## (10)

## VALVE DATA MANUAL



AVOLTD
AVOCET HOUSE 92-96 VAUXHALL BRIDGE ROAD LONDON, S.W. 1 ENGLAND

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## IMPORTANT

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AVO LTD., Avocet House,
92-96, Vauxhall Bridge Road, London, S.W.I
VICtoria 3404 ( 12 lines)
Please inform me/us immediately a further edition of this Manual becomes available.


Please state the serial number of your instrument which appears on either the scale plate or an identification label.
"AVO" Valve Tester Serial No.
"AVO" Valve Characteristic Meter Serial No.
"AVO" Valve Tester Type 160 Serial No.
"AVO" Value Data Manual
Keeping a manual of this type fully corrected and up-to-date is, as you will appreciate, a complex and exacting task.
If you have any suggestions to make regarding this publication or wish to contribute data or observations which may be to our mutual benefit, we will be very pleased to receive your remarks set out on the postcard below.

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# THE <br> AVO <br> <br> VALVE DATA <br> <br> VALVE DATA <br> <br> MANUAL 

 <br> <br> MANUAL}

## SEVENTEENTH EDITION, 1965

FOR USE WITH VALVE CHARACTERISTIC METER MK 1-4 VALVE TESTER TYPE 160 AND AVO VALVE TESTER

Edited by : C. E. BULL

Published by


## 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.

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.

## WATCH OUR ADVERTISEMENTS FOR FURTHER ANNOUNCEMENTS.

IMPORTANT-In the interests of accuracy, it is not recommended that these instruments should be used with a constant voltage transformer, unless it is known that the 3 rd and 5 th harmonic content is of a negligible proportion.

## Contents



## 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. 8. Continental 8 pin (F8).
No. 2. B9G.
No. 3. B8B.
No. 4. B3G. Hivac D.A. 4
No. 9. B7A.
No. 9/1 B7A for use with and 5 pin.

Vave Testar Type 160.
No. 5. Blank.
No. 10 5AA \& 7AA (Acorn Valves).
No. 6. $\operatorname{Sm} 7$ (6A7 Base).
No. 11 B5A.
No. 7. B9A.
No. 12 B9D.
No. 13 B10B

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.

## NOTES

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.

BACK EMISSION. 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. Data to which this note refers is indicated thus ' $\xi$ '

GRID BIAS. 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 these instruments are, therefore, advised to use the alternative data which has been supplied, which is indicated thus $\phi$.

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). Dependant upon the electrode to which this pin is internally connected the correct code can be set up and normal test procedure followed.


INSULATION TESTING. The manufacturers of certain specialised types of valve e.g. VHF types, thyratrons etc., limit the maximum applied inter-electrode voltage to very low values, these restrictions apply with the valve either hot or cold.

In the Avo Valve Characteristic Meter, the peak value of the applied insulation potential is 150 V , whilst this is perfectly satisfactory for the vast majority of valves listed, users are advised to check with the manufacturers' data sheets when special types are to be tested.

The majority of valves listed in the Avo Valve Data Manual are not subject to this limitation, but where valve data is not given, care should be exercised. Where valves are subject to this limitation they are indicated thus

LOW ANODE IMPEDANCE TRIODES. It has come to our notice that a number of valves included in the Valve Data Manual which, when tested, produce low anode currents, a typical example being the 6080 valve.

These valves have a moderately high mutual conductance coupled with a very low Ra. In the case of the 6080 this is in the order of 250 ohms. Ideally, when testing this type of valve, the source impedance should be negligible. Unfortunately, with the Valve Characteristic Meter, the source impedance is in the order of 200 ohms, most of which is due to the anode current measuring circuit. Under normal conditions this impedance is negligible when compared with the anode impedance of the valve under test ; when these low impedance types are being tested, the valve is effectively being tested under dynamic conditions. Whilst we appreciate the difficulties with this drawback, we feel it is still acceptable, bearing in mind that the instrument will adequately test some 5000 ordinary valve types.

One suggestion for easing this difficulty is that a valve is selected which, when tested under dc conditions, meets the manufacturers' specifications. This valve should then be used under the same conditions in the Valve Characteristic Meter and the variation in anode currents and mutual conductance should then be noted, and used as a guide when testing valves of the same type.

Since only manufacturers' data is included in this publication anode current and mutual conductance figures have been omitted and the valve has been indicated thus $\Delta$.

## ABBREVIATIONS

D, DD, DDD.-Diodes and multiple 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.

TI.- Tuning Indicator (magic eye).
CCR.- Cold Cathode Rectifier.
$\ddagger$ Appearing among ROLLER SELECTOR switch numbers, refers to third diodes in triple diodes. Refer to Working Instructions, Chapter 3, Section headed "Instruction 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 higher current taken by the particular valve.

## (1V) Electrical \& Electronic Measuring INSTRUMENTS



Model 7 Universal AvolMETER Mk. 2
A multi-range a.c./d.c. instrument providing 50 ranges of readings on a 5 min. hand calibrated scale. Range selection is by means of two rotary switches, for a.c. and d.c. respectively. A press button provides an additional range for each value of current and voltage shown on the switch knobs. Current consumption at full scale deflection is 1 mA or 2 mA according to whether press button is used or 2 mA according to whether press button is used or not. Iotal resistance is 500,000 ohms. By AvoMeter Power Factor and Wattage Unit) power factor and power can be measured in a.c, circuits factor and power can be measured in a.c. circuits An automatic cut-out provides protection against
damage through overload.

```
Current: a.c. and d.c. 0 to 10A.
Voltage: a.c. and d.c. 0 to 1,000V,
Resistance: Up to 40 megohms.
Capacity: 0.01 to 20\muF.
Audio-Frequency Power Output: 0-20W.
Decibels: -25db to - 16db.
Size: }8\times7\frac{1}{4}\times4\frac{1}{2}\textrm{in}.\quad\mathrm{ Weight: 6}\mp@subsup{}{\frac{3}{4}}{\textrm{Ib}
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## Model 40 Universal AVOMETER Mk. 2

A similar instrument to the Model 7 AvoMeter described above, but providing 40 ranges of current voltage and resistance. Total resistance is 200,000 olims.

Current: a.c. and d.c. 0 to 12 A .
Voltage: a.c. and d.c. 0 to $1,200 \mathrm{~V}$.
Resistance: Up to 1 megohm.
Size: $8 \times 7 \frac{1}{4} \times 4 \frac{1}{2} \mathrm{in} . \quad$ Weight: $6 \frac{1}{4} \mathrm{lb}$.

THE phenomenal progress of recent years in electrical engineering owes much to the contemporary advances in the design of electrical measuring instruments.
The equipment of a laboratory for making electrical measurements and tests can involve an expenditure of hundreds of pounds. Likewise the test gear essential to the work of the radio service engineer can also be a source of considerable expense.
This difficulty is largely surmounted, and other advantages are conferred, by the use of modern multi-range testing instruments, which afford maximum usefulness with a reasonable initial outlay.

AVO Instruments are scientifically designed on sound principles, being the outcome of many years of successful experience by the pioneers and leading manufacturers of multirange instruments. Before leaving our factory, every Avo Instrument is tested and adjusted to give a high degree of accuracy and constancy of performance.

Model 8 Universal Avometer Mk. 3

This multi-range instrument has This multi-range instrument has been designed primarily for the electronic, radio and television features that adition to the many eatures that made prevous model amous, the Mk. 3 noodel includes increased sensitivity in the lower a.c. voltage ranges, a fused ohm circuit which gives increased protection against inadvertent overload, and improved temperature compensation allowing the use of high current d.c. shunts.
This model incorporates all the acilities of previous Model 8 AvoMeters, providing means for Avometers, providing means for
 op to 2500 V a $c$ 'd current up to
10 A (minimum a.c.d.c. current measurement 100 mA and $50^{\mu} \mathrm{A}$ respectively) and self-contained resistance measurements up to 20 megohms.
It has a sensitivity of $20,000 \Omega / V$ on all d.c. ranges and $1,000 \Omega / V$ on a.c. ranges from 10 volts upwards.

