Valve Data Manual

Edition 23
1981

for models

CT 160 · VT 160

VCM mk 1 · VCM mk 2 · VCM mk 3 · VCM mk 4 · VCM 163

ABBREVIATIONS

CCR	Cold Cathode Rectifier
D	Diode
DD	Double Diode
DDD	Triple Diode
DDDD	Quadruple Diode
DT	Diode Triode
DDT	Double Diode Triode
DP	Diode Pentode
DDP	Double Diode Pentode
gm	Mutual Conductance in milliamps per volt
H	Heptode or Hexode
Ia	Anode current in milliamps
N	Nonode
O	Octode
P	Pentode or Tetrode
PP	Double Pentode or Double Tetrode
T	Triode
TH	Triode Heptode or Triode Hexode
THY	Thyratron
TI	Tuning Indicator
TP	Triode Pentode
TT	Double Triode
TTT	Triple Triode
R	Half-wave rectifier
RR	Full-wave rectifier
Ra	Anode Circuit resistance
Va	Anode voltage
Vg_1	Control grid voltage
Vg_2	Screen grid voltage
Vh	Heater voltage
VCM	Valve Characteristic Meter
X, Y, Z	Are positions on the Pin Selector switches on the VCM 163

SYMBOLS

* **INTERNAL CONNECTION**

Among Selector Switch settings, this indicates that the valve pin is connected inside the valve to an electrode for the purpose of improving mechanical rigidty. As the internal connection may be to a different electrode for any given valve type, **it is essential that this pin be left unconnected** to the valve tester (Selector Switch to 0). If it is required to know which electrode is internally connected to the asterisked pin, this may be done with an ohmmeter on a sufficiently low range to discriminate between heater resistance and a direct connection.

† **TRIPLE DIODE TESTING**

Among Selector Switch settings, this indicates the pin connecting the third diode (d'''). With the earlier generations of testers (all other than VCM 163) this requires a special testing procedure for d'''. Please refer to the Operating Instructions for the tester concerned.

† **EXTERNAL ANODE LOAD**

A dagger appearing in the gm data column indicates that the figure given is the value of the external anode load (Ra) to be inserted for the test. Please see notes on Testing Tuning Indicators, Cold Cathode Rectifiers, Gas-filled Rectifiers and Thyratrons.

( ) **HIGH CURRENT HEATERS**

Brackets around heater voltage, e.g. (5), indicate that a tester voltage setting higher than that specified by the valve manufacturer should be used to compensate for voltage drop at the valve base, occurring in the case of high current heaters.

ξ **SECONDARY EMISSION**

This symbol against a type number indicates a valve susceptible to secondary emission (back emission) from the anode. For these valves two alternative sets of figures are given.

ϕ **GRID CURRENT ERRORS** (VCM1 and VCM2 only)

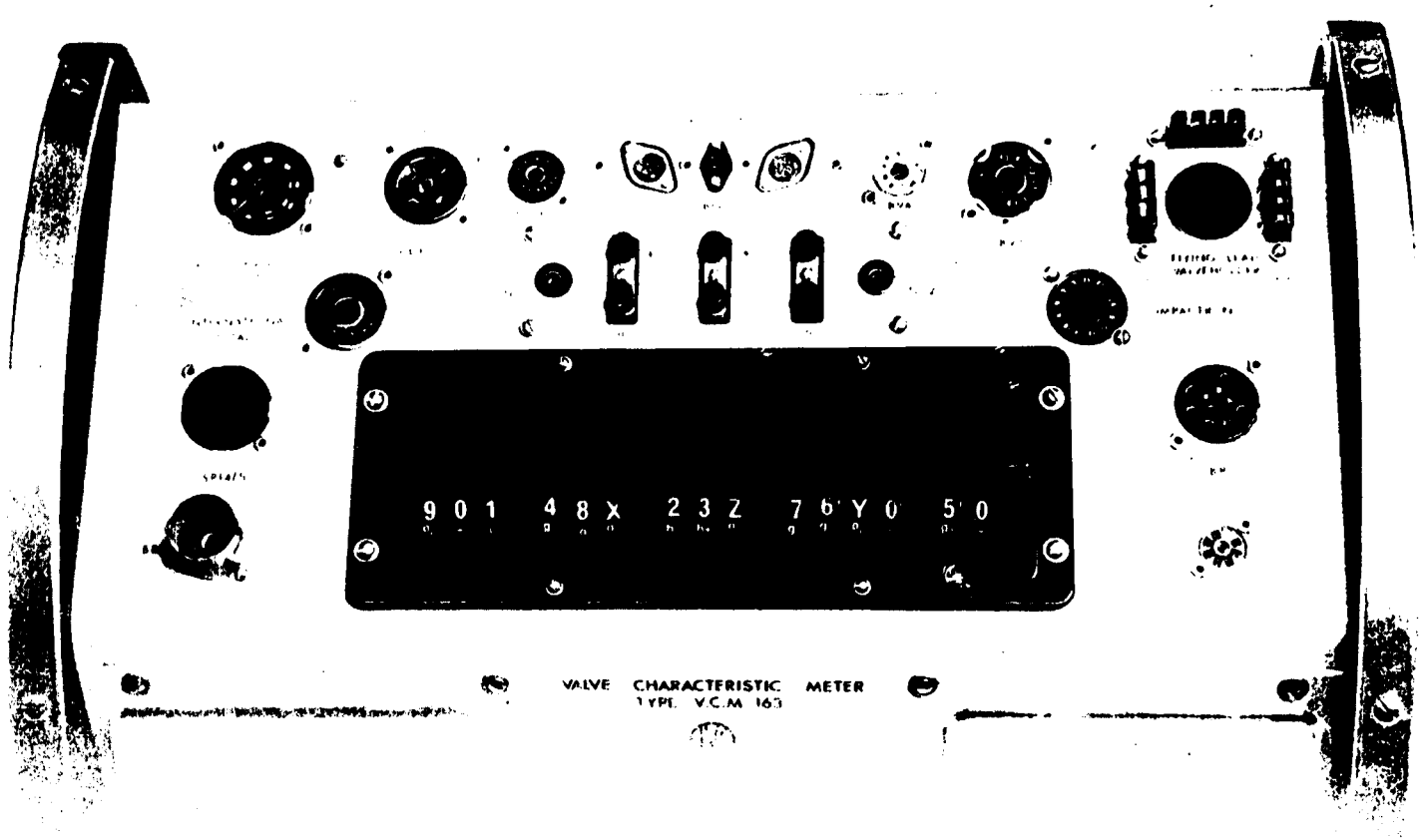
Next to a type number, this indicates a valve calling for Vg_1 of less than 1V and which is susceptible to grid current. This current may increase the grid bias voltage, giving rise to unexpectedly low mutual conductance readings. For these valves, two alternative sets of figures are given which only need be used if testing with a VCM1 or VCM2.

△ **VALVES OF LOW ANODE RESISTANCE** (all testers except VCM 163)

Next to type number, this indicates a valve which is likely to give Ia and gm readings considerably different from the valve makers data. With the earlier generations of AVO valve testers this effect was due to the internal anode resistance of the valve (ra) being of a very low value, approaching that of the anode current measuring circuit of the tester (approx. 200Ω). To overcome this limitation, the readings of Ia and gm obtained should be compared with those of a known good valve. Ia and gm values quoted are for use with the VCM 163 Tester only.

□ **INTER-ELECTRODE TESTS AT LOW VOLTAGE ONLY** (all testers except VCM 163)

Next to a type number, this indictaes a specialised valve type (thyratron, close-spaced VHF triode etc.) whose manufacturer has placed a very low limit on the inter-electrode voltage ratings. These restrictions apply whether the valve is hot or cold. The earlier generations of AVO valve testers should not be used for inter-electrode insulation testing on these few types, because the test voltage used is 150V (peak). The limitation does not apply to the tester VCM 163 where the test voltage used is 50V d.c.



The Valve Socket Panel of the AVO VCM163 Valve Characteristic Meter

CONTENTS

WARNINGS

USE OPERATING INSTRUCTIONS

This book does not replace Operating Instructions supplied with the various AVO Valve Tester models.

ELECTRIC SHOCK

Users of AVO Valve Testers are warned that voltages of up to 450V may be present on valve sockets and link terminals (where provided) for external component connections.

CONSTANT VOLTAGE TRANSFORMERS

In the interests of accuracy, it is recommended that AVO Valve Testers should NOT be powered from a constant voltage transformer, unless it is known that the 3rd and 5th harmonic content is of negligible proportion.

DAMAGE TO VALVES

While every care has been taken in the preparation of this manual, the publishers cannot accept any responsibility for damage caused to any valve under test, or to the instrument, resulting from incorrect information.

TRADE MARKS

The Trade Marks AVO and AVOMETER are the exclusive property of AVO Limited

USING THE AVO VALVE MANUAL

USE WITH AVO VALVE TESTERS

This manual is published primarily as an aid to users of AVO valve testers in setting up their instrument for each valve type. The operating procedure and some instrument limitations vary according to the tester model concerned and users should obtain this class of information from the Operating Instructions supplied with the tester.

The AVO instruments covered by this manual are:

VCM 163	Valve Characteristic Meter
VCM mk 1	Valve Characteristic Meter
VCM mk 2	Valve Characteristic Meter
VCM mk 3	Valve Characteristic Meter
VCM mk 4	Valve Characteristic Meter
VT 160	Valve Tester, Commercial Version
CT 160	Valve Tester, Services Version

USE FOR INDEPENDENT REFERENCE

The manual is also a useful source of basic valve data, indexed by type number only, without the need to know the valve manufacturer. Valve characteristics are given directly, in tabular form and pin connections may be obtained by decoding the selector switch settings for VCM 163 (p. xi).

MULTIPLE VALVES

For multiple valves (e.g. triode-pentodes), two lines of characteristic data are given in this manual. The section with the fewer electrodes is given on the top line (e.g. triode, in a triode-pentode). This is usually obvious from the absence or presence of a Vg_2 value in the tables. Where the two sections have identical characteristics (e.g. a double triode) only one line is given. For quadruple diodes (e.g. 6JU8) the anodes of D1 and D3 are coupled internally to the cathodes of D2 and D4. In these cases, two lines of pin Selector Switch settings are given in order that each diode pair may be tested separately.

TYPE VARIANTS

Usually indicated by suffix letters added by the manufacturer to the basic type numbers;

Example 1	Basic type	6L6
	Variants	6L6A, 6L6B, 6L6G, 6L6GT, 6L6GTA

In this example, the variations concern the glass bulb or base and do not affect the characteristics. Therefore only one entry is given in this manual, under basic type 6L6, which is equally valid for testing all the variants shown in the example.

Example 2	Basic type	PL81
	Variant	PL81A

In some cases the variant does have different characteristics from the basic type and in these cases the manual gives separate entries.

FLYING LEAD VALVES

AVO Valve Testers VCM 163, VCM 4, CT 160 and VT 160 have special connecting sockets for flying leads valves. In other tester models valves with solder-in wire leads, in place of the normal plug-in type of base, may be tested by inserting the wires carefully into a suitable valve holder on the tester. As each flying lead valve is usually a variant of a normal based type, it is best to use the socket appropriate to the based type.

In the case of Brimar flying lead valves, these have prefix letters F/, FF/, SF/, SX/, or XF/ before the basic type number, e.g. F/6064. The AVO Valve Manual gives the test data under the basic type number 6064 but not under the flying lead variant F/6064.

TUNING INDICATORS

Special procedures are required for testing cathode ray tuning indicators, full details of which are given in the Operating Instruction book with each tester. Testers type VCM 1 and VCM 2 are not suitable for testing tuning indicators.

The tester screen-grid switch is used to connect the target supply and the voltage required is given in the Vg_2 column of this manual. An external anode load resistor is required and this may be connected between the Anode Link terminals on the tester. The value of the resistor required is given in the gm data column, keyed with a dagger symbol †. At the approximate bias given in the Vg_1 column, the triode section should be at cut-off and the display showing the minimum area.

On reducing the grid bias to zero, the illuminated area should increase to maximum and the anode current should be approximately that given in the Ia column.

For dual sensitivity indicators, two lines of data are given, the upper line relating to the more sensitive indication.

THYRATRONS

Special procedures are required for testing thyratrons, full details of which are given in the Operating Instructions book with each tester. Testers VCM 1 and VCM 2 are not suitable for the testing of thyratrons.

The applied anode voltage for testing thyratrons is given in the Va column of this manual in the usual way. The resistance figure given in the gm column is the value of external load to be connected between the Anode Link terminals on the tester. With Ia meter on the highest range, Vg_1 is set to maximum and then reduced until the valve strikes. The value of current flow to be expected is given in the Ia column of this manual.

COLD CATHODE and GAS FILLED RECTIFIERS

Testing valves of these types requires the external connection of a suitable range limiting resistor between the Anode Link terminals of the AVO tester, in order to protect the valve from damage. The value of resistor to use is given in the gm column of this manual. Testers VCM 1 and VCM 2 are not suitable for testing these rectifiers.

HIGH VOLTAGE RECTIFIERS

Test data for high voltage rectifiers requires a different format and special test procedure. The information on testing these types appears separately in Appendix 1 in this manual.

VOLTAGE STABILISERS

Voltage stabiliser valves (e.g. OA2, QS75/20, STV108-30, VR75/30) are not included in this manual because they cannot be fully tested on AVO Valve Characteristic Meters.

SETTING UP TESTER

FROM

VALVE MANUFACTURER'S DATA

This Valve Data Manual lists over 7,900 different types but should a valve be encountered which is not included, AVO testers may be set up from data supplied by the valve manufacturer.

PROCEDURE

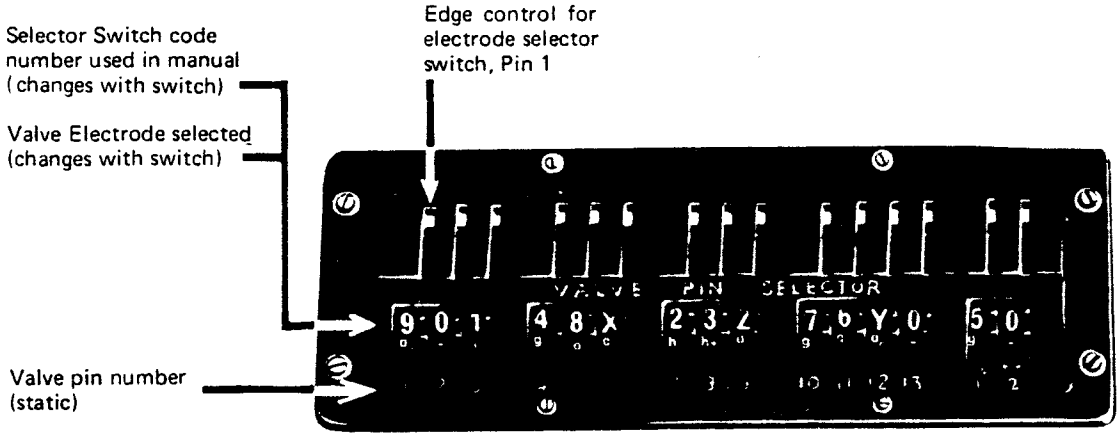
1 Look up the valve in the manufacturer's data and refer to the base diagram.

2 Set the Selector Switch for Pin 1 (on the left hand end of the barrel switch assembly on the AVO valve tester) to the electrode given by the valve maker. The roller selectors are engraved with the standard electrode letter symbols, as well as switch position code numbers used is this manual.

3 Repeat for remaining pin connections

4 Set electrode supplies from valve manufacturer's "Characteristics" data. Do not use figures given under headings of "Maximum Ratings" or "Typical Operation".

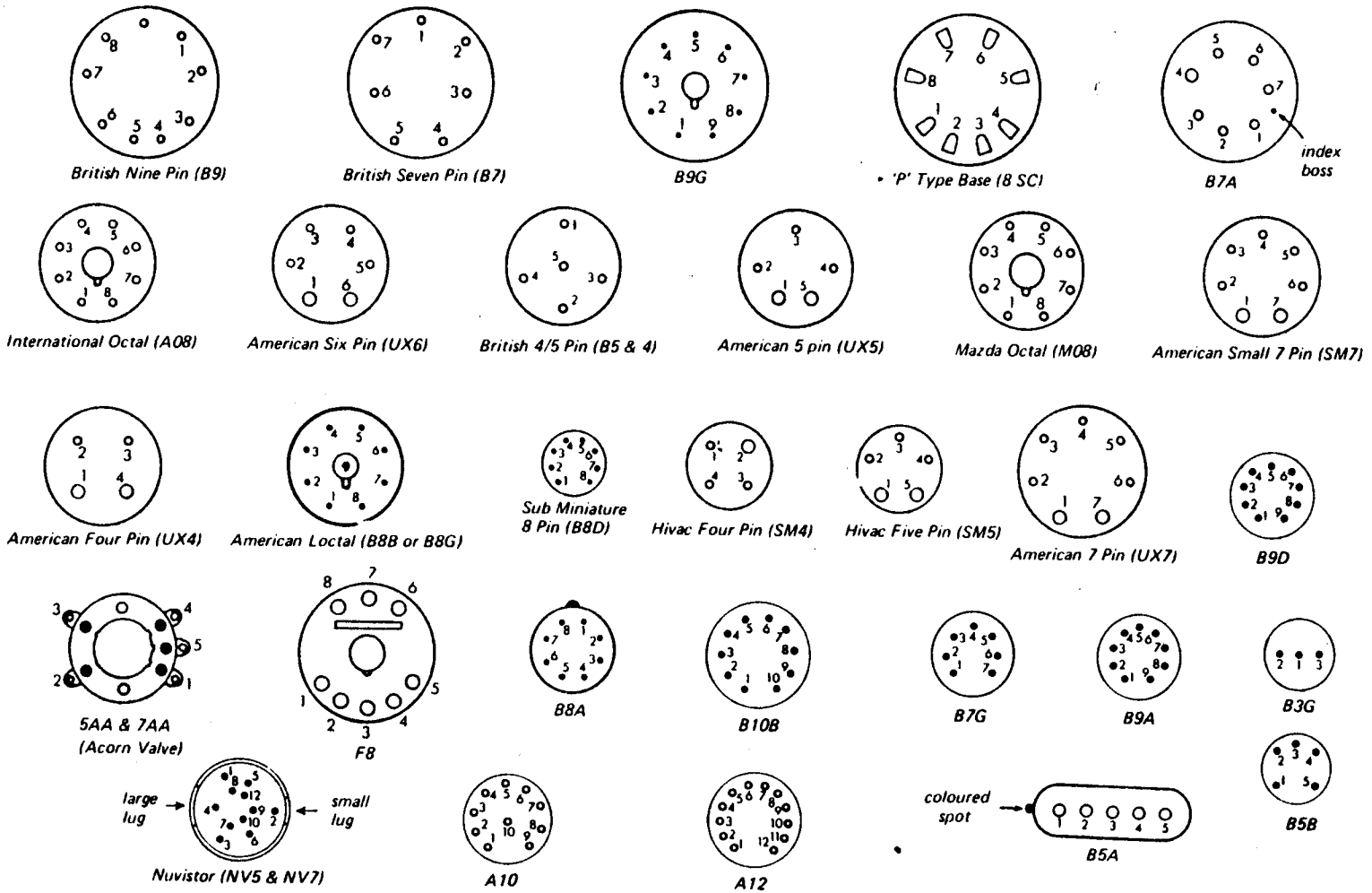
5 Plug valve into appropriate socket and proceed with normal test in accordance with the Operating Instructions for the tester concerned.



Top view of the barrel switch assembly on an AVO VCM 163.
Other tester models are similar, but some have fewer switch rollers

STANDARD NUMBERING OF VALVE PINS

(viewed from underside of socket)



NOTE: *This is not a diagram of the socket panel of any AVO valve tester*

FINDING PIN CONNECTIONS

FROM

AVO VALVE DATA MANUAL

When using the AVO Valve Data Manual for independent reference in servicing work, the valve characteristics information is read out directly, but the valve pin connections need decoding.

This is easily done by taking the 'Selector Switch' and 'Top Cap' code numbers given in the VCM 163 columns of the AVO Valve Data Manual and decoding them by reference to the following tables and to the standard valve pin numbering diagrams on the facing page.

PIN DECODING TABLES

VALVE TYPE	VCM163 only	
	SELECTOR SWITCH	TOP CAP
PCL82	415 238 718 0000	00

Pins 1,2,3 — Pins 4,5,6 — Pins 7,8,9 — Pins 10,11,12,13

Electrode Selector Switch Code Number in Valve Manual	Electrode Symbol	Electrode
0	–	None
1	C	Cathode
2	h–	Heater
3	h+	Heater
4	g_1 ′	Control grid
5	g_1 ″	Control grid of second section
6	g_1 ‴	Control grid of third section
7	g_2	Screen grid
8	a	Anode
9	ad ′	First Diode anode
X	ad ″	Second Diode anode
Y	ad ‴	Third Diode anode
Z	ad ⁗	Fourth Diode anode

EXAMPLE

For PCL82, Pin 1 is shown in the AVO Manual as Electrode Code 4. Decoding table shows Code Number 4 always represents Control Grid. Hence Pin 1 is Control Grid. The position of Pin 1 is found from the Standard Pin Numbering Diagram.

VALVE SOCKET ADAPTORS

If the required valve socket is not already fitted to your AVO valve tester, one of the socket adaptors may provide a solution.

The following adaptors were available, at the time of going to press, from:

AVO Ltd,
Archcliffe Road,
Dover, Kent. CT17 9EN
Telephone: Dover (0304) 202620

ADAPTORS

VCM 163 ONLY			VCM 3 VT 160 / VCM 4 CT 160			VCM 1 / VCM 2		
Adaptor No	Socket type	Plugs in to	Adaptor No	Socket type	Plugs in to	Adaptor No	Socket type	Plugs in to
2	B9G	AO8	5	Fit your own socket	AO8	1	B7G and B8A (Miniature and Rimlock)	AO8
3	B8B (loctal)	AO8	6	SM7 (to fit SA7 base)	AO8	2	B9G	AO8
4	B3G	AO8	9	B7A	AO8	3	B8B (Loctal)	AO8
5	Fit your own socket	AO8	11	B5A (5 flying leads)	AO8	4	B3G	AO8
6	SM7 (fits SA7 base)	AO8				5	Fit your own socket	AO8
9	B7A	AO8				6	SM7 (fits SA7 base)	AO8
17	UX6 (American 6-pin)	SP14				9	B7A	AO8
18	UX7 (American 7-pin)	SP14				11	B5A (5 flying leads)	AO8
19	MO8 (Mazda octal)	SP14						
20	B7 (British 7-pin)	SP14						

TEST DATA FOR RECEIVING AND SMALL TRANSMITTING VALVES

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	VCM163 Tester only — TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4 — TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
0Z4	008 080 101 0000	00	007 060 010		-		250		58	†3k	A08	CCR
00	384 200 000 0000	00	364 200 000		5	0	40		1.0	0.66	UX4	T
00A	384 200 000 0000	00	364 200 000		5	0	40		1.5	0.66	UX4	T
01	384 200 000 0000	00	364 200 000		5	4.5	90		2.5		UX4	T
01A	384 200 000 0000	00	364 200 000		5	9	150		3	0.8	UX4	T
01AA	384 200 000 0000	00	364 200 000		5	4.5	90		3.2	0.9	UX4	T
01B	384 200 000 0000	00	364 200 000		5	4.5	90		2.5	0.72	UX4	T
06F90	873 420 000 0000	00	653 420 000		0.6	1.1	20	20	.05	0.1	B5A	P
054V	842 310 000 0000	00	642 310 000		4		100			4	B5	T
084	842 300 000 0000	00	642 300 000		4	2.0	150		4.0	1.4	B4	T
1	291 300 000 0000	00	281 300 000		6.3				60		UX4	R
1A3	291 009 300 0000	00	281 008 300		1.4						B7G	D
1A4	387 200 000 0000	40	365 200 000	G1	2	3	150	75	2.2	0.6	UX4	P
1A4E	387 200 000 0000	40	365 200 000	G1	2	3	150	75	2.2	0.6	UX4	P
1A4P	387 200 000 0000	40	365 200 000	G1	2	3	90	75	2.2	0.7	UX4	P
1A4T	287 300 000 0000	40	265 300 000	G1	2	3	150	75	2.2	0.6	UX4	PP
1A5	038 740 200 0000	00	036 540 200		1.4	4.5	90	90	4	0.85	A08	P
1A6	288 473 000 0000	40	266 453 000	G1	2	0	150	75	3	0.4	UX6	P
1A7	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
1A7	028 748 300 0000	40	026 546 300	G1	1.4	0	90	45	0.6	0.25	A08	H
1A8	328 748 290 0000	40	327 546 280	G1	1.4		90	90	1.2	0.7	A08	DTP
1AB5	387 004 220 0000	00	365 004 220		1.2	1.5	150	150	6.8	1.35	B8B	P
1AB6	287 481 300 0000	00	265 461 300		1.4	4.1	60	60	1.65	0.1	B7G	H
1AC5	040 230 870 0000	00	*4* 23* 650		1.2	4.5	60	60	2.0	0.75	B8D	P
1AC6	288 484 300 0000	00	266 464 300		1.4	4.0	60		4	2.2	B7G	H
1AD2	200 000 000 0030	90			1.25				30		A12	R
1AD4	872 430 000 0000	00	652 430 000		1.2	1.6	90	90	5.7	2.3	B5A	P
1AD5	040 230 870 0000	00	*4* 23* 650		1.2	3.0	60	60	1.85	0.73	B8D	P
1AE4	287 024 300 0000	00	265 024 300		1.2	0	90	90	3.5	1.55	B7G	P
1AE5	842 473 000 0000	00	642 453 000		1.2		40	40	0.9	0.2	B5A	P
1AF4	287 024 300 0000	00	265 024 300		1.4	0	90	90	1.65	0.95	B7G	P
1AF5	209 784 300 0000	00	208 564 300		1.4	0	90	90	1.1	0.6	B7G	DP
1AF33	209 784 300 0000	00	208 564 300		1.4		60	60	1.6	0.5	B7G	DP
1AF34	209 784 300 0000	00	208 564 300		1.2		60	60	1.6	0.5	B7G	DP
1AG4	873 420 000 0000	00	653 420 000		1.2	3.6	40	50	2.4	1	B5A	P
1AG5	879 243 000 0000	00	658 243 000		1.2	2	40	40	0.2	0.2	B5A	DP
1AH4	872 473 000 0000	00	652 453 000		1.2		40	40	0.7	0.7	B5A	P
1AH5	209 784 300 0000	00	208 564 300		1.4	1.5	60	60	0.17	0.17	B7G	DP
1AJ4	287 124 300 0000	00	265 124 300		1.4	0.8	75	75	1.4	0.65	B7G	P
1AJ5	879 243 000 0000	00	658 243 000		1.2		40	40	1	0.4	B5A	DP
1AK4	872 430 000 0000	00	652 430 000		1.2		40	40	0.7	0.7	B5A	P
1AL4	387 004 020 0000	00	365 004 020		1.4	4.5	90	90	4	0.8	B8B	P
1AM4	287 024 300 0000	00	265 024 300		1.4		90	60	2.4	0.3	B7G	P
1AN5	287 224 300 0000	00	265 224 300		1.4	0	60	60	1.0	0.7	B7G	P
1AQ5	288 424 300 0000	00	266 424 300		1.4		90	40			B7G	H
1AR5	209 784 300 0000	00	208 564 300		1.4		60	60	0.9	0.5	B7G	DP
1AS4	287 024 300 0000	00	265 024 300		1.4	0	90	90	1.6	0.85	B7G	P
1AS5	287 904 300 0000	00	265 804 300		1.4		60	60	0.9	0.5	B7G	DP
1AU3	030 000 200 0000	90	030 000 200	D1	1.2						A08	D
1AX2	230 232 032 0000	00	230 232 032	D1	1.4						B9A	D
1AY2	230 000 000 0000	90	020 000 300	D1	1.25						B3G	D
1B1P	209 784 300 0000	00	208 564 300		1.2	0	60	40	1.0	0.25	B7G	P
1B3	020 000 300 0000	90	020 000 300	D1	1.2						A08	D
1B4	387 200 000 0000	40	365 200 000	G1	2	3	200	60	1.7	0.6	UX4	P
1B4P	387 200 000 0000	40	365 200 000	G1	2	3	90	75	1.6	0.6	UX4	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
1B4T(T)	287 300 000 0000	40	265 300 000	G1	2	3	150	75	1.7	0.6	UX4	P
1B5	289 X43 000 0000	00	268 943 000		2	3	150		0.8	0.57	UX6	DDT
1B5L	389 X42 000 0000	00	368 942 000		2	3	100		0.8	0.5	UX6	DDT
1B6	287 408 300 0000	00	265 406 300		1.4	1.5	90	75	1.5	0.75	B7G	P
1B7	028 748 300 0000	40	026 546 300	G1	1.4	0	90	50	1.5	0.8	A08	H
1B8	038 748 290 0000	40	037 546 280	G1	1.4	6	90		0.1	0.3	A08	DTP
	038 758 290 0000	40				6	90	90	6.3	1.1		
1BC2	200 030 000 0000	90	200 030 000	D1	1.25		100		10.0		B9A	D
1BH2	200 030 000 0000	90	200 030 000	D1	1.25						B9A	D
1BK2	200 030 000 0000	90	200 030 000	D1	1.4						B9A	D
1BY2	110 011 010 0110	00		D1	1.25				7.0		A12	D
1C	29X 300 000 0000	00	289 300 000		6						UX4	DD
1C1	288 424 300 0000	00	266 424 300		1.4	4	75		4.5	1.2	B7G	H
1C3	288 484 300 0000	00	266 464 300		1.4		60		3		UX4	P
1C4	387 200 000 0000	40	365 200 000	G1	2	0	150	75	2.5	1	A08	P
1C5	038 740 200 0000	00	036 540 200		1.4	7.5	90	90	7.5	1.5	A08	P
1C6	388 472 000 0000	40	366 452 000	G1	2	0	150	75		1	UX6	H
1C7	028 748 300 0000	40	026 546 300	G1	2	0	150	75		1	A08	H
1C8	240 238 740 0000	00	240 236 540		1.2	0	30	30	0.3		B8D	H
1C91	824 300 000 0000	00	624 300 000		1.2	2.5	150		7		B5A	T
1C91	028 448 300 0000	00	026 447 300		1.2	2.5	125		7		A08	TT
1D3	402 308 080 0000	00	402 306 060		1.2	5	90		12.5	3.4	B8A	T
1D4	284 730 000 0000	00	264 530 000		2	6	150	150	9.5	2.4	UX5	P
1D5	902 310 000 0000	00	802 310 000		40				120		B5	R
1D5EG	028 700 300 0000	40	026 500 300	G1	2	3	150	60	2.2	0.7	A08	P
1D5GT	028 700 300 0000	40	026 500 300	G1	2	3	150	75	2.2	0.6	A08	P
1D6	290 193 000 0000	00	280 183 000		25						UX6	R
1D7	038 748 200 0000	40	036 546 200	G1	2	0	150	75	3	0.42	A08	P
1D8	038 748 290 0000	50	037 546 280	G1	1.4	0	90		1.1	0.5	A08	DTP
						9	90	90	5	0.9		
1DN5	287 904 300 0000	00	265 804 300		1.4		60	60	2.1	0.6	B7G	DP
1E3	402 203 080 0000	00	402 203 060		1.2	0	150		20	3.5	B9A	T
1E4	028 040 300 0000	00	026 040 300		1.4	3	90		1.4	0.76	A08	T
1E5	038 700 200 0000	40	036 500 200	G1	2	3	150	75	1.7	0.6	A08	P
1E7	038 458 270 0000	00	036 447 250		2	4.5	150	150	7.5	1.43	A08	PP
1E8	240 238 740 0000	00	240 236 540		1.2	0	60	60	1.8	0.74	B8D	H
1F2	287 024 300 0000	00	265 024 300		1.4	1.0	90	75	2.9	0.92	B7G	P
1F3	287 024 300 0000	00	265 024 300		1.4	1.0	90	50	1.9	0.75	B7G	P
1F4	384 720 000 0000	00	364 520 000		2	3	90	90	4	1.4	UX5	P
1F5	038 740 200 0000	00	036 540 200		2	3	90	90	4	1.4	A08	P
1F6	387 9X2 000 0000	40	365 892 000	G1	2	1.5	150	75	2.2	0.6	UX6	DDP
1F7	038 9X7 200 0000	40	036 895 200	G1	2	1.5	150	75	2.2	0.6	A08	DDP
1F33	287 024 300 0000	00	265 024 300		1.4		90	60	3.5	0.7	B7G	P
1F34	287 024 300 0000	00	265 024 300		1.2		90	60	3.5	0.7	B7G	P
1F860	141 230 871 0000	00	141 230 651		20		200	175	10	7.5	B9A	P
1FD1	209 784 300 0000	00	2*8 564 300		1.4	1.5	60	60	0.17	0.17	B7G	DP
1FD9	209 784 300 0000	00	208 564 300		1.4	1.0	75	75	1.6	0.63	B7G	DP
1G3	020 000 300 0000	90	*2* 0*0 3*0	D1	1.2						A08	D
1G4	038 040 200 0000	00	036 040 200		1.4	6	90		2.3	0.82	A08	T
1G5	038 740 200 0000	00	036 540 200		2	6	90	90	8.5	1.5	A08	P
1G6	028 458 300 0000	00	026 447 300		1.4	0	90		1.0	0.67	A08	TT
1H1	028 458 300 0000	00	026 447 300		2.1		150		3.2	2.1	A08	TT
1H2	230 232 032 0000	90	23* 232 *32	D1	1.4						B9A	D

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
1H3C	028 458 300 0000	00	026 447 300		1.2	5.5	150		2.3	0.8	A08	TT
1H4	028 040 300 000C	00	026 040 300		2	9	150		3	0.9	A08	T
1H5	238 090 200 0000	40	036 080 200	G1	1.4	0.5	100		0.1	0.2	A08	DT
1H6	038 9X4 200 0000	00	036 894 200		2	3	150		0.8	0.57	A08	DDT
1H33	287 424 300 0000	00	265 424 300		1.4		90	60	1.6		B7G	H
1H34	287 424 300 0000	00	265 424 300		1.2		90	60	1.6		B7G	H
1H35	287 474 300 0000	00	265 454 300		1.4		90	40	0.6		B7G	H
1J3	020 000 300 0000	90	020 000 300	D1	1.2						A08	D
1J5			036 540 200		2	16.5	150	150	7	0.95	A08	P
1J6	028 457 300 0000	00	026 447 300		2	3	150		1.7		A08	TT
1J6GX	028 457 300 0000	00	026 447 300		2	0	150		2		A08	TT
1K1P	287 024 300 0000	00	265 014 300		1.2	0.5	60	40	1.7	0.65	B7G	P
1K3	020 000 300 0000	90	020 000 300	D1	1.2						A08	D
1K4	387 200 000 0000	40	365 200 000	G1	2		150	75	2.5	1	UX4	P
1K5	028 700 300 0000	40	026 500 300	G1	2		125	75	2.5	1	A08	P
1K5B	028 700 300 0000	40	026 500 300	G1	2		125	75	1	1	A08	P
1K6	38X 972 000 0000	40	369 852 000	G1	2	3	150	90	0.9	0.6	UX6	DDP
1K7	028 9X7 300 0000	40	026 895 300	G1	2	4.4	150	150	1.5	0.7	A08	DDP
1L4	287 024 300 0000	00	265 024 300		1.4	0	90	75	2.9	0.92	B7G	P
1L5	028 740 300 0000	00	026 540 300		2	6	200	200	10	2.4	A08	P
1L6	288 471 300 0000	00	266 451 300		1.4	0	90	50	4	0.55	B7G	H
1L33	284 728 300 0000	00	264 526 300		1.4	7	90	60	7.4	1.4	B7G	P
1L34	274 728 300 0000	00	254 526 300		1.2	7	90	60	7.4	1.4	B7G	P
1L60	842 300 000 0000	00	642 300 000		1		150		6.0	1.2	B4	T
1L84	387 004 020 0000	00	365 004 020		1.4	4.5	90	90	4	0.85	B8B	P
1L91	872 430 000 0000	00	652 430 000		1.2	4.5	40	40	1.2	0.5	B5A	P
1L861	041 230 871 0000	00	041 230 651		20		200	200	15	9	B9A	P
1LA4	387 004 020 0000	00	361 004 020	S	1.4	4.5	90	90	4	0.85	B8B	P
1LA4E	387 004 020 0000	00	365 004 020		1.4	4.5	90	90	3.5	0.8	B8B	P
1LA6	388 474 020 0000	00	366 454 020		1.4	0	90	50	1.8	0.55	B8B	H
1LB4	387 004 020 0000	00	365 004 020		1.4	9	90	90	5	0.9	B8B	P
1LB6	288 774 430 0000	00	266 554 430		1.4	0	90	75	0.4	0.1	B8B	H
1LB7	287 104 130 0000	00	265 104 130		1.4	3	40	40	1	0.3	A08	P
1LC5	387 124 020 0000	00	365 124 020		1.4	0	90	50	1.15	0.77	B8B	P
1LC6	288 474 030 0000	00	266 454 030		1.4	0	90	50	3	0.55	B8B	H
1LD5	387 904 020 0000	00	365 804 020		1.4	0	90	50	0.6	0.57	B8B	DP
1LE3	370 004 020 0000	00	350 0*4 020		1.4	3	90		1.4	0.76	B8B	T
1LF3	280 004 030 0000	00	260 004 030		1.4	3	90		1.4	0.76	B8B	T
1LG5	387 124 020 0000	00	365 124 020		1.4	1.5	90	90	3.7	1.15	B8B	P
1LH4	280 904 030 000	00	360 804 020		1.4	0	90		0.15	0.27	B8B	DT
1LN5	387 124 020 0000	00	365 124 020		1.4	0	90	90	1.6	0.8	B8B	P
1M1	400 230 080 0000	00	4*0 230 060		1.4	34	250	0	0.99	†2.2	B8B	TI
1M3	400 230 080 0000	00	4*0 230 060		1.4	23	200	0	0.1	†1.0	B8D	TI
1M5G	038 700 200 0000	40	036 500 200	G1	2		150	75	2.5	1	A08	P
1M90	824 300 000 0000	00	624 300 000		1.4		90		0.25		B4A	T
1N2	020 000 300 0000	90	*2* *** 3*0	D1	1.2						A08	D
1N5	038 700 200 0000	40	036 500 200	G1	1.4		90	90	1.2	0.7	A08	P
1N6	038 749 200 0000	00	036 548 200		1.4	4.5	90	90	3.4	0.8	A08	DP
1NA31	902 209 300 0000	00	802 208 300		5				15		B7G	R
1P1	387 024 300 0000	00	365 024 300		1.4	5.2	90	90	5.0	1.4	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS				CHARACTERISTICS						BASE	VALVE CLASS
	VCM163 Tester only		CT160, VT160 VCM Mk 1,2,3 & 4									
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
1P5	038 700 200 0000	40	036 500 200	G1	1.4		90	90	2.3	0.7	A08	P
1P10	284 738 200 0000	00	264 536 200		1.4	7	90	75	7.4	1.57	B7G	P
1P11	387 024 300 0000	00	365 024 300		1.4	4.5	90	90	9.5	2.15	B7G	P
1Q5	038 740 200 0000	00	036 540 200		1.4	4.5	90	90	9.5	2.2	A08	P
1Q6	040 239 870 0000	00	040 238 650		1.25	0	60	60	1.6	0.6	B8D	DP
1R	028 710 300 0000	40	026 510 300	G1	1.4		90	90	1.2	0.7	A08	P
1R4	200 900 130 0000	00	200 800 130		1.4						B8B	D
1R5	288 424 300 0000	00	266 424 300		1.4	4	75		5	1.2	B7G	H
1R5T	281 427 300 0000	00	261 425 300		1.4		90	70	1.15	0.3	B7G	H
1R6	230 232 032 0000	90	230 232 032	D1	1.2						B9A	D
1S2A	320 323 023 0000	90	32* 323 *23	D1	1.4						B9A	D
1S4	284 728 300 0000	00	264 526 300		1.4	7	90	75	7.4	1.57	B7G	P
1S5	209 784 300 0000	00	208 564 300		1.4	0	75	75	1.6	0.62	B7G	DP
1S6	804 239 070 0000	00	604 238 050		1.2	0	60	60	1.6	0.6	B8D	DP
1SA6	021 407 380 0000	00	021 405 360		1.4	0	90	75	2.45	0.97	A08	P
1SB6	038 790 240 0000	00	036 580 240		1.4	0	90	75	1.45	0.66	A08	DP
1T	038 700 320 0000	40	036 500 320	G1	1.4	4.5	90	90	0.9	2.1	A08	P
1T2	123 000 000 0000	90	123 000 000	D1	1.4						B3G	D
1T4	387 200 000 0000	00	365 200 000		2	0	150	75	2.5	1	UX4	P
1T4	287 024 300 0000	00	265 024 300		1.4	0	90	75	3.5	0.9	B7G	P
1T5	038 740 200 0000	00	036 540 200		1.4	6	90	90	6.5	1.15	A08	P
1T6	804 239 070 0000	00	604 238 050		1.2	0	60	60	1.6	0.6	B8D	DP
1U4	287 024 300 0000	00	265 024 300		1.4	0	90	90	0.8	0.68	B7G	P
1U5	287 904 300 0000	00	265 804 300		1.4	0	75	75	1.6	0.62	B7G	DP
1U6	288 741 300 0000	00	266 541 300		1.4	0	75	50	1.7	0.3	B7G	H
1V	291 300 000 0000	00	281 300 000		6.3				60		UX4	R
1V2	900 230 009 0000	00	8** 230 **8		0.625						B9A	D
1V4	285 024 300 0000	00	265 *24 300		1.25	0	150	100	1.6		B7G	P
1V5	040 230 870 0000	00	*4* 23* 650		1.2	4.5	60	60	2	0.75	B7G	P
1V6	875 248 300 0000	00	654 247 300		1.25	0	45		4.4		B7B	TP
							45	45	0.4	0.2		
1W4	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
1W4	287 004 300 0000	00	265 004 300		1.4	9	90	90	5	0.92	B7G	P
1W5	040 230 870 0000	00	040 230 650		1.25	0	60	60	1.8	0.73	B84	P
1W50	942 310 000 0000	00	842 010 000		1.0	0.5	100		0.2	0.2	B5	T
1X2	230 232 032 0000	90	230 232 032	D1	1.2						B9A	D
1X2B	020 000 003 0000	90	020 000 003	D1	1.2						B9A	D
1Y2	200 300 000 0000	90	200 300 000	D1	1.4						UX4	R
1Y32	232 232 300 0000	90	232 232 300	D1	1.4						B7G	D
1Z1	020 000 300 0000	90	020 000 300	D1	0.7						A08	D
1Z2	232 232 300 0000	90	232 232 300	D1	1.2						B7G	D
2	842 300 000 0000	00	642 300 000		2	4	150		1.5		B4	T
2/25A	200 300 000 0000	90	200 300 000	D1	6.3				30		UX4	R
2/50A	200 300 000 0000	90	200 300 000	D1	5				60		UX4	R
2A1M	028 748 300 0000	40	026 546 300	G1	2		150	75	2.2		A08	H
2A3	284 300 000 0000	00	264 300 000		2.5	45	250		60	5.2	UX4	T
2A3H	384 200 000 0000	00	364 200 000		2.5	62	300		40	5.25	UX4	T
2A3W	284 300 000 0000	00	264 300 000		2.5	45	250		60	5.2	UX4	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALV CLAS
2A5	287 413 000 0000	00	265 413 000		2.3(3)	16.5	250	250	34	2.5	UX6	P
2A6	28X 913 000 0000	40	269 813 000	G1	2.5	2	250		0.9	1.1	UX6	DDT
2A7	287 741 300 0000	40	265 541 300	G1	2.5	8	250	100	3.5	1.1	Sm7	H
2AF4	842 314 800 0000	00	642 314 600		2.5	4.0	100		15	6.6	B7G	T
2AH2	200 000 000 0030	90			2.5						A12	D
2AS2	220 002 002 0030	90			2.5				5		A12	D
2AV2	900 230 009 0000	00	800 230 008		1.8						B9A	D
2AZ2	230 232 032 0000	90	230 232 032		2.1						B9A	D
2B3	020 000 300 0000	90	*20 000 3*0	D1	1.7						A08	D
2B5	280 413 000 0000	00										
	208 413 000 0000	00	267 413 000		2.5		300		9		UX6	TT
2B5	834 225 380 0000	00	634 224 370		1.2	1	90		2.6	1.1	B8A	TT
2B7	287 9X1 300 0000	40	265 891 300	G1	2.5	3	250	125	9	1.1	UX7	DDP
2B21	300 200 000 0000	90	300 200 000	D1	2.5				5		UX4	R
2B22	021 010 310 0000	90	021 010 310	D1	6.3						A08	D
2B25	200 900 300 0000	00	200 800 300		1.4						B7G	D
2B26	290 300 000 0000	00	280 300 000		2.5				120		UX4	R
2BN4	142 381 400 0000	00	142 361 400		2	1.5	150		9	6.8	B7G	T
2BU2	220 000 030 0030	80		A	2.5		60		7.0		A12	R
2C21	218 481 300 0000	50	217 461 300	G1	6.3	16.5	250		8.3	1.3	UX7	TT
2C22	020 000 310 0000	84	020 000 310	A1 G1	6.3	10.5	300		11	3	A08	T
2C23	284 300 000 0000	00	264 300 000		7.5	32	350		16	1.55	UX4	T
2C25	284 300 000 0000	00	264 300 000		7	100	350		50		UX4	T
2C26	020 000 310 0000	84	020 000 310	A1 G1	6.3	15	350		16		A08	T
2C34	204 150 300 0000	88	204 140 300	A1 A2	6.3	36	300		80		Sm7	TT
2C40	021 010 310 0000	84	*21 010 310	A1 G1	6.3	5	250		20		A08	T
2C43	021 010 310 0000	84	*21 010 310	A1 G1	6.3		400		38		A08	T
2C45	384 200 000 0000	00	364 200 000		7	40	250		29		UX4	T
2C48	287 004 130 0000	00	265 004 130		6.3	15	250	250	70		B8B	P
2C50	481 581 230 0000	00	461 471 230		12.6		200		18	2.9	A08	TT
2C50	287 004 130 0000	00	265 004 130		12	15	250	250	70		B8B	P
2C51	214 808 513 0000	00	214 607 413		6.3	2	150		8.2	5.5	B9A	TT
2C52	481 581 230 0000	00	461 471 230		12.5	2	250		1.3	1.9	A08	TT
2CN3A					1.8	.6	150		9.0	7.7	B7G	T
2CW4	080 400 010 2030	00			2.1	1	100	-	7.6	9.8	NV5	T
2CY5	412 387 100 0000	00	412 365 100		2.5	1	150	80	10	8	B7G	P
2D1	29X 130 000 0000	00	289 130 000		2.5						UX5	DD
2D2	9X2 310 000 0000	00	892 310 999		2						B5	DD
2D4	9X2 310 000 0000	00	892 310 000		4						B5	DD
2D4B	0X1 231 900 0000	00	091 231 800		4						B7	DD
2D13	023 190 000 0000	X0	023 180 000	D2	13						B5	DD
2D13A	923 1X0 000 0000	00	823 190 000		13						B5	DD
2D13C	9X2 310 000 0000	00	892 310 000		13						B5	DD
2D21	412 318 100 0000	00	412 316 100		6.3	5	200		26	†6kΩ	B7G	THY
						9	400		55			
2DL4	414 234 484 0000	00	414 234 464		2		150		12.5	14	B9A	T
2DS4	080 400 010 2030	00			2.1	0.8	100		6.5	9	NV5	T
2DV4	880 404 100 2030	00			2.1	1	75		10.5	11.5	NV7	T
2DZ4	842 314 800 0000	00	642 314 600		2.35		75		15	6.7	B7G	T
2E5	284 713 000 0000	00	264 513 000		2.5	8	250		0.2	†1.0	A08	TI

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
2E22	274 130 000 0000	80	254 130 000	A1	6.3	15	400	250	60	5.5	UX5	P
2E24	237 242 300 0000	80	235 242 300	A1	3	18.5	400	200	16	3.2	A08	P
2E25	020 740 320 0000	00	020 540 320		6.3	22.5	400	250	40		A08	P
2E26	127 141 300 0000	80	125 141 300	A1	6.3	20	200	200	20	3.5	A08	P
2E30	413 387 200 0000	00	413 365 200		3	20	250	250	40	3.7	B7G	P
2E31	872 430 000 0000	00	652 430 000		1.25	0	20	20	0.4	0.5	B5A	P
2E35	872 430 000 0000	00	652 430 000		1.25	0	20	20	0.27	0.38	B5A	P
2E41	879 243 000 0000	00	658 243 000		1.25	0	20	20	0.36	0.37	B5A	P
2E50	412 287 300 0000	00	412 265 300		6.3	20	250	250	10	3.4	B7G	P
2EA5	412 387 100 0000	00	412 365 100		2.3	1	250	150	10	8	B7G	P
2EN5	0X2 310 900 0000	00	092 310 800		2.1						B7G	DD
2ER5	142 380 100 0000	00	142 360 100		2.3	1.2	200		10		B7G	T
2ES5	142 380 100 0000	00	142 360 100		2.3	1	200		15	9.5	B7G	T
2EV5	412 387 100 0000	00	412 365 100		2.4		250	75	11.5	8.8	B7G	P
2F7	287 841 300 0000	50	275 641 300	G1	2.5	3 3	100 250	 100	4 2.8		UX7	TP
2FH5	142 380 100 0000	00	142 360 100		2.3	1	150		11	9	B7G	T
2FQ5	142 380 100 0000	00	142 360 100		2.3	1.2	150		11.5	11	B7G	T
2FS5	412 387 100 0000	00	412 365 100		2.4	0.2	275	150	10	10	B7G	P
2FV6	287 424 300 0000	00	265 424 300		2.4	1	150	75	10	8	B7G	P
2FY5	142 380 100 0000	00	142 360 100		2.4	1.2	150		11	12	B7G	T
2G5	284 713 000 0000	00	264 513 000		2.5	22	250	250	0.2		UX6	TI
2GK5	142 380 100 0000	00	142 360 100		2.3	1.2	150		11	15	B7G	T
2GU5	412 381 100 0000	00	412 361 100		2.4	0.4	135	135	10	15.5	B7G	H
2GW5	842 314 100 0000	00	642 314 000		2.4	1	150		13	15	B7G	T
2H1		00	026 447 300		2.1		150		3.2	2.1	A08	TT
2HA5	412 380 100 0000	00	412 360 100		2.2		200		19	20	B7G	T
2HK5	412 380 100 0000	00	412 360 100		2.3		150		12.5	15	B7G	T
2HM5	412 387 100 0000	08	412 365 100		2.4	1.2	150		12.5	14.5	B7G	T
2HMD	472 310 000 0000 572 310 000 0000	80	452 310 000	A1 A2	4		200	100	3.8	1.1	B5	PP
2HQ5	412 381 100 0000	00	412 361 100		2.4	1	150		11.5	15	B7G	T
2HR8	701 238 014 0000	00	501 236 014		2.1		250	150	3	1.8	B9A	P
2J2	230 232 032 0000	90	230 232 032	D1	2						B9A	D
2K2	028 700 300 0000	40	026 500 300	G1	2	2	100	100	2.5	0.9	A08	P
2L32	284 738 200 0000	00	264 536 200		1.4	7	60	60	7	1.5	B7G	P
2L33	287 438 200 0000	00	265 436 200		1.4	8.4	150	90	14.1	1.9	B7G	P
2L35	287 143 200 0000	00	265 143 200		1.2	8.8	150	90	14.2	2.1	B7G	P
2M2M	284 738 200 0000	00	264 536 200		1.2	3.5	60	60	3.7	1.1	B7G	P
2-01C	200 000 300 0000	90	2** *** 300	D1	5						B7G	D
2P	842 300 000 0000	00	642 300 000		2	22	250		40	7	B4	T
2P1P	284 738 200 0000	00	204 510 300		1.2	3.5	60	60	2.8	0.9	B7G	P
2S	29X 130 000 0000	00	289 130 000		2.5				15		UX5	RR
2S/140G	209 130 900 0000	00	208 130 800		6.3				5		B7G	R
2S/280F			*12 3** *00	D1	4				30		B7G	R
2SC10	842 300 000 0000	00	642 300 000		2.5	1	250		15	2.4	B4	T
2T4	842 310 800 0000	00	642 310 600		2.3	2.7	75		18	7	B7G	T
2T/270K	112 311 100 0000	90	112 311 100	D1	4						B7G	R
2U14	842 300 000 0000	00	642 300 000		2		150		2	0.6	B4	T
2U15	842 300 000 0000	00	642 300 000		2		150		4	0.8	B4	T
2V2	020 000 030 0000	90	020 000 030	D1	2.5						A08	D

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
2V3	020 000 300 0000	90	020 000 300	D1	2.5(3)						A08	R
2W3	020 900 030 0000	00	020 800 030		2.5				60		A08	R
2X2	300 200 000 0000	90	300 200 000	D1	2.5(3)						UX4	R
2X3	020 900 030 0000	00	020 800 030		2.5				120		A08	R
2XP	842 300 000 0000	00	642 300 000		2	36	300		50	7	B4	T
2Y2	200 300 000 0000	90	200 300 000	D1	2.5				5		UX4	R
2Z2	290 300 000 0000	00	280 300 000		2.5				60		UX4	R
2.5C9	842 300 000 0000	00	642 300 000		2.5	4	250		8	2.2	B4	T
3	842 300 000 0000	00	642 300 000		2	7.5	150		3.4	0.9	B4	T
3A2	230 232 032 0000	90	230 232 032	D1	3						B9A	D
3A3	020 000 300 0000	90	*2* 0*0 3*0	D1	3						A08	D
3A3A	020 000 300 0000	80	020 000 300	A	3.15		100		7.0			R
3A3B	020 000 300 0000	80	020 000 300	A	3.15		100		7.0			R
3A8	238 748 390 0000	50	237 546 380	G1	1.4	0 0	90 90	90	0.2 12	0.3 0.7	A08	DTP
3A/107A	284 300 000 0000	00	264 300 000		4	8	150		6.5	1.6	UX4	T
3A/107B	842 300 000 0000	00	642 300 000		4	8	150		6.5	1.6	B4	T
3A/108A	284 300 000 0000	00	264 300 000		2	1.5	150		0.9	0.5	UX4	T
3A/108B	842 300 000 0000	00	642 300 000		2	1.5	150		0.9	0.5	B4	T
3A/109A	284 300 000 0000	00	264 300 000		4	8	150		19	1.2	UX4	T
3A/109B	842 300 000 0000	00	642 300 000		4	8	150		19	1.2	B4	T
3A/154M	280 004 130 0000	00	260 0*4 130		6.3	2	250		12	3	B8B	T
3A/167M	200 810 430 0000	00	2*0 61* 430		6.3	3.5	200		10	30	B8G	T
3AE4	387 004 230 0000	00	365 004 230		1.4	9	90	90	1.8	1.6	A08	P
3AF4	842 314 800 0000	00	642 314 600		3	4	100		15	6.6	B7G	T
3AJ8	751 238 584 0000	00	541 237 464		3.1	3 2	100 250	100	5 6.5	2.3 2.4	B9A	TH
3AL5	1X2 310 900 0000	00	192 310 800		3				5		B7G	DD
3AT2A	220 000 030 0030	80	020 000 300	A	3.15		140		20.0		A12	R
3AT2	200 000 000 0030	90			3.15						A12	D
3AT4	802 304 100 0000	00	602 304 100		3.1	1	200		11.5	6.7	B7G	T
3AU6	412 387 100 0000	00	412 365 100		3	1.0	250	150	10	5.2	B7G	P
3AV6	412 3X9 800 0000	00	412 398 600		3	2	250		1.2	1.6	B7G	DDT
3AW2A	220 000 030 0030	80	020 000 300	A	3.15		60		7.0		A12	R
3AW3	020 000 300 0000	90	*2* 0*0 3*0	D1	3.1						A08	D
3AY6	412 39X 800 0000	00	412 389 600		3	2	250		1.2	1.6	B7G	DDT
3AZ4	020 90X 030 0000	00	020 809 030		5				60		A08	RR
3B2	020 000 300 0000	90	*2* 0** 3*0	D1	3						B8A	D
3B4	724 332 800 0000	00	524 332 600		1.25	10	150	125	30	2.2	B7G	P
3B5	038 740 320 0000	00	036 540 320		1.4	7	75	75	6.7	1.5	A08	P
3B7	384 205 830 0000	00	364 204 730		1.4	0	90		5.2	1.85	B8B	TT
3B24	320 200 000 0000	90	320 200 000	D1	2.5				30		UX4	R
3B29	300 200 000 0000	90	300 200 000	D1	2.5						UX4	R
3B/102B	843 210 000 0000	00	643 210 000		6.3		400		100	6	B5	T
3B/240M	214 444 130 0000	80	214 444 130	A1	6.3	1	300		50	27	B8B	T
3B/241M	214 444 130 0000	80	214 444 130	A1	19	1	300		50	27	B8B	T
3B/252B	842 310 000 0000	00	642 310 000		6.3	20	400		60	10	B5	T
3BA6	412 387 100 0000	00	412 365 100		3	1	250	100	11	4.4	B7G	P
3BC5	412 387 100 0000	00	412 365 100		3	1.3	250	150	7.5	5.7	B7G	P
3BE6	412 388 100 0000	00	412 365 100		3.1	6	150	100	7.5	3.5	B7G	H
3BF2	200 200 200 3030	90			3.6						A12	D
3BF6	142 380 100 0000	00	142 360 100		3.1	9	250		9.5	1.9	B7G	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
3BL2A	110 011 011 0010	00		A	3.3		50		7.0		A12	R
3BM2A				A	3.0		50		7.0		A12	R
3BN2A	230 000 000 0000	00	230 000 000	A	3.15		150		7.0		A12	R
3BN4	142 381 400 0000	00	142 361 400		2.8	2	150		9	6.8	B7G	T
3BN4A	142 381 400 0000	00	142 361 400		3.0	-6	150		9	7.7	B7G	T
3BN6	412 374 800 0000	00	412 354 600		3	1	60	60	0.5	1	B7G	P
3BU8	[178 231 401 0000 170 231 481 0000	00 00	157 231 461		3	1	100	60	1	1.5	B9A	PP
3BX6	141 230 871 0000	00	141 230 651		3.4	2	200	175	10	7.2	B9A	P
3BY6	412 387 400 0000	00	412 365 400		3	2.5	250	100	6.5	2.4	B7G	H
3BY7	141 230 871 0000	00	141 230 651		3.2	1.8	250	75	8	5.7	B9A	P
3BZ6	412 387 100 0000	00	412 365 100		3	1.0	150	125	14	8	B7G	P
3C2	020 030 200 0000	00	020 *3* 2*0		1.5						A08	D
3C5	038 740 320 0000	00	036 540 320		1.4	9	90	90	6	1.4	A08	P
3C6	208 458 320 0000	00	206 447 320		1.4	0	90		4.5	1.3	B8D	TT
3C24	200 300 000 0000	84	200 300 000	A1 G1	6.3	3	400		4.5	1.2	UX4	T
3C36	412 387 100 0000	00	412 365 100		3	2.2	200	150	9.5	6.2	B7G	P
3CA3	030 000 200 0000	90	030 000 200	D1	3.6						A08	D
3CB6	412 387 100 0000	00	412 365 100		3	1.0	150	125	13	8.0	B7G	P
3CE5	412 387 100 0000	00	412 365 100		3.1	2.1	200	150	9.5	6.2	B7G	P
3CF5	402 387 100 0000	00	402 365 100		3.1		150	125	11	7.6	B7G	P
3CF6	412 387 100 0000	00	412 365 100		3	1.0	150	125	12	7.6	B7G	P
3CN3A	020 000 300 000	80	020 000 300	A	3.15		60		7.0			R
3CS6	412 387 100 0000	00	412 365 100		3	1.0	100	30	1.0	1.1	B7G	H
3CU3	020 000 300 0000	80	020 000 300	A	3.15		50		7.0			R
3CY5	412 387 100 0000	00	412 365 100		2.9	1	150	75	10	9	B7G	P
3CZ3	020 000 300 0000	80	020 000 300	A	3.15		60		7.0		B8B	R
3D21A	320 704 210 0000	80	320 504 210	A1	6.3	30	400	300		5.5	A08	P
3DB3	230 000 000 0000	80	230 000 000	A	3.15		100		7.0		A08	R
3DC3	230 000 000 0000	80	230 000 000	A	3.15		50		7.0		A08	R
3DG4	101 090 X00 0000	00	1*1 080 900		3.3				120		A08	RR
3DJ3	230 000 000 0000	80	230 000 000	A	3.15		70		7.0		B8-25	R
3DK6	412 387 100 0000	00	412 365 100		3.1	0.9	150	125	12	9.8	B7G	P
3DL4	414 234 484 0000	00	414 234 464		2.6	1.2	150		12	14	B9A	T
3DT6	412 387 100 0000	00	412 365 100		3.15	2.2	150	100	1.1	0.8	B7G	P
3DT6A	412 387 400 0000	00	412 365 100		3.15	5.2	150	100.0	1.55	1.35	B7G	P
3DZ4	842 314 800 0000	00	642 314 600		3.2		75		15	6.7	B7G	T
3E5	387 024 300 0000	00	365 024 300		1.4	8	90	90	6	1.2	B7G	P
3E6	287 134 020 0000	00	265 134 020		1.4	0	90	90	2.5	1.8	A08	P
3EA5	402 387 100 0000	00	402 365 100		3	1	250	100	10	8	B7G	P
3EH7	141 230 871 0000	00	141 230 651		3.4	2	200	90	12	12.5	B9A	P
3EJ7	141 230 710 0000	00	141 230 510		3.4	2.5	200	200	10	15	B9A	P
3ER5	142 380 100 1000	00	142 360 100		3.6	1.2	250		10	10.5	B7G	T
3ES5	142 380 100 0000	00	142 360 100		3	1	200		15	9.5	B7G	T
3EV5	412 387 100 0000	00	412 365 100		2.9		250	75	11.5	8.5	B7G	P
3FH5	142 380 100 0000	00	142 360 100		3	1	250		11	9	B7G	T
3FQ5	142 380 100 0000	00	142 360 100		2.8	1.2	150		11.5	11	B7G	T
3FS5	412 387 100 0000	00	412 365 100		2.9	0.2	300	150	9	10	B7G	P
3FY5	142 380 100 0000	00	142 360 100		3.1	1	150		11	13	B7G	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
3G10	9X2 300 000 0000	00	892 300 000		2.5				30		B4	RR
3GK5	142 380 100 0000	00	142 360 100		2.8	1	150		11.5	15	B7G	T
3GS8	[178 231 401 0000 170 231 481 0000	00 00]	156 231 471		3.1		100	75	2	1.2	B9A	PP
3GW5	842 314 100 0000	00	642 314 100		3	1	150		13	15	B7G	T
3HA5	412 380 100 0000	00	412 360 100		2.7		200		19	20	B7G	T
3HK5	412 380 100 0000	00	412 360 100		2.9	1	150		12.5	15	B7G	T
3HM5	412 380 100 0000	00	412 360 100		2.9	1.2	150		12.5	14.5	B7G	T
3HM6	141 230 871 0000	00	141 230 621		3.15	3.9	125	125	13	15	B9A	P
3HQ5	412 381 100 0000	00	412 361 100		3	1	150		11.5	15	B7G	T
3HS8	[178 231 401 0000 170 231 481 0000	00 00]	157 231 461		3.1		100	75	2	0.4	B9A	PP
3JC6	141 230 871 0000	00	141 230 651		3.5	3	125	125.0	14.0	16	B9A	P
3JC6A	141 230 871 0000	00	141 230 651		3.5	3	125	125.0	14.0	16	B9A	P
3JD6	141 230 871 0000	00	141 230 651		3.5	0	125	125.0	15.0	1.4	B9A	P
3JD6A	141 230 871 0000	00	141 230 651		3.5	0	125	125.0	15.0	14	B9A	P
3KF8	[170 231 481 0000 178 231 501 0000	00 00]	156 231 471		3.1	1	150	150	4	1	B9A	PP
3KT6	141 230 871 0000	00	140 230 651		3.5	0	330	330.0	17.0	18.0	B9A	P
3L31	287 438 200 0000	00	265 436 200		1.4	8.7	150	90	14.2	2.1	B7G	P
3L35	287 243 200 0000	00	265 243 200		1.4		150	125	18.5		B7G	P
3LE4	387 004 230 000	00	365 004 230		1.4	9	90	90	1.8	1.6	A08	P
3LF4	387 004 230 0000	00	365 004 230		1.4	4.5	90	90	8	2	B8B	P
3Q4	384 728 300 0000	00	364 526 300		1.4	5	90	90	6.9	1.97	B7G	P
3Q5	038 740 320 0000	00	036 540 320		1.4	4.6	90	90	9	2	A08	P
3S4	384 728 300 0000	00	364 526 300		1.4	7	90	75	7.4	1.57	B7G	P
3SB6	038 740 200 0000	00	036 540 200		1.4		90	60	1.4	0.6	A08	P
3V4	387 024 300 0000	00	365 024 300		1.4	4.5	90	90	7.7	2	B7G	P
3W4	284 738 200 0000	00	264 536 200		1.4	5.2	90	90	6.8	1.7	B7G	P
3Y4	284 738 200 0000	00	264 536 200		1.4	5.4	60	60	5	1.2	B7G	P
3Y6A1	023 104 780 0000	00	023 104 560		6.3		400	300		2	F8	P
3Z4	284 738 200 0000	00	264 536 200		1.4	7	60	60	6.5	1.4	B7G	P
4	842 300 000 0000	00	642 300 000		2	1	150		1	0.9	B4	T
4A6G	028 458 230 0000	00	026 447 230		2	1.5	90		1.2	0.9	A08	TT
4A07	842 300 000 0000	00	642 300 000		4	2	100		1.4	1.2	B4	T
4A08N	842 300 000 0000	00	642 300 000		4		200		6	2.4	B4	T
4A10	842 300 000 0000	00	642 300 000		4	2.5	150		6	1.8	B4	T
4A15	842 300 000 0000	00	642 300 000		4		100		7	2.2	B4	T
4A80	842 310 000 0000	00	642 310 000		4		150		6	2	B5	T
4A80N	842 310 000 0000	00	642 310 000		4		200		6	2.4	B5	T
4A90	842 310 000 0000	00	642 310 000		4		200		8	3.5	B5	T
4A120	842 310 000 0000	00	642 310 000		4		150			1.4	B5	T
4AU6	412 387 100 0000	00	412 365 100		4	1	250	150	10	5.2	B7G	P
4AV6	412 39X 800 0000	00	412 389 600		4.2	2	250		1.2	1.6	B7G	DDT
6BA6	412 387 100 0000	00	412 365 100		4.2	1	250	100	11	4.4	B7G	P
4BC5	412 387 100 0000	00	412 365 100		4.2	1.3	250	150	7.5	5.7	B7G	P
4BC8	841 238 510 0000	00	741 236 410		4.2	2.2	150		10	6.2	B9A	TT
4BE6	412 388 100 0000	00	412 365 100		4.2	6	150		7.5	3.5	B7G	H
4BL8	857 238 114 0000	00	645 237 114		4.5	[2 2	100 200	175	14 10	5 6.2]	B9A	TP
4BN4	142 381 400 0000	00	142 361 400		4	2.2	150		9	7	B7G	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
4BN6	142 374 800 0000	00	142 354 600		4.2	1	60	60	0.5	1.0	B7G	P
4BQ7	851 238 410 0000	00	741 236 410		4	2	150		9	6.4	B9A	TT
4BS8	841 238 510 0000	00	641 237 410		4.2	4.4	150		10	7.2	B9A	TT
4BU8	170 231 481 0000 178 231 581 0000	00 00	157 231 461		4.2	1	150	100	4	3.5	B9A	PP
4BX8	841 238 510 0000	00	641 237 410		4.2	1	65		9	6.7	B9A	TT
4BZ6	412 387 100 0000	00	412 365 100		4.2	1	100	100	12	8	B7G	P
4BZ7	851 238 410 0000	00	741 236 410		4.2	2.2	150		10	6.8	B9G	TT
4BZ8	841 238 510 0000	00	641 237 410		4.2	2	150		10	8	B9A	TT
4BZ11	841 238 510 0000	00	741 236 410		4	2.2	150		10	6.8	B9A	TT
4C1	284 300 000 0000	00	264 300 000		3	3	90		5	1	UX4	T
4C2	842 310 000 0000	00	642 310 000		4	5	150		11	2.5	B5	T
4C3	842 310 000 0000	00	642 310 000		4	3.5	200		6	2.4	B5	T
4C5	842 300 000 0000	00	642 300 000		4	10	400		30	4	B4	T
4C101	023 004 080 0000	00	023 004 060		4	45	250		60	6	F8	T
4C102	842 300 000 0000	00	642 300 000		4	45	250		40	2	B4	T
4C103	842 300 000 0000	00	642 300 000		4	35	250		45	3.5	B4	T
4CB6	412 387 100 0000	00	412 365 100		4.2	1	150	125	13	8	B7G	P
4CC1	842 301 850 0000	00	642 301 140		4	3.5	200		6	3.2	F8	TT
4CE5	412 387 100 0000	00	412 365 100		4.2	1	150	125	11	7.6	B7G	P
4CF6	412 387 100 0000	00	412 365 100		4.2	2	200	150	9.5	6.2	B7G	P
4CF8	701 238 014 0000	00	501 236 014		4.5	2	250	150	3	2	B9A	P
4CM4	841 234 148 0000	00	641 234 146		3.6	1.5	200		12	14	B9A	T
4CS6	412 387 100 0000	00	412 365 100		4	1	100	30	1	11	B7G	P
4CX7	841 238 510 0000	00	641 237 410		4.2	10	150		9	6.4	B9A	TT
4CY5	412 387 100 0000	00	412 365 100		4.2	1	150	80	10	8	B7G	P
4D1	000 231 800 0000	40	000 231 600	G1	13	3	250		10	5	B7	T
4D80	842 310 000 0000	00	642 310 000		4		100		2	1	B5	T
4DE6	412 387 100 0000	00	412 365 100		4.2	1.1	150	125	15.5	8	B7G	P
4DK6	412 387 100 0000	00	412 365 100		4.2	0.9	150	125	12	9.7	B7G	P
4DL4	414 234 484 0000	00	414 234 464		4	1.2	150		12	14	B9A	T
4DT6	412 387 100 0000	00	412 365 100		4.2		150	150	12	9	B7G	P
4E2	023 19X 780 0000	40	923 189 560	G1	4	14	250	275	72		8SC	DDP
4E4	023 110 780 0000	40	023 110 560	G1	4	2	250	100	3	2.1	8SC	P
4E104	287 004 130 0000	00	265 004 130		4	6	250	250	36	9	B8G	P
4E204	023 110 780 0000	00	023 110 560		4	3	250	100	8	1.8	F8	P
4EH7	141 230 871 0000	00	141 230 651		4.4	2	200	100	12	12.5	B9A	P
4EJ7	141 230 871 0000	00	141 230 651		4.4	2.5	200	200	10	15	B9A	P
4ER5	142 380 100 0000	00	142 360 100		4.2	1.2	200		10	10.5	B9A	T
4ES8	851 238 410 0000	00	741 236 410		4	1.2	90		15	12.5	B9A	TT
4EW6	412 387 100 0000	00	412 365 100		4.2	0.8	150	125	11	14	B7G	P
4FC7	148 234 118 0000	00	146 234 117		3.8	1.2	90		15	12.3	B9A	T
4FS7	151 234 887 0000	00	141 234 675		4.6	3 1.2	100 200	150	14 10	5.5 1.2	B9A	TP
4G30	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
4G105	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
4G200	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
4G5000	023 000 000 0000	90	023 000 000	D1	4						F8	R
4GG1	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
4GG2	9X2 300 000 0000	00	892 300 000		4				60		B4	RR

