VALVE ELECTRONIC

CV216

ADMIRALTY SIGNAL & RADAR ESTABLISHMENT

Specification AD/CV216/Issue 4, Dated 14.2.51. To be read in conjunction with K1001, ignoring clauses :- 5.2, 5.8.	SECURITY	
	Specification	Valve
	Unclassified	Unclassified

TYPE OF VALVE:- Voltage Stabiliser

CATHODE:- Cold

ENVELOPE:- Glass, unmetallised

PROTOTYPE:- OD3/VR150

MARKING

See K1001/4.

BASE
IO

See K1001/AIV/D2.

RATING			Note
Max. Striking Voltage	(V)	180	
Approx. Operating Voltage	(V)	150	
Min. Operating Current	(mA)	5	
Max. Operating Current	(mA)	40	

Pin	Electrode
1	No connection
2	Cathode
3	Connected internally to Pin 7
4	Pin omitted
5	Anode
6	Pin omitted
7	Connected internally to Pin 3
8	No connection

DIMENSIONS

See K1001/AI/D1

Dimension	Min.	Max.
A mm	96	105
B mm	-	40

PACKING

See K1005.

TESTS

To be performed in addition to those applicable in K1001

	Test Conditions Va (V)	Test Conditions Ia (mA)	Test	Limits Min.	Limits Max.	No. Tested	Note
a	Increased from zero until Ia flows		Striking Voltage (V)	-	180	100%	1,2
b	Adjusted	40	Va (V)	-	162	100%	2
c	Adjusted	30	Va (V)	-	160	1% (5)	2
d	justed	5	Va (V)	145	-	100%	2
e	50		Leakage Current (µA)	-	10	1% (5)	2
f	Impedance (i) Difference between value of Va in test 'b' and value in test 'd' (V)			-	5.5	100%	
	(ii) Difference between value of Va in test 'c' and value in test 'd' (V)			-	4.0	1% (5)	
g	Noise Test The valve is to be tested for freedom from oscillation and noise during operation. For this purpose a calibrated amplifier detector having a level response within ± 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 5 mA to 40 mA and at no point in this range must the R.M.S. noise input voltage to the amplifier exceed 10 mV. For the purpose of the test the valve shall be operated from a well filtered variable D.C. supply.					100%	

NOTES

1. This test is to be performed at least 24 hours after the valve is sealed off.

2. With a minimum resistance of 1 K in series with the anode.