VALVE ELECTRONIC **CV294**

ADMIRALTY SIGNAL & RADAR ESTABLISHMENT

Specification AD/CV294/Issue 5. Dated 6. 10. 53. To be read in conjunction with K1001.	SECURITY Specification: Unclassified Valve: Unclassified

→ Indicates a change

TYPE OF VALVE: Gas-filled Pre-TR Cell for S-Band. CONSTRUCTION:- Cylindrical Glass Cell. PROTOTYPE:- VX3035	MARKING See K1001/4.
	DIMENSIONS See Fig. 1. Page 3. ←
RATING See "Tests".	

NOTES

A. Solid Filling. The cell shall be filled as completely as possible with Brazillian Rock Crystal in the form of needles up to 4 mm in length mixed in equal parts of material sieved through 25-30 B.S.S., 30-36 B.S.S. and 36-52 B.S.S. sieves. →

B. Gas Filling. The cell shall also contain a standard gas mixture of 80% neon and 20% helium and an additional 0.40% of argon at a pressure of 40 mm ± 2 mm of mercury.

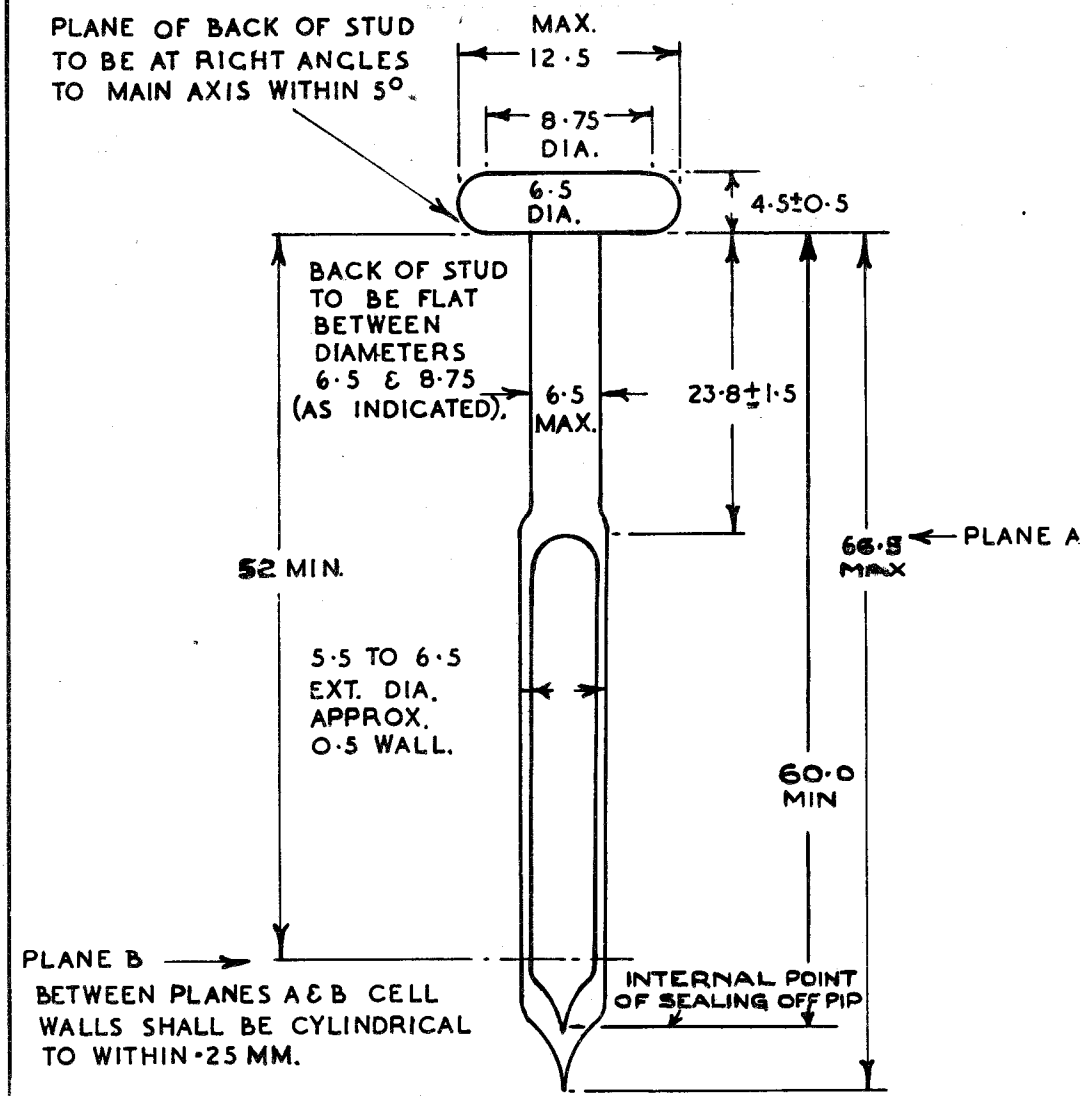
C. Packing. The cells shall be packed singly in an approved type of carton.

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions	Test	Limits		No. Tested
			Min.	Max.	
a	Operate the cell in an approved circuit of the kind shown in Fig. 2. Observe the deionisation time of the cell in conjunction with a normal CV293 (Time taken from the end of the transmitter pulse for the signal power transmitted by the pre-TR + TR system to rise to a level 6 db below the signal level when fully deionised).	Deionisation (recovery) time (μS)	-	10	5%
→ b	The cells shall be operated in an approved circuit (277P) at S.V.T.L. and the average life recorded.	Average life (Hours)	500	-	1%

FIG 1.



THE WHOLE OF THE VALVE BELOW THE STUD SHALL FIT FREELY INTO A CYLINDER OF MAX. INTERNAL DIAMETER 6·5 MM. AND MINIMUM LENGTH 60 MM.

ALL DIMENSIONS IN MMS.

FIG. 2.

SCHEMATIC OF HIGH LEVEL TEST GEAR