```
Voltage: a.c. and d.c. }0\mathrm{ to 2,500V.
Current: a.c. and d.c. O to 10A.
Resistance: 0-20 megohms with internal batteries.
                                    0-200 megohms with external d.c. supply.
Decibels:-15db to + 15db.
Size: 8\frac{1}{8}\times7\frac{1}{4}<4\frac{1}{2}\mathrm{ in. Weight: 6}\mathbf{2}/\textrm{lb}\mathrm{ .}
```

All AvoMeters conform where applicable, with the limits of accuracy laid down in Section 6 of the British Standard Specification 89/1954, for Industrial Portable Instruments.

## MEASURING INSTRUMENTS



## Avo Multimeter Hi 108

A self-contained, battery operated, multi-range instrument for measuring a.c./d.c. voltage, a.c./d.c. current, resistance and decibels, with provision for measuring r.f. voltage using an external probe.
Two transistorised amplifiers, one a.c., one d.c., form the basis of the multimeter. The d.c. amplifier used for d.c. measurements, is a differential long tailed pair, stabilised by heavy negative feedback against supply voltage and tem. perature variations.
A dual input transistor reduces zero drift with temperature to a negligible value of the order of $24 \mu \mathrm{~V} /{ }^{\circ} \mathrm{C}$, thus minimising operation of the set d.c. zero control.
A separate a.c. amplifier, used for a.c. measurements is also stabilised by a high degree of negative feedback which also ensures the linearity of the a.c. scales. Using an r.f. probe and the multiplier unit, r.f. voltage may be measured between 300 mV and 10 V at frequencies up to $250 \mathrm{Mc} / \mathrm{s}$.
Voltage a.c. and d.c. 100 mV to 1000 V f.s.d.
Current a.c. and d.c. $30 \mu \mathrm{~A}$ to 3 A f.s.d.
Voltage r.f. $\quad 300 \mathrm{mV}$ to 10 V f.s.d.
Resistance $\quad 0$ to $20 \mathrm{M} \Omega$
Accuracy d.c. $+3 \%$ off.s.d., a.c. $+4 \%$ of f.s.d
Size: $16 \times 7 \frac{1}{4} \times 6 \frac{1}{4} \mathrm{ins}$. Weight: $10 \frac{1}{2} \mathrm{lb}$.



## Electronic IMultimeter CT 471A

A portable battery operated multi-range meter using semi-conductors throughout, of high stability and with an accuracy of $\pm 2 \%$ on d.c. voltage and $\pm 3 \%$ on a.c. voltage.

Three basic scales cover all measurements. The two main scales, used for all voltage and current measurements, are linear and the third scale, used for resistance measurements, indicates increasing resistance towards full scale deflection.
Zero adjustment is effected on any d.c. range without disconnecting the meter from the circuit under test. Provision is made for centre zero operation on d.c. voltage. A reversing facility enables both positive and negative d.c. voltages and current to be measured without reversing the connections. Supplied with high impedance r.f. probe, capacitive divider (division ratio $100-1$ ) and $50 \Omega$ and $75 \Omega$ terminating pads.

Voltage a.c. and d.c. 12 ny to 1200 V f.s.d.
Currenta.c. and d.c. $12 \mu \mathrm{~A}$ to 1.2 A f.s.d.
Voltage r.f.
(up to $1000 \mathrm{Mc} / \mathrm{s}$ )
Resistance
40 mV to 4 V f.s.d.

## Panclimatic AvoMeters

The standard AvoMeters can be relied upon to give excellent service in any climate. However, where extremes of climatic conditions are experienced, special protection is desirable for certain components.
In affording this protection, advantage has been taken of the latest developments in panclimatic techniques-for example, the use of new moulding powders in the manufacture of the cases and the "potting' of certain components to render them completely impervious to extremes of humidity and resistant to fungus growth.
These special instruments are now available at a small additional charge and are known as:
The Model $7 \times$ AvoMeter The Model $8 \times$ AvoMeter
The Model 8(S)X AvoMeter
The Model 9(S) $\times$ AvoMeter MEASURING INSTRUMENTS


## Avo Transistor Analyser Mk. 2

A portable, mains operated self-contained instrument for checking signal or medium power transistors. A circuit has been developed which enables noise to be expressed in terms of an equivalent $1,000 \mathrm{c} / \mathrm{s}$ input, thus giving a quantitative expression of noise.
I'co: $\quad 2 \mu \mathrm{~A}$ first indication.
Beta: $0-25$ and $0-250$, measured at $1,000 \mathrm{c} / \mathrm{s}$.
Noise: Peak a.f. noise can be measured, in the range $1-40 \mathrm{db}$ with a bandwidth of $10 \mathrm{kc} / \mathrm{s}$.
Collector Voltage: $0-12 \mathrm{~V}$, or external.
Base Current: $0-1 \mathrm{~mA}$, or $1-40 \mathrm{~mA}$.
Collector Current: 0-1A.
Turnover Voltage: Means are provided for checking curnover voltage utilising the internal movement, the high collector voltage being applied from an external source.
Size: $15 \frac{1}{4} \times 9 \frac{1}{2} \times 5 \mathrm{in}$. Weight: 12 lb .
A battery operated version is also available.


## In-Circuit Transistor Tester TT 162

A portable, battery operated Transistor Tester for the 'In-Circuit' testing of signal or medium power p.n.p. or n.p.n. transistors. Carefully designed circuits balance out the shunting effect of components external to the transistor under test. A d.c. bridge circuit balances out the in-circuit components connected to the transistor collector and enables the collector current and voltage to be set to the required value. An a.c. bridge circuit balances out the in-circuit components connected to the base of the transistor under test and enables beta to be measured at the a.c. bridge frequency of approximately $1,000 \mathrm{c} / \mathrm{s}$.
A battery check facility ensures that the supply voltages do not fall below the limit required for satisfactory operation. Overload protection is provided internally.

| Collector Voltage | Variable $\mathrm{O}-10 \mathrm{Y}$ |
| :--- | :--- |
| Collector Current | $0-30 \mathrm{~mA}$ |
| Current Gain ( $\beta$ ) | $0-300$ |
| Leakage Current (I co) | First indication $2 \mu \mathrm{~A}$. |

Collector Yoltage

Collector Cuin

Leakage Current (l'co)

## The Precision Avometer

This precision instrument has been designed and developed in the Avo laboratory in response to requests from industrial and laboratory engineers for an accurate and stable local reference or transfer standard for a.c./d.c. voltage and current measurements.
The instrument, which is self-contained and portable, is housed in an attractive polished wooden case. A separate compartment in the removable cover provides storage space for leads, etc., and affixed to the inside of the cover is the test certificate which is supplied for each instrument.

Current: a.c. and d.c. 1.5 mA to 15 A f.s.d. Voltage: a.c. and d.c. 1.5 to
1500 V f.s.d.
Sensitivity: $100 \Omega / V$ d.c. and a.c. except the $3 V$ a.c. range which requires 50 mA for f.s.d.

Size: $13 \frac{3}{4} \times 11 \frac{1}{2} \times 6 \frac{3}{4} \mathrm{in} . \quad$ Weight: 21 lb .12 oz .


## MEASURING INSTRUMENTS

## MULTIMINOR MODEL 4

A compact panclimatic moving coil/rectifier instrument for the measurement of a.c. and d.c. voltage, d.c. current and resistance.

Ranges: a.c. and d.c. Voltage $0-1000 \mathrm{~V}$.
d.c. Current 0-1A.

Resistance: $0-20,000 \Omega, 0-2$ Megohms (using $1 \frac{1}{2} \vee$ cell).
Accuracy: d.c. $\pm \mathbf{2 . 2 5 \%}$ a.c. $\pm 2.75 \%$
Sensitivity: $10,000 \Omega /$ V.d.c. $\quad 1,000 \Omega / V . a . c$.
Weight: 16 oz.
Size: $5 \frac{5}{8} \times 3 \frac{7}{8} \times 1 \frac{3}{8} \mathrm{in}$.
Supplied complete with leads, interchangeable crocodile clips and prods together with an instruction booklet, all contained in an attractive P.V.C. case.


The following ACCESSORIES are available for Avo Testing Instruments

AvoMeter Voltage Multipliers.
AvoMeter Transformers for a.c. Current Measurements.
AvoMeter Resistance Range Extension Units.

AvoMeter Shunts for d.c. Current.
Multiminor Voltage Multipliers.
Multiminor Shunts.
Long Reach Safety Clips.
E.H.T. d.c. Voltage multipliers can be supplied for the AVO Electronic Testmeter, the Model 8, 8X, 8(S)X, 9SX, and 9Mk2 AvoMeter.

Leather Cases are available for most Instruments.

- A Comprehensive Guide to the complete range of 'Avo' Instruments is available upon request



## DOUGLAS and MACADIE COIL WINDERS

The Machine illustrated is the 'Douglas' Fully Automatic Multi-Winder, for the high-speed production of large quantities of coils with or without paper interleaving. It will produce round, square or rectangular coils up to 6 in . each in length, and up to $4 \frac{1}{2}$ in. diameter. As many as 12 smaller coils can be wound simultaneously within the total available winding length of 15 in ., at headstock speeds of between 600 and 2,000 r.p.m.

Our complete catalogue illustrates twenty-seven different machines, ranging from a simple Hand-Winder to the large Multi-Winder capable of producing 12 coils simultaneously.

AVO LTD. LONDON, S.W.I, ENGLAND
DIAGRAM OF STANDARD PIN CONNECTIONS
(viewed from underside of base)

AMERICAN FIVE PIN (UX5)




MAZDA OCTAL (MOB)


DIAGRAM OF STANDARD PIN CONNECTIONS
BRITISH SEVEN PIN (BT)

BRITISH 4/5 PIN (B5 \& B4)

AMERICAN FOUR PIN (UX4)



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

NOTE.-Many of the commercial equivalents listed in the following pages will have different CV. numbers, this is due to special service requirements which do not affect the radio engineer, e.g. interelectrode capacitance, bulb size, life test etc. It should also te noted that test data given in this manual may differ between equivalent valves, due to different sets

| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01A | 750 |  | 1835A | 3628 | 6038 |
| 02DF | 2260 | DF64 | 1 B 38 | 3549 |  |
| 09 | 2725 | 3209 | 1840 | 2914 |  |
| 09D | 1596 | 3209 | $1 \mathrm{B41}$ | 3550 |  |
| 095 | 1518 | 3209 | $1 \mathrm{B49}$ | 508 |  |
| 0517 |  | Pl5557 | 1 B 58 | 3745 |  |
| OA2 | 1832 | STV150/30 150CL | 1863A | 2826 |  |
| na2 ${ }^{\text {Wa }}$ | 4020 | M8223 | $1 \mathrm{C1}$ | 782 | X17 1R5 DK91 |
| OA3 | 3798 | VR75/30 QS75/40 | 1 C 2 |  | DK92 X18 14C6 X20 |
| oa70 | 8243 | 1 N87 | 163 |  | DK96 |
| 0a73 | 442 | 1 1N616 | 1 C 3 |  | X25 1ab6 DK96 |
| OA79 |  | 1 N 541 | 165G | 1803 | DL35 N14 |
| OA85 | 1354 |  | 1 CSGT | 1805 | 40SUA |
| OA86 |  | 1 N 480 | 1 C 21 | 762 | G1502D |
| 0487 |  | 1 N490 | 1 CP 1 | 2302 | DH3-91 |
| $0 \mathrm{A91}$ | 7130 | 1 N 17 | 1D5 | 764 | U4024 405UA RZUR1C |
| 0.95 | 7041 | 1N618 | 1D5GP | 705 | 1 DFGT |
| OA202 | 7040 |  | 1DSGT | 1806 |  |
| ов2 | 1833 | STV108/30 108C1 | $1{ }^{1} 7$ | 765 |  |
| ob2WA | 4028 | M/8224 | 1D8GT | 1811 |  |
| ов3 | 3799 |  | 1 E 3 |  | ${ }_{\text {KC83 }}$ |
| OC3 | 686 | VR105/30 | $1{ }^{1} 5$ | 766 | KP35 |
| OC16 | 7010 | 2N115 | 1E5GP | 766 | 1 1E5GT |
| 2-0C16 |  | 2N116 | 1 D13 | 75 | DA90 CL753 1A3 |
| OC44 | 7003 | GET874 TK31C | 1 187 | 1812 |  |
| OC70 |  | 2N279 | 1 Fl |  | dF96 1AJ4 1AF4 W25 |
| $00^{\prime} 7$ | 7005 | 2N280 | 1 F 2 | 1758 | DF92 1 L4 |
| $0 \mathrm{C72}$ | 7006 | 2N281 | 1 F 3 | 785 | DF91 1T4 W/17 |
| 2-0c72 |  | 2N282 | 1 1F4 | 767 |  |
| 0 C 73 | 5337 | ${ }^{2} 2823$ | 1 1F5 | 768 | KL35 |
| $0 \times 76$ |  | ${ }^{\text {2N284 }}$ | $1 \mathrm{F6}$ | 769 |  |
| $0 \mathrm{C77}$ | 7007 | ${ }^{2 N 284 A}$ | 1 F 7 GV | 770 |  |
| $0 \mathrm{CP71}$ | 7129 | $2 \mathrm{2N77}$ | ${ }^{1 / \mathrm{FD}} 1$ |  | DAF96 ZD25 1aH5 1AJ5 |
| OD3 | 216 | QS150/40 VR150/30 150C3 | 1 1FD 9 | 784 | DAF91 1S5 $\mathrm{ZD17}$ |
| OE3 | 431 | 85 A 1 | 1 G 3 | 1817 | 1 H 4 G |
| OG3 | 449 | STV85/10 85A2 | 1 G 5 | 771 |  |
| OZ4 | 692 |  | ${ }_{1} \mathrm{GGGG}$ | 772 |  |
| 024A | 517 | 1003 | 1G6GT | 773 |  |
| 1 A 3 | 753 | DA90 1 D13 | 1G8 | 7026 | z811 |
| ${ }^{144 P}$ | 754 |  | 1635 |  | $4 \mathrm{C35} \times 8 \mathrm{BH}-100 \mathrm{CV} 1787$ |
| 1 A5G | 755 | DL31 | 1650 | 2050 | EN32 |
| 1ASGT | 756 |  | 1 H 4 G | 774 |  |
| 1 A 6 | 757 |  | 1 HSG | 1818 | DAC32 HD14 |
| 1 A F | 1800 | X14 | ${ }^{145 G T}$ | 1820 | DAC32 |
| 147GT | 1802 | DK32 X14 | 1 L 4 | 1758 | DF92 1F2 |
| $1 \mathrm{AB6}$ |  | DK96 1 13 325 | 1 lag | 775 |  |
| $1 \mathrm{AC6}$ |  | DK92 108182 x 20 | $1 \mathrm{LB4}$ | 776 |  |
| 1AD4 | 2237 | DF62 DF652 | $1 \mathrm{LC5}$ | 777 |  |
| 1 AF 4 |  | DF96 1F1 W25 1aJ4 | ${ }^{1 L C 6}$ | 778 |  |
| 1 AH5 |  |  | 1LD5 1 LH | 779 |  |
| Tast |  | DF96 W2S | 1 LH4 | 780 |  |
| 1AJ5 |  | ZD25 1AH5 DAF96 | 1 12N5 | 781 |  |
| $1 \mathrm{AM4}$ |  | 1T4SF | 1LN5E | 781 |  |
| 1 ANS |  | DF97 | $1 \mathrm{M1}$ | 2980 | dM70 |
| 1 AQS |  | ${ }^{1255 S F}$. | ${ }^{193}$ | 2980 | 1M3 DM70 Y25 1m3 |
| ${ }^{183 / 8106}$ | 514 | U41 | 1 N 3 |  | DM71 |
| 1 B GT | 1830 | U41 DX30 | ${ }^{1} \mathrm{NFG}$ | 1821 | Z14 DF33 |
| 184P | 758 |  | 1 NFGT | 1823 | ${ }^{\text {DF3 }} 3$ |
| $1 \mathrm{B5} / 25$ | 759 |  | 1 N 21 | 727 | ${ }^{1 N 21 B} \operatorname{CS2A}$ CS37A |
| 187GT | 760 |  | 1N21B | 367 | CS2A CS37A |
| 1821A | 3586 | 4714 | 1 N 21 C | 3525 |  |
| $1 \mathrm{B22}$ | 761 | WE1378X | 1 N 23 | 5012 | 1N23E 1N23C |
| 1823 | 539 | 729 A | 1N23A | 749 |  |
| 1824 | 725 |  | 1N23B | 2856 |  |
| 1824A | 3548 |  | 1N23BM | 2857 |  |
| 1826 | 576 |  | 1N23CR | 5013 |  |
| 1 B 27 | 713 | TRC1 | 1 N 25 | 2916 |  |
| $1 \mathrm{B32} / 532 \mathrm{~A}$ | 2648 | 532A | 1/26 | 1785 |  |
| 1 B 35 | 369 |  | 1N28 | 2918 | CS37A 1N21B |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1N31 | 3509 |  | 2822 | 2931 |  |
| 1 N 32 | 5016 |  | 2 B 29 | 2666 | 829B QQVO7-40 |
| 1 N 34 | 2829 |  | 2B32 | 788 | 832A QQVO4-15 |
| 1 N 38 | 3551 |  | 2B36 | 1078 | T4D |
| 1 N 43 | 2919 |  | 2B52 | 2789 | QQVO3-20A |
| 1N47 | 3729 |  | 2B94 | 2797 | QQVO6-40A |
| 1N53 | 5015 |  | 2BP1 | 3678 | RK33 1642 RK22 |
| 1N54 | 1354 | OA85 | 2 C 21 | 875 | RK33 1642 maz2 |
| 1N54A. | 2961 |  | 2C22 | 792 |  |
| 1N58 | 1354 |  | 2026 | 802 | 2C26A |
| 1N60 |  | OA159 | $2 \mathrm{C26A}$ | 1759 793 | $\begin{aligned} & 2 \mathrm{C} 26 \\ & \mathrm{R} \times 233 \mathrm{R} \times 233 \mathrm{~A} \end{aligned}$ |
| 1N64 |  | OA160 | 2 C 33 | 793 | 4074A |
| 1N69 | 2923 |  | 2634 | 18 | 4074A |
| 1N72 | 2974 |  | 2039A | 2516 | 446A 446B |
| 1N75 |  | OA161 | $2 \mathrm{C40}$ | 2932 | TD3-12 |
| 1N78 | 5014 |  | 2C42 | 2932 688 | T03.5-12 |
| 1N81 | 2928 |  | 2 C 43 2 C 45 | 596 | 38142 |
| 1N87 1N87/A |  | OA70 1N87/A OA70 | 2 C 45 2 C 46 | 2933 | TD05-12 |
| 1N198 | 5076 | 6CL6 | 2 C 51 | 2831 |  |
| 1 N476 | 1353 | OA81 | 2C51W | 2866 |  |
| 1N478 | 1354 | 0485 | 2 C 53 | 3559 |  |
| 1N480 |  | OA86 | 2 D 2 | 794 |  |
| 1N490 |  | OA87 | 2D4A | 795 | D41 D400 DEL4 |
| 1N541 |  | OA79 | 2D13C | 796 | $\begin{aligned} & \text { 10D1 } \\ & \text { ENY1 20A3 } 5727 \end{aligned}$ |
| 1N542 |  | 2-0A79 | 2 D 21 | 7876 | M8204 |
| 1N616 1N617 | 442 | OA73 | $\begin{aligned} & \text { 2D21W } \\ & \text { 2021Wa } \end{aligned}$ | 4018 | M8204 |
| 191818 | 7047 | OA95 DL 25 3E5 $3 \mathrm{C4}$ | 2DP1 | 1813 798 | 2P22 |
|  | 728 | 1T6GT | 2E26 | 3990 | Qv01-10 |
| $1 \mathrm{P10}$ | 484 | DL92 N17 3S4 | 2E30 | 2517 |  |
| 1 P 11 | 2983 | DL94 N19 3V4 | 2 G | 1842 |  |
| 1 P 21 | 5138 | 27M1 931A | $2 \mathrm{G8}$ | 7027 | 2R12 1S001 |
| 1 P 23 | 2680 | 868918913 | 2G/402A | 1835 | 3B28 ESU103 RR3-250 |
| 1 P 28 |  | $27 \mathrm{M3} \mathrm{MS-9SY}$ | 2G/472B | 2518 | 4B32 RR3-1250 |
| 1 P 30 | 1764 | CE2 71A3 | 2G/473C | 2399 | GXU3 RR3-1250a |
| 1 P 31 | 3812 | WE3A 3AE | 2 H 28 | 1835 | 3B28 RR3-250 |
| 1 P 32 | 405 | CE25 550G 2530 | 2H66 | 32 | 866A RG3 250A |
| 125G | 1824 | DL36 | 2 J 21 | 2778 | 2J21A |
| 1 Q 22 | 3555 |  | 2J21A | 719 |  |
| 1R4 | 2709 |  | 2 J 22 | 800 |  |
| 1R5 | 782 | DK91 X17 1c1 | 2 J 26 | 1760 |  |
| 152 |  | DY86 | 2 J 31 | 1807 |  |
| 1S2A |  | DY87 | 2 J 32 | 1808 |  |
| 1 S 4 | 783 | DL91 | 2 J 33 | 1809 |  |
| 1 S 5 | 784 | DAF91 2017 1FD9 | 2 J 34 | 1810 |  |
| 1T2 |  | R16 U37 | $2 J 36$ | 514 |  |
| 1 T 4 | 785 | DF91 W17 1F3 | $2 J 42$ | 3676 | JP9-7 MAG3 M503 |
| 175GT | 1829 |  | 2J42A | 3997 | MAG4 JP9-15 |
| $1 \mathrm{U4}$ | 2507 | DF904 5910 | 2 J 48 | 1822 |  |
| 105 | 3912 | DAF92 | 2 J 49 | 3687 | JP9-50B |
| IV | 1999 | $6 \mathrm{z3}$ | $2 J 50$ | 2793 | JP9-50C |
| 1V2 | 3994 |  | 2 J 51 | 3560 | JPT9-60 |
| 1 V 3 |  | DCF60 | 2551 A | 5134 | JPT9-60 |
| 1X2A | 5032 | DY80 R19 | 2 J 54 | 801 |  |
| $1 \mathrm{Z2}$ | 2510 |  | $2 J 56$ | 2852 | JP9-50 |
| 2-25A |  | AZ35 | 2 J 58 | 997 | 3092 |
| 2-150D | 3878 | 152RA | 2K28 | 1892 |  |
| 2 A 3 | 1831 |  | 2K33 | 1786 |  |
| 2 A 5 | 1834 |  | 2K41 | 3904 |  |
| 2A6 | 1769 |  | 2K48 | 3669 |  |
| 2A7 | 787. |  | 2N115 | 7010 | $0 \mathrm{C16}$ |
| 2A/100A |  | D/1 | 2N280 | 7005 | 0 C 71 |
| $2 \mathrm{AP1}$ | 790 | DG4-1 | 2N281 | 7006 | $0 \mathrm{C72}$ |
| 2AP1A | 790 | 1814P1 | 2N284A | 7077 | 0 C 77 |
| 2B4 | 648 | 885 | 2S/140G | 469 | EA76 6489 |
| 2B7 | 1837 |  | 2S/141G | 4504 | 7435 |
| 2B21 | 597 | 2X2A | 2T/270K | 261 | HR2 R10 6305 |


| TYPE | CV No. | EQUIVALENTS | TYPE | cV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2V3G | 804 |  | 3BP1 | 814 | 3BP1A |
| 2V/400A | 32 | 886A DQ2 ESU886 | $3 \mathrm{BP1A}$ | 2934 |  |
| 2V/401C | 1446 | 4017B | $3 \mathrm{BP7} \mathrm{C}^{\text {a }}$ |  | XF80 |
| 2V/470C | 1355 | 4049 C | 38X6 |  | XF85 |
| 2V/471A | 1449 | 872A | 3 BY 6 |  | DL96 1P1 N25 |
| 2v/500C | 5 | 4049D RG4-1250 | $3 \mathrm{C4}$ |  | XXB |
| 2V/531E | 1420 | 869B 4078A | 306 |  | XXB |
| 2W/540E | 1601 | 4222 B | 3 C 22 | 999 | PL3C23 TQ1/2 |
| 2 x 2 | 3748 | 2B21 143D 2 Y 2 | 3 C 23 | 789 | 2 T 24 |
| 2X2A | 597 | 1 K 22 R612G 879 | 3024 | $\begin{array}{r}789 \\ \hline 1765\end{array}$ | 5664 |
| 2X2/897 | 3748 | 2X2A | $3 \mathrm{C31/C1B}$ | 1765 941 | H664 25T |
| 2X2/8907 | 3748 |  | 3 C 34 | 941 372 | XH3-045 1G45P |
| 2x/105G | 448 | OA71 GEX54 | $3 \mathrm{C45}$ | 372 |  |
| 2X/106G | 425 | OA74 GEX44 | 3C/250A | 1034 | DET3 1505 N43-275 |
| 2 Y 2 | 597 | R1626 2B21 2X2 | 30/270A | 1252 | 2127 V1505 MI3-275 |
| 3/02AM | 2230 | 965K | 3C/350E | 30 | 4270A 433 A TY4-350 |
| 3A | 3812 | 1P31 3AE | 3C/351H | 27 | 4357A 833A T14-350 |
| 3A4 | 2300 | DL92 | 3D6/1299 | 815 | 12993 d6 |
| 3A5 | 808 | DCC90 | 3121A | 2659 |  |
| 3A/105B | 809 |  | 3D22 | 51 |  |
| 3A/107A | 249 |  | 3D/100A | 222 |  |
| 3A/107B | 1655 | AR11 425XP | 3D/150G | 2735 | 7C88 |
| 3A/108A | 1653 | AR12 4020A | 3DL4 |  |  |
| $3 \mathrm{~A} / 108 \mathrm{~B}$ | 1657 | 4020B | 3DP1 | 816 |  |
| 3A/109A | 1671 | 4021A | 3E5 |  | N25 1P1 DL96 |
| $3 \mathrm{~A} / 109 \mathrm{~B}$ | 1663 | AR20 4021B | 3E29 | 3599 | 10 |
| 3A/110B | 1659 | 4022B | 3EG1 | 1526 | 701 D |
| 3A/135A | 2598 | 264A 426A | 3EH7 |  | XF183 |
| 3A/141A | 1639 | $4101 \mathrm{E} 3 \mathrm{~A} / 141 \mathrm{AY}$ | 3EJ7 |  | XF184 |
| 3A/142A | 1641 | 4102D 3A/142AY | 3EP1 | 817 | 1806P1 |
| 3A/144A | 1694 |  | 3ER5 |  | YC95 |
| 3A/145/J | 16 | 525A | 3ER6 |  | PC95 |
| 3A/146J | 53 |  | PFP7 | 1761 |  |
| 3A/147J | 82 |  | $3 \mathrm{G15}$ |  |  |
| 3A/148J | 88 |  | 3G/501A | 2215 | TK2/6 XR1-6400 5545 |
| $3 \mathrm{~A} / 167 \mathrm{M}$ | 5112 | 437A | $3 \mathrm{GP1}$ | 516 |  |
| $3 \mathrm{AB4} 4$ |  | PC92 | 3GRK | 442 | GEX35 OA73 |
| 3AE | 3812 | 1 P 31 3A | 3H/151J | 2516 | 2C39A TD1/100A |
| 3AJ8 |  | XCH81 | 3 J 31 | 1788 |  |
| 3AL5 |  | XAA91 | $3 \mathrm{~J} / 121 \mathrm{E}$ | 28 | ACT9 |
| 3ALPI | 2175 | DG7-5 | 3J/160E | 2245 |  |
| 3AMP1 | 2431 | DG7-32 | $3 \mathrm{~J} / 170 \mathrm{E}$ | 2905 |  |
| 3AP1 | 602 | $906 \mathrm{P1}$ | 3J/195E | 5071 |  |
| 3AT4A |  | PC93 | 3J/260E | 2908 |  |
| $3 \mathrm{AU6}$ |  | XF94 | 3 JP1 | 2935 |  |
| 3B4 | 2240 | DL98 | 3JP7 | 2869 |  |
| 3B7 | 811 |  | $3 \mathrm{JP12}$ | 2816 |  |
| 3B21 | 2959 | 3822 | $3 \mathrm{KP1}$ | 3833 .1737 |  |
| 3822 | 3815 |  | 3NP4 | $\because 1737$ | MW6-2 ${ }^{\text {1298 }}$ /191E |
| 3B24 | 812 | 732A 428T CE230 | , 3P/270B | 2950 | 1298 30/191E |
| 3B24W | 2858 | 1 K 24428 T 732A | 304 | 818 | M18 DL95 |
| 3B24WA | 4021 | 732A 428T 3B24 | 305 GT | 819 | DL33 N16 N15 |
| 3B26 | 3575 |  | 3084 E |  | 4220 C |
| 3B28 | 1835 | RR3/250 ESU130 2 H 28 GXU1 | $3 \mathrm{C} / 120 \mathrm{E}$ | 1605 | 4013C |
| 3B29 | 3689 | 1 K 29 | 30/150E | 1450 | 4228A |
| $3 \mathrm{~B} / 100 \mathrm{~B}$ | 1689 | PA1 | 30/180E | 1603 | 4014A |
| 3B/102B | 84 | . . | 30/181E | 1600 | 4006A |
| 3B/151A | 1648 | 4205E | 30/191E | 570 | 3Q/195E |
| 3B/200B | 1047 | TZ05-20 T206 | 30/195E | 570 | 3Q/191E |
| $3 \mathrm{~B} / 240 \mathrm{M}$ | 2214 |  | 30/211E | 1604 | - SS1971 |
| 3B/241M | 5116 |  | 3Q/212E | 1797 | 4081A |
| 3B/252B | 1688 | 4033L | 30/213E | 1734 |  |
| 3B/254D |  | 6 BD 4 A | 30/220E |  | 4009B |
| 3B/251A | 1648 | 4043 C | 30/260E | 446 |  |
| $3 \mathrm{~B} / 400 \mathrm{~A}$ | 1452 | 4300A | 30/293E | 1447 | 4030D |
| $3 \mathrm{~B} / 401 \mathrm{~J}$ | 127 |  | $3 \mathrm{O} / 310 \mathrm{E}$ | 3873 |  |
| 3B/501A | 49 |  | 3RP1 | 3941 | - . |
| 3B/504B | 1288 | 4304CB | 3 S 4 | 820 | $N 17$ DL92 1P10 |
| 3B/850A | 25 | 4242A ES85 | 3V4 | 2983 | 1PL DL94 N19 |
| 3B/851A | 1620 | DET6 4094A | $3 \mathrm{~V} / 280 \mathrm{~B}$ |  | VLS342A |
| 3BLP7 |  | DP7-10 | 3V/281B |  | 4039A |
| 3BLP31 |  | DH7-10 | 3V/290A |  | 57 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3V/390A | 5027 | PL5559 XG1-2500 | 4 J 28 | 3781 |  |
| $3 \mathrm{~V} / 530 \mathrm{E}$ | 447 | 408064 | 4 J 29 | 3782 |  |
| 3V/390B | 5828 | Frs7 | 4 J 30 | 3783 |  |
| 3V/390E | 5207 |  | 4 J 31 | 1914 | M518A |
| 3V/420B | 2126 |  | $4 J 33$ | 1916 |  |
| 3V/500A |  | EST102 | 4 J 34 | 1897 | M518A |
| 3V/530E | 477 |  | 4 J 35 | 1898 | M518A |
| 3V/531E | 477 |  | 4550 | 2284 | JP9-520 |
| 3W4 |  | 3S4SF | $4 J 52$ | 3569 | JP9-80 |
| 3WP1 | 3946 | DG7-36 | 4 J 52 A | 5018 | JP9-80A |
| 4 m 6 A | 1905 | QY3-65 3F65 | 4 J 53 | 513 | M518 |
| 4/100BU | 1264 | FW4-500 U18 | 4 J 54 | 3947 |  |
| 4-125A | 2963 | 4F21 QY3-125 4D21 Q160-1 | 4 J 55 | 3948 |  |
| 4-240A | 2131 |  | 4 J 56 | 3949 |  |
| 4-250A | 2964 | QY4-2505D22 Q400/1 5F22 | 4 J 57 | 3950 |  |
| 4-400A | 3879 | QY4-400 5F23 | 4J58 | 3951 |  |
| 4-1000 | 3880 | 7F25 | 4 J 78 | 3953 | JP9-250A |
| 4 A 1 | 821 |  | 4PR60A | 252 | QV20-P18 |
| 4A/137B | 243 | 4045A | 4SH | 1126 |  |
| 4 B 13 | 26 | 813 QY2-100 | 4SHA | 825 |  |
| 4B22 | 2936 |  | 4 T 16 |  | 10074 |
| 4B24 | 822 | EL3L | $4 \mathrm{T17}$ | 1924 | 100 TH |
| 4 B 25 |  | WL670A | 4 T 100 |  | 13 |
| 4826 | 1836 | 1163 | 4 THA | 826 | A36C TH4 AC/TH1 |
| 4 B 28 | 2777 |  | 4 TPB (CLEAR) | 828 |  |
| 4 B 30 | 934 | 15R 8022 | 4TPB (MET) | 829 |  |
| 4 B 31 | 3510 |  | 4 TSP | 830 | TSP4 AC/SP3 |
| 4 B 32 | 2518 | RR3-1250 DQ4 GXU2 | 4X150A | 2519 | QV1-150A 4F15R |
| 4 B 35 | 926 | 12 X 825 WE 327 A | 4X150D | 3991 | QV10150D 4F20R |
| 4 B 36 | 2779 | $20 \times 672$ | 4X150G | 3893 | QV1-150G |
| 4 BL 8 |  | XCF80 | 4 X 250 B | 2487 | 4H/160M |
| 4 C 21 | 2576 | 211 211W | 4 X 500 A |  | QBL4/800 QY4/500A |
| 4C22 | 2987 | HF100 | 4XP | 1168 | AC044 PP3/250 PX 4 |
| 4 C 27 | 92 | E1232 | 5/62CM |  | 5 BIP 1 |
| 4 C 30 | 933 | 15E8023 | 5/62PM |  | 5 BHP 11 |
| 4035 | 1787 | XH8-100 | 5A6 | 2360 |  |
| 4C/100A | 2756 | 4260 A | 5A/102A | 3784 |  |
| 4C/800E |  | 4278A | 5A/102D | 1724 | 329A |
| 4 CF 8 |  | PCF86 | 5A/105A | 1726 |  |
| $4 \mathrm{CM4}$ |  | PC86 | $5 \mathrm{~A} / 128 \mathrm{~B}$ | 244 | 4046A |
| 4 CSUA | 1267 | $1 \mathrm{D5}$ U4020 | 5A/136A | 2619 | 4328A |
| 4D1 | 1109 | H. 1320 | 5A/136D | 245 | 4328D |
| 4 D 21 | 2963 | Q160/1 4-125A | 5A/150A |  | QVO5-25 807 4310A |
| 4 D 32 | 3543 |  | 5A/156M | 1136 | EF54 |
| 4 DL 4 |  | PC88 | 5A/157D | 358 | EF37A OM5B |
| 4E27 | 824 | HK257B | 5A/159N | 2000 | EF91 HP6 6AM6 277 |
| $4 \mathrm{EH7}$ |  | YF183 | $5 \mathrm{~A} / 160 \mathrm{H}$ |  | 6F11 6AM6 6064 |
| 4EJ7 |  | XF184 | 5A/160K |  | 6F11 6am6 6064 |
| 4EP1 |  | DH10-94 | 5A/163K | 1635 |  |
| 4 ES 8 |  | XCC189 | 5A/164K | 3536 | LS408A |
| 4FR15R | 2519 | 4X150A QV1-150A | 5A/170K | 3998 | E180F 6683 EF861 |
| $4 \mathrm{FC7}$ |  | XCC89 | 5A/172G | 4501 | 7432 |
| 4FP7 |  | 5087 | 5A/173G | 4502 | 7433 |
| 4 FI 5 |  | PC97 | 5A/174G | 4503 | 7434 |
| $4 \mathrm{G8}$ | 7028 | 2R14 15003 | 5A/175G | 4506 |  |
| 4G23 |  | 3023 | $5 \mathrm{ADP1}$ | 5035 | DG13-34 |
| 4 G 63 |  | 5563 | $5 \mathrm{ADP7}$ | 5125 | DP13-34 |
| $4 G 93$ |  | 393A | $5 \mathrm{ADP11}$ |  | DB13-34 |
| 4G/280K | 797 | 2D21 20a3 EN91 | 5AL5 | 1377 | GZ34 |
| 4G/401A |  | 3022 | 5AP1 | 832 | 1805P1 |
| 4H22 |  | 4 B 32 3B22 | 5AQ4 | 1864 | GZ32 5V4G 5T4 |
| 4H72 |  | 872A | $5 \mathrm{AR4}$ | 1377 | U52 G234 |
| 4H73 |  | 673 | 5AZ4 | 1268 | U50 R52 |
| 4 H 88 |  | 8008 | 5B1 | 1018 | Z21 |
| 4H/135M | 2519 | 4X150A QV1-150A | 5B21 |  | 1164 |
| 4H/136M | 3991 | 4X150D QV1-150D | 5B/100A | 1369 | 4061A |
| 4H/182E | 1883 |  | $5 \mathrm{~B} / 151 \mathrm{~A}$ | 1080 | 4307A 307A |
| 4J/26 | 3779 |  | 5B/152D | 2659 | 3D21A |
| 4 J 27 | 3780 |  | 5B/250A | 124 | QVO5-25 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5B/251M | 428 | 5B/254M | 5 Y 4 GT | 1857 |  |
| 5B/252M | 391 | LS650 | $5 \mathrm{Z3}$ | 1861 | U50 A274A |
| 5B/253M | 499 |  | $5 \mathrm{5Z4}$ | 1864 | GZ330 R52U50 G230 |
| 5B/254M | 428 | 5B/251M | 5 L 4 GT | 2748 | GZ30 |
| 5B/255M | 391 | LS650 | 5/02K |  | 1652 M |
| 5B/256M | 499 |  | $6 / 30 \mathrm{~L} 2$ | 5264 |  |
| 5B/257M | 2220 |  | $6 / 30 \mathrm{~L} 2$ 6 6/3 | 5264 730 | B729 ECC84 6GA8 |
| 5B/258M | 2347 |  | 6A6 | 1867 | HLA2 41MTL 354V ACHL |
| 5B/300B | 834 |  | 6A7 | 1870 |  |
| 5B/502A | 1096 | 828 | 6A8 | 579 | X63 |
| $5 \mathrm{~B} / 600 \mathrm{~A}$ | 1081 | 4052 A | 6A8G | 578 | X63 |
| 5B/700A | 631 | 828 | 6A8GT | 580 |  |
| $5 \mathrm{BKP1}$ | 5168 | DH13-97 | 6AB4 |  | EC93 |
| $5 \mathrm{BP1}$ | 601 | 5 HP 1 | $6 \mathrm{AB5}$ | 843 | 6 N 5 |
| 5BP4/1802P4 | 836 |  | $6 \mathrm{AB7}$ | 1873 |  |
| 5C22 | 2520 | XH16-200 HT415 | 6AB8 | 1873 | ECL80 LN152 |
| 5C/100A | 26 | 813 QY2-100 | 6AB5G | 844 | Helso |
| 5c/450A | 1506 | ESP450 | 6AC5GT | 845 |  |
| 5C/500 |  | P300-1 | $6 \mathrm{AC7}$ | 660 | 1852 |
| 5 CP 1 | 600 | DG13-2 | $6 \mathrm{AD7}$ | 1878 |  |
| $5 \mathrm{CP1A}$ | 2191 | DG13-2 | 6AD8 |  | EBF81 |
| 5CP7 | 838 | 5CP7A | 6AE8 | 5115 | X79 |
| 5D21 | 2814 | P552/1E Q160-1 4-250A | 6AF4 | 5036 | EC93 |
| 5022 | 2964 | Q400-1 | 6AF4A | 5074 |  |
| 5D/100A | 1627 |  | 6AF6G | 847 |  |
| 5 ES 8 |  | YCC189 | 6AG5 | 848 | EF96 6BC5 |
| 5F22A | 2131 | 6156 QY4-250 | 6AG6 | 1438 | EL33 KT61 6M6 |
| $5 \mathrm{FC7}$ |  | YCC89 | 6AG7 | 1882 | EL821 |
| 5FP4A |  | MW13-35 | 6AH6 | 2521 |  |
| 5 FP 7 | 718 | MP13-1 | 6 6, 4 | 5126 | EC84 |
| 5FP7(Special) | 1789 | 5 FP 14 | 6AJ5 | 995 |  |
| 5 FP 7 A | 3959 | MF13-1 | 6AJ7 | 849 | 6AC7 |
| 5 FP 11 | 5070 | MW13-1 | 6A, 88 | 2128 | ECH81 6C12 |
| 5 H 4 | 840 |  | $6 \mathrm{AK5}$ | 850 | EF95 5654 E94F EF905 55916096 |
| 5H69A. |  | 869 B | 6AK5W | 2877 | M8100 |
| $5 \mathrm{HP1}$ | 3583 | $5 \mathrm{BP1}$ | 6aK6 | 1762 | EL91 |
| 5HP1A | 3583 | 5 BP 1 | 6AK7 | 1784 | 6AG7 |
| 5 J 23 | 542 |  | 6AK8 |  | EABC80 6LD12 DH719 6T8 6GX8 |
| $5 J 26$ | 3602 | JNP1-500W | 6AL3 |  | EY88 |
| 5 J 29 | 3842 |  | 6AL5 | 283 | EB91 6D2 D77 |
| 5330 | 3843 |  | 6AL5W | 2882 | M8212 5726 |
| 5 J 31 | 5844 |  | 6AL7 | 3708 |  |
| 5 J 32 | 1538 |  | 6AM4 | 5073 |  |
| 5 J 59 | 3952 |  | 6aM5 | 136 | EL91 N144 7D9 6P17 |
| 5J/180E | 445 |  | 6amb | 138 | EF91 6F12 277 |
| $5 \mathrm{JP1}$ | 1791 | 5JP1A | 6AN4 | 3989 |  |
| 5JP2A | 3918 | * | 6AN5 | 2854 |  |
| 5L/444 | 311 |  | 6an7 |  | ECH80 |
| 5LP1 | 741 | 2511A5 | 6AQ4 | 417 | EC91 : |
| 5MP1 | 740 | 2505A5 | 6AQ5 | 1862 | EL90 N727 |
| 5R4GY | 717 | 5R4WGA | 6AQ5W | 2883 | M8245 |
| 5R4WGY | 2835 |  | 6A26 | 2937 | EB'91 6AV6 6066 |
| 5T01A | 1868 | MF13-1 5FP7A | 6AQ8 |  | ECC85 6L12 B719 6463 |
| 5 T 4 | 1846 | U52 GZ34 | 6AR6 | 3613 | EL34 |
| 5T21 |  | 250TH | 6AS6 | 2522 |  |
| 5 T 33 | 635 | 833A TY4-350 | 6AS6W | 2884 | M8196 5725 |
| 5U4G | 575 | US2 GZ31 | 6AS7G | 2523 | A1834 6080 |
| 5U4GT | 8.41 | U52 | 6at6 | 452 | EBC90 DH77 |
| 508 |  | XCP82 | 6AU6 | 2524 | EF96 |
| $5 \mathrm{PP1}$ |  | DG13-22 | 6AU6WA | 4023 |  |
| 5UP7 | 2840 |  | 6AU7 | 5052 | ECC82 |
| 5 V 4 | 729 | GZ32 6AQ4 | 6AV3 |  | EY89 |
| 5W4 | 1849 |  | 6AV4 |  | EZ91 |
| 5W4G | 842 |  | 6AV6 | 2526 | EBC91 |
| 5W4GT | 503 |  | 6B4 |  | 6 A 3 |
| 5X4 | 1852 |  | 6B4G | 851 |  |
| 5 S 4 G | 1851 | " $550-252$ | 685 | 1885 |  |
| 5Y3G | 1854 | U50 R52 5AZ4 | 6B6 | 1887 | DH63 |
| 5I3GT | 1856 | U50 R52 5AZ4 | 6B7 | 1891 |  |
| 5I3WGTA | 4027 |  | 688 | 1893 | E8F32 |

TYPE
CV No.
6BA6
6BA6W
$6 \mathrm{AB7}$
$6 \mathrm{BC4}$
$6 B C 4$
$6 B C 5$
6BD7
6BD7A
6BE6
6BE7
6BG6
6BH6
6BJ5
6BJJ6
6 BK 8
6BL6
6BL7
6BL8
6BM6A
6BM8
6BQ5
6BQ67A
6BR5
$6 \mathrm{BR7}$

## 6BS4

6BS7
6BT4
6BW4
6BW6
6 BX 6
$6 \mathrm{BW7}$
$6 \mathrm{BY7}$
$6 \mathrm{C4}$
6C4WA
6 C5
6 C 5 GT
6C6
6 C 7
6 CBG
6 C 9
6 Cl 10
$6 \mathrm{C12}$
6 C 16
6 C 21
6 C 31
60 A 4
6CA7
6CB6
6 CD 7
6CF6
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5037
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TYPE

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|  | 3883 | EAF42 |
| 60U7 | 3888 | ECH42 6C10 |
| 6CV7 | 3882 | EBC41 |
| 6CW5 | 5094 | EL86 |
| 6CW7 | 5281 | ECC84 6L16 B319 |
| 6D1 | 1092 | EAF50 |
| GD2 | 383 | 6AL5 EB91 B77 |
| 6 D 4 | 1949 | EN93 |
| 6 D 6 | 1900 |  |
| 6 D 7 | 1776 |  |
| 6 D 8 | 1902 | X73M |
| 6DA5 | 5055 | EM81 |
| 6DA6 | 5156 | EF89 |
| $6 \mathrm{DC8}$ |  | EBF89 6FD12 |
| 6DG7 |  | EM85 |
| 6DJ8 | 5358 | ECC88 |
| $6 \mathrm{DL4}$ |  | EC88 |
| 6DL5 |  | EL95 |
| 6DR8 |  | EBF83 |
| 6DS8 |  | ECH83 |
| 6DU6 |  | EF89F |
| 6DX8 |  | ECL 84 |
| 6 E 5 | 1906 |  |
| 6 E 8 |  | X61 |
| 6EH7 | 5831 | EP183 |
| $6 \mathrm{EJ7}$ | 5810 | EF184 |
| 6ES6 |  | EF97 |
| 6ET6 |  | EF98 |
| $6 \mathrm{F1}$ | 3841 |  |
| 6F1 | 2939 |  |
| 6 F 5 | 1909 | H63 |
| 6F5G | 1908 | H63 |
| 6F5GT | 1910 |  |
| 6 F 6 | 1912 |  |
| 6F6G | 1911 | KT63 |
| 6F6GT | 731 | KT63 |
| $6 \mathrm{F7}$ | 1915 | 6F7E 6F7B |
| 6F8 | 1819 |  |
| 6F8G | 1917 |  |
| 6711 | 1901 |  |
| 6 F 12 | 138 | 6AM6 8D3 EF91 777 |
| 6F13 | 1829 | 1 T 5 GT |
| $6 \mathrm{F14}$ | 1919 |  |
| 6715 |  | EF41 |
| 6 F 16 | 3886 | EF41 W150 |
| 6 F 17 | 416 |  |
| 6 F 18 |  | W739 |
| $6 \mathrm{F19}$ | 1375 | 6 BY 7 EF85 |
| 6 F 20 |  | N79 W729 |
| 6 F 21 | 131 | EF92 |
| 6 F 22 |  | EF86 |
| 6 F 32 | 1116 |  |
| 6F33 | 329 |  |
| 6F33Special | 2209 | 6AS6 |
| 6F50R |  | 4X500A QT4-500A |
| 6FG6 |  | EM84 |
| 6 G 5 |  | 6 U 5 M 1 |
| 6G6G | 1926 |  |
| $6 \mathrm{G8}$ | 7029 | 1S004 |
| 6G8G | 856 |  |
| $6 \mathrm{G10}$ |  | FG105 XGQ2-6400 |
| 6G45 | 2215 | 5545 XR1-6400 |
| $6 \mathrm{H1}$ | 132 | V885 |
| $6 \mathrm{H5}$ |  | 615 |
| 6116 | 1930 | D63 EEB34 |
| 6H6G | 1929 | D63 |
| 6H6GT | 1931 | D63 |
| 6 J 4 | 1763 | N8248 |
| 6 J 4 WA | 5029 | M8232 |


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| 655 | 1933 | L63 | 6S7G | 1974 |  |
| 6J5G | 1932 | L63 | 6SA7 | 1966 |  |
| 6J5GT | 1934 |  | 6SA7GT | 1967 |  |
| 6 J 6 | 858 | ECC91 | 6SC7 | 1969 |  |
| 6 J 6 W | 2843 |  | 6SC7GT | 1970 |  |
| 6J6WA | 4031 | M8081 M8212 | 6SD7GT | 865 |  |
| $6 \mathrm{J7}$ | 1936 | 263 | 6SF5 | 1972 |  |
| 6J7G | 1935 | z63 | 6SF5GT | 1973 |  |
| 6J7GT | 1937 |  | 6SG7 | 1978 |  |
| 6J8G | 859 |  | 6SH7 | 594 |  |
| 6K4 | 2955 | EC70 | 6SH7GT | 595 |  |
| 6KG5 | 860 |  | 6SH7L | 5067 |  |
| 6K5GT | 861 |  | 6SJ7 | 591 |  |
| 6K6G | 1938 |  | 6SJ7G | 590 |  |
| 6K6GT | 1940 |  | 6SJ7GT | 592 |  |
| 6K7 | 1942 | W63 | 6SJ7WGT | 3619 |  |
| 6K7G | 1941 | KTW63 | 6SJTY | 866 |  |
| 6K7GT | 1943 |  | 6SK7 | 1981 |  |
| $6 \mathrm{K8}$ | 1945 | $\times 61$ | 6SK7GT | 1982 |  |
| 6K8G | 1944 | X65 | 6SL7GT | 1985 | ECC35 |
| 6K8GT | 1946 |  | 6SN7 | 278 | B65 |
| 6 K 25 | 2217 |  | 6SN7GT | 1988 | B65 |
| 6L5G | 862 |  | 6SNTHGT | 3627 | QA2408 |
| 6 L 6 | 1948 | KT66 | 6SQ7 | 1990 |  |
| 6L6G | 1947 | EL37 | 6SQ7GT | 1991 |  |
| 6L6GA | 2817 |  | 6SR7 | 867 |  |
| 6L6 HGA | 3618 | 5932 | 6SS7 | 1993 |  |
| 6L6WGB | 2796 | 5881 | 6ST7 | 1996 |  |
| 6L7 | 1951 |  | 6ST7G | 1995 |  |
| 6L6G | 1950 | KT66 | 6 SU7 |  | ECC35 |
| 6 L 12 |  | ECC85 | 6T4 | 3808 |  |
| 6 6.13 | 492 | 12AX7 ECC83 | 6T7G | 500 |  |
| 6L16 | 5281 | ECC84 | 618 |  | EABC80 DH719 6AK8 |
| 6L18 | 1899 |  | $6 \mathrm{TH8}$ |  |  |
| 6L19 | 1850 |  | 603 |  | EY80 |
| 6L34 | 417 | EC91 6AQ4 ${ }^{\text {E }}$ | 6U5/6G5. | 504 | 6M1 |
| 6LD3 | 3882 | EBC41 DH150 1 HH718 | 6U5G | 2747 | Y61 Y63 |
| $6 \mathrm{LD12}$ |  | EABC80 6AK8 6T8 | 6U7G | 706 | W63 KTW63 |
| $6 L D 13$ $6 L D 20$ |  | EBC81 6BD7A | $6 \mathrm{U8}$ | 5065 | ECF82 6678 |
| 6LY1 | 1920 | 1652M | 6V3A | 5021 |  |
| $6 \mathrm{M1}$ | 2747 | 6 U 5 EM 35 Y 61 | 6 V 4 | 1535 | Ez80 |
| 6M2 | 394 | EM34 6CD7 | 6V6 | 510 |  |
| 6M6 |  | EL33 6AG6 | 6V6G | 509 |  |
| 6N3 |  | EY82 | 6V6GT | 511 |  |
| 6N5 | 843 | 6AB5 | 6V7G | 870 |  |
| 6N6 | 1954 |  | 6W2 |  | 6X2 Ex51 R12 R12A |
| 6N6G | 1953 |  | 6\% $6 \times 2 \mathrm{l}$ | 512 426 | EY51 R12 R12A 6W2 U43 |
| 6N7 | 1957 |  | $6 \times 2$ | 426 | EYS1 R12 R12A 6W2 U43 |
| 6N7G | 1956 |  | 6 X 4 | 493 | EZ90 U78 |
| 6N7GT | 1958 |  | 6 X 4 W | 4005 | 6063 - |
| 6N8 |  | EBF80 WD709 | 6X5 6 | 573 | U70 E235 6z\%5 |
| 6P5 | 1819 |  | 6X5G | 572 |  |
| 6P7 | 864 |  | 6X5GT | 574 3734 | U70 Ez35 |
| 678 |  | OM10 | 6X5WGT | 3734 |  |
| 6P15 | 2975 | EL84 | 6 Y 3 | 1816 |  |
| $6 \mathrm{P17}$ | 136 | EL91 | 676G | 515 |  |
| 6 P 25 | 1853 | KT61 6A96 | $6 \mathrm{Z4}$ | 619 | 84 |
| 6 Q 4 | 1886 | EC80 | $6 \mathrm{Z5} 5$ | 871 |  |
| 685 | 1815 | 884 | 6ZY5 |  | $6 \times 5$ EZ35 U70 |
| 607 | 588 | DL163 | 6ZY5G | 873 |  |
| 607GT | 587 | DH63 | 627 G | 872 |  |
| 6R3 | 5905 | EY81 | 7 | 874 |  |
| 6R4 | 1865 | EC81 | 7A | 823 | WE7A |
| 6R6G | 1960 |  | 7A2 | 1174 | Pen4Va AC/Pen |
| 6R7 | 1963 | DL63 | 7A3 | 1181 | PenA4 AC2/Pen KT41 |
| 6R7GT | 1964 |  | 7A4 | 1770 |  |
| 6 S 2 | 2966 | EY86 | 7A6 | 876 |  |
| 6S2A |  | EY87 | 7A7 | 877 | W81 |
| $6 \mathrm{S7}$ | 1975 | KTW61 | 7A7LM | 877 | W81 |

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| 7A8 | 878 |  | 9-3 | 368 |  |
| 7AH7 |  | PCC84 | 9A1 | 1172 | VMP4G |
| 7AHP1 | 2352 | DG16-22 | 9 A 8 |  | PCF80 LZ319 30C1 |
| 7AHP7 | 2498 | DP16-22 | $9 \mathrm{AB4}$ |  | UC92 |
| 7AHP11 |  | DB16-22 | 9AK8 |  | PABC80 |
| 7AN7 | 5192 | PCC84 B 319 | $9 \mathrm{AQ8}$ |  | PCC85 |
| 7 B | 824 | HK257B | 9 D 2 | 1106 | VP1322 |
| 7B4 | 879 |  | 9 D 5 | 1053 | EFF36 OM5 |
| $7 \mathrm{B5}$ | 880 | EL22 KT81 | 9D6 | 131 | EF92 6F21 W77 |
| 7B5E | 880 |  | 9 HP 7 | 905 |  |
| 7B5LT | 881 |  | $9 . \mathrm{P} 1$ | 1783 |  |
| 7B6 | 882 | DH81 | 9 LD 1 | 254 |  |
| 7B6LM | 882 | DH81 | 9L01A | 464 |  |
| 7 7 7 | 522 | W149, | $9 \mathrm{LP7}$ | 2789 | 2 P 455 |
| 7B8 | 883 |  | 9MD6 | 262 |  |
| 788 LM | 883 |  | $9 \mathrm{MO6A}$ | 2108 |  |
| 7 BP 7 | 884 | 1813P7 7B4 | 9MW5AX | 2192 |  |
| $7 \mathrm{BP7}$ A | 3637 | 1813 P 7 | 9 PK 5 | 109 |  |
| 7C4/1203A | 2706 | 7C4 | 9 T 71 |  | 5770 |
| 7 C 5 | 885 | N148 | 948 |  | PCF82 |
| $7 \mathrm{C5LT}$ | 886 |  | 10 | 603 | 2 C 23 |
| $7 \mathrm{C6}$ | 887 | DH149 | 10Special | 906 | GL1602 |
| 7C6 | 1777 |  | 10C1 |  | X145 X118 |
| 7 D 5 | 1425 |  | 10014 |  | UCH81 X119 AD8 |
| 706 | 1672 | Pen3520 Pen36C | $10 \mathrm{D1}$ | 1300 | DD620 |
| $7 \mathrm{D8}$ | 889 | Pen13C | 10 D 2 |  | UAA91 |
| 7D8S | 1328 |  | 10D3 | 1419 | HAD1320 13DHA |
| 7 D 9 | 136 | EL91 6AM5 N144 | 10 F 1 |  | Z145 |
| 7 D 10 | 2127 | EL821 | $10 \mathrm{F9}$ |  | W118 W145 |
| $7 \mathrm{DJ8}$ |  | PCC88 | 10 F 18 |  | UF89 W119 |
| 7E5/1201 | 2704 | 1201 | 10 FD 12 |  | UBF89 |
| 7 E 6 | 891 |  | $10 \mathrm{KP7}$ | 3693 |  |
| 7E7 | 892 |  | 10L14 |  | B109 JCC85 |
| 7 F 7 | 893 |  | 10LD3 |  | DH118 DH142 UBC41 |
| 778 | 2968 |  | 10 LD 11 |  | DL145 |
| 7 F 16 | 3886 | EF41 | 10LD12 |  | UABC80 DH109 |
| 7 F 25 A |  | 4-1000A | 10LD13 |  | DH119 UBC81 |
| 7G7 | 894 | EF22 | 10M2 |  | UN4 UM35 |
| 7H7 | 895 | W148 | 10 P 13 | 1977 | N118 N145 UL41 |
| 7 H 57 |  | 857B | 10 P 18 |  | N119 UL84 45B5 |
| 7 J 7 | 897 |  | 10 PL 12 |  | UCL82 50BH8 |
| 7 K 7 | 896 |  | 10Y | 603 |  |
| 7MB1A | 1880 |  | 11 E 1 | 2798 | QQV03-10 |
| 7N7 | 898 |  | 11A2 | 2813 | $\mathrm{AC} / \mathrm{HL} / \mathrm{DD}$ M $\mathrm{HD}^{4}$ |
| 707 | 899 |  | 11 E 2 | 276 |  |
| 7 T 7 | 900 |  | 11E3 | 73 | V1120B |
| 757 |  | X81 X148 | 12A/112A | 1714 | EF9 |
| 7 P 7 | 3639 |  | 12A5 | 908 |  |
| 7W7 | 902 | 1282 | 12 A 6 | 525 |  |
| 7 Y 4 | 901 | U82 U149 | 12A6GT | 526 |  |
| 7 YP 2 | 5061 |  | 12A7 | 909 |  |
| $7 \mathrm{Z4}$ | 1790 | U82 | 12A8GT | 910 |  |
| 8A1 | 1124 | SP4 MSP4 | 12AC5 |  | UF41 W142 |
| 8A1 | 1282 | DG7-36 | 12AEP6 | 429 | MF31-55 C12R |
| 8 A3 | 3813 | WE8A | 12AH7G'T | 529 |  |
| 8A8 |  | $30 \mathrm{C1}$ PCF80 LZ319 | 12AT6 |  | HBC90 |
| 8D2 | 1108 | SP13C | 12AT7 | 455 | B309 ECC81 |
| 8 D 3 | 138 | EF91 6AM6 6Fit | 12AT7WA | 4024 | M8162 |
| 8 D 5 | 2135 | 6BR7 | $12 \mathrm{AU7}$ | 491 | B329 ECC82 |
| 8D6 |  | 6BW7 | 12AV6 | - | HBC91 |
| 8D7 |  | 6BS7 | $12 \mathrm{AX7}$ | 492 | ECC83 6L13 B339 |
| 8F66R |  | 6166 | 12AY7 | 3650 |  |
| 8G7 | 7030 | 15007 | 12B8GT | 911 |  |
| 8HG8 |  | PCF86 | 12 BA 6 | 1928 | HF93 |
| 8 T 21. |  | 9 C 21. | 128E6 |  | HK90 |
| 8T21R |  | 9622 | 1208 | 531 |  |
| 8T71R |  | 5671 | 12C8GT | 3827 |  |
| 8992 |  | 892 | $12 \mathrm{DP7}$ | 913 |  |
| 8792R |  | 892-R | 120p8 | 914 | 12DP7 |
| 9/01 | 254 | $30 \mathrm{D5}$ | 12E1 | 345 |  |


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| 12 E 12 | 398 | 715B P535/E | 1501 | 2956 | FC13C 15D2 |
| 12FP7 | 915 |  | 15 D 2 | 1107 |  |
| 12H6 | 916 |  | $15 \mathrm{DQ8}$ |  | PCL84 |
| 12.55 | 534 |  | 15E | 933 | 80234030 |
| 12J5GT | 535 |  | 15L01A | 1744 |  |
| 12 J 7 GT | 917 |  | 15MH3A | 174 | C15B |
| 12 K 7. |  | W76 | 15R | 934 | 4 B 308022 |
| 12K7GT | 918 | W76 | 16 A 5 |  | PL82 30P16 |
| 12 K 8 | 703 | X76M | 16A8 |  | PCL 82 |
| 12K8GT | 3927 |  | 16 A 23 |  | XY88 |
| 12L01A | 2162 |  | 17(thy) | 2957 | PL5557 |
| 12 MW 3 |  | C12D | 17BQP4 |  | MW43-69 |
| 12MW3A |  | C12B | 17 BIP 4 |  | AW43-80 |
| 1207 |  | DH76 | 17 C 8 |  | UBF80 |
| 1207GT | 547 |  | 17CVP4 |  | C17AA CME1706 AN43-88 |
| $12 \mathrm{S7}$ |  | UAF42 WD147 | 1723 |  | PY81 |
| 12SA7 | 537 |  | 18GV8 |  | PCL85 |
| 12SA7GT | 538 |  | 19BD |  | PY80 U152 19U3 |
| 12SC7 | 540 |  | 19 BR 5 |  | UM80 |
| 12SF5 | 919 |  | 19FL8 |  | $9 \mathrm{BF89}$ |
| 12SF5GT | 920 |  | 19 D 3 |  | UCH81 |
| 12SF7 | 921 |  | 19D8 |  | UCH81 |
| 12SG7 | 694 | 6SG7X | 19 E 2 | 265 |  |
| 12 SH 7 | 922 |  | 1963 | 277 |  |
| 12SH7GT | 3651 |  | 1996 | 371 | SU45 |
| 12 SJ 7 | 697 |  | 19H1 | 121 | V1920 |
| 12Su7GT | 698 |  | 19 H 4 | 2180 |  |
| 12SK7 | 543 |  | 1945 | 490 |  |
| 12SK7GT | 544 |  | 19 SU |  | PY82 |
| 12SLTGT | 924 |  | 1978 |  | FY82 U319 |
| 12SN7GT | 925 | B36 | 1943 |  | PY80 U152 |
| 12SQ7 | 546 | DH76 | $19 \times 3$ |  | PY80 U309 |
| 12SQ7GT | 547 |  | 19 Y 3 |  | PY82 U319 U154 |
| 12 SP 7 | 3655 |  | 20 A 1 | 1424 | TH4B AC/TH1 TH4 X41 |
| 12 SR 7 | 700 |  | 20A2 | 1848 | EN32 6574 |
| 12SW7 | 3666 |  | 2043 | 797 | 2 D 21 EN91 PL21 |
| 12 SX 7 | 3697 | 12SW7 B36 | 20CV | 5120 |  |
| 12SY7 | 3668 |  | 20 D 2 |  | X31 |
| 12T01A | 1869 | MF31-95 | 20 D 3 |  | 12AH8 |
| 12T03A | 2328 | MF31-95 | 20K | 1379 |  |
| 12X825 |  | 68510 | 21/2 | 3584 | PL81 N339 |
| 12 XPR 4 A |  | MW31-74 |  |  | 24E |
| 12 Y 4 | 523 |  | 24A | 936 | V2023 |
| 1273 | 927 |  | 24B1 | 6008 339 | V2023 |
| $13 \mathrm{CM5}$ 13 D 1 |  | XL36 | 24B2 | 339 125 |  |
| 13D1 | 423 | 25SN7GT | ${ }_{24 \mathrm{G}}^{24 \mathrm{C}}$ | 125 | 3 l 24 |
| 13D2 | 1988 | 6SN7GT | 24 G |  | KT33 |
| 13D3 | 2212 | 6158 | 25 A6 | 549 | KT33 |
| 13DHA |  | 11 D 3 HLDD320 TDD13C | 25A6G | 550 |  |
| 13E1 | 2377 |  | 25A7GT | 937 |  |
| 13PGA |  | 15D1 FC13C | 25B6 | 939 |  |
| 13SPA | 929 | 8D2 | 25B8GT | 940 |  |
| 13VPA |  | $9 \mathrm{D} 2 \mathrm{VP1322} \mathrm{VP13C}$ | 25E5 |  | PL36 30P4 |
| 14A7 | 3935 | 12B7 | 25 L 6 | 552 | KT32 |
| 14AF7 |  | XXD | 25L6GT | 553 | KT32 |
| 14AHP4A |  | AW36-80 | 25SN7GT | 423 | $13 \mathrm{D1}$ |
| 14 F 7 | 930 |  | 259 | 941 | HK24 3034 |
| 14K7 |  | UCH42 | 25 TG | 789 | HK24G 3C24 |
| 14 KP 4 |  | MW36-24 | 25 Y 4 |  | PY31 0312524 |
| 14L. | 1087 |  | 25Y5 | 942 |  |
| 14L7 |  | UBC41 DH142 10LD3 | 2574 |  | U31 PY31 25Y4 |
| 14LP4 |  | MW36-24 | 2525 | 555 |  |
| 14R7 | 3937 |  | . $25 \mathrm{Z6}$ | 558 |  |
| 14S7 | 3936 |  | 2586GT | 559 |  |
| 15 | 931 |  | 26 | 943 |  |
| 15A | 986 |  | 26A7GT | 3577 |  |
| 15A2 | 3576 | MX40 41MPG A80A | 26 AE6 |  | PY86 |
| 15A6 |  | PL83 N309 | 26D | 2727 | 3226 D |
| 15B | 326 |  | 26J | 2786 |  |
| 15CW5 |  | PL84 | 27 | 944 |  |


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| 27M1 | 337 | 931 A 1 P 21 | 41STH | 2508 | AC/TH1 X41 20A1 |
| 28D7 | 945 |  | 42 | 609 | 42E |
| 28D7GT | 946 |  | 42 E | 609 |  |
| 2901 | 430 |  | 42MP/Pen | 1181 | PenA4 7A3 PT4 KT41 |
| 29 D | 2728 | 3229 D | 42 MPT | 1325 |  |
| 30 | 604 |  | 420 T | 2511 | PenA4 7A3 Pr4 |
| 30TVIN | 1780 |  | 420 TDD | 2521 | AC2 PendD DDPP4B |
| 3045 |  | HL94 | 42SPT | 1444 |  |
| 30 C 1 |  | PCP80 9A8 L2319 | 43 | 2514 |  |
| 30 CA | 987 | V1040 | 43E | 2514 |  |
| 30C12P1 | 1746 |  | 4310 | 1039 | R2 US |
| 30D5 | 1860 |  | 44A/160M | 415 | TT15 |
| 30E7/P1 | 400 | V1063P1 | 45 | 610 |  |
| 30E8P1 | 2216 |  | 45A5 | 1977 | UL41 N142 |
| $30 \mathrm{HM} / \mathrm{HD}$ | 1140 | PX25 420XP D024 | 4585 |  | UL84 |
| 30L1 | 5192 | PCC84 3319 7AN7 | 45DS | 2528 |  |
| 30P16 |  | PL82 16A5 N329 | 45 IU | 2529 |  |
| 30P18 |  | PL84 15CW8 | 45SP | 596 | 384122 C 45 |
| 31 | 947 |  | 4525GT | 2530 |  |
| 31A3 |  | UY41 U142 U404 | 46 | 2531 |  |
| 31C2 | 2965 | RL7076-2B | 47 | 1772 |  |
| 32 | 711 | 32E | 49 | 2532 |  |
| 32A | 951 | 32G 32E | 50 | 2533 |  |
| 32E | 957 | 32G 32A | 50BM8 |  | UCL82 |
| 32G | 953 | 32A 32E | $50 C 5$ | 1959 | HL92 |
| 32J | 958 | 26J | 50L6G | 2534 | KT71 |
| 32L7GT | 984 | 32A | 50L6GT | 571 |  |
| 33 | 949 |  | 5076GT | 805 |  |
| 33A/100A | 1750 |  | 51 | 487 |  |
| 33A/138M | 18 | 7074A | 51 A 3 |  | WL927 |
| 33A/158M | 1884 |  | 52CG | 2986 | 203A |
| 33B/152M | 1540 |  | 52KU | 1863 | 5V4 GZ32 |
| 34 | 1751 |  | 53 | 2535 |  |
| 34 E | 1751 |  | 53A | 2536 | 3-50J4 |
| 35/51 | 1752 |  | 53 KU | 378 | U54 GZ37 |
| 35A5LT | 1753 |  | 54 KU | 729 | GZ32 |
| 35 L 6 | 561 |  | $54 \mathrm{NCP11}$ | 2885 | 54NCP11 |
| 35L6GT | 562 |  | 55 | 2537 |  |
| 35 T | 668 | DET18 | 55CG | 405 | 927 |
| 35TG | 1754 |  | 55N3 |  | UY82 |
| 3523 | 564 |  | 56 | 611 |  |
| 35Z3LT | 726 |  | 57 | 612 | XGF1-2500 |
| 35Z4GT | 2500 | U76 | 58 | 613 |  |
| $35 \mathrm{Z5}$ | 568 |  | 59 | 2538 |  |
| 36 | 1775 |  | 59A3 | 2962 | 1N38A |
| 37 | 606 |  | 59A4 | 2692 | 918 |
| 38 | 712 |  | 59D |  | WL. 928 |
| 38A | 712 |  | 59TAV3 |  | WL917 |
| 38A3 |  | UY85 | 60a3 |  | WL920 |
| 39/44 | 1771 | 329 | 61A3 |  | WL930 |
| 40 | 2501 |  | 61BC | 1979 |  |
| 40PPA |  | 7D3 | 61DV3 |  | WL929 |
| 40SUA | 1276 | 1 D5 U4020 UR1C | 618 | 2539 |  |
| 40Z5 | 2530 |  | 62BT | 1745 |  |
| 40Z5GT | 2530 |  | 62 DDT | 3882 | EBC41 6LD $36 \mathrm{CV7}$ |
| 41 | 608 | 41E | 62TH | 3888 | ECH42 6C10 |
| 41DS | 1131 |  | 62VP |  | EF41 6F16 60J5 |
| 41 FP | 2520 | ML4 AC/P | 63D | 2540 |  |
| 41MH | 2503 | MH41 484V HLA2 AC/2HL | 63ME | 2747 | 6M1 6U5G EMB5 161 |
| 41MFH | 1037 | 354 V AC/L MH4 | 63DS | 2731 | 3263DS |
| 41MHL | 2504 | 354V MH4 244V AC/HL | 63SPT | 1091 | EF50 Z90 |
| 41MLF | 1038 | 41MHL 244 V | 63 TP |  | ECL80 6ab8 |
| 41MP | 1458 | ML4 TT4 AC/P | 64ME |  | EM34 6CD7 |
| 41 MPG | 2505 | MX40 FC4 15A2 X42 | 64SPT |  | EF80 2719 6BW7 |
| 41MPT | 2506 |  | 64SU | 135 | EY91 |
| 41MRC |  | AC2HL | 65ME |  | EM80 |
| 41MSG |  | MS4B SP4 AC/SG | 66 KU | 3891 | EZ40 6BT4 |
| 41MTL | 1117 | $354 V$ | 67 PT | 3889 | El41 6CK5 |
| 41MVSG |  | SP4 | 70B1 | 470 |  |
| 41MXP | 1122 | PA1 | 71A | 2541 |  |

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| 71A3 | 1764 | CE2 1P30 |
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| 72 | 709 | RX232 3B24 |
| 72 R | 709 | RX232 3B24 |
| 73 | 2543 | RK73 RKR73 |
| 73R | 2543 | FK73 RKP73 |
| 75 | 614 |  |
| 75 B 1 | 284 | QS75-20 |
| 75 Cl | 4084 | 6065 M8161 |
| 76 | 615 |  |
| 77 | 616 |  |
| 78 | 2544 |  |
| 78DS | 1328 | Pen1340 Pen13C |
| 79 | 2545 |  |
| 80 | 617 |  |
| 81 | 2546 |  |
| 82 | 1773 |  |
| 82AV4 |  | WL919 |
| 83 | 618 |  |
| 83V | 2547 |  |
| 84 | 2548 | 84/624 |
| 84/624 | 619 | 84 |
| 84A3 |  | WL923 |
| 85 | 2549 |  |
| 85A1 | 431 | OE3 |
| 85A2 | 449 | QS83/3 OG3 |
| 85A4 |  | WL928 |
| 88D | 2185 |  |
| 89 | 833 | 89 Y |
| 89D | 2193 |  |
| 895 | 2750 |  |
| 89Y | 833 | 89 |
| 90AG | 2270 |  |
| 90aV | 2132 | VA50 |
| 90CG | 2133 |  |
| 90 CV | 2134 |  |
| 90EG4 | 1587 | 901A |
| $95 \mathrm{A1}$ | 286 | SM95 QS95/10 |
| 100B1 | 1199 |  |
| 100R | 2967 | 8020 |
| 100't | 2552 |  |
| 101D | 1778 | 3A/141A |
| 101F | 2553 |  |
| 102D | 1779 | 3A/142A |
| 104D |  | 3A/144A |
| 104V | 1161 | ML4 PA1 45P |
| 105 |  | PL105 XGQ2-6400 |
| 108 C 1 | 1833 | OB2 |
| 111A | 2554 |  |
| 112 | 1774 |  |
| 116Pen | 1337 |  |
| 117L7GT | 2556 |  |
| 117N7GT | 2557 |  |
| 11726GT | 2558 |  |
| 120A |  | 4120A |
| 121A | 2560 | 4121A |
| 121K |  | C12FM MN53-80 |
| 121VP |  | UF41 12AC5 |
| 122A | 2561 |  |
| 129 B | 2950 | 3P/270B 3Q/191E |
| 141DDT |  | UBC41 10LD3 14L7 |
| 141K |  | MW36-24 |
| 141TH |  | UCH42 |
| 1430 | 557 | D42 |
| 150B2 | 2225 | 6354 |
| 150 B 3 | 287 | QS150/15 |
| 150C2 | 1832 | OA2 |
| 15003 | 216 | OD3 |
| 150 C 4 | 1832 | OA2 |
| 152RA | 3878 | 2-150D |
| 154V | 1037 | MHL4 |

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| 161 | 708 |  |
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| 164V. | 2562 | MHL4 |
| 171DDP |  | UBF80 17C8 |
| 172K |  | MW43-69 17BQP4 |
| 173K |  | NW43-69 17BQP4 |
| 185 BT | 1980 | 185BTA |
| 200 | 2988 | HV18 |
| 202 | 1200 |  |
| 202STH |  | TH2321 |
| 203A |  | 4242A |
| 203B | 2986 |  |
| 204A | 2563 | UV204A |
| 205D | 1749 | 3B/151A |
| 205 E | 2566 | 3B/151A |
| 205F | 2567 |  |
| 210DET | 2569 | HL2 |
| 210 DTT | 1044 | TDD2A |
| 210 HF | 2570 | PM2HL |
| 210HL | 2571 | PM2HL |
| 210 HPT |  | KTS Pen220 |
| 210LF | 1021 | HLB1 |
| 210PG | 1043 | FC2 |
| 210RC | 2977 | HL2 |
| 210SPG |  | FC2 X22 |
| 210SPT | 1049 | Z22 |
| 210VPA | 2574 | W21 |
| 210VPT | 1083 | W21 |
| 210VPT | 171 |  |
| 211 | 620 | 4C21 |
| 211 | 2576 | 4 C 21 |
| 211H |  | T100-1 |
| 212E | 2577 | 4212E MY3-275 |
| 212K |  | MW53-80 |
| 215P | 1019 | PL15 |
| 215SG | 1018 | PM12M |
| 218 | 2579 |  |
| 220B | 1032 | B21 |
| $2201 P T$ | 1333 | Z22 |
| 220 C | 2580 |  |
| 220 HPT | 1118 | PN22A |
| 220LF | 1313 |  |
| 220LPT | 1195 | KTw63 |
| 2200 T | 1118 | PN22A |
| 220P | 1020 | PL2 |
| 220PA | 1022 | LP2 |
| 220PT | 1051 | Per:220A |
| 220RC | 1312 |  |
| 220SG | 1018 | Z21 |
| 220 TH | 1082 | H24 |
| 220 vs | 2582 | PM12M |
| 220VSG | 1028 | PM12M |
| 225 DU | 1454 |  |
| 228A | 734 | 4228A |
| 230xP | 1023 | P2 |
| 231D | 2584 | GAN5 |
| 238B |  | PL5555 |
| 239 | 1771 | 39/44 |
| 240 B | 2586 | B21 PM2BA |
| 2400P | 1035 | QP230 |
| 242A |  | ES85 4242A |
| 242B |  | 4242A ES85 |
| 242C | 2587 | 4242A ES85 |
| 244A | 2588 |  |
| 244V | 1038 | 354V |
| 249A |  | 2V/400A |
| 25014 | 2589 | RK63 |
| 250\% |  | WL806 |
| 256B | 2592 |  |
| 257A | 2593 |  |
| 258B | 2594 |  |


| TYPE | CV Ho | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
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|  | 2595 |  | 401CAHA | 389 |  |
| 259A | 2595 |  | 402 Pen | 1672 | Pen36C |
| 264A | 2598 |  | 405 BU | 2640 |  |
| 264 C | 2599 |  | 408A | 2205 | E4103-E-14 |
| 267B | 2600 | F267B | 408 BU | 2211 | 408CAHA |
| 270A | 30 | 4270A | 408 C F | 1152 | L410 |
| 271A | 2601 |  | 410 PT | 1167 | PM24A |
| 272 |  | 5557 XG5-500 | 415XP | 1154 | PM254 |
| 272A | 2602 |  | 417A | 2642 | 2 K 41 |
| 274A | 2602 | 4274A | 420 T | 2511 |  |
| 274B | 684 | 5U4G | $420 \times \mathrm{P}$ | 1040 | PX25 D024 |
| 275A | 2604 |  | 428T | 812 | CE230 428T |
| 278A | 4278 A |  | 431 U |  | R3 IW4-500 MU14 |
| 279A | 669 | 4279A | 436 A |  | A2674 |
| 282A | 2065 |  | 437A |  | 3A/167M |
| 293A | 3829 |  | 4410 |  | R3 U25 IW4/500 |
| 296A |  | WL849 | 442 BU | 1796 | R2 DW4-350 |
| 3 OA | 2608 | 4300A | 446 | 3725 | GL446 |
| 300B | 2609 | 9300 A | 446A | 932 |  |
| 302THA |  | TH2321 | 446B | 687 | $2 \mathrm{C40}$ |
| 303 | 2610 |  | 446 C | 2272 |  |
| 303A | 2986 |  | 450TH | 2572 |  |
| 304 | 1202 |  | 451PT |  | UL41 45A5 |
| 3047H | 2611 | HK304H WL535 | 460BU | 2644 | R3 DW4-500 |
| 304TL | 3580 |  | 464A | 688 | 2 C 43 |
| 305D |  | WLi801A | 471A | 3586 | 1B21A |
| 307A | 2612 | 4307A | 484V | 1678 | HLA2 AC2/HL |
| 310A | 2613 |  | 506 BU | 2645 | DW2 U10 |
| 3108 | 1781 |  | 522 | 999 | 3 C 22 |
| 311 |  | 4242A 242B 203A | 532 | 2647 |  |
| 311A | 2614 |  | 532A | 2648 | $1 \mathrm{B32}$ |
| 311 CH |  | T100-1 211H | 5410 |  | UL41 |
| 311 SU |  | UY41 31A3 | 560BU | 2645 | U10 DW2 |
| 313C | 2615 | 43130 | 576 | 3749 |  |
| 314A | 2616 |  | 578 | 2967 | 8020 100R |
| 316A | 683 | CL316A | $610 \times \mathrm{P}$ | 1154 | PM254 |
| 322A | 623 | RK28A 38803 | 615 | 3506 | HY615 |
| 323A | 2617 |  | 616 |  | KT66 |
| 327A | 2618 | 5637 3-10063/327A | 635 P | 1208 | PM256 |
| 327A | 926 | $4 \mathrm{B35}$ 12X825 | 644 | 670 | HK645 |
| 328A | 2619 | 3B28A | 648P1 | 746 |  |
| 329A | 2620 |  | 651 |  | PL5552A |
| 330B | 2621 |  | 652 |  | PL5551A |
| 331A | 2622 |  | 653B | 666 | 9004 |
| 332A | 2623 | WE322A | 657 |  | PL5551A 652 |
| 332Pen | 1401 | Cl33 | 672 |  | 3V/390A |
| 337A | 2624 | WE337A | 676 |  | 3V/490A |
| 338A | 2625 |  | 700A | 689 | 4 J 42 |
| 340A | 1782 |  | 700 B | 695 | 4 J 42 |
| 346A | 2626 |  | 700 C | 696 | 4 J 42 |
| 349A | 2726 | EL83 6CK6 | 700 D | 699 | 4 J 42 |
| 349B | 2628 |  | 701A | 677 | WE701A |
| 350A | 2629 |  | 702A | 678 | 702B |
| 350 B | 621 | 38101 L801 | 703A | 679 | 368AS |
| 351A | 2630 |  | 705A | 3587 | 8021 2T/450E |
| 351B | 2630 |  | 706A | 3588 |  |
| 352A | 2631 |  | 707A | 3589 | K307 |
| 354A | 2632 |  | 707B | 1768 | 2K28 |
| 354B | 1173 | 244V A30D AC/HL | 708A | 3590 |  |
| 357A | 691 | 4357A | 709A | 2652 |  |
| 357B |  | 3 C 24 | 710A | 62 | E1046 |
| 362A | 2633 |  | 713A | 3593 |  |
| 367 | 2634 |  | 714AY | 2653 |  |
| 368A | 710 |  | 715A | 2654 |  |
| 371B | 3511 |  | 715B | 2655 | P535/1E |
| 375A | 2636 |  | 715C | 598 |  |
| 388A | 2637 |  | 717A | 2594 | GS1630 |
| 393A | 2638 |  | 719A | 3596 | CE302 |
| 394A | 2639 |  | 720 C | 3907 |  |
| $400 T D D$ | 2521 | 6АН6 | 721 A | 3595 |  |
| 401A | 967 | E4103-B-4 | 722A | 3596 | CE302 |

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$723 A$ 723A/B 724A 724 B $725 A$
$726 A$ 726A 726 B
726 C 729A 731 A
732 A 800 801 802 803
804 805 806 807 W
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828 829 A 829B 830 B 832A 833 833A 836
837 838 841

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 845 W846 849
849 H 851 852 857 857 B 859 860 861
863 863
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865 865

866JR 868 869B 872 872A 872AX

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| 720 |  |
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| 1795 | KS9-20 |
| 2656 |  |
| 1793 |  |
| 722 | JP9-250D |
| 676 |  |
| 3597 |  |
| 3644 |  |
| 539 | $1 B 23$ |
| 850 | EF95 |
| 812 | $3 B 24$ |
| 2657 | RK30 |
| 621 | 38101 |
| 621 | VE310 |
| 622 | GL802 |
| 623 | RK28A 38802 |
| 624 | $4052 A$ |
| 625 | T100-1 |
| 2658 | GL806 |
| 124 | QVO5-25 5B/25OA |
| 3809 | QVO5-25 5B/25OA |
| 626 |  |
| 2660 | NU302 HY302 |
| 627 | WL810 |
| 628 | GL811 |

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$892 R$
$893 R$
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902 M
902P1
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906P1
908 A
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919 M
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931 A
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$946 A$
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$966 A$
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| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
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| 1547 | 1289 | IW4 R3 | 3226 D | 2727 | 26 D |
| 1561 | 1064 | DW4-500 | $3226 . J$ | 2786 | 26 J |
| 1601A | 1385 | E4504/B/16 | 32290 | 2728 | 29D |
| 1601 ABC | 440 |  | 3263DS | 2731 | 63DS |
| 1601E | 440 |  | 3530 | 405 | 55GG |
| 1603 | 652 | 606 | 3572 |  | 866A DCG4/1000G |
| 1608A | 1391 | E4504/E/16 | 3861B | 2519 | QEL150 4X150A QV1-150A |
| 1609 | 2712 |  | 3874A | 26 | QB2-250 813 QV2-100 |
| 1610 | 2713 |  | 3885 |  | DCX4/1000 |
| 1611 | 653 | 6F6 | 3945 |  | 845 |
| 1612 | 654 |  | 3951 | 2733 |  |
| 1613 | 655 |  | 3982 | 2680 | 1 P 23 |
| 1614 | 2714 | QV06-20 | 4003A | 2743 |  |
| 1616 | 656 |  | 4004B | 2329 |  |
| 1619 | 723 |  | 4006A | 1600 | CAT1 BW173 |
| 1620 | 657 | 6.77 GT | 4008A | 1601 | AW223 CAR1 |
| 1622 | 658 | 6L6G | 4011A | 1415 |  |
| 1625 | 659 |  | 4012A | 1445 | 4094A |
| 1626 | 1755 |  | 4013 C | 1605 |  |
| 1629 | 1756 |  | 4014A | 1603 |  |
| 1630 | 2715 |  | 4015A | 2735 |  |
| 1637 | 1052 | OM9 EL32 | 4017B | 1446 |  |
| 1642 | 875 | 2 C 21 RK33 | 4018G | 1733 |  |
| 1646 | 966 | E4504/M/16 | 4019A | 249 | 3A/107A |
| 1652N | 1530 | 6 LT 1 | 4019B | 1655 | AR11 425XD |
| 1655 | 2716 | $6 \mathrm{SC7}$ | 4020A | 1653 | AR12 3A/10BA |
| 1658M | 307 | 6LY1 | 4020B | 1657 | 3A/108B |
| 1672 |  | WL172 | 4021A | 1671 | 3A/109A |
| 1701 |  | PL5557 | 4021B | 1663 | AR20 3A/1C9B |
| 1729 | 2717 |  | 4022AR | 1664 | $3 \mathrm{~A} / 110 \mathrm{~B}$ |
| 1754 | 3618 | 5948 | 4022B | 1659 |  |
| 1805 P 1 | 832 | 5AP1 | 4030A | 1447 |  |
| 1806P1 | 817 | 3EP1 | 4030 D | 1447 |  |
| 181317 | 884 | 7RP7 2P468 | 4033A | 1220 | 3B/252B61P |
| 1814P1 | 790 | 2AP1 1814P1 | 4033AF | 2743 |  |
| 1821 | 1443 | DW2 | 4033L | 1688 | 3B/252B61P |
| 1851 | 599 | GL1851 | 4043C | 1448 |  |
| 1852 | 660 | 6AC7 | 4045A | 243 |  |
| 1853 | 1873 | $6 \mathrm{AB7}$ | 4046A | 244 |  |
| 1861 | 1039 | IW4-500 | 4047B | 1600 | CAT1 BW173 4006 |
| 1867 |  | IW4-350 R2 | 4049 C | 1355 |  |
| 1876 | 2718 |  | 40490 | 5 | AH221 RG4-1250 GV21 |
| 1877 |  | HVR2 | 4050AG | 2745 |  |
| 1904 |  | 3V/390A | 4052A | 1081 |  |
| 1907 | 3521 | XH25-500 | 4053 | 950 |  |
| 1908 P 1 | 1783 | $9 \mathrm{JP1}$ | 4053A | 967 |  |
| 1909A | 2291 |  | 4056A | 1025 | DET25 |
| 1924 | 2719 |  | 4059A | 1611 | MR4 |
| 1960 | 1792 | 5836 | 4060A | 1030 | T250 Ef30 |
| 1971 |  | WL207 | 4061A | 1369 |  |
| 2000 |  | 685061163 | 4062A | 1568 |  |
| 2000 T | 998 |  | 4064A | 2746 | DQ4A |
| 2050 | 2565 | EN32 20A2 | 4064B | 1749 | 872A DQ4 |
| 2051 | 1798 | 20A2 | 4066A | 1181 | KT41 TA3 APP4B |
| 2100A | 2967 | WL8020 RV12-100 | 4069A | 1372 | RK28 |
| 2211 BRA | 439 | 22/11BXA | 4074A | 18 | DET19 2034 RK34 |
| 2218BRA | 439 | $22 / 11$ BXA | 4074B | 1573 |  |
| 2269 Y | 2463 |  | 4077A | 33 | 40770 |
| 250143 | 602 | 906P1 | 4078A | 1420 | 869B 2V/531E |
| 2505A5 | 740 | 5MP1 | 4078 GA | 447 |  |
| 2511 A 5 | 741 | 5 LPI | 4081 | 2749 |  |
| 2529as | 1791 | $5 \mathrm{SP1A}$ | 4081A | 1797 |  |
| 3025 | 2722 |  | 4242 A | 25 | E585 UE311 |
| 3069 |  | 866A DCC4/1000G | 4313 C | 75 | 313 C |
| 3070 |  | 872A DCG5/5000GB | 4316A | 683 | 316A |
| 3071 | 2723 | 869B | 4317 | 1201 |  |
| 3072 |  | WL857B | 4328A | 2619 | 328A |
| 3078 |  | DCG9/20 6508 | 4328 D | 245 |  |
| 3209 | 2725 | 09.J | 4357A | 27 | 357A ES351 |
| 3220K | 954 | 20K | 4378 | 1254 |  |


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| 4407 | 1084 |  | 5718 | 3930 |  |
| 4409 | 995 | 6AJ5 | 5719 | 4008 |  |
| 4410 | 1087 |  | 5725 | 4011 | M8196 |
| 4412E |  | V1505 | 5726 | 4007 | EAA901S 6AL5W |
| 4502 | 1086 |  | 5727 | 4018 | 2D21 |
| 4602 | 956 |  | 5749 | 4009 | 6BA6W |
| 4605 | 1085 |  | 5750 | 4012 | 6BE6W |
| 4606 | 2764 |  | 5751 | 4017 |  |
| 4607 | 690 | RK48A | 5755 | 3755 | BTL2-1 TY6-5000B |
| 4608 | 1511 | * | 5762 |  | BIL2-1 T16-5000B |
| 4671 | 1059 | HA2 955 ES0111 | 5763 | 2129 | Qvo3-12 BW165 |
| 4672 | 4695 |  | 5771 |  | ${ }^{\text {BW165 }} 818190$ |
| 4673 | 2765 |  | 5783 | 3933 | 85A3 M8190 |
| 4687 | 2766 |  | 5783 WA | 4066 | M8190 |
| 4690 | 2767 |  | 5784 | 3986 | ECC70 |
| 4701A | 677 | 701A | 5787 5796 | 3897 3706 | $\begin{aligned} & \text { 5787WA } \\ & \text { XR1-1600 } \end{aligned}$ |
| 4702A | 678 | 702A | 5799 | 2678 |  |
| 4703A | 679 | 703A | 5799 | 2678 |  |
| 4705A | 3587 | 705A | 5800 | 2730 |  |
| 4706 | 3588 | 706A | 5800 | 2730 | ME1402 |
| 4707A | 3589 | 707A | 5814 | 4016 | 5814 WA |
| 4708A | 3590 | 708A | 5814 WA | 4032 | 5814 |
| 4713A | 3593 | 713A | 5829 | 3998 | E180F |
| 4717A | 3594 | 717A | 5840 | 3929 | EF732 |
| 4721A | 3595 | 721A | 5842 | 3789 | 1547 WE417A. |
| 4722A | 3596 | 722 A | 5846 | 2859 | WL5846 |
| 4726A | 676 | 726A | 5847 | 3905 |  |
| 5215A | 1081 |  | 5852 | 3943 |  |
| 5517 | 2609 | CK1013 | 5855 | 5957 | XR1-12 |
| 5544 | 2210 | XR1-3200 | 5861 | 273 | TT003-106 |
| 5545 | 2215 | XR1-6400 5686 | 5866 | 1924 | TB2.5-300 TY2-125 |
| 5556 | 2640 | 405 BU | 5867 | 1350 | TB3-750 TY30250 |
| 5557 | 2957 | XG5-500 | 5868 | 1351 | TB4-1250 TY4-500 |
| 5559 | 5027 | XG1-2500 571 | 5870 |  | DCG12/30 |
| 5586 | 3611 |  | 5876 | 2972 | DCa12/30 |
| 5620 |  | 4004B | 5886 | 495 | ME1401 |
| 5626 | 298 | FA15 |  | 2797 | QQVO6-40A 5894A |
| 5628 | 2952 | FA13 | 5894 5894 A | 2797 2797 | $\text { QOVO6-40A } 5894$ |
| 5629 | 2662 | PL5632 C3J ZT1011 8063 XR1-1600A | 5895 | 1835 | QQCO4-15 QQZO4-15 |
| 5632 | 5234 | PL5632 C3J zTl011 8063 XRI-1600A | 5896 | 2698 |  |
| 5636 | 3928 | EF7730 | 5902 | 4029 | EL71 |
| 5641 | 473 | EY70 | 5915 |  | EH900 |
| 5642 | 2241 | DY70 | 5920 |  | E900C |
| 5643 | 474 | EM70 | 5923 |  | TBW6/6000 |
| 5644 | 3987 |  | 5924 |  | TBL6/6000 |
| 5647 | 3916 |  | 5932 | 3899 | 18L6/600 |
| 5651 | 2573 | QS1209 85A2 | 5933 | 3517 |  |
| 5651 WA | 4008 | M8098 | 5939 | 3545 | WL5939 |
| 5654 | 4010 | 6AK5WA | 5948 | 3518 | 1754 |
| 5656 | 2970 |  | 5949 | 3521 | XH25-500 |
| 5657 | 3958 |  | 5962 | 2383 | BR191 |
| 5663 | 3610 |  | 5963 | 3900 |  |
| 5664 | 1765 | $3 C 31 / \mathrm{C1B}$ 889 R | 5976 |  | KS7-85A |
| 5667 5670 | 2687 | 889R | 6002 | 3902 | QK221 |
| 5672 | 2238 | DL620 | 6005 | 4019 | M8245 6AQ5W |
| 5675 | 2971 |  | 6007 |  | DL67 |
| 5676 | 2239 | XFR3 | 6008 |  | DF67 |
| 5678 | 2254 | DF60 | 6021 | 3986 | ECC70 |
| 5683 | 2574 | 6014 | 6024 | 3539 | ATR387 |
| 5684/C3J/A | 2753 | 6011 | 6027 | 3997 | JP9-15 2J42A |
| $5685 / \mathrm{C} 3 \mathrm{JA}$ | 2574 | 210VPA | 6038 | 3628 | 1835A |
| 5686 | 3612 |  | 6057 | 4004 | 12AX7 M8137 |
| 5687 | 2578 |  | 6058 | 4025 | QA2404 M8079 |
| 5691 | 3705 |  | 6059 | 4006 | 6BR7 |
| 5692 | 3942 |  | 6060 | 4024 | M8126 |
| 5693 | 3699 |  | 6061 | 4043 | 6BW6 |
| 5696 | 3512 | EN92 | 6062 | 4039 | M8091 |
| 5702 | 3895 | 5702WA | 6063 | 4005 | 6X4WA |
| 5704 | 2874 | EA76 6489 | 6064 | 4014 | S6F12 QA2403 |


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| 6065 | 4015 | M8161 | 6922 | 2492 | E88CC |
| 6067 | 4003 | M8136 | 6923 | 5140 | EA52 |
| 6073 | 2903 | OA2 | 6939 | 2466 | QQE02-5 QQVO2-6 |
| 6074 | 4028 | OB2WA | 6960 |  | QBW7/800 TY7-600W |
| 6075 |  | KPW5/3500 | 6961 | 5239 | QBL7/800 TY7-6000A |
| 6076 | 5219 | KS7-85A QB15/3500 CR1100 | 6972 |  | JP9-75 |
| 6077 |  | TBW12/100 TY12-50A | 6977 | 6094 | DM160 |
| 6079 | 3522 | QY5-500 | 7001 | 4067 | M8167 |
| 6080 | 2984 |  | 7004 |  | TBL2/300 TDD2-300A |
| 6083 |  | PE1/100 | 7028 |  | JP9-2.5 |
| 6084 | 2729 | E8OF | 7034 | 2519 | OV1-150A |
| 6085 | 5989 | E80CC | 7035 | 3991 | 4X150D QV1-1500 |
| 6088 | 2699 |  | 7036 |  | 5915A |
| 6095 | 4019 | 6AQ5W M8245 | 7062 | 5766 | E18CC |
| 6096 | 4010 | MB100 5654 6AK5W 6096 | 7090 |  | JP2-0.2D |
| 6097 | 4007 | M8212 5726 6A25W 6097 | 7091 |  |  |
| 6100 | 4022 | M8480 | 7092 |  | TB5/2500 ${ }^{\text {E181CC }}$ |
| 6101 | 4031 | 6J6WA M8081 | 7118 |  | E181CC |
| 6106 | 2996 | HL41D | 7119 |  | E182CC |
| 6111 | 3961 |  | 7125 |  | EBF89 ${ }^{\text {d }} 18 \mathrm{CB}$ |
| 6117 | 3906 |  | 7136 |  | JN2-2.5W |
| 6130 | 3629 | 3C45 XH3-045 | 7292 |  | EF72 |
| 6131 | 3632 |  | 7432 7433 | 4501 | EFF73 |
| 6132 | 4055 | 6CH6 | 7433 7434 | 4503 | EF731 |
| 6135 | 4022 | м8080 | 7434 7435 | 4504 | EA76 |
| 6146 | 3523 | QYO6-20 | 7435 | 4505 |  |
| 6155 | 2130 | QX3-125 | 7436 | 4505 | S1966 |
| 6156 | 2131 | QY4-250 | 7437 7438 | 4508 | EF70 |
| 6158 | 4068 | 13 D 3 | 7438 7457 | 1070 | GD100B |
| 6161 | 3901 | 55805946 | 7457 | 824 | adiob |
| 6187 | 4011 | M8196 | 8001 |  |  |
| 6189 | 4003 | 12AUTWA M8196 | 8003 | 2768 | $\begin{aligned} & \text { T100-1 } \\ & \text { DCG5/5000GS } \end{aligned}$ |
| 6199 |  | 150AVP | 8008 |  | DCG5/5000GS |
| 6201 | 3508 | ECC801S | 8008 AX | 62 | E1046 |
| 6205 | 2432 |  | 8012 | 662 | GL8012 |
| 6218 | 5734 | E8OT |  | 716 | 8013 |
| 6227 |  | E8OL | 8013 A 8016 | 541 | 183GT R6158A |
| 6252 | 2799 | QQVO3-20A TT20 | 8020 | 2967 | RY12-100 |
| 6261 | 2901 | EF86 7729 | 8021 | 3587 | 378A |
| 6268 | 1787 | 4C35 | 8022 | 944 | 27 |
| 6279 | 2520 | 5C22 | 8023 | 933 | 4 C 3015 A |
| 6291 |  | 150AVP 6199 | 8025 | 663 | 3E29 |
| 6305 |  | 2T/270K | 8025A | 3915 |  |
| 6354 | 2225 | 150B2 QS1200 | 8026 | 92 | 4 C 27 |
| 6360 | 2798 | QQv03-10 | 9001 | 1757 |  |
| 6370 | 5106 | E1T | 9002 | 664 | GL9002 |
| 6373 | 2105 | DL70 | 9003 | 665 |  |
| 6374 | 2235 | EY84 | 9004 | 666 | 653B |
| 6375 | 2295 | DC70 | 9005 | 667 | GL9005 |
| 6391 | 476 | EF74 | 9006 | 2967 | 100R WL578 |
| 6410 | 3903 | QK338 | 9901 |  | 5867 |
| 6488 | 466 | EF73 | 9903 |  | 5894 B1135 |
| 6489 | 469 | EA76 | 13077 | 2770 |  |
| 6516 | 4063 | M8082 | 38116 |  | 1163 |
| 6538 | 2236 | Z800U | 38166 |  | DCG4/1000G |
| 6539 | 2255. | X801U | 38217 | 2957 | 5557 XG5-500 |
| 6574 | 2253 | EN32 | 68503 | 2773 | 68510 |
| 6617 |  | TBW12/25 TY 12-25W | 68504 | 2774 |  |
| 6618 |  | TBL12/25 TY12-25A | 68506 | 2775 | 1163 |
| 6627 | 4028 | OB2WA M8224 | 68508 |  | 1164 |
| 6686 |  | E81L | 68510 | 2776 |  |
| 6687 |  | E91H | 68530/U600 | 3756 | 1048 |
| 6688 | 3988 | E180F | 178148 |  | 11636850638116 |
| 6689 |  | E83F | 180238 |  | 116468508 |
| 6693 |  | DCG6/18 RG4-3000 | 189048 | 2777 | 1163 |
| 6700 | 5277 | ET51 | 189049 |  | 116368506 |
| 6778 | 468 | EC70 | 217283 |  | 116418023868508 |
| 6779 | 2434 | 2803U | 289414 |  | 116318904938116 |
| 6866 |  | E702 | 289416 |  | 116328941418904938116 |
| 6870 | 5121 |  | 766766 |  | 116421728318023868508 |
|  |  |  | 859483 | 2779 | $4 \mathrm{B36} 20 \times 672$ |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A11B |  | 1W4-35 R2 | AC1S | 2819 |  |
| A11C |  | 1W4-500 R3 | AC/S2 | 1677 | SP4 |
| A11D |  | 1W4-350 R2 | AC/S2Pen | 1282 | HP4101/7 |
| A20B |  | 2D4A | AC/SG | 2822 | 8A1 |
| A23A |  | TDD4 | AC/SG AC/SG |  | E1046 |
| A27D |  | Pen4DD | AC/SG AC/SGM | 1190 | AS5124 |
| A30D |  | 354V | AC/SGM | 1677 | S4VB MS4B |
| A36B |  | TH4B | ACSH |  |  |
| A36C |  | TH4B | AC/SL |  | ${ }_{\text {SP4 }}$ /S2Pen |
| A40 | 2800 | HA. | AC/SP1 | 2820 | AC/S2Pen |
| A40/N3 | 2801 |  | AC/SP3 | 2923 |  |
| A41 | 1175 | ZA1 AP4 | AC/SP3RH | 1430 |  |
| A50A |  | SP4 8A1 | AC/S1VM | 1165 |  |
| A50B |  | SP4B | $\mathrm{AC} / \mathrm{TP}$ | 1718 |  |
| A50M |  | 9 A 1 | ACT6 | 2825 |  |
| A50P |  | VP4B | ACT9 | 28 |  |
| A70B |  | Pen4Va 7A2 | ACT10 | 2827 |  |
| A70C |  | PenA4 | ACT14 |  | BR140 |
| A70D |  | PenA4 | ACT16 | 1431 |  |
| P70E |  | PenB4 | ACT17 | 225 |  |
| A80A |  | FC4 15A2 | ACT19 | 379 |  |
| A207 |  | ESU77 | ACT22 | 257 |  |
| A373 | 1184 |  | ACT23 | 288 |  |
| A800 | 412 |  | ACT24 | 240 |  |
| A819 | 1698 |  | ACT25 | 436 |  |
| A901 | 1722 |  | ACT27 | 2163 |  |
| A915 | 1462 |  | ACT28 | 2163 |  |
| A915Met | 2803 |  | ACT29 | 28 | BR1138 |
| A915AMet | 2804 |  | ACT30 | 2383 | 5762 |
| A924 | 2805 |  | $\mathrm{AC} / \mathrm{TH} 1$ | 2830 | TH4B |
| A1065M | 1343 |  | $\mathrm{AC} / \mathrm{VH}$ | 3788 | VP4 |
| A1320 | 51 | Y65 | AC/vP | 2269 | ME1401 5802 |
| A1714 | 408 |  | $\mathrm{AC} / \mathrm{VPB}$ | 2823 | VP4B |
| A1820 | 409 |  | $\mathrm{AC} / \mathrm{VP} 1$ | 518 | VP4A/5 |
| A1834 | 2523 | RY12-100 | AC/VP2 | 2832 | VP4B |
| A2087 | 2171 |  | AC/VS | 1165 |  |
| A2134 | 2179 | E2134 | AC/Y | 1174 | KT42 7A2 |
| A2272 | 2318 |  | AC/YY | 1326 | APP4E (B4) |
| A2293 | 4079 | $11 \mathrm{C1}$ | AC/Z | 1181 | PenA4 |
| A2426 | 4082 |  | $\mathrm{AD} / \mathrm{P} 4$ | 1198 | ACP4 |
| A2521 | 2453 | 6CR4 | AF3 | 2833 |  |
| A2688 | 4081 |  | AF350 | 1252 | 4212E 14D13. |
| A4501 |  | QE06-50 | AFH202 | 12 | E1191 |
| A4229 | 824 | HK257A | AFX203 | 2868 | C1A |
| AC044 | 1168 | P12/250 | AFX212 | 1949 | EN93 6D4 |
| AC2/HL | 2806 | MH41 904V | AFX234 | 5023 | EN93 6D4 |
| AC2/HLMet | 2807 | HLA2 904V | AG866A | 32 | DCG4/1000G RG3-1250A |
| AC2/Pen | 2808 | PenA4 7a3 | AG872A | 642 | DCGS/5000GB |
| AC2PenDD | 519 | PT4D DN41 | AG8008 |  | DCG5/5000GS |
| AC/4Pen | 1326 | Pen4B | AGR9950 |  | 5869 |
| AC/5Pen | 2809 | PT10 N41 | AGR9951 |  | 5870 DCG12/30 |
| AC/5PendD | 1196 |  | AH200 | 2168 |  |
| AC/Pen | 1189 |  | AH201 | 32 | ESU866 RG3-250A 866A |
| AC/7 | 1683 | MKT4 | AH205 | 532 | 857B |
| AC104 | 1161 | 104V | AH211 | 532 | GU24 |
| AC/DD | 1170 | SD41 | AH213 | 2732 | 869B |
| AC/DDT | 2813 | TDD4 | AH217 | 642 | DCG5/500G6B 872A |
| $\mathrm{AC} / \mathrm{HL}$ | 2811 |  | AH221 | 5 | RGF4-1250 4049D GU21 |
| AC/HLMet | 2812 | 354V | AH238 | 1629 | RG3-1250 |
| AC/HL/DDD | 2813 | $11 \mathrm{~A} 2 \mathrm{DDT4}$ | AL1 | 159 |  |
| AC/HL/DD |  | TDD4 | AL22-10 | 5300 | 2273P ORP33 |
| $\mathrm{AC} / \mathrm{HP}$ | 1282 | SP4 | AL60 | 9 |  |
| AC/L | 1732 | TT4 LF4 41FP | AN1 | 1128 | ME1502 GT1C |
| ACP | 2815 | PA1 4MXP 054 TT4 | AP4 | 175 | XSG1.5 |
| AC/P | 1179 | ML4 41FP TT4 | APP4A | 1683 | 7A2 |
| AC/Pen | 1174 | P4BA 7A2 | APP4B | 1181 | 7A3 PenA4 |
| ACPT | 2818 |  | APP4C | 1684 |  |
| AC/P4 | 207 |  | APP4G | 2836 |  |
| ACPT8 | 2818 |  | APP4E |  | PenB4 |
| AC/Q | 1326 | B4 Pen428 | APV4 | 1039 | 1W4-350 R3 |

TYPE
CV No. EQUIVALENTS

| APV4100 |  | 1561 |
| :---: | :---: | :---: |
| AR63 | 3710 |  |
| AR300 | 2839 | 4212E |
| AS4120 |  | SP4 |
| ASG04A |  | BL1267 Z300T |
| ASG5017 |  | PL5557 TQ2 |
| ASG5023 |  | PL3C23 |
| ASG5025 |  | PL3C23 |
| ASG5121 | 789 | PL2D21 EN91 |
| ASG6011 |  | PL5684 C3JA |
| AT4 | 1171 | HA1 A40 |
| AW43-80 |  | 17BTP4 |
| AW53-80 |  | 21 CLP4 |
| AX4/125A |  | 6155 QB3/300 |
| AX105 |  | PL105 |
| AX224 | 1835 | DCX4/1000 3B28 CXU1 |
| AX230 | 2518 | DCX4/5000 4B32 GXU2 |
| AX9900 | 1924 | 5866 TB25/300 T350-1 |
| AX9902 | 1351 | 5868 TB4/1250 |
| AX9903 | 2797 | 5894 QQEO6-40 |
| AX9904 | 3926 | 5923 TBW6/6000 |
| AX9904R |  | 5924 TBL/6000 |
| AX9905 | 1838 | 5895 QQCO4/15 QQZO4-15 |
| AX9906 | - | 6077 TBW12/100 TY12-54W |
| AX9906R |  | 6078 TBL $12 / 100$ TY12-50A |
| AX9907 |  | 6075 QBW5/3500 QY5-3000W |
| AX9907R | 5219 | 6076 QBL5/3500 QY5-3000A |
| AX9908 | 3522 | 6079 QB5/1750 QY5-S10 |
| AX9909 |  | 6083 PE1/100 |
| AX9910 | 2799 | 6252 QQEO3/20 QQVO3-20A |
| AX9911 | 1787 | 6268 4C35 XH8-100 |
| AX9912 | 2520 | 6269 5C22 XH16-200 |
| AZ1 | 2860 | A231 |
| AZ2 | 2861 |  |
| AZ31 | 2862 | U143 |
| AZ32 | 2861 |  |
| AZ41 | 3892 |  |
| B1C/1C | 2734 | 4003A 5A |
| B1C/1E | 433 |  |
| B2A | 2565 | 2050 |
| B4B/1C | 536 | 4120/AA |
| B6 | 2140 |  |
| B6E | 2141 |  |
| B12 | 494 |  |
| B12E | 2142 |  |
| B21 | 2864 | $240 \mathrm{BPM2BA}$ |
| B24 | 2143 |  |
| B24E | 2144 |  |
| B30 | 2865 |  |
| B36 | 925 | 12SN7GT |
| B63 | 278 | 6SN7GT |
| B65 | 278 | 6SN7GT |
| B109 |  | UCC85 |
| B142 | 1927 |  |
| B152 | 455 | 12AT7 B309 ECC81 |
| B217 | 1021 | HLB1 D210 |
| B228 | 1673 | FM2HL |
| B230 | 1032 | FD220 |
| B240 | 1032 | PM2B |
| B262 | 1018 | Z21 56215 |
| B309 | 455 | ECC81 B152 12AT7 |
| B319 | 5192 | PCC84 |
| B329 | 491 | ECC82 |
| B339 | 492 | 12AX7 ECC83 |
| B719 |  | ECC85 6AQ8 |
| B1109 | 2736 |  |
| B1135 |  | 58679901 TY4-400 |
| B2048 |  | X2818 |
| B2049 |  | X2918 |

TYPE

| BA9-20 | 2393 | 7635 |
| :---: | :---: | :---: |
| BD78 | 2125 | - |
| BLC/ 1 C | 433 |  |
| BK24 |  | 5552A |
| BK34 |  | 5553B |
| BK42 |  | 5551A |
| BK44 | 1742 |  |
| BK46 |  | 5555 |
| BL6 6 | 1102 |  |
| B0L014 | 984 | S2A |
| BPMO4 |  | 6AQ5 |
| BR1 | 692 | OZ4 |
| BR29 | 2687 | ML5667 889 |
| BR152 | 28 | ACT9 |
| BR153 | 2159 |  |
| BR161 | 2322 |  |
| BR175 | 904 | ESA892 |
| BR179 | 2323 |  |
| BR191 | 383 |  |
| BR191B |  | 5762 TY6-5000B |
| BR1130 |  | 5736 |
| BS4 | 189 |  |
| BS4A | 1859 |  |
| BS5 | 233 |  |
| BS48 | 460 |  |
| BS52 | 1841 |  |
| BS60 | 527 | DA60 |
| BS62 | 1858 |  |
| BS64 | 1743 |  |
| BS82 | 463 |  |
| BS84 | 462 |  |
| BS92 | 461 |  |
| BS100 | 1219 | DA100 |
| BT5 | 1147 | 5559 XG1-2500 |
| B19 | 1145 |  |
| BT9A | 1146 |  |
| BT9B | 13 |  |
| BT19 | 1144 | XG2-540 |
| BT25 | 1147 | 21N13 |
| BT45 | 22 |  |
| BT69 |  | $6786 \mathrm{DCG7} / 100 \mathrm{BXG15-12}$ |
| BT75 | 489 |  |
| BI79 | 372 | 3 C 45 FX227 |
| BT83 | 1120 | 5622 XH16-3200 |
| BT91 | 2210 | 5544 XR1-3200 |
| BTR32 | 458 |  |
| BTR34 | 459 |  |
| BU100/6 | 2867 |  |
| BY | 1600 | CAT1 4006A |
| BW129 |  | ESW5000 |
| BW140 | 2871 | CAT6 |
| BW153 | 2872 | CAT9 |
| BW175 |  | ESW892 |
| C1A | 2868 | AFX203 |
| C1B | 1765 | 5664 |
| C1C | 1400 |  |
| C1K | 2790 |  |
| C3J | 5234 | 56328063 ZT1011 |
| C3JA | 5234 | 56848063 XR1-1600A |
| C6A | 714 |  |
| C9A |  | CRM92 |
| C10B |  | UR1C V20 1D5 BTY36 |
| C10SS/2G | 2794 |  |
| C12B | 2315 |  |
| C12A |  | CRM121 |
| C12FM |  | MW31-14 |
| C12R | 429 | 12AEP26 |
| C14HM | 3535 |  |
| C16GS/2G | 2745 | 4050AG |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C17-1A |  | MW43-69 | CE226 |  | 1163 |
| C17-2A |  | MW43-69 | CE230 | 819 | PL33 N16 |
| C17-4A |  | MW43-80 | CE235 |  | 1164 |
| C17AA |  | AW43-88 | CEE309 | 2957 | PL5557 TQ2 X65-500 |
| C20C |  | 10 D 1 | CE311 |  | PL3C23 TQ1/2 |
| C21-1A |  | MW53-80 | CE866 |  | DCG4/1000G |
| C21AA |  | AW53-88 | CE872A |  | DCG5/5000GB |
| C21kM |  | MW53-80 | CE927 |  | $3546 \mathrm{PW} / \mathrm{O} 2$ |
| C30B |  | HL13C 4D | CF1 |  | SP13 |
| C36-24 |  | MW36-24 | CF2 |  | VP13A |
| C36A |  | TH21C | CF7 |  | SP13 |
| C50B |  | SP13C 8D2 BTY69 | CG1-C | 425 | OA74 |
| CSON |  | 9 D 2 | CG1-E | 425 | CEX44 |
| C70D |  | $7 \mathrm{D6}$ | CG4E |  | 2X105G |
| C80B |  | FC13C 1501 | CG14 | 496 |  |
| C143 | 26 | 813 QYZ-100 | CK1 |  | PC13 |
| C144 | 2666 | QQVO7-40 829B | CK502AX | 385 | PL71 |
| C178A | 2797 | 5894 QQVO6-40A | CK505AX | 443 | PF70 |
| C180 | 788 | 832A QQVO4-15 | CK506AX | 387 | PL72 |
| C200 | 2988 | HV18 NU200 | CK546DX |  | DL651 |
| C203A | 2986 | 203A HD203A | CK549DX |  | DF651 |
| C243N | 1118 | KT2 PT2 22A | CK707 | 2848 |  |
| C866 |  | DCG4/1000G | CK1005 | 2874 | 1005 |
| C8660 |  | DCG4/1000G: | CK5672 |  | 5672 |
| C872 |  | DCG5/5000G | CK5704 | 2847 | 5704 |
| C1108 | 2130 | 6155 QV3-125 | CK5726 |  | 5726 |
| C1111 | 427 | 5D21 7156 | CK5886 |  | DF703 |
| C1112 | 2131 | 6156 QV4-250 | CL4 | 2875 |  |
| C1123 | 3543 | 4D32 | CL33 | 1401 | 332Pen |
| C1133 |  | $4 \mathrm{PR60}$ | CMG8 | 1432 | GS26 |
| C7501 | 2869 | $3 \mathrm{JP7}$ | OMG22 | 1473 | 5266 |
| CAA322 | 1904 |  | OMG25 | 242 | 5566927 |
| CAR1 | 1601 | 4222B AW223 | OGG25 | 250 |  |
| CAR4 | 1602 |  | CMG25 | 1472 |  |
| CAT1 | 1600 | 4006A BW173 | CTR139 |  | 872R |
| cat2 | 1606 |  | CR176 | 2324 |  |
| cat6 | 2871 | TX12-12W | CR1100 | 5219 | 6076 QBL5/3500 Qx5-3000A |
| Cat9 | 2872 | BW153 | CR1101 |  | 6181 |
| Cat17 | 533 |  | CRM91 |  | C9A |
| Cat20c | 421 | BW187 | CRM92 |  | C9A |
| CBL31 | 1463 |  | CRM121 |  | C12A |
| CC2 |  | HL13 | CRT4/1 | 2880 |  |
| CC3D | 2870 |  | CRT5/1 | 487 |  |
| CC3L | 2266 |  | CS2-A | 103 |  |
| CC81E |  | 6201 | CS2-C | 1907 |  |
| CC82E |  | 6067 | CS3-A | 253 |  |
| CCE3 305 |  | $3 \mathrm{~V} / 340 \mathrm{~B}$ | CS3-B | 1844 |  |
| CE1 |  | 918 | CS4B | 2258 |  |
| CE1C | 2692 | 918 | CT1-500 | 1144 | 3V/340B XG2-500 |
| CE1D | 2680 | 1 P 23 | CT1/2500 |  | PL5559/57 |
| CE1E | 2680 | 918 | CHS24A | 1968 |  |
| CE2 | 1764 | 1 P 30 | CX25 | 1766 |  |
| CE3 |  | 1 P 31 | Cx1113 | 2851 | 3 D 22 |
| Ce4 |  | 1 P 36 | CXT1 | 2389 |  |
| CE5 |  | 1 P 35 | CxT2 | 2400 |  |
| CE11v |  | 917 | CY1 |  | G2080 |
| CE20 | 1474 | CE25 Nu20 | Cr1C |  | UR1C V20 |
| CE21 |  | 920 | CY31 | 1402 | OM1 |
| CE23 |  | 923 | D1 | 1078 | T4D |
| CE25 | 405 | 1 P 32927 | D2 | 2778 | 2 J 21 |
| CE26 |  | 1 P 33 | D4 | 1037 | 354V |
| CE29 |  | 1P39 929 | D41 | 1187 | 204A |
| CE31v |  | 919 | D42 | 557 |  |
| CE34 |  | 934 | D61 | 1092 | EA50 |
| CE59 |  | 5581 | D63 | 554 | 6H6G |
| CE72 | 709 | 72R 3B24 | D77 | 140 | EB91 6al5 |
| CE91 |  | 1 P 37 | D143 |  | 12 |
| CE225 |  | 1163 | D152 | 283 | EB91 6AL5 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1021 | LK31 D210 | DET23 | 354 | T103-5 |
| D2100 | 1170 | SD4A | DET24 | 397 | T104-20 |
| D418 | 1686 |  | DET25 | 1025 |  |
| DA | 1109 | 401 | DET29 | 2397 |  |
| DA30 | 563 | D026 440XP | DF1 | 2907 | 1N5GT |
| DA41 | 1076 | TZ40 | DF33 | 1823 | 5678 |
| DA42 |  | 1 D 13 | ${ }^{\text {DF60 }}$ | 2371 | 6611 |
| DA60 | 527 |  | DF662 | 2237 | 1 AD 4 |
| DA90 | 753 | 1A3 | DF63 | 2433 |  |
| DA100 | 1219 | ES1102 | DF64 | 2260 | 02DF |
| DAC1 | 2887 |  | DF64 | 2107 |  |
| DAC32 | 1818 | 1H5GT | DF66 | 2107 | 6008 |
| DAF70 | 2104 |  | DF67 | 433 | BIC/1E |
| DAF91 | 784 | 1 FD 91 S 5 | DF70 | 43 | BIC/1e |
| DAF96 |  | 1 AH 51 FD 1 | DE72 | 2103 |  |
| DAG1 | 2 |  | DF91 | + 785 | 174 1F3 |
| DB7-36 |  | 3 WP11 | DF92 | 1758 | 1 L 41 F 2 |
| DB13/14 |  | 5ADP11 | DF96 |  | 1AJ4 1F1 |
| DB13/134 |  | $5 \mathrm{ADP11}$ | DF97 |  | 1AN5 |
| DB16-22 |  | 7AMP11 | DF904 |  | 104 |
| DC2P | 1735 |  | DF904 | 5131 |  |
| DC51 | 1 |  | DG7-5 | 2175 | 3ALP1 |
| DC70 | 2275 | 6375 | DG7-32 | 2431 | 3AMP1 5UP1 |
| DCC90 | 808 | 3 A 5 | DG7-36 | 3946 | 3W01 |
| DCF60 |  | 1 V 6 | DG13-2 | 2191 | 5 CP 1 A |
| DCG4/1000ED | 1425 | DQ2A PG3-250 | Df 1334 | 5035 | 5ADP1 |
| DCG4/1000G | 32 | DQ2 RG3-250A 866A | DG16-22 | 2352 | $7 \mathrm{AHP1}$ |
| DCG5-5000GB | 642 | 872A DQ4 | DG736 | 235 | 8A1 |
| DCG9/20 |  | DQ6 | DGP | 1141 | GDT4C |
| DCX4-1000 | 1835 | 3B28 DX2 RR3-250 | DH | 1665 |  |
| DCX4-5000 | 2518 | 4B32 RR3-1250 | DH3-91 | 2302 | 1 CP 1 |
| DDL4 | 1691 | DD4 D41 | DH7-91 | 6095 | 3AFP1 |
| DD4 | 1170 | 2D4A | DH10-94 |  | 4EP1 |
| DD6 | 140 | EB91 6AL5 | DH13-97 | 5168 | 5BKP1 |
| DD6G | 140 | 6AL5 6D2 | DH30 | 1695 | DDL13 |
| DD41 | 1403 |  | DH42 |  | TTD4 |
| DD620 | 2889 |  | DH63 | 587 | 6Q7G |
| DDA1 |  | 2D4A | DH63M | 587 | 6 Q76 |
| DDL4 | 1691 | 2D4A | DH73M | 2909 |  |
| DDL 13 | 1695 | DH30 | DH76 |  | 1207GT |
| DDPP4BM | 519 | 27 D Pen4DD | DH77 | 452 | EBC90 6AT6 |
| DDPP4M |  | Pen4DD | DH81 | 882 | $7 \mathrm{B6}$ |
| DDPP6BS |  | EBL1 | DH109 |  | UABC80 |
| DDPP6S |  | EBL1 | DH118 |  | DH142 URC41 14L7 |
| DDPP39S |  | CBL1 | DH142 |  | UBC41 14L7 |
| DDR2 | 173 | EF55 | DH147 | 1055 | EBC33 6R7G |
| DDT | 2813 | H4D NA2 | DH149 |  | 7C6 |
| DDT | 2890 | TDD4 H4D | DH150 | 3882 | EBC41 6CV7 |
| DDT2 |  | TDD2A | DH719 |  | EABC80 6AK8 |
| DDT4 | 2813 | TDD4 | DH791 |  | 3AFP1 |
| DDT220 |  | TDD2A | DH817 |  | DH150 |
| DDX52 | 2232 |  | DK1 | 2910 |  |
| DE5 | 2891 |  | DK2 |  | 1AC6 1C2 |
| DET5B | 2892 |  | DK20 |  | GC10D |
| DEQ | 1156 |  | DK32 | 1802 | 1A7 |
| DER | 1642 |  | DK91 | 782 | 1 R 51 Cl |
| DETISW | 2895 |  | DK92 | \% | 1ac6 1C2 |
| DET3 | 1034 |  | DK96 |  | $1 \mathrm{AB6} 1 \mathrm{C} 3$ |
| DET5 | 1223 |  | DL | 1661 |  |
| DET6 | 1620 | 4094A | DL2 | 2911 |  |
| DET9 | 2899 |  | DL29 |  | $3 \mathrm{D6}$ |
| DET10 | 2900 |  | DL33 | 819 | 3Q5GT |
| DET12 | 1288 | 4304CB | DL35 | 1805 | 1 C 5 |
| DET16 | 1363 | B150 | DL36 |  | 105GT |
| DET18 | 419 | 357 | DL63 | 2912 | $6 \mathrm{R7}$ |
| DET19 | 18 | EK34 2C34 4074A | DL64 | 2331 |  |
| DET20 | 6 | E1148 | DL66 | 2106 |  |
| DET22 | 273 | TD03-10 | DL68 | 2259 |  |



| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | E4504/C/16 | 1517 | 09D |
| E1371 | 105 |  | E4504/E/16 | 1391 | 90 E 64 |
| E1373 | 99 |  | E4504/M/16 | 966 |  |
| E1379 | 79 |  | EA50 | 1092 | D61 |
| E1411 | 153 |  | EA52 | 5140 | 6923 |
| E1415 | 115 |  | EA76 | 469 | 6489 |
| E1416 | 281 | X61M | EAA91 |  | 6AL5 |
| E1417 | 117 |  | EAA901S |  | 5726 |
| E1419 | 154 | TT04-20 | EABC80 |  | 6AK8 6LD12 6TH |
| E1423 | 406 |  | EAC91 | 137 |  |
| E1429 | 79 |  | EAF42 | 3883 | 6Cr7 |
| E1436 | 188 | 7475 | EB34 | 1054 | $6 \mathrm{H6}$ |
| E1453 | 1646 |  | EB41 | 3881 |  |
| E1457 | 257 | ACT22 | EB91 | 140 | $6 \mathrm{D} 2 \mathrm{6AL} 5$ |
| E1458 | 168 | X060 | EBC3 | 1428 |  |
| E1459 | 174 |  | EBC2 1 | 347 |  |
| E1465 | 236 |  | EBC33 | 1055 | 0M4 |
| E1468 | 172 |  | EBC41 | 3882 | 6CV7 6LD3 |
| E1474 | 78 |  | EBC81 |  | 6LD13 |
| E1481 | 192 |  | EBC90 | 452 | 6АT6 |
| E1485 | 807 | 3 A 4 DL93 | EBC91 | 2526 | 6AV6 |
| E1487 | 208 |  | EBF2 | 2925 |  |
| 1494 | 191 |  | EBF32 | 2925 | 3Cv01 |
| E1495 | 259 |  | EBF80 |  | 6 N 8 |
| E1496 | 240 | ACT24 | EBF83 |  | 6DR8 |
| E1497 | 215 |  | EBF89 |  | $6 \mathrm{DC8} 6 \mathrm{DFl} 2$ |
| E1511 | 355 |  | EBL31 | 2926 |  |
| E1516 | 221 | TTR31 | EBL131 | 2926 |  |
| E1524 | 338 |  | EC31 | 1433 |  |
| E1525 | 290 |  | EC50 | 2927 |  |
| E1531 | 214 |  | EC52 | 1137 |  |
| E1532 | 1624 |  | EC53 | 1197 |  |
| E1541 | 1716 |  | EC54 | 66 | RL37 |
| E1563 | 1863 | 5246 R 52 | EC55 | 273 468 | 5861 TD03-106 |
| E1591 | 181 | ECC32 | EC70 | 468 | 5718 |
| E1599 | 272 | KR6/4 | EC71 | 1886 | 6 6 4 |
| E1606 | 278 | B65 | EC81 | 1565 | 6R4 |
| E1633 | 456 |  | EC90 | 133 | 6 C 4 |
| E1647 | 288 | ACT23 | EC91 | 417 | 6234 6AQ4 |
| E1648 | 135 543 | EY91 | EC92 |  | $6 \mathrm{AB4}$ |
| E1659 | 543 | 12SK7 | ECC31 | 1285 | 6N7G |
| E1706 | 437 | KT67 | ECC32 | 181 | 6SN7GT |
| E1714 | 408 | A1714 | ECC33 | 2821 | 6SN7 |
| E1769 | 397 | DET24 | ECC35 | 569 | 6SN7GT |
| E1860 | 240 | ACT24 | ECC40 | 3884 |  |
| E1935 | 415 | TM15 | ECC81 | 455 | 12AT7 |
| E1938 | 493 | $6 \times 4$ U78 | ECC82 | 491 | $12 \mathrm{AU7}$ |
| E1954 | 25 | ES85 | ECC83 | 492 | 12AX7 6 U 3 |
| E1955 | 797 | 2 D 21 EN91 | ECC84 | 5281 | 6 CW 7 |
| E1956 | 261 | 2T/270K | ECC85 |  | 6L12 6AQ8 |
| E1959 | 495 | ME1401 VX32 | ECC88 |  | 16DJ8 |
| E1996 | 436 | ACT25 | ECC91 | 858 | 6 J 6 |
| E2204 | 2115 | 183GT | ECC189 | 5331 | 6ES8 |
| E2016 | 1758 | EF92 6CQ6 | ECC801S |  | 6201 |
| E2018 | 454 | 6BA6 | ECC802S |  | 6067 |
| E2095 | 471 | EL70 | ECC962 |  | E92CC |
| E2133 | 2276 | 2319 | ECP82 | 5065 | 6 U |
| E2134 | 2179 |  | ECH3 | 2929 |  |
| E2163 | 491 | EcC82 12aut | ECH22 | 302 |  |
| E2164 | 492 | $12 \mathrm{AX7} \mathrm{ECC83}$ | ECH33 | 2930 |  |
| E2221 | 2277 |  | ECH35 | 1347 | 6 K 8 |
| E4103/B/4 | 1522 |  | ECH42 | 2888 | $6 \mathrm{CU7}$ |
| E4103/E/4 | 2205 |  | ECH81 | 2128 | 6AJ8 |
| E4205/B/7 | 1588 | ECR30 | ECH83 |  | 6058 |
| E4025/C/7 | 1525 |  | ECH113 |  | ECH42 |
| E4412/B/9 | 1587 | ECR35 | ECL80 |  | 6AB8 |
| E4412/C/9 | 2301 | 902A | ECL82 |  | 6BM8 |
| E4412/E/9 | 1529 |  | ECL84 |  | 6DX8 |
| E4412/M/9 | 1521 |  | ECR30 | 1588 |  |
| E4504/B/16 | 1385 |  | ECR35 | 1587 | 901A |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ECR57 | 1587 |  | EL50 | 2941 |  |
| ECR60 | 1097 | 1601A | EL70 | 471 | 5902 SN947D |
| ECR75 | 1787 | 4035 | EL71 |  | 5902 N\|M |
| EE17 | 2957 | 5557 KG5-500 | EL81 | 2721 | 6 C 16 |
| EE866 |  | DCG4/1000G | EL83 | 2726 | $6 \mathrm{CK6}$ |
| EE8020 | 2967 |  | EL84 | 2975 | $6 \mathrm{BQ5}$ |
| EP5 |  | EF9 | EL85 | 3526 | 6 BN 5 |
| EFP8 | 1713 | EF9 | EL90 | 1862 | 6A05 |
| EF9 | 1427 |  | EL91 | 136 | 6am |
| EF22 | 303 | $7 \mathrm{B7} 7$. | EL95 |  | $6 \mathrm{DL5}$ |
| EF36 | 1056 | 0 MS - | EL360 | 5830 | EL36 |
| EF37 | 358 | 5A/157D 0M5B | EL821 | 2127 | $6 \mathrm{CH6}$ |
| EF37A | 5080 |  | EL822 | 2382 |  |
| EF49 | 1053 | 6 K 7 GT | EL861 |  | E81L 6686 |
| ER40 | 3885 |  | ELC3J | 5234 | TX2/3 56328063271011 XR1-1600A |
|  | 3886 | 6 CJ 5 | ELC6J |  | 5632 |
| ${ }_{\text {EF4 }}^{\text {EF }}$ ( | 3887 1578 |  | ELC6J/A |  | TX2/6 5684 |
| EF51 | 1035 | QP QTT2 | EM1 | 2942 1434 | EM1 |
| EF53 | 1136 |  | EM31 | 1077 | EM31 |
| EF54 | 1136 |  | EM34 | 394 | $6 \mathrm{DC7}$ |
| EF55 | 173 |  | EM35 | 1103 | 6 USG |
| EF70 | 467 | 6487 | Em80 | 1352 | 6BR5 |
| EF71 | 475 | 5899 | EM81 | 5055 | 6DA5 |
| EF72 | 465 |  | Em84 |  | EM840 |
| ${ }_{\text {EF773 }}$ EF74 | 466 | 6488 | EM91 | 797 | 2D21 20A3 |
| EFP0 | 1376 | 6BX6 | EM840 |  | EM84 |
| EF85 | 1375 | 6BY7 6F19 | EN32 | 2253 | ${ }_{6}$ EN30 |
| EF86 | 2901 | 6267 6F22 6CF8 2729 | EN70 | 474 | 5643 |
| EF89 | 5156 | $6 \mathrm{DA6}$ | EN91 | 797 | 2 D 21 20A3 |
| EF91 | 138 | 6am6 6F12 | EN92 | 3512 | 5696 |
| EF92 | 131 | ${ }^{6 C Q 66 F 12906}$ | EN93 | 1949 | 6 D 4 |
| EF93 | 454 | ${ }_{6}^{6846}$ | EQ80 |  | 6BE7 |
| EF95 | 850 | 6AK5 | ES15 | 3853 | RS15 |
| EF96 |  | 6AG5 | ES85 | 25 | 4242A 242C UE311 211 |
| EF978 |  | 6ES6 | ES40A | 2563 | 204A |
| EF183 | 5831 | ${ }_{6 \text { 6EH6 }}$ | ES207 | 3850 | ${ }_{\text {TZZ }}^{\text {RS250 }}$ |
| EF730 |  | 5636 | ${ }_{\text {ES5 }}^{\text {E } 235}$ | 3851 | ${ }_{\text {RS253 }}$ |
| EF731 |  | 5899 | ES357 | 27 | 357A 4357A |
| EF732 |  | 5840 | ES450 | 1207 |  |
| EF734 |  | 6205 | ES833 | 635 | 833A TYA-350 |
| EFP660 | 3998 5108 | E180F 6688 | ES1500 | 1614 | MT13 |
| EH90 |  | 6CS6 | ${ }_{\text {ESA }}$ ES800A | 1614 2688 | MT13 891 R |
| EHA5000 | 2687 | 889R 5667 | ESA892 | 701 | 892 R |
| EHM2 | 2139 |  | ESA892C | 904 | 892R BR175 |
| EHT1 | 19 | V1901 | ESA5000 | 2687 | 889R 5667 |
| EHT15 |  | ESU15 | ESG250 | 1031 | Sc250 |
| EHW3000 | 2686 | 889 ESW5000 | ESP450 | 1506 | 5c/450A |
| EK2 | 1426 |  | ESU15 |  | EHT15 |
| EK32 | 1057 |  | EsuT4 | 74 | V1922 |
| EK90 | 453 | 68E6 | ESU75 | 2943 |  |
| EL1-1C |  | $3 \mathrm{B22}$ | EsU76 | 2945 |  |
| EL1C |  | 3B22 | ESUTT | 2160 | A207 |
| EL2 | 1429 |  | ESU150 | 2946 |  |
| EL3C | 822 | 4 B 24 | ESU200 | 5 | 4049D GU20/21 |
| EL5B | 2936 | $4 \mathrm{B22}$ | Esu208 | 1260 |  |
| EL22 | 304 |  | ESU300 | 2947 | AH221 GU21 |
| EL31 | 2888 |  | ESU450 | 1259 |  |
| EL32 | 1052 | OM9 1637 | ESU866 | 32 | DQ2 866 A RG3-250A |
| EL33 | 2938 | 6AG6G | ESU872 | 642 | DQ4 872A |
| EL34 | 1741 | 6 CA 7 | ESU1500 | 2944 |  |
| EL35 | 1269 | 6L6G | ESU8008 |  | DCG5/5000s |
| EL36 | 2940 | 6 CM 5 | ESW501 | 1621 |  |
| EL37 | 586 | $6 \mathrm{~L} 6 \mathrm{KT66}$ | ESW5000 | 2686 | 889 |
| EL38 | 450 | 6CN6 | ET3 | 541 | 1B3GT R6158A |
| EL41 | 3839 | 6 CK 5 | ET30 | 1030 | т250 |
| EL42 | 3890 |  | ET51 | 5277 | 6700 |


| TYPE |  | CY No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ET1000 |  |  | TB4/800 | G5H | 2247 |  |
| EW2A |  | 2139 |  | G-9 |  | WL868 918 |
| EY51 |  | 426 | $6 \mathrm{X2} \mathrm{R12}$ | G10H | 2173 | MX103 |
| EY70 |  | 473 | SN954 5641 | G10HE | 2287 |  |
| EY81 |  | 5905 | 6R3 | G10/241E | 2223 |  |
| EY84 |  | 2235 | 6374 R18 | G14 |  | WL920 |
| EY86 |  | 2966 | 6 S 2 | G15F |  | WL927 |
| EY91 |  | 135 |  | G20/5D |  | DQ6 |
| EZ22 |  | 346 | 724 | G24 | 411 |  |
| EZ35 |  | 574 | 6X5GT | -G24E | 2148 | GM5B |
| EZ40 |  | 3891 | 6BT4 | G24H | 2147 |  |
| EZ80 |  | 1535 | 6V4 | G48 |  | 1163 |
| EZ81 |  | 5072 | 6CA4 | G49 |  | 1163 |
| Ez90 |  | 493 | 6X4 | G50/1G | 2208 |  |
| F2 |  | 2338 | 1923 | G60E | 2149 | G60E |
| F60 |  |  | 1163 | G75/2D | 3798 | VR75/30 |
| F123A |  | 2949 | T100-1 | G75/3G | 4030 | QS75/60 |
| F129B |  | 2950 | 129B 3P/270B 30/191E | G105/1D | 686 | VR105/30 |
| F28A |  | 734 | 228A | G108/1G | 1833 | OB2 |
| F353 |  | 642 | 872A A4217 | G120/1D | 438 |  |
| F353A |  | 642 | 872A DQ4 | G120/1D | 438 |  |
| F366A |  | 32 | 866A | G150/1A | 75 | 4313 C 313 C |
| F869B |  | 2723 | 869B | G150/2D | 216 | OD3 |
| F872A |  | 642 | DQ4 | G150/4K | 1832 | OA2 150G2 |
| F872B |  | 642 | $4 \mathrm{B32} 4064 \mathrm{~B}$ | G180/2D | 2029 |  |
| F892R |  | 904 | 892R | G180/2M | 395 | QS150/45 |
| F/2726 |  | 4049 | M8180 | G210/1C | 212 |  |
| F/2750 |  | 4037 | 5750 | G240/2D | 2174 |  |
| F/5654 |  | 4050 | M8180 | G400/1K | 2194 |  |
| F/5750 |  | 4037 | 5750 | G400/2G | 4047 |  |
| F/6057 |  | 4035 | M8214 | G431 |  | DW2 |
| F/6060 |  | 4033 | M8144 | G445B | 1651 |  |
| F/6061 |  | 4045 | 6BW6 6061 | G470 |  | DW2 |
| F/6063 |  | 4001 | 6 X 4 WA | G2080 |  | CY1 UR1C |
| F/6064 |  | 4002 | M8140 | G4120 |  | DW4-500 |
| F/6067 |  | 4034 | M8144 | G4120N |  | IW4-500 |
| F/6132 |  | 4056 | 6CH6 6132 | GA5A | 2647 | 532 |
| F/6158 |  | '4069 | 13 D3 6158 | GC10A | 2199 |  |
| PA13 |  | 2952 | 5628 | GC10B/s | 2271 | Z303C 6482 |
| FA14 |  | 2953 | 5629 | GC10/4B | 1739 |  |
| FA15 |  | 298 | 5626 | GD86W | 2321 |  |
| FC2 |  | 1043 | $210 \mathrm{P6}$ X22 | GD86W/S | 2321 |  |
| FC2A |  | 2954 |  | GD100A/S | 188 | 7475 |
| FC4 |  | 2955 | 15A2 V04 | GD100B/S | 1070 | 7475 |
| FC13C |  | 2956 | V013 | GD120A/S | 1110 | 5130 |
| FG17 |  | 2957 | 5557 TQ2 | GD120A/S | 45 | S130P |
| FG27A |  | 2958 | 873 | GD150A/S | 216 | OD3 150L3 |
| FG57 |  | 5027 | 575559 XG1-2500 | GD150M/S | 1832 | 150 C 2 OA 3 |
| FG67 |  | 742 | 12675728 | GDT4B | 1141 |  |
| FG105 |  |  | 105 XGQ2-6400 | GET2 | 743 | V611 NE2 |
| FG154 |  |  | $3 \mathrm{~V} / 390 \mathrm{~B}$ | GEX36 | 2279 |  |
| FG235A |  |  | PL5552A | GEX45/1 | 425 | 2X106G |
| FG238A |  |  | PL5553B | GEX54 | 448 | 0 O71 |
| FG271 |  |  | PL5551A | GEX64 | 2310 |  |
| FP54 |  | 2960 | 5740 | GEX66 | 2290 |  |
| FVD7 |  | 404 | HR7 | GEX402 | 2902 |  |
| FW4/500 |  | 1254 | RV200/600 | GEX541 | 5104 |  |
| FW4/800 |  | 31 | U20 | GHT1 | 2203 | FK215 |
| FX215 |  | 2203 | GHT1 | GHT2 | 2418 |  |
| FX219 |  | 2520 | 5C22 XH16-200 | GL446 | 3725 | GL446A |
| FX225 |  | 1787 | $4 \mathrm{C} 35 \times \mathrm{XH8}-100$ | GL446A | 932 | Gli446A |
| FX227 |  | 372 | 3C45 XH3-045 | GL446B | 687 | GL446B |
| FX229 |  | 3521 | 5949 XH35-500 | GL455 | 2789 | 9 LP 7 |
| FX231 |  | 2993 | $5 \mathrm{C} 32 \times \mathrm{XH} 16 \mathrm{~m}$ 200 | GL464 | 3604 | $2 \mathrm{C43} 464 \mathrm{~A}$ |
| FY |  |  | PM24M | GL464A | 688 | 464A GL464A |
| FZ9011G |  | 2270 | 90AG | GL471A | 3586 | 1821A |
| FZ9011V |  | 2132 | 90AV | GL532 | 2647 | 532 |
| FZ9012G |  | 2133 | 90CG | GL572 |  | 2C39A |
| F29012V |  | 2134 | 90CV | GL592 | 1903 | 592 |
| G1/235G |  | 3524 |  | GL806 | 2658 | 806 |
| G1/371K |  | 2224 |  | GL868 | 2680 | 868 1P23 918 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GL889R | 2687 | 889R | HA2 | 1059 | 9554671 |
| GL892R | 904 | 892R RR175 | HaA91 |  | 12AL5 |
| GL.918 | 2692 | 918 | HAD | 1419 | 11 D 3 |
| GL,927 |  | 3546PW | HBC80 |  | $19 \mathrm{T8}$ |
| GL2050 | 2565 | 2050 B2A | HBC90 |  | 12AT7 |
| GL8020 | 2967 | 30208023 | HBC91 |  | 12AV6 |
| GL8023 | 933 | 15E 8023 | HD14 | 1818 | 1155G |
| GLE10000/25/1 | 1625 | DCA4/100ED BG3-250 | HD22 |  | TTD2A |
| GLE20000/2.5/10 |  | 6508 DCG9/2 | HD24 | 2985 | TDD2A |
| GLY1 |  | 1652M | HD51 |  | OA2 |
| GM1B | 2149 | G60E | HD52 |  | OB2 |
| GM4 | 2138 |  | HD203A | 2986 | 203A |
| GC1OD |  | DK20 | HF93 | 1928 | $12 \mathrm{BA6}$ |
| GM5 | 411 |  | HF94 | 1961 | $12 \mathrm{AU6}$ |
| GM5B | 2148 | G24E | HF100 | 2987 | 4 C 22 |
| GN24 |  | DW2 | HF130 | 638 | 838 RK58 |
| GR1 |  | TV801 | LF150 |  | T100-1 |
| GS10C/S | 2325 | Z502S | HF175 |  | T100-1 |
| GS16S0(80-110) | 2694 | 930 | HF200 | 2988 | 3C150A |
| GS16/160 | 248 |  | HF300 | 693 |  |
| GS16(80-110) | 1473 |  | HG2 |  | DQ2A 3 C34 |
| GS18 | 242 |  | HK24 | 941 | 25T 3C34 25 TG |
| GS26 | 1432 |  | HK24G | 789 | 3C24 425 TG |
| GS46 | 584 | PE7B | HK54 | 707 | 4C25E6 |
| GS47X | 405 | 3546PW 9275566 | HK90 |  | 12 BE 6 |
| GS118 | 1801 |  | HK254E | 2989 |  |
| GS146 | 2692 | 918 | HK357 | 824 | 4E27 |
| GS544X | 1913 |  | HL2 | 1673 | PM2HL |
| GT1 | 2969 | 849 | HL2Met | 2991 |  |
| GT1A | 1143 | ME1502 | HL2K | 1050 | PM2HL |
| GT1C | 1128 | ME1502 | HL4 | 1173 | 354 V |
| GT1E | 530 |  | HL4X | 1037 | 41 MTL ACHL |
| GT11 | 435 |  | HL13C | 1109 | $4 \mathrm{D1}$ |
| GTE20000/2.5/TO |  | 6508 DCG9/2 | HL21 | 1303. |  |
| GTR95M/S | 286 | SM95 | HL21DD | 1044 | TDD2A |
| GTR120A/S | 45 | S130P | HL23 | 1130 |  |
| GTR150M/S | 287 | SM150 | HL23DD | 2995 |  |
| GU1 | 1262 | RCi-250 | HL41 | 24 |  |
| GUS | 1072 | MU4250 | HL410D | 2996 |  |
| GU7 | 2973 |  | HL92 | 1959 | 5005 |
| GU8 | 1628 |  | HL133 | 2998 |  |
| GU11 | 532 變 | A AW205 | HL133DD | 2999 |  |
| GU12 | $32 *$ | DQ2 866A ESU866 | HL210 | 3500 | PM2HL |
| GU18 | 1629 | RG3-1250 | HL210A | 1503 |  |
| GU20 | 1435 | AH211 | HL610 | 3501 |  |
| GU20/21 | 5 | RGA-1250 GU21 | HL1320 | 3502 | HL13C 4D1 354 V |
| GU21 | 5 | $4049 \mathrm{DESU2OO}$ GU21 | HLA2 | 1678 | 354 V 210LF DZ10 |
| GU50 | 1072 | RGIT-240A ESU101 | HLB1 HLDD/1320 | 1021 3503 | 210LF DZ10 |
| GX4W | 4005 | 6063 | HMO4 |  | 6BE6 |
| GX402 | 2902 |  | HN309 |  | PCL82 |
| GXU1 | 1825 | 4B32 RR3-1250 | HP2 | 1032 | 220 BPMZB |
| GXU3 | 2399 | AX228 2G/473C | HP6 HP13S | 138 | EF91 ${ }^{\text {VP13A }}$ A 6 |
| GXU4/1000 |  | DCX4/5000 | HP210 | 1322 | SP210 |
| GZ30 | 2748 | 5Z4GT | HP215 | 1322 | SP210 |
| GZ31 |  | 5U4G | HP415 | 1169 | $9 \mathrm{A1}$ VMP4G |
| GZ32 | 593 | 5 V 4 | HP4101 | 1124 |  |
| GZ33 | 378 | 53 KU | HP4101C | 1282 | SP4 8A1 |
| G234 | 1377 | 5AR4 | HP4106 | 1169 | VMP4G 9A1 |
| GZ37 | 378 | 53 KU | HP4115 | 1169 | MV5Pen 9a1 |
| H2 | 2977 | PM2HL | HR1 |  | R10 |
| H2D | 1044 | TDD2A | HR2 | 261 | R10 2T/270K |
| H12 | 2978 |  | HR7 | 404 | FVD7 |
| H30 | 2979 | D5 | HR210 | 1673 | PM2HL |
| H42 | 1182 | HL4G | HT7 |  | XG5-500 |
| H45 | 372 | BT79 3C45 | HT415 | 3540 | 5 C 22 |
| H63 | 1073 | 6F5G | HV18 | 2988 | HF200 NU200 |
| H210 | 1673 | PM2HL | HVR2 | 1290 | SU2150A |
| H410 | 2981 |  | HY51B | 702 | 830B UE930B |
| H610 | 2982 |  | HY61 | 124 | 807 |
| HA1 | 1171 | A40 AT4 | HY75 | 751 |  |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HY90 |  | 35W4 | KS9-20D |  | 723A/B |
| HY114B | 3505 |  | KT2 | 1118 | PM22A |
| HY615 | 3506 | 615 Det20 | KT8 | 1079 |  |
| IFW1 | 1039 | 1 W 4431 U | KT8C | 1079 |  |
| IW2 |  | R2 | KT9-150W |  | 55395 |
| IW3 | 1039 | IW4-350 | KT24 | 1334 | PM22A |
| IW3-350 | 1039 | APV4 | KT30 | 3519 |  |
| IW4/500 | 1039 | APV4 R3 | KT31 | 3530 |  |
| J231AAA |  | 1163 | KT32 | 1287 | 25 L 6 |
| JN2-2.5A.5A |  | 7091 | KT33 |  | 25A6G |
| JN2-2.5W |  | 7292 | KT33C | 1503 |  |
| JP28-20.2 |  | 7090 | KT38 | 1576 | VT75A |
| JP2-2 |  | 7091 | KT41 | 1181 | 7A3 |
| JP2.5 |  | 7028 | KT42 | 1175 | 7A2 |
| JP9-2.5 |  | 6972 | KT44 | 1577 | VT75A |
| JP9-7 | 3676 | 2142 Mag3 | KT44T | 1576 | VT75A |
| JP9-7A | 370 | M508 | KT45 | 1825 |  |
| JP9-7D | 1866 | M503 | KT61 | 1438 | 6AG6 EL33 |
| JP9-15 | 3997 | 2142A Mag4 | KT63 | 1186 | 6F6G |
| JP9-50 | 2852 | 2156 | KT66 | 1075 | EL37 6L6G |
| JP9-75 |  | 6972 | KT67 | 437 |  |
| JP9-80 | 3569 | 4J52A | KT71 |  | 50L6GT |
| JP9-80A | 5018 | 4J52A | KT81 | 885 | $7 \mathrm{C5}$ |
| JP9-250 | 2284 | 4 J 50 | KT88 |  | 12 E 13 |
| JP9-250A | 3955 | $4 \mathrm{J78}$ | KTW61 | 1100 |  |
| JPT9-01 | 2420 |  | KTW62 | 1100 |  |
| JPT9-02 | 2421 |  | KTH63 | 1195 | 6K7 6U7 |
| JPT9-60 | 3560 | 4J5A1 | KTW73 | 1056 | 0 M 5 LF 36 |
| K2 |  | DCG4/1000ED | KTH73M | 3527 |  |
| K3A | 410 |  | KTW74M | 918 | 12K7 |
| K7RF4 | 1808 | 2 J 32 | KTZ41 | 3529 |  |
| K23B |  | TTD2A | KTR63 | 1074 | 617G |
| K30A |  | PM2HL | KTZ73M | 3530 |  |
| K30C |  | PN2HL | KU25 | 2993 | $5 \mathrm{C} 22 \mathrm{FX219}$ |
| K30D |  | PM2HL | KU45 | 3875 |  |
| к30K |  | PM2HL | L2 | 3531 | PM2HL |
| K40N |  | PM12M | L2/B |  | PN2HL |
| K50N |  | VP2B | L9 | 328 |  |
| K70B |  | PM22A | L21 | 3532 | PN2HL |
| к77B |  | QP22B | L210D | 1308 | TDD2A |
| K80A |  | FC2 | L22DD | 3533 |  |
| K80B |  | FC2A | L30 | 3534 |  |
| K301 | 1261 | RX3-120 | 163 | 1067 | 6J5G EC90 6 |
| K302 | 2164 |  | L77 | 133 1021 | $\begin{aligned} & \text { EC90 6C4 } \\ & \text { PM2HL } \end{aligned}$ |
| K305 | 2263 |  | L210 L410 | 1152 | L410 PM4DX |
| K307 | 1871 | 707B | L600 | 3537 | L600N 6C22 |
| K308 | 2283 |  | 1610 | 3538 |  |
| K312 | 2273 |  | LD210 | 502 | 210LF D210 |
| K322 | 2791 |  | LG210 | 1021 | D210 L210 |
| K324 | 2304 |  | LL2 | 1732 | PM2HL |
| K335 | 2343 |  | LN119 |  | UCL82 |
| K1051 | 2849 |  | LN152 |  | ECL80 6ab8 |
| K1105P2 | 3736 |  | LN309 | 5144 | PCL83 . |
| K814024 | 3514 |  | LN319 |  | 30PL1 |
| KB2 | 3515 |  | LP2 | 548 | 220 L2 |
| KD21 |  | OA3 VR75/30 | LP2 | 1023 | PM202. |
| KD24 |  | 003 VR105/30 | LP2 (Selected) | 1304 | L2 220 |
| KD25 |  | OD3 VR150/30 | LP4 | 1168 | AC044 |
| KK2 | 3516 |  | LP220 | 1166 | LP2 PM2A |
| KR3 | 218 |  | LS5 | 1637 |  |
| KR6/1 | 116 |  | LS5A | 1637 |  |
| KR6/2 | 237 |  | LS5B | 2846 |  |
| KR6/3 | 238 |  | LS5X | 1667 |  |
| KR6/4 | 272 |  | LS6A | 3541 |  |
| KRN2 | 87 |  | LS7 | 1660 |  |
| KRN3 | 217 |  | LS8 | 1656 |  |
| KS7-85 |  | 2K26 | LS9A | . 1676 |  |
| KS7-85A |  | 5976 | LS9B | 1676 |  |
| KS9-20 | 1795 | 723A/B | LS408A. | 2536 | 53A |
| KS9-20A | 2792 | 2K25 | LS532 | 3542 |  |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LS650 | 391 | 5B/252M | M8225 | 4080 | 75 C 1 |
| LS731 | 273 | DET22 ME1001 | M8232 | 5029 | 6J4WA |
| LZ319 |  | PCF80 9A8 | M8234 | 5082 | 5725/6AS6W |
| LZ329 |  | 3001 PCF80 | M8237 | 4049 | F/5726 |
| M2H | 2886 |  | M8245 | 4019 | 6005/6AQJ |
| M6 | 2145 |  | MAG8 | 2380 |  |
| M215H | 177 |  | MB13-1 | 5070 | 5FP11 |
| M500 | 353 |  | ME41 | 3565 |  |
| M501 | 76 |  | ME1001 | 273 | TT03-10 |
| M501A | 3660 |  | ME1005 | 354 | TD03-5 |
| M502 | 2166 | 4J50 JP9-250 | ME1 100 | 1795 | KS9-20 723A/B |
| M502A | 2373 | JP9-180 | ME1101 | 3676 | 2 J 42 JP9-7 |
| M503 | 1866 | $2 \mathrm{~J} 42 \mathrm{JP9}-70$ | ME1101A | 3997 | JP9-15 |
| M505 | 1747 |  | ME1101D | 1866 | JP9-7D |
| M506A | 3982 |  | ME1400 | 432 |  |
| M 507 | 69 |  | ME1401 | 2269 | 5802 |
| M508 | 370 | JP9-7A | ME1402 | 2730 | 5800 |
| M509 | 3976 |  | ME1403 | 2348 | 5889 |
| M510 | 1827 | 2 J 32 | ME1500 | 474 | EN70 5643 |
| M511 | 3953 | 4 J 78 JP9-250A | ME1501 | 2253 | 6574 EN32 |
| M512 | 1828 | $2 J 36$ | ME1502 | 1128 | AN1 |
| M513 | 3528 |  | ME1503 | 1787 | XHS-100 4C35 |
| M518A | 1997 |  | MF13-1 | 3959 | 5FP7A |
| M519 | 1484 |  | MF22-22 | 3999 |  |
| M521 | 2376 |  | MF22-75 | 2372 |  |
| M523 | 2412 |  | MF31-55 | 429 | C12R 12AEP26 |
| M525 | 2365 |  | MF31-95 | 2328 | 12T03A Pent139 |
| M526 | 3676 | $2 \mathrm{~J} 42 \mathrm{JP9-7}$ | MH4 | 1037 | 354V |
| M528 | 1497 |  | MH4Met | 399 | NR31 |
| M529 | 2426 |  | MH41 | 1505 | HLA2 AC2/HL |
| M536 |  | $4 \mathrm{~J} 43 \mathrm{4J44}$ | MHD4 | 3546 | DDT4 |
| M537 | 2281 | K308 | MHL4 | 1038 | 41MLF |
| M539 | 2425 |  | MHLD6 | 1101 |  |
| M541 |  | 5 J 26 | MHT4 | 2955 | FC4 |
| M542 | 3611 | 5586 | MKT4 | 1683 | Pen4VA 7A2 |
| M543 |  | 7182 | ML4 | 1732 | PA1 TT4 |
| M548 | 5031 |  | ML6 | 1105 |  |
| M549 | 2424 |  | ML5667 | 2687 | 5667 889R |
| M551 | 3569 | $2 J 42$ | MM4V | 1165 | 5667 889R |
| M8079 | 4025 | 6058 QA2404 | M M 13 -10 | 5164 |  |
| M8080 | 4058 | 6100 6C4WA | MM13-10 | 5164 |  |
| M8081 | 4031 | 6101 6J6WA | MP31-55 | 2314 | C12R 12AEP26 |
| M8082 | 4063 | N77 EL91 | MP/Pen | 1683 | Pen4VA |
| M8083 | 4014 | 6064 S6F12 | MPT4 | 1174 | Pen4VA 7A2 |
| M8091 | 4044 | 6443 | MPP4K | 3552 |  |
| M8096 | 4039 | 6062 | MPT42 | 2554 | 111A. |
| M8097 | 4059 | EAC91 | MR4 | 1611 |  |
| M8098 | 4048 | QS1212 | MR10 | 34 |  |
| M8099 | 4070 | 6AQ4 | MR75 | 1142 |  |
| M8100 | 4010 | 5654 6AK5W | MR300 | 3557 |  |
| M8122 | 4007 | 5726/6AL5W | MR300E | 3558 |  |
| M8124 | 4035 | F/5750 | MS4 | 1164 |  |
| M8136 | 4003 | 6067 | MS4B | 3533 | SP4 |
| M8137 | 4004 | 6057 | MS4C |  | SP4 |
| M8140 | 4002 | F/6064 | MSG/HA |  | SP4 |
| M8141 | 4036 | F/8141 | MSG/LA | 1677 | SP4 |
| M8142 | 4054 | QS1213 | MS/Pen | 3561. | SP4 8A1 |
| M8144 | 4033 | F/6060 | MS/Pen(Clear) | 1124 | SP4 8A1 |
| M8149 | 4034 | F/6067 | MSPen(5Pin) | 244 | 4046A |
| M8157 | 483 | QV04-7 | MS/PenB | 1125 |  |
| M8161 | 4015 | 6065 | MSP4 | 1282 | SP4 |
| M8162 | 4024 | 12AT7WA | MSP41 | 3562 |  |
| M8167 | 4067 | 7001 | MS/Pen/T | 1129 |  |
| M8179 | 4076 | $6 \mathrm{~J} 2 \mathrm{ECC91}$ | MP4 | 1610 |  |
| M8180 | 4050 | F/5654 | MT9F | 1439 |  |
| M8190 | 4066 | 5783WA | MT9L | 1440 |  |
| M8196 | 4011 | 5725/6AS6W | MT11SW | 3563 |  |
| M8204 | 4018 | 5727/2D21 | MT12 | 3564 |  |
| M8216 | 3987 | 5644 | MT12A | 1441 |  |
| M8223 | 4020 | OA2WA | MT13 | 1614 | ES1500A |
| M8224 | 4028 | 0B2WA | MT14 | 1442 |  |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MI16 | 1030 | ET30 T250 | N308 |  | 30P4 |
| MT17 | 2957 | 5557 XG5-500 | N309 |  | PL83 |
| MT57 | 5027 | 5559 XG1-2500 | N329 |  | PL82 16A5 30 P 16 |
| MT105 |  | 105 XGQ2-6400 | N339 |  | PL81 |
| MT5544 | 2210 | 5544 XR1-3200 | N359 |  | PL81 |
| MT5545 | 2215 | 5545 XR1-6400 | N369 |  | PCL82 16A8 30P12 |
| MU1 | 3567 |  | N379 |  | PL84 |
| MU2 | 1459 |  | N709 |  | EL84 |
| MU12 | 1039 | IW4-350 | N727 | 1862 | EL90 6AQ5 |
| MU12/14 | 1039 | IW4-500 | NE2 | 2976 | VG11 GET2 |
| MU4250 | 1072 | gU50 Rg1-240A | NE16 | 651 | GL991 CD2005 |
| MV6-5 | 1976 |  | NE17 | 359 |  |
| MVSG | 1165 |  | NE18 | 360 |  |
| MVSPen | 3571 | VMP4G 9A1 | NE19 | 263 |  |
| MVSPenB | 3572 | $\mathrm{AC}^{\text {3 } / \mathrm{YP}}{ }^{\text {P }}$ | NHP1 | 310 |  |
| MW6-2 | 1737 | 3NP4 | NL715 |  | PLS557 |
| MW13-35 |  | 5FP4A | NO22M |  | 6851 |
