150	277	600	0-60	31	8	5 1/2	4/0	60
FCP-22-200	200	277	600	0-60	31	8	5 1/2	4/0	60

1 3/8 Dia. Clearance hole recommended for 1-1 1/2 NPSM conduit



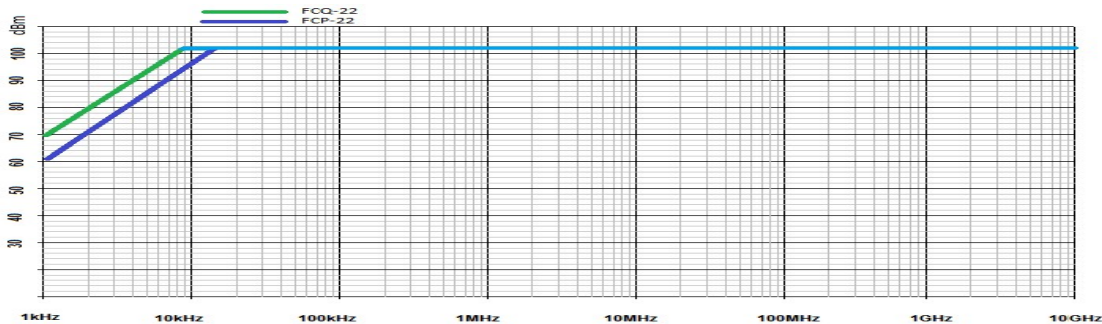


## *RF Power Line Penetration Filters for shielded enclosures (FCP-11, -12, -22, -23)*

FCP-22 Series 60 Hz in Dual, Triple\* and Quadruple configuration  
FCP-23 Series available for 400 Hz

Part No*	Current (AMPS)	Line to Ground Voltage		Frequency (Hz)	Dimensions (Inches)			AWG	APPR WT (LBS)
		VAC	VDC		A	B	C		
FCP-22-2x30	2x30	277	600	0-60	20	8	4	10	40
FCP-22-2x50	2x50	277	600	0-60	24	8	4	6	50
FCP-22-2x63	2x63	277	600	0-60	24	8	4	5	50
FCP-22-2x100	2x100	277	600	0-60	29	9	4 ½	2	50
FCP-22-4x30	4x30	277	600	0-60	24	16	4	6	100
FCP-22-4x63	4x63	277	600	0-60	24	16	4	6	100
FCP-22-4x200	4x200	277	600	0-60	31	23	12	2	400

\*Triple configuration available upon request



\* FCP-22 AND 23 SERIES 100dB from 14KHz TO 10GHz measured in a 50 Ω system per MIL-STD 220A load condition

\*\* FCP 11 AND 12 SERIES 100dB from 100kHz TO 10GHz measured in a 50 Ω system per MIL-STD 220A load condition

\*\*\* Also available in FCQ-22 SERIES 100dB from 9kHz to 10GHz

### SPECIFICATIONS

#### ELECTRICAL

**CURRENT RATING:** The filters shall be capable of withstanding 140% of rated current for 15 minutes without deterioration

**INSERTION LOSS:** The filters shall provide specified insertion loss of 100 db minimum over its indicated frequency range when measured in accordance with MIL-STD-220A

**VOLTAGE:** The filters shall be capable of operating continuously at full- rated voltage and withstanding an initial test of twice the rated voltage for one minute

#### MECHANICAL

**CASE:** The filter case shall be made of cold-rolled steel

**CONSTRUCTION:** Input and output terminals shall be completely enclosed in RF shielded compartments. Cover on the input compartment shall be screw-down type

**FINISH:** All filter cases shall be made corrosion-resistant with suitable plating

**IMPREGNANT:** The impregnant shall be non-flammable as classified by UL and MIL-F-15733

**TERMINALS:** The terminals shall be made of high temperature ceramic

