

Horwin PRF-V/Ux-x series is a "band pass – band reject" filters based on a quarter wave 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 or reject spacing.

There are single or dual cavity 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 road is invar made. All this provides excellent frequency stability in temperature range from - 30 to + 60°C.

Filters are tuned for customer's specified frequencies and no further adjustments should be required. If frequency changes become necessary cavity pass frequency may be adjusted by tuning road and reject frequency by adjustable coupling loop and tuning capacitor.



PRF-Vx-5

PRF-Vx-8

PRF-Ux-5

PRF-Ux-8

PRF Pass-Reject Filter x frequency range (V=VHF, U=UHF) x cavities numbers x cavity width (inches)	PRF-Vx-5		PRF-Vx-8		PRF-Ux-5		PRF-Ux-8		
	VHF pass-reject filter 5" cavities		VHF pass-reject filter 8" cavities		UHF pass-reject filter 5" cavities		UHF pass-reject filter 8" cavities		
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	1	2	1	2	1	2	
Insertion losses, dB	0.5	1	0.5	1	0.5	1	0.5	1	
ATT, dB @ notch frequency	17	45	19	50	20	47	22	55	
Dimensions, mm (with tuning rod extended)	H	880	880	880	880	400	400	400	400
	D	130	130	210	210	130	130	210	210
	W	130	260	210	420	130	260	210	420
Weight, kg	2.7	5.5	3.5	7.1	1.5	3.1	2	4.1	