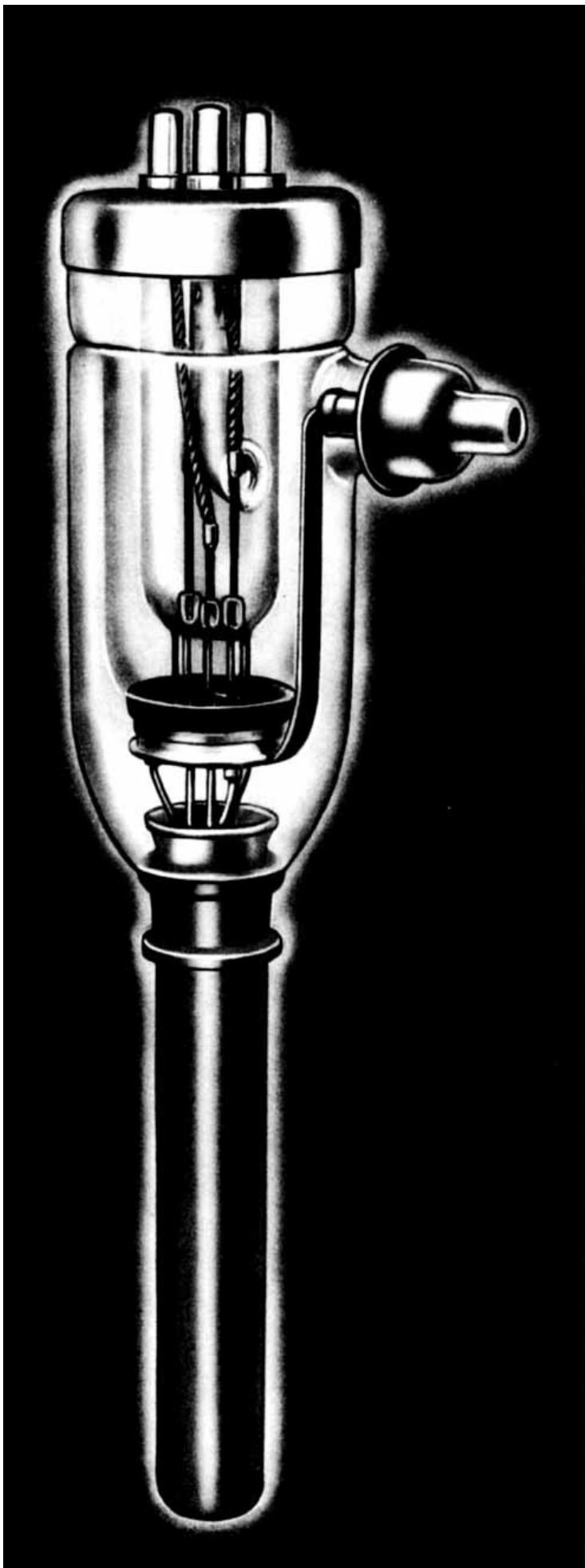


FEDERAL

F-891 TRANSMITTING TUBE



TECHNICAL DATA

Main Use	Modulator.
Number of Electrodes	3
Filament Voltage	22 volts
Current	60 amperes
Type	Tungsten, Two-Unit
Excitation	D-C. Single or Two Phase A-C
Thermionic Emission	10 amperes
Average Characteristic Values calculated at $E_b = 10000$, $I_b = 0.75$ ampere, $E_f = 22$ volts.	
Grid Voltage (approximate)	—1000 volts
Amplification Factor	8
Mutual Conductance	3300 micromhos
Plate Resistance	2400 ohms
Approximate Direct Inter-electrode Capacitances	
Plate to Grid	27 mmf.
Grid to Filament	18 mmf.
Plate to Filament	2 mmf.
Type of Cooling	Water
Water Jacket	Standard or Federal Type 1000-A

