

## ADMIRALTY SIGNAL ESTABLISHMENT

Specification AD/CV1145/Issue 2. Dated 11.11.46. To be read in conjunction with K1001, ignoring clauses:- 5.2, 5.8.	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td>Specification</td><td>Valve</td></tr> <tr> <td>Restricted</td><td>Unclassified</td></tr> </table>	SECURITY		Specification	Valve	Restricted	Unclassified
SECURITY							
Specification	Valve						
Restricted	Unclassified						

<u>TYPE OF VALVE:-</u> Mercury vapour filled grid-controlled gas discharge triode.			<u>MARKING</u> See K1001/4.	
<u>CATHODE:-</u> Indirectly heated.			<u>DIMENSIONS AND CONNECTIONS</u> See Fig. 1.	
<u>ENVELOPE:-</u> Glass.				
<u>PROTOTYPE:-</u> BT9 Form A.				
<u>RATING</u>			<u>PACKING</u> See K1001/7.3.	
Heater Voltage	(V)	5.0	Note C, D.	
Heater Current (approx.)	(A)	20		
Max. peak forward anode voltage	(kV)	10		
Max. peak anode current	(A)	40		
Ambient temperature range	(°C)	10-30		
			A	

NOTES

- A. Ambient temperature is defined as the temperature measured with a thermometer with its bulb or junction placed 2-ins. from the glass bulb of the valve at the cathode end, and on a level with the cap band.
- B. Mounting. During test, the valve is to be mounted vertically with anode uppermost in an enclosure screened from draughts, with ambient temperature between 10° and 30°C.
- C.  $V_h$  is measured at valve pins.
- D. Pre-heating at  $V_f = 5.0$  V.    Before operation    :    15 mins. min.  
    Before tests 'a'  
    and 'b'                :    15 mins. min.  
    Before test 'c'        :    30 mins. min.

To ensure correct distribution of mercury, pre-heating before tests shall be carried out with an asbestos cowl over the anode end of the valve. A cowl in the form of a cone, 6" high and 4" in diameter, made of four thicknesses of 2 mil. asbestos paper, is suggested.

TESTS

To be performed in addition to those applicable in K1001.

See Notes A,B,C,D.

	Test Conditions				Test	Limits		No. Tested
	Vh (V)	Va (V)	Vg (V)	Ia (A)		Min.	Max.	
a	5.0				Ih (A)	18	22	10%
b	5.0	Ad-justed	0	12.5 DC	Va DC (V)	-	20	10%
c	<p>Vh = 5.0 V; Vx = 10 kV peak, 50 c/s AC; Vy = 100 V DC approx.; R = 0.2 MΩ to 0.4 MΩ; P = 10,000 Ω; V = valve under test.</p> <div></div> <p>Vy reduced until discharge occurs.</p>				<p>Min. value of -Vy prior to striking of discharge (V)</p>	-	15	100%

OUTLINE DIMENSIONS.

CVII45