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
4GG3	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
4GG4	023 090 0X0 0000	00	023 080 090		4				30		F8	RR
4GK5	142 380 100 0000	00	142 360 100		4	1	150		11.5	15	B7G	T
4GM6	412 387 100 0000	00	412 365 100		4.2		150	125	14	13	B7G	P
4GS8	178 231 401 0000	00	156 231 401		4.2		100	75	2	1.2	B9A	PP
	170 231 481 0000	00	156 231 471									
4GW5	842 314 100 0000	00	642 314 000		4.2	1	150		13	15	B7G	T
4GX7	151 238 784 0000	00	141 236 574		4.2	1	125		13	8.5	B9A	TP
						1	125	125	8	11		
4GZ5	142 347 800 0000	00	142 345 600		4		250	250	16	8.5	B7G	P
4H07	842 300 000 0000	00	642 300 000		4		150		3	1.1	B4	T
4H08	842 300 000 0000	00	642 300 000		4		150		5	1.2	B4	T
4H80	842 300 000 0000	00	642 300 000		4		150		3	1.1	B4	T
4HA5	412 380 100 0000	00	412 360 100		3.9		200		19	20	B7G	T
4HA7	281 100 005 8430	00	261 100 004		4.2	8.5	250		10.5	2.2	A12	TT
						2	250		1.2	1.6		
4HK5	412 380 100 0000	00	412 360 100		4.0		150		12.5	15	B7G	T
4HM5	412 387 100 0000	00	412 365 100		4	1.2	150		12.5	14.5	B7G	T
4HM6	141 230 871 0000	00	141 230 651		4.2	3.9	125	125	13	15	B9A	P
4HQ5	412 380 100 0000	00	412 361 100		4.2	1.0	150		11.5	15	B7G	T
4HS8	178 231 481 0000	00	157 231 461		4.2		100	75	2	0.4	B9A	PP
4JC6	141 230 871 0000	00	141 230 851		4.5	0	330	330	14	1.6	B9A	P
4JD6	141 230 871 0000	00	141 230 641		4.5	0	125	125	15	14	B9A	P
4JK6	412 387 100 0000	00	412 365 100		3.7	0.9	125	125	11.5	18	B7G	P
4JL6	412 387 100 0000	00	412 365 100		3.7	0.9	125	60	12.5	15.5	B7G	P
4K30	842 300 000 0000	00	642 300 000		4	10	150		20	3.6	B4	T
4K32	842 300 000 0000	00	642 300 000		4	15	200		30	3.6	B4	T
4K50	842 300 000 0000	00	642 300 000		4	20	200		60	5	B4	T
4K60	842 300 000 0000	00	642 300 000		4	20	300		60	3.5	B4	T
4K61	842 300 000 0000	00	642 300 000		4		300			3	B4	T
4K100	842 300 000 0000	00	642 300 000		4	3	300	200	50	4	B4	T
4KE8	047 230 100 0000		045 230 000		4.5	0	125	125	10	12	B9A	PT
4KF8	170 231 481 0000	00	150 231 461		4.2	1	150	150	4	1	B9A	PP
	178 231 501 0000	00	156 231 401									
4KT6	800 230 014 0000	00	800 000 014		4.5	0	330	330	17.0	18	B9A	P
4L11	842 300 000 0000	00	642 300 000		4		150		7	1.4	B4	T
4L12	842 300 000 0000	00	642 300 000		4		150		9	2	B4	T
4L13	842 300 000 0000	00	642 300 000		4		200		8	2	B4	T
4L13A	842 300 000 0000	00	642 300 000		4	11	200		14	2.5	B4	T
4L14	842 300 000 0000	00	642 300 000		4		200		10	2.2	B4	T
4L15	842 300 000 0000	00	642 300 000		4		100			2.2	B4	T
4L16	842 300 000 0000	00	642 300 000		4	8	150		100	2.2	B4	T
4L20	842 300 000 0000	00	642 300 000		2		100			1.4	B4	T
4L28	842 300 000 0000	00	642 300 000		4	4	150		10.5	4	B4	T
4L29	842 300 000 0000	00	642 300 000		4	8	150		20	3.6	B4	T
4LJ8	481 230 010 0000		461 230 010		4.3	0	280	0	12	8.0	B9A	PP
	000 238 714 0000		000 236 514			0	280	125	13.0	13.0		
4LMBT	842 310 000 0000	00	642 310 000		4	1	200		3.4	2.6	B5	T
4MBT	842 310 000 0000	00	642 310 000		4	1	200		3.4	2.6	B5	T
4MP12	412 387 400 0000	00	412 365 400		4	6	200	175	25	5.5	B7G	P
4N08	842 300 000 0000	00	642 300 000		4		100		8	1.2	B4	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
4N100	842 310 000 0000	00	642 310 000		4		150			3.5	B5	T
4N110	842 310 000 0000	00	642 310 000		4		200		5	1.5	B5	T
4NG	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
4P25	842 300 000 0000	70	642 300 000	G2	4	19	250	150	12	1.3	B4	P
4R-HH2	751 238 410 0000	00	741 236 410		4.2	1	90		8.5	8	B9A	TT
4R-HH8	841 238 510 0000	00	641 237 410		4.2	1	100		16	16	B9A	TT
4R-HH9	841 238 510 0000	00	641 237 410		4.2		90		16	16	B9A	TT
4S	29X 130 000 0000	00	289 130 000		2.5						UX5	DD
4S-09	742 300 000 0000	80	542 300 000	A1	4	1	200	100	4.5	0.9	B4	P
4S120	742 310 000 0000	80	542 310 000	A1	4	2	200	60	4	0.5	B5	P
4S121	742 310 000 0000	80	542 310 000	A1	4		200	100	6	1	B5	P
4S126	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2	B5	P
4T1	842 314 800 0000	00	642 314 600		4.7	2.3	80		16	6.6	B7G	T
4THA	847 231 800 0000	40	645 231 700	G1	4	[5 2	100 250	 100	1.5 3.5	1.5 2.5]	B7	TH
4TP	548 231 700 0000	80	446 231 500	A2	4	5	150	150	16	4.5	B7	TP
4TPB	081 321 700 0000	40	061 321 500	G1	4	3	250	150	12	8	B7	P
4TSA	047 231 800 0000	80	045 231 600	A1	4		250	100	5	1.6	B7	P
4TSP	041 231 700 0000	80	041 231 500	A1	4	3	250	150	12	8	B7	P
4U130	843 210 000 0000	00	643 210 000		3.5		100			2.8	B5	T
4W08	842 300 000 0000	00	642 300 000		4		150		4	1.5	B4	T
4W100	842 310 000 0000	00	642 310 000		4		200		1.5	3.5	B5	T
4W120	842 310 000 0000	00	642 310 000		4		200		2	0.7	B5	T
4W200	842 310 000 0000	00	642 310 000		4		150			3.3	B5	T
4X150A	712 101 314 0000	80	512 1*1 314	A1	6.3	30	250	200	32	4.0	B9G	P
4XP	842 300 000 0000	00	642 300 000		4	28.5	250		48	5	B4	T
4Z60A	023 090 0X0 0000	00	023 080 090		4				30		F8	RR
5A6	801 227 413 0000	00	601 225 413		2.5	15	150	150	20		B9A	P
5A/102D	028 710 310 0000	40	026 510 310	G1	7.5	18	200	150	42	2.5	A08	P
5A/136D	028 710 310 0000	40	026 510 310	G1	7.5	5.5	250	150	5.2	2	A08	P
5A/137D	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	1.8		A08	P
5A/150A	287 113 000 0000	40	265 113 000	G1	10	5.5	250	150	5.2	2	UX6	P
5A/152M	287 104 130 0000	00	265 104 130		6.3	2	250	150	10	7.5	B8B	P
5A/155M	278 101 403 0000	00	256 101 403		6.3	2	250	250		6.5	B9G	P
5A/156M	287 114 113 0000	00	265 114 113		6.3	1.7	250	250	10	7.7	B9G	P
5A/157D	018 710 310 0000	40	026 510 310	G1	6.3	2	250	100		1.8	A08	P
5A/163K	141 238 117 0000	00	141 236 115		6.3	1.5	200	200	15	15	B9A	P
5A/170K	141 230 817 0000	00	141 230 615		6.3	1.5	200	150	13	16.3	B9A	P
5A/171G	102 713 410 0000	80	102 513 410	A1	6.3	5	100	100	20	2.7	B8D	P
5A/180M	287 114 130 0000	00	365 114 130		6.3	1	200	150	26	32	B8G	P
5A/189KY	412 381 700 0000	00	412 361 500		6.3	2	250	250	10	7.6	B7G	P
5A/201K	412 381 970 0000	00	412 361 500		6.3	3.3	200	200	7.1	4	B7G	DP
5A/206K	*41 23* 876 0000	00	*41 23* 678		6.3	2.0	200	115	10.0	8.4	B9A	P
5A/210K	412 381 700 0000	00	412 361 500		6.3	5	100	100	12.5	4	B7G	P
5A/220K	801 227 413 0000	00	601 225 413		5	10	150	150	28	4.4	B9A	P
5AM8	147 238 191 0000	00	145 236 181		4.7	1.7	200	150	11.5	7.0	B9A	DP
5AN8	841 238 751 0000	00	641 237 541		5	[6 2.2	200 200	 150	13 9.5	3.3 6.2]	B9A	TP
5AQ5	412 387 400 0000	00	412 365 400		5	12.5	250	250	45.0	4:1	B7G	P
5AR4	030 90X 020 0000	00	*30 809 020		5				120		A08	RR

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
5AS4	030 X09 020 0000	00	030 908 020		5				120		A08	RR
5AS8	741 239 118 0000	00	541 238 116		5	2.2	200	150	9.5	6.2	B9A	DP
5AT4	030 90X 020 0000	00	030 809 020		5.0						A08	RR
5AT8	481 238 715 0000	00	461 237 514		5	1 1.8	100 250	150	8.5 7.7	5.8 4.6	B9A	TP
5AU4	920 90X 030 0000	00	020 809 030		5				180		A08	RR
5AV8	148 235 178 0000	00	146 234 157		5	6 2.2	200 200	150	13 9.5	3.3 6.2	B9A	TP
5AW4	020 90X 030 0000	00	020 809 030		5				120		A08	RR
5AX4	020 90X 030 0000	00	020 809 030		5				60		A08	RR
5AZ3	299 0XX 990 9930	00			5				120		A12	RR
5AZ4	020 90X 030 0000	00	020 809 030		5				60		B8B	RR
5B1	742 300 000 0000	80	542 300 000	A1	2	1	150	90	2	1.4	B9A	P
5B8	148 235 178 0000	00	146 234 157		5	6 1.8	200 200	150	13 9.5	3.3 6.3	B9A	TP
5B/104D	028 740 310 0000	00	026 540 310		24	2	24	24	3	3	A08	T
5B/110M	287 104 130 0000	00	265 104 130		6.3	6	250	150	38	6.5	B8B	P
5B/152D	320 704 210 0000	80	320 504 210	A1	6.3	30	400	300	50	5.5	A08	P
5B/250A	274 130 000 0000	80	254 130 000	A1	6.3	12.5	400	250	83	6.3	UX5	P
5B/251M	217 044 130 0000	80	215 044 130	A1	6.3	15	250	250	72	6	B8B	P
5B/252M	287 044 130 0000	00	265 044 130		6.3	15	250	250	72	6	B8B	P
5B/253M	287 044 130 0000	00	265 044 130		19	15	150	250	72	6	B8B	P
5B/254M	217 144 130 0000	80	215 144 130	A1	6.3	20	300	250	50	5.6	B8B	P
5B/255M	287 144 130 0000	00	265 144 130		6.3	20	300	250	50	5.6	B8B	P
5B/256M	217 144 130 0000	80	215 144 130	A1	19	20	300	250	50	5.6	B8B	P
5B/257M	287 144 130 0000	00	265 144 130		12	20	300	250	50	5.6	B8B	P
5B258M	217 144 130 0000	80	215 144 130	A1	19	14	250	250	72	6	B8B	P
5B/280D	028 741 310 0000	00	*26 541 310		6.3	60	400	300	100	6.3	A08	P
5B/351D	020 740 310 0000	80	020 540 310	A1	6.3	10	150	150	200	14	A08	P
5B/354D	038 741 210 0000	00	*36 541 210		6.3	20	300	150	90	10	A08	P
5B/355D	030 740 210 0000	80	*30 540 210	A1	6.3	10	150	150	200	14	A08	P
5B/900A	204 178 300 0000	00	2*4 156 300		26	14	150	150	500	35	B7A	T
5B/901A	204 178 300 0000	00	2*4 156 300		26	30	150	150	500	25	B7A	P
5BC3	203 0X0 009 0000	00	2*3 *9* **8		5				120		B9B	RR
5BC3A	203 0XX 099 0000	00	203 087 099		5.0		40		200			RR
5BE8	481 238 715 0000	00	461 237 514		4	1 1	150 250	100	18 10	8.5 5.2	B9A	TP
5BK7	851 238 411 0000	00	741 236 411		5	2	150		10.7	9.3	B9A	TT
5BQ7	851 238 410 0000	00	741 236 410		5.6	2	150		9	6.4	B9A	TT
5BR8	481 238 715 0000	00	461 237 514		5	1 0.9	150 250	100	18 10	8.5 5.2	B9A	TP
5BS8	841 238 510 0000	00	641 237 410		5.6		150		10	7.2	B9A	TT
5BT8	X91 238 741 0000	00	981 236 541		4.7	2.2	200	150	9.5	6.2	B9A	DDP
5BW8	X19 234 178 0000	00	918 234 156		4.7	1.1	250	100	10	5.2	B9A	DDP
5BZ7	841 238 510 0000	00	741 236 410		5.6	2.2	150		10	6.8	B9A	TT
5CG4	030 90X 020 0000	00	030 809 020		5				60		A08	RR
5CG8	481 238 715 0000	00	461 237 514		4.7	0.9 1.9	100 250	150	8.5 7.7	5.8 4.6	B7G	TP
5CL8	481 238 715 0000	00	461 237 514		4.7	0.9 1	150 150	125	15 12	8 5.8	B9A	TP
5CL8A	481 230 000 0000	00	461 230 000		4.7	1 1	125 100	70 125	14 12	8.0 6.5	B9A	TP
5CM6	704 234 108 0000	00	504 234 106		4.7	12.5	250	250	45	4.1	B9A	P
5CM8	851 238 714 0000	00	641 237 514		4.7	2 2.2	250 200	150	1.8 9.5	2 6.2	B9A	TP
5CQ8	857 238 114 0000	00	645 237 114		4.2	0.8 1	150 150	125	15 12	8 5.8	B7G	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
5CR8	851 238 714 0000	00	641 237 514		4.7	2 1	125 125	 125	12 13	4 7.7	B9A	TP
5CU4	190 90X 030 0000	00	120 809 030		5				180		A08	RR
5CZ5	704 234 108 0000	00	504 234 a*6		45	6.7	100	100	43	9	B9A	P
5DH8	481 238 715 0000	00	461 237 514		5.2	2.5 1	250 150	 125	7 13	4.4 8.6	B9A	TP
5DJ4	229 9XX 330 0000	00	228 899 330		5.0				120		A08	RR
5DN4	229 9XX 330 0000	00	228 899 330		5				120		A08	RR
5E255	842 370 000 0000	00	642 350 000		2	4.5	150	150	9.5	2.5	B5	P
5E415	842 370 000 0000	00	642 350 000		4	25	300	200	20	1.7	B5	P
5EA8	857 238 114 0000	00	645 237 114		4.7	1 1	150 150	 125	18 12	8.5 6.4	B9A	TP
5EH8	148 231 578 0000	00	146 231 457		4.7	1 1	150 150	 125	13.5 12	7.5 6	B9A	TP
5ES8	841 238 510 0000	00	641 237 410		5.6	1.2	90		15	12.5	B9A	TT
5EU8	848 231 517 0000	00	746 231 415		4.7	1 1	150 150	 125	18 12	8.5 6.4	B9A	TP
5EW6	412 387 100 0000	00	412 365 100		5.6	0.8	150	125	11	14	B7G	P
5FC7	148 235 118 0000	00	146 234 117		5.1	1.2	100		15	12.3	B9A	TT
5FG7	481 238 715 0000	00	461 237 514		4.7	1 1	150 150	 125	13 11	7.5 6	B9A	TP
5FV8	481 238 715 0000	00	461 237 514		4.7	1 1	150 150	 125	14 12	8 6.5	B9A	TP
5GK18	020 90X 030 0000	00	020 809 030		5						A08	RR
5GK20	030 90X 020 0000	00	030 809 020		5				†20		A08	RR
5GK22	030 90X 020 0000	00	030 809 020		5						A08	RR
5GK24	030 90X 020 0000	00	030 809 020		5				120		A08	RR
5GH8	857 238 114 0000	00	645 237 114		4.7	1 1	150 150	 125	13 12	8.5 7.5	B9A	TP
5GH8A	800 230 014 0000 047 328 100 0000	00 00	000 230 014 045 230 014		4.7	1 1	125 125	 125	13.5 12.0	8.5 7.5	B9A	PT
5GM6	412 387 000 0000	00	412 365 000		5.6	56	150	150	14	13	B7G	P
5GX6	412 387 100 0000	00	412 365 100		4.7	1	150	100	3.7	3.7	B7G	P
5GX7	151 238 784 0000	00	141 236 574		5.6	1 1	125 125	 125	13 8	8.5 11	B9A	TP
5HA7	281 100 005 8430	00	261 100 004		5.6	8.5 2	250 250		10.5 1.2	22 1.6	A12	TT
5H26	412 387 100 0000	00	412 365 100		6.3		150	100	3.2		B7G	P
5HB7	151 238 784 0000	00	141 237 654		4.7	1 1.2	150 175	 150	18 10	8.5 12	B9A	TP
5HG8	151 234 887 0000	00	141 234 675		5.3	3 1.2	100 175	 150	14 10	5.5 12	B9A	TP
5J6	882 345 100 0000	00	672 344 100		5	0.8 3	100 150		8.5 5	5.3 4.5	B7G	TT
5JK6	412 387 100 0000	00	412 365 100		4.9	0.9	125	125	11.5	18	B7G	P
5JL6	412 387 100 0000	00	645 365 100		4.9	0.9	125	60	12.5	15.5	B7G	P
5KD8	857 238 114 0000	00	645 237 114		5.6	1	125		13.5	7.5	B9A	TP
5KE8	857 238 114 0000	00	645 237 114		5.6	1 0.4	125 125	 125	13 10	8 12	B9A	TP
5KZ8	851 238 715 0000	00	641 237 514		4.7	1 1	125 125	 125	13.5 12.0	8.5 7.5	B9A	TP
5LJ8	481 238 715 0000	00	461 237 514		5.6	0.7 0.5	125 125	 125	13 12	8 13	B9A	TP
5MB8	481 238 715 0000	00	461 237 514		5.6	0.7 0.4	125 125	 125	13 10	8 12	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
5MK9	002 390 000 0000	00	002 380 000		5				60		B7G	R
5MHH3	882 345 100 0000	00	672 344 100		4.7	1	100		11	7.5	B7G	TT
5M-HH3	142 380 100 0000	00	142 360 100		4.7	1	100		11	7.5	B7G	T
5MQ8	800 230 014 0000	00	00 230 014		5.6	0 0	330 330	125	18 12	8.5 10	9AE	TP
5P29	120 740 310 0000	80	120 540 310	A1	6.3	7	250	250	100	14.3	A08	P
5Q5	038 740 320 0000	00	036 540 320		1.4	4.6	90	90	4.5	2	A08	P
5R4	020 90X 030 0000	00	020 809 030		5(5.7)				60		A08	RR
5R4GY	020 90X 030 0000	00	020 809 030		5(5.7)				60			
5RDDH1	X11 239 841 0000	00	911 238 641		4.7	2	250		1.6	1.6	B9A	DDT
5RHH5	841 228 513 0000	00	641 227 413		4.6	1	100		0.6	0.3	B9A	TT
5RK16	900 230 0X0 0000	00	800 230 090		5				120		B9A	RR
5T4	020 90X 030 0000	00	020 809 030		5				120		A08	RR
5T4A	041 231 700 0000	80	041 231 500	A1	4	4.5	250	150	4.5	1.7	B7	P
5T8	9X1 23Y 148 0000	00	*91 238 146		5	3	250		1.0	1.2	B9A	DDDT
5U4	020 90X 030 0000	00	020 809 030		5(5.7)				120		A08	RR
5U4-GA	020 X09 030 0000	00	020 908 030		5.0		750		525		B5-15	RR
5U8	857 238 114 0000	00	645 237 114		5	1 1	150 250	100	18 10	8.5 5.2	B9A	TP
5V3	020 90X 030 0000	00	020 809 030		5				120		A08	RR
5V4	030 90X 020 0000	00	030 809 020		5(5.7)				60		A08	RR
5V6	028 740 310 0000	00	026 540 310		4.7	12.5	250	250	45	4.1	A08	P
5W4	020 90X 030 0000	00	020 809 030		5				60		A08	RR
5X3	29X 300 000 0000	00	289 300 000		5				15		A08	RR
5X4	009 0X0 230 0000	00	008 090 230		5				120		A08	RR
5X8	148 231 578 0000	00	146 231 457		5	1 1.8	100 250	150	8.5 7.7	5.8 4.6	B9A	TP
5Y3	020 90X 030 0000	00	020 809 030		5				60		A08	RR
5Y3GB	030 90X 020 0000	00	030 809 020		5(5.7)				60		A08	RR
5Y3GR	020 90X 030 0000	00	020 809 030		5(5.7)				60		A08	RR
5Y3GT	020 90X 030 0000	00	020 809 030		5(5.7)				60		A08	RR
5Y4	009 0X0 230 0000	00	008 090 230		5				60		A08	RR
5Y4SG	009 0X0 230 0000	00	008 090 230		5				60		A08	RR
5Z3	29X 300 000 0000	00	289 300 000		5(5.7)				120		UX4	RR
5Z4	030 90X 020 0000	00	030 809 020		5(5.7)				60		A08	RR
5Z4G	030 90X 020 0000	00	030 809 020		5(5.7)				60		A08	RR
5Z10	020 X09 030 0000	00	020 908 030		5				120		B8A	RR
6/30L2	851 238 410 0000	00	741 236 410		6.3	7.9	200		10	3.4	B9A	TT
6A3	284 300 000 0000	00	264 300 000		6.3	36	250		60	5.25	UX4	T
6A4	284 730 000 0000	00	264 530 000		6.3	9	150	150	14	1.9	UX5	P
6A5	028 040 310 0000	00	026 040 310		6.3	45	250		60	5.25	A08	T
6A6	285 148 300 0000	00	274 146 300		6.3	5	250		3.0	1.6	UX7	TT
6A7	287 741 300 0000	40	265 541 300	G1	6.3	8	250	100	3.5	1.1	Sm7	H
6A8	028 747 310 0000	40	026 545 310	G1	6.3	8	250	100	3.5	1.1	A08	H
6A10C	028 741 340 0000	00	026 541 340		6.3		250	100	3.5		A08	H
6AB4	802 304 100 0000	00	602 304 100		6.3	2	250		10	5.5	B7G	T
6AB5	284 713 000 0000	00	264 513 000		6.3	15.5	150	150	0.1	†1.0MΩ	UX6	TI
6AB7	021 417 380 0000	00	021 415 360		6.3	3	300	200	12.5	5	A08	P
6AB8	841 238 175 0000	00	641 237 154		6.3	2 8	100 200	200	4 17.5	1.4 3.5	B9A	TP
6AC5	028 040 310 0000	00	026 040 310		6.3	0	250		2.5		A08	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6AC6	020 840 310 0000 028 050 310 0000	00 00	026 740 310		6.3	2	300	150	10	9	A08	P
6AC7	021 417 380 0000	00	021 415 360		6.3	2	300					
6AC9	2X1 100 114 7830	00			6.3	1	125	125	12	10	A12	DDP
6AD4	402 013 080 0000	00	402 013 080		6.3	11.5	100		1.4	2	B8B	T
6AD5	028 040 310 0000	00	026 040 310		6.3	1	250		0.9	1.5	A08	T
6AD6	028 740 310 0000	00	026 540 310		6.3	3 50	150 150	150			A08	TI
6AD7	428 758 310 0000	00	427 546 310		6.3	25 16.5	250 250	250	4 34	0.3 2.5	A08	TP
6AD8	741 238 9X1 0000	00	541 236 891		6.3	2.0	250	90	6.7	1.1	B9A	DDP
6AE4	028 040 310 0000	00	026 040 310		6.3	15	100		7	1.2	A08	T
6AE5	028 040 310 0000	00	026 040 310		6.3	15	100		7	1.2	A08	T
6AE6	020 840 310 0000 028 050 310 0000	00 00	026 740 310		6.3	1.5	250		6.5	1	A08	TT
6AE7	028 415 310 0000	00	026 414 310		6.3	13.5	250		10	3	A08	TT
6AE8	051 230 480 0000 751 238 500 0000	00 00	541 237 46*		6.3	2 2	100 250	90	5.2 3.5	2.2	B9A	TH
6AF3	000 230 009 0000	10	*** 23* **8	C	6.3				120		B9A	R
6AF4	842 314 800 0000	00	642 314 600		6.3	4	100		15	6.6	B7G	T
6AF4A	842 314 800 0000	00	642 314 600		6.3	3	100		20	7.5	B7G	T
6AF5	028 040 310 0000	00	026 040 310		6.3	18	200		7	1.5	A08	T
6AF6	028 740 310 0000	00	026 540 310		6.3	81	150	125			A08	TI
6AF7	028 470 310 0000 020 478 310 0000	00 00	026 457 310		6.3	45 15	200 200	200 200	0.16 0.15	†1 †1	A08	TI
6AF11	285 814 181 7630	00			6.3	2 2 3	200 200 200	 150	7 9.2 24	5.5 4.4 11	A12	TTP
6AG5	412 387 100 0000	00	412 365 100		6.3	1.5	250	150	6.5	5	B7G	P
6AG6	028 740 310 0000	00	026 540 310		6.3	6	250	250	32	10	A08	P
6AG7	120 417 380 0000	00	120 415 360		6.3	3	300	150	30	11	A08	P
6AG11	219 148 851 X130	00	218 146 641		6.3	1	125		7.5	7.8	A12	DDTT
6AH4	420 080 310 0000	00	420 060 310		6.3	23	250		30	4.5	A08	T
6AH5	720 804 310 0000	00	520 604 310		6.3	18	350	250	54	5.2	A08	P
6AH6	412 387 100 0000	00	412 365 100		6.3	2	300	150	10	9	B7G	P
6AH7	518 148 230 0000	00	417 146 230		6.3	9	250		12	2.4	A08	TT
6AH9	248 100 000 0030	00			6.3	9	250 250	128 150	8.0 25.0	2.75 21	A12	PT
6AJ4	414 484 234 0000	00	414 464 234		6.3	2	125		8	7	B9A	T
6AJ5	412 387 100 0000	00	412 365 100		6.3	7.5	200	175	2.9	2.7	B7G	P
6AJ7	020 417 380 0000	00	020 415 360		6.3		300	150	10	9	A08	P
6AJ8	751 238 084 0000	00	541 237 164		6.3	3 2	100 250	 100	5 6.5	2.3 2.4	B9A	TH
6AK4	402 013 080 0000	00	402 013 060		6.3	2.5	250		9.5	3.8	B8D	T
6AK5	412 387 100 0000	00	412 365 100		6.3	3.5	150	150	7	4.3	B7G	P
6AK6	412 387 100 0000	00	412 365 100		6.3	9	200	175	15	2.3	B7G	P
6AK7	120 417 380 0000	00	120 415 360		6.3	3	300	150	30	11	A08	P
6AK8	Y91 23X 148 0000	00	†91 238 146		6.3	3	250		1.0	1.2	B9A	DDDT
6AL3	000 230 009 0000	10	*** 23* **8	C	6.3						B9A	D
6AL5	1X2 310 900 0000	00	192 310 800		6.3						B7G	DD
6AL6	020 740 310 0000	80	020 540 310	A1	6.3	14	250	250	72	6	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6AL11	215 118 741 7830	00			6.3	2	15	100	1.3	1	A12	PP
6AM4	414 484 234 0000	00	414 464 234		6.3	1	200		10	9.8	B9A	T
6AM5	412 380 700 0000	00	412 360 500		6.3	13.5	250	250	16	2.6	B7G	P
6AM6	412 381 700 0000	00	412 361 500		6.3	2 1.5	250 200	250 150	10 4	7.5 6.4	B7G	P
6AM8	147 238 191 0000	00	145 236 181		6.3	1.7	200	150	11.5	7	B9A	DP
6AN4	842 314 800 0000	00	642 314 600		6.3	1.3	200		13	10	B7G	T
6AN5	412 387 100 0000	00	412 365 100		6.3	6	150	125	35	8	B7G	P
6AN6	29X YZ1 300 0000	00	289 ††1 300		6.3						B7G	DDDD
6AN7	051 230 084 0000 751 230 805 0000	00 00	541 230 764		6.3	2 2	100 250	100	5 3	2 0.7	B9A	TP
6AN8	841 238 751 0000	00	641 237 541		6.3	6 2.2	200 200	150	13 9.5	3.3 6.2	B9A	TP
6AQ4	412 314 800 0000	00	412 314 600		6.3	2	250		6	8.5	B7G	T
6AQ5	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4.1	B7G	P
6AQ6	412 39X 800 0000	00	412 398 600		6.3	3	250		1.0	1.2	B7G	DDT
6AQ7	91X 481 230 0000	00	918 461 230		6.3	2	250		2.3	1.6	A08	DDT
6AQ8	851 238 410 0000	00	741 236 410		6.3	2.3	250		10	5.5	B9A	TT
6AR5	412 387 000 0000	00	412 365 000		6.3	16	250	250	34	2.4	B7G	P
6AR6	108 072 430 0000	00	106 052 430		6.3	36	300	300	58	4.3	A08	P
6AR7	481 9X1 230 0000	00	461 891 230		6.3	2	250		1.3	1	A08	DDT
6AR7GT	208 7X9 130 0000	40	206 598 130	G1	6.3	2	250	100	7	2.5	A08	DDP
6AR8	117 324 188 0000	00	115 324 166		6.3	3	250	250	10	4	B9A	P
6AR11	287 151 187 4130	00			6.3	0.7	125	125	11	10.5	A12	PP
6AS4	001 090 230 0000	00	001 080 230		6.3						A08	R
6AS5	142 347 800 0000	00	142 345 600		6.3	8.5	150	125	35	5.6	B7G	P
6AS6	412 387 100 0000	00	412 365 100		6.3	2	150	125	5.5	3.5	B7G	P
6AS7	501 481 230 0000 581 401 230 0000	00 00	471 461 230		6.3	40	100		50	7	A08	TT
6AS8	741 239 118 0000	00	541 238 116		6.3	2.2	200	150	9.5	6.2	B9A	DP
6AS11	285 814 181 7630	00			6.3	2 2 2	200 200 200	 125	7 9.2 24	5.5 4.4 10.5	A12	TTP
6AT6	412 39X 800 0000	00	412 389 600		6.3	3	250		1	1.2	B7G	DDT
6AT7	851 228 413 0000	00	641 237 410		6.3	2 1	250 100		10 3.7	5.5 4	B9A	TT
6AT8	481 238 715 0000	00	461 237 514		6.3	1 1.8	100 250	 150	8.5 7.7	5.8 4.6	B9A	TP
6AU4	001 090 230 0000	00	001 080 230		6.3				120		A08	R
6AU5	421 080 370 0000	00	421 060 350		6.3	20	200	150	50	5.6	A08	P
6AU6	412 387 100 0000	00	412 365 100		6.3	1	250	150	10	5.2	B7G	P
6AU7	841 228 513 0000	00	641 227 413		3	8.5	250		10	2.2	B9A	TT
6AU8	148 231 578 0000	00	146 213 457		6.3	1.2 1.5	150 200	 125	8.5 15	4.8 7	B9A	TP
6AV4	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
6AV5	421 080 370 0000	00	421 060 350		6.3	22.5	250	150	57	5.9	A08	P
6AV6	412 39X 800 0000	00	412 389 600		6.3	2	250		1.2	1.6	B7G	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6AV8	485 231 871 0000	00	464 231 751		6.3	6 2.2	200 200	 150	13 9.5	3.3 6.2	B9A	TP
6AV11	281 181 504 8630	00			6.3	8.5	250		10.5	2.2	A12	TTT
6AW4	29X 130 000 0000	00	289 130 000		6.3				30		UX5	RR
6AW5	209 1X0 310 0000	00	208 190 310		6.3				30		A08	RR
6AW6	412 387 100 0000	00	412 365 100		6.3	1.8	250	150	7	5	B7G	P
6AW7	14X 918 230 0000	00	149 816 230		6.3	0	100		1.4	1.2	A08	DDT
6AW8	148 231 578 0000	00	146 231 457		6.3	2 3	200 200	 150	4 13	4 9	B9A	TP
6AX2	230 232 032 0000	90	23* 232 *32	D1	6.3				120		B9A	R
6AX3	200 900 100 8030	00			6.3				120		A12	R
6AX4	001 090 230 0000	00	001 080 230		6.3				120		A08	R
6AX5	02X 090 310 0000	00	029 080 310		6.3				60		A08	RR
6AX6	029 1X0 310 0000	00	028 190 310		6.3				120		A08	RR
6AX7	841 228 513 0000	00	641 227 413		3	2	250		1.2	1.6	B9A	TT
6AX8	857 238 114 0000	00	645 237 114		6.3	1 1.2	150 250	 100	18 10	8.5 4.8	B9A	TP
6AY3	090 230 901 0000	00	*8* 23* 8*1		6.3				120		B9D	R
6AY5	023 740 310 0000	80	023 540 310	A1	6.3	12.5	250	250	47	4.1	A08	P
6AY8	028 79X 310 0000	40	026 589 310	G1	6.3	5	250	100	52	9.5	A08	DDP
6AY11	219 158 841 X130	00			6.3	2	250		1.2	1.9	B8A	DD
6AZ5	910 230 1X0 0000	00	810 230 190		6.3						B8A	DD
6AZ6	093 113 X00 0000	00	083 113 900		6.3						B8A	DD
6AZ8	871 325 184 0000	00	751 324 164		6.3	6 2.3	200 200	 150	13 9.5	3.3 6	B9A	TP
6B2P	472 389 100 0000	00	452 368 100		6.3	3	250	100	6.7	1.85	B7G	P
6B3	090 230 909 0000	10	080 230 808	C	6.3						B9A	D
6B4	028 040 300 0000	00	026 040 300		6.3	45	250		60	5.2	A08	T
6B6	028 9X0 310 0000	40	026 890 310	G1	6.3	2	250		0.9	1.1	A08	DDT
6B7	289 9X1 300 0000	40	265 891 300	G1	6.3	3	250	150	9	1.1	Sm7	DDP
6B8	028 X97 310 0000	40	026 985 310	G1	6.3	3	250	150	10	1.3	A08	DDP
6B10	215 848 1X1 9030	00			6.3	9.5	250		.7	1.8	A12	DDTT
6B11	288 474 130 0000	00	276 454 130		6.3	3	100 150	 125	5 5	2.3	B9A	TH
6B31	921 013 X00 0000	00	821 013 900		6.3						B7G	DD
6B32	192 310 X00 0000	00	182 311 900		6.3				5		B7G	DD
6BA3	090 230 901 0000	00	*8* 23* 8*1		6.3				180		B9A	R
6BA5	402 083 710 0000	00	402 063 510		6.3	2	100	100	5.5	2.1	B8A	P
6BA6	412 387 100 0000	00	412 365 100		6.3	1	250	100	11	4.4	B7G	P
6BA7	841 231 108 0000	00	641 231 106		6.3	2	100		18	7.0	B9A	H
6BA8	148 231 578 0000	00	146 231 457		6.3	8 2.5	200 200	 150	8 13	2.7 9	B9A	TP
6BA11	2Y7 418 114 1830	00			6.3	11	250 100	 60	5.0	1.8 1.7	A12	TPP
6BB14	*SEE EL500*											
6BC4	844 231 448 0000	00	644 231 446		6.3	1.5	150		14.5	10	B8A	T
6BC5	412 387 100 0000	00	412 365 100		6.3	1.3	250	150	7.5	5.7	B7G	P
6BC7	190 23X 1Y1 0000	00	180 239 1†1		6.3				5		B9A	DDD
6BC8	841 238 510 0000	00	741 236 410		6.3	2.2	150		10.0	6.2	B9A	TT
6BC32	412 39X 800 0000	00	412 389 600		6.3	2	250		1	1.6	B7G	DDT
6BD5	421 080 370 0000	00	421 060 350		6.3	12	200	200		5	A08	P
6BD6	412 387 100 0000	00	412 354 100		6.3	3	250	100	9	2	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6BD7	841 239 0X0 0000	00	641 238 09*		6.3	3.0	250		1.0	1.2	B9A	DDT
6BD11	285 814 181 7630	00			6.3	11	250 100	60	5.0	1.8 1.7	A12	TPP
6BE3	200 800 100-0030	00			6.3				300		A12	R
6BE6	112 387 400 0000	00	112.365 400		6.3	1.5	250	100	3	.47	B7G	H
6BE7	741 238 114 0000	00	541 236 114		6.3	1	250	20	0.95	0.7	B9A	N
6BE8	481 238 715 0000	00	461 237 514		6.3	1	150		18	8.5	B9A	TP
6BF5	412 387 400 0000	00	412 365 400			1	250	100	10	5.2		
6BF6	412 3X9 800 0000	00	412 398 600		6.3	7.5	100	100	36	7.5	B7G	P
6BF7	842 113 580 0000	00	642 113 470		6.3	9	250		9.5	1.9	B7G	DDP
6BF11	215 017 841 7830	00			6.3	0.8	100		8	4.8	B8D	TT
6BG6	021 040 370 0000	80	021 040 350	A1	6.3	6	150	100	38	2.6	*A12	PP
6BG7	852 113 480 0000	00	742 113 460			1.8	150	100	1.3	1		
6BH3	090 230 901 0000	00	*8* 23* 8*1		6.3	15	250	250	75	6	A08	P
6BH3A	080 230 801 0000	00	080 230 801		6.3	0.8	100		8	4.8	B9A	TT
6BH5	741 238 000 0000	00	541 236 000		6.3				180		B9D	R
6BH6	412 385 100 0000	00	412 365 100		6.3		32		350			R
6BH8	148 321 578 0000	00	146 321 457		6.3	2.5	250	100	6	1.7	B9A	P
6BH11	281 514 867 8130	00			6.3	1	250	150	7.4	4.6	B7G	P
6BJ5	412 380 700 0000	00	412 36* 500		6.3	5	250		9.5	3.3	B9A	TP
6BJ6	412 387 100 0000	00	412 365 100			1.6	200	125	15	7		
6BJ7	1Y0 23X 191 0000	00	1†0 239 181		6.3	1	125		8.5	13.5	A12	TTP
6BJ8	911 23X 841 0000	00	811 239 641			1	125	125	12	7.5		
6BK4B	120 040 300 0000	00	120 040 030	A	6.3	5	250	250	35	10.5	B7G	P
6BK5	804 231 470 0000	00	604 231 450		6.3	1	250	100	9.2	3.6	B7G	P
6BK6	412 39X 800 0000	00	412 389 600		6.3						B9A	DDD
6BK7	851 238 410 0000	00	741 236 410		6.3	9	250		8	2.8	B9A	DDT
6BK7A	851 238 410 0000	00	741 236 410		6.3	7	27000	0	1.6	0.2	B8-71	T
6BK7B	000 230 410 0000	00	000 236 410			0		40				
	841 230 000 0000	00	841 230 000		6.3	5	250	250	35	8.5	B9A	P
6BK8	701 238 014 0000	00	501 236 014		6.3	2	250		1.2	1.6	B7G	DDT
6BL4	001 090 230 0000	00	**1 *8* 230		6.3	1.0	100		9	6.1	B9A	TT
6BL7	581 481 230 0000	00	471 461 230		6.3							
6BL8	857 238 114 0000	00	645 237 114		6.3	2	150		10.7	9	B9A	TT
6BM5	412 387 400 0000	00	412 365 400			2	100		14	5	B9A	TT
6BM8	415 238 718 0000	00	414 237 516		6.3	11	150		18	9.3	B9A	TT
6BN4	142 381 400 0000	00	142 361 400		6.3		150	150	3	1.8	B9A	P
6BN4A	142 381 000 0000		142 361 400		6.3				180		A08	R
6BN5	441 231 817 0000	00	441 231 615		6.3	9	250		40	7	A08	TT
6BN6	142 374 800 0000	00	142 354 600		6.3	2	200	175	10	6.2	B9A	TP
6BN7	851 231 408 0000	00	741 231 406		6.3	6	250	250	30	7	B9A	P
6BN8	911 23X 841 0000	00	811 239 641			1	200		3.7	2.5	B9A	TP
6BN11	214 780 517 0830	00	214 560 415	A	6.3	16	200	200	35	6.4		
6BP16	280 173 041 0000	00	260 153 041		6.3	2.2	150		9	7	B7G	T
6BQ5	041 230 807 0000	00	*41 23* 6*5		6.3	6	150		9	7.7	B7G	T
6BQ6	020 740 310 0000	80	020 540 310	A1	6.3	10.8	250	225	25	3.2	B9A	P
						1	60	60	0.5	1.0	B7G	P
					6.3	15	250		24	5.5	B9A	TT
						1	125		5	2		
					6.3	3	250		1.6	2.5	B9A	DDT
					6.3	0.8	150	125	11	14	A12	PP
					6.3		150	150	50	26	B9A	P
					6.3	7.3	250	250	48	11.3	B9A	P
					6.3	22.5	250	150	57	5.9	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6BQ7	851 238 410 0000	00	741 236 410		6.3	2	150		9	6	B9A	TT
6BR5	410 230 807 0000	00	41* 23* 6*5		6.3	14	200	200	0.4	†0.5	B9A	TT
6BR7	041 230 871 0000	00	041 230 651		6.3	3	250	100	2	1.2	B9A	P
6BR8	481 238 715 0000	00	461 237 514		6.3	[1 0.8	150 250	 100	18 10	8.5 5.2]	B9A	TP
6BR8A	[481 230 000 0000 000 238 715 0000	00 00	461 230 000 000 236 514	]	6.3	[1 1	125 125	 110	3.5 9.5	7.5 5.0]	B9A	TP
6BS3	090 230 901 0000	00	*8* 23* 8*1		6.3				180		B9D	R
6BS3A	080 230 801 0000	00	060 230 601		6.3		12			140		R
6BS4	842 314 800 0000	00	642 314 600		6.3	4	100		16	8	B7G	T
6BS5	741 238 001 0000	00	541 236 **1		6.3	7.5	250	250	50	7	B9A	P
6BS7	001 230 871 0000	40	001 230 651	G1	6.3	3	250	100	2	1.2	B9A	P
6BS8	841 238 510 0000	00	641 237 410		6.3	2.2	150		10	7.2	B9A	TT
6BT4	290 00X 130 0000	00	280 009 130		6.3				30		B8A	RR
6BT6	412 39X 800 0000	00	412 389 600		6.3	3	250		1	1.2	B7G	DDT
6BT8	9X1 238 741 0000	00	891 236 541		6.3	2.2	200	150	9.5	6.2	B9A	DDP
6BU6	412 39X 800 0000	00	412 389 600		6.3	9	150		9.5	1.9	B7G	DDT
6BU8	[178 231 401 0000 170 231 581 0000	00 00	] 157 231 461		6.3		100	60	2.2	1.5	B9A	PP
6BV7	987 23X 141 0000	00	865 239 141		6.3	5	250	250	38	10	B9A	DDP
6BV8	148 23X 119 0000	00	146 239 118		6.3	3.7	200		11	5.6	B9A	DDT
6BW4	900 230 X01 0000	00	800 230 901		6.3				30		B9A	RR
6BW6	041 230 871 0000	00	*41 230 651		6.3	13	300	225	34	3.7	B9A	P
6BW7	141 230 871 0000	00	141 230 651		6.3	2.4	250	250	9.7	8.2	B9A	P
6BW8	X19 234 178 0000	00	918 234 156		6.3	1.1	250	100	10	5.2	B9A	DDP
6BW11	214 780 087 1530	00			6.3	0.8	150	125	11	14	A12	PP
6BX4	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
6BX6	141 230 871 0000	00	141 230 651		6.3	3	200	200	8	7.2	B9A	P
6BX7	581 481 230 0000	00	471 461 230		6.3	16.4	250		42	7.6	A08	TT
6BX8	841 238 510 0000	00	641 237 410		6.3	5	150		11	7.5	B9A	TT
6BY5	120 X90 310 0000	00	120 980 310		6.3				60		A08	RR
6BY6	412 387 400 0000	00	412 365 400		6.3	2.5	250	100	6.5	2.4	B7G	H
6BY7	141 230 871 0000	00	141 230 651		6.3	2	250	100	10	6	B9A	P
6BY8	411 239 871 0000	00	411 238 651		6.3	1.1	100	100	5	3.9	B9A	DP
6BZ6	412 387 100 0000	00	412 365 100		6.3	1	125	125	14	8	B7G	P
6BZ7	851 238 410 0000	00	741 236 410		6.3	2.2	150		10	6.8	B9A	TT
6BZ8	841 238 510 0000	00	641 237 410		6.3	1	150		10	8	B9A	TT
6C2C	028 458 300 0000	00	026 447 300		6.3	8	250		9	2.6	A08	TT
6C3M	028 040 300 0000	00	026 040 300		2	2.5	150		1.5	1.3	A08	T
6C4	802 384 100 0000	00	602 364 100		6.3	8.5	250		10.5	2.2	B7G	T
6C4A	028 040 300 0000	00	026 040 300		6.3		250		60	5.2	A08	T
6C5	028 040 310 0000	00	026 040 310		6.3	8	250		8	2	A08	T
6C6	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	2	1.2	UX6	P
6C7	280 9X1 300 0000	40	260 891 300	G1	6.3	9	250		4.5	1.2	Sm7	DDT
6C8	028 148 310 0000	50	026 147 310	G1	6.3	4.5	250		3.2	1.6	A08	TT
6C9	[208 405 130 0000 280 575 130 0000	00 00	] 276 454 130		6.3	[2.5 2.5	100 150	 100	5 8	3 2.5]	B8A	TH
6C10	[280 405 130 0000 208 575 130 0000	00 00	] 276 454 130		6.3	[2 2	100 250	 100	5 8	2.2 2.4]	B8A	TH
6C12	751 238 084 0000	00	541 237 164		6.3	[3 2	100 250	 100	3 6.5	2 2.4]	B9A	TH

