

MINISTRY OF SUPPLY - DLRD(A)/TRE

VALVE ELECTRONIC

CV1871

Specification MOS(A)/CV1871
 Issue 2 Dated 8.7.53
 To be read in conjunction with K1001.

SECURITY	
Specification	Valve
UNCLASSIFIED	UNCLASSIFIED

—————> Indicates a change

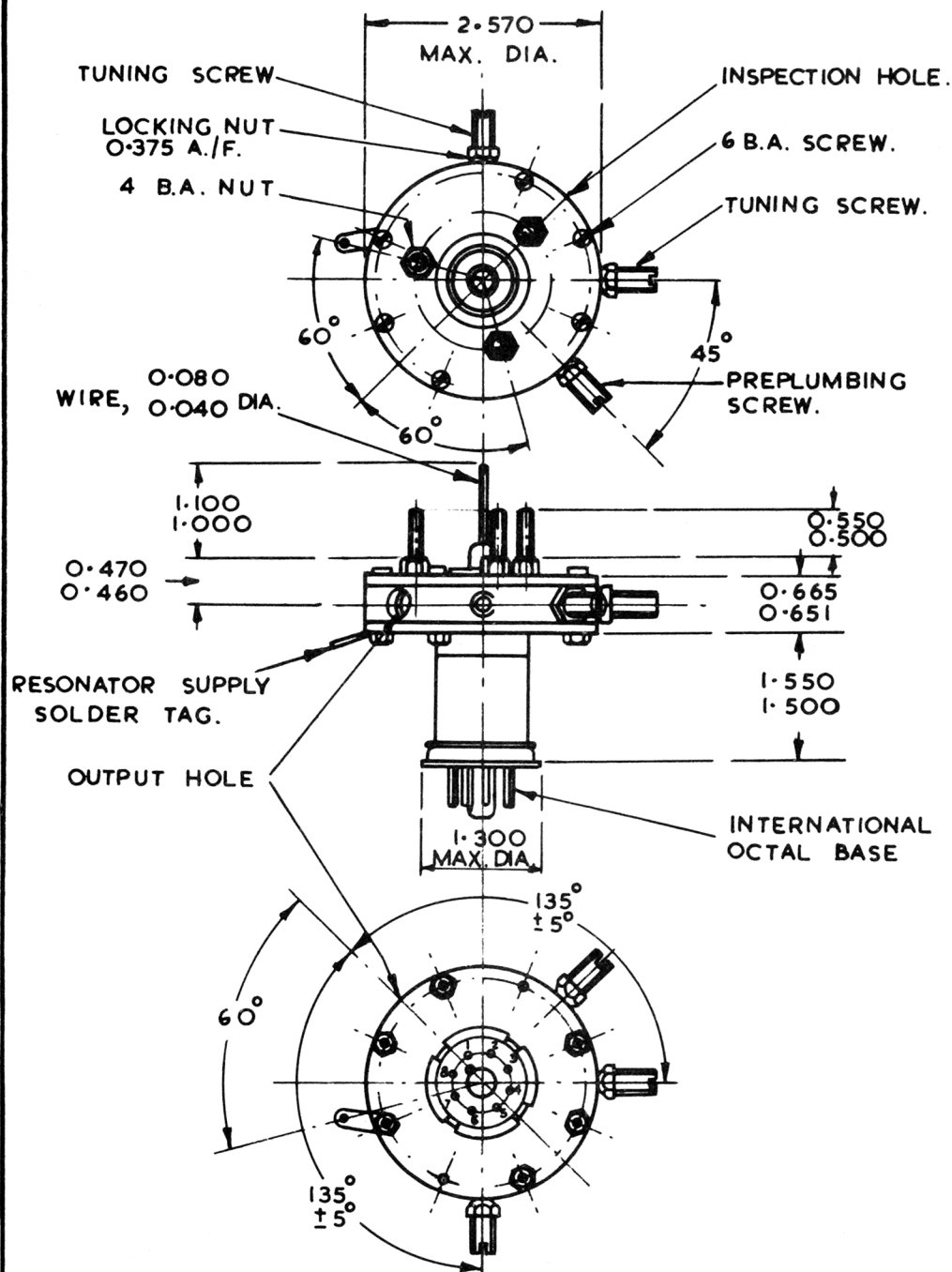
TYPE OF VALVE - Velocity Modulated Oscillator				<u>MARKING</u>		
CATHODE - Indirectly-heated				See K1001/4		
PROTOTYPE - K307						
<u>RATING</u>				<u>BASE</u>		
				International Octal		
				<u>CONNECTIONS</u>		
				Pin	Electrode	
Heater Voltage	(V)	6.3	Note A B	1	No connection	
Heater Current	(A)	0.56		2	Heater-Cathode	
Max. Anode Voltage	(V)	300		3	Heater-Cathode	
Max. Total Cathode Current	(mA)	44		4	No connection	
Min. Tuning Range	(Mc/s)	2750 to 2850		5	No connection	
Reflector Voltage Range	(V)	-10 to -130		6	No connection	
Min. Power Output	(mW)	30		7	Heater	
Max. Total Impedance in the reflector to cathode circuit	(Megohm)	1.0		8	No connection	
				TC	Reflector	
				Body	Anode	
				<u>DIMENSIONS AND CONNECTIONS</u>		
				See Drawing on Page 3.		
<u>NOTES</u>						
A. The anode of this valve is the resonator.						
B. Refers to the beam current when the valve is oscillating.						
C. The reflector voltage must always remain negative with respect to cathode. If under AFC operating conditions there is a chance of the reflector voltage becoming equal to, or positive with respect to the cathode, a protective diode must be used.						

