

Transmitting Valve

TYPE C.A.T.15

(Cooled Anode.)



(Approximate overall dimensions : 388 × 176 m/ms.)³⁸²⁹

A cooled anode valve suitable for use as a high frequency amplifier in short wave telegraph or telephone transmitters. The anode forms part of the valve envelope, designed for cooling by water circulated in direct contact with the anode.

The required flow of water is 1.5 gallons per minute.

In suitable circuits on a telegraphic load the valve may be operated on wavelengths of the order of 3 metres. At 3 metres the maximum input is 0.75 ampere mean anode current at 5,000 anode volts D.C. At 2 metres wavelength the input must be reduced and should not exceed 0.6 ampere mean anode current at 3,500 anode volts D.C.

The maximum permissible continuous anode dissipation is 2.5 kw.

Marked Volts. Individual valves are marked with the filament voltage which gives 4.5 amperes emission at 90 % saturation.

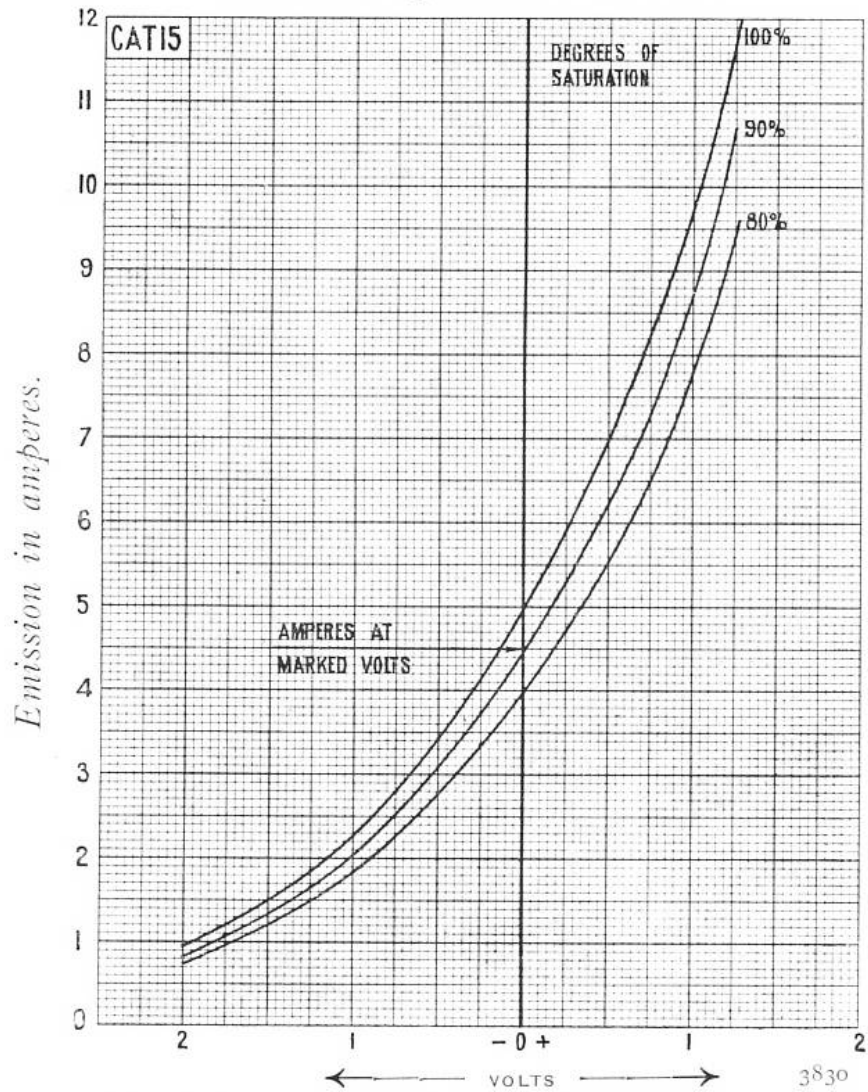
Approximate Data :

Filament Volts 11	Emission in amperes at	
		90 % saturation	.. 4.5
Filament Current (amps.)	.. 50	*Amplification factor	.. 50
Anode Volts (max.) D.C.	.. 5,000	*Impedance (ohms)	.. 20,000

* Taken about anode volts 5,000 and grid volts zero.

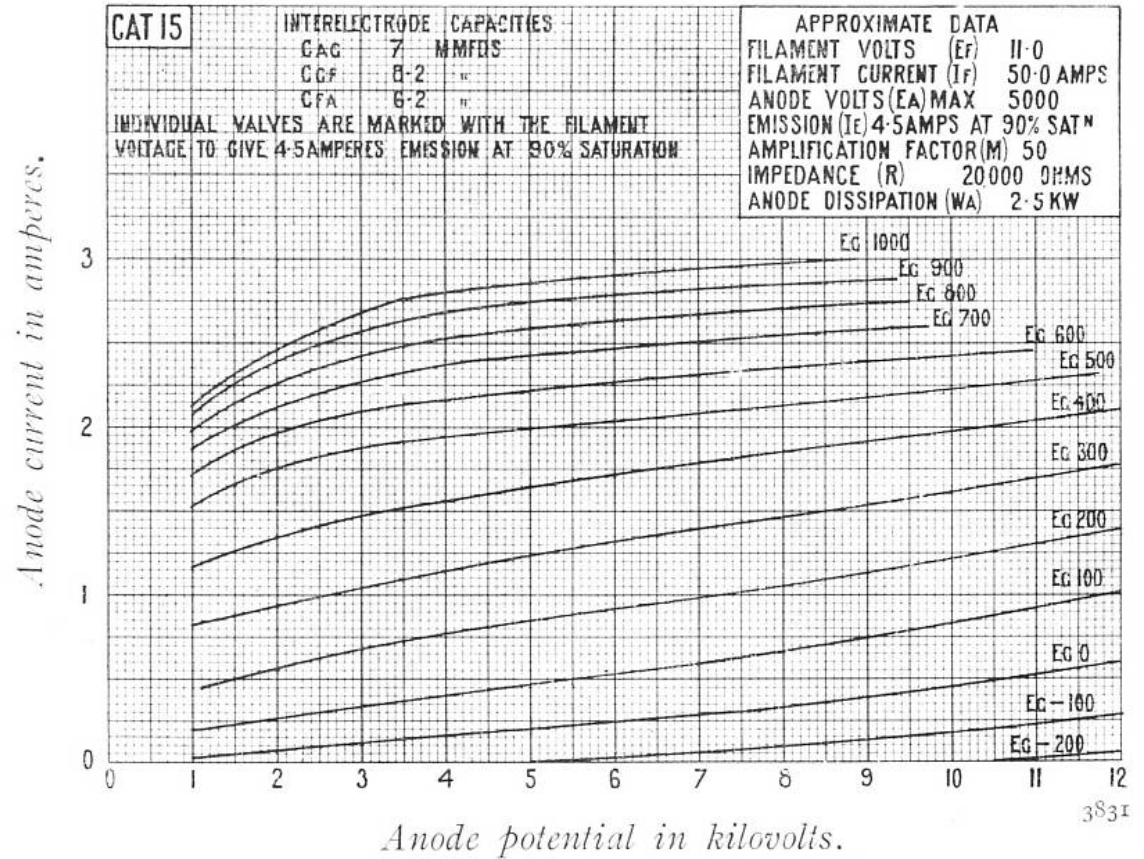
Code Word : IWDRO.

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.

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