



# VALVE DATA MANUAL



AVO LTD

AVOCET HOUSE

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LONDON, S.W. 1 ENGLAND

THE  
AVO  
VALVE DATA  
MANUAL

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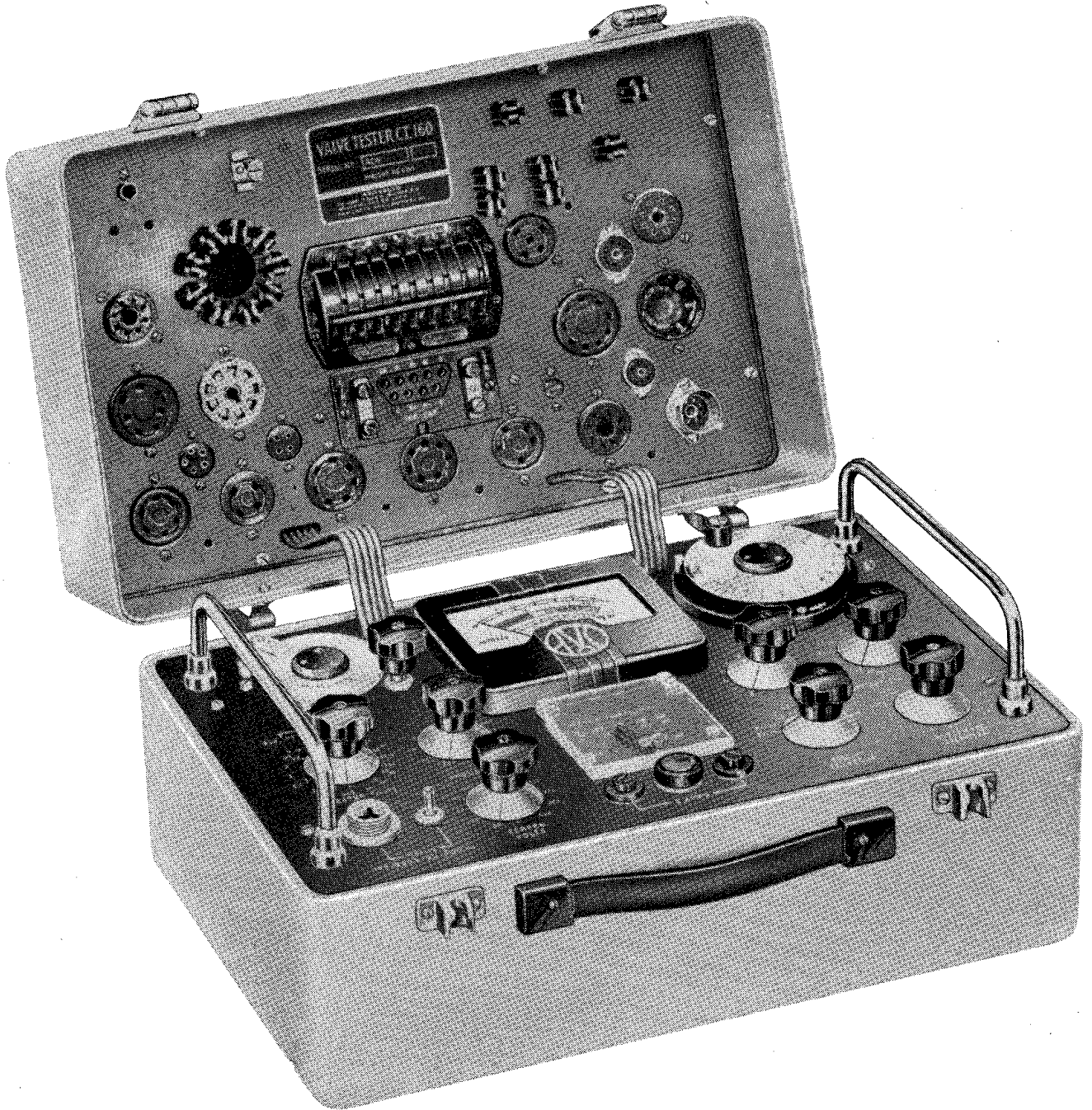
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THE AVO VALVE CHARACTERISTIC METER Mk. III



THE AVO VALVE TESTER TYPE 160

## FOREWORD

This data manual is primarily intended for use with the "AVO" Valve Characteristic Meter, the "AVO" Valve Tester Type 160, and "AVO" Valve Tester, but once the Selector Switch code is understood, the manual also forms a quick and convenient guide for general use.

The Instruction Book which accompanies the instrument should be thoroughly studied before the data contained in this manual is used, but as a convenient guide to the user who is already familiar with the full instruction book, abbreviated working instructions are given.

It is our intention to issue revised copies of this manual from time to time and dates of publication will be given in our advertisements in the Trade Press.

The return of the enclosed postcard will enable us to inform you when new issues become available.

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## Accessories.

If the valve base required does not appear on the Valve Holder Panel it is necessary to use an adaptor which plugs into an existing valve holder. These are supplied as follows:

No. 1. B7G and B8A.	No. 6. Sm7 (6A7 Base).
No. 2. B9G.	No. 7. B9A.
No. 3. B8B.	No. 8. Continental 8 pin (F8).
No. 4. B3G. Hivac D.A.4 and 5 pin.	No. 9. B7A.
No. 5. Blank.	No. 9/1 B7A for use with Valve Tester Type 160.

Whilst every care has been taken in the preparation of this manual to ensure that the data given is correct, the Company cannot accept any responsibility for damage caused to a valve under test, or the instrument, due to the inclusion of incorrect information.

**ABBREVIATED WORKING INSTRUCTIONS FOR THE "AVO" VALVE**  
**CHARACTERISTIC METER Mks. I & II.**

The brief notes which follow are intended to act as a guide to the operator who has already studied, and is familiar with, the contents of the Instruction Manual issued with the instrument.

1. Check mains adjustment tap and connect mains lead to the supply, red and black leads are line and neutral, green or yellow, the Earth connection.
2. Set "CIRCUIT SELECTOR" to "CHECK (C)".
3. Set "METER SELECTOR" to 100 on outer scale.
4. Turn "SET ZERO" Control fully clockwise.
5. Set "FILAMENT VOLTAGE" switches to value indicated in Valve Data. The figure in parenthesis should be ignored.
6. Set "ANODE VOLTS", "SCREEN VOLTS", and "GRID VOLTS" to values indicated in Valve Data.
7. Set "ROLLER SELECTOR" switch as indicated in Valve Data.
8. Switch "ON", press "RESET" button, release, and with "ELECTRODE LEAKAGE" switch at "~" adjust movement pointer to position "~" by means of "SET ~" switch.

**ALL VALVES.**

1. Insert Valve.
2. Fully rotate "ELECTRODE LEAKAGE" switch, check heater continuity at "H" and insulation on all other positions.
3. Set "CIRCUIT SELECTOR" at "CHECK (H)" to measure leakage from Heater/Cathode to all other electrodes strapped, with valve hot.
4. Turn "CIRCUIT SELECTOR" to "C/H ins." to measure leakage between heater and cathode with valve hot (if valve is indirectly heated).

**TRIODES, DOUBLE TRIODES, DIODE TRIODES, PENTODES, DOUBLE PENTODES, DIODE PENTODES AND TETRODES IN SIMILAR COMBINATION.**

**ANODE CURRENT.** Turn "ANODE SELECTOR" to "A<sub>1</sub>". "CIRCUIT SELECTOR" to "TEST". Meter should then indicate "ANODE CURRENT". Reduce "METER SELECTOR" switch setting if required. If the meter lamps go out do not press "RESET" button until you have checked for faulty settings on "ROLLER SELECTOR" switch. If these are in order, the valve is probably "soft" and the test should proceed no further.

**MUTUAL CONDUCTANCE.** Reduce Meter reading to "ZERO" by means of the "SET ZERO" control. Press "mA/V" Button. Meter reading in milli-amps represents "MUTUAL CONDUCTANCE" in "mA/V". To test on "GOOD/BAD" scale, reduce meter readings to "ZERO" as before, turn "METER SELECTOR" switch to "mA/V" position. Adjust "SET mA/V" control to figure given in the Valve Data. Press "mA/V" Button. A good valve should read within the green band on the meter

For double valves, check data for difference in electrode voltages and repeat above operation at A<sub>2</sub>.

**GAS TEST.** To measure Grid current, proceed as for mutual conductance, using "GOOD/BAD" scale. Reduce meter reading to "ZERO" by means of the "SET ZERO" control, press "mA/V" button, adjust meter reading to full scale by means of "SET mA/V" control. Release "mA/V" button, press "GAS" button. Full scale deflection will now represent  $10\mu\text{A}$  Grid Current. For currents over  $10\mu\text{A}$  use method given in full instruction book.

**DIODES.** To measure "DIODES" set the "METER SELECTOR" switch to 1 on inner ring of figures and "ANODE SELECTOR" switch to "A<sub>1</sub>", turn "CIRCUIT SELECTOR" switch to "DIODE". Check double diodes at "A<sub>1</sub>" and "A<sub>2</sub>".

**RECTIFIERS.** Proceed as above to test for electrode leakage, heater/cathode leakage, etc. Using inner ring of figures, set "METER SELECTOR" switch to load shown in Valve Data, turn "CIRCUIT SELECTOR" switch to "REC" Good valves will read in green band on meter scale. Load reading is per anode.

**NOTE.** When using a recently produced instrument to check valves having a cathode top cap connection, the flying lead cathode socket will be found in the base of the "P" Type Valveholder (8SC; see page 16).

This socket is not fitted to earlier instruments and the following procedure should therefore be observed. Locate an unconnected pin (not internally connected to an electrode within the valve) upon the valve to be tested, set the appropriate roller to  $\frac{1}{c}$ , connect flying lead to valve top cap and insert plug in any valve holder pin corresponding to the roller set to  $\frac{1}{c}$ .

**TUNING INDICATORS (MAGIC EYES).** For testing data see Appendix I.

**Abbreviations used in this Manual.**

For detailed information, refer to the working instructions for the Valve Characteristic Meter.

**D, DD, DDD,** - Diodes.

**DT, DDT, DP, DDP.** - Valve with another electrode assembly in addition to the diode.

**H.** - Heptode or Hexode.

**N.** - Nonode.

**O.** - Octode.

**P.** - Pentode. **PP.** - Double pentode.

**T.** - Triode. **TT.** - Double triode. **TH.** - Triode Heptode, or Triode Hexode.

**TP.** - Triode pentode.

**R.** - Rectifier. **RR.** - Full wave rectifier.

\*. - Denotes internally connected pin. For Valve Characteristic Meter Mk. I see procedure at top of page 11. For Valve Characteristic Meter Mk. II read "0" in place of "\*" in selector switch number.

†. - Third diode in triple diode.



## ABBREVIATED WORKING INSTRUCTIONS FOR THE "AVO" VALVE

### CHARACTERISTIC METER MARK III.

Before switching "ON" the full Instruction Book should be read and always used for reference when testing unusual types of valves.

1. Check mains adjustment tap and connect mains lead to the supply, red and black leads are line and neutral, green or yellow being the earth connection.
2. Set "CIRCUIT SELECTOR" to "CHECK C" and "ELECTRODE SELECTOR" to "A<sub>1</sub>".
3. Set "METER SWITCH" to 100 on the Ia scale.
4. Turn "BACKING OFF" controls fully anti-clockwise.
5. Set "HEATER VOLTS" switches to value indicated in Valve Data. The figure in parenthesis should be ignored.
6. Set "ANODE VOLTS", "SCREEN VOLTS" and "GRID VOLTS" to values indicated in Valve Data.
7. Rotate the "SET Ma/V" control to figure given in Valve Data using (where possible) the inner scale and appropriate setting of associated switch.
8. Set "ROLLER SELECTOR" switch as indicated in Valve Data and ensure that A<sub>1</sub> and A<sub>2</sub> links are tight. (For "\*" in data read "0").
9. With leakage switch at "~", switch on, and allow instrument to warm up. Adjust pointer to position "~" by means of "SET~" switch.

### ALL VALVES.

1. Insert valve, and make any top cap connections if required.
2. Fully rotate "LEAKAGE" switch, check heater continuity at "H" and insulation on all other positions.
3. Set "CIRCUIT SELECTOR" to "CHECK H" to measure leakage from Heater/Cathode to all other electrodes strapped together with valve hot.
4. Turn "CIRCUIT SELECTOR" to "C/H" to measure leakage between heater and cathode with valve hot (if valve is indirectly heated).

### TRIODES, DOUBLE TRIODES, DIODE TRIODES PENTODES, DOUBLE PENTODES, DIODE PENTODES AND TETRODES IN SIMILAR COMBINATION.

ANODE CURRENT. With "ELECTRODE SELECTOR" at "A<sub>1</sub>" set "CIRCUIT SELECTOR" to "TEST". Meter should then indicate anode current. Reduce METER SWITCH setting if required. *If protective relay operates, switch off and check for incorrect setting of "ROLLER SELECTOR" switch or panel controls. If all controls are correct and relay continues to operate when instrument is switched on again, the valve is probably soft and the test should be discontinued.*

**MUTUAL CONDUCTANCE.** Reduce meter reading to zero by means of "BACKING OFF" controls. Set "METER SWITCH" to "2.5" position and readjust zero if necessary. Turn "METER SWITCH" to "mA/V" position, when a good valve will give an indication in the green band on the meter scale. To obtain actual mA/V reading, adjust "SET mA/V" control until needle reads on calibration point marked 1mA/V, in centre of green band. The "SET mA/V" control will now indicate the mutual conductance of the valve under test. To obtain a reading for valves with mutual conductance below 3mA/V, use outer scale setting on "SET mA/V" control and follow the procedure outlined above. See the Instruction Manual for more detailed information on the use of the "SET mA/V" control, the testing of valves with "slope" less than 1 mA/V.

For double valves, check data for difference in electrode voltages and repeat above operations with the "ELECTRODE SELECTOR" set to "A<sub>2</sub>".

**GAS TEST.** To measure grid current set "CIRCUIT SELECTOR" to position "GAS" and the "METER SWITCH" to its 100mA position. Meter will now indicate gas current, full-scale indication being 100μA.

**DIODES.** To check diodes turn "ELECTRODE SELECTOR" to "D<sub>1</sub>" and "METER SWITCH" to "1mA" on D/R scale (unless otherwise indicated in Valve Data). Turn "CIRCUIT SELECTOR" to "TEST". The condition of the valve will now be given on the "REPLACE/GOOD" scale. Check double diodes at D<sub>1</sub> and D<sub>2</sub> position of the "ELECTRODE SELECTOR".

**RECTIFIERS.** To check rectifiers, set "ELECTRODE SELECTOR" to "D<sub>1</sub>" and set anode loading given in Valve Data, on D/R scale of "METER SWITCH". Turn "CIRCUIT SELECTOR" to "TEST". The condition of the valve will now be indicated on "REPLACE/GOOD" scale. Load reading is per anode. Check full-wave rectifiers at positions "D<sub>1</sub>" and "D<sub>2</sub>" of "ELECTRODE SELECTOR" switch.

On completion of tests return controls to their fully anti-clockwise position.

**TESTING WIRE ENDED (FLYING LEAD) VALVES.** Wire-ended (flying lead) valves may be tested by inserting individual wires into appropriate electrode connections of a suitable valve holder in correct sequence.

When using the AVO V.C.M. Mk 111, the setting of the selector switch may be ignored, the leads being inserted into appropriate sockets of the top cap connector panel.

**NOTE †** Alternative test figures are given for use when valve shows signs of back emission from anode to G3. This phenomenon can be recognised by the anode current apparently decreasing as the valve heats up.

When using AVO Characteristic Meter Marks I and II, to check valves requiring a bias of less than 1 volt, erroneous readings may be obtained due to the valve drawing grid current, which has the effect of reducing the grid bias voltage thus producing low mutual conductance readings. Users of this instrument are therefore advised to use the alternative data which has been supplied wherever possible. Valves with alternative data are marked thus §

## ABBREVIATED WORKING INSTRUCTIONS FOR

### THE "AVO" VALVE TESTER TYPE 160

The brief notes which follow are intended to act as a guide to the operator who has already studied, and is familiar with, the full operating instructions given in Working Instructions for the "AVO" Valve Tester type 160.

The "AVO Valve Data Manual" can in general be used as a source of test data for the AVO Valve Tester type 160, but some valves which demand a reasonably heavy heater current, must have their normal heater voltage uprated to compensate for the voltage drop in the wiring and transformer (see note below).

#### Procedure for finding Test Data.

1. Note commercial or "service" reference on valve and consult the index to ascertain whether it is listed. If the valve is a service type, the cross-reference section will give the commercial equivalent and also the page on which test data is listed.

#### Note.

Test Data for the AVO Valve Characteristic Meter and AVO Valve Tester type 160 is identical and will be found under the heading "Valve Characteristic Meter Data". Valves which draw a heavy heater current have an alternative heater voltage shown in parenthesis, e.g. 5U4 which has a normal heater voltage of 5 has been unrated to 5.7 to compensate for voltage drop in wiring and transformer. The figure in parenthesis should always be used when employing the AVO Valve Tester Type 160.

#### (1) SETTING OF INSTRUMENT.

- (a) Check coarse mains voltage setting of MAINS VOLTAGE SELECTOR panel and if necessary, re-set for supply voltage.
- (b) Set CIRCUIT SELECTOR to SET ~.
- (c) Set ELECTRODE SELECTOR to A<sub>1</sub>.
- (d) Set heater volts and associated toggle switch to value indicated in Valve Data.
- (e) Set ANODE VOLTS, SCREEN VOLTS, NEG GRID VOLTS, and ANODE CURRENT switches to value indicated in Valve Data.
- (f) Set ROLLER SELECTOR switch to Code Number given in the Valve Data and check that the links on the top panel are firmly connected.
- (g) Connect mains lead to instrument and supply.
- (h) Switch on, allow a few moments for instrument to warm up, and adjust rotary MAINS VOLTAGE SELECTOR until the meter needle lies in the black zone marked " ~ ".

#### (2) ALL VALVES.

- (a) Insert valve and if necessary, connect "Top Cap Lead" between valve and appropriate socket in TOP CAP CONNECTOR PANEL.
- (b) Set CIRCUIT SELECTOR to H/CONT to check heater continuity.
- (c) Set CIRCUIT SELECTOR to A/R and using successive settings of ELECTRODE SELECTOR at A<sub>1</sub>, A<sub>2</sub>, D<sub>1</sub>, D<sub>2</sub>, check electrode insulation with the valve cold between anodes and the remaining electrodes strapped together.

- (d) Set CIRCUIT SELECTOR to S/R and set ELECTRODE SELECTOR switch to  $A_1$  to check insulation with the valve cold between screen and all other electrodes (except diodes) strapped together.
- (e) Set CIRCUIT SELECTOR to CH/R and ELECTRODE SELECTOR to  $A_1$  or  $D_1$  and  $D_2$  to check with valve hot, insulation between heater/cathode and all other electrodes strapped together.
- (f) Set CIRCUIT SELECTOR and ELECTRODE SELECTOR to C/H to check with valve hot, insulation between heater and cathode (for indirectly heated valves).

**(3) TRIODES, DOUBLE TRIODES, DIODE TRIODES, PENTODES, DOUBLE PENTODES, DIODE PENTODES AND TETRODES, IN SIMILAR COMBINATION.**

Set CIRCUIT SELECTOR to TEST and ELECTRODE SELECTOR to  $A_1$ .

**NOTE :**

*Should protective relay operate, switch off and check for incorrect setting of ROLLER SWITCH, or electrode voltages. If these are correct and relay continues to "buzz" when instrument is switched on, the valve is probably "soft" (gassy) and the test should proceed no further.*

**(3.1) To check relative goodness of valve in conjunction with coloured comparison scale.**

**(a) Using recommended anode current.**

- (i) Do not alter ANODE CURRENT controls, but adjust NEG GRID VOLTS control until meter reads zero.
- (ii) Slowly rotate SET mA/V control to SET ZERO position and make any final adjustment to zero, using fine ANODE CURRENT control.
- (iii) Continue rotation of SET mA/V control to expected value of mA/V (meter needle should rise).
- (iv) Comparative "goodness" of valve will now be shown by position of needle on coloured scale.

**(b) Using recommended negative grid voltage.**

- (i) Do not alter NEG GRID VOLTS control, but adjust ANODE CURRENT controls until meter reads zero.
- (ii) Slowly rotate SET mA/V control to SET ZERO position and make any final adjustment to zero, using fine ANODE CURRENT control.
- (iii) Continue rotation of SET mA/V control to expected value of mA/V (meter needle should rise).
- (ii) Slowly rotate SET mA/V control to SET ZERO position and make any final adjustment to zero, using fine ANODE CURRENT control.
- (iv) Comparative "goodness" of valve will now be shown by position of needle on coloured scale.

**(3.2) To check valve by direct reading of mutual conductance.****(a) Using recommended anode current.**

- (i) Do not alter ANODE CURRENT controls, but adjust NEG GRID VOLTS control until meter reads zero.
- (iii) Continue rotation of SET mA/V control until meter needle reaches calibration line in centre of "good" zone.
- (iv) Read actual value of mutual conductance from SET mA/V dial. This figure can be compared with that given in Data Book.

**(b) Using recommended negative grid volts.**

- (i) Do not alter NEG GRID VOLTS control, but adjust ANODE CURRENT controls until meter reads zero.
- (ii) *Slowly* rotate SET mA/V control to SET ZERO position and make any final adjustment to zero, using fine ANODE CURRENT control.
- (iii) Continue rotation of SET mA/V control until meter needle reaches calibration line in centre of "good" zone.
- (iv) Read actual value of mutual conductance from SET mA/V dial. This figure can be compared with that given in the Data Book.

**(3.3) To check valves having a mutual conductance less than 1 mA/V.**

Since the SET mA/V dial is not calibrated below 1 mA/V, it is not possible to check on the coloured comparison scale, valves having an expected mutual conductance less than 1mA/V. Such valves are checked by direct measurement of mutual conductance using the procedure as in Section 3.2 with the exception that the mA/V dial is rotated to the 1mA/V position and the actual value for mutual conductance (being less than 1mA/V) is read on the meter scale calibrated 0.1 — 1mA/V.

For valves with more than one electrode assembly, having set up for any difference in electrode voltages, repeat appropriate test with ELECTRODE SELECTOR at A<sub>2</sub>.

**(3.4) Gas Test.**

Set CIRCUIT SELECTOR to GAS, and ELECTRODE SELECTOR to A<sub>1</sub>. Gas current will now be directly indicated in  $\mu$ A.

**(4) DIODES & RECTIFIERS.**

Proceed as in Sections 1 and 2, then with the CIRCUIT SELECTOR at position TEST, ELECTRODE SELECTOR at D<sub>1</sub> and using inner ring of figures, set the right-hand ANODE CURRENT control to the load figure specified in Valve Data. The comparative "goodness" of a valve is shown by the position of the needle on coloured scale.

Load reading is per anode. Check full-wave rectifiers and double diodes with ELECTRODE SELECTOR at D<sub>1</sub> and D<sub>2</sub> respectively.

Check signal diodes at 1mA loading unless otherwise specified in data.

**ABBREVIATIONS USED IN THIS MANUAL.**

D, DD, DDD - Diodes.

DT, DDT, DP, DDP - Valve with another electrode assembly in addition to the diode.

H - Heptode or Hexode.

N - Nonode.

O - Octode.

P - Pentode or Tetrode, PP - Double Pentode or Double Tetrode.

T - Triode, TT - Double Triode, TH - Triode Heptode, or Triode Hexode.

TP - Triode Pentode.

R - Rectifier, RR - Full-wave Rectifier.

T1 - Tuning Indicator (magic eye).

CCR - Cold Cathode Rectifier.

† - Appearing among ROLLER SELECTOR switch numbers, refers to third diodes in triple diodes. Refer to Working Instructions Chapter 3, Section headed "Instructions for Testing Specific Valve Types" for full test procedure.

( ) - Where brackets appear around stated heater voltage thus (5) it indicates that heater voltage given in Data columns has been uprated to allow for voltage drop at valve base, due to high heater current taken by the particular valve.

**NOTES REFERRED TO IN VALVE DATA REMARKS COLUMN.**

- A The heater/cathode lead identified with red marking should be connected to Pin No. 1.
- B The grid top cap is situated over Pins No. 7 and 8.
- C This valve does not fit special valve holders supplied, and roller selector Data will depend on connections made to valve electrodes.
- D Pin No. 1 on the flat pinch type of base is the lead adjacent to the coloured blob the remaining pins being directly numbered across the base from Pin No. 1.
- E Alternative test figures are given for use when valve shows signs of back emission from anode to  $G_3$ . This phenomenon can be recognised by the anode current apparently decreasing as the valve heats.
- G Valves on the B8D base when leads are cut, should be tested either by insertion in a B8D Adaptor, or leads lengthened and tested in the same way as those with flexible leads, by using the special 9 clip valve holder.
- H Tests on tuning indicators should not be made until the resistor value ( $R_a$ ), indicated in the remarks column, has been inserted across the link(s) on valve panel.
- J Use special 9 clip valve holder.
- K The grid top cap is situated over Pins No. 4 and 5.
- L  $A_1$  is situated above pins 2 & 3.  
 $A_2$  is situated above pins 7 & 8.
- M  $A_1$  is situated above pins 2 & 3.  
 $A_2$  is situated above pins 5 & 6.
- N Use special B7A adaptor (Adaptor 9/1).

## ABBREVIATED WORKING INSTRUCTIONS FOR THE "AVO" VALVE TESTER.

Although the "Avo" Valve Tester has been out of production for some years, the following operational notes will be of assistance to the user not entirely familiar with the instrument, and its employment in conjunction with this data manual.

The data in the following pages for the "AVO" VALVE CHARACTERISTIC METER also gives sufficient information for the checking of the valves with the "AVO" VALVE TESTER, referred to as the "A.V.T."

The data is presented in the following form :—

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			

By ignoring the data shown in the columns specifically marked Valve Characteristic Meter, the data applicable to the "A.V.T.", is obvious.

1. The voltage selector panel associated with the internal transformer in the meter unit should be set to match the voltage of the A.C. mains supply.
2. Before switching on, locate in this manual the line of data applicable to the valve to be tested and set the ANODE, SCREEN and HEATER switches to the voltages indicated. The SELECT ANODE switch should be set to "NORMAL", "A<sub>2</sub>", "D<sub>1</sub>" or "D<sub>2</sub>" according to the test to be undertaken, the SET ZERO control turned fully clockwise, the SET mA/V control set at 100, and the ROLLER SELECTOR SWITCH set up in accordance with the code number appearing in the data.
3. Switch on, noting that the neon indicator lights up indicating that the mains switch is on, and insert test lead plugs into the sockets in Meter Unit Panel. The neon lamp will now have been extinguished. If the Crocodile Clips at the remote ends of the leads are now connected to the valve pins in turn, shorts between the valve electrodes will be indicated by the neon lamp glowing. The test should not proceed further if shorts between electrodes (other than heater pins) are indicated.
4. Insert valve in correct socket upon valve panel and observe test procedure outlined below.

**NOTE:** The heater voltages in parenthesis should be ignored.

### P. & T. (Pentodes and Triodes).

As the valve warms up the initial anode current will be registered upon the meter and should be backed off to zero by means of the SET ZERO control. The SET mA/V control should now be set to "mA/V" and any adjustment required to return the needle to zero, made upon the SET ZERO control.

The toggle key is now depressed in the direction marked mA/V thus indicating the slope of the valve upon the "mA/V" scale. This reading should compare favourably with the figure given in the data.

The toggle key is now depressed in the direction marked C. INS. (for indirectly heated valves only) thus indicating cathode/heater insulation which should, for a good valve, be of the order of 5—10MΩ (in the case of pentodes, for this test the SCREEN switch should be at set 60 or damage to the instrument and valve may result).

**DT, DDT, DP, DDP (Valves with another electrode assembly in addition to diode).**

The mutual conductance of the triode or pentode section is checked with anode selector at "Normal". Emission figures for each diode are then obtained as below.

"†" See information given under the heading "Diodes" below.

**TT and PP (Double Electrode Assemblies)**

The mutual conductance of each half of such a valve is obtained with the anode selector at "Normal" and  $A_2$ .

Where no mutual conductance figure is given, each half of valve should be checked for matching of mutual conductance.

**R (Rectifiers).**

To test rectifying valves for emission, set mA/V control at 100 and anode volts switch at "Rec". Emission of each anode (in case of full wave) will be obtained by setting anode selector at " $D_1$ " and " $D_2$ " respectively. The two emissions should match within small limits and can be compared with the figures given in the mA/V column which indicates the order of emission to be expected.

**D, DD and DDD (Diodes).**

These are tested for emission for each diode with anode volts switch at "D" and anode selector at " $D_1$ " and " $D_2$ ". Set "mA/V" control at "mA/V" when reading should be greater than 0.5 for a good diode. Readings will generally be between 2 and 5. Where the symbol "†" occurs amongst the selector switch set up figures, set to  $\frac{7}{A_2}$  and test for emission of third diode with Anode Selector at  $A_2$ .

Where  $D_1$  or  $D_2$  appears under the heading "Top Cap" these should be connected to top cap "A" and tested with the anode selector at "Normal".

		<i>Selector Switch</i>	<i>T.C.</i>	<i>Vf</i>	<i>Anode Volts</i>	<i>Base</i>	<i>Type</i>
E.g.	EA50	123 000 000	$D_1$	6	D	B3G	D

Connect to Anode Top Cap (A) and check for emission of Diode with Anode Selector at "Normal".

**TH, TP, O (Frequency Changers).**

To test frequency changers two sets of figures are given, first check the triode (Oscillator) section with the anode selector at "Normal" and then the pentode (mixer) section with the selector at  $A_2$ .

**SPECIAL NOTES.**

Due to the vast improvements in valve technique, the A.V.T. has limitations to its use. Notably the tendency to parasitic oscillations has greatly increased, and this should be borne in mind when high slope, short grid base valves of the all-glass base construction are under test.



## INTERNAL CONNECTION (\*).

When the symbol \* appears among the Selector Switch set up figures, it indicates that an unknown electrode may be connected to this pin internally. To obtain the complete Selector Switch coding, test with an ohmmeter between pin marked \* and all others. (The ohmmeter should be on a sufficiently low range to discriminate between a dead short and filament resistance.) Dependent upon the electrode to which this pin is internally connected the correct code can be set up and normal test procedure followed.

Where the pin marked \* is O.C. to all others Set Roller to 0.

”	”	”	”	”	”	connected to Cathode	Set Roller to	..	1.
”	”	”	”	”	”	Heater -	”	..	2.
”	”	”	”	”	”	Heater +	”	..	3.
”	”	”	”	”	”	Grid	”	..	4.
”	”	”	”	”	”	Screen	”	..	5.
”	”	”	”	”	”	Anode	”	..	6.
”	”	”	”	”	”	Anode 2	”	..	7.
”	”	”	”	”	”	Diode Anode 1	Set Roller to	8.	
”	”	”	”	”	”	Diode Anode 2	”	9.	

### 1.4 Volt Dry Dattery Valves.

To obtain the filament supply for the 1.4V series, set the filament voltage switch to 10 volts and the toggle switch on the valve holder panel to  $\div 7$  position. The toggle switch must always be returned to “Normal” after such tests. Where the Filament Voltage Extension Unit is used, 1.4 volts can be obtained direct by setting to 1.4V, but in these circumstances the  $\div 7$  toggle switch must be left at “Normal”.

### Special Note re Use of Valve Base Adaptor No. 2.

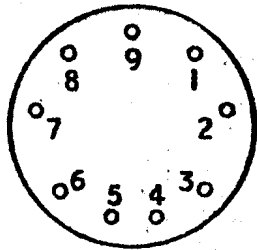
When using this data in conjunction with the B9G base, Pin 1 must be connected to  $H_{3+}$ , and Pin 8 connected to  $H_2$ . In these circumstances most types will give heater/cathode short which can be ignored. Apart from the filament connections referred to all other set up figures will remain as printed, but pin 9 should be connected to  $O_E$  Eg. EF50. Using Valve Base Adaptor No. 2, Selector Switch Number will read 356 101 420.

### Old Type Panels.

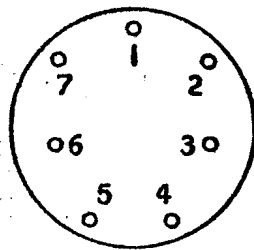
Note that the foregoing information does not apply to the now obsolete English and American panels without roller switch.

# DIAGRAM OF STANDARD PIN CONNECTIONS

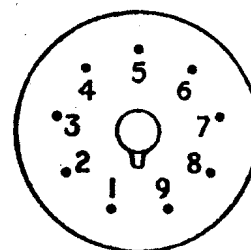
(viewed from underside of base)



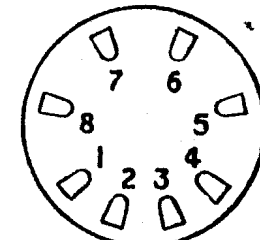
**BRITISH NINE PIN (B9)**



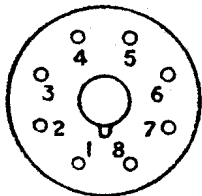
**BRITISH SEVEN PIN (B7)**



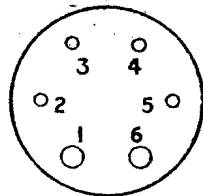
**B9G**



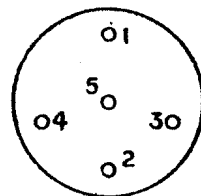
**'P' TYPE BASE (8SC)**



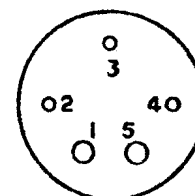
**INTERNATIONAL OCTAL (AO8)**



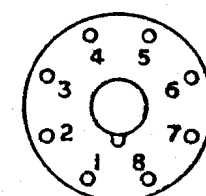
**AMERICAN SIX PIN (UX6)**



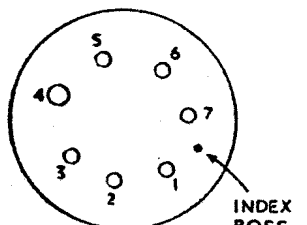
**BRITISH 4/5 PIN (B5&B4)**



**AMERICAN FIVE PIN (UX5)**

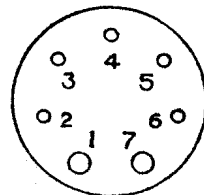


**MAZDA OCTAL (MO8)**

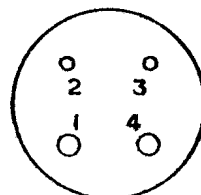


**B7A**

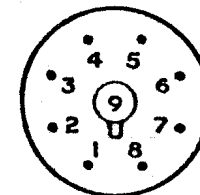
INDEX BOSS



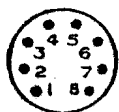
**AMERICAN SMALL SEVEN PIN (SM7)**



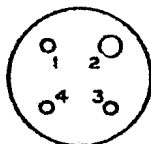
**AMERICAN FOUR PIN (UX4)**



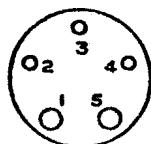
**AMERICAN OCTAL (B8B or B8G)**



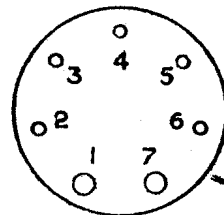
**SUB MINIATURE 8 PIN (B8D)**



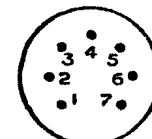
**HIVAC FOUR PIN (SM4)**



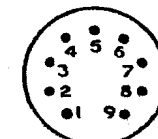
**HIVAC FIVE PIN (SM5)**



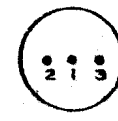
**AMERICAN SEVEN PIN (UX7)**



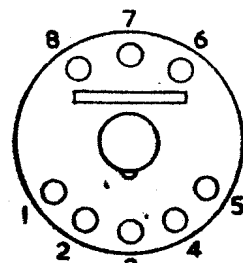
**B7G**



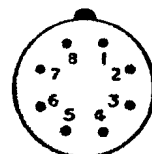
**B9A**



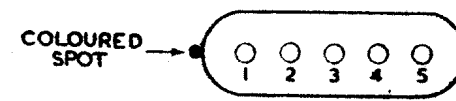
**B3G**



**FB**



**B8A**

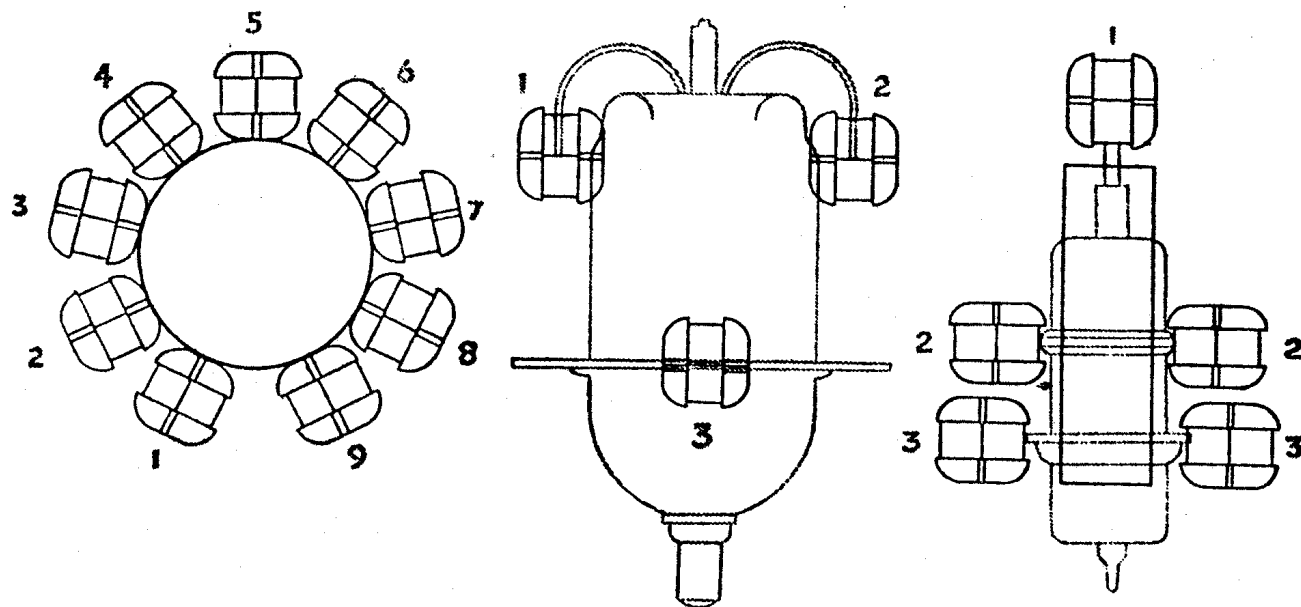


**B5A**

COLOURED SPOT

**DIAGRAM OF SPECIAL VALVE HOLDERS FITTED TO  
THE AVO VALVE TESTER TYPE 160**

*(bases are viewed from top of valve panel)*



**FIG. 9.**

## Commercial Valve Index and Cross Reference to British Service Types

### ABBREVIATIONS USED FOR MANUFACTURERS' NAMES

BRIM. ... ..	Brimar	M.O.V. ... ..	Marconi Osram Valve Co.
B.T.H. ... ..	British Thompson Houston	M.W.T. ... ..	Marconi Wireless & Telegraph Co.
COSS. ... ..	A. C. Cossor	MULL. ... ..	Mullard
E.S. ... ..	Edison & Swan (Ediswan)	PHIL. ... ..	Phillips
E.M.I. ... ..	Electric & Musical Industries (Emitron)	PINN. ... ..	Pinnacle Electronic Products
E.T. ... ..	Electronic Tubes	R.C.A. ... ..	Radio Corporation of America
E.E.V. ... ..	English Electric Co.	RAY. ... ..	Raytheon
FERR. ... ..	Ferranti	S.T.C. ... ..	Standard Telephones & Cables
G.E. ... ..	General Electric (U.S.A.)	TUNG. ... ..	British Tungsram Ltd.
G.E.C. ... ..	General Electric Co.	W.E. ... ..	Western Electric
MAZ. ... ..	Mazda	20th ... ..	20th Century Electronics

Commercial Valve	Maker	Service Equiv. (or nearest in brackets)	Page	Commercial Valve	Maker	Service Equiv. (or nearest in brackets)	Page
O1A	U.S.A.	CV750	...	1B3/8106	U.S.A.	CV541	...
	S.T.C.		...	1B3GT	U.S.A.	CV1830	...
O2DF	MULL.	(CV2260)	...	1B4P	U.S.A.	CV758	...
O9	COSS.	CV2725	...	1B5/255	U.S.A.	CV759	...
O9D	COSS.	(CV1596)	...	1B7GT	U.S.A.	CV760	...
O9J	COSS.	(CV1518)	...	1B21A	U.S.A.	CV3586	...
OA2	U.S.A.	CV1832	...	1B22	U.S.A.	CV761	...
OA3	U.S.A.	(CV3798)	...	1B23	U.S.A.	CV539	...
OA4	U.S.A.	CV752	...	1B24	U.S.A.	CV725	...
OA81	MULL.	{(CV448)	...	1B24A	U.S.A.	CV3548	...
		{(CV1353)	...	1B26	U.S.A.	CV576	...
OA85	MULL.	CV1354	...	1B27	U.S.A.	CV713	...
OB2	U.S.A.	CV1833	...	1B32/532A	U.S.A.	CV2648	...
OB3	U.S.A.	CV3799	...	1B32	U.S.A.	CV2648	...
OC3	U.S.A.	(CV686)	...	1B35	U.S.A.	CV369	...
OD3	U.S.A.	(CV216)	...	1B35A	U.S.A.	CV3628	...
OG3	MULL.	(CV449)	...	1B36	U.S.A.	CV577	...
OZ4	U.S.A.	CV692	...	1B38	U.S.A.	CV3549	...
	S.T.C.		...	1B40	U.S.A.	CV2914	...
OZ4A	U.S.A.	CV517	...	1B41	U.S.A.	CV3550	...
1A3	U.S.A.	CV753	...	1B49	U.S.A.	CV508	...
	Hivac		...	1B56	U.S.A.	CV3877	...
	COSS.		...	1B58	U.S.A.	CV3745	...
1A4P	U.S.A.	CV754	...	1B63A	U.S.A.	CV2826	...
1A5G	U.S.A.	CV755	...	1C1	MAZ.	(CV782)	...
	S.T.C.		...	1C5G	U.S.A.	CV1803	...
	TUNG.		...		COSS.		...
1A5GT	U.S.A.	CV756	...		FERR.		...
	S.T.C.		...		S.T.C.		...
1A5GT/G	U.S.A.	CV756	...	1C5GT	U.S.A.	CV1805	...
	FERR.		...		S.T.C.		...
1A6	U.S.A.	CV757	...	1C5GT/G	U.S.A.	CV1805	...
1A7G	U.S.A.	CV1800	...		FERR.		...
	S.T.C.		...		S.T.C.		...
	COSS.		...	1C21	U.S.A.	CV762	...
	TUNG.		...	1CP1	E.T.	(CV2302)	...
1A7gt	BRIM.	CV1802	...	1D5	S.T.C.	CV764	...
1AD4	U.S.A.	(CV2237)	...	1D5GP	R.C.A.	CV705	...
1AE5	U.S.A.	—	...	1D5GT	R.C.A.	CV1806	...
1AH4	U.S.A.	—	...	1D7	R.C.A.	CV765	...

Commercial Valve	Maker	Service Equiv. (or nearest in brackets)	Page
1D8GT	R.C.A.	CV1811	2
1D13	MAZ.	(CV753)	2
1DN5	R.C.A.	—	122
1E5GP	R.C.A.	CV766	2
1E5GT	R.C.A.	CV766	2
1E7	R.C.A.	CV1812	2
1F2	MAZ.	(CV1758)	2
1F3	MAZ.	(CV785)	2
1F4	R.C.A.	CV767	2
1F5	R.C.A.	CV768	2
1F6	R.C.A.	CV769	2
1F7GV	R.C.A.	CV770	2
1FD9	MAZ.	(CV784)	2
1G3	R.C.A.	—	122
1G4	R.C.A.	CV1817	2
1G4GT/G	R.C.A.	CV1817	2
1G5	R.C.A.	CV771	2
1G6G	R.C.A.	CV772	2
1G6GT	R.C.A.	CV773	2
1G6GT/G	R.C.A.	CV773	2
1H4G	R.C.A.	CV774	2
1H5G	U.S.A.	CV1818	2
	S.T.C.		
	COSS.		
	TUNG.		
1H5GT	U.S.A.	CV1820	2
	S.T.C.		
1H5GT/G	U.S.A.	CV1820	2
	FERR.		
1J3	G.E.	—	122
1L4	U.S.A.	(CV1758)	2
	S.T.C.		
	COSS.		
1LA6	R.C.A.	CV775	3
1LB4	R.C.A.	CV776	3
1LC5	R.C.A.	CV777	3
1LC6	R.C.A.	CV778	3
1LD5	R.C.A.	CV779	3
1LH4	R.C.A.	CV780	3
1LN5	R.C.A.	CV781	3
	S.T.C.		
1LN5E	S.T.C.	CV781	3
1N5G	U.S.A.	CV1821	3
	S.T.C.		
	COSS.		
	TUNG.		
1N5GT	U.S.A.	CV1823	3
	S.T.C.		
1N5GT/G	U.S.A.	CV1823	3
	FERR.		
1N21	U.S.A.	CV727	—
1N21B	U.S.A.	CV367	—
1N21C	U.S.A.	CV3525	—
1N23A	U.S.A.	CV749	—
1N23B	U.S.A.	CV2856	—
1N23BM	U.S.A.	CV2857	—

Commercial Valve	Maker	Service Equiv. (or nearest in brackets)	Page
1N25	U.S.A.	CV2916	—
1N26	U.S.A.	CV1785	—
1N28	U.S.A.	CV2918	—
1N31	U.S.A.	CV3509	—
1N34	U.S.A.	CV2829	—
1N34	U.S.A.	(CV1354)	—
1N38	U.S.A.	CV3551	—
1N38A	U.S.A.	CV2962	—
1N43	U.S.A.	CV2919	—
1N47	U.S.A.	CV3729	—
1N54	U.S.A.	(CV1354)	—
1N54A	U.S.A.	CV2961	—
1N58	U.S.A.	(CV1354)	—
1N69	U.S.A.	CV2923	—
1N70	U.S.A.	CV2924	—
1N72	U.S.A.	CV2974	—
1N81	U.S.A.	CV2928	—
1N88	U.S.A.	{(CV448)	—
		{(CV1353)	—
1P1	MAZ.	(CV820)	3
1P5	R.C.A.	CV728	3
1P21	U.S.A.	(CV337)	—
1P23	U.S.A.	(CV2680)	—
1P30	U.S.A.	(CV1764)	—
1P31	U.S.A.	CV3812	—
1P32	U.S.A.	(CV405)	—
1Q5G	U.S.A.	CV1824	3
	S.T.C.		
	TUNG.		
1Q5GT	U.S.A.	CV1826	3
	S.T.C.		
	FERR.		
1Q5GT/G	U.S.A.	CV1826	3
	FERR.		
1Q22	U.S.A.	CV3555	—
1R4/1294	U.S.A.	CV2709	3
1R5	U.S.A.	(CV782)	3
	FERR.		
	E.T. S.T.C.		
	TUNG.		
1S4	U.S.A.	(CV783)	3
	FERR.		
	COSS.		
	S.T.C.		
	TUNG.		
1S5	U.S.A.	(CV784)	3
	FERR.		
	E.T. S.T.C.		
	TUNG.		
1T4	U.S.A.	(CV785)	3
	FERR.	(CV828)	—
	TUNG.		
	E.T.		
	Hivac		
1T5GT	R.C.A.	CV1829	3
1U4	U.S.A.	CV2507	3

Commercial Valve	Maker	Service Equip. (or nearest in brackets)	Page	Commercial Valve	Maker	Service Equip. (or nearest in brackets)	Page
1U5	U.S.A.	CV3912	3	2J31	Siemens	CV1807	—
	S.T.C.			2J32	Siemens	CV1808	—
1V	R.C.A.	CV1999	3	2J33	Siemens	CV1809	—
1Z2	U.S.A.	CV2510	4	2J34	Siemens	CV1810	—
2A3	U.S.A.	CV1831	4	2J36	Siemens	CV514	—
	S.T.C.			2J42	Siemens	CV3676	—
2A5	U.S.A.	CV1834	4		MULL.		
	S.T.C.			2J48	Siemens	CV1822	—
	TUNG.			2J49	Siemens	CV3687	—
2A6	U.S.A.	CV1769	4	2J50	Siemens	CV2793	—
	TUNG.			2J51	Siemens	CV3560	—
2A7	U.S.A.	CV787	4	2J54	Siemens	CV801	—
	TUNG.			2J56	Siemens	CV2852	—
2AP1	U.S.A.	CV790	—	2J58	RAY.	CV997	—
2APIA	U.S.A.	CV790	—	2K25	U.S.A.	CV2792	—
2BP1	U.S.A.	CV3678	—	2K28	U.S.A.	CV1892	—
2B4	U.S.A.	CV648	—	2K33	RAY.	CV1786	—
2B7	U.S.A.	CV1837	4	2K41	U.S.A.	CV3904	—
	TUNG.			2K48	U.S.A.	CV3669	—
2B21	U.S.A.	CV597	4	2S/140G	S.T.C.	(CV469)	—
2B22	U.S.A.	CV2931	4	2T/270K	S.T.C.	(CV261)	5
2B36	U.S.A.	(CV1078)	4	2T/450E	S.T.C.	(CV3587)	—
2C21	U.S.A.	CV875	4	2V3	R.C.A.	CV803	5
2C22	R.C.A.	CV792	4	2V3G	R.C.A.	CV804	5
2C26	U.S.A.	CV802	4	2V/400A	S.T.C.	(CV32)	—
2C26A	U.S.A.	(CV1759)	—	2V/401C	S.T.C.	CV1446	—
2C33	U.S.A.	CV793	—	2V/470C	S.T.C.	(CV1355)	—
2C34	U.S.A.	(CV18)	—	2V/471A	S.T.C.	(CV1449)	—
2C39A	U.S.A.	CV2516	—	2V/500C	S.T.C.	(CV5)	—
2C40	U.S.A.	CV2643	—	2V/531E	S.T.C.	CV1420	—
2C42	U.S.A.	CV2932	—	2W/540E	S.T.C.	(CV1601)	—
2C43	U.S.A.	CV688	—	2X2	U.S.A.	CV3748	5
2C45	U.S.A.	CV596	—	2X2/897	U.S.A.	CV3748	5
2C46	U.S.A.	CV2933	—	2X2A	U.S.A.	CV597	5
2C51	U.S.A.	CV2831	4	2X/105G	S.T.C.	(CV448)	—
2C51W	U.S.A.	CV2866	—	2X/106G	S.T.C.	(CV425)	—
2C53	U.S.A.	CV3559	—	2Y2	R.C.A.	CV597	5
2D2	MULL.	CV794	4	2-150D	U.S.A.	CV3878	—
2D4A	MULL.	CV795	4	2-150D/ 152RA	U.S.A.	CV3878	—
2D13C	MULL.	CV796	5	3A	W.E.(U.S.A.)	CV3812	—
2D21	S.T.C.	(CV797)	5	3AE	W.E.(ENG.)	CV3812	—
	U.S.A.			3AP1/906P1	U.S.A.	CV602	—
	MULL.			3AP1	U.S.A.	CV602	—
	Hivac			3A4	U.S.A.	(CV807)	5
2D21W	U.S.A.	CV2876	—		S.T.C.		
2DP1	U.S.A.	CV1813	—		COSS.		
2E22	U.S.A.	CV798	5	3A5	U.S.A.	(CV808)	5
2E30	U.S.A.	CV2517	5	3A/105-B	S.T.C.	CV809	—
2G	Siemens	CV1842	—	3A/107A	S.T.C.	(CV249)	5
2G/402A	S.T.C.	CV1835	—	3A/107B	S.T.C.	(CV1655)	5
2G/472B	S.T.C.	CV2518	—	3A/108A	S.T.C.	(CV1653)	5
2G/473C	S.T.C.	CV2399	—	3A/108B	S.T.C.	(CV1657)	6
2J21	U.S.A.	—	—	3A/109A	S.T.C.	(CV1671)	6
2J21A	Siemens	CV719	—	3A/1663	S.T.C.	(CV1663)	—
2J22	Siemens	CV800	—	3A/110B	S.T.C.	(CV1659)	—
2J26	Siemens	CV1760	—				

Commercial Valve	Maker	Service Equip. (or nearest in brackets)	Page	Commercial Valve	Maker	Service Equip. (or nearest in brackets)	Page
3A/135A	S.T.C.	CV2598	...	3EP1	U.S.A.	CV817	...
3A/141A	S.T.C.	(CV1639)	...	3EP1/1806P1	U.S.A.	CV817	...
3A/142A	S.T.C.	(CV1641)	...	3E29	U.S.A.	CV3599	...
3A/144A	S.T.C.	(CV1694)	...	3FP7	U.S.A.	CV1761	...
3A/145J	S.T.C.	(CV16)	...	3G/501A	S.T.C.	CV2215	...
3A/146J	S.T.C.	(CV53)	...	3GP1	U.S.A.	CV516	...
3A/147J	S.T.C.	(CV82)	...	3GRK	G.E.C.	(CV442)	...
3A/148J	S.T.C.	(CV88)	...	3H/151J	S.T.C.	CV2516	...
3A/167M	S.T.C.	—	122	3J/121E	S.T.C.	CV28	...
3AZ4	U.S.A.	—	122	3JP1	U.S.A.	CV2945	...
3B4	U.S.A.	(CV2240)	6	3JP7	U.S.A.	CV2869	...
3B7/1291	U.S.A.	CV811	6	3JP12	U.S.A.	CV2816	...
3B21	U.S.A.	CV2959	6	3J31	U.S.A.	CV1788	...
3B22	U.S.A.	CV3815	6	3J/160E	S.T.C.	(CV2245)	...
3B24	U.S.A.	CV812	6	3J/170E	S.T.C.	CV2905	...
2B24W	U.S.A.	CV2858	6	3J/260E	S.T.C.	CV2908	...
3B24WA	U.S.A.	CV4021	6	3KP1	U.S.A.	CV3733	...
3B26	U.S.A.	CV3575	6	3P/270B	S.T.C.	CV2950	...
3B28	U.S.A.	CV1835	—	3Q4	S.T.C.	CV818	7
	MULL.				U.S.A.		
3B29	U.S.A.	CV3689	—	3Q5GT	U.S.A.	CV819	7
3B/100-B	S.T.C.	(CV1689)	—		S.T.C.		
3B/102-B	S.T.C.	(CV84)	—	3Q5GT/G	U.S.A.	CV819	7
3B/151A	S.T.C.	(CV1648)	—		FERR.		
3B/200-B	S.T.C.	(CV1047)	—	3Q/120G	S.T.C.	(CV1605)	—
3B/240M	S.T.C.	(CV2214)	6	3Q/150E	S.T.C.	CV1450	—
		{(CV1688)	6	3Q/180E	S.T.C.	(CV1603)	—
3B/252B	S.T.C.	{(CV1220)	6	3Q/181E	S.T.C.	(CV1600)	—
		{(CV1148)	—	3Q/191E	S.T.C.	(CV570)	—
3B/351A	S.T.C.	CV1452	—	3Q/195E	S.T.C.	(CV570)	—
3B/400A	S.T.C.	(CV127)	—	3Q/211E	S.T.C.	(CV1604)	—
3B/401J	S.T.C.	(CV49)	—	3Q/212E	S.T.C.	CV1797	—
3B/501A	S.T.C.	(CV1288)	—	3Q/213E	S.T.C.	(CV1734)	—
3B/504B	S.T.C.	(CV25)	—	3Q/260E	S.T.C.	(CV446)	—
3B/850A	S.T.C.	(CV1620)	—	3Q/293E	S.T.C.	(CV1447)	—
3B/851A	S.T.C.	CV814	—	3Q/310E	S.T.C.	CV3873	—
3BP1	U.S.A.	CV2934	—	3S4	S.T.C.	(CV820)	7
3BP1A	U.S.A.	CV999	—		U.S.A.		
3C22	U.S.A.	CV789	—	3V/290B	S.T.C.	CV5028	—
3C24	U.S.A.	CV1765	—	3V/420B	S.T.C.	(CV2126)	—
3C31/C1B	U.S.A.	CV941	—	3V/530E	S.T.C.	(CV477)	—
3C34	U.S.A.	(CV372)	—	3V/531E	S.T.C.	CV447	—
3C45	U.S.A.	(CV1034)	—	3WP1	—	CV3946	—
3C/250A	S.T.C.	{(CV1252)	—	4-65A	U.S.A.	CV1905	—
		{(CV1619)	—	4/125A	Eimac	(CV2963)	—
3C/270A	S.T.C.	(CV30)	—	4-125A	U.S.A. Pinn.	(CV2130)	—
3C/350E	S.T.C.	(CV27)	—	4-240A	U.S.A. Pinn.	{(CV2131)	—
3C351H	S.T.C.	CV815	6			{(CV2964)	—
3D6/1299	U.S.A. S.T.C.	CV2659	—	4/250A	Eimac	(CV2964)	—
3D21A	U.S.A.	CV2851	—	4-400A	U.S.A.	CV3879	—
	S.T.C.			4-1000A	U.S.A.	CV3880	—
3D22	U.S.A. E.E.	CV1422	—	4A1	U.S.A.	CV821	—
	S.T.C.			4A/137B	S.T.C.	(CV243)	—
3D/100A	S.T.C.	CV2735	—	4B22	U.S.A.	CV2936	—
3D/150G	S.T.C.	CV816	—	4B24	U.S.A.	CV822	—
3DP1	U.S.A.	(CV1526)	—	4B26	U.S.A.	CV1836	—
3EG1	Cintel		—				—

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4B28	U.S.A.	CV2777	—	5A/102A	S.T.C.	CV3784	—
4B30	U.S.A.	CV934	—	5A/102D	S.T.C.	(CV1724)	8
4B31	U.S.A.	CV3510	—	5A/105	S.T.C.	(CV1726)	—
4B32	U.S.A.	CV2518	—	5A/128B	S.T.C.	(CV244)	—
	MULL.			5A/136A	S.T.C.	CV2619	—
4B35	U.S.A.	CV926	—	5A/136D	S.T.C.	(CV245)	9
4B36	—	(CV2779)	—	5A/163K	S.T.C.	CV1635	9
4C21	R.C.A.	CV2576	—	5A/157D	S.T.C.	(CV358)	9
4C22	U.S.A.	CV2987	—	5A/159N	S.T.C.	(CV2000)	—
4C27	U.S.A.	(CV92)	—	5A/164K	S.T.C.	CV3536	—
4C30	U.S.A.	CV933	—	5B1	S.T.C.	(CV1018)	9
4C35	U.S.A.	CV1787	—	5B/100A	S.T.C.	(CV1369)	—
	MULL.			5B/151A	S.T.C.	(CV1080)	—
4C/100A	S.T.C.	CV2756	—	5B/250A	S.T.C.	(CV124)	9
4CSUA	COSS.	(CV1267)	—	5B/251M	S.T.C.	(CV428)	9
4D1	S.T.C.	(CV1109)	7	5B/152D	S.T.C.	CV2659	—
4D21	U.S.A.	(CV2963)	—	5B/252M	S.T.C.	(CV391)	9
4D32	U.S.A.	CV3543	—	5B/253M	S.T.C.	(CV499)	9
4DT6	G.E.	—	122	5B/254M	S.T.C.	(CV428)	9
4E27	U.S.A.	CV824	—	5B/255M	S.T.C.	(CV391)	9
4G/280K	S.T.C.	(CV797)	—	5B/256M	S.T.C.	(CV499)	9
4H/135M	S.T.C.	CV2519	—	5B/257M	S.T.C.	(CV2220)	9
4H/180E	S.T.C.	CV1883	—	5B/258M	S.T.C.	(CV2347)	122
4J26	U.S.A.	CV3779	—	5B/300B	S.T.C.	CV834	—
4J27	U.S.A.	CV3780	—	5B/502A	S.T.C.	(CV1096)	—
4J28	U.S.A.	CV3781	—	5B/600A	S.T.C.	(CV1081)	—
4J29	U.S.A.	CV3782	—	5B/700A	S.T.C.	(CV631)	—
4J30	U.S.A.	CV3783	—	5BP1	U.S.A.	CV601	—
4J31	U.S.A.	CV1914	—	5BP4/			
4J33	U.S.A.	CV1916	—	1802P4	R.C.A.	CV836	—
4J34	U.S.A.	CV1897	—	5C22	U.S.A.	(CV2520)	—
4J35	U.S.A.	CV1898	—		MULL.		
4J50	U.S.A.	(CV2284)	—	5C/100A	S.T.C.	(CV26)	—
4J52	U.S.A.	CV3569	—	5C/101A	S.T.C.	(CV1372)	—
4J53	U.S.A.	CV513	—			(CV1506)	—
4J54	U.S.A.	CV3947	—	5C/450A	S.T.C.	(CV1630)	—
4J55	U.S.A.	CV3948	—	5CP1	U.S.A.	CV600	—
4J56	U.S.A.	CV3949	—	5CP1A	U.S.A.	(CV2191)	—
4J57	U.S.A.	CV3950	—	5CP7	U.S.A.	CV838	—
4J58	U.S.A.	CV3951	—	5D21	U.S.A.	(CV2814)	—
4J78	U.S.A.	CV3953	—	5D22	U.S.A.	(CV2964)	—
4PR60A	U.S.A.	CV2752	—	5D/100A	U.S.A.	(CV1627)	—
4SH	COSS.	(CV1126)	—	5FP7(spec.)	U.S.A.	CV1789	—
4SHA	COSS.	CV825	—	5FP7	U.S.A.	CV718	—
4THA	COSS.	CV826	8	5FP7A	U.S.A.	CV3959	—
4TPB(clear)	COSS.	CV828	8	5FP14	U.S.A.	CV1789	—
4TPB(met)	COSS.	CV829	8	5GP1	U.S.A.	CV839	—
4TSP	COSS.	CV830	8	5HP1	U.S.A.	CV3583	—
4XP	COSS.	(CV1168)	8	5HP1A	U.S.A.	CV3583	—
4X150A	U.S.A.	CV2519	—	5H4	U.S.A.	CV840	—
4X150D	S.T.C.	CV3991	8	5JP1	U.S.A.	CV1791	—
4X150G	U.S.A.	CV3893	—	5J23	U.S.A.	CV542	—
5A6	U.S.A.	(CV2360)	8	5J26	U.S.A.	CV3602	—
5AP1	U.S.A.	CV832	—	5J29	U.S.A.	CV3642	—
5API/				5J30	U.S.A.	CV3843	—
1805P1	U.S.A.	CV832	—	5J31	U.S.A.	CV5844	—



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5J59	U.S.A.	CV3952	...	6A7	U.S.A.	CV1870	... 11
5J/180E	S.T.C.	(CV445)	...		S.T.C.		
5JP2A	U.S.A.	CV3918	...		TUNG.		
5L/444	G.E.C.	CV311	...	6A8	U.S.A.	CV579	... 11
5LP1	U.S.A.	CV741	...	6A8G	U.S.A.	CV578	... 11
5MP1	U.S.A.	CV740	...		S.T.C.		
5R4GY	U.S.A.	(CV717)	... 10		FERR.		
5R4WGY	U.S.A.	CV2835	... 10	6A8GT	U.S.A.	CV580	... 11
5TO1A	Cintel	CV1868	...		S.T.C.		
5T4	R.C.A.	CV1846	... 10		FERR.		
5U4G	U.S.A.	(CV575)	... 10		TUNG.		
	S.T.C.			6AB5	U.S.A.	CV843	... 123
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5U4G	TUNG.	(CV1071)	... 10	6AB6	—	—	... 122
5U4GT	R.C.A.	(CV841)	... 10	6AB7	U.S.A.	CV1873	... 11
5UP7	U.S.A.	CV2840	...		FERR.		
5V4	U.S.A.	CV729	... 10		COSS.		
	S.T.C.			6AB7/1853	U.S.A.	CV1873	... 11
	FERR.			6AC5G	R.C.A.	CV844	... 11
5W4	R.C.A.	CV1849	... 10	6AC5GT	R.C.A.	CV845	... 11
5W4G	R.C.A.	CV842	... 10	6AC6	—	—	... 122
5W4GT	R.C.A.	CV503	... 10	6AC7	U.S.A.	CV660	... 11
5X4	U.S.A.	CV1852	... 10		FERR.		
5X4G	U.S.A.	CV1851	... 10	6AC7/1852	R.C.A.	CV660	... 11
	S.T.C.			6AD7	R.C.A.	CV1878	... 11
	TUNG.				MULL.		
5Y3G	U.S.A.	CV1854	... 10		PHIL.		
	S.T.C.			6AF4	—	CV5036	... 11
	TUNG.			6AF6G	R.C.A.	CV847	Appendix 1
	COSS.			6AG5	U.S.A.	CV848	... 11
	FERR.			6AG6	U.S.A.	(CV1438)	... 11
5Y3GT	U.S.A.	CV1856	... 10		S.T.C.		
	S.T.C.			6AG7	R.C.A.	CV1882	... 11
	TUNG.			6AH6	U.S.A.	CV2521	... 11
5Y3GTA	U.S.A.	CV4027	... 10	6AJ5	—	CV995	... 11
5Y3GT/G	U.S.A.	CV1856	... 10	6AJ7/6AC7	U.S.A.	CV849	... 11
5Y4	U.S.A.	CV1857	... 10	6AJ7	U.S.A.	CV849	... 11
5Y4G	BRIM.	CV1857	... 10	6AJ2	MULL.	(CV2128)	... 11
5Z3	U.S.A.	CV1861	... 10		PHIL.		
	S.T.C.			6AK5	U.S.A.	(CV850)	... 11
	TUNG.				FERR.		
5Z4	U.S.A.	CV1864	... 10	6AK5W	U.S.A.	CV2877	... 11
	S.T.C.			6AK6	U.S.A.	CV1762	... 11
	FERR.				S.T.C.		
5Z4G	U.S.A. TUNG.	(CV1863)	... 10	6AK7	U.S.A.	CV1784	... 11
	S.T.C.				MULL.		
	COSS.			6AL5	S.T.C. E.T.	(CV283)	... 11
	TUNG.				TUNG.	(CV140)	... —
5Z4GT	U.S.A.	(CV2748)	... 10		FERR.		
	COSS.			6AL5W	U.S.A.	CV2882	... 11
	MULL.			6AL7G	U.S.A.	CV3707	... 122
6A3	U.S.A.	CV730	... 10	6AM5	E.T. S.T.C.	(CV136)	... 12
	S.T.C.			6AM6	U.S.A.	(CV138)	... 12
6A6	U.S.A.	CV1867	... 11		S.T.C. E.T.		
	S.T.C.			6AN5	U.S.A.	CV2854	... 12
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6AQ5	U.S.A. S.T.C.	CV1862	12	6C4W	U.S.A.	CV2842	15
6AQ5W	U.S.A.	CV2883	12	6C5	U.S.A. FERR.	CV582	15
6AQ6	U.S.A.	CV2937	12		COSS.		
6AR6	U.S.A.	CV3613	12	6C5G	U.S.A. FERR.	CV581	15
6AS6	U.S.A.	CV2522	12		S.T.C.		
6AS6W	U.S.A.	CV2884	12		TUNG.		
6AS7G	U.S.A.	CV2523	12	6C5G	U.S.A. FERR.	CV583	15
6AT6	U.S.A. TUNG.	(CV452)	12		COSS.		
6AU6	U.S.A. S.T.C.	CV2524	12	6C5GT/G	U.S.A.	CV583	15
6AU6WA	U.S.A.	CV4023	12	6C6	U.S.A. S.T.C.	CV585	15
6AV6	U.S.A.	CV2526	12		TUNG.		
6AZ6	—	—	122		FERR.		
6B5	—	—	122		COSS.		
6BA6W	MULL.	CV5037	13	6C7	U.S.A.	CV584	15
6BA6	U.S.A. S.T.C.	(CV454)	13	6C8G	U.S.A.	CV1896	15
6BA7	U.S.A.	CV2527	13	6C10	MAZ.	CV3888	15
6BC4	MULL.	CV5038	13	6C21	U.S.A.	CV855	—
6BE6	U.S.A.	(CV453)	13	6CH6	S.T.C. PHIL.	(CV2127)	15
6BF7	— S.T.C.	CV3984	13	6CJ6	MULL.	(CV2721)	15
6BH6	U.S.A. S.T.C.	CV3908	13	6CL6	MULL.	CV5041	16
6BJ6	U.S.A. S.T.C.	CV3909	14	6CK6	MULL.	CV2726	16
6BL6	U.S.A.	CV3614	—	6CQ6	U.S.A.	CV2937	16
6BL7	MULL.	CV5039	14	6CU8	R.C.A.	—	122
6BM6A	MULL.	CV3939	—	6CY7	G.E.	—	122
6BM6	U.S.A.	CV3615	—	6D1	MAZ.	{(CV375)	16
6BN6	MULL.	CV3616	14			{(CV1092)	16
6BQ5	MULL.	CV2975	14	6D2	MAZ.	{(CV140)	16
6BQ6	MULL.	CV5040	14			{(CV383)	16
6BR7	S.T.C.	(CV2135)	14	6D4	U.S.A.	CV1949	—
6BW6	S.T.C.	(CV2136)	14	6D6	U.S.A. S.T.C.	CV1900	16
6B4G	S.T.C. U.S.A.	CV851	13		TUNG.		
6B5	S.T.C. U.S.A.	CV1885	—		FERR.		
6B6G	S.T.C. U.S.A.	CV1887	13	6D7	COSS.		
6B7	S.T.C. U.S.A.	(CV1891)	13	6D8	R.C.A.	CV1776	16
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6B8G	U.S.A. FERR.	CV1893	13	6DQ5	(F.R.) MAZ.	—	122
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6F7	U.S.A.	CV1915 ...	17		S.T.C.		
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6F8	U.S.A.	CV1918 ...	17	6J8G	U.S.A.	CV859 ...	18
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	FERR.			6K4	U.S.A.	CV2855 ...	—
6F8G	U.S.A.	CV1917 ...	17	6K5G	U.S.A.	CV860 ...	18
	FERR.				S.T.C.		
	COSS.			6K5GT	U.S.A.	CV861 ...	18
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6F14	MAZ.	CV1919 ...	17		S.T.C.		
6F17	MAZ.	(CV416) ...	17	6K6GT	U.S.A.	CV1940 ...	18
6F32	MAZ.	(CV1116) ...	17		FERR.		
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6G6G	U.S.A.	CV1926 ...	17		FERR.		
	FERR.				COSS.		
6G8G	R.C.A.	CV856 ...	17	6K7G	U.S.A.	(CV1941) ...	18
6H1	MAZ.	CV132 ...	—		TUNG.		
6H6	U.S.A.	CV1930 ...	17		COSS.		
	COSS.			6K7GT	U.S.A.	(CV1943) ...	18
	FERR.				FERR.		
6H6G	U.S.A.	CV1929 ...	17		S.T.C.		
	FERR.				COSS.		
	S.T.C.			6K8	U.S.A.	CV1945 ...	18
	TUNG.				FERR.		
6H6GT	U.S.A.	CV1931 ...	17		COSS.		
	FERR.			6K8G	U.S.A.	(CV1944) ...	18
	S.T.C.				FERR.		
6H6GT/G	U.S.A.	CV1931 ...	17		S.T.C.		
6J4	U.S.A.	CV1763 ...	18		TUNG.		
6J5	U.S.A.	CV1933 ...	18	6K8GT	U.S.A.	CV1946 ...	18
	FERR.				FERR.		
	COSS.				S.T.C.		
6J5G	U.S.A.	(CV1932) ...	18		TUNG.		
	COSS.			6K25	MAZ.	(CV2217) ...	18
	S.T.C.			6L5G	R.C.A.	CV862 ...	18
	MULL.			6L6	U.S.A.	CV1948 ...	18
6J5GT	U.S.A.	(CV1934) ...	18		FERR.		
	FERR.				COSS.		
	COSS.			6L6G	U.S.A.	(CV1947) ...	18
	S.T.C.				S.T.C.		
6J5GT/G	U.S.A.	(CV1934) ...	18		TUNG.		
6J6	U.S.A.	(CV858) ...	18		FERR.		
6J6W	U.S.A.	CV2843 ...	18		COSS.		
6J7	U.S.A.	CV1936 ...	18	6L6GA	U.S.A.	CV2817 ...	18
	FERR.				TUNG.		
	COSS.			6L6WGA	U.S.A.	CV3618 ...	18

Commercial Valve	Maker	Service Equiv. (or nearest in brackets)	Page	Commercial Valve	Maker	Service Equiv. (or nearest in brackets)	Page
6L6WGB	U.S.A.	CV2796	18	6SA7GT	U.S.A.	CV1967	19
6L7	U.S.A.	CV1951	18	6SA7GT/G	U.S.A.	CV1967	19
6L6G	U.S.A.	CV1950	18	6SC7	U.S.A.	CV1969	19
	S.T.C.			6SC7GT	U.S.A.	CV1970	19
	TUNG.			6SD7GT	U.S.A.	CV865	19
6L13	MAZ.	CV492	—	6SF5	U.S.A.	CV1972	19
6L18	MAZ.	CV1899	18	6SF5GT	U.S.A.	CV1973	19
6L19	MAZ.	CV1850	18	6SG7	U.S.A.	CV1978	19
6L34	MAZ.	{(CV417)	18		FERR.		
		{(CV319)	18		S.T.C.		
6LD3	MAZ.	(CV3882)	18	6SH7	U.S.A.	CV594	19
6LD20	MAZ.	CV1920	18		FERR.		
6M1	MAZ.	{(CV2747)	Appendix 1		S.T.C.		
		{(CV1103)	Appendix 1		COSS.		
6N5	U.S.A.	CV843	—	6SH7GT	U.S.A.	CV595	19
6N6	U.S.A.	CV1954	—		FERR.		
6N6G	U.S.A.	CV1953	—	6SH7L	—	(CV5167)	19
	S.T.C.			6SJ7	U.S.A.	CV591	19
6N7	U.S.A.	CV1957	18		FERR.		
	FERR.				S.T.C.		
6N7G	U.S.A.	CV1956	18		COSS.		
	S.T.C.			6SJ7G	U.S.A.	CV590	19
6N7GT	U.S.A.	CV1958	18	6SJ7GT	U.S.A.	CV592	19
	FERR.				FERR.		
	S.T.C.				TUNG.		
6P5GT/G	R.C.A.	CV1819	18	6SJ7WGT	U.S.A.	CV3619	19
6P7GT/G	R.C.A.	CV864	18	6SJ7Y	R.C.A.	CV866	19
6P17	MAZ.	CV136	—	6SJ8G	SWEDISH	—	122
6P25	MAZ.	CV1853	19	6SJ8EG	SWEDISH	—	122
6Q4	MULL.	CV1886	19	6SK7	U.S.A.	CV1981	19
	PHIL.				FERR.		
6Q5	U.S.A.	CV1815	—	6SK7GT	U.S.A.	CV1982	19
6Q7	U.S.A.	CV588	19		FERR.		
6Q7G	U.S.A.	(CV587)	19		TUNG.		
	COSS.				COSS.		
	S.T.C.			6SK7GT/G	U.S.A.	CV1982	19
	TUNG.			6SL7GT	U.S.A.	CV1985	19
	FERR.				FERR.		
6Q7GT	U.S.A.	(CV589)	19		S.T.C.		
	FERR.				COSS.		
	S.T.C.			6SN7	MULL.	CV278	19
	TUNG.			6SN7GT	U.S.A.	(CV1988)	19
	COSS.				FERR.		
6R4	MULL.	CV1865	19		S.T.C.		
6R6G	U.S.A.	CV1960	19		TUNG.		
6R7	U.S.A.	CV1963	19	6SN7WGT	U.S.A.	CV3627	19
6R7G	U.S.A.	CV1962	19	6SQ7	U.S.A.	CV1990	19
	S.T.C.				FERR.		
	FERR.				S.T.C.		
	TUNG.				COSS.		
6R7GT	U.S.A.	CV1964	19	6SQ7GT	U.S.A.	CV1991	19
6R7GT/G	U.S.A.	CV1964	19		FERR.		
6SA7	U.S.A.	CV1966	19		TUNG.		
	S.T.C.			6SQ7GT/G	U.S.A.	CV1991	19
	FERR.			6SR7	U.S.A.	CV867	19
	COSS.						

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6SS7	FERR.	CV1993	19	6ZY5G	S.T.C.	CV873	21
	COSS.			6Z4	U.S.A.	CV619	20
6ST7	U.S.A.	CV1996	19	6Z5	U.S.A.	CV871	20
6ST7G	U.S.A.	CV1995	19	6Z7G	U.S.A.	CV872	21
6S7	U.S.A.	CV1975	19	7	U.S.A.	CV874	—
6S7G	U.S.A.	CV1974	19	7A	U.S.A.	CV823	—
6T4	U.S.A.	CV3808	20	7A2	S.T.C.	(CV1174)	21
6T7G	U.S.A.	CV500	20	7A3	S.T.C.	(CV1181)	21
6U5/6G5	U.S.A.	CV504	123	7A4	U.S.A.	CV1770	21
	S.T.C.			7A6	U.S.A.	CV876	21
	TUNG.			7A7	U.S.A.	CV877	21
6U5G	S.T.C.	(CV2747)	Appendix 1		S.T.C.		
	TUNG.				FERR.		
6U7G	U.S.A.	CV706	20	7A7LM	U.S.A.	CV877	21
	S.T.C.			7A8	U.S.A.	CV878	21
	TUNG.				S.T.C.		
	FERR.			7B	—	CV824	—
6U8	—	CV5065	20	7B4	U.S.A.	CV884	21
6V6	U.S.A.	CV510	20	7B5	U.S.A.	CV880	21
	COSS.				S.T.C.		
	FERR.			7B5E	S.T.C.	(CV880)	21
6V6G	TUNG.	(CV509)	20	7B5LT	R.C.A.	CV881	21
	U.S.A.			7B6	U.S.A.	CV882	21
	COSS.				S.T.C.		
	FERR.				FERR.		
	S.T.C.			7B6LM	U.S.A.	CV882	21
6V6GT	TUNG.	(CV511)	20	7B7	U.S.A.	CV522	21
	U.S.A.				S.T.C. E.T.		
	COSS.				FERR.		
	FERR.			7B8	U.S.A.	CV883	21
	S.T.C.				S.T.C.		
6V6GT/G	U.S.A.	(CV511)	20	7B8LM	U.S.A.	CV883	21
6V7G	U.S.A.	CV870	20	7BP7	U.S.A.	CV884	—
6W4gt	—	CV512	20	7BP7A	U.S.A.	CV3637	—
6W7G	U.S.A.	CV512	20	7C4/1203A	R.C.A.	CV2706	21
6X2	MULL.	(CV426)	20	7C5	U.S.A.	CV885	21
	PHIL.				FERR.		
6X4	U.S.A.	(CV493)	20		S.T.C. E.T.		
	S.T.C.			7C5LT	R.C.A.	CV886	21
6X4W	U.S.A.	CV2844	20	7C6	U.S.A.	CV887	21
6X5	R.C.A.	CV573	20		S.T.C. E.T.		
6X5G	TUNG.	(CV572)	20		FERR.		
	U.S.A.			7C7	U.S.A.	CV1777	21
	S.T.C.				S.T.C.		
	FERR.			7D5	S.T.C.	CV1425	21
	COSS.			7D6	S.T.C.	(CV1672)	21
6X5GT	U.S.A.	(CV574)	20	7D8	S.T.C.	CV889	21
	S.T.C.			7D8S	S.T.C.	(CV1328)	21
	FERR.			7D9	S.T.C.	(CV136)	21
	COSS.			7D10	S.T.C.	(CV2127)	21
6X5GT/G	U.S.A.	(CV574)	20	7E5	U.S.A.	CV2704	21
6X5WGT	U.S.A.	CV3734	20	7E5/1201	U.S.A.	CV2704	21
6Y3	Canada	CV1816	20	7E6	U.S.A.	CV891	21
6Y6G	U.S.A.	CV515	20	7E7	U.S.A.	CV892	21
	FERR.			7F7	U.S.A.	CV893	21
	COSS.				S.T.C.		

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7F8	U.S.A.	CV2968 ...	21	11A2	S.T.C.	(CV2813) ...	23
7G7	U.S.A.	CV894 ...	22	11A6	—	— ...	122
7G7/1232	U.S.A.	CV894 ...	22	11A8	—	— ...	122
7H7	U.S.A.	CV895 ...	22	11C5	—	— ...	122
	S.T.C.			11D3	S.T.C.	CV1419 ...	23
	FERR. E.T.			11E2	MAZ.	(CV276) ...	24
7J7	U.S.A.	CV897 ...	22	11E3	MAZ.	(CV73) ...	—
	S.T.C.			11F6	—	— ...	122
7K7	U.S.A.	CV896 ...	22	11J7	—	— ...	122
	S.T.C.			11K7	—	— ...	122
	FERR.			11L6	—	— ...	122
7MB1A	Cintel	(CV1880) ...	—	11N7	—	— ...	122
7N7	U.S.A.	CV898 ...	22	12A/112A	R.C.A.	CV1774 ...	24
	COSS.			12A5	R.C.A.	CV908 ...	24
	S.T.C.			12A6	U.S.A.	CV525 ...	24
7Q7	U.S.A.	CV899 ...	22		FERR.		
	FERR.				S.T.C.		
	COSS.			12A6GT	R.C.A.	CV526 ...	24
7R7	U.S.A.	CV900 ...	22	12A7	U.S.A.	CV909 ...	24
	FERR.				S.T.C.		
	S.T.C.			12A8GT	R.C.A.	CV910 ...	24
7UP7	U.S.A.	CV3639 ...	—	12A8GT/G	R.C.A.	CV910 ...	24
7W7	U.S.A.	CV902 ...	22	12AEP6	—	CV429 ...	—
7Y4	U.S.A.	CV901 ...	22	12AH7GT	U.S.A.	CV529 ...	24
	FERR.				FERR.		
	S.T.C. E.T.			12AT7	U.S.A.	(CV455) ...	24
7Z4	U.S.A.	CV1790 ...	22		S.T.C. E.T.		
	FERR.			12AT7WA	U.S.A.	(CV4024) ...	24
	S.T.C.			12AU6	U.S.A. TUNG.	CV1961 ...	24
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8A1	S.T.C.	(CV1124) ...	22	12AU7	U.S.A.	(CV491) ...	24
8A3	W.E.	CV3813 ...	—		S.T.C.		
8CY7	G.E.	— ...	122		Hivac		
8D2	S.T.C.	(CV1108) ...	22	12AX7	U.S.A.	(CV492) ...	24
8D3	S.T.C.	(CV138) ...	22		S.T.C.		
8D5	S.T.C.	(CV2135) ...	23	12AY7	U.S.A.	CV3650 ...	24
9-3	—	(CV368) ...	—	12B8GT	R.C.A.	CV911 ...	24
9A1	S.T.C.	(CV1172) ...	23	12BA6	U.S.A.	(CV1928) ...	25
9CL8	G.E.	— ...	122	12BH7	—	CV504 ...	25
9D2	S.T.C.	(CV1106) ...	23		S.T.C.		
9D5	S.T.C.	(CV1053) ...	—	12C8	U.S.A.	CV531 ...	25
9D6	S.T.C.	(CV131) ...	23		FERR.		
9HP7	U.S.A.	CV905 ...	—	12C8			
9JP1	U.S.A.	CV1783 ...	—	(Special)	U.S.A.	CV837 ...	—
9LO1A	Cintel	(CV464) ...	—	12C8GT	S.T.C.	CV3827 ...	25
9LP7	U.S.A.	CV2789 ...	—	12DP7	U.S.A.	CV913 ...	—
9MD6	Cintel	(CV262) ...	—	12DP8	U.S.A.	CV914 ...	—
9MO6A	Cintel	(CV2108) ...	—	12E1	MAZ.	(CV345) ...	25
9MW5AX	Cintel	(CV2127) ...	—	12E12	MAZ.	CV398 ...	—
9PK5	E.M.I.	(CV109) ...	—	12FP7	U.S.A.	CV915 ...	—
10	R.C.A.	CV603 ...	23	12H6	R.C.A.	CV916 ...	25
	TUNG.			12J5	R.C.A.	CV534 ...	25
10 (Special)	R.C.A.	CV906 ...	—	12J5GT	U.S.A.	CV535 ...	25
10D1	S.T.C.	(CV1300) ...	23		COSS.		
10KP7	U.S.A.	CV3693 ...	—		FERR.		
10Y	U.S.A.	(CV603) ...	—		TUNG.		

