Hôrwin

VHF/UHF PASS-REJECT FILTERS with 5" & 8" Cavities

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 - $30 \text{ to} + 60^{\circ}\text{C}$.

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
<pre>PRF Pass-Reject Filter x frequency range (V=VHF, U=UHF) x cavities numbers x cavity width (inches)</pre>		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 D W	880 130 130	880 130 260	880 210 210	880 210 420	400 130 130	400 130 260	400 210 210	400 210 420
Weight, kg		2.7	5.5	3.5	7.1	1.5	3.1	2	4.1