ADMIRALTY SIGNAL ESTABLISHMENT

VALVE ELECTRONIC **CV1197** (NR88)

Specification AD/CV1197/Issue 4.
Dated 21.7.47.
To be read in conjunction with K1001, ignoring clauses:- 5.2.1; 5.2.2; 5.3.

SECURITY	
Specn.	Valve
Restricted	Unclassified

TYPE OF VALVE:- Triode for operation as an oscillator at frequencies up to 600 Mc/s.

CATHODE:- Indirectly Heated, Oxide Coated.

ENVELOPE:- Glass, see page 3.

PROTOTYPE:- RL18.

MARKING

See K1001/4.

BASE AND DIMENSIONS

See page 3.

GAUGES

A.S.E. Gauges Nos. 328 and 329A and B check dimensions.
See **pages 4 and 5.**

PACKAGING

See K1005.

RATING

			Note
Heater Voltage	(V)	6.3	
Heater Current	(A)	0.25	
Max. Anode Voltage	(V)	250	
Max. Anode Dissipation	(W)	2.5	
Max. Vh-c	(V)	40	
Anode Current	(mA)	7.5	A
g_m	(mA/V)	2.9	A
Ra	(ohms)	11,500	A

CAPACITANCES (pF.)

Ca-c	(max.)	0.69
Cg-c	(mean)	1.25
Ca-g	(mean)	1.33

NOTES

A. Va = 200 V, Vg = -5.3 V.

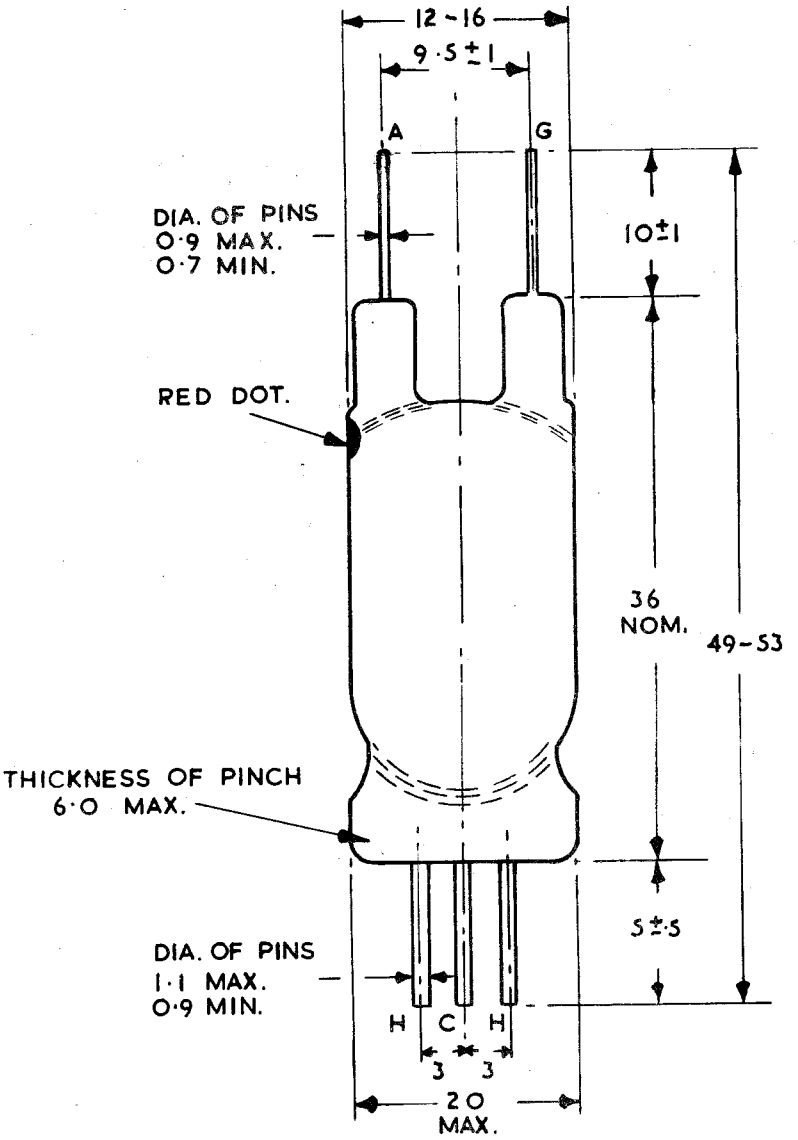
B. **It is desirable that** at least one week shall elapse between the pumping and final testing of the valves.