| MW13-75 |  | 5FP4A | NP90 | 3607 |  |
| MW18-2 |  | CRM71 | NSP1 | 220 | 631 P1 |
| MW22-3 |  | CRM92 CRM92A | NSP2 | 2296 | 631 |
| MW22-22 | 3999 |  | NT2 | 2213 | CC3L |
| M ${ }^{\text {W }} 31$ 1-16 |  | C12FM | NU1 | 2680 | 1 P 23918 |
| MV31-74 |  | $12 \times \mathrm{P} 4 \mathrm{~A}$ C12FM | NU20 | 1474 | CE20 CE25 |
| MW43-69 |  | 17BQP4 C17/1A | NU40T2 | 1076 | DA41 T240 |
| MW50-23 |  | $21 \mathrm{CJP4}$ | NU75H | 751 | HY75 |
| MW53-80 |  | C21/1A 212K 21CLP4 | NU114B | 3505 | HI1148 |
| MW100 | 25 | ES85 4242A | Nu200 | 2988 | HY18 |
| MX1 | 1515 |  | N0615 | 3506 | 615 |
| MX2 | 418 |  | 0202 |  | FC4 |
| MX40 | 3576 | VO4 15A2 7AHP1 | 0406 |  | FC4 |
| MX52 MX57 | 306 |  | 01307 |  | FC13 |
| MX57 MX103 | 209 2150 |  | OA2 | 1832 | 6073 150L2 |
| MX105 | 2151 |  | OA2WA | 4020 | 6073 M8223 |
| MX107 | 2152 |  | OA3 | 3798 | VR75-30 |
| NX108 | 2153 |  | OA4 | 752 | 1 N87 |
| MX113 |  | 18513 | OA73 | 442 | 1 N616 |
| MX114 |  | 18514 | OA79 |  | 1N541 |
| MY3-275 | 1252 | 212E V1505 | 2-0A79 |  | 1 N 542 |
| MZO5-20 | 3573 |  | OA81 | 448 | GEX59 GEX55 |
| Mx05-60 | 1206 | BS60 Da60 | OA85 | 1354 | 1N478 |
| MZ1 | 25 | ES85 242C | OA86 | 1354 | 1N480 |
| MZ1-75 | 444 |  | OA87 |  | 1N490 |
| MZ1-76 | 3574 |  | 0 A 91 |  | 1N617 |
| MZ1-100 | 1219 | DA100 | OA95 |  | 1N618 |
| MZ2-200 | 200 |  | OB2 | 3799 | VR90-30 |
| N14 | 1803 819 | DL3 <br> DL 33 <br> 105 | OB2WA | 4028 | 6074 M8224 |
| $N 16$ | 819 | DL33 305 | OB3 | 3799 | VR90-30 |
| $N 17$ | 820 | DL92 3 S4 | 0 C 2.5 | 1607 | , |
| N18 | 818 | DL95 3Q4 | 0 C 3 | 686 | VR105-30 |
| N19 | 2983 | DL94 3V4 | 0 C 16 |  | 2N115 |
| N25 |  | DL96 3C4 | 0 C 45 | 5105 | GET873 TK30C |
| N30 |  | 7 7 5 | 0070 |  | 2N279 |
| N40 | 1181 | PenA4 7A3 | 0071 |  | 2N280 |
| N43 | 1657 | 40223 3A/110B | 0072 |  | 2N281 |
| N66 | 586 | EL37 | 0 C 73 |  | 2N283 |
| N77 | 136 | EL91 6P17 6AM5 | 0 C 76 |  | 2N284 |
| N78 | 3711 |  | OD3 | 216 | VR150-30 15003 |
| N118 |  | N145 | OM1 | 1402 | CY31 |
| N119 |  | UR84 | OM3 | 1054 | EB34 |
| N142 | 1977 | UL41 45A5 | OM4 | 1055 | EBC33 6R7 |
| N144 | 136 | EL91 6AM5 | OM5 | 1056 | EF36 |
| N147 |  | EL23 6AG6 | OM5B |  | EF37A |
| N148 |  | $7 \mathrm{C5}$ | OM6 | 1063 | EF39 |
| N150 | 3889 | EL41 6CK5 | OM7 |  | EF39 |
| N151 |  | EL42 | OM9 | 1052 | EL32 |
| N152 | 5077 | PL81 21A6 | OM10 | 1581 | $6 \mathrm{K8GT}$ |
| N153 |  | PL83 15A6 | OP41 |  | PenB4 |
| N154 |  | PL82 16A5 | OP42 |  | PenA4 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 024 | 517 | 1003 | Pen428 | 3634 | AC4/Pen B4 |
| OZ4QA | 692 | 1003 | Pen1340 | 3635 | 7 D 8 |
| P 2 | 1246 | PN202 | Pen1346 | 3636 |  |
| P2-12 |  | QGE04/20 832A | Pen3520 |  | $7 \mathrm{D6}$ |
| P2-40B |  | 829B | PenA4 | 3638 | APP4B 7A3 |
| P6 |  | 1163 | PenB1 | 1118 | PM22A |
| P12/250 | 1168 | ACO44 | PenB4 | 3624 | GS46 |
| P15 |  | 1164 | PendD4020 |  | DDPP39M |
| P27/500 | 1040 | PX25 | PJ8 | 3640 | 5556 |
| P41 | 1408 |  | PJ23 | 3680 | 1641 |
| P57 | 1466 |  | PK150 | 150 |  |
| P61 | 1066 |  | PL17 | 2957 | TQ2 XG5-500 5557 |
| P215 | 1019 | 215P PM2 | PL21 | 797 | TQ2 2 D 21 EN91 |
| P220 | 3620 | P220 | PL36 |  | 25E5 |
| P220A | 1023 | PM202 | PL81 | 5077 | 21 A6 |
| P240 |  | PM202 | PL82 |  | 16A5 30P16 |
| P410 | 3621 | P410 PM4X | PL83 |  | 15 A6 |
| P415 | 1154 | PM254 | PL84 |  | 15CW5 |
| P425 | 1154 | PM254 | PL522 | 2520 | 5 C 22 FX219 |
| P435 |  | PM24M | PL1265 |  | Z300T |
| P435/1E | 398 | 715B | PL5632 | 5234 | C3J 8063 2T1011 XR1-1600A |
| P440N |  | Pen4Va | PL5684 | 5234 | C3JA 8063 2T1011 XR1-1600A |
| P441N |  | Pen4Va | PL6011 |  | C3JA |
| P460 |  | PX4 | PMO4 | 454 | 6BA6 EF93 |
| P495 | 1181 | PenA4 | PMO5 | 850 | $6 \mathrm{AK5}$ EF95 |
| P535/1E | 398 | C1111 715B | PM07 | 138 | 6AM6 EF91 |
| P552/1E | 427 | 5 D 12 C 1111 | PM1A | 2977 | PM2HL |
| P610 | 3622 | P610 | PM1HF | 1673 | PM2HL |
| P625 | 1208 | 625 P | PM1HL | 3641 | HL2 210HL |
| P807 |  | 7293 | PM1LF | 3642 | HLB1 D210 |
| P809 |  | 7294 | PM2 | 1019 | 215P |
| P810 |  | 6198 | PM2A | 3643 | LP2 L2 |
| P811 |  | 7295 | PM2B | 1032 | 220 B |
| P813 |  | 6332 | PM2BA | 1163 |  |
| P816 |  | 5820 | PM2DL |  | PM2HL |
| P817 |  | 6474 | PM2DX | 3645 | PM2HL |
| P882 |  | 7389 | PM2HL | 1050 | HL2K |
| PA1 | 1689 | 104 | PM3 | 1151 | L410 410LF |
| PA20 | 1732 | ML4 | PM4DX | 1152 | 410 LF L410 |
| PA40 | 3623 | V503 | PM12 | 1018 | 215SG 221 |
| Pa5021 |  | DCG4/1000G | PM12A | 1018 | SG215 S2 |
| PabC80 |  | 9 9K8 | PM12M | 1041 | 220Vs US2M |
| PCC84 |  | 7an7 30L1 | PM12V | 319 |  |
| PCC85 |  | $9 \mathrm{AQ8}$ | PM14 | 1159 | S410 |
| PCC88 |  | 7DJ8 | PM22 | 3649 |  |
| PCF80 |  | $30 C 1$ 9A8 | PM22A | 3647 |  |
| PCF82 |  | 908 | PM22D | 3578 | KT2A |
| PCL82 |  | 16A8 | PM24A | 1167 |  |
| PCL83 | 5144 |  | PM24D | 1237 |  |
| PCL84 |  | 150Q8 | PM24E | 3648 |  |
| PD22A | 1163 |  | PM202 | 185 |  |
| PD220 | 1032 | 220 B | PM254 | 1153 |  |
| PD220A | 1696 | B21 240B | PM256 | 1208 | 625 P |
| PE7 | 3624 | GS46 | PP2 |  | PN22A |
| PE8 | 3625 | VS18B0 | PP3/250 | 1168 | AC044 PX 4 |
| Pen4DD | 519 | DDPP4M | PP4 |  | PM24M |
| Pen4Va | 1174 | APP4A 7A2 | PP5/400 | 1040 | P27/500 |
| Pen4VB |  | PenA4 7A3 | PP6/400 |  | PX25 |
| Pen13C | 889 | 7 D 8 | PP6AS |  | EL2 |
| Pen25 | 65 | Pen25 | PP6BG |  | EL33 |
| Pen36A | 1672 |  | PP13A |  | 7 D 5 |
| Pen36C | 1672 | 706 | PP35 |  | $7 \mathrm{D6}$ |
| Pen40do |  | DDPP39M | PP36 | 1672 |  |
| Pen44 | 3630 |  | PP60 | 1075 | KT66 |
| Pen45 | 1407 |  | PP220 |  | PM202 |
| Pen45DD | 3631 |  | PP222 | 1118 | KT2 |
| Pen46 | 1127 |  | PT2 | 1118 | PM22A |
| Pen220 | 1118 | PM22A | PT4 | 1181 | 7 A 3 |
| Pen220A | 1051 | 220PT | PP5 | 3652 |  |
| Pen231 | 3633 | PN22D | PT5E | 3579 |  |
| Pen383 | 1456 | 706 | PT6 | 3653 | SW75Pen |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PT11 | 3654 |  | QS75/40 | 1895 | 6939 VR75/30 OA3 |
| PT15 | 1104 | SW40Pen | QS75/60 | 434 |  |
| PT25 | 1046 |  | QS83/3 | 449 | 85 A 2 |
| PT41 |  | PM24M | QS92/10 | 188 | 7475 |
| PT425 | 3656 |  | QS95/10 | 286 | $95 \mathrm{A1}$ |
| PT425 | 1167 |  | QS105/45 | 422 |  |
| PTA | 889 | 705 | QS108/45 | 422 |  |
| PV05-15 | 3657 |  | QS150/50 | 287 | SM150 150A2 |
| PV1-35 | 3658 |  | QS150/30 | 216 | OD3 150C3 |
| PV4 |  | DW4-350 | QS150/40 | 216 | VR150/30 OD3 15003 |
| PV495 | 1443 | DW2 | QS150/45 | 395 | BS54 |
| PV4200 |  | DW4-500 | QS1200 | 2225 | 6354 150B2 |
| PX4 | 1168 | ACO44 | QS1202 | 4052 |  |
| PX5 | 1040 | 420XP 1024 | QS1203 | 4053 |  |
| PX25 | 1040 | P27/500 | QS1205 | 3798 | VR75/30 |
| PX41 | 1168 | AC044 | QS1206 | 686 |  |
| PX230 |  | PM202 | QS1207 | 1832 | OA2 |
| PY3-600 | 1373 |  | QS1208 | 1833 | OB2 |
| PY80 |  | 19x3 | QS1209 | 449 | 85 A2 063 |
| PY81 |  | 1723 | QS1210 | 4020 | M8223 OA2WA |
| PY82 |  | 19 Y 3 U 192 | QS1212 | 4048 | M8224 OB2WA |
| PY88 |  | 3OAE3 | QS1213 | 4054 | M8142 |
| PZ1-35 | 1240 |  | Qvo3-12 | 2129 | 5763 |
| PZ1-75 | 1221 | SW75Pen PT5E | QV04-7 | 309 |  |
| QA75/40 | 1895 | STV70/60 | QV04-7R | 483 | M8157 807 |
| QA2400 | 4015 | 6065 M8161 | Qv05-25 QV06-20 | 124 3523 | 6146 |
| QA2401 | 133 | L77 6C4 | QV06-20 | 2519 | 4X150A |
| QA2402 | 136 | N77 EL91 | QV1-150A | 2519 | 4 X 150 A |
| QA2403 | 4014 | M8083 | QV20-P18 | 2752 | 4PR60A |
| QA2404 | 4025 | 6058 EB91 | QY2-100 | 26 | C143 813 |
| QA2405 | 415 | 44A/160M | QY3-65 | 1905 | 4-65A |
| QA2406 | 4024 | M8162 6063 | QY3-125 | 2130 | 6155 |
| QA2407 | 4005 | 6063 6X4WA | QY4-250 | 2131 | 6156 |
| QB2-250 | 26 | 813 6155 C1108 0160-1 |  | 5959 | C1136 |
| QB3-300 | 2130 | 6155 6156 $6071112080400-3$ | QY4-500A |  | QBL4/800 |
| QB3.3-750 |  | $6156 C 1112$ Q400-3 6079 | QY5-300W |  | CW1100 |
| QB3-1750 |  | 6079 ( 6076 ACS4 CR1110 | QY5-500 | 3522 | 6078 |
| QBL5/3500 | 5129 | 6076 ACS4 CR1110 6075 CW1100 | QY5-3000A | 1098 | ACS4 |
| QBW5/3500 |  | 6075 CW1100 | QYS50-P40 | 313 |  |
| QE03-10 | 2129 | 5763 | R1 | 1443 | APV4 |
| QE05/40H |  | 6159 | R2 |  | IW4-350 |
| QF196 | 1078 | D1 2836 | R2/10 | 97 |  |
| QK26 | 1768 | 7078 | R2/38 | 98 |  |
| QK221 | 3902 | 6002 | R3 | 1039 | IW4-500 |
| QK283 | 3685 |  | R3/10 | 95 |  |
| QK284 | 3686 |  | R3/16 | 96 |  |
| QK338 | 3903 | 6410 | R4 | 1796 | DW4-350 R2 |
| Q13353 | 3737 |  | R4A | 1074 | DW4-500 R3 |
| QK533 |  | N1034 | R6A | 2775 | 1163 |
| QK610 |  | N1010 | R10 | 261 | 2T/270K |
| QMG159 | 2874 | 1005 | R11 | 1111 | U27 |
| QP21 | 1035 | 2400P | R12 | 426 | Ex51 6X2 |
| QP22B | 1035 | QPT2 | R14 |  | PZ30 |
| QP25 | 556 |  | R15A |  | 1164 |
| QP230 | 1035 | QP22B | R16 |  | 1 T 2 |
| QPT2 | 1035 | 240QP | R17 | 2218 | 6157 |
| QQE03-12 | 2798 | 6360 | R186 | 2235 | EY84 6374 |
| QQE06-40 | 424 | 5894 | R19 |  | 1X2B |
| QQVO2-6 |  | TT23 | R41 | $\cdots$ | DW4-500 |
| QQV03-10 | 2798 | $11 \mathrm{E13}$ TT24 | R42 |  | IW4-350 |
| QQVO3-20 | 2799 | 6252 | R52 | 1863 | $524 \mathrm{GGZ30}$ |
| QQVO3-20A | 2799 | TT20 | R243 |  | EC55 5861 |
| QQv04-15 | 788 | 832A C180 | R290 |  | K81A |
| QQvo4-20 | 2663 | 815 | R612G | 597 | 2X2A |
| QQV06-40 | 424 | 5894 | R4410 | 521 |  |
| QQVO6-40A | 2797 | TT25 | R6015 | 2354 |  |
| QQV5-P10 | 2295 | 3E29 | R6010 | 2353 |  |
| QQZ04-15 | 1838 | 5895 | RE614 |  | LK4110 |
| Q570/20 | 284 | 75B1 STV70/20 | RENS1824 |  | X2818 |
| QS75/20 | 284 | 75B1 | RENS1834 |  | X2918 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RGif-204A | 1072 | MU4250 | RX233 | 3688 | 2033 |
| RG1-240A |  | ESU101 | RX233A | 793 | 2 C 33 |
| RG1-125 | 1263 |  | RX2235 | 709 | 723824 |
| RG1-240 | 1626 | GU50 | RY12 |  | 8020 |
| RG1-250 | 3667 | DCG1-250 | RZ |  | UR1C 1 D5 |
| RG3-250 | 1625 | DQ2A ESQ866 | R21-150 | 3690 |  |
| PGG3-250A | 32 | 866A GU12 DQ2 | RZ1-250 | 2853 |  |
| RG3-1250 | 1629 | DOG4/5000 | S1M2 | 2134 | 90cV |
| RG3-1250A | 5 | AH221 GU21 | S1M5 | 2155 | C5128R |
| RG4-1000 | 3670 |  | S1.5/8000 |  | 5552A |
| RG4-1250 | 5 | GU20/21 | S2 | 1018 | 215SG 221 |
| BGF5-500 | 1349 | 4064A | S2A | 984 |  |
| RG5-12GC |  | 6786 DGG7/100B | S3A | 374 |  |
| RG1000/3000 |  | DCG5 $/ 5000 \mathrm{~GB}$ DQ4 | S4V |  | SP4 AS4120 |
| RGN4004 |  | G4004 | S4VB | 1677 | MSTAB |
| RHK6332 |  | 732A/B | S6F12 | 4041 |  |
| RK18 |  | T50-1 | S6F17 | 4040 |  |
| RK20 |  | 4052A | S6F33 | 4064 |  |
| RK28 | 704 |  | S11A |  | DW2 |
| RK28 | 3672 | 4069A | S11D |  | DW4-350 R2 |
| RK28A | 3673 | 803 | S11E2 | 4060 |  |
| RК30 | 2657 | 800 | S13A | 3694 |  |
| RK31 | 3674 |  | S15/5D |  | TQ6 |
| RK33 | 875 | 20211642 | S23 | 3691 | 215SG 221 |
| RK34 | 18 | 4074A | S23Met | 3692 | SG215 221 |
| RK38 | 2591 |  | S24 | 1018 | 221 215SG |
| RK47 | 3677 | 814 | S25A | 16 | 3A/145J |
| RK48 |  | 813 P120-1 | S26A | 53 | 3A/146J |
| RK48A | 690 |  | S27A | 82 | $3 \mathrm{~A} / 147 \mathrm{~J}$ |
| RK51 |  | T50-1 | S28A | 88 | 3A/148J |
| RK49 | 3679 | 807 | S30A | 127 | 3B/401J |
| RK57 | 625 | 805 T100-1 | S30C |  | AC044 |
| RK60 | 3680 | 1641 | S130 | 1110 | GTR120A |
| RK62 | 3681 |  | S130P | 45 | GTR120A |
| RK63 | 2589 | 250TH HK454H | S213 |  | PM12M |
| RK6112 | 2116 | - | S215 | 3695 | 221 215SG |
| PKR47 | 3683 |  | S215A | 3696 | 221 |
| RKR72 | 709 | 72 3B24 | S215B | 1018 | 221 |
| RKR73 | 2543 | 73 | S215VM | 1028 | PM1 2M |
| RL7 7 | 1136 | EF54 | S218 |  | SP2 |
| RL16 | 1137 | EC52 | S410 | 1159 | PM14 |
| RL17 | 2957 | 5557 X $65-500$ | S420 |  | VP4B |
| RL18 | 1197 | EC53 | S435N |  | SP4 |
| RL21 | 797 | 2 D 21 EN91 | S610 | 3698 |  |
| RL37 | 66 | EC54 | S625 | 1317 | - 012 |
| RL57 | 5027 | 5559 XG1-2500 | S856 |  | OA2 |
| WL1267 |  | 1267 2300T | 5860 |  | OB2 |
| RR3-250 | 1835 | 3B28 ESU103 GXU1 | S1328 |  | SP13 |
| RR3-1250 | 2518 | 4 B 32 GXU 2 | SAL39 | 3876 |  |
| RR3-1250A | 2399 | 2G/473C GXU3 | SC1/350 | 2456 |  |
| RR3-1250B |  | GXU4 | SC1/400 | 2457 |  |
| RS566 |  | 30/310E | SC1/600 | 2458 |  |
| RS613 | 1924 | 5866 TB2.5/300 TY2-125 | SC1/800 | 2549 |  |
| RS630. |  | 5867 TB3/750 TY4-400 | SC1/1000 | 2460 |  |
| RS631 | 1351 | 5868 TB4/1250 TY4-500 | SC1/1200 | 2461 |  |
| RS685 | 2130 | 6155 QB3/300 QY3-125 | SC1/1400 | 2462 |  |
| RS686 | 2131 | 6156 QB3.5/750 QY4-250 | SD2 |  | PM2HL |
| RS687 | 3522 | 6079 QB5/ 1750 QY3-125 | SD6 | 1989 |  |
| RS 1002 |  | QB4/1100 | SD61 | 1092 | EA50 |
| RS1007 | 1924 | 6155 QB3/300 QT3-125 | SDR |  | 5555 |
| RS103L1 |  | TBL12/50 | SDS |  | 5553B |
| RS 1013 W |  | TBW12/50 | SE211C |  | PM12M |
| RSt061 |  | 5868 TB4/1250 | SG215 | 3702 |  |
| RSQ15/5 |  | TQ6 | SG215A |  | PM12M |
| RV120/250 | 1064 | DW4-500 1561 | SG220 | 1018 | 221 |
| RV120/350 |  | DW4-350 | SG250 | 1031 | ESG250 |
| RV120/500 |  | DW4-500 | S1M2 | 2154 | CS12B |
| RV200/600 |  | U18/20 | SIMS | 2155 | CS12BR |
| RX3-120 | 1261 |  | SM95 | 286 | GTR9SM/S 95A1 |
| RX120A |  | 1164 | SM150 | 287 | 150A2 150b3 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SN947D | 471 | ELTO 5902 | SW75Pen | 1371 | PZ1-75 |
| SN954 | 473 | 5641 EY70 | SX541 | 2384 | ZS10C |
| SN956B | 2251 |  | SX542 | 2413 | ZS20 |
| SP2 | 1320 | 210 SPT | SX643 | 4077 | ZS21 |
| SP4 | 1324 | AC/S2 HP4101C | SX644 | 4078 | ZS22 |
| SP4B | 3703 | - 101 803 6avo | T2G9/10E | 357 | D165747 |
| SP6 | 136 | EF91 803 6AM6 | T4D | 3721 |  |
| SP13C | 3704 | 8 D 3 | T6D |  | Ea50 |
| SP40Pen | 1104 | PT15 | T20 | 3772 | V970 |
| SP41 | 1547 |  | T20G | 1047 | 3B/200B |
| SP42 | 1336 |  | T21 | 3679 | RK49 |
| SP61 | 1065 |  | T40 |  | T50-1 |
| SP210 | 1332 | SP2 | T41 | 3723 |  |
| SP215 | 1320 |  | T55 |  | T50-1 |
| SP220 |  | PM202 | T200 | 3727 | H4D 11A2 |
| SP1320 |  | SP13C | T250 | 1030 | ET30 |
| SPT2 | 1049 | 210 SPT | T300/1 |  | TB3/1000 |
| SPT4A | 1282 | 8 A 1 | T814 | 2658 | 806 |
| SRS4452 | 2799 | QQE03/20 | T2000 | 1121 |  |
| SS22AF | 39 |  | TB2.5/300 | 1924 | 5866 |
| SS1971 | 1604 |  | TB3/750 |  | 5867 T3501-1 |
| ST11 | 188 | 7475 E1436 | TB4/1250 | 1351 | 5868 |
| ST90K |  | Z900T 5823 | TB5/2500 |  | 7092 |
| STE1000/2.5/15 | 5027 | 5559 XG1-2500 | TBL2/300 |  | 7004 |
| STE1300/01/5 | 797 | 2D21 EN91 | TBL6/6000 | 3926 | 5924 |
| STE2500/6/40 |  | 105 | TBLT/8000 |  | 6961 |
| STE15000/15/45 |  | DCG7/100 | TBL12/250 |  | 6618 |
| STR108/30 |  | OB2 | TBL $12 / 100$ |  | 6078 |
| STR150/30 |  | OA2 | TBW6/600 |  | 5923 |
| STV70/20 | 284 | 75B1 | TBW7/800 |  | 6960 |
| STV70/60 | 1895 |  | TBW12/25 |  | 6617 |
| STV85/10 | 449 | 85 A 2 CG 3 | TBW12/100 |  | 6077 |
| STV108/30 | 1833 | OB2 108C1 | TD1-100A | 2516 | 2C39A |
| STV150/30 | 1832 | OA2 150C2 | TD2.5-12 | 688 2932 | 464A |
| STV150/200 | 3709 |  | TD3-12 | 2932 | 2C42 |
| STY280/40 | 1068 |  | TD6 ${ }^{\text {TD4-10 }}$ | 2201 | $\begin{aligned} & \text { E2043 } \\ & \text { EA50 2B35 } \end{aligned}$ |
| STY280/80 | 1069 |  | TDDD2A |  | TDD2A |
| STV280/80A | 3712 |  | TDD 4 | 3727 | DDT4 11 D3 |
| SU41 SU44 | 1113 261 | U17 2T/270K | TDD13C | 1419 | DDT13 11D3 |
| SU44 SU45 | 261 371 | 2T/270K | TD03-5 | 345 | DET23 |
| SU61 |  | EY51 6X2 R12 R12A | TD03-10 | 273 | DET22 |
| SU150 | 128 |  | TD03-10F | 2204 | TD03-10F |
| SU2150A | 1290 |  | TT004-20 | 397 | DET24 |
| SU4150A | 1134 | HVR2 | TT005-12 | 2933 | $2 \mathrm{C46}$ |
| SV-0A2 | 1832 | OA2 4020 | TG30 |  | $3 \mathrm{C4} 5$ |
| SV-OB2 | 1833 | OB2 108C1 | TG57 |  | PL5557 |
| SV2C39A | 2516 | 2C39A | TG200B |  | 62684035 |
| SV-2D21 | 797 | 2 D 21 EN91 | TG1000 |  | 62785 C 22 |
| SV-3B28 | 1835 | 3828 - | TG3000 |  | 5949 |
| SV-3D21A | 2659 | 3D21A | TGRB |  | 872A |
| SV-3D22 | 2851 | 3 D 22 | TH2 | 1410 |  |
| SV-4B32 | 2518 | 4B32 | TH4A | 1194 | XA1 20A1 |
| SV4X/150A | 2519 | 4X150A | TH4B | 1194 | ACTH1 |
| SV.-4X150D | 3991 | 4X150D | TH22C |  | TH29 |
| SV-57 | 5027 | 3 V 390 B | TH41 | 1411 |  |
| SV-75/30 | 3598 |  | TH225 |  | 2K25 |
| SV280/40 | 1068 |  | TH813 | 26 | QB2-250 |
| SV280/80 | 1069 |  | TH1249 |  | 2 J 49 |
| SV-705A | 3587 | 705A 2T/450E | TH1250 |  | 2 J 50 |
| SV813 | 26 | 813 C 143 | TH1450 |  | 4 J 50 |
| SV-828 | 631 | 828 | TH1452 |  | 4 J 52 |
| SV-5545 | 2215 | XR1-6400 | TH1478 |  | $4 J 78$ |
| SV-VR150/30 | 216 | OD3 150C3 | TH1526 |  | 5 J 26 |
| SW5 | 3715 |  | TH1725A |  | 725 |
| SW7 | 3719 |  | TH2200 |  | K345 |
| SW7 | 1069 |  | TH2312 |  | TH29 |
| SWioh | 1076 | da91 TZ40 | TH5021B | 32 | DCG4/1000G |
| SW35Pen | 1370 | PY1/35 | TH5021V | 1625 | DCG4/1000ED |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TH5031 | 1449 | 872A | TY4-350 | 536 | 4120/AA |
| TH5031B | 1835 | DCG5 /5000GB 3B28 | TY4-500 | 1351 | 5868 |
| TH5040 |  | 869B | TY5-500 |  | TB4/1500 |
| TH5221 |  | 3B28 | TY6-800 |  | TB5/2500 7092 |
| TH5221V/B |  | DCX4/1000 | TY6-5000A | 3926 | 5924 |
| ${ }_{\text {TH6011 }}$ |  | PL5577 | TY6-5000 |  | 5923 -TBW6/6000 |
| TH6031 |  | PL5559 | TY7-6000A | 5239 | TBL7/8000 6961 |
| TH6120 |  | PL105 | TY7-6000 |  | TBW7/8000 8268 |
| TH6220 |  | PL5545 | TY12-25 |  | TBW12/25 |
| TH6230 |  | PL3C23 | TY12-25A |  | TBW12/25 6618 |
| TH6345 |  | 3045 | TY12-50A |  | 6078 TBL $12 / 100$ |
| TH6435 | 1787 | 6268 4C35 XH8-100 | TYS4-500 |  | 6077 TBW12/100 |
| TH6522 | 2520 | 6276 5C22 HT415 XH16-200 | TZ03-20 | 1889 |  |
| TH6907 | 3521 | 59491907 XH25-500 | TT23 |  | QQvo2-6 |
| TH7020 |  | 5551A | TT24 |  | QQVO3-10 |
| TH7030 |  | 5552A | TT25 |  | QQVO6-40A |
| TH7040 |  | 5553B | TZ2-250 | 1618 | ES250M |
| TMC15B | 3730 |  | TZ2-300 | 3741 |  |
| TMC16B | 3731 |  | TZ4C |  | DA41 |
| TMC20B | 3732 | 405UA | TZ20 | 3742 |  |
| TP22 | 1344 | $\because$ | TZ40 | 1076 | DA41 SW40W |
| TP25 | 1345 |  | U4 | 1608 |  |
| TP26 | 3735 |  | U5 | 3743 |  |
| TQ1/2 |  | 3 C 23 ASG5023 | U6 | 3744 |  |
| TQ2 |  | PL1 17 TH6011 FG17 ASG5017 | U10 | 1443 | RV120/350 R 1 |
| TQ2-3 | 2210 | 5544 ASG5044A XR1-3200 | U12 | 1064 | DW4-500 |
| TQ2/6 | 2215 | $5545 \mathrm{C6J}$ TH6020 XR1-6400 | U14 | 1064 | DW4-500 |
| TRP4 | 2378 |  | U15 | 3747 | R4A 1561 |
| TRPS | 2379 |  | U16 | 1290 | SU2150A |
| TRW1 | 2351 |  | U17 | 1113 |  |
| TRW2 | 2303 |  | U18 | 1264 | FW4-500 451U |
| TRW5 | 2297 |  | U18/20 | 31 | FW4-800 |
| TRW7 | 3539 | 6024 ATR387 | U19 | 187 |  |
| TS70 | 798 | 2 E 22 | U19/23 | 187 |  |
| 'TSP4 | 560 |  | U20 | 31 | FW4-800 |
| TSH05 | 1288 | DETY 2 | U21 | 3751 |  |
| TSW50 | 1288 | DET12 | U22 | 3750 |  |
| TSW50A | 1235 |  | U23 | 235 |  |
| TSY4-500 | 1889 |  | U24 | 1927 | B142 |
| TT14 | 1179 | 41FP M4 | U27 | 1111 | V1907 |
| TT10 | 26 | 813 | U30 | 3752 |  |
| TR11 | 1501 | E1192 | U31 | 3753 | 2524G |
| TT12 | 524 |  | U37 | 2289 | 1 T 2 |
| TH15 | 415 | 44A/160M | U41 | 2115 | 1 T 2 |
| TT16 | 2963 | C1108 | U43 | 246 | EY51 R12A 6X2 |
| TT17 |  | PL5557 | U45 |  | U25 |
| TP18 | 2666 | 829B C144 | U47 |  | U26 |
| TT20 | 2799 | QQV03-20 | U50 | 1268 | 5Y3GT 524 |
| TTR31 | 221 | E1516 | U52 | 1071 | 5U4G |
| TTR31MC | 1748 |  | U54 | 378 | 53KU GX37 |
| TTR21MR | 3841 | 6F1 | U60 | 4075 |  |
| TTR31NR | 1923 |  | U70 | 574 | 6X5GT EZ35 |
| TV03-10 | 1573 |  | U74 |  | 3524GT |
| TV03-10A | 1089 |  | U76 |  | 35Z4GT |
| TV4 | 1412 |  | U78 | 493 | 6X4 EZ90 |
| TV101 |  | ESU151 | U82 | 3919 | 2724 7Y4 |
| TV102 | 1504 | VU504 | U118 |  | U145 |
| TV801 |  | 4303CB TY1-50 | U119 |  | UY85 35A3 ${ }^{\circ}$ |
| TX2/3 | 2210 | 5544 | U142 |  | UY41 31A3 |
| TX2/6 | 2215 | 5545 | U143 | 2862 | AZ31 |
| TX3-200 | 3739 |  | U147 | 574 | $6 \mathrm{X5}$ EZ35 |
| TX4 | 1194 | X41 20a1 | U149 |  | 7 T 4 |
| TXX5-400 | 3740 |  | U150 | 3891 | EZ40 6BT4 |
| TX12-12 |  | CAT6 | U151 | 426 | EY51 6X2 R12 |
| TX41 |  | TH4B | U152 |  | PY80 19X3 |
| TXM100 |  | 2 D 21 EN91 | U153 |  | PY81 1723 |
| TY1-50 | 1288 | DET12 8019 | 0154 |  | PY82 19 Y 3 |
| TY2-125 | 1924 | 5866 | U192 |  | PY82 1943 |
| TY3-250 | 1350 | 5867 | U201 |  | CY31 |
| TY4-350 | 635 | 833A | U281 |  | CY31 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | - |  |  |
|  |  | PY32 | V203A/1K | 234 |  |
| U291 |  | CY31 | V203C/LD | 230 |  |
| U301 |  | CY31 | V 226 | 3765 |  |
| U319 |  | PY82 19 Y 3 | V230A/K | 299 |  |
| U381 |  | UY85 | V233A/1K | 2190 |  |
| 0404 |  | 31A3 | V235A/1K | 2221 |  |
| 1600 | 3756 |  | V239/1K | 5048 |  |
| U709 | 5072 | EZ81 6CA4 | V240C/2K | 2189 |  |
| U718 | 3891 | UU9 EX40 6BT4 | V241C/1K | 5049 |  |
| U4020 | 1267 | V30 UR1C 1D5 | V245 | 1367 |  |
| UABC80 |  | DH109 10LD12 | V246A/.1K | 228 |  |
| UAF42 |  | 12S7 | V248A | 1366 |  |
| UBC41 |  | 14L7 10LD3 | V257 | 1723 |  |
| UBC81 |  | $10 \mathrm{LD13}$ | V312 | 3766 |  |
| UBF80 |  | 171DDP $17 \mathrm{C8}$ | V339 | 3767 |  |
| UBF89 |  | 10 FD 12 | V503 | 3768 | DA30 440XP |
| UC92 |  | $9 \mathrm{AB4}$ | V625 | 93 |  |
| UCC85 |  | B109 10L14 | V630 | 201 |  |
| UCH42 |  | 14K7 | V872 | 1116 | 6 F 32 |
| UCH81 |  | X119 10C14 19D8 | V877 | 3769 |  |
| UCL82 |  | 50BM8 | V884 | 131 | 6CQ6 EF92 |
| UD2 |  | PM202 | V885 | 132 |  |
| UD143 | 2293 | XB1 | V887 | 136 | EL91 N77 |
| UD166C | 2257 | XC11 | V914 | , 1170 | 2D4A |
| UE301 | 621 | 801 | V994A | 3797 |  |
| UE311 | 25 | 4242A ES85 | V995 | 3770 |  |
| UE905 | 625 | 805 RK57 | V960 | 54 |  |
| UE938 | 638 | 838 RK58 | V970 | 3772 |  |
| UE945 | 735 | 845 | V1010 | 3773 |  |
| UE966 |  | DCG/1000G 866A | V1020 | 3774 |  |
| UE966A |  | DCG4/1000G 866A | V1021 | 3775 |  |
| UE972 | 642 | 872A | V1023 | 3776 |  |
| UE972A |  | DCG5/5000GB PL5557 | V1029 | 3777 |  |
| UE1967 |  | PL5557 12AC5 | V1040 | 987 |  |
| UF41 |  | 12AC5 | V1042 | 275 |  |
| UF89 |  | $12 \mathrm{DA6}$ | V1043 | 401 |  |
| UL41 | 1977 | $45 \mathrm{A5}$. | V1047 | 961 |  |
| UL84 |  | 10D18 45B5 | V1052 | 441 |  |
| UM80 |  | Y119 19BR5 | V 1063 P 1 V 1101 | 400 1361 | MXO5-20 |
| UM85 |  | 10M2 | V1105 | 3778 |  |
| UR1 |  | CY1 | V1111 | 1127 | Pen46 |
| UR1C | 1267 | V20 105 | V1120 | 72 |  |
| UR3C | 3758 |  | V1120B | 73 | 11E3 |
| UU2 |  | R2 | V1133 | 276 | 11 E 2 |
| U33 |  | 1W4-350 R2 R3 R1 | V1135B | 345 | 12E1 |
| U44 | 3759 | 1W4-350 R3 | V1135C | 277 | 1963 : |
| U05 | 1039 | 1W4-500 R3 | V1501 | 3581 |  |
| UU6 | 1413 |  | V1505 | 1252 | 212E MX-275 |
| UU7 | 3761 |  | V1507A | 1504 | EHTH |
| UU9 | 1855 | E240 | V1901 | 1504 | EHT1 |
| UU10 |  | RV200/600 | V1904 | 1072 | MU4250 |
| UU12 | 5072 | E281 6CA4 | V1906 | 20 |  |
| UU60/250 |  | 1W4-350 R2 | V1907 | 1111 | R11 |
| UU120/250 |  | 1W4-350 R2 | V1913 | 1508 | 019 |
| UU120/350 | 1796 | RV120/350 R2 | V1920 | 121 | $19 \mathrm{H1}$ |
| UU120/500 | 1064 | APV4 R3 | V1922 | 74 | ESUT4 |
| UV203A | 2986 | 203A | V1924 | 100 |  |
| UX866 |  | DCG4/1000GB | V1928 | 261 | 2T/270K R10 |
| UX6653 | 3592 |  | V1939 | 371 | $19 \mathrm{G6}$ |
| UY41 |  | 31 A 3 | V2024 | 125 |  |
| UY85 |  | U381 38A3 | V2030F | 349 |  |
| UY807 |  | 807 | V2046A | 486 |  |
| V 20 | 764 | UR1C | V2053 | 403 |  |
| V20S |  | CY1 | VA16 | 528 |  |
| V40 | 2967 | 8020 RY12-100 | VA35 | 285 |  |
| V54 |  | K358 | VA50 | 2132 | 90AV |
| V700 |  | T50-1 | VA201B |  | K351 |
| V120 | 3762 |  | VA220 |  | K345 |
| V123 | 3763 | $\cdots$ | VF01 | 80 |  |
| V154 |  | K353 | VFO3 | 81 |  |


| TYPE | cV No. | EQUIVALENTS | TYPE | cV No. | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VFT6 | 2976 | 6 6us | W76 |  | 12K7¢T |
| VFT6 | 2747 | 6U5G | W77 | 131. | EF92 9D6 6F21 |
| vG1 | 2976 | NE2 GET2 | W81 |  | $7 \mathrm{H7}$ |
| VH550 |  | DCG4/1000ED | W118 |  | W145 |
| vH550A |  | DCG4/1000G | W142 |  | UF41 12AC5 |
| VH7400 |  | DCG4/5000GB | W143 |  | EF22 $7 \mathrm{H7}$ |
| vh7400a |  | DCG4/5000EG | W147 | 1053 | EF39 |
| VHT2 |  | FC2 | W148 |  | 7H7 |
| vhт2A | 1043 | FC2A | W149 |  | $7 \mathrm{P7}$ |
| VHT4 | 2955 | FC4 15A2 | W150 | 3886 | EF41 6 C15 |
| vHTA | 2956 | $15 \mathrm{D1}$ | W719 | 1375 | EF85 |
| VJ5552 |  | PL552A5 | W727 | 454 | EF93 6BA6 |
| VLS452 | 3784 | 5A/102A | W731D | 2538 | 59 |
| VLS492AG | 1527 |  | W739 |  | 6F18 |
| VM4V |  | AS4125 | WD30 | 3810 |  |
| VMP4 | 1169 | 9 A 1 | WD119 |  | UBF89 |
| VMP4G | 1169 | 9 A 1 | WD142 |  | UAF42 1257 |
| VMP4Met | 1169 | 9 A 1 | WD150 | 3883 | EAF42 6 CT7 |
| VMS4 | 1165 | As4125 | WD709 |  | EBF80 |
| V02 |  | ${ }^{\text {FCCIA }}$ | WE12 |  | EN4 |
| vo4 | 2955 | FC4 | WE17 |  | 5551 |
| v013 |  | FC13C | WE189 |  | 1163 |
| v013S |  | FC13 | WL17 |  | 5551 |
| VP2 | 3787 | VP21 | WL631 |  | 5559 3V/390A |
| VP2BMet | $\begin{array}{r}520 \\ 3788 \\ \hline\end{array}$ | 9A1 | WL651 |  | 5552A |
| VP4A | 1169 | 9A1 | WL652 |  | 5551 A |
| VP4B | 3582 | AC/VP2 | WL653B |  | 5555 |
| vp6 | 133 | EF92 9D6 6CQ6 | WL655 ${ }^{\text {W2899416 }}$ |  | 1163 VE289 |
| VP13C | 3790 | 9 PD 2 | WT210-0001 |  | 2 D 21 |
| VP21 vP23 | 1083 3792 | VP210 | WT210-0003 |  | WL884 |
| VP23 VP24Met | 3792 3793 |  | WT210-0004 |  | WL2050 |
| VP241 ${ }^{\text {VP }}$ t | 3793 21 |  | WT210-0008 |  | 866A |
| vP133 | 1457 |  | WT210-0011 |  | 003 |
| vp210 | 3794 | VP2 | WT210-0016 |  | ${ }_{\text {WL172 }}$ |
| VP1322 | 3796 | VP13B 9D2 | WT210-0038 |  | 5796 |
| VPT2 |  | VP210 | WT210-0044 |  | 575 A |
| VPT4 | 1083 | VP21 | WT210-0045 |  | 892 |
| VPT4 VPT4B | 1169 1169 | 9A1 | WT210-0047 |  | 3 C 23 |
| VPT210 | 1083 | vP2 | WT210-0051 |  | OA2 |
| VR75/30 | 3798 | OA3 | WT210-0054 |  | ${ }_{\text {PL5 }} 5859$ |
| VR90-30 | 3799 | ${ }^{\text {OB3 }}$ | WT210-0057 |  | 632 B |
| VR90-ST | 686 | - | WT210-0058 |  | Ku676 |
| VR105-MT |  | OB2 | WT210-0059 |  | ${ }_{5685}^{677}$ |
| VR105-ST |  |  | WT210-0063 |  | 5665 |
| VR150-30 | 216 | ${ }_{\text {OL2 }}$ OD3 2 2S150/40 150C3 | WT210-0069 |  | 5557 |
| VR150-ST |  | OD3 | WT210-0070 |  | 5550 |
| vS2 | 3800 | PM12M | WT210-0071 |  | 5551A |
| VS18B0 | 3625 | PE8 | W1210-0072 |  | 5553 B |
| VS24 | 3802 3803 | ${ }_{\text {PM12M }}$ | WT210-0074 |  | WLi05 |
| VS26 | 161 |  | WT210-0075 |  | 5822 |
| vS210 |  | PM12M | WT210-0077 |  | \% K 182 |
| vS215 |  | PM12M | WT210-0078 |  | ML182 |
| vx2 |  | $\checkmark \mathrm{VP2B}$ | WT210-0079 |  | ${ }_{105}^{105}$ |
| VX550A VX7400 |  | DCX4/1000 DCX4/5000 | WT210-0086 |  | 833A |
| Vx7400 W7/1D | 2358 | DCX4/5000 | WT210-0093 |  | 5668 |
| W7/2D | 2188 |  | WT210-0100 |  | 5796 |
| W17 | 785 | DF91 1 T4 | WT210-0116 |  | 632 B |
| W21-4 | 171 | 210 VPT | WT210-0120 |  | ${ }_{678}$ |
| W21-7 | 3804 | VP21 | WT210-0134 |  | 678 |
| W25 |  | DF96 | WT210-0137 |  | 502 A 5796 |
| W30K | 3805 3806 |  | WT210-0157 |  | 5552A |
| w61 | 100 | V1924 | WT262 |  | $2 \mathrm{~V} / 400 \mathrm{~A}$ |
| W63 | 1183 | 6K7G 6UT | HT269 |  | VR105 |


| TYPE | CV No. | EQUIVALENTS | TYPE | CV No. | EQUIVALENTS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WT272 |  | PL5557 TQ2 | XH3-045 | 372 | BT79 3645 |  |
| WT294 |  | VR150 | XH8-100 | 1787 | 62684035 |  |
| W1606 |  | 2 D 21 | XH16-200 | 2520 | 6279 5c22 |  |
| WT-T105 |  | 892 | XH25-500 | 3521 | 59491907 |  |
| WT-T106 |  | 6011 | XL02.0V | 1701 |  |  |
| WT-T108 |  | $3 \mathrm{C23}$ | XL1. 5 | 1720 |  |  |
| WT-T110 |  | 5830 | XL2V | 3831 |  |  |
| WT-T111 |  | 5559 | XN | 14 | . |  |
| WT-T112 |  | 632B | XP1.5 | 176 |  |  |
| WT-T113 |  | KU676 | XP2V | 1702 |  |  |
| WT-T117 |  | 5557 | XP4 |  | PX4 |  |
| WT-T118 |  | 105 | XR1-12 | 5957 | 5855 |  |
| WT-T119 |  | 172 | XR1-600 | 3706 | 5796 |  |
| WT-T127 |  | 833 A | XR1-3200 | 2210 | 5544 |  |
| WT-T132 |  | OA4G | XR1-6400 | 2215 | 5545 |  |
| WT-T141 |  | VR57 VR75/30 | XR6 | 465 | EF72 |  |
| X14 |  | 147 | XR7 | 466 | EFF3 6488 |  |
| X17 | 782 | DK91 1R5 | XR8 | 468 | EL70 6K4 |  |
| X18 |  | DK92 1AC6 | XSG1.5V | 175 |  |  |
| X20 |  | DK92 | XSG2V | 3833 |  |  |
| $\times 21$ | 3816 | FC2A | XW2V | 1703 |  |  |
| X21Met | 3817 |  | Y25 |  | 1M1 DM70 |  |
| X22 | 3818 | FC2 | Y61 | 1103 | 6U5G |  |
| X23 | 1082 | 2201H | Y63 | 1103 | 6U5G |  |
| X24 | 3819 | 22017 | Y65 | 51 | A1320 |  |
| X24Met | 3820 | 220TH | Y119 |  | UM80 |  |
| X25 |  | DK96 | Y220 | 1118 | ET2 PT2 |  |
| $\times 30$ |  | 1501 | 214 |  | 1N5G |  |
| X31 | 3821 | 2002 | Z21 | 3836 | 2155 G 52 |  |
| X 31 Met | 3822 |  | 262 | 3838 | 12CSTGT |  |
| X41 | 1460 | $20 \mathrm{A1} \mathrm{ACHH1}$ | 263 |  | 637 G |  |
| X41Met | 2833 |  | 266 | 3839 | 68M6 |  |
| X42 | 3576 | MH4105 15A2 | 277 | 138 | EF91 8D3 6AM6 |  |
| X61M | 281 | 6 K 39 ECH35 | Z90 | 1091 | EP50 |  |
| $\times 63$. | 3825 | 6ABG | 2142 |  | UF42 |  |
| $\times 64$ | 1208 | 6L7G | Z150 | 3887 | EF42 |  |
| $\times 65$ | 3826 | 6KBG | 2152 | 1376 | EF80 6BX6 6BW |  |
| X66 | 1099 | AF3 | Z203G | 2271 | GC10B. |  |
| X71 |  | 12K8 | Z225 |  | DQ2 |  |
| X76 |  | 12 K 8 | 23036 | 2271 | QC10B |  |
| X77 | 132 | EK90 6BE6 | Z239/16 | 2187 |  |  |
| X81 |  | 7S7 | 23007 | 1992 | 1267 |  |
| X117 |  | 5D22 | Z319 | 2276 |  |  |
| X118 |  | X145 | 2319/1G | 2187 |  |  |
| X119 |  | UCH81 | Z329 |  | 30F5 |  |
| X142 |  | UCH42 14K7 | 2502S | 2325 | GC10C/S |  |
| X143 |  | ECH21 : | Z719 | 1376 | 6BX6 EF80 6BW | 2152 |
| X147 | 1581 | ECH35 6K8G | 2729 | 2901 | EF86 6722 |  |
| X148 |  | 7S7 | Z759 | 5060 |  |  |
| X150 | 3888 | ECH42 6007 | Z800U | 2236 |  |  |
| X661 | 2183 |  | Z801U | 2255 |  |  |
| X662 | 2234 |  | Z803U | 2434 | 6779 |  |
| X719 | 2128 | ECH81 6AJ8 | Z900T | 5122 | 5823 |  |
| $\times 727$ | 453 | EK90 6BE6 | 25823 |  | Z900T |  |
| XB1 | 2293 | UD143 | ZA1 | 1175 | A41 AP |  |
| XB875B |  | 2051 | ZA2 | 1095 | 4672 |  |
| XE1 | 495 | 5802 | 2017 | 784 | Daf91 1 S5 |  |
| XE2 | 2202 |  | ZD25 |  | DAF96 |  |
| XG1-2500 |  | 5559 | ZD152 |  | 6N8 EBF8O |  |
| XG2-12 |  | 255 | ZG532 | 2647 | 532 |  |
| XG2-500 | 1144 | BT19 | 2G547 | 372 | BT19 |  |
| XG5-500 | 2957 | FG17 | ZP455 | 2789 | $9 \mathrm{LP7}$ |  |
| XG15/10 |  | DCG7/100 | ZP477 | - 914 | 12017 |  |
| XG15/12 |  | DCG7/100B | 7P527 | 855 | 6 C 21 | $\because$ |
| XG25 |  | PL260 | 2P572 |  | 2C39A |  |
| XGQ2-6400 |  | PL105 | ZP579 | 3842 | 5 J 29 |  |
| XGR3 | 151 |  | ZP584 | 3843 | 5330 |  |
| XH1.5 | 3830 |  | ZP590 | 3844 | 5 J 31 |  |


| SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AD1 | DLS10 | ATP4 | V248A | CV53 | 3A/146J |
| AR4 | PM1HF | ATP5 | V245 | CV54 | V960 |
| AR5 | P220 | ATP7 | V266 | CV55 | E1190 |
| AR6 | LP2 | ATP10 | 1062A | CV56 | E1325 |
| AR7 | 4D1 | ATP35 | PV1-35 | CV57 | E1271 |
| AR8 | HL23DD | ATP75 | PT6 | CV58 | E1273 |
| AR9 | PM1LF | ATP100 | 4069A | CV62 | E1046 |
| AR10 | TDD2A | ATS25A | 807 | CV63 | E1323 |
| AR11 | 4019B | ATS70 | 4282B | CV64 | E1342 |
| AR12 | 4020A | AU1 | U18 | CV65 | Pen25 |
| AR13 | B406 | AU2 | RG250 | CV66 | RL37 |
| AR14 | 220 RC | AU3 | U12/14 | CV69 | E1326 |
| AR15 | 220LF | AU3A | 1561 | cV71 | ASGL1M |
| AR16 | 220 B | AU4 | 017 | CV72 | V1120 |
| AR17 | MH4 | AUS | V1907. | CV73 | 11E3 |
| AR20 | 4021B | AU6 | GU50 | CV74 | ESU74 |
| AR21 | ERC33 | AU8 | U22 | CV75 | 4313 C |
| ARD2 | 01 | Au12 | U15 | CV76 | E1359 |
| ARD4 | D42 | AU13 | 524 | CV77 | K TUBE |
| ARDD1 | 10D1. | AW2 | 7475 | CV78 | E1379 |
| ARDD3 | $6 \mathrm{H6}$ | AW3 | S130 | CV79 | E1429 |
| ARDD5 | EB34 | AW4 | STV280/40 | CV80 | VF01 |
| ARH1 | 6 L 7 | AW5 | ME41 | CV81 | VF08 |
| ARP1 | PT2 | AM6 | EM31 | CV82 | 3A/147J |
| ARP2 | SP2 | CV1 | D051 | CV84 | 4033A |
| ARP3 | 9 D 2 | CV2 | E1228 | CV85 | V2023 |
| ARP4 | SP210 | CV3 | AFN202 | CV86 | V1507 |
| ARP5 | VP2 | CV4 | E1229 | CV87 | KRN2 |
| ARP6 | SP4 | Cv5 | 4049 D | CV88 | DV32 |
| ARP7 | 42MPT | cv6 | E1148 | CV89 | E1380 |
| ARP8 | AC4Pen | CV8 | E1356 | CV90 | E1368 |
| ARP9 | Pen1340 | cv9 | AL60 | CV92 | E1332 |
| ARP9A | 708 | CV12 | E1191 | CV93 | V625 |
| ARP10 | PenA4 | CV13 | ВT9B | CV94 | DS103 |
| ARP11 | TSP4 | CV14 | XN | CV95 | R3/10 |
| ARP12 | VP23 | CV15 | E1226 | CV96 | R3/16 |
| ARP13 | VP210 | CV16 | S25A | CV97 | R2/10 |
| ARP14 | 2201PT | CV18 | DET19 | CV98 | R2/38 |
| ARP15 | Ктษ63 | CV19 | EHT1 | CV99 | E1373 |
| ARP16 | $6 \mathrm{J7}$ | cv20 | V1906 | CV100 | V2D33B |
| ARP17 | 6F6 | CV21 | VP41 | CV105 | E1371 |
| ARP18 | KT24 | CV22 | BT45 | CV108 | BM313 |
| ARP19 | SP41 | CV24 | HL41 | CV109 | $9 \mathrm{KP5}$ |
| ARP21 | 262 | CV25 | 4242A | CV110 | VS68 |
| ARP22 | 116/Pen | CV26 | 813 | CV114 | E1265 |
| ARP23 | MS/Pen | CV27 | 4357A | CV115 | E1415 |
| ARP24 | 220VPT | CV28 | ACT9 | CV116 | KR6/1 |
| ARP25 | KT41 | CV29 | E1235 | CV117 | E1417 |
| ARP26 | KT44 | CV30 | 4270 A | CV118 | SP61 |
| ARP33 | MSP4 | CV31 | U20 | CV119 | XJ |
| ARP34 | EF39 | CV32 | RG3-250A | CV120 | MF |
| ARP35 | EF50 | CV33 | 4077A | CV121 | V1920 |
| ARP36 | SP61 | CV34 | MR10 | CV122 | E1336 |
| ARP37 | QP25 | CV38 | E1198 | CV123 | E1330 |
| ARP38 | KTZ73 | CV39 | S22AF | CV124 | 807 |
| ARS7 | VS24 | CV40 | E1255 | CV125 | 2043 |
| - ARS8 | PM12V | CV41 | E1267 | CV126 | E1362 |
| ARTH2 | ECH35 | CV42 | E1256 | CV127 | S30A |
| ARTP1 | TP22 | CV44 | E1155 | CV128 | SU750 |
| ARTP2 | TP25 | CV45 | S130P | CV129 | KRN2A |
| AT20 | MZ05/20 | CV46 | 8011 | CV130 | KRN3 |
| AT35 | DET25 | CV49 | 3B/501A | CV131 | 9 96 |
| AT37 | ACT36 | CV51 | A1320 | CV132 | V885 |
| ATS25 | 807 | CV52 | E1231 | CV133 | 6C4 |


| SERVICE TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV135 | EY91 | Cv225 | ACT17 | CV312 | ESU74 |
| CV136 | $7 \mathrm{D9}$ | CV228 | ${ }_{\text {DV4 }}$ ( ${ }^{\text {a }}$ | CV313 | QSY50-P40 |
| CV137 | EAC91 | CV229 | 1336 | CV315 | TY1-51 |
| CV138 | EF91 | CV230 | DV55 | CV319 | E1453 |
| CV139 | 6 L 34 | CV232 | MF | cr320 | E4103/b/4 |
| CV140 | ${ }^{64 L 5}$ | CV233 | B55 | cv321 | кт66 |
| CV141 | ${ }^{\text {U4B }}$ | CV234 | DV56 | CV324 | CV1628 |
| CV142 | XP1.5 | CV235 | U23 | CV326 | 15B |
| CV143 | U3 | CV236 | E1465 | CV327 | EF52 |
| CV144 | U4 | cv237 | KR6/2 | CV328 | L9 |
| CV145 | U5 | Cv238 | RK6/3 | CV329 | 6 F 33 |
| CV147 | U7 | CV240 | ACT24 | ${ }^{\text {cr335 }}$ | VCR522B |
| CV148 | U8 | CV242 | GS18 | CV336 | VCR522C |
| CV149 | U7 | CV243 | 4045A | CV337 | 27M1 |
| CV150 | PK150 | CV244 | AF2 | CV338 | E1524 |
| CV152 | GU21 | CV245 | 4328 D | CV339 | 24B2 |
| CV153 | E1411 | CV248 | GS16 | CV342 | DLS19 |
| CV154 | E1419 | CV249 | 4019A | CV343 | V894 |
| CV155 | ${ }^{\text {E1 }} 190$ | CV250 | CMG25RS | CV344 | E1323 |
| CV158 | KR3 | CV251 | MX57 | CV345 | 12 E 1 |
| CV159 | ${ }_{\text {E1 } 1342}$ | CV252 | ${ }^{\text {ACR22 }}$ | CV346 | ${ }_{\text {ERC2 }}$ |
| CV160 CV161 | E1342 | CV253 | CS3A | CV347 CV349 | ${ }_{\text {EBC2 }}$ V2030 |
| cV162 | 57094 | CV254 CV256 | NS2 | cv350 | E1368 |
| cV163 | 5744WA | CV257 | ACT22 | CV352 | EBC33 |
| CV164 | ${ }_{\text {CG3E }}$ | CV258 | E1273 | CV353 | M500 |
| CV165 | ${ }_{\text {CSTX }}^{\text {CSA }}$ | CV259 | E1495 | CV354 | ME1005 |
| ${ }^{\text {cV166 }}$ | GEE54/50 ${ }_{\text {TY }}$ | cv260 | SP61 | CV355 | E1511 |
| CV167 |  | Cv261 | $\stackrel{\text { R10 }}{ }$ | CV356 CV357 | ${ }_{\text {E1511 }}^{\text {E16 }}$ |
| CV169 | XD61 | CV262 CV263 | 9MP6 | ${ }^{\text {cV358 }}$ | EF37A |
| CV170 | 12 SF 7 GT | CV264 | AP1188 | CV359 | NE17 |
| CV171 | 21 VPPT | CV265 | 19E2 | CV360 | NE18 |
| CV172 | E1468 | CV266 | E1336 | CV361 | 5B/700A |
| cV173 CV174 | ${ }_{\text {EFF5 }}$ | CV267 | E1336 | CV363 | vx363 |
| CV175 | XSG1.5 | CV268 | E1330 | ${ }^{\text {cV366 }}$ | ${ }_{1}$ 6AG7 ${ }^{\text {a }}$ |
| CV176 | XP1.5 | CV269 | ${ }^{\text {VCR97 }}$ | CV368 | ${ }_{9-3}$ |
| CV177 | 813 | CV272 | KR6/4 | cv369 | 1835 |
| CV178 CV180 | ${ }_{\text {KR4 }}{ }^{\text {E148 }}$ | CV273 | 5861 | CV370 | 2 J 42 |
| cv181 | ECC32 | CV275 | ${ }_{1} 11542$ | CV371 CV372 | $19 \mathrm{C6}$ |
| CV182 | E1488 | ${ }^{\text {CV276 }}$ | $11{ }^{1963}$ | CV374 | S3A |
| CV185 CV186 | PM202 | CV278 | E1606 | Cv375 | easo |
| CV186 CV187 | E1342 | CV279 | NG16 | CV377 | V1135C |
| CV188 | 7475 | CV281 | X61 | CV378 | ${ }_{\text {ACT19 }}$ |
| CV189 | BS4 | CV282 | ${ }_{6 \mathrm{ELL} 5}^{\mathrm{E} 4504 / \mathrm{M} / 16}$ | CV379 CV30 | Er54 |
| ${ }^{\text {CV190 }}$ | ${ }_{\text {DLS }}{ }^{\text {E14 }} 494$ | CV283 | STV30/20 | CV381 | vX4024 |
| CV191 CV192 | E1494 E1481 | CV285 |  | CV382 | T24/40JA |
| CV192 CV199 | ${ }_{\text {E1481 }}$ | CV286 | QS95/10 | CV383 | T24/40JB |
| CV199 CV200 | MZ2-200 | CV287 | ACT23 | CV384 | DET5 |
| cr201 | V630 | CV288 | ACT23 | CV385 | ${ }^{\text {DL7 }} 11$ |
| CV202 | YF | CV289 | G400 | ${ }_{\text {CV386 }}$ CV387 | ${ }_{\text {DF72 }}$ |
| CV207 | AC/P4 1487 | CV290 | E1481 | CV388 | VX4055 |
| CV208 cV209 | 1487 MK57 | ${ }^{\text {cv292 }}$ | CV497 | cV389 | vCRx210 |
| CV209 | V2030B | CV295 | B554 | CV391 | 5B/255M |
| CV212 | LS594 | CV296 | DDR2 | CV392 | VCR7241 |
| CV214 | E1531 | CV298 | FA15 | CV393 | vx7026 |
| CV215 | E1497 | CV299 | V230A/1K | CV394 |  |
| CV216 | VR150/30 | CV302 | ${ }_{\text {EFF22 }}$ | cv396 | VCRX245 |
| CV217 | KRN3 | CV303 | EL22 | cr397 | DET24 |
| CV218 | ${ }_{\text {E10 }}$ | CV304 CV305 | EF51 | CV398 | 715B |
| CV290 č220 | 631/P1 | CV306 | MX52 | CV399 | MH4 |
| CV221 | E1516 | CV307 | Qvo4-7 | CV400 | $3 E 7$ V 1043 |
| cv222 | E1489 | CV309 | ${ }_{\text {NHP1 }}^{\text {QVO4-7 }}$ | CV402 | BS68 |
| CV223 | ${ }_{\text {KRN2A }}$ | CV310 | 54/444 | cV403 | FVD7 |
| CV224 | krN2A | Cvor |  | cv404 | 8R7 |
|  |  |  |  | CV405 | 927 |


| SERVICE | COMMERCIAL | SERVICE | COMmercial | SERVICE | COMMERCIAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | EQUIVALENT | TYPE | EQUIVALENT | TYPE | equivalent |
| CV406 | E1423 | CV482 | A237 | CV553 | 25 L 6 |
| CV408 | A1714 | CV483 | QV04-7R | CV554 | D63 |
| CV409 | A1820 | CV484 | DL92 | CV555 | 2525 |
| CV410 | к3А | CV486 | v2046A | Cv556 | QP25 |
| CV411 | gm5 | CV487 | 6RT/51 | CV557 | D42 |
| CV412 | A800 | CV488 | BS90 | Cv558 | 2526 |
| CV413 | G150/2D | CV489 | BT75 | CV559 | 2526 |
| CV415 | TT15 | CV490 | 19 H | CV560 | TSP4 |
| CV416 | 6 F 17 | CV491 | $12 \mathrm{AU7}$ | CV561 | 35 L 6 |
| CV417 | EC91 | CV492 | 12AX7 | CV562 | $35 \mathrm{L6}$ |
| cV418 | MK2 | CV493 | $6 \times 4$ | CV563 | da30 |
| CV419 | EC91 | CV494 | B12 | CV564 | 3523 |
| CV420 | VCRX277 | CV495 | 5802 | CV565 | 3523 |
| CV421 | Cat200 | -v496 | CG14 | CV566 | RG-2 |
| CV422 | QS108/45 | CV498 | NE17 | CV567 | 3525 |
| CV423 | 25SN7 | CV499 | 5B/256M | CV568 | 3525 |
| CV424 | QQvo6-40 | CV500 | $6{ }^{6} 7$ | CV569 | ECC35 |
| CV425 | CF1-C | Cr501 | EBF32 | CV570 | 3Q/195E |
| CV426 | EY51 | CV502 | L210 | CV571 | 50 L 6 |
| cv427 | 5 D 21 | CV503 | 5W4 | CV572 | $6 \times 5$ |
| CV428 | 5B/254M | CV504 | 605 | CV573 | $6 \times 5$ |
| CV429 | 12AEP6 | CV505 | MT16 | CV574 | EZ35 |
| CV430 | 29 Cl | Cv506 | GL8023 | CV575 | 5 U 4 |
| cV431 | 85A1 | CV507 | REL64 | CV576 | 1826 |
| CV432 | ME1400 | - V 508 | 4B49 | CV578 | 6A8 |
| CV433 | BC1CE | CV509 | 6V6G | CV579 | 6A8 |
| CV434 | QS75/60 | CV510 | 6 V 6 | CV580 | 6 A 8 |
| CV435 | GT11 | CV511 | 6 6 6 | CV581 | $6 \mathrm{C5}$ |
| CV436 | АСТ25 | CV512 | $6 \mathrm{W7}$ | CV582 | 6 C 5 |
| CV437 | KT76 | CV513 | $4{ }^{5} 3$ | CV583 | $6 \mathrm{G5}$ |
| CV438 | G120/1B | CV514 | 2 J 36 | CV584 | GS146 |
| CV439 | 22/11 BXA | CV515 | 6 Y 6 | CV585 | 6C6 |
| CV440 | 1601 ABC | CV516 | 3GP1 | CV586 | EL37 |
| CV441 | V1052 | CV517 | 024A | CV587 | 687 |
| CV442 | GEX35 | CV518 | AC/VP1 | CV588 | 687 |
| CV443 | CK505AX | CV519 | Pen4D | cv589 | 687 |
| CV444 | MZ1-75 | Cv520 | vP2B | CV590 | 6SJ7 |
| CV445 | 5J/180E | CV521 | R4410 | CV591 | 6SJ7 |
| CV446 | 3Q/260E | CV522 | 7B7 | CV592 | 6SJ7 |
| CV447 | 4078GA | Cv523 | 12 Y 4 | CV593 | GZ32 |
| CV448 | GEX54 | CV524 | TT12 | CV594 | $6 \mathrm{SH7}$ |
| CV449 | 85 A 2 | CV525 | 12A6 | CV595 | $6 \mathrm{SH7}$ |
| CV450 | EL38 | CV526 | 12A6 | CV596 | $2 \mathrm{C45}$ |
| CV451 | ET3 | cv527 | DA60 | CV597 | $2 \times 2 \mathrm{~A}$ |
| CV452 | 6AT6 | CV528 | va16 | CV598 | 715 C |
| CV453 | 68E6 | CV529 | 12AH7 | Cr599 | 1851 |
| CV454 | 6BA6 | Cv530 | 6T1E | cV600 | $5 \mathrm{CP1}$ |
| cv455 | 12AT7 | cv531 | 12C8 | CV601 | 5BP1 |
| CV456 | E1633 | Cv532 | GU11 | cv602 | 3AP1 |
| CV458 | BTR32 | cV533 | CAT17c | cv603 | 10 |
| CV459 | BTR34 | Cv534 | 12 J | cv604 | 30 |
| CV460 | ES48 | CV535 | 12 J | cv605 | 32 |
| CV461 | BS92 | CV536 | 4120/AA | cv606 | 37 |
| CV462 | BS84 | CV537 | 12SA7 | CV607 | 38 |
| cv463 | BS82 | CV538 | 12 SA 7 | cv608 | 41 |
| cV464 | 9L01A | CV539 | G71E | CV609 | 42 |
| cv465 | EF72 | CV540 | 12 Sr 7 | Cv610 | 45 |
| CV466 | EF73 | CV541 | 1 B 3 | cv611 | 56 |
| CV467 | EF70 | CV542 | 5 J 23 | cv612 | 57 |
| CV468 | EC70 | CV543 | 12SK7 | cv613 | 58 |
| CV469 | eaf6 | CV544 | $12 \mathrm{SK7}$ | cv614 | 75 |
| CV470 | vx8036 | CV545 | ACSP3 | cv615 | 76 |
| CV471 | EL70 | CV546 | $12 \mathrm{SQ7}$ | cv616 | 77 |
| CV472 | EF74 | CV547 | 12SQ7 | Cv617 | 80 |
| cv473 | EY70 | Cv548 | LP2 | CV618 | 83 |
| CV474 | 5643 | CV549 | 25A6 | CV619 | $84 / 6 \mathrm{Z4}$ |
| cV475 | EF71 | CV550 | 2546 | cv620 | 211 |
| Cv476 | T921 | Cv551 | $26 \mathrm{L6}$ | cv621 | 801 |
| CV477 | 5899 | CV552 | 25L6 | cv622 | 802 |


| SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | EQUIVALENT |  |  |  |  |
| CV623 | 803 | CV700 | 12SR7 | CV770 | 1 F 7 |
| CV624 | 804 | CV701 | ESA892 | CV771 | 195 |
| CV625 | 805 | CV702 | 830B | CV772 | $1 \mathrm{G6}$ |
| CV626 | 808 | CV703 | $12 \mathrm{K8}$ | CV773 | 196 |
| CV627 | 810 | CV704 | RK20A | CV774 | 1 H 4 |
| CV628 | 811 | CV705 | 1D5GP | CV775 | 1 LA6 |
| cv629 | 814 | CV706 | 6 U 7 | CV776 | 1LB4 |
| CV630 | 826 | CV707 | HK54 | cV777 | $1 \mathrm{LC5}$ |
| CV631 | 828 | CV708 | 161 | CV778 | $1 \mathrm{LC6}$ |
| CV632 | 829 | CV709 | 72 | CV779 | $1 \mathrm{LD6}$ |
| CV633 | 829A | CV710 | 368A | CV780 | 1 LH 4 |
| CV634 | 832 | CV711 | 32 | CV781 | 1LN5 |
| CV635 | 833 | CV712 | 38 | CV782 | 1R5 |
| CV636 | 836 | CV713 | 1B27 | CV783 | 154 |
| CV637 | 837 | CV714 | C6A | CV784 | 1 S 5 |
| CV638 | 838 | CV715 | 6F5GT | CV785 | 1 T 4 |
| CV639 | 843 | CV716 | 8013A | CV786 | 115 |
| cV640 | 860 | CV717 | 5R4GY | CV787 | 2 A 7 |
| CV641 | 861 | CV718 | 5FP7 | CV788 | 832A |
| CV642 | 872A | CV719 | 2J21A | CV789 | 3 C 24 |
| cV643 | 874 | CV720 | 723A | CV790 | 2AP1 |
| CV644 | -875A | CV722 | 725A | CV791 | 2B7 |
| CV645 | 876 | CV723 | 1619 | CV792 | 2 C 22 |
| cV646 | 879 | CV724 | 816 | CV793 | 2 C 33 |
| CV647 | 884 | CV725 | 1B24 | CV794 | 2 D 2 |
| CV648 | 885 | CV726 | 3523 | CV795 | 2D4A |
| CV649 | 956 | CV727 | 1N21 | CV796 | $2 \mathrm{D13C}$ |
| CV650 | 958 | CV728 | 1P66T | CV797 | 2 D 21 |
| CV651 | 991 | CV729 | 5V4 | CV798 | 2 E 22 |
| CV652 | 1603 | CV730 | 6 63 | cv800 | 2 J 22 |
| CV653 | 1611 | CV731 | 6F6 | CV801 | $2 J 54$ |
| CV654 | 1612 | CV732 | 6W4GT | CV802 | 2 C 26 |
| CV655 | 1613 | CV733 | REL8D | CV803 | 2 V 3 |
| CV656 | 1616 | CV734 | 228A | CV804 | 2 V 3 |
| cV657 | 1620 | CV735 | 845 | CV805 | 50 Y 6 |
| CV658 | 1622 | CV736 | 905 | CV807 | 3 A 4 |
| CV659 | 1625 | CV737 | 906 | CV808 | 3 A 5 |
| CV660 | 6 AC7 | CV738 | 953 | CV809 | 3A/105B |
| CV661 | 6 AB 7 | CV739 | 3AP1 | CV810 | 3AE |
| CV662 | 8012 | CV740 | 5MP1 | CV811 | 1291 |
| cV663 | 8025 | CV741 | 5LP1 | CV812 | $3 \mathrm{B24}$ |
| CV664 | 9002 | CV742 | FG67 | CV813 | 959 |
| cV665 | 9003 | CV743 | GET2 | CV814 | $3 \mathrm{BP1}$ |
| CV666 | 9004 | CV744 | GET4 | CV815 | 3D6 |
| CV667 | 9005 | CV745 | HK24 | CV816 | 3DP1 |
| CV668 | 35 T | CV746 | 468 P 1 | CV817 | 3 EP 1 |
| cV669 | 279A | CV747 | 6AC7 | CV818 | 304 |
| cV670 | HK645 | CV748 | 725A | CV819 | 305 |
| cV676 | WE726A | CV749 | 1N23A | CV820 | 354 |
| CV677 | WE761A | CV750 | 01A | CV821 | 4A1 |
| cV678 | 702A | CV751 | HY75 | CV822 | 4B24 |
| CV679 | 703A | CV752 | OA4 | CV823 | 7 A |
| CV683 | 316A | CV753 | 1A3 | CV824 | 4E27 |
| CV684 | 274B | CV754 | 1A4P | CV825 | 4SHA |
| CV685 | VR150-30 | CV755 | 1 A 5 | CV826 | 4THA |
| CV686 | $0 C 3$ | CV756 | 1 A5 | CV828 | 4 TTPB |
| CV687 | 446B | CV757 | 1 A 6 | CV829 | 4 TPB |
| CV688 | 2 C 43 | CV758 | 1B4P | CV830 | 4TSP |
| cV689 | 700A | CV759 | $1 \mathrm{B5}$ | CV831 | 5AP1 |
| CV690 | RK48A | CV760 | $1 \mathrm{B7}$ | CV832 | $5 \mathrm{AP1}$ |
| cV691 | 357A | CV761 | $1 \mathrm{B22}$ | CV833 | 89 5/300B |
| CV692 | 0 O 4 | CV762 | $1 \mathrm{C21}$ | CV834 | $5 \mathrm{~B} / 300 \mathrm{~B}$ |
| cV693 | HF300 | CV763 | $1 \mathrm{CA4}$ | CV835 | 5 BP 1 |
| CV694 | 12SG7 | CV764 | 1 D 4 | CV836 | 5BP4 |
| cV695 | 700 B | CV765 | 1 D 7 | CV837 | 12C8 |
| CV696 | 700 C | CV766 | 1E5GP | CV838 | $5 \mathrm{CP7} 7$ |
| CV697 | $12 \mathrm{SJ7}$ | CV767 | 1F4 | CV839 | 5GP1 |
| cV698 | 12SJ7 | CV768 | 1F5G | CV840 | 5 H 4 |
| CV699 | 700 D | CV769 | 1 F 6 | CV841 | 504 |


| SERVICF <br> TYPE | COMMERCIAL fquIVALENT | $\begin{aligned} & \text { SERVICE } \\ & \text { TYPF } \end{aligned}$ | COMMERCIAL FQUIVALENT | SERVICT | COMMERCIAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV842 | 5W4 |  |  | TYPE | FQUIVAIENT |
| CV843 | 6AB5 | CV916 | $12 \mathrm{H6}$ | CV1021 | 210LP |
| CV844 | 6AC5 | CV918 | 12 K 7 | CV1022 | 220pa |
| CV845 | $6 \mathrm{AC5}$ | CV919 | 12SF5 | CV1023 | 230XP |
| CV846 | 6AC7 | CV920 | 12SF5 | CV1025 | DET25 |
| cV847 | 6AF6G | CV921 | 12SF7 | CV1027 | 210LF |
| CV848 | 6AG5 | cv921 | 12SF7 | CV1028 | 220VSg |
| CV849 | $6 \mathrm{AC7}$ | cv923 | 12SJ7 | CV1029 | ESU150 |
| CV850 | 6AK5 | CV924 | 12SL7 | CV1030 | 4060A |
| CV851 | 6B4 | CV925 | 12SN7 | CV1031 | ESG250 |
| CV852 | 6 C 4 | CV926 | 4 B 35 | CV1032 | 220B |
| CV854 | $6 \mathrm{C7}$ | CV927 | $12 \mathrm{Z3}$ | CV1034 | DET3 |
| CV855 | 6 C 21 | CV928 | 13-4 | CV1035 | QP21 |
| CV856 | $6 \mathrm{G8}$ | Cr929 | 13 SPA | CV1036 | 220PA |
| CV857 | $6 H 7$ | cv930 | 14 F 7 | CV1037 | MH4 |
| CV858 | 6 J 6 | CV931 | 15 | CV1038 | MHL4 |
| CV859 | 6.58 | CV932 | 446A | CV1039 | 1561 |
| CV860 | 6K5 | cr933 | 15 E | CV1040 | PX25 |
| CV861 | $6 \mathrm{K5}$ | CY934 | 15R | CV1041 | PM12M |
| CV862 | 6 L 5 | CV936 | 24A | CV1042 | 210LF |
| CV864 | 6 P 7 | CV937 | $25 A 7$ | CV1043 | 210 PG |
| CV865 | $6 \mathrm{SD7}$ | CV938 | 25 AC 5 | CV1044 | 210 DDT |
| CV866 | 6SJTY | CV939 | 2586 | CV1045 | $\times 56$ |
| CV867 | 6SR7 | CV940 | 25B8 | CV1046 | PT25H |
| CV869 | 6 V 5 GT | CV941 | HK24 | CV1047 | TZO5-50 |
| CV870 | 6V7 | CV942 | 2555 | CV1048 | 210SG |
| CV871 | $6 \mathrm{Z5}$ | CV943 | 26 | CV1049 | 210SPT |
| CV872 | 627 | CV944 | 27 | CV1050 | HL2 |
| CV873 | $6 \mathrm{ZY5}$ | CV945 | 28D7 | CV1051 | Pen220A |
| CV874 | 7 | CV946 | 28D7 | CV1052 | EL32 |
| CV875 | 1642 | CV947 | 31 | CV1053 | EF39 |
| CV876 | $7 \mathrm{7a}$ | CV948 | 32 L 7 | CV1054 | EB34 |
| CV877 | 7A7 | CV949 | 33 | CV1055 | EBC33 |
| CV878 | 7A8 | cv950. | E4103/B/4 | CV1056 | EP36 |
| CV879 | $7 \mathrm{B4}$ | CV951 | 32A | CV1057 | EK32 |
| CV880 | $7 \mathrm{B5}$ | CV952 | 4081 | CV1058 | EP60 |
| CV881 | 7B5 | CV953 | 32 | CV1059 | 955 |
| CV882 | 7B6 | CV954 | 20K | CV1060 | 807 |
| CV883 | 788 | CV955 | 4409 | CV1061 | DET19 |
| CV884 | $7 \mathrm{BP7}$ | CV956 | 4602 | CV1062 | TY1-50 |
| CV885 | 7 C 5 | CV957 | 32 | CV1064 | U12/14 |
| CV886 | 7 C 5 | cV958 | $26 J$ | CV1065 | SP61 |
| CV887 | 706 | cV959 | 20 K | CV1066 | P61 |
| CV888 | 7 D 7 | CV960 | E4504/B/16 | CV1067 | 6 J 5 |
| CV889 | 708 | CV961 | NC13 | CV1068 | STV280/40 |
| CV890 | 7E5 | CV962 | E4504/E/16 | CV1069 | STV280/80 |
| CV891 | 7E6 | cV963 | CV1596 | CV1070 | 7475 |
| CV892 | 7E7 | cV964 | E4205-B | CV1071 | U52 |
| CV893 | TE7 | CV966 | E4504/M/16 | CV1072 | GU50 |
| CV894 | $7 \mathrm{G7}$ | CV967 | E4103/B/4 | CV1073 | H63 |
| cV895 | $7 \mathrm{H7}$ | CV979 | DSL10 | CV1074 | $6 J 7$ |
| CV896 | 7 K 7 | CV982 | X962106 | CV1075 | KT66 |
| CV897 | 737 | cV983 | X961101 | CV1076 | DA41 |
| CV898 | 7N7 | CV984 | S2A | CV1077 | EM31 |
| CV899 | 707 | CV986 | 15A | CV1078 | D1 |
| CV900 | $7 \mathrm{R7}$ | cV987 | NC13A | CV1079 | кT8 |
| CV901 | 7Y4 | CV988 | - $\times 961101$ | CV1080 | 4307A |
| CV902 | $7 \mathrm{W7}$ | CV989 | 41D5 | CV1081 | 4052A |
| cv904 | 892R | CV995 | 6AJ5 | CV1082 | 2207H |
| CV905 | 9 HP 7 | CV996 | EL32 | CV1083 | 210 VTP |
| CV906 | 1602 | cv997 | 3092 | CV1087 | 14L |
| cV907 | 12A | CV998 | 20007 | CV1088 | 832 |
| CY908 | 12A5 | CV999 | 3 C 22 | CV1089 | TVO3-10A |
| cV909 | 12A7 | CV1000 | 4 D 1 | CV1090 | E1046 |
| CV910 | 12A8 | CV1001 | SU2150A | CV1091 | EF50 |
| CV911 | 12B8 | CV1002 | E1192 | CV1092 | EA50 |
| CV913 | 12DP7 | CV1018 | 215SG | CV1095 | 954 |
| CV914 | 12DP7 | CV1019 | PM2 | CV1096 | 5B/502A |
| CV915 | 12FP7 | CV1020 | 220P | CV1097 | ECR60 |


| SERVICE TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV1098 | E960T | CV1175 | AP4 | CV1293 | PT6 |
| cy1099 | X66 | CV1176 | AP4 | CV1296 | MU14 |
| CV1100 | KTW62 | CV1177 | 4D1 | CV1300 | 10D1 |
| CV1101 | MHLD6 | CV1178 | DA30 | CV1301 | $6 \mathrm{H6}$ |
| CV1102 | BL63 | CV1179 | ML4 | CV1302 | D42 |
| CV1103 | Y63 | CV1180 | 244V | CV1303 | PM1HF |
| CV1104 | PT15 | CV1181 | KT41 | CV1304 | LP2 |
| CV1105 | ML6 | CV1182 | H42 | CV1305 | 4D1 |
| CV1106 | 9 D 2 | CV1183 | W42 | CV1306 | HL23DD |
| CV1107 | 15 D 2 | CV1184 | A373 | CV1307 | PMILF |
| CV1108 | $8 \mathrm{D2}$ | CV1186 | 6 F 6 | CV1308 | TDD2A |
| CV1109 | 4D1 | CV1187 | D41 | CV1309 | 4019B |
| CV1110 | S130 | CV1188 | N43 | CV1310 | KC1 |
| CV1111 | V1907 | CV1189 | AC6Pen | CV1311 | B406 |
| CV1112 | V1026 | CV1190 | ACP4 | CV1312 | 220RC |
| CV1113 | U17 | CV1191 | KTZ41 | CV1313 | 220LF |
| CV1114 | E1024 | CV1192 | Z62 | CV1314 | DLS10 |
| CV1116 | V872 | CV1193 | X65 | CV1316 | 4021B |
| CV1117 | 41MIL | CV1194 | X41 | CV1317 | 5625 |
| CV1118 | KT2 | CV1195 | KTW63 | CV1318 | VS24 |
| CV1119 | DDL4 | CV1196 | AC5PendD | CV1319 | PM12V |
| CV1120 | SU2150A | CV1197 | EC53 | CV1320 | SP2 |
| CV1121 | T41 | CV1198 | ACP4 | CV1321 | 9 D 2 |
| CV1122 | 41 MXP | CV1200 | 202 | CV1322 | SP210 |
| CV1123 | EF8 | CV1201 | 4317 | CV1323 | VP2 |
| CV1124 | MS/Pen | CV1202 | 304 | CV1324 | SP4 |
| CV1125 | MS/PenB | CV1205 | E1007 | CV1325 | 42MPT |
| CV1126 | 4 SH | CV1206 | D060 | CV1326 | AC4Pen |
| CV1127 | Pen46 | CV1207 | ES50 | CV1327 | Pen1340 |
| CV1128 | GT1C | CV1208 | PM256 | CV1328 | 708 |
| CV1129 | MS/Pen | CV1219 | MZ1-100 | CV1329 | PenA4 |
| CV1130 | HL23 | CV1220 | 4033L | CV1330 | TSP4 |
| CV1131 | 41DS | CV1221 | PZ1-75 | CV1331 | VP23 |
| CV1133 | V960 | CV1222 | ACT6 | CV1332 | VP21 |
| CV1134 | HVR2 | CV1223 | DET5 | CV1333 | $2201 P T$ |
| CV1135 | E1148 | CV1235 | DET12 | CV1334 | KT24 |
| CV1136 | EF54 | CV1237 | PM24D | CV1335 | SP41 |
| CV1137 | EC52 | CV1238 | PM24D | CV1336 | SP42 |
| CV1138 | E4412/B/9 | CV1240 | PZ1-35 | CV1337 | 116 Pen |
| CV1140 | 12MD6 | CV1246 | PM202 | CV1338 | 220 VPT |
| CV1141 | DPQ | CV1250 | 4279A | CV1339 | KT41 |
| CV1142 | MR75 | CV1252 | 4212E | CV1340 | KP45 |
| CV1143 | GT1A | CV1255 | E1232 | CV1341 | MSP4 |
| CV1144 | BT19 | CV1256 | E1232 | CV1342 | QP25 |
| CV1145 | BT9/A | CV1257 | E1155 | CV1343 | KTZ73 |
| CV1147 | BT35 | CV1259 | ESU450 | CV1344 | TP22 |
| CV1148 | E1289 | CV1260 | ESU208 | CV1345 | TP25 |
| CV1149 | BT41 | CV1261 | RX3-120 | CV1347 | ECH35 |
| CV1151 | PMB | CV1262 | GU1 | CV1349 | RG5-500 |
| CV1152 | PM4DX | CV1263 | RG1-125 | CV1350 | TB3/750 |
| CV1153 | PM254 | CV1264 | 018 | CV1351 | TB4/1250 |
| CV1155 | DEQ | CV1265 | U15 | CV1352 | EM80 |
| CV1156 | DEQ | CV1266 | U15 | CV1353 | OA81 |
| CV1158 | PM14 | CV1267 | U4020 | CV1354 | OA85 |
| CV1159 | PM14 | CV1268 | 5 Y 3 | CV1355 | ESU300 |
| CV1160 | 104 V | CV1279 | MU2 | CV1356 | U22 |
| CV1161 | 104V | CV1280 | 6L7 | CV1357 | SG250 |
| CV1163 | PD220A | CV1281 | KTW61 | CV1359 | ME41 |
| CV1164 | ACSG | CV1281 | KTW61 | CV1361 | M205-20 |
| CV1165 | VMS4 | CV1282 | MSP4 | CV1362 | Det25 |
| CV1166 | P220 | CV1283 | SP4 | CV1363 | DET16 |
| CV1167 | PM24A | CV1284 | MS/Pen | CV1364 | 807 |
| CV1168 | PX4 | CV1285 | 6N7 | CV1365 | 4282B |
| CV1169 | VMP4G | CV1286 | 6 L 6 | CV1366 | V248A |
| CV1170 | D41 | CV1287 | KT32 | CV1367 | V245 |
| CV1171 | AT4 | CV1288 | 244 V | CV1368 | V266 |
| CV1172 | VMP4G | CV1289 | 1561 | CV1369 | 4061A |
| CV1173 | 354 V | CV1290 | SU2150A | CV1370 | PV1-35 |
| CV1174 | KT42 | CV1291 | HVR2 | CV1371 | PZ1-35 |


| SERVICE <br> TYPE | COMMERCIAL FQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | EQUIVALENT |  |  |  |  |
| CV1372 | 4069A | CV1451 | 4274a | CV1553 | ESU450X |
| CV1373 | PY3-600 | CV1452 | 4300A | CV1565 | 230xP |
| CV1374 | 807 | CV1453 | 4378 | CV1567 | 2 C 25 |
| CV1375 | EF85 | CV1454 | 225DU | CV1568 | 4062A |
| CV1376 | EP80 | CW1455 | 411 U | CV1569 | R3 |
| CV1377 | GZ34 | CV1456 | Pen383 | CV1570 | EK32 |
| CV1379 | 2.0 K | CV1457 | VP133 | CV1571 | VT58A |
| CV1380 | 20K | CV1458 | 41 MP | CV1572 | 807 |
| CV1382 | ACR10 | CV1459 | MU2 | CV1573 | 4074B |
| CV1384 | 41DS | CV1460 | X41 | CV1574 | SP41 |
| CV1385 | E4504/B/16 | CV1461 | U22 | CV1575 | VU71A |
| CV1386 | ACR3 | CV1462 | A915 | CV1576 | KT38 |
| CV1387 | ACR4 | CV1463 | CBL31 | CV1577 | E1143 |
| CV1388 | ACR5 | CV1464 | EF39 | CV1578 | EF50 |
| CV1389 | ACR6 | CV1466 | P57 | CV1579 | 954 |
| CV1390 | ECR35 | CV1467 | PY3-600 | CV1580 | E1235 |
| CV1391 | E4504/E/16 | CV1 468 | SP4 | CV1581 | ECH35 |
| CV1393 | ACR17 | CV1469 | Z22 | CV1582 | S130 |
| CV1394 | ACR18 | CV1470 | 3P/270B | CV1585 | T41 |
| CV1397 | E4504/M/16 | CV1471 | 4049A | CV1586 | HL23 |
| CV1400 | C1C | CV1472 | CMG25 | CV1587 | ECR35 |
| CV1401 | Cl33 | CV1473 | CMG25 | CV1588 | ECR30 |
| CV1402 | CY31 | CV1474 | CE20 | CV1592 | E4504/C/16 |
| CV1403 | DD41 | CV1475 | M501 | CV1596 | 091 |
| CV1404 | EF36 | CV1476 | M507 | CV1597 | E4103/B/4 |
| CV1405 | E1199 | CV1477 | M507 | CV1598 | 41DS |
| CV1406 | HL41 | CV1478 | M501 | CV1600 | CAT1 |
| CV1 407 | Pen45 | CV1479 | M501 | CV1601 | CAR1 |
| CV1408 | P41 | CV1480 | M501 | CV1602 | CARA |
| CV1409 | SP2 | CV1481 | M501 | CV1603 | 4104A. |
| CV1410 | TH2 | CV1482 | M501 | CV1604 | SS1971 |
| CV1411 | TH41 | CV1483 | M519 | CV1605 | 4013 C |
| CV1412 | TV4 | CV1484 | M519 | CV1606 | CAT2 |
| cV1413 | UU6 | CV1485 | M519 | CV1607 | 002.5 |
| CV1414 | VP41 | CV1486 | M519 | CV1608 | U4 |
| CV1415 | 4011A | CP1495 | M528 | CV1609 | SW7 |
| CV1417 | ES85 | CV1496 | M528 | CV1610 | MT4 |
| CV1418 | 10D1 | CV1497 | M528 | CV1611 | MR4 |
| CV1419 | 11 D 3 | CV1498 | M528 | CV1612 | VT9B |
| CV1420 | 4078A | CV1499 | M528 | CV1614 | ES1500A |
| CV1422 | 3D/10A | CV1500 | M528 | CV1615 | ESU1500 |
| CV1423 | 9 D 2 | CV1501 | E1192 | CV1618 | ES250M |
| CV1424 | 20 A 1 | CV1502 | K132 | CV1619 | 4212 E |
| CV1425 | 7 D 5 | CV1503 | KT33C | CV1620 | DET6 |
| CV1426 | EK2 | CV1504 | V1901 | cV1621 | ESW501 |
| CV1427 | EF9 | CV1505 | MH41 | CV1622 | 4052A |
| CV1428 | EBC3 | CV1506 | ESP450 | CV1623 | RGL250 |
| CV1429 | EL2 | CV1508 | V1913 | CV1624 | P21-75 |
| CV1430 | ACSP3 | CV1510 | E1242 | CV1625 | RG3-250 |
| CV1431 | ACT16 | CV1515 | MX1 | CV1626 | RG1-240A |
| CV1432 | CMG8 | CV1517 | E4504/C/16 | CV1627 | 5D/100A |
| CV1433 | EC31 | CV1518 | 09 D | CV1628 | GU8 |
| CV1434 | EM4 | CV1519 | V1042 | CV1629 | RG3-1250A |
| CV1435 | gu2 | CV1521 | E4412/M/9 | CV1630 | ESP450 |
| CV1436 | HL2 | CV1522 | E413-B4 | CV1632 | 1N82 |
| CV1437 | E1143 | CV1525 | E4205/C/7 | CV1633 | 3 V 4 |
| CV1438 | KT61 | CV1526 | 3EG1 | CV1634 | XB2 |
| CV1439 | MT9F | CV1527 | VLS492AG | CV1635 | 5A/163K |
| CV1440 | MT9L | CV1529 | E4412/E/9 | CV1636 | LS5 |
| CW1441 | MT12A | CV1530 | $6 \mathrm{LY1}$ | CV1637 | LS5 |
| C71442 | MT14 | CV1535 | EZ80 | CV1638 | 4101D |
| CV1443 | R1 | CV1536 | 1608ABA | CV1639 | 4101E |
| CV1444 | 42SPT | CV1537 | 3ACP2 | CV1640 | 4002D |
| CV1445 | 4012A | CV1538 | 5 J 32 | CV1641 | 4102E |
| CV1446 | 4107B | CV1539 | D15 | CV1642 | DER |
| CV1447 | 4030D | CV1540 | 33B/152M | CV1643 | E132 |
| CV1448 | 4043 C | CV1543 | 12M06 | CV1644 | E1532 |
| CV1449 | 4064B | CV1546 | 12MD6 | CV1645 | E133 |
| CV1450 | 4227A | CV1552 | VX3B | CV1646 | E1453 |


| $\begin{aligned} & \text { SERVICE } \\ & \text { TYPE } \end{aligned}$ | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: |
| CV1647 | LS5B | CV1719 | U22 |
| CV1648 | 4205E | CV1720 | XL1.5. |
| CV1649 | 6 C 5 | CV1721 | XP1.5 |
| CV1650 | L.S5A | CV1722 | ${ }^{\text {A901 }}$ |
| CV1651 | G455B | CV1723 | V257 |
| CV1652 | P220A | CV1724 | 5A/102D |
| CV1653 | KC1 | CV1726 | 5A/105A |
| CV1655 | 4019B | CV1727 | 222 |
| CV1656 | LS8 | CV1728 | WE262B |
| cV1657 | 4020 B | CV1731 | S130 |
| CV1658 | LS9B | CV1732 | ML4 |
| cv1659 | 4022B | CV1733 | 4108AG |
| CV1660 | LS7 | CV1734 | 30/213E |
| CV1661 | DL | CV1735 | DC2P |
| CV1662 | P215 | CV1737 | MW6-2 |
| cv1663 | 4021B | CV1738 | ${ }^{2} 5161$ |
| CV1664 | B406 | CV1739 | GC10/4B |
| CV1665 | DH | CV1740 | GS12C |
| cv1666 | P610 | CV1741 | El34 |
| CV1667 | LS8A | CV1742 | BK44 |
| CV1668 | 4033L | CV1743 | BS64 |
| CV1669 | P625 | CV1744 | 15L01A |
| Cv1670 | HL1320 | CV1745 | ${ }^{62 \mathrm{BF}}{ }^{\text {a }}$ |
| cv1671 | 4021A | CV1746 | $30 \mathrm{C12P1}$ |
| CV1672 | Pen36C | CV1747 | M505 |
| CV1673 | PM2HL | CV1748 | TTR31MC |
| CV1674 | $\mathrm{AC} / \mathrm{S} 2 / \mathrm{Pen}$ | CV1749 | 205 D |
| CV1675 | N43 | CV1750 | 33A/100A |
| cv1676 | LS8A | CV1751 | 34 |
| CW1677 | AS52 | cV1752 | 35 |
| CV1678 | HLA2 | CV1753 | 35A5 |
| CV1679 | da30 | CV1754 | 35TG |
| Cv1680 | PM202 | CV1755 | 1626 |
| CV1681 | TSP4 | CV1756 | 1629 |
| Cv1683 | MKT4 | ${ }^{\text {cV1 }} 757$ | 9001 |
| CV1684 | APP4C | CV1758 | 1L4 |
| cv1685 | APP4C | CV1759 | $2 \mathrm{C26A}$ |
| cV1686 | D418 | CV1760 | 2 J 26 |
| CV1687 | D418 | CV1761 | 3FP7 |
| CW1688 | 4033L | CV1762 | 6 6.K4 |
| CV1689 | PA1 | CV1763 | 6 J 4 |
| cV1690 | 9 A 1 | CV1764 | ${ }_{5664}$ |
| CV1691 | DDL4 | CV1765 | ¢ 6864 |
| cv1692 | AC/P | CV1766 | CX25 |
| cv1694 | 3A/144A | CV1768 | 7076 |
| CV1695 | DH30 | CV1769 | 2 AB |
| cv1696 | B21 | CV1770 | 7A4 ${ }^{39 / 44}$ |
| cv1697 | X41 | CV1771 | ${ }_{47}^{39 / 44}$ |
| CV1698 | A819 | CV1772 | 47 |
| CV1699 | SP41 | CV1773 | ${ }_{112}{ }^{\text {d }}$ / 12 A |
| Cv1700 | SP41 | CV1774 | 112A/12A |
| CV1701 | XLO | CV1775 | 36 |
| Cv1702 | XP | CV1776 | ${ }_{7}^{607}$ |
| CV1703 | XW | CV1777 | $7 \mathrm{C7}$ |
| cV1704 | 57 | CV1778 | 101 d |
| ${ }_{\text {cV1 }}$ CV1705 | 58 | CV1779 CV1780 | ${ }^{102 \mathrm{D}}$ 30TVIN |
| CV1707 | 2 A 5 | CV1781 | 310 B |
| cV1708 | 80 | CV1782 | 340A |
| CV1709 | $6 \mathrm{D6}$ | CV1783 | ${ }_{6} 9 \mathrm{JP1}$ |
| CV1710 | 6C6 | CV1784 | 6AK7 |
| CV1712 | 42 | CV1786 | 3к33 |
| CV1713 | EF8 | CV1787 | 4 C 35 |
| cV1714 | EF9 | CV1788 | 3 J 31 |
| CV1715 | EBC3 | CV1789 | 5 FP 14 |
| CV1716 | E1541 | CV1790 | 724 |
| CV1717 | 4307A | CV7091 | 5LP1 |
| CV1718 | ACTP | CV1792 | 1960 |

TYPE

| CV1793 | 724 B |
| :---: | :---: |
| CV1794 | 959 |
| CV1795 | 723A/B |
| CV1796 | DW4 |
| CV1797. | 4081A |
| CV1798 | 2051 |
| CV1799 | 350B |
| CV1800 | 1 A 7 |
| CV1801 | GS118 |
| CV1802 | 1 A7 |
| CV1803 | 105 |
| CV1805 | DL35 |
| CV1806 | 105 |
| CV1807 | 2 J 31 |
| CV1808 | 2 J 32 |
| CV1809 | 2 J 33 |
| CV1810 | 3 J 34 |
| CV1811 | 1 D 8 |
| CV1812 | 1E7 |
| CV1813 | $2 \mathrm{PP1}$ |
| CV1814 | 5LP1 |
| CV1815 | 685 |
| CV1816 | 613 |
| CV1817 | 164 |
| CV1818 | 1H5 |
| CV1819 | 6 P 5 |
| CV1820 | 1H5 |
| CV1821 | 1N5 |
| CY1822 | $2 J 48$ |
| CV1823 | 1N5 |
| CV1824 | 105 |
| CV1825 | KT45 |
| CV1826 | 105 |
| CV1827 | M510 |
| CV1828 | M512 |
| CV1829 | 175 |
| CV1830 | 1 B 3 |
| CV1831 | 2 A 3 |
| CV1832 | OA2 |
| CV1833 | OB2 |
| CV1834 | 2 A 5 |
| CV1835 | 3B28 |
| CV1836 | 4B26 |
| CV1837 | 2B7 |
| CV1838 | QQZO4-15 |
| CV1839 | 6713 |
| CV1841 | BS52 |
| CV1842 | 2G |
| CV1843 | 2 Y 2 |
| CV1844 | GS3/B |
| CV1846 | 5 T4 |
| CV1847 | 19 H 4 |
| CV1848 | 2042 |
| CV1849 | 5W4 |
| CV1850 | 6 L 19 |
| CV1851 | 5X4 |
| CV1852 | 5X4 |
| CV1853 | 6P25 |
| CV1854 | $5 \pm 3$ |
| CV1855 | UU9 |
| CV1856 | $5 \times 3$ |
| CV1857 | 5 Y 4 |
| CV1858 | BS62 |
| CV1859 | BS4A |
| CV1860 | 30 D 5 |
| CV1861 | 573 |
| CV1862 | 6AQ5 |
| CV1863 | 524 |
| CV1864 | 524 |


| SERVICE <br> TYPE | COMMERCIAL EqUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV1867 | 6A6 | CV1943 | $6 \mathrm{K7}$ | Cv2127 | 6 CH 6 |
| CV1865 | ${ }_{574}^{684}$ | CV1944 | 6 K 8 | CV2128 | 6AJ8 |
| CV1868 | 5 T 01 A | CV1945 | $6 \mathrm{K8}$ | CV2129 | 5763 |
| CV1869 | ${ }_{647} 12 \mathrm{TO1A}$ | CV1946 | 6K8 | CV2130 | TT16 |
| CV1871 | к307 | CV1948 | ${ }_{6 L 6}$ | CV2131 | 5022 |
| CV1873 | $6 \mathrm{AB7}$ | CV1949 | $6 \mathrm{D4}$ | CV2132 | 90 V |
| CV1876 | 1852 | CV1950 | $6 \mathrm{L7}$ | CV2133 | 90 cG |
| CV1878 | 6AD7 | CV1951 | 6 L 7 | cV2135 | ${ }_{8} 90 \mathrm{CV}$ |
| CV1879 | HP4101 | cV1953 | $6^{60} 6$ | CV2136 | 6BH6 |
| CV1880 | 7BM1A | CV1954 | ${ }^{6 N 6}$ | CV2137 | E4504/M/16 |
| CV1882 | ${ }^{\text {6AG77 }}$ 4/180E | CV1955 | ${ }_{\text {EF97 }}$ EF91 | cV2138 | GM4 |
| CV1884 | $33 \mathrm{~A} / 158 \mathrm{M}$ | CV1957 | 6 N 7 | CV2139 | EHM2 |
| CV1885 | 6B5 | CV1958 | $6 \times 7$ | CV2140 | ${ }_{\text {B6E }}$ |
| CV1886 | EC80 | CV1959 | 5005 | CV2142 | B6E |
| CV1887 | 6B6 | CV1960 | 6R6 | cv2143 | ${ }_{\text {B24 }}$ |
| CV1888 | ${ }_{\text {TSY }}$ EC4-500 | CV1961 | ${ }^{124 U 6}$ | CV2144 | ${ }_{\text {B24E }}$ |
| CV1891 | $6 \mathrm{B7}{ }^{\text {a }}$ | CV1963 | $6 \mathrm{R7}$ | CV2145 | M6 |
| CV1892 | 2K28 | CV1964 | 6 RT | CV2146 | DM6 |
| Cv1893 | 6 B 86 | cV1965 | ET30 | CV2147 | $\mathrm{G24H}^{\text {G2 }}$ |
| CV1894 | 6B8 | cV1966 | 6 SA 7 | CV2148 | $\mathrm{GMSB}_{\text {GM1 }}$ |
| CV1895 | STV/70/60 | CV1967 | 6SA7 | CV2149 | GM1B |
| CV1896 | 6 C 8 | CV1968 | CwS24A | CV2150 | MX103 |
| CV1897 | 4 4 34 | CV1969 | ${ }_{6 S C 7}$ | CV2151 | MX105 MX107 |
| CV1898 | $4 J 35$ $6 L .18$ | CV1970 | ${ }_{1 T 4}^{6 S C 7}$ | cV2153 | MX108 |
| CV1900 | 6D6 | CV1972 | 6 SF5 | CV2154 | S1M2 |
| CV1901 | 6F11 | CV1973 | 6SF5 | CV2155 | S1M5 |
| cv1902 | $6 \mathrm{D8}$ | CV1974 | 657 | CV2159 | ${ }^{\text {BR153 }}$ |
| CV1903 | 592 | CV1975 | $6 \mathrm{S7}$ | CV2160 | ESU77 |
| CV1904 | CAA322 | cV1976 | MV6-5 | CV2161 | K301 |
| CV1905 | 4.65 A | CV1977 | UL41 | CV2163 | ACT28 $4 \mathrm{IJ50}$ |
| CV1906 | 6E5 | CV1978 | ${ }^{6 S G 7}$ | CV2171 | 4.50 A2087 |
| CV1907 CV1908 | ${ }_{6 \mathrm{FS} 5}^{\text {CS2-C }}$ | CV1979 CV1980 | 618T 185 BT | CV2173 | G10H |
| CV1909 | 6 F 5 | CV1981 | 6SK7 | CV2174 | G240/2D |
| CV1910 | $6 \mathrm{F5}$ | CV1982 | $6 \mathrm{SK7}$ | CV2175 | DG7-5 |
| cV1911 | 6F6 | CV1984 | $6 \mathrm{SC7}$ | CV2179 | A2134 |
| CV1912 | 6F6 | CV1985 | 6SL7 | CV2180 | 19 H 4 |
| Cv1913 | GS44X | CV1986 | 6SN7 | CV2181 | BS104 |
| CV1914 | 4 J 31 | CV1988 | 6SN7 | CV2183 | X661 |
| cV1915 | 6 FT | CV1989 | SD6 | CV2185 | 88 D |
| CV1916 | 3B/151A | CV1990 | 6 SQ 7 | CV2187 | Z239/1G |
| CV1917 | 6 F 8 | CV1991 | $6 \mathrm{SQ7}$ | CV2188 | W7/2d |
| CV1918 | 6 F 8 | CV1992 | 1267 | CV2189 | V24C/2K |
| CV1919 | $6 \mathrm{F4} 4$ | CV1993 | ${ }_{6}^{6 S 57}$ | CV2191 | ${ }_{\text {D } 23313 / 2 ~}^{1}$ |
| CV1921 | U24 | CV1996 | 6 6ST7 | CV2192 | $9 \mathrm{MW5AX}$ |
| CV1923 | TTR31MR | CV1999 | 1 v | CV2193 | 89D |
| CV1924 | TY2-125 | CV20c0 | 5A/159M | CV2194 | $\mathrm{G}^{\text {G400/1K }}$ |
| CV1926 | $6 \mathrm{G6}$ | CV2006 | EF55 |  | EP91 |
| CV1927 | B142 12 BAG | CV2029 |  | CV2199 Cr2201 | ${ }_{\text {E } 2043}$ |
| CV1928 CV1929 | ${ }_{6} 12 \mathrm{HA} 6$ | CV2101 | ${ }_{\text {DF72 }}$ | ${ }^{\text {cri201 }}$ | E2043 XE2 |
| CV1930 | 6H6 | cV2103 | DF73 | CV2203 | GHT1 |
| CV1931 | $6 \mathrm{H6}$ | CV2104 | daf70 | CV2204 | TD03-10F |
| cv1932 | 6 J 5 | cV2105 | DF70 | CV2205 | E4103/E/34 |
| CV1933 | 6 J 5 | CV2106 | DL66 | CV2208 | ${ }_{6}^{\text {G53/1G }}$ 6- |
| CV1934 | 6.55 | CV2107 | DF66 | CV2209 | ${ }_{5544} 6$ P3Special |
| CV1935 | 657 | Cv2108 | 9 MO 6 A | CV2210 | 5544 |
| CV1936 | 657 | CV2109 | VX4099 | CV2212 | 13 D 3 |
| cv1937 | $6 \mathrm{J7}$ | CV2110 | E2004 | CV2213 | NT2 |
| CV1938 | 6K6 | CV2115 | U41 | CV2214 | 3B/240M |
| CV1939 | $37 \times 50$ | CV2116 | VX5029 | CV2215 | 5545 |
| CV1940 | 6K6 | CV2124 | BK24 | CV2216 | 3088/P1 |
| CV1941 | $6 \times 7$ | CV2125 | BD78 | CV2217 | $6 \mathrm{6K25}$ |
| CV1942 | 6 K |  |  |  |  |


| SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV2220 | 5B/257M | CV2325 | Z502S | CV2506 | 41MPT |
| CV2221 | V235A-1K | CV2328 | MF31-35 | CV2507 | 1 U 4 |
| CV2223 | G10/241/K | CV2329 | 4004B | CV2508 | 41 STH |
| CV2224 | G1/371K | CV2331 | DL64 | CV2509 | 41 FP |
| CV2225 | 150 B 2 | CV2338 | F2 | CV2510 | $1 \mathrm{Z2}$ |
| CV2229 | M502A | CV2343 | $K 335$ | CV2511 | 420 T |
| CV2231 | E2266 | CV2347 | 5B/258M | CV2512 | 420 TDD |
| CV2232 | DDX52 | CV2348 | 5826 | CV2514 | 43 |
| CV2233 | G5H | CV2349 | EN30 | CV2516 | 2C39A |
| CV2234 | X662 | CV2352 | DG16-21 | CV2517 | 2 E 30 |
| CV2235 | EY84 | CV2353 | R61010 | CV2518 | $4 \mathrm{B32}$ |
| CV2236 | Z800U | CV2354 | R6015 | CV2519 | 4X150A |
| CV2237 | $1 \mathrm{AD4}$ | CV2358 | W7/1D | CV2520 | 5 C 22 |
| CV2238 | 5672 | CV2360 | 5 A 6 | CV2521 | 6AH6 |
| CV2239 | 5676 | CV2361 | DL69 | CV2522 | 6AS6 |
| CV2240 | 3B4 | CV2362 | M525 | CV2523 | 6AS7G |
| CV2241 | DY70 | CV2363 | M525 | CV2524 | 6 6U6 |
| CV2243 | PSG8 | CV2364 | M525 | CV2525 | 6AV6 |
| CV2245 | 3J/160E | CV2365 | M525 | CV2526 | 6AV6 |
| CV2246 | DDX52 | CV2367 | M525 | CV2527 | 6BA7 |
| CV2247 | 65 H | CV2368 | M525 | CV2528 | 45DS |
| CV2253 | ME1501 | CV2369 | AA76 | CV2529 | 451 U |
| CV2254 | 5678 | CV2370 | 3S4 | CV2530 | $45 \mathrm{Z5}$ |
| CV2255 | Z801U | CV2371 | DF61 | CV2531 | 46 |
| CV2256 | X662 | CV2372 | MF22-75 | CV2532 | 49 |
| CV2257 | UD166C | CV2373 | M502A | CV2533 | 50 |
| CV2258 | C43B | CV2374 | GD60 | CV2534 | $50 \mathrm{L6}$ |
| CV2259 | DL68 | CV2375 | GD100 | CV2535 | 52 |
| CV2260 | DF64 | CV2376 | M521 | CV2537 | 55 |
| CV2263 | K305 | CV2382 | EL822 | CV2538 | 59 |
| CV2266 | CC3L | CV2383 | BR191 | CV2539 | 61 P |
| CV2269 | ME1401 | CV2384 | ZS10C | CV2540 | 63 D |
| CV2270 | 90ag | CV2389 | CxT1 | CV2541 | 71 A |
| CV2271 | GC10B | CV2390 | 3A4 | CV2542 | 72 |
| CV2273 | K312 | CV2393 | BA9-20 | CV2543 | 73 |
| CV2274 | BS114 | CV2394 | DA42 | CV2544 | 78 |
| CV2275 | DC70 | CV2399 | 2G/473C | - CV2545 | 79 |
| CV2276 | Z319 | CV2400 | CXT2 | CV2546 | 81 |
| CV2277 | 13 E 1 | CV2412 | M253 | CV2547 | 83 V |
| CV2281 | M537 | CV2413 | SX642 | CV2548 | 84 |
| CV2282 | K308 | CV2414 | XC305/1 | CV2549 | 85 |
| CV2283 | VX7069 | CV2416 | C1133 | CV2550 | 100 T |
| CV2284 | 4 J 50 | CV2418 | G7T2 | CV2551 | 100 TH |
| CV2286 | E4412/E/9 | CV2420 | JPT9-01 | CV2552 | 1007H |
| CV2287 | $\mathrm{G1OH}$ | CV2421 | JPT9-02 | CV2553 | 101F |
| CV2288 | DL66 | CV2424 | M549 | CV2554 | 111A |
| CV2289 | 037 | CV2425 | M539 | CV2556 | $117 \mathrm{L7}$ |
| CV2290 | GEX36 | CV2426 | M529 | CV2557 | 117N7 |
| CV2291 | 1909A. | CV2428 | 25110 | CV2558 | 11726 |
| CV2293 | XB-1 | CV2431 | DG7-32 | CV2560 | 2 J 51 |
| CV2295 | 3 E 29 | CV2432 | 6025 | CV2561 | 122A |
| CV2296 | NSP2 | CV2433 | DF63 | CV2562 | 164V |
| CV2299 | DL73 | CV2434 | 6779 | CV2563 | 204A |
| CV2300 | 3A4 | CV2449 | 7182 | CV2565 | 2050 |
| CV2301 | E4412/C/9 | CV2450 | 7182 | CV2566 | 205 E |
| CV2302 | 1 CP 1 | CV2451 | 7182 | CV2567 | 205F |
| CV2304 | K324 | CV2452 | 7182 | CV2569 | 210DET |
| CV2306 | ES122 | CV2473 | JP9-250F | CV2570 | 210 HF |
| CV2307 | BS120 | CV2486 | XC18 | CV2571 | 210HL |
| CV2308 | BS116 | CV2487 | QV2-250B | CV2572 | 4507H |
| CV2309 | BS118 | CV2492 | E88CC | CV2573 | 5651 |
| CV2310 | GEX64 | CV2493 | E88CC/01 | CV2574 | 210 VPA |
| CV2314 | MP31-55 | CV2497 | MG13-11 | CV2575 | 5670 |
| CV2315 | C12B | CV2498 | DP16-22 | CV2576 | 211sp |
| CV2316 | 6260B | CV2500 | 3524 | CV2577 | 26A7 |
| CV2317 | 6260 C | CV2501 | 40 | CV2578 | 5687 |
| CV2321 | GD86W/S | Cv2502 | 41FP | CV2579 | 218 |
| CV2322 | BR161 | CV2503 | 41MH | CV2580 | 220 C |
| CV2323 | BR179 | CV2504 | 41 MHL | CV2581 | 2200 T |
| CV2324 | CR1 76 | CV2505 | 41 MPG | CV2582 | 220Vs |


| SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE TYPE | COMMERCIAL EQUIVALENT | SERVICE TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV2584 | 231D | CV2659 | 3D21A | CV2743 | 4033AF |
| CV2585 | 39. | CV2660 | 809 | CV2744 | 4 J 34 |
| CV2586 | 240 B | CV2661 | 812 | CV2745 | 4050AG |
| CV2587 | 242 C | CV2662 | 5639 | CV2746 | 4064A |
| CV2588 | 244A | CV2663 | 815 | CV2747 | 6U5G |
| CV2589 | 2501H | CV2664 | 822 | CV2748 | $5 \mathrm{Z4}$ |
| CV2591 | 100тн | CV2665 | 825 | CV2749 | 4081 |
| CV2592 | 256B | CV2666 | 829B | CV2750 | 89 J |
| CV2593 | 257A | CV2668 | 846 | CV2751 | 4096 AB |
| CV2594 | 258B | CV2669 | 849 | CV2752 | $4 \mathrm{PR60A}$ |
| CV2595 | 259A | CV2670 | 849 H | CV2753 | 5684 |
| CV2597 | 262A | CV2671 | 851 | CV2754 | 5685 |
| CV2598 | 264A | CV2672 | 852 | CV2755 | 4251AX |
| CV2599 | 264C | CV2673 | 852 | CV2756 | 4260A |
| CV2600 | 267B | CV2674 | 863 | CV2759 | 4304 |
| CV2601 | 271A | CV2675 | 864 | CV2760 | 430 B |
| CV2602 | 272A | CV2676 | 865 | CV2761 | 4304BB |
| CV2603 | 274A | CV2678 | 5799 | CV2762 | 4316A |
| CV2604 | 275A | CV2679 | 866 J | CV2764 | 4606 |
| CV2605 | 282A | CV2680 | 868 | CV2765 | 4673 |
| CV2606 | 284 | CV2683 | 878 | CV2766 | 4687 |
| CV2607 | 2840 | CV2685 | 880 | CV2767 | 4960 |
| CV2608 | 300A | CV2686 | 889 | CV2768 | 8003 |
| CV2609 | 330A | CV2687 | 889 R . | CV2769 | 9006 |
| CV2610 | 3030. | CV2688 | 891R | CV2770 | 13077 |
| CV2611 | 04TH | CV2689 | 893R | CV2772 | 23043 |
| CV2612 | 307A | CV2690 | 904V | CV2773 | 68503 |
| CV2613 | 310A | CV2691 | 913 | CV2774 | 68504 |
| CV2614 | 311A | CV2692 | 981 | CV2775 | 68506 |
| CV2615 | 3130 | CV2693 | 10 KP 7 | CV2776 | 68510 |
| CV2616 | 314A | CV2694 | 930 | CV2777 | $4 \mathrm{B28}$ |
| CV2617 | 323A | CV2695 | 931 | CV2778 | 2J21A |
| CV2618 | 327A | CV2696 | 931A | CV2779 | $4 \mathrm{B36}$ |
| CV2619 | 328A | CV2697 | 935 | CV2786 | 26 J |
| CV2620 | 329A | CV2698 | 5896 | CV2788 | NT13 |
| CY2621 | 330 B | CV2699 | 6088 | CV2789 | $9 \mathrm{LP7}$ |
| CV2622 | 331A | CV2700 | 957 | CV2790 | C1K |
| CV2623 | 332A | CV2701 | 958A | CV2791 | K332 |
| CV2624 | 337A | CV2704 | 7 T 5 | CV2792 | 2 K 25 |
| CV2625 | 338A | CV2705 | 1203 | CV2793 | 2 J 50 |
| CV2626 | 346A | CV2706 | 7 C 4 | CV2794 | C10SS/2G |
| CV2627 | 349A | CV2707 | 1231 | CV2795 | 1 L 4 |
| CV2628 | 349B | CV2709 | $1 \mathrm{R4}$ | CV2796 | 6L6WGB |
| CV2629 | 350A | CV2710 | 306 | CV2797 | 5894A |
| CV2630 | 351A | CV2711 | $1500 \%$ | CV2798 | QQVO3-12 |
| CV2631 | 352A | CV2712 | 1609 | CV2799 | QQVO3-20 |
| CV2632 | 354A | CV2713 | 1610 | CV2800 | A40 |
| CV2633 | 362A | CV2714 | 1614 | CV2801 | A40/N3 |
| CV2634 | 367 | CV2715 | 1630 | CV2803 | 2915 |
| CV2636 | 375A | CV2716 | 6SC7 | CV2804 | A915A |
| CV2637 | 388A | cv2717 | 1729 | CV2805 | A294 |
| CV2638 | 393A | CV2718 | 1876 | CV2806 | $\mathrm{AC} / 2 \mathrm{HL}$ |
| CV2639 | 394A | CV2719 | 1924 | CV2807 | AC2HL |
| CV2640 | 405BL | CV2721 | 60.6 | CV2808 | AC2Pen |
| Cv2642 | 417A | CV2722 | 3025 | CV2809 | AC5Pen |
| CV2643 | 2C40 | CV2723 | 869B | CV2810 | E4504/M/16 |
| CV2644 | 460 BU | CV2725 | 09 | CV2811 | AC/HL |
| CV2645 | R1 | CV2726 | 6ск6 | CV2812 | $\mathrm{AC} / \mathrm{HL}$ |
| CV2647 | 532 | CV2727 | 26D | CV2813 | AC/HLDD |
| CV2648 | 632A | CV2728 | 29D | CV2814 | 5 D 21 |
| CV2650 | 12AY7 | CV2729 | E80F | CV2815 | ACP |
| CV2651 | 7078 | CV2730 | 5800 | CV2816 | 3 JP12 |
| CV2652 | 709A | CV2731 | 63DS | CV2817 | 6L6GA |
| CV2653 | 714A | CV2733 | 3951 | CV2818 | AC/PT8 |
| CV2654 | 715A | CV2734 | 4033A | CV2819 | AC/S |
| CV2655 | 715B | CV2735 | 4015A | CV2820 | AC/SP1 |
| CV2656 | 724A | CV2736 | 3 C 24 | CV2821 | ECC33 |
| CV2657 | 800 | CV2738 | RG1-240 | CV2822 | AC/SG |
| CV2658 | 806 | CV2742 | 114 | CV2823 | AC/SP3 |


| SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | $\begin{aligned} & \text { SERVICE } \\ & \text { TYPE } \end{aligned}$ | COMMERCIAL EQUIVALENT | SERVICE TYPE | COMMERCIAL FQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV2924 | AC/SPen | CV2900 | det10 | CV2975 | 6BQ5 |
| CV2825 | ${ }_{\text {ACT6 }}$ | CV2901 | EF86 | CV2976 | NE |
| cV2826 | 1863A | CV2903 | OA2 | CV2977 | н2 |
| cV2827 | ACT10 | CV2905 | 3J/170E | CV2978 | H12 |
| CV2829 | 293A | CV2907 | DF1 | CV2979 | н30 |
| CV2830 | $\mathrm{AC} / \mathrm{TH1}$ | CV2908 | 3J/260E | CV2980 | DM70 |
| CV2831 | $2 \mathrm{C51}$ | CV2909 | $\mathrm{DH73}^{\text {d }}$ | Cv2981 | H410 |
| CV2832 | AC/VP2 | CV2910 | DK1 | cv2982 | H610 |
| CV2833 | af3 | CV2911 | ${ }^{\text {DL2 }}$ 2 | CV2983 | DL94 |
| CV2834 | AgT1 | CV2912 | DL63 | CV2984 | 6080 |
| cy2835 | 5R4YGY | CV2913 | DLS1 | CV2985 | HD24 |
| CV2836 | APP4G | CV2914 | 1 B 42 | CV2986 | HD203A |
| CV2837 | APP4G | CV2916 | 1 N 25 | CV2987 | HF100 |
| CV2839 | AR300 | CV2918 | 1N28 | CV2988 | HF200 |
| CV2840 | 5UP7 | CV2919 | ${ }_{\text {F114 }}$ N43 | CV2989 | HK354E |
| CV2841 | ARP12T | CV2920 | E1148 | CV2990 | 6136 |
| CV2842 | 6C4W | CV2923 | 1 1N70 | CV2991 | HL2 |
| cV2843 | 6 J 6 W | CV2924 | 12070 | CV2992 | 6106 |
| CV2844 | $6 \times 4 \mathrm{~W}$ | CV2925 | EBF2 | CV2993 | KU25 |
| CV2845 | LS5 | CV2926 | EbL31 | CV2994 | HL23 |
| CV2846 | LS5B | CV2927 | EC50 | CV2995 | HL23DD |
| CV2847 | 5704 | CV2928 | ECH3 | CV2996 | HLD41D |
| CV2848 | CK707 | CV2929 | ${ }_{\text {ECH3 }}$ | CV2997 | HL63 |
| CV2849 | K1051 | CV2930 | ${ }_{2 \mathrm{P} 22}$ | CV2998 | HL133 |
| CV2850 | at200a | Cv2931. | 2 B 22 | CV2999 | HL133DD |
| CV2851 | 3 D 22 | CV2932 | ${ }_{2}^{2 \mathrm{C4} 46}$ | CV3500 | HL210 |
| CV2852 | $2 J 56$ | CV2933 | ${ }_{3}^{2} 48 \mathrm{C} 1 \mathrm{~A}$ | CV3501 | H6610 |
| CV2853 | RZ1-250 | CV2934 | ${ }_{5} 5$ BP1 1 | CV3502 | HL1320 |
| cv2854 | 6AN5 | CV2935 | $5 \mathrm{JP1}$ | CV3503 | HLDD1320 |
| CV2855 | 6 K 4 | CV2936 | 4 B 22 | CV3506 | HY615 |
| CV2856 | 1N23B | CV2937 | ${ }^{6405}$ | CV3508 | 6208 |
| CV2857 | 1N23BM | CV2938 | ${ }_{6 \times 4}$ | CV3509 | 1 N31 |
| CV2858 | 3824W | CV2939 | $6 \mathrm{F4} 5$ | CV3510 | 4831 |
| cV2859 | 5846 | CV2941 | EL50 | CV3511 | 371B |
| CV2860 | AZ1 | CV2940 | EL36 | CV3512 | 5696 |
| CV2861 | AZ2 | CV2942 | EM1 | CV3514 | K8140824 |
| Cv2862 | AZ31 | CV2943 | ${ }_{\text {ESUVI }}$ | CV3515 | KB2 |
| CV2864 | B21 | CV2944 | EsSU75 | CV3516 | кK2 |
| CV2865 | B30 | CV2945 |  | CV3517 | 5933 |
| Cv2866 | 2C51W | CV2946 | ${ }_{\text {ESU300 }}$ | CV3518 | 5948/1754 |
| Cv2867 | BU100/6 | CV2947 | ESU450 | CV35.19 | KT30 |
| CV2868 | C1A | CV2948 | Fisu4a | CV3520 | KT31 |
| CV2869 | 3JP7 | CV2949 | ${ }_{1293}$ | CV3521 | 5949/1907 |
| CV2870 | CC3D | CV2950 | 1298 | CV3522 | 6079 |
| CV2871 | CaT6 | ${ }_{\text {cV2952 }}$ | FA14 | CV3523 | 6146 |
| cv2872 | CAT9 | CV2953 | ${ }_{\text {FC2 }}$ | CV3524 | T1/236G |
| CV2974 | 1005 | CV2954 | ${ }_{\text {FC4 }}$ | CV3525 | 1N21C |
| CV2875 | CL4 | CV2955 | ${ }_{\text {FCCI }}$ | CV3526 | EL85 |
| Cv2876 | $2 \mathrm{D21W}$ | c)2956 J2957 | FG17 | CV3527 | ${ }_{\text {KTV73 }}$ |
| cv2877 | 6AK5 | N2957 | ${ }_{\text {FG6278 }}$ | CV3528 | M513 |
| CV2878 | CRT1 | ${ }_{\text {CV2958 }}$ | ${ }_{3 \mathrm{EG21}}$ | CV3529 | KT41 |
| CV2879 | CRT1 | CV2960 | FP54 | CV3531 | KT273 |
| CV2880 | CRT4/1 |  | 1 N 54 A | CV3532 | $\mathrm{L}_{2} 2$ |
| Cv2882 | 6AL5W | CV29662 | 1 N 38 A | Cv3533 | L21 |
| CV2883 | 6 A 05 W | CV2962 | $4-125 \mathrm{~A}$ | Cv3534 |  |
| CV2884 | ${ }^{\text {6AS6 }}$ 54EP11 | CV2964 | $4-250 \mathrm{~A}$ | CV3535 | ${ }_{\text {C1 }}$ |
| CV2885 | M2H | cv2966 | Ey86 | CV3536 | LS408A |
| CV2887 | DAC1 | CV2965 | RL7076-2A | CV3537 | L500 |
| CV2888 | El31 | CV2964 | 5 D 22 | CV3538 | L610 |
| CV2889 | DD620 | CV2963 | $4 \mathrm{4D21}$ | CV3539 | 6024 |
| CV2890 | DDT | CV2967 | ${ }_{7 \times 8}$ | CV3540 | HT415 |
| CV2891 | ${ }^{\text {DE5 }}$ | CV2968 | GT1 | ${ }^{\text {CV354 }}$ | ${ }_{\text {LS6A }}$ |
| CV2892 | ${ }_{\text {DETISH }}$ | CV2970 | 5656 | cV3543 | 4 D 32 |
| CV2896 | 52CG | CV2971 | 5675 | CV3545 | 5939 |
| CV2897 | 74B1A | CV2972 | 5876 | CV3546 | Mid4 |
| CV2898 | DET8 | CV2973 | GU7 | CV3547 | MH14 |
| CV2899 | DET10 | CV2974 | 1 N 72 | CV3548 | 1824A |


| SERVICE TYPE | COMMERCIAL EQUIVALENT | SERVICE TYPE | COMMERCIAL EQUIVALENT | SERVICE TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV3549 | 1B38 |  |  | CV3702 | SG215 |
| CV3550 | $1 \mathrm{B41}$ | CV3626 | PenB4 | CV3703 | SP4B |
| CV3551 | 1N38 | CV3627 | 6SNTHGT | CV3704 | SP13C |
| CV3552 | MPT4 | CV3628 | 1835A | CV3705 | 5691 |
| CV3553 | MS4B | CV3629 | 6130 | CV3706 | 5796 |
| CV3554 | MPT42 | CV3630 | Pen44 | CV3707 | 6AL7GT |
| CV3555 | 1022 | CV3631 | Pen45DD | CV3709 | STV150/200 |
| CV3557 | MR300 | CV3632 | 6131 | CV3710 | AR63 |
| CV3558 | MR300/E | CV3633 | Pen231 | CV3711 | N78 |
| CV3559 | 2 C 53 | CV3634 | Pen428 | CV3712 | STV280/80A |
| CV3560 | 2151 | CV3635 | Pen1340 | CV3714 | 822special |
| CV3561 | MS/Pen | CV3636 | Pen1346 | CV3715 | SW5 |
| CV3562 | MSP41 | CV3637 | 7BP7A | CV3719 | SW7 |
| CV3563 | MT11SW | CV3638 | PenA4 | CV3721 | T4D |
| CV3564 | MP12 | CV3639 | 6F4 | cV3722 | T20 |
| CV3565 | ME41 | CV3640 | PJ8 | CV3723 | T41 |
| CV3567 | MU1 | CV3641 | PM1 ${ }^{\text {LIL }}$ | Cr3724 | T200 |
| CV3569 | 4 J 52 | CV3642 | PM1LF | CV3725 | GL446 |
| CV3570 | MU4250 | CV3643 | PM2A | CV3726 | TDD2A |
| CV3571 | MVSPen | CV3644 | 726C | CY3727 | tDD4 |
| CV3572 | MVSPenB | CV3645 | PM20X | CV3729 | 1N47 |
| CV3573 | MZ05-20 | CV3646 | 845W | CV3730 | TMC15B |
| CV3574 | MZ1/76 | CV3647 | PM22A | CV3731 | TMC16B |
| cV3575 | 3B26 | cv3648 | PM24E | CV3732 | TMC20B |
| Cv3576 | MX40 | CV3649 | PM22 | CV3733 | 3KP1 |
| CV3577 | 25A7GT | CV3650 | 12AY7 | CV3734 | 6X5WGT |
| CV3578 | PM22D | CV3651 | 12SH7GT | CV3735 | TP26 |
| CV3579 | PT5E | CV3652 | PT5 | CV3736 | K1105P2 |
| CV3580 | 304TL | CV3653 | PT6 | CV3737 | QK353 |
| CV3581 | V1501 | CV3654 | PT11 | CV3738 | VXR130 |
| CV3582 | VP4B | CV3655 | 12SP7 | CV3739 | TX3-200 |
| CV3583 | 5HP1 | CV3657 | PV05-15 | CV3739 | TX5-400 |
| CV3584 | 21/2 | CV3658 | PV1-35 | CV3740 | 1X5-400 |
| CV3586 | 471A | CV3659 | M501A | CV3741 | T22-300 |
| CV3587 | 705A | CV3660 | M510a | CV3742 | TZ20 |
| CV3588 | 706A | CV3661 | M501A | CV3743 | U5 |
| CV3589 | 707A/B | CV3662 | M501A | CV3744 | U6 |
| CV3590 | 708A | CV3666 | 12SW7 | CV3745 | T14 |
| CV3592 | Ux6653 | CV3667 | RG1-250 | CV3746 | U15 |
| CV3593 | 713A | CV3668 | 12 SY 7 | CV3747 | 015 |
| CV3594 | 717A | CV3669 | 2K48 | CV3748 | 282 |
| CV3595 | 721A | cV3670 | RG4-1000 | CV3749 | 576 |
| CV3596 | 726B | CV3671 | RK25 | CV3750 | U22 |
| CV3597 | 726V | CV3672 | RK28 | CV3751 | U21 |
| CV3599 | 829B | CV3673 | RK28A | CV3752 | U30 |
| CV3600 | 202P1 | CV3674 | RK31 | CV3753 | 031 |
| CV3601 | 7193 | CV3675 | 9004 | CV3754 | U50 |
| CV3602 | $5 J 26$ | cv3676 | 2 J 42 | CV3755 | 5755 |
| CV3604 | GL464 | CV3677 | RK47 | CV3756 | U600 |
| CV3605 | GL464 | CV3678 | 2BP1 | CV3758 | UR3C |
| CV3606 | 5 J 29 | CV3679 | RK49 | CV3759 |  |
| CV3607 | NP90 | CV3680 | RK60 | CV3760 | $0{ }^{1}$ |
| CV3608 | 5 J 30 | CV3681 | RK62 | CV3761 | V120 |
| CV3609 | 5517 | CV3683 | RKR47 | CV3762 | V1238 |
| CV3610 | 5663 | cV3685 | QK283 | CV3763 | V1238 |
| CV3611 | 5586 | cV3686 | QK284 | CV3765 | V226 |
| CV3612 | 5686 | CV3687 | 4 J 49 | CV3766 | V339 |
| CV3613 | 6AR6 | CV3688 | 2033 | CV3767 | V503 |
| CV3614 | 68L6 | CV3689 | 3829 | CV3768 | V877 |
| CV3615 | 68M6 | CV3690 | R2-150 | CV3769 | V877 |
| CV3616 | 6BN6 | cv3691 | S23 | CV3770 | v955 |
| CV3618 | 6L6WGA | CV3692 | 523 | CV3772 | V1010 |
| cV3619 | 6SJ7wGT | CV3693 | $10 \mathrm{KP7}$ | CV3773 | V1010 |
| CV3620 | P220 | CV3694 | S130A | CV3774 | V1020 |
| CV3621 | P410 | CV3695 | S215 | CV3775 | V1021 |
| CV3622 | P610 | CV3696 | S215A | CV3776 | V1023 |
| CV3623 | PA40 | CV3697 | 12SX7GT | CV3777 | V1105 |
| CV3624 | PE7B | cV3698 | 5610 | CV3778 | V1105 |
| CV3625 | PE8 | CV3699 | 5693 | CV3779 | 4 J 26 |


| SERVICE TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CV3780 | 4 J 27 |  |  | CV3931 | 5906 |
| CV3781 | 4 J 28 | CV3855 | RS329 | CV3932 | 5977 |
| CV3782 | 4 J 29 | CV3856 | RS330 | CV3933 | 5783 |
| CV3783 | 4 J 30 | CV3857 | RS283A | CV3934 | 1N34A |
| CV3784 | 5B/102A | CV3858 | RS18 | CV3935 | 14R7 |
| CV3785 | VMP4G | CV3859 | RV271A | CV3936 | 1457 |
| CV3786 | WMP4G | CV3860 | RS282 | CV3937 | 14R7 |
| CV3787 | vP2 | CV3862 | R555 | CV3938 | 12CS7GT |
| CV3788 | VP4 | CV3863 | RS289 | CV3939 | 6BM6A |
| CV3789 | 5842 | CV3864 | RS389 | CV3940 | 2 C 39 |
| CV3790 | VP13C | CV3865 | RS288 | CV3941 | 3RP1 |
| CV3791 | vP21 | CV3866 | RS203/40 | CV3942 | 5692 |
| CV3792 | VP24 | Cr3867 | RSQ15/40 | CV3943 | 5852 |
| CV3794 | BP210 | CV3868 | RSQ15/5 | CV3944 | 2 J 30 |
| Cv3795 | VP215 | CV3869 | RSQ15/5 | CV3945 | 2 K 45 |
| CV3796 | VP1322 | CV3870 | RGQ10/4D | CV3946 | 3WP1 |
| CV3797 | V944A | CV3871 | RS254 | CV3947 | 4 J 54 |
| CV3798 | OA3 | CV3872 | RS255 | CV3948 | 4.555 |
| CV3799 | OB3 | 73 | RS566 | CV3949 | 4 J 56 |
| CV3800 | VS2 | CV3874 | ATR3488 | CV3950 | 4557 |
| CV3802 | Vs24 | CV3875 CV3876 | SAL39 | CV3951 | 4 J 58 |
| CV3803 | VS24 | CV3877 | 1 B 56 | CV3953 | 4 J 78 |
| CV3804 | W21 | CV3878 | 2-150D | CV3954 | 5 CP 7 |
| CV3805 | W30 W31 | CV3879 | 4-400A | CV3955 | 5 CP 12 |
| CV3806 | W31 | CV3880 | 4-100A | CV3955 | 719 A |
| CV3808 | 6 T 4 | CV3881 | EB41 | CV3956 | 1258 |
| CV3809 | 807W | CV3882 | FBCC41 | CV3957 | 5657 |
| CV3810 | WD30 | CV3883 | EAF42 | CV3958 | $5 \mathrm{FP7A}$ |
| CV3812 | 1 P 31 | CV3884 | ECC40 | CV3960 | 5783 |
| CV3813 | 8A 3822 | CV3885 | EF40 | CV3961 | 6111 |
| CV3815 | 3 B 22 $\times 21$ | CV3886 | EF41 | CV3963 | 559 |
| CV3816 | X21 $\times 21$ | CV3887 | EF42 | CV3964 | 354 |
| CV3817 | X 21 X 22 | CV3888 | ECH42 | CV3964 | 2546 |
| CV3818 | X22 | CV3889 | EL41 | CV3965 | 0K428 |
| CV3819 | X24 | CV3890 | EL42 | CV3966 | 1N63 |
| CV3820 | X24 | CV3891 | EZ40 | CV3967 | 1 N 63 |
| CV3821 | X31 | CY3892 | AZ41 | CV3968 | 3771A |
| CV3822 | X31 X41 | CV3893. | 4X150G | CV3969 | 577 |
| CV3823 | X41 | CV3894 | 6BF7 | CV3970 | 5721 |
| CV3825 | X63 | CV3895 | 5702 | CV3971 | 69095 |
| CV3826 | X65 | CV3896 | 5784 | CV3972 | 6095 |
| CV3827 | 12C8GT | CV3897 | 5787 | CV3973 | 6ASTY |
| CV3828 | X66 | CV3898 | 5829 | CV3974 | 6236 |
| CV3829 | 293A | CV3899 | 5932 | CV3975 | M509 |
| CV3830 | XH1.5 | CV3900 | 5963 | CV3976 | M509 |
| CV3831 | XL2 | cV3901 | 6161 | CV3977 | 6Ag7x |
| CV3832. | XP2 | CV3902 | 6002 | CV3979 | OD3W |
| CV3833 | XSG2.0V | CV3903 | QK338 | CV3979 CV3980 | 12SR7GT |
| CV3834 | XW2 | CV3904 | 2K41 | CV39881 | G5S3 |
| CV3835 | 221 | CV3905 | 5847 | CV3982 | M506 |
| CV3836 | Z21 | CV3906 | 6117 | CV3983 | 12SW7GT |
| CV3837 | Z21 | CV3907 | 720 C | CV3985 | 6SLTHGT |
| CV3838 | Z62 | CV3908 | 68H6 | CV3985 | 6021 |
| CV3839 | Z66 | CV3909 | 6BJ6 | CV3987 | 5644 |
| CV3840 | TTR 31 MR | CV3912 | $1 \mathrm{U}_{5}$ | CV3988 | 6442 |
| CV3841 | 611 | CV3915 | 8025A | CV3989 | 6AN4 |
| CV3842 | 5 J 29 | CV3916 | 5647 | CV3989 | 6E26 |
| CV3843 | 5 J 30 | CV3917 | 5703 | CV3990 | 4X150D |
| CV3844 | $5 J 31$ | CV3918 | 5JP2A | CV3992 | H06002 |
| CV3845 | RS366 | CV3919 | U82 | CV3992 |  |
| CV3846 | RS261 | CV3920 | A2196 | CV3993 | 1 N 2 |
| CV3847 | RS250 | CV3921 | A2244 | CV3994 | $1 \mathrm{Cc}{ }^{\text {a }}$ |
| CV3848 | RS260 | CV3923 | 1 N 21 B | CV3995 | U709 |
| CV3849 | RS217 | CV3924 | 6AC1H | CV3996 | JP9-15 |
| CV3850 | RS207 | CV3926 | 7 C 23 | CV3998 | E180F |
| CV3851 | RS253 | CV3927 | 12K8 | CV3999 | MW22/22 |
| CV3852 | RS285 | CV3928 | 5636 | CV4001 | F/6063 |
| CV3853 | RS15 | CV3929 | 5840 | CV4002 | F/6064 |
| CV3854 | RS47 | CV3930 | 5718 | CV4002 | F/6064 |


| SERVICE | COMMERCIAL | SERVICE | COMMERCIAL | SERVICE | COMMERCIAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | EQUIVALENT | TYPE | EQUIVALENT | TYPE | EQUIVALENT |
| CV4003 | 12AU7 | CV4504 | 2S/141G | CV5074 | 6AF4A |
| CV4004 | 6057 | CV4506 | 5A/175G | CV5075 | 622 C |
| CV4005 | $6 \times 4$ | CV5001 | 601 C | CV5076 | 1N198 |
| CV4006 | 6059 | CV5002 | CS3A | CV5077 | PL81 |
| CV4007 | 6AL5W | CV5003 | BU28/4 | CV5078 | XC17 |
| CV4008 | 6719 | CV5004 | $3 \mathrm{JP2}$ | CV5079 | 5643 |
| CV4009 | 6BA6W | CV5005 | 6110 | CV5080 | EF37A |
| CV4010 | 5654 | CV5006 | 6021 | CV5081 | 61SPT |
| CV4011 | 6AS6W | CV5007 | 6112 | CV5082 | M8234 |
| CV4012 | 5750 | CV5008 | 6080WA | CV5083 | QS75-20 |
| cV4013 | 5670 | CV5009 | 6203 | CV5084 | 30B1P3 |
| CV4014 | 6064 | CV5010 | 5644 | CV5085 | 27M2 |
| CV4015 | 6065 | CV5011 | TH1657A | CV5086 | 6BS7 |
| CV4016 | 5814 | CV5012 | 1 N 23 C | CV5087 | 4EP7 |
| CV4017 | 5751 | CV5013 | 1N23CR | CV5088 | XC15 |
| CV4018 | 2D21H | CV5014 | 1N78 | CV5089 | L3040 |
| CV4019 | 6AQ5W | CV5015 | 1 N 53 | CV5090 | L4031 |
| CV4020 | OA2 WA | CV5016 | 1N32 | CV5092 | EF800 |
| CV4021 | 3B24WA | CV5017 | 4507L | CV5093 | EL803 |
| CV4022 | 6135 | CV5018 | JP9-80 | CV5094 | EL86 |
| CV4023 | 6AU6WA | CV5019 | QK387 | CV5095 | GK2261 |
| CV4024 | 12AT7HA | CV5020 | QK388 | CV5096 | GK2401 |
| CV4025 | 6 AL 5 | CV5021 | 6 V 3 A | CV5098 | ZS21 |
| CV4026 | 6R4WGA | CV5022 | CS31A | CV5099 | 2S22 |
| CV4027 | 5 Y 3 WGTA | CV5023 | AFX212 | CV5100 | GJ3M |
| CV4028 | OB2WA | CV5024 | MX-408/U | CV5101 | GJ5M |
| CV4029 | 5902 | CV5025 | XB2 | CV5102 | GJ6M |
| CV4030 | G75/3G | CV5026 | 1 N 320 | CV5103 | ZS20B |
| CV4031 | 6J6WA | CV5027 | XG1-2500 | CV5104 | GEX541 |
| CV4032 | 6814A | cV5028 | $3 \mathrm{~V} / 390 \mathrm{~B}$ | CV5105 | $0 \mathrm{C45}$ |
| CV4033 | F/6060 | CV5029 | 6 J 4 WA | CV5106 | E1T |
| CV4034 | F/6067 | CV5030 | 26Z5W | CV5107 | KD63 |
| CV4035 | F/6057 | CV5031 | M548 | CV5108 | EFP60 |
| CV4036 | F/6443 | CV5032 | 1X2A. | CV5109 | GE10 |
| CV4037 | F/5750 | CV5033 | 3-14 | CV5112 | 3A/167M |
| CV4039 | 6062 | CV5034 | 3 JP11 | CV5113 | 5787 WA |
| CV4040 | S6F17 | CV5035 | DG13-34 | CV5114 | 6260B |
| CV4041 | S6F17F | CV5036 | 6AF4 | CV5115 | X79 |
| CV4042 | $19 \mathrm{G6}$ | CV5037 | 6BA6H | CV5116 | 3B/241M |
| CV4043 | 6061 | CV5038 | 6 BC 4 | CV5120 | 20 CV |
| cV4044 | 6443 | CV5039 | 6BL7 | CV5121 | 6870 |
| CV4045 | F/6061 | CV5040 | 6BQ6 | CV5122 | 2900T |
| CV4047 | G400/2G | CV5041 | 6CL6 | CV5123 | JP9-15D |
| CV4048 | QS1212 | CV5042 | 12 BH 7 | CV5125 | DP13-34 |
| CV4049 | $\mathrm{F} / 5726$ | CV5043 | 311A | CV5131 | DG4-1 |
| CV4050 | F/5654 | CV5044 | 5836 | CV5132 | M8163 |
| CV4051 | F/6158 | CV5045 | 5837 | CV5134 | JPT9-60 |
| CV4052 | QS1202 | CV5046 | 5844 | CV5140 | EA52 |
| Cv4053 | QS1203 | CV5047 | G7B | CV5144 | PCL83 |
| CV4054 | F/5654 | CV5048 | V239C/1K | CV5156 | EF89 |
| CV4055 | 6132 | CV5049 | V241C/1K | CV5157 | DP13-2 |
| CV4056 | F/6132 | CV5050 | 212-G11A | CV5168 | DH13-97 |
| CV4058 | 664WA | CV5051 | HD2016A | CV5171 | DP7-5 |
| cV4059 | M8097 | CV5052 | $6 \mathrm{AU7}$ | CV5172 | DK92 |
| CV4060 | SI1E12 | CV5053 | 6098CT | CV5173 | $90 \mathrm{C1}$ |
| CV4063 | 6516 | CV5054 | 6390 | CV5192 | PCC84 |
| CY4066 | M8190 | CV5055 | EM81 | CV5214 | E90CC |
| cV4067 | M8167 | CV5056 | A2094 | CV5215 | ECF80 |
| CV4068 | 6158 | CV5057 | 5702 WA | CV5219 | QY5-3000A |
| CV4069 | F/6158 | CV5058 | 578WA | CV5233 | EL32 |
| CV4070 | M8099 | CV5059 | 5829WA | CV5234 | ZT1011/XR1-1600A |
| CV4073 | SX641 | CV5060 | 2759 | CV5235 | JP9-50 |
| CV4074 | SX642 | CV5061 | $7 \mathrm{YP2}$ | CV5239 | 9Y7-6000A |
| CV4076 | M8179 | CV5062 | 5841 | CV5244 | MB13-1 |
| CV4077 | SX643 | CV5063 | $1 \mathrm{N7O}$ | CV5247 | XH8-100 |
| CV4078 | SX644 | CV5064 | 1N38A | CV5249 | KS9-30 |
| CV4080 | M8225 | CV5065 | 6 U 8 | CV5269 | DG7-6 |
| CV4085 | M8195 | CV5066 | BL25 | CV5277 | ET51 |
| CV4098 | M8234 | CV5067 | 6SH7L | CV5278 | 2520M |
| CV4100 | M8223 | CV5068 | ES75H | CV5281 | ECC84 |
| CV4101 | M8224 | CV5069 | 6621 | CV5282 | AL13-36 |
| CV4104 | M8224 | CV5070 | 5 FP 11 | CV5300 | ALL22-10 |
| CV4501 | 5A/172G | CV5071 | 3J/195E | CV5302 | DH7-91 |
| CV4502 | 5A/173G | CV5072 | E281 | CV5304 | 6463 |
| CV4503 | 5A/174G | CV5073 | 6AM4 | CV5311 | M8248 |


| SERVICE | COMMERCIAL | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | EQUIVALENT | TYPE | EQUIVALENT | TYPE |  |
| CV5331 | ECC189 | NR42 | P220 | N016 | GU5 |
| CV5354 | E188CC | NR43 | PM24A | NU17 | UU5 |
| CV5358 | ECC88 | NR44 | PX4 | NU18 | 017 |
| CV5365 | 6BQ7A | NR45 | VMP4G | NU20 | U50 |
| CV5369 | DHM10-93 | NR46 | D41 | NU31 | MU2 |
| CV5397 | EC157 | NR47 | PX25 | NU33 | SU2150A |
| CV5412 | DM160 | NR48 | EBC33 | NU33A | HVR2 |
| CV5418 | DG7-31 | NR49 | EF36 | NJ34 | HVR2 |
| CV5430 | TD1-100A | NR250 | AT4 | V177 | EM31 |
| CV5434 | EM84 | NR51 | VMP4G | V1103 | Y63 |
| CV5443 | JPG9-02C | NR52 | 354 V | VR18 | 21556 |
| CV5458 | TDO3-10E | NR53 | KT42 | VR19 | PM2 |
| CV5472 | E88CC | NR54 | AP4 | VR21 | 210LF |
| CV5473 | QQVO2-6 | NR54A | AP4 | VR22 | 220PA |
| CV5724 | E80T | NR55 | $4 \mathrm{D1}$ | VR27 | 210LF |
| CV5745 | G733 | NR56 | DA30 | VR28 | 220VSG |
| CV5754 | TD04-20A | NR57 | ML4 | VR32 | 220B |
| CV5760 | DP13-97 | NR58 | 244 V | VR35 | QP21 |
| CV5766 | E182CC | NR59 | KT41. | VR37 | MH4 |
| CV5793 | DN13-34 | NR60 | H42 | VR38 | MHLT4 |
| CV5808 | E55L | NR61 | W42 | VR40 | PX25 |
| CV5809 | E810F | NR64 | KTW62 | VR41 | GM12M |
| CV5810 | EF184 | NR65 | MSP4 | VR43 | 210PG |
| CV5811 | DH13-10 | NR66 | D41 | VR44 | 2100 DT |
| CV5820 | Z700U | NR67 | 6L7 | VR45 | X56 |
| CV5830 | EL360 | NR68 | 607 | VR46 | PT25H |
| CV5831 | EF183 | NR69 | Y63 | VR47 | TZO5-20 |
| CV5847 | QQVO7-50 | NR70 | MS/Pen | VR49 | 2105 ST |
| CV5883 | DNM9-11 | NR71 | MS/PenT | VR53 | EF39 |
| CV5900 | KS7-85A | NR72 | N43 | VR54 | EB34 |
| CV5905 | EY81 | NR73 | 6N7 | VR55 | EB3C3 |
| CV5940 | DP4-1. | NR 74 | FV1-35 | VR56 | EF36 |
| CV5956 | TD03-10 | NR75 | ACP4 | VR57 | EK32 |
| CV5957 | XR1-12 | NR76 | KTZ41 | VR57A | EK32 |
| CV5959 | QY4-400 | NRT7 | 6L6 | VR59 | 955 |
| CV5961 | CV5961 | NR78 | 6C5 | VR65 | SP61 |
| CV5962 | TD03-101 | NR78A | 163 | VR655A | SP41 |
| CV5989 | E80CC | NR79 | Z62 | VR66 | P61 |
| CV6007 | XH3-045 | NR80 | E1148 | VR67 | 6 J 5 |
| CV6008 | 24B1 | N281 | $6 \mathrm{K7}$ | VR78 | D1 |
| CV6072 | JP8-02B | NR82 | X65 | VR82 | 220 TH |
| CV6087 | LA9-3B | NR83 | 6 J 7 | VR83 | 210VPT |
| CV6094 | DM1 60 | NR84 | 2041 | VR91 | EF50 |
| CV6095 | DH7-91 | NR85 | 6 F 6 | VR91A | EF50 |
| CV6114 | JPT9-02E | NR86 | KTW63 | VR92 | EA50 |
| CV7129 | 0CP71 | NR87 | AC5PenDD | VR95 | 954 |
| NR16A | PM4DX | NR94 | ACP4 | VR95A | 954 |
| NGTI | DPQ | NS1 | STX280/80 | VR99 | X66 |
| NGT2 | GT1C | NS3 | 202 | VR99A | ECH35 |
| NGT4 | GT1A | NS4 | 4713 | VR100 | KTW62 |
| NGT121 | T41 | NS5 | 304 | VR101 | MHLD6 |
| NGT128 | GI1C | NT18 | D060 | VR102 | BL63 |
| NR15 | PM3 | NT20 | PM365 | VR105 | ML6 |
| NR15A | PM4DX | NT36 | DA100 | VR106 | 902 |
| NR16 | EM254 | NT37 | 4033A | VR107 | 1502 |
| NR18 | DEQ | NT38A | PZ1-75 | VR108 | 8 D 2 |
| NR22 | PM14 | NT39 | ACT36 | VR109 | $4 \mathrm{D1}$ |
| NR23 | PM14 | NT40 | DET5 | VR109A | 4D1 |
| NR26 | MHL4 | NT58 | DET12 | VR116 | V872 |
| NR27 | 104V | NI62 | FM24D | VR117 | 41MTL |
| NR27A | 104 V | NT62A | PM24D | VR117A | 41MTL |
| NR28 | PM2 | NT65A | PZ1-35 | VR118 | KT2 |
| NR31 | MH4 | NT82 | PM202 | VR119 | DDL4 4 |
| NR35 | PD220A | NU3 | U12/14 | VR122 | 41MXP |
| NR37 | ACSG | NUS | RXX3-120 | VR123 | EF8 |
| NR38 | VMS4 | NU12 | U18 | VR124 | MS/Pen |
| NR39 | PM22A | NU13 | U15 | VR125 | MS/PenB |
| NR40 | PN24D | NU13A | U15 | VR126 | 4SH |
| NR41 | 210 VPT | NU15 | U4020 | VR129 | MS/Pen |


| SERVICE | COMMERCIAL | SERVICE | COMMERCIAL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| TYPE | EQUIVALENT | TYYPE | CQUIVALENT <br> EQU | SERVICE | COMMERCIAL |
| VR130 | HL23 | VT60A | 807 | TYPE | EQUIVALENT |


| SERVICE | COMMERCIAL | SERVICE | COMMERCIAL | SERVICE | COMMERCIAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE | EQUIVALENT | TYPE | EQUIVALENT | TYPE | EQUIVALENT |
| VT1 | 203A | VT85 | 6K7 | VT136 | 1625 |
| VT2 | 205B | VT86 | 6K7 | VT137 | 1626 |
| VT4B/C | 211 | VT86A | 6K7G | VT138 | 1629 |
| VTS | 215A | V186B | 6K7GT | VT139 | VR150-30 |
| VT6 | 212A | VT87 | 6 L 7 | VT140 | 1628 |
| VI7 | WX12 | VT87A | 6L7G | VT141 | 531 |
| VT8 | UV204 | VT88 | 6R7 | VT142 | WE39DY |
| VT17 | 860 | VT88A | 6R7G | VT143 | 805 |
| VT19 | 861 | VT883 | 6RTGT | VT144 | 813 |
| VT22 | 204A | VI89 | 89 | VT145 | 523 |
| VT24 | 864 | VT90 | 6H6 | VT146 | 1N5GT |
| V125 | 10 | VT90A | 6H6GT | VT147 | 1 A 7 |
| VT25A | 10 | VT91 | 657 | VT148 | $1 \mathrm{D8}$ |
| VT26 | 22 | VT91A | $6 \mathrm{J7GT}$ | VT149 | 3 A 8 |
| VT27 | 30 | VT92 | 607 | VT150 | 6SA7 |
| VT28 | 24 | VT92A | 607G | VT150A | 6SA7GT |
| VT29 | 27 | VT93 | 6B8 | VT151 | 6A8 |
| VT30 | 01A | VI93A | 6B8G | VT151A | 6A8GT |
| VT31 | 31 | VT94 | $6{ }_{6} 5$ | VT152 | $6 \mathrm{K6}$ |
| VT33 | 33 | VT94A | 6J5G | VT152A | 6K6GT |
| VT34 | 207 | VT94B | 6 J 5 | VT153 | 12 C 8 |
| VT35 | 35/51 | VI94C | 6 J 5 | VT154 | 814 |
| VT36 | 36 | VT94D | 655 GT | VT158 | 3092 |
| VT37 | 37 | VT95 | 2 A 3 | VT161 | 12 SA 7 |
| VT38 | 38 | VT96 | 6N7 | VT162 | 12SJ7 |
| VT39 | 869 | VT96B | 6N7 | VT163 | $6 \mathrm{C8}$ |
| VI39A | 869A | VT97 | 5W4 | VT164 | 1619 |
| VT40 | 40 | VT98 | 6U5/6G5 | VT165 | 1624 |
| VT41 | 851 | VT99 | 6F8 | VT166 | 371A |
| VT42 | 872 | VT100 | 807 | VT167 | 6K8 |
| VT42A | 872 | VT100A | 807 | VT167A | 6K8GT |
| VT43 | 845 | VT101 | 837 | VT168A | 6 Y 6 |
| VT44 | 32 | VT103 | 6SQ7 | VT169 | 12 C 8 |
| VT45 | 45 | VT104 | 12SQ7 | VP170 | 1E5GP |
| VT46 | 866 | VT105 | 6SC7 | VT171 | 1 R 5 |
| VP46A | 866A | VT1 106 | 803 | VT171A | 1 R 5 |
| VT47 | 47 | VT107 | 6 V 6 | VT172 | 1 S 5 |
| VT48 | 41 | VT108 | 450TH | VT173 | 1 T 4 |
| VT49 | 39/44 | VT109 | 2051 | VT174 | 3 S 5 |
| VT50 | 50 | VT111 | 5BP4/1802P4 | VT175 | 1613 |
| VT51 | 841 | VT112 | 6AC7 | VT176 | $6 \mathrm{AB7}$ |
| VT52 | 2 C 45 | VT114 | 5 T 4 | VT177 | 1LH4 |
| VT54 | 34 | VT115 | 6 L 6 | VT178 | $1 \mathrm{LC5}$ |
| VT55 | 865 | VT115A | 6L6GT | VT179 | 11N5 |
| VT56 | 56 | VT116 | 6SL7 | VT180 | 3LF4 |
| VT57 | 57 | YT116A | 6SJ7GT | VT181 | 7 74 |
| VT58 | 58 | VT116B | 6SJTY | VT182 | 3B7 |
| VT60 | 850 | VT117 | 6SK7 | VT183 | 1R4 |
| VT62 | 801 | VT117A | 6SK7GT | VT184 | VR90/30 |
| VT63 | 42 | VT118 | 832 | VT185 | 306 |
| VT64 | 800 | VT119 | 2X2 | VT187 | 575A |
| VT65 | 6 C 5 | VT120 | 954 | VT188 | 7E6 |
| VI65A | 6C5G | VT121 | 955 | VT189 | $7 \mathrm{F7}$ |
| VT'66 | 6 F 6 | VT122 | 530 | VT190 | 7H7 |
| VT66A | 6F6G | VT123 | 5586 | VT191 | 316A |
| VT67 | 30 | VT124 | 1 A 5 | VT192 | 7 T 4 |
| VT68 | 6B7 | VT125 | 105 | VT193 | $7 \mathrm{C7}$ |
| VT69 | 6 D 6 | VT126 | $6 \times 5$ | VT194 | 7 J 7 |
| VT70 | 6 F 7 | VT126A | 6X5G | VT195 | 1005 |
| VT72 | 842 | VT126B | 6X5GT | VT196 | 6 W 5 |
| VT73 | 843 | VT128 | 1630 | VT197A | 5Y3G |
| VT74 | 5 Z 4 | VT129 | 304 TL | VT198A | $6 \mathrm{G6}$ |
| VT75 | 75 | VT130 | 250TL | VT199 | 6SS7 |
| VT76 | 76 | VT131 | 12SK7 | VT200 | VR105-30 |
| VT77 | 77 | VT132 | 12K8 | VT201 | 25 L 6 |
| VT78 | 78 | VT133 | 12SR7 | VT201C | ${ }_{9}^{25006}$ |
| V180 | 80 | VT134 | 12 A 6 | VT202 | 9006 9003 |
| VT83 | 83 | VT135 | 1255 | VT203 | 9003 |
| VT84 | 84/624 | VT135A | 12 J 5 | VT204 | HK24G |


| SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT | SERVICE <br> TYPE | COMMERCIAL EQUIVALENT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VT205 | 6ST7 |  | 6SL7 | VT282 | ZG489 |
| VT206A | 5V4G | VT230 | 3501 | VT283 | QF-206 |
| VT207 | 12 AH 7 | VT231 | 6SN7 | VT284 | QF-197 |
| VT208 | $7 \mathrm{B8}$ | VI231 | ${ }_{\text {E } 1148}$ | VT285 | QF-200C |
| VT209 | 12SG7 | VT233 | ESP7 | VT286 | 832A |
| VT210 | 154 | VT233 | 6SR7 | VT287 | 815 |
| VT211 | 6SG7 | VT234 | 114 B | VT288 | 12SH7 |
| VT212 | 958 | VT236 | 836 | VT289 | 12SL7 |
| VI213A | 6L5 | V1236 | 836 | VT249 | 1006 |
| VT214 | 12\%6 | VT237 | 957 | VT250 | EF50 |
| VT215 | 6 E 5 | VT238 VT239 | 956 | VT251 | WL441 |
| VT216 | 816 | V1239 | 1LE3 | VT252 | 923 |
| VT217 | 811 | VT240 | 7105 | VT254 | 304TH |
| VT218 | 100TH | VT241 | 785 | VT255 | 705A |
| VT220 | 2507H | VT243 | 7 C 4 | VT256 | GL486 |
| VT221 | 305 | V1244 | 504 | VT257 | K-7 |
| VT222 | 884 | VT245 | 2050 | VT259 | 829 |
| VT223 | 145 | V1246 | 918 | VT260 | OA3 |
| VT224 | RK34 | VT247 | $6 \mathrm{AG7}$ | VT264 | 304 |
| VT225 | 307A | VT248 | $3 \mathrm{CP1} 1880 \mathrm{P} 1$ | VP266 | 1616 |
| VT226 | 3EP1/1806P1 | VT277 | 417 | VT267 | WL578 |
| VT227 | 7184 | Y1279 | G12 | VT268 | 12SC7 |
| VT228 | 8012 | VT280 | C7063 | VT269 | 717A |

British Post Office V.T. Series Index and Cross Reference to British Service Types

| VALVE | C.V.N.O | EQUIVALENTS | VALVE | C.V.N.O | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 1610 | MT4 | 105 | 1673 | PM2HL |
| 11 | 1611 | MR4 | 106 | 1674 | AC/S2Pen |
| 16 | 1607 | 002.5 | 107 | 1675 | N43 |
| 17 | 1608 | U4 | 108 | 1676 | LS8A |
| 19 | 1612 | VT9B | 109 | 1677 | AC52 |
| 20 | 1613 |  | 110 | 1678 | HLLA2 |
| 24 | 1636 | LS5 | 111 | 1679 | DA30 |
| 25 | 1637 | LS5 | 112 | 1680 | PM202 |
| 26 | 1600 | CAT1 | 113 | 1681 | TSP4 |
| 27 | 1601 | CAR1 | 114 | 1682 |  |
| 31 | 1638 | 4101D | 115 | 1683 | MKT4 |
| 32B | 1640 | 4002 D | 116 | 1684 | APP4C |
| 32D | 1641 | 4102E | 116A | 1685 | APP4C |
| 33 | 1642 | DER | 118A | 1686 | D418 |
| 35 | 1615 | ESU1500 | 118B | 1687 | D418 |
| 34 | 1614 | ES1500A | 119 | 1169 | VMP4G |
| 36 | 1602 | CAR4 | 120 | 1688 | 3B/252B |
| 37B | 1643 | E132 | 121A | 1288 | 3B/252B |
| 376 | 1644 | E1532 | 122 | 244 | AP2 |
| 38 | 1645 | E133 | 125 | 1689 | PA1 |
| 38A | 1646 | E1453 | 126 | 1690 | 9 A 1 |
| 40 | 1647 | LS5B | 127 | 1187 | D41 |
| 46 | 1616 |  | 127A | 1691 | DDLA |