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12J7GT	U.S.A.	CV917	25	12SQ7GT/G	U.S.A.	CV547	26
	S.T.C.			12SP7	U.S.A.	CV3655	—
	FERR.			12SR7	U.S.A.	CV700	26
	TUNG.			12SW7	U.S.A.	CV3666	26
12J8GT/G	U.S.A.	CV917	—	12SX7	U.S.A.	CV3697	26
12K7GT	U.S.A.	CV918	25	12SY7	U.S.A.	CV3668	26
	FERR.			12TO1A	Cintel	CV1869	—
	S.T.C.			12Y4	Canadian	CV523	26
	TUNG.			12Z3	R.C.A.	CV927	26
12K7GT/G	U.S.A.	CV918	25		S.T.C.		
12K8	U.S.A.	CV703	25		MULL.		
	FERR.			13D1	S.T.C.	(CV423)	26
12K8GT	U.S.A.	CV3927	—	13D3	S.T.C.	(CV2212)	27
	FERR.			13E1	MAZ.	CV2377	—
	S.T.C.			13SPA	COSS.	CV929	27
	TUNG.			13VPA	COSS.	(CV1106)	27
12LO1A	Cintel	(CV2162)	—	14A7	U.S.A.	CV3935	27
12Q7	BRIM.	CV547	26		FERR.		
12SA7	U.S.A.	CV537	26	14F7	U.S.A.	CV930	27
	COSS.			14J8	Swedish	—	122
12SA7GT	U.S.A.	CV538	26	14L	COSS.	(CV1087)	—
	TUNG.			14R7	U.S.A.	CV3937	27
12SC7	U.S.A.	CV540	26		S.T.C.		
	FERR.			14S7	U.S.A.	CV3936	27
12SF5	R.C.A.	CV919	26		S.T.C. E.T.		
12SF5GT	R.C.A.	CV920	26		FERR.		
12SF7	R.C.A.	CV921	26	15	R.C.A.	CV931	27
12SG7	U.S.A.	CV694	26		S.T.C.		
	COSS.				COSS.		
	FERR.			15A	Siemens	(CV986)	—
12SH7	U.S.A.	CV922	26	15A2	S.T.C.	(CV3576)	27
	FERR.			15B	Siemens	(CV326)	—
12SH7GT	U.S.A.	CV3651	26	15D1	S.T.C.	(CV2956)	28
	FERR.			15D2	S.T.C.	(CV1107)	28
12SJ7	U.S.A.	CV697	26	15E	U.S.A.	CV933	—
	FERR.			15LO1A	Cintel	CV1744	—
	S.T.C.			15R	U.S.A.	CV934	—
12SJ7GT	U.S.A.	CV698	26	17D4	G.E.	—	122
	FERR.			19E2	MAZ.	(CV265)	—
	TUNG.			19G3	MAZ.	(CV277)	28
12SK7	U.S.A.	CV543	26	19G6	MAZ.	(CV371)	28
	FERR.			19H1	MAZ.	(CV121)	28
	S.T.C.			19H4	MAZ.	(CV2180)	28
12SK7GT	U.S.A.	CV544	26	19H5	MAZ.	(CV490)	—
	FERR.			20A1	S.T.C.	CV1424	29
	TUNG.			20A2	MAZ.	CV1848	—
12SK7GT/G	U.S.A.	CV544	26	20A3	MAZ.	(CV797)	—
12SL7GT	R.C.A.	CV924	26	20D4	G.E.	—	122
12SN7GT	U.S.A.	CV925	26				
	S.T.C.			20K	COSS.	{(CV954)	—
	FERR.					{(CV1379)	—
12SQ7	U.S.A.	CV546	26	21/2	U.S.A.	CV3584	—
	FERR.			22/11BXA	M.O.V.	(CV439)	—
	S.T.C.			22S/200A	S.T.C.	CV1451	—
12SQ7GT	U.S.A.	CV547	26			{(CV1588)	—
	FERR.			23D	COSS.	{(CV1382)	—
	TUNG.			24A	U.S.A.	CV936	29
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24B2	MAZ.	(CV339)	...	30C12P1	MAZ.	CV1746	...
24C3	MAZ.	CV125	...	30C13	MAZ.	—	122
25A6	U.S.A.	CV549	...	30D5	MAZ.	CV1860	...
	S.T.C.		29	30E7/P1	MAZ.	CV400	...
	COSS.			30E8P1	MAZ.	(CV2216)	...
	MULL.			30HM/HD	—	(CV1140)	...
25A6	U.S.A.	CV550	...	31	R.C.A.	CV947	...
25A6GT/G	U.S.A. TUNG.	CV550	...	31C2	MAZ.	CV2965	...
25A7GT/G	U.S.A.	CV937	...	32	S.T.C.	CV711	31
25AC5GT/G	U.S.A.	CV938	...		U.S.A.		
25B5	—	—	...	32	COSS.	(CV711)	31
25B6	U.S.A.	CV939	...	32A	COSS.	(CV951)	...
25B8	U.S.A.	CV940	...	32E	COSS. S.T.C.	(CV957)	31
	S.T.C.		30	32E	U.S.A.	(CV711)	31
25L6	U.S.A.	CV552	...	32G	COSS.	(CV953)	...
25L6G	U.S.A.	CV551	...	32J	COSS.	(CV958)	...
	FERR.		30	32L7GT	U.S.A.	CV948	31
	TUNG.				S.T.C.		
25L6GT	U.S.A.	CV553	...	33	U.S.A.	CV949	31
	S.T.C.		30		TUNG.		
	TUNG.			33A/100A	S.T.C.	CV1750	32
25L6GT/G	U.S.A.	CV553	...	33A/138A	S.T.C.	(CV18)	32
25SN7GT	S.T.C.	(CV423)	...	33A/158M	S.T.C.	(CV1884)	32
25T	Eimac	CV941	...	33B/152M	S.T.C.	CV1540	32
25TG	Eimac	CV789	...	34	U.S.A.	CV1751	32
25Y5	U.S.A.	CV942	...	34E	S.T.C.	(CV1751)	32
	S.T.C.		30	35	U.S.A.	CV1752	32
	MULL.				TUNG.		
25Z5	U.S.A.	CV555	...		COSS.		
	S.T.C.		30		MULL.		
	COSS.			35A5LT	U.S.A.	CV1753	32
	TUNG.			35L6	U.S.A. TUNG.	CV561	32
25Z6	U.S.A.	CV558	...	35L6GT	U.S.A.	CV562	32
25Z6	U.S.A.	CV559	...		FERR.		
	TUNG.		30		S.T.C.		
25Z6GT/G	U.S.A.	CV559	...	35L6GT/G	U.S.A.	CV562	32
26	U.S.A.	CV943	...		COSS.		
26A7GT	U.S.A.	CV3577	...		S.T.C.		
26D	COSS.	CV2727	...	35T	Eimac	CV668	...
26J	COSS.	CV2786	...		M.O.V.		...
27	U.S.A.	CV944	...	35TG	Eimac	CV1754	...
	S.T.C.		31	35Z3	U.S.A.	CV564	32
	COSS.				S.T.C.		
	TUNG.				FERR.		
27M1	MAZ.	(CV337)	...	35Z3	U.S.A.	CV565	32
28D7	U.S.A.	CV945	...	35Z3LT	U.S.A.	CV726	32
28D7GT/G	U.S.A.	CV946	...	35Z4GT	TUNG.	CV2500	32
29C1	MAZ.	(CV430)	...		U.S.A.		
29D	COSS.	CV2728	...		FERR.		
30	U.S.A.	CV604	...		S.T.C.		
	COSS.		31	35Z5	U.S.A.	CV567	32
	S.T.C.			35Z5GT	U.S.A.	CV568	32
30TWIN	Eimac	CV1780	...		TUNG.		



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35Z5GT/G	U.S.A.	CV568 ...	32	45	R.C.A.	CV610 ...	33
35/51	U.S.A.	CV1752 ...	32		COSS.		
36	U.S.A.	CV1775 ...	32		S.T.C.		
	COSS.				TUNG.		
	MULL.			45DS	COSS.	CV2528 ...	—
	S.T.C.			451U	COSS.	CV2529 ...	33
37	U.S.A.	CV606 ...	32	45SP	R.C.A.	CV596 ...	—
	S.T.C.			45Z5GT	R.C.A.	CV2530 ...	33
	COSS.			46	R.C.A.	CV2531 ...	33
	MULL.			47	U.S.A.	CV1772 ...	33
38	U.S.A.	CV712 ...	32		S.T.C.		
38	COSS.	(CV712) ...	32		TUNG.		
38A	U.S.A.	CV712 ...	32	49	R.C.A.	CV2532 ...	33
39/44	U.S.A.	CV1771 ...	32	50	U.S.A.	CV2533 ...	33
	S.T.C.				TUNG.		
40	U.S.A.	CV2501 ...	32	50C5	U.S.A.	(CV1959) ...	33
40SUA	COSS.	(CV1276) ...	32	50L6G	U.S.A.	CV2534 ...	34
40Z5	U.S.A.	CV2530 ...	32		FERR.		
40Z5GT	U.S.A.	CV2530 ...	32	50L6GT	U.S.A.	CV571 ...	34
41	S.T.C.	CV608 ...	32		S.T.C.		
	U.S.A.				TUNG.		
41DS	S.T.C.	(CV1131) ...	—	50Y6GT	U.S.A.	CV805 ...	34
41FP	COSS.	CV2502 ...	32	50Y6GT/G	U.S.A.	CV805 ...	34
41MH	COSS.	(CV2503) ...	32	51	E.M.I.	(CV487) ...	34
41MHF	COSS.	(CV1037) ...	32	52CG	MULL.	CV2896 ...	—
41MHL	COSS.	CV2504 ...	32	52KU	COSS.	(CV1863) ...	34
41MLF	COSS.	(CV1038) ...	32	53	U.S.A.	CV2535 ...	34
41MP	COSS.	(CV1458) ...	32	53A	U.S.A.	CV2536 ...	—
41MPG	COSS.	CV2505 ...	32	53KU	E.T.	(CV378) ...	34
41MPT	COSS.	CV2506 ...	32	54KU	COSS.	(CV729) ...	34
41MTL	COSS.	(CV1117) ...	33	54NCP11	U.S.A.	CV2885 ...	—
41MXP	COSS.	(CV1122) ...	33	55	U.S.A.	CV2537 ...	34
41STH	COSS.	(CV2508) ...	33	56	U.S.A.	CV611 ...	34
					TUNG.		
42	U.S.A.	{(CV609) ...	33	57	S.T.C.	CV5027 ...	31
		{(CV1712) ...	33	57	U.S.A.	CV612 ...	34
	FERR.				TUNG.		
	S.T.C.			58	U.S.A.	CV613 ...	34
	COSS.				TUNG.		
42E	U.S.A.	CV609 ...	33	59	U.S.A.	CV2538 ...	34
	COSS.			59A3	U.S.A.	(CV2692) ...	—
	S.T.C.			59A4	U.S.A.	(CV2692) ...	—
42MP/Pen	COSS.	(CV1181) ...	33	61BT	COSS.	CV1979 ...	34
42MPT	COSS.	(CV1325) ...	33	61P	COSS.	CV2539 ...	—
420T	COSS.	CV2511 ...	33	62BT	E.T.	CV1745 ...	34
420TDD	COSS.	CV2512 ...	33	63D	COSS.	CV2540 ...	—
42SPT	COSS.	CV1444 ...	33	63ME	—	CV2747	Appendix 1
43	U.S.A.	CV2514 ...	33	63DS	COSS.	CV2731 ...	—
	S.T.C.			63SPT	COSS.	(CV1091) ...	34
	TUNG.			64SU	COSS.	(CV135) ...	—
43E	COSS.	CV2514 ...	33	70B1	MULL.	(CV470) ...	—
	S.T.C.			71A	U.S.A.	CV2541 ...	35
43IU	COSS.	(CV1039) ...	33	71A3	U.S.A.	(CV1764) ...	—
44A/160M	S.T.C.	(CV415) ...	33	72	U.S.A.	CV709 ...	35
44IU	COSS.	(CV1039) ...	33	72R	RAY.	CV709 ...	—
				73	U.S.A.	CV2543 ...	35

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73R	RAY.	CV2543	—	104V	MULL.	(CV1161)	36
75	R.C.A.	TUNG. CV614	35	108C1	MULL.	(CV1833)	—
	COSS.			111A	U.S.A.	CV2554	—
	S.T.C.			112A	U.S.A.	CV1774	36
76	U.S.A.	CV615	35	116Pen	COSS.	(CV1337)	36
	TUNG.			117L7GT	U.S.A.	CV2556	36
	S.T.C.			117N7GT	R.C.A.	CV2557	—
77	U.S.A.	CV616	35		S.T.C.		
	S.T.C.			117Z6GT	R.C.A.	CV2558	36
	FERR.			117Z6GT/G	U.S.A.	CV2558	36
	TUNG.			121A	U.S.A.	CV2560	—
78	U.S.A.	CV2544	35	122A	U.S.A.	CV2561	—
	S.T.C.			129B	Federal Union	CV2950	—
	FERR.			143D	U.S.A.	CV597	—
	TUNG.			150B2	MULL.	(CV2225)	—
78DS	S.T.C.	(CV1328)	—	150C2	MULL.	(CV1832)	—
79	R.C.A.	CV2545	35	152RA	U.S.A.	CV3878	—
	COSS.			154V	MULL.	(CV1037)	36
	S.T.C.			161	G.E.C.	CV708	—
80	COSS.	CV617	35	164V	MULL.	CV2562	36
	U.S.A.			185BT	COSS.	CV1980	36
80A	—	—	122	200	U.S.A.	CV2988	—
	S.T.C.			202	G.E.C.	(CV1200)	—
	TUNG.			203B	U.S.A.	CV2986	—
	FERR.			204A	U.S.A.	CV2563	—
81	R.C.A.	CV2546	35	205D	U.S.A.	CV1749	36
82	—	CV1773	35	205E	W.E.	CV2566	36
	TUNG.			205F	W.E.	CV2567	36
83	R.C.A.	CV618	35	210DET	—	CV2569	37
	S.T.C.			210DDT	COSS.	CV1044	37
83V	R.C.A.	CV2547	35	210HF	COSS.	CV2570	37
84	R.C.A.	(CV2548)	35	210HL	COSS.	CV2571	37
	COSS.			210LF	COSS.	(CV1021)	37
84/6Z4	R.C.A.	CV619	35 & 20	210PG	COSS.	(CV1043)	37
	S.T.C.			210RC	COSS.	CV2977	37
85	R.C.A.	CV2549	35	210SPT	COSS.	(CV1049)	37
	COSS.			210VPA	COSS.	CV2574	37
	S.T.C.			210VPT			
85A1	MULL.	(CV431)	—	(7 pin)	COSS.	(CV1083)	37
85A2	MULL.	(CV449)	—	210VPT			
88D	COSS.	(CV2185)	—	(4 Pin)	—	CV171	—
89	U.S.A.	CV833	35	211	R.C.A.	CV620	—
89D	COSS.	(CV2193)	—	211(Special)	R.C.A.	CV2576	—
89J	COSS.	CV2750	—	212E	W.E.	CV2577	—
89Y	U.S.A.	CV833	—	215P	COSS.	(CV1019)	37
90AG	MULL.	(CV2270)	—	215SG	COSS.	(CV1018)	37
90AV	MULL.	(CV2132)	—	218	R.C.A.	CV2579	—
90CG	MULL.	(CV2133)	—	220B	COSS.	(CV1032)	37
90CV	MULL.	(CV2134)	—	220C	Federal Union	CV2580	—
90EG4	Cintel	(CV1587)	—	220HPT	COSS.	(CV1118)	37
100B1	MULL.	(CV1199)	—	2201PT	COSS.	(CV1333)	37
100R	—	CV2967	—	220LF	COSS.	(CV1313)	—
100TH	Eimac	CV2552	—	220LPT	COSS.	(CV1195)	—
101D	U.S.A.	CV1778	—	220/OT	COSS.	(CV1118)	37
101F	U.S.A.	CV2553	—	220P	COSS.	(CV1020)	37
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220RC	COSS.	(CV1312) ...	—	332A	W.E.	CV2623 ...	—
220SG	COSS.	(CV1018) ...	37	332Pen.	COSS.	(CV1401) ...	38
220TH	COSS.	(CV1082) ...	37	337A	W.E.	CV2624 ...	38
220VS	COSS.	CV2582 ...	37	338A	W.E.	CV2625 ...	—
220VSG	COSS.	(CV1028) ...	37	340A	W.E.	CV1782 ...	—
225DU	COSS.	CV1454 ...	37	346A	W.E.	CV2626 ...	—
228A	W.E.	CV734 ...	—	349A	W.E.	CV2627 ...	38
230XP	COSS.	(CV1023) ...	37	349B	W.E.	CV2628 ...	—
231D	W.E.	CV2584 ...	37	350A	W.E.	CV2629 ...	—
239	U.S.A.	CV1771 ...	—	350B	W.E.	CV621 ...	39
240B	COSS.	CV2586 ...	37	351A	W.E.	CV2630 ...	39
240QP	COSS.	(CV1035) ...	37	351B	—	CV1630 ...	—
242C	W.E.	CV2587 ...	—	352A	W.E.	CV2631 ...	39
244A	W.E.	CV2588 ...	—	354A	W.E.	CV2632 ...	—
244V	MULL.	(CV1038) ...	37	354V	MULL.	(CV1173) ...	39
250TH	Eimac	CV2589 ...	—	357A	W.E.	CV691 ...	—
256B	W.E.	CV2592 ...	—	362A	W.E.	CV2633 ...	39
257A	W.E.	CV2593 ...	—	367	MULL.	CV2634 ...	39
258B	Taylor	CV2594 ...	—	368A	W.E.	CV710 ...	—
259A	W.E.	CV2595 ...	38	371B	U.S.A.	CV3511 ...	—
262A	W.E.	CV2597 ...	38	375A	U.S.A.	CV2636 ...	—
262B	W.E.	CV2597 ...	38	388A	U.S.A.	CV2637 ...	—
264A	W.E.	CV2598 ...	38	393A	U.S.A.	CV2638 ...	—
264C	W.E.	CV2599 ...	38		FERR.		
267B	W.E.	CV2600 ...	—	394A	U.S.A.	CV2639 ...	—
270A	W.E.	(CV30) ...	—	400TDD	—	CV2512 ...	—
271A	W.E.	CV2601 ...	38	401CAHA	G.E.C.	(CV389) ...	—
272A	W.E.	CV2602 ...	38	402Pen	COSS.	CV1672 ...	39
274A	W.E.	CV2603 ...	38	405BU	COSS.	CV2640 ...	39
274B	W.E.	CV684 ...	38	408CHA	G.E.C.	(CV2211) ...	—
275A	W.E.	CV2604 ...	38	410LF	COSS.	(CV1152) ...	—
279A	W.E.	CV669 ...	—	410PT	COSS.	(CV1167) ...	122
282A	W.E.	CV2605 ...	—	415XP	COSS.	(CV1154) ...	—
293A	W.E.	CV3829 ...	38	417A	Westinghouse	CV2642 ...	—
300A	W.E.	CV2608 ...	—	420T	—	CV2511 ...	39
300B	W.E.	CV2609 ...	—	420XP	COSS.	(CV1040) ...	—
303	G.E.C.	CV2610 ...	—	425XP	COSS.	(CV1655) ...	—
303A	U.S.A.	CV2986 ...	38	428T	U.S.A.	CV872 ...	—
304	G.E.C.	(CV1202) ...	—	442BU	COSS.	(CV1796) ...	39
304TH	U.S.A.	CV2611 ...	—	446	U.S.A.	CV3725 ...	—
304TL	U.S.A.	CV3580 ...	—	446A	U.S.A.	CV932 ...	39
307A	W.E.	CV2612 ...	—	446B	U.S.A.	CV687 ...	39
310A	W.E.	CV2613 ...	38	450TH	U.S.A.	CV2572 ...	—
310B	W.E.	CV1781 ...	38	451	—	— ...	122
311A	W.E.	CV2614 ...	38	460BU	COSS.	CV2644 ...	40
313C	W.E.	CV2615 ...	—	464A	U.S.A.	CV688 ...	—
314A	W.E.	CV2616 ...	—	471A	U.S.A.	CV3586 ...	—
316A	W.E.	CV683 ...	—	484V	MULL.	(CV1678) ...	40
322A	W.E.	CV623 ...	—	506BU	COSS.	CV2645 ...	40
323A	W.E.	CV2617 ...	—	522	U.S.A.	CV999 ...	—
327A	U.S.A.	CV2618 ...	—	532	Westinghouse	CV2647 ...	—
327A	W.E.	CV926 ...	—	532A	Westinghouse	CV2648 ...	—
328A	W.E.	CV2619 ...	38	560BU	—	CV2645 ...	—
329A	W.E.	CV2620 ...	38	576	U.S.A.	CV3749 ...	—
330B	W.E.	CV2621 ...	—	578	U.S.A.	CV2967 ...	—

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610XP	COSS.	(CV1154)	...		TUNG.	(CV1572)	...
615	—	CV3506	40		S.T.C.	(CV1374)	...
625P	COSS.	(CV1208)	...	807W	U.S.A.	CV3809	40
631P1	U.S.A.	(CV220)	...	808	R.C.A. TUNG.	CV626	...
645	Heinz-Kaufman	CV670	...	809	R.C.A.	CV2660	...
648P1	U.S.A.	CV746	...	810	R.C.A.	CV627	...
653B	U.S.A.	CV666	...	811	R.C.A.	CV628	...
660T	—	—	122	812	R.C.A.	CV2661	...
700A	W.E.	CV689	...	813	U.S.A.	(CV26)	...
700B	W.E.	CV695	...		S.T.C.		...
700C	W.E.	CV696	...		COSS.		...
700D	W.E.	CV699	...	814	R.C.A.	CV629	...
701A	W.E.	CV677	...	815	R.C.A.	CV2663	...
702A	W.E.	CV678	...	816	R.C.A.	CV724	40
703A	W.E.	CV679	...	822	U.S.A.	CV2664	...
705A	W.E. S.T.C.	CV3587	...	825	R.C.A.	CV2665	40
706A	W.E.	CV3588	...	826	R.C.A.	CV630	...
707A	W.E.	CV3589	...	828	R.C.A. S.T.C.	CV631	...
707B	W.E.	CV1768	...	829	U.S.A.	CV2666	122
708A	W.E.	CV3590	...	829A	U.S.A.	CV3599	...
709A	W.E.	CV2652	...	829B	U.S.A.	(CV2666)	122
710A	W.E.	(CV62)	...	830B	U.S.A.	CV702	...
713A	W.E.	CV3593	40	832	R.C.A.	(CV1088)	...
714AY	W.E.	CV2653	...	832A	R.C.A.	CV788	122
715A	U.S.A.	CV2654	...	833	R.C.A.	CV635	...
715B	U.S.A.	CV2655	...	833A	R.C.A.	CV635	...
715C	U.S.A.	CV598	...	836	U.S.A.	CV636	40
717A	W.E.	CV3594	40	837	U.S.A.	CV637	...
719A	—	CV3956	...	838	R.C.A.	CV638	...
720C	W.E.	CV3907	...	841	U.S.A.	CV906	...
721A	W.E.	CV3595	...	843	R.C.A.	CV639	41
722A	W.E.	CV3596	...	845	R.C.A.	CV735	...
723A	W.E.	CV720	...	845W	U.S.A.	CV3646	...
723A/B	W.E.	CV1795	...	846	R.C.A.	CV2668	...
724A	W.E.	CV2656	...	849	R.C.A.	CV2669	...
724B	W.E.	CV1793	...	849H	R.C.A.	CV2670	...
725A	W.E.	CV722	...	851	R.C.A.	CV2671	...
726A	W.E.	CV676	...	852	R.C.A.	CV2672	...
726B	W.E.	CV3597	...	857B	R.C.A.	CV2673	...
726C	W.E.	CV3644	...	859	U.S.A.	CV2779	...
729A	U.S.A.	(CV539)	...	860	R.C.A.	CV640	...
731A	W.E.	(CV850)	40	861	R.C.A.	CV641	...
732A	W.E.	CV812	...	863	R.C.A.	CV2674	...
800	TUNG.	CV2657	...	864	R.C.A.	CV2675	41
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	COSS.			866	R.C.A.	(CV32)	...
	S.T.C.			866A	R.C.A.	(CV32)	...
801	U.S.A.	CV621	...	866JR	R.C.A.	CV2679	...
801A	U.S.A.	CV621	...	868	U.S.A.	CV2680	...
802	R.C.A.	CV622	40	868/PJ23	U.S.A.	(CV2680)	...
803	R.C.A.	CV623	...	869B	U.S.A.	CV2723	...
804	R.C.A.	CV624	...	872	U.S.A.	CV642	...
805	R.C.A. TUNG.	CV625	40	872A	U.S.A.	CV642	...
806	R.C.A.	CV2658	...	874	U.S.A.	CV643	...
807	U.S.A.	(CV124)	40	875A	Taylor	CV644	...
	COSS.	(CV1060)	...	876	U.S.A.	CV645	...

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879	U.S.A.	CV597	... 41	1611	R.C.A.	CV653	... 42
880	U.S.A.	CV2685	...	1612	R.C.A.	CV654	... 42
884	U.S.A.	CV647	... 41	1613	R.C.A.	CV655	... 42
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889R	U.S.A.	(CV2687)	...	1619	R.C.A.	CV723	... 42
889RA	U.S.A.	(CV2687)	...	1620	R.C.A.	CV657	... 42
891	U.S.A.	CV2688	...	1622	R.C.A.	CV658	... 42
892R	U.S.A.	CV904	...	1625	R.C.A.	CV659	... 42
893R	U.S.A.	CV2689	...		S.T.C.		
902	U.S.A.	CV3600	...	1626	R.C.A.	CV1755	... 42
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906	R.C.A.	CV737	...	1630	R.C.A.	CV2715	... —
906P1	R.C.A.	CV602	...	1637	R.C.A.	(CV1052)	... 42
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918	U.S.A.	CV2692	...	1655	U.S.A.	CV2716	... 42
927	R.C.A.	(CV405)	...	1729	MULL.	CV2717	... —
929	R.C.A.	CV2693	...	1754	U.S.A.	CV3518	... —
930	R.C.A.	CV2694	...	1805P1	R.C.A.	CV832	... —
930B	U.S.A.	CV702	...	1806P1	U.S.A.	CV817	... —
931	R.C.A.	CV2695	...	1809P1	R.C.A.	CV1783	... —
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5628	U.S.A.	CV2952	—	—	S.T.C.	—	—
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5664	U.S.A.	CV1765	—	5814A	U.S.A.	CV4016	45
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5670	U.S.A.	CV4013	45	5829	U.S.A.	CV3998	—
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5672	U.S.A.	(CV2238)	45	5842	U.S.A.	CV3789	45
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5678	U.S.A.	CV2753	45	5852	U.S.A.	CV3943	46
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5684	U.S.A.	CV2753	—	—	PHIL.	—	—
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5692	U.S.A.	CV3942	45	—	PHIL.	—	—
5693	U.S.A.	CV3699	45	5896	U.S.A.	CV2698	46
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5702	U.S.A.	CV3895	—	5902	U.S.A.	CV4029	46
5704	U.S.A.	CV2847	—	5904	—	—	122
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5949/1907	U.S.A.	CV3521	—	8003	R.C.A.	CV2768	—
5963	U.S.A.	CV3900	46	8011	R.C.A.	(CV62)	—
6002	U.S.A.	CV3902	—	8012	R.C.A.	CV662	—
6005	U.S.A.	CV4019	46	8013A	R.C.A.	CV716	50
6005/ 6AQ5W	U.S.A.	CV4019	46	8016	U.S.A.	CV541	50
6024	U.S.A.	CV3539	—	8020	R.C.A.	CV2967	50
6027	U.S.A.	CV3997	—	8021	R.C.A.	CV3587	—
6038	U.S.A.	CV3628	—	8022	R.C.A.	CV934	—
6057	S.T.C.	(CV4004)	47	8023	R.C.A.	CV933	—
6058	S.T.C.	(CV4025)	47	8025	R.C.A.	CV663	—
6059	S.T.C.	(CV4006)	47	8025A	R.C.A.	(CV3915)	—
6060	S.T.C.	(CV4024)	47	8026	R.C.A.	(CV92)	—
6061	BRIM.	CV4043	47	9001	R.C.A.	CV1757	50
6062	BRIM.	CV4039	47	9002	R.C.A.	CV664	50
6063	S.T.C.	(CV4005)	47	9003	R.C.A.	CV665	50
6064	S.T.C.	(CV4014)	47	9004	R.C.A.	CV666	—
6065	S.T.C.	(CV4015)	47	9005	R.C.A.	CV667	—
6067	S.T.C.	(CV4003)	47	9006	R.C.A.	CV2769	50
6073	U.S.A.	CV2903	—	13077	U.S.A.	CV2770	—
6074	U.S.A.	(CV4028)	—	23042	U.S.A.	CV2772	—
6079	U.S.A.	CV3522	—	68503	MAZ.	CV2773	—
6080	U.S.A.	CV2984	47	(modified)			
	MULL.			68504	E.S.	CV2774	—
6088	U.S.A.	CV2699	—	68506	E.S.	CV2775	—
6095	U.S.A.	(CV4019)	47	68510	E.S.	CV2776	—
6096	U.S.A.	(CV4010)	47	68530/U600	E.S.	CV3756	—
6097	U.S.A.	(CV4007)	47	189048	U.S.A.	CV2777	—
6100	BRIM.	CV4022	47	824476	Sperry	—	122
6101	U.S.A.	(CV4031)	47	859483	Westinghouse	CV2779	—
6101/6J6WA	U.S.A.	(CV4031)	47	A40	MAZ.	CV2800	51
6106	U.S.A.	CV2992	47	A40/N3	MULL.	CV2801	—
6111	U.S.A.	CV3961	47	A41	MAZ.	(CV1175)	—
6117	U.S.A.	CV3906	—	A214	—	—	122
6130	U.S.A.	CV3629	—	A373	M.O.V.	(CV1184)	—
6130/3C45	U.S.A.	CV3629	—	A800	M.O.V.	(CV412)	—
6131	U.S.A.	CV3632	—	A819	M.O.V.	(CV1698)	53
6132	BRIM.	CV4055	48	A901	M.O.V.	(CV1722)	53
6135	U.S.A.	CV4022	48	A915	M.O.V.	CV1462	—
6136	U.S.A.	CV2990	48	A915met	M.O.V.	CV2803	—
6146	U.S.A.	CV3523	48	A915Amet	M.O.V.	CV2804	—
6155	U.S.A.	(CV2130)	—	A924	M.O.V.	CV2805	—
6155/4-125A	Amperex	(CV2130)	—	A1065	M.O.V.	(CV1343)	—
6156	U.S.A.	(CV2131)	48	A1320	G.E.C.	CV51	—
6156/4-125A	Amperex	(CV2131)	48	A1714	M.O.V.	(CV408)	53
6158	S.T.C.	CV4068	48	A1820	M.O.V.	(CV409)	53
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6187	U.S.A.	(CV4011)	48	A2030N	—	—	122
6201	U.S.A.	CV3508	48	A2040N	—	—	122
6410	U.S.A.	CV3903	—	A2134	G.E.C.	CV2179	53
6516	S.T.C.	CV4064	48	A2293	—	—	122
7032	—	—	122	A4229	U.S.A.	CV824	—
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B262	PHIL.	(CV1018)	57	C180	E.E.V.	(CV788)	60
B309	M.O.V.	(CV455)	57	C200	U.S.A.	CV2988	—
B329	G.E.C.	CV491	57	C203A	U.S.A.	CV2986	—
B339	G.E.C.	CV492	58	C243N	PHIL.	(CV1118)	60
B406	PHIL.	(CV3621)	58	C543	—	—	122
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BD78	B.T.H.	(CV2125)	—	C1108	E.E.V.	(CV2131)	—
BLC/1C	S.T.C.	(CV433)	—	C7501	U.S.A.	(CV2130)	—
BK44	B.T.H.	CV1742	—	CAA322	U.S.A.	CV2869	—
BL63	M.O.V.	(CV1102)	59	CAR1	M.O.V.	CV1904	—
BOLO14	S.T.C.	CV984	—	CAR4	M.O.V.	(CV1601)	—
MW	—	—	—	CAT1	M.O.V.	(CV1602)	—
BR1	—	CV692	—	CAT2	M.O.V.	(CV1600)	—
BR153	E.E.V.	(CV2159)	—	CAT6	M.O.V.	(CV1606)	—
BR161	E.E.V.	(CV2322)	—	CAT9	M.O.V.	(CV2871)	—
BR179	E.E.V.	(CV2322/2323)	—	CAT17	M.O.V.	(CV2872)	—
BS4	B.T.H.	(CV189)	—	CAT17	M.O.V.	CV533	—
BS4A	B.T.H.	CV1859	—	CAT20C	M.O.V.	(CV421)	—
BS5	B.T.H.	(CV233)	—	CBL31	PHIL.	CV1463	60
BS48	B.T.H.	CV460	—		TUNG.		
BS52	B.T.H.	CV1841	—		MULL.		
BS60	MAZ.	(CV527)	—	CC3D	Hivac	CV2870	—
BS62	—	CV1858	—	CC3L	Hivac	(CV2266)	—
BS64	B.T.H.	CV1743	—	CE1C	U.S.A.	(CV2692)	—
BS82	B.T.H.	(CV463)	—	CE1D	U.S.A.	(CV2680)	—
BS84	B.T.H.	(CV462)	—	CE1E	U.S.A.	(CV2680)	—
BS92	B.T.H.	(CV461)	—	SE2	U.S.A.	CV1764	—
BS100	MAZ.	(CV1219)	—	CE20	U.S.A.	CV1474	—
BT5	B.T.H.	(CV1147)	—	CE25	U.S.A.	(CV405)	—
BT9	B.T.H.	CV1145	—	CE72	U.S.A.	CV709	—
BT9A	B.T.H.	(CV1146)	—	CE230	U.S.A.	CV812	60
BT9B	B.T.H.	(CV13)	—	CG1-C	B.T.H.	(CV425)	—
BT19	B.T.H.	(CV1144)	—	CG1-E	B.T.H.	(CV425)	—
BT35	B.T.H.	(CV1147)	—	CG14	—	(CV496)	—
BT45	B.T.H.	(CV22)	—	CK502AX	RAY.	(CV385)	—
BT75	B.T.H.	(CV489)	—	CV505AX	RAY.	(CV443)	—
BT79	B.T.H.	(CV372)	—	CK506AX	RAY.	(CV387)	—
BT83	B.T.H.	(CV1120)	—	CK707	RAY.	CV2848	—
BTR32	FERR.	(CV458)	—	CK1005	RAY.	CV2874	61
BTR34	FERR.	CV459	—	CK5704	RAY.	CV2847	—
BU100/6	E.S.	CV2867	—	CL4	PHIL.	CV2875	61
BW140	E.E.V.	(CV2871)	—		MULL.		
BW153	E.E.V.	(CV2872)	—		TUNG.		
C1A	U.S.A.	(CV2868)	—	CL33	MULL.	CV1401	61
C1B	U.S.A.	CV1765	—		TUNG.		
C1C	PHIL.	CV1400	—	CMG8	G.E.C.	(CV1432)	—
C1K	U.S.A.	CV2790	—	CMG22	G.E.C.	(CV1473)	—
C6A	U.S.A.	CV714	—	CMG25	G.E.C.	(CV242)	—
C10/SS/2G	S.T.C.	(CV2794)	—	CMG25	G.E.C.	(CV250)	—
C12B	S.T.C.	(CV2315)	—	(R.S.)			
C12R	S.T.C.	(CV429)	—	CMG25	G.E.C.	(CV1472)	—
C14HM	S.T.C.	CV3535	—	short			
C16GS/2G	S.T.C.	CV2745	—	CRT4/1	E.M.I.	CV2880	—
C143	E.E.V.	(CV26)	—	CRT/51	E.M.I.	(CV487)	—

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CR176	E.E.V.	(CV2324)	—	DER	M.O.V.	(CV1642)	—
CS2-A	B.T.H.	(CV103)	—	DET1SW	M.O.V.	CV2895	—
CS2-C	B.T.H.	CV1907	—	DET3	M.O.V.	(CV1034)	—
CS3-A	B.T.H.	(CV253)	—	DET5	M.O.V.	(CV1223)	—
CS3-B	B.T.H.	CV1844	—	DET6	M.O.V.	(CV1620)	—
CS4B	B.T.H.	(CV2258)	—	DET9	M.O.V.	CV2899	—
CWS24A	G.E.C.	CV1968	—	DET10	M.O.V.	CV2900	—
CX25	U.S.A.	CV1766	—	DET12	M.O.V.	(CV1288)	—
CX1113	E.E.	CV2851	—	DET16	M.O.V.	(CV1363)	—
CY31	MULL.	CV1402	—	DET18	M.O.V.	(CV419)	—
	PHIL.			DET19	M.O.V.	(CV18)	64
	TUNG.			DET20	M.O.V.	(CV6)	64
D1	MAZ.	(CV1078)	61	DET22	M.O.V.	(CV273)	—
D2	U.S.A.	CV2778	61	DET23	M.O.V.	(CV354)	—
D4	FERR.	(CV1037)	61	DET24	M.O.V.	(CV397)	—
D41	M.O.V.	(CV1187)	62	DET25	M.O.V.	(CV1025)	—
D42	M.O.V.	CV557	62	DE5	M.O.V.	CV2891	64
D61	MAZ.	(CV1092)	62	DET5B	M.O.V.	CV2892	—
D63	M.O.V.	CV554	62	DF1	—	CV2907	65
D77	M.O.V.	(CV140)	62	DF33	MULL.	(CV1823)	65
D210	Hivac	(CV1021)	62	DF64	MULL.	CV2260	65
D400	TUNG.	(CV1170)	62	DF66	MULL.	(CV2107)	65
D401	—	—	122	DF70	MULL.	(443)	65
D418	TUNG.	(CV1686)	62	DF72	MULL.	(CV2101)	65
DA	FERR.	(CV1109)	62	DF73	MULL.	(CV2103)	65
DA30	M.O.V.	CV563	62	DF91	MULL.	(CV785)	65
DA41	M.O.V.	(CV1076)	—	DF92	MULL.	(CV1758)	65
DA60	M.O.V.	CV527	—	DGP	COSS.	(CV1141)	—
DA90	MULL.	(CV753)	62	DG7-5	MULL.	(CV2175)	—
DA100	M.O.V.	(CV1219)	—	DG13-2	MULL.	(CV2191)	—
DAC1	MULL.	CV2887	62	DH	M.O.V.	(CV1665)	65
DAC32	MULL.	(CV8120)	62	DH30	M.O.V.	(CV1695)	65
DAF70	MULL.	(CV2104)	62	DH63	M.O.V.	(CV587)	65
DAF91	MULL.	(CV784)	63	DH63M	M.O.V.	(CV587)	65
DAG1	MULL.	CV2	—	DH73M	M.O.V.	CV2909	65
DC2P	MAZ.	(CV1735)	63	DH77	M.O.V.	(CV452)	65
DC51	MULL.	(CV1)	—	DH81	M.O.V.	(CV882)	65
DC70	MULL.	(CV2275)	63	DK1	MULL.	CV2910	66
DCC90	MULL.	CV808	63	DK31	—	—	122
DDL	COSS.	(CV1691)	—	DK32	MULL.	(CV1802)	66
DD4	COSS.	(CV1170)	63	DK91	MULL.	(CV782)	66
	TUNG.			DL	M.O.V.	(CV1661)	66
DD6	COSS.	(CV140)	63	DL2	MULL.	CV2911	66
	FERR.			DL33	MULL.	(CV819)	66
DD6G	TUNG.	(CV140)	63	DL35	MULL.	(CV1803)	66
DD41	MAZ.	CV1403	64	DL63	M.O.V.	CV2912	66
DD620	MAZ.	CV2889	64	DL64	MULL.	(CV2331)	66
DDL4	—	CV1691	64	DL66	MULL.	(CV2106)	66
DDL13	COSS.	(CV1695)	—	DL68	MULL.	(CV2105)	66
DDPP4BM	TUNG.	(CV519)	—	DL70	MULL.	CV2105	66
DDR2	MULL.	(CV173)	64	DL71	MULL.	(CV385)	66
DDT	COSS.	CV2813	64	DL72	MULL.	(CV387)	66
DDTmet	TUNG.	CV2890	64	DL73	MULL.	(CV2299)	66
DDT4	TUNG.	(CV2813)	64	DL75	MULL.	(CV2102)	66
DDX52	MULL.	(CV2232)	—	DL91	MULL.	CV783	66
DEQ	M.O.V.	(CV1156)	—	DL92	MULL.	(CV820)	66

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DL94	MULL.	CV2983	66	E1229	M.O.V.	CV4	—
DL95	MULL.	(CV818)	66	E1231	M.O.V.	(CV52)	—
DL98	MULL.	CV2240	67	E1232	M.O.V.	(CV92)	—
DLS10	Ediswan	(CV190)	—	E1235	M.O.V.	(CV29)	—
DLS10	E.S.	(CV190)	—	E2236	M.O.V.	(CV69)	—
DLS19	E.S.	(CV979)	—	E1242	M.O.V.	(CV1510)	70
DM6	20th	CV342	—	E1248	M.O.V.	(CV8)	—
DM70	MULL.	(CV2146)	—	E1255	M.O.V.	(CV40)	—
DO26	MULL.	CV2980	Appendix 1	E1256	M.O.V.	(CV42)	—
DO30	MULL.	(CV1178)	67	E1266	M.O.V.	(CV15)	—
DO42	—	(CV1178)	67	E1267	M.O.V.	(CV41)	—
DO60	MULL.	—	122	E1271	M.O.V.	(CV57)	—
DQP	COSS.	(CV1206)	—	E1273	M.O.V.	(CV58)	—
DS	FERR.	(CV1121)	—	E1287	M.O.V.	(CV23)	—
DS103	M.W.T.	(CV2979)	67	E1289	M.O.V.	(CV1148)	—
DT70	U.S.A.	(CV94)	—	E1297	M.O.V.	(CV5)	—
DT143	—	CV798	—	E1320	M.O.V.	(CV51)	Appendix 1
DT215	—	—	122	E1323	M.O.V.	(CV63)	70
DTV1	—	—	122	E1325	M.O.V.	(CV56)	—
DV32	S.T.C.	(CV88)	—	E1326	M.O.V.	(CV69)	—
DV34	S.T.C.	(CV127)	—	E1331	M.O.V.	(CV1510)	—
DV40B	S.T.C.	(CV228)	—	E1335	M.O.V.	(CV61)	—
DV55	S.T.C.	(CV230)	—	E1337	M.O.V.	(CV78)	—
DV56	S.T.C.	(CV234)	—	E1342	M.O.V.	(CV64)	—
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DW4/500	MULL.	CV1796	68	E1362	M.O.V.	(CV126)	—
DY70	MULL.	(CV1064)	68	E1365	M.O.V.	(CV114)	—
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E90F	MULL.	CV2729	68	E1371	M.O.V.	(CV105)	—
E132	M.O.V.	—	122	E1373	M.O.V.	(CV99)	—
E133	M.O.V.	(CV1643)	—	E1379	M.O.V.	(CV79)	—
E220B	—	(CV1645)	—	E1380	M.O.V.	(CV89)	—
E406N	PHIL.	—	122	E1411	M.O.V.	(CV153)	—
E446	PHIL.	(CV1282)	69	E1415	M.O.V.	(CV115)	—
E960	M.O.V.	(CV1058)	—	E1416	M.O.V.	(CV281)	—
E960T	M.O.V.	(CV1098)	—	E1416	M.O.V.	(CV281)	—
E1024	M.O.V.	(CV1184)	—	E1417	M.O.V.	(CV117)	—
E1046	M.O.V.	(CV1090)	—	E1419	M.O.V.	(CV154)	—
E1097	M.O.V.	(CV1111)	—	E1423	M.O.V.	CV406	—
E1132	M.O.V.	(CV1111)	—	E1429	M.O.V.	(CV79)	—
E1143	M.O.V.	(CV1577)	—	E1436	G.E.C.	(CV188)	—
E1148	M.O.V.	(CV6)	70	E1453	M.O.V.	(CV1646)	—
E1155	M.O.V.	(CV44)	—	E1457	M.O.V.	(CV257)	—
E1161	M.O.V.	(CV1253)	—	E1458	M.O.V.	(CV178)	—
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E1180	M.O.V.	(CV1077)	—	E1465	M.O.V.	(CV236)	—
E1189	M.O.V.	(CV1255)	—	E1468	M.O.V.	(CV172)	—
E1190	M.O.V.	(CV55)	—	E1474	M.O.V.	(CV78)	—
E1191	M.O.V.	(CV12)	—	E1481	M.O.V.	(CV192)	—
E1192	M.O.V.	(CV1501)	70	E1485	M.O.V.	(CV807)	—
E1198	M.O.V.	(CV38)	—	E1487	M.O.V.	(CV208)	—
E1199	M.O.V.	CV1405	—	E1494	M.O.V.	(CV191)	—
E1209	M.O.V.	(CV7)	—	E1495	M.O.V.	(CV259)	—
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E1511	M.O.V.	{(CV355)	—	EB91	MULL.	(CV140)	71
E1516	M.O.V.	(CV221)	—	EBC3	MULL.	CV1428	71
E1524	M.O.V.	(CV338)	—	EBC21	MULL.	(CV347)	72
E1527	M.O.V.	(CV290)	—	EBC33	MULL.	(CV1055)	72
E1531	M.O.V.	(CV214)	—	EBC41	PHIL.	CV3882	72
E1532	M.O.V.	(CV1624)	—	EBC90	MULL.	(CV452)	72
E1541	M.O.V.	(CV1716)	—	EBF2	MULL.	CV2925	72
E1563	M.O.V.	(CV1863)	—	EBF32	MULL.	CV2925	72
E1591	M.O.V.	(CV181)	—	EBL131	MULL.	CV2926	—
E1599	M.O.V.	(CV273)	—	EC31	MULL.	CV1433	72
E1606	M.O.V.	(CV278)	70	EC50	MULL.	CV2927	—
E1633	M.O.V.	(CV456)	—	EC52	MULL.	(CV1137)	72
E1647	M.O.V.	(CV288)	—	EC53	MULL.	(CV1197)	72
E1648	M.O.V.	(CV135)	—	EC54	MULL.	(CV66)	72
E1659	M.O.V.	(CV453)	—	EC55	MULL.	(CV273)	—
E1706	M.O.V.	(CV437)	70	EC70	MULL.	(CV468)	72
E1714	M.O.V.	(CV408)	—	EC80	PHIL.	CV1886	72
E1769	M.O.V.	(CV397)	—	EC81	PHIL.	CV1865	72
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E2018	M.O.V.	(CV454)	—	ECC91	MULL.	(CV858)	73
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E2134	M.O.V.	(CV2179)	71	ECH33	MULL.	CV2930	73
E2163	M.O.V.	(CV491)	—	ECH35	MULL.	(CV1347)	73
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E4103/E/4	G.E.C.	(CV2205)	—	ECR35	MULL.	(CV1587)	—
E4205/B/7	G.E.C.	(CV1588)	—	ECR60	MULL.	(CV1097)	—
E4205/C/7	G.E.C.	(CV1525)	—	EE8020	—	CV2967	—
E4412/B/9	G.E.C.	(CV1587)	—	EF8	MULL.	(CV1713)	74
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E4412/E/9	G.E.C.	(CV1529)	—	EF22	MULL.	(CV303)	74
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E4504/C/16	G.E.C.	{(CV1517)	—				
E4504/E/16	G.E.C.	(CV1391)	—				
E4504/M/16	G.E.C.	(CV966)	—				
EA50	MULL.	(CV1092)	71				
EA76	MULL.	(CV469)	71				
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EF40	PHIL.	CV3885	74		TUNG.		
EF41	PHIL.	CV3886	74	EM31	MULL.	(CV1077)	Appendix 1
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EF51	MULL.	(CV1035)	75	EN30	FERR.	(CV2349)	—
EF52	MULL.	(CV327)	75	EN32	MULL.	(CV2253)	—
EF54	MULL.	(CV1136)	75	EN70	MULL.	(CV474)	—
EF55	MULL.	(CV173)	75	EN707	—	—	—
EF70	MULL.	(CV467)	75	EN91	MULL.	(CV797)	—
EF71	MULL.	CV475	75	ES15	E.S.	CV3853	—
EF72	MULL.	(CV465)	75	ES85	E.S.	(CV25)	—
EF73	MULL.	(CV466)	75	ES240A	E.S.	CV2563	—
EF86	MULL.	CV2901	75	ES207	E.S.	CV3850	—
EF89F	MAZ:(Fr.)	—	122	ES250M	E.S.	(CV1618)	—
EF91	MULL.	(CV138)	75	ES253	E.S.	CV3851	—
EF92	MULL.	(CV131)	75	ES357	E.S.	(CV27)	—
EF93	MULL.	(CV354)	75	ES450	E.S.	(CV1207)	—
EF95	MULL.	(CV850)	—	ES833	E.S.	(CV635)	—
EHA5000	E.S.	CV2687	—	ES1500	E.S.	(CV1614)	—
EHM2	G.E.C.	(CV2139)	—	ES1500A	E.S.	(CV1614)	—
EHT1	M.O.V.	(CV19)	—	ESA891	E.S.	CV2688	—
EHW3000	E.S.	CV2686	—	ESA892	E.S.	CV701	—
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EK32	MULL.	(CV1057)	76	ESG250	E.S.	(CV1031)	—
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	MULL.			ESU74	E.S.	(CV74)	—
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	TUNG.			ESU76	E.S.	CV2945	—
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EL32	MULL.	(CV1052)	76	ESU300	E.S.	CV2947	—
EL33	MULL.	CV2938	76	ESU450	E.S.	(CV1259)	—
	TUNG.			ESU866	E.S.	(CV32)	—
EL35	MULL.	(CV1286)	76	ESU872	E.S.	CV642	—
EL36	MULL.	CV2940	76	ESU1500	E.S.	CV2944	—
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EL37	MULL.	CV586	76	ESW5000	E.S.	(CV2686)	—
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EL81	MULL.	(CV2721)	77	EY91	MULL.	(CV135)	77
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EL83	MULL.	CV2726	77	EZ35	MULL.	(CV574)	78
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F328A	Federal	CV734	...	G150/4K	S.T.C.	CV1832	...
F353	Federal	CV642	...	G180/2G	S.T.C.	CV2029	...
F353A	Federal	CV642	...	G180/2M	S.T.C.	(CV395)	...
F366A	Federal	(CV32)	...	G210/1C	S.T.C.	(CV212)	...
F869B	U.S.A.	CV2723	...	G240/2D	S.T.C.	(CV2174)	...
F872A	U.S.A.	CV642	...	G400/1K	S.T.C.	(CV2194)	...
F872B	U.S.A.	CV642	...	G400/2G	S.T.C.	CV4047	...
F892R	Federal	CV904	...	G445B	—	(CV1651)	...
F/2726	BRIM.	CV4049	...	G3060	S.T.C.	—	122
F/2750	BRIM.	CV4037	...	GA5A	U.S.A.	CV2647	...
F/5654	BRIM.	CV4050	...	GC10A	Ericsson	(CV2199)	...
F/6057	BRIM.	CV4035	...	GC10B/S	Ericsson	(CV2271)	...
F/6060	BRIM.	CV4033	...	GC10/4B	Ericsson	CV1739	...
F/6061	BRIM.	CV4045	...	GD150A	—	CV216	...
F/6063	S.T.C.	(CV4001)	...	GD150M/S	—	CV1832	...
F/6064	S.T.C.	(CV4002)	...	GD120A/S	—	CV45	...
F/6067	BRIM.	CV4034	...	GD100A/S	—	CV188	...
F/6132	BRIM.	CV4056	...	GD100B/S	—	CV1070	...
F/6158	BRIM.	CV4051	...	GDT4B	COSS.	(CV1141)	...
F/7001	BRIM.	—	122	GD86W	Ericsson	(CV2321)	...
FA13	U.S.A.	CV2952	...	GET2	G.E.C.	CV743	...
FA14	U.S.A.	CV2953	...	GEX35	G.E.C.	(CV442)	...
FA15	U.S.A.	(CV298)	...	GEX36	G.E.C.	CV2279	...
FC2	MULL.	(CV1043)	78	GEX45/1	G.E.C.	(CV425)	...
FC2A	MULL.	CV2954	78	GEX54	G.E.C.	CV448	...
FC4	MULL.	—	...	GE64	G.E.C.	(CV2310)	...
FC13C	MULL.	CV2956	79	GEX66	G.E.C.	CV2290	...
FG17	U.S.A.	CV2957	...	GEX402	E.E.V.	CV2902	...
FG27A	U.S.A.	CV2958	...	GL203A	U.S.A.	CV2986	...
FG67	U.S.A.	CV742	...	GL446	U.S.A.	CV3725	...
FP54	U.S.A.	CV2960	...	GL446A	U.S.A.	CV932	...
FVD7	FERR.	(CV404)	...	GL446B	U.S.A.	CV687	...
-FW4/500	MULL.	(CV1264)	79	GL455	U.S.A.	CV2789	...
FW4/800	MULL.	(CV31)	79	GL464	U.S.A.	CV3604	...
FX215	E.E.V.	(CV2203)	...	GL464A	U.S.A.	CV688	...
FX219	E.E.V.	(CV2520)	...	GL471A	U.S.A.	CV3586	...
G1/235G	S.T.C.	CV3524	...	GL532	U.S.A.	CV2647	...
G1/371K	S.T.C.	(CV2224)	...	GL532	U.S.A.	CV2647	...
G5H	20th	CV2247	...	GL806	U.S.A.	CV2658	...
G10H	20th	(CV2233)	...	GL868	U.S.A.	(CV2680)	...
G10H	20th	(CV2173)	...	GL889R	U.S.A.	(CV2687)	...
G10HE	20th	CV2287	...	GL889RA	U.S.A.	(CV2687)	...
G10/241E	S.T.C.	(CV2223)	...	GL892R	U.S.A.	(CV904)	...
G24	20th	CV411	...	GL918	U.S.A.	(CV2692)	...
G24E	20th	(CV2148)	...	GL2050	U.S.A.	CV2565	...
G24H	20th	(CV2147)	...	GL8020	U.S.A.	CV2967	...
G50/1G	S.T.C.	(CV2208)	...	GL8023	U.S.A.	CV933	...
G60E	20th	(CV2149)	...	GM1B	Cintel	(CV2149)	...
G75/2D	S.T.C.	(CV3798)	...	GM4	G.E.C.	(CV2138)	...
G75/3G	S.T.C.	CV4030	...	GM5	Cintel	(CV111)	...
G105/1D	S.T.C.	(CV686)	...	GM5B	Cintel	(CV2148)	...
G108/1K	S.T.C.	CV1833	...	GS10C	Ericsson	(CV2325)	...
G120/1D	S.T.C.	(CV438)	...	GS1650	—	—	...
G150/1A	S.T.C.	(CV75)	...	(80-110)	Cintel	(CV2694)	...

Commercial Valve	Maker U.S.A.	Service Equip. (or nearest in brackets)	Page	Commercial Valve	Maker U.S.A.	Service Equip. (or nearest in brackets)	Page
GL592		CV1903	—	HK257		CV824	—
GS16 (160)	Cintel	(CV248)	—	HK354E		CV2989	—
GS16 (80-110)	Cintel	(CV1473)	—	HL2	MAZ.	(CV1673)	81
GS18	Cintel	(CV242)	—		M.O.V.		
GS26	Cintel	(CV1432)	—		TUNG.		
GS44X	Cintel	CV1913	—	HL2Met	M.W.T.	CV2991	81
GS46	Cintel	CV584	—	HL2K	M.O.V.	(CV1050)	81
GS47X	Cintel	(CV405)	—	HL4	TUNG.	(CV1173)	81
GS118	Cintel	CV1801	—	HL4X	TUNG.	(CV1037)	81
GS146	Cintel	CV2692	—	HL13C	MULL.	(CV1109)	81
GT1	M.O.V.	CV2969	—	HL21	M.O.V.	(CV1303)	81
GT1A	M.O.V.	(CV1143)	—	HL21DD	MAZ.	(CV1044)	81
GT1C	M.O.V.	(CV1128)	80	HL23	MAZ.	(CV1130)	81
GT1E	M.O.V.	CV530	—	HL23DD	MAZ.	CV2995	81
GT11	—	(CV435)	—	HL41	MAZ.	(CV24)	81
GTR95M/S	Ericsson	(CV286)	—	HL41DD	MAZ.	CV2996	81
GTR150M/S	Ericsson	(CV287)	—	HL92	MULL.	(CV1959)	82
GU1	M.O.V.	(CV1262)	—	HL133	MAZ.	CV2998	82
GU5	M.O.V.	(CV1072)	—	HL133DD	MAZ.	CV2999	82
GU7	M.O.V.	CV2973	—	HL210	MAZ.	CV3500	82
GU8	M.O.V.	(CV1628)	—		M.O.V.		
GU11	M.O.V.	CV532	—	HL210A	M.O.V.	CV1303	—
GU20	M.O.V.	CV1435	—	HL610	M.O.V.	CV3501	—
GU21	M.O.V.	(CV5)	—	HL1320	MAZ.	CV3502	82
GU50	M.O.V.	(CV1072)	—	HLA2	S.T.C.	(CV1678)	82
GX402	E.E.V.	(CV2902)	—	HLB1	S.T.C.	(CV1021)	82
GZ30	MULL.	CV2748	80	HLDD/1320	MAZ.	CV3503	82
GZ32	Mullard	CV593	80	HP2	FERR.	(CV1032)	82
GZ33	MULL.	CV378	80	HP6	TUNG.	(CV138)	82
H2	M.O.V.	CV2977	80	HP210	TUNG.	(CV1322)	82
	MAZ.			HP215	Hivac	(CV1322)	82
H2D	FERR.	(CV1044)	—	HP415	TUNG.	(CV1169)	82
H12	M.O.V.	CV2978	80	HP4101	TUNG.	(CV1124)	82
H30	M.O.V.	CV2979	80	HP4101C	TUNG.	(CV1282)	83
H42	M.O.V.	(CV1182)	80	HP4106	TUNG.	(CV1169)	83
H45	U.S.A.	(CV372)	—	HP4115	TUNG.	(CV1169)	83
H63	M.O.V.	(CV1073)	80	HR2	FERR.	(CV261)	83
H210	M.O.V.	(CV1673)	80	HR7	FERR.	(CV404)	83
	Hivac			HR210	TUNG.	(CV1673)	83
H410	M.O.V.	CV2981	80	HT415	U.S.A.	CV3540	—
H610	M.O.V.	CV2982	—	HV18	U.S.A.	CV2988	—
HA1	M.O.V.	(CV1171)	—	HVR2	MULL.	(CV1134)	83
HA2	M.O.V.	(CV1059)	—	HY51B	Hytron	(CV702)	—
HAD	FERR.	(CV1419)	81	HY61	Hytron	(CV124)	83
HD14	M.O.V.	(CV1818)	81	HY75	Hytron	CV751	—
HD24	M.O.V.	CV2985	81	HY114B	Hytron	CV3505	—
HD203A	Taylor	CV2986	—	HY615	Hytron	CV3506	83
HF93	MULL.	(CV1928)	81	IFW1	Dario	(CV1039)	—
HF100	Amperex	CV2987	—	1W3	MULL.	(CV1039)	84
HF130	Amperex	CV638	—	1W4-350	MULL.	CV1039	84
HF200	Amperex	CV2988	—	1W4/500	MULL.	(CV1039)	84
HF300	Amperex	CV693	—	JP9-7	MULL.	(CV3676)	—
HK24	U.S.A.	CV941	—	JP9-7A	MULL.	(CV370)	—
HK24G	U.S.A.	CV789	—	JP9-15	U.S.A.	CV3997	—
HK54	U.S.A.	CV707	—	JPT9-01	MULL.	CV2420	—



Commercial		Service Equip. (or nearest in brackets)		Page	Commercial		Service Equip. (or nearest in brackets)		Page
Valve	Maker				Valve	Maker			
K3A	FERR.	(CV410)	...	...	L21	M.O.V.	CV3532	...	86
K7RF4	R.C.A.	CV1808	...	...	L21DD	MAZ.	(CV1308)	...	86
K302	E.E.V.	(CV2164)	...	...	L22DD	MAZ.	CV3533	...	86
K305	E.E.V.	(CV2263)	...	...	L30	M.O.V.	CV3534	...	86
K307	E.E.V.	CV1871	...	...	L63	M.O.V.	(CV1067)	...	86
K308	E.E.V.	(CV2283)	...	...	L77	M.O.V.	(CV133)	...	86
K322	E.E.V.	(CV2791)	...	...	L210	M.O.V.	(CV1021)	...	86
K324	E.E.V.	(CV2304)	...	...					
K1051	U.S.A.	CV2849	...	...		Hivac			
K1105P2	U.S.A.	CV3736	...	...	L410	M.O.V.	(CV1152)	...	86
K814024	U.S.A.	CV3514	...	...	L600	U.S.A.	CV3537	...	—
KB2	MULL.	CV3515	...	84	L610	M.O.V.	CV3538	...	—
KK2	PHIL.	CV3516	...	85	LD210	TUNG.	CV502	...	87
KR3	E.M.I.	(CV217)	...	—	LG210	TUNG.	(CV1021)	...	—
KR6/1	E.M.I.	(CV116)	...	—	LL2	TUNG.	CV1732	...	87
KR6/2	E.M.I.	(CV237)	...	—	LP2				
KR6/3	E.M.I.	(CV238)	...	—	(Selected)	G.E.C.	CV1304	...	87
KR6/4	E.M.I.	(CV272)	...	—	LP2	M.O.V.	CV548	...	87
KRN2	E.M.I.	(CV87)	...	—	LP2	FERR.	(CV1023)	...	87
KRN3	E.M.I.	(CV217)	...	—	LP4	FERR.	(CV1168)	...	87
KS9-20	MULL.	(CV1795)	...	—		M.O.V.			
KS9-20A	MULL.	(CV2792)	...	—	LP220	TUNG.	(CV1166)	...	87
KT2	M.O.V.	(CV1118)	...	85	LS5	M.O.V.	(CV1637)	...	—
KT8	M.O.V.	(CV1079)	...	85	LS5A	M.O.V.	(CV1637)	...	—
KT8C	M.O.V.	(CV1079)	...	85	LS5B	M.O.V.	(CV2846)	...	—
KT24	M.O.V.	(CV1334)	...	85	LS5X	M.O.V.	(CV1667)	...	—
KT30	M.O.V.	CV3519	...	85	LS6A	M.O.V.	(CV3541)	...	87
KT31	M.O.V.	CV3530	...	85	LS7	M.O.V.	(CV1660)	...	87
KT32	M.O.V.	(CV1287)	...	85	LS8	M.O.V.	(CV1656)	...	87
KT33C	M.O.V.	(CV1503)	...	85	LS8A	M.O.V.	(CV1676)	...	87
KT38	M.O.V.	(CV1576)	...	—	LS9B	M.O.V.	(CV1676)	...	87
KT41	M.O.V.	(CV1181)	...	86	LS408A	S.T.C.	CV2536	...	—
KT42	M.O.V.	(CV1174)	...	86	LS532	S.T.C.	CV3542	...	—
KT44	M.O.V.	(CV1577)	...	86	LS650	S.T.C.	(CV391)	...	—
KT44T	M.O.V.	(CV1576)	...	—	LS731	S.T.C.	(CV273)	...	—
KT45	M.O.V.	CV1825	...	86	M2H	20th	(CV2886)	...	—
KT61	M.O.V.	CV1438	...	86	M6	20th	(CV2145)	...	—
KT63	M.O.V.	(CV1186)	...	86	M215H	COSS.	(CV177)	...	—
KT66	M.O.V.	(CV1075)	...	86	M500	E.E.V.	(CV353)	...	—
KT67	M.O.V.	(CV437)	...	86	M501	E.E.V.	(CV76)	...	—
KT81	M.O.V.	(CV885)	...	86	M502	E.E.V.	(CV2166)	...	—
KTW61	M.O.V.	(CV1100)	...	86	M503	E.E.V.	CV1866	...	—
KTW62	M.O.V.	(CV1100)	...	86	M505	E.E.V.	CV1747	...	—
KTW63	M.O.V.	(CV1195)	...	86	M507	E.E.V.	(CV69)	...	—
KTW73	M.O.V.	(CV1056)	...	86	M508	E.E.V.	(CV370)	...	—
KTW73M	M.O.V.	CV3527	...	86	M510	E.E.V.	CV1827	...	—
KTW74M	M.O.V.	(CV918)	...	86	M512	E.E.V.	CV1828	...	—
KTZ41	M.O.V.	CV3529	...	86	M513	E.E.V.	CV3528	...	—
KTZ63	M.O.V.	(CV1074)	...	86	M8079	MULL.	(CV4025)	...	88
KTZ73M	M.O.V.	CV3530	...	86	M8081	MULL.	(CV4031)	...	88
KU25	U.S.A.	CV2993	...	—	M8083	MULL.	(CV4014)	...	88
KU45	U.S.A.	CV3875	...	—	M8098	MULL.	CV4048	...	—
L2	MAZ.	CV3531	...	86	M8100	MULL.	(CV4010)	...	88
L9	Siemens	(CV328)	...	—	M8190	MULL.	CV4066	...	—
	FERR.				M8216	MULL.	CV3987	...	—
					M8223	MULL.	CV4020	...	—

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Valve	Maker			Valve	Maker		
M8224	MULL.	CV4028	...	MT5545	MULL.	(CV2215)	...
ME41	MAZ.	CV3565	Appendix 1	MU1	—	CV3567	89
ME1001	MULL.	(CV273)	...	MU2	MAZ.	CV1459	89
ME1005	MULL.	(CV354)	...	MU12	M.O.V.	(CV1039)	89
ME1100	MULL.	(CV1795)	...	MU12/14	M.O.V.	(CV1039)	89
ME1400	MULL.	(CV432)	...	MU4250	COSS.	(CV1072)	89
ME1401	MULL.	(CV495)	...	MV6-5	PHIL.	CV1976	—
ME1500	MULL.	(CV474)	...	MVSG	COSS.	(CV1165)	89
ME1501	MULL.	(CV2253)	...	MVSPen	COSS.	CV3571	89
ME1502	MULL.	(CV1128)	...	MVSPen	COSS.	(CV1169)	89
ME1503	MULL.	(CV1787)	...	MVSPenB	COSS.	CV3572	89
MF13-1	MULL.	CV3959	...	MW6-2	MULL.	CV1737	—
MF31-55	MULL.	(CV429)	...	MW100	COSS.	(CV25)	—
MH4	M.O.V.	(CV1037)	88	MX1	E.M.I.	(CV1515)	—
MH4met	M.O.V.	(CV399)	88	MX2	E.M.I.	(CV418)	—
MH41	M.O.V.	(CV1505)	88	MX40	M.O.V.	CV3576	89
MHD4	M.O.V.	CV3546	88	MX52	B.T.H.	(CV306)	—
MHL4	M.O.V.	(CV1038)	88	MX57	B.T.H.	(CV209)	—
MHLD6	M.O.V.	(CV1101)	88	MX103	MULL.	(CV2150)	—
MHT4	—	(CV2955)	...	MX105	MULL.	(CV2151)	—
MKT4	M.O.V.	(CV1683)	88	MX107	MULL.	(CV2152)	—
ML4	M.O.V.	(CV1732)	88	MX108	MULL.	(CV2153)	—
ML6	M.O.V.	(CV1105)	88	MZ05-20	MULL.	CV3573	89
ML5667	Machlett	(CV2687)	...	MZ05-60	MULL.	(CV1206)	—
MM4V	MULL.	(CV1165)	89	MZ1-70	MULL.	(CV25)	—
MP/Pen	COSS.	(CV1683)	89	MZ1-75	MULL.	(CV444)	—
MPT4	M.O.V.	(CV1174)	89	MZ1-76	MULL.	CV3574	—
MPT4K	M.O.V.	CV3552	89	MZ1-1000	MULL.	(CV1219)	—
MPT42	M.O.V.	CV2554	...	MZ2-200)	MULL.	(CV200)	—
MR4	M.O.V.	(CV1611)	89	N14	M.O.V.	(CV1803)	89
MR10	M.O.V.	(CV34)	...	N16	M.O.V.	(CV819)	89
MR75	E.S.	(CV1142)	...	N17	M.O.V.	(CV820)	90
MR300	E.S.	CV3557	...	N18	M.O.V.	(CV818)	90
MR300E	E.S.	CV3558	...	N41	M.O.V.	(CV1181)	90
MS4	M.O.V.	(CV1164)	89	N43	M.O.V.	(CV1675)	90
MS4B	M.O.V.	CV3553	89	N77	M.O.V.	(CV136)	90
MSG/LA	COSS.	(CV1677)	89	N78	M.O.V.	CV3711	90
MS/Pen	COSS.	CV3561	89	N727	M.O.V.	(CV1862)	90
MS/Pen clear	COSS.	(CV1124)	89	NE2	U.S.A.	CV2976	—
MS/Pen				NE16	U.S.A.	CV651	—
(5 Pin)	COSS.	(CV244)	89	NE17	E.S.	(CV359)	—
MS/PenB	COSS.	(CV1125)	89	NE18	E.S.	(CV360)	—
MS/Pen/T	COSS.	(CV1129)	89	NE19	MAZ.	(CV263)	—
MSP4	M.O.V.	(CV1282)	89	NHP1	FERR.	(CV310)	—
MSP41	M.O.V.	CV3562	89	NP90	U.S.A.	CV3607	—
MT4	M.O.V.	(CV1610)	...	NSP1	FERR.	(CV220)	—
MT9F	M.O.V.	CV1439	...	NSP2	FERR.	(CV2269)	—
MT9L	M.O.V.	CV1440	...	NT2	Hivac	(CV2213)	—
MT11SW	M.O.V.	CV3563	...	NU1	U.S.A.	(CV2680)	—
MT12	M.O.V.	CV3564	...	NU20	U.S.A.	(CV1474)	—
MT12A	M.O.V.	CV1441	...	NU40T2	N.U.	(CV1076)	—
MT13	M.O.V.	(CV1614)	...	NU75H	U.S.A.	CV751	—
MT14	M.O.V.	CV1442	...	NU114B	U.S.A.	CV3505	—
MT16	M.O.V.	(CV1030)	...	NU200	U.S.A.	CV2988	—
MT17	MULL.	(CV2957)	...	NU615	U.S.A.	CV3506	—
MT5544	MULL.	(CV2210)	...	OA2	U.S.A.	CV1832	—

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OA2WA	U.S.A.	CV4020 ...	—	Pen46	MAZ.	(CV1127) ...	94
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OA4	U.S.A.	CV752 ...	—	Pen220A	MAZ.	(CV1051) ...	94
OB2	U.S.A.	CV3799 ...	—	Pen231	MAZ.	CV3633 ...	94
OB2WA	U.S.A.	CV4028 ...	—	Pen383	MAZ.	CV1456 ...	94
OB3	U.S.A.	CV3799 ...	—	Pen428	MULL.	CV3634 ...	94
OC2.5	MULL.	(CV1607) ...	—	Pen1340	MAZ.	CV3635 ...	94
OC3	U.S.A.	(CV686) ...	—	Pen1346	—	CV3636 ...	—
OD3	U.S.A.	CV216 ...	—	PenA4	MULL.	CV3638 ...	94
OM1	COSS.	(CV1402) ...	91	PenB1	S.T.C.	(CV1118) ...	94
OM3	COSS.	(CV1054) ...	91	PenB4	MULL.	CV3626 ...	94
OM4	COSS.	(CV1055) ...	91	PJ8	U.S.A.	CV3640 ...	—
OM5	COSS.	(CV1056) ...	91	PJ23	U.S.A.	(CV3680) ...	—
OM6	COSS.	(CV1063) ...	91	PK150	EMI.	(CV150) ...	—
OM9	COSS.	(CV1052) ...	91	PL522	PHIL.	(CV2520) ...	—
OM10	COSS.	(CV1581) ...	91	PM1A	MULL.	CV2977 ...	95
OZ4	U.S.A. S.T.C.	CV517 ...	1	PM1HF	MULL.	(CV1673) ...	95
OZ4A	U.S.A.	CV692 ...	1	PM1HL	MULL.	(CV3641) ...	95
P2	M.O.V.	(CV1246) ...	91	PM1LF	MULL.	CV3642 ...	95
P12/250	TUNG.	(CV1168) ...	91	PM2	MULL.	(CV1019) ...	95
P27/500	TUNG.	(CV1040) ...	92	PM2A	MULL.	(CV3643) ...	95
P41	MAZ.	CV1408 ...	92	PM2B	MULL.	(CV1032) ...	95
P57	—	CV1466 ...	—	PM2BA	MULL.	(CV1163) ...	95
P61	MAZ.	(CV1066) ...	92	PM2DX	MULL.	CV3645 ...	95
P215	MAZ.	(CV1019) ...	92	PM2HL	MULL.	(CV1050) ...	95
	M.O.V.			PM3	MULL.	(CV1151) ...	95
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P220	MAZ.	(CV3620) ...	92	PM12	MULL.	(CV1018) ...	95
	Hivac			PM12A	MULL.	(CV1018) ...	95
	Hivac			PH12M	MULL.	(CV1041) ...	95
P220A	MAZ.	(CV1023) ...	92	PM12V	MULL.	(CV319) ...	95
P226	—	— ...	122	PM14	MULL.	(CV1159) ...	95
P410	M.O.V.	CV3621 ...	92	PM22	MULL.	CV3649 ...	95
P415	M.O.V.	(CV1154) ...	92	PM22A	MULL.	CV3647 ...	95
P425	MAZ.	(CV1154) ...	92	PM22D	MULL.	CV3578 ...	95
P435/1E	S.T.C.	(CV398) ...	—	PM24A	MULL.	(CV1167) ...	95
P495	TUNG.	(CV1181) ...	92	PM24D	MULL.	(CV1237) ...	95
P552/1E	S.T.C.	(CV427) ...	—	PM24E	MULL.	CV3648 ...	95
P610	M.O.V.	CV3622 ...	—	PM202	MULL.	(CV185) ...	95
P625	M.O.V.	(CV1208) ...	—	PM254	MULL.	(CV1153) ...	95
PA1	S.T.C.	(CV1689) ...	93	PM256	MULL.	(CV1208) ...	95
PA40	MAZ.	CV3623 ...	93	PP3/250	MAZ.	(CV1168) ...	95
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PE8	MAZ.	CV3625 ...	—	PT2	M.O.V.	(CV1118) ...	96
Pen4DD	MULL.	CV519 ...	93	PT4	M.O.V.	(CV1181) ...	96
Pen4VA	MULL.	(CV1174) ...	93		FERR.		
Pen13C	MULL.	(CV889) ...	93	PT5	M.O.V.	CV3652 ...	96
Pen25	MAZ.	(CV65) ...	93	PT5E	M.O.V.	CV3579 ...	—
Pen36A	—	(CV1672) ...	94	PT6	M.O.V.	CV3653 ...	—
Pen36C	MULL.	(CV1672) ...	94	PT11	M.O.V.	CV3654 ...	—
Pen44	MAZ.	CV3630 ...	94	PT15	M.O.V.	(CV1104) ...	97
Pen45	MAZ.	CV1407 ...	94	PT25	M.O.V.	(CV1046) ...	97
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PT425X	M.O.V.	(CV1167)	—	QS1200	E.E.V.	(CV2225)	—
PTA	FERR.	(CV889)	97	QS1202	G.E.C.	CV4052	—
PV05-15	MULL.	CV3657	—	QS1205	E.E.V.	(CV3758)	—
PV1-35	MULL.	CV3658	97	QS1206	E.E.V.	(CV686)	—
PV495	TUNG.	(CV1443)	97	QS1207	E.E.V.	(CV1832)	—
PX4	M.O.V.	(CV1168)	97	QS1208	E.E.V.	(CV1833)	—
PX5	Hivac	(CV1040)	98	QS1209	G.E.C.	CV449	—
PX25	M.O.V.	(CV1040)	98	QS1210	G.E.C.	CV4020	—
PX41	Hivac	(CV1168)	98	QS1211	G.E.C.	CV4028	—
PY3-600	MULL.	(CV1373)	—	QS1212	G.E.C.	CV4048	—
PZ1-35	MULL.	(CV1240)	—	QS1213	G.E.C.	CV4054	—
PZ1-75	MULL.	(CV1221)	—	QV03-12	MULL.	(CV2129)	99
QA2400	M.O.V.	(CV4015)	98	QV04-7	MULL.	(CV309)	99
QA75/40	G.E.C.	CV1895	—	QV04-7R	MULL.	CV483	99
QA2401	G.E.C.	CV133	98	QV07-40	MULL.	—	122
QA2402	G.E.C.	CV136	98	QV05-25	MULL.	(CV124)	99
QA2403	M.O.V.	(CV4014)	98	QV06-20	MULL.	(CV3523)	99
QA2404	M.O.V.	(CV4025)	98	QV1-150A	MULL.	(CV2519)	—
QA2405	G.E.C.	CV415	98	QV1-150	MULL.	(CV2519)	—
QA2406	M.O.V.	CV4024	98	QY2-100	MULL.	(CV26)	—
QA2407	M.O.V.	(CV4005)	98	QY3-125	MULL.	(CV2130)	—
QF196	U.S.A.	(CV1078)	—	QY4-250	MULL.	(CV2131)	—
QK26	Raytheon	CV1768	—	QY5-3000A	MULL.	(CV1098)	—
QK221	U.S.A.	CV3902	—	R1	S.T.C.	(CV1443)	99
QK283	U.S.A.	CV3685	—	R2/10	G.E.C.	(CV97)	—
QK284	U.S.A.	CV3686	—	R2/38	G.E.C.	(CV98)	—
QK338	U.S.A.	CV3903	—	R3	S.T.C.	(CV1039)	99
QK353	U.S.A.	CV3737	—	R3/10	G.E.C.	(CV95)	—
QMG159	U.S.A.	(CV2874)	—	R3/16	G.E.C.	CV96	—
QP21	M.O.V.	(CV1035)	98	R4	FERR.	CV1796	99
QP22B	MULL.	(CV1035)	98	R4A	FERR.	(CV1064)	99
QP25	MAZ.	CV556	98	R10	S.T.C.	(CV261)	99
QP230	MAZ.	(CV1035)	99	R11	S.T.C.	(CV1111)	99
QPT2	FERR.	(CV1035)	—	R12	S.T.C.	(CV426)	99
QQE03-12	PHIL.	CV2798	99	R17	S.T.C.	(CV2218)	99
QQE06-40	PHIL.	(CV424)	99	R18	S.T.C.	(CV2235)	99
QQV03-10	MULL.	(CV2798)	99	R52	FERR.	(CV1863)	99
QQV03-20	MULL.	(CV2799)	99	R231	—	—	122
QQV03-20A	MULL.	(CV2799)	99	R612G	U.S.A.	CV597	—
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QQV06-40	MULL.	(CV424)	99	R6010	E.M.I.	(CV2353)	—
QQV06-40A	MULL.	(CV2797)	—	R6015	E.M.I.	(CV2354)	—
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RG1-240	MULL.	(CV1626)	—	S26A	S.T.C.	(CV53)	—
RG1-250	MULL.	CV3667	—	S27A	S.T.C.	(CV82)	—
RG3-250	MULL.	(CV1625)	—	S28A	S.T.C.	(CV88)	—
RG3-250A	MULL.	(CV32)	—	S30A	S.T.C.	(CV127)	—
RG3-1250	MULL.	(CV1629)	—	S130	COSS.	(CV1110)	—
RG3-1250A	MULL.	(CV5)	—		M.O.V.		
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The equivalents given below are purely for convenience, and it does not necessarily follow that the data for any given valve type will appear in the data pages or even that the valve given can be tested on an 'AVO' Valve Characteristic Meter, or an 'AVO' Valve Tester.

