

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. $V_{tr} = \text{max. } 2 \times 500$ V_{eff}
 D.C. output $I_o = \text{max. } 250$ mA
 Voltage drop in the valve $V_{arc} = \text{max. } 15$ V

Permissible capacitance of capacitor across input of the smoothing circuit: $C = \text{max. } 64$ μ F

When a capacitor is connected across the smoothing circuit:

The ohmic resistance in the D.C. circuit, with $C = 64$ μ F $R_t = \text{min. } 200$ ohms
 with $C = 32$ μ F $R_t = \text{min. } 150$ ohms
 with $C = 16$ μ F $R_t = \text{min. } 100$ ohms

For the correct operation of this valve reference should be made to the notes on the AX 1.

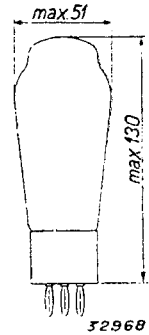


Fig. 1
Dimensions in mm.

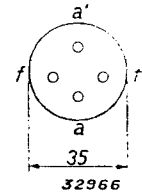


Fig. 2
Arrangement of base connections and electrodes.

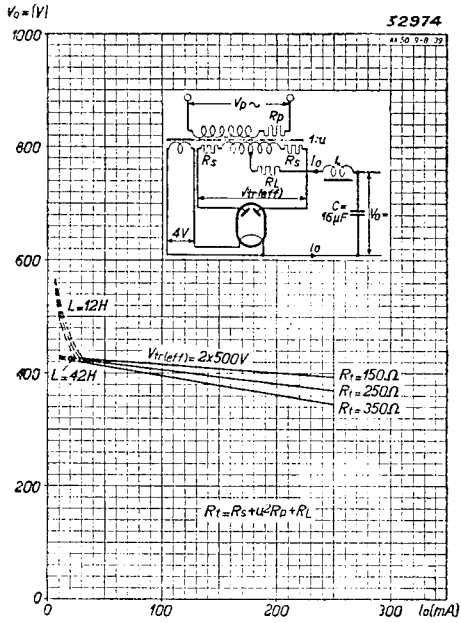


Fig. 3

Loading curves (direct voltage as a function of the output current) with respect to different values of the total resistance $R_L = (R_L + I_s + u^2 R_p)$ 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.

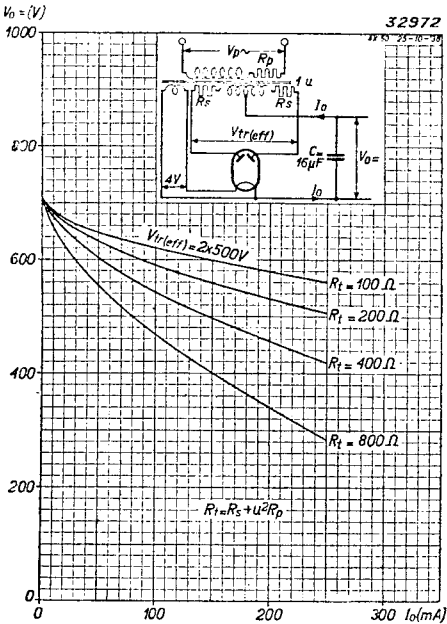


Fig. 4

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