

VALVE ELECTRONIC

CV1159

(NR23)

ADMIRALTY SIGNAL ESTABLISHMENT

Specification AD/GV1159/Issue 2. Dated 20.6.46. To be read in conjunction with K1001.	<u>SECURITY</u>	
	<u>Specification</u> Restricted	<u>Valve</u> Unclassified

<u>TYPE OF VALVE</u> :- Tetrode <u>CATHODE</u> :- Directly heated. <u>ENVELOPE</u> :- Glass. <u>PROTOTYPE</u> :- S410, PM14.	<u>MARKING</u> See K1001/4.
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<u>RATING</u>		Note	<u>BASE</u>	
Filament Voltage (V)	3.6		B4. See K1001/AIV/D5.1.	
Approx. Filament Current (A)	0.09		Pin	Electrode
Max. Anode Voltage (V)	150		1	Screen Grid
Mutual Conductance (mA/V)	1.0	A	2	Control Grid
Min. Anode Impedance (Ω)	167,000	A	3	Filament
Amplification Factor (min.)	130	A	4	Filament
			TC	Anode
			<u>TOP CAP</u>	
			See K1001/AI/D5.4.	

<u>NOTES</u>		<u>DIMENSIONS</u>		
A. $V_a = 120 \text{ V}$, $V_{g2} = 80 \text{ V}$, $V_{g1} = 0 \text{ V}$.		See K1001/AI/D1.		
		Dimension	Min.	Max.
		A mm	-	140
		B mm	-	46
		C mm	-	39.5
The bulb, for a minimum of 50 mm from sole of valve, must have max. dia. 42.5 mm.				

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions					Test	Limits		No. Tested	
	Vf (V)	Va (V)	Vg2 (V)	Vg1 (V)	Ia (mA)		Min.	Max.		
a	3.6	-	-	-	-	If (A)	0.07	0.11	1% (20)	
b	3.6	150	=Va	-2	-	-I _g (μA)	-	0.5	100%	
c	3.6	120	80	0	-	I _{g2} (mA)	-	2.5	100%	
d	i	3.6	100	80	0	x	y - x (mA)	-	0.24	100%
	ii	3.6	140	80	0	y				
e	i	3.6	120	80	-0.5	p	q - p (mA)	0.3	0.7	100%
	ii	3.6	120	80	0	q				
f	$\text{amplification factor} = \frac{q - p}{80} = \frac{q - p}{y - x}$						1.6		100%	
g	3.6	120	80	0	-	I _g (μA)	-0.5	0.5	100%	