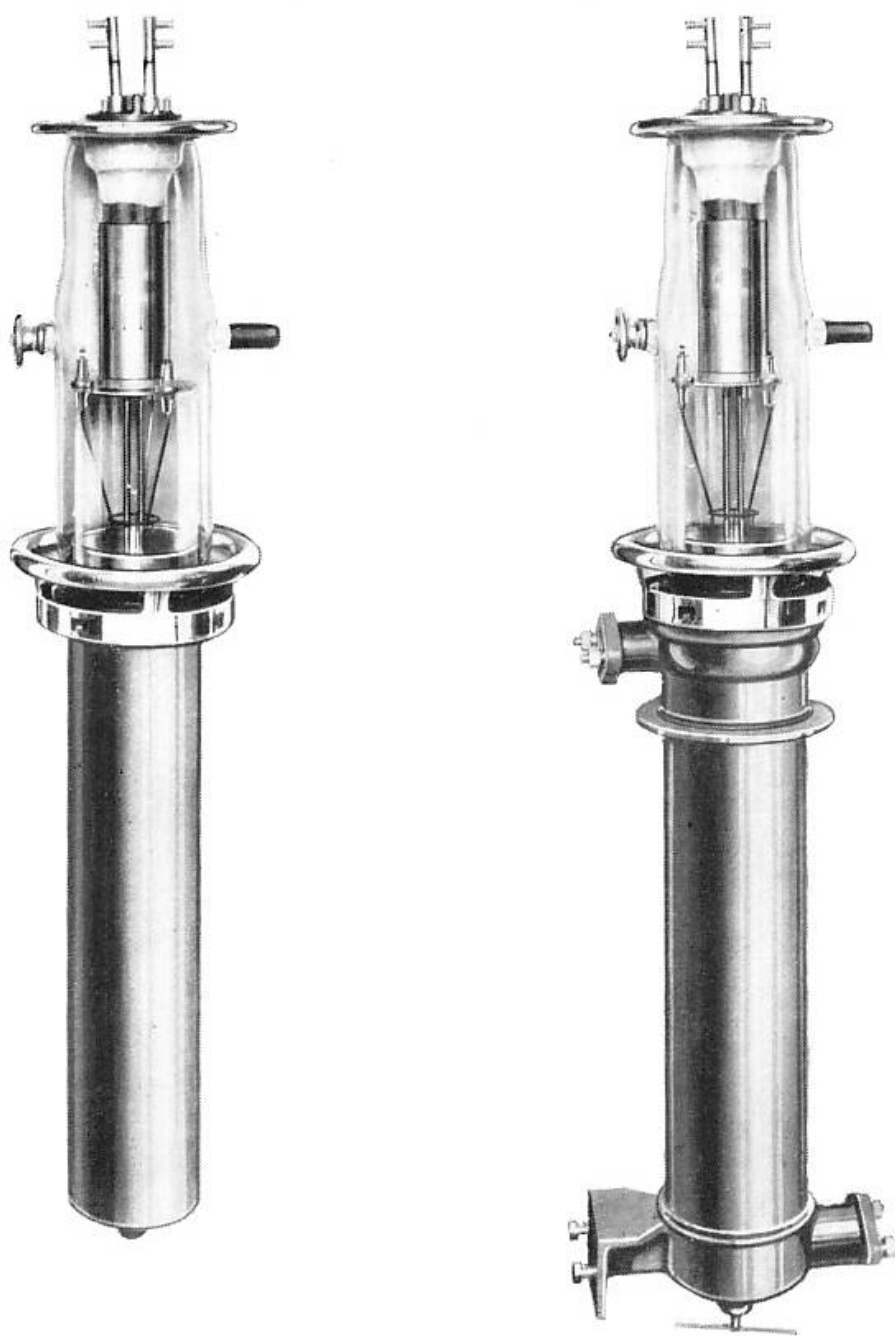


Transmitting Valve

TYPE C.A.T.12A

(Cooled Anode.)



(Approximate overall dimensions : 1,120 × 200 ³⁸²⁶ m/ms.)

