ADMIRALTY SIGNAL ESTABLISHMENT

VALVE ELECTRONIC **CV957**
(NC8)

Specification AD/CV957/Issue 2. Dated 1.2.46. To be read in conjunction with K1003.	SECURITY Specification Restricted	Valve. Restricted

TYPE OF DEFLECTION:-	Electrostatic.
TYPE OF FOCUS:-	Gas (Argon).
SCREEN:-	00S33.
PROTOTYPE:-	32E.

MARKING

See K1003/7.

RATING		Note
Filament Voltage (V)	0.6	
Filament Current (A)	1.2	
Max. Anode Voltage Va (kV)	1.5	
Modulator Voltage (V) (Mean)	-165	
X-plate sensitivity (mm/V)	$\frac{450}{Va}$	A
Y-plate sensitivity (mm/V)	$\frac{450}{Va}$	A

BASE

8-Pin Bayonet (Pb8)

DIMENSIONS AND CONNECTIONS

See Drawing Page 4.

NOTE

A. Measured at Va = 1000 V.

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 µA.						
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 (uA)	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%

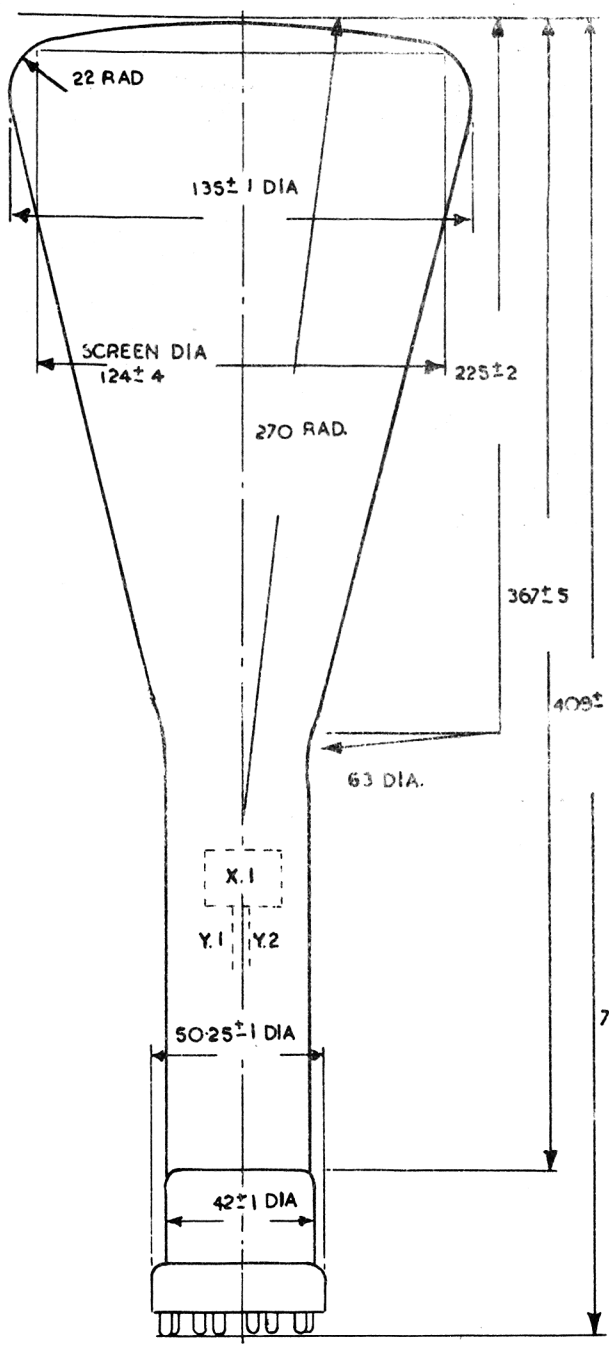
TESTS (CONTD.)

	Test Conditions	Test	Limits Min.	Limits Max.	No. Tested
g	Va = 1000 V.	Deflection sensitivities (mm/V) X-plates Y-plates	$\frac{400}{Va}$ $\frac{400}{Va}$	$\frac{500}{Va}$ $\frac{500}{Va}$	10% (2)
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

CV957

CV957/2/4



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.