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# TEST DATA FOR RECEIVING AND SMALL TRANSMITTING VALVES

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
OZ4	007 060 010		—		250		58	3KΩ	No Data Available			A08	CCR
OO	364 200 000		5	0	40		1	0.66	No Data Available			UX4	T
00A	364 200 000		5	0	45		1.5	0.66	No Data Available			UX4	T
OI	364 200 000		5	4.5	90		2.5		80			UX4	T
OIA	364 200 000		5	9	125		3	0.8	80		0.72	UX4	T
OIAA	364 200 000		5	4.5	90		3.2	0.90	90		0.85	UX4	T
OIB	364 200 000		5	4.5	90		2.5	0.72	90		0.72	UX4	T
O84	642 300 000		4	2.0	125		4.0	1.4	125		1.4	B4	T
I	281 300 000		6				60		REC		20mA	UX4	R
IA3	281 008 300		1.4						D			B7G	D
IA4E	365 200 000	G <sub>1</sub>	2	3	150	75	2.2	0.65	100	75	0.6	UX4	P
IA4P	365 200 000	G <sub>1</sub>	2	3	90	75	2.2	0.72	80	75	0.7	UX4	P
IA4T	265 300 000	G <sub>1</sub>	2	3	150	75	2.2	0.625	100	75	0.6	UX4	P
IA5	036 540 200		1.4	4.5	90	90	4	0.85	80	75	0.8	A08	P
IA6	266 453 000	G <sub>1</sub>	2	0	150	75	3	0.425	80	60	0.4	UX6	P
IA7	026 546 300	G <sub>1</sub>	1.4	0	90	50	1.8	0.55	80	60	0.5	A08	H
IAB5	365 004 220		1.2	1.5	150	150	6.8	1.35	100	100		B8B	P
IAB6	265 461 300		1.4	4.1	60	60	1.65	0.1	No Data Available			B7G	H
IAC5	*4* 23* 650		1.25	4.5	60	60	2.0	0.75	60	60	0.75	B8D	P
IAC6	266 464 300		1.4	4.0	60		4	1.2	80			B7G	H
IAD4	652 430 000		1.25	1.6	90	90	5.7	2.3	80	75	2	B5A	P
IAD5	*4* 23* 650		1.25	3.0	60	60	1.85	0.73	60	60	0.73	B8D	P
IAE4	265 024 300		1.25	0	90	90	3.5	1.55	90	90	1.55	B7G	P
IAF4	265 024 300		1.4	0	90	90	1.65	0.95	80	90	0.9	B7G	P
IAF5	208 564 300		1.4	0	90	90	1.1	0.6	80	90	0.6	B7G	DP
IAH5	208 564 300		1.4	1.5	60	60	0.17	0.17	60	60	0.17	B7G	DP
IAJ4	265 *24 300		1.4	0.8	75	75	1.4	0.65	80	75	0.75	B7G	P
IAN5	265 224 300		1.4	0	60	60	1	.75	80	75	0.8	B7G	P
IAS4	265 024 300		1.4	0	90	90	1.6	.85	100	90		B7G	P
IAX2	230 232 032	D <sub>1</sub>	1.4						D			B9A	D
IB3	020 000 300		1.25						D			A08	R
IB4P	365 200 000	G <sub>1</sub>	2	3	90	75	1.6	0.6	80	60	0.6	UX4	P
IB4(T)	265 300 000	G <sub>1</sub>	2	2	175	75	1.7	0.65	100	60	0.6	UX4	P
IB5	268 943 000		2	3	150		0.8	0.57	100		0.5	UX6	DDT
IB6	265 406 300		1.4	1.5	90	75	1.5	0.75	80	75	0.75	B7G	P
IB7	026 546 300	G <sub>1</sub>	1.4	0	90	50	1.5	0.875	80	60	0.8	A08	H
IB8	037 546 280		1.4	0 6	90	0	0.15	0.27	80		0.15	A08	PDT
					90	90	6.3	1.15	80	75	1.1		
IC	289 300 000		6				1.0	D				UX4	D
ICI	266 424 300		1.4	4	75		4.5	1.2	80		1.4	B7G	H
IC2	266 464 300		1.4	4	60		4	1.2	80		1.4	B7G	H
IC3 (U.S.A.)	260 406 300		1.4	3	90		1.4	0.76	80		0.7	B7G	T
IC4	365 200 000	G <sub>1</sub>	2	0	175	75	2.5	1	150	75	1	UX4	P
IC5	036 540 200		1.4	7.5	90	90	7.5	1.55	80	75	1.5	A08	P
IC6	366 452 000	G <sub>1</sub>	2	0	175	75		1.05	150	75	1.05	UX6	H

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
IC7	026 546 300	G <sub>1</sub>	2	0	175	75		1.05	150	75	1.05	A08	H
IC8	240 236 540		1.25	0	30	30		.3	No Data Available			B8D	H
ID3	402 306 060		1.2	5	90			12.5	100		3.4	B8A	T
ID4	264 530 000		2	6	175	175		9.5	100	100		UX5	P
ID5	802 310 000		40					120	REC		60mA	B5	R
ID5eg	026 500 300	G <sub>1</sub>	2	3.0	125	60		2.2	100	60	0.6	A08	P
ID5GP	036 500 200	G <sub>1</sub>	2	3	90	75		2.2	80	60	0.7	A08	P
ID5GT	036 500 200	G <sub>1</sub>	2	3	150	75		2.2	100	60	0.6	A08	P
ID6	280 183 000		25					60	REC		60mA	UX6	R
ID7	036 546 200	G <sub>1</sub>	2	0	150	75		3	150	75	1.05	A08	P
ID8	037 546 280	G <sub>1</sub>	1.4	0 9	90	0	1.1	0.575	80	60	0.5	A08	DTP
					90	90	5	0.925	80	75	0.9		
ID13	281 0*8 300		1.4						D			B7G	D
IE3	402 203 060		1.2	0	150		20	3.5	100			B9A	T
IE4	026 040 300		1.4	3	90		1.4	0.76	80		0.76	A08	T
IE5GP	036 500 200	G <sub>1</sub>	2	3	90	75	1.6	0.6	80	60	0.6	A08	P
IE5	036 500 200	G <sub>1</sub>	2	3	175	75	1.7	0.65	100	60	0.6	A08	P
IE7	036 447 250		2	4.5	150	150	7.5	1.425	100	100	1.4	A08	PP
IE8	240 236 540		1.25	0	60	60	1.8	.74	No Data Available			B8D	H
IF1	265 024 300		1.4	0	60	60	1.65	0.75	80	60	0.75	B7G	P
IF2	265 024 300		1.4	1	90	75	2.9	0.92	80	75	0.92	B7G	P
IF3	265 024 300		1.4	1	90	50	1.8	0.75	80	60	0.75	B7G	P
IF4	364 520 000		2	3	90	90	4	1.4	80	75	1.4	UX5	P
IF5	036 540 200		2	3	90	90	4	1.4	80	75	1.4	A08	P
IF6	365 892 000	G <sub>1</sub>	2	1.5	175	75	2.2	0.65	150	75	0.6	UX6	DDP
IF7	036 985 200	G <sub>1</sub>	2	1.5	175	75	2.2	0.65	150	75	0.6	A08	DDP
IF7GV	036 895 200	G <sub>1</sub>	2	1.5	175	75	2.2	0.65	150	75	0.6	A08	DDP
IFD1	2*8 564 300		1.4	1.5	60	60	0.17	0.17	80	60	0.17	B7G	DP
IFD9	208 564 300		1.4	1	75	75	1.6	0.63	80	75	0.63	B7G	DP
IG4	036 040 200		1.4	6	90		2.3	0.825	80		0.825	A08	T
IG5	036 540 200		2	6	90	90	8.5	1.5	80	75	1.5	A08	P
IG6	026 447 300		1.4	0	90		1.0	0.675	80		0.67	A08	TT
IH4	026 040 300		2	9	150		3	0.9	100		0.9	A08	T
IH5	036 080 200	G <sub>1</sub>	1.4	0.5	100		0.13	.22	80		0.27	A08	DT
IH6	036 894 200		2	3	150		0.8	0.575	100		0.57	A08	DDT
IJ5	036 540 200		2	16.5	150	150	7	0.95	100	100	0.9	A08	P
IJ6	026 447 300		2	3	150		1.7		100			A08	TT
IJ6GX	026 447 300		2	0	125		2		125			A08	TT
IK4	365 200 000	G <sub>1</sub>	2	0	150	75	2.5	1.05	150	75	1.05	UX4	P
IK5	026 500 300	G <sub>1</sub>	2	0	125	75	2.5	1.05	125	75	1.05	A08	P
IK5B	026 500 300	G <sub>1</sub>	2	0	125	75	2.5	1.05	125	75	1.05	A08	P
IK6	369 852 000	G <sub>1</sub>	2	3	150	90	0.9	0.6	100	75	0.6	UX6	DDP
IK7	026 895 300	G <sub>1</sub>	2	4.5	125	150	1.5	0.7	100	100	0.7	A08	DDP
IL4	265 024 300		1.4	0	90	75	2.9	0.925	80	75	0.9	B7G	P
IL5	026 540 300		2	6	175	175	9.5	2.4	100	150	2.4	A08	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
IL6	266 451 300		1.4	0	90	50	4	0.55	80	60		B7G	H
IL60	642 300 000		1.0		150		6.0	1.2	150		1.2	B4	T
ILA4	365 004 020		1.4	4.5	90	90	4	0.85	80	75	0.85	B8B	P
ILA4E	365 004 020		1.4	4.5	90	90	3.5	0.8	80	75	0.8	B8B	P
ILA6	366 454 020		1.4	0	90	50	1.8	0.55	80	60	0.5	B8B	H
ILA6E	366 454 020		1.4	0	90	50	1.8	0.55	80	60	0.5	B8B	H
ILB4	365 004 020		1.4	9	90	90	5	0.925	80	75	0.9	B8B	P
ILB6	276 554 430		1.4	0	75		1.2		80			B8B	H
					90	75	0.4		80	75			
ILC5	365 124 020		1.4	0	90	50	1.15	0.775	80	60	0.77	B8B	P
ILC6	266 454 030		1.4	0	90	50	3	0.55	80	60	0.5	B8B	H
ILD5	365 804 020		1.4	0	90	50	0.6	0.578	80	60	0.5	B8B	DP
ILE3	350 0*4 020		1.4	3	90		1.4	0.76	80		0.76	B8B	T
ILF3	360 004 020		1.4	3	90		1.4	0.76	80		0.76	B8B	T
ILG5	365 124 020		1.4	1.5	90	90	3.7	1.15	80	90	1.15	B8B	P
ILH4	360 804 020		1.4	0	90		0.15	0.275	80		0.27	B8B	DT
ILN5	365 124 020		1.4	0	90	90	1.6	0.8	80	90	0.8	B8B	P
ILN5E	365 124 020		1.4	0	90	90	1.6	0.8	80	90	0.8	B8B	P
IM5G	036 500 200	G <sub>1</sub>	2	0	150	75	2.5	1	150	75	1	A08	P
IN5	036 500 200	G <sub>1</sub>	1.4	0	90	90	1.2	0.750	80	90	0.75	A08	P
IN6	036 548 200		1.4	4.5	90	90	3.4	0.8	80	75	0.8	A08	DP
IPI	365 024 300		1.4	5.2	90	90	5.0	1.4	80	75	1.4	B7G	P
IP5	036 500 200	G <sub>1</sub>	1.4	0	90	90	2.3	0.75	80	90	0.75	A08	P
IP10	264 536 200		1.4	7	90	75	7.4	1.57	80	60	1.57	B7G	P
IP11	365 024 300		1.4	4.5	90	90	9.5	2.15	80	75	2	B7G	P
IQ5	036 540 200		1.4	4.5	90	90	9.5	2.2	80	75	2.2	A08	P
IQ6	040 238 650		1.25	0	60	60	1.6	0.6	No Data Available			B8D	DP
IR	026 510 300	G <sub>1</sub>	1.4	0	90	90	1.2	0.75	80	90	0.75	A08	P
IR4	200 800 130		1.4						D			B8B	D
IR5	266 424 300		1.4	4	75		4.5	1.2	80		1.4	B7G	H
IS2A	32* 323 *23	D <sub>1</sub>	1.4						D			B9A	D
IS4	264 526 300		1.4	7	90	75	7.4	1.575	80	60	1.5	B7G	P
IS5	208 564 300		1.4	0	75	75	1.6	0.625	80	75	0.625	B7G	DP
IS6	604 238 050		1.2	0	60	60	1.6	0.6	No Data Available			B8D	DP
ISA6	021 405 360		1.4	0	90	75	2.45	0.97	80	75	0.97	A08	P
ISB6	036 580 240		1.4	0	90	75	1.45	0.665	80	75	0.66	A08	DP
IT	036 500 320	G <sub>1</sub>	1.4	4.5	90	90	9.9	2.1	80	75	2.1	A08	P
IT2	123 000 000	D <sub>1</sub>	1.4						D			B3G	D
IT4	265 024 300		1.4	0	90	75	3.5	0.9	80	75	0.9	B7G	P
IT5	036 540 200		1.4	6	90	90	6.5	1.15	80	75	1.15	A08	P
IT6	604 238 050		1.2	0	60	60	1.6	0.6	No Data Available			B8D	DP
IU4	265 024 300		1.4	0	90	90	0.8	0.68	80	90	0.9	B7G	P
IU5	265 804 300		1.4	0	75	75	1.6	0.625	80	75	0.6	B7G	DP
IU6	266 451 300		1.4	0	75	50	1.7	0.3	No Data Available			B7G	H
IV	281 300 000		6				60		REC 20mA			UX4	R

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
IV2	8** 230 **8		0.625							D		B9A	D	
IV4	260 *24 300		1.25	0	125	100	1.6			125	100	B7G	P	
IV5	*4* 23* 650		1.2	4.5	60	60	2	0.75		No Data Available		B7G	P	
IW4	265 004 300		1.4	9	90	90	5	0.925		80	75	0.9	B7G	P
IW5	040 230 650		1.25	0	60	60	1.8	.73		No Data Available		B8A	P	
IW50	642 300 000		1							D		B4	D	
IX2	230 232 032	D <sub>1</sub>	1.25							D		B9A	R	
IY2	200 300 000	D <sub>1</sub>	1.4							D		UX4	R	
IZ1	020 000 300	D <sub>1</sub>	.7							D		A08	D	
IZ2	232 232 300	D <sub>1</sub>	1.25				2			D		B7G	R	
2	642 300 000		2	4	150		1.5			100		B4	T	
2/25A	200 300 000	D <sub>1</sub>	6				30			REC	18mA	UX4	R	
2/50A	200 300 000	D <sub>1</sub>	5				60			REC	20mA	UX4	R	
2A3	264 300 000		2.5	45	250		60	5.2		100	5.2	UX4	T	
2A3H	364 200 000		2.5	62	300		40	5.25		100	5.25	UX4	T	
2A5	265 413 000		2.5(3)	16.5	250	250	34	2.5		100	PenLF	2.5	UX6	P
2A6	268 913 000	G <sub>1</sub>	2.5	2	250		0.9	1.11		150	1.1	UX6	DDT	
2A7	265 541 300	G <sub>1</sub>	2.5	8	250	100	3.5	1.15		150	100	1.1	Sm7	H
2AF4	642 314 600		2.5	4.0	100		15	6.6		80	6.0	B7G	T	
2B3	*20 000 3*0	D <sub>1</sub>	1.7							D		A08	D	
2B5	267 413 000		2.5		300		9			No Data Available		UX6	TT	
2B7	265 891 300	G <sub>1</sub>	2.5	3	250	125	9	1.125		100	100	1.12	UX7	DDP
2B7S	265 891 300	G <sub>1</sub>	2.5	3	250	100	6	1		100	100	1	UX7	DDP
2B21	300 200 000	D <sub>1</sub>	2.5				5			D		UX4	R	
2B22	021 010 310	D <sub>1</sub>	6							D		A08	D	
2B25	200 800 300		1.4							D		B7G	D	
2B26	280 300 000		2.5				120			REC	30mA	UX4	R	
2B35	123 000 000	D <sub>1</sub>	6							D		B3G	D	
2B36	123 000 000	D <sub>1</sub>	4							D		B3G	D	
2BN4	142 351 400		2	1.5	150		9	6.8		100	7.0	B7G	T	
2C21	217 461 300	G <sub>1</sub>	6	16.5	250		8.3	1.375		100	1.37	UX7	TT	
2C22	020 000 310	A <sub>1</sub> G <sub>1</sub>	6	10.5	300		11	3		100	3	A08	T	
2C23	264 300 000		7.5	32	350		16	1.55		100	1.5	UX4	T	
2C25	264 300 000		7	100	350		50			No Data Available		UX4	T	
2C26	020 000 310	A <sub>1</sub> G <sub>1</sub>	6	15	350		16			100		A08	T	
2C48	265 004 130		6	15	250	250	70			100	150	B8B	P	
2C50	265 004 130		12	15	250	250	70			100	150	B8B	P	
2C51	214 607 413		6	2	150		8.2	5.5		125	5.5	B9A	TT	
2C52	461 471 230		12.5	2	250		1.3	1.9		200	1.9	A08	TT	
2CY5	412 365 100		2.5	1	125	80	10	8		125	75	8	B7G	P
2D1	289 130 000		2.5							D		UX5	DD	
2D2	892 310 000		2							D		B5	DD	
2D4	892 310 000		4							D	4.5	B5	DD	
2D4A	892 310 000		4							D	4.5	B5	DD	
2D4B	091 231 800		4							D		B7	DD	

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>i</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V			
2D13	023 180 000	D <sub>2</sub>	13							D			B5	DD
2D13a	823 190 000		13							D			B5	DD
2D13C	892 310 000		13							D			B5	DD
2D21	412 316 100		6		400		50	6kΩ		No Data Available			B7G	Thyratron
2E22	254 130 000	A <sub>1</sub>	6	15	400	250	60	5.5	100	PenLF			UX5	P
2E24	235 242 300	A	3	18.5	400	200	16	3.2	200	100	3.2		A08	P
2E25	020 540 320		6	22.5	400	250	40		No Data Available			A08	P	
2E26	125 141 300	A	6	20	200	200	20	3.5	100	75	3.5		A08	P
2E30	413 365 200		3	20	250	250	40	3.7	100	PenLF 3.7			B7G	P
2E31	652 430 000		1.25	0	20	20	.4	.5	No Data Available			B5A	P	
2E32	652 430 000		1.25	0	20	20	.4	.5	No Data Available			B5A	P	
2E35	652 430 000		1.25	0	20	20	.27	.38	No Data Available			B5A	P	
2E36	652 430 000		1.25	0	20	20	.27	.38	No Data Available			B5A	P	
2E41	658 243 000		1.25	0	20	20	.36	.37	No Data Available				P	
2E42	658 243 000		1.25	0	20	20	.35	.37	No Data Available				P	
2E50	412 265 300		6	20	250	250	10	3.4	100	100			B7G	P
2F7	275 641 300	G <sub>1</sub>	2.5	{ 3.0 3.0	100		4.0		100	60	3.8	} UX7		TP
					250	100	2.8		100	100				
2HMD	452 310 000	A <sub>1</sub> A <sub>2</sub>	4		200	100	3.8	1.14	100	100	1.1		B5	PP
2K2	026 500 300	G <sub>1</sub>	2	2.0	100	100	2.5	0.9	100	100	0.9		A08	P
2P	642 300 000		2	22	250		40	7	100		7		B4	T
2S	289 130 000		2.5				15		REC		10mA		UX5	RR
2T4	642 314 600		2.3	2.7	75		18	7	75		7		B7G	T
2T/270K	112 311 100	D <sub>1</sub>	4						REC		5mA		B7G	R
2U14	642 300 000		2		125		2	0.6	125		0.6		B4	T
2U15	642 300 000		2		150		4	0.8	100		0.8		B4	T
2V2	020 000 03*	D <sub>1</sub>	2.5						D				A08	D
2V3	020 000 300	D	2.5 (3)						D				A08	R
2W3	020 800 030		2.5			60			REC		20mA		A08	R
2X2	300 200 000	D <sub>1</sub>	2.5 (3)				5		D				UX4	R
2X2A	300 200 000	D <sub>1</sub>	2.5 (3)				5		D				UX4	R
2X3	020 800 030		2.5				120		REC		30mA		A08	R
2XP	642 300 000		2	36	300		50	7	100		7		B4	T
2Y2	200 300 000	D <sub>1</sub>	2.5				5		D				UX4	R
2Z2	280 300 000		2.5				60		REC		20mA		UX4	R
3	642 300 000		2	7.5	150		3.4	0.9	100		0.9		B4	T
3A2	230 232 032	D <sub>1</sub>	3						D				B9A	D
3A3	*2* 0*0 3*0	D <sub>1</sub>	3						D				A08	D
3A4	365 426 300		1.4	8.4	150	90	13.3	1.9	100	75	1.9		B7G	P
3A5	264 347 200		1.4	2.5	90		3.7	1.8	80		1.8		B7G	TT
3A8	237 546 380	G <sub>1</sub>	1.4	{ 0 0	90	0	0.2	0.325	80	60	0.32	} A08	} A08	DTP
					90	90	1.2	0.75	80	60				
3A/107A	264 300 000		4	8	125		6.5	1.6	100		1.6		UX4	T
3A/107B	642 300 000		4	8	125		6.5	1.6	100		1.6		B4	T
3A/108A	264 300 000		2	1.5	125		0.9	0.5	100		0.5		UX4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
3A/108B	642 300 600		2	1.5	125		0.9	0.5	100		0.5	B4	T
3A/109A	264 300 000		4	8	125		19	1.2	100		1.2	UX4	T
3A/109B	642 300 000		4	8	125		19	1.2	100		1.2	B4	T
3A/154M	260 0*4 130		6	2	250		12	3	100		3	B8B	T
3AF4A	642 314 600		3	4	100		15	6.6	100		7.5	B7G	T
3AL5	192 310 800		3				5		D			B7G	DD
3AU6	412 365 100		3	1.0	250	150	10.0	5.2	100	150	5.0	B7G	P
3AV6	412 398 600		3	2.0	250		1.2	1.6	200		1.6	B7G	DDT
3AY6	412 389 600		3	2.0	250		1.2	1.6	200		1.6	B7G	DDT
3B2	*2* 0** 3*0	D <sub>1</sub>	3						D			B8A	D
3B4	524 332 600		1.25	7.5	150	125		1.7	No Data Available			B7G	P
3B5	036 540 320		1.4	7	75	75	6.7	1.5	80	60	1.5	A08	P
3B7	364 204 730		1.4	0	90		5.2	1.85	80		1.85	B8B	TT
3B21	289 300 000		2.5				120		REC		30mA	UX4	RR
3B22	289 300 000		2.5				120		REC		30mA	UX4	RR
3B23	200 300 000	D <sub>1</sub> D <sub>2</sub>	2.5				120		REC		30mA	UX4	RR
3B24	320 200 000	D <sub>1</sub>	2.5				30		REC		15mA	UX4	R
3B25	200 300 000	D <sub>1</sub>	2.5				120		REC		15mA	UX4	R
3B26	030 000 200	D <sub>1</sub>	2.5				15		REC		10mA	A08	R
3B27	280 300 000		2.5				120		REC		30mA	UX4	R
3B/240M	214 444 130	A	6	1	300		50	27	No Data Available			B8B	T
3B/241M	214 444 130	A	19	1	300		50	27	No Data Available			B8B	T
3B/252B	642 310 000		6	20	400		60	10	100		8	B5	T
3BA6	412 365 100		3	1.0	250	100	11.0	4.4	100	100	4.4	B7G	P
3BC5	412 365 100		3	1.3	250	150	7.5	5.7	100	150	5.8	B7G	P
3BE6	412 366 100		3	2.0	100		11.0	7.0	100		5.0	B7G	H
3BN4	142 361 400		2.8	2	150		9	6.8	100		6	B7G	T
3BN6	412 354 600		3	1.0	60	60	0.25	1.0	80	60	1.0	B7G	P
3BU8	157 231 461		3	1.0	100	60	1	1.5	100	60	1.5	B9A	PP
3BY6	412 365 400		3	2.5	250	100	6.5	2.4	100	100	2.0	B7G	H
3BZ6	412 365 100		3	1.0	125	125	14.0	8.0	200	150	6.0	B7G	P
3C2	020 *3* 2*0	D <sub>1</sub>	1.5						D			A08	D
3C4	365 *24 300		1.4	5.2	90	75	5.0	1.4	80	75	0.75	B7G	P
3C5	036 540 320		1.4	9	90	90	6	1.4	80	75	1.4	A08	P
3C6	206 447 320		1.4	0	90		4.5	1.3	80		1.3	B8D	TT
3C36	412 365 100		3	2.2	200	150	9.5	6.2	100	150	6.0	B7G	P
3CB6	412 365 100		3	1.0	125	125	13.0	8.0	100	150	6.0	B7G	P
3CF6	412 365 100		3	1.0	125	125	12.0	7.8	100	150	6.0	B7G	P
3CS6	412 365 100		3	1.0	100	30	1.0	1.1	100		1.1	B7G	H
3D6	365 004 230		1.4	4.5	150	90	10.2	2.4	100	75	2.4	B8B	P
3DT6	412 365 100		3	2.2	150	100	1.1	0.8	150	100	2.0	B7G	P
3E5	365 024 300		1.4	8	90	90	6	1.2	80	75	1.2	B7G	P
3E6	265 134 020		1.4	0	90	90	2.5	1.8	90	90	1.8	A08	P
3G10	892 300 000		2.5				30		REC		15mA	B4	RR
3G130	892 300 000		2.5				30		REC		15mA	B4	RR

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
3LE4	365 004 230		1.4	9	90	90	1.8	1.6	80	75	1.6	A08	P
3LF4	365 004 230		1.4	4.5	90	90	8	2	80	75	2	B8B	P
3Q4	364 526 300		1.4	5	90	90	6.9	1.975	80	75	1.9	B7G	P
3Q5	036 540 320		1.4	4.6	90	90	9.0	2	80	75	2	A08	P
3S4	364 526 300		1.4	7	90	75	7.4	1.574	80	60	1.5	B7G	P
3V4	365 024 300		1.4	4.5	90	90	7.7	2	80	75	2	B7G	P
4	642 300 000		2	1	150		1	0.9	150		0.9	B4	T
4/100BU	892 300 000		4				120		REC		30mA	B4	RR
4A6G	026 447 230		2	1.5	90		1.2	0.9	80		0.9	A08	TT
4A07	642 300 000		4	2	100		1.4	1.2	100		1.2	B4	T
4A08	642 300 000		4		150		4	1.8	100		1.0	B4	T
4A10	642 300 000		4	2.5	125		6	1.8	125		1.8	B4	T
4A15	642 300 000		4		100		7	2.2	100		2.2	B4	T
4A80	642 310 000		4		150		6	2	150		2	B5	T
4A90	642 310 000		4		200		8	3.5	100		3.0	B5	T
4A120	642 310 000		4		125			1.4	125		1.4	B5	T
4AU6	412 365 100		4	1	250	150	10	5.2	100	150	5.2	B7G	P
4BA6	412 365 100		4.2	1	250	100	11	4.4	100	100	4.4	B7G	P
4BC5	412 365 100		4.2	1.3	250	150	7.5	5.7	100	150	5.7	B7G	P
4BC8	741 236 410		4.2	2.2	150		10.0	6.2	150		5.0	B9A	TT
4BE6	412 366 100		4.2	2	100		11	7	100		5	B7G	H
4BN6	142 354 600		4.2	1	60	60	25	1.0	80	60	1.0	B7G	P
4BQ7A	741 236 410		4	2.0	150		9.0	6.4	100		6.0	B9A	TT
4BS8	641 237 410		4.2	4.4	150		10	7.2	100		7	B9A	TT
4BU8	157 231 461		4.2	1	150	100	4	3.5	150	100	3.5	B9A	PP
4BX8	641 237 410		4.2		125		11	7.5	125			B9A	TT
4BZ7	741 236 410		4	2.2	150		10.0	6.8	100		6.0	B9A	TT
4BZ8	641 237 410		4.2	2	125		10	8	125		8	B9A	TT
4C1	264 300 000		3	3	90		5	1	80		1	UX4	T
4C1A	364 200 000		3	3	90		5	1	90		1	UX4	T
4C2	642 310 000		4	5	125		11	2.5	125		2.5	B5	T
4C3	642 310 000		4	3.5	200		6	2.4	100		2.0	B5	T
4C4	642 310 000		4	3.5	200		6	2.4	100		2.0	B5	T
4C5	642 300 000		4	10	400		30	4	No Data Available			B4	T
4C102	642 300 000		4	45	250		40	2	No Data Available			B4	T
4C103	642 300 000		4	35	225		45	3.5	No Data Available			B4	T
4CB6	412 365 100		4.2	1	125	125	13	8	125	125	8	B7G	P
4CE5	412 365 100		4.2	1	125	125	11	7.6	125	125	7.6	B7G	P
4CX7	641 237 410		4.2	10	150		9	6.4	150			B9A	TT
4CY5	412 365 100		4.2	1	125	80	10	8	125	75	8	B7G	P
4D1	000 231 600	G <sub>1</sub>	13	3	250		10	5	100		4	B7	T
4D80	642 310 000		4		100		2	1	100		1	B5	T
4G30	892 300 000		4				15		D			B4	RR
4G105	892 300 000		4				30		REC		15mA	B4	RR
4G200	892 300 000		4				60		REC		20mA	B4	RR

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
4H07	642 300 000		4		150		3	1.1	100		1.0	B4	T
4H08	642 300 000		4		150		5	1.2	100		1.0	B4	T
4H80	642 310 000		4		200		6	2	100		0.2	B5	T
4K30	642 300 000		4	10	150		20	3.6	100		3.0	B4	T
4K32	642 300 000		4	15	200		30	3.6	100		3.0	B4	T
4K50	642 300 000		4	20	200		60	5	No Data Available			B4	T
4K60	642 300 000		4	20	300		60	3.5	No Data Available			B4	T
4K61	642 300 000		4		300			3	No Data Available			B4	T
4K100	642 300 000		4	3	300	200	50	4	No Data Available			B4	T
4L11	642 300 000		4		150		7	1.4	100		1.0	B4	T
4L12	642 300 000		4		150		9	2	100		1.5	B4	T
4L13	642 300 000		4		200		8	2	100		2	B4	T
4L13a	642 300 000		4	11	200		14	2.5	100			B4	T
4L14	642 300 000		4		200		10	2.2	No Data Available			B4	T
4L15	642 300 000		4		100			2.2	100		2.2	B4	T
4L16	642 300 000		4	8	150		100	2.2	100		2.0	B4	T
4L20	642 300 000		2		100			1.4	100		1.4	B4	T
4L28	642 300 000		4	4	150		10.5	4	100		3.0	B4	T
4L29	642 300 000		4	8	150		20	3.6	100			B4	T
4LMBT	642 310 000		4	1	200		3.4	2.6	100		2	B5	T
4N08	642 300 000		4		100		8	1.2	100		1.2	B4	T
4N100	642 310 000		4		150			3.5	100		3	B5	T
4N110	642 310 000		4		200		5	1.5	100		1.3	B5	T
4NG	892 300 000		4				30		REC		15mA	B4	RR
4P25	642 300 000	G <sub>2</sub>	4	19	250	150	12	1.3	100	100		B4	P
4S	289 130 000		2.5						D			UX5	D
4S09	542 300 000	A <sub>1</sub>	4		200		1	0.6	100			B4	P
4S120	542 310 000	A <sub>1</sub>	4		200		2	0.7	100	100		B5	P
4S121	542 310 000	A <sub>1</sub>	4		200	100	6	1.0	100	100		B5	P
4S126	642 310 000	A <sub>1</sub>	4	2	200	100	3	2	100	100		B5	P
4THA	645 231 700	G <sub>1</sub>	4	{ 5	100		1.5	1.5	80	60	1.5	B7	TH
4TP	446 231 500	A <sub>2</sub>	4	2	250	100	3.5	2.5	100	100	2.2		
4TPB	061 231 500	G <sub>1</sub>	4	5	150	150	16	4.5	150	100	4.5	B7	TP
4TSA	045 231 600	A <sub>1</sub>	4	3	250	100	12	8	100	100	7	B7	P
4TSP	041 231 500	A	4	0	250	100	5.0	1.6	250	100	1.6	B7	P
4W03	642 300 000		4		80		0.04	1.1	80		1.1	B4	T
4W03n	642 300 000		4		200		0.04	1.1	100		1.0	B4	T
4W08	642 300 000		4		150				100			B4	T
4W100	642 310 000		4		200		1.5	3.5	100		3	B5	T
4W120	642 310 000		4		200		2	0.07	100			B5	T
4W200	642 310 000		4		150			3.3	100		3	B5	T
4XP	642 300 000		4	28.5	250		48	5	100		7	B4	T
5A6	601 225 413		2.5	15	150	150	20		100	100		B9A	P
5A/102D	026 510 310	G <sub>1</sub>	7.5	18	175	150	42	2.5	100	100	2.5	A08	P



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
5A/136D	026 510 310	G <sub>1</sub>	7.5	5.5	250	150	5.2	2	100	100	2	A08	P
5A/137D	026 510 310		6.3	2	250	100	1.8		100	100		A08	P
5A/150A	265 113 000	G <sub>1</sub>	10	5.5	250	150	5.2	2	100	100	2	UX6	P
5A/152M	265 104 130		6	2	250	150	10	7.5	100	100	5	B8B	P
5A/155M	256 101 403		6	2	250	250		6.5	100	100	5	B9G	P
5A/156M	256 101 403		6	1.7	250	250		7.7	100	150	6	B9G	P
5A/157D	026 510 310	G <sub>1</sub>	6	2	250	100		1.8	100	100	1.8	A08	P
5A/163K	141 236 115		6	1.5	200	200	15	15	No Data Available			B9A	P
5A/170K	141 230 615		6.3	1.5	175	150	13	16.5	No Data Available			B9A	P
5A/171G	102 513 410	A <sub>1</sub>	6	5	100	100	20	2.7	100	100	2.5	B8D	P
5AM8	145 236 181		5	1.7	200	150	11.5	7.0	100	150	7.0	B9A	DP
5AN8	641 237 541		5	6.0	200		13.0	3.3	100	60	3.0	B9A	TP
5AQ5	412 365 400		5		2.2	200	150	9.5	6.2	100	150		
5AR4	*30 809 020		5	12.5			45.0	4.1	100	PenLF	4.0	B7G	P
5AS4	030 908 020		5				120		REC		30mA	A08	RR
5AS8	541 238 116		5	2.2	200	150	9.5	6.2	100	150	6.0	B9A	DP
5AT8	461 237 514		5	1.0	100		8.5	5.8	100	60	5.0	B9A	TP
5AU4	020 809 030		5		1.8	250	150	7.7	4.6	100	150		
5AV8	146 234 157		5	6	200		13	3.3	REC		40mA	A08	R
5AW4	020 809 030		5		2.2	200	150	1	9.5	No Data Available			B9A
5AX4	020 809 030		5				60		REC		20mA	A08	RR
5AZ4	020 809 030		5				60		REC		20mA	B8B	RR
5BI	542 300 000	A <sub>1</sub>	2	1	150	90	2	1.3	150	90	1.3	B9A	P
5B8	146 234 157		5	6	200		13	3.3	100	60	3	B9A	TP
5B/110M	265 104 130		6		1.8	200	150	9.5	6.3	100	150		
5B/250A	254 130 000	A	6	12.5	400	250	83	6.3	100	150	6	UX5	P
5B/251M	215 044 130	A	6	15	250	250	72	6	100	100	5	B8B	P
5B/252M	265 044 130		6	15	250	250	72	6	100	100	5	B8B	P
5B/253M	265 044 130		19	15	250	250	72	6	100	100	5	B8B	P
5B/254M	215 144 130	A	6	20	300	250	50	5.6	100	100	5	B8B	P
5B/255M	265 144 130		6	20	300	250	50	5.6	100	100	5	B8B	P
5B/256M	215 144 130	A	19	20	300	250	50	5.6	100	100	5	B8B	P
5B/257M	265 144 130		12	20	300	250	50	5.6	100	100	5	B8B	P
5BE8	461 237 414		4	1	150		18	8.5	100	60	7	B9A	TP
5BK7a	741 236 411		5		1	250	100	10	5.2	150	100		
5BQ7A	741 236 410		5.6	2	150		9	6.4	100		5	B9A	TT
5BR8	461 237 514		5	1.0	150		18	8.5	100	60	8	B9A	TP
5BT8	981 236 541		4.7		0.95	250	100	10	5.2	100	100		
5BZ7	741 236 410		5.6	2.2	150		10	6.8	100		6	B9A	TT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
5CG8	461 237 514		4.7	.85	100		8.5	5.8	100	60	5.8	B9A	TP
5CL8	461 237 514		4.7	1.5	250	150	7.7	4.6	100	100		B9A	TP
5CZ5	504 234 1*6		45	.95	125	125	12	5.8	100	100	5.5	B9A	P
5DH8	461 237 514		5.2	1	125	100	43	9	100	100		B9A	TP
5CM8	641 237 514		4.7	6.7	100	100	7	4.4	100	100	4	B9A	TP
				1	125	125	13	8.6	125	125	8.6	B9A	TP
				2	250		1.8	2	100	60		B9A	TP
				2.2	200	150	9.5		100	100		B9A	TP
5E255	642 350 000		2	4.5	150	150	9.5	2.5	100	100	2.5	B5	P
5E415	642 350 000		4	25	300	200	20	1.7	100	PenLF	1.7	B5	P
5MK9	002 380 000		5				60		REC		20mA	B7G	R
§ 5J6	672 344 100		5	.85	100		8.5	5.3	100		5.3	B7G	TT
5PT4A	041 231 500	A <sub>1</sub>	4	3.0	150		5.0	4.5	100		5.3	B7	P
				4.5	250	150	4.5	1.7	100	100		B7	P
5P29	120 540 310	A <sub>1</sub>	6	7	250	250	100	14.3	No Data Available			A08	P
5Q5	036 540 320		1.4	4.6	90	90	4.5	2	80	75	2	A08	P
5R4	020 809 030		5 (5.7)				60		REC		25mA	A08	RR
5R4GY	030 809 020		5 (5.7)				60		REC		20mA	A08	RR
5T4	020 809 030		5				120		REC		30mA	A08	RR
5T8	†91 238 146		5	3.0	250		1.0	1.2	150		1.3	B9A	DDDT
5U4	020 809 030		5 (5.7)				120		REC		70mA	A08	RR
5U8	645 237 114		5	1.0	150		18.0	8.5	100	60	7.0	B9A	TP
5V3	020 809 030		5	1.0	250	100	10.0	5.2	150	100	5.0	B9A	TP
5V4	030 809 020		5 (5.7)				120		REC		30mA	A08	RR
							60		REC		60mA	A08	RR
5V6	026 540 310		4.7	12.5	250	250	45.0	4.1	100	PenLF	4.0	A08	P
5W4	020 809 030		5				60		REC		20mA	A08	RR
5X3	289 300 000		5				15		REC		10mA	A08	RR
5X4	008 090 230		5				120		REC		30mA	A08	RR
5X8	146 231 457		5	1.0	100		8.5	5.8	100	60	5.0	B9A	TP
				1.8	250	150	7.7	4.6	100	150	4.0	B9A	TP
5Y3GB	030 809 020		5 (5.7)				60		REC		20mA	A08	RR
5Y3GR	020 809 030		5 (5.7)				60		REC		20mA	A08	RR
5Y3GT	020 809 030		5 (5.7)				60		REC		20mA	A08	RR
5Y4	008 090 230		5				60		REC		30mA	A08	RR
5Y4SG	008 090 230		5				60		REC		20mA	A08	RR
5Z3	289 300 000		5 (5.7)				120		REC		30mA	UX4	RR
5Z4	030 809 020		5 (5.7)				60		REC		30mA	A08	RR
5Z4G	030 809 020		5 (5.7)				60		REC		30mA	A08	RR
6J0L2	741 236 410		6.3	7.9	200		10	3.4	100		3	B9A	TT
6A3	264 300 000		6	36	250		60	5.25	100		5	UX4	T
6A4	264 300 000		6	9	150	150	14	1.9	100	100	1.9	UX5	P
6A5	026 040 310		6	45	250		60	5.25	100		5	A08	T

§ See note on Page 8

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6A6	274 146 300		6	5	250		3.0	1.6	100		3.1	UX7	TT
6A7	265 541 300	G <sub>1</sub>	6	8	250	100	3.5	1.15	100	100	1.15	Sm7	H
6A7E	265 541 300	G <sub>1</sub>	6	8	250	100	3.5	1.15	100	100	1.15	Sm7	H
6A7S	265 541 300	G <sub>1</sub>	6	8	250	100	3.5	1.15	100	100	1.15	Sm7	H
6A8GT	026 545 310	G <sub>1</sub>	6	8	250	100	3.5	1.15	100	100	1.15	A08	H
6AB4	602 304 100		6	2	250		10	5.5	100		5.5	B7G	T
6AB7	021 415 360		6	3	300	200	12.5	5	100	150	5	A08	R
6AB8	641 237 154		6	2	100	0	4	1.4	100	60	1.4	B9A	TP
6AC5	026 040 310		6	8.0	200	200	17.5	3.5	100	150	3.5		
6AC7	021 415 360		6	0	250		2.5		No Data Available			A08	T
6AD4	402 013 080		6	2	300	150	10	9	100	100	8	A08	P
6AD5	026 040 310		6	11.5	100		1.4	2	100		2	B8B	T
6AD7	427 546 310		6	2	250		0.9	1.5	200		1.5	A08	T
6AD8	541 236 891		6	25	250	0	4	0.325	100	60	0.32	A08	TP
6AE5	026 040 310		6	16.5	250	250	34	2.5	100	PenLF	2.5		
6AE6	026 740 310		6	2.0	250	90	6.7	1.1	100	90		B9A	DDP
6AE7	026 414 310		6	15	100		7	1.2	80		1.2	A08	T
6AE8	541 237 46*		6	1.5	250		6.5	4	200		1	A08	TT
6AF4	642 314 600		6	13.5	250		10	3	100		3	A08	TT
6AF4A	642 314 600		6	2	100	90	5.2	2.2	100	60	2.8	B9A	TH
6AF5	026 040 310		6	2	250		3.5		150	90			
6AG5	412 365 100		6	4	100		15	6.6	80		6	B7G	T
6AG6	026 540 310		6	3	100		20	7.5	100		7.5	B7G	T
6AG7	120 415 360		6	18	175		7	1.5	100		1.5	A08	T
6AH4	420 060 310		6	1.5	250	150	6.5	5	100	100	5	B7G	P
6AH5	520 604 310		6	6	250	250	32	10	100	PenLF	9	A08	P
6AH6	412 365 100		6	3	300	150	30	11	100	100	10	A08	P
6AH7	461 471 230		6	23	250		30	4.5	100		4	A08	T
6AH7GT	417 146 230		6	18	350	250	54	5.2	100	PenLF	5	A08	P
6AJ4	414 464 234		6	2	300	150	10	9	100	100	8	B7G	P
6AJ5	412 365 100		6	16	250		10	2.2	100		2.2	A08	TT
6AJ7	020 415 360		6	9	250		12	2.4	100		2.4	A08	TT
6AJ8	541 237 164		6	2	125		8	7	100		10	B9A	T
6AK4	402 013 060		6	7.5	175	75	2.9	2.75	100	75		B7G	P
6AK5	412 365 100		6	3.0	100		5.0	2.3	100	60	2.3	B9A	TH
6AK6	412 365 100		6	2.0	250	100	6.5	2.4	150	100	2.4		
6AK7	120 415 360		6	2.5	200		9.5	3.8	100		3	B8D	T
6AK8	191 238 146		6	2.3	150	150	7	4.3	100	100	4	B7G	P
6AL5	192 310 800		6	9	175	175	15	2.3	100	100	2.3	B7G	P
6AL6	020 540 310	A	6	3	300	150	30	11	100	100	9	A08	P
6AM4	414 464 234		6	3.0	250		1.0	1.2	100		1.3	B9A	DDDT
			6	14	250	250	72	6	D		6.0	B7G	DD
			6	1.0	200		10	9.8	100	PenLF	6	A08	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6AM5	412 360 500		6	13.5	250	250	16	2.6	100	PenLF	2.6	B7G	P
† 6AM6	412 361 500		6	{ 2 1.5	250 200	250 150	10 4	7.5 6.4	100 100	PenLF PenLF	5 5	B7G	P
6AM8	145 236 181		6	1.7	200	150	11.5	7.0	100	150	7.0	B9A	DP
6AN4	642 314 600		6	1.3	200		13	10	100			B7G	T
6AN5	412 365 100		6	6	125	125	35	8	100	100	7	B7G	P
6AN6	289 †† 300		6						D			B7G	DDDD
6AN7	541 230 764		6	{ 2.0 2.0	100 250	100	5.0 3.0	2.0 0.75	100 100	60 100	2.8	B9A	TP
6AN8	641 237 541		6	{ 6 2.2	200 200	150	13 9.5	3.3 6.2	100 100	60 150	3 6	B9A	TP
6AQ4	412 314 600		6	2.0	250		6.0	8.5	200		8.0	B7G	T
6AQ5	412 365 400		6	12.5	250	250	45	4.1	100	PenLF	4	B7G	P
6AQ6	412 398 600		6	3	250		1.0	1.2	150		1.2	B7G	DDT
6AQ7	918 461 230		6	2	250		2.3	1.6	100		1.6	A08	DDT
6AQ8	741 236 410		6	2.3	250		10.0	5.5	100		5.0	B9A	TT
6AR5	412 365 000		6	16	250	250	34	2.4	100	PenLF	2.4	B7G	P
6AR6	106 052 430		6	36	300	300	58	4.3	100	PenLF	4.3	A08	P
6AR7GT	206 598 130	G	6	2	250	100	7	2.5	100	100	2.5	A08	DDP
6AR7	461 891 230		6	2	250		1.3	1.05	200		1.05	A08	DDT
6AS4	001 080 230		6						REC			A08	R
6AS5	142 345 600		6	8.5	150	125	35	5.6	100	100	5	B7G	P
6AS6	412 365 100		6	2	125	125	5.5	3.5	100	100	3.5	B7G	P
6AS7	471 461 230		6	31.5	150		125	7	100		7	A08	TT
6AS8	541 238 116		6	2.2	200	150	9.5	6.2	100	150	6	B9A	DP
6AT6	412 389 600		6	3	250		1	1.2	100		1.2	B7G	DDT
6AT7n	641 237 410		6	{ 2 1	250 100		10 3.7	5.5 4.0	100 100		5 4.0	B9A	TT
6AT8	461 237 514		6	{ 1.0 1.8	100 250	150	8.5 7.7	5.8 4.6	100 100	60 150	5.8 4.0	B9A	TP
6AU4	001 080 230		6				120		REC		40mA	A08	R
6AU5	421 060 350		6	20	175	150	50	5.6	80	60	6	A08	P
6AU6	412 365 100		6	1	250	150	10.0	5.2	100	100	3.9	B7G	P
6AU7	641 227 413		3	8.5	250		10.5	2.2	100		2.0	B9A	TT
6AU8	146 231 457		6	{ 1.25 1.5	150 200	125	8.5 15.0	4.9 7.0	100 100	60 100	5.0 7.0	B9A	TP
6AV4	802 309 100		6				30		REC		15mA	B7G	RR
6AV5	421 060 350		6	22.5	250	150	57	5.9	100	100	5.8	A08	P
6AV6	412 389 600		6	2	250		1.2	1.6	100		1.2	B7G	DDT
6AW4	289 130 000		6				30		REC		15mA	UX5	RR
6AW5	208 190 310		6				30		REC		15mA	A08	RR
6AW6	412 365 100		6	1.8	250	150	7	5	100	150	5	B7G	P
6AW7	149 816 230		6	0	100		1.4	1.2	100		1.2	A08	DDT

† See note on Page 8

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6AW8	146 231 457		6	{ 2.0 3.0	200		4.0	4.0	100	60	4.0	} B9A	TP
6AX2	23* 232 *32	D <sub>1</sub>	6		200	150	13.0	9.0	100	100	9.0		B9A
6AX4	001 080 230		6				120		REC		35mA	A08	R
6AX5	029 080 310		6				60		REC		20mA	A08	RR
6AX6	028 190 310		6				120		REC		30mA	A08	RR
6AX7	641 227 413		3	2	250		1.2	1.6	100		1.2	B9A	TT
6AX8	645 237 114		6	{ 1 1.2	150		18	8.5	100		8	} B9A	TP
6AY5	023 540 310		6		250	100	10	4.8	100	100			A08
6AY8	026 589 310	G <sub>1</sub>	6	12.5	250	250	47	4.1	100	PenLF	4	A08	DDP
6AZ5	810 230 190		6	5	250	100	52	9.5	100		9	A08	DD
									D			B8A	
6AZ8	751 324 164		6	{ 6.0 2.3	200		13.0	3.3	100	60	3.0	} B9A	TP
6B4	026 040 300		6		200	150	9.5	6.0	100	100	6.0		A08
6B6	026 980 310	G <sub>1</sub>	6	45	250		60	5.25	100		5	A08	DDT
6B7	265 891 300	G <sub>1</sub>	1	2	250		0.9	1.1	100		1.1	Sm7	DDP
6B7E	265 891 300	G <sub>1</sub>	6	3	250	125	9	1.125	100	100	1.1	Sm7	DDP
6B7S	265 891 300	G <sub>1</sub>	6	3	250	125	9	1.125	100	100	1.1	Sm7	DDP
6B8	026 985 310	G <sub>1</sub>	6	3	250	125	10	1.325	100	100	1.3	A08	DDP
6B8G	026 985 310	G <sub>1</sub>	6	3	250	125	9	1.125	100	100	1.2	A08	DDP
6B8SG	026 985 310	G <sub>1</sub>	6	3	250	125	9	1.125	100	100	1.2	A08	DDP
6BA5	402 063 190		6	2	100	100	5.5	2.1	100	100	2	B8A	P
6BA6	412 365 100		6	1	250	100	11	4.4	100	100	4.4	B7G	P
6BA7	641 231 106		6	2	100		187		100		7	B9A	H
6BA8	146 231 457		6	{ 8 2.5	200		8	2.7	100	60	5.0	} B9A	TP
6BC4	642 314 460		6		200	150	13	9.0	100	100	9.0		B8A
6BC5	412 365 100		6	1.5	150		14.5	10	100		10.0	B7G	P
				1.3	250	150	7.5	5.7	100	150	5.7	B7G	P
6BC7	180 239 1+1		6				5		D			B9A	RRR
6BC8	741 236 410		6	2.2	150		10.0	6.2	150		5	B9A	TT
6BD5	421 060 350		6	12	200	200		5	100	100	5	A08	P
6BD6	412 365 100		6	3	250	100	9	2	100	100	2	B7G	P
6BD7	641 238 09*		6	3.0	250		1.0	1.2	150		1.2	B9A	DDT
6BE6	412 366 100		6	2	100		11	7.0	100		5	B7G	H
6BE7	541 236 114		6	1	250	20	0.95	0.7	No Data Available			B9A	N
6BE8	461 237 514		6	{ 1 1	150		18	8.5	100	60	8	} B9A	TP
6BF5	412 365 400		6		250	100	10	5.2	100	100			B7G
6BF6	412 398 600		6	7.5	100	100	36	7.5	100	90	7	B7G	DDT
				9	250		9.5	1.9	100		1.9	B7G	DDT
6BF7	642 113 470		6	0.8	100		8	4.8	100		4.8	B8D	TT
6BG6	021 040 350	A	6	15	250	250	75	6	No Data Available			A08	P
6BG7	742 113 460		6	0.8	100		8	4.8	100		4.8	B9A	TT
6BH5	541 236 000		6	2.5	250	100	6.0	1.7	150	100	1.7	B9A	P
6BH6	412 365 100		6	1	250	150	7.4	4.6	100	100	3.4	B7G	P

VALVE	SELECTOR SWITCH No.	T.C.	VI	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
6BH8	146 231 457		6	5.0	150		9.5	3.3	100	60		B9A	TP	
6BJ5	412 36* 500		6	1.6	200	125	15.0	7.0	100	100			B7G	P
6BJ6	412 365 100		6	5	250	250	35	10.5	100	150	10		B7G	P
6BJ7	140 239 181		6	1	250	100	9.2	3.6	100	100	3.6		B9A	DDD
6BJ8	811 239 641		6	9	250		8	2.8	100			B9A	DDT	
6BK5	604 231 450		6	5	250	250	35	8.5	100	150	8	B9A	P	
6BK6	412 389 600		6	2	250		1.2	1.6	100		1.6	B7G	DDT	
6BK7	741 236 410		6	1.0	100		9.0	6.1	100		6.0	B9A	TT	
6BK7-A	741 236 410		6	2	150		10.7	9	100		9	B9A	TT	
6BK8	501 236 014		6		250	150	3	1.8	100	100		B9A	P	
6BL4	**1 *8* 230		6				180		REC		40mA	A08	R	
6BL7	471 46J 230		6	9	250		40	7.0	100		6	A08	TT	
6BL8	645 237 114		6	2	100		14	5	100	60	5	B9A	TP	
6BM5	412 365 400		6	2	175	175	10	6.2	100	150	6		B9A	P
6BM8	414 237 516		6	6	250	250	30	7	No Data Available			B9A	TP	
			6	0	100		3.5	2.5	100	60	2.5	B9A	TP	
			6	16	200	200	35	6.4	100	100	6		B9A	TP
6BN4	142 361 400		6	2.2	150		9	7.0	100		7.0	B7G	T	
6BN5	441 231 615		6	10.8	225	225	26.0	3.2	100	150	3.2	B9A	P	
6BN6	142 354 600		6	1	60	60	0.25	1	80	60	1	B7G	P	
6BN7	741 231 406		6	15	250		24	5.5	No Data Available			B9A	TT	
6BN8	026 895 310	G <sub>1</sub>	6	1	125		5	2	100	100	1.1		A08	DDP
			6	3	250	125	9	1.13	100					
6BQ5	*41 23* 6*5		6	7.3	250	250	48.0	11.3	100	150	10.0	B9A	P	
6BQ6	020 540 310	A	6	22.5	250	150	57	5.9	100	100	5	A08	P	
6BQ7	741 236 410		6	2	150		9	6	150		6	B9A	TT	
6BQ7-A	741 236 410		6	2	150		9	6.4	100		5	B9A	TT	
6BR7	041 230 651		6	3	250	100	2	1.225	100	100	1.2	B9A	P	
6BR8	461 237 514		6	1.0	150		18	8.5	100	60	8	B9A	TP	
6BS4	642 314 600		6	0.85	250	100	10	5.2	100	100			B7G	T
6BS5	541 236 **1		6	4	100		16.0	8.0	100		8	B9A	P	
6BS7	001 230 651	G <sub>1</sub>	6	7.5	250	250	50	7	100	100		B9A	P	
6BS8	641 237 410		6	3	250	100	2	1.25	100	100	1.2	B9A	P	
			6	2.2	150		10	7.2	100		7	B9A	TT	
6BT4	280 009 130		6				30		REC		15mA	B8A	RR	
6BT6	412 389 600		6	3	250		1	1.2	150		1.2	B7G	DDT	
6BT8	891 236 541		6	2.2	200	150	9.5	6.2	100	100		B9A	DDP	
6BU6	412 389 600		6	9	250		9.5	1.9	100		1.9	B7G	DDT	
6BU8	157 231 461		6		100	60	2.2	1.5	100	60		B9A	PP	
6BV7	865 239 141		6	5	250	250	38	10	100	150	10	B9A	DDP	
6BV8	146 239 118		6	3.7	200		11	5.6	100			B9A	DDT	
6BW4	800 230 901		6				30		REC		15mA	B9A	RR	
6BW6	*41 230 651		6	13	300	225	34	3.75	100	150	3.7	B9A	P	
6BW7	141 230 651		6	1.4	250	250	9.7	8.2	100	100	7	B9A	P	

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6BW8	918 234 156		6.3	1.1	250	100	10	5.2	100	100		B9A	DDP
6BX4	802 308 100		6				30		REC		15mA	B7G	RR
6BX6	141 230 651		6	3	200	200	8	7.2	100	100	7	B9A	P
6BX7	471 461 230		6	16.4	250		42	7.6	100		6	A08	TT
6BX8	641 237 410		6	5	125		11	7.5	125		7	B9A	TT
6BY5	120 980 310		6				60		REC		20mA	A08	RR
6BY6	412 365 400		6	2.5	250	100	6.5	2.4	100	100	2	B7G	H
6BY7	141 230 651		6	2.0	250	100	10.0	6.0	150	100	5.0	B9A	P
6BY8	026 598 310	G <sub>1</sub>	6	4	250	250	44	12	100	PenLF	10	A08	DD
6BZ6	412 365 100		6	1.0	125	125	14	8	125	125	7	B7G	P
6BZ7	741 236 410		6	2.2	150		10.0	6.8	100		6.0	B9A	TT
6BZ8	641 237 410		6	1	125		10	8	125		8	B9A	TT
6C4	602 364 100		6	8.5	250		10.5	2.2	100		3	B7G	T
6C5	026 040 310		6	8	250		8	2	100		2	A08	T
6C6	265 113 000	G <sub>1</sub>	6	3	250	100	2	1.225	100	100	1.2	UX6	P
6C7	260 981 300	G <sub>1</sub>	6	9	250		4.5	1.25	100		1.2	Sm7	DDT
6C8	026 147 310	G <sub>1</sub>	6	4.5	250		3.2	1.6	100		1.6	A08	TT
6C9	276 454 130		6	2.5	100		5.0	3.0	100	60	3.0	B8A	TH
				2.5	250	100	8.0	2.5	100	100	2.5		
6C10	276 454 130		6	2.0	100		5.0	2.2	100	60	2.8	B8A	TH
				2.0	250	100	8.0	2.4	100	100	3.5		
6C11	276 454 130		6	3	100		5	2.3	100	60	2.3	B9A	TH
					125	125	5		100	100			
6C12	541 237 164		8	3	100		3	2	100	60	3	B9A	TH
				2	250	100	6.5	2.4	100	100	2.4		
6C31	027 546 310	G <sub>1</sub>	6	4.0	100		7	3.4	100	60	5	A08	TH
				3.0	250	100	5	2.8	100	100	3.1		
6CA4	8*1 23* 9**		6				60		REC		20mA	B9A	RR
6CA5	142 345 600		6	4.5	125	125	36	9.2	125	126	9.2	B7G	P
6CA7	126 540 310		6	14.5	250	250	57	8.5	100	100	9.0	A08	P
6CB5	521 441 350	A	6	30.0	175	175	90	8.8	100	100	8.0	A08	P
6CB6	412 365 100		6	1.0	125	125	13	8.0	100	150	6	B7G	P
6CD6	021 040 350	A	6	30	175	175	75	7.7	100	100	7.0	A08	P
6CE5	412 365 100		6	1	125	125	11	7.6	125	125	7.6	B7G	P
6CF6	412 365 100		6	1.0	125	125	12	7.8	100	150	6	B7G	P
6CF8	501 236 014		6	2	250	150	3	1.85	100	100		B9A	P
6CG6	412 365 100		6	8.0	250	150	9	2	100	100		B7G	P
6CG7	641 237 410		6	8.0	250		9.0	2.6	100		3.0	B9A	TT
6CG8	461 237 514		6	2	100		8.5	5.8	100	60	5.9	B9A	TP
				2	250	150	7.7	4.6	100	150	4		
6CH6	041 230 651		6	4.5	250	250	40	11.0	100	150	9.0	B9A	P
6CH7	741 236 411		6	2.2	150		10	6.8	150		6.8	B9A	TT
6CH8	175 321 446		6	2	200		13	3.3	100		4.9	B9A	TP
				2.2	200	150	9.5	6.3	100	150	5		
6CJ5	260 054 130		6	2.5	250	100	6	2.2	100	100	2.2	B8A	P
6CJ6	*41 23* *51	A	6	22	175	175	45	6.2	100	100	5	B9A	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6CK5	260 054 130		6		250	250	36	10	100	PenLF	8	B8A	P
6CK6	541 231 600			5.5	250	250	36.0	10.0	100	150	9.0	B9A	P
6CL5	521 441 350	A <sub>1</sub>	6	40	175	175	90	6.5	100	100		A08	P
6CL6	145 236 154		6	3	250	150	30	11	No Data Available			B9A	P
6CL8	461 237 514		6	0.85	125		15	8	100	60	8	B9A	TP
				1	125	125	12	5.8	100	100	5		
6CM5	026 540 310	A <sub>1</sub>	6	7	250	250	72	14.5	100	PenLF		A08	P
6CM6	504 234 106		6	12.5	250	250	45	4.1	100	100		B9A	P
6CM7	701 236 441		6	7.0	200		5.0	2.0	100	60	2.8	B9A	TT
				8.0	250		20.0	4.4	100	100	4.7		
6CM8	641 237 514		6	2	250		1.8	2	100	60		B9A	TP
6CN6	120 540 310	A	6	7	250	250	100	14.3	100	PenLF	10	A08	P
6CN7	981 331 462		3	3	250		1.0	1.2	100		1.3	B7G	DDT
6CQ6	412 361 500		6	2.5	250	200	8.0	2.5	100	150	2.5	B7G	P
6CQ8	645 237 114		6	0.85	125		15	8	100		8	B9A	TP
				1	125	125	12	5.8	125	125	5.8		
6CR6	182 365 400		6	2.0	250	100	9.5	2.0	250	100	1.95	B7G	DT
6CS5	514 234 1*6		6	10	200	125	47	8	100	100		B9A	P
6CS6	412 365 100		6	1.0	100	30	1.0	1.1	No Data Available			B7G	H
6CS7	604 237 411		6	8.5	250		10.5	2.2	100		2	B9A	TT
				10.6	250		19	4.5	100		4		
6CT7	268 154 130		6	2	250	100	5	1.8	100	100	1.8	B8A	DP
6CU5	142 345 600		6	8	125	100	50	7.5	125	100	7.5	B7G	P
6CU6	020 540 310	A	6	22.5	250	150	57	5.5	100	100	6.0	A08	P
6CU7	276 454 130		6	2	100		5	2.2	100	60	2.8	B8A	TH
				2	250	100	8	2	100	100	3.5		
6CV7	264 089 130		6	3	250		1	1.3	150		1.3	B8A	DDT
6CW7	147 234 116		6	1.5	90		12	6	100		6	B9A	TT
6CX7	641 237 411		6	2	150		9	6.4	100		6	B9A	TT
6CX8	146 231 456		6	1.5	150		9	4.6	100	60	4.6	B9A	TP
				2	200	125	24	10	100	60			
6CW5	*41 23* 6*5		6	12.5	175	175	70	10	100	100	9	B9A	P
6CZ5	504 234 1*6		6	14	250	250	46	4.8	100	100		B9A	P
6D1	123 000 000	D <sub>1</sub>	6						D			B3G	D
6D2	192 310 800		6						D			B7G	RR
6D3	812 380 000		6						D			B7G	R
6D5	026 040 310		6	40	275		31	2.1	100		2.1	A08	T
6D6	265 113 000	G <sub>1</sub>	6	3	250	100	8.2	1.6	100	100	1.6	UX6	P
6D7	265 101 300	G <sub>1</sub>	6	3	250	100	2	1.225	100	100	1.2	Sm7	P
6D8	027 546 310	G <sub>1</sub>	6	3	150		4.2		100	60		A08	H
				3	250	100	3.5		150	100			
6DA6	041 230 651		6	2.0	250	100	9.0	3.6	250	100	3.6	B9A	P
6DB6	412 365 100		6	1	150	150	5.8	2	100	100		B7G	P
6DC6	412 365 100		6	2.2	200	150	9.5	5.5	150	100	5.0	B7G	P
6DE6	412 365 100		6	1.1	125	125	16	8	100	100	8	B7G	P



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6DG6	026 540 310		6	7.5	200	125	47	8	100	PenLF		A08	P
6DN6	021 040 350	A <sub>1</sub>	6	18	200	125	70	9	100	100		A08	P
6DQ6	020 540 310	A	6	22.5	250	150	75	6.6	125	100		A08	P
6DR4	123 000 000	D <sub>1</sub>	6						D			B3G	D
6DR6	*41 23* *51		6	23	175	175	45	6.6	100	100		B9A	P
6DT6	412 365 100		6	2.2	150	100	1.1	0.8	150	100	2.0	B7G	P
6E6	274 146 300		6	27.5	250		18	1.7	100		1.7	UX7	TT
6E7	265 101 300	G <sub>1</sub>	6	3	250	100	8.2	1.6	100	100	1.6	Sm7	
6E8G	027 546 310	G <sub>1</sub>	6	4.8	150		3.3	2.8	150	60	2.8	A08	TH
6EH6	412 365 100		6		250	100	2.3	100	100				
6EX4	802 309 100		6				30		REC		15mA	B9A	RR
6F1	261 514 130		6	1.8	200	200	10	9	100	60	8	B8A	P
6F5	020 600 310	G <sub>1</sub>	6	2	250		0.9	1.5	100		1.5	A08	T
6F6	026 540 310		6	16.5	250	250	34	2.5	100	PenLF	2.5	A08	P
6F7	275 641 300	G <sub>1</sub>	6	3.0	100		3.5	0.5	100	60	0.5	Sm7	TP
			6		100	100	6.3	1.05	100	100	1.05		
6F7B	275 641 300	G <sub>1</sub>	6	3.0	100		3.5	0.5	100	60	0.5	UX7	TP
			6		100	100	6.3	1.05	100	100	1.05		
6F7E	275 641 300	G <sub>1</sub>	6	3.0	100		3.5	0.5	100	60	0.5	UX7	TP
			6		100	100	6.3	1.05	100	100	1.05		
6F7M	023 756 410	G <sub>1</sub>	6	3.0	100		3.5	0.5	100	60	0.5	UX7	TP
			6		100	100	6.3	1.05	100	100	1.05		
6F8	027 146 310	G <sub>1</sub>	6	8	250		9	2.6	100		2.6	A08	TT
6F11	260 154 130		6	1.8	250	100	4.4	2.2	100	100	2.2	B8A	P
6F12	412 361 500		6	2	250	250	10	7.5	100	PenLF	5	B7G	P
			6		150	150	4	6.4	100	PenLF	5		
6F13	260 154 130		6	1.8	200	200	10	9	150	150	8	B8A	P
6F14	260 154 130		6	1.25	150	150	28	10.6	100	100	8	B8A	P
6F15	260 154 130		6	2.5	250	100	7	2.3	100	100	2.3	B8A	P
6F16	261 154 130		6	2.5	250	100	6	2.2	100	100	2.2	B8A	P
6F17	412 361 500		6	2	150	150	46	6	100	100		B7G	P
6F18	141 230 651		6	1.3	175	100	12	4.5	125	100		B9A	P
6F19	141 230 651		6	2	250	100	10	6	150	100	5	B9A	P
6F32	216 510 030	G <sub>1</sub>	6	4.5	200	200	5.1	3	100	150	3	M08	P
6F33	412 361 500		6	4	200	200	5.75	3.55	100	150	3.5	B7G	P
6FX4	902 309 100		6				30		REC		15mA	B7G	RR
6G6	026 540 310		6	9	175	175	15	2.3	100	100	2.3	A08	P
6G7	026 985 310	G <sub>1</sub>	6	3	250	125	10	1.325	100	100	1.3	A08	DDP
6G8	026 985 310	G <sub>1</sub>	6	3	250	125	9	1.125	100	100	1.1	A08	DDP
6GG6	802 300 190		6				30		REC		15mA	F8	RR
6H4	020 800 310		6						D			A08	D
6H6	029 180 310		6						D	4		A08	DD

See note on Page 8

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6H8G	026 895 310	G <sub>1</sub>	6	2	250	125	8.5	2.4	100	100	2.4	A08	DDP
6H8MG	026 895 310	G <sub>1</sub>	6	2	250	125	6	1.8	100	100	1.8	A08	DDP
6J4	412 344 600		6	1.5	150		15	12	100		10	B7G	T
6J5	026 040 310		6	8	250		9	2.6	100		2.6	A08	T
6J6	762 344 100		6	3	150		5	4.5	100		5.3	B7G	TT
6J7	026 510 310	G <sub>1</sub>	6	3	250	100	2	1.225	100	100	1.2	A08	P
6J8	027 546 310	G <sub>1</sub>	6	{ 3	150			1.6	100	60	1.6	A08	TH
				{ 3	250	100	1.3	1.2	100	100	1.5		
6K5	026 000 310	G <sub>1</sub>	6	{ 3	250		1.1	1.4	200		1.4		
6K6	026 540 310		6	18	250	250	32	2.3	100	PenLF	2.3	A08	P
6K7	026 510 310	G <sub>1</sub>	6	3	250	125	10.5	1.65	100	100	1.6	A08	P
6K8	027 546 310	G <sub>1</sub>	6	{ 1	100		8	2.5	100	60	3	A08	TH
				{ 3	250	100	4	1.2	100	100	1.6		
6K25	026 040 310		6		100		30	2KΩ	No Data Available			A08	Thyratron
6L1	274 164 130		6	8.6	200		10	2.8	100		2.0	B8A	TT
6L5G	026 040 310		6	9	250		8	1.9	100		1.9	A08	T
6L6	026 540 310		6	18	350	250	54	5.2	100	PenLF	5.2	A08	P
6L7	026 540 310	G <sub>1</sub>	6	3	250	100	5.3	1.1	100	100	1.1	A08	H
6L12	741 236 410		6	2.3	250		10	5.9	100		5	B9A	TT
6L18	260 064 130		6	13.3	250		12.0	5.5	80		7.0	B8A	T
6L19	274 164 130		6	1.8	200		5	3.1	150		3.1	B8A	TT
6L34	412 314 600		6	1.5	250		10	9	150		7	B7G	T
6LD3	264 098 130		6	1.9	250		0.85	1.95	150		1.9	B8A	DDT
6LD12	191 238 146		6	3	250		1	1.2	100		1.3	B9A	DDDT
6LD20	264 098 130		6	5.9	250		5	2.3	100		3.0	B8A	DDT
6M3	*28 0*0 *30		6						D			A08	R
6M5	541 230 600		6	7	250	250	36	10.0	100	100	10.0	B9A	P
6M6	026 540 310		6	6	250	250	36	9.5	100	PenLF	8	A08	P
6M7	026 510 310	G <sub>1</sub>	6	2.5	250	125	10.5	3.4	100	100	3.2	A08	P
6M7MG	026 510 310	G <sub>1</sub>	6	2.5	250	125	6	2	100	100	2	A08	P
6M8	137 546 280	G <sub>1</sub>	6	{ 1.0	100		0.5	1.1	100	60	1.1	A08	DTP
				{ 3.0	100	100	8.5	1.9	100	100	1.9		
6N3	*** 23* **8		6				180		REC		50mA	B9A	R
6N4	412 361 400		6	3	175		12	6	150		6	B7G	T
6N7	027 446 310		6	5	250		3	1.6	100		1.6	A08	TT
6N8	541 236 891		6	2	250	90	5	2.2	100	90	2.2	B9A	DDP
6NK7	026 510 310	G <sub>1</sub>	6	2	250	100	5	2.3	100	100	2.3	A08	P
6PI	026 540 310		6	8.5	250	250	40	8.8	100	150	8	A08	P
6P5	026 040 310		6	13.5	250		5	1.25	100		1.4	A08	T
6P6	215 413 000	A	6	8.0	250	150	34		100	100		UX6	P
6P7	023 756 410	G	6	{ 3.0	100		3.5	0.5	100	60	0.5	A08	TP
				{ 3.0	100	100	6.3	1.05	100	100	1.05		
6P8	027 546 310	G	6	{ 2.4	100		2.2		100	60		A08	TH
				{ 6	250	75	1.5		100	75			
6P9	412 365 400		6	6	250	250	30	7	No Data Available			B9A	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6P15	041 230 605		6	7.5	250	250	49	11.3	100	150	10	B9A	P
6P25	026 540 310		6	8.5	250	250	40	8.8	100	100	8	A08	P
6P26	026 540 310		6	8.5	250	250	40	8.8	100	PenLF	8	A08	P
6P28	020 540 310	A	6	8.8	100	250	72	9.5	100	PenLF	9	A08	P
6PX6	026 540 310		6	6	250	35	9.2	9.2	100	PenLF	8	A08	P
6PZ8	026 589 310	G <sub>1</sub>	6	6	250	250	36	9.2	100	PenLF	8	A08	DDP
6Q4	441 230 446		6	1.5	250		15	12.0	No Data Available			B9A	T
6Q6	026 080 310		6	3	250		1.2	1.05	150		1.05	A08	DT
6Q7	026 980 310	G <sub>1</sub>	6	3	250		1	1.2	100		1.5	A08	DDT
6QL6	541 236 154		6	11.5	175	175	52	9.5	125	100		B9A	P
6R	026 510 310	G	6	2	250	100	3.7	2.0	100	100		A08	P
6R3	*** 23* **8	C	6				120		REC		30mA	B9A	R
6R4	401 230 060		6	2	150		30	5.5	100		5	B9A	T
6R6	026 500 310	G <sub>1</sub>	6	3	250	100	7	1.45	100	100	1.4	A08	P
6R7	026 980 310	G <sub>1</sub>	6	9	250		9.5	1.9	100		1.9	A08	DDT
6R8	8†1 239 146		6	9	250		9.5	1.9	100		1.9	B9A	DDDT
6RV	026 510 310	G <sub>1</sub>	6	2	250	100	6.4	2.1	100	100	2.1	A08	P
6S2	*** 23* ***	D <sub>1</sub>	5						D			B9A	D
6S4	*1* 234 **6		6	8	250		26	4.5	100		4.5	B9A	T
6S6	120 600 350	G <sub>1</sub>	6	2	250	100	13	4	100	100	4	A08	P
6S7	026 510 310	G <sub>1</sub>	6	3	250	100	8.5	1.75	100	100	1.7	A08	P
6S8	†18 916 230	G <sub>1</sub>	6	2	250		0.9	1.1	200		1.1	A08	DDDT
6SA7	126 641 310		6	3.6	100		12	4.3	100		1.4	A08	H
6SA7G	026 641 310		6	3.6	100		12	4.3	100		1.4	A08	H
6SB7Y	126 541 310		6	1	250	100	3.8		100	100		A08	H
6SC5	026 400 310		6	4	250		7.5	2.7	100		2.7	A08	T
6SC7	074 461 230		6	2	250		2	1.325	200		1.3	A08	TT
6SD7	021 415 360		6	2	250	100	6	3.6	100	100	3.6	A08	P
6SE7	021 415 360		6	1.5	250	100	4.5	3.4	100	100	3.4	A08	P
6SF5	014 060 320		6	2	250		0.9	1.5	200		1.5	A08	T
6SF7	041 586 230		6	1	250	100	12.4	2.05	100	100	2	A08	DP
6SG7	021 415 360		6	1	250	125	11.8	4.7	100	100	4.7	A08	P
6SH7	021 415 360		6	1	250	150	10.8	4.9	100	150	4.9	A08	P
6SJ7	021 415 360		6	3	250	100	3	1.65	100	100	1.6	A08	P
6SK7	021 4 5 360		6	3	250	100	9.2	2	100	100	2	A08	P
6SL7	461 471 230		6	2	250		2.3	1.6	150		1.6	A08	TT
6SN7	461 471 230		6	8	250		9	2.6	100		2.6	A08	TT
6SQ7	041 896 230		6	2	250		0.9	1.1	200		1.1	A08	DDT
6SR7	041 986 230		6	9	250		9.5	1.9	100		1.9	A08	DDT
6SS7	021 415 360		6	3	250	100	9	1.85	100	100	1.8	A08	P
6ST7	041 896 230		6	9	250		9.5	1.9	100		1.9	A08	DDT
6SU7	471 461 230		6	2	250		2.3	1.6	200		1.6	A08	TT
6SV7	041 586 230		6	1	250	150	7.5	3.4	100	150	3.5	A08	DP
6SZ7	041 986 230		6	3	250		1	1.2	200		1.2	A08	DDT
6T	205 413 000	A <sub>1</sub>	6	12.5	250	250	4.5	4.1	100	PenLF	4	UX6	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
6T4	642 314 600		6	3.0	80		18.0	7.0	80		7.0	B7G	T	
6T6	026 500 310	G <sub>1</sub>	6	1	250	100	10	5.5	100	100	5.5	A08	P	
6T7	026 980 310	G <sub>1</sub>	6	3	250		1.2	1.05	100		1.05	A08	DDT	
6T8	†91 238 146		6	3	250		1	1.2	150		1.3	B9A	DDDT	
6TE8	427 546 310	G <sub>1</sub>	6	{	2	100		3.7	100	60		} A08	TH	
					2	250	100	3.5	100	100				
6TE9	651 237 440		6	{	2.5	100		4	2	100	2	} B9A	TH	
					7.0	200	90	3	0.75	100	90			
6TH8	027 546 310	G <sub>1</sub>	6	{	1.5	300	75	3.5	100	75		} A08	TH	
6TP	205 413 000	A <sub>1</sub>	6	14.5	250	250	72	6	100	PenLF	6	UX6	P	
6U3	**1 23* **8		6				180		REC		40mA	B9A	R	
6U4	001 080 230		6				120		REC		30mA	A08	R	
6U6	026 540 310		6	14	200	150	56	6.2	100	100	6.2	A08	P	
6U7	026 510 310	G <sub>1</sub>	6	3	250	100	8	1.5	100	100	1.5	A08	P	
6U8	645 237 114		6	{	1	150	0	18	8.5	100	60	7	} B9A	TP
					1	250	100	10	5.2	150	100	5		
6V3	080 230 808	C	6				120		REC		40mA	B9A	R	
6V3P	000 230 009	C	6				120		REC		40mA	B9A	R	
6V4	8*1 23* 9**		6				30		REC		15mA	B9A	RR	
6V5	006 540 320		6	12.5	250	250	45	4.1	100	PenLF	4.1	A08	P	
6V6	026 540 310		6	12.5	250	250	45	4.1	100	PenLF	4	A08	P	
6V7	026 980 310	G <sub>1</sub>	6	20	250		8	1.1	100		1.1	A08	DDT	
6V8	681 234 †19		6	3	250		1	1.2	100		1.3	B9A	DDDT	
6W2	023 000 000	D <sub>1</sub>	6						D			B3G	D	
6W3	**1 23* **8		6				120		REC		40mA	B9A	R	
6W4	001 080 230		6				120		REC		30mA	A08	R	
6W5	028 090 310		6				60		REC		20mA	A08	RR	
6W6	026 540 310		6	9.5	150	150	58	8	100	100	8	A08	P	
6W7	026 510 310	G <sub>1</sub>	6	3	250	100	2	1.225	100	100	1.2	A08	P	
6WC5	265 414 300		6	1.5	250	100			125	100		UX7	O	
6X2	023 000 000	D <sub>1</sub>	6						D			B3G	D	
6X3	020 000 310	D <sub>1</sub>	6				5		D			A08	R	
6X4	802 309 100		6				30		REC		35mA	B7G	RR	
6X5	028 090 310		6				30		REC		35mA	A08	RR	
6X8	146 231 457		6	{	1.0	100		8.5	5.8	100	60	5.0	} B9A	TR
					1.8	250	150	7.7	4.6	100	150	4.0		
6Y3	020 000 300	D <sub>1</sub>	6				30		REC		15mA	A08	R	
6Y5	208 193 000		6				30		REC		15mA	UX6	RR	
6Y6	026 540 310		6	13.5	150	150	58	7	100	100	7	A08	P	
6Y7	027 446 310		6	0	250		5.3	1.8	150		1.8	A08	TT	
6Z3	381 200 000		6				60		REC		20mA	UX4	R	
6Z4	289 130 000		6				30		REC		45mA	UX5	RR	
6Z5	328 192 000		6				30		REC		15mA	UX6	RR	
6Z6	028 190 310		6				30		REC		15mA	A08	RR	

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6Z7	026 447 310		6	0	175		4.2	0.55	150		0.55	A08	TT
6ZDH3A	264 813 000		6	2	225		1.5	1.5	100		1.2	UX6	DT
6ZPI	265 413 000		6	9	200	200	15	1.75	100	100		UX6	P
6ZY5	028 090 310		6				15		REC		15mA	A08	RR
7A2	642 310 000	S	4	17	250	250	40	3.2	100	PenLF	2.3	B5	P
7A2	045 231 600		4	17	250	250	40	3.2	100	PenLF	2.3	B7	P
7A3	045 231 600		4	6	250	250	32	10	100	100	10	B7	P
7A4	260 0*4 130		6	8	250		9	2.6	100		2.6	B8B	T
7A5	265 004 130		6	9	125	125	44	6	100	90	6	B8B	P
7A6	219 008 130		6				5		D			B8B	RR
7A7	265 104 130		6	3	250	100	9.2	2	100	100	2	B8B	P
7A8	266 451 130		6	1	250	100	14	1.4	100	100	1.6	B8B	O
7AB7	526 141 310		6	2	250	100	4	1.8	100	100	1.2	B8B	P
7AC7	412 365 100		6		300	150	10	9	100	100	8	B7G	P
7AD7	265 104 130		6	2.3	300	150	28	9.5	100	150	9	B8B	P
7AF7	217 446 130		6	9	250		9	2.1	100		2.1	B8B	TT
7AG7	265 114 130		6	2	250	250	6	4.2	200	200	4.2	B8B	P
7AH7	265 114 130		6	2	250	250	6.8	3.3	100	150	3.3	B8B	P
7AJ7	265 104 130		6	3	250	100	2.2	1.575	100	100	1.5	B8B	P
7AK7	265 104 130		6	0	150	90	40	6.5	150	90	6	B8B	P
7AN7	147 234 116		7.5	1.5	90		12	6	100		6	B9A	TT
7AU7	741 226 413		3.5	8.5	250		10.5	2.2	100		2.2	B9A	TT
7B4	260 004 130		6	2	250		0.9	1.5	200		1.5	B8B	T
7B5	265 004 130		6	18	250	250	32	2.3	100	PenLF	2.3	B8B	P
7B6	264 *89 130		6	2	250		0.9	1.1	200		1.1	B8B	DDT
7B7	265 104 130		6	3	250	100	8.5	1.75	100	100	1.7	B8B	P
7B8	265 454 130		6	2	250	100		1.15	100	100	1.1	B8B	H
7C4	2*0 800 130		6				5		D			A08	R
7C5	265 004 130		6	12.5	250	250	45	4.1	100	PenLF	4.1	B8B	P
7C5LT	265 004 130		6	12.5	250	250	45	4.1	100	PenLF	4.1	B8B	P
7C6	264 198 130		6	1	250		1.3	1	250		1	B8B	DDT
7C7	265 114 130		6	3	250	100	2	1.3	100	100	1.3	B8B	P
7D3	045 231 600		40	20	150	125	36	2.4	100	100	3.8	B7	P
7D5	045 231 600		13	16.5	250	250	34	2.35	100	PenLF	2.3	B7	P
7D6	045 231 600		40	6	250	250	32	10	100	100	10	B7	P
7D7	076 451 130		6	3	250	100	1.3	0.27	125	100		B8B	TH
7D8	045 231 600		13	6	250	250	32	10	100	100	10	B7	P
7D9	412 360 500		6	13.5	250	250	16	2.6	100	PenLF	2.6	B7G	P
7D9	045 231 600		13	25	250	250	32	1.8	100	PenLF	1.8	B7	P
7D10	*41 230 651		6	4.5	250	250	40	11	100	150	9	B9A	P
7E5	426 141 630		6	3	175		5.5	3	150		3	B8B	T
7E6	264 *98 130		6	8	250		9.5	1.9	100		1.9	B8B	DDT
7E7	269 854 130		6	3	250	100	7.5	1.3	100	100	1.3	B8B	DDP
7F7	217 446 130		6	2	250		2.3	1.6	200		1.6	B8B	TT
7F8	427 116 340		6	3	250		6	3.3	200		3.3	B8B	TT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
7F16	261 154 130		6	2.5	250	100	6	2.2	100	100	2.2	B8A	P
7G7	265 114 130		6	2	250	100	6	4.5	100	100	4.6	B8B	P
7G8	265 441 730		6	2.5	250	100	4.5	2.1	100	100	2.1	B8B	PP
7H6	265 114 130		6	2.5	250	150	9.5	3.5	100	150	3.5	B8B	P
7H7	265 114 130		6	2	250	150	10	4.2	100	150	4.2	B8B	P
7J7	276 454 130		6	{ 3 3	150 250		6.6 100	1.4 1.4	150 100	60 100	1.4	B8B	TH
7K7	216 498 130		6	2	250		2.3	1.6	200		1.6	B8B	DDT
7L7	265 104 130		6	1.5	250	100	4.5	3.1	100	100	3.1	B8B	P
7N7	217 446 130		6	8	250		9	2.6	100		2.6	B8B	TT
7Q7	266 414 130		6	2	100		15	6	100		4.5	B8B	H
7R1	280 300 000		7.5				60		REC		20mA	UX4	R
7R7	269 854 130		6	1	250	100	6.2	3.4	100	100	3.4	B8B	DDP
7S7	276 454 130		6	{ 1 2	100 250		4.8 100	1.4 4	100 100	60 100	1.8 2.2	B8B	TH
7T7	265 104 130		6	1	250	150	10.8	4.9	100	150	4.9	B8B	P
7V7	265 114 130		6	2	300	150	10	5.8	100	150	5.8	B8B	P
7W7	265 114 130		6	2	300	150	10	5.8	100	150	5.8	B8B	P
7X6	218 009 130		6				30		REC		15mA	B8B	RR
7X7	264 189 130		6	1	250		1.9	1.5	250		1.5	B8B	DDT
7Y4	208 009 130		6				30		REC		30mA	B8B	RR
7Z4	209 008 130		6				60		REC		20mA	B8B	RR
8A1	041 231 500	A	4	1.5	200	75	3.5	4	100	75	4	B7	P
8A1	542 310 000	A	4	1.5	200	75	3.5	4	100	75	4	B5	P
8A2	542 310 000	A	4	2.1	200	100	3	2.4	100	100	2.4	B5	P
8A8	645 237 114		9	{ 2.0 2.0	100 175		14.0 175	5.0 10.0	100 100	60 150	5.0 6.0	B9A	TP
8AU8	146 231 457		8.5	{ 1.25 1.5	150 200		8.5 125	4.9 16	100 100	60 100	5 7	B9A	TP
8AW8	146 231 456		8.4	{ 2 3	200 200		4 150	4 13	100 100	60 100	4 9	B9A	TP
8BA8	146 231 456		8.4	{ 8 3	200 200		8 150	2.7 13	100 100	60 100	5	B9A	TP
8BQ7A	641 237 410		8.4	2	150		9	6.4	100		6	B9A	TT
8CG7	741 236 410		8.4	8	250		9	2.6	100		3	B9A	TT
8CM7	701 236 441		8.4	{ 7 8	200 250		5 20	2.0 4.4	100 100		2.8 4.7	B9A	TT
8CN7	891 221 643		4.2	3	250		1	1.2	100		1.3	B9A	DDT
8CX8	146 231 456		8.0	{ 1.5 2	150 200		9 125	4.6 25	100 100	60 60	4.6	B9A	TP
8D2	061 281 500	G <sub>1</sub>	13	3	250	100	2	1.25	100	100	1.25	B7	P
† 8D3	412 361 500		6	{ 2 1.5	250 200	250	10	7.5	100	PenLF	5	B7G	P
8D4	026 510 310	G <sub>1</sub>	6	2	250	100	3	1.8	100	100	1.8	A08	P

† See note on Page 8.

