AX 50 Full-wave gas-filled rectifying valve

The AX 50 is a full-wave gas-filled rectifying valve for use in fairly large amplifier equipment.

**FILAMENT RATINGS**

Heating: direct by A.C.
Heater voltage .................................................. $V_f = 4$ V
Heater current .................................................. $I_f = 3.75$ A

**MAXIMUM RATINGS**

Secondary (A.C) voltage of the power transformer on no load ................................... $V_{tr} = \max. 2 \times 500$ V
D.C. output .................................................. $I_o = \max. 250$ mA
Voltage drop in the valve .................................. $V_{are} = \max. 15$ V
Permissible capacitance of capacitor across input of the smoothing circuit: $C = \max. 64 \mu F$

When a capacitor is connected across the smoothing circuit:
The ohmic resistance in the D.C. circuit, with $C = 64 \mu F$ .................................. $R_l = \min. 200$ ohms
with $C = 32 \mu F$ .................................. $R_l = \min. 150$ ohms
with $C = 16 \mu F$ .................................. $R_l = \min. 100$ ohms

For the correct operation of this valve reference should be made to the notes on the AX 1.
Fig. 3
Loading curves (direct voltage as a function of the output current) with respect to different values of the total resistance $R_t = R_a + n^2 R_p$ in a smoothing circuit in which a choke is the first component. The voltage curves relating to lower values of current for chokes of 12 and 42 H are shown by the broken lines.

Fig. 4
Loading curves (direct voltage as a function of the output current) for different values of the total resistance $R_t = R_a + n^2 R_p$ in a smoothing circuit in which the first component is a capacitor.