A cooled anode valve suitable for use as a high frequency amplifier, in medium or long wave telegraph or telephone transmitters. Its characteristics render it suitable for use also as a modulator.

The anode forms part of the valve envelope. For the purpose of cooling, water flowing at the rate of not less than 20 gallons per minute should be circulated in direct contact with the anode.

The external valve filament leads require to be cooled by circulating water. Air cooling of the glass envelope near the anode seal is also required.

When used as an amplifier of modulated high frequency currents the continuous anode dissipation should not exceed 75 kilowatts at an anode voltage of 18 k.v. D.C.

As a low frequency amplifier or modulator valve the maximum permissible dissipation is 60 k.w. at 18 k.v. D.C.

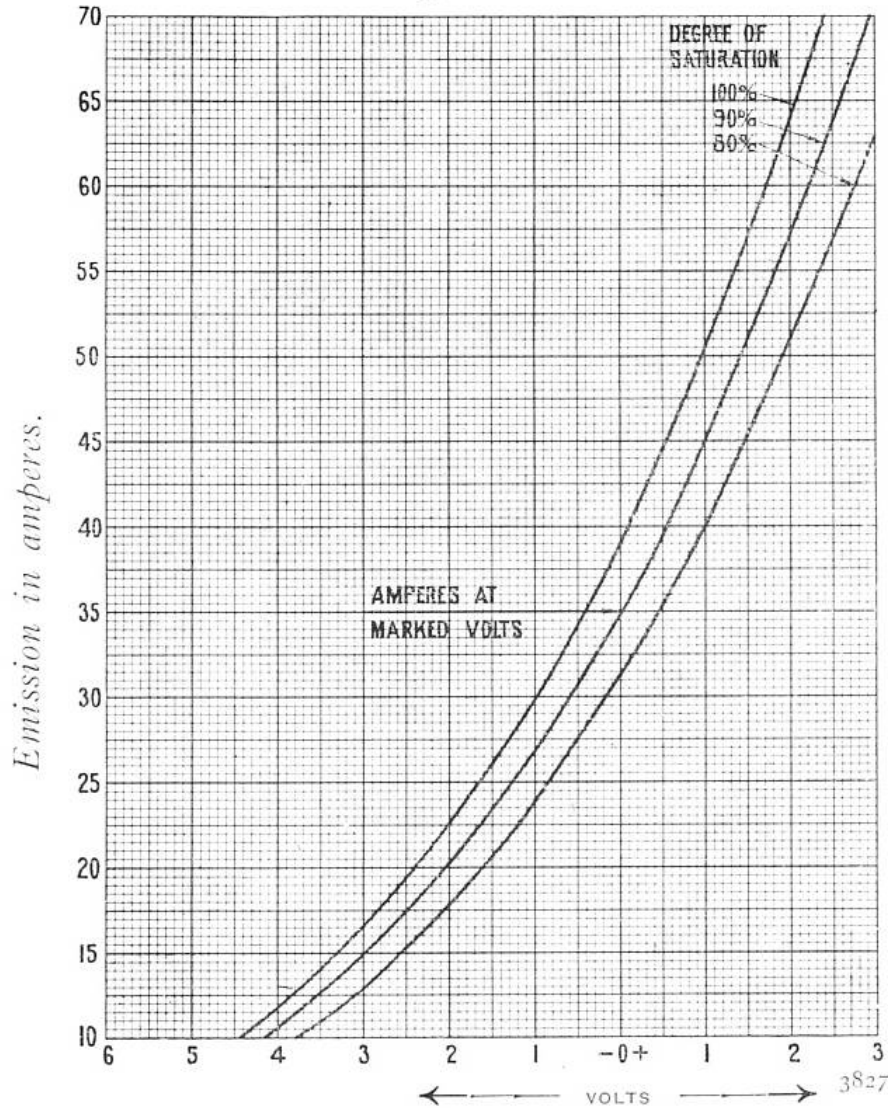
Marked Volts. Individual valves are marked with the filament voltage which gives 35 amperes emission at 90 % saturation.