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6C16	857 238 114 0000	00	645 237 114		6.3	[2 2	100 200	175	14 10	5 6.2]	B9A	TP
6C18	878 231 514 0000	00	657 231 414		6.3	[3 1.5	100 125	125	14 10	5.5 11]	B9A	TP
6C31	[020 048 310 0000 028 750 310 0000	40 50]	027 546 310	G1	6.3	[4 3	100 250	100	7 5	3.4 2.8]	A08	TH
6C31	412 344 800 0000	00	412 344 600		6.3	15	150			12	B7G	T
6C93	200 800 100 803	00			6.3		20		600		A12	R
6CA4	901 230 X00 0000	00	9*1 23* 8**		6.3				60		B9A	RR
6CA5	142 347 800 0000	00	142 345 600		6.3	4.5	150	125	36	9.2	B7G	P
6CA7	128 740 310 0000	00	126 540 310		6.3	14.5	250	250	57	8.5	A08	P
6CB5	721 441 370 0000	80	521 441 350	A	6.3	30	175	175	90	8.8	A08	P
6CB5A	721 441 370 0000	80	521 441 350	A	6.3	[0 30	75 175	150 125	460 90]	8.8	A08	P
6CB6	412 387 100 0000	00	412 365 100		6.3	1	150	125	13	8	B7G	P
6CB6A			412 365 100		6.3	2	200	150	9.5	6.2	B7G	P
6CC10	481 581 230 0000	00	461 471 230		6.3	9	250		6.5	2.2	B8A	TT
6CC31	882 354 100 0000	00	672 344 100		6.3		200		6	3	B7G	TT
6CC40	841 238 510 0000	00	641 237 410		6.3	8.5	250		10.5	2.2	B9A	TT
6CC41	851 238 410 0000	00	741 236 410		6.3	1.5	250		2.3	2	B9A	TT
6CC42	214 808 513 0000	00	214 607 413		6.3	2	150		8	5.2	B9A	TT
6CC43	841 238 510 0000	00	641 237 410		6.3	2.3	250		10	5.9	B9A	TT
6CD6	021 040 370 0000	80	021 040 350	A1	6.3	30	200	175	75	7.7	A08	P
6CK6G			021 040 350		6.3	30	200	150	64	6.7	A08	P
6CD6GA	021 040 370 0000	80	021 040 350	A	6.3	30	175	175	75	7.7	B8G	P
6CD7	028 748 310 0000	00	026 546 310		6.3	[4.2 12.5	250 250	250 250	1	†1.0]	A08	TI
6CE3	200 900 100 9030	00			6.3				180		A12	R
6CE5	412 387 100 0000	00	412 365 100		6.3	1	200	125	11	7.6	B7G	P
6CF5	402 387 100 0000	00	402 365 100		6.3		150	125	11	7.6	B7G	P
6CF6	412 387 100 0000	00	412 365 100		6.3	1	200	125	12	7.8	B7G	P
6CF8	701 238 014 0000	00	501 236 014		6.3	2	250	150	3	1.85	B9A	P
6CG6	412 387 100 0000	00	412 365 100		6.3	8	250	150	9	2	B7G	P
6CG7	841 238 510 0000	00	641 237 410		6.3	8	250		9	2.6	B9A	TT
6CG8	481 238 715 0000	00	461 237 514		6.3	[2	100 250	150	8.5 7.7	5.8 4.6]	B9A	TP
6CH3	090 230 901 0000	00	080 230 801		6.3				180		B9A	R
6CH6	041 230 871 0000	00	041 230 651		6.3	4.5	250	250	40	11	B9A	P
6CH7	851 238 410 0000	00	741 236 410		6.3	2.2	150		10	6.8	B9A	TT
6CH8	187 321 548 0000	00	175 321 446		6.3	[2 2.2	200 200	150	13 9.5	3.3 6.3]	B9A	TP
6CH40	751 238 584 0000	00	541 237 464		6.3	[2	100 250	100	4.5 10	3.2]	B9A	TH
6CJ3	080 230 801 0000	00	060 230 601		6.3		16		350			R
6CJ5	280 074 130 0000	00	260 054 130		6.3	2.5	250	100	6	2.2	B8A	P
6CJ6	041 230 071 0000	80	041 230 051	A1	6.3		200	200	45	6.2	B9A	P
6CK3	080 230 801 0000	00	060 230 601		6.3		16		350			R
6CK4	424 080 310 0000	00	424 060 310		6.3	28	250		40	5.5	A08	T
6CK5	281 074 130 0000	00	261 054 130		6.3	7	250	250	36	10	B8A	P
6CK6	741 231 800 0000	00	541 231 600		6.3	5.5	250	250	36	10	B9A	P
6CL3	080 230 801 1000	00	060 230 601		6.3		16		350		B9A	R
6CL5	721 441 370 0000	80	521 441 350	A1	6.3	40	150	150	80	6.3	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6CL6	147 238 174 0000	00	145 236 154		6.3	3	250	150	30	11	B9A	P
6CL8	481 238 715 0000	00	461 237 514		6.3	0.8 1.0	150 150	 125	150 12	8 5.8	B9A	TP
6CM4	841 234 148 0000	00	641 234 146		6.3		200		12	14	B9A	T
6CM5	020 740 310 0000	00	020 540 310		6.3	7	250	250	72	14	A08	P
6CM6	704 234 108 0000	00	504 234 106		6.3	12.5	250	250	45	4.1	B9A	P
6CM7	801 238 451 0000	00	701 236 441		6.3	7 8	200 250		5 20	2 4.4	B9A	TT
6CM8	851 238 714 0000	00	641 237 514		6.3	2	250 200	 150	1.8 9.5	2 6.2	B9A	TP
6CN5	028 740 310 0000	00	026 540 310		6.3	18	350	250	66	5.2	A08	P
6CN6	120 740 310 0000	00	120 540 310		6.3	7	250	250	100	14.3	A08	P
6CN7	X91 331 482 0000	00	981 331 462		3	3	250		1	1.2	B7G	DDT
6CQ4	001 090 230 0000	00	**1 080 230		6.3				180		A08	R
6CQ6	412 381 700 0000	00	412 361 500		6.3	2.5	250	200	8	2.5	B7G	P
6CQ8	857 238 114 0000	00	645 237 114		6.3	0.8 1	150 150	 125	15 12	8 5.8	B9A	TP
6CR4	414 484 234 0000	00	414 464 234		6.3	1	150		16	6	B9A	T
6CR5	174 231 741 0000	80	154 231 541	A1	6.3	22.5	250	150	65	6	B9A	P
6CR6	192 387 400 0000	00	182 365 400		6.3	2	250	100	9.5	2	B7G	DT
6CR8	851 238 714 0000	00	641 237 514		6.3	2	150 150	 125	12 13	4 7.7	B9A	TP
6CS5	714 234 108 0000	00	514 234 1*6		6.3	10	200	125	47	8	B9A	P
6CS6	412 387 100 0000	00	412 365 100		6.3	1	100	30	1	1.1	B7G	H
6CS7	805 238 411 0000	00	604 237 411		6.3	8.5 10.6	250 250		10.5 19	2.2 4.5	B9A	TT
6CS8	841 238 714 0000	00	641 237 514		6.3	2 0.9	150 150	 125	12 13	4 7.7	B9A	TP
6CT3	080 238 001 0000	00	060 236 001		6.3		16		350		B9A	R
6CT7	289 174 130 0000	00	268 154 130		6.3	2	250	100	5	1.8	B8A	DP
6CU5	142 347 800 0000	00	142 345 600		6.3	8	125	100	50	7.5	B8G	P
6CU6	020 740 310 0000	80	020 540 310	A1	6.3	22.5	250	150	57	5.5	A08	P
6CU7	288 475 130 0000 280 575 130 0000	00	276 454 130		6.3	2 2	100 250	 100	5 8	2 2	B8A	TH
6CU8	187 231 548 0000	00	175 231 446		6.3	6 2.2	200 200	 150	13 9.5	3.3 6.2	B9A	TP
6CV7	284 09X 130 0000	00	264 089 130		6.3	3	250		1	1.3	B8A	DDT
6CW4	080 400 010 2030	00			6.3	1	100		7.6	9.8	NV5	T
6CW5	041 230 807 0000	00	*41 23* 6*5		6.3	12.5	200	175	70	10	B9A	P
6CW7	148 235 118 0000	00	147 234 116		6.3	1.5	90		12	6	B9A	TT
6CX7	841 238 511 0000	00	641 237 411		6.3	2	150		9	6.4	B9A	TT
6CX8	148 231 578 0000	00	146 231 457		6.3	1.5 2	150 200	 125	9 24	4.6 10	B9A	TP
6CY5	412 387 100 0000	00	412 365 100		6.3	1	150	75	10	8	B7G	P
6CY7	805 238 411 0000	00	714 236 411		6.3	3 18.5	250 150		1.2 30	1.3 5.4	B9A	TT
6CZ5	704 234 108 0000	00	504 234 1*6		6.3	14	250	250	46	4.8	B9A	P
6D1	213 000 000 0000	90	123 000 000	D1	6.3						B3G	D
6D2	1X2 310 900 0000	00	192 310 800		6.3						B7G	RR
6D3	912 390 000 0000	00	812 380 000		6.3						B7G	R
6D4	402 310 000 0000	00	402 310 000		6.3	110	18		100		B7G	T
6D5	028 040 310 0000	00	026 040 310		6.3	40	300		31	2.1	A08	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6D6	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	2	1.2	Sm7	P
6D7	287 101 300 0000	00	265 101 300		6.3	3	250	100	2	12.2	A08	P
6D8	029 748 310 0000	5	027 546 310	G1	6.3	[3	150 250	100	4.2 3.5	]	A08	H
6D10	281 181 506 8430	00			6.3	1.0	125		4.2	4.2	A12	TTP
6DA4	001 090 230 0000	00	**1 080 230		6.3				120		A08	R
6DA6	041 230 871 0000	00	041 230 651		6.3	2	250	100	9	3.6	B9A	P
6DA7	805 238 411 0000	00	604 237 411		6.3	[8 17.5	250 150		9 40	2.6 5.7	] B9A	TT
6DB5	714 234 108 0000	00	514 234 1*6		6.3	9.6	200	125	46	8	B9A	P
6DB6	412 387 100 0000	00	412 365 100		6.3	1	150	150	5.8	2	B7G	P
6DC6	412 387 100 0000	00	412 365 100		6.3	2.2	200	150	9.5	5.5	B7G	P
6DC8	741 238 8X1 0000	00	541 236 891		6.3	2	250	100	9	3.8	B9A	DDP
6DDHV1	157 238 984 0000	00	145 237 864		6.3	[2 1	250 250	100	90 9	1.6 3.5	] B9A	DTP
6DE4	001 090 230 0000	00	001 080 230		6.3				120		A08	R
6DE6	412 387 100 0000	00	412 365 100		6.3	1.1	150	125	16	8	B7G	P
6DE7	855 238 411 0000	00	744 236 411		6.3	[17.5 11	150 250		32 5.5	6.5 2	] B9A	TT
6DG6	028 740 310 0000	00	026 540 310		6.3	7.5	200	125	47	8	A08	P
6DG7	041 230 871 0000	00	041 230 651		6.3	20	250	100	11	4.4	B9A	P
6DJ8	841 238 511 0000	00	641 237 411		6.3	1.3	90		15	12.5	B9A	TT
6DK6	412 387 100 0000	00	412 365 100		6.3	0.9	150	125	12	9.8	B7G	P
6DL4	414 234 484 0000	00	414 234 464		6.3		150		12.5	14	B9A	T
6DL5	412 387 400 0000	00	412 365 400		6.3	7.3	250	225	26	5.5	B7G	P
6DM4	001 090 230 0000	00	001 080 230		6.3				180		A08	R
6DN3	080 230 801 0000	00	060 230 601		6.3		14		350		B9A	R
6DN6	021 040 370 0000	80	021 040 350	A1	6.3	18	200	125	70	9	A08	P
6DN7	481 581 230 0000	00	461 471 230		6.3	9.5	250		34	7.4	A08	TT
6DQ4	001 090 230 0000	00			6.3				120		A08	R
6DQ5	421 741 370 0000	80	421 541 350	A1	6.3	25	175	125	110	10.5	A08	P
6DQ6	020 740 310 0000	80	020 540 310	A1	6.3	22.5	250	150	75	6.6	A08	P
6DQ8	481 238 141 0000	00	461 237 141		6.3	[1.7 2.1	200 200	175	3 18	11 6.5	] B9A	TP
6DR4	123 000 000 0000	90	123 000 000	D1	6.3						B3G	D
6DR6	041 230 071 0000	00	*41 23* *51		6.3	23	200	175	45	6.6	B9A	P
6DR7	855 238 411 0000	00	644 237 411		6.3	[17.5 3	150 250		35 1.4	6.5 1.6	] B9A	TT
6DR8	741 238 9X1 0000	00	541 236 891		6.3		12	12	45		B9A	DDP
6DS4	080 400 010 2030	00			6.3	0.9	100		6.5	9	NU5	T
6DS5	412 387 100 0000	00	412 365 100		6.3	8.5	250	200	29	5.8	B7G	P
6DS8	751 238 184 0000	00	541 237 164		6.3	[	12 12	12	0.7 0.4	1.4 0.7	] B9A	TP
6DT5	704 230 108 0000	00	504 230 1*6		6.3	16.5	250	250	38	6.5	B9A	P
6DT6	412 387 100 0000	00	412 365 100		6.3	2.2	150	100	11	0.8	B7G	P
6DT6A	412 387 100 0000	00	412 365 100		6.3	5.2	150	100	1.55	1.35	G7-1	P
6DT8	851 238 410 0000	00	741 236 410		6.3	2.5	250		10	5.5	B9A	TT
6DV4	880 404 100 2030	00			6.3	1	75		10.5	11.5	NV7	T
6DW4	090 230 901 0000	00	*8* 23* 8*1		6.3				180		B9D	R
6DW4B	080 230 801 0000	00	060 230 601		6.3		25		350			R
6DW5	704 234 108 0000	00	504 234 106		6.3	22.5	200	150	55	5.5	B9A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6DX8	481 238 157 0000	00	461 237 145		6.3	[1.7 2	200 170	170	3 18	4 10.4]	B9A	TP
6DY7	041 230 807 0000	00	041 230 605		6.3	12.5	250	150	50	6	B9A	P
6DZ4	842 314 800 0000	00	642 314 600		6.3	0.3	75		15	6.7	B7G	T
6DZ7	428 718 310 0000	00	426 517 310		6.3	7.3	250	250	48	11.3	A08	PP
6DZ8	415 238 718 0000	00	414 237 516		6.3	[	150 150	125	0.8 45	1.4 7.5]	B9A	TP
6E4	751 238 584 0000	00	541 237 464		6.3	2.6	200 200	100	5.4 3.7		B9A	TH
6E5	284 713 000 0000	00	264 513 000		6.3	7.5	250	250	0.2	†1.0	UX6	TI
6E6	285 148 300 0000	00	274 146 300		6.3	27.5	250		18	1.7	UX7	TT
6E7	287 101 300 0000	40	265 101 300	G1	6.3	2	250	100	8.2	1.6	Sm7	P
6E8	[020 748 310 0000 028 740 310 0000	50 50]	027 546 310	G1	6.3	[4.8 2.3	150 250	100	3.3 2.3	2.8 3.5]	A08	TH
6E102	802 310 470 0000	00	602 301 450		6.3	7	250	250	72	15	F8	P
6EA5	412 387 100 0000	00	412 365 100		6.3	1	250	150	10	8	B7G	P
6EA6	481 581 230 0000	00	461 471 230		6.3	25	200		48	6.5	A08	TT
6EA7	481 581 230 0000	00	461 471 230		6.3	25	200		48	6.5	A08	TT
6EA8	857 238 114 0000	00	645 237 114		6.3	[1 1	150 125	125	18 12	8.5 6.4]	B9A	TP
6EB5	192 310 X00 0000	00	182 310 900		6.3				7		B9G	DD
6EB8	148 231 578 0000	00	146 231 457		6.3	[2 2	250 200	125	2 25	2.7 12]	B9A	TP
6EF6	028 740 310 0000	00	026 540 310		6.3	18	250	250	50	5	A08	P
6EH5	142 347 800 0000	00	142 345 600		6.3	3.2	100	125	42	14.6	B7G	P
6EH6	412 387 100 0000	00	412 365 100		6.3	1	250	150	7.4	4.6	B7G	P
6EH7	141 230 871 0000	00	141 230 651		6.3	2	200	90	12	12.5	B9A	P
6EH8	148 231 578 0000	00	146 231 457		6.3	[1 1	150 150	125	13 12	7.5 6]	B9A	TP
6EJ7	141 230 871 0000	00	141 230 651		6.3	2.5	200	200	10	15	B9A	P
6EL7	141 230 871 0000	00	141 230 651		6.3	1.8	200	175	10	8.8	B9A	P
6EM5	704 234 108 0000	00	504 234 106		6.3	18	250	250	35	5.1	B9A	P
6EM7	581 481 230 0000	00	471 461 230		6.3	[3 20	250 150		1.4 50	1.6 7.2]	A08	TT
6EQ7	141 237 890 0000	00	141 235 680		6.3		100	100	9	3.9	B9A	DP
6ER5	142 381 010 0000	00	142 361 *10		6.3	1.2	200		10	10.5	B7G	T
6ES5	142 380 100 0000	00	142 360 100		6.3	1	200		15	9.5	B7G	P
6ES6	412 387 100 0000	00	412 365 100		6.3	0.7	12	12			B9A	P
6ES8	841 238 510 0000	00	641 237 410		6.3	1.2	90		15	12.5	B9A	TT
6ET6	412 387 100 0000	00	412 365 100		6.3	1	12	12	4.8	3	B7G	P
6ET7	19X 231 478 0000	00	189 231 456		6.3		200	150	25	11.5	B9A	DDP
6EU7	230 148 851 0000	00	230 146 741		6.3	2	250		1.2	1.6	B9A	TT
6EU8	848 231 517 0000	00	746 231 415		6.3	[1 1	150 150	100	18 12	8.5 6.4]	B9A	TP
6EV5	412 387 100 0000	00	412 365 100		6.3		200	80	11.5	8.8	B7G	P
6EV6	841 238 510 0000	00	641 237 410		6.3	2	250		9.2	5.2	B9A	TT
6EV7	841 238 510 0000	00	641 237 410		6.3	2.0	250		9.2	5.2	B9A	TT
6EW6	412 387 100 0000	00	412 365 100		6.3	0.8	150	125	11	14	B7G	P
6EW7	855 238 411 0000	00	744 236 411		6.3	[17.5 11	150 250		45 5.5	7.5 2]	B9A	TT
6EX4	902 30X 100 0000	00	802 309 100		6.3				30		B9A	RR
6EX6	021 040 370 0000	80	021 040 350	A1	6.3		200	150	67	7.7	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
6EY6	028 740 310 0000	00	026 540 310		6.3	17.5	250	250	44	4.4	A08	P
6EZ5	028 740 310 0000	00	026 540 310		6.3	20	250	250	43	4.1	B8A	P
6EZ8	168 238 584 0000	00	14† 237 464		6.3	1	150		4.2	4.2	B9A	TTT
6F1	281 714 130 0000	00	261 514 130		6.3	1.8	200	200	10	9	B8A	P
6F5	020 800 310 0000	40	020 600 310	G1	6.3	2	250		0.9	1.5	A08	T
6F6	028 740 310 0000	00	026 540 310		6.3	16.5	250	250	34	2.5	A08	P
6F7	287 841 300 0000	50	275 641 300	G1	6.3	[3 3	100 100	 100	3.5 6.3	0.5 1]	Sm7	TP
6F7B	297 841 300 0000	50	275 641 300	G1	6.3	[3 3	100 100	 100	3.5 6.3	0.5 1]	UX7	TP
6F7M	023 878 410 0000	50	275 641 300	G1	6.3	[3 3	100 100	 100	3.5 6.3	0.5 1]	UX7	TP
6F8	028 158 310 0000	40	027 146 310	G1	6.3	8	250		9	2.6	A08	TT
6F10	021 417 380 0000	00	021 415 360		6.3	2	300	150	10	9	A08	P
6F11	280 174 130 0000	00	260 154 130		6.3	1.8	250	100	4.4	2.2	B8A	P
ξ 6F12	412 381 700 0000	00	412 361 500		6.3	[2 1.5	250 200	250 150	10 4	7.5 6.4]	B7G	P
6F13	280 174 130 0000	00	260 154 130		6.3	1.8	200	200	10	9	B8A	P
6F14	280 174 130 0000	00	260 154 130		6.3	1.25	150	150	28	10.6	B8A	P
6F15	281 174 130 0000	00	261 154 130		6.3	2.5	250	100	7	2.3	B8A	P
6F16	281 174 130 0000	00	261 154 130		6.3	2.5	250	100	6	2.2	B8A	P
6F17	412 381 700 0000	00	412 361 500		6.3	5	100	100	12.5	4.0	B7G	P
6F18	141 230 871 0000	00	141 230 651		6.3	1.3	200	100	12	4.5	B9A	P
6F19	141 230 871 0000	00	141 230 651		6.3	2	250	100	10	6	B9A	P
6F20	141 230 871 0000	00	141 230 651		6.3	2	200	175	10	6	B9A	P
6F21	412 381 700 0000	00	412 361 500		6.3	2.5	250	200	7.8	2.5	B7G	P
6F22	701 238 014 0000	00	501 236 014		6.3	2	250	150	3	1.8	B9A	P
6F23	141 231 871 0000	00	141 230 650		6.3	1.9	150	150	10	9.2	B9A	P
6F24	141 230 871 0000	00	141 230 651		6.3	1.9	170	170	10	15	B9A	P
6F25	141 230 871 0000	00	141 230 651		6.3	1.5	200	100	11.5	12.5	B9A	P
6F26	141 230 871 0000	00	141 230 651		6.3	2	250	100	10	6	B9A	P
6F28	141 234 870 0000	00	*41 234 650		6.3	2.9	200	200	10	12.5	B9A	P
6F29	141 230 871 0000	00	141 230 651		6.3	2	200	90	12	12.5	B9A	P
6F30	141 230 871 0000	00	141 239 651		6.3	2.5	200	200	10	15.4	B9A	P
6F31	412 387 100 0000	00	412 365 100		6.3	1	250	100	11	4.2	B7G	P
6F32	412 387 100 0000	00	412 365 100		6.3		200	125	8	4.6	B7G	P
6F32	218 710 030 0000	40	216 510 030	G1	6.3	4.5	200	200	5.1	3	M08	P
6F32V	412 387 000 0000	00	412 365 000		6.3	3	150	150	7	4.3	B7G	P
6F33	412 381 700 0000	00	412 361 500		6.3	2	125	125	5.2	3.5	B7G	P
6F35	412 387 100 0000	00	412 365 100		6.3		40	30	2.7	2.7	B7G	P
6F36	412 387 100 0000	00	412 365 100		6.3		300	150	10	9	B7G	P
6F40	111 231 874 0000	00	111 231 654		6.3	2	250	150	3	2	B9A	P
6F41	141 230 871 0000	00	141 230 651		6.3	2.0	150	150	10	7.4	B9A	P
6F60	041 230 887 0000	00	041 230 665		6.3	23	250	200	55	5	B9A	P
6F80	741 231 800 0000	00	541 231 600		6.3		200	200	36	10	B9A	P
6FA7	941 238 741		841 236 541		6.3	[0 0	100 100	100 100	2.2 3.8	1.9 3.2]	B9A	DPP
6FC7	148 235 018 0000	00	146 234 017		6.3	1.2	90		15	12	B9A	TT
6FD6	412 387 100 0000	00	412 365 100		6.3		12	12		1.4	B7G	P
6FD7	855 238 411 0000	00	644 237 411		6.3	[17.5	150 250		45 6	7.5 1.6]	B9A	TT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6FD12	741 238 9X1 0000	00	541 236 891		6.3	2	250	100	9	3.8	B9A	DDP
6FE5	028 740 310 0000	00	026 540 310		6.3	12.5	100	100	94	9.5	A08	P
6FG5	412 387 100 0000	00	412 365 100		6.3	0.2	250	250	9	9.5	B7G	P
6FG6	401 237 805 0000	00	401 235 607		6.0	22	250	250	0.5	†0.5	B9A	TI
6FG7	481 238 715 0000	00	461 237 514		6.3	1 1	125 125	 125	13 11	7.5 6	B9A	TP
6FH5	142 380 100 0000	00	142 365 100		6.3	1	150		11	9	B7G	T
6FH6	020 740 310 0000	80	020 540 310	A1	6.3	22.5	250	150	75	6	A08	P
6FJ7	204 080 101 5830	00	204 060 101		6.3	8 9.5	250 250		8 41	2.5 7.7	A12	TT
6FJ8	210 741 390 0000	80	210 541 380	A1	6.3	22.5	250	150	75	6.6	A08	DP
6FLD12	741 238 9X1 0000	00	541 236 891		19	2	250	100	9	3.8	B9A	DDP
6FM7	205 080 151 4830	00	204 060 141		6.3	3 25	250 175		2 40	2.2 6	•A12	TT
6FM8	191 23X 148 0000	00	181 239 146		6.3	3	250		1	1.2	B9A	DDT
6FN5	721 441 370 0000	00	521 441 350		6.3	22.5	200	150	100	10	B8A	P
6FQ5	142 380 100 0000	00	142 360 100		6.3	1.2	150		11	11	B7G	T
6FQ7	841 238 510 0000	00	741 236 410		6.3	8	250		9	2.6	B9A	TT
6FR7	855 238 411 0000	00	644 237 411		6.3	3 20	250 150		1.4 50	6.8 5.4	B9A	TT
6FS5	412 387 100 0000	00	412 365 100		6.3	0.2	300	150	9	10	B7G	P
6FV6	402 387 100 0000	00	402 365 100		6.3	1	150	75	10	8	B9A	P
6FV8	481 238 715 0000	00	461 237 514		6.3	1 1	150 150	 125	14 12	8 6.5	B9A	TP
6FW5	421 080 370 0000	00	421 060 350		6.3	22.5	250	150	65	7.3	A08	P
6FW8	851 238 410 0000	00	741 236 410		6.3	1.2	100		15	13	B9A	TT
6FX4	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
6FY5	142 380 100 0000	00	142 360 100		6.3	1	150		11	13	B9A	T
6FY7	205 080 101 4830	00	205 080 101		6.3	3 17.5	250 150		1.4 35	1.6 6.5	A12	TT
6FY8	415 238 718 0000	00	414 237 516		6.3	1.5 13.5	125 125	 125	2.5 50	2 7	B9A	TP
6G5	284 713 000 0000	00	264 513 000		6.3	22	250	250	0.2	†1.0	UX6	TI
6G6	028 740 310 0000	00	026 540 310		6.3	9	200	175	15	2.3	A08	P
6G7	028 X97 310 0000	40	026 985 310	G1	6.3	3	250	125	10	1.3	A08	DDP
6G8	028 X97 310 0000	40	026 985 310	G1	6.3	3	250	125	9	1.1	A08	DDP
6G11	215 108 741 7830	00	214 106 541		6.3	8 1.8	125 150	100 100	49 1.3	7.5 1.0	A12	PP
6GA4	028 040 310 0000	00	026 040 310		6.3	18.5	250		50	7	A08	T
6GA7	277 410 810 0930	00	255 410 610		6.3	22.5	250	150	120 75	6.6	A12	RP
6GA8	841 238 510 0000	00	641 237 410		6.3		250		8		B9A	TT
6GA8	428 040 310 0000	00	426 040 310		6.3	18.5	250		50	7	A08	T
6GB3	030 740 310 0000	80	020 540 310	A1	6.3	7.7	100	100	100	14	A08	P
6GB5			441 235 51*	A1	6.3	20	150	150	70	10	B9A	P
6GB6	020 740 310 0000	80	020 540 310	A1	6.3	22.5	250	150	6.5	6	A08	P
6GB7	020 740 310 0000	80	020 540 310	A1	6.3	7.7	100	100	100	14	A08	P
6GB9	020 740 310 0000	80	020 540 310	A1	6.3	22.5	250	150	75	6.6	A08	P
6GC5	714 234 178 0000	00	514 234 156		6.3	7.5	100	100	50	8	B9D	P
6GC6	021 740 370 0000	80	021 540 350	A1	6.3	22.5	250	150	75	6.6	A08	P
6GD7	481 238 715 0000	00	481 238 715		6.3	1 1	125 175	 150	15 10	10 12	B9A	TP
6GE5	274 100 800 1430	00			6.3	22.5	250	150	65	7.3	A12	P
6GE7	028 47X 310 0000	00	026 457 310	A	6.3	5	250	250			A08	
6GE8	714 238 15[illegible] 0000	00	514 236 147		6.3	21 2	150 150	 150	35 5.5	5 3.2	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6GF5	274 100 800 1430	00	254 100 600		6.3	26.5	250	150	34	4.7	A12	P
6GF7	151 238 084 0000	00	141 237 064		6.3	3 20	250 150		1.4 50	1.6 7.2	B9D	TT
6GF7A	141 23X 095 0000	80	141 239 084	A	6.3	3 20	250 150	1.4 50			B9D	TT
6GG6	902 300 1X0 0000	00	802 300 190		6.3				30		F8	RR
6GH8	857 238 114 0000	00	645 237 114		6.3	1 1	150 150	125	13.5 12	8.5 7.5	B9A	TP
6GH8A	847 238 114 0000	00	645 237 114		6.3	1 1	125 125	125	13.5 12.0	8.5 7.5	B9A	TP
6GJ5	741 234 700 0000	80	541 234 5**	A1	6.3	22.5	250	150	70	7.1		
6GJ5A	741 234 700 0000	80	541 234 500	A	6.3	22.5	250	150	70	7.1	B9A	P
6GJ7	151 238 784 0000	00	141 236 574		6.3	3 1.2	100 200	200	15 10	9 11	B9A	TP
6GJ8	857 238 114 0000	00	645 237 114		6.3	1 1	150 125	125	13.5 12	8.5 7.5	B9A	TP
6GK5	142 380 100 0000	00	142 360 100		6.3	1	150		11.5	15	B7G	T
6GK6	141 230 871 0000	00	141 230 651		6.3	7.3	250	250	48	11.3	B9A	P
6GK17	001 090 230 0000	00	001 080 230		6.3						A08	R
6GL7	481 481 230 0000	00	471 461 230		6.3	3	250		2.0	2.2	B8B	TT
6GM5	700 234 108 0000	00	500 234 106		6.3	10	300	300	60	10.2	B9A	P
6GM6	412 387 100 0000	00	412 365 100		6.3	2	125	125	14	2.6	B7G	P
6GM8			641 237 410		6.3	0.3	12		2.4	4.6	B9A	TT
6GN6	412 387 900 0000	00	412 365 800		6.3	68	250	100	11	4.4	B7G	DP
6GN8	148 231 578 0000	00	146 231 457		6.3	2 3	250 200	150	2 25	2.7 11.5	B9A	TP
6GQ7	1Y0 23X 191 0000	00	1†* 239 181		6.3				5		B9A	DDD
6GS8	170 231 481 0000 178 231 501 0000	00 00	156 231 471		6.3	0.5	100	75	2	1.2	B9A	PP
6GT5	741 234 708 0000	00	541 234 5*6		6.3	42	250	150	70	7.1	B9D	P
6GT5A	741 234 708 0000	00	541 234 506		6.3	22.5	250	150	70	7.1	B9A	TP
6GU5	412 387 100 0000	00	412 365 100		6.3	0.4	150	150	9	15	B7G	P
6GU7	851 238 410 0000	00	641 237 410		6.3	10.5	250		11.5	3.1	B9A	TT
6GV5	207 140 704 173	80	205 140 504		6.3	22.5	250	150	65	7.3	A12	P
6GV7	878 231 514 0000	00	657 231 414		6.3	1.5	100 150	150	14 11	5.5 11	B9A	TP
6GV8	841 238 715 0000	00	641 237 514		6.3	0.6 15	100 200	175	5 41	6.5 7.5	B9A	TP
6GW5	842 314 100 0000	00	642 314 100		6.3	1	150		13	15	B7G	T
6GW6	020 740 310 0000	80	020 540 310		6.3	22.5	250	150	70	7.1	A08	P
6GW8	417 238 158 0000	00	415 237 146		6.3	1.7 7	250 250	250	1.2 36	1.6 10	B9A	TP
6GX6	412 387 100 0000	00	412 365 100		6.3		150	100	3.7	3.7	G7G	P
6GX7	151 238 784 0000	00	141 237 564		6.3	1	125	125	8	11	B9A	TP
6GY5	207 140 704 1730	80	2*5 140 504		6.3	20	125	125	50	9.1	A12	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6H1	412 380 700 0000	00	412 360 500		6.3	1.8	250	100		2.1	B7G	H
6H4	020 900 310 0000	00	020 800 310		6.3						A08	D
6H5	284 713 000 0000	00	264 513 000		6.3	22	250	250	0.2	†1.0	UX6	TI
6H6	02X 190 310 0000	00	029 180 310		6.3						A08	DD
6H7C	028 458 310 0000	00	026 447 310		6.3	5	250		3	1.6	A08	TT
6H7G	128 458 310 0000	00	126 447 310		6.3		300		35	3.2	A08	TT
6H8C	481 581 230 0000	00	461 471 230		6.3	8	250		9	3	A08	TT
6H8G	028 X97 310 0000	40	026 985 310	G1	6.3	2	250	125	8.5	2.4	A08	DDI
6H8MG	028 X97 310 0000	40	026 985 310	G1	6.3	2	250	125	6	1.8	A08	DDI
6H9C	481 581 230 0000	00	461 471 230		6.3	2	250		2.2	1.6	A08	TT
6H10C	084 581 230 0000	00	064 471 230		6.3	2	250		2	1.3	A08	TT
6H13C	481 581 230 0000	00	461 471 230		6.3	30	90		80	5	A08	TT
6H31	412 387 100 0000	00	412 365 100		6.3		250	100	3		B7G	H
6HA5	412 380 100 0000	00	412 360 100		6.3	1	150		11.5	14.5	B7G	T
6HB5	274 100 800 1430	00	254 100 600		6.3	20	125	125	50	9.1	A12	P
6HB6	141 230 871 0000	00	141 230 651		6.3	33	250	125	40	24	B9A	P
6HB7	151 238 784 0000	00	141 236 574		6.3	[1 1	150 125	125	18 12	8.5 6.4]	B9A	TP
6HC8	415 238 718 0000	00	414 237 516		6.3	[3 18	250 250	250	1.4 38	2 5.1]	B9A	TP
6HD5	207 140 804 1730	00			6.3	22	150	150	65	10	A12	P
6HE5	243 108 004 7130	00			6.3	20	250	250	43	4.1	A12	P
6HE7	290 180 014 0730	00			6.3	[22	125	125	120 60	8.8]	A12	RP
6HF5	207 147 074 1730	80			6.3	28	175	175	100	11	A12	P
6HF8	148 231 578 0000	00	146 231 457		6.3	[2	200 200	125	4 25	4 12.5]	B9A	TP
6HG5	*SEE 6AQ5*											
6HG8	151 234 887 0000	00	141 234 675		6.3	[3 1.2	100 200	150	14 10	6 12]	B9A	TP
6HJ8	147 238 191 0000	00	145 236 181		6.3	6	150	125	11.5	9.3	B9A	DP
6HK5	412 380 100 0000	00	412 360 100		6.3	1	150		12.5	15	B7G	T
6HK8	841 238 510 0000	00	641 237 410		6.3	1	90		8.5	8	B9A	TT
6HL8	857 238 114 0000	00	645 237 114		6.3	[1 1	125 125	125	12.5 12	7 10]	B9A	TP
6HM5	412 380 100 0000	00	412 360 100		6.3	1.2	150		12.5	14.5	B7G	T
6HM6	141 230 871 0000	00	141 230 651		6.3	3.9	125	125	13	15	B9A	P
6HQ5	412 381 100 0000	00	412 361 100		6.3	1	150		11.5	15	B7G	T
6HR6	412 387 100 0000	00	412 365 100		6.3	1.2	200	100	13.2	8.5	B7G	P
6HS6	412 387 100 0000	00	412 365 100		6.3	0.8	150	75	8.8	9.5	B7G	P
6HS8	[178 231 401 0000 170 231 581 0000	00 00]	157 231 461		6.3	0	100	75	2	0.4	B9A	PP
6HU8	748 235 187 0000	00	546 234 175		6.3	9	250	250	24	6	B9A	PP
6HW8	187 234 181 0000	00	165 234 161		6.3	3.5	250	250	13	4	B9A	P
6HZ6	412 387 100 0000	00	412 387 100		6.3	1.1	150	100	3.2	3.4	B7G	P
6HZ8	148 231 578 0000	00	146 231 457		6.3	[2	200 250	175	3.5 29	4 12.6]	B9A	TP
6J4	412 344 800 0000	00	412 344 600		6.3	1.5	150		15	12	B7G	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6J5	028 040 310 0000	00	026 040 310		6.3	8	250		9	2.6	A08	T
6J6	882 345 100 0000	00	762 344 100		6.3	3	150		5	4.5	B7G	TT
6J7	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	2	1.2	A08	P
6J8	020 048 310 0000 028 740 310 0000	50 50	027 546 310	G1	6.3	3 3	100 100	 100	3 1.3	1.6 1.2	A08	TH
6J9	861 238 485 0000	00	641 236 464		6.3	1	125		6	5.2	A10	TTT
6J10	271 807 518 0430	00			6.3	3 8	100 250	100 250	 35	9 6.5	A12	PP
6J11	278 041 718 0530	00			6.3	0.8	125	125	11	13	A12	PP
6JA8	148 231 578 0000	00	146 231 457		6.3	2 1.5	150 150	 150	1 18	1.5 13	B9A	TP
6JB6	741 234 710 0000	80	541 234 51*	A1	6.3	22.5	250	150	70	7.1	B9D	P
6JB8	857 238 114 0000	00	645 237 114		6.3	8.5 3	250 250	 100	10.5 3	2.2 1.6	B9A	TP
6JC8	157 238 148 0000	00	145 237 146		6.3	1 1	150 150	 125	12 9	6.5 5.5	B9A	TP
6JD5	247 100 800 7430	00			6.3	10	125	125	1.0	55	A12	T
6JD6	141 230 878 0000	00	141 230 656		6.3	0	125	125	15	14	B9A	P
6JE6	741 234 710 0000	80	541 234 51*	A1	6.3	25	150	100	100	10	B9D	P
6JE8	148 231 578 0000	00	146 231 457		6.3	2 2	200 200	 175	4.5 22	4.2 12	B9A	TP
6JF6	741 235 760 0000	80	541 234 550	A	6.3	20	130	125	80	10	B9D	P
6JF8	210 741 390 0000	80	210 541 380	A1	6.3	22.5	250	150	75	6.6	A08	DP
6JG6	741 231 710 0000	00	541 231 5*6		6.3	20	130	125	80	10	B9D	P
6JG6A	741 231 710 0000	00	541 231 506		6.3	20	130	125	80	10.0	B9A	P
6JH6	412 387 100 0000	00	412 387 100		6.3	1	125	125	14	8	B7G	P
6JH8	117 324 188 0000	00	115 324 166		6.3		250	250	14	4.4	B9A	P
6JK6	412 387 100 0000	00	412 365 100		6.3	0.9	125	125	11.5	18	B7G	P
6JK8	841 238 510 0000	00	741 236 410		6.3	1 1.2	100 150		5.3 10	6.8 13	B9A	TT
6JL6	412 387 100 0000	00	412 365 100		6.3	0.9	125	60	12.5	15.5	B7G	P
6JM6	217 140 000 1030	80			6.3	22.5	250	150	65	7.3	A12	P
6JN6	217 100 800 1430	00			6.3	22.5	250	150	65	7.3	A12	P
6JN8	481 238 715 0000	00	461 237 514		6.3	1 1	125 125	 125	12 13.5	7.5 8.5	B9A	TP
6JQ6	807 231 400 4000	00	605 231 100		6.3	18	140	140	25	4.2	B9A	P
6JR6	741 236 708 0000	00	541 234 506		6.3	20	50	125	45	7.0	B9A	P
6JS6	217 140 000 1730	00			6.3	27	175	125	100	11	A12	P
6JS6A	217 040 000 0730	80			6.3	25	175	125	125	11.3	A12	P
6JT6	741 231 708 0000	00	541 231 5*6		6.3	22.5	250	150	70	7.1	B9D	P
6JT6A	741 231 708 0000	00	541 231 506		6.3	22.5	250	150	70	7.1	B9A	P
6JT8	148 231 578 0000	00	146 231 457		6.3	2 1.6	250 200	 100	1.5 17	2.7 20	B9A	TP
6JU8	Z11 230 X11 0000 ZY1 230 X91 0000	00 00	810 230 910 081 230 190		6.3				5 5		B9A	DDDD
6JU8A	ZY1 230 X91 0000	00	981 230 761		6.3		10		60		B9A	DDDD
6JV8	148 231 578 0000	00	146 231 457		6.3	2 2.9	200 200	 200	4 22	4 11.5	B9A	TP
6JW8	*SEE ECF 802*											
6JZ6	217 040 000 0030	80	040 000 003		6.3	20	125	125	46	9	A12	P
6JZ8	280 805 571 4130	00			6.3	5 8	150 125	 100	5.5 46	23. 7.1	A12	TP
6K1P	412 387 100 0000	00	412 365 100		6.3	1.5	250	100	6.5	2.0	B7G	DD
6K4P	412 387 100 0000	00	412 365 100		6.3	1.0	250	100	11	4.4	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6K5	028 000 310 0000	40	026 000 310	G1	6.3	3	250		1.1	1.4	A08	T
6K6	028 740 310 0000	00	026 540 310		6.3	18	250	250	32	2.3	A08	P
6K7	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	10.5	1.5	A08	P
6K8	020 048 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	1 3	100 250	 100	8 4	2.5 1.2	A08	TH
6K11	281 181 504 8630	00			6.3	8.5 2.5	250 250		10.5 1.2	2.2 1.6	A12	TT
6K25	028 040 310 0000	00	026 040 310		6.3		100		30	2k	A08	TH
6KA8	841 235 178 0000	00	141 237 564		6.3	3 10	250 150	 100	1.4 39	1.6 8.4	B9D	TP
6KD5	217 040 004 0730	80	215 040 004		6.3	22.5	150	110	120	14	A12	P
6KD6	217 040 004 0730	80			6.3	22.5	150	110	120	14	A12	P
6KD8	857 238 114 0000	00	645 237 114		6.3	1 1	125 125	 100	13.5 9	7.5 5	B9A	TP
6KE8	857 238 114 0000	00	645 237 114		6.3	1 0.4	125 125	 125	13 10	8 10	B9A	TP
6KF8	170 231 481 0000 178 231 501 0000	00 00	156 231 471		6.3	1	150	150	4	1	B9A	PP
6KH2P	192 310 X00 0000	00	182 310 900		6.3				5.0		B7G	RR
6KM8	889 231 478 0000	00	668 231 456		6.3		100	100	4.2	3.4	B9A	DP
6KN6	217 140 000 1030	00			6.3	20	125	125	100	16	A12	P
6KR8	148 231 578 0000	00	146 231 457		6.3	1 2	100 200	 100	15 19.5	10.4 20	B9A	TP
6KT8	148 321 578 0000	00	146 231 457		6.3	2 1	250 125	 125	1.8 12	3.2 10	B9A	TP
6KU8	1X9 231 478 0000	00	189 231 456		6.3	1.6	200	100	17	20	B9A	DD
6KV6	741 231 708 0000	00	541 231 506		6.3	25	150	150	80	9.5	B9A	P
6KV8	148 231 578 0000	00	146 231 457		6.3	1.8 1.6	200 200	 125	4 20	4 23	B9A	TP
6KY8	151 238 784 0000	00			6.3	3 10	250 150	 100	1.4 39	1.6 8.4	B9D	TP
6KZ8	851 238 715 0000	00	641 237 514		6.3	1.0 1.0	150 150	 150	13.5 12	8.5 7.5	B9A	TP
6L1	285 184 130 0000	00	274 164 130		6.3	8.6	200		10	2.8	B8A	TT
6L5	028 040 310 0000	00	026 040 310		6.3	9	250		8	1.9	A08	T
6L6	028 740 310 0000	00	026 540 310		6.3	18	350	250	54	5.2	A08	P
6L7	028 740 310 0000	40	026 540 310	G1	6.3	3	250	100	6.3	1.1	A08	H
6L10	120 417 380 0000	00	120 415 360		6.3	3	300	150	30	11	B8A	P
6L12	851 238 410 0000	00	741 236 410		6.3	2.3	250		10	5.9	B9A	TT
6L13	851 228 413 0000	00	741 226 413		6.3	2	250		1.2	1.6	B9A	TT
6L15	158 234 118 0000	00	147 234 116		6.3	1.2	90		15	9	B9A	TT
6L16	148 235 108 0000	00	146 234 107		6.3	1.5	90		12	6.2	B9A	TT
6L18	280 084 130 0000	00	260 064 130		6.3	13.3	250		12	5.5	B8A	T
6L19	285 184 130 0000	00	274 164 130		6.3	1.8	200		5	3.1	B8A	TT
6L31	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4.1	B7G	P
6L34	412 314 800 0000	00	412 314 600		6.3	1.5	250		10	9	B7G	T
6L41	801 237 144 0000	00	602 235 144		6.3	17.2	250	250	45	7	B9A	P
6L43	147 238 174 0000	00	145 236 154		6.3	3	300	150	30	11	B9A	P
6L50	214 471 130 0000	80	214 451 130	A1	6.3	12.6	200	250	70	5	B9A	P
6L50V	217 447 113 0000	80	215 445 113	A1	6.3	25	400	250	30	3.5	B9A	P
6L86	217 540 000 5730	80			6.3	20	150	110	105	13.4	A12	P
6L88	148 231 578 0000	00	146 231 456		6.3	0.9 1.6	125 200	 100	13 17	5 20	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6LC8	841 235 178 0000	00	641 234 157		6.3	[2 1.2	200 150	100	4 4	4 4.4]	B9A	TP
6LD3	284 0X9 130 0000	00	264 098 130		6.3	1.9	250		0.85	1.95	B8A	DDT
6LD12	YX1 239 148 0000	00	†91 238 146		6.3	1.0	100		0.8	1.45	B9A	DDDT
6LD13	841 239 0X0 0000	00	641 238 09*		6.3	1.9	250		0.85	1.2	B9A	DDT
6LD20	284 0X9 130 0000	00	264 098 130		6.3	5.9	250		5	2.3	B8A	DDT
6LE8	[811 230 174 0000 011 238 174 0000	00 00	] 611 230 154		6.3	2.5	100	100	8	5.8	B9A	PP
6LF8	148 231 578 0000	00	146 231 456		6.3	[2 2.5	200 100	150	4 20	4 11]	B9A	TP
6LFD12	741 238 9X1 0000	00	541 236 891		19	2	150	100	9	3.8	B9A	DDP
6LJ8	481 238 715 0000	00	461 236 514		6.3	[0.7 0.5	125 125	125	13 12	8 13]	B9A	TP
6LM8	[800 230 014 0000 047 238 100 0000	00 00	600 230 140 045 230 610]		6.3	0	[330 350	330	13.5 12	8.5 6.0]	B9A	T
6LQ8	[148 230 000 0000 000 231 478 0000	00 00	146 230 000 000 231 456]		6.9	0	[125 200	125 125	15 20	3.1 3.5]	B9A	PT
6LR6	217 140 000 1730	80			6.3	0	60	220	740	16	A12	TP
6LR8	151 238 784 0000	00	141 236 564		6.3	[4 10	250 150	125	2.3 56	3.6 9.3]	B9A	TP
6LU8	280 805 571 4130	00			6.3	[4 10	250 150	125	2.3 56	3.6 9.3]	A12	TP
6LY8	[148 230 000 0000 000 231 478 0000	00 00	146 230 000 146 230 000]		6.3	2.0	[19.5 1.0	100 0	19.5 1	20 1.7]	B9A	P
6M1	028 740 310 0000	00	026 540 310		6.3	22.5	250	250	0.2	†1.0	A08	TI
6M2	027 478 310 0000	00	*25 456 310		6.3	[4 2	250 250	250 250	0.12 0.25	†0.2 †0.1]	A08	TI
6M3	029 000 030 0000	10	*28 0*0 *30	C	6.3						A08	R
6M5	741 230 800 0000	00	541 230 600		6.3	7	250	250	36	10	B9A	P
6M6	028 740 310 0000	00	026 540 310		6.3	6	250	250	36	9.5	A08	P
6M7	028 710 310 0000	40	026 510 310	G1	6.3	2.5	250	125	10.5	3.4	A08	P
6M8	138 748 290 0000	50	137 546 280	G1	6.3	[1 3	100 100	100	0.5 8.5	1.1 1.9]	A08	DTP
6M11	267 158 841 0830	00	2*5 146 641		6.3	[2 0.8	250 150		10 11	5.5 14]	A12	TTP
6M40	410 230 807 0000	00	410 230 605		6.3	20	250		0.5	†1.0	B9A	TI
6MB8	481 237 516 0000	00	[461 230 000 200 236 514]		6.3	0	[125 125	125	13 10	8.0 12]	B9A	T
6MD3	901 390 100 0000	00	802 380 100		6.3				10		B7G	R
6MD4	102 310 900 0000	00	102 310 800		6.3						B7G	D
6MD8	YX9 234 156 0000	00	996 234 144		6.3	10.5	250		11.5	3.1	B9A	TTT
6ME8	XY7234 168 0000	00	895 234 167		6.3	16	250		[1.3 1.3]	4.4	B9A	DT
6MF8	[280 000 000 4130 200 804 560 0030	00 00]			6.3	[4 20	250 250	0 250	2.6 50	4.1 4.1]	A12	P
6MH1	412 344 800 0000	00	412 344 600		6.3		150		14.5	13	B7G	T
6MHH3	882 345 100 0000	00	672 344 100		6.3	1	100		11	7.5	B7G	TT
6MJ8	2X1 908 040 5630	00			6.3	10.5	250		10.0	3.0	A12	TTT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6M-L2	842 384 100 0000	00	642 364 100		6.3	4.5	150		14	5	B7G	T
6M-L4	842 314 800 0000	00	642 314 600		6.3		100		17	6.5	B7G	T
6MK7	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	5	2.3	A08	P
6MK8	178 239 589 0000	00	159 231 481		6.3	0.0 5.0	100 100	67.5 63.5	0 2.0		E9-1	DP
6MN8	2Y1 X09 040 563	00			6.3	0	200 125		4.5 11.0	4.0 7.5	A12	TP
6MP2	412 387 000 0000	00	412 365 000		6.3	6	200	175	25	5.5	B7G	P
6MP17	412 387 400 0000	00	412 365 400		6.3	8	250	250	32	5.2	B7G	P
6MU8	800 230 014 0000 047 238 100 0000	00 00	600 230 014 045 236 000		0.6	0	125 150	150	11.5 9.0	6.0 9.0	B9A	TP
6N1P	841 238 410 0000	00	641 237 410		6.3	4.8	250		8	4.3	B9A	T
6N2P	841 228 413 0000	00	641 237 410		6.3	1.5	250		2.3	2	*B9A	T
6N3	001 230 009 0000	00	**1 23* **8		6.3				180		B9A	R
6N4	412 381 400 0000	00	412 361 400		6.3	3	200		12	6	B7G	T
6N5	284 713 000 0000	00	264 513 000		6.3	15.3	150	150	0.2	†1.0	UX6	TI
6N6	028 850 310 0000	00	020 610 310		6.3	0	300 300		9 42	2.5	A08	TT
6N6P	841 238 410 0000	00	641 237 410		6.3	2	125		30	10	B9A	TT
6N7	028 548 310 0000	00	027 446 310		6.3	5	250		3	1.6	A08	TT
6N7	028 710 310 0000	40	026 510 310	G1	6.3	2.5	250	125	10.5	3.4	A08	P
6N8	741 238 9X1 0000	00	541 236 891		6.3	2	250	90	5	2.2	B9A	DDP
6N15P	882 345 100 0000	00	762 344 100		6.3	2	100		8.5	5.6	B7G	TT
6NK7	028 710 310 0000	40	026 510 310	G1	6.3	2.5	250	125	10.5	3.4	A08	P
6NK8	*SEE 6R-HH8*											
6P1	028 740 310 0000	00	026 540 310		6.3	8.5	250	250	30	8.8	A08	P
6P2	412 387 100 0000	00	412 365 100		6.3	68	250	150	10.6	5.2	B7G	P
6P5	028 040 310 0000	00	026 040 310		6.3	13.5	250		5	1.25	A08	T
6P6	217 413 000 0000	80	215 413 000	A1	6.3	8	250	150	34		UX6	P
6P7	023 878 410 0000	50	023 756 410	G1	6.3	3 3	100 100	100	3.5 6.3	0.5 1	A08	TP
6P8	020 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	8	100 250	75	2.2 2.2	0.7	A08	TH
6P9	412 387 400 0000	00	412 366 400		6.3	6	250	250	30	7	B9A	P
6P15	041 230 807 0000	00	*41 23* 6*5		6.3	7.5	250	250	49	11.3	B9A	P
6P17	412 380 700 0000	00	412 360 500		6.3	13.5	250	250	16	2.6	B7G	P
6P28	020 740 310 0000	80	020 540 310	A1	6.3	8.8	350	250	72	9.5	A08	P
6P1P	871 238 417 0000	00	651 230 400		6.3	12.5	250	250	45	4.5	B9A	P
6P2P	412 387 100 0000	00	412 365 000		6.3	5.5	125	125	35	8	B7G	P
6P4P	902 310 X00 0000	00	802 310 900		6.3				30		B7G	RR
6PL12	415 238 718 0000	00	414 237 516		6.3	8.5	100 250	250	3.5 40	2.5 8.8	B9A	P
6PX6	028 740 310 0000	00	026 540 310		6.3	6	250		35	9.2	A08	P
6PZ8	028 7X9 310 0000	40	026 598 310	G1	6.3	6	250	250	36	9.2	A08	DDP
6Q4	441 230 448 0000	00	441 230 446		6.3	1.5	250		15	12	B9A	T
6Q6	028 090 310 0000	00	026 080 310		6.3	3	250		1.2	1.05	A08	DT
6Q7	028 X90 310 0000	40	026 980 310	G1	6.3	3	250		1	1.2	A08	DDT
6Q11	281 181 514 8630	00			6.3	2.0	150 250		2.2 1.2	2.5 1.6	A12	TTT
6QL6	741 238 174 0000	00	541 236 154		6.3	11.5	200	175	52	9.5	B9A	P
6R	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	3.7	2	A08	P
6R4	410 230 080 0000	00	401 230 060		6.3	2	150		30	5.5	B9A	T
6R6	028 700 310 0000	40	026 500 310	G1	6.3	3	250	100	7	1.45	A08	P
6R7	028 X90 310 0000	40	026 980 310	G1	6.3	9	250		9.5	1.9	A08	DDT
6R8	9Y1 23X 148 0000	00	8†1 239 146		6.3	9	250		9.5	1.9	B9A	DDDT
6R51P	471 230 807 0000	00	451 23* 6*5		6.3	8	250	250	54	11	B9A	P
6RA2	014 234 008 0000	00	014 234 006		6.3	31	150		100	8.5	B9A	P
6RA3	808 032 041 0000	00	606 032 041		6.3	70	250		45	4.5	B9A	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only		PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
6RA5	808 032 041 0000	00	606 032041		6.3	20	100		80	11	B9A	T
6RA8	014 234 008 0000	00	014 234 006		6.3	21	300	300	75	9	B9A	P
6RB11	704 234 108 0000	00	504 234 106		6.3	12.5	200	200	45	7.5	B9A	P
6R-DHV1	157 328 984 0000	00	145 327 864		6.3	2 1	250 250	 100	1.2 9	1.6 3.5	B9A	DTP
6RHH2	851 238 410 0000	00	741 236 410		6.3	1	90		8.5	8	B9A	TT
6R-HH8	841 238 510 0000	00	641 237 410		6.3		100		16	16	B9A	TT
6RHV1	157 238 184 0000	00	145 237 164		6.3	2 1	250 250	 100	12 9	1.6 3.5	B9A	TP
6RK19	000 230 009 0000	10	*** 23* **8	C1	6.3				120		B9A	R
6RP10	280 173 041 0000	00	260 153 041		6.3	2.6	150	150	36	13.5	B9A	P
6RP15	471 230 807 0000	00	451 23* 6*5		6.3	8	250	250	59	11	B9A	P
6RR8	402 108 073 0000	00	402 106 053		6.3		150	150	13	12.6	B9A	P
6RR21	741 238 9X1 0000	00	541 236 891		6.3		150	150	13.5	15	*B9A	DDP
6RV	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	6.4	2.1	A08	P
6S1P	812 384 100 0000	00	612 304 000		6.3	7	250		6.3	2.2	B7G	T
6S2	000 230 000 0000	90	230 232 032	D1	6.3						B9A	R
6S2P	412 344 800 0000	00	412 300 600		6.3	1	100		10	11	B7G	T
6S2A	000 230 000 0000	90	*** 23* ***	D1	6.3						B9A	D
6S4	010 234 008 0000	00	*1* 234 **6		6.3	8	250		26	4.5	B9A	T
6S4A	014 234 008 0000	00	014 234 006		6.3	-8	250		24	4.5	B9A	T
6S5	028 370 310 0000	00	026 470 310		6.3	8	250		0.23	†1.0	A08	TI
6S6	120 800 370 0000	40	120 600 350	G1	6.3	2	250	100	13	4	A08	P
6S7	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	8.5	1.75	A08	P
6S8	Y19 X18 230 0000	40	†18 916 230	G1	6.3	2	250		0.9	1.1	A08	DDDT
6SA7	128 841 310 0000	00	126 641 310		6.3	3.6	100		12	4.3	A08	H
6SC5	028 400 310 0000	00	026 400 310		6.3	4	250		7.5	2.7	A08	T
6SC7	085 481 230 0000	00	074 461 230		6.3	2	250		2	1.3	A08	TT
6SD7	021 417 380 0000	00	021 415 360		6.3	2	250	100	6	3.6	A08	P
6SE7	021 417 380 0000	00	021 415 360		6.3	1.5	250	100	4.5	3.4	A08	P
6SF5	014 080 320 0000	00	014 060 320		6.3	2	250		0.9	1.5	A08	T
6SF7	041 791 380 0000	00	041 581 360		6.3	1	250	100	12.4	2.05	A08	DP
6SG7	021 417 380 0000	00	021 415 360		6.3	1	250	125	11.8	4.7	A08	P
6SH7	021 417 380 0000	00	021 415 360		6.3	1	250	150	10.8	4.9	A08	P
6SJ7	021 417 380 0000	00	021 415 360		6.3	3	250	100	3	1.65	A08	P
6SJ8EG	028 748 310 0000 028 750 310 0000	40	027 546 310	G1	6.3	3 3	150 150	 100	5 1.3	1.6 1.2	A08	TH
6SJ8G	028 748 310 0000 028 750 310 0000	50	021 415 360		6.3	3	250	100	9.2	2	A08	P
6SK7	021 417 380 0000	00	021 415 360		6.3	3	250	100	9.2	2	A08	P
6SL7	481 581 230 0000	00	461 471 230		6.3	2	250		2.3	1.6	A08	TT
6SN7	481 581 230 0000	00	461 471 230		6.3	8	250		9	2.9	A08	TT
6SQ7	041 9X8 230 0000	00	041 896 230		6.3	2	250		0.9	1.1	A08	DDT
6SR7	041 X98 230 0000	00	041 986 230		6.3	9	250		9.5	1.9	A08	DDT
6SS7	021 417 380 0000	00	021 415 360		6.3	3	250	100	9	1.85	A08	P
6ST7	041 9X8 230 0000	00	041 896 230		6.3	9	250		9.5	1.9	A08	DDT
6SU7	581 481 230 0000	00	471 461 230		6.3	2	250		2.3	1.6	A08	TT
6SV7	041 798 230 0000	00	941 586 230		6.3	1	250	150	7.5	3.4	A08	DP
6SZ7	041 X98 230 0000	00	041 986 230		6.3	3	250		1	1.2	A08	DDT
6T	207 413 000 0000	80	205 413 000	A1	6.3	12.5	250	250	4.5	4.1	UX6	P
6T1	841 314 800 0000	00	642 314 600		6.3		75		16	6.6	B7G	T
6T4	842 314 800 0000	00	642 314 600		6.3	3	80		18	7	B7G	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only		PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
6T5	284 713 000 0000	00	264 513 000		6.3	22	250	250		†1.0	UX6	TI
6T6	028 700 310 0000	40	026 500 310	G1	6.3	1	250	100	10	5.5	A08	P
6T7	028 X90 310 0000	40	026 980 310	G1	6.3	3	250		1.2	1	A08	DDT
6T8	YX1 239 148 0000	00	†91 238 146		6.3	3	250		1	1.2	B9A	DDDT
6T9	280 410 051 7830	00			6.3	[2 8	250 250	 250	1.5 37	2.1 6.5]	A12	TP
6T10	215 017 841 7830	00			6.3	[8 1.8	250 150	250 100	37 1.3	6.5 1]	A12	PP
6T24	848 230 115 0000	00	647 230 114		6.3	2	150		17	7	B9A	TT
6T26	841 238 510 0000	00	641 237 410		6.3	2.3	250		10	6	B9A	TT
6T27	841 238 510 0000	00	641 237 410		6.3		150		10	6.8	B9A	TT
6TD32	9X1 23Y 148 0000	00	891 230 146		6.3	3	250		1	1.2	B9A	DDT
6TD33	9X1 23Y 148 0000	00	891 230 146		6.3	3	250		2.2	2.1	B9A	DDDT
6TE8	728 148 310 0000	50	427 146 310	G1	6.3	[2 2	100 250	 100	3.7 3.5	]	A08	TH
6TE9	[801 230 450 0000 071 238 550 0000	00 00	651 237 440		6.3	[2.5	100 200	 90	4 3	2 0.7]	B9A	TH
6TH8	[028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	[7 1.5	150 200	 75	6 3.5	1.1]	A08	TH
6TP	207 413 000 0000	80	205 413 000	A1	6.3	14.5	250	250	12	6	UX6	P
6TP1	857 238 114 0000	00	645 237 114		6.3	[68	150 250	 100	18 10	8.5 5.2]	B9A	TP
6TP3	841 238 175 0000	00	641 237 154		6.3	[2 3	100 200	 100	4 8	2 3]	B9A	TP
6TP4	157 238 814 0000	00	145 237 614		6.3	[68	150 250	 100	18 10	8.5 5.2]	B9A	TP
6TP5	751 328 184 0000	00	541 327 164		6.3	[	100 200	 100	2.2 9	1.3]	B9A	TP
6U3	001 230 009 0000	00	**1 23* **8		6.3				180		B9A	R
6U4	001 090 230 0000	00	001 080 230		6.3				120		A08	R
6U5	028 740 310 0000	00	026 540 310		6.3	8	250				A08	TI
6U5/6G5	284 713 000 0000	00	264 513 000		6.3	22	250	250	0.2	†1.0	UX6	TI
6U5M	029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
6U6	028 740 310 0000	00	026 540 310		6.3	14	200	150	56	6.2	A08	P
6U7	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	8	1.5	A08	P
6U8	857 238 114 0000	00	645 237 114		6.3	[1 1	150 250	 100	18 10	8.5 5.2]	B9A	TP
6U9	115 123 878 4000	00			6.3	[2 1.4	100 175	 125	14 13	5 12]		T P
6U10	281 181 504 8630	00			6.3	[6 1.5	200 200	 	9.6 1.2	2.3 1.6]	A12	TTT
6UG56	028 740 310 0000		026 540 310		6.3	8	250	250		†0.1	A08	TI
6V3	092 230 909 0000	10	082 230 808	C	6.3				120		B9A	RR
6V4	901 230 X00 0000	00	9*1 23* 8**		6.3				30		B9A	R
6V5	008 740 230 0000	00	006 540 230		6.3	12.5	250	250	45	4.1	A08	P
6V6	028 740 310 0000	00	026 540 310		6.3	12.5	250	250	45	4.1	A08	P
6V7	028 X90 310 0000	40	026 980 310	G1	6.3	20	250		8	1.1	A08	DDT
6V8	891 234 Y1X 0000	00	681 234 †19		6.3	3	250		1	1.2	B9A	DDDT
6W2	023 000 000 0000	90	023 000 000	D1	6.3						B3G	D
6W3	001 230 009 0000	00	**1 23* **8		6.3				20		B9A	R
6W4	001 090 230 0000	00	001 080 230		6.3				120		A08	R
6W5	029 0X0 310 0000	00	028 090 310		6.3				60		A08	RR
6W6	028 740 310 0000	00	026 540 310		6.3	9.5	150	150	58	8	A08	P
6W7	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	2	1.2	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6WC5	288 114 300 0000	00	266 114 300		6.3	3.6	100		12	4.3	B7G	H
6X2	023 000 000 0000	90	023 000 000	D1	6.3						B3G	D
6X3	020 000 310 0000	90	020 000 310	D1	6.3				5		A08	R
6X4	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
6X5	029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
6X6	027 740 310 0000	00	025 540 310		5		250	250			A08	T1
6X8	148 231 578 0000	00	146 231 457		6.3	[1 1.8	100 250	 150	8.5 7.5	5.8 4.6]	B9A	TP
6X9	115 123 878 4000	00			6.3	[1 1.7	170 175	 150	8.5 14	4.8 13]		TP
6Y3	030 000 200 0000	90	030 000 200	D1	6.3				5		A08	R
6Y5	209 1X3 000 0000	00	208 193 000		6.3				30		UX6	RR
6Y6	028 740 310 0000	00	026 540 310		6.3	13.5	150	150	58	7	A08	P
6Y6-GA	028 743 1000	00	026 543 100		6.3	[.14	135	135	61	7.0 7.1]	A08	P
6Y7	028 458 310 0000	00	027 446 310		6.3	0	250		5.3	1.8	A08	TT
6Y9	517 823 147 8000	00			6.3	[2.6 2.3	175 150	175 150	30 10	21 8.5]		P
6Y50	902 309 001 0000	00	802 308 001		6.3				180		B9A	R
6Z3	391 200 000 0000	00	381 200 000		6.3				60		UX4	R
6Z4	29X 130 000 0000	00	289 130 000		6.3				30		UX5	RR
6Z5	329 1X2 000 0000	00	328 192 000		6.3				30		UX6	RR
6Z6	029 1X0 310 0000	00	028 190 310		6.3				30		A08	RR
6Z7	028 458 310 0000	00	026 447 310		6.3	0	200		4.2	0.5	A08	TT
6Z31	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
6Z40	000 230 009 0000	10	000 230 008	C	6.3				120		B9A	R
6ZDH3A	284 913 000 0000	00	264 813 000		6.3	2	250		1.5		UX6	DT
6ZE1	284 713 000 0000	00	264 513 000		6.3	7	250			†1.0	UX6	TI
6ZH1P	412 387 100 0000	00	412 365 100		6.3	2.2	125	125	5.5	3.5	B7G	P
6ZH2P	412 387 100 0000	00	412 365 100		6.3	2.2	125	125	7.5	5.2	B7G	P
6ZH3P	412 387 100 0000	00	412 365 100		6.3	2	250	150	7	5	B7G	P
6ZH4P	412 387 100 0000	00	412 365 100		6.3	1	250	100	11	4.4	B7G	P
6ZH5P	412 387 100 0000	00	412 365 100		6.3	2	250	100	10	9	B7G	P
6ZP1	287 413 000 0000	00	265 413 000		6.3	9	200	200	15	1.7	UX6	P
6ZY5	029 0X0 310 0000	00	028 090 310		6.3				15		A08	RR
7A2	047 231 800 0000	00	045 231 600		4	17	250	250	40	3.2	B7	P
7A3	045 231 800 0000	00	045 231 600		4	6	250	250	32	10	B7	P
7A4	280 004 130 0000	00	260 0*4 130		6.3	8	250		9	2.6	B8B	T
7A5	287 004 130 0000	00	265 004 130		6.3	9	150	125	44	6	B8B	P
7A6	21X 009 130 000	00	219 008 130		6.3				5		B8B	RR
7A7	287 104 130 0000	00	265 104 130		6.3	3	250	100	9.2	2	B8B	P
7A8	288 471 130 0000	00	266 451 130		6.3	1	250	100	14	1.4	B8B	O
7AB7	728 141 310 0000	00	526 141 310		6.3	2	250	100	4	1.8	B8B	P
7AC7	412 387 100 0000	00	412 365 100		6.3		300	150	10	9	B7G	P
7AD7	287 104 130 0000	00	265 104 130		6.3	2.3	300	150	28	9.5	B8B	P
7AF7	218 548 130 0000	00	217 446 130		6.3	9	250		9	2.1	B8B	TT
7AG7	287 114 130 0000	00	265 114 130		6.3	2	250	250	6	4.2	B8B	P
7AH7	287 114 130 0000	00	265 114 130		6.3	2	250	250	6.8	3.3	B8B	P
7AJ7	287 104 130 0000	00	265 104 130		6.3	3	250	100	2.2	1.5	B8B	P
7AK7	287 104 130 0000	00	265 104 130		6.3	0	150	90	40	6.5	B8B	P
7AN7	158 234 118 0000	00	147 234 116		7.5	1	90		12	6	B9A	TT
7AU7	851 228 413 0000	00	741 226 413		3.5	8.5	250		10.5	2.2	B9A	TT
7B4	280 004 130 0000	00	260 004 130		6.3	2	250		0.9	1.5	B8B	T
7B5	287 004 130 0000	00	265 004 130		6.3	18	250	250	32	2.3	B8B	P
7B6	284 0X9 130 0000	00	264 *98 130		6.3	2	250		0.9	1.1	B8B	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
7B7	287 104 130 0000	00	265 104 130		6.3	3	250	100	8.5	1.7	B8B	P
7B8	287 474 130 0000	00	265 454 130		6.3	2	250	100		1.1	B8B	H
7C4	200 900 130 0000	00	2*0 800 130		6.3				5		A08	R
7C5	287 004 130 0000	00	265 004 130		6.3	12.5	250	250	45	4.1	B8B	P
7C6	284 1X9 130 0000	00	264 198 130		6.3	1	250		1.3	1	B8B	DDT
7C7	287 114 130 0000	00	265 114 130		6.3	3	250	100	2	1.3	B8B	P
7CE40	148 235 118 0000	00	146 234 117		7	1.5	90		12	6	B9A	TT
7D3	047 231 800 0000	00	045 231 600		40	20	150	125	36	2.4	B7	P
7D5	047 231 800 0000	00	045 231 600		13	16.5	250	250	34	2.3	B7	P
7D6	047 231 800 0000	00	045 231 600		40	6	250	250	32	10	B7	P
7D7	[208 405 130 0000	00	] 276 454 130		6.3	[3	150		3		] B8B	TH
	280 575 130 0000	00				3	250	100	1.3	0.2		
7D8	047 231 800 0000	00	045 231 600		13	6	250	250	32	10	B7	P
7D9	412 380 700 0000	00	412 360 500		6.3	13.5	250	250	16	2.6	B7G	P
7D9	047 231 800 0000	00	045 231 600		13	25	250	250	32	1.8	B7	P
7D10	041 230 871 0000	00	*41 230 651		6.3	4.5	250	250	40	11	B8A	P
7D11	028 740 310 0000	00	026 540 310		6.3	20	350	250	95	9	A08	P
7DJ8	841 238 510 0000	00	641 237 411		7	1.3	90		15	12.5	B9A	TT
7E5	428 141 830 0000	00	426 141 630		6.3	3	200		5.5	3	B8B	T
7E6	284 0X9 130 0000	00	264 *98 130		6.3	8	250		9.5	1.9	B8B	DDT
7E7	28X 974 130 0000	00	269 854 130		6.3	3	250	100	7.5	1.3	B8B	DDP
7ED7	141 230 871 0000	00	141 230 651		7.3	1.9	200	175	10		B9A	P
7EK7	148 235 118 0000	00	146 234 117		7	1.2	200		15	4	B9A	TT
7ES8	841 238 510 0000	00	641 237 410		7	1.2	90		15	12.5	B9A	TT
7EY6	028 740 310 0000	00	026 540 310		7.2	17.5	250	250	44	4.4	A08	P
7F7	218 548 130 0000	00	217 446 130		6.3	2	250		2.3	1.6	B8B	TT
7F8	528 118 340 0000	00	427 116 340		6.3	3	250		6	3.3	B8B	TT
7F16	281 174 130 0000	00	261 154 130		6.3	2.5	250	100	6	2.2	B8A	P
7FC7	148 235 118 0000	00	146 234 117		7.2	1.2	90		15	12	B9A	TT
7G7	287 114 130 0000	00	265 114 130		6.3	2	250	100	6	4.5	B8B	P
7G8	287 451 830 0000	00	265 441 730		6.3	2.5	250	100	4.5	2.1	B8B	PP
7GH8	788 234 151 0000	00	576 234 141		8	[3	100		14		] B9A	TH
						1.2	200	150	10			
7GV7	878 231 514 0000	00	657 231 414		7.4	[3	100		14	5.5	]	TP
						2	250	250	10	11		
7H6	287 114 130 0000	00	265 114 130		6.3	2.5	250	150	9.5	3.5	B8B	P
7H7	287 114 130 0000	00	265 114 130		6.3	2	250	150	10	4.2	B8B	P
7HG8	151 234 887 0000	00	741 234 675		7.2	[	125		15		] B9A	TH
							250	150	18			
7J7	[208 405 130 0000	00	] 276 454 130		6.3	[3	150		6.6	1.4	] B8B	TH
	280 575 130 0000	00				3	250	100	1.4			
7K7	218 4X9 130 0000	00	216 498 130		6.3	2	250		2.3	1.6	B8B	DDT
7KY6	141 230 871 0000	00	141 230 651		7.3	0	200	135	30	30	B9A	P
7KZ6	141 230 871 0000	00	141 230 651		7.3	0	250	115	25	24	B9A	P
7L7	287 104 130 0000	00	265 104 130		6.3	1.5	250	100	4.5	3.1	B8B	P
7MP18	412 387 400 0000	00	412 365 400		7.5	5	200	175	35	11	B9A	P
7N7	218 548 130 0000	00	217 446 130		6.3	8	250		9	2.6	B8B	TT
7Q7	288 414 130 0000	00	266 414 130		6.3	2	100		15	6	B8B	H
7R1	290 300 000 0000	00	280 300 000		7.5				60		UX4	R
7R7	28X 974 130 0000	00	269 854 130		6.3	1	250	100	6.2	3.4	B8B	DDP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
7S7	288 405 130 0000	00	276 454 130		6.3	1	100		4.8	1.4	B8B	TH
	280 575 130 0000	00				2	250	100	4	2		
7T7	287 104 130 0000	00	265 104 130		6.3	1	250	150	10.8	4.9	B8B	P
7V7	287 114 130 0000	00	265 114 130		6.3	2	300	150	10	5.8	B8B	P
7X6	219 00X 130 0000	00	218 009 130		6.3				30		B8B	RR
7X7	284 19X 130 0000	00	264 189 130		6.3	1	250		1.9	1.5	B8B	DDT
7Y4	209 00X 130 0000	00	208 009 130		6.3				30		B8B	RR
7Z4	20X 009 130 0000	00	209 008 130		6.3				60		B8B	RR
8A1	742 310 000 0000	80	542 310 000	A1	4	1.5	200	75	3.5	4	B5	P
8A1	041 231 700 0000	80	041 231 500	A1	4	1.5	200	75	3.5	4	B7	P
8A2	742 310 000 0000	80	542 310 000	A1	4	2.1	200	100	3	2.4	B5	P
8A8	857 238 114 0000	00	645 237 114		9	2	100		14	5	B9A	TP
						2	200	175	10	6.2		
8AC9	2X1 100 114 7830	00			8.4	1	125	125	12	10	A12	DDP
8AU8	148 231 578 0000	00	146 231 457		8.5	1.25	150		8.5	4.9	B9A	TP
						1.5	200	125	16	7		
8AW8	148 231 578 0000	00	146 231 457		8.4	2	200		4	4	B9A	TP
						3	200	150	13	9		
8AW8A	000 231 478 0000	00	000 231 456		8.4	-2	200		4	4	B9A	TP
						0	65	150	46	9.5		
							150	150	15			
8B8	415 238 718 0000	00	414 237 516		8	1	100		1	1.9	B9A	TP
						16	200	200	35	6.4		
8B10	215 848 1X1 9030	00			8.5	9.5	250		7	1.8	A12	DDT
6BA8	148 231 578 0000	00	146 231 457		8.4	8	200		8	2.7	B9A	TP
						3	200	150	13	9		
8BH8	148 231 578 0000	00	146 231 457		8.4	5	150		9.5	3.3	B9A	TP
						1.6	200	125	15	7		
8BM8	415 238 718 0000	00	414 237 516		7.9	1	200		3.7	2.5	B9A	TP
						16	200	200	35	6.4		
8BM11	287 015 871 4300	00	265 015 651		6.3	1	100	125	14	8	A12	PP
						0.9	150	125	12	9.8		
8BN8	911 23X 841 0000	00	811 239 641		8.4	3	250		1.6	2.6	B9A	DDT
8BQ5	041 230 807 0000	00	*41 23* 6*5		8	7.3	250	250	48	11.5	B9A	P
8BQ7A	841 238 510 0000	00	641 237 410		8.4	2	150		9	6.4	B9A	TT
8BU11	218 415 867 8130	00			7.8	1	125		13.5	8.6	A12	TTP
						11	125	125	12	7.5		
8CF40	857 238 114 0000	00	645 237 114		9	2	100		14	5	B9A	TP
						2	200	175	10	6.2		
8CG7	851 238 410 0000	00	741 236 410		8.4	8	250		9	2.6	B9A	TT
8CL8	841 235 178 0000	00	461 237 514		8.4	2	200		4	4	B9A	TP
						1.2	150	100	4	4.4		
8CM7	801 238 451 0000	00	701 236 441		8.4	7	200		5	2	B9A	TT
						8	250		20	4.4		
8CN7	9X1 221 843 0000	00	891 221 643		4.2	3	250		1	1.2	B9A	DDT
8CS7	805 238 411 0000	00	704 236 411		8.4	10.6	250		19	4.5	B9A	TT
8CW5	071 230 807 0000	00	*51 23* 6*5		8	12.5	200	175	70	10	B9A	P
8CW8	517 238 148 0000	00	415 237 146		8	1.7	250		1.2	1.6	B9A	TP
						7	250	250	36	10		
8CX8	148 231 478 0000	00	146 231 456		8	1.5	150		9	4.6	B9A	TP
						2	200	125	25	10		
8CY7	805 238 411 0000	00	6*4 237 411		7.9	3	250		1.2	1.3	B9A	TT
						18.5	150		30	5.4		

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	VCM163 Tester only — TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4 — TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
8D2	081 231 700 0000	40	061 231 500	G1	13	3	250	100	2	1.25	B7	P
8D3	412 381 700 0000	00	412 361 500		6.3	2 1.5	250 200	250 150	10 4	7.5 6.4	B7G	P
8D4	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	3	1.8	A08	P
8D5	041 230 871 0000	00	041 230 651		6.3	3	250	100	2	1.2	B9A	P
8D6	141 230 871 0000	00	141 230 651		6.3	2	200	175	10	2.5	B9A	P
8D7	001 230 871 0000	40	001 230 651	G1	6.3	3	250	100	2	1.25	B9A	P
8D8	701 238 014 0000	00	501 236 014		6.3	2	250	150	3	1.9	B9A	P
8DX8	481 238 157 0000	00	461 237 145		7.5	1.7 2.1	200 200	175	30 18	4 11	B9A	TP
8EB8	148 231 578 0000	00	146 231 457		8	2 2	250 200	125	2 25	2.7 12.5	B9A	TP
8EM5	704 234 108 0000	00	504 234 106		8.4	18	250	250	35	5.1	B9A	P
8ET7	19X 231 478 0000	00	189 231 456		8	100	200	150	25	11.5	B9A	DDP
8FQ7	851 238 410 0000	00	741 236 410		8.4	8	250		9	2.6	B9A	TT
8G140	9X2 300 000 0000	00	892 300 000		8				60		B4	RR
8GE8	148 231 578 0000	00	146 231 457		8.2	2	200 200	175	4.5 22	4.2 12	B9A	TP
8GK6	141 230 871 0000	00	141 230 651		8	7.4	250	250	48	11.3	B9A	P
8GN8	148 231 578 0000	00	146 231 457		8	2 3	250 200	150	2 25	2.7 11.5	B9A	TP
8GW8	417 238 158 0000	00	415 237 146		7.5	1.7 7.0	250 250	250	1.2 36	1.6 10	B9A	TP
8GX7	151 238 784 0000	00	151 236 574		7.7	1 1	125 125	125	13 8	8.5 11	B9A	TP
8HG8	151 234 887 0000	00	141 234 675		8	3 1.2	100 200	150	14 10	5.5 12	B9A	TP
8JE8	148 231 578 0000	00	146 231 457		8.2	2	200 250	150	4.5 22	4.2 12	B9A	TP
8JK8	841 238 510 0000	00	741 236 410		8.4	1.0 1.2	100 150		5.3 10	6.8 13	B9A	TT
8JT8	148 231 578 0000	00	146 231 457		7.7	2 1.6	250 200	100	1.5 17	2.7 20	B9A	TP
8JV8	148 231 578 0000	00	146 231 457		8.5	2 2.9	200 200	200	4 22	4 10.7	B9A	TP
8KA8	841 235 178 0000	00	641 234 157		8.4	2 1.2	200 150	100	4 4	4 4.4	B9A	TP
8LC8	841 235 178 0000	00	641 234 157		8.4	2 1.2	200 150	100	4 4	4 9.4	B9A	TP
8LE8	811 230 174 0000 011 238 174 0000	00	611 230 154		8	2.5	100	100	8	5.8	B9A	PP
8MP12	412 387 400 0000	00	412 365 400		8.5		200	175	25		B7G	P
8RB11	704 234 108 0000	00	504 234 106		8.5	12.5	200	200	45	7.5	B9A	P
8RHP1	415 238 718 0000	00	414 237 516		8.2	16	100 200	200	3.5 35	2.5 6.4	B9A	TP
8SN7	481 581 230 0000	00	461 471 230		8.4	8	250		9	2.6	A08	TT
8T27	841 238 510 0000	00	641 237 410		8.4		150		10	6.8	B9A	TT
9A1	742 231 000 0000	80	542 231 000	A1	4	1.5	200	75	5	4.2	B5	P
9A1	947 231 700 0000	80	045 231 500	A1	4	1.5	200	75	5	4.2	B7	P
9A3	081 231 700 0000	40	061 231 500	G1	4	2	250	125	10	1.8	B7	P
9A8	857 238 114 0000	00	645 237 114		9	2 2	100 200	175	14 10	5 6.2	B9A	TP
9AB4	802 304 100 0000	00	602 304 100		9	2	250		10	5	B7G	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	VCM163 Tester only — TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4 — TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
9ABC40	9X1 23Y 148 0000	00	891 230 146		9.5	1.9	170		1	1.4	B9A	DDDT
9AK8	YX1 239 148 0000	00	†91 238 146		9.5	2.3	200		1	1.4	B9A	DDDT
9AQ8	841 238 510 0000	00	641 237 410		9	2.1	200		10	5.8	B9A	TT
9AU7	851 228 413 0000	00	741 226 413		4.7	3.5	250		10.5	2.2	B9A	TT
9BM5	412 387 400 0000	00	412 365 400		9	6	250	250	30	7	B9A	P
9BQ7	841 238 510 0000	00	641 237 410		8.4	2	150		9	6.4	B9A	TT
9BR7	841 22X 913 0000	00	641 229 813		4.7	2.0	250		10	4	B9A	DDT
9BW6	041 230 871 0000	00	*41 230 651		9	12.5	250	250	45	4.1	B9A	P
9C8	857 238 114 0000	00	645 237 114		9	[2 2	100 200	 175	14 10	5 6.2]	B9A	TP
9CL8	481 238 715 0000	00	461 237 514		9.5	[0.75 0.1	150 150	 125	15 12	8 5.8]	B9A	TP
9D2	081 231 700 0000	40	061 231 500	G1	13	3	250	125	10.5	1.65	B7	P
9D6	412 381 700 0000	00	412 361 500		6.3	2.5	250	200	8	2.5	B7G	P
9D7	141 230 871 0000	00	141 230 651		6.3	1.5	250	100	10	8.4	B9A	P
9DZ8	415 238 718 0000	00	414 237 516		9	[1.2 8	150 150	 125	0.8 45	1.4 7.5]	B9A	TP
9EA8	857 238 114 0000	00	857 238 114		18.9	[1 1	150 125	 125	18 12	8.5 6.4]	B9A	TP
9EF6	028 740 310 0000	00	026 540 310		9.4	18	250	250	50	5	A08	P
9EN7	157 238 414 0000	00	157 236 414		9	[	150 200	 150	6 7.6	5 8.5]	B9A	TP
9GV8	841 238 741 0000	00	641 237 541		9.4	[.8 15	250 250	 250	8 12	]	B9A	TP
9J6	882 345 100 0000	00	762 344 100		9	0.85	100		8.5	5.3	B7G	TT
9JT8	148 231 778 0000	00	148 231 578		7.7	[2 1.6	250 200	 100	1.5 1.7	2.7 20]	B9A	TP
9KC6	140 231 807 0000	00	140 231 605		8.7	1	250	150	18.0	24	B9A	P
9KZ8	851 238 715 0000	00	641 237 514		9.4	[1 1	125 125	 125	13.5 12	8.5 7.5]	B9A	TP
9LA6	147 230 856 0000	00	145 230 644		8.7	0	250	150	25	21.0	B9A	P
9MN8	2Y1X09 040 563	00			9.5	0	[200 125		4.8 11.0	4.0 7.5]	B9A	TTT
9P9	412 387 400 0000	00	412 365 400		9	6	250	250	30	7	B9A	P
9RA6	140 230 408 0000	00	140 230 406		9.5	12	250		26	8.5	B9A	T
9T8	YX1 239 148 0000	00	†91 238 146		9.5	3	250		1	1.2	B9A	DDDT
9T26	841 238 510 0000	00	641 237 410		9.5	2.3	250		10	6	B9A	TT
9TP4	157 238 814 0000	00	145 237 614		9.4	[68	150 250	 100	18 10	8.5 5.2]	B9A	TP
9U8	857 238 114 0000	00	645 237 114		9.5	[1 1	150 250	 100	18 10	8.5 5.2]	B9A	TP
9X8	148 231 578 0000	00	146 231 457		9.5	[3.5	100 150	 150	8.5 6.2	5.8 2.1]	B9A	TP
10	284 300 000 0000	00	264 300 000		7.5	32	250		16	1.55	UX4	T
10AL11	215 118 741 7830	00			9.8	2	15	100	1.3	1	A12	PP
10BM8	415 238 718 0000	00	414 237 516		10	[11.5	100 150	 150	3 41	2.2 7.5]	B9A	TP
10BQ5	041 230 807 0000	00	041 230 605		10	7.3	250	250	48	11	B9A	P
10C1	[208 475 130 0000 280 575 130 0000	00 00]	276 454 130		28	[3.3 2.5	100 200	 100	6 8	3 2.5]	B9A	TH
10C2	288 475 130 0000	00	276 454 130		28	[3.3 1.5	100 175	 100	6 3	3 5]	B8A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
10C8	841 238 751 0000	00	641 237 541		10.5	2.7 1.5	250 150	125	7.3 11.5	4.4 8	B9A	TP
10C14	751 238 184 0000	00	541 237 164		19	2.2	100 200	100	13.7 5	3.7 2.3	B9A	TP
10CW5	041 230 807 0000	00	*41 23* 6*5		10	12.5	150	150	70	10	B9A	P
10D1	9X2 310 000 0000	00	892 310 000		13				5		B5	RR
10D2	1X2 310 900 0000	00	192 310 800		19				5		B7G	RR
10DA7	814 238 511 0000	00	614 237 411		10.5	8 17.5	250 150		9 40	2 6 5.7	B9G	TT
10DA8	804 238 511 0000	00	604 237 411		10.5	8	250		9	2.6	B9A	TT
10DE7	855 238 411 0000	00	744 236 411		10	17.5 11	150 250		32 5.5	6.5 2	B9A	TT
10DR7	855 238 411 0000	00	744 236 411		9.7	17.5 3	150 250		35 1.4	6.5 1.6	B9A	TT
10DX8	481 238 157 0000	00	461 237 145		10	1.7 2.1	200 200	175	3 18	4 11	B9A	TP
10EB8	148 231 578 0000	00	146 231 457		10.5	2	250 200	125	2 25	2.7 12.5	B9A	TP
10EG7	581 481 230 0000	00	471 461 230		9.7	11 17.5	350 150		5.5 45	2 7.5	A08	TT
10EM7	581 481 230 0000	00	461 471 230		9.7	20 3	150 250		50 1.4	7.2 1.6	B9A	TT
10ER5	142 380 100 0000	00	142 360 100		10.8	1.2	200		10	10.5	B7G	TT
10EW7	855 238 411 0000	00	744 236 411		9.7	17.5 11	150 250		45 5.5	7.5 2.0	B9A	TT
10F1	281 714 130 0000	00	261 415 130		22	1.8	200	200	100	9	B8A	P
10F3	280 174 130 0000	00	260 154 130		22	2.3	200	200	6	6.5	B8A	P
10F9	280 174 130 0000	00	260 154 130		13	2.5	200	100	7	2.3	B8A	P
10F18	141 230 871 0000	00	141 230 651		13	1.3	200	100	12	4.5	B9A	P
10FD7	855 238 411 0000	00	644 237 411		9.7	17.5	250 150		6 45	1.6 7.5	B9A	TT
10FD12	741 238 9X1 0000	00	541 236 891		19	1.5	200	200	11	4.5	B9A	DDP
10FG7	151 238 084 0000	00	141 237 064		9.7	3 20	250 150		1.4 50	1.6 7.2	B9A	TT
10FR7	844 238 511 0000	00	644 237 411		9.7	3 20	250 150		1.4 50	1.6 7.2	B9A	TT
10GF7	151 238 084 0000	00	141 237 064		9.7	20 3	150 250		50 1.4	7.2 1.6	B9D	TT
10GF7A	151 238 084 0000	00	151 236 094		9.7	-3 0 -20 28	250 60 150 250		1.4 95 50 10		B9A	TT
10GN8	148 231 578 0000	00	146 231 457		10.5	2 3	250 200	150	2 25	2.7 11.5	B9A	TP
10GW8	417 238 158 0000	00	415 237 146		10	1.7 7	250 250	250	1.2 36	1.6 10	B9A	TP
10FH8	148 231 578 0000	00	146 231 457		10	2 1	250 250	250	4 25	4 12.5	B9A	TP
10JA8	148 231 578 0000	00	146 231 457		10.5	2 1.5	150 150	150	1 18	1.5 13	B9A	TP
10JT8	148 231 578 0000	00	148 231 578		10.2	2 1.6	250 200	100	1.5 17	2.7 20	B9A	TP
10JY8	148 231 578 0000	00	146 231 457		10.5		125 200	150	15 24	10.4 11	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	VCM163 Tester only — TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4 — TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
10KR8	148 231 578 0000	00	146 231 457		10.5	[1 1.6	100 200	 100	15 19.5	10.4 20.0]	B9A	TP
10KU8	19X 231 478 0000	00	19* 231 478		10.2	1.6	200	100	17	20	B9A	DDP
10L1	412 314 800 0000	00	412 314 600		19	1.5	250		10	8.5	B7G	T
10L14	841 238 510 0000	00	641 237 410		26	2.1	200		10	5.8	B9A	TT
10LB8	148 231 578 0000	00	148 231 578		10.2	[0.9 1.6	125 200	 100	13 17	5 20]	B9A	TP
10LD3	284 0X9 130 0000	00	264 098 130		14	1.1	150		0.6	1.95	B8A	DDT
10LD11	284 0X9 130 0000	00	264 098 130		15	5.9	250		5	2.3	B8A	DDT
10LD12	YX1 239 148 0000	00	†91 238 146		28	2.3	200		1	1.4	B9A	DDDT
10LD13	841 239 0X0 0000	00	641 238 09*		13	4.4	150		0.5	1.4	B9A	DDT
10LE8	[811 230 174 0000 011 238 174 0000	00 00]	011 236 154		10	2.5	100	100	8	5.8	B9A	PP
10M1	028 740 310 0000	00	026 540 310		18	19	200	175	0.2	†1.0	A08	TI
10M2	208 478 130 0000	00	206 456 130		12.6	[3 20	200 200	200 200	0.1 0.19	†0.2 †0.1]	A08	TI
10P13	280 074 130 0000	00	260 054 130		40	6	150	150	30	7.5	B8A	P
10P14	028 740 310 0000	00	026 540 310		40	9.4	200	175	40	7.2	A08	P
10P18	041 230 807 0000	00	*41 23* 6*5		45	12.5	200	175	70	10	B9A	P
10PL12	415 238 718 0000	00	414 237 516		50	[16	100 200	 200	3.5 35	2.5 6.4]	B9A	TP
11	382 400 000 0000	00	362 400 000		1.1	4.5	90		2.5	0.4	UX4	T
11A1	010 234 008 0000	00	*1* 234 **6		6.3		150		100	12	B9A	T
11A2	X09 231 800 0000	40	908 231 600	G1	4	2	200		3	2.8	B7	DDT
11A6	284 158 300 0000	00	264 147 300		10	1	100			3.1	A08	TT
11AR11	287 151 187 4130	00			11.2	0.7	125	125	11	10.5	A12	PP
11C5	028 040 310 0000	00	026 040 310		10	1	100			2	A08	T
11CY7	805 238 411 0000	00	7*4 236 411		11	[3	250 150		1.2 30	1.3 5.4]	B9A	TT
11D3	X09 231 800 0000	40	908 231 600	G1	13	2	250		0.6	1.1	B7	DDT
11D5	X09 231 800 0000	40	908 231 600	G1	13	3	250		3.8	1.5	B7	DDT
11E1	218 740 030 0000	00	216 540 030		6 3		250	250	50	7.3	M08	P
11E2	020 740 310 0000	80	020 540 310	A1	6.3	16.5	200	200	25	9	A08	P
11E8	200 848 310 0000	50	200 647 310	G1	11		150		20		A08	TT
11E13	415 228 783 0000	00	414 226 573		6.3	40	300	200	75		B9A	PP
11E14	020 740 310 0000	80	020 540 310	A1	6.3	16	250	250	48	7	A08	P
11F6	028 740 310 0000	00	026 540 310		10	1	100	150		2.5	A08	P
11HM7	141 230 871 0000	00	141 230 651		11.0	0	250	135	30	30.0	B9A	P
11J7	028 700 310 0000	40	026 500 310	G1	10	1	250	100		1.2	A08	P
11JE8	148 231 578 0000	00	146 231 457		10	[2	200 200	 175	4.5 22	4.2 12]	B9A	TP
11K7	028 700 310 0000	40	026 500 310	G1	10	1	250	100		1.4	A08	P
11KV8	148 231 578 0000	00	146 231 457		10.9	[1.8 1.6	200 200	 125	4 20	4 23]	B9A	TP
11L6	028 740 310 0000	00	026 540 310		10	1	100	150		6	A08	P
11LQ8	148 231 578 0000	00	146 231 456		10.9	[1 1.6	125 125	 125	15 16.5	10.4 21]	B9A	TP
11N7	028 458 310 0000	00	026 447 310		10	1	100			3.1	A08	TT
11QL8	148 231 578 0000	00	146 231 457		10.9	[1 1.4	125 200	 125	15 20	10.4 23]	B9A	TP
11X5	029 0X0 310 0000	00	028 090 310		11				30		A08	RR
12	384 200 000 0000	00	364 200 000		1.1	4.5	90		2.5	0.42	UX4	T
12A	284 300 000 0000	00	264 300 000		5	4.5	90		5	1.5	UX4	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
12A4	142 330 408 0000	00	142 330 406		6.3	9	250		23	0.8	B9A	T
12A5	287 413 200 0000	00	265 413 200		6.3	15	100	100	17	1.7	UX7	P
12A6	028 740 310 0000	00	026 540 310		12.5	12.5	250	250	30	2	A08	P
12A7	287 191 300 0000	40	265 181 300	G1	12.5	12.5	150	150	30 9	1	Sm7	RP
12A8	028 747 310 0000	40	026 545 310	G1	12.5	3	250	100	3.5	1.15	A08	H
12AB5	704 234 178 0000	00	504 234 156		12	12.5	250	250	45	4.1	B9A	P
12AB5	421 080 370 0000	00	421 060 350		12	22.5	250	150	57	5.9	A08	P
12AC5	280 074 130 0000	00	26* *54 130		12	3	200	125	2.3	2.3	B8A	P
12AC6	412 387 100 0000	00	412 365 100		12.6	10	12.6	12.6	0.5	0.7	B7G	P
12AD5	741 238 000 0000	00	541 236 **0		12.6	2.5	100	100	6	2.2	B9A	P
12AD6	412 387 100 0000	00	412 365 100		12.6		12	12	5	3.8	B7G	P
12AD7	841 228 513 0000	00	641 227 413		6.3	2	250		1.25	1.6	B9A	TT
12AE6	412 39X 300 0000	00	412 389 600		12.6	0	12.6		0.7	1	B7G	DDT
12AE7	841 228 513 0000	00	641 227 413		6.3		12.6		0.9	6.5	B9A	TT
12AF3	000 230 990 0000	00	*** 23* 88*		12.6				120		B9A	R
12AF6	412 387 100 0000	00	412 365 100		12.6		12	12	0.7	1.1	B7G	P
12AG6	412 387 100 0000	00	412 365 100		12.6	0.8	12	12	0.5		B7G	H
12AH6	412 389 100 0000	00	412 365 100		12.6	2	300	150	10	9	B7G	P
12AH7	418 158 230 0000	00	417 146 230		12.5	3.6	100		3.7	1.55	A08	TT
12AH8	051 220 483 0000 751 228 503 0000	00 00	541 227 463		6.3	3	100 250	100	14.7 2.6	3.5	B9A	TH
12AJ6	412 39X 800 0000	00	412 389 600		12.6		12		0.7	1.2	B7G	DDT
12AJ7	741 238 484 0000	00	541 237 464		12	2.5	100 250	90	4 3	2 0.6	B9A	TH
12AK7	851 228 413 0000	00	741 226 413		6.3	2	250		1.2	1.6	B9A	TT
12AL5	1X2 310 900 0000	00	192 310 800		12.5				5		B7G	RR
12AL8	875 238 141 0000	00	654 237 141		12.6	0.9 0.8	12 12	12	0.2 25	0.5 8	B9A	TP
12AL11	215 118 741 7830	00			12.6	8	250	250	36	6.5	A12	PP
12AQ5	412 387 400 0000	00	412 365 400		12.5	12.5	250	250	45	4.1	B7G	P
12AS5	142 347 800 0000	00	142 345 600		12	8.5	150	100	35	5.6	B7G	P
12AT6	412 39X 800 0000	00	412 389 600		6.3	3	250		1	1.2	B7G	DDT
12AT7	851 228 413 0000	00	741 226 413		6.3	2	250		10	5.5	B9A	TT
12AU4	001 090 230 0000	00	001 080 230		12				120		A08	R
12AU6	412 387 100 0000	00	412 365 100		12.6	1	250	150	10.8	5.2	B7G	P
12AU7	851 228 413 0000	00	741 226 413		12.6	8.5	250		10.5	2.2	B9A	TT
12AU8	148 231 578 0000	00	146 231 457		12.6	1.5 1.35	150 200	125	8.5 15	4.9 7	B9A	TP
12AV5	421 080 370 0000	00	421 060 350		12.6	22.5	250	150	55	5.5	A08	P
12AV6	412 39X 800 0000	00	412 389 600		12.5	2	250		1.2	1.6	B7G	DDT
12AV7	851 228 413 0000	00	741 226 413		6.3	1	150		18	8.5	B9A	TT
12VA7A	X51 239 413 0000	00	961 238 413		12.6	0	100		3.1	6.25	B9A	TT
12AW6	412 387 100 0000	00	412 365 100		12.5	1.5	250	150	7	5	B7G	P
12AX4	001 090 230 0000	00	001 080 230		12.5				120		A08	R
12AX7A	841 238 410 0000	00	741 237 410		12.6	.1	100		0.5	1.25	B9A	TT
12AY3	090 230 901 0000	00	080 230 801		12.6				180		B9D	R
12AY3A	080 230 801 0000	00	080 230 801		12.6		32		350		B9A	R
12AY7	841 228 513 0000	00	641 227 413		6.3	4	250		3	1.7	B9A	TT
12AZ7	851 228 413 0000	00	741 226 413		6.3	2	200		10	5.5	B9A	TT
12AZ7A	X71 239 410 0000	00	941 238 410		12.6	-5	100		3.7	4.0	B9A	TT
12B3	090 230 909 0000	10	080 230 808	C1	12.6						B9A	R
12B4	142 330 408 0000	00	142 330 406		6.3	17.5	150		34	6.4	B9A	T
12B4A	140 230 408 0000	00	140 230 406		12.6	-17.5	150		34	6.3	B9A	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
12B6	028 090 310 0000	40	026 080 310	G1	12.5	2	250		0.9	1.1	A08	DT
12B7	287 104 130 0000	00	265 104 130		12.5	3	250	100	9.2	2	B8B	P
12B8	128 781 340 0000	50	127 561 340	G1	12.5	[1.1 3	100 100	 100	0.6 8	1.5 2.1]	A08	TP
12BA6	412 387 100 0000	00	412 365 100		12.5	1	250	100	11	4.4	B7G	P
12BA7	841 231 108 0000	00	641 231 106		12.5	2	100		18	7	B9A	H
12BB14	441 237 710 0000	80	441 235 510	A1	12	20	150	150	70	10	B9D	P
12BC32	412 39X 800 0000	00	412 389 600		12	2	250		1	1.6	B7G	DDT
12BD6	412 387 100 0000	00	412 365 100		12.5	3	250	100	9	2	B7G	P
12BE3	200 900 100 9030	00			12.6				120		A12	R
12BE6	412 388 100 0000	00	412 366 100		12.5	6	150		7.5	3.5	B7G	H
12BF6	412 3X9 800 0000	00	412 398 600		12.5	9	250		9.5	1.9	B7G	DDT
12BF11	215 017 841 7830	00	214 015 641	A	12.6	[6 1.8	150 150	100 100	3.8 1.3	8.6 1]	A12	PP
12BH7	851 228 413 0000	00	741 226 413		6.3	10.5	250		11.5	3.1	B9A	TT
12BH7A	851 238 410 0000	00	641 236 410		12.6	-10.5	250		11.5	3.1	B9A	TT
12BK5	804 231 470 0000	00	604 231 450		12	5	250	250	35	8.5	B9A	P
12BL6	412 387 100 0000	00	412 365 100		12.6	0.6	12	12	1.4	1.3	B7G	P
12BN6	142 374 800 0000	00	142 354 600		12.5	1	60	60	0.5	1	B7G	P
12BQ6	020 740 310 0000	80	020 540 310	A1	12	22.5	250	150	57	5.9	A08	P
12BR7	841 229 X13 0000	00	641 228 913		6.3	2	250		10	5.5	B9A	DDT
12BR7A	841 229 X13 0000	00	641 228 913		6.3	2	250		10	5.5	B9A	DDT
12BS3	090 230 901 0000	00	*8* 23* 8*1		12.6				180		B9D	R
12BT6	412 39X 800 0000	00	412 389 600		12.5	3	250		1	1.2	B7G	DDT
12BU6	412 39X 800 0000	00	412 389 600		12.5	9	250		9.5	1.9	B7G	DDT
12BU8	178 231 481 0000	00	156 231 471		12.6	1	100	60	1	1.5	B7G	PP
12BV7	141 223 871 0000	00	141 223 651		6.3	2.2	250	150	27	13	B9A	P
12BW4	900 230 X01 0000	00	800 230 901		12				30		B9A	RR
12BX6	141 230 871 0000	00	141 230 651		12.6	2	150	150	10	7.4	B9A	P
12BY7	141 223 871 0000	00	141 223 651		6.3	2.1	250	150	25	12	B9A	P
12BY7A	141 230 871 0000	00	141 230 651		12.6	-11.6	250	180	26	11.0	B9A	P
12BZ6	412 387 100 0000	00	412 365 100		12.6	1	100	125	14	8	B7G	P
12BZ7	851 228 413 0000	00	741 226 413		6.3	2	250		2.5	3.2	B9A	TT
12C2C	028 040 310 0000	00	026 040 310		12.6	8	250		9	2.6	A08	T
12C5	142 347 800 0000	00	142 345 600		12	7.5	150	100	49	7.5	B7G	P
12C8	028 X97 310 0000	40	026 985 310	G1	12.5	3	250	125	10	1.3	A08	DDP
12CA5	142 347 800 0000	00	142 345 600		12	4.5	125	125	36	9.2	B7G	P
12CD6	021 040 370 0000	80	021 040 350		12.6	55	150	150	75	7.7	A08	P
12CK3	080 230 801 000	00	080 230 801		12.6				250		B9A	R
12CL3	080 230 801 000	00	080 230 801		12.6				350		B9A	R
12CM6	704 234 108 0000	00	504 234 106		12	12.5	250	250	45	4.1	B9A	P
12CN5	142 347 800 0000	00	142 345 600		12.6		12	12	4.5	3.8	B7G	P
12CR5	174 231 741 0000	80	154 231 541	A1	12.6	22.5	250	150	65	6	B9A	P
12CR6	192 387 400 0000	00	182 365 400		12	2	250	100	6.9	2.2	B7G	DP
12CS5	714 234 108 0000	00	514 234 1*6		12.6	10	200	125	47	8	B9A	P
12CS6	112 387 400 0000	00	112 365 400		12	1	100	30	0.8	1.5	B7G	P
12CT8	841 238 751 0000	00	641 237 541		12	[1.4 1.5	150 200	 125	9 15	4.9 7]	B9A	TP
12CU5	142 347 800 0000	00	142 345 600		12	8	150	100	50	7.5	B7G	P
12CU6	020 740 310 0000	80	020 540 310	A1	12	22	250	150	57	5.8	A08	P
12CX6	412 387 100 0000	00	412 365 100		12.6	0	12	12	3	3.1	B7G	P
12D4	001 090 230 0000	00	**1 *8* 230		12						A08	D

