MINISTRY OF SUPPLY (D.C.D.)

VALVE ELECTRONIC

CV92

Specification MAP/CV92/Issue 4. Dated 18.1.50. To be read in conjunction with K1001 ignoring clause:- 5.2.	SECURITY Specification: ~~RESTRICTED~~ Unclassified. Valve: UNCLASSIFIED ←

→ Indicates a change

TYPE OF VALVE - Triode with forced air-cooled anode.

CATHODE - Indirectly heated, oxide coated.

ENVELOPE - Metal glass construction.

MARKING

See K1001/4.

PACKING ←

See K1005

BASE

None

RATING		Note
Heater Voltage (V)	6.0	
Heater Current (A)	6.5	
Max. Peak Anode Voltage (kV)	8.0	A
Max. Anode Dissipation (W)	150	B
Amplification Factor	22	C
Average Grid Voltage (V)	-31	
Efficiency of pair of Valves at Wavelengths of Operation of 50 cms.	40%	
Absolute Min. Wavelength of Operation (cms)	40	
CAPACITANCES (pf)		
Cag	8.0	
Cge	11.0	
Cae	2.25	

DIMENSIONS and CONNECTIONS

See drawing on page 3

NOTES

A - The valve shall be processed so that it will withstand H.T. switching in two stages, viz:- first to half Va then to full Va, when operated in a push-pull oscillator circuit modulated by a pulse of length 1.0 μ.sec., with repetition frequency 500 per sec. and with Va not greater than 8.0 (KV).

B - During testing and operation the air-cooled surface of the anode must be maintained below 140°C. A blast of air blown on to the anode diffuser at the rate of at least 5 cu. ft./min. and on to the grid seal at the rate of approx. 1 cu.ft./min. is suggested.

C:- At Va = 1kV, Ia = 100 mA.

CV92

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions			Test	Limits		No. Tested	Note
	Vf	Va	Ia(mA)		Min.	Max.		
a	6.0	0	0	Ih(A) (A)	5.85	7.15	100%	
b	6.0	1000	100	Vg (V)	-19.0	-43.0	100%	
c	6.0	1000	100	Reverse Ig (μA) (gas)	-	10	100%	1
d	6.0	1000	100	Reverse Ig (Emission Current) (mA)	-	10	100%	1
e	6.0	500	100	1. Vg 2. Change in Vg from value noted in (b).	Must not be positive 17	 29	 100% 100%	
f	6.0	Anode and grid strapped Peak applied voltage 1.5 kV. tp = 2μsecs. PRF = 50/sec. Pulse shape sinusoidal		Peak emission (A)	40	-	100%	
g	Measured using adaptor Type 111 Ref. 10A/19297 See K1001/A.III							
	Links to H.P.	Links to L.P.	Links to E	CAPACITANCES (pF)				
	2	3	1,4,5,6 7,8,9,10 TF1, TC2	Cag	6.0	10.0	T.A.	
	3	1	2,4,5,6 7,8,9,10 TC1, TC2	Cge	8.25	13.75		
	2	1	3,4,5,6 7,8,9,10 TC1, TC2	Cae	1.5	3.0		

Note

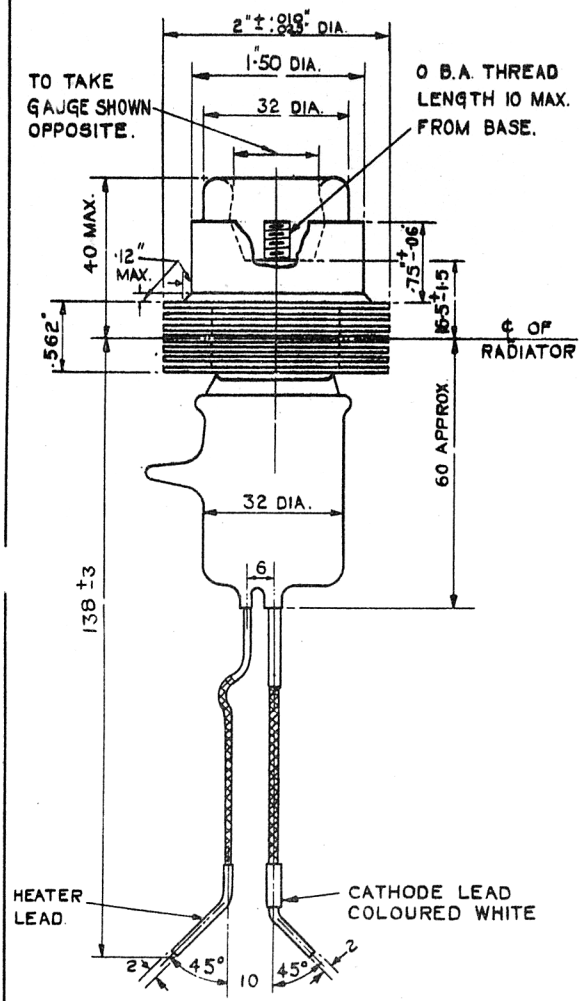
1. The gas component of the negative Ig can be taken as the immediate decrease in negative current when Vg is rapidly increased to cut-off value. The presence of unsaturated grid emission may render test "c" impossible.

CV 92

CORONA RING GAUGES

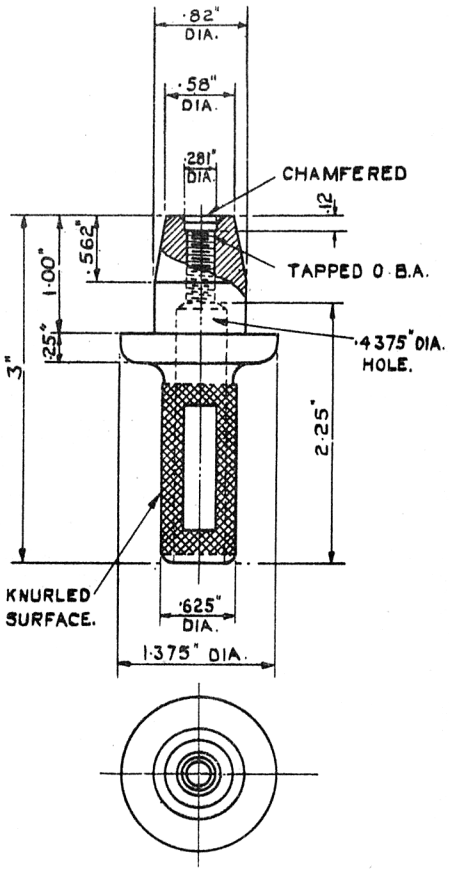
'GO' RING GAUGE
1·51" DIA.

'NO GO' RING GAUGE
1·49" DIA.



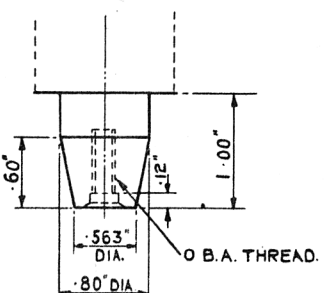
NOTE:- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

GRID SEAL GAUGE



MAT:- BRASS OR MILD STEEL
TAKEN FROM DRG. OF A.S.E. GAUGE Nº 32302

MAXIMUM OUTSIDE DIMENSIONS OF SUITABLE GRID CONNECTORS.



WHEREVER POSSIBLE KEEP THIS DIMENSION DOWN TO ·75" DIA.