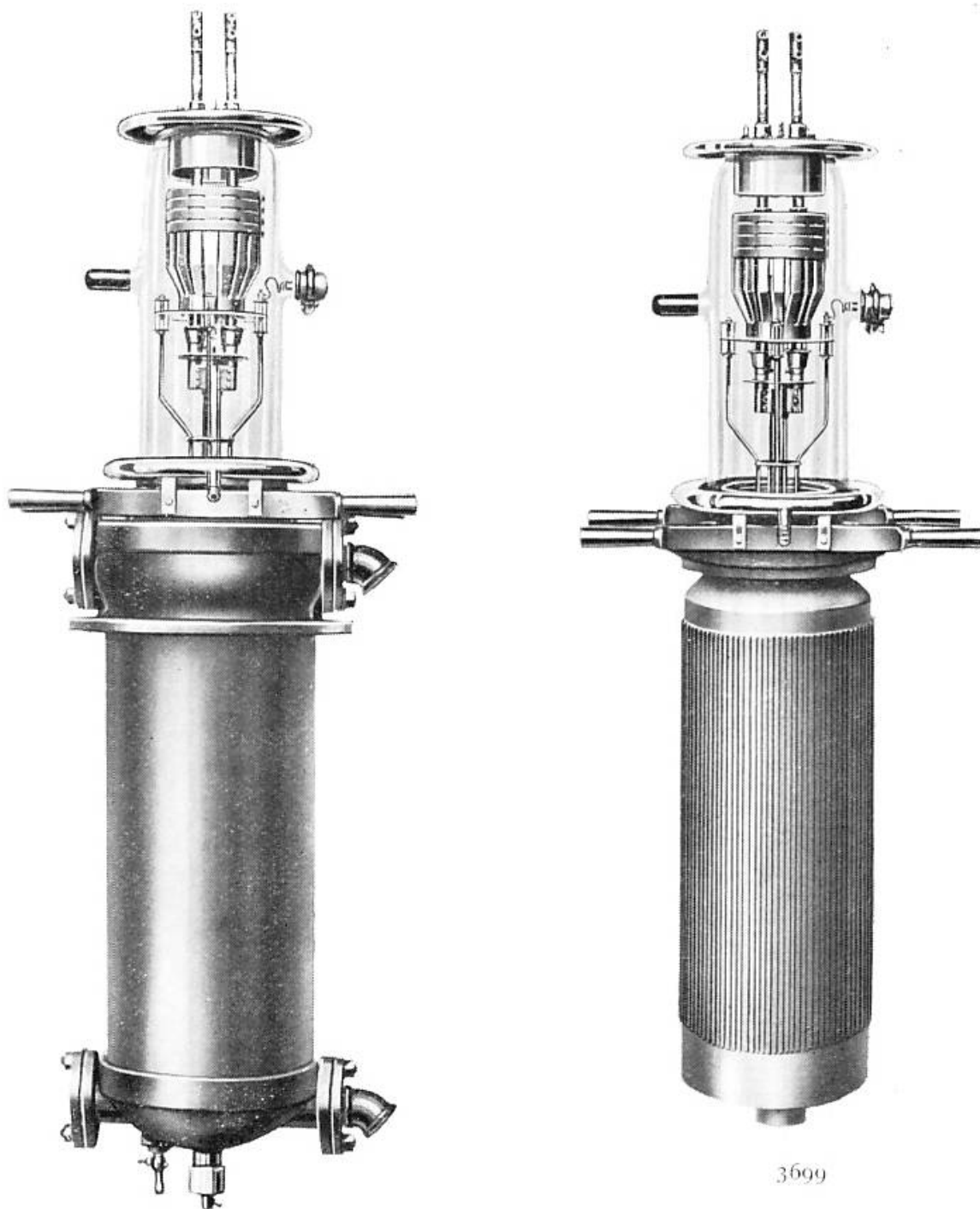


Transmitting Valve

TYPE C.A.T.14

(Cooled Anode)



(Approximate overall dimensions : 1,200 × 420 m/m.)

A cooled anode valve suitable for use as a high frequency amplifier in telegraph or telephone transmitters.

The anode forms part of the valve envelope, and is designed for cooling by water circulated in direct contact with the anode. The rate of flow should be about 40 gallons per minute.

The design of this valve requires water cooling of the filament seals. Air cooling of the glass portion of the envelope is also required.

When used as an amplifier of modulated high frequency currents the continuous anode dissipation should not exceed 150 kw. at an anode voltage of 18—20 kv. D.C.