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
8D5	041 230 651		6	3	250	100	2	1.225	100	100	1.2	B9A	P
8D6	141 230 651		6	2.0	175	175	10.0	2.5	100	100	2.5	B9A	P
8D7	001 230 651	G <sub>1</sub>	6	3	250	100	2	1.25	100	100	1.2	B9A	P
8G140	892 300 000		8				60		REC		20mA	B4	RR
9A1	045 231 500	A	4	1.5	200	75	5	4.25	100	75	4.2	B7	P
9A1	542 310 000	A	4	1.5	200	75	5	4.25	100	75	4.2	B5	P
9A3	061 231 500	G <sub>1</sub>	4	2	250	125	10	1.8	100	100	1.8	B7	P
9A8	645 237 114		9	2	100		14	5	100	60	5	B9A	TP
9AB4	602 304 100		9	2	175	175	10	6.2	150	150	10		
9AK8	†91 238 146		9.5	2.3	200		1.0	1.4	100		1.4	B7G	T
												B9A	DDDT
9AQ8	641 237 410		9	2.1	200		10	5.8	200		5.8	B9A	TT
9AU7	741 226 413		4.7	3.5	250		10.5	2.2	100		2.2	B9A	TT
9BQ7A	641 237 410		8.4	2	150		9	6.4	100		6	B9A	TT
9BM5	412 365 400		9	6	250	250	30	7				B9A	P
9BW6	*41 230 651		9	12.5	250	250	45	4.1	100	150	4	B9A	P
9D2	061 231 500	G <sub>1</sub>	13	3	250	125	10.5	1.65	100	100	1.8	B7	P
9D6	412 361 500		6	2.5	250	200	8	2.5	100	100	2.5	B7G	P
9D7	141 230 651		6	1.5	250	100	10	8.4	100	100		B9A	P
9J6	762 344 100		9	0.85	100		8.5	5.3	100		5.3	B7G	TT
9P9	412 365 400		9	6	250	250	30	7	100	100		B9A	P
9U8	645 237 114		9.5	1.0	150		18.0	8.5	100	60	8.5	B9A	TP
				1.0	250	100	10.0	5.2	100	100	5.0		
10	264 300 000		7.5	32	350		16	1.55	100		1.55	UX4	T
10C1	276 454 130		28	3.3	100		6	3	100	60	3	B8A	TH
				2.5	175	100	8	2.5	100	100	2.5		
10C2	276 454 130		28	3.3	100		6.0	3.0	100	60	3.0	B8A	TP
				1.5	175	100	3.0	5.0	100	100	5.0		
10C8	641 237 541		10.5	2.7	250		7.3	4.4	100	60	5	B9A	TP
				1.5	125	125	11.5	8.0	125	125	8		
10D1	892 310 000		13				5		D			B5	RR
10D2	192 310 800		19				5		D			B7G	RR
10F1	261 514 130		22	1.8	200	200	10	9	100	150	7	B8A	P
10F3	260 154 130		22	2.35	200	200	6	6.5	100	150	7	B8A	P
10F9	260 154 130		13	2.5	175	100	7	2.3	100	100	2.3	B8A	P
10F18	141 230 651		13	1.3	175	100	12	4.5	100	100		B9A	P
10L1	412 314 600		19	1.5	250		10	8.5	100		8	B7G	T
10LD3	264 098 130		14	1.1	150		0.5	1.95	150		1.9	B8A	DDT
10LDJ1	264 098 130		15	5.9	250		5	2.3	100		3	B8A	DDT
10PI3	260 054 130		30	6.0	150	150	30	7.5	100	100	6.0	B8A	P
10PI4	026 540 310		40	9.4	175	175	40	7.2	100	PenLF	6	A08	P
11	362 400 000		1.1	4.5	90		2.5	0.425	80		0.4	UX4	T
11A2	908 231 600	G <sub>1</sub>	4	2	200		3	2.8	100		2.8	B7	DDT
11D3	908 231 600	G <sub>1</sub>	13	2	250		0.6	1.1	100		1.1	B7	DDT
11D5	908 231 600	G <sub>1</sub>	13	3	250		3.8	1.5	150		1.5	B7	DDT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
11E1	216 540 030		6		250	250	50	7.3	100	100	7	M08	P
11E2	020 540 310	A	6		200	200	25	9	100	150	8	A08	P
11E8	200 647 310	G <sub>1</sub>	11		150		20		100			A08	TT
11X5	028 090 310		11				30		REC		15mA	A08	RR
12	364 200 000		1.1	4.5	90		2.5	0.425	80		0.4	UX4	T
12A	264 300 000		5	4.5	90		5	1.5	80		1.5	UX4	T
12A4	142 330 406		6	9.0	250		23	8.0	250		8.0	B9A	T
12A5	265 413 200		6	15	100	100	17	1.7	100	90	1.7	UX7	P
12A6	026 540 310		12.5	12.5	250	250	30	3	100	PenLF	3	A08	P
12A7	265 181 300	G <sub>1</sub>	12.5	{ 12.5	150	150	30 9	0.975	REC 100	100	15mA 0.9	Sm7	RP
12A8	026 545 310	G <sub>1</sub>	12.5	8	250	100	3.5	1.15	100	100	1.1	A08	H
12AB5	504 234 156		12	12.5	250	250	45.0	4.1	250	200	4.0	B9A	P
12AC5	26* *54 130		12	3	200	125	7.2	2.3	100	150	2.3	B8A	P
12AD7	641 227 413		6	2	250		1.25	1.6	100			B9A	TT
12AH7	417 146 230		12.5	3.6	100		3.7	1.55	80		1.55	A08	TT
12AH8	541 227 463		6	{ 0 3	100 250	100	5.7 2.6	3.5	100 100	60 100	3.5 2.8	B9A	TH
12AK7	741 226 413		6	2	250		1.2	1.6	150		1.6	B9A	TT
12AJ7	541 237 464		12	{ 2.5	100 22.5	90	4 3	2.0 0.65	100 100	60 100	2	B9A	TH
12AJ8	541 237 464		12	{ 1.2	60 100	60	2.5 1.7		60 100	60 60		B9A	TH
12AL5	192 310 800		12.5				5		D			B7G	RR
12AQ5	412 365 400		12.5	12.5	250	250	45	4.1	100	150	4	B7G	P
12AS5	142 345 600		12	8.5	150	100	35	5.6	150	100	5.6	B7G	P
12AT6	412 389 600		12.5	3	250		1	1.2	100		1.2	B7G	DDT
12AT7	741 226 413		6	2	250		10	5.5	200		5	B9A	TT
12AU4	001 080 230		12				120		REC		40mA	A08	R
12AU6	412 365 100		12.5	1	250	150	10.8	5.2	100	100	5.2	B7G	P
12AU7	741 226 413		6	8.5	250		10.5	2.2	100		2.2	B9A	TT
12AV5	421 060 350		12	22.5	250	150	57	5.9	100	100	5.8	A08	P
12AV6	412 389 600		12.5	2	250		1.2	1.6	100		1.2	B7G	DDT
12AV7	741 226 413		6	1.0	150		18	8.5	100		7	B9A	TT
12AW6	412 365 100		12.5	1.5	250	150	7	5	100	PenLF	5	B7G	P
12AW7	412 365 100		12.5	1.8	250	150	7	5	100	150	5	B7G	P
12AX4	001 080 230		12.5				120		REC		35mA	A08	R
12AX7	741 226 413		6	2	250		1.2	1.6	150		1.6	B9A	TT
12AY7	641 227 413		6	4	250		3	1.75	100		1.7	B9A	TT
12AZ7	741 226 413		6.3	2.0	250		10.0	5.5	100		5.5	B9A	TT
12B4	142 330 406		6	17.5	150		34.0	6.4	150		6.3	B9A	T
12B6	026 080 310	G <sub>1</sub>	12.5	2	250		0.9	1.1	150		1.1	A08	DT
12B7	265 104 130		12.5	3	250	100	9.2	2	100	100	2	B8B	P
12B8	127 561 340	G <sub>1</sub>	12.5	{ 1.1 3	100 100	100	0 8	0.6 2.1	100 90	60 90	1.5 1.8	A08	TP



VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
12BA6	412 365 100		12.5	1	250	100	11	4.4	100	100	4.4	B7G	P
12BA7	641 231 105		12.5	2	100		18	7	100		7	B9A	H
12BD6	412 365 100		12.5	3	250	100	9	2	100	100	2	B7G	P
12BE6	412 366 100		12.5	2	100		11	7	100		5	B7G	H
12BF6	412 398 600		12.5	9	250		9.5	1.9	100		1.9	B7G	DDT
12BH7	741 226 413		6	10.5	250		11.5	3.1	100		4	B9A	TT
12BK5	604 231 450		12	5.0	250	250	35.0	8.5	100	150	8.0	B9A	P
12BK6	412 389 600		12.5	2	250		1.2	1.6	150		1.6	B7G	DDT
12BN6	142 354 600		12.5	1	60	60	0.25	1	80	60	1	B7G	P
12BQ6	020 540 310	A <sub>1</sub>	12	22.5	250	150	57	5.9	100	100	5	A08	P
12BR7	641 228 913		6	2	250		10	5.5	100		4	B9A	DDT
12BT6	412 389 600		12.5	3	250		1.0	1.2	150		1.2	B7G	DDT
12BU6	412 389 600		12.5	9	250		9.5	1.9	150		1.9	B7G	DDT
12BV7	141 223 651		6	2.2	250	150	27	13	100	100		B9A	P
12BW4	800 230 901		12				30		REC		15mA	B9A	RR
12BY7	141 223 651		6	2.1	250	150	25	12.0	150	100	10.0	B9A	P
12BZ7	741 226 413		6	2.0	250		2.5	3.2	100		3.0	B9A	TT
12C5	142 345 600		12	7.5	125	100	49	7.5	100	90	6	B7G	P
12C8	026 985 310	G <sub>1</sub>	12.5	3	250	125	10	1.325	100	100	1.3	A08	DDP
12CA5	142 345 600		12	4.5	125	125	36	9.2	100	100	8	B7G	P
12CM6	504 234 106		12	12.5	250	250	45	4.1	100	100		B9A	P
12CR6	182 365 400		12	2	250	100	9.6	2.2	100	100	2	B7G	DP
12CS6	112 365 400		12	1	100	30	0.8	1.5	No Data Available			B7G	P
12CT8	641 237 541		12	{ 1.4	150		9	4.9	100	60	4.5	B9A	TP
12CU5	142 345 600		12	{ 1.5	200	125	15	7	100	100			
12CU6	020 540 310	A <sub>1</sub>	12	8	125	100	50	7.5	100	100	7	B7G	P
12D4	**1 *8* 230		12	22	250	150	57	5.9	100	100		A08	P
12DA6	041 230 651		12	1	175	100	12	4.4	100	100		A08	D
12DQ6	020 540 310	A <sub>1</sub>	12	22.5	250	150	75	6.6	100	100		A08	P
12E1	020 540 310	A <sub>1</sub>	6	18	150	150	100	9.6	100	100	10	A08	P
12E5	026 040 310		12.5	13.5	250		5	1.45	100		1.4	A08	T
12E8	027 546 310	G <sub>1</sub>	12	{ 2	100		3.3		100	60		A08	TH
12F	280 300 000		5	{ 2	100	100	3	0.56	100	100	0.56		
12F5	020 600 310	G <sub>1</sub>	12.5	2	250		60	0.9	REC		20mA	UX4	R
12G4	602 364 100		12	8	250		10	3.0	150		1.5	A08	T
12G7	026 980 310	G <sub>1</sub>	12.5	3	250				100		3	B7G	T
12G8	714 226 143		6						D			A08	DD
12H4	623 364 100		6	8	250		9	2.6	90		3	B7G	T
12H6	029 180 310		12.5						D		4	A08	DD
12J5	026 040 310		12.5	8	250		9	2.6	100		2.6	A08	T
12J7	026 510 310	G <sub>1</sub>	12.5	3	250	100	2	1.225	100	100	1.2	A08	P
12K7	026 510 310	G <sub>1</sub>	12.5	3	250	125	10.5	1.65	100	100	1.6	A08	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE		
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V				
12K8	027 546 310	G <sub>1</sub>	12.5	1 3	100		8	2.5	100	60	3	A08	TH		
12L6	026 540 310		12		250	100	4	1.2	100	100	1.6		A08	P	
12L8	414 752 360		12.5		8.25	200	125	46	8.0	100	100		8.0	A08	PP
12M7	026 510 310	G <sub>1</sub>	12	2.5	100	100	6	2.2	100	100	2.2	A08	P		
12NK7	026 510 310	G <sub>1</sub>	12.5	2	250	100	5	2.3	100	100	2.3	A08	P		
12Q7	026 980 310	G <sub>1</sub>	12.5	3	250		1	1.2	150		1.2	A08	DDT		
12S7	268 154 130		13	2	200	90	5	2	100	100	1.9	B8A	DP		
12S8	†18 916 230	G <sub>1</sub>	12.5	2	250		0.9	1.1	150		1.1	A08	DDDT		
12SA7	126 641 340		12.5	3.6	100		12	4.3	100		4.5	A08	H		
12SA7G	026 641 340		11.5	3.6	100		12	4.3	100		4.5	A08	H		
12SC7	074 461 230		12.5	2	250		2	1.325	150		1.3	A08	TT		
12SF5	014 060 320		12.5	2	250		0.9	1.5	150		1.5	A08	T		
12SF7	041 586 230		12.5	1	250	100	12.9	2.05	100	100	2	A08	DP		
12SG7	021 415 360		12.5	1	250	125	11.8	4.7	100	100	4.7	A08	P		
12SH7	021 415 360		12.5	1	250	150	10.8	4.9	100	150	4.9	A08	P		
12SJ7	021 415 360		12.5	3	250	100	3	1.65	100	100	1.6	A08	P		
12SK7	021 415 360		12.5	3	250	100	9.2	2	100	100	2	A08	P		
12SL7	461 471 230		12.5	2	250		2.3	1.6	150		1.6	A08	TT		
12SN7	461 471 230		12.5	8	250		9	2.6	100		2.6	A08	TT		
12SQ7	041 896 230		12.5	2	250		0.9	1.1	150		1.1	A08	DDT		
12SR7	041 986 230		12.5	9	250		9.5	1.9	100		1.9	A08	DDT		
12SS7	021 415 360		12.5	3	250	100	9	1.85	100	100	1.8	A08	P		
12SW7	041 986 230		12.5	9	250		9.5	1.9	100		1.9	A08	DDT		
12SX7	471 461 230		12.5	8	250		9	2.6	100		2.6	A08	TT		
12SY7	126 641 340		12.5	1	100		22	4.5	100		4.5	A08	H		
12TE8	427 546 310		12	100 250			3.4		100	60		A08	TH		
12TE9	651 237 440		12		100			3.4		100	60			B9A	TH
12V6	026 540 310		12.5		12.5	250	250	45	4.1	100	150		4	A08	P
12W6	026 540 310		12	9.5	150	150	58	8.0	100	100	8.0	A08	P		
12WC5	265 414 300		12	1.5	250	100			No Data Available			UX7	O		
12X3	210 300 000	D <sub>1</sub>	12.5				60		REC		20mA	UX4	R		
12X4	802 309 100		12.5				30		REC		15mA	B7G	RR		
12Y4	892 310 000		12				31		REC		15mA	UX4	RR		
12Z3	281 300 000		12.5				60		REC		60mA	UX4	R		
12Z5	281 319 200		6				30		REC		15mA	UX7	RR		
12ZDH3A	264 813 000		12	2	225		1.5	1.5	125		1.2	UX6	DT		
12ZPIA	265 413 000		12	9	200	200	30	2.3	100	PenLF		UX6	P		
13	298 300 000		5				60		REC		20mA	UX4	RR		
13BCIU	206 081 930	G <sub>1</sub>	12.5	1.8	200		3	2	150		2	B8B	DDT		
13BF2U	206 581 930	G <sub>1</sub>	12.5	2.1	200	200	5	2	100	200	2	B8B	DDP		
13D1	461 471 230		25	8	250		2	2.6	100		2.5	A08	TT		
13D2	461 471 230		6	8	250		9	2.6	100		2.6	A08	TT		

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
13D3	741 226 413		6	4.6	250		6	2.3	100		2.3	B9A	TT
13DHA	908 231 600	G <sub>1</sub>	13	1.5	250		1	1.5	100		1.5	B7	DDT
13F9U	206 501 130	G <sub>1</sub>	12.5	2.6	200	200	6.2	2.2	100	200	2.2	B8B	P
13H1	023 110 560	G <sub>1</sub>	3	2	200	100	3	2	100	100	2	8SC	P
13H2	023 110 560	G <sub>1</sub>	13	3	200	100	8.2	1.8	100	100	1.8	8SC	P
13PGA	645 231 700	G <sub>1</sub>	13	{ 20 3	200		4		100	60		} B7	H
13SPA	061 231 500	G <sub>1</sub>	13	3	200	100	3.5		100	100			
13VI	023 189 560	G <sub>1</sub>	13	8.5	200	200	45	4.4	100	PenLF	4	8SC	DDP
13VPA	061 231 500	G <sub>1</sub>	13	3	200	100	7	1.8	100	100	1.8	B7	P
14	265 130 000	G <sub>1</sub>	14	3	250	90	4	1.05	100	90	1	UX5	P
14A4	260 0*4 130		12.5	8	250		9	2.6	100		2.6	B8B	T
14A5	265 004 130		12.5	12.5	250	250	30	3	100	PenLF	3	B8B	P
14A7	265 104 130		12.5	3	250	100	9.2	2	100	100	2	B8B	P
14AF4	216 447 130		12	10	250		9	2.1	100		2	B8B	TT 8
14AF7	216 447 130		12.5	9	250		9	2.1	100		2.1	B8B	TT
14B6	264 *89 130		12.5	2	250		0.9	1.1	150		1.1	B8B	DDT
14B8	265 454 130		12.5	2	250	100		1.15	100	100	1.1	B8B	H
14C5	265 004 130		12.5	12.5	250	250	47	4.1	100	PenLF	4.1	B8B	P
14C7	265 114 130		12.5	3	250	100	2.2	1.575	100	100	1.5	B8B	P
14E6	264 *98 130		12.5	8	250		9.2	1.9	100		1.9	B8B	DDT
14E7	269 854 130		12.5	3	250	100	7.5	1.3	100	100	1.3	B8B	DDP
14F6	026 540 310		14	16.5	250	250	35	2.5	100	150	2.5	A08	P
14F7	217 446 130		12.5	2	250		2.3	1.6	150		1.6	B8B	TT
14F8	427 116 340		12.5	3	250		6	3.3	150		3.3	B8B	TT
14H7	265 114 130		12.5	2	250	150	10	4.2	100	100	4.2	B8B	P
14J7	276 454 130		12.5	{ 3 3	150		6.6	1.4	100	60	1.4	} B8B	TH
					250	100	1.4		100	100			
14K7	276 454 130		14	{ 2.0 2.0	100		6.4	2.2	100	60	2.8	} B8A	TH
					200	90	2.7	1.5	100	75	1.5		
14L7	264 098 130		14	1.6	175		15	1.65	150		1.65	B8A	DDT
14N7	217 446 130		12.5	8	250		9	2.6	100		2.6	B8B	TT
14Q7	266 414 130		12.5	2	100		15	6	100		4.5	B8B	H
14R7	269 854 130		12.5	1	250	100	6.2	3.4	100	100	3.4	B8B	DDP
14S7	276 454 130		12.5	{ 1 2	100		4.8	1.4	100	60	1.6	} B8B	TH
					250	100	4	2	100	100	2.2		
14V7	265 104 130		12.5	2	300	150	9.6	5.8	100	100	5.8	B8B	P
14W7	265 114 130		12.5	2.2	300	150	10	5.8	100	100	5.8	B8B	P
14X7	264 189 130		12.5	1	250		1.9	1.5	150		1.5	B8B	DDT
14Y4	208 009 130		12.5				30		REC		15mA	B8B	RR
14Z3	281 300 000		12.5				60		REC		20mA	UX4	R
15	265 130 000	G <sub>1</sub>	2	1.5	150	75	1.85	0.75	100	75	0.75	UX5	P
15	264 300 000		2.5	33	250		22	2.35	100		2.0	UX4	T
15A2	645 231 700	G <sub>1</sub>	4	{ 20 3	200		4		100	60		} B7	H
					250	100	3.5		100	100			

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
15A6	541 231 600		15	2.9	175	175	36	10	100	100	2	B9A	P
15A8	124 541 360	A <sub>2</sub>	15	8	250		9	2.6	100	60	2	A08	TP
				7.5	100	100	45	7.3	100	100	7.5		
15D1	645 231 700	G <sub>1</sub>	13	20	200		4		100	60		B7	H
				3	250	100	3.5		100	100			
15D2	645 231 700	G <sub>1</sub>	13	20	200		4		100	60	0.6	B7	H
				3	250	100	3.5		100	100	4.6		
15X6	029 180 310		25				30		REC		15mA	A08	RR
16	280 300 000		7.5				60		REC		20mA	UX4	R
16A5	*41' 23* 6*5		16	14.2	200	200	45	7.5	100	100	7	B9A	P
16A8	414 237 516		16	0	100		3.0	2.2	100	60	3.0	B9A	TP
				11.5	175	175	41	7.5	100	100	6.0		
160N8	414 237 516		15	16	100		3.3	3.6	100	60	3.6	B9A	TP
					200	200	35	6.4	100	100			
16D1	046 231 700		13		300		45		100			B7	TT
17	264 130 000		14	6	90		2.7	0.8	80		0.8	UX5	T
17AV5	421 060 350		16	22.5	250	150	57	5.9	100	100	5.8	A08	P
17AX4	001 080 230		16				120		REC		35mA	A08	R
17BQ6	020 540 310	A <sub>1</sub>	17	22.5	250	150	75	6.6	125	100		A08	P
17C5	142 345 600		16	7.5	125	100	49	7.5	100	90	6	B7G	P
17C8	541 236 891		17	2	200	125	5	2.2	100	100	2	B9A	DDP
17D1	869 231 500	G <sub>1</sub>	13	3	250	125	9	1.1	100	100	1.1	B7	DDP
17DQ6	020 540 310	A <sub>1</sub>	16	22.5	250	150	75	6	125	100		A08	P
17N8	541 236 891		17	2.0	200	75	5	2.2	100	75	2	B9A	DDP
17Z3	*** 23* **8	C	17				120		REC		60mA	B9A	R
18	265 413 000		14	16.5	250	250	34	2.5	100	PenLF	2.5	UX6	P
18A5	421 060 350		18	17	200	125	40	4.8	100	100		A08	P
18AK5	412 365 100		18	2.5	175	125	7.7	5.1	125	100	5.1	B7G	P
18AQ5	412 365 100		18	7.2	175	175	28	3.5	100	125	3.5	B7G	P
18C51	214 607 413		18	2	150		8.2	5.5	125		5.4	B9A	TT
18J6	672 344 100		18	1	100		6.5	5	100		5	B7G	T
19	364 472 000		2	3	150		1.7		100			UX6	TT
19AJ8	541 237 164		19	3.0	100		5.0	2.3	100	60	2.3	B9A	TH
				2.0	250	100	6.5	2.4	150	100	2.4		
19AQ5	412 365 400		19	12.5	250	250	47	4.1	100	150	4	B7G	P
19AU4	**1 080 230		19				120		REC		40mA	A08	R
19BD	**1 23* **8		19				60		REC		16mA	B9A	R
19BG6	021 040 350	A	19	15	250	250	75	6.0	100	PenLF	6.0	A08	P
19BY7	141 231 651		19	2	170	100	9.7	5.9	200	100	6	B9A	P
19C8	8†1 239 146		19	1	100		0.5	1.25	100		1.2	B9A	DDDT
19D8	541 237 464		19	0	100		13.5	3.7	100	60	3.7	B9A	TH
				2.6	200	125	7.6	2.4	100	100	2.4		
19G3	020 000 300	D <sub>1</sub>	4				30		REC		17mA	A08	R
19G6	112 311 100	D <sub>1</sub>	4				30		REC		15mA	B7G	R
19H1	002 300 000	D <sub>1</sub>	4				60		REC		23mA	B4	R
19H4	020 000 300	D <sub>1</sub>	2.5				30		REC		13mA	A08	R

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
-19J6	762 344 100		19	1	100		8.5	5.3	100		5.3	B7G	TT
19SU	**1 23* **8		19				120		REC		36mA	B9A	R
19T8	†91 238 146		19	3	250		1	1-2	150		1-2	B9A	DDDT
19U3	**1 23* **8		19				120		REC		40mA	B9A	R
19V8	-681 234 †19		19	3	250		1	1-2	100		1-3	B9A	DDDT
19W3	**1 23* *08		19				120		REC		35mA	B9A	R
19X3	**1 23* **8		19				120		REC		60mA	B9A	R
19X8	146 231 457		19	{ 1-0 1-8	100 250	150	8.5 7.7	5-8 4-6	100 100	60 150	5-0 4-0	B9A	TP
19Y3	**1 23* **8		19				120		REC		60mA	B9A	R
20	364 200 000		3	16.5	90		3	0-415	80		0-4	UX4	T
20A1	645 231 700	G <sub>1</sub>	4	{ 12.5 1-5	100 250	75	2.3 2.2		100 100	60 75	1-2 2-8	B7	TH
20D1	182 310 900		9.5				5		D			B7G	RR
20D2	745 231 600	G <sub>1</sub>	13	{ 7.5 3	100 250	100	3.8 2.5		100 100	60 100		B7	TH
20D3	541 227 463		6	{ 1 3	100 250	100	3-6		100 100	60 100	3-6	B9A	TH
20F2	260 154 130		11	1-25	150	150	27	10-6	100	100	9-0	B8A	P
20J8	027 546 310	G <sub>1</sub>	20	{ 1-5 3	100 250	100	1-5 1-5		100 100	100		A08	H
20L1	274 164 130		12	12-0	250		10-0		100		2-8	B8A	TT
20P1	020 540 310	A	38	30	200	200	80	6	100	100	5	A08	P
20P2	020 540 310	A	38	7.5	225	225		13.5	100	100	10	A08	P
20P3	026 540 310		20	9-4	175	175	42	7-2	100	100	6	A08	P
20P4	020 540 310	A	38	33	200	200	70	10-0	No Data Available			A08	P
20P5	260 054 130		20	6.3	180	150	29	7.5	100	100	7-0	A08	P
21A6	*41 23* *51	A	21	28	200	200	40	6	100	100	5	B9A	P
21A7	276 454 130		21	{ 3 3	150 250	100	3.5 1.3		100 100	60 100		B8B	TH
21B6	*41 23* *51	A <sub>1</sub>	21	23	175	175	45	6-5	100	100		B9A	P
21TH8	027 546 310	G <sub>1</sub>	21	{ 2-5 1-5	100 200	90	4 3	2 0-75	100 100	60 90	2	A08	TH
22	365 200 000	G <sub>1</sub>	3	1-5	150	50	1.7	0-375	125	60	0-5	UX4	P
22AC	265 300 000	G <sub>1</sub>	2.5	3	90	90	4	1-05	80	90	1	UX4	P
24	264 300 000		2	13.5	175		8	1-6	100		1-2	UX4	T
24A	265 130 000	G <sub>1</sub>	2.5	3	175	90	4	1	100	90	1	UX5	P
24B	265 130 000	G <sub>1</sub>	2.5	3	175	90	4	1	100	90	1	UX5	P
24NG	281 193 000		40				30		REC		15mA	UX6	RR
24S	265 130 000	G <sub>1</sub>	2.5	3	175	90	4	1	100	90	1	UX5	P
25	542 300 000	A	2		150	75	2.5	1	100	75	1	B5	P
25	268 843 000		2	3	125		1	0-5	125		0-5	UX6	DDT
25A6	026 540 310		25	18	150	125	33	2-375	100	90	3-5	A08	P
25A7	126 548 310		25	{ 15 0	100 125	100	60 20.5	1-8	100	90	20mA 1-8	A08	RP
25ACID	206 008 030	G <sub>1</sub>	1-4	0	125		0.76	0-4	100		0-4	A08	DT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
25AV5GA	421 060 350		25	22.5	250	150	57	5.9	100	100	5.8	A08	P
25AX4	001 080 230		25				120		REC		30mA	A08	R
25B6	026 540 310		25	22	150	150	61	5	100	100	5	A08	P
25B8	127 561 340	G <sub>1</sub>	25	1-0 3-0	100		0.6	1.5	100	60	1.5	A08	TP
					100	100	7.6	2.0	100	100	2.0		
25BG6	021 040 350	A <sub>1</sub>	25	22	125	125	69	5.0	No Data Available			A08	P
25BK5	604 231 450		25	5	250	250	35	8.5	100	150	8	B9A	P
25BQ6	020 540 310	A	25	22.5	250	150	57	5.9	100	100	5	A08	P
25C5	142 345 600		25	7.5	125	100	49	7.5	100	90	6	B7G	P
25C6	026 540 310		25	14	200	150	61	7.1	100	100	7	A08	P
25CA5	142 345 600		25	4.5	125	125	36	9.2	125	125	9.2	B7G	P
25CD6	021 040 350	A	25	30	175	175	75	7.5	100	100	7.5	A08	P
25CU6	020 540 310	A	25	22.5	250	150	57	5.9	100	100	6.0	A08	P
25D8	127 546 380	G <sub>1</sub>	25	1-0 3-0	100		0.5	1.1	100	60	1.1	A08	DTP
					100	100	8.5	1.9	100	100	1.9		
25DN6	021 040 350	A <sub>1</sub>	25	18	125	125	70	9	No Data Available			A08	P
25DQ6	020 540 310	A <sub>1</sub>	25	22.5	250	150	75	6	100	100		A08	P
25E5	020 540 310	A <sub>1</sub>	25	21	175	175	100	11	No Data Available			A08	P
25EC6	021 040 350	A <sub>1</sub>	25	22.5	125	125	70	7.5	No Data Available			A08	P
25FID	206 501 030	G <sub>1</sub>	1-4	2.5	125	125	1.2	0.72	100	100	0.7	A08	P
25F5	142 345 600		25	7.5	100	100	37	5.8	No Data Available			B7G	P
25L6	026 540 310		25	8.25	200	125	46	8	100	90	8	A08	P
25MK15	002 380 100		25				25		REC		20mA	B7G	R
25RE	281 193 000		25				30		REC		15mA	UX6	RR
25SN7	461 471 230		25	8	250		9	2.6	REC		2.5	A08	TT
25S	268 943 000		2	3	150		0.8	0.57	100		0.57	UX6	DDT
25T3G	020 000 310	D <sub>1</sub> D <sub>2</sub>	25				60		REC		15mA	A08	RR
25U4	001 080 230		25				120		100		30mA	A08	R
25V5	028 190 310		25				60		REC		20mA	A08	RR
25W4	001 080 230		25				120		REC		30mA	A08	R
25W6	026 540 310		25	8.5	250	125	46	8	100	100	8	A08	P
25W9	001 080 230		25				120		REC		30mA	A08	R
25X4	020 080 310		25				120		REC		30mA	A08	R
25X5	020 080 310		25				120		REC		30mA	A08	RR
25X6	028 190 310		25				30		REC		15mA	A08	RR
25Y4	020 080 310		25				60		REC		20mA	A08	R
25Y5	281 193 000		25				60		REC		40mA	UX6	RR
25Y5G	028 190 310		25				60		REC		40mA	A08	RR
25Y6	028 190 310		25				30		REC		15mA	A08	RR
25Z3	281 300 000		25				60		REC		20mA	UX4	R
25Z4	028 080 310		25				120		REC		60mA	A08	R
25Z5	291 183 000		25				60		REC		60mA	UX6	RR
25Z6	029 180 310		25				60		REC		60mA	A08	RR
26	264 300 000		1.5	10	150		5.5	1.1	100		1.1	UX4	T
26A6	412 365 100		26	1.8	250	250	10.5	4	100	100	4	B7G	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
26A7	414 752 360		26	4.5	30	30	20	5.5	No Data Available			A08	PP
26AQ8	641 237 410		26	1.5	175		8.7	6	100	6		B9A	TT
26B6	026 540 310		35	18	250	125	33	2.375	100	90	2.3	A08	P
26BK6	412 389 600		26	2	250		1.2	1.6	150		1.6	B7G	DDT
26BQ6	020 540 310	A <sub>1</sub>	25	22.5	250	150	55	5.8	100	100		A08	P
26C6	412 398 600		26	9	250		9.5	1.9	100		1.9	B7G	DDT
26CG6	412 365 100		26		250	150	9	2	100	100		B7G	P
26D6	412 365 100		26	0	100	100	2.7	7.2	100	100	6	B7G	H
26E6	026 540 310		26	14	200	125	60	7.1	100	100	7	A08	P
26NG	281 193 000		40				30		REC		15mA	UX6	RR
26Z5W	801 229 013		13				30		REC		15mA	B9A	RR
26Z6	801 239 010		26				60		REC		15mA	B9A	RR
27	264 130 000		2.5	21	250		5.2	0.95	100		0.95	UX5	T
27S	264 130 000		2.5	21	250		5.2	0.95	100		0.95	UX5	T
27SU	320 080 210		13				120		REC		70mA	A08	R
27SV	230 080 310		13				180		REC		40mA	A08	R
28AK8	811 239 146		28	2	200		1.3	1.5	100		1.4	B9A	DDDT
28AX8	811 239 146		28	1.0	100		0.8	1.4	100		1.45	B9A	DDDT
28D7	245 671 430		28	3.5	30	30	12.5	3.4	No Data Available			B8B	PP
28Z5	208 009 130		28				60		REC		20mA	B8B	RR
29	264 413 000		2.5	3	175		4.5	1.45	100		1.4	UX6	T
29CI	220 283 330		4						D			A08	D
30	364 200 000		2	9	150		3	0.9	100		0.9	UX4	T
30A5	142 345 600		30	6.7	100	100	43	9.2	No Data Available			B7G	P
30CI	645 237 114		9	{ 2.0 2.0	100 175		14 175	5.0 10.0	100	60	5.1 6.0	B9A TP	
30F5	141 230 651		7.5	1.8	175	175	10	8.8	100	100		B9A	P
30FLI	641 237 541		9.4	{ 7.9 2.1	200 175		10 175	3.6 7.5	100	60		B9A TP	
30GP9	026 543 100		30	19	200	100	45	3.5	100	100		A08	P
30LI	147 234 116		7.5	3.4	150		16.0	6.6	100		6.0	B9A	TT
30P4	02* 540 310	A <sub>1</sub>	25	21	175	175	100	11	No Data Available			A08	P
30P12	*41 23* 6*5		12	10.3	175	175	31	6.7	100	100		B9A	P
30P14	026 540 310		13	9.4	175	175	42	7.2	100	100		A08	P
30P16	041 230 605		16	14.2	200	200	45	8.2	100	100	7	B9A	P
30PLI	641 237 154		13	{ 7.9 9.6	200 175		10 175	3.4 28	100	60		B9A TP	
30X	264 300 000		2	12.5	175		3.1	9.3	100		9	UX4	T
31	364 200 000		2	22.5	150		8	0.925	100		0.9	UX4	T
31A3	280 000 130		31				60		REC		20mA	B8A	R
32	365 200 000	G <sub>1</sub>	2	3	150	75	1.7	0.64	100	75	0.6	UX4	P
32E	365 200 000	G <sub>1</sub>	2	3	150	75	1.7	0.64	100	75	0.6	UX4	P
32L7	126 548 310		32.5	{ 5	90	90	38	6	REC		20mA 6	A08 RP	
33	364 520 000		2	14	150	150	14.5	1.45	100	100	1.4	UX5	P

VALVE	SELECTOR SWITCH No.	T.C.	Vi	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
33A/100A	020 440 310	A <sub>1</sub> A <sub>2</sub>	6	14	300		10	3	No Data Available			A08	TT
33A/138A	204 140 300	A <sub>1</sub> A <sub>2</sub>	6	7	250		15	3	100		3	UX7	TT
33A/158M	216 447 130		6	5	200		20	2.8	100		2.8	B8B	TT
33B/152M	421 342 134	A <sub>1</sub> A <sub>2</sub>	6	1	300		40.0	18.5	No Data Available			B9G	TT
34	365 200 000	G <sub>1</sub>	2	3	150	75	2.8	0.6	100	75	0.6	UX4	P
34E	365 200 000	G <sub>1</sub>	2	3	150	75	2.8	0.6	100	75	0.6	UX4	P
35	265 130 000	G <sub>1</sub>	2.5	3	250	90	6.5	1.05	100	75	1.05	UX5	P
35A5	265 004 130		35	8	200	100	41	5.9	100	90	5.9	B8B	P
35B5	412 365 400		35	7.5	125	100	40	5.8	100	90	5.8	B7G	P
35C5	142 345 600		35	7.5	125	100	40	5.8	100	90	5.8	B7G	P
35L6	026 540 310		35	7.5	200	100	40	5.8	100	90	5.8	A08	P
35QL6	451 236 154		35	11.5	175	175	52	9.5	100	100	8.3	B8A	P
35RE	281 193 000		35				60		REC		20mA	UX6	RR
35S	265 120 000	G <sub>1</sub>	2.5	3	250	90	6.5	1.08	100	90	1.8	UX5	P
35W4	002 383 100		27.5				60		REC		70mA	B7G	R
35X4	**2 38* 100		35				60		REC		20mA	B7G	R
35Y4	280 200 130		27.5				60		REC		20mA	B8B	R
35Y5	280 200 130		27.5				60		REC		20mA	B8B	R
35Z3	280 000 130		35				120		REC		60mA	B8B	R
35Z3LT	280 000 130		35				120		REC		60mA	B8B	R
35Z4	020 080 310		35				120		REC		60mA	A08	R
35Z4GT	020 080 310		35				120		REC		60mA	A08	R
35Z5	022 080 310		27.5				60		REC		60mA	A08	R
35Z6	028 190 310		35				60		REC		20mA	A08	RR
36	265 130 000	G <sub>1</sub>	6	3	250	90	3.2	1.08	100	90	1.08	UX5	
37	264 130 000		6	18	250		7.5	1.1	100		1.1	UX5	T
38	265 130 000	G <sub>1</sub>	6	18	175	175	14	1.05	100	100	1.05	UX5	P
39	265 130 000	G <sub>1</sub>	6	3	175	90	5.8	1	100	90	1	UX5	P
40	364 200 000		5	1.5	175		0.2	0.2	150		0.2	UX4	T
40PPA	045 231 600		40	25	150	150	36	2	100	100	4	B5	P
40SUA	802 310 000		40				60		REC		60mA	B5	R
40Z5	022 080 310		35				120		REC		30mA	A08	R
41	265 413 000		6	18	250	250	32	2.3	100	100	2.3	UX6	P
41E	265 413 000		6	18	250	250	32	2.3	100	100	2.3	UX6	P
41FP	642 310 000		4	18	250		19	2.8	100		2.8	B5	T
41M	026 540 310		6	18	250	250	32	2.3	100	PenLF	2.3	A08	P
41MDG	652 310 000	G <sub>1</sub>	4	0	150	100		0.25	150	100	0.25	B5	P
41MH	642 310 000		4	1.5	200		3.2	3	100		4	B5	T
41MHF	642 310 000		4	2	150		2.5	2.8	125		2.8	B5	T
41MHL	642 310 000		4	3	200		4	3.1	100		4.5	B5	T
41MLF	642 310 000		4	4.5	175		7.5	1.9	125		1.9	B5	T
41MP	642 310 000		4	7.5	200		24	6.0	100		7.5	B5	T
41MPG	545 231 600	G <sub>1</sub>	4	1.5	250	100	3.3		100	100		B7	H
41MPT	041 231 500	A <sub>1</sub>	4	1.5	250	100	12	4.8	100	100	4.8	B7	P
41MRC	642 310 000		4	1	200		2.5	2.6	150		2.6	B5	T



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
41MSG	465 230 574		4	1.5	125	60	0.8	2.5	100	60	2.5	B9	PP
41MTA	642 310 000		4	1	100		4.9	4	100		4	B5	T
41MTB	642 310 000		4	1	100		3.6	2.6	100		2.6	B5	T
41MTL	642 310 000		4	2.5	200		5.9	3	100		3	B5	T
41MTS	645 231 700		4	1	250	100	5	1.6	100	100	1.6	B7	PP
41MVSG	542 310 000	A <sub>1</sub>	4	1.5	200	100	3	2	100	100	2	B5	P
41MXP	642 310 000		4	12.5	200		40	6.0	100		7.5	B5	T
41STH	645 231 700	G <sub>1</sub>	4	1.5	100		2		200	100	1.6	B7	TH
				1.5	200	60	1		100	60	2.5		
42	264 300 000		1.5	13.5	175		3.9	0.8	100			UX4	T
42	265 413 000		6	16.5	250	250	34	2.5	100	PenLF	2.5	UX6	P
42E	265 413 000		6	16.5	250	250	34	2.5	100	PenLF	2.5	UX6	P
42MP/Pen	045 231 600		4	5.5	250	250	32	6	100	PenLF	7	B7	P
42MPT	041 231 500	A	4 (5)	3	200	200	34	8.5	100	PenLF	8	B7	P
42/OT	045 231 600		4	5.5	250	275	34	7	100	PenLF	7	B7	P
42/OTDD	968 231 500	G <sub>1</sub>	4	5.5	250	250	34	7	100	PenLF	7	B7	DDP
42PTB	061 231 500	G <sub>1</sub>	4	3	200	200	34	8.5	100	150	8	B7	P
42SPT	041 231 500	A	4	10.5	250	250	64	11	100	PenLF	10	B7	P
43	265 413 000		25	18	150	125	33	2.375	100	100	2.3	UX6	P
43E	265 413 000		25	18	150	125	33	2.375	100	100	2.3	UX6	P
43MG	026 540 310		25	18	250	125	33	2.375	100	100	2.3	A08	P
43IU	892 300 000		4 (5)				60		REC		20mA	B4	RR
44	265 130 000	G <sub>1</sub>	6	3	175	90	5.8	1	100	90	1	UX5	P
44A/160M	241 657 143		6	14	250	150	30	3.9	100	100	3	B9G	PP
44IU	892 300 000		4				60		REC		30mA	B4	RR
44SU	802 300 000		4				30		REC		15mA	B4	R
45	264 300 000		2.5	50	250		34	2.175	100		2.1	UX4	T
45A	264 300 000		2.5	68	325		43	2.37	100		2.37	UX4	T
45A5	26* *54 130		45	9	175	175	54	9.5	100	100	7	B8A	P
45B5	041 23* 6*5		45	12.5	175	175	70	10	100	100		B9A	P
45IU	892 300 000		4 (5)				120		REC		30mA	B4	RR
45LIU	206 540 130		45	13	200	200	45	7.5	100	100	7	A08	P
45Z3	28* 108 300		45				60		REC		70mA	B7G	R
45Z5	022 080 310		37.5				60		REC		20mA	A08	R
46	264 630 000		2.5	33	250		22	2.35	100		2.3	UX5	T
47	264 530 000		2.5	16.5	250	250	31	2.5	100	PenLF	3.8	UX5	P
48	265 413 000		30	10	100	100	52	3.8	100	90	3.8	UX6	P
49	264 630 000		2	20	125		6	1.125	100		1.1	UX5	T
50	264 300 000		7.5	70	400		55	2.1	100		2.1	UX4	T
50A5	265 004 130		50	7.5	125	100	49	8	100	90	7	B8B	P
50AX6	028 190 310		50				120		REC		30mA	A08	RR
50B5	412 365 400		50	7.5	125	100	49	7.5	100	90	6	B7G	P
50BK5	604 231 450		50	5	250	250	35	8.5	100	PenLF		B9A	P
50CID	206 089 030	G <sub>1</sub>	1.4	1.5	100		1.5	0.92	100		0.92	A08	DDT
50CS	142 345 600		50	7.5	125	100	49	7.5	100	90	6	B7G	P

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
50C6	026 540 310		50	13.5	150	150	58	7	100	100	7	A08	P
50CD6	021 040 350	A	50	30	175	175	75	7.5	100	100	7	A08	P
50F2D	206 501 030	G <sub>1</sub>	1.4	1.5	100	125	1.4	1	100	100	1	A08	P
50LID	206 540 030		1.4	4.5	100	125	4.8	1	100	100	1	A08	P
50L6	026 540 310		50	8.25	200	125	46	9.5	100	75	8	A08	P
50X6	219 008 130		50				60		REC		20mA	B8B	RR
50Y1U	388 208 120		45				120		REC		30mA	A08	R
50Y6	029 180 310		50				60		REC		20mA	A08	RR
50Y7	028 193 310		46				60		REC		20mA	A08	RR
50Z6	029 180 310		50				120		REC		30mA	A08	RR
50Z7	029 183 310		48				60		REC		20mA	A08	RR
51	265 130 000	G <sub>1</sub>	2.5	3	250	90	6.5	10.5	175	90	10.2	UX5	P
52	264 530 000		6	1	125	100	41	2	125	100	2	UX5	P
52CD6	021 040 350	A	52									A08	P
52KU	030 908 020		5				60		REC		30mA	A08	RR
53	274 146 300		2.5	5	250		3	1.6	100		3.1	UX7	TT
53KU	030 908 020		5 (5.7)				120		REC		40mA	A08	RR
54KU	030 908 020		5				120		REC		60mA	A08	RR
55	269 813 000	G <sub>1</sub>	2.5	20	250		8	1.1	100		1.1	UX6	DDT
55A/165M	245 761 430		12	15	150	150	60	4	100	100		B8G	PP
56	264 130 000		2.5	13.5	250		5	1.45	100		1.45	UX5	T
56AS	264 130 000		6	13.5	250		5	1.45	100		1.45	UX5	T
57	265 113 000	G <sub>1</sub>	2.5	3	250	100	2	1.225	100	100	1.2	UX6	P
57AS	265 113 000	G <sub>1</sub>	6	3	250	100	2	1.22	100	100	1.2	UX6	P
58	265 113 000	G <sub>1</sub>	2.5	3	250	100	8	1.5	100	100	1.5	UX6	P
58AS	265 113 000	G <sub>1</sub>	6	3	250	100	8	1.5	100	100	1.5	UX6	P
59	265 411 300		2.5	18	250	250	35	2.5	100	PenLF	2.5	UX7	P
59B	265 410 300		2.5	26	250	250	26	6	100	PenLF	6	UX7	P
60/250	892 300 000		4				30		REC		15mA	B4	RR
61BT	020 540 310	A	6	20	200	200	40	4	100	100	4	A08	P
61SPT	520 604 310		6	10.5	250	250	64	11	100	PenLF	9	A08	P
61SPT	021 540 310	A	6	10.5	250	250	64	11	100	PenLF	9	A08	P
62BT	020 540 310	A	6	18	175	175	100	10	100	100	9	A08	P
62DDT	264 098 130		6	3	250		1.0	1.3	150		1.3	B8A	DDT
62TH	276 454 130	G <sub>1</sub>	6	{ 2 2	{ 100 150	{ 100	{ 5 8	{ 2.2 2	{ 100 100	{ 60 100	{ 2.6 3.5	{ B8A	TH
62VP	261 154 130		6	2.5	250	100	6	2.2	100	100	2	B8A	P
63	020 540 230	A <sub>1</sub>	1.2	22.5	250	125	25		100	100		A08	P
63SPT	256 101 403		6	2	250	250	10	6.5	100	PenLF	6	B9G	P
63TI	641 237 154		6	{ 2.3 8	{ 100 200	{ 200	{ 4 17.5	{ 1.4 3.3	{ 100 100	{ 60 PenLF	{ 1.4 3	{	TP
63TP	641 237 154		6.3	{ 2.3 8	{ 100 200	{ 200	{ 4 17	{ 1.9 3.3	{ 100 100	{ 60 150	{ 1.4 3	{ B9A	TP
64	265 130 000	G <sub>1</sub>	6	3	175	90	3.1	1.05	100	90	1.05	UX5	P
64SPT	141 230 651		6.3	2	175	175	10	7.4	100	100	6	B9A	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
65	265 130 000	G <sub>1</sub>	6	3	175	90	4.5	1	100	90	1	UX5	P
66KU	280 009 130		6				30		REC		15mA	B8A	RR
67	264 130 000		6	9	150		5	1.1	100		1.1	UX5	T
67PT	261 054 130		6	7	250	250	36	10	100	50	9	B8A	P
68	265 130 000	G <sub>1</sub>	6	13.5	150	90	14	1.4	100	75	1.4	UX5	P
68A	265 130 000		6	13.5	125	125	14	1.4	100	100		UX5	P
69	264 413 000		6	3	175		4.5	1.45	150		0.5	UX6	T
70	264 413 000		6	6	175		2.3	0.5	150		0.5	UX6	T
70A7	126 548 310		70	7.5	125	100	60	5.8	REC	90	15mA	A08	RP
70L7	126 541 380		70				60		REC		20mA		
				7.5	125	100	40	7.5	100	90	6.5	A08	RP
71	264 300 000		5	40	175		20	1.7	100		1.7	UX4	T
71A	264 300 000		5	16.5	90		10	1.4	80		1.4	UX4	T
71B	264 300 000		5	40	175		20	1.7	100		1.7	UX4	T
72	300 200 000	D <sub>1</sub>	2.5				30		REC		15mA	UX4	R
73	*2* 0** 3*0	D <sub>1</sub>	2.5				15		REC		10mA	A08	R
75	269 813 000	G <sub>1</sub>	6	2	250		0.9	1.1	150		1.1	UX6	DDT
76	264 130 000		6	13.5	250		5	1.45	100		1.4	UX5	T
77	265 113 000	G <sub>1</sub>	6	3	250	100	2.3	1.25	100	100	1.2	UX6	P
77E	265 113 000	G <sub>1</sub>	6	3	250	100	2.3	1.25	100	100	1.2	UX6	P
78	265 113 000	G <sub>1</sub>	6	3	250	125	10.5	1.65	100	100	1.6	UX6	P
78E	265 113 000	G <sub>1</sub>	6	3	175	75	4	1.1	100	75	1.1	UX6	P
79	274 163 000	G <sub>1</sub>	6	0	250		5.3	1.8	150		1.8	UX6	TT
80	298 300 000		5 (5-7)				60		REC		20mA	UX4	RR
80M	289 300 000		5 (5-7)				60		REC		20mA	UX4	RR
81	280 300 000		7.5				60		REC		20mA	UX4	R
81M	280 300 000		7.5				60		REC		20mA	UX4	R
82	289 300 000		2.5				60		REC		20mA	UX4	RR
82V	389 200 000		2.5				60		REC		20mA	UX4	RR
83	289 300 000		5				120		REC		30mA	UX4	RR
83V	398 200 000		5				60		REC		60mA	UX4	RR
84	289 130 000		6				30		REC		30mA	UX5	RR
85	269 813 000	G <sub>1</sub>	6	20	250		8	1.1	100		1.1	UX6	DDT
85AS	268 913 000	G <sub>1</sub>	6	20	250		8	1.11	100		1.1	UX6	DDT
85S	268 913 000	G <sub>1</sub>	6	10.5	250		3.7	0.75	125		1.1	UX6	DDT
88	289 300 000		5				60		REC		20mA	UX4	RR
89	265 113 000	G <sub>1</sub>	6	10	100	100	9.5	1.2	100	90	1.2	UX6	P
90	264 413 000		2.5	0	150		3.5	1.4	150		1.4	UX6	T
90AC	642 310 000		4	12.5	200		40	7.5	100		7	B5	T
92	264 413 000		6	0	250		3.5	1.4	100		1.4	UX6	T
95	265 413 000		2.5	20	325	300	42	2.3	100	PenLF	2.3	UX6	P
96	281 300 000		10				120		REC		30mA	UX4	R
98	289 130 000		6				30		REC		15mA	UX5	RR
99V	426 300 000		3.3	4.5	90		2.5	0.42	100		0.42	UX4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
99X	264 300 000		3.3	4.5	90		2.5	0.42	100		0.42	UX4	T
100AC	642 310 000		4	6	200		5	2	100		2	B5	T
104V	642 310 000		4	1	100		15	3.5	100		3.5	B5	T
112A	364 200 000		5	4.5	90		5	1.575	80		1.5	UX4	T
114	020 000 300	A <sub>1</sub> G <sub>1</sub>	1.4		175		15		100			A08	T
114B	020 000 300	A <sub>1</sub> G <sub>1</sub>	1.4	4.0	175		12	1.1	100		1.1	A08	T
116/Pen	005 231 600	G <sub>1</sub>	11.5	1	100	100		7	100	100	6	B7	P
117L7	126 458 310		117	5.2	100	100	60	5.3	REC		20mA	A08	RP
117M7	126 458 310		117		100	100	60	5.3	REC	90	5.3		
117Z3	*02 381 000		117				60		REC		20mA	B7G	R
117Z4	020 080 310		117				60		REC		20mA	A08	R
117Z6	029 180 310		117				60		REC		20mA	A08	RR
120	642 310 000		2	12	150		12		100			B5	T
121VP	26* *54 130		12.5	3.0	200	126	7.2	2.3	100	150	2.3	B8A	P
124AC	542 310 000	A	4	1.4	200	60	1.6	0.9	100	60	0.9	B5	P
141DDT	264 089 130		14	1.55	170		1.5	1.65	100		1.5	B8A	DDT
141TH	276 454 130		14	2	100		5.0	2.0	100	60	2.8	B8A	TH
142BT	026 540 310		14		250	100	8.0	2.2	100	75	1.5		
144V	642 310 000		4	8.5	200		29	3.7	100	100	3.7	A08	P
154V	642 310 000		4	8	200		6	1.4	100		1.4	B5	T
			4	6	200		9	2	100		2	B5	T
163Pen	041 23* 6*5		16	10.4	175	175	53	9.5	No Data Available			B9A	P
164V	642 310 000		4	9	200		12	3.4	100		3.4	B5	T
171DDP	541 236 891		17	2	200	125	5	2.2	100	100	2	B9A	DDP
181	264 300 000		3	30	175		16	1.05	100		1.05	UX4	T
182A	264 300 000		5	45	200		18	1.5	100		1.5	UX4	T
182B	264 300 000		5	35	250		18	1.5	100		1.5	UX4	T
182B	264 300 000		5	35	250		18	1.5	100		1.5	UX4	T
183	264 300 000		5	60	250		30	1.7	100		1.7	UX4	T
185BT	020 540 310	A	18	18	175	175	100	9.5	100	100	8	A08	P
185BTA	020 540 310	A <sub>1</sub>	18	18	175	175	100	9.5	100	100	8	A08	P
200A	264 300 000		5	0	50		1.5	0.67	No Data Available			UX4	T
202DDT	809 231 600	G <sub>1</sub>	20	3	200		3	2.4	150		2.4	B7	DDT
202MPG	545 231 600	G <sub>1</sub>	20	1.5	200	100	3.0		100	100		B7	H
202SPB	061 231 500	G <sub>1</sub>	20	1.5	250	100	4.8	2.8	100	100	2.8	B7	P
202STH	645 231 700	G <sub>1</sub>	20	1.5	100		2		100	60		B7	TH
			20		200	60	1		100	60			
202VP	041 231 500	A	20	1.5	250	100	4.3	2.2	100	100	2.2	B7	P
202VPB	061 231 500	G <sub>1</sub>	20	1.5	250	100	4.3	2.2	100	100	2.2	B7	P
203THA	545 231 600	G <sub>1</sub>	20	2	250	100	3.5		100	100		B7	H
205D	264 300 000		4.5	29	400		30		100		1.8	UX4	T
205E	264 300 000		4.5	22.5	350		29	1.94	No Data Available			UX4	T
205F	264 300 000		4.5	18	300		31	1.75	No Data Available			UX4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
210DDT	682 390 000	G <sub>1</sub>	2	1	100		2.3	1.1	100		1.1	B5	DDT
210DET	642 300 000		2	4.5	150		3	1.1	100		1.1	B4	T
210HF	642 300 000		2	3	150		1.6	1.5	100		1.5	B4	T
210HL	642 300 000		2	3	150		1.6	1.1	100		1.1	B4	T
210HPT	642 350 000		2	4.5	150	150	7.5	2.5	100	100	2.5	B5	P
210LF	642 300 000		2	4.5	150		4.8	1.4	100		1.4	B4	T
210PG	645 230 700	G <sub>1</sub>	2	0	150		1.1		150	60	0.4	B7	H
210RC	642 300 000		2		150	40	0.4		150	75	1.5		
210RC	642 300 000		2	1.5	150		0.85	0.8	150		0.8	B4	T
210SPG	645 230 700	G <sub>1</sub>	2	0	150		1.1		150		0.5	B7	H
210SPT	041 230 500	A	2		150	40	0.4		150	75	1.5		
210SPT	041 230 500	A	2	1	150	60	2.9	1.3	150	60	1.3	B7	P
210T	264 300 000		7.5	32	350		16	1.55	100		1.55	UX4	T
210VPA	041 230 500	A	2	1	150	60	2.9	1.11	150	60	1.1	B7	P
210VPT	041 230 500	A	2	1	150	60	1.9	1.1	150	60	1.1	B7	P
213	289 300 000		5				30		REC		15mA	UX4	RR
213Pen	*41 23* *51	A <sub>1</sub>	21	22	175	175	45	6.2	100	100	6	B9A	P
215P	642 300 000		2	7.5	150		10	2.25	100		2.2	B4	T
215SG	542 300 000	A	2	1	150	60	1.4	1.1	150	60	1.1	B4	P
217A	228 300 000		10			120			REC		30mA	UX4	R
220B	446 230 700		2	3	150		5.0	1.5	100		1.5	B7	TT
220DD	892 310 000		2						D			B5	DD
220HPT	642 350 000		2	4.5	150	150	8	2.5	100	100	2.5	B5	P
220IPT	040 230 500	A	2	1.5	125	60	2.2	1	100	60	1	B7	P
220OT	642 350 000		2	4.5	150	150	9.5	2.5	100	100	2.5	B5	P
220P	642 300 000		2	7.5	150		11	2.25	100		2.2	B4	T
220PA	642 300 000		2	4.5	150		10	4	100		4	B4	T
220PT	642 350 000		2	9	150	150	19	2.5	100	100	2.5	B5	P
220SG	542 300 000	A	2	1	150	60	1.5	1.6	100	60	1.6	B4	P
220TH	645 230 700	G <sub>1</sub>	2	3	100		1.7	1.2	100	60	1.2	B7	TH
220TH	645 230 700	G <sub>1</sub>	2		125	60	0.6	0.6	125	60	0.6		
220VS	542 300 000	A	2	1	100	60	2.0	1.6	100	60	1.6	B4	P
220VSG	542 300 000	A	2	1.5	150	60	2.6	1.5	100	60	1.6	B4	P
225DU	082 323 900		2				15		REC		10mA	B7	RR
230	642 300 000		2	20	150		18	3	100		3	B4	T
230	200 300 000	D <sub>1</sub>	5				30		REC		15mA	UX4	R
230PT	642 350 000		2	15	150	150	14	2	100	100	2	B5	P
230XP	642 300 000		2	18	150		22	3	100		2	B4	T
231D	264 300 000		3	3	90		2.1	8.4	100		0.51	UX4	T
240B	446 230 700		2	1	125		8.5		100			B7	TT
240QP	446 235 700		2	12	150	150	6		100	100	2.5	B7	PP
244	264 130 000		2	6	150		5.5	1	100		1	UX5	T
244V	642 310 000		4	5.5	200		5.5	2.8	100		2.8	B5	T
245A	265 130 000	G <sub>1</sub>	2	1.5	150	50	4.8	0.65	No Data Available			UX5	P
247A	206 040 030		2	4.5	150		3.2	0.94	100		0.94	A08	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
249B	223 300 000	D <sub>1</sub>	2.5				120			REC	30mA	UX4	R
252A	264 300 000		5	50	400		60	3.4	100		3.4	UX4	T
255	268 943 000		2	3	150		0.8	0.57	100		0.5	UX6	DDT
257	264 530 000		5	21.5	125	100	20	1.35	100	90	1.3	UX5	P
257A	240 300 000	A <sub>1</sub>	3	3	90		2.1	0.51	100		0.51	UX4	T
259A	265 130 000	G <sub>1</sub>	2	1.5	175	75	5.5	1.38	100	75	1.3	UX5	P
259B	265 130 000	G <sub>1</sub>	2	1.5	175	75	5.5	1.38	100	75	1.3	UX5	P
262B	261 300 000	G <sub>1</sub>	10	4.5	150		2.8	0.9	100		0.9	UX4	T
264	264 300 000		1.1	9	150		2.5	0.64	100		0.64	UX4	T
264E	264 300 000		1.5	8	100		2.1	0.58	100		0.58	UX4	T
264C	264 300 000		1.5	8	100		2.1	0.58	100		0.58	UX4	T
271A	264 130 000		5	30	400		37.5	2.9	100		100	UX5	T
272A	264 130 000		10	15	150		5.4	0.76	100		0.76	UX5	T
274A	289 300 000		5				60		REC		20mA	UX4	RR
274B	289 300 000		5				60		REC		20mA	UX4	RR
275A	264 300 000		5	4.5	200		47	2.7	100		2.7	UX4	T
281A	264 530 000		5	60	150	75	35	1.47	No Data Available			UX5	P
283A	265 130 000	G <sub>1</sub>	2	1.5	175	75	5.9	1.36	100	75	1.36	UX5	P
285	265 130 000	G <sub>1</sub>	2	12	175	150	8.8	0.88	100	100	0.88	UX5	P
286A	265 113 000	G <sub>1</sub>	2	1.5	175	75	6.2	1.2	100	75	1.2	UX6	P
290A	265 113 000	G <sub>1</sub>	10	1.5	175		5.4	1.22	150		1.2	UX6	P
291A	275 641 300	G <sub>1</sub>	10	{ 3 7.5	175 175	75	4.5 3.1		100 100	60 75		{ B7	H
292A	268 913 000	G <sub>1</sub>	10	6	150		2.1	0.66	100		0.66	UX6	DDT
293A	265 413 000		10	18	175	175	14.5	1.05	100	100	1.05	UX6	P
302THA	645 231 700	G <sub>1</sub>	30	{ 2	100 250	100	1.5 3.5		100 250	60 100		{ B7	TH
303A	268 943 000		2	6	150		2	0.64	100		0.64	UX6	DDT
304AC	542 310 000	A	4	2	200	100	3	1.9	100	100	1.9	B5	P
309A	265 413 000		10	1.5	175	75	4.8	1.1	100	60	1.1	UX6	P
310A	265 113 000	G <sub>1</sub>	10	3	150	150	5.5	1.8	100	100	1.8	UX6	P
310B	265 113 000	G <sub>1</sub>	10	3	150	150	5.5	1.8	100	100	1.8	UX6	P
311A	265 130 000	G <sub>1</sub>	10	15	150	150	30	2.8	100	100	2.8	UX5	P
311SU	28* *** 130		31				60		REC		20mA	B8A	R
324A	200 300 000	D <sub>1</sub>	5				5		D			UX4	R
328A	265 113 000	G <sub>1</sub>	7.5	3	150	150	5.5	1.8	100	100	1.8	UX6	P
329A	265 130 000	G <sub>1</sub>	7.5	15	150	150	37.5	3.3	100	100	3	UX5	P
329L	265 130 000	G <sub>1</sub>	7.5	15	150	150	37	3.3	100	100	3	UX5	P
332Pen	026 540 310		33	8.5	200	200	45	8	100	100	7	A08	P
336A	265 413 000		10	14	250	250	30	4.2	100	100		UX6	P
337A	265 113 000	G <sub>1</sub>	10	3	150	150	6.3	1.6	100	100	1.6	UX6	P
345A	289 130 000		6				60		REC		20mA	UX5	RR
347A	020 600 310	G <sub>1</sub>	6	4.5	150		2.8	0.9	100		0.9	A08	T
348A	026 510 310	G <sub>1</sub>	6.3		125	125	5.5	1.8	100	100		A08	P
349A	026 540 310		6	14	250	250	30	4.2	100	PenLF	4.2	A08	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
350B	026 540 310		6	20	400	250	85	6.25	No Data Available			A08	P
351A	028 090 310		1				120		REC		20mA	A08	RR
352A	268 913 000	G <sub>1</sub>	10	6	150		2.1	0.65	100		0.65	UX6	DDT
354V	642 310 000		4	4.5	250		6.5	3.5	100		3	B5	T
361A	243 560 000		1.4		50	40	0.4	0.57	No Data Available			UX5	P
362A	243 560 000		1.4		50	50	1.26	0.57	No Data Available			UX5	P
367A	060 524 310		6	20	400	250	85	6.2	No Data Available			A08	P
373A	021 455 310		2		150		2	1.32	100		1.3	A08	P
374A	021 405 310		3		125		18	3	125		3	A08	P
375A	026 540 310		20		40		12	4.7	No Data Available			A08	
383A	120 406 030		6		125		7.5	2.8	100		2.8	A08	T
385A	125 040 130		6		125		7.5	2.5	100		2.5	A08	P
387A	125 040 130		6		125		5.6	4	100		3.8	A08	P
401A	264 300 000		5	9	50		1.5	0.8	No Data Available			UX4	T
402	264 300 000		3	40	175		40	1	100		1	UX4	T
402-OT	005 231 600	G <sub>1</sub>	40	12	250	250	32	7	100	PenLF	7	B7	P
402P	000 231 600	G <sub>1</sub>	4	15	200		27	5.5	100		7.5	B7	T
402Pen	005 231 600	G <sub>1</sub>	40	6.7	200	200	40	7	100	100	7	B7	P
402PenA	005 231 600	G <sub>1</sub>	40	9	150	150	56	8	100	100	8	B7	P
403A	413 265 100		6	2.3	150	150	7	4.4	100	100	4	B7G	P
405BU	892 300 000		4				15		REC		10mA	B4	RR
406	642 300 000		4		150		5.5	0.5	100		0.5	B4	T
407A	214 637 412		20	2	150		8.2	5.5	100		5.5	B9A	TT
408BU	892 300 000		4				15		REC		10mA	B4	RR
410HF	642 300 000		4	2.5	200		0.2	0.22	100		0.2	B4	T
410P	642 300 000		4	16	250		12	1.8	100		1.8	B4	T
410RC	642 300 000		4	2.5	200		0.2	0.2	100		0.2	B4	T
410SG	542 300 000	A	4	1	200	100	4.5	0.9	100	100	0.9	B4	P
412BU	892 300 000		4				30		REC		17mA	B4	RR
412SU	802 300 000		4				60		REC		22mA	B4	R
415PT	642 350 000		4	25	300	200	20	1.7	100	PenLF	1.7	B5	P
415QT	642 350 000		4	25	300	200	20	1.8	100	PenLF	1.8	B5	P
415SP	642 300 000		4	18	150		11	1.6	100		1.6	B4	T
420T	045 231 600		4	4.4	250	250	40	10.5	100	PenLF	9	B7	P
425PT	642 350 000		4	17	250	150	12	1.3	100	100	1.3	B5	P
435A	402 106 053		6	10	175	150	13	16.5	No Data Available			B9A	P
437A	304 002 116		6	10	150		40		No Data Available			B9A	T
441U	892 300 000		4				60		REC		20mA	B4	RR
442BU	892 300 000		4				60		REC		20mA	B4	RR
446A/B	021 000 310	A <sub>1</sub> G <sub>1</sub>	6	3	250		15	4.5	100			A08	T
450	642 300 000		4	55	250		50	3.5	100		3.5	B4	T
450	264 300 000		7.5		400		55	2.1	100		2.0	UX4	T
450AC	542 310 000	A	4		200	100	3.5	3	100	100	3	B5	P
451PT	26* *54 130		45	9	175	175	54.5	9.5	100	100	7	B8A	P
451U	823 900 000		4				120		REC		30mA	B4	RR

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
460BU	892 300 000		4				60			REC		20mA	B4	RR
482A	264 300 000		5	45	200		18	1.5		100		1.5	UX4	T
482B	264 300 000		5	35	250		18	1.5		100		1.5	UX4	T
483	264 300 000		5	60	250		30	1.7		100		1.7	UX4	T
484V	642 310 000		4	2.5	200		0.25	1.2		100		1.2	B5	T
485	264 130 000		3	9	175		5.8	1.4		100		1.4	UX5	T
486	026 040 300		3	3	90		3	0.61		80		0.6	A08	T
500	892 300 000		4				30			REC		15mA	B4	RR
506	892 300 000		4				30			REC		15mA	B4	RR
506BU	892 300 000		4				30			REC		15mA	B4	RR
506K	892 300 000		2				30			REC		15mA	B4	RR
509	892 300 000		2				60			REC		20mA	B4	RR
511D	892 300 000		4				60			REC		20mA	B4	RR
538A	741 226 413		6	2	250		10	5.5		200		5	B9A	TT
542A	602 304 100		6	2	250		10	5.5		200		5.5	B7G	T
543A	402 013 060		6	2.5	200		9.5	3.8		100		3	B8D	T
543B	402 013 060		6	2.5	200		9.5	3.8		100		3	B8D	T
544A	602 364 100		6	8.5	250		10.5	2.2		100		3	B7G	T
546A	802 309 100		6				30			REC		15mA	B7G	RR
547A	120 415 360		6	3	300	150	30	11		100	100	10	A08	P
§ 548A	762 344 100		6	3	100		8.5	5.3				5.3	B7G	TT
					150		5	4.5		100				
549A	192 310 800		6							D			B7G	RR
550A	471 461 230		6	2	250		2.3	1.6		150		1.6	A08	TT
559	021 010 030	D <sub>1</sub>					5			D			A08	R
605	642 300 000		4	6	150		10	1.4		100		1.4	B4	T
612BU	892 300 000		6				30			REC		15mA	B4	RR
615	642 300 000		4	41	150		4	1.4		100		1.4	B4	T
620T	642 300 000		6	95	400		62.5	2.3		100		2.3	B4	T
635GTX	026 040 310		6	20	350		20			No Data Available			A08	T
660	642 300 000		6	100	400		120	2.3		100		2.3	B4	T
680XP	642 300 000		6	100	400		3.5	1.1		100		1.1	B4	T
713A	021 415 360		6	2	125	125	7.5	3.95		100	100	3.9	A08	P
717A	021 415 360		6	2	125	125	7.5	4		100	100	4	A08	P
731A	412 365 100		6	2.3	150	150	7	4.3		100	100	4	B7G	P
802	205 411 300	A	6	18	400	250	30	2.2		100	PenLF	2.0	UX7	P
805	642 300 000		6	6	150		10	1.4		100		1.4	B4	T
807	254 130 000	A	6	12.5	400	250	83	6.5		100	PenLF	6	UX5	P
816	200 300 000	D <sub>1</sub>	2.5				120			REC		30mA	UX4	R
825	642 300 000		6	0	150		6	1.4		150		1.4	B4	T
825BU	892 300 000		7.5				60			REC		20mA	B4	RR
836	2** 00* 300	D <sub>1</sub>	2.5				120			REC		30mA	B7G	R
840	254 130 000	A	2	3	175	75	1	0.4		100	60	0.4	UX5	P

§ See note on Page 8



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
842	264 130 000		7.5	100 <sup>P</sup>	400		25	1.25	100		1.25	UX5	T
843	264 130 000		2.5	25	350		25	1.7	100		1.7	UX5	T
864	364 200 000		1.1	4.5	90		2.9	0.61	80		0.61	UX4	T
871	200 300 000	D <sub>1</sub>	2.5				120		REC		30mA	UX4	R
879	300 200 000	D <sub>1</sub>	2.5				5		D			UX4	R
884	026 040 310		6		300		55	4KΩ	No Data Available			A08	Thyratron
885	264 130 000		2.5		300		55	4KΩ	No Data Available			UX5	Thyratron
904V	642 310 000		4	2	200		2	2	150		2	B5	T
950	041 230 500	A	2	16.5	175	150	7	0.95	100	100	0.95	B7	P
951	265 300 000	G <sub>1</sub>	2	3	175	60	1.7	0.65	100	60		UX4	P
985	289 130 000		5				30		REC		15mA	UX5	RR
986	289 300 000		5				60		REC		20mA	UX4	RR
994V	642 310 000		4	0	100			3.6	100		3.6	B5	T
1002	802 300 000		1.8				60		REC		25mA	B4	R
1005	008 092 030		6				30		REC		15mA	A08	RR
1007	008 090 230		1.0				60		REC		20mA	A08	RR
1012	289 300 000		1.7				120		REC		30mA	UX4	RR
1028	202 322 200	D <sub>1</sub>	6				60		REC		23mA	B7G	R
1103	809 231 600	G <sub>1</sub>	13	2	225		1.5	1.5	100		1.2	B7	DDT
1130	892 300 000		1.8						D			B4	DD
1201	426 141 630		6	3	175		5.5	3	150		3	B8B	T
1201	892 300 000		25						D			B4	DD
1203	200 800 130		6						D			B8B	D
1203A	200 800 130		6						D			B8B	D
1204	526 141 310		6	2	250	100	1.75	1.2	100	100	1.2	B8B	P
1206	265 441 730		6	2.5	250	100	4.5	2.1	100	100	2.1	B8B	PP
1221	265 113 000	G <sub>1</sub>	6	3	250	100	2	1.22	100	100	1.2	UX6	P
1223	026 510 310	G <sub>1</sub>	6	3	250	100	2	1.22	100	100	1.2	A08	P
1229	265 300 000	G <sub>1</sub>	2	3	150	75	1.7	0.64	100	75	0.64	UX4	P
1230	264 300 000		2	9	150		3		100			UX4	T
1231	265 104 130		6	30	300	300	13	6.3	100	100	6.3	B8B	P
1232	265 114 130		6	2	250	100	6	4.5	100	100	4.5	B8B	P
1247	000 230 000	D <sub>1</sub>	0.625						D			B8A	D
1273	265 104 130		6	3	250	100	2.2	1.5	100	100	1.5	B8B	P
1274	028 090 310		6				30		REC		15mA	A08	RR
1275	289 300 000		5				120		REC		30mA	UX4	RR
1276	264 300 000		4.5	45	250		60	5.25	No Data Available			UX4	T
1280	265 104 130		12.5	3	250	100	2.2	1.5	100	100	1.5	B8B	P
1282	265 114 130		6	2	300	150	10	5.8	100	150	5.8	B8B	P
1284	265 104 130		12.5	3	250	100	9	2	100	100	2	B8B	P
1288	364 204 730		1.4	0	90		5.2	1.85	80		1.85	A08	TT
1291	274 304 620		1.4		90		5.2	1.85	80		1.85	A08	TT
1292	364 204 730		1.4	0	90		5.2	1.85	80		1.85	A08	TT
1293	260 064 030		1.4	0	90		4.7	1.3	80		1.3	B8B	T
1294	200 800 130		1.4						D			A08	D

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
1299	365 004 230		1.4	4.5	150	90	10.2	2.4	100	90	2.4	B8B	P
1560	289 300 000		5				60		REC		20mA	UX4	RR
1560	892 300 000		5				60		REC		20mA	B4	RR
1561	892 300 000		4				60		REC		20mA	B4	RR
1562	280 300 000		7.5				120		REC		30mA	UX4	R
1602	264 300 000		7.5	23.5	250		10	1.33	100		1.33	UX4	T
1603	265 113 000	G <sub>1</sub>	6	3	250	100	2	1.225	100	100	1.2	UX6	P
1608	264 300 000		2.5	90	400		95		No Data Available			UX4	T
1609	364 520 000		1.1	1.5	125	75	2.5	0.725	100	75	0.72	UX5	P
1610	264 530 000		2.5	16.5	250	250	31	2.5	100	PenLF	3.8	UX5	P
1611	026 540 310		6	16.5	250	250	34	2.5	100	PenLF	2.5	A08	P
1612	026 540 310	G <sub>1</sub>	6	3	250	100	5.3	1.1	100	100	1.1	A08	H
1613	026 540 310		6	16.5	250	250	34	2.5	100	PenLF	2.5	A08	P
1614	026 540 310		6	18	350	250	54	5.2	100	PenLF	5.2	A08	P
1616	200 300 000	D <sub>1</sub>	2.5				120		REC		30mA	UX4	R
1619	026 540 310		2.5	10	300	250	45	4.5	100	PenLF	4.5	A08	P
1620	026 510 310	G <sub>1</sub>	6	3	250	100	2	1.225	100	100	1.2	A08	P
1621	026 540 310		6	16.5	250	250	34	2.5	100	PenLF	2.5	A08	P
1622	026 540 310		6	18	350	250	54	5.2	100	100	5.2	A08	P
1624	026 540 310		2.5	10	300	250	45	4.5	100	PenLF		A08	P
1625	254 130 000	A <sub>1</sub>	12	12.5	400	250	83	6.5	100	PenLF	6	UX5	P
1626	026 040 310		12.5	32	250		20	2.1	100		2.1	A08	T
1631	026 540 310		12.5	18	350	250	54	5.2	100	PenLF	5.2	A08	P
1632	026 540 310		12.5	8	200	100	50	9.5	100	90	9	A08	P
1633	471 461 230		25	8	250		11.5	2.6	100		2.6	A08	TT
1634	074 461 230		12.5	2	250		2	1.325	150		1.3	A08	TT
1635	027 446 310		6	0	300		3.5	0.9	100		0.9	A08	TT
1637	026 500 310	G <sub>1</sub>	6	18	250	250	32	3.8	100	PenLF	3.8	A08	P
1638	029 180 310		6						D			A08	DD
1639	026 890 310	G <sub>1</sub>	6	5.5	250		5	2	100		2	A08	DDT
1641	200 300 000	D <sub>1</sub> D <sub>2</sub>	5				120		REC		30mA	UX4	RR
1641/RK60	200 300 000	D <sub>1</sub> D <sub>2</sub>	5				15		REC		12mA	UX4	RR
1642	216 471 300	G <sub>1</sub>	6	16.5	250		8.3	1.3	110			UX7	TT
1644	414 752 360		12.5	9	175	175	13	2.15	100	100	2.1	A08	PP
1649	021 415 360		6	2	300	150	10	9	100	100	8	A08	P
1654	2** 00* 300	D <sub>1</sub>	1.4						D			B7G	D
1655	074 461 230		6	2	250		2	1.325	200		1.3	A08	TT
1659	268 913 000	G <sub>1</sub>	2.5	2	250		0.9	1.1	150		1.1	UX6	DDT
1662	364 526 300		1.4	8.4	150	90	13.3	1.9	100	75	1.9	B7G	P
1664	026 985 310	G <sub>1</sub>	2.5	3	250	125	10	1.325	100	100	1.3	A08	DDP
1701	892 300 000		1.8				120		REC		30mA	B4	RR
1801	892 300 000		4				15		REC		10mA	B4	RR
1805	892 300 000		4				30		REC		15mA	B4	RR
1807	892 300 000		4				30		REC		15mA	B4	RR
1810	003 200 000	D <sub>1</sub>	4				30		REC		15mA	B4	R

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
1815	892 300 000		4				60		REC		20mA	B4	RR
1817	892 300 000		4				120		REC		30mA	B4	RR
1821	892 300 000		4				30		REC		15mA	B4	RR
1823	892 300 000		4				30		REC		15mA	B4	RR
1831	892 300 000		4				30		REC		12mA	B4	RR
1832	082 300 000		4				120		REC		30mA	B4	R
1851	026 510 310	G <sub>1</sub>	6	2	300	150	10	9	100	100	8	A08	P
1852	021 415 360		6	2	300	150	10	9	100	100	8	A08	P
1853	021 415 360		6	3	300	200	12.5	5	100	150	5	A08	P
1861	892 300 000		4				60		REC		20mA	B4	RR
1867	389 200 000		4				60		REC		20mA	UX4	RR
1875	023 000 000	D <sub>1</sub>	4				5		D			8SC	R
1876	123 000 080		4				5		D			8SC	R
1877	002 300 000	D <sub>1</sub>	4				3		D			B4	R
1882	023 080 090		5				60		REC		20mA	8SC	RR
1883	023 080 090		5				60		REC		20mA	8SC	RR
2051	026 041 310		6		250		75	2.5kΩ	No Data Available			A08	Thyratron
2101	264 530 000		2	4.5	150	150	8	1.7	100	100	1.7	UX5	P
2102	268 953 000		2	1	100		2.5	1.3	100		1.3	UX6	DDT
2103	274 546 300		2	7.5	150	150	4	1.6	100	100	1.6	UX7	PP
2151	265 413 000		14	31	250	250	47	2.4	100	PenLF	2.4	UX6	P
2318	892 300 000		4				30		REC		15mA	B4	RR
2506	892 300 000		4				15		REC		10mA	B4	RR
3006	802 300 000		4						D			B4	D
3074A	204 140 300	A <sub>1</sub> A <sub>2</sub>	6		300		50	3.0	No Data Available			UX7	TT
3075A	002 300 000	D <sub>1</sub>	2						DI			B4	D
3329A	265 113 000	G <sub>1</sub>	7.5		175	125	31	2.9	100	100		UX6	P
3481	026 510 310	G <sub>1</sub>	6	13.5	150	150	5.5	1.8	100	100	1.8	A08	P
3720	364 200 000		5	1.5	175		0.2	0.2	150		0.2	UX4	T
3871	264 300 000		30	19	100	100	52	3.8	100	90	3.8	UX6	P
3872	364 200 000		2	9	150		3		100			UX4	T
3873	365 200 000	G <sub>1</sub>	2	3	150	75	1.5	0.64	100	75	0.6	UX4	P
3921	264 300 000		2.5	50	250		34	2.17	100		2.1	UX4	T
3924	265 130 000	G <sub>1</sub>	2.5	3	175	90	4	1	100	90	1	UX5	P
4019A	264 300 000		4		200		9.7	1.3	100		1.2	UX4	T
4019B	642 300 000		4	4	100		7.5	1.27	100		1.2	B4	T
4020A	264 300 000		2	2	150		1.2	0.6	100		0.6	UX4	T
4020B	264 300 000		2	2	150		1.2	0.6	100		0.6	UX4	T
4021A	264 300 000		4	10	150		32.5	3	100		0.6	UX4	T
4021B	642 300 000		4	8	125		23	3	100		3	B4	T
4022AR	264 300 000		4	6	200		16.2	2.2	100		2.0	UX4	T
4033	264 130 000		6	20	400		50	9	100		8	UX5	T
4033A	642 310 000		6	20	400		50	9	100		8	B5	T
4033L	642 310 000		6	20	400		60	10	100		8	B5	T
4037A	802 300 000		4				120		REC		30mA	B4	R

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
4061A	205 411 300	A	6	10	400	200	50	2.5	100	150	2.5	B7	P
4074A	204 140 300	A <sub>1</sub> A <sub>2</sub>	6	13	300		15	3	100		3	UX7	TT
4077A	003 200 000	D <sub>1</sub>	5				120		REC		30mA	B4	R
4274A	289 300 000		5				120		REC		30mA	UX4	RR
4300A	364 200 000		5	90	400		50		No Data Available			UX4	T
4310A	265 113 000	G <sub>1</sub>	10	5.5	250	150	5.2	2	100	100	2	UX6	P
4328A	265 113 000	G <sub>1</sub>	7.5	5.5	250	175		2	100	150	2	UX6	P
4328D	026 510 310	G <sub>1</sub>	7.5	5.5	250	150	5.2	2	100	100	2	A08	P
4608	642 310 000		4	6	150		11	2.5	100		2.5	B5	T
4610	542 310 000	A	4	1.3	200	100	1.5	0.9	100	100	0.9	B5	P
4613	642 300 000		4	22	250		48	3.5	No Data Available			B4	T
4614	642 310 000		4	16	200		12	1.3	No Data Available			B5	T
4618	542 310 000	A	4	2	200	100	3	2.2	100	100	2.2	B5	P
4619	892 300 000		4				30		REC		15mA	B4	RR
4631	264 300 000		2	1.5	150		0.7		150			UX4	T
4636	542 310 000		4	2	200	100	3	2.3	100	100		B5	P
4650	642 350 000		4	63	300	300	30		No Data Available			B5	P
4652	892 300 000		4				60		REC		20mA	B4	RR
4654	411 230 050	A	6	14	250	275	72.0	8.5	No Data Available			S8	P
4654K	023 114 500	A <sub>1</sub>	6	12.6	250	275	72	8.5	125	125		8SC	P
4655	462 300 000		4.5				60		REC		15mA	B4	RR
4657	642 310 000		4	1.5	200		1	2.2	200		2.2	B5	T
4670	432 564 570		2	8.5	90	90	1		80	75		8SC	PP
4673	642 310 000	G <sub>1</sub>	4	2.5	250	200	8	5	100	PenLF	5	B5	P
4673	023 110 560	G <sub>1</sub>	4	4	250	200	8	5	100	150	5	8SC	P
4679	026 447 300		6	2.5	250		8	5	100		4.6	A08	P
4682	023 100 560	G <sub>1</sub>	4		375	250	24		100	PenLF		8SC	P
4683	023 004 060		4		350		43		100			8SC	T
4684	023 104 560		4		375	250	24		100	PenLF		8SC	P
4688	023 104 560		4		375	275	48		100	PenLF		8SC	P
4689	023 104 560		6		375	275	48		100	PenLF		8SC	P
4694	023 104 560		6	7.5	375	250	24	8	100	PenLF		8SC	P
4699	023 104 560		6	12.5	300	300	55	13	100	PenLF	9	8SC	P
5516	235 242 300	A	3	14	400	250	75	4	100	PenLF	4	A08	P
5556	264 300 000		4.5	30	350		9	0.98	No Data Available			UX4	T
5590	412 365 100		6	4.5	90	90	3.9	2	80	90	2	B7G	P
5591	412 365 100		6	1.9	175	125	7.7	5.0	125	100	5.0	B7G	P
5603	021 415 360		6	12.5	150	150	50	5.4	100	100	5.4	A08	P
5608	412 365 100		6	12	125	125	7.5	5	100	90	5.0	B7G	P
5610	612 364 000		6	1.5	90		17	4	80		4.0	B7G	T
5618	265 134 200		3	8	275	75	19	3.5	100	60	3.5	B7G	P
5635	442 *63 710		6	.5	100		4.8		100		3.8	B8B	T
5636	412 163 510		6	3	100	100	4	1.9	100	100	1.9	B8D	P
5637	402 013 060		6		100		1.4	2.7	100		2.7	B8B	T
5639	412 163 510		6	2.6	150	100	21	9	100	100	9	B8D	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
5640	412 163 510		6	9	100	100	31	5	100	100	5	B8B	P
5641	082 813 080		6				30		REC		15mA	B8D	R
5647	381 280 000		6				5.0		D			B5A	D
5654	412 365 100		6	2	125	125	7.5	5	100	100	5	B7G	P
5656	544 231 761		6	2	150	125	15	5.8	100	100		B9A	PP
5659	026 540 310		12.5	12.5	250	250	32		100	PenLF		A08	P
5660	026 895 310	G <sub>1</sub>	12.5	3	250	125	10	1.325	100	100	1.3	A08	DDP
5661	021 415 360		12.5	0.4	250	100	9.2	2	100	100	2	A08	P
5670	214 607 413		6	2	150		8.2	5.5	125		5.5	B9A	TT
5672	653 420 000		1.25	6.5	60	60	3.1	.65	No Data Available			B5A	P
5676	624 300 000		1.25	5	125		4	1.6	125		1.6	B5A	T
5678	652 430 000		1.25	0	60	60	1.8	1	No Data Available			B5A	P
5679	218 309 120		6				5		D			B8B	RR
5686	141 235 615		6	12.5	250	250	27	3.1	100	100		B9A	P
5687	641 221 437		6	12.5	250		16	4.1	100		7	B9A	TT
5690	238 192 310		6				120		REC		30mA	A08	RR
5691	471 461 230		6	2	250		2.3	1.6	150		1.6	A08	TT
5692	471 461 230		6	9	250		6.5	2.2	100		2.2	A08	TT
5693	021 415 360		6	3	250	100	3	1.65	100	100	1.6	A08	P
5694	126 447 310		6	6	300		7	3.2	No Data Available			A08	TT
5718	402 013 060		6	2.0	100		13.0	5.5	100		5.5	B8D	T
5719	402 013 060		6	1.3	150		1.8	2.3	100		1.6	B8B	T
5721	641 227 413		6	2	250		1.3	1.6	100		1.6	B9A	TT
5722	802 208 300		3						D			B7G	D
5725	412 365 100		6	2	125	125	5.2	3.2	100	100	3.5	B7G	P
5726	192 310 800		6						D			B7G	RR
5732	026 510 310	G <sub>1</sub>	6	3	125	100	8	2.2	100	100	2	A08	D
5749	412 365 100		6	1	250	100	11	4.4	100	100	4.3	B7G	P
5750	412 366 400		6	2	100		11	7.0	100		6	B7G	H
5751	741 226 413		6	3.0	250		1.0	1.2	100		1.2	B9A	TT
5755	471 461 230		6	2	250		2.3	1.6	200		1.6	A08	TT
5763	601 235 144		6	7.5	250	250	45	7	100	PenLF	7	B9A	P
5797	411 235 600		26.5	1	30	30	.5	1.0	No Data Available			B8D	P
5812	413 365 200		3	23	250	250	40	4.1	100	PenLF	4.1	B7G	P
5814	741 226 413		6	8.5	250		10.5	2.2	100		3.0	B9A	TT
5824	026 540 310		25	22	125	125	61	5	125	125	5	A08	P
5825	200 300 000	D <sub>1</sub>	1.5						D			UX4	D
5838	028 090 310		12				30		REC		15mA	B8A	RR
5839	028 090 310		26				30		REC		15mA	A08	RR
5840	412 163 510		6	1.4	100	100	7.0	5.0	100	100	5.0	B8D	P
5842	602 441 443		6	1.5	150		26	24.0	100		2.4	B9A	T
5844	672 244 100		6	2.3	100		4.8	3.4	100		3.4	B7G	TT
5845	802 290 300		6						D			B7G	DD
5847	402 106 053		6	2	150	150	13	12.5	150	150	12	B9A	P
5851	206 005 340		2.5	7.5	125	125	5.5	1.6	125	125	1.6	B8B	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
5852	028 090 310		6				30		REC		15mA	A08	RR
5873	264 114 730		6	3	150		9	2.9	100		2.3	B8B	TT
5879	401 230 561		6	3	250	100	1.8	1	100	100	1	B9A	P
5881	026 540 310		6	12.5	300	200	48	5.3	100	150	5	A08	P
5894	245 134 200	A <sub>1</sub> A <sub>2</sub>	6		400	250	30	3.4	No Data Available			B7A	PP
5896	812 093 100		6				15		REC		15mA	B8B	RR
5897	402 013 060		6	2.3	150		14	6.5	100		5.8	B8A	T
5898	402 013 060		6	2	150		1.8	2.3	100		1.7	B8A	T
5899	412 163 510		6	2.0	100	100	13.0	5.5	100	100	5.0	B8D	P
5900	412 163 510		6		100	100	7.2	4.5	100	100	4.5	B8A	P
5901	412 163 510		6	1.5	100	100	7.5	5.0	100	100	2.4	B8A	P
5902	412 163 510		6	6.5	100	100	30	4.2	No Data Available			B8A	P
5903	812 093 100		26				5		D			B8B	RR
5905	412 163 510		26	0	20	20	2.3	2.8	No Data Available			B8A	P
5906	412 163 510		26	1.5	100	100	7.5	5	100	100	5	A08	P
5907	412 164 510		26	0	20	20	2.7	3.0	No Data Available			B8A	P
5908	412 163 510		26	0	20	20	2.3	1.7	No Data Available			B8A	P
5910	265 *24 300		1.4	0	90	90	1.6	0.9	100	90	0.9	B7G	P
5915	412 365 100		6	0	75	75	6.3	2	80	75	2	B7G	H
5916	412 163 510		26		100	100	4.4	1.28	100	100	1.2	B8A	P
5920	762 344 100		6	2.1	100		8.5	6	100		6	B7G	TT
5930	264 300 000		2.5	45	250		60	5.25	No Data Available			UX4	T
5931	020 809 030		5				120		ERC		30mA	A08	RR
5932	026 540 310		6	14	250	250	72	6	100	PenLF	5.2	A08	P
5933	254 130 000	A	6	14	300	250	83	6.5	100	150	6	UX5	P
5947	222 833 380		4.4						D			A08	D
5961	126 541 340		6		250	100			100	100		A08	H
5963	741 226 413		6	0	75		8	2.8	80		2.8	B9A	TT
5964	762 344 100		6	1	100		9.5	6	100		6	B7G	TT
5965	741 226 413		6	1.8	150		8.2	6.5	150		6.0	B9A	TT
5967	624 334 260		1.25		40		3	2	No Data Available			B8B	TT
5968	240 670 430		1.25	0	40		0.7	1.3	No Data Available			B8B	TT
5969	245 675 430		1.25	3	125	40	6	1.7	No Data Available			B8B	PP
5977	402 013 060		6	2.7	100		10	4.5	100		4.5	B8B	T
5987	462 613 060		6	18	100		9	1.85	100		1.85	B8B	T
5992	026 540 310		6	12.5	250	250	45	4.1	100	PenLF	4	A08	P
5993	802 010 309		6				30		REC		15mA	B9A	RR
5998	461 471 230		6		100		100	15.5	No Data Available			A08	TT
6004	020 000 030	D <sub>1</sub> D <sub>2</sub>	2.5				60		REC		20mA	A08	RR
6005	412 365 400		6	12.5	250	250	45	4	100	150	4	B7G	P
6006	021 415 360		6	14	250	125	11	4.7	100	100		A08	P
6007	653 420 000		1.25	.2	20	20	.47	.42	No Data Available			B5A	P
6008	653 420 000		.625	1.15	20	20	.05	.1	No Data Available			B5A	P
6021	642 113 470		6	1.0	100		6.5	5.4	100		5	B8D	TT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6026	001 230 460		6	2.6	125		12	5.9	100		5.9	B8B	T
6028	412 365 100		20	1.8	125	125	7.5	5.0	100	125	5.0	B7G	P
§ 6030	672 344 100		6	{ 3 0.85	150 100		5 8.5	4.5 5.8	100 100		5.8 5.8	B7G	TT
6042	461 471 230		25	8	250		9	2.6	100		2.6	A08	TT
6045	672 344 100		6	0.5	100		9	6.4	100		6.4	B7G	TT
6046	026 540 310		25	8.2	200	125	46	8	100	125	8	A08	P
6052	812 093 100		6				30		REC			B8B	RR
6053	812 093 100		26				5		D			B8B	DD
6057	741 226 413		6	2	250		1.2	1.6	150		1.6	B9A	TT
6058	192 310 800		6						D			B7G	RR
6059	041 230 651		6	3	250	100	2	1.225	100	100	1.2	B9A	P
6060	741 226 413		6	2	250			5.5	200		5	B9A	TT
6061	*41 230 651		6	13	300	225	34	3.75	100	150	3.7	B9A	P
6062	601 235 144		6	7.5	250	250	45	7	100	150	7	B9A	P
6063	802 309 100		6				30		REC		15mA	B7G	RR
‡ 6064	412 361 500		6	{ 2 1.5	250 200	250	10 4.0	7.5 6.4	100 100	150 150	5 5	B7G	P
6065	412 361 500		6	2.5	250	250	8	2.5	100	100	2.5	B7G	P
6066	412 389 600		6	3	250		1	1.2	150		1.2	B7G	DDT
6067	741 226 413		6	8.5	250		10.5	2.2	100		2.2	B9A	TT
6072	741 226 413		6	4	250		3	1.75	100		1.7	B9A	TT
6080	471 461 230		6	30	100		100	7	No Data Available			A08	TT
6082	471 461 230		26.5	30	100		100	7	No Data Available			A08	TT
6084	501 236 014		6	2.0	250	125	10	9.0	150	100		B9A	P
6085	641 227 413		6	5.5	250		6	2.7	100		2	B9A	TT
6086	541 236 **1		18	1.8	200	100	8.3	8.2	100	100	8	B9A	P
6087	020 809 030		5				60		REC		20mA	A08	RR
6094	452 634 516		6	12.5	250	250	45	6	100	PenLF	6	B9A	P
6095	412 365 400		6	12.5	250	250	45	4.1	100	PenLF	4	B7G	P
6096	412 365 100		6	2	125	125	7.5	5	125	125	5	B7G	P
6097	192 310 800		6						D			B7G	RR
6098	106 052 430		6	22.5	250	250	77	5.4	100	100		A08	P
6099	672 344 100		6	{ 3 -85	150 100		5 8.5	4.5 5.3	100 100		5.8 5.8	B7G	TT
6100	602 364 100		6	8.5	250		10.5	2.2	100		3.0	B7G	T
6101	762 344 100		6	2	150		9	5.5	100		6	B7G	TT
6106	020 809 030		5				60		REC		20mA	A08	RR
6110	812 093 100		6				5		D			B8B	RR
6111	642 113 470		6	1.9	100		8.5	5	100		5	B8B	TT
6112	642 113 470		6	1.4	150		1.75	2.5	100		0.8	A08	TT
6113	641 471 230		6	3	250		3	1.7	100		1.6	A08	TT
6118	026 890 310		6	3	250		1.0	1.2	150		1.3	A08	DDT

+ See note on Page 8.

