



FLYING SPOT SCANNER TUBES

14in. diagonal Rectangular Tubes with metal backed screen and external conductive coating. Primarily designed for general Flying Spot Scanner applications.

FOCUS Low Voltage Electrostatic.

DEFLECTION Magnetic.

SCREEN

Phosphor ... Type 'A' Type 'Q' Type 'Q2'

Fluorescence ... Green Blue/Violet Magenta

Persistence ... Ultra short Killed *

For further details, refer to the relevant phosphor characteristics at the front of this section of the handbook.

PHYSICAL DETAILS.

Base B12A (Duodecal).

Anode Cap CT8 (Cavity Type).

Max. Overall Length 420 mm.

Nom. neck diameter 37 mm.

For other dimensions see drawing overleaf.

Mounting Position Any.

These tubes have an external conductive coating which may be used for E.H.T. smoothing.

BASE CONNECTIONS.

Pin 1—Heater. Pin 7—No Connection.

Pin 2—Grid. Pin 8—No Pin.

Pin 3—No Pin. Pin 9—No Pin.

Pin 4—No Pin. Pin 10—1st Anode.

Pin 5—No Pin. Pin 11—Cathode.

Pin 6—3rd Anode. Pin 12—Heater.

Side Contact—2nd Anode, 4th Anode.

HEATER.

†Heater Voltage 6.3 volts.

Heater Current 0.3 amp.

RATINGS.

Max. A₁ Voltage 500 volts.

Max. A₂+A₄ voltage 15 kV.

Max. Pos. A₃ voltage +500 volts.

Max. Neg. A₃ voltage -500 volts.

Min. A₁ voltage 200 volts.

Min. A₂+A₄ voltage 8 kV.

Max. V_{h-k} 200 volts.

Max. R_{g-k} 1.5 MΩ

Max. R_{h-k} 1.0 MΩ

TYPICAL OPERATION.

1st Anode Voltage 300 volts.

2nd and 4th Anode voltage 12 kV.

§3rd Anode voltage for focus -300 to +300 volts.

†V_g for visual cut off -40 to -80 volts.

CAPACITANCES.

C_{k-all} <8 pF.

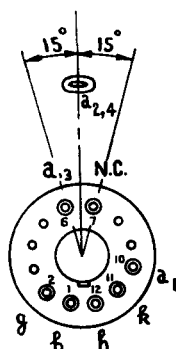
C_{g-all} <8 pF.

C_{a-ext. coating} 1100 pF. (approx.).

14/03AB

14/03QB

14/03Q2B



Base
Connections

Underside View
of Base

*A blue filter should be provided for the photocell to separate the two colour peaks which have different persistence times.

†When used for series operation, the surge heater voltage should not exceed 9.5 volts r.m.s. and a current limiting device should be incorporated in the circuit to limit switching surge.

§The point of optimum focus lies between these values.

‡The grid should never be positive with respect to the cathode, except during the period immediately after switching off, when it may be allowed to rise to +1 volt.



