

Horwin PRF-V/Ux-x series is a "band pass" filters based on a quarter length 5 or 8 inches width square cavities. The use of large cavities provides a high input power rating and means high Q, resulting in a very narrow pass band.

There are one, two or three cavities filters available. More cavities provide greater selectivity and, when required, a wider pass-band. Filter nominal impedance is 50 Ohms. N-type "female" connectors are used for input/output connections.

Cavities are aluminium made with 5 mm thick top plate welded to the cavity body. Inner conductor and coupling loops are silver plated cooper made. Central tuning rod is invar made. All this provide excellent frequency stability in temperature range from - 30 to + 60 C°.

Filters are tuned for customer specified frequencies and no future adjustments should be required. If frequencies changes became necessary cavity pass frequency may be adjusted by tuned road and pass width by adjustable coupling loops.



PF-U2-8



PF-V3-8

PF	Pass Filter	PF-Vx-5			PF-Vx-8			PF-Ux-5			PF-Ux-8		
		VHF band pass filter 5" cavities			VHF band pass filter 8" cavities			UHF band pass filter 5" cavities			UHF band pass filter 8" cavities		
x	frequency range (V=VHF, U=UHF)	144 – 174			144 – 174			400 – 470			400 – 470		
x	cavities numbers	1	2	3	1	2	3	1	2	3	1	2	3
x	cavity width (inches)	1/4λ, 5"			1/4λ, 8"			1/4λ, 5"			1/4λ, 8"		
	Cavity size	1/4λ, 5"			1/4λ, 8"			1/4λ, 5"			1/4λ, 8"		
	Frequency range, MHz	144 – 174			144 – 174			400 – 470			400 – 470		
	Max. continuous power input, W	200			200			200			200		
	Cavities numbers	1	2	3	1	2	3	1	2	3	1	2	3
	ATT, dB/offset, Mhz												
	(0.5 dB insertion losses on central F)	-20/3	-	-	-20/2	-	-	-15/4	-	-	-15/2	-	-
	(2.0 dB insertion losses on central F)	-40/3	-50/2	-50/1	-35/2	-55/2	-65/2	-25/4	-45/4	-60/4	-28/2	-45/2	-60/2
	(2.5 dB insertion losses on central F)	-	-60/2	-55/1	-	-65/2	-75/2	-	-55/4	-80/4	-	-50/2	-75/2
	Dimensions, mm	H 850 850 850			850 850 850			400 400 400			400 400 400		
	(with tuning rod extended)	W 130 130 130			210 210 210			130 130 130			210 210 210		
		L 130 260 390			210 420 630			130 260 390			210 420 630		
	Weight, kg	2.7	5.5	8.3	3.5	7.1	10.7	1.5	3.1	4.7	3.0	4.1	6.2