

| | | |
|--|------------------------------------|------------------------------|
| Specification MAP/CV188/Issue 6 Dated 16.1.49 To be read in conjunction with K1001, ignoring clause: 5.2. | <u>SECURITY</u> | |
| | <u>Specification</u> RESTRICTED | <u>Valve</u> UNCLASSIFIED |

→ Indicates a change

| | | | |
|--|------|---|----------------|
| <u>TYPE OF VALVE:</u> Gas filled voltage stabiliser. | | <u>MARKING</u> See K. 1001/4 | |
| <u>CATHODE:</u> Cold | | <u>PACKING</u> See K. 1005 | |
| <u>ENVELOPE:</u> Glass - unmetallised | | | |
| <u>RATING</u> | | <u>BASE</u> B4 | |
| | Note | Pin | Electrode |
| Max. Striking Voltage (V) | 140 | 1 | Anode |
| Normal Operating Voltage (V) | 100 | 2 | Cathode |
| Quiescent Current (mA) | 4 | 3 | No connection |
| Max. Cathode Current (mA) | 10 | 4 | No connection |
| Min. Cathode Current (mA) | 1 | | |
| <u>REQUIREMENT</u> | | <u>DIMENSIONS</u> See K. 1001/AI/DL. | |
| 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. | | Dimension | Min. Max. |
| | | A (mm) | - 85 |
| | | B (mm) | - 33 |

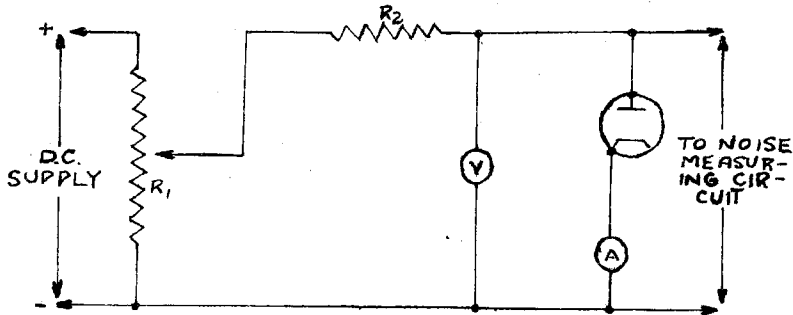
TESTS

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

| Test Conditions | Test | Limits | | No. Tested | |
|---|--|---------------------------|------|------------|-----------|
| | | Min. | Max. | | |
| 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) | 85 | 100 | 100% |
| c | Cathode current changed from 10mA. to 1mA. | 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 calibration 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 10mA. to 1mA. and at no point in this range must the R.M.S. noise input voltage to the amplifier exceed 100mV. | | | | 100% or S |

FIG. 1.

TEST CIRCUIT



A - Low Resistance Milliammeter.

V - Voltmeter.

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