

4 VALVE DATA J OSCILLOSCOPE AND PICTURE TUBES

MW6-2 (contd.)

SCREEN Metal-backed

LUMINESCENT COLOUR

White.

The picture diameter must not exceed 57.5 mm

FOCUSING AND DEFLECTION

Magnetic

The number of ampere-turns required for focusing at $V_a=25KV$ and with an air-gap of 11 to 13 mm in the magnetic circuit is 920.

The inner diameter of the focus coil should be 27.5 mm, and provision should be made for adjusting in through 2.5 to 3° in both the horizontal and vertical directions for picture centering.

The deflection angle is 38°

TYPICAL OPERATING CONDITIONS

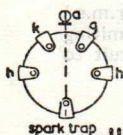
V_a	25	KV
I_a (av)	100	μA
* V_g for cut-off	-40 to -90	V

*In no circumstances must the grid be allowed to become positive with respect to the cathode

LIMITING VALUES

V_a max.	25	KV
** V_{h-k} max.	± 125	V

** It is necessary to ensure that this value is not exceeded during the warming up period immediately after switching on.



BASE :
V

DIMENSIONS

L=268 mm
D= 65 mm

MW22-14 Television picture tubes with 9 in. diameter screen.

MW22-14C These tubes are suitable for series operation

MW22-17 HEATER

V_h 6.3 V I_h 0.3 A

MW22-18

Important Note.—The heater voltage must not exceed 8.5 V when the supply is switched on. If the heater is connected in series with the heaters of other valves a current limiting device should be included in the circuit to ensure that this voltage is not exceeded.

CAPACITANCES

C_g -all	<10	$\mu\mu F$
C_k -all	<10	$\mu\mu F$
C_{a2-M}	1,000	$\mu\mu F$



EXTERNAL CONDUCTIVE COATING

Types MW 22-14 and MW 22-18 have an external conductive coating designated M which must be earthed. The capacitance $c_{a2}-M$ may be used to provide smoothing for the EHT supply.

Types MW 22-14C and MW 22-17 have no external conductive coating

MW22-14
MW22-14C
MW22-17
MW22-18
(contd.)

FLUORESCENT COLOUR

White

FOCUSING AND DEFLECTION Magnetic

With the centre of the deflector coils 204 mm from the centre of the screen, the deflection sensitivity at $V_{a2}=7$ KV is $0.08 \times L$ mm/gauss.

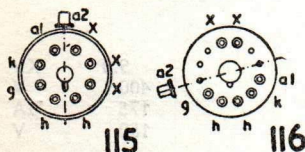
Where L =length of the electron path through the field of the deflector coil in mm.

TYPICAL OPERATING CONDITIONS

V_{a2}	7.0	KV
V_{a1}	200	V
* V_{k1} for cut-off	-40	V
Focusing ampere-turns	650 approx.	
*In no circumstances must the grid be allowed to become positive with respect to the cathode.		

LIMITING VALUES

V_{a2} max.	9.0	KV
V_{a1} max.	400	V
I_{a2} max.	100	μ A
V_{h-k} max.	150	V



DIMENSIONS : $L=376$ mm $D=230$ mm

BASES :

MW 22-14	MW 22-17
MW 22-14C	MW 22-18
B8G (115)	B12A (116)

Television picture tubes with 12 in. diameter screens

MW31-14C
MW31-17
MW31-18

HEATER

V_h 6.3 V I_h 0.3 A. Suitable for series operation, D.C. or A.C.

Note.—The heater voltage must not exceed 8.5 when the supply is switched on. If the heater is connected in series with the heaters of other valves a current limiting device should be included in the circuit to ensure that this voltage is not exceeded.