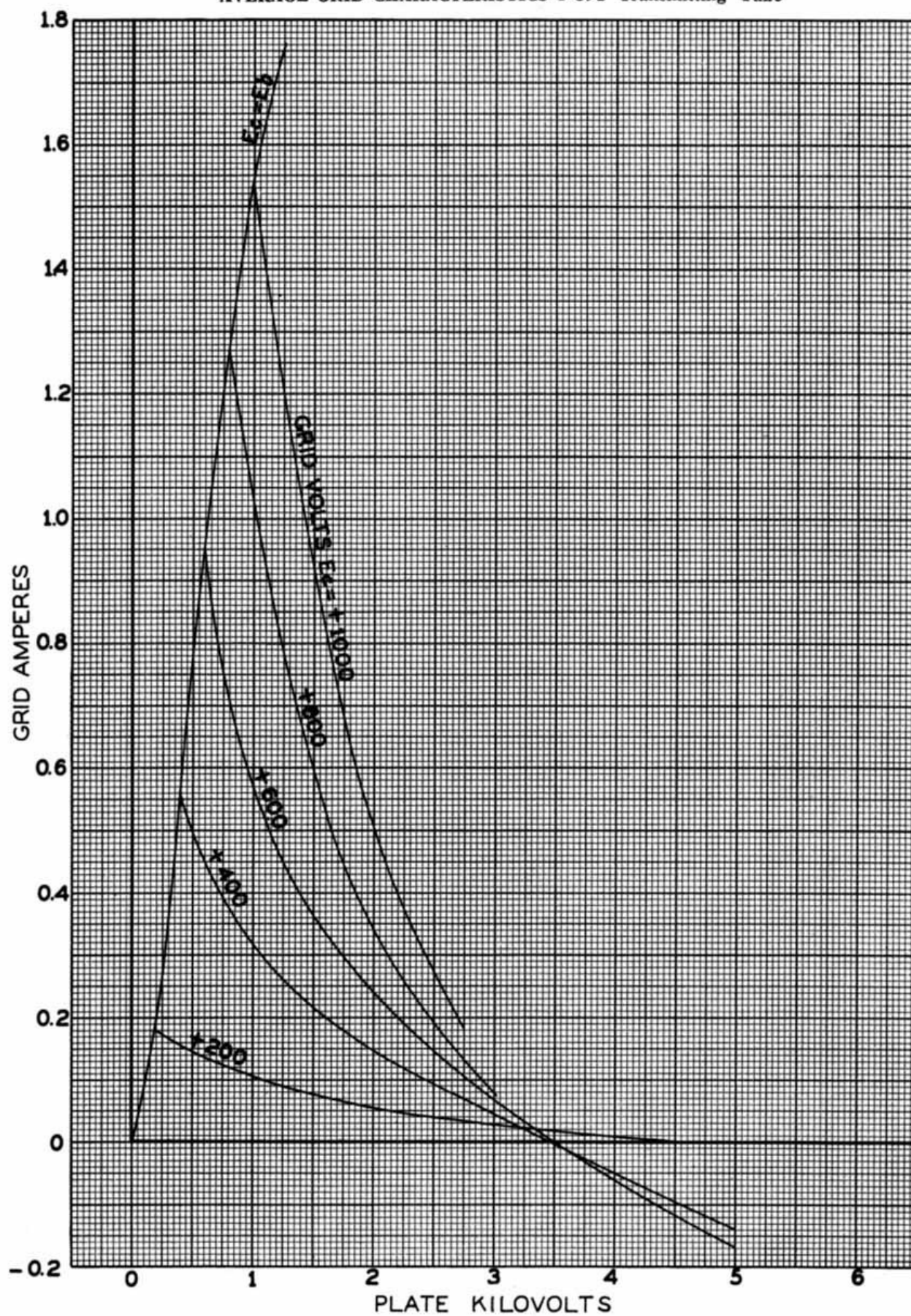
The information above and in the following pages by no means represents exact conditions of operation to be imposed for any particular situation. Since tubes are used under many widely different conditions the manufacturer will gladly furnish information regarding characteristics for design purposes.

Manufactured by

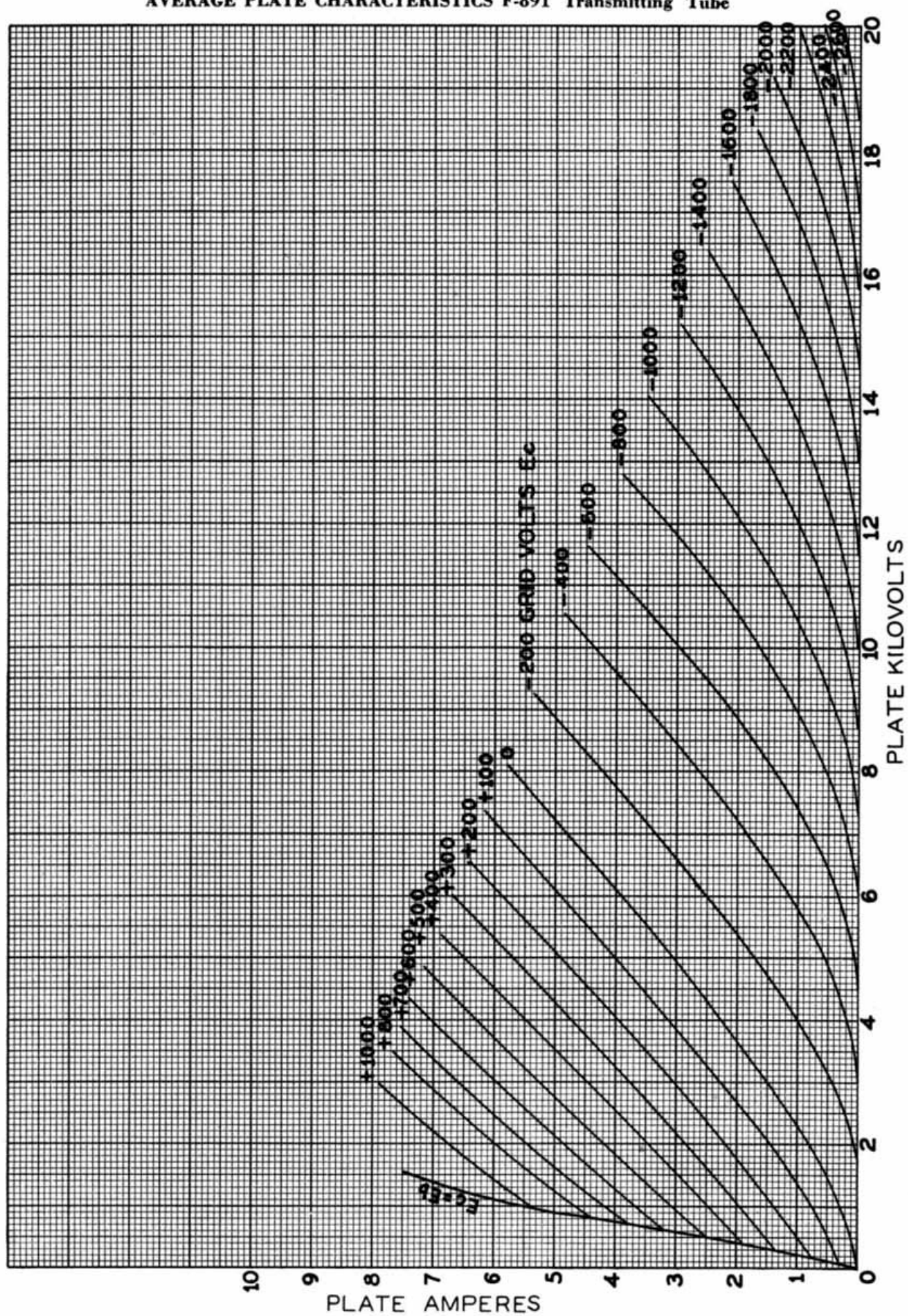
FEDERAL TELEGRAPH CO.