§ See note on Page 8.

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
6125	8*2 384 100		6	8.5	250		10.5	2.2	150		2.2	B7G	T
6132	*41 230 651		6	4.5	250	250	40	11	100	150	9	B9A	P
6134	021 415 360		6	2	300	150	10	9	100	150		A08	P
6135	6*2 364 100		6	8.5	250		10.5	2.2	100		2.2	B7G	T
6136	412 365 100		6	1.0	250	150	10.6	5.2	100	150	5	B7G	P
6137	021 415 360		6	3	250	100	9.2	2	100	100	2	A08	P
6145	265 104 130		5		150	100	34	10	100	100		B7G	P
6146	125 141 310	A	6	30	200	200	100	7	No Data Available			A08	P
6147	206 035 240		1.25	7.5	125	125	5.5	1.6	100	125	1.5	B8B	P
6153T	023 164 570	G <sub>1</sub>	6	{ 2 2	100 250	100	16 12	5 3.5	100 100	60 100	5 3	}8SC	TH
6156	412 360 500		6	13.5	250	250	16	2.6	100	150	2.6	B7G	P
6157	**1 23* ***	D <sub>1</sub>	6				120		REC		30mA	B9A	R
6158	741 226 413		6	4.6	250		6	2.3	100		2.3	B9A	TT
6159	125 141 130	A	26	30	200	100	100	7	No Data Available			A08	P
6180	461 471 230		6	8	250		9	2.6	100		2.6	A08	TT
6186	412 365 100		6	1.4	250	150	7	5	100	100	4	B7G	P
6187	412 365 100		6	2	125	125	5.2	3.2	100	125	3.0	B7G	P
6188	461 471 230		6	2	250		2.3	1.6	150		1.4	A08	TT
6189	641 227 413		6	8.5	250		10.5	2.2	100		3	B9A	TT
6197	145 236 154		6	3	250	150	30	11	100	150	10	B9A	P
6201	741 226 413		6	2	250		10	5.5	100		5	B9A	TT
6202	802 309 100		6				60		REC		20mA	B7G	RR
6203	800 230 109		6						REC			B9A	RR
6205	412 163 510		6	1.4	100	100	7.5	5	100	100	5	B8D	P
6211	741 226 413		6	2	100		4.6	3.6	100		3.6	B9A	TT
6215	020 000 300	D <sub>1</sub>							D			A08	D
6216	641 236 510		6	6	200	100	47	8.8	100	100		B9A	P
6227	041 230 651		6	5.2	200	200	30	9	100	100		B9A	P
6247	442 613 000	A <sub>1</sub>	6	3	200		4	3	100		2.6	B7G	T
6265	412 365 100		6	1	250	150	9	4	100	125		B7G	P
6267	501 236 014		6	1.0	250	100	3.0	1.85	100	100	1.8	B9A	P
6287	156 236 546		6	12.5	250	250	48	4.1	100	100		B9A	P
6293	125 141 300	A	6		200	200	100	7.3	No Data Available			A08	P
6302	265 113 000	G <sub>1</sub>	6	2.2	300	150	11	9	No Data Available			UX6	P
6305	112 311 100	D <sub>1</sub>	4				5		REC		5mA	B7G	R
6325	108 090 230		6				60		REC		20mA	A08	RR
6327	121 040 350		6	22.5	250	250	120	8	100	100		A08	P
6336	471 461 230		6	41.5	150		100	11	No Data Available			A08	TT
6350	614 227 140		6	2	250		12	5.5	100		5	B9A	TT
6374	**1 23* **8	D <sub>1</sub>	6				120		REC		30mA	B9A	R
6375	400 230 060		1.25	4.5	150		12.0	3.4	150		3.4	B8D	T
6385	214 607 413		6	2.1	150		82	5.5	125		5.5	B9A	TT
6386	214 607 413		6	2	100		9.6	4	100		4	B9A	TT
6394	461 471 230		26.5	45	150		100	11	No Data Available			A08	TT



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
6397	306 025 240		1.25	7.5	125	125	7	1.9	100	100		B8B	P
6417	601 235 144		12.5	7.5	250	250	45	7	100	150	7	B9A	P
6443	**1 23* ***	D <sub>1</sub>	6				120		REC		36mA	B9A	R
6463	614 227 143		6	2	250		12	5.5	100			B9A	TT
6485	412 365 100		6	1.6	300	150	10	9	100	100		B7G	P
6488	412 653 160		6	2.0	100	100	7.5	5.0	100	100	5.0	B8D	P
6489	261 360 000		6		100		8		100			SM5	T
6516	412 360 500		6	13.5	250	250	16.0	2.6	100	150	2.6	B7G	P
6520	461 471 230		6	60	150		50	7	No Data Available			A08	TT
6524	542 134 500	A <sub>1</sub> A <sub>2</sub>	6	2	200	200	50	4.5	100	100		B7A	PP
6550	026 540 310		6	16.5	400	225	87	9	No Data Available			A08	P
6660	412 365 100		6	1.1	250	100	11	4.4	100	100	4.3	B7G	P
6661	412 365 100		6	1.0	250	150	7.4	4.6	100	100		B7G	P
6662	412 365 100		6	1.0	250	100	9.2	3.6	100	100	3.6	B7G	P
6663	182 310 900		6						D			B7G	RR
6669	412 365 400		6	12.5	250	250	47	4.1	100	PenLF	4	A08	P
6677	145 236 154		6	3	250	150	30	11	100	100		B9A	P
6679	641 227 413		6	2	250		10	5.5	200		5	B9A	TT
6680	641 227 413		6	8.5	250		10.5	2.2	100		2.2	B9A	TT
6681	641 227 413		6	2	250		1.2	1.6	150		1.6	B9A	TT
6686	041 230 651		6	2.5	200	200	20	11	100	100		B9A	P
6687	412 365 100		6	5	125	75	.5	.6	125	75	.6	B7G	H
6688	141 23* 615		6	1	200	150	13.1	16.5	No Data Available			B9A	P
6689	541 236 **1		6	1.7	200	125	10	9	100	100		B9A	P
6697	641 227 413		6	8.5	250		10	2.0	150			B9A	TT
6760	641 236 510		18	7.5	125	125	70	12	No Data Available			B9A	P
6761	641 236 510		6	7.5	125	125	70	13	No Data Available			B9A	P
6829	641 227 413		6	2.2	150		10.7	8.1	150		8.1	B9A	TT
6850	542 134 500	A <sub>1</sub> A <sub>2</sub>	12		200	200	50	4.5	100	100		B7A	PP
6870	141 223 651		6	3.5	250	250	25	8.5	100	100	8	B9A	P
6883	125 141 130	A <sub>1</sub>	12	30	200	200	100	7	No Data Available			B9A	P
6893	125 141 130	A <sub>1</sub>	12	30	200	200	100	7	No Data Available			B9A	P
§ 6927	672 344 100		6	3 -85	150		5	4.5	100		5	} B7G	TT
					100		8.5	5.8	100		5		
6928	412 365 400		6	12.5	250	250	45	4.1	100	PenLF	4	B7G	P
6955	641 227 413		6	8.5	250		11.5	2.3	100			B9A	TT
7000	026 510 310	G <sub>1</sub>	6	3	250	100	2	1.225	100	100	1.2	A08	P
7184	026 540 360		6	15	250	250	70		100	PenLF		A08	P
7193	020 000 310	A <sub>1</sub> G <sub>1</sub>	6	10.5	300		11	3	100		3	A08	T
7700	265 113 000	G <sub>1</sub>	6	3	250	100	2	1.2	100	100		UX6	P
7752	412 365 100		6	2	125	125	5.5	3.5	100	100	3.5	B7G	P
7755	412 365 100		6		30	30	3	2.75	No Data Available			B7G	P
7756	106 052 430		6	36	300	300	58	4.3	100	PenLF	4.3	A08	P

§ See note on Page 8.

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
8013A	200 300 000	D <sub>1</sub>	2.5				15		REC		10mA	B4	R
8016	020 000 030	D <sub>1</sub>	1.25						D			A08	D
8020	200 300 000	D <sub>1</sub>	5				120		REC		30mA	UX4	R
9001	412 365 100		6	3	250	100	2	1.4	100	100	1.4	B7G	P
9002	612 364 100		6	7	250		6.3	2.2	100		2.22	B7G	T
9003	412 365 100		6	3	250	100	6.7	1.8	100	100	1.8	B7G	P
9006	812 380 100		6				5		D			B7G	R
9072	020 000 310	A <sub>1</sub> G <sub>1</sub>	6		300		15	2.5	No Data Available			A08	T
18013	061 231 500	G <sub>1</sub>	4		200	200	8	5	100	100		B7	P
18014	005 231 600	G <sub>1</sub>	4		200	200	35	8	100	100		B7	P
18015	061 231 500		21		125	125	8	8.3	125	125	8.3	B7	P
18016	005 231 600		21		125	125	48	9	125	125	9	B7	P
18040	265 104 130		18	3.4	200	200	15	10	100	150	10	B8B	P
18042	541 236 **1		18	1.8	200	100	8.3	8.2	100	100	8	B9A	P
18043	541 236 **1		6	1.8	200	100	8.2	8.2	100	100	8	B9A	P
18045	041 230 651		18	3	200	200	20	11	100	150	10	B9A	P
18046	041 230 651		18	3	200	200	20	11	100	150	10	B9A	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
A11A	892 300 000		4				60		REC		20mA	B4	RR
A11B	892 300 000		4				60		REC		20mA	B4	RR
A11C	892 300 000		4				60		REC		20mA	B4	RR
A11D	892 300 000		4				60		REC		20mA	B4	RR
A20B	892 310 000		4						D			B5	DD
A23A	809 231 600	G <sub>1</sub>	4	7	250		4.0	2.0	100		2.9	B7	DDT
A26	264 300 000		15	1.5	90		4.5	1.16	80		1.16	UX4	T
A27D	819 236 500	G <sub>1</sub>	4	6	250	250	36	9.5	100	PenLF	9.5	B7	DDP
A28	264 300 000		15	1.5	90		7.5	1.16	80		1.16	UX4	T
A30	264 300 000		15	27	175		22	1.08	100		1.08	UX4	T
A30B	642 310 000		4	2	250		10	5.5	200		5.5	B5	T
A30D	642 310 000		4	3.5	200		6	2.4	100		2.4	B5	T
A32	264 300 000		15	3	150		1.5	0.94	150		0.94	UX4	T
A36A	645 231 700	G <sub>1</sub>	4	{ 2	150		6	1.2	150	60	1.2	} B7	TH
				{ 2	200	100	3.5		200	75			
A36B	645 231 700	G <sub>1</sub>	4	{ 2	100		22	6	100	60	6	} B7	TH
				{ 2	250	150	3.5		100	PenLF			
A36C	645 231 700	G <sub>1</sub>	4	{ 3	100	0	9	3.8	100	60	5.0	} B7	TH
				{ 2.5	250	100	3.25		100	100	3.0		
A40	264 300 000		15	40.5	175		21	1.5	100		1.5	UX4	T
A40M	254 130 000	A	4	1.5	200	100	3	2	200	100	3	UX5	P
A40M	542 310 000	A	4	1.5	200	100	3	2	200	100	3	B5	P
A48	264 300 000		15	4.5	90		4.5	1.18	80		1.18	UX4	T
A50A	542 310 000	A	4	2	200	100	3	2.3	100	100	2.3	B5	P
A50A	040 231 500	A	4	2	200	100	3	2.3	100	100	2.3	B7	P
A50B	061 231 500	G <sub>1</sub>	4	1.5	250	250	6	3.5	200	200	3.5	B7	P
A50M	041 231 500	A	4	2	200	125	4.5	2.3	100	100	2.3	B7	P
A50M	542 310 000	A	4	2	200	125	4.5	2.3	100	100	2.3	B5	P
A50N	542 310 000	A	4	2	225	100	4.25	2.5	200	100	2.5	B5	P
A50N	041 231 500	A	4	2	225	100	4.25	2.5	200	100	2.5	B7	P
A50P	060 231 500	G <sub>1</sub>	4	3	250	250	11.5	2	100	PenLF	2	B7	P
A70B	642 310 000	S	4	25	250	250	36	2.6	100	PenLF	2.6	B5	P
A70B	045 231 600		4	25	250	250	36	2.6	100	PenLF	2.6	B7	P
A70C	045 231 600		4	3	250	250	36	9	100	PenLF	9	B7	P
A70D	045 231 600		4	3	250	250	36	9	100	PenLF	9	B7	P
A70D	642 350 000		4	5.8	250	250	36	9.5	100	150	8	B5	P
A70E	045 231 600		4	14	250	275	72	8.5	100	PenLF	8.5	B7	P
A70P	045 231 600		4	14.5	250	250	70		100	PenLF		B7	P
A80A	123 174 560	G <sub>1</sub>	4	{ 1.8	90		2		100	90	1.3	} 8SC	O
				{ 8.5	250	75	1.6		200		2.5		
A80A	645 231 700	G <sub>1</sub>	4	{ 1.8	90	75	2		100	90	1.3	} B7	O
				{ 8.5	250	75	1.5		100	90	1.5		
A104	642 300 000		1.1	10	100		5	0.35	100		0.35	B4	T
A106	264 300 000		1.4	9	100		2	0.4	100		0.4	UX4	T
A106	642 300 000		1.4	9	100		2	0.4	100		0.4	B4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
A109	264 300 000		1.4	9	150		2	0.45	100		0.4	UX4	T
A110	264 300 000		1.4	4.5	125		3	0.4	125		0.4	UX4	T
A110	642 300 000		1.4	4.5	125		3	0.4	125		0.4	B4	T
A125	642 300 000		1.25	3	150		0.4	0.45	100		0.4	B4	T
A203	642 300 000		2	30	150		12	1.5	100		1.5	B4	T
A205	642 300 000		2	18	150		7	1.2	100		1.2	B4	T
A206	642 300 000		2	8.5	150		3.8		100		1	B4	T
A209	642 300 000		2	9	150		4	1.0	100		1.0	B4	T
A210	642 300 000		2	9	125		3	0.9	100		0.9	B4	T
A211	642 300 000		2	2	150		2	1.2	100		1.2	B4	T
A225	642 300 000		2	3	150		1	1.0	100		1.0	B4	T
A235	042 300 000	A	2	0	150		1.5	0.4	150		0.4	B4	T
A241	642 300 000	S	2	2	20	20	1.2	1.0	No Data Available			B4	P
A242	265 300 000	G <sub>1</sub>	2	3	125	75	1.7	0.6	100	75	0.6	UX4	P
A303	264 300 000		3	27	150		3	0.6	100			UX4	T
A306	264 300 000		3	15	150		1.5	0.4	100			UX4	T
A404	642 300 000		4	10	100		4	0.45	100		0.45	B4	T
A406	642 300 000		4	9	150		6	0.45	100		0.45	B4	T
A408	642 300 000		4	4	150		4	1.5	100		1.5	B4	T
A409	642 300 000		4	9	150		3.5	0.9	100		1.2	B4	T
A410	642 300 000		4	3	150		3.5	0.5	100		1.2	B4	T
A410	264 300 000		4	3	150		3.5	0.5	100		1.2	UX4	T
A410N	642 300 000		4	3	150		3.5	0.5	100		0.5	B4	T
A411	642 300 000		4	3	200		6	2.5	150		2.5	B4	T
A414K	642 300 000		4	4.5	150		4	2	100		2	B4	T
A415	642 300 000		4	4	150		4	1.5	100		2	B4	T
A416	642 300 000		4	4.5	150		4	2	100		2	B4	T
A402	642 300 000		4	4	150		4	1.5	100		1.5	B4	T
A425	642 300 000		4	2.5	200		0.25	1.2	100		1.2	B4	T
A430	642 300 000		4	3	200		6	2.5	150		2.5	B4	T
A430	042 300 000	A	4	0	150		1.5	0.5	150		0.5	B4	T
A430N	642 310 000		4	4.5	250		6.5	3.5	100		3	B5	T
A435	642 300 000		4	1	150		2.1	0.5	150		0.5	B4	T
A440N	642 310 000		4	1.6	200		0.2	2.2	150		2.2	B5	T
A442	542 300 000	A	4	1	200	100	4	0.7	200	100	0.8	B4	P
A442	254 300 000	A	4	1	200	100	1.0	0.4	200	100	0.8	UX4	P
A557	602 310 000	G <sub>1</sub>	4	8	150		28	2	100		2	B5	T
A577	602 310 000	G <sub>1</sub>	4	20	250		40	2	100		2.0	B5	T
A600	642 300 000		6	9	150		4	1.5	100		1.5	UX4	T
A609	642 300 000		6	9	150		4	1.5	100		1.5	B4	T
A615	642 300 000		6	4.5	150		4	2.4	100		2.4	B4	T
A630	642 300 000		6	1.5	150		0.7	1.5	150		1.5	B4	T
A635	642 300 000		6	1	150		1.2	1.5	150		1.5	B4	T
A642	542 300 000	A	6	1	200	100		0.7	200	100	0.7	B4	P
A802	642 310 000		4	3	100		2.5	2.5	100		2.5	B5	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
A819	060 231 500	G <sub>1</sub>	4		250	250	8	7.5	100	100		B7	P
A863	026 500 310	G <sub>1</sub>	6	3	250	100	2	1.23	100	100	1.2	A08	P
A901	045 231 600		5		100	100	50	9	No Data Available			B7	P
A1685	026 510 310	G <sub>1</sub>	6.3	3	125	100	8	3.2	100	100	3.2	A08	P
A1685M	026 510 310	G <sub>1</sub>	6	3	125	100	8	3.2	100	100	3.2	A08	P
A1714	412 30* 600		6	2.5	150		10	8.5	100		8	B7G	T
A1820	265 004 130		6		250	250	40	10.5	100	PenLF	9	B8B	P
A1834	471 461 230		6	40	100		52	3	No Data Available			A08	TT
A2087	6*2 360 800		4.4				5		D			B7G	R
A2118	642 300 000		20	3	200		6	2.3	100		2	B4	T
A2134	412 36* 500		6	7.8	150	150	55	9.5	100	100	9	B7G	P
A2272	21* *1* *13	A <sub>1</sub>	6.3						D			B9G	R
A4090	642 310 000		4	3.5	250		6	2.4	150		2.4	B5	T
A4110	642 300 000		4	3.5	200		6	2.4	100		2.2	B4	T
AABI	023 1+0 980		4						D			8SC	DDD
AA61	274 164 130		6	5.2	250		6	2.7	100		2.7	B8A	TT
ABI	902 310 000	D <sub>1</sub>	4						D			B5	DD
AB2	902 310 000	D <sub>1</sub>	4						D			B5	DD
ABC1	023 198 060	G <sub>1</sub>	4	7	250		4	2	100		2	8SC	DDT
ABC91	412 389 600		6	2	250		1.2	1.6	100		1.4	B7G	DDT
ABLI	023 198 560	G <sub>1</sub>	4	6	250	250	36	9	100	PenLF	9.0	8SC	DDP-
AC/042	642 300 000		2	38	300		50	5	100		5	B4	T
AC/044	642 300 000		4	38	300		50	5	100		5	B4	T
AC054	642 300 000		4	22	250		48	3.5	No Data Available			B4	T
AC/064	642 300 000		4	21	200		20	3	100		3	B4	T
AC084	642 300 000		4	22	300		17	1.1	100		1.1	B4	T
AC084N	642 300 000		4	0	100		21	2.5	100		2.5	B4	T
AC2	023 100 060	G <sub>1</sub>	4	5.5	250		6	2.5	100		2.5	8SC	T
AC2DD	869 231 500	G <sub>1</sub>	4	5.5	250	250	32		100	PenLF		B7	DDP
AC2/HL	642 310 000		4	1.75	200		4.9	5	100		5	B5	T
AC2/Pen	045 231 600		4	5.3	250	250	32	7.0	100	PenLF	8	B7	P
AC2/PenDD	869 231 500	G <sub>1</sub>	4	5.3	250	250	32	7.0	100	PenLF	8	B7	DDP
AC3Pen	045 231 600		4	3	250	250	36	9	100	PenLF	9	B7	P
AC4/Pen	045 231 600		4 (5)	7	225	225	56	11	100	100	10	B7	P
AC5/Pen	045 231 600		4	8.5	250	250	40	9.4	100	PenLF	9.4	B7	P
AC5/PenDD	869 231 500	G <sub>1</sub>	4 (5)	8.5	250	250	40	9.4	100	PenLF	9.4	B7	DDP
AC6/Pen	045 231 000	A	4 (4.5)	6.9	300	225	63	9.5	100	100	8.5	B7	P
AC104	642 310 000		4	10	150		8.5	3.5	100		3.5	B5	T
AC701	103 060 020	G <sub>1</sub>	4	1.6	40		0.5	0.7	No Data Available			B8D	T
ACD	802 310 000		4						D			B5	D
ACDD													
(HIVAC)	892 310 000		4						D			B5	DD
AC/DDT	809 231 600	G <sub>1</sub>	4	4	200		5	2.3	100		2.3	B7	DDT
AC/DX	642 310 000		4	3	200		5	3.5	100		3.5	B5	T
AC/G	642 310 000		4	7.5	200		8	2.7	100		2.7	B5	T

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
ACHF	642 310 000		4	3	200		3	2.5	100		2.5	B5	T
ACHL	642 310 000		4	2.5	200		7	2.0	100		3.5	B5	T
AC/HLDD	809 231 600	G <sub>1</sub>	4	3	200		4.9	2.6	100		2.6	B7	DDT
ACHLDD	910 231 680	G <sub>1</sub>	4	3	200		4.9	2.6	100		2.7	B9	DDDT
ACHL4	642 310 000		4	5	250		5	3.3	100		3.3	B5	T
ACHL4DD	809 231 600	G <sub>1</sub>	4	3	250		7	2.5	100		2.5	B7	DDT
ACHM4	542 310 000	A	4		250	100	10	2.5	100	100	2.5	B5	P
AC/HP	041 231 500	A	4	1.5	200	100	4.2	3.2	100	100	3.2	B7	P
AC/HP	543 210 000	A	4	1.5	200	100	4.2	3.2	100	100	3.2	B5	P
ACHVP	542 310 000	A	4	2	200	100	3	2.3	100	100	2.3	B5	P
ACHI	174 652 300	G <sub>1</sub>	4	{ 2 2	150 75		11 2.5	2.0	100 80	60 75	2	C7	TH
ACH4	642 310 000		4	4	200		3	3.3	100		3.3	B5	T
ACH4	642 310 000		4	4	200		3	3.3	100		3.3	B5	T
AC/L	642 310 000		4	13.5	200		17	4.25	100		4.25	B5	T
ACL4	642 310 000		4	15	250		9	4	100		4	B5	T
AC/LP	642 310 000		4	14	200		18	4.25	100		4.25	B5	T
ACME4	642 310 000	S	4	16	250	250	26		100	PenLF		B5	P
ACP	642 300 000		4	21	200		19	3	100		3	B4	T
AC/P	642 310 000		4	13.5	200		17	2.75	100		2.75	B5	T
ACPI	642 310 000		4	28	200		24	2.3	100		2.3	B5	T
ACP4	042 310 000	A	4	1	100		20	7	100		7	B5	T
ACP4	642 310 000		4	20	250		20	4	100		4	B5	T
ACPN	642 350 000		4	12	250	200	22		100	PenLF		B5	P
ACPNDH	642 350 000		4	10	250	200	18		100	PenLF		B5	P
AC/PP	642 300 000		4	25	400		50	5	100		5	B4	T
ACPP	045 231 600		4	5.5	250	250	32		No Data Available			B7	P
AC/Pen.	045 231 600		4	15.5	250	250	32	2.7	100	100	2.5	B7	P
AC/Pen.	642 310 000	S	4	12	200	200	24	2.5	100	100	2.5	B5	P
ACPT	642 310 000	S	4	8	250	200	31		100	PenLF		B5	P
ACPX4	642 310 000		4	18	250		30	4	100		4	B5	T
ACPX4a	642 300 000		4	25	250		50	5	100		5	B4	T
ACQ	045 231 600		4	22	400	250	57	6	100	PenLF	6	B7	P
ACQA	045 231 600		6	23	400	250		6	100	PenLF	6	B7	P
AC/SIVM	542 310 000	A	4	1.5	200	75	5.6	1.1	200	75	1.1	B5	P
AC/S2	542 310 000	A	4	1.0	200	60	6	3.4	200	60	3.4	B5	P
ACS2Pen	041 231 500	A	4	1.5	250	100	8	4.6	200	100	5.5	B7	P
AC/SG	542 310 000	A	4	1.5	200	60	4.5	1.9	200	60	1.9	B5	P
AC/SGVM	542 310 000	A	4	2	200	60	5.8	2.0	200	60	2	B5	P
AC/SH	542 310 000	A	4	1.5	200	75	7.4	2.5	200	75	3.5	B5	P
AC/SL	041 230 500	A	4	1	200	75	3.8	2.0	200	75	2.0	B7	P
AC/SL	061 230 500	G <sub>1</sub>	4	1	200	75	3.8	3.3	200	75	3.3	B7	P
ACSPI	041 231 500	A	4	3	200	200	4.9	2.7	100	PenLF	2.7	B7	P
ACSP3	061 231 500	G <sub>1</sub>	4	1.5	250	100	9	7.5	200	100	7.5	B7	P
ACTHI	645 231 700	G <sub>1</sub>	4	{ 2.7 3	75 250		6.0 3	3.0 3.5	100 250	60 100	3.5 3.8	B7	TH

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
ACTHIA	271 640 530	G <sub>1</sub>	4	3	75		6.0	3.0	80	60	3	MO8	TH
ACTP	571 231 640	G <sub>1</sub>	4		3	250	100	3	3.5	100	100		3.5
ACVG	542 310 000	A	4	5	150	0	1.5	1.4	100	60	1.4	B5	P
ACVH	542 310 000	A	4	0	200	75	5	3	200	75	3		B5
AC/VP	041 231 500	A	4	1.5	200	100	5.7	2.5	200	100	3	B7	
AC/VP	542 310 000	A	4	1.5	200	100	5.7	2.5	200	100	3	B5	P
ACVPB	061 231 500	G <sub>1</sub>	4	1.5	250	150	12	4	250	200	4	B7	P
AC/VP1	041 231 500	A	4	2.8	250	200	7.4	2	100	PenLF	2	B7	P
AC/VP2	061 231 500	G <sub>1</sub>	4	2.8	250	200	7.4	2	100	PenLF	2	B7	P
AC/VP4	041 231 500	A	4		250	100	6	3	100	100	3	B7	P
ACVS	542 310 000	A	4	1.5	200	75	4.4	2.0	200	75	3	B5	P
ACVS4	542 310 000	A	4	2	250	50	6	2	200	60	2	B5	P
AC/Y	045 231 600		4	10	250	250	32	3.5	100	100	3.5	B7	P
AC/Y	642 310 000	S	4	10	250	250	32	3.5	100	100	3.5	B5	P
AC/YC	045 231 600		4	10	250	250	68	7.5	100	PenLF	7.5	B7	P
AC/YY	045 231 600		4	10	250	250	68		100	PenLF		B7	P
AC/Z	642 310 000	S	4	5.5	250	250	32	7.5	100	PenLF	8	B5	P
AC/Z	045 231 600		4	5.5	250	250	32	7.5	100	PenLF	8	B7	P
AC/ZDD	869 231 500	G <sub>1</sub>	4	5.5	250	250	32	8	100	PenLF	8	B7	DDP
AD	281 300 000		6				60		REC		20mA	B4	R
ADI	023 004 060		4	45	250		60	6	100		6	8SC	T
ADI/350	023 004 060		4	66	350		42		100			8SC	T
ADG	642 310 000		20	10	200		10	3.5	100		3.5	B5	T
ADHF	642 310 000		20	3	200		5	3.5	100		3.5	B5	T
ADHP	041 231 500	A	20		200	100	5	2.8	200	100	2.8	B7	P
ADL	642 310 000		20	13	200		20	3	100		3	B5	T
ADPN	642 350 000		20	15	250	200	22		100	PenLF		B5	P
ADVHP	041 231 500	A	20		200	100	5.5	2.5	200	100	2.5	B7	P
AE	265 413 000		13	13.5	100	100	8.5	1.65	100	90	1.65	UX6	P
AF	281 300 000		2.5				120		REC		20mA	UX4	R
AF2	542 310 000	A	4	2	225	100	4.25	2.5	200	100	3.2	B5	P
AF3	023 110 560	G <sub>1</sub>	4	3	250	100	8	1.8	250	100	1.8	8SC	P
AF7	023 110 560	G <sub>1</sub>	4	2	250	100	3	2.1	250	100	2.1	8SC	P
AG	289 300 000		5				120		REC		20mA	UX4	RR
AF8	026 546 310		6	2	200	50	3.5		No Data Available			A08	O
AG495	642 310 000		4	4	200		4	2.5	100		2.5	B5	T
AG4100	642 300 000		4	3	150		5	2	125		2	B4	P
AH1	023 145 560	G <sub>1</sub>	4	2	250	75	3	1.8	200	75	1.8	8SC	P
AH100	023 145 560	G <sub>1</sub>	4	2.5	200	100	5.5	1.5	100	100	1.5	8SC	P
AH4105	542 310 000	A	4	2	200	125	4.5	2.3	100	100	2.3	B5	
AK2	123 164 570	G <sub>1</sub>	4	2	100	75	4.2	0.9	80	75	0.9	8SC	O
					2	250	75	4.3	2.2	100	75		

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>i</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
AL1	023 004 560		4	15	250	250	36	2.8	100	PenLF	2.8	8SC	P
AL2	023 100 560	G <sub>1</sub>	4	25	250	250	36	2.6	100	PenLF	2.6	8SC	P
AL2/375	023 100 560	G <sub>1</sub>	4	25	250	250	36	2.6	100	PenLF	2.6	8SC	P
AL3	245 231 600		4	3	250	250	36	9	100	PenLF	9	B7	P
AL3	023 104 560		4	6.5	250	250	36	9.5	100	150	8	8SC	P
AL4	145 231 600		4	3	250	250	36	9	100	PenLF	9.5	B7	P
AL4	023 104 560		4	6.5	250	250	36	9.5	100	150	8	8SC	P
AL4/375	145 231 600		4	6	250	250	34	9.5	100	PenLF	8	B7	P
AL4/375	023 104 560		4	6	250	250	34	9.5	100	150	8	8SC	P
AL5	145 231 600		4	14	250	275	72	8.5	100	PenLF	7	B7	P
AL5	023 104 560		4	15	250	250	72	7	100	150	6	8SC	P
AL5/375	023 104 560		4	14	250	275	72	8.5	100	PenLF	6	8SC	P
AL60	041 231 500	A	4 (5)	7	250	250	72	14.5	100	PenLF	8.5	B7	P
AL495	642 310 000		4	12	250		20	4	100		4	B5	T
AMOE	045 231 600		4	14	250	250	72	9	100	PenLF	9	B7	P
AN4092	642 310 000	D <sub>1</sub>	4	3.5	200		6	2.0	100		2	B5	DT
AP495	642 310 000		4	1.5	200		2.5	5	150		5	B5	T
APP4A	045 231 600		4	16.5	250	250	36	3.5	100	PenLF	3.5	B7	P
APP4As	023 100 560	G <sub>1</sub>	4	16.5	250	250	36	3.5	100	PenLF	3.5	8SC	P
APP4B	045 231 600		4	5	250	250	32	10	100	PenLF	10	B7	P
APP4Bs	023 104 560		4	5	250	250	32	10	100	PenLF	10	8SC	P
APP4C	145 231 600		4 (5)	5	250	250	36	10	100	PenLF	10	B7	P
APP4D	145 231 600		4	16	250	250	72	7	100	PenLF	7	B7	P
APP4E	145 231 600		4 (5)	13.5	350	275	72	8.5	100	PenLF	8.5	B7	P
APP4E	023 104 560		4 (5)	13.5	350	275	72	8.5	100	PenLF	8.5	8SC	P
APP4G	041 231 500	A	4 (5)	6	250	250	36	10	100	PenLF	10	B7	P
APP4G	005 231 600	G <sub>1</sub>	4 (5)	6	250	250	36	10	100	PenLF	10	B7	P
APP495	642 350 000		4	23	300	200	25	2	100	100	2	B5	P
APP4100	642 310 000	S	4	15	250	250	24	2.5	100	150	2.5	B5	P
APP4120	642 310 000	S	4	15	350	200	22	3.5	100	100	3.5	B5	P
APV4	892 300 000		4				60		REC		20mA	B4	RR
APV4100	892 300 000		4				60		REC		20mA	B4	RR
APV4200	892 300 000		4				60		REC		20mA	B4	RR
AR495	642 310 000		4	1	100			5	100		5	B5	T
AR4100	642 310 000		4	3	200		3	2	150		2	B5	T
AR4101	642 310 000		4	1	100			3	100		3	B5	T
AS494	542 310 000	A	4		200	100	15	1.5	100	100	1.5	B5	P
AS495	542 310 000	A	4	2	200	100	1	3.4	200	100	3.4	B5	P
AS4100	542 310 000	A	4	6	200	100	4	1.425	100	90	1.4	B5	P
AS4120	542 310 000	A	4	2	250	100	3	3	150	100	3	B5	P
AS4125	542 310 000	A	4	2	250	100	3	3	200	100	3	B4	P
AX	264 300 000		5	9	150		3	0.8	100		0.8	UX4	T
AX1	892 300 000		4				60		REC		20mA	B4	RR
AX50	892 300 000		4				120		REC		30mA	B4	RR
AZI	023 080 090		4				30		REC		20mA	8SC	RR



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
AZ2	023 080 090		4				60			REC	20mA	8SC	RR	
AZ3	023 180 090		4				60			REC	20mA	8SC	RR	
AZ4	023 080 090		4				120			REC	30mA	8SC	RR	
AZ11	902 300 080		4				60			REC	20mA	F8	RR	
AZ12	902 300 080		4				60			REC	20mA	F8	RR	
AZ21	288 039 920		2				30			REC	17mA	A08	RR	
AZ31	020 809 030		4				30			REC	20mA	A08	RR	
AZ32	020 809 030		4				60			REC	20mA	A08	RR	
AZ33	028 090 300		4				60			REC	20mA	A08	RR	
AZ41	*8* **9 230		4				30			REC	10mA	B8A	RR	
AZ50	023 080 090		4				120			REC	30mA	8SC	RR	
B2	642 300 000		2	2	125		2	1.2		100	1.2	B4	T	
B7	642 300 000		6		125		8	0.67		100	0.67	B4	T	
B11	642 300 000		6		200		20	1.4		100	1.4	B4	T	
B21	447 230 600		2	3	150		5.0	1.5		100	2.1	B7	TT	
B22	446 230 700		2		150		5			150		B7	TT	
B23	642 300 000		2		125		4	0.75		100	0.75	B4	TT	
B24	446 230 700		2	0	150		7			100		B7	TT	
B30	447 231 600		13	0	175					100		B7	TT	
B36	471 461 230		13	8	250		9	2.6		100	2.6	A08	TT	
B63	264 147 300		6	5	250		6	3.1		200	3.1	UX7	TT	
B65	471 461 230		6	8	250		9	2.6		100	2.6	A08	TT	
B105	264 300 000		1.4	18	150		8	1.0		100		UX4	T	
B105	642 300 000		1.4	18	150		8	1.0		100		B4	T	
B152	741 226 413		6	2	250		10.0	5.5		200	5	B9A	TT	
B203	642 300 000		2	26	150		11	1.5		100	1.5	B4	T	
B204	264 300 000		2	22.5	125		8	0.9		100	0.9	UX4	T	
B205	642 300 000		2	18	150		7	1.2		100	1.2	B4	T	
B205	264 300 000		2	18	150		7	1.2		100	1.2	UX4	T	
B217	642 300 000		2	4.5	150		3	1.3		100	1.3	B4	T	
B217	264 300 000		2	4.5	150		3	1.3		100	3	UX4	T	
B228	264 300 000		2	2	150		2	1.2		150	1.4	UX4	T	
B228	642 300 000		2	2	150		2	1.2		100	1.2	B4	T	
B230	446 230 700		2	1	150		5.5			150		B7	TT	
B240	470 642 300		2	0	150		15			150		C7	TT	
B240	264 473 000		2		150		15			No Data Available		UX6	TT	
B242	542 300 000	A	2	0	200	75	4.5	1.1		100	75	1.1	B4	P
B242	254 300 000	A	2	0	200	75	4.5	1.1		100	75	1.1	UX4	P
B255	542 300 000	A	2	1	150	100	1.8	1.2		150	100	1.2	B4	P
B255	254 300 000	A	2	1	150	100	1.8	1.2		150	100	1.2	UX4	P
B262	542 300 000	A	2	1	150	100	1.8	1.3		150	100	1.3	B4	P
B262	265 300 000	G <sub>1</sub>	2	1	150	100	1.8	1.3		150	100	1.3	UX4	P
B309	741 226 413		6	2	250		10	5.5		100	5	B9A	TT	
B319	147 234 116		7.5	1.5	90		12	6		100	6	B9A	TT	
B329	741 226 413		6	8.5	250		10.5	2.2		100	2.2	B9A	TT	

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
B339	741 226 413		6	2	250		1.2	1.6	150		1.6	B9A	T
B342	265 300 000	G <sub>1</sub>	2	2.5	150	75	4	1.3	150	75	1.3	UX4	P
B403	642 300 000		4	30	150		15	1.5	100		1.5	B4	T
B403	264 300 000		4	30	150		15	1.5	100		1.2	UX4	T
B405	642 300 000		4	18	150		11	1.6	100		1.6	B4	T
B405	264 300 000		4	18	150		11	1.6	100		1.4	UX4	T
B406	642 300 000		4	15	150		8	1.4	100		1.4	B4	T
B406	264 300 000		4	15	150		8	1.3	100		1.3	UX4	T
B409	642 300 000		4	16	250		12	2	100		2	B4	T
B409	264 300 000		4	16	250		12	2	100		2	UX4	T
B415	642 300 000		4	4.5	150		3	2	100		2	B4	T
B415	264 300 000		4	4.5	150		3	2	100		2	UX4	T
B424	642 300 000		4	2.3	200		6	2.5	150		2.5	B4	T
B424S	642 300 000		4	3	200		6	2.5	100		2.5	B4	T
B424	264 300 000		4	2.3	200		6	2.5	150		2.5	UX4	T
B425	642 300 000		4	4.5	150		3	2	100		2	B4	T
B425	264 300 000		4	4.5	150		3	2	100		2	UX4	T
B438	264 300 000		4	2.5	200		0.2	2	150		2	UX4	T
B438	642 300 000		4	2.5	200		0.2	2	150		2	B4	T
B438S	642 300 000		4	1.5	200		2	2	150		2	B4	T
B442	542 300 000	A	4	1	200	100	4.5	0.9	200	100	0.9	B4	P
B442M	542 300 000	A	4	1	200	100	4.5	0.9	100	100	0.9	B4	P
B442M	254 300 000	A	4	1	200	100	4.5	0.9	100	100	0.9	UX4	P
B442S	542 300 000	A	4	1	200	100	4.5	0.9	100	100	0.9	B4	P
B443	642 350 000		4	17	200	150	12	1.2	100	PenLF	1.2	B5	P
B443S	642 350 000		4	12	250	75	12	1.6	100	60	1.6	B5	P
B443	264 300 000	G <sub>2</sub>	4	17	200	150	12	1.2	100	PenLF	1.2	UX4	P
B443s	642 300 000	G <sub>2</sub>	4	12	250	75	12	1.6	100	60	1.6	B4	P
B443s	264 300 000	G <sub>2</sub>	4	12	250	75	12	1.6	100	60	1.6	UX4	P
B491	642 310 000		4	1.5	200		4	4	150		4	B4	T
B543	642 350 000		5	15	200	150	12	1.3	150	100	1.3	B5	P
B543(s)	642 350 000		5	15	200	150	12	1.3	150	100	1.3	B5	P
B543	264 300 000	G <sub>2</sub>	5	15	200	150	12	1.3	150	100	1.3	UX4	P
B543	642 300 000	G <sub>2</sub>	5	15	200	150	12	1.3	150	100	1.3	B4	P
B605	642 300 000		6	18	150		9	1.8	100		1.8	B4	T
B605	264 300 000		6	18	150		9	1.8	100		1.8	UX4	T
B609	642 300 000		6	18	250		12	1.8	100		1.8	B4	T
B719	741 236 410		6	2	250		10.0	6.0	250		6.0	B9A	TT
B2006	642 310 000		20	18	200		15	1.6	100		1.6	B5	T
B2038	642 310 000		20	3	200		6	2.3	100		2.3	B5	T
B2041	602 300 000	G <sub>1</sub>	20	1	100		2.5	0.1	100		0.1	B4	T
B2042	542 310 000	A	20	2	200	60	4	1	100	60	1	B5	P
B2043	642 310 000	S	20	18	200	200	20	1.7	100	100	1.7	B5	P
B2044S	642 310 000	D <sub>1</sub>	20	3	200		6	1.8	100		1.8	B5	DT
B2045	542 310 000	A	20	2	200	60	4	1	150	60	1	B5	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
B2046	542 310 000	A	20	2	200	100	3	2.2	150	100	2.2	B5	P
B2047	542 310 000	A	20	2	200	100	4	2	150	100	2	B5	P
B2055	542 310 000	A	20	1.5	200	100	3	2	100	100	2	B5	P
B2052T	542 310 000	A	20	2	200	100	3	2	150	100	2	B5	P
B2099	642 310 000		20	1.6	200		0.2	3	150		3	B5	T
BA2	446 230 700		2	0	150		1.5		150			B7	TT
BB1	902 310 000	D <sub>1</sub>	16						D			B5	DD
BBC12	682 390 000	G <sub>1</sub>	2	4.5	150		2.5	1.5	100		1.5	B5	DDT
BB220A	446 230 700		2	3	150		4		100			B7	TT
BB240	446 230 700		2	6	150		2.2		100			B7	TT
BCH1	165 231 700	G <sub>1</sub>	24	2	100		5	1.2	100		1.2	B7	TP
					200	50	1.3	0.75	100	60			
BF1	642 300 000		4	15	150		8	1.3	100		1.3	B4	T
BF61	261 054 130		6	7	250	250	36	10	100	150	8	B8A	P
BF62	261 054 130		6	10	225	225	26	3.2	100	150	3.2	B8A	P
BF451	261 054 130		45	9	175	175	54.5	9.5	100	100	7	B8A	P
BL2	652 310 000	G <sub>1</sub>	30	20	200	100	40	3	100	90	3	B5	P
BL63	027 146 310	G <sub>1</sub>	6	16	250		14	4.2	100		4.2	A08	TT
BHP61	023 010 560	G <sub>1</sub>	2	0.5	125	125	2.5	0.7	125	125	0.7	8SC	P
BLP61	023 004 560		2		150	150	7	2.7	100	100		8SC	P
BM968	200 300 000	D <sub>1</sub>	2.5				60		REC		35mA	UX4	R
BPM04	412 365 400		6.3	12.5	250	250	45	4.5	100	PenLF	4	B7G	P
BW3	642 350 000		2	4.5	150	125	6	2.2	100	100	2.2	B5	P
BW602	642 300 000		2	12	150		12	3.4	100		3.4	B4	T
BW1304	642 300 000		2	6	150		6	3.2	100		3.2	B4	T
BX2	446 230 700		2	0	175		2.5		100			B7	TT
BX604	642 300 000		2	12	150		8	1.5	100		1.5	B4	T
C3G	261 504 130		6.3	1.8	225	150	13	13.5	100	100		B8B	P
C3G	216 514 130		6.3	1.8	225	150	13	13.5	100	100		B8B	P
C3M	261 504 130		20	4.5	225	150	15.0	6.0	100	100	5.2	B8B	P
C9	642 300 000		4	9	150		3.5	0.9	100		0.9	B4	T
CI0B	023 100 080		20				75		REC		23mA	8SC	R
CI0B	802 310 000		20				60		REC		23mA	B5	R
C20C	982 310 000		13						D			B5	DD
C23B	809 231 600	G <sub>1</sub>	13	5	200		4	2	100		2	B7	DDT
C25	642 300 000		4	2.5	200		2.3	1.2	150		1.2	B4	T
C30	261 504 130		6.3	4.5	225	150	15	6	100	100		B8B	P
C30B	000 231 600	G <sub>1</sub>	13	4	200		4	3.2	150		3.2	B7	T
C36A	645 231 740		21	1.5	100		4	2	125	60	1.2	B9	TH
					225	75	3		100	75			
C36C	645 231 740		29	2.5	100		4	2	100	60		B9	TH
					225	75	3	3.5	250	100			
C36B	645 231 700	G <sub>1</sub>	29		100				100	60		B7	TH
					250	150	3.4		100	100			
C50B	061 231 500	G <sub>1</sub>	13	2.2	200	200	2.5	2.8	100	PenLF	2.8	B7	P
C50N	061 231 500	G <sub>1</sub>	13	2	200	200	9.5	2	100	150	2	B7	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
C70D	023 110 560	G <sub>1</sub>	33	8.5	200	200	45	8	100	PenLF	7	8SC	P
C70D	045 231 600		35	8.5	200	200	45	8	100	PenLF	7	B7	P
C80B	123 154 560	G <sub>1</sub>	13	1.5	200	90	1.6		150	75		8SC	O
C109	642 300 000		1	9	150		3.5	0.5	100		0.5	B4	T
C125	642 300 000		1	3	150			0.8	125		0.8	B4	T
C135	042 300 000	A	1.4	1	150		1.5	1	150		1	B4	T
C142	542 300 000	A	1	1.5	150	75	1.7	0.8	100		0.8	B4	P
C144	245 134 200	A <sub>1</sub> A <sub>2</sub>	6.3	15	300	200	40	9	No Data Available			B7A	PP
C180	245 134 200	A <sub>1</sub> A <sub>2</sub>	6.3	20	300	250	55	3.5	No Data Available			B7A	PP
C243	642 350 000		2	15	150	150	17	1.5	100	100	1.5	B5	P
C243N	642 350 000		2	4.5	150	125	6	2.2	150	100	2.2	B5	P
C243N	264 530 000		2	4.5	150	125	6	2.2	150	100	2.2	UX5	P
C405	642 300 000		4	32	250		20	1.9	100		1.9	B4	T
C405	264 300 000		4	32	250		20	1.9	100		1.9	UX4	T
C408	642 300 000		4	7	150		14	2.9	100		2.9	B4	T
C443	642 350 000		4	25	300	200	20	1.7	100	PenLF	1.7	B5	P
C443N	642 350 000		4	42	300	200	20	1.5	100	PenLF	1.5	B5	P
C443N/S	642 350 000		4	20	300	150	20	1.5	100	100	1.5	B5	P
C453	642 350 000		4	25	300	200	20	1.7	100	PenLF	1.7	B5	P
C508	264 300 000		5	9	150		6.2	1.7	100		1.7	UX4	T
C509A	642 300 000		4	10	150		10	1	100		1	B4	T
C603	642 300 000		6	40	175		20	1.7	100		1.7	B4	T
C606	642 300 000		6	27	250		20	3.3	100		3.5	B4	T
C643	642 350 000		6	21	300	200	20	1.5	100	PenLF	1.5	B5	P
CB215	446 230 700		2	1	150		15	1.7	100		1.7	B7	TT
CB215S	023 064 470		2	1	150		12	1.7	100		1.7	8SC	TT
CB220	446 230 700		2	3	150		15		100			B7	TT
CBC1	023 198 060	G <sub>1</sub>	13	7	250		4	2	100		2	8SC	DDT
CBL1	023 189 560	G <sub>1</sub>	44	8.5	200	200	45	8	100	PenLF	7	8SC	DDP
CBL6	023 198 560	G <sub>1</sub>	44	8	100	100	45	6	100	75	6	8SC	DDP
CBL31	026 985 310	G <sub>1</sub>	44	8.5	200	200	45	8	100	PenLF	7	A08	DDP
CCI	023 100 060	G <sub>1</sub>	13	3.7	200		2.6	2	150		2	8SC	T
CC2	023 100 060	G <sub>1</sub>	13	5.5	250		6	2.5	200		2.5	8SC	T
CCHI	023 164 570	G <sub>1</sub>	20	10 2	200		2.5	2.3	100	60	2.3	8SC	TH
					200	50	2		100	60			
CCH2	023 164 570	G <sub>1</sub>	29	10 2	200		2.5	2.3	100	60	2.3	8SC	TH
					200	75	2		100	75			
CCH35	027 546 310	G <sub>1</sub>	7.5	2 2	100		5.4	2.2	100	60	2.8	A08	TH
					250	100	5	2.4	200	100	4		
CE230	320 200 000	D <sub>1</sub>	2.5				30		REC		15mA	UX4	R
CF1	023 110 560	G <sub>1</sub>	13	2	200	100	3	2.3	100	100	2.3	8SC	P
CF2	023 110 560	G <sub>1</sub>	13	2	200	100	4.5	2.2	100	100	2.2	8SC	P
CF3	023 110 560	G <sub>1</sub>	13	2	100	75	7.5	2.1	100	75	2.1	8SC	P
CF7	023 110 560	G <sub>1</sub>	13	2	100	100	3	2.1	100	100	2.1	8SC	P
CF50	123 100 560	G <sub>1</sub>	30	2	100	100	1.5	3.3	100	100	3.3	8SC	P
CF51	123 100 560	G <sub>1</sub>	30	2	250	100	1.7	3.3	100	100		8SC	P

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
CF61	276 454 130		6	2	100		5	2.2	100		2.8	B8A	TH
					250	100	3	2	100	100	2.4		
CF141	276 454 130		14	2	100		6.4	2.2	100		2.8	B8A	TH
					200	90	2.7	1.5	100	75	1.5		
CH1	023 145 560	G <sub>1</sub>	13	2	250	75	3	1.8	200	75	1.8	8SC	P
CK1	023 154 560	G <sub>1</sub>	13	1.5	200	90	8	3	200	75	1.6	8SC	P
CK3	461 230 650	G <sub>1</sub>	19	15	200	100	2.5		No Data Available			S8	O
CK546	653 420 000		1.25	0	20	20	0.4	0.45	No Data Available			B5A	P
CK1002	008 090 010		6				30	3KΩ	No Data Available			A08	CCR
CK1005	008 092 030		6.3				30		REC	15mA		A08	RR
CK1006	289 300 000		2				60		REC	20mA		UX4	RR
CK1007	008 092 030		1				60		REC	20mA		A08	RR
CK1012	289 300 000		2				120		REC	30mA		UX4	RR
CK1024	008 090 010		6				60	3KΩ	No Data Available			A08	CCR
CK1028	202 322 200	D <sub>1</sub>	6				60		REC	20mA		B7G	R
CK1091	200 900 300		1.4						D			B7G	D
CK5814	741 226 413		6	8.5	250		10.5	2.2	100		2.2	B9A	TT
CL1	023 100 560	G <sub>1</sub>	13	14	200	200	25	2.5	100	PenLF	2.5	8SC	P
CL2	023 100 560	G <sub>1</sub>	24	15	100	100	50	3.8	200	75	3.8	9SC	P
CL3	160 452 300		35	9.5	200	200	40	5.5	150	100	5	C7	P
CL4	023 100 560	G <sub>1</sub>	33	8.5	200	200	45	8	100	PenLF	7	8SC	P
CL6	023 100 560	G <sub>1</sub>	35	9.5	200	100	45	8	100	90	7	8SC	P
CL33	026 540 310		33	8.5	200	200	45	8	100	100	7	A08	P
CV135	812 380 000		6				60		REC		23mA	B7G	R
CV137	812 314 600		6	3	200		7.5	2.5	100		2.5	B7G	DT
CV139	412 314 600		6	1.5	250		10	9	100		6	B7G	T
CV1510	265 501 403		6		400	250	30	3	100	150	3	B9G	P
CY1	023 100 080		20				120		REC		60mA	8SC	R
CY1c	803 210 000		20				60		REC		20mA	B5	R
CY2	123 190 080		30				60		REC		20mA	8SC	RR
CY21	208 001 003		25				120		REC		23mA	B9G	R
CY31	020 080 310		20				120		REC		60mA	A08	R
CY32	029 180 310		30				60		REC		23mA	A08	RR
CZ30	028 193 210		80				60		REC		20mA	A08	RR
CZ501d	265 113 000		3.5	2.5	250	125	6.5	3.5				UX6	P
CZ504D	265 113 000		5.5	13.5	250	200	40	3.5				UX6	P
D020	642 300 000		7.5	50	400		55	2.1	100		2.1	B4	T
D <sub>1</sub>	280 300 000		7.5				60		REC		20mA	UX4	R
D1	123 000 000	D <sub>1</sub>	4				5		D			B3G	R
D1	642 300 000		4	1	40		1	0.8	No Data Available			B4	T
D1	289 300 000		5				60		REC		20mA	UX4	RR
D2	642 300 000		4	6	100		2.2	0.25	100		0.25	B4	T
D2M9	182 310 900		6.3				5		D			B7G	DD
D4	642 310 000		4	3	200		4	3.3	150		3.3	B5	T
D13U	023 100 060	G <sub>1</sub>	13	5	225		6	2.5	100			8SC	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
D024	642 300 000		4	40	400		63	7.5	100		6.0	B4	T
D025	642 300 000		6	75	300		60	3.75	100		3.75	B4	T
D026	642 300 000		4	92	400		63	3.8	100		3.8	B4	T
D030	642 300 000		4	100	400		60	6.9	100		6.0	B4	T
DO42	918 236 500	G <sub>1</sub>	4	6	250	250	36	9.5	100	150	8.0	B7	DDP
D41	892 310 000		4						D			B5	DD
D42	812 300 000		4						D			B4	D
D43	012 300 000	A	4				15		D			B5	DD
D61	268 154 130		6.3	2	250	125	5	1.8	100	100		B8A	P
D63	028 190 310		6						D		9mA	A08	DD
D77	192 310 800		6						D			B7G	DD
D105	264 300 000		1	18	150		8	2	150		2	UX4	T
D105	642 300 000		1	18	150		8	2	150		2	B4	T
D110	264 300 000		4	40	250		40	2.7	100		2.7	UX4	T
D110	642 300 000		4	40	250		40	2.7	100		2.7	B4	T
D121	268 154 130		12.5	2	200	90	5	2	100	100	2	B8A	DP
D152	192 310 800		6						D			B7G	RR
D210	642 300 000		2	3	150		3.5	1.25	100		1.25	B4	T
D210SW	603 200 000	G <sub>1</sub>	2	4.5	150		2.4	1.35	100		1.35	B4	T
D243	642 350 000		2.5	27	300	200	20	2	100	PenLF	2	B5	T
D400	892 310 000		4						D			B5	D
D404	642 300 000		4	10	100		4	0.45	100		0.45	B4	T
D410	642 300 000		4	3	150		3.5	0.5	150		0.5	B4	T
D418	102 300 000	D <sub>1</sub>	4						D			B4	D
D604	023 181 910		6						D			8SC	DD
DA	000 231 600	G <sub>1</sub>	13	2.6	200		3.7	2.2	150		2.2	B7	T
DA1	642 300 000		2	1	40		0.25	0.4	No Data Available			Sm4	T
DA2	642 300 000		2	2.15	40		1.25	0.5	No Data Available			Sm4	T
DA3	642 300 000		2	2.8	40		1.8	0.62	No Data Available			Sm4	T
DA30	642 300 000		4 (5)	70	300		60	3.5	100		6.0	B5	T
DA42	214 300 000	A <sub>1</sub>	7.5		400			3.0	No Data Available				T
DA90	281 0*8 300		1.4				5		D			B7G	R
DA101	200 800 300		1.2						D			B7G	D
DA406	542 300 000	A	4	2.5	150	75	3	0.8	100	75	0.8	B4	P
DAC1	023 008 060	G <sub>1</sub>	1.4	1	90		0.14	0.27	80		0.27	8SC	DT
DAC21	206 008 030	G <sub>1</sub>	1.4	0	125		0.75	0.4	80		0.3	A08	DT
DAC22	264 008 030		1.25		90		0.35	0.3	90		0.3	B8G	DT
DAC25	264 228 230		1.4	1	125		0.6	0.35	125		0.35	A08	DT
DAC31	036 080 200	G <sub>1</sub>	1.4	1	90		0.45	0.27	80		0.27	A08	DT
DAC32	036 080 200	G <sub>1</sub>	1.4		90		0.15	0.275	90		0.275	A08	DT
DAFI	082 362 450		1.2		125	60	1.4		125	60		F8	P
DAF11	802 362 450		1.4	0	90	50	0.22	2	80	60	2	F8	DP
DAF40	268 354 230		1.4	1.0	75	75	0.85	0.7	80	75	0.8	B8A	DP
DAF41	268 354 230		1.4	1.0	75	75	0.85	0.7	80	75	0.8	B8A	DP
DAF70	604 238 050		1.25	0	60	60	0.8	0.45	80	75		B8D	DP

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE		
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V				
DAF91	208 564 300		1.4	1	90	90	2	0.72	80	90	0.72	B7G	DP		
DAF92	265 804 300		1.4	1	90	90	2	0.72	90	90	0.72	B7G	DP		
DAF96	208 564 300		1.4	1.5	60	60	0.17	0.17	80	75	0.17	B7G	DP		
DAFI91	2*8 564 300		1.4	0	60	60	2.2	0.75	No Data Available			B7G	DP		
DASI	542 300 000	A	2	2.7	125	125	1.5	0.58	100	100	0.58	Sm4	P		
DB	446 230 700		25	0	250		40		250			B7	TT		
DBC21	206 098 030	G <sub>1</sub>	1.4	1.5	125		1.6	0.9	100		0.9	A08	DDT		
DBC25	208 904 630		1.4	1.5	125		1.6	0.9	125		0.9	B8B	DDT		
DBC31	026 980 300	G <sub>1</sub>	1.4	1.5	125		1.6	0.9	100		0.9	A08	DDT		
DC2/HLDD	809 231 600	G <sub>1</sub>	25	1	200			2	100		2	B7	DDT		
DC2P	642 310 000		35	13.5	200		17	3.75	100		3.75	B5	T		
DC2/Pen	045 231 600		35	10	250	200	30	2.5	100	100	2.5	B7	P		
DC2/Pen	642 310 000	S	35	10	250	200	30	2.5	100	100	2.5	B5	P		
DC2SG	542 310 000	A	20	1	200	75	5.5	1.8	200	75	1.8	B5	P		
DC2SGVM	542 310 000	A	20	2	200	60	5.8	1.5	200	60	1.5	B5	P		
DC3HL	642 310 000		25	1	80		0.34	0.38	100		0.38	B5	T		
DC11	602 302 400		1.4	2.5	90		2.0	1.0	80		1.0	F8	T		
DC25	260 024 030		1.4	3.5	100		1.8	0.85	100		0.85	B8B	T		
DC70	400 230 060		1.25	4.5	150		14.5	3.7	100		3.4	B8D	T		
DC80	402 320 060		1.2	0	150		20	3.5	100			B9A	T		
DC90	266 044 300		1.4	3.0	90		3.0	1.1	9.0		1.1	B7G	T		
DC93	204 036 200		1.4	5	100		10	2.4	100		2.3	B7G	T		
DC96	266 044 300		1.4	2.5	90		2.1	1.0	90		0.95	B7G	T		
DC193	2*4 *36 200		1.4	5	100		10	2.4	100		2.4	B7G	T		
DCC90	274 346 200		1.4	2.5	90		3.7	1.8	80		1.8	B7G	TT		
DCH1	207 540 630		1.4	4	60		2.1	1.4	60	60	1.4	A08	TH		
					125	125	1.0		100	100					
DCH11	723 465 430		1.25		90		0.85		100	60				F8	TH
					125	60			100	60					
DCH21	207 540 630	G <sub>1</sub>	1.4	0	60		2.1	1.4	No Data Available			A08	TH		
				0	90	60	1		80	60					
DCH22	276 454 030		1.4	0	60		1.4		No Data Available			A08	TH		
				0	90	50	0.75								
DCH25	276 454 030		1.4	0	60		2	1.3	No Data Available			A08	TH		
				0	90	60	1		80	60					
DCH31	027 546 300		1.4	1	60		2.1	1.4	No Data Available			A08	TH		
					90	60	1	1.4	80	60					
DC/HL	642 310 000		6	1	100			3	100		3	B5	T		
DC/P	642 310 000		8	1	200			4.5	200		4.5	B5	T		
DC/SG	542 310 000	A	6	0	125	75		2.75	200	75	2.75	B5	P		
DD4	892 310 000		4						D			B5	DD		
DD4D	091 231 800		4						D			B7	DD		
DD6	892 310 000		6						D			B5	DD		
DD6	192 310 800		6						D			B7G	DD		
DD6Ds	023 180 910		6						D			85C	DD		
DD6G	192 310 800		6						D			B7G	DD		

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
DD13	892 310 000		13							D		B5	DD
DD41	219 080 130		4							D		M08	DD
DD101	219 080 130		10							D		M08	DD
DD207	892 300 000		2							D		B4	DD
DD465	902 310 000	D <sub>1</sub>	4							D		B5	DD
DD620	892 310 000		6							D		B5	DD
DD818	892 310 000		8							D		B5	DD
DD960	204 036 200		1.4	3	60		9	2.45		No Data Available		B7G	T
DDA1	892 310 000		4							D		B5	DD
DDD11	742 302 460		1.2	4.5	125		1.5	1.0	125		1.5	A08	TT
DDD25	206 447 030		1.4	1.5	100		3.5	1.2	100		1.2	A08	TT
DDL4	892 310 000		4				5			D		B5	RR
DDP4B	968 231 500	G <sub>1</sub>	4	5	250	250	36	8	100	PenLF	7	B7	DDP
DDP4M	918 236 500	G <sub>1</sub>	4	5	250	250	36	8	100	PenLF	7	B7	DDP
DD/Pen	849 231 500	A	4	2.5	200	100	5	2.7	100	100	2.7	B7	DDP
DDPP4B	869 231 500	G <sub>1</sub>	4	5	250	250	36	10	100	PenLF	9	B7	DDP
DDPP4BS	023 189 560	G <sub>1</sub>	4	5	250	250	36	10	100	PenLF	9	8SC	DDP
DDPP4M	869 231 500	G <sub>1</sub>	4 (5)	5	250	250	36	10	100	PenLF	9	B7	DDP
DDPP6B	968 231 500	G <sub>1</sub>	6	6	250	250	36	9.5	100	PenLF	9	B7	DDP
DDPP6BS	023 189 560	G <sub>1</sub>	6	5	250	250	36	10	100	PenLF	9	8SC	DDP
DDPP39	968 231 500	G <sub>1</sub>	35	8	200	200	45	8.5	100	PenLF	8	B7	DDP
DDPP39M	918 236 500	G <sub>1</sub>	35	8	200	200	45	8.5	100	PenLF	8	B7	DDP
DDPP39S	023 198 560	G <sub>1</sub>	35	8	200	200	45	8.5	100	PenLF	8	8SC	DDP
DDR2	256 101 030		6	5	250	250	40	12		No Data Available		A08	P
DDR3	812 380 000		6				60			REC	20mA	B7G	R
DDR7	412 236 500		6	12.5	250	250	16	2.6	100	PenLF	2.6	B8A	P
DDT	908 231 600	G <sub>1</sub>	4	3	200		3.4	2.1	100		2.4	B7	DDT
DDT2	682 390 000	G <sub>1</sub>	2	3	150		1	1.4	100		1.4	B5	DDT
DDT2B	682 390 000	G <sub>1</sub>	2	4.5	150		2.5	1	100		1.0	B5	DDT
DDT2BS	023 089 060	G <sub>1</sub>	2	4.5	150		2.5	1	100		1.0	8SC	DDT
DDT4	809 231 600	G <sub>1</sub>	4	3	200		3	2.5	150		2.5	B7	DDT
DDT4(S)	908 231 600	G <sub>1</sub>	4	5	250		4	3.6	150		3.6	B7	DDT
DDT4(S)	023 198 060	G <sub>1</sub>	4	5	250		4	3.6	150		3.6	8SC	DDT
DDT6	809 231 600	G <sub>1</sub>	6	5.5	250		5	2	150		2	B7	DDT
DDT6S	023 189 060	G <sub>1</sub>	6	5.5	250		5	2	150		2	8SC	DDT
DDT13	908 231 600	G <sub>1</sub>	13	4	200		5	2.0	150		2.3	B7	DDT
DDT13S	023 189 060	G <sub>1</sub>	13	5	200		4	3.6	100		3.6	8SC	DDT
DDT16	809 231 600	G <sub>1</sub>	16	3	200		5	1.9	100		2.5	B7	DDT
DDT213	809 231 600	G <sub>1</sub>	13	4	200		5	2.25	150		2.2	B7	DDT
DDT215	682 390 000	G <sub>1</sub>	2	3	150		3	1.6	100		1.6	B5	DDT
DDT220	682 390 000	G <sub>1</sub>	2.5	4.5	150		2.5	1	100		1.0	B5	DDT
DE1	264 130 000		2.5	21	250		5.2	0.975	100		0.975	UX5	T
DE5	280 300 000		2.5				120		REC		30mA	UX4	R
DET19	204 140 300	A <sub>1</sub> A <sub>2</sub>	6		300		25	2.1		No Data Available		UX7	TT
DET20	020 000 310	A <sub>1</sub> G <sub>1</sub>	6	5.5	250		12	3	100		3	A08	T



