MINISTRY OF SUPPLY (D.C.D.)

VALVE ELECTRONIC CV1070

Specification MAP/CV1070/Issue 9 Dated 20.7.50 To be read in conjunction with K.1001, ignoring clause:- 5.2.	SECURITY	
	Specification	Valve
	UNCLASSIFIED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Gas filled voltage stabiliser.

CATHODE - Cold

ENVELOPE - Glass, unmetallised

PROTOTYPE - 7475

MARKING

See K.1001/4

RATING			Note
Max. Striking Voltage	(V)	140	
Normal Operating Voltage	(V)	100	
Quiescent Current	(mA)	4	
Max. Cathode Current	(mA)	8	
Min. Cathode Current	(mA)	1	
Max. A.C. Resistance	(Ω)	300	

BASE

B4

Pin	Electrode
1	Anode
2	Cathode
3	No connection
4	No connection

DIMENSIONS

See K.1001/A1/D1.

Diameter		Min.	Max.
A	(mm)	72	85
B	(mm)	-	33

NOTE

To allow the use of the valve as an indicator, the design shall be such that the glow produced by the gas discharge shall be visible at the end of the valve remote from the base.

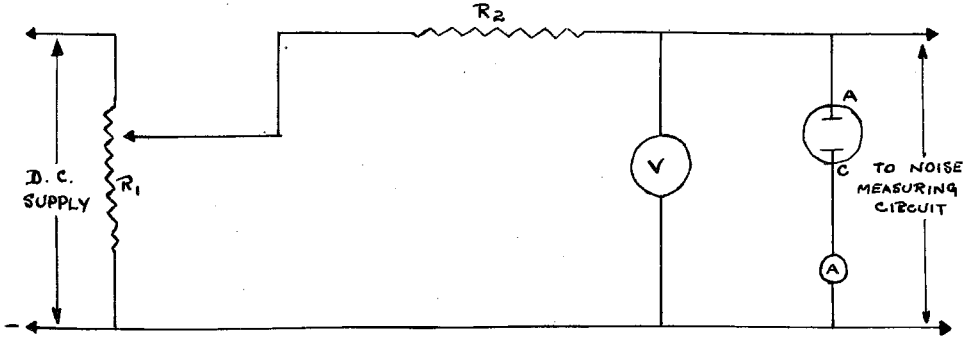
TESTS

To be performed in addition to those applicable in K.1001.

	Test Conditions	Test	Limits Min.	Limits Max.	No. Tested
	Tests shall be carried out in a circuit similar to that shown in Fig. 1 below.				
a	Increase the voltage applied to the valve until current flows	Striking voltage (V)	-	140	100%
	Before the tests given below are made the valve is to be run with the cathode current adjusted to 4 mA. for a period of 5 minutes.				
b	Cathode current adjusted to 4mA.	Output voltage (V)	90	110	100%
c	Cathode current changed from 10 mA. to 1 mA.	Output voltage change (V)	-	5.0	100% or S
d	Valve is to be tested for freedom from noise during operation. For this purpose a calibrated amplifier-detector having a substantially linear response over the range 50-5000 c.p.s. is to be connected between the anode and cathode. The cathode current is to be varied slowly from 8 mA. to 1 mA. and at no point in this range must the R.M.S. noise input voltage to the amplifier exceed 100 mV.				100% or S

FIG. I

TEST CIRCUIT



A - Low resistance milliammeter.

V - Voltmeter.

The values of R1 and R2 will be dependant on the supply voltage available.