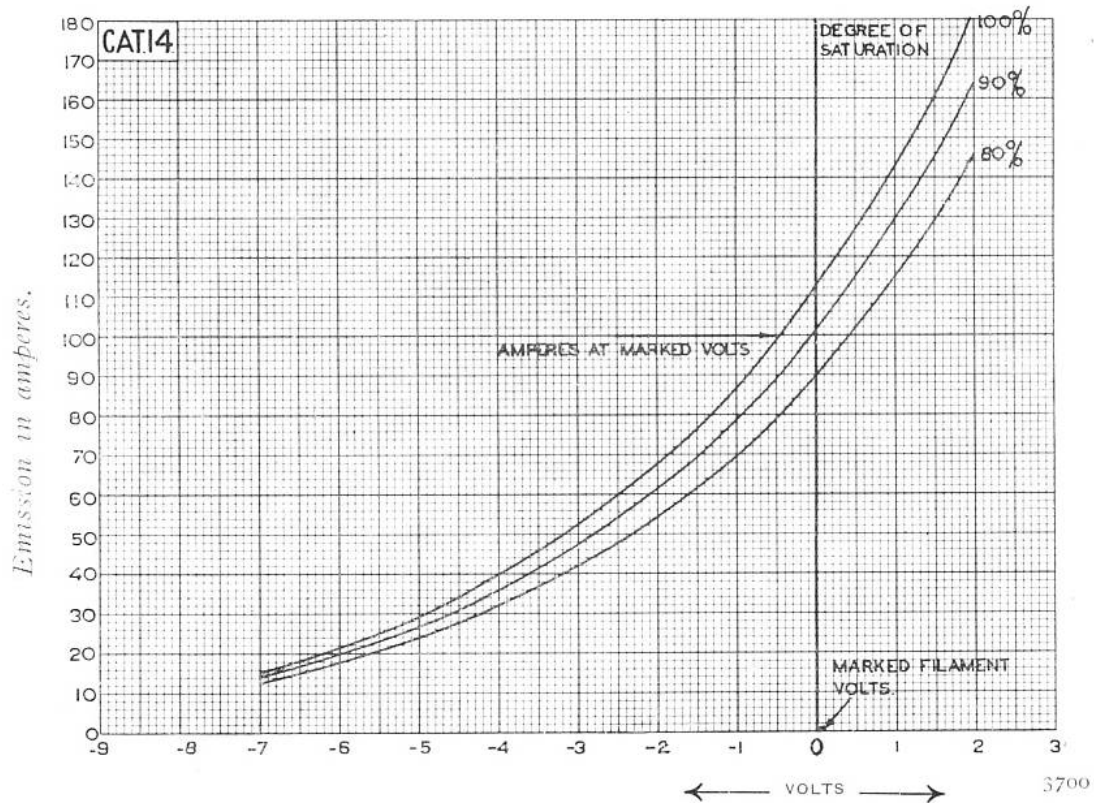
Marked Volts. Individual valves are marked with the filament voltage which gives 100 amperes emission current at 90% saturation.

Approximate Data :

Filament volts	32.5	Emission amperes at 90% saturation	...	100
Filament current (amps.)	...	460		Amplification factor	...	45
Anode volts max. (D.C.)	...	20,000		Mutual Conductance (ma/v.)	...	50
Anode dissipation max. (k.w.)	...	150				

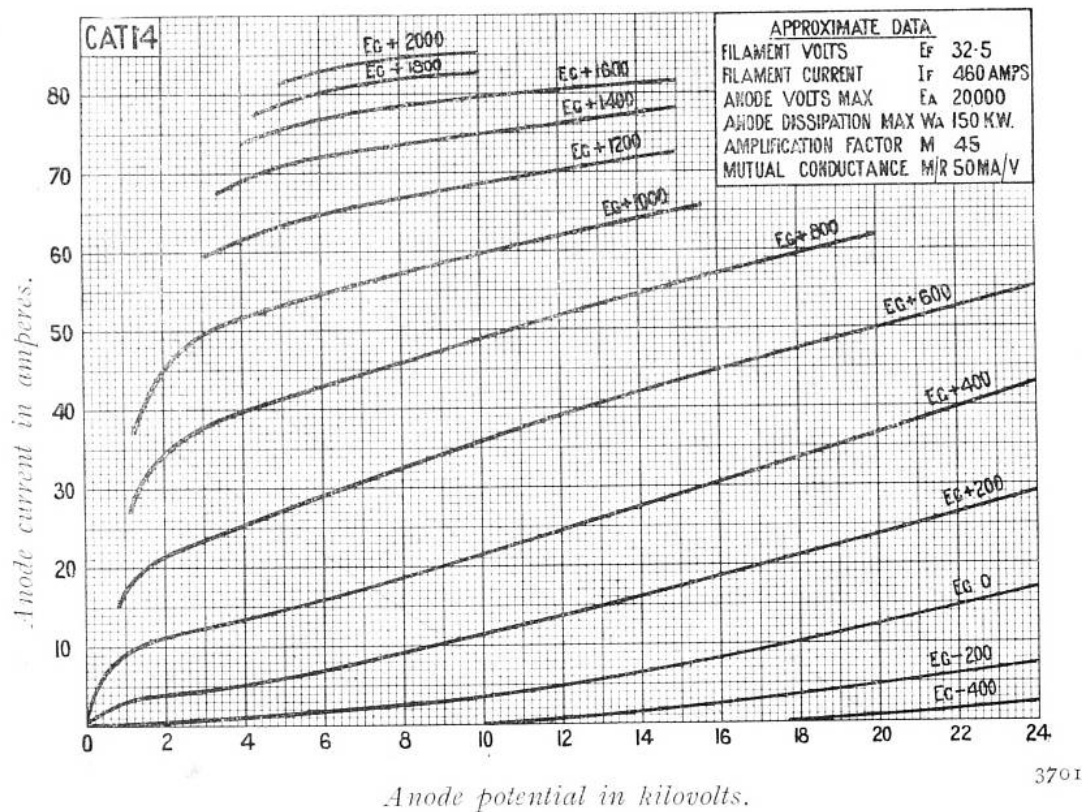
Code Word : IWCRU

Variation of emission with filament volts as related to marked filament volts for various degrees of saturation of emission current.



Marked volts to be decreased by above amount.

Marked volts to be increased by above amount.



Taken at filament volts to give 100 amperes emission at 90 per cent. saturation.

Characteristic Curves of Average Valve.

TYPE C.A.T.14