| 47 | 1603 | 4104A | 128 | 1692 | AC/P |
| 51 | 1617 |  | 130 | 1621 | ESW501 |
| 52 | 1025 | DET25 | 131 | 1168 | PX4 |
| 53 | 1604 | SS1971 | 132 | 1694 | 3A/144A |
| 54 | 1618 | ES250M | 133 | 1695 | DH30 |
| 56 | 1648 | 4205E | 136 | 1118 | KI2 |
| 57 | 25 | ES85 | 137 | 1081 | 4502A |
| 58 | 1619 | 4212E | 138 | 1623 | RG1-250 |
| 59 | 1620 | DET6 | 139 | 399 | Mi4 |
| 60 | 1605 | 4013 C | 140 | 1166 | P220 |
| 61 | 1609 | 5617 | 142 | 1039 | R3 |
| 62 | 1606 | Cat7 | 143 | 1696 | B21 |
| 65 | 1649 | 605 | 144 | 1371 | PZ1-35 |
| 66 | 1650 | LS5A | 145 | 243 | 4045A |
| 68 | 1651 | G455B | 146 | 1625 | RG30250 |
| 69 | 1652 | P220A | 147 | 1697 | X41 |
| 72 | 249 | 4019A | 148 | 1689 | 4819 |
| 73A | 1653 | KC1 ${ }^{\text {a }}$ | 149 | 1349 | fu5-500 |
| 74 | 1654 |  | . 150 | 1699 | SP41 |
| 75 | 1655 | 4109B | 150A | 1700 | SP41 |
| 78 | 1656 | LS8 | 151 | 1701 | X10 |
| 79A | 1657 | 4020 B | 152 | 1702 | XP |
| 80A | 1658 | L29B | 153 | 1703 | XW |
| 81 | 1659 | 4022B | 154 155 | 1067 | 6 J 5 |
| 82 | 1660 | LS 5 | 155 | 1704 | 57 |
| 85 | 1661 | DL | 156 | 1705 | 58 |
| 86 | 1662 | P215 | 157 | 1706 | 287 |
| 87 | 1663 | 4021B | 158 159 | 1707 1708 | 245 |
| 88 | 1664 | B406 | 159 160 | 1708 1709 | 80 606 |
| 89 | 1665 | DH | 160 161 | 1709 1710 | 6D6 |
| 90 | 1732 | ML4 | 161 | 1710 1711 | 6C6 |
| 91 | 1038 | MH4 | 162 | 1711 1712 | 687 42 |
| 92 | 1735 | DC2P | 164 | 1713 | EP8 |
| 93 | 1666 | P610 | 165 | 1714 | $1 \mathrm{F9}$ |
| 94 95 | 1667 1668 | LS8A | 166 | 1715 | E8BC3 |
| 98 | 1669 | P625 | 167 | 1716 | E1541 |
| 100 | 1670 | HL1320 | 168 | 1626 | RG10240A |
| 1008 | 1670 | H11320 | 169 | 1717 | 43074 |
| 102 | 1671 | 4021 A | 170 | 1718 | AC/TP |
| 103B | 1672 | Pen360 | 171 | 1719 | U22 |

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| VALVE | C.V.N.O | EQUIVALENTS | VALVE | C.V.N.O | EQUIVALENTS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 177 | 1720 | XIT. 5 | 194 | 587 | 687 |
| 178 | 1721 | XP1.5 | 195 | 1863 | 524 |
| 179 | 1722 | A901 | 196 | 509 | 6 V 6 |
| 180 | 1053 | EF39 | 197 | 1629 | RG3 3-1250A |
| 181 | 1052 | EL32 | 198 | 1075 | KT66 |
| 182 | 1823 | 1N5 | 199 | 124 | 807 |
| 183 | 1724 | 5A/102D | 200 | 1065 | SP61 |
| 185 | 245 | 4328D | 201 | 1056 | EF36 |
| 186 | 1726 | 5A/105A | 202 | 1054 | EB34 |
| 187 | 1627 | 5D/100A | 203 | 9 | AL60 |
| 188 | 1727 | 222 | 204 | 18 | DET19 |
| 189 | 1128 | Gric | 205 | 1630 | ESP450 |
| 190 | 1728 | wE262B | 206 | 1120 | SU2150A |
| 191 | 1628 | GU8 | 207 | 1091 | EPF50 |
| 193 | 1100 | ETW61 |  |  |  |

## B.V.A. UTILITY EQUIVALENTS

The last figure of this number denotes the manufacturer and can be disregarded. E.g., all the $\mathbf{2 6 0}$ series are equivalent to an EL.33.

| B.V.A. | Civilian | B.V.A. | Civilian | B.V.A. | Civilian |
| :---: | :--- | :---: | :--- | :---: | :---: |
| No. | No. | No. | No. | No. | No. |
| 132 | HL23DD | 172 | TP25 | 264 | EL33 |
| 142 | VP23 | 211 | DW4/350 | 274 | ECH35 |
| 162 | Pen25 | 243 | EF29 |  |  |

TEST DATA FOR RECEIVING AND SMALL TRANSMITTING VALVES ${ }^{1}$

| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | $m A / V$ | Anade Volts | Scre Vol |  | $\mathrm{mA} / \mathrm{V}$ |  |  |
| OZ4 | 007060010 |  | - |  | 250 |  | 58 | $3 \mathrm{k} \Omega$ | No | ta | Avai | lable | A08 | CCR |
| 00 | 364200000 |  | 5 | 0 | 40 |  | 1.0 | 0.66 | No D | ta A | Avai | lable | UX4 | T |
| OOA | 364200000 |  | 5 | 0 | 40 |  | 1.5 | 0.66 | No D | ta A | Avai | lable | UX4 | T |
| 01 | 364200000 |  | 5 | 4.5 | 90 |  | 2.5 |  | 80 |  |  |  | UX4 | T |
| 01A | 364200000 |  | 5 | 9 | 150 |  | 3 | 0.8 | 80 |  |  | 0.7 | UX4 | T |
| O1AA | 364200000 |  | 5 | 4.5 | 90 |  | 3.2 | 0.9 | 90 |  |  | 0.8 | UX4 | T |
| 01B | 364200000 |  | 5 | 4.5 | 90 |  | 2.5 | 0.72 | 90 |  |  | 0.8 | UX4 | T |
| $06 \mathrm{F9} 9$ | 653420000 |  | 0.6 | 1.1 | 20 | 20 | . 05 | 0.1 | No D | ta A | Avai | lable | B5A | P |
| O54V | 642310000 |  | 4 |  | 100 |  |  | 4 | 100 |  |  | 4 | B5 | T |
| 084 | 642300000 |  | 4 | 2.0 | 150 |  | 4.0 | 1.4 | 125 |  |  | 1.4 | B4 | T |
| 1 | 281300000 |  | 6 |  |  |  | 60 |  | REC |  |  | 20 mA | UX4 | R |
| 1 A 3 | 281008300 |  | 1.4 |  |  |  |  |  | D |  |  |  | B7G | D |
| 1A.4 | 365200000 | G1 | 2 | 3 | 150 | 75 | 2.2 | 0.6 | 100 |  | 75 | 0.6 | UX4 | P |
| 1A4E | 365200000 | G1 | 2 | 3 | 150 | 75 | 2.2 | 0.6 | 100 |  | 75 | 0.6 | UX4 | P |
| 1A4P | 365200000 | G1 | 2 | 3 | 90 | 75 | 2.2 | 0.7 | 80 |  | 75 | 0.7 | UX4 | P |
| 1A4T | 265300000 | G1 | 2 | 3 | 150 | 75 | 2.2 | 0.6 | 100 |  | 75 | 0.6 | UX4 | P |
| 1 A5 | 036540200 |  | 1.4 | 4.5 | 90 | 90 | 4 | 0.85 | 80 |  | 75 | 0.8 | A08 | P |
| 1 A6 | 266453000 | G1 | 2 | 0 | 150 | 75 | 3 | 0.4 | 80 |  | 60 | 0.4 | UX6 | P |
| 1 A 7 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  |  | 20 mA | B4 | RR |
| 1A7 | 026546300 | G1 | 1.4 | 0 | 90 | 50 | 1.8 | 0.5 | 80 |  | 60 | 0.5 | A08 | H |
| 1 A8 | 327546280 | G1 | 1.4 |  | 90 | 90 | 1.2 | 0.7 | 80 |  | 90 | 0.7 | A08 | DIP |
| 1 AB 5 | 365004220 |  | 1.2 | 1.5 | 150 | 150 | 6.8 | 1.35 | 100 |  | 00 |  | B8B | P |
| $1 \mathrm{AB6}$ | 265461300 |  | 1.4 | 4.1 | 60 | 60 | 1.65 | 0.1 | No | ata | Avai | ilable | - B7G | H |
| 1AC5 | *4* 23* 650 |  | 1.2 | 4.5 | 60 | 60 | 2.0 | 0.75 | 60 |  | 60 | 0.7 | B8D | P |
| 1 AC6 | 266464300 |  | 1.4 | 4.0 | 60 |  | 4 | 2.2 | 80 |  |  |  | B7G | H |
| 1 AD 4 | 652430000 |  | 1.2 | 1.6 | 90 | 90 | 5.7 | 2.3 | 80 |  | 75 | 2.0 | B5A | P |
| $1 \mathrm{AD5}$ | *4* 23* 650 |  | 1.2 | 3.0 | 60 | 60 | 1.85 | 0.73 | -60 |  | 60 | 0.7 | B8D | P |
| 1 AE4 | 265024300 |  | 1.2 | 0 | 90 | 90 | 3.5 | 1.55 | 90 |  | 80 | 1.5 | B7G | P |
| 1 AE5 | 642453000 |  | 1.2 |  | 40 | 40 | 0.9 | 0.2 | No | ata | Avai | ilable | e B5A | P |
| 1 AF4 | 265024300 |  | 1.4 | 0 | 90 | 90 | 1.65 | 0.95 | 80 |  | 90 | 0.9 | B7G | P |
| 1 AF5 | 208564300 |  | 1.4 | 0 | 90 | 90 | 1.1 | 0.6 | 80 |  | 90 | 0.6 | B7G | DP |
| 1 AF33 | 208564300 |  | 1.4 |  | 60 | 60 | 1.6 | 0.5 | No | Data | Avai | ilable | e B7G | DP |
| 1 AF34 | 208564300 |  | 1.2 |  | 60 | 60 | 1.6 | 0.5 | No | Data | Avai | ilable | e B7G | DP |
| 1 AG4 | 653420000 |  | 1.2 | 3.6 | 40 | 50 | 2.4 | 1 | No | ata | Avai | ilable | e B5A | P |
| 1AG5 | 658243000 |  | 1.2 | 2 | 40 | 40 | 0.2 | 0.2 | No | ta | Avai | lable | B5A | DP |
| 1 AH 4 | 652453000 |  | 1.2 |  | 40 | 40 | 0.7 . | 0.7 | No | ata | Avai | ilable | e B5A | P |
| 1 AH5 | 208564300 |  | 1.4 | 1.5 | 60 | 60 | 0.17 | 0.17 | 60 |  | 60 | 0.1 | B7G | DP |
| $1 \mathrm{~A} J 4$ | 265124300 |  | 1.4 | 0.8 | 75 | 75 | 1.4 | 0.65 | 80 |  | 75 | 0.7 | B7G | P |
| 1AJ5 | 658243000 |  | 1.2 |  | 40 | 40 | 1 | 0.4 | $\mathrm{N}_{n}$ | ata | Ava | ilable | e B5A | DP |
| 1 AK4 | 652430000 |  | 1.2 |  | 40 | 40 | 0.7 | 0.7 |  | ata | Avai | ilable | e B5A | P |
| 1 ALA | 365004020 |  | 1.4 | 4.5 | 90 | 90 | 4 | 0.8 | 80 |  | 75 | 0.8 | B8B | P |
| 1 AM4 | 265024300 |  | 1.4 |  | 90 | 60 | 2.4 | 0.3 | 80 |  | 60 | 0.2 | B7G | P |
| 1 AN5 | 265224300 |  | 1.4 | 0 | 60 | 60 | 1.0 | 0.7 | 80 |  | 75 | 0.8 | B7G | P |
| 1AQ5 | 266424300 |  | 1.4 |  | 90 | 40 |  |  | No | data | Avai | ilable | e B7G | H |
| 1 ARS | 208564300 |  | 1.4 |  | 60 | 60 | 0.9 | 0.5 | No | ata | Avai | ilable | e B7G | DP |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{array}{\|c\|c} \text { e } & \text { Sceen } \\ \vdots & \text { Volts } \end{array}$ | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 1 F3 | 265024300 |  | 1.4 | 1.0 | 90 | 50 | 1.9 | 0.75 | 80 | 60 | 0.7 | B7G | P |  |
| 1 F 4 | 364520000 |  | 2 | 3 | 90 | 90 | 4 | 1.4 | 80 | 75 | 1.4 | UX5 | P |  |
| 1 F 5 | 036540200 |  | 2 | 3 | 90 | 90 | 4 | 1.4 | 80 | 75 | 1.4 | A08 | P |  |
| $1 \mathrm{F6}$ | 365892000 | G1 | 2 | 1.5 | 150 | 75 | 2.2 | 0.6 | 150 | 75 | 0.6 | UX6 | DDP |  |
| $1 \mathrm{F7}$ | 036895200 | G1 | 2 | 1.5 | 150 | 75 | 2.2 | 0.6 | 150 | 75 | 0.6 | A08 | DDP |  |
| 1 F 7 GV | 036895200 | G1 | 2 | 1.5 | 150 | 75 | 2.2 | 0.6 | 150 | 75 | 0.6 | A08 | DDP |  |
| 1 F 33 | 265024300 |  | 1.4 |  | 90 | 60 | 3.5 | 0.7 | 80 | 60 |  | B7G | P |  |
| 1 F34 | 265024300 |  | 1.2 |  | 90 | 60 | 3.5 | 0.7 | 80 | 60 |  | ${ }_{\text {B7G }}$ | P |  |
| 1 F860 | 141230651 |  | 20 |  | 200 | 175 | 10 | 7.5 | 100 | 100 | 7 | B9A | P |  |
| 1 FD 1 | 2*8 564300 |  | 1.4 | 1.5 | 60 | 60 | 0.17 | 0.17 | 80 | 60 | 0.1 | B7G | DP |  |
| 1 FD 9 | 208564300 |  | 1.4 | 1.0 | 75 | 75 | 1.6 | 0.63 | 80 | 75 | 0.6 | B7G | DP |  |
| 163 | *2* $0 * 03 * 0$ | D1 | 1.2 |  |  |  |  |  | D |  |  | A08 | D |  |
| $1 \mathrm{G4}$ | 036040200 |  | 1.4 | 6 | 90 |  | 2.3 | 0.82 | 80 |  | 0.8 | A08 | T |  |
| 1 G 5 | 036540200 |  | 2 | 6 | 90 | 90 | 8.5 | 1.5 | 80 | 75 | 1.5 | A08 | P |  |
| $1 \mathrm{G6}$ | 026447.300 |  | 1.4 | 0 | 90 |  | 1.0 | 0.67 | 80 |  | 0.6 | A08 | TT |  |
| 1H2 | 23* 232 *32 | D1 | 1.4 |  |  |  |  |  | D |  |  | B9A | D |  |
| 1H3C | 026447300 |  | 1.2 | 5.5 | 150 |  | 2.3 | 0.8 | 100 |  |  | A08 | TT |  |
| 1 H 4 | 026040300 |  | 2 | 9 | 150 |  | 3 | 0.9 | 100 |  | 0.9 | A08 | T |  |
| 1 H 5 | 036080200 | G1 | 1.4 | 0.5 | 100 |  | 0.1 | 0.2 | 80 |  | 0.2 | A08 | DT |  |
| 1H6 | 036894200 |  | 2 | 3 | 150 |  | 0.8 | 0.57 | 100 |  | 0.5 | A08 | DDT |  |
| 1H33 | 265424300 |  | 1.4 |  | 90 | 60 | 1.6 |  | 80 | 60 | 0.3 | B7G | H |  |
| 1H34 | 265424300 |  | 1.2 |  | 90 | 60 | 1.6 |  | 80 | 60 | 0.3 | B7G | H |  |
| 1H35 | 265454300 |  | 1.4 |  | 90 | 40 | 0.6 |  | No Data | Avail | lable | B7G | H |  |
| 1 J 3 | 020000300 | D1 | 1.2 |  |  |  |  |  | D |  |  | A08 | D |  |
| 1 J 5 | 036540200 |  | 2 | 16.5 | 150 | 150 | 7 | 0.95 | 100 | 100 | 0.9 | A08 | P |  |
| 1 J 6 | 026447300 |  | 2 | 3 | 150 |  | 1.7 |  | 100 |  |  | A08 | TT |  |
| 1J6GX | 026447300 |  | 2 | 0 | 150 |  | 2 |  | 125 |  |  | A08 | TT |  |
| 1K3 | 020000300 | D1 | 1.2 |  |  |  |  |  | D |  |  | A08 | D |  |
| 1K4 | 365200000 | G1 | 2 |  | 150 | 75 | 2.5 | 1 | 150 | 75 | 1 | UX4 | P |  |
| 1K5 | 026500300 | G1 | 2 |  | 125 | 75 | 2.5 | 1 | 125 | 75 | 1 | A08 | P |  |
| 1K5 ${ }^{\text {c }}$ | 026500300 | G1 | 2 |  | 125 | 75 | 1 | 1 | 125 | 75 | 1 | A08 | P |  |
| 1K6 | 369852000 | G1 | 2 | 3 | 150 | 90 | 0.9 | 0.6 | 100 | 75 | 0.6 | UX6 | DDP |  |
| 1 K 7 | 026895300 | G1 | 2 | 4.4 | 150 | 150 | 1.5 | 0.7 | 100 | 100 | 0.7 | A08 | DDP |  |
| 1 L 4 | 265024300 |  | 1.4 | 0 | 90 | 75 | 2.9 | 0.92 | 80 | 75 | 0.9 | B7G | P |  |
| 1 L 5 | 026540300 |  | 2 | 6 | 200 | 200 | 10 | 2.4 | 100 | 150 | 2.4 | A08 | P |  |
| 156 | 266451300 |  | 1.4 | 0 | 90 | 50 | 4 | 0.55 | 80 | 60 |  | B7G | H |  |
| 1 L 33 | 264526300 |  | 1.4 | 7 | 90 | 60 | 7.4 | 1.4 | 80 | 60 |  | B7G | P |  |
| 1L34 | 254526300 |  | 1.2 | 7 | 90 | 60 | 7.4 | 1.4 | 80 | 60 |  | B7G | P |  |
| $1 \mathrm{L6O}$ | 642300000 |  | 1 |  | 150 |  | 6.0 | 1.2 | 150 |  | 1.2 | B4 | T |  |
| 1 L 84 | 365004020 |  | 1.4 | 4.5 | 90 | 90 | 4 | 0.85 | 80 | 70 | 0.8 | B8B | P |  |
| 1L91 | 652430000 |  | 1.2 | 4.5 | 40 | 40 | 1.2 | 0.5 | No Data | Avail | lable | B5A | P |  |
| 1 L 861 | 041230651 |  | 20 |  | 200 | 200 | 15 | 9 | 100 | 100 |  | B9A | P |  |
| 1LA4E | 365004020 |  | 1.4 | 4.5 | 90 | 90 | 3.5 | 0.8 | 80 | 75 | 0.8 | B8B | P |  |
| 1 LAG | 366454020 |  | 1.4 | 0 | 90 | 50 | 1.8 | 0.55 | 80 | 60 | 0.5 | B8B | H |  |
| 1La6E | 366454020 |  | 1.4 | 0 | 90 | 50 | 1.8 | 0.55 | 80 | 60 | 0.5 | B8B | H |  |
| 1LB4 | 365004020 |  | 1.4 | 9 | 90 | 90 | 5 | 0.9 | 80 | 75 |  |  | P |  |
| 1LB6 | 276554430 |  | $1.4\{$ | 0 | 75 90 | 75 | 1.2 0.4 |  | 80 80 | 75 |  |  | H |  |


| VALVE | SELECTOR SWITCH No. |  |  | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BA |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Neg. Grid Volts |  |  | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \mathrm{la}_{\mathrm{mA}} \end{aligned}$ | mA/V | Anode Volts |  |  |  |  |  |
| 1LB7 | 265 | 104130 |  |  |  | 1.4 | 3 | 40 | 40 | 1 | 0.3 | No Data |  | ilable | A08 | P |  |
| 1LC5 | 365 | 124020 |  |  | 1.4 | 0 | 90 | 50 | 1.15 | 0.77 | 80 | 60 | 0.7 | B8B | P |  |
| 1LC6 | 266 | 454030 |  |  | 1.4 | 0 | 90 | 50 | 3 | 0.55 | 80 | 60 | 0.5 | B8B | H |  |
| 1 LD 5 | 365 | 804020 |  |  | 1.4 | 0 | 90 | 50 | 0.6 | 0.57 | 80 | 60 | 0.5 | B8B | DP |  |
| 1LE3 | 350 | 0*4 020 |  |  | 1.4 | 3 | 90 |  | 1.4 | 0.76 | 80 |  | 0.76 | B8B | T |  |
| 1LF3 | 260 | 004020 |  |  | 1.4 | 3 | 90 |  | 1.4 | 0.76 | 80 |  | 0.7 | B8B | T |  |
| 1LG5 | 365 | 124020 |  |  | 1.4 | 1.5 | 90 | 90 | 3.7 | 1.15 | 80 | 90 | 1.1 | B8B | P |  |
| 1LH4 | 260 | 804020 |  |  | 1.4 | 0 | 90 |  | 0.15 | 0.27 | 80 |  | 0.2 | B8B | DT |  |
| 1LN5 | 365 | 124020 |  |  | 1.4 | 0 | 90 | 90 | 1.6 | 0.8 | 80 | 90 | 0.8 | B8B | P |  |
| 1LN5E | 365 | 124020 |  |  | 1.4 | 0 | 90 | 90 | 1.6 | 0.8 | 80 | 90 | 0.8 | B8B | P |  |
| 1M5G | 036 | 500200 | G1 |  | 2 |  | 150 | 75 | 2.5 | 1 | 150 | 75 | 1 | A08 | P |  |
| 1N2 | *2* | *** 3*0 | D1 |  | 1.2 |  |  |  |  |  | D |  |  | A08 | D |  |
| 1 N 5 | 036 | 500200 | G1 |  | 1.4 |  | 90 | 90 | 1.2 | 0.7 | 80 | 75 | 0.7 | A08 | P |  |
| 1 1N6 | 036 | 548200 |  |  | 1.4 | 4.5 | 90 | 90 | 3.4 | 0.8 | 80 | 75 | 0.8 | A08 | DP |  |
| 1NA31 | 802 | 208300 |  |  | 5 |  |  |  | 15 |  | REC |  | 10 mA | B7G | R |  |
| 1 P 1 | 365 | 024300 |  |  | 1.4 | 5.2 | 90 | 90 | 5.0 | 1.4 | 80 | 75 | 1.4 | B7G | P |  |
| 1 P 5 | 036 | 500200 | G1 |  | 1.4 |  | 90 | 90 | 2.3 | 0.7 | 80 | 90 | 0.7 | A08 | P |  |
| 1 P 10 | 264 | 536200 |  |  | 1.4 | 7 | 90 | 75 | 7.4 | 1.57 | 80 | 60 | 1.5 | B7G | P |  |
| 1 P 11 | 365 | 024300 |  |  | 1.4 | 4.5 | 90 | 90 | 9.5 | 2.15 | 80 | 75 | 2 | B7G | P |  |
| 105 | 036 | 540200 |  |  | 1.4 | 4.5 | 90 | 90 | 9.5 | 2.2 | 80 | 75 | 2.2 | A08 | P |  |
| 106 | 040 | 238650 |  |  | 1.25 | 0 | 60 | 60 | 1.6 | 0.6 | No Data |  | ilable | B8D | DP |  |
| 1R | 026 | 510300 | G1 |  | 1.4 |  | 90 | 90 | 1.2 | 0.7 | 80 | 90 | 0.7 | A08 | P |  |
| 1R4 | 200 | 800130 |  |  | 1.4 |  |  |  |  |  | D |  |  | B8B | D |  |
| 1 R 5 | 266 | 424300 |  |  | 1.4 | 4 | 75 |  | 5 | 1.2 | 80 |  | 1.4 | B7G | H |  |
| 1R6 | 230 | 232032 | D1 |  | 1.2 |  |  |  |  |  | D |  |  | B9A | D |  |
| 1LB7 | 265 | 104130 |  |  | 1.4 | 3 | 40 | 40 | 1 | 0.3 | No Data |  | ilable | A08 | P |  |
| $1 \mathrm{LC5}$ | 365 | 124020 |  |  | 1.4 | 0 | 90 | 50 | 1.15 | 0.77 | 80 | 60 | 0.7 | B8B | P |  |
| 1S2A | 32* | $323 * 23$ | D1 |  | 1.4 |  |  |  |  |  | D |  |  | B9A | D |  |
| 154 | 264 | 526300 |  |  | 1.4 | 7 | 90 | 75 | 7.4 | 1.57 | 80 | 60 | 1.5 | B7G | P |  |
| 1S4T | 264 | 5*6 300 |  |  | 1.4 | 7 | 90 | 75 | 7.2 | 1.6 | 100 | 75 |  | B7G | P |  |
| 1 S 5 | 208 | 564300 |  |  | 1.4 | 0 | 75 | 75 | 1.6 | 0.62 | 80 | 75 | 0.6 | B7G | DP |  |
| 1S5T | $2 * 8$ | 564300 |  |  | 1.4 |  | 90 | 75 | 1.6 | 0.5 | 75 | 60 |  | B7G | DP |  |
| 156 | 604 | 238050 |  |  | 1.2 | 0 | 60 | 60 | 1.6 | 0.6 | No Data |  | ailable | B8D | DP |  |
| $1 \mathrm{SA6}$ | 021 | 405360 |  |  | 1.4 | 0 | 90 | 75 | 2.45 | 0.97 | 80 | 75 | 0.9 | A08 | P |  |
| 1 SB6 | 036 | 580240 |  |  | 1.4 | 0 | 90 | 75 | 1.45 | 0.66 | 80 | 75 | 0.6 | A08 | DP |  |
| 1T | 036 | 500320 | G1 |  | 1.4 | 4.5 | 90 | 90 | 0.9 | 2.1 | 80 | 75 | 2.1 | A08 | P |  |
| 1T2 | 123 | 000000 | D1 |  | 1.4 |  |  |  |  |  | D |  |  | B3G | D |  |
| 1 T 4 | 365 | 200000 |  |  | 2 | 0 | 150 | 75 | 2.5 | 1 | 150 | 75 | 1 | UX4 | P |  |
| 174 | 265 | 024300 |  |  | 1.4 | 0 | 90 | 75 | 3.5 | 0.9 | 80 | 75 | 0.9 | B7G | P |  |
| 1T4T | 265 | 024300 |  |  | 1.4 |  | 90 | 75 |  |  | 80 | 75 |  | B7G | P |  |
| 115 | 036 | 540200 |  |  | 1.4 | 6 | 90 | 90 | 6.5 | 1.15 | 80 | 75 | 1.1 | A08 | P |  |
| 176 | 604 | 238050 |  |  | 1.2 | 0 | 60 | 60 | 1.6 | 0.6 | No Data |  | ailable | B8D | DP |  |
| 1 U 4 | 265 | 024300 |  |  | 1.4 | 0 | 90 | 90 | 0.8 | 0.68 | 80 | 90 | 0.9 | B7G | P |  |
| 145 | 265 | 804300 |  |  | 1.4 | 0 | 75 | 75 | 1.6 | 0.62 | 80 | 75 | 0.6 | B7G | DP |  |
| 146 | 266 | 541300 |  |  | 1.4 | 0 | 75 | 50 | 1.7 | 0.3 | No Data |  | ailable | B7G | H |  |
| 1V | 281 | 300000 |  |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | R |  |
| 1v2 | 8** | $230 * * 8$ |  |  | 0.625 |  |  |  |  |  | D |  |  | B9A | D |  |
| 1v4 | 260 | *24 300 |  |  | 1.25 | 0 | 1501 | 100 | 1.6 |  | 125 | 100 |  | B7G | P |  |
| 1 V 5 | *4* | 23* 650 |  |  | 1.2 | 4.5 | 60 | 60 | 2 | 0.75 | No Data | Ava | ailable | B7G | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO Valve tester |  |  | BASE | TYPE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |  |
| 1W4 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 40 mA | B4 | RR |  |
| 1W4 | 265004300 |  | 1.4 | 9 | 90 | 90 | 5 | 0.92 | 80 | 75 | 0.9 | B7G | P |  |
| 1w5 | 040230650 |  | 1.25 | 0 | 60 | 60 | 1.8 | 0.73 | No Data | Avai | lable | B8A | P |  |
| 1 W50 | 842300000 |  | 1.0 |  |  |  |  |  | D |  |  | B4 | D |  |
| 1X2 | 230232032 | D1 | 1.2 |  |  |  |  |  | D |  |  | B9A | R |  |
| 1X2B | *2* *****3 | D1 | 1.2 |  |  |  |  |  | D |  |  | B9A | D |  |
| 1 T 2 | 200300000 | D1 | 1.4 |  |  |  |  |  |  |  |  | UX4 | R |  |
| 1 Y32 | 232232300 | D1 | 1.4 |  |  |  |  |  | D |  |  | B7G | D |  |
| 1Y32T | 232232300 | D1 | 1.4 |  |  |  |  |  | D |  |  | B7G | D |  |
| 1Z1 | 020000300 | D1 | 0.7 |  |  |  |  |  | D |  |  | A08 | D |  |
| $1 \mathrm{Z2}$ | 232232300 | D1 | 1.2 |  |  |  |  |  | D |  |  | B7G | D |  |
| 1Z2S | 2** *** 300 | D1 | 1.2 |  |  |  |  |  | D |  |  | B7G | D |  |
| 2 | 642300000 |  | 2 | 4 | 150 |  | 1.5 |  | 100 |  |  | B4 | T |  |
| 2/25A | 200300000 | D1 | 6 |  |  |  | 30 |  | REC |  | 18 mA | UX4 | R |  |
| 2/50A | 200300000 | D1 | 5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | R |  |
| 2A1M | 026546300 | G1 | 2 |  | 150 | 75 | 2.2 |  | 100 | 80 |  | A08 | H |  |
| 2 A 3 | 264300000 |  | 2.5 | 45 | 250 |  | 60 | 5.2 | 100 |  | 5.2 | UX4 | T |  |
| 2A3H | 364200000 |  | 2.5 | 62 | 300 |  | 40 | 5.25 | 100 |  | 5.2 | UX4 | T |  |
| 2A3W | 264300000 |  | 2.5 | 45 | 250 |  | 60 | 5.2 | 100 |  | 5.2 | UX4 | T |  |
| 2A5 | 265413000 |  | 2.3 (3) | 16.5 | 250 | 250 | 34 | 2.5 | 100 | 150 | 2.5 | Ux6 | P |  |
| $2 \mathrm{A6}$ | 269813000 | G1 | 2.5 | 2 | 250 |  | 0.9 | 1.1 | 150 |  | 1.1 | Ux6 | DDT |  |
| 2A6S | 269813000 | G1 | 2.5 | 2 | 250 |  | 0.9 | 1.1 | 150 |  | 1.1 | UX6 | DDT |  |
| 2A7 | 265541300 | G1 | 2.5 | 8 | 250 | 100 | 3.5 | 1.1 | 150 | 100 | 1.1 | Sm7 | H |  |
| 2AF4 | 642314600 |  | 2.5 | 4.0 | 100 |  | 15 | 6.6 | 80 |  | 6.0 | B7G | T |  |
| 2B3 | *20 000 3*0 | D1 | 1.7 |  |  |  |  |  | D |  |  | A08 | D |  |
| 2B5 | 267413000 |  | 2.5 |  | 300 |  |  |  | No Data | a Avai | lable | Ux6 |  |  |
| 2B5 | 634224370 |  | 1.2 | 1 | 90 |  | 2.6 | 1.1 | 80 |  | 1.1 | B8A | TT |  |
| 2B7 | 265891300 | G1 | 2.5 | 3 | 250 | 125 | 9 | 1.1 | 100 | 100 | 1.1 | UX7 | DDP |  |
| 2B7S | 265891300 | G1 | 2.5 | 3 | 250 | 100 | 6 | , | 100 | 100 | , | UX7 | DDP |  |
| 2B21 | 300200000 | D1 | 2.5 |  |  |  | 5 |  | D |  |  | UX4 | R |  |
| 2B22 | 021010310 | D1 | 6 |  |  |  |  |  | D |  |  | A08 | D |  |
| 2B25 | 200800300 |  | 1.4 |  |  |  |  |  | D |  |  | B7G | D |  |
| 2B26 | 280300000 |  | 2.5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | R |  |
| 2B35 | 123000000 | D1 | 6 |  |  |  |  |  | D |  |  | B3G | D |  |
| 2B36 | 123000000 | D1 | 4 |  |  |  |  |  | D |  |  | B3G | D |  |
| 2BN4 | 142361400 |  | 2 | 1.5 | 150 |  | 9 | 6.8 | 100 |  | 7 | B7G | T |  |
| 2BN4A | 142361400 |  | 2 | 1.5 | 150 |  | 9 | 6.8 | 100 |  | 7 | B7G | T |  |
| 2 C 21 | 217461300 | G1 | 6 | 16.5 | 250 |  | 8.3 | 1.3 | 100 |  | 1.3 | UX7 | TT |  |
| 2 C 22 | 020000310 | A1 G1 | 6 | 10.5 | 300 |  | 11 | 3 | 100 |  | 3 | A08 | T |  |
| 2 C 23 | 264300000 |  | 7.5 | 32 | 350 |  | 16 | 1.55 | 100 |  | 1.5 | UX4 | T |  |
| 2 C 25 | 264300000 |  | 7 | 100 | 350 |  | 50 |  | No Data | a Avai | lable | UX4 | T |  |
| 2 C 26 | 020000310 | A1 G1 | 6 | 15 | 350 |  | 16 |  | 100 |  |  | A08 | $T$ |  |
| 2C26A | 020000310 | A1 G1 | 6 | 15 | 350 |  | 16 |  | 100 |  |  | A08 | T |  |
| 2C40 | *21 010310 | A1 G1 | 6 | 5 | 250 |  | 20 |  | 100 |  |  | A08 | T |  |
| 2 C 43 | *21 010310 | A1 G1 | 6.3 |  | 400 |  | 38 |  | 100 |  |  | A08 | T |  |
| 2 C 45 | 364200000 |  | 7 | 40 | 250 |  | 29 |  | 100 |  |  | UX4 | T |  |
| 2C48 | 265004130 |  | 6 | 15 | 250 | 250 | 70 |  | 100 | 150 |  | B8B | P |  |


| VALVE | SELECTOR SWITCH No. |  |  | T.C. | V |  | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BA |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Neg. Grid Volts |  |  |  |  |  | Scree Volts | $\begin{aligned} & l_{\mathrm{a}}^{2} \\ & \mathrm{ma} \end{aligned}$ |  | mA/V |  | Anode Volts | $\begin{aligned} & \text { Scree } \\ & \text { Volts } \end{aligned}$ | mA |  |  |  |
| 2 C 50 | 461 | 471230 |  |  |  | 12.6 |  |  | 200 |  |  | 18 |  | 2.9 | 100 | 0 |  |  | A08 | TT |  |
| 2 C 50 | 265 | 004130 |  |  | 12 | 15 |  | 250 | 250 |  | 70 |  |  | 100 | 0 | 150 |  | B8B | P |  |
| 2 C 51 | 214 | 607413 |  |  | 6 | 2 |  | 150 |  |  | 8.2 |  | 5.5 | 12 | 25 |  | . 5 | B9A | TT |  |
| 2C51L | 214 | 607413 |  |  | 6 |  |  | 150 |  |  | 8.2 |  | 5.5 | 100 | 0 |  |  | B9G | TT |  |
| 2C52 | 461 | 471230 |  |  | 12.5 | 2 | 2 | 250 |  |  | 1.3 |  | 1.9 | 200 | 0 |  | . 9 | A08 | TI |  |
| 2 CY 5 | 412 | 365100 |  |  | 2.5 | 1 |  | 150 | 80 | 0 | 10 |  | 8 | 12 | 5 | 75 |  | B79 | P |  |
| 2D1 | 289 | 130000 |  |  | 2.5 |  |  |  |  |  |  |  |  | D |  |  |  | UX5 | DD |  |
| 2D2 | 892 | 310000 |  |  | 2 |  |  |  |  |  |  |  |  | D |  |  |  | B5 | DD |  |
| 2 D 4 | 892 | 310000 |  |  | 4 |  |  |  |  |  |  |  |  | D |  |  |  | B5 | DD |  |
| 2D4A | 892 | 310000 |  |  | 4 |  |  |  |  |  |  |  |  | D |  |  |  | B5 | DD |  |
| 2D4B | 091 | 231800 |  |  | 4 |  |  |  |  |  |  |  |  | D |  |  |  | B7 | DD |  |
| 2 D 13 | 023 | 180000 | D2 |  | 13 |  |  |  |  |  |  |  |  | D |  |  |  | B5 | DD |  |
| 2D13A | 823 | 190000 |  |  | 13 |  |  |  |  |  |  |  |  | D |  |  |  | B5 | DD |  |
| 2D13C | 892 | 310000 |  |  | 13 |  |  |  |  |  |  |  |  | D |  |  |  | B5 | DD |  |
| 2D21 | 412 | 316100 |  |  | 6 |  |  | 400 |  |  | 506 | $6 \mathrm{k} \Omega$ |  |  | Data | Avai | ble | B7G | TH |  |
| 2DL4 | 414 | 234464 |  |  | 2 |  |  | 150 |  |  | 12.5 | 14 |  |  | Data | Avai | le | B9A | T |  |
| 2E22 | 254 | 130000 | A1 |  | 6 | 15 |  | 400 | 250 |  | 60 |  | 5.5 | 100 |  | 150 |  | UX5 | P |  |
| 2E24 | 235 | 242300 | A1 |  | 3 | 18. |  | 400 | 200 |  | 16 |  | 3.2 | 200 |  | 100 | . 2 | A08 | P |  |
| 2E25 | 020 | 540320 |  |  | 6 | 22. |  | 400 | 250 |  | 40 |  |  |  | Data | Avai | le | A08 | P |  |
| 2E26 | 125 | 141300 | A1 |  | 6 | 20 |  | 200 | 200 |  | 20 |  | 3.5 | 100 |  | 75 | . 5 | A08 | P |  |
| 2E30 | 413 | 365200 |  |  | 3 | 20 |  | 250 | 250 |  | 40 |  | 3.7 |  | 0 | 100 | . 7 | B7G | P |  |
| 2E31 | 652 | 430000 |  |  | 1.25 | 0 |  | 20 | 20 |  | 0.4 |  | 0.5 |  | Data | Avai | le | B5A | P |  |
| 2E32 | 652 | 430000 |  |  | 1.25 | 0 |  | 20 | 20 |  | 0.4 |  | 0.5 |  | Data | Avai | ble | B5A | P |  |
| 2E35 | 652 | 430000 |  |  | 1.25 | 0 |  | 20 | 20 |  | 0.27 |  | 0.38 |  | Data | Avai | 1 e | B5A | P |  |
| 2E36 | 652 | 430000 |  |  | 1.25 | 0 |  | 20 | 20 |  | 0.27 |  | . 38 |  | Data | Avai | ble | B5A | P |  |
| 2 E 41 | 658 | 243000 |  |  | 1.25 | 0 |  | 20 | 20 |  | 0.36 |  | 0.37 |  | Data | Avail |  |  | P |  |
| 2E42 | 658 | 243000 |  |  | 1.25 | 0 |  | 20 | 20 |  | 0.35 |  | . 37 |  | Data | Avai | le | B5A | P |  |
| 2E50 | 412 | 265300 |  |  | 6 | 20 |  | 250 | 250 |  | 10 |  | 3.4 | 100 |  | 100 |  | B7G | P |  |
| 2EA5 | 412 | 365100 |  |  | 2.3 | 1 |  | 250 | 150 |  | 10 | 8 |  | 100 |  | 100 |  | B7G | P |  |
| 2EM5 | 0923 | 310800 |  |  | 2.1 |  |  |  |  |  |  |  |  | D |  |  |  | B7G | DD |  |
| 2FN5 | 092 | 310800 |  |  | 2.1 |  |  |  |  |  |  |  |  |  | D |  |  | B7G | DD |  |
| 2 ER 5 | 142 | 360100 |  |  | 2.3 | 1. | . 2 | 200 |  |  | 10 |  |  | 100 |  |  |  | B7G | $T$ |  |
| 2ES5 | 142 | 360100 |  |  | 2.3 | , |  | 200 |  |  | 15 |  | 9.5 | 100 |  |  |  | B7G | T |  |
| 2 EV 5 | 265 | 424300 |  |  | 2.4 |  |  | 250 | 75 |  | 11.5 |  | . 8 | 100 |  | 80 |  | B7G | P |  |
| 2 F 7 | 275 | 641300 | G1 |  | 2.5 \{ | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |  | 100 250 | 100 |  | 4 2.8 |  |  | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  |  |  | TP |  |
| $2 \mathrm{FH5}$ | 1423 | 360100 |  |  | 2.3 | 1 |  | 150 |  |  | 11 | 9 |  | 100 |  |  |  | B7G | T |  |
| 2 FQ 5 | 1423 | 360100 |  |  | 2.3 | 1. | . 2 | 150 |  |  | 11.5 | 11 |  | 100 |  |  |  | B7G | T |  |
| 2FQ5A | 1423 | 360100 |  |  | 2.3 | 1. | . 2 | 150 |  |  | 11 | 12 |  | 100 |  |  |  | B7G | T |  |
| 2FS5 | 4123 | 365100 |  |  | 2.4 | 0. | . 2 | 275 | 150 |  | 10 | 10 |  | 100 |  | 100 |  | B7G | P |  |
| 2 FV 6 | 265 | 424300 |  |  | 2.4 | 1 |  | 150 | 75 |  | 10 | 8 |  | 100 |  | 80 |  | B7G | P |  |
| 2 FY 5 | 1423 | 360100 |  |  | 2.4 | 1. | . 2 | 150 |  |  | 11 | 12 |  | 100 |  |  |  | B7G | T |  |
| 2GK5 | 142 | 360100 |  |  | 2.3 | 1. | . 2 | 150 |  |  | 11 | 15 |  | No | Data | Avail | le | B7G | T |  |
| 2 H 1 | 026 | 447300 |  |  | 2.1 |  |  | 150 |  |  | 3.2 |  | . 1 | 100 |  |  |  | A08 | TT |  |
| 2 H 1 M | 026 | 447300 |  |  | 2 | 2 |  | 150 |  |  | 1.2 | 1 |  | 100 |  |  |  | A08 | TT |  |
| 2 HMD | 452 | 310000 | A1 | 1 A2 | 4 |  |  | 200 | 100 |  | 3.8 |  | 1.1 | 100 |  | 100 | . 1 | B5 | PP |  |
| 2HR8 | 5012 | 236014 |  |  | 2.1 |  |  | 250 | 150 |  | 3 |  | . 8 | 100 |  | 100 |  | B9A | P |  |
| 2 J 2 | 2302 | 232032 | D1 |  | 2 |  |  |  |  |  |  |  |  | D |  |  |  | B9A | D |  |



| Valve | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE IESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen <br> Volts | $\begin{array}{c\|c} \mathrm{en} & \mathrm{la} \\ \mathrm{~s} & \mathrm{~mA} \end{array}$ | mA/V | Anode | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| 3AT4A | 602304100 |  | 3.1 | 1 | 200 |  | 11.5 | 6.7 | 100 |  |  | B7G | T |  |
| 3AU6 | 412365100 |  | 3 | 1.0 | 250 | 150 | 10 | 5.2 | 100 | 150 | 5 | B7G | P |  |
| 3av6 | 412398600 |  | 3 | 2 | 250 |  | 1.2 | 1.6 | 200 |  | 1.6 | B7G | DDT |  |
| 3AN3 | *2* 0*0 3*0 | D1 | 3.1 |  |  |  |  |  | D |  |  | A08 | D |  |
| 3AY6 | 412389600 |  | 3 | 2 | 250 |  | 1.2 | 1.6 | 200 |  | 1.6 | B7G | DDT |  |
| 3AZ4 | 020809030 |  | 5 |  |  |  | 60 |  | REC |  | 15 mA | A08 | RR |  |
| 3B2 | *2* 0** $3 * 0$ | D1 | 3 |  |  |  |  |  | D |  |  | B8A | D |  |
| 3B4 | 524332600 |  | 1.25 | 10 | 150 | 125 | 30 | 2.2 | 100 | 100 | 2 | B7G | P |  |
| 3B5 | 036540320 |  | 1.4 | 7 | 75 | 75 | 6.7 | 1.5 | 80 | 60 | 1.5 | A08 | P |  |
| 3B7 | 364204730 |  | 1.4 | 0 | 90 |  | 5.2 | 1.85 | 80 |  | 1.8 | B8B | TT |  |
| 3B24 | 320200000 | D1 | 2.5 |  |  |  | 30 |  | REC |  | 15 mA | UX4 | R |  |
| 3B29 | 300200000 | D1 | 2.5 |  |  |  |  | REC |  |  |  |  | R |  |
| 3B/102B | 643210000 |  | 6 |  | 400 |  | 100 | 6 | No Data | Avail | lable | B5 | T |  |
| 3B/240M | 214444130 | A1 | 6 | 1 | 300 |  | 50 | 27 | No Data | Avail | lable | B8B | T |  |
| 3B/241M | 214444130 | A1 | 19 | 1 | 300 |  | 50 | 27 | No Data | Avail | lable | B8B | T |  |
| 3B/252B | 642310000 |  | 6 | 20 | 400 |  | 60 | 10 | 100 |  | 8 | B5 | T |  |
| 3BA6 | 412365100 |  | 3 | 1 | 250 | 100 | 11 | 4.4 | 100 | 100 | 4.4 | B7G | P |  |
| 3BC5 | 412365100 |  | 3 | 1.3 | 250 | 150 | 7.5 | 5.7 | 100 | 150 | 5.8 | B7G | P |  |
| 3BE6 | 412366100 |  | 3.1 | 2 | 100 | 100 | 11 | 7 | 100 | 100 | 5 | B7G | H |  |
| 3BF6 | 142360100 |  | 3.1 | 9 | 250 |  | 9.5 | 1.9 | 100 |  |  | B7G | T |  |
| 3BN4 | 142361400 |  | 2.8 | 2 | 150 |  | 9 | 6.8 | 100 |  | 6 | B7G | T |  |
| 3BN6 | 412354600 |  | 3 | 1 | 60 | 60 | 0.5 | 1 | 80 | 60 | 1 | B7G | P |  |
| $3 \mathrm{BU8}$ | 157231461 |  | 3 | 1 | 100 | 60 | 1 | 1.5 | 100 | 60 | 1.5 | B9A | PP |  |
| 3BX6 | 141230651 |  | 3.4 | 2 | 200 | 175 | 10 | 7.2 | 100 | 100 | 6 | B9a | P |  |
| 3BY6 | 412365400 |  | 3 | 2.5 | 250 | 100 | 6.5 | 2.4 | 100 | 100 | 2.0 | B7G | H |  |
| 3 BY 7 | 141230651 |  | 3.2 | 1.8 | 250 | 75 | 8 | 5.7 | 100 | 75 |  | B9A | P |  |
| 3BZ6 | 412365100 |  | 3 | 1.0 | 150 | 125 | 14 | 8 | 200 | 150 | 6 | B7G | P |  |
| 3 C 2 | $020 * 3 * 2 * 0$ |  | 1.5 |  |  |  |  |  | D |  |  | 08 | D |  |
| 3 C 4 | $365 * 24300$ |  | 1.4 | 5.2 | 90 | 90 | 5.0 | 1.4 | 80 | 75 | 0.7 | B7G | P |  |
| $3 \mathrm{C5}$ | 036540320 |  | 1.4 | 9 | 90 | 90 | 6 | 1.4 | 80 | 75 | 1.4 | A08 | P |  |
| $3 \mathrm{C6}$ | 206447320 |  | 1.4 | 0 | 90 |  | 4.5 | 1.3 | 80 |  | 1.3 | B8D | TT |  |
| 3 C 24 | 200300000 | A1 G1 | 6.3 | 3 | 400 |  | 4.5 | 1.2 | 100 |  |  | UX4 | T |  |
| 3036 | 412365100 |  | 3 | 2.2 | 200 | 150 | 9.5 | 6.2 | 100 | 150 | 6 | B7G | P |  |
| $3 \mathrm{CB6}$ | 412365100 |  | 3 | 1.0 | 150 | 125 | 13 | 8.0 | 100 | 150 | 6.0 | B7G | P |  |
| 3 CE 5 | 412365100 |  | 3.1 | 2.1 | 200 | 150 | 9.5 | 6.2 | 100 | 100 |  | B7G | P |  |
| 3CF5 | 402365100 |  | 3.1 |  | 150 | 125 | 11 | 7.6 | 100 | 100 |  | B7G | P |  |
| $3 \mathrm{CF6}$ | 412365100 |  | 3 | 1.0 | 150 | 125 | 12 | 7.8 | 100 | 150 | 6 | B7G | P |  |
| $3 \mathrm{CS6}$ | 412365100 |  | 3 | 1.0 | 100 | 30 | 1.0 | 1.1 | 100 |  | 1.1 | B7G | H |  |
| $3 \mathrm{CY5}$ | 412365100 |  | 2.9 | 1 | 150 | 75 | 10 | 9 | 100 | 80 | 8 | B7G | F |  |
| 3 n 6 | 365004230 |  | 1.4 | 4.5 | 150 | 90 | 10.2 | 2.4 | 100 | 75 | 2.4 | B8B | P |  |
| 3D21A | 320504210 | A1 | 6.3 | 30 | 400 | 300 |  | 5.5 | No Data | Avail | lable | A08 | P |  |
| 3DG4 | 414234464 |  | 2.6 |  | 150 |  | 12.5 | 14 | No Data | Avail | lable | B9A | T |  |
| 3DG4 | $1^{* 1} 080900$ |  | 3.3 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| 3DK6 | 412365100 |  | 3.1 | 0.9 | 150 | 125 | 12 | 9.8 | 100 | 100 | 9.5 | B7G | P |  |
| 3DL4 | 414234464 |  | 2.6 | 1.2 | 150 |  | 12 | 14 | No Data | Avail | lable | B9A | T |  |
| 3DT6 | 412365100 |  | 3 | 2.2 | 150 | 100 | 1.1 | 0.8 | 150 | 100 | 2.0 | B7G |  |  |
| 3E5 | 365024300 |  | 1.4 | 8 | 90 | 90 | 6 | 1.2 | 80 | 75 | 1.2 | B7G | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\underset{m a}{l a}$ | mA/V | $\begin{array}{\|l\|l\|} \hline \text { Anode } \\ \text { Volts } \end{array}$ |  | Screen Volts | mA/V |  |  |  |
| 3E6 | 265134020 |  | 1.4 | 0 | 90 | 90 | 2.5 | 1.8 | 90 |  | 90 | 1.8 | A08 | P |  |
| 3EA5 | 402365100 |  | 3 | 1 | 250 | 100 | 10 | 8 | 100 |  | 100 |  | B7G | P |  |
| 3 EH 7 | 141230651 |  | 3.4 | 2 | 200 | 90 | 12 | 12.5 | No D | Data | Avail | lable | B9A | P |  |
| 3EJ7 | 141230510 |  | 3.4 | 2.5 | 200 | 200 | 10 | 15 | No D | Data | Avail | lable | B9A | P |  |
| 3ER5 | 142360100 |  | 3.6 | 1.2 | 250 |  | 10 | 10.5 | 100 |  |  |  | B7G | T |  |
| 3ES5 | 142360100 |  | 3 | 1 | 200 |  | 15 | 9.5 | 100 |  |  |  | B7G | T |  |
| 3EV5 | 265424300 |  | 2.9 |  | 250 | 75 | 11.5 | 8.5 | 100 |  | 80 |  | B7G | P |  |
| 3 FH 5 | 142360100 |  | 3 | 1. | 150 |  | 11 | 9 | 100 |  |  |  | B7G | T |  |
| 3FQ5 | 142360100 |  | 2.8 | 1.2 | 150 |  | 11.5 | 11 | 100 |  |  |  | B7G | T |  |
| 3FQ5A | 142360100 |  | 2.8 | 1.2 | 150 |  | 11 | 12 | No D | Data | Avail | lable | B7G | T |  |
| 3FS5 | 412365100 |  | 2.9 | 0.2 | 300 | 150 | 9 | 10 | No D | Data | Avail | lable | B7G | P |  |
| 3 FY 5 | 142360100 |  | 3.1 | 1 | 150 |  | 11 | 13 | No D | Data | Avail | lable | B7G | T |  |
| 3G10 | 892300000 |  | 2.5 |  |  |  | 30 |  | REC |  |  | 15 mA | B4 | RR |  |
| 3G130 | 892300000 |  | 2.5 |  |  |  | 30 |  | REC |  |  | 15 mA | B4 | RR |  |
| 3GK5 | 142360100 |  | 2.8 | 1 | 150 |  | 11.5 | 15 | No D | Data | Avail | lable | B7G | T |  |
| 3GS8 | 156231471 |  | 3.1 |  | 100 | 75 | 2 | 1.2 | 100 |  | 75 |  | B9A | PP |  |
| 3HM5 | 412360100 |  | 2.9 | 1.2 | 150 |  | 12.5 | 14.5 | No D | Data | a Avai | lable | B7G | T |  |
| 3HS8 | 157231461 |  | 3.1 |  | 100 | 75 | 2 | 0.4 | 100 |  | 75 | 0.4 | B9A | PP |  |
| 3L31 | 265436200 |  | 1.4 | 8.7 | 150 | 90 | 14.2 | 2.1 | 100 |  | 90 |  | B7G | P |  |
| 3L35 | 265243200 |  | 1.4 |  | 150 | 125 | 18.5 |  | 100 |  | 100 |  | B7G | P |  |
| 3LE4 | 365004230 |  | 1.4 | 9 | 90 | 90 | 1.8 | 1.6 | 80 |  | 75 | 1.6 | A08 | P |  |
| 3LF4 | 365004230 |  | 1.4 | 4.5 | 90 | 90 | 8 | 2 | 80 |  | 75 | 2 | B8B | P |  |
| 304 | 364526300 |  | 1.4 | 5 | 90 | 90 | 6.9 | 1.97 | 80 |  | 75 | 1.9 | B7G- | P |  |
| 305 | 036540320 |  | 1.4 | 4.6 | 90 | 90 | 9 | 2 | 80 |  | 75 | 2 | A08 | P |  |
| 3S4 | 364526300 |  | 1.4 | 7 | 90 | 75 | 7.4 | 1.57 | 80 |  | 60 | 1.5 | B7G | P |  |
| 3S4T | 264526300 |  | 1.4 | 7 | 90 | 60 | 7.4 | 1.4 | 80 |  | 60 | 1.4 | B7G | P |  |
| 3SB6 | 036540200 |  | 1.4 |  | 90 | 60 | 1.4 | 0.6 | 80 |  | 60 |  | A08 | P |  |
| 3V4 | 365024300 |  | 1.4 | 4.5 | 90 | 90 | 7.7 | 2 | 80 |  | 75 | 2 | B7G | P |  |
| 3W4 | 264536200 |  | 1.4 | 5.2 | 90 | 90 | 6.8 | 1.7 | 80 |  | 75 | 1.5 | B7G | P |  |
| 3 Y 4 | 264536200 |  | 1.4 | 5.4 | 60 | 60 | 5 | 1.2 | 80 |  | 60 |  | B7G | P |  |
| 3Y6A1 | 023104560 |  | 6.3 |  | 400 | 300 |  | 2 | No D | Data | Avail | lable | F8 | P |  |
| $3 \mathrm{Z4}$ | 264536200 |  | 1.4 | 7 | 60 | 60 | 6.5 | 1.4 | No D | Data | Avail | lable | B7G | P |  |
| 4 | 642300000 |  | 2 | 1 | 150 |  | 1 | 0.9 | 150 |  |  | 0.9 | B4 | T |  |
| 4/100BU | 892300000 |  | 4 |  |  |  | 120 |  | REC |  |  | 30 mA | B4 | RR |  |
| 4A6G | 026447230 |  | 2 | 1.5 | 90 |  | 1.2 | 0.9 | 80 |  |  | 0.9 | A08 | TT |  |
| 4A07 | 642300000 |  | 4 | 2 | 100 |  | 1.4 | 1.2 | 100 |  |  | 1.2 | B4 | T |  |
| 4 AOBN | 642300000 |  | 4 |  | 200 |  | 6 | 2.4 | 100 |  |  |  | B4 | T |  |
| 4A10 | 642300000 |  | 4 | 2.5 | 150 |  | 6 | 1.8 | 125 |  |  | 1.8 | B4 | T |  |
| 4A15 | 642300000 |  | 4 |  | 100 |  | 7 | 2.2 | 100 |  |  | 2.2 | B4 | T |  |
| 4 A 80 | 642310000 |  | 4 |  | 150 |  | 6 | 2 | 150 |  |  | 2 | B5 | T |  |
| 4A80N | 642310000 |  | 4 |  | 200 |  | 6 | 2.4 | 100 |  |  |  | B5 | T |  |
| 4A90 | 642310000 |  | 4 |  | 200 |  | 8 | 3.5 | 100 |  |  | 3 | B5 | T |  |
| 4A120 | 642310000 |  | 4 |  | 150 |  |  | 1.4 | 125 |  |  | 1.4 | B5 | T |  |
| 4AU6 | 412365100 |  | 4 | 1 | 250 | 150 | 10 | 5.2 | 100 |  | 60 | 5.2 | B7G | P |  |
| 4AV6 | 412389600 |  | 4.2 | 2 | 250 |  | 1.2 | 1.6 | 100 |  |  | 1.2 | B7G | DDT |  |
| 4 BA 6 | 412365100 |  | 4.2 | 1 | 250 | 100 | 11 | 4.4 | 100 |  | 100 | 4.4 | B7G | P |  |
| $4 \mathrm{BC5}$ | 412365100 |  | 4.2 | 1.3 | 250 | 150 | 7.5 | 5.7 | 100 |  | 150 | 5.7 | B7G | P |  |
| 4BC8 | 741236410 |  | 4.2 | 2.2 | 150 |  | 10 | 6.2 | 150 |  |  | 5 | B9A | TT |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | $\left\lvert\, \begin{gathered} \text { Anode } \\ \text { Volts } \end{gathered}\right.$ | $\begin{array}{l\|c\|c}  & \text { Screen } \\ \text { s } & \text { Volts } \end{array}$ | $\begin{aligned} & \mathrm{l}_{\mathrm{a}} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode |  | Screen Volts | mA/V |  |  |  |
| 4FS7 | 141234675 |  |  | $\begin{aligned} & 3 \\ & 1.2 \end{aligned}$ | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | 150 | 14 10 | $\begin{aligned} & 5.5 \\ & 1.2 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| 4G30 | 892300000 |  | 4 |  |  |  | 15 |  | D |  |  |  | B4 | RR |  |
| 4G105 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  |  |  | B4 | RR |  |
| 4G200 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  |  |  | B4 | RR |  |
| 4G5000 | 023000000 | D1 | 4 |  |  |  |  |  | D |  |  |  | F8 | R |  |
| 4GG1 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  |  |  | B4 | RR |  |
| 4GG2 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  |  |  | B4 | RR |  |
| 4GG3 | 892300000 |  | 4 |  |  |  | 120 |  | REC |  |  |  | B4 | RR |  |
| 4GG4 | 023080090 |  | 4 |  |  |  | 30 |  | REC |  |  |  | F8 | RR |  |
| 4GK5 | 142360100 |  | 4 | 1 | 150 |  | 11.5 | 15 | No Data | A | Avail | ble | B7G | T |  |
| 4GM6 | 412365100 |  | 4.2 |  | 150 | 125 | 14 | 13 | No Data |  | Avail |  | B7G | P |  |
| 4GS8 | 156231471 |  | 4.2 |  | 100 | 75 | 2 | 1.2 | 100 |  | 75 |  | B9A | PP |  |
| 4GZ5 | 142345600 |  | 4 |  | 250 | 250 | 16 | 8.5 | 100 |  | 00 |  | B7G | P |  |
| 4H07 | 642300000 |  | 4 |  | 150 |  | 3 | 1.1 | 100 |  |  |  | B4 | T |  |
| 4HO7N | 642300000 |  | 4 |  | 150 |  | 3 | 1.1 | 100 |  |  |  | B4 | T |  |
| 4H08 | 642300000 |  | 4 |  | 150 |  | 5 | 1.2 | 100 |  |  |  | B4 | T |  |
| $4 \mathrm{H8O}$ | 642300000 |  | 4 |  | 150 |  | 3 | 1.1 | 100 |  |  |  | B4 | T |  |
| 4HS8 | 157231461 |  | 4.2 |  | 100 | 75 | 2 | 0.4 | 100 |  |  | . 4 | B9A | PP |  |
| 4K30 | 642300000 |  | 4 | 10 | 150 |  | 20 | 3.6 | 100 |  |  |  | B4 | T |  |
| 4K32 | 642300000 |  | 4 | 15 | 200 |  | 30 | 3.6 | 100 |  |  | . 0 | B4 | T |  |
| 4K50 | 642300000 |  | 4 | 20 | 200 |  | 60 | 5 | No Data |  | Avail | ble | B4 | T |  |
| 4K60 | 642300000 |  | 4 | 20 | 300 |  | 60 | 3.5 | No Data |  | Avail | ble | B4 | T |  |
| 4K61 | 642300000 |  | 4 |  | 300 |  |  | 3 | No Data |  | Avail | ble | B4 | T |  |
| 4 K 100 | 642300000 |  | 4 | 3 | 300 | 200 | 50 | 4 | No Data |  | Avail |  | B4 | T |  |
| 4L11 | 642300000 |  | 4 |  | 150 |  | 7 | 1.4 | 100 |  |  | . 0 | B4 | T |  |
| 4L12 | 642300000 |  | 4 |  | 150 |  | 9 | 2 | 100 |  |  | . 5 | B4 | T |  |
| 4L13 | 642300000 |  | 4 |  | 200 |  | 8 | 2 | 100 |  |  |  | B4 | T |  |
| 4L13A | 642300000 |  | 4 | 11 | 200 |  | 14 | 2.5 | 100 |  |  |  | B4 | T |  |
| 4L14 | 642300000 |  | 4 |  | 200 |  | 10 | 2.2 | No Data |  | Avail | ble | B4 | T |  |
| 4L15 | 642300000 |  | 4 |  | 100 |  |  | 2.2 | 100 |  |  | .2 | B4 | T |  |
| 4L16 | 642300000 |  | 4 | 8 | 150 |  | 100 | 2.2 | 100 |  |  | . 0 | B4 | T |  |
| 4L20 | 642300000 |  | 2 |  | 100 |  |  | 1.4 | 100 |  |  | . 4 | B4 | T |  |
| 4L28 | 642300000 |  | 4 | 4 | 150 |  | 10.5 | 4 | 100 |  |  |  | B4 | T |  |
| 4L29 | 642300000 |  | 4 | 8 | 150 |  | 20 | 3.6 | 100 |  |  |  | B4 | T |  |
| 4LMBT | 642310000 |  | 4 | 1 | 200 |  | 3.4 | 2.6 | 100 |  |  |  | B5 | T |  |
| 4 MBT | 642310000 |  | 4 | 1 | 200 |  | 3.4 | 2.6 | 100 |  |  | . 6 | B5 | T |  |
| 4MP12 | 412365400 |  | 4 | 6 | 200 | 175 | 25 | 5.5 | 100 |  | 00 |  | B7G | P |  |
| 4NO8 | 642300000 |  | 4 |  | 100 |  | 8 | 1.2 | 100 |  |  | . 2 | B4 |  |  |
| 4N100 | 642310000 |  | 4 |  | 150 |  |  | 3.5 | 100 |  |  |  | B5 | T |  |
| 4N110 | 642310000 |  | 4 |  | 200 |  | 5 | 1.5 | 100 |  |  | . 3 | B5 | T |  |
| 4NG | 892300000 |  | 4 |  |  |  | 30 |  | REC |  |  | mA | B4 | RR |  |
| 4P25 | 642300000 | G2 | 4 | 19 | 250 | 150 | 12 | 1.3 | 100 |  | 00 |  | B4 | P |  |
| 4R-HH2 | 741236410 |  | 4.2 | 1 | 90 |  | 8.5 | 8 | 80 |  |  |  | B9A | TT |  |
| 4R-HH8 | 641237410 |  | 4.2 | 1 | 100 |  | 16 | 16 | No Data | A | Avail | ble | B9A | TT |  |
| 4R-HH9 | 641237410 |  | 4.2 |  | 90 |  | 16 | 16 | No Data | A | Avail | ble | B9A | TT |  |
| 4 S | 289130000 |  | 2.5 |  |  |  |  |  | D |  |  |  | UX5 | DD |  |
| 4S09 | 542300000 | A1 | 4 |  | 200 |  | 1 | 0.6 | 100 |  |  |  | B4 | P |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg . Grid Volts | Anode Volts | $\left\lvert\, \begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}\right.$ | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | $\begin{aligned} & \text { Screen } \\ & \text { Volts } \end{aligned}$ | ma/V |  |  |  |
| 5AU4 | 020809030 |  | 5 |  |  |  | 80 |  | REC |  | 40 mA | A08 | R |  |
| 5AV8 | 146234157 |  | 5 \{ | $\begin{aligned} & 6 \\ & 2.2 \end{aligned}$ | 200 | 150 | 13 9.5 | 3.3 6.2 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| 5AW4 | 020809030 |  | 5 |  |  |  | 120 |  | REC |  | 40 mA | A08 | RR |  |
| 5AW8 | 641237541 |  | 4.7 \{ | 6 2.1 | $\begin{aligned} & 200 \\ & 200 \end{aligned}$ | 150 | 13 9.5 | $\begin{aligned} & 3.3 \\ & 6.2 \end{aligned}$ | 100 100 | $\begin{array}{r} 60 \\ 150 \end{array}$ | $\left.\begin{array}{l} 3 \\ 6 \end{array}\right\}$ | B9A | TP |  |
| 5AX4 | 020809030 |  | 5 |  |  |  | 60 |  | REC |  | 2 ma | A08 | RR |  |
| 5AZ4 | 020809030 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | B8B | RR |  |
| 5B1 | 542300000 | A1 | 2 | 1 | 150 | 90 | 2 | 1.4 | 150 | 90 | 1.3 | B9A | P |  |
| 5B8 | 146234157 |  | 5 \{ | $\begin{aligned} & 6 \\ & 1.8 \end{aligned}$ | 200 200 | 150 | 13 9.5 | 3.3 6.3 | 100 100 | $\begin{array}{r} 60 \\ 150 \end{array}$ | $\left.\begin{array}{l} 3 \\ 6 \end{array}\right\}$ | B9A | TP |  |
| 5B/110M | 265104130 |  | 6 | 6 | 250 | 150 | 38 | 6.5 | 100 | 100 | 5 | B8B | P |  |
| 5B/250A | 254130000 | A1 | 6 | 12.5 | 400 | 250 | 83 | 6.3 | 100 | 150 | 6 | UX5 | P |  |
| 5B/251M | 215044130 | A1 | 6 | 15 | 250 | 250 | 72 | 6 | 100 | 100 | 5 | B8B | P |  |
| 5B/252M | 265044130 |  | 6 | 15 | 250 | 250 | 72 | 6 | 100 | 100 | 5 | B8B | P |  |
| 5B/253M | 265044130 |  | 19 | 15 | 250 | 250 | 72 | 6 | 100 | 100 | 5 | B8B | P |  |
| 5B/254M | 215, 144130 | A1 | 6 | 20 | 300 | 250 | 50 | 5.6 | 100 | 100 | 5 | B8B | P |  |
| 5B/255M | 265144130 |  | 6 | 20 | 300 | 250 | 50 | 5.6 | 100 | 100 | 5 | B8B | P |  |
| 5B/256M | 215144130 | A1 | 19 | 20 | 300 | 250 | 50 | 5.6 | 100 | 100 | 5 | B8B | P |  |
| 5B/257M | 265144130 |  | 12 | 20 | 300 | 250 | 50 | 5.6 | 100 | 100 | 5 | B8B | P |  |
| 5B/258M | 215144130 |  | 19 | 14 | 250 | 250 | 72 | 6 | No Dat | Avai | lable | B8B | P |  |
| 5B/354D | *36 541210 |  | 6.3 | 20 | 300 | 150 | 90 | 10 | No Dat | Avai | lable | A08 | P |  |
| 5B/355D | *36541210 |  | 6.3 | 20 | 300 | 150 | 90 | 10 | No Dat | Avai | lable | A08 | P |  |
| 5BC3 | 2*3 *9***8 |  | 5 |  |  |  | 120 |  | REC |  | 40 mA | B9A | RR |  |
| 5BE8 | 461237414 |  | 4 \{ | 1 | $\begin{aligned} & 150 \\ & 250 \end{aligned}$ | 100 | 18 10 | 8.5 5.2 | 100 150 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 7 \\ 5 \end{array}\right\}$ | B9A | TP |  |
| 5BK7A | 741236411 |  | 5 | 2 | 150 |  | 10.7 | 9.3 | 100 |  | 9 | B9A | TT |  |
| 5BQ7A | 741236410 |  | 5.6 | 2 | 150 |  | 9 | 6.4 | 100 |  | 5 | B9A | TT |  |
| 5BR8 | 461237514 |  | 5 \{ | $\begin{aligned} & 1 \\ & 0.9 \end{aligned}$ | 150 250 | 100 | 18 10 | 8.5 5.2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $8\}$ | B9A | TP |  |
| 5BS8 | 641237410 |  | 5.6 |  | 150 |  | 10 | 7.2 | 100 |  |  | B9A | TT |  |
| 5BT8 | 981236541 |  | 4.7 | 2.2 | 200 | 150 | 9.5 | 6.2 | 100 | 100 |  | B9A | DDP |  |
| 5BW8 | 918234156 |  | 4.7 | 1.1 | 250 | 100 | 10 | 5.2 | 100 | 100 |  | B9A | DDP |  |
| 5BX7 | 641237410 |  | 5.6 |  | 150 |  | 10 | 6.8 | 100 |  | 6.8 | B9A | TT |  |
| 5BZ7 | 741236410 |  | 5.6 | 2.2 | 150 |  | 10 | 6.8 | 100 |  | 6 | B9A | TT |  |
| 5CG4 | 030809020 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 5CG8 | 461237514 |  | 4.7 \{ | 0.9 1.9 | 100 250 | 150 | 8.5 7.7 | 5.8 4.6 | 100 100 |  |  | B7G | TP |  |
| 5CL8 | 461237514 |  | 4.7 \{ | 0.9 | 150 | 150 | $15^{7}$ | 4.6 | 100 |  |  |  | TP |  |
| $5 \mathrm{CL8}$ | 461237514 |  | 4.7 ( | 1 | 150 | 125 | 12 | 5.8 | 100 | 100 | 5.5 |  |  |  |
| $5 \mathrm{CM6}$ | 504234106 |  | 4.7 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 100 |  | B9A | P |  |
| 5CM8 | 641237514 |  | 4.7 \{ | $\begin{aligned} & 2 \\ & 2.2 \end{aligned}$ | 250 200 | 150 | 1.8 9.5 | 2 6.2 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A |  |  |
| 5CQ8 | 645237114 |  | 4.2 \{ | 0.8 1 | 150 150 | 125 | 15 12 | 8 5.8 | $\begin{aligned} & 100 \\ & 125 \end{aligned}$ |  | 9.5 ${ }^{8}$ ( | B7G | TP |  |
| 5CR8 | 641237514 |  | 4.7 \{ | 2 | 125 125 | 125 | 12 | 4.7 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 4 \\ 7 \end{array}\right\}$ | B9A | TP |  |
| 5CU4 | 120809030 |  | 5 |  |  |  | 180 |  | REC |  | 60 mA | A08 | RR |  |
| 5CZ5 | 504234 1*6 |  | 4.7 | 6.7 | 100 | 100 | 43 | 9 | 100 | 100 |  | B9A | P |  |




| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \text { mA } \end{gathered}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| 6AG7 | 120415360 |  | 6 | 3 | 300 | 150 | 30 | 11 | 100 | 100 | 410 | A08 | P |  |
| 6AH4 | 420060310 |  | 6 | 23 | 250 |  | 30 | 4.5 | 100 |  |  | A08 | T |  |
| 6 6H5 | 520604310 |  | 6 | 18 | 350 | 250 | 54 | 5.2 | 100 | 150 | 5 | A08 | P |  |
| 6aH6 | 412365100 |  | 6 | 2 | 300 | 150 | 10 |  | 100 | 100 | 2. | B7G | $\stackrel{\mathrm{P}}{ }$ |  |
| 6AH7 | 461471230 |  | 6 | 16 | 250 |  | 10 | 2.2 | 100 |  | 2.2 | A08 | TT |  |
| 6AH7GT | 417146230 |  | 6 | 9. | 250 |  | 12 | 2.4 | 100 |  | 2.4 | A08 | TT |  |
| 6AJ4 | 414464234 |  | 6 | 2 | 125 |  | 8 | 7 | 100 |  | 10 | B9A | T |  |
| 6AJ5 | 412.369100 |  | 6 | 7.5 | 200 | 175 | 2.9 | 2,7 | 100 | 75 |  | B7G | $\stackrel{P}{P}$ |  |
| 6AJ7 | 020415360 |  | 6 |  | 300 | 150 | 10 | 9 | 150 | 150 | 7.5 | A08 | P |  |
| 6AJ8 | 541237164 |  | 6 | 2 | 100 250 | 100 | 6.5 | 2.3 2.4 | 100 150 | 60 100 | $\left.\begin{array}{l} 2.3 \\ 2.4 \end{array}\right\}$ | B9A | TH |  |
| 6АK4 | 402013060 |  | 6 | 2.5 | 250 |  | 9.5 | 3.8 | 100 |  | 3 | B8D | T |  |
| 6АK5 | 412365100 |  | 6 | 2.3 | 150 | 150 | 7 | 4.3 | 100 | 100 | 4 | B7G | P |  |
| 6AK6 | 412365100 |  | 6 | 9 | 200 | 175 | 15 | 2.3 | 100 | 100 | 2.3 | B7G | P |  |
| 6AK7 | 120415360 |  | 6 | 3 | 300 | 150 | 30 | 11 | 100 | 100 | 9 | A08 | P |  |
| 6aK8 | t91 238146 |  | 6 | 3 | 250 |  | 1.0 | 1.2 | 100 |  | 1.3 | B9A | DDDT |  |
| 6AL3 | *** 23* **8 | C | 6 |  |  |  |  |  | D |  |  | B9A | D |  |
| 6AL5 | 192310800 |  | 6 |  |  |  |  |  | D |  | 6.0 | B7G | DD |  |
| 6AL6 | 020540310 | A1 | 6 | 14 | 250 | 250 | 72 | 6 | 100 | 150 | 6 | A08 | P |  |
| 6AL7 | $42689 \dagger 310$ |  | 6 | 6 | 300 |  |  |  | 100 |  |  | A08 | DDDT |  |
| 6AM4 | 414464234 |  | 6 | 1 | 200 |  | 10 | 9.8 | 100 |  | 6 | B9A | T |  |
| 6AM5 | 412360500 |  | 6 | 13.5 | 250 | 250 | 16 | 2.6 | 100 | 150 | 2.6 | B7G | P |  |
| ¢6AM6 | 412361500 |  | 6 | 2 | 250 | 250 | 10 | 7.5 | 100 | 150 |  | B7G | P |  |
| 6aM8 | 145236181 |  | 6 | 1.5 1.7 | 200 200 | 150 150 | 11.5 | 6.4 | 100 100 | 150 150 | 5 7 | B9A | DP |  |
| 6AM8A | 145236181 |  | 6 | 1.7 | 200 | 150 | 9.5 | 5.8 | 100 | 150 | 7 | B9A | DP |  |
| 6AN4 | 642314600 |  | 6 | 1.3 | 200 |  | 13 | 10 | 100 |  |  | B7G | T |  |
| 6an5 | 412365100 |  | 6 | 6 | 150 | 125 | 35 | 8 | 100 | 100 | 7 | B7G | P |  |
| 6AN6 | 289 t+1 300 |  | 6 |  |  |  |  |  | D |  |  | B7G | DDDD |  |
| 6AN7 | 541230764 |  | 6 | 2 | 100 |  | 5 | 2 | 100 | 60 | 2.8 | B9A | TP |  |
|  |  |  |  | 2 | 250 | 100 | 3 13 | 0.7 3.3 | 100 100 | 100 60 |  |  |  |  |
| 6an8 | 641237541 |  | 6 | 2.2 | 200 | 150 | 9.5 | 6.2 | 100 | 60 150 |  | B9A | TP |  |
| 6AN8A | 641237541 |  | 6 | $6$ |  |  | 13 | 3.3 | 100 | 60 |  | B9A | TP |  |
|  | 64123754 |  |  | 2.2 |  | 150 | 9.5 | 6.2 | 100 | 100 |  | B9A |  |  |
| 6AQ4 | 412314600 |  | 6 | 2 | 250 |  | 6 | 8.5 | 200 |  | 8 | B7G | T |  |
| 6AQ5 | 412365400 |  | 6 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | B7G | P |  |
| 6AQ5A | 412365400 |  | 6 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | B7G | P |  |
| 6AQ6 | 412398600 |  | 6 | 3 | 250 |  | 1.0 | 1.2 | 150 |  | 1.2 | B7G | DDT |  |
| 6AQ7 | 918461230 |  | 6 | 2 | 250 |  | 2.3 | 1.6 | 100 |  | 1.6 | A08 | DDT |  |
| 6AQ8 | 741236410 |  | 6 | 2.3 | 250 |  | 10 | 5.5 | 100 |  | 5 | B9A | TT |  |
| 6AR5 | 412365000 |  | 6 | 16 | 250 | 250 | 34 | 2.4 | 100 | 150 | 2.4 | B7G | P |  |
| 6AR6 | 106052430 |  | 6 | 36 | 300 | 300 | 58 | 4.3 | 100 | 150 | 4.3 | A08 | P |  |
| 6AR7 | 461891230 |  | 6 | 2 | 250 |  | 1.3 | 1 | 200 | 1 | A08 | DDT |  |  |
| 6AR7GT | 206598130 |  | 6 | 2 | 250 | 100 | 7 | 2.5 | 100 | 100 | 2.5 | A08 | DDP |  |
| 6AR8 | 115324166 |  | 6 | 3 | 250 | 250 | 10 | 4 | 100 | 100 |  | B9A | P |  |
| 6AS4 | 001080230 |  | 6 |  |  |  |  |  | REC |  |  | A08 | R |  |
| 6AS5 | 142345600 |  | 6 | 8.5 | 150 | 125 | 35 | 5.6 | 100 | 100 | 5 | B7G | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 6AS6 | 412365100 |  | 6 | 2 | 150 | 125 | 5.5 | 3.5 | 100 | 100 | 3.5 | B7G | P |  |
| 6AS6 | 471461230 |  | 6 | 40 | 100 |  | 50 | 7 | 100 |  |  | A08 | TT |  |
| 46AS7 | 471461230 |  | 6 | 40 | 100 |  |  |  | No D | ta Avai | ilable | A08 | TT |  |
| 6AS8 | 541238116 |  | 6 | 2.2 | 200 | 150 | 9.5 | 6.2 | 100 | 150 | 6 | B9A | DP |  |
| 6AT6 | 412389600 |  | 6 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.2 | B7G | DDT |  |
| 6AT7 | 641237410 |  |  | 2 1 | 250 100 |  | 10 3.7 | 5.5 | 100 100 | 60 | 5 | \} B9A | TT |  |
| 6AT8 | 461237514 |  |  | 1. | 100 |  | 8.5 | 5.8 | 100 | 60 |  |  | TP |  |
|  |  |  |  | 1.8 | 250 100 | 150 | 7.7 8.5 | 4.6 | 100 | 150 60 |  |  |  |  |
| 6at8A | 461237514 |  |  | 1.8 | 250 | 150 | 8.5 7.7 | 5.8 4.6 | 100 | 100 | 4.8 | B9A | TP |  |
| 6AU4 | 001080230 |  | 6 |  |  |  | 120 |  | REC |  | 40 mA | A08 | R |  |
| 6AU5 | 421060350 |  | 6 | 20 | 200 | 150 | 50 | 5.6 | 80 | 60 | 6 | A08 | P |  |
| $6 \mathrm{AU6}$ | 412365100 |  | 6 |  | 250 | 150 | 10 | 5.2 | 100 | 100 | 3.9 | B7G | P |  |
| 6AUGA | 412365100 |  | 6 |  | 250 | 150 | 10 | 5.2 | 100 | 100 | 3.9 | B7G | P |  |
| 6AU7 | 641227413 |  | 3 | 8.5 | 250 |  | 10 | 2.2 | 100 |  | 2 | B9A | TT |  |
| 6AU8 | 146231457 |  |  | 1.2 | 150 |  | 8.5 | 4.8 | 100 | 60 | 5 | B99 |  |  |
| 6AU8 | 14623145 |  |  | 1.5 | 200 150 | 125 | 15 | 7 | 100 | 100 | 7 |  |  |  |
| 6AU8A | 146231457 |  |  | 1.5 |  | 125 | $\begin{array}{r} 8.6 \\ 15 \end{array}$ | $\begin{aligned} & 4 \cdot 9 \\ & 7 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | 389 | TP |  |
| 6AV4 | 802309100 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | B7G | RR |  |
| 6AV5 | 421060350 |  | 6 | 22.5 | 250 | 150 | 57 | 5.9 | 100 | 100 | 5.8 | A08 | P |  |
| 6AV6 | 412389600 |  | 6 | , | 250 |  | 1.2 | 1.6 | 100 |  | 1.2 | B7G | DDT |  |
| 6AV8 | 464231751 |  | 6 | 6 | 200 |  | 13 | 3.3 | 100 | 60 | 3 | B9A | TP |  |
| 6AW4 | 289130000 |  | 6 | 2.2 | 200 | 150 | 30.5 | 6.2 | 100 | 150 | $6$ | UX5 | RR |  |
| 6AW5 | 208190310 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| 6AW6 | 412365100 |  | 6 | 1.8 | 250 | 150 | 7 | 5 | 100 | 150 | 5 | B7G | ${ }_{\mathbf{P}}$ |  |
| 6AW7 | 149816230 |  | 6 | 0 | 100 |  | 1.4 | 1.2 | 100 |  | 1.2 | A08 | DDT |  |
| 6AW8 | 146231457 |  |  | 2 | 200 |  | 4 | 4 | 100 | 60 | 4 3 |  |  |  |
| 6AX2 | 23* 232 *32 | D1 |  | 3 | 200 | 150 | 13 | 9 | 100 | 100 | 9 9 |  | IP |  |
| 6AX2 | 23*232*32 | D1 | 6 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |
| $6 \mathrm{AX4}$ | 001080230 |  | 6 |  |  |  | 120 |  | REC |  | 35 mA |  |  |  |
| $6 \mathrm{AX5}$ | 029080310 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 6AX6 | 028190310 |  | 6 |  |  |  | 120 |  | REC |  | 30 mA | A08 | ${ }_{R R}$ |  |
| $6 \mathrm{AX7}$ | 641227413 |  | 3 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.2 | B9A | ${ }_{\text {TT }}$ |  |
| 6AX8 | 546237114 |  |  | $\begin{aligned} & 1 \\ & 1.2 \end{aligned}$ | 150 250 | 100 | 18 10 | $\begin{aligned} & 8.5 \\ & 4.8 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $8\}$ | B9A | TP |  |
| 6AY3B | *8* 23* 8*1 |  | 5 |  |  |  | 180 |  |  |  |  |  |  |  |
| 6AY3 6 6ay | *8* $23 * 810$ | A1 | 6 |  |  |  | 120 |  | REC |  | 30 mA | B9A | ${ }_{\text {R }}^{\text {R }}$ |  |
| 6AY8 | 026589310 | G1 | 6 | 12.5 5 | 250 | 250 100 | 47 52 | 4.1 | 100 | 150 |  | A08 | $\stackrel{\mathrm{P}}{ }$ |  |
| 6AZ5 | 810230190 |  | 6 | 5 | 250 | 100 | 5 | 9.5 | D | 90 | 9 | A08 | DDP DD |  |
| 6AZ6 | 083113900 |  | 6 |  |  |  |  |  | D |  |  |  |  |  |
| 6AZ8 | 751324164 |  |  | $\begin{aligned} & 6 \\ & 2.3 \end{aligned}$ | 200 200 | 150 | $\begin{aligned} & 13 \\ & 9.5 \end{aligned}$ | $\begin{aligned} & 3.3 \\ & 6 \end{aligned}$ | 100 100 | $60$ | $\left.\begin{array}{l} 3 \\ 6 \end{array}\right\}$ | B9A | TP |  |
| 6B3 | 080 026080808 | C | 6 |  |  |  |  |  | D | 100 |  | B9A | R |  |
| 6B4 | 026040300 036040200 |  | 6 | 45 | 250 |  | 60 | 5.2 | 100 |  | 5 | A08 | T |  |
|  |  |  |  | 45 | 250 |  | 60 | 5.2 | No Dat | Avail | able | B8A | T |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVETESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | $\begin{aligned} & \text { Screen } \\ & \text { Volts } \end{aligned}$ | $\mathrm{ma} / \mathrm{N}$ |  |  |  |
| 6B6 | 026890310 | G1 | 6 | 2 | 250 |  | 0.9 | 1.1 | 100 |  | 1.1 | A08 | DDT |  |
| 6B7 | 265891300 | G1 | 6 | 3 | 250 | 150 | 9 | 1.1 | 100 | 100 | 1.1 | Sm7 | DDP |  |
| 6B7E | 265891300 | G1 | 6 | 3 | 250 | 150 | 9 | 1.1 | 100 | 100 | 1.1 | Sm7 | DDP |  |
| 6B7S | 265891300 | G1 | 6 | 3 | 250 | 150 | 9 | 1.1 | 100 | 100 | 1.1 | Sm7 | DDP |  |
| 6B8 | 026985310 | G1 | 6 | 3 | 250 | 150 | 10 | 1.3 | 100 | 100 | 1.3 | A08 | DDP |  |
| 6B8G | 026985310 | G1 | 6 | 3 | 250 | 150 | 9 | 1.1 | 100 | 100 | 1.3 | A08 | DDT |  |
| 6B8SG | 026985310 | G1 | 6 | 3 | 250 | 150 | 9 | 1.1 | 100 | 100 | 1.2 | A08 | DDP |  |
| 6B11 | 276454130 |  | 6 \{ | 3 | 100 150 | 125 | 5 | 2.3 | 100 100 | 60 100 | 2.3 | B9A | TH |  |
| 6B31 | 821013900 |  | 6.3 |  |  |  |  |  | D |  |  | B7G | DD |  |
| 6B32 | 182311900 |  | 6.3 |  |  |  | 5 |  | D |  |  | B7G | DD |  |
| 6BA3 | *8* $23 * 8 * 1$ |  | 6.3 |  |  |  | 180 |  | REC |  | 35 mA | B9A | R |  |
| 6BA5 | 402063510 |  | 6 | 2 | 100 | 100 | 5.5 | 2.1 | 100 | 100 | 4 | B8A | P |  |
| 6BA6 | 412365100 |  | 6 | 1 | 250 | 100 | 11 | 4.4 | 100 | 100 | 4.4 | B7G | P |  |
| 6BA7 | 641231106 |  | 6 | 2 | 100 |  | 18 | 7.0 | 100 |  | 7 | B9A | H |  |
| 6BA8 | 146231457 |  | 6 \{ | 8 | 200 200 | 150 |  | $\begin{aligned} & 2.7 \\ & 9 \end{aligned}$ | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 5 \\ 9 \end{array}\right\}$ | B9A | TP |  |
| 6BA8A | 146231457 |  | 6 | 8 2.5 | 200 | 150 | $\begin{array}{r} 8 \\ 13 \end{array}$ | $2.7$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $2.5\}$ | B9A | TP |  |
| 6BC4 | 644231446 |  | 6 | 1.5 | 150 |  | 14.5 | 10 | 100 |  | 10.0 | B8A | T |  |
| 6BC5 | 412365100 |  | 6 | 1.3 | 250 | 150 | 7.5 | 5.7 | 100 | 150 | 5.7 | B7G | P |  |
| 6BC7 | $1802391+1$ |  | 6 |  |  |  | 5 |  | D |  |  | B9A | RRR |  |
| 6BC8 | 741236410 |  | 6 | 2.2 | 150 |  | 10.0 | 6.2 | 150 |  | 5 | B9A | TT |  |
| 6BC32 | 412389600 |  | 6.3 | 2 | 250 |  | 1 | 1.6 | 100 |  | 1.2 | B7G | DDT |  |
| 6BD5 | 421060350 |  | 6 | 12 | 200 | 200 |  | 5 | 100 | 100 | 5 | A08 | P |  |
| 6BD6 | 412365100 |  | 6 | 3 | 250 | 100 | 9 | 2 | 100 | 100 | 2 | B7G | P |  |
| 6BD7 | 641238 09* |  | 6 | 3.0 | 250 |  | 1.0 | 1.2 | 150 |  | 1.2 | B9A | DDT |  |
| 6BD7A | 641 238 09* |  | 6.3 | 3 | 250 |  | 1 | 1.2 | 150 |  | 1.2 | B9A | DDT |  |
| 6BE6 | 412365400 |  | 6 | 1.5 | 250 | 100 | 3 | 2.75 | 100 |  |  | B7G | H |  |
| 6BE7 | 541236114 |  | 6 | 1 | 250 | 20 | 0.95 | 0.7 | No Data | Avail | lable | B9A | N |  |
| 6BE8 | 461237514 |  | 6 \{ | 1 | 150 250 | 100 | 18 10 | 8.5 5.2 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $8\}$ | B9A | TP |  |
| 6BF5 | 412265400 |  | 6 | 7.5 | 100 | 100 | 36 | 7.5 | 100 | 90 | 7 | B7G |  |  |
| 6BF6 | 412398600 |  | 6 | 9 | 250 |  | 9.5 | 1.9 | 100 |  | 1.9 | B7G | DDT |  |
| 6BF7 | 642113470 |  | 6 | 0.8 | 100 |  | 8 | 4.8 | 100 |  | 4.8 | B8D | TT |  |
| 6BG6 | 021040350 | A1 | 6 | 15 | 250 | 250 | 75 | 6 | No Data |  | lable | A08 | P |  |
| 6BG7 | 742113460 |  | 6 | 0.8 | 100 |  | 8 | 4.8 | 100 |  | 4.8 | B9A | TT |  |
| 6BH3 | *8* $23 * 8 * 1$ |  | 6.3 |  |  |  | 180 |  | REC |  | 50 mA | B9D | R |  |
| 6BH5 | 541236000 |  | 6 | 2.5 | 250 | 100 | 6 | 1.7 | 150 | 100 | 1.7 | B9A | P |  |
| 6BH6 | 412365100 |  | 6 | 1 | 250 | 150 | 7.4 | 4.6 | 100 | 100 | 3.4 | B7G | P |  |
| 6RH6 | 141230651 |  | 6.3 |  | 250 | 250 | 40 | 20 | No Data | Avail | lable | B9A | $P$ |  |
| 6BH8 | 146321457 |  | 6 9 | 1.6 | 150 200 | 125 | ${ }_{15}^{9.5}$ | 3.3 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\}$ | B9A | TP |  |
| 6BJ5 | 412 36*500 |  | 6 | 5 | 250 | 250 | 35 | 10.5 | 100 | 150 | 10 | ${ }^{\text {B7G }}$ | P |  |
| 6BJ6 | 412365100 |  | 6 | 1 | 250 | 100 | 9.2 | 3.6 | 100 | 100 | 3.6 | B7G | P |  |
| 6BJ7 | 1 to 239181 |  | 6 |  |  |  |  |  | D |  |  | B9A | DDD |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | Screen | ma/v |  |  |




| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grld Volts | Anode Volts | Screen Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | mA/V | Anode Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| 6CG8A | 461237514 |  | $6\{$ |  | 100 250 | 150 | $\begin{aligned} & 8.5 \\ & 7.7 \end{aligned}$ | $\begin{aligned} & 5.8 \\ & 4.6 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | 3B9A | TP |  |
| 6 CH 6 | 041230651 |  | 6 | 4.5 | 250 | 250 | 40 | 11 | 100 | 150 | 9 | B9A | P |  |
| $6 \mathrm{CH7}$ | 741236410 |  | 6 | 2.2 | 150 |  | 10 | 6.8 | 150 |  | 6.8 | B9A | TT |  |
| 6CH8 | 175321446 |  | $6\{$ | 2.2 | 200 200 | 150 | 13 9.5 | 3.3 6.3 | 100 100 | 60 150 | $\left.\begin{array}{l} 4.9 \\ 5 \end{array}\right\}$ | B9A | TP |  |
| 6 CH 40 | 541237464 |  | $6.3\{$ | 2 | 100 250 | 100 | 10.5 | 3.2 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \}B9A | TH |  |
| 6CJ5 | 260054130 |  | 6 | 2.5 | 250 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | B8A | P |  |
| 6CJ6 | 041230051 | A1 | 6 |  | 200 | 200 | 45 | 6.2 | No D | ta Avai | lable | B9A | P |  |
| 6CK4 | 424060310 |  | 6 | 28 | 250 |  | 40 | 5.5 | No De | ta Avai | lable | A08 | T |  |
| 6CK5 | 261054130 |  | 6 | 7 | 250 | 250 | 36 | 10 | 100 | 150 | 8 | B8A | P |  |
| 6CK6 | 541231600 |  | 6 | 5.5 | 250 | 250 | 36 | 10 | 100 | 150 | 9 | B9A | P |  |
| 6CL5 | 521441350 | A1 | 6.3 | 40 | 150 | 150 | 80 | 6.3 | 100 | 100 |  | A08 | P |  |
| 6 CL 6 | 145236154 |  | 6 | 3 | 250 | 150 | 30 | 11 | No D | ta Avai | lable | B9A | $\mathbf{P}$ |  |
| 6CL8 | 461237514 |  | 6 \{ | 0.8 1.0 | 150 150 | 125 | 15 12 | 8.8 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l}8 \\ 5\end{array}\right\}$ | \} B9A | TP |  |
| 6CL8A | 461237514 |  | 6 \{ | 0.8 1 | 150 150 | 125 | 15 12 | $\begin{aligned} & 8 \\ & 5.8 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \}B9A | TP |  |
| 6CM4 | 641234146 |  | 6 |  | 200 |  | 12 | 14 | No Da | ta Avai | lable | B9A | T |  |
| $6 \mathrm{MM6}$ | 504234106 |  | 6 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 100 | 4 | B9A | $\mathbf{P}$ |  |
| 6CM7 | 701236441 |  | 6 | 7 | 200 |  | 5 20 | 2.4 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l}2.8 \\ 4.7\end{array}\right\}$ | $\} \mathrm{B9A}$ | TT |  |
| 6CM8 | 641237514 |  | 6 | 2 | 250 | 150 | 1.8 9.5 | 2.2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \}B9A | TP |  |
| 6CN5 | 026540310 |  | 6.3 | 18 | 350 | 250 | 66 | 5.2 | No D | ta Avai | lable | A08 | P |  |
| 6CN6 | 120540310 |  | 6 | 7 | 250 | 250 | 100 | 14.3 | 100 | 150 | 10 | A08 | P |  |
| 6CN7 | 981331462 |  | 3 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.3 | B7G | DDT |  |
| $6 \mathrm{CQ4}$ | **1 080230 |  | 6.3 |  |  |  | 180 |  | REC |  | 30 mA | A08 | R |  |
| 60Q6 | 412361500 |  | 6 | 2.5 | 250 | 200 | 8 | 2.5 | 100 | 150 | 2.5 | B7G | P |  |
| 6CQ8 | 645237114 |  | 6 | ${ }_{1} 18$ | 150 150 | 125 | 15 12 | 8 5.8 | 100 125 |  | $8$ | \}B9A | TP |  |
| 6CQ8A | 645237114 |  | 6 | 0.8 1 | 150 150 | 125 125 | 15 12 | $\begin{aligned} & 3.8 \\ & 8.8 \\ & 5.8 \end{aligned}$ | $\begin{aligned} & 100 \\ & 125 \end{aligned}$ | $\begin{array}{r} 125 \\ 60 \\ 125 \end{array}$ | $\begin{aligned} & 5.8 \\ & 5.8 \end{aligned}$ | \}B9A | TP |  |
| 6CR4 | 414464234 |  | 6.3 | 1 | 150 |  | 16 | 6 | No Da | ta Avai | lable | B9A | T |  |
| 6CR5 | 154231541 | A1 | 6.3 | 22.5 | 250 | 150 | 65 | 6 | 100 | 100 |  | B9A | P |  |
| 6CR6 | 182365400 |  | 6 | 2 | 250 | 100 | 9.5 | 2 | 250 | 100 | 1.9 | B7G | DT |  |
| 6CR8 | 641237514 |  | $6\{$ | 2 | 150 150 | 125 | 12 13 | 4.7 |  | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 4 \\ 7 \end{array}\right\}$ | \}B9A | TP |  |
| 6CS5 | $5142341 * 6$ |  | 6 | 10 | 200 | 125 | 47 | 8 | 100 | 100 |  | B9A | P |  |
| 6CS6 | 412365100 |  | 6 | 1 | 100 | 30 | 1 | 1.1 | No D | ta Avai | lable | B7G | H |  |
| 6CS7 | 604237411 |  | 6 | A2 8.5 410.6 | 250 250 |  | 10.5 19 | 2.2 4.5 | 100 100 |  | $\begin{aligned} & 2 \\ & 4 \end{aligned}$ | $\}$ B9A | TT |  |
| 6CS8 | 641237514 |  | 6 \{ | 2 0.9 | 150 150 | 125 | 12 | 4.7 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l}4 \\ 7\end{array}\right\}$ | \} ${ }^{\text {99A }}$ | TP |  |
| 6 CT 4 | 411231146 |  | 6.3 | 1 | 150 |  | 16 | 15 | No D | ta Avai | lable | B9A | TT |  |
| 6 CT 7 | 268154130 |  | 6 | 2 | 250 | 100 | 5 | 1.8 | 100 | 100 | 1.8 | B8A | DP |  |
| 6005 | 142345600 |  | 6 | 8 | 125 | 100 | 50 | 7.5 | 125 | 100 | 7.5 | B8G | $\mathbf{P}$ |  |
| 6006 | 020540310 | A1 | 6 | 22.5 | 250 | 150 | 57 | 5.5 | 100 | 100 | 6 | A08 | P |  |
| 6CU7 | 276454130 |  | 6 | 2 2 | 100 250 | 100 | 5 8 | 2.2 2 | 100 100 | 60 100 | $\left.\begin{array}{l} 2.8 \\ 3.5 \end{array}\right\}$ | \} 88 A | TH |  |
| $6 \mathrm{CU8}$ | 175231446 |  | 6. | 6 | 200 | 150 | 13 9.5 | 3.3 6.2 | 100 100 | 60 150 | $\left.\begin{array}{l} 3 \\ 6 \end{array}\right\}$ | \} $\mathrm{B9A}$ | TP |  |
| 6 CV 7 | 264089130 |  | 6 | 3 | 250 |  | 1 | 1.3 | 150 |  | 1.3 | B8A | LDT |  |
| 6CW5 | *41 23* 6*5 |  | 6 | 12.5 | 200 | 175 | 70 | 10 | 100 | 100 | 9 | B9A | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. |  |  | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Vf | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| 6CW7 | 147234116 |  | 6 |  | 1.5 | 90 |  | 12 | 6 | 100 |  | 6 | B9A | TT |  |
| 6CX7 | 641237411 |  | 6 |  | 2 | 150 |  | 9 | 6.4 | 100 |  | 6 | B9A | TT |  |
| 6CX8 | 146231457 |  | 6 | \{ | 1.5 | 150 | 125 | 9 24 | ${ }_{10} 4.6$ | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| 6 CY 5 | 412365100 |  | 6 |  | 1 | 150 | 75 | 10 | 8 | 100 | 80 |  | B7G | P |  |
| 6 CY 7 | 714236411 |  |  | \{ | $\begin{gathered} 3 \\ 18.5 \end{gathered}$ | $\begin{aligned} & 250 \\ & 150 \end{aligned}$ |  | 1.2 | $\begin{aligned} & 1.3 \\ & 5.4 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | B9A | TT |  |
| $6 \mathrm{CZ5}$ | 504234 1*6 |  | 6 |  | 14 | 250 | 250 | 46 | 4.8 | 100 | 100 |  | B9A | P |  |
| 6 D 1 | 123000000 | D1 | 6 |  |  |  |  |  |  | D |  |  | B3G | D |  |
| 6D2 | 192310800 |  | 6 |  |  |  |  |  |  | D |  |  | B7G | RR |  |
| 6D3 | 812380000 |  | 6 |  |  |  |  |  |  | D |  |  | B7G | R |  |
| 6D5 | 026040310 |  | 6 |  | 40 | 300 |  | 31 | 2.1 | 100 |  | 2.1 | A08 | T |  |
| $6 \mathrm{D6}$ | 265113000 | G1 | 6 |  | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | Sm7 | P |  |
| $6 \mathrm{D7}$ | 265101300 |  | 6 |  | 3 | 250 | 100 | 2 | 12.2 | 100 | 100 |  | A08 | P |  |
| 6D8 | 027546310 | G1 | 6 | \{ | 3 | 150 250 | 100 | 4.2 3.5 |  | 100 150 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \}A08 | H |  |
| 6 DA 4 | **1 080230 |  | 6 |  |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| 6DA6 | 041230651 |  | 6 |  | 2 | 250 | 100 | 9 | 3.6 | 100 | 100 | 3.6 | B9A | P |  |
| 6DA7 | 604237411 |  | 6 | \{ | $\begin{gathered} 8 \\ 17.5 \end{gathered}$ | $\begin{aligned} & 250 \\ & 150 \end{aligned}$ |  | 9 40 | 2.6 5.7 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | B9A | TT |  |
| 6DB5 | 514234 1*6 |  | 6 |  | 9.6 | 200 | 125 | 46 | 8 | 100 | 100 |  | B9A | P |  |
| 6DB6 | 412365100 |  | 6 |  | 1 | 150 | 150 | 5.8 | 2 | 100 | 100 |  | B7G | P |  |
| $6 \mathrm{DC6}$ | 412365100 |  | 6 |  | 2.2 | 200 | 150 | 9.5 | 5.5 | 150 | 100 | 5 | B7G | P |  |
| 6DC8 | 541236891 |  | 6 |  | 2 | 250 | 100 | 9 | 3.8 | 100 | 100 |  | B9A | DDP |  |
| 60DHV1 | 145237864 |  | 6 | $\{$ | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ | 250 250 | 100 | 91 9 | 1.6 3.5 | 100 100 | $\begin{array}{r} 50 \\ 100 \end{array}$ |  | B9A | DTP |  |
| 6DE4 | 001080230 |  | 6 |  |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| 6DE6 | 412365100 |  | 6 |  | 1.1 | 150 | 125 | 16 | 8 | 100 | 100 | 8 | B7G | P |  |
| 6DE7 | 744236411 |  | 6 | \{ | $\begin{aligned} & 17.5 \\ & 11 \end{aligned}$ | 150 250 |  | 32 5.5 | $\begin{aligned} & 6.5 \\ & 2 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | B9A | TT |  |
| 6DG6 | 026540310 |  | 6 |  | 7.5 | 200 | 125 | 47 | 8 | 100 | 150 |  | A08 | P |  |
| 6DG7 | 041230651 |  | 6 |  | 20 | 250 | 100 | 11 | 4.4 | 100 | 100 | 5 | B9A | P |  |
| 6DJ8 | 641237411 |  | 6 |  | 1.3 | 90 |  | 15 | 12.5 | No Da | Avai | lable | B9A | TT |  |
| 6DK6 | 412365100 |  | 6 |  | 0.9 | 150 | 125 | 12 | 9.8 | 100 | 100 | 9.5 | B7G | P |  |
| 6DL4 | 414234464 |  | 6 |  |  | 150 |  | 12.5 | 14 | No Da | a Avail | lable | B9A | T |  |
| 6 DL 5 | 412365400 |  | 6 |  | 7.3 | 250 | 225 | 26 | 5.5 | 100 | 100 |  | B7G | P |  |
| $\begin{aligned} & \text { 6DM4 } \\ & \text { 6DN6 } \end{aligned}$ | $\begin{array}{lll} 001 & 080 & 230 \\ 021 & 040 & 350 \end{array}$ | A1 | $\begin{aligned} & 6 \\ & 6 \end{aligned}$ |  | 18 | 200 | 125 | $\begin{array}{r} 180 \\ 70 \end{array}$ | 9 | $\begin{aligned} & \text { HEC } \\ & 100 \end{aligned}$ | 100 | 35 | $\begin{aligned} & \mathrm{A} 08 \\ & \mathrm{~A} 08 \end{aligned}$ | $\stackrel{\mathrm{R}}{\mathrm{P}}$ |  |
| 6.DN7 | 461471230 |  | 6 |  | 9.5 | 250 |  | 34 | 7.4 | 100 |  |  | A08 | TT |  |
| 6DQ5 | 421541350 | A1 | 6 |  | 17.5 | 150 | 100 | 10.5 |  | No Da | a Avail | lable | A08 | P |  |
| 6DQ6 | 020540310 | A1 | 6 |  | 22.5 | 250 | 150 | 75 | 6.6 | 125 | 100 |  | A08 | P |  |
| 6DR4 | 123000000 | D1 | 6 |  |  |  |  |  |  | D |  |  | B3G | D |  |
| 6DR6 | *41 23* *51 |  | 6 |  | 23 | 200 | 175 | 45 | 6.6 | 100 | 100 |  | B9A | P |  |
| 6DR7 | 644237411 |  | 6 | $\{$ | 17.5 3 | 150 250 |  | 35 1.4 | 6.5 1.6 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | B9A | TT |  |
| 6DR8 | 541236891 |  | 6 |  |  | 12 | 12 | 45 |  | No Da | Avail | lable | B9A | DDP |  |
| 6DS5 | 412365100 |  | 6 |  | 8.5 | 250 | 200 | 29 | 5.8 | 100 | 100 |  | B7G | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \mathbf{l a}_{\mathrm{mA}} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO Valve tester |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\underset{m A}{\text { la }}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 6EV6 | 641237410 |  | 6.3 | 2 | 250 |  | 9.2 | 5.2 | 100 |  |  | B9A | TT |  |
| $\begin{aligned} & \text { 6EV7 } \\ & \text { 6EW6 } \end{aligned}$ | $\begin{array}{lll} 641 & 237 & 410 \\ 412 & 365 & 100 \end{array}$ |  | $\begin{aligned} & 6.3 \\ & 6 \end{aligned}$ | $\begin{aligned} & 2.0 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & 250 \\ & 150 \end{aligned}$ | 125 | $11^{9 \cdot 2}$ | $14^{5 \cdot 2}$ | 100 No | ta Avail | $\begin{gathered} 5.0 \\ \text { ilable } \end{gathered}$ | $\begin{array}{r} \mathrm{B9A} \\ e \mathrm{B7G} \end{array}$ | ${ }_{P}^{\text {T }}$ |  |
| 6EW7 | 744236411 |  | 6.3 \{ | $\begin{aligned} & 17.5 \\ & 11 \end{aligned}$ | 150 250 |  | $\begin{aligned} & 45 \\ & 5.5 \end{aligned}$ | 7.5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | \} B9A | TT |  |
| 6 EX 4 | 802309100 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | B9A | RR |  |
| 6EX6 | 021040350 | A1 | 6.3 |  | 200 | 150 | 67 | 7.7 | 100 | 100 |  | A08 | P |  |
| GEY6 | 026540310 |  | 6.3 | 17.5 | 250 | 250 | 44 | 4.4 | No D | ta Avail | lable | A08 | P |  |
| 6EZ5 | 026540310 |  | 6.3 | 20 | 250 | 250 | 43 | 4.1 | No D | ta Avail | lable | B8A | P |  |
| 6EZ8 | 144127464 |  | 6.3 | 1 | 150 |  | 4.2 | 4.2 | 100 |  | 4.2 | B9A | TT |  |
| 6 F 1 | 261514130 |  | 6 | 1.8 | 200 | 200 | 10 | 9 | 100 | 60 | 8 | B8A | P |  |
| 6 F 5 | 020600310 | G1 | 6 | 2 | 250 |  | 0.9 | 1.5 | 100 |  | 1.5 | A08 | T |  |
| 6F6 | 026540310 |  | 6 | 16.5 | 250 | 250 | 34 | 2.5 | 100 | 150 | 2.5 | A08 | P |  |
| 6F7 | 275641300 | G1 | 6 6 | 3 | 100 100 | 100 | 3.5 6.3 | 0.5 | 100 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $0.5$ | $\} \mathrm{Sm7}$ | TP |  |
| 6F7B | 275641300 | G1 | 6 , | 3 3 | 100 100 | 100 | 3.5 6.3 | 0.5 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $0.5$ | \}Ux7 | TP |  |
| 6F7E | 275641300 | G1 | 6 9 | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | 100 100 | 100 | 3.5 6.3 |  | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 0.5 \\ & 1.05 \end{aligned}$ | \}ux7 | TP |  |
| 6F7M | 023756410 | G1 | 6 | 3 | 100 100 | 100 | 3.5 6.3 | 0.5 1 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 0.5 \\ & 1 \end{aligned}$ | \}ux7 | TP |  |
| 6F8 | 027146310 | G1 | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| 6 F 10 | 021415360 |  | 6.3 | 2 | 300 | 150 | 10 | 9 | 100 | 100 |  | A08 | P |  |
| 6 F 11 | 260154130 |  | 6 | 1.8 | 250 | 100 | 4.4 | 2.2 | 100 | 100 | 2.2 | B8A | P |  |
| $\boldsymbol{\xi} 6 \mathrm{~F} 12$ | 412361500 |  | 6 | $\begin{aligned} & 2 \\ & 1.5 \end{aligned}$ | 250 |  | $\begin{array}{r} 10 \\ 4 \end{array}$ | $\begin{aligned} & 7.5 \\ & 6.4 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{aligned} & 150 \\ & 150 \end{aligned}$ | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ | $\}$ B7G | P |  |
| 6 F 13 | 260154130 |  | 6 | 1.8 | 200 | 200 | 10 | 9 | 150 | 150 | 8 | B8A | $P$ |  |
| 6F14 | 260154130 |  | 6 | 1.25 | 150 | 150 | 28 | 10.6 | 100 | 100 | 8 | B8A | $P$ |  |
| 6F15 | 261154130 |  | 6 | 2.5 | 250 | 100 | 7 | 2.3 | 100 | 100 | 2.3 | B8A | P |  |
| 6 F 16 | 261154130 |  | 6 | 2.5 | 250 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | B8A | P |  |
| 6F17 | 412361500 |  | 6 | 5 | 100 | 100 | 12.5 | 4.0 | 100 | 100 |  | B7G | P |  |
| 6F18 | 141230651 |  | 6 | 1.3 | 200 | 100 | 12 | 4.5 | 125 | 100 |  | B9A | P |  |
| 6 F 19 | 141230651 |  | 6 | 2 | 250 | 100 | 10 | 6 | 150 | 100 | 5 | B9A | P |  |
| 6 F 20 | 141230651 |  | 6.3 | 2 | 200 | 175 | 10 | 6 | 100 | 100 |  | B9A | P |  |
| 6 F 21 | 412361500 |  | 6 | 2.5 | 250 | 200 | 7.8 | 2.5 | 100 | 100 |  | B7G | P |  |
| 6 F 22 | 501236014 |  | 6 | 2 | 250 | 150 | 3 | 1.8 | 100 | 100 |  | B9A | P |  |
| 6 F 23 | 141231651 |  | 6.3 | 2 | 200 | 175 | 10 | 9.2 | 100 | 100 |  | B9A | P |  |
| 6F24 | 141230651 |  | 6.3 |  | 200 | 200 | 10 | 15 | No D | ta Avai | ilable | B9A | P |  |
| 6F25 | 141230651 |  | 6.3 |  | 200 | 200 | 11.5 | 12.5 | No D | ta Avai | lable | B9A | P |  |
| 6F26 | 141230651 |  | 6.3 | 2 | 250 | 100 | 10 | 6 | 100 | 100 | 6 | B9A | P |  |
| 6F28 | *41 234650 |  | 6.3 | 2.9 | 200 | 200 | 10 | 12.5 | 100 | 100 |  | B9A | P |  |
| 6F29 | 141230651 |  | 6.3 | 2 | 200 | 90 | 12 | 12.5 | No D | ta Avail | lable | B9a | P |  |
| 6 F 30 | 141230651 |  | 6.3 | 2.5 | 200 | 200 | 10 | 15.4 | No D | ta Avail | lable | B9A | $P$ |  |
| $6 \mathrm{F31}$ | 412365100 |  | 6.3 | 1 | 250 | 100 | 11 | 4.2 | 100 | 100 |  | B7G | P |  |
| $6 \mathrm{F32}$ | 412365100 |  | 6.3 |  | 200 | 125 | 8 | 4.6 | 100 | 100 |  | B7G | P |  |
| 6F32 | 216510030 | G1 | 6 | 4.5 | 200 | 200 | 5.1 | 3 | 100 | 150 | 3 | M08 | P |  |
| 6F32V | 412365000 |  | 6.3 | 3 | 150 | 150 | 7 | 4.3 | 100 | 100 |  | B7G | P |  |
| 6 F 33 | 412361500 |  | 6.3 | 2 | 125 | 125 | 5.2 | 3.5 | 100 | 100 | 3 | B7G | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | $\mathrm{mA} / \mathrm{V}$ | Anode Volts | Screen Volts | mA/V |  |  |  |
| 6F35 | 412365100 |  | 6.3 |  | 40 | 30 | 2.7 | 2.7 | No D | ta Ava | lable | B7G | P |  |
| 6 F 36 | 412365100 |  | 6.3 |  | 300 | 150 | 10 | 9 | No D | ata Ava | lable | B7G | P |  |
| 6 F 40 | 111231654 |  | 6.3 | 2 | 250 | 150 | 3 | 2 | 100 | 100 |  | B9A | P |  |
| 6 F 41 | 141230651 |  | 6.3 | 2.0 | 150 | 150 | 10 | 7.4 | 100 | 100 | 6 | B9A | P |  |
| 6F60 | 041230665 |  | 6.3 | 23 | 250 | 200 | 55 | 5 | 100 | 100 |  | B9A | P |  |
| $6 \mathrm{F80}$ | 541231600 |  | 6.3 |  | 200 | 200 | 36 | 10 | 100 | 100 |  | B9A | P |  |
| 6 FC 7 | 146234017 |  | 6.3 | 1.2 | 90 |  | 15 | 12 | No | ata Ava | ilable | B9A | TT |  |
| 6FD6 | 412365100 |  | 6.3 |  | 12 | 12 |  | 1.4 | No D | ata Ave | ilable | B7G | p |  |
| 6 FD 7 | 644237411 |  | $6.3\{$ | 17.5 | 150 250 |  | 45 6 | 7.5 1.6 | $100$ $100$ |  |  | \}B9A | TT |  |
| 6FD12 | 541236891 |  | 6.3 | 2 | 250 | 100 | 9 | 3.8 | 100 | 100 | . 6 | B9A | DDP |  |
| 6FE5 | 026540310 |  | 6.3 | 12.5 | 100 | 100 | 94 | 9.5 | No | ata Ava | ilable | e A08 | P |  |
| 6FG5 | 412365100 |  | 6.3 | 0.2 | 250 | 250 | 9 | 9.5 | No D | Data Ave | ilable | B7G | P |  |
| 6FG7 | 461237514 |  | $6.3\{$ | 1 | 125 125 | 125 | 13 11 | 7.5 6 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 7 \\ & 6 \end{aligned}$ | \} $\mathrm{B9A}$ | TP |  |
| 6F45 | 142360100 |  | 6.3 | 1 | 150 | 125 | 11 | 9 | 100 | 100 |  | B7G | T |  |
| 6 FH 6 | 020540310 | A1 | 6.3 | 22.5 | 250 | 150 | 75 | 6 | 100 | 100 |  | A08 | P |  |
| 6 FH 8 | 146234517 |  | $6.3\{$ | 1 | 100 250 | 250 | 7.9 7.3 | 5.5 4.4 | 100 100 | 60 100 | 5 | \} B9A | TP |  |
| $6 \mathrm{FJ8}$ | 210541380 | A1 | 6.3 | 22.5 | 250 | 150 | 75 | 6.6 | 100 | 100 |  | A08 | DP |  |
| $6 \mathrm{FLD12}$ | 541236891 |  | 19 | 2 | 250 | 100 | 9 | 3.8 | 100 | 100 |  | B9A | DDP |  |
| 6FM8 | 181239146 |  | 6.3 | 3 | 250 |  | 1 | 1.2 | 100 | 100 |  | B9A | DDT |  |
| 6 FN 5 | 521441350 |  | 6.3 | 22.5 | 200 | 150 | 100 | 10 | No D | ta Ava | ilable | B8A | P |  |
| 6FR7 | 644237411 |  | $6.3\{$ | 3 20 | 250 150 |  | 50 ${ }^{1.4}$ | 6.8 5.4 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | $\} \mathrm{B9A}$ | TT |  |
| 6FQ5 | 142360100 |  | 6.3 | 1.2 | 150 |  | 11 | 11 | No D | ta Ava | 1able | B7G | T |  |
| 6FQ7 | 741236410 |  | 6.3 | 8 | 250 |  | 9 | 2.6 | 100 |  |  | B9A | TT |  |
| 6FR7 | 644237411 |  | $6.3\{$ | 3 20 | 250 150 |  | 1.4 | 1.6 | 100 |  | $1.5$ | \}B9A | TT |  |
| 6FS5 | 412365100 |  | 6.3 | 0.2 | 300 | 150 | 50 9 | $10^{7.2}$ | No D | ta Ava | lable | B7G | P |  |
| 6FV6 | 402365100 |  | 6.3 | 1 | 150 | 75 | 10 | 8 | 100 | 80 | 8 | B9A | P |  |
| 6FV8 | 461237514 |  | 6 \{ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | 150 150 | 125 | 14 | $\begin{aligned} & 8 \\ & 6.5 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 8 \\ & 6.5 \end{aligned}$ | $\} \mathrm{B9A}$ | TP |  |
| $6 \mathrm{~F}^{45}$ | 421060350 |  | 6.3 | 22.5 | 250 | 150 | 65 | 13.3 | 100 | 100 | - | A08 | P |  |
| 6FW8 | 741236410 |  | 6.3 | 1.2 | 100 |  | 15 | 13 | No D | ta Ava | ilable | - B9A | TI |  |
| 6 FX 4 | 902309100 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | B7G | RR |  |
| 6FY5 | 142360100 |  | 6.3 | 1 | 150 |  | 11 | 13 | No D | ata Ava | ilable | B9A | T |  |
| 6 FY8 | 455237461 |  | 6 \% | $\begin{array}{r} 1.5 \\ 13.5 \end{array}$ | 150 150 | 125 | 2.5 50 | 2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \} B9A | TP |  |
| $6 \mathrm{G6}$ | 026540310 |  | 6 | 9 | 200 | 175 | 15 | 2.3 | 100 | 100 | 2.3 | A08 | P |  |
| 6G7 | 026985310 | G1 | 6 | 3 | 250 | 125 | 10 | 1.3 | 100 | 100 | 1.3 | A08 | DDP |  |
| $6 \mathrm{G8}$ | 026985310 | G1 | 6 | 3 | 250 | 125 | 9 | 1.1 | 100 | 100 | 1.1 | A08 | DDP |  |
| 6GA4 | 026040310 |  | 6.3 | 18.5 | 250 |  | 50 | 7 | 100 |  |  | A08 | T |  |
| 6GA8 | 641237410 |  | 6.3 |  | 250 |  | 8 |  | 100 |  |  | B9A | TT |  |
| 6GA8 | 426040310 |  | 6.3 | 18.5 | 250 |  | 50 | 7 | 100 |  |  | A08 | T |  |
| 6GB3A | 020540310 | A1 | 6.3 | 7.7 | 100 | 100 | 100 | 14 | No D | ata Ave | ilable | e A08 | P |  |
| 6GB6 | 020540310 | A1 | 6.3 | 22.5 | 250 | 150 | 6.5 | 6 | 100 | 100 |  | A08 | P |  |
| 6GB7 | 020540310 | A | 6.3 | 7.7 | 100 | 100 | 100 | 14 | No D | ata Ava | ilable | e A 08 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | data for avo VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 6GB9 | 020540310 | A1 | 6.3 | 22.5 | 250 | 150 | 75 | 6.6 | 125 | 100 |  | A08 | P |  |
| 6GC5 | 514234156 |  | 6.3 | 7.5 | 100 | 100 | 50 | 8 | 100 | 100 |  | B9D | P |  |
| 6GC6 | 021540350 | A1 | 6.3 | 22.5 | 250 | 150 | 75 | 6.6 | 100 | 100 |  | A08 | P |  |
| 6GE8 | 514236147 |  | 6.3 | $\left\{\begin{array}{r}21 \\ 2\end{array}\right.$ | 150 |  | 35 | 3.2 | 100 | 60 |  | \} 99 A | TP |  |
|  |  |  |  | $\left\{\begin{array}{l}2 \\ 3\end{array}\right.$ | 150 | 150 | 5.5 | 3.2 | 100 | 100 |  |  | TP |  |
| 6GF7 | 141237064 |  | 6.3 | $\left\{\begin{array}{r}3 \\ 20\end{array}\right.$ | $\begin{aligned} & 250 \\ & 150 \end{aligned}$ |  | ${ }_{50} 1.4$ | $\begin{aligned} & 1.6 \\ & 7.2 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | \} $\mathrm{B9D}$ | TT |  |
| 6GG6 | 802300190 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | F8 | RR |  |
| 6GH8 | 645237114 |  | 6 |  | 150 | 125 | 13.5 | 8.5 | 100 |  |  | B9A | TP |  |
| $6 \mathrm{GJ5}$ | $5412345^{* *}$ | A1 | 6.3 | 22.5 | 250 | 150 | 70 | 7.1 | 100 | 100 |  | B9D | P |  |
| 6GJ8 | 645237114 |  | 6.3 |  | 150 | 125 | 13.5 | 8.5 | 100 | 60 100 |  | \} B9A | TP |  |
| 6 GK 5 | 142360100 |  | 6.3 | 1 | 150 |  | 11.5 | 15 | No D | ta Avai | lable | B7G | T |  |
| 6GK6 | 141230651 |  | 6.3 | 7.3 | 250 | 250 | 48 | 11.3 | 100 | 100 |  | B9A | P |  |
| 6GK17 | 001080230 |  | 6.3 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| 6GM5 | 500234106 412365100 |  | 6.3 | 10 | 300 | 300 | 60 | 10.2 | No D | ta Avai | lable | B9A | ${ }_{p}^{\text {P }}$ |  |
| 6GN6 | 412365800 |  | 6.3 6.3 | 56 68 | 150 | 100 | 14 11 | 13 4.4 | No 100 | 100 | lable | B7G | $\stackrel{\mathrm{P}}{\mathrm{DP}}$ |  |
| 6GN8 | 146231457 |  | 6.3 | $\left\{\begin{array}{l}2 \\ 3\end{array}\right.$ |  | 150 | 2 25 |  | 100 100 | $60$ |  | \}B9A | TP |  |
| 6GQ7 $6 G S 8$ | $1+*$ 239 <br> 156 181 |  | 6.3 6.3 |  | 100 | 75 | 5 5 2 | 1.2 | ${ }_{1}^{\mathrm{D}} 100$ | 75 |  | B9A | $\mathrm{PDP}_{\mathrm{pm}}$ |  |
| $6 \mathrm{GT5}$ | 541234 5*6 |  | 6.3 | 42 | 250 | 150 | 70 | 7.1 | 100 | 100 |  | B9D | P |  |
| 6GU5 | 412365100 |  | 6.3 | 0.4 | 150 | 150 | 9 | 15 | 100 | 100 |  | B7G | P |  |
| 6GV7 | 657231414 |  | 6.3 | $\{1.5$ | 100 150 | 150 | 14 11 |  | 100 100 | 60 100 | 5 9 | $\}$ В9A. | TP |  |
| 6GV8 | 641237514 |  | 6.3 | $\left\{\begin{array}{c}0.6\end{array}\right.$ | 100 |  | 5 | 6.5 | 100 | 60 |  | B9A | TP |  |
|  | -641237 |  | 6.3 | $\stackrel{15}{1.7}$ | 200 250 | 175 | 41.2 | 7.5 1.6 | 100 100 | 100 60 |  |  |  |  |
| 6GW8 | 415237146 |  | 6.3 | $\left\{\begin{array}{l}1.7 \\ 7\end{array}\right.$ | 250 | 250 | 36 |  | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | $\} \mathrm{B9A}$ | TP |  |
| 6GX6 | 412365100 |  | 6.3 |  | 150 | 100 | 3.7 | 3.7 | 100 | 100 |  | B7G | P |  |
| 6GY6 | 412365100 |  | 6.3 |  | 150 | 100 | 3.7 | 3.7 | 100 | 100 |  | B7G | P |  |
| 6GY8 | 414236117 |  | 6.3 |  | 150 |  | 4.5 | 4.6 | 100 |  | 4 | B9A | TT |  |
| 6 H 1 | 412360500 |  | 6 | 1.8 | 250 | 100 |  | 2.1 | 100 | 100 | 2 | B7G | H |  |
| 6H4 | 020800310 |  | 6 |  |  |  |  |  | D |  |  | A08 | D |  |
| 6H6 | 029180310 |  | 6 |  |  |  |  |  | D |  | 4 | A08 | DD |  |
| 6H7C | 026447310 |  | 6.3 | 5 | 250 |  | 3 | 1.6 | 100 |  |  | A08 | TT |  |
| 6H7G | 126447310 |  | 6.3 |  | 300 |  | 35 | 3.2 | 100 |  |  | A08 | TT |  |
| 6H8C | 461471230 |  | 6.3 | 8 | 250 |  | 9 | 3 | 100 |  |  | A08 | TT |  |
| 6H8G | 026985310 | G1 | 6 | 2 | 250 | 125 | 8.5 | 2.4 | 100 | 100 | 2.4 | A08 | DDP |  |
| 6H8MG | 026985310 | G1 | 6 | 2 | 250 | 125 | 6 | 1.8 | 100 | 100 | 1.8 | A08 | DDP |  |
| $6 \mathrm{H9C}$ | 461471230 |  | 6.3 | 2 | 250 |  | 2.2 | 1.6 | 100 |  |  | A08 | TT |  |
| $6 \mathrm{H10C}$ | 064471230 |  | 6.3 | 2 | 250 |  | 2 | 1.3 | 100 |  | 1.3 | A08 | TT |  |
| 6 H 13 C | 461471230 |  | 6.3 | 30 | 90 |  | 80 | 5 | No D | a Avail | lable | A08 | TT |  |
| 6H31 | 412365100 |  | 6.3 |  | 250 | 100 | 3 |  | 100 | 100 |  | B7G | H |  |
| 6HA5 $6 \mathrm{HB6}$ | 412360100 141230651 |  | 6.3 6.3 | 31 | 150 250 | 125 | 11.5 | 14.5 | No D | ta Avai | lable | B7G | ${ }_{P}^{\text {P }}$ |  |





| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. <br> Grid <br> Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \text { mA } \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |
| $6 \mathrm{S4}$ | *1* $234 * * 6$ |  | 6 | 8 | 250 |  | 26 | 4.5 | 100 |  | 4.5 | B9A | T |
| 656 | 120600350 | G1 | 6 | 2 | 250 | 100 | 13 | 4 | 100 | 100 | 4 | A08 | P |
| 6S7 | 026510310 | G1 | 6 | 3 | 250 | 100 | 8.5 | 1.75 | 100 | 100 | 1.7 | A08 | P |
| $6 \mathrm{S8}$ | $\dagger 18916230$ | G1 | 6 | 2 | 250 |  | 0.9 | 1.1 | 200 |  | 1.1 | A08 | DDDT |
| 6SA7 | 126641310 |  | 6 | 3.6 | 100 |  | 12 | 4.3 | 100 |  | 1.4 | A08 | H |
| 6SA7G | 026641310 |  | 6 | 3.6 | 100 |  | 12 | 4.3 | 100 |  | 1.4 | A08 | H |
| 6SB7Y | 126541310 |  | 6 | 1 | 250 | 100 | 3.8 |  | 100 | 100 |  | A08 | H |
| 6SC5 | 026400310 |  | 6 | 4 | 250 |  | 7.5 | 2.7 | 100 |  | 2.7 | A08 | T |
| 6SC7 | 074461230 |  | 6 | 2 | 250 |  | 2 | 1.3 | 200 |  | 1.3 | A08 | TT |
| 6SD7 | 021415360 |  | 6 | 2 | 250 | 100 | 6 | 3.6 | 100 | 100 | 3.6 | A08 | P |
| 6SE7 | 021415360 |  | 6 | 1.5 | 250 | 100 | 4.5 | 3.4 | 100 | 100 | 3.4 | A08 | P |
| 6SF5 | 014060320 |  | 6 | 2 | 250 |  | 0.9 | 1.5 | 200 |  | 1.5 | A08 | T |
| 6SF7 | 041581360 |  | 6 | 1 | 250 | 100 | 12.4 | 2.05 | 100 | 100 | 2 | A08 | DP |
| 6SG7 | 021415360 |  | 6 | 1 | 250 | 125 | 11.8 | 4.7 | 100 | 100 | 4.7 | A08 | P |
| 6SH7 | 021415360 |  | 6 | 1 | 250 | 150 | 10.8 | 4.9 | 100 | 150 | 4.9 | A08 | P |
| 6SJ7 | 021415360 |  | 6 | 3 | 250 | 100 | 3 | 1.65 | 100 | 100 | 1.6 | A08 | P |
| 6SJ8EG | 027546310 | G1 | 6 | 3 | 150 |  | 5 | 1.6 | 100 | 60 |  | A08 | TH |
|  |  |  |  | 3 | 150 150 | 100 | ${ }_{5} .3$ | 1.2 | 100 100 | 100 60 |  |  |  |
| 6SJ8G | 027546310 | G1 | 6 | 3 | 250 | 100 | 1.3 | 1.2 | 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | 1.2 | A08 | TH |
| 6SK7 | 021415360 |  | 6 | 3 | 250 | 100 | 9.2 | 2 | 100 | 100 | 2 | A08 | P |
| 6SL7 | 461471230 |  | 6 | 2 | 250 |  | 2.3 | 1.6 | 150 |  | 1.6 | A08 | TT |
| 6SN7 | 461471230 |  | 6 | 8 | 250 |  | 9 | 2.9 | 100 |  | 2.6 | A08 | TT |
| 6SQ7 | 041896230 |  | 6 | 2 | 250 |  | 0.9 | 1.1 | 200 |  | 1.1 | A08 | DDT |
| 6SR7 | 041986230 |  | 6 | 9 | 250 |  | 9.5 | 1.9 | 100 |  | 1.9 | A08 | DDT |
| 6SS7 | 021415360 |  | 6 | 3 | 250 | 100 | 9 | 1.85 | 100 | 100 | 1.8 | A08 | P |
| 6ST7 | 041896230 |  | 6 | 9 | 250 |  | 9.5 | 1.9 | 100 |  | 1.9 | A08 | DDT |
| 6SU7 | 471461230 |  | 6 | 2 | 250 |  | 2.3 | 1.6 | 200 |  | 1.6 | A08 | TT |
| 6SV7 | 041586230 |  | 6 | 1 | 250 | 150 | 7.5 | 3.4 | 100 | 150 | 3.5 | A08 | DP |
| 6SZ7 | 041986230 |  | 6 | 3 | 250 |  | 1 | 1.2 | 200 |  | 1.2 | A08 | DDT |
| 6T | 205413000 | A1 | 6 | 12.5 | 250 | 250 | 4.5 | 4.1 | 100 | 150 | 4 | Ux6 | P |
| $6 \mathrm{T1}$ | 642314600 |  | 6 |  | 75 |  | 16 | 6.6 | 80 |  |  | B7G | T |
| $6 T 4$ | 642314600 |  | 6 | 3 | 80 |  | 18 | 7 | 80 |  | 7 | B7G | T |
| 6 T 6 | 026500310 | G1 | 6 | 1 | 250 | 100 | 10 | 5.5 | 100 | 100 | 5.5 | A08 | P |
| 6 T 7 | 026980310 | G1 | 6 | 3 | 250 |  | 1.2 | 1 | 100 |  | 1 | A08 | DDT |
| $6 \mathrm{T8}$ | +91 238146 |  | 6 | 3 | 250 |  | 1 | 1.2 | 150 |  | 1.3 | B9A | DDDT |
| 6T8A | t91 238146 |  | 6 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.3 | B9A | DDDT |
| 6T24 | 647230114 |  | 6 | 2 | 150 |  | 17 | 7 | 100 |  |  | B9A | TT |
| 6T26 | 641237410 |  | 6 | 2.3 | 250 |  | 10 | 6 | 100 |  |  | B9A | TT |
| 6 T 27 | 641237410 |  | 6 |  | 150 |  | 10 | 6.8 | 100 |  |  | B9A | TT |
|  |  | G1 |  | 2 | 100 |  | 3.7 |  | 100 | 60 |  | \} AO 8 | TH |
| 6TE8 | 427546310 | G1 |  | 2 | 250 | 100 | 3.5 |  | 100 | 100 |  |  | In |
| 6TE9 | 651237440 |  | 6 | 2.5 | 100 200 | 90 | $\begin{aligned} & 4 \\ & 3 \end{aligned}$ | $\begin{aligned} & 2 \\ & 0.7 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{aligned} & 60 \\ & 90 \end{aligned}$ |  | $\}$ B9A | TH |
| 6TH8 | 027546310 | G1 | 6 | ${ }_{7}^{7.5}$ | 150 200 | 75 | 6 3.5 | 1.1 | 150 100 | 60 75 |  | \} A08 | TH |
| 6TP | 205413000 | A1 | 6 | 14.5 | 250 | 250 | 12 | 6 | 100 | 150 | 6 | Ux6 | P |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & l_{a} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |  |
| 6Z31 | 802309100 |  | 6.3 |  |  |  | 30 |  | REC |  | 15 mA | B7G | RR |  |
| 6240 | 000230008 | C | 6.3 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |
| $6 \mathrm{ZDH3A}$ | 264813000 |  | 6 | 2 | 250 |  | 1.5 | 1.5 | 100 |  | 1.2 | UX6 | DT |  |
| 6ZP1 | 265413000 |  | 6 | 9 | 200 | 200 | 15 | 1.7 | 100 | 100 |  | UX6 | P |  |
| 6ZY5 | 028090310 |  | 6 |  |  |  | 15 |  | REC |  | 15 mA | A08 | RR |  |
| 7A2 | 045231600 |  | 4 | 17 | 250 | 250 | 40 | 3.2 | 100 | 150 | 2.3 | B7 | P |  |
| 7A3 | 045231600 |  | 4 | 6 | 250 | 250 | 32 | 10 | 100 | 100 | 10 | B7 | P |  |
| 7A4 | $2600 * 4130$ |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | B8B | T |  |
| 7A5 | 265004130 |  | 6 | 9 | 150 | 125 | 44 | 6 | 100 | 90 | 6 | B8B | P |  |
| 7A6 | 219008130 |  | 6 |  |  |  | 5 |  | D |  |  | B8B | RR |  |
| 7A7 | 265104130 |  | 6 | 3 | 250 | 100 | 9.2 | 2 | 100 | 100 | 2 | B8B | P |  |
| 7A8 | 266451130 |  | 6 | 1 | 250 | 100 | 14 | 1.4 | 100 | 100 | 1.6 | B8B | 0 |  |
| 7AB7 | 526141310 |  | 6 | 2 | 250 | 100 | 4 | 1.8 | 100 | 100 | 1.2 | B8B | P |  |
| 7AC7 | 412365100 |  | 6 |  | 300 | 150 | 10 | 9 | 100 | 100 | 8 | B7G | P |  |
| 7AD7 | 265104130 |  | 6 | 2.3 | 300 | 150 | 28 | 9.5 | 100 | 150 | 9 | B8B | P |  |
| 7AF7 | 217446130 |  | 6 | 9 | 250 |  | 9 | 2.1 | 100 |  | 2.1 | B8B | TT |  |
| 7AG7 | 265114130 |  | 6 | 2 | 250 | 250 | 6 | 4.2 | 200 | 200 | 4.2 | B8B | P |  |
| 7AH7 | 265114130 |  | 6 | 2 | 250 | 250 | 6.8 | 3.3 | 100 | 150 | 3.3 | B8B | P |  |
| 7AJ7 | 265104130 |  | 6 | 3 | 250 | 100 | 2.2 | 1.5 | 100 | 100 | 1.5 | B8B | P |  |
| 7AK7 | 265104130 |  | 6 | 0 | 150 | 90 | 40 | 6.5 | 100 | 100 | 6.0 | B8B | P |  |
| 7AN7 | 147234116 |  | 7.5 | 1. | 90 |  | 12 | 6 | 100 |  | 6 | B9A | TT |  |
| 7AU7 | 741226413 |  | 3.5 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2.2 | B9A | TT |  |
| $7 \mathrm{B4}$ | 260004130 |  | 6 | 2 | 250 |  | 0.9 | 1.5 | 200 |  | 1.5 | B8B | T |  |
| 7B5 | 265004130 |  | 6 | 18 | 250 | 250 | 32 | 2.3 | 100 | 150 | 2.3 | B8B | P |  |
| 7B6 | 264 *98 130 |  | 6 | 2 | 250 |  | 0.9 | 1.1 | 200 |  | 1.1 | B8B | DDT |  |
| $7 \mathrm{B7}$ | 265104130 |  | 6 | 3 | 250 | 100 | 8.5 | 1.7 | 100 | 100 | 1.7 | B8B | P |  |
| 7B8 | 265454130 |  | 6 | 2 | 250 | 100 |  | 1.1 | 100 | 100 | 1.1 | B8B | H |  |
| 7 C 4 | 2*0 800130 |  | 6 |  |  |  | 5 |  | D |  |  | A08 | R |  |
| 7 C 5 | 265004130 |  | 6 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4.1 | B8B | P |  |
| 7C5LT | 265004130 |  | 6 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4.1 | B8B | P |  |
| 7c6 | 264198130 |  | 6 | 1 | 250 |  | 1.3 | 1 | 250 |  | 1 | B8B | DDT |  |
| $7 \mathrm{C7}$ | 265114130 |  | 6 | 3 | 250 | 100 | 2 | 1.3 | 100 | 100 | 1.3 | B8B | P |  |
| 7 CE 40 | 146234117 |  | 7 | 1.5 | 90 |  | 12 | 6 | 80 |  | 6 | B9A | TT |  |
| 7D3 | 045231600 |  | 40 | 20 | 150 | 125 | 36 | 2.4 | 100 | 100 | 3.8 | B7 | P |  |
| 7 D 5 | 045231600 |  | 13 | 16.5 | 250 | 250 | 34 | 2.3 | 100 | 150 | 2.3 | B7 | P |  |
| 7D6 | 045231600 |  | 40 | 6 | 250 | 250 | 32 | 10 | 100 | 100 | 10 | B7 | P |  |
| 7 D 7 | 276454130 |  | 6 \{ | 3 | 150 250 | 100 | 3 1.3 | 0.2 | 100 100 | 60 100 |  | B8B | TH |  |
| 7D8 | 045231600 |  | 13 | 6 | 250 | 250 | 32 | 10 | 100 | 100 | 10 | B7 | P |  |
| 7D9 | 412360500 |  | 6 | 13.5 | 250 | 250 | 16 | 2.6 | 100 | 150 | 2.6 | B7G | P |  |
| 709 | 045231600 |  | 13 | 25 | 250 | 250 | 32 | 1.8 | 100 | 150 | 1.8 | B7 | P |  |
| 7010 | *41 230651 |  | 6 | 4.5 | 250 | 250 | 40 | 11 | 100 | 150 | 9 | B8A | P |  |
| 7 D 11 | 026540310 641237411 |  | $6.3$ |  | $\begin{array}{r} 350 \\ 90 \end{array}$ | 250 | $\begin{aligned} & 95 \\ & 15 \end{aligned}$ | ${ }_{12.5}^{9}$ | 100 <br> No Data | ${ }_{\text {a Avail }}^{100}$ |  | A08 | $\stackrel{\mathrm{P}}{\mathrm{TT}}$ |  |
| 7058 | 6426141630 |  | 7 6 | 1.3 | 200 |  | 5.5 | ${ }^{12.5}$ | No Data 150 |  | 3 | B8B | TT |  |
| 7E6 | $264 * 98130$ |  | 6 | 8 | 250 |  | 9.5 | 1.9 | 100 |  | 1.9 | B8B | DDT |  |
| 7 E 7 | 269854130 |  | 6 | 3 | 250 | 100 | 7.5 | 1.3 | 100 | 100 | 1.3 | B8B | DDP |  |
| 7ED7 | 141230651 |  | 7.3 | 1.9 | 200 | 175 | 10 |  | 100 | 100 |  | B9A | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| TEK7 | 146234117 |  | 7 | 1.2 | 200 |  | 15 | 4 | 100 |  | 4 | B9A | TT |  |
| TES8 | 641237410 |  | 7 | 1.2 | 90 |  | 15 | 12.5 | No Da | a Avai | lable | B9A | TT |  |
| TEY6 | 026540310 |  | 7.2 | 17.5 | 250 | 250 | 44 | 4.4 | 100 | 100 |  | A08 | P |  |
| 7F7 | 217446130 |  | 6 | 2 | 250 |  | 2.3 | 1.6 | 200 |  | 1.6 | B8B | TT |  |
| 7F8 | 427116340 |  | 6 | 3 | 250 |  | 6 | 3.3 | 200 |  | 3.3 | B8B | TT |  |
| 7 F 16 | 261154130 |  | 6 | 2.5 | 250 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | B8A | P |  |
| 7 FC 7 | 146234117 |  | 7.2 | 1.2 | 90 |  | 15 | 12 | No Da | Avai | lable | B9A | TT |  |
| 7G7 | 265114130 |  | 6 | 2 | 250 | 100 | 6 | 4.5 | 100 | 100 | 4.6 | B8B | P |  |
| 7G8 | 265441730 |  | 6 | 2.5 | 250 | 100 | 4.5 | 2.1 | 100 | 100 | 2.1 | B8B | PP |  |
| 7GH8 | 576234141 |  |  | $\begin{aligned} & 3 \\ & 1.2 \end{aligned}$ | 100 200 | 150 | 14 10 |  | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | $\}$ B9A | TH |  |
| 7GV7 | 657231414 |  | 7.4 | 3 | 100 250 | 250 | 14 10 | 11.5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | $\} \mathrm{B9A}$ | TP |  |
| 7H6 | 265114130 |  | 6 | 2.5 | 250 | 150 | 9.5 | 3.5 | 100 | 150 | 3.5 | B8B | P |  |
| 7 H 7 | 265114130 |  | 6 | 2 | 250 | 150 | 10 | 4.2 | 100 | 150 | 4.2 | B8B | P |  |
| 7HG8 | 146234117 |  | 7.9 | 3 | 100 |  | 14 |  | 100 |  |  | B9A | TT |  |
| $7 \mathrm{J7}$ | 276454130 |  |  | 3 3 | $\begin{aligned} & 150 \\ & 250 \end{aligned}$ | 100 | $\begin{aligned} & 6.6 \\ & 1.4 \end{aligned}$ | 1.4 | $\begin{aligned} & 150 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $1.4$ | $\}$ B8B | TH |  |
| 7K7 | 216498130 |  | 6 | 2 | 250 |  | 2.3 | 1.6 | 200 |  | 1.6 | B8B | DDT |  |
| 7L7 | 265104130 |  | 6 | 1.5 | 250 | 100 | 4.5 | 3.1 | 100 | 100 | 3.1 | B8B | P |  |
| 7MP18 | 412365400 |  | 7.5 | 5 | 200 | 175 | 35 | 11 | No Da | a Avai | lable | B9A | P |  |
| 7N7 | 217446130 |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | B8B | TT |  |
| 7Q7 | 266414130 |  | 6 | 2 | 100 |  | 15 | 6 | 100 |  | 4.5 | B8B | H |  |
| 7R1 | 280300000 |  | 7.5 |  |  |  | 60 |  | REC |  | 20mA | UX4 | R |  |
| 7R7 | 269854130 |  | 6 | 1 | 250 | 100 | 6.2 | 3.4 | 100 | 100 | 3.4 | B8B | DDP |  |
| 7 S 7 | 276454130 |  |  | 1 | 100 | 100 | 4.8 4 | 1.4 2 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 1.8 \\ 2.2 \end{array}\right\}$ | \} $88 B$ | TH |  |
| 7 T 7 | 265104130 |  | 6 | 1 | 250 | 150 | 10.8 | 4.9 | 100 | 150 | 4.9 | B8B | P |  |
| 7V7 | 265114130 |  | 6 | 2 | 300 | 150 | 10 | 5.8 | 100 | 150 | 5.8 | B8B | P |  |
| 7W7 | 265114130 |  | 6 | 2 | 300 | 150 | 10 | 5.8 | 100 | 150 | 5.8 | B8B | P |  |
| 7X6 | 218009130 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | B8B | RR |  |
| 7X7 | 264189130 |  | 6 | 1 | 250 |  | 1.9 | 1.5 | 250 |  | 1.5 | B8B | DDT |  |
| 7Y4 | 208009130 |  | 6 |  |  |  | 30 |  | REC |  | 30 nA | B8B | RR |  |
| 7Z4 | 209008130 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | B8B | RR |  |
| 8A1 | 542310000 | A1 | 4 | 1.5 | 200 | 75 | 3.5 | 4 | 100 | 75 | 4 | B5 | P |  |
| 8 A 1 | 041231500 | A1 | 4 | 1.5 | 200 | 75 | 3.5 | 4 | 100 | 75 | 4 | B7 | P |  |
| 8A2 | 542310000 | A1 | 4 | 2.1 | 200 | 100 | 3 | 2.4 | 100 | 100 | 2.4 | B5 | P |  |
| 8A8 | 645237114 |  |  | $\begin{aligned} & 2 \\ & 2 \end{aligned}$ | 100 200 | 175 | 14 10 | 5. | 100 100 | 60 150 |  | \} 9 AA | TP |  |
| 8AU8 | 146231457 |  | 8.5 | $\begin{aligned} & 1.25 \\ & 1.5 \end{aligned}$ | 150 200 | 125 | ${ }^{8.5}$ | 4.9 7 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 5 \\ & 7 \end{aligned}$ | \} 89 A | TP |  |
| 8AU8A | 146231457 |  | 8.5 | 1.2 1.5 | 150 200 200 | 125 | 8.5 16 | 4.9 7 | 100 100 | 60 100 | $\left.\begin{array}{l}5 \\ 7\end{array}\right\}$ | \} B9A | TP |  |
| 8AW8 | 146231457 |  |  | 2 3 | 200 | 150 | 4 13 | 4 9 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 4 \\ 9 \end{array}\right\}$ | \} 9 A | TP |  |
| 8B8 | 414237516 |  |  | $\begin{array}{r} 1 \\ 16 \end{array}$ | 100 200 | 200 | 1 35 | 1.9 6.4 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $1.9$ | $\} \mathrm{B9A}$ | TP |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & l_{\mathrm{a}} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen | $\mathrm{ma} / \mathrm{V}$ |  |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grld Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & l_{a} \\ & m A \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| 10 | 264300000 |  | 7.5 | 32 | 250 |  | 16 | 1.55 | 100 |  | 1.5 | UX4 | T |  |
| 10BM8 | 414237516 |  |  | $11.5$ | 100 150 | 150 | 3 41 | 2.2 7.5 | 100 100 | 60 100 |  | \} B9A | TP |  |
| 10BQ5 | 041230605 |  | 10 | 7.3 | 250 | 250 | 48 | $11^{7.5}$ | No D | ta Avai | lable | B9A | P |  |
| 10C1 | 276454130 |  |  | $\left\{\begin{array}{l}3.3 \\ 2.5\end{array}\right.$ | 100 200 | 100 | 6 8 | 3 2.5 | 100 100 | 60 100 | 3 2.5 | \} B8A | TH |  |
| 10C2 | 276454130 |  |  | $\left\{\begin{array}{l}3.3 \\ 1.5\end{array}\right.$ | 100 175 | 100 | 6 3 | 3 5 | 100 100 | 60 100 | 3 5 | \} 88 A | TP |  |
| 1008 | 641237541 |  | 10.5 | $\left\{\begin{array}{l}2.7 \\ 1.5\end{array}\right.$ | 250 150 | 125 | 7.3 11.5 |  | 100 125 |  | 5 8 | \}B9A | TP |  |
| 10 C 14 | 541237164 |  | 19 | \{ 2.2 | 100 | 100 | 13.7 5 | 3.7 2.3 | 100 100 | 60 100 |  | B9A | TP |  |
| $\begin{aligned} & \text { 10CW5 } \\ & 10 \mathrm{D} 1 \end{aligned}$ | $\begin{array}{lll} * 41 & 23 * & 6 * 5 \\ 892 & 310000 \end{array}$ |  | $\begin{aligned} & 10 \\ & 13 \end{aligned}$ | 12.5 | 150 | 150 | 70 5 | 10 | ${ }_{\text {No }}$ D | ta Ava | lable | B9 ${ }^{\text {B9A }}$ | RR |  |
| 10D2 | 192310800 |  | 19 |  |  |  | 5 |  | D |  |  | B7G | RR |  |
| 10DA7 | 614237411 |  | 10.5 | $\left\{\begin{array}{c}8 \\ 17.5\end{array}\right.$ | 250 150 |  | 9 40 |  | 100 100 |  |  | \}B9G | TT |  |
| 10DA8 | 604237411 |  | 10.5 | 8 | 250 |  | 9 | 2.6 | 100 |  |  | B9A | TT |  |
| 10DE7 | 744236411 |  | 10 | $\left\{\begin{array}{l}17.5 \\ 11\end{array}\right.$ | 150 |  |  | 6.5 2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | B9A | TT |  |
| 10DR7 | 744236411 |  | 9.7 | $\left\{\begin{array}{c}17.5 \\ 3\end{array}\right.$ | 150 |  | 35 1.4 |  | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | B9A | $T \mathrm{~T}$ |  |
| 10EB8 | 146231457 |  | 10.5 | \{ 2 | $\begin{aligned} & 250 \\ & 200 \end{aligned}$ | 125 | $\begin{array}{r} 2 \\ 25 \end{array}$ |  | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  | \}B9A | TP |  |
| 10EG7 | 461471230 |  | 9.7 | $\left\{\begin{array}{l}11 \\ 17.5\end{array}\right.$ | $\begin{aligned} & 350 \\ & 150 \end{aligned}$ |  | ${ }_{45}^{5.5}$ | $\begin{aligned} & 2 \\ & 7.5 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | $\}_{\text {A08 }}$ | TT |  |
| 10EM7 | 461471230 |  | 9.7 | $\left\{\begin{array}{r}20 \\ 3\end{array}\right.$ | 150 250 |  | 50 1.4 | 7.2 1.6 | 100 100 |  |  | \}B9A | TT |  |
| 10ER5 | 142360100 |  | 10.8 | 1.2 | 200 |  | $10^{\circ}$ | 10.5 | No D | ta Avai | lable | B7G | T |  |
| 10EW7 | 744236411 |  | 9.7 | $\left\{\begin{array}{l}17.5 \\ 11 \\ 1.7\end{array}\right.$ | 150 250 |  | 45 5.5 | 7.5 2.0 | 100 100 |  |  | \}B9a | TT |  |
| 10DX8 | 461237145 |  | 10 | 1.7 2.1 |  | 175 |  | $\begin{array}{r} 4 \\ 11 \end{array}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  |  | TP |  |
| 10 Fl | 261514130 |  | 22 | 1.8 | 200 | 200 | 10 | 9 | 100 | 100 |  | B8A | P |  |
| 10F3 | 260154130 |  | 22 | 2.3 | 200 | 200 | 6 | 6.5 | 100 | 150 | 7 | B8A | P |  |
| 10F9 | 260154130 |  | 13 | 2.5 | 200 | 100 | 7 | 2.3 | 100 | 100 | 2.3 | B8A | P |  |
| 10 F 18 | 141230651 |  | 13 | 1.3 | 200 | 100 | 12 | 4.5 | 100 | 100 |  | B9A | P |  |
| 10 FD 7 | 644237411 |  | 9.7 | 17.5 | $\begin{aligned} & 250 \\ & 150 \end{aligned}$ |  | $\begin{array}{r} 6 \\ 45 \end{array}$ | $\begin{aligned} & 1.6 \\ & 7.5 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | $\} \mathrm{B9A}$ | TT |  |
| 10 FD 12 | 541236891 |  | 19 | 1.5 | 200 | 200 | 11 | 4.5 | 100 | 100 |  | B9A | DDP |  |
| 10FG7 | 141237064 |  | 9.7 | 3 20 | $\begin{aligned} & 250 \\ & 150 \end{aligned}$ |  | 1.4 50 | 1.6 7.2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | \}B9A | TT |  |
| 10GF7 | 141237064 |  |  | 20 3 2 | 150 250 250 |  | 50 1.4 | 7.2 1.6 2.7 | 100 100 100 |  |  |  | TT |  |
| 10GN8 | 146231457 |  | 10.5 | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | 250 200 250 | 150 | 2 25 1 | 2.7 11.5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| 10GW8 | 415237146 |  |  | $\begin{aligned} & 1.7 \\ & 7 \end{aligned}$ | 250 250 | 250 | ${ }_{36}^{1.2}$ | ${ }_{10}^{1.6}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \}B9A | TP |  |
| 10HF8 | 146231457 |  | 10 |  | $\begin{aligned} & 250 \\ & 250 \end{aligned}$ | 250 | $\begin{array}{r} 4 \\ 18 \end{array}$ | $\begin{gathered} 4 \\ 12.5 \end{gathered}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 4 | B9A | TP |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. <br> Grid <br> Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \text { la } \\ & m A \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 10JY8 | 146231457 |  | 10.5 | $\{$ | 125 200 | 150 | $\begin{aligned} & 15 \\ & 24 \end{aligned}$ | $\begin{aligned} & 10.4 \\ & 11 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| $10 \mathrm{KR8}$ | 146231457 |  | 10.5 | \{ | 100 200 | 100 | $\begin{aligned} & 15 \\ & 19.5 \end{aligned}$ | $\begin{aligned} & 10.4 \\ & 20.0 \end{aligned}$ | No D | ta Avai | ilable | B9A | TP |  |
| 10L1 | 412314600 |  | 19 | 1.5 | 250 |  | 10. | 8.5 | 100 |  | 8 | B7G | T |  |
| 10 L 14 | 641237410 |  | 26 | 2.1 | 200 |  | 10 | 5.8 | 100 |  | 5 | B9A | TT |  |
| 10LD3 | 264098130 |  | 14 | 1.1 | 150 |  | 0.6 | 1.95 | 150 |  | 1.9 | B8A | DDT |  |
| 10LD11 | 264098130 |  | 15 | 5.9 | 250 |  | 5 | 2.3 | 100 |  | 3 | B8A | DDT |  |
| 10 LD12 | t91 238146 |  | 28 | 2.3 | 200 |  | 1 | 1.4 | 100 |  | 1.4 | B9A | DDDT |  |
| 10LD13 | 641238 09* |  | 13 | 4.4 | 150 |  | 0.5 | 1.4 | 100 |  | 1.4 | B9A | DDT |  |
| 10 P 13 | 260054130 |  | 40 | 6 | 150 | 150 | 30 | 7.5 | 100 | 100 | 6 | B8A | P |  |
| 10 P 14 | 026540310 |  | 40 | 9.4 | 200 | 175 | 40 | 7.2 | 100 | 150 | 6 | A08 | P |  |