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
12D26	412 387 100 0000	00	412 365 100		12.6		12	12	4.5	3.8	B7G	P
12DA6	041 230 871 0000	00	041 230 651		12	1	200	100	12	4.4	B9A	P
12DB5	814 234 108 0000	00	614 234 1*6		12.6	9.6	200	125	46	8	B9A	P
12DE8	419 238 171.0000	00	418 236 151		12.6	0.8	12	12	1.3	1.5	B9A	DP
12DF5	901 22X 013 0000	00	801 229 013		6.3				30		B9A	RR
12DF7	841 228 513 0000	00	641 227 413		6.3	2	250		1.2	1.6	B9A	TT
12DJ8	841 238 510 0000	00	641 237 410		12.6	1.3	100		15	12.5	B9A	TT
12DK5	141 230 871 0000	00	141 230 651		12.6	0	12	12	2	3.3	B9A	P
12DK6	412 387 100 0000	00	412 387 100		12.6	0.9	125	125	12	9.8	B7G	P
12DK7	141 223 871 0000	00	141 223 651		6.3	0	12	12	6	5	B9A	P
12DL4	414 234 484 0000	00	414 234 464		12		150		12.5	14	B9A	T
12LD6	917 238 41X 0000	00	815 236 419		12.6	2.5	12	12	3.8	6.5	*B9A	DDP
12DL8	914 238 71X 0000	00	814 236 519		12.6	0.5	12	12	40	15	B9A	DDP
12DM4	001 090 320 0000	00	0*1 080 230		12.6				180		B9A	R
12DM5	142 347 800 0000	00	142 345 600		12.6	7.5	150	100	49	7.5	B7G	P
12DM6	704 234 108 0000	00	504 234 106		12	12.5	250	250	45	4.1	B9A	P
12DM7	841 228 513 0000	00	641 227 413		6.3	2	250		1.2	1.6	B9A	TT
12DQ4	001 090 230 0000	00	001 080 230		12.6			120			A08	R
12DQ6	020 740 310 0000	80	020 540 310	A1	12	22.5	250	150	75	6.6	A08	P
12DQ7	141 223 871 0000	00	141 223 651		6.3	2.1	100	125	26	10.5	B9A	P
12DS7	907 238 41X 0000	00	805 236 419		12.6	2	12	12	40		B9A	DDP
12DT1	412 39X 800 0000	00	412 389 600		12.6	3	250		1	1.2	B7G	DDT
12DT2	412 39X 800 0000	00	412 389 600		12.6	2	250		1.1	1.6	B7G	DDT
12DT5	704 234 108 0000	00	504 234 1*6		12.6	16.5	250	250	38	6.2	B9A	P
12DT6	412 387 100 0000	00	412 365 100		12.6	2.2	150	100	1.1	1.8	B7G	P
12DT7	841 228 513 0000	00	641 227 413		6.3	2	250		1.2	1.6	B9A	TT
12DT8	841 238 510 0000	00	741 236 410		12.6	2.5	250		10	5.5	B9A	TT
12DU7	417 238 90X 0000	00	415 236 8*9		12.6	0	12	12	12	6.2	B9A	DDP
12DV7	1X9 228 413 0000	00	198 226 413		12.6	0	12		0.4	0.7	B9A	DDT
12DV8	X14 238 719 0000	00	914 236 518		12.6	1.0	12.6	12.6	6.8		B9A	DDP
12DW5	704 234 108 0000	00	504 234 106		12.6	22.5	200	150	55	5.5	B9A	P
12DW7	851 238 410 0000	00	641 337 412		6.3	2 8.5	250 250		1.2 10.5	1.6 2.2	B9A	TT
12DW8	851 238 419 0000	00	641 237 418		12.6	0 0	12.6 12.6		1.9 7.5	2.7 6.5	B9A	DTT
12DY8	517 238 184 0000	00	415 237 164		12.6	0	12 12	12	1.2 14	2 6	B9A	TP
12DZ6	412 387 100 0000	00	412 365 100		12.6	0	12	12	4.5	3.8	B7G	P
12DZ8	415 238 718 0000	00	414 236 517		12	1.2 9	120 150	125	0.8 45	1.4 7.5	B9A	TP
12E1	020 740 310 0000	80	020 540 310	A1	6.3	18	150	150	75	9.8	A08	T
12E1C	030 740 310 0000	80	*30 540 210	A1	6.3	10	150	150	200	14	A08	P
12E4	751 238 584 0000	00	541 237 464		12.6	2.6	200 200	100	5.4 3.7		B9A	TH
12E5	028 040 310 0000	00	026 040 310		12.5	13.5	250		5	1.4	A08	T
12E8	020 048 310 0000 028 750 310 0000	50 50	027 546 310	G1	12	2	100 100	100	3.3 3	0.5	A08	TH
12E14	030 740 210 0000	80	*30 540 210	A1	6.3	10	150	150	200	14	A08	P
12EA6	412 387 100 0000	00	412 365 100		12.6		12	12	3.2	3.8	B7G	P
12EC8	481 238 715 0000	00	461 237 514		12.6	0 0	12 12	12	2.4 0.6	4.7 2	B9A	TP
12ED5	142 347 800 0000	00	142 345 600		12.6	4.0	100	100	32	8.1	B7G	P
12EF6	028 740 310 0000	00	026 540 310		12.6	18	250	250	50	5.0	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	VCM163 Tester only: TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4: TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
12EG6	412 387 400 0000	00	412 365 400		12.6	0.8	12.6	12.6	0.4	1.0	B7G	H
12EH5	142 234 800 0000	00	142 345 600		12.6	3.2	100	125	42	14.6	B7G	P
12EK6	412 387 100 0000	00	412 365 100		12.6	0	12	12	4.4	4.2	B7G	P
12EL6	482 3X9 100 1000	00	462 398 100		12.6	0	12		0.7	1.2	B7G	DDT
12EM6	417 238 009 0000	00	415 236 **8		12.6	0	12	12	6	5	B9A	DP
12EN6	028 740 310 0000	00	026 540 310		12.6	9.5	200	100	50	8.0	A08	P
12EQ7	141 237 890 0000	00	141 235 680		12.6	0	100	100	9	3.9	B9A	DP
12ES5	142 380 100 0000	00	142 360 100		12.6	1	200		10	9.4	B7G	T
12EX6	412 387 100 0000	00	412 365 100		12.6	1.0	12	12	2.4	4	B7G	P
12EZ6	412 387 100 0000	00	412 365 100		12.6	0.7	12	12	1.9	2.7	B7G	P
12F	290 300 000 0000	00	280 300 000		5				60		UX4	R
12F5	020 800 310 0000	40	020 600 310	G1	12.5	2	250		0.9	1.5	A08	T
12F8	978 23X 141 0000	00	856 239 141		12.6	0	12	12	1	1	B9A	DDP
12F31	412 387 100 0000	00	412 365 100		12	1	100	100	10.8	4.3	B7G	P
12FK6	412 39X 800 0000	00	412 389 600		12.6	0	12		1.3	1.2	B7G	DDT
12FM6	412 3X9 800 0000	00	412 398 600		12.6	0	12		1	1.3	B7G	DDT
12FQ8	858 238 481 0000	00	747 236 461		12	1	200		3	1.5	B9A	TT
12FR8	415 327 898 0000	00	414 325 786		12.6	[0.6	12		1	1.2		
12FT6	412 39X 800 0000	00	412 389 600			0.8	12	12	1.9	2.7]	B9A	DTP
12FX5	142 347 800 0000	00	142 345 600		12.6	0	12.6		0.6	1	B7G	DDT
12FX8	758 324 181 0000	00	547 324 161		12.6	0	150	130	36	13.5	B7G	P
					12.6	[0	12.6		1.3	1.4		
						0	12.6		0.3	0.3]	B9A	TH
12G4	802 384 100 0000	00	602 364 100		12	8	250		10	3	B7G	T
12G7	028 X90 310 0000	40	026 980 310	G1	12.5	3	250			1.2	A08	DDT
12G8	815 228 143 0000	00	714 226 143		6.3	12.6			7.2	2.6	B9A	TT
12GA6	412 388 100 0000	00	412 366 100		12.6	0	12.6	12.6	0.3	0.14	B7G	O
12GB3	020 740 310 0000	80	*2* 540*310	A1	12.6	7.7	100	100	100	14	A08	P
12GB6	020 740 080 0000	80	020 540 070	A1	12.6	22.5	250	150	57	5.9	A08	P
12GB7	020 740 310 0000	80	020 540 310	A	12.6	7.7	100	100	100	14	A08	P
12GC6	217 434 000 0000	80	215 434 000	A	12.6	0	250	150	75	6.6	UX6	P
12GE5	274 100 800 1430	00			12.6	22.5	250	150	65	7.3	A12	P
12GE8	274 100 800 1430	00			12.6	22.5	250	150	65	7.3	A12	P
12GJ5	741 234 700 0000	80	541 234 5**	A1	12.6	22.5	250	150	70	7.1	B9D	P
12GK17	001 090 230 0000	00	001 080 230		12.6				120		A08	R
12GN6	412 387 900 0000	00	412 365 800		12.6	68	250	100	11	4.4	B7G	DP
12GN7	111 230 871 0000	00	141 230 651		12.6	2	250	150	28	36	B9A	P
12GT5	741 324 708 0000	00	541 324 5*6		12.6	22.5	250	150	70	7.1	B9D	P
12GV5	207 140 704 1730	80			12.6	22.5	250	150	65	7.3	A12	P
12GW6	020 740 310 0000	80	020 540 310	A1	12.6	22.5	250	150	70	7.1	A08	P
12H1C	418 158 230 0000	00	416 147 230		12.6	6.5	200		7.6	1.9	A08	TT
12H4	823 384 100 0000	00	623 364 100		6.3	8	250		9	2.6	B7G	T
12H6	02X 190 310 0000	00	029 180 310		12.6						A08	DD
12H10C	084 581 230 0000	00	064 471 230		12.6	2	250		2	1.3	A08	TT
12H31	412 387 400 0000	00	412 365 400		12.6		100	100	2.8	0.4	B7G	H
12HE7	290 180 014 0730	00			12.6	[22	125	125	120 60	8.8]	A12	RP
12HG7	141 230 871 0000	00	141 230 651		12.6	0	400	0	31	32.0	9BF	P
12HL7	141 230 856 0000	00	141 230 645		12.6	0	400	0	25	21.0	B9A	P
12J5	028 040 310 0000	00	026 040 310		12	8	250		9	2.6	A08	T
12J7	028 710 310 0000	40	026 510 310	G1	12.5	3	250	100	2	1.225	A08	P
12J8	417 238 19X 0000	00	415 236 189		12.6		12	12	12	5.5	B9A	DDP
12JB6	741 234 710 0000	80	541 234 51*	A1	12.6	22.5	250	150	70	7.1	B9D	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
12J86A	741 234 710 0000	80	541 234 510	A	12.6	-22.5 0 22.5	150 60 250	150 150 150	1.0	7.1	B9A	P
12JN6	217 100 800 1430	00			12.6	22.5	250	150	65	7.3	A12	P
12JN8	481 238 715 0000	00	481 238 715		12.6	1 1	125 125	 125	12 13.5	7.5 8.5	B9A	TP
12JQ6	741 231 708 0000	00	541 231 506		12.6	-225. 0 22.5	150 60 250	150 150 150	390 70	7.1	B9A	P
12JT6	741 231 708 0000	00	541 231 5*6		12.6	22.5	250	150	70	7.1	B9D	P
12K5	142 377 800 0000	00	142 355 600		12.6	2	12	12	8	7	B7G	P
12K7	028 710 310 0000	40	026 510 310	G1	12.5	3	250	125	10.5	1.65	A08	P
12L6	028 740 310 0000	00	026 540 310		12	8.25	200	125	46	8	A08	P
12L8	514 872 380 0000	00	414 752 360		12.5	9	200	175	13	2.1	A08	PP
12M7	028 710 310 0000	40	026 510 310	G1	12	2.5	100	100	6	2.2	A08	P
12M71	271 084 130 0000	00	251 064 130		12.6	15	200	200	0.3	†0.5	B8B	TI
12MD8	XY9 234 156 0000	00	996 234 144		12.6	0	330	-	11.5	3.1		TTT
12NK7	028 710 310 0000	40	026 510 310	G1	12.5	2	250	100	5	2.3	A08	P
12P1	412 387 100 0000	00	412 365 100		12.6	68	250	100	11	4.4	B7G	P
12P2	412 387 100 0000	00	412 365 100		12.6	68	250	150	10.6	5.2	B7G	P
12R5	142 347 800 0000	00	142 345 600		12.6	8.5	100	100	40	7	B7G	P
12RK19	000 230 009 0000	10	*** 23* **8	C	12.6				120		B9A	R
12RLL3	841 228 513 0000	00	641 227 413		12.6		150		10	5.5	B9A	TT
12S8	Y19 X18 230 0000	40	†18 916 230	G1	12.5	2	250		0.9	1.1	A08	DDDT
12SA7	128 841 340 0000	00	126 641 340		12.5	3.6	100		12	4.3	A08	H
12SF5	014 080 320 0000	00	014 060 320		12.5	2	250		0.9	1.5	A08	T
12SF7	041 798 230 0000	00	041 586 230		12.5	1	250	100	19.9	2	A08	DP
12SG7	021 417 380 0000	00	021 415 360		12.5	1	250	125	11.8	4.7	A08	P
12SH7	021 417 380 0000	00	021 415 360		12.5	1	250	150	10.8	4.9	A08	P
12SJ7	021 417 380 0000	00	021 415 360		12.5	3	250	100	3	1.65	A08	P
12SK7	021 417 380 0000	00	021 415 360		12.5	3	250	100	9.2	2	A08	P
12SL7	481 581 230 0000	00	461 471 230		12.5	2	250		2.5	1.6	A08	TT
12SN7	481 581 230 0000	00	461 471 230		12.5	8	250		9	2.6	A08	TT
12SQ7	041 9X8 230 0000	00	941 896 230		12.5	2	250		0.9	1.1	A08	DDT
12SR7	041 X98 230 0000	00	041 986 230		12.5	9	250		9.5	1.9	A08	DDT
12SS7	021 417 380 0000	00	021 415 360		12.5	3	250	100	9	1.85	A08	P
12SW7	041 X98 230 0000	00	041 986 230		12.5	9	250		9.5	1.9	A08	DDT
12SX7	581 481 230 0000	00	471 461 230		12.5	8	250		9	2.6	A08	TT
12SY7	128 841 340 0000	00	126 641 340		12.5	1	100		22	4.5	A08	H
12TE8	528 748 310 0000	00	427 546 310		12		100 250	 100	3.4 3.7		A08	TH
12TE9	508 230 450 0000 071 238 550 0000	00 00	651 237 440		12		100 250	 100	3.4 3	0.75	B9A	TH
12T10	215 017 841 7830	00			12.6	8 1.9	250 150	250 100	37	6.5 1	A12	PP
12U5	284 713 000 0000	00	264 513 000		12.6	22	250	250	0.2	†1.0	UX6	TI
12U7	851 228 413 0000	00	741 226 413		6.3		12		1.2	1	B9A	TT
12V6	028 740 310 0000	00	026 540 310		12.5	12.5	250	250	45	4.1	A08	P
12W6	028 740 310 0000	00	026 540 310		12	9.5	150	150	58	8.0	A08	P
12WC5	287 414 300 0000	00	265 414 300		12	1.5	250	100			UX7	P
12X3	210 300 000 0000	90	210 300 000	D1	12.5				60		UX4	R
12X4	902 30X 100 0000	00	802 309 100		12.5				30		B7G	RR

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
12Y4	9X2 310 000 0000	00	892 310 000		12				31		UX4	RR
12Z3	291 300 000 0000	00	281 300 000		12.6				30		UX4	R
12Z4	291 300 000 0000	00	281 300 000		12.5				60		UX4	R
12Z5	291 31X 200 0000	00	281 319 200		6.3				30		UX7	RR
12ZDH3A	284 913 000 0000	00	264 813 000		12	2	250		1.5	1.5	UX6	DT
12ZP1A	287 413 000 0000	00	265 413 000		12	9	200	200	30	2.3	UX6	P
13	2X9 300 000 0000	00	298 300 000		5				60		UX4	RR
13BC1U	208 091 X30 0000	40	206 081 930	G1	2.5	1.8	200		3	2	B8B	DDT
12BF2U	208 791 X30 0000	40	206 581 930	G1	12.5	2.1	200	200	5	2	B8B	DDP
13CM5	020 740 310 0000	80	020 540 310	A	12.8		100	100	100	14	A08	P
13D5	841 238 410 0000	00	741 226 413		6.3	8.5	250		1.6		B9A	TT
13D7	148 231 085 000	00	146 231 074		6.3		250		2.2	3.3	B9A	TT
13D8	851 228 413 0000	00	741 226 413		6.3	8.5	250		10.5	2.2	B9A	TT
13D9	851 228 413 0000	00	741 226 413		6.3	2	200			5.7	B9A	TT
13DE7	855 238 410 0000	00	644 237 410		13	[11 17.5	250 150		5.5 32	2 6.5]	B9A	TT
13DHA	X09 231 800 0000	40	908 231 600	G1	13	1.5	250		1	1.5	B7	DDT
13DR7	855 238 410 0000	00	644 237 410		13	[3 17.5	250 150		1.4 35	1.6 6.5]	B9A	TT
13E1	204 178 300 0000	00	2*4 156 300		26	14	150	150	500	35	B7A	T
13E12	204 178 300 0000	00	2*4 156 300		26	30	150	150	500	25	B7A	P
13EM7	581 481 230 0000	00	471 461 230		13	20 3	150 250		50 1.4	7.2 1.6	B9A	TT
13F7	023 110 780 0000	40	023 110 560	G1	13	2	200	100	3	3.1	8SC	P
13F9U	208 701 130 0000	40	206 501 130	G1	12.5	2.6	200	200	6.2	2.2	B8B	P
13FD7	855 238 411 0000	00	644 237 411		6.3	[3 17.5	250 150		1.4 40	1.6 7.5]	B9A	TT
13FG7	141 238 085 0000	00	141 236 074		13	[20 3	150 250		50 1.4	7.2 1.6]	B9A	TT
13FM7	205 080 151 4830	00			13	[3 25	250 175	2 40	2.2 6	]	A12	TT
13FR7	855 238 411 0000	00	644 237 411		13	[3 20	250 150		1.4 50	1.6 7.2]	B9A	TT
13GB5	441 237 710 0000	80	441 235 510	A	13.0	10	75	200	440	P	B9A	P
13GF7	151 238 084 0000	00	141 237 064		13	[3 20	250 150		1.4 50	1.6 7.2]	B9D	TT
13H1	023 110 780 0000	40	023 110 560	G1	3	2	200	100	3	2	8SC	P
13H2	023 110 780 0000	40	023 110 560	G1	13	3	200	100	8.2	1.8	8SC	P
13J10	271 817 418 0530	00			13.2	[8	100 125	100 250	 35	 6.5]	A12	TP
13M4V	208 747 132 0000	00	206 540 130		12.6	[4.2 12.5	200 200	200 200		†1.0 †1.0]	A08	TI
13SPA	081 231 700 0000	40	061 231 500	G1	13	3	200	100	2.3	1.7	B7	P
13V1	013 19X 780 0000	40	013 189 560	G1	13	8.5	200	200	45	4.4	8SC	DDP
13VPA	081 231 700 0000	40	061 231 500	G1	13	3	200	100	7	1.8	B7	P
14..	287 130 000 0000	40	265 130 000	G1	14	3	250	90	4	1	UX5	P
14A4	280 004 130 0000	00	260 0*4 130		12.5	8	250		9	2.6	B8B	T
14A5	287 004 130 0000	00	265 004 130		12.5	12.5	250	250	30	3	B8B	P
14A7	287 104 130 0000	00	265 104 130		12.5	3	250	100	9.2	2	B8B	P
14AF4	218 458 130 0000	00	216 447 130		12	10	250		9	2.1	B8B	TT
14B6	284 09X 130 0000	00	264 *89 130		12.5	2	250		0.9	1.1	B8B	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	VCM163 Tester only: TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4: TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
14B8	287 474 130 0000	00	265 454 130		12.5	2	250	100		1.1	B8B	H
14C5	287 004 130 0000	00	265 004 130		12.5	12.5	250	250	47	4.1	B8B	P
14C7	287 114 130 0000	00	265 114 130		12.5	3	250	100	2.2	1.5	B8B	P
14E6	284 0X9 130 0000	00	264 *98 130		12.5	8	250		9.3	1.9	B8B	DDT
14E7	28X 974 130 0000	00	269 854 130		12.5	3	250	100	7.5	1.3	B8B	DDP
14F6	028 740 310 0000	00	026 540 310		14	16.5	250	250	35	2.5	A08	P
14F7	218 548 130 0000	00	217 446 130		12.5	2	250		2.3	1.6	B8B	TT
14F8	528 118 340 0000	00	427 116 340		12.5	3	250		6	3.3	B8B	TT
14GT8	191 23X 148 0000	00	181 239 146		14	3	250		0.7	1.0		DDT
14GW8	417 238 158 0000	00	415 237 146		14.7	1.7 7	250 250	 250	1.2 36	1.6 10	B9A	TP
14H7	287 114 130 0000	00	265 114 130		12.5	2	250	150	10	4.2	*B8B	P
14J7	208 405 130 0000 280 575 130 0000	00 00	276 454 130		12.5	3 3	150 250	 100	6.6 1.4	1.4	B8B	TH
14JG8	191 23X 148 0000	00	181 239 146		14	2	250		2	2.2	B9A	DDT
14K7	208 405 130 0000 280 575 130 0000	00 00	276 454 130		14	2 2	100 200	 90	6.4 2.7	2.2 1.5	B8A	TH
14L7	284 0X9 130 0000	00	264 098 130		14	1.6	200		15	1.65	B8A	DDT
14N7	218 548 130 0000	00	217 446 130		12.5	8	250		9	2.6	B8B	TT
14Q7	288 414 130 0000	00	266 414 130		12.5	2	100		15	6	B8B	H
14R7	28X 974 130 0000	00	269 854 130		12.5	1	250	100	6.2	3.4	B8B	DDP
14S7	208 405 130 0000 280 575 130 0000	00 00	276 454 130		12.5	1 2	100 250	 100	4.8 4	1.4 2	B8B	TH
14V7	287 104 130 0000	00	265 104 130		12.5	2	300	150	9.6	5.8	B8B	P
14W7	287 114 130 0000	00	265 114 130		12.5	2.2	300	150	10	5.8	B8B	P
14X7	284 19X 130 0000	00	264 189 130		12.5	1	250		1.9	1.5	B8B	DDT
14Y4	209 00X 130 0000	00	208 009 130		12.5				30		B8B	RR
14Z3	291 300 000 0000	00	281 300 000		12.5				60		UX4	R
15	284 300 000 0000	00	264 300 000		2.5	33	250		22	2.35	UX4	T
15	287 130 000 0000	40	265 130 000	G1	2	1.5	150	75	1.85	0.75	UX5	P
15A2	847 231 800 0000	00	645 231 700	G1	4	20 3	200 250	 100	4 3.5		B7	H
15A6	471 231 800 0000	00	451 231 600		15	2.9	200	175	36	10	B9A	P
15A8	124 571 380 0000	20	124 451 360	A2	15	8 7.5	250 100	 100	9 45	2.6 7.3	A08	TP
15AF11	285 814 181 7630	00			6.3	2 2 3	200 200 200	 150	7 9.2 24	5.5 4.4 11	A12	TTP
15BD7A	841 239 0X0 0000	00	641 238 090		15	1.5	200		1.5	1.6	B9A	DDT
15BD11	285 814 181 7630	00			6.3	2 2 2.1	200 200 150	 150	7.0 9.2 17	5.5 4.4 10.4	A12	TTP
15CW5	071 230 807 0000	00	*51 23* 6*5		15	12.5	200	175	70	10	B9A	P
15D1	847 231 800 0000	00	645 231 700	G1	13	20 3	200 250	 100	4 3.5		B7	H
15DQ8	481 238 157 0000	00	461 237 145		15	1.7 2.9	200 200	 150	3.0 18	4.0 11	B9A	TP
15E	280 701 300 0000	40	260 501 300	G1	2		150	75	1.8	0.7	B7G	P
15EA7	481 581 230 0000	00	461 471 230		14.8	25	200		48	6.5	A08	TT
15EW6	412 387 100 0000	00	412 365 100		15	1	125	125	3.2	14	B7G	P
15F80	741 231 800 0000	00	541 231 600		15		200	200	36	10	B9A	P
15FM7	205 080 151 4830	00			14.8	3 25	250 175		2 40	2.2 6	A12	TT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
15FY7	205 080 101 4830	00			14.7	3 17.5	250 150		1.4 35	1.6 6.5	A12	TT
15HB6	141 237 871 0000	00	141 235 651		14.7	4.6	250	250	40	20	B9A	P
15KY8	151 238 784 0000	00	141 237 564		15	3 10	250 150	100	1.4 39	1.6 8.4	B9D	TP
15KY8A	151 238 784 0000	00	141237 564		15	3 10	250 150	100	1.4 39	1.6 8.4	B9D	TP
15LE8	811 230 174 0000 011 238 174 0000	00 00	011 236 154		15	2.5	100	100	8	5.8	B9A	PP
15TP7	481 238 157 0000	00	461 237 145		15	1.7 2.9	200 200	200	3 18	4 10.4	B9A	TP
15X6	02X 190 310 0000	00	029 180 310		25				30		A08	RR
15YF7	205 080 101 4830	00			14.7	3 17.5	250 150		1.4 35	1.6 6.5	A12	TT
16	290 300 000 0000	00	280 300 000		7.5				60		UX4	R
16A5	041 230 807 0000	00	*41 23* 6*5		16	14.2	200	200	45	7.5	B9A	P
16A8	415 238 718 0000	00	414 237 516		16	1.5 11.5	200 200	200	1.7 41	2.4 7.5	B9A	TP
16AQ3	000 230 009 0000	10	*** 23* **8	C	16.4				180		B9A	R
16B	290 300 000 0000	00	280 300 000		7.5				60		UX4	R
16CN8	414 235 718 0000		414 237 516		16	1 16	100 200	200	3.3 35	3.6 6.4	B9A	TP
16DS4	080 400 010 2030	00			6.3		100		6.5	9	NV	T
16GK6	141 230 871 0000	00	141 230 651		16	7.4	250	250	48	11.3	B9A	P
16GK8	415 238 718 0000	00	414 237 516		16		200 250	250	10 30	3.4 7.5	B9A	TP
16GY5	207 140 704 1730	80			15.8	20	125	125	50	9.1	A12	P
16KA6	207 140 000 1030	80			15.8	20	125	125	50	9.1	A12	P
16L40	041 230 807 0000	00	041 230 605		16	14.2	200	200	45	7.6	B9A	P
16N8	415 238 718 0000	00	414 237 516		15	16	100 200	200	3.3 35	3.6 6.4	B9A	TP
16TP6	151 234 887 0000	00	141 234 675		16	11.5	100 200	175	3.5 41	2.5 7.5	B9A	TP
17	284 130 000 0000	00	264 130 000		14	6	90		2.7	0.8	UX5	T
17AV5	421 080 370 0000	00	421 060 350		16	22.5	250	150	57	5.9	A08	P
17AX3	200 900 100 8030	00			16.3						A12	D
17AX4	001 090 230 0000	00	001 080 230		16.8				120		A08	R
17AY3	090 230 910 0000	00	*8* 23* 810		16.8				120		B9D	R
17AY3A	080 230 801 0000	00	060 230 601		16.8		32		350		B9A	R
17BE3	200 900 100 9030	00			16.8				120		A12	R
17BE11	215 017 841 7830	00			16.8	6 1.8	150 150	100 100	38 1.3	8.6 1	A12	PP
17BH3	090 230 901 0000	00	*8* 23* 8*1		17				180		B9D	R
17BH3A	080 230 801 0000	00	060 230 601		17.0		32		350		B9A	R
17BQ6	020 740 310 0000	80	020 540 310	A1	17	22.5	250	150	75	6.6	A08	P
17BS3	090 230 901 0000	00	*8* 23* 8*1		16.8				120		B9D	R
17BS3A	080 230 801 0000	00	060 230 601		16.8		12		140		B9A	R
17C5	142 347 800 0000	00	142 345 600		16	7.5	150	100	49	7.5	B7G	P
17C8	741 238 9X1 0000	00	541 236 891		17	2	200	125	5	2.2	B9A	DDP
17C9	478 231 578 1000	00			16.8	1	125	75	10	8	A10	PP
17CA5	142 347 800 0000	00	142 345 600		16.8	4.0	100	100	32	8	B7G	P
17CK3	080 230 801 0000	00	060 230 601		16.8		16		250		B9A	R
17CT3	080 230 001 0000	00	060 230 001		16.8		16		350		B9A	R
17CU5	142 347 800 0000	00	142 345 600		16.8	7.5	100	100	49	7.3	B7G	P
17D1	98X 231 700 0000	40	869 231 500	G1	13	3	250	125	9	1.1	B7	DDP
17D4	001 090 230 0000	00	**1 *8* 230		16.8				145		A08	D

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
17D4A	001 090 230 0000	00	**1 *8* 230		16.8				180		A08	R
17DA4			001 080 230		16.8				120		A08	R
17DE4	001 090 230 0000	00	001 080 230		17				120		A08	R
17DM4	001 090 230 0000	00	001 080 230		16.8				180		A08	R
17DM4A	018 230 000 0000	00	016 230 000		16.8		35		400		B5-85	R
17DQ4	001 090 230 0000	00	001 080 230		16.8				120		A08	R
17DQ6	020 740 310 0000	80	020 540 310	A1	16	22.5	250	150	75	6	A08	P
17EW8	851 238 410 0000	00	741 236 410		17	1.1	100		4.5	4.6	B9A	TT
17F6	041 230 887 0000	00	041 230 665		17	23	250	200	53	5.0	B9A	P
17FL8	741 238 9X1 0000	00	541 236 891		17	1.5	200	100	11	4.5	B9A	DDP
17GJ5	741 234 700 0000	80	541 234 5**	A1	16.8	22.5	250	150	70	7.1	B9D	P
						-22.5	150	150	390			
17GJ5A	741 234 700 0000	80	541 234 500	A	16.8	-22.5	250	150	70	7.1	B9A	P
17GE5	274 100 800 1430	00			16.8	22.5	250	150	65	7.3	A12	P
17GT5	741 234 708 0000	00	541 234 506		16.8	42	250	150	70	7.1	B9A	P
17GT5A	741 234 708 0000	00	541 234 506		16.8	-22.5	250	150	70	7.1	B9A	P
17GV5	207 140 704 1730	80			16.8	22.5	250	150	65	7.3	A12	P
17GW6	020 740 310 0000	80	020 540 310	A1	16.8	22.5	250	150	70	7.1	B8A	P
17GW8	417 238 158 0000	00	415 237 146		16.8	[1.7	250		1.2	1.6	B9A	TP
						7.0	250	250	36	10]		
17H3	109 230 090 0000	00	108 230 080		17.5				60		B9A	D
17HC8	415 238 718 0000	00	414 237 516		16.8	[3	250		1.4	2	B9A	TP
						18	250	250	38	5.1]		
17JB6	741 234 710 0000	80	541 234 51*	A1	16.8	22.5	250	150	70	7.1	B9D	P
17JG6	741 231 708 0000	00	541 231 5*6		16.8	20	150	100	80	10	B9D	P
17JK8	851 238 410 0000	00	714 236 410		16.8	[1.0	100		5.3	6.8	B9A	TT
						1.3	150		10	13]		
17JM6	217 140 000 1030	80			16.8	22.5	250	150	65	7.3	A12	P
17JN6	217 100 800 1430	00			16.8	22.5	250	150	65	7.3	A12	P
17JQ6	807 231 441 0000	00	605 231 441		17.0	-18	425	[120 140]	35	4.2	B9A	P
17JR6	741 231 708 0000	00	541 231 506		16.8	-20	130	125	45	7.0	B9A	P
17JT6	741 231 708 0000	00	541 231 5*6		16.8	22.5	250	150	70	7.1	B9D	P
17JZ8	280 805 571 4130	00			16.8	[5	150		5.5	2.3	A12	TP
						8	125	100	46	7.1]		
17JZ8	280 805 571 4130	00			16.8	[5	150		3.3	1.9	A12	TP
						8	125	100	44	7.1]		
17KV6	741 231 708 0000	00	541 231 506		16.8	-24.5	140	140	80	9.5	B9A	P
17L6	028 740 310 0000	00	026 540 310		16.8	7.0	100	100	49	8	A08	P
17LD8	151 238 784 0000	00	101 236 564		16.8	[5	150		3.3	1.9	B9A	TP
						8	125	100	44	7.1]		
17N8	741 238 9X1 0000	00	541 236 891		17	2	200	75	5	2.2	B9A	DDP
17R5	142 347 800 0000	00	142 345 600		16.8	8.5	100	100	40	7	B7G	P
17R7	000 230 009 0000	10	*** 23* **8	C	17				120		B9A	R
17W6	028 740 310 0000	00	026 540 310		16.8	9	200	125	46	8	A08	P
17X10	271 817 418 0530	00			16.8	[	125	100	0.2		A12	PP
						6	150	100	38	8.6]		

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
17Z3	000 230 009 0000	10	*** 23* **8	C	17				120		B9A	R
18	287 413 000 0000	00	265 413 000		14	16.5	250	250	34	2.5	UX6	P
18A5	421 080 370 0000	00	421 060 350		18	17	200	125	40	4.8	A08	P
18AK5	412 387 100 0000	00	412 365 100		18	2.5	150	125	7.7	5.1	B7G	P
18AQ5	412 387 100 0000	00	412 365 100		18	7.2	150	175	28	3.5	B7G	P
18C51	214 808 513 0000	00	214 607 413		18	2	150		8.2	5.5	B9A	TT
18D2	841 238 715 0000 811 238 715 0000	00 00	641 237 514		9.5	1.8 1.6	150 200	175	12.5 10	10 10	B9A	TP
18D3	857 238 114 0000	00	645 237 114		6.3	1 2	150 150	150	18 7	8.5 11	B9A	TP
18DG6	412 387 100 0000	00	412 365 100		18	1	100	100	5	4.3	B7G	P
18DZ8	415 238 718 0000	00	414 237 516		18	1.2 9	100 150	125	0.8 45	1.4 7.5	B9A	TP
18F24	281 174 130 0000	00	261 154 130		18	2.1	250	200	15	10.5	A08	P
18FW6	412 387 100 0000	00	412 365 100		18	1	100	100	11	4.4	B7G	P
18FX6	412 387 100 0000	00	412 365 100		18		100	100	24	7	B7G	O
18FX6A	412 387 100 000	00	412 365 100		18.0	0	150	100	2.3	7.0	B7G	P
18FY6	412 39X 800 0000	00	412 389 600		18	1	100		0.6	1.3	B7G	DDT
18FY6A	412 300 800 0000 002 3X0 000 0000	00 00	412 300 600 002 398 000		18.0	-1	100		0.6	1.3	B7G	DDT
18GD6	141 230 871 0000	00	141 230 651		18		100	100	5	4.3	B9A	P
18GD6A	412 387 100 0000	00	412 365 100		18.0	-4.7	100	100	5	4.3	B7G	P
18GE6	142 380 100 0000	00	142 360 100		18	1	100		1	1.7	B7G	T
18GV8	841 238 715 0000	00	641 237 514		18	0.85 15	100 175	175	5 41	5.5 7	B9A	TP
18HB8	418 237 815 0000	00	416 235 714		18	1 6	100 100	100	2.5 32	3.9 6.2	B9A	TP
18J6	882 345 100 0000	00	672 344 100		18	1	100		6.5	5	B7G	TT
19	384 582 000 0000	00	364 472 000		2	3	150		1.7		UX6	TT
19A3	002 293 100 0000	00	002 283 100		9.5				60		B7G	R
19AJ8	751 238 584 0000	00	541 237 164		19	3 2	100 250	100	5 6.5	2.3 2.4	B9A	TH
19AQ5	412 387 400 0000	00	412 365 400		19	12.5	250	200	47	4.1	B7G	P
19AU4	001 090 230 0000	00	**1 080 230		19				120		A08	R
19BD	001 230 009 0000	00	**1 23* **8		19				60		B9A	R
19BG6	021 040 370 0000	80	021 040 350	A1	19	15	250	250	75	6	A08	P
19BY7	141 213 871 0000	00	141 213 651		19	2	175	100	9.7	5.9	B9A	P
19C8	9Y1 23X 148 0000	00	8†1 239 146		19	1	100		0.5	1.2	B9A	DDDT
19CL8	481 238 715 0000	00	461 237 514		18.9	0.85 1	150 150	125	15 12	8 5.8	B9A	TP
19CL8A	481 230 000 0000 000 238 714 0000	00 00	461 230 000 000 236 514		18.9	1 1.0	125 125	125	14 12	8.0 6.5	B9A	TP
19D8	751 238 184 0000	00	541 237 464		19	2.6	100 200	125	13.5 7.6	3.7 2.4	B9A	TH
19DC8	741 238 9X1 0000	00	541 236 891		19	2	250	100	9	3.8	B9A	DDP
17DE7	855 238 411 0000	00	644 237 411		19.5	11 17.5	250 150		5.5 35	6.5	B9A	TT
19EA8	857 238 114 0000	00	645 237 114		18.9	1 1	150 150	125	18 12	8.5 6.4	B9A	TP
19EH7	141 230 871 0000	00	141 230 651		19	2	200	100	13	13	B9A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
19EJ7	141 230 871 0000	00	141 230 651		18.9	2.5	200	200	10	15	B9A	P
19FL8	741 238 9X1 0000	00	541 236 891		19	1.5	200	100	11	4.5	B9A	DDP
19G3	020 000 300 0000	90	020 000 300	D1	4				30		A08	R
19G6	112 311 100 0000	90	112 311 100	D1	4				30		B7G	R
19GQ7	1Y0 23X 191 0000	00	1†* 239 181		18.9				5		B9A	DDD
19GV8	841 238 715 0000	00	641 237 514		18.9	0.6 15	100 200	200	41	6.5 7.5	B9A	TP
19H1	002 300 000 0000	90	002 300 000	D1	4				60		B4	R
19H4	020 000 300 0000	90	020 000 300	D1	2.5				30		A08	R
19HR6	412 387 100 0000	00	412 365 100		18.9	1.2	200	100	13.2	8.5	B7G	P
19HS6	412 387 100 0000	00	412 365 100		18.9	0.8	150	75	8.8	9.5	B7G	P
19HV8	481 238 715 0000	00	461 237 514		18.9	1.0 1.0	100 150	150	0.8 13	1.3 7	B9A	TP
19J6	882 345 100 0000	00	762 344 100		19	1	100		8.5	5.3	B7G	TT
19JN8	481 238 715 0000	00	481 238 715		18.9	1 1	125 125	125	12 13.5	7.5 8.5	B9A	TP
19MR9	412 387 400 0000	00	412 365 400		19	2.5	100	100	7	3.5	B7G	P
19MV5	412 387 400 0000	00	412 365 400		19	2	150	125	10	3.5	B7G	P
19Q9	578 231 148 0000	00	578 231 148		18.9	1 1	125 125	125	14 12	8 6.5	B9A	TP
19R3	001 230 009 0000	00	001 230 008		19				180		B9A	R
19RLL1	214 808 513 0000	00	214 607 413		19	1.7	150		9	5.5	B9A	TT
19RLL2	841 238 510 0000	00	641 237 410		19	8.5	250		10.5	2.2	B9A	TT
19RP11	401 238 714 0000	00	401 236 514		19	7	100	100	35	5.5	B9A	P
19SU	001 230 009 0000	00	**1 23* **8		19				120		B9A	R
19T8	YX1 239 148 0000	00	†91 238 146		19	3	250		1.0	1.2	B9A	DDDT
19U3	001 230 009 0000	00	**1 23* **8		19				120		B9A	R
19V8	891 234 Y1X 0000	00	681 234 †19		19	3	250		1.0	1.2	B9A	DDDT
19W3	001 230 009 0000	00	**1 23* *08		19				120		B9A	R
19X8	148 231 578 0000	00	146 231 457		19	1 1.8	100 250	150	8.5 7.7	5.8 5.6	B9A	TP
19Y40	001 230 009 0000	00	001 230 008		19				180		B9A	R
20	384 200 000 0000	00	364 200 000		3	16.5	90		3	0.4	UX4	T
20A1	847 231 800 0000 057 231 800 0000	50 50	645 231 700	G1	4	12.5 1.5	100 250	75	2.3 2.2		B7	TH
20A3	412 318 100 0000	00	412 316 100		6.3		400		50	6	B9A	P
20CH4U	218 745 830	50	216 544 730	G2	20	2	200 200	100	4.1 3.5	0.75	B8A	TP
20D1	192 310 X00 0000	00	182 310 900		9.5				5		B7G	RR
20D2	840 231 000 0000 057 231 800 0000	50 50	645 231 600	G1	13	7.5 3	100 250	100	3.8 2.5		B7	TH
20D3	051 330 482 0000 751 338 502 0000	00 00	541 227 463		6.3	1 3	100 250	100	3.6	3.6	B9A	TH
20D4	751 238 184 0000	00	541 237 164		6.3	2	100 250	100	15 7	3.5 2.8	B9A	TH
20EQ7	141 237 890 0000	00	141 235 680		20	0	100	100	9	10.9	B9A	DP
20EZ7	223 148 851 0000	00	223 146 741		10	1.0	150			1.6	B9A	TT
20F2	280 174 130 0000	00	260 154 130		11	1.2	150	150	27	10.6	B8A	P
20J8	029 748 310 0000	40	027 546 310	G1	20	1.5 3	100 250	100	1.5 1.5		A08	H
20L1	285 184 130 0000	00	274 164 130		12	12	250		10	2.8	B8A	TT
20P1	020 740 310 0000	80	020 540 310	A1	38	30	200	200	80	6	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
20P2	020 740 310 0000	80	020 540 310	A1	38	7.5	250	250		13.5	A08	P
20P3	028 740 310 0000	00	026 540 310		20	9.4	200	175	42	7.2	A08	P
20P4	020 740 310 0000	80	020 540 310	A1	38	33	200	200	100	6	A08	P
20P5	280 074 130 0000	00	260 054 130		20	6.3	200	150	29	7.5	A08	P
20RDHV1	157 238 984 0000	00	145 237 864		20	[2 1	250 250	 100	1.2 9	1.2 3.5]	B9A	DTP
20Y1	023 100 090 0000	00	023 100 080		20				60		F8	R
20Y40	000 230 009 0000	10	000 230 008	C	20				120		B9A	R
21	287 413 000 0000	00	265 413 000		6.3	45	400	300	65		UX6	P
21A6	041 230 071 0000	80	*41 23* *51	A1	21.5	28	200	200	40	6.0	B9A	P
21A7	[208 405 130 0000 280 575 130 0000	00 00	276 454 130		21	 3	150 250	 100	3.5 1.3	0.3 1.9]	B8B	TH
21B6	041 230 071 0000	80	041 230 051	A1	21	23	200	200	45	6.5	B9A	P
21CW7	148 235 118 0000	00	146 234 117		21	1.5	90		12	6	B9A	TT
21DJ8	841 238 510 0000	00	641 237 410		21	1.3	90		15	12.5	B9A	TT
21EX6	021 040 370 0000	80	021 040 350	A1	21.5		200	150	67	7.7	A08	P
21GY5	207 140 704 1730	80			21	20	125	125	50	9.1	A12	P
21HB5	274 100 800 1430	00			21	20	125	125	46	9.0	A12	P
21HB5A	274 100 800 1430	00	254 100 600		21	20	130	130	46	9	A12	P
21HD5	207 140 804 1730	00			21.5	22	150	150	65	10	A12	P
21JV6	217 000 800 0430	00	215 000 600		21	20	130	130	50	9.1	A12	P
21JZ6	217 040 000 0030	80	215 040 000		21	20	125	125	46	9.0	A12	P
21KA6	207 140 000 1030	80			21	20	125	125	50	9.1	A12	P
21L40	041 231 071 0000	80	041 231 051	A1	21.5	28	200	200	40	6	B9A	P
21LR8	151 238 784 0000	00	041 236 564		21	4 10	250 150	 125	2.3 56	3.6 9.3	B9A	TP
21LU8	280 805 571 4130	00			21	4 10	250 150	 125	2.3 56	3.6 9.3	A12	TP
21TH8	020 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	21	 2.5	100 200	 90	4 3	2 0.7	A08	TH
22	387 200 000 0000	40	365 200 000	G1	3	1.5	150	50	1.7	0.3	UX4	P
22AC	287 300 000 0000	40	265 300 000	G1	2.5	3	90	90	4	1.05	UX4	P
22AQ3	000 230 009 0000	10	*** 23* **8	C	22				180		B9A	R
22BH3	090 230 901 0000	00	*8* 23* 8*1		22.4				180		B9D	R
22BW3	200 900 100 9030	00			22.4				120		A12	R
22DE4	001 090 230 0000	00	001 080 230		22.4				120		A08	R
22FC7	148 235 118 0000	00	146 234 117		21.6	1.2	90		15	12.3	B9A	TT
22JF6	741 234 710 0000	80	541 234 510	A	22.0	20	130	125	80	10.0	B9A	P
22JG6	741 231 708 0000	00	541 231 5*6		22	20	130	125	80	10	B9D	P
22JG6A	741 231 708 6000	00	541 231 506		22.0	20	130	125	80	10.0	B9D	P
22JR6	741 231 708 0000	00	541 231 506		22.0	-20	125	125	45	7.0	B9A	P
22JU6	741 234 710 0000	80	541 234 51*	A1	22	20	150	100	45	7	B9D	P
22KM6	741 234 710 0000	80	541 234 510	A	22.0	-24.5	140	140	80	9.5	B9A	P
22S/101G	192 310 X00 0000	00	182 310 900		6.3				5		B7G	R
23	207 411 300 0000	80	205 411 300	A1	2.5	90	400	150	43		UX7	P
23Z9	285 080 067 4830	00	267 060 000		23	[2 5 8	150 150 120	 110	5.4 5.5 46	3.9 2.4 7.1]	A12	TTP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
24	284 300 000 0000	00	264 300 000		2	13.5	200		8	1.6	UX4	T
24A	287 130 000 0000	40	265 130 000	G1	2.5	3	200	90	4	1	UX5	P
24GA7	277 410 810 0930	00			24	22.5	250	150	120 75	6.6	A12	RP
24NG	291 1X3 000 0000	00	281 193 000		40						UX6	RR
24S	287 130 000 0000	40	265 130 000	G1	2.5	3	200	90	4	1	UX5	P
25	289 X43 000 0000	00	268 943 000		2	3	150		1.0	0.5	UX6	DDT
25	205 411 300 0000	80	205 411 300	A1	6.3	90	400	150	43		UX7	P
25A6	028 740 310 0000	00	026 540 310		25	18	150	125	33	2.3	A08	P
25A7	128 749 310 0000	00	126 548 310		25	15	100	100	60 20.5	1.8	A08	RP
25ACID	208 009 030 0000	40	206 008 030	G1	1.4	0	150		0.76	0.4	A08	DT
25AC5	028 040 310 0000	00	026 040 310		25	0	200		4	3.8	A08	T
25AQ8	X41 238 410 0000	00	741 236 410		25	1.1	100		4.5	4.6	B9A	TT
25AV5	421 080 370 0000	00	421 060 350		25	22.5	250	150	57	5.9	A08	P
25AX4	001 090 230 0000	00	001 080 230		25				120		A08	R
25B6	028 740 310 0000	00	026 540 310		25	22	150	150	61	5	A08	P
25B8	128 781 340 0000	50	127 561 340	G1	25	1 3	100 100	100	0.6 7.6	1.5 2	A08	TP
25BG6	021 040 370 0000	80	021 040 350	A1	25	22	150	150	70	5	A08	P
25BK5	804 231 470 0000	00	604 231 450		25	5	250	250	35	8.5	B9A	P
25BQ6	020 740 310 0000	80	020 540 310	A1	25	22.5	250	150	55	5.5	A08	P
25C5	142 347 800 0000	00	142 345 600		25	7.5	150	100	49	7.5	B7G	P
25C6	028 740 310 0000	00	026 540 310		25	14	200	150	61	7.1	A08	P
25CA5	142 347 800 0000	00	142 345 600		25	4.5	150	125	36	9.2	B7G	P
25CD6	021 040 370 0000	80	021 040 350	A1	25	30	200	200	75	7.5	A08	P
25CD6GB	021 043 700 0000	80	021 043 500	A	25.0	-50	175	175	75	7.7	A08	P
25CG3					25.0		25		700		B9A	R
25CK3	080 230 801 0000	00	060 230 601		25.2		16		1200		B9A	R
25CM3	080 230 801 0000	00	060 230 601		25.0		10		350		B9A	R
25CR5	174 231 741 0000	00	154 231 541		25	22.5	250	150	65	6	B9A	P
25CU6	020 740 310 0000	80	020 540 310	A1	25	23	250	150	60	6	A08	P
25D4	001 090 230 0000	00	001 080 230		25				120		A08	R
25D8	128 748 390 0000	50	127 546 380	G1	25	1 3	100 100	100	0.5 8.5	1.1 1.9	A08	DTP
25DK4	002 390 100 0000	00	002 380 100		25				60		B7G	R
25DN6	021 040 370 0000	80	021 040 350	A1	25	18	125	125	70	9	A08	P
25DQ6	020 740 310 0000	80	020 540 310	A1	25	22.5	250	150	75	6	A08	P
25DT5	704 234 108 0000	00	504 234 1*6		25	16.5	250	250	38	6.5	B9A	P
25E2	751 228 384 0000 751 228 305 0000	00 00	541 227 365		12.6	2	200 200	100	6.5 4		B9A	TH
25E5	020 740 310 0000	80	020 540 310	A1	25	8.2	100	100	100	14	A08	P
25EC6	021 040 370 0000	80	021 040 350	A1	25	23	125	125	70	7.5	A08	P
25EH5	142 347 800 0000	00	142 345 600		25	3.2	100	125	42	14.6	B7G	P
25F5	142 347 800 0000	00	142 345 600		25	7.5	100	100	37	5.8	B7G	P
25F5A	142 347 800 0000	00	142 345 600		25.0	-7.5	110	110	43	6.4	B7G	P
25F7	020 740 310 0000	80	020 540 310	A1	25	21	150	150	100	11	A08	P
25FG6	020 740 310 0000	80	*2* 540 310	A1	25	21	200	175	100	11	A08	P
25FID	208 701 040 0000	40	206 501 040	G1	1.4	2.5	150	125	1.2	0.7	A08	P
25FY8	415 238 871 8000	00	414 237 516		25	1.5 13.5	150 150	125	2.5 50	2 7	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
25GB6	020 740 310 0000	80	020 540 310	A1	25	22.5	250	150	6.5	6	A08	P
25JQ6	807 231 441 0000	00	605 231 441		25.2	120	40	120	35	4.2	B9A	P
25L6	028 740 310 0000	00	026 540 310		25	8.2	200	125	47	8	A08	P
25MK15	002 390 100 0000	00	002 380 100		25				25		B7G	R
25RE	291 1X3 000 0000	00	281 193 000		25				30		UX6	RR
25S	289 X43 000 0000	00	268 943 000		2	3	150		0.8	0.6	UX6	DDT
25SN7	481 581 230 0000	00	461 471 230		25	8	250		9	2.6	A08	TT
25T3G	020 000 310 0000	9X	020 000 310	D1 D2	25				60		A08	RR
25V5	029 1X0 310 0000	00	028 190 310		25				60		A08	R
25W6	028 740 310 0000	00	026 540 310		25	8.5	250	125	46	8	A08	P
25W9	001 090 230 0000	00	001 080 230		25				120		A08	R
25X4	020 090 310 0000	00	020 080 310		25				120		A08	R
25X6	029 1X0 310 0000	00	028 190 310		25				30		A08	RR
25Y5	291 1X3 000 0000	00	281 193 000		25				60		UX6	RR
25Y5G	029 1X0 310 0000	00	028 190 310		25				60		A08	RR
25Y6	029 1X0 310 0000	00	028 190 310		25				30		A08	RR
25Z3	291 300 000 0000	00	281 300 000		25				60		UX4	R
25Z5	2X1 193 000 0000	00	291 183 000		25				60		UX6	RR
25Z6	02X 190 310 0000	00	029 180 310		25				60		A08	RR
26	284 300 000 0000	00	264 300 000		1.5	10	150		5.5	1.1	UX4	T
26A6	412 387 100 0000	00	412 365 100		26	1.8	250	250	10.5	4	B7G	P
26A7	415 872 380 0000	00	414 752 360		26	4.5	30	30	20	5.5	A08	PP
26AE6	000 230 009 0000	10	*** 23* **8	C	26						B9A	R
26AQ8	851 238 410 0000	00	641 237 410		26	1.5	200		8.7	6	B9A	TT
26B6	028 740 310 0000	00	026 540 310		35	18	250	125	33	2.3	A08	P
26BK6	412 39X 800 0000	00	412 389 600		26	2	250		1.2	1.6	B7G	DDT
26BQ6	020 740 310 0000	80	020 540 310	A1	25	22.5	250	150	55	5.8	A08	T
26C6	412 3X9 800 0000	00	412 398 600		26	9	250		9.5	1.9	B7G	DDT
26CG6	412 387 100 0000	00	412 365 100		26	8	250	150	9	2	B7G	P
26D6	412 387 100 0000	00	412 365 100		26	0	100	100	2.7	7.2	B7G	H
26E6	028 740 310 0000	00	026 540 310		26	14	200	125	60	7.1	A08	P
26NG	291 1X3 000 0000	00	281 193 000		40				30		UX6	RR
26Z5	901 22X 013 0000	00	801 229 013		13				30		B9A	RR
26Z6	901 23X 010 0000	00	801 239 010		26				60		B9A	RR
27	234 130 000 0000	00	264 130 000		2.5	21	250		5.2	0.9	UX5	T
27BL8	857 238 114 0000	00	645 237 114		27	[2 2	100 200	175	14 10	5 6.2]	B9A	TP
27HM	284 130 000 0000	00	264 130 000		2.5	13.5	180		5		B5B	T
27SU	320 090 210 0000	00	320 080 210						120		A08	R
27SV	230 090 310 0000	00	230 080 310		13				180		A08	R
28AK8	9Y1 23X 148 0000	00	8†1 239 146		28	2	200		1.3	1.5	B9A	DDDT
28AX8	9Y1 23X 148 0000	00	8†1 239 146		28	1	100		0.8	1.4	B9A	DDDT
28D7	247 881 530 0000	00	245 671 430		28	3.5	30	30	12.5	3.4	B8B	PP
28HD5	207 140 804 1730	00			28	22	150	150	65	10	A12	P
28Z5	209 00X 130 0000	00	208 009 130		28				60		B8B	RR
29	284 413 000 0000	00	264 413 000		2.5	3	200		4.5	1.4	UX6	T
29C1	220 293 330 0000	00	220 283 330		4				3		A08	D
29GK6	141 230 871 0000	00	141 230 651		28.6	7.4	250	250	48	11.3	B9A	P
30	384 200 000 0000	00	364 200 000		2	9	150		3	0.9	UX4	T
30A5	142 347 800 0000	00	142 345 600		30	6.7	100	100	43	9.2	B7G	P
30AE3	000 230 009 0000	10	*** 23* **8	C	30						B9A	D
30AG11	219 158 841 X130	00			30	1	125	7.5	7.8		A12	DDTT

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	VCM163 Tester only: TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4: TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
30C1	857 238 114 0000	00	645 237 114		9	2 2	100 200	 200	14 10	5 6.6	B9A	TP
30C13	178 238 415 0000	00	157 236 414		9	2 2	100 200	 175	14 10	5 6.2	B9A	TP
30C15	178 238 415 0000	00	157 236 414		9	2 2.5	100 200	 150	15 10	6 9	B9A	TP
30C17	178 238 415 0000	00	157 236 414		7.4	3.2 1.5	100 125	 125	15 10	8.5 11	B9A	TP
30C18	878 231 514 0000	00	657 231 414		7.4	3 1.5	100 125	 125	14 10	5.5 11	B9A	TP
30F5	141 230 871 0000	00	141 230 651		7.5	1.8	200	200	10	8.8	B9A	P
30F27	141 230 871 0000	00	141 230 651		3.7	1.2	200	150	13.5	15	B9A	P
30FL1	841 238 751 0000	00	641 237 541		9.4	1.9 2.7	200 200	 200	10 10	3.6 7.5	B9A	TP
30FL2	841 230 000 0000 000 238 741 0000	00 00	641 230 000 000 236 541		10.4	7.7 2.0	200 170	 170	10 10	3.4 8.0	B9A	TP
30FL12	841 238 751 0000	00	641 237 541		10	4.9 2.9	150 200	 200	10 10	3.7 12.5	B9A	TP
30FL13	841 238 751 0000	00	641 237 541		10		200 200	 200	10 10	3.4 12.5	B9A	TH
30FL14	878 231 514 0000	00	657 231 414		7.4	3 1.7	100 150	 150	14 12	5.5 14.5	B9A	TP
30GP9	028 743 100 0000	00	026 543 100		30	19	200	200	45	3.5	A08	P
30L1	158 234 118 0000	00	147 234 116		7.5	1.5	90	12		6.0	B9A	TT
30L15	158 324 118 0000	00	147 324 116		7	1.2	90		15	9	B9A	TT
30L17	148 235 118 0000	00	146 234 117		7.2	0.8	75		15	16.5	B9A	TT
30P4	020 740 310 0000	80	020 540 310	A1	25	8.2	100	100	100	14	A08	P
30P12	041 230 807 0000	00	*41 23* 6*5		12.6	10.3	200	200	31	6.7	B9A	P
30P14	028 740 310 0000	00	026 540 310		13	9.4	200	200	42	7.2	A08	P
30P16	041 230 807 0000	00	041 230 605		16	14.2	200	200	45	8.2	B9A	P
30P18	041 230 807 0000	00	041 23* 6*5		16	6	200	200	34	10	B9A	P
30P19	020 740 310 0000	80	*2* 540 310	A1	25	8.5	100	100	100	15	A08	P
30PL1	841 238 175 0000	00	641 237 154		13	7.9 9.6	200 200	 200	10 28	3.4 6	B9A	TP
30PL12	415 238 718 0000	00	414 237 516		16	0 16	100 200	 200	3.5 35	2.5 6.4	B9A	TP
30PL13	415 238 718 0000	00	414 237 516		16	2.2 20	200 250	 250	10 45	4.4 17.5	B9A	TP
30PL14	415 238 718 0000	00	414 237 516		16	7.7 15	200 150	 150	10 50	3.4 7.6	B9A	TP
30PL15	841 238 715 0000	00	641 237 514		16	2.2 14.5	100 170	 170	10 50	4.3 7.3	B9A	TP
30X	284 300 000 0000	00	264 300 000		2	12.5	175		3.1	9.3	UX4	T
31	384 200 000 0000	00	364 200 000		2	22.5	150		8	0.9	UX4	T
31A3	290 000 130 0000	00	280 000 130		31				60		B8A	R
31AV3	001 230 009 0000	00	**1 23* **8		31				60		B9A	R
31JS6	217 140 000 1730	80			31.5	28	175	125	100	11.3	A12	P
31JS6A	217 040 000 0730	80	215 040 000	A	31.5	25	175	125	125	11.3	A12	P
31Z	245 300 000 0000 245 300 000 0000	80 08	244 300 000	A1/A2	6.3	100 15	400 400		75 75	2.8	UX4	TT
32	387 200 000 0000	40	365 200 000	G1	2	3	150	75	1.7	0.6	UX4	P
32A8	415 238 718 0000	00	414 237 516		32	1 16	100 200	 200	1 35	1.9 6.4	B9A	TP
32BX7	481 581 230 0000	00	461 471 230		31.5	17	250		42	7.2	A08	TT
32E	387 200 000 0000	40	365 200 000	G1	2	3	150	75	1.7	0.6	UX4	P
32ET5	142 347 800 0000	00	142 345 600		32	7.5	100	100	30	5.5	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
32ET5A	142 347 800 0000	00	142 345 600		32.0	-7.5	1.10	110	30	5.5	B7G	P
32GA7	277 410 810 0930	00			32	[22.5	250	150	120 75	6.6]	A12	RP
32L7	128 749 310 0000	00	126 548 310		32.5	[5	90	90	60 38	6]	A08	RP
33	384 720 000 0000	00	364 520 000		2	14	150	150	14.5	1.4	Sm7	P
33/100A	020 540 310 0000	88	020 440 310	A1/A2	6.3	14	300		10	3	A08	TT
33A/101K	841 228 513 0000	00	641 227 413		6.3	2	250		1.2	1.6	B9A	TT
33A/138A	204 150 300 0000	88	204 140 300	A1/A2	7	7	250		15	3	UX7	TT
33A/158M	218 458 130 0000	00	216 447 130		6.3	5	200		20	2.8	B8B	TT
33B/152M	521 342 135 0000	88	421 342 134	A1/A2	6.3	1	300		40	18.5	B9G	TT
33GT7	290 180 014 7430	00			33.6	22.5	125	125	48	6.5	A12	DP
33GY7	290 180 014 4730	00	280 160 014		33.6	22.5	130	130	48	6.5	A12	DP
33GY7	290 180 014 4730	00			33.6	22.5	125	125	48	6.5	A12	DP
33JR6	741 236 708 0000	00	541 231 506		33.0	-20	125	125	45	7.0	B9A	P
33JV6	215 100 800 1430	00			33	20	125	125	50	9.1	A12	P
34	204 150 300 0000	88	204 140 300	A1/A2	6.3	36	300		80	4.4	UX7	TT
34	387 200 000 0000	40	365 200 000	G1	2	3	150	75	2.8	0.6	UX4	P
34E			365 200 000	G1	2	3	150	75	2.8	0.6	UX4	P
34CE3	200 900 100 9030	00			34.5				180		A12	R
34CM3	080 230 801 0000	00	080 230 801		33.5		10		350		B9A	R
34GD5	142 317 800 0000	00	142 315 600		34	7.5	100	100	35	5.7	B7G	P
34GD5A	142 347 800 6000	00	142 345 600		34.0	-7.5	1.10	110	.35	5.7	B7G	P
35	287 130 000 0000	40	265 130 000	G1	2.5	3	250	90	6.5	1	UX5	P
35A3	002 390 100 0000	00	002 380 100		35				60		B7G	R
35A5	287 004 130 0000	00	265 004 130		35	8	200	100	41	5.9	B8B	P
35B5	412 387 400 0000	00	412 365 400		35	7.5	150	100	40	5.8	B7G	P
35C3	002 390 100 0000	00	002 380 100		35				60		B7G	R
35C5	142 347 800 0000	00	142 345 600		35	7.5	150	100	40	5.8	B7G	P
35CD6	021 040 370 0000	80	021 040 350	A1	35	30	200	175	75	7.7	A08	P
35D5	401 238 070 0000	00	401 236 050		35	10.5	200	175	52	9.5	B9A	P
35DZ8	415 238 718 0000	00	414 237 516		35	[1.2 9	150 150	125	0.8 45	1.4 7.5]	B9A	TP
35EH5	142 347 800 0000	00	142 345 600		35	62	100	100	3.2	12	B7G	P
35F4	412 387 400 0000	00	412 365 400		35	7.5	100	100	41	5.8	B7G	P
35F6	041 230 887 0000	00	041 230 665		35	23	250	200	55	5	B9A	P
35FN5	721 441 370 0000	80	521 441 350	A1	35	22.5	200	150	100	10	B8A	P
35GD5A	142 347 800 0000	00	142 345 600		34	7.5	100	100	45	7.5	B7G	P
35GL6	142 273 800 0000	00	142 253 600		35	7.5	100	100	45	7.5	B7G	P
35HB8	418 237 815 0000	00	416 235 714		35	[1 6	100 100	100	2.5 32	3.9 6.2]	B9A	TP
35L6	028 740 310 0000	00	026 540 310		35	7.5	200	100	40	5.8	A08	P
35L31	412 387 400 0000	00	412 365 400		35	13	200	200	55	8	B7G	P
35QL6	471 238 174 0000	00	451 236 154		35	11.5	200	200	52	9.5	B8A	P
35R1	002 392 100 0000	00	002 382 100		35				60		B7G	R
35R2	002 390 100 0000	00	002 380 100		35				60		B7G	R
35RE	291 1X3 000 0000	00	281 193 000		35				60		UX6	RR
35S	287 120 000 0000	40	265 120 000	G1	2.5	3	250	90	6.5	10.8	UX5	P
35W4	002 393 100 0000	00	002 383 100		27.5				60		B7G	R
35X4	002 390 100 0000	00	002 380 100		35				60		B7G	R
35Y4	290 200 130 0000	00	280 200 130		27.5				60		B8B	R
35Y31	002 390 100 0000	00	002 380 100		35				120		B7G	R

