

—Standard Valves—

SS 1971
Valve

SS 1971 VALVE

DOUBLE ENDED WATER COOLED TRIODE.

SPECIFICATION.

Cathode.

Pure Tungsten filament.
Constant voltage type.

Dimensions.

Net weight 7 lbs. (3,200 gms.)
Overall length $26\frac{1}{2}"$ (67.5 cms.)
Bulb diameter $3\frac{3}{8}"$ (8.9 cms.)

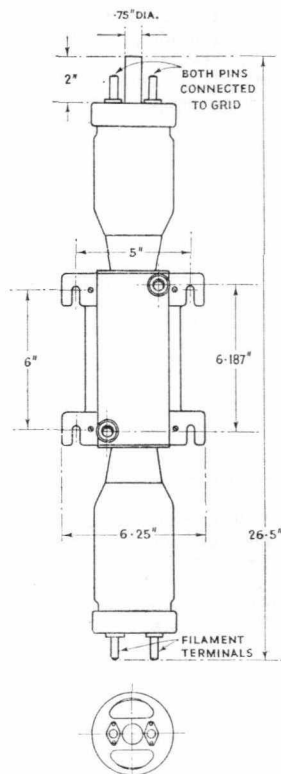
Water Flow.

5 gallons per minute.

Constants.

Filament voltage 19–21 volts
(exact filament voltage marked
on bulb).
Nominal filament current 64 amps.
Total emission 11 amps.
*Impedance 3,500 ohms
*Amplification factor 21
Grid-anode capacity 20 $\mu\mu\text{F}$.
Anode-filament capacity 5.5 $\mu\mu\text{F}$.
Grid-filament capacity 8 $\mu\mu\text{F}$.

* at anode current of 1.0 amp.



LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	12,000 volts
Maximum direct anode voltage for anode modulation	9,000 volts
Maximum direct anode current	2.75 amps.
Maximum anode dissipation	15 Kw.
Maximum grid dissipation	250 watts
Maximum frequency for above ratings	15 Mc.
Anode voltage for frequency of 22 Mc.	10,000 volts

Note :—No water jacket required as it forms part of the valve.

V.1971-I
Nov. 1937

—Standard Valves—

TYPICAL OPERATING CONDITIONS.

	Class B. A.F. Amp. For balanced 2 valve circuit.
Direct anode voltage	10,000 volts
Grid bias	—250 to —350 volts
Direct anode current per valve—zero signal	0.45 amps.
Direct anode current per valve—maximum signal	2.2 amps.
Load resistance—anode to anode	4,000 ohms.
Maximum signal output—2 valves	24 Kw.
Anode dissipation	10 Kw.

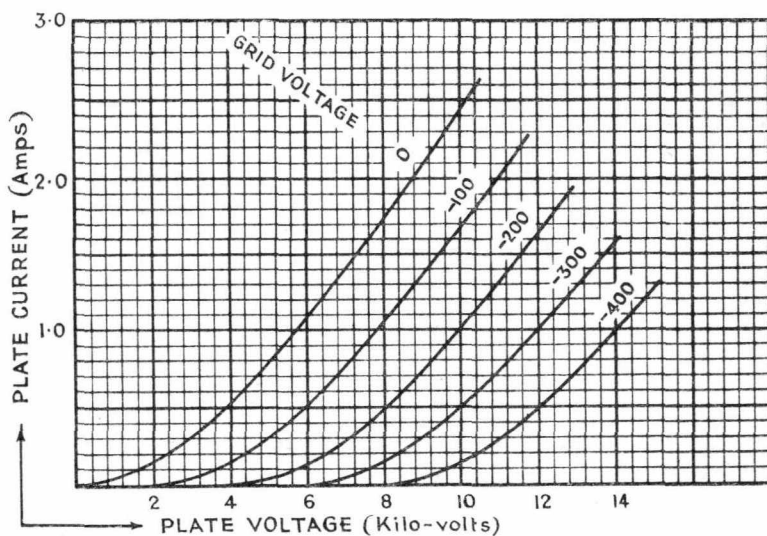
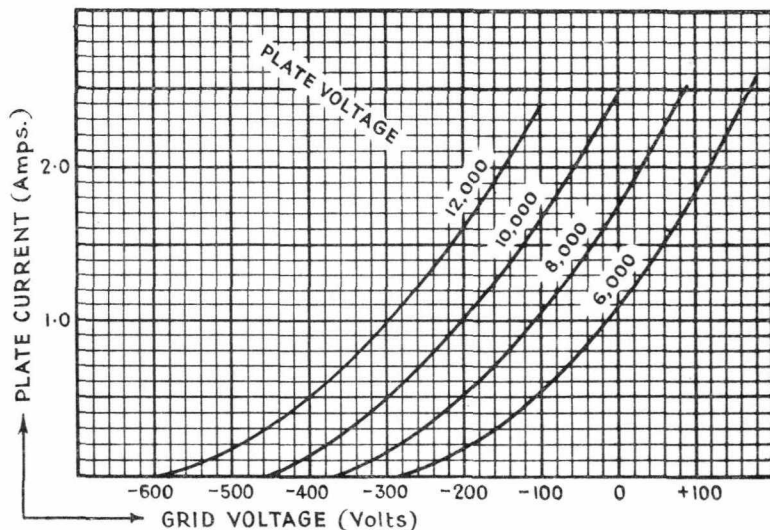
RADIO FREQUENCY OPERATION.

	Class B Telephony	Class C Telephony	Class C Telegraphy
	Modulated Carrier applied to grid	Subject to anode modulation	Unmodulated
Direct anode voltage	10,000	7,000	10,000 volts
Direct anode current	1.5	1.5	3 amps.
Grid bias	—400	—650	—900 to —1,300 volts
Anode dissipation	10	3.5	10 Kw.
Carrier output	5	7	20 Kw.

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These curves are taken with A.C. filament heating, grid and anode voltages being referred to the centre point of the filament.



V.1971.2
Nov. 1937

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