200 Mt. Pleasant Avenue Newark, N. J., U. S. A.

AVERAGE GRID CHARACTERISTICS F-891 Transmitting Tube



AVERAGE PLATE CHARACTERISTICS F-891 Transmitting Tube



Maximum Ratings

F-891 Transmitting Tube

CLASS A AUDIO AMPLIFIER OR MODULATOR

D-C Plate Voltage	12000 volts
Plate Input	7500 watts
Plate Dissipation	7500 amepres

CLASS B AUDIO AMPLIFIER OR MODULATOR

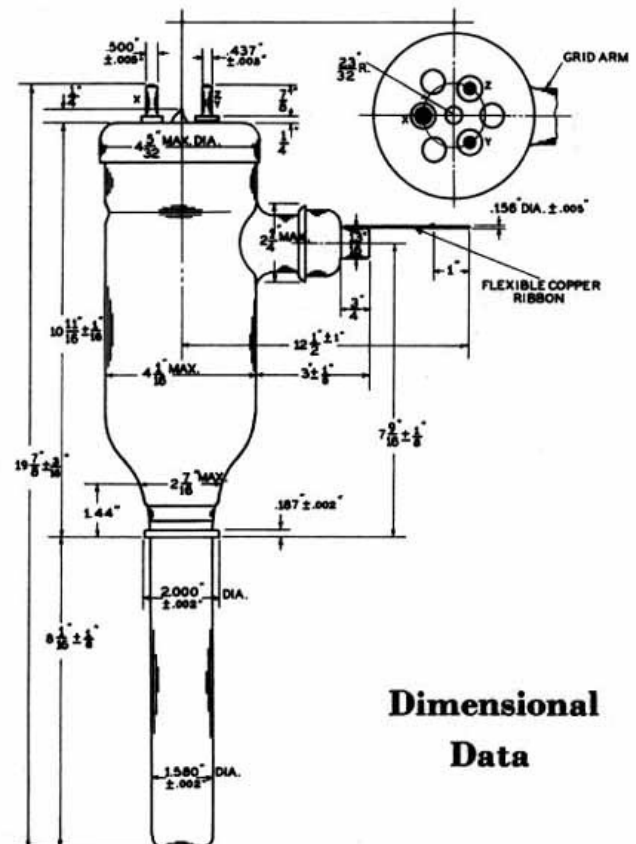
D-C Plate Voltage	15000 volts
Max. Signal D-C Plate Current	2.0 amperes
Max. Signal Plate Input	20000 watts
Plate Dissipation	5000 watts

Typical Operation Data

F-891 Transmitting Tube

CLASS A, A-F POWER AMPLIFIER & MODULATOR

Filament Voltage	22 volts
D-C Plate Voltage	10000 volts
D-C Grid Voltage	-1020 volts (approx.)
Peak Grid Swing	1009 volts (approx.)
D-C Plate Current	0.720 amps.
Plate Resistance	2380 ohms
Transconductance	3370 micromhos
Load Resistance	10300 ohms
Power Output	
(5% Second Harmonic)	2000 watts



Dimensional Data