| 10 P 18 | *41 23* 6*5 |  | 45 | 12.5 | 200 | 175 | 70 | 10 | 100 | 100 | 9 | B9A | P |  |
| 10PL12 | 414237516 |  | 50 | $\{16$ | 100 200 | 200 | 35.5 | 2.5 6.4 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | 2.5 | \}89A | TP |  |
| 11 | 362400000 |  | 1.1 | 4.5 | 90 |  | 2.5 | 0.4 | 80 |  | 0.4 | UX4 | T |  |
| 11A1 | *1* 234 **6 |  | 6.3 |  | 150 |  | 100 | 12 |  |  |  | B9A | T |  |
| 11A2 | 908231600 | G1 | 4 | 2 | 200 |  | 3 | 2.8 | 100 |  | 2.8 | B7 | DDT |  |
| 11A6 | 264147300 |  | 10 | 1 | 100 |  |  | 3.1 | 100 |  | 3.1 | A08 | TT |  |
| 11 C 5 | 026040310 |  | 10 | 1 | 100 |  |  | 2 | 100 |  | 3 | A08 |  |  |
| 11CY7 | 742364110 |  | 11 | $\{3$ | $\begin{aligned} & 250 \\ & 150 \end{aligned}$ |  | ${ }_{30} 1.2$ | 1.3 5.4 | 100 100 |  |  | B9A | TT |  |
| 11D3 | 908231600 | G1 | 13 | 2 | 250 |  | 0.6 | 1.1 | 100 |  | 1.1 | B7 | DDT |  |
| 11D5 | 908231600 | G1 | 13 | 3 | 250 |  | 3.8 | 1.5 | 150 |  | 1.5 | B7 | DDT |  |
| 11E1 | 216540030 |  | 6 |  | 250 | 250 | 50 | 7.3 | 100 | 100 | 7 | M08 | P |  |
| 11E2 | 020540310 | A1 | 6 | 16.5 | 200 | 200 | 25 | 9 | 100 | 150 | 8 | A08 | P |  |
| 11E8 | 200647310 | G1 | 11 |  | 150 |  | 20 |  | 100 |  |  | A08 | TT |  |
| 11813 | 414226573 |  | 6.3 | 40 | 300 | 200 | 74 |  | No D |  | 1able | B9A | PP |  |
| 11F6 | 026540310 |  | 10 | 1 | 100 | 150 |  | 2.5 | 100 | 150 | 2.5 | A08 | P |  |
| $11 \mathrm{J7}$ | 026500310 | G1 | 10 | 1 | 250 | 100 |  | 1.2 | 250 | 100 | 1.2 | A08 | P |  |
| 11JE8 | 146231457 |  | 10 | $\{2$ | 200 | 175 | $22^{4.5}$ | ${ }_{12}{ }^{4.2}$ | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| $11 \mathrm{K7}$ | 026500310 | G1 | 10 | 1 | 250 | 100 |  | 1.4 | 250 | 100 | 1.4 | A08 | P |  |
| 11L6 | 026540310 |  | 10 | 1 | 100 | 150 |  | 6 | 100 | 150 | 6 | A08 | P |  |
| 11N7 | 026447310 |  | 10 | 1 | 100 |  |  | 3.1 | 100 |  | 3.1 | A08 | TT |  |
| 11X5 | 028090310 |  | 11 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| 12 | 364200000 |  | 1.1 | 4.5 | 90 |  | 2.5 | 0.42 | 80 |  | 0.4 | UX4 | T |  |
| 12A | 264300000 |  | 5 | 4.5 | 90 |  | 5 | 1.5 | 80 |  | 1.5 | UX4 | T |  |
| 12A4 | 142330406 |  | 6 | 9 | 250 |  | 23 | 0.8 | 250 |  | 0.8 | B9A | T |  |
| 12 A 5 | 265413200 |  | 6 | 15 | 100 | 100 | 17 | 1.7 | 100 | 90 | 1.7 | Ux7 | P |  |
| 12 A 6 | 026540310 |  | 12.5 | 12.5 | 250 | 250 | 30 | 2 | 100 | 150 | 3 | A08 | P |  |
| 12A7 | 265181300 | G1 | 12.5 | $\{12.5$ | 150 | 150 | 30 9 | 1 | REC 100 | 100 | $\begin{gathered} 15 \mathrm{~mA} \\ 1 \end{gathered}$ | Sm7 | RP |  |
| 12A8 | 026545310 | G1 | 12.5 | 3 | 250 | 100 | 3.5 | 1.15 | 100 | 100 | 1.1 | A08 | H |  |
| $12 \mathrm{AB5}$ | 504234156 |  | 12 | 12.5 | 250 | 250 | 45 | 4.1 | 250 | 200 | 4 | B9A | P |  |
| $12 \mathrm{AB5}$ | 421060350 |  | 12 | 22.5 | 250 | 150 | 57 | 5.9 | 100 | 100 | 5.8 | A08 | P |  |
| $12 \mathrm{AC5}$ | 26**54 130 |  | 12 | 3 | 200 | 125 | 2.3 | 2.3 | 100 | 150 | 2.3 | B8A | P |  |
| 12AC6 | 412365100 |  | 12.6 |  | 12. |  | 0.5 | 0.7 | No D | ta Avai | lable | B7G | P |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | $\begin{array}{\|l\|} \text { Anode } \\ \text { Volts } \end{array}$ | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | malv |  |  |  |
| 12BD6 | 412365100 |  | 12.5 | 3 | 250 | 100 | 9 | 2 | 100 | 100 | 2 | B7G | P |  |
| 12BE6 | 412366100 |  | 12.5 | 2 | 100 |  | 20 | 7 | 100 |  | 5 | B7G | H |  |
| 12BF6 | 412398600 |  | 12.5 | 9 | 250 |  | 9.5 | 1.9 | 100 |  | 1.9 | B7G | DDT |  |
| 12 BH 7 | 741226413 |  | 6 | 10.5 | 250 |  | 11.5 | 3.1 | 100 |  | 4 | B9A | TT |  |
| 12BK5 | 604231450 |  | 12 | 5 | 250 | 250 | 35 | 8.5 | 100 | 150 | 8 | B9A | P |  |
| 12BK6 | 412389600 |  | 12.5 | 2 | 250 |  | 1.2 | 1.6 | 150 |  | 1.6 | B7G | DDT |  |
| 12 BL 6 | 412365100 |  | 12.6 | 0.6 | 12 | 12 | 1.4 | 1.3 | No Data | Avai | lable | B7G | P |  |
| 12BN6 | 142354600 |  | 12.5 | 1 | 60 | 60 | 0.5 | 1 | 80 | 60 | 1 | B7G | P |  |
| 12BQ6 | 020540310 | A1 | 12 | 22.5 | 250 | 150 | 57 | 5.9 | 100 | 100 | 5 | A08 | P |  |
| 12BR7 | 641228913 |  | 6 | 2 | 250 |  | 10 | 5.5 | 100 |  | 4 | B9A | DDT |  |
| 12BR7A | 641228913 |  | 6.3 |  | 100 |  | 3.7 | 4 | 100 |  |  | B9A | DDT |  |
| 12BS3A | *8* 23* 8*1 |  | 12.6 |  |  |  | 180 |  | REC |  | 40 mA | B9D | R |  |
| 12BT6 | 412389600 |  | 12.5 | 3 | 250 |  | 1 | 1.2 | 150 |  | 1.2 | B7G | DDT |  |
| $12 \mathrm{BU6}$ | 412389600 |  | 12.5 | 9 | 250 |  | 9.5 | 1.9 | 150 |  | 1.9 | B7G | DDT |  |
| 12BV7 | 141223651 |  | 6 | 2.2 | 250 | 150 | 27 | 13 | 100 | 100 |  | B9A | P |  |
| 12BW4 | 800230901 |  | 12 |  |  |  | 30 |  | REC |  | 15 mA | B9A | RR |  |
| 12BX6 | 141230651 |  | 12.6 | 2 | 150 | 150 | 10 | 7.4 | 100 | 100 |  | B9A | P |  |
| 12BY7 | 141223651 |  | 6 | 2.1 | 250 | 150 | 25 | 12 | 150 | 100 | 10 | B9A | P |  |
| 12BZ6 | 412365100 |  | 12.6 | 1 | 100 | 125 | 14 | 8 | 125 | 125 | 7 | B7G | P |  |
| 12BZ7 | 741226413 |  | 6 | 2 | 250 |  | 2.5 | 3.2 | 100 |  | 3 | B9A | TT |  |
| 12C2C | 026040310 |  | 12.6 | 8 | 250 |  | 9 | 2.6 | 100 |  |  | A08 | $T$ |  |
| 12 C 5 | 142345600 |  | 12 | 7.5 | 150 | 100 | 49 | 7.5 | 100 | 90 | 6 | B7G | P |  |
| 12 C 8 | 026985310 | G1 | 12.5 | 3 | 250 | 125 | 10 | 1.3 | 100 | 100 | 1.3 | A08 | DDP |  |
| 12CA5 | 142345600 |  | 12 | 4.5 | 125 | 125 | 36 | 9.2 | 100 | 100 | 8 | B7G | P |  |
| 12 CD 6 | 021040350 | A | 12.6 | 55 | 150 | 150 | 75 | 7.7 | 100 | 100 |  | A08 | P |  |
| $12 \mathrm{CM6}$ | 504234106 |  | 12 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 100 |  | B9A | P |  |
| $12 \mathrm{CN5}$ | 142345600 |  | 12.6 |  | 12 | 12 | 4.5 | 3.8 | No Data | Avai | lable | B7G | P |  |
| 12CR5 | 154231541 | A1 | 12.6 | 22.5 | 250 | 150 | 65 | 6 | 100 | 100 |  | B9A | P |  |
| $12 \mathrm{CR6}$ | 182365400 |  | 12 | 2 | 250 | 100 | 6.9 | 2.2 | 100 | 100 | 2 | B7G | DP |  |
| 12CS5 | $5142341 * 6$ |  | 12.6 | 10 | 200 | 125 | 47 | 8 | 100 | 188 |  | B9A | P |  |
| $12 \mathrm{CS6}$ | 112365400 |  | 12 | 1 | 100 | 30 | 0.8 | 1.5 | No Data | Avai | lable | B7G | P |  |
| 12CT8 | 641237541 |  |  | 1.4 | 150 | 125 | 9 15 | 4.9 | 100 |  |  | B9A | TP |  |
| 12 C 5 | 142345600 |  | 12 | 8 | 150 | 100 | 50 | 7.5 | 100 | 100 | 7 | B7G | $P$ |  |
| 12016 | 020540310 | A1 | 12 | 22 | 250 | 150 | 57 | 5.8 | 100 | 100 |  | A08 | P |  |
| 12CX6 | 412365100 |  | 12.6 |  | 12 | 12 |  | 3.1 | No Data | Avai | lable | B7G | P |  |
| 12 CY 6 | 412365100 |  | 12.6 |  | 12 | 12 | 1.6 | 3.2 | No Data | Avail | lable | B7G | P |  |
| 12 D 4 | **1 *8* 230 |  | 12 |  |  |  |  |  | D |  |  | A08 | D |  |
| 12 D 26 | 412365100 |  | 12.6 |  | 12 | 12 | 4.5 | 3.8 | No Data | Avai | lable | B7G | P |  |
| $12 \mathrm{DA6}$ | 041230651 |  | 12 | 1 | 200 | 100 | 12 | 4.4 | 100 . | 100 |  | B9A | P |  |
| 12DB5 | 614234 1*6 |  | 12.6 | 9.6 | 200 | 125 | 46 | 8 | 100 | 100 |  | B9A | P |  |
| 12DE8 | 418236151 |  | 12.6 | 0.8 | 12 | 12 | 1.3 | 1.5 |  |  |  | B9A | DP |  |
| $12 \mathrm{DF5}$ | 801229013 |  | 6.3 |  |  |  | 30 |  | REC |  | 15 mA | B9A | RR |  |
| 12DF7 | 641227413 |  | 6.3 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.2 | B9A | TT |  |
| 12DJ8 | 641237410 |  | 12.6 | 1.3 | 100 |  | 15 | 12.5 | No Data | Avail | lable | B9A | TT |  |
| 12DK5 | 141230651 |  | 12.6 |  | 12 | 12 | 2 | 3.3 | No Data | Avail | lable | B9A | P |  |
| 12DK7 | 141223651 |  | 6.3 |  | 12 | 12 | 6 | 5 | No Data | Avail | lable | B9A | P |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & l_{\mathrm{ma}}^{2} \\ & \hline \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 12F31 | 412365100 |  | 12 | 1 | 100 | 100 | 10.8 | 4.3 | 100 | 100 | 4.3 | B7G | P |  |
| 12FK6 | 412389600 |  | 12.6 |  | 12 |  | 1.3 | 1.2 | No Da | a Avail | lable | B7G | DDT |  |
| 12 FM 6 | 412398600 |  | 12.6 |  | 12 |  | 1 | 1.3 | No D | ta Avai | lable | B7G | DDI |  |
| 12FQ8 | 747236461 |  | 12 | 1 | 200 |  | 3 | 1.5 | 100 |  | 1.5 | B9A | TT |  |
| 12FR8 | 414325786 |  | 12.6 \{ | $\begin{aligned} & 0.6 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & 12 \\ & 12 \end{aligned}$ | 12 | $\begin{aligned} & 1 \\ & 1.9 \end{aligned}$ | $\left.\begin{array}{l} 1.2 \\ 2.7 \end{array}\right\}$ | No D | ta Avai | lable | B9A | DTP |  |
| 12 FT 6 | 412389600 |  | 12.6 |  | 12 |  | 2 | 1.9 | No D | ta Avai | lable | B7G | DDT |  |
| 12FX8 | 747324161 |  | 12.6 \{ |  | 12.6 |  | 1.3 4.4 | $\left.\begin{array}{l}1.4 \\ 3.6\end{array}\right\}$ | No D | ta Avail | lable | B9A | TH |  |
| 12FX8A | 747324161 |  | 12.6 \{ |  | 12.6 |  | 1.3 4.4 | $\left.\begin{array}{l} 1.4 \\ 3.6 \end{array}\right\}$ | No D | ta Avai | lable | B9A | TH |  |
| 12G4 | 602364100 |  | 12 | 8 | 250 |  | $10^{4}$ | 3.6 | 100 |  | 3 | B7G | T |  |
| 12G7 | 026980310 | G1 | 12.5 | 3 | 250 |  |  | 1.2 | 100 |  |  | A08 | DDT |  |
| 12G8 | 714226143 |  | 6.3 | 12.6 |  |  | 7.2 | 2.6 | No D | ta Avai | lable | B9A | TT |  |
| $12 \mathrm{GA6}$ | 412366100 |  | 12.6 |  | 12. |  | 3.6 | 2.4 | No D | ta Avai | lable | B7G | 0 |  |
| 12GB3 | *2* 540310 |  | 12.6 | 7.7 | 100 | 100 | 100 | 14 | No D | ta Avai | lable | A08 | P |  |
| 12GB6 | 020540070 | A1 | 12.6 | 22.5 | 250 | 150 | 57 | 5.9 | 100 | 100 | 5 | A08 | P |  |
| 12GB7 | 020540310 | A | 12.6 | 7.7 | 100 | 100 | 100 | 14 | No D | ta Avai | lable | A08 | P |  |
| 12GJ5 | 541234 5** | A1 | 12.6 | 22.5 | 250 | 150 | 70 | 7.1 | 100 | 100 |  | B9D | $\boldsymbol{P}$ |  |
| $12 \mathrm{GK17}$ | 001080230 |  | 12.6 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| 12 GN 6 | 412365800 |  | 12.6 | 68 | 250 | 100 | 11 | 4.4 | 100 | 100 |  | B7G | DP |  |
| 12GT5 | 541324 5*6 |  | 12.6 | 22.5 | 250 | 150 | 70 | 7.1 | 100 | 100 |  | B9D | P |  |
| 12GW6 | 020540310 | A1 | 12.6 | 22.5 | 250 | 150 | 70 | 7.1 | 100 | 100 |  | A08 | P |  |
| 12H1C | 416147230 |  | 12.6 | 6.5 | 200 |  | 7.6 | 1.9 | 100 |  |  | A08 | TT |  |
| 12H4 | 623364100 |  | 6 | 8 | 250 |  | 9 | 2.6 | 90 |  | 3 | B7G | T |  |
| $12 \mathrm{H6}$ | 029180310 |  | 12.5 |  |  |  |  |  | D |  | 4 | 108 | DD |  |
| 12 H 10 C | 064471230 |  | 12.6 | 2 | 250 |  | 2 | 1.3 | 100 |  |  | A08 | TT |  |
| 12H31 | 412365400 |  | 12.6 |  | 100 | 100 | 2.8 | 0.4 | 100 | 100 | 0.4 | B7G | H |  |
| 12 J 5 | 026040310 |  | 12 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | T |  |
| 12 J 7 | 026510310 | G1 | 12.5 | 3 | 250 | 100 | 2 | 1.225 | 100 | 100 | 2.2 | A08 | P |  |
| 1258 | 415236189 |  | 12.6 |  | 12 | 12 | 12 | 5.5 | No D | ta Avai | lable | B9A | DDP |  |
| $12 \mathrm{JB6}$ | 541 234 51* | A | 12.6 | 22.5 | 250 | 150 | 70 | 7.1 | 100 | 100 |  | B9D | P |  |
| 12JT6 | 541231 5*6 |  | 12.6 | 22.5 | 250 | 150 | 70 | 7.1 | 100 | 100 |  | B9D | P |  |
| 12K5 | 142355600 |  | 12.6 | 2 | 12 | 12 | 8 | 7 | No D | ta Avai | lable | B7G | $P$ |  |
| 12K7 | 026510310 | G1 | 12.5 | 3 | 250 | 125 | 10.5 | 1.65 | 100 | 100 | 1.6 | A08 | P |  |
| 12 K 8 | 027546310 | G1 | 12.5 \{ | $\begin{aligned} & 1 \\ & 3 \end{aligned}$ | 100 | 100 | 8 | 2.5 1.2 | 100 100 | 60 100 | $\begin{aligned} & 3 \\ & 1.6 \end{aligned}$ | (A08 | TH |  |
| 12 L 6 | 026540310 |  | 12 | 8.25 | 200 | 125 | 46 | 8 | 100 | 100 | 8 | A08 | P |  |
| 12L8 | 414752360 |  | 12.5 | 9 | 200 | 175 | 13 | 2.1 | 100 | 100 | 2.1 | A08 | PP |  |
| 12M7 | 026510310 | G1 | 12 | 2.5 | 100 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | A08 | P |  |
| 12 NK 7 | 026510310 | G1 | 12.5 | 2 | 250 | 100 | 5 | 2.3 | 100 | 100 | 2.3 | A08 | P |  |
| 12P1 | 412365100 |  | 12.6 | 68 | 250 | 100 | 11 | 4.4 | 100 | 100 |  | B7G | P |  |
| 12P2 | 412365100 |  | 12.6 | 68 | 250 | 150 | 10.6 | 5.2 | 100 | 100 |  | B7G | P |  |
| 12 Q | 026980310 | G1 | 12.5 | 3 | 250 |  | 1 | 1.2 | 150 |  | 1.2 | A08 | DDT |  |
| ${ }^{12 R 5}$ | $\begin{array}{llll}142 & 345 & 600 \\ * * * 23 * * * 8\end{array}$ |  | 12.6 12.6 | 8.5 | 100 | 100 |  | 7 |  | 100 |  |  |  |  |
| 12 RK 19 | *** 23* **8 | C | 12.6 12.6 |  |  |  | $180$ |  | REC 100 |  | 40 mA | $\mathrm{BgA}$ | $\underset{T r}{R}$ |  |
| 12RLL3 12 S 7 | 641227413 268154130 |  | ${ }_{13} 12.6$ | 2 | 150 200 | 90 | 10 5 | 5.5 | 100 100 | 100 | 1.9 | B9A | TT |  |

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| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| $12 \mathrm{S8}$ | +18 916230 | (i1 | 12.5 | 2 | 250 |  | 0.9 | 1.1 | 150 |  | 1.1 | A08 | DDDT |  |
| 12SA7 | 126641340 |  | 12.5 | 3.6 | 100 |  | 12 | 4.3 | 100 |  | 4.5 | A08 | H |  |
| 12SA7G | 026641340 |  | 12.5 | 3.6 | 100 |  | 12 | 4.3 | 100 |  | 4.5 | A08 | H |  |
| 12SC7 | 074461230 |  | 12.5 | 2 | 250 |  | 2 | 1.3 | 150 |  | 1.3 | A08 | $T T$ |  |
| 12SF5 | 014060320 |  | 12.5 | 2 | 250 |  | 0.9 | 1.5 | 150 |  | 1.5 | A08 | T |  |
| 12SF7 | 041586230 |  | 12.5 | 1 | 250 | 100 | 12.9 | 2 | 100 | 100 | 2 | A08 | DP |  |
| 12SG7 | 021415360 |  | 12.5 | 1 | 250 | 125 | 11.8 | 4.7 | 100 | 100 | 4.7 | A08 | P |  |
| 12SH7 | 021415360 |  | 12.5 | 1 | 250 | 150 | 10.8 | 4.9 | 100 | 150 | 4.9 | A08 | P |  |
| 12SJ7 | 021415360 |  | 12.5 | 3 | 250 | 100 | 3 | 1.65 | 100 | 100 | 1.6 | A08 | P |  |
| 12SK7 | 021415360 |  | 12.5 | 3 | 250 | 100 | 9.2 | 2 | 100 | 100 | 2 | A08 | P |  |
| 12SL7 | 461471230 |  | 12.5 | 2 | 250 |  | 2.5 | 1.6 | 150 |  | 1.6 | A08 | TT |  |
| 12SN7 | 461471230 |  | 12.5 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| 12SQ7 | 041896230 |  | $\begin{aligned} & 12.5 \\ & 12.5 \end{aligned}$ | 2 | 250 |  | 0.9 | 1.1 | 150 |  | 1.1 | A08 | DDT |  |
| 12SR7 | 041986230 |  |  | 9 | 250 |  | 9.5 | 1.9 | 100 |  | 1.9 | A08 | DDT |  |
| 12SS7 | 021415360 |  | $\begin{aligned} & 12.5 \\ & 12.5 \end{aligned}$ | 3 | 250 | 100 | 9 | 1.85 | 100 | 100 | 1.8 | A08 | P |  |
| 12SW7 | 041986230 |  | 12.5 | 9 | 250 |  | 9.5 | 1.9 | 100 |  | 1.9 | A08 | DDT |  |
| 12SX7 | 471461230 |  | 12.5 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| 12SY7 | 126641340 |  | 12.5 | 1 | 100 |  | 22 | 4.5 | 100 |  | 4.5 | A08 | H |  |
| 12TE8 | 427546310 |  |  |  | 100 |  | 3.4 |  | 100 | 60 |  | \} 408 | TH |  |
|  |  |  |  |  | 250 | 100 | 3.7 |  | 100 | 100 |  |  |  |  |
| 12 TE 9 | 651237440 |  | 12 |  | 250 | 100 | 3.4 |  | 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \} ${ }^{\text {94A }}$ | TH |  |
| 12 U 7 | 741226413 |  | ${ }^{6} 12.5$ |  | 12 |  | 1.2 | 1 | No Da | a Avai | lable | B9A | TT |  |
| 12v6 | 026540310 |  |  | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | A08 | P |  |
| 12W6 | 026540310 |  | 12 | 9.5 | 150 | 150 | 58 | 8.0 | 100 | 100 | 8.0 | A08 | P |  |
| 12WC5 | 265414300 |  | 12 | 1.5 | 250 | 100 |  |  | No Da | a Avai | lable | UX7 | P |  |
| 12X3 | 210300000 | D1 | 12.5 |  |  |  | 60 |  | REC |  | 20 | UX4 | R |  |
| $12 \times 4$ | 802309100 |  | 12.5 |  |  |  | 30 |  | REC |  | 15 mA | B7G | RR |  |
| 12 Y 4 | 892310000 |  | 12 |  |  |  | 31 |  | REC |  | 15 mA | UX4 | RR |  |
| $12 \mathrm{Z3}$ | 281300000 |  | 12.6 |  |  |  | 30 |  | REC |  | 15 mA | UX4 | R |  |
| $12 \mathrm{Z4}$ | 281300000 |  | 12.5 |  |  |  | 60 |  | REC |  | 60 mA | UX4 | R |  |
| 12 z | 281319200 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | UX7 | RR |  |
| 1220 33 A | 264813000 |  | 12 | 2 | 250 |  | 1.5 | 1.5 | 125 |  | 1.2 | Ux6 | DT |  |
| 12ZP1A | 265413000 |  | 12 | 9 | 200 | 200 | 30 | 2.3 | 100 | 150 |  | UX6 | P |  |
| 13 | 298300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |  |
| 13BCIU | 206081930 | G1 | 2.5 | 1.8 | 200 |  | 3 | 2 | 150 |  | 2 | B8B | DDT |  |
| 13BF2U | 206581930 | G1 | 12.5 | 2.1 | 200 | 200 | 5 | 2 | 100 | 200 | 2 | B8B | DDP |  |
| $13 \mathrm{CM5}$ | 020540310 | A | 12.8 |  | 100 | 100 | 100 | 14 | 100 | 100 |  | A08 | P |  |
| 13D1 | 461471230 |  | 25 | 8 | 250 |  | 2 | 2.6 | 100 |  | 2.5 | A08 | TT |  |
| 13D2 | 461471230 |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| 13D3 | 741226413 |  | 6 | 4.6 | 250 |  | 6 | 2.3 | 100 |  | 2.3 | B9A | TT |  |
| 13D7 | 146231074 |  | 6.3 |  | 250 |  | 2.2 | 3.3 | 100 |  |  | B9A | TT |  |
| 13D8 | 741226413 |  | 6.3 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  |  |  | TT |  |
| 13DE7 | 644237410 |  | 13 | $\left\{\begin{array}{l} 11 \\ 17.5 \end{array}\right.$ | 250 150 |  | 32.5 | 2.5 | 100 100 |  | $\}$ | B9A | TT |  |
| 13 DHA | 908231600 | G1 | 13 | $\left\{\begin{array}{c}1.5 \\ 3 \\ 17.5\end{array}\right.$ | 250 |  | 1 | 1.5 | 100 |  | 1.5 | B7 | DDT |  |
| 13DR7 | 644237410 |  |  |  | 250 |  | 1.4 | 1.6 | 100 |  |  |  | TT |  |
| T30R7 | 644237410 |  | 13 |  | 150 |  | 35 | 6.5 | 100 |  |  |  |  |  |


| VALVE | SELECTOR SWITCH No. | - T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 13 EM 7 | 471461230 |  |  | 20 3 | 150 250 |  | 50 $\cdot 1.4$ | 7.2 1.6 | 100 100 |  |  | \} B9A | TT |  |
| 13F7 | 023110560 |  | 13 | 2 | 200 | 100 | 3 | 2.1 | 100 | 100 |  | 8SC | P |  |
| 13F9U | 206501130 | G1 | 12.5 | 2.6 | 200 | 200 | 6.2 | 2.2 | 100 | 200 | 2.2 | B8B | P |  |
| 13FD7 | 644237411 |  | 6.3 | $\{17.5$ | 250 150 |  | 6 45 | 1.6 7.5 | 100 100 |  |  | \} B9A | TT |  |
| 13FG7 | 141236074 |  | 13 | $\left\{\begin{array}{r}20 \\ 3\end{array}\right.$ | 150 250 |  | 50 1.4 | $\begin{aligned} & 7.2 \\ & 1.6 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | \} 99 A | TT |  |
| 13FR7 | 644237411 |  | 13 | $\left\{\begin{array}{r}3 \\ 20\end{array}\right.$ | 250 150 |  | 1.4 50 | 1.6 7.2 | 100 100 |  |  | B9A | TT |  |
| 13GF7 | 541237064 |  | 13 | $\left\{\begin{array}{r} 20 \\ 3 \end{array}\right.$ | 150 |  | 50 1.4 | 7.2 1.6 | 100 100 |  |  | $\} \mathrm{B9D}$ | TT |  |
| 13H1 | 023110560 | G1 | 3 | 2 | 200 | 100 | 3 | 2 | 100 | 100 | 2 | 8SC | P |  |
| 13H2 | 023110560 | G1 | 13 | 3 | 200 | 100 | 8.2 | 1.8 | 100 | 100 | 1.8 | 8SC | P |  |
| 13 PGA | 645231700 | G1 | 13 | $\left\{\begin{array}{r} 20 \\ 3 \end{array}\right.$ | 200 250 | 100 | 4 3.5 |  | 100 100 | 60 100 |  | $\} B 7$ | H |  |
| 13SPA | 061231500 | G1 | 13 | 3 | 200 | 100 | 2.3 | 1.7 | 100 | 100 | 2.2 | B7 | P |  |
| 13 V 1 | 013189560 | G1 | 13 | 8.5 | 200 | 200 | 45 | 4.4 | 100 | 150 | 4 | 8SC | DDP |  |
| 13 VPA | 061231500 | G1 | 13 | 3 | 200 | 100 | 7 | 1.8 | 100 | 100 | 1.8 | B7 | P |  |
| 14 | 265130000 | G1 | 14 | 3 | 250 | 90 | 4 | 1 | 100 | 90 | 1 | UX5 | P |  |
| 14 A 4 | $2600 * 4130$ |  | 12.5 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | B8B | T |  |
| 14A5 | 265004130 |  | 12.5 | 12.5 | 250 | 250 | 30 | 3 | 100 | 150 | 3 | B8B | P |  |
| 14A7 | 265104130 |  | 12.5 | 3 | 250 | 100 | 9.2 | 2 | 100 | 100 | 2 | B8B | P |  |
| 14AF4 | 216447130 |  | 12 | 10 | 250 |  | 9 | 2.1 | 100 |  | 2 | B8B | TT |  |
| $14 \mathrm{AF7}$ | 216447130 |  | 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 | DIT |  |
| 14B8 | 265454130 |  | 12.5 | 2 | 250 | 100 |  | 1.1 | 100 | 100 | 1.1 | B8B | H |  |
| $14 \mathrm{C5}$ | 265004130 |  | 12.5 | 12.5 | 250 | 250 | 47 | 4.1 | 100 | 150 | 4.1 | B8B | P |  |
| $14 \mathrm{C7}$ | 265114130 |  | 12.5 | 3 | 250 | 100 | 2.2 | 1.5 | 100 | 100 | 1.5 | B8B | P |  |
| 14 E 6 | $264 * 98130$ |  | 12.5 | 8 | 250 |  | 9.3 | 1.9 | 100 |  | 1.9 | B8B | DDT |  |
| 14E7 | 269854130 |  | 12.5 | 3 | 250 | 100 | 7.5 | 1.3 | 100 | 100 | 1.3 | B8B | DDP |  |
| 14F6 | 026540310 |  | 14 | 16.5 | 250 | 250 | 35 | 2.5 | 100 | 150 | 2.5 | A08 | P |  |
| 14 F 7 | 217446130 |  | 12.5 | 2 | 250 |  | 2.3 | 1.6 | 150 |  | 1.6 | B8B | TT |  |
| 14F8 | 427116340 |  | 12.5 | 3 | 250 |  | 6 | 3.3 | 150 |  | 3.3 | B8B | TT |  |
| 14GT8 | 181239146 |  | 14 | ${ }^{3} 1$ | 250 |  | 0.7 | 1.0 | 100 |  |  | B9A | DDT |  |
| 14GW8 | 415237146 |  | 14.7 | $\left\{\begin{array}{l} 1.7 \\ 7 \end{array}\right.$ | 250 250 | 250 | 36 | $10^{1.6}$ | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $1.6$ | $\} \mathrm{B9A}$ | TY |  |
| 14H7 | 265114130 |  | 12.5 | 2 | 250 | 150 | 10 | 4.2 | 100 | 100 | 4.2 | B8B | P |  |
| 14 J 7 | 276454130 |  | 12.5 | $\left\{\begin{array}{l}3 \\ 3\end{array}\right.$ | 150 | 100 | 6.6 1.4 | 1.4 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $1.4$ | $\} \mathrm{B} 8 \mathrm{~B}$ | TH |  |
| $14 J G 8$ | 181239146 |  | 14 | 2 | 250 |  | 2 | 2.2 | 100 |  |  | B9A | DDT |  |
| 14K7 | 276454130 |  | 14 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 200 | 90 | 6.4 2.7 | 2.2 1.5 | 100 100 | 60 75 | 2.8 1.5 | $\} B 8 A$ | TH |  |
| 14L7 | 264098130 |  | 14 | 1.6 | 200 |  | 15 | 1.65 | 150 |  | 1.6 | B8A | DDT |  |
| 14N7 | 217446130 |  | 12.5 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | B8B | TT |  |
| $14 \mathrm{Q7}$ | 266414130 |  | 12.5 | 2 | 100 |  | 15 | 6 | 100 |  | 4.5 | B8B | H |  |
| 14R7 | 269854130 |  | 12.5 | 1 | 250 | 100 | 6.2 | 3.4 | 100 | 100 | 3.4 | B8B | DDP |  |
| $14 \mathrm{S7}$ | 276454130 |  | 12.5 | $\left\{\begin{array}{l}1 \\ 2\end{array}\right.$ | 100 250 | 100 | 4.8 4 | 1.4 2.4 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | 1.6 2.2 | \} 88 B | TH |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO <br> VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volt5 | Anode Volts | Screen Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | mA/V | Anade Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| 14V7 | 265104130 |  | 12.5 | 2 | 300 | 150 | 9.6 | 5.8 | 100 | 100 | 5.8 | B8B | P |  |
| 14W7 | 265114130 |  | 12.5 | 2.2 | 300 | 150 | 10 | 5.8 | 100 | 100 | 5.8 | B8B | P |  |
| 14X7 | 264189130 |  | 12.5 | 1 | 250 |  | 1.9 | 1.5 | 150 |  | 1.5 | B8B | DDT |  |
| 14 Y 4 | 208009130 |  | 12.5 |  |  |  | 30 |  | REC |  | 15 mA | B8B | RR |  |
| $14 \mathrm{Z3}$ | 281300000 |  | 12.5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | R |  |
| 15 | 264300000 |  | 2.5 | 33 | 250 |  | 22 | 2.35 | 100 |  | 2.0 | UX4 | T |  |
| 15 | 265130000 | G1 | 2 | 1.5 | 150 | 75 | 1.85 | 0.75 | 100 | 75 | 0.75 | UX5 | P |  |
| 15A2 | 645231700 | G1 | 4 | $\left\{\begin{array}{r}20 \\ 3\end{array}\right.$ | 200 | 100 | 4 3.5 |  | 100 100 | 60 100 |  | $\}$ B7 | H |  |
| 15A6 | 451231600 |  | 15 | 2.9 | 200 | 175 | 36 | 10 | 100 | 100 | 9 | B9A | P |  |
| 15 A 8 | 124541360 | A2 | 15 | $\left\{\begin{array}{l} 8 \\ 7.5 \end{array}\right.$ | 250 100 | 100 | $\begin{array}{r} 9 \\ 45 \end{array}$ | $\begin{aligned} & 2.6 \\ & 7.3 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 2 \\ & 7.5 \end{aligned}$ | \}A08 | TP |  |
| 15BD7A | 641238090 |  | 15 | 1.5 | 200 |  | 1.5 | 1.6 | 100 |  | 1.6 | B9A | DDT |  |
| 15CW5 | *51 23* 6*5 |  | 15 | 12.5 | 200 | 175 | 70 | 10 | 100 | 60 |  | B9A | P |  |
| 15 D 1 | 645231700 | G1 | 13 | $\left\{\begin{array}{r}20 \\ 3\end{array}\right.$ | 200 | 100 | 4 3.5 |  | 100 100 | 60 100 |  | \}B7 | H |  |
| 15 D 2 | 645231700 | G1 | 13 | $\left\{\begin{array}{r}20 \\ 3\end{array}\right.$ | 200 | 100 | 4 3.5 |  | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 0.6 \\ & 4.6 \end{aligned}$ | \}B7 | H |  |
| 15DQ8 | 461237145 |  | 15 | $\{1.7$ | 200 150 | 150 | 3.0 18 | ${ }_{11}^{4.0}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $4.0$ | \}B9A | TP |  |
| 15E | 260501300 | G1 | 2 |  | 150 | 75 | 1.8 | 0.7 | 100 | 60 |  | B7G | P |  |
| 15 EA 7 | 461471230 |  | 14.8 | 25 | 200 |  | 48 | 6.5 | No D | ta Avai | ilable | A08 | TT |  |
| 15EW6 | 412365100 |  | 15 |  | 150 | 120 | 11 | 14 | No Da | ta Avai | ilable | B7G | P |  |
| 15 F 80 | 541231600 |  | 15 |  | 200 | 200 | 36 | 10 | No Da | a Avai | ilable | B9A | P |  |
| 15KY8A | 141237564 |  | 15 | $\left\{\begin{array}{r}3 \\ 10\end{array}\right.$ | 250 150 | 100 | ${ }_{39} 1.4$ | $\begin{aligned} & 1.6 \\ & 8.4 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \}B9D | TP |  |
| 15TP7 | 461237145 |  | 15 | $\left\{\begin{array}{l}1.7 \\ 2.9\end{array}\right.$ | $\begin{aligned} & 200 \\ & 200 \end{aligned}$ | 200 | $\begin{array}{r} 3 \\ 18 \end{array}$ | $\begin{gathered} 4 \\ 10.4 \end{gathered}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $4\}$ | B9A | TP |  |
| $15 \times 6$ | 029180310 |  | 25 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| 16 | 280300000 |  | 7.5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | R |  |
| 16A5 | *41 23* 6*5 |  | 16 | 14.2 | 200 | 200 | 45 | 7.5 | 100 | 100 | 7 | B9A | P |  |
| 16A8 | 414237516 |  | 16 | $\left\{\begin{array}{r}1.5 \\ 11.5\end{array}\right.$ | 200 | 200 | ${ }_{41}{ }^{1.7}$ | $\begin{aligned} & 2.4 \\ & 7.5 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 3 \\ & 6 \end{aligned}$ | \}B9A | TP |  |
| 16AQ3 | *** $23 * * * 8$ | C | 16.4 |  |  |  | 180 |  | REC |  | 40 mA | B9A | R |  |
| 16B | 280300000 |  | 7.5 |  |  |  | 60 |  | REC |  | 15 mA | UX4 | R |  |
| 16D1 | 046231700 |  | 13 |  | 300 |  | 45 |  | 100 |  |  | B7 | TT |  |
| 16GK6 | 141230651 |  | 16 | 7.4 | 250 | 250 | 48 | 11.3 | No Da | a Avai | lable | B9A | P |  |
| 16GK8 | 414237516 |  | 16 |  | 200 250 | 250 | 10 30 | 3.4 7.5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| 16N8 | 414237516 |  | 15 | $\{16$ | 100 200 | 200 | 3.3 35 | 3.6 6.4 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $3.6\}$ | B9A | TP |  |
| 16 TP 6 | 141234675 |  | 16 | $\{11.5$ | 100 | 175 | 3.5 41 | 2.5 7.5 | 100 100 | 60 100 | $2.5\}$ | B9A | TP |  |
| 16TP8 | 141234675 |  | 16 | $\{11.5$ | 100 200 | 175 | 41.5 | 2.5 7.5 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| 17 | 264130000 |  | 14 | 6 | 90 |  | 2.7 | 0.8 | 80 |  | 0.8 | UX5 | T |  |
| 17 AV 5 | 421060350 |  | 16 | 22.5 | 250 | 150 | 57 | 5.9 | 100 | 100 | 5.8 | A08 | P |  |
| 17AX4 ${ }^{\text {17AXTA }}$ | 001080230 001080230 |  | 16.8 16.8 |  |  |  | 120 120 |  | REC REC |  | $\begin{aligned} & 35 \mathrm{~mA} \\ & 35 \mathrm{~mA} \end{aligned}$ | $\begin{aligned} & \text { A08 } \\ & \text { A08 } \end{aligned}$ | $\begin{aligned} & \mathrm{R} \\ & \mathrm{R} \end{aligned}$ |  |



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| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| 18 F 24 | 261154130 |  | 18 | 2.1 | 250 | 200 | 15 | 10.5 | 100 | 100 |  | A08 | P |  |
| 18 FW 6 | 412365100 |  | 18 | 1 | 100 | 100 | 11 | 4.4 | 100 | 100 | 4.4 | B7G | P |  |
| 18FW6A | 412365100 |  | 18 | 1 | 100 | 100 | 11 | 4.4 | 100 | 100 | 4.4 | B7G | P |  |
| 18 FX 6 | 412365100 |  | 18 |  | 100 | 100 | 24 | 7 | 100 | 100 |  | B7G | 0 |  |
| 18FY6 | 412389600 |  | 18 | 1 | 100 |  | 0.6 | 1.3 | 100 |  | 1.3 | B7G | DDT |  |
| 18GD6 | 141230651 |  | 18 |  | 100 | 100 | 5 | 4.3 | 100 | 100 |  | B9A | P |  |
| 18 GE 6 | 142360100 |  | 18 | 1 | 100 |  | 1 | 1.7 | 100 |  | 1.7 | B7G | T |  |
| 18GV8 | 641237514 |  | 18 | \{ | 100 150 | 150 | 10 | 5.5 7.5 | 100 100 | 60 100 | 5 | B9A | TP |  |
| 18HB8 | 416235714 |  | 18 | \{ | 100 100 | 100 | 2.5 | 3.9 6.2 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| 18 J 6 | 672344100 |  | 18 | 1 | 100 | 100 | 6.5 | 5.2 | 100 |  | 5 | B7G | TT |  |
| 19 | 364472000 |  | 2 | 3 | 150 |  | 1.7 |  | 100 |  |  | UX6 | TT |  |
| 19 A 3 | 002283100 |  | 9.5 |  |  |  | 60 |  | REC |  | 20 mA | B7G | R |  |
| 19AJ8 | 541237164 |  | 19 | $\left\{\begin{array}{l}3 \\ 2\end{array}\right.$ | 100 250 | 100 | 5 6.5 | 2.3 2.4 | 100 150 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 2.3 \\ & 2.4 \end{aligned}$ | \} B9A | TH |  |
| 19AQ5 | 412365400 |  | 19 | 12.5 | 250 | 200 | 47 | 4.1 | 100 | 150 | 4 | B7G | P |  |
| $19 \mathrm{AU4}$ | **1 080230 |  | 19 |  |  |  | 120 |  | REC |  | 40 mA | A08 | R |  |
| 19BD | **1 23***8 |  | 19 |  |  |  | 60 |  | REC |  | 16 mA | B9A | R |  |
| 19BG6 | 021040350 | A1 | 19 | 15 | 250 | 250 | 75 | 6 | 100 | 150 | 6 | A08 | P |  |
| 19BY7 | 141213651 |  | 19 | 2 | 175 | 100 | 9.7 | 5.9 | 200 | 100 | 6 | B9A | P |  |
| $19 \mathrm{C8}$ | $8 \dagger 1239146$ |  | 19 | 1 | 100 |  | 0.5 | 1.2 | 100 |  | 1.2 | B9A | DDDT |  |
| 19CL8 | 461237514 |  | 18.9 | $\left\{\begin{array}{l}0.85 \\ 1\end{array}\right.$ | $\begin{aligned} & 150 \\ & 150 \end{aligned}$ | 125 | $\begin{aligned} & 15 \\ & 12 \end{aligned}$ | $\begin{aligned} & 8 \\ & 5.8 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 8 \\ & 5 \end{aligned}$ | \} $\mathrm{B9A}$ | TP |  |
| 1903 | 541237464 |  | 19 | $\{2.6$ | 100 200 | 125 | $\begin{array}{r} 13.5 \\ 7.6 \end{array}$ | $\begin{aligned} & 7 \\ & 2.4 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 2.4 | \}B9A | TH |  |
| 1908 | 541237464 |  | 19 | $\{2.6$ | 100 200 | 125 | 13.5 7.6 | 3.7 2.4 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 3.7 \\ & 2.4 \end{aligned}$ | \} $\mathrm{B9A}$ | TH |  |
| 19 DC 8 | 541236891 |  | 19 | 2 | 250 | 100 | 9 | 3.8 | 100 | 100 |  | B9A | DDP |  |
| 19DE7 | 644237411 |  | 19.5 | $\left\{\begin{array}{l}11 \\ 17.5\end{array}\right.$ | 250 150 |  | 35.5 | 6.5 | 100 100 |  |  | B9A | TI' |  |
| 19EA8 | 645237114 |  | 18.9 | $\left\{\begin{array}{l}1 \\ 1\end{array}\right.$ | $\begin{aligned} & 150 \\ & 150 \end{aligned}$ | 125 | $\begin{aligned} & 18 \\ & 12 \end{aligned}$ | $\begin{aligned} & 8.5 \\ & 6.4 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $8\}$ | B9A | TP |  |
| $19 \mathrm{EH7}$ | 141230651 |  | 19 | 2 | 200 | 100 | 13 | 13 | No D | a Avai | lable | B9A | P |  |
| $19 \mathrm{EJ7}$ | 141230651 |  | 18.9 | 2.5 | 200 | 200 | 10 | 15 | No Dr | ,a Avai | ilable | B9A | P |  |
| 19EZ8 | 144127464 |  | 18.9 | 1 | 150 |  | 4.2 | 4.2 | 100 |  | 4.2 | B9A | TT |  |
| 19 FL 8 | 541236891 |  | 19 | 1.5 | 200 | 100 | 11 | 4.5 | 100 | 100 |  | B9A | DDP |  |
| $19 \mathrm{G3}$ | 020000300 | D1 | 4 |  |  |  | 30 |  | REC |  | 17 mA | A08 | R |  |
| 1966 | 112311100 | D1 | 4 |  |  |  | 30 |  | REC |  | 15 mA | B7G | R |  |
| 19GQ7 | $1+* 239181$ |  | 18.9 |  |  |  | 5 |  | D |  |  | B9A | DDD |  |
| 19GV8 | 641237414 |  | 18.9 | 0.6 | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | 200 | 41 | $\begin{aligned} & 6.5 \\ & 7.5 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $6.5\}$ | B9A | TP |  |
| 19H1 | 002300000 | D1 | 4 |  |  |  | 60 |  | REC |  | 23 mA | B4 | R |  |
| 19 H 4 | 020000300 | D1 | 2.5 |  |  |  | 30 |  | REC |  | 13 mA | A08 | R |  |
| 19 HR 6 | 412365100 |  | 18.9 | 1.2 | 200 | 100 | 13.2 | 8.5 | 100 | 100 |  | B7G | P |  |
| 19HS6 | 412365100 |  | 18.9 | 0.8 | 150 | 75 | 8.8 | 9.5 | 100 | 100 |  | B7G | P |  |
| 19HV8 | 461237514 |  | 18.9 | 1.0 1.0 | 100 150 | 150 | 0.8 13 | $7^{1.3}$ | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 1.3 \\ 6 \end{array}\right\}$ | B9A | TP |  |
| $19 J 6$ | 762344100 |  | 19 | 1 | 100 |  | 8.5 | 5.3 | 100 |  | 5.3 | B7G | TT |  |



| VALVE | SELECTOR SWITCH No. | T.c. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. <br> Grid <br> Volts | Anode | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 21ES8 | 641237410 |  | 21 | 1.3 | 100 |  | 15 | 12.5 | No D | a Avai | lable | B9A | TT |  |
| 21 EX6 | 021040350 | A1 | 21.5 |  | 200 | 150 | 67 | 7.7 | 100 | 100 |  | A08 | P |  |
| 21L40 | 041231051 | A1 | 21.5 | 28 | 200 | 200 | 40 | 6 | 100 | 100 |  | B9A | $P$ |  |
| 21 TH8 | 027546310 | G1 | 21 |  | 100 |  | 4 | 2 | 100 | 60 |  | A08 | TH |  |
| 22 | 365200000 | G1 | 3 | 2.5 1.5 | 200 150 | 90 50 | 3 1.7 | 0.7 0.3 | 100 125 |  | 0.5 | UX4 | P |  |
| 22 AC | 265300000 | G1 | 2.5 | 3 | 90 | 90 | 4 | 1.05 | 80 | 90 | 1 | UX4 | P |  |
| 22 AQ 3 | *** 23***8 | C | 22 |  |  |  | 180 |  | REC |  | 20 mA | B9A | R |  |
| 22BH3 | *8* 23* 8*1 |  | 22.4 |  |  |  | 180 |  | REC |  | 40 mA | B9D | R |  |
| 22DE4 | 001080230 |  | 22.4 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| 22 FC 7 | 146234117 |  | 21.6 | 1.2 | 90 |  | 15 | 12.3 |  |  |  | B9A | TT |  |
| 22JG6 | 541231 5*6 |  | 22 |  | 150 | 150 | 80 | 10 | No D | a Avail | lable | B9D | P |  |
| $22 \mathrm{JU6}$ | 541234 51* | A1 | 22 | 20 | 150 | 100 | 45 | 7 | 100 | 100 |  | B9D | P |  |
| 22S/101G | 182310900 |  | 6.3 |  |  |  | 5 |  | D |  |  | B79 | R |  |
| 23 | 205411300 | A1 | 2.5 | 90 | 400 | 150 | 43 |  | No Da | a Avail | lable | UX7 | P |  |
| 24 | 264300000 |  | 2 | 13.5 | 200 |  | 8 | 1.6 | 100 |  | 1.2 | UX4 | T |  |
| 24A | 265130000 | G1 | 2.5 | 3 | 200 | 90 | 4 | 1 | 100 | 90 | 1 | UX5 | P |  |
| 24 E | 265130000 | G1 | 2.5 | 3 | 200 | 90 | 4 | 1 | 100 | 90 | 1 | UX5 | P |  |
| 24NG | 281193000 |  | 40 |  |  |  | 30 |  | REC |  | 15 mA | UX6 | RR |  |
| 24S | 265130000 | G1 | 2.5 | 3 | 200 | 90 | 4 | 1 | 100 | 90 | 1 | UX5 | P |  |
| 25 | 268943000 |  | 2 | 3 | 150 |  | 1.0 | 0.5 | 125 |  | 0.5 | Ux6 | DDT |  |
| 25 | 205411300 | A1 | 6.3 | 90 | 400 | 150 | 43 |  | No Da | a Avail | lable | UX7 | P |  |
| 25A6 | 026540310 |  | 25 | 18 | 150 | 125 | 33 | 2.3 | 100 | 90 | 3.5 | A08 | P |  |
| 25A7 | 126548310 |  | 25 | $\{15$ | 100 | 100 | 60 | 18 | REC |  | $20 \mathrm{~mA}$ | A08 | RP |  |
| 25ACID | 206008030 | G1 | 1.4 | 0 | 150 |  | 0.76 | 0.4 | 100 |  | 0.3 | A08 | DT |  |
| 25AC5 | 026040310 |  | 25 |  | 200 |  | 4 | 3.8 | 100 |  | 3.5 | A08 | T |  |
| 25AV5 | 421060350 |  | 25 | 22.5 | 250 | 150 | 57 | 5.9 | 100 | 100 | 5.8 | A08 | P |  |
| 25AX4 | 001080230 |  | 25 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| 25B5 | 267413000 |  | 25 | $\{$ | 100 100 |  | 45 7 | 2.2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  |  | UX7 | TT |  |
| 25B6 | 026540310 |  | 25 | 22 | 150 | 150 | 61 | 5 | 100 | 100 |  |  | P |  |
| 25B8 | 127561340 | G1 | 25 | $\left\{\begin{array}{l}1 \\ 3\end{array}\right.$ | 100 100 | 100 | $\begin{aligned} & 0.6 \\ & 7.6 \end{aligned}$ | $1.5$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 1.5 \\ 2 \end{array}\right\}$ | A08 | TP |  |
| 25BG6 | 021040350 | A1 | 25 |  | 150 | 150 | 70 | 5 | No Da | a Avail | lable | A08 | P |  |
| 25BK5 | 604231450 |  | 25 | 5 | 250 | 250 | 35 | 8.5 | 100 | 150 | 8 | B9A | P |  |
| 25BQ6 | 020540310 | A1 | 25 | 22.5 | 250 | 150 | 55 | 5.5 | 100 | 100 |  | A08 | P |  |
| 25C5 | 142345600 |  | 25 | 7.5 | 150 | 100 | 49 | 7.5 | 100 | 90 | 6 | B7G | P |  |
| $25 \mathrm{C6}$ | 026540310 |  | 25 | 14 | 200 | 150 | 61 | 7.1 | 100 | 100 | 7 | A08 | P |  |
| $25 \mathrm{CA5}$ | 142345600 |  | 25 | 4.5 | 150 | 125 | 36 | 9.2 | 125 | 125 | 9.2 | B7G | P |  |
| 25CD6 | 021040350 | A1 | 25 | 30 | 200 | 200 | 75 | 7.5 | 100 | 100 | 7.5 | A08 | $P$ |  |
| 25CR5 | 154231541 |  | 25 | 22.5 | 250 | 150 | 65 | 6 | 100 | 100 |  | B9A | P |  |
| 25 CU6 | 020540310 | A1 | 25 |  | 300 | 150 | 80 |  | No Da | Avail | lable | A08 | P |  |
| 25 D 4 | 001080230 |  | 25 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| 25D8 | 127546380 | G1 | 25 | $\left\{\begin{array}{l}1 \\ 3\end{array}\right.$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | 100 | 0.5 8.5 | $\begin{aligned} & 1.1 \\ & 1.9 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 1.1 \\ 1.9 \end{array}\right\}$ | A08 | DTP |  |
| 25DK4 | 002380100 |  | 25 |  |  |  | 60 |  | REC |  | 15 mA | B7G | R |  |
| 25DN6 | 021040350 | A1 | 25 |  | 150 | 150 | 70 | 9 | No Da | a Avail | lable | A08 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Yolts } \end{gathered}$ | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |
| 25DQ6 | 020540310 | A1 | 25 | 22.5 | 250 | 150 | 75 | 6 | 100 | 100 |  | A08 | P |
| 25DT5 | 504234 1*6 |  | 25 | 16.5 | 250 | 250 | 38 | 6.5 | 100 | 100 |  | B9A | P |
| 25E2 | 541227365 |  | 12.6 | $\{2$ | 200 | 100 | 6.5 4 |  | 100 100 | 100 100 |  | \}B9A | TH |
| 25E5 | 020540310 | A1 | 25 | 21 | 200 | 200 | 100 | 11 | No D | ta Avail | 1able | A08 | P |
| $25 \mathrm{EC6}$ | 021040350 | A1 | 25 |  | 150 | 100 | 70 | 7.5 | No D | ta Avail | lable | A08 | P |
| 25 EH 5 | 142345600 |  | 25 | 3.2 | 100 | 125 | 42 | 14.6 | No D | ta Avail | lable | B7G | P |
| 25F5 | 142345600 |  | 25 | 7.5 | 100 | 100 | 37 | 5.8 | No D | ta Avail | lable | B7G | P |
| 25F7 | 020540310 | A | 25 | 21 | 150 | 150 | 100 | 11 | 100 | 100 |  | A08 | P |
| 25FG6 | *2* 540310 | A1 | 25 | 21 | 200 | 175 | 100 | 11 | No D | ta Avail | lable | A08 | P |
| 25FID | 206501040 | G1 | 1.4 | 2.5 | 150 | 125 | 1.2 | 0.7 | 100 | 100 | 0.7 | A08 | P |
| 25GB6 | 020540310 | A1 | 25 | 22.5 | 250 | 150 | 6.5 | 6 | 100 | 100 |  | A08 | P |
| 25GY8 | 414237516 |  | 25 | $\left\{\begin{array}{r}1.5 \\ 13.5\end{array}\right.$ | 150 | 125 | 2.5 | 2 | 100 | 60 |  | B9A | TP |
| 25 L 6 | 026540310 |  | 25 | 8.2 | 200 | 125 | 47 | 8 | 100 | 90 | 8 | A08 | P |
| 25MK15 | 002380100 |  | 25 |  |  |  | 25 |  | REC |  | 20 mA | B7G | R |
| 25RE | 281193000 |  | 25 |  |  |  | 30 |  | REC |  | 15 mA | Ux6 | RR |
| 255 | 268943000 |  | 2 | 3 | 150 |  | 0.8 | 0.6 | 100 |  | 0.6 | UX6 | DDT |
| 25SN7 | 461471230 |  | 25 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.5 | A08 | TT |
| 25T3G | 020000310 | D1 D2 | 25 |  |  |  | 60 |  | REC |  | 15 mA | A08 | RR |
| 2544 | 001080230 |  | 25 |  |  |  | 120 |  | REC |  | 30 mA . | A08 | R |
| 25 V 5 | 028190310 |  | 25 |  |  |  | 60 |  | REC |  | 20 mA | A08 | R |
| 25W4 | 001080230 |  | 25 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |
| 25W6 | 026540310 |  | 25 | 8.5 | 250 | 125 | 46 | 8 | 100 | 100 | 8 | A08 | P |
| 25W9 | 001080230 |  | 25 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |
| 25X4 | 020080310 |  | 25 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |
| 25X5 | 020080310 |  | 25 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |
| 25X6 | 028190310 |  | 25 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |
| 2544 | 020080310 |  | 25 |  |  |  | 60 |  | REC |  | 20 mA | A08 | R |
| 25 Y 5 | 281193000 |  | 25 |  |  |  | 60 |  | REC |  | 40 mA | UX6 | RR |
| 25Y5G | 028190310 |  | 25 |  |  |  | 60 |  | REC |  | 40 mA | A08 | RR |
| 25 Y 6 | 028190310 |  | 25 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |
| 2583 | 281300000 |  | 25 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | R |
| 2524 | 028080310 |  | 25 |  |  |  | 120 |  | REC |  | 60 mA | A08 | R |
| 25 Z 5 | 291183000 |  | 25 |  |  |  | 60 |  | REC |  | 60 mA | UX6 | RR |
| 2526 | 029180310 |  | 25 |  |  |  | 60 |  | REC |  | 60 mA | A08 | RR |
| 26 | 264300000 |  | 1.5 | 10 | 150 |  | 5.5 | 1.1 | 100 |  | 1.1 | UX4 | T |
| 26 AFF 6 | *** 23***8 | C | 26 |  |  |  |  |  | ${ }_{1}$ |  |  | B9A | R |
| 26 A 6 | 412365100 |  | 26 | 1.8 | 250 | 250 | 10.5 | 4 | 100 | 100 | 4 | B7G | P |
| 26A7 | 414752360 |  | 26 | 4.5 | 30 | 30 | 20 | 5.5 | No D | ta Avai | ilable | A08 | PP |
| 26AQ8 | 641237410 |  | 26 | 1.5 | 200 |  | 8.7 | 6 | 100 |  | 6 | B9A | TT |
| 26B6 | 026540310 |  | 35 | 18 | 250 | 125 | 33 | 2.3 | 100 | 90 | 2.3 | A08 |  |
| 26BK6 | 412389600 |  | 26 | 2 | 250 |  | 1.2 | 1.6 | 150 |  | 1.6 | B7G | DDT |
| 26BQ6 | 020540310 | A1 | 25 | 22.5 | 250 | 150 | 55 | 5.8 | 100 | 100 |  | A08 |  |
| $26 \mathrm{C6}$ | 412398600 |  | 26 | 9 | 250 |  | 9.5 | 1.9 | 100 |  | 1.9 | ${ }^{\text {B7G }}$ | ${ }_{\text {D }}$ |
| 26CG6 | 412365100 |  | 26 |  | 250 | 150 | 9 | 2 | 100 | 100 |  | B7G | P |
| 26D6 | 412365100 |  | 26 | 0 | 100 | 100 | 2.7 | 7.2 | 100 | 100 | 6 | B7G | H |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | $\mathrm{mA} / \mathrm{V}$ | Anode Volts | Screen Volts | mA/V |  |  |  |
| 26E6 | $026540 \quad 310$ |  | 26 | 14 | 200 | 125 | 60 | 7.1 | 100 | 100 | 7 | A08 | P |  |
| 26 NG | 281193000 |  | 40 |  |  |  | 30 |  | REC |  | 15 mA | UX6 | RR |  |
| 2625W | 801229013 |  | 13 |  |  |  | 30 |  | REC |  | 15 mA | B9A | RR |  |
| $26 \mathrm{Z6}$ | 801239010 |  | 26 |  |  |  | 60 |  | REC |  | 15 mA | B9A | RR |  |
| 27 | 264130000 |  | 2.5 | 21 | 250 |  | 5.2 | 0.9 | 100 |  | 0.9 | UX5 | T |  |
| 27BL8 | 645237114 |  | 27 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | 175 | $\begin{aligned} & 14 \\ & 10 \end{aligned}$ | $\begin{aligned} & 5 \\ & 6.2 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 5 | \} ${ }^{\text {99A }}$ | TP |  |
| 27 S | 264130000 |  | 2.5 | 21 | 250 |  | 5.2 | 0.9 | 100 |  | 0.9 | UX5 | T |  |
| 27 SU | 320080210 |  | 13 |  |  |  | 120 |  | REC |  | 70 mA | A08 | R |  |
| 27 SV | 230080310 |  | 13 |  |  |  | 180 |  | REC |  | 40 mA | A08 | R |  |
| 28 AK 8 | $8+1239146$ |  | 28 | 2 | 200 |  | 1.3 | 1.5 | 100 |  | 1.4 | B9A | DDDT |  |
| 28AX8 | $8+1239146$ |  | 28 | 1 | 100 |  | 0.8 | 1.4 | 100 |  | 1.4 | B9A | DDDT |  |
| 28D7 | 245671430 |  | 28 | 3.5 | 30 | 30 | 12.5 | 3.4 | No D | ta Avai | lable | B8B | Pp |  |
| 2875 | 208009130 |  | 28 |  |  |  | 60 |  | REC |  | 20 mA | B8B | RR |  |
| 29 | 264413000 |  | 2.5 | 3 | 200 |  | 4.5 | 1.4 | 100 |  | 1.4 | IX6 | T |  |
| $29 \mathrm{C1}$ | 220283330 |  | 4 |  |  |  |  |  | D |  |  | A08 | D |  |
| 29GK6 | 141230651 |  | 28.6 | 7.4 | 250 | 250 | 48 | 11.3 | No D | ta Avai | lable | B9A | P |  |
| 30 | 364200000 |  | 2 | 9 | 150 |  | 3 | 0.9 | 100 |  | 0.9 | UX4 | T |  |
| 30A5 | 142345600 |  | 30 | 6.7 | 100 | 100 | 43 | 9.2 | 100 | 100 |  | B7G | P |  |
| 30AE3 | *** 23***8 | C | 30 |  |  |  |  |  | D |  |  | B9A | D |  |
| 30C1 | 645237114 |  | 9 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 200 | 200 | $\begin{aligned} & 14 \\ & 10 \end{aligned}$ | $\begin{aligned} & 5 \\ & 6.6 \end{aligned}$ |  | $\begin{array}{r} 60 \\ 150 \end{array}$ | $\left.\begin{array}{l} 5.1 \\ 6 \end{array}\right\}$ | B9A | TP |  |
| $30 \mathrm{C13}$ | 645237114 |  | 9 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 200 | 175 | 14 10 | $\begin{aligned} & 5 \\ & 6.2 \end{aligned}$ | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \} B9A | TP |  |
| 30 C 15 | 157236414 |  | 9 | \{ | 150 200 | 125 | 6 7.6 | 5 8.5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \} $\mathrm{B9A}$ | TP |  |
| 30 C 17 | 157236414 |  | 7.4 | $\left\{\begin{array}{l} \\ 0.8\end{array}\right.$ | 100 200 | 150 | $\begin{aligned} & 15 \\ & 6.4 \end{aligned}$ | 8.5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 8 | \} ${ }^{\text {99A }}$ | TP |  |
| 30 F 5 | 141230651 |  | 7.5 | 1.8 | 200 | 200 | 10 | 8.8 | 100 | 100 |  | B9A | P |  |
| 30 F 27 | 141230651 |  | 3.7 | 1.2 | 200 | 150 | 13.5 | 15 | No D | ta Avai | lable | B9A | P |  |
| 30FL1 | 641237541 |  | 9.4 | $\left\{\begin{array}{l}7.9 \\ 2.1\end{array}\right.$ | 200 200 | 200 | 10 10 | $\begin{aligned} & 3.6 \\ & 7.5 \end{aligned}$ | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \} $\mathrm{B9A}$ | TP |  |
| 30 FL 12 | 641237541 |  | 10 | $\left\{\begin{array}{l}4.9 \\ 2.9\end{array}\right.$ | 150 200 | 200 | 10 10 | 3.7 12.5 | 100 100 | 60 100 | $3.7$ | $\} B 9 \mathrm{~A}$ | TP |  |
| 30 FL 13 | 641237541 |  | 10 | \{ | 200 200 100 | 200 | 10 10 10 | 3.4 12.5 | 100 | $\begin{aligned} & 60 \\ & \text { ta Avai } \end{aligned}$ | $\begin{gathered} 3.4 \\ \text { i lable } \end{gathered}$ | $\} \mathrm{B} 9 \mathrm{~A}$ | TH |  |
| 30 FL 14 | 657231414 |  | 7.4 | $\left\{\begin{array}{l}3 \\ 1.7\end{array}\right.$ | $\begin{aligned} & 100 \\ & 150 \end{aligned}$ | 150 | $\begin{aligned} & 14 \\ & 12 \end{aligned}$ | $\begin{array}{r} 5.5 \\ 14.5 \end{array}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \}B9A | TP |  |
| $30 \mathrm{GP9}$ | 026543100 |  | 30 | 19 | 200 | 200 | 45 | 3.5 | 100 | 100 |  | A08 | P |  |
| 30 L 1 | 147234116 |  | 7.5 | 3.4 | 150 |  | 26 | 6.6 | 100 |  | 6 | B9A | TT |  |
| $30 L 15$ | 147324116 |  | 7 | 1.2 | 90 |  | 15 | 9 | 80 |  | 8 | B9A | TT |  |
| $30 L 17$ | 146234117 |  | 7.2 | 6 | 75 |  | 15 | 16.5 | No D | ta Avai | lable | B9A | TT |  |
| 30 P 4 | $020540 \quad 310$ | A1 | 25 | 21 | 200 | 200 | 100 | 11 | No D | ta Avai | lable | A08 | P |  |
| 30 P 12 | *41 23* 6*5 |  | 12 | 10.3 | 200 | 200 | 31 | 6.7 | 100 | 100 |  | B9A | P |  |
| $30 \mathrm{P1} 4$ | 026540310 |  | 13 | 9.4 | 200 | 200 | 42 | 7.2 | 100 | 100 |  | A08 | P |  |
| 30 P 16 | 041230605 |  | 16 | 14.2 | 200 | 200 | 45 | 8.2 | 100 | 100 | 7 | B9A | P |  |
| 30 P 18 | 041 23* 6*5 |  | 16 | 6 | 200 | 200 | 34 | 10 | No D | ta Avai | lable | B9A | P |  |
| 30P19 | *2* 540310 | A1 | 25 | 15 | 400 | 175 | 100 | 15 | No D | ta Avai | lable | A08 | P |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | $\mathrm{mA} / \mathrm{V}$ | Anode Volts | Screen Volts | $\mathrm{ma/V}$ |  |  |  |
| 35 HB 8 | 416235714 |  | 35 |  | 100 100 | 100 | 32.5 | $\begin{aligned} & 3.9 \\ & 6.2 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| 35L6 | 026540310 |  | 35 | 7.5 | 200 | 100 | 40 | 5.8 | 100 | 90 | 5.8 | A08 | P |  |
| 35L31 | 412365400 |  | 35 | 13 | 200 | 200 | 55 | 8 | 100 | 100 | 8 | B7G | P |  |
| 350L6 | 451236154 |  | 35 | 11.5 | 200 | 200 | 52 | 9.5 | 100 | 100 | 8.3 | B8A | P |  |
| 35R1 | 002382100 |  | 35 |  |  |  | 60 |  | REC |  | 30 mA | B7G | R |  |
| 35R2 | 002380100 |  | 35 |  |  |  | 60 |  | REC |  | 30 mA | B7G | R |  |
| 35RE | 281193000 |  | 35 |  |  |  | 60 |  | REC |  | 20 mA | UX6 | RR |  |
| 355 | 265120000 | G1 | 2.5 | 3 | 250 | 90 | 6.5 | 10.8 | 100 | 90 | 1.8 | UX5 | P |  |
| 35W4 | 002383100 |  | 27.5 |  |  |  | 60 |  | REC |  | 70 mA | B7G | R |  |
| 35X4 | 002380100 |  | 35 |  |  |  | 60 |  | REC |  | 20 mA | B7G | R |  |
| 35Y4 | 280200130 |  | 27.5 |  |  |  | 60 |  | REC |  | 20 mA | B8B | R |  |
| $35 \mathrm{Y5}$ | 280200130 |  | 27.5 |  |  |  | 60 |  | REC |  | 20 mA | B8B | R |  |
| 35731 | 002380100 |  | 35 |  |  |  | 120 |  | REC |  | 20 mA | B7G | R |  |
| 3523 | 280000130 |  | 35 |  |  |  | 120 |  | REC |  | 60 mA | B8B | R |  |
| 3523LT | 280000130 |  | 35 |  |  |  | 120 |  | REC |  | 60 mA | B8B | R |  |
| 3574 | 020080310 |  | 35 |  |  |  | 120 |  | REC |  | 60 mA | A08 | R |  |
| 3524GT | 020080310 |  | 35 |  |  |  | 120 |  | REC |  | 60 mA | A08 | R |  |
| 3525 | 022080310 |  | 27.5 |  |  |  | 60 |  | REC |  | 60 mA | A08 | R |  |
| $35 \mathrm{Z6}$ | 028190310 |  | 35 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 36 | 265130000 | G1 | 6 | 3 | 250 | 90 | 3.2 | 1 | 100 | 90 | 1 | UX5 | P |  |
| 36AM3 | 002283100 |  | 36 |  |  |  | 60 |  | REC |  | 15 mA | B7G | R |  |
| 37 | 264130000 |  | 6 | 18 | 250 |  | 7.5 | 1.1 | 100 |  | 1.1 | UX5 | T |  |
| 38 | 265130000 | G1 | 6 | 18 | 200 | 200 | 14 | 1 | 100 | 100 | , | UX5 | P |  |
| 38A3 | **1 23***8 |  | 38 |  |  |  | 60 |  | REC |  | 20 mA | B9A | R |  |
| 38R3 | 001230008 |  | 38 |  |  |  | 180 |  | REC |  | 40 mA | B9A | R |  |
| 39 | 260501300 | G1 | 6.3 | 3 | 250 | 90 | 5.8 | 1 | 100 | 90 |  | B7G | P |  |
| 39 | 265130000 | G1 | 6 | 3 | 200 | 90 | 5.8 | 1 | 100 | 90 | 1 | UX5 | P |  |
| 40 | 364200000 |  | 5 | 1.5 | 200 |  | 0.2 | 0.2 | 150 |  | 0.2 | UX4 | T |  |
| 40PPA | 045231600 |  | 40 | 25 | 150 | 150 | 36 | 2 | 100 | 100 | 4 | B7 | P |  |
| 40SUA | 802310000 |  | 40 |  |  |  | 60 |  | REC |  | 60 mA | B5 | R |  |
| 40Z5 | 022080310 |  | 35 |  |  |  | 120 |  | REC |  | 30 mA |  | R |  |
| 41 | 265413000 |  | 6 | 18 | 250 | 250 | 32 | 2.3 | 100 | 100 | 2.3 | UX6 | P |  |
| 41 E | 265413000 |  | 6 | 18 | 250 | 250 | 32 | 2.3 | 100 | 100 | 2.3 | UX6 | P |  |
| 41FP | 642310000 |  | 6 | 18 | 250 |  | 19 | 2.8 | 100 |  | 2.8 | B5 | T |  |
| 41M | 026540310 |  | 6 | 18 | 250 | 250 | 32 | 2.3 | 100 | 150 | 2.3 | A08 | P |  |
| 41 MDG | 652310000 | G1 | 4 | 0 | 150 | 100 |  | 0.2 | 150 | 100 | 0.2 | B5 | P |  |
| 41 MH | 642310000 |  | 4 | 1.5 | 200 |  | 3.2 | 3 | 100 |  | 4 | B5 | T |  |
| 41MMF | 642310000 |  | 4 | 2 | 150 |  | 2.5 | 2.8 | 125 |  | 2.8 | B5 | T |  |
| 41 MHL | 642310000 |  | 4 | 3 | 200 |  | 4 | 3.1 | 100 |  | 4.5 | B5 | T |  |
| 41MLF | 642310000 |  | 4 | 4.5 | 200 |  | 7.5 | 1.9 | 125 |  | 1.9 | B5 | T |  |
| 41 MP | 642310000 |  | 4 | 7.5 | 200 |  | 24 | 6.0 | 100 |  | 7.5 | B5 | T |  |
| 41MPG | 454231600 | G1 | 4 | 1.5 | 250 | 100 | 3.3 |  | 100 | 100 |  | B7 | H |  |
| 41MPT | 041231500 | A1 | 4 | 1.5 | 250 | 100 | 12 | 4.8 | 100 | 100 | 4.8 | B7 | P |  |
| 41MRC | 642310000 |  | 4 | 1 | 200 |  | 2.5 | 2.6 | 150 |  | 2.6 | B5 | T |  |
| 41MSG | 465230574 |  | 4 | 1.5 | 150 | 60 | 0.8 | 2.5 | 100 | 60 | 2.5 | B9 | PP |  |
| 41MSG | 542310000 |  | 4 | 1.5 | 150 | 60 | 0.8 | 2.5 | 100 | 60 | 2.5 | B5 | P |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | data for valve characteristic METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grld Volts | Anode Volts | Screen | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| 50A5 | 265004130 |  | 50 | 7.5 | 150 | 100 | 49 | 8 | 100 | 90 | 7 | B8B | P |  |
| 50AX6 | 028190310 |  | 50 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| 50B5 | 412365400 |  | 50 | 7.5 | 150 | 100 | 49 | 7.5 | 100 | 90 | 6 | B7G | P |  |
| 50BC1D | 206089030 | G1 | 1.4 | 0.5 | 90 |  | 1.4 | 0.8 | 80 |  |  | A08 | DDT |  |
| 50BK5 | 604231450 |  | 50 | 5 | 250 | 250 | 35 | 8.5 | 100 | 150 |  | B9A | P |  |
| 50BM8 | 414237516 |  | 50 | $\{10$ | 100 150 | 150 | 41.5 | 2.5 7.5 | 100 100 | 60 100 |  | $\}$ B9A | TP |  |
| 50C5 | 142345600 |  | 50 | 7.5 | 150 | 100 | 49 | 7.5 | 100 | 90 | 6 | B7G | P |  |
| 5006 | 026540310 |  | 50 | 13.5 | 150 | 150 | 58 | 7 | 100 | 100 | 7 | A08 | P |  |
| 50CID | 206089030 | G1 | 1.4 | 1.5 | 100 |  | 1.5 | 0.9 | 100 |  | 0.9 | A08 | DDT |  |
| 50CA5 | 142345600 |  | 50 | 4.5 | 150 | 125 | 37 | 9.2 | No D | ta Avai | ilable | B7G | P |  |
| 50CD6 | 021040350 | A1 | 50 | 30 | 200 | 200 | 75 | 7.5 | 100 | 100 | 7 | ${ }^{\text {A } 08}$ | P |  |
| 50DC4 | 002363100 |  | 25 |  |  |  | 60 |  | REC |  | 20 mA |  |  |  |
| 50 EH 5 | 142345600 |  | 50 | 3.2 | 100 | 125 | 42 | 14.6 | No D | a Avai | ilable | B7G | P |  |
| 50 F 2 | 412365400 |  | 50 | 7.5 | 100 | 100 | 50 | 7.5 | 100 | 100 |  | B7G | P |  |
| 50F2D | 206501030 | G1 | 1.4 | 1.5 | 100 | 125 | 1.4 | 1 | 100 | 100 | 1 | A08 | P |  |
| 50FA5 | 142345600 |  | 50 | 7.5 | 100 | 100 | 40 | 5.8 | 100 | 100 |  | B7G | P |  |
| 50 FE 5 | 026540310 |  | 50 | 16 | 150 | 150 | 80 | 9.5 | 100 | 100 |  | A08 | P |  |
| 50FK5 | 142345600 |  | 50 |  | 100 | 100 | 32 | 12.8 | No D | ta Avai | ilable | B7G | P |  |
| 50FY8 | 414237516 |  | 50 | $\left\{\begin{array}{r}1.5 \\ 13.5\end{array}\right.$ | 150 150 | 125 | 2.5 | 2 | 100 | 60 100 |  | \} $\mathrm{B9}$ A | TP |  |
| 50LID | 206540030 |  | 1.4 | 4.5 | 100 | 125 | 4.8 | 1 | 100 | 100 | 1 | A08 | $p$ |  |
| 50L6 | 026540310 |  | 50 | 8.2 | 200 | 125 | 46 | 9.5 | 100 | 75 | 8 | A08 | P |  |
| 50R4 | 080230901 |  | 50 |  |  |  | 60 |  | REC |  | 40 mA |  | RR |  |
| $50 \mathrm{RP1}$ | 141236518 |  | 50 | $\{1$ | 200 | 100 | 60 9 | 4.5 | REC | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{gathered} 60 \mathrm{~mA} \\ 4 \end{gathered}$ | $\}_{\text {B9A }}$ | RP |  |
| $50 \times 6$ | 219008130 |  | 50 |  |  |  | 60 |  | REC |  | 20 mA | B8D | RR |  |
| 50 YIU | 388208120 |  | 45 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| 5076 | 029180310 |  | 50 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 5017 | 028193310 |  | 46 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 5026 | 029180310 |  | 50 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| 5027 | 029183310 |  | 48 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 51 | 265130000 | G1 | 2.5 | 3 | 250 | 90 | 6.5 | 10.5 | 175 | 90 | 10 | UX5 | P |  |
| 52 | 264530000 |  | 6 | 1 | 250 | 100 | 41 | 2 | 125 | 100 | 2 | UX5 | P |  |
| 52KU | 030908020 |  | 5 |  |  |  | 60 |  | REC |  | 30 mA | A08 | RR |  |
| 53 | 274146300 |  | 2.5 | 5 | 250 |  | 3 | 1.6 | 100 |  | 3.1 | UX7 | TT |  |
| 53 KU | 030908020 |  | 5 |  |  |  | 120 |  | REC |  | 40 mA | A08 | RR |  |
| 54 KU | 030908020 |  | 5 |  |  |  | 120 |  | REC |  | 60 mA | A08 | RR |  |
| 55 | 269813000 | G1 | 2.5 | 20 | 250 |  | 8 | 1.1 | 100 |  | 1.1 | UX6 | DDT |  |
| 55A/165M | 245 $* * 1$ 761430 $23 * * 8$ |  | 12 55 | 15 | 150 | 150 | 60 120 | 4 | 100 | 100 | 30 mA | B8G B9A | ${ }_{\mathrm{P}}^{\mathrm{P}}$ |  |
| 56 | 264130000 |  | 2.5 | 12.5 | 250 |  | 5 | 1.4 | 100 |  | 1.4 | UX5 | T |  |
| 56AS | 264130000 |  | 6 | 13.5 | 250 |  | 5 | 1.4 | 100 |  | 1.4 | UX5 | T |  |
| 57 | 265113000 | G1 | 2.5 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | UX6 | P |  |
| 57AS | 265113000 | G1 | 6 | 3 | 250 | 100 | 2 | 0.2 | 100 | 100 | 1.2 | Ux6 | P |  |
| 58 | 265113000 | G1 | 2.5 | 3 | 250 | 100 | 8 | 1.5 | 100 | 100 | 1.5 | UX6 | P |  |
| 58AS | 265113000 | G1 | 6 | ${ }^{3}$ | 250 | 100 | 8 | 1.5 | 100 | 100 | 1.5 | Ux6 | P |  |
| 58TF1 | 417 23† 564 |  | 58 | $\left\{\begin{array}{r}2 \\ 31\end{array}\right.$ | 200 250 | 250 | 4 38 | 1.5 2.5 | 100 100 | 60 100 | 1.5 | B9A | TPP |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | ${ }_{\mathrm{mA}}^{1 \mathrm{a}}$ | $\mathrm{mA} / \mathrm{V}$ | Anode | Screen Volts | mA/V |  |  |  |
| 81 | 280300000 |  | 7.5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | R |  |
| 81M | 280300000 |  | 7.5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | R |  |
| 82 | 289300000 |  | 2.5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |  |
| 82v | 289300000 |  | 2.5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |  |
| 83 | 289300000 |  | 5 |  |  |  | 120 |  | REC |  | 20 mA | UX4 | RR |  |
| 83V | 289300000 |  | 5 |  |  |  | 60 |  | REC |  | 60 mA | UX4 | RR |  |
| 84 | 289130000 |  | 6 |  |  |  | 30 |  | REC |  | 30 mA | UX5 | RR |  |
| 85 | 269813000 | G1 | 6 | 20 | 250 |  | 8 | 1.1 | 100 |  | 1.1 | Ux6 | DDT |  |
| 85AS | 268913000 | G1 | 6 | 20 | 250 |  | 8 | 1.1 | 100 |  | 1.1 | IX6 | DDT |  |
| 85 S | 268913000 | G1 | 6 | 10.5 | 250 |  | 3.7 | 0.7 | 125 |  | 1.1 | Ux6 | DDT |  |
| 88 | 289300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |  |
| 89 | 265113000 | G1 | 6 | 10 | 100 | 100 | 9.5 | 1.2 | 100 | 90 | 1.2 | Ux6 | p |  |
| 90 | 264413000 |  | 2.5 |  | 150 |  | 3.5 | 1.4 | 150 |  | 1.4 | UX6 | T |  |
| 90 AC | 642310000 |  | 4 | 12.5 | 200 |  | 40 | 7.5 | 100 |  | 7 | B5 | T |  |
| 92 | 264413000 |  | 6 |  | 250 |  | 3.5 | 1.4 | 100 |  | 1.4 | LX6 | T |  |
| 95 | 265413000 |  | 2.5 | 20 | 350 | 300 | 42 | 2.3 | 100 | 150 | 2.3 | (X6 | P |  |
| 96 | 281300000 |  | 10 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | R |  |
| 98 | 289130000 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | UX5 | RR |  |
| 99 V | 426300000 |  | 3.3 | 4.4 | 90 |  | 2.5 | 0.4 | 100 |  | 0.4 | UX4 | T |  |
| 99X | 264300000 |  | 3.3 | 4.5 | 90 |  | 2.5 | 0.4 | 100 |  | 0.4 | UX4 | T |  |
| 100AC | 642310000 |  | 4 | 6 | 200 |  | 5 | 2 | 100 |  | 2 | B5 | T |  |
| 104V | 642310000 |  | 4 | 1 | 100 |  | 15 | 3.5 | 100 |  | 3.5 | B5 | T |  |
| 100/200LLID | 346547220 |  | 1.4 | 9.4 | 150 | 125 | 4 |  | 100 | 100 |  | A08 | P |  |
| 112A | 364200000 |  | 5 | 4.5 | 90 |  | 5 | 1.5 | 80 |  | 1.5 | UX4 | T |  |
| 114 | 020000300 | A1G1 | 1.4 |  | 200 |  | 15 |  | 100 |  |  | A08 | T |  |
| 114B | 020000300 | A1G1 | 1.4 | 4 | 200 |  | 12 | 1.1 | 100 |  | 1.1 | A08 | T |  |
| 116/Pen | 005231600 | G1 | 11.5 | 1 | 100 | 100 |  | 7 | 100 | 100 | 6 | B7 | P |  |
| 117DDP | 541236891 |  | 17 | 2 | 250 | 150 | 5 | 2.2 | 100 | 100 | 2 | B9A | DDP |  |
| 1177 | 126458310 |  | 117 \{ | 5.2 | 100 | 100 | 60 43 | 5.3 |  | 90 | $\left.\begin{array}{r} 20 \mathrm{~mA} \\ 5.3 \end{array}\right\}$ | A08 | RP |  |
| 117 N 7 | 126458310 |  | 117 \{ | 5.2 | 100 | 100 | 60 43 | 5.3 | REC 100 | 90 | $\left.\begin{array}{c}20 \mathrm{maA} \\ 5.3\end{array}\right\}$ | A08 | RP |  |
| 11773 | *02 381000 |  | 117 |  |  |  | 60 |  | REC |  | 20 mA | B7G | R |  |
| 11724 | 020080310 |  | 117 |  |  |  | 60 |  | REC |  | 20 mA | A08 | R |  |
| 11726 | 029180310 |  | 117 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 120 | 642310000 |  | 2 | 12 | 150 |  | 12 |  | 100 |  |  | B5 | T |  |
| 120 VPA | 041230500 | A1 | 2 | 1 | 150 | 60 | 2.9 | 1.1 | 150 | 60 | 1.1 | B7 | P |  |
| 121VP | 26* *54 130 |  | 12.5 |  | 200 | 150 | 7.2 | 2.3 | 100 | 150 | 2.3 | B8A | P |  |
| 124 AC | 542310000 | A1 | 4 | 1.4 | 200 | 60 | 1.6 | 0.9 | 100 | 60 | 0.9 | B5 | P |  |
| 141 DDT | 264089130 |  | 14 | 1.5 | 200 |  | 1.5 | 1.6 | 100 |  | 1.5 | B8A | DDT |  |
| 141 TH | 276454130 |  | 14 \{ | 2 | 100 250 | 100 | 5 | 2.2 | 100 100 | 60 75 | $\left.\begin{array}{l} 2.8 \\ 1.5 \end{array}\right\}$ | B8A | TH |  |
| 142BT | 026540130 |  | 14 | 8.5 | 200 | 200 | 29 | 3.7 | 100 | 100 | 3.7 | A08 | P |  |
| 144 V | 642310000 |  | 4 | 8 | 200 |  | 6 | 1.4 | 100 |  | 1.4 | B5 | T |  |
| 154 V | 642310000 |  | 4 | 6 | 200 |  | 9 | 2 | 100 |  | 2 | B5 | T |  |
| 163Pen | 041 23* 6*5 |  | 16 | 10.4 | 200 | 175 | 53 | 9.5 | No Da | a Avai | lable | B9A | P |  |
| 164 V | 642310000 |  | 4 | 9 | 200 |  | 12 | 3.4 | 100 |  | 3.4 | B5 | T |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Vols | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/v |  |  |  |
| 171DDP | 541236891 |  | 17 | 2 | 200 | 125 | 5 | 2.2 | 100 | 100 | 2 | B9A | DDP |  |
| 181 | 264300000 |  | 3 | 30 | 200 |  | 16 | 1 | 100 |  | 1 | UX4 | T |  |
| 182 | 264300000 |  | 5 | 45 | 200 |  | 18 | 1.5 | 100 |  | 1.5 | UX4 | T |  |
| 182A | 264300000 |  | 5 | 45 | 200 |  | 18 | 1.5 | 100 |  | 1.5 | UX4 | T |  |
| 182B | 264300000 |  | 5 | 35 | 250 |  | 18 | 1.5 | 100 |  | 1.5 | UX4 | T |  |
| 183 | 264300000 |  | 5 | 60 | 250 |  | 30 | 1.7 | 100 |  | 1.7 | UX4 | T |  |
| 185BT | 020540310 | A1 | 18 | 18 | 200 | 200 | 100 | 9.5 | 100 | 100 | 8 | A08 | P |  |
| 185BTA | 020540310 | A1 | 18 | 18 | 200 | 200 | 100 | 9.5 | 100 | 100 | 8 | A08 | P |  |
| 200A | 264300000 |  | 5 |  | 60 |  | 1.5 | 0.7 | No D |  | lable | UX4 | T |  |
| 202DDT | 809231600 | G1 | 20 | 3 | 200 |  | 3 | 2.4 | 150 |  | 2.4 | B7 | DDT |  |
| 202MPG | 545231600 | G1 | 20 | 1.5 | 200 | 100 | 3 |  | 100 | 100 |  | B7 | H |  |
| 202SPB | 061231500 | G1 | 20 | 1.5 | 250 | 100 | 4.8 | 2.8 | 100 | 100 | 2.8 | B7 | P |  |
| 202STH | 645231700 | G1 | 20 \{ | 1.5 1.5 | 100 | 60 | 2 |  | 100 100 | $60$ |  | \} 7 | TH |  |
| 202VP | 041231500 | A1 | 20 | 1.5 | 250 | 100 | 4.3 | 2.2 | 100 | 100 | 2.2 | B7 | P |  |
| 202VPB | 061231500 | G1 | 20 | 1.5 | 250 | 100 | 4.3 | 2.2 | 100 | 100 | 2.2 | B7 | P |  |
| 203 THA | 545231600 | G1 | 20 | 2 | 250 | 100 | 3.5 |  | 100 | 100 |  | B7 | H |  |
| 205D | 264300000 |  | 3.5 | 29 | 400 |  | 30 |  | 100 |  | 1.8 | UX4 | T |  |
| 205E | 264300000 |  | 4.5 | 22.5 | 350 |  | 29 | 1.9 | 100 |  |  | UX4 | $T$ |  |
| 205F | 264300000 |  | 4.5 | 18 | 300 |  | 31 | 1.7 | 100 |  |  | UX4 | T |  |
| 210 DDT | 682390000 | G1 | 2 | 1 | 100 |  | 2.3 | 1.1 | 100 |  | 1.1 | B5 | DDT |  |
| 210DET | 642300000 |  | 2 | 4.5 | 150 |  | 3 | 1.1 | 100 |  | 1.1 | B4 | T |  |
| 210 DPT | 041230500 | A1 | 2 |  | 150 | 60 | 2.9 | 1.3 | 150 | 60 | 1.3 | B7 | P |  |
| 210 HF | 642300000 |  | 2 | 3 | 150 |  | 1.6 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| 210 HL | 642300000 |  | 2 | 3 | 150 |  | 1.6 | 1.1 | 100 |  | 1.1 | B4 | T |  |
| 210 HPT | 642350000 |  | 2 | 4.5 | 150 | 175 | 7.5 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| 210 LF | 642300000 |  | 2 | 4.5 | 150 |  | 4.8 | 1.4 | 100 |  | 1.4 | B4 | T |  |
| 210PG |  | G1 |  |  | 150 |  | 1.1 |  | 150 | 60 | 0.4 |  |  |  |
| 210 PG | 645230700 | G1 |  |  | 150 | 40 | 0.4 |  | 150 | 75 | 1.5 | B7 | H |  |
| 210PGA | 645230700 | G1 | 2 \{ |  | 150 150 |  | 1.1 0.4 |  | 150 150 | 60 75 | 1.4 | \}B7 | H |  |
| 210RC | 642300000 |  | 2 | 1.5 | 150 | 40 | 0.4 0.8 | 0.8 | 150 | 75 | 1.5 0.8 | B4 | T |  |
| 210 SPG | 645230700 | G1 | 2 \{ |  | 150 150 | 40 | 1.1 0.5 |  | 150 150 | 75 | $\left.\begin{array}{l} 0.5 \\ 1.5 \end{array}\right\}$ | B7 | H |  |
| $210 S P T$ | 041230500 | A1 | 2 | 1 | 150 | 60 | 1.9 | 1.1 | 100 | 60 | 1.2 | B7 | P |  |
| 210 T | 264300000 |  | 7.5 | 32 | 350 |  | 16 | 1.5 | 100 |  | 1.5 | UX4 | T |  |
| 210 VPa | 041230500 | A1 | 2 | 1 | 150 | 60 | 2.9 | 1.1 | 150 | 60 | 1.1 | B7 | P |  |
| 210VPT | 041231500 | A1 | 2 | 1 | 150 | 60 | 1.9 | 1.1 | 150 | 60 | 1.1 | B7 | P |  |
| 213 | 289300000 |  | 5 |  |  |  | 30 |  | REC |  | 15 mA | UX4 | RR |  |
| 213Pen | *41 23* *51 | A1 | 21 | 22 | 200 | 200 | 45 | 6.2 | 100 | 100 |  | B9A | P |  |
| 215 P | 642300000 |  | 2 | 7.5 | 150 |  | 10 | 2.2 | 100 |  | 2.2 | B4 | T |  |
| 215SG | 542300000 | A1 | 2 | 1 | 150 | 60 | 1.4 | 1.1 | 150 | 60 | 1.1 | B4 | P |  |
| 217A | 228300000 |  | 10 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | R |  |
| 220 | 200300000 |  | 2.5 |  |  |  | 15 |  | REC |  | 15 mA | UX4 | R |  |
| 220B | 446230700 |  | 2 | 3 | 150 |  | 5.0 | 1.5 | 100 |  | 1.5 | B7 | TT |  |
| 220DD | 892310000 |  | 2 |  |  |  |  |  | ${ }_{1}$ |  |  | B5 | DD |  |
| 220HPT | 642350000 |  | 2 | 4.5 | 150 | 150 | 8 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| $2201 P T$ | 040230500 | A1 | 2 | 1.5 | 150 | 60 | 2.2 | 1 | 100 | 60 | 1 | B7 | P |  |

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| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & l_{\mathrm{a}}^{2} \\ & \mathrm{~m} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| 22007 | 642350000 |  | 2 | 4.5 | 150 | 150 | 9.5 | 2.5 | 100 | 100 | 2.5 | B5 | p |  |
| 220P | 642300000 |  | 2 | 7.5 | 150 |  | 11 | 2.2 | 100 |  | 2.2 | B4 | T |  |
| 220PA | 642300000 |  | 2 | 4.5 | 150 |  | 10 | 4 | 100 |  | 4 | B4 | T |  |
| 220PT | 642350000 |  | 2 | 9 | 150 | 150 | 19 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| 220SG | 542300000 | A1 | 2 | 1 | 150 | 60 | 1.5 | 1.6 | 100 | 60 | 1.6 | B4 | P |  |
| 220TH | 645230700 | G1 |  | 3 | 100 150 | 60 | 1.7 0.6 | 1.2 0.6 | $\begin{aligned} & 100 \\ & 125 \end{aligned}$ | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ | $\left.\begin{array}{l} 1.2 \\ 0.6 \end{array}\right\}$ | B7 | TH |  |
| 220vs | 542300000 | A1 | 2 | 1 | 100 | 60 | 2 | 1.6 | 100 | 60 | 1.6 | B4 | P |  |
| 220VSG | 542300000 | A1 | 2 | 1.5 | 150 | 60 | 2.6 | 1.5 | 100 | 60 | 1.6 | B4 | P |  |
| 225 DU | 082323900 |  | 2 |  |  |  | 15 |  | REC |  | 10 mA | B7 | RR |  |
| 230 | 642300000 |  | 2 | 20 | 150 |  | 18 | 3 | 100 |  | 3 | B4 | T |  |
| 230 | 200300000 | D1 | 5 |  |  |  | 30 |  | REC |  | 14 mA | UX4 | R |  |
| 230PT | 642350000 |  | 2 | 15 | 150 | 150 | 14 | 2 | 100 | 100 | 2 | B5 | P |  |
| 230XP | 642300000 |  | 2 | 18 | 150 |  | 22 | 3 | 100 |  | 2 | B4 | T |  |
| 231D | 264300000 |  | 3 | 3 | 90 |  | 2.1 | 8.4 | 100 |  | 0.5 | UX4 | T |  |
| 240B | 446230700 |  | 2 | 1 | 150 |  | 8.5 |  | 100 |  |  | B7 | TT |  |
| 240QP | 446235700 |  | 2 | 12 | 150 | 150 | 6 |  | 100 | 100 | 2.5 | B7 | PP |  |
| 244 | 264130000 |  | 2 | 6 | 150 |  | 5.5 | 1 | 100 |  | 1 | UX5 | T |  |
| 244V | 642310000 |  | 4 | 5.5 | 200 |  | 5.5 | 2.8 | 100 |  | 2.8 | B5 | T |  |
| 245A | 265130000 | G1 |  | 1.5 | 150 | 50 | 4.8 | 0.6 | 100 | 60 |  | UX5 | P |  |
| 246A | 365200000 | F1 | 3.3 | 1.5 | 150 | 40 | 1.5 | 0.4 | No Data | $a \quad$ ai | ilable | UX4 | P |  |
| 247A | 206040030 |  | 2 | 4.5 | 150 |  | 3.2 | 0.9 | 100 |  | 0.9 | A08 | T |  |
| 248A | 026510310 | G1 | 6.3 |  | 150 | 125 | 5.5 | 1.8 | 100 | 100 |  | A08 | P |  |
| 249B | 223300000 | D1 | 2.5 |  |  |  | 120 |  | REC |  | 30 mA | Ux4 | R |  |
| 252A | 264300000 |  | 5 | 50 | 400 |  | 60 | 3.4 | 100 |  | 3.4 | UX4 | T |  |
| 255 | 268943000 |  | 2 | 3 | 150 |  | 0.8 | 0.6 | 100 |  | 0.5 | UX6 | DDT |  |
| 257 | 264530000 |  | 5 | 21.5 | 100 | 100 | 20 | 1.3 | 100 | 90 | 1.3 | UX5 | p |  |
| 257A | 260300000 | G1 | 3.1 | 3 | 90 |  | 2.1 | 0.5 | 80 |  | 0.5 | UX4 | T |  |
| 259A | 265130000 | G1 | 2 | 1.5 | 200 | 75 | 5.5 | 1.4 | 100 | 75 | 1.4 | (X) | ${ }^{\text {p }}$ |  |
| 259B | 265130000 | G1 | 2 | 1.2 | 200 | 75 | 5.5 | 1.4 | 100 | 75 | 1.4 | UX5 | P |  |
| 262B | 261300000 | G1 | 10 | 4.5 | 150 |  | 2.8 | 0.9 | 100 |  | 0.9 | IX4 | T |  |
| 264 | 264300000 |  | 1.1 | 9 | 150 |  | 2.5 | 0.6 | 100 |  | 0.6 | UX4 | T |  |
| 264C | 264300000 |  | 1.5 | 8 | 100 |  | 2.1 | 0.6 | 100 |  | 0.6 | UX4 | T |  |
| 264E | 264300000 |  | 1.4 | 8 | 100 |  | 2.1 | 0.6 | 100 |  | 0.6 | IX4 | T |  |
| 271A | 264130000 |  | 5 | 30 | 400 |  | 37.5 | 2.9 | 100 |  |  | UX5 | T |  |
| 272A | 264130000 |  | 10 | 15 | 150 |  | 5.4 | 0.7 | 100 |  | 0.7 | IX5 | T |  |
| 274A | 289300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | IX4 | RR |  |
| 274B | 289300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | Ux4 | RR |  |
| 275A | 264300000 |  | 5 | 4.5 | 200 |  | 47 | 2.7 | 100 |  | 2.7 | UX4 | T |  |
| 281A | 264530000 |  | 5 | 60 | 150 | 75 | 35 | 1.5 | No Data | Avail | lable | UX5 | P |  |
| 283A | 265130000 | G1 | 2 | 1.5 | 200 | 75 | 5.9 | 1.3 | 100 | 75 | 1.3 | 125 | P |  |
| 285 | 265130000 | G1 | 2 | 12 | 200 | 150 | 8.8 | 0.9 | 100 | 100 | 0.9 | UX5 | P |  |
| 286A | 265113000 | G1 | 2 | 1.5 | 200 | 75 | 6.2 | 1.2 | 100 | 75 | 1.2 | UX6 | P |  |
| 290A | 265113000 | G1 | 10 | 1.5 | 200 | 75 | 5.4 | 1.2 | 150 |  | 1.2 | Ux6 | P |  |
| 291A | 275641300 | G1 | 10 | 3 | 200 | 75 | 4.5 3.1 |  | 100 100 | $\begin{aligned} & 60 \\ & 75 \end{aligned}$ |  | B7 | H |  |
| 292A | 268913000 | G1 | 10 | 6 | 150 |  | 2.1 | 0.6 | 100 |  | 0.6 | Ux6 | DDT |  |
| 293A | 265413000 |  | 10 | 18 | 200 | 200 | 14.5 | 1 | 100 | 100 | 1 | Ux6 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\left\lvert\, \begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}\right.$ | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | $\mathrm{mA} / \mathrm{V}$ | Anode Volts |  | creen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| 300A | 364200000 |  | 5 | 97 | 400 |  | 80 |  | No D | ta | Avai | lable | UX4 | T |  |
| 300B | 364200000 |  | 5 | 97 | 400 |  | 80 |  | No D |  | a Avai | lable | UX4 | T |  |
| 302 | 645231700 | G1 | 30 | 2 | 100 250 | 100 | 1.5 3.5 |  | 100 250 |  | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \} 77 | TH |  |
| 303A | 268943000 |  | 2 | 6 | 150 |  | 2 | 0.6 | 100 |  |  | 0.6 | UX6 | DDT |  |
| 304AC | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 1.9 | 100 |  | 100 | 1.9 | B5 | P |  |
| 309A | 265413000 |  | 10 | 1.5 | 200 | 75 | 4.8 | 1.1 | 100 |  | 60 | 1.1 | Ux6 | P |  |
| 310A | 265113000 | G1 | 10 | 3 | 150 | 150 | 5.5 | 1.8 | 100 |  | 100 | 1.8 | UX6 | P |  |
| 310 B | 265113000 | G1 | 10 | 3 | 150 | 150 | 5.5 | 1.8 | 100 |  | 100 | 1.8 | UX6 | P |  |
| 311A | 265130000 | G1 | 10 | i5 | 150 | 150 | 30 | 2.8 | 100 |  | 100 | 2.8 | UX5 | P |  |
| 311 SU | 28**** 130 |  | 31 |  |  |  | 60 |  | REC |  |  | 20 mA | B8A. | R |  |
| 324A | 200300000 | D1 | 5 |  |  |  | 5 |  | D |  |  |  | UX4 | R |  |
| 328A | 265113000 | G1 | 7.5 | 3 | 150 | 150 | 5.5 | 1.8 | 100 |  | 100 | 1.8 | UX6 | P |  |
| 329A | 265130000 | G1 | 7.5 | 15 | 150 | 150 | 37.5 | 3.3 | 100 |  | 100 | 3 | UX5 | P |  |
| 329L | 265130000 | G1 | 7.5 | 15 | 150 | 150 | 37 | 3.3 | 100 |  | 100 | 3 | UX5 | P |  |
| 332Pen | 026540310 |  | 33 | 8.5 | 200 | 200 | 45 | 8 | 100 |  | 100 | 7 | A08 | P |  |
| 336A | 265413000 |  | 10 | 14 | 250 | 250 | 30 | 4.2 | 100 |  | 100 |  | UX6 | P |  |
| 337A | 265113000 | G1 | 10 | 3 | 150 | 150 | 6.3 | 1.6 | 100 |  | 100 | 1.6 | UX6 | P |  |
| 345A | 289130000 |  | 6 |  |  |  | 60 |  | REC |  |  | 20 mA | UX5 | RR |  |
| 347A | 020600310 | G1 | 6 | 4,5 | 150 |  | 2.8 | 0.9 | 100 |  |  | 0.9 | A08 | T |  |
| 349A | 026540310 |  | 6 | 14 | 250 | 250 | 30 | 4.2 | 100 |  | 150 | 4.2 | A08. | P |  |
| 350B | 026540310 |  | 6 | 20 | 400 | 250 | 85 | 6.2 | No D | ta | Avai | lable | A08 | P |  |
| 351A | 028090310 |  | 1 |  |  |  | 120 |  | REC |  |  | 20 mA | A08 | RR |  |
| 352A | 268913000 | G1 | 10 | 6 | 100 |  | 2.1 | 0.6 | 100 |  |  | 0.6 | UX6 | DDT |  |
| 354V | 642310000 |  | 4 | 4.5 | 250 |  | 6.5 | 3.6 | 100 |  |  | 3 | B5 | T |  |
| 361A | 243560000 |  | 1.4 |  | 50 | 40 | 0.4 | 0.6 | No D | ta | Avai | lable | UX5 | P |  |
| 362A | 243560000 |  | 1.4 |  | 50 | 50 | 1.3 | 0.5 | No D | ta | Avai | lable | UX5 | P |  |
| 367A | 060524310 |  | 6 | 20 | 400 | 250 | 85 | 6.2 | No D |  | Avai | lable | A08 | P |  |
| 373A | 021455360 |  | 2 |  | 150 | 150 | 2 | 1.3 | 100 |  |  | 1.3 | A08 | P |  |
| 374A | 021405360 |  | 3 |  | 150 | 125 | 18 | 3 | 125 |  |  | 3 | A08 | P |  |
| 375A | 026540310 |  | 20 |  | 40 | 40 | 12 | 4.7 | No D | ta | Avai | lable | A08 | P |  |
| 381A | 120080300 |  | 6.3 |  |  |  | 5 |  | D |  |  |  | A08 | D |  |
| 383A | 120406030 |  | 6 |  | 150 |  | 7.5 | 2.8 | 100 |  |  | 2.8 | A08 | T |  |
| 385A | 125040130 |  | 6 |  | 150 |  | 7.5 | 2.5 | 100 |  |  | 2.5 | A08 | P |  |
| 387A | 125040130 |  | 6 |  | 150 |  | 5.6 | 4 | 100 |  |  | 3.8 | A08 | P |  |
| 396A | 214607413 |  | 6.3 | 2.2 | 150 |  | 8.2 | 5.5 | 100 |  |  | 6 | B9A | TT |  |
| 401A | 265300000 |  | 5 | 9 | 50 |  | 1.5 | 0.8 | No D | ta | Avai | lable | UX4 | T |  |
| 402 | 264300000 |  | 3 | 40 | 200 |  | 40 | 1 | 100 |  |  | 1 | UX4 | T |  |
| 402-0T | 005231600 | G1 | 40 | 12 | 250 | 250 | 32 | 7 | 100 |  | 150 | 7 | B7 | P |  |
| 402 P | 000231600 | G1 | 4 | 15 | 200 |  | 27 | 5.5 | 100 |  |  | 7.5 | B7 | T |  |
| 402Pen | 005231600 | G1 | 40 | 6.7 | 200 | 200 | 40 | 7 | 100 |  | 100 | 7 | B7 | P |  |
| 402PenA | 005231600 | G1 | 40 | 9 | 150 | 150 | 56 | 8 | 100 |  | 100 | 8 | B7 | P |  |
| 403A | 413265100 |  | 6 | 2.3 | 150 | 150 | 7 | 4.4 | 100 |  | 100 | 4 | B7G | P |  |
| 403B | 412365100 |  | 6.3 |  | 200 | 125 | 7.7 | 5.1 | 100 |  | 100 |  | B7G | P |  |
| 404A | 402106053 |  | 6.3 |  | 150 | 150 | 13.5 | 12.5 | 100 |  | 100 |  | B9A | P |  |
| 405BU | 892300000 |  | 4 |  |  |  | 15 |  | REC |  |  | 10 mA | B4 | RR |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Voles | Screen Volts | mA/V |  |  |  |
| 406 | 642300000 |  | 4 |  | 150 |  | 5.5 | 0.5 | 100 |  | 0.5 | B4 | T |  |
| 407A | 214637412 |  | 20 | 2 | 150 |  | 8.2 | 5.5 | 100 |  | 5.5 | B9A | TT |  |
| 408A | 412365100 |  | 20 | 2 | 150 | 125 | 7.5 | 5 | 100 | 125 | 5 | B7G | P |  |
| 408 BU | 892300000 |  | 4 |  |  |  | 15 |  | REC |  | 10 mA | B4 | RR |  |
| 409A | 410065100 |  | 6.3 |  | 150 | 125 | 5.2 | 3.2 | 100 | 100 |  | B7G | P |  |
| 410HF | 642300000 |  | 4 | 2.5 | 200 |  | 0.2 | 0.2 | 100 |  | 0.2 | B4 | T |  |
| 410 P | 642300000 |  | 4 | 16 | 250 |  | 12 | 1.8 | 100 |  | 1.8 | B4 | T |  |
| 410 PT | 462350000 |  | 4 | 1 | 100 | 150 |  | 2.5 | 100 | 150 | 2.5 | B5 | P |  |
| 410RC | 642300000 |  | 4 | 2.5 | 200 |  | 0.2 | 0.2 | 100 |  | 0.2 | B4 | T |  |
| 410SG | 542300000 | A1 | 4 | 1 | 200 | 100 | 4.5 | 0.9 | 100 | 100 | 0.9 | B4 | P |  |
| 412BU | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 17 mA | B4 | RR |  |
| 412SU | 802300000 |  | 4 |  |  |  | 60 |  | REC |  | 22 mA | B4 | R |  |
| 415 PT | 642350000 |  | 4 | 25 | 300 | 200 | 20 | 1.7 | 100 | 150 | 1.7 | B5 | P |  |
| 415 QT | 642350000 |  | 4 | 25 | 300 | 200 | 20 | 1.8 | 100 | 150 | 1.8 | B5 | P |  |
| 415SP | 642300000 |  | 4 | 18 | 150 |  | 11 | 1.6 | 100 |  | 1.6 | B4 | T |  |
| 417A | 602441443 |  | 6.3 | 1.5 | 150 |  | 25 | 25 | No D | ta Avai | lable | B9A | T |  |
| 420T | 045231600 |  | 4 | 4.4 | 250 | 250 | 40 | 10.5 | 100 | 150 | 9 | B7 | P |  |
| 425PT | 642350000 |  | 4 | 17 | 250 | 150 | 12 | 1.3 | 100 | 100 | 1.3 | B5 | P |  |
| 431 U | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 15 mA | B4 | RR |  |
| 435A | 402106053 |  | 6 | 10 | 200 | 150 | 13 | 16.3 | No Da | a Avail | lable | B9A | P |  |
| 436A | 211403506 |  | 6.3 | 1.4 | 200 | 150 | 23 | 32 | No Da | a Avail | lable | B9A | P |  |
| 437A | 304002116 |  | 6 | 10 | 150 |  | 40 |  | No Da | a Avail | lable | B9A | T |  |
| 441U | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| 442 BU | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| 446A/B | 021000310 | A1/G1 | 6 | 3 | 250 |  | 15 | 4.5 | 100 |  |  | A08 | T |  |
| 450 | 642300000 |  | 4 | 55 | 250 |  | 50 | 3.5 | 100 |  | 3.5 | B4 | T |  |
| 450 | 264300000 |  | 7.5 |  | 400 |  | 55 | 2.1 | 100 |  | 2.0 | IX4 | T |  |
| 450AC | 542310000 | A1 | 4 |  | 200 | 100 | 3.5 | 3 | 100 | 100 | 3 | B5 | P |  |
| 451 | 892300000 |  | 1.8 |  |  |  |  |  | REC |  |  | B4 | RR |  |
| 451PT | $26 * * 54130$ |  | 45 | 9 | 200 | 200 | 54.5 | 9.5 | 100 | 100 | 7 | B8A | P |  |
| 451 U | 823900000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | RR |  |
| 460 BU | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| 482A | 264300000 |  | 5 | 45 | 200 |  | 18 | 1.5 | 100 |  | 1.5 | UX4 | T |  |
| 482B | 264300000 |  | 5 | 35 | 250 |  | 18 | 1.5 | 100 |  | 1.5 | UX4 | T |  |
| 483 | 264300000 |  | 5 | 60 | 250 |  | 30 | 1.7 | 100 |  | 1.7 | UX4 | T |  |
| 484V | 642310000 |  | 4 | 2.5 | 200 |  | 0.2 | 1.2 | 100 |  | 1.2 | B5 | T |  |
| 485 | 264130000 |  | 3 | 9 | 200 |  | 5.8 | 1.4 | 100 |  | 1.4 | UX5 | T |  |
| 486 | 026040300 |  | 3 | 3 | 90 |  | 3 | 0.6 | 80 |  | 0.6 | A08 | T |  |
| 500 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| 501 | 653420000 |  | 1.4 | 0 | 40 | 40 | 1 | 0.8 | No Da | a Avail | lable | B5A | P |  |
| 501AX | 653420000 |  | 1.4 | 0 | 40 | 40 | 1 | 0.8 | No Da | a Avail | lable | B5A | P |  |
| 502AX | 653420000 |  | 1.2 | 1.2 | 40 | 40 | 8.6 | 0.5 | No Da | a Avail | lable | B5A | P |  |
| 503AX | 653420000 |  | 1.2 | 2 | 40 | 40 | 0.8 | 0.5 | No Da | a Avail | lable | B5A | P |  |
| 505AX | 653420000 |  | 0.6 | 0 | 40 | 30 | 0.1 | 0.1 | No Da | a Avail | lable | B5A | P |  |
| 506 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| 506AX | 653420000 |  | 1.2 | 4.5 | 40 | 40 | 1.2 | 0.5 | No Da | a Avail | lable | B5A | P |  |
| 506BU | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | $\begin{gathered} \text { Anode } \\ \text { Volts } \end{gathered}$ | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts |  | creen Volts | ma/V |  |  |  |
| 574AX | 653420000 |  | 0.6 | 0.6 | 20 | 20 | 0.1 | 0.1 | No Da | ta | Avail | lable | B5A | P |  |
| 578 | 8*1 239146 |  | 4.7 | 3 | 250 |  | 1 | 1.2 | 100 |  |  | 1.3 | B9A | DDDT |  |
| 605 | 642300000 |  | 4 | 6 | 150 |  | 10 | 1.4 | 100 |  |  | 1.4 | B4 | T |  |
| 608CX | 623410000 |  | 6.3 | 2 | 150 |  | 9 | 5 | 100 |  |  | 5 | B5A | T |  |
| 612 BU | 892300000 |  | 6 |  |  |  | 30 |  | REC |  |  | 15 mA | B4 | RR |  |
| 615 | 642300000 |  | 4 | 41 | 150 |  | 4 | 1.4 | 100 |  |  | 1.4 | B4 | T |  |
| 619CX | 623410000 |  | 6.3 | 2 | 250 |  | 4 | 4 | 100 |  |  |  | B5A | T |  |
| 620 T | 642300000 |  | 6 | 99 | 400 |  | 62 | 2.3 | 100 |  |  | 2.3 | B4 | T |  |
| 635GTX | 026040310 |  | 6 | 20 | 350 |  | 20 |  | 100 |  |  |  | A08 | T |  |
| 660 | 642300000 |  | 6 | 100 | 400 |  | 120 | 2.3 | 100 |  |  | 2.3 | B4 | T |  |
| 660 T | 642300000 |  | 6 | 1 | 100 |  |  | 7.4 | 100 |  |  | 7.5 | B4 | T |  |
| 680xp | 642300000 |  | 6 | 100 | 400 |  | 3.5 | 1.1 | 100 |  |  | 1.1 | B4 | T |  |
| 713A | 021415350 |  | 6 | 2 | 150 | 125 | 7.5 | 4 | 100 |  | 100 | 4 | A08 | P |  |
| 717A | 021415360 |  | 6 | 2 | 150 | 125 | 7.5 |  | 100 |  | 100 | 4 | A08 | P |  |
| 731A | 412365100 |  | 6 | 2.3 | 150 | 150 | 7 | 4.3 | 100 |  | 100 | 4 | B7G | P |  |
| 801 | 364200000 |  | 7.5 | 15 | 400 |  | 60 | 2.5 | 100 |  |  |  | UX4 | T |  |
| 802 | 205411300 | A1 | 6 | 18 | 400 | 250 | 30 | 2.2 | 100 |  | 150 | 2 | UX7 | P |  |
| 805 | 642300000 |  | 6 | 6 | 150 |  | 10 | 1.4 | 100 |  |  | 1.4 | B4 | T |  |
| 807 | 254130000 | A1 | 6 | 12.5 | 400 | 250 | 83 | 6.5 | 100 |  | 150 | 6 | UX5 | P |  |
| 816 | 200300000 | D1 | 2.5 |  |  |  | 120 |  | REC |  |  | 30 mA | UX4 | R |  |
| 825 | 642300000 |  | 6 |  | 150 |  | 6 | 1.4 | 150 |  |  | 1.4 | B4 | T |  |
| 825BU | 892300000 |  | 7.5 |  |  |  | 60 |  | REC |  |  | 20 mA | B4 | RR |  |
| 829 B | 245134200 | A1/A2 | 6.3 |  | 300 | 250 | 25 | 1.9 | No Da |  |  | lable | B7A | PP |  |
| 832 | 245134200 | A1 A2 | 6.3 |  | 150 | 125 | 30 | 3.5 | 100 |  | 150 | 3.5 | B7A | PP |  |
| 832A | 245134200 | A1/A2 | 6.3 |  | 150 | 125 | 30 | 3.5 | 100 |  | 150 | 3 | B7A | PP |  |
| 836 | 2** 00* 300 | D1 | 2.5 |  |  |  | 120 |  | REC |  |  | 30 mA | B75 | R |  |
| 837 | 205411300 |  | 12.6 | 40 | 400 | 150 | 45 |  | No Da |  | Avail | lable | [X7 | P |  |
| 840 | 254130000 | A1 | 2 | 3 | 200 | 75 | 1 | 0.4 | 100 |  | 60 | 0.4 | $1 \times 5$ | P |  |
| 841 | 264300000 |  | 7.5 | 1 | 100 |  |  | 0.7 | 100 |  |  | 0.7 | (X4 | T |  |
| 842 | 264130000 |  | 7.5 | 100 | 400 |  | 25 | 1.2 | 100 |  |  | 1.2 | (X5 | T |  |
| 843 | 264130000 |  | 2.5 | 25 | 350 |  | 25 | 1.7 | 100 |  |  | 1.7 | IX5 | T |  |
| 864 | 364200000 |  | 1.1 | 4.5 | 90 |  | 2.9 | 0.6 | 80 |  |  | 0.6 | IX4 | T |  |
| 871 | 200300000 | D1 | 2.5 |  |  |  | 120 |  | REC |  |  | 30 ma | LX4 | R |  |
| 879 | 200300000 | D1 | 2.5 |  |  |  | 5 |  | D |  |  |  | UX4 | R |  |
| 884 | 026040310 |  | 6 |  | 300 |  | 55 | $4 \mathrm{k} \Omega$ | No Da |  | Avail | lable | A08 | THY |  |
| 885 | 264130000 |  | 2.5 |  | 300 |  | 55 | $4 \mathrm{k} \Omega$ | No Da | a | Avail | lable | UX 5 | THY |  |
| 904V | 642310000 |  | 4 | 2 | 200 |  | 2 | 2 | 150 |  |  | 2 | B5 | T |  |
| 950 | 041230500 | A1 | 2 | 16.5 | 200 | 150 | 7 | 0.9 | 100 |  | 100 | 0.9 | B7 | P |  |
| 951 | 265300000 | G1 | 2 | 3 | 200 | 60 | 1.7 | 0.6 | 100 |  | 60 |  | (X4 | P |  |
| 952F | 288310000 |  | 6.3 |  |  |  |  |  | D |  |  |  | 5AA | D |  |
| 954 | 213154000 | A1 | 6.3 | 3 | 250 | 100 | 2 | 1.4 | 100 |  | 100 |  | 7AA | $P$ |  |
| 955 | 264310 (X) |  | 6.3 | 7 | 250 |  | 6.3 | 2.2 | 100 |  |  |  | 5AA | T |  |
| 956 | 213154000 | A1 | 6 | 3 | 250 | 100 | 6.7 | 1.8 | 100 |  | 00 |  | 7AA | P |  |
| 957 | 322460000 |  | 1.2 | 5 | 150 |  | 2 | 0.6 | 100 |  |  |  | 5AA | T |  |
| 958A | 322460000 |  | 1.2 | 20 | 150 |  |  |  | No Da | a | Avail | lable | 5AA | $T$ |  |
| 959 | 322154000 | A1 | 1.2 | 3 | 150 | 60 | 1.7 | 0.6 | 100 |  | 60 |  | 7AA | P |  |
| 985 | 289130000 |  | 5 |  |  |  | 30 |  | REC |  |  | 15 mA | EX5 | RR |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | mA/V |  |  |
| 986 | 289300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |
| 994 V | 642310000 |  | 4 | 0.5 | 100 |  |  | 3.6 | 100 |  | 3.6 | B5 | T |
| 1002 | 802300000 |  | 1.8 |  |  |  | 60 |  | REC |  | 25 mA | B4 | R |
| 1005 | 008092030 |  | 6.3 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |
| 1006 | 289300000 |  | 1.7 | \% |  |  | 120 |  | REC |  | 30 mA | UX4 | RR |
| 1007 | 008090230 |  | 1.0 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |
| 1012 | 289300000 |  | 1.7 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | RR |
| 1028 | 202322200 | D1 | 6 |  |  |  | 60 |  | REC |  | 23 mA | B7G | R |
| 1103 | 809231600 | G1 | 13 | 2 | 250 |  | 1.5 | 1.5 | 100 |  | 1.2 | B7 | DDT |
| 1130 | 892300000 |  | 1.8 |  |  |  |  |  | D |  |  | B4 | DD |
| 1201 | 426141630 |  | 6 | 3 | 200 |  | 5.5 | 3 | 150 |  | 3 | B8B | T |
| 1201 | 892300000 |  | 2.5 |  |  |  | 30 |  | D |  |  | B4 | DD |
| 1203 | 200800130 |  | 6 |  |  |  |  |  | D |  |  | B8B | D |
| 1203A | 200800130 |  | 6 |  |  |  |  |  | D |  |  | B8B | D |
| 1204 | 526141310 |  | 6 | 2 | 250 | 100 | 1.7 | 1.2 | 100 | 100 | 1.2 | B8B | P |
| 1206 | 265441730 |  | 6 | 2.5 | 250 | 100 | 4.5 | 2.1 | 100 | 100 | 2.1 | B8B | PP |
| 1221 | 165113000 | G1 | 6 | 3 | 250 | 100 |  | 1.2 | 100 | 100 | 1.2 | UX6 | Pr |
| 1222 | 265403100 |  | 6.3 | 18 | 350 | 250 | 54 | 5.2 | 100 | 150 | 5.2 | A08 | P |
| 1223 | 026510310 | G1 | 6 | 3 | 250 | 100 |  | 1.2 | 100 | 100 | 1.2 | A08 | P |
| 1229 | 265300000 | G1 | 2 | 3 | 150 | 75 | 1.7 | 0.6 | 100 | 75 | 0.6 | LX4 | P |
| 1230 | 264300000 |  | 2 | 9 | 150 |  | 3 |  | 100 |  |  | UX4 | T |
| 1231 | 265104130 |  | 6 | 30 | 300 | 200 | 13 | 6.3 | 100 | 100 | 6.3 | B8B | P |
| 1232 | 265114130 |  | 6 | 2 | 250 | 100 | 6 | 4.5 | 100 | 100 | 4.5 | B8B | P |
| 1236A | 333882220 |  |  |  |  |  |  |  |  |  |  | A08 | D |
| 1238 | 245671430 |  | 28 | 3.5 | 40 | 30 | 12.5 | 3.4 | No | ta Ava | lable | B8B | PP |
| 1247 | 000230000 | D1 | 0.6 |  |  |  |  |  | D |  |  | B8A | D |
| 1273 | 265104130 |  | 6 | 3 | 250 | 100 | 2.2 | 1.5 | 100 | 100 | 1.5 | B8B | P |
| 1274 | 028090310 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |
| 1275 | 289300000 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | LX4 | RR |
| 1276 | 264300000 |  | 4.3 | 45 | 250 |  | 60 | 5.2 | 100 |  |  | LX4 | T |
| 1280 | 265104130 |  | 12.5 | 3 | 250 | 100 | 2.2 | 1.5 | 100 | 100 | 1.5 | B8B | P |
| 1282 | 265114130 |  | 6 | 2 | 300 | 150 | 10 | 5.8 | 100 | 150 | 5.8 | B8B | P |
| 1284 | 265104130 |  | 12.5 | 3 | 250 | 100 | 9 | 2 | 100 | 100 | 2 | B8B | P |
| 1288 | 364240730 |  | 1.4 |  | 90 |  | 5.2 | 1.8 | 80 |  | 1.8 | A08 | TT |
| 1291 | 274304620 |  | 1.4 |  | 90 |  | 5.2 | 1.8 | 80 |  | 1.8 | A08 | TT |
| 1292 | 364204730 |  | 1.4 |  | 90 |  | 5.2 | 1.8 | 80 |  | 1.8 | A08 | TT |
| 1293 | 260064030 |  | 1.4 |  | 90 |  | 4.7 | 1.3 | 80 |  | 1.3 | B8B | T |
| 1294 | 200800130 |  | 1.4 |  |  |  |  |  | D |  |  | A08 | L |
| 1299 | 365004230 |  | 1.4 | 4.5 | 150 | 90 | 10.2 | 2.4 | 100 | 90 | 2.4 | B8B | P |
| 1560 | 289300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |
| 1560 | 892300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |
| 1561 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |
| 1562 | 280300000 |  | 7.5 |  |  |  | 120 |  | REC |  | 30 ma | UX | R |
| 1602 | 264300000 |  | 7.5 | 23.5 | 250 |  | 10 | 1.3 | 100 |  | 1.3 | UX4 | T |
| 1603 | 265113000 | G1 | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | 1 $\times 6$ | P |
| 1608 | 264300000 |  | 2.5 | 90 | 400 |  | 95 |  | No D | ta Ay | lable | UX4 | T |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | $\mathrm{mA} / \mathrm{V}$ | Anode Volts | Screen Volts | $m A / V$ |  |  |  |
| 1609 | 364520000 |  | 1.1 | 1.5 | 150 | 75 | 2.5 | 0.7 | 100 | 75 | 0.7 | UX5 | P |  |
| 1610 | 264530000 |  | 2.5 | 16.5 | 250 | 250 | 31 | 2.5 | 100 | 150 | 3.8 | UX5 | P |  |
| 1611 | 026540310 |  | 6 | 16.5 | 250 | 250 | 34 | 2.5 | 100 | 150 | 2.5 | A08 | P |  |
| 1612 | 026540310 | G1 | 6 | 3 | 250 | 100 | 5.3 | 1.1 | 100 | 100 | 1.1 | A08 | H |  |
| 1613 | 026540310 |  | 6 | 16.5 | 250 | 250 | 34 | 2.5 | 100 | 150 | 2.5 | A08 | P |  |
| 1614 | 026540310 |  | 6 | 18 | 350 | 250 | 54 | 5.2 | 100 | 150 | 5.2 | A08 | P |  |
| 1616 | 200300000 | D1 | 2.5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | R |  |
| 1619 | 026540310 |  | 2.5 | 10 | 300 | 250 | 45 | 4.5 | 100 | 150 | 4.5 | A08 | P |  |
| 1620 | 026510310 | G1 | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | A08 | P |  |
| 1621 | 026540310 |  | 6 | 16.5 | 250 | 250 | 34 | 3.5 | 100 | 150 | 2.5 | A08 | P |  |
| 1622 | 026540310 |  | 6 | 18 | 350 | 250 | 54 | 5.2 | 100 | 100 | 5.2 | A08 | P |  |
| 1624 | 205401300 | A1 | 2.5 | 10 | 300 | 250 | 45 | 4.5 | 100 | 150 |  | UX7 | P |  |
| 1625 | 205401300 | A1 | 12 | 12.5 | 400 | 250 | 83 | 6.5 | 100 | 150 | 6 | UX7 | P |  |
| 1626 | 026040310 |  | 12.5 | 32 | 250 |  | 20 | 2.1 | 100 |  | 2.1 | A08 | T |  |
| 1631 | 026540310 |  | 12.5 | 18 | 350 | 250 | 54 | 5.2 | 100 | 150 | 5.2 | A08 | P |  |
| 1632 | 026540310 |  | 12.5 | 8 | 200 | 100 | 50 | 9.5 | 100 | 90 | 9 | A08 | P |  |
| 1633 | 471461230 |  | 25 | 8 | 250 |  | 11.5 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| 1634 | 074461230 |  | 12.5 | 2 | 250 |  | 2 | 1.3 | 150 |  | 1.3 | A08 | TT |  |
| 1635 | 027446310 |  | 6 | 0 | 300 |  | 3.5 | 0.9 | 100 |  | 0.9 | A08 | TT |  |
| 1637 | 026500310 | G1 | 6 | 18 | 250 | 250 | 32 | 3.8 | 100 | 150 | 3.8 | A08 | P |  |
| 1638 | 029180310 |  | 6 |  |  |  |  |  | D |  |  | A08 | DD |  |
| 1639 | 026890310 | G1 | 6 | 5.5 | 250 |  | 5 | 2 | 100 |  | 2 | A08 | DDT |  |
| 1641 | 200300000 | D1/D2 | 5 |  |  |  | 120 |  | REC |  | 39 mA | UX4 | RR |  |
| 1641/RK60 | 200300000 | D1/D2 | 5 |  |  |  | 15 |  | REC |  | 12 mA | UX4 | RR |  |
| 1642 | 216471300 | G1 | 6 | 16.5 | 250 |  | 8.3 | 1.4 | 100 |  | 12 ma | UX7 | TT |  |
| 1644 | 414752360 |  | 12.5 | 9 | 200 | 200 | 13 | 2.1 | 100 | 100 | 2.1 | A08 | PP |  |
| 1649 | 021415360 |  | 6 | 2 | 300 | 150 | 10 | 9 | 100 | 100 | 8 | A08 | $\mathbf{P}$ |  |
| 1654 1655 | $2 * * 00 * 300$ 074461230 | D1 | 1.4 |  |  |  |  |  | D |  |  | B7G | D |  |
| 1655 | 074461230 |  | 6 | 2 | 250 |  | 2 | 1.3 | 200 |  | 1.3 | A08 | TT |  |
| 1659 | 268913000 | G1 | 2.5 | 2 | 250 |  | 0.9 | 1.1 | 150 |  | 1.1 | UX6 | DDT |  |
| 1662 | 364526300 |  | 1.4 | 8.4 | 150 | 90 | 13.3 | 1.9 | 100 | 75 | 1.9 | B7G | $\mathbf{P}$ |  |
| 1664 | 026985310 | G1 | 2.5 | 3 | 250 | 125 | 10 | 1.3 | 100 | 100 | 1.3 | A08 |  |  |
| 1701 | 892300000 |  | 1.8 |  |  |  | 120 |  | REC |  | 30 mA | B4 | $\mathrm{RR}$ |  |
| 1801 | 892300000 |  | 4 |  |  |  | 15 |  | RESC |  | 10 mA | B4 | RR |  |
| 1805 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| 1807 | 892300000 |  | 4 |  |  |  | 30 |  | FREC |  | 15 mA | B4 | RR |  |
| 1810 | 003200000 | D1 | 4 |  |  |  | 30 |  | FECC |  | 15 mA | B4 | R |  |
| 1815 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| 1817 | 892300000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | RR |  |
| 1821 | 892300000 |  | 4 |  |  |  | 30 |  | RESC |  | 15 mA | B4 | RR |  |
| 1823 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| 1831 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 12 mA | B4 | RR |  |
| 1832 | 082300000 |  | 4 |  |  |  | :20 |  | REC |  | 30 mA | B4 | R |  |
| 1851 | 026510310 | G1 | 6 | 2 | 300 | 150 | 10 | 9 | 100 | 100 | 8 | A08 | P |  |
| 1851GT | 026510310 | G1 | 6 |  | 300 | 150 | 10 | 9 | 100 | 100 |  | A08 | P |  |
| 1852 | 021415360 |  | 6 | 2 | 300 | 150 | 10 | 9 | 100 | 100 | 8 | A08 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |  |
| 1853 | 021415360 |  | 6 | 3 | 300 | 200 | 12.5 | 5 | 100 | 150 | 5 | A08 | P |  |
| 1853 GT | 204153600 |  | 6.3 | 3 | 300 | 200 | 12.5 | 5 | 100 | 100 |  | A08 | P |  |
| 1861 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| 1867 | 389200000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |  |
| 1868 | 023180090 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | F8 | RR |  |
| 1875 | 023000000 | D1 | 4 |  |  |  | 5 |  | D |  |  | 8SC | R |  |
| 1876 | 123000080 |  | 4 |  |  |  | 5 |  | D |  |  | 8 SC | R |  |
| $1877$ |  | D1 | 4 |  |  |  | 3 |  |  |  |  | B4 |  |  |
| $1881 \mathrm{~A}$ | $892300000$ |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
|  | 023080090 |  |  |  |  |  | 60 |  | REC |  | 20 mA | 8SC | RR |  |
| 1883 | 023080090 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | RR |  |
| 1884 | 120908030 |  | 2.5 |  |  |  | 15 |  | REC |  | 15 | A08 | RR |  |
| 2051 | 026041310 |  | 6 |  | 250 |  | 75 | $3 \mathrm{k} \Omega$ | No D | ta Avai | ilable | A08 | THY |  |
| 2101 | 264530000 |  | 2 | 4.5 | 150 | 150 | 8 | 1.7 | 100 | 100 | 1.7 | UX5 |  |  |
| 2102 | 268953000 |  | 2 |  | 100 |  | 2.5 | 1.3 | 100 |  | 1.3 | Ux6 | DDT |  |
| 2103 | 274546300 |  | 2 | 7.5 | 150 | 150 | 4 | 1.5 | 100 | 100 | 1.6 | UX7 | PP |  |
| 2151 | 265413000 |  | 14 | 31 | 250 | 250 | 47 | 2.7 | 100 | 150 | 2.4 | Ux6 | P |  |
| 2318 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| 2506 | 892300000 |  | 4 |  |  |  | 15 |  | REC |  | 10 mA | B4 | RR |  |
| 3006 | 802300000 |  | 4 |  |  |  |  |  | D |  |  | B4 | D |  |
| 3041 | 652430000 |  | 1.2 | 1 | 20 | 20 | 0.2 | 0.3 | No D | ta Avai | ilable | B5A | P |  |
| 3041A | 652430000 |  | 1.2 | 1 | 20 | 20 | 0.2 | 0.3 | No D | ta Avai | ilable | B5A | P |  |
| 3074A | 204140300 | A1/A2 | 6 |  | 300 |  | 50 | 3 | No D | ta Avai | ilable | UX7 | TT |  |
| 3075A | 002300000 | D1 | 2 |  |  |  |  |  | D |  |  | B4 | D |  |
| 3310A | 265113000 |  | 10 |  | 250 | 150 | 5.6 | 2 | 100 | 100 |  | Ux6 | P |  |
| 3311A | 265113000 |  | 10 |  | 200 | 150 | 33 | 3 | 100 | 100 |  | UX6 | P |  |
| 3328A | 265113000 |  | 7.5 |  | 250 | 150 | 5.6 | 1.9 | 100 | 100 |  | UX6 | P |  |
| 3329A | 265113000 | G1 | 7.5 |  | 200 | 125 | 31 | 2.9 | 100 | 100 |  | UX6 | P |  |
| $3481$ | $026510310$ | G1 | 6 | 13.5 | 150 | 150 | 5.5 | 1.8 | 100 | 100 | 1.8 | A08 | P |  |
| 3720 | 364200000 |  | 5 | 1.5 | 200 |  | 0.2 | 0.2 | 150 |  | 0.2 | UX4 | T |  |
| 3871 | 264300000 |  | 30 | 19 | 100 | 100 | 52 | 3.8 | 100 | 90 | 3.8 | Ux6 | P |  |
| 3872 | 364200000 |  | 2 | 9 | 150 |  | 3 |  | 100 |  |  | UX4 | T |  |
| 3873 | 365200000 | G1 | 2 | 3 | 150 | 75 | 1.5 | 0.6 | 100 | 75 | 0.6 | UX4 | P |  |
| 3921 | 264300000 |  | 2.5 | 50 | 250 |  | 34 | 2.1 | 100 |  | 2.1 | UX4 | T |  |
| 3924 | 265130000 | G1 | 2.5 | 3 | 200 | 90 | 4 | 1 | 100 | 90 | 1 | UX5 | P |  |
| 4019A | 264300000 |  | 4 |  | 200 |  | 9.7 | 1.3 | 100 |  | 1.2 | UX4 | T |  |
| 4019B | 642300000 |  | 4 | 4 | 100 |  | 7.5 | 1.2 | 100 |  | 1.2 | B4 | T |  |
| 4020A | 264300000 |  | 2 | 2 | 150 |  | 1.2 | 0.6 | 100 |  | 0.6 | UX4 | T |  |
| 4020B | 264300000 |  | 2 | 2 | 150 |  | 1.2 | 0.6 | 100 |  | 0.6 | UX4 | T |  |
| 4021A | 264300000 |  | 4 | 10 | 150 |  | 32.5 | 3 | 100 |  | 0.6 | UX4 | T |  |
| 4021B | 642300000 |  | 4 | 8 | 150 |  | 23 | 3 | 100 |  | 3 | B4 | T |  |
| 4022AR | 264300000 |  | 4 | 6 | 200 |  | 16.2 | 2.2 | 100 |  | 2.0 | UX4 | T |  |
| 4022R | 264300000 |  | 4 | 6 | 200 |  | 16.2 | 2.2 | 100 |  | 2.0 | UX4 | T |  |
| 4033 | 264130000 |  | 6 | 20 | 400 |  | 50 | 9 | 100 |  | 8 | UX5 | T |  |
| 4033A | 642310000 |  | 6 | 20 | 400 |  | 50 | 9 | 100 |  | 8 | B5 | T |  |
| 4033L | 642310000 |  | 6 | 20 | 400 |  | 60 | 10 | 100 |  |  |  |  |  |
| 4037A | 802300000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |  |
| 4045A | 642350000 |  | 5 | 70 | 250 | 60 | 43 | 1.3 | No Data | a Avai | lable | B5 | P |  |
| 4061A | 205411300 | A1 | 6 | 10 | 400 | 200 | 50 | 2.5 | 100 | 150 | 2.5 | B7 | P |  |
| 4074A | 204140300 | A1/A2 | 6 | 13 | 300 |  | 15 | 3 | 100 |  | 3 | UX7 | TT |  |
| 4077A | 003200000 | D1 | 5 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| 4264A | 364200000 |  | 1.5 |  | 100 |  |  | 6.3 | 100 |  | 6 | UX4 | T |  |
| 4274A | 289300000 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | RR |  |
| 4300A | 364200000 |  | 5 | 90 | 400 |  | 50 |  | No Data | a Avai | lable | UX4 | T |  |
| 4310A | 265113000 | G1 | 10 | 5.5 | 250 | 150 | 5.2 | 2 | 100 | 100 | 2 | UX6 | P |  |
| 4328A | 265113000 | G1 | 7.5 | 5.5 | 250 | 175 |  | 2 | 100 | 150 | 2 | UX6 | T |  |
| 4328D | 026510310 | G1 | 7.5 | 5.5 | 250 | 150 | 5.2 | 2 | 100 | 100 | 2 | A08 | T |  |
| 4608 | 642310000 |  | 4 | 6 | 150 |  | 11 | 2.5 | 100 |  | 2.5 | B5 | T |  |
| 4610 | 542310000 | A1 | 4 | 1.3 | 200 | 100 | 1.5 | 0.9 | 100 | 100 | 0.9 | B5 | P |  |
| 4611 | 364200000 |  | 6 | 40 | 200 |  | 20 | 1.7 | No Data | a Avai | lable | UX4 | T |  |
| 4611 | 642300000 |  | 6 | 40 | 200 |  | 20 | 1.7 | No Data | a Avail | lable | B4 | T |  |
| 4612 | 642300000 |  | 4 | 40 | 250 |  | 40 | 2.7 | No Data | a Avai | lable | B4 | T |  |
| 4613 | 642300000 |  | 4 | 22 | 250 |  | 48 | 3.5 | No Data | a Avai | lable | B4 | T |  |
| 4614 | 642310000 |  | 4 | 16 | 200 |  | 12 | 1.3 | No Data | a Avai | lable | B5 | T |  |
| 4618 | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2.2 | 100 | 100 | 2.2 | B5 | P |  |
| 4619 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| 4623 | 123000000 | D1 | 6.3 |  |  |  | 5 |  | D |  |  | B3G | D |  |
| 4631 | 264300000 |  | 2 | 1.5 | 150 |  | 0.7 |  | 150 |  |  | UX4 | T |  |
| 4635 | 642310000 |  | 4 | 16 | 200 |  | 12 | 9 | No Data | a Avail | lable | B5 | T |  |
| 4636 | 542310000 |  | 4 | 2 | 200 | 100 | 3 | 2.3 | 100 | 100 |  | B5 | P |  |
| 4650 | 642350000 |  | 4 | 63 | 300 | 300 | 30 |  | No Data | a Avail | lable | B5 | P |  |
| 4651 | 023180090 |  | 6.3 |  |  |  | 60 |  | REC |  | 20 mA | F8 | RR |  |
| 4652 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| 4654 | 411230050 | A1 | 6 | 14 | 250 | 275 | 72 | 8.5 | No Data | a Avail | lable | 8SC | P |  |
| 4654K | 023114500 | A1 | 6 | 12.5 | 250 | 275 | 72 | 8.5 | 125 | 125 |  | 8SC | P |  |
| 4654P | 411230050 | A1 | 6 | 14 | 250 | 275 | 72 | 8.5 | No Data | a Avai | lable | 8SC | P |  |
| 4655 | 462300000 |  | 4.5 |  |  |  | 60 |  | REC |  | 15 mA | B4 | RR |  |
| 4657 | 642310000 |  | 4 | 1.5 | 200 |  | 1 | 2.2 | 200 |  | 2.2 | B5 | T |  |
| 4670 | 432564570 |  | 2 | 8.5 | 90 | 90 | 1 |  | 80 | 75 |  | 8SC | PP |  |
| 4671 | 264310000 |  | 6.3 | 5 | 200 |  | 4.5 | 2 | 100 |  |  | 5AA | T |  |
| 4672 | 513100000 | A1/G1 | 6.3 | 3 | 90 | 90 | 1.2 | 1.1 | 100 | 100 | 1.1 | 5AA | P |  |
| 4673 | 642310000 | G1 | 4 | 2.5 | 250 | 200 | 8 | 5 | 100 | 150 | 5 | B5 | P |  |
| 4673 | 023110560 | G1 | 4 | 4 | 250 | 200 | 8 | 5 | 100 | 150 | 5 | 8SC | P |  |
| 4675 | 264310000 |  | 4 | 5 | 200 |  | 4.5 | 2 | 100 |  |  | 5AA | T |  |
| 4676 | 251310000 | A1/G1 | 4 | 3 | 250 | 100 | 2 | 1.4 | 100 | 100 |  | 5AA | P |  |
| 4679 | 026447300 |  | 6 | 2.5 | 250 |  | 8 | 5 | 100 |  | 4.6 | A08 | P |  |
| 4682 | 023100560 | G1 | 4 |  | 375 | 250 | 24 |  | 100 | 150 |  | 8SC | P |  |
| 4683 | 023004060 |  | 4 |  | 350 |  | 43 |  | 100 |  |  | 8SC | T |  |
| 4684 | 023104560 |  | 4 |  | 400 | 250 | 24 |  | 100 | 150 |  | 8SC | P |  |
| 4688 | 023104560 |  | 4 |  | 400 | 275 | 48 |  | 100 | 150 |  | 8SC | P |  |
| 4689 | 026540310 |  | 6.3 |  | 400 | 275 | 48 |  | No Data | Avail | lable | A08 | P |  |
| 4689 | 023104560 |  | 6 |  | 400 | 275 | 48 |  | 100 | 150 |  | 8SC | P |  |
| 4694 | 023104560 |  | 6 | 7.5 | 400 | 250 | 24 | 8 | 100 | 150 |  | 8SC | P |  |
| 4695 | 251310000 | A1/G1 | 6.3 | 3 | 250 | 100 | 6.7 | 1.7 | 100 | 100 |  | 5AA | P |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 5726 | 192310800 |  | 6.3 |  |  |  | 5 |  | D |  |  | B7G | RR |  |
| 5732 | 026510310 | GI | 6 | 3 | 150 | 100 | 8 | 2.2 | 100 | 100 | 2 | A08 | P |  |
| 5744 | 623410000 |  | 6.3 | 2 | 250 |  | 4 | 4 | 100 |  |  | B5A | T |  |
| 5749 | 412365100 |  | 6 | 1 | 250 | 100 | 11 | 4.4 | 100 | 100 | 4.3 | B7G | P |  |
| 5750 | 412366400 |  | 6 | 2 | 100 |  | 11 | 7 | 100 |  | 6 | B7G | H |  |
| 5751 | 741226413 |  | 6 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.2 | B9A | TT |  |
| $5755^{\circ}$ | 471461230 |  | 6 | 2 | 250 |  | 2.3 | 1.6 | 200 |  | 1.6 | A08 | TT |  |
| 5763 | 601235144 |  | 6 | 7.5 | 250 | 250 | 45 | 7 | 100 | 150 | 7 | B9A. | P |  |
| 5784 | 652311400 |  | 6.3 | 2 | 150 | 125 | 5.2 | 3.2 | 100 | 100 | 3 | B7G | P |  |
| 5785 | 823000000 |  | 1.2 |  |  |  |  |  | D |  |  | B3G | D |  |
| 5797 | 411235600 |  | 26.5 | 1 | 30 | 30 | 0.5 | 1 | No D | ta Avai | ilable | B8D | P |  |
| 5798 | 741231460 |  | 26 | 0 | 20 |  | 2.3 | 3.1 | No D | ta Avai | lable |  | TT |  |
| 5812 | 413365200 |  | 3 | 23 | 250 | 250 | 40 | 4.1 | 100 | 150 | 4.1 | B7G | P |  |
| 5814 | 741226413 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 3 | B9A | TT |  |
| 5814A | 741226413 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 3 | B9A | TT |  |
| 5824 | 026540310 |  | 25 | 22 | 150 | 125 | 61 | 5 | 125 | 125 | 5 | A08 | P |  |
| 5825 | 200300000 | D1 | 1.5 |  |  |  |  |  | D |  |  | UX4 | D |  |
| 5838 | 028090310 |  | 12 |  |  |  | 30 |  | REC |  | 15 mA | B8A | RR |  |
| 5839 5840 | $\begin{array}{lll}028 & 090 & 310 \\ 412 & 163 & 510\end{array}$ |  | $\begin{gathered} 26.5 \\ 6 \end{gathered}$ | 1.4 | 100 | 100 | $\begin{array}{r} 180 \\ 7 \end{array}$ | 5 | REC 100 | 100 | $\begin{gathered} 30 \mathrm{~mA} \\ 5 \end{gathered}$ | $\begin{aligned} & \text { A08 } \\ & \text { B8D } \end{aligned}$ | $\stackrel{R}{\mathrm{P}}$ |  |
| 5842 | 602441443 |  | 6 | 1.5 | 150 |  | 26 | 24 | 100 |  | 2.4 | B9A | T |  |
| 5844 | 672344100 |  | 6 | 2.3 | 100 |  | 4.8 | 3.4 | 100 |  | 3.4 | B7G | TT |  |
| 5845 | 802290300 |  | 6 |  |  |  |  |  | D |  |  | B7G | DD |  |
| 5847 | 402106053 |  | 6 | 2 | 150 | 150 | 13 | 12.5 | 150 | 150 | 12 | B9A | P |  |
| 5851 | 206005340 |  | 2.5 | 7.5 | 150 | 125 | 5.5 | 1.6 | 125 | 125 | 1.6 | B8B | P |  |
| 5852 | 028090310 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| 5854 | 653420000 |  | 1.2 | 2 | 40 | 40 | 0.8 | 0.5 | No D | ta Avai | lable | B5A | P |  |
| 5871 | 026540310 |  | 6.3 | 12.5 | 250 | 250 | 45 | 4.5 | 100 | 150 | 4 | A08 | P |  |
| 5873 | 264114730 |  | 6 | 3 | 150 |  | 9 | 2.9 | 100 |  | 2.3 | B8B | TT |  |
| 5875 | 652430000 |  | 1.2 |  | 90 | 90 | 3.5 | 2.5 | 80 | 90 |  | B5A | P |  |
| 5879 | 401230561 |  | 6 | 3 | 250 | 100 | 1.8 | 1 | 100 | 100 | 1 | B9A | P |  |
| 5881 | 026540310 |  | 6 | 12.5 | 300 | 200 | 48 | 5.3 | 100 | 150 | 5 | A08 | P |  |
| 5882 | 028090310 |  | 12.6 |  |  |  | 30 |  | REC |  | 20 mA | A08 | RR |  |
| 5894 | 245134200 | A1/A2 | 6 |  | 400 | 250 | 30 | 3.4 | No D | ta Avai | 1able | B7A | PP |  |
| 5896 | 812093100 |  | 6 |  |  |  | 15 |  | REC |  | 15 mA | B8B | RR |  |
| 5897 | 402013060 |  | 6 | 2.3 | 150 |  | 14 | 6.5 | 100 |  | 5.8 | B8A | T |  |
| 5898 | 402013060 |  | 6 | 2 | 150 |  | 1.8 | 2.3 | 100 |  | 1.7 | B8A | T |  |
| 5899 | 412163510 |  | 6 | 1.4 | 100 | 100 | 7.2 | 4.5 | 100 | 100 | 5 | B8D | P |  |
| 5900 | 412163510 |  | 6 |  | 100 | 100 | 7.2 | 4.5 | 100 | 100 | 5 | B8A | P |  |
| 5901 | 412163510 |  | 6 | 1.5 | 100 | 100 | 7.5 | 5 | 100 | 100 | 5 | B8A | P |  |
| 5902 | 412163510 |  | 6 | 6.5 | 100 | 100 | 30 | 4.2 | 100 | 100 |  | B8A | P |  |
| 5903 | 812093100 |  | 26 |  |  |  | 5 |  | D |  |  | B8B | RR |  |
| 5904 | 402013060 |  | 26 | 0 | 20 |  |  | 5 | No D | ta Avai | lable |  | T |  |
| 5905 | 412163510 |  | 26 |  | 20 | 20 | 2.3 | 2.8 | No D | ta Avai | lable | B8A | P |  |
| 5906 | 412163510 |  | 26 | 1.5 | $10{ }^{\text {a }}$ | 100 | 7.5 | 5 | 100 | 100 | 5 | A08 | P |  |
| 5907 | 412163510 |  | 26 |  | 20 | 20 | 2.7 | 3 | No D | ta Avai | lable | B8A | P |  |
| 5908 | 412163510 |  | 26 |  | 20 | 20 | 2.3 | 1.7 | No D | ta Avai | lable | B8A | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg . Grid Volts | Anode Volts | Screen <br> Votr Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| 6057 | 741226413 |  | 6 | 2 | 250 |  | 1.2 | 1.6 | 150 |  | 1.6 | B9A | TT |  |
| 6058 | 192310800 |  | 6 |  |  |  |  |  | D |  |  | B7G | DD |  |
| 6059 | 041230651 |  | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | B9A | P |  |
| 6060 | 741226413 |  | 6 | 2 | 250 |  | 10 | 5.5 | 200 |  | 5 | B9A | TT |  |
| 6061 | *41 230651 |  | 6 | 13 | 300 | 225 | 34 | 3.7 | 100 | 150 | 3.7 | B9A | P |  |
| 6062 | 601235144 |  | 6 | 7.5 | 250 | 250 | 45 | 7 | 100 | 150 | 7 | B9A | P |  |
| 6063 | 802309100 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | B7G | RR |  |
| $\xi 6064$ | 412361500 |  | 6 | 2 | 250 | 250 | 10 | 7.5 | 100 | 150 | 5 | B7G | P |  |
