

# Modulating Valve

## TYPE M.T.12A

(Molybdenum Electrodes)



(Approximate overall dimensions: <sup>3507</sup> 320 × 125 m/m.)

As a *modulating valve* the maximum continuous anode dissipation is 75 milliamperes at 2,500 anode volts D.C. At higher anode voltages the maximum permissible anode loss is reduced.

As a *high frequency amplifier* on a telegraphic load at wavelengths not less than 15 metres, the input should not exceed 100 milliamperes mean anode current at 2,000 anode volts D.C. When so used it is recommended that a shield be fitted over the valve envelope. At this rating it will be found necessary to adjust the filament voltage to approximately 13.25 volts. On wavelengths not less than 300 metres the anode voltage may be increased to 3,000 volts D.C. The maximum continuous anode dissipation permissible under oscillating conditions is 200 watts.

### Approximate Data:

#### As a modulator.

Filament volts ... ..	12.5	Anode volts D.C. ...	2,000-3,000
Filament amperes ... ..	5.5	Total emission (milliamps.) ...	300

#### As a high frequency amplifier.

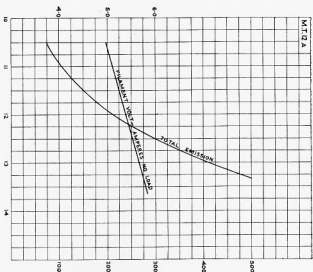
Filament volts ... ..	13.25	Anode volts D.C. ...	2,000-3,000
Filament amperes ... ..	5.8	Total emission (milliamps.) ...	475
*Amplification factor ...	9	*Impedance (ohms) ...	7,500

\* Taken about anode volts 2,000 and grid volts—100.

Code Word: IVIPZ.

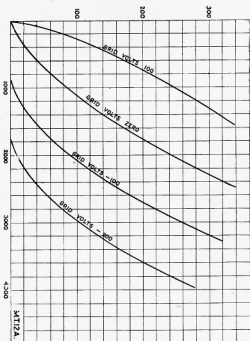
MARCONI'S WIRELESS TELEGRAPH CO., LTD.,  
MARCONI HOUSE,  
STRAND, LONDON, W.C. 2.

Filament current in amperes.



Total emission in milliamperes.

Anode current in milliamperes.



Filament potential in volts.

3506

Characteristic Curves of Average Valve.

TYPE M.T.12A

Anode potential in volts.

2745