

MINISTRY OF SUPPLY D.L.R.D. (A)/RAE

<b>Specification M.O.S.A./CV.422</b> <b>Issue 4 Dated 2.10.1952</b> <b>To be read in conjunction with K.1001</b> <b>excluding clauses 5.2, 5.8.</b>	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td>Specification UNCLASSIFIED</td><td>Valve UNCLASSIFIED</td></tr> </table>	SECURITY		Specification UNCLASSIFIED	Valve UNCLASSIFIED
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→ Indicates a change

<u>TYPE OF VALVE</u> - Voltage Stabiliser				<u>MARKING</u> See K.1001/4	
<u>CATHODE</u> - Cold					
<u>ENVELOPE</u> - Glass, unmetallised					
<u>PROTOTYPE</u> - VX. 371				<u>BASE</u> B8G See K.1001/ATV/D.12	
<u>RATINGS</u>			Note		
Max. Anode take-over voltage	(V)	120	A		
Max. Anode current	(mA)	45			
Min. Anode current	(mA)	5			
Mean Voltage drop across valve operating at 25mA.	(V)	108	A		
Max. Priming anode current	(mA)	1.0	B		
				<u>CONNECTIONS</u>	
				Pin	Electrode
				1)	Anode Priming anode
				2)	
				3	
				4)	
				5)	Cathode
				6)	
				7)	
				8)	
				<u>DIMENSIONS</u> See K1001/A1/D7	
				<u>Dimension</u>	<u>Min.</u> <u>Max.</u>
				B (mm)	- 29
				A (mm)	70 80

NOTES

- A. These conditions apply with the priming electrode connected to 150V. + ve thro' 0.1M $\Omega$
- B. If not required for use, the priming electrode shall be joined to the main anode through a resistance of 80,000  $\Omega$

TESTS

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

Test Conditions				Test	Limits		No. Tested
					Min.	Max.	
a	Priming Anode Voltage	Main Anode Voltage	Main Anode Current (mA)	The valve must conduct			100%
	150V through 0.1 M $\Omega$	0	-				
b	150V through 0.1 M $\Omega$	Increased until current flows	-	Anode take-over voltage (V)	-	120	100%
c	150V through 0.1 M $\Omega$	Adjust	25	Voltage drop between main Anode and Cathode (V)	103	113	100%
d	150V through 0.1 M $\Omega$	Adjust	Changed from 5 to 45	Regulation (V)	-	5	100%
e	150V through 0.1 M $\Omega$	Adjust	Changed from 5 to 25	Regulation (V)	-	2	100%
f	The valve is to be tested for freedom from noise during operation. For this purpose, a calibrated amplifier detector having a response within $\pm 2$ db. of its response at 400 c.p.s. over the range of 50-5000 c.p.s. is to be connected between the Anode and Cathode. The Cathode current is to be varied slowly from 45 mA. to 5 mA. and at no point in this range must the R.M.S. noise input voltage to the amplifier exceed 10 mV.						100%