| $\zeta 6064$ | 412361500 |  |  | 1.5 | 200 | 150 | 4 | 6.4 | 100 | 150 | 5 | B7a |  |  |
| 6065 | 412361500 |  | 6 | 2.5 | 250 | 250 | 8 | 2.5 | 100 | 100 | 2.5 | B7G | P |  |
| 6066 | 412389600 |  | 6 | 3 | 250 |  | 1 | 1.2 | 150 |  | 1.2 | B7G | DDT |  |
| 6067 | 741226413 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2.2 | B9A | TT |  |
| 6068 | 021040350 |  | 6.3 | 8 | 400 | 150 | 36 | 5.3 | 100 | 100 |  | A08 | $\stackrel{\mathrm{P}}{\mathrm{Tr}}$ |  |
| $6072$ | 741226413 |  | 6 | 4 | 250 |  | 3 | 1.7 | 100 |  | 1.7 | B9A | TT |  |
| $\triangle 6080$ | 471461230 |  | 6 | 30 | 100 |  |  |  | No Da | a Avai | lable | A08 | TT |  |
| 6082 | 471461230 |  | 26.5 | 30 | 100 |  | 100 | 7 | No Da | a Avai | lable | A08 | TT |  |
| 6084 | 501236014 |  | 6 | 2 | 250 | 125 | 10 | 9 | 150 | 100 |  | B9A | P |  |
| 6085 | 641227413 |  | 6 | 5.5 | 250 |  | 6 | 2.7 | 100 |  | 2 | B9A | TT |  |
| 6086 | $541236 * * 1$ |  | 18 | 1.8 | 200 | 100 | 8.3 | 8.2 | 100 | 100 | 8 | B9A | P |  |
| 6087 | 020809030 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 6088 | 653420000 |  | 1.2 | 1.2 | 40 | 40 | 0.7 | 0.6 | NO Data | a Avai | ilable | B5A | P |  |
| 6092 | 653420000 |  | 1.2 | 6.5 | 60 | 60 | 2.9 | 0.7 | No Da | a. Avai | lable | B5A | P |  |
| 6094 | 452634516 |  | 6 | 12.5 | 250 | 250 | 45 | 6 | 100 | 150 | 6 | B9A | P |  |
| 6095 | 412365400 |  |  | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | B7G | P |  |
| 6096 | 412365100 |  | 6 | 2 | 150 | 125 | 7.5 | 5 | 125 | 125 | 5 | B7G | P |  |
| 6097 | 192310800 |  | 6 |  |  |  |  |  | D |  |  | B7G | DD |  |
| 6098 | 106052430 |  | 6 | 22.5 | 250 | 250 | 77 | 5.4 | 100 | 100 |  | A08 | P |  |
| 6099 | 672344100 |  | 6 \{ | $\begin{aligned} & 3 \\ & 0.8 \end{aligned}$ | 150 100 |  | $\begin{aligned} & 5 \\ & 8.5 \end{aligned}$ | $\begin{aligned} & 4.5 \\ & 5.3 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ |  | $\left.\begin{array}{l}5.8 \\ 5.8\end{array}\right\}$ | B7G | TT |  |
| 6100 | 602364100 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 3 | B7G | T |  |
| 6101 | 762344100 |  | 6 | 2 | 150 |  | 9 | 5.5 | 100 |  | 6 | B7G | TT |  |
| 6106 | 020809030 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 6110 | 812093100 |  | 6 |  |  |  | 5 |  | D |  |  | B8B | RR |  |
| 6111 | 642113470 |  | 6 | 1.9 | 100 |  | 8.5 | 5 | 100 |  | 5 | B8B | TT |  |
| 6112 | 642113470 |  | 6 | 1.4 | 150 |  | 1.7 | 2.5 | 100 |  | 0.8 | A08 | TT |  |
| 6113 | 641471230 |  | 6 | 3 | 250 |  | 3 | 1.7 | 100 |  | 1.6 | A08 | TT |  |
| 6118 | 026890310 |  | 6 | 3 | 250 |  | 1.0 | 1.2 | 150 |  | 1.3 | A08 | DDT |  |
| 6125 | $8 * 2384100$ |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 150 |  | 2.2 | B7G | T |  |
| 6132 | *41 230651 |  | 6 | 4.5 | 250 | 250 | 40 | 11 | 100 | 150 | 9 | B9A | P |  |
| 6134 | 021415360 |  | 6 | 2 | 300 | 150 | 10 | 9 | 100 | 150 |  | A08 | P |  |
| 6135 | 6*2 364100 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2.2 | B7G | T |  |
| 6136 | 412365100 |  | 6 | 1 | 250 | 150 | 10.6 | 5.2 | 100 | 150 | 5 | B7G | P |  |
| 6137 | 021415360 |  | 6 | 3 | 250 | 100 | 9.2 | 2 | 100 | 100 | 2 | A08 | P |  |
|  |  |  |  |  | 150 | 100 | 34 | 10 | 100 | 100 |  | B7G | P |  |
| 6146 | 125141310 | A1 | 6 | 28 | 200 | 200 | 100 | 7 | No Da | a Avai | 1able | A08 | P |  |
| 6147 | 206035240 |  | 1.2 | 7.5 | 150 | 125 | 5.5 | 1.6 | 100 | 125 | 1.5 | B8B | P |  |
| 6149 | 623410000 |  | 6.3 |  | 150 |  | 9 | 5 | 100 |  |  | B5A | T |  |
| 6151 | 623410000 |  | 6.3 |  | 250 |  | 4 | 4 | 100 |  |  | B5A | T |  |




| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Valts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| 6840 | 614227130 |  | 6.3 |  | 250 |  | 14 | 6.7 | 100 |  |  | B8D | P |  |
| 6850 | 542134500 | A1 A2 | 12 |  | 200 | 200 | 50 | 4.5 | 100 | 100 |  | B7A | PP |  |
| 6851 | 641227413 |  | 6.3 | 3.1 | 250 |  | 1 | 1.2 | 100 |  | 1.2 | B9A | TT |  |
| 6853 | 030809020 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| 6854 | 214607413 |  | 6.3 | 19.6 | 150 |  | 8.2 | 5.2 | 100 |  | 5.2 | B9A | TT |  |
| 6870 | 141223651 |  | 6 | 3.5 | 250 | 250 | 25 | 8.5 | 100 | 100 | 8 | B9A | $P$ |  |
| 6872 | 521413100 | A1 | 6.3 | 1 | 400 | 100 | 3.5 | 2.2 | 100 | 100 |  | B7G | P |  |
| 6877 | 402634016 |  | 6.3 | 12 | 100 |  | 75 | 6.5 | No Data | a Avail | lable | B9A | T |  |
| 6883 | 125141130 | A1 | 12 | 30 | 200 | 200 | 100 | 7 | No Data | a Avai | lable | B9A | $\stackrel{P}{\text { P }}$ |  |
| 6887 | 182310900 |  | 6 |  |  |  |  |  | D |  |  | B7G | DD |  |
| 6888 | 021415600 |  | 6.3 |  | 150 | 90 | 38 |  | 100 | 90 |  | A08 | P |  |
| 6889 | 200053420 | A1 | 6.3 | 22.5 | 250 | 250 | 77 | 5.4 | 100 | 100 |  | A08 | P |  |
| 6893 | 125141130 | A1 | 12 | 30 | 200 | 200 | 100 | 7 | No Data | a Avai | lable | B9A | $\stackrel{P}{P}$ |  |
| 6900 | 741221436 |  | 6.3 | 2 | 150 |  | 36 | 11.5 | No Data | a Avai | lable | B9A | TT |  |
| 6907 | 245134200 | A1 A2 | 6.3 | 50 | 400 | 250 | 100 |  | No Data | a Avail | lable | B7A | PP |  |
| 6913 | 741226413 |  | 6.3 | 5 | 150 |  | 11 | 4.6 | 100 |  |  | B9A | TT |  |
| 6919 | 182310900 |  | 6 |  |  |  | 5 |  | D |  |  | B7G | RR |  |
| 6922 | 641327411 |  | 6.3 | 1.2 | 90 |  | 15 | 12.5 | No Data | a Avai | lable | B9A | TT |  |
| ¢6927 | 672344100 |  | 6 \{ | 3 | 150 |  | 5 | 4.5 | 100 |  | 5 | B7G | TT |  |
| 6928 | 412365400 |  | 6 | 12.5 | 100 250 | 250 | $45^{8.5}$ | 5.8 4.1 | 100 100 | 150 |  | B7G | P |  |
| 6939 | 414226573 |  | 6.3 | 100 | 300 | 200 | 85 | 10 | No Data | a Avail | lable | B9A | PP |  |
| 6943 | 412163510 |  | 6.3 |  | 100 | 100 | 8 | 3.6 | 100 | 100 | 3.6 | B8D | P |  |
| 6944 | 412163510 |  | 6.3 |  | 100 | 100 | 7 | 3.2 | 100 | 100 | 3.2 | B8D | P |  |
| 6945 | 412163510 |  | 6.3 |  | 100 | 100 | 25 | 3.5 | 100 | 100 |  | B8D | P |  |
| 6946 | 402013060 |  | 6.3 |  | 100 |  | 9 | 3.8 | 100 |  |  | B8D | T |  |
| 6947 | 642113470 |  | 6.3 |  | 150 |  | 6.5 | 4 | 100 |  |  | B8D | TT |  |
| 6948 | 642113470 |  | 6.3 |  | 100 |  | 0.8 | 1.6 | 100 |  |  | B8D | TT |  |
| 6954 | 412365100 |  | 6.3 | 1 | 150 | 150 | 5.9 | 2 | 100 | 100 |  | B7G | P |  |
| 6955 | 641227413 |  | 6 | 8.5 | 250 |  | 11.5 | 2.3 | 100 |  |  | B9A | TT |  |
| 6968 | 402365100 |  | 6.3 | 2 | 150 | 125 | 7.5 | 5 | 125 | 100 | 4 | B7G | P |  |
| 6973 | 504234156 |  | 6.3 | 15 | 250 | 250 | 46 | 4.8 | 100 | 100 |  | B9A | P |  |
| 7000 | 026510310 | G1 | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | A08 | P |  |
| 7025 | 741236413 |  | 6 | 2 | 250 |  | 1.2 | 1.6 | 150 |  | 1.6 | B9A | TT |  |
| 7027 | 526544310 |  | 6.3 |  | 200 | 200 |  |  | 100 | 100 |  | B8A | P |  |
| 7032 | 412365100 |  | 6.3 | 2 | 250 | 100 | 4.5 | 1.8 | 100 | 100 |  | B7G | H |  |
| 7036 | 412365100 |  | 6 | 0 | 75 | 75 | 6.3 | 2 | 80 | 75 | 2 | B7G | H |  |
| 7044 | 641221437 |  | 6.3 | 2 | 150 |  | 36 | 10 | No Data | a Avail | lable | B9A | TT |  |
| 7051 | 645237114 |  | 6.3 \{ | 1.0 1.0 | 150 200 | 100 | 18 10 | $\begin{aligned} & 8.5 \\ & 5 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $8\}$ | B9A | TP |  |
| 7054 | $14123 * 651$ |  | 13.5 | 2.7 | 250 | 150 | 19 | 11.5 | 100 | 100 |  | B9A | P |  |
| 7055 7056 | 182310900 412365100 |  | 13.5 13.5 |  |  |  |  |  | ${ }_{1}$ D |  |  | ${ }^{\text {B7G }}$ | RR |  |
| 7057 | 641237410 |  | 13.5 | 2.2 | 150 | 150 | $10^{9.5}$ | 6.2 6.8 | 100 100 | 100 |  | ${ }^{\text {B7G }}$ | $\stackrel{\mathrm{P}}{\mathrm{T}}$ |  |
| 7058 | 641237410 |  | 13.5 |  | 250 |  | 1.2 | 1.6 | 100 |  |  | B9A | TT |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | majn |  |  |
| 7370 | 641221437 |  | 20 | 2 | 120 |  | 36 | 11.5 | 100 |  | 11.5 | B9A | TT |
| 7382 | 412300600 |  | 6.3 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.6 | B7G | T |
| 7408 | 026540310 |  | 6.3 | 12.5 | 250 | 250 | 4.7 | 4.6 | 100 | 100 |  | A08 | P |
| 7492 | 741226413 |  | 6.3 |  | 250 |  |  | 5.5 | 100 |  |  | B9A | TT |
| 7498 | 412361500 |  | 6.3 |  | 250 | 250 |  | 7.5 | 100 | 100 |  | B7G | P |
| 7534 | *2* $54 * 310$ | A | 6.3 | 15.5 | 250 | 150 | 100 | 25.0 |  | Data Ava | ilable | e A08 | P |
| 7543 | 412365100 |  | 6.3 | 1.0 | 250 | 150 | 10.8 | 5.2 | 100 | 100 | 5 | B7G | P |
| 7551 | 145236151 |  | 13 | 18 | 250 | 250 | 40 | 5.3 | 80 | 60 |  | B9A | P |
| $7558$ | 145236151 |  | 6.3 | 18 | 250 | 250 | 40 | 5.3 | 100 | 100 |  | B9A | P |
| $7561$ | 026540310 |  | 25 |  | 100 | 100 | 555 | 10.5 |  | Data Ava | ilable | e A08 | P |
| 7581 | 026540310 |  | 6.3 | 14 | 250 | 250 | 72 | 6 | 100 | 100 |  | B8A | P |
| 7591 | 026514350 |  | 6.3 | 10 | 300 | 300 | 75 | 10.2 | 100 | 100 |  | A08 | P |
| 7607 | 125141300 | A1 | 6.3 | 17 | 300 | 250 | 80 | 8 | 100 | 100 |  | A08 | P |
| 7643 | 645237114 |  | 6.3 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 200 | 17 | 14 | $5$ | $100$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 6 | \} 99 A | TP |
| 7683 | 416236156 |  | 6.3 | 0.5 | 300 | 250 | 12.6 | 5 | 100 | 100 | 5 |  | P |
| 7687 | 645237114 |  | 6.3 | $\{8.5$ | 200 200 | 125 | $10^{7.5}$ | $\begin{aligned} & 2.5 \\ & 5.8 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | $\} \mathrm{B9A}$ | IP |
| 7693 | 412365100 |  | 6.3 | 100 | 250 | 150 | 7.4 | 4.6 | 100 | 100 |  | B7G | P |
| 7694 | 412365100 |  | 6.3 | 80 | 250 | 100 | 9.2 | 3.6 | No | Data Ava | ilable | e B7G | P |
| 7695 | 5** 234 1*6 |  | 50 | 11 | 130 | 130 | 100 | 11.0 |  | Data Ava | ilable | e B9A | P |
| 7699 | 414226573 |  | 6.3 |  | 250 |  | 45 | 10 | No | Data Ava | ilable | e B9A | PP |
| 7700 | 265113000 | G1 | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | UX6 |  |
| 7701 | 141236515 |  | 13.6 | 12.5 | 250 | 250 | 28 | 3.6 | 100 | 100 |  | B9A | P |
| 7716 | 146231457 |  | 13.6 | $\left\{\begin{array}{l}1.0 \\ 60\end{array}\right.$ | 150 200 | 100 | 24.6 | 3 9.5 | 100 100 | 60 100 | $2.5$ | \}B9A | TP |
| 7717 | 412365100 |  | 6.3 | 1 | 125 | 80 | 10 | 8 | 100 | 80 |  | B7G | P |
| 7719 | 641226413 |  | 6.3 | 10.5 | 300 |  | 4.0 | 3.5 | 100 |  | 3 | B9A | T |
| 7721 | 141230615 |  | 6.3 | 10 | 200 | 150 | 22 | 35 | No | Data Ava | ilable | e B9A | P |
| 7722 | 141230615 |  | 6.3 | 1 | 200 | 150 | 3.4 | 27 | No | Data Ava | ilable | e B9A | P |
| 7724 | 181239146 |  | 14 | 3.0 | 250 |  | 0.7 | 1.0 | 100 |  | 1 | B9A | DDT |
| 7728 | 641227413 |  | 6.3 | 2 | 250 |  | 10 | 5.5 | 100 |  | 4 | B9A | TT |
| 7729 | 641227413 |  | 6.3 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.2 | B9A | TT |
| 7731 | 641237114 |  | 6.3 | $\left\{\begin{array}{l} 1 \\ 0.05 \end{array}\right.$ | 150 $5 \quad 20$ | 100 | 18 10 | 8.5 5.7 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | $\}$ B9A | TP |
| 7732 | 412365100 |  | 6.3 | 1 | 200 | 125 | 13 | 8 | 100 | 100 |  | B7G | P |
| 7733 | 141223651 |  | 6.3 | 3 | 250 | 175 | 24 | 12 |  | Data Ava | ilable | e B9A | P |
| 7734 | 514236147 |  | 6.3 | $\left\{\begin{array}{c} 21 \\ 2.0 \end{array}\right.$ | 150 150 | 150 | 35 5.5 | 5.4 3.2 |  | Data Ava | ilable | e ${ }^{\text {B9A }}$ | TP |
| 7738 | 642314600 |  | 6.3 |  | 400 |  | 12 | 9.9 | No | Data Ava | ilable | e B7G | T |
| 7751 | 026540310 |  | 6.3 | 8 | 100 | 100 | 100 | 14 | No | Data Ava | ilable | e A08 | P |
| 7752 | 412365100 |  | 6 | 2 | 150 | 125 | 5.5 | 3.5 | 100 | 100 | 3.5 | B7G | P |
| 7754 | 5** $2341 * 6$ |  | 6.3 |  | 150 | 150 | 100 | 11. | No | Data Ava | ilable | Le B9A | P |
| 7755 | 412365100 |  | 6 |  | 40 | 30 | 3 8 | 2.7 | No | Data Ava | ilable | e B7G | P |
| 7756 | 106052430 |  | 6 | 36 | 300 | 300 | 58 | 4.3 | 100 | 150 | 4.3 | A08 | P |
| 7757 7761 7788 | $\begin{array}{lll}451 & 034 & 510 \\ 214 & 607 & 413 \\ 141 & 235 & 615\end{array}$ |  | 6.3 12.6 6.3 | 12.5 | 250 150 150 | 250 150 | 45 85.2 35 | 4.1 50.5 50 | 100 100 No | PenI <br> Data Ava | F 4.0 | $\begin{array}{r} \text { B9A } \\ \text { B9A } \\ \text { le } \mathrm{B99A} \end{array}$ | $\begin{aligned} & \mathrm{P} \\ & \mathrm{TT} \\ & \mathrm{p} \end{aligned}$ |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\left\|\begin{array}{c} \text { Screen } \\ \text { Volts } \end{array}\right\|$ | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode | Screen Volts | mAN |  |  |  |
| 7803 | 641237410 |  | 6.3 | 1.3 | 90 |  | 15 | 12.5 | No D | ta Avai | ilable | B9A | TT |  |
| 7898 | 741236 41* |  | 12 | 2 | 250 |  | 10 | 5.5 | 100 |  | 5.5 | B9A | TT |  |
| 8013A | 200300000 | D1 | 2.5 |  |  |  | 15 |  | REC |  | 10 mA | B4 | R |  |
| 8016 | 020000030 | D1 | 1.2 |  |  |  |  |  | D |  |  | A08 | D |  |
| 8032 | 125141310 | A1 | 13.5 | 32 | 200 | 200 | 100 | 7 | No D | ta Avai | ilable | A08 | P |  |
| 8077 | $14123 * 651$ |  | 13.5 | 2.7 | 250 | 150 | 19 | 11.5 | 100 | 100 |  | B9A | P |  |
| 8223 | 741236410 |  | 6.3 | 1.5 | 100 |  | 30 | 20 | No D | ta Avai | ilable | B9A | TT |  |
| 8233 | 615231141 |  | 6.3 | 3 | 150 | 150 | 50 | 45 | No | ta Avail | ilable | B9D | P |  |
| 8255 | 414234444 |  | 6.3 | 1.2 | 150 |  | 12 | 13 | No D | ta Avai | ilable | B9A | T |  |
| 8348 | 424236572 |  | 1.6 |  | 200 | 200 | 30 | 3.3 | 100 | 100 |  | B9A | PP |  |
| 9001 | 412365100 |  | 6 | 3 | 250 | 100 | 2 | 1.4 | 100 | 100 | 1.4 | B7G | $P$ |  |
| 9002 | 612364100 |  | 6 | 7 | 250 |  | 6.3 | 2.2 | 100 |  | 2.2 | B7G | T |  |
| 9003 | 412365100 |  | 6 | 3 | 250 | 100 | 6.7 | 1.8 | 100 | 100 | 1.8 | B7G | P |  |
| 9004 | 203180000 |  | 6.3 |  |  |  | 5 |  | D |  |  | 5AA | R |  |
| 9005 | 218330000 |  | 3.6 |  |  |  |  |  | D |  |  | 5AA | D |  |
| 9006 | 812380100 |  | 6 |  |  |  | 5 |  | D |  |  | B7G | R |  |
| 9072 | 020000310 | A1/G1 | 6 |  | 300 |  | 15 | 2.5 | No D | ta Avai | ilable | A08 | T |  |
| 18013 | 061231500 | G1 | 4 |  | 200 | 200 | 8 | 5 | 100 | 100 |  | B7 | P |  |
| 18014 | 005231600 | G1 | 4 |  | 200 | 200 | 35 | 8 | 100 | 100 |  | B7 | P |  |
| 18015 | 061231500 |  | 21 |  | 150 | 125 | 8 | 8.3 | 125 | 125 | 8.3 | B7 | P |  |
| 18016 | 005231600 |  | 21 |  | 150 | 125 | 48 | 9 | 125 | 125 | 9 | B7 | P |  |
| 18040 | 265104130 |  | 18 | 3.4 | 200 | 200 | 15 | 10 | 100 | 150 | 10 | B8B | P |  |
| 18042 | 541236 **1 |  | 18 | 1.8 | 200 | 100 | 8.3 | 8.2 | 100 | 100 | 8 | B9A | P |  |
| 18043 | 541236 **1 |  | 6 | 1.8 | 200 | 200 | 8.2 | 8.2 | 100 | 100 | 8 | B9A | P |  |
| 18045 | 041230651 |  | 18 | 3 | 200 | 200 | 20 | 11 | 100 | 150 | 10 | B9A | P |  |
| 18046 | 041230651 |  | 18 | 3 | 200 | 100 | 20 | 11 | 100 | 150 | 10 | B9A | $\stackrel{\mathrm{P}}{ }$ |  |
| 18048 | 261504130 |  | 20 | 4.8 | 250 | 150 | 16 | 6.5 | 100 | 100 |  | B8D | $P$ |  |
| 95108 | 653420000 |  | 1.2 | 1 | 40 | 40 | 2.2 | 1 | No D | ta Avai | ilable | B5A | P |  |
| 824476 | 461471230 |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| A11A | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| A11B | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| A11C | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| A11D | 892200000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| A20B | 892310000 |  | 4 |  |  |  | 60 |  | D |  |  | B5 | DD |  |
| A23A | 809231600 | G1 | 4 | 7 | 250 |  | 4 | 2 | 100 |  | 2 | B7 | DDT |  |
| A26 | 264300000 |  | 15 | 1.5 | 90 |  | 4.5 | 1.1 | 80 |  | 1.1 | UX4 | T |  |
| A270 | 819236500 | G1 | 4 | 6 | 250 | 250 | 36 | 9.5 | 100 | 150 | 9.5 | B7 | DDP |  |
| A28 | 264300000 |  | 15 | 1.5 | 90 |  | 7.5 | 1.1 | 80 |  | 1.1 | UX4 | T |  |
| A30 | 264300000 |  | 15 | 27 | 200 |  | 22 | 1.0 | 100 |  | 1.0 | UX4 | T |  |
| A30B | 642310000 |  | 4 | 2 | 250 |  | 10 | 5.5 | 200 |  | 5.5 | B5 | T |  |
| A30D | 642310000 |  | 4 | 3.5 | 200 |  | 6 | 2.4 | 100 |  | 2.4 | B5 | T |  |
| A32 | 264300000 |  | 15 | 3 | 150 |  | 1.5 | 0.9 | 150 |  | 0.9 | UX4 | T |  |
| A36A | 645231700 | G1 | 4 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 150 200 | 100 | 6 3.5 | 1.2 | 150 200 | $\begin{aligned} & 60 \\ & 75 \end{aligned}$ | 1.2 ) | B7 | TH |  |
| A36B | 645231700 | G1 | 4 | $\{2$ | 100 250 | 150 | 22 3.5 | 6 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 150 \end{array}$ |  |  | TH |  |
| A36C | 645231700 | G1 | 4 | $\left\{\begin{array}{l}3 \\ 2.5\end{array}\right.$ | 100 | 100 | $\begin{aligned} & 9 \\ & 3.25 \end{aligned}$ | $\begin{aligned} & 3.8 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l}5 \\ 3 \\ 1.5\end{array}\right\}$ | B7 | TH |  |
| A40 | 264300000 |  | 15 | 40.5 | 200 |  | 21 | 1.5 | 100 |  | 1.5 | UX4 | T |  |
| A40 | 264310000 |  | 4 |  | 100 |  |  | 2 | 100 |  | 2 | 5AA | T |  |
| A40M | 254130000 | A1 | 4 | 1.5 | 200 | 100 | 3 | 2 | 200 | 100 | 3 | UX5 | P |  |
| A40M | 542310000 | A1 | 4 | 1.5 | 200 | 100 | 3 | 2 | 200 | 100 | 2 | B5 | P |  |
| A41 | 351220000 | A1/G1 | 4 |  | 250 | 100 |  | 2 | 100 | 100 |  | 5AA | P |  |
| A48 | 264300000 |  | 15 | 4.5 | 90 |  | 4.5 | 1.1 | 80 |  | 1.1 | UX4 | T |  |
| A50A | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2.3 | 100 | 200 | 2.3 | B5 | P |  |
| A50A | 040231500 | A1 | 4 | 2 | 200 | 100 | 3 | 2.3 | 100 | 100 | 2.3 | B7 | P |  |
| A50B | 061231500 | G1 | 4 | 1.5 | 250 | 250 | 6 | 3.5 | 200 | 200 | 3.5 | B7 | P |  |
| A50M | 041231500 | A1 | 4 | 2 | 200 | 125 | 4.5 | 2.3 | 100 | 100 | 2.3 | B7 | P |  |
| A50M | 542310000 | A1 | 4 | 2 | 250 | 125 | 4.5 | 2.3 | 100 | 100 | 2.3 | B5 | P |  |
| A50N | 542310000 | A1 | 4 | 2 | 250 | 100 | 4.2 | 2.5 | 200 | 100 | 2.5 | B5 | P |  |
| A50N | 041231500 | A1 | 4 | 2 | 250 | 100 | 4.2 | 2.5 | 200 | 100 | 2.5 | B7 | P |  |
| A50P | 060231500 | G1 | 4 | 3 | 250 | 250 | 11.5 | 2 | 100 | 150 | 2 | B7 | P |  |
| A70B | 642310000 | G2 | 4 | 25 | 250 | 250 | 36 | 2.6 | 100 | 150 |  | B5 | P |  |
| A70B | 045231600 |  | 4 | 25 | 250 | 250 | 36 | 2.6 | 100 | 150 | 2.6 | B7 | P |  |
| A70C | 045231600 |  | 4 | 3 | 250 | 250 | 36 | 9 | 100 | 150 | 9 | B7 | P |  |
| A70D | 045231600 |  | 4 | 3 | 250 | 250 | 36 | 9 | 100 | 150 | 9 | B7 | P |  |
| A70D | 642350000 |  | 4 | 5.8 | 250 | 250 | 36 | 9.5 | 100 | 150 | 8 | B5 | P |  |
| A70E | 045231600 |  | 4 | 14 | 250 | 275 | 72 | 8.5 | 100 | 150 | 8.5 | B7 | P |  |
| A70P | 045231600 |  | 4 | 14.5 | 250 | 250 | 70 |  | 100 | 150 |  | B7 | P |  |
| A80A | 123174560 | G1 | 4 | $\left\{\begin{array}{l}1.8 \\ 8.8\end{array}\right.$ | 90 250 |  | 2.6 |  | 100 | 90 |  | $\}_{8 S C}$ | 0 |  |
|  |  |  |  | $\left\{\begin{array}{l}8.5 \\ 1.8\end{array}\right.$ | 250 90 | 75 75 | ${ }_{2} 1.6$ |  | 200 100 |  | 2.5 1.3 |  |  |  |
| A80A | 645231700 | G1 | 4 | $\left\{\begin{array}{l}8.8 \\ 8.5\end{array}\right.$ | 250 | 75 | 1.5 |  | 100 | 90 | 1.5 | B7 | 0 |  |
| A104 | 642300000 |  | 1.1 | 10 | 100 |  | 5 | 0.3 | 100 |  | 0.3 | B4 | T |  |
| A106 | 642300000 |  | 1.4 | 9 | 100 |  | 2 | 0.4 | 100 |  | 0.4 | UX4 | T |  |
| A106 | 642300000 |  | 1.4 | 9 | 100 |  | 2 | 0.4 | 100 |  | 0.4 | B4 | T |  |
| A109 | 642300000 |  | 1.3 | 9 | 150 |  | 2 | 0.4 | 100 |  | 0.4 | B4 | T |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO valve tester |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \text { mA } \end{gathered}$ | mA/V | Anode Volts | Scree Volt | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| A109 | 264300000 |  | 1.4 | 9 | 150 |  | 2 | 0.4 | 100 |  | 0.4 | UX4 | T |  |
| A110 | 264300000 |  | 1.4 | 4.5 | 150 |  | 4 | 0.4 | 125 |  | 0.4 | UX4 | T |  |
| A110 | 642300000 |  | 1.4 | 4.5 | 150 |  | 3 | 0.4 | 125 |  | 0.4 | B4 | T |  |
| A125 | 642300000 |  | 1.2 | 3 | 150 |  | 0.4 | 0.4 | 100 |  | 0.4 | B4 | T |  |
| A203 | 642300000 |  | 2 | 30 | 150 |  | 12 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| A205 | 642300000 |  | 2 | 18 | 150 |  | 7 | 1.2 | 100 |  | 1.2 | B4 | T |  |
| A206 | 642300000 |  | 2 | 8.5 | 150 |  | 3.8 |  | 100 |  | 1 | B4 | T |  |
| A209 | 642300000 |  | 2 | 9 | 150 |  | 4 | 1.0 | 100 |  | 1.0 | B4 | T |  |
| A209 | 264300000 |  | 2 | 9 | 150 |  | 4 | 1.0 | 100 |  |  | UX4 | T |  |
| A210 | 364200000 |  | 2 | 9 | 150 |  | 3 | 1.0 | 100 |  |  | UX4 | T |  |
| A210 | 642300000 |  | 2 | 9 | 150 |  | 3 | 0.9 | 100 |  | 0.9 | B4 | T |  |
| A211 | 642300000 |  | 2 | 2 | 150 |  | 2 | 1.2 | 100 |  | 1.2 | B4 | T |  |
| A214 | 642300000 |  | 2 | 3 | 150 |  | 4.5 | 1.3 | 100 |  | 3 | B4 | T |  |
| A225 | 642300000 |  | 2 | 3 | 150 |  | 1 | 1 | 100 |  | 1 | B4 | T |  |
| A225 | 364200000 |  | 2 | 3 | 150 |  | 1 | 1 | 100 |  | 1 | UX4 | T |  |
| A235 | 200300000 | D1 | 6 |  |  |  | 30 |  | REC |  | 15 mA | UX4 | R |  |
| A235 | 042300000 | A1 | 2 |  | 150 |  | 1.5 | 0.4 | 150 |  | 0.4 | B4 | T |  |
| A239 | 230300000 | D1 | 5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | R |  |
| A241 | 642300000 | G2 | 2 | 2 | 20 | 20 | 1.2 | 1 | No D |  | ilabl | B4 | P |  |
| A242 | 265300000 | G1 | 2 | 3 | 150 | 75 | 1.7 | 0.6 | 100 | 7 | 0.6 | UX4 | P |  |
| A303 | 264300000 |  | 3 | 27 | 150 |  | 3 | 0.6 | 100 |  |  | UX4 | T |  |
| A306 | 264300000 |  | 3 | 15 | 150 |  | 1.5 | 0.4 | 100 |  |  | UX4 | T |  |
| A404 | 642300000 |  | 4 | 10 | 100 |  | 4 | 0.4 | 100 |  | 0.4 | B4 | T |  |
| A406 | 364200000 |  | 4 | 9 | 100 |  | 2 | 0.4 | 100 |  |  | UX4 | T |  |
| A406 | 642300000 |  | 4 | 9 | 100 |  | 2 | 0.4 | 100 |  |  | B4 | T |  |
| A408 | 642300000 |  | 4 | 4 | 150 |  | 4 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| A409 | 642300000 |  | 4 | 9 | 150 |  | 3.5 | 0.9 | 100 |  | 1.2 | B4 | T |  |
| A409 | 264300000 |  | 4 | 9 | 150 |  | 3.5 | 0.9 | 100 |  | 0.9 | UX4 | T |  |
| A410 | 642300000 |  | 4 | 3 | 150 |  | 3.5 | 0.5 | 100 |  | 0.2 | B4 | T |  |
| A410 | 264300000 |  | 4 | 3 | 150 |  | 3.5 | 0.5 | 100 |  | 1.2 | UX4 | T |  |
| A410N | 642300000 |  | 4 | 3 | 150 |  | 3.5 | 0.5 | 100 |  | 0.5 | B4 | T |  |
| A411 | 642300000 |  | 4 | 3 | 200 |  | 6 | 2.5 | 150 |  | 2.5 | B4 | T |  |
| A414 | 364200000 |  | 4 | 4.5 | 150 |  | 3 | 2 | 100 |  | 2 | UX4 | T |  |
| A414 | 642300000 |  | 4 | 4.5 | 150 |  | 3 | 2 | 100 |  |  | B4 | T |  |
| A414K | 642300000 |  | 4 | 4.5 | 150 |  | 4 | 2 | 100 |  | 2 | B4 | T |  |
| A415 | 642300000 |  | 4 | 4 | 150 |  | 4 | 1.5 | 100 |  | 2 | B4 | T |  |
| A416 | 642300000 |  | 4 | 4.5 | 150 |  | 4 | 2 | 100 |  | 2 | B4 | T |  |
| A420 | 642300000 |  | 4 | 4 | 150 |  | 4 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| A425 | 642300000 |  | 4 | 2.5 | 200 |  | 0.2 | 1.2 | 100 |  | 1.2 | B4 | T |  |
| A430 | 642300000 |  | 4 | 3 | 200 |  | 6 | 2.5 | 150 |  | 2.5 | B4 | T |  |
| A430 | 042300000 | A1 | 4 |  | 150 |  | 1.5 | 0.5 | 150 |  | 0.5 | B4 | T |  |
| A430N | 642310000 |  | 4 | 4.5 | 250 |  | 6.5 | 3.5 | 100 |  | 3 | B5 | T |  |
| A435 | 642300000 |  | 4 | 1 | 150 |  | 2.1 | 0.5 | 150 |  | 0.5 | B4 |  |  |
| A440N | 642310000 |  | 4 | 1.6 | 200 |  | 0.2 | 2.2 | 150 |  | 2.2 | B5 |  |  |
| A442 | 542300000 | A1 | 4 | 1 | 200 | 100 | 4 | 0.7 | 200 | 100 | 0.8 | B4 |  |  |
| A442 | 254300000 | A1 | 4 | 1 | 200 | 100 | 1 | 0.4 | 200 | 100 | 0.8 | UX4 | P |  |
| A557 | 602310000 | G1 | 4 | 8 | 150 |  | 28 | 2 | 100 |  | 2 | B5 | T |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | data for valve characteristic METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. <br> Grid <br> Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| A577 | 602310000 | G1 | 4 | 20 | 250 |  | 40 | 2 | 100 |  | 2 | B5 | T |  |
| A600 | 642300000 |  | 6 | 9 | 150 |  | 4 | 1.5 | 100 |  | 1.5 | UX4 | I |  |
| A609 | 642300000 |  | 6 | 9 | 150 |  | 4 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| A609 | 602310000 | G1 | 6 | 9 | 150 |  | 4 | 1.5 | 100 |  |  | B5 | T |  |
| A615 | 642300000 |  | 6 | 4.5 | 150 |  | 4 | 2.4 | 100 |  | 2.4 | B4 | T |  |
| A630 | 642300000 |  | 6 | 1.5 | 150 |  | 0.7 | 1.5 | 150 |  | 1.5 | B4 | T |  |
| A635 | 642300000 |  | 6 |  | 150 |  | 1.2 | 1.5 | 150 |  | 1.5 | B4 | T |  |
| A642 | 542300000 | A1 | 6 | 1 | 200 | 100 |  | 0.7 | 200 | 100 | 0.7 | B4 | P |  |
| A802 | 642310000 |  | 4 | 3 | 100 |  | 2.5 | 2.5 | 100 |  | 2.5 | B5 | T |  |
| A819 | 060231500 | G1 | 4 |  | 250 | 250 | 8 | 7.5 | 100 | 100 |  | B7 | P |  |
| A863 | 026500310 | G1 | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | A08 | P |  |
| A901 | 045231600 |  | 5 |  | 100 | 100 | 50 | 9 | No Data | a Avail | lable | B7 | P |  |
| A1685 | 026510310 | G1 | 6.3 | 3 | 150 | 100 | 8 | 3.2 | 100 | 100 | 3.2 | A08 | P |  |
| A1685M | 026510310 | G1 | 6 | 3 | 150 | 100 | 8 | 3.2 | 100 | 100 | 3.2 | A08 | P |  |
| $\triangle \mathrm{A} 1714$ | 412 3** 600 |  | 6 | 2.2 | 150 |  |  |  | 100 |  | 8 | B7G | T |  |
| A1820 | 265004130 |  | 6 |  | 250 | 250 | 40 | 10.5 | 100 | 150 | 9 | B8B | P |  |
| $\triangle \mathrm{A} 1834$ | 471461230 |  | 6 | 40 | 100 |  |  |  | No Data | a Avail | lable | A08 | TT |  |
| A1860 | 502332406 |  | 2.5 | 7 | 200 | 150 | 35 | 6 | 100 | 100 |  | B9A | T |  |
| A2030N | 642310000 |  | 20 | 3 | 200 |  | 6 | 2.3 | 100 |  | 2.3 | B5 | T |  |
| A2040N | 642310000 |  | 20 | 1.6 | 200 |  | 0.2 | 3 | 100 |  | 1 | B5 | T |  |
| A2087 | 8*2 380100 |  | 4.4 |  |  |  | 5 |  | D |  |  | B7G | R |  |
| A2118 | 642350000 |  | 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 |  |
| A2226 | *41 23* *51 | A1 | 6.3 | 12.5 | 150 | 150 | 50 | 8.5 | 100 | 100 |  | B9A | P |  |
| A2272 | 21* *1* *13 | D1 | 6 |  |  |  |  |  | D |  |  | B9G | R |  |
| 4A2293 | *1* $234 * * 6$ |  | 6.3 | 23 | 150 |  |  |  | No Data | a Avail | lable | B9A | T |  |
| A2426 | *2* 54* 310 | A1 | 6.3 | 13.5 | 150 | 150 | 50 | 8 | No Data | a Avail | lable | A08 | P |  |
| A2521 | 414464234 |  | 6.3 | 1 | 150 |  | 15 | 15 | No Data | a Avail | lable | B9A | T |  |
| A2599 | 411231146 |  | 6.3 | 1 | 150 |  | 16 | 15 | No Data | a Avail | lable | B9A | T |  |
| A2637 | 120040300 | A1 | 6.3 | 7.0 | 20 |  | 1.0 | 0.6 | No Data | a Avail | lable | A08 | T |  |
| A2674 | 211403506 |  | 6.3 | 1.4 | 200 | 150 | 23 | 30 | No Data | a Avail | lable | B9A | P |  |
| A2688 | 412314600 |  | 6.3 | 1 | 100 |  | 12 | 11.5 | No Data | a Avail | lable | B7G | T |  |
| A2738 | *26 541310 |  | 6.3 | 19 | 250 | 200 | 50 | 10 | 100 | 100 |  | A08 | P |  |
| A2744 | 414464234 |  | 6.3 | 1 | 150 |  | 16 | 15 | No Data | Avail | able | B9A | T |  |
| A2792 | *4* 23* 1** | A1 | 6.3 | 1.7 | 400 |  | 1 | 2.5 | 100 |  | 2.5 | A08 | T |  |
| A2900 | 741226413 |  | 6.3 | 2 | 250 |  | 10.5 | 6.2 | 100 |  | 6.2 | B9A | TT |  |
| A2913 | 413214600 |  | 6.3 |  | 200 |  | 15.5 | 14 | No Data | Avail | able | B9A | T |  |
| A3042 | *41 23* *51 | A1 | 6.3 | 12.5 | 150 | 150 | 50 | 8.5 | No Data | A Avail | able | B9A | P |  |
| A3064 | 412361500 |  | 6.3 | 1.6 | 250 | 250 | 10 | 7.6 | 100 | 100 |  | B7G | P |  |
| A4090 | 642310000 |  | 4 | 3.5 | 250 |  | 6 | 2.4 | 150 |  | 2.4 | B5 | T |  |
| A4110 | 642310000 |  | 4 | 3.5 | 250 |  | 6 | 2.4 | 100 |  | 2.5 | B5 | T |  |
| AA61 | 274164130 |  | 6 | 5.2 | 250 |  | 6 | 2.7 | 100 |  | 2.7 | B8A | TT |  |
| AA91E | 182310900 |  | 6.3 |  |  |  | 5 |  | D |  |  | B7G | DD |  |
| AAB1 | 0231 to 980 |  | 4 |  |  |  |  |  | D |  |  | 8SC | DDD |  |
| AB1 | 902310000 | D1 | 4 |  |  |  |  |  | D |  |  | B5 | DD |  |
| ABC1 | 023198060 | G1 | 4 | 7 | 250 |  | 4 | 2 | 100 |  | 2 | 8SC | DDT |  |
| ABC91 | 412389600 |  | 6 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.4 | B7G | DDT |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{array}{\|c\|c\|} \hline & \text { Screen } \\ s & \text { Volts } \end{array}$ | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| ABL1 | 023198560 | G1 | 4 | 6 | 250 | 250 | 36 | 9 | 100 | 150 | 9.0 | 8SC | DDP |  |
| AC/042 | 642300000 |  | 2 | 38 | 300 |  | 50 | 5 | 100 |  | 5 | B5 | T |  |
| AC/044 | 642300000 |  | 4 | 38 | 300 |  | 50 | 5 | 100 |  | 5 | B4 | T |  |
| AC/054 | 642300000 |  | 4 | 22 | 250 |  | 48 | 3.5 | No Data | a Avail | lable | B4 | T |  |
| AC/064 | 642300000 |  | 4 | 21 | 200 |  | 20 | 3 | 100 |  | 3 | B4 | T |  |
| ACO84 | 642300000 |  | 4 | 22 | 300 |  | 17 | 1.1 | 100 |  | 1.1 | B4 | T |  |
| AC084N | 642300000 |  | 4 |  | 100 |  | 21 | 2.5 | 100 |  | 2.5 | B4 | T |  |
| AC701 | 621300000 | G1 | 4 | 1.6 | 60 |  | 2.6 | 2.8 | 60 |  | 2.8 | B5A | T |  |
| AC2 | 023100060 | G1 | 4 | 5.5 | 250 |  | 6 | 2.5 | 100 |  | 2.5 | 8SC | T |  |
| AC2DD | 869231500 | G1 | 4 | 5 | 250 | 250 | 32 |  | 100 | 150 |  | B7 | DDP |  |
| AC2/HL | 642310000 |  | 4 | 1.2 | 250 |  | 2.5 | 6.5 | 100 |  | 5 | B5 | T |  |
| AC2/Pen | 045231600 |  | 4 | 5.3 | 250 | 250 | 32 | 8.5 | 100 | 150 | 8 | B7 | P |  |
| AC2/PendD | 869231500 | G1 | 4 | 5.3 | 250 | 250 | 32 | 8.5 | 100 | 150 | 8 | B7 | DDP |  |
| AC3Pen | 045231600 |  | 4 | 3 | 250 | 250 | 36 | 9 | 100 | 150 | 9 | B7 | P |  |
| AC4/Pen | 045231600 |  | 4(5) | 7 | 250 | 250 | 56 | 11 | 100 | 100 | 0 | B7 | P |  |
| AC5/Pen | 045213600 |  | 4 | 8.5 | 250 | 250 | 40 | 9.4 | 100 | 150 | 9.9 | B7 | P |  |
| AC5/PenDD | 869231500 | G1 | 4(5) | 8.5 | 250 | 250 | 40 | 9.4 | 100 | 150 | 9.4 | B7 | DDP |  |
| AC6/Pen | 045231000 | A1 | 4(5) | 6.9 | 300 | 225 | 63 | 9.5 | 100 | 100 | 8.5 | B7 | P |  |
| AC101 | 602310000 | G1 | 4 | 5.5 | 250 |  | 7 | 2.7 | 100 |  |  | B5 | T |  |
| AC104 | 642310000 |  | 4 | 10 | 150 |  | 8.5 | 3.5 | 100 |  | 3.5 | B5 | T |  |
| AC701 | 103060020 | G1 | 4 | 1.6 | 40 |  | 0.5 | 0.7 | No Data | a Avail | able | B8D | T |  |
| ACD | 802310000 |  | 4 |  |  |  |  |  | D |  |  | B5 | D |  |
| ACDD | 892310000 |  | 4 |  |  |  |  |  | D |  |  | B5 | DD |  |
| $\mathrm{AC} / \mathrm{DDT}$ | 809231600 | G1 | 4 | 4 | 200 |  | 5 | 2.3 | 100 |  | 2.3 | B7 | DDT |  |
| AC/DX | 642310000 |  | 4 | 3 | 200 |  | 5 | 3.5 | 100 |  | 3.5 | B5 | T |  |
| AC/G | 642310000 |  | 4 | 7.5 | 200 |  | 8 | 2.7 | 100 |  | 2.7 | B5 | $T$ |  |
| ACH1 | 174652300 | G1 | 4 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 150 150 | 75 | $\begin{aligned} & 5 \\ & 2.5 \end{aligned}$ | 2 | $\begin{array}{r} 100 \\ 80 \end{array}$ | $\begin{aligned} & 60 \\ & 75 \end{aligned}$ | $2\}$ | C7 | TH |  |
| ACHL4 | 642310000 |  | 4 | 5 | 250 |  | 5 | 3.3 | 100 |  | 3.3 | B5 | T |  |
| ACHF | 642310000 |  | 4 | 3 | 200 |  | 3 | 2.5 | 100 |  | 2.5 | B5 | T |  |
| ACHL | 642310000 |  | 4 | 2.5 | 200 |  | 7 | 2 | 100 |  | 3.5 | B5 | T |  |
| AC/HLDD | 809231600 | G1 | 4 | 3 | 200 |  | 4.9 | 2.6 | 100 |  | 2.6 | B7 | DDT |  |
| ACHLDDD | 9 90 231680 | G1 | 4 | 3 | 200 |  | 4.9 | 2.6 | 100 |  | 2.7 | B9 | DDDT |  |
| ACHL4DD | 809231600 | G1 | 4 | 3 | 250 |  | 7 | 2.5 | 100 |  | 2.5 | B7 | DDT |  |
| ACHM4 | 542310000 | A1 | 4 |  | 250 | 100 | 10 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| AC/HP | 041231500 | A1 | 4 | 1.5 | 200 | 100 | 4.2 | 3.2 | 100 | 100 | 3.2 | B7 | P |  |
| AC/HP | 543210000 | A1 | 4 | 1.5 | 200 | 100 | 4.2 | 3.2 | 100 | 100 | 3.2 | B5 | P |  |
| ACHVP | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2.3 | 100 | 100 | 2.3 | B5 | P |  |
| ACH4 | 642310000 |  | 4 | 4 | 200 |  | 3 | 3.3 | 100 |  | 3.3 | B5 | T |  |
| AC/L | 642310000 |  | 4 | 13.5 | 200 |  | 17 | 4.25 | 100 |  | 4.25 | B5 | T |  |
| ACL4 | 642310000 |  | 4 | 15 | 250 |  | 9 | 4 | 100 |  | 4 | B5 | T |  |
| AC/LP | 642310000 |  | 4 | 14 | 200 | 18 | 4.25 |  | 100 |  | 4.25 | B5 | T |  |
| ACME4 | 642310000 | G2 | 4 | 16 | 250 | 250 | 26 |  | 100 | 150 |  | B5 | P |  |
| ACP | 642300000 |  | 4 | 21 | 200 |  | 19 | 3 | 100 |  | 3 | B4 | T |  |
| AC/P | 642310000 |  | 4 | 13.5 | 200 |  | 17 | 2.7 | 100 |  | 2.7 | B5 | T |  |
| ACP1 | 642310000 |  | 4 | 28 | 200 |  | 24 | 2.3 | 100 |  | 2.3 B | B5 | T |  |
| ACP/4 | 042310000 | A1 | 4 | 1 | 100 |  | 20 | 7 | 100 |  | 7 | B5 | T |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode | $\left\|\begin{array}{c} \text { Screen } \\ \text { Volts } \end{array}\right\|$ | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volte | Screen Volts | mA/V |  |  |  |
| AD1 | 023004060 |  | 4 | 45 | 250 |  | 60 | 6 | 100 |  | 6 | 8SC | T |  |
| AD1/350 | 023004060 |  | 4 | 66 | 400 |  | 42 |  | 100 |  |  | 8SC | T |  |
| AD1N | 023004060 |  | 4 |  | 300 |  | 60 |  | 100 |  |  | F8 | T |  |
| AD101 | 642310000 |  | 4 | 26.5 | 250 |  | 40 | 4.6 | 100 |  |  | B5 | T |  |
| ADG | 642310000 |  | 20 | 10 | 200 |  | 10 | 3.5 | 100 |  | 3.5 | B5 | T |  |
| ADHF | 642310000 |  | 20 | 3 | 200 |  | 5 | 3.5 | 100 |  | 3.5 | B5 | T |  |
| ADHP | 041231500 | A1 | 20 |  | 200 | 100 | 5 | 2.8 | 200 | 100 | 2.8 | B7 | P |  |
| ADL | 652310000 |  | 20 | 13 | 200 |  | 20 | 3 | 100 |  | 3 | B5 | T |  |
| ADPN | 642350000 |  | 20 | 15 | 250 | 200 | 22 |  | 100 | 150 |  | B5 | P |  |
| ADVHP | 041231500 | A1 | 20 |  | 200 | 100 | 5.5 | 2.5 | 200 | 100 | 2.5 | B7 | P |  |
| AE | 265413000 |  | 13 | 13.5 | 100 | 100 | 8.5 | 1.6 | 100 | 90 | 1.6 | UX6 | P |  |
| AF | 281300000 |  | 2.5 |  |  |  | 120 |  | REC |  | 20 mA | UX4 | R |  |
| AF2 | 542310000 | A1 | 4 | 2 | 200 | 100 | 4.2 | 2.5 | 200 | 100 | 3.2 | B5 | P |  |
| AF3 | 023110560 | G1 | 4 | 3 | 250 | 100 | 8 | 1.8 | 250 | 100 | 1.8 | 8SC | P |  |
| AF7 | 023110560 | G1 | 4 | 2 | 250 | 100 | 3 | 2.1 | 250 | 100 | 2.1 | 8SC | P |  |
| AF8 | 026546310 |  | 6 | 2 | 200 | 50 | 3.5 |  | 100 | 60 |  | A08 | 0 |  |
| AG | 289300000 |  | 5 |  |  |  | 120 |  | REC |  | 20 mA | UX4 | RR |  |
| AG495 | 642310000 |  | 4 | 4 | 200 |  | 4 | 2.5 | 100 |  | 2.5 | B5 | T |  |
| AG4100 | 642300000 |  | 4 | 3 | 150 |  | 5 | 2 | 125 |  | 2 | B4 | T |  |
| AH1 | 023145560 | G1 | 4 | 2 | 250 | 75 | 3 | 1.8 | 200 | 75 | 1.8 | 8SC | P |  |
| AH100 | 023145560 | G1 | 4 | 2.5 | 200 | 100 | 5.5 | 1.5 | 100 | 100 | 1.5 | 8SC | P |  |
| AH4105 | 542310000 | A1 | 4 | 2 | 200 | 125 | 4.5 | 2.3 | 100 | 100 | 2.3 | B5 | P |  |
| AK2 | 123164570 | G1 | 4 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 | 75 75 | 4.2 | 0.9 2.2 | 80 100 | $\begin{aligned} & 75 \\ & 75 \end{aligned}$ | $\begin{aligned} & 0.9 \\ & 2 \end{aligned}$ | 8SC | 0 |  |
| AL1 | 023004560 |  | 4 | 15 | 250 | 250 | 36 | 2.8 | 100 | 150 | 2.8 | 8SC | P |  |
| AL2 | 023100560 | G1 | 4 | 25 | 250 | 250 | 36 | 2.6 | 100 | 150 | 2.6 | 8SC | P |  |
| AL2/375 | 023100560 | G1 | 4 | 25 | 250 | 250 | 36 | 2.6 | 100 | 150 | 2.6 | 8SC | P |  |
| AL3 | 245231600 |  | 4 | 3 | 250 | 250 | 36 | 9 | 100 | 150 | 9 | B7 | P |  |
| AL3 | 023104560 |  | 4 | 6.5 | 250 | 250 | 36 | 9.5 | 100 | 150 | 8 | 8SC | P |  |
| AL4 | 145231600 |  | 4 | 3 | 250 | 250 | 36 | 9 | 100 | 150 | 9.5 | B7 | P |  |
| AL4 | 023104560 |  | 4 | 6.5 | 250 | 250 | 36 | 9.5 | 100 | 150 | 8 | 8SC | P |  |
| AL4/375 | 145231600 |  | 4 | 6 | 250 | 250 | 34 | 9.5 | 100 | 150 | 8 | B7 | P |  |
| AL4/375 | 023104560 |  | 4 | 6 | 250 | 250 | 34 | 9.5 | 100 | 150 | 8 | ${ }^{85 C}$ | P |  |
| AL5 | 145231600 |  | 4 | 14 | 250 | 250 | 72 | 8.5 | 100 | 150 | 7 | $\stackrel{\text { B7 }}{8 \text { 8 }}$ | P |  |
| AL5/375 | 023104560 |  | 4 | 14 | 250 | 275 | 72 | 8.5 | 100 | 150 | 6 | ${ }^{85} 7$ | P |  |
| AL60 | 041231500 | A1 | 4(5) | 7 | 250 | 250 | 72 | 14.5 | 100 | 150 | 8.5 | B7 | P |  |
| AL60 | 502331460 |  | 2.4 | 7 | 200 | 150 | 35 | 6 | 100 | 100 |  | B8D | P |  |
| AL495 | 642310000 |  | 4 | 12 | 250 |  | 30 | 4 | 100 |  | 4 | B5 | T |  |
| AL860 | 502331406 |  | 4.8 | 7 | 200 | 150 | 35 | 6 | 100 | 100 |  | B9A | P |  |
| AMOE | 045231600 |  | 4 | 14 | 250 | 250 | 72 | 9 | 100 | 150 |  | B7 | P |  |
| AN4092 | 642310000 | D1 | 4 | 3.5 | 200 |  | 6 | 2 | 100 |  | 2 | B5 | DT |  |
| APP4A | 045231600 |  | 4 | 16.5 | 250 | 250 | 36 | 3.5 | 100 | 150 | 3.5 | B7 | P |  |
| APP4AS | 023100560 | G1 | 4 | 16.5 | 250 | 250 | 36 | 3.5 | 100 | 150 | 3.5 | 8SC | $P$ |  |
| APP4B | 045231600 |  | 4 | 5 | 250 | 250 | 32 | 10 | 100 | 150 | 10 | B7 | P |  |
| APP4BS | 023104560 |  | 4 | 5 | 250 | 250 | 32 | 10 | 100 | 150 | 10 | ${ }^{85 C}$ | P |  |
| APP4G | 041231500 | A1 | 4 | 6 | 250 | 250 | 36 | 10 | 100 | 100 |  | B7 | P |  |
| AP495 | 642310000 |  | 4 | 1.5 | 200 |  | 2.5 | 5 | 150 |  | 5 | B5 | T |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO valve tester |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Voles | Anode Volts | Screen Volts | $\begin{aligned} & l a \\ & m A \end{aligned}$ | mA/V | Anode Volte | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| B65 | 471461230 |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| B105 | 264300000 |  | 1.4 | 18 | 150 |  | 8 | 1.0 | 100 |  |  | UX4 | T |  |
| B105 | 642300000 |  | 1.4 | 18 | 150 |  | 8 | 1.0 | 100 |  |  | B4 | T |  |
| B109 | 741236410 |  | 26 | 1.5 | 200 |  | 10 | 6.2 | 100 |  | 6 | B9A | TT |  |
| B152 | 741226413 |  | 6 | 2 | 250 |  | 10.0 | 5.5 | 200 |  | 5 | B9A | TT |  |
| B203 | 642300000 |  | 2 | 26 | 150 |  | 11 | 1.5 | 100 |  |  |  |  |  |
| B204 | 264300000 |  | 2 | 22.5 | 125 |  | 8 | 0.9 | 100 |  | 1.5 0.9 | ${ }_{\text {UX4 }}$ | ${ }_{T}^{T}$ |  |
| B205 | 642300000 |  | 2 | 18 | 150 |  | 7 | 1.2 | 100 |  | 1.2 | B44 | T |  |
| B205 | 264300000 |  | 2 | 18 | 150 |  | 7 | 1.2 | 100 |  | 1.2 | Ux4 | T |  |
| B217 | 642300000 |  | 4.5 | 4.5 | 150 |  | 3 | 1.3 | 100 |  | 1.3 | B4 | T |  |
| B217 | 264300000 |  | 2 | 4.5 | 150 |  | 3 | 1.3 | 100 |  |  |  |  |  |
| B228 | 264300000 |  | 2 | 2 | 150 |  | 2 | 1.2 | 100 |  |  | UX4 | T |  |
| B230 | 446230700 |  | 2 | 1 | 150 |  | 5.5 |  | 150 |  | 1.2 | B4 | TT |  |
| B240 | 264473000 |  | 2 |  | 150 |  | 15 |  | No D |  | lable | UX6 | TI |  |
| B242 | 542300000 | A | 2 | 0 | 200 | 75 | 4.5 | 1.1 | 100 | 75 | 1.1 | B4 | P |  |
| B242 | 254300000 | A | 2 | 0 | 200 | 75 | 4.5 | 1.1 | 100 | 75 | 1.1 | UX4 | P |  |
| B255 | 542300000 | A | 2 | 1 | 150 | 100 | 1.8 | 1.2 | 150 | 100 | 1.2 | B4 | ${ }_{P}$ |  |
| B255 | 254300000 | A | 2 | 1 | 150 | 100 | 1.8 | 1.2 | 150 | 100 | 1.2 | UX4 | P |  |
| B262 | 542300000 | A | 2 | 1 | 150 | 100 | 1.8 | 1.3 | 150 | 100 | 1.3 | B4 | P |  |
| B262 | 265300000 | G1 | 2 | 1 | 150 | 100 | 1.8 | 1.3 | 150 | 100 | 1.3 | UX4 | P |  |
| B309 | 741226413 |  | 6 | 2 | 250 |  | 10 | 5.5 | 100 | 100 | 5 | B9A | TT |  |
| B319 | 147234116 |  | 7.5 | 1.5 | 90 |  | 12 | 6 | 100 |  | 6 | B9A | TT |  |
| B329 | 741226413 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2.2 | B9A | TT |  |
| B339 | 741226413 |  | 6 | 2 | 250 |  | 1.2 | 1.6 | 150 |  | 1.6 | B9A | T |  |
| B342 | 265300000 | G1 | 2 | 2.5 | 150 | 75 | 4 | 1.3 | 150 | 75 | 1.3 | UX4 | P |  |
| B349 | 147234116 |  | 7 | 1.2 | 90 |  | 15 | 9 | 80 |  | 9 | B9A | TT |  |
| B403 | 642300000 |  | 4 | 30 | 150 |  | 15 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| B403 | 264300000 |  | 4 | 30 | 150 |  | 15 | 1.5 | 100 |  | 1.2 | UX4 | T |  |
| B405 | 642300000 |  | 4 | 18 | 150 |  | 11 | 1.6 | 100 |  | 1.6 | B4 | T |  |
| B405 | 264300000 |  | 4 | 18 | 150 |  | 11 | 1.6 | 100 |  | 1.4 | UX4 | T |  |
| B406 | 642300000 |  | 4 | 15 | 150 |  | 8 | 1.4 | 100 |  | 1.4 | B4 | T |  |
| B406 | 264300000 |  | 4 | 15 | 150 |  | 8 | 1.3 | 100 |  | 1.3 | UX4 | T |  |
| B409 | 642300000 |  | 4 | 16 | 250 |  | 12 | 2 | 100 |  | 2 | B4 | T |  |
| B409 | 264300000 |  | 4 | 16 | 250 |  | 12 | 2 | 100 |  | 2 | UX4 | T |  |
| B415 | 264300000 |  | 4 | 4.5 | 150 |  | 3 | 2 | 100 |  | 2 | UX4 | T |  |
| B424 | 642300000 |  | 4 | 2.3 | 200 |  | 6 | 2.5 | 150 |  | 2.5 | B4 | T |  |
| B424 | 264300000 |  | 4 | 2.3 | 200 |  | 6 | 2.5 | 150 |  | 2.5 | UX4 | T |  |
| B424S | 642300000 |  | 4 | 3 | 200 |  | 6 | 2.5 | 100 |  | 2.5 | B4 | T |  |
| B425 | 642300000 |  | 4 | 4.5 | 150 |  | 3 | 2 | 100 |  | 2 | B4 | T |  |
| B425 | 264300000 |  | 4 | 4.5 | 150 |  |  | 2 | 100 |  | 2 | UX4 | T |  |
| B435N | 642310000 | D1 | 4 | 3.5 | 200 |  | 6 | 2 | 100 |  | 2 | B5 | DT |  |
| B438 | 642300000 |  | 4 | 2.5 | 200 |  | 0.2 | 2 | 150 |  | 2 | B4 | T |  |
| B438 | 264300000 |  | 4 | 2.5 | 200 |  | 0.2 | 2 | 150 |  | 2 | UX4 | T |  |
| B438S | 642300000 |  | 4 | 1.5 | 200 |  | 2 | 2 | 150 |  | 2 | B4 | T |  |
| B442 | 542300000 | A1 | 4 | 1 | 200 | 100 | 4.5 | 0.9 | 200 | 100 | 0.9 | B4 | P |  |
| B442M | 542300000 | A1 | 4 | 1 | 200 | 100 | 4.5 | 0.9 | 100 | 100 | 0.9 | B4 | P |  |
| B442M | 254300000 | A1 | 4 |  | 200 | 100 | 4.5 | 0.9 | 100 | 100 | 0.9 | UX4 | P |  |
| B442S | 542300000 | A1 | 4 | 1 | 200 | 100 | 4.5 | 0.91 | 100 | 100 | 0.9 | B4 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. |  | data for valve characteristic METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Vf | Vf Neg. <br> Grid <br> Volts | Anode Volts | Crreen | $\begin{aligned} & l_{a} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |  |
| B443 | 642350000 |  | 7 | 17 | 200 | 150 | 12 | 1.2 | 100 | 150 | 1.2 | B5 | P |  |
| B443 | 264300000 | G2 | 4 | 17 | 200 | 150 | 12 | 1.2 | 100 | 150 | 1.2 | UX4 | P |  |
| B443S | 642350000 |  | 4 | 12 | 250 | 75 | 12 | 1.6 | 100 | 60 | 1.6 | B5 | P |  |
| B443S | 642300000 | G2 | 4 | 12 | 250 | 75 | 12 | 1.6 | 100 | 60 | 1.6 | B4 | P |  |
| B443S | 264300000 | G2 | 4 | 12 | 250 | 75 | 12 | 1.6 | 100 | 60 | 1.6 | UX4 | P |  |
| B491 | 642310000 |  | 4 | 1.5 | 200 |  | 4 | 4 | 150 |  | 4 | B4 | T |  |
| B543 | 642350000 |  | 5 | 15 | 200 | 150 | 13 | 1.3 | 150 | 100 | 1.3 | B5 | P |  |
| B543 | 264300000 | G2 | 5 | 15 | 200 | 150 | 12 | 1.3 | 150 | 100 | 1.4 | UX4 | P |  |
| B543 | 642300000 | G2 | 5 | 15 | 200 | 150 | 12 | 1.3 | 150 | 100 | 1.3 | B4 | P |  |
| B543S | 642350000 |  | 5 | 15 | 200 | 150 | 12 | 1.3 | 150 | 100 | 1.3 | B5 | P |  |
| B605 | 642300000 |  | 6 | 18 | 150 |  | 9 | 1.8 | 100 |  | 1.8 | B4 | T |  |
| B605 | 264300000 |  | 6 | 18 | 150 |  | 9 | 1.8 | 100 | 100 | 1.8 | Ux4 | T |  |
| B609 | 642300000 |  | 6 | 18 | 250 |  | 12 | 1.8 | 100 |  | 1.8 | B4 | T |  |
| B719 | 741236410 |  | 6 | 2 | 250 |  | 10 | 6 | 250 |  | 6 | B9A | TT |  |
| B729 | 741236410 |  | 6.3 |  | 200 |  | 10 | 3.4 | 100 |  | 3.5 | B9A | TT |  |
| B2006 | 642310000 |  | 20 | 18 | 200 |  | 15 | 1.6 | 100 |  | 1.6 | B5 | T |  |
| B2038 | 642310000 |  | 20 | 3 | 200 |  | 6 | 2.3 | 100 |  | 2.3 | B5 | T |  |
| B2041 | 602300000 | G1 | 20 | 1 | 100 |  | 2.5 | 0.1 | 100 |  | 0.1 | B4 | T |  |
| B2042 | 542310000 | A1 | 20 | 2 | 200 | 60 | 4 | 1 | 100 | 60 | 1 | B5 | P |  |
| B2043 | 642310000 | G2 | 20 | 18 | 200 | 200 | 20 | 1.7 | 100 | 100 | 1.7 | B5 | P |  |
| B2044 | 218004530 |  | 20 | 4 | 200 | 60 | 0.7 | 2.8 | 100 | 60 |  | A08 | P |  |
| B2044S | 642310000 | D1 | 20 | 3 | 200. |  | 6 | 1.8 | 100 |  | 1.8 | B5 | DT |  |
| B2045 | 542310000 | A1 | 20 | 2 | 200 | 60 | 4 | 1 | 150 | 60 |  | B5 | P |  |
| B2046 | 542310000 | A1 | 20 | 2 | 200 | 100 | 3 | 2.2 | 150 | 100 | 2.2 | B5 | P |  |
| B2047 | 542310000 | A1 | 20 | 2 | 200 | 100 | 4 | 2 | 150 | 100 | 2 | B5 | P |  |
| B2052T | 542310000 | A1 | 20 | 2 | 200 | 100 | 3 | 2 | 150 | 100 | 2 | B5 | P |  |
| B2055 | 542310000 | A1 | 20 | 1.5 | 200 | 100 | 3 | 2 | 100 | 100 | 2 | B5 | P |  |
| B2099 | 642310000 |  | 20 | 1.6 | 200 |  | 0.2 | 3 | 150 |  | 3 | B5 | T |  |
| BA2 | 446230700 |  | 2 |  | 150 |  | 1.5 |  | 150 |  |  | B7 | TT |  |
| BB1 | 902310000 | D1 | 16 |  |  |  |  |  | D |  |  | B5 | DD |  |
| BB220A | 446230700 |  | 2 | 3 | 150 |  | 4 |  | 100 |  |  | B7 | TT |  |
| BB240 | 446230700 |  | 2 | 6 | 150 |  | 2.2 |  | 100 |  |  | B7 | TT |  |
| BBC12 | 682390000 | G1 | 2 | 4.5 | 150 |  | 2.5 | 1.5 | 100 |  | 1.5 | B5 | DDT |  |
| BCH1 | 465231700 | G1 | 24 |  | 100 200 |  | 5 1.3 | 1.2 | 100 100 | 60 |  | B7 | TP |  |
| BF1 | 642300000 |  | 4 | 15 | 150 | 50 | 8.3 | 1.2 1.3 | 100 100 |  | 1.3 | B4 | T |  |
| BF61 | 261054130 |  | 6 | 7 | 250 | 250 | 36 | 10 | 100 | 150 | 8 | B8A | P |  |
| BF62 | 261054130 |  | 6 | 10 | 250 | 250 | 26 | 3.2 | 100 | 150 | 3.2 | B8A | P |  |
| BF451 | 261054130 |  | 45 | 9 | 200 | 175 | 54.5 | 9.5 | 100 | 100 | 7 | B8A | P |  |
| BHP61 | 023010560 | G1 | 2 | 0.5 | 150 | 125 | 2.5 | 0.7 | 125 | 125 | 0.7 | 8SC | P |  |
| BL2 | 652310000 | G1 | 30 | 20 | 200 | 100 | 40 | 3 | 100 | 90 | 3 | B5 | P |  |
| BL63 | 027146310 | G1 | 6 | 16 | 250 |  | 14 | 4.2 | 100 |  | 4.2 | A08 | TT |  |
| BLP61 | 023004560 |  | 2 |  | 150 | 150 | 7 | 2.7 | 100 | 100 |  | 8SC | P |  |
| BM968 | 200300000 | D1 | 2.5 |  |  |  | 60 |  | REC |  | 35 mA | UX4 | R |  |
| BPMO4 | 412365400 |  | 6.3 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | B7G | P |  |
| BW3 | 642350000 |  | 2 | 4.5 | 150 | 125 | 6 | 2.2 | 100 | 100 | 2.2 | B5 | P |  |
| BW602 | 642300000 |  | 2 | 12 | 150 |  | 12 |  |  |  |  |  |  |  |
| BW1304 | 642300000 |  | 2 | 6 | 150 |  | 6 | 3.2 | 100 |  | 3.2 | B4 | T |  |

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| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. <br> Grid <br> Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/ |  |  |  |
| BX2 | 446230700 |  | 2 |  | 200 |  | 2.5 |  | 100 |  |  | B7 | TT |  |
| BX604 | 642300000 |  | 2 | 12 | 150 |  | 8 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| C3A | 261504130 |  | 6.3 |  | 250 | 150 | 16 | 6.5 | 100 | 100 |  | B8G | P |  |
| C3G | 261504130 |  | 6.3 | 1.8 | 200 | 150 | 13 | 14 | No Data | a Avai | lable | A08 | P |  |
| C3G | 216514130 |  | 6.3 | 1.8 | 250 | 150 | 13 | 13.5 | 100 | 100 |  |  |  |  |
| C3G | 802362450 |  | 6.3 | 1.8 | 200 | 150 | 13 | 14 | No Data | a Avai | lable | F8 | DP |  |
| C3M | 261504130 |  | 20 | 4.5 | 250 | 150 | 15.0 | 6.0 | 100 | 100 | 5.2 | B8B |  |  |
| C9 | 642300000 |  | 4 | 9 | 150 |  | 3.5 | 0.9 | 100 |  | 0.9 | B4 | T |  |
| C10B | 023100080 |  | 20 |  |  |  | 75 |  | REC |  | 23 mA | 8SC | R |  |
| C10B | 802310000 |  | 20 |  |  |  | 60 |  | REC |  | 23 mA | B5 | R |  |
| C20C | 892310000 |  | 13 |  |  |  |  |  | D |  |  | B5 | DD |  |
| C23B | 809231600 | G1 | 13 | 5 | 200 |  | 4 | 2 | 100 |  | 2 | B7 | DDT |  |
| C25 | 642300000 |  | 4 | 2.5 | 200 |  | 2.3 | 1.2 | 150 |  | 1.2 | B4 | T |  |
| C30 | 261504130 |  | 6.3 | 4.5 | 250 | 150 | 15 | 6 | 100 | 100 |  | B8B | P |  |
| C30B | 000231600 | G1 | 13 | 4 | 200 |  | 4 | 3.2 | 150 |  | 3.2 | B7 | T |  |
| C36A | 645231740 |  | 21 | $\{1.5$ | 100 250 | 75 | 4 3 | 2 | 100 100 | 60 75 |  | B9 | TH |  |
| C36B | 645231700 | G1 | 29 |  | 100 250 | 150 | 3.4 | 2 | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | $\begin{aligned} & 60 \\ & 75 \end{aligned}$ | $\left.\begin{array}{l} 1.2 \\ 3 \end{array}\right\}$ | B7 | TH |  |
| C36C | 645231740 |  | 29 | $\{2.5$ | 100 250 | 75 | 3 |  | 100 100 | $\begin{aligned} & 60 \\ & 75 \end{aligned}$ | 1.2 | B9 | TH |  |
| C50B | 061231500 | G1 | 12 | 2.2 | 200 | 200 | 2.5 | 2.8 | 100 | 150 | 2.8 | B7 | P |  |
| C50N | 061231500 | G1 | 13 | 2 | 200 | 200 | 9.5 | 2 | 100 | 150 | 2 | B7 | P |  |
| C70D | 023110560 | G1 | 33 | 8.5 | 200 | 200 | 45 | 8 | 100 | 150 | 7 | 8SC | P |  |
| C70D | 045231600 |  | 35 | 8.5 | 200 | 200 | 45 | 8 | 100 | 150 | 7 | B7 | P |  |
| C80B | 123154560 | G1 | 13 | 1.5 | 200 | 90 | 1.9 |  | 150 | 75 |  | 8SC | 0 |  |
| C109 | 642300000 |  | 1 | 9 | 150 |  | 3.5 | 0.5 | 100 |  | 0.5 | B4 | T |  |
| C125 | 642300000 |  | 1 | 3 | 150 |  | 0.7 | 0.8 | 125 |  | 0.8 | B4 | T |  |
| 0135 | 042300000 | A1 | 1.4 |  | 150 |  | 1.5 | 1 | 100 |  | 1 | B4 | T |  |
| C142 | 542300000 | A1 | 1 | 1.5 | 150 | 75 | 1.7 | 0.8 | 100 | 75 | 0.8 | B4 | P |  |
| C144 | 245134200 | A142 | 6.3 | 15 | 300 | 200 | 40 | 9 | No Data | Avail | lable | B7A | PP |  |
| C180 | 245134200 | A1A2 | 6.3 | 20 | 300 | 250 | 55 | 3.5 | No Data | Avail | lable | B7A | PP |  |
| C243 | 642350000 |  | 2 | 15 | 150 | 150 | 17 | 1.5 | 100 | 100 | 1.5 | B5 | P |  |
| C243N | 642350000 |  | 2 | 4.5 | 150 | 125 | 6 | 3.2 | 150 | 100 | 2.2 | B5 | P |  |
| C243N | 264530000 |  | 2 | 4.5 | 150 | 125 | 6 | 2.2 | 150 | 100 | 2.2 | UX5 | P |  |
| C405 | 642300000 |  | 4 | 32 | 250 |  | 20 | 1.9 | 100 |  | 1.9 | B4 | T |  |
| C405 | 264300000 |  | 4 | 32 | 250 |  | 20 | 1.9 | 100 |  | 1.9 | UX4 | T |  |
| C408 | 642300000 |  | 4 | 7 | 150 |  | 14 | 2.9 | 100 |  | 2.9 | B4 | T |  |
| C443 | 642350000 |  | 4 | 25 | 300 | 200 | 20 | 1.7 | 100 | 150 | 1.7 | B5 | P |  |
| C443N | 642350000 |  | 4 | 42 | 300 | 200 | 20 | 1.5 | 100 | 150 | 1.5 | B5 | P |  |
| C443N/S | 642350000 |  | 4 | 20 | 300 | 150 | 20 | 1.5 | 100 | 100 | 1.5 | B5 | P |  |
| C453 | 642350000 |  | 4 | 25 | 300 | 200 | 20 | 1.7 | 100 | 150 | 1.7 | B5 | P |  |
| C508 | 264300000 |  | 5 | 9 | 150 |  | 6.2 | 1.7 | 100 |  | 1.7 | UX4 | T |  |
| C509A | 642300000 |  | 5 | 10 | 150 |  | 10 | 1 | 100 |  | 1 | B4 | T |  |
| C543 | 642350000 |  | 4 | 1 | 100 | 150 |  | 2 | 100 | 150 | 2 | B5 | P |  |
| C603 | 642300000 |  | 6 | 40 | 200 |  | 20 | 1.7 | 100 |  | 1.7 | B4 | T |  |
| C606 | 642300000 |  | 6 | 27 | 250 |  | 20 | 3.3 | 100 |  | 3.5 | B4 | T |  |
| C643 | 642350000 |  | 6 | 21 | 300 | 200 | 20 | 1.5 | 100 | 150 | 1.5 | B5 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Voles | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts |  | creen Volts | mAN |  |  |  |
| CB215 | 446230700 |  | 2 |  | 150 |  | 15 | 1.7 | 100 |  |  | 1.7 | B7 | TT |  |
| CB215S | 023064470 |  | 2 | 1 | 150 |  | 12 | 1.7 | 100 |  |  | 1.7 | 8SC | TT |  |
| CB220 | 446230700 |  | 2 | 3 | 150 |  | 15 |  | 100 |  |  |  | B7 | TT |  |
| CBC1 | 023198060 | G1 | 13 | 7 | 250 |  | 4 | 2 | 100 |  |  | 2 | 8SC | DDT |  |
| CBL1 | 023189560 | G1 | 44 | 8.5 | 200 | 200 | 45 | 8 | 100 |  | 150 | 7 | 8SC | DDP |  |
| CBL6 | 023198560 | G1 | 44 | 8 | 100 | 100 | 45 | 6 | 100 |  | 75 | 6 | 8SC | DDP |  |
| CBL31 | 026985310 | G1 | 44 | 8.5 | 200 | 200 | 45 | 8 | 100 |  | 150 | 7 | A08 | DDP |  |
| CC1 | 023100060 | G1 | 13 | 3.7 | 200 |  | 2.6 | 2 | 150 |  |  | 2 | 8SC | T |  |
| CC2 | 023100060 | G1 | 13 | 5.5 | 250 |  | 6 | 2.5 | 200 |  |  | 2.5 | 8SC | T |  |
| CC81E | 641227413 |  | 6.3 | 0.6 | 250 |  | 10 | 5.5 | 100 |  |  | 5.5 | B9A | TT |  |
| CC82E | 641227413 |  | 6.3 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  |  | 2.5 | B9A | TT |  |
| CC86E | 641227413 |  | 6.3 | 9.3 | 250 |  | 14.5 | 5.2 | 100 |  |  | 6 | B9A | TT |  |
| CCa | 741226413 |  | 6.3 |  | 100 |  | 15 | 12 | No D |  | Avai | ilable | B9A | TT |  |
| CCH1 | 023156470 | G1 | 20 | $\left\{\begin{array}{r}10 \\ 2\end{array}\right.$ | 200 | 50 | 2.5 | 2.3 | 100 100 |  | 60 60 | 2.3 | 8SC | TH |  |
| CCH2 | 023164570 | G1 | 29 | $\left\{\begin{array}{r}10 \\ 2\end{array}\right.$ | 200 | 75 | 2.5 | 2.3 | 100 100 |  |  | 2.3 \} | 8SC | TH |  |
| CCH35 | 027546310 | G1 | 7.5 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 250 | 100 | 5.4 | 2.2 2.4 | 100 200 |  | 60 100 | 2.8 | A08 | TH |  |
| CE230 | 320200000 | D1 | 2.5 |  |  |  | 30 |  | REC |  |  | 15 mA | UX4 | R |  |
| CF1 | 023110560 | G1 | 13 | 2 | 200 | 100 | 3 | 2.3 | 100 |  | 00 | 2.3 | 8SC | P |  |
| CF2 | 023110560 | G1 | 13 | 2 | 200 | 100 | 4.5 | 2.2 | 100 |  | 00 | 2.2 | 8 SC | P |  |
| CF3 | 023110560 | G1 | 13 | 2 | 100 | 75 | 7.5 | 2.1 | 100 |  | 75 | 2.1 | 8SC | P |  |
| CF7 | 023110560 | G1 | 13 | 2 | 100 | 100 | 3 | 2.1 | 100 |  | 00 | 2.1 | 8SC | P |  |
| CF50 | 123100560 | G1 | 30 | 2 | 200 | 100 | 1.5 | 3.3 | 100 |  | 00 | 3.3 | 8SC | P |  |
| CF51 | 123100560 | G1 | 30 | 2 | 250 | 100 | 1.7 | 3.3 | 100 |  | 00 |  | 8SC | P |  |
| CF61 | 276454130 |  | 6 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | $\begin{aligned} & 100 \\ & 250 \end{aligned}$ | 100 | $\begin{aligned} & 5 \\ & 3 \end{aligned}$ | $2.2$ | 100 100 |  | $\begin{array}{r} 60 \\ 60 \end{array}$ | $\left.\begin{array}{l} 2.8 \\ 2.4 \end{array}\right\}$ | B8A | TH |  |
| CF141 | 276454130 |  | 14 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 200 | 90 | 6.4 2.7 | 2.2 1.5 | 100 100 |  |  | $\left.\begin{array}{l} 2.8 \\ 1.5 \end{array}\right\}$ | B8A | TH |  |
| ${ }^{\text {CH1 }}$ | 023145560 | G1 | 13 | 2 | 250 | 75 | 3.7 | 1.8 | 200 |  | 75 | 1.8 | 8SC | P |  |
| CK1 | 023154560 | G1 | 13 | 1.5 | 200 | 90 | 8 | 3 | 200 |  | 75 | 1.6 | 8 SC | P |  |
| CK3 | 023154560 | G1 | 19 | 15 | 200 | 100 | 2.5 |  | No D |  | Avail | lable | 8SC | 0 |  |
| CK108 | 265113000 | G1 | 6.3 | 3 | 250 | 100 | 2.3 | 1.2 | 100 |  | 00 |  | UX6 | P |  |
| CK507AX | 653420000 |  | 1.2 | 2 | 40 | 40 | 0.9 | 0.6 | No D | a | Avail | lable | B5A | P |  |
| CK509AX | 634200000 |  | 0.62 |  | 40 |  | 0.1 | 0.1 | No D | a | Avail | lable | B5A | T |  |
| CK515BX | 634200000 |  | 0.62 |  | 40 |  | 0.1 | 0.1 | No Da | a A | Avail | lable | B5A | T |  |
| CK518AX | 653420000 |  | 1.2 | 2 | 40 |  | 0.8 | 0.5 | No D | a | Avail | lable | B5A | T |  |
| CK520AX | 653420000 |  | 0.62 | 2.5 | 40 | 40 | 0.2 | 0.1 | No D | ta | Avai | lable | B5A | P |  |
| CK521AX | 653420000 |  | 1.2 | 3 | 20 | 20 | 0.6 | 0.4 | No Da | a $A$ | Avail | lable | B5A | P |  |
| CK523AX | 653420000 |  | 1.2 | 1.2 | 20 | 20 | 0.3 | 0.3 | No D | a | Avail | lable | B5A | P |  |
| CK524AX | 653420000 |  | 1.2 | 1.7 | 20 | 20 | 0.4 | 0.3 | No D | a | Avail | lable | B5A | P |  |
| CK525AX | 653420000 |  | 1.2 | 1.2 | 20 | 20 | 0.2 | 0.3 | No D | a | Avail | lable | B5A | P |  |
| CK526AX | 653420000 |  | 1.2 | 1.5 | 20 | 20 | 0.5 | 0.4 | No Da | a A | Avail | lable | B5A | P |  |
| CK527AX | 653420000 |  | 1.2 |  | 20 | 20 | 0.1 | 0.2 | No Da | a $A$ | Avail | lable | B5A | P |  |
| CK528AX | 653420000 |  | 1.2 | 1.2 | 40 | 40 | 0.7 | 0.6 | No D | a | Avail | lable | B5A | P |  |
| CK529AX | 653420000 |  | 1.2 | 1.2 | 20 | 20 | 0.3 | 0.3 | No D | ta | Avai | lable | B5A | P |  |
| CK531DX | 653420000 |  | 1.2 | 1.5 | 20 | 20 | 0.3 | 0.2 | No Da | a | Avail | lable | B5A | P |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts | $\begin{aligned} & \text { Screen } \\ & \text { Volts } \end{aligned}$ | ma/v |  |  |  |
| CK5744 | 623410000 |  | 6.3 |  | 250 |  | 4 | 4 | 100 |  |  | B5A | T |  |
| CK5744WA | 623410000 |  | 6.3 |  | 250 |  | 4 | 4 | 100 |  |  | B5A | T |  |
| CK5744WB | 623410000 |  | 6.3 |  | 250 |  | 4 | 4 | 100 |  |  | B5A | T |  |
| CK5749 | 412365100 |  | 6.3 |  | 250 | 100 | 11 | 4.4 | 100 | 100 | 4.4 | B7G | P |  |
| CK5751 | 641227413 |  | 6.3 | 3 | 250 |  | 1.0 | 1.2 | 100 |  | 1.2 | B9A | TT |  |
| CK5755 | 614224173 |  | 6.3 | 0.9 | 100 |  | 0.1 | 0.5 | 100 |  | 0.5 | B9A | TT |  |
| CK5784 | 652311400 |  | 6.3 | 2 | 150 | 125 | 5.2 | 3.2 | 100 | 100 |  | B7F | P |  |
| CK5784WA | 652311400 |  | 6.3 | 2 | 150 | 125 | 5.2 | 3.2 | 100 | 100 |  | B7F | P |  |
| CK5784WB | 652311400 |  | 6.3 | 2 | 150 | 125 | 5.2 | 3.2 | 100 | 100 |  | B7F | P |  |
| CK5785 | 823000000 |  | 1.2 |  |  |  |  |  | D |  |  |  | D |  |
| CK5814 | 741226413 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2.2 | B9A | TT |  |
| CK5829 | 812139100 |  | 6.3 |  |  |  | 5 |  | D |  |  | BTF | DD |  |
| CK5829WA | 812139100 |  | 6.3 |  |  |  | 5 |  | D |  |  | B7F | DD |  |
| CK5851 | 206035240 |  | 1.2 | 7.5 | 150 | 125 | 5.5 | 1.6 | 100 | 100 |  | B8D | P |  |
| CK5854 | 652430000 |  | 1.2 | 2 | 40 | 40 | 0.8 | 0.5 | No Data | a Avai | lable | B5A | P |  |
| CK5873 | 264114730 |  | 6.3 | 3 | 150 |  | 9 | 2.9 | 100 |  |  | B8D | TT |  |
| CK5875 | 652430000 |  | 1.2 |  | 90 | 90 | 3.5 | 2.5 | 80 | 75 |  | B5A | P |  |
| CK5881 | 026540310 |  | 6.3 | 14 | 150 | 250 | 75 | 6.1 | 100 | 100 |  | A08 | P |  |
| CK5910 | 265024300 |  | 1.4 |  | 90 | 90 | 1.6 | 0.9 | 100 |  | 0.9 | B7G | P |  |
| CK5965 | 641227413 |  | 6.3 |  | 150 |  | 8.2 | 6.5 | 100 |  |  | B9A | TT |  |
| CK5967 | 624334270 |  | 1.2 |  | 40 |  | 3 | 0.1 | No Data | Avail | lable | B8D | TT |  |
| CK5968 | 624334270 |  | 1.2 |  | 40 |  | 0.7 | 1.3 | No Data | Avail | lable | B8D | TT |  |
| CK5969 | 245675430 |  | 1.2 | 3 | 150 | 40 | 6 | 1.7 | No Data | Avail | lable | B8D | PP |  |
| CK5970 | 245675430 |  | 1.2 |  | 40 | 40 | 3 | 1.8 | No Data | Avail | lable | B8D | PP |  |
| CK5971 | 642430000 |  | 1.2 |  | 60 |  | 3.5 | 2.1 | No Data | a Avail | lable | B5A | T |  |
| CK5972 | 652430000 |  | 1.2 |  | 60 | 60 | 2.5 | 1.3 | No Data | Avail | lable | B5A | P |  |
| CK5975 | 614230000 |  | 6.3 |  | 100 |  | 10 | 5.1 | 100 |  | 5 | B5A | T |  |
| CK5995 | $8 * 2310000$ |  | 6.3 |  |  |  | 30 |  | REC |  | 15 mA | B5A | R |  |
| CK6005 | 412365400 |  | 6.3 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | B7G | $P$ |  |
| CK6021 | 642113470 |  | 6.3 |  | 100 |  | 6.5 | 5.4 | 100 |  | 5.4 | B8D | TT |  |
| CK6029 | 624300000 |  | 1.2 | 4 | 90 |  | 11 | 2 | 80 |  | 3 | B5A | T |  |
| CK6050 | 624300000 |  | 1.2 | 5 | 150 |  |  | 1.6 | 100 |  | 2 | B5A | T |  |
| CK6051 | 652430000 |  | 1.2 | 4 | 40 | 40 | 3 | 1.2 | No Data | Avail | able | B5A | P |  |
| CK6088 | 653420000 |  | 1.2 | 1.2 | 40 | 40 | 0.7 | 0.6 | No Data | Avail | able | B5A | P |  |
| CK6092 | 653420000 |  | 1.2 | 4.5 | 40 | 40 | 1.4 | 0.6 | No Data | Avail | lable | B5A | P |  |
| CK6100 | 602364100 |  | 6.3 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  |  | B7G | T |  |
| CK6101 | 672344100 |  | 6.3 |  | 100 |  | 9 | 6 | 100 |  | 6 | B7G | TT |  |
| CK6110 | 812093100 |  | 6.3 |  |  |  |  |  | D |  |  | B8D | DD |  |
| CK6111 | 642113470 |  | 6.3 |  | 100 |  | 8.5 | 5 | 100 |  | 5 | B8D | TT |  |
| CK6112 | 642113470 |  | 6.3 |  | 100 |  | 0.8 | 1.8 | 100 |  | 2 | B8D | TT |  |
| CK6135 | 602364100 |  | 6.3 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2.2 | B7G | T |  |
| CK6147 | 206035240 |  | 1.2 | 7.5 | 150 | 125 | 5.5 | 1.6 | 100 | 100 |  | B8D | P |  |
| CK6152 | 614230000 |  | 6.3 |  | 100 |  | 10 | 5.1 | 100 |  | 5 | B5A | T |  |
| CKF18G | 412365100 |  | 6.3 |  | 250 | 150 | 7 |  | 100 | 100 |  | B7G | P |  |
| CK6201 | 641227413 |  | 6.3 6.3 |  | 250 20 | 30 | 10 | 5.5 3.3 | 100 |  |  | ${ }^{\text {B9A }}$ | TT |  |
| CK6247 | 442613060 |  | 6.3 |  | 250 |  |  | 2.6 | 100 |  |  | ${ }_{\text {B8D }}$ | $\stackrel{\text { P }}{\text { T }}$ |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| CK6247WA | 442613060 |  | 6.3 |  | 250 |  |  | 2.6 | 100 |  |  | B8D | $T$ |  |
| CK6286 | 624300000 |  | 1.2 | 2 | 60 |  | 6 | 2.1 | No Da | a Avail | lable | B5A | T |  |
| CK6397 | 206035240 |  | 1.2 | 7.5 | 150 | 125 | 7.2 | 2 | 100 | 100 |  | B8D | P |  |
| CK6414 | 741226413 |  | 6.3 |  | 200 |  | 8 | 5.5 | 100 |  | 6 | B9A | TT |  |
| CK6418 | 652430000 |  | 1.2 | 1.2 | 20 | 20 | 0.2 | 0.3 | No Da | a Avail | lable | B5A |  |  |
| CK6419 | 652430000 |  | 0.6 | 0.6 | 12 | 12 |  |  | No Dat | a Avail | lable | B5A | P |  |
| CK6485 | 412365100 |  | 6.3 |  | 300 | 150 | 10 | 9 | 100 | 100 |  | B7G | P |  |
| CK6519 | 653420000 |  | 1.2 |  | 20 | 20 | 0.4 | 0.4 | No Da | a Avail | ilable | B5A | P |  |
| CK6526 | 652430000 |  | 1.2 | 6 | 100 | 100 | 6.5 | 1.9 | 100 | 100 | 2 | B5A | P |  |
| CK6533 | 644612360 |  | 6.3 |  | 150 |  | 0.9 | 1.7 | 100 |  |  | B8D | T |  |
| CK6533WA | 644612360 |  | 6.3 |  | 150 |  | 0.9 | 1.7 | 100 |  |  | B8D | T |  |
| CK6540 | 652311400 |  | 6.3 |  | 150 |  | 7.5 | 5 | 100 |  |  | B7G | P |  |
| CK6611 | 642113470 |  | 6.3 |  | 100 |  | 8.5 | 5 | 100 |  | 5 | B8D | TT |  |
| CK6612 | 642113470 |  | 6.3 |  | 100 |  | 0.8 | 1.8 | 100 |  | 0.8 | B8D | TT |  |
| CK6872 | 652311400 |  | 6.3 |  | 150 | 125 | 7.7 | 4.1 | 100 | 100 |  | B7G | P |  |
| CK6883 | 125141310 | A1 | 12.6 | 33 | 300 | 200 | 70 | 7 | No Da | a Avail | 1able | A08 | P |  |
| CK7994 | 346441430 |  | 6.3 | 1 | 100 |  | 13 | 18 | No Dat | Avail | lable | B8D | T |  |
| CK7995 | 214311650 |  | 6.3 | 1.6 | 150 | 150 | 8 | 13 | No Da | a Avail | lable | B8D | P |  |
| CL1 | 023100560 | G1 | 13 | 14 | 200 | 200 | 25 | 2.5 | 100 | 150 | 2.5 | 8SC | P |  |
| CL2 | 023100560 | G1 | 24 | 15 | 100 | 100 | 50 | 3.8 | 200 | 75 | 3.8 | 8SC | P |  |
| CL4 | 023100560 | G1 | 33 | 8.5 | 200 | 200 | 45 | 8 | 100 | 150 | 7 | 8SC | P |  |
| CL6 | 023100560 | G1 | 35 | 9.5 | 200 | 100 | 45 | 8 | 100 | 90 | 7 | 8SC | P |  |
| CL33 | 026540310 |  | 33 | 8.5 | 200 | 200 | 45 | 8 | 100 | 100 | 7 | A08 | P |  |
| C0241 | 026500300 | G1 | 2 | 1 | 150 | 75 | 3.5 | 1.4 | 125 | 80 | 1.4 | A08 | P |  |
| C0243 | 026447300 |  | 2 |  | 150 |  | 4 | 1.8 | 100 |  | 1.8 | A08 | TT |  |
| CO244 | 026540300 |  | 2 | 2.5 | 150 | 125 | 4.1 | 1.8 | 125 | 125 | 1.8 | A08 | P |  |
| C0257 | 021450300 |  | 28 | 3 | 100 | 100 | 6 | 2.5 | 100 | 100 | 3 | A08 | P |  |
| CO258 | 026540300 |  | 1.8 | 6 | 150 | 125 | 10 | 2 | 100 | 100 |  | A08 | P |  |
| ${ }_{\text {CY1 }}^{\text {CY }}$ ( | 023100080 803210000 |  | 20 |  |  |  | 60 |  | REC |  | 60 mA | 8SC | R |  |
| CY1C | 803210000 |  | 20 |  |  |  | 60 |  | REC |  | 20 mA | B5 | R |  |
| CY2 | 123190080 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CY21 CY31 | 208 020 0080 0 |  | 25 |  |  |  | 120 |  | $\stackrel{\text { REC }}{\text { REC }}$ |  | 23 mA | 898 | ${ }_{R}^{R R}$ |  |
| CY31 | 020080310 |  | 20 |  |  |  | 120 |  | REC |  | 60 mA | A08 | R |  |
| CY32 | 029180310 |  | 30 |  |  |  | 60 |  | REC |  | 23 mA | A08 | RR |  |
| CZ30 | 028193210 |  | 80 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| CZ501D | 265113000 | G1 | 3.5 | 2.5 | 150 | 125 | 6.5 | 3.5 | 100 | 100 | 3 | UX6 |  |  |
| CZ504D | 265413000 |  | 5.5 | 13.5 | 250 | 200 | 40 | 3.5 | 100 | 100 |  | UX6 | P |  |
| D1 | 123000000 | D1 | 4 |  |  |  | 5 |  | D |  |  | B3G | R |  |
| D1 | 289300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |  |
| D1 | 642300000 |  | 4 | 1 | 40 |  | 1 | 0.8 | No Da | a Avail | 1able | B4 | T |  |
| D2 | 642300000 |  | 4 | 6 | 100 |  | 2.2 | 0.2 | 100 |  | 0.2 | B4 |  |  |
| D2M9 | 182310900 |  | 6.3 |  |  |  | 5 |  | D |  |  | B7G | DD |  |
| ${ }_{\text {D3A }}$ D ${ }^{\text {d }}$ | 141230615 $14123 * 615$ |  | 6.3 1.2 | $\frac{1}{3} \cdot 2$ | 200 150 | 150 60 | 22.7 | ${ }^{36}$ | ${ }^{\text {No }} 100 \mathrm{Da}$ | a Avail | lable | B9A | P |  |
| D4 | 642310000 |  | 4 | 3 | 200 |  | $4{ }^{-7}$ | 3.3 | 100 |  | 3 | ${ }_{\text {B }}$ | ${ }_{T}$ |  |
| D13'5 | 023100060 | G1 | 13 | 5 | 250 |  | 6 | 2.5 | 100 |  |  | 8SC | ${ }_{\text {T }}$ |  |
| D442 | 892310000 812300000 |  | 4 4 |  |  |  | 15 |  | D |  |  | B5 | $\stackrel{\text { DD }}{\text { D }}$ |  |



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| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode <br> Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| DBC21 | 206098030 | G1 | 1.4 | 1.5 | 150 |  | 1.6 | 0.9 | 100 |  | 0.9 | A08 | DDT |  |
| DBC25 | 208904630 |  | 1.2 | 1.5 | 150 |  | 1.6 | 0.9 | 125 |  | 0.9 | B8B | DDT |  |
| DBC31 | 026980300 | G1 | 1.4 | 1.5 | 150 |  | 1.6 | 0.9 | 100 |  | 0.9 | A08 | DDT |  |
| DC2/HLDD | 809231600 | G1 | 25 |  | 200 |  |  | 2 | 100 |  | 2 | B7 | DDT |  |
| DC2P | 642310000 |  | 35 | 13.5 | 200 |  | 17 | 3.7 | 100 |  | 3.7 | B5 | T |  |
| DC2/Pen | 045231600 |  | 35 | 10 | 250 | 200 | 30 | 2.5 | 100 | 100 | 2.5 | B7 | P |  |
| DC2/Pen | 642310000 | G2 | 35 | 10 | 250 | 200 | 30 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| DC2SG | 542310000 | A | 20 |  | 200 | 75 | 5.5 | 1.8 | 200 | 75 | 1.8 | B5 | P |  |
| DC2SGVM | 542310000 | A1 | 20 | 2 | 200 | 60 | 5.8 | 1.5 | 200 | 60 | 1.5 | B5 | P |  |
| DC3HL | 642310000 |  | 25 | 1 | 90 |  | 0.3 | 0.4 | 100 |  | 0.4 | B5 | T |  |
| DC11 | 602302400 |  | 1.2 | 2.5 | 90 |  | 2 | 1 | 80 |  | 1 | F8 | T |  |
| DC25 | 260024030 |  | 1.2 | 3.5 | 100 |  | 1.8 | 0.8 | 100 |  | 0.8 | B8B | T |  |
| DC70 | 400230060 |  | 1.2 | 4.5 | 150 |  | 14.5 | 3.7 | 100 |  | 3.4 | B8D | T |  |
| DC80 | 402230060 |  | 1.2 | 3.5 | 150 |  | 20 | 3.5 | 100 |  | 3.5 | B9A | T |  |
| DC90 | 266044300 |  | 1.4 | 3 | 90 |  | 3 | 1.1 | 90 |  | 1.1 | B7G | T |  |
| DC93 | 204036200 |  | 1.4 | 5 | 100 |  | 10 | 2.4 | 100 |  | 2.3 | B7G | T |  |
| DC96 | 266044300 |  | 1.4 | 2.5 | 90 |  | 2.1 | 1 | 90 |  | 1 | B7G | T |  |
| DC193 | $2 * 4 * 36200$ |  | 1.4 | 5 | 100 |  | 10 | 2.4 | 100 |  | 2.4 | B7G | T |  |
| DCC90 | 274346200 |  | 1.4 | 2.5 | 90 |  | 3.7 | 1.8 | 80 |  | 1.8 | B7G | TT |  |
| DCH1 | 207540630 | G1 | 1.4 | $\{$ | 60 150 | 125 | 2.1 | $\begin{aligned} & 1.4 \\ & 1 \end{aligned}$ |  | $\begin{array}{r} 60 \\ 100 \end{array}$ | $1.4\}$ | A08 | TH |  |
| DCH11 | 642273450 |  | 1.2 | $\{4$ | $\begin{array}{r} 90 \\ 150 \end{array}$ | 60 |  |  |  | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  |  | TH |  |
| DCH21 | 20'\% 540630 | G1 | 1.4 | $\{$ | 60 90 | 60 | $\begin{aligned} & 2.1 \\ & 1 \end{aligned}$ | 1.4 | $\begin{aligned} & 80 \\ & 80 \end{aligned}$ | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | A08 | TH |  |
| DCH22 | 276454030 |  | 1.2 | \{ | 60 90 | 50 | 1.4 0.7 |  | 80 80 | 60 60 |  | A08 | TH |  |
| DCH25 | 276454030 |  | 1.4 | , | 60 90 | 60 | 2 1 | 1.3 | 80 80 | 60 60 |  | A08 | TH |  |
| DCH31 | 027546300 | G1 |  | , | 60 90 | 60 | $\begin{aligned} & 2.1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 1.4 \\ & 1.4 \end{aligned}$ | $\begin{aligned} & 80 \\ & 80 \end{aligned}$ | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | A08 | TH |  |
| DC/HL | 642310000 |  | 6 | 1 | 100 |  |  | 3 | 100 |  | 3 | B5 | T |  |
| DC/P | 642310000 |  | 8 | 1 | 200 |  |  | 4.5 | 200 |  | 4.5 | B5 | T |  |
| DC/SG | 542310000 892310000 | A1 | 6 4 |  | 150 | 75 |  | 2.7 | ${ }_{\mathrm{D}}^{200}$ | 75 | 2.7 | $\begin{aligned} & \text { B5 } \\ & \text { B5 } \end{aligned}$ | $\stackrel{\mathrm{P}}{\mathrm{DD}}$ |  |
| DD4D | 091231800 |  | 4 |  |  |  |  |  | D |  |  | B7 | DD |  |
| DD6 | 892310000 |  | 6 |  |  |  |  |  | D |  |  | B5 | DD |  |
| DD6 | 192310800 |  | 6 |  |  |  |  |  | D |  |  | B7G | DD |  |
| DD6DS | 023180910 |  | 6 |  |  |  |  |  | D |  |  | 8SC | DD |  |
| DD6G | 192310800 |  | 6 |  |  |  |  |  | D |  |  | B7G | DD |  |
| DD13 | 892310000 |  | 13 |  |  |  | 5 |  | D |  |  | B5 | DD |  |
| DD41 | 219080130 |  | 4 |  |  |  |  |  | D |  |  | M08 | RR |  |
| DD101 | 219080130 |  | 10 |  |  |  |  |  | D |  |  | M08 | DD |  |
| DD207 | 892300000 |  | 2 |  |  |  |  |  | D |  |  | B4 | DD |  |
| DD465 | 902310000 | D1 | 4 |  |  |  |  |  | D |  |  | B5 | DD |  |
| DD620 | 892310000 |  | 6 |  |  |  |  |  | D |  |  | B5 | DD |  |
| DD818 DD960 | $\begin{array}{ll} 892310 & 000 \\ 204 & 036 \\ 200 \end{array}$ |  | $\begin{aligned} & 8 \\ & 1.4 \end{aligned}$ | 3 | 60 |  | 9 | 2.4 | $\stackrel{\text { No }}{\text { No }}$ | a Avail | able | $\stackrel{\text { B5 }}{\text { B7 }}$ | $\underset{\mathrm{T}}{\mathrm{DD}}$ |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Voles | Anode Volts | $\left\|\begin{array}{c} \text { Screen } \\ \text { Volts } \end{array}\right\|$ | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |


| DDA1 | 892 | 310 | 000 |  | 4 |  |  |  |  |  | D |  |  | B5 | DD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DDD11 | 742 | 302 | 460 |  | 1.2 | 4.5 | 150 |  | 1.5 | 1.0 | 125 |  | 1.5 | F8 | 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 | 2315 | 500 | G1 | 4 | 5 | 250 | 250 | 36 | 8 | 100 | 150 | 7 | B7 | DDP |
| DDP4M | 918 | 236 | 500 | G1 | 4 | 5 | 250 | 250 | 36 | 8 | 100 | 150 | 7 | B7 | DDP |
| DD/Pen | 849 | 2315 | 500 | A | 4 | 2.5 | 200 | 100 | 5 | 2.7 | 100 | 100 | 2.7 | B7 | DDP |
| DDPP4B | 869 | 231 | 500 | G1 | 4 | 5 | 250 | 250 | 36 | 10 | 100 | 150 | 9 | B7 | DDP |
| DLPP4BS | 023 | 1895 | 560 | G1 | 4 | 5 | 250 | 250 | 36 | 10 | 100 | 150 | 9 | 8SC | DDP |
| DDPP4M | 869 | 231 | 500 | G1 | 4(5) | 5 | 250 | 250 | 36 | 10 | 100 | 150 | 9 | B7 | DDP |
| DDPP6B | 968 | 2315 | 500 | G1 | 6 | 6 | 250 | 250 | 36 | 9.5 | 100 | 150 | 9 | B7 | DDP |
| DDPP6BS | 023 | 1895 | 560 | G1 | 6 | 5 | 250 | 250 | 36 | 10 | 100 | 150 | 9 | 8SC | DDP |
| DDPP39 | 968 | 2315 | 500 | G1 | 39 | 8 | 200 | 200 | 45 | 8.5 | 100 | 150 | 8 | B7 | DDP |
| DDPP39M | 918 | 2365 | 500 | G1 | 39 | 8 | 200 | 200 | 45 | 8.5 | 100 | 150 | 8 | B7 | DDP |
| DDPP39S | 023 | 1985 | 560 | G1 | 44 | 8 | 200 | 200 | 45 | 8.5 | 100 | 150 | 8 | 8SC | DDP |
| DDR2 | 256 | 1014 | 403 |  | 6 | 5 | 250 | 250 | 40 | 12 | No Data |  | lable | B9G | P |
| DDR3 | 812 | 380 | 000 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | B7G | R |
| DDR7 | 412 | 3605 | 500 |  | 6 | 12.5 | 250 | 250 | 16 | 2.6 | 100 | 150 | 2.6 | B7G | P |
| DDT | 908 | 2316 | 600 | G1 | 4 | 3 | 200 |  | 3.4 | 2.4 | 100 |  | 2.4 | B7 | DDT |
| DDT2 | 682 | 390 | 000 | G1 | 2 | 3 | 150 |  | 1 | 1.4 | 100 |  | 1.4 | B5 | DDT |
| DDT2B | 682 | 390 | 000 | G1 | 2 | 4.5 | 150 |  | 2.5 | 1 | 100 |  | 1 | B5 | DDT |
| DDT2BS | 023 | 089 | 060 | G1 | 2 | 4.5 | 150 |  | 2.5 | 1 | 100 |  | 1 | 8SC | DDT |
| DDT4 | 809 | 2316 | 600 | G1 | 4 | 3 | 150 |  |  | 2.5 | 150 |  | 2.5 | B7 | DDT |
| DDT4 (S) | 908 | 2316 | 600 | G1 | 4 | 5 | 200 |  | 3 | 3.6 | 150 |  | 3.6 | B7 | DDT |
| DDT4(S) | 023 | 1980 | 060 | G1 | 4 | 5 | 250 |  | 4 | 3.6 | 150 |  | 3.6 | 8SC | DDT |
| DDT6 | 809 | 231600 | 600 | G1 | 6 | 5.5 | 250 |  | 4 | 2 | 150 |  | 2 | B7 | DDT |
| DDT6S | 023 | 18906 | 060 | G1 | 6 | 5.5 | 250 |  | 5 | 2 | 150 |  | 2 | 8SC | DDT |
| DDT13 | 908 | 3216 | 600 | G1 | 13 | 4 | 200 |  | 5 | 2 | 150 |  | 2 | B7 | DDT |
| DDT13S | 023 | 18906 | 060 | G1 | 13 | 5 | 200 |  | 4 | 3.6 | 100 |  | 3.6 | 8SC | DDT |
| DDT16 | 809 | 2316 | 600 | G1 | 16 | 3 | 200 |  | 5 | 2.5 | 100 |  | 2.5 | B7 | DDT |
| DDT213 | 809 | 2316 | 600 | G1 | 13 | 4 | 200 |  | 5 | 2.2 | 150 |  | 2.2 | B7 | DDT |
| DDT215 | 682 | 390 | 000 | G1 | 2 | 3 | 150 |  | 3 | 1.6 | 100 |  | 1.6 | B5 | DDT |
| DDT220 | 682 | 390 | 000 | G1 | 2.5 | 4.5 | 150 |  | 2.5 | , | 100 |  | 1 | B5 | DDT |
| DE1 | 264 | 130 | 000 |  | 2.5 | 21 | 250 |  | 5.2 | 1 | 100 |  | 1 | UX5 | T |
| DE5 | 280 | 3000 | 000 |  | 2.5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | R |
| DET19 | 204 | 1403 | 300 | A142 | 6 |  | 300 |  | 25 | 2.1 | 100 |  |  | Ux7 | TT |
| DET20 | 020 | 0003 | 310 | A1G1 | 6 | 5.5 | 250 |  | 12 | 3 | 100 |  | 3 | A08 | T |
| DF1 | 0320 | 0005 | 560 | G1 | 1.4 |  | 90 | 90 | 1.2 | 0.7 | 80 | 90 | 0.7 | 8SC | P |
| DF11 | 602 | 3024 | 450 |  | 1.2 |  | 90 | 50 | 0.9 | 0.6 | 80 | 60 | 0.6 | F8 | P |
| DF16 | 654 | 23000 | 000 |  | 0.6 |  | 20 | 20 | 0.3 | 0.3 | No Data | Avai | lable | B5A | P |
| DF21 | 206 | 50103 | 030 | G1 | 1.4 |  | 90 | 90 | 1.2 | 0.7 | 80 | 90 | 0.7 | A08 | P |
| DF22 | 206 | 50103 | 030 | G1 | 1.4 | 1.5 | 90 | 90 | 1.4 | 1.1 | 80 | 90 | 1.1 | A08 | P |
| DF23 | 265 | 114 | 130 |  | 1.2 | 1.5 | 90 | 60 | 0.6 | 0.6 | 80 | 60 | 0.6 | A08 | P |
| DF25 | 265 | 1141 | 130 |  | 1.2 | 0.5 | 150 | 60 | 1 | 0.6 | 125 | 60 | 0.6 | A08 | P |
| DF26 | 2651 | 1141 | 130 |  | 1.2 | 1.1 | 150 | 90 | 1.2 | 0.3 | 125 | 90 | 0.3 | A08 | P |
| DF31 | 0265 | 51030 | 300 | G1 | 1.4 |  | 90 | 90 | 1.2 | 0.6 | 80 | 90 | 0.6 | A08 | P |
| DF32 | 0265 | 5103 | 300 | G1 | 1.4 | 1.5 | 90 | 90 | 1.4 | 1.1 | 80 | 90 | 1.2 | A08 | P |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |


| DF33 | 036 | 500200 | G1 | 1.4 | 0.5 | 90 | 90 | 0.8 | 0.7 | 80 | 90 | A08 | P |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DF51 | 542 | 300000 | A1 | 1.5 |  | 40 | 12 | 1.1 | 0.1 | No Data | Available | SM4 | P |
| DF60 | 652 | 430000 | . | 1.2 | 2 | 60 | 60 | 0.5 | 0.8 | No Data | Available | B5A | P |
| DF61 | 652 | 430000 |  | 1.2 | 1 | 60 | 60 | 0.9 | 0.8 | No Data | Available | B5A | P |
| DF62 | 652 | 430000 |  | 1.2 | 1 | 90 | 90 | 7.4 | 2 | 80 | 75 | B5A | P |
| DF63 | 652 | 430000 |  | 1.2 | 2.5 | 90 | 90 | 1.2 | 0.4 | 80 | $80 \quad 0.6$ | B5A | P |
| DF70 | *4* | 23* 650 |  | 0.6 |  | 40 | 40 | 0.4 | 0.2 | No Data | Available | B8D | P |
| DF72 | *40 | 230650 |  | 1.2 |  | 60 | 60 | 1.7 | 1 | No Data | Available | B8D | P |
| DF73 | *40 | 230650 |  | 1.2 |  | 90 | 75 | 1.7 | 0.8 | 80 | $75 \quad 0.8$ | B8D | P |
| DF91 | 265 | 024300 |  | 1.4 |  | 90 | 75 | 3.5 | 0.9 | 80 | $60 \quad 0.9$ | B7G | P |
| DF92 | 265 | 024300 |  | 1.4 | 2 | 90 | 60 | 1.9 | 0.7 | 80 | $\begin{array}{ll}60 & 0.7\end{array}$ | B7G | P |
| DF95 | 265 | 024300 |  | 1.4 | 1 | 90 | 75 | 3.7 | 1 | 80 | 60 | B7G | P |
| DF96 | 265 | *24 300 |  | 1.4 | 0.8 | 75 | 75 | 1.4 | 0.6 | 80 | $75 \quad 0.7$ | B7G | P |
| DF97 | 265 | 224300 |  | 1.4 |  | 60 | 60 | 1.7 | 0.8 | 80 | $75 \quad 0.8$ | B7G | P |
| DF161 | 026 | 510300 | G1 | 0.7 |  | 20 | 20 | 0.3 | 0.8 | No Data | Available | A08 | P |
| DF167 | 653 | 420000 |  | 0.6 |  | 20 | 20 | 0.1 |  | No Data | Available | B5A | P |
| DF191 | 265 | *24 300 |  | 1.4 |  | 60 | 60 | 4.2 | 1 | No Data | Available | B7G | P |
| DF668 | 652 | 430000 |  | 1.2 | 1.6 | 90 | 90 | 5.7 | 2.3 | 80 | 90 | B5A | P |
| DF669 | 652 | 430000 |  | 1.2 |  | 60 | 60 | 1.8 | 1.1 | No Data | Available | B5A | P |
| DF904 | 265 | *24 300 |  | 1.4 |  | 90 | 90 | 1.6 | 0.9 | 90 | $90 \quad 0.9$ | B7G | P |
| DF906 | 265 | 3*4 300 |  | 1.4 |  | 40 | 40 | 3 | 1.7 | No Data | Available | B7G | P |
| DF961 | 265 | 024300 |  | 1.2 |  | 60 | 60 | 3.4 | 0.8 | No Data | Available | B7G | P |
| DFF50 | 246 | 557430 |  | 1.4 | 1.1 | 20 | 20 | 2.2 | 1.2 | No Data | Available | A08 | PP |
| DFF51 | 246 | 557430 |  | 1.4 |  | 20 | 20 | 2.1 | 0.7 | No Data | Available | A08 | PP |
| DFF101 | 634 | 572400 |  | 1.4 |  | 40 | 40 | 1 | 0.2 | No Data | Available | B7G | PP |
| DG210 | 642 | 350000 |  | 2 | 1.5 | 100 | 20 | 1 | 1 | No Data | Available | B5 | P |
| DH | 642 | 310000 |  | 16 | 3 | 200 |  | 6 | 3.7 | 100 | 3.7 | B5 | T |
| DH30 | 908 | 231600 | G1 | 13 | 2 | 200 |  | 2.8 | 4.5 | 150 | 4.5 | B7 | DDT |
| DH42 | 908 | 231600 | G1 | 4 | 3 | 250 |  | 1.1 | 1.2 | 150 | 1.2 | B7 | DDT |
| DH63 | 026 | 890310 | G1 | 6 | 3 | 250 |  | 1.1 | 1.2 | 150 | 1.2 | A08 | DDT |
| DH73 | 026 | 890310 | G1 | 6 | 3 | 250 |  | 4.5 | 2 | 250 | 2 | A08 | DDT |
| DH74 | 026 | 890310 | G1 | 13 | 3 | 250 |  | 1.1 | 1.2 | 100 | 1.2 | A08 | DDT |
| DH76 | 026 | 890310 | G1 | 13 | 3 | 250 |  | 1.1 | 1.2 | 150 | 1.2 | A08 | DDT |
| DH77 | 412 | 389600 |  | 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 |
| DH101 | 264 | *98 130 |  | 19 | 3 | 250 |  | 1 | 1.2 | 150 | 1.2 | B8B | DDT |
| DH107 | 412 | 389600 |  | 19 | 3 | 250 |  | 1 | 1.2 | 150 | 1.2 | B7G | DDT |
| DH109 | +91 | 238146 |  | 28 | 2.3 | 200 |  | 1 | 1.4 | 100 | 1.4 | B9A | DDDT |
| DH118 | 264 | 089130 |  | 13 | 1 | 100 |  | 0.8 | 1.4 | 100 | 1.4 | B8A | DDT |
| DH119 | 641 | 238 09* |  | 13 | 0.7 | 100 |  | 0.8 | 1.4 | 100 | 1.4 | B9A | DDT |
| DH142 | 264 | 098130 |  | 14 | 1.6 | 200 |  | 1.5 | 1.6 | 100 | 1.4 | B8A | DDT |
| DH147 | 026 | 890310 | G1 | 6 | 5.5 | 250 |  | 5 | 2 | 100 | 2 | A08 | DDT |
| DH149 | 264 | 198130 |  | 6 | 1 | 250 |  | 1.3 |  | 250 | 1 | B8A | DDT |
| DH150 | 264 | 098130 |  | 6 | 3 | 250 |  | 10 | 1.3 | 150 | 1.3 | B8A | DDT |
| DH718 | 264 | 089130 |  | 6.3 | 3 | 250 |  | 1 | 1.3 | 100 | 1.4 | B8A | DDT |
| DH719 | 981 | $23 \dagger 146$ |  | 6 | 3 | 250 |  |  | 1.3 | 100 | 1.3 | B9A | DDDT |
| DHD | 908 | 231600 | G1 | 16 | 3.2 | 200 |  | 3.2 | 2.2 | 200 | 2.2 | B7 | DDT |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Voles | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | $m A / V$ | Anode Volts | Screen Volts | $m A / V$ |  |  |  |
| DL145 | 264098130 |  | 15 | 5.9 | 250 |  | 5 | 2.3 | 150 |  | 2.3 | B8A | DDT |  |
| DL161 | 654230000 |  | 1.4 |  | 20 | 20 | 0.5 | 0.5 | No Data | a Avail | able | B5A | P |  |
| DL167 | 653420000 |  | 1.2 |  | 20 | 20 | 0.5 | 1.5 | No Dat | a Avail | able | B5A | P |  |
| DL192 | 264536200 |  | 1.4 | 7 | 60 | 60 | 7 | 1.5 | No Dat | Avail | able | B7G | P |  |
| DL193 | 265436200 |  | 1.4 | 7.5 | 100 | 60 | 9.5 | 2.9 | 150 | 60 | 2.9 | B7G | P |  |
| DL620 | 653420000 |  | 1.2 | 6.5 | 60 | 60 | 3.1 | 0.6 | 80 | 75 | 0.6 | B5A | P |  |
| DL650 | 653420000 |  | 1.2 |  | 20 | 20 | 0.4 | 0.4 | No Data | Avail | able | B5A | P |  |
| DL651 | 653420000 |  | 1.2 |  | 20 | 20 | 0.4 | 0.4 | No Dat | a Avail | able | B5A | P |  |
| DL907 | 365004200 |  | 1.4 | 5.5 | 150 | 125 | 15 | 3.1 | 125 | 125 | 3.1 | B7G | P |  |
| DL962 | 264536200 |  | 1.4 | 7 | 60 | 60 | 7 | 1.5 | No Dat | Avail | able | B7G | P |  |
| DL963 | 265436200 |  | 1.2 | 7.5 | 150 | 60 | 10 | 2.2 | 100 | 60 |  | B7G | P |  |
| DLL21 | 246547330 |  | 1.4 | 8.7 | 150 | 125 | 1 |  | 100 | 100 |  | A08 | PP |  |
| DLL25 | 046547230 |  | 1.4 | 9.4 | 150 | 125 | 17 |  | 125 | . 125 |  | B8G | PP |  |
| DLL31 | 326447250 |  | 1.4 | 5 | 90 | 90 | 3 |  | 80 | 75 |  | A08 | PP |  |
| DLL101 | 264574300 |  | 1.4 | 7 | 90 | 60 | 8.2 | 1.1 | 80 | 60 | 1.2 | B7G | PP |  |
| DLL102 | 264574300 |  | 1.4 |  | 40 40 | 40 40 | 1.3 2 | 0.5 0.5 | $\begin{aligned} & 80 \\ & 80 \end{aligned}$ | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | B7G | PP |  |
| DLP51 | 023004560 | C | 4 | 17 | 250 | 250 | 36 | 2.5 | 100 | 100 |  | 8SC | P |  |
| DN41 | 968231500 | G1 | 4 | 3.3 | 250 | 200 | 32 | 10 | 100 | 150 | 9 | B7 | DDP |  |
| DN143 | 264598130 |  | 6 | 6.2 | 250 | 275 | 44 | 9.5 | 100 | 150 | 9 | B8B | DLP |  |
| D024 | 642300000 |  | 4 | 40 | 400 |  | 63 | 7.5 | 100 |  | 6.0 | B4 | T |  |
| D025 | 642300000 |  | 6 | 75 | 300 |  | 60 | 3.7 | 100 |  | 3.7 | B4 | T |  |
| D026 | 642300000 |  | 4 | 92 | 400 |  | 63 | 3.8 | 100 |  | 3.8 | B4 | T |  |
| D030 | 642300000 |  | 4 | 100 | 400 |  | 60 | 6.9 | 100 |  | 6 | B4 | T |  |
| D042 | 918236500 | G1 | 4 | 6 | 250 | 250 | 36 | 9.5 | 100 | 150 | 8 | B7 | DDP |  |
| DP | 264008030 |  | 16 | 7.5 | 200 |  | 25 | 6 | 100 |  | 6 | A08 | DT |  |
| DP5 | 642350000 |  | 4 | 5 | 250 | 250 | 10 | 4 | 100 | 150 | 4 | B5 | P |  |
| DP7 | 023004560 |  | 4 | 20 | 250 | 250 | 20 | 2.5 | 100 | 150 | 2.5 | 8SC | P |  |
| DP61 | 412365100 |  | 6 | 8.5 | 200 | 125 | 7.7 | 5.1 | 150 | 150 | 4 | B7G | P |  |
| DP495/6 | 869231500 | G1 | 4 | 6.5 | 250 | 250 | 35 | 9.5 | 100 | 150 |  | B7 | DDP |  |
| DP4480 | 819236500 | G1 | 44 | 8.4 | 200 | 200 | 46 | 8 | 100 | 100 | 7 | B7 | DDP |  |
| DP/Pen | 045231600 |  | 16 | 10 | 200 | 200 | 31 | 3.5 | 100 | 100 | 3.5 | B7 | P |  |
| DPT | 045213600 |  | 16 | 10 | 200 | 200 | 40 | 3.1 | 100 | 150 | 3.1 | B7 | P |  |
| DPT | 642310000 | G2 | 16 | 10 | 200 | 200 | 40 | 3 | 100 | 150 | 3 | B5 | P |  |
| DS | 542310000 | A1 | 16 | 1.5 | 200 | 75 | 2.8 | 1.1 | 200 | 75 | 1.1 | B5 | P |  |
| DS | 000231600 | G1 | 13 | 3 | 200 |  | 4 | 2.5 | 150 |  | 2.5 | B7 | T |  |
| DSB | 542310000 | A1 | 16 | 1 | 150 | 90 | 3.4 | 3.2 | 150 | 90 | 3.2 | B5 | P |  |
| DSPen | 061231500 | G1 | 16 | 1.5 | 200 | 100 | 4 | 2.3 | 200 | 100 | 2.3 | B7 | P |  |
| DT7 | 642300000 |  | 4 | 16 | 200 |  | 14 | 2 | 100 |  | 2 | B4 | T |  |
| DT41 | 809321600 | G1 | 4 | 1 | 100 |  |  | 3 | 100 |  | 3 | B7 | DDT |  |
| DT215 | 023089060 | G1 | 2 | 4.5 | 150 |  | 2.5 | 1 | 100 |  | 1 | 8SC | DDT |  |
| DT215 | 682390000 | G1 | 2 | 4.5 | 150 |  | 2.5 | 1.5 | 100 |  | 1.5 | B5 | DDT |  |
| DT436 | 809231600 | G1 | 4 | 7 | 250 |  | 4 | 3.6 | 100 |  | 2 | B7 | DDT |  |
| DT436 | 023198060 | G1 | 4 | 7 | 250 |  | 4 | 2 | 100 |  | 2 | 8SC | DDT |  |
| DT1336 | 023198060 | G1 | 13 | 5 | 200 |  | 4 | 2 | 100 |  | 2 | 8SC | DDT |  |
| DTV1 | $809 \cdot 231600$ | G1 | 13 | 1 | 100 |  |  | 3 | 100 |  | 3 | B7 | DDT |  |
| DU1 | 802300000 |  | 4 |  |  |  | 30 |  | REC |  | 5 mA | B4 | R |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Vohs | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |  |
| DU2 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| DU3 | 892300000 |  | 4 |  |  |  | 15 |  | REC |  | 10 mA | B4 | RR |  |
| DU4 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| DU5 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| DU10 | 802300000 |  | 4 |  |  |  | 60 |  | REC |  | 25 mA | B4 | R |  |
| DVSG | 542310000 | A1 | 16 | 1 | 200 | 75 | 7.5 | 2.5 | 100 | 75 | 2.5 | B5 | P |  |
| DVS/Pen | 542310000 | A1 | 16 | 1.5 | 200 | 100 | 6.5 | 1 | 200 | 100 | 3 | B5 | P |  |
| DW1 | 892300000 |  | 4 |  |  |  | 15 |  | REC |  | 10 mA | B4 | RR |  |
| DW2 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 20 mA | B4 | RR |  |
| DW2X | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 20 mA | B4 | RR |  |
| DW3 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| DW4 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| DW4/350 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| DW4/500 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| DW5 | 802300000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| DW7X | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| DW8 | 892300000 |  | 5 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| DW15 | 892300000 |  | 7.5 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| DW30 | 892300000 |  | 7.5 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| DW802 | 642300000 |  | 4 | 25 | 250 |  | 26 | 4 | 100 |  | 4 | B5 | T |  |
| DW1508 | 642310000 |  | 4 | 7.5 | 150 |  | 4 | 1.5 | 100 |  | 1.5 | B5 | T |  |
| DW4011 | 642310000 |  | 4 | 5 | 200 |  | 5 | 3.6 | 150 |  | 3.6 | B5 | T |  |
| DW4023 | 642310000 |  | 4 | 3 | 150 |  | 2.5 | 1.7 | 100 |  | 1.7 | B5 | T |  |
| DX2 | 642300000 |  | 2 | 3 | 150 |  | 3.5 | 1.4 | 100 |  | 1.4 | B4 | T |  |
| DY30 | *2* 0*0 3*0 | D1 | 1.2 |  |  |  |  |  | D |  |  | A08 | D |  |
| DY70 | 230000000 | D1 | 1.2 |  |  |  |  |  | D |  |  | B3G | D |  |
| DY80 | 23* 232 *32 | D1 | 1.2 |  |  |  |  |  | D |  |  | B9A | D |  |
| DY86 | 23* 232 *32 | D1 | 1.4 |  |  |  |  |  | D |  |  | B9A | D |  |
| DY87 | 23* 232 *32 | D1 | 2.4 |  |  |  |  |  | D |  |  | B9A | D |  |
| DY604 | 642300000 |  | 4 | 15 | 150 |  | 8 | 1.3 | 100 |  | 1.3 | B4 | T |  |
| DZ2 | 542300000 | A1 | 4 | 1 | 200 | 100 | 4 | 0.7 | 100 | 100 | 4 | B4 | P |  |
| E | 642300000 |  | 4 | 9 | 200 |  | 1.7 | 0.4 | 100 |  | 0.4 | B4 | T |  |
| E | 264300000 |  | 3 | 22.5 | 125 |  | 6.5 |  | 125 |  |  | UX4 | T |  |
| E1C | 216489130 |  | 6.3 | 5 | 200 |  | 4.5 | 2 | 100 |  | 2 | A08 | DDT |  |
| E1F | 216054300 |  | 6.3 | 3 | 250 | 100 | 2 | 1.4 | 100 | 100 |  | B7 | P |  |
| E4 | 642300000 |  | 4 | 16 | 200 |  | 12 | 1.8 | 100 |  |  | B4 | T |  |
| E4D | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| E4F | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| E4H | 802300000 |  | 4 |  |  |  | 125 |  | REC |  | 30 mA | B4 | R |  |
| EAK | 003200000 | D1 | 4 |  |  |  | 60 |  | REC |  | 20 mA | B5 | R |  |
| E4L | 003200000 | D1 | 4 |  |  |  | 120 |  | REC |  | 30 mA | B5 | R |  |
| E2OV | 023100080 |  | 20 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | R |  |
| ${ }_{\text {E } 5006 C}$ | 615 <br> 641 <br> 631 <br> 337 <br> 1412 |  | 6.3 | 5.5 | 150 250 | 150 | 50 6 | 45 | No 100 |  | $\begin{gathered} \text { lable } \\ 2.5 \end{gathered}$ | $\begin{aligned} & \text { B9D } \\ & \text { B9A } \end{aligned}$ | $\stackrel{\mathrm{P}}{\mathrm{TT}}$ |  |
| E80CF | 645237114 |  | 6.3 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | 175 | $\begin{aligned} & 14 \\ & 10 \end{aligned}$ | $\begin{aligned} & 5 \\ & 6.2 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| E80F | 501236014 |  | 6.3 | 1.6 | 250 | 100 | 3 | 1.8 | 150 | 100 | 1.8 | B9A | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | mA/V | Anode Volts |  | Creen Volts | mA/V |  |  |  |
| E80L | 041230651 |  | 6.3 | 4.5 | 200 | 200 | 30 | 9 | 100 |  | 100 |  | B9A | P |  |
| E81CC | 641227413 |  | 6.3 |  | 250 |  | 10 | 5.5 | 100 |  |  | 5.5 | B9A | TT |  |
| E81L | 041230651 |  | 6.3 | 3 | 200 | 200 | 20 | 11 | 100 |  | 100 |  | B9A | P |  |
| E82CC | 641227413 |  | 6.3 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  |  |  | B9A | TT |  |
| E83CC | 641227413 |  | 6.3 | 2 | 250 |  | 1.2 | 1.6 | 100 |  |  | 1.6 | B9A | TT |  |
| E83F | $541236 * * 1$ |  | 6.3 | 2 | 200 | 125 | 10 | 9 | 100 |  | 125 | 12 | B9A | P |  |
| E84L | *41 23* 6*5 |  | 6.3 |  | 250 | 250 | 48 | 11 | No Da |  | Avail | lable | B9A | P |  |
| E86C | 641234146 |  | 6.3 | 2 | 200 |  | 12 | 14 | No Da |  | Avail | lable | B9A | T |  |
| E87L | 041230651 |  | 6 | 6 | 250 | 150 | 36 | 10 | 100 |  | 100 |  | B9A | P |  |
| E88C | 414234464 |  | 6.3 | 1.2 | 150 |  | 12.5 | 13.5 | No D |  | Avai | lable | e B9A | T |  |
| -E888CC | 641237410 |  | 6.3 | 1.2 | 90 |  | 15 | 12.5 | 100 |  |  | 13 | B9A | TT |  |
| E88CC/01 | 741236410 |  | 6.3 | 1.2 | 100 |  | 15 | 12.5 | No D |  | Avail | lable | B9A | TT |  |
| E90CC | 672344100 | - | 6.3 | 2.1 | 100 |  | 8.5 | 6 | 100 |  |  | 8.5 | B7G | TT |  |
| E90F | 412365100 |  | 6.3 | 1.2 | 250 | 150 | 7.4 | 4.6 | 100 |  | 100 |  | B7G | P |  |
| E91AA | 182310900 |  | 6.3 |  |  |  |  |  | D |  |  |  | B7G | D |  |
| E91H | 412365100 |  | 6.3 | 5 | 150 | 75 | 0.5 | 0.6 | 125 |  | 75 | 0.6 | B7G | H |  |
| E92CC | 672344100 |  | 6.3 | 1.7 | 150 |  | 8.5 | 6 | 100 |  |  | 6 | B7G | TT |  |
| E95F | 412365100 |  | 6.3 | 2 | 150 | 125 | 7.5 | 5.5 | 100 |  | 100 |  | B7G | P |  |
| E99F | 412365100 |  | 6.3 | 20 | 250 | 100 | 9.2 | 3.8 | 100 |  | 100 |  | B9A | P |  |
| E130L | *2* 54* 310 | A1 | 6.3 | 15.5 | 250 | 150 | 100 | 27 | 100 |  | 100 |  | A08 | P |  |
| E135 | 365304220 |  | 12.6 | 25 | 400 |  | 80 |  | 100 |  |  |  | A08 | P |  |
| E180CC | 641227413 |  | 6.3 | 1.9 | 150 |  | 8.5 | 6.3 | 100 |  |  | 7.8 | B9A | TI |  |
| E180F | 141 23* 615 |  | 6 | 2 | 200 | 150 | 13 | 16.5 | No Da | a | Avail | able | B9A | P |  |
| E181CC | 641227413 |  | 6.3 | 3 | 150 |  | 8.5 | 4.7 | 100 |  |  | 5.6 | B9A | TT |  |
| E182CC | 741221436 |  | 6.3 | 2 | 150 |  | 36 | 15 | No Da |  | Avail | able | B9A. | TT |  |
| E184 | 141230651 |  | 6.3 | 2.5 | 200 | 200 | 10 | 15 | No Da | a | Avail | able | B9A | P |  |
| E186F | 141 23* 615 |  | 6.3 | 1.4 | 200 | 150 | 11.5 | 16 | No Dat | A | Avail | able | B9A | P |  |
| E188CC | 641327410 |  | 6.3 | 1.4 | 90 |  | 12 | 11.5 | No Dat | A | Avail | able | B9A | TT |  |
| E220B | 446230700 |  | 2 | 1 | 150 |  | 3 | 2.5 | 100 |  |  | 2.5 | B7 | TT |  |
| E235 | 642300000 |  | 2 | 7.5 | 150 |  | 13 | 3 | 100 |  |  | 3 | B4 | T |  |
| E235L | *26 54* 310 |  | 6.3 | 8.2 | 100 | 100 | 100 | 14 | No Da |  | Avail | able | A08 | P |  |
| E236L | *2* 54* 310 | A1 | 6.3 | 8.2 | 100 | 1001 | 100 | 14 | No Da | a | Avail | able | A08 | P |  |
| E280F | 141 23* 615 |  | 6.3 | 1.8 | 200 | 150 | 20 | 26 | No Da |  | Avail | able | B9A | P |  |
| E282F | 141 23* 615 |  | 6.3 |  | 150 | 150 | 35 | 26 | No Da | a | Avail | able | B9A | P |  |
| E283CC | 146231074 |  | 6.3 | 2 | 250 |  | 1.2 | 1.6 | 100 |  |  |  | B9A | TIT |  |
| E288CC | 741236410 |  | 6.3 | 1.5 | 100 |  | 3018 | 18 | No Dat |  | Availa | able | B9A | TT |  |
| E405 | 642300000 |  | 4 | 32 | 250 |  | 20 | 2 | 100 |  |  | 2 | B4 | T |  |
| E406 | 642300000 |  | 4 | 34 | 250 |  | 8 | 2.3 | 100 |  |  | 2.3 | B4 | T |  |
| E406N | 642300000 |  | 4 | 34 | 250 |  | 8 | 2.3 | 100 |  |  | 2.3 | B4 | T |  |
| E408 | 642300000 |  | 4 | 30 | 400 |  | 26 | 2 | 100 |  |  | 2. | B4 | T |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | $\begin{aligned} & \text { Screen } \\ & \text { Volts } \end{aligned}$ | ma/V |  |  |  |
| E408N | 642300000 |  | 4 | 36 | 400 |  | 30 | 2.7 | 100 |  | 2 | B4 | T |  |
| E409 | 642310000 |  | 4 | 16 | 200 |  | 12 | 1.3 | 100 |  | 1.3 | B5 | T |  |
| E409N | 642310000 |  | 4 | 16 | 200 |  | 12 | 1.3 | 100 |  | 1.3 | B5 | T |  |
| E410 | 642300000 |  | 4 | 28 | 400 |  | 30 | 6 | 100 |  | 6 | B4 | T |  |
| E414 | 642310000 |  | 4 | 6 | 150 |  | 6.5 | 2 | 100 |  | 2 | B5 | T |  |
| E414 | 642300000 |  | 4 | 15 | 150 |  | 8 | 1.3 | 100 |  | 1.3 | B4 | T |  |
| E415 | 642310000 |  | 4 | 8 | 200 |  | 6 | 1.4 | 100 |  | 1.4 | B5 | T |  |
| E415 | 264130000 |  | 4 | 8 | 200 |  | 6 | 1.4 | 100 |  | 1.4 | UX5 | T |  |
| E420 | 642300000 |  | 4 | 18 | 150 |  | 11 | 1.6 | 100 |  | 1.6 | B4 | T |  |
| E422 | 642300000 |  | 4 | 16 | 250 |  | 12 | 5 | 100 |  | 5 | B4 | T |  |
| E424 | 642310000 |  | 4 | 2.5 | 200 |  | 6 | 2.4 | 100 |  | 2.4 | B5 | T |  |
| E424N | 642310000 |  | 4 | 3.5 | 200 |  | 6 | 2.4 | 100 |  | 2.4 | B5 | T |  |
| E424R | 612300000 | G1 | 4 | 5 | 200 |  | 6 | 1.6 | 100 |  | 1.6 | B4 | T |  |
| E425 | 642310000 |  | 4 | 4.5 | 150 |  | 3 | 3 | 100 |  | 1 | B5 | T |  |
| E428 | 642310000 |  | 4 | 3 | 200 |  | 6 | 2.4 | 100 |  | 2.4 | B5 | T |  |
| E430 | 642310000 |  | 4 | 3 | 150 |  | 4 | 2 | 100 |  | 2 | B5 | T |  |
| E430N | 642310000 |  | 4 | 15 | 200 |  | 15 | 3 | 100 |  | 3 | B5 | T |  |
| E435 | 642310000 |  | 4 | 1.5 | 200 |  | 3 | 1 | 100 |  | 3 | B5 | T |  |
| E438 | 642310000 |  | 4 | 3 | 200 |  | 2.5 | 1.5 | 100 |  | 1.5 | B5 | T |  |
| E438M | 642310000 |  | 4 | 3 | 200 |  | 2.5 | 1.5 | 100 |  | 1.5 | B5 | T |  |
| E441 | 642310000 | G2 | 4 |  | 100 | 100 | 1.7 | 1.0 | 100 | 100 |  | B5 | P |  |
| E441N | 652300000 | G1 | 4 |  | 100 |  | 1.7 | 1 | 100 |  | 1 | B4 | T |  |
| E442 | 542310000 | A1 | 4 | 1.3 | 200 | 60 | 1.5 | 0.9 | 100 | 60 | 0.9 | B5 | P |  |
| E442S | 542310000 | A1 | 4 | 2 | 200 | 60 | 4 |  | 100 | 60 | 1 | B5 | P |  |
| E443H | 642350000 |  | 4 | 40 | 400 | 200 | 30 | 1.9 | 100 | 100 | 1.9 | B5 | P |  |
| E444 | 258413000 | A1 | 4 | 3 | 200 | 90 | 4 | 3 | 100 | 90 | 3 | UX6 | DP |  |
| E444N | 258413000 | A1 | 4 | 3 | 100 | 90 | 4 | 3 | 100 | 90 | 3 | UX6 | DP |  |
| E444S | 642310000 | D1 | 4 | 3.5 | 200 |  | 6 | 2 | 100 |  | 2 | B5 | DT |  |
| E445 | 542310000 | A1 | 4 | 2 | 200 | 100 | 6 | 1 | 100 | 100 | 1 | B5 | P |  |
| E445M | 542310000 | A1 | 4 | 2 | 200 | 100 | 6 | 1 | 100 | 100 |  | B5 | P |  |
| E446 | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2.3 | 100 | 100 | 2.3 | B5 | P |  |
| E447 | 542310000 | A1 | 4 | 2 | 200 | 125 | 4.5 | 2.3 | 100 | 100 | 2.3 | B5 | P |  |
| E448 | 164552300 | G1 | 4 | 1.5 | 200 | 125 | 3 | 0.6 | 100 | 100 |  | C7 | P |  |
| E449 | 165452300 | G1 | 4 | 2 | 200 | 75 | 3 | 1.8 | 100 | 75 | 1.8 | C7 | P |  |
| E451 | 642350000 |  | 4 |  | 400 | 250 | 17 |  | 100 | 150 | 2.4 | B4 | P |  |
| E452T | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2 | 100 | 100 | 2 | B5 | P |  |
| E452T | 254130000 | A1 | 4 | 2 | 200 | 100 | 3 | 2 | 100 | 100 | 2 | UX5 | P |  |
| E453 | 045231600 |  | 4 | 15 | 250 | 250 | 24 | 2.5 | 100 | 150 | 2.5 | B7 |  |  |
| E454 | 216809300 | G1 | 4 | 3.5 | 200 |  | 3.5 | 1.6 | 100 |  | 1.6 | UX7 | ${ }_{\mathrm{D}}^{\mathrm{P}}$ T |  |
| E455 | 542310000 | A1 | 4 | 1.5 | 200 | 100 | 3 | 2 | 100 | 100 | 2 | B5 | P |  |
| E455 | 254130000 | A1 | 4 | 1.5 | 200 | 100 | 3 | 2 | 100 | 100 | 2 | UX5 | P |  |
| E462 | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2 | 100 | 100 | 2 | B5 | P |  |
| E463 | 045231600 |  | 4 | 22 | 250 | 250 | 36 | 2.7 | 100 | 150 | 2.7 | B7 | P |  |
| E499 | 642310000 |  | 4 | 1.6 | 200 |  | 0.2 | 4 | 150 |  | 4 | D5 | T |  |
| E501D | 265113000 | G1 | 3.5 | 2.5 | 250 | 125 | 6.5 | 3.5 | 100 | 100 |  | UX6 | P |  |
| E501R | 265113000 | G1 | 6.3 | 2.5 | 250 | 125 | 6.5 | 3.5 | 100 | 100 |  | Ux6 | P |  |




| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | $\mathrm{mA} / \mathrm{V}$ | Anode Volts | Screen Volts | mA/V |  |  |  |
| E7040 | 020540310 | A1 | 25 | 21 | 150 | 150 | 100 | 11 | No Da | a Avail | lable | A08 | P |  |
| E7041 | *41 23**51 | A1 | 21.5 | 24 | 150 | 150 | 45 | 6.5 | 100 | 100 |  | B9A | P |  |
| E7043 | 541231600 |  | 15 | 2.3 | 150 | 150 | 36 | 10 | No Da | a Avail | lable | B9A | P |  |
| E7044 | *41 23* 6*5 |  | 16 | 6 | 200 | 200 | 34 | 10 | No D | a Avail | lable | B9A | P |  |
| E7051 | 645237114 |  | 6.3 | $\left\{\begin{array}{l}1 \\ 1\end{array}\right.$ | 150 150 | 100 | $\begin{aligned} & 18 \\ & 10 \end{aligned}$ | $\begin{aligned} & 8.5 \\ & 5.2 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $8\}$ | B9A | TP |  |
| E7053 | 414237516 |  | 6.3 | $\{22.5$ | 100 250 | 250 | 28.5 | 2.2 5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 2 | B9A | TP |  |
| E7055 | 414237516 |  | 16 | $\{11.5$ | 100 150 | 150 | 41.5 | 2.2 7.5 | 100 100 | 60 100 | 2 \} | B9A | TP |  |
| E7056 | 645237114 |  | 9.5 | $\left\{\begin{array}{l}1 \\ 1\end{array}\right.$ | 150 150 | 100 | 18 10 | 8.5 5.2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 8 , | B9A | TP |  |
| E7059 | 414237516 |  | 50 | $\{16$ | 100 200 | 200 | $35^{3.5}$ | 2.2 6.8 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $2.2$ | \}B9A | TP |  |
| E7060 | 266044300 |  | 1.4 | 2.5 | 90 |  | 2.1 | 1 | 80 |  | 1 | B7G | T |  |
| E7062 | 265024300 |  | 1.4 |  | 90 | 90 | 1.6 | 0.8 | 80 | 90 |  | B7G | P |  |
| E7066 | 200564300 |  | 1.4 |  | 90 | 90 | 1.1 | 0.4 | 80 | 90 | 0.4 | B7G | P |  |
| E7074 | 641234146 |  | 6.3 | 1.5 | 150 |  | 12 | 14 | No D | ta Avail | lable | B9A | T |  |
| E7075 | 641234146 |  | 3.8 | 1.5 | 150 |  | 12 | 14 | No D | ta Avail | lable | B9A | T |  |
| E7078 | 041230651 |  | 6.3 | 2 | 250 | 100 | 9 | 4.4 | 100 | 100 |  | B9A | P |  |
| E7079 | 041230651 |  | 12.6 | 1 | 150 | 100 | 12 | 4.4 | 100 | 100 |  | B9A | P |  |
| E7081 | 020540310 | A1 | 6.3 | 21 | 150 | 150 | 100 | 11 | No D | ta Avail | lable | A08 | P |  |
| E7087 | 461237145 |  | 15 | $\left\{\begin{array}{l}1.7 \\ 2.1\end{array}\right.$ | 200 150 | 150 | 3 18 | 4 11 | 100 100 | 60 100 | 4 4 | B9A | TP |  |
| E7088 | 461237145 |  | 6.3 | $\left\{\begin{array}{l}1.7 \\ 2.1\end{array}\right.$ | 200 150 | 150 | 3 | 4 11 | 100 100 | 60 100 | 4 , | B9A | TP |  |
| E7108 | 501236014 |  | 6.3 | 2 | 250 | 150 | 3 | 2 | 100 | 100 |  | B9A | P |  |
| E7109 | 156231471 |  | 6.3 | 1.1 | 200 | 150 | 13 | 16.5 | No D | ta Avail | lable | B9A | PP |  |
| E7110 | 141230651 |  | 6.3 | 3.5 | 250 | 250 | 10 | 6.8 | 100 | 100 |  | B9A | P |  |
| E7143 | 412314600 |  | 3.1 | 1 | 200 |  | 11.5 | 6.7 | 100 |  | 6 | B7G | T |  |
| E7144 | 614237410 |  | 6.3 | 1.2 | 90 |  | 15 | 12.5 | No D | ta Avail | lable | B9A | TT |  |
| E7145 | 501236014 |  | 6.3 | 2 | 50 | 50 | 1.8 |  | No D | ta Avail | lable | B9A | P |  |
| EA40 | 200800130 |  | 6 |  |  |  | 5 |  | D |  |  | B8A | R |  |
| EA50 | 123000000 | D1 | 6 |  |  |  |  |  | D |  | 6 | B3G | D |  |
| EA63 | 541231600 |  | 6.3 | 5.5 | 250 | 250 | 36 | 10.5 | No D | ta Avail | lable | B9A | P |  |
| EA76 | 281380000 |  | 6 |  |  |  | 5 |  | D |  |  | B5B | R |  |
| EA111 | 023010000 | D1 | 6.3 |  |  |  | 60 |  | REC |  | 20 mA | F8 | R |  |
| EA962 | 200100300 | D1 | 6.3 |  |  |  |  |  | D |  |  | B7G | D |  |
| EAA11 | 812300190 |  | 6.3 |  |  |  | 5 |  | D |  |  | F8 | RR |  |
| EAA91 | 182311900 |  | 6.3 |  |  |  | 5 |  | D |  |  | B7G | DD |  |
| EAA901 | 182310900 |  | 6.3 |  |  |  |  |  | D |  |  | B7G | DD |  |
| EAA901S | 182310900 |  | 6.3 |  |  |  |  |  | D |  |  | B7G | DD |  |
| EAB1 | 023 1to 890 |  | 6 |  |  |  |  |  | D |  |  | 8SC | DDD |  |
| EABC80 | +91 238146 |  | 6 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.3 | B9A | DDDT |  |
| EAC91 | 812314600 |  | 6 | 3.2 | 200 |  | 7.4 | 2.8 | 100 |  | 2.8 | B7G | DT |  |
| EAF21 | 265814130 |  | 6.3 | 2 | 250 | 100 | 6 | 2.8 | 100 | 100 |  | B8G | DP |  |
| EAF41 | 268154130 |  | 6 | 4 | 250 | 100 | 5 | 1.8 | 100 | 100 | 1.8 | B8A | DP |  |
| EAF42 | 268154130 |  | 6 | 2 | 250 | 100 | 5 | 1.8 | 100 | 100 | 1.8 | B8A | DP |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| EAF801 | 541236081 |  | 6.3 | 2 | 250 | 200 | 9 | 3.8 | 100 | 100 |  | B9A | DP |  |
| EB4 | 023180910 |  | 6 |  |  |  |  |  | D |  |  | 8SC | DD |  |
| EB11 | 802301190 |  | 6 |  |  |  |  |  | D |  |  | F8 | DD |  |
| EB34 | 029180310 |  | 6 |  |  |  | 5 |  | D |  |  | A08 | DD |  |
| EB40 | 208090130 |  | 6 |  |  |  |  |  | D |  |  | B8A | DD |  |
| EB41 | 201908130 |  | 6 |  |  |  | 5 |  | D |  |  | B8A | RR |  |
| EB91 | 192310800 |  | 6 |  |  |  |  |  | D |  |  | B7G | DD |  |
| EB111 | 023004060 |  | 4 | 50 | 250 |  | 60 | 5.2 | 100 |  |  | F8 | T |  |
| EBC1 | 023198060 | G1 | 6 | 7 | 250 |  | 4 | 2 | 100 |  | 2 | 8SC | DDT |  |
| EBC3 | 023189060 | G1 | 6 | 5.5 | 250 |  | 5 | 2 | 100 |  | 2 | 8SC | DDT |  |
| EBC11 | 892301460 |  | 6 | 8 | 250 |  | 5 | 2.2 | 100 |  | 2 | F8 | DDT |  |
| EBC21 | 264 *89 130 |  | 6 | 5.5 | 250 |  | 5 | 2 | 100 |  | 2 | B8B | DDT |  |
| EBC30 | 023189060 | G1 | 6 | 4.3 | 200 |  | 4 | 2 | 150 |  | 2 | 8SC | DDT |  |
| EBC33 | 026890310 | G1 | 6 | 5.5 | 250 |  | 5 | 2 | 100 |  | 2 | A08 | DDT |  |
| EBC41 | 264089130 |  | 6 | 3 | 250 |  | 1 | 1.3 | 100 |  | 1.2 | B8A | DDT |  |
| EBC51 | 389060420 |  | 6.3 | 7.3 | 250 |  | 70 | 4 | 100 |  | 4 | B9G | DDT |  |
| EBC80 | 641238090 |  | 6.3 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.2 | B9A | DDT |  |
| EBC81 | 641238 09* |  | 6 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.2 | B9A | DDT |  |
| EBC90 | 412389600 |  | 6 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.2 | B7G | DDT |  |
| EBC91 | 412389600 |  | 6 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.6 | B7G | DDT |  |
| EBF1 | 023189560 | G1 | 6 | 3 | 250 | 125 | 9 | 1.1 | 100 | 100 | 1.1 | 8SC | DDP |  |
| EBF2 | 023189560 | G1 | 6 | 2 | 250 | 100 | 5 | 1.8 | 100 | 150 | 1.8 | 8SC | DDP |  |
| EBF2G | 206589130 | G1 | 6.3 | 2 | 250 | 100 | 5 | 1.8 | 100 | 100 | 1.8 | A08 | DDP |  |
| EBF11 | 892361450 |  | 6 | 2 | 250 | 100 | 5 | 1.8 | 100 | 100 | 1.8 | F8 | DDP |  |
| EBF15 | 982361450 |  | 6 | 2 | 250 | 100 | 12 | 5 | 100 | 100 | 5 | F8 | DDP |  |
| EBF21 | 268954130 |  | 6 | 3.2 | 250 | 100 | 7.5 | 2.2 | 100 | 100 |  | B8G | DDP |  |
| EBF32 | 026895310 | G1 | 6 | 2 | 250 | 100 | 5 | 1.8 | 100 | 100 | 1.8 | A08 | DDP |  |
| EBF35 | 216589130 | G1 | 6 | 2 | 250 | 100 | 5 | 1.8 | 100 | 100 | 1.8 | A08 | DDP |  |
| EBF80 | 541236891 |  | 6 | 2 | 250 | 90 | 5 | 2.2 | 100 | 90 | 2.2 | B9A | DDP |  |
| EBF81 | 541236891 |  | 6 | 2 | 250 | 75 | 6.7 | 1.1 | 100 | 100 |  | B9A | DDP |  |
| EBF83 | 541236891 |  | 6.3 |  | 12 | 12 | 0.4 | 1 | No D |  | lable | B9A | DDP |  |
| EBF89 | 541236891 |  | 6.3 | 2 | 250 | 100 | 9 | 3.8 | 100 | 100 |  | B9A | DDP |  |
| EBF171 | 892541360 |  | 6.3 | 3.2 | 250 | 80 | 6 | 1.8 | 100 | 80 |  | B8B | DDP |  |
| EBL1 | 023189560 | G1 | 6 | 6 | 250 | 250 | 36 | 9.5 | 100 | 150 | 9 | 8SC | DDP |  |
| EBL21 | 264598130 |  | 6 | 6 | 250 | 250 | 36 | 9 | 100 | 150 | 9 | B8B | DDP |  |
| EBL31 | 026895310 | G1 | 6 | 6 | 250 | 250 | 36 | 9.5 | 100 | 150 | 9 | A08 | DDP |  |
| EBL71 | 264589130 |  | 6 | 5 | 250 | 250 | 44 | 9.5 | 250 | 200 | 9.5 | A08 | DDP |  |
| EC2 | 023100060 | G1 | 6 | 5.5 | 250 |  | 6 | 2.5 | 100 |  | 1.5 | 8SC | T |  |
| EC21 | 206401003 |  | 6 | 4 | 250 |  | 5 | 2.7 | 100 |  | 2.5 | B9G | T |  |