To be performed in addition to those applicable in K1001

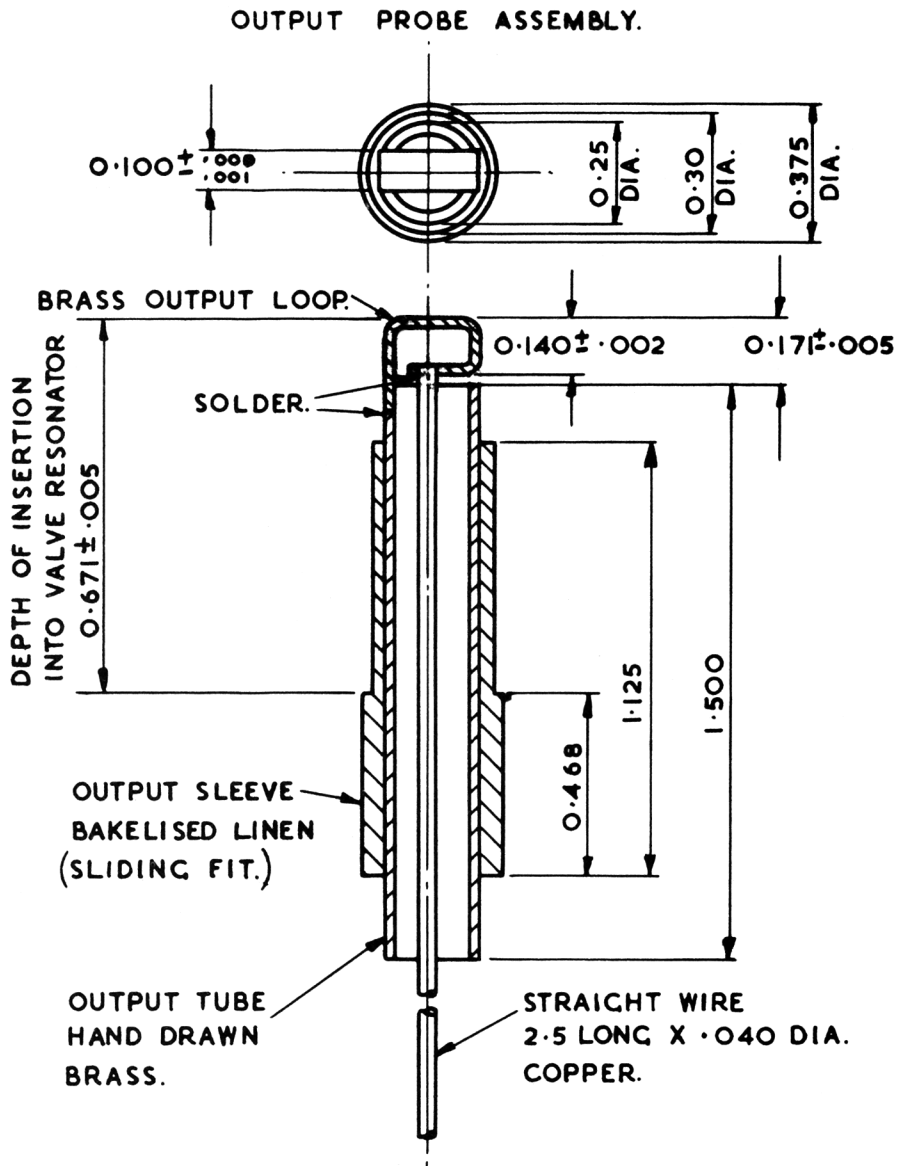
Test Conditions					Test	Limits		No. Tested	Note
						Min.	Max.		
a	Vh (V)	Va (V)	V ref. (V)	Frequency (Mcs)	Heater Current (A)	0.52	0.61	S	
	6.3	-	-	-					
b	6.3	300	Adjust for max. output	Any con- venient frequency within range 2750-2850	1. Power Output (mW) 2. Cathode Current (mA)	30 20	- 44	S	1
c	6.3	300	Adjust for max. output	2750 ⁺⁰ / ₋₂₀	1. Power Output (mW) 2. Reflector Voltage (V) 3. Electronic Tuning (Mcs)	30 -10 10	- -130 -	100%	1
d	6.3	300	Adjust for max. output	2850 ⁺²⁰ / ₋₀	1. Power Output (mW) 2. Reflector Voltage (V) 3. Electronic Tuning (Mcs)	30 -10 10	- -130 -	100%	1
e	5.7	300	Adjust for max. output	As for Test (b)	1. Power Output (mW) 2. Decrease in Cathode Current (%)	20 -	- 30	100% 100%	1 & 2

NOTES

1. This test shall be performed using the coupling shown in the Drawing on Page 4.
2. This test shall be performed after a minimum storage period of 7 days.



ALL DIMENSIONS IN INCHES.



OUTPUT LOOP TUBE AND WIRE ASSEMBLY
TO BE SILVER PLATED.

ALL DIMENSIONS IN INCHES.