FERRANTI

PICTURE MONITOR TUBE

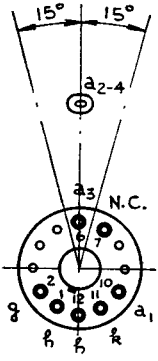
1790/03TB

A rectangular tube with 17" diagonal screen and 90° deflection angle. Designed primarily for use in Television Monitoring Equipment.

FOCUS	Low Voltage Electrostatic.
DEFLECTION	Magnetic
SCREEN	Metal backed
Phosphor	Type 'T'—Silver Activated.
Fluorescence	White.

This tube can be supplied with other screen phosphors.

For further details refer to the 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.
Mounting Position	Any.

For other dimensions see drawing on page 2.
The external conductive coating 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 & 4th Anodes.

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.

Heater Voltage	6·3 volts.
1st Anode Voltage	300 volts.
2nd + 4th Anode Voltage ...	15 kV.
*3rd Anode Voltage for focus ...	-300 to +300 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.

*Optimum focus lies between these values.

†The modulator 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.

Issue 1, Apl., 1959

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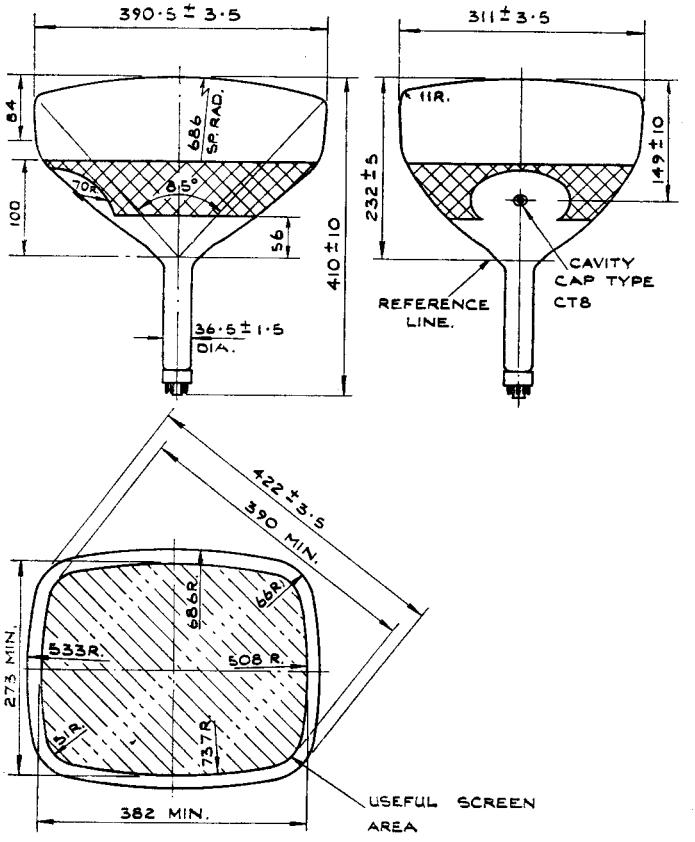
390·5 ± 3·5
311 ± 3·5
84
686 SP RAD.
11R.
149 ± 10
232 ± 5
100
70°
81·5°
56
410 ± 10
CAVITY CAP TYPE CT8
REFERENCE LINE.
36·5 ± 1·5 DIA.
422 ± 3·5
390 MIN.
686R.
66R.
273 MIN.
533R.
508 R.
13R.
737R.
USEFUL SCREEN AREA
382 MIN.