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
DF1	032 000 560	G <sub>1</sub>	1.4	1	90	90	1.2	0.75	80	90	0.75	B5C	P
DF11	602 302 450		1.4	0	90	50	0.9	0.65	80	60	0.6	F8	P
DF21	206 501 030	G <sub>1</sub>	1.4	1	90	90	1.2	0.7	80	90	0.7	A08	P
DF22	206 501 030	G <sub>1</sub>	1.4	1.5	90	90	1.4	1.1	80	90	1.1	A08	P
DF23	265 114 130		1.4	1.5	90	60	0.65	0.58	80	60	0.58	A08	P
DF25	265 114 130		1.4	1	125	60	1	0.65	125	60	0.65	A08	P
DF26	265 114 130		1.4	1.1	125	90	1.2	0.3	125	90	0.3	A08	P
DF31	026 510 300	G <sub>1</sub>	1.4	1	90	90	1.2	0.65	80	90	0.65	A08	P
DF32	026 510 300	G <sub>1</sub>	1.4	1.5	90	90	1.4	1.1	80	90	1.1	A08	P
DF33	036 500 200	G <sub>1</sub>	1.4	0.5	90	90	0.82	0.75	80	90	0.	A08	P
DF60	652 430 000		1.25	2.0	60	60	0.5	0.8	No Data Available			B5A	P
DF61	652 430 000		1.25	1.0	60	60	0.9	0.8	No Data Available			B5A	P
DF62	652 430 000		1.25	1.0	90	90	7.4	2.0	80	75		B5A	P
DF64	652 430 000		0.625	0.62	20	20	0.65	0.1	No Data Available			B5A	P
DF65	265 430 000		0.625	1.15	20	20	0.05	0.1	No Data Available			B5A	P
DF66	653 420 000		0.625	1.05	20	20	0.05	0.1	No Data Available			B5A	P
DF67	653 420 000		0.625	1.15	20	20	0.05	0.1	No Data Available			B5A	P
DF70	*4* 23* 650		0.625	0	40	40	0.37	0.22	No Data Available			B8D	P
DF72	*40 230 650		1.25	0	60	60	1.7	1.0	No Data Available			B8D	P
DF73	*40 230 650		1.25	0	80	75	1.7	0.8	80	75	0.8	B8D	P
DF91	265 024 300		1.4	1	90	75	3.5	0.9	80	60	0.9	B7G	P
DF92	265 024 300		1.4	2.0	90	60	1.9	0.7	80	60	0.7	B7G	P
DF96	265 024 300		1.4	1	90	75	3.7	1	80	60	1	B7G	P
DF96	265 *24 300		1.4	0.8	75	75	1.4	0.65	80	75	0.75	B7G	P
DF97	265 224 300		1.4	0	60	60	1.68	0.84	80	75	0.8	B7G	P
DF167	653 420 000		0.625	0	20	20	0.1		No Data Available			B5A	P
DF191	265 *24 300		1.4	0	60	60	4.2	1	No Data Available			B7G	P
DF904	265 *24 300		1.4	0	90	90	1.6	0.9	90	90	0.9	B7G	P
DF906	265 3*4 300		1.4	0	40	40	3	1.7	No Data Available			B7G	P
DFF50	246 557 430		1.4	* 11	20	20	22.5	1.2	No Data Available			A08	PP
DFF51	246 557 430		1.4	1	20	20	2.1	0.7	No Data Available			A08	PP
DFF101	634 572 400		1.4	0	40	40	1	0.22	No Data Available			B7G	PP
DG210	642 350 000		2	1.5	100	20	1	1	No Data Available			B5	P
DH	642 310 000		16	3	200		6	3.7	100		3.7	B5	T
DH30	908 231 600	G <sub>1</sub>	13	2	200		2.8	4.5	150		4.5	B7	DDT
DH42	908 231 600	G <sub>1</sub>	4	3	250		1.1	1.2	150		1.2	B7	DDT
DH63	026 890 310	G <sub>1</sub>	6	3	250		1.1	1.2	150		1.2	A08	DDT
DH73	026 890 310	G <sub>1</sub>	6	3	250		4.5	2	250		2	A08	DDT
DH74	026 890 310	G <sub>1</sub>	13	3	250		1.1	1.2	100		1.2	A08	DDT
DH76	026 980 310	G <sub>1</sub>	13	3	250		1.1	1.2	150		1.2	A08	DDT
DH77	412 389 600		6	3	250		1	1.2	150		1.2	B7G	DDT
DH81	264 *98 130		6	3	250		1	1.2	150		1.2	B8B	DDT
BH101	264 *98 130		19	3	250		1	1.2	150		1.2	B8B	DDT
DH107	412 389 600		19	3	250		1	1.2	150		1.2	B7G	DDT
DH142	264 089 130		14	1.6	175		1.5	1.65	100		1.4	B8A	DDT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
DH147	026 890 310	G <sub>1</sub>	6	5.5	250		5	2	100		2	A08	DDT
DH149	264 198 130		6	1.0	250		1.3	1.0	250		1.0	B8A	DDT
DH150	264 098 130		6	3	250		1.0	1.3	150		1.3	B8A	DDT
DH719	981 23† 146		6	3	250		1.0	1.3	100		1.3	B9A	DDDT
DHD.	908 231 600	G <sub>1</sub>	16	3.2	200		3.2	2.2	200		2.2	B7	DDT
DHL	642 310 000		16	1.5	150		3.8	4.5	100		4.5	B5	T
DK1	023 064 560	G <sub>1</sub>	1.4	0	90	50	1.8	0.55	80	60	0.55	8SC	H
DK21	206 540 630	G <sub>1</sub>	1.4	2	60	60	4.5	1.4	80	60	1.4	A08	H
DK32	036 546 200	G <sub>1</sub>	1.4	0	90	50	1.8	0.55	80	60	0.55	A08	H
DK40	265 454 030		1.4	2	75	75	0.9	0.7	80	75		B8A	O
DK91	266 424 300		1.4	4	75		4.5	1.2	80		1.4	B7G	H
DK92	266 464 300		1.4	4	60		4.0	1.2	80		1.2	B7G	H
DK96	265 461 300		1.4	1.5	75	50	1.0	0.4	80	60	0.4	B7G	H
DK192	265 450 000		1.4		60	60			No Data Available			B7G	H
DL	642 310 000		16	8	200		25	4.5	100		4.5	B5	T
DL1	023 004 560		1.4	3	90	90	4	1.25	80	75	1.25	8SC	P
DL2	032 004 560		1.4	7.5	90	90	7.5	1.55	80	75	1.55	8SC	P
DL11	602 302 450		1.4	4.4	90	90	3.7	1.0	80	90	1	F8	P
DL21	206 540 030		1.4	3	90	90	4	1.3	80	90	1.3	A08	P
DL22	265 024 330		1.4	4	125	125	5	1.6	100	100	1.6	A08	P
DL25	265 204 330		1.4	4.7	125	125	4.5	2.1	100	100	2.1	A08	P
DL31	036 540 200		1.4	3	90	90	4	1.25	80	75	1.25	A08	P
DL33	036 540 320		1.4	4.5	90	90	9.5	2.2	80	75	2.2	A08	P
DL35	036 540 200		1.4	7.5	90	90	7.5	1.55	80	75	1.55	A08	P
DL36	036 540 200		1.4	4.5	90	90	9.5	2.2	90	90	2.2	A08	P
DL41	362 054 220		1.4	5.8	125	125	5	1.3	80	90	1.3	B8A	P
DL63	026 890 310	G <sub>1</sub>	6	3	250		4.2	1.6	100		1.6	A08	DDT
DL64	652 430 000		1.25	1.5	20	20	0.16	0.18	No Data Available			B5A	P
DL65	365 420 000		1.25	0.2	20	20	0.47	0.42	No Data Available			B5A	P
DL66	653 420 000		1.25	1.4	20	20	3	0.35	No Data Available			B5A	P
DL67	653 420 000		1.25	0.2	20	20	0.47	0.42	No Data Available			B5A	P
DL68	653 420 000		1.25	2.2	20	20	0.6	0.43	No Data Available			B5A	P
DL69	652 430 000		1.25	2.5	90	90	1.75	0.85	80	75	0.85	B5A	P
DL70	*4* 23* 650		1.25	7.5	150	90	7.5	1.9	150	90	1.0	B8D	P
DL71	*4* 23* 650		1.25	1.25	40	40	0.6	0.55	No Data Available			B8D	P
DL72	*4* 23* 650		1.25	4.5	40	40	1.25	0.5	No Data Available			B8D	P
DL73	*40 230 650		1.25	9	100	100	15	2.5	100	100	3.8	B8D	P
DL74	026 890 310	G <sub>1</sub>	13	3	250		5.1	1.65	100		1.65	A08	DDT
DL75	*40 230 650		1.25	2.5	90	90	1.7	0.85	90	90	0.9	B8D	P
DL82	264 *98 130		6.0	3	250		5.0	1.4	150		1.4	B8B	DDT
DL91	264 536 200		1.4	7	90	75	7.4	1.58	80	60	1.5	B7G	P
DL92	264 536 200		1.4	7	90	75	7.4	1.58	80	75	1.58	B7G	P
DL93	365 426 300		1.4	8.4	150	90	13.3	1.9	100	75	1.9	B7G	P
DL94	365 024 300		1.4	4.5	90	90	9.5	2.15	80	75	2.15	B7G	P
DL95	264 536 200		1.4	4.5	90	90	9.5	2.15	80	75	2.1	B7G	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
DL96	265 034 200		1.4	3.0	90	90	5.0	1.4	80	60	1.4	B7G	P
DL98	504 233 600		1.25	38	150	125	25		No Data Available			B7G	P
DL167	653 420 000		1.25		20	20	5	1.5	No Data Available			B5A	P
DL145	264 098 130		15	5.9	250		5	2.3	150		2.3	B8A	DDT
DL192	264 536 200		1.4	7	60	60	7	1.5	No Data Available			B7G	P
DL193	265 436 200		1.4	7.5	150	60	9.5	2.9	150	60	2.9	B7G	P
DL620	653 420 000		1.25	6.5	60	60	3.1	0.65	80	75	0.65	B5A	P
DL651	653 420 000		1.25	0	20	20	4	0.45	No Data Available			B5A	P
DL907	365 004 200		1.4	5.5	125	125	15	3.1	125	125	3.1	B7G	P
DLL21	246 547 330		1.4	8.7	125	125	1		100	100		A08	PP
DLL25	046 547 230		1.4	9.4	125	125	17		125	125		B8G	PP
DLL31	326 447 250		1.4	5	90	90	3		80	75		A08	PP
DLL101	264 574 300		1.4	7	90	60	8.2	1.1	80	60	1.2	B7G	PP
DLL102	264 574 300		1.4	0	40	40	1.3	0.55	No Data Available			B7G	PP
				0	40	40	2.0	0.55	No Data Available				
DLP51	023 004 560	C	4	17	250	250	36	2.5	No Data Available			B5C	P
DN41	968 231 500	G <sub>1</sub>	4	3.3	250	200	32	10	100	PenLF	9	B7	DDP
DN143	264 598 130		6	6.2	250	275	44	9.5	100	PenLF	9	B8B	DDP
DO24	642 300 000		4	40	400		63	7.5	100		6.5	B4	T
DO26	642 300 000		4	92	400		63	3.8	100		6.3	B4	T
DO30	642 300 000		4	100	400		60	4	100		4	B4	T
DP	264 008 030		16	7.5	200		25	6	100		6	M08	DT
DP5	642 350 000		4	5	250	250	10	4	100	PenLF	4	B5	P
DP7	023 004 560		4	20	250	250	20	2.5	100	PenLF	2.5	85C	P
DP61	412 365 100		6	2.3	150	150	7	4.3	150	150	4	B7G	P
DP495/6	869 231 500	G <sub>1</sub>	4	6.5	250	250	35	9.5	100	PenLF		B7	DDP
DP4480	819 236 500	G <sub>1</sub>	44	8.4	200	200	46	8	100	PenLF	7	B7	DDP
DP/Pen	045 231 600		16	10	200	200	31	3.5	100	100	3.5	B7	P
DPT	045 231 600		16	10	200	200	40	3.1	100	PenLF	3.1	B7	P
DPT	642 310 000	G <sub>2</sub>	16	10	200	200	40	3	100	PenLF	3	B5	P
DS	000 231 600	G <sub>1</sub>	13	3	200		4	2.5	150		2.5	B7	T
DS	542 310 000	A	16	1.5	200	75	2.8	1.1	200	75	1.1	B5	P
DSB	542 310 000	A	16	1	150	90	3.4	3.2	150	90	3.2	B5	P
DSPen	061 231 500	G <sub>1</sub>	16	1.5	200	100	4.0	2.3	200	100	2.3	B7	P
DT7	642 300 000		4	16	200		14	2	100		2	B4	T
DT436	023 198 060	G <sub>1</sub>	4	7	250		4	2	100		2	85C	DDT
DT1336	023 198 060	G <sub>1</sub>	13	5	200		4	2	100		2	85C	DDT
DU1	802 300 000		4				30		REC		15mA	B4	R
DU2	892 300 000		4				30		REC		17mA	B4	RR
DU3	892 300 000		4				15		REC		10mA	B4	RR
DU4	892 300 000		4				30		REC		15mA	B4	RR
DU5	892 300 000		4				30		REC		17mA	B4	RR
DU10	802 300 000		4				60		REC		25mA	B4	R
DVSG	542 310 000	A	16	1	200	75	7.5	2.5	100	75	2.5	B5	P
DVS Pen	542 310 000	A	16	1.5	200	100	6.5	1.0	200	100	3	B5	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/v	Anode Volts	Screen Volts	mA/V		
DW1	892*300 000		4				15		REC		10mA	B4	RR
DW2	892 300 000		4				30		REC		20mA	B4	RR
DW2X	892 300 000		4				30		REC		20mA	B4	RR
DW3	892 300 000		4				30		REC		20mA	B4	RR
DW4	892 300 000		4				60		REC		20mA	B4	RR
DW4/350	892 300 000		4				60		REC		20mA	B4	RR
DW4/500	892 300 000		4				60		REC		20mA	B4	RR
DW5	802 300 000		4				120		REC		30mA	B4	R
DW7X	892 300 000		4				30		REC		15mA	B4	RR
DW8	892 300 000		5				30		REC		15mA	B4	RR
DW30	892 300 000		7.5				60		REC		20mA	B4	RR
DW802	642 300 000		4	25	250		26	4	100		4	B5	T
DW1508	642 310 000		4	7.5	150		4	1.5	100		1.5	B5	T
DW4011	642 310 000		4	5.0	200		5.0	3.6	150		3.6	B5	T
DW4023	642 310 000		4	3.0	150		2.5	1.75	100		1.7	B5	T
DX2	642 300 000		2	3	150		3.5	1.4	100		1.4	B4	T
DY30	*2* 0*0 3*0	D <sub>1</sub>	1.25						D			A08	D
DY80	23* 232 *32	D <sub>1</sub>	1.25						D			B9A	D
DY86	32* 323 *23	D <sub>1</sub>	1.4						D			B9A	D
DY87	23* 232 *32	D <sub>1</sub>	2.4						D			B9A	D
DY604	642 300 000		4	15	150		8	1.3	100		1.3	B4	T
DZ2	542 300 000	A	4	1	200	100	4	0.7	100	100	4	B4	P
E	642 300 000		4	9	200		1.7	0.4	100		0.4	B4	T
E	264 300 000		3	22.5	125		6.5		125			UX4	T
E4	642 300 000		4	16	200		12	1.8	100			B4	T
E4D	892 300 000		4				30		REC		15mA	B4	RR
E4F	892 300 000		4				60		REC		20mA	B4	RR
E4H	802 300 000		4				125		REC		30mA	B4	R
E4K	003 200 000	D <sub>1</sub>	4				60		REC		20mA	B5	R
E4L	003 200 000	D <sub>1</sub>	4				120		REC		30mA	B5	R
E20V	023 100 080		20				60		REC		20mA	B5C	R
E80CC	641 337 412		6.3	5.5	250		6	2.7	100		2.5	B9A	TT
E80F	501 236 014		6.3	1.65	250	100	3	1.85	150	100	1.8	B9A	P
E80L	041 230 651		6.3	5.2	200	200	30	9	100	100		B9A	P
E81L	041 230 651		6.3	3.0	200	200	20	11	100	100		B9A	P
E83F	541 236 **1		6.3	2.0	200	125	10	9	100	125	12.0	B9A	P
E87L	041 230 651		6	6	250	150	36	10	100	100		B9A	P
E88CC	641 237 410		6.3	4	200		24	13.0	100		13.0	B7G	TT
E90CC	672 344 100		6.3	2.1	100		8.5	6	100		8.5	B9A	TT
E91H	412 365 100		6.3	5	125	75	0.5	0.6	125	75	0.6	B7G	H
E92CC	672 344 100		6.3	1.7	150		8.5	6	100		5.6	B7G	TT
E180CC	641 227 413		6.3	1.9	150		8.5	6.3	100		7.8	B9A	TT
E180F	141 23* 615		6	1.0	200	150	13.1	16.5	No Data Available			B9A	P
E181CC	641 227 413		6.3	3	150		8.5	4.7	100		5.6	B9A	TT
E235	642 300 000		2	7.5	150		13	3	100		3	B4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
E405	642 300 000		4	32	250		20	2	100		2	B4	T
E406	642 300 000		4	34	250		8	2.3	100		2.3	B4	T
E406N	642 300 000		4	34	250		8	2.3	100		2.3	B4	T
E408	642 300 000		4	30	400		26	2	100		2	B4	T
E408N	642 300 000		4	36	400		30	2.7	100		2	B4	T
E409	642 310 000		4	16	200		12	1.3	100		1.3	B5	T
E409N	642 310 000		4	16	200		12	1.3	100		1.3	B5	T
E410	642 300 000		4	28	400		30	6	100		6	B4	T
E414	642 310 000		4	6	150		6.5	2	100		2	B5	T
E414	642 300 000		4	15	150		8	1.3	100		1.3	B4	T
E415	642 310 000		4	8	200		6	1.4	100		1.4	B5	T
E415	264 130 000		4	8	200		6	1.4	100		1.4	UX5	T
E420	642 300 000		4	18	150		11	1.6	100		1.6	B4	T
E422	642 300 000		4	16	250		12	5	100		5	B4	T
E424	642 310 000		4	2.5	200		6	2.4	100		2.4	B5	T
E424R	612 300 000	G <sub>1</sub>	4	5	200		6	1.6	100		1.6	B4	T
E424N	642 310 000		4	3.5	200		6	2.4	100		2.4	B4	T
E425	642 310 000		4	4.5	150		3	1	100		1	B5	T
E428	642 310 000		4	3.0	200		6.0	2.4	100		2.4	B5	T
E430	642 310 000		4	3	150		4	2	100		2	B5	T
E430N	642 310 000		4	15	200		15	3	100		3	B5	T
E435	642 310 000		4	1.5	200		3	3	100		3	B5	T
E438	642 310 000		4	2.5	200		0.3	1.5	100		1.5	B5	T
E441N	652 300 000	G <sub>1</sub>	4	0	100	0	1.7	1	100		1	B4	T
E442	542 310 000	A	4	1.3	200	60	1.5	0.9	200	60	0.9	B5	P
E442S	542 310 000	A	4	2	200	60	4	1	100	60	1	B5	P
E443H	642 350 000		4	15	250	250	36	2.8	100	PenLF	2.8	B5	P
E443N	642 350 000		4	40	400	200	30	1.9	100	100	1.9	B5	P
E444	258 413 000	A	4	3	200	90	4	3	100	90		UX6	DP
E444N	258 413 000	A	4	3	100	90	4	3	100	90	3	UX6	DP
E444S	642 310 000	D <sub>1</sub>	4	3.5	200		6	2	100		2	B5	DT
E445	542 310 000	A	4	2	200	100	6	1	100	100	1	B5	P
E446	542 310 000	A	4	2	200	100	3	2.3	100	100	2.3	B5	P
E447	542 310 000	A	4	2	200	125	4.5	2.3	100	100	2.3	B5	P
E448	164 552 300	G <sub>1</sub>	4	1.5	200	125	3	0.58	100	100		C7	P
E449	165 452 300	G <sub>1</sub>	4	2	200	75	3	1.8	100	75	1.8	C7	P
E451	642 350 000		4		400	250	17		100	150	2.4	B4	P
E452T	542 310 000	A	4	2	200	100	3	2	100	100	2	B5	P
E452T	254 130 000	A	4	2	200	100	3	2	100	100	2	UX5	P
E453	045 231 600		4	15	250	250	24	2.5	100	PenLF	2.5	B7	P
E454	216 809 300	G <sub>1</sub>	4	3.5	200		3.5	1.6	100		1.6	UX7	DDT
E455	542 310 000	A	4	1.5	200	100	3	2	100	100	2	B5	P
E455	254 130 000	A	4	1.5	200	100	3	2	100	100	2	UX5	P
E462	542 310 000	A	4	2	200	100	3	2	100	100	2	B5	P
E463	045 231 600		4	22	250	250	36	2.7	100	PenLF	2.7	B7	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
E499	642 310 000		4	1.6	200		0.2	4	150		4	B5	T
E501D	265 113 000	G	3	2.5	250	125	6.5	3.5	100	100		UX6	T
E501R	265 113 000	G	6.3	2.5	250	125	6.5	3.5	100	100		UX6	T
E504D	265 413 000		5	13.5	250	200	40	3.5	100	100		UX6	P
E504P'	265 413 000		6.3	13.3	250	200	40	3.5	100	100		UX6	P
E543	045 231 600		4	15	250	250	24	2.5	100	PenLF	2.5	B7	P
E646	020 080 310		26				120		REC		30mA	A08	R
E703	642 300 000		7.5	100	400		30	1	100		1	B5	T
E851	030 908 020		5				120		REC		30mA	A08	RR
E1137	366 446 622		6	2.3	250		32	16	No Data Available			B9G	T
E1148	020 000 310	G <sub>1</sub> A	6	5.5	250		14	3.0	100		3.0	A08	T
E1192	021 450 310	A	6	11	250	150	30	3.5	100	100	3.5	A08	P
E1242	265 101 403		6		400	250	30	3	100	150	3	B9G	P
E1323	020 000 310	A G <sub>1</sub>	6	3	100		25	6.7	100		6	A08	T
E1413	265 024 300		1.4	1	90	75	3.5	0.9	80	75	0.9	B7G	P
E1478	642 300 000		4	1	100			6.9	100		6.0	B5	T
E1484	208 564 300		1.4	1	90	90	2.7	0.63	80	90	0.6	B7G	DP
E1489	241 657 143		6		350	250	21	3.9	100	100	3.9	B9G	PP
E1517	412 361 500		6	2.5	200	200	8	2.5	100	100	2.5	B7G	P
E1518	412 361 500		6	2	250	250	10	7.5	100	150	5	B7G	P
E1606	461 471 230		6	8	250		9	2.6	100		2.6	A08	TT
E1624	6*2 364 100		6	8.5	250		10.5	2.2	100		2.2	B7G	T
E1654	026 510 310	G <sub>1</sub>	6	1.5	200	200	10.9	8.5	100	150	8	A08	P
E1662	412 360 500		6	12	250	250	20	2.6	100	PenLF	2.6	B7G	P
E1677	002 300 000	D <sub>1</sub>	2				15		REC		10mA	B4	R
E1678	026 510 310	G <sub>1</sub>	13	3	250	100	7.6	1.5	100	100	1.5	B7G	P
E1681	026 540 310		15	13	175	175	35	2.5	100	100	2.5	A08	P
E1682	020 800 310		30				120		REC		30mA	A08	R
E1706	256 051 463		6	8	250	175	80	13	100	100	10	B9G	P
E1709	064 471 230		6	2	250		2	1.35	150		1.3	A08	TT
E1733	009 **8 230		6				60		REC		20mA	B8B	RR
E1736	265 004 130		6	4.4	250	250	40	10.5	100	PenLF	10.0	B8B	P
E1740	209 008 130		6				30		REC		15mA	B8B	RR
E1751	192 310 800		6				5		D			B7G	RR
E1780	009 **8 230		4				30		REC		15mA	B8B	RR
E1787C	316 541 120		6	9	250	175	50	8	100	100	8	B9G	P
E1794	265 104 130		19	3	250	75	2.5	2.8	100	60	2.8	B8B	P
E1795	280 008 130		50				120		REC		30mA	B8B	R
E1796	265 004 130		80	9.5	175	175	70	10	100	100	9	B8B	P
E1809	265 104 136		6	3	250	100	8	2.8	100	100	2.8	B8B	P
E1813	264 198 130		19	3	250		1	1.2	100		1.2	B8B	DDT
E1816	364 526 300		1.4	7	90	75	7.4	1.575	80	60	1.5	B7G	P
E1835	005 231 600	G <sub>1</sub>	13	4.4	250	250	40	10.5	100	PenLF	9	B7	P
E1838	264 198 130		6	3	250		1	1.2	100		1.2	B8B	DDT
E1848	264 *98 130		6	2	200		10	1.4	200		1.4	B8B	DDT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
E1884	002 300 000	D <sub>1</sub>	2				5		D			B4	R
E1912	412 389 600		6	3	250		1	1.2	100		1.2	B7G	DDT
E1935	241 657 143		6	26	250	200	30	3.9	100	100	3.9	B9G	PP
E1938	802 309 100		6				30		REC		15mA	B7G	RR
E1969	542 376 400		6	2 1	100		5	2.2	100	60	2.8	B7G	TH
					250	75	5.3	2.2	250	75			
E1976	412 361 500		19	2.5	200	200	8	2.5	100	150	2.5	B7G	P
E1984	412 36* 500		6	5.5	250	250	35	10	100	PenLF	9	B7G	P
E1985	281 008 300		40				60		REC		20mA	B7G	R
E1987	412 36* 500		40	8	175	150	50	10	100	100	9	B7G	P
E1994	471 461 230		13	8	250			2.6	100		2.6	A08	TT
E2004	*2* 0*0 3*0	D <sub>1</sub>	1.25				5		D			A08	R
E2020N	642 310 000		20	18	200		15	1.6	100		1.6	B5	T
E2047	412 361 500		12.5	2.5	200	200	8	2.5	200	200	2.5	B7G	P
E2122	902 308 100		6				30		REC		15mA	B7G	RR
E2128	241 657 143		19	16.5	250	150	30	3.9	100	100	3.9	B9G	PP
E2134	412 36* 500		6		175	175	55	9.5	100	100	7	B7G	P
E2153	412 36* 500		13	8	175	150	50	10	100	100	9	B7G	P
E2178	**1 23* **8		20				120		REC		38mA	B9A	R
E2179	*41 23* *51	A	20	12	150	150	50	8.5	100	100	7	B9A	P
E2185	026 040 310		6	8	250		9	2.6	100		2.6	A08	T
E2223	*** 23* **8		25				120		REC		30mA	B9A	R
E2256	**1 23* **8		20				120		REC		40mA	B9A	R
E2382	021 *4* 350	A	52		150	150	100	16	No Data Available			A08	P
EA40	200 800 130		6						D			B8A	D
EA50	123 000 000	D <sub>1</sub>	6						D		6.3mA	B3G	D
EÄ76	281 380 000*		6				5		D			B5B	R
EÄ111	023 010 000	D <sub>1</sub>	6.3				60		REC		20mA	F8	R
EÄÄ11	023 189 100		6.3				5		D			F8	DD
EÄÄ91	182 311 900		6.3				5		D			B7G	DD
EÄÄ901	182 310 900		6.3						D			B7G	DD
EÄB1	023 110 890		6						D			B8C	DDD
EÄBC80	191 238 146		6	3	250		1.0	1.2	100		1.3	B9A	DDDT
EÄC91	812 314 600		6	3.2	200		7.5	2.8	100		2.8	B7G	DT
EÄF21	265 814 130		6.3	2	250	100	6	2.8	100	100		B8G	P
EÄF41	268 154 130		6	2	250	100	5.0	1.8	100	100	1.8	B8A	DP
EÄF42	268 154 130		6	2	250	100	5	1.8	100	100	1.8	B8A	DP
EB4	023 180 910		6						D			B8C	DD
EB11	802 301 190		6						D			F8	DD
EB34	029 180 310		6				5.0		D			A08	DD
EB40	208 090 130		6						D			B8A	DD
EB41	201 908 130		6				5		D			B8A	RR
EB91	192 310 800		6						D			B7G	DD
EBC1	023 198 060	G <sub>1</sub>	6	7	250		4	2	100		2	B8C	DDT
EBC3	023 189 060	G <sub>1</sub>	6	5.5	250		5	2	100		2	B8C	DDT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
EBC11	892 301 460		6	6.3	200		4	2	100		2	FB	DDT
EBC21	264 489 130		6	5.5	250		5	2	100		2	BBB	DDT
EBC30	023 189 060	G <sub>1</sub>	6	4.3	200		4	2	150		2	BSC	DDT
EBC33	026 890 310	G <sub>2</sub>	6	5.5	250		5	2	100		2	A08	DDT
EBC41	264 098 130		6	3	250		1	1.3	100		1.2	B8A	DDT
EBC51	389 060 420		6.3	7.5	250		10	4.0	100		4.0	A08	DDT
EBC80	641 238 090		6.3	3.0	250		1.0	1.2	100		1.2	B9A	DDT
EBC81	641 238 09*		6	3	250		1.0	1.2	250		1.2	B9A	DDT
EBC90	412 389 600		6	3	250		1	1.2	150		1.2	B7G	DDT
EBC91	412 389 600		6	2	250		1.2	1.6	200		1.6	B7G	DDT
EBF1	023 198 560	G <sub>1</sub>	6	3	250	125	9	1.1	100	100	1.1	BSC	DDP
EBF2	032 198 560	G <sub>1</sub>	6	2	250	100	5	1.8	100	PenLF	1.8	BSC	DDP
EBF11	982 361 450		6	2	250	100	5	1.8	100	100	1.8	FB	DDP
EBF15	982 361 450		6	2	250	100	12	5	100	100	5	FB	DDP
EBF21	268 954 130		6	3.2	250	100	7.5	2.2	100	100		B8G	DDP
EBF32	026 895 310	G <sub>1</sub>	6	2	250	100	5	1.8	100	100	1.8	A08	DDP
EBF35	216 589 130	G <sub>2</sub>	6	2	250	100	5	1.8	100	100	1.8	A08	DDP
EBF80	541 236 891		6	2	250	90	5	2.2	100	90	2.2	B9A	DDP
EBF81	541 236 891		6.3	2	250	75	6.7	1.1	100	100		B9A	DDP
EBF89	541 236 891		6.3	2	250	100	9	3.8	100	100		B9A	DDP
EBL171	892 541 360		6.3	3.2	250	80	6	1.8	100	80		BBB	DDP
EBL1	023 189 560	G <sub>1</sub>	6	6	250	250	36	9.5	100	PenLF	9.0	BSC	DDP
EBL21	264 598 130		6	6.0	250	250	36	9.0	100	PenLF	9.0	BBB	DDP
EBL31	026 895 310	G <sub>1</sub>	6	6	250	250	36	9.5	100	PenLF	9.0	A08	DDP
EBL71	264 589 130		6	5	250	250	44	9.5	250	200	9.5	A08	DDP
EC2	023 100 060	G <sub>1</sub>	6	5.5	250		6	2.5	100		1.5	BSC	T
EC21	206 401 003		6	4	250		5	2.7	100		2.5	B9G	T
EC31	026 040 310		6	16	250		20	3.2	100		3.2	A08	T
EC40	244 644 130		6	1.5	275		15	12	100		9	B8A	T
EC41	206 040 130		6	5.5	175		20	4.5	125		4.5	B8A	T
EC52	241 600 003		6	2.6	250		10	6.5	100		6.5	B9G	T
EC53	123 000 000	A G <sub>1</sub>	6	3.3	200		7.5	2.9	100		2.9	B3G	T
EC54	244 664 413		6	1.5	250		10	9	100		7	B9G	T
EC70	482 603 160		6	2	100		13	5.5	100		5.5	B8D	T
EC80	441 230 446		6	1.5	250		15	12	150		10	B9A	T
EC81	401 230 060		6	2	150		30	5.5	100		3	B9A	T
EC84	414 464 234		6.3	1.1	125		16	10	100		10	B9A	T
EC90	642 364 100		6	8.5	250		10.5	2.2	100		3.1	B7G	T
EC91	412 314 600		6	2	250		6	8.5	200		8.0	B7G	T
EC92	602 304 100		6	2.0	250		10.0	5.0	100		5.0	B7G	T
EC93	642 314 600		6	4	100		16.0	8.0	100		8	B7G	T
EC94	642 314 600		6.3	2.5	100		16	6.6	100		6.6	B7G	T
ECC31	027 446 310		6	4.6	250		6	2.3	100		2.3	A08	TT
ECC32	461 471 230		6	4.6	250		6	2.3	100		2.3	A08	TT
ECC33	461 471 230		6	4	250		9	3.6	100		3.6	A08	TT



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
ECC34	461 471 230		6	16	250		10	2.2	100		2.2	A08	TT
ECC35	461 471 230		6	2.5	250		2.3	2	100		2	A08	TT
ECC40	274 164 130		6	5.2	250		6	2.7	100		2.7	B8A	TT
ECC81	741 226 413		6	2	250		10	5.5	150		5	B9A	TT
ECC82	741 226 413		6	8.5	250		10.5	2.2	100		2	B9A	TT
ECC83	741 226 413		6	2.0	250		1.2	1.6	150		1.6	B9A	TT
ECC84	147 234 116		6	1.5	90		12	6.0	100		6.0	B9A	TT
ECC85	741 236 410		6	2.3	250		10	5.9	100		5	B9A	TT
ECC91	672 344 100		6	0.85	100		8.5	5.3	100		5.3	B7G	TT
				3.0	150		5.0	4.5	100		5.3		
ECC180	641 237 410		6.3	2.0	150		9	6.4	100		6.3	B9A	TT
ECC801	641 227 413		6.3		250		10	5.5	100			B9A	TT
ECC802S	641 227 413		6.3	8.5	250		10.5	2.2	100		2.0	B9A	TT
ECF1	023 164 570	G <sub>1</sub>	6	3.0	150	0	8.0	2.2	150	60	2.6	B8C	TP
				2.0	250	100	5.0	2.5	100	100	2.5		
ECF12	642 371 450		6	0	100	0	11.0	3.0	100	60	3.0	F8	TP
ECF80	645 237 114		6	2	100	0	14	5	100	60	5	B9A	TP
				3	250	200	7	5.5	100	150	6		
ECF82	645 237 114		6	1.0	100		18.0	8.5	100	60	7.0	B9A	TP
				1.0	250	100	10.0	5.2	100	100	5.0		
ECH2	023 164 570	G <sub>1</sub>	6	1	100		9.5	5.5	100	60	5.0	B8C	TH
				2.5	250	100	3.25		200	100	3.0		
ECH3	023 164 570	G <sub>1</sub>	6	2	100		5	2.4	100	60	2.8	B8C	TH
				2	250	100	4.8	2.5	200	100	2.5		
ECH4	123 614 570	G <sub>1</sub>	6	2	100		6.3	2.7	100	60	2.2	B8C	TH
				2	250	100	6.5	2.6	100	PenLF	2.6		
ECH4G	127 546 310		6.3	2	100		6.3	2.7	100	60	2.2	A08	TH
				2	250	200	6.5	2.6	100	PenLF	2.6		
ECH11	264 371 450		6	2.0	100	0	5.0	2.4	100	60	2.8	F8	TH
				2.0	250	100	4.7	2.5	200	100	2.5		
ECH21	276 454 131		6	2	100		6.25	2.4	100	60	3.2	B8B	TH
				2	250	90	5.3	2.2	100	90	2.2		
ECH33	027 546 310	G <sub>1</sub>	6	2	100		5	2.4	100	60	2.8	A08	TH
				2	200	100	3	2.8	100	100			
ECH35	027 546 310	G <sub>1</sub>	6	2	100		5.4	2.2	100	60	2.8	A08	TH
				2	250	100	5	2.4	100	100	1.2		
ECH41	276 454 130		6	2	100		5	2.2	100	60	2.2	B8A	TH
				2	250	100	3	2	100	100	2.4		
ECH42	276 454 130		6	2	100		5	2.2	100	60	2.8	B8A	TH
				2	250	100	8	2	100	100	3.2		
ECH43	276 454 130		6	2	100		5	2.2	100	60	2.2	B8A	TH
				2	250	100	8	2	100	100	1.9		
ECH71	276 454 430		6	2	250		2		100	60		B8B	TH
				2	250	100	3	0.75	100	100			
ECH80	541 23* 674		6.3	2	250	75	3	0.75	100	80	0.75	B9A	TH
ECH81	541 237 164		6	3	100		5	2.3	100	60	2.3	B9A	TH
				2	250	100	6.5	2.4	150	100	2.4		

VALVE	SELECTOR SWITCH No.	T.C.	Vr	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	la mA	mA/V	Anode Volts	Screen Volts	mA/V		
ECL11	452 371 460		6	2.5	250	0	2.0	2.0	100	60	2.0	F8	TP
				6.0	250	250	36	9.0	100	150	7.0		
ECL80	641 237 154		6	2.3	100	0	4	1.4	100	60	1.4	B9A	TP
				8.0	200	200	17.5	3.3	100	PenLF	3.0		
ECL81	451 237 614		6.3	1.5	200		0.5	1.2	100	60	1.2	B9A	TH
				5.5	250	250	36	8.7	100	100			
ECL82	414 237 516		6.3	0	100		3.5	2.5	100	60	2.5	B9A	TP
				16	200	200	35	6.4	100	100	6		
ECL83	641 237 154		6.3	1.5	200		1.6	2.5	100	60	2.5	B9A	TP
				9.5	175	175	30	5.5	100	100	5.0		
ECL113	267 454 130		6	1.0	150	0	2	1.6	100	60	1.6	B8A	TP
				3.5	250	250	25	8.5	100	150	8.5		
ED111	266 104 430		6.3	5	200		40	8	No Data Available			B8A	T
EDD11	742 301 460		6	8.0	200		3.5		200		3.5	F8	TT
EDD111	742 311 460		6	8.0	250		9.0	2.3	100		2.3	F8	TT
EE50	256 501 403		6.3	3.0	250	250	10	14	250	150	10.0	B9G	P
EEL71	274 554 630		6.3	6.5	250	250	24	6.5	100	100		B8G	PP
EEPI	023 150 560		6.3	2.5	250	150	8	17	No Data Available			85C	P
EEP71	023 110 560	G <sub>1</sub>	6	3	225	100	8	2.2	100	100		85C	P
EF1	023 110 560	G <sub>1</sub>	6	2	250	100	3	2.3	100	100	2.3	85C	P
EF2	023 110 560	G <sub>1</sub>	6	2	250	100	4.5	2.2	100	100	2.2	88SC	P
EF3	023 110 560	G <sub>1</sub>	6	2.5	250	100	8	1.8	100	100	1.8	85C	P
EF5	023 110 560	G <sub>1</sub>	6	3	250	100	8	1.7	100	100	1.7	85C	P
EF6	023 110 560	G <sub>1</sub>	6	2	250	100	3	2	100	100	2	85C	P
EF7	023 110 560	G <sub>1</sub>	6	1.5	250	100	3	2.1	100	100	2.1	85C	P
EF8	023 111 560	G <sub>1</sub>	6	2.5	250	250	8	1.8	100	PenLF	1.8	85C	P
EF9	023 110 560	G <sub>1</sub>	6	2.5	250	100	6	2.2	100	100	2.2	85C	P
EF11	602 301 450		6	2	250	100	6	2.2	100	100	2	F8	P
BF12	602 301 450		6	2	250	100	3	2.1	100	100	2	F8	P
EF12	602 301 450		6.3	2	250	100	3	1.7	100	100	1.5	F8	P
EF13	612 301 450		6	2	250	100	4.5	2.3	100	100	2	F8	P
EF14	612 350 140		6	4.5	200	200	12	7	100	150	6	F8	P
EF15	612 301 450		6	2	250	100	12	5.5	100	100	5	F8	P
EF22	265 104 130		6	2.5	250	100	6	2.2	100	100	2.2	B8B	P
EF25	023 110 560	G <sub>1</sub>	6	2	250	100	5	1.8	100	100	1.8	85C	P
EF36	026 510 310	G <sub>1</sub>	6	2	250	100	3	1.8	100	100	1.8	A08	P
EF37	026 510 310	G <sub>1</sub>	6	2	250	100	3	1.8	100	100	1.8	A08	P
EF37A	026 510 310	G <sub>1</sub>	6	2	250	100	3	1.8	100	100	1.8	A08	P
EF38	126 510 310	G <sub>1</sub>	6	2.5	250	250	8	1.8	100	PenLF	1.8	A08	P
EF39	026 510 310	G <sub>1</sub>	6	2.5	250	100	6	2.2	100	100	2.2	A08	P
EF40	26* 145 130		6	2	250	150	3	1.8	100	150	1.8	B8A	P
EF41	261 154 130		6	2.5	250	100	6	2.2	100	100	2.2	B8A	P
EF42	260 154 130		6	2	250	250	10	9.5	100	PenLF	8.0	B8A	P
EF43	260 154 130		6	2	250	150	15	6.4	100	150	6	B8A	P
EF44	260 145 130		6.3	2	250	150	3	1.8	100	150	1.8	B8A	P
EF50	256 101 403		6	1.55	250	250	10	6.5	100	PenLF	6.0	B9G	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
EF51	261 154 130		6	2	250	250	14	9.5	100	PenLF	9.0	B8B	P
EF52	261 154 130		6	2	250	250	10	10	100	150	8	B8G	P
EF53	256 101 403		6	2	250	250	10	6.5	100	150	6.5	B9G	P
EF54	265 114 113		6	1.7	250	250	10	7.7	100	PenLF	7.0	B9G	P
EF55	256 101 403		6	4	250	150	10	7	100	100	6	B9G	P
EF70	412 163 510		6	2	100	100	3	2.5	100	100	2.5	B8D	P
EF71	412 163 510		6	2	100	100	13	5.5	100	100	4.5	B8D	P
EF72	412 163 510		6	1.4	100	100	7	5	100	100	5	B8D	P
EF73	412 653 160		6	2	100	100	7.5	5.5	100	100	5	B8D	P
EF74	412 653 160		6.3	1.4	100	100	7	3.1	100	100	3	B8D	P
EF80	141 230 651		6	2	175	175	10	7.2	100	100	6	B9A	P
EF81	541 236 000		6.3	2.5	250	125	6	2.2	100	100		B9A	P
EF82	*41 230 651		6	4.5	250	250	40	11	100	150	9	B9A	P
EF83	501 236 014		6.3	1.6	250	50	4	1.6	100	100	2.0	B9A	P
EF85	141 230 651		6	2	250	100	10	6	150	100	5	B9A	P
EF86	501 236 014		6	1	250	100	3	1.85	100	100	1.8	B9A	P
EF87	501 236 014		6.3	2.0	250	100	3.3	1.9	100	100		B9A	P
EF88	501 236 014		6.3	2.0	250	100	7	2.1	100	100		B9A	P
EF89	041 230 651		6	2.0	250	100	9.0	3.6	250	100	3.6	B9A	P
EF91	412 361 500		6	{ 2 1.5	{ 250 200	{ 250 150	{ 10 4	{ 7.65 6.4	{ 100 100	{ PenLF PenLF	{ 5 5	{ B7G B7G	P
EF92	412 361 500		6	2.5	250	200	8	2.5	100	PenLF	2.5	B7G	P
EF93	412 365 100		6	1	250	100	11.6	4.5	150	100	4	B7G	P
EF94	412 365 100		6	1.0	250	100	10.6	5.2	100	150	5.2	B7G	P
EF95	412 365 100		6	2.3	150	150	7	4.3	100	100	4	B7G	P
EF96	412 365 100		6	1.5	250	150	6.5	5.0	100	100	5.0	B7G	P
EF111	612 350 140		6.3	2	250	75	6	2.2	No Data Available			F8	P
EF112	612 350 140		6.3	2	250	100	3	2.1	100	100		F8	P
EF172	112 540 360		6.3	2	250	100	5	3	100	100		B8A	P
EF174	112 540 360		6.3	3.5	200	200	12	9	100	100		B8A	P
EF175	112 540 360		6.3	2.1	250	100	12	4.5	100	100		B8A	P
EF190	412 365 100		6.3	2.0	200	150	9.5	6.2	100	100		B7G	P
EF410	26* *54 130		6.3	2	250	100	6	2.7	100	100		B8A	P
EF800	141 230 651		6.3	2	175	175	10	7.2	100	100		B9A	P
EF802	141 23* 651		6.3	1.2	175	175	12	8	100	100		B9A	P
EF804	101 230 654		6.3	2	250	150	3	2	100	100		B9A	P
EF804S	101 230 654		6.3	2	250	150	3	2	100	100		B9A	P
EF805S	141 230 651		6.3	1.8	250	75	8	5.7	100	80		B9A	P
EFF50	265 414 573		6	2	250	200	6	8	100	PenLF	7	B9G	PP
EFF51	265 414 573		6	2	250	200	6	8	100	PenLF	7	B9G	PP
EFM1	023 114 560		6	2	250	100	1.3		No Data Available			8SC	IP
EFP20	256 145 130		6.3	2	250	200	5	12	100	100		B8G	P
EG420	802 300 000		4				120		REC		30mA	B4	R

(Appendix I.)

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
EH1	023 145 560	G <sub>1</sub>	6	2	250	80	3	1.8	200	75	1.8	8SC	P
EH2	023 115 560	G <sub>1</sub>	6	3	250	100	4.2	1.4	100	100	1.4	8SC	P
EH90	412 365 100		6.3	1	100	30	1	1.1	No Data Available			B7G	H
EH900	412 365 100		6.3	0	150	80	1.0	1.1	100	90		B7G	H
EK1	123 174 560	G <sub>1</sub>	6	{ 1.5 8.5	90 250	75	1.6		80 100	75		8SC	O
EK2	023 154 560	G <sub>1</sub>	6	2	250	75	2.8	1.8	100	60	2.1	8SC	O
EK3	023 164 560	G <sub>1</sub>	6	2	100	60	11	3.8	100	60	3.8	8SC	O
EK32	026 545 310	G <sub>1</sub>	6	2.0	250	75	2.8	1.5	100	60	2.1	A08	O
EK90	412 366 100		6	2	100		11	7	100		5	B7G	H
EL1	023 100 560	G <sub>1</sub>	6	18.5	250	250	32	2.6	100	PenLF	2.6	8SC	P
EL2	023 100 560	G <sub>1</sub>	6	18	250	250	32	2.8	100	PenLF	2.8	8SC	P
EL3	023 104 560		6	6	250	250	36	9	100	PenLF	9	8SC	P
EL3N	023 104 560		6.3	6	250	250	36	9	100	PenLF	8	8SC	P
EL3/375	023 104 560		6.3	6	250	250	36	9	100	PenLF	8	8SC	P
EL5/375	023 104 560		6.3	14	250	275	72	8.5	No Data Available			8SC	P
EL5	023 104 560		6	14	250	275	72	8.5	100	PenLF	8.5	8SC	P
EL6	023 104 560		6	7	250	250	72	14.5	100	PenLF	10	8SC	P
EL6 spec.	023 104 560		6.3	7	250	250	72	14.5	100	PenLF	10	8SC	P
EL8	023 104 560		6.3	7.5	250	250	20	5.5	100	PenLF		8SC	P
EL11	602 301 450		6	6	250	250	36	9	100	150	7	F8	P
EL11N	602 301 450		6.3	6	250	250	36	9	100	150	7	F8	P
EL12	602 301 450		6	7	250	250	72	15	No Data Available			F8	P
EL12 Spec.	502 301 400	A <sub>1</sub>	6.3	19	400	350	42	10	No Data Available			F8	P
EL12/325	602 301 450		6.3	7	250	250	72	15	No Data Available			F8	P
EL12/375	602 301 450		6.3	7	375	250	72	15	No Data Available			F8	P
EL13	602 301 450		6.3	7.5	250	250	20	5.5	100	150	5	F8	P
EL20	265 104 130		6	34	300	300	12.5	3.7	100	100		B8B	P
EL22	265 004 130		6	7	250	250	44	9.5	100	PenLF	9	B8B	P
EL31	120 540 310	A	6	9	300	275	91	14	100	PenLF	10	A08	P
EL32	026 500 310	G <sub>1</sub>	6	18	250	250	32	2.8	100	PenLF	2.8	A08	P
EL33	026 540 310		6	6	250	250	36	9	100	PenLF	8	A08	P
EL34	126 540 310		6	13.5	250	250	100	11.0	100	100	8	A08	P
EL35	026 540 310		6	15.5	250	250	72	5	100	PenLF	5	A08	P
EL36	*2* 54* 310	A <sub>1</sub>	6	7	250	250	72	14.5	100	PenLF	10	A08	P
EL37	026 540 310		6	13.5	250	250	100	11	100	PenLF	10	A08	P
EL38	120 540 310	A	6	7	250	250	89	14.3	100	PenLF	10	A08	P
EL38N	120 540 310	A <sub>1</sub>	6	7	250	250	89	14.3	100	PenLF	10	A08	P
EL39	020 541 310	A <sub>1</sub>	6	23	175	125	45	6.5	100	100		A08	P
EL41	26* *54 130		6	7.0	250	250	36	10.0	100	PenLF	8	B8A	P
EL42	261 054 130		6	10.8	225	225	26	3.2	100	PenLF	3.2	B8A	P
EL43	260 154 130		6	3	250	250	36	10	100	PenLF	8	B8A	P
EL44	200 154 130	A	6	22.5	250	250	20	5	100	PenLF	5	B8A	P
EL50	023 114 500	A	6	14	250	275	72	8.5	100	PenLF	8	8SC	P
EL51	023 104 500	A	6		400	300	44	7	100	150	7	8SC	P

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
EL53	023 104 560		6	7.7	400	250	24	8	100	150	7	8SC	P
EL54	023 104 560		6	12.2	300	300	55	13	No Data Available			8SC	P
EL60	216 005 413		6	14.5	250	250	67	9	100	100	8	B9G	P
EL70	412 163 510		6	9	100	100	31	2.2	100	90	2.2	B8D	P
EL80	541 230 600		6.3	6.5	250	250	36	10	100	150	9	B9A	P
EL81	*41 23* *51	A	6	38.5	250	250	32.0	4.6	100	100	2.2	B9A	P
EL81F	*41 23* *51	A <sub>1</sub>	6.3	38.5	250	250	32	4.6	100	100	2.2	B9A	P
EL82	*41 23* 6*5		6.3	10.4	175	175	54	9	100	100		B9A	P
EL83	541 23* 600		6	5.5	250	250	36	10	100	150	9	B9A	P
EL84	*41 23* 6*5		6	7.3	250	250	48	11.3	100	150	10.0	B9A	P
EL85	441 231 615		6	10.8	225	225	26	3.2	100	150	3.2	B9A	P
EL86	*41 23* 6*5		6.3	12.5	175	175	70	10	100	100	9	B9A	P
EL88	041 230 651		6.3	4.5	200	200	33	9.7	100	100		B9A	P
EL89	041 230 651		6.3	6	250	250	38	10.5	100	100		B9A	P
EL90	412 365 400		6	12.5	250	250	45	4.1	100	150	4	B7G	P
EL91	412 360 500		6	13.8	250	250	16	2.6	100	PenLF	2.6	B7G	P
EL95	412 365 400		6.3	9	250	250	24	5.0	100	100		B7G	P
EL150	602 301 450		6.3	17	350	250	95	6.5	No Data Available			F8	P
EL171	102 541 360		6.3	12	250	250	40	9	No Data Available			B8A	P
EL172	102 541 360		6.3	7	250	250	72	15	No Data Available			B8A	P
EL180	141 223 651		6.3	2.0	250	150	25	12	100	100		B9A	P
EL803	541 231 600		6.3	3.5	200	200	36	10	100	100		B9A	P
EL804	041 230 005	A <sub>1</sub>	6.3	12	175	175	70	10	100	100		B9A	P
EL820	*41 23* *51	A	6	38.5	250	250	32.0	4.6	100	150	4.0	B9A	P
EL821	*41 23* 651		6	4.5	250	250	40	11	100	150	10	B9A	P
EL822	*41 23* 651		6	2.5	250	150	40	13	100	100	10	B9A	P
EL11	423 174 560		6	20	250	250	15	1.7	100	PenLF	1.8	8SC	PP
ELP71	023 104 560		6	7	250	250	36	9	100	PenLF		8SC	P
ELP72	023 100 560	G <sub>1</sub>	6	17	250	250	36	2.5	100	PenLF		8SC	P
ELP73	023 100 560	G <sub>1</sub>	6	17	250	250	36	2.5	100	PenLF		8SC	P
EQ80	541 236 114		6	1	250	20	0.95	0.7	No Data Available			B9A	N
ER4	002 300 000	D <sub>1</sub>	4				3		D			B4	D
EW60	280 000 103		6				120		REC		30mA	B9G	R
EY51	023 000 000	D <sub>1</sub>	6						D			B3G	D
EY70	082 813 080		6				30		REC		17mA	M8	R
EY80	**1 23* **8		6				120		REC		40mA	B9A	R
EY81	*** 23* **8	C	6.3				120		REC		40mA	B9A	R
EY82	**1 23* **8		6.3				180		REC		50mA	B9A	R
EY83	*** 23* **8	C	6.3						D			B9A	D
EY84	**1 23* ***	D <sub>1</sub>	6				120		REC		30mA	B9A	R
EY86	230 232 032	D <sub>1</sub>	6						D			B9A	R
EY87	23* 232 *32	D <sub>1</sub>	6.3						D			B9A	D
EY91	812 380 000		6				60		REC		20mA	B7G	R
EY92	002 360 100		6.3				60		REC		15mA	B7G	R
EYY13	230 238 090		82				120		REC		30mA	F8	RR

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
EZ1	023 180 090		6				30		REC		15mA	8SC	RR
EZ2	023 180 090		6				30		REC		15mA	8SC	RR
EZ3	023 180 090		6				60		REC		20mA	8SC	RR
EZ4	023 180 090		6				60		REC		20mA	8SC	RR
EZ11	902 300 180		6				30-0		REC		15mA	F8	RR
EZ12	902 300 180		6				60-0		REC		20mA	F8	RR
EZ22	208 009 130		6				60		REC		20mA	B8B	RR
EZ33	028 090 310		6				60		REC		20mA	A08	RR
EZ35	028 090 310		6				30		REC		45mA	A08	RR
EZ40	280 *09 130		6				30		REC		25mA	B8A	RR
EZ41	280 009 130		6				30-0		REC		30mA	B8A	RR
EZ80	801 230 900		6				30-0		REC		35mA	B9A	RR
EZ81	8*1 23* 9**		6				60-0		REC		25mA	B9A	RR
EZ82	8*1 23* 8**		6-3				30		REC		15mA	B9A	RR
EZ90	802 309 100		6-3				30		REC		15mA	B7G	RR
EZ91	802 309 100		6-3				30		REC		15mA	B7G	RR
F5	642 300 000		4	40	300		40	6	100		6	B4	T
F10	642 300 000		4	15	300		30	5-5	100		5-5	B4	T
F100	642 350 000		4	16	250	250	42	2-5	100	PenLF	2-5	B5	P
F109	264 300 000		1-5	14-5	175		6-2	11-5	100		11	UX4	T
F109	642 300 000		1-5	14-5	175		6-2	11-5	100		11	B4	T
F203	264 300 000		2-5	56	275		36	2	100			UX4	T
F203	642 300 000		2-5	56	275		36	2	150		2	B4	T
F209(A)	642 310 000		2-5	21	250		5	1	100		1	B5	T
F209	642 300 000		2-5	21	250		5-2	0-97	100			B4	T
F209	264 300 000		2-5	21	250		5-2	0-97	100			UX4	T
F215	264 130 000		2-5	6	150		6-5	2	100		2	UX5	T
F215	642 310 000		2-5	6	150		6-5	2	100		2	B5	T
F242	265 130 000	G <sub>1</sub>	2-5	1-3	200	100	1-5	0-9	200	100	0-9	UX5	P
F410	642 300 000		4	15	275		13-5	2-8	100		2-8	B4	T
F443	642 350 000		4	30	400	200	45	3-2	100	100	3-2	B5	P
F443N	642 350 000		4	30	400	200	45	3-2	100	100	3-2	B5	P
F460	642 310 000		4	2	250		10	5-5	200		5-5	B5	T
F704	642 300 000		7-5	84	400		55	2-1	100		2-1	B5	T
F707	642 300 000		7-5	84	400		55	2-1	100		2-1	B4	T
F707	264 300 000		7-5	84	400		55	2-1	100		2-1	UX4	T
F708	264 300 000		7-5		400		30	1-6	100		1-6	UX4	T
FC2	645 230 700	G <sub>1</sub>	2	{ 0	150	50	2-0		80		0-4	B7	O
				{ 0	150	75	0-95	0-2	125	75	0-8		
				{ 0	150	50	1-2		100		0-5		
FC2A	645 230 700	G <sub>1</sub>	2	{ 0	150	50	0-7	0-27	100	75	1-0	B7	O
				{ 4	90	90	2-0	1	100	90	1-3		
FC4	645 231 700	G <sub>1</sub>	4	{ 4	250	90	1-6	1	250	90	1-5	B7	O
				{ 4	250	90	1-6	1	250	90	1-5		
FC13	023 164 570	G <sub>1</sub>	13	{ 3	90	75	2	1-3	100		1-5	B8C	O
				{ 2	200	75	2-6	0-6	200	75	2-5		

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
FC13c	845 231 700	G <sub>1</sub>	13	3 2	90	75	2.0	1.3	80	75	1.2	B7	O
FC141	207 640 530	G <sub>1</sub>	1.4		200	75	2.6		200	75	2.5		M08
FH2118	165 452 300	G <sub>1</sub>	20	2	200	80	3		100	75		C7	P
FW1	893 200 000		4				30		REC		15mA	B4	RR
FW3	892 300 000		4				60		REC		30mA	B4	RR
FW4/500	982 300 000		4 (5)				120		REC		30mA	B5	RR
FW4/800	982 300 000		4 (5)				60		REC		30mA	B5	RR
FY	642 350 000		4	10	250	250	32	5	100	PenLF	5	B5	P
FZ1	023 180 090		13				30		REC		15mA	8SC	RR
G	264 300 000		5	3	175		0.2		100		0.2	UX4	T
G/25L6	026 540 310		25	8.25	200	125	46	8	100	90	8	A08	P
G/50C5	142 345 600		50	7.5	125	100	49	7.5	100	90	6	B7G	P
G84	280 300 000		2.5				60		REC		20mA	UX4	RR
G407	642 300 000		4	4	125		4	1.3	100		4	B4	T
G409	642 300 000		4	4	125		4	1.3	100		4	B4	T
G431	892 300 000		4				30		REC		15mA	B5	RR
G459	023 080 090		4				60		REC		20mA	8SC	RR
G460	892 300 000		4				60		REC		20mA	B4	RR
G470	892 300 000		4				30		REC		15mA	B4	RR
G504	892 300 000		4				30		REC		15mA	B4	RR
G660	023 190 080		6.3				30		REC		15mA	8SC	RR
G715	802 300 000		7.5				120		REC		30mA	B4	R
G1054	892 300 000		4				30		REC		15mA	B4	RR
G1064	892 300 000		4				60		REC		20mA	B4	RR
G1380	023 180 090		12				30		REC		15mA	8SC	RR
G1404	802 300 000		4				120		REC		30	B4	R
G1503	892 300 000		2.5				30		REC		15mA	B4	RR
G2004	892 300 000		4				60		REC		20mA	B4	RR
G2005	892 300 000		5				60		REC		20	B4	RR
G2080	802 310 000		20				60		REC		20mA	B5	R
G2504	892 300 000		4				60		REC		20mA	B4	RR
G4004	892 300 000		4				120		REC		30mA	B48	RR
G4100	802 300 000		4				120		REC		30mA	B4	R
G4120	892 300 000		4				60		REC		20mA	B5	RR
G4150	892 300 000		4				60		REC		20mA	B4	RR
G4180	892 300 000		4				120		REC		30mA	B4	RR
G4300	892 300 000		4				120		REC		30mA	B4	RR
G/5749	412 365 100		6	1.0	250	100	11	4.4	100	100	4.4	B7G	P
G/5750	412 366 400		6	2.0	100		11	7.0	100		6	B7G	H
G/6042	461 471 230		25	8	250		9	2.6	100		2.6	A08	TT
G/6059	041 230 651		6	3	250	100	2	1.22	100	100	1.2	B7G	P
G/6060	741 226 413		6	2.0	250		10	5.5	200		5.0	B9A	TT
G/6061	*41 230 651		6	13.0	300	225	35	3.75	100	150	3.7	B9A	P
G/6062	601 235 144		6	7.5	250	250	45	7.0	100	150	7.0	B9A	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
G/6066	412 389 600		6	3.0	250		1.0	1.2	150		1.2	B7G	DDT
G/6100	602 364 100		6	8.5	250		10.5	2.2	100		3.0	B7G	T
G/6132	*41 230 651		6	4.5	250	250	40	11.0	100	150	9	B9A	P
G/6157	**1 23* ***	D <sub>1</sub>	6				120		REC		30mA	B9A	R
G/6158	744 226 413		6	4.6	250		6.0	2.3	100		2.3	B9A	TT
G/6180	461 471 230		6	8	250		9	2.6	100		2.6	A08	TT
G/6443	**1 23* ***	D <sub>1</sub>	6				120		REC		33mA	B9A	R
G/6516	412 360 500		6	12.5	250	250	16	2.6	100	PenLF	2.6	B7G	P
GG1	288 009 930		4				30		REC		15mA	B8B	RR
GN24	892 300 000		4				30		REC		15mA	B4	RR
GR4	892 300 000		4				120		REC		30mA	B4	RR
GTIC	642 310 000		4		200		48	3KΩ	No Data Available			B5	Thyratron
GY11	333 022 200	D <sub>1</sub>	2.5				30		REC		15mA	F8	R
GZ30	020 908 030		5				60		REC		20mA	A08	RR
GZ31	620 908 030		5				120		REC		30mA	A08	RR
GZ32	030 809 020		5 (5-7)				60		REC		50mA	A08	RR
GZ33	030 809 020		5				120		REC		30mA	A08	RR
GZ34	*30 809 020		5				120		REC		30mA	A08	RR
GZ40	28* **9 130		5				30		REC		17mA	B8A	RR
GZ41	28* **9 130		5				60		REC		26mA	B8A	RR
H2	642 300 000		2	1	150		2.5	0.8	150		0.8	B4	T
H4	642 300 000		4	4	125		4	1.3	125		1.3	B4	T
H4D	809 231 600	G <sub>1</sub>	4	2.5	200		5.5	2.7	150		2.7	B7	DDT
H12	642 300 000		2	1.3	100		0.6	1.0	100		1.2	Sm4	T
H13	023 100 060	G <sub>1</sub>	13	4	200		6	2.5	100		2.5	A08	T
H20	642 310 000		20	1.6	200		0.2	1.0	100		1.0	B5	T
H30	000 231 600	G <sub>1</sub>	13	1.5	250		7.5	6.0	100		6	B7	T
H42	000 231 600	G <sub>1</sub>	4	2	250		1	1.5	200		1.7	B7	T
H63	020 600 310	G <sub>1</sub>	6	2	250		1	1.5	100		1.5	A08	T
H141D	206 080 030	G <sub>1</sub>	1.4	1	90		0.1	0.25	80		0.25	M08	DT
H210	642 300 000		2	3	150		1.1	1.15	100		1.15	B4	T
H406D	542 300 000	A	4	1.5	175	75	4	0.8	100	80		B4	P
H407 Spec.	642 300 000		4	9	150		3.5	0.9	100		0.9	B4	T
H410D	642 300 000	A	4	1.5	175	75	3.5	0.8	100	75		B4	P
H412	642 300 000		4	9	125		5	1.2	125		1.2	B4	T
H607	642 300 000		6	1	100			0.45	100		0.45	B4	T
H1818D	542 310 000		20	2	200	100	3	2	100	100		B5	P
H1918D	542 310 000		20	2	200	60	4	1	100	60		B5	P
H2018D	542 310 000		20	2	200	60	4	1	100	60		B5	P
H2518D	542 310 000	A	20	2.5	225	100	3.5	2	100	100		B5	P
H2618D	542 310 000	A	20	2.5	250	100	5	2	100	100		B5	P
H4080D	542 310 000	A	4	1.5	200	75	4	2.5	100	100		B5	P
H4111D	542 310 000	A	4	2.5	225	100	3.5	2	100	100		B5	P
H4115D	542 310 000	A	4	2.5	225	100	3.5	2	100	100		B5	P
H4125D	542 310 000	A	4	2	200	100	6	1	100	100		B5	P



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
H4128D	542 310 000	A	4	2.5	225	100	3.5	2	100	100		B5	P
H4129D	542 310 000	A	4	2.5	250	100	5	2	100	100		B5	P
HAA91	182 310 900		12						D			B7G	DD
HABC80	871 239 146		19	3	250		1	1.2	100		1.3	B9A	DDDT
HAD	908 231 600	G <sub>1</sub>	13	2.5	200		3.3	2	150		2	B7	DDT
HBC90	412 389 600		12.5	3	250		1.0	1.2	100		1.2	B7G	DDT
HBC91	412 398 600		12.5	2	250		1.2	1.6	100		1.2	B7G	DDT
HCH81	541 237 464		12.6	2.5	100		4	2	100	60	2	B9A	TH
					225	90	3	0.65	100	90	0.65		
HD2	642 300 000		2	5	200		5	1	150		1	B4	T
HD2	682 390 000	G <sub>1</sub>	2	2.5	150		3.5	1.3	100			B5	DDT
HD14	036 080 200	G <sub>1</sub>	1.4	0	90		0.13	0.22	100		0.28	A08	DT
HD21	682 390 000	G <sub>1</sub>	2	1.5	150		1.8	1.5	150		1.5	B4	DDT
HD22	682 390 000	G <sub>1</sub>	2	3	150		1.8	1.5	100		1.5	B5	DDT
HD23	682 390 000	G <sub>1</sub>	2	1	125		1	1.0	125		1.0	B5	DDT
HD24	682 390 000	G <sub>1</sub>	2	1.5	150		0.8	1.0	100		1.4	B5	DDT
HF61	26* *54 130		6.3	2.6	250	100	6	2.2	100	100	2.2	B8A	P
HF62	260 154 130		6.3	2	250	250	10	9	100	PenLF	8	B8A	P
HF85	141 230 651		12.5	2.3	200	125	11.4	6.1	100	90		B9A	P
HF93	412 365 100		12.5	1	250	100	11	4.4	100	100	4.3	B7G	P
HF94	412 365 100		12.5	1	250	150	10.6	5.2	100	100	3.9	B7G	P
HF121	26* 054 103		12.5	3	200	125	7.2	2.3	100	100	2	B8A	P
HK90	412 366 100		12.5	2	100		11	7	100		5	B7G	H
HL2	642 300 000		2	1.5	150		2.2	1.5	150		1.5	B4	T
HL2	023 004 060		2	1.5	150		2.2	1.5	150		1.5	8SC	T
HL2K	642 300 000		2	1.5	150		2.2	1.5	150		1.5	B4	T
HL2S	023 004 060		2	1.5	150		2.2	1.5	150		1.5	8SC	T
HL3	206 040 030		2	1.5	125		0.5	1.5	125		1.5	M08	T
HL4	642 310 000		4	4.5	250		5	3.5	150		3.5	B5	T
HL4g	000 231 600	G <sub>1</sub>	4	4.5	250		5	3.5	150		3.5	B7	T
HL4gs	023 100 060	G <sub>1</sub>	4	4.5	250		5	3.5	150		3.5	8SC	T
HL13	023 100 060	G <sub>1</sub>	13	3.7	200		5	3.3	150		3	8SC	T
HL13	000 231 600	G <sub>1</sub>	13	2.75	200		6	3.5	150		4	B7	T
HL13c	000 231 600	G <sub>1</sub>	13	3.7	200		5	3.3	150		4	B7	T
HL13g	023 004 060	G <sub>1</sub>	13	5.5	250		6	2.5	150		2.5	8SC	T
HL13s	023 100 060	G <sub>1</sub>	13	3	200		6	3.5	150		3.5	8SC	T
HL21	642 300 000		2	3	150		1.75	1.5	125		1.5	B4	T
HL21DD	682 390 000	G <sub>1</sub>	2	2	150		2	1.3	125		1.3	B5	DDT
HL22 (MAZDA)	020 604 030		2	2	150		2	1.3	125		1.3	M08	T
HL22DD	206 080 930	G <sub>1</sub>	2	2	150		2	1.3	125		1.3	M08	DDT
HL23	206 040 030		2	2.4	150		1.5	1.2	100		1.2	M08	T
HL23DD	206 080 930	G <sub>1</sub>	2	2.8	150		1.5	1.05	100		1.2	M08	DDT
HL41	216 040 030		4	4.5	250		7	3.1	150		3.1	M08	T
HL41DD	216 090 830	G <sub>1</sub>	4	5.2	250		6	2.2	100		2.4	M08	DDT
HL42DD	216 090 830	G <sub>1</sub>	4	5	200		7.5	2.5	100		2.5	M08	DDT

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
HL84	*41 23* 6*5		30	12.5	175	175	70	10	100	100		B9A	P
HL90	412 365 400		19	12.5	250	250	45	4.1	100	150	4	B7G	P
HL92	142 345 600		50	7.5	125	125	49	7.5	100	100	7	B7G	P
HL94	142 345 600		30	6.7	100	100	43	9.2	100	100	9.2	B7G	P
HL133	216 000 030	G <sub>1</sub>	13	3.3	200		6	2.9	200		2.9	M08	T
HL133DD	216 090 830	G <sub>1</sub>	13	5.4	250		6	2.3	150		2.3	M08	DDT
HL134DD	216 080 930	G <sub>1</sub>	13	5	250		7	2.5	100		2.5	M08	DDT
HL135	023 100 060	G <sub>1</sub>	13	3	200		6	3.5	150		3.5	85C	T
HL210	642 300 000		2	1	100		1.1	0.7	100		1.0	B4	T
HL410	642 300 000		4	6	150		1.2	0.83	150		0.83	B4	T
HL607	642 300 000		6	1	100		1	1	100		1	B4	T
HL1320	000 231 600	G <sub>1</sub>	13	3.3	200		6	3	150		3	B7	T
HLA1	642 310 000		4	1	200		5	8	200		7	B5	T
HLA2	642 310 000		4	2.5	200		6	5.5	150		5.5	B5	T
HLB1	642 300 000		2	3	150		2	1.5	100		1.5	B5	T
HL/DD1320	809 231 600	G <sub>1</sub>	13	3	200		4.3	1.9	100		1.9	B7	DDT
HM20	642 310 000		20	3.3	225		6	2.5	100		2.3	B5	T
HN309	641 237 154		12.6	2	250		2.8	2.2	100	60	2.0	B9A	TP
				9	150	150	24	5.6	150	150	5.6		
HP2	446 230 700		2	1	125		8.5		125			B7	TT
‡ HP6	412 361 500		6	2	250	250	10	7.5	100	PenLF	5	B7G	P
				1.5	200	150	4	6.4	100	PenLF	5		
HP13	061 231 500	G <sub>1</sub>	13	1	250	100	8	3.5	250	100	3.5	B7	P
HP13s	023 110 560	G <sub>1</sub>	13	1	250	100	8	3.5	250	100	3.5	85C	P
HP210	542 300 000	A	2	1.5	150	150	1.9	1.9	150	150	1.9	B4	P
HP210	041 230 500	A	2	1.5	150	150	1.9	1.9	150	150	1.9	B7	P
HP210C	041 230 500	A	2	1	150	150	1.9	1.9	150	150	1.9	B7	P
HP210nc	542 300 000	A	2	1	150	150	1.9	1.9	150	150	1.9	B4	P
HP210nc	041 230 500	A	2	1	150	150	1.9	1.9	150	150	1.9	B7	P
HP211C	041 230 500	A	2	1	150	150	2.6	1.7	150	150	1.7	B7	P
HP211c	542 300 000	A	2	1	150	150	2.6	1.7	150	150	1.7	B4	P
HP211	041 230 500	A	2	1	150	150	2.6	1.7	150	150	1.7	B7	P
HP215	542 300 000	A	2	1.5	150	80	1.5	1.2	150	75	1.2	B4	P
HP215	041 230 500	A	2	1.5	150	80	1.5	1.2	150	75	1.2	B7	P
HP415	041 231 500	A	4	2	250	100	8	2.7	100	100	2.7	B7	P
HP101B	160 152 300	G <sub>1</sub>	10		250	150	2.3	1.25	100	PenLF	1.25	C7	P
HP111B	160 152 300	G <sub>1</sub>	10	3	250	150	10.5	1.65	100	100	1.65	C7	P
HP2018	041 231 500	A	20	2	200	100	4	3.5	200	100	2.5	B7	P
HP2018	542 310 000	A	20	2	200	100	4	3.5	100	100	3.5	B5	P
HP2118	041 230 500	A	20	2	200	100	5	3.5	100	100	3.5	B7	P
HP2118	542 310 000	A	20	2	200	100	5	3.5	100	100	2.5	B5	P
HP4100	542 310 000	A	4	2	200	100	3	3.5	100	100	3.5	B5	P
HP4101	041 231 500	A	4	2	200	100	3.5	3.5	100	100	3.5	B7	P

‡ See note on Page 8.

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
HP4101	542 310 000	A	4	2	200	100	3.5	3.5	100	100	3.5	B5	P
HP4101c	542 310 000	A	4	2	200	100	3.5	2.8	100	100	2.8	B5	P
HP4101c	041 231 500	A	4	2	200	100	3.5	2.8	100	100	2.8	B7	P
HP4105	542 310 000	A	4	2	250	100	4.5	3	100	100	3	B5	P
HP4105	041 231 500	A	4	2	250	100	4.5	3	100	100	3	B7	P
HP4106	041 231 500	A	4	2	200	100	5	3.5	100	100	3.5	B7	P
HP4106	542 310 000	A	4	2	200	100	5	3.5	100	100	3.5	B5	P
HP4106C	041 231 500	A	4	2	200	100	5	3.5	100	100	3.5	B7	P
HP4106C	542 310 000	A	4	2	200	100	5	3.5	100	100	3.5	B5	P
HP4115	041 231 500	A	4	2	200	100	4.3	3.2	100	100	3.2	B7	P
HP4115	542 310 000	A	4	2	200	100	4.3	3.2	100	100	3.2	B5	P
HP4115c	542 310 000	A	4	2	250	100	4.5	3.2	100	100	3.2	B5	P
HP4115c	041 231 500	A	4	2	250	100	4.5	3.2	100	100	3.2	B7	P
HR1	2** 3** *00	A	6						D			B7G	R
HR2	112 311 100	D <sub>1</sub>	4				5		D			B7G	R
HR2	642 300 000		2	2	150		12	0.6	125		0.6	B4	T
HR2S	023 004 060		2	2	150		1.2	0.6	125		0.6	85C	T
HR3	112 311 100	D <sub>1</sub>	4				15		REC		10mA	B7G	R
HR4	112 311 100	D <sub>1</sub>	4				30		REC		15mA	B7G	R
HR5	112 311 100	D <sub>1</sub>	4				30		REC		15mA	B7G	R
HR6	112 311 100	D <sub>1</sub>	4				60		REC		20mA	B7G	R
HR7	020 000 030	D <sub>1</sub>	4				30		REC		15mA	A08	R
HR8	030 000 020	D <sub>1</sub>	4				30		REC		15mA	A08	R
HR9	0** 080 230	D <sub>1</sub>	4						D			A08	D
HR11	020 000 030	D <sub>1</sub>	4						D			A08	D
HR210	642 300 000		2	1.5	200		1	1.3	150		1.3	B4	T
HR406	642 300 000		4	3	200		1	1.5	150		1.5	B4	T
HR410	642 300 000		4	3	200		1	1.5	150		1.5	B4	T
HSD	809 231 600	G <sub>1</sub>	13	3	200		4.6	2.3	150		2.3	B7	DDT
HVR1	002 300 000	D <sub>1</sub>	2				5		REC		1.3mA	B4	R
HVR2	003 200 000	D <sub>1</sub>	4				3		REC		2.0mA	B4	R
HVR2A	003 200 000	D <sub>1</sub>	2 (2.5)				3		REC		2.0mA	B4	R
HVUI	002 300 000	D <sub>1</sub>	4				3		D			B4	R
HY24	264 300 000		2	45	175		20		100			UX4	T
HY61	254 130 000	A <sub>1</sub>	6	14	300	250	83	6.5	No Data Available			UX5	P
HY65	030 540 210	A <sub>1</sub>	6	45	350	200	63		100	100		A08	P
HY90	002 383 100		35				60		REC		25mA	B7G	R
HY113	264 030 000		1.4	4.5	50		0.4	0.25	No Data Available			UX5	T
HY115	364 520 000		1.4	1.5	50	20	0.03	0.06	No Data Available			UX5	P
HY125	364 520 000		1.4	3	50	50	0.9	0.3	No Data Available			UX5	P
HY615	020 000 310	A <sub>1</sub> G <sub>1</sub>	6	35	300		20		100			A08	T
HY866	280 300 000		2.5				120		REC		30mA	UX4	R
HZ50	280 300 000		13				60		REC		20mA	UX4	R
IRV120/350s	023 180 090		4				60		REC		20mA	85C	RR
IW2	893 200 000		4				30		REC		40mA	B4	RR

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
IW3	892 300 000		4				60		REC		50mA	B4	RR
IW4/350	892 300 000		4				60		REC		40mA	B4	RR
IW4/500	893 200 000		4 (5)				60		REC		20mA	B4	RR
K4	892 300 000		4				120		REC		30mA	B4	RR
K23A	682 390 000	G <sub>1</sub>	2	5.5	150		2.5	1.4	100		1.4	B5	DDT
K23B	682 390 000	G <sub>1</sub>	2	1.5	150		1.4	1.2	150		1.2	B5	DDT
K24	265 130 000	G <sub>1</sub>	2.5	1.5	175	75	2	0.8	100	75	0.8	UX5	P
K27	264 130 000		2.5	4.5	90		3	1	80		1	UX5	T
K30A	642 300 000		2	3	150		1.5	0.8	150		0.8	B4	T
K30B	642 300 000		2	7.5	150		4	0.9	100		0.9	B4	T
K30C	642 300 000		2	1.5	150		2	1.4	100		1.4	B4	T
K30D	642 300 000		2	3	150		4	1.5	100		1.5	B4	T
K30E	642 300 000		2	4.5	150		2	1.5	100		1.5	B4	T
K30g	642 300 000		2	7	150		6	3.5	100		3.5	B4	T
K30K	642 300 000		2	1.5	150		2.2	1.4	100		1.4	B4	T
K33A	064 234 700		2	0	150		3		150			B7	TI
K33B	446 230 700		2	1.5	125		3	2.4	125		2.1	B7	TT
K40B	542 300 000	A	2	0	150	75	2	1.5	100	75	1.5	B4	P
K40N	542 300 000	A	2	0	150	90	2.5	1.4	100	90	1.4	B4	P
K40N	041 230 500	A	2	0	150	90	2.5	1.4	100	90	1.4	B7	P
K50M	041 231 500	A	2	5	125	125	3	1.5	100	100	1.5	B7	P
K50N	064 235 500	G <sub>1</sub>	2	1.5	125	60	2	1.4	125	60	1.4	B7	P
K70B	642 350 000		2	4.5	150	150	9.5	2.5	100	100	2.5	B5	P
K70D	642 350 000		2	2.4	125	150	5	4	100	100	4	B5	P
K77A	465 230 574		2	10.5	125	150	2.5	4	100	100	4	B9	PP
K77B	446 235 700		2	11.7	150	150	3.8		100	100		B7	PP
K80A	645 230 700	G <sub>1</sub>	2	0	150	50	2		80	60	0.4	B7	O
				0	150	75	0.95		125	75	0.8		
K80B	645 230 700	G <sub>1</sub>	2	0	150	150	2.1		100	60	0.1		
				0	150	150	0.7		100	75	1.0	B7	O
K435-10	642 300 000		4	3.0	300		50	5.0	100		5.0	B4	T
K450/50	642 300 000		4	50	400		120	5	100		5	B4	T
K1658	542 310 000	A <sub>1</sub>	7	25	400	225	50	3.2	No Data Available			B5	P
K1668	542 310 000	A <sub>1</sub>	7	25	400	225	50	3.2	No Data Available			B5	P
K1678	542 310 000	A <sub>1</sub>	7	25	400	225	50	3.2	No Data Available			B5	P
K1694	642 300 000		4	3.5	200		6	2.6	100		2.4	B4	T
KB2	289 130 000		2						D			5SC	DD
KBC1	023 098 060	G <sub>1</sub>	2	4.5	150		2.5	1.0	100		1	8SC	DDT
KBC32	036 980 200	G <sub>1</sub>	2	0	100		2.4	1.2	100		1.2	A08	DDT
KC1	023 004 060		2	1.5	150		1.2	0.6	125		0.6	8SC	T
KC3	023 004 060		2	2.8	150		3	2.5	100		2.5	8SC	T
KC4	023 004 060		2	1.5	150		2.2	1.4	125		1.4	8SC	T
KC50	642 300 000		2	1	40		0.25	0.4	No Data Available			Sm4	T
KC51	642 300 000		2	2	40		1.25	0.5	No Data Available			Sm4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE		
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V				
KCF30	037 546 200	G <sub>1</sub>	2	1.0 2.5 0.5	100	0	3.7	1.6	100	60	1.7	A08	TP		
KCHI	023 064 570	G <sub>1</sub>	2		90	80	1.5	0.9	100	75	0.9			8SC	TH
KDD1	023 074 460		2		5	90	60	1	0.9	80	60				
KD50	642 300 000		2	2.8	40		1.8	0.56	No Data Available			Sm4	T		
KE50	542 300 000	A	2	2	125	50	0.8	0.56	100	60	0.56	Sm4	P		
KF1	050 412 300	A	2	1	125	150	3	1.8	125	150	1.8	C7	P		
KF2	050 412 300	A	2	1	125	150	3	1.3	125	150	1.3	C7	P		
KF3	023 010 560	G <sub>1</sub>	2	1	90	90	1	0.5	80	90	0.5	8SC	P		
KF4	023 010 560	G <sub>1</sub>	2	1	90	90	1.2	0.7	80	90	0.7	8SC	P		
KF7	023 004 500	A	2	1.5	90	90	1.8	0.7	80	90	0.7	8SC	P		
KF8	023 004 500	A	2	1	90	90	1.5	0.6	80	90	0.6	8SC	P		
KF35	026 510 300	G <sub>1</sub>	2	1.5	125	60	1.45	1.08	125	60	1.08	A08	P		
KH1	023 051 560	G <sub>1</sub>	2	1.5	90	60	2.1	1.4	80	60	1.4	8SC	P		
KK2	023 064 560	G <sub>1</sub>	2	1	90	50	2		80	60		8SC	O		
KK2G	026 546 300	G <sub>1</sub>	2	1.0	90	50	2.0		80	60		A08	O		
KK32	037 546 200	G <sub>1</sub>	2.0	0 0	150	50	2.1		150	60	2.1	A08	O		
KL1	642 350 000		2		4.5	90	90	8	1.7	80	75			1.7	B5
KL1	032 004 560		2	4.5	90	90	8	1.7	80	75	1.7	8SC	P		
KL2	023 004 560		2	7.5	90	90	11	1.8	80	75	1.8	8SC	P		
KL4	023 004 560		2	2.5	90	90	4.7	1.8	80	75	2.8	8SC	P		
KL5	032 004 560		2	4	90	90	4.8	1.4	80	75	1.4	8SC	P		
KL35	036 540 200		2	4.5	125	150	5.6	2.2	100	100	2.2	A08	P		
KLL3	423 564 570		2	12	150	150	8		100	100		8SC	PP		
KLL32	026 447 350		2	11.3	125	150	3.8	2.6	100	100	2.6	A08	PP		
KR5	264 530 000		6	9	150	150	14	1.9	100	100	1.9	UX5	P		
KR20	264 413 000		2.5	0	250		3.5	1.4	250		1.4	UX6	T		
KR22	264 413 000		6	0	250		3.5	1.4	250		1.4	UX6	T		
KR25	265 413 000		2.5	16.5	250	250	34	2.2	100	PenLF	2.2	UX6	P		
KR28	289 130 000		6				30		REC		15mA	UX5	RR		
KR31	281 300 000		10				120		REC		30mA	UX4	R		
KT2	642 350 000		2	4.5	150	150	7.5	2.5	100	100	2.5	B5	P		
KT8	542 310 000	A	6	16	250	250	72	6	100	100	6	B5	P		
KT8C	542 310 000	A	6	16	250	250	72	6	100	PenLF	6	B5	P		
KT16	026 540 230		1.4	4.5	90	90	8.8	1.9	No Data Available			A08	P		
KT21	642 350 000		2	2.5	150	125	5.3	5.3	100	100	5.3	B5	P		
KT24	642 350 000		2	3.5	150	125	5.0	3.2	100	100	3.2	B5	P		
KT30	045 231 600		13	12	250	250	40	3.9	100	PenLF	3.9	B7	P		
KT31	305 221 600	G <sub>1</sub>	13	4	200	175	40	10	100	150	9	B7	P		
KT32	026 540 310		26	7.6	125	150	75	9	100	100	8	A08	P		
KT33	326 540 210		13	13.2	200	200	60	10	100	100	9	A08	P		
KT33c	326 540 210		13	7	175	175	92	10	100	100	9	A08	P		
KT35	326 540 210		13	11.5	200	200	50	10	100	100	9	A08	P		

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
KT36	020 540 310	A	26	10.0	150	150	60	11.0	100	100	10.0	A08	P
KT41	045 231 600		4 (5)	4.4	250	250	40	10.5	100	PenLF	9	B7	P
KT42	045 231 600		4	16.5	250	250	34	2.5	100	PenLF	2.5	B7	P
KT44	041 231 500	A	4 (5)	15	250	250	85	6.25	100	PenLF	6.2	B7	P
KT45	041 231 500	A	4	15	250	250	85	6.3	100	PenLF	6.0	B7	P
KT55	*26 540 310		52	15	150	150	88.0	16	No Data Available			A08	P
KT61	026 540 310		6	4.4	250	250	40	10.5	100	PenLF	9	A08	P
KT63	026 540 310		6	16.5	250	250	34	2.5	100	PenLF	2.5	A08	P
KT66	026 540 310		6	15	250	250	65	6.3	100	PenLF	6.0	A08	P
KT67	256 001 403		6	9	250	175	80	13	100	100	10	B9G	P
KT71	026 540 310		48	9.8	175	175	70	10	100	100	9	A08	P
KT72	026 540 310		16	12.5	175	175	30	2.5	100	100	2.5	A08	P
KT73	026 540 310		6	12.5	175	175	35	2.5	100	100	2.5	A08	P
KT74	026 540 310		16	12.5	175	175	30	2.5	100	100	2.5	A08	P
KT76	026 540 310		15	13	175	175	35	2.5	100	100	2.5	A08	P
KT81	265 004 130		6	4.4	250	250	40	10.5	100	PenLF	9	B8B	P
KT88	026 540 310		6	30	250	250	57	10	No Data Available			A08	P
KT101	265 004 130		80	9.5	175	175	70	10	100	100	9	B8B	P
KTW61	026 510 310	G <sub>1</sub>	6	3	250	100	10	2.9	100	90	2.9	A08	P
KTW62	026 500 310	G <sub>1</sub>	6	3	250	100	8	2.85	100	100	2.8	A08	P
KTW63	026 510 310	G <sub>1</sub>	6	3	250	100	7.6	1.5	100	90	1.5	A08	P
KTW73	026 510 310	G <sub>1</sub>	6	3	250	100	6.5	1.7	100	90	1.7	A08	P
KTW74	026 500 310	G <sub>1</sub>	13	3	250	100	7.6	1.5	100	90	1.7	A08	P
KTZ41	061 231 500	G <sub>1</sub>	4	1.5	250	250	18	12	200	200	10	B7	P
KTZ63	026 500 310	G <sub>1</sub>	6	2	250	100	1	1.23	100	100	1.2	A08	P
KTZ73	026 500 310	G <sub>1</sub>	6	3	250	100	2	1.5	100	90	1.5	A08	P
KZ	802 310 000		20				60		REC		20mA	B5	R
L2	642 300 000		2	3.8	150		4	1.5	125		1.5	B4	T
L2/B	642 300 000		2	3.8	150		4	1.5	125		1.5	B4	T
L2D	642 310 000		2	4.5	150		2	1.5	100		1.5	B5	T
L2/DD	682 390 000	G <sub>1</sub>	2	3.8	150		4	1.6	100		1.6	B5	DDT
L4	642 300 000		4	16	250		20	3.2	100		3.2	B4	T
L11	642 300 000		1	12	100		2.8	0.57	100		0.57	B4	T
L12	642 300 000		2	3	40		2.2	0.8	No Data Available			Sm4	T
L21	642 300 000		2	6	150		2.2	1.8	100		1.8	B4	T
L21DD	682 390 000	G <sub>1</sub>	2	3	150		5.2	1.8	100		1.8	B5	DDT
L22DD	206 080 930	G <sub>1</sub>	2	4.2	150		4	1.55	100		1.55	A08	DDT
L30	040 231 600		13	8	200		25	4.2	100		4.2	B7	T
L42MD	642 350 000		4	20	250	250	22	2.5	100	100		B5	P
L63	026 040 310		6	8	250		9	2.6	100		2.6	A08	T
L77	6*2 364 100		6	8.5	250		10.5	2.2	100		2.2	B7G	T
L210	642 300 000		2	0	150			0.92	100		0.92	B4	T
L408	642 300 000		4	3	150		5	1.5	125		1.5	B4	T
L410	642 300 000		4	4	150		4.3	1.5	100			B4	P
L412	642 300 000		4	1.5	200		3	1.2	200		1.2	B4	T

