

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.

	12/08HM*	12/08JM
Phosphor	Type 'H'	Type 'J'
Fluorescence	Orange	Blue
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	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 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.

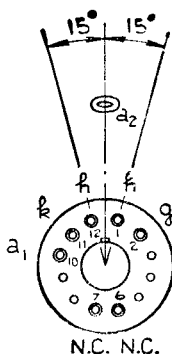
1st Anode Voltage	300 volts
2nd Anode Voltage	15 kV
V_g for visual cut-off	-60 volts
Av. Grid Drive for 50 μ A beam current	20 volts
Line width at $I_B=50 \mu$ A	0.25 mm.
‡ Focus Coil	640 amp. turns (approx)

*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



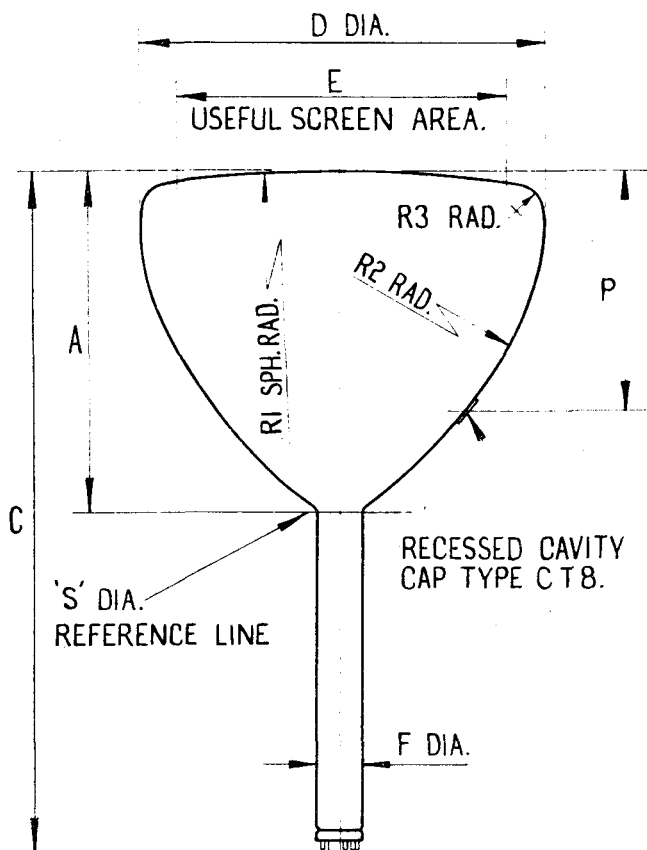
Base
Connections

Underside View
of Base

Ferranti

12/08 HM

12/08 JM



DIM.	INS.	mm.	DIM.	INS.	mm.
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	426
E	9.842	250 MIN.	R3	7.48 ± .079	19 ± 2
F	1.378 ± .020 .039	35 ± 1.5	S	1.417	36