Approximate Data :

Filament Volts	30	Emission in amperes at	
			90 % saturation	.. 35
Filament Current	220	Amplification factor	.. 10
Anode Volts (max.) D.C.	..	18,000	Mutual Conductance (Ma/v)	20

Code Word : IWDIN.

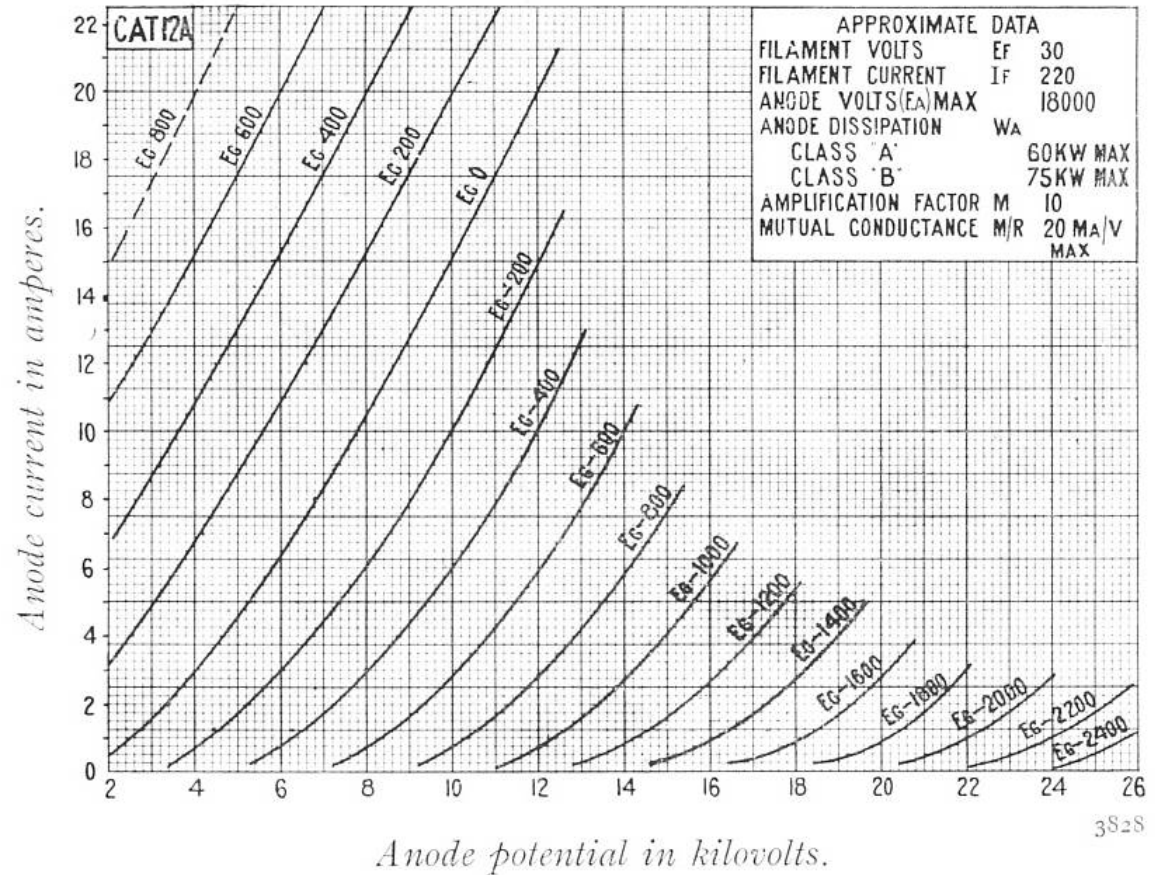
Variation of emission with filament volts as related to marked filament volts for various degrees of, and saturation of, emission current.



Marked volts to be decreased by above amount.

Marked volts to be increased by above amount.

Characteristic curves of average Valve.



Taken at filament volts to give 35 amperes emission at 90 per cent. saturation.

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