

# Ferranti

## RADAR TUBES

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

Improved version of CV.429. giving higher resolution.

FOCUS	...	...	...	Magnetic
DEFLECTION	...	...	...	Magnetic
SCREEN.				
Phosphor	...	...	12/08HM*	12/08JM
Fluorescence	...	...	Type 'H'	Type 'J'
Afterglow	...	...	Orange	Blue
Persistence	...	...	Orange	Yellow
	...	...	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	...	...	...	CT8. (Cavity Type)
Max. Overall Length	...	...	...	520 mm
Neck Diameter	...	...	...	35 mm 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 amps

### RATINGS.

Max. 1st Anode Voltage	...	...	600 volts
Max. 2nd Anode Voltage	...	...	15.5 kV
Min. 1st Anode Voltage	...	...	250 volts
Min 2nd Anode Voltage	...	...	9.0 kV
Max. Cathode Current	...	...	150 $\mu$ A
Max. $V_{h-k}$	...	...	200 volts
Max. $R_{h-k}$	...	...	1.0 M $\Omega$
Max. $R_{g-k}$	...	...	1.5 M $\Omega$

### CAPACITANCES.

$C_{k-all}$	...	...	...	<8.0 pF
$C_{g-all}$	...	...	...	<8.0 pF

### TYPICAL OPERATING CONDITIONS.

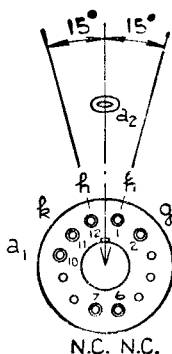
1st Anode Voltage	...	...	300 volts
2nd Anode Voltage	...	...	15 kV
$V_g$ for visual cut-off	...	...	-60 volts
Av. Grid Drive for 50 $\mu$ A beam current	...	...	20 volts
Line width at $I_B=50 \mu$ A	...	...	0.25 mm.
‡Focus Coil	...	...	640 amp. turns (approx)

\*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. 120 mms. from the reference line (36 mm. Ring Gauge Position).

12/08 HM

12/08 JM



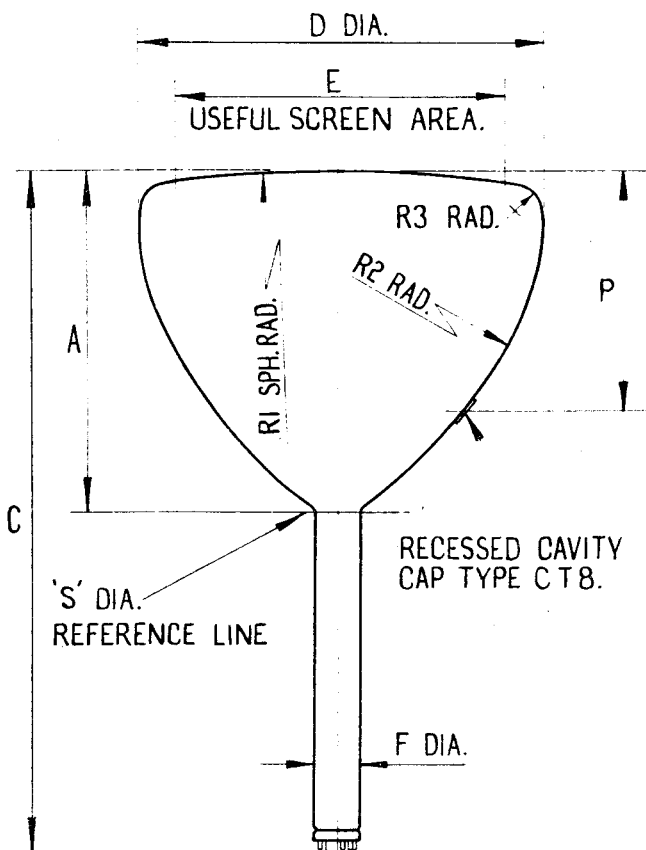
Base Connections

Underside View of Base

# Ferranti

12/08 HM

12/08 JM



DIM.	INS.	m m.	DIM.	INS.	m m.
A	10.710 ± .138	272 ± 3.5	P	7.087 ± .197	180 ± 5
C	20.197 ± .276	513 ± 7	R1	39.370	1000
D	12.000 ± .079	305 ± 2	R2	16.772	4.26
E	9.842	250 MIN.	R3	7.48 ± .079	19 ± 2
F	1.378 ± $\begin{smallmatrix} .020 \\ .039 \end{smallmatrix}$	35 ± $\begin{smallmatrix} .5 \\ 1 \end{smallmatrix}$	S	1.417	36