

# 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<sub>eff</sub>  
 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:  $C = \text{max. } 64$   $\mu$ F

When a capacitor is connected across the smoothing circuit:

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

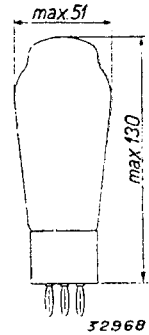


Fig. 1  
Dimensions in mm.

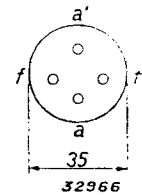


Fig. 2  
Arrangement of base connections and electrodes.

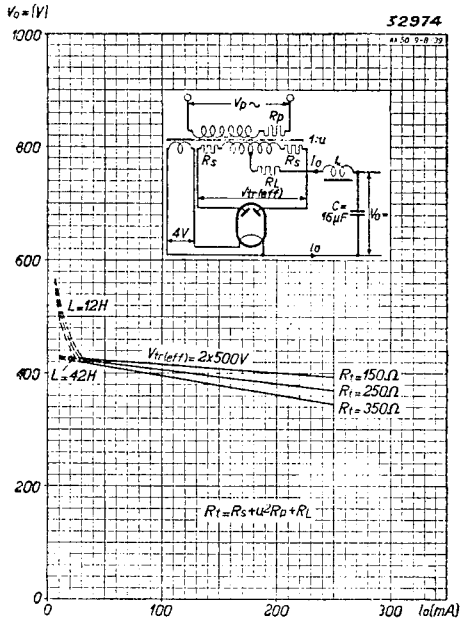


Fig. 3

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

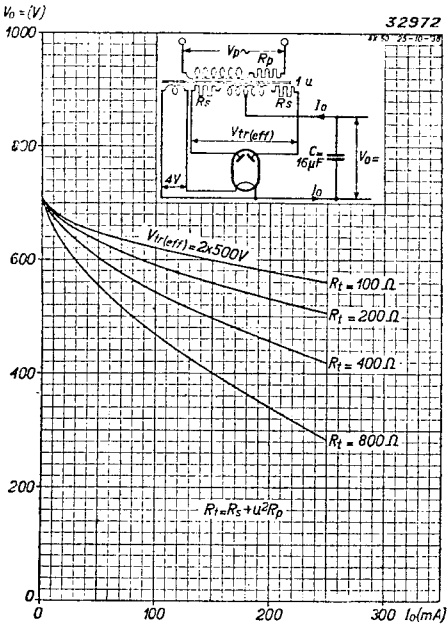


Fig. 4

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