| EC31 | 026040310 |  | 6 | 16 | 250 |  | 20 | 3.2 | 100 |  | 3.2 | A08 | T |  |
| EC40 | 244644130 |  | 6 | 1.5 | 300 |  | 15 | 12 | 100 |  | 9 | B8A | $T$ |  |
| EC41 | 206040130 |  | 6 | 5.5 | 200 |  | 20 | 4.5 | 125 |  | 4 | B8A | T |  |
| EC52 | 241600003 |  | 6 | 2.6 | 250 |  | 10 | 6.5 | 100 |  | 6.5 | B9G | T |  |
| EC53 | 123000000 | A1G1 | 6 | 3.3 | 200 |  | 7.5 | 2.9 | 100 |  | 2.9 | B3G | T |  |
| EC54 | 244644413 |  | 6 | 1.5 | 250 |  | 10 | 9 | 100 |  | 7 | B9G | T |  |
| EC56 | *21 0*0 310 | A1G1 | 6.3 | 1.8 | 200 |  | 30 | 15 | No Da | a Avai | lable | A08 | T |  |
| EC57 | *21 0*0 310 | A1G1 | 6.3 | 1.8 | 200 |  | 30 | 15 | No Da | a Avai | lable | A08 | T |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/V | Anode Volts |  | Screen Volts | mA/V |  |  |  |
| EC70 | 462603160 |  | 6 | 2 | 100 |  | 13 | 5.5 | 100 |  |  | 5.5 | B8D | T |  |
| EC71 | 402013060 |  | 6.3 |  | 100 |  | 8.5 | 5.8 | 100 |  |  | 5.8 | B8D | T |  |
| EC80 | 441230446 |  | 6 | 1.5 | 250 |  | 15 | 12 | 150 |  |  | 10 | B9A | T |  |
| EC81 | 401230060 |  | 6 | 2 | 150 |  | 30 | 5.5 | 100 |  |  | 3 | B9A | T |  |
| EC84 | 414464234 |  | 6.3 | 1.1 | 150 |  | 16 | 10 | 100 |  |  | 10 | B9A | T |  |
| EC86 | 641234146 |  | 6.3 | 1.5 | 75 |  | 12 | 14 | No D | ta | Avail | lable | B9A | T |  |
| EC86C | 641234146 |  | 6.3 | 1.5 | 200 |  | 12 | 14 | No D | ta | Avail | lable | B9A | T |  |
| EC88 | 414234464 |  | 6 | 1.2 | 150 |  | 12.5 | 14 | No D | da | Avail | lable | B9A | T |  |
| EC90 | 6*2 364100 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  |  | 3.3 | B7G | T |  |
| EC91 | 412314600 |  | 6 |  | 250 |  | 6 | 8.5 | 200 |  |  | 8 | B7G | T |  |
| EC92 | 602304100 |  | 6 | 2 | 250 |  | 10 |  | 100 |  |  | 5 | B7G | T |  |
| EC93 | 642314600 |  | 6 | 4 | 100 |  | 16 | 8 | 100 |  |  | 8 | B7G | T |  |
| EC94 | 642314600 |  | 6.3 | 2.5 | 100 |  | 16 | 6.6 | 100 |  |  | 6.6 | B7G | T |  |
| EC95 | 142361700 |  | 6.3 | 1.2 | 200 |  | 10 | 10.5 | No | ata | Avai | ilable | B7G | T |  |
| EC96 | 412314600 |  | 6.3 | 1 | 200 |  | 11.5 | 6.7 | 100 |  | A | 5 | B7G | T |  |
| EC97 | 142236100 |  | 6.3 | 1 | 150 |  | 11 | 13 | No D | ta | Avail | lable | B7G | T |  |
| EC98 | 412344600 |  | 6.3 | 1.3 | 150 |  | 13.5 | 13.5 | No D | ta | Avail | lable | B7G | T |  |
| EC157 | *21 0*0 310 | A1 G1 | 6.3 | 2 | 200 |  | 44 | 22 | No D | ata | Avai | ilable | A08 | T |  |
| EC158 | *21 0*0 310 | A1 G1 | 6.3 | 4 | 200 |  | 68 | 15 | No | ta | Avail | ilable | A08 | T |  |
| EC760 | 462603160 |  | 6.3 | 2.4 | 150 |  | 13 | 6.5 | 100 |  |  |  | B8D | T |  |
| EC806S | 641234146 |  | 6.3 |  | 200 |  | 12 | 14 | No D | ata | Avail | ilable | B9A | T |  |
| EC900 | 412360100 |  | 6.3 | 1 | 150 |  | 11.5 | 14.5 | No D | ta | Avail | lable | B7G | T |  |
| EC903 | 642314600 |  | 6.3 | 4 | 100 |  | 16 | 8 | 100 |  |  |  | B7G | T |  |
| EC1000 | $102 * 13060$ | G1 | 6.3 | 2 | 80 |  | 14 | 14.5 | No D | ta | Avail | lable | B8D | T |  |
| EC1030 | 444123460 |  | 6.3 |  | 100 |  | 7 | 16 | No D | ata | Avail | lable | B8D | T |  |
| EC1031 | 444123460 |  | 6.3 |  | 100 |  | 7 | 16 | No D | ta | Avail | lable | B8D | T |  |
| EC8010 | 414234464 |  | 6.3 |  | 200 |  | 25 | 28 | No D | ta | Avail | 1able | B9A | T |  |
| EC8020 | 414234464 |  | 6.3 | 2.4 | 200 |  | 40 | 60 | No D | ta | Avail | lable | B9A | T |  |
| ECC31 | 027446310 |  | 6 | 4.6 | 250 |  | 6 | 2.3 | 100 |  |  | 2.3 | A08 | TT |  |
| ECC32 | 461471230 |  | 6 | 4.6 | 250 |  | 6 | 2.3 | 100 |  |  | 2.3 | A08 | TT |  |
| ECC33 | 461471230 |  | 6 | 4 | 250 |  | 9 | 3.8 | 100 |  |  | 3.6 | A08 | TT |  |
| ECC34 | 461471230 |  | 6 | 16 | 250 |  | 10 | 2.2 | 100 |  |  | 2.2 | A08 | TT |  |
| ECC35 | 461471230 |  | 6 | 2.5 | 250 |  | 2.3 | 2 | 100 |  |  | 2 | A08 | TT |  |
| ECC40 | 274164130 |  | 6 | 5.2 | 250 |  | 6 | 2.7 | 100 |  |  | 2.7 | B8A | TT |  |
| ECC70 | 742113460 |  | 6.3 | 1 | 100 |  | 6.5 | 5.4 | 100 |  |  | 5.4 | B8D | TT |  |
| ECC81 | 741226413 |  | 6 | 2 | 250 |  | 10 | 5.5 | 150 |  |  | 5 | B9A | TT |  |
| ECC82 | 741226413 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  |  | 2 | B9A | TT |  |
| ECC83 | 741226413 |  | 6 | 2 | 250 |  | 1.2 | 1.6 | 150 |  |  | 1.6 | B9A | TT |  |
| ECC84 | 147234116 |  | 6 | 1.5 | 90 |  | 12 | 6 | 100 |  |  | 6 | B9A | TT |  |
| ECC85 | 741236410 |  | 6 | 2.3 | 250 |  | 10 | 5.9 | 100 |  |  | 5 | B9A | TT |  |
| ECC86 | 641237410 |  | 6.3 | 0.3 | 12 |  | 2.5 | 4.6 | No D | ta | Avail | lable | B9A | TT |  |
| ECC88 | 741236410 |  | 6.3 | 1.2 | 90 |  | 15 | 12.6 | No D | da | Avail | lable | B9A | TT |  |
| ECC89 | 146234117 |  | 6.3 | 1.2 | 90 |  | 15 | 12 | No D | Data | Avai | lable | B9A | TT |  |
| ¢ ECC91 | 672344100 |  | 6 | 0.8 3 | 100 150 |  | 8.5 5 | 5.3 4.5 | 100 100 |  |  | 5.3 5.3 | -B7G | TT |  |
| ECC180 | 641237410 |  | 6.3 | 2 | 150 |  | 9 | 6.4 | 100 |  |  | 6.3 | B9A | TT |  |
| ECC186 | 641227413 |  | 6.3 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  |  | 3.1 | B9A | TT |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grld Volts | Anode Volts | Screen Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| ECC189 | 641327410 |  | 6.3 | 1.2 | 90 |  | 15 | 12.5 | No Da | a Avai | lable | B9A | TT |  |
| ECC230 | 461471230 |  | 6 | 30 | 100 |  | 100 | 6.5 | No Da | a Avai | lable | A08 | TT |  |
| ECC282 | 641227413 |  | 6.3 |  | 100 |  | 11.8 | 3.1 | 100 |  | 3.1 | B9A | TT |  |
| ECC801 | 641227413 |  | 6.3 |  | 250 |  | 10 | 5.5 | 100 |  |  | B9A | TT |  |
| ECC801S | 641227413 |  | 6.3 |  | 250 |  | 10 | 5.5 | 100 |  |  | B9A | TT |  |
| ECC802 | 641227413 |  | 6.3 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2 | B9A | TT |  |
| ECC802S | 641227413 |  | 6.3 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2 | B9A | TT |  |
| ECC803 | 641227413 |  | 6 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.6 | B9A | TT |  |
| ECC803S | 641227413 |  | 6.3 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.6 | B9A | TT |  |
| ECC804 | 641237410 |  | 6.3 | 7.7 | 200 |  | 10 | 3.4 | 100 |  | 3 | B9A | TT |  |
| ECC807 | 147231064 |  | 6.3 | 1.5 | 250 |  | 1.3 | 2.4 | 100 |  | 2.4 | B9A | TT |  |
| ECC808 | 416230714 |  | 6.3 | 1.9 | 250 |  | 1.2 | 1.6 | 100 |  | 1.6 | B9A | TT |  |
| ECC813 | 614227143 |  | 6.3 |  | 250 |  | 14.5 | 5.2 | 100 |  | 5 | B9A | TT |  |
| ECC865 | 641237410 |  | 6.3 | 14 | 200 |  | 8.7 | 6 | 100 |  | 6.5 | B9A | TT |  |
| ECC960 | 672344100 |  | 6.3 | 2.1 | 100 |  | 8.5 | 6 | 100 |  | 6 | B7G | TT |  |
| ECC962 | 672344100 |  | 6.3 | 1.7 | 150 |  | 8.5 | 6 | 100 |  | 6 | B7G | TT |  |
| ECC8100 | 141237416 |  | 6.3 |  | 100 100 |  | 25 25 | 16 20 | No Da | a Avai | lable |  | TT |  |
| ECF1 | 023164570 | G1 | 6.3 | $\left\{\begin{array}{l}3 \\ 2\end{array}\right.$ | 150 250 | 100 | 8 | 2.2 2.5 | 150 100 | 60 100 | 2.6 2.5 | $\}_{8 \mathrm{SC}}$ | TP |  |
| ECF12 | 642371450 |  | 6 | $\{2$ | 100 250 | 100 | 11 5 | 3 | 100 100 | 60 100 | 3 | \}F8 | TP |  |
| ECF80 | 645237114 |  | 6 | $\left\{\begin{array}{l}2 \\ 3\end{array}\right.$ | 100 250 | 200 | $\begin{array}{r} 14 \\ 7 \end{array}$ | 5. | $\begin{aligned} & 100 \\ & 150 \end{aligned}$ | $\begin{array}{r} 60 \\ 150 \end{array}$ | $\begin{aligned} & 5 \\ & 5 \\ & 5 \end{aligned}$ | \}89A | TP |  |
| ECF82 | 645237114 |  | 6 | $\left\{\begin{array}{l}1 \\ 1\end{array}\right.$ | 150 250 | 100 | 18 10 | 8.5 5.2 | 100 100 | 60 100 | $\begin{aligned} & 7 \\ & 5 \end{aligned}$ | $\} \mathrm{B9A}$ | TP |  |
| ECF83 | 146237514 |  | 6.3 | 3.7 | 60 60 | 50 | $3^{6.5}$ | 3.6 1.3 | $\begin{aligned} & 80 \\ & 80 \end{aligned}$ | 60 60 |  | \}B9A | TP |  |
| ECF86 | 141234675 |  | 6 | $\left\{\begin{array}{l}3 \\ 1.2\end{array}\right.$ | 100 200 | 150 | 14 10 | 12.5 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \}B9A | TP |  |
| ECF801 | 141236574 |  | 6.3 | $\left\{\begin{array}{l}3 \\ 1.2\end{array}\right.$ | 100 150 | 100 | 15 | 8.5 10 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | \} B9A | TP |  |
| ECF802 | 141237564 |  | 6.3 | $2{ }^{2}$ | 200 | 100 | 3.5 | 3.5 | 100 | 60 |  | B9A | TP |  |
| ECF802 | 141237564 |  | 6.3 | 1 | 100 | 100 | 6 | 5.5 | 100 | 100 |  |  |  |  |
| ECF804 | 645237114 |  | 6.3 | $\left\{\begin{array}{l}1.5 \\ 2\end{array}\right.$ | 150 150 | 150 | 13.5 7 |  | 100 100 | 60 100 |  | $\}$ B9A | TP |  |
| ECF805 | 657231414 |  | 6.3 | $\left\{\begin{array}{l}3 \\ 1.5\end{array}\right.$ | 100 100 |  | 14 10 |  | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $100$ |  | \} 99 A | TP |  |
|  |  |  |  |  | 100 |  | 14 | 5.5 | 100 |  |  |  |  |  |
| ECF8070 | 141237564 |  | 6.3 |  | 200 | 150 | 10 | 12 | No D | ta Avai | lable |  | TP |  |
| ECH2 | 023164570 | G1 | 6 | $\left\{\begin{array}{l}1 \\ 2.5\end{array}\right.$ | 100 250 | 100 | $\begin{aligned} & 9.5 \\ & 3.2 \end{aligned}$ | 5.5 | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | $\} 8 \mathrm{SC}$ | TH |  |
| ECH3 | 023164570 | G1 | 6 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 250 | 100 | 5 4.8 | 2.4 2.5 | 100 200 | 60 100 |  | \} 8 SC | TH |  |
| ECH3G | 027546310 | G | 6 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 250 | 100 | 5 4.8 | 1.4 2.5 | 100 100 | 60 100 |  | \}A08 | TH |  |
|  |  |  |  | ) 2 | 100 |  | 6.3 | 2.7 | 100 | 60 | 2.2 |  | TH |  |
| ECH4 | 123614570 | G1 | 6 | $\{2$ | 250 | 100 | 6.5 | 2.6 | 100 | 150 | 2.6 |  | H |  |



| VALVE | SELECTOR SWITCH No. |  |  | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts |  | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| ECLL800 | $6472341+5$ |  |  |  |  | 6.3 | 9.0 | 100 |  | 26 | 0.05 | 100 | 60 |  | B9A | TPP |  |
| ED111 | 266 | 6104 | 430 |  | 6.3 | 9.0 | 250 | 250 | 40 | 6.0 8 | 100 No Da | ${ }^{100}$ | lable | B8A |  |  |
| EDD11 | 742 | 2301 | 460 |  | 6 | 8 | 200 |  | 3.5 |  | 200 |  | 3.5 | F8 | TT |  |
| EDD111 | 742 | 2311 | 460 |  | 6 | 8 | 250 |  | 9 | 2.3 | 100 |  | 2.3 | F8 | TT |  |
| EE1 | 023 | 3180 | 560 |  | 6.3 | 2.5 | 250 | 150 | 8 | 14 | No Dat | a Avai | lable | F8 | DP |  |
| EE50 | 256501403$* 41231650$ |  |  |  | 6.3 | 3 | 250 | 250 | 10 | 14 | 250 | 150 | 10 | B9G | P |  |
| EE80 |  |  |  |  | 6.3 |  | 200 | 200 | 10 | 12.5 | No Data$100$ | Available |  |  | ${ }_{P}$ |  |
| EEL71 | 274 | 4554 | 631 |  | 6.3 | 6.5 | 250 | 250 | 24 | 6.5 |  | 100 |  |  | PP |  |
| EEP1 | 023 | 3180 | 560 | G1 | 6.3 | 2.5 | 250 | 150 | 8 | 17 | No Data Available |  |  | 8SC | DP |  |
| EEP71 | 023 | 110 | 560 | G1 | 6 | 3 | 250 | 100 | 8 | 2.2 | 100 | 100 |  | 8SC | P |  |
| EEL171 | 542 | 2654 | 371 |  | 6.3 | $\left\{\begin{array}{r} 12 \\ 2 \end{array}\right.$ | 250 100 | $\begin{array}{r} 250 \\ 50 \end{array}$ | $40$ | 9 | $100$ | $\begin{array}{r} 100 \\ 60 \end{array}$ |  | B8B | PP |  |
| EEL171 | 216 | 000 | 300 | G1 | 6.3 | 12 | 250 | 250 | 40 | 9 | 100 | $100$ |  | B7 | T |  |
| EEL171 | 036 | 080 |  |  | 6.3 | 2 | 100 | 50 | 2 |  | 100 | $60$ |  | ${ }_{\text {A08 }}$ | DT |  |
| EF1 | 023 | 110 | 560 | G1 | 6 | 2 | 250 | 100 | 3 | 2.3 | 100 | 100 | 2.3 |  | P |  |
| EF2 | 023 | 110 |  | G1 | 6 | 2 | 250 | 100 | 4.5 | 2.2 | 100 | 100 | 2.2 | 8SC | P |  |
| EF2S | 023 | 110 | 560 | G1 | 6.3 | 2 | 250 | 100 | 5 | 1.8 | 100 | 100 |  | 8SC |  |  |
| EF3 | 023 | 110 | 560 | G1 | 6 | 2.5 | 250 | 100 | 8 | 1.8 | 100 | 100 | 1.8 | 8SC | P |  |
| EF5 | 023 | 110 | 560 | G1 | 6 | 3 | 250 | 100 | 8 | 1.7 | 100 | 100 | 1.7 | 8SC |  |  |
| EF6 | 023 | 110 | 560 | G1 | 6 | 2 | 250 | 100 | 3 | 2 | 100 | 100 | 2 | 8SC |  |  |
| EF6N | 023 | 110 | 560 | G1 | 6.3 | 2 | 250 | 100 | 3 | 2.1 | 100 | 100 | 2 | 8SC | P | P |
| EF7 | 023 | 110 | 560 | G1 | 6 | 1.5 | 250 | 100 | 3 | 2.1 | 100 | 100 | 2.1 | 8SC | P |  |
| EF8 | 023 | 111 | 560 | G1 | 6 | 2.5 | 250 | 250 | 8 | 1.8 | 100 | 150 | 1.8 | 8SC | P |  |
| EF9 | 023 | 110 | 560 | G1 | 6 | 2.5 | 250 | 100 | 6 | 2.2 | 100 | $100 \cdot$ | 2.2 | 8SC | P |  |
| EF9N | 023 | 110 | 560 | G1 | 6.3 | 2.5 | 250 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | 8SC | P |  |
| EF11 | 602 | 301 | 450 |  | 6 | 2 | 250 | 100 | 6 | 2.2 | 100 | 100 | 2 | F8 | P |  |
| EF12 | 602 | 301 | 450 |  | 6 | 2 | 250 | 100 | 3 | 2.1 | 100 | 100 | 2 | F8 | P |  |
| EF12spec. | 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 | G1 | 6 | , | 250 | 100 | 5 | 1.8 | 100 | 100 | 1.8 | 8SC | P |  |
| EF36 | 026 | 510 | 310 | G1 | 6 | 2 | 250 | 100 | 3 | 1.8 | 100 | 100 | 1.8 | A08 | P |  |
| EF37 | 026 | 510 | 310 | G1 | 6 | 2 | 250 | 100 | 3 | 1.8 | 100 | 100 | 1.8 | A08 | P |  |
| EF37A | 026 | 510 |  | G1 | 6 | 2 | 250 | 100 | 3 | 1.8 | 100 | 100 | 1.8 | A08 | P |  |
| EF38 | 126 | 510 | 310 | G1 | 6 | 2.5 | 250 | 250 | 8 | 1.8 | 100 | 150 | 1.8 | A08 | P |  |
| EF39 | 026 | 510 | 310 | G1 | 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 |  | 250 | 250 | 10 | 9.5 | 100 | 150 | 8 | 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 | 1.5 | 250 | 250 | 10 | 6.5 | 100 | 150 | 6 | B9G | P |  |
| EF51 | 261 | 154 | 130 |  | 6 | 2 | 250 | 250 | 14 | 9.5 | 100 | 150 |  | B8B | P |  |
| EF52 | 261 | 154 | 130 |  | 6 | 2 | 250 | 250 | 10 | 10 | 100 | 150 | 8 | B8G | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | $m A / V$ | Anode Volts: | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| EF53 | 256101403 |  | 6 | 2 | 250 | 250 | 10 | 6.5 | 100 | 150 | 6.5 | B9G | P |  |
| EF54 | 265114113 |  | 6 | 1.7 | 250 | 250 | 10 | 7.7 | 100 | 150 | 7 | B9G | P |  |
| EF55 | 256101403 |  | 6 | 4 | 250 | 150 | 10 | 7 | 100 | 100 | 6 | B9G | P |  |
| EF70 | 412163510 |  | 6 | 2 | 100 | 100 | 3 | 2.5 | 100 | 100 | 2.5 | B8D | P |  |
| EF71 | 412163510 |  | 6 | 2 | 100 | 100 | 13 | 5.5 | 100 | 100 | 4.5 | B8D | P |  |
| EF72 | 412163510 |  | 6 | 1.4 | 100 | 100 | 7 | 5 | 100 | 100 | 5 | B8D | P |  |
| EF73 | 412653160 |  | 6 | 2 | 100 | 100 | 7.5 | 5.5 | 100 | 100 | 5 | B8D | P |  |
| EF74 | 412653160 |  | 6.3 | 1.4 | 100 | 100 | 7 | 3.1 | 100 | 100 | 3 | B8D | P |  |
| EF80 | 141230651 |  | 6 | 2 | 200 | 175 | 10 | 7.2 | 100 | 100 | 6 | B9A | P |  |
| EF81 | 541236000 |  | 6.3 | 2.5 | 250 | 125 | 6 | 2.2 | 100 | 100 |  | B9A | P |  |
| EF82 | *41 230651 |  | 6 | 4.5 | 250 | 250 | 40 | 11 | 100 | 150 | 9 | B9A | P |  |
| EF83 | 501236014 |  | 6.3 | 1.6 | 250 | 50 | 4 | 1.6 | 100 | 100 | 2 | B9A | P |  |
| EF85 | 141230651 |  | 6 | 2 | 250 | 100 | 10 | 6 | 150 | 100 | 5 | B9A | P |  |
| EF86 | 501236014 |  | 6 | 2 | 250 | 150 | 3 | 2.3 | 100 | 100 | 1.8 | B9A | P |  |
| EF87 | 501236014 |  | 6.3 | 2 | 250 | 100 | 3.3 | 1.9 | 100 | 100 |  | B9A | P |  |
| EF88 | 501236014 |  | 6.3 | 2 | 250 | 100 | 7 | 2.1 | 100 | 100 |  | B9A | P |  |
| EF89 | 041230651 |  | 6 | 2 | 250 | 100 | 9 | 3.6 | 250 | 100 | 3.6 | B9A | P |  |
| EF89F | 041230651 |  | 6.3 | 20 | 250 | 100 | 11 | 4.4 | 100 | 100 | 5 | B9A | P |  |
| $\boldsymbol{\xi}$ EF91 | 412361500 |  | 6 | 2 | 250 | 250 150 | 10 4 | 7.6 6.4 | 100 | 150 | 5 | \} 7 7G | P |  |
| EF92 | 412361500 |  | 6 | 2.5 | 250 | 150 | 8 | 6.4 2.5 | 100 | 150 | 2.5 | B7G | P |  |
| EF93 | 412365100 |  | 6 | 1 | 250 | 100 | 11.6 | 4.5 | 150 | 100 | 4 | B7G | P |  |
| EF94 | 412365100 |  | 6 | 1 | 250 | 150 | 10.6 | 5.2 | 100 | 150 | 5.2 | B7G | P |  |
| EF95 | 412365100 |  | 6 | 2.3 | 150 | 150 | 7 | 4.3 | 100 | 100 | 4 | B7G | P |  |
| EF96 | 412365100 |  | 6 | 1.5 | 250 | 150 | 6.5 | 5 | 100 | 100 | 5 | B7G | P |  |
| EF97 | 412365100 |  | 6.3 | 0.7 | 12 | 12 |  |  | No Da | a Avai | lable | B7G | P |  |
| EF98 | 412365100 |  | 6.3 | 1 | 12 | 12 | 4.8 | 3 | No Da | a Avai | lable | B7G | P |  |
| EF111 | 612350140 |  | 6.3 | 2 | 250 | 75 | 6 | 2.2 | No Da | ta Avai | lable | F8 | P |  |
| EF112 | 612350140 |  | 6.3 | 2 | 250 | 100 | 3 | 2.1 | 100 | 100 |  | F8 | P |  |
| EF172 | 112540360 |  | 6.3 | 2 | 250 | 100 | 5 | 3 | 100 | 100 |  | B8A | P |  |
| EF174 | 112540360 |  | 6.3 | 3.5 | 200 | 200 | 12 | 9 | 100 | 100 |  | B8A | P |  |
| EF175 | 112540360 |  | 6.3 | 2.1 | 250 | 100 | 12 | 4.5 | 100 | 100 |  | B8A | P |  |
| EF183 | 141230651 |  | 6 | 2 | 200 | 90 | 12 | 12.5 | No D | ta Avai | lable | B9A | P |  |
| EF184 | 141230651 |  | 6.3 | 2.5 | 200 | 200 | 10 | 15 | No D | ta Avai | lable | B9A | P |  |
| EF186 | 641230651 |  | 6.3 | 0.5 | 200 | 50 |  |  | 100 | 60 |  | B9A | P |  |
| EF190 | 412365100 |  | 6.3 | 2 | 200 | 150 | 9.5 | 6.2 | 100 | 100 |  | B7G | P |  |
| EF410 | $26 * * 54130$ |  | 6.3 | 2 | 250 | 100 | 6 | 2.7 | 100 | 100 |  | B8A | P |  |
| EF730 | 562603160 |  | 6.3 | 1 | 100 | 100 | 5.3 | 3.2 | 100 | 100 | 3.5 | B8D | P |  |
| EF731 | 412163510 |  | 6.3 |  | 100 | 100 | 7.2 | 4.5 | 100 | 100 | 4.5 | B8D | P |  |
| EF732 | 412163510 |  | 6.3 | 1.5 | 100 | 100 | 7.5 | 5 | 100 | 100 | 5 | B8D | P |  |
| EF734 | 412163510 |  | 6.3 | 1.5 | 100 | 100 | 7.5 | 5 | 100 | 100 | 5 | B8D | P |  |
| EF762 | 412163510 |  | 6.3 | 1.5 | 100 | 100 | 7.5 | 5 | 100 | 100 | 5 | B8D | P |  |
| EF800 | 141230651 |  | 6.3 | 2 | 200 | 175 | 10 | 7.2 | 100 | 100 |  | B9A | P |  |
| EF802 | $14123 * 65^{*}$ |  | 6.3 | 1.8 | 200 | 175 | 12 | 8 | 100 | 100 |  | B9A | P |  |
| EF804 | 101230654 |  | 6.3 | 2 | 250 | 150 | 3 | 2 | 100 | 100 |  | B9A | P |  |
| EFP804S | $\begin{array}{lll}101 & 230 & 654 \\ 141 & 230 & 651\end{array}$ |  | 6.3 6.3 | 1.8 | 250 250 | 150 75 | 3 8 | 2 5.7 | 100 100 | 100 80 |  | $\begin{aligned} & \text { B9A } \\ & \text { B9A } \end{aligned}$ | P $\mathbf{P}$ |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Voles | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | $m A / V$ | Anode Volts | Screen Voles | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| EF806S | 501236014 |  | 6.3 |  | 250 | 150 | 3.2 | 2 | 100 | 100 |  | B9A | $p$ |  |
| EF811 | 141235680 |  | 6.3 | 1.5 | 200 | 90 | 11.5 | 12.5 | No D | ta Avai | lable | B9A | ${ }_{\text {P }}$ |  |
| EF812 | 141230651 |  | 6.3 | 1.8 | 150 | 150 | 10 |  | 100 | 100 | lable | B9A | PP |  |
| EF814 | 141230651 |  | 6.3 | 1.9 | 150 | 150 | 10 |  | 100 | 100 |  | B9A | P |  |
| EF860 | 141230651 |  | 6.3 |  | 250 | 250 | 10 | 6.8 | 100 | 100 |  | B9A | $\begin{aligned} & P \\ & P \end{aligned}$ |  |
| EF861 | 141230615 |  | 6.3 | 1.1 | 200 | 150 | 13 | 16.5 | No | ta Avai | lable | B9A | P |  |
| EF866 | 501236014 |  | 6.3 | 2 | 250 | 150 | 3 | 2 | 100 | 100 | 2 | B9A | P |  |
| EF905 | 412365100 |  | 6.3 | 2 | 150 | 125 | 7.5 | 5 | 100 | 100 |  | B7G | P |  |
| EF8010 | 141230651 |  | 6.3 | 2 | 200 | 100 | 12 | 12.5 | No D | ta Avai | ilable | B9A | P |  |
| EF8200 | 141235615 |  | 6.3 |  | 200 | 150 | 22 | 35 | No D | ta Avai | ilable | B9A | P |  |
| EFF50 | 265414573 |  | 6 | 2 | 250 | 200 | 6 | 8 | 100 | 150 | 7 | B9G | PP |  |
| EFF51 | 265414573 |  | 6 | 2 | 250 | 200 | 6 | 8 | 100 | 150 | 7 | B9G | PP |  |
| EFM1 | 023114560 |  | 6 | 2 | 250 | 100 | 1.3 |  | No D | ta Avai | lable | 8SC | 1 P |  |
| EFP20 | 256145130 |  | 6.3 | 2 | 250 | 200 | 5 | 12 | 100 | 100 |  | B8G | P |  |
| EFP60 | 214156163 |  | 6.3 | 2 | 250 | 150 | 20 | 25 | 100 | 100 |  | B9G | P |  |
| EG420 | 802300000 |  | 4 |  |  |  | 120 |  | REC |  | 30mA | B4 | R |  |
| EH1 | 023145560 | G1 | 6 | 2 | 250 | 80 | 3 | 1.8 | 200 | 75 | 1.8 | 8SC | P |  |
| EH2 | 023115560 | G1 | 6 | 3 | 250 | 100 | 4.2 | 1.4 | 100 | 100 | 1.4 | 8SC | P |  |
| EH90 | 412365100 |  | 6.3 | 1 | 100 | 30 | 1 | 1.1 | No D | ta Avai | lable | B7G | H |  |
| EH900 | 412365100 |  | 6.3 |  | 150 | 80 | 1 | 1.1 | 100 | 90 |  | B7G | H |  |
| EH900S | 412365100 |  | 6.3 | 10 | 150 | 75 | 0.2 |  | 100 | 60 |  | B7G | H |  |
| EK1 | 123164570 | G1 | 6 | $\{1.5$ | 90 250 | 75 | 2.6 |  | 80 100 |  |  | \} 8 SC | 0 |  |
| EK2 | 023154560 | G1 | 6 | 2 | 250 | 75 | 2.8 | 1.8 | 100 | 60 | 2.1 | 8SC | 0 |  |
| EK2G | 026545310 |  | 6.3 | 2 | 250 | 75 | 2.7 | 1.8 | 100 | 60 | 2.1 | A08 | 0 |  |
| EK3 | 023154560 | G1 | 6 | 2 | 100 | 60 | 11 | 3.8 | 100 | 60 | 3.8 | 8SC | 0 |  |
| EK32 | 026545310 | G1 | 6 | 2 | 250 | 75 | 1.5 | 1.5 | 100 | 60 | 2.1 | A08 | 0 |  |
| EK90 | 412366100 |  | 6 | 2 | 100 |  | 11 | 7 | 100 |  | 5 | B7G | H |  |
| EL1 | 023100560 | G1 | 6 | 18.5 | 250 | 250 | 32 | 2.6 | 100 | 150 | 2.6 | 8SC | P |  |
| EL2 | 023100560 | G1 | 6 | 18 | 250 | 250 | 32 | 2.8 | 100 | 150 | 2.8 | 8SC | P |  |
| EL3 | 023104560 |  | 6 | 6 | 250 | 250 | 36 | 9 | 100 | 150 | 9 | 8SC | P |  |
| EL3/375 | 023104560 |  | 6.3 | 6 | 250 | 250 | 36 | 9 | 100 | 150 | 8 | 8SC | P |  |
| EL3/425 | 023104560 |  | 6.3 | 15.6 | 400 | 300 | 25 | 3 | No D | ta Avai | ilable | 8SC | P |  |
| EL3N | 023104560 |  | 6.3 | 6 | 250 | 250 | 36 | 9 | 100 | 150 | 8 | 8SC | P |  |
| EL3NG | 023104560 |  | 6.3 | 6 | 250 | 250 | 36 | 9 | 100 | 100 |  | 8SC | P |  |
| EL3NG | 026540310 |  | 6.3 | 6 | 250 | 250 | 36 | 9 | 100 | 150 | 8 | A08 | P |  |
| EL5 | 023104560 |  | 6 | 14 | 250 | 275 | 72 | 8.5 | 100 | 150 | 8.5 | 8SC | P |  |
| EL5/375 | 023140560 |  | 6.3 | 14 | 250 | 275 | 72 | 8.5 | No D | ta Avai | ilable | 8SC | P |  |
| EL5/600 | 023114500 | A. 1 | 6.3 |  | 250 | 275 | 72 | 8.5 | 100 | 150 | 8.5 | 8SC | P |  |
| EL5G | 026540310 |  | 6.3 | 14 | 250 | 275 | 72 | 8.5 | 100 | 150 | 8.5 | A08 | P |  |
| EL6 | 023104560 |  | 6 | 4 | 250 | 250 | 72 | 14.5 | 100 | 150 | 10 | 8SC | P |  |
| EL6/435 | 023104560 |  | 6.3 | 7.5 | 250 | 250 | 20 | 5.5 | 100 | 100 |  | 8SC | P |  |
| EL6spec. | 023104560 |  | 6.3 | 7 | 250 | 250 | 72 | 14.5 | 100 | 150 | 10 | 8SC | P |  |
| EL8 | 023104560 |  | 6.3 | 7.5 | 250 | 250 | 20 | 5.5 | 100 | 150 |  | 8SC | P |  |
| EL11 | 602301450 |  | 6 | 6 | 250 | 250 | 36 | 9 | 100 | 150 | 7 | F8 | P |  |
| EL11N | 602301450 |  | 6.3 | 6 | 250 | 250 | 36 | 9 | 100 | 150 | 7 | F8 | P |  |
| EL12 | 602301450 |  | 6 | 7 | 250 | 250 | 72 | 15 | No | ta Ava | ilable | F8 | P |  |



| VALVE | SELECTOR SWITCH No. |  |  | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts |  | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| EL171 | 102 | 2541 | 360 |  |  | 6.3 | 12 | 250 | 250 | 40 | 9 | No Da | a Avail | lable | B8A | P |  |
| EL172 | 102 | 2541 | 360 |  | 6.3 | 7 | 250 | 250 | 72 | 15 | No Da | a Avail | lable | B8A | P |  |
| EL180 | 141 | 1223 | 651 |  | 6.3 | 2 | 250 | 150 | 25 | 12 | 100 | 100 |  | B9A | P |  |
| EL183 | 141 | 1226 | 513 |  | 6.3 | 2.1 | 200 | 200 | 40 | 25 | No Da | a Avail | lable | B9A | P |  |
| EL300 | 521 | 1441 | 350 |  | 6.3 | 22.5 | 200 | 150 | 100 | 10 | No Da | a Avail | lable | B8A | P |  |
| EL360 | *2* | * 540 | 310 | A1 | 6.3 | 7.7 | 100 | 100 | 100 | 14 | No Da | a Avail | lable | A08 | P |  |
| EL500 | 441 | 1235 | 51* | A1 | 6.3 | 20 | 150 | 150 | 70 | 10 | No Da | a Avail | lable | B9A | $P$ |  |
| EL803 | 541 | 1231 | 600 |  | 6.3 | 3.5 | 200 | 200 | 36 | 10 | 100 | 100 |  | B9A | P |  |
| EL803S | 641 | 321600 | 600 |  | 6.3 |  | 200 | 200 | 32 | 10 | No Da | a Avail | lable | B9A | P |  |
| EL804 | 041 | 1230 | 005 | A1 | 6.3 | 12 | 200 | 175 | 70 | 10 | 100 | 100 |  | B9A | P |  |
| EL820 | *41 | $123 *$ | *51 | A1 | 6 | 38.5 | 250 | 250 | 32 | 4.6 | 100 | 150 | 4 | B9A | P |  |
| EL821 | *41 | $123 *$ | 651 |  | 6 | 4.5 | 250 | 250 | 40 | 11 | 100 | 1501 | 10 | B9A | P |  |
| EL822 | * 41 | 1 23* | 651 |  | 6 | 2.5 | 250 | 150 | 40 | 13 | 100 | 100 | 10 | B9A | P |  |
| EL861 | 041 | 1230 | 651 |  | 6.3 |  | 200 | 200 | 20 | 11 | No D | a Avail | lable | B9A | P |  |
| EL863 | 541 | 1231 | 600 |  | 6.3 | 5.5 | 250 | 250 | 36 | 11 | No Da | a Avail | lable | B9A | P |  |
| EL3010 | 231 | 145 | 210 | A1 | 6.3 |  | 350 | 100 | 100 | 60 | No D | a Avail | lable | A08 | P |  |
| EL8000 | 141 | 1235 | 615 |  | 6.3 |  | 250 | 250 | 48 | 50 | No D | a Avail | lable | B9A | P |  |
| ELL1 | 423 | 174 | 560 |  | 6 | 20 | 250 | 250 | 15 | 1.7 | 100 | 150 | 1.8 | 8SC | PP |  |
| ELL80 | 546 | 234 | 175 |  | 6.3 | 9.0 | 250 | 250 | 24 | 6.0 | 100 | 100 |  | B9A | PP |  |
| ELP71 | 023 | 3104 | 560 |  | 6 | 7 | 250 | 250 | 36 | 9 | 100 | 150 |  | 8SC | P |  |
| ELP72 | 023 | 3100 | 560 | G1 | 6 | 17 | 250 | 250 | 36 | 2.5 | 100 | 150 |  | 8 SC | P |  |
| ELP73 | 023 | 10056 | 560 | G1 | 6 | 17 | 250 | 250 | 36 | 2.5 | 100 | 150 |  | 8SC | P |  |
| EMG1 | 452 | 2361 | 100 |  | 6.3 | 4.5 | 20 | 20 | 7 | 4 | No Da | a Avail | lable | B7G | P |  |
| EQ80 | 541 | 236 | 114 |  | 6 | , | 250 | 20 | 0.9 | 0.7 | No Da | a Avail | lable | B9A | N |  |
| ER4 | 002 | 300 | 000 | D1 | 4 |  |  |  | 3 |  | D |  |  | B4 | D |  |
| EW60 | 280 | 0000 | 103 |  | 6 |  |  |  | 120 |  | REC |  | 30 mA | B9G | R |  |
| EY51 | 023 | 3000 | 000 | D1 | 6 |  |  |  |  |  | D |  |  | B3G | D |  |
| EY70 | 082 | 213 | 080 |  | 6 |  |  |  | 30 |  | REC |  | 17 mA | B8D | R |  |
| EY80 | **1 | 1 23* | **8 |  | 6 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| EY81 | *** | * 23* | **8 | C | 6.3 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| EY82 | **1 | 1 23* | **8 |  | 6.3 |  |  |  | 180 |  | REC |  | 50 mA | B9A | R |  |
| EY83 | *** | * 23* | **8 | C | 6.3 |  |  |  |  |  | D |  |  | B9A | D |  |
| EY84 | **1 | 1 23* | *** | D1 | 6 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |
| EY86 | 23* | * 232 | *32 | D1 | 6 |  |  |  |  |  | D |  |  | B9A | D |  |
| EY87 | 23* | * 232 | *32 | D1 | 6.3 |  |  |  |  |  | D |  |  | B9A | D |  |
| EY88 | *** | * 23* | **8 | C1 | 6.3 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| EY89 | **1 | 1 23* | **8 |  | 6.3 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |
| EY91 | 812 | 2380 | 000 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | B7G | R |  |
| EY92 | 002 | 360 | 100 |  | 6.3 |  |  |  | 60 |  | REC |  | 15 mA | B7G | R |  |
| EY3000 | 023 | 3100 | 000 | D1 | 6.3 |  |  |  | 120 |  | REC |  | 20 mA | 8SC | R |  |
| EY3000N | 023 | 3100 | 000 | D | 6.3 |  |  |  | 120 |  | REC |  | 30 mA | 8SC | R |  |
| EYY13 | 230 | -238 | 090 |  | 6.3 |  |  |  | 120 |  | REC |  | 30 mA | F8 | RR |  |
| EZ1 | 023 | 180 | 090 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | 8SC | RR |  |
| EZ2 | 023 | 3180 | 090 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | 8 SC | RR |  |
| EZ3 | 023 | 3180 | 090 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | RR |  |
| EZ4 | 023 | 3180 | 090 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | RR |  |
| EZ11 | 902 | 2300 | 180 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | F8 | RR |  |




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| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen | ma/V |  |  |  |
| G/6132 | *41 230651 |  | 6 | 4.5 | 250 | 250 | 40 | 11 | 100 | 150 | 9 | B9A | P |  |
| G/6157 | **1 23**** | D1 | 6 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |
| G/6158 | 744226413 |  | 6 | 4.6 | 250 |  | 6 | 2.3 | 100 |  | 2.3 | B9A | TT |  |
| G/6180 | 461471230 |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| G/6443 | **1 $23 * * * *$ | D1 | 6 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |
| G/6516 | 412360500 |  | 6 | 12.5 | 250 | 250 | 16 | 2.6 | 100 | 150 | 2.6 | B7G | P |  |
| GG1 | 288009930 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B8B | RR |  |
| GN24 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| GR4 | 892300000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | RR |  |
| QGT1C | 642310000 |  | 4 |  | 200 |  | 48 | 3K | No Data | Avail | lable | B5 | THY |  |
| GY11 | 333022200 | D1 | 2.5 |  |  |  | 30 |  | REC |  | 15 mA | F8 | R |  |
| GZ30 | 020908030 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| GZ31 | 020908030 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| GZ32 | 030809020 |  | 5(5.7) |  |  |  | 60 |  | REC |  | 50 mA | A08 | RR |  |
| GZ33 | 030809020 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| G234 | *30 809020 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| GZ37 | 030908020 |  | 5(5.7) |  |  |  | 120 |  | REC |  | 40 mA | A08 | RR |  |
| GZ40 | 28***9 130 |  | 5 |  |  |  | 30 |  | REC |  | 17 mA | B8A | RR |  |
| GZ41 | 28***9 130 |  | 5 |  |  |  | 30 |  | REC |  | 26 mA | B8A | RR |  |
| H2 | 642300000 |  | 2 | 1 | 150 |  | 2.5 | 0.8 | 150 |  | 0.8 | B4 | T |  |
| H2D | 682390000 | G1 | 2 | 1.5 | 150 |  | 3.5 | 1.3 | 100 |  | 1.3 | B5 | DDT |  |
| H4 | 642300000 |  | 4 | 4 | 150 |  | 4 | 1.3 | 125 |  | 1.3 | B4 | T |  |
| H4D | 216809300 | G1 | 4 | 3 | 200 |  | 4.5 | 2.7 | 100 |  | 2.5 | B7 | DDT |  |
| H4D | 809231600 | G1 | 4 | 2.5 | 200 |  | 5.5 | 2.7 | 150 |  | 2.7 | B7 | DDT |  |
| H12 | 642300000 |  | 2 | 1.3 | 100 |  | 0.6 | 1 | 100 |  | 1.2 | SM4 | T |  |
| H13 | 023100060 | G1 | 13 | 4 | 200 |  | 6 | 2.5 | 100 |  | 2.5 | A08 | T |  |
| H20 | 642310000 |  | 20 | 1.6 | 200 |  | 0.2 | , | 100 |  | 1 | B5 | T |  |
| H30 | 000231600 | G1 | 13 | 1.5 | 250 |  | 7.5 | 6 | 100 |  | 6 | B7 | T |  |
| H42 | OCS 231600 | G1 | 4 | 2 | 250 |  | 1 | 1.5 | 200 |  | 1.7 | B7 | T |  |
| H42 | 216000300 | G1 | 4 | 2 | 250 |  | 1 | 1.5 | 100 |  | 1.5 | B7 | T |  |
| H63 | 020600310 | G1 | 6.3 | 2 | 250 |  | 1 | 1.6 | 100 |  | 1.5 | A08 | T |  |
| H141D | 206080030 | G1 | 1.4 | 1 | 90 |  | 0.1 | 0.2 | 80 |  | 0.2 | M08 | DT |  |
| H210 | 642300000 |  | 2 | 3 | 150 |  | 1.1 | 1.1 | 100 |  | 1.1 | B4 | T |  |
| H406D | 542300000 | A1 | 4 | 1.5 | 200 | 75 | 4 | 0.8 | 100 | 80 |  | B4 | P |  |
| H407spec. | 642300000 |  | 4 | 9 | 150 |  | 3.5 | 0.9 | 100 |  | 0.9 | B4 | T |  |
| H410D | 642300000 | A1 | 4 | 1.5 | 200 | 75 | 3.5 | 0.8 | 100 | 75 |  | B5 | P |  |
| H412 | 642300000 |  | 4 | 9 | 150 |  | 5 | 1.2 | 125 |  | 1.2 | B4 | T |  |
| H607 | 642300000 |  | 6 | 1 | 100 |  |  | 0.4 | 100 |  | 0.4 | B4 | T |  |
| H1818D | 542310000 | A1 | 20 | 2 | 200 | 100 | 3 | 2 | 100 | 100 |  | B5 | P |  |
| H19180 | 542310000 | A1 | 20 | 2 | 200 | 60 | 4 | 1 | 100 | 60 |  | B5 | P |  |
| H2018D | 542310000 | A1 | 20 | 2 | 200 | 60 | 4 | 1 | 100 | 60 |  | B5 | P |  |
| H2518D | 542310000 | A1 | 20 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | B5 | P |  |
| H2618D | 542310 OCO | A1 | 20 | 2.5 | 250 | 100 | 5 | 2 | 100 | 100 |  | B5 | $\stackrel{\mathrm{P}}{\mathrm{p}}$ |  |
| H4080D | 542310000 | A1 | 4 | 1.5 | 200 | 75 | 4 | 2.5 | 100 | 100 |  | B5 | P |  |
| H4111D | 542310000 | A1 | 4 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | B5 | P |  |
| H4115D | 542310000 | A1 | 4 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | B5 | P |  |
| H4125D | 542310000 | A1 | 4 | 2 | 200 | 100 | 6 | 1 | 100 | 100 |  | B5 | P |  |


| VALVE | SELECTOR SWITCH No. |  | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Neg. Grid Valks |  | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| H4128D | 542 | 310000 |  | A1 | 4 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | B5 | P |  |
| H4129D | 542 | 310000 | A1 | 4 | 2.5 | 250 | 100 | 5 | 2 | 100 | 100 |  | B5 | P |  |
| HaA91 | 182 | 310900 |  | 12 |  |  |  |  |  | D |  |  | B7G | DD |  |
| HABC80 | $8+1$ | 239146 |  | 19 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.3 | B9A | DDDT |  |
| HAD | 908 | 231600 | G1 | 13 | 2.5 | 200 |  | 3.3 | 2 | 150 |  | 2 | B7 | DDT |  |
| HBC90 | 412 | 389600 |  | 12.5 | 3 | 250 |  | 1 | 1.2 | 100 |  | 1.2 | B7G | DDT |  |
| HBC91 | 412 | 389600 |  | 12.5 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.2 | B7G | DDT |  |
| HCH81 | 541 | 237464 |  | 12.6 | $\{2.5$ | 100 250 | 90 | 4 3 | 2 0.6 | 100 100 | $\begin{aligned} & 60 \\ & 90 \end{aligned}$ | $\left.\begin{array}{l} 2 \\ 0.6 \end{array}\right\}$ | B9A | TH |  |
| HD2 | 542 | 300000 |  | 2 | 5 | 200 |  | 5 | 1 | 150 |  | 1 | B4 | T |  |
| HD2 | 682 | 390000 | G1 | 2 | 2.5 | 150 |  | 3.5 | 1.3 | 100 |  |  | B5 | DDT |  |
| HD14 | 436 | 080200 | G1 | 1.4 |  | 90 |  | 0.1 | 0.2 | 100 |  | 0.2 | A08 | DT |  |
| HD21 | 682 | 390000 | G1 | 2 | 1.5 | 150 |  | 1.8 | 1.5 | 150 |  | 1.5 | B5 | DDT |  |
| HD22 | 682 | 390000 | G1 | 2 | 3 | 150 |  | 1.8 | 1.5 | 100 |  | 1.5 | B5 | DDT |  |
| ED23 | 682 | 390000 | G1 | 2 | 1 | 150 |  |  | 1 | 125 |  | 1 | B5 | DDT |  |
| HD23 | 862 | 390000 | G1 | 2 | 2 | 150 |  | 1 | 1.4 | 100 |  | 1.4 | B5 | DDT |  |
| HD24 | 682 | 390000 | G1 | 2 | 1.5 | 150 |  | 0.8 | 1 | 100 |  | 1.4 | B5 | DDT |  |
| HD30 | 524 | 4332600 |  | 1.2 | 75 | 150 | 125 |  | 1.7 | No Da |  | lable | B7G | P |  |
| HD93 | 23* | * 232 *32 | D1 | 1.2 |  |  |  |  |  | D |  |  | B9A | D |  |
| HD96 | 021 | 040310 | A1 | 25 | 22.5 | 250 | 150 | 55 | 5.5 | 100 | 100 |  | A08 | P |  |
| HF61 | 26* | *54 130 |  | 6.3 | 2.6 | 250 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | B8A | P |  |
| HF62 | 260 | 154130 |  | 6.3 | 2 | 250 | 250 | 10 | 9 | 100 | 150 | 8 | B8A | P |  |
| HF85 | 141 | 230651 |  | 12.5 | 2.3 | 200 | 125 | 11.4 | 6.1 | 100 | 90 |  | B9A | P |  |
| HF93 | 412 | 365100 |  | 12.5 | 1 | 250 | 100 | 11 | 4.4 | 100 | 100 | 4.3 | B7G | P |  |
| HF94 | 412 | 365100 |  | 12.5 | 1 | 250 | 250 | 10.6 | 5.2 | 100 | 100 | 3.9 | B7G | P |  |
| HF121 | 26* | * 054130 |  | 12.5 | 3 | 200 | 125 | 1.2 | 2.3 | 100 | 100 | 2 | B8A | P |  |
| HK90 | 412 | 2366100 |  | 12.5 | 2 | 100 |  | 11 | 7 | 100 |  | 5 | B7G | H |  |
| HL2 | 642 | 300000 |  | 2 | 1.5 | 150 |  | 2.2 | 1.5 | 150 |  | 1.5 | B4 | T |  |
| HL2 | 023 | 004060 |  | 2 | 1.5 | 150 |  | 2.2 | 1.5 | 150 |  | 1.5 | 8SC | T |  |
| HL2K | 642 | 300000 |  | 2 | 1.5 | 150 |  | 2.2 | 1.5 | 150 |  | 1.5 | B4 | T |  |
| HL2S | 023 | 004060 |  | 2 | 1.5 | 150 |  | 2.2 | 1.5 | 150 |  | 1.5 | 8SC | T |  |
| HL3 | 206 | 040030 |  | 2 | 1.5 | 125 |  | 0.5 | 1.5 | 125 |  | 1.5 | M08 | T |  |
| HL4 | 642 | 310000 |  | 4 | 4.5 | 250 |  | 5 | 3.5 | 150 |  | 3.5 | B5 | T |  |
| HL4+ | 642 | 310000 |  | 4 | 4.5 | 250 |  | 5 | 4.9 | 100 |  | 5 | B5 | T |  |
| HL4G | 000 | 231600 | G1 | 4 | 4.5 | 250 |  | 5 | 3.5 | 150 |  | 3.5 | B7 | T |  |
| HL4GS | 023 | 100060 | G1 | 4 | 4.5 | 250 |  | 5 | 3.5 | 150 |  | 3.5 | 8SC | T |  |
| HL13 | 023 | 100060 | G1 | 13 | 3.7 | 200 |  | 5 | 3.3 | 150 |  | 3 | 8SC | T |  |
| HL13 | 000 | 231600 | G1 | 13 | 2.7 | 200 |  | 6 | 3.5 | 150 |  | 4 | B7 | T |  |
| HL13C | 000 | 231600 | G1 | 13 | 3.7 | 200 |  | 5 | 3.3 | 150 |  | 4 | B7 | T |  |
| HL13G | 023 | 3004060 | G1 | 13 | 5.5 | 250 |  | 6 | 2.5 | 150 |  | 2.5 | 8SC | T |  |
| HL13S | 023 | 100060 | G1 | 13 | 3 | 200 |  | 6 | 3.5 | 150 |  | 3.5 | 8SC | T |  |
| HL21 | 642 | 300000 |  | 2 | 3 | 150 |  | 1.7 | 1.5 | 125 |  | 1.5 | B4 | T |  |
| HL21DD | 682 | 390000 | G1 | 2 | 2 | 150 |  | 2 | 1.3 | 125 |  | 1.3 | B5 | DDT |  |
| HL22 | 206 | 040030 |  | 2 | 2 | 150 |  | 2 | 1.3 | 125 |  | 1.3 | M08 | T |  |
| HL22DD | 206 | 080930 | G1 | 2 | 2 | 150 |  | 2 | 1.3 | 125 |  | 1.3 | M08 | DDT |  |
| HL23 | 206 | 040030 |  | 2 | 1.5 | 150 |  | 1.5 | 1.2 | 100 |  | 1.2 | M08 | T |  |
| HL23DD | 206 | 080930 | G1 | 2 | 1.5 | 150 |  | 0.6 | 1.2 | 100 |  | 1.2 | M08 | DDT |  |

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| VALVE | SELECTOR SWITCH No. | T.C. |  | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Vf Neg. <br>  <br>  <br>  <br>  <br> Grid <br> Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | $\begin{aligned} & \text { Screen } \\ & \text { Volts } \end{aligned}$ | mav |  |  |  |
| HL41 | 216040030 |  | 4 | 3.1 | 250 |  | 2.2 | 3.4 | 150 |  | 3.1 | M08 | T |  |
| HL41DD | 216090830 | G1 | 4 | 3.1 | 250 |  | 2.2 | 2.6 | 100 |  | 2.4 | M08 | DDT |  |
| HL42DD | 216090830 | G1 | 4 | 0.2 | 200 |  | 2.8 | 2.9 | 100 |  | 2.5 | M08 | DDT |  |
| HL84 | *41 23* 6*5 |  | 30 | 12.5 | 200 | 175 | 70 | 10 | 100 | 100 |  | B9A | P |  |
| HL90 | 412365400 |  | 19 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | B7G | P |  |
| HL92 | 142345600 |  | 50 | 7.5 | 150 | 125 | 49 | 7.5 | 100 | 100 | 7 | B7G | P |  |
| HL94 | 142345600 |  | 30 | 6.7 | 100 | 100 | 43 | 9.2 | 100 | 100 | 9.2 | B7G | P |  |
| HL133 | 216000030 | G1 | 13 | 3.3 | 200 |  | 6 | 2.9 | 200 |  | 2.9 | M08 | T |  |
| HL133DD | 216090830 | G1 | 13 | 2.5 | 200 |  | 1.5 | 2.5 | 150 |  | 2.3 | M08 | DDT |  |
| HL134DD | 216080930 | G1 | 13 | 5 | 250 |  | 7 | 2.5 | 100 |  | 2.5 | M08 | DDT |  |
| HL135 | 023100060 | G1 | 13 | 3 | 200 |  | 6 | 3.5 | 150 |  | 3.5 | 8SC | T |  |
| HL210 | 642300000 |  | 2 | 1 | 100 |  | 1.1 | 0.7 | 100 |  | 1 | B4 | T |  |
| HL410 | 642300000 |  | 4 | 6 | 150 |  | 1.2 | 0.8 | 150 |  | 0.8 | B4 | T |  |
| HL607 | 642300000 |  | 6 | 1 | 100 |  |  | 1 | 100 |  | 1 | B4 | T |  |
| HL 1320 | 000231600 | G1 | 13 | 3.3 | 200 |  | 6 | 3 | 150 |  | 3 | B7 | T |  |
| HLA1 | 642310000 |  | 4 | 1 | 200 |  | 5 | 8 | 200 |  | 7 | B5 | T |  |
| HLA2 | 642310000 |  | 4 | 2.5 | 200 |  | 6 | 5.5 | 150 |  | 5.5 | B5 | T |  |
| HLB1 | 642300000 |  | 2 | 3 | 150 |  | 2 | 1.5 | 100 |  | 1.5 | B5 | T |  |
| HL/DD1320 | 809231600 | G1 | 13 | 3 | 200 |  | 4.3 | 1.9 | 100 |  | 1.9 | B7 | DDT |  |
| HM2O | 642310000 |  | 20 | 3.3 | 250 |  | 6 | 2.5 | 100 |  | 2.3 | B5 | T |  |
| HN309 | 641237154 |  | 12 | $\left\{\begin{array}{l}2 \\ 9\end{array}\right.$ | 250 150 | 150 | $24^{2.8}$ | 2.2 5.6 | 100 150 | $\begin{array}{r} 60 \\ 150 \end{array}$ | $\left.\begin{array}{l} 2 \\ 5.6 \end{array}\right\}$ | B9A | TP |  |
| HP2 | 446230700 |  | 2 | 1 | 150 |  | 8.5 |  | 125 |  |  | B7 | TT |  |
| HP13 | 061231500 | G1 | 13 | 1 | 250 | 100 | 8 | 3.5 | 250 | 100 | 3.5 | B7 | P |  |
| HP13S | 023110560 | G1 | 13 | 1 | 250 | 100 | 8 | 3.5 | 250 | 100 | 3.5 | 8SC | P |  |
| HP210 | 542300000 | A1 | 2 | 1.5 | 150 | 150 | 1.9 | 1.9 | 150 | 150 | 1.9 | B4 | P |  |
| HP210 | 041230500 | A1 | 2 | 1.5 | 150 | 150 | 1.9 | 1.9 | 150 | 150 | 1.9 | B7 | P |  |
| HP210C | 041230500 | A1 | 2 | 1 | 150 | 150 | 1.9 | 1.9 | 150 | 150 | 1.9 | B7 | P |  |
| HP210NC | 542300000 | A1 | 2 | 1 | 150 | 150 | 1.9 | 1.9 | 150 | 150 | 1.9 | B4 | P |  |
| HP210NC | 041230500 | A1 | 2 | 1 | 150 | 150 | 1.9 | 1.9 | 150 | 150 | 1.9 | B7 | P |  |
| HP211 | 041230500 | A1 | 2 | 1 | 150 | 150 | 2.6 | 1.7 | 150 | 150 | 1.7 | B7 | P |  |
| HP211C | 041230500 | A1 | 2 | 1 | 150 | 150 | 2.6 | 1.7 | 150 | 150 | 1.7 | B7 | P |  |
| HP211C | 542300000 | A1 | 2 | 1 | 150 | 150 | 2.6 | 1.7 | 150 | 150 | 1.7 | B4 | P |  |
| HP215 | 542300000 | A1 | 2 | 1.5 | 150 | 80 | 1.5 | 1.2 | 150 | 75 | 1.2 | B4 | P |  |
| HP215 | 041230500 | A1 | 2 | 1.5 | 150 | 80 | 1.5 | 1.2 | 150 | 75 | 1.2 | B7 | P |  |
| HP415 | 041231500 | A1 | 4 | 2 | 250 | 100 | 8 | 2.7 | 100 | 100 | 2.7 | B7 | P |  |
| HP1018 | 160152300 | G1 | 10 | 3 | 250 | 100 | 2.3 | 1.3 | 100 | 150 | 1.3 | B7 | P |  |
| HP1118 | 160152300 | G1 | 10 | 3 | 250 | 100 | 8.2 | 1.6 | 100 | 100 | 1.6 | B7 | P |  |
| HP2018 | 542310000 | A1 | 20 | 2 | 200 | 100 | 4 | 3.5 | 100 | 100 | 3.5 | B5 | P |  |
| HP2018 | 041231500 | A1 | 20 | 2 | 200 | 100 | 4 | 3.5 | 200 | 100 | 2.5 | B7 | P |  |
| HP2118 | 041230500 | A1 | 20 | 2 | 200 | 100 | 5 | 3.5 | 100 | 100 | 3.5 | B7 | P |  |
| HP2118 | 542310000 | A1 | 20 | - 2 | 200 | 100 | 5 | 3.5 | 100 | 100 | 2.5 | B5 | P |  |
| HP4100 | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 3.5 | 100 | 100 | 3.5 | B5 | P |  |
| HP4101 | 041231500 | A1 | 4 | 2 | 200 | 100 | 3.5 | 3.5 | 100 | 100 | 3.5 | B7 | P |  |
| HP4101 | 542310000 | A1 | 4 | 2 | 200 | 100 | 3.5 | 3.5 | 100 | 100 | 3.5 | B5 | P |  |
| HF4101C | 542310000 | A1 | 4 | 2 | 200 | 100 | 3.5 | 2.8 | 100 | 100 | 2.8 | B5 | P |  |
| HP4101C | 041231500 | A1 | 4 | 2 | 200 | 100 | 3.5 | 2.8 | 100 | 100 | 2.8 | B7 | P |  |




| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALYE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| KDD1 | 023074460 |  | 2 |  | 90 |  | 0.8 | 0.8 | 80 |  | 0.8 |  | TT |  |
| KE50 | 542300000 | A1 | 2 | 2 | 150 | 50 | 0.8 | 0.6 | 100 | 60 | 0.8 | SM4 | P |  |
| KF1 | 050412300 | A1 | 2 | 1 | 150 | 150 | 3 | 1.8 | 125 | 150 | 1.8 | C7 | P |  |
| KF2 | 050412300 | A1 | 2 | 1 | 150 | 150 | 3 | 1.3 | 125 | 150 | 1.8 | C7 | $\stackrel{\mathrm{P}}{\mathrm{P}}$ |  |
| KF3 | 023010560 | G1 | 2 | 1 | 90 | 90 | 1 | 0.5 | 80 | 90 | 0.5 | 8SC | P |  |
| KF4 | 023010560 | G1 | 2 | 1 | 90 | 90 | 1.2 | 0.7 | 80 | 90 | 0.7 | 8SC | P |  |
| KF7 | 023004500 | A1 | 2 | 1.5 | 90 | 90 | 1.8 | 0.7 | 80 | 90 | 0.7 | 8SC | P |  |
| KF8 | 023004500 | A1 | 2 | , | 90 | 90 | 1.5 | 0.6 | 80 | 90 | 0.6 | 8SC | P |  |
| KF3 3 | 026510300 | G1 | 2 | 1.5 | 150 | 60 | 1.4 | 1.1 | 125 | 60 | 1.1 | A08 | P |  |
| KH1 | 023051560 | G1 | 2 | 1.5 | 90 | 60 | 2.1 | 1.4 | 80 | 60 | 1.4 | 8SC | P |  |
| KK2 | 023064560 | G1 | 2 | 1 | 90 | 50 | 2 |  | 80 | 60 |  | 8SC | 0 |  |
| KK2G | 026546300 | G1 | 2 | 1 | 90 | 50 | 2 |  | 80 | 60 |  | A08 | 0 |  |
| KK32 | 037546200 | G1 | 2 | \{ | 150 | 50 | 2.1 |  | 150 | 60 |  | ¢ 408 | 0 |  |
| KL1 | 642350000 |  | 2 | 4.5 | 150 90 | 50 90 | ${ }_{8} 8$ | 1.7 | 150 80 | 60 | 0.7 1.7 | B5 | P |  |
| KL1 | 032004560 |  | 2 | 4.5 | 90 | 90 | 8 | 1.7 | 80 | 75 | 1.7 | 8SC | P |  |
| KL2 | 023 c04 560 |  | 2 | 7.5 | 90 | 90 | 11 | 1.8 | 80 | 75 | 1.8 | 8SC | P |  |
| KL4 | 023004560 |  | 2 | 2.5 | 100 | 100 | 5 | 2 | 80 | 75 | 2.8 | 8SC | P |  |
| KL4G | 036540200 |  | 2 | 2.5 | 90 | 90 | 4.7 | 1.8 | 80 | 75 | 2.8 | A08 | P |  |
| KL5 | 032004560 |  | 2 | 4 | 90 | 90 | 4.8 | 1.4 | 80 | 75 | 1.4 | 8SC | P |  |
| KL35 | 036540200 |  | 2 | 4.5 | 150 | 150 | 5.6 | 2.2 | 100 | 100 | 2.2 | A08 | P |  |
| KLL3 | 423564570 |  | 2 | 12 | 150 | 150 | 8 |  | 100 | 100 |  | 8SC | PP |  |
| KLL32 | 026447350 |  | 2 | 11.3 | 150 | 150 | 3.8 | 2.6 | 100 | 100 | 2.6 | A08 | PP |  |
| KR5 | 264530000 |  | 5 | 9 | 150 | 150 | 14 | 1.9 | 100 | 100 | 1.9 | UX5 | P |  |
| KR20 | 264413000 |  | 2.5 |  | 250 |  | 3.5 | 1.4 | 250 |  | 1.4 | UX6 | T |  |
| KR22 | 264413000 |  | 6 |  | 250 |  | 3.5 | 1.4 | 250 |  | 1.4 | Ux6 | T |  |
| KR25 | 264413000 |  | 2.5 | 16.5 | 250 | 250 | 34 | 2.2 | 100 | 150 | 2.2 | Ux6 | P |  |
| KR28 | 289130000 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | UX5 | RR |  |
| KR31 | 281300000 |  | 10 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | R |  |
| KT2 | 642350000 |  | 2 | 4.5 | 150 | 150 | 7.5 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| KT8 | 542310000 | A1 | 6 | 16 | 250 | 250 | 72 | 6 | 100 | 100 | 6 | B5 | P |  |
| KT8C | 542310000 | A1 | 6 | 16 | 250 | 250 | 72 | 6 | 100 | 150 | 6 | B5 | P |  |
| KT16 | 026540230 |  | 1.4 | 4.5 | 90 | 90 | 8.8 | 1.9 |  | Data Ava | ilable | e A08 | P |  |
| KT21 | 642350000 |  | 2 | 2.5 | 150 | 125 | 5.3 | 5.3 | 100 | 100 | 5.3 | B5 | P |  |
| KT24 | 642350000 |  | 2 | 3.5 | 150 | 125 | 5 | 3.2 | 100 | 100 | 3.2 | B5 | P |  |
| KT30 | 045231600 |  | 13 | 12 | 250 | 250 | 40 | 3.9 | 100 | 150 | 3.9 | B7 | P |  |
| KT31 | 305221600 | G1 | 13 | 4 | 200 | 175 | 40 | 10 | 100 | 150 | 9 | B7 | P |  |
| KT32 | 026540310 |  | 26 | 7.6 | 150 | 150 | 75 | 9 | 100 | 100 | 8 | A08 | P |  |
| KT33 | 326540210 |  | 13 | 13.2 | 200 | 200 | 60 | 10 | 100 | 100 | 9 | A08 | P |  |
| KT33C | 326540210 |  | 13 | 7 | 200 | 175 | 92 | 10 | 100 | 100 | 9 | A08 | P |  |
| KT35 | 326540210 |  | 13 | 11.5 | 200 | 200 | 50 | 10 | 100 | 100 | 9 | A08 | P |  |
| KT36 | 020540310 | A1 | 26 | 10 | 150 | 150 | 60 | 11 | 100 | 100 | 10 | A08 | P |  |
| KT41 | 045231600 |  | 4(5) | 4.4 | 250 | 250 | 40 | 10.5 | 100 | 150 | 9 | B7 | P |  |
| KT42 | 045231600 |  | 4 | 16.5 | 250 | 250 | 34 | 2.5 | 100 | 150 | 2.5 | B7 | P |  |
| KT44 | 041231500 | A1 | 4(5) | 25 | 250 | 250 | 85 | 6.3 | 100 | 150 | 6.2 | B7 | P |  |
| KT45 | 041231500 | A1 | 4 | 25 | 250 | 250 | 85 | 6.3 | 100 | 150 | 6.3 | B7 | P |  |
| KT55 | *26 540310 |  | 52 | 15 | 150 | 150 | 88 | 16 | No 1 | Data Ava | ilable | A08 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO valve tester |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Yolts } \end{gathered}$ | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | $\mathrm{mA} V$ |  |  |  |
| KT61 | 026540310 |  | 6 | 4.4 | 250 | 250 | 40 | 10.5 | 100 | 150 | 9 | A08 | P |  |
| KT63 | 026540310 |  | 6 | 16.5 | 250 | 250 | 34 | 2.5 | 100 | 150 | 2.5 | A08 | P |  |
| KT66 | 026540310 |  | 6 | 15 | 250 | 250 | 65 | 6.3 | 100 | 150 | 6 | A08 | P |  |
| KT67 | 256001403 |  | 6 | 9 | 250 | 175 | 80 | 13 | 100 | 100 | 10 | B9G | P |  |
| KT71 | 026540310 |  | 48 | 9.8 | 200 | 175 | 70 | 10 | 100 | 100 | 9 | A08 | P |  |
| KT72 | 026540310 |  | 16 | 12.5 | 200 | 175 | 30 | 2.5 | 100 | 100 | 2.5 | A08 | P |  |
| KT73 | 026540310 |  | 6 | 4.5 | 200 | 175 | 35 | 2.5 | 100 | 100 | 2.5 | A08 | P |  |
| KT74 | 026540310 |  | 16 | 12.5 | 200 | 175 | 30 | 2.5 | 100 | 100 | 2.5 | A08 | P |  |
| KT76 | 026540310 |  | 15 | 13 | 200 | 175 | 35 | 2.5 | 100 | 100 | 2.5 | A08 | P |  |
| KT77 | 026540310 |  | 6.3 |  | 250 | 250 | 100 | 11.5 | 100 | 100 |  | A08 | F |  |
| KT81 | 265004130 |  | 6 | 4.4 | 250 | 250 | 40 | 10.5 | 100 | 150 | 9 | B8B | P |  |
| KT88 | 026540310 |  | 6 | 20 | 250 | 250 | 57 | 8 | No Data | Avail | 1able | A08 | P |  |
| KT101 | 265004130 |  | 80 | 9.5 | 200 | 175 | 70 | 10 | 100 | 100 | 9 | B8B | P |  |
| KTW61 | 026510310 | G1 | 6 | 4 | 250 | 100 | 10 | 2.9 | 100 | 90 | 2.9 | A08 | P |  |
| KTW62 | 026500310 | G1 | 6 | 3 | 250 | 100 | 8 | 2.8 | 100 | 100 | 2.8 | A08 | P |  |
| KTW63 | 026510310 | G1 | 6 | 3 | 250 | 100 | 7.6 | 1.5 | 10 C | 90 | 1.5 | A08 | P |  |
| KTW73 | 026510310 | G1 | 6 | 3 | 250 | 100 | 6.5 | 1.7 | 100 | 90 | 1.7 | A08 | P |  |
| KTW73M | 026500310 | G1 | 6 | 3 | 250 | 100 | 6.5 | 1.7 | 100 | 100 | A08 | P |  |  |
| KTW74 | 026510310 | G1 | 13 | 3 | 250 | 100 | 7.6 | 1.5 | 100 | 90 | 1.7 | A08 | P |  |
| KTW74M | 026500310 | G1 | 13 | 3 | 250 | 100 | 7.6 | 1.5 | 100 | 100 |  | A08 | P |  |
| KTZ41 | 061231500 | G1 | 4 | 1.5 | 250 | 250 | 18 | 12 | 200 | 200 | 10 | B7 | P |  |
| KTZ63 | 026510310 | G1 | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | A08 | P |  |
| KTZ73 | 026500310 | G1 | 6 | 3 | 250 | 100 | 2 | 1.5 | 100 | 90 | 1.5 | A08 | P |  |
| KTZ73M | 026500310 | G1 | 6 | 3 | 250 | 100 | 2 | 1.5 | 100 | 100 |  | A08 | P |  |
| KZ | 802310000 |  | 20 |  |  |  | 60 |  | REC |  | 20 mA | B5 | R |  |
| L2 | 642300000 |  | 2 | 4.5 | 150 |  | 9 | 1.6 | 150 |  | 1.6 | B4 | T |  |
| L2/B | 642300000 |  | 2 | 3.8 | 150 |  | 4 | 1.5 | 125 |  | 1.5 | B4 | T |  |
| L2D | 642310000 |  | 2 | 4.5 | 150 |  | 2 | 1.5 | 100 |  | 1.5 | B5 | T |  |
| L2/DD | 682390000 | G1 | 2 | 3.8 | 150 |  | 4 | 1.6 | 100 |  | 1.6 | B5 | DDT |  |
| L4 | 642300000 |  | 4 | 16 | 250 |  | 20 | 3.2 | 100 |  | 3.2 | B4 | T |  |
| L11 | 642300000 |  | 1 | 12 | 100 |  | 2.8 | 0.6 | 100 |  | 0.6 | B4 | T |  |
| L12 | 642300000 |  | 2 | 3 | 40 |  | 2.2 | 0.8 | No Data |  | ilable | SM4 | T |  |
| L21 | 642300000 |  | 2 | 6 | 150 |  | 3.2 | 1.8 | 100 |  | 1.8 | B4 | T |  |
| L21DD | 682390000 | G1 | 2 | 3 | 150 |  | 5.2 | 1.8 | 100 |  | 1.8 | B5 | DDT |  |
| L22DD | 206080930 | G1 | 2 | 4.2 | 150 |  | 4 | 1.6 | 100 |  | 1.6 | A08 | DDT |  |
| L30 | 042231600 |  | 13 | 8 | 200 |  | 25 | 4.2 | 100 |  | 4.2 | B7 | T |  |
| L42MD | 642350000 |  | 4 | 20 | 250 | 250 | 22 | 2.5 | 100 | 100 |  | B5 | P |  |
| L63 | 026040310 |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | T |  |
| L77 | 6*2 364100 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2.2 | B7G | T |  |
| L210 | 642300000 |  | 2 |  | 150 |  |  | 0.9 | 100 |  | 0.9 | B4 | T |  |
| L408 | 642300000 |  | 4 | 3 | 150 |  | 5 | 1.5 | 125 |  | 1.5 | B4 | T |  |
| L410 | 642300000 |  | 4 | 4 | 150 |  | 4.3 | 1.5 | 100 |  |  | B4 | T |  |
| L412 | 642300000 |  | 4 | 1.5 | 200 |  | 3 | 1.2 | 100 |  | 1.2 | B4 | T |  |
| L413 | 642300000 |  | 4 | 16 | 200 |  | 12 | 1.8 | 100 |  | 1.6 | B4 | T |  |
| L414 | 642300000 |  | 4 | 8 | 150 |  | 12 | 2.8 | 100 |  | 2.8 | B4 | T |  |
| L415 | 642300000 |  | 4 | 10 | 200 |  | 8 | 2 | 100 |  | 2 | B4 | T |  |
| L416D | 643200000 | G2 | 4 | 13 | 250 | 80 | 12 | 1.4 | 100 | 75 |  | B4 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | V | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| L427D | 642350000 |  | 4 | 42 | 300 | 200 | 20 | 1.5 | 100 | 100 |  | B5 | P |  |
| L486D | 642350000 |  | 4 | 15 | 250 | 250 | 35 | 2.7 | 100 | 150 | 2.7 | B5 | P |  |
| L495 | 842350000 |  | 4 | 30 |  |  |  | 5 |  |  |  | B5 | D |  |
| L497D | 642350000 |  | 4 | 30 | 400 | 200 | 45 | 3.2 | No Data | Avail | lable | B5 | P |  |
| L510D | 642350000 |  | 5 | 17 | 200 | 150 | 12 | 1.3 | 100 | 100 |  | B5 | P |  |
| L2318 | 642350000 |  | 20 | 18 | 200 | 200 | 20 | 1.7 | 100 | 100 |  | B5 | P |  |
| L4150D | 642310000 | G1 | 4 | 15 | 250 | 250 | 24 | 2.5 | 100 | 100 |  | B5 | P |  |
| L4910 | 642350000 |  | 4 | 40 | 400 | 200 | 30 | 1.8 | No Data | Avail | lable | B5 | P |  |
| LA | 364520000 |  | 6 | 12 | 200 | 175 | 22 | 2.2 | 100 | 100 | 2.2 | UX5 | P |  |
| LD210 | 642300000 |  | 2 | 4.5 | 150 |  | 3 | 1.3 | 125 |  | 1.3 | B4 | T |  |
| LD410 | 642300000 |  | 4 | 6 | 200 |  | 4 | 1.8 | 100 |  | 1.8 | B4 | T |  |
| LG5 | 218090130 |  | 6 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| LG6 | 218090130 |  | 12 |  |  |  | 30 |  | REC |  | 15 mA | B8B | RR |  |
| LG14 | 123000000 | D1 | 6 |  |  |  | 5 |  | D |  |  | B3G | R |  |
| LK430 | 642300000 |  | 4 | 32 | 250 |  | 20 | 1.9 | 100 |  |  | B4 | T |  |
| LK460 | 642300000 |  | 4 | 40 | 250 |  | 30 | 2.2 | No Data | Avail | lable | B4 | T |  |
| LK4110 | 642300000 |  | 4 | 36 | 400 |  | 30 | 2.7 | No Data | Avail | lable | B4 | T |  |
| LK4112 | 642300000 |  | 4 | 21.6 | 250 |  | 48 | 3.5 | No Data | Avail | lable | B4 | T |  |
| LK4200 | 642300000 |  | 4 | 36 | 400 |  | 45 | 4 | No Data | Avail | lable | B4 | T |  |
| LL2 | 642300000 |  | 2 | 2.5 | 150 |  | 3 | 2.5 | 125 |  | 2.6 | B4 | T |  |
| LL2S | 023004060 |  | 2 | 2.5 | 150 |  | 3 | 2.6 | 125 |  | 2.6 | 8SC | T |  |
| LL4 | 642310000 |  | 4 | 10 | 350 |  | 18 | 3.5 | 125 |  | 3.5 | B5 | T |  |
| LL610 | 642350000 |  | 5 | 17 | 200 | 150 | 12 | 1.3 | No Data | Avai | lable | B5 | P |  |
| LN119 | 414237516 |  | 50 | $\left\{\begin{array}{r}0 \\ 16\end{array}\right.$ | 100 200 | 200 | 35.5 | 2.5 6.4 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $2.5\}$ | B9A | TP |  |
| LN152 | 641237154 |  | 6 | $\left\{\begin{array}{l}2.3 \\ 6.7\end{array}\right.$ | 100 200 | 175 | 4.0 15.0 | 1.4 3.2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 1.4 \\ 3.0 \end{array}\right\}$ | B9A | TP |  |
| LN309 | 641237154 |  | 12.5 | $\left\{\begin{array}{l}8.5 \\ 8.0\end{array}\right.$ | 250 200 | 175 | 10.5 30 | 2.2 4.5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 2.0 \\ 4.0 \end{array}\right\}$ | B9A | TP |  |
| LN319 | 641237154 |  |  | $\left\{\begin{array}{l}8.0 \\ 9\end{array}\right.$ | 200 200 | 175 | 10 32 | 3.4 6.5 | 100 100 | 60 100 | $\left.\begin{array}{r} 4.0 \\ 3.4 \end{array}\right\}$ | B9A | TP |  |
| LN329 | 645237114 |  | 9 | $\left\{\begin{array}{l} 2 \\ 2 \end{array}\right.$ | 100 200 | 175 | 14 10 | 5 6.2 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ |  | B9A | TP |  |
| LP2 | 642300000 |  | 2 | 4.5 | 150 |  | 10 | 3.6 | 100 |  | 3.6 | B4 | T |  |
| LP4 | 642300000 |  | 4 | 36 | 250 |  | 48 | 5.5 | 100 |  | 5.5 | B4 | T |  |
| LP25 | 642300000 |  | 4 | 31 | 400 |  | 50 | 7.5 | 100 |  | 6.9 | B4 | T |  |
| LP220 | 642300000 |  | 2 | 4.5 | 150 |  | 5 | 3.5 | 100 |  | 3.5 | B4 | P |  |
| LS5 | 642300000 |  | 4.7 | 47 | 400 |  | 25 |  | No Data | Avail | lable | B4 | T |  |
| LS5A | 642300000 |  | 5.2 |  | 400 |  | 33 | 0.9 | No Data | Avail | lable | B4 | T |  |
| LS6A | 642300000 |  | 6 | 91 | 400 |  | 64 | 2.3 | No Data | a Avai | lable | B5 | T |  |
| LS7 | 642300000 |  | 4 | 4 | 150 |  | 21 | 2.4 | 100 |  | 2.4 | B5 | T |  |
| LS8 | 642300000 |  | 4 | 8 | 150 |  |  | 1.3 | 100 |  |  | B4 | T |  |
| LS8A | 642300000 |  | 4 | 8 | 150 |  | 26 | 3 | No Data | a Avai | lable | B4 | T |  |
| LS9B | 642300000 |  | 2 | 1.5 | 150 |  | 8 | 0.6 | 100 |  | 0.6 | B4 | T |  |
| LS826 | 246310000 |  | 6.3 | 1.1 | 100 |  | 7.5 | 5 | 100 |  | 5 | B5B | T |  |
| Lu4A | 642300000 |  | 4 |  | 200 |  |  |  |  |  | 1.6 |  | T |  |
| LZ319 | 645237114 |  | 9 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 200 | 175 | 14 10 | $\begin{aligned} & 5 \\ & 6.2 \end{aligned}$ | 100 100 | 60 100 | 5 5 | $\}$ B9A | TP |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode | Screen Volts | $\begin{aligned} & l_{\mathrm{a}} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | $\begin{aligned} & \text { Screen } \\ & \text { Volts } \end{aligned}$ | ma/v |  |  |  |
| LZ329 | 237114 |  | 9 | $\left\{\begin{array}{l}2.0 \\ 2.0\end{array}\right.$ | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | 175 | $\begin{aligned} & 14 \\ & 10 \end{aligned}$ | 56 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 5.0 \\ 5.0 \end{array}\right\}$ |  | TP |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M0465 | 5231700 | G1 | 4 | $1.5$ | $\begin{array}{r} 75 \\ 250 \end{array}$ | 75 | 21.6 |  | 80 | 75 | \} | B7 | 0 |  |
|  |  |  |  |  |  |  |  |  | 100 |  |  |  |  |  |  |
| M0495 | 123174560 | G1 | 4 | $\left\{\begin{array}{l}1.5 \\ 8.5\end{array}\right.$ | 90 |  |  |  | 80 |  |  | 8 SC | 0 |  |
| M3057 | 041230651 |  | 6.3 | $\begin{aligned} & 8.5 \\ & 4.5 \end{aligned}$ | $\begin{aligned} & 250 \\ & 200 \end{aligned}$ | 75200 | $30^{1.6}$ | 9 | 100 | 75100 |  | B9A | P |  |
| M8079 | 192310800 |  | 6 |  |  |  | 5 |  | D |  |  |  | RR |  |
| M8080 | 602364100 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 3 | B7G | T |  |
| M8081 | 672344100 |  | 6 | 0.8 | 100 |  | 8.5 | 5.3 | 100 |  | 5.3 | B7G | TT |  |
| M8082 | 412360500 |  | 6 | 12.4 | 250 | 250 | 16 | 2.6 | No Data | Avai | lable | B7G | P |  |
| M8083 | 412361500 |  | 6 | $\left\{\begin{array}{l}2 \\ 1\end{array}\right.$ | 250 | 250 | 10 | 7.65 | 100 | 150 | 5.0 | B7G | P |  |
| M8091 | **1 23**** | D1 | 6.3 | 1.5 | 200 | 150 | 120 | 6.4 | REC |  |  | B9A | $R$ |  |
| M8096 | 601235144 |  | 6 | 7.5 | 250 | 250 | 45 | 7 | 100 | 150 | 7 | B7A | P |  |
| M8097 | 812314600 |  | 6 | 2.8 | 200 |  | 7.5 | 2.8 | 100 |  | 2.8 | B7G | DT |  |
| M8099 | 412314600 |  | 6 | 2 | 250 |  | 6 | 8.5 | 200 |  | 8 | B7G | T |  |
| M8100 | 412365100 |  | 6 | 2.3 | 150 | 150 | 7 | 4.3 | No Data | Avai | ilable | B7G | P |  |
| M8101 | 412365100 |  | 6 | 1 | 250 | 100 | 11 | 4.4 | 250 | 100 | 4.4 | B7G | P |  |
| M8121 | 412163510 |  | 6 | 1.4 | 100 | 100 | 7 | 5 | 100 | 10 C | 5 | B8D | P |  |
| M8122 | 412653160 |  | 6 | 2 | 100 | 100 | 7.5 | 5 | 100 | 100 | 5 | B8D | p |  |
| M8123 | 281380000 |  | 6 |  |  |  | 5 |  | D |  |  | B8D | R |  |
| M8125 | 412163510 |  | 6 | 2 | 100 | 100 | 3 | 2.5 | 100 | 100 | 2.3 | B8D | P |  |
| M8135 | 412 3** 651 |  | 6 | 4.5 | 250 | 250 | 40 | 11 | 100 | 150 | 10 | B9A | P |  |
| M8136 | 741226413 |  | 6.3 | 8.5 | 250 |  | 8.5 | 2.2 | 100 |  | , | B9A | TT |  |
| M8137 | 741226413 |  | 6 | 2 | 250 |  | 1.2 | 1.6 | 100 |  | 1.6 | B9A | TT |  |
| M8138 | 802309100 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | B7G | RR |  |
| M8156 | 462603160 |  | 6 | 2 | 100 |  | 13 | 5.5 | 100 |  | 5.5 | B8D | T |  |
| M8157 | 265511413 |  | 6 | 30 | 300 | 250 | 25 | 1.9 | 100 | 100 | 1.9 | B9G | P |  |
| M8161 | 412361500 |  | 6 | 2.5 | 250 | 200 | 8 | 2.5 | 100 | 150 | 2.5 | B7G | P |  |
| M8162 | 741226413 |  | 6 | 1.5 | 200 |  | 8.5 | 6.5 | 200 |  | 8.5 | B9A | TT |  |
| M8178 | 402013060 |  | 6.3 |  | 100 |  | 8.5 | 5.8 | 100 |  | 5.8 | B8D | T |  |
| M8195 | 501236014 |  | 6.3 | 1 | 250 | 100 | 3 | 1.8 | 100 | 100 | 1.8 | B9A | P |  |
| M8196 | 412265100 |  | 6.3 | 2 | 150 | 125 | 5.5 | 3.5 | 100 | 100 | 3 | B7G | P |  |
| M8212 | 182310900 |  | 6.3 |  |  |  | 5 |  | D |  |  | B7G | RR |  |
| M8245 | 412365400 |  | 6.3 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | B7G | P |  |
| M8248 | 412344600 |  | 6.3 | 1.35 | 150 |  | 13.5 | 13.5 | No Data | Avail | lable | B7G | T |  |
| MAZ41 | *8* **9 23* |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| MC1 | 423060000 |  | 1.9 | 1.5 | 100 |  | 4 | 0.8 | 100 |  | 0.8 | 8SC | T |  |
| ME2 | 642350000 |  | 2 | 12 | 200 | 200 | 13 |  | 100 | 100 |  | B5 | P |  |
| ME25 | 642350000 |  | 4 | 30 | 400 | 300 | 60 |  | 100 | 100 |  | B5 | P |  |
| ME1400 | 026510310 | G1 | 6.3 | 2 | 250 | 100 | 1 | 1.8 | 100 | 100 | 1.8 | A08 | P |  |
| MH4 | 642310000 |  | 4 | 2 | 200 |  | 8 | 3 | 100 |  | 3.6 | B5 | T |  |
| MH40 | 642310000 |  | 4 | 3 | 200 |  | 2.7 | 2.4 | 100 |  | 2.4 | B5 | T |  |
| MH41 | 642310000 |  | 4 | 1.5 | 200 |  | 5.2 | 6 | 200 |  | 6 | B5 | T |  |
| MH206 | 645230600 | G1 | 2 | 3 | 150 | 75 | 3.2 |  | 100 | 75 |  | B7 | H |  |
| MH1118 | 645231600 | G1 | 10 | 3 | 200 | 100 | 3.5 |  | 100 | 90 | 0.6 | B7 | H |  |
| $\mathrm{MH}_{\text {M }} \mathrm{M} 105$ | 645231600 908231600 | G1 | 4 | 3 | 200 | 100 | 7.5 |  | 100 | 100 |  | B7 | H |  |
| MHL4 | 642310000 | G | 4 | ${ }_{8}^{4}$ | 250 |  | 8 | 2.9 | 100 100 |  | 1.9 2.5 | ${ }^{\text {B7 }}$ | ${ }_{T}^{\text {not }}$ |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Vf Neg. <br> Grdd <br> Volts | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |  |
| MHLD6 | 026890310 | G1 | 6 | 5 | 200 |  | 11.5 | 3 | 100 |  | 3 | A08 | DDT |  |
| MKT4 | 045231600 |  | 4 | 11 | 250 | 200 | 32 | 3 | 100 | 100 | 3 | B7 | P |  |
| MKT4 | 642310000 | G2 | 4 | 11 | 250 | 200 | 32 | 3 | 100 | 100 | 3 | B5 | P |  |
| ML4 | 642310000 |  | 4 | 16 | 250 |  | 14 | 3.2 | 100 |  | 3.2 | B5 | T |  |
| ML6 | 642310000 |  | 6 | 8 | 200 |  | 24 | 3.8 | 100 |  | 3.8 | B5 | T |  |
| ML40 | 642310000 |  | 4 | 3 | 200 |  |  | 3 | 100 |  | 3 | B5 | T |  |
| MM4V | 542310000 | A1 | 4 | 1.5 | 200 | 125 | 6 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| MM20 | 542310000 | A1 | 20 |  | 200 | 100 | 6 | 3.5 | 100 | 100 | 3.5 | B5 | P |  |
| MP2 | 642300000 |  | 2 | 12 | 150 |  | 12.5 | 3 | 100 |  | 3 | B4 | T |  |
| MP4 | 067231500 | G1 | 4 |  | 250 | 150 | 8 | 2.5 | 100 | 100 | 2.5 | B7 | PP |  |
| MP/Pen | 045231600 |  | 4 | 16 | 250 | 250 | 3 | 3.5 | 100 | 100 | 3.5 | B7 | P |  |
| MP/Pen | 642310000 | G2 | 4 | 16 | 250 | 250 | 30 | 3.5 | 100 | 100 | 3.5 | B5 | P |  |
| MPT4 | 045231600 |  | 4 | 9 | 250 | 200 | 32 | 3 | 100 | 100 | 3 | B7 | P |  |
| MPT4 | 642310000 | G1 | 4 | 9 | 250 | 200 | 32 | 3 | 100 | 100 | 3 | B5 | P |  |
| MR1 | 802300000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| MR4 | 642300000 |  | 4 | 3 | 200 |  | 6 | 2.5 | 150 |  | 2.5 | B4 | T |  |
| MS4 | 542310000 | A1 | 4 | 1.5 | 250 | 75 | 2.4 | 1.1 | 250 | 75 | 1.1 | B5 | P |  |
| MS4B | 542310000 | A1 | 4 | 1 | 200 | 75 | 3.4 | 3 | 100 | 75 | 3 | B5 | P |  |
| MS4C | 542310000 | A1 | 4 | 1 | 200 | 75 | 3.4 | 3.2 | 200 | 75 | 3.2 | B5 | P |  |
| MSG/HA | 542310000 | A1 | 4 | 1.5 | 200 | 80 | 2.1 | 2 | 100 | 75 | 2 | B5 | P |  |
| MSG/LA | 542310000 | A1 | 4 | 1.5 | 200 | 75 | 5.2 | 3.7 | 100 | 75 | 3.7 | B5 | P |  |
| MSP4 | 041231500 | A1 | 4 | 1.8 | 200 | 100 | 3.4 | 2.4 | 100 | 75 | 3.5 | B7 | P |  |
| MSP4 | 542310000 | A1 | 4 | 1.8 | 200 | 100 | 3.4 | 2.4 | 100 | 75 | 3.5 | B5 | P |  |
| MSP41 | 542310000 | A1 | 4 | 4 | 250 | 250 | 8.5 | 3.2 | 100 | 150 | 3.2 | B5 | P |  |
| MSP41 | 041231500 | A1 | 4 | 4 | 250 | 250 | 8.5 | 3.2 | 100 | 150 | 3.2 | B7 | P |  |
| MS/Pen | 041231500 | A1 | 4 | 1.5 | 200 | 100 | 4.8 | 2.8 | 100 | 100 | 2.8 | B7 | P |  |
| MS/Pen | 542310000 | A1 | 4 | 1.5 | 200 | 100 | 4.8 | 2.8 | 100 | 100 | 2.8 | B5 | P |  |
| MS/PenA | 542310000 | A1 | 4 | 2.5 | 200 | 150 | 9 | 4 | 100 |  |  |  | P |  |
| MS/PenA | 041231500 | A1 | 4 | 2.5 | 200 | 150 | 9 | 4 | 100 | 150 | 4 | $\begin{aligned} & \text { B5 } \\ & \text { B7 } \end{aligned}$ | P |  |
| MS/PenB | 061231500 | G1 | 4 | 1.5 | 200 | 100 | 4.8 | 2.8 | 100 | 100 | 2.8 | B7 | P |  |
| MS/PenT | 041231500 | A1 | 4 | 1.5 | 200 | 100 | 4.8 | 2.8 | 100 | 100 | 2.8 | B7 | P |  |
| MS/PenT | 542310000 | A1 | 4 | 1.5 | 200 | 100 | 4.8 | 2.8 | 100 | 100 | 2.8 | B5 | P |  |
| MSVPen | 041231500 | A1 | 4 | 1.5 | 200 | 100 | 4.3 | 2.2 | 100 | 100 | 2.2 | B7 | P |  |
| MSVPenB | 061231500 | G1 | 4 | 1.5 | 200 | 100 | 4.3 | 2.2 | 200 | 100 | 2.2 | B7 | P |  |
| mu1 | 002300000 | D1 | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | R |  |
| MU2 | 002300000 | D1 | 2 |  |  |  |  |  | D |  |  |  |  |  |
| MU12 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 25 mA | $\begin{aligned} & \text { B4 } \\ & \hline \end{aligned}$ | $\stackrel{\mathrm{R}}{\mathrm{RR}}$ |  |
| MU12/14 | 892300000 |  | 4(5) |  |  |  | 60 |  | REC |  | 40 mA | B4 | RR |  |
| MU14 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 40 mA | B4 | RR |  |
| MU4250 | 232300000 | D1 | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| MVSG | 542310000 | A1 | 4 | 1.5 | 200 | 75 | 7.5 | 2.5 | 100 | 75 | 2.5 | B5 | P |  |
| MVSPen | 542310000 | A1 | 4 | 2 | 250 | 125 | 5.1 | 2.3 | 200 | 100 | 2.3 | B5 | P |  |
| MX40 | 645231700 | G1 | 4 | $\left\{\begin{array}{l}1 \\ 3\end{array}\right.$ | 150 | 75 |  | 0.15 | 150 | 75 | 0.6 | B7 | TH |  |
| MZO5-20 | 642300000 |  | 6 | 12 | 250 350 | 75 | $45^{4.5}$ | 2.0 4.2 | 250 100 | 75 | 1.4 4 | B4 | T |  |

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| VALVE | SELECTOR SWITCH No. | T.C. |  | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Vf Neg. <br> Grid <br> Volks | Anode Volts | $\begin{array}{\|c} \text { ecreen } \\ \hline \text { Volts } \\ \hline \end{array}$ | $\underset{\mathrm{mA}}{\mathrm{la}}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| NF3 | 023110560 | G1 | 12.5 | $5 \quad 2$ | 200 | 100 | 4.5 | 2.3 | 100 | 100 | 2.3 | 8SC | P |  |
| NG320 | 002300000 | D1 | 2 |  |  |  |  |  | D |  |  | B5 | D |  |
| NG3020 | 002300000 | D1 | 2 |  |  |  | 5 |  | D |  |  | B4 | R |  |
| NHP51 | 023100560 | G1 | 4 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | 8SC | P |  |
| NIX2 | *41 23* *51 | A1 | 21.5 | $5 \quad 28$ | 200 | 200 | 40 | 6 | 100 | 100 | 6 | B9A | P |  |
| NLP61 | 023104560 |  | 4 | 7 | 250 | 250 | 4 | 9 | 100 | 100 |  | 8SC | P |  |
| NLP62 | 020314560 |  | 4 | 14 | 250 | 250 | 72 | 9 | No Dat | a Avail | lable | 8SC | P |  |
| NSS42 | 542310000 | A1 | 4 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | B5 | P |  |
| NSS43 | 542310000 | A1 | 4 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | B5 | P |  |
| NSS183 | 542310000 | A1 | 20 | 2.5 | 200 | 100 | 3.5 | 2 | 100 | 100 |  | B5 | P |  |
| NT51 | 023100060 | G1 | 4 | 5 | 250 |  | 6 | 2.5 | 100 |  | 2.2 | 8SC | T |  |
| NVS4 | 542310000 | A1 | 4 | 2 | 200 | 100 | 6 | 1 | 100 | 100 |  | B5 | P |  |
| NW4 | 642310000 |  | 4 | 2.5 | 200 |  | 2.5 | 1 | 100 |  | 2.2 | B5 | $T$ |  |
| 00 | 364200000 |  | 5 |  | 40 |  | 1 | 0.6 | No Dat | a Avail | lable | UX4 | T |  |
| OOA | 364200000 |  | 5 |  | 40 |  | 1.5 | 0.6 | No Dat | a Avail | lable | UX4 | T |  |
| 01 | 364200000 |  | 5 | 4.5 | 90 |  | 2.5 |  | 80 |  |  | UX4 | T |  |
| 01A | 364200000 |  | 5 | 4.5 | 90 |  | 2.5 | 0.7 | 80 |  | 0.7 | UX4 | T |  |
| 01AA | 364200000 |  | 5 | 4.5 | 90 |  | 3.2 | 0.9 | 90 |  | 0.8 | UX4 | T |  |
| 01B | 364200000 |  | 5 | 4.5 | 90 |  | 2.5 | 0.7 | 90 |  | 0.7 | UX4 | T |  |
| 015/400 | 642300000 |  | 4 | 35 | 400 |  | 40 | 4.5 | 100 |  | 4.5 | B4 | T |  |
| 054V | 642310000 |  | 4 |  | 100 |  |  | 4 | 100 |  |  | B5 | T |  |
| 084 | 642300000 |  | 4 | 4 | 150 |  | 4 | 1.3 | 100 |  | 1.2 | B4 | T |  |
| 0202 | 645230000 | G1 | 2 | \{ | 150 | 50 | 2 |  | 100 |  |  | B7 | 0 |  |
| 0202 | 64523000 |  |  | \{ 4 | 150 90 | 75 90 | ${ }_{2} 0.95$ | 0.2 | 100 100 | 75 90 | 1.3 , |  |  |  |
| 0406 | 645231700 | G1 | 4 | $\left\{\begin{array}{l}4 \\ 4\end{array}\right.$ | 250 | 90 | 1.6 | 1 | 250 | 90 | 1.5 |  | 0 |  |
| 01307 | 023154560 | G1 | 4 | 1.5 | 200 | 90 | 8 | 3 | 200 | 75 | 1.6 | 8SC | P |  |
| OBC3 | 041896231 |  | 12.5 | $5 \quad 2$ | 250 |  | 1 | 1.1 | 150 |  | 1.1 | A08 | DDT |  |
| OBF2 | 206581930 | G1 | 9 | 2 | 200 | 100 | 6 | 1.8 | 100 | 100 | 1.7 | A08 | DDP |  |
| OCH4 | 217544630 | G1 | 15 | $\{2$ | 100 200 | 100 | 3.5 3 | 0.75 | 100 100 | 60 100 | $\left.\begin{array}{l} 3.5 \\ 0.7 \end{array}\right\}$ | A08 | TH |  |
| OF1 | 026510310 | G1 | 6.3 | 33 | 250 | 100 | 8.5 | 1.8 | 100 | 100 | 1.7 | A08 | P |  |
| OF9 | 206501130 | G1 | 8.5 | 52.5 | 200 | 100 | 6 | 2.2 | 100 | 100 | 2 | A08 | P |  |
| OM1 | 020080310 |  | 30 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| OM3 | 028190310 |  | 6 |  |  |  |  |  | D |  |  | A08 | DD |  |
| OM4 | 026980310 | G1 | 6 | 5 | 250 |  | 5.5 | 2.2 | 100 |  | 2.2 | A08 | DDT |  |
| OM5 | 026510310 | G1 | 6 | 2 | 250 | 100 | 3 | 1.8 | 100 | 100 | 1.8 | A08 | P |  |
| OM5B | 026510310 | G1 | 6 | 2 | 250 | 100 | 3 | 1.8 | 100 | 100 | 1.6 | A08 | P |  |
| OM5C | 026510310 |  | 6 | 2 | 250 | 100 | 3 | 1.8 | 100 | 100 | 1.8 | A08 | P |  |
| OM6 | 026510310 | G1 | 6 | 2.5 | 250 | 100 | 6 | 2 | 100 | 100 | 2 | A08 | P |  |
| OM7 | 026510310 | G1 | 6 | 2.5 | 250 | 100 | 6 | 2 | 100 | 100 | 2 | A08 | P |  |
| OM9 | 026500310 | G1 | 6 | 18 | 250 | 250 | 32 | 2.8 | 100 | 150 | 2.8 | A08 | P |  |
| OM10 | 027546310 | G1 | 6 | $\left\{\begin{array}{l} 2.0 \\ 2.0 \end{array}\right.$ | 100 250 | 100 | 5.4 5.0 | 2.2 2.4 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 2.8 \\ 1.2 \end{array}\right\}$ | A08 | TH |  |
| OP41 | 045231600 |  | 4 | 12.5 | 250 | 250 |  | 9.1 | 100 | 100 | 8 | B7 | P |  |
| OP42 | 045231600 |  | 4 | 6.2 | 250 | 250 |  | 10.5 | 100 | 100 | 9 | B7 | P |  |
| 056/300 | 642350000 |  | 4 | 20 | 300 | 150 | 22 | 2 | 100 | 100 |  | B5 | P |  |
| OS18/600 | 023114500 | A1 | 6 | 14 | 250 | 275 | 72 | 8.5 | 100 | 150 | 8 | 8SC | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. <br> Grid <br> Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| OSW2190 | 021414360 |  | 6.3 | 2 | 300 | 150 | 10 | 9 | No D | ta Avail | lable | A08 | P |  |
| OSW2192 | 120415360 |  | 6.3 | 3 | 300 | 150 | 30 | 11 | No D | ta Avai | lable | A08 | P |  |
| OSW2600 | 021415360 |  | 6.3 | 2 | 300 | 150 | 10 | 9 | No D | a Avail | lable | A08 | $\stackrel{+}{P}$ |  |
| OSW2601 | 120415360 |  | 6.3 | 3 | 300 | 150 | 30 | 11 | No D | ta Avai | lable | A08 | P |  |
| - OSW3105 | 041896230 |  | 6.3 | 2 | 250 |  | 0.9 | 1.1 | 100 |  | lable | A08 | ${ }_{\text {DDT }}$ |  |
| OSW3106 | 026540310 |  | 6.3 | 12.5 | 250 | 250 | 45 | 4.1 | 100 | 150 | 4 | A08 | P |  |
| OSW3107 | 020809030 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| OSW3108 | 026540310 |  | 6.3 | 14 | 250 | 250 | 72 | 6 | 100 | 150 | 5 | A08 | P |  |
| OSW3109 | 028190300 |  | 6.3 |  |  |  |  |  | D |  |  | A08 | DD |  |
| 0SW3111 | 021415360 |  | 6.3 | 3 | 250 | 100 | 9.2 | 2 | 100 | 100 | 2 | A08 | P |  |
| OSW3112 | 026040310 |  | 6.3 | 8 | 250 |  | 9 | 2.6 | 100 |  | 3 | A08 | T |  |
| P2 | 642300000 |  | 2 | 6 | 100 |  | 12 | 3.5 | 100 |  | 4 | B4 | T |  |
| P4. | 642300000 |  | 4 | 21 | 250 |  | 30 | 2.8 | 100 |  | 2.8 | B4 | T |  |
| P6M0 | 023104560 |  | 6.3 | 14 | 250 | 250 | 72 | 9 | 100 | 100 |  | 8SC | P |  |
| P12/250 | 642300000 |  | 4 | 44 | 250 |  | 60 | 6 | 100 |  | 6 | B4 | T |  |
| P15/250 | 642300000 |  | 4 | 44 | 250 |  | 60 | 6 | 100 |  | 6 | B4 | P |  |
| P15/250S | 023004060 |  | 4 | 44 | 250 |  | 60 | 6 | 100 |  | 6 | 8SC | T |  |
| P24/450 | 642300000 |  | 7.5 | 70 | 400 |  | 55 | 2.1 | 100 |  | 2.1 | B4 | T |  |
| P25/400 | 642300000 |  | 6 | 100 | 350 |  | 70 | 3.7 | 100 |  | 3.7 | B4 | T |  |
| P25/500 | 642300000 |  | 6 | 90 | 400 |  | 65 | 3 | 100 |  | 3 | B4 | T |  |
| P26/500 | 642300000 |  | 4 | 100 | 400 |  | 62.5 | 4.2 | 100 |  | 4.2 | B4 | T |  |
| P27/500 | 642300000 |  | 4 | 27 | 400 |  | 62.5 | 8.5 | 100 |  | 8 | B4 | T |  |
| P30/500 | 642300000 |  | 4 | 100 | 400 |  | 60 | 4 | 100 |  | 4 | B4 | T |  |
| P41 | 216040030 |  | 4 | 11.8 | 250 |  | 16 | 4.5 | 100 |  | 4.5 | 108 | T |  |
| P43M | 642350000 |  | 4 | 17 | 250 | 250 | 26 | 2.5 | 100 | 100 |  | B5 | P |  |
| P61 | 216040030 |  | 6 | 11.8 | 250 |  | 16 | 4.5 | 100 |  | 4.5 | M08 | T |  |
| P215 | 642300000 |  | 2 |  | 150 |  |  | 1.4 | 100 |  | 2.2 | B4 | T |  |
| P220 | 642300000 |  | 2 | 7.5 | 150 |  | 6 | 3 | 100 |  | 3 | B4 | T |  |
| P220A | 642300000 |  | 2 | 14 | 150 |  | 15 | 2.7 | 100 |  | 2.7 | B4 | T |  |
| P222 | 642300000 |  | 2 | 10.5 | 150 |  | 6 | 3 | 100 |  | 3 | B4 | T |  |
| P225 | 642350000 |  | 2 | 4.5 | 150 | 150 | 5.6 | 2.2 | 100 | 100 | 2.2 | B5 | P |  |
| P240 | 642300000 |  | 2 | 24 | 150 |  | 18 | 1.1 | 100 |  | 3.7 | B4 | T |  |
| P240A | 642300000 |  | 2 | 21 | 150 |  | 25 | 5 | 100 |  | 5 | B4 | T |  |
| P410 | 642300000 |  | 4 | 12 | 150 |  | 7 | 1.3 | 100 |  | 1.5 | B4 | T |  |
| P414 | 642300000 |  | 4 | 16 | 100 |  | 14 | 2.8 | 80 |  | 2.8 | B4 | T |  |
| P415 | 642300000 |  | 4 | 25 | 150 |  | 14 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| P420 | 642300000 |  | 4 | 85 | 400 |  | 50 | 6 | 100 |  | 6 | B4 | T |  |
| P421 | 642350000 |  | 4 | 11 | 200 | 75 | 12 | 1.5 | 100 | 75 |  | B5 | P |  |
| P422 | 642350000 |  | 4 | 20 | 250 | 250 | 22 | 2.5 | 100 | 100 |  | B5 | P |  |
| P425 | 642350000 |  | 4 | 25 | 300 | 200 | 20 | 1.7 | 100 | 150 | 1.7 | B5 | P |  |
| P425 | 642300000 |  | 4 | 16.5 | 150 |  | 17 | 1.9 | 100 |  |  | B4 | T |  |
| P430 | 264300000 |  | 4 | 30 | 200 |  | 25 | 2.2 | 100 |  | 2.2 | UX4 | T |  |
| P434 | 032004560 |  | 4 | 17 | 250 | 250 | 36 | 2.5 | 100 | 100 |  | 8SC | P |  |
| P435 | 642350000 |  | 4 | 17 | 250 | 250 | 30 | 3 | 100 | 150 | 3 | B5 | P |  |
| P440 | 642350000 |  | 4 | 30 | 400 | 200 | 45 | 5 | No D | ta Avail | lable | B5 | P |  |
| P440N | 045231600 |  | 4 | 22 | 250 | 250 | 26 | 2.8 | 100 | 150 | 2.8 | B7 | P |  |
| P440N | 642310000 |  | 4 |  | 250 | 250 | 20 | 2.5 | 100 | 150 | 2.8 | B5 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volks | Anode Volts | \begin{tabular}{\|c|c|}
\hline
\end{tabular} | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| P441N | 045231600 |  | 4 | 22 | 250 | 250 | 36 | 2.8 | 100 | 150 | 2.8 | B7 | P |  |
| P455 | 264300000 |  | 4 | 15 | 250 |  | 30 | 5.5 | 100 |  | 5.5 | UX4 | T |  |
| P455 | 023100650 |  | 4 | 25 | 250 | 250 | 36 | 2.6 | 100 | 150 | 2.8 | 8SC | P |  |
| P460 | 642300000 |  | 4 | 40 | 200 |  | 50 | 3.5 | 100 |  | 3.5 | B4 | T |  |
| P520 | 642350000 |  | 5 | 17 | 200 | 150 | 12 | 1.3 | 100 | 100 |  | B5 | P |  |
| P625 | 642300000 |  | 6 | 26 | 250 |  | 24 | 2.5 | 100 |  |  | B4 | T |  |
| P469 | 045231600 |  | 4 | 14 | 250 | 275 | 72 | 8.5 | 100 | 150 | 7 | B7 | P |  |
| P495 | 045231600 |  | 4 | 6 | 200 | 200 | 32 |  | 100 | 100 |  | B7 | P |  |
| P496 | 045231600 |  | 4 | 6 | 200 | 200 | 32 | 9.5 | 100 | 100 | 8 | B7 | P |  |
| P625A | 642300000 |  | 6 | 39 | 200 |  | 25 | 2.3 | 100 |  |  | B4 | T |  |
| P625B | 642300000 |  | 6 | 1 | 200 |  |  | 2.8 | 200 |  | 2.8 | B4 | T |  |
| P626 | 023100560 | G1 | 6.3 | 32 | 250 | 250 | 26 | 2.5 | 100 | 100 |  | 8SC | P |  |
| P628 | 023100560 | G1 | 6.3 | 17 | 250 | 250 | 56 | 2.5 | 100 | 100 |  | 8SC | P |  |
| P650 | 642300000 |  | 6 | 1 | 100 |  | 37 | 2.7 | 100 |  | 2.7 | B4 | T |  |
| P861 | 289130000 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | UX5 | RR |  |
| P1320 | 023100560 |  | 13 | 20 | 250 | 250 | 22 | 1,9 | 100 | 100 |  | 8SC | P |  |
| P2018 | 642310000 |  | 20 | 15 | 200 |  | 20 | 4 | 100 |  | 4 | B5 | T |  |
| P2020N | 642310000 | G2 | 20 | 18 | 200 | 200 | 20 | 1.7 | 100 | 100 | 1.7 | B5 | P |  |
| P2060 | 023140560 |  | 24 | 19 | 200 | 100 | 40 | 3.2 | 100 | 90 | 3 | 8SC | P |  |
| P2460 | 642310000 | G2 | 24 | 19 | 200 | 100 | 40 |  | 100 | 90 |  | B5 | P |  |
| P3580 | 045231600 |  | 33 | 8.5 | 200 | 200 | 45 | 8 | 100 | 150 | 7 | B7 | P |  |
| P4100 | 642300000 |  | 4 | 40 | 400 |  | 30 |  | 100 |  |  | B4 | T |  |
| Pa20 | 642300000 |  | 2 | 36 | 300 |  | 49 | 5.2 | 100 |  | 5 | B4 | T |  |
| PA1 | 642310000 |  | 4 | 10 | 200 |  | 40 | 5 | 100 |  | 5 | B5 | P |  |
| PA40 | 642300000 |  | 4 | 90 | 400 |  | 200 | 10 | 100 |  | 9 | B4 | T |  |
| PAB1 | 0231 to 980 |  | 6 |  |  |  |  |  | D |  |  | 8SC | DDD |  |
| PABC80 | +91 238146 |  | 9.5 | 2.3 | 200 |  | 1 | 1.4 | 100 |  | 1.4 | B9A | DDDT |  |
| PB1 | 234600000 |  | 2 | 4 | 150 |  | 11.5 | 3.8 | 150 |  | 3.8 | B4 | T |  |
| PB495 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| PBF2 | 026895310 | G1 | 6 | 3 | 250 | 100 | 5.8 | 1.2 | 100 | 100 | 1.2 | A08 | DDP |  |
| PC86 | 641234146 |  | 3.8 | 1.5 | 200 |  | 12 | 14 | No Data | Avail | lable | B9A | T |  |
| PC88 | 414234464 |  | 4 | 1.2 | 150 |  | 12.5 | 14 | No Data | Avail | lable | B9A | T |  |
| PC92 | 602304100 |  | 3.2 | 2 | 250 |  | 10 | 5 | 100 |  | 5 | B7G | $T$ |  |
| PC93 | 642314600 |  | 4.7 | 4 | 100 |  | 16 | 8 | 100 |  | 8 | B9A | P |  |
| PC95 | 142360100 |  | 3.6 | 1.2 | 200 |  | 10 | 10.5 | No Data | Avai | lable | B7G | T |  |
| PC96 | 412314600 |  | 3.1 | 1 | 200 |  | 11.5 | 6.7 | 200 |  | 6.7 | B7G | T |  |
| PC97 | 142360100 |  | 4.5 | , | 150 |  | 11 | 13 | No Data | Avail | able | B7G | T |  |
| PC900 | 412361100 |  | 4 | 1 | 150 |  | 12 | 15 | No Data | Avail | able | B7G | T |  |
| PCC84 | 147234116 |  | 7 | 1.5 | 90 |  | 12 | 6 | 100 |  | 6 | B9A | TT |  |
| PCC85 | 641237410 |  | 9 | 2.1 | 200 |  | 10 | 5.8 | 150 |  | 5.8 | B9A | TT. |  |
|  | 641237410 |  | 7 | 1.2 | 90 |  | 15 | 12.5 | No Data | Avail | able |  |  |  |
| PCC89 | 147234116 |  | 7.2 | 1.2 | 90 |  | 15 | 12.5 | No Data | Avail | able | B9A | TT |  |
| PCC189 | 641237410 |  | 7 | 1.2 | 90 |  | 15 | 12.5 | No Data | Avail | able | B9a | TT |  |
| PCC805 | 146234117 |  | 7 | 1.2 | 90 |  | 15 | 9 | 100 |  |  | B9A | T |  |
| PCC806 | 146234117 |  | 7 | 1.2 | 90 |  | 5 | 91 | 100 |  | 9 B | 89A T | TT |  |
| PCE80 | 641237541 |  | 10 |  | $\begin{aligned} & 200 \\ & 200 \end{aligned}$ | $200 \quad 1$ | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ | $\begin{array}{r} 3.4 \\ 12.5 \end{array}$ | $\begin{array}{ll} 100 \\ 100 & 10 \end{array}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $3.4\}$ | B9A | TP |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO <br> VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Voles | Anode Volts | Screen Volts | $\begin{aligned} & \mathrm{la} \\ & \mathrm{~mA} \end{aligned}$ | $m A / V$ | Anode Volts | Screen Volts | mA/V |  |  |  |
| PCE82 | 641237541 |  | 10 |  | 150 200 | 200 | 10 10 | $\begin{array}{r} 3.7 \\ 12.5 \end{array}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $100$ | $3.7\}$ | B9A | TP |  |
| PCE800 | 641237541 |  | 9.4 |  | 200 200 | 200 | 10 10 | 3.4 7.5 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $3.4\}$ | 39A | TP |  |
| PCF80 | 645237114 |  | 9 | 2 2.0 | 100 200 | 175 | 14.0 10.0 | 5.0 6.2 | 100 150 | $\begin{array}{r} 60 \\ 150 \end{array}$ | $\left.\begin{array}{l} 5.0 \\ 5.0 \end{array}\right\}$ | B9A | TP |  |
| PCF82 | 645237114 |  | 9.5 | 1.0 1.0 | 150 250 | 0 100 | 18 10 | 8.5 5.2 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l}7.0 \\ 5.0\end{array}\right\}$ | B9A | TP |  |
| PCF84 | 576234141 |  |  | 2 | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | 175 | $\begin{array}{r} 14 \\ 8 \end{array}$ | $\begin{aligned} & 2.5 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l} 3 \\ 2.2 \end{array}\right\}$ | B9A | TP |  |
| PCF86 | 141234675 |  | 8 | $\left\{\begin{array}{l}3 \\ 1.2\end{array}\right.$ | 100 200 100 | 150 | $\begin{aligned} & 14 \\ & 10 \end{aligned}$ | $\begin{array}{r} 6 \\ 12 \end{array}$ | $\begin{aligned} & 100 \\ & \text { No Dat } \end{aligned}$ | $60$ <br> Avail | $\mathrm{able}\}$ | B9A | TP |  |
| PCF87 | 157236414 |  | 7.4 | 3.2 | 100 200 | 150 | 15 6.4 | 8.5 | 100 100 | 60 100 | 8 \% | B9A |  |  |
| PCF800 | 157236414 |  | 9 |  | 100 200 | 150 | 6 | 5 8.5 | 100 100 | 60 100 | $\left.\begin{array}{l}5 \\ 5\end{array}\right\}$ | B9A | TP |  |
| PCF801 | 141237564 |  | 8 | $\left\{\begin{array}{l}3 \\ 1.2\end{array}\right.$ | 100 200 | 125 | 15 10 | 8.5 10.5 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | 8 \% | B9A | TP |  |
| PCF802 | 645237114 |  | 9.0 | $\left\{\begin{array}{l}2.0 \\ 1.0\end{array}\right.$ | 200 100 | 100 | 3.5 6.0 | 3.5 5.5 | 100 100 | 60 100 | $\left.\begin{array}{l}3.5 \\ 5\end{array}\right\}$ | 39 | TP |  |
| PCF803 | 141237564 |  | 9 | $\{3$ | 100 150 | 100 | 15 10 | $\begin{array}{r} 9 \\ 11 \end{array}$ | $\begin{aligned} & 80 \\ & 80 \end{aligned}$ | $\begin{aligned} & 60 \\ & 60 \end{aligned}$ |  | B9A | IP |  |
| PCF805 | 657231414 |  | 7.4 | $\left\{\begin{array}{l}3 \\ 1.5\end{array}\right.$ | 100 150 | 150 | 14 10 | ${ }_{11}{ }^{5} 5$ | 100 100 | 60 100 | 5 \} | B9A | TP |  |
| PCF806 | 141237564 |  | 8 | 3 1.2 | 100 200 | 150 | 14 10 | ${ }^{5} 2.5$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 6 , | 9A | TP |  |
| PCF808 | 657231414 |  | 7.4 | $\left\{\begin{array}{l}3 \\ 1.7\end{array}\right.$ | 100 150 | 150 | 14 12 | 5.5 14.5 | 100 80 | 60 60 | 6 6 | B9A | TP |  |
| PCL81 | 451237614 |  | 12.6 | $\left\{\begin{array}{l}1.7 \\ 6.9\end{array}\right.$ | 150 200 | 200 | 30.3 | 1.6 8.7 | 100 100 | 60 100 | $1.2\}$ | B9A | TP |  |
| PCL82 | 414237516 |  | 16 | $\left\{\begin{array}{c}1.5 \\ 11\end{array}\right.$ | 200 200 | 175 | ${ }^{1.7}$ | 2.4 7.5 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l}3 \\ 6\end{array}\right\}$ | B9A | TP |  |
| PCL83 | 641237154 |  | 12.5 | $\left\{\begin{array}{l}8.5 \\ 9.0\end{array}\right.$ | 250 200 | 0 175 | 10.5 30 | 2.2 4.7 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\left.\begin{array}{l}2.0 \\ 4.0\end{array}\right\}$ | B9A | TP |  |
| PCL84 | 461237145 |  | 15 | $\left\{\begin{array}{l}1.7 \\ 2.9\end{array}\right.$ | 200 200 | 200 | 3 18 | 4 10 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | 4 , | B9A | TP |  |
| PCL8 ${ }^{5}$ | 641237514 |  | 18 | $\left\{\begin{array}{l}0.8 \\ 15\end{array}\right.$ | 100 200 | 175 | 41 | 6.5 7.5 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $6.5\}$ | B9A | TP |  |
| PCL86 | 415237146 |  | 14.5 | $\left\{\begin{array}{l}1.7 \\ 5.7\end{array}\right.$ | 250 250 | 250 | ${ }^{1.2}$ | 1.6 10.5 | $\begin{aligned} & 100 \\ & \text { No Dat } \end{aligned}$ | $\begin{aligned} & 60 \\ & \text { Avail } \end{aligned}$ | $\left.\begin{array}{l} 2 \\ \text { able } \end{array}\right\}$ | B9A | TP |  |
| PCL88 | 414237516 |  |  |  | $\begin{aligned} & 200 \\ & 200 \end{aligned}$ | 200 | 10 | 3.4 | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | $3\}$ | B9A | TP |  |
| PC05-15 | 023014500 | A1 | 4 |  | 400 | 250 | 40 | 1.3 | No Da | a Avail | able | 8SC | P |  |
| PCO3/3A | 023014500 | A1 | 2 |  | 300 | 125 |  | 1.4 | 100 | 100 |  | 8SC | P |  |
| PCO3/3B | 023014500 | A1 | 4 |  | 300 | 125 |  | 1.4 | 100 | 100 |  | 8SC | P |  |
| PD220 | 446230700 |  | 2 | 1.2 | 150 |  | 0.8 | 0.9 | 150 |  | 0.9 | B7 | TT |  |
| PD220A | 446230700 |  | 2 | 3 | 150 |  | 5 | 1.5 | 100 |  | 1.5 | B7 | TT |  |
| PDD2 | 264589130 |  | 6.3 | 6 | 250 | 250 | 36 | 9 | 100 | 100 | 8.5 | A08 | DDP |  |
| PE04-10 | 023114500 | A1 | 12 |  | 400 | 300 | 27 | 7.5 | No Da | a Avail | able | 8SC | P |  |
| PE05-15 | 023114500 | A1 | 12 |  |  |  | 40 | 1.5 | No Da | a Avail | lable | 8SC | P |  |


| VALVE | SELECTOR SWITCH No. |  | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Neg. Grid Volts |  | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volte | Screen Volts | mA/V |  |  |  |
| PE05/25 | 256 | 6130000 |  | A1 | 12.6 | 80 | 400 | 200 | 70 |  | No Da | a Avai | lable | B5B | P |  |
| PE06/40P | 123 | 114500 | A1 | 6 | 40 | 400 | 300 | 40 | 4 | No Da | a Avail | lable | 8SC | P |  |
| PE1-100 | 245 | 611300 |  | 12 | 33 | 400 | 250 | 40 | 6 | No Da | a Avail | lable | B7A | P |  |
| Pen4DD | 918 | 236500 | G1 | 4(5) | 6 | 250 | 250 | 36 | 9.5 | 100 | 150 | 8 | B7 | DDP |  |
| Pen4V | 642 | 310000 | G2 | 4 | 10 | 250 | 200 | 35 | 3 | 100 | 150 | 2.8 | B5 | P |  |
| Pen4VA | 642 | 310000 | G2 | 4 | 22 | 250 | 250 | 36 | 2.8 | 100 | 150 | 2.8 | B5 | P |  |
| Pen4VA | 045 | 231600 |  | 4 | 20 | 250 | 250 | 36 | 2.8 | 100 | 150 | 2.8 | B7 | P |  |
| Pen4VB | 045 | 231600 |  | 4 | 5.8 | 250 | 250 | 36 | 9.5 | 100 | 150 | 8 | B7 | P |  |
| Pen4VX | 642 | 310000 | G2 | 4 | 15 | 350 | 200 | 22 | 3.5 | 100 | 150 | 3.5 | B5 | P |  |
| Pen13 | 023 | 3100560 | G1 | 13 | 14 | 200 | 200 | 25 | 2.5 | 100 | 100 | 2.5 | 8SC | F |  |
| Pen13A | 023 | 110560 | G1 | 33 | 8.5 | 200 | 200 | 45 | 8 | 100 | 100 | 6 | 8SC | P |  |
| Pen13C | 045 | 231600 |  | 13 | 11 | 250 | 250 | 32 | 6.5 | 100 | 150 | 6 | B7 | P |  |
| Pen20 | 642 | 310000 | G2 | 20 | 18 | 200 | 200 | 20 | 1.7 | 100 | 150 | 1.7 | B5 | P |  |
| Pen24 | 206 | 540030 |  | 2 | 3.3 | 200 | 125 | 5 | 4 | 100 | 100 | 4 | M08 | P |  |
| Pen25 | 206 | 540030 |  | 2 | 3.6 | 200 | 125 | 5 | 3 | 100 | 100 | 3 | M08 | P |  |
| Pen26 | 023 | 100560 | G1 | 24 | 19 | 200 | 100 | 40 | 3.1 | 100 | 60 | 3 | 8SC | P |  |
| Pen36A | 145 | 231600 |  | 35 | 8.5 | 200 | 200 | 45 | 8 | 100 | 150 | 7 | B7 | P |  |
| Pen36C | 045 | 231600 |  | 33 | 8.5 | 200 | 200 | 45 | 8 | 100 | 100 | 7 | B7 | P |  |
| Pen40DD | 918 | 236500 | G1 | 44 | 8.5 | 200 | 200 | 45 | 8 | 100 | 100 | 7 | B7 | DDP |  |
| Pen44 | 216 | 540030 |  | 4 | 11 | 300 | 275 | 70 | 10.6 | 100 | 150 | 9 | M08 | P |  |
| Pen45 | 216 | 540030 |  | 4 | 8.5 | 250 | 250 | 40 | 8.8 | 100 | 150 | 8 | M08 | P |  |
| Pen45AN | 216 | 540030 |  | 4 | 8.5 | 250 | 250 | 40 | 8.8 | 100 | 150 | 8 | M08 | P |  |
| Pen450d | 216 | 590830 | G1 | 4 | 8.5 | 250 | 250 | 40 | 8.8 | 100 | 100 | 8 | M08 | DDP |  |
| Pen46 | 210 | 540030 | A1 | 4(5) | 8 | 300 | 225 | 63 | 8.5 | 100 | 100 | 8 | M08 | P |  |
| Pen141 | 206 | 540030 |  | 1.4 | 9 | 90 | 90 | 5.5 | 1.4 | 80 | 75 | 1.4 | M08 | P |  |
| Pen220 | 642 | 350000 |  | 2 | 4.9 | 150 | 150 | 9 | 2.2 | 100 | 100 | 2.2 | B5 | P |  |
| Pen220A | 642 | 350000 |  | 2 | 9 | 150 | 150 | 18 | 2.2 | 100 | 100 | 2.2 | B5 | P |  |
| Pen230 | 642 | 350000 |  | 2 | 4.5 | 150 | 125 | 6 | 2.2 | 150 | 125 | 2.2 | B5 | P |  |
| Pen231 | 642 | 350000 |  | 2 | 2.5 | 150 | 125 | 5 | 4.4 | 100 | 100 | 5 | B5 | P |  |
| Pen383 | 216 | 540030 |  | 38 | 10 | 200 | 175 | 64 | 10.5 | 100 | 100 | 9 | M08 | P |  |
| Pen384 | 216 | 540030 |  | 38 | 7 | 150 | 125 | 40 | 7.8 | 100 | 100 | 12 | M08 | P |  |
| Pen425 | 642 | 350000 |  | 4 | 25 | 300 | 200 | 20 | 1.7 | 100 | 100 | 1.7 | B5 | P |  |
| Pen428 | 045 | 231600 |  | 4(5) | 13.8 | 250 | 250 | 72 | 8.5 | 250 | 200 | 7 | B7 | P |  |
| Pen453DD | 216 | 590830 | G1 | 45 | 10 | 200 | 175 | 64 | 10.5 | 100 | 100 | 9 | M08 | DDP |  |
| Pen650 | 023 | 114500 | A1 | 6 | 24 | 400 | 300 | 30 | 5 | 100 | 150 | 5 | 8SC | P |  |
| Pen1340 | 045 | 231600 |  | 13 | 8.6 | 250 | 250 | 41 | 6.4 | 100 | 150 | 6 | B7 | P |  |
| Pen2020 | 023 | 100560 | G1 | 20 | 19 | 200 | 100 | 40 | 3.1 | 100 | 60 | 3.1 | 8SC | P |  |
| Pen3520 | 045 | 231600 |  | 35 | 8 | 200 | 200 | 40 | 7.3 | 100 | 100 | 7 | B7 | P |  |
| Pen3820 | 045 | 231600 |  | 38 | 10 | 150 | 175 | 64 | 10.5 | 100 | 100 | 9 | B7 | P |  |
| PenA1 | 642 | 350000 |  | 4 | 16.5 | 250 | 250 | 32 | 3 | 100 | 150 | 3 | B5 | P |  |
| PenA4 | 045 | 231600 |  | 4 | 5.8 | 250 | 250 | 36 | 9.5 | 100 | 150 | 9 | B7 | P |  |
| PenA4 | 005 | 231600 | G1 | 4 | 5 | 250 | 250 | 40 | 9.1 | 100 | 100 | 8 | B7 | P |  |
| PenB1 | 642 | 350000 |  | 2 | 4.5 | 150 | 150 | 8.5 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| PenB4 | 045 | 231600 |  | 4(5) | 14 | 250 | 275 | 72 | 8.5 | 100 | 150 | 7 | B7 | P |  |
| PenDD61 | 869 | 231500 | G1 | 6 | 5.3 | 250 | 250 | 32 | 8.5 | 250 | 200 | 8 | B7 | DDP |  |
| PendD1360 | 968 | 231500 | G1 | 13 | 5.3 | 250 | 250 | 32 | 8.2 | 100 | 100 | 8 | B7 | DDP |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Voles | Screen Voles | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| PendD2530 | 869231500 | G1 | 25 | 7.8 | 250 | 250 | 43 | 7.8 | 100 | 150 | 7.8 | B7 | DDP |  |
| PenDD4020 | 968231500 | G1 | 40 | 7.7 | 250 | 250 | 43 | 7.8 | 100 | 100 | 7 | B7 | DDP |  |
| PenDD4022 | 968231500 | G1 | 45 | 10 | 200 | 175 | 64 | 10.5 | 100 | 100 | 12 | B7 | DDP |  |
| PF9 | 026510310 | G1 | 6 | 3.5 | 250 | 100 | 7.5 | 1.7 | 100 | 100 | 1.6 | A08 | P |  |
| PF83 | 501236014 |  | 4.5 | 2 | 60 | 50 | 1.9 |  | No Da | ta Avai | lable | B9A | P |  |
| PF86 | 501236014 |  | 4.5 | 2 | 250 | 150 | 3 | 2 | 100 | 100 |  | B9A | P |  |
| PF462 | 041230500 | A1 | 2 | 1 | 150 | 150 | 3 | 1.9 | 150 | 150 | 1.9 | B7 | P |  |
| PF472 | 041230500 | A1 | 2 | 0.5 | 150 | 150 | 2.5 | 1.7 | 150 | 150 | 1.7 | B7 | P |  |
| PL11 | 602301450 |  | 17.5 | 10.5 | 200 | 200 | 53 | 9 | 100 | 100 |  | F8 | P |  |
| PL33 | 026540310 |  | 19 | 5.3 | 250 | 250 | 32 | 9 | 100 | 150 | 8 | A08 | P |  |
| PL36 | *2* 540310 | A1 | 25 | 21 | 200 | 175 | 100 | 11 | No D | ta Avai | lable | A08 | P |  |
| PL38 | 120540310 | A1 | 30 | 5.5 | 200 | 200 | 75 | 13.5 | 100 | 150 | 10 | A08 | P |  |
| PL81 | *41 23**51 | A1 | 21.5 | 28 | 200 | 200 | 30 | 6 | 100 | 100 | 6 | B9A | P |  |
| PL81F | *41 23* *51 | A1 | 21.5 | 28 | 200 | 200 | 30 | 6 | 100 | 100 | 6 | B9A | P |  |
| PL82 | 041230605 |  | 16 | 14.2 | 200 | 200 | 45 | 7.6 | 100 | 100 | 7 | B9A | P |  |
| PL83 | 541231600 |  | 15 | 2.3 | 200 | 175 | 36 | 10 | 100 | 100 | 9 | B9A | P |  |
| PL84 | *41 23* 6*5 |  | 15 | 12.5 | 200 | 175 | 70 | 10 | 100 | 100 | 9 | B9A | P |  |
| PL136 | 521441350 | A1 | 35 | 12 | 100 | 100 | 90 | 19 | No Da | ta Avai | lable | A08 | P |  |
| PL183 | 541231640 |  | 12.6 | 2.1 | 150 | 225 | 40 | 25 | No Da | ta Avai | lable | B9A | P |  |
| PL300 | 521441350 | A1 | 35 | 22.5 | 200 | 150 | 100 | 10 | No Da | ta Avai | lable | B8A | P |  |
| PL500 | 441235510 | A1 | 27 | 14 | 150 | 150 | 100 | 10 | No Da | ta Avai | lable | B9D | P |  |
| PL820 | 041231551 | A1 | 21.5 | 22 | 200 | 175 | 45 | 6.2 | 100 | 100 | 6 | B9A | P |  |
| PMO4 | 412365100 |  | 6.3 | 1.2 | 250 | 100 | 11 | 4.4 | 100 | 100 | 4 | B7G | P |  |
| PMO5 | 412365100 |  | 6.3 | 2.3 | 150 | 150 | 7 | 4.3 | 100 | 100 | 4 | B7G | P |  |
| PMO7 | 412361500 |  | 6.3 | 2 | 250 | 250 | 10 | 7.5 | 100 | 150 | 5 | B7G | P |  |
| PM1A | 642300000 |  | 2 |  | 100 |  | 1 | 1.2 | 100 |  | 1.2 | B4 | T |  |
| PM1HF | 642300000 |  | 2 | 3 | 150 |  | 1.5 | 0.8 | 100 |  | 0.8 | B4 | T |  |
| PM1HL | 642300000 |  | 2 | 1.5 | 150 |  | 2.3 | 1.2 | 150 |  | 1.2 | B4 | T |  |
| PM1LF | 642300000 |  | 2 | 6 | 150 |  | 3 | 0.9 | 100 |  | 0.9 | B4 | T |  |
| PM2 | 642300000 |  | 2 | 7 | 100 |  | 4 | 0.9 | 100 |  | 0.9 | B4 | T |  |
| PM2A | 642300000 |  | 2 | 6 | 160 |  | 5 | 2 | 100 |  | 2 | B4 | T |  |
| PM2B | 446230700 |  | 2 | 1 | 150 |  | 3 | 2.5 | 100 |  | 2.5 | B7 | TT |  |
| PM2BA | 446230700 |  | 2 | 1 | 150 |  | 3 | 2.1 | 100 |  | 2.1 | B7 | TT |  |
| PM2DL | 642300000 |  | 2 | 4.5 | 150 |  | 2 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| PM2DX | 642300000 |  | 2 | 5 | 150 |  | 2.3 | 1.1 | 100 |  | 1 | B4 | T |  |
| PM2HL | 642300000 |  | 2 | 1.5 | 150 |  | 2.2 | 1.4 | 150 |  | 1.4 | B4 | T |  |
| PM3 | 642300000 |  | 4 |  | 100 |  | 2 | 1.1 | 100 |  | 1 | B4 | T |  |
| PM4DX | 642300000 |  | 4 |  | 100 |  | 1.5 | 2 | 100 |  | 2 | B4 | T |  |
| PM12 | 542300000 | A1 | 2 |  | 150 | 75 | 4 | 1.1 | 100 | 75 | 1.1 | B4 | P |  |
| PM12A | 542300000 | A1 | 2 | 1 | 150 | 75 | 2 | 1.5 | 100 | 75 | 1.5 | B4 | P |  |
| PM12M | 542300000 | A1 | 2 | 1 | 150 | 90 | 1.4 | 1.4 | 150 | 90 | 1.4 | B4 | P |  |
| PM12V | 542300000 | A1 | 2 |  | 150 | 90 |  | 0.7 | 100 | 90 | 0.7 | B4 | P |  |
| PM14 | 542300000 | A1 | 4 |  | 150 | 75 | 2.7 | 0.8 | 100 | 75 | 0.8 | B4 | P |  |
| PM22 | 642350000 |  | 2 | 10 | 150 | 150 | 15 | 1.3 | 100 | 100 | 1.3 | B5 | P |  |
| PM22A | 642350000 |  | 2 | 4.5 | 150 | 150 | 5.6 | 2.2 | 100 | 100 | 2.2 | B5 | P |  |
| PM22C | 642350000 |  | 2 | 16 | 150 | 150 | 23 | 3 | 100 | 100 | 3 | B5 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode | Screen Volts | $\begin{aligned} & \mathbf{l a}_{\mathrm{mA}} \end{aligned}$ | mA/V | Anode Volte | Screen Volts | mA/V |  |  |  |
| PM22D | 642350000 |  | 2 | 2.4 | 150 | 150 | 5 | 3 | 100 | 100 | 3 | B5 | P |  |
| PM24 | 642350000 |  | 4 | 11 | 150 | 150 | 20 | 1.7 | 100 | 100 | 1.7 | B5 | P |  |
| PM24 | 642310000 | G2 | 4 | 11 | 150 | 150 | 20 | 1.7 | 100 | 100 | 1.7 | B5 | P |  |
| PM24A | 642350000 |  | 4 | 22.5 | 300 | 200 | 20 |  | 100 | 100 | 2 | B5 | P |  |
| PM24B | 642350000 |  | 4 | 40 | 400 | 300 | 30 | 2.1 | 100 | 100 | 2.1 | B5 | P |  |
| PM24C | 642350000 |  | 4 | 20 | 400 | 200 |  | 3 | 100 | 100 |  | B5 | P |  |
| PM24D | 642350000 |  | 4(5) | 35 | 400 | 200 | 50 | 4 | 100 | 100 | 4 | B5 | P |  |
| PM24DC | 642350000 |  | 4(5) | 42 | 300 | 200 | 20 | 1.5 | 100 | 100 | 2 | B5 | P |  |
| PM24E | 642350000 |  | 4 | 40 | 300 | 300 | 83 | 3.9 | 100 | 150 | 3.9 | B5 | P |  |
| PM24M | 642350000 |  | 4 | 17 | 250 | 250 | 30 | 3 | 100 | 150 | 3 | B5 | P |  |
| PM202 | 642300000 |  | 2 | 14 | 150 |  | 14 | 3.5 | 100 |  | 2.5 | B4 | T |  |
| PM252 | 642300000 |  | 2 |  | 100 |  | 32 | 3.7 | 100 |  |  | B4 | T |  |
| PM254 | 642300000 |  | 4 | 21 | 200 |  | 15 |  | 100 |  |  | B4 | T |  |
| PM256 | 642300000 |  | 6 | 27 | 250 |  | 20 |  | 100 |  | 2.4 | B4 | T |  |
| PN2 | 642350000 |  | 2 | 7.5 | 150 | 150 | 6 |  | 100 | 100 |  | B5 | P |  |
| PP2 | 642300000 | G2 | 2 | 5 | 150 | 150 | 7 | 2.1 | 100 | 100 | 2.1 | B4 | P |  |
| PP2 | 642350000 |  | 2 | 5 | 150 | 150 | 7 | 2.1 | 100 | 100 | 2.1 | B5 | P |  |
| PP2S | 023004560 |  | 2 | 5 | 150 | 150 | 7 | 2.1 | 100 | 100 | 2.1 | 8SC | P |  |
| PP3/250 | 642300000 |  | 4 | 37 | 300 |  | 48 | 5.2 | 100 |  | 6.5 | B4 | T |  |
| PP4 | 642350000 |  | 4 | 15 | 250 | 250 | 36 | 3 | 100 | 150 |  | B4 | P |  |
| PP4S | 032004560 |  | 4 | 15 | 250 | 250 | 36 | 3 | 100 | 150 |  | 8SC | P |  |
| PP4S | 642350000 |  | 4 | 15 | 250 | 250 | 36 | 3 | 100 | 150 |  | B5 | P |  |
| PP5/400 | 642300000 |  | 4(5) | 32 | 400 |  | 62 | 8.2 | 100 |  | 6 | B4 | T |  |
| PP6AS | 023104560 |  | 6 | 18 | 250 | 250 | 32 | 2.8 | 100 | 150 | 2.8 | 8 SC | P |  |
| PP6B | 265413000 |  | 6 |  | 250 | 250 | 36 | 10 | 100 | 150 | 9 | UX6 | P |  |
| PP6BG | 026540310 |  | 6 | 6 | 250 | 250 | 36 | 10 | 100 | 150 | 9 | A08 | P |  |
| PP6BS | 026540310 |  | 6 | 6 | 150 | 250 | 36 | 9 | 100 | 150 | 9 | A08 | P |  |
| PP6C | 026540310 |  | 6 | 12 | 250 | 200 | 36 | 10 | 100 | 150 | 9 | A08 | P |  |
| PP6E | 045231600 |  | 6 | 17 | 500 | 275 | 72 | 8.5 | 100 | 150 | 8 | B7 | P |  |
| PP13A | 045231600 |  | 13 | 12 | 200 | 200 | 40 | 2.6 | 100 | 100 | 2.5 | B7 | P |  |
| PP13S | 023100560 | G1 | 13 | 14 | 200 | 200 | 25 | 3.5 | 100 | 100 | 3.5 | 8SC | P |  |
| PP24 | 005231600 | G1 | 24 | 19 | 200 | 100 | 40 | 3 | 100 | 75 | 3 | B7 | P |  |
| PP24S | 023100560 | G1 | 24 | 19 | 200 | 100 | 40 | 3 | 100 | 75 | 3 | 8 SC | P |  |
| PP34 | 005231600 | G1 | 35 | 6.5 | 200 | 200 | 45 | 8.5 | 100 | 100 | 8 | B7 | P |  |
| PP34S | 023100560 | G1 | 35 | 6.5 | 200 | 200 | 45 | 85 | 100 | 100 | 8 | 8SC | P |  |
| PP35 | 045231600 |  | 35 | 6.5 | 200 | 200 | 45 | 8.5 | 100 | 100 | 8 | B7 | P |  |
| PP36 | 145231600 |  | 35 | 6.5 | 200 | 200 | 45 | 8.5 | 100 | 100 | 8 | B7 | P |  |
| PP37 | 005231600 | G1 | 35 | 9.5 | 200 | 100 | 45 | 8.5 | 100 | 75 | 8 | B7 | P |  |
| PP60 | 026540310 |  | 6 | 15 | 250 | 250 | 85 | 6.3 | 100 | 150 | 6.3 | A08 | P |  |
| PP215 | 642350000 |  | 2 | 4.5 | 90 | 90 | 8 | 1.7 | 100 | 90 | 1.7 | 8SC | P |  |
| PP215S | 032004560 |  | 2 | 4.5 | 90 | 90 | 8 | 1.7 | 100 | 90 | 1.7 | 8SC | P |  |
| PP220 | 642300000 |  | 2 | 12 | 150 |  | 12.5 | 3 | 100 |  |  | B4 | T |  |
| PP222 | 642350000 |  | 2 | 6 | 150 | 150 | 12 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| PP222 | 642300000 | G1 | 2 | 6 | 150 | 150 | 12 | 2.5 | 100 | 100 | 2.5 | B4 | P |  |
| PP225 | 642350000 |  | 2 | 12 | 150 | 150 | 18 |  | 100 | 100 | 2 | B5 | P |  |
| PP225S | 023004560 |  | 2 | 12 | 150 | 125 | 18 | 2 | 100 | 100 | 2 | 8SC | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grld Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volte | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| PP415 | 642350000 |  | 4 | 12 | 200 | 200 | 12 | 1.8 | 100 | 150 | 1.8 | B5 | P |  |
| PP416 | 642350000 |  | 4 | 12 | 200 | 75 | 10 | 2 | 100 | 60 | 2 | B5 | P |  |
| PP430 | 642350000 |  | 4 | 25 | 200 | 200 | 20 | 2 | 100 | 100 | 2 | B5 | P |  |
| PP431 | 642350000 |  | 4 | 20 | 250 | 250 | 22 | 1.9 | 100 | 150 | 1.9 | B5 | P |  |
| PP2018 | 642310000 | G2 | 20 | 18 | 200 | 200 | 20 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| PP2018 | 045231600 |  | 20 | 18 | 200 | 200 | 20 | 2.5 | 100 | 100 | 2.5 | B7 | P |  |
| PP2101 | 364520000 |  | 2 | 3 | 150 | 150 | 7 | 2.1 | 100 | 100 | 2.1 | UX5 | P |  |
| PP3521 | 040231600 |  | 35 | 25 | 200 |  | 70 | 6.3 | 100 |  | 6 | B7 | T |  |
| PP4100 | 642350000 |  | 4 | 40 | 400 | 300 | 30 | 3 | 100 | 150 | 3 | B5 | P |  |
| PP4101 | 642350000 |  | 4 | 14 | 250 | 250 | 36 | 3.5 | 100 | 150 | 3.5 | B5 | P |  |
| PP4118 | 160452300 |  | 40 | 10 | 200 | 175 | 35 | 6.5 | 100 | 100 | 6 | C7 | $\mathbf{P}$ |  |
| PT | 045231600 |  | 4 | 6 | 250 | 250 | 32.5 | 7.5 | 100 | 150 | 2 | B7 | P |  |
| PT2 | 642350000 |  | 2 | 4.5 | 150 | 125 | 5.3 | 2.6 | 100 | 100 | 7.6 | B5 | P |  |
| PT2 | 642300000 | G2 | 2 | 4.5 | 150 | 150 | 6.5 | 2.5 | 100 | 100 | 2 | B4 | P |  |
| PT2A | 642350000 |  | 2 | 10.5 | 150 | 150 | 18 |  | 100 | 100 |  | B5 | P |  |
| PT2K | 642350000 |  | 2 | 4.5 | 150 | 150 | 9.5 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| PT4 | 642350000 |  | 4 | 17 | 250 | 250 | 30 | 3 | 100 | 150 | 2.3 | B5 | P |  |
| PT4 | 045231600 |  | 4 | 6 | 250 | 250 | 36 | 9.5 | 100 | 150 | 7 | B7 | P |  |
| PT4 | 216045300 |  | 4 | 6 | 250 | 250 | 31 | 7 | 100 | 100 |  | B7 | $\mathbf{P}$ |  |
| PT4D | 968231500 | G1 | 4 | 6 | 250 | 250 | 32.5 | 7.5 | 100 | 150 | 7 | B7 | DDP |  |
| PT5 | 045231600 |  | 26 | 7 | 250 | 250 | 36 | 9 | 100 | 100 |  | B7 | P |  |
| PT10 | 045231600 |  | 4 | 7.5 | 250 | 250 | 40 | 9 | 100 | 150 | 8 | B7 | P |  |
| PT12 | 204531102 | A1 | 10 | 15 | 250 | 250 | 62 | 6 | 100 | 150 | 6 | B9 | P |  |
| PT15 | 542310000 | A1 | 6 | 25 | 300 | 300 | 40 | 2.8 | 100 | 100 | 1.2 | B5 | P |  |
| PT16 | 642350000 |  | 4 | 15 | 300 | 300 | 55 | 4.8 | 100 | 150 | 4.8 | B5 | P |  |
| PT25 | 642350000 |  | 4 | 22 | 400 | 200 | 62 | 4 | 100 | 100 | 4 | B5 | P |  |
| PT25H | 642350000 |  | 5 | 16 | 400 | 300 | 62 | 6.5 | 100 | 150 | 5 | B5 | P |  |
| PT41 | 642350000 |  | 4 | 12.5 | 250 | 200 | 30 | 3 | 100 | 100 | 3 | B5 | P |  |
| PT41B | 642350000 |  | 4 | 40 | 400 | 300 | 30 | 2.2 | 100 | 100 | 2.2 | B5 | P |  |
| PT225 | 642350000 |  | 2 | 6 | 150 | 150 | 8 | 2.3 | 100 | 100 | 2.5 | B5 | P |  |
| PT225 | 642300000 | G2 | 2 | 6 | 150 | 150 | 8 | 2.3 | 100 | 100 | 2.5 | B4 | P |  |
| PT240 | 642350000 |  | 2 | 9 | 150 | 150 | 16 | 2.5 | 100 | 100 | 1.6 | B5 | P |  |
| PT250 | 642350000 |  | 2 | 15 | 250 | 250 | 40 |  | 100 | 150 |  | B5 | P |  |
| P1425 | 642350000 |  | 4 | 7.5 | 150 | 150 | 15 | 2 | 100 | 100 | 2 | B5 | P |  |
| PTA | 045231600 |  | 13 | 10 | 250 | 250 | 32 | 4 | 100 | 150 | 4 | B7 | P |  |
| PTAD | 968231500 | G1 | 4 | 6 | 250 | 250 | 7 | 7 | 100 | 150 | 7 | B7 | DDP |  |
| PTS | 005231600 | G1 | 26 | 5.5 | 250 | 250 | 40 | 6 | 100 | 150 | 6 | B7 | P |  |
| PTS | 045231600 |  | 26 | 8.2 | 250 | 250 | 32 | 6 | 100 | 150 | 5 | B7 | P |  |
| PTSA | 869231500 | G1 | 26 | 5.5 | 200 | 200 | 40 |  | 100 | 150 |  | B7 | DDP |  |
| PTSD | 968231500 | G1 | 26 | 5 | 250 | 200 | 40 | 6 | 100 | 150 | 6 | B7 | DDP |  |
| PTT120P | 641237410 |  | 18 | 1.5 | 250 |  | 10 | 5.5 | 100 |  |  | B8D | TT |  |
| PTM122P | 641237410 |  | 18 | 2 | 250 |  | 10 | 5.5 | 100 |  | 5 | B8D | TT |  |
| PTT141 | 602441443 |  | 6.3 | 1.2 | 150 |  | 22 | 25 | No Da | ta Avai | lable | B9A | T |  |
| PTM202 | 412356010 |  | 18 | 2.2 | 200 | 200 | 8 | 5.5 | 100 | 100 |  | B8D | P |  |
| PTM'202S | 412356010 |  | 18 | 2.2 | 200 | 200 | 8 | 5.5 | 100 | 100 |  | B8D | P |  |
| PIT203 | 026510310 | G1 | 18 | 5 | 200 | 200 | 35 | 8.5 | No De | ta Avai | lable | A08 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Valts | Anode Volts | $\begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}$ | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| PTT203P | 026500310 | G1 | 18 | 5 | 200 | 200 | 35 | 8.5 | 100 | 100 |  | A08 | P |  |
| PTT208P | 412356110 |  | 18 | 4.5 | 200 | 200 | 18 | 6 | 100 | 100 |  | B8D | P |  |
| PTT212P | 412356010 |  | 18 | 1.6 | 200 | 200 | 10.5 | 8.5 | No D | a Avail | ilable | B8D | P |  |
| PTT213P | 412356010 |  | 6.3 | 1.6 | 200 | 200 | 10.5 | 8.5 | No D | a Avai | ilable | B8D | P |  |
| PTT214P | 412365110 |  | 6.3 | 1.8 | 150 | 150 | 12.5 | 13.5 | No D | ta Avai | ilable | B8D | P |  |
| PTT216 | 402106053 |  | 6.3 | 1.8 | 150 | 150 | 12.5 | 13.5 | No D | ta Avai | ilable | B8D | P |  |
| PTT217 | 123141516 |  | 6.3 | 1.6 | 150 | 150 | 12.5 | 16 | No D | ta Avai | ilable | B9A | P |  |
| PTT241P | 412356 *00 |  | 6.3 | 2.9 | 250 | 225 | 34 | 12.5 | No D | ta Avai | ilable | B8D | $P$ |  |
| PTT243P | 421356130 |  | 6.3 | 1.5 | 150 | 150 | 26 | 28 | No D | ta Avail | ilable | B8D | P |  |
| PTT244P | 615141230 |  | 18 | 1.5 | 150 | 150 | 26 | 27 | No D | ta Avai | ilable | B8D | P |  |
| PTT310A | 604143210 |  | 20 | 1.8 | 75 | 75 | 2 | 3.2 | 80 | 75 | 3.2 | B8D | P |  |
| PTZ | 005231600 | G1 | 40 | 5.5 | 250 | 200 | 40 | 7.5 | 100 | 150 | 7 | B7 | P |  |
| PV06-20 | 400235100 | A1 | 6 | 40 | 200 | 300 | 40 | 4 | 100 | 100 | 4 | B7 | P |  |
| PVO6-25 | 401235100 | A1 | 6 | 40 | 200 | 300 | 40 | 4 | 100 | 100 | 4 | B7 | P |  |
| PV1-35 | 401235100 | A1 | 12 | 25 | 250 | 200 | 40 | 2 | 100 | 100 | 2 | B7 | P |  |
| PV4 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| PV25 | 091231800 |  | 25 |  |  |  | 60 |  | REC |  | 20 mA | B7 | RR |  |
| PV29 | 091231800 |  | 30 |  |  |  | 60 |  | REC |  | 20 mA | B7 | RR |  |
| PV29S | 123180090 |  | 30 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | RR |  |
| PV30 | 091231800 |  | 30 |  |  |  | 30 |  | REC |  | 15 mA | B7 | RR |  |
