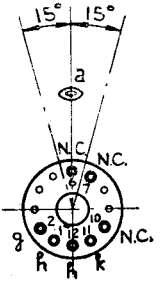
Ferranti

HIGH RESOLUTION DISPLAY TUBE

A 9 inch diameter Display Tube with an optically flat face with ground internal and external surfaces.

FOCUS.	Magnetic
DEFLECTION.	Magnetic
SCREEN.	
Phosphor	Type 'P' (Fine particle size).
Fluorescence	Blue.
Persistence	Ultra short.

For further details refer to Screen 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	625 mm.
Max. Diameter	236 mm.
Nom. Neck Diameter	35 mm.
*Useful Screen Area	195 mm. min. dia.

BASE CONNECTIONS.

Pin 1—Heater	Pin 7—Not Connected
Pin 2—Grid.	Pin 8—No Pin
Pin 3—No Pin.	Pin 9—No Pin.
Pin 4—No Pin.	Pin 10—Not Connected
Pin 5—No Pin.	Pin 11—Cathode.
Pin 6—Not Connected.	Pin 12—Heater.

Side contact—Anode.

HEATER.

Heater Voltage	6·3 v.
Heater Current...	0·3 A.

RATINGS.

Max. Anode Voltage	30 kV.
Nom. V_g for visual cut-off	Va/300
Max. $V_{h—k}$ (heater negative) ...	200 v.
Max. $V_{h—k}$ (heater positive) ...	200 v.
Max. $R_{g—k}$	1·5 M Ω

TYPICAL OPERATION.

Heater Voltage	6·3 v.
Anode	15 kV.
V_g for visual cut-off	—50 v.
Line width at screen centre (see page 4.)	

CAPACITANCE.

$C_{k—all}$	<8pF.
$C_{g—all}$	<8pF.

X-RAY WARNING: When operated at an anode voltage in excess of 16 kV. shielding may be required to protect against harmful X-ray radiation which could cause possible injury from prolonged exposure.