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	VCM163 Tester only: TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4: TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
35Z3	290 000 130 0000	00	280 000 130		35				120		B8B	R
35Z4	020 090 310 0000	00	020 080 310		35				120		A08	R
35Z5	020 090 310 0000	00	022 080 310		27.5				60		A08	R
35Z6	029 1X0 310 0000	00	028 190 310		35				60		A08	RR
36	287 130 000 0000	40	265 130 000	G1	6.3	3	250	90	3.2	1	UX5	P
36AM3	002 293 100 0000	00	002 283 100		36				60		B7G	R
36AM3B	002 380 100 0000	00	002 360 100		36.0		16		150		B7G	R
37	284 130 000 0000	00	264 130 000		6.3	18	250		7.5	1,1	UX5	T
38	287 130 000 0000	40	265 130 000	G1	6.3	18	200	200	14	1	UX5	P
38A3	001 230 009 0000	00	**1 23* **8		38				60		B9A	R
38HE7	290 180 014 0730	00			37.8	22	125	125	60	8.8	A12	RP
38HK7	290 180 014 0730	00			37.8	22	130	130	60	8.8	A12	DP
38R3	001 230 009 0000	00	001 230 008		38				100		B9A	R
39	280 701 300 0000	40	260 501 300	G1	6.3	3	250	90	5.8	1	B7G	P
39	287 130 000 0000	40	265 130 000	G1	6.3	3	200	90	5.8	1	UX5	P
40	384 200 000 0000	00	364 200 000		5	1.5	200		0.2	0.2	UX4	T
40FR5	142 347 800 0000	00	142 345 600		40	7.5	125	125	35	6.0	B7G	P
40KD6	217 040 004 0730	80		A	40	22.5	150	110	120	14	A12	P
40PPA	047 231 800 0000	00	045 231 600		40	25	150	150	36	2	B7	P
40SUA	902 310 000 0000	00	802 310 000		40				60		B5	R
40Z5	022 090 310 0000	00	022 080 310		35				120		A08	R
41	287 413 000 0000	00	265 413 000		6.3	18	250	250	32	3.2	UX6	P
41FP	842 310 000 0000	00	642 310 000		6.3	18	250		19	2.8	B5	T
41M	028 740 310 0000	00	026 540 310		6.3	18	250	250	32	2.3	A08	P
41MDG	872 310 000 0000	40	652 310 000	G1	4	0	150	100		0.2	B5	P
41ME	023 104 780 0000	00	023 104 560		4	5	250	250		†1.0	8SC	TI
41MH	842 310 000 0000	00	642 310 000		4	1.5	200		3.2	3	B5	T
41MHF	842 310 000 0000	00	642 310 000		4	2	150		2.5	2.8	B5	T
41MHL	842 310 000 0000	00	642 310 000		4	3	200		4	4.1	B5	T
41MLF	842 310 000 0000	00	642 310 000		4	4.5	200		7.5	1.9	B5	T
41MP	842 310 000 0000	00	642 310 000		4	7.5	200		24	6.0	B5	T
41MPG	474 231 800 0000	40	454 231 600	G1	4	1.5	250	100	3.3	0.9	B7	H
41MPT	041 231 700 0000	80	041 231 500	A1	4	1.5	250	100	12	4.8	B7	P
41MRC	842 310 000 0000	00	641 310 000		4	1	200		2.5	2.6	B5	T
41MSG	487 230 785 0000	00	465 230 574		4	1.5	150	60	0.8	2.5	B9	PP
41MSG	742 310 000 0000	80	542 310 000	A1	4	1.5	150	60	0.8	2.5	B5	P
41MTA	842 310 000 0000	00	642 310 000		4	1	100		4.9	4	B9	T
41MTB	842 310 000 0000	00	642 310 000		4	1	100		3.6	2.6	B5	T
41MTL	842 310 000 0000	00	642 310 000		4	2.5	200		5.9	3	B5	T
41MTS	047 231 800 0000 057 231 000 0000	00 80	645 231 700		4	1	250	100	5	1.6	B7	PP
41MXP	842 310 000 0000	00	642 310 000		4	12.5	200		40	6	B5	T
41MVSG	742 310 000 0000	80	542 310 000	A1	4	1.4	200	200	3	2	B5	P
41STH	840 321 000 0000 057 321 800 0000	50 50	645 231 700	G1	4	1.5 1.5	100 200	60	2 1		B7	TH
42	284 300 000 0000	00	264 300 000		1.5	13.5	150		3.9	0.8	UX4	T
42	287 413 000 0000	00	265 413 000		6.3	16.5	250	250	34	2.5	UX6	P
42MP/PEN	045 231 800 0000	00	045 231 600		4	5.5	250	250	32	6	B7	P
42MPT	041 231 700 0000	80	041 231 500	A1	4(5)	3	200	200	34	8.5	B7	P
42/OT	047 231 200 0000	00	045 231 600		4	5.5	250	275	34	7	B7	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
42OTDD	X89 231 700 0000	40	968 231 500	G1	4	5.5	250	250	34	7	B7	DDP
42PTB	081 231 700 0000	40	061 231 500	G1	4	3	200	200	34	8.5	B7	P
42SPT	041 231 700 0000	80	041 231 500	A1	4	10.5	250	250	64	11	B7	P
43	284 583 000 0000	00	265 413 000		25	18	150	125	33	2.3	UX6	P
43	287 413 000 0000	00	264 473 000		1.5	[4.5 20	135 135		3 14	0.9	] UX6	TT
43E	285 413 000 0000	00	265 413 000		25	18	150	125	33	2.3	UX6	P
431U	9X2 300 000 0000	00	892 300 0000		4				60		B4	RR
43MG	028 740 300 0000	00	026 540 310		25	18	250	125	33	2.3	A08	P
44	287 130 000 0000	40	265 130 000	G1	6.3	3	200	90	5.8	1	UX5	P
44A/160M	241 878 153 0000	00	241 657 143		6.3	14	250	250	30	3.9	B9G	PP
44GW8	417 238 158 0000	00	415 237 146		44	[1.7 7	250 250	250	1.2 36	1.6 10	] B9A	TP
44IU	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
44SU	902 300 000 0000	00	802 300 000		4				30		B4	R
45	284 300 000 0000	00	264 300 000		2.5	50	250		34	2.1	UX4	T
45A	284 300 000 0000	00	264 300 000		2.5	68	325		43	2.3	UX4	T
45A5	280 074 130 0000	00	26* *54 130		45	9	200	200	54	9.5	B8A	P
45B5	041 230 807 0000	00	041 23* 6*5		45	12.5	200	200	70	10	B9A	P
45BQ5	041 230 807 0000	00	041 23* 6*5		45	12.5	300	175	70	10	B9A	P
45DQ8	181 238 157 0000	00	461 237 145		45	[1.7 12.5	200 200	175	3 70	4 10	] B9A	TP
45DX8	481 238 157 0000	00	461 237 145		45	[1.7 2.1	200 200	175	3 18	4	] B9A	TP
45IU	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
45LIU	208 740 130 0000	00	206 540 130		45	13	200	200	45	7.5	A08	P
45Z3	290 109 300 0000	00	28* 108 300		45				60		B7G	R
45Z5	022 090 310 0000	00	022 080 310		37.5				60		A08	R
46	284 830 000 0000	00	264 630 000		2.5	33	250		22	2.3	UX5	T
47	284 730 000 0000	00	264 530 000		2.5	16.5	250	250	31	2.5	UX5	P
48	287 413 000 0000	00	265 413 000		30	10	100	100	52	3.8	UX6	P
48A8	415 238 718 0000	00	414 237 516		48	[11.5	100 150	150	3.5 41	2.5 7.5	] B9A	TP
49	284 830 000 0000	00	264 630 000		2	20	150		6	1.1	UX5	T
49	287 413 000 0000	00	265 413 000		6.3	50	400	250	95		UX6	P
50	284 300 000 0000	00	264 300 000		7.5	70	400		55	2.1	UX4	T
50A5	287 004 130 0000	00	265 004 130		50	7.5	150	100	49	8	B8B	P
50AX6	029 1X0 310 0000	00	028 190 310		50				120		A08	RR
50B5	412 387 400 0000	00	412 365 400		50	7.5	150	100	49	7.5	B7G	P
50BC1D	208 09X 030 0000	40	206 089 030	G1	1.4	0.5	90		1.4	0.8	A08	DDT
50BK5	804 231 470 0000	00	604 231 450		50	5	250	250	35	8.5	B9A	P
50BM8	415 238 718 0000	00	414 237 516		50	[10	100 150	150	3.5 41	2.5 7.5	] B9A	TP
50C5	142 347 800 0000	00	142 345 600		50	7.5	150	100	49	7.5	B7G	P
50C6	028 740 310 0000	00	026 540 310		50	13.5	150	150	58	7	A08	P
50C1D	208 90X 030 0000	40	206 089 030	G1	1.4	1.5	100		1.5	0.9	A08	DDT
50CA5	142 347 800 0000	00	142 345 600		50	4.5	150	125	37	9.2	B7G	P
50CD6	021 040 370 0000	80	021 040 350	A1	50	30	200	200	75	7.5	A08	P
50DC4	002 393 100 0000	00	002 363 100		25				60		B7G	R
50EH5	142 347 800 0000	00	142 345 600		50	3.2	100	125	42	14.6	B7G	P
50F2	412 387 400 0000	00	412 365 400		50	7.5	100	100	50	7.5	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
50F2D	208 701 030 0000	40	206 501 030	G1	1.4	1.5	100	125	1.4	1	A08	P
50FA5	142 347 800 0000	00	142 345 600		50	7.5	100	100	40	5.8	B7G	P
50FE5	028 740 310 0000	00	026 540 310		50	16	150	150	80	9.5	A08	P
50FK5	142 347 800 0000	00	142 345 600		50	2	100	100	32	12.8	B7G	P
50FY8	415 238 718 0000	00	414 237 516		50	1.5 13.5	150 150	 125	2.5 50	2 7.5	B9A	TP
50LID	208 740 030 0000	00	206 540 030		1.4	4.5	100	125	4.8	1	A08	P
50L6	028 740 310 0000	00	026 540 310		50	8.2	200	125	46	9.5	A08	P
50L66T	028 043 100 0000	00	026 043 100		50.0	-7.5	200		50	9.5	B7G	
50R4	090 230 X01 0000	00	080 230 901		50				60		B9A	RR
50RP1	141 238 719 0000	00	141 236 518		50	1	200	100	60 9	4.5	B9A	RP
50X6	21X 009 130 0000	00	219 008 130		50				60		B8D	RR
50YIU	399 209 120 0000	00	388 208 120		45				120		A08	R
50Y6	02X 190 310 0000	00	029 180 310		50				60		A08	RR
50Y7	029 1X3 310 0000	00	028 193 310		46				60		A08	RR
50Z6	02X 190 310 0000	00	029 180 310		50				120		A08	RR
50Z7	02X 190 310 0000	00	029 183 310		48				60		A08	RR
51	287 130 000 0000	40	265 130 000	G1	2.5	3	250	90	6.5	10.5	UX5	P
52	284 730 000 0000	00	264 530 000		6.3	1	250	100	41	2	UX5	P
52KU	030 X09 020 0000	00	030 908 020		5				60		A08	RR
53	285 148 300 0000	00	274 146 300		2.5	5	250		3	1.6	UX7	TT
53KU	030 X09 020 0000	00	030 908 020		5				120		A08	RR
55	28X 913 000 0000	40	269 813 000	G1	2.5	20	250		8	1.1	UX6	DD
55A/165M	247 881 530 0000	00	245 761 430		12	15	150	150	60	4	B8G	PP
55N3	001 230 009 0000	00	**1 23* **8		55				120		B9A	T
56	284 130 000 0000	00	264 130 000		2.5	12.5	250		5	1.4	UX5	T
56AS	284 130 000 0000	00	264 130 000		6.3	13.5	250		5	1.4	UX5	T
57	287 113 000 0000	40	265 113 000	G1	2.5	3	250	100	2	1.2	UX6	P
57AS	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	2	0.2	UX6	P
58	287 113 000 0000	40	265 113 000	G1	2.5	3	250	100	8	1.5	UX6	P
58AS	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	8	1.5	UX6	P
58TF1	518 238 786 0000	40	417 23† 564	G1	58	2 31	200 250	 250	4 38	1.5 2.5	B9A	TPP
59	287 411 300 0000	00	265 411 300		2.5	18	250	250	35	2.5	UX7	P
59B	287 410 300 0000	00	265 410 300		2.5	26	250	250	26	6	UX7	P
60	200 300 000 0000	9X	200 300 000	D1/D2	5				120		UX4	RR
60/250	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
60E3	002 390 100 0000	00	002 380 100		60				60		B7G	R
60FX5	142 347 800 0000	00	142 345 600		60	2	100	100	50	13.5	B7G	P
61BT	020 740 310 0000	80	020 540 310	A1	6.3	20	200	200	40	4	A08	P
61SPT	720 804 310 0000	00	520 604 310		6.3	10.5	250	250	64	11	A08	P
62BT	020 740 310 0000	80	020 540 310	A1	6.3	19.5	250	175	100	9.5	B8A	P
62DDT	284 0X9 130 0000	00	264 098 130		6.3	3	250		1	1.3	B8A	DDT
62L31	412 367 400 0000	00	412 365 400		62	15	200	200	55	8	B7G	P
62TH	208 405 130 0000 280 575 130 0000	00	276 454 130		6.3	2 2	100 150	 100	5 8	2.2 2	B8A	TH
62VP	281 174 130 0000	00	261 154 130		6.3	2.5	250	100	6	2.2	B8A	P
63ME	028 740 310 0000	00	026 540 310		6.3	22	250	250	0.3	†1.0	A08	TI
63SPT	278 101 403 0000	00	256 101 403		6.3	2	250	250	10	6.5	B9G	P
63TP	841 238 175 0000	00	641 237 154		6.3	2.3 8	100 200	 200	4 17.5	1.4 3.3	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
64	280 101 300 0000	40	026 457 310	G1	6.3	3	200	90	3.1	1	B7G	P
64ME	028 470 310 0000	00	226 457 310		6.3	16	250	250		†1.0	A08	TI
	020 478 310 0000	00				2.5	250	250		†1.0		
64SPT	141 230 870 0000	00	141 230 650		6.3	2.6	200	200	10	7.1	B9A	P
65	287 130 000 0000	40	265 130 000	G1	6.3	3	200	90	4.5	1	UX5	P
65ME	410 230 807 0000	00	41* 23* 6*5		6.3		250	250			B9A	TI
66KU	290 00X 130 0000	00	280 009 130		6.3				30		B8A	RR
67	284 130 000 0000	00	264 130 000		6.3	9	150		5	1.1	UX5	T
67PT	281 074 130 0000	00	261 054 130		6.3	7	250	250	36	10	B8A	P
68	287 130 000 0000	40	265 130 000	G1	6.3	13.5	150	90	14	1.4	UX5	P
68A	287 130 000 0000	00	265 130 000	G1	6.3	13.5	150	125	14	1.4	UX5	P
69	284 413 000 0000	00	264 413 000		6.3	3	200		4.5	1.4	UX6	T
70	284 413 000 0000	00	264 413 000		6.3	6	200		2.3	0.3	UX6	T
70A7	128 749 310 0000	00	126 548 310		70	7.5	150	100	60 40	5.8	A08	RP
70L7	128 741 390 0000	00	126 541 380		70	7.5	125	100	60 40	7.5	A08	RP
71	284 300 000 0000	00	264 300 000		5	40	200		20	1.7	UX4	T
71A	284 300 000 0000	00	264 300 000		5	16.5	90		10	1.4	UX4	T
75	020 000 300 0000	84	020 000 300	A1/G1	6.3	60	400		82		A08	T
75	28X 913 000 0000	40	269 813 000	G1	6.3	2	250		0.9	1.1	UX6	DDT
76	284 130 000 0000	00	264 130 000		6.3	13.5	250		5	1.4	UX5	T
77	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	2.3	1.25	UX6	P
77E	287 113 000 0000	00	265 113 000	G1	6.3	3	250	100	2.3	1.25	UX6	P
78	287 113 000 0000	40	265 113 000	G1	6.3	3	250	125	10.5	1.65	UX6	P
78E	287 113 000 0000	00	265 113 000	G1	6.3	3	200	75	4	1.1	UX6	P
79	284 183 000 0000	00	264 173 000	G1	6.3		250		10.6		UX6	TT
80	2X9 300 000 0000	00	298 300 000		5				60		UX4	RR
80HK	390 200 000 0000	00	380 200 000		5				60		UX4	R
80M	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
80S	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
81	290 300 000 0000	00	280 300 000		7.5				60		UX4	R
82	29X 300 000 0000	00	289 300 000		2.5				60		UX4	RR
83	29X 300 000 0000	00	289 300 000		5				120		UX4	RR
83V	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
34	29X 130 000 0000	00	289 130 000		6.3				30		UX5	RR
85	28X 913 000 0000	40	269 813 000	G1	6.3	20	250		8	1.1	UX6	DDT
85AS	289 300 000 0000	00	268 913 000	G1	6.3	20	250		8	1.1	UX6	DDT
85S	289 X13 000 0000	40	268 913 000	G1	6.3	10.5	250		3.7	0.7	UX6	DDT
88	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
89	287 113 000 0000	40	265 113 000	G1	6.3	10	100	100	9.5	1.2	UX6	P
90	284 413 000 0000	00	264 413 000		2.5		150		3.5	1.4	UX6	T
90AC	842 310 000 0000	00	642 310 000		4	12.5	200		40	7.5	B5	T
92	284 413 000 0000	00	264 413 000		6.3		250		3.5	1.4	UX6	T
95	287 413 000 0000	00	265 413 000		2.5	20	350	300	42	2.3	UX6	P
96	291 300 000 0000	00	281 300 000		10				120		UX4	R
98	29X 130 000 0000	00	289 130 000		6.3				30		UX5	RR
99V	428 300 000 0000	00	426 300 000		3.3	4.4	90		2.5	0.4	UX4	T
99X	284 300 000 0000	00	264 300 000		3.3	4.5	90		2.5	0.4	UX4	T
100AC	842 310 000 0000	00	642 310 000		4	6	200		5	2	B5	T
104V	842 310 000 0000	00	642 310 000		4	1	100		15	3.5	B5	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
100/200 LLID	348 748 220 0000	00	346 547 220		1.4	9.4	150	125	4		A08	P
112A	384 200 000 0000	00	364 200 000		5	4.5	90		5	1.5	UX4	T
114	020 000 300 0000	84	020 000 300	A1/G1	1.4		200		15		A08	T
114B	020 000 300 0000	84	020 000 300	A1/G1	1.4	4	200		12	1.1	A08	T
116/Pen	007 231 800 0000	40	005 231 600	G1	11.5	1	100	100		7	B7	P
117DD	741 238 9X1 0000	00	541 236 891		17	2	250	150	5	2.2	B9A	DDP
117L7	128 479 310 0000	00	126 458 310		117	5.2	100	100	60 43	5.3	A08	RP
117Z3	002 391 000 0000	00	*02 381 000		117				60		B7G	R
117Z4	020 090 310 0000	00	020 080 310		117				60		A08	R
117Z6	02X 190 310 0000	00	029 180 310		117				60		A08	RR
120	842 310 000 0000	00	642 310 000		2	12	150		12		B5	T
120VPA	041 230 700 0000	80	041 230 500	A1	2	1	150	60	2.9	1.1	B7	P
121VP	280 074 130 0000	00	26* *54 130		12.5	3	200	115	7.2	2.3	B8A	P
124AC	742 310 000 0000	80	542 310 000	A1	4	1.4	200	60	1.6	0.9	B5	P
141DDT	284 09X 130 0000	00	264 089 130		14	1.5	200		1.5	1.6	B8A	DDT
141TH	208 405 130 0000 280 575 130 0000	00 00	276 454 130		14	2 2	100 250	100	5 8	2 2.2	B8A	TH
142BT	028 740 130 0000	00	026 540 130		14	8.5	200	200	29	3.7	A08	P
144V	842 310 000 0000	00	642 310 000		4	8	200		6	1.4	B5	T
154V	842 310 000 0000	00	642 310 000		4	6	200		9	2	B5	T
163Pen	041 230 807 0000	00	041 23* 6*5		16	10.4	200	175	53	9.5	B9A	P
164V	842 310 000 0000	00	642 310 000		4	9	200		12	3.4	B5	T
171DDP	741 238 9X1 0000	00	541 236 891		17	2	200	125	5	2.2	B9A	DDP
181	284 300 000 0000	00	264 300 000		3	30	200		16	1	UX4	T
182	284 300 000 0000	00	264 300 000		5	45	200		18	1.5	UX4	T
182B	284 300 000 0000	00	264 300 000		5	35	250		18	1.5	UX4	T
183	284 300 000 0000	00	264 300 000		5	60	250		30	1.7	UX4	T
185BT	020 740 310 0000	80	020 540 310	A1	18	18	200	200	100	9.5	A08	P
200	200 300 000 0000	90	200 300 000	D1	2.5				15		UX4	R
200A	284 300 000 0000	00	264 300 000		5		60		1.5	0.7	UX4	T
202DDT	90X 231 800 0000	40	809 231 600	G1	20	3	200		3	2.4	B7	DDT
202MPG	747 231 800 0000	40	545 213 600	G1	20	1.5	200	100	3	1.3	B7	H
202SPB	081 231 700 0000	40	061 231 500	G1	20	1.5	250	100	4.8	2.8	B7	P
202STH	840 231 000 0000 057 231 800 0000	50 50	645 231 700	G1	20	1.5 1.5	100 200	60	2 1		B7	TH
202VP	041 231 700 0000	80	041 231 500	A1	20	1.5	250	100	4.3	2.2	B7	P
202VPB	081 231 700 0000	40	061 231 500	G1	20	1.5	250	100	4.3	2.2	B7	P
203THA.	747 231 800 0000	40	545 231 600	G1	20	2	250	100	3.5	0.85	B7	H
205D	284 300 000 0000	00	264 300 000		3.5	29	400		30	0.95	UX4	T
205E	284 300 000 0000	00	264 300 000		4.5	22.5	350		29	1.9	UX4	T
205F	284 300 000 0000	00	264 300 000		4.5	18	300		31	1.7	UX4	T
210DDT	892 3X0 000 0000	40	682 390 000	G1	2	1	100		2.3	1.1	B5	DDT
210DET	842 300 000 0000	00	642 300 000		2	4.5	150		3	1.1	B4	T
210DPT	041 230 700 0000	80	041 230 500	A1	2	1	150	60	2.9	1.3	B7	P
210HF	842 300 000 0000	00	642 300 000		2	3	150		1.6	1.5	B4	T
210HPT	842 370 000 0000	00	642 350 000		2	4.5	150	175	7.5	2.5	B5	P
210LF	842 300 000 0000	00	642 300 000		2	4.5	150		4.8	1.4	B4	T
210PG			645 230 700	G1	2	0	150 150	40	1.1 0.4		B7	H

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
210RC	842 300 000 0000	00	642 300 000		2	1.5	150		0.8	0.8	B4	T
210SPT	041 230 700 0000	80	041 230 500	A1	2	1	150	60	1.9	1.1	B7	P
210T	284 300 000 0000	00	264 300 000		7.5	32	350		16	1.5	UX4	T
210VPA	041 230 700 0000	80	041 230 500	A1	2	1	150	60	2.9	1.1	B7	P
210VPT	041 231 700 0000	80	041 231 500	A1	2	1	150	60	1.9	1.1	B7	P
213	29X 300 000 0000	00	289 300 000		5				30		UX4	RR
213Pen	041 230 071 0000	80	*41 23* *51	A1	21	22	200	200	45	6.2	B9A	P
215P	842 300 000 0000	00	642 300 000		2	7.5	150		10	2.2	B4	T
215SG	742 300 000 0000	80	542 300 000	A1	2	1	150	60	1.4	1.1	B4	P
217A	229 300 000 0000	00	228 300 000		10				120		UX4	R
220	200 300 000 0000	90	200 300 000	D1	2.5				15		UX4	R
220B	458 230 800 0000	00	446 230 700		2	3	150		5.0	1.5	B7	TT
220DD	9X2 310 000 0000	00	892 310 000		2						B5	DD
220HPT	842 370 000 0000	00	642 350 000		2	4.5	150	150	8	2.5	B5	P
220IPT	040 230 700 0000	80	040 230 500	A1	2	1.5	150	60	2.2	1	B7	P
220OT	842 370 000 0000	00	642 350 000		2	4.5	150	150	9.5	2.5	B5	P
220P	842 300 000 0000	00	642 300 000		2	7.5	150		11	2.2	B4	T
220PA	842 300 000 0000	00	642 300 000		2	4.5	150		10	4	B4	T
220PT	842 370 000 0000	00	642 350 000		2	9	150	150	19	2.5	B5	P
220SG	742 300 000 0000	80	542 300 000	A1	2	1	150	60	1.5	1.6	B4	P
220TH	840 320 000 0000 057 320 800 0000	50 50	645 230 700	G1	2	3	100 150	60	1.7 0.6	1.2 0.6	B7	TH
220VS	742 300 000 0000	80	542 300 000	A1	2	1	100	60	2	1.6	B4	P
220VSG	742 300 000 0000	80	542 300 000	A1	2	1.5	150	60	2.6	1.5	B4	P
225DU	092 323 X00 0000	00	082 323 900		2				15		B7	RR
230	842 300 000 0000	00	642 300 000		2	20	150		18	3	B4	T
230	200 300 000 0000	90	200 300 000	D1	5				30		UX4	R
230PT	842 370 000 0000	00	642 350 000		2	15	150	150	14	2	B5	P
230XP	842 300 000 0000	00	642 300 000		2	18	150		22	3	B4	T
231D	284 300 000 0000	00	264 300 000		3	3	90		2.1	8.4	UX4	T
240B	548 230 800 0000	00	446 230 700		2	1	150		8.5		B7	TT
240QP	548 237 800 0000	00	446 253 700		2	12	150	150	6	2.5	B7	PP
244	284 130 000 0000	00	264 130 000		2	6	150		5.5	1	UX5	T
244V	842 310 000 0000	00	642 310 000		4	5.5	200		5.5	2.8	B5	T
245A	287 130 000 0000	40	265 130 000	G1	2	1.5	150	50	4.8	0.6	UX5	P
246A	387 200 000 0000	40	365 200 000	G1	3.3	1.5	150	40	1.5	0.4	UX4	P
247A	208 040 030 0000	00	206 040 030		2	4.5	150		3.2	0.9	A08	T
248A	028 710 310 0000	40	026 510 310	G1	6.3		150	125	5.5	1.8	A08	P
249B	223 300 000 0000	90	223 300 000	D1	2.5				120		UX4	R
252A	284 300 000 0000	00	264 300 000		5	50	400		60	3.4	UX4	T
255	289 X43 000 0000	00	268 943 000		2	3	150		0.8	0.6	UX6	DDT
257	284 730 000 0000	00	264 530 000		5	21.5	100	100	20	1.3	UX5	P
257A	280 300 000 0000	40	260 300 000	G1	3.1	3	90		2.1	0.5	UX4	T
259A	287 130 000 0000	40	265 130 000	G1	2	1.5	200	75	5.5	1.4	UX5	P
259B	287 130 000 0000	40	265 130 000	G1	2	1.2	200	75	5.5	1.4	UX5	P
262B	281 300 000 0000	40	261 300 000	G1	10	4.5	150		2.8	0.9	UX4	T
264	284 300 000 0000	00	264 300 000		1.1	9	150		2.5	0.6	UX4	T
264C	284 300 000 0000	00	264 300 000		1.5	8	100		2.1	0.6	UX4	T
264E	284 300 000 0000	00	264 300 000		1.4	8	100		2.1	0.6	UX4	T
271A	284 130 000 0000	00	264 130 000		5	30	400		37.5	2.9	UX5	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
272A	284 130 000 0000	00	264 130 000		10	15	150		5.4	0.7	UX5	T
274A	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
275A	284 300 000 0000	00	264 300 000		5	4.5	200		47	2.7	UX4	T
281A	284 730 000 0000	00	264 530 000		5	60	150	75	35	1.5	UX5	P
283A	287 130 000 0000	40	265 130 000	G1	2	1.5	200	75	5.9	1.3	UX5	P
285	287 130 000 0000	40	265 130 000	G1	2	12	200	150	8.8	0.9	UX5	P
286A	287 113 000 0000	40	265 113 000	G1	2	1.5	200	75	6.2	1.2	UX6	P
290A	287 113 000 0000	40	265 113 000	G1	10	1.5	200	75	5.4	1.2	UX6	P
291A	287 841 300 0000	40	275 641 300	G1	10	3 7.5	200 200	 75	4.5 3.1		B7	H
292A	289 X13 000 0000	40	268 913 000	G1	10	6	150		2.1	0.6	UX6	DDT
293A	287 413 000 0000	00	265 413 000		10	18	200	200	14.5	1	UX6	P
300A	284 300 000 0000	00	364 200 000		5	97	400		80	1.3	UX4	T
302	847 231 800 0000 057 231 800 0000	50 50	645 231 700	G1	30	2 2	100 250	 100	1.5 3.5	 0.9	B7	TH
303A	289 X43 000 0000	00	268 943 000		2	6	150		2	0.6	UX6	DDT
304AC	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	1.9	B5	P
309A	287 413 000 0000	00	265 413 000		10	1.5	200	75	4.3	1.1	UX6	P
310A	287 113 000 0000	40	265 113 000	G1	10	3	150	150	5.5	1.8	UX6	P
311A	287 130 000 0000	40	265 130 000	G1	10	15	150	150	30	2.8	UX5	P
311SU	290 000 130 0000	00	28* *** 130		31		225		100		B8A	R
324A	200 300 000 0000	90	200 300 000	D1	5				5		UX4	R
328A	287 113 000 0000	40	265 113 000	G1	7.5	3	150	150	5.5	1.8	UX6	P
329A	287 130 000 0000	40	265 130 000	G1	7.5	15	150	150	37.5	3.3	UX5	P
332Pen	028 740 310 0000	00	026 540 310		33	8.5	200	200	45	8	A08	P
336A	287 413 000 0000	00	265 413 000		10	14	250	250	30	4.2	UX6	P
337A	287 113 000 0000	40	265 113 000	G1	10	3	150	150	6.3	1.6	UX6	P
345A	29X 130 000 0000	00	289 130 000		6.3				60		UX5	RR
347A	020 800 310 0000	40	020 600 310	G1	6.3	4.6	150		2.8	0.9	A08	T
349A	028 740 310 0000	00	026 540 310		6.3	14	250	250	30	4.2	A08	P
350B	028 740 310 0000	00	026 540 310		6.3	20	400	250	85	6.2	A08	P
351A	029 0X0 310 0000	00	028 090 310		6.3				120		A08	RR
352A	289 X13 000 0000	40	268 913 000	G1	10	6	100		2.1	0.6	UX6	DDT
354V	842 310 000 0000	00	642 310 000		4	4.5	250		6.5	3.6	B5	T
361A	243 780 000 0000	00	243 560 000		1.4		50	40	0.4	0.6	UX5	P
362A	243 780 000 0000	00	243 560 000		1.4		50	50	1.3	0.5	UX5	P
367A	080 724 310 0000	00	060 524 310		6.3	20	400	250	85	6.2	A08	P
373A	021 477 380 0000	00	021 455 360		2		150	150	2	1.3	A08	P
374A	021 407 380 0000	00	021 405 360		3		150	125	18	3	A08	P
375A	028 740 310 0000	00	026 540 310		20		40	40	12	4.7	A08	P
381A	120 090 300 0000	00	120 080 300		6.3				5		A08	D
383A	120 408 030 0000	00	120 406 030		6.3		150		7.5	2.8	A08	T
385A	127 040 130 0000	00	125 040 130		6.3		150		7.5	2.5	A08	P
387A	127 040 130 0000	00	125 040 130		6.3		150		5.6	4	A08	P
396A	214 808 513 0000	00	214 607 413		6.3	2.2	150		8.2	5.5	B9A	TT
401A	287 300 000 0000	00	265 300 000		5	9	50		1.5	0.8	UX4	T
402	284 300 000 0000	00	264 300 000		3	40	200		40	1	UX4	T
402-0T	007 231 800 0000	40	005 231 600	G1	40	12	250	250	32	7	B7	P
402P	000 231 800 0000	40	000 231 600	G1	4	15	200		27	5.5	B7	T
402Pen	007 231 800 0000	40	005 231 600	G1	40	6.7	200	200	40	7	B7	P
402PenA	007 231 800 0000	40	005 231 600	G1	40	9	150	150	56	8	B7	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
403A	413 287 100 0000	00	413 265 100		6.3	2.3	150	150	7	4.4	B7G	P
403B	412 387 100 0000	00	412 365 100		6.3		200	125	7.7	5.1	B7G	P
404A	402 108 073 0000	00	402 106 053		6.3		150	150	13.5	12.5	B9A	P
405BU	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
406	842 300 000 0000	00	642 300 000		4		150		5.5	0.5	B4	T
407A	214 838 512 0000	00	214 637 412		20	2	150		8.2	5.5	B9A	TT
408A	412 387 100 0000	00	412 365 100		20	2	150	125	7.5	5	B7G	P
408BU	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
409A	410 087 100 0000	00	410 065 100		6.3		150	125	5.2	3.2	B7G	P
410HF	842 300 000 0000	00	642 300 000		4	2.5	200		0.2	0.2	B4	T
410P	842 300 000 0000	00	642 300 000		4	16	250		12	1.8	B4	T
410PT	482 370 000 0000	00	462 350 000		4	1	100	150		2.5	B5	P
410RC	842 300 000 0000	00	642 300 000		4	2.5	200		0.2	0.2	B4	T
410SG	742 300 000 0000	80	542 300 000	A1	4	1	200	100	4.5	0.9	B4	P
412BU	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
412SU	902 300 000 0000	00	802 300 000		4				60		B4	R
415PT	842 370 000 0000	00	642 350 000		4	25	300	200	20	1.7	B5	P
415SP	842 300 000 0000	00	642 300 000		4	18	150		11	1.6	B4	T
417A	802 441 443 0000	00	602 441 443		6.3	1.5	150		25	25	B9A	T
420T	047 231 800 0000	00	045 231 600		4	4.4	250	250	40	10.5	B7	P
425PT	842 370 000 0000	00	642 350 000		4	17	250	150	12	1.3	B5	P
431U	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
435A	402 108 073 0000	00	402 106 053		6.3	10	200	150	13	16.3	B9A	P
436A	211 403 708 0000	00	211 403 506		6.3	1.4	200	150	23	32	B9A	P
437A	304 002 118 0000	00	304 002 116		6.3	10	150		40		B9A	T
441U	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
446A/B	021 000 310 0000	84	021 000 310	A1/G1	6.3	3	250		15	4.5	A08	T
450	842 300 000 0000	00	642 300 000		4	55	250		50	3.5	B4	T
450	284 300 000 0000	00	264 300 000		7.5		400		55	2.1	UX4	T
450AC	742 310 000 0000	80	542 310 000	A1	4		200	100	3.5	3	B5	P
451	9X2 300 000 0000	00	892 300 000		1.8			16		650	B4	RR
451PT	280 074 130 0000	00	26* *54 130		45	9	200	200	54.5	9.5	B8A	P
451U	923 X00 000 0000	00	823 900 000		4				120		B4	RR
460BU	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
482A	284 300 000 0000	00	264 300 000		5	45	200		18	1.5	UX4	T
482B	284 300 000 0000	00	264 300 000		5	35	250		18	1.5	UX4	T
483	842 310 000 0000	00	264 300 000		5	60	250		30	1.7	UX4	T
484V	842 310 000 0000	00	642 310 000		4	2.5	200		0.2	1.2	B5	T
485	284 130 000 0000	00	264 130 000		3	9	200		5.8	1.4	UX5	T
486*	028 040 300 0000	00	026 040 300		3	3	90		3	0.6	A08	T
500	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
501	873 420 000 0000	00	653 420 000		1.4	0	40	40	1	0.8	B5A	P
502	873 420 000 0000	00	653 420 000		1.2	1.2	40	40	8.6	0.5	B5A	P
503	873 420 000 0000	00	653 420 000		1.2	2	40	40	0.8	0.5	B5A	P
505	873 420 000 0000	00	653 420 000		0.6	0	40	30	0.1	0.1	B5A	P
506	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
506AX	873 420 000 0000	00	653 420 000		1.2	4.5	40	40	1.2	0.5	B5A	P
506BU	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
506K	9X2 300 000 0000	00	892 300 000		2	2			30		B4	RR
507AX	287 438 200 0000	00	265 436 200		1.2		40	40	0.9	0.5	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
509	9X2 300 000 0000	00	892 300 000		2				60		B4	RR
509AX	834 200 000 0000	00	634 200 000		0.6	2	40		0.1	0.1	B5A	T
511D	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
512AX	873 420 000 0000	00	653 420 000		0.6	0.6	20	20	0.1	0.1	B5A	P
515BX	834 200 000 0000	00	634 200 000		0.6		40		0.1	0.1	B5A	T
516AX	803 420 000 0000	00	603 420 000		0.6	0.6	22.5		0.1	0.2	B5A	T
518AX	873 420 000 0000	00	653 420 000		1.2	2	40	40	0.8	0.5	B5A	P
520AX	873 420 000 0000	00	653 420 000		0.6	2.5	40	40	0.2	0.1	B5A	P
521AX	873 420 000 0000	00	653 420 000		1.2	3	20	20	0.8	0.4	B5A	P
522AX	873 420 000 0000	00	653 420 000		1.2	0	20	20	0.3	0.4	B5A	P
523AX	873 420 000 0000	00	653 420 000		1.2	1.2	20	20	0.3	0.3	B5A	P
524AX	873 420 000 0000	00	653 420 000		1.2	1.7	12	12	0.4	0.3	B5A	P
525AX	873 420 000 0000	00	653 420 000		1.2	1.2	20	20	0.2	0.3	B5A	P
526AX	873 420 000 0000	00	653 420 000		1.2	1.5	20	20	0.4	0.4	B5A	P
527AX	873 420 000 0000	00	653 420 000		1.2	0	20	20	0.1	0.2	B5A	P
528AX	873 420 000 0000	00	653 420 000		1.2	0	20	20	0.3	0.4	B5A	P
529AX	873 420 000 0000	00	653 420 000		1.2	1.2	12	12	0.3	0.3	B5A	P
532DX	873 420 000 0000	00	653 420 000		1.2	0	20	20	0.4	0.4	B5A	P
533DX	873 420 000 0000	00	653 420 000		1.2	0	20	20	0.3	0.4	B5A	P
535AX	873 420 000 0000	00	653 420 000		1.2	1.2	15		0.3	0.3	B5A	P
537AX	873 420 000 0000	00	653 420 000		1.2	1.5	20	20	0.4	0.4	B5A	P
538A	851 228 413 0000	00	741 226 413		6.3	2	250		10	5.5	B9A	TT
539DX	873 420 000 0000	00	653 420 000		1.2	1.4	20	20	0.2	0.3	B5A	P
541DX	873 420 000 0000	00	653 420 000		1.2	0	30	30	0.2	0.4	B5A	P
542A	802 304 100 0000	00	602 304 100		6.3	2	250		10	5.5	B7G	T
542DX	873 420 000 0000	00	653 420 000		1.2	2	20	20	0.4	0.3	B5A	P
542DXS			653 420 000		1.2	2	20	20	0.4	0.3	B5A	P
543	402 013 080 0000	00	402 013 060		6.3	2.5	200		9.5	3.8	B8D	T
544A	802 384 100 0000	00	602 364 100		6.3	8.5	250		10.5	2.2	B7G	T
544DX	873 420 000 0000	00	653 420 000		1.2	0	30	30	0.1	0.3	B5A	P
546A	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
546DX	873 420 000 0000	00	653 420 000		1.2	0	20	20	0.3	0.4	B5A	P
547A	120 417 380 0000	00	120 415 360		6.3	3	300	150	30	11	A08	P
547DX	873 420 000 0000	00	653 420 000		1.2	0	40	30	0.2	0.4	B5A	P
548A	982 344 000 0000	00	762 344 100		6.3	[0.8 3	100 150		8.5 5	5.3 4.5]	B7G	TT
548DX	873 420 000 0000	00	653 420 000		1.2	1.4	20	20	0.2	0.3	B5A	P
549A	1X2 310 900 0000	00	192 310 800		6.3						B7G	DD
550A	581 481 230 0000	00	471 461 230		6.3	2	250		2.3	1.6	A08	TT
553AXA	872 430 000 0000	00	652 430 000		1.2	0	20	20	0.4	0.5	B5A	P
559	021 010 030 0000	90	021 010 030	D1	6.3				27		A08	R
568AX	803 420 000 0000	00	603 420 000		1.2	5.5	135		1.9	0.6	B5A	T
569AX	872 430 000 0000	00	652 430 000		1.2		60	60	1.8	1.1	B5A	P
573AX	824 300 000 0000	00	624 300 000		1.2	4	90		11	2	B5A	T
574AX	873 420 000 0000	00	653 420 000		0.6	0.6	20	20	0.1	0.1	B5A	P
578	901 23X 148 0000	00	811 239 146		4.7	3	250		1	1.2	B9A	DDDT
605	842 300 000 0000	00	642 300 000		4	6	150		10	1.4	B4	T
608CX	823 410 000 0000	00	623 410 000		6.3	2	150		9	5	B5A	T
612BU	9X2 300 000 0000	00	892 300 000		6.3				30		B4	RR
615	842 300 000 0000	00	642 300 000		4	41	150		4	1.4	B4	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
619CX	823 410 000 0000	00	623 410 000		6.3	2	250		4	4	B5A	T
620T	842 300 000 0000	00	642 300 000		6.3	99	400		62	2.3	B4	T
635GTX	028 040 310 0000	00	026 040 310		6.3	20	350		20		A08	T
660	842 300 000 0000	00	642 300 000		6.3	100	400		120	2.3	B4	T
660T	842 300 000 0000	00	642 300 000		6.3	1	100		7.4	7.4	B4	T
680XP	842 300 000 0000	00	642 300 000		6.3	100	400		3.5	1.1	B4	T
713A	021 417 380 0000	00	021 415 360		6.3	2	125		7.5	4	A08	P
731A	412 387 100 0000	00	412 365 100		6.3	2.3	150	150	7	4.3	B7G	P
801	384 200 000 0000	00	364 200 000		7.5	15	400		60	2.5	UX4	T
802	207 411 300 0000	80	205 411 300	A1	6.3	18	400	250	30	2.2	UX7	P
805	842 300 000 0000	00	642 300 000		6.3	6	150		10	1.4	B4	T
807	274 130 000 0000	80	254 130 000	A1	6.3	12.5	400	250	83	6.5	UX5	P
816	200 300 000 0000	90	300 300 000	D1	2.5				120		UX4	R
825	842 300 000 0000	00	642 300 000		6.3		150		6	1.4	B4	T
825BU	9X2 300 000 0000	00	892 300 000		7.5				60		B4	RR
829B	[247 135 200 0000 247 135 200 0000	08 80]	245 134 200	A1/A2	6.3	55	300	250	25	1.9	B7A	PP
832	[247 135 200 0000 247 135 200 0000	80 08]	245 134 200	A1/A2	6.3	60	150	125	30	3.5	B7A	PP
836	200 000 300 0000	90	2** 00* 300	D1	2.5				120		B7G	R
837	207 411 300 0000	00	205 411 300		12.6	40	400	150	45		UX7	P
840	274 130 000 0000	80	254 130 000	A1	2	3	200	75	1	0.4	UX5	P
841	284 300 000 0000	00	264 300 000		7.5	1	100			0.7	UX4	T
842	284 130 000 0000	00	264 130 000		7.5	100	400		25	1.2	UX5	T
843	284 130 000 0000	00	264 130 000		2.5	25	350		25	1.7	UX5	T
864	384 200 000 0000	00	364 200 000		1.1	4.5	90		2.9	0.6	UX4	T
871	200 300 000 0000	90	200 300 000	D1	2.5				120		UX4	R
879	200 300 000 0000	90	200 300 000	D1	2.5				5		UX4	R
884	028 040 310 0000	00	026 040 310		6.3	[15 35	100 200		22 50]	†4kΩ	A08	THY
885	284 130 000 0000	00	264 130 000		2.5	[15 35	100 100		22 50]	†4kΩ	UX5	THY
904V	842 310 000 0000	00	642 310 000		4	2	200		2	2	B5	T
950	041 230 700 0000	80	041 230 500	A1	2	16.5	200	150	7	0.9	B7	P
951	287 300 000 0000	40	265 300 000	G1	2	3	200	60	1.7	0.6	UX4	P
952F	299 310 000 0000	00	288 310 000		6.3				2		5AA	D
954	213 174 000 0000	80	213 154 000	A1	6.3	3	250	100	2	1.4	7AA	P
955	284 310 000 0000	00	264 310 000		6.3	7	250		6.3	2.2	5AA	T
956	213 174 000 0000	80	213 154 000	A1	6.3	3	250	100	6.7	1.8	7AA	P
957	322 480 000 0000	00	322 460 000		1.2	5	150		2	0.6	5AA	T
958	384 220 000 0000		364 220 000		1.2	7.5	135		3	1.2	5AA	T
958A	322 480 000 0000	00	364 220 000		1.2	20	150				5AA	T
959	322 174 000 0000	80	322 154 000	A1	1.2	3	150	60	1.7	0.6	7AA	P
985	29X 130 000 0000	00	289 130 000		5				30		UX5	RR
986	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
994V	842 310 000 0000	00	642 310 000		4	0.5	100			3.6	B5	T
1002	903 300 000 0000	00	802 300 000		1.8				60		B4	R
1005	009 0X2 030 0000	00	008 092 030		6.3				30		A08	RR
1006	29X 300 000 0000	00	289 300 000		1.7				120		UX4	RR
1007	009 0X0 230 0000	00	008 090 230		1.0				60		A08	RR
1012	29X 300 000 0000	00	289 300 000		1.7				120		UX4	RR
1028	202 322 200 0000	90	202 322 200	D1	6.3				60		B7G	R
1103	90X 231 800 0000	40	809 231 600	G1	13	2	250		1.5	1.5	B7	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
1130	9X2 300 000 0000	00	892 300 000		1.8				1.3		B4	DD
1201	428 141 830 0000	00	426 141 630		6.3	3	200		5.5	3	B8B	T
1201	9X2 300 000 0000	00	892 300 000		2.5				30		B4	DD
1203	200 900 130 0000	00	200 800 130		6.3				5		B8B	D
1204	728 141 310 0000	00	526 141 310		6.3	2	250	100	1.7	1.2	B8B	P
1206	287 451 830 0000	00	265 441 730		6.3	2.5	250	100	4.5	2.1	B8B	PP
1216	882 345 100 0000	00	672 344 100		6.3	2.3	100		4.8	3.4	B7G	TT
1217	412 387 100 0000	00	412 365 100		6.3	2	75	75	6.3	2	B7G	H
1221	187 113 000 0000	40	165 113 000	G1	6.3	3	250	100	2	1.2	UX6	P
1222	287 403 100 0000	00	265 403 100		6.3	18	350	250	54	5.2	A08	P
1223	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	2	1.2	A08	P
1229	287 300 000 0000	40	265 300 000	G1	2	3	150	75	1.7	0.6	UX4	P
1230	284 300 000 0000	00	264 300 000		2	9	150		3		UX4	T
1231	287 104 130 0000	00	265 104 130		6.3	30	300	200	13	6.3	B8B	P
1232	287 114 130 0000	00	265 114 130		6.3	2	250	100	6	4.5	B8B	P
1236A	333 992 220 0000	00	333 882 220		2						A08	D
1238	257 881 430 0000	00	245 671 430		28	3.5	40	30	12.5	3.4	B8B	PP
1247	000 230 000 0000	90	000 230 000	D1	0.6				0.4		B8A	D
1273	287 104 130 0000	00	265 104 130		6.3	3	250	100	2.2	1.5	B8B	P
1274	029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
1275	29X 300 000 0000	00	289 300 000		5				120		UX4	RR
1276	284 300 000 0000	00	264 300 000		4.3	45	250		60	5.2	UX4	T
1280	287 104 130 0000	00	265 104 130		12.5	3	250	100	2.2	1.5	B8B	P
1282	287 114 130 0000	00	265 114 130		6.3	2	300	150	10	5.8	B8B	P
1284	287 104 103 0000	00	265 104 130		12.5	3	250	100	9	2	B8B	P
1288	384 250 830 0000	00	364 240 730		1.4		90		5.2	1.8	A08	TT
1291	284 305 820 0000	00	274 304 620		1.4		90		5.2	1.8	A08	TT
1292	384 205 830 0000	00	364 204 730		1.4		90		5.2	1.8	A08	TT
1293	280 084 030 0000	00	260 064 030		1.4	0	90		5.2	1.3	B8B	T
1294	200 900 130 0000	00	200 800 130		1.4				1		A08	D
1299	387 004 230 0000	00	365 004 230		1.4	4.5	150	90	10.2	2.4	B8B	P
1560	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
1560	9X2 300 000 0000	00	892 300 0000		5				60		B4	RR
1561	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
1562	290 300 000 0000	00	280 300 000		7.5				120		UX4	R
1602	284 300 000 0000	00	264 300 000		7.5	23.5	250		10	1.3	UX4	T
1603	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	2	1.2	UX6	P
1608	284 300 000 0000	00	264 300 000		2.5	90	400		95		UX4	T
1609	384 720 000 0000	00	364 520 000		1.1	1.5	150	75	2.5	0.7	UX5	P
1610	284 730 000 0000	00	264 530 000		2.5	16.5	250	250	31	2.5	UX5	P
1611	028 740 310 0000	00	026 540 310		6.3	16.5	250	250	34	2.5	A08	P
1612	028 740 310 0000	40	026 540 310	G1	6.3	3	250	100	5.3	1.1	A08	H
1613	028 740 310 0000	00	026 540 310		6.3	16.5	250	250	34	2.5	A08	P
1614	028 740 310 0000	00	026 540 310		6.3	18	350	250	54	5.2	A08	P
1616	200 300 000 0000	90	200 300 000	D1	2.5				120		UX4	R
1619	028 740 310 0000	00	026 540 310		2.5	10	300	250	45	4.5	A08	P
1620	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	2	1.2	A08	P
1621	028 740 310 0000	00	026 540 310		6.3	16.5	250	250	34	3.5	A08	P
1624	207 401 300 0000	80	205 401 300	A1	2.5	10	300	250	45	4.5	UX7	P
1625	207 401 300 0000	80	205 401 300	A1	12	12.5	400	250	83	6.5	UX7	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
1626	028 040 310 0000	00	026 040 310		12.5	32	250		20	2.1	A08	T
1629	028 740 310 0000	00	026 540 310		12.5	8	250	250	0.2	†1.0	A08	TI
1631	028 740 310 0000	00	026 540 310		12.5	18	350	250	54	5.2	A08	P
1632	028 740 310 0000	00	026 540 310		12.5	8	200	100	50	9.5	A08	P
1633	581 481 230 0000	00	471 461 230		25	8	250		11.5	2.6	A08	TT
1634	085 481 230 0000	00	074 461 230		12.5	2	250		2	1.3	A08	TT
1635	028 548 310 0000	00	027 446 310		6.3	0	300		3.5	0.9	A08	TT
1637	028 700 310 0000	40	026 500 310	G1	6.3	18	250	250	32	3.8	A08	P
1638	02X 190 310 0000	00	029 180 310		6.3						A08	DD
1639	028 9X0 310 0000	40	026 890 310	G1	6.3	5.5	250		5	2	A08	DDT
1641	200 300 000 0000	9X	200 300 000	D1/D2	5				120		UX4	RR
1641/RK60	200 300 000 0000	9X	200 300 000	D1/D2	5				50		UX4	RR
1642	218 481 300 0000	50	216 471 300	G1	6.3	16.5	250		8.3	1.4	UX7	TT
1644	514 872 380 0000	00	414 752 360		12.5	9	200	200	13	2.1	A08	PP
1649	021 417 380 0000	00	021 415 360		6.3	2	300	150	10	9	A08	P
1654	200 000 300 0000	90	2** 00* 300	D1	1.4						B7G	D
1655	085 481 230 0000	00	074 461 230		6.3	2	250		2	1.3	A08	TT
1659	289 X13 000 0000	40	268 913 000	G1	2.5	2	250		0.9	1.1	UX6	DDT
1662	384 728 300 0000	00	364 526 300		1.4	8.4	150	90	13.3	1.9	B7G	P
1664	028 X97 310 0000	40	026 985 310	G1	2.5	3	250	125	10	1.3	A08	DDP
1701	9X2 300 000 0000	00	892 300 000		1.8				120		B4	RR
1801	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
1805	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
1810	003 200 000 0000	90	003 200 000	D1	4				30		B4	R
1815	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
1817	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
1831	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
1832	092 300 000 0000	00	082 300 000		4				120		B4	R
1851	028 710 310 0000	40	026 510 310	G1	6.3	2	300	150	10	9	A08	P
1852	021 417 380 0000	00	021 415 360		6.3	2	300	150	10	9	A08	P
1853	021 417 380 0000	00	021 415 360		6.3	3	300	200	12.5	5	A08	P
1853GT	028 710 310 0000	40	026 510 310	G1	6.3	3	300	200	12.5	5	A08	P
1861	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
1867	39X 200 000 0000	00	389 200 000		4				60		UX4	RR
1868	023 190 0X0 0000	00	023 180 090		4				60		F8	RR
1875	023 000 000 0000	90	023 000 000	D1	4				5		8SC	R
1876	123 000 090 0000	00	123 000 080		4				5		8SC	R
1877	002 300 000 0000	90	002 300 000	D1	4				3		B4	R
1881	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
1882	023 090 0X0 0000	00	023 080 090		5				60		8SC	RR
1884	120 X09 030 0000	00	120 908 030		2.5				15		A08	RR
2033	982 344 100 0000	00	762 344 100		6.3	1	100		9.5	6	B7G	TT
2051	028 041 310 0000		026 041 310		6.3	[	100 250		30 75	] †3kΩ	A08	THY
2101	284 730 000 0000	00	264 530 000		2	4.5	150	150	8	1.7	UX5	P
2102	289 X73 000 0000	00	268 953 000		2	1	100		2.5	1.3	UX6	DDT
2103	285 748 300 0000	00	274 546 300		2	7.5	150	150	4	1.5	UX7	PP
2151	287 413 000 0000	00	265 413 000		14	31	250	250	47	2.7	UX6	P
2318	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
2506	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
3006	902 300 000 0000	00	802 300 000		4				3		B4	D
3041	872 430 000 0000	00	652 430 000		1.2	1	20	20	0.2	0.3	B5A	P
3074A	[205 140 300 0000 205 140 300 0000	80 80]	204 140 300	A1/A2	6.3		300		50	3	UX7	TT
3075A	002 300 000 0000	90	002 300 000	D1	2				3		B4	D
3310A	287 113 000 0000	40	265 113 000	G1	10		250	150	5.6	2	UX6	P
3311A	287 113 000 0000	40	265 113 000	G1	10		200	150	33	3	UX6	P
3328A	287 113 000 0000	40	265 113 000	G1	7.5		250	150	5.6	1.9	UX6	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
3329A	287 113 000 0000	40	265 113 000	G1	7.5		200	125	31	2.9	UX6	P
3481	028 710 310 0000	40	026 510 310	G1	6.3	13.5	150	150	5.5	1.8	A08	P
3720	384 200 000 0000	00	364 200 000		5	1.5	200		0.2	0.2	UX4	T
3872	384 200 000 0000	00	364 200 000		2	9	150		3		UX4	T
3873	387 200 000 0000	40	365 200 000	G1	2	3	150	75	1.5	0.6	UX4	P
3921	284 300 000 0000	00	264 300 000		2.5	50	250		34	2.1	UX4	T
3924	287 130 000 0000	40	265 130 000	G1	2.5	3	200	90	4	1	UX5	P
4019A	284 300 000 0000	00	264 300 000		4		200		9.7	1.3	UX4	T
4019B	842 300 000 0000	00	642 300 000		4	4	100		7.5	1.2	B4	T
4020A	284 300 000 0000	00	264 300 000		2	2	150		1.2	0.6	UX4	T
4020B	842 300 000 0000	00	642 300 000		2	2	150		1.2	0.6	B4	T
4021A	284 300 000 0000	00	264 300 000		4	10	150		32.5	3	UX4	T
4021B	842 300 000 0000	00	642 300 000		4	8	150		23	3	B4	T
4022AR	284 300 000 0000	00	264 300 000		4	6	200		16.2	2.2	UX4	T
4022B	842 300 000 0000	00	642 300 000		4	6	200		16.2	2.2	B4	T
4033	284 130 000 0000	00	264 130 000		6.3	20	400		50	9	UX5	T
4033A	842 310 000 0000	00	642 310 000		6.3	20	400		50	9	B5	T
4033L	842 310 000 0000	00	642 310 000		6.3	20	400		60	10	B5	T
4037A	902 300 000 0000	00	802 300 000		4				120		B4	R
4045A	842 370 000 0000	00	642 350 000		5	70	250	60	43	1.3	B5	P
4061A	205 411 300 0000	80	205 411 300	A1	6.3	10	400	200	50	2.5	B7	P
4074A	205 140 300 0000	88	204 140 300	A1/A2	6.3	13	300		15	3	UX7	TT
4077A	003 200 000 0000	90	003 200 000	D1	5				120		B4	R
4264A	384 200 000 0000	00	364 200 000		1.5		100			0.5	UX4	T
4274A	29X 300 000 0000	00	289 300 000		5				120		UX4	RR
4300A	384 200 000 0000	00	364 200 000		5	90	400		50		UX4	T
4310A	287 113 000 0000	40	265 113 000	G1	10	5.5	250	150	5.2	2	UX6	P
4328A	287 113 000 0000	40	265 113 000	G1	7.5	5.5	250	175		2	UX6	T
4328D	028 710 310 0000	40	026 510 310	G1	7.5	5.5	250	150	6.2	2	A08	T
4605	284 130 000 0000	00	264 130 000		1.8	6	220		4		UX5	T
4606	423 800 000 0000	00	423 600 000		4.5	9	130		8.5	1	UX4	T
4607	423 800 000 0000	00	423 600 000		2.1	1.6	130		0.7	0.5	UX4	T
4608	842 310 000 0000	00	642 310 000		4	6	150		11	2.5	B5	T
4609	423 800 000 0000	00	423 600 000		4.2	5	130		8	2.3	UX4	T
4610	742 310 000 0000	80	542 310 000	A1	4	1.3	200	100	1.5	0.9	B5	P
4611	384 200 000 0000	00	364 200 000		6.3	40	200		20	1.7	UX4	T
4611	842 300 000 0000	00	642 300 000		6.3	40	200		20	1.7	B4	T
4612	842 300 000 0000	00	642 300 000		4	40	250		40	2.7	B4	T
4613	842 300 000 0000	00	642 300 000		4	22	250		48	3.5	B4	T
4614	842 310 000 0000	00	642 310 000		4	16	200		12	1.3	B5	T
4617	423 800 000 0000	00	423 600 000		4	0.8	130		25	3	UX4	T
4618	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2.2	B5	P
4619	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
4623	123 000 000 0000	90	123 000 000	D1	6.3				5		B3G	D
4630	423 800 000 0000	00	423 600 000		4.2	8.4	180		8.5	1.3	UX4	T
4631	284 300 000 0000	00	264 300 000		2	1.5	150		0.7		UX4	T
4635	842 310 000 0000	00	642 310 000		4	16	200		12	9	B5	T
4636	742 310 000 0000	80	542 310 000		4	2	200	100	3	2.3	B5	P
4650	842 370 000 0000	00	642 350 000		4	63	300	300	30		B5	P
4651	023 190 000 0000	00	023 180 090		6.3				60		8SC	RR
4652	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
4654	411 230 070 0000	80	411 230 050	A1	6.3	14	250	275	72	8.5	8SC	P
4654K	023 114 700 0000	80	023 114 500	A1	6.3	12.5	250	275	72	8.5	8SC	P
4654P	411 230 070 0000	80	411 230 050	A1	6.3	14	250	275	72	8.5	8SC	P
4655	182 300 000 0000	00	462 300 000		4.5				60		B4	RR
4657	842 310 000 0000	00	642 310 000		4	1.5	200		1	2.2	B5	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
4670	532 784 780 0000	00	432 564 570		2	8.5	90	90	1		8SC	PP
4671	284 310 000 0000	00	264 310 000		6.3	5	200		4.5	2	5AA	T
4672	713 100 000 0000	84	513 100 000	A1/G1	6.3	3	90	90	1.2	1.1	5AA	P
4673	023 110 780 0000	40	023 110 560	G1	4	2.5	250	200	8	5	B5	P
4675	284 310 000 0000	00	264 310 000		4	5	200		4.5	2	5AA	T
4676	271 310 000 0000	84	251 310 000	A1/G1	4	3	250	100	2	1.4	5AA	P
4677	023 104 780 0000	00	023 104 560		4	4	250	250	0.12	†2.0	8SC	TI
4678	023 104 780 0000	00	023 104 560		6.3	5	250	250	0.1	†2.0	8SC	TI
4679	023 110 560 0000	00	023 110 560		6.3	2.5	250	200	8	5	8SC	P
4682	023 100 780 0000	40	023 100 560	G1	4		375	250	24		8SC	P
4683	023 004 080 0000	00	023 004 060		4		350		43		8SC	T
4684	023 104 780 0000	00	023 104 560		4		400	250	24		8SC	P
4688	023 104 780 0000	00	023 104 560		4		400	275	48		8SC	P
4689	023 740 310 0000	00	026 540 310		6.3		400	275	48		A08	P
4689	023 104 780 0000	00	023 104 560		6.3		400	275	48		8SC	P
4694	023 104 780 0000	00	023 104 560		6.3	7.5	400	250	24	8	8SC	P
4695	271 310 000 0000	84	251 310 000	A1/G1	6.3	3	250	100	6.7	1.7	5AA	P
4696	023 190 780 0000	40	023 180 560	G1	6.3	2.5	250	150	8	14	F8	DP
4699	023 104 780 0000	00	023 104 560		6.3	12.5	300	300	55	13	8SC	P
5222	402 813 080 0000	00	402 613 060		6.3	1	100		0.7	1.7	B8D	T
5516	237 242 300 0000	80	235 242 300	A1	3	14	400	250	75	4	A08	P
5556	284 300 000 0000	00	264 300 000		4.5	30	350		9	0.9	UX4	T
5590	412 387 100 0000	00	412 365 100		6.3	4.5	90	90	3.9	2	B7G	P
5591	412 387 100 0000	00	412 365 100		6.3	1.9	200	125	7.7	5	B7G	P
5603	021 417 380 0000	00	021 415 360		6.3	12.5	150	150	50	5.4	A08	P
5608	412 387 100 0000	00	412 365 100		6.3	12	150	125	7.5	5	B7G	P
5610	812 384 000 0000	00	612 364 000		6.3	1.5	90		17	4	B7G	T
5618	287 134 200 0000	00	265 134 200		3	8	300	75	19	3.5	B7G	P
5635	452 083 810 0000	00	442 *63 710		6.3	0.5	100		4.8		B8B	TT
5636	412 183 710 0000	00	412 163 510		6.3	1.4	100	100	5.3	3.3	B8D	P
5637	402 013 080 0000	00	402 013 060		6.3		100		1.4	2.7	B8B	T
5639	412 183 710 0000	00	412 163 510		6.3	2.6	150	100	21	9	B8D	P
5640	412 183 710 0000	00	412 163 510		6.3	6	100	100	31	5	B8B	P
5641	092 913 090 0000	00	082 813 080		6.3				30		B8D	R
5642	023 000 000 0000	90	023 000 000	D1	1.2				0.25		B3G	D
5643	812 113 410 0000	00	612 113 410		6.3	5 2.6	150 300		37 75	†3.75Ω	B8D	THY
5645	812 430 000 0000	00	612 430 000		6.3	2.8	100		5	2.7	B5B	T
5646	812 430 000 0000	00	612 430 000		6.3	1.1	100		1.4	2.4	B5B	T
5647	391 290 000 0000	00	381 280 000		6.3				5.0		B5A	D
5654	412 387 100 0000	00	412 365 100		6.3	2	150	125	7.5	5	B7G	P
5656	754 231 881 0000	00	544 231 761		6.3	2	150	125	15	5.8	B9A	PP
5659	028 740 310 0000	00	026 540 310		12.5	12.5	250	250	32	3	A08	P
5660	028 9X7 310 0000	40	026 895 310	G1	12.5	3	250	125	10	1.3	A08	DDP
5661	021 417 380 0000	00	021 415 360		12.5	0.4	250	100	9.2	2	A08	P
5670	214 808 513 0000	00	214 607 413		6.3	2	150		8.2	5.5	B9A	TT
5672	873 420 000 0000	00	653 420 000		1.2	6.5	60	60	3.1	0.6	B5A	P
5676	824 300 000 0000	00	624 300 000		1.2	5	150		4	1.6	B5A	T
5677	834 200 000 0000	00	634 200 000		1.2	6	150		1.9	0.6	B5A	T
5678	872 430 000 0000	00	652 430 000		1.2	0	60	60	1.8	1	B5A	P
5679	219 30X 120 0000	00	218 309 120		6.3				5		B8B	RR
5686	141 237 817 0000	00	141 235 615		6.3	12.5	250	250	27	3.1	B9A	P
5687	841 221 538 0000	00	741 221 436		6.3	12.5	250		12.5	5.0	B9A	TT
5690	239 1X2 310 0000	00	238 192 310		6.3				20		A08	RR
5691	581 481 230 0000	00	471 461 230		6.3	2	250		2.3	1.6	A08	TT
5692	581 481 230 0000	00	471 461 230		6.3	9	250		6.5	2.2	A08	TT
5693	021 417 380 0000	00	021 415 360		6.3	3	250	100	3	1.6	A08	P
5694	128 458 310 0000	00	126 447 310		6.3	6	300		7	3.2	A08	TT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
5702	872 311 400 0000	00	652 311 400		6.3	2	150	115	7.5	5	B7G	P
5703	823 410 000 0000	00	623 410 000		6.3	2	150		9	5	B5A	T
5704	923 100 000 0000	00	623 100 000		6.3				5		B5A	R
5718	402 013 080 0000	00	402 013 060		6.3	2	100		13	5.5	B8D	T
5719	402 013 080 0000	00	402 013 060		6.3	1.3	150		1.8	2.3	B8B	T
5722	902 209 300 0000	00	802 208 300		3						B7G	D
5725	412 387 100 0000	00	412 365 100		6.3	2	150	125	5.2	3.2	B7G	P
5726	1X2 310 900 0000	00	192 310 800		6.3				5		B7G	RR
5732	028 710 310 0000	40	026 510 310	G1	6.3	3	150	100	8	2.2	A08	P
5744	823 410 000 0000	00	623 410 000		6.3	2	250		4	4	B5A	T
5749	412 387 100 0000	00	412 365 100		6.3	1	250	100	11	4.4	B7G	P
5750	112 387 400 0000	00	112 365 400		6.3	1.5	250	100	3	.47	B7G	H
5751	851 228 413 0000	00	741 226 413		6.3	3	250		1	1.2	B9A	TT
5755	814 225 183 0000	00	714 224 163		6.3	2	250		2.3	1.6	A08	TT
5763	801 237 144 0000	00	601 235 144		6.3	7.5	250	250	45	7	B9A	P
5784	872 311 400 0000	00	652 311 400		6.3	2	150	125	5.2	3.2	B7G	P
5785	923 000 000 0000	00	823 000 000		1.2						B3G	D
5797	411 237 800 0000	00	411 235 600		26.5	1	30	30	0.5	1	B8D	P
5798	851 231 480 0000	00	741 231 460		26	0	20		2.3	3.1	B8D	TT
5812	413 387 200 0000	00	413 365 200		3	23	250	250	40	4.1	B7G	P
5814	851 228 413 0000	00	741 226 413		6.3	8.5	250		10.5	2.2	B9A	TT
5824	028 740 310 0000	00	026 540 310		25	22	150	125	61	5	A08	P
5825	200 300 000 0000	90	200 300 000	D1	1.5				2		UX4	D
5838	029 0X9 310 0000	00	028 090 310		12				30		B8A	RR
5839	029 0X0 310 0000	00	028 090 310		26.5				180		A08	RR
5840	412 183 710 0000	00	412 163 510		6.3	1.4	100	100	7	5	B8D	P
5842	802 441 443 0000	00	602 441 443		6.3	1.5	150		26	24	B9A	T
5844	882 345 100 0000	00	672 344 100		6.3	2.3	100		4.8	3.4	B7G	TT
5845	902 2X0 300 0000	00	802 290 300		6.3				5		B7G	DD
5847	402 108 073 0000	00	402 106 053		6.3	2	150	150	13	12.5	B9A	P
5851	208 007 340 0000	00	206 005 340		2.5	7.5	150	125	5.5	1.6	B8B	P
5852	029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
5854	873 420 000 0000	00	653 420 000		1.2	2	40	40	0.8	0.5	B5A	P
5871	028 740 310 0000	00	026 540 310		6.3	12.5	250	250	45	4.5	A08	P
5873	284 115 830 0000	00	264 114 730		6.3	3	150		9	2.9	B8B	TT
5875	872 430 000 0000	00	652 430 000		1.2	0	90	90	3.5	2.5	B5A	P
5879	401 230 781 0000	00	401 230 561		6.3	3	250	100	1.8	1	B9A	P
5881	028 740 310 0000	00	026 540 310		6.3	12.5	300	200	48	5.3	A08	P
5882	029 0X0 310 0000	00	028 090 310		12.6				30		A08	RR
5894	[257 134 200 0000 257 134 200 0000	08 80]	245 134 200	A1/A2	6.3		400	250	30	3.4	B7A	PP
5896	912 0X3 100 0000	00	812 093 100		6.3				15		B8B	RR
5897	402 013 080 0000	00	402 013 060		6.3	2.3	150		14	6.5	B8A	T
5898	402 013 080 0000	00	402 013 060		6.3	2	150		1.8	2.3	B8A	T
5899	412 183 710 0000	00	412 163 510		6.3	1.4	100	100	7.2	4.5	B8D	P
5901	412 183 710 0000	00	412 163 510		6.3	1.5	100	100	7.5	5	B8A	P
5902	412 183 710 0000	00	412 163 510		6.3	6.5	100	100	30	4.2	B8A	P
5903	912 0X3 100 0000	00	812 093 100		26				5		B8B	RR
5904	402 013 080 0000	00	402 013 060		26	0	20		3	5	B8D	T
5905	412 183 710 0000	00	412 163 510		26		20	20	2.3	2.8	B8A	P
5906	412 183 710 0000	00	412 163 510		26	1.5	100	100	7.5	5	A08	P
5907	412 183 710 0000	00	412 163 510		26		20	20	2.7	3	B8A	P
5908	412 183 710 0000	00	412 163 510		26		20	20	2.3	1.7	B8A	P
5910	287 024 300 0000	00	265 *24 300		1.4		90	90	1.6	0.9	B7G	P
5915	412 387 100 0000	00	412 365 100		6.3	0	75	75	6.3	2	B7G	H

