ADMIRALTY SIGNAL ESTABLISHMENT

VALVE ELECTRONIC **CV298**

Specification AD/CV298/Issue 2 Dated 8.10.46. To be read in conjunction with K1001	SECURITY Specn. [redacted] thereto Valve Unclassified

TYPE OF VALVE:- Single-pole double throw vacuum switch

ENVELOPE:- Kovar/Glass

PROTOTYPE:- FA15

MARKING

See K1001/4.

Additional Marking:-

(See Note E)

RATING		Note
Max. Voltage between any two Contacts (V)(RMS)	3000	A
Max. Continuous Current (A)(RMS)	15	B
Ambient Temperature Range (°C)	-40 to +100	
Max. Contact Pressure (gms)	500	
Recommended Contact Pressure (gms)	75	C

BASE

See Page 3.

DIMENSIONS

See Page 3.

PACKING

See K1001/7.

NOTES

A. At sea level, 50% humidity.

B. The life of the switch depends upon the interrupting rating, with a resistance load, as follows :-

V (RMS)	Current (A)	Operation (Total Life)
3000	10	1000
3000	3	100,000
3000	1	1,000,000

Notes continued overleaf ...

NOTES (Contd.)

C. Applied at a distance of $2\frac{3}{8}$" from the flexible diaphragm; the pressure must be capable of closing the gap in either direction from any position.

D. All metal parts of the valve must be smeared with vaseline after sand blasting.

E. All valves shall be graded according to the measurement of contact gap at each 0.001" from 0.023" to 0.031" and the gap indicated by a marking on the switch and on the carton.

The contact gap is to be measured at a point $2\frac{3}{8}$" distant from the flexible diaphragm.

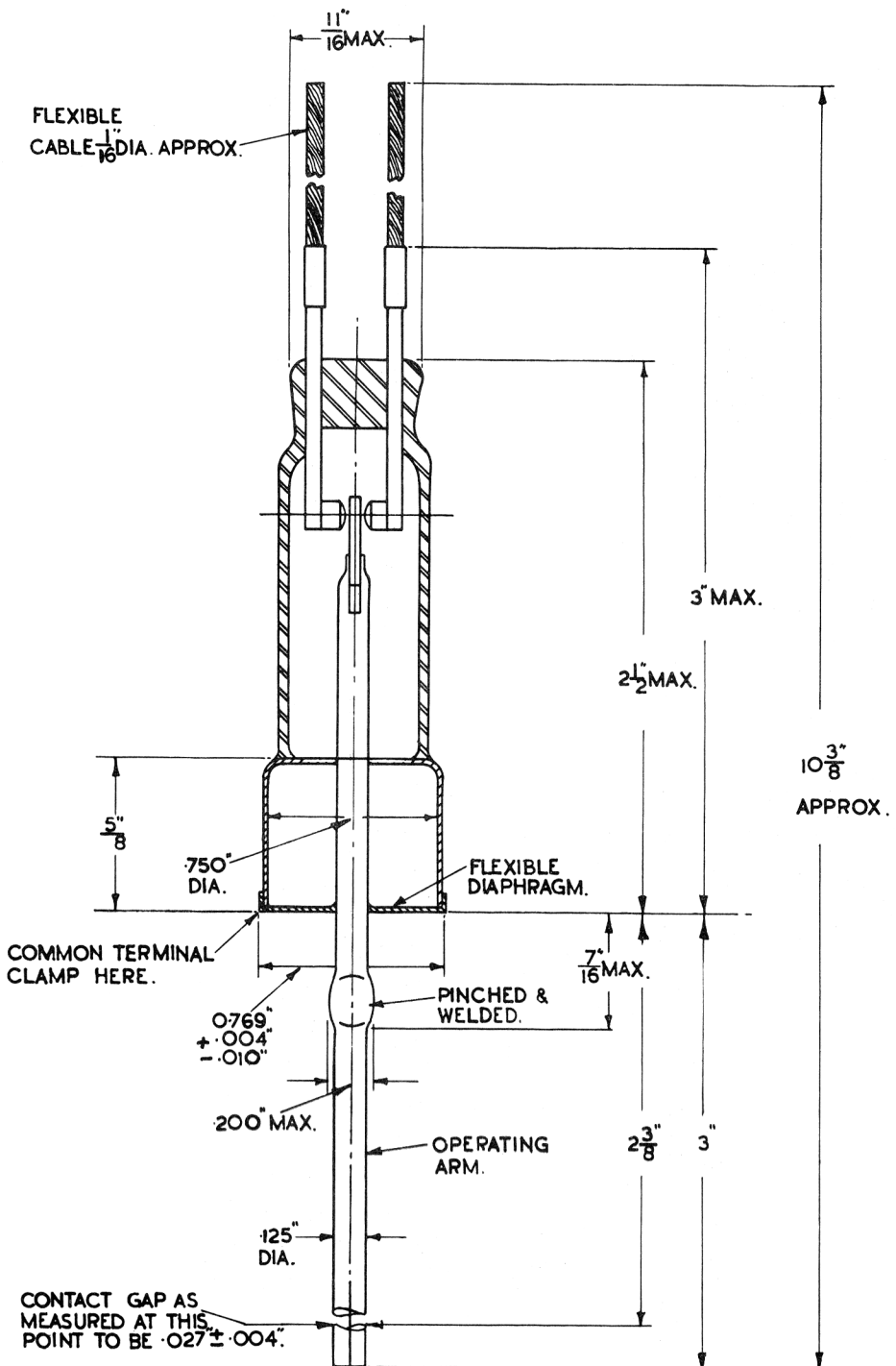
TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions	Test	Limits Min.	Limits Max.	No. Tested
a	Moving contact made alternately to each fixed contact, and a voltage of 6000 V. peak applied between each fixed contact and the moving contact.	There shall be no breakdown between the contacts and no appreciable glow discharge due to remanent gas.			100%
b	Moving contact to be made to each fixed contact alternately with a pressure of 75 grams applied at a point $2\frac{3}{8}$" from the flexible diaphragm.	Contact resistance measured between the point of applied pressure and the flexible lead not to exceed 100 milliohms with a current of 10 A.			100%

DIMENSIONS

CV298



AMENDMENT "A" TO SPECIFICATION

AD/CV298 ISSUE 2, DATED 8.10.46

Test Clause 'b'

Delete Test Clause and insert new Test Clause:

"The resistance measured between common terminal and either flexible lead is not to exceed 25 milliohms with a current of 10 amperes flowing".

N.50340