*Minimum diameter of internal ground surface

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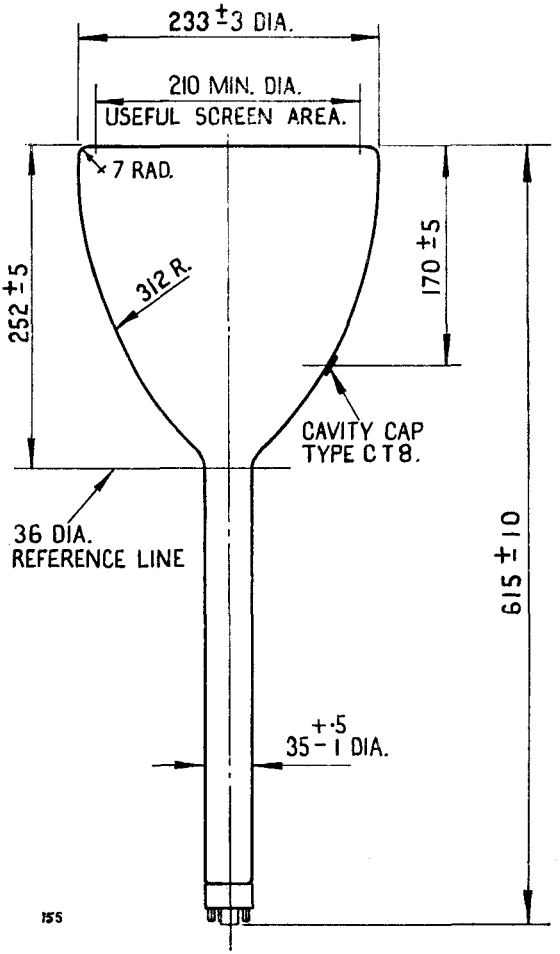
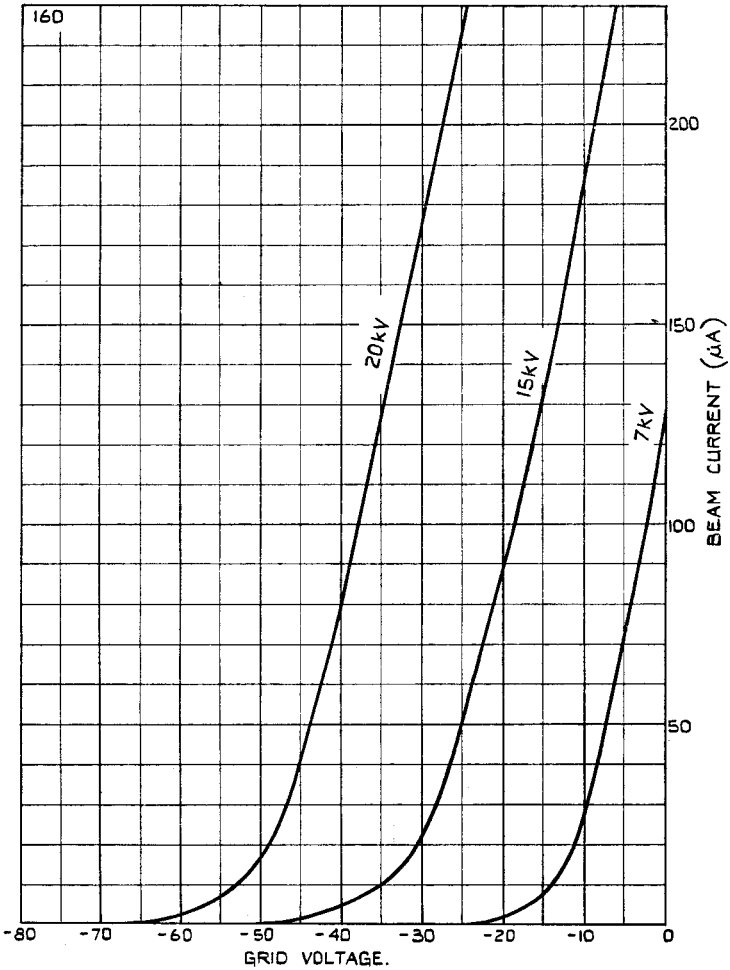
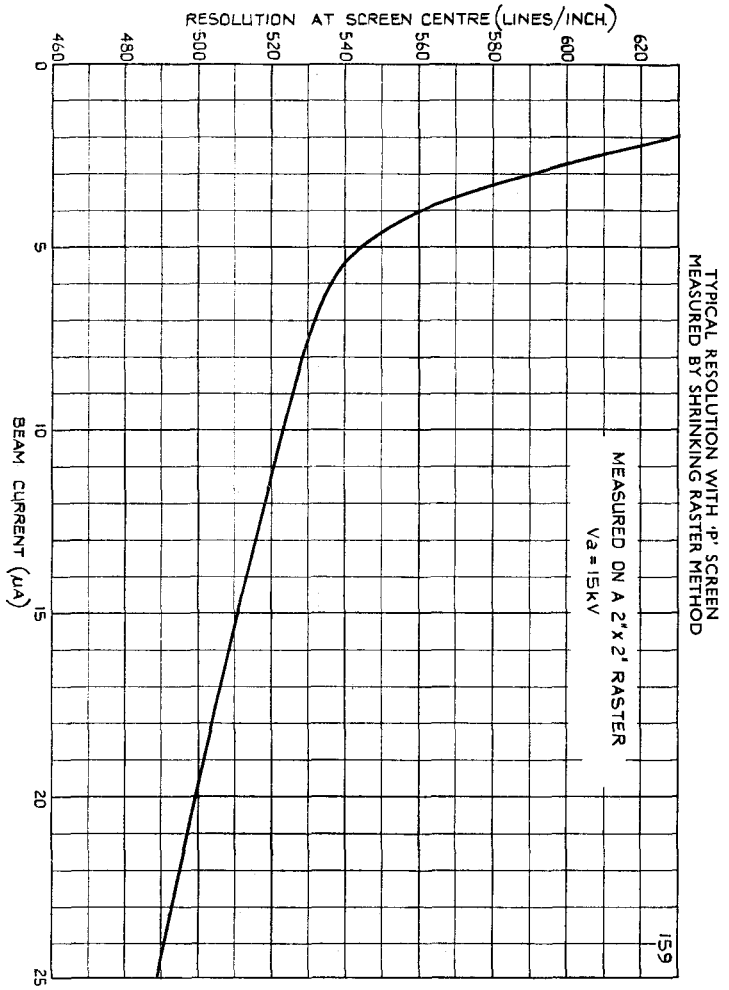


ALL DIMENSIONS IN MILLIMETERS

TYPICAL ANODE CURRENT/GRID VOLTAGE CHARACTERISTIC




TYPICAL RESOLUTION WITH 'P' SCREEN
MEASURED BY SHRINKING RASTER METHOD
MEASURED ON A 2"x 2" RASTER
Va = 15kV
159
RESOLUTION AT SCREEN CENTRE (LINES/INCH)
460
480
500
520
540
560
580
600
620
BEAM CURRENT (μA)
0
5
10
15
20
25