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
5916	412 183 710 0000	00	412 163 510		26	1.3	100	100	4.4	1.3	B8A	P
5920	882 345 100 0000	00	762 344 100		6.3	2.1	100		8.5	6	B7G	TT
5930	284 300 000 0000	00	264 300 000		2.5	45	250		60	5.2	UX4	T
5931	020 90X 030 0000	00	020 809 030		5				120		A08	RR
5932	028 740 310 0000	00	026 540 310		6.3	14	250	250	72	6	A08	P
5933	374 120 000 0000	80	354 120 000	A1	6.3	14	300	250	83	6.5	UX5	P
5947	222 933 390 0000	00	222 833 380		4.4						A08	D
5961	128 741 340 0000	00	126 541 340		6.3		250	100			A08	H
5963	851 228 413 0000	00	741 226 413		6.3	2	75		3.5	2	B9A	TT
5964	882 345 100 0000	00	762 344 100		6.3	1	100		9.5	6	B7G	TT
5965	851 228 413 0000	00	741 226 413		6.3	1.8	150		8.2	6.5	B9A	TT
5967	824 335 280 0000	00	624 334 270		1.2		40		3	2	B8B	TT
5968	240 880 530 0000	00	240 670 430		1.2	0	40		0.7	1.3	B8B	TT
5969	247 887 530 0000	00	245 675 430		1.2	3	125	40	6	1.7	B8B	PP
5970	247 887 530 0000	00	245 675 430		1.2		40	40	3	1.8	B8D	PP
5971	842 430 000 0000	00	642 430 000		1.2	2.5	150		5.6	2.5	B5A	T
5972	872 430 000 0000	00	652 430 000		1.2	0	60	60	2.5	1.3	B5A	P
5975	814 230 000 0000	00	614 230 000		6.3	8	200		12	4	B5A	T
5977	402 013 080 0000	00	402 013 060		6.3	2.7	100		10	4.5	B8B	T
5987	482 813 080 0000	00	462 613 060		6.3	18	100		9	1.8	B8B	T
5992	028 740 310 0000	00	026 540 310		6.3	12.5	250	250	45	4.1	A08	P
5993	902 010 30X 0000	00	802 010 309		6.3				30		B9A	RR
5995	902 310 000 0000	00	802 310 000		6.3				30		B5A	R
5998	481 581 230 0000	00	461 471 230		6.3	14	120		90	14	A08	TT
6004	020 000 030 0000	9X	020 000 030	D1/D2	2.5				60		A08	RR
6005	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4	B7G	P
6006	021 417 380 0000	00	021 415 360		6.3	14	250	125	11	4.7	A08	P
6007	873 420 000 0000	00	653 420 000		1.2	0.2	20	20	0.4	0.4	B5A	P
6008	873 420 000 0000	00	653 420 000		0.6	1.1	20	20	0.5	0.1	B5A	P
6021	842 113 580 0000	00	642 113 470		6.3	1.0	100		6.5	5.4	B8D	TT
6026	001 230 480 0000	00	001 230 460		6.3	2.6	150		12	5.9	B8B	T
6028	412 387 100 0000	00	412 365 100		20	1.8	150	125	7.5	5	B7G	P
6029	824 300 000 0000	00	624 300 000		1.2	4	90		11	2	B5A	T
6030	882 345 100 0000	00	672 344 100		6.3	[3	150		5	4.5]	B7G	TT
						0.8	100		8.5	5.8		
6042	481 581 230 0000	00	461 471 230		25	8	250		9	2.6	A08	TT
6045	882 345 100 0000	00	672 344 100		6.3	0.5	100		9	6.4	B7G	TT
6046	028 740 310 0000	00	026 540 310		25	8.2	200	125	46	8	A08	P
6049	412 183 710 0000	00	412 163 510		6.3	1.5	100	100	7.4	3.5	B8A	P
6050	824 300 000 0000	00	624 300 000		1.2	5	150		4	1.6	B5A	T
6051	872 430 000 0000	00	652 430 000		1.2	4	40	40	3	1.2	B5A	P
6052	912 0X3 100 0000	00	812 093 100		6.3				30		B8B	RR
6053	912 0X3 100 0000	00	812 093 100		26				5		B8B	DD
6055	402 013 080 0000	00	402 013 060		26		40			4.7	B8D	T
6056	412 183 710 0000	00	412 163 510		26		40	40		3	B8D	P
6057	851 228 413 0000	00	741 226 413		6.3	2	250		1.2	1.6	B9A	TT
6058	1X2 310 900 0000	00	192 310 800		6.3				9		B7G	DD
6059	041 230 871 0000	00	041 230 651		6.3	3	250	100	2	1.2	B9A	P
6060	851 228 413 0000	00	741 226 413		6.3	2	250		10	5.5	B9A	TT
6061	041 230 871 0000	00	*41 230 651		6.3	13	300	225	34	3.7	B9A	P
6062	801 237 144 0000	00	601 235 144		6.3	7.5	250	250	45	7	B9A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6063	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
6064	412 381 700 0000	00	412 361 500		6.3	[2 1.5	250 200	250 150	10 4	7.5 6.4]	B7G	P
6065	412 381 700 0000	00	412 361 500		6.3	2.5	250	250	8	2.5	B7G	P
6066	412 39X 800 0000	00	412 389 600		6.3	3	250		1	1.2	B7G	DDT
6067	851 228 413 0000	00	741 226 413		6.3	8.5	250		10.5	2.2	B9A	TT
6068	021 040 370 0000	80	021 040 350		6.3	8	400	150	36	5.3	A08	P
6072	851 228 413 0000	00	741 226 413		6.3	4	250		3	1.7	B9A	TT
6080	[501 481 230 0000 581 401 230 0000	00 00]	471 461 230		6.3	30	100		100	7	A08	TT
6082	[501 481 230 0000 581 401 230 0000	00 00]	471 461 230		26.5	30	100		100	7	A08	TT
6084	701 238 014 0000	00	501 236 014		6.3	2	250	125	10	9	B9A	P
6085	841 228 513 0000	00	641 227 413		6.3	5.5	250		6	2.7	B9A	TT
6086	741 238 001 0000	00	541 236 **1		18	1.8	200	100	8.3	8.2	B9A	P
6087	020 90X 030 0000	00	020 809 030		6.3				60		A08	RR
6088	873 420 000 0000	00	653 420 000		1.2	1.2	40	40	0.7	0.6	B5A	P
6092	873 420 000 0000	00	653 420 000		1.2	6.5	60	60	2.9	0.7	B5A	P
6094	472 834 718 0000	00	452 634 516		6.3	12.5	250	250	45	6	B9A	P
6095	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4.1	B7G	P
6096	412 387 100 0000	00	412 365 100		6.3	2	150	125	7.5	5	B7G	P
6097	1X2 310 900 0000	00	192 310 800		6.3				9		B7G	DD
6098	108 072 430 0000	00	106 052 430		6.3	22.5	250	250	77	5.4	A08	P
6099	882 345 100 0000	00	672 344 100		6.3	[3 0.8	150 100		5 8.5	4.5 5.3]	B7G	TT
6100	802 384 100 0000	00	6*2 364 100		6.3	8.5	250		10.5	2.2	B7G	T
6101	882 345 100 0000	00	762 344 100		6.3	2	150		9	5.5	B7G	TT
6106	020 90X 030 0000	00	020 809 030		5				60		A08	RR
6110	912 0X3 100 0000	00	812 093 100		6.3				5		B8B	RR
6111	842 113 580 0000	00	642 113 470		6.3	1.9	100		8.5	5	B8B	TT
6112	842 113 580 0000	00	642 113 470		6.3	1.4	150		1.7	2.5	A08	TT
6113	841 581 230 0000	00	641 471 230		6.3	3	250		3	1.7	A08	TT
6118	028 9X0 310 0000	00	026 890 310		6.3	3	250		1.0	1.2	A08	DDT
6125	902 394 100 0000	00	6*2 364 100		6.3	8.5	250		10.5	2.2	B7G	T
6132	041 230 871 0000	00	*41 230 651		6.3	4.5	250	250	40	11	B9A	P
6134	021 417 380 0000	00	021 415 360		6.3	2	300	150	10	9	A08	P
6135	802 384 100 0000	00	6*2 364 100		6.3	8.5	250		10.5	2.2	B7G	T
6136	412 387 100 0000	00	412 365 100		6.3	1	250	150	10.6	5.2	B7G	P
6137	021 417 380 0000	00	021 415 360		6.3	3	250	100	9.2	2	A08	P
6145	287 104 130 0000	00	265 104 130		6.3		150	100	34	10	B7G	P
6146	127 141 310 0000	80	125 141 310	A1	6.3	28	200	200	100	7	A08	P
6147	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	5.5	1.6	B8B	P
6149	823 410 000 0000	00	623 410 000		6.3		150		9	5	B5A	T
6151	823 410 000 0000	00	623 410 000		6.3	0	250		4	4	B5A	T
6152	814 230 000 0000	00	614 230 000		6.3		200		12	4	B5A	T
6153T	023 184 780 0000	50	023 164 570	G1	6.3	[2 2	100 250	100	16 12	5 3.5]	8SC	TH
6156	412 380 700 0000	00	412 360 500		6.3	13.5	250	250	16	2.6	B7G	P
6157	001 230 000 0000	90	**1 23* ***	D1	6.3				120		B9A	R
6158	851 228 413 0000	00	741 226 413		6.3	4.6	250		6	2.3	B9A	TT
6159	127 141 310 0000	80	125 141 310	A1	26	30	200	200	100	7	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6169	842 113 840 0000	00	642 113 640		6.3	1	200		11	6.5	A08	T
6180	481 581 230 0000	00	461 471 230		6.3	8	250		9	2.6	A08	TT
6186	412 387 100 0000	00	412 365 100		6.3	1.4	250	150	7	5	B7G	P
6187	412 387 100 0000	00	412 365 100		6.3	2	150	125	5.2	3.2	B7G	P
6188	481 581 230 0000	00	461 471 230		6.3	2	250		2.3	1.6	A08	TT
6189	841 228 513 0000	00	641 227 413		6.3	8.5	250		10.5	2.2	B9A	TT
6197	147 238 174 0000	00	145 236 154		6.3	3	250	150	30	11	B9A	P
6201	851 228 413 0000	00	741 226 413		6.3	2	250		10	5.5	B9A	TT
6202	902 30X 100 0000	00	802 309 100		6.3				60		B7G	RR
6203	900 230 10X 0000	00	800 230 109		6.3				70		B9A	RR
6205	412 183 710 0000	00	412 163 510		6.3	4	100	100	7.5	5	B8D	P
6206	412 183 710 0000	00	412 163 510		6.3	1.3	100	100	7.5	5	B8A	P
6211	851 228 413 0000	00	741 226 413		6.3	1.2	100		4.6	3.6	B9A	TT
6216	841 238 710 0000	00	641 236 510		6.3	6	200	100	47	8.8	B9A	P
6222	402 813 090 0000	00	402 613 080		6.3	1	100		0.7	1.7	B8D	T
6227	041 230 871 0000	00	041 230 651		6.3	5.2	200	200	30	9	B9A	P
6245	872 311 400 0000	00	652 311 400		6.3	0	150	150	7.5	5.0	B7G	P
6247	442 813 000 0000	80	442 613 000	A1	6.3	3	200		4	3	B7G	T
6252	257 134 200 0000	88	245 134 200	A1/A2	6.3	17	400	200	20	6.5	B7A	PP
6265	412 387 100 0000	00	412 365 100		6.3	1	250	150	9	4	B7G	P
6267	701 238 014 0000	00	501 236 014		6.3	1.0	250	100	3.0	1.8	B9A	P
6281	873 420 000 0000	00	653 420 000		6.3	0.6	20	20			B5A	P
6286	824 300 000 0000	00	624 300 000		1.2	2	60		6	2.1	B5A	T
6287	178 238 748 0000	00	156 236 546		6.3	12.5	250	250	48	4.1	B9A	P
6293	127 141 300 0000	80	125 141 300	A1	6.3		200	200	100	7.3	A08	P
6302	287 113 000 0000	40	265 113 000	G1	6.3	2.2	300	150	11	9	UX6	P
6305	112 311 100 0000	90	112 311 100	D1	4				5		B7G	R
6325	109 0X0 230 0000	00	108 090 230		6.3				60		A08	RR
6327	121 040 370 0000	00	121 040 350		6.3	22.5	250	250	120	8	A08	P
6336A	581 481 230 0000	00	461 461 230		6.3	60	200		75	5	A08	TT
6350	814 228 153 0000	00	614 227 143		6.3	5	150		11	4.6	B9A	TT
6351	141 321 877 0000	00	141 321 655		6.3	2	350	250	12.5	11.5	B9A	P
6352	200 392 X30 0000	00	2** 382 930		1.5						B8A	D
6355	782 738 100 0000	00	562 536 100		6.3	15	250	150			B7G	TI
6360	514 228 783 0000	00	414 226 573		6.3	15	200	200	30	3.3	B9A	PP
6374	001 230 009 0000	90	**1 23* **8	D1	6.3				120		B9A	R
6375	400 230 080 0000	00	400 230 060		1.2	4.5	150		12.0	3.4	B8D	T
6384	108 072 430 0000	00	106 052 430		6.3	22	250	250	77	5.5	A08	P
6385	214 808 513 0000	00	214 607 413		6.3	2.1	150		82	5.5	B9A	TT
6386	214 808 513 0000	00	214 607 413		6.3	2	100		9.6	4	B9A	TT
6394	481 581 230 0000	00	461 471 230		26.5	45	150		100	11	A08	TT
6397Spec	208 037 240 0000	00	206 035 240		1.2		150	150	9	2.3	B8D	P
6414	841 228 513 0000	00	641 227 413		6.3	2	200		8	5.5	B9A	TT
6417	801 237 144 0000	00	601 235 144		12.5	7.5	250	250	45	7	B9A	P
6418	872 430 000 0000	00	652 430 000		1.2	1.2	20	20	0.2	0.3	B5A	P
6419	872 430 000 0000	00	652 430 000		0.6	0.6	15	15	0.06	0.1	B5A	P
6443	001 230 000 0000	90	**1 23* ***	D1	6.3				120		B9A	R
6463	814 228 153 0000	00	614 227 143		6.3	10	250		14.5	5.2	B9A	TT
6485	412 387 100 0000	00	412 365 100		6.3	1.6	300	150	10	9	B7G	P
6486/A	410 283 711 0000	00	410 263 511		6.3	2	150	125	3.5	3.2	B9A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6488	412 873 180 0000	00	412 653 160		6.3	2.0	100	100	7.5	5.0	B8D	P
6489	281 380 000 0000	00	261 360 000		6.3		100		8		Sm5	T
6516	412 380 700 0000	00	412 360 500		6.3	13.5	250	250	16.0	2.6	B7G	P
6519	873 420 000 0000	00	653 420 000		1.2	0	22.5	22.5	0.4	0.4	B5A	P
6520	481 581 230 0000	00	461 471 230		6.3	60	150		50	7	A08	TT
6526	872 430 000 0000	00	652 430 000		1.2	6	100	100	6.5	1.9	B5A	P
6528	[501 481 230 0000 581 401 230 0000	00 00]	471 461 230		6.3	20	200				A08	TT
6533	844 812 380 0000	00	644 612 360		6.3	1.3	150		0.9	1.7	B8D	T
6535	882 345 100 0000	00	672 344 100		6.3	0.8	100		8.5	5.3	B7G	TT
6540	412 387 000 0000	00	412 365 000		6.3	2	125	125	7.5	5	B7G	P
6542	742 135 700 0000	88	542 134 500	A1/A2	6.3	2	200	200	50	4.5	B7A	PP
6550	028 740 310 0000	00	026 540 310		6.3	16.5	400	225	87	9	A08	P
6582A	410 283 711 0000	00	410 263 511		6.3	1.8	120	120	7.5	4.5	B9A	P
6611	872 430 000 0000	00	652 430 000		1.2	0	40	40	1	1	B5A	P
6612	872 430 000 0000	00	652 430 000		1.2	0	40	40	3	3	B5A	P
6660	412 387 100 0000	00	412 365 100		6.3	1.1	250	100	11	4.4	B7G	P
6661	412 387 100 0000	00	412 365 100		6.3	1.0	250	150	7.4	4.6	B7G	P
6662	412 387 100 0000	00	412 365 100		6.3	1.0	250	100	9.2	3.6	B7G	P
6663	192 310 X00 0000	00	182 310 900		6.3				9		B7G	DD
6664	412 39X 800 0000	00	412 389 600		6.3	12	250		10	5.5	B7G	DDT
6669	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	47	4.1	A08	P
6676	412 387 100 0000	00	412 365 100		6.3	56	150	150	13	8	B7G	P
6677	147 238 174 0000	00	145 236 154		6.3	3	250	150	30	11	B9A	P
6678	857 238 114 0000	00	645 237 114		6.3	[1.6 0.9	150 250	 100	18 10	8.5 5.2]	B9A	TP
6679	841 228 513 0000	00	641 227 413		6.3	2	250		10	5.5	B9A	TT
6680	841 228 513 0000	00	641 227 413		6.3	8.5	250		10.5	2.2	B9A	TT
6681	841 228 513 0000	00	641 227 413		6.3	2	250		1.2	1.6	B9A	TT
6686	041 230 871 0000	00	041 230 651		6.3	2.5	200	200	20	11	B9A	P
6687	412 387 100 0000	00	412 365 100		6.3	5	150	75	0.5	0.6	B7G	H
6688	141 230 817 0000	00	141 23* 615		6.3	1	200	150	13.5	16.5	B9A	P
6689	741 238 001 0000	00	541 236 **1		6.3	1.7	200	125	10	9	B9A	P
6690	852 183 410 0000	00	742 163 410		6.3	0.8	100		8	4.8	B8A	TT
6697	841 228 513 0000	00	641 227 413		6.3	8.5	250		10	2.0	B9A	TT
6754	901 023 10X 0000	00	801 023 109		6.3				30		B9A	RR
6760	841 238 710 0000	00	641 236 510		18	7.5	150	125	70	12	B9A	P
6761	841 238 710 0000	00	641 236 510		6.3	7.5	150	125	70	13	B9A	P
6788	412 183 710 0000	00	412 163 510		6.3	1.4	100	100	0.8	1.1	B8A	P
6814	401 013 080 0000	00	402 013 060		6.3	1.5	100		10	6	B8A	T
6829	841 228 513 0000	00	641 227 413		6.3	2.2	150		10.7	8.1	B9A	TT
6832	842 113 580 0000	00	642 113 470		6.3	2.4	100		0.7	1	B8D	TT
6840	814 228 143 0000	00	614 227 143		6.3	8.7	250		14	5.9	B9A	TT
6845	402 387 100 0000	00	402 365 100		6.3	2	300	150	10	9	B7G	P
6850	752 134 700 0000	88	542 134 500	A1/A2	12		200	200	50	4.5	B7A	PP
6851	841 228 513 0000	00	641 227 413		6.3	3.1	250		1	1.2	B9A	TT
6853	030 90X 020 0000	00	030 809 090		5				60		A08	RR
6854	214 808 513 0000	00	214 607 413		6.3	19.6	150		8.2	5.2	B9A	TT
6870	141 223 871 0000	00	141 223 651		6.3	3.5	250	250	25	8.5	B9A	P
6872	721 413 100 0000	80	521 413 100	A1	6.3	1	400	100	3.5	2.2	B7G	P
6877	402 834 018 0000	00	402 634 016		6.3	12	100		75	6.3	B9A	T
6883	127 141 130 0000	80	125 141 130	A1	12	30	200	200	100	7	B9A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
6887	192 310 X00 0000	00	182 310 900		6.3				10		B7G	DD
6888	021 417 380 0000	00	021 415 350		6.3		150	90	38		A08	P
6889	200 073 420 0000	00	200 053 420	A1	6.3	22.5	250	250	77	5.4	A08	P
6900	851 221 438 0000	00	741 221 436		6.3	2	150		36	11.5	B9A	TT
6907	247 135 200 0000 247 135 200 0000	08 80	245 134 200	A1/A2	6.3	50	400	250	100		B7A	PP
6913	851 228 413 0000	00	741 226 413		6.3	5	150		11	4.6	B9A	TT
6919	192 310 X00 0000	00	182 310 900		6.3				5		B7G	RR
6922	841 238 510 0000	00	641 237 510		6.3	1.2	90		15	12.5	B9A	TT
6927	882 345 100 0000	00	672 344 100		6.3	3 0.8	150 100		5 8.5	4.5 5.8	B7G	TT
6928	412 387 400 0000	00	412.365 400		6.3	12.5	250	250	45	4.1	B7G	P
6939	415 228 783 0000	00	414 226 573		6.3	5	250	200	25	10.5	B9A	PP
6943	412 183 710 0000	00	412 163 510		6.3	1.2	100	100	8	3.6	B8D	P
6944	412 183 710 0000	00	412 163 510		6.3	1.05	100	100	7	3.2	B8D	P
6945	412 183 710 0000	00	412 163 510		6.3	6.7	100	100	25	3.5	B8D	P
6946	402 013 080 0000	00	402 013 060		6.3	2.4	100		9	3.8	B8D	T
6947	842 113 580 0000	00	642 113 470		6.3	1.75	150		6.5	4	B8D	TT
6948	842 113 580 0000	00	642 113 470		6.3	1.2	100		0.8	1.6	B8D	TT
6954	412 387 100 0000	00	412 365 100		6.3	1	150	150	5.9	2	B7G	P
6955	841 228 513 0000	00	641 227 413		6.3	8.5	250		11.5	2.3	B9A	TT
6968	402 387 100 0000	00	402 365 100		6.3	2	150	125	7.5	5	B7G	P
6973	704 234 178 0000	00	504 234 156		6.3	15	250	250	46	4.8	B9A	P
7000	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	2	1.2	A08	P
7025	851 228 413 0000	00	741 226 413		6.3	2	250		1.2	1.6	B9A	TT
7027 (A)	728 744 310 0000	00	526 544 310		6.3	14	250	250	72	6	B8A	P
7032	412 387 100 0000	00	412 365 100		6.3	2	250	100	4.5	1.8	B7G	H
7036	412 387 100 0000	00	412 365 100		6.3	0	75	75	6.3	2	B7G	H
7044	841 221 538 0000	00	641 221 437		6.3	2	150		36	10	B9A	TT
7051	857 238 114 0000	00	645 237 114		6.3	1.0 1.0	150 200	 100	18 10	8.5 5	B9A	TP
7054	141 230 871 0000	00	141 23* 651		13.5	2.7	250	150	19	11.5	B9A	P
7055	192 310 X00 0000	00	182 310 900		13.5				5		B7G	RR
7056	412 387 100 0000	00	412 365 100		13.5	2.2	200	150	9.5	6.2	B7G	P
7057	841 238 510 0000	00	641 237 410		13.5	2.2	150		10	6.8	B9A	TT
7058	841 238 510 0000	00	641 237 410		13.5	2	250		1.2	1.6	B9A	TT
7059	857 238 114 0000	00	645 237 114		13.5	1 0.9	150 250	 100	18 10	8.5 5.2	B9A	TP
7060	841 238 751 0000	00	641 237 541		13.5	1.5 1.6	150 200	 125	9 15	4.9 7	B9A	TP
7061	704 234 178 0000	00	504 234 156		13.5	10	200	200	36	4.2	B9A	P
7062	841 228 513 0000	00	641 227 413		6.3	0.8	100		8.5	7.8	B9A	TT
7066	209 784 300 0000	00	208 564 300		1.4		100	100	1.1	0.4	B7G	DP
7071	000 230 000 0000	90	*** 23* ***	D1	6.3						B9A	D
7072	000 230 009 0000	10	*** 23* **8	C	6.3				180		B9A	R
7073	000 230 009 0000	10	*** 23* **8	C	26				180		B9A	R
7074	841 234 148 0000	00	641 234 146		6.3		200		12	14	B9A	T
7075	841 234 148 0000	00	641 234 146		3.8		200		12	14	B9A	T
7078	041 230 871 0000	00	041 230 651		6.3	2.0	250	100	9	4.4	B9A	P
7079	041 230 871 0000	00	041 230 651		12.6		200	100	12	4.4	B9A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
△7105	501 481 230 0000 581 401 230 0000	00	471 461 230		12.6	30	100				A08	TT
7108	701 238 014 0000	00	501 236 014		6.3		250	150	3	2	B9A	P
7110	141 230 871 0000	00	141 230 651		6.3	3.5	250	250	10	6.8	B9A	P
7118	841 228 513 0000	00	641 227 413		6.3	1.4	100		8.5	5.6	B9A	TT
7119	841 221 538 0000	00	641 221 437		6.3	7	200		23	6.4	B9A	TT
7125	741 238 9X1 0000	00	541 236 891		6.3	2	250	100	9	3.8	B9A	DDP
7137	412 344 800 0000	00	412 344 600		6.3	1.3	150		13.5	8.5	B7G	T
7143	412 314 800 0000	00	412 314 600		3.1	1.0	200		11.5	6.7	B7G	T
7144	841 238 510 0000	00	641 237 410		6.3	1.2	90		15	12.5	B9A	TT
7145	701 238 014 0000	00	501 236 014		6.3	2.0	50	50	1.8		B9A	P
7150	831 421 107 0000	00	632 421 1*5		6.3		150	125	24	34	B9A	P
7167	412 387 100 0000	00	412 365 100		13.5	1	150	80	10	8	B7G	P
7184	028 740 310 0000	00	026 540 310		6.3	12.5	250	250	47	4.1	A08	P
7189	041 230 807 0000	00	*41 23* 6*5		6.3	7.3	250	250	48	11.3	B9A	P
7193	020 000 310 0000	84	020 000 310	A1/G1	6.3	10.5	300		11	3	A08	T
7199	887 231 514 0000	00	675 231 414		6.3	8 1.5	200 250	 125	9 12.5	2 7	B9A	TP
7212	127 142 380 0000	00	125 142 360		6.3	28	200	200	100	7	A08	P
7227	041 230 871 0000	00	*41 23* 651		27.5	2.5	40	40	8	5	B9A	P
7233	848 238 418 0000	00	646 236 416		6.3	40	150		50	9	B9A	T
7236	581 181 230 0000	00	471 461 230		6.3	14	150		100	12.5	A08	TT
7239	410 237 101 0000	80	48* 235 1*1	A1	6.3	5	300	100	10.5	4.2	B9A	P
7244	882 345 100 0000	00	672 344 100		6.3	0.4	100		9	6	B7G	TT
7245	412 344 800 0000	00	412 344 600		6.3	1.35	150		13.5	11	B7G	T
7247	851 228 413 0000	00	641 227 413		6.3	2 8.5	250 250		1.2 10.5	1.6 2.2	B9A	TT
7258	841 238 751 0000	00	641 237 541		12.5	3 9	150 150	 125	15 12	4.5 7.8	B9A	TP
7308	851 238 410 0000	00	741 236 410		6.3	1.4	90		12	11.5	B9A	TT
7316	841 228 513 0000	00	641 227 413		6.3		100		11.8	3.1	B9A	TT
7318	841 228 513 0000	00	641 227 413		6.3	8.5	250		11.5	2.3	B9A	TT
7320	041 230 807 0000	00	041 230 605		6.3	7.3	250	250	48	11.3	B9A	P
7355	028 014 370 0000	00	026 014 350		6.3	15	250	250	70	7.6	A08	P
7358	127 141 300 0000	00	125 141 300		6.3		200	200	100	7	A08	P
7370	841 221 538 0000	00	641 221 437		20	2	120		36	11.5	B9A	TT
7382	412 300 800 0000	00	412 300 600		6.3	2	250		1.2	1.6	B7G	T
7408	028 740 310 0000	00	026 540 310		6.3	12.5	250	250	4.7	4.6	A08	P
7489	841 228 513 0000	00	641 226 513		6.3	8.5	250		10.5	2.2	B9A	TT
7489			741 226 413		6.3	8.5	250		10.5	2.2	B9A	TT
7492	851 228 413 0000	00	741 226 413		6.3		250			5.5	B9A	TT
7498	412 381 700 0000	00	412 361 500		6.3		250	250		7.5	B7G	P
7534	020 740 310 0000	80	*2* 54* 310	A	6.3	15.5	250	150	100	25.0	A08	P
7543	412 387 100 0000	00	412 365 100		6.3	1.0	250	150	10.8	5.2	B7G	P
7551	147 238 171 0000	00	145 236 151		13	18	250	250	40	5.3	B9A	P
7558	147 238 171 0000	00	145 236 151		6.3	18	250	250	40	5.3	B9A	P
7561	928 740 310 0000	00	026 540 310		25		100	100	55	10.5	A08	P
7581	028 740 310 000	00	026 540 310		6.3	14	250	250	72	6	B8A	P
7586	080 400 010 2030	00			6.3	1.3	75		10.5	11.5	NV5	P
7587	070 400 010 2030	80			6.3	0.9	125	50	10	10.6	NV5	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
7591	028 714 370 0000	00	026 514 350		6.3	10	300	300	75	10.2	A08	P
7607	127 141 300 0000	80	125 141 300	A1	6.3	17	300	250	80	8	A08	P
7643	857 238 114 0000	00	645 237 114		6.3	[2 2	100 200	175	14 10	5 6.2]	B9A	TP
7683	418 238 178 0000	00	416 236 156		6.3	0.5	300	250	12.6	5	B9A	P
7687	857 238 114 0000	00	645 237 114		6.3	[8.5	200 200	125	7.5 10	2.5 5.8]	B9A	TP
7688	141 512 386 8080	00			6.3	2	250		1.2	1.6	A12	TTT
7689	141 512 386 8080	00			6.3	8.5	250		10.5	2.2	A12	TTT
7690	141 512 386 8080	00			6.3	2	250		10	5.5	A12	TTT
7693	412 387 100 0000	00	412 365 100		6.3	100	250	150	7.4	4.6	B7G	P
7694	412 387 100 0000	00	412 365 100		6.3	80	250	100	9.2	3.6	B7G	P
7695	700 234 108 0000	00	5** 234 1*6		50	11	130	130	100	11.0	B9A	P
7699	[514 228 703 0000 514 220 783 0000]	00	414 226 573		6.3		250		45	10	B9A	PP
7700	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	2	1.2	UX6	P
7701	141 238 717 0000	00	141 236 515		13.6	12.5	250	250	28	3.6	B9A	P
7716	148 231 578 0000	00	146 231 457		13.6	[1.0 60	150 200	100	1.6 24	3 9.5]	B9A	TP
7717	412 387 100 0000	00	412 365 100		6.3	1	125	80	10	8	B7G	P
7719	841 228 413 0000	00	641 226 413		6.3	10.5	300		4.0	3.5	B9A	T
7721	141 230 817 0000	00	141 230 615		6.3	10	200	150	22	35	B9A	P
7722	141 230 817 0000	00	141 230 615		6.3	1	200	150	34	27	B9A	P
7724	191 23X 148 0000	00	181 239 146		14	3.0	250		0.7	1.0	B9A	DDT
7728	841 228 513 0000	00	641 227 413		6.3	2	250		10	5.5	B9A	TT
7729	841 228 513 0000	00	641 227 413		6.3	2	250		1.2	1.6	B9A	TT
7731	857 238 114 0000	00	641 237 114		6.3	[1 0.95	150 250	100	18 10	8.5 5.2]	B9A	TP
7732	412 387 100 0000	00	412 365 100		6.3	1	200	125	13	8	B7G	P
7733	141 223 871 0000	00	141 223 651		6.3	3	250	175	24	12	B9A	P
7734	714 238 158 0000	00	514 236 147		6.3	[21 2.0	150 150	150	35 5.5	5.4 3.2]	B9A	TP
7738	842 314 800 0000	00	642 314 600		6.3	1.2	200		12	9.5	B7G	T
7751	028 740 310 0000	00	026 540 310		6.3	8	100	100	100	14	A08	P
7752	412 387 100 0000	00	412 365 100		6.3	2	150	125	5.5	3.5	B7G	P
7754	700 234 108 0000	00	5** 234 1*6		6.3	12	150	150	100	11	B9A	P
7755	412 387 100 0000	00	412 365 100		6.3		40	30	3	2.7	B7G	P
7756	108 072 430 0000	00	106 052 430		6.3	36	300	300	58	4.3	A08	P
7757	471 034 710 0000	00	451 034 510		6.3	12.5	250	250	45	4.1	B9A	P
7759	842 113 580 0000	00	642 113 470		26.5	1	100		6.5	5.4	A08	TT
7760	842 113 580 0000	00	642 113 470		26.5		26.5		3	5	A08	TT
7761	214 808 513 0000	00	214 607 413		12.6		150		8.2	5.5	B9A	TT
7762	412 183 710 0000	00	412 163 510		26.5	1.2	110	100	30	4.2	A08	P
7763	811 234 178 0000	00	611 234 156		6.3		250	90	4.2		B9A	P
7788	141 237 817 0000	00	141 235 615		6.3		150	150	35	50	B9A	P
7803	841 238 510 0000	00	641 237 410		6.3	1.3	90		15	12.5	B9A	TT
7861	214 808 413 0000	00	214 607 413		12.6	2	150		8.2	5.5	B9A	TT
7868	741 234 708 0000	00	541 234 506		6.3	10	300	300	60	10.2	B9D	P
7887	842 113 580 0000	00	642 113 470		26.5	1.9	100		8.5	5	A08	TT
7888	402 013 080 0000	00	402 031 060		26.5	2.3	150		13	6.5	A08	T
7889	842 113 580 0000	00	642 113 570		26.5	1.4	150		1.75	2.5	A08	TT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
7895	080 400 010 2030	00			6.3	1	100		7	9.4	NV5	T
7898	841 238 510 0000	00	741 236 41*		13.5	2	250		10	5.5	B9A	TT
7905	247 008 173 0000	00	245 006 153		6.3	-6	200	185	36	6.7	B9A	P
7984	218 881 711 4730	00			13.5	9	200	125	100	13.5	A12	DP
8013A	200 300 000 0000	90	200 300 000	D1	2.5				15		B4	R
8016	020 000 030 0000	90	020 000 030	D1	1.2						A08	D
8032	127 141 310 0000	80	125 141 310	A1	13.5	32	200	200	100	7	A08	P
8056	080 400 010 2030	00			6.3	0.8	24		8.5	7	NV5	T
8058	010 100 010 2034	80			6.3	0.5	100		10	12.4	NV5	T
8077	141 230 871 0000	00	141 23* 651		13.5	2.7	250	150	19	11.5	B9A	P
8156	218 881 711 4730	00	.		13.5	9	200	125	75	7.6	A12	P
8223	851 238 410 0000	00	741 236 410		6.3	1.5	100		30	20	B9A	TT
8233	817 231 141 0000	00	615 231 141		6.3	3	150	150	50	45	B9D	P
8255	414 234 444 0000	00	414 234 444		6.3	1.2	150		12	13	B9A	T
8334	842 314 800 0000	00	642 314 600		6.3	1.8	200		18	10.75	B7G	T
8348	425 238 782 0000	00	424 236 572		1.6		200	200	30	3.3	B9A	PP
8380	070 400 010 2300	80		A	6.0	0	80	80	7.5	1.1	NV5	T
8382	080 400 010 230	00			6.0	55	135			1.28	NV5	T
8417	287 431 000 0000	00	265 431 000		6.3	-12	300	300	100	23.0	A08	P
8441	080 400 010 2300	00			6.0	55	300		5.5	6.7	NV5	T
8456	080 400 010 2300	00			6.0	0.7	12.0		5.5	8.0	NV5	T
8532	412 344 800 0000	00	412 344 600		6.3	55	150		9.0	8.8		T
8628	080 400 010 2030	00										
8808	110 101 000 0230	80		A	6.3	0	206		50	18.0		T
9001	412 387 100 0000	00	412 365 100		6.3	3	250	100	2	1.4	B7G	P
9002	812 384 100 0000	00	612 364 100		6.3	7	250		6.3	2.2	B7G	T
9003	412 387 100 0000	00	412 365 100		6.3	3	250	100	6.7	1.8	B7G	P
9004	203 190 000 0000	00	203 180 000		6.3				5		5AA	R
9005	219 330 000 0000	00	218 330 000		3.6				1		5AA	D
9006	912 390 100 0000	00	812 380 100		6.3				5		B7G	R
9072	020 000 310 0000	84	020 000 310	A1/G1	6.3		300		15	2.5	A08	T
18004	423 800 000 0000	00	423 600 000		4.4	25	130		22	1	UX4	T
18013	081 231 700 0000	40	061 231 500	G1	4		200	200	8	5	B7	P
18014	007 231 800 0000	40	005 231 600	G1	4		200	200	35	8	B7	P
18015	081 231 700 0000	00	061 231 500		21		150	125	8	8.3	B7	P
18016	007 231 800 0000	00	005 231 600		21		150	125	48	9	B7	P
18040	287 104 130 0000	00	265 104 130		18	3.4	200	200	15	10	B8B	P
18042	741 238 001 0000	00	541 236 **1		18	1.8	200	100	8.3	8.2	B9A	P
18043	741 238 001 0000	00	541 236 **1		6.3	1.8	200	200	8.2	8.2	B9A	P
18045	041 230 871 0000	00	041 230 651		18	3	200	200	20	11	B9A	P
18046	041 230 871 0000	00	041 230 651		18	3	200	100	20	11	B9A	P
18048	281 704 130 0000	00	261 504 130		20	4.8	250	150	16	6.5	B8D	P
95108	873 420 000 0000	00	653 320 000		1.2	1	40	40	2.2	1	B5A	P
824476	481 581 230 0000	00	461 471 230		6.3	8	250		9	2.6	A08	TT
A11A	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
A11D	9X2 300 000 0000	00	892 200 000		4				60		B4	RR
A20B	9X2 310 000 0000	00	892 310 000		4				60		B5	DD
A23A	90X 231 800 0000	40	809 231 600	G1	4	7	250		4	2	B7	DDT
A26	284 300 000 0000	00	264 300 000		15	1.5	90		4.5	1.1	UX4	T
A27D	91X 238 700 0000	40	819 236 500	G1	4	6	250	250	36	9.5	B7	DDP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
A28	284 300 000 0000	00	264 300 000		15	1.5	90		7.5	1.1	UX4	T
A30	284 300 000 0000	00	264 300 000		15	27	200		22	1.0	UX4	T
A30B	842 310 000 0000	00	642 310 000		4	2	250		10	5.5	B5	T
A30D	842 310 000 0000	00	642 310 000		4	3.5	200		6	2.4	B5	T
A32	284 300 000 0000	00	264 300 000		15	3	150		1.5	0.9	UX4	T
A36A	847 231 800 0000 057 231 800 0000	50 50	645 231 700	G1	4	2 2	150 200	 100	6 3.5	1.2	B7	TH
A36B	847 231 800 0000 057 231 800 0000	50 50	645 231 700	G1	4	 2	100 250	 250	22 3.5	6 0.75	B7	TH
A36C	847 231 800 0000 057 231 800 0000	50 50	645 231 700	G1	4	3 2.5	100 250	 100	9 3.25	3.8 2.5	B7	TH
A40	284 300 000 0000	00	264 300 000		15	40.5	200		21	1.5	UX4	T
A40	284 310 000 0000	00	264 310 000		4		100			2	5AA	T
A40M	274 130 000 0000	80	254 130 000	A1	4	1.5	200	100	3	2	UX5	P
A40M	742 310 000 0000	80	542 310 000	A1	4	1.5	200	100	3	2	B5	P
A41	371 220 000 0000	84	351 220 000	A1/G1	4		250	100		2	5AA	P
A48	284 300 000 0000	00	264 300 000		15	4.5	90		4.5	1.1	UX4	T
A50A	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2.3	B5	P
A50A	040 231 700 0000	80	040 231 500	A1	4	2	200	100	3	2.3	B7	P
A50B	081 231 700 0000	40	061 231 500	G1	4	1.5	250	250	6	3.5	B7	P
A50M	041 231 700 0000	80	041 231 500	A1	4	2	200	125	4.5	2.3	B7	P
A50M	742 310 000 0000	80	542 310 000	A1	4	2	250	125	4.5	2.3	B5	P
A50N	742 310 000 0000	80	542 310 000	A1	4	2	250	100	4.2	2.5	B5	P
A50N	041 231 700 0000	80	041 231 500	A1	4	2	250	100	4.2	2.5	B7	P
A50P	080 231 700 0000	40	060 231 500	G1	4	3	250	250	11.5	2	B7	P
A70B	842 310 000 0000	70	642 310 000	G2	4	25	250	250	36	2.6	B5	P
A70B	047 231 800 0000	00	045 231 600		4	25	250	250	36	2.6	B7	P
A70C	047 231 800 0000	00	045 231 600		4	3	250	250	36	9	B7	P
A70D	842 370 000 0000	00	642 350 000		4	5.8	250	250	36	9.5	B5	P
A70E	047 231 800 0000	00	045 231 600		4	14	250	275	72	8.5	B7	P
A70P	047 231 800 0000	00	045 231 600		4	14.5	250	250	70		B7	P
A80A	123 184 780 0000	40	123 184 560	G1	4	1.8 8.5	90 250	 75	2 1.6	0.6	8SC	O
A80A	847 231 800 0000	40	645 231 700	G1	4	1.8 8.5	90 250	75 75	2 1.5	0.6	B7	O
A104	842 300 000 0000	00	642 300 000		1.1	10	100		5	0.3	B4	T
A106	842 300 000 0000	00	642 300 000		1.4	9	100		2	0.4	UX4	T
A106	842 300 000 0000	40	642 300 000		1.4	9	100		2	0.4	B4	T
A109	842 300 000 0000	00	642 300 000		1.3	9	150		2	0.4	B4	T
A109	284 300 000 0000	00	264 300 000		1.4	9	150		2	0.4	UX4	T
A110	284 300 000 0000	00	264 300 000		1.4	4.5	150		4	0.4	UX4	T
A110	842 300 000 0000	00	642 300 000		1.4	4.5	150		3	0.4	B4	T
A125	842 300 000 0000	00	642 300 000		1.2	3	150		0.4	0.4	B4	T
A203	842 300 000 0000	00	642 300 000		2	30	150		12	1.5	B4	T
A205	842 300 000 0000	00	642 300 000		2	18	150		7	1.2	B4	T
A206	842 300 000 0000	00	642 300 000		2	8.5	150		3.8		B4	T
A209	842 300 000 0000	00	642 300 000		2	9	150		4	1.0	B4	T
A209	284 300 000 0000	00	264 300 000		2	9	150		4	1.0	UX4	T
A210	384 200 000 0000	00	364 200 000		2	9	150		3	1.0	UX4	T
A210	842 300 000 0000	00	642 300 000		2	9	150		3	0.9	B4	T
A211	842 300 000 0000	00	642 300 000		2	2	150		2	1.2	B4	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
A214	842 300 000 0000	00	642 300 000		2	3	150		4.5	1.3	B4	T
A225	842 300 000 0000	00	642 300 000		2	3	150		1	1	B4	T
A225	384 200 000 0000	00	364 200 000		2	3	150		1	1	UX4	T
A235	200 300 000 0000	90	200 300 000	D1	6.3				30		UX4	R
A235	042 300 000 0000	80	042 300 000	A1	2		150		1.5	0.4	B4	T
A239	230 200 000 0000	90	230 300 000	D1	2.5				60		UX4	R
A241	842 300 000 0000	70	642 300 000	G2	2	2	20	20	1.2	1	B4	P
A242	287 300 000 0000	40	265 300 000	G1	2	3	150	75	1.7	0.6	UX4	P
A303	284 300 000 0000	00	264 300 000		3	27	150		3	0.6	UX4	T
A306	284 300 000 0000	00	264 300 000		3	15	150		1.5	0.4	UX4	T
A404	842 300 000 0000	00	642 300 000		4	10	100		4	0.4	B4	T
A406	384 200 000 0000	00	364 200 000		4	9	100		2	0.4	UX4	T
A406	842 300 000 0000	00	642 300 000		4	9	100		2	0.4	B4	T
A408	842 300 000 0000	00	642 300 000		4	4	150		4	1.5	B4	T
A409	842 300 000 0000	00	642 300 000		4	9	150		3.5	0.9	B4	T
A409	284 300 000 0000	00	264 300 000		4	9	150		3.5	0.9	UX4	T
A410	842 300 000 0000	00	642 300 000		4	3	150		3.5	0.5	B4	T
A410	284 300 000 0000	00	264 300 000		4	3	150		3.5	0.5	UX4	T
A410N	842 300 000 0000	00	642 300 000		4	3	150		3.5	0.5	B4	T
A411	842 300 000 0000	00	642 300 000		4	3	200		6	2.5	B4	T
A414	384 200 000 0000	00	364 200 000		4	4.5	150		3	2	UX4	T
A414	842 300 000 0000	00	642 300 000		4	4.5	150		3	2	B4	T
A415	842 300 000 0000	00	642 300 000		4	4	150		4	1.5	B4	T
A416	842 300 000 0000	00	642 300 000		4	4.5	150		4	2	B4	T
A420	842 300 000 0000	00	642 300 000		4	4	150		4	1.5	B4	T
A425	842 300 000 0000	00	642 300 000		4	2.5	200		0.2	1.2	B4	T
A430	842 300 000 0000	00	642 300 000		4	3	200		6	2.5	B4	T
A430	042 300 000 0000	80	042 300 000	A1	4		150		1.5	0.5	B4	T
A430N	842 310 000 0000	00	642 310 000		4	4.5	250		6.5	3.5	B5	T
A435	842 300 000 0000	00	642 300 000		4	1	150		2.1	0.5	B4	T
A440N	842 310 000 0000	00	642 310 000		4	1.6	200		0.2	2.2	B5	T
A442	742 300 000 0000	80	542 300 000	A1	4	1	200	100	4	0.7	B4	P
A442	274 300 000 0000	80	254 300 000	A1	4	1	200	100	1	0.4	UX4	P
A557	802 310 000 0000	40	602 310 000	G1	4	8	150		28	2	B5	T
A577	802 310 000 0000	40	602 310 000	G1	4	20	250		40	2	B5	T
A600	842 300 000 0000	00	642 300 000		6.3	9	150		4	1.5	UX4	T
A609	842 300 000 0000	00	642 300 000		6.3	9	150		4	1.5	B4	T
A609	802 310 000 0000	40	602 310 000	G1	6.3	9	150		4	1.5	B5	T
A615	842 300 000 0000	00	642 300 000		6.3	4.5	150		4	2.4	B4	T
A630	842 300 000 0000	00	642 300 000		6.3	1.5	150		0.7	1.5	B4	T
A635	842 300 000 0000	00	642 300 000		6.3		150		1.2	1.5	B4	T
A642	742 300 000 0000	80	542 300 000	A1	6.3	1	200	100	4	0.7	B4	P
A802	842 310 000 0000	00	642 310 000		4	3	100		2.5	2.5	B5	T
A819	080 231 700 0000	40	060 231 500	G1	4		250	250	8	7.5	B7	P
A863	028 700 310 0000	40	026 500 310	G1	6.3	3	250	100	2	1.7	A08	P
A901	047 231 800 0000	00	045 231 600		5		100	100	50	9	B7	P
A1685	028 710 310 0000	40	026 510 310	G1	6.3	3	150	100	8	3.2	A08	P
A1714	412 300 800 0000	00	412 3** 600		6.3	2.2	150		10	8.5	B7G	T
A1820	287 004 130 0000	00	265 004 130		6.3		250	250	40	10.5	B8B	P
△A1834	581 481 230 0000	00	471 461 230		6.3	40	100				A08	TT

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
A1860	702 332 408 0000	00	502 332 406		2.5	7	200	150	35	6	B9A	T
A2030N	842 310 000 0000	00	642 310 000		20	3	200		6	2.3	B5	T
A2040N	842 310 000 0000	00	642 310 000		20	1.6	200		0.2	3	B5	T
A2087	902 390 100 0000	00	8*2 380 100		4.4				5		B7G	R
A2118	842 370 000 0000	00	642 300 000		20	3	200		6	2.3	B4	T
A2134	412 380 700 0000	00	412 36* 500		6.3	7.6	150	150	55	9.5	B7G	P
A2226	041 230 071 0000	80	*41 23* *51	A1	6.3	12.5	150	150	50	8.5	B9A	P
A2272	210 010 013 0000	90	21* *1* *13	D1	6.3				10		B9G	R
A2293	010 234 008 0000	00	*1* 234 **6		6.3	23	150		100	12	B9A	T
A2327	010 234 008 0000	00	010 234 006		6.3	3.5	250		20	6	B9A	T
A2359	010 234 008 0000	00	010 234 006		6.5		150		100	12	B9A	T
A2426	020 740 310 0000	80	*2* 54* 310	A1	6.3	13.5	150	150	50	8	A08	P
A2521	414 484 234 0000	00	414 464 234		6.3	1	150		15	15	B9A	T
A2599	412 231 148 0000	6.3	411 231 146		6.3	1	150		16	15	B9A	T
A2637	120 040 300 0000	80	120 040 300	A1	6.3	7.0	20		1.0	0.6	A08	T
A2674	211 403 708 0000	00	211 403 506		6.3	1.4	200	150	23	30	B9D	P
A2688	412 314 800 0000	00	412 314 600		6.3	1	100		12	11.5	B7G	T
A2738	028 741 310 0000	00	*26 541 310		6.3	19	250	200	50	10	A08	P
A2792	040 230 100 0000	80	*4* 23* 1**	A1	6.3	1.7	400		1	2.5	A08	T
A2900	851 228 413 0000	00	741 226 413		6.3	2	250		10.5	6.2	B9A	TT
A2913	413 214 800 0000	00	413 214 600		6.3		200		15.5	14	B9A	T
A2975	412 300 800 0000	00	412 3** 600		6.3	1.0	175		15.5	14	B7G	T
A3042	041 230 071 0000	80	*41 23* *51	A1	6.3	12.5	150	150	50	8.5	B9A	P
A3064	412 381 700 0000	00	412 361 500		6.3	1.6	250	250	10	7.6	B7G	P
A4090	842 310 000 0000	00	642 310 000		4	3.5	250		6	2.4	B5	T
A15526	110 101 000 0230	80			6.3	0	200		15	18	NV	T
AA61	285 184 130 0000	00	274 164 130		6.3	5.2	250		6	2.7	B8A	TT
AA81E	192 310 X00 0000	00	182 310 900		6.3				5		B7G	DD
AAB1	023 1Y0 X90 0000	00	023 1*0 980		4						BSC	DOD
AB1	X02 310 000 0000	90	902 310 000	D1	4				0.8		B5	DD
ABC1	023 1X9 080 0000	40	023 198 060	G1	4	7	250		4	2	BSC	DDT
ABC91	412 39X 900 0000	00	412 389 600		6.3	2	250		1.2	1.6	B7G	DDT
ABL1	023 1X9 780 0000	40	023 198 560	G1	4	6	250	250	36	9	BSC	DDP
AC/042	842 300 000 0000	00	642 300 000		2	38	300		50	5	B5	T
AC/044	842 300 000 0000	00	642 300 000		4	38	300		50	5	B4	T
AC/045	842 300 000 0000	00	642 300 000		4	22	250		48	3.5	B4	T
AC/064	842 300 000 0000	00	642 300 000		4	21	200		20	3	B4	T
AC084	842 300 000 0000	00	642 300 000		4	22	300		17	1.1	B4	T
AC084N	842 300 000 0000	00	642 300 000		4		100		21	2.5	B4	T
AC2	023 100 080 0000	40	023 100 060	G1	4	5.5	250		6	2.5	BSC	T
AC2DD	98X 231 700 0000	40	869 231 500	G1	4	5	250	250	32		B7	DDP
AC2/HL	842 310 000 0000	00	642 310 000		4	1.2	250		2.5	6.5	B5	T
AC2/Pen	047 231 800 0000	00	045 231 600		4	5.3	250	250	32	8.5	B7	P
AC2/PenDD	98X 231 700 0000	40	869 231 500	G1	4	5.3	250	250	32	8.5	B7	DDP
AC3/Pen	047 231 800 0000	00	045 231 600		4	3	250	250	36	9	B7	P
AC4/Pen	047 231 800 0000	00	045 231 600		4(5)	7	250	250	56	11	B7	P
AC5/Pen	047 213 800 0000	00	045 213 600		4	8.5	250	250	40	9.4	B7	P
AC5/PenDD	98X 231 700 0000	40	869 231 500	G1	4(5)	8.5	250	250	40	9.4	B7	DDP
AC6/Pen	047 231 000 0000	80	045 231 000	A1	4(5)	6.9	300	225	63	9.5	B7	P
AC101	802 310 000 0000	40	602 310 000	G1	4	5.5	250		7	2.7	B5	T
AC104	842 310 000 0000	00	642 310 000		4	10	150		8.5	3.5	B5	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
AC701	103 080 020 0000	40	103 060 020	G1	4	1.6	40		0.5	0.7	B8D	T
ACD	902 310 000 0000	00	802 310 000		4						B5	D
ACDD	9X2 310 000 0000	00	892 310 000		4						B5	DD
AC/DDT	90X 231 800 0000	40	809 231 600	G1	4	4	200		5	2.3	B7	DDT
AC/DX	842 310 000 0000	00	642 310 000		4	3	200		5	3.5	B5	T
AC/G	842 310 000 0000	00	642 310 000		4	7.5	200		8	2.7	B5	T
ACH1	847 231 800 0000 057 231 800 0000	50 50	174 652 300	G1	4	2 2	150 150	 75	5 2.5	2	C7	TH
ACHL4	842 310 000 0000	00	642 310 000		4	5	250		5	3.3	B5	T
ACHF	842 310 000 0000	00	642 310 000		4	3	200		3	2.5	B5	T
ACHL	842 310 000 0000	00	642 310 000		4	2.5	200		7	2	B5	T
AC/HLDD	90X 231 800 0000	40	809.231 600	G1	4	3	200		4.9	2.6	B7	DDT
ACHLDDD	XY0 231 890 0000	40	9T0 231 680	G1	4	3	200		4.9	2.6	B9	DDDT
ACHL4DD	90X 231 800 0000	40	809 231 600	G1	4	3	250		7	2.5	B7	DDT
ACHM4	742 310 000 0000	80	542 310 000	A1	4		250	100	10	2.5	B5	P
AC/HP	041 231 700 0000	80	041 231 500	A1	4	1.5	200	100	4.2	3.2	B7	P
AC/HP	743 210 000 0000	80	543 210 000	A1	4	1.5	200	100	4.2	3.2	B5	P
ACHVP	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2.3	B5	P
ACH4	842 310 000 0000	00	642 310 000		4	4	200		3	3.3	B5	T
AC/L	842 310 000 0000	00	642 310 000		4	13.5	200		17	4.25	B5	T
ACL4	842 310 000 0000	00	642 310 000		4	15	250		9	4	B5	T
AC/LP	842 310 000 0000	00	642 310 000		4	14	200	18	4.25		B5	T
AC/ME	047 231 800 0000	00	045 231 600		4	22	250	250	0.2	†1.0	B7	TI
ACME4	842 310 000 0000	70	642 310 000	G2	4	16	250	250	26		B5	P
ACP	842 300 000 0000	00	642 300 000		4	21	200		19	3	B4	T
AC/P	842 310 000 0000	00	642 310 000		4	13.5	200		17	2.7	B5	T
ACP1	842 310 000 0000	00	642 310 000		4	28	200		24	2.3	B5	T
ACP/4	042 310 000 0000	80	042 310 000	A1	4	1	100		20	7	B5	T
ACP/4	842 310 000 0000	00	642 310 000		4	20	250		20	4	B5	T
ACPN	842 370 000 0000	00	642 350 000		4	12	250	200	22		B5	P
ACPNDH	842 370 000 0000	00	642 350 000		4	10	250	200	18		B5	P
AC/PP	842 300 000 0000	00	842 300 000		4	25	400		50	5	B4	T
ACPP	047 231 800 0000	00	045 231 600		4	5.5	250	250	32		B7	P
AC/Pen	047 231 800 0000	00	045 231 600		4	15.5	250	250	32	2.7	B7	P
AC/Pen	842 310 000 0000	70	642 310 000	G2	4	12	200	200	24	2.5	B5	P
ACPT	842 310 000 0000	70	642 310 000	G2	4	8	250	200	31		B5	P
ACPX4	842 310 000 0000	00	642 310 000		4	18	250		30	4	B5	T
ACPX4A	842 300 000 0000	00	642 300 000		4	25	250		50	5	B4	T
ACQ	047 231 800 0000	00	045 231 600		4	22	400	250	57	6	B7	P
ACQA			045 231 600		6.3	23	400	250		6	B7	P
AC/S1VM	742 310 000 0000	80	542 310 000	A1	6.3	1.4	200	75	5.6	1.1	B5	P
AC/S2	742 310 000 0000	80	542 310 000	A1	4	1	200	60	6	3.4	B5	P
AC/S2Pen	041 231 700 0000	80	041 231 500	A1	4	1.5	250	100	8	4.6	B7	P
AC/SG	742 310 000 0000	80	542 310 000	A1	4	1.5	200	60	4.5	1.9	B5	P
AC/SGVM	742 310 000 0000	80	542 310 000	A1	4	2	200	60	5.8	2.0	B5	P
AC/SH	742 310 000 0000	80	542 310 000	A1	4	1.5	200	75	7.4	2.5	B5	P
AC/SL	041 230 700 0000	80	041 230 500	A1	4	2	200	100	3.8	2	B5	P
ACSP1	041 231 700 0000	80	041 231 500	A1	4	3	200	200	4.9	2.7	B7	P
ACSP3	081 231 700 0000	40	061 231 500	G1	4	1.5	250	100	9	7.5	B7	P
AC+SP3/RH	081 231 700 0000	40	061 231 500	G1	4	1.5	250	100	7	7.5	B7	P
ACTH1	847 231 800 0000 057 231 800 0000	50 50	654 231 700	G1	4	2.7 3	75 250	 100	6 3	3 3.5	B7	TH

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
ACTH1A	218 840 730 0000 218 050 730 0000	50 50	216 740 530	G1	4	3 3	75 250	100	6 3	3 3.5	M08	TH
ACTP	781 231 840 0000	50	571 231 640	G1	4	3 5	150 250	200	1.5 5.5	1.4 1.6	B9	TP
ACVG	742 310 000 0000	80	542 310 000	A1	4		200	75	5	3	B5	P
ACVH	742 310 000 0000	80	542 310 000	A1	4	1.5	200	75	9.3	2.7	B5	P
AC/VP	041 231 700 0000	80	041 231 500	A1	4	1.5	200	100	5.7	2.5	B7	P
AC/VP	742 310 000 0000	80	542 310 000	A1	4	1.5	200	100	5.7	2.5	B5	P
ACVPB	081 231 700 0000	40	061 231 500	G1	4	1.5	250	150	12	4	B7	P
AC/VP1	041 231 700 0000	80	041 231 500	A1	4	2.8	250	200	7.4	2	B7	P
AC/VP2	081 231 700 0000	40	061 231 500	G1	4	2.8	250	100	7.4	2	B7	P
ACVP4	041 231 700 0000	80	041 231 500	A1	4		250	100	6	3	B7	P
ACVS	742 310 000 0000	80	542 310 000	A1	4	1.5	200	75	4.4	2	B5	P
ACVS4	742 310 000 0000	80	542 310 000	A1	4	2	250	50	6	2	B5	P
AC/Y	047 231 800 0000	00	045 231 600		4	10	250	250	32	3.5	B7	P
AC/Y	842 310 000 0000	70	642 310 000	G2	4	10	250	250	32	3.5	B6	P
AC/YC	047 231 800 0000	00	045 231 600		4	10	250	250	68	7.5	B7	P
AC/YY	047 231 800 0000	00	045 231 600		4	10	250	250	68	7.5	B7	P
AC/Z	842 310 000 0000	70	642 310 000	G2	4	5.5	250	250	32	7.5	B5	P
AC/Z	047 231 800 0000	00	045 231 600		4	5.5	250	250	32	7.5	B7	P
AC/ZDD	98X 231 700 0000	40	869 231 500	G1	4	5.5	250	250	32	8	B7	DDP
AD	291 300 000 0000	00	281 300 000		6.3				30		UX4	R
AD1	023 004 080 0000	00	023 004 060		4	45	250		60	6	8SC	T
AD1/350	023 004 080 0000	00	023 004 060		4	66	400		42		8SC	T
AD1N	023 004 080 0000	00	023 004 060		4		300		60		F8	T
AD101	842 310 000 0000	00	642 310 000		4	26.5	250		40	4.6	B5	T
ADG	842 310 000 0000	00	642 310 000		20	10	200		10	3.5	B5	T
ADHF	842 310 000 0000	00	642 310 000		20	3	200		5	3.5	B5	T
ADHP	041 231 700 0000	80	041 231 500	A1	20		200	100	5	2.8	B7	P
ADL	872 310 000 0000	00	652 310 000		20	13	200		20	3	B5	T
ADPN	842 370 000 0000	00	642 350 000		20	15	250	200	22		B5	P
ADVHP	041 231 700 0000	80	041 231 500	A1	20		200	100	5.5	2.5	B7	P
AE	287 413 000 0000	00	265 413 000		13	13.5	100	100	8.5	1.6	UX6	P
AF	291 300 000 0000	00	281 300 000		2.5				120		UX4	R
AF2	742 310 000 0000	80	542 310 000	A1	4	2	200	100	4.2	2.5	B5	P
AF3	023 110 780 0000	40	023 110 560	G1	4	3	250	100	8	1.8	8SC	P
AF7	023 110 780 0000	40	023 110 560	G1	4	2	250	100	3	2.1	8SC	P
AF8	028 748 310 0000	00	026 546 310		6.3	2	200	50	3.5		A08	O
AG	29X 300 000 0000	00	289 300 000		5				20		UX4	RP
AG495	842 310 000 0000	00	642 310 000		4	4	200		4	2.5	B5	T
AG4100	842 300 000 0000	00	642 300 000		4	3	150		5	2	B4	T
AH1	023 147 780 0000	40	023 145 560	G1	4	2	250	75	3	1.8	8SC	P
AH100	023 147 780 0000	40	023 145 560	G1	4	2.5	200	100	5.5	1.5	8SC	P
AH4105	742 310 000 0000	80	542 310 000	A1	4	2	200	125	4.5	2.3	B5	P
AK2	023 185 780 0000	40	123 164 570	G1	4	2 2	100 250	75 75	4.2 4.5	0.9 2.2	8SC	O
AL1	023 004 780 0000	00	023 004 560		4	15	250	250	36	2.8	8SC	P
AL2	023 100 780 0000	40	023 100 560	G1	4	25	250	250	36	2.6	8SC	P
AL3	247 231 800 0000	00	245 231 600		4	3	250	250	36	9	B7	P
AL3	023 104 780 0000	00	023 104 560		4	6.5	250	250	36	9.5	8SC	P
AL4	147 231 800 0000	00	145 231 600		4	3	250	250	36		B7	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
AL4	023 104 780 0000	00	023 104 560		4	6.5	250	250	36	9.5	8SC	P
AL4/375	147 231 800 0000	00	145 231 600		4	6	250	250	34	9.5	B7	P
AL4/375	023 104 780 0000	00	023 104 560		4	6	250	250	34	9.5	8SC	P
AL5	147 231 800 0000	00	145 231 600		4	14	250	250	72	8.5	B7	P
AL5/375	023 104 780 0000	00	023 104 560		4	14	250	275	72	8.5	8SC	P
AL60	041 231 700 0000	80	041 231 500	A1	4(5)	7	250	250	72	14.5	B7	P
AL60	702 331 480 0000	00	502 331 460		2.4	7	200	150	35	6	B8D	P
AL495	842 310 000 0000	00	642 310 000		4	12	250		30	4	B5	T
AL860	702 331 408 0000	00	502 331 406		4.8	7	200	150	35	6	B9A	P
AM1	023 104 780 0000	00	023 104 560		4	5	250	250	0.1	†2.0	8SC	TI
AMOE	047 231 800 0000	00	045 231 600		4	14	250	250	72	9	B7	P
AN4092	842 310 000 0000	90	642 310 000	D1	4	3.5	200		6	2	*B5	DT
APP4A	047 231 800 0000	00	045 231 600		4	16.5	250	250	36	3.5	B7	P
APP4AS	023 100 780 0000	40	023 100 560	G1	4	16.5	250	250	36	3.5	8SC	P
APP4B	047 231 800 0000	00	045 231 600		4	5	250	250	32	10	B7	P
APP4BS	023 104 780 0000	00	023 104 560		4	5	250	250	32	10	8SC	P
AP495	842 310 000 0000	00	642 310 000		4	1.5	200		2.5	5	B5	T
APP4C	147 231 800 0000	00	145 231 600		4(5)	5	250	250	36	10	B7	P
APP4D	147 231 800 0000	00	145 231 600		4	16	250	250	72	7	B7	P
APP4E	147 231 800 0000	00	145 231 600		4(5)	13.5	350	275	72	8.5	B7	P
APP4E	023 104 780 0000	00	023 104 560		4(5)	13.5	350	275	72	8.5	8SC	P
APP4G	081 231 700 0000	40	061 231 500	G1	4(5)	6	250	250	36	10	B7	P
APP4G	041 231 700 0000	80	005 231 600	G1	4(5)	6	250	250	36	10	B7	P
APP4G	007 231 800 0000	40	005 231 600	G1	4	6	250	250	36	10	B7	P
APP495	842 370 000 0000	00	642 350 000		4	23	300	200	25	2	B5	P
APP4100	842 310 000 0000	70	642 310 000	G2	4	15	250	250	24	2.5	B5	P
APP4120	842 310 000 0000	70	642 310 000	G2	4	15	350	200	22	3.5	B5	P
APV4	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
APV4200	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
AR495	842 310 000 0000	00	642 310 000		4	1	100			5	B5	T
AR4100	842 310 000 0000	00	642 310 000		4	3	200		3	2	B5	T
AR4101	842 310 000 0000	00	642 310 000		4	1	100			3	B5	T
AS494	742 310 000 0000	80	542 310 000	A1	4		200	100	15	1.5	B5	P
AS495	742 310 000 0000	80	542 310 000	A1	4	2	200	100	1	3.4	B5	P
AS4100	742 310 000 0000	80	542 310 000	A1	4	6	200	100	4	1.4	B5	P
AS4120	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	3	B5	P
AS4125	742 310 000 0000	80	542 310 000	A1	4	2	250	100	3	3	B4	P
AV11	200 300 000 0000	90	700 300 000	D1	2.5						UX4	R
AV44	120 093 000 0000	00	120 083 000		2.6				0.2			D
AX	264 300 000 0000	00	264 300 000		5	9	150		3	0.8	UX4	T
AX1	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
AX50	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
AZ1	023 090 0X0 0000	00	023 080 090		4				30		8SC	RR
AZ2	023 090 0X0 0000	00	023 080 090		4				60		8SC	RR
AZ3	023 190 0X0 0000	00	023 180 090		4				60		8SC	RR
AZ4	023 090 0X0 0000	00	023 080 090		4(5)				60		8SC	RR
AZ11	X02 300 090 0000	00	902 300 080		4				60		F8	RR
AZ21	299 03X X20 0000	00	288 039 920		2				30		A08	RR
AZ31	020 90X 030 0000	00	020 809 030		4				30		A08	RR
AZ32	020 90X 030 0000	00	020 809 030		4				60		A08	RR
AZ33	029 0X0 300 0000	00	028 090 300		4				60		A08	RR
AZ41	090 00X 230 0000	00	*8* **9 230		4				30		B8A	RR

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
AZ50	023 090 0X0 0000	00	023 080 090		4(5)				120		8SC	RR
AZ50	9X2 300 000 0000	00	892 300 000		4(5)				120		B4	RR
B2	842 300 000 0000	00	642 300 000		2	2	150		2	1.2	B4	T
B7	842 300 000 0000	00	642 300 000		6.3		150		8	0.67	B4	T
B11	842 300 000 0000	00	642 300 000		6.3		200		20	1.4	B4	T
B21	458 230 800 0000	00	447 230 600		2	3	150		5.0	1.5	B7	TT
B22	458 230 800 0000	00	446 230 700		2		150		5		B7	TT
B23	842 300 000 0000	00	642 300 000		2		150		4	0.75	B4	T
B24	458 230 800 0000	00	446 230 700		2	0	150		7		B7	TT
B30	481 238 500 0000	00	461 237 400		13	0	200		30		B7	TT
B36	581 481 230 0000	00	471 461 230		13	8	250		9	2.6	A08	TT
B63	284 158 300 0000	00	264 147 300		6.3	5	250		6	3.1	UX7	TT
B65	581 481 230 0000	00	471 461 230		6.3	8	250		9	2.6	A08	TT
B105	284 300 000 0000	00	264 300 000		1.4	18	150		8	1.0	UX4	T
B105	842 300 000 0000	00	642 300 000		1.4	18	150		8	1.0	B4	T
B109	851 238 410 0000	00	741 236 410		26	1.5	200		10	6.2	B9A	TT
B152	851 228 413 0000	00	741 226 413		6.3	2	250		10.0	5.5	B9A	TT
B203	842 300 000 0000	00	642 300 000		2	26	150		11	1.5	B4	T
B204	284 300 000 0000	00	264 300 000		2	22.5	125		8	0.9	UX4	T
B205	842 300 000 0000	00	642 300 0000		2	18	150		7	1.2	B4	T
B205	284 300 000 0000	00	264 300 000		2	18	150		7	1.2	UX4	T
B217	842 300 000 0000	00	642 300 000		4.5	4.5	150		3	1.3	B4	T
B217	284 300 000 0000	00	264 300 000		2	4.5	150		3	1.3	UX4	T
B228	284 300 000 0000	00	264 300 000		2	2	150		2	1.2	B4	T
B230	548 230 800 0000	00	446 230 700		2	1	150		5.5		B7	TT
B240	284 583 000 0000	00	264 473 000		2	0	150		15		UX6	TT
B242	742 300 000 0000	80	542 300 000	A1	2	0	200	75	4.5	1.1	B4	P
B242	274 300 000 0000	80	254 300 000	A1	2	0	200	75	4.5	1.1	UX4	P
B255	742 300 000 0000	80	542 300 000	A1	2	1	150	100	1.8	1.2	B4	P
B255	274 300 000 0000	80	254 300 000	A1	2	1	150	100	1.8	1.2	UX4	P
B262	742 300 000 0000	80	265 300 000	G1	2	1	150	100	1.8	1.3	UX4	P
B309	851 228 413 0000	00	741 226 413		6.3	2	250		10	5.5	B9A	TT
B319	158 234 118 0000	00	147 234 116		7.5	1.5	90		12	6	B9A	TT
B329	851 228 413 0000	00	741 226 413		6.3	8.5	250		10.5	2.2	B9A	TT
B339	851 228 413 0000	00	741 226 413		6.3	2	250		1.2	4.6	B9A	T
B342	287 300 000 0000	40	265 300 000	G1	2	2.5	150	75	4	1.3	UX4	P
B349	158 234 118 0000	00	147 234 116		7	1.2	90		15	9	B9A	TT
B403	842 300 000 0000	00	642 300 000		4	30	150		15	1.5	B4	T
B403	284 300 000 0000	00	264 300 000		4	30	150		15	1.5	UX4	T
B405	842 300 000 0000	00	642 300 000		4	18	150		11	1.6	B4	T
B405	284 300 000 0000	00	264 300 000		4	18	150		11	1.6	UX4	T
B406	842 300 000 0000	00	642 300 000		4	15	150		8	1.4	B4	T
B406	284 300 000 0000	00	264 300 000		4	15	150		8	1.3	UX4	T
B409	842 300 000 0000	00	642 300 000		4	16	250		12	2	B4	T
B409	284 300 000 0000	00	264 300 000		4	16	250		12	2	UX4	T
B415	284 300 000 0000	00	264 300 000		4	4.5	150		3	2	UX4	T
B424	842 300 000 0000	00	642 300 000		4	2.3	200		6	2.5	B4	T
B424	284 300 000 0000	00	264 300 000		4	2.3	200		6	2.5	UX4	T
B424S	842 300 000 0000	00	642 300 000		4	3	200		3	2.5	B4	T
B425	842 300 000 0000	00	642 300 000		4	4.5	150		3	2	B4	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	VCM163 Tester only — TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4 — TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
B425	284 300 000 0000	00	264 300 000		4	4.5	150		3	2	UX4	T
B435N	842 310 000 0000	90	642 310 000	D1	4	3.5	200		6	2	B5	DT
B438	842 300 000 0000	00	642 300 000		4	2.5	200		0.2	2	B4	T
B438	284 300 000 0000	00	264 300 000		4	2.5	200		0.2	2	UX4	T
B438S	842 300 000 0000	00	642 300 000		4	1.5	200		2	2	B4	T
B442	742 300 000 0000	80	542 300 000	A1	4	1	200	100	4.5	0.9	B4	P
B442M	274 300 000 0000	80	254 300 000	A1	4	1	200	100	4.5	0.9	UX4	P
B443	842 370 000 0000	00	642 350 000		7	17	200	150	12	1.2	B5	P
B443	284 300 000 0000	70	264 300 000	G2	4	17	200	150	12	1.2	UX4	P
B443S	842 300 000 0000	70	642 350 000		4	12	250	75	12	1.6	B5	P
B443S	842 300 000 0000	70	642 300 000	G2	4	12	250	75	12	1.6	B4	P
B443S	284 300 000 0000	70	264 300 000	G2	4	12	250	75	12	1.6	UX4	P
B494	842 310 000 0000	00	642 310 000		4	1.5	200		4	4	B4	T
B543	842 370 000 0000	00	642 350 000		5	15	200	150	13	1.3	B5	P
B543	284 300 000 0000	70	264 300 000	G2	5	15	200	150	12	1.3	UX4	P
B543	842 300 000 0000	70	642 300 000	G2	5	15	200	150	12	1.3	B4	P
B605	842 300 000 0000	00	642 300 000		6.3	18	150		9	1.8	B4	T
B605	284 300 000 0000	00	264 300 000		6.3	18	150		9	1.8	UX4	T
B609	842 300 000 0000	00	642 300 000		6.3	18	250		12	1.8	B4	T
B719	851 238 410 0000	00	741 236 410		6.3	2	250		10	6	B9A	TT
B729	851 238 410 0000	00	741 236 410		6.3	7.7	200		10	3.4	B9A	TT
B2006	842 310 000 0000	00	642 310 000		20	18	200		15	1.6	B5	T
B2038	842 310 000 0000	00	642 310 000		20	3	200		6	2.3	B5	T
B2041	802 300 000 0000	40	602 300 000	G1	20	1	100		2.5	0.1	B4	T
B2042	742 310 000 0000	80	542 310 000	A1	20	2	200	60	4	1	B5	P
B2043	842 310 000 0000	70	642 310 000	G2	20	18	200	200	20	1.7	B5	P
B2044	219 004 730 0000	00	218 004 530		20	4	200	60	0.7	2.8	A08	P
B2044S	842 310 000 0000	90	642 310 000	D1	20	3	200		6	1.8	B5	DT
B2045	742 310 000 0000	80	542 310 000	A1	20	2	200	60	4	1	B5	P
B2046	742 310 000 0000	80	542 310 000	A1	20	2	200	100	3	2.2	B5	P
B2047	742 310 000 0000	80	542 310 000	A1	20	2	200	100	4	2	B5	P
B2055	742 310 000 0000	80	542 310 000	A1	20	1.5	200	100	3	2	B5	P
B2099	842 310 000 0000	00	642 310 000		20	1.6	200		0.2	3	B5	T
BA2	548 230 800 0000	00	446 230 700		2		150		1.5		B7	TT
BB1	X02 310 000 0000	90	902 310 000	D1	16						B5	DD
BB220A	548 230 800 0000	00	446 230 700		2	3	150		4		B7	TT
BB240	548 230 800 0000	00	446 230 700		2	6	150		2.2		B7	TT
BBC12	892 3X0 000 0000	40	682 390 000	G1	2	4.5	150		2.5	1.5	B5	DDT
BCH1	487 231 800 0000	50	465 231 700	G1	24		100		5	1.2	B7	TP
	507 231 800 0000	50				2	200	50	1.3	0.7		
BF1	842 300 000 0000	00	642 300 000		4	15	150		8	1.3	B4	T
BF61	281 074 130 0000	00	261 054 130		6.3	7	250	250	36	10	B8A	P
BF62	281 074 130 0000	00	261 054 130		6.3	10	250	250	26	3.2	B8A	P
BF451	281 074 130 0000	00	261 054 130		45	9	200	175	54.5	9.5	B8A	P
BHP61	023 010 780 0000	40	023 010 560	G1	2	0.5	150	125	2.5	0.7	8SC	P
BL2	872 310 000 0000	40	652 310 000	G1	30	20	200	100	40	3	B5	P
BL63	028 148 310 0000	60	027 146 310	G1	6.3		250		14	4.2	A03	TT
BLP61	023 004 780 0000	00	023 004 560		2		150	150	7	2.7	8SC	P
BM968	200 300 000 0000	90	200 300 000	D1	2.5				60		UX4	R
BPM04	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4.1	B7G	P
BW3	842 370 000 0000	00	642 350 000		2	4.5	150	125	6	2.2	B5	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only		PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V ↑Ra MΩ		
BW602	842 300 000 0000	00	642 300 000		2	12	150		12	3.4	B4	T
BW1304	842 300 000 0000	00	642 300 000		2	6	150		6	3.2	B4	T
BX2	548 230 800 0000	00	446 230 700		2		200		2.5		B7	TT
BX604	842 300 000 0000	00	642 300 000		2	12	150		8	1.5	B4	T
C3A	281 704 130 0000	00	261 504 130		6.3		250	150	16	6.5	B8G	P
C3G	281 704 130 0000	00	261 504 130		6.3	1.8	200	150	13	14	A08	P
C3G	218 714 130 0000	00	216 514 130		6.3	1.8	250	150	13	13.5	B8B	P
C3G	907 382 470 0000	00	802 362 450		6.3	1.8	200	150	13	14	F8	DP
C3M	281 704 130 0000	00	261 504 130		20	4.5	250	150	15.0	6.0	B8B	P
C8	842 300 000 0000	00	642 300 000		4	9	150		3.5	0.9	B4	T
C10B	023 100 090 0000	00	023 100 080		20				75		8SC	R
C10B	902 310 000 0000	00	802 310 000		20				60		B5	R
C20C	9X2 310 000 0000	00	892 310 000		13						B5	DD
C23B	90X 231 800 0000	40	809 231 600	G1	13	5	200		4	2	B7	DDT
C25	842 300 000 0000	00	642 300 000		4	2.5	200		2.3	1.2	B4	T
C30	281 704 130 0000	00	261 504 130		6.3	4.5	250	150	15	6	B8B	P
C30B	000 231 800 0000	40	000 231 600	G1	13	4	200		4	3.2	B7	T
C36A	[847 231 800 0000 057 231 800 0000	50 50	] 645 231 740		21	[1.5	100 250	75	4 3	2	] B9	TH
C36B	[847 231 800 0000 057 231 800 0000	50 50	] 645 231 700	G1	29	[	100 250	150	4 3.4	2	] B7	TH
C36C	[847 231 800 0000 057 231 800 0000	50 50	] 645 231 740		29	[2.5	100 250	75	4 3	2 3.5	] B9	TH
C50B	081 231 700 0000	40	061 231 500	G1	12	2.2	200	200	2.5	2.8	B7	P
C50N	081 231 700 0000	40	061 231 500	G1	13	2	200	200	9.5	2	B7	P
C70D	023 110 780 0000	40	023 110 560	G1	33	8.5	200	200	45	8	8SC	P
C70D	047 231 800 0000	00	045 231 600		35	8.5	200	200	45	8	B7	P
C80B	123 174 780 0000	40	123 154 560	G1	13	1.5	200	90	1.9		8SC	O
C109	842 300 000 0000	00	642 300 000		1	9	150		3.5	0.5	B4	T
C125	842 300 000 0000	00	642 300 000		1	3	150		0.7	0.8	B4	T
C135	042 300 000 0000	80	042 300 000	A1	1.4		150		1.5	1	B4	T
C142	742 300 000 0000	80	542 300 000	A1	1	1.5	150	75	1.7	0.8	B4	P
C144	247 135 200 0000	88	245 134 200	A1/A2	6.3	15	300	200	40	9	B7A	PP
C180	247 135 200 0000	88	245 134 200	A1/A2	6.3	20	300	250	55	3.5	B7A	PP
C243	842 370 000 0000	00	642 350 000		2	15	150	150	17	1.5	B5	P
C243N	284 730 000 0000	00	642 350 000		2	4.5	150	125	6	3.2	B5	P
C243N	284 730 000 0000	00	264 530 000		2	4.5	150	125	6	2.2	UX5	P
C405	842 300 000 0000	00	642 300 000		4	32	250		20	1.9	B4	T
C405	284 300 000 0000	00	264 300 000		4	32	250		20	1.9	UX4	T
C408	842 300 000 0000	00	642 300 000		4	7	150		14	2.9	B4	T
C443	842 370 000 0000	00	642 350 000		4	25	300	200	20	1.7	B5	P
C443N	842 370 000 0000	00	642 350 000		4	42	300	200	20	1.5	B5	P
C443N/S	842 370 000 0000	00	642 350 000		4	20	300	150	20	1.5	B5	P
C453	842 370 000 0000	00	642 350 000		4	25	300	200	20	1.7	B5	P
C508	284 300 000 0000	00	264 300 000		5	9	150		6.2	1.7	UX4	T
C509A	842 300 000 0000	00	642 300 000		5	10	150		10	1	B4	T
C543	843 370 000 0000	00	642 350 000		4	1	100	150		2	B5	P
C603	842 300 000 0000	00	642 300 000		6.3	40	200		20	1.7	B4	T
C606	842 300 000 0000	00	642 300 000		6.3	27	250		20	3.3	B4	T
C643	842 370 000 0000	00	642 350 000		6.3	21	300	200	20	1.5	B5	P
C1134	247 137 200 0000	88	245 135 200	A1/A2	6.3	17	400	200	20	2.5	B7A	PP

