MINISTRY OF SUPPLY (D.C.D.)

VALVE ELECTRONIC

# CV262

Specification MAP/CV 262.
Issue 1. Dated 20.9.50.
To be read in conjunction with K1003

| SECURITY | |
|---|---|
| Specification | Valve |
| UNCLASSIFIED | UNCLASSIFIED |

→ Indicates a change

| | |
|---|---|
| TYPE OF VALVE | - Cathode Ray Tube |
| TYPE OF DEFLECTION | - Magnetic |
| TYPE OF FOCUS | - Magnetic |
| BULB | - Internally coated with conductive coating |
| SCREEN | - BYL 46 |

**MARKING**

See K1001/4

**BASE**

I.O.

| RATING | | | Note |
|---|---|---|---|
| Heater Voltage | (V) | 4.0 | |
| Heater Current | (A) | 1.0 | |
| Max. Anode Voltage | (kV) | 9.0 | |

**CONNECTIONS**

| Pin | Electrode |
|---|---|
| 1 | No Connection |
| 2 | Heater |
| 3 | Pin Omitted |
| 4 | Pin Omitted |
| 5 | Grid |
| 6 | Pin Omitted |
| 7 | Heated |
| 8 | Cathode |
| Side Contact | Anode |

Side Contact - Plug cap shall conform to BS448

**DIMENIONS**

See Drawing on Page 4

To be performed in addition to those applicable in K1003

| | Test Conditions | | | Test | Limits Min. | Limits Max. | No. Tested | Note |
|---|---|---|---|---|---|---|---|---|
| a | See K1003/5.12 | | | CAPACITANCES (pF)<br>Grid to all other electrode | - | 25 | 5%<br>(5) | |
| | Vh | Va(kV) | Vg | | | | | |
| b | 4.0 | 0 | 0 | Ih (A) | - | 1.2 | 100% | |
| c | 4.0 | 4.0 | Adjust to cut off<br>Focus adjusted to optimum<br>See Note (1) | Vg (V)<br>Value to be noted | -30 | -65 | 100% | 1 |
| d | 4.0 | 4.0 | - | (1) Vg (V) | -1 | - | 100% | |
| | Focus adjusted for optimum. Vg adjusted to give a light output of 0.1 candles when viewed through a C2 filter, (Type 26, Ref.10AB/474) on a close raster of convenient size. | | | (2) Change in value of Vg from test (c) (V) | - | 25 | 100% | 2 |
| e | 4.0 | 4.0 | As for test "d" | (1) Focus Coil Current (mA) | 80 | 120 | T.A. | |
| | Focus adjusted for optimum. DEFLECTION - Sine wave line scan of 50c/s nom. and a line length of 94mm. Measure in "X" and "Y" directions successively at the centre of the track. | | | (2) Line Width | - | 1.3 | 100% | |
| f | 4.0 | 4.0 | -65<br>See K1003/5.4.2<br>Resistor = 10MΩ | Grid Insulation<br>(1) Leakage current (μA) | - | 6.5 | 100% | |
| | | | | (2) Increase in voltmeter reading | - | 100% | | |
| g | 4.0 | 4.0 | Any convenient value | Useful Screen Area<br>Diameter (mm) | 190 | - | 100% | |
| | Focus adjusted for optimum. Deflection to cover stated circle centred on centre of screen | | | | | | | |

TESTS (Contd.)

CV262

| | Test Conditions | | | Test | Limits | | No. Tested | Note |
|---|---|---|---|---|---|---|---|---|
| | | | | | Min. | Max. | | |
| h | 4.0 | 4.0 | Near cut-off<br>No focussing coil energisation | Deviation of spot from centre of screen (mm) | - | 10 | 100% | |
| j | 4.0 | 4.0 | Any convenient value<br>No focussing coil energisation. Deflecting fields to cover the useful screen area. | The screen shall not be worse for graininess and uniformity than a standard tube or pattern | | | 100% | |
| k | 4.0 | 4.0 | -<br>Test to be done in Test Set 331, using a close raster of convenient size. | Afterglow (secs) | 30 | 60 | 10% | |