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
L413	642 300 000		4	16	200		12	1.8	100		1.6	B4	T
L414	642 300 000		4	8	150		12	2.8	100		2.8	B4	T
L415	642 300 000		4	10	200		8	2	100		2	B4	T
L416D	643 200 000	G <sub>2</sub>	4		250	80	12	1.4	100	75		B4	P
L427D	642 350 000		4		300	200	20	1.5	100	100		B5	P
L486D	642 350 000		4	15	250	250	35	2.7	100	PenLF	2.7	B5	P
L491D	642 350 000		4	40	400	200	30	1.8	No Data Available			B5	P
L495	642 350 000		4	30				5				B5	P
L496D	642 350 000		4	17	250	250	36	2.5	100	100		B5	P
L497	642 350 000		4		400	200	45	3.2	No Data Available			B5	P
L510D	642 350 000		5	17	200	150	12	1.3	100	100		B5	P
L2318	642 350 000		20		200	200	20	1.7	100	100		B5	P
L4150D	642 310 000	G <sub>2</sub>	4		250	250	24	2.5	100	100		B5	P
LA	364 520 000		6	12	175	175	22	2.2	100	100	2.2	UX5	P
LD210	642 300 000		2	4.5	150		3	1.3	125		1.3	B4	T
LD410	642 300 000		4	6	200		4	1.8	100		1.8	B4	T
LG5	218 090 130		6				120		REC		30mA	A08	RR
LG6	218 090 130		12				30		REC		15mA	B8B	RR
LG14	123 000 000	D <sub>1</sub>	6				5		D			B3G	R
LK430	642 300 000		4		250		20	1.9	100			B4	T
LK460	642 300 000		4	40	225		30	2.2	No Data Available			B4	T
LK4110	642 300 000		4	36	400		30	2.7	No Data Available			B4	T
LK4112	642 300 000		4	21.6	250		48	3.5	No Data Available			B4	T
LK4200	642 300 000		4	36	400		45	4	No Data Available			B4	T
LL2	642 300 000		2	2.5	150		3	2.6	125		2.6	B4	T
LL2s	023 004 060		2	2.5	150		3	2.6	125		2.6	B5C	T
LL4	642 310 000		4	10	350		18	3.5	125		3.5	B5	T
LL610	642 350 000		5	17	200	150	12	1.3	No Data Available			B5	P
LN152	641 237 154		6	2.3	100		4.0	1.4	100	60	1.4	B9A	TP
				6.7	175	175	15.0	3.2	100	100	3.0		
LN309	641 237 154		12.5	8.5	250		10.5	2.2	100	60	2.0	B9A	TP
				8.0	175	175	30	4.5	100	100	4.0		
LP2 (FERRANTI)	642 300 000		2	4.5	150		10	3.6	100		3.6	B4	T
LP4	642 300 000		4	36	250		48	5.5	100		5.5	B4	T
LP25	642 300 000		4	31	400		50	7.5	100		6.9	B4	T
LP220	642 300 000		2	4.5	150		5	3.5	100		3.5	B4	T
LS6A	642 300 000		6	91	400		64	2.3	No Data Available			B5	T
LS7	642 300 000		4	4	150		21	2.4	100		2.4	B5	T
LS8	642 300 000		4	8	125			1.3	No Data Available			B4	T
LS8A	642 300 000		4	8	125		26	3	No Data Available			B4	T
LS9B	642 300 000		2	1.5			8	0.6	100		0.6	B4	T
LS826	246 310 000		6.3	1.1	100		7.5	5.0	100		5.0	B5B	T
LU4A	642 300 000		4	16	200		12	1.8	100		1.6	B4	T

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
LZ319	645 237 114		9	{ 2.0 2.0	100		14	5	100	60	5.0	} B9A	TP
M8079	192 310 800		6		175	175	10	6	100	100	6.0		B7G
M8081	672 344 100		6	0.85	100		8.5	5.3	100		5.3	B7G	TT
M8082	412 360 500		6	12.4	250	250	16	2.6	No Data Available			B7G	P
§ M8083	412 361 500		6	{ 2 1.5	250	250	10	7.65	100	150	5.0	} B7G	P
					200	150	4	6.4	100	150	5.0		
M8096	601 235 144		6	7.5	250	250	45.0	7.0	100	150	7.0	B9A	P
M8097	812 314 600		6	2.8	200		7.5	2.8	100		2.8	B7G	DT
M8099	412 314 600		6	2	250		6.0	8.5	200		8.0	B7G	T
M8100	412 365 100		6	2.3	150	150	7	4.3	No Data Available			B7G	P
M8101	412 365 100		6	1.0	250	100	11.0	4.4	250	100	4.4	B7G	P
M8121	412 163 510		6	1.4	100	100	7.0	5.0	100	100	5.0	B8D	P
M8122	412 653 160		6	2.0	100	100	7.5	5.0	100	100	5.0	B8D	P
M8123	281 380 000		6				5.0		D			B8D	R
M8125	412 163 510		6	2.0	100	100	3.0	2.5	100	100	2.3	M8	P
M8135	412 3** 651		6	4.5	250	250	40.0	11.0	100	150	10.0	B9A	P
M8136	741 226 413		6.3	8.5	250		8.5	2.2	100		2.0	B9A	TT
M8137	741 226 413		6	2.0	250		1.2	1.6	100		1.6	B9A	TT
M8138	802 309 100		6				30.0		REC		15mA	B7G	RR
M8156	462 603 160		6	2.0	100		13.0	5.5	100		5.5	B8D	T
M8157	265 511 413		6	30.0	300	250	25.0	1.9	100	100	1.9	B9G	P
M8161	412 361 500		6	2.5	250	200	8.0	2.5	100	PenLF	2.5	B7G	P
M8162	741 226 413		6	1.5	200		8.5	6.5	200		8.5	B9A	TT
M8195	501 236 014		6.3	1.0	250	100	3	1.85	100	100	1.8	B9A	P
MAZ41	*8* **9 230		4				30		REC		15mA	A08	RR
MCI	423 060 000		1.9	1.5	100		4	0.8	100		0.8	8SC	T
ME2	642 350 000		2	12	200	200	13		100	100		B5	P
ME25	642 350 000		4	30	400	300	60		100	100		B5	P
MH4	642 310 000		4	2	200		8	3.0	100		3.6	B5	T
MH40	642 310 000		4	3	200		2.7	2.0	100		2.4	B5	T
MH41	642 310 000		4	1.5	200		5.2	6	200		6	B5	T
MH206	645 230 600	G <sub>1</sub>	2	3	150	75	3.2		100	75		B7	H
MH1118	426 510 310	G <sub>1</sub>	10	3	200	100	3.5		100	90	0.6	A08	P
MH4105	645 231 700	G <sub>1</sub>	4	3	200	100	7.5		100	100		B7	H
MHD4	908 231 600	G <sub>1</sub>	4	4	200		2	1.9	100		1.9	B7	DDT
MHL4	642 310 000		4	8	250		8	2.5	100		2.5	B5	T
MHLD6	025 890 310	G <sub>1</sub>	6	5	200		11.5	3	100		3	A08	DDT
MKT4	045 231 600		4	11	250	200	32	3	100	100	3	B7	P
MKT4	642 310 000	S	4	11	250	200	32	3	100	100	3	B5	P
ML4	642 310 000		4	16	250		14	3.2	100		3.2	B5	T
ML6	642 310 000		6	8	200		24	3.8	100		3.8	B5	T
ML40	642 310 000		4	3	200			3	100		3	B5	T

§ See note on Page 8



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
MM4V	542 310 000	A	4	1.5	200	125	6	2.5	100	100	2.5	B5	P
MM20	542 310 000	A	20	0	200	100	6	3.5	100	100	3.5	B5	P
MO465	645 231 700	G <sub>1</sub>	4	1.5	75		2		80			B7	O
MO495	123 174 560	G <sub>1</sub>	4		250	75	1.6		100	75			
MP2	642 300 000		2	8.5	250	75	1.6		100	75		B4	T
MP4	067 231 500	G <sub>1</sub>	4	12	150		12.5	3	100		3		
MP Pen	045 231 600		4		250	150	8	2.5	100	100	2.5	B7	PP
MP Pen	642 310 000	S	4	16	250	250	30	2.5	100	100	3.5	B7	P
MPT4	045 231 600		4	16	250	250	30	2.5	100	100	3.5	B5	P
MPT4	642 310 000	S	4	9	250	200	32	3	100	100	3	B7	P
MPT4	642 310 000	S	4	9	250	200	32	3	100	100	3	B5	P
MR1	802 300 000		4				120		REC		30mA	B4	R
MR4	642 300 000		4	3	200		6	2.5	150		2.5	B4	T
MS4	542 310 000	A	4	1.5	250	75	2.4	1.1	250	75	1.1	B5	P
MS4B	542 310 000	A	4	1	200	75	3.4	3.0	100	75	3.0	B5	P
MS4c	542 310 000	A	4	1	200	75	3.4	3.2	200	75	3.2	B5	P
MSG/HA	542 310 000	A	4	1.5	200	80	2.1	2	100	75	2	B5	P
MSG/LA	542 310 000	A	4	1.5	200	75	5.2	3.75	100	75	3.75	B5	P
MSP4	041 231 500	A	4	1.8	200	100	3.4	2.4	100	75	3.5	B7	P
MSP4	542 310 000	A	4	1.8	200	100	3.4	2.4	100	75	3.5	B5	P
MSP4I	542 310 000	A	4	4	250	250	8.5	3.2	100	PenLF	3.2	B5	P
MSP4I	041 231 500	A	4	4	250	250	8.5	3.2	100	PenLF	3.2	B7	P
MS/Pen	041 231 500	A	4	1.5	200	100	4.8	2.8	100	100	2.8	B7	P
MS/Pen	542 310 000	A	4	1.5	200	100	4.8	2.8	100	100	2.8	B5	P
MS/PenA	542 310 000	A	4	2.5	200	150	9.0	4.0	100	150	4.0	B5	P
MS/PenA	041 231 500	A	4	2.5	200	150	9	4	100	150	4	B7	P
MS/PenB	061 231 500	G <sub>1</sub>	4	1.5	200	100	4.8	2.8	100	100	2.8	B7	P
MS/PenT	041 231 500	A	4	1.5	200	100	4.8	2.8	100	100	2.8	B7	P
MS/PenT	542 310 000	A	4	1.5	200	100	4.8	2.8	100	100	2.8	B5	P
MU1	002 300 000	D <sub>1</sub>	4				60		REC		20mA	B4	R
MU2	002 300 000	D <sub>1</sub>	2				5		D			B4	R
MU12	892 300 000		4				60		REC		25mA	B4	RR
MU12/14	892 300 000		4 (5)				60		REC		40mA	B4	RR
MU14	892 300 000		4				60		REC		40mA	B4	RR
MU4250	232 300 000	D <sub>1</sub>	4				120		REC		30mA	B4	R
MVSG	542 310 000	A	4	1.5	200	75	7.5	2.5	100	75	2.5	B5	P
MVSPen	542 310 000	A	4	2	250	125	5.1	2.3	200	100	2.3	B5	P
MVSPen	041 231 500	A	4	1.5	200	100	4.3	2.2	100	100	2.2	B7	P
MVSPenB	061 231 500	G <sub>1</sub>	4	1.5	200	100	4.3	2.2	200	100	2.2	B7	P
MX40	645 231 700	G <sub>1</sub>	4	1 3	150	75		0.6	150	75	0.6	B7	TH
					250	75			250	75	1.4		
MZ05-20	642 300 000		6	12	350		45	4.2	100		4	B4	T
N14	036 540 200		1.4	7.5	90	90	7	1.55	80	75	1.55	A08	P
N15	026 540 230		1.4	7	90	90	7	1.55	80	75	1.55	A08	P
N16	026 540 230		1.4	4.5	90	90	9.5	2.1	80	90	2.1	A08	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
N17	264 536 200		1.4	7	90	75	7.4	1.58	80	60	1.58	B7G	P
N18	264 526 300		1.4	4.5	90	90	9.5	2.1	80	75	2	B7G	P
N19	365 024 300		1.4	4.5	90	90	7.7	2.0	80	75	2.0	B7G	P
N30	045 231 600		13	12	250	250	40	3.9	100	PenLF	3.9	B7	P
N31	205 331 600	G <sub>1</sub>	13	4.4	200	175	40	10	100	100	9	B7	P
N37	412 360 500		13	8.0	175	150	50	10.0	100	100	9.0	B7G	P
N40	045 231 600		4	3.5	250	250	32	2.9	100	150	2.9	B7	P
N41	045 231 600		4	3.5	250	250	32	10.0	100	PenLF	9	B7	P
N42	045 231 600		4	16.5	250	250	34	2.9	100	PenLF	2.5	B7	P
N43	005 231 600	G <sub>1</sub>	4 (5)	4.5	250	250	40	10	100	PenLF	9	B7	P
N63	026 540 310		6	16.5	250	250	34	2.5	100	150	2.5	A08	P
N66	026 540 310		6	15	250	250	85	6.3	100	150	6	A08	P
N77	412 360 500		6	12	250	250	20	2.6	100	PenLF	2.6	B7G	P
N78	412 360 500		6	5.5	250	250	35	10.0	100	150	9.0	B7G	P
N108	412 36* 500		40	8	175	150	50	10	100	100	9.0	B7G	P
N142	261 054 130		45	9.5	175	175	54.5	9.5	100	100	9.0	B8A	P
N144	412 360 500		6	12	250	250	20.0	2.6	100	PenLF	2.6	B7G	P
N145	261 054 130		40	6.3	175	150	29	7.5	100	100	7.0	B8A	P
N147	026 540 310		6	6	250	250	36	9	100	PenLF	8	A08	P
N148	265 004 130		6	12.5	250	250	45	4.1	100	100	4	B8A	P
N150	261 054 130		6	7	250	250	36	10	100	100	9	B8A	P
N151	261 054 130		6	13.5	250	250	22.5	2.9	100	100	2.9	B8A	P
N152	041 231 551	A	20	28	200	200	40.0	6.0	100	100	6.0	B9A	P
N153	541 231 600		15	2.3	175	175	36.0	10.0	100	100	9.0	B9A	P
N154	*41 23* 6*5		16	14.2	200	200	45	8.2	100	100	7	B9A	P
N155	441 231 615		6	10.8	225	225	26	3.2	150	100	3.2	B9A	P
N309	541 231 600		15	2.3	175	175	36.0	10.0	100	100	9.0	B9A	P
N329	*41 23* 6*5		16	14.2	200	200	45	8.2	100	100	7.0	B9A	P
N339	*41 23* *51	A	21.5	13	150	150	50.0	8.5	100	100	7.0	B9A	P
N349	*41 23* *51	A	20	12.0	150	150	5.0	8.5	100	100	7.0	B9A	P
N359	041 231 551	A	21.5	28	200	200	40	6	100	100	6	B9A	P
N709	*41 23* 6*5		6	7.3	250	250	48	11.3	100	150	10	B9A	P
N727	412 365 400		6	12.5	250	250	45.0	4.1	100	PenLF	4.0	B7G	P
NDD40	802 310 000		4						D			B4	D
NEP51	023 110 560		4	3	225	100	8	2.2	100	100		8SC	P
NF2	023 110 560	G <sub>1</sub>	12.5	2	200	250	3	2.1	100	150	2.1	8SC	P
NF3	023 110 560	G <sub>1</sub>	12.5	2	200	100	4.5	2.3	100	100	2.3	8SC	P
NG320	002 300 000	D <sub>1</sub>	2						D			B5	D
NG3020	002 300 000	A	2				5		D			B4	R
NHP51	023 110 560	G	4	2.5	225	100	3.5	2	100	100		8SC	P
NIX2	*41 23* *51	A	21.5	28	200	200	40	6	100	100	6	B9A	P
NLP61	023 104 560		4	7	250	250	4	9	100	100		8SC	P
NLP62	020 314 560		4	14	250	250	72	9	No Data Available			8SC	P
NSS42	542 310 000	A	4	2.5	225	100	3.5	2	100	100		B5	P
NSS43	542 310 000	A	4	2.5	225	100	3.5	2	100	100		B5	P

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>i</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
NSS183	542 310 000	A	20	2.5	225	100	3.5	2	100	100		B5	P
NT51	023 100 060	G	4	5	220		6	2.5	100		2.2	85C	T
NVS4	542 310 000	A	4	2	200	100	6	1	100	100		B5	P
NW4	642 310 000		4	2.5	200		2.5	1	100		2.2	B5	T
OO	364 200 000		5	0	40		1	0.66	No Data Available			UX4	T
OOA	364 200 000		5	0	40		1.5	.66	No Data Available			UX4	T
OI	364 200 000		5	4.5	90		2.5		80			UX4	T
OIA	364 200 000		5	4.5	90		2.5	.72	80		.72	UX4	T
OIAA	364 200 000		5	4.5	90		3.2	.9	90		.85	UX4	T
OIB	364 200 000		5	4.5	90		2.5	.72	90		0.72	UX4	T
015/400	642 300 000		4	35	400		40	4.5	100		4.5	B4	T
084	642 300 000		4	4	125		4	1.3	100		1.2	B4	T
OBC3	041 896 230		12.5	2	250		1	1.1	150		1.1	A08	DDT
OBF2	206 581 930		9	2	200	100	6	1.8	100	100	1.7	A08	P
OCH4	217 544 630		15	{	100		3.5		100	60	3.5	} A08	TH
					200	100	3	0.75	100	100	0.75		
OF1	026 510 310	G	6.3	3	250	100	8.5	1.75	100	100	1.7	A08	P
OF5	026 510 310	G	12.6		250	100	7	1.45	100	100	1.4	A08	P
OF9	206 501 130	G <sub>1</sub>	8.5		200	100	6	2.2	100	100	2	A08	P
OM1	020 080 310		30				120		REC		30mA	A08	R
OM3	028 190 310		6						D			A08	DD
OM4	026 980 310	G <sub>1</sub>	6	5	250		5.5	2.2	100		2.2	A08	DDT
OM5	026 510 310	G <sub>1</sub>	6	2	250	100	3	1.8	100	100	1.8	A08	P
OM5C	026 510 310		6	2	250	100	3	1.8	100	100	6	A08	P
OM6	026 510 310	G <sub>1</sub>	6	2.5	250	100	6	2	100	100	2	A08	P
OM7	026 510 310	G <sub>1</sub>	6	2.5	250	100	6	2	100	100	2	A08	P
OM9	026 500 310	G <sub>1</sub>	6	18	250	250	32	2.8	100	150	2.8	A08	P
OM10	027 546 310	G <sub>1</sub>	6	{	100		5.4	2.2	100	60	2.8	} A08	TH
					2.0	250	100	2.7	0.7	100	100		
OP41	045 231 600		4	12.5	250	250		9.1	100	100	8	B7	P
OP42	045 231 600		4	6.2	250	250		10.5	100	100	9	B7	P
OS18/600	023 114 500	A <sub>1</sub>	6	14	250	275	72	8.5	100	PenLF	8	85C	P
OSW3105	041 896 230		6.3	2	250		0.9	1.1	100		1	A08	DDT
OSW3106	026 540 310		6.3	12.5	250	250	45	4.1	100	150	4	A08	P
OSW3107	020 809 030		5				60		REC		20mA	A08	RR
OSW3108	026 540 310		6.3	14	250	250	72	6	100	150	5	A08	P
OSW3109	028 190 300		6.3						D			A08	DD
OSW3111	021 415 360		6.3		250	100	9.2	2	100	100	2	A08	P
OSW3112	026 040 310		6.3	8	250		9	2.6	100		3	A08	T
OS6/300	642 350 000		4	20	300	150	22	2	100	100		B5	P
P2	642 300 000		2	10	150		19	3.5	100		3.5	B4	T
P4	642 300 000		4	21	250		30	2.8	100		2.8	B4	T
P6MO	023 104 560		6.3	14	250	250	72	9	100	100		85C	P
P12/250	642 300 000		4	44	250		60	6	100		6	B4	T
P15/250	642 300 000		4	44	250		60	6	100		6	B4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
P15/250(S)	023 004 060		4	44	250		60	6	100		6	8SC	T
P24/450	642 300 000		7.5	70	400		55	2.1	100		2.1	B4	T
P25/400	642 300 000		6	100	350		70	3.7	100		3.7	B4	T
P25/500	642 300 000		6	90	400		65	3	100		3	B4	T
P26/500	642 300 000		4	100	400		62.5	4.2	100		4.2	B4	T
P27/500	642 300 000		4	27	400		62.5	8.5	100		8	B4	T
P30/500	642 300 000		4	100	400		60	4	100		4	B4	T
P41	216 040 030		4	11.8	250		16	4.5	100		4.5	M08	T
P43M	642 350 000		4	17	250	250	36	2.5	100	100		B5	P
P61	216 040 030		6	11.8	250		16	4.5	100		4.5	M08	T
P215	642 300 000		2	0	150			1.4	100		2.2	B4	T
P220	642 300 000		2	7.5	150		6	3.0	100		3	B4	T
P220A	642 300 000		2	14	150		15	2.7	100		2.7	B4	T
P222	642 300 000		2	7.5	150		6	3	100		3	B4	T
P225	642 350 000		2	4.5	150	150	5.6	2.2	100	100	2.2	B5	P
P240	642 300 000		2	24	150		18	1.1	100		3.7	B4	T
P240A	642 300 000		2	21	150		25	5	100		5	B4	T
P410	642 300 000		4	12	150		7	1.25	100		1.5	B4	T
P414	642 300 000		4	16	100		14	2.8	80		2.8	B4	T
P415	642 300 000		4	25	150		14	1.5	100		1.5	B4	T
P420	642 300 000		4	85	400		50	6	100		6	B4	T
P422	642 350 000		4	20	250	250	22	2.5	100	100		B5	P
P425	642 300 000		4	16.5	150		17	1.9	100			B4	T
P430	264 300 000		4	30	200		25	2.2	100		2.2	UX4	T
P434	032 004 560		4	17	250	250	36	2.5	100	100		8SC	P
P435	642 350 000		4	17	250	250	30	3	100	PenLF	3	B5	P
P440	642 350 000		4	30	400	200	45	5	No Data Available			B5	P
P440N	045 231 600		4	22.0	250	250	36	2.8	100	PenLF	2.8	B7	P
P441n	045 231 600		4	22	250	250	36	2.8	100	PenLF	2.8	B7	P
P455	264 300 000		4	15	250		30	5.5	100		5.5	UX4	T
P460	642 300 000		4	40	200		50	3.5	100		3.5	B4	T
P469	045 231 600		4	14	250	275	72	8.5	100	PenLF	7	B7	P
P495	045 231 600		4	6	200	200	32		100	100		B7	P
P496	045 231 600		4	6	200	200	32	9.5	100	100	8	B7	P
P520	642 350 000		5	17	200	150	12	1.3	100	100		B5	P
P625B	642 300 000		6	1	200			2.8	200		2.8	B4	T
P626	023 100 560		6.3	22	250	250	36	2.5	100	100		8SC	P
P628	023 100 560		6.3	17	250	250	36	2.5	100	100		8SC	P
P650	642 300 000		6	1	100		37	2.7	100		2.7	B4	T
P861	289 130 000		6				30		REC		15mA	UX5	RR
P1320	023 100 560		13	20	250	250	22	1.9	100	100		8SC	P
P2018	642 310 000		20	15	200		20	4	100		4	B5	T
P2060	023 104 560		24	19	200	100	40	3.15	100	90	3	8SC	P
P2460	642 310 000	S	24	19	200	100	40		100	90		B5	P
P3580	045 231 600		33	8.5	200	200	45	8	100	150	7	B7	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
P4100	642 300 000		4	40	400		30			100			B4	T
PA1	642 310 000		4	10	200		40	5		100		5	B5	T
PA20	642 300 000		2	36	300		49	5.2		100		5	B4	T
PA40	642 300 000		4	90	400		200	10		100		9	B4	T
PABC80	†91 238 146		9.5	2.3	200		1.0	1.4		100		1.4	B9A	DDDT
PABI	023 1†0 980		6							D			8SC	DDD
PBI	234 600 000		2	4.0	150		11.5	3.85		150		3.85	B4	T
PB495	892 300 000		4				30			REC		15mA	B4	RR
PBF2	026 895 310	G <sub>1</sub>	6	3	250	100	5.8	1.2		100	100	1.2	A08	DDP
PCO5-15	023 014 500	A <sub>1</sub>	4		400	250	40	1.25		No Data Available			8SC	P
PCC84	147 234 116		7.0	1.5	90		12.0	6.0		100		6.0	B9A	TT
PCC85	641 237 410		9	2.1	200		10	5.8		150		5.8	B9A	TT
PCC88	641 237 410		7	1.2	90		15	12.5		No Data Available			B9A	TT
PCF80	645 237 114		9	2	100		14.0	5.0		100	60	5.0	B9A	TP
PCF82	645 237 114		9.5	1.0	150	0	18	8.5		150	150	10.0	B9A	TP
				1.0	250	100	10	5.2		100	100	5.0	B9A	TP
PCL81	451 237 614		12.6	1.5	200		0.5	1.2		100	60	1.2	B9A	TP
				6.5	200	200	30	8.7		100	100		B9A	TP
PCL82	414 237 516		16	0	100		3	2.2		100	60		B9A	TP
				11	175	175	41	7.5		100	100		B9A	TP
PCL83	641 237 154		12.5	8.5	250	0	10.5	2.2		100	60	2.0	B9A	TP
				9.0	175	175	30	4.7		100	100	4.0	B9A	TP
PCL84	461 237 145		15	1.7	200		3	4		100	60	4	B9A	TP
				2.9	200	200	18	10		100	100		B9A	TP
PD220	446 230 700		2	1.15	150		0.8	0.9		150		0.9	B7	TT
PD220A	446 230 700		2	3	150		5.0	1.5		100		1.5	B7	TT
PDD2	264 589 130		6.3	6	250	250	36	9		100	100	8.5	A08	DDP
PEO4-10	023 114 500	A <sub>1</sub>	12	300			27	7.5		No Data Available			8SC	P
PEO5-15	023 114 500	A <sub>1</sub>	12				40	1.5		No Data Available			8SC	P
PEO6-4OP	123 114 500	A <sub>1</sub>	6	40	400	300	40	4		No Data Available			8SC	P
PEI-80	023 114 500	A <sub>1</sub>	12				40	2.5		No Data Available			8SC	P
PEI-100	245 611 300		12	33	400	250	40	6		No Data Available			B7A	P
Pen4DD	918 236 500	G <sub>1</sub>	4 (5)	6	250	250	36	9.5		100	PenLF	8	B7	DDP
Pen4V	642 310 000	G <sub>2</sub>	4	10	250	200	35	3.0		100	PenLF	2.8	B5	P
Pen4VA	642 310 000	G <sub>2</sub>	4	22	250	250	36	2.8		100	PenLF	2.8	B5	P
Pen4VA	045 231 600		4	20	250	250	36	2.8		100	PenLF	2.8	B7	P
Pen4VB	045 231 600		4	5.8	250	250	36	9.5		100	PenLF	8	B7	P
Pen4VX	642 310 000	S	4	15	350	200	22	3.5		100	150	3.5	B5	P
Pen13	023 100 560	G <sub>1</sub>	13	14	200	200	25	2.5		100	100	2.5	8SC	P
Pen13A	023 110 560	G <sub>1</sub>	33	8.5	200	200	45	8		100	100	6	8SC	P
Pen13C	045 231 600		13	11	250	250	32	6.5		100	PenLF	6	B7	P
Pen20	642 310 000	S	20	18	200	200	20	1.7		100	150	1.7	B5	P
Pen24	206 540 030		2	3.3	125	125	5	4		100	100	4	M08	P
Pen25	206 540 030		2	3.6	125	125	5	3		100	100	3	M08	P
Pen26	023 100 560	G <sub>1</sub>	24	19	200	100	40	3.1		100	60	3	8SC	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
Pen36A	145 231 600		35	8.5	200	200	45	8	100	150	7	B7	P
Pen36C	045 231 600		33	8.5	200	200	45	8	100	100	7	B7	P
Pen40DD	918 236 500	G <sub>1</sub>	44	8.5	200	200	45	8	100	100	7	B7	DDP
Pen44	216 540 030		4	11	300	275	70	10.6	100	PenLF	9	M08	P
Pen45	216.540 030		4	8.5	250	250	40	8.8	100	PenLF	8	M08	P
Pen45DD	216 590 830	G <sub>1</sub>	4	8.5	250	250	40	8.8	100	100	8	M08	DDP
Pen46	210 540 030	A	4 (5)	8.0	300	225	63	8.5	100	100	8	M08	P
Pen141	206 540 030		1.4	9	90	90	5.5	1.4	80	75	1.4	M08	P
Pen220	642 350 000		2	4.9	150	150	9	2.2	100	100	2.2	B5	P
Pen220A	642 350 000		2	9	150	150	18	2.2	100	100	2.2	B5	P
Pen230	642 350 000		2	4.5	150	125	6.0	2.2	150	125	2.2	B5	P
Pen231	642 350 000		2	2.5	125	125	5	4.4	100	100	5	B5	P
Pen383	216 540 030		38	10	175	175	64	10.5	100	100	9	M08	P
Pen384	216 540 030		38	7	125	125	40	7.8	100	100	12.0	M08	P
Pen425	642 350 000		4	25	300	200	20	1.7	100	100	1.7	B5	P
Pen428	045 231 600		4 (5)	13.8	250	250	72.0	8.5	250	200	7.0	B7	P
Pen453DD	216 590 830	G <sub>1</sub>	45	10	175	175	64	10.5	100	100	9	M08	DDP
Pen650	023 114 500	A	6	24	400	300	30	5	100	150	5	8SC	P
Pen1340	045 231 600		13	8.6	250	250	41	6.4	100	PenLF	6	B7	P
Pen2020	023 100 560	G <sub>1</sub>	20	19	200	100	40	3.1	100	60	3.1	8SC	P
Pen3520	045 231 600		35	8.0	200	200	40.0	7.3	100	100	7.0	B7	P
Pen3820	045 231 600		38	10	150	175	64	10.5	100	100	9	B7	P
PenA1	642 350 000		4	16.5	250	250	32	3	100	PenLF	3	B5	P
PenA4	045 231 600		4	5.8	250	250	36	9.5	100	PenLF	9	B7	P
PenA4	005 231 600	G <sub>1</sub>	4	5	250	250	40	9.1	100	100	8	B7	P
PenB1	642 350 000		2	4.5	150	150	8.5	2.5	100	100	2.5	B5	P
PenB4	045 231 600		4 (5)	14	250	275	72	8.5	100	PenLF	7	B7	P
PenDD61	869 231 500	G <sub>1</sub>	6	5.3	250	250	32.0	8.5	250	200	8.0	B7	DDP
PenDD1360	968 231 500	G <sub>1</sub>	13	5.3	250	250	32	8.2	100	100	8	B7	DDP
PenDD2530	869 231 500	G <sub>1</sub>	25	7.75	250	250	43	7.8	100	150	7.8	B7	DDP
PenDD4020	968 231 500	G <sub>1</sub>	40	7.75	250	250	43	7.8	100	100	7	B7	DDP
PenDD4021	968 231 500	G <sub>1</sub>	45	10	175	175	64	10.5	100	100	12	B7	DDP
PF9	026 510 310	G <sub>1</sub>	6	3.5	250	100	7.5	1.65	100	100	1.6	A08	P
PF462	041 230 500	A	2	1	150	150	3	1.85	150	150	1.85	B7	P
PF472	041 230 500	A	2	0.5	150	150	2.5	1.7	150	150	1.7	B7	P
PL33	026 540 310		19	5.3	250	250	32	9.0	100	PenLF	8	A08	P
PL36	*2* 540 310	A <sub>1</sub>	25	21.0	175	175	100	11.0	No Data Available			A08	P
PL38	120 540 310	A	30	5.5	200	200	75	13.5	100	PenLF	10	A08	P
PL81	041 231 551	A	21.5	28	200	200	30	6.0	100	100	6.0	B9A	P
PL81F	*41 23* *51	A <sub>1</sub>	21.5	28	200	200	30	6	100	100	6	B9A	P
PL82	041 230 605		16	14.2	200	200	45.0	7.6	100	100	7.0	B9A	P
PL83	541 231 600		15	2.3	175	175	36	10	100	100	9	B9A	P
PL84	*41 23* 6*5		15	12.5	175	175	70	10	100	100	9	B9A	P
PL820	041 231 551	A	21.5	22.0	175	175	45.0	6.2	100	100	6.0	B9A	P
PMO4	412 365 100		6.3	1.2	250	100	11	4.4	100	100	4	B7G	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
PM05	412 365 100		6.3	2.3	150	150	7	4.3	100	100	4	B7G	P
PM07	412 361 500		6.3	2	250	250	10	7.5	100	150	5	B7G	P
PM1A	642 300 000		2	0	100		1	1.2	100		1.2	B4	T
PM1HF	642 300 000		2	3	150		1.5	0.8	100		0.8	B4	T
PM1HL	642 300 000		2	1.5	150		2.3	1.2	150		1.2	B4	T
PM1LF	642 300 000		2	6	125		3	0.9	100		0.9	B4	T
PM2	642 300 000		2	7	100		4	0.9	100		0.9	B4	T
PM2A	642 300 000		2	6	150		5	2	100		2	B4	T
PM2B	446 230 700		2	1	125		3	2.5	100		2.5	B7	TT
PM2BA	446 230 700		2	1	100			2.1	100		2.1	B7	TT
PM2DL	642 300 000		2	4.5	150		2	1.5	100		1.5	B4	T
PM2DX	642 300 000		2	5	150		2.3	1.05	100		1	B4	T
PM2HL	642 300 000		2	1.5	150		2.2	1.4	150		1.4	B4	T
PM3	642 300 000		4	0	100		2	1.05	100		1.0	B4	T
PM4DX	642 300 000		4	0	100		1.5	2	100		2	B4	T
PM12	542 300 000	A	2	0	150	75	4.0	1.1	100	75	1.1	B4	P
PM12A	542 300 000	A	2	1	150	75	2	1.5	100	75	1.5	B4	P
PM12M	542 300 000	A	2	1	150	90	1.4	1.4	150	90	1.4	B4	P
PM12V	542 300 000	A	2	0	150	90		0.75	100	90	0.7	B4	P
PM14	542 300 000	A	4	0	150	75	2.75	0.87	100	75	0.8	B4	P
PM22	642 350 000		2	10	150	150	15	1.3	100	100	1.3	B5	P
PM22A	642 350 000		2	4.5	150	150	5.6	2.2	100	100	2.2	B5	P
PM22C	642 350 000		2	16	150	150	23	3	100	100	3	B5	P
PM22D	642 350 000		2	2.4	150	150	5	3	100	100	3	B5	P
PM24	642 350 000		4	11	150	150	20	1.75	100	100	1.7	B5	P
PM24	642 310 000	S	4	11	150	150	20	1.75	100	100	1.7	B5	P
PM24A	642 350 000		4	22.5	300	200	20		100	100	2	B5	P
PM24B	642 350 000		4	40	400	300	30	2.1	100	100	2.1	B5	P
PM24C	642 350 000		4	20	400	200		3.0	100	100		B5	P
PM24D	642 350 000		4 (5)	35	400	200	50	4	100	100	4	B5	P
PM24DC	642 350 000		4 (5)	42	300	200	20	1.5	100	100	2	B5	P
PM24E	642 350 000		4	40	300	300	83	3.9	100	150	3.9	B5	P
PM24M	642 350 000		4	17	250	250	30	3	100	PenLF	3	B5	P
PM202	642 300 000		2	14	150		14	3.5	100		2.5	B4	T
PM252	642 300 000		2	0	100		32	3.7	100			B4	T
PM254	642 300 000		4	21	200		15		100			B4	T
PM256	642 300 000		6	27	250		20		100		2.4	B4	T
PN2	642 350 000		2	7.5	150	150	6		100	100		B5	P
PP2	642 300 000	S	2	5	150	150	7	2.1	100	100	2.1	B4	P
PP2	642 350 000		2	5	150	150	7	2.1	100	100	2.1	B5	P
PP2s	023 004 560		2	5	150	150	7	2.1	100	100	2.1	8SC	P
PP3/250	642 300 000		4	37	300		48	5.2	100		6.5	B4	T
PP4	642 350 000		4	15	250	250	36	3.0	100	PenLF		B4	P
PP4s	032 004 560		4	15	250	250	36	3.0	100	PenLF		8SC	P
PP4s	642 350 000		4	15	250	250	36	3.0	100	PenLF		B5	P

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
PP5/400	642 300 000		4 (5)	32	400		62	7	100		6	B4	T
PP6As	023 104 560		6	18	250	250	32	2.85	100	PenLF	2.8	8SC	P
PP6B	265 413 000		6		250	250	36	10	100	PenLF	9	UX6	P
PP6BG	026 540 310		6	6	250	250	36	10	100	PenLF	9	A08	P
PP6BS	026 540 310		6	6.0	250	250	36.0	9.0	100	PenLF	9	A08	P
PP6C	026 540 310		6	12	250	200	36	10	100	PenLF	9	A08	P
PP6E	045 231 600		6	17	400	275	72	8.5	100	PenLF	8	B7	P
PP13A	045 231 600		13	12	200	200	40	2.65	100	100	2.5	B7	P
PP13s	023 100 560	G <sub>1</sub>	13	14	200	200	25	3.5	100	100	3.5	8SC	P
PP24	005 231 600	G <sub>1</sub>	24	19	200	100	40	3	100	75	3	B7	P
PP24S	023 100 560	G <sub>1</sub>	24	19	200	100	40	3	100	75	3	8SC	P
PP34	005 231 600	G <sub>1</sub>	35	6.5	200	200	45	8.5	100	100	8	B7	P
PP34S	023 100 560	G <sub>1</sub>	35	6.5	200	200	45	8.5	100	100	8	8SC	P
PP35	045 231 600		35	6.5	200	200	45	8.5	100	100	8	B7	P
PP36	145 231 600		35	6.5	200	200	45	8.5	100	100	8	B7	P
PP37	005 231 600	G <sub>1</sub>	35	9.5	200	100	45	8.5	100	75	8	B7	P
PP60	026 540 310		6	15	250	250	85	6.3	100	150	6.3	A08	P
PP215	642 350 000		2	4.5	90	90	8	1.7	100	90	1.7	B5	P
PP215S	032 004 560		2	4.5	90	90	8	1.7	100	90	1.7	8SC	P
PP220	642 300 000		2	12	150		12.5	3	100		3	B4	T
PP222	642 350 000		2	6	150	150	12	2.5	100	100	2.5	B5	P
PP222	642 300 000	G <sub>2</sub>	2	6	150	150	12	2.5	100	100	2.5	B4	P
PP225	642 350 000		2	12	150	150	18	2	100	100	2	B5	P
PP225s	023 004 560		2	12	150	125	18	2	100	100	2	8SC	P
PP415	642 350 000		4	12	200	200	12	1.8	100	150	1.8	B5	P
PP416	642 350 000		4	12	200	75	10	2	100	60	2	B5	P
PP430	642 350 000		4	25	200	200	20	2	100	100	2	B5	P
PP431	642 350 000		4	20	250	250	22	1.9	100	150	1.9	B5	P
PP2018	642 310 000	G <sub>2</sub>	20	18	200	200	20	2.5	100	100	2.5	B5	P
PP2018	045 231 600		20	18	200	200	20	2.5	100	100	2.5	B7	P
PP2101	364 520 000		2	3	150	150	7	2.1	100	100	2.1	UX5	P
PP3521	040 231 600		35	25	200		70	6.3	100		6	B7	T
PP4100	642 350 000		4	40	400	300	30	3	100	PenLF	3	B5	P
PP4101	642 350 000		4	14	250	250	36	3.5	100	PenLF	3.5	B5	P
PP4118	160 452 300		40	10	175	175	35	6.5	100	100	6	C7	P
PT	045 231 600		4	6	250	250	32.5	7.5	100	PenLF	7	B7	P
PT2	642 350 000		2	4.5	125	125	5.3	2.6	100	100	2.6	B5	P
PT2	642 300 000	G <sub>2</sub>	2	4.5	150	150	6.5	2.5	100	100	2	B4	P
PT2A	642 350 000		2	10.5	150	150	18		100	100		B5	P
PT2-K	642 350 000		2	4.5	150	150	9.5	2.5	100	100	2.5	B5	P
PT4(M-O)	642 350 000		4	17	250	250	30	3.0	100	PenLF	2.85	B5	P
PT4/D	968 231 500	G <sub>1</sub>	4	6	250	250	32.5	7.5	100	PenLF	7	B7	DDP
PT4(Ferranti)	045 231 600		4	6	250	250	36	9.5	100	PenLF	7	B7	P
PT5	045 231 600		26	7	250	250	36	9	No Data Available			B7	P
PT10	045 231 600		4	7.5	250	250	40	9	100	PenLF	8	B7	P



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
PT12	204 531 102	A	10	15	250	250	62	6	100	PenLF	6	B9	P
PT15	542 310 000	A	6	25.0	300	300	2.8		100	100	1.2	B5	P
PT16	642 350 000		4	15	300	300	55	4.8	100	PenLF	4.8	B5	P
PT25	642 350 000		4	22	400	200	62	4	100	100	4	B5	P
PT25H	642 350 000		5	16	400	300	62.5	6.5	100	PenLF	5	B5	P
PT41	642 350 000		4	12.5	250	200	30	3	100	100	3	B5	P
PT41B	642 350 000		4	40	400	300	30	2.25	100	100	2.2	B5	P
PT225	642 350 000		2	6	150	150	8	2.3	100	100	2.5	B5	P
PT225	642 300 000	G <sub>2</sub>	2	6	150	150	8	2.3	100	100	2.5	B4	P
PT240	642 350 000		2	9	150	150	16	2.5	100	100	1.6	B5	P
PT250	642 350 000		2	15	250	250	40		100	PenLF		B5	P
PT425	642 350 000		4	7.5	150	150	15	2	100	100	2	B5	P
PTAD	968 231 500	G <sub>1</sub>	4	6	250	250	7	7	100	PenLF	7	B7	DDP
PTA	045 231 600		13	10	250	250	32	4	100	PenLF	4	B7	P
PTS	005 231 600	G <sub>1</sub>	26	5.5	250	250	40	6	100	PenLF	6	B7	P
PTS	045 231 600		26	8.2	250	250	32	6	100	PenLF	5	B7	P
PTSA	869 231 500	G <sub>1</sub>	26	5.5	200	200	40		100	PenLF		B7	DDP
PTSD	968 231 500	G <sub>1</sub>	26	5	250	200	40	6	100	PenLF	6	B7	DDP
PTZ	005 231 600	G <sub>1</sub>	40	5.5	250	200	40	7.5	100	PenLF	7	B7	P
PVO6-20	400 235 100	A	6	40	200	300	40	4	100	100	4	B7	P
PVO6-25	401 235 100	A	6	40	200	300	40	4	100	100	4	B7	P
PV1-35	401 235 100	A	12	25	250	200	40	2	100	100	2	B7	P
PV4	892 300 000		4				60		REC		20mA	B4	RR
PV25	091 231 800		25				60		REC		20mA	B7	RR
PV29	091 231 800		30				60		REC		20mA	B7	RR
PV29s	123 180 090		30				60		REC		20mA	8SC	RR
PV30	091 231 800		30				30		REC		15mA	B7	RR
PV30a	123 180 090		30				30		REC		15mA	8SC	RR
PV30S	123 190 080		30				60		REC		20 mA	8SC	RR
PV75/1000	892 300 000		4				30		REC		17mA	B4	RR
PV100/2000	892 300 000		4				60		REC		18mA	B4	RR
PV200/600	892 300 000		4				120		REC		28mA	B4	RR
PV400	802 300 000		4				30		REC		15mA	B4	R
PV430	892 300 000		4				15		REC		9mA	B4	RR
PV475	892 300 000		4				15		REC		11mA	B4	RR
PV480	802 300 000		4				30		REC		16mA	B4	R
PV495	892 300 000		4				30		REC		17mA	B4	RR
PV3018	190 812 300		30				60		REC		20mA	C7	RR
PV4100	892 300 000		4				30		REC		15mA	B4	RR
PV4200	892 300 000		4				60		REC		27mA	B4	RR
PV4201	892 300 000		4				60		REC		27mA	B4	RR
PV4300	892 300 000		4				60		REC		20mA	B4	RR
PVB6	892 310 000		6				60		REC		20mA	B5	RR
PX2	642 300 000		2	22	150	22		1.5	100		1.5	B4	T
PX4	642 300 000		4	43	300	43		6	100		6	B4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
PX5	642 300 000		4	34	400		62.5	6.5	100		6.5	B4	T
PX25	642 300 000		4 (5)	31	400		40	7.5	100		7	B4	T
PX25A	642 300 000		4 (5)	100	400		62.5	3.7	100		6.9	B4	T
PX41	642 300 000		4	40	250		49	6	100		6	B4	T
PX230	642 300 000		2	15	150		17.5	3.5	100		3.5	B4	T
PX230SW	602 300 000	G <sub>1</sub>	2	15	150		18	3.5	100		3.5	B4	T
PX240	642 300 000		2	32	200		25	3	100		3	B4	T
PX2100	642 300 000		7.5	30	400		18	1.6	100		1.6	Sm4	T
PY31	020 080 310		17				120		REC		70mA	A08	R
PY32	028 08* 310		29				180		REC			A08	R
PY71	200 800 030	C	21				120		REC		30mA	B8B	R
PY80	001 230 008		19				120		REC		70mA	B9A	R
PY81	*** 23* **8	C	17				120		REC		60mA	B9A	R
PY82	**1 23* **8		19				120		REC		70mA	B9A	R
PY83	*** 23* **8	C	20				120		REC		70mA	B9A	R
PZ	264 530 000		2.5	16.5	250	250	31	2.5	100	PenLF	2.5	UX5	P
PZ03-3	401 235 000	A	4	25	300	125	25	1.4	100	100	1.4	B7	P
PZ05-15	401 235 000	A	4		400	150	40	1.25	100	100	1.2	B7	P
PZ30	029 183 210		26				120		REC		60mA	A08	RR
PZH	265 413 000		2.5	16.5	250	250	34	2.2	100	PenLF	2.2	UX6	P
QA2400	412 361 500		6	2.5	200	200	8.0	2.5	100	150	2.5	B7G	P
QA2401	6*2 364 100		6	8.5	250		10.5	2.2	100		2.22	B7G	T
QA2402	412 36* 500		6	13.5	250	250	16.0	2.6	100	150	2.6	B7G	P
QA2403	412 361 500		6	2.0	250	250	10.0	7.5	100	150	5.0	B7G	P
QA2404	192 310 800		6	1.6	200	150	4.0	6.4	100	150	5.0	B7G	DD
QA2405	241 657 143		6	14	250	150	30	3.9	100	100	3.9	B9G	PP
QA2406	471 226 413		6	2.0	250		10.0	5.5	100		5.0	B9A	TT
QA2407	802 309 100		6				30		REC		15mA	B7G	RR
QA2408	481 461 230		6	8.0	250		9.0	2.6	100		2.6	A08	TT
QB65	461 471 230		6	8	250		9	2.6	100		2.6	A08	TT
QB309	641 227 413		6	2	250		10	5.5	100		5	B9A	TT
QD77	182 310 900		6						D			B7G	DD
QE04-10	265 511 413		6.3	12	300	150	25	1.9	No Data Available			B9G	P
QE05-40	125 141 300	A <sub>1</sub>	6		200	200	100	7	No Data Available			A08	P
QE06-50	254 130 000	A <sub>1</sub>	6	14	300	250	83	6.5	100	100		UX5	P
QL77	6*2 364 100		6	8.5	250		10.5	2.2	100		2	B7G	T
QN77	412 360 500		6	12.5	250	250	16	2.6	100	PenLF	2.6	B7G	P
QPT2	476 235 700		2	9	150	150	3.3		100	100		B7	PP
QP21	446 235 700		2	4.5	150	150	11.0	2.3	100	100	2.3	B7	PP
QP22A	465 230 574		2	12	150	150	3	4	150	150	4	B9	PP
QP22B	446 235 700		2	11.7	150	150	3.8		100	100	3.1	B7	PP
QP25	207 544 630		2	6	125	125	10	3	100	100	3	M08	PP

† See note on Page 8

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
QP230	446 235 700		2	9.6	125	125	4.65	3	100	100	3	B7	PP
QP240	465 230 574		2	5.0	150	150	25	4	100	100	4	B9	PP
QQ03-12	601 235 144		6		300	250	45	7	No Data Available			B9A	P
QQCO4-15	263 724 540		6	14	300	200	20	2.0	No Data Available			B8B	P
QQE03-20	245 134 200		6	17	400	200	20	2.5	No Data Available			B7A	PP
QQE04-20	245 134 200	A <sub>1</sub> A <sub>2</sub>	6	26	400	250	30	3.0	No Data Available			B7A	PP
QQE06-40	245 134 200	A <sub>1</sub> A <sub>2</sub>	6		400	250	30	3.4	No Data Available			B7A	PP
QQV03-10	414 226 573		6	10	200	150	30.0	3.3	No Data Available			B9A	PP
QQV04-20	241 531 420	A <sub>1</sub> A <sub>2</sub>	6	23	400	200	25	4	No Data Available			B7A	PP
QQV06-40	245 134 200	A <sub>1</sub> A <sub>2</sub>	6		400	250	30	3.4	No Data Available			B7A	PP
QQZ04-15	273 624 540		3	10	300	200	20	2	100	100	2	B8B	PP
QV03-12	601 235 144		6	7.5	250	250	45.0	7.0	100	150	7.0	B9A	P
QV04-7	265 511 413		6	30	300	250	25	1.9	100	100	1.9	B9G	P
QV04-12	601 235 144		6	7.5	250	250	45	7	100	150	7	B9A	P
QV04-20	241 531 420	A <sub>1</sub> A <sub>2</sub>	6	22	400	200	25	4	100	100	4	A08	PP
QV05-25	254 130 000	A	6	12.5	300	250	83	6.5	100	150	6	UX5	P
QV06-20	125 141 130	A	6	30	200	200	100	7	No Data Available			A08	P
QW77	412 361 500		6	2.5	200	200	8	2.5	100	100	2.5	B7G	P
QZ77	412 361 500		6	2	250	250	10	7.6	100	100	5	B7G	P
RI	892 300 000		4				30		REC		15mA	B4	RR
R2	892 300 000		4				60		REC		30mA	B4	RR
R3	892 300 000		4 (5)				60		REC		50mA	B4	RR
R4	892 300 000		4				60		REC		40mA	B4	RR
R4a	892 300 000		4				60		REC		40mA	B4	RR
R4B	802 300 000		4				60		REC		40mA	B4	R
R10	112 311 100	D <sub>1</sub>	4				5		D			B7G	R
R11	002 300 000	D <sub>1</sub>	4				60		REC		20mA	B4	R
R12	023 000 000	D <sub>1</sub>	6						D			B3G	D
R13A	028 090 310		13				30		REC		15mA	A08	RR
R14	028 193 210		26				120		REC		60mA	A08	RR
R16	123 000 000		1.4						D			B3G	D
R17	**1 23* ***	D <sub>1</sub>	6				120		REC		30mA	B9A	R
R18	**1 23* ***	D <sub>1</sub>	6				120		REC		36mA	B9A	R
R19	230 232 032	D <sub>1</sub>	1.25						D			B9A	D
R41	892 300 000		4				60		REC		20mA	B4	RR
R42	892 300 000		4				60		REC		20mA	B4	RR
R43	892 300 000		4				180		REC		40mA	B4	RR
R52	030 809 020		5				60		REC		20mA	A08	RR
R80	264 300 000		4	24	250		20	4	100		4	UX4	T
R236	026 510 300	G <sub>1</sub>	1.4	2	100	100	1	0.55	100	100	0.5	A08	P
R2018	642 310 000		20	2.5	200		2.5	3	100		3	B5	T
RA	892 310 000		13				30		REC			B5	RR
RA1	364 200 000		15	4.5	90		4.5	1.185	80		1.1	UX4	T
RB350/80	892 300 000		4				30		REC		15mA	B4	RR
RB500/120	892 300 000		4				60		REC		20mA	B4	RR

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
RB650/250	892 300 000		4				120			REC	30mA	B4	RR
RE034	642 300 000		4	3	200		2	1.2	100		1	B4	T
RE074	642 300 000		4	9	150		3.5	0.9	100		0.9	B4	T
RE074N	642 300 000		4	9	150		3.5	0.9	100		0.9	B4	T
RE084	642 300 000		4	4	150		4	1.5	100		1.5	B4	T
RE114	642 300 000		4	15	150		13	1.3	100		1.3	B4	T
RE134	642 300 000		4	17	250		12	2.0	100		1.9	B4	T
RE144	642 300 000		4	9	125		2	0.65	125		0.65	B4	T
RE304	642 300 000		4	32	250		20	1.9	100		1.6	B4	T
RE404	642 300 000		3.5		200			0.6	100		0.6	B4	T
RE604	642 300 000		4	45	250		40	2.5	No Data Available			B4	T
REN704	652 310 000	G <sub>1</sub>	4		100		2	1.1	100		1.1	B5	P
REN904	642 310 000		4	3.5	200		6	2.4	100		2.4	B5	T
REN914	642 310 000		4	1.5	200		0.2		100			B5	T
REN924	642 310 000	D <sub>1</sub>	4	3	200		6	2	100		2	B5	DT
REN1004	542 310 000		4		200			1.5	100		1.4	B5	T
REN1814	642 310 000		20	1.6	200		0.2	1.0	100		1.0	B5	T
REN1817D	652 310 000	G <sub>1</sub>	20		100	100		1.1	100	90	1.1	B5	P
REN1821	642 310 000		20	3	200		6	2.3	100		2.3	B5	T
REN1826	642 310 000	D <sub>1</sub>	20	3	200		6	1.8	100		1.8	B5	DT
RENS1204	542 310 000	A	4	2	200	60	4	1.0	100	60		B5	P
RENS1214	542 310 000	A	4	2.2	200	100	6	1.0	100	100		B5	P
RENS1264	542 310 000	A	4	2	200	100	3	2	100	100		B5	P
RENS1264B1	542 300 000	A	4	2	200	100	3	2	100	100		B4	P
RENS1274	542 310 000	A	4		200	100	3	2	100	100		B5	P
RENS1284	542 310 000	A	4	2	200	100	3	2.5	100	100		B5	P
RENS1294	542 310 000	A	4	2	200	100	4.5	2	100	100		B5	P
RENS1374D	642 310 000	G <sub>2</sub>	4	18	250	250	24	2.5	100	100		B5	P
RENS1818	542 310 000	A	20	2	200	100	3	2	100	100		B5	P
RENS1819	542 310 000	A	20		200	60	4	1	100	60		B5	P
RENS1820	542 310 000	A	20	2	200	60	4	1	100	60		B5	P
RENS1823D	642 310 000	G <sub>2</sub>	20	18	200	200	20	1.7	100	100		B5	P
RENS1884	642 310 000	G <sub>2</sub>	20	2	200	100	3	2.4	100	100		B5	P
RENS1894	642 310 000	G <sub>2</sub>	20	2.2	200	100	4	1.8	100	100		B5	P
RES094	542 300 000	A	4	2	200	75	4	7	100	75		B5	P
RES164	642 350 000		4	11.5	250	75	12	1.4	100	75		B5	P
RES174D	642 300 000	G <sub>2</sub>	4	19	250	150	12	1.3	100	100		B4	P
RES364	642 350 000		4	2.5	300	200	20	1.7	100	100		B5	P
RES374	642 350 000		4	42	300	200	20	1.5	No Data Available			B5	P
RES964	642 350 000		4	15	250	250	36	2.8	No Data Available			B5	P
RFG5	003 200 000	D <sub>1</sub>	6						D			F8	R
RFP8/14	041 231 500	A <sub>1</sub>	4	20	400	250	35	4	100	PenLF	4	B7	P
RFP8/14	542 310 000	A <sub>1</sub>	4	20	400	250	35	4	100	PenLF	4	B5	P
RG250/1000	002 300 000	D <sub>1</sub>	4				120		REC		30mA	B4	R
RG250/3000	280 300 000		2.5				120		REC		30mA	UX4	R

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
RGN354	802 300 000		4				15			D			B4	R
RGN504	892 300 000		4				15			D			B4	RR
RGN564	802 300 000		4				30			REC		15mA	B4	RR
RGN1054	892 300 000		4				30			REC		15mA	B4	RR
RGN1064	892 300 000		4				30			REC		15mA	B4	RR
RGN1074	892 300 000		4				60			REC		20mA	B4	RR
RGN1304	802 300 000		4				60			REC		20mA	B4	R
RGN1503	892 300 000		2.5				30			REC		15mA	B4	RR
RGN2004	892 300 000		4				60			REC		20mA	B4	RR
RGN2504	892 300 000		4				60			REC		20mA	B4	RR
RH	061 231 500	G <sub>1</sub>	4	1.7	250	100	7.9	7	200	100	7.4		B7	P
RK10	264 300 000		7.5	100	350		50		100				UX4	T
RK15	264 300 000		2.5	33	250		22	2.35	100		2.3		UX4	T
RK16	264 130 000		2.5	28	250		26	2.6	100		2.6		UX5	T
RK19	200 300 000	D <sub>1</sub> D <sub>2</sub>	7.5				120				30mA		UX4	RR
RK21	200 300 000	D <sub>1</sub>	2.5				120				30mA		UX4	R
RK24	364 200 000		2	13.5	175		8	1.6	100		1.6		UX4	T
RK39	254 130 000	A <sub>1</sub>	6	14	300	250	83	6.5	100	PenLF			UX5	P
RK60	200 300 000	D <sub>1</sub> D <sub>2</sub>	5				120				30mA		UX4	RR
RL7	265 114 113		6	1.7	250	250	10.0	7.7	100	150	7.0		B9G	P
RL16	241 600 003		6	2.5	250		10	6.5	100		5		B9G	T
RL18	241 600 003		6	2.6	250		10.0	6.5	100		6.4		B9G	T
RL37	244 664 413		6	1.5	250		10	9	100		7		B9G	T
RO337	892 300 000		2.5				30				15mA		B4	RR
RO423	892 300 000		2.5				30				15mA		B4	RR
RO431	892 300 000		4				60				20mA		B4	RR
RO443	892 300 000		4				60				20mA		B4	RR
RO446	892 300 000		4				30				15mA		B4	RR
RO452	892 300 000		4				60				20mA		B4	RR
RO457	892 300 000		4				60				20mA		B4	RR
RO481	802 300 000		4				120				30mA		B4	R
RO534	892 300 000		5				60				20mA		B4	RR
RO771	802 300 000		7.5				120				30mA		B4	R
RS	802 310 000		3				60				20mA		B5	R
RS1009	245 134 200	A <sub>1</sub> A <sub>2</sub>	6	25	400	250	30	3.4	No Data Available				B7A	PP
RS1019	245 134 200	A <sub>1</sub> A <sub>2</sub>	6	20	40	250	20	2.5	No Data Available				B7A	PP
RRAF	642 300 000		4	2	125		4	1.45	100		1.4		B4	T
RRBF	642 300 000		4	2.5	125		10	1.25	100		1.2		B4	T
RSAF	542 300 000	A	4	1	150	75	4.5	1.25	150	75	1.25		B4	T
RT1-2	642 300 000		4	2.6	125		26	2.5	100		2.5		B4	T
RT2	642 300 000		4	4	200		18	1.75	150		1.75		B4	T
RT3	642 300 000		4	2.3	300		15	2.85	100		2.8		B4	T
RTR4341	061 231 500	G <sub>1</sub>	21	2.2	125	125	8	8	100	125	8		B4	P
RTR4342	005 231 600	G <sub>1</sub>	21	5.8	125	125	48	9	100	125	8		B7	P
RV120/250	892 300 000		4				60				20mA		B4	RR

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V			
RV120/350	892 300 000		4				60			REC	20mA	B4	RR	
RV120/350S	023 080 090		4				60			REC	30mA	8SC	RR	
RV120/500	892 300 000		4				60			REC	20mA	B4	RR	
RV120/500S	023 080 090		4				60			REC	20mA	8SC	RR	
RV200/600	892 300 000		4				120			REC	30mA	B4	RR	
RV210	042 310 000	A <sub>1</sub>	4	53	400		70	5.8		No Data Available		B5	T	
RX21	200 030 000	D <sub>1</sub>	2.5				120			REC	30mA	UX5	R	
RX215	389 200 000		2.5				5			D		UX4	RR	
RZ	023 100 080		20				60			REC	20mA	8SC	R	
SO1	264 300 000		15	40.5	175		21	1.5		100	1.5	UX4	T	
SO2	264 300 000		7.4	88	400		55	2.1		100	2.1	UX4	T	
S2	542 300 000	A	2	1	125	60	2.25	1.1		125	60	1.1	B4	P
S4V	542 310 000	A	4	1	200	75	1.5	1.15		100	75	1.1	B5	P
S4VA	542 310 000	A	4	1.5	200	100	2.75	2		100	100	2	B5	P
S4VB	542 310 000	A	4	1.5	200	125	4.6	2.5		100	100	2.5	B5	P
S11A	892 300 000		4				30			REC	15mA	B4	RR	
S11D	892 300 000		4				60			REC	20mA	B4	RR	
S12	542 300 000	A	2	1	100	30	2.5	0.7		No Data Available		Sm4	P	
S21	542 300 000	A	2	0	125	75	3.6	1.1		100	75	1.1	B4	P
S22	542 300 000	A	2	0	125	75	4	1.75		125	75	1.75	B4	P
S23	542 300 000	A	2	1	150	75	2.8	1.1		150	75	1.1	B4	P
S24	542 300 000	A	2	1	150	75	3.2	1.4		150	75	1.4	B4	P
S30C	642 300 000		4	38	300		50	5		100	5	5	B4	T
S30D	642 300 000		2	38	300		50	5		100	5	5	B4	T
S207	542 300 000	A	2	1.5	200	100	3	0.7		100	100	0.7	B4	P
S208	542 300 000	A	2	0	200	100	2	0.8		100	100	0.8	B4	P
S209	023 010 560	G <sub>1</sub>	2	0.5	125	125	2.4	0.7		125	125	0.7	8SC	P
S210	642 300 000	G <sub>2</sub>	2	1.5	150	90	3	1.2		100	90	1.0	B4	P
S213	542 300 000	A	2	0.5	150	90	3	1.3		100	90	1.3	B4	P
S215	542 300 000	A	1	1.0	150	90		0.85		100	90	1.5	B4	P
S215A	542 300 000	A	2	1	150	60	2	1.1		150	60	1.1	B4	P
S215B	542 300 000	A	2	1	150	60	1.5	1.2		150	60	1.2	B4	P
S215VM	542 300 000	A	2	1.4	150	60	1.0	0.8		150	60	1.4	B4	P
S217	542 300 000	A	2	0.5	150	150	2.3	1.7		100	150	1.7	B4	P
S218	041 230 500	A	2	0.5	150	150	3	1.85		100	150	1.8	B7	P
S220	542 300 000	A	2		150	75	4	1.1		150	75	1.1	B4	P
S310A	265 113 000	G <sub>1</sub>	10	3	125	150	5.5	1.9		100	100	1.9	UX6	P
S311A	265 130 000	G <sub>1</sub>	10	15	125	150	30	2.8		100	100	2.8	UX5	P
S328A	265 113 000	G <sub>1</sub>	7.5	3	125	150	5.5	1.9		100	100	1.9	UX6	P
S329A	265 130 000	G <sub>1</sub>	7.5	15	125	150	30	2.8		100	100	2.8	UX5	P
S329L	265 113 000	G <sub>1</sub>	7.5	15	125	125	30	2.8		No Data Available		UX6	P	
S406/7	542 300 000	A	4	2	200	100	1.5	1		100	100	1	B4	P
S408	542 300 000	A	4	1.5	175	75	4	0.7		100	75		B4	P
S409	542 300 000	A	4	1.5	175	75	4	0.8		100	75		B4	P
S410	542 300 000	A	4	1.5	175	75	4	1.0		100	75		B4	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
S415N	542 310 000	A	4	2	200	100	6	1	100	100	1	B5	P
S420	061 231 500	G <sub>1</sub>	4	3	250	250	11.5		100	200		B7	P
S430N	542 300 000	A	4	1.3	200	100	1.5	0.9	100	100	3	B5	P
S431N	542 310 000	A	4	1.5	225	100	3.0	2.0	100	100		B5	P
S432N	023 110 560	G <sub>1</sub>	4	3	225	100	2.5	2.2	100	100		8SC	P
S435n	542 310 000	A	4	2	200	100	3.0	2.3	100	100	2.3	B5	P
S440	061 231 500	G <sub>1</sub>	4	2.35	250	250	4.1	3.45	100	200	3.4	B7	P
S493	542 310 000	A	4	2	200	100	4		100	100		B5	P
S495	542 310 000	A	4	2	200	100	6	2.5	100	100	2.5	B5	P
S617	023 110 560	G <sub>1</sub>	6.3	3	225	100	2.5	2.2	100	100		8SC	P
S620	023 110 560	G <sub>1</sub>	6.3	2.5	225	100	3.5	2.0	100	100		8SC	P
S629	023 110 560	G <sub>1</sub>	6.3	2.5	225	100	3.5	2.0	100	100		8SC	P
S1323	061 231 500	G <sub>1</sub>	13	3	200	100	8	1.85	100	100	1.85	B7	P
S1323	023 110 560	G <sub>1</sub>	13	3	200	100	8	1.85	100	100	1.85	8SC	P
S1324	061 231 500	G <sub>1</sub>	13	2	200	100	3	2.37	100	100	2.3	B7	P
S1327	023 110 560	G <sub>1</sub>	13	2.5	250	100	3.5	2.0	100	100		8SC	P
S1328	023 110 560	G <sub>1</sub>	13	2	200	100	3	2.37	100	100	2.3	8SC	P
S2018	041 231 500	A	20	3	200	60	4	1.2	100	60	1.2	B7	P
S2018	542 310 000	A	20	3	200	60	4	1.2	100	60	1.2	B5	P
S2035N	542 310 000	A	20	2.5	225	100	3.5	2.0	100	100		B5	P
S2043	542 310 000	A	20	2.5	250	100	5	2.0	100	100		B5	P
S4020A	254 300 000		2	1	125		1.3	0.6	100		0.6	UX4	T
S4020B	642 300 000		2	1	125		1.3	0.6	100		0.6	UX4	T
S4021A	264 300 000		4	8	125		20	3	100		3	UX4	T
S4021B	642 300 000		4	8	125		20	3	100		3	B4	T
S4022AR	236 400 000		4	4.5	125		5	2.2	100		2.2	UX4	T
S4022B	642 300 000		4	4.5	125		5	2.2	100		2.2	B4	T
S4045A	642 350 000		5	70	250	75	45	1.45	100	60	1.45	B5	P
SD	892 310 000		5						D			B5	DD
SD2	642 300 000		2	1.5	150		2.2	1.4	150		1.4	B4	T
SD6	*82 310 *00		6				5		D		6mA	B7G	R
SD6I	123 000 000	D <sub>1</sub>	6						D			B3G	D
SD917A	402 013 060		6.3	3.6	100		1.4	2.7	100		2.7	B8A	T
SE21I	542 300 000	A	2	1	150	75	1	1.5	150	75	1.5	B4	P
SE21IC	542 300 000	A	2	1.0	150	75	1	1.5	150	75	1.5	B4	P
SE2018	542 310 000	A	20	3	200	60	4	1.2	100	60	1.2	B5	P
SE2118	542 310 000	A	20	24	200	100	3	3	100	60	3	B5	P
SG2	542 300 000	A	2		150	75	2.5	1	100	75	1	B4	P
SG215	542 300 000	A	2	1.5	150	75	2.7	1	100	60	1	B4	P
SG215A	542 300 000	A <sub>1</sub>	2	1.5	125	75	1.5	1.1	125	60	1.1	B4	P
SG215VM	542 300 000		2	0	125	75		1.4	125	80	1.4	B4	P
SG220	542 300 000	A	2	1.5	150	75	2.4	1.5	100	75	1.5	B4	P
SG220SW	652 300 000	G <sub>1</sub>	2	1.5	150	75	2.4	1.5	150	75	1.5	B4	P
SGAI	542 310 000	A	4		200	100	6	3	100	100	3	B5	P
SN954	082 813 080		6.3				30		REC		15mA	B8A	R

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
SN1039A	412 365 100		6.3	1.4	100	100	7.0	5.1	100	100	5	B7G	P
SP2	041 230 500	A	2	1	150	150	3	1.8	150	150	1.8	B7	P
SP2B	061 230 500	G <sub>1</sub>	2	1	150	150	2.6	0.8	150	150	0.8	B7	P
SP2B(S)	032 004 560		2	1	150	150	2.6	0.8	150	150	0.8	8SC	P
SP2D	061 230 500	G <sub>1</sub>	2	1	150	150	1.4	1.7	150	150	1.7	B7	P
SP2D	542 300 000	A	2	1	125	125	1.45	1.7	125	100	1.7	B4	P
SP2V	041 230 500	A	2	0	150	75	2.9	1.1	100	75	1	B7	P
SP4(TUNG)	061 231 500	G <sub>1</sub>	4	2	200	100	3	2.3	100	100	2.3	B7	P
SP4	542 310 000	A	4	2	200	100	3	2.3	100	100	2.3	B5	P
SP4A	041 231 500	A	4	2	250	100	3	2.4	100	100	2.4	B7	P
SP4(MUL)	041 231 500	A	4	2	200	100	3	2.3	100	100	2	B7	P
SP4B	061 231 500	G <sub>1</sub>	4	2.4	250	250	4	3.4	100	100	3.4	B7	P
SP4C	023 110 560	G <sub>1</sub>	4	2.4	250	250	4	3.4	100	100	3.4	B7	P
SP4S	023 110 560	G <sub>1</sub>	4	2	250	100	3	3.5	100	PenLF	3.5	8SC	P
‡ SP6	412 361 500		6	2	250	250	10	7.5	100	PenLF	5	B7G	P
				1.5	200	150	4	6.4	100	PenLF	5		
SP6S	023 110 560	G <sub>1</sub>	6	2	250	100	3	2	100	100	2	8SC	P
SP13	061 231 500	A	13	2	200	100	3.3	2.2	100	100	2.2	B7	P
SP13	023 110 560	G <sub>1</sub>	13	2	200	100	3.3	2.2	100	100	2.2	8SC	P
SP13B	061 231 500	G <sub>1</sub>	13	1.5	200	200	2	4	100	150	4	B7	P
SP13C	061 231 500	G <sub>1</sub>	13	2.2	200	200	2.5	2.8	100	150	2.8	B7	P
SP13S	023 110 560	G <sub>1</sub>	13	2	150	100	3	2.4	100	100	2.4	8SC	P
SP20	542 310 000	A	20		200	100	4.5	3.5	100	100	3.5	B5	P
SP22	206 510 030	G <sub>1</sub>	2	1	125	125	1.1	1.2	125	100	1.2	M08	P
SP35	023 110 560	G <sub>1</sub>	35	8	200	200	41	7	100	PenLF	7	8SC	P
SP41	216 510 030	G <sub>1</sub>	4	1.5	200	200	10.9	8.5	100	150	8	M08	P
SP42	216 510 030	G <sub>1</sub>	4	1.3	200	125	20	8.4	100	100	8	M08	P
SP61	216 510 030	G <sub>1</sub>	6	1.5	200	200	10.9	8.5	100	150	8	M08	P
SP62	216 510 030	G <sub>1</sub>	6	1.25	200	100	16	9	200	100	8	M08	P
SP65	023 110 560	G <sub>1</sub>	6	2	250	100	3	2.1	100	100	2.1	8SC	P
SP141	206 500 030	G <sub>1</sub>	1.4	1	90	90	1.3	0.75	80	90	0.75	M08	P
SP181	216 510 030	G <sub>1</sub>	18	1.5	200	200	10.9	8.5	100	PenLF	8	M08	P
SP210	041 230 500	A	2	1	125	125	1.1	1.2	125	100	1.2	B7	P
SP215	041 230 500	A	2	1.5	150	80	2.1	1.6	100	75	1.6	B7	P
SP220	642 300 000		2	12	150		14	3	100		3	B4	T
SP1320	041 231 500	A	13	1.5	250	100	4.4	2.0	100	100	2	B7	P
SP2220	041 231 500	A	22	3	250	200	4.9	2.65	100	150	2.6	B7	P
SPT2	041 230 500	A	2	1	125	125	2.8	1.5	125	100	1.5	B7	P
SPT4A	041 231 500	A	4	1.5	250	100	2	2.3	200	100	2.3	B7	P
SPTA	061 231 500		13	2.5	200	100	2.2	1.4	100	100		B7	P
SPTS	041 231 500	A	13	1.5	250	100	2	3	100	100	3	B7	P
SR2	642 300 000		2	16	200		10	3	100		3	B4	T
SR4	642 310 000		4	20	250		20	4	100		4	B5	T
SRS4451	245 134 200	A <sub>1</sub> A <sub>2</sub>	6	25	400	250	30	3.4	No Data Available			B7A	PP
SS210	542 300 000	A	2	1	150	75	0.6	1.4	150	75	1.4	B4	P
SS210C	542 300 000	A	2	1	150	75		1.4	150	75	1.4	B5	T

‡ See note on Page [8]



VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
SS210DDT	682 390 000	G <sub>1</sub>	2	5.5	150		2.4	1.4	100		1.4	B5	DDT
SS210D	642 300 000		2	4.5	150		2	1.6	100		1.6	B4	T
SS210HF	642 300 000		2	4	150		1	0.75	100		0.75	B4	T
SS210HL	642 300 000		2	1.5	150		2	1.4	125		1.4	B4	T
SS220PA	642 300 000		2	6	150		8	3.5	100		3.5	B4	T
SS220P	642 300 000		2	12	150		6	1.5	100		1.5	B4	T
SS220SP	642 300 000		2	12	150		14	3.5	100		3.5	B4	T
SS240SP	642 300 000		2	12	150		15	3.5	100		3.5	B4	T
SS2018	542 310 000	A	20	3	200	100	3	3	100	90	3	B5	P
SU25	*2* 0** 3*0	D <sub>1</sub>	2						D			A08	D
SU45	112 311 100	D <sub>1</sub>	4				30		REC		15mA	B7G	R
SU61	023 000 000	D <sub>1</sub>	6						D			B3G	D
SU2130	002 300 000	D <sub>1</sub>	2				2		D			B4	R
SU2150	002 300 000	D <sub>1</sub>	2 (2.5)				2		D			B4	R
SU2150A	002 300 000	D <sub>1</sub>	2 (2.5)				5		D		2mA	B4	R
SU3130	002 300 000	D <sub>1</sub>	2						D			B4	D
SWG2	652 300 000	G <sub>1</sub>	2		150	75		1.5	100	75	1.5	B4	P
SWI	802 300 000		4				30		REC		15mA	B4	R
T2M05	672 344 100		6	0.85 3	100		8.5	5.3	100		5.3	B7G	TT
T4D	123 000 000	D <sub>1</sub>	4		150		5	4.5	100		5.3		
T6D	123 000 000	D <sub>1</sub>	6						D			B3G	D
T13U	023 100 060	G <sub>1</sub>	13	4	200		5.9	2.6	100		2.6	8SC	T
T41(MAZDA)	216 040 030		4		100		30	2KΩ	No Data Available			M08	Thyratron
T134	542 300 000	A	4	1	150	75	5	1.3	100	75		B4	P
T136	642 300 000		4	8	200		6	1.6	100		1.6	B4	T
T151	642 300 000	G <sub>2</sub>	4	15	200	150	12	1.8	100	100		B4	P
T204	023 004 060		2	1	125		1.8	0.6	125		0.6	8SC	T
T435	023 100 060	G <sub>1</sub>	4	5	225		6	2.5	100		2.4	8SC	T
T635	023 100 060	G <sub>1</sub>	6.3	16	250		20	3.2	100		3	8SC	T
T1335	023 100 060	G <sub>1</sub>	13	4.5	225		6	2.5	100		2.4	8SC	T
TB13	802 310 000		13						D			B5	D
TB032	642 300 000		2	30	150		12	1.5	100		1.5	B4	T
TB052	642 300 000		2	15	150		7	1.2	100		1.2	B4	T
TB062	642 300 000		2	10.5	150		13	2	100		2	B4	T
TB102	642 300 000		2	4	150		5	1.25	100		1.2	B4	T
TB122	642 300 000		2	4.5	150		6	3.5	100		3.5	B4	T
TB172	642 300 000		2	4.5	150		4	1.4	100		1.4	B4	T
TB282	642 300 000		2	1.5	150		2	1.3	125		1.3	B4	T
TB402	446 230 700		2	0	150		6		150			B7	TT
TB452	542 300 000	A	2	0	150	75	2	1.5	150	75	1.5	B4	P
TB552	542 300 000	A	2	0	150	75	4	1.5	150	75	1.5	B4	P
TB622	542 300 000	A	2	0	150	90	2	1.4	100	90	1.4	B4	P
TB9920	642 310 000		20	1.5	200		0.2	4	150		4	B5	T
TBC14	809 231 600	G <sub>1</sub>	4	7	250		4	2	100		2	B7	DDT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
TBC113	809 231 600	G <sub>1</sub>	13	5	200		4	3.6	100		3.6	B7	DDT
TC05-25	642 300 000		4		400		65	2.2	No Data Available			B4	T
TC432	642 300 000	S	2	4.5	150	150	9.5	2.5	100	100	2.5	B4	P
TC432	642 350 000		2	4.5	150	150	9.5	2.5	100	100	2.5	B5	P
TD044	642 300 000		4	40	250		40	3	100		3	B4	T
TDD1C	023 189 060		13	5.0	200		4.0	2.0	100		2.0	B7	DDT
TDD2	682 390 000	G <sub>1</sub>	2	5.5	150		2.5	1.4	100		1.4	B5	DDT
TDD2A	682 390 000	G <sub>1</sub>	2	1.5	150		1.95	1.2	125		1.2	B5	DDT
TDD4	908 231 600	G <sub>1</sub>	4	7	250		4	2	100		2	B7	DDT
TDD13C	809 231 600	G <sub>1</sub>	13	5	200		4	2	100		2	B7	DDT
TDD25	809 231 600	G <sub>1</sub>	25	1	100		4	2	100		2	B7	DDT
TE2	028 090 310		26				30		REC		15mA	A08	RR
TE3	028 090 310		12				30		REC		15mA	A08	RR
TE5	028 090 310		6.3				30		REC		15mA	A08	RR
TE094	642 310 000		4	16	200		12	1.3	100		1.3	B5	T
TE104	642 300 000		4	36	400		61	4	100		4	B4	T
TE244	642 310 000		4	3.5	200		6	2.4	150		2.4	B5	T
TE384	642 310 000		4	2	200		3	1.5	150		1.5	B5	T
TE424	542 310 000	A	4		200	100	3	2	100		2	B5	P
TE434	642 350 000		4	14	250	250	36		100	PenLF		B5	P
TE464	041 231 500	A	4		200	100	3	2.5	100	100	2.5	B7	P
TE474	041 231 500	A	4	1.5	200	100	4.5	2	100	100	2	B7	P
TE534	642 310 000	S	4	15	250	250	24		100	PenLF		B5	P
TE564	041 231 500	A	4	1.5	200	100	4.5	3.2	100	100	3.2	B7	P
TE634	045 231 600		4	22	250	250	36		100	100		B7	P
TE994	642 310 000		4	1.6	250		4	4	200		4	B5	T
TF64	061 231 500	G <sub>1</sub>	4	2.75	250	250	11	2	200	150	2	B7	P
TF104	642 300 000		4	36	400		61	4	100		4	B4	T
TH1	276 454 300		6.3		250				100	60		} B8B TH	
					250				100	100			
TH2	645 230 700	G <sub>1</sub>	2	1.5	150		0.95	1.2	100	60	1.2	} B7 TH	
				1.5	250	75	4		125	60	0.7		
TH4	645 231 700	G <sub>1</sub>	4	2	150		6	1.2	150	60	1.2	} B7 TH	
				2	200	100	3.5		200	75	3.0		
TH4A	645 231 700	G <sub>1</sub>	4	4.6	100		5	2.0	125	60	6	} B7 TH	
				2	250	100	3.5		200	100	3.0		
TH4B	645 231 700	G <sub>1</sub>	4	3	100		9	3.8	100	60	5.5	} B7 TH	
				2.5	250	100	3.25		200	100	3.5		
TH13C	645 231 700	G <sub>1</sub>	13	2	150		6	1.2	100	60	1.2	} B7 TH	
				1.5	250	75	4.0	1.8	200	75	3.6		
TH21C	645 231 700	G <sub>1</sub>	21	2	125		6	1.2	100	60	1.2	} B7 TH	
				1.5	250	75	4	1.8	200	75	3.0		
TH22C	645 231 700	G <sub>1</sub>	29		125		5	6	100	60	5	} B7 TH	
				2	250	100	3.5		200	75	3.0		
TH29	645 231 700	G <sub>1</sub>	29		100		12.0	4.5	100	60	5	} B7 TH	
				2	250	100	3.5		200	75	3.0		

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
TH30	645 231 700	G <sub>1</sub>	30	2	100		9.5	5.5	100	60	5.5	B7	TH
TH30C	645 231 700	G <sub>1</sub>	29		125		3.5		100	60			
TH31	217 640 530	G <sub>1</sub>	4	3	100		10.2	4	100	60	5.3	M08	TH
TH41	217 640 530	G <sub>1</sub>	4		250	100	3	3	100	90	3		
TH62	027 546 310	G <sub>1</sub>	6	2	100		4.4	2.4	100	60	2.2	A08	TH
					250	100	3		200	100	1.2		
TH233	217 640 530	G <sub>1</sub>	23	2	100		14.0	2.1	100	60	4.0	M08	TH
TH2320	645 231 700	G <sub>1</sub>	23		150	100	2.6	3	100	90	3		
TH2321	645 231 700	G <sub>1</sub>	23	0	100		4.5	5.3	100	60	5.3	B7	TH
TL54	045 231 600		4		150	100	3	3	100	100	3.8		
§ TMO5	672 344 100		6	.85	100		4.0	5.3	100	60	5.3	B7	TH
					150	100	2.6	3.0	100	100	3.0		
TM12	412 344 600		6.3	1.5	150		70		100	PenLF		B7	P
TP4	571 231 640	G <sub>1</sub>	4	3	125		8.5	5.3	100		5.3	B7G	TT
TP22	571 230 640	G <sub>1</sub>	2		150	200	5	4.5	100		5.3		
TP23	645 230 700	G <sub>1</sub>	2	1	100		1.5	1.2	100		1.2	B7A	T
TP25	207 640 530	G <sub>1</sub>	2		125	60	1.2	1.0	150	60	1.3		
TP26	207 640 530	G <sub>1</sub>	2	1.0	125		4.5	2.1	100	60	2.1	B7	TP
TP230	561 230 740	G <sub>1</sub>	2		125	60	1.0	1.0	125	60	1.2		
TP443	642 350 000		4	1.0	125		3.7	1.6	100	60	1.7	M08	TP
TP1340	571 231 640	G <sub>1</sub>	13		125	60	1.0	1.0	125	60	1.0		
TP2620	571 231 640	G <sub>1</sub>	26	1.5	125		1.0	1.0	125	60	1.0	M08	TP
					125	75	1.5	1.5	125	75	1.5		
TS49	261 504 130		20	0	100		20.0	1.1	100	60	1.1	B9	TP
TS51	412 365 100		6		150	75	4.3	1.3	150	75	1.3		
§ TS52	672 344 100		6	22	250	250	36	5	100	PenLF	5	B5	P
TS53	541 236 **1		18		250	250	2.0	1.4	150	60	0.14		
TS54	541 236 **1		6.3	6.0	250		6.5	2.1	100	100		B9	TP
					250	200	1.5	1.4	100	60	1.4		
TSE4	061 231 500		4	2.5	250		6.5	3.4	100	150	3.4	B9	TP
TSP4	061 231 500	G <sub>1</sub>	4		250	200	6.5	3.4	100	150	3.4		
TT4	642 310 000		4	16	250		20	3.2	100		3.2	B5	T