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
CB215	548 230 800 0000	00	446 230 700		2	1	150		15	1.7	B7	TT
CB215S	023 084 580 0000	00	023 064 470		2	1	150		12	1.7	8SC	TT
CB220	548 230 800 0000	00	446 230 700		2	3	150		15		B7	TT
CBC1	023 1X9 080 0000	40	023 198 060	G1	13	7	250		4	2	8SC	DDT
CBL1	023 19X 780 0000	40	023 189 560	G1	44	8.5	200	200	45	8	8SC	DOP
CBL6	023 1X9 780 0000	40	023 198 560	G1	44	8	100	100	45	6	8SC	DOP
CBL31	028 X97 310 0000	40	026 985 310	G1	44	8.5	200	200	45	8	A08	DOP
CC1	023 100 080 0000	40	023 100 060	G1	13	3.7	200		2.6	2	8SC	T
CC2	023 100 080 0000	40	023 100 060	G1	13	5.5	250		6	2.5	8SC	T
CC81E	841 228 513 0000	00	641 227 413		6.3	0.6	250		10	5.5	B9A	TT
CC82E	841 228 513 0000	00	641 227 413		6.3	8.5	250		10.5	2.2	B9A	TT
CC86E	841 228 513 0000	00	641 227 413		6.3	9.3	250		14.5	5.2	B9A	TT
CCa	851 228 413 0000	00	741 226 413		6.3		100		15	12	B9A	TT
CCH1	023 178 480 0000 023 170 580 0000	50 50	023 156 470	G1	20	10 2	200 200	 50	2.5 7	2.3	8SC	TH
CCH2	023 184 780 0000 023 105 780 0000	50 50	023 164 570	G1	29	10 2	200 200	 75	2.5 2	2.3	8SC	TH
CCH35	020 048 310 0000 028 750 310 0000	50 50	027 546 310	G1	7.5	2 2	100 250	 100	5.4 5	2.2 2.4	A08	TH
CF1	023 110 780 0000	40	023 110 560	G1	13	2	200	100	3	2.3	8SC	P
CF2	023 110 780 0000	40	023 110 560	G1	13	2	200	100	4.5	2.2	8SC	P
CF3	023 110 780 0000	40	023 110 560	G1	13	2	100	75	7.5	2.1	8SC	P
CF7	023 110 780 0000	40	023 110 560	G1	13	2	100	100	3	2.1	8SC	P
CF50	123 100 780 0000	40	123 100 560	G1	30	2	200	100	1.5	3.3	8SC	P
CF51	123 100 780 0000	40	123 100 560	G1	30	2	250	100	1.7	3.3	8SC	P
CF61	288 475 130 0000 280 575 130 0000	00 00	276 454 130		6.3	2 2	100 250	 100	5 3	2.2 2	B8A	TH
CF141	288 475 130 0000 280 575 130 0000	00 00	276 454 130		14	2 2	100 200	 90	6.4 2.7	2.2 1.5	B8A	TH
CH1	023 147 780 0000	40	023 145 560	G1	13	2	250	75	3	1.8	8SC	P
CK1	023 174 780 0000	40	023 154 560	G1	13	1.5	200	90	8	3	8SC	P
CK3	023 174 780 0000	40	023 154 560	G1	19	15	200	100	2.5		8SC	O
CK108	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	7.3	1.7	UX6	P
CK507AX	873 420 000 0000	00	653 420 000		1.2	2	40	40	0.9	0.6	B5A	P
CK509AX	834 200 000 0000	00	634 200 000		0.62		40		0.1	0.1	B5A	T
CK518AX	873 420 000 0000	00	653 420 000		1.2	2	40		0.8	0.5	B5A	T
CK520AX	873 420 000 0000	00	653 420 000		0.62	2.5	40	40	0.2	0.1	B5A	P
CK521AX	873 420 000 0000	00	653 420 000		1.2	3	20	20	0.6	0.4	B5A	P
CK523AX	973 420 000 0000	00	653 420 000		1.2	1.2	20	20	0.3	0.3	B5A	P
CK524AX	873 420 000 0000	00	653 420 000		1.2	1.2	20	20	0.4	0.3	B5A	P
CK526AX	873 420 000 0000	00	653 420 000		1.2	1.5	20	20	0.5	0.4	B5A	P
CK527AX	873 420 000 0000	00	653 420 000		1.2		20	20	0.1	0.2	B5A	P
CK528AX	873 420 000 0000	00	653 420 000		1.2	1.2	40	40	0.7	0.6	B5A	P
CK529AX	873 420 000 0000	00	653 420 000		1.2	1.2	20	20	0.3	0.3	B5A	P
CK531DX	873 420 000 0000	00	653 420 000		1.2	1.5	20	20	0.3	0.2	B5A	P
CK532DX	873 420 000 0000	00	653 420 000		1.2		20	20	0.4	0.4	B5A	P
CK535AX	873 420 000 0000	00	653 420 000		1.2	1.2	20	20	0.3	0.3	B5A	P
CK539AX	873 420 000 0000	00	653 420 000		1.2	1.4	20	20	0.2	0.3	B5A	P
CK541DX	873 420 000 0000	00	653 420 000		1.2		30	30	0.2	0.4	B5A	P
CK542DX	873 420 000 0000	00	653 420 000		1.2	2	20	20	0.4	0.3	B5A	P
CK544DX	873 420 000 0000	00	653 420 000		1.2		30	30	0.1	0.3	B5A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
CK545DX	873 420 000 0000	00	653 420 000		0.6	0.6	20	20			B5A	P
CK546	873 420 000 0000	00	653 420 000		1.2		20	20	0.4	0.4	B5A	P
CK1002	009 0X0 010 0000	00	008 090 010		6.3				30	3k	A08	CCR
CK1005	009 0X2 030 0000	00	008 092 030		6.3				30		A08	RR
CK1006	29X 300 000 0000	00	289 300 000		2				60		UX4	RR
CK1007	009 0X2 030 0000	00	008 092 030		1				60		A08	RR
CK1012	29X 300 000 0000	00	289 300 000		2				120		UX4	RR
CK1024	009 0X0 010 0000	00	008 090 010		6.3				60	3k	A08	CCR
CK1028	202 322 300 0000	90	202 322 300	D1	6.3				60		B7G	R
CK1091	200 900 300 0000	00	200 800 300		1.4						B7G	D
CK1216	882 345 100 0000	00	672 344 100		6.3		100		5	3.4	B7G	TT
CK5608	284 158 300 0000	00	264 147 300		2.5	6	200		6	2.4	UX7	TT
CK5639	412 183 710 0000	00	412 163 510		6.3		150	100	21	9	B8D	P
CK5654	412 387 100 0000	00	412 365 100		6.3	2	150	125	7.5	5	B7G	P
CK5656	745 231 881 0000	00	544 231 671		6.3	2	150	125	15	5.8	B9A	PP
CK5670	214 808 513 0000	00	214 607 413		6.3		150		8.5	5.5	B9A	TT
CK5672	873 420 000 0000	00	653 420 000		1.2	6.5	60	60	3.2	0.6	B5A	P
CK5676	824 300 000 0000	00	624 300 000		1.2	5	150		4	1.6	B5A	T
CK5677	824 300 000 0000	00	624 300 000		1.2	5.5	150		1.9	0.8	B5A	T
CK5678	872 430 000 0000	00	652 430 000		1.2		60	60	1.8	1.1	B5A	P
CK5687	841 221 538 0000	00	641 221 437		6.3	2	150		36	11	B9A	TT
CK5692	481 581 230 0000	00	461 471 230		6.3	9	250		6.5	2.2	A08	TT
CK5693	128 458 310 0000	00	126 447 310		6.3	6	200	7		3.2	B8B	TT
CK5694	128 458 310 0000	00	126 447 310		6.3	6	300		7	3.2	A08	TT
CK5697	832 400 000 0000	00	632 400 000		0.6	3	12		0.2	0.1	B5A	T
CK5702	873 420 000 0000	00	653 420 000		6.3		150	125	7.5	5	B7G	P
CK5703	823 410 000 0000	00	623 410 000		6.3		150		9	5	B5A	T
CK5704	823 100 000 0000	00	623 100 000		6.3				5		B5A	D
CK5725	412 387 100 0000	00	412 365 100		6.3	2	150	125	5.2	3.2	B7G	P
CK5726	192 310 X00 0000	00	182 310 900		6.3				5		B7G	DD
CK5744	823 410 000 0000	00	623 410 000		6.3		250		4	4	B5A	T
CK5749	412 387 100 0000	00	412 365 100		6.3		250	100	11	4.4	B7G	P
CK5751	841 228 513 0000	00	641 227 413		6.3	3	250		1.0	1.2	B9A	TT
CK5755	814 225 183 0000	00	614 224 173		6.3	0.9	100		0.1	0.5	B9A	TT
CK5784	872 311 400 0000	00	652 311 400		6.3	2	150	125	5.2	3.2	B7F	P
CK5785	923 000 000 0000	00	823 000 000		1.2							D
CK5814	851 228 413 0000	00	741 226 413		6.3	8.5	250		10.5	2.2	B9A	TT
CK5829	912 13X 100 0000	00	812 139 100		6.3				5		B7F	DD
CK5851	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	5.5	1.6	B8D	P
CK5854	872 430 000 0000	00	652 430 000		1.2	2	40	40	0.8	0.5	B5A	P
CK5873	284 115 830 0000	00	264 114 730		6.3	3	150		9	2.9	B8D	TT
CK5875	872 430 000 0000	00	652 430 000		1.2		90	90	3.5	2.5	B5A	P
CK5881	028 740 310 0000	00	026 540 310		6.3	14	150	250	75	6.1	A08	P
CK5910	287 024 300 0000	00	265 024 300		1.4		90	90	1.6	0.9	B7G	P
CK5965	841 228 513 0000	00	641 227 413		6.3		150		8.2	6.5	B9A	TT
CK5967	824 335 280 0000	00	624 334 270		1.2		40		3	0.1	B8D	TT
CK5968	824 335 280 0000	00	624 334 270		1.2		40		0.7	1.3	B8D	TT
CK5969	247 887 530 0000	00	245 675 430		1.2	3	150	40	6	1.7	B8D	PP
CK5970	247 887 530 0000	00	245 675 430		1.2		40	40	3	1.8	B8D	PP
CK5971	842 430 000 0000	00	642 430 000		1.2		60		3.5	2.1	B5A	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
CK5972	872 430 000 0000	00	652 430 000		1.2		60	60	2.5	1.3	B5A	P
CK5975	814 230 000 0000	00	614 230 000		6.3		100		10	5.1	B5A	T
CK5995	902 310 000 0000	00	8*2 310 000		6.3				30		B5A	R
CK6005	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4.1	B7G	P
CK6021	842 113 580 0000	00	642 113 470		6.3		100		6.5	5.4	B8D	TT
CK6029	824 300 000 0000	00	624 300 000		1.2	4	90		11	2	B5A	T
CK6050	824 300 000 0000	00	624 300 000		1.2	5	150		4	1.6	B5A	T
CK6051	872 430 000 0000	00	652 430 000		1.2	4	40	40	3	1.2	B5A	P
CK6088	873 420 000 0000	00	653 420 000		1.2	1.2	40	40	0.7	0.6	B5A	P
CK6092	873 420 000 0000	00	653 420 000		1.2	4.5	40	40	1.4	0.6	B5A	P
CK6100	802 384 100 0000	00	602 364 100		6.3	8.5	250		10.5	2.2	B7G	T
CK6101	882 345 100 0000	00	672 344 100		6.3		100		9	6	B7G	TT
CK6110	912 0X3 100 0000	00	812 093 100		6.3						B8D	DD
CK6111	842 113 580 0000	00	642 113 470		6.3		100		8.5	5	B8D	TT
CK6112	842 113 580 0000	00	642 113 470		6.3		100		0.8	1.8	B8D	TT
CK6147	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	5.5	1.6	B8D	P
CK6152	814 230 000 0000	00	614 230 000		6.3		100		10	5.1	B5A	T
CK6186	412 387 100 0000	00	412 365 100		6.3		250	150	7	5	B7G	P
CK6201	841 228 513 0000	00	641 227 413		6.3		250		10	5.5	B9A	TT
CK6245	872 311 400 0000	00	652 311 400		6.3		20	30	2.5	3.3	B7G	P
CK6247	442 813 060 0000	00	442 613 060		6.3		250			2.6	B8D	T
CK6286	824 300 000 0000	00	624 300 000		1.2	2	60		6	2.1	B5A	T
CK6397	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	7.2	2	B8D	P
CK6414	851 228 413 0000	00	741 226 413		6.3		200		8	5.5	B9A	TT
CK6418	872 430 000 0000	00	652 430 000		1.2	1.2	20	20	0.2	0.3	B5A	P
CK6419	872 430 000 0000	00	652 430 000		0.6	0.6	12	12			B5A	P
CK6485	412 385 100 0000	00	412 365 100		6.3		300	150	10	9	B7G	P
CK6519	873 420 000 0000	00	653 420 000		1.2		20	20	0.4	0.4	B5A	P
CK6526	872 430 000 0000	00	652 430 000		1.2	6	100	100	6.5	1.9	B5A	P
CK6533	844 812 380 0000	00	644 612 360		6.3		150		0.9	1.7	B8D	T
CK6540	872 311 400 0000	00	652 311 400		6.3		150		7.5	5	B7G	P
CK6611	842 113 580 0000	00	642 113 470		6.3		100		8.5	5	B8D	TT
CK6612	842 113 580 0000	00	642 113 470		6.3		100		0.8	1.8	B8D	TT
CK6872	872 311 400 0000	00	652 311 400		6.3		150	125	7.7	4.1	B7G	P
CK6883	127 141 310 0000	80	125 141 310	A1	12.6	33	300	200	70	7	A08	P
CK7994	348 441 430 0000	00	346 441 430		6.3	1	100		13	18	B8D	T
CK7995	214 311 870 0000	00	214 311 650		6.3	1.6	150	150	8	13	B8D	P
CL1	023 100 780 0000	40	023 100 560	G1	13	14	200	200	25	2.5	8SC	P
CL2	023 100 780 0000	40	023 100 560	G1	24	15	100	100	50	3.8	8SC	P
CL4	023 100 780 0000	40	023 100 560	G1	33	8.5	200	200	45	8	8SC	P
CL6	023 100 780 0000	40	023 100 560	G1	35	9.5	200	100	45	8	8SC	P
CL33	028 740 310 0000	00	026 540 310		33	8.5	200	200	45	8	A08	P
CO241	028 700 300 0000	40	026 500 300	G1	2	1	150	75	3.5	1.4	A08	P
CO243	028 458 300 0000	00	026 447 300		2		150		4	1.8	A08	TT
CO244	028 740 300 0000	00	026 540 300		2	2.5	150	125	4.1	1.8	A08	P
CO257	021 470 300 0000	80	021 450 300	A	2	3	100	100	6	2.5	A08	P
CO258	028 740 300 0000	00	026 540 300		1.8	6	150	125	10	2	A08	P
CV TYPE NUMBERS	SEE PAGES 160 to 221 or 222 to 240											
CY1	023 100 090 0000	00	023 100 080		20				60		8SC	R
CY1C	903 210 000 0000	00	803 210 000		20				60		B5	R
CY2	123 1X0 090 0000	00	123 190 080		30				60		8SC	R

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
CY21	209 001 003 0000	00	208 001 003		25				120		B9A	R
CY31	020 090 310 0000	00	020 080 310		20				120		A08	R
CY32	02X 190 310 0000	00	029 180 310		30				60		A08	RR
CZ30	029 1X3 210 0000	00	028 193 210		80				60		A08	RR
CZ501D	287 113 000 0000	40	265 113 000	G1	3.5	2.5	150	125	6.5	3.5	UX6	P
CZ504D	287 413 000 0000	00	265 413 000		5.5	13.5	250	200	40	3.5	UX6	P
D1	123 000 000 0000	90	123 000 000	D1	4				5		B3G	R
D1	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
D1	842 300 000 0000	00	642 300 000		4	1	40		1	0.8	B4	T
D1C	284 230 000 0000	00	264 230 000		1.2	5	135		2	0.6	5AA	T
D2	842 300 000 0000	00	642 300 000		4	6	100		2.2	0.2	B4	T
D2C	284 230 000 0000	00	264 230 000		1.2	7.5	135		3	1.2	5AA	T
D2M9	192 310 X00 0000	00	182 310 900		6.3				5		B7G	DD
D3A	141 230 817 0000	00	141 230 615		6.3	1.2	200	150	22	36	B9A	P
D3F	141 230 817 0000	00	141 23* 615		1.2	3	150	60	1.7	0.6	B9A	P
D4	842 310 000 0000	00	642 310 000		4	3	200		4	3.3	B5	T
D13U	023 100 080 0000	40	023 100 060	G1	13	5	250		6	2.5	8SC	T
D41	9X2 310 000 0000	00	892 310 000		4						B5	DD
D42	912 300 000 0000	00	812 300 000		4				15		B4	D
D43	012 300 000 0000	90	012 300 000	D1	4				15		B5	D
D61	289 174 130 0000	00	268 154 130		6.3	2	250	125	5	1.8	38A	DP
D63	029 1X0 310 0000	00	028 190 310		6.3				2		A08	DD
D77	1X2 310 900 0000	00	192 310 800		6.3				5		B7G	DD
D105	284 300 000 0000	00	264 300 000		1	18	150		8	2	UX4	T
D105	842 300 000 0000	00	642 300 000		1	18	150		8	2	B4	T
D110	284 300 000 0000	00	264 300 000		4	40	250		40	2.7	UX4	T
D110	842 300 000 0000	00	642 300 000		4	40	250		40	2.7	B4	T
D121	289 174 130 0000	00	268 154 130		12.5	2	200	90	5	2	38A	DP
D143	842 370 000 0000	00	642 350 000		1	1	100	150	12	1.2	B5	P
D152	1X2 310 900 0000	00	192 310 800		6.3						B7G	RR
D210	842 300 000 0000	00	642 300 000		2	3	150		3.5	1.2	B4	T
D210SW	803 200 000 0000	40	603 200 000	G1	2	4.5	150		2.4	1.3	B4	T
D243	842 370 000 0000	00	642 350 000		2.5	27	300	200	20	2	B5	P
D400	9X2 310 000 0000	00	892 310 000		4						B5	DD
D401	X02 310 000 0000	90	902 310 000	D1	4				5		B4	DD
D404	384 200 000 0000	00	364 200 000		4	40	250		40	2.7	UX4	T
D404	842 300 000 0000	00	642 300 000		4	40	250		40	2.7	B4	T
D410	842 300 000 0000	00	642 300 000		4	3	150		3.5	0.5	B4	T
D418	102 300 000 0000	90	102 300 000	D1	4						B4	D
D604	023 191 X10 0000	00	023 181 910		6.3						8SC	DD
DA	000 231 800 0000	40	000 231 600	G1	13	2.6	200		3.7	2.2	B7	T
DA1	842 300 000 0000	00	642 300 000		2	1	40		0.3	0.4	Sm4	T
DA2	842 300 000 0000	00	642 300 000		2	2.1	40		1.2	0.5	Sm4	T
DA3	842 300 000 0000	00	642 300 000		2	2.8	40		1.8	0.6	Sm4	T
DA30	842 300 000 0000	00	642 300 000		4(5)	70	300		60	3.5	B5	T
DA42	214 300 000 0000	80	214 300 000	A1	7.5		400			3	B4	T
DA101	200 900 300 0000	00	200 800 300		1.2						B7G	D
DA406	742 300 000 0000	80	642 300 000	A1	4	2.5	150	75	3	0.8	B4	P
DAC1	023 009 080 0000	40	023 008 060	G1	1.4		90		0.1	0.3	8SC	DT

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	VCM163 Tester only: TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4: TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
DAC21	208 009 030 0000	40	206 008 030	G1	1.4		100		0.7	0.4	A08	DT
DAC22	284 009 030 0000	00	264 008 030		1.2		90		0.3	0.3	B8G	DT
DAC25	284 229 230 0000	00	264 228 230		1.2		150		0.6	0.3	A08	DT
DAC31	038 090 200 0000	40	036 080 200	G1	1.4		90		0.4	0.3	A08	DT
DAC32	038 090 200 0000	40	036 080 200	G1	1.4		90		0.1	0.3	A08	DT
DAF1	902 382 470 0000	00	802 362 450		1.2		150	60	1.4		F8	DP
DAF11	902 382 470 0000	00	802 362 450		1.2		90	50	0.8	0.5	F8	DP
DAF40	289 374 230 0000	00	268 354 230		1.4		75	75	0.8	0.7	B8A	DP
DAF70	804 239 070 0000	00	604 238 050		1.2		60	60	0.8	0.4	B8D	DP
DAF91	209 784 300 0000	00	208 564 300		1.4	1	90	90	2	0.7	B7G	DP
DAF92	287 904 300 0000	00	265 804 300		1.4	1	90	90	2	0.7	B7G	DP
DAF96	209 784 300 0000	00	2*8 564 300		1.4	1.5	60	60	0.2	0.2	B7G	DP
DAF191	209 784 300 0000	00	2*8 564 300		1.4		60	60	2.2	0.7	B7G	DP
DAF961	209 784 300 0000	00	208 564 300		1.2	0	60	60	2.2	0.7	B7G	DP
DAS1	742 300 000 0000	80	542 300 000	A	2	2.7	150	125	1.5	0.6	Sm4	P
DB	548 230 800 0000	00	446 230 700		25		250		40		B7	TT
DB3	843 200 000 0000	00	643 200 000		1.5	2.8	40		1.8	0.6	Sm4	T
DB32	182 311 X00 0000	00	162 311 900		6.3				5		B7G	DD
DBC21	208 0X9 030 0000	40	206 098 030	G1	1.4	1.5	150		1.6	0.9	A08	DDT
DBC25	209 X04 830 0000	00	208 904 630		1.2	1.5	150		1.6	0.9	B8B	DDT
DBC31	028 X90 300 0000	40	026 980 300	G1	1.4	1.5	150		1.6	0.9	A08	DDT
DBS1	743 200 000 0000	80	543 200 000	A1	1.5	2.7	120	60	1.5	0.6	Sm4	P
DC2/HLDD	90X 231 800 0000	40	809 231 600	G1	25	1	200			2	B7	DDT
DC2P	842 310 000 0000	00	642 310 000		35	13.5	200		17	3.7	B5	T
DC2/Pen	047 231 800 0000	00	045 231 600		35	10	250	200	30	2.5	B7	P
DC2/Pen	842 310 000 0000	70	642 310 000	G2	35	10	250	200	30	2.5	B5	P
DC2SG	742 310 000 0000	80	542 310 000	A	20	1	200	75	5.5	1.8	B5	P
DC2SGVM	742 310 000 0000	80	542 310 000	A1	20	2	200	60	5.8	1.5	B5	P
DC3HL	842 310 000 0000	00	642 310 000		25	1	90		0.3	0.4	B5	T
DC11	802 302 400 0000	00	602 302 400		1.2	2.5	90		2	1	F8	T
DC25	280 024 030 0000	00	260 024 030		1.2	3.5	100		1.8	0.8	B8B	T
DC70	400 230 080 0000	00	400 230 060		1.2	4.5	150		14.5	3.7	B8D	T
DC80	402 230 080 0000	00	402 230 060		1.2	3.5	150		20	3.5	B9A	T
DC90	288 044 300 0000	00	266 044 300		1.4	3	90		3	1.1	B7G	T
DC93	204 038 200 0000	00	204 036 200		1.4	5	100		10	2.4	B7G	T
DC96	288 044 300 0000	00	266 044 300		1.4	2.5	90		2.1	1	B7G	T
DC193	204 038 200 0000	00	2*4 *36 200		1.4	5	100		10	2.4	B7G	T
DCC90	285 348 200 0000	00	274 346 200		1.4	2.5	90		3.7	1.8	B7G	TT
DCH1	208 740 310 0000 208 750 030 0000	50 50	207 540 630	G1	1.4		60 150	 125	2.1 1	1.4 1	A08	TH
DCH11	842 382 570 0000 052 382 570 0000	00 00	642 273 450		1.2	4	90 150	 60	0.8 1		F8	TH
DCH21	208 740 830 0000 208 750 030 0000	50 50	207 540 630	G1	1.4		60 90	 60	2.1 1	1.4	A08	TH
DCH22	288 475 030 0000 280 575 030 0000	00 00	276 454 030		1.2		60 90	 50	1.4 0.7		A08	TH
DCH25	288 475 230 0000 280 575 230 0000	00 00	276 454 030		1.4		60 90	 60	2 1	1.3	A08	TH
DCH31	028 748 300 0000 028 750 300 0000	50 50	027 546 300	G1	1.4		60 90	 60	2.1 1	1.4 1.4	A08	TH
DC/HL	842 310 000 0000	00	642 310 000		6.3	1	100			3	B5	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only		PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
DC/P	842 310 000 0000	00	642 310 000		8	1	200			4.5	B5	T
DC/SG	742 310 000 0000	80	542 310 000	A1	6.3		150	75		2.7	B5	P
DD4	9X2 310 000 0000	00	892 310 000		4				0.8		B5	DD
DD4D	0X1 231 900 0000		092 231 800		4				4		B7	DD
DD6	9X2 310 000 0000	00	892 310 000		6.3						B5	DD
DD6	1X2 310 900 0000	00	192 310 800		6.3				9		B7G	DD
DD6DS	023 190 X10 0000	00	023 180 910		6.3				9		8SC	DD
DD6G	1X2 310 900 0000	00	192 310 800		6.3						B7G	DD
DD13	9X2 310 000 0000	00	892 310 000		13				5		B5	DD
DD41	21X 090 130 0000	00	219 080 130		4				5		M08	RR
DD101	21X 090 130 0000	00	219 080 130		10						M08	DD
DD207	9X2 300 000 0000	00	892 300 000		2						B4	DD
DD465	X02 310 000 0000	90	902 310 000	D1	4						B5	DD
DD620	9X2 310 000 0000	00	892 310 000		6.3				1		B5	DD
DD818	9X2 310 000 0000	00	892 310 000		8						B5	DD
DD960	204 038 200 0000	00	204 036 200		1.4	3	60		9	2.4	B7G	T
DDA1	9X2 310 000 0000	00	892 310 000		4						B5	DD
DDD11	852 302 480 0000	00	742 302 460		1.2	4.5	150		1.5	1.0	F8	TT
DDD25	208 548 030 0000	00	206 447 030		1.4	1.5	100		3.5	1.2	A08	TT
DDL4	9X2 310 000 0000	00	892 310 000		4				5		B5	RR
DDP48	X89 231 700 0000	40	968 231 500	G1	4	5	250	250	36	8	B7	DDP
DDP4M	X19 238 700 0000	40	918 236 500	G1	4	5	250	250	36	8	B7	DDP
DD/Pen	94X 231 700 0000	80	849 231 500	A	4	2.5	200	100	5	2.7	B7	DDP
DDPP48	98X 231 700 0000	40	869 231 500	G1	4	5	250	250	36	10	B7	DDP
DDPP48S	023 19X 780 0000	40	023 189 560	G1	4	5	250	250	36	10	8SC	DDP
DDPP4M	98X 231 700 0000	40	869 231 500	G1	4(5)	5	250	250	36	10	B7	DDP
DDPP68	X89 231 700 0000	40	968 231 500	G1	6.3	6	250	250	36	9.5	B7	DDP
DDPP68S	023 19X 780 0000	40	023 189 560	G1	6.3	5	250	250	36	10	8SC	DDP
DDPP39	X89 231 700 0000	40	968 231 500	G1	39	8	200	200	45	8.5	B7	DDP
DDPP39M	X19 238 700 0000	40	918 236 500	G1	39	8	200	200	45	8.5	B7	DDP
DDPP39S	023 1X9 780 0000	40	023 198 560	G1	44	8	200	200	45	8.5	8SC	DDP
DDR2	278 101 403 0000	00	256 101 403		6.3	5	250	250	40	12	B9G	P
DDR3	912 390 000 0000	00	812 380 000		6.3				60		B7G	R
DDR7	412 380 700 0000	00	412 360 500		6.3	12.5	250	250	16	2.6	B7G	P
DDT	X09 231 800 0000	40	908 231 600	G1	4	3	200		3.4	2.4	B7	DDT
DDT2	892 3X0 000 0000	40	682 390 000	G1	2	3	150		1	1.4	B5	DDT
DDT2B	892 3X0 000 0000	40	682 390 000	G1	2	4.5	150		2.5	1	B5	DDT
DDT2BS	023 09X 080 0000	40	023 089 060	G1	2	4.5	150		2.5	1	8SC	DDT
DDT4	90X 231 800 0000	40	809 231 600	G1	4	3	150			2.5	B7	DDT
DDT4(S)	X09 231 800 0000	40	908 231 600	G1	4	5	200		3	3.6	B7	DDT
DDT4(S)	023 1X9 080 0000	40	023 198 060	G1	4	5	250		4	3.6	8SC	DDT
DDT6	90X 231 800 0000	40	809 231 600	G1	6.3	5.5	250		4	2	B7	DDT
DDT6S	023 19X 080 0000	40	023 189 060	G1	6.3	5.5	250		5	2	8SC	DDT
DDT13	X09 321 800 0000	40	908 321 600	G1	13	4	200		5	2	B7	DDT
DDT13S	023 19X 080 0000	40	023 189 060	G1	13	5	200		4	3.6	8SC	DDT
DDT16	90X 231 800 0000	40	809 231 600	G1	16	3	200		5	2.5	B7	DDT
DDT213	90X 231 800 0000	40	809 231 600	G1	13	4	200		5	2.2	B7	DDT
DDT215	892 3X0 000 0000	40	682 390 000	G1	2	3	150		3	1.6	B5	DDT
DDT220	892 3X0 000 0000	40	682 390 000	G1	2.5	4.5	150		2.5	1	B5	DDT
DE1	284 130 000 0000	00	264 130 000		2.5	21	250		5.2	1	UX5	T

VALVE TYPE NUMBER	PIN CONNECTIONS				CHARACTERISTICS						BASE	VALVE CLASS
	VCM163 Tester only		CT160, VT160 VCM Mk 1,2,3 & 4		V_h	V_{g1}	V_a	V_{g2}	I_a	gm mA/V		
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V	V	V	V	mA	†Ra MΩ		
DE5	290 300 000 0000	00	280 300 000		2.5				120		UX4	R
DET19	205 140 300 0000	88	204 140 300	A1/A2	6.3		300		25	2.1	UX7	TT
DET20	020 000 310 0000	84	020 000 310	A1/G1	6.3	5.5	250		12	3	A08	T
DF1	032 000 780 0000	40	032 000 560	G1	1.4		90	90	1.2	0.7	8SC	P
DF11	802 302 470 0000	00	602 302 450		1.2		90	50	0.9	0.6	F8	P
DF16	874 230 000 0000	00	654 230 000		0.6		20	20	0.3	0.3	B5A	P
DF22	208 701 030 0000	40	206 501 030	G1	1.4	1.5	90	90	1.4	1.1	A08	P
DF23	287 114 130 0000	00	265 114 130		1.2	1.5	90	60	0.6	0.6	A08	P
DF25	287 114 130 0000	00	265 114 130		1.2	0.5	150	60	1	0.6	A08	P
DF26	287 114 130 0000	00	265 114 130		1.2	1.1	150	90	1.2	0.3	A08	P
DF32	028 710 300 0000	40	026 510 300	G1	1.4	1.5	90	90	1.4	1.1	A08	P
DF33	038 700 200 0000	40	036 500 200	G1	1.4	0.5	90	90	0.8	0.7	A08	P
DF51	742 300 000 0000	80	542 300 000	A1	1.5		40	12	1.1	0.1	9M4	P
DF61	872 430 000 0000	00	652 430 000		1.2	1	60	60	0.9	0.8	B5A	P
DF62	872 430 000 0000	00	652 430 000		1.2	1	90	90	7.4	2	B5A	P
DF63	872 430 000 0000	00	652 430 000		1.2	2.5	90	90	1.2	0.4	B5A	P
DF70	040 230 870 0000	00	*4* 23* 650		0.6		40	40	0.4	0.2	B8D	P
DF72	040 230 870 0000	00	*40 230 650		1.2	0	60	60	1.7	1	B8D	P
DF73	040 230 870 0000	00	*40 230 650		1.2		90	75	1.7	0.8	B8D	P
DF91	287 024 300 0000	00	265 024 300		1.4	0	90	75	3.5	0.9	B7G	P
DF92	287 024 300 0000	00	265 024 300		1.4	2	90	60	1.9	0.7	B7G	P
DF95	287 024 300 0000	00	265 024 300		1.4	1	90	75	3.7	1	B7G	P
DF96	287 024 300 0000	00	265 *24 300		1.4	0.8	75	75	1.4	0.6	B7G	P
DF97	287 224 300 0000	00	265 224 300		1.4		60	60	1.7	0.8	B7G	P
DF161	028 710 300 0000	40	026 510 300	G1	0.7		20	20	0.3	0.8	A08	P
DF167	873 420 000 0000	00	653 420 000		0.6		20	20	0.1		B5A	P
DF191	287 024 300 0000	00	265 *24 300		1.4		60	60	4.2	1	B7G	P
DF668	872 430 000 0000	00	652 430 000		1.2	1.6	90	90	5.7	2.3	B5A	P
DF669	872 430 000 0000	00	652 430 000		1.2	0	60	60	1.8	1.1	B5A	P
DF904	287 024 300 0000	00	265 *24 300		1.4	0	90	90	1.6	0.9	B7G	P
DF906	287 304 300 0000	00	265 3*4 300		1.4	0	40	40	3	1.7	B7G	P
DF961	287 024 300 0000	00	265 024 300		1.2	0	60	60	3.4	0.8	B7G	P
DFF50	248 778 530 0000	00	246 557 430		1.4	1.1	20	20	2.2	1.2	A08	PP
DFF51	248 778 530 0000	00	246 557 430		1.4	0	20	20	2.1	0.7	A08	PP
DFF101	834 782 500 0000	00	634 572 400		1.4		40	40	1	0.2	B7G	PP
DG210	842 370 000 0000	00	642 350 000		2	1.5	100	20	1	1	B5	P
DH	842 310 000 0000	00	642 310 000		16	3	200		6	3.7	B5	T
DH30	X09 231 800 0000	40	908 231 600	G1	13	2	200		2.8	4.5	B7	DDT
DH42	X09 231 800 0000	40	908 231 600	G1	4	3	250		1.1	1.2	B7	DDT
DH63	028 9X0 310 0000	40	026 890 310	G1	6.3	3	250		1.1	1.2	A08	DDT
DH73	028 9X0 310 0000	40	026 890 310	G1	6.3	3	250		4.5	2	A08	DDT
DH74	028 9X0 310 0000	40	026 890 310	G1	13	3	250		1.1	1.2	A08	DDT
DH77	412 39X 800 0000	00	412 389 600		6.3	3	250		1	1.2	B7G	DDT
DH81	284 0X9 130 0000	00	264 *98 130		6.3	3	250		1	1.2	B8B	DDT
DH101	284 0X9 130 0000	00	264 *98 130		19	3	250		1	1.2	B8B	DDT
DH107	412 39X 800 0000	00	412 389 600		19	3	250		1	1.2	B7G	DDT
DH109	YX1 239 148 0000	00	191 238 146		28	2.3	200		1	1.4	B9A	DDDT
DH118	284 09X 130 0000	00	264 089 130		13	1	100		0.8	1.4	B8A	DDT
DH119	841 239 0X0 0000	00	641 238 09*		13	0.7	100		0.8	1.4	B9A	DDT
DH142	284 0X9 130 0000	00	264 098 130		14	1.6	200		1.5	1.6	B8A	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
DH147	028 9X0 310 0000	40	026 890 310	G1	6.3	5.5	250		5	2	A08	DDT
DH149	284 1X9 130 0000	00	264 198 130		6.3	1	250		1.3	1	B8A	DDT
DH150	284 0X9 130 0000	00	264 098 130		6.3	3	250		10	1.3	B8A	DDT
DH718	284 09X 130 0000	00	264 089 130		6.3	3	250		1	1.3	B8A	DDT
DH719	X91 23Y 148 0000	00	981 23† 146		6.3	3	250		1	1.3	B9A	DDDT
DHD	X09 231 800 0000	40	908 231 600	G1	16	3.2	200		3.2	2.2	B7	DDT
DHL	842 310 000 0000	00	642 310 000		16	1.5	150		3.8	4.5	B5	T
DK1	023 084 780 0000	40	023 064 560	G1	1.4		90	50	1.8	0.5	8SC	H
DK21	208 740 830 0000	40	206 540 630	G1	1.4	2	60	60	4.5	1.4	A08	H
DK31	02X 748 300 0000	00	027 546 300	G1	1.4	1 1	75 150	60 90			A08	TH
DK32	038 748 200 0000	40	036 546 200	G1	1.4	0	90	45	0.6	0.25	A08	H
DK40	287 474 030 0000	00	265 454 030		1.4	2	75	75	0.9	0.7	B8A	O
DK91	288 424 300 0000	00	266 424 300		1.4	4	75		4.5	1.2	B7G	H
DK92	288 484 300 0000	00	266 464 300		1.4	4	60		4	1.2	B7G	H
DK96	287 481 300 0000	00	265 401 300		1.4	1.5	75	50	1	0.4	B7G	H
DK192	287 474 300 0000	00	265 454 300		1.4		60	60			B7G	H
DL	842 310 000 0000	00	642 310 000		16	8	200		25	4.5	B5	T
DL1	023 004 780 0000	00	023 004 560		1.4	3	90	90	4	1.2	8SC	P
DL2	032 004 780 0000	00	032 004 560		1.4	7.5	90	90	7.5	1.5	8SC	P
DL11	802 302 470 0000	00	602 302 450		1.2	4.4	90	90	3.7	1	F8	P
DL21	208 740 030 0000	00	206 540 030		1.4	3	90	90	4	1.3	A08	P
DL22	287 004 330 0000	00	265 004 330		1.2	4	150	125	5	1.6	A08	P
DL25	287 204 330 0000	00	265 204 330		1.2	4.7	150	125	4.5	2.1	A08	P
DL29	287 004 320 0000	00	265 004 320		1.4	4.5	90	90	9.5	2.4	B8G	P
DL31	038 740 200 0000	00	036 540 200		1.4	3	90	90	4	1.2	A08	P
DL33	038 740 320 0000	00	036 540 320		1.4	4.5	90	90	9.5	2.2	A08	P
DL35	038 740 200 0000	00	036 540 200		1.4	7.5	90	90	7.5	1.5	A08	P
DL36	038 740 200 0000	00	036 540 200		1.4	4.5	90	90	9.5	2.2	A08	P
DL41	380 074 220 0000	00	36* 054 220		1.4	5.8	150	125	5	1.3	B8A	P
DL63	028 9X0 310 0000	40	026 890 310	G1	6.3	3	250		4.2	1.6	A08	DDT
DL64	872 430 000 0000	00	652 430 000		1.2	1.5	20	20	0.2	0.2	B5A	P
DL65	387 420 000 0000	00	365 420 000		1.2	0.2	20	20	0.5	0.4	B5A	P
DL66	873 420 000 0000	00	653 420 000		1.2	1.4	20	20	0.3	0.3	B5A	P
DL67	873 420 000 0000	00	653 420 000		1.2	0.2	20	20	0.5	0.4	B5A	P
DL68	873 420 000 0000	00	653 420 000		1.2	2.2	20	20	0.6	0.4	B5A	P
DL69	872 430 000 0000	00	652 430 000		1.2	2.5	90	90	1.7	0.8	B5A	P
DL70	040 230 870 0000	00	*4* 23* 650		1.2	7.5	150	90	7.5	1.9	B8D	P
DL71	040 230 870 0000	00	*4* 23* 650		1.2	1.2	40	40	0.6	0.5	B8D	P
DL72	040 230 870 0000	00	*4* 23* 650		1.2	4.5	40	40	1.2	0.5	B8D	P
DL73	040 230 870 0000	00	*40 230 650		1.2	9	100	100	15	2.5	B8D	P
DL74	028 9X0 310 0000	40	026 890 310	G1	13	3	250		5.1	1.6	A08	DDT
DL75	040 230 870 0000	00	*40 230 650		1.2	2.5	90	90	1.7	0.8	B8D	P
DL82	284 0X9 130 0000	00	264 *98 130		6.3	3	250		5	1.4	B8B	DDT
DL91	284 728 300 0000	00	264 576 300		1.4	7	90	75	7.4	1.6	B7G	P
DL92	284 738 200 0000	00	264 536 200		1.4	7	90	75	7.4	1.6	B7G	P
DL93	387 428 300 0000	00	365 426 300		1.4	8.4	150	90	13.3	1.9	B7G	P
DL94	387 024 300 0000	00	365 024 300		1.4	4.5	90	90	9.5	2.1	B7G	P
DL95	284 738 200 0000	00	264 536 200		1.4	4.5	90	90	9.5	2.1	B7G	P
DL96	287 034 200 0000	00	265 034 200		1.4	5.2	90	90	5	1.4	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT180 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
DL98	724 332 800 0000	00	524 332 600		1.25	10	150	125	30	2.2	B7G	P
DL101	038 740 210 0000	00	036 540 210		1.4		100	100	10	2.5	B8A	P
DL145	284 0X9 130 0000	00	264 098 130		16	5.9	250		5	2.3	B8A	DDT
DL161	874 230 000 0000	00	654 230 000		1.4		20	20	0.5	0.5	B5A	P
DL167	873 420 000 0000	00	653 420 000		1.2		20	20	0.5	1.5	B5A	P
DL192	284 738 200 0000	00	264 536 200		1.4	7	60	60	7	1.5	B7G	P
DL193	287 438 200 0000	00	265 436 200		1.4	7.5	100	60	9.5	2.9	B7G	P
DL620	873 420 000 0000	00	653 420 000		1.2	6.5	60	60	3.1	0.6	B5A	P
DL650	873 420 000 0000	00	653 420 000		1.2	0	20	20	0.4	0.4	B5A	P
DL907	387 004 200 0000	00	365 004 200		1.4	5.5	150	125	15	3.1	B7G	P
DL962	284 738 200 0000	00	264 536 200		1.4	7	60	60	7	1.5	B7G	P
DL963	287 438 200 0000	00	265 436 200		1.2	7.5	150	60	10	2.2	B7G	P
DLL21	248 758 330 0000	00	246 547 330		1.4	8.7	150	125	1		A08	PP
DLL25	048 758 230 0000	00	046 547 230		1.4	9.4	150	125	17		B8G	PP
DLL31	328 458 270 0000	00	326 447 250		1.4	5	90	90	3		A08	PP
DLL101	284 785 300 0000	00	264 574 300		1.4	7	90	60	8.2	1.1	B7G	PP
DLL102	284 785 300 0000	00	264 574 300		1.4		40	40	1.3	0.5	B7G	PP
DLP51	023 004 780 0000	10	023 004 560	C	4	17	250	250	36	2.5	8SC	P
DM21	028 740 030 0000	00	026 540 030		1.4		90	90	0.03	†2.0	A08	TI
DM70	400 230 080 0000	00	4*0 230 060		1.4	23	200	0	0.1	†1.0	B8D	TI
DM71	400 230 080 0000	00	4*0 23* 060		1.4	23	200	0	0.1	†1.0	B8D	TI
DN41	X89 231 700 0000	40	968 231 500	G1	4	3.3	250	200	32	10	B7	DDP
DN143	284 7X9 130 0000	00	264 598 130		6.3	6.2	250	275	44	9.5	B8B	DDP
D024	842 300 000 0000	00	642 300 000		4	40	400		63	7.5	B4	T
D025	842 300 000 0000	00	642 300 000		6.3	75	300		60	3.7	B4	T
D026	842 300 000 0000	00	642 300 000		4	92	400		63	3.8	B4	T
D030	842 300 000 0000	00	642 300 000		4	100	400		60	6.9	B4	T
D042	X19 238 700 0000	40	918 236 500	G1	4	6	250	250	36	9.5	B7	DDP
DP	284 009 030 0000	00	264 008 030		16	7.5	200		25	6	A08	DT
DP5	842 370 000 0000	00	642 350 000		4	5	250	250	10	4	B5	P
DP7	023 004 780 0000	00	023 004 560		4	20	250	250	20	2.5	8SC	P
DP61	412 387 100 0000	00	412 365 100		6.3	8.5	200	125	7.7	5.1	B7G	P
DP495/6	98X 231 700 0000	40	869 231 500	G1	4	6.5	250	250	35	9.5	B7	DDP
DP4480	91X 238 700 0000	40	819 236 500	G1	44	8.4	200	200	46	8	B7	DDP
DP/Pen	047 231 800 0000	00	045 231 600		16	10	200	200	31	3.5	B7	P
DPT	047 213 800 0000	00	045 213 600		16	10	200	200	40	3.1	B7	P
DPT	642 310 000 0000	70	642 310 000	G2	16	10	200	200	40	3	B5	P
DS	742 310 000 0000	80	542 310 000	A1	16	1.5	200	75	2.1	1.1	B5	P
DS	000 231 800 0000	40	000 231 600	G1	13	3	200		4	2.5	B7	T
DSB	742 310 000 0000	80	542 310 000	A1	16	1	150	90	3.4	3.2	B5	P
DSPen	081 231 700 0000	40	061 231 500	G1	16	1.5	200	100	4	2.3	B7	P
DT7	842 300 000 0000	00	642 300 000		4	16	200		14	2	B4	T
DT141	90X 321 800 0000	40	809 321 600	G1	4	1	100			3	B7	DDT
DT215	023 09X 080 0000	40	023 089 060	G1	2	4.5	150		7.5	1	8SC	DDT
DT215	023 089 060 0000	40	682 390 000	G1	2	4.5	150		2.5	1.5	B5	DDT
DT436	90X 231 800 0000	40	809 231 600	G1	4	7	250		4	3.6	B7	DDT
DT436	023 1X9 080 0000	40	023 198 060	G1	4	7	250		4	7	8SC	DDT
DT1336	023 1X9 080 0000	40	023 198 060	G1	13	5	200		4	2	8SC	DDT
DTV1	90X 231 800 0000	40	809 231 600	G1	13	1	100			3	B7	DDT
DU1	802 300 000 0000	00	802 300 000		4				30		B4	R

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
CK545DX	873 420 000 0000	00	653 420 000		0.6	0.6	20	20			B5A	P
CK546	873 420 000 0000	00	653 420 000		1.2		20	20	0.4	0.4	B5A	P
CK1002	009 0X0 010 0000	00	008 090 010		6.3				30	3k	A08	CCR
CK1005	009 0X2 030 0000	00	008 092 030		6.3				30		A08	RR
CK1006	29X 300 000 0000	00	289 300 000		2				60		UX4	RR
CK1007	009 0X2 030 0000	00	008 092 030		1				60		A08	RR
CK1012	29X 300 000 0000	00	289 300 000		2				120		UX4	RR
CK1024	009 0X0 010 0000	00	008 090 010		6.3				60	3k	A08	CCR
CK1028	202 322 300 0000	90	202 322 300	D1	6.3				60		B7G	R
CK1091	200 900 300 0000	00	200 800 300		1.4						B7G	D
CK1216	882 345 100 0000	00	672 344 100		6.3		100		5	3.4	B7G	TT
CK5608	284 158 300 0000	00	264 147 300		2.5	6	200		6	2.4	UX7	TT
CK5639	412 183 710 0000	00	412 163 510		6.3		150	100	21	9	B8D	P
CK5654	412 387 100 0000	00	412 365 100		6.3	2	150	125	7.5	5	B7G	P
CK5656	745 231 881 0000	00	544 231 671		6.3	2	150	125	15	5.8	B9A	PP
CK5670	214 808 513 0000	00	214 607 413		6.3		150		8.5	5.5	B9A	TT
CK5672	873 420 000 0000	00	653 420 000		1.2	6.5	60	60	3.2	0.6	B5A	P
CK5676	824 300 000 0000	00	624 300 000		1.2	5	150		4	1.6	B5A	T
CK5677	824 300 000 0000	00	624 300 000		1.2	5.5	150		1.9	0.8	B5A	T
CK5678	872 430 000 0000	00	652 430 000		1.2		60	60	1.8	1.1	B5A	P
CK5687	841 221 538 0000	00	641 221 437		6.3	2	150		36	11	B9A	TT
CK5692	481 581 230 0000	00	461 471 230		6.3	9	250		6.5	2.2	A08	TT
CK5693	128 458 310 0000	00	126 447 310		6.3	6	200	7		3.2	B8B	TT
CK5694	128 458 310 0000	00	126 447 310		6.3	6	300		7	3.2	A08	TT
CK5697	832 400 000 0000	00	632 400 000		0.6	3	12		0.2	0.1	B5A	T
CK5702	873 420 000 0000	00	653 420 000		6.3		150	125	7.5	5	B7G	P
CK5703	823 410 000 0000	00	623 410 000		6.3		150		9	5	B5A	T
CK5704	823 100 000 0000	00	623 100 000		6.3				5		B5A	D
CK5725	412 387 100 0000	00	412 365 100		6.3	2	150	125	5.2	3.2	B7G	P
CK5726	192 310 X00 0000	00	182 310 900		6.3				5		B7G	DD
CK5744	823 410 000 0000	00	623 410 000		6.3		250		4	4	B5A	T
CK5749	412 387 100 0000	00	412 365 100		6.3		250	100	11	4.4	B7G	P
CK5751	841 228 513 0000	00	641 227 413		6.3	3	250		1.0	1.2	B9A	TT
CK5755	814 225 183 0000	00	614 224 173		6.3	0.9	100		0.1	0.5	B9A	TT
CK5784	872 311 400 0000	00	652 311 400		6.3	2	150	125	5.2	3.2	B7F	P
CK5785	923 000 000 0000	00	823 000 000		1.2							D
CK5814	851 228 413 0000	00	741 226 413		6.3	8.5	250		10.5	2.2	B9A	TT
CK5829	912 13X 100 0000	00	812 139 100		6.3				5		B7F	DD
CK5851	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	5.5	1.6	B8D	P
CK5854	872 430 000 0000	00	652 430 000		1.2	2	40	40	0.8	0.5	B5A	P
CK5873	284 115 830 0000	00	264 114 730		6.3	3	150		9	2.9	B8D	TT
CK5875	872 430 000 0000	00	652 430 000		1.2		90	90	3.5	2.5	B5A	P
CK5881	028 740 310 0000	00	026 540 310		6.3	14	150	250	75	6.1	A08	P
CK5910	287 024 300 0000	00	265 024 300		1.4		90	90	1.6	0.9	B7G	P
CK9565	841 228 513 0000	00	641 227 413		6.3		150		8.2	6.5	B9A	TT
CK5967	824 335 280 0000	00	624 334 270		1.2		40		3	0.1	B8D	TT
CK5968	824 335 280 0000	00	624 334 270		1.2		40		0.7	1.3	B8D	TT
CK5969	247 887 530 0000	00	245 675 430		1.2	3	150	40	6	1.7	B8D	PP
CK5970	247 887 530 0000	00	245 675 430		1.2		40	40	3	1.8	B8D	PP
CK5971	842 430 000 0000	00	642 430 000		1.2		60		3.5	2.1	B5A	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
CK5972	872 430 000 0000	00	652 430 000		1.2		60	60	2.5	1.3	B5A	P
CK5975	814 230 000 0000	00	614 230 000		6.3		100		10	5.1	B5A	T
CK5995	902 310 000 0000	00	8*2 310 000		6.3				30		B5A	R
CK6005	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4.1	B7G	P
CK6021	842 113 580 0000	00	642 113 470		6.3		100		6.5	5.4	B8D	TT
CK6029	824 300 000 0000	00	624 300 000		1.2	4	90		11	2	B5A	T
CK6050	824 300 000 0000	00	624 300 000		1.2	5	150		4	1.6	B5A	T
CK6051	872 430 000 0000	00	652 430 000		1.2	4	40	40	3	1.2	B5A	P
CK6088	873 420 000 0000	00	653 420 000		1.2	1.2	40	40	0.7	0.6	B5A	P
CK6092	873 420 000 0000	00	653 420 000		1.2	4.5	40	40	1.4	0.6	B5A	P
CK6100	802 384 100 0000	00	602 364 100		6.3	8.5	250		10.5	2.2	B7G	T
CK6101	882 345 100 0000	00	672 344 100		6.3		100		9	6	B7G	TT
CK6110	912 0X3 100 0000	00	812 093 100		6.3						B8D	DD
CK6111	842 113 580 0000	00	642 113 470		6.3		100		8.5	5	B8D	TT
CK6112	842 113 580 0000	00	642 113 470		6.3		100		0.8	1.8	B8D	TT
CK6147	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	5.5	1.6	B8D	P
CK6152	814 230 000 0000	00	614 230 000		6.3		100		10	5.1	B5A	T
CK6186	412 387 100 0000	00	412 365 100		6.3		250	150	7	5	B7G	P
CK6201	841 228 513 0000	00	641 227 413		6.3		250		10	5.5	B9A	TT
CK6245	872 311 400 0000	00	652 311 400		6.3		20	30	2.5	3.3	B7G	P
CK6247	442 813 080 0000	00	442 613 060		6.3		250			2.6	B8D	T
CK6286	824 300 000 0000	00	624 300 000		1.2	2	60		6	2.1	B5A	T
CK6397	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	7.2	2	B8D	P
CK6414	851 228 413 0000	00	741 226 413		6.3		200		8	5.5	B9A	TT
CK6418	872 430 000 0000	00	652 430 000		1.2	1.2	20	20	0.2	0.3	B5A	P
CK6419	872 430 000 0000	00	652 430 000		0.6	0.6	12	12			B5A	P
CK6485	412 385 100 0000	00	412 365 100		6.3		300	150	10	9	B7G	P
CK6519	873 420 000 0000	00	653 420 000		1.2		20	20	0.4	0.4	B5A	P
CK6526	872 430 000 0000	00	652 430 000		1.2	6	100	100	6.5	1.9	B5A	P
CK6533	844 812 380 0000	00	644 612 360		6.3		150		0.9	1.7	B8D	T
CK6540	872 311 400 0000	00	652 311 400		6.3		150		7.5	5	B7G	P
CK6611	842 113 580 0000	00	642 113 470		6.3		100		8.5	5	B8D	TT
CK6612	842 113 580 0000	00	642 113 470		6.3		100		0.8	1.8	B8D	TT
CK6872	872 311 400 0000	00	652 311 400		6.3		150	125	7.7	4.1	B7G	P
CK6883	127 141 310 0000	80	125 141 310	A1	12.6	33	300	200	70	7	A08	P
CK7994	348 441 430 0000	00	346 441 430		6.3	1	100		13	18	B8D	T
CK7995	214 311 870 0000	00	214 311 650		6.3	1.6	150	150	8	13	B8D	P
CL1	023 100 780 0000	40	023 100 560	G1	13	14	200	200	25	2.5	8SC	P
CL2	023 100 780 0000	40	023 100 560	G1	24	15	100	100	50	3.8	8SC	P
CL4	023 100 780 0000	40	023 100 560	G1	33	8.5	200	200	45	8	8SC	P
CL6	023 100 780 0000	40	023 100 560	G1	35	9.5	200	100	45	8	8SC	P
CL33	028 740 310 0000	00	026 540 310		33	8.5	200	200	45	8	A08	P
CO241	028 700 300 0000	40	026 500 300	G1	2	1	150	75	3.5	1.4	A08	P
CO243	028 458 300 0000	00	026 447 300		2		150		4	1.8	A08	TT
CO244	028 740 300 0000	00	026 540 300		2	2.5	150	125	4.1	1.8	A08	P
CO257	021 470 300 0000	80	021 450 300	A	2	3	100	100	6	2.5	A08	P
CO268	028 740 300 0000	00	026 540 300		1.8	6	150	125	10	2	A08	P
CV TYPE NUMBERS	SEE PAGES 160 to 221 or 222 to 240											
CY1	023 100 090 0000	00	023 100 080		20				60		8SC	R
CY1C	903 210 000 0000	00	803 210 000		20				60		B5	R
CY2	123 1X0 090 0000	00	123 190 080		30				60		8SC	R

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
CY21	209 001 003 0000	00	208 001 003		25				120		B9A	R
CY31	020 090 310 0000	00	020 080 310		20				120		A08	R
CY32	02X 190 310 0000	00	029 180 310		30				60		A08	RR
CZ30	029 1X3 210 0000	00	028 193 210		80				60		A08	RR
CZ501D	287 113 000 0000	40	265 113 000	G1	3.5	2.5	150	125	6.5	3.5	UX6	P
CZ504D	287 413 000 0000	00	265 413 000		5.5	13.5	250	200	40	3.5	UX6	P
D1	123 000 000 0000	90	123 000 000	D1	4				5		B3G	R
D1	29X 300 000 0000	00	289 300 000		5				60		UX4	RR
D1	842 300 000 0000	00	642 300 000		4	1	40		1	0.8	B4	T
D1C	284 230 000 0000	00	264 230 000		1.2	5	135		2	0.6	5AA	T
D2	842 300 000 0000	00	642 300 000		4	6	100		2.2	0.2	B4	T
D2C	284 230 000 0000	00	264 230 000		1.2	7.5	135		3	1.2	5AA	T
D2M9	192 310 X00 0000	00	182 310 900		6.3				5		B7G	DD
D3A	141 230 817 0000	00	141 230 615		6.3	1.2	200	150	22	36	B9A	P
D3F	141 230 817 0000	00	141 23* 615		1.2	3	150	60	1.7	0.6	B9A	P
D4	842 310 000 0000	00	642 310 000		4	3	200		4	3.3	B5	T
D13U	023 100 080 0000	40	023 100 060	G1	13	5	250		6	2.5	8SC	T
D41	9X2 310 000 0000	00	892 310 000		4						B5	DD
D42	912 300 000 0000	00	812 300 000		4				15		B4	D
D43	012 300 000 0000	90	012 300 000	D1	4				15		B5	D
D61	289 174 130 0000	00	268 154 130		6.3	2	250	125	5	1.8	B8A	DP
D63	029 1X0 310 0000	00	028 190 310		6.3				2		A08	DD
D77	1X2 310 900 0000	00	192 310 800		6.3				5		B7G	DD
D105	284 300 000 0000	00	264 300 000		1	18	150		8	2	UX4	T
D105	842 300 000 0000	00	642 300 000		1	18	150		8	2	B4	T
D110	284 300 000 0000	00	264 300 000		4	40	250		40	2.7	UX4	T
D110	842 300 000 0000	00	642 300 000		4	40	250		40	2.7	B4	T
D121	289 174 130 0000	00	268 154 130		12.5	2	200	90	5	2	B8A	DP
D143	842 370 000 0000	00	642 350 000		1	1	100	150	12	1.2	B5	P
D152	1X2 310 900 0000	00	192 310 800		6.3						B7G	RR
D210	842 300 000 0000	00	642 300 000		2	3	150		3.5	1.2	B4	T
D210SW	803 200 000 0000	40	603 200 000	G1	2	4.5	150		2.4	1.3	B4	T
D243	842 370 000 0000	00	642 350 000		2.5	27	300	200	20	2	B5	P
D400	9X2 310 000 0000	00	892 310 000		4						B5	DD
D401	X02 310 000 0000	90	902 310 000	D1	4				5		B4	DD
D404	384 200 000 0000	00	364 200 000		4	40	250		40	2.7	UX4	T
D404	842 300 000 0000	00	642 300 000		4	40	250		40	2.7	B4	T
D410	842 300 000 0000	00	642 300 000		4	3	150		3.5	0.5	B4	T
D418	102 300 000 0000	90	102 300 000	D1	4						B4	D
D604	023 191 X10 0000	00	023 181 910		6.3						8SC	DD
DA	000 231 800 0000	40	000 231 600	G1	13	2.6	200		3.7	2.2	B7	T
DA1	842 300 000 0000	00	642 300 000		2	1	40		0.3	0.4	Sm4	T
DA2	842 300 000 0000	00	642 300 000		2	2.1	40		1.2	0.5	Sm4	T
DA3	842 300 000 0000	00	642 300 000		2	2.8	40		1.8	0.6	Sm4	T
DA30	842 300 000 0000	00	642 300 000		4(5)	70	300		60	3.5	B5	T
DA42	214 300 000 0000	80	214 300 000	A1	7.5		400			3	B4	T
DA101	200 900 300 0000	00	200 800 300		1.2						B7G	D
DA406	742 300 000 0000	80	542 300 000	A1	4	2.5	150	75	3	0.8	B4	P
DAC1	023 009 080 0000	40	023 008 060	G1	1.4		90		0.1	0.3	8SC	DT

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	VCM163 Tester only: TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4: TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
DAC21	208 009 030 0000	40	206 008 030	G1	1.4		100		0.7	0.4	A08	DT
DAC22	284 009 030 0000	00	264 008 030		1.2		90		0.3	0.3	B8G	DT
DAC25	284 229 230 0000	00	264 228 230		1.2		150		0.6	0.3	A08	DT
DAC31	038 090 200 0000	40	036 080 200	G1	1.4		90		0.4	0.3	A08	DT
DAC32	038 090 200 0000	40	036 080 200	G1	1.4		90		0.1	0.3	A08	DT
DAF1	902 382 470 0000	00	802 362 450		1.2		150	60	1.4		F8	DP
DAF11	902 382 470 0000	00	802 362 450		1.2		90	50	0.8	0.5	F8	DP
DAF40	289 374 230 0000	00	268 354 230		1.4		75	75	0.8	0.7	B8A	DP
DAF70	804 239 070 0000	00	604 238 050		1.2		60	60	0.8	0.4	B8D	DP
DAF91	209 784 300 0000	00	208 564 300		1.4	1	90	90	2	0.7	B7G	DP
DAF92	287 904 300 0000	00	265 804 300		1.4	1	90	90	2	0.7	B7G	DP
DAF96	209 784 300 0000	00	2*8 564 300		1.4	1.5	60	60	0.2	0.2	B7G	DP
DAF191	209 784 300 0000	00	2*8 564 300		1.4		60	60	2.2	0.7	B7G	DP
DAF961	209 784 300 0000	00	208 564 300		1.2	0	60	60	2.2	0.7	B7G	DP
DAS1	742 300 000 0000	80	542 300 000	A	2	2.7	150	125	1.5	0.6	Sm4	P
DB	548 230 800 0000	00	446 230 700		25		250		40		B7	TT
DB3	843 200 000 0000	00	643 200 000		1.5	2.8	40		1.8	0.6	Sm4	T
DB32	182 311 X00 0000	00	162 311 900		6.3				5		B7G	DD
DBC21	208 0X9 030 0000	40	206 098 030	G1	1.4	1.5	150		1.6	0.9	A08	DDT
DBC25	209 X04 830 0000	00	208 904 630		1.2	1.5	150		1.6	0.9	B8B	DDT
DBC31	028 X90 300 0000	40	026 980 300	G1	1.4	1.5	150		1.6	0.9	A08	DDT
DBS1	743 200 000 0000	80	543 200 000	A1	1.5	2.7	120	60	1.5	0.6	Sm4	P
DC2/HLDD	90X 231 800 0000	40	809 231 600	G1	25	1	200			2	B7	DDT
DC2P	842 310 000 0000	00	642 310 000		35	13.5	200		17	3.7	B5	T
DC2/Pen	047 231 800 0000	00	045 231 600		35	10	250	200	30	2.5	B7	P
DC2/Pen	842 310 000 0000	70	642 310 000	G2	35	10	250	200	30	2.5	B5	P
DC2SG	742 310 000 0000	80	542 310 000	A	20	1	200	75	5.5	1.8	B5	P
DC2SGVM	742 310 000 0000	80	542 310 000	A1	20	2	200	60	5.8	1.5	B5	P
DC3HL	842 310 000 0000	00	642 310 000		25	1	90		0.3	0.4	B5	T
DC11	802 302 400 0000	00	602 302 400		1.2	2.5	90		2	1	F8	T
DC25	280 024 030 0000	00	260 024 030		1.2	3.5	100		1.8	0.8	B8B	T
DC70	400 230 080 0000	00	400 230 060		1.2	4.5	150		14.5	3.7	B8D	T
DC80	402 230 080 0000	00	402 230 060		1.2	3.5	150		20	3.5	B9A	T
DC90	288 044 300 0000	00	266 044 300		1.4	3	90		3	1.1	B7G	T
DC93	204 038 200 0000	00	204 036 200		1.4	5	100		10	2.4	B7G	T
DC96	288 044 300 0000	00	266 044 300		1.4	2.5	90		2.1	1	B7G	T
DC193	204 038 200 0000	00	2*4 *36 200		1.4	5	100		10	2.4	B7G	T
DCC90	285 348 200 0000	00	274 346 200		1.4	2.5	90		3.7	1.8	B7G	TT
DCH1	[208 740 310 0000 208 750 030 0000	50 50]	207 540 630	G1	1.4	[	60 150	 125	2.1 1	1.4 1]	A08	TH
DCH11	[842 382 570 0000 052 382 570 0000	00 00]	642 273 450		1.2	[4	90 150	 60	0.8 1	]	F8	TH
DCH21	[208 740 830 0000 208 750 030 0000	50 50]	207 540 630	G1	1.4	[	60 90	 60	2.1 1	1.4]	A08	TH
DCH22	[288 475 030 0000 280 575 030 0000	00 00]	276 454 030		1.2	[	60 90	 50	1.4 0.7	]	A08	TH
DCH25	[288 475 230 0000 280 575 230 0000	00 00]	276 454 030		1.4	[	60 90	 60	2 1	1.3]	A08	TH
DCH31	[028 748 300 0000 028 750 300 0000	50 50]	027 546 300	G1	1.4	[	60 90	 60	2.1 1	1.4 1.4]	A08	TH
DC/HL	842 310 000 0000	00	642 310 000		6.3	1	100			3	B5	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
DC/P	842 310 000 0000	00	642 310 000		8	1	200			4.5	B5	T
DC/SG	742 310 000 0000	80	542 310 000	A1	6.3		150	75		2.7	B5	P
DD4	9X2 310 000 0000	00	892 310 000		4				0.8		B5	DD
DD4D	0X1 231 900 0000		092 231 800		4				4		B7	DD
DD6	9X2 310 000 0000	00	892 310 000		6.3						B5	DD
DD6	1X2 310 900 0000	00	192 310 800		6.3				9		B7G	DD
DD6DS	023 190 X10 0000	00	023 180 910		6.3				9		8SC	DD
DD6G	1X2 310 900 0000	00	192 310 800		6.3						B7G	DD
DD13	9X2 310 000 0000	00	892 310 000		13				5		B5	DD
DD41	21X 090 130 0000	00	219 080 130		4				5		M08	RR
DD101	21X 090 130 0000	00	219 080 130		10						M08	DD
DD207	9X2 300 000 0000	00	892 300 000		2						B4	DD
DD465	X02 310 000 0000	90	902 310 000	D1	4						B5	DD
DD620	9X2 310 000 0000	00	892 310 000		6.3				1		B5	DD
DD818	9X2 310 000 0000	00	892 310 000		8						B5	DD
DD960	204 038 200 0000	00	204 036 200		1.4	3	60		9	2.4	B7G	T
DDA1	9X2 310 000 0000	00	892 310 000		4						B5	DD
DDD11	852 302 480 0000	00	742 302 460		1.2	4.5	150		1.5	1.0	F8	TT
DDD25	208 548 030 0000	00	206 447 030		1.4	1.5	100		3.5	1.2	A08	TT
DDL4	9X2 310 000 0000	00	892 310 000		4				5		B5	RR
DDP4B	X89 231 700 0000	40	968 231 500	G1	4	5	250	250	36	8	B7	DDP
DDP4M	X19 238 700 0000	40	918 236 500	G1	4	5	250	250	36	8	B7	DDP
DD/Pen	94X 231 700 0000	80	849 231 500	A	4	2.5	200	100	5	2.7	B7	DDP
DDPP4B	98X 231 700 0000	40	869 231 500	G1	4	5	250	250	36	10	B7	DDP
DDPP4BS	023 19X 780 0000	40	023 189 560	G1	4	5	250	250	36	10	8SC	DDP
DDPP4M	98X 231 700 0000	40	869 231 500	G1	4(5)	5	250	250	36	10	B7	DDP
DDPP6B	X89 231 700 0000	40	968 231 500	G1	6.3	6	250	250	36	9.5	B7	DDP
DDPP6BS	023 19X 780 0000	40	023 189 560	G1	6.3	5	250	250	36	10	8SC	DDP
DDPP39	X89 231 700 0000	40	968 231 500	G1	39	8	200	200	45	8.5	B7	DDP
DDPP39M	X19 238 700 0000	40	918 236 500	G1	39	8	200	200	45	8.5	B7	DDP
DDPP39S	023 1X9 780 0000	40	023 198 560	G1	44	8	200	200	45	8.5	8SC	DDP
DDR2	278 101 403 0000	00	256 101 403		6.3	5	250	250	40	12	B9G	P
DDR3	912 390 000 0000	00	812 380 000		6.3				60		B7G	R
DDR7	412 380 700 0000	00	412 360 500		6.3	12.5	250	250	16	2.6	B7G	P
DDT	X09 231 800 0000	40	908 231 600	G1	4	3	200		3.4	2.4	B7	DDT
DDT2	892 3X0 000 0000	40	682 390 000	G1	2	3	150		1	1.4	B5	DDT
DDT2B	892 3X0 000 0000	40	682 390 000	G1	2	4.5	150		2.5	1	B5	DDT
DDT2BS	023 09X 080 0000	40	023 089 060	G1	2	4.5	150		2.5	1	8SC	DDT
DDT4	90X 231 800 0000	40	809 231 600	G1	4	3	150			2.5	B7	DDT
DDT4(S)	X09 231 800 0000	40	908 231 600	G1	4	5	200		3	3.6	B7	DDT
DDT4(S)	023 1X9 080 0000	40	023 198 060	G1	4	5	250		4	3.6	8SC	DDT
DDT6	90X 231 800 0000	40	809 231 600	G1	6.3	5.5	250		4	2	B7	DDT
DDT6S	023 19X 080 0000	40	023 189 060	G1	6.3	5.5	250		5	2	8SC	DDT
DDT13	X09 321 800 0000	40	908 321 600	G1	13	4	200		5	2	B7	DDT
DDT13S	023 19X 080 0000	40	023 189 060	G1	13	5	200		4	3.6	8SC	DDT
DDT16	90X 231 800 0000	40	809 231 600	G1	16	3	200		5	2.5	B7	DDT
DDT213	90X 231 800 0000	40	809 231 600	G1	13	4	200		5	2.2	B7	DDT
DDT215	892 3X0 000 0000	40	682 390 000	G1	2	3	150		3	1.6	B5	DDT
DDT220	892 3X0 000 0000	40	682 390 000	G1	2.5	4.5	150		2.5	1	B5	DDT
DE1	284 130 000 0000	00	264 130 000		2.5	21	250		5.2	1	UX5	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
DE5	290 300 000 0000	00	280 300 000		2.5				120		UX4	R
DET19	205 140 300 0000	88	204 140 300	A1/A2	6.3		300		25	2.1	UX7	TT
DET20	020 000 310 0000	84	020 000 310	A1/G1	6.3	5.5	250		12	3	A08	T
DF1	032 000 780 0000	40	032 000 560	G1	1.4		90	90	1.2	0.7	8SC	P
DF11	802 302 470 0000	00	602 302 450		1.2		90	50	0.9	0.6	F8	P
DF16	874 230 000 0000	00	654 230 000		0.6		20	20	0.3	0.3	B5A	P
DF22	208 701 030 0000	40	206 501 030	G1	1.4	1.5	90	90	1.4	1.1	A08	P
DF23	287 114 130 0000	00	265 114 130		1.2	1.5	90	60	0.6	0.6	A08	P
DF25	287 114 130 0000	00	265 114 130		1.2	0.5	150	60	1	0.6	A08	P
DF26	287 114 130 0000	00	265 114 130		1.2	1.1	150	90	1.2	0.3	A08	P
DF32	028 710 300 0000	40	026 510 300	G1	1.4	1.5	90	90	1.4	1.1	A08	P
DF33	038 700 200 0000	40	036 500 200	G1	1.4	0.5	90	90	0.8	0.7	A08	P
DF51	742 300 000 0000	80	542 300 000	A1	1.5		40	12	1.1	0.1	SM4	P
DF61	872 430 000 0000	00	652 430 000		1.2	1	60	60	0.9	0.8	B5A	P
DF62	872 430 000 0000	00	652 430 000		1.2	1	90	90	7.4	2	B5A	P
DF63	872 430 000 0000	00	652 430 000		1.2	2.5	90	90	1.2	0.4	B5A	P
DF70	040 230 870 0000	00	*4* 23* 650		0.6		40	40	0.4	0.2	B8D	P
DF72	040 230 870 0000	00	*40 230 650		1.2	0	60	60	1.7	1	B8D	P
DF73	040 230 870 0000	00	*40 230 650		1.2		90	75	1.7	0.8	B8D	P
DF91	287 024 300 0000	00	265 024 300		1.4	0	90	75	3.5	0.9	B7G	P
DF92	287 024 300 0000	00	265 024 300		1.4	2	90	60	1.9	0.7	B7G	P
DF95	287 024 300 0000	00	265 024 300		1.4	1	90	75	3.7	1	B7G	P
DF96	287 024 300 0000	00	265 *24 300		1.4	0.8	75	75	1.4	0.6	B7G	P
DF97	287 224 300 0000	00	265 224 300		1.4		60	60	1.7	0.8	B7G	P
DF161	028 710 300 0000	40	026 510 300	G1	0.7		20	20	0.3	0.8	A08	P
DF167	873 420 000 0000	00	653 420 000		0.6		20	20	0.1		B5A	P
DF191	287 024 300 0000	00	265 *24 300		1.4		60	60	4.2	1	B7G	P
DF668	872 430 000 0000	00	652 430 000		1.2	1.6	90	90	5.7	2.3	B5A	P
DF669	872 430 000 0000	00	652 430 000		1.2	0	60	60	1.8	1.1	B5A	P
DF904	287 024 300 0000	00	265 *24 300		1.4	0	90	90	1.6	0.9	B7G	P
DF906	287 304 300 0000	00	265 3*4 300		1.4	0	40	40	3	1.7	B7G	P
DF961	287 024 300 0000	00	265 024 300		1.2	0	60	60	3.4	0.8	B7G	P
DFF50	248 778 530 0000	00	246 557 430		1.4	1.1	20	20	2.2	1.2	A08	PP
DFF51	248 778 530 0000	00	246 557 430		1.4	0	20	20	2.1	0.7	A08	PP
DFF101	834 782 500 0000	00	634 572 400		1.4		40	40	1	0.2	B7G	PP
DG210	842 370 000 0000	00	642 350 000		2	1.5	100	20	1	1	B5	P
DH	842 310 000 0000	00	642 310 000		16	3	200		6	3.7	B5	T
DH30	X09 231 800 0000	40	908 231 600	G1	13	2	200		2.8	4.5	B7	DDT
DH42	X09 231 800 0000	40	908 231 600	G1	4	3	250		1.1	1.2	B7	DDT
DH63	028 9X0 310 0000	40	026 890 310	G1	6.3	3	250		1.1	1.2	A08	DDT
DH73	028 9X0 310 0000	40	026 890 310	G1	6.3	3	250		4.5	2	A08	DDT
DH74	028 9X0 310 0000	40	026 890 310	G1	13	3	250		1.1	1.2	A08	DDT
DH77	412 39X 800 0000	00	412 389 600		6.3	3	250		1	1.2	B7G	DDT
DH81	284 0X9 130 0000	00	264 *98 130		6.3	3	250		1	1.2	B8B	DDT
DH101	284 0X9 130 0000	00	264 *98 130		19	3	250		1	1.2	B8B	DDT
DH107	412 39X 800 0000	00	412 389 600		19	3	250		1	1.2	B7G	DDT
DH109	YX1 239 148 0000	00	†91 238 146		28	2.3	200		1	1.4	B9A	DDDT
DH118	284 09X 130 0000	00	264 089 130		13	1	100		0.8	1.4	B8A	DDT
DH119	841 239 0X0 0000	00	641 238 09*		13	0.7	100		0.8	1.4	B9A	DDT
DH142	284 0X9 130 0000	00	264 098 130		14	1.6	200		1.5	1.6	B8A	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
DH147	028 9X0 310 0000	40	026 890 310	G1	6.3	5.5	250		5	2	A08	DDT
DH149	284 1X9 130 0000	00	264 198 130		6.3	1	250		1.3	1	B8A	DDT
DH150	284 0X9 130 0000	00	264 098 130		6.3	3	250		10	1.3	B8A	DDT
DH718	284 09X 130 0000	00	264 089 130		6.3	3	250		1	1.3	B8A	DDT
DH719	X91 23Y 148 0000	00	981 23† 146		6.3	3	250		1	1.3	B9A	DDDT
DHD	X09 231 800 0000	40	908 231 600	G1	16	3.2	200		3.2	2.2	B7	DDT
DHL	842 310 000 0000	00	642 310 000		16	1.5	150		3.8	4.5	B5	T
DK1	023 084 780 0000	40	023 064 560	G1	1.4		90	50	1.8	0.5	8SC	H
DK21	208 740 830 0000	40	206 540 630	G1	1.4	2	60	60	4.5	1.4	A08	H
DK31	02X 748 300 0000	00	027 546 300	G1	1.4	[1 1	75 150	60 90			A08	TH
DK32	038 748 200 0000	40	036 546 200	G1	1.4	0	90	45	0.6	0.25	A08	H
DK40	287 474 030 0000	00	265 454 030		1.4	2	75	75	0.9	0.7	B8A	O
DK91	288 424 300 0000	00	266 424 300		1.4	4	75		4.5	1.2	B7G	H
DK92	288 484 300 0000	00	266 464 300		1.4	4	60		4	1.2	B7G	H
DK96	287 481 300 0000	00	265 401 300		1.4	1.5	75	50	1	0.4	B7G	H
DK192	287 474 300 0000	00	265 454 300		1.4		60	60			B7G	H
DL	842 310 000 0000	00	642 310 000		16	8	200		25	4.5	B5	T
DL1	023 004 780 0000	00	023 004 560		1.4	3	90	90	4	1.2	8SC	P
DL2	032 004 780 0000	00	032 004 560		1.4	7.5	90	90	7.5	1.5	8SC	P
DL11	802 302 470 0000	00	602 302 450		1.2	4.4	90	90	3.7	1	F8	P
DL21	208 740 030 0000	00	206 540 030		1.4	3	90	90	4	1.3	A08	P
DL22	287 004 330 0000	00	265 004 330		1.2	4	150	125	5	1.6	A08	P
DL25	287 204 330 0000	00	265 204 330		1.2	4.7	150	125	4.5	2.1	A08	P
DL29	287 004 320 0000	00	265 004 320		1.4	4.5	90	90	9.5	2.4	B8G	P
DL31	038 740 200 0000	00	036 540 200		1.4	3	90	90	4	1.2	A08	P
DL33	038 740 320 0000	00	036 540 320		1.4	4.5	90	90	9.5	2.2	A08	P
DL35	038 740 200 0000	00	036 540 200		1.4	7.5	90	90	7.5	1.5	A08	P
DL36	038 740 200 0000	00	036 540 200		1.4	4.5	90	90	9.5	2.2	A08	P
DL41	380 074 220 0000	00	36* 054 220		1.4	5.8	150	125	5	1.3	B8A	P
DL63	028 9X0 310 0000	40	026 890 310	G1	6.3	3	250		4.2	1.6	A08	DDT
DL64	872 430 000 0000	00	652 430 000		1.2	1.5	20	20	0.2	0.2	B5A	P
DL65	387 420 000 0000	00	365 420 000		1.2	0.2	20	20	0.5	0.4	B5A	P
DL66	873 420 000 0000	00	653 420 000		1.2	1.4	20	20	0.3	0.3	B5A	P
DL67	873 420 000 0000	00	653 420 000		1.2	0.2	20	20	0.5	0.4	B5A	P
DL68	873 420 000 0000	00	653 420 000		1.2	2.2	20	20	0.6	0.4	B5A	P
DL69	872 430 000 0000	00	652 430 000		1.2	2.5	90	90	1.7	0.8	B5A	P
DL70	040 230 870 0000	00	*4* 23* 650		1.2	7.5	150	90	7.5	1.9	B8D	P
DL71	040 230 870 0000	00	*4* 23* 650		1.2	1.2	40	40	0.6	0.5	B8D	P
DL72	040 230 870 0000	00	*4* 23* 650		1.2	4.5	40	40	1.2	0.5	B8D	P
DL73	040 230 870 0000	00	*40 230 650		1.2	9	100	100	15	2.5	B8D	P
DL74	028 9X0 310 0000	40	026 890 310	G1	13	3	250		5.1	1.6	A08	DDT
DL75	040 230 870 0000	00	*40 230 650		1.2	2.5	90	90	1.7	0.8	B8D	P
DL82	284 0X9 130 0000	00	264 *98 130		6.3	3	250		5	1.4	B8B	DDT
DL91	284 728 300 0000	00	264 526 300		1.4	7	90	75	7.4	1.6	B7G	P
DL92	284 738 200 0000	00	264 536 200		1.4	7	90	75	7.4	1.6	B7G	P
DL93	387 428 300 0000	00	365 426 300		1.4	8.4	150	90	13.3	1.9	B7G	P
DL94	387 024 300 0000	00	365 024 300		1.4	4.5	90	90	9.5	2.1	B7G	P
DL95	284 738 200 0000	00	264 536 200		1.4	4.5	90	90	9.5	2.1	B7G	P
DL96	287 034 200 0000	00	265 034 200		1.4	5.2	90	90	5	1.4	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
DL98	724 332 800 0000	00	524 332 600		1.25	10	150	125	30	2.2	B7G	P
DL101	038 740 210 0000	00	036 540 210		1.4		100	100	10	2.5	B8A	P
DL145	284 0X9 130 0000	00	264 098 130		15	5.9	250		5	2.3	B8A	DDT
DL161	874 230 000 0000	00	654 230 000		1.4		20	20	0.5	0.5	B5A	P
DL167	873 420 000 0000	00	653 420 000		1.2		20	20	0.5	1.5	B5A	P
DL192	284 738 200 0000	00	264 536 200		1.4	7	60	60	7	1.5	B7G	P
DL193	287 438 200 0000	00	265 436 200		1.4	7.5	100	60	9.5	2.9	B7G	P
DL620	873 420 000 0000	00	653 420 000		1.2	6.5	60	60	3.1	0.6	B5A	P
DL650	873 420 000 0000	00	653 420 000		1.2	0	20	20	0.4	0.4	B5A	P
DL907	387 004 200 0000	00	365 004 200		1.4	5.5	150	125	15	3.1	B7G	P
DL962	284 738 200 0000	00	264 536 200		1.4	7	60	60	7	1.5	B7G	P
DL963	287 438 200 0000	00	265 436 200		1.2	7.5	150	60	10	2.2	B7G	P
DLL21	248 758 330 0000	00	246 547 330		1.4	8.7	150	125	1		A08	PP
DLL25	048 758 230 0000	00	046 547 230		1.4	9.4	150	125	17		B8G	PP
DLL31	328 458 270 0000	00	326 447 250		1.4	5	90	90	3		A08	PP
DLL101	284 785 300 0000	00	264 574 300		1.4	7	90	60	8.2	1.1	B7G	PP
DLL102	284 785 300 0000	00	264 574 300		1.4		40	40	1.3	0.5	B7G	PP
DLP51	023 004 780 0000	10	023 004 560	C	4	17	250	250	36	2.5	8SC	P
DM21	028 740 030 0000	00	026 540 030		1.4		90	90	0.03	†2.0	A08	TI
DM70	400 230 080 0000	00	4*0 230 060		1.4	23	200	0	0.1	†1.0	B8D	TI
DM71	400 230 080 0000	00	4*0 23* 060		1.4	23	200	0	0.1	†1.0	B8D	TI
DN41	X89 231 700 0000	40	968 231 500	G1	4	3.3	250	200	32	10	B7	DDP
DN143	284 7X9 130 0000	00	264 598 130		6.3	6.2	250	275	44	9.5	B8B	DDP
D024	842 300 000 0000	00	642 300 000		4	40	400		63	7.5	B4	T
D025	842 300 000 0000	00	642 300 000		6.3	75	300		60	3.7	B4	T
D026	842 300 000 0000	00	642 300 000		4	92	400		63	3.8	B4	T
D030	842 300 000 0000	00	642 300 000		4	100	400		60	6.9	B4	T
D042	X19 238 700 0000	40	918 236 500	G1	4	6	250	250	36	9.5	B7	DDP
DP	284 009 030 0000	00	264 008 030		16	7.5	200		25	6	A08	DT
DP5	842 370 000 0000	00	642 350 000		4	5	250	250	10	4	B5	P
DP7	023 004 780 0000	00	023 004 560		4	20	250	250	20	2.5	8SC	P
DP61	412 387 100 0000	00	412 365 100		6.3	8.5	200	125	7.7	5.1	B7G	P
DP495/6	98X 231 700 0000	40	869 231 500	G1	4	6.5	250	250	35	9.5	B7	DDP
DP4480	91X 238 700 0000	40	819 236 500	G1	44	8.4	200	200	46	8	B7	DDP
DP/Pen	047 231 800 0000	00	045 231 600		16	10	200	200	31	3.5	B7	P
DPT	047 213 800 0000	00	045 213 600		16	10	200	200	40	3.1	B7	P
DPT	642 310 000 0000	70	642 310 000	G2	16	10	200	200	40	3	B5	P
DS	742 310 000 0000	80	542 310 000	A1	16	1.5	200	75	2.1	1.1	B5	P
DS	000 231 800 0000	40	000 231 600	G1	13	3	200		4	2.5	B7	T
DSB	742 310 000 0000	80	542 310 000	A1	16	1	150	90	3.4	3.2	B5	P
DSPen	081 231 700 0000	40	061 231 500	G1	16	1.5	200	100	4	2.3	B7	P
DT7	842 300 000 0000	00	642 300 000		4	16	200		14	2	B4	T
DT41	90X 321 800 0000	40	809 321 600	G1	4	1	100			3	B7	DDT
DT215	023 09X 080 0000	40	023 089 060	G1	2	4.5	150		2.5	1	8SC	DDT
DT215	023 089 060 0000	40	682 390 000	G1	2	4.5	150		2.5	1.5	B5	DDT
DT436	90X 231 800 0000	40	809 231 600	G1	4	7	250		4	3.6	B7	DDT
DT436	023 1X9 080 0000	40	023 198 060	G1	4	7	250		4	2	8SC	DDT
DT1336	023 1X9 080 0000	40	023 198 060	G1	13	5	200		4	2	8SC	DDT
DTV1	90X 231 800 0000	40	809 231 600	G1	13	1	100			3	B7	DDT
DU1	902 300 000 0000	00	802 300 000		4				30		B4	R

