FERRANTI
RADAR TUBE

A 12in. diameter flat faced Radar Display Tube with Electrostatic Focus. It has a long persistence fluoride screen which is metal backed.

FOCUS ... Electrostatic.
DEFLECTION ... Magnetic.
*SCREEN:— Fluorescence ... Orange.
Afterglow ... Orange.
Persistence ... Long.

PHYSICAL DETAILS.
Base ... International Octal.
Anode Cap ... CT.I.
Max. Overall Length ... 545 mm.
Max. Diameter ... 306-5 mm.
Neck Diameter ... 35±mm.
For other dimensions see drawing overleaf.

BASE CONNECTIONS.
Pin 1—No Connection. Pin 5—Grid.
Pin 2—1st Anode. Pin 6—Cathode.
Pin 3—2nd Anode. Pin 7—Heater.
Pin 4—No Connection. Pin 8—Heater.
Side Cap—3rd Anode.

HEATER.
Heater Voltage ... 4·0 volts.
Heater Current ... 0·9 amp.

RATINGS.
Max. 3rd Anode Voltage ... 13 kV.
Min. 3rd Anode Voltage ... 9 kV.
†Max. 1st Anode Voltage ... 2·5 kV.
†Min. 1st Anode Voltage ... 1·5 kV.
Max. $V_{H-K}$ ... 150 Volts.

CHARACTERISTICS AND TYPICAL OPERATION.
3rd Anode Voltage ... 12 kV.
2nd Anode Voltage for focus ... 1·85 to 2·05 kV.
1st Anode Voltage ... 2·1 kV.
$V_g$ for visual cut-off ... -70 to -120 Volts.
Av. Grid Drive for $I_B=50\mu\text{A}$ ... 22 Volts.

CAPACITANCES.
$c_{ek}$—all ... < 10·0 pF.
$c_{g-k}$ ... < 10·0 pF.

*The screen material is liable to burn if operated with a spot which is stationary or slow moving. The tube should not be operated under such conditions even at low beam current.
†The voltage applied to $a_1$ should always be at least 50 volts positive with respect to $a_2$.

This tube was formerly designated A12/02.

The anode cap can lie within 15° either side of the centre line as indicated in the diagram.

FERRANTI LIMITED, GEM MILL, CHADDERTON, OLDHAM, LANCS.
All dimensions in millimetres.
$V_{a5} = 9 \text{ to } 13 \text{ kV}$

$V_{a1} = 2.2 \text{ kV}$

$V_{a1} = 20 \text{ kV}$

$V_{a1} = 1.8 \text{ kV}$

GRID VOLTAGE

BEAM CURRENT (μA)