| PV30A | 123180090 |  | 30 |  |  |  | 30 |  | REC |  | 15 mA | 8SC | RR |  |
| PV30S | 123190080 |  | 30 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | RR |  |
| PV75/1000 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 17 mA | B4 | RR |  |
| PV100/2000 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 18 mA | B4 | RR |  |
| PV200/600 | 892300000 |  | 4 |  |  |  | 120 |  | REC |  | 28 mA | B4 | RR |  |
| PV400 | 802300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | R |  |
| PV430 | 892300000 |  | 4 |  |  |  | 15 |  | REC |  | 9 mA | B4 | RR |  |
| PV475 | 892300000 |  | 4 |  |  |  | 15 |  | REC |  | 11 mA | B4 | RR |  |
| PV480 | 802300000 |  | 4 |  |  |  | 30 |  | REC |  | 16 mA | B4 | R |  |
| PV495 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 17 mA | B4 | RR |  |
| PV3018 | 190812300 |  | 30 |  |  |  | 60 |  | REC |  | 20 mA | C7 | RR |  |
| PV4100 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| PV4200 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 27 mA | B4 | RR |  |
| PV4201 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 27 mA | B4 | RR |  |
| PV4300 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| PVB6 | 892310000 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | B5 | RR |  |
| PX2 | 642300000 |  | 2 | 22 | 150 |  | 22 | 1.5 | 100 |  | 1.5 | B5 | T |  |
| PX4 | 642300000 |  | 4 | 43 | 300 |  | 43 | 6 | 100 |  | 6 | B4 | T |  |
| PX5 | 642300000 |  | 4 | 34 | 400 |  | 62.5 | 6.5 | 100 |  | 6.5 | B4 | T |  |
| PX25 | 642300000 |  | 4(5) | 31 | 400 |  | 40 | 7.5 | 100 |  | 7 | B4 | T |  |
| PX25A | 642300000 |  | 4(5) | 100 | 400 |  | 62.5 | 3.7 | 100 |  | 6.5 | B4 | T |  |
| PX41 | 642300000 |  | 4 | 40 | 250 |  | 49 | 6 | 100 |  | 6 | B4 | T |  |
| PX230 | 642300000 |  | 2 | 15 | 150 |  | 17.5 | 3.5 | 100 |  | 3.5 | B4 | T |  |
| PX230SW | 602300000 | G1 | 2 | 15 | 150 |  | 18 | 3.5 | 100 |  | 3.5 | B4 | T |  |
| PX240 | 642300000 |  | 2 | 32 | 200 |  | 25 | 3 | 100 |  | 3 |  | T |  |
| PX2100 | 642300000 |  | 7.5 | 30 | 400 |  | 18 | 1.6 | 100 |  | 1.6 | SM4 | T |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | $m A / V$ | Anode Volts | Screen Volts | mAN |  |  |  |
| PY31 | 020080310 |  | 17 |  |  |  | 120 |  | REC |  | 70 mA | A08 | R |  |
| PY32 | 028 08* 310 |  | 29 |  |  |  | 180 |  | REC |  | 70 mA | A08 | R |  |
| PY33 | 028080310 |  | 29 |  |  |  | 180 |  | REC |  | 70 mA | A08 | R |  |
| PY71 | 200800030 | C | 21 |  |  |  | 120 |  | REC |  | 30 mA | B8B | R |  |
| PY80 | 001230008 |  | 19 |  |  |  | 180 |  | REC |  | 70 mA | B9A | R |  |
| PY81 | *** $23 * * * 8$ | C | 17 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| PY82 | **1 23***8 |  | 19 |  |  |  | 180 |  | REC |  | 70 mA | B9A | R |  |
| PY83 | *** 23* **8 | C | 20 |  |  |  | 120 |  | REC |  | 70 mA | B9A | R |  |
| PY88 | *** 23* **8 | C | 26 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| PY300 | 028 08* 310 |  | 29 |  |  |  | 180 |  | REC |  | 40 mA | A08 | R |  |
| PY800 | *** 23* **8 | C | 19 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| PY801 | *** 23* **8 | C | 19 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| PZ | 264530000 |  | 2.5 | 16.5 | 250 | 250 | 31 | 2.5 | 100 | 150 | 2.5 | UX5 | P |  |
| PZ03-3 | 401235000 | A1 | 4 | 25 | 300 | 125 | 25 | 1.4 | 100 | 100 | 1.4 | B7 | P |  |
| PZ05-15 | 401235000 | A1 | 4 |  | 400 | 150 | 40 | 1.2 | 100 | 100 | 1.2 | B7 | P |  |
| PZ30 | 029183210 |  | 26 |  |  |  | 120 |  | REC |  | 60 mA | A08 | RR |  |
| PZH | 265413000 |  | 2.5 | 16.5 | 250 | 250 | 34 | 2.2 | 100 | 150 | 2.2 | UX6 | P |  |
| QA2400 | 412361500 |  | 6 | 2.5 | 200 | 200 | 8 | 2.5 | 100 | 150 | 2.5 | B7G | P |  |
| QA2401 | 6*2 364100 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2.2 | B7G | T |  |
| QA2402 | 412 36* 500 |  | 6. | 13.5 | 250 | 250 | 16 | 2.6 | 100 | 150 | 2.6 | B7G | P |  |
| QA2403 | 412361500 |  | 6 | $\left\{\begin{array}{l}2.0 \\ 1.6\end{array}\right.$ | 250 200 | 250 150 | 10.0 4.0 | $\begin{aligned} & 7.5 \\ & 6.4 \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{aligned} & 150 \\ & 150 \end{aligned}$ | $\left.\begin{array}{l} 5.0 \\ 5.0 \end{array}\right\}$ | B7G | $\mathbf{P}$ |  |
| QA2404 | 192310800 |  | 6 |  |  |  | 3 |  | D |  |  | B7G | DD |  |
| QA2405 | 241657143 |  | 6 | 14 | 250 | 150 | 30 | 3.9 | 100 | 100 | 3.9 | B9G | PP |  |
| QA2406 | 471226413 |  | 6 | 2 | 250 |  | 10 | 5.5 | 100 |  | 5 | B9A | TT |  |
| QA2407 | 802309100 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | B7G | RR |  |
| QA2408 | 471461230 |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| QB65 | 461471230 |  | 6 | 8 | 250 |  | 9 | 2.6 | 100 |  | 2.6 | A08 | TT |  |
| QB309 | 641227413 |  | 6 | 2 | 250 |  | 10 | 5.5 | 100 |  | 5 | B9A | TT |  |
| QC05/35 | 235242300 | A1 | 1.6 |  | 200 | 200 | 100 | 7 | No Da | a Avail | lable | A08 | P |  |
| QD77 | 182310900 |  | 6 |  |  |  |  |  | D |  |  | B7G | DD |  |
| QQE03/20 | 245134200 | A1 A2 | 6 | 17 | 400 | 200 | 20 | 2.5 | No Da | a Avai | lable | B7A | PP |  |
| QE04-10 | 265511413 |  | 6 | 12 | 300 | 150 | 25 | 1.9 | 100 | 100 |  | B9G | P |  |
| QE05 | 125141300 | A1 | 6 |  | 200 | 200 | 100 | 7 | No Da | ta Avai | lable | A08 | P |  |
| QE06-50 | 254130000 | A1 | 6 | 14 | 200 | 250 | 83 | 6.5 | 100 | 100 |  | UX5 | P |  |
| QL77 | 6*2 364100 |  | 6 | 8.5 | 250 |  | 10.5 | 2.2 | 100 |  | 2 | B7G | T |  |
| QN77 | 412360500 |  | 6 | 12.5 | 250 | 250 | 16 | 2.6 | 100 | 150 | 2.6 | B7G | P |  |
| QP21 | 446235700 |  | 2 | 4.5 | 150 | 150 | 11 | 2.3 | 100 | 100 | 2.3 | B7 | PP |  |
| QP22A | 465230574 |  | 2 | 12 | 150 | 150 | 3 | 4 | 150 | 150 | 4 | B9 | PP |  |
| QP22B | 446235700 |  | 2 | 11.7 | 150 | 150 | 3.8 |  | 100 | 100 | 3.1 | B7 | PP |  |
| QP25 | 207544630 |  | 6 | 2 | 150 | 125 | 10 | 3 | 100 | 100 | 3 | M08 | PP |  |
| QP230 | 446235700 |  | 2 | 9.6 | 150 | 125 | 4.6 | 3 | 100 | 100 | 3 | B7 | PP |  |
| QP240 | 465230574 |  | 3 | 5 | 150 | 150 | 25 | 4 | 100 | 100 | 4 | B9 | PP |  |
| QPT2 | 476235700 |  | 2 | 9 | 150 | 150 | 3.3 |  | 100 | 100 |  | B7 | PP |  |
| QQ03-12 | 601235144 |  | 6 |  | 300 | 250 | 45 | 7 | 100 | 100 |  | B9A | P |  |
| QQCO3/14 | 412657240 |  | 3.1 |  | 200 | 200 | 30 | 3.2 | 100 | 100 | 3 | B9A | PP |  |
| QQCO4-15 | 263724540 |  | 6 | 14 | 200 | 200 | 20 | 2 | 100 | 100 |  | B8B | P |  |


| VALVE | SELECTOR SWITCH No. |  |  | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO valve tester |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts |  | Anode Volts | $\left\lvert\, \begin{gathered} \text { Screen } \\ \text { Volts } \end{gathered}\right.$ | $\begin{gathered} \mathrm{l}_{\mathrm{ma}}^{2} \end{gathered}$ | mA/V | Anode Voltt | $\begin{aligned} & \text { Screen } \\ & \text { Volts } \end{aligned}$ | man |  |  |  |
| QQEO2-5 | 414 | 4226 | 573 |  |  | 6.3 | 50 | 250 | 250 | 45 | 10.5 | No Data | Avail | lable | B9A | PP |  |
| QQE03-12 | 414 | 226 | 573 |  | 6.3 | 15 | 200 | 200 | 30 | 3.3 | 100 | 100 |  | B9A | PP |  |
| QQEO3-20 | 245 | 134 | 200 | A1 A2 | 6 | 17 | 400 | 200 | 20 | 2.5 | No Data | a Avail | lable | B7A | PP |  |
| QQEO4-20 | 245 | 134 | 200 | A142 | 6 | 26 | 400 | 250 | 30 | 3 | No Data | Avail | lable | B7A | PP |  |
| QQE06-40 | 245 | 134 | 200 | A1A2 | 6 |  | 400 | 250 | 30 | 3.4 | No Data | Avail | lable | B7A | PP |  |
| QQUO3-25 | 345 | 124 | 300 |  | 6.3 | 50 | 400 | 250 | 40 | 2.5 | No Data | Avail | lable | B7A | PP |  |
| QQvo2-6 | 414 | 226 | 573 |  | 6.3 | 2.5 | 150 | 150 | 22 | 10.5 | 100 | 100 |  | B9A | PP |  |
| QQVO3-10 | 414 | 4226 | 573 |  | 6 | 10 | 200 | 150 | 30 | 3.3 | 100 | 100 |  | B9A | PP |  |
| QQVO3-20 | 245 | 134 | 200 | A1A2 | 6.3 | 17 | 300 | 200 | 20 | 2.5 | 100 | 100 |  | B7A | PP |  |
| QQVO3-20A | 245 | 134 | 200 | A1A2 | 6.3 | 17 | 300 | 200 | 20 | 2.5 | 100 | 100 |  | B7A | PP |  |
| QQv04-15 | 245 | 134 | 200 | A142 | 6.3 | 27 | 400 | 250 | 30 | 3 | 100 | 100 |  | B7A | PP |  |
| QQVO4-20 | 241 | 531 | 420 | A142 | 6 | 23 | 400 | 200 | 25 | 4 | 100 | 100 |  | B7A | PP |  |
| QQVO6-40 | 245 | 134 | 200 | A142 | 6.3 |  | 400 | 250 | 30 | 3.4 | 100 | 100 |  | B7A | PP |  |
| QQV06-40A | 245 | 134 | 200 | A142 | 6.3 |  | 400 | 250 | 30 | 3.4 | 100 | 100 |  | B7A | PP |  |
| QQV07-40 | 245 | 134 | 200 | A142 | 6.3 |  | 300 | 250 | 25 | 1.9 | 100 | 100 |  | B7A | PP |  |
| Q.QV07-50 | 345 | 124 | 300 |  | 6.3 |  | 400 | 250100 | 100 | 4.5 | No Data | Avail | lable | B7A | PP |  |
| QQZO4-15 | 273 | 624 | 540 |  | 3 | 10 | 300 | 200 | 20 | 2 | 100 | 100 | , | B8B | PP |  |
| QQZ06-40 | 245 | 3*4 | 200 | A1 A2 | 2.1 |  | 200 | 200 | 30 | 4.5 | 100 | 100 |  | B7A | PP |  |
| Q/U37 | 023 | 000 | 000 | D1 | 1.4 |  |  |  |  |  | D |  |  | B3G | D |  |
| Q/U452 | 230 | 000 | 000 | D1 | 2 |  |  |  |  |  | D |  |  | B3G | D |  |
| QVO3-12 | 601 | 1235 | 144 |  | 6 | 7.5 | 250 | 250 | 45 | 7 | 100 | 150 | 7 | 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 |  |
| QV04-15 | 245 | 134 | 200 | A1A2 | 6.3 | 60 | 400 | 250 | 90 |  | 100 | 100 |  | B7A | PP |  |
| QV04-20 | 241 | 531 | 420 | A1A2 | 6 | 22 | 400 | 200 | 25 | 4 | 100 | 100 | 4 | A08 | PP |  |
| QVO5-25 | 254 | 130 | 000 | A1 | 6 | 12.5 | 300 | 250 | 83 | 6.5 | 100 | 150 | 6 | UX5 | P |  |
| QVO6-20 | 125 | 1413 | 310 | A1 | 6 | 28 | 200 | 200100 | 100 | 7 | 100 | 100 |  | A08 | P |  |
| QW77 | 412 | 361 | 500 |  | 6 | 2.5 | 200 | 200 | 8 | 2.5 | 100 | 100 | 2.5 | B7G | P |  |
| Q277 | 412 | 361 | 500 |  | 6 |  | 250 | 250 | 10 | 7.6 | 100 | 100 | 5 | B7G | P |  |
| R1 | 892 | 300 | 000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| R2 | 892 | 300 | 000 |  | 4 |  |  |  | 60 |  | REC |  | 30 mA | B4 | RR |  |
| R3 | 892 | 300 | 000 |  | 4(5) |  |  |  | 60 |  | REC |  | 50 mA | B4 | RR |  |
| R4 | 892 | 300 | 000 |  | 4 |  |  |  | 60 |  | REC |  | 40 mA | B4 | RR |  |
| R4A | 892 | 300 | 000 |  | 4 |  |  |  | 60 |  | REC |  | 40 mA | B4 | RR |  |
| R4B | 802 | 300 | 000 |  | 4 |  |  |  | 60 |  | REC |  | 40 mA | B4 | R |  |
| R10 | 112 | 311 | 100 | D1 | 4 |  |  |  | 5 |  | D |  |  | B7G | R |  |
| R11 | 002 | 300 | 000 | D1 | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | R |  |
| R12 | 023 | 000 | 000 | D1 | 6 |  |  |  |  |  | D |  |  | B3G | D |  |
| R13A | 028 | 090 | 310 |  | 13 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| R14 | 028 | 193 | 210 |  | 26 |  |  |  | 120 |  | REC |  | 60 mA | A08 | RR |  |
| R16 | 123 | 000 | 000 |  | 1.4 |  |  |  |  |  | D |  |  | B3G | D |  |
| R17 | **1 | 23* | *** | D1 | 6 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| R18 | **1 | 23* | *** | D1 | 6 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| R19 | 230 | 232 | 032 | D1 | 1.2 |  |  |  |  |  | D |  |  | B9A | D |  |
| R20 | 23* | 232 | *32 | D1 | 2 |  |  |  |  |  | D |  |  | B9A | R. |  |
| R41 | 892 | 300 | 000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| R42 | 892 | 300 | 000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | $m A / V$ | Anode Volts | Screen Volts | mA/V |  |  |  |
| R43 | 892300000 |  | 4 |  |  |  | 180 |  | REC |  | 40 mA | B4 | RR |  |
| R52 | 030809020 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| R80 | 264300000 |  | 4 | 24 | 250 |  | 20 | 4 | 100 |  | 4 | UX4 | T |  |
| R116 | 026540310 | G1 | 10 | 2.2 | 200 | 200 | 8 |  | 100 | 100 |  | A08 | P |  |
| R120 | 026040310 |  | 6.3 |  | 250 |  | 60 | 6.4 | 100 |  |  | A08 | T |  |
| R122N | 026510310 | G1 | 18 |  | 200 | 200 | 8 | 5.5 | 100 | 100 |  | A08 | P |  |
| R123 | 026500310 | G1 | 18 |  | 200 | 200 | 35 | 8.5 | 100 | 100 |  | A08 | P |  |
| R125C | 026890310 | G1 | 18 | 5.5 | 250 |  | 5 | 2.5 | 100 |  | 3 | A08 | DDT |  |
| R125N | 026890310 | G1 | 18 |  | 250 |  | 5 | 2.5 | 100 |  |  | A08 | DDT |  |
| R126F | 026510310 | G1 | 18 |  | 200 | 200 | 6 | 1.7 | 100 | 100 |  | A08 | P |  |
| R126N | 026510310 | G1 | 18 |  | 200 | 200 | 6 | 1.7 | 100 | 100 |  | A08 | P |  |
| R128 | 028190310 |  | 18 |  |  |  |  |  | D |  |  | A08 | DD |  |
| R134 | 026541310 |  | 18 |  | 200 | 200 | 18 | 6 | 100 | 100 |  | A08 | P |  |
| R142 | 412360100 |  | 6.3 |  | 200 | 200 | 10.5 | 8.5 | 100 | 100 |  | B7G | P |  |
| R143 | 412360100 |  | 6.3 |  | 200 | 200 | 8 | 5.5 | 100 | 100 |  | B7G | P |  |
| R144 | 412361500 |  | 6.3 | 2 | 250 | 250 | 10 | 7.6 | 100 | 100 |  | B7G | P |  |
| R145 | 412360100 |  | 18 |  | 200 | 200 | 8 | 5.5 | 100 | 100 |  | B7G | P |  |
| R147 | 412356110 |  | 18 |  | 200 | 200 | 18 | 6 | 100 | 100 |  | B8D | P |  |
| R148 | 641237410 |  | 18 |  | 250 |  | 10 | 5.5 | 100 |  | 5.5 | B8D | TT |  |
| R150 | 123141516 |  | 6.3 | 1.6 | 150 | 150 | 12.5 | 16 | No D | ta Avai | lable | B9A | P |  |
| R236 | 026510300 | G1 | 1.2 | 2 | 100 | 100 | 1 | 0.5 | 100 | 100 | 0.5 | A08 | P |  |
| R242P | 400123060 |  | 6.3 | 4.5 | 150 |  | 15 | 4.3 | 100 |  | 5 | B5A | T |  |
| R244 | 402013060 |  | 6.3 |  | 150 |  | 13 |  | 100 |  |  | B8D | T |  |
| R265 | 412360510 |  | 6.3 |  | 100 | 100 | 7.5 | 5 | 100 | 100 | 5 | B8D | P |  |
| R271 | 412163510 |  | 6.3 | 2 | 150 | 125 | 5.2 | 3.2 | 100 | 100 |  | B8D | P |  |
| R290 | 020080030 |  | 1.2 |  |  |  | 5 |  | D |  |  | A08 | D |  |
| R2018 | 642310000 |  | 20 | 2.5 | 200 |  | 2.5 | 3 | 100 |  | 3 | B5 | T |  |
| R5559 | $6 * 21 * 1413$ |  | 6.3 | 1.5 | 150 |  | 25 | 25 | No D | ta Avail | lable | B5D | T |  |
| RA | 892310000 |  | 13 |  |  |  | 30 |  | REC |  | 15 mA | B5 | $R \mathrm{R}$ |  |
| RA1 | 364200000 |  | 15 | 4.5 | 90 |  | 4.5 | 1.2 | 80 |  | 1.2 | UX4 | T |  |
| RB350/80 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| RB500/120 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| RB650/250 | 892300000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | RR |  |
| RC5B | 023008060 | G1 | 12.6 |  | 100 |  | 24 | 6 | 100 |  | 6 | 8SC | DT |  |
| RC5C | 023008060 | G1 | 2.4 |  | 100 |  | 24 | 6 | 100 |  | 6 | 8SC | DT |  |
| RE034 | 642300000 |  | 4 | 3 | 200 |  | 2 | 1.2 | 100 |  | 1 | B4 | T |  |
| RE052 | 642300000 |  | 2 | 3 | 150 |  | 1 | 1 | 100 |  | 1 | B4 | T |  |
| RE054 | 642300000 |  | 4 | 4 | 150 |  | 4 | 1.3 | 100 |  | 1.3 | B4 | T |  |
| RE062 | 642300000 |  | 2 | 9 | 150 |  | 4 | 1 | 100 |  | 1 | B4 | T |  |
| REO74 | 642300000 |  | 4 | 9 | 150 |  | 3.5 | 0.9 | 100 |  | 0.9 | B4 | T |  |
| RE074D | 642300000 |  | 4 | 3 | 150 |  | 3.5 | 0.5 | 150 |  | 0.5 | B5 | T |  |
| RE074N | 642300000 |  | 4 | 9 | 150 |  | 3.5 | 0.9 | 100 |  | 0.9 | B4 | T |  |
| RE076 | 642300000 |  | 6 | 9 | 150 |  | 4 | 1.5 | 100 |  | 1.4 | B4 | T |  |
| RE084 | 642300000 |  | 4 | 4 | 150 |  | 4 | 1.5 | 100 |  | 1.5 | B4 | T |  |
| RE114 | 642300000 |  | 4 | 15 | 150 |  | 13 | 1.3 | 100 |  | 1.3 | B4 | T |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/V |  |  |  |
| RE122 | 264300000 |  | 2 | 4.5 | 150 |  | 3 | 1.3 | 100 |  | 1.3 | UX4 | T |  |
| RE122 | 642300000 |  | 2 | 19 | 150 |  | 7 | 1.2 | 100 |  | 1.2 | B4 | T |  |
| RE124 | 642300000 |  | 4 | 18 | 150 |  | 11 | 1.6 | 100 |  | 1.6 | B4 | T |  |
| RE134 | 642300000 |  | 4 | 17 | 250 |  | 12 | 2 | 100 |  | 2 | B4 | T |  |
| RE144 | 642300000 |  | 4 | 9 | 150 |  | 2 | 0.7 | 100 |  | 0.7 | B4 | T |  |
| RE304 | 642300000 |  | 4 | 32 | 250 |  | 20 | 1.9 | 100 |  | 2 | B4 | T |  |
| RE402B | 064234700 |  | 2 |  | 150 |  | 3 |  | 100 |  |  | B7 | TT |  |
| RE404 | 642300000 |  | 3.5 |  | 200 |  |  | 0.6 | 100 |  | 1 | B4 | T |  |
| RE604 | 642300000 |  | 4 | 45 | 250 |  | 40 | 2.5 | 100 |  |  | B4 | T |  |
| REN704 | 652310000 | G1 | 4 |  | 100 |  | 2 | 1.2 | 100 |  | 1.1 | B5 | P |  |
| REN904 | 642310000 |  | 4 | 3.5 | 200 |  | 6 | 2.4 | 100 |  | 2.4 | B5 | T |  |
| REN914 | 642310000 |  | 4 | 1.5 | 200 |  | 0.2 |  | 100 |  |  | B5 | T |  |
| REN924 | 642310000 | D1 | 4 | 3 | 200 |  | 6 | 2 | 100 |  | 2 | B5 | DT |  |
| REN1004 | 642310000 |  | 4 |  | 200 |  |  | 1.5 | 100 |  | 1.4 | B5 | T |  |
| REN1104 | 642310000 |  | 4 | 16 | 200 |  | 12 | 1.3 | 100 |  | 1.3 | B5 | T |  |
| REN1814 | 642310000 |  | 20 | 1.6 | 200 |  | 0.2 | , | 100 |  | 1 | B5 | T |  |
| REN1817D | 652310000 | G1 | 20 |  | 100 | 100 |  | 1.1 | 100 | 90 | 1.1 | B5 | P |  |
| REN1821 | 642310000 |  | 20 | 3 | 200 |  | 6 | 2.3 | 100 |  | 2.3 | B5 | T |  |
| REN1822 | 642310000 |  | 20 | 18 | 200 |  | 15 | 1.6 | 100 |  | 1.6 | B5 | P |  |
| REN1826 | 642310000 | D1 | 20 | 3 | 200 |  | 6 | 1.8 | 100 |  | 1.8 | B5 | DT |  |
| RENS1204 | 542310000 | A1 | 4 | 2 | 200 | 60 | 4 | 1 | 100 | 60 | 1 | B5 | P |  |
| RENS1214 | 542310000 | A1 | 4 | 2.2 | 200 | 100 | 6 | 1 | 100 | 100 |  | B5 | P |  |
| RENS1224 | 164552300 | G1 | 4 | 1.5 | 200 | 125 | 3 | 0.6 | 100 | 100 |  | C7 | P |  |
| RENS1234 | 165452300 | G1 | 4 | 2 | 200 | 75 | 3 | 1.8 | 100 | 75 | 1.8 | C7 | P |  |
| RENS1264 | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2 | 100 | 100 |  | B5 | P |  |
| RENS1264B1 | 542300000 | A1 | 4 | 2 | 200 | 100 | 3 | 2 | 100 | 100 |  | B4 | T |  |
| RENS1274 | 542310000 | A1 | 4 |  | 200 | 100 | 3 | 2 | 100 | 100 |  | B5 | P |  |
| RENS1284 | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2.5 | 100 | 100 |  | B5 | P |  |
| RENS1294 | 542310000 | A1 | 4 | 2 | 200 | 100 | 4.5 | 2 | 100 | 100 |  | B5 | P |  |
| RENS1374D | 642310000 | G2 | 4 | 18 | 250 | 250 | 24 | 2.5 | 100 | 100 |  | B5 | P |  |
| RENS1384 | 642310000 | G1 | 4 | 22 | 250 | 250 | 36 | 2.8 | 100 | 150 | 2.9 | B5 | P |  |
| RENS1818 | 542310000 | A1 | 20 | 2 | 200 | 100 | 3 | 2 | 100 | 100 |  | B5 | P |  |
| RENS1819 | 542310000 | A1 | 20 |  | 200 | 60 | 4 | 1 | 100 | 60 |  | B5 | P |  |
| RENS1820 | 542310000 | A1 | 20 | 2 | 200 | 60 | 4 | 1 | 100 | 60 | 1 | B5 | P |  |
| RENS1823D | 642310000 | G2 | 20 | 18 | 200 | 200 | 20 | 1.7 | 100 | 100 |  | B5 | P |  |
| RENS1884 | 542310000 | G2 | 20 | 2 | 200 | 100 | 3 | 2.4 | 100 | 100 |  | B5 | P |  |
| RENS1894 | 542310000 | G2 | 20 | 2.2 | 200 | 100 | 4 | 1.8 | 100 | 100 |  | B5 | P |  |
| RESO94 | 542300000 | A1 | 4 | 2 | 200 | 75 | 4 | 7 | 100 | 75 |  | B5 | P |  |
| RES105 | 642300000 | G1 | 5 | 15 | 200 | 150 | 12 | 1.3 | 150 | 100 | 1.3 | B4 | P |  |
| RES164 | 542350000 |  | 4 | 11.5 | 250 | 75 | 12 | 1.4 | 100 | 75 |  | B5 | P |  |
| RES 174 D | 642300000 | G2 | 4 | 19 | 250 | 150 | 12 | 1.3 | 100 | 100 |  | B4 | P |  |
| RES212 | 642350000 |  | 2 | 4.4 | 150 | 125 | 6 | 2.2 | 150 | 100 | 2.2 | B5 | P |  |
| RES 364 | 542350000 |  | 4 | 2.5 | 300 | 200 | 20 | 1.7 | 100 | 100 |  | B5 | P |  |
| RES374 | 642350000 |  | 4 | 42 | 300 | 200 | 20 | 1.5 | No Da | a Avai | lable | B5 | P |  |
| RES664D | 642350000 |  | 4 | 40 | 400 | 200 | 30 | 1.9 | 100 | 100 | 1.9 | B5 | P |  |
| RES964 | 642350000 |  | 4 | 15 | 250 | 250 | 36 | 2.8 | No Da | a Avai | lable | B5 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\underset{m A}{\text { la }}$ | $m A / V$ | Anode Volts | Screen Volts | mA/V |  |  |  |
| RFG5 | 003200000 | D1 | 6 |  |  |  |  |  | D |  |  | F8 | R |  |
| RFP8/14 | 041231500 | A1 | 4 | 20 | 400 | 250 | 35 | 4 | 100 | 150 | 4 | B7 | P |  |
| RFP8/14 | 542310000 | A1 | 4 | 20 | 400 | 250 | 35 | 4 | 100 | 150 | 4 | B5 | P |  |
| RG250/1000 | 002300000 | D1 | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| RG250/3000 | 280300000 |  | 2.5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | R |  |
| RGN354 | 802300000 |  | 4 |  |  |  | 15 |  | D |  |  | B4 | R |  |
| RGN504 | 892300000 |  | 4 |  |  |  | 15 |  | D |  |  | B4 | RR |  |
| RGN564 | 802300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| RGN1054 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| RGN1064 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| RGN1074 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| RGN1304 | 802300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | R |  |
| RGN1404 | 082300000 |  | 4 |  |  |  | 120 |  | REC |  | 20 mA | B4 | R |  |
| RGN1503 | 892300000 |  | 2.5 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| RGN2004 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| RGN2504 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| RGN4004 | 892300000 |  | 4 |  |  |  | 120 |  | REC |  | 20 mA | B4 | RR |  |
| RH | 061231500 | G1 | 4 | 1.7 | 250 | 100 | 7.9 | 7 | 200 | 100 | 7.4 | B7 | P |  |
| RK10 | 265300000 |  | 7.5 | 100 | 350 |  | 50 |  | No Da | a Avai | lable | UX4 | T |  |
| RK15 | 264300000 |  | 2.5 | 33 | 250 |  | 22 | 2.3 | 100 |  | 2.3 | UX4 | T |  |
| RK16 | 264130000 |  | 2.5 | 28 | 250 |  | 26 | 2.6 | 100 |  | 2.6 | B5 | T |  |
| RK19 | 200300000 | D1D2 | 7.5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | RR |  |
| RK21 | 200300000 | D1 | 2.5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | R |  |
| RK24 | 364200000 |  | 2 | 13.5 | 200 |  | 8 | 1.6 | 100 |  | 1.6 | UX4 | T |  |
| RK39 | 254130000 | A1 | 6 | 14 | 300 | 250 | 83 | 6.5 | 100 | 150 |  | UX5 | P |  |
| RK60 | 200300000 | D1D2 | 5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | RR |  |
| RL2T2 | 236400000 |  | 1.9 | 1.5 | 100 |  | 15 | 2.4 | 100 |  | 2.4 | 5AA | T |  |
| RL7 | 265114113 |  | 6 | 1.7 | 250 | 250 | 10 | 7.7 | 100 | 150 | 7 | B9G | P |  |
| RL12P2 | 265114113 |  | 12.6 | 6 | 150 | 150 | 15 | 2.3 | 100 | 100 |  | B9G | P |  |
| RL15A | 510423206 |  | 2.4 | 20 | 350 | 200 | 57 |  | No Da | Avai | lable | B9A | P |  |
| RL16 | 241600003 |  | 6 | 2.5 | 250 |  | 10 | 6.5 | 100 |  | 5 | B9G | T |  |
| RL18 | 123000000 |  | 6 | 3.3 | 200 |  | 7.5 | 2.9 | 100 |  | 2.9 | B3G | T |  |
| RL37 | 244664413 |  | 6 | 1.5 | 250 |  | 10 | 9 | 100 |  | 7 | B9G | T |  |
| R0337 | 892300000 |  | 2.5 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| R0423 | 892300000 |  | 2.5 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| R0431 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| R0443 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| R0446 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| RO452 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| R0457 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| R0481 | 802300000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| R0534 | 892300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| R0771 | 802300000 |  | 7.5 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| RRAF | 642300000 |  | 4 | 2 | 100 |  | 4 | 1.4 | 100 |  | 2 | B4 | T |  |
| RRBF | 642300000 |  | 4 | 2.5 | 100 |  | 10 | 1.2 | 100 |  | 2 | B4 | T |  |
| RS | 802310000 |  | 3 |  |  |  | 60 |  | REC |  | 20 mA | B5 | R |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Voles | Anode Volts | Screen Voles | $\underset{\mathrm{mA}}{\mathrm{Ia}}$ | $m A / V$ | Anode Volts | Screen Volts | mA/V |  |  |  |
| RS242 | 642300000 |  | 3.8 | 5 | 400 |  | 70 | 3 | 100 |  | 3 | B4 | T |  |
| RS1009 | 245134200 | A1A2 | 6 | 25 | 400 | 250 | 30 | 3.4 | 100 | 100 |  | B7A | PP |  |
| RS1019 | 245134200 | A1A2 | 6 | 20 | 400 | 250 | 20 | 2.5 | 100 | 100 |  | B7A | PP |  |
| RSAF | 542300000 | A1 | 4 | 1 | 150 | 75 | 4.5 | 1.2 | 100 | 75 | 1.2 | B4 | T |  |
| RT1-2 | 642300000 |  | 4 | 2.6 | 150 |  | 26 | 2.5 | 100 | 7 | 2.5 | B4 | T |  |
| RT2 | 642300000 |  | 4 | 4 | 200 |  | 18 | 1.7 | 150 |  | 1.7 | B4 | T |  |
| RT3 | 642300000 |  | 4 | 2.3 | 300 |  | 15 | 2.8 | 100 |  | 2.8 | B4 | T |  |
| RTR4141 | 026510310 | G1 | 5.2 | 3 | 250 | 100 | 2.5 | 1.2 | 100 | 100 |  | A08 | P |  |
| RTR4142 | 026510310 | G1 | 5.2 | 8 | 150 | 125 | 15 | 2.7 | 100 | 100 |  | A08 | P |  |
| RTR4341 | 061231500 | G1 | 21 | 2.2 | 150 | 8 | 8 | 8 | 100 | 125 | 8 | B4 | P |  |
| RTR4342 | 005231600 | G1 | 21 | 5.8 | 150 | 125 | 48 | 9 | 100 | 125 | 8 | B7 | P |  |
| RV12P2000 | 450612310 |  | 12.6 | 2.3 | 200 | 75 | 1.8 | 1.5 | 100 | 60 |  | B7 | P |  |
| RV120/250 | 892300000 |  | 4 |  |  | 7 | 60 | 1.5 | REC | 60 | 20 mA | B4 | RR |  |
| RV120/350 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| RV120/350S | 023080090 |  | 4 |  |  |  | 60 |  | REC |  | 30 mA | 8SC | RR |  |
| RV120/500 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| RV120/500S | 023080090 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | RR |  |
| RV200/600 | 892300000 |  | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | RR |  |
| RV210 | 042310000 | A1 | 4 | 53 | 400 |  | 70 | 5.8 | No D | ta Avai | lable | B5 | T |  |
| RX21 | 200030000 | D1 | 2.5 |  |  |  | 120 |  | REC |  | 30 mA | UX5 | R |  |
| RX215 | 389200000 |  | 2.5 |  |  |  | 5 |  | D |  |  | UX4 | RR |  |
| RZ | 023100080 |  | 20 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | R |  |
| S2 | 542300000 | A1 | 2 | 1 | 150 | 60 | 2.3 | 1.1 | 125 | 60 | 1.1 | B4 | P |  |
| S2P20 | 601225413 |  | 5 | 10 | 150 | 150 | 28 | 4.4 | 100 | 100 |  | B9A | P |  |
| S4V | 542310000 | A1 | 4 | 1 | 200 | 75 | 1.5 | 1.1 | 100 | 75 | 1.1 | B5 | P |  |
| S4VA | 542310000 | A1 | 4 | 1.5 | 200 | 100 | 2.8 | 2 | 100 | 100 | 2 | B5 | P |  |
| S4VB | 542310000 | A1 | 4 | 1.5 | 200 | 125 | 4.6 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| S6F12 | 412361500 |  | 6 | 2 | 250 | 250 | 10 | 7.5 | 100 | 100 |  | B7G | P |  |
| S6F17 | 412361500 |  | 6 | 5 | 100 | 100 | 12.5 | 4 | 100 | 100 |  | B7G | P |  |
| S6F33 | 412361500 |  | 6.3 | 3.3 | 200 | 200 | 7.1 | 4 | 100 | 100 |  | B7G | P |  |
| S11A | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |  |
| S11D | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| S11E12 | *26 541310 |  | 6.3 | 60 | 400 | 300 | 100 | 6.3 | No D | a Avai | lable | A08 | P |  |
| S12 | 542300000 | A1 | 2 | 1 | 100 | 30 | 2.5 | 0.7 | No D | ta Avai | lable | SM4 | P |  |
| S12 | 542300000 | A1 | 2 | 1 | 100 | 30 | 2.5 | 0.7 | No D | ta Avai | lable | SM4 | P |  |
| S19G6 | *12 3***00 | D1 | 4 |  |  |  | 30 |  | REC |  | 15 mA | B7G | R |  |
| S19G6F | *12 3***00 | D1 | 4 |  |  |  | 30 |  | REC |  | 15 mA | B7G | R |  |
| S21 | 542300000 | A1 | 2 |  | 150 | 75 | 3.6 | 1.1 | 100 | 75 | 1.1 | B4 | P |  |
| S22 | 542300000 | A1 | 2 |  | 150 | 75 | 4 | 1.7 | 125 | 75 | 1.7 | B4 | P |  |
| S23 | 542300000 | A1 | 2 | 1.5 | 150 | 75 | 2.8 | 1.1 | 150 | 75 | 1.1 | B4 | P |  |
| S24 | 542300000 | A1 | 2 | 1 | 150 | 75 | 3.2 | 1.4 | 150 | 75 | 1.4 | B4 | P |  |
| S30C | 642300000 |  | 4 | 38 | 300 |  | 50 | 5 | 100 |  | 5 | B4 | T |  |
| S30D | 642300000 |  | 2 | 38 | 300 |  | 50 | 5 | 100 |  | 5 | B4 | T |  |
| S207 | 542300000 | A1 | 2 | 1.5 | 200 | 100 | 3 | 0.7 | 100 | 100 | 0.7 | B4 | P |  |
| S208 | 5423000000 | A1 | 2 |  | 200 | 100 | 2 | 0.8 | 100 | 100 | 0.8 | B4 | P |  |
| S209 | 023010560 | G1 | 2 | 0.5 | 150 | 125 | 2.4 | 0.7 | 125 | 125 | 0.7 | 8SC | P |  |
| S210 | 642300000 | G2 | 2 | 1.5 | 150 | 90 | 3 | 1.2 | 100 | 90 | 1 | B4 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | $\begin{gathered} \text { Anode } \\ \text { Volts } \end{gathered}$ | Screen Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| S213 | 542300000 | A1 | 2 | 0.5 | 150 | 90 | 3 | 1.3 | 100 | 90 | 1.3 | B4 | P |  |
| S215 | 542300000 | A1 | 1 | 1 | 150 | 90 |  | 0.9 | 100 | 90 | 1.5 | B4 | P |  |
| S215A | 542300000 | A1 | 2 | 1 | 150 | 60 | 2 | 1.1 | 150 | 60 | 1.1 | B4 | P |  |
| S215B | 542300000 | A1 | 2 | 1 | 150 | 60 | 1.5 | 1.2 | 150 | 60 | 1.2 | B4 | P |  |
| S215VM | 542300000 | A1 | 2 | 1.4 | 150 | 60 | 1 | 0.8 | 150 | 60 | 1.4 | B4 | P |  |
| S217 | 041230500 | A1 | 2 | 0.5 | 150 | 150 | 2.5 | 1.7 | 150 | 150 | 1.7 | B7 | P |  |
| S217 | 542300000 | A1 | 2 | 0.5 | 150 | 150 | 2.3 | 1.7 | 100 | 150 | 1.7 | B4 | P |  |
| S218 | 041230500 | A1 | 2 | 0.5 | 150 | 150 | 3 | 1.9 | 100 | 150 | 1.8 | B7 | P |  |
| S220 | 542300000 | A1 | 2 |  | 150 | 75 | 4 | 1.1 | 150 | 75 | 1.1 | B4 | P |  |
| S310A | 265113000 | G1 | 10 | 3 | 150 | 150 | 5.5 | 1.9 | 100 | 100 | 1.9 | UX6 | P |  |
| S311A | 265130000 | G1 | 10 | 15 | 150 | 150 | 30 | 2.8 | 100 | 100 | 2.8 | UX5 | P |  |
| S328A | 265113000 | G1 | 7.5 | 3 | 150 | 150 | 5.5 | 1.9 | 100 | 100 | 1.9 | UX6 | P |  |
| S329A | 265130000 | G1 | 7.5 | 15 | 150 | 150 | 30 | 2.8 | 100 | 100 | 2.8 | UX5 | P |  |
| S329L | 265113000 | G1 | 7.5 | 50 | 150 | 125 | 30 | 2.8 | No Da | Avail | lable | UX6 | P |  |
| S406/7 | 542300000 | A1 | 4 | 2 | 200 | 150 | 1.5 | 1 | 100 | 100 | 1 | B4 | P |  |
| S408 | 542300000 | A1 | 4 | 1.5 | 200 | 75 | 4 | 0.7 | 100 | 75 |  | B4 | P |  |
| S409 | 542300000 | A1 | 4 | 1.5 | 200 | 75 | 4 | 8.8 | 100 | 75 |  | B4 | P |  |
| S410 | 542300000 | A1 | 4 | 1.5 | 200 | 75 | 4 | 1 | 100 | 75 |  | B4 | P |  |
| S410N | 542310000 | A1 | 4 | 2 | 200 | 60 | 4 | 1 | 100 | 60 | 1 | B5 | P |  |
| S412N | 542310000 | A1 | 4 | 1.3 | 200 | 100 | 1.5 | 1 | 100 | 100 | 1 | B5 | P |  |
| S415N | 542310000 | A1 | 4 | 2 | 200 | 100 | 6 | 1 | 100 | 100 | 1 | B5 | P |  |
| S420 | 061231500 | G1 | 4 | 3 | 250 | 250 | 11.5 |  | 100 | 200 |  | B7 | P |  |
| S423 | 023110560 | G1 | 4 | 3 | 250 | 100 | 8 | 1.8 | 250 | 100 | 1.9 | 8SC | P |  |
| S424 | 023110560 | G1 | 4 | 2 | 250 | 100 | 3 | 2.1 | 250 | 100 | 2.1 | 8SC | P |  |
| S430N | 542310000 | A1 | 4 | 1.3 | 200 | 100 | 1.5 | 0.9 | 100 | 100 | 3 | B5 | P |  |
| S431N | 542310000 | A1 | 4 | 1.5 | 250 | 100 | 3 | 2 | 100 | 100 |  | B5 | P |  |
| S432N | 023110560 | G1 | 4 | 3 | 250 | 100 | 2.5 | 2.2 | 100 | 100 |  | 8SC | P |  |
| S434N | 542310000 | A1 | 4 | 2 | 200 | 100 | 4.5 | 2.3 | 100 | 100 | 2.3 | B5 | P |  |
| S434N | 041231500 | A1 | 4 | 1.5 | 200 | 100 | 4.5 | 2 | 100 | 100 | 2 | B7 | P |  |
| S435N | 041231500 | A1 | 4 | 2 | 200 | 100 | 3 | 2.3 | 200 | 100 | 2.3 | B7 | P |  |
| S435N | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2.3 | 100 | 100 | 2.3 | B5 | P |  |
| S440 | 061231500 | G1 | 4 | 2.4 | 250 | 250 | 4.1 | 3.5 | 100 | 200 | 3.4 | B7 | P |  |
| S493 | 542310000 | A1 | 4 | 2 | 200 | 100 | 4 |  | 100 | 100 |  | B5 | P |  |
| S495 | 542310000 | A1 | 4 | 2 | 200 | 100 | 6 | 2.5 | 100 | 100 | 2.5 | B4 | P |  |
| S617 | 023110560 | G1 | 6.3 | 3 | 250 | 100 | 2.5 | 2.2 | 100 | 100 |  | 8SC | P |  |
| S620 | 023110560 | G1 | 6.3 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | 8SC | P |  |
| S629 | 023110560 | G1 | 6.3 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | 8SC | P |  |
| S1323 | 061231500 | G1 | 13 | 3 | 200 | 100 | 8 | 1.9 | 100 | 100 | 1.9 | B7 | P |  |
| S1323 | 023110560 | G1 | 13 | 3 | 200 | 100 | 8 | 1.9 | 100 | 100 | 1.9 | 8SC | P |  |
| S1324 | 061231500 | G1 | 13 | 2 | 200 | 100 | 3 | 2.4 | 100 | 100 | 2.3 | B7 | P |  |
| S1327 | 023110560 | G1 | 13 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | 8SC | P |  |
| S1328 | 023110560 | G1 | 13 | 2 | 200 | 100 | 3 | 2.4 | 100 | 100 | 2.3 | 8SC | P |  |
| S2010N | 542310000 | A1 | 20 | 2 | 200 | 60 | 4 | 1 | 100 | 60 | 1 | B5 | P |  |
| S2012N | 542310000 | A1 | 20 | 2 | 200 | 60 | 4 | 1 | 150 | 60 | 1 | B5 | P |  |
| S2018 | 041231500 | A1 | 20 | 3 | 200 | 60 | 4 | 1.2 | 100 | 60 | 1.2 | B7 | P |  |
| S2018 | 542310000 | A1 | 20 | 3 | 200 | 60 | 4 | 1.2 | 100 | 60 | 1.2 | B5 | P |  |
| S2030N | 542310000 | A1 | 20 | 2 | 200 | 100 | 3 | 2 | 150 | 100 | 2 | B5 | P |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | $m A / V$ | Anode Volts |  | creen Volts | mA/V |  |  |  |
| SP13 | 023110560 | G1 | 13 | 2 | 200 | 100 | 3.3 | 2.2 | 100 |  | 100 | 2.2 | 8SC | P |  |
| SP13C | 061231500 | G1 | 13 | 2.2 | 200 | 200 | 2.5 | 2.8 | 100 |  | 150 | 2.8 | B7 | P |  |
| SP13S | 023110560 | G1 | 13 | 2 | 150 | 100 | 3 | 2.4 | 100 |  | 100 | 2.4 | 8SC | P |  |
| SP20 | 542310000 | A1 | 20 |  | 200 | 100 | 4.5 | 3.5 | 100 |  | 100 | 3.5 | B5 | P |  |
| SP22 | 206510030 | G1 | 2 | 1 | 150 | 125 | 1.1 | 1.2 | 125 |  | 100 | 1.2 | M08 | P |  |
| SP35 | 023110560 | G1 | 35 | 8 | 200 | 200 | 41 | 7 | 100 |  | 150 | 7 | 8SC | P |  |
| SP41 | 216510030 | G1 | 4 | 1.5 | 200 | 200 | 10.9 | 8.5 | 100 |  | 150 | 8 | M08 | P |  |
| SP42 | 216510030 | G1 | 4 | 1.3 | 200 | 125 | 20 | 8.4 | 100 |  | 100 | 8 | M08 | P |  |
| SP61 | 216510030 | G1 | 6 | 1.5 | 200 | 200 | 10.9 | 8.5 | 100 |  | 150 | 8 | M08 | P |  |
| SP62 | 216510030 | G1 | 6 | 1.3 | 200 | 100 | 16 | 9 | 200 |  | 100 | 8 | M08 | P |  |
| SP65 | 023110560 | G1 | 6 | 2 | 250 | 100 | 3 | 2.1 | 100 |  | 100 | 2.1 | 8SC | P |  |
| SP141 | 206500030 | G1 | 1.4 | 1 | 90 | 90 | 1.3 | 0.8 | 80 |  | 90 | 0.8 | M07 | P |  |
| SP181 | 216510030 | G1 | 18 | 1.5 | 200 | 200 | 10.9 | 8.5 | 100 |  | 150 | 8 | M08 | P |  |
| SP210 | 041230500 | A1 | 2 | 1 | 125 | 125 | 1.1 | 1.2 | 125 |  | 100 | 1.2 | B7 | P |  |
| SP215 | 041230500 | A1 | 2 | 1.5 | 150 | 80 | 2.1 | 1.6 | 100 |  | 75 | 1.6 | B7 | P |  |
| SP220 | 642300000 |  | 2 | 12 | 150 |  | 14 | 3 | 100 |  |  | 3 | B4 | T |  |
| SP514 | 402106053 |  | 6.3 | 1.7 | 150 | 150 | 12.3 | 13.5 | No D |  | Avai | lable | B9A | P |  |
| SP1320 | 041231500 | A. 1 | 13 | 1.5 | 150 | 100 | 4.4 | 2 | 100 |  | 100 | 2 | B7 | P |  |
| SP2220 | 041231500 | A1 | 22 | 3 | 250 | 200 | 4.9 | 2.7 | 100 |  | 150 | 2.6 | B7 | P |  |
| SPTA | 061231400 | G1 | 13 | 2.5 | 250 | 100 | 2.2 | 1.4 | 100 |  | 100 |  | B7 | T |  |
| SPT2 | 041230500 | A1 | 2 | 1 | 125 | 125 | 2.8 | 1.5 | 125 |  | 100 | 1.5 | B7 | P |  |
| SPT4A | 041231500 | A1 | 4 | 1.5 | 250 | 100 | 2 | 2.3 | 200 |  | 100 | 2.3 | B7 | P |  |
| SPTA | 041231500 |  | 13 | 2.5 | 200 | 100 | 2.2 | 1.4 | 100 |  | 100 |  | B7 | P |  |
| SPTS | 041231500 | A1 | 13 | 1.5 | 250 | 100 | 2 | 3 | 100 |  | 100 | 3 | B7 | P |  |
| SR2 | 642300000 |  | 2 | 16 | 200 |  | 10 | 3 | 100 |  |  | 3 | B4 | T |  |
| SR4 | 642310000 |  | 4 | 20 | 250 |  | 20 | 4 | 100 |  |  | 4 | B5 | T |  |
| SRS4451 | 245134200 | A1A2 | 6 | 25 | 400 | 250 | 30 | 3.4 | No |  | Avai | lable | B7A | PP |  |
| SS210 | 542300000 | A1 | 2 | 1 | 150 | 75 | 0.6 | 1.4 | 150 |  | 75 | 1.4 | B4 | P |  |
| SS210C | 542300000 | A1 | 2 | 1 | 150 | 175 | 0.6 | 1.4 | 150 |  | 75 | 1.4 | B4 | P |  |
| SS2100 | 642300000 |  | 2 | 4.5 | 150 |  | 2 | 1.6 | 100 |  |  | 1.6 | B4 | T |  |
| SS210DDT | 682390000 | G1 | 2 | 5.5 | 150 |  | 2.4 | 1.4 | 100 |  |  | 1.4 | B5 | DDT |  |
| SS210HF | 642300000 |  | 2 | 4 | 150 |  | 1 | 0.8 | 100 |  |  | 0.8 | B4 | T |  |
| SS210HL | 642300000 |  | 2 | 1.5 | 150 |  | 21.4 | 12.5 |  |  |  | 1.4 | B4 | T |  |
| SS220P | 642300000 |  | 2 | 12 | 150 |  | 6 | 1.5 | 100 |  |  | 1.5 | B4 | T |  |
| SS220PA | 642300000 |  | 2 | 6 | 150 |  | 8 | 3.5 | 100 |  |  | 3.5 | B4 | T |  |
| SS220SP | 642300000 |  | 2 | 12 | 150 |  | 14 | 3.5 | 100 |  |  | 3.5 | B4 | T |  |
| SS240SP | 642300000 |  | 2 | 12 | 150 |  | 15 | 3.5 | 100 |  |  | 3.5 | B4 | T |  |
| SS2018 | 542310000 | A1 | 20 | 3 | 200 | 100 | 3 | 3 | 100 |  | 90 | 3 | B5 | P |  |
| ST507 | 602441443 |  | 6.3 | 1.2 | 150 |  | 23 | 25 |  |  |  | lable | B9A | T |  |
| SU25 | *2* $0 * * 3 * 0$ | D1 | 2 |  |  |  |  |  | D |  |  |  | A08 | D |  |
| SU42 | 030000020 | D1 | 4 |  |  |  |  |  | D |  |  |  | A08 | R |  |
| SU45 | 112311100 | D1 | 4 |  |  |  | 30 |  | REC |  |  | 15 mA | B7G | R |  |
| SU61 | 023000000 | D1 | 6 |  |  |  |  |  | D |  |  |  | B3G | D |  |
| SU2130 | 002300000 | D1 | 2 |  |  |  | 2 |  | D |  |  |  | B4 | R |  |
| SU2150 | 002300000 | D1 | $2(2.5)$ |  |  |  | 2 |  | D |  |  |  | B4 | R |  |
| SU2150A | 002300000 | D1 | $2(2.5)$ |  |  |  | 5 |  | D |  |  | 2 mA | B4 | RR |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Voles | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | $m A / V$ | Anode Volts | Screen Volts | $m A / V$ |  |  |  |
| TDD4 | 908231600 | G1 | 4 | 7 | 250 |  | 4 | 2 | 100 |  | 2 | B7 | DDT |  |
| TDD13 | 023189060 | G1 | 13 | 1 | 100 |  |  | 2.9 | 100 |  | 2.9 | 8SC | DDT |  |
| TDD13C | 809231600 | G1 | 13 | 5 | 200 |  | 4 | 2 | 100 |  | 2 | B7 | DDT |  |
| TDD25 | 809231600 | G1 | 25 | 1 | 100 |  | 4 | 2 | 100 |  | 2 | B7 | DDT |  |
| TE2 | 028090310 |  | 26 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| TE3 | 028090310 |  | 12 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| TE5 | 028090310 |  | 6.3 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| TEO94 | 642310000 |  | 4 | 16 | 200 |  | 12 | 1.3 | 100 |  | 1.3 | B5 | T |  |
| TE104 | 642300000 |  | 4 | 26 | 400 |  | 61 | 4 | 100 |  | 4 | B4 | T |  |
| TE244 | 642310000 |  | 4 | 3.5 | 200 |  | 6 | 2.4 | 150 |  | 2.4 | B5 | T |  |
| TE384 | 642310000 |  | 4 | 2 | 200 |  | 3 | 1.5 | 150 |  | 1.5 | B5 | T |  |
| TE424 | 542310000 | A1 | 4 |  | 200 | 100 | 3 | 2 | 100 | 100 | 2 | B5 | P |  |
| TE434 | 642350000 |  | 4 | 14 | 250 | 250 | 36 |  | 100 | 150 |  | B5 | P |  |
| TE464 | 041231500 | A1 | 4 |  | 200 | 100 | 3 | 2.5 | 100 | 100 | 2.5 | B7 | P |  |
| TE474 | 041231500 | A1 | 4 | 1.5 | 200 | 100 | 4.5 | 2 | 100 | 100 | 2 | B7 | P |  |
| TE534 | 642310000 | G2 | 4 | 15 | 250 | 250 | 24 |  | 100 | 150 |  | B5 | P |  |
| TE564 | 041231500 | A1 | 4 | 1.5 | 200 | 100 | 4.5 | 2.2 | 100 | 100 | 3.2 | B7 | P |  |
| TE634 | 045231600 |  | 4 | 22 | 250 | 250 | 36 |  | 100 | 100 |  | B7 | P |  |
| TE994 | 642310000 |  | 4 | 1.6 | 250 |  | 4 | 4 | 200 |  | 4 | B5 | $T$ |  |
| TF64 | 061231500 | G1 | 4 | 2.7 | 250 | 250 | 11 | 2 | 200 | 150 | 2 | B7 | P |  |
| TF104 | 642300000 |  | 4 | 36 | 400 |  | 61 | 4 | 100 |  | 4 | B4 | T |  |
| TH1 | 276454300 |  | 6.3 | 4 | 100 250 | 150 | 4 |  | 100 | $60$ |  | B8B | TH |  |
| TH2 | 645230700 | G1 | 2 | $\left\{\begin{array}{l}1.5 \\ 1.5\end{array}\right.$ | 150 250 | 75 | 0.95 4 | 1.2 | 100 125 | 60 60 | 1.2 0.7 | \} ${ }^{\text {7 }}$ | TH |  |
| TH4 | 645231700 | G1 | 4 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 150 200 | 100 | 6 3.5 | 1.2 | 150 | $\begin{aligned} & 60 \\ & 75 \end{aligned}$ | 1.2 3.0 | \}B7 | TH |  |
| TH4A. | 645231700 | G1 | 4 | $\left\{\begin{array}{l}4.6 \\ 2\end{array}\right.$ | 100 250 | 100 | $\begin{aligned} & 5 \\ & 3.5 \end{aligned}$ | 2.0 | 125 200 | 60 100 |  | \}B7 | TH |  |
| TH4B | 645231700 | G1 | 4 | $\left\{\begin{array}{l}3 \\ 2.5\end{array}\right.$ | 100 250 | 100 | $\begin{aligned} & 9 \\ & 3.25 \end{aligned}$ | 3.8 | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | $\begin{array}{r} 60 \\ 100 \end{array}$ | 5.5 3.5 | \}B7 | TH |  |
| TH13C | 645231700 | G1 | 13 | $\left\{\begin{array}{l}2 \\ 1.5\end{array}\right.$ | 150 | 75 | 6 4.0 | 1.2 1.8 | 100 200 | 60 75 | 1.2 3.6 | \}B7 | TH |  |
| TH21C | 645231700 | G1 | 21 | $\left\{\begin{array}{l}2 \\ 1.5\end{array}\right.$ | 150 250 | 75 | 6 4 | 1.2 1.8 | 100 200 | 60 75 | 1.2 3.0 | \} 7 | TH |  |
| TH22C | 645231700 | G1 | 29 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 150 250 | 100 | 5 3.5 | 6 | 100 200 | 60 75 |  | ,B7 | TH |  |
| TH29 | 645231700 | G1 | 29 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 250 | 100 | 12.0 3.5 | 4.5 | 100 200 | 60 75 |  | \}B7 | TH |  |
| TH30 | 645231700 | G1 | 30 | $\{2$ | 100 150 |  | 9.5 | 5.5 | 100 100 | 60 60 |  | $\} \mathrm{B} 7$ | TH |  |
| TH30C | 645231700 | G1 | 29 | $\left\{\begin{array}{l}2.5\end{array}\right.$ | 250 250 | 100 100 | 3.5 3.25 |  | 100 100 | 100 100 |  | \}B7 | TH |  |
| TH31 | 217640530 | G1 | 4 | $\left\{\begin{array}{l}3 \\ 3\end{array}\right.$ | 100 250 | 100 | 10.2 3 | 4 3 | 100 100 | 60 90 |  | M08 | TH |  |
| TH41 | 217640530 | G1 | 4 | $\left\{\begin{array}{l}3 \\ 3\end{array}\right.$ | 100 250 | 100 | 10.2 3 | 4 3.1 | 100 100 | 60 100 | 5.3 3.1 | M08 | TH |  |
| TH62 | 027546310 | G1 | 6 | $\left\{\begin{array}{l}2 \\ 2\end{array}\right.$ | 100 250 | 100 | 4.4 3 | 2.4 | 100 200 | 60 100 | 2.2 1.2 | A08 | TH |  |



| VALVE | SELECTOR SWITCH No. |  |  | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grld Volts |  | Anode Volts | $\begin{array}{\|c\|c} \text { Screen } \\ \text { Volts } \end{array}$ | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | mA/N | Anode Volts | Screen Volts | mA/V |  |  |  |
| TT20 | 245 | 134 | 200 |  | A1A2 | 6 | 17 | 400 | 200 | 20 | 2.5 | 100 | 100 |  | B7A | PP |  |
| TT21 |  | 540 | 310 | A1 | 6.3 | 30 | 300 | 300 | 80 | 7 | No Dat | Avail | able | A08 | P |  |
| TT22 | 020 | 540 | 310 | A1 | 12.6 | 30 | 300 | 300 | 80 | 7 | No Dat | Avail | able | A08 | P |  |
| TT23 | 414 | 226 | 573 |  | 6.3 |  | 150 | 150 | 25 | 10.5 | 100 | 100 |  | 89A | PP |  |
| TT24 | 414 | 2265 |  |  | 6.3 |  | 2502 | 200 | 30 | 3.3 | 100 | 100 |  | B9A | PP |  |
| TT25 | 245 | 6173 |  | A1A2 | 6.3 |  | 4002 | 250 | 30 | 3.4 | No Data | Availa | able | B7A | PP |  |
| TT210 | 023 | 074 | 460 |  | 2 |  | 150 |  | 1.5 |  | 80 |  |  | 8SC | TT |  |
| TV03-10 | 442 | 310 | 000 | A1A2 | 6 | 17 | 300 |  | 17 | 3.2 | 100 |  | 3 | B5 | TT |  |
| TW1 | 802 | 310 | 000 |  | 20 |  |  |  | 60 |  | REC |  | 20 mA | B5 | R |  |
| TW2 | 892 | 310 |  |  | 30 |  |  |  | 60 |  | REC |  | 2 ma | B5 | RR |  |
| TX4 | 645 | 231 | 700 | G1 | 4 | $\left\{\begin{array}{l}5 \\ 1.5\end{array}\right.$ | 150 300 | 90 | $\begin{aligned} & 9 \\ & 5.5 \end{aligned}$ | 1.5 | $\begin{aligned} & 150 \\ & 200 \end{aligned}$ | $\begin{aligned} & 60 \\ & 90 \end{aligned}$ |  | B7 | TH |  |
| TX21 | 645 | 231 | 700 | G1 | 21 | $\left\{\begin{array}{l}2 \\ 15\end{array}\right.$ | 150 |  | 15 | 2.5 | 100 | 60 |  | B7 | TH |  |
|  |  |  |  |  |  | 1.5 | 250 | 90 | 5.5 |  | 200 | 75 |  |  |  |  |
| TX41 | 645 | 231 | 700 | G1 | 4 | $\left\{\begin{array}{l}3 \\ 2\end{array}\right.$ | 100 |  | 9 | 3.8 | 100 | 60 |  | B7 | TH |  |
| TY86F | 23* | * 232 |  | D1 | 7.5 |  | 250 | 100 | 3.2 |  |  |  |  |  | R |  |
| TZ40 | 204 | 4300 | 000 | A1 | 7.5 | 1 | 100 |  |  | 0.4 | 100 |  | 0.4 | UX4 | T |  |
| U4C | 642 | 300 |  |  | 4 | 12 | 200 |  | 35 | 3.2 | 100 |  | 3.2 | B4 | T |  |
| U4E | 642 | 300 | 000 |  | 4 | 40 | 400 |  | 45 | 4 | No DAt | Avail | able | B4 | T |  |
| U4F | 642 | 300 |  |  | 4 | 40 | 400 |  | 45 | 4 | No Dat | Avail | able | B4 | T |  |
| U5 | 892 | 300 |  |  | 5 |  |  |  | 15 |  | REC |  | 5 mA | B4 | RR |  |
| U8 | 892 | 300 |  |  | 7.5 |  |  |  | 60 |  | Reic |  | 0 mA | B4 | RR |  |
| U9 | 892 | 300 |  |  | 4 |  |  |  | 30 |  | REC |  | 5 mA | B4 | RR |  |
| U10 | 892 | 300 |  |  | 4 |  |  |  | 30 |  | REC |  | 5 mA | B4 | RH |  |
| U12 | 892 | 300 |  |  | 4(5) |  |  |  | 60 |  | REC |  | 0 mA | B4 | RR |  |
| U12/14 | 892 | 300 |  |  | 4(5) |  |  |  | 60 |  | REC |  | 30 mA | B4 | RR |  |
| U14 | 892 | 300 |  |  | 4 |  |  |  | 60 |  | REC |  | 0 mA | B4 | RR |  |
| U15 | 802 | 300 | 000 |  | 6 |  |  |  | 120 |  | REC |  | 0 mA | B4 | R |  |
| U16 | 002 | 300 | 000 | D1 | 2 |  |  |  | 5 |  | REC |  | 5 mA | B4 | R |  |
| U17 | 002 | 300 |  | D1 | 5 |  |  |  | 30 |  | REC |  | 5 mA | B4 | R |  |
| U18 | 892 | 300 |  |  | 4(5) |  |  |  | 120 |  | REC |  | 0 mA | B4 | RR |  |
| U18/20 | 892 | 300 |  |  | 4(5) |  |  |  | 120 |  | REC |  | 3 mA | B4 | RR |  |
| U19 | 002 | 300 | 000 | D1 | 4(5) |  |  |  | 120 |  | REC |  | 40 mA | B4 | R |  |
| U19/23 | 002 | 300 |  | D1 | 4 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| U20 | 892 | 300 | 000 |  | 4(5) |  |  |  | 60 |  | REC |  | 2 mA | B4 | RR |  |
| U21 | 002 | 300 | 000 | D1 | 2 |  |  |  | 5 |  | REC |  | 5 mA | B4 | R |  |
| U22 | 200 | 000 | 030 | D1 | 2(3) |  |  |  | 5 |  | D |  |  | M08 | R |  |
| U22FH | 200 | 000 | 030 | D1 | 2 |  |  |  |  |  | D |  |  | M08 | D |  |
| U23 | 002 | 300 | 000 | D1 | 4(5) |  |  |  | 120 |  | REC |  | 3 mA | B4 | R |  |
| U24 | 030 | 000 |  | D1 | 2 |  |  |  | , |  | REC |  | 2 mA | A08 | R |  |
| U25 | 023 | 000 |  | D1 | 2 |  |  |  |  |  | D |  |  | B3G | D |  |
| U26 | 391 | 221 | 800 |  | 13 |  |  |  | 60 |  | REC |  | 20 mA | B7 | RR |  |
| U26 | 231 | 232 | 132 | D1 | 2 |  |  |  |  |  | D |  |  | B9A | D |  |
| U27 | 002 | 300 | 000 | D1 | 4 |  |  |  | 30 |  | REC |  | 5 mA | B4 | R |  |
| U29 | 002 | 300 | 000 | D1 | 2 |  |  |  | 15 |  | REC |  | 30 mA | B5 | R |  |
| U30 | 391 | 221 | 800 |  | 13 |  |  |  | 60 |  | REC |  | 30 mA | B7 | RR |  |
| U30/250 | 802 | 300 | 000 |  | 4 |  |  |  | 30 |  | REC |  | 5 mA | B4 | R |  |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| U31 | 020080310 |  | 26 |  |  |  | 120 |  | REC |  | 50 mA | A08 | R |  |
| U33 | 002300000 | D1 | 2 |  |  |  | 3 |  | D |  |  | B4 | R |  |
| U35 | 020000030 | D1 | 1.4 |  |  |  | 2 |  | D |  |  | A08 | R |  |
| U37 | 023000000 | D1 | 1.4 |  |  |  | 0.5 |  | D |  |  | B2G | D |  |
| U41 | *2* 0*0 3*0 | D1 | 1.2 |  |  |  | 1 |  | D |  |  | A08 | D |  |
| U43 | 023000000 | D1 | 6 |  |  |  | 0.5 |  | D |  |  | B2G | D |  |
| U45 | 230000000 | D1 | 6 |  |  |  |  |  | D |  |  | B3G | R |  |
| U47 | 230000000 | D1 | 2 |  |  |  |  |  | D |  |  | B3G | R |  |
| U49 | 230232032 | D1 | 2 |  |  |  |  |  | D |  |  | B9A | D |  |
| U50 | 020908030 |  | 5(5.7) |  |  |  | 60 |  | REC |  | 30 mA | A08 | RR |  |
| U51 | 030908020 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| U52 | 030908020 |  | 5(5.7) |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| U52IT | 008090230 |  | $5(5.7)$ |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| U54 | 030908020 |  | 5 (5.7) |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |  |
| U60 | *2* *** 3*0 | D1 | 6.3 |  |  |  |  |  | D |  |  | A08 | D |  |
| U60/500 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | R |  |
| U65/550 | 802300000 |  | 7.5 |  |  |  | 60 |  | REC |  | 20 mA | B4 | R |  |
| U70 | 028090310 |  | 6 |  |  |  | 30 |  | REC |  | 30 mA | A08 | RR |  |
| U71 | 020080310 |  | 30 |  |  |  | 60 |  | REC |  | 50 mA | A08 | R |  |
| U74 | 020080310 |  | 30 |  |  |  | 120 |  | REC |  | 30 mA | A08 | R |  |
| U76 | 020080310 |  | 30 |  |  |  | 120 |  | REC |  | 60 mA | A08 | R |  |
| U77 | *20 809020 |  | 5 |  |  |  | 180 |  | REC |  | 40 mA | A08 | RR |  |
| U78 | 802309100 |  | 6 |  |  |  | 30 |  | REC |  | 30 mA | B7G | RR |  |
| U81 | 009008230 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | B8B | RR |  |
| U82 | 209008130 |  | 6 |  |  |  | 30 |  | REC |  | 30 mA | B8B | RR |  |
| U84 | 009 **8 230 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B8B | RR |  |
| U101 | 280008130 |  | 50 |  |  |  | 120 |  | REC |  | 30 mA | B8B | R |  |
| U107 | 281008300 |  | 40 |  |  |  | 60 |  | REC |  | 20 mA | B7G | R |  |
| U118 | 280 *** 130 |  | 40 |  |  |  | 60 |  | REC |  | 25 mA | B8A | R |  |
| U119 | **1 23***8 |  | 38 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |
| U120/500 | 892300000 |  | 2 |  |  |  | 120 |  | REC |  | 30 mA | B4 | R |  |
| U134 | 028190310 |  | 13 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |  |
| U142 | 280000130 |  | 31 |  |  |  | 60 |  | REC |  | 20 mA | B8A | R |  |
| U143 | 020908030 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |  |
| U145 | 280000130 |  | 40 |  |  |  | 60 |  | REC |  | 60 mA | B8A | R |  |
| U147 | 028090310 |  | 6 |  |  |  | 30 |  | REC |  | 30 mA | A08 | RR |  |
| U149 | 209008130 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | B8B | RR |  |
| U150 | 280009130 |  | 6 |  |  |  | 30 |  | REC |  | 40 mA | B8A | RR |  |
| U151 | 023000000 | D1 | 6 |  |  |  |  |  | D |  |  | B3G | D |  |
| U152 | 001230008 |  | 19 |  |  |  | 120 |  | REC |  | 70 mA | B9A | R |  |
| U153 | *** 23***8 | C | 17 |  |  |  | 120 |  | REC |  | 60 mA | B9A | R |  |
| U154 | **1 23* **8 |  | 19 |  |  |  | 120 |  | REC |  | 70 mA | B9A | RR |  |
| U191 | 0** 080230 | C1 | 19 |  |  |  | 120 |  | REC |  |  | A08 | R |  |
| 0192 | **1 $23 * * * 8$ |  | 19 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |
| U193 | *** 23* **8 | C1 | 19 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| U201 | 020080310 |  | 20 |  |  |  | 60 |  | REC |  | 60 mA | A08 | R |  |
| U251 | *** 23***8 | C | 25 |  |  |  | 120 |  | REC |  | 30 mA | B9A | R |  |



150

| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | $\mathrm{mA} / \mathrm{V}$ | Anode Volts | Screen Volts | mA/V |  |  |


| UE1 | 023 | 100 | 080 |
| :--- | :--- | :--- | :--- |
| UE2 | 123 | 180 | 090 |
| UE13 | O20 | 080 | 310 |
| UE100 | 208 | $0 * 0$ | 130 |
| UEL11 | 452 | 371 | 560 |


|  | 25 |  | 60 |  |  |  | REC |  | $\begin{aligned} & 20 \mathrm{~mA} \\ & 20 \mathrm{~mA} \end{aligned}$ | $\begin{aligned} & 8 \mathrm{SC} \\ & 8 \mathrm{SC} \end{aligned}$ | RRR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 |  |  |  | 60 |  | REC |  |  |  |  |
|  | 25 |  |  |  | 60 |  | REC |  | 20 mA | A08 | R |
|  | 50 |  |  |  |  |  | REC |  |  | A08 | R |
| G |  |  | 100 | 30 | 2.4 | 1.6 | 100 | 60 |  |  | PP |
|  | 48 \{ | 6 | 200 | 200 | 22 | 5 | 100 | 100 |  |  | PP |
| G1 | 12.5 | 2.5 | 100 | 100 | 3.2 | 2.2 | 100 | 100 | 2.2 | 8SC | P |
| G1 | 12.5 | 20 | 100 | 100 | 3 | 1.8 | 100 | 100 | 1.8 | 8SC | P |
| G1 | 12 | 2 | 200 | 200 |  | 1.6 | 100 | 100 |  | B8B | P |
| G1 | 12.5 | 2.5 | 200 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | A08 | P |
| G1 | 12.5 | 2.4 | 200 | 100 | 5.5 | 2.4 | 100 | 100 | 2.3 | 8SC | P |
|  | 15 | 2 | 200 | 75 | 6 | 2.2 | 100 | 100 | 2 | F8 | P |
|  | 25 | 5 | 200 | 200 | 12 | 7 | 100 | 100 | 7 | F8 | P |
|  | 25 | 2 | 200 | 100 | 12 | 5.5 | 100 | 100 | 5.5 | F8 | P |
|  | 12.5 | 2.5 | 200 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | B8B | P |
|  | 12.5 | 3 | 200 | 125 | 7.2 | 2.3 | 100 | 150 | 2.3 | B8A | P |
|  | 21 | 2 | 200 | 175 | 10 | 8.5 | 100 | 150 | 8 | B8A | p |
|  | 21 | 2 | 200 | 125 | 15 | 6.3 | 100 | 100 |  | B8A | P |
|  | 19 | 2 | 200 | 170 | 10 | 7.4 | 100 | 100 | 7 | B9A | P |
|  | 12.6 | 2.5 | 250 | 125 | 6 | 2.2 | 100 | 100 |  | B9A | P |
|  | 19 | 2 | 200 | 100 | 9.7 | 5.9 | 200 | 200 | 6 | B9A | P |
|  | 12.6 | 2 | 200 | 150 | 3 | 1.8 | 100 | 100 | 1.8 | B9A | P |
|  | 12.6 | 2 | 200 | 100 | 9 | 3.8 | 175 | 100 | 4.4 | B9A | P |
|  | 20 | 2 | 200 | 100 | 4.5 | 3 | 100 | 100 |  | B8B | P |
|  | 30 | 3 | 200 | 150 | 12 | 8 | 100 | 100 |  | B8B | P |
|  | 30 | 2 | 200 | 75 | 10 | 5.7 | 100 | 75 |  | B8B | P |
|  | 18.9 | 2 | 200 | 90 | 12 | 12.5 | No | Data Ava | lable | B9A | P |
|  | 18.9 | 2.5 | 200 | 200 | 10 | 15 | No | Data Ava | lable | B9A | P |
|  | 13 | 3 | 250 | 100 | 8 | 2.2 | 100 | 100 |  | 8SC | P |
|  | 4 |  |  |  | 5 |  | D |  |  | B5 | RR |
|  | 13 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | 8SC | p |
|  | 13 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 100 |  | 8SC | P |
|  | 60 | 11.5 | 200 | 200 | 55 | 8.5 | 100 | 150 | 8 | A08 | P |
|  | 35 | 5 | 200 | 200 | 20 | 7 | 100 | 150 | 6 | 8SC | P |
|  | 45 | 14 | 200 | 75 | 6 | 2.2 | 100 | 75 |  | F8 | P |
|  | 45 | 14 | 200 | 200 | 45 | 9 | 100 | 100 |  | F8 | P |
|  | 60 | 8 | 200 | 125 | 75 | 12 | No | Data Ava | ilable | F8 | P |
|  | 45 | 13 | 200 | 200 | 55 | 8 | 100 | 150 | 7 | B8B | P |
|  | 46 | 10 | 200 | 175 | 61 | 9 | 100 | - 100 | 8 | B8B | P |
|  | 45 | 9 | 200 | 175 | 54 | 9.5 | 100 | 100 | 7 | B8A | P |
|  | 50 | 2.6 | 250 | 250 | 36 | 10 | 100 | -100 |  | B ${ }^{\text {A }}$ | P |
| A1 | 45 | 13.5 | 200 | 175 | 28.5 | 7 | 100 | - 100 | 6.5 | B8A | P |
|  | 45 | 9 | 200 | 175 | 54 | 9.5 | 100 | - 100 | 7 | B8A | P |
|  | 45 | 5.2 | 200 | 200 | 22 | 6.5 | 100 | - 100 |  | B8B | P |
|  | 45 | 12.5 | 200 | 175 | 70 | 10 | 100 | - 100 | 9 | B9A | P |
|  | 55 | 8.5 | 200 | 200 | 45 | 9 | 100 | - 100 |  | B8D | P |
| 25 |  |  | 250 | 250 | 24 |  | 100 | 100 |  | B9A | Pr' |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | $m A N$ | Anode Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |
| ULP | 642310000 |  | 13 | 20 | 250 |  | 27 | 4 | 100 |  | 4 | B5 | T |
| ULP51 | 623145000 |  | 40 | 17 | 250 | 250 | 36 | 2.5 | 100 | 100 |  | 8SC | P |
| ULP61 | 023100560 | G1 | 33 | 8 | 200 | 200 | 55 | 9 | 100 | 100 |  | 8SC | P |
| UN955 | 213460000 |  | 6.3 | 7 | 250 |  | 6.3 | 2.2 | 100 |  | 2 | 5AA | T |
| UP2 | 023140560 |  | 25 | 19 | 200 | 100 | 40 | 3 | 100 | 75 | 3 | 8SC | P |
| UP6 | 023100560 | G1 | 35 | 8 | 200 | 200 | 55 | 9 | 100 | 100 |  | 8SC | P |
| UP13 | 026540310 |  | 35 | 8 | 200 | 200 | 55 | 9 | 100 | 100 |  | A08 | P |
| UP13 | 040231500 | A1 | 13 | 1 | 200 | 100 |  | 3 | 200 | 100 | 3 | B7 | P |
| UP35U | 023100560 | G1 | 35 | 8 | 200 | 200 | 55 | 9 | 100 | 100 |  | 8SC | P |
| UPX | 642310000 |  | 25 | 34 | 250 |  | 38 | 7 | 100 |  | 7 | B5 | T |
| U080 | 541236114 |  | 12 | 1 | 250 | 20 | 0.9 | 7 |  | ata Ava | ilable | e B9A | P |
| UR1 | 023100080 |  | 20 |  |  |  | 60 |  | REC |  | 60 mA | 8SC | R |
| UR1C | 802310000 |  | 20 |  |  |  | 60 |  | REC |  | 60 mA | B5 | R |
| UR2 | 123180.090 |  | 30 |  |  |  | 60 |  | REC |  | 70 mA | 8SC | RR |
| UR3 | 123180090 |  | 30 |  |  |  | 60 |  | REC |  | 65 mA | 8SC | RR |
| UR3C | 091231800 |  | 30 |  |  |  | 60 |  | REC |  | 65 mA | B7 | RR |
| UT2 | 023100060 | G1 | 15 | 5 | 100 |  | 6 | 3 | 100 |  | 3 | 8SC | T |
| UTH4 | 423164570 | G1 | 17 | $\{2.5$ | 100 | - 90 | 4 3 | 2 0.8 | 100 100 | $60$ $90$ | $2$ | $\}_{8 \mathrm{SC}}$ | TH |
| UTH12 | 423164570 | G1 | 17 | $\left\{\begin{array}{l}  \\ 2.5 \end{array}\right.$ | $\begin{aligned} & 100 \\ & 250 \end{aligned}$ | $30$ | 4 3 | $\begin{aligned} & 2 \\ & 0.7 \end{aligned}$ |  |  |  | $\} 8 \mathrm{SC}$ | TH |
| UU2 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |
| UU3 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 30 mA | B4 | RR |
| UU4 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 35 mA | B4 | RR |
| UU5 | 892300000 |  | 4(5) |  |  |  | 60 |  | REC |  | 20 mA | A B4 | RR |
| UU6 | 208090030 |  | 4 |  |  |  | 60 |  | REC |  | 40 mA | A M08 | RR |
| UU7 | 208090030 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | M08 | RR |
| 008 | 208090030 |  | 4 |  |  |  | 120 |  | REC |  | 50 mA | M08 | RR |
| UU9 | 290008130 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | A B8A | RR |
| UU10 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | A B4 | RR |
| UU12 | 8*1 23* ${ }^{* *}$ |  | 6 |  |  |  | 60 |  | REC |  | 25 mA | B9A | RR |
| UU30/250 | 892300000 |  | 4 |  |  |  | 15 |  | REC |  | 10 mA | A. B4 | RR |
| U060/250 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | A $\quad$ B4 | RR |
| UU120/250 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | A B4 | RR |
| U0120/350 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | A B4 | RR |
| UU120/500 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | - ${ }^{\text {B4 }}$ | RR |
| UVG51 | 123190080 |  | 30 |  |  |  | 60 |  | REC |  | 20 mA | A 8SC | RR |
| UY1 | 388028120 |  | 50 |  |  |  | 120 |  | REC |  | 30 mA | A A08 | R |
| UY1 (N) | 388028120 |  | 50 |  |  |  | 120 |  | REC |  | 30 mA | A A08 | R |
| UYINS | $3 * 802 * 120$ |  | 50 |  |  |  | 120 |  | REC |  | 30 mA | A ${ }_{\text {F }}$ | R |
| UY2 | 023180000 |  | 26 |  |  |  | 30 |  | REC |  | 15 mA | F8 | R |
| UY3 | 023100080 |  | 50 |  |  |  | 120 |  | REC |  | 30 mA | - 8SC | R |
| UY4 | 023100080 |  | 35 |  |  |  | 30 |  | REC |  | 15 mA | A 8SC | R |
| UY11 | 802300100 |  | 50 |  |  |  | 120 |  | REC |  | 50 mA | F8 | R |
| UY21 | $28080 * 130$ |  | 50 |  |  |  | 120 |  | REC |  | 70 mA | A B8B | R |
| UY22 | 280808130 |  | 26 |  |  |  | 60 |  | REC |  | 20 mA | A B8B | R |
| UY31 | 020080310 |  | 50 |  |  |  | 120 |  | REC |  | 30 ma | A A08 | R |



| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grld Volts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{l}_{\mathrm{a}} \end{gathered}$ | mA/V | Anode | Screen Volts | mA/V |  |  |
| VEG51 | 026100080 |  | 20 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | R |
| VEL11 | 452371560 |  | 90 |  | 100 | 30 | 2.4 | 1.6 | 100 | 100 |  | \}F8 | PP |
| VF3 | 023110560 | G1 | 55 | 2.5 | 250 | 200 100 | 22 5 | 5 | 100 100 | 100 100 |  | 8 SC | P |
| VF7 | 023110560 | G1 | 55 | 2.5 | 250 | 100 | 3.5 | 2 | 100 | 150 | 6 | 8SC | P |
| VF14 | 612350140 |  | 60 | 4.5 | 250 | 250 | 12 | 7 | 100 | 100 |  | F8 | P |
| VG406 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |
| VG410 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |
| VG411 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |
| VG420 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |
| VG421 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |
| VG2503 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |
| VG2908 | 892300000 |  | 2.5 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |
| VG3008 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |
| VG3016 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |
| VG3630 | 892300000 |  | 4 |  |  |  | 120 |  | REC |  | 20 mA | B4 | RR |
| VG5006 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |
| VG5007 | 023080090 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | 8 SC | RR |
| VG5107 | 802300090 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | F8 | RR |
| VH2 | 812380100 |  | 6 |  |  |  | 5 |  | D |  |  | B7G | D |
| VH3 | 142364100 |  | 6 | 4.5 | 150 |  | 13 | 5 | 100 |  | 5 | B7G | T |
| VH5 | 412365100 |  | 6 | 2 | 200 | 125 | 7.7 | 5.1 | 100 | 100 |  | B7G | P |
| VHP13 | 041231500 | A1 | 13 | 1.5 | 200 | 100 | 4 | 2 | 100 | 100 | 4 | B7 | P |
| VHT2 | 645230600 | G1 | 2 |  | 150 | 75 |  |  | 100 | 75 |  | B4 | H |
| VHT2A | 645230600 | G1 | 2 |  | 150 | 50 |  |  | 100 | 60 |  | B7 | H |
| VHT4 | 545231600 | G1 | 4 | 3 | 200 | 100 | 3.6 |  | 100 | 100 |  | B7 | H |
| VHTA | 123164550 | G1 | 13 | 1.5 | 250 | 100 | 3.2 |  | 100 | 100 |  | 8SC | H |
| VHTA | 545231600 | G1 | 13 | 1.5 | 200 | 100 | 3.2 |  | 100 | 100 |  | B7 | H |
| VHTS | 645231500 | G1 | 13 | 3 | 200 | 100 | 2.6 |  | 100 | 100 |  | B7 | H |
| VHTS | 545231600 | G1 | 13 | 3 | 200 | 100 |  |  | 100 | 100 |  | B7 | H |
| VL1 | 023100560 | G1 | 55 | 14 | 200 | 200 | 25 | 2.2 | 100 | 100 |  | 8SC | P |
| VL4 | 023100560 | G1 | 110 | 8.5 | 200 | 200 | 45 | 8 | 100 | 100 |  | 8SC | P |
| VLS61 | 002300000 | D1 | 2 |  |  |  | 3 |  | D |  |  | B4 | R |
| VM1 | 2** 00* 300 | D1 | 1.4 |  |  |  |  |  | D |  |  | B7G | D |
| VM4V | 542310000 | A1 | 4 | 1 | 200 | 80 | 14 | 2.4 | 200 | 75 | 2.4 | B5 | P |
| VMP4 | 041231500 | A1 | 4 | 2 | 250 | 100 | 3 | 3.5 | 150 | 100 | 3.5 | B7 | P |
| VMP4 | 542310000 | A1 | 4 | 1 | 250 | 100 | 5 | 3.5 | 200 | 100 | 3.5 | B5 | P |
| VMP4G | 041231500 | A1 | 4 | 2 | 250 | 100 | 8 | 2.7 | 100 | 100 | 2.7 | B7 | P |
| VMS4 | 542310000 | A1 | 4 | 1 | 200 | 80 | 11 | 2.1 | 200 | 75 | 2.4 | B5 | P |
| VMS4B | 542310000 | A1 | 4 | 1 | 200 | 80 | 5.2 | 2.4 | 200 | 75 | 2.9 | B5 | P |
| V02 | 645320600 | G1 | 2 |  | 150 | 90 | 1.8 |  | 150 | 90 |  | B7 | 0 |
| vo2s | 023064560 | G1 | 2 |  | 150 | 50 | 2 |  | No | ata Ava | ilable | 8SC | 0 |
| V04 | 645231500 | G1 | 4 | 1.5 | 250 | 75 | 1.6 |  | 100 | 75 |  | B7 | 0 |
| v04S | 023154560 | G1 | 4 | 1.5 | 250 | 75 | 1.6 |  | 100 | 75 |  | 8SC | 0 |
| v06 | 123164560 | G1 | 6 | 3 | 100 | 100 | 4.6 |  | 100 | 100 |  | 8 SC | 0 |
| V013 | 645231500 | G1 | 13 | 1.5 | 250 | 75 | 1.6 |  | 100 | 75 |  | B7 | 0 |
| v013S | 123154560 | G1 | 13 | 1.5 | 250 | 75 | 1.6 |  | 100 | 75 |  | 8SC | 0 |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| V0133 | 023164570 | G1 | 13 | $\left\{\begin{array}{l}1 \\ 1\end{array}\right.$ | 100 200 | 75 | 1 | 1.2 1.7 | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | $\begin{aligned} & 60 \\ & 80 \end{aligned}$ | $\left.\begin{array}{l} 1.2 \\ 1.7 \end{array}\right\}$ | B7 | TH |  |
| VP2 | 041230500 | A1 | 2 | 1 | 150 | 150 | 3 | 1.5 | 150 | 150 | 1.5 | B7 | P |  |
| VP2B | 061230500 | G1 | 2 | 1.5 | 150 | 150 | 1.6 | 0.7 | 80 | 90 | 0.5 | B7 | P |  |
| VP2B | 065231500 | G1 | 2 | 1.5 | 150 | 60 | 2 | 1.4 | 100 | 60 | 1.4 | B7 | H |  |
| VP2B | 032004560 |  | 2 | 15 | 150 | 150 | 2.5 | 0.7 | 150 | 150 | 0.6 | 8SC | P |  |
| VP2BS | 032010560 | G1 | 2 | 1 | 150 | 150 | 2.5 | 0.7 | 150 | 150 | 0.6 | 8SC | P |  |
| VP2D | 061230500 | G1 | 2 | 1.5 | 150 | 75 | 1.3 | 2 | 150 | 75 | 2 | B7 | P |  |
| VP4 | 542310000 | A1 | 4 | 2 | 200 | 100 | 4.5 | 2.3 | 100 | 100 | 2.3 | B5 | P |  |
| VP4 | 041231500 | A1 | 4 | 2 | 200 | 100 | 4.5 | 2.3 | 100 | 100 | 2.3 | B7 | P |  |
| VP4A | 041231500 | A1 | 4 | 2 | 200 | 100 | 4.3 | 2.5 | 100 | 100 | 2.5 | B7 | P |  |
| VP4B | 061231500 | G1 | 4 | 3 | 250 | 250 | 11.5 | 2 | 100 | 100 | 1.8 | B7 | P |  |
| VP4C | 041231500 | A1 | 4 | 2 | 250 | 250 | 11.5 | 4 | 100 | 150 | 4 | B7 | P |  |
| VP4S | 023110560 | G1 | 4 | 2 | 250 | 100 | 8 | 1.8 | 100 | 90 | 1.8 | 8SC | P |  |
| VP4S | 061231500 | G1 | 4 | 3 | 250 | 100 | 8 | 1.8 | 100 | 90 | 1.8 | B7 | P |  |
| VP6 | 412361500 |  | 6 | 2.5 | 250 | 200 | 8 | 2.1 | 100 | 150 | 2.1 | B7G | P |  |
| VP6 | 061231500 | G1 | 6 | 3 | 250 | 100 | 7.5 | 1.7 | 200 | 100 | 1.7 | B7 | P |  |
| VP6S | 023110560 | G1 | 6 | 3 | 250 | 100 | 7.5 | 1.8 | 200 | 100 | . 7 | 8SC | P |  |
| VP12D | 026985310 | G1 | 13 | 3 | 250 | 125 | 9 | 1.1 | 100 | 100 | 1.1 | A08 | DDP |  |
| VP13 | 041231500 | A1 | 13 | 1.5 | 200 | 100 | 6.3 | 3 | 100 | 100 | 3 | B7 | P |  |
| VP13 | 061231500 | G1 | 13 | 3 | 200 | 100 | 8 | 2.8 | 100 | 100 | 2.8 | B7 | P |  |
| VP13A | 023110560 | G1 | 13 | 2 | 200 | 100 | 4 | 2.2 | 100 | 100 | 2.2 | 8SC | P |  |
| VP13B | 061231500 | G1 | 13 | 2 | 200 | 200 | 9 | 2.2 | 200 | 200 | 2.2 | B7 | P |  |
| VP13C | 061231500 | G1 | 13 | 2 | 200 | 200 | 9 | 2.2 | 200 | 200 | 2.2 | B7 | P |  |
| VP13K | 061231500 | G1 | 13 | 3 | 200 | 100 | 8 | 2 | 100 | 100 | 2 | B7 | P |  |
| VP13S | 061231500 | G1 | 13 | 3 | 200 | 100 | 8 | 2.8 | 100 | 100 | 2.8 | B7 | P |  |
| VP13S | 023110560 | G1 | 13 | 3 | 200 | 100 | 8 | 2.8 | 100 | 100 | 2.8 | 8SC | P |  |
| VP20 | 542310000 | A1 | 20 | 2 | 200 | 100 | 4 | 2.2 | 200 | 100 | 2.2 | B5 | P |  |
| VP21 | 041230500 | A1 | 2 | 1 | 150 | 60 | 1.8 | 1.1 | 150 | 60 | 1.1 | B7 | P |  |
| VP22 | 206510030 | G1 | 2 | 1.5 | 150 | 60 | 1.2 | 0.8 | 100 | 60 | 0.8 | M08 | P |  |
| VP23 | 206510030 | G1 | 2 | 1.5 | 150 | 60 | 1.4 | 1 | 100 | 60 | 1 | M08 | P |  |
| VP41 | 216510030 | G1 | 4 | 2.7 | 250 | 250 | 7.7 | 2 | 100 | 150 | 2 | M08 | P |  |
| VP41 | 061231500 | G1 | 4 | 3.3 | 250 | 250 | 11 | 2 | 100 | 200 | 3.1 | B7 | P |  |
| VP133 | 216510030 | G1 | 13 | 2.7 | 150 | 150 | 8 | 2.1 | 150 | 100 | 2.1 | M08 | P |  |
| VP210 | 041230500 | A1 | 2 | 1.5 | 150 | 60 | 1.1 | 0.8 | 100 | 60 | 0.8 | B7 | P |  |
| VP210 | 542300000 | A1 | 2 | 1.5 | 150 | 60 | 1.1 | 0.8 | 125 | 60 | 0.8 | B4 | P |  |
| VP215 | 542300000 | A1 | 2 | 1.5 | 150 | 75 | 2 | 0.7 | 150 | 75 | 1.3 | B4 | P |  |
| VP215 | 041230500 | A1 | 2 | 1.5 | 150 | 75 | 2 | 0.7 | 150 | 75 | 1.3 | B7 | P |  |
| VP215B | 061230500 | G1 | 2 | 1.5 | 150 | 125 | 1.5 | 1 | 125 | 100 | 1.2 | B7 | P |  |
| VP215C | 041230500 | A1 | 2 | 1.5 | 150 | 125 | 1.5 | 1 | 125 | 100 | 1.2 | B7 | P |  |
| VP1320 | 041231500 | A1 | 13 | 2.7 | 250 | 100 | 5 | 2 | 100 | 100 | 2 | B7 | P |  |
| VP1321 | 041231500 | A1 | 13 | 2.8 | 200 | 200 | 7.4 | 2 | 150 | 150 | 2 | B7 | P |  |
| VP1322 | 061231500 | G1 | 13 | 2.8 | 250 | 200 | 7.4 | 2 | 100 | 100 | 2 | B7 | P |  |
| VPT2 | 542300000 | A1 | 2 | 1.5 | 150 | 60 | 1.5 | 1.1 | 125 | 60 | 1.1 | B4 | P |  |
| VPT2 | 041230500 | A1 | 2 | 1.5 | 150 | 60 | 1.5 | 1.1 | 125 | 60 | 1.1 | B7 | P |  |
| VPT4 | 542310000 | A1 | 4 | 3 | 250 | 100 | 5.5 | 2 | 100 | 90 | 2 | B5 | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | mA/V | Anode Volts | Screen Volts | ma/v |  |  |  |
| VPT4 | 041231500 | A1 | 4 | 3 | 250 | 100 | 5.5 | 2 | 100 | 90 | 2 | B7 | P |  |
| VPT4B | 041231500 | A1 | 4 | 3 | 250 | 100 | 6 | 3.2 | 100 | 90 | 3.2 | B7 | P |  |
| VPTA | 041231500 | A1 | 13 | 2 | 250 | 100 | 4.2 | 2.9 | 100 | 100 | 2.9 | B7 | P |  |
| VPTS | 041231500 | A1 | 13 |  | 200 | 100 | 5.5 | 2.6 | 100 | 90 | 2.6 | B7 | P |  |
| VPU1 | 060231500 | G1 | 13 | 1 | 250 | 200 |  | 3.5 | 100 | 100 |  | B7 | P |  |
| VS2 | 542300000 | A1 | 2 | 2.5 | 150 | 60 | 2 | 1.2 | 100 | 60 | 1.4 | B4 | P |  |
| VS24 | 542300000 | A1 | 2 | 1 | 150 | 75 | 2.8 | 1.5 | 150 | 75 | 1.5 | B4 | P |  |
| VS24K | 542300000 | A1 | 2 | 1 | 150 | 75 | 2.8 | 1.5 | 150 | 75 | 1.5 | B4 | P |  |
| VS210 | 542300000 |  | 2 | 2.5 | 150 | 60 | 2 | 1.4 | 100 | 60 | 1.4 | B4 | P |  |
| VS215 | 542300000 | A1 | 2 | 1 | 150 | 75 | 6 | 0.7 | 150 | 75 | 1 | B4 | P |  |
| VSGA1 | 542310000 | A1 | 4 | 1.5 | 200 | 100 | 7 | 6.1 | 100 | 100 | 6 | B5 | P |  |
| VT1 | 642310000 |  | 4 | 5 | 200 |  | 5 | 2 | 100 |  | 2 | B5 | T |  |
| VT2 | 642310000 |  | 4 | 2 | 200 |  | 3 | 1.9 | 150 |  | 1.9 | B5 | T |  |
| VTP4 | 542310000 | A1 | 4 | 3 | 200 | 100 | 5.5 | 2 | 100 | 100 | 2 | B5 | P |  |
| vx2 | 061235500 | G1 | 2 | 1 | 150 | 60 | 1 |  | 150 | 60 |  | B7 | H |  |
| vx2S | 023015560 | G1 | 2 | 1 | 150 | 60 | 1 |  | 150 | 60 |  | 8SC | H |  |
| vx4 | 515231600 | G1 | 4 | 2 | 250 | 75 | 1.8 |  | 100 | 75 |  | B7 | H |  |
| VX4S | 023115560 | G1 | 4 | 2 | 250 | 万 | 1.8 |  | 100 | 75 |  | 8SC | H |  |
| vx6S | 023115560 | G1 | 6 | 3 | 250 | 100 | 1.9 | 4 | 100 | 100 | 4 | 8SC | P |  |
| vx13 | 515231600 | G1 | 13 | 2 | 250 | 75 | 1.8 |  | 100 | 75 |  | B7 | P |  |
| VX13S | 023115560 | G1 | 13 | 2 | 250 | 75 | 1.8 |  | 100 | 75 |  | 8SC | H |  |
| VY1 | 023100080 |  | 55 |  |  |  | 60 |  | REC |  | 20 mA | 8SC | R |  |
| VY2 | 023180000 |  | 30 |  |  |  | 15 |  | D |  |  | 8SC | R |  |
| VY2N | 023100080 |  | 30 |  |  |  | 15 |  | D |  |  | 8SC | R |  |
| W4 | 642300000 |  | 4 | 7.5 | 150 |  | 3 | 1.2 | 100 |  | 1.2 | B4 | T |  |
| W4-500 | 892300000 |  | 4 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |  |
| W17 | 265024300 |  | 1.4 | 1 | 90 | 75 | 3.5 | 0.9 | 80 | 75 | 0.9 | B7G | P |  |
| W21 | 041230500 | A1 | 2 | 1 | 150 | 125 | 3.3 | 1 | 150 | 100 | 1.4 | B7 | P |  |
| W21 | 542300000 | A1 | 2 | 1 | 150 | 125 | 2.3 | 1 | 150 | 100 | 1.4 | B4 | P |  |
| W25 | 265 *24 300 |  | 1.4 |  | 90 | 60 | 1.7 | 0.8 | 90 | 60 |  | B7G | P |  |
| W30 | 041231500 | A1 | 13 | 1 | 250 | 250 | 12 | 4 | 250 | 250 | 4 | B7 | P |  |
| W31 | 041231500 | A1 | 13 | 3 | 250 | 100 | 8 | 2.7 | 100 | 90 | 2.7 | B7 | P |  |
| W42 | 061231500 | G1 | 4 | 3 | 250 | 100 | 7.6 | 1.5 | 100 | 100 | 1.5 | B7 | P |  |
| W61 | 026510310 | G1 | 6 | 3 | 250 | 75 | 8.5 | 2.9 | 100 | 75 | 2.9 | A08 | P |  |
| W63 | 026510310 | G1 | 6 | 3 | 250 | 100 | 7.6 | 1.5 | 100 | 90 | 1.5 | A08 | P |  |
| W76 | 026510310 | G1 | 13 | 3 | 250 | 100 | 7.6 | 1.5 | 200 | 100 | 1.5 | A08 | P |  |
| W77 | 412361500 |  | 6 | 2 | 200 | 200 | 8 | 2.5 | 100 | 150 | 2.5 | B7G | P |  |
| W81 | 265104130 |  | 6 | 3 | 250 | 100 | 8 | 2.8 | 100 | 90 | 2.8 | B8B | P |  |
| W101 | 265104130 |  | 19 | 3 | 250 | 100 | 8 | 2.8 | 100 | 90 | 2.8 | B8B | P |  |
| W107 | 412361500 |  | 12.5 | 2.5 | 200 | 200 | 8 | 2.5 | 100 | 150 | 2.5 | B7G | P |  |
| W118 | 260154130 |  | 13 | 2.5 | 200 | 100 | 7 | 2.3 | 100 | 100 | 2.5 | B8A | P |  |
| W119 | 141230651 |  | 13 | 1.3 | 200 | 100 | 13 | 4.4 | 100 | 100 | 4.4 | B9A | P |  |
| W142 | 261154130 |  | 12 | 3 | 250 | 250 | 7.2 | 2.2 | 100 | 150 | 2.2 | B8A | P |  |
| W143 | 265104130 |  | 6 | 2.5 | 250 | 100 | 6 | 2.2 | 100 | 100 | 2.2 | B8B | P |  |
| W145 | 260154130 |  | 13 | 2.5 | 200 | 100 | 7 | 2.3 | 100 | 100 | 2.3 | B8A | P |  |
| W147 | 026510310 | G1 | 6 | 2.5 | 250 | 100 | 6 | 2.2 | 100 | 100 | 2 | A08 | P |  |
| W148 | 265140130 |  | 6 | 2.5 | 250 | 150 | 9.5 | 2.8 | 100 | 150 | 3.8 | B8B | P |  |


| VALVE | SELECTOR SWITCH No. | T.C. | V f | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \mathrm{la} \\ \mathrm{~mA} \end{gathered}$ | $\mathrm{mA} / \mathrm{V}$ | Anode Volts | Screen Volts | mA/V |  |  |
| W149 | 265104130 |  | 6 | 3 | 250 | 100 | 8.5 | 1.8 | 100 | 90 | 1.7 | B8B | P |
| W150 | 261154130 |  | 6 | 2.5 | 250 | 100 | 6 | 2.2 | 100 | 150 | 2.2 | B8A | P |
| W213 | 642300000 |  | 2 | 2.5 | 150 |  | 1 | 1.2 | 150 |  | 1.2 | B4 | T |
| W216 | 040120560 |  | 2 | 1.5 | 150 | 90 | 3 | 1.2 | 100 | 90 | 1.2 | B7 | P |
| W318 | 809231600 | G1 | 4 | 2 | 100 |  | 3.5 | 2.5 | 100 |  | 2.5 | B7 | DDT |
| W406 | 642300000 |  | 4 | 7.5 | 150 |  | 3 | 1.2 | 100 |  | 1.2 | B4 | T |
| W411 | 642300000 |  | 4 | 2.5 | 150 |  | 3 | 2.2 | 100 |  | 2.2 | B4 | T |
| W412 | 642300000 |  | 4 | 7.5 | 150 |  | 3 | 1.2 | 100 |  | 1.2 | B4 | T |
| W415N | 642310000 |  | 4 | 2.5 | 200 |  | 2.5 | 1 | 100 |  | 1 | B5 | T |
| W420 | 642300000 |  | 4 | 4 | 150 |  | 4 | 1.3 | 100 |  | 1.2 | B4 | T |
| W719 | 141230651 |  | 6 | 2 | 250 | 100 | 10 | 6 | 150 | 100 | 5 | B9A. | P |
| W727 | 412365100 |  | 6 | 1 | 250 | 100 | 11 | 4.4 | 100 | 100 | 4.4 | B7G | P |
| W729 | 141230651 |  | 6 | 2 | 200 | 175 | 8 | 5.7 | 100 | 100 |  | B9A | P |
| W739 | 141230651 |  | 6.3 | 1.3 | 175 | 100 | 12 | 4.4 | 100 | 100 | 4 | B9A | P |
| W4080 | 642310000 |  | 4 | 2.5 | 200 |  | 2.5 | 1 | 100 |  | 1 | B5 | T |
| W4110 | 642310000 |  | 4 | 1.5 | 200 |  | 1 | 3 | 100 |  | 2.5 | B5 | T |
| WD2 | 642300000 |  | 2 | 2.5 | 150 |  | 1 | 1 | 100 |  | 1.2 | B4 | T |
| WD30 | 560231890 | G1 | 13 | 1 | 250 | 100 | 7 | 2.6 | 250 | 100 | 2.6 | B9 | DDP |
| WD40 | 560231890 | G1 | 4 | 1 | 250 | 100 | 7 | 3.5 | 100 | 100 | 3.5 | B9 | DDP |
| WD70 | 541236891 |  | 6 | 2 | 250 | 90 | 5 | 2.2 | 100 | 90 | 2.2 | B9A | DDP |
| WD119 | 541236891 |  | 19 | 1.5 | 200 | 100 | 11 | 4.5 | 100 | 100 | 4.5 | B9A | DDP |
| WD142 | 268154130 |  | 13 | 2 | 200 | 90 | 5 | 2.1 | 100 | 100 | 1.9 | B8A | DP |
| WD150 | 268154130 |  | 6 | 2 | 250 | 100 | 5 | 2.1 | 100 | 100 | 2 | B8A | DP |
| WD709 | 541236891 |  | 6 | 2 | 250 | 90 | 5 | 2.2 | 100 | 90 | 2.2 | B9A | DDP |
| WE23 | 542310000 | A1 | 4 | 2 | 200 | 100 | 3 | 2.5 | 100 | 100 |  | B5 | P |
| WE24 | 542310000 | A1 | 4 |  | 200 | 100 | 3 | 2.5 | 100 | 100 |  | B5 | P |
| WE27 | 642310000 |  | 4 | 3.5 | 200 |  | 6 | 2.4 | 100 |  | 2.2 | B5 | T |
| WE28 | 642310000 |  | 4 | 1.5 | 200 |  | 1 | 2.5 | 100 |  | 2.2 | B5 | T |
| WE29 | 642310000 | D1 | 4 | 3 | 200 |  | 6 | 2 | 100 |  | 2 | B5 | DT |
| WE30 | 642350000 |  | 4 | 15 | 250 | 250 | 36 | 2.8 | No D | ta Avai | lable | B5 | P |
| WE33 | 023110560 |  | 4 | 3 | 100 | 250 | 8 | 1.9 | 100 | 100 |  | 8SC | P |
| WE35 | 023004560 |  | 4 | 15 | 250 | 250 | 15 | 2.8 | 100 | 100 |  | 8SC | P |
| WE37 | 023189060 | G1 | 4 | 7 | 250 |  | 4 | 2 | 100 |  | 2 | 8 SC | DDT |
| WE38 | 023104560 |  | 4 | 6 | 250 | 250 | 36 | 9 | 100 | 100 |  | 8 SC | P |
| WE39 | 023100060 | G1 | 4 | 5.5 | 250 |  | 6 | 2.5 | 100 |  |  | 8SC | P |
| WE51 | 892300000 |  | 4 |  |  |  | 30 |  | REC |  | 15 mA | B4 | RR |
| WE52 | 892300000 |  | 2 |  |  |  | 60 |  | REC |  | 20 mA | B4 | RR |
| WE53 | 023080090 |  | 4 |  |  |  | 60 |  | REC |  | 25 mA | 8SC | RR |
| WE54 | 023080090 |  | 4 |  |  |  | 30 |  | REC |  | 12 mA | 8SC | RR |
| WE350A | 254130000 | A1 | 6 | 4.5 | 400 | 250 | 83 | 6.5 | 100 | 150 | 6 | UX5 | P |
| WE377 | 029180310 |  | 117 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |
| WE403A | 412365100 |  | 6 | 2.3 | 150 | 150 | 7 | 4.3 | 100 | 100 | 4 | B7G | P |
| WHTS | 745231600 | G1 | 13 | $\left\{\begin{array}{l}1 \\ 1\end{array}\right.$ | 150 250 | 75 |  | 0.6 1.5 | 150 250 | 60 75 | $\left.\begin{array}{l}0.6 \\ 1.4\end{array}\right\}$ | \}B7 | TH |
| WT389 | 036540320 |  | 1.4 | 4.6 | 90 | 90 | 8 | 2 | 80 | 75 | 2 | A08 | P |
| WT210-0006 | $029180 \quad 310$ |  | 6 |  |  |  |  |  | D |  |  | A08 | DD |
| WT210-0007 | 026540310 |  | 6 | 18 | 350 | 250 | 54 | 5.2 | 100 | 150 | 5.2 | A08 | P |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | $\begin{aligned} & \text { Anode } \\ & \text { Volts } \end{aligned}$ | Screen Volts | $\begin{aligned} & \text { la } \\ & \mathrm{mA} \end{aligned}$ | $m A / V$ | Anode Volts | Screen Volts | maN |  |  |
| WT210-0012 | 298300000 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | UX4 | RR |
| WT210-0013 | 289300000 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | RR |
| WT210-0019 | 289300000 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | UX4 | RR |
| WT210-0021 | 028090310 |  | 6 |  |  |  | 30 |  | REC |  | 15 mA | A08 | RR |
| WT210-0025 | 029180310 |  | 117 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |
| WT210-0029 | 026040310 |  | 6 | 8 | 250 |  | 8 | 2 | 100 |  | 2 | A08 | T |
| WT210-0037 | 126458310 |  | 117 | $\left\{\begin{array}{l}  \\ 5.2 \end{array}\right.$ | 2 100 | 100 | 60 43 | 5.3 | REC 100 |  | $20 \mathrm{~mA}$ $5.3$ | \} 408 | RP |
| WT210-0040 | 802309100 |  | 6 |  | - 100 | - | 30 | 5.3 | REC | 9 | 15 mA | B7G | RR |
| WT210-0042 | 030809020 |  | 5 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |
| WT210-0048 | 020809030 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |
| WT210-0081 | 021415360 |  | 6 | 2 | 250 | -100 | 3 | 1.7 | 100 | 10 | 1.6 | A08 | P |
| WT210-0082 | 026540310 |  | 6 | 12.5 | $5 \quad 250$ | - 250 | 45 | 4.1 | 100 | 150 | 4.1 | A08 | $\mathbf{P}$ |
| WT210-0083 | 216498130 |  | 6 | 2 | 250 |  | 2.3 | 1.6 | 200 |  | 1.6 | B8B | DDT |
| WT210-0084 | 027446310 |  | 6 | 5 | 250 |  | 3 | 1.6 | 100 |  | 1.6 | A08 | TT |
| WT210-0085 | 412365400 |  | 50 | 7.5 | 5150 | -100 | 49 | 7.5 | 100 |  | 6 | B7G | P |
| WT210-0087 | 027546310 | G1 | 6 | $\left\{\begin{array}{l}1 \\ 3\end{array}\right.$ | 100 250 | 0 | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ | 2.5 1.2 | 100 100 | 10 | $\begin{aligned} & 3 \\ & 1.6 \end{aligned}$ | $\} A 08$ | TH |
| WT210-0089 | 026540310 |  | 6 | 9 | 200 | - 175 | 15 | 2.3 | 100 | 100 | 2.3 | A08 | P |
| WT210-0090 | 265113000 | G1 | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | UX6 | P |
| WT210-0094 | 461471230 |  | 6 | 8 | 250 |  | 9 | 2.6 | -100 |  | 2.6 | 6 A08 | TT |
| WT210-0108 | 461471230 |  | 6 | 31.5 | 5150 |  | 100 | 7 |  | Data A | ailable | e A08 | TT |
| WT210-0148 | 029080310 |  | 6 |  |  |  | 60 |  | REC |  | 20 mA | A08 | RR |
| WT390 | 026040310 |  | 6 | $\{8$ | $\begin{aligned} & 250 \\ & 150 \end{aligned}$ |  | 8 5.5 | 2 | 100 100 | 6 |  | \} 108 | T |
| WT-T102 | 020809030 |  | 5 |  |  |  | 60 |  | REC |  | 20mA | A08 | RR |
| WT-T122 | 021415360 |  | 6 | 3 | 250 | - 100 | 3 | 1.6 | - 100 | 100 | 1.6 | 6 A08 | $\mathbf{P}$ |
| WT-T123 | 026540310 |  | 6 | 12.5 | 5250 | - 250 | 45 | 4.1 | 100 | 15 | 4 | A08 | P |
| WT-T124 | 216498130 |  | 6 | 2 | 250 |  | 2.3 | 1.6 | 6200 |  | 1.6 | 6 B8B | DDT |
| WT-T125 | 027446310 |  | 6 | 5 | 250 |  | 3 | 1.6 | 6100 |  | 1.6 | 6 A08 | TT |
| WT-T126 | 412365400 |  | 50 | 7.5 | 5150 | - 100 | 49 | 7.5 | 5100 |  | 6 | B7G | P |
| WT-T128 | 027546310 | G1 | 6 | $\left\{\begin{array}{l} 1 \\ 3 \end{array}\right.$ | 100 250 | - 100 | 8 4 | 2.5 1.2 | $\begin{array}{ll}100 \\ 2 & 100\end{array}$ | 100 | $\begin{aligned} & 3 \\ & 1.6 \end{aligned}$ | $6\} \text { A08 }$ | TH |
| WT-T130 | 026540310 |  | 6 | 9 | 200 | $\bigcirc 175$ | 15 | 2.3 | 100 | 100 | 2.3 | 3 A08 | P |
| WT-T131 | 265113000 | G1 | 6 | 3 | 250 | O 100 | 2 | 1.2 | 2100 | 10 | 1.2 | UX6 | P |
| WT-T135 | 020809030 |  | 5 |  |  |  | 120 |  | REC |  | 30 mA | A08 | RR |
| X14 | 026546300 | G1 | 1.4 |  | 90 | 50 | 1.8 | 0.5 | - 80 | 60 | 0.5 | A08 | H |
| X17 | 266424300 |  | 1.4 | 4 | 75 | 5 | 4.5 | 1.2 | 280 |  | 1.2 | B7G | H |
| X18 | 266464300 |  | 1.4 | 4 | 75 | 5 | 4 | 1.2 | 280 |  | 1.4 | 4 B7G | H |
| X 21 | 645230600 | G1 | 2 |  | 150 | - 75 |  |  | 100 | 7 |  | B7 | H |
| X22 | 645320600 | G1 | 2 |  | 150 | - 75 |  |  | 100 | 7 |  | B7 | H |
| X23 | 645231700 | G1 | 2 | $\{1.5$ | 100 $5 \quad 150$ | 0 60 | 2.1 0.7 |  | 100 150 | 6 | 1.1 1.5 | 1) B7 | TH |
| X24 | 645231700 | G1 | 2 | $\left\{\begin{array}{l}  \\ 1.5 \end{array}\right.$ | 100 150 | O 60 | 2.1 0.7 |  | 100 150 | 60 | $\begin{aligned} & 1.3 \\ & 1.6 \end{aligned}$ | 3 $\}$ B7 | TH |
| X25 | 265461300 |  | 1.4 | 1.5 | 575 | 550 | 1 | 0.4 | 480 | 6 | 0.4 | 4 B7G | H |
| X30 | 645231600 | G1 | 13 | 3 | 150 | - 75 | 7 |  | 100 | 7 |  | B7 | H |

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| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO <br> VALVE TESTER |  |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. <br> Grid <br> Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | $m A / V$ | Anode Volts |  | creen Volts | mA/V ${ }^{\text {B }}$ |  |  |
| XFY14 | 653420000 |  | 1.2 | 6.5 | 60 | 60 | 3.1 | 0.6 |  | Data | a Avai | lable | e B5A | P |
| XFY15 | 653420000 |  | 1.2 | 6.5 | 60 | 60 | 3 | 0.6 |  | Data | a Avai | ilable | e B5A | P |
| XFY20 | 653420000 |  | 0.6 |  | 20 | 20 |  |  |  | Data | a Avai | ilable | e B5A | P |
| XFY21 | 653420000 |  | 1.2 |  | 20 | 20 | 0.4 | 0.4 |  | Data | a Avaj | ilable | e B5A | P |
| XFY22 | 653420000 |  | 1.2 | 1.2 | 20 | 20 | 0.3 | 0.4 |  | Data | a Avaj | ilable | e B5A | P |
| XFY23 | 653420000 |  | 1.2 | 2 | 20 | 20 | 0.4 | 0.3 |  | Data | a Ava | ilable | e B5A | P |
| XFY 31 | 653420000 |  | 1.2 |  | 20 | 20 | 0.4 | 0.4 |  | Data | a Ava | ilable | e B5A | P |
| XFY 32 | 653420000 |  | 1.2 | 1.5 | 20 | 20 | 0.4 | 0.3 |  | Data | a Ava | ilable | e B5A | P |
| XFY 33 | 653420000 |  | 1.2 | 2 | 20 | 20 | 0.4 | 0.3 |  | Data | a Avai | ilable | e B5A | P |
| XFY 34 | 653420000 |  | 1.2 | 4 | 40 | 40 | 1.5 | 0.6 |  | Data | a Ava | ilable | e B5A | P |
| XFY 35 | 653420000 |  | 1.2 | 1.5 | 40 | 40 | 0.7 | 0.6 |  | Data | a Ava | ilable | e B5A | P |
| XFY41 | 653420000 |  | 1.2 | 1.2 | 40 | 30 | 0.3 | 0.4 |  | Data | a Ava | ilable | e B5A | P |
| XFY43 | 653420000 |  | 1.2 | 2 | 20 | 20 | 0.4 | 0.3 |  | Data | a Ava | ilable | e B5A | P |
| XFY 51 | 653420000 |  | 1.2 |  | 20 | 20 | 0.2 | 0.3 |  | Data | a Ava | ilable | e B5A | P |
| XFY53 | $653420 \cdot 000$ |  | 1.2 | 3 | 20 | 20 | 0.5 | 0.3 |  | Data | a Avai | ilable | e B5A | P |
| XFY 53 M | 653420000 |  | 1.2 | 3 | 20 | 20 | 0.5 | 0.3 | No | Data | a Ava | ilable | e B5A | P |
| XFY54 | 653420000 |  | 1.2 | 2 | 20 | 20 | 0.3 | 0.3 |  | Data | a Ava | ilable | e B5A | P |
| XH2.0V | 642300000 |  | 2 | 1 | 60 |  | 0.5 | 0.6 |  | Data | a Ava | ilable | e SM4 | T |
| XL | 642300000 |  | 2 | 1.5 | 75 |  | 1.5 | 0.9 | 80 |  |  | 0.8 | SM4 | T |
| XL01. 5 | 642300000 |  | 1.5 | 1 | 60 |  | 0.9 | 0.7 |  | Data | a Ava | ilable | e SM4 | T |
| XL01.5V | *41 $23 * 6 * 5$ |  | 8 | 7.3 | 250 | 250 | 48 | 11.3 | 100 | 1 | 150 | 10 | B9A | P |
| XL1.5 | 642300000 |  | 1.5 | 1 | 60 |  | 0.7 | 0.6 |  | Data | a Ava | ilable | e SM4 | T |
| XL02.0V | 642300000 |  | 2 | 1 | 60 |  | 1.1 | 0.9 | No | Data | a Ava | ilable | e SM4 | T |
| XL2.0V | 642300000 |  | 2 | 1 | 60 |  | 1 | 0.8 | No | Data | a Ava | ilable | e SM4 | T |
| XL36 | 642300000 |  | 1.5 | 4.5 | 50 |  | 1.7 | 0.7 | 80 |  |  |  | SM4 | T |
| XL84 | $6 * 2364100$ |  | 2 | 1 | 50 |  | 1.1 | 0.9 | 80 |  |  |  | B7G | T |
| XL86 | *2* 540310 | A1 | 12.8 | 8.3 | 100 | 100 | 77 | 11 | 100 | - | 150 | 10 | A08 | P |
| XP | 642300000 |  | 2 | 4.5 | 100 |  | 9.5 | 1 | 80 |  |  | 1 | SM4 | T |
| XP1.5V | 642300000 |  | 1.5 | 4 | 60 |  | 1.8 | 0.8 | No | Data | a Ava | ilable | e SM4 | T |
| XP2 | 642300000 |  | 2 | 4.5 | 75 |  | 4 | 1 | 80 |  |  | 1 | SM4 | T |
| XPH1. 5 | 264730000 | G1 | 1.5 | $\{4.5$ | 40 40 |  | 0.5 1.7 | $\begin{aligned} & 0.5 \\ & 0.7 \end{aligned}$ | 60 60 |  |  |  | $\}$ SM5 | TT |
| XR2 | 206035240 |  | 1.2 | 7.5 | 150 | 125 | 7 | 1.9 | 125 |  | 100 |  | B8D | P |
| XR4 | 206035240 |  | 1.2 | 7.5 | 150 | 125 | 7 | 1.9 | 100 |  | 100 |  | B8D | P |
| XR6 | 412163510 |  | 6.3 | 1.4 | 100 | 100 | 7 | 5 | 100 |  | 100 | 5 | B8D | P |
| XR7 | 412653160 |  | 6.3 | 2 | 100 | 100 | 7.5 | 5.5 | 100 |  | 100 | 5.5 | B8D | P |
| XR8 | 462603160 |  | 6.3 | 2.5 | 100 |  | 8 | 4.2 | 100 |  |  | 4.2 | B8D | T |
| XR9 | 742113460 |  | 6.3 | 1.8 | 100 |  | 8.5 | 5 | 100 |  |  | 5 | B8B | TT |
| XSG | 542300000 | A1 | 2 | 1 | 150 | 60 | 1.4 | 0.7 | 100 |  | 60 | 0.6 | SM4 | P |
| XSG1.5V | 542300000 | A1 | 1.5 |  | 50 | 30 | 0.5 | 0.3 |  | Data | a Ava | ilable | e SM4 | P |
| XSG2.0V | 542300000 | A1 | 2 |  | 60 | 30 | 0.6 | 0.4 | No | Data | a Ava | ilable | e SM4 | P |
| XVS2.0V | 542300000 | A1 | 2 |  | 60 | 30 | 0.4 | 0.3 |  | Data | a Ava | ilable | e SM4 | P |
| XW1.5 | 254630000 |  | 1.5 |  | 60 | 30 | 0.7 | 0.5 |  | Data | a Ava | ilable | e SM5 | P |
| XW1.5V | 251630000 | G1 | 1.5 |  | 50 | 50 | 0.7 | 0.5 |  | Data | a Ava | ilable | e SM5 | P |
| XW2.0V | 254630000 |  | 2 |  | 60 | - 50 | 0.9 | 0.6 |  | Data | a Ava | ilable | e SM5 | P |
| XW075A | 653420000 |  | 0.6 |  | 40 | - 30 | 0.3 | 0.2 |  | Data | ta Ava | ilable | e B5A | P |
| XW075B | 653420000 |  | 0.6 |  | 40 | 30 | 0.2 | 0.2 | No | Data | a Ava | ilable | e B5A | P |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO <br> VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ \mathrm{mA} \end{gathered}$ | mA/V | Anode Volts | Screen Volts | $\mathrm{mA} / \mathrm{V}$ |  |  |  |
| XXB | 206447320 |  | 1.4 |  | 90 |  | 4.5 | 1.3 | 90 |  | 1.3 | B8B | TT |  |
| XXD | 216447130 |  | 12.5 | 10 | 250 |  | 9 | 2.1 | 100 |  | 2.1 | B8B | TT |  |
| XXFM | 264189130 |  | 6.3 | 2 | 250 |  | 1.5 | 1.5 | 100 |  | 1.4 | B8B | DDT |  |
| XXL | 260004130 |  | 6 | 8 | 250 |  | 8 | 2.3 | 100 |  | 2.3 | B8B | T |  |
| XY | 254630000 |  | 2 | 3 | 75 | 75 | 4 | 1.2 | 80 | 75 | 1.2 | SM5 | P |  |
| XY1.4A | 653420000 |  | 1.4 | 4.5 | 40 | 40 | 1.8 | 0.5 | No D | ata Ava | ilable | B5A | P |  |
| XY1.4B | 653420000 |  | 1.2 | 4.5 | 40 | 40 | 1.6 | 0.6 | No | ata Ava | ilable | B5A | P |  |
| XY1.4C | 653420000 |  | 1.2 | 1.5 | 40 | 40 | 0.5 | 0.5 | No D | Data Ava | ilable | B5A | P |  |
| XY1. 5 | 254630000 |  | 1.5 | 1.5 | 40 | 40 | 1.7 | 1 | No D | Data Ava | ilable | SM5 | P |  |
| XY2.0V | 246530000 |  | 2 | 2 | 60 | 50 | 1.7 | 1.4 | No | Data Ava | ilable | - SM5 | P |  |
| XY14B | 653420000 |  | 1.2 | 4.5 | 40 | 40 | 0.3 | 0.6 | No D | Data Ava | ilable | B5A | P |  |
| XY14CC | 653420000 |  | 1.2 | 1.5 | 40 | 40 | 0.5 | 0.5 | No D | ta Ava | lable | B5A | P |  |
| XY88 | *** $23 * * * 8$ | C | 16 |  |  |  | 120 |  | REC |  | 40 mA | B9A | R |  |
| Y13 | 045231600 |  | 13 | 20 | 250 | 250 | 40 | 3.9 | 100 | 150 |  | B7 | P |  |
| Y220 | 642300000 | G2 | 2 | 4.5 | 150 | 150 | 10.5 | 2.5 | 100 | 100 | 2.5 | B4 | P |  |
| Y220 | 642350000 |  | 2 | 4.5 | 150 | 150 | 10.5 | 2.5 | 100 | 100 | 2.5 | B5 | P |  |
| Y230 | 642350000 |  | 2 | 3 | 150 | 150 | 5 |  | 100 | 100 |  | B5 | P |  |
| YA1000 | 230232032 |  | 4 |  |  |  | 180 |  | REC |  | 10 mA | B9A | R |  |
| YC88 | 414234464 |  | 2.6 |  | 160 |  | 12.5 | 14 | No D | ata Ava | ilable | B9A | T |  |
| YC95 | 142360100 |  | 2.2 | 1.2 | 200 |  | 10 | 10.5 | No D | ata Ava | lable | B7G | T |  |
| YCC89 | 146234117 |  | 4.8 | 1.9 | 100 |  | 15 | 12 | No D | ta Avail | lable | B9A | 'TT |  |
| YCL82 | 414237516 |  | 10.8 | $\{0$ | 100 200 | 150 | 4.5 | $\begin{aligned} & 2.5 \\ & 7.5 \end{aligned}$ |  | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 2 \\ & 6 \end{aligned}$ | \}B9A | TP |  |
| YCL84 | 461237145 |  | 10 | $\{1.7$ | 200 | 150 | 3 18 | 4 11 | 100 100 | $\begin{array}{r} 60 \\ 100 \end{array}$ | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ | \}B9A | TP |  |
| YCL86 | 415237146 |  | 10 | $\left\{\begin{array}{l}1.7 \\ 7\end{array}\right.$ | 250 250 | 250 | ${ }^{1.2}$ | 1.6 | 100 100 | 60 100 | $\begin{aligned} & 1.6 \\ & 1.6 \end{aligned}$ | \}B9A | TP |  |
| YD2 | 642300000 |  | 2 | 4.5 | 150 |  | 6 | 3 | 100 |  | 2 | B4 | T |  |
| YF183 | 141230651 |  | 4.2 | 2 | 200 | 100 | 12 | 12.5 | No D | ata Ava | lable | B9A | P |  |
| YF184 | 141230651 |  | 4.2 | 2.5 | 200 | 200 | 10 | 15 | No D | ta Ava | lable | B9A | P |  |
| YL84 | *41 23* 6*5 |  | 8 | 7.3 | 250 | 250 | 48 | 11.3 | No D | Data Ava | ilable | e B9A | P |  |
| YL86 | 041 23* 6*5 |  | 8 | 12.5 | 200 | 200 | 75 | 10 | No D | Data Ava | ilable | - B9A | P |  |
| YL1000 | 014235166 |  | 1.1 |  | 100 | 100 | 30 | 4.3 | 100 | 100 |  | B9A | P |  |
| YL 1030 | $2453 * 4200$ | A1 A2 | 2.1 |  | 200 | 200 | 30 | 4.5 | 100 | 100 |  | B7A | PP |  |
| YL1060 | 245134200 | A1 A2 | 6.3 | 15 | 300 | 250 | 95 | 5 | No D | data Ava | ilable | B7A | PP |  |
| YL1080 | 424236572 |  | 1.6 |  | 200 | 200 | 30 | 3.3 | 100 | 100 |  | B9A | PP |  |
| YL1130 | 423756324 |  | 1.1 |  | 200 | 200 | 40 | 7 | 100 | 100 |  | B9A | PP |  |
| YL1240 | 414227563 |  | 6.75 |  | 400 | 200 | 30 | 3.3 | 100 | 100 |  | B9A | PP |  |
| YY88 | *** $23 * * * 8$ | C | 22 |  |  |  | 180 |  | REC |  | 40 mA | B9A | R |  |
| Z14 | 036500200 | G1 | 1.4 | 1 | 100 | 100 | 0.5 | 0.6 | 80 | 90 | 0.7 | A08 | P |  |
| Z21 | 041230500 | A1 | 2 | 1 | 150 | 150 | 1.1 | 1.2 | 150 | 100 | 1.2 | B7 | P |  |
| Z21 | 542300000 | A1 | 2 | 1 | 150 | 150 | 1.1 | 1.2 | 150 | 100 | 1.2 | B4 | P |  |
| 222 | 041230500 | A1 | 2 |  | 150 | 150 | 2.5 | 1.4 | 100 | 100 |  | B7 | P |  |
| Z22Met | 041230500 | A1 | 2 |  | 150 | 150 | 2.5 | 1.4 | 100 | 100 |  | B7 | P |  |
| 226 | 045231600 |  | 26 | 5.5 | 250 | 250 | 32 | 7.5 | 100 | 100 | 8 | B7 | P |  |
| 262 | 026510310 | G1 | 6 | 2 | 300 | 150 | 10 | 7.5 | 100 | 100 | 7.5 | A08 | P |  |
| Z63 | 026510310 | G1 | 6 | 3 | 250 | 100 | 2 | 1.2 | 100 | 100 | 1.2 | A08 | P |  |
| 266 | 026510310 | G1 | 6 | 1.5 | 200 | 200 | 10.9 | 8.5 | 100 | 150 | 8 | A08 | P |  |

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| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE |  | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{aligned} & \text { la } \\ & \text { mA } \end{aligned}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |  |
| 273 | 026510310 | G1 | 6 | 3 | 250 | 100 | 6.5 | 1.7 | 100 | 90 | 1.8 | A08 | P |  |
| Z77 | 412361500 |  | 6 | 2 | 250 | 250 | 10 | 7.5 | 100 | 150 | 5 | B7G | $P$ |  |
| Z90 | 256101403 |  | 6 | 1.5 2 | 200 | 150 250 | 4 10 | 6.4 6 | 100 100 | 150 150 |  |  | P |  |
| Z142 | 260154130 |  | 21 | 2 | 200 | 200 | 10 | 8.5 | 100 | 150 | 8 | B8A | P |  |
| Z145 | 261514130 |  | 22 | 1.8 | 200 | 200 | 10 | 9 | 100 | 150 | 7 | B8A | P |  |
| 2150 | 260154130 |  | 6 | 2 | 250 | 250 | 10 | 9.5 | 100 | 150 | 8 | B8A | P |  |
| Z152 | 141230651 |  | 6 | 2 | 200 | 200 | 10 | 7.4 | 100 | 100 | 6 | B9A | P |  |
| Z220 | 642300000 | G2 | 2 | 7.5 | 150 | 150 | 15 | 2 | 100 | 100 | 2 | B4 | P |  |
| Z220 | 642350000 |  | 2 | 7.5 | 150 | 150 | 15 | 2 | 100 | 100 | 2 | B5 | P |  |
| Z309 | 141223651 |  | 6 | 2 | 250 | 250 | 20 | 15 | No Data | Avail | lable | B9A | P |  |
| Z319 | 141321655 |  | 6 | 2 | 350 | 250 | 12.5 | 11.5 | No Data | Avail | lable | B9A | P |  |
| Z329 | 141230651 |  | 7.3 | 1.9 | 200 | 175 | 10 | 8.8 | 100 | 100 |  | B9A | P |  |
| Z359 | 141230651 |  | 12 | 2 | 250 | 250 | 20 | 15 | 100 | 100 |  | B9A | P |  |
| 2719 | 141230651 |  | 6 | 2 | 200 | 175 | 10 | 7.4 | 100 | 150 | 6 | B9A | P |  |
| 2729 | 501236014 |  | 6 | 1 | 250 | 100 | 2 | 1.8 | 100 | 100 | 1.8 | B9A | P |  |
| 2749 | 141230651 |  | 6.3 | 1.9 | 200 | 175 | 10 |  | No Data |  | lable | B9A | P |  |
| 2759 | 141023651 |  | 6 | 2 | 250 | 250 | 15 | 15 | 100 | 100 |  | B9A | P |  |
| 2 | 892310000 |  | 13 |  |  |  |  |  | D |  |  | B5 | DD |  |
| 2 D 2 | 642300000 |  | 2 | 12 | 150 |  | 7 | 1 | 100 |  | 1.2 | B4 | T |  |
| 2017 | 208564300 |  | 1.4 | 1 | 90 | 90 | 2.7 | 0.6 | 80 | 90 | 0.6 | B7G | DP |  |
| WD25 | 2*8 564300 |  | 1.4 | 1.5 | 60 | 60 | 0.2 | 0.2 | No Data | Avail | lable | B7G | DP |  |
| ZD152 | 541236891 |  | 6 | 2 | 250 | 90 | 5 | 2.2 | 100 | 90 | 2.2 | B9A | DDP |  |

## 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 | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | BASE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts. | Anode Volts | Target Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | $\begin{gathered} \mathrm{Ra} \\ \mathrm{M} \Omega \end{gathered}$ |  |
| 1M1 | 4*0 230060 |  | 1.4 | 34 | 250 | 0 | 0.09 | 2.2 | B8D |
| 1M3 | $4^{*} 0230060$ |  | 1.4 | 23 | 200 | 0 | 0.1 | 1 | B8D |
| 2E5 | 264513000 |  | 2.5 | 8 | 250 | 250 | 0.2 | 1 | A08 |
| 2 G 5 | 264513000 |  | 2.5 | 22 | 250 | 250 | 0.2 |  | UX6 |
| 6 AB 5 | 264513000 |  | 6 | 15.5 | 150 | 150 | 0.13 | 1 | UX6 |
| 6AD6 | 026540310 |  |  | 53 | 150 150 |  |  |  | A08 |
| 6AF6 | 026540310 |  | 6 | 81 | 150 | 125 |  |  | A08 |
| 6AF7 | 026457310 |  | 6 | 4.5 | 200 | 200 | 0.16 |  | A08 |
| 6 BR 5 | 41* 23* 6*5 |  | 6 | 15 14 | 200 | 200 200 | 0.15 0.4 | 1 | B9A |
|  |  |  |  | $\{4.2$ | 250 | 250 |  | 1 | A08 |
| 6 CD 7 | 026546310 |  | 6 | 12.5 | 250 | 250 | 1.0 | 1 |  |
| 6E5 | 264513000 |  | 6 | 7.5 | 250 | 250 | 0.2 | 1 | UX6 |
| $6 \mathrm{G5}$ | 264513000 |  | 6 | 22 | 250 | 250 | 0.2 | 1 | UX6 |
| $6 \mathrm{H5}$ | 264513000 |  | 6 | 22 | 250 | 250 | 0.2 | 1 | UX6 |
| 6M1 | 026540310 |  | 6 | 22.5 | 250 | 250 | 0.2 | 1 | A08 |
|  | *25 456310 |  |  | $\left\{\begin{array}{l}4 \\ 4\end{array}\right.$ | 250 | 250 | 0.12 | 0.2 | A08 |
| $6 \mathrm{M2}$ | *25 456310 |  |  | 2 | 250 | 250 | 0.25 | 0.1 |  |
| 6 N 5 | 264513000 |  | 6 | 15.3 | 150 | 150 | 0.2 | 1 | UX6 |
| $6 T 5$ | 264513000 |  | 6 | 22 | 250 | 250 |  | 1 | UX6 |
| 6U5/6G5 | 264513000 |  | 6 | 22 | 250 | 250 | 0.2 | 1 | UX6 |
| 6x6 | 025540310 |  | 5 |  | 250 | 250 |  |  | A08 |
| 62E1 | 264513000 |  | 6.3 | 7 | 250 |  |  | 1 | UX6 |
| 10M1 | 026540310 |  | 18 | 19 | 200 | 175 | 0.2 | 1 | A08 |
| 10M2 | $2 * 6456130$ |  | 12.6 | 3 | 200 | 200 | 0.1 | 0.2 | A08 |
| 1205 | 264513000 |  | 12.6 | 20 | 200 | 200 250 | 0.19 0.2 | ${ }_{1}^{0.1}$ | Ux6 |
| 41 ME | 023104560 |  | 4 | 5 | 250 | 250 |  | 1 | 8SC |
| 63ME | 026540310 |  | 6 | 22 | 250 | 250 | 0.3 | 1 | A08 |
| 64ME | 026457310 |  | 6 | 16 | 250 | 250 |  | 1 | A08 |
| 65ME | 41* 23* 6*5 |  | 6 |  | 250 | 250 250 |  |  | B9A |
| 1629 | 026540310 |  | 12.5 | 8 | 250 | 250 | 0.2 | 1 | A08 |
| 4678 | 023104560 |  | 6 | 5 | 250 | 250 | 0.1 | 2 | 8SC |
| AC/ME | 045231600 |  | 4 | 22 | 250 | 250 | 0.2 | 1 | B7 |
| AM1 | 023104560 |  | 4 | 5 | 250 | 250 | 0.1 | 2 | 8 SC |
| DM21 | 026540030 |  | 1.4 |  | 90 | 90 | 0.03 | 2 | A08 |
| DM70 | 4*0 230060 |  | 1.4 | 23 | 200 | 0 | 0.1 | 1 | B8D |
| DM71 | 4*0 23*060 |  | 1.4 | 23 | 200 | 0 | 0.1 | 1 | B8D |


| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | BASE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts. | Anode <br> Volts | Target Volts | $\underset{\mathrm{mA}}{\mathrm{la}}$ | $\begin{gathered} \mathrm{Ra} \\ \mathrm{M} \Omega \end{gathered}$ |  |
| E130 | 026540310 |  | 6 | 15 | 250 | 250 |  | 1 | A08 |
| E1320 | 026540310 |  | 6 | 11 | 250 | 250 | 1 |  | A08 |
| EM1 | 023104560 |  | 6 | 5 | 250 | 250 | 0.1 | 2 | 8SC |
| EM3 | 023104560 |  | 6 | 18 | 200 | 200 | 0.2 | 1 | 8SC |
| EM4 | 023164560 |  | 6 | $\left\{\begin{array}{r}4.2 \\ 12.5\end{array}\right.$ | 200 200 | $\begin{aligned} & 200 \\ & 200 \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | 8SC |
| EM11 | 026546310 |  | 6 | $\left\{\begin{array}{r}5 \\ 16\end{array}\right.$ | 250 250 | 250 250 |  | 1 | A08 |
| EM31 | 026540310 |  | 6 | 5 | 250 | 250 |  | 2 | A08 |
| EM34 | 026456310 |  | 6 | 4.2 | 250 | 250 |  | 1 | A08 |
| EM35 | 026540310 |  | 6 | 12.5 | 250 250 | 250 250 | 1 | 1 | A08 |
| EM71 | 251064130 |  | 6 | 20 | 250 | 250 | 0.5 |  | B8B |
| EM80 | 41*23* 6*5 |  | 6 | 14 | 250 | 250 | 0.4 | 0.5 | B9A |
| EM81 | 41* $23 * 6 * 5$ |  | 6 | 10.5 | 250 | 250 | 0.4 | 0.5 | B9A |
| EM84 | 4*1 $2356 * 6$ |  | . 6 | 22 | 250 | 250 | 0.5 | 0.5 | B9A |
| EM87 | 4*1 235 6*6 |  | 6.3 | 14 | 250 | 250 | 1.1 | 1 | B9A |
| EM840 | 4*1 $2356 * 6$ |  | 6 | 22 | 250 | 250 | 0.5 | 0.5 | B9A |
| FT4 | 026540310 |  | 4 | 6 | 250 | 250 |  | 1 | A08 |
| ME4S | 023104560 |  | 4 | 5 | 250 | 250 |  | 2 | 8SC |
| ME6S | 023104560 |  | 6 | 5 | 250 | 250 |  | 2 | 8SC |
| ME41 | 216040530 |  | 4 | 22.5 | 250 | 250 | 0.2 | 1 | M08 |
| ME91 | 216040530 |  | 9 | 17 | 150 | 150 | 0.2 | 1 | M08 |
| ME920 | 045231600 |  | 9 | 19 | 200 | 175 | 0.2 | 1 | B7 |
| PM5 | 206546130 |  | 6 | $\left\{\begin{array}{r}15 \\ 5\end{array}\right.$ | 200 | 200 200 |  | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | A08 |
| PM84 | 4*1 $2356 * 6$ |  | 4.2 | 22 | 250 | 250 | 0.5 | 0.5 | B9A |
| TK406 | 023104560 |  | 4 | 5 | 250 | 250 | 0.1 | 2 | 8SC |
| TV4 | 023140560 |  | 4 | 5 | 250 | 250 |  | 1 | 8SC |
| UM4 | 206546130 |  | 12.6 | $\left\{\begin{array}{r}4.2 \\ 12.5\end{array}\right.$ | 200 | 200 200 |  | 1 | A08 |
| UM11 | 206546130 |  | 15 | $\left\{\begin{array}{r}4.2 \\ 12.5\end{array}\right.$ | 200 200 | 200 200 |  | 1 | A08 |
| UM34 | 026456310 |  | 12.5 | $\left\{\begin{array}{r}4.2 \\ 12.5\end{array}\right.$ | 250 250 | 250 250 | 1 | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | A08 |
| UM80 | 41* $23 * 6 * 5$ |  | 19 | 14 | 200 | 200 | 0.4 | 0.5 | B9A |
| LM81 | 41* 23* 6*5 |  | 19 | 14 | 200 | 200 | 0.4 | 0.5 | B9A |
| UM84 | 4*1 $2356 * 6$ |  | 12.6 | 22 | 250 | 250 | 0.4 | 0.5 | B9A |
| VFT4 | 026540310 |  | 4 | 20 | 250 | 250 |  | 1 | A08 |
| VME4 | 045231600 |  | 4 | 22 | 250 | 250 |  | 1 | B7 |
| VTF6 | 026540310 |  | 6 | 22 | 200 | 200 | 0.2 | 1 | A08 |
| Y25 | 4*0 320060 |  | 1.4 | 34 | 250 |  | 0.09 | 2.2 | B8A |
| Y61 | 026540310 |  | 6 | 22 | 250 | 250 | 0.2 | 1 | A08 |
| Y62 | 026540310 |  | 6 | 22 | 250 | 250 |  | 1 | A08 |
| Y63 | 026540310 |  | 6 | 22 | 250 | 250 | 0.2 | 1 | A08 |
| Y64 | 026540310 |  | 6 | 22 | 250 | 250 |  | 1 | A08 |
| Y65 | 026540310 |  | 6 | 11 | 250 | 250 |  | 1 | A08 |

## APPENDIX II.

## Test Data for High Voltage Rectifiers.

The following procedure should be adopted when testing high voltage reotifiers.
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 $A_{1}$ 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 $\mathrm{A}_{2}$.

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 <br> SWITCH No. | T.C. | Vf. | Anode <br> Volts <br> (Max.) | la mA <br> (Min.) | Valve <br> Holder | Type |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | REMARKS

## APPENDIX III.

## Test Data for 'Service' Type Valves NOTES REFERRED TO IN THE 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 value shows signs of back emission from anode to $G_{9}$. 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 ( Ra ), indicated in the remarks column, has been inserted across the link(s) on valve panel
J Use special 9 clip valve holder fitted to Valve Tester type 160

| VALVE | SELECTOR SWITCH No. | T.C. | Vf. | Neg. Grid Volts | Anode Volts | Screen Volts | la mA | mA/V | Base | Type | REMARKS | Civ. <br> Equiv. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CVI6 | 234000000 | $\mathrm{A}_{1}$ | 4 | 1 | 250 |  | 6 | 4.2 | Disc seal | T | $\min$ slope <br> See Note A |  |
| CV53 | 234000000 | $\mathrm{A}_{1}$ | 4 | 1 | 250 |  | 6 | 4.2 | Disc seal | T | min slope <br> See Note A |  |
| CV82 | 234000000 | $A_{1}$ | 4 | 3 | 250 |  | 20 | $3 \cdot 7$ | Disc seal | T | See Note A min slope | 3A/141] |
| CV88 | See Note C |  | 6 | 0 | 250 |  | 4 | 5 | Disc seal | T | See Note C | 3A/148 |
| CV93 | See Note C |  | 1.4 | 0 | 20 |  |  | 0.7 | Disc seal | T | See Note C | V625 |
| CVI05 | 020000030 | $D_{1}$ | 6 |  |  |  | 30 |  | A08 | R |  |  |
| CVI22 | 632400000 |  | 1.4 | 0 | 100 |  |  | 0.8 | Special | T | See Note D |  |
| CVI32 | 412361500 |  | 6 | 1.8 | 250 | 100 | $6 \cdot 3$ | 2 | B7G | H |  |  |
| CV201 | 021540300 | A | (2.5) | 10 | 250 | 150 | 25 | $3 \cdot 3$ | A08 | P |  |  |
| CV229 | 623400000 |  | 1.4 | 0 | 100 |  |  | 0.8 | Special | T | See Note D |  |
| CV243 | 042350000 |  | (5) | 40 | 75 | 75 | 45 | 1.5 | B5 | P |  | 4045A |
| CV273 | 346000000 | H | 6 | 4 | 250 |  | 28 | 8.5 | Disc seal | T |  | DET22 |
| CV354 | 346000000 | H | 6 | 2 | 250 |  | 10 | 6.5 | Disc seal | T |  |  |
| CV384 | 642300000 |  | (5) | 30 | 400 |  | 62 | 7.5 | B4 | T |  | DET5 |
| CVII55 | 642300000 |  | 4 | 0 | 75 |  | 0.7 | 0.2 | B4 | T |  |  |
| CVI223 | 642300000 |  | (5) | 30 | 400 |  | 62 | 7.5 | 84 | T |  | DET5 |
| CVI508 | 002300000 | $A_{1}$ | (5) | 40 | 100 |  |  |  | B4 | R |  |  |
| CVI584 | 642310000 |  | 4 | 3.5 | 200 |  | $5 \cdot 4$ | $3 \cdot 1$ | B5 | T |  |  |



## APPENDIX IV.

Test Data for Russian Valves

| VALVE | SELECTOR SWITCH No. | T.C. | Vf | DATA FOR VALVE CHARACTERISTIC METER \& VALVE TESTER TYPE 160 |  |  |  |  | DATA FOR AVO VALVE TESTER |  |  | BASE | TYPE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Neg. Grid Volts | Anode Volts | Screen Volts | $\begin{gathered} \text { la } \\ m A \end{gathered}$ | mA/V | Anode Volts | Screen Volts | mA/V |  |  |
| 1KII | 265024300 |  | 1.2 | 0.5 | 60 | 40 | 1.7 | . 65 | No Dat | Availabl |  | B7G | P |
| 1Б1П | 208564300 |  | 1.2 | 0 | 60 | 40 | 1.0 | . 25 | No Da | Available |  | B7G | DP |
| $2 \Pi 1 \Pi$ | 264536200 |  | 1.2 | 3.5 | 60 | 60 | 2.8 | 0.9 | No Da | A Availabl |  | B7G | P |
| 652П | 452368100 |  | $6 \cdot 3$ | 1.5 | 250 | 100 | 6.5 | 2.0 | 100 | 100 | 2 | B7G | DP |
| 6K1II | 412365100 |  | 6.3 | 3 | 250 | 100 | 6.7 | 1.85 | 100 | 100 | 1.9 | B7G | P |
| 6K4II | 412365100 |  | $6 \cdot 3$ | 1.0 | 250 | 100 | 11 | 4.4 | 100 | 100 | 4.4 | B7G | P |
| 6Ж2П | 412365100 |  | 6.3 | $2 \cdot 2$ | 125 | 125 | 7.5 | $5 \cdot 2$ | 100 | 100 |  | B7G | P |
| 6Ж1П | 412365100 |  | $6 \cdot 3$ | $2 \cdot 2$ | 125 | 125 | $5 \cdot 5$ | 3.55 | 100 | 100 |  | B7G | P |
| 6ЖЗ3П | 412365100 |  | 6.3 | 2 | 250 | 150 | 7 | 5 | 100 | 100 |  | B7G | P |
| 6\%4П | 412365100 |  | $6 \cdot 3$ | 1 | 250 | 100 | 11 | 4.4 | 100 | 100 | 4 | B7G | P |
| 6\%5.A | 412365100 |  | 6.3 | 2.0 | 250 | 100 | 10 | 9 | 100 | 100 |  | B7G | P |
| Г837 | 205411300 | $A_{1}$ | 12.6 | 85 | 400 |  | 60 | 3.5 | No Da | a Availab |  | B7G | P |
| 6 CIII | 612364100 |  | 6.3 | 7 | 250 |  | 6.3 | $2 \cdot 2$ | 100 |  | 2.2 | B7G | T |
| 6C2II | 412344600 |  | $6 \cdot 3$ | 1.0 | 100 |  | 10 | 11 | No Da | a Availab |  | B7G | T |
| 6H15П | 672344100 |  | $6 \cdot 3$ | 2 | 100 |  | 8.5 | $5 \cdot 6$ | 100 |  | 5.6 | B7G | TT |
| 6 HIIT | 641237410 |  | 6.3 | 4.8 | 250 |  | 8 | $4 \cdot 3$ | 100 |  | 8 | B9A | $T$ |
| $6 \mathrm{H} 2 \Pi$ | 641227413 |  | 6.3 | 1.5 | 250 |  | $2 \cdot 3$ | 2 | 100 |  | 2 | B9A | T |
| 6×2П | 182310900 |  | $6 \cdot 3$ |  |  |  | 5 |  | D |  |  | B7G | RR |
| $6 \Pi 4 \Pi$ | 802310900 |  | $6 \cdot 3$ |  |  |  | 30 |  | REC |  | 15 | B7G | RR |
| 6П2П | 412365100 |  | 6.3 | 5.5 | 125 | 125 | 35 | 8 | 100 | 100 | 6 | B7G | P |
| 61117 | 651236415 |  | 6.3 | 12.5 | 250 | 250 | 45 | 4.5 | 100 | Penlf | 4 | 89A | P |



