



## CATHODE RAY TUBES

9-inch diameter Triode Tubes having high quality flat faces with ground internal and external surfaces

Types 9/22AM and 9/22QM are designed for use in Flying Spot Scanner applications

Type 9/22PM is for use in recording high resolution images on blue sensitive film stock

FOCUS	...	...	...	Magnetic
DEFLECTION	...	...	...	Magnetic
SCREEN	...	...	...	Metal Backed (All Types)
Phosphor	...	9/22AM	9/22PM	9/22QM
Fluorescence	...	Type 'A'	Type 'P'	Type 'Q'
Persistence	...	Green	Blue	Blue/Violet
	...	Ultra-short	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	...	...	...	CT 8 (Cavity Type)
Max. Overall Length	...	...	...	565 mm.
Max. Diameter	...	...	...	236 mm.
Useful Screen Area	...	...	...	200 mm. dia.
Nom. Neck Diameter	...	...	...	37 mm.

For other dimensions see drawing overleaf.

### 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 volts.
Heater Current	...	...	0.3 amp.

### RATINGS.

Max. Anode Voltage	...	30 kV.
Nom. Vg for visual cut off	...	Va/120
Max. V <sub>hk</sub> (Heater Negative)	...	200 volts.
Max. V <sub>hk</sub> (Heater Positive)	...	200 volts.

### TYPICAL OPERATION.

Heater Voltage	...	6.3 volts.
Anode Voltage	...	25 kV.
Vg for visual cut off	...	-210 volts.
Grid Drive for I <sub>g</sub> = 100μA.	...	35 volts.
Screen Resolution at 50 f.p.s.	...	1000 lines.
§Focus Coil	...	570 ampere turns (approx).

### CAPACITANCE.

C <sub>k</sub> -all	...	<8 pF.
C <sub>g</sub> -all	...	<8 pF.

\*A suitable coil is a solenoid of approx. 16,000 turns of 38 s.w.g. wire, positioned with the gap approx. 150 mm, in front of the modulator. Ferranti Type 38/13300 is available.

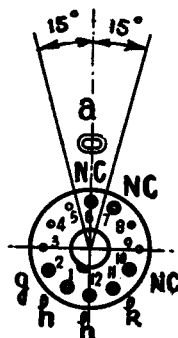
### X-RAY WARNING.

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.

9/22AM

9/22PM

9/22QM



9/22AM

9/22PM

922QM