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions Vh (V)	Va (V)	Vg (V)	Test	Limits Min.	Limits Max.	No. Tested
a	6.3	Va-c = 200 V through 10 megohms with C + ve.		A-C Leak (μA)	-	6.0	5% (5)
b	6.3	Vg-c = 200 V through 10 megohms with C + ve.		G-C Leak (μA)	-	6.0	5% (5)
c	6.3	Vc-h = 50 V through 1 megohm with C + ve.		H-C Leak (μA)	-	14.5	5% (5)
d	6.3			Ih (mA)	225	275	100%
e	6.3	200	0	Ia (mA)	13	26	100%
f	6.3	200	-4	Ia (mA)	3	8	100%
g	6.3	200	-8	Ia (mA)	-	1.0	100%
h	6.3	200	-1.5 With 0.1 megohms in the cathode grid lead.	Reverse Ig (μA)	-	0.75	100%
j	6.3	15 AC	15 AC	Ie (mA)	15	-	100%
k	See K1001/AIII.			Capacitances (pF.)			
	Links to H.P.	Links to L.P.	Links to E.				
	TC1	1,2,3.	TC2,4,5,6,7,8,9,10.	Ca-c	0.45	0.69	6 per week
	TC2	1,2,3.	TC1,4,5,6,7,8,9,10.	Cg-c	1.1	1.4	
	TC2	TC1	1,2,3,4,5,6,7,8,9,10.	Ca-g	1.15	1.51	

OUTLINE DIMENSIONS.



ALL DIMENSIONS ARE IN MILLIMETRES.

GAUGES

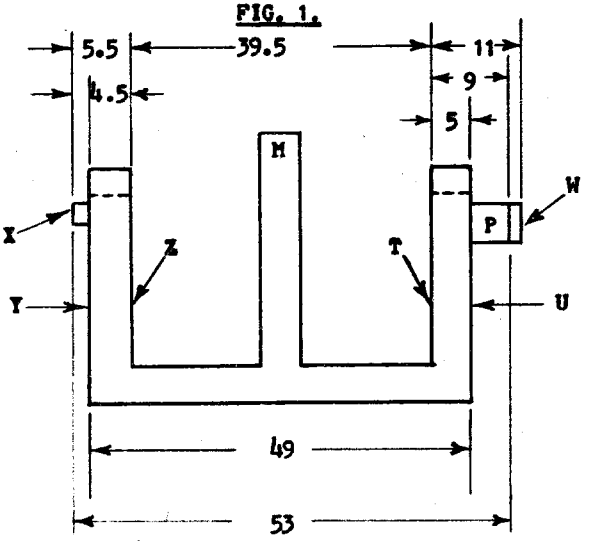
A.S.E. gauges Nos. 328 and 329A and B are available for checking the dimensions of

Gauge No. 328	:	Checks:-	Max. glass length. Max. glass body diameter. Max. and min. seal wire lengths. Disposition of all seal wires. Max. overall length.
Gauge No. 329A (GO and NOT GO)	:	Checks:-	Max. and min. diameters of anode and grid seal wires.
Gauge No. 329B (GO and NOT GO)	:	Checks:-	Max. and min. diameters of filament seal wires.

The essential dimensions of these gauges and the method of using are as follows:-

SIDE VIEW

FIG. 1.



Dimensions: Millimetres.
Unessential dimensions are not given.

Use: Gauge No. 328.
(See Fig.1.)

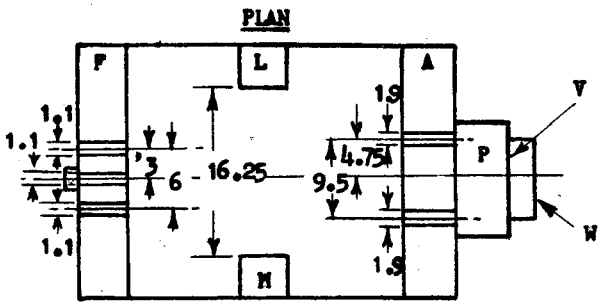
(a) Max. Glass Length. The valve should sit easily in the gauge.

(b) Seal Disposition.
Channels at F and A check filament and anode/grid seals' dispositions respectively.

(c) Filament Seal Length.
Push the glass of the filament seal pinch against the surface Z. Then ends of filament seals should lie between surfaces X (the end of the dowl pin) and Y.

GAUGES (Contd.)

CV1197



(d) Anode/grid Seals' Length. Push the glass of the anode/grid seal pinch against the surface T. Then ends of anode/grid seals should lie between surfaces V (shoulder of platform P) and W.

(e) Overall Length. With ends of filament seals in plane Y, the ends of the anode/grid seals should fall between surfaces U and V.

(f) Max. Width of Bulb. This dimension is proved satisfactory if the valve fits between the uprights L and M.

(A steel rule may conveniently be used in the above operations).

Gauge No. 329A and B. This gauge consists of a piece of metal slotted in four places to widths corresponding to the maximum and minimum permissible diameters of the filament and anode/grid seals. The wires should "go" into the corresponding "maximum" slot, but not into the corresponding "minimum" slot.