

FERRANTI RADAR TUBE

A 21in. diagonal Rectangular Tube with a metal backed screen and external conductive coating. Designed primarily for use as a Radar Display Tube.

FOCUS	...	...	...	Magnetic.
DEFLECTION	...	...	...	Magnetic.
Deflection Angle...	...	...	...	90°.
SCREEN	...	...	...	Metal Backed.
Phosphor	...	...	...	Type 'H'
Fluorescence	...	...	...	Orange.
Afterglow	...	...	...	Orange.
Persistence	...	...	...	Very Long.

For further details, refer to Screen Type 'T' phosphor characteristics at the front of this section of the handbook. This tube can also be supplied with other screen phosphors.

PHYSICAL DETAILS.

Base	...	...	...	B12A (Duodecal).
Anode Cap	...	...	...	CT8 (Cavity Type).
Max. Overall Length	...	...	...	514 mm.
Nom. Neck Diameter	...	...	...	37 mm.
For other dimensions see drawing.	...	...	...	
Mounting Position	...	...	...	Any.

This tube has 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—No Connection.	Pin 12—Heater.
Side Contact—2nd Anode.	

HEATER.

Heater Voltage	...	...	...	6.3 volts.
Heater Current	...	...	...	0.3 amp.

RATINGS.

Max. A ₁ Voltage	...	...	...	500 volts.
Max. A ₂ Voltage	...	...	...	18 kV.
Min. A ₁ Voltage	...	...	...	200 volts.
Min. A ₂ Voltage	...	...	...	12 kV.
Max. V _{h-k}	...	...	...	200 volts.
Max. R _{g-k}	...	...	...	1.5 MΩ
Max. R _{h-k}	...	...	...	1.0 MΩ
Max. A ₁ Supply Impedance	...	...	...	1.5 MΩ

TYPICAL OPERATION.

1st Anode Voltage	...	...	...	300 volts.
2nd and 4th Anode Voltage	...	...	...	16 kV.
*V _g for visual cut off	...	...	...	-40 to -80 volts.
Focus	...	...	...	See Note †

An ion trap magnet is not required.

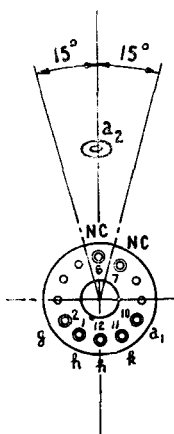
CAPACITANCES.

C _{k-all}	...	...	...	<8 pF.
C _{g-all}	...	...	...	<8 pF.
C _{a-ext. coating}	...	...	...	1500 pF. (approx.).

*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.

†The recommended centre of the magnetic length of the focus unit should be approx. 100 mm. from the Reference Line.

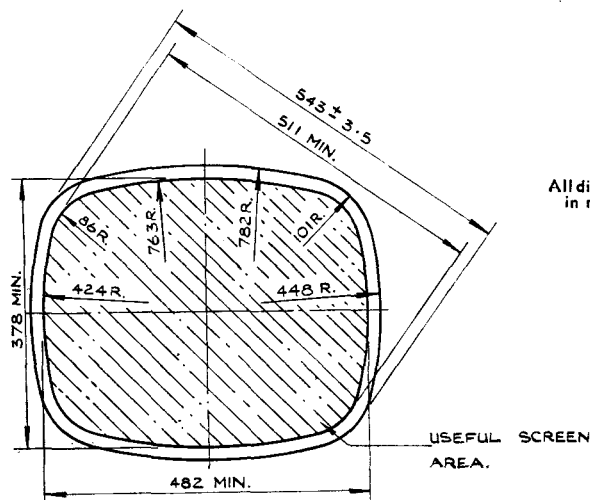
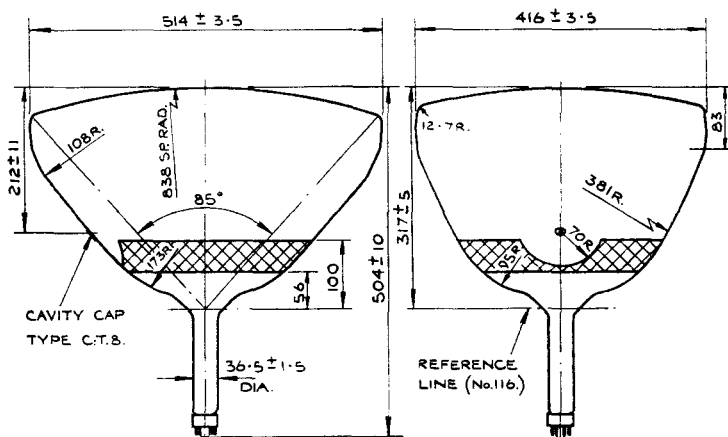
21/04HB



Base
Connections
Underside View
of Base



21/04HB



All dimensions are
in millimetres