

A.P.61761 VALVE TESTER, CT160

(Joint Services Designation:- Valve Characteristic Meter, CT160)

SUMMARY OF DATA

PURPOSE

A transportable instrument for testing all receiving and low power transmitting valves in common use.

BRIEF DESCRIPTION

The instrument is built into a metal carrying case comprising two parts. The base contains the controls for the electrode supplies and the meter, and the lid which houses the various valveholders and roller selector switch. This switch is engraved with letters and figures to correspond with a code in the operating manual so that the tester can be set up for any given valve. Using the mutual conductance parameter, the instrument can give a "Good-Replace" reading, alternatively it can provide sufficient information for the plotting of characteristic curves. Other facilities available include measurement of interelectrode insulation (hot and cold), anode and screen current for single and multiple valves, gas current up to 100 μ A, mutual conductance, heater continuity and checks on rectifiers under load conditions. The instrument is fitted with an automatic aural and visual warning device which operates if certain circuits are inadvertently overloaded or a short circuit occurs. Circuit design virtually eliminates the possibility of spurious oscillation.



VALVE TESTER CT160

PERFORMANCE

Mutual Conductance	0.1 to 20 mA/volt (60% or over, "Good"; 45% or less "Replace") Accuracy \pm 5%.
Anode Current	Up to 100 mA (Diode and Rectifiers tested for emission only 1, 5, 15, 30, 60 and 120 mA ranges).
Anode Voltage	20, 40, 60, 75, 90, 100, 150, 200, 250, 300, 400.
Screen Voltage	20, 40, 60, 75, 90, 100, 125, 150, 200, 250, 300.
Heater Voltage	0.625, 1.25, 2, 2.5, 4, 5, 6.3, 10, 11, 13, 16, 20, 25, 30, 40, 48, 70, 117 These can be increased by 15% by a switch giving 1.4, 3, 4.5, 5.7, 7.5, 12.6, 15, 18, 23, 28, 35, 45, 55 and 80V.
Negative Bias	0 to 40V.
Electrode Insulation	Heater cold - Anode to Rest, Screen to Rest. Heater hot - Heater and Cathode to Rest, and Heater to Cathode.
Gas Current	Up to 100 μ A.

POWER REQUIREMENTS

105-120, 175-250 volts \pm 6%; adjustment can be made in 5 volt steps.

50 to 500 c/s \pm 10%

50W max.

PHYSICAL DATA

Height 10 in. Width 15½ in. Depth 11½ in. Weight 25 lb. (approx.)

REMARKS

The carrying case is shower-proof only.

OTHER SERVICE OR COMMERCIAL DESIGNATION

M.O.S. Designation : Valve Tester, CT160
Civilian Equivalent : AVO Valve Tester Type VT160.

HANDBOOKS

B.R.1771(13)A (Giving full operating instructions also theory and maintenance data).
B.R.1771(13)B (Giving abbreviated operating instructions and valve data).

ESTABLISHMENT LIST

E.1115.

PRODUCTION SPECIFICATION

15098.