

VALVE ELECTRONIC

CV 438

GENERAL POST OFFICE: E-IN-C (S)

Specification: G.P.O. /CV438/ Issue 1 Dated: April 1949 To be read in conjunction with K 1001 ignoring clauses 5.2 and 5.3	<div>SECURITY</div> <div> <div>Specification</div> <div>XXXXXXXXXX</div> <div>Unclass</div> </div> <div> <div>Valve</div> <div>XXXXXXXXXX</div> <div>Unclass</div> </div>
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—————> indicates a change

<u>TYPE OF VALVE:</u> Gas filled stabiliser			<u>MARKING</u>												
<u>CATHODE:</u> Cold			See K1001/4												
<u>ENVELOPE:</u> Unmetallised glass															
<u>PROTOTYPE</u> G120/1B															
<u>RATING</u>			<u>BASE</u>												
<div>Nominal breakdown voltage (V)100</div> <div>Nominal maintaining voltage (V)55</div> <div>D.C. operating current continuous (mA)2 to 30</div> <div>Regulation 2 mA to 30mA (V)3</div> <div>Max. peak cathode current (mA)50</div> <div>(averaged over 1 second)</div> <div>Max. direct cathode current (mA)30</div>			<u>B4</u>												
			<u>CONNECTIONS</u>												
			<div>Note</div>												
			<table><tr><th>Pin</th><th>Electrode</th></tr><tr><td>1</td><td>Anode</td></tr><tr><td>2</td><td>Cathode</td></tr><tr><td>3</td><td>Not connected</td></tr><tr><td>4</td><td>Not connected</td></tr></table>			Pin	Electrode	1	Anode	2	Cathode	3	Not connected	4	Not connected
			Pin	Electrode											
1	Anode														
2	Cathode														
3	Not connected														
4	Not connected														
			<u>DIMENSIONS</u>												
			See K1001/A1/D1												
			<table><tr><th>Dimension</th><th>Min.</th><th>Max.</th></tr><tr><td>A (mm)</td><td></td><td>102</td></tr><tr><td>B (mm)</td><td></td><td>35</td></tr></table>			Dimension	Min.	Max.	A (mm)		102	B (mm)		35	
Dimension	Min.	Max.													
A (mm)		102													
B (mm)		35													

CV 438

TESTS

To be performed in addition to those applicable in K1001

	TEST CONDITIONS	T E S T	LIMITS		No. Tested	Note
			Min	Max.		
a	Ia(mA)	Anode breakdown voltage (V)		120	100%	A,B,C
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b	20	Anode maintaining voltage (V)		65	100%	A,B
c	2	Anode volts "x" (V)		7	100%	A,B,D
	30	Anode volts "y" (V)				
		Difference between V "x" and V "y" (V)				

N O T E

- A. Test shall be carried out using a D.C. power supply with not more than 0.5 per cent ripple. A protective resistance of 5,000 ohms shall be included in the cathode circuit.
- B. Voltages shall be measured directly across the valve under test.
- C. A voltage not exceeding 75 volts D.C. shall be applied to the anode and increased gradually until the valve strikes.
- D. A period of not less than 30 seconds shall be allowed to elapse after the establishment of the conditions specified, before a reading of the maintaining voltage is taken.