§ See note on Page 8

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
TT4A	642 310 000		4	9	250		20	4.1	100		4.1	B5	T
TT11	020 450 310	A	6	11	250	150	30	3.5	100	100	3.5	A08	P
TT12	204 531 102	A	19	13	250	250	72	6	100	100	6	B9G	P
TT14	204 051 103	A	6	13	250	250	72	6	100	100	6	B9G	P
TT15	241 657 143		6	14	250	150	30	3.9	100	100	3.9	B9G	PP
TT19	241 657 143		19	16.5	250	150	30	3.9	100	100	3.9	B9G	PP
TT20	245 134 200	A <sub>1</sub> A <sub>2</sub>	6	17	400	200	20	2.5	No Data Available			B7A	PP
TV03-10	442 310 000	A <sub>1</sub> A <sub>2</sub>	6	17	300		17	3.2	100		3	B5	TT
TW1	802 310 000		20				60		REC		20mA	B5	R
TW2	892 310 000		30				60		REC		20mA	B5	RR
TX4	645 231 700	G <sub>1</sub>	4	5.0 1.5	150		9.0	1.5	150	60		B7	TH
TX21	645 231 700	G <sub>1</sub>	21		2.0	150	90	5.5	2.5	200	90		
TX41	645 231 700	G <sub>1</sub>	4	1.5	250	90	5.5	3.8	100	75	1.5	B7	TH
U4C	642 300 000		4	3	100		9		100	60	5		
U4E	642 300 000		4	2.5	250	100	3.25		250	100		B7	TH
U4F	642 300 000		4	12	200		35	3.2	100		3.2	B4	T
U5	892 300 000		4	40	400		45	4	No Data Available			B4	T
U8	892 300 000		5				15		REC		15mA	B4	RR
U9	892 300 000		7.5				60		REC		20mA	B4	RR
U10	892 300 000		4				30		REC		15mA	B4	RR
U12	892 300 000		4				60		REC		20mA	B4	RR
U12/14	892 300 000		4 (5)				60		REC		30mA	B4	RR
U14	892 300 000		4				60		REC		20mA	B4	RR
U15	802 300 000		6				120		REC		30mA	B4	R
U16	002 300 000	D <sub>1</sub>	2				5		REC		5mA	B4	R
U17	002 300 000	D <sub>1</sub>	4				30		REC		15mA	B4	R
U18	892 300 000		4 (5)				120		REC		30mA	B4	RR
U18/20	892 300 000		4 (5)				120		REC		30mA	B4	RR
U19	002 300 000	D <sub>1</sub>	4 (5)				120		REC		40mA	B4	R
U19/23	002 300 000	D <sub>1</sub>	4				120		REC		30mA	B4	R
U20	892 300 000		4 (5)				60		REC		20mA	B4	RR
U21	002 300 000	D <sub>1</sub>	2				5		REC		5mA	B4	R
U22	200 000 030	D <sub>1</sub>	2 (3)				5		D			M08	D
U22FH	200 000 030	D <sub>1</sub>	2						D			M08	D
U23	002 300 000	D <sub>1</sub>	4 (5)				120		REC		30mA	B4	R
U24	030 000 200	D <sub>1</sub>	2				1.0		REC		2mA	A08	R
U25	023 000 000	D <sub>1</sub>	2						D			B3G	D
U26	391 221 800		13				60		REC		20mA	B7	RR
U29	002 300 000	D <sub>1</sub>	2				15		REC		30mA	B5	R
U30	391 221 800		13				60		REC		30mA	B7	RR
U30/250	802 300 000		4				30		REC		15mA	B4	R
U31	020 080 310		26				120		REC		50mA	A08	R

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
U33	002 300 000	D <sub>1</sub>	2				3			D		B4	R
U35	020 000 030	D <sub>1</sub>	1.4				2			D		A08	R
U37	023 000 000	D <sub>1</sub>	1.4				0.5			D		B2G	D
U41	*2* 0*0 3*0	D <sub>1</sub>	1.25				1			D		A08	D
U43	023 000 000		6				0.5			D		B2G	D
U50	020 908 030		5 (5.7)				60			REC	30mA	A08	RR
U51	030 908 020		5				120			REC	30mA	A08	RR
U52	030 908 020		5 (5.7)				120			REC	30mA	A08	RR
U52it	008 090 230		5 (5.7)				120			REC	30mA	A08	RR
U54	030 908 020		5 (5.7)				120			REC	30mA	A08	RR
U60/500	892 300 000		4				60			REC	20mA	B4	R
U65/550	802 300 000		7.5				60			REC	20mA	B4	R
U70	028 090 310		6				30			REC	30mA	A08	RR
U71	020 080 310		30				60			REC	50mA	A08	R
U74	020 080 310		30				120			REC	30mA	A08	R
U76	020 080 310		30				120			REC	60mA	A08	R
U78	802 309 100		6				30			REC	30mA	B7G	RR
U81	009 008 230		6				60			REC	20mA	B8B	RR
U82	209 008 130		6				30			REC	30mA	B8B	RR
U84	009 **8 230		4				30			REC	15mA	B8B	RR
U101	280 008 130		50				120			REC	30mA	B8B	R
U107	281 008 300		40				60			REC	20mA	B7G	R
U134	028 190 310		13				60			REC	20mA	A08	RR
U120/500	892 300 000		2				120			REC	30mA	B4	R
U142	280 000 130		31				60			REC	20mA	B8A	R
U143	020 908 030		4				30			REC	15mA	A08	RR
U145	280 000 130		40				60			REC	60mA	B8A	R
U147	028 090 310		6				30			REC	30mA	A08	RR
U149	209 008 130		6				30			REC	15mA	B8B	RR
U150	280 009 130		6				30			REC	40mA	B8A	RR
U151	023 000 000	D <sub>1</sub>	6							D		B8G	D
U152	001 230 008		19				120			REC	70mA	B9A	R
U153	*** 23* **8	C	17				120			REC	60mA	B9A	R
U154	**1 23* **8		19				120			REC	70mA	B9A	R
U191	0** 080 230	C <sub>1</sub>	19							D		A08	R
U201	020 080 310		20				60			REC	60mA	A08	R
U251	*** 23* **8	C	25				120			REC	30mA	B9A	R
U281	020 080 310		28				120			REC	80mA	A08	R
U282	001 000 230	D <sub>1</sub>	28				120			REC	36mA	A08	R
U301	0** 080 230	C	30				120			REC	35mA	A08	R
U309	**1 23* **8		20				120			REC	70mA	B9A	R
U319	**1 23* **8		20				120			REC	70mA	B9A	R
U329	*** 23* **8	C	25				120			REC	60mA	B9A	R
U403	201 080 030		40				120			REC	70mA	M08	R
U404	280 *** 130		40				60			REC	60mA	B8A	R

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
U415	642 300 000		4	10.5	150		5	1.4	100		1.4	B4	T
U418	642 300 000		4	13	150		10	1.6	100		1.6	B4	T
U650	802 300 000		6				30		REC		15mA	B4	R
U709	8*1 23* 9**		6				60		REC		20mA	B9A	RR
U801	128 899 310		80				120		REC		30mA	A08	RR
U2140P	391 221 800		13				60		REC		20mA	B7	RR
U4020	802 310 000		40				120		REC		70mA	B5	R
UAA11	023 189 100		22				5		D			85C	DD
UAA91	192 310 900		19				5		D			B7G	DD
UAA171	120 813 090		25				5		D			B8B	DD
UABC80	181 239 146		28	1.0	100		0.8	1.45	100		1.45	B9A	DDDT
UAF21	265 814 130		20	2	250	100	6	2.8	100	100		B8A	P
UAF41	268 154 130		13	2	200	90	5	2	100	100	1.9	B8A	DP
UAF42	268 154 130		13	2	200	90	5	2	100	100	1.9	B8A	DP
UB41	201 908 130		19				5		D		6mA	B8A	RR
UB91	182 310 900		19						D			B7G	DD
UBC1	206 081 930	G <sub>1</sub>	13	1.7	200		3	2	150		2	A08	DDT
UBC41	264 098 130		14	1.6	175		1.5	1.65	150		1.65	B8A	DDT
UBC81	641 238 09*		14	1.5	175		1.5	1.6	100		1.4	B9A	DDT
UBF2	206 581 930	G <sub>1</sub>	12.5	2	250	100	5	1.8	100	150	1.8	A08	DDP
UBF11	892 361 450		20	2	200	75	5	1.8	200	75	1.8	F8	DDP
UBF15	892 361 450		27	2	250	100	12	5	200	100	5	F8	DDP
UBF80	541 236 891		17	2	200	125	5	2.2	100	100	2.0	B9A	DDP
UBF89	541 236 891		19	2	200	100	9	3.8	100	100	3.5	B9A	DDP
UBF171	892 541 360		20	3.2	250	75	6	1.8	100	75		B8B	DDP
UBL1	206 581 930	G <sub>1</sub>	55	11.5	200	200	55	8.5	100	100	8	A08	DDP
UBL3	023 189 560	G <sub>1</sub>	55	6	100	100	29	7.5	100	90	7	85C	DDP
UBL21	264 598 130		55	13	200	200	55	8	100	100	7	B8B	DDP
UBL71	264 589 130		55	5.2	250	250	44	9.5	100	100	0.7	B8B	DDP
UC92	602 304 100		9.5	1.0	200		11.5	6.4	200		6.4	B7G	T
UCC84	147 234 116		21	1.5	90		12.0	6.0	100		6.0	B9A	TT
UCC85	641 237 410		26	2.1	200		10.0	5.8	100		5	B9A	TT
UCF12	642 371 450		20	1.0	100			3.0	100	60	3.0	F8	TP
UCF80	645 237 114		19	2.0	100	100	5.0	2.0	200	100	2.0	B9A	TP
UCH4	217 544 630	G <sub>1</sub>	20	2.0	100	175	10.0	6.2	100	150	6.0	A08	TH
UCH5	123 614 570		20	2	100		6.3	2.7	100	60	2.2	B8B	TH
UCH11	642 371 450		20	2	250	100	6.5	2.6	100	150	2.6	F8	TH
UCH21	276 454 131		20	2	100	100	5	2.4	100	60	1.8	B8B	TH
UCH41	276 454 130		14	2	250	90	4.7	2.5	200	100	2.5	B8B	TH
				2	100		6.4	2.2	100	60	3.2	B8B	TH
				2	200	90	5.2	2.2	100	90	2.2	B8A	TH
				2	100		6.4	2.2	100	60	2.8	B8A	TH
				2	200	90	2.7	1.5	100	75	1.5	B8A	TH

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
UCH42	276 454 130		14	2.0	100		5	2.0	100	60	2.0	B8A	TH
				2.0	175	75	8	2.2	100	75	2.0		
UCH43	276 454 130		14	2.0	100		5	2.0	100	60	2.0	B8A	TH
				2.0	175	75	8	2.2	100	75	2.0		
UCH71	276 454 131		20	2.0	100		16.4	2.2	100	60	3.2	B8B	TH
				2.0	200	90	5.2	2.2	100	90	2.2		
UCH81	541 237 464		19	0	100		13.5	3.7	100	60	3.7	B9A	TH
				2.6	200	125	7.6	2.4	100	100	2.4		
UCH171	642 544 370		20		200		3		100	60		B8B	TH
				2.5	200	100	2	0.7	100	100			
UCL11	452 371 460		60	2.0	200		2.0	2.1	150	60	2.0	B8	TP
				8.5	200	200	45.0	9.0	100	100	7.0		
UCL81	451 237 614		39	1.5	200		0.5	1.2	100	60	1.2	B9A	TP
				7	200	200	30	8.7	100	100			
UCL82	414 237 516		50	0	100		3.5	2.5	100	60	2.5	B9A	TP
				16	200	200	35	6.4	100	100	6.8		
UCL83	641 237 154		40	1.5	200		2.4	2.5	150	60	2.0	B9A	TP
				9.5	175	175	30	5.5	100	100	5		
UD2	642 300 000		2	12.0	150		14.0	2.5	100		2.5	B4	T
UDDL71	023 189 560	G <sub>1</sub>	44	10	200	200	60	9	100	100		8SC	DDP
UDH	802 310 000		20				60		REC		20mA	B5	R
UDP12	023 180 560	G <sub>1</sub>	40	10	200	200	60	9	No Data Available			8SC	DDP
UDP13	026 580 310	G <sub>1</sub>	40	10	200	200	60	9	No Data Available			A08	DP
UDT1	023 189 060	G <sub>1</sub>	15	3	200		10.3	3	150		3	8SC	DDT
UE1	023 100 080		25				60		REC		20mA	S8C	R
UE2	123 180 090		50				60		REC		20mA	8SC	RR
UE13	020 080 310		25				60		REC		20mA	A08	R
UE100	208 0*0 130		50						REC			A08	R
UEL11	452 371 540		48	0	100	30	2.4	1.6	100	60	1.6	F8	PP
				6	200	200	22	5	100	100			
UF5	023 110 560	G <sub>1</sub>	12.5	2.5	100	100	3.2	2.2	100	100	2.2	8SC	P
UF6	023 110 560	G <sub>1</sub>	12.5	20	100	100	3	1.8	100	100	1.8	8SC	P
UF8	206 511 130	G <sub>1</sub>	12	2	200	200		1.6	100	100		B8B	P
UF9	206 501 130	G <sub>1</sub>	12.5	2.5	200	100	6	2.2	100	100	2.2	A08	P
UF10	023 110 560	G <sub>1</sub>	12.5	2.4	200	100	5.5	2.35	100	100	2.3	8SC	P
UF11	602 301 450		15	2	200	75	6	2.2	100	100	2	F8	P
UF14	612 350 140		25	5	200	200	12	7	100	100	7	F8	P
UF15	612 301 450		25	2	200	100	12	5.5	100	100	5.5	F8	P
UF21	265 104 130		12.5	2.5	200	100	6	2.2	100	100	2.2	B8B	P
UF41	26* *54 130		12.5	3	200	125	7.2	2.3	100	150	2.3	B8A	P
UF42	260 154 130		21	2	175	175	10	8.5	100	150	8	B8A	P
UF43	260 154 130		21	2	170	125	15	6.3	100	100		B8A	P
UF60	141 230 651		19	2.0	170	170	10.0	7.4	100	100	7.0	B9A	P
UF65	141 231 651		19	2.0	170	100	9.7	5.9	200	100	6.0	B9A	P
UF69	041 230 651		12.6	2.0	200	200	11.1	3.8	175	100	4.4	B9A	P
UF172	112 540 360		20	2	200	100	4.5	3	100	100		B8B	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/v	Anode Volts	Screen Volts	mA/V		
UF174	112 540 360		30	3	200	150	12	8	100	100		B8B	P
UF175	112 540 360		30	2	200	75	10	5.7	100	75		B8B	P
UH3	023 110 560		13	3	225	100	8	2.2	100	100		8SC	P
UH4	893 200 000		4				5		D			B5	RR
UHP51	023 110 560		13	2.5	225	100	3.5	2	100	100		8SC	P
UHP52	023 110 560		13	2.5	225	100	3.5	2	100	100		8SC	P
UL1	206 540 130		60	11.5	200	200	55	8.5	100	PenLF	8	A08	P
UL2	023 104 560		35	5	200	200	20	7	100	PenLF	6	8SC	P
UL11	602 301 450		45	14	200	75	6	2.2	100	75		F8	P
UL11	501 623 140		45	14	200	200	45	9	100	100		F8	P
UL12	602 301 450		60	8	200	125	75	12	No Data Available			F8	P
UL21	265 004 130		45	13	200	200	55	8	100	PenLF	7	B8B	P
UL22	265 004 130		46	10.0	175	175	61.0	9.0	100	100	8.0	B8B	P
UL41	26* 54 130		45	9	175	175	54.5	9.5	100	100	7	B8A	P
UL43	260 154 130		50	2.6	250	250	36	10	100	100		B8A	P
UL44	200 154 130	A	45	13.5	175	175	28.5	7.0	100	100	6.5	B8A	P
UL46	261 054 130		45	9	175	175	54.5	9.5	100	100	7	B8A	P
UL71	264 500 130		45	5.2	200	200	22	6.5	100	100		B8B	P
UL84	*41 23* 6*5		45	12.5	175	175	70	10	100	100	9	B9A	P
UL171	102 541 360		55	8.5	200	200	45	9	100	100		B8B	P
ULP	642 310 000		13	20	250		27	4	100		4	B5	T
ULP51	623 145 000		40	17	250	250	36	2.5	No Data Available			8SC	P
ULP61	023 100 560	G <sub>1</sub>	33	8	200	200	55	9	No Data Available			8SC	P
UP6	023 100 560	G <sub>1</sub>	35	8	200	200	55	9	100	100		8SC	P
UPI3	026 540 310		35	8	200	200	55	9	No Data Available			A08	P
UP35U	023 100 560	G <sub>1</sub>	35	8	200	200	55	9	No Data Available			8SC	P
UPX	642 310 000		25	34	250		38	7	100		7	B5	T
UP2	023 140 560		25	19	200	100	40	3	100	75	3	8SC	P
UQ80	541 236 114		12	1.0	250	20	0.95	7.0	No Data Available			B9A	N
URI	023 100 080		20				120		REC.		60mA	8SC	R
URIC	802 310 000		20				60		REC		60mA	B5	R
UR2	123 180 090		30				60		REC		70mA	8SC*	RR
UR3	123 180 090		30				60		REC		65mA	RR	RR
UR3C	091 231 800		30				60		REC		65mA	B7	RR
UT2	023 100 060	G <sub>1</sub>	15	5	100		6	3	100		3	8SC	T
UTH4	423 164 570	G <sub>1</sub>	17	2.5	100		4	2.0	100	60	2.0	8SC	TH
					200	90	3	0.75	100	90			
UTH12	423 164 570	G <sub>1</sub>	17	2.5	100		4	2	100	60	2.0	8SC	TH
					225	30	3	0.65	No Data Available				
UU2	892 300 000		4				30		REC		15mA	B4	RR
UU3	892 300 000		4				30		REC		30mA	B4	RR
UU4	892 300 000		4				60		REC		35mA	B4	RR
UU5	892 300 000		4 (5)				60		REC		20mA	B4	RR
UU6	208 090 030		4				60		REC		40mA	M08	RR
UU7	208 090 030		4				60		REC		20mA	M08	RR



VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
UU8	208 090 030		4				120			REC	50mA	M08	RR
UU9	290 008 130		6				30-0			REC	15mA	B8A	RR
UU10	892 300 000		4				60			REC	20mA	B4	RR
UU12	8*1 23* 9**		6				60			REC	25mA	B9A	RR
UU30/250	892 300 000		4				15			REC	10mA	B4	RR
UU60/250	892 300 000		4				30			REC	15mA	B4	RR
UU120/250	892 300 000		4				60			REC	20mA	B4	RR
UU120/350	892 300 000		4				60			REC	20mA	B4	RR
UU120/500	892 300 000		4				60			REC	20mA	B4	RR
UVG51	123 190 080		30				60			REC	20mA	8SC	RR
UY1	388 028 120		50				120			REC	30mA	A08	R
UY1(N)	388 028 120		50				120			REC	30mA	A08	R
UY2	023 180 000		26				30			REC	15mA	F8	R
UY3	023 100 080		26				120			REC	30mA	8SC	R
UY4	023 100 080		35				30			REC	15mA	8SC	R
UY11	802 300 100		50				120			REC	50mA	F8	R
UY21	280 80* 130		50				120			REC	70mA	B8B	R
UY22	280 808 130		26				60			REC	20mA	B8B	R
UY31	020 080 310		50				120			REC	30mA	A08	R
UY41	280 000 130		31				60			REC	60mA	B8A	R
UY42	280 *0* 130		31				60			REC	50mA	B8A	R
UY82	**1 23* **8		55				180			REC	35mA	B9A	R
UY85	**1 23* **8		38				120			REC	60mA	B9A	R
UY91	812 380 800		26				60			REC	20mA	B7G	R
UY92	**2 38* 100		26				60			REC	20mA	B7G	R
V2M70	802 309 100		6-3				30			REC	15mA	B7G	RR
V2M	023 100 080		20				60			REC	20mA	8SC	R
V20	802 310 000		20				60			REC	20mA	B5	R
V20/7000	002 300 000	D <sub>1</sub> *	4				15			REC	10mA	B4	R
V22/7000	000 010 100	D <sub>1</sub> *	6-3				5			D		B8B	D
V25	081 231 900		25				60			REC	20mA	B7	RR
V30	802 310 000		30				120			REC	50mA	B5	R
V30/1	002 300 000	D <sub>1</sub>	2							D		B4	D
V41	*8* **9 230		4				30			REC	15mA	B8B	RR
V51	280 009 130		5				30			REC	15mA	B8A	RR
V61	28* **9 130		6				30			REC	15mA	B8A	RR
V99	263 400 000		3	4.5	90		2.5	0.42		580	0.4	UX4	T
V226	041 230 500	A	6	5	400	250	14	3		100	150	B7	P
V245	041 230 500	A	3		250	250	16	5		100	PenLF	B7	P
V248A	260 540 030	A	2	10	150	150	32	5.2		100	100	M08	P
V311	28* **3 130		31				60			REC	20mA	B8A	RR
V312	602 310 000	G <sub>1</sub>	4	4.8	250		6	2.3		100		B5	T
V339	000 231 600	G <sub>1</sub>	4		250			1.7		100		B7	T
V453	216 510 030	G <sub>2</sub>	4	1.8	250	100	4.5	2.0		100	100	M08	P
V503	642 300 000		4	85	400		100	4.5		100		B4	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA						A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
V872	216 510 030	G <sub>1</sub>	6	4	200	200	6.7	3.35	100	150	3.3	M08	P	
V884	412 361 500		6.3	2.5	250	200	8	2.5	100	PenLF	2.5	B7G	P	
V914	892 310 000		4						D			B5	DD	
V960	002 300 000		4						D			B5	DD	
V960	002 300 000	D <sub>1</sub>	4				60		REC		20mA	B4	R	
V1120	045 231 000	A	6	9.75	200	200	40	8.7	100	100	7	B7	P	
V1120B	040 231 500	A	4 (5)	9.75	200	200	40	8.7	100	100	7	B7	P	
VI906	002 300 000	D <sub>1</sub>	4 (5)				60		REC		20mA	B4	R	
VI907	002 300 000	D <sub>1</sub>	4				60		REC		20mA	B4	R	
VI928	112 311 100	D <sub>1</sub>	4				5		D			B7G	R	
V2018	002 300 000	D <sub>1</sub>	20				30		REC		15mA	B4	R	
V2118	802 310 000		20				60		REC		20mA	B5	R	
V4200	802 300 000		4				120		REC		30mA	B4	R	
VBF11	892 361 450		35	2	200	75	5	1.9	100	80	1.9	F8	DDP	
VCI	023 100 060	G <sub>1</sub>	55	2	200		6	3	200		3	8SC	T	
VCH11	642 371 450		40	{ 2.5 0.5 4.5 }	100		4	2.0	100	60	2.0	} F8 } F8	TH	
VCL11	452 371 460		90		225	90	3	0.65	100	90				
VDSB	542 310 000	A	16		100		2	2.4	100	60	2.4			
VDS	542 310 000	A	16	200	200	12	5	100	100		3	B5	P	
VEG51	026 100 080		20	2	200	75		1.6	100	75	1.6	B5	P	
VEL11	452 371 560		90	{ 0 6 }	200	30	2.4	1.6	100	100		} F8 } F8	PP	
VF3	023 110 560	G <sub>1</sub>	55		100	30	2.4	1.6	100	100				
VF7	023 110 560	G <sub>1</sub>	55		200	200	22	5	100	100				
VF14	612 350 140		60	250	100	5	2	100	150	6		8SC	P	
VG406	892 300 000		4	250	250	12	7	100	100			F8	P	
VG410	892 300 000		4				30		REC		15mA	B4	RR	
VG411	892 300 000		4				60		REC		20mA	B4	RR	
VG420	892 300 000		4				60		REC		20mA	B4	RR	
VG421	892 300 000		4				60		REC		20mA	B4	RR	
VG2503	892 300 000		4				30		REC		15mA	B4	RR	
VG2908	892 300 000		2.5				30		REC		15mA	B4	RR	
VG3008	892 300 000		4				30		REC		15mA	B4	RR	
VG3016	892 300 000		4				60		REC		420mA	B4	RR	
VG3630	892 300 000		4				120		REC		28mA	B4	RR	
VG5006	892 300 000		4				60		REC		20mA	B4	RR	
VG5007	023 080 090		4				60		REC		20mA	8SC	RR	
VG5107	802 300 090		4				60		REC		20mA	F8	RR	
VH2	812 380 100		6				5		D			B7G	D	
VH3	142 364 100		6	4.5	125		13	5	100		5	B7G	T	
VH5	412 365 100		6	2	175	125	7.7	5.1	100	100		B7G	P	
VHPI3	041 231 500	A	13	1.5	200	100	4	2	100	100	4	B7	P	
VHT2	645 230 600	G <sub>1</sub>	2		125	75			100	75		B7	H	

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
VHT2A	645 230 600	G <sub>1</sub>	2	0	125	50				100	60		B7	H
VHT4	545 231 600	G <sub>1</sub>	4	3	200	100	3-6			100	100		B7	H
VHTA	123 164 550	G <sub>1</sub>	13	1-5	250	100	3-2			100	100		8SC	H
VHTA	545 231 600	G <sub>1</sub>	13	1-5	200	100	3-2			100	100		B7	H
VHTS	645 231 500	G <sub>1</sub>	13	3	200	100	2-6			100	100		B7	H
VHTS	545 231 600	G <sub>1</sub>	13	3	200	100				100	100		B7	H
VLI	023 100 560	G <sub>1</sub>	55	14	200	200	25	2-2		100	100		8SC	P
VL4	023 100 560	G <sub>1</sub>	110	8-5	200	200	45	8		100	100		8SC	P
VLS6I	002 300 000	D <sub>1</sub>	2				3			D			B4	R
VMI	2** 00* 300	D <sub>1</sub>	1-4							D			B7G	D
VM4V	542 310 000	A	4	1	200	80	14	2-4		200	75	2-4	B5	P
VMP4	041 231 500	A	4	2	250	100	3	3-5		150	100	3-5	B7	P
VMP4	542 310 000	A	4	1	250	100	5-0	3-5		200	100	3-5	B5	P
VMP4G	041 231 500	A	4	2	250	100	8	2-7		100	100	2-7	B7	P
VMS4	542 310 000	A	4	1	200	80	11	2-1		200	75	2-4	B5	P
VMS4B	542 310 000	A	4	1	200	80	5-2	2-4		200	75	2-9	B5	P
V02	645 320 600	G <sub>1</sub>	2	0	150	90	1-8			150	90		B7	O
V02S	023 064 560	G <sub>1</sub>	2	0	150	50	2-0			No Data Available			8SC	O
V04	645 231 500	G <sub>1</sub>	4	1-5	250	75	1-6			100	75		B7	O
V04S	023 154 560	G <sub>1</sub>	4	1-5	250	75	1-6			100	75		8SC	O
V06	123 164 560	G <sub>1</sub>	6	3	100	100	4-6			100	100		8SC	O
V013	645 231 500	G <sub>1</sub>	13	1-5	250	75	1-6			100	75		B7	O
V013(S)	123 154 560	G <sub>1</sub>	13	1-5	250	75	1-6			100	75		8SC	O
VP2	041 230 500	A	2	1	150	150	3	1-5		150	150	1-5	B7	P
VP2B	061 230 500	G <sub>1</sub>	2	1-0	150	150	2-5	0-65		150	150	0-6	B7	P
(MUL)VP2B	065 231 500	G <sub>1</sub>	2	1-5	150	60	2	1-4		100	60	1-4	B7	H
VP2B	032 004 560		2	15	150	150	2-5	0-65		150	150	0-6	8SC	P
VP2BS	032 010 560	G <sub>1</sub>	2	1	150	150	2-5	0-65		150	150	0-6	8SC	P
VP2D	061 230 500	G <sub>1</sub>	2	1-5	150	75	1-3	2-0		150	75	2	B7	P
VP3	542 310 000	A	4	2	200	100	4-5	2-3		100	100	2-3	B5	P
VP4	041 231 500	A	4	2	200	100	4-5	2-3		100	100	2-3	B7	P
VP4A	542 310 000	A	4	2	200	100	4-25	2-5		100	100	2-5	B5	P
VP4A	041 231 500	A	4	2	200	100	4-25	2-5		100	100	2-5	B7	P
VP4B	061 231 500	G <sub>1</sub>	4	3	250	250	11-5	2		100	100	1-8	B7	P
VP4C	041 231 500	A	4	2	250	250	11-5	4		100	150	4	B7	P
VP4S	023 110 560	G <sub>1</sub>	4	2	250	100	8	1-8		100	90	1-8	8SC	P
VP4S	061 231 500	G <sub>1</sub>	4	3	250	100	8	1-8		100	90	1-8	B7	P
VP6	412 361 500		6	2-5	250	200	8	2-1		100	150	2-1	B7G	P
VP6	061 231 500	G <sub>1</sub>	6	3	250	100	7-5	1-7		200	100	1-7	B7	P
VP6S	023 110 560	G <sub>1</sub>	6	3	250	100	7-5	1-75		200	100	1-7	8SC	P
VP12D	026 985 310	G <sub>1</sub>	13	3	250	125	9	1-1		100	100	1-1	A08	DDP
VP13	041 231 500	A	13	1-5	200	100	6-3	3		100	100	3	B7	P
VP13	061 231 500	G <sub>1</sub>	13	3	200	100	8	2-8		100	100	2-8	B7	P
VP13A	023 110 560	G <sub>1</sub>	13	2	200	100	4	2-2		100	100	2-2	8SC	P
VP13B	061 231 500	G <sub>1</sub>	13	2	200	200	9	2-2		200	200	2-2	B7	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
VP13C	061 231 500	G <sub>1</sub>	13	2	200	200	9	2.2	200	200	2.2	B7	P
VP13K	061 231 500	G <sub>1</sub>	13	3	200	100	8	2	100	100	2	B7	P
VP13S	061 231 500	G <sub>1</sub>	13	3	200	100	8	2.8	100	100	2.8	B7	P
VP13S	023 110 560	G <sub>1</sub>	13	3	200	100	8	2.8	100	100	2.8	8SC	P
VP20	542 310 000	A	20	2	200	100	4	2.2	200	100	2.2	B5	P
VP21	041 230 500	A	2	1	150	60	1.8	1.1	150	60	1.1	B7	P
VP22	206 510 030	G <sub>1</sub>	2	1.5	125	60	1.2	0.8	100	60	0.8	M08	P
VP23	206 510 030	G <sub>1</sub>	2	1.5	125	60	1.4	1.0	100	60	1.0	M08	P
VP41	216 510 030	G <sub>1</sub>	4	2.7	250	200	7.7	2.0	100	150	2	M08	P
VP41	061 231 500	G <sub>1</sub>	4	3.5	250	250	11	2.0	100	200	3.1	B7	P
VP133	216 510 030	G <sub>1</sub>	13	2.7	150	150	8	2.1	150	100	2.1	M08	P
VP210	041 230 500	A	2	1.5	125	60	1.1	0.82	100	60	0.8	B7	P
VP210	542 300 000	A	2	1.5	125	60	1.1	0.82	125	60	0.82	B4	P
VP215	542 300 000	A	2	1.5	150	75	2	0.7	150	75	1.25	B4	P
VP215	041 230 500	A	2	1.5	150	75	2	0.7	150	75	1.25	B7	P
VP215B	061 230 500	G <sub>1</sub>	2	1.5	125	125	1.5	1.0	125	100	1.2	B7	P
VP215C	041 230 500	A	2	1.5	125	125	1.5	1.0	125	100	1.2	B7	P
VP1320	041 231 500	A	13	2.7	250	100	5	2	100	100	2	B7	P
VP1321	041 231 500	A	13	2.8	200	200	7.4	2	150	150	2	B7	P
VP1322	061 231 500	G <sub>1</sub>	13	2.8	250	200	7.4	2	100	100	2	B7	P
VPTA	041 231 500	A	13	2	250	100	4.2	2.9	100	100	2.9	B7	P
VPTS	041 231 500	A	13	3	200	100	5.5	2.6	100	90	2.6	B7	P
VPY2	542 300 000	A	2	1.5	125	60	1.5	1.1	125	60	1.1	B4	P
VPT2	041 230 500	A	2	1.5	125	60	1.5	1.1	125	60	1.1	B7	P
VPT4	542 310 000	A	4	3	250	100	5.5	2	100	90	2	B5	P
VPT4	041 231 500	A	4	3	250	100	5.5	2	100	90	2	B7	P
VPT4B	041 231 500	A	4	3	250	100	6	3.2	100	90	3.2	B7	P
VS2	542 300 000	A	2	2.5	125	60	2	1.2	100	60	1.4	B4	P
VS24	542 300 000	A	2	1	150	75	2.8	1.5	150	75	1.5	B4	P
VS24K	542 300 000	A	2	1	150	75	2.8	1.5	150	75	1.5	B4	P
VS210	542 300 000		2	2.5	125	60	2.0	1.4	100	60	1.4	B4	P
VS215	542 300 000	A	2	1	150	75	6	0.75	150	75	1.0	B4	P
VSGA1	542 310 000	A	4	1.5	200	100	7	6.15	100	100	6	B5	P
VT1	642 310 000		4	5	200		5	2	100		2	B5	T
VT2	642 310 000		4	2	200		3	1.9	150		1.9	B5	T
VTP4	542 310 000	A	4	3	200	100	5.5	2	100	100	2	B5	P
VX2	061 235 500	G <sub>1</sub>	2	1	150	60	1		150	60		B7	H
VX2S	023 015 560	G <sub>1</sub>	2	1	150	60	1		150	60		8SC	H
VX4	515 231 600	G <sub>1</sub>	4	2	250	75	1.8		100	75		B7	H
VX4S	023 115 560	G <sub>1</sub>	4	2	250	75	1.8		100	75		8SC	H
VX6S	023 115 560	G <sub>1</sub>	6	3	250	100	1.85	4	100	100	4	8SC	P
VX13	515 231 600	G <sub>1</sub>	13	2	250	75	1.8		100	75		B7	P
VX13S	023 115 560	G <sub>1</sub>	13	2	250	75	1.8		100	75		8SC	H
VY1	023 100 080		55				60		REC		20mA	8SC	R
VY2	023 180 000		30				15		D			8SC	R

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V			
VY2N	023 100 080		30				15			D			B5C	R
W4	642 300 000		4	7.5	125		3	1.2		100		1.2	B4	T
W4-500	892 300 000		4				60			REC		20mA	B4	RR
W17	265 024 300		1.4	1	90	75	3.5	0.9		80	75	0.9	B7G	P
W21	041 230 500	A	2	1	150	125	2.3	1.0		150	100	1.4	B7	P
W21	542 300 000	A	2	1	150	125	2.3	1.0		150	100	1.4	B4	P
W30	041 231 500	A	13	1	250	250	12	4		250	250	4	B7	P
W31	041 231 500	A	13	3	250	100	8	2.7		100	90	2.7	B7	P
W42	061 231 500	G <sub>1</sub>	4	3	250	100	7.6	1.5		100	100	1.5	B7	P
W61	026 510 310	G <sub>1</sub>	6	3	250	75	8.5	2.9		100	75	2.9	A08	P
W63	026 510 310	G <sub>1</sub>	6	3	250	100	7.6	1.5		100	90	1.5	A08	P
W76	026 510 310	G <sub>1</sub>	13	3	250	100	7.6	1.5		200	100	1.5	A08	P
W77	412 361 500		6	2	200	200	8	2.5		100	150	2.5	B7G	P
W81	265 104 130		6	3.0	250	100	8	2.8		100	90	2.8	B8B	P
W101	265 104 130		19	3	250	100	8	2.8		100	90	2.8	B8B	P
W107	412 361 500		12.5	2.5	200	200	8	2.5		100	150	2.5	B7G	P
W142	261 154 130		12	3.0	250	250	7.2	2.2		100	150	2.2	B8A	P
W143	265 104 130		6	2.5	250	100	6	2.2		100	100	2.2	B8B	P
W145	260 154 130		13	2.5	175	100	7	2.3		100	100	2.3	B8A	P
W147	026 510 310	G <sub>1</sub>	6	2.5	250	100	6	2.2		100	100	2	A08	P
W148	265 104 130		6	2.5	250	150	9.5	3.8		100	150	3.8	B8B	P
W149	265 104 130		6	3	250	100	8.5	1.75		100	90	1.7	B8B	P
W150	261 154 130		6	2.5	250	100	6.0	2.2		100	150	2.2	B8A	P
W213	642 300 000		2	2.5	150		1	1.2		150		1.2	B4	T
W216	040 120 560		2	1.5	150	90	3	1.2		100	90	1.2	B7	P
W318	809 231 600	G <sub>1</sub>	4	2	100		3.5	2.5		100		2.5	B7	DDT
W406	642 300 000		4	7.5	125		3	1.2		100		1.2	B4	T
W411	642 300 000		4	2.5	125		3	2.2		100		2.2	B4	T
W412	642 300 000		4	7.5	125		3	1.2		100		1.2	B4	T
W415N	642 310 000		4	2.5	200		2.5	1.0		100		1.0	B5	T
W420	642 300 000		4	4	125		4	1.3		100		1.2	B4	T
W719	141 230 651		6	2.0	250	100	10.0	6.0		150	100	5.0	B9A	P
W729	141 230 651		6	2	175	175	8	5.7		100	100		B9A	P
W4080	642 310 000		4	2.5	200		2.5	1.0		100		1.0	B5	T
W4110	642 310 000		4	1.5	200		1.0	3		100		2.5	B5	T
W727	412 365 100		6	1.0	250	100	11.0	4.4		100	100	4.4	B7G	P
WD30	560 231 890	G <sub>1</sub>	13	1	250	100	7	2.6		250	100	2.6	B9	DDP
WD40	560 231 890	G <sub>1</sub>	4	1	250	100	7	3.5		100	100	3.5	B9	DDP
WD70	541 236 891		6	2.0	250	90	5.0	2.2		100	90	2.2	B9A	DDP
WD142	268 154 130		13	2	175	90	5	2.1		100	100	1.9	B8A	DP
WD150	268 154 130		6	2	250	100	5	2.1		100	100	2	B8A	DP
WD709	541 236 891		6	2	250	90	5	2.2		100	90	2.2	B9A	DDP
WE23	542 310 000	A <sub>1</sub>	4	2	200	100	3	2.5		100	100		B5	P
WE24	542 310 000	A <sub>1</sub>	4		200	100	3	2.5		100	100		B5	P
WE27	642 310 000		4	3.5	200		6	2.4		100		2.2	B5	T

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
WE28	642 310 000		4	1.5	200		1	2.5	100		2.2	B5	T
WE29	642 310 000	D <sub>1</sub>	4	3	200		6	2	100		2.0	B5	DT
WE30	642 350 000		4	15	250	250	36	2.8	No Data Available			B5	P
WE51	892 300 000		4				30		REC		15mA	B4	RR
WE52	892 300 000		2				60		REC		20mA	B4	RR
WE350A	254 130 000	A <sub>1</sub>	6	12.5	400	250	83	6.5	100	PenLF	6	UX5	P
WE377	029 180 310		117				60		REC		20mA	A08	RR
WE403A	412 365 100		6	2.3	150	150	7	4.3	100	100	4	B7G	P
WT389	036 540 320		1.4	4.6	90	90	8	2	80	75	2	A08	P
WT390	026 040 310		6	8	250		8	2	100		2	A08	T
					150		5.5		100	60			
WT210-0012	298 300 000		5				60		REC		20mA	UX4	RR
WT210-0013	289 300 000		5				120		REC		30mA	UX4	RR
WT210-0019	289 300 000		5				120		REC		30mA	UX4	RR
WT210-0021	028 090 310		6				30		REC		15mA	A08	RR
WT210-0025	029 180 310		117				60		REC		20mA	A08	RR
WT210-0029	025 040 310		6	8	250		8	2	100		2	A08	T
							60		REC		20mA		
WT210-0037	126 458 310		117	5.2	100	100	43	5.3	100	90	5.3	A08	RP
WT210-0040	802 309 100		6				30		REC		15mA	B7G	RR
WT210-0007	026 540 310		6	18	350	250	54	5.2	100	PenLF	5.2	A08	P
WT210-006	029 180 310		6						D			A08	DD
WT210-0042	030 809 020		5				60		REC		20mA	A08	RR
WT210-0048	020 809 030		5				120		REC		30mA	A08	RR
WT210-0081	021 415 360		6	2	250	100	3	1.65	100	100	1.6	A08	P
WT210-0082	026 540 310		6	12.5	250	250	45	4.1	100	PenLF	4.1	A08	P
WT210-0083	216 498 130		6	2	250		2.3	1.6	200		1.6	B8B	DDT
WT210-0084	027 446 310		6	5	250		3	1.6	100		1.6	A08	TT
WT210-0085	412 365 400		50	7.5	125	100	49	7.5	100	90	6	B7G	P
WT210-0087	027 546 310	G <sub>1</sub>	6	1	100		8	2.5	100	60	3	A08	TH
				3	250	100	4	1.2	100	100	1.6		
WT210-0089	026 540 310		6	9	175	175	15	2.3	100	100	2.3	A08	P
WT210-0090	265 113 000	G <sub>1</sub>	6	3	250	100	2	1.22	100	100	1.2	UX6	P
WT210-0094	461 471 230		6	8	250		9	2.6	100		2.6	A08	TT
WT210-0108	461 471 230		6	31.5	150		125	7	100		7	A08	TT
WT210-0148	029 080 310		6				60		REC		20mA	A08	RR
WT-T102	020 809 030		5				60		REC		20mA	A08	RR
WT-T122	021 415 360		6	3	250	100	3	1.6	100	100	1.6	A08	P
WT-T123	026 540 310		6	12.5	250	250	45	4.1	100	PenLF	4.0	A08	P
WT-T124	216 498 130		6	2	250		2.3	1.6	200		1.6	B8B	DDT
WT-T125	027 446 310		6	5	250		3	1.6	100		1.6	A08	TT
WT-T126	412 365 400		50	7.5	125	100	49	7.5	100	90	6	B7G	P
WT-T128	027 546 310	G <sub>1</sub>	6	1	100		8	2.5	100	60	3	A08	TH
				3	250	100	4	1.2	100	100	1.6		
WT-T130	026 540 310	G <sub>1</sub>	6	9	175	175	15	2.3	100	100	2.3	A08	TH

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
WT-T131	265 113 000	G <sub>1</sub>	6	3	250	100	2	1.22	100	100	1.2	UX6	P
WT-T135	020 809 030		5				120		REC		30mA	A08	RR
X14	026 546 300	G <sub>1</sub>	1.4	0	90	50	1.8	0.5	80	60	0.5	A08	H
X17	266 424 300		1.4	4	75		4.5	1.2	80		1.4	B7G	H
X18	266 464 300		1.4	4	60		4	1.2	80		1.4	B7G	H
X21	645 230 600	G <sub>1</sub>	2	0	150	75			100	75		B7	H
X22	645 320 600	G <sub>1</sub>	2	0	150	75			100	75		B7	H
X23	645 231 700	G <sub>1</sub>	2	1.5	100		2.1		100	60	1.1	B7	TH
					150	60	0.7		150	60	1.5		
X24	645 231 700	G <sub>1</sub>	2	1.5	100		2.1		100	60	1.3	B7	TH
					150	60	0.7		150	60	1.6		
X30	645 231 600	G <sub>1</sub>	13	3	150	75	7		100	75		B7	H
X31	645 231 700	G <sub>1</sub>	13	3	150		2.2		100	60	2.0	B7	TH
					250	75	2.3		250	75	3.0		
X32	645 231 600	G <sub>1</sub>	13	3	150	75	7		100	75		B7	H
X41	645 231 700	G <sub>1</sub>	4	3	150		5	1.4	150	60	1.8	B7	TH
					250	75	2.3	1.4	100	75	2.0		
X42	642 231 600	G <sub>1</sub>	4	3	250	100	7.0	2.0	100	100	2.0	B7	H
X61	027 546 310	G <sub>1</sub>	6	2.0	100		5.4	2.2	100		2.2	A08	TH
					250	100	3.0	0.65	150	100	0.65		
X62	027 546 310	G <sub>1</sub>	6		250	125	5		100	100		A08	TH
X63	026 545 310	G <sub>1</sub>	6	3	250	100	6	1.6	100	100	1.6	A08	H
X64	026 540 310	G <sub>1</sub>	6	3	250	100	5.3	1.1	100	100	1.1	A08	H
X65	027 546 310	G <sub>1</sub>	6	3	100		8	2.5	100	60	1	A08	TH
					250	100	4	1.2	100	100	0.5		
X66	027 546 310	G <sub>1</sub>	6	3	100		8	2.5	100	60	1.3	A08	TH
					250	100	4	1.2	100	100	1.0		
X71	027 546 310	G <sub>1</sub>	15	3	100				100	60	1.5	A08	TH
					250	100			150	100	3.0		
X73	026 546 310	G <sub>1</sub>	6	3	150	75			100	75		A08	H
X75	026 546 310	G <sub>1</sub>	15		150	75			100	75		A08	H
X76	027 546 310	G <sub>1</sub>	13	3.0	100		8.0	2.5	100	60	0.6	A08	TH
					250	100	4.0	1.2	100	100	1.6		
X77	412 366 100		6	2	100		12	6.5	100		6.5	B7G	H
X78	542 376 400		6	1.0	100		5.0	2.2	100	60	2.8	B7G	TH
					125	75	5.3	2.2	100	75	2.0		
X79	541 237 46*		6	3	100		5	2.2	100	60	2.8	B9A	TH
					250	75	2.9		100	75	2		
X81	276 454 130		6	2.0	100		4.8	1.4	100	60	1.65	B8B	TH
					250	100	4.0	2.0	100	100	2.0		
X99	264 300 000		3	4.5	90		2.5	0.42	80		0.4	UX4	T
X101	276 454 130	G <sub>1</sub>	19	2	100		3		100	60		B8B	TH
					250	100	3		100	100			
X107	412 365 400		19		100	250	4					B7G	O
X108	542 376 400		19	1	100		5	2.2	100	60	2.2	B7G	TH
					250	75	5.3	2.2	100	75	1.6		
X109	541 237 46*		19	3	100		5	2.2	100	60	2.8	B9A	TH
					250	75	2.9		100	75			

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
XI42	276 454 130		14	{ 2.0 2.0	100 175		5.0 8	2.0 2.2	100 100	60 75	2.2 2.0	B8A	TH
XI43	276 454 131		6	{ 2 2	100 250	75 90	6.25 5.3	2.4 2.2	100 100	60 100	3.2 2.2		
XI45	276 454 130		28	{ 3.3 2.5	100 175		6.0 8.0	3.0 2.5	100 100	60 100	3 2.5	B8A	TH
XI47	027 546 310	G <sub>1</sub>	6	{ 2 2	100 250		5.4 5	2.2 2.4	100 100	60 100	2.8 1.2		
XI48	276 454 130		6	{ 1 2	100 250		4.8 4.0	1.4 2.0	100 100	60 100	1.6 2.0	B8B	TH
XI50	276 454 130		6	{ 2 2	100 250		5 8	2.6 2.2	100 100	60 100	2.8 3.5		
X719	541 237 651		6	{ 3.0 2.0	100 250		5.0 6.5	2.3 2.4	100 150	60 100	2.3 2.4	B9A	TH
X727	412 366 100		6	2	100		11.0	7	100		5		
X6030	020 880 300		3						D			B8B	D
XD	642 300 000		2	1.5	75		0.65	0.75	80		0.7	Sm4	T
XD1.5	642 300 000		1.5	0	50		0.45	0.4	No Data Available			SM4	T
XD2.0V	642 300 000		2	1	50		0.45	0.56	No Data Available			Sm4	T
XFR1	652 430 000		1.25	0	40	40	3	2	No Data Available			B5A	P
XFR2	652 430 000		1.25	0	60	60	1.8	1.1	No Data Available			B5A	P
XFR3	624 300 000		1.25	5	125		4	1.7	125		1.7	B5A	T
XFW10	653 420 000		.625	0	20	20			No Data Available			B5A	P
XFW30	653 420 000		.625	0	20	20			No Data Available			B5A	P
XFW40	653 420 000		.625	0	20	20			No Data Available			B5A	P
XFW50	653 420 000		.625	0	20	20			No Data Available			B5A	P
XFY10	653 420 000		1.25	1.25	20	20	0.5	.35	No Data Available			B5A	P
XFY11	653 420 000		1.25	0	20	20	.3	.42	No Data Available			B5A	P
XFY12	653 420 000		1.25	.5	20	20	.25	.37	No Data Available			B5A	P
XFY14	653 420 000		1.25	6.5	60	60	3.1	0.65	No Data Available			B5A	P
XFY20	653 420 000		.625	0	20	20			No Data Available			B5A	P
XFY21	653 420 000		1.25	0	20	20	.38	.41	No Data Available			B5A	P
XFY22	653 420 000		1.25	1.2	20	20	0.3	0.36	No Data Available			B5A	P
XFY23	653 420 000		1.25	2	20	20	0.4	0.34	No Data Available			B5A	P
XFY31	653 420 000		1.25	0	20	20	0.38	0.41	No Data Available			B5A	P
XFY32	653 420 000		1.25	1.5	20	20	.36	.32	No Data Available			B5A	P
XFY33	653 420 000		1.25	2	20	20	0.4	.34	No Data Available			B5A	P
XFY34	653 420 000		1.25	4	40	40	1.5	0.6	No Data Available			B5A	P
XFY35	653 420 000		1.25	1.5	40	40	.75	.57	No Data Available			B5A	P
XFY41	653 420 000		1.25	1.2	30	30	.30	.38	No Data Available			B5A	P
XFY43	653 420 000		1.25	2	20	20	0.4	.34	No Data Available			B5A	P
XFY51	653 420 000		1.25	0	20	20	0.2	.32	No Data Available			B5A	P
XFY53	653 420 000		1.25	3	20	20	.45	.3	No Data Available			B5A	P
XH1.5	642 300 000		1.5	0	50		.45	0.5	No Data Available			Sm4	T
XH2.0V	642 300 000		2	1	50		.45	0.56	No Data Available			Sm4	T
XL	642 300 000		2	1.5	75		1.5	0.85	80		0.8	Sm4	T



VALVE	SELECTOR SWITCH No.	T.C.	V <sub>i</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
XL01.5	642 300 000		1.5	1.0	50		0.9	0.65	No Data Available			Sm4	T
XL1.5	642 300 000		1.5	1	50		.7	0.6	No Data Available			Sm4	T
XL02.0V	642 300 000		2	1	50		1.1	0.92	No Data Available			Sm4	T
XL2.0V	642 300 000		2	1	50		1.0	0.84	No Data Available			Sm4	T
XP	642 300 000		2	4.5	100		9.5	1	80	1		Sm4	T
XPI.5	642 300 000		1.5	4	50		1.8	0.8	No Data Available			Sm4	T
XP2	642 300 000		2	4.5	75		4	1	80	1		Sm4	T
XP2.0V	642 300 000		2	3	50		2	1.0	No Data Available			Sm4	T
XR2	206 035 240		1.25	7.5	125	125	7	1.9	125	100		B8D	P
XSG	542 300 000	A	2	1.0	125	60	1.4	0.7	100	60	0.6	Sm4	P
XSG1.5	542 300 000	A <sub>1</sub>	1.5	0	50	30	0.6	0.3	No Data Available			Sm4	T
XSG2.0V	542 300 000	A	2	0	50	30	0.6	0.4	No Data Available			Sm4	P
XVS2.0V	542 300 000	A	2	0	50	30	0.4	0.33	No Data Available			Sm4	P
XW075A	653 420 000		.75		30	30	.3	.18	No Data Available			B5A	P
XW1.5	251 630 000	G <sub>1</sub>	1.5	0	50	30	0.6	0.5	No Data Available			Sm5	P
XW2.0V	251 630 000	G <sub>1</sub>	2	0	50	50	0.95	0.6	No Data Available			Sm5	P
XXB	206 447 320		1.4		90		4.5	1.3	90		1.3	B8B	TT
XXD	216 447 130		12.5	10	250		9	2.1	100		2.1	B8B	TT
XXFM	264 189 130		6.3	2	225		1.5	1.5	100		1.4	B8B	DDT
XXL	260 004 130		6	8	250		8	2.3	100		2.3	B8B	T
XY	254 630 000		2	3	75	75	4.0	1.25	80	75	1.2	Sm5	P
XY1.5	246 530 000		1.5	1.5	40	40	1.75	1	No Data Available			Sm5	P
XY2.0V	246 530 000		2	2	50	50	1.75	1.4	No Data Available			Sm5	P
XY14B	653 420 000		1.25	4.5	40	40	.3	.6	No Data Available			B5A	P
XY14CC	653 420 000		1.25	1.5	40	40	.5	.5	No Data Available			B5A	P
Y13	045 231 600		13	20	250	250	40	3.9	100	150		B7	P
Y220	642 300 000	S	2	4.5	150	150	10.5	2.5	100	100	2.5	B4	P
Y220	642 350 000		2	4.5	150	150	10.5	2.5	100	100	2.5	B5	P
Y230	642 350 000		2	3	150	150	7		100	100		B5	P
Z14	036 500 200	G <sub>1</sub>	1.4	1	90	90	0.5	0.6	80	90	0.7	A08	P
Z21	542 300 000	A	2	1	150	125	1.1	1.2	150	100	1.2	B4	P
Z21	041 230 500	A	2	1	150	125	1.1	1.2	150	100	1.2	B7	P
Z26	045 231 600		26	5.5	250	250	32	7.5	100	100	8.0	B7	P
Z62	026 510 310	G <sub>1</sub>	6	2	300	150	10	7.5	100	100	7.5	A08	P
Z63	026 500 310	G <sub>1</sub>	6	2	250	100	1.0	1.23	100	100	1.2	A08	P
Z66	026 510 310	G <sub>1</sub>	6	1.5	200	200	10.9	8.5	100	150	8.0	A08	P
Z73	026 510 310	G <sub>1</sub>	6	3	250	100	6.5	1.7	100	90	1.7	A08	P
† Z77	412 361 500		6	2	250	250	10	7.5	100	PenLF	5.0	B7G	P
			6		1.5	200	150	4	6.4	100	PenLF		
Z90	256 101 403		6	2	250	250	10	6.0	100	150	6.0	B9G	P
Z142	260 154 130		21	2	175	175	10	8.5	100	150	8	B8A	P
Z145	261 514 130		22	1.8	200	200	10	9	100	150	7	B8A	P
Z150	260 154 130		6	2	250	250	10	9.5	100	150	8	B8A	P

† See note on Page 8

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
Z152	141 230 651		6	2.0	170	170	10.0	7.4	100	100	6.0	B9A	P
Z220	642 300 000	S	2	7.5	150	150	15	2.0	100	100	2.0	B4	P
Z220	642 350 000		2	7.5	150	150	15	2.0	100	100	2.0	B5	P
Z309	141 223 651		6	2	250	250	20	15	No Data Available			B9A	P
Z319	141 321 615		6	10.4	350	250	15.5	1.9	100	100	6	B9A	P
Z359	141 230 651		12	2	250	250	20	15	100	100		B9A	P
Z719	141 230 651		6	2	175	175	10	7.4	100	150	6	B9A	P
Z729	501 236 014		6	1	250	100	3	1.8	100	100	1.8	B9A	P
Z759	141 023 651		6	2	250	250	20	15	100	100		B9A	P
ZD	892 310 000		13						D			B5	DD
ZD17	208 564 300		1.4	1	90	90	2.7	0.63	80	90	0.6	B7G	DP
ZD152	541 236 891		6	2	250	90	5	2.2	100	90	2.2	B9A	DDP
IAE5	642 453 000		1.25	0	40	40	0.9	0.2	No data available				P
IAH4	652 430 000		1.25	0	40	40	0.75	0.75	No data available			B5A	P
IDN5	265 804 300		1.4	0	60	60	2.1	0.63	No data available			B7G	DP
IG3	*2* 0*0 3*0	D <sub>1</sub>	1.25						D			A08	D
IJ3	020 000 300	D <sub>1</sub>	1.25						D			A08	D
3A/167M	2*0 61* 430		6.3	4	200		10	30	No data available			B8B	T
3AZ4	020 809 030		5				60		REC		15mA	A08	RR
4DT6	412 365 100		4.2	2.2	150	100	11	0.8	150	100	2	B7G	P
5B/258M	215 144 130	A <sub>1</sub>	19	14	250	250	72	6	No data available			B8B	P
6AB6	026 740 310		6.3	0	250		34	1.8	100		1.8	A08	TT
			0		250		5		100				
6AC6	026 740 310		6.3		0	175		45	2	100			
6AL7	426 89* 310		6	6	300		7		100			A08	DDDT
6AZ6	083 113 900		6						D			B8A	DD
6B5	267 413 000		6	0	300		42	2.2	100			UX6	TT
			0		300		9	0.6	100				
6CU8	175 231 446		6.3	6	200		13	3.3	100	60	3	B9A	TP
			2.2	200	150	9.5	6.2	100	150	6			
6CY7	7*4 236 411		6.3	18.5	150		30	5.4	100				
6DA4	**1 060 230		6.3	3	250		1.2	1.3	100		1.4	A08	R
6DG7	041 230 651		6.3	20	250	100	11	4.4	100	100	5		
6DQ5	421 541 350		6.3	25	175	125	110	10.5	No data available			A08	P
6DS5	412 365 100		6.3	8.5	250	200	29	5.8	100	100		B7G	P
6DT6	412 365 100		6.3	2.2	150	100	11	0.8	150	100	2	B7G	P
6SJ8G	027 546 310	G <sub>1</sub>	6	3	150		5	1.6	100	60	1.6	A08	TH
			3		250	100	1.3	1.2	100	100	1.2		
6SJ8EG	027 546 310	G <sub>1</sub>	6		3	150		5	1.6	100	60		
			3	250	100	1.3	1.2	100	100	1.2			
8CY7	7*4 236 411		7.9	18.5	150		30	5.4	100			B9A	TT
			3	250		1.2	1.3	100					
9CL8	461 237 514		9.5	0.75	125		15	8	100		7.5	B9A	TP
			1	125	125	12	5.8	125	150	5			
11A6	264 147 300		10	1	100			3.1	100			A08	TT

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE	
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V			
11A8	027 546 310		10	{ 1	100	100				100	100		A08	TP
11C5	026 040 310		10	{ 1	100				2	100		2	A08	T
11F6	026 540 310		10	{ 1	100	150			2.5	100	PenLF	2.5	A08	P
11J7	026 500 310	G <sub>1</sub>	10	{ 1	250	100			1.2	250	100	1.2	A08	P
11K7	026 500 310	G <sub>1</sub>	10	{ 1	250	100			1.4	250	100	1.4	A08	P
11L6	026 540 310		10	{ 1	100	150			6	100	PenLF	6	A08	P
11N7	026 447 310		10	{ 1	100				3.1	100		3.1	A08	TT
14J8	027 546 310	G <sub>1</sub>	12.6	{ 1	100		8		2.5	100	60	2.5	A08	TH
17D4	**1 080 230		16.8	{ 3	250	100	4		1.2	100	100	1	A08	R
							120			REC		30mA	A08	R
20D4	541 237 164		6.3	{ 0	100		15		3.5	100		3.3	B9A	TH
25AC5	026 040 310		25	{ 2	250	100	7		2.8	100	100		A08	T
25B5	267 413 000		25	{ 0	175		4		3.8	100		3.5	UX6	TT
				{ 0	100		45		2.2	100		2	UX6	TT
				{ 0	100		7			100			UX6	TT
30C13	645 237 114		9	{ 2	100		14		5	100	60	5.1	B9A	TP
80A	298 300 000		5	{ 2	175	175	10		6.6	100	150	6	B9A	TP
							60			REC		20mA	UX4	RR
410PT	642 350 000		4	{ 1	100	150			2.5	100	PenLF	2.5	B5	P
451	892 300 000		1.8							REC			B4	RR
660T	642 300 000		6	{ 1	100				7.4	100		7.5	B4	T
829B	245 134 200	A <sub>1</sub> A <sub>2</sub>	6.3		300	250	25		1.9	No data available			B7A	PP
832	245 134 200	A <sub>1</sub> A <sub>2</sub>	6.3		150	125	30		3.5	100	PenLF	3.5	B7A	PP
832A	245 134 200	A <sub>1</sub> A <sub>2</sub>	6.3		150	125	30		3.5	100	PenLF	3	B7A	PP
5798	741 231 460		26	{ 0	20		2.3		3.1	No data available				TT
5904	402 013 060		26	{ 0	20				5	No data available				T
6169	462 113 640		6	{ 1	175		11.5		6.5	100		6.5	A08	T
7032	412 365 100		6.3	{ 2	250	100	4.5		1.8	100	100		B7G	H
824476	461 471 230		6	{ 8	250		9		2.6	100		2.6	A08	TT
A214	642 300 000		2	{ 3	150		4.5		1.3	100		3	B4	T
A2030N	642 310 000		20	{ 3	200		6		2.3	100		2.3	B5	T
A2040N	642 310 000		20	{ 1.6	200		0.2		3	100		1	B5	T
A2293	*1* 234 **6		6.3	{ 23	150		100		12	No data available			B9A	P
B435N	642 310 000	D <sub>1</sub>	4	{ 3.5	200		6		2	100		2	B5	DT
C543	642 350 000		4	{ 1	100	150			2	100	PenLF	2	B5	P
D143	642 350 000		1	{ 1	100	150			1.2	100		1.2	B5	P
D401	902 310 000	D <sub>1</sub>	4							D			B4	DD
DK31	027 546 300	G <sub>1</sub>	1.4	{ 1	80	60				80	60		A08	TH
				{ 1	125	90				125	90		A08	TH
D042	819 236 500	G <sub>1</sub>	40	{ 1	100	150			8	100	PenLF	8	B7	DDP
DT41	809 321 600	G <sub>1</sub>	4	{ 1	100				3	100		3	B7	DDT
DT215	023 089 060	G <sub>1</sub>	2	{ 4.5	125		25		1	100		1	85C	DDT
DTV1	809 231 600	G <sub>1</sub>	13	{ 1	100				3	100		3	B7	DDT
E90F	412 365 100		6.3	{ 1.2	250	150	7.4		4.6	100	100		B7G	P

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Anode Volts	Screen Volts	mA/V		
E220B	446 230 700		2	0	150		1.5		100			B7	TT
ECC88	941 236 410		6.3	1.2	90		15	12.5	No data available			B9A	TT
EF89F	041 230 651		6.3	20	250	100	11	4.4	100	100	5	B9A	P
F/7001	412 365 100		6.3	0	125	125	35	4.8	100	100	4	B7G/F	P
G3060	123 190 080		30				60		REC		20mA	8SC	RR
P226	023 004 560		2	5	125	125	7	2.1	80	75	2.9	8SC	P
Pen220	642 310 000		2	4.5	125	125		2.2	100	100	2.5	B5	P
QQV07-40	245 134 200	A <sub>1</sub> A <sub>2</sub>	6.3		300	250	25	1.9	No data available			B7A	PP
RE052	642 300 000		2	3	150		1	1	100		1	B4	T
RE054	642 300 000		4	4	125		4	1.3	100		1.3	B4	T
RE062	642 300 000		2	9	150		4	1	100		1	B4	T
RE074D	642 300 000		4	3	150		3.5	0.5	150		0.5	B5	T
RE076	642 300 000		6	9	150		4	1.5	100		1.4	B4	T
RE122	264 300 000		2	4.5	150		3	1.3	100		3	UX4	T
RE122	642 300 000		2	18	150		7	1.2	100		1.2	B4	T
RE124	642 300 000		4	18	150		11	1.6	100		1.6	B4	T
REN1104	642 310 000		4	16	200		12	1.3	100		1.3	B5	T
REN1822	642 310 000		20	18	200		15	1.6	100		1.6	B5	T
RENS1224	164 552 300	G <sub>1</sub>	4	1.5	200	125	3	0.58	100	100		C7	P
RENS1234	165 452 300	G <sub>1</sub>	4	2	200	75	3	1.8	100	75	1.8	C7	P
RENS1384	642 310 000	G <sub>2</sub>	4	22	250	250	36	2.8	100	PenLF	2.9	B5	P
RES105	642 300 000	G <sub>2</sub>	5	15	200	150	12	1.3	150	100	1.3	B4	P
RES212	642 350 000		2	4.5	150	125	6	2.2	150	100	2.2	B5	P
RES664D	642 350 000		4	40	400	200	30	1.9	100	100	1.9	B5	P
RGN1404	082 300 000		4				120		REC		20mA	B4	RR
RGN4004	892 300 000		4				120		REC		20mA	B4	RR
S410N	542 310 000	A <sub>1</sub>	4	2	200	60	4	1	100	60	1	B5	P
S412N	542 310 000	A <sub>1</sub>	4	1.3	200	100	1.5	1	100	100	1	B5	P
S415N	542 310 000	A <sub>1</sub>	4	2	200	100	6	1	100	100	1	B5	P
S423	023 110 560	G <sub>1</sub>	4	3	250	100	8	1.8	250	100	1.9	8SC	P
S424	023 110 560	G <sub>1</sub>	4	2	250	100	3	2.1	250	100	2.1	8SC	P
S430N	542 310 000	A <sub>1</sub>	4	2	200	100	3	2	100	100	2	B5	P
S434N	542 310 000	A <sub>1</sub>	4	2	200	100	4.5	2.3	100	100	2.3	B5	P
S2010N	542 310 000	A <sub>1</sub>	20	2	200	60	4	1	100	60	1	B5	P
S2012N	542 310 000	A <sub>1</sub>	20	2	200	60	4	1	150	60	1	B5	P
S2030N	542 310 000	A <sub>1</sub>	20	2	200	100	3	2	150	100	2	B5	P
T223	023 004 060		2	2.8	125		3	2.5	100		2.5	8SC	T
T2	642 300 000		2	1	100			1	100		1	B4	T
TDD13	023 189 060	G <sub>1</sub>	13	1	100			2.9	100		2.9	8SC	DDT
TD2	642 300 000		2	7	150		4	0.9	100		0.9	B4	T
TT210	023 074 460		2	0	125		1.5		80			8SC	TT
T460	023 004 060		4	45	250		60	6	100		6	8SC	T
TH2620	645 231 700	G <sub>1</sub>	26	1	100			5.3	100	60	5.3	B7	TH
				1	250	100		3.9	250	100	3.8		
TZ40	204 300 000	A <sub>1</sub>	7.5	1	100			0.4	100		0.4	UX4	T
U26	231 232 132	D <sub>1</sub>	2						D			B9A	D

VALVE	SELECTOR SWITCH No.	T.C.	V <sub>f</sub>	VALVE CHARACTERISTIC METER DATA					A.V.T. DATA			BASE	TYPE
				Neg. Grid Volts	Anode Volts	Screen Volts	I <sub>a</sub> mA	mA/V	Anode Volts	Screen Volts	mA/V		
UPI3	040 231 500	A <sub>1</sub>	13	1	200	100		3	200	100	3	B7	P
VO133	023 164 570	G <sub>1</sub>	13	1	100			1.25	100	60	1.25	B7	TH
VPUI	060 231 500	G <sub>1</sub>	13		200	75		1.75	200	75	1.75		
WHTS	745 231 600	G <sub>1</sub>	13	1	150			0.6	150	60	0.6	B7	TH
XFY15	653 420 000		1.25		250	75		1.4	250	75	1.4		
XFY54	653 420 000		1.25	6.5	60	60	3	0.65	No data available			B5A	P
XR6	412 163 510		6.3	2	20	20	0.34	0.28	No data available			B5A	P
XR7	412 653 160		6.3	1.4	100	100	7	5	100	100	5	B8D	P
XR8	462 603 160		6.3	2	100	100	7.5	5.5	100	100	5.5	B8D	P
ZD2	642 300 000		2	2.5	100		8	4.2	100		4.2	B8D	T
				12	150		7	1	100		1.2	B4	T

# APPENDIX I.

## TEST DATA FOR TUNING INDICATORS

Tuning indicators are tested with the controls set according to the figures given in the table below; using the screen switch for obtaining the target voltage and inserting the anode load, as shown in column marked "Ra" by means of the link on the panel of the instrument. At the approximate bias given in the table the triode section should be at cut-off and the "eye" fully closed. On reducing the grid bias to zero the "eye" should open fully and the anode current should be approximately that given in the table. In the case of double sensitivity indicators giving multiple images corresponding to the different sensitivities, two sets of data (wherever possible) are given, the first set relating to the sensitive indication.

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA FOR TUNING INDICATORS					BASE
				Neg. Grid Volts	Anode Volts	Target Volts	la mA	Ra MΩ	
1M1	4*0 230 060		1.4	34	250	0	0.09	2.2	B8D
1M3	4*0 230 060		1.4	23	175	0	.1	1	B8D
2E5	264 513 000		2.5	8	250	250	0.24	1	A08
2G5	264 513 000		2.5	22	250	250	0.24		UX6
6AB5	264 513 000		6	15.5	150	150	0.13	1	UX6
6AD6	026 540 310		6	{ 3 50	150 150				A08
6AF6	026 540 310		6	81	125	125			A08
6AF7	026 457 310		6	{ 4.5 15	200 200	200 200	0.16 0.15	1 1	A08
6BR5	41* 23* 6*5		6	14	200	200	.4	.5	B9A
6CD7	026 546 310		6	{ 4.2 12.5	250 250	250 250		1 1	A08
6E5	264 513 000		6	7.5	250	250	0.2	1	UX6
6G5	264 513 000		6	22	250	250	0.24	1	UX6
6H5	264 513 000		6	22	250	250	0.24	1	UX6
6M1	026 540 310		6	22.5	250	250	0.23	1	A08
6M2	*25 456 310		6	{	250	250	.1 .2	2 1	A08
6N5	264 513 000		6	15.5	150	150	0.13	1	UX6
6T5	264 513 000		6	22	250	250		1	UX6
6U5	264 513 000		6	22	250	250	0.24	1	UX6
6X6	025 540 310		5		250	250			A08
10M1	026 540 310		18	19	175	175	.16	1	A08
10M2	2*6 456 130		12.6	30	200	200			A08
12U5	264 513 000		12.6	22	250	250	.24	1	UX6
41ME	023 104 560		4	5	250	250		1	85C
63ME	026 540 310		6	22	250	250	0.25	1	A08
64ME	026 457 310		6	{ 16 2.5	250 250	250 250		1 1	A08
65ME	41* 23* 6*5		6		250	250			B9A
1629	026 540 310		12.5	8	250	250	0.24	1	A08
4678	023 104 560		6	5	250	250	0.095	2	85C
AC/ME	045 231 600		4	22	250	250	0.24	1	B7
AM1	023 104 560		4	5	250	250	0.095	2	85C
DM21	206 540 030		1.4		90	90	0.025	2	A08
DM70	4*0 230 060		1.4	23	175	0	.1	1	B8D

VALVE	SELECTOR SWITCH No.	T.C.	Vf	VALVE CHARACTERISTIC METER DATA FOR TUNING INDICATORS					BASE
				Neg. Grid Volts	Anode Volts	Target Volts	Ia mA	Ra MΩ	
DM71	4*0 230 060		1.4	23	175	0	.1	1	B8D
E130	026 540 310		6	15	250	250		1	A08
E1320	026 540 310		6	11	250	250	4	1	A08
EM1	023 104 560		6	5	250	250	0.095	2	8SC
EM3	023 104 560		6	18	200	200	0.176	1	8SC
EM4	023 164 560		6	{ 4.2 12.5	200 200	200 200		1 1	{ 8SC
EM11	026 546 310		6	{ 5 16	250 250	250 250		1 1	{ A08
EM31	026 540 310		6	{ 5	250	250		2	A08
EM34	026 456 310		6	{ 4.2 12.5	250 250	250 250	1.0	1 1	{ A08
EM35	026 540 310		6	22	250	250		1	A08
EM71	251 064 130		6	20	250	250	.5		B8B
EM80	41* 23* 6*5		6	14	250	250	.37	.5	B9A
EM81	41* 23* 6*5		6	10.5	250	250	.37	.5	B9A
EM84	4*1 235 6*6		6	22	250	250	.45	0.47	B9A
EM85	401 235 606		6	14	250	250		.47	B9A
EM840	4*1 235 6*6		6	22	250	250	.45	.47	B9A
FT4	026 540 310		4	6	250	250		1	A08
ME4S	023 104 560		4	5	250	250		2	8SC
ME6S	023 104 560		6	5	250	250		2	8SC
ME41	216 040 530		4	22.5	250	250	0.23	1	M08
ME91	216 040 530		9	17	150	150	0.135	1	M08
ME920	045 231 600		9	19	175	175	0.18	1	B7
PM5	206 546 130		6	{ 15 5	200 200	200 200		1 1	{ A08
TV4	023 104 560		4	{ 5	250	250		1	8SC
UM4	206 546 130		12.6	{ 4.2 12.5	200 200	200 200		1 1	{ A08
UM11	206 546 130		15	{ 4.2 12.5	200 200	200 200		1 1	{ A08
UM34	026 456 310		12.5	{ 4.2 12.5	250 250	250 250	1	1 1	{ A08
UM80	41* 23* 6*5		19	14	200	200	.35	.5	B9A
UM81	41* 23* 6*5		19	14	200	200	.4	.5	B9A
VFT4	026 540 310		4	20	250	250		1	A08
VME4	045 231 600		4	22	250	250		1	B7
VTF6	026 540 310		6	22	200	200		1	A08
Y61	026 540 310		6	22	250	250	0.24	1	A08
Y62	026 540 310		6	22	250	250		1	A08
Y63	026 540 310		6	22	250	250	0.24	1	A08
Y64	026 540 310		6	22	250	250		1	A08
Y65	026 540 310		6	11	250	250		1	A08

## APPENDIX II.

### Test Data for High Voltage Rectifiers.

The following procedure should be adopted when testing high voltage rectifiers. Make insulation checks with valve cold and hot as stated in paragraphs 1 and 2 of the Abbreviated Working Instructions.

Then set Anode and *Screen* Voltage switches to their minimum value (i.e. 20) and Anode Current Controls to figure shown in Data column. With Circuit Selector set to TEST and Anode Selector at A<sub>1</sub> increase Anode Volts setting until indicating meter reads in a forward direction.

The setting of the Anode Voltage switch for a good valve should not exceed the figure given in column headed Anode Volts.

When checking full wave or voltage doubler rectifiers, check second Anode with Anode Selector at A<sub>2</sub>.

*NOTE* the valve should be heated to working temperature before setting Circuit Selector to position TEST and only left at this position for sufficient time to take a reading.

VALVE	SELECTOR SWITCH No.	T.C.	Vf.	Anode Volts (Max.)	la mA (Min.)	Valve Holder	Type	REMARKS
1B3	020 000 300	A1	1.25	200	6	A08	R	
1Z2	232 232 300	A1	1.4			B7G	R	
2V3	020 000 300	A1	2.5 (3)			A08	R	
2V3G	020 000 300	A1	2.5 (3)			A08	R	
2X2	200 300 000	A1	2.5 (3)	100	10	UX4	R	
2Y2	200 300 000	A1	2.5	100	10	UX4	R	
3B24	320 200 000	A1	2.5	60	10	UX4	R	
6W2	230 000 000	A1	6	100	9	Nil	R	
225DU	072 323 600		2	40	20	B7	RR	Test A <sub>1</sub> & A <sub>2</sub>
405BU	672 300 000		4	40	20	B4	RR	Test A <sub>1</sub> & A <sub>2</sub>
732A	320 200 000	A1	2.5	60	10	UX4	R	
879	200 300 000	A1	2.5	100	10	UX4	R	
1876	123 000 700		4			8SC	R	
1877	002 300 000	A1	4	100	10	B4	R	
8016	020 000 300	A1	1.25	200	6	A08	R	
CE230	320 200 000	A1	2.5	60	10	UX4	R	
EY51	230 000 000	A1	6	100	9	NIL	R	
HVR2	002 300 000	A1	4	100	10	B4	R	
HVR2A	002 300 000	A1	2 (2.5)	100	10	B4	R	
R12	230 000 000	A1	6.3	100	9	Nil	R	
SU61	230 000 000	A1	6.3	100	9	Nil	R	
SU2150	002 300 000	A1	2 (2.5)	60	4	B4	R	
SU2150A	002 300 000	A1	2	200	50	B4	R	
U17	002 300 000	A1	4	40	35	B4	R	
U19	002 300 000	A1	4 (5)	40	70	B4	R	
U21	002 300 000	A1	2	60	4	B4	R	
U22	200 000 030	A1	2 (3)	60	4	M08	R	
U23	002 300 000	A <sub>1</sub>	4 (5)	40	100	B4	R	
U24	020 000 300	A1	2	20	0.5	A08	R	
U41	020 300 000	A1	1.25	200	6	A08	R	
U43	230 000 000	A1	6.3	100	9	Nil	R	
U151	230 000 000	A1	6.3	100	9	Nil	R	
V21/7000	002 300 000	A1	4	100	10	B4	R	
V960	002 300 000	A1	4	80	90	B4	R	
V1906	002 300 000	A1	4 (5)	60	100	B4	R	
V1907	002 300 000	A1	4	150	70	B4	R	
V1913	002 300 000	A1	4 (5)	40	100	B4	R	
V1920	002 300 000	A1	4 (5)	100	90	B4	R	
VL51	002 300 000	A1	4	100	10	B4	R	



# APPENDIX III.

## Test Data for 'Service' Type Valves

VALVE	SELECTOR SWITCH No.	T.C.	Vf.	Neg Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Base	Type	REMARKS	Civ. Equiv.
CV16	234 000 000	A <sub>1</sub>	4	1	250		6	4.2	Disc seal	T	min slope See Note A	
CV20	002 300 000	A <sub>1</sub>	(5)		60		100		B4	R		
CV53	234 000 000	A <sub>1</sub>	4	1	250		6	4.2	Disc seal	T	min slope See Note A	
CV54	002 300 000	A <sub>1</sub>	4		40		40		B4	R		
CV63	020 000 310	A <sub>1</sub> G <sub>1</sub>	6	3	100		25	6.7	A08	T	See Note B	
CV78	366 446 612		6	2.3	250		32	15	B9G	T		
CV82	234 000 000	A <sub>1</sub>	4	3	250		20	3.7	Disc seal	T	See Note A min slope	3A/141J
CV84	642 310 000		6	9	300		55	6	B5	T <sub>i</sub>		3B/102B
CV88	See Note C		6	0	250		4	5	Disc seal	T	See Note C	3A/148J
CV93	See Note C		1.4	0	20			0.7	Disc seal	T	See Note C	V625
CV105	020 000 030	D <sub>1</sub>	6				30		A08	R		
CV121	002 300 000	A <sub>1</sub>	(5)		100		90		B4	R		
CV122	632 400 000		1.4	0	100			0.8	Special	T	See Note D	
CV132	412 361 500		6	1.8	250	100	6.3	2	B7G	H		
CV139	412 314 600		6	1.5	250		10	9	B7G	T		
CV201	021 540 300	A <sub>1</sub>	(2.5)	10	250	150	25	3.3	A08	P		
CV222	241 657 143		6	12	250	125	30	3	B9G	PP		
CV229	623 400 000		1.4	0	100			0.8	Special	T	See Note D	
CV243	042 350 000		(5)	40	75	75	45	1.5	B5	P		4045A
CV260	216 510 030	G <sub>1</sub>	6	1.8	200	200	8	8.5	M08	P		
CV261	112 311 100	A <sub>1</sub>	4		90		12				B7G R	
CV273	346 000 000	H—	6	1	250		20	3	Disc seal	T		
CV277	020 000 300	A <sub>1</sub>	4		40		100		A08	R		
CV296	256 101 403		6	7	250	250	10	6	B9G	P		
CV317	322 322 222	A <sub>1</sub>	4		60		80		B9G	R		
CV321	026 540 310		6	15	250	250	85	6.2	A08	P		
CV344	020 000 310	A <sub>1</sub> G <sub>1</sub>	6	3	100		25	6.7	A08	T	See Note B	
CV354	346 000 000	H—	6	2	250		10	6.5	Disc seal	T		
CV371	112 311 100	A <sub>1</sub>	4		60		50		B7G	R		
CV384	642 300 000		(5)	30	400		62	7.5	B4	T		DET5
CV387	040 230 650		1.25	4.5	40	40		0.5	B8D	P	See Note D	
CV404	030 000 020	A <sub>1</sub>	4		100		90		A08	R		
CV1111	002 300 000	A <sub>1</sub>	4		150		70		B4	R		
CV1133	002 300 000	A <sub>1</sub>	4		80		90		B4	R		
CV1155	642 300 000		4	0	75		0.7	0.2	B4	T		

VALVE	SELECTOR SWITCH No.	T.C.	Vf.	Neg Grid Vol'ts	Anode Volts	Screen Volts	Ia mA	mA/V	Base	Type	REMARKS	Civ. Equiv.
CV1223 1508	642 300 000 002 300 000		(5) A <sub>1</sub>	30 (5)	400		62 40	7.5	B4 100	T		DET5
CV1510	265 511 413		6	10	250	150	30	3	B9G	P	B4 R	
CV1569	892 300 000		(5)				60		B4	RR		
CV1584	642 310 000		4	3.5	200		5.4	3.1	B5	T		
CV1689	642 310 000		4	10	200		40	6.5	B5	T		3B/100B
CV2000	412 361 500		6	{ 2 2 2	250 200 250	250 150 250	10 4 10	7.5 6.4 7.5	B8D	P	See Notes J & E	
CV2001	412 361 500		6	{ 2 1.5	250 200	250 150	10 4	7.5 6.4	B8D	P	See Notes J & E	
CV2002	412 360 500		6	13.5	250	250	16	2.6	Spec	P	See Note J	
CV2003	412 360 500		6	13.5	250	250	16	2.6	Spec	P	See Note J	
CV2004	192 310 800		6				5		Spec	RR	See Note J	
CV2005	192 310 800		6				5		Spec	RR	See Note J	
CV2007	741 226 413		6	8.5	250		10.5	2.2	Spec	TT	See Note J	
CV2008	412 300 600		6	2.2	150		10	8	Spec	TT	See Note J	
CV2009	412 314 600		6	1.5	250		10	8.5	Spec	T	See Note J	
CV2010	762 344 100		6	1	100		8.5	5.6	Spec	TT	See Note J	
CV2011	741 226 413		6	2	250		1.2	1.6	Spec	TT	See Note J	
CV2013	041 230 651		6	4.5	250	250	40	11	Spec	P	See Note J	
CV2014	601 235 144		6	7.5	250	250	45	7	Spec	P	See Note J	
CV2015	Not known		6	7	250	250	10	6	B9G	P		
CV2016	741 226 413		6	2	250		10.5	5.5	Spec	TT	See Note J	
CV2017	412 361 500		6	4	200	200	5.8	3.5	Spec	P	See Note J	
CV2020	412 365 100		6	2	150	125	7.5	5	Spec	Spec	See Note J	
CV2021	902 308 100		6				30		Spec	R	See Note J	
CV2022	441 230 561		6	12.5	250	250	45	4.1	Spec	P	See Note J	
CV2023	412 361 500		6	2.5	250	200	8	2.5	Spec	P	See Note J	
CV2024	412 366 100		6	2	100		11	7	Spec	H	See Note J	
CV2025	412 361 500		6	{ 2 1.5	250 200	250 150	10 4	7.5 6.4	Spec	P	See Note J	
CV2101	040 230 650		1.25	0	75	75	2	1	B8D	P	See Note J	
CV2102	040 230 650		1.25	2.5	90	90	1.7	0.85	B8D	P	See Note J	
CV2103	040 230 650		1.25	0	75	75	1.9	0.95	B8D	P	See Note J	
CV2104	604 238 050		1.25	2.3	90	90	0.7	0.4	B8D	DP	See Note J	
CV2105	040 230 650		1.25	7.5	150	90	7.7	1.9	B8D	P	See Note J	
				1	20	20	0.1	0.35	B5A	P	See Note J	
CV2156	241 657 143		20	14	250	150	30	3.9	B9G	PP		
CV2180	020 000 300	A <sub>1</sub>	2.5		100		40		A08	R		
CV2195	412 361 500		6	{ 2 1.5	250 200	250 150	10 4	7.5 6.4	B7G	P	See Note E	
CV2204	346 000 000	H—	6	1	250		20	3	Disc seal	T	min slope	
CV2207	346 000 000	H—	6	1	250		20	3	Disc seal	T	min slope	
CV2209	412 361 500		6	4	200	200	5.8	3.5	B7G	P		
CV2231	041 230 051	A <sub>1</sub>	6	12.5	50	150	50	8.5	B9A	P		

VALVE	SELECTOR SWITCH No.	T.C.	Vf.	Neg Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Base	Type	REMARKS	Civ. Equiv.
CV2243	041 230 651		6	2	200	125	17	8.4	B9A	P		
CV2267	Not known		6				30		Spec	RR	See Note C	
CV2268	" "		6	2	250	250	10	7.5	Spec	P	" " "	
CV2277	041 230 651		25	2.5	20	20	14	4	B0A	P		
CV2299	040 230 650		1.25	9	100	100	15	2.5	B8D	P		
CV2539	642 310 000		6	20	400		55	9	B5	T		
CV2838	Not known	A <sub>1</sub> G <sub>1</sub>	2		60			0.3	Special	T	See Note C	
CV2920	020 000 310	A <sub>1</sub> G <sub>1</sub>	6	5.5	250		14	3	A08	T		
		A <sub>1</sub>	(3)		100		10					
CV4036	001 230 000	D <sub>1</sub>	6				120		B9A(F)	R		
CV4040	412 361 500		6	12	200	200	17	3.6	B7G	P		
CV4041	412 361 500		6	12	200	200	17	3.6	B7G(F)			
AU1	892 300 000		(5)				120		B4	RR		
AU3	892 300 000		(5)				60		B4	RR		
AU3A	892 300 000		(5)				60		B4	RR		
VU111	002 300 000	A <sub>1</sub>	4		150		70		B4	R		
VU508	002 300 000	A <sub>1</sub>	(5)		40		100		B4	R		