

FERRANTI MONITOR TUBE

21/03TB

A 21in. diagonal Rectangular Tube with a metal backed screen and external conductive coating. Designed for use in Television Monitoring Equipment.

FOCUS	...	...	...	Low Voltage Electrostatic.
DEFLECTION	...	...	...	Magnetic.
Deflection Angle	...	...	...	90°.
SCREEN	...	...	...	Metal backed.
Phosphor	...	...	...	Type 'T'—Silver activated.
Fluorescence	...	...	...	White.
Persistence	...	...	...	Short.

For further details, refer to Screen Type 'T' phosphor characteristics at the front of this section of the handbook. This tube can 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

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. A ₁ Voltage	...	...	...	500 volts.
Max. A ₂ +A ₄ voltage	...	...	...	18 kV.
Max. Pos. A ₃ voltage	...	...	...	+500 volts.
Max. Neg. A ₃ voltage	...	...	...	-500 volts.
Min. A ₁ voltage	...	...	...	200 volts.
Min. A ₂ +A ₄ voltage	...	...	...	12 kV.
Max. V _{h-k}	...	...	...	200 volts.
Max. R _{g-k}	...	...	...	1.5 MΩ
Max. R _{h-k}	...	...	...	1.0 MΩ

TYPICAL OPERATION.

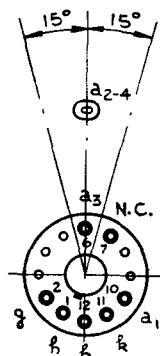
1st Anode Voltage	...	...	...	300 volts.
2nd and 4th Anode voltage	...	...	...	16 kV.
**3rd Anode voltage for focus	...	...	...	-200 to +200 volts.
†V _g for visual cut off	...	...	...	-30 to -90 volts.

CAPACITANCES.

C _k -all	...	...	...	<8 pF.
C _g -all	...	...	...	<8 pF.
C _a -ext. coating	...	...	...	1500 pF. (approx.).

**The point of optimum focus lies between these values.

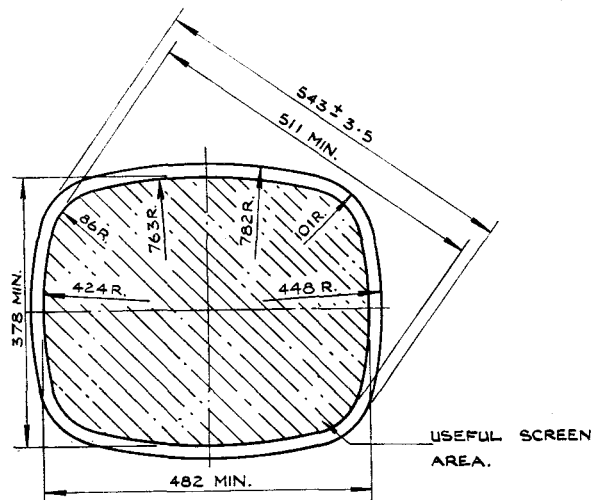
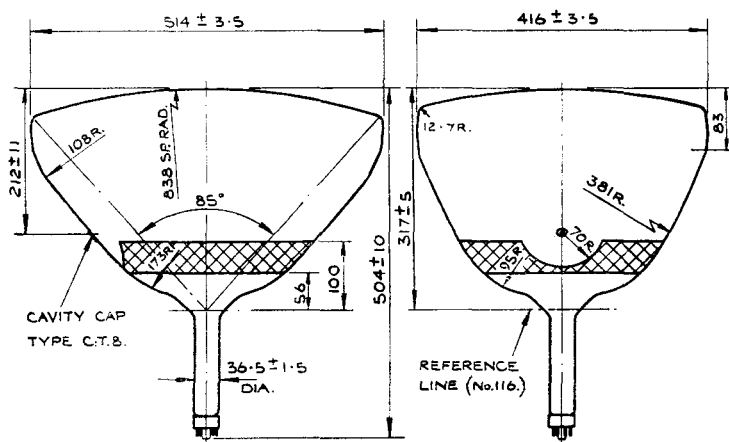
†The grid should never be positive with respect to the cathode, except during the period immediately after switching off, when it may be allowed to rise to +1 volt.



Base
Connections
Underside View
of Base



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DIMENSIONS IN MILLIMETRES