FERRANTI

FLYING SPOT SCANNER TUBE

6/33AM

An indirectly heated Triode Tube with a 6in. diameter metal backed screen and electrostatic deflection. This tube is suitable as a replacement for earlier types S6/30A or 6/3A.

FOCUS	Magnetic.
DEFLECTION	Electrostatic.
SCREEN	Metal Backed.
Phosphor	Type 'A'.
Fluorescence	Green.
Persistence	Ultra-short.

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	CT8 Cavity Type.*
Deflector Plate Caps	Type CT2 (9.7 mm. dia.).
Max. Overall Length	495 mm.
Useful Screen Area	127 mm. dia. (flat face).
Neck Diameter	37±1 mm.
Mounting Position	Any.

For other dimensions see drawing.

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—No Connection.
Pin 5—No Pin.	Pin 11—Cathode.
Pin 6—No Connection.	Pin 12—Heater.

Side Contact—Anode.

HEATER.

Heater Voltage	6.3 volts.
Heater Current	0.3 amp.

RATINGS.

Max. Anode Voltage	25 kV.
Max. V_{h-k}	100 volts.
Max. Beam Current	200 μA.

CHARACTERISTICS.

†Nom. Vg for visual cut off ...	$V_a/120$
Av. Mod. Drive for 50 μA Beam Current	33 volts.
Deflection Sensitivity :—	
'X' plates	500/V_a mm./V.
'Y' plates	450/V_a mm./V.

TYPICAL OPERATION.

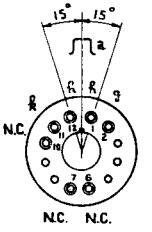
Heater Voltage	6.3 volts.
Anode Voltage	20 kV.
V_g for visual cut off	−170 volts.
‡Focus Coil	900 ampere turns (approx.).
Screen Resolution	> 100 lines per cm.
Normal Peak Beam Current ...	150 μA.

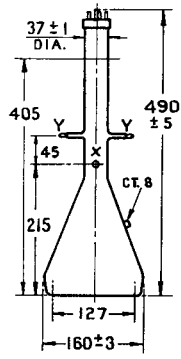
X-RAY WARNING.

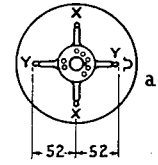
When operated at high anode voltage shielding may be required to protect against harmful X-Ray radiation, which could cause possible injury from prolonged exposure.

CAPACITANCES.

$C_{x\ x_2-y\ y_2}$	1.0 pF.
C_{g-all}	5.8 pF.
$C_{x_1-x_2}$	1.0 pF.
$C_{y_1-y_2}$	0.9 pF.
$C_{x_1-all} = C_{x_2-all}$	4.8 pF.
$C_{y_1-all} = C_{y_2-all}$	4.3 pF.







Dimensions shown are in millimetres.

*A suitable adaptor to CT2 can be supplied where the tube is required to replace an earlier type.
†The grid should never be positive with respect to the cathode.
‡Positioned so that the gap is 100 mm. in front of the modulator.

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