NOTES

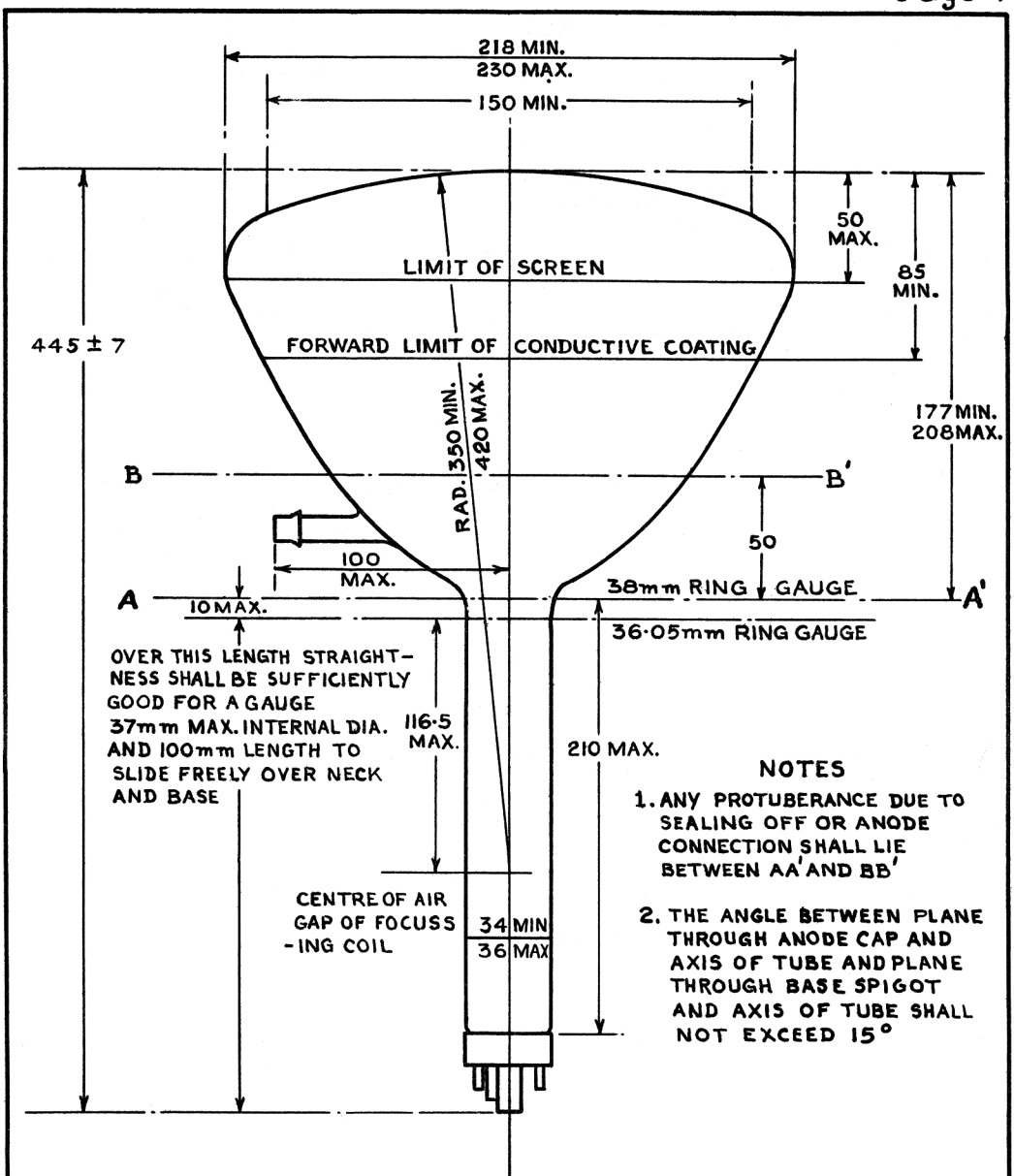
1. For the purpose of tests (c), (d), (e), (g), (h), (j), (k), the focussing fields required are to be obtained by means of Rotating Gear Unit, Magnetic, Ref.No.10QB/66 with the focussing coil in its mean position.

   The tube will be mounted with the front edge of the coil assembly mounting set 1.5mm from axis AA (See Drawing on Page 4.)

2. Within the range of grid voltage from cut-off to light output, the beam current shall increase continuously.

# CV 262






ALL DIMENSIONS ARE IN MILLIMETRES