

ADMIRALTY SIGNAL ESTABLISHMENT

(NC2)

Specification AD/CV951/Issue 2. Dated 1.2.46. To be read in conjunction with K1003.	<table> <tr> <th colspan="2"><u>SECURITY</u></th></tr> <tr> <td><u>Specification</u></td><td><u>Valve</u></td></tr> <tr> <td>Restricted</td><td>Restricted</td></tr> </table>	<u>SECURITY</u>		<u>Specification</u>	<u>Valve</u>	Restricted	Restricted
<u>SECURITY</u>							
<u>Specification</u>	<u>Valve</u>						
Restricted	Restricted						

<u>TYPE OF DEFLECTION:-</u>			Electrostatic	<u>MARKING</u>	
<u>TYPE OF FOCUS:-</u>			Gas (Argon)	See K1003/7.	
<u>SCREEN:-</u>			GGN28		
<u>PROTOTYPE:-</u>			32A	<u>BASE</u>	
				8-pin Bayonet (PB8)	
<u>RATING</u>				<u>DIMENSIONS AND CONNECTIONS</u>	
				See Drawing, Page 3.	

DIMENSIONS AND CONNECTIONS

See Drawing, Page 3.

TESTS

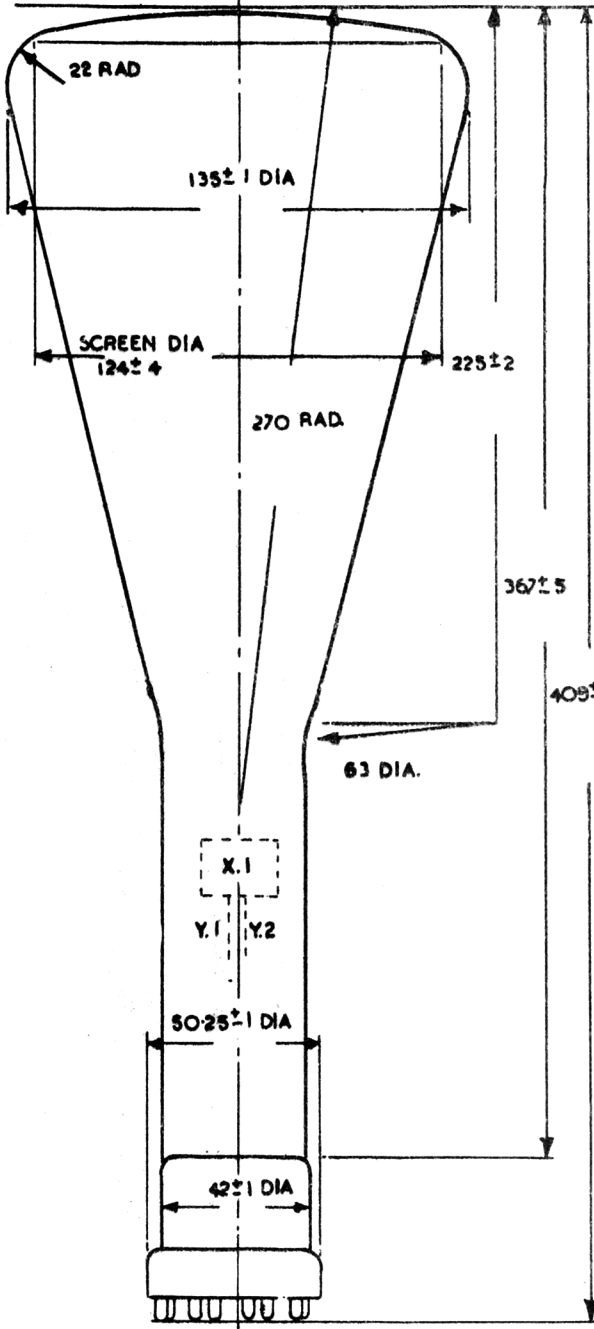
To be performed in addition to those applicable in K1003.

	Test Conditions			Test	Limits		No. Tested
	If (A)	Va (kV)	Vg (V)		Min.	Max.	
a	1.25	-	-	Vf (V)	0.6	0.75	100%
b	1.25	1.5	Adjusted	Filament Saturation	A decrease of If by 0.05 A. shall not decrease Ia by more than 10%		100%
	Vg adjusted for Ia = 150 $\mu$ A.						
c	Adjusted	1.5	Adjusted	(i) Focus and brilliance	To be no worse than a standard tube		100%
	An A.C. voltage to be applied to each pair of deflector plates so that an open raster of not less than 60 mm square is obtained. The trace shall be sharply focussed by adjustment of Vg and filament voltages.			(ii) Vg (V)	-140	-190	
Vf to be adjusted during test 'c' to the minimum for satisfactory operation. This voltage and the corresponding filament current shall be marked on the tube as follows :- "Minimum filament rating.....volts.....amps".							
d	Adjusted	1.5	Adjusted	Ia ( $\mu$ A)	50	150	100%
As test 'c'.							
e	Conditions as in test 'c'; the tube to be operated with Va = 300, 500, 700, 900, 1100 and 1300 V; Vg adjusted for optimum operation in each case.			Effect of Va on focus	No deterioration in focus in comparison with 'c (i)' shall occur.		100%
f				Angle between X- and Y-plate axes.	87°	93°	100%
g	Va = 1000 V.			Deflection sensitivities (mm/V)			
				X-plates	$\frac{400}{V_a}$	$\frac{500}{V_a}$	10% (2)
				Y-plates	$\frac{400}{V_a}$	$\frac{500}{V_a}$	
h	See K1003/5.10.			Deviation of spot from the centre of screen (mm)	-	10	100%
i	With normal If and with Vg set to cut-off, Va shall be increased to 3000 V. for 5 secs.			High Va working	With conditions specified the tube shall be free from flash-over.		100%
j	See K1003/5.4.1.			Insulation (M $\Omega$ )	200	-	100%

OUTLINE DIMENSIONS

CV951.

CV951/2/3



NOTE:-  
VIEWING THE SCREEN  
OF THE TUBE WITH THE  
BASE IN POSITION AS SHOWN  
A POSITIVE POTENTIAL  
APPLIED TO CONTACT No.4  
(X.1) SHALL DEFLECT THE  
SPOT TO THE LEFT AND A  
POSITIVE POTENTIAL APPLIED  
TO CONTACT No.(2)(Y.1) SHALL  
DEFLECT THE SPOT UPWARDS.

