

FERRANTI RADAR TUBE

12in. diameter flat faced Radar Display Tubes primarily designed for P.P.I. applications.

FOCUS	...	...	...	Magnetic.
DEFLECTION	...	...	...	Magnetic.
SCREEN.				
Phosphor	...	12/04HM*	12/04JM	Type 'H'
Fluorescence	...	Orange	Blue.	Type 'J'
Afterglow	...	Orange	Yellow.	
Persistence	...	long	long.	

Both types have metal backed screens.

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.2. (9.25mm. dia.)
Max. Overall Length	...	...	...	520mms.
Neck diameter	...	...	...	35mms. nominal

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—1st Anode.
Pin 5—No Pin.	Pin 11—Cathode.
Pin 6—No Connection.	Pin 12—Heater.

Side Cap—2nd Anode.

HEATER.

Heater Voltage	...	...	...	6.3 volts.
Heater Current	...	...	...	0.3 amp.

RATINGS.

Max. 1st Anode Voltage	...	...	...	600 volts.
Max. 2nd Anode Voltage	...	...	...	15.0 kV.
Min. 1st Anode Voltage	...	...	...	250 volts.
Min. 2nd Anode Voltage	...	...	...	9.0 kV.
Max. Cathode Current	...	...	...	150 μ A.
Max. V_h-k	...	...	...	200 volts.
Max. R_h-k	...	...	...	1.0 M Ω .
Max. R_g-k	...	...	...	1.5 M Ω .

CAPACITANCES.

C_k -all	...	...	...	<8.0 pF.
C_g -all	...	...	...	<8.0 pF.

TYPICAL OPERATING CONDITIONS.

1st Anode Voltage	...	...	...	300 volts.
2nd Anode Voltage	...	...	...	15 kV.
V_g for visual cut off	...	...	...	-60 volts.
Av. Mod. Drive for 50 μ A beam current	...	...	...	20 volts.
‡Focus Coil	...	...	...	640 amp. turns (approx.)

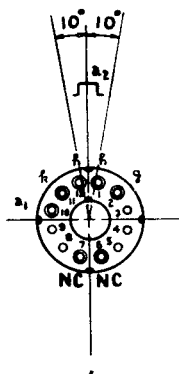
*This tube has a magnesium fluoride screen which is liable to burn even at low values of beam current, if operated with a spot which is stationary or slow moving.

‡Positioned so that the centre of the gap is approx. 120mms. from the reference line (36mm. Ring Gauge Position).

This tube was formerly designated A12/04.

12/04 HM

12/04 JM



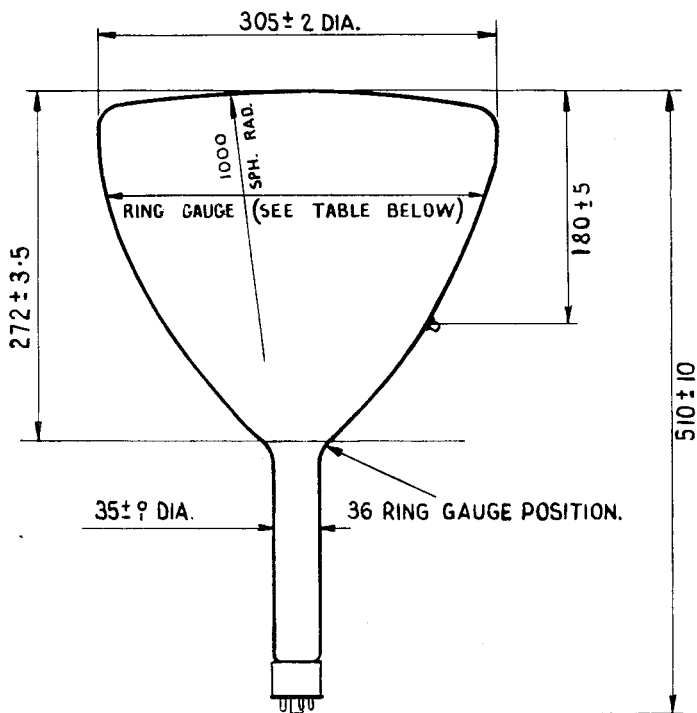
**Base
Connections
Underside View
of Base**

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



12/04 HM

12/04 JM



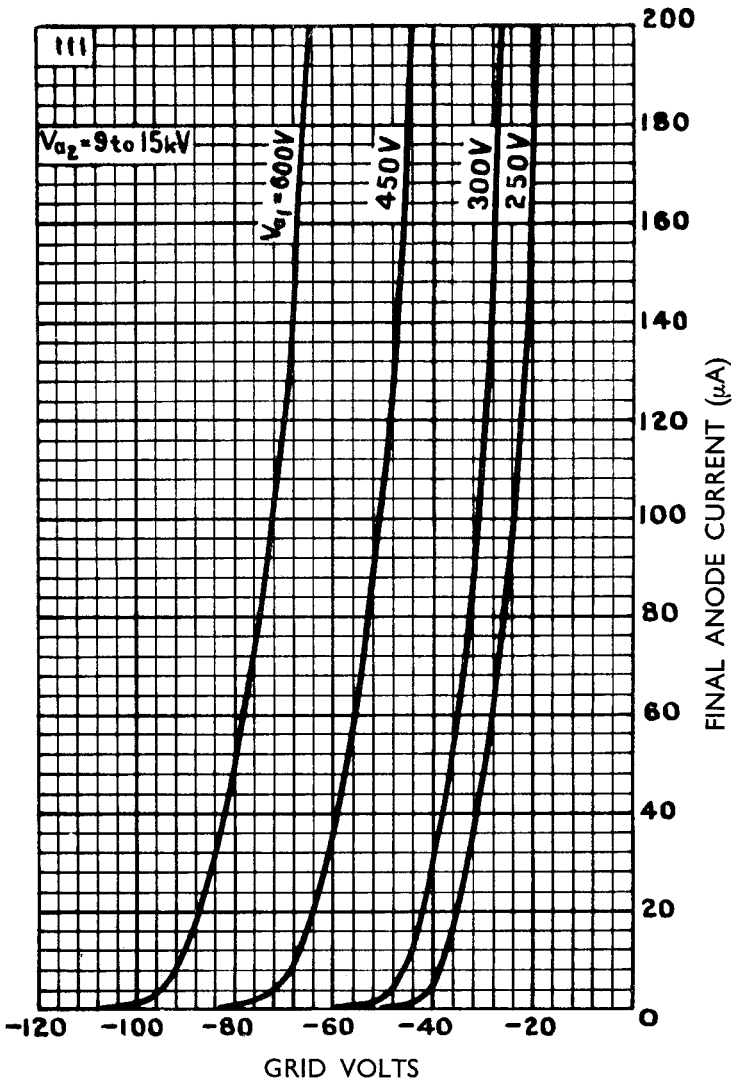
RING GAUGE (m m)	DISTANCE FROM CENTRE OF SCREEN.(m m)
280	96 \pm 10
230	150 \pm 9
180	191 \pm 8
130	222 \pm 7
80	249 \pm 6
36.1	272 \pm 3.5

ALL DIMENSIONS IN MILLIMETRES



12/04 HM

12/04 JM



12/04 HM

12/04 JM