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
DU2	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
DU3	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
DU10	902 300 000 0000	00	802 300 000		4				60		B4	R
DVSG	742 310 000 0000	80	542 310 000	A1	16	1	200	75	7.5	2.5	B5	P
DVS/Pen	742 310 000 0000	80	542 310 000	A1	16	1.5	200	100	6.5	1	B5	P
DW3	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
DW4	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
DW5	9X2 300 000 0000	00	892 300 000		4				120		B4	R
DW8	9X2 300 000 0000	00	892 300 000		5				30		B4	RR
DW15	9X2 300 000 0000	00	892 300 000		7.5				30		B4	RR
DW30	9X2 300 000 0000	00	892 300 000		7.5				60		B4	RR
DW802	842 300 000 0000	00	642 300 000		4	25	250		26	4	B5	T
DW1508	842 310 000 0000	00	642 310 000		4	7.5	150		4	1.5	B5	T
DW4011	842 310 000 0000	00	642 310 000		4	5	200		5	3.6	B5	T
DW4023	842 310 000 0000	00	642 310 000		4	3	150		2.5	1.7	B5	T
DX2	842 300 000 0000	00	642 300 000		2	3	150		3.5	1.4	B4	T
DY30	020 000 300 0000	90	*2* 0*0 3*0	D1	1.2				2		A08	D
DY51	230 000 000 0000	90	230 000 000	D1	1.4				13		B3G	D
DY70	230 000 000 0000	90	230 000 000	D1	1.2				1.8		B3G	D
DY80	230 232 032 0000	90	23* 232 *32	D1	1.2				0.5		B9A	D
DY86/87	230 232 032 0000	90	23* 232 *32	D1	1.4				0.5		B9A	D
DY604	842 300 000 0000	00	642 300 000		4	15	150		8	1.3	B4	T
DY802	230 232 032 0000	90	23* 232 *32	D1	1.4				0.5		B9A	R
DZ2	742 300 000 0000	80	542 300 000	A1	4	1	200	100	4	0.7	B4	P
E	842 300 000 0000	00	642 300 000		4	9	200		1.7	0.4	B4	T
E	284 300 000 0000	00	264 300 000		3	22.5	125		6.5		UX4	T
E1C	218 49X 130 0000	00	216 489 130		6.3	5	200		4.5	2	A08	DD1
E1F	218 074 300 0000	00	216 054 300		6.3	3	250	100	2	1.4	B7	P
E2e	087 014 023 0000	00	065 014 023		18	3.5	220	220	42	10.5	B9	P
E4	842 300 000 0000	00	642 300 000		4	16	200		12	1.8	B4	T
E4D	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
E4F	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
E4H	902 300 000 0000	00	802 300 000		4				125		B4	R
E4K	003 200 000 0000	90	003 200 000	D1	4				60		B5	R
E4L	003 200 000 0000	90	003 200 000	D1	4				120		B5	R
E20V	023 100 090 0000	00	023 100 080		20				60		8SC	R
E55L	817 231 141 0000	00	615 231 141		6.3		150	150	50	45	B9D	P
E80CC	841 338 512 0000	00	641 337 412		6.3	5.5	250		6	2.8	B9A	TT
E80CF	857 238 114 0000	00	645 237 114		6.3	2 2	100 200	 175	14 10	5 6.2	B9A	TP
E80F	701 238 014 0000	00	501 236 014		6.3	1.6	250	100	3	1.8	B9A	P
E80L	041 230 871 0000	00	041 230 651		6.3	4.5	200	200	30	9	B9A	P
E81CC	841 228 513 0000	00	641 227 413		6.3	2	250		10	5.5	B9A	TT
E81L	041 230 871 0000	00	041 230 651		6.3	3	200	200	20	11	B9A	P
E82CC	841 228 513 0000	00	641 227 413		6.3	8.5	250		10.5	2.2	B9A	TT
E83CC	841 228 513 0000	00	641 227 413		6.3	2	250		1.2	1.6	B9A	TT
E83F	742 238 001 0000	00	541 236 **1		6.3	2	200	125	10	9	B9A	P
E84L	041 230 807 0000	00	*41 23* 6*5		6.3	7.3	250	250	48	11	B9A	P
E86C	841 234 148 0000	00	641 234 146		6.3	2	200		12	14	B9A	T
E87L	041 230 871 0000	00	041 230 651		6.3	6	250	150	36	10	B9A	P
E88C	414 234 484 0000	00	414 234 464		6.3	1.2	150		12.5	13.5	B9A	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
□E88CC	841 238 510 0000	00	641 237 510		6.3	1.2	90		15	12.5	B9A	TT
E88CC/01	841 238 510 0000	00	641 237 510		6.3	1.2	90		15	12.5	B9A	TT
E90CC	882 345 100 0000	00	672 344 100		6.3	2.1	100		8.5	6	B7G	TT
E90F	412 387 100 0000	00	412 365 100		6.3	1.2	250	150	7.4	4.6	B7G	P
E91AA	192 310 X00 0000	00	182 310 900		6.3				9		B7G	D
E91H	412 387 100 0000	00	412 365 100		6.3	5	150	75	0.5	0.6	B7G	H
E92CC	882 345 100 0000	00	672 344 100		6.3	1.7	150		8.5	6	B7G	TT
E95F	412 387 100 0000	00	412 365 100		6.3	2	150	125	7.5	5.5	B7G	P
E99F	412 387 100 0000	00	412 365 100		6.3	20	250	100	9.2	3.8	B9A	P
E130	028 740 310 0000	00	026 540 310		6.3	15	250	250		†1.0	A08	TI
E130L	020 740 310 0000	80	*2* 54* 310	A1	6.3	15.5	250	150	100	27	A08	P
E135	387 304 220 0000	00	365 304 220		12.6	25	400		80		A08	P
E180CC	841 228 513 0000	00	641 227 413		6.3	1.9	150		8.5	6.3	B9A	TT
E180F	141 230 817 0000	00	141 23* 615		6.3	1.25	180	150	13	16.5	B9A	P
E181CC	841 228 513 0000	00	641 227 413		6.3	3	150		8.5	4.7	B9A	TT
E182CC	841 221 538 0000	00	741 221 436		6.3	2	150		36	15	B9A	TT
E184	141 230 871 0000	00	141 230 651		6.3	2.5	200	200	10	15	B9A	P
E186F	141 230 817 0000	00	141 23* 615		6.3	1.4	200	150	11.5	16	B9A	P
E188CC	841 328 510 0000	00	641 327 410		6.3	1.4	90		12	11.5	B9A	TT
E220B	548 230 800 0000	00	446 230 700		.2	1	150		3	2.5	B7	TT
E235	842 300 000 0000	00	642 300 000		2	7.5	150		13	3	B4	T
E235L	028 740 310 0000	00	*26 54* 310		6.3	8.2	100	100	100	14	A08	P
E236L	020 740 310 0000	80	*2* 54* 310	A1	6.3	8.2	100	100	100	14	A08	P
E280F	141 230 817 0000	00	141 23* 615		6.3	1.8	200	150	20	26	B9A	P
E282F	141 230 817 0000	00	141 23* 615		6.3		150	150	35	26	B9A	P
E283CC	148 231 085 0000	00	146 231 074		6.3	2	250		1.2	1.6	B9A	TT
E288CC	851 238 410 0000	00	741 236 410		6.3	1.5	100		30	18	B9A	TT
E405	842 300 000 0000	00	642 300 000		4	32	250		20	2	B4	T
E406	842 300 000 0000	00	642 300 000		4	34	250		8	2.3	B4	T
E408	842 300 000 0000	00	642 300 000		4	30	400		26	2	B4	T
E408N	842 300 000 0000	00	642 300 000		4	36	400		30	2.7	B4	T
E409	842 310 000 0000	00	642 310 000		4	16	200		12	1.3	B5	T
E410	842 300 000 0000	00	642 300 000		4	28	400		30	6	B4	T
E414	842 310 000 0000	00	642 310 000		4	6	150		6.5	2	B5	T
E414	842 300 000 0000	00	642 300 000		4	15	150		8	1.3	B4	T
E415	842 310 000 0000	00	642 310 000		4	8	200		6	1.4	B5	T
E415	284 130 000 0000	00	264 130 000		4	8	200		6	1.4	UX5	T
E420	842 300 000 0000	00	642 300 000		4	18	150		11	1.6	B4	T
E422	842 300 000 0000	00	642 300 000		4	16	250		12	5	B4	T
E424	842 310 000 0000	00	642 310 000		4	2.5	200		6	2.4	B5	T
E424N	842 310 000 0000	00	642 310 000		4	3.5	200		6	2.4	B5	T
E424R	812 300 000 0000	40	612 300 000	G1	4	5	200		6	1.6	B4	T
E425	842 310 000 0000	00	642 310 000		4	4.5	150		3	3	B5	T
E428	842 310 000 0000	00	642 310 000		4	3	200		6	2.4	B5	T
E430	842 310 000 0000	00	642 310 000		4	3	150		4	2	B5	T
E430N	842 310 000 0000	00	642 310 000		4	15	200		15	3	B5	T
E435	842 310 000 0000	00	642 310 000		4	1.5	200		3	1	B5	T
E438	842 310 000 0000	00	642 310 000		4	3	200		2.5	1.5	B5	T
E441	842 310 000 0000	70	642 310 000	G2	4		100	100	1.7	1.0	B5	P
E442	742 310 000 0000	80	542 310 000	A1	4	1.3	200	60	1.5	0.9	B5	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
E442S	742 310 000 0000	80	542 310 000	A1	4	2	200	60	4	1	B5	P
E443H	842 370 000 0000	00	642 350 000		4	40	400	200	30	1.9	B5	P
E444	279 413 000 0000	80	258 413 000	A1	4	3	200	90	4	3	UX6	DP
E444N	279 413 000 0000	80	258 413 000	A1	4	3	100	90	4	3	UX6	DP
E444S	842 310 000 0000	90	642 310 000	D1	4	3.5	200		6	2	B5	DT
E445	742 310 000 0000	80	542 310 000	A1	4	2	200	100	6	1	B5	P
E446	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2.3	B5	P
E447	742 310 000 0000	80	542 310 000	A1	4	2	200	125	4.5	2.3	B5	P
E448	184 772 300 0000	40	164 552 300	G1	4	1.5	200	125	3	0.6	C7	P
E449	187 472 300 0000	40	165 452 300	G1	4	2	200	75	3	1.8	C7	P
E451	842 370 000 0000	00	642 350 000		4		400	250	17		B4	P
E452T	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2	B5	P
E452T	274 130 000 0000	80	254 130 000	A1	4	2	200	100	3	2	UX5	P
E453	047 231 800 0000	00	045 231 600		4	15	250	250	24	2.5	B7	P
E454	218 90X 300 0000	40	216 809 300	G1	4	3.5	200		3.5	1.6	UX7	DDT
E455	742 310 000 0000	80	542 310 000	A1	4	1.5	200	100	3	2	B5	P
E455	274 130 000 0000	80	254 130 000	A1	4	1.5	200	100	3	2	UX5	P
E463	047 231 800 0000	00	045 231 600		4	22	250	250	36	2.7	B7	P
E499	842 310 000 0000	00	642 310 000		4	1.6	200		0.2	4	D5	T
E501D	287 113 000 0000	40	265 113 000	G1	3.5	2.5	250	125	6.5	3.5	UX6	P
E501R	287 113 000 0000	40	265 113 000	G1	6.3	2.5	250	125	6.5	3.5	UX6	P
E504D	287 413 000 0000	00	265 413 000		5	13.5	250	200	40	3.5	UX6	P
E504P	287 423 000 0000	00	265 423 000		6.3	13.3	250	200	40	3.5	UX6	P
E646	020 090 310 0000	00	020 080 310		26				120		A08	R
E703	842 300 000 0000	00	642 300 000		7.5	100	400		30	1	B5	T
E810F	141 237 817 0000	00	141 235 615		6.3	1.9	150	150	35	50	B9A	P
E851	030 X09 020 0000	00	030 908 020		5				120		A08	RR
E1137	388 448 822 0000	00	366 446 622		6.3	2.3	250		32	16	B9G	T
E1148	020 000 310 0000	84	020 000 310	A1/G1	6.3	5.5	250		14	3	A08	T
E1192	021 470 310 0000	80	021 450 310	A1	6.3	11	250	150	30	3.5	A08	P
E1242	287 711 403 0000	00	265 511 403		6.3	30	300	250	25	1.9	B9G	P
E1320	028 740 310 0000	00	026 540 310		6.3	11	250	250	1		A08	TI
E1323	020 000 310 0000	84	020 000 310	A1/G1	6.3	3	100		25	6.7	A08	T
E1413	287 024 300 0000	00	265 024 300		1.4	1	90	75	3.5	0.9	B7G	P
E1478	842 300 000 0000	00	642 300 000		4	1	100			6.9	B5	T
E1484	209 784 300 0000	00	208 564 300		1.4	1	90	90	2.7	0.6	B7G	DP
E1489	241 878 153 0000	00	241 657 143		6.3		350	250	21	3.9	B9G	PP
E1517	412 381 700 0000	00	412 361 500		6.3	2.5	200	200	8	2.5	B7G	P
E1518	412 381 700 0000	00	412 361 500		6.3	2	250	250	10	7.5	B7G	P
E1606	481 581 230 0000	00	461 471 230		6.3	8	250		9	2.6	A08	TT
E1624	802 384 100 0000	00	6*2 364 100		6.3	8.5	250		10.5	2.2	B7G	T
E1654	028 710 310 0000	40	026 510 310	G1	6.3	1.5	200	200	10.9	8.5	A08	P
E1662	412 380 700 0000	00	412 360 500		6.3	12	250	250	20	2.6	B7G	P
E1677	002 300 000 0000	90	002 300 000	D1	2				15		B4	R
E1678	028 710 310 0000	40	026 510 310	G1	13	3	250	100	7.6	1.5	B7G	P
E1681	028 740 310 0000	00	026 540 310		15	13	200	175	35	2.5	A08	P
E1682	020 900 310 0000	00	020 800 310		30				120		A08	R
E1706	278 071 483 0000	00	256 051 463		6.3	8	250	175	80	13	B9G	P
E1709	084 581 230 0000	00	064 471 230		6.3	2	250		2	1.3	A08	TT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
E1733	00X 009 230 0000	00	009 **8 230		6.3				60		B8B	RR
E1736	287 004 130 0000	00	265 004 130		6.3	4.4	250	250	40	10.5	B8B	P
E1740	20X 009 130 0000	00	209 008 130		6.3				30		B8B	RR
E1751	1X2 310 900 0000	00	192 310 800		6.3				5		B7G	RR
E1780	00X 009 230 0000	00	009 **8 230		4				30		B8B	RR
E1787C	318 741 120 0000	00	316 541 120		6.3	9	250	175	50	8	B9G	P
E1794	287 104 130 0000	00	265 104 130		19	3	250	75	2.5	2.8	B8B	P
E1795	290 009 130 0000	00	280 008 130		50				120		B8B	R
E1796	287 004 130 0000	00	265 004 130		80	9.5	200	175	70	10	B8B	P
E1809	287 104 130 0000	00	265 104 130		6.3	2	250	100	8	2.8	B8B	P
E1813	284 1X9 130 0000	00	264 198 130		19	3	250		1	1.2	B8B	DDT
E1816	384 728 300 0000	00	364 526 300		1.4	7	90	75	7.4	1.5	B7G	P
E1835	007 231 800 0000	40	005 231 600	G1	13	4.4	250	250	40	10.5	B7	P
E1838	284 1X9 130 0000	00	264 198 130		6.3	3	250		1	1.2	B8B	DDT
E1848	284 0X9 130 0000	00	264 *98 130		6.3	2	200		10	1.4	B8B	DDT
E1861	041 230 871 0000	00	041 230 651		6.3		200	200	19	10	B9A	P
E1884	002 300 000 0000	90	002 300 000	D1	2				5		B4	R
E1912	412 39X 800 0000	00	412 389 600		6.3	3	250		1	1.2	B7G	DDT
E1935	241 878 153 0000	00	241 657 143		6.3	26	250	200	30	3.9	B9G	PP
E1938	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
E1969	742 378 400 0000	00	542 376 400			[2 1	100 250	75	5 5.3	2.2] 2.2	B7G	TH
E1976	412 381 700 0000	00	412 361 500		19	2.5	200	200	8	2.5	B7G	P
E1984	412 380 700 0000	00	412 36* 500		6.3	5.5	250	250	30	10	B7G	P
E1985	291 009 300 0000	00	281 008 300		40				60		B7G	R
E1987	412 380 700 0000	00	412 36* 500		40	8	200	150	50	10	B7G	P
E1994	581 481 230 0000	00	471 461 230		13	8	250			2.6	A08	TT
E2004	020 000 300 0000	90	*2* 0*0 3*0	D1	1.2				5		A08	R
E2020N	842 310 000 0000	00	642 310 000		20	18	200		15	1.5	B5	T
E2047	412 381 700 0000	00	412 361 500		12.5	2.5	200	200	8	2.5	B7G	P
E2122	X02 309 100 0000	00	902 308 100		6.3				30		B7G	RR
E2128	241 878 153 0000	00	241 657 143		19	16.5	250	150	30	3.9	B9G	PP
E2134	412 380 700 0000	00	412 36* 500		6.3		200	200	55	9.5	B7G	P
E2153	412 380 700 0000	00	412 36* 500		13	8	200	150	50	10	B7G	P
E2178	001 230 009 0000	00	**1 23* 88*		10				120		B9A	R
E2179	041 230 071 0000	80	*41 23* *51	A1	10	12	150	150	50	8.5	B9A	P
E2185	028 040 310 0000	00	026 040 310		6.3	8	250		9	2.6	A08	T
E2223	000 230 009 0000	00	*** 23* **8		25				120		B9A	R
E2256	001 230 009 0000	00	**1 23* **8		20				120		B9A	R
E2382	021 040 370 0000	80	021 *4* 350	A1	52		150	150	100	16	A08	P
E2754	802 441 443 0000	00	602 441 443		6.3	1.5	150		25	25	B9A	T
E2965	241 878 153 0000	00	142 756 143		6.3	18	300	200	40	3.7	B9G	PP
E7002	000 230 000 0000	90	*** 23* ***	D	1.4				60		B9A	R
E7003	000 230 000 0000	90	*** 23* ***	D1	6.3						B9A	D
E7004	192 310 X00 0000	00	182 310 900		6.3				5		B7G	DD
E7005	901 230 X00 0000	00	801 23* 9**		6.3						B9A	DD
E7006	901 230 X00 0000	00	801 23* 9**		6.3				30		B9A	RR
E7007	000 230 009 0000	10	*** 23* **8	C	17				120		B9A	R
E7010	001 230 009 0000	00	**1 23* **8		55				120		B9A	R
E7011	001 230 009 0000	00	**1 23* **8		38				180		B9A	R
E7013	802 304 100 0000	00	602 304 100		6.3	2	250		20	5.5	B7G	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
E7014	802 304 100 0000	00	602 304 100		9.4	2	250		10	5.5	B7G	T
E7015	841 228 513 0000	00	641 227 413		6.3		100		11	3	B9A	TT
E7017	841 228 513 0000	00	641 227 413		6.3	1	100		0.5	1.2	B9A	TT
E7019	148 235 118 0000	00	146 234 117		6.3	1.5	90		12	6	B9A	TT
E7020	841 238 510 0000	00	641 237 410		6.3	2.3	250		10	5.9	B9A	TT
E7022	841 238 510 0000	00	641 237 410		7	1.2	90		15	12.5	B9A	TT
E7023	148 235 118 0000	00	146 234 117		7	1.5	100		12	6	B9A	TT
E7024	841 238 510 0000	00	641 237 410		9	2.1	200		10	5.8	B9A	TT
E7025	841 238 510 0000	00	641 237 410		26	2.1	200		10	5.8	B9A	TT
E7026	141 230 871 0000	00	141 230 651		6.3	2	150	150	10	7.4	B9A	P
E7027	701 238 014 0000	00	501 236 014		6.3	2	250	150	3	2.5	B9A	P
E7032	128 740 310 0000	00	126 540 310		6.3	100	250	250	100	11	A08	P
E7033	041 230 071 0000	80	*41 23* *51	A1	6.3	38.5	250	250	32	4.6	A08	P
E7034	741 231 800 0000	00	541 231 600		6.3		200	200	36	10	B9A	P
E7040	020 740 310 0000	80	020 540 310	A1	25	21	150	150	100	11	A08	P
E7041	041 230 071 0000	80	*41 23* *51	A1	21.5	24	150	150	45	6.5	B9A	P
E7043	741 231 800 0000	00	541 231 600		15	2.3	150	150	36	10	B9A	P
E7044	041 230 807 0000	00	*41 23* 6*5		16	6	200	200	34	10	B9A	P
E7050	741 238 9X1 0000	00	541 236 891		6.3	2	250	100	9	3.8	B9A	DDP
E7051	857 238 114 0000	00	645 237 114		6.3	[1 1	150 150	 100	18 10	8.5 5.2]	B9A	TP
E7053	415 238 718 0000	00	414 237 516		6.3	[22.5	100 250	 250	3.5 28	2.2 5]	B9A	TP
E7054	9X1 23Y 148 0000	00	891 238 146		28	1.8	175		1	1.4	B9A	DDDT
E7055	415 238 718 0000	00	414 237 516		16	[11.5	100 150	 150	3.5 41	2.2 7.5]	B9A	TP
E7056	857 238 114 0000	00	645 237 114		9.5	[1 1	150 150	 100	18 10	8.5 5.2]	B9A	TP
E7057	742 238 9X1 0000	00	542 236 891		19	2	250	100	9	3.8	B9A	DDP
E7059	415 238 718 0000	00	414 237 516		50	[16	100 200	 200	3.5 35	2.2 6.8]	B9A	TP
E7060	288 044 300 0000	00	266 044 300		1.4	2.5	90		2.1	1	B7G	T
E7062	287 024 300 0000	00	265 024 300		1.4		90	90	1.6	0.8	B7G	P
E7066	200 784 300 0000	00	200 564 300		1.4		90	90	1.1	0.4	B7G	P
E7071	000 230 000 0000	90	000 230 000	D1	6.3						B9A	D
E7072	000 230 009 0000	10	000 230 008	C	6.3				180		B9A	R
E7073	000 230 009 0000	10	000 230 008	C	26				180		B9A	R
E7074	841 234 148 0000	00	641 234 146		6.3	1.5	150		12	14	B9A	T
E7075	841 234 148 0000	00	641 234 146		3.8	1.5	150		12	14	B9A	T
E7076	841 238 510 0000	00	641 236 410		6.3	0.4	12.6		1	2.6	B9A	TT
E7078	041 230 871 0000	00	041 230 651		6.3	2	250	100	9	4.4	B9A	P
E7079	041 230 871 0000	00	041 230 651		12.6	1	150	100	12	4.4	B9A	P
E7081	020 740 310 0000	80	020 540 310	A1	6.3	21	150	150	100	11	A08	P
E7087	481 238 157 0000	00	461 237 145		15	[1.7 2.1	200 150	 150	3 18	4 11]	B9A	TP
E7088	481 238 157 0000	00	461 237 145		6.3	[1.7 2.1	200 150	 150	3 18	4 11]	B9A	TP
E7108	701 238 014 0000	00	501 236 014		6.3	2	250	150	3	2	B9A	P
E7109	141 230 817 0000	00	141 230 615		6.3	1.1	200	150	13	16.5	B9A	P
E7110	141 230 871 0000	00	141 230 651		6.3	3.5	250	250	10	6.8	B9A	P
E7143	412 314 800 0000	00	412 314 600		3.1	1	200		11.5	6.7	B7G	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
E7144	814 238 510 0000	00	614 237 410		6.3	1.2	90		15	12.5	B9A	TT
E7145	701 238 014 0000	00	501 236 014		6.3	2	50	50	1.8		B9A	P
EA40	200 900 130 0000	00	200 800 130		6.3				5		B8A	R
EA50	123 000 000 0000	90	123 000 000	D1	6.3						B3G	D
EA63	741 231 800 0000	00	541 231 600		6.3	5.5	250	250	36	10.5	B9A	P
EA76	291 390 000 0000	00	281 380 000		6.3				5		B5B	R
EA111	023 010 000 0000	90	023 010 000	D1	6.3				60		F8	R
EA962	200 100 300 0000	90	200 100 300	D1	6.3						B7G	D
EAA11	912 300 1X0 0000	00	812 300 190		6.3				5		F8	RR
EAA91	192 311 X00 0000	00	182 311 900		6.3				5		B7G	DD
EAA171	122 913 3X0 0000	00	122 813 390		6.3		200		10		B8G	DD
EAA901	192 310 X00 0000	00	182 310 900		6.3				10		B7G	DD
EAB1	023 1Y0 9X0 0000	00	023 1†0 890		6.3				0.8		8SC	DDD
EABC80	YX1 239 148 0000	00	†91 238 146		6.3	3	250		1	1.2	B9A	DDDT
EAC91	912 314 800 0000	00	812 314 600		6.3	3.2	200		7.4	2.8	B7G	DT
EAF21	287 914 130 0000	00	265 814 130		6.3	2	250	100	6	2.8	B8G	DP
EAF41	289 174 130 0000	00	268 154 130		6.3	4	250	100	5	1.8	B8A	DP
EAF42	289 174 130 0000	00	268 154 130		6.3	2	250	100	5	1.8	B8A	DP
EAF81	041 238 907 0000	00	041 236 805		6.3	2	250	100	9	3.6	B9A	DP
EAF801	741 238 091 0000	00	541 236 081		6.3	2	250	200	9	3.8	B9A	DP
EB4	023 190 X10 0000	00	023 180 910		6.3				0.8		8SC	DD
EB11	902 301 1X0 0000	00	802 301 190		6.3				9		F8	DD
EB34	02X 190 310 0000	00	029 180 310		6.3				5		A08	DD
EB40	209 0X0 130 0000	00	208 090 130		6.3				40		B8A	DD
EB41	201 X09 130 0000	00	201 908 130		6.3				5		B8A	RR
EB91	1X2 310 900 0000	00	192e310 800		6.3				9		B7G	DD
EB111	023 004 080 0000	00	023 004 060		4	50	250		60	5.2	F8	T
EBC1	023 1X9 080 0000	40	023 198 060	G1	6.3	7	250		4	2	8SC	DDT
EBC3	023 19X 080 0000	40	023 189 060	G1	6.3	5.5	250		5	2	8SC	DDT
EBC11	9X2 310 480 0000	00	892 301 460		6.3	8	250		5	2.2	F8	DDT
EBC21	284 09X 130 0000	00	264 *89 130		6.3	5.5	250		5	2	B8B	DDT
EBC30	023 19X 080 0000	40	023 189 060	G1	6.3	4.3	200		4	2	8SC	DDT
EBC33	028 9X0 310 0000	40	026 890 310	G1	6.3	5.5	250		5	2	A08	DDT
EBC41	284 09X 130 0000	00	264 089 130		6.3	3	250		1	1.3	B8A	DDT
EBC51	39X 080 420 0000	00	389 060 420		6.3	7.3	250		70	4	B9G	DDT
EBC80	841 239 0X0 0000	00	641 238 090		6.3	3	250		1	1.2	B9A	DDT
EBC90	412 39X 800 0000	00	412 389 600		6.3	3	250		1	1.2	B7G	DDT
EBC91	412 39X 800 0000	00	412 389 600		6.3	2	250		1.2	1.6	B7G	DDT
EBF1	023 19X 780 0000	40	023 189 560	G1	6.3	3	250	125	9	1.1	8SC	DDP
EBF2	023 19X 780 0000	40	023 189 560	G1	6.3	2	250	100	5	1.8	8SC	DDP
EBF2G	208 79X 130 0000	40	206 589 130	G1	6.3	2	250	100	5	1.8	A08	DDP
EBF11	9X2 381 470 0000	00	892 361 450		6.3	2	250	100	5	1.8	F8	DDP
EBF15	X92 381 470 0000	00	982 361 450		6.3	2	260	100	12	5	F8	DDP
EBF21	289 X74 130 0000	00	268 954 130		6.3	3.2	250	100	7.5	2.2	B8G	DDP
EBF32	028 9X7 310 0000	40	026 895 310	G1	6.3	2	250	100	5	1.8	A08	DDP
EBF35	218 79X 130 0000	40	216 589 130	G1	6.3	2	250	100	5	1.8	A08	DDP
EBF80	741 238 9X1 0000	00	541 236 891		6.3	2	250	90	5	2.2	B9A	DDP
EBF81	741 238 9X1 0000	00	541 236 891		6.3	2	250	75	6.7	1.1	B9A	DDP
EBF83	741 238 9X1 0000	00	541 236 891		6.3		12	12	0.4	1	B9A	DDP
EBF89	741 238 9X1 0000	00	541 236 891		6.3	2	250	100	9	3.8	B9A	DDP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
EBF171	9X2 741 380 0000	00	892 541 360		6.3	3.2	250	80	6	1.8	B8B	DDP
EBF175	231 9X1 817 4000	00			6.3	2	250	80	6	5	B10B	DDP
EBL1	023 19X 780 0000	40	023 189 560	G1	6.3	6	250	250	36	9.5	8SC	DDP
EBL21	284 7X9 130 0000	00	264 598 130		6.3	6	250	250	36	9	B8B	DDP
EBL31	028 9X7 310 0000	40	026 895 310	G1	6.3	6	250	250	36	9.5	A08	DDP
EBL71	284 79X 130 0000	00	264 589 130		6.3	5	250	250	44	9.5	A08	DDP
EC2	023 100 080 0000	40	023 100 060	G1	6.3	5.5	250		6	2.5	8SC	T
EC21	208 401 003 0000	00	206 401 003		6.3	4	250		5	2.7	B9G	T
EC31	028 040 310 0000	00	026 040 310		6.3	16	250		20	3.2	A08	T
EC40	244 844 130 0000	00	244 644 130		6.3	1.5	300		15	12	B8A	T
EC41	208 040 130 0000	00	206 040 130		6.3	5.5	300		20	4.5	B8A	T
EC52	241 800 003 0000	00	241 600 003		6.3	2.6	250		10	6.5	B9G	T
EC53	123 000 000 0000	84	123 000 000	A1/G1	6.3	3.3	200		7.5	2.9	B3G	T
EC54	244 844 413 0000	00	244 644 413		6.3	1.5	250		10	9	B9G	T
EC56	021 000 310 0000	84	*21 0*0 310	A1/G1	6.3	1.8	200		30	15	A08	T
EC70	482 803 180 0000	00	462 603 160		6.3	2	100		13	5.5	B8D	T
EC71	402 013 080 0000	00	402 013 060		6.3	1.25	100		8.5	5.8	B8D	T
EC80	441 230 448 0000	00	441 230 446		6.3	1.5	250		15	12	B9A	T
EC81	401 230 080 0000	00	401 230 060		6.3	2	150		30	5.5	B9A	T
EC84	414 484 234 0000	00	414 464 234		6.3	1.1	150		16	10	B9A	T
EC86	841 234 148 0000	00	641 234 146		6.3	1.5	75		12	14	B9A	T
EC86C	841 234 148 0000	00	641 234 146		6.3	1.5	200		12	14	B9A	T
EC88	414 234 484 0000	00	414 234 464		6.3	1.2	150		12.5	14	B9A	T
EC90	802 384 100 0000	00	6*2 364 100		6.3	8.5	250		10.5	2.2	B7G	T
EC91	412 314 800 0000	00	412 314 600		6.3	2	250		6	8.5	B7G	T
EC92	802 304 100 0000	00	602 304 100		6.3	2	250		10	5	B7G	T
EC93	842 314 800 0000	00	642 314 600		6.3	4	100		16	8	B7G	T
EC94	842 314 800 0000	00	642 314 600		6.3	2.5	100		16	6.6	B7G	T
EC95	142 381 100 0000	00	142 361 100		6.3	1.2	200		10	10.5	B7G	T
EC96	412 314 800 0000	00	412 314 600		6.3	1	200		11.5	6.7	B7G	T
EC97	142 238 100 0000	00	142 356 100		6.3	1	150		11	13	B7G	T
EC98	412 344 800 0000	00	412 344 600		6.3	1.3	150		13.5	13.5	B7G	T
EC157	021 000 310 0000	84	*21 0*0 310	A1/G1	6.3	2	200		44	22	A08	T
EC158	021 000 310 0000	84	*21 0*0 310	A1/G1	6.3	4	200		68	15	A08	T
EC760	482 803 180 0000	00	462 603 160		6.3	2.4	150		13	6.5	B8D	T
EC806S	841 234 148 0000	00	641 234 146		6.3		200		12	14	B9A	T
EC900	412 380 100 0000	00	412 360 100		6.3	1	150		11.5	14.5	B7G	T
EC903	842 314 800 0000	00	642 314 600		6.3	4	100		16	8	B7G	T
EC1000	102 013 080 0000	40	102 *13 060	G1	6.3	2	80		14	14.5	B8D	T
EC1030	444 123 480 0000	00	444 123 460		6.3		100		7	16	B8D	T
EC8010	414 234 484 0000	00	414 234 464		6.3		200		25	28	B9A	T
EC8020	414 234 484 0000	00	414 234 464		6.3	2.4	200		40	60	B9A	T
ECC31	028 548 310 0000	00	027 446 310		6.3	4.5	250		6	2.3	A08	TT
ECC32	481 581 230 0000	00	461 471 230		6.3	4.6	250		6	2.3	A08	TT
ECC33	481 581 230 0000	00	461 471 230		6.3	4	250		9	3.8	A08	TT
ECC34	481 581 230 0000	00	461 471 230		6.3	16	250		10	2.2	A08	TT
ECC35	481 581 230 0000	00	461 471 230		6.3	2.5	250		2.3	2	A08	TT
ECC40	285 184 130 0000	00	274 164 130		6.3	5.2	250		6	2.7	B8A	TT
ECC70	852 113 480 0000	00	742 113 460		6.3	1	100		6.5	5.4	B8D	TT
ECC81	851 228 413 0000	00	741 226 413		6.3	2	250		10	5.5	B9A	TT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
ECC82	851 228 413 0000	00	741 226 413		6.3	8.5	250		10.5	2.2	B9A	TT
ECC83	851 228 413 0000	00	741 226 413		6.3	2	250		1.2	1.6	B9A	TT
ECC84	158 234 118 0000	00	147 234 116		6.3	1.5	90		12	6	B9A	TT
ECC85	851 238 410 0000	00	741 236 410		6.3	2.3	250		10	5.9	B9A	TT
ECC86	841 238 510 0000	00	641 237 410		6.3	0.3	12		2.5	4.6	B9A	TT
ECC88	841 238 510 0000	00	641 237 510		6.3	1.2	90		15	12.6	B9A	TT
ECC89	148 235 118 0000	00	146 234 117		6.3	1.2	90		15	12	B9A	TT
Ø ECC91	882 345 100 0000	00	672 344 100		6.3	0.8 3	100 150		8.5 5	5.3 4.5	B7G	TT
ECC171	231 488 512 0000	00	231 466 412		6.3	1.5	200		2.5	2.5	B10B	TT
ECC180	841 238 510 0000	00	641 237 410		6.3	2	150		9	6.4	B9A	TT
ECC186	841 228 513 0000	00	641 227 413		6.3	8.5	250		10.5	10.5	B9A	TT
ECC189	841 328 510 0000	00	641 327 410		6.3	1.4	90		15	12.5	B9A	TT
ECC230	481 581 230 0000	00	461 471 230		6.3	30	100		100	6.5	A08	TT
ECC282	841 228 513 0000	00	641 227 413		6.3	2	100		11.8	3.1	B9A	TT
ECC801	841 228 513 0000	00	641 227 413		6.3	2	250		10	5.5	B9A	TT
ECC802	841 228 513 0000	00	641 227 413		6.3	8.5	250		10.5	2.2	B9A	TT
ECC803	841 228 513 0000	00	641 227 413		6.3	2	250		1.2	1.6	B9A	TT
ECC804	841 238 510 0000	00	641 237 410		6.3	7.7	200		10	3.4	B9A	TT
ECC807	158 231 084 0000	00	147 231 064		6.3	1.5	250		1.3	2.4	B9A	TT
ECC808	418 230 815 0000	00	416 230 714		6.3	1.9	250		1.2	1.6	B9A	TT
ECC813	814 228 153 0000	00	614 227 143		6.3		250		14.5	5.2	B9A	TT
ECC865	841 238 510 0000	00	641 237 410		6.3	14	200		8.7	6	B9A	TT
ECC960	882 345 100 0000	00	672 344 100		6.3	2.1	100		8.5	6	B7G	TT
ECC962	882 345 100 0000	00	672 344 100		6.3	1.7	150		8.5	6	B7G	TT
ECC2000	015 123 841 8000	00			6.3	1.2 1.2	90 90		27 27	22 16.5	B10B	TT
ECC8100	151 238 418 0000	00	141 237 416		6.3		100 100		25 25	16 20	B9A	TT
ECF1	023 184 780 0000	50	023 164 570	G1	6.3	3 2	150 250	 100	8 5	2.2 2.5	8SC	TP
ECF12	842 381 570 0000	00	642 371 450		6.3	 2	100 250	 100	11 5	3 2	F8	TP
ECF80	857 238 114 0000	00	645 237 114		6.3	2 3	100 250	 200	14 7	5 5.5	B9A	TP
ECF82	857 238 114 0000	00	645 237 114		6.3	 1	150 250	 100	18 10	8.5 5.2	B9A	TP
ECF83	148 238 715 0000	00	146 237 514		6.3	3.7	60 60	 50	6.5 3	3.6 1.3	B9A	TP
ECF86	151 234 887 0000	00	141 234 675		6.3	3 1.2	100 200	 150	14 10	5.5 12	B9A	TP
ECF174	314 818 175 0000	00	314 616 154		6.3	0 2	100 250	 150	11 8	5 3	B10B	TP
ECF801	151 238 784 0000	00	141 236 564		6.3	3 1.2	100 150	 100	15 10	8.5 10	B9A	TP
ECF802	857 238 114 0000	00	645 237 114		6.3	2 1	200 100	 100	3.5 6	3.5 5.5	B9A	TP
ECF804	857 238 114 0000	00	645 237 114		6.3	1.5 2	150 150	 150	13.5 7	7.2 11	B9A	TP
ECF805	878 231 514 0000	00	657 231 414		6.3	3 1.5	100 100	 100	14 10	5.5 11	B9A	TP
ECF8070	151 238 784 0000	00	141 237 564		6.3	3 1.2	100 200	 150	14 10	5.5 12	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
ECH2	023 184 780 0000 023 105 780 0000	50 50	023 164 570	G1	6.3	1 2.5	100 250	100	9.5 3.2	5.5	8SC	TH
ECH3	023 184 080 0000 023 105 780 0000	50 50	023 164 570	G1	6.3	2 2	100 250	100	5 4.8	2.4 2.5	8SC	TH
ECH3G	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G	6.3	2 2	100 250	100	5 4.8	1.4 2.5	A08	TH
ECH4	023 854 780 0000	50	123 614 570	G1	6.3	2 2	100 250	100	6.3 6.5	2.7 2.6	8SC	TH
ECH4G	128 748 310 0000	50	127 546 310	G	6.3	2 2	100 250	200	6.3 6.5	2.7 2.6	A08	TH
ECH11	842 381 570 0000 052 381 570 0000	00 00	642 371 450		6.3	2 2	100 250	100	5 4.7	2.4 2.5	F8	TH
ECH21	288 475 131 0000	00	276 454 131		6.3	2 2	100 250	90	6.2 5.3	2.4 2.2	B8B	TH
ECH33	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	2 2	100 200	100	5 3	2.4 2.8	A08	TH
ECH35	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	2 2	100 250	100	5.4 5	2.2 2.4	A08	TH
ECH41	288 475 130 0000 280 575 130 0000	00 00	276 454 130		6.3	2 2	100 250	100	5 3	2.2 2	B8A	TH
ECH42	288 475 130 0000 280 575 130 0000	00 00	276 454 130		6.3	2 2	100 250	100	5 8	2.2 2	B8A	TH
ECH71	288 475 131 0000	00	276 454 431		6.3	2 2	250 250	100	2 3	0.7	B8B	TH
ECH80	051 230 084 0000 751 230 805 0000	00 00	541 23* 674		6.3	2 2	75 250	75	5 3	0.75	B9A	TH
ECH81	751 238 084 0000	00	541 237 164		6.3	3 2	100 250	100	5 6.5	2.3 2.4	B9A	TH
ECH83	751 238 084 0000	00	541 237 164		6.3	0.25 0.5	12 12	12	0.7 0.4	1.4 0.7	B9A	TH
ECH84	551 238 784 0000	00	441 237 564		6.3	0 0	50 150	14	3.0 1.7	3.7 2.2	B9A	TP
ECH113	288 475 130 0000 280 575 130 0000	00 00	276 454 130		6.3	2	100 250	90	4.8 3		B8A	TH
ECH171	842 751 381 0000	00	642 544 371		6.3	2	250 250	75	3 2	0.7	B8B	TH
ECH200	114 723 851 8000	00	114 523 651		6.3	1	100 12.6	12.6	9.5 0.8	8.5	B10B	TP
ECH8000	751 238 084 0000	00	541 237 464		6.3	1.5 1.5	100 250	100	11 9	4.2 5	B9A	TH
ECL11	572 381 480 0000	00	452 371 460		6.3	2.5 6	250 250	250	2 36	2 9	F8	TP
ECL80	841 238 175 0000	00	641 237 154		6.3	2.3 8	100 200	200	4 17.5	1.4 3.3	B9A	TP
ECL81	471 238 815 0000	00	451 237 614		6.3	1.9 5.5	150 250	250	1.3 36	1.6 8.7	B9A	TH
ECL82	415 238 718 0000	00	414 237 516		6.3	1 16	200 200	200	3.7 35	2.4 6.4	B9A	TP
ECL83	841 238 175 0000	00	641 237 154		6.3	1.5 9.5	200 200	175	1.6 30	2.5 5.5	B9A	TP
ECL84	481 238 157 0000	00	461 237 145		6.3	1.7 2.0	200 175	175	3 18	4 10.4	B9A	TP
ECL85	841 238 715 0000	00	641 237 514		6.3	0.8 15	100 200	175	5 41	6.5 7.5	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
ECL86	417 238 158 0000	00	415 237 146		6.3	[1.9 7	250 250	 250	1.2 36	1.6 10]	B9A	TP
ECL113	288 574 130 0000	00	267 454 130		6.3	[1 3.5	150 250	 250	2 25	1.6 8.5]	B8A	TP
ECLL800 [	840 235 180 0000 048 235 187 0000	00 00]	647 234 115		6.3	[9.0 9.0	100 250	 250	4 26	0.05 6.0]	B9A	TPP
ED111	288 104 430 0000	00	266 104 430		6.3	5	200		40	8	B8A	T
EDD11	852 301 480 0000	00	742 310 460		6.3	8	200		3.5		F8	TT
EDD111	852 311 480 0000	00	742 311 460		6.3	8	250		9	2.3	F8	TT
EDD171	231 488 512 0000	00	231 466 412		6.3	3.5	150		14	4.8	B10B	TT
EE1	023 190 780 0000	00	023 180 560		6.3	2.5	250	150	8	14	F8	DP
EE50	278 701 403 0000	00	256 501 403		6.3	3	250	250	10	14	B9G	P
EE80	041 231 870 0000	00	*41 231 550		6.3		200	200	10	12.5	B9A	P
EEL71	285 774 831 0000	00	274 554 631		6.3	6.5	250	250	24	6.5	B9G	PP
EEL171	752 874 381 0000	00	542 654 371		6.3	[12 2	250 100	250 50	40 3	9]	B8B	PP
EEL171	218 000 300 0000	40	216 000 300	G1	6.3	12	250	250	40	9	B7	T
EEL171	038 090 200 0000	00	036 080 200		6.3	2	100	50	2		A08	DT
EEP1	023 190 780 0000	40	023 180 560	G1	6.3	2.5	250	150	8	17	8SC	DP
EEP71	023 110 780 0000	40	023 110 560	G1	6.3	3	250	100	8	2.2	8SC	P
EF2	023 110 780 0000	40	023 110 560	G1	6.3	2	250	100	4.5	2.2	8SC	P
EF2S	023 110 780 0000	40	023 110 560	G1	6.3	2	250	100	5	1.8	8SC	P
EF3	023 110 780 0000	40	023 110 560	G1	6.3	2.5	250	100	8	1.8	8SC	P
EF5	023 110 780 0000	40	023 110 560	G1	6.3	3	250	100	8	1.7	8SC	P
EF6	023 110 780 0000	40	023 110 560	G1	6.3	2	250	100	3	2	8SC	P
EF7	023 110 780 0000	40	023 110 560	G1	6.3	1.5	250	100	3	2.1	8SC	P
EF8	023 111 780 0000	40	023 111 560	G1	6.3	2.5	250	250	8	1.8	8SC	P
EF9	023 110 780 0000	40	023 110 560	G1	6.3	2.5	250	100	6	2.2	8SC	P
EF11	802 301 470 0000	00	602 301 450		6.3	2	250	100	6	2.2	F8	P
EF12	802 301 470 0000	00	602 301 450		6.3	2	250	100	3	2.1	F8	P
EF12spec.	802 301 470 0000	00	602 301 450		6.3	2	250	100	3	1.7	F8	P
EF13	812 301 470 0000	00	612 301 450		6.3	2	250	100	4.5	2.3	F8	P
EF14	812 370 140 0000	00	612 350 140		6.3	4.5	200	200	12	7	F8	P
EF15	812 301 470 0000	00	612 301 450		6.3	2	250	100	12	5.5	F8	P
EF22	287 104 130 0000	00	265 104 130		6.3	2.5	250	100	6	2.2	B8B	P
EF25	023 110 780 0000	40	023 110 560	G1	6.3	2	250	100	5	1.8	8SC	P
EF36	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	3	1.8	A08	P
EF38	128 710 310 0000	40	126 510 310	G1	6.3	2.5	250	250	8	1.8	A08	P
EF39	028 710 310 0000	40	026 510 310	G1	6.3	2.5	250	100	6	2.2	A08	P
EF40	280 147 130 0000	00	26* 145 130		6.3	2	250	150	3	1.8	B8B	P
EF41	281 174 130 0000	00	261 154 130		6.3	2.5	250	100	6	2.2	B8A	P
EF42	280 174 130 0000	00	260 154 130		6.3	2	250	250	10	9.5	B8A	P
EF43	280 174 130 0000	00	260 154 130		6.3	2	250	150	15	6.4	B8A	P
EF44	280 147 130 0000	00	260 145 130		6.3	2	250	150	3	1.8	B8A	P
EF50	278 101 403 0000	00	256 101 403		6.3	1.5	250	250	10	6.5	B9G	P
EF51	281 174 130 0000	00	261 154 130		6.3	2	250	250	14	9.5	B8B	P
EF52	281 174 130 0000	00	261 154 130		6.3	2	250	250	10	10	B8G	P
EF53	278 101 403 0000	00	256 101 403		6.3	2	250	250	10	6.5	B9G	P
EF54	287 114 113 0000	00	265 114 113		6.3	1.7	250	250	10	7.7	B9G	P
EF55	278 101 403 0000	00	256 101 403		6.3	4	250	150	10	7	B9G	P
EF70	412 183 710 0000	00	412 163 510		6.3	2	100	100	13	5.5	B8D	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
EF71	412 183 710 0000	00	412 163 510		6.3	2	100	100	13	5.5	B8D	P
EF72	412 183 710 0000	00	412 163 510		6.3	1.4	100	100	7	5	B8D	P
EF73	412 873 180 0000	00	412 653 160		6.3	2	100	100	7.5	5.5	B8D	P
EF74	412 873 180 0000	00	412 653 160		6.3	1.4	100	100	7	3.1	B8D	P
EF80	141 230 871 0000	00	141 230 651		6.3	2	200	175	10	7.2	B9A	P
EF81	741 238 000 0000	00	541 236 000		6.3	2.5	250	125	6	2.2	B9A	P
EF82	041 230 871 0000	00	*41 230 651		6.3	4.5	250	250	40	11	B9A	P
EF83	701 238 014 0000	00	501 236 014		6.3	1.6	250	50	4	1.6	B9A	P
EF85	141 230 871 0000	00	141 230 651		6.3	2	250	100	10	6	B9A	P
EF86	701 238 014 0000	00	501 236 014		6.3	2	250	150	3	2.3	B9A	P
EF87	701 238 014 0000	00	501 236 014		6.3	2	250	100	3.3	1.9	B9A	P
EF88	701 238 014 0000	00	501 236-014		6.3	2	250	100	7	2.1	B9A	P
EF89	041 230 871 0000	00	041 230 651		6.3	2	250	100	9	3.6	B9A	P
EF89F	041 230 871 0000	00	041 230 651		6.3	20	250	100	11	4.4	B9A	P
EF91	412 381 700 0000	00	412 361 500		6.3	[illegible]	250	250	10	7.6	B7G	P
EF92	412 381 700 0000	00	412 361 500		6.3	2.5	250	200	8	2.5	B7G	P
EF93	412 387 100 0000	00	412 365 100		6.3	1	250	100	11.6	4.5	B7G	P
EF94	412 387 100 0000	00	412 365 100		6.3	1	250	150	10.6	5.2	B7G	P
EF95	412 387 100 0000	00	412 365 100		6.3	2.3	150	150	7	4.3	B7G	P
EF96	412 387 100 0000	00	412 365 100		6.3	1.5	250	150	6.5	5	B7G	P
EF97	412 387 100 0000	00	412 365 100		6.3	0.7	12	12			B7G	P
EF98	412 387 100 0000	00	412 365 100		6.3	1	12	12	4.8	3	B7G	P
EF111	812 370 140 0000	00	612 350 140		6.3	2	250	75	6	2.2	F8	P
EF112	812 370 140 0000	00	612 350 140		6.3	2	250	100	3	2.1	F8	P
EF172	112 740 380 0000	00	112 540 360		6.3	2	250	100	5	3	B8A	P
EF174	112 740 380 0000	00	112 540 360		6.3	3.5	200	200	12	9	B8A	P
EF175	112 740 380 0000	00	112 540 360		6.3	2.1	250	100	12	4.5	B8A	P
EF183	141 230 871 0000	00	141 230 651		6.3	2	200	90	12	12.5	B9A	P
EF184	141 230 871 0000	00	141 230 651		6.3	2.5	200	200	10	15	B9A	P
EF186	841 230 871 0000	00	641 230 651		6.3	0.5	200	50			B9A	P
EF190	412 387 100 0000	00	412 365 100		6.3	2	200	150	8.5	6.2	B7G	P
EF410	280 074 130 0000	00	26* *54 130		6.3	2	250	100	6	2.7	B8A	P
EF730	782 803 180 0000	00	562 603 160		6.3	1	100	100	5.3	3.2	B8D	P
EF731	412 183 710 0000	00	412 163 510		6.3	1.1	100	100	7.2	4.5	B8D	P
EF732	412 183 710 0000	00	412 163 510		6.3	1.5	100	100	7.5	5	B8D	P
EF734	412 183 710 0000	00	412 163 510		6.3	1.5	100	100	7.5	5	B8D	P
EF800	141 230 871 0000	00	141 230 651		6.3	2	200	175	10	7.2	B9A	P
EF802	141 230 870 0000	00	141 23* 65*		6.3	1.8	200	175	12	8	B9A	P
EF804	101 230 874 0000	00	101 230 654		6.3	2	250	150	3	2	B9A	P
EF805S	141 230 871 0000	00	141 230 651		6.3	1.8	250	75	8	5.7	B9A	P
EF806S	701 238 014 0000	00	501 236 014		6.3		250	150	3.2	2	B9A	P
EF811	141 237 890 0000	00	141 230 650		6.3	1.5	200	90	11.5	12.5	B9A	DP
EF812	141 230 871 0000	00	141 230 651		6.3	1.6	150	150	10	9.2	B9A	P
EF814	141 230 871 0000	00	141 230 651		6.3	1.9	150	150	10	15	B9A	P
EF860	141 230 871 0000	00	141 230 651		6.3		250	250	10	6.8	B9A	P
EF861	141 230 817 0000	00	141 230 615		6.3	1.1	200	150	13	16.5	B9A	P
EF866	701 238 014 0000	00	501 236 014		6.3	2	250	150	3	2	B9A	P
EF905	412 387 100 0000	00	412 365 100		6.3	2	150	125	7.5	5	B7G	P
EF8010	141 230 871 0000	00	141 230 651		6.3	2	200	100	12	12.5	B9A	P
EF8200	141 237 817 0000	00	141 235 615		6.3		200	150	22	35	B9A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
EFF50	287 415 783 0000	00	265 414 573		6.3	2	250	200	6	8	B9G	PP
EFL200	517 823 147 8000	00			6.3	[2.6 2.3	175 150	175 150	30 10	21 8.5]	B10B	PP
EFM1	023 114 780 0000	00	023 114 560		6.3	2	250	100	1.3		8SC	TP
EFP20	278 147 130 0000	00	256 145 130		6.3	2	250	200	5	12	B8G	P
EFP60	214 178 183 0000	00	214 156 163		6.3	2	250	150	20	25	B9G	P
EG420	902 300 000 0000	00	802 300 000		4				120		B4	R
EH1	023 147 780 0000	40	023 145 560	G1	6.3	2	250	80	3	1.8	8SC	P
EH2	023 117 780 0000	40	023 115 560	G1	6.3	3	250	100	4.2	1.4	8SC	P
EH90	412 387 100 0000	00	412 365 100		6.3	1	100	30	1	1.1	B7G	H
EH900	412 387 100 0000	00	412 365 100		6.3	0	150	80	1	1.1	B7G	H
EH900S	412 387 100 0000	00	412 365 100		6.3	10	150	75	0.2		B7G	H
EK1	123 184 7X0 0000	00	123 164 570	G1	6.3	[1.5 8.5	90 250	75	2 1.6	]	8SC	O
EK2	023 174 780 0000	40	023 154 560	G1	6.3	2	250	75	2.8	1.8	8SC	O
EK2G	028 747 310 0000	00	026 545 310		6.3	2	250	75	2.7	1.8	A08	O
EK3	023 174 780 0000	40	023 154 560	G1	6.3	2	100	60	11	3.8	8SC	O
EK32	028 747 310 0000	40	026 545 310	G1	6.3	2	250	75	1.5	1.5	A08	O
EK90	112 387 400 0000	00	112 365 400		6.3	1.5	250	100	3	.47	B7G	H
EL1	023 100 780 0000	40	023 100 560	G1	6.3	18.5	250	250	32	2.6	8SC	P
EL3	023 104 780 0000	00	023 104 560		6.3	6	250	250	36	9	8SC	P
EL3/425	023 104 780 0000	00	023 104 560		6.3	15.6	400	300	25	3	8SC	P
EL3NG	028 740 310 0000	00	026 540 310		6.3	6	250	250	36	9	A08	P
EL5	023 104 780 0000	00	023 104 560		6.3	14	250	275	72	8.5	8SC	P
EL5/375	023 140 780 0000	00	023 140 560		6.3	14	250	275	72	8.5	8SC	P
EL5/600	023 114 700 0000	80	023 114 500	A1	6.3		250	275	72	8.5	8SC	P
EL5G	028 740 310 0000	00	026 540 310		6.3	14	250	275	72	8.5	A08	P
EL6	023 104 780 0000	00	023 104 560		6.3	7	250	250	72	14.5	8SC	P
EL6/435	023 104 780 0000	00	023 104 560		6.3	7.5	250	250	20	5.5	8SC	P
EL6spec.	023 104 780 0000	00	023 104 560		6.3	7	250	250	72	14.5	8SC	P
EL11	802 301 470 0000	00	602 301 450		6.3	6	250	250	36	9	F8	P
EL12	802 301 450 0000	00	602 301 450		6.3	7	250	250	72	15	F8	P
EL12/325	802 301 470 0000	00	602 301 450		6.3	7	250	250	72	18	F8	P
EL12/375	802 301 470 0000	00	602 301 450		6.3	7	400	250	72	15	F8	P
EL12spec	702 301 400 0000	80	502 301 400	A1	6.3	19	400	350	42	10	F8	P
EL13	802 310 470 0000	00	602 310 450		6.3	7.5	250	250	20	5.5	F8	P
EL20	287 104 130 0000	00	265 104 130		6.3	34	300	300	12.5	3.7	B8B	P
EL22	287 004 130 0000	00	265 004 130		6.3	7	250	250	44	9.5	B8B	P
EL30	028 741 310 0000	00	026 541 310		6.3	4.5	250	250	18	6.5	A08	P
EL31	120 740 310 0000	80	120 540 310	A1	6.3	9	300	275	91	14	A08	P
EL32	028 700 310 0000	40	026 500 310	G1	6.3	18	250	250	32	2.8	A08	P
EL33	028 740 310 0000	00	026 540 310		6.3	6	250	250	36	9	A08	P
EL34	128 740 310 0000	00	126 540 310		6.3	13.5	250	250	75	11	A08	P
EL35	028 740 310 0000	00	026 540 310		6.3	15.5	250	250	72	5	A08	P
EL36	020 740 310 0000	80	020 540 310	A1	6.3	7	250	250	72	14	A08	P
EL37	020 740 310 0000	00	020 540 310		6.3	13.5	250	250	100	11	A08	P
EL38	120 740 310 0000	80	120 540 310	A1	6.3	7	250	250	89	14.3	A08	P
EL39	020 741 310 0000	80	020 541 310	A1	6.3	3.2	200	125	45	6.5	A08	P
EL41	280 074 130 0000	00	26* *54 130		6.3	7	250	250	36	10	B8A	P
EL42	281 074 130 0000	00	261 054 130		6.3	10.8	225	225	26	3.2	B8A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
EL43	280 174 130 0000	00	250 154 130		6.3	3	250	250	36	10	B8A	P
EL44	200 174 130 0000	80	200 154 130	A1	6.3	22.5	250	250	20	5	B8A	P
EL50	023 114 700 0000	80	023 114 500	A1	6.3	14	250	275	72	8.5	8SC	P
EL51	023 104 700 0000	80	023 104 500	A1	6.3	30	400	300	44	7	8SC	P
EL53	023 104 780 0000	00	023 104 560		6.3	7.7	400	250	24	8	8SC	P
EL54	023 140 780 0000	00	023 140 560		6.3	12.2	300	300	55	13	8SC	P
EL60	218 007 413 0000	00	216 005 413		6.3	14.5	250	250	67	9	B9G	P
EL70	412 183 710 0000	00	412 163 510		6.3	9	100	100	31	2.2	B8D	P
EL71	412 183 710 0000	00	412 163 510		6.3	8.5	100	100	30	4	B8D	P
EL80	741 230 800 0000	00	541 230 600		6.3	6.5	250	250	36	10	B9A	P
EL81	041 230 071 0000	80	*41 23* *51	A1	6.3	38.5	250	250	32	4.6	B9A	P
EL81F	041 230 070 0000	80	041 230 050	A1	6.3	28	200	200	40	6	B9A	P
EL82	041 230 807 0000	00	*41 23* 6*5		6.3	10.4	200	200	54	9	B9A	P
EL83	741 230 800 0000	00	541 23* 600		6.3	5.5	250	250	36	10	B9A	P
EL84	041 230 807 0000	00	*41 23* 6*5		6.3	7.3	250	250	48	11.3	B9A	P
EL85	441 231 817 0000	00	441 231 615		6.3	10.8	250	225	26	3.2	B9A	P
EL86	041 230 807 0000	00	*41 23* 6*5		6.3	12.5	200	175	70	10	B9A	P
EL86F	041 230 807 0000	00	*41 23* 6*5		6.3	12.5	200	200	70	10	B9A	P
EL88	041 230 871 0000	00	041 230 651		6.3	4.5	200	200	33	9.7	B9A	P
EL89	041 230 871 0000	00	041 230 651		6.3	6	250	250	38	10.5	B9A	P
EL90	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4.1	B7G	P
EL91	412 380 700 0000	00	412 360 500		6.3	13.8	250	250	16	2.6	B7G	P
EL95	412 387 400 0000	00	412 365 400		6.3	9	250	250	24	5	B7G	P
EL131	128 740 310 0000	00	126 54* 310		6.3	12	250	250	100	11	A08	P
EL150	802 301 470 0000	00	602 301 450		6.3	7	350	250	95	6.5	F8	P
EL171	102 741 380 0000	00	102 541 360		6.3	12	250	250	40	9	B8A	P
EL172	102 741 380 0000	00	102 541 360		6.3	7	250	250	72	15	B8A	P
EL180	141 223 871 0000	00	141 223 651		6.3	2	250	150	25	12	B9A	P
EL183	141 228 713 0000	00	141 226 513		6.3	2.1	200	200	40	25	B9A	P
EL300	721 441 370 0000	80	541 441 350	A1	6.3	22.5	200	150	100	10	B8A	P
EL360	020 740 310 0000	80	*2* 540 310	A1	6.3	7.7	100	100	100	14	A08	P
EL500	441 237 710 0000	80	441 235 51*	A1	6.3	20	150	150	70	10	B9D	P
EL502	441 237 710 0000	80	441 235 510	A1	6.3	35	200	200	100	2	B9D	P
EL503	714 231 408 0000	00	514 231 406		6.3	13.2	250	250	100	23	B9D	P
EL504	441 237 710 0000	00	441 235 510	A1	6.3	20	150	150	70	10	B9A	P
EL505	417 237 141 0000	80	415 235 141	A1	6.3	40	150	150	60	8	B9D	P
EL506	741 234 708 0000	00	541 234 5*6		6.3	10	300	300	60	10.2	B9D	P
EL803	741 231 800 0000	00	541 231 600		6.3	3.5	200	200	36	10	B9A	P
EL803S	741 321 800 0000	00	541 321 600		6.3	3.5	200	200	32	10	B9A	P
EL804	041 230 007 0000	80	041 230 005	A1	6.3	12	200	175	70	10	B9A	P
EL820	041 230 071 0000	80	*41 23* *51	A1	6.3	38.5	250	250	32	4.6	B9A	P
EL821	041 230 871 0000	00	*41 23* 651		6.3	4.5	250	250	40	11	B9A	P
EL822	041 230 871 0000	00	*41 23* 651		6.3	2.5	250	150	40	13	B9A	P
EL861	041 230 871 0000	00	041 230 651		6.3		200	200	20	11	B9A	P
EL863	741 231 800 0000	00	541 231 600		6.3	5.5	250	250	36	11	B9A	P
EL3010	231 147 210 0000	80	231 145 210	A1	6.3		350	100	100	60	A08	P
EL5070	017 231 141 0000	80	*15 231 141	A1	6.3	3	125	125	50	45	B9D	P
EL8000	141 237 817 0000	00	141 235 615		6.3		250	250	48	50	B9A	P
ELL1	523 184 780 0000	00	423 174 560		6.3	20	250	250	15	1.7	8SC	PP
ELL80	748 235 187 0000	00	546 234 175		6.3	9.0	250	250	24	6.0	B9A	PP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
ELP71	023 104 780 0000	00	023 104 560		6.3	7	250	250	36	9	8SC	P
ELP72	023 100 780 0000	40	023 100 560	G1	6.3	17	250	250	36	2.5	8SC	P
EM1	023 104 780 0000	00	023 104 560		6.3	5	250	250	0.1	†2.0	8SC	TI
EM2	023 104 780 0000	00	023 104 560		6.3	4	250	250	0.1	†2.0	8SC	
EM3	023 104 780 0000	00	023 104 560		6.3	18	200	200	0.2	†1.0	8SC	TI
EM4	023 184 780 0000	00	023 164 560		6.3	4.2 12.5	200 200	200 200		†1.0 †1.0	8SC	TI
EM11	028 748 310 0000	00	026 546 310		6.3	5 16	250 250	250 250		†1.0 †1.0	A08	TI
EM31	028 740 310 0000	00	026 540 310		6.3	5	250	250	0.1	†2.0	A08	TI
EM34	028 478 310 0000	00	026 456 310		6.3	4.2 12.5	250 250	250 250	1	†1.0 †1.0	A08	TI
EM35	028 740 310 0000	00	026 540 310		6.3	22	250	250		†1.0	A08	TI
EM71	271 084 130 0000	00	251 064 130		6.3	20	250	250	0.5		B8B	TI
EM72	271 084 130 0000	00	251 064 130		6.3	20	250	250	0.5		B8B	
EM80	410 230 807 0000	00	41* 23* 6*5		6.3	14	250	250	0.4	†0.5	B9A	TI
EM81	410 230 807 0000	00	41* 23* 6*5		6.3	10.5	250	250	0.4	†0.5	B9A	TI
EM84	401 237 808 0000	00	4*1 235 6*6		6.3	22	250	250	0.5	†0.5	B9A	TI
EM87	401 237 808 0000	00	4*1 235 6*6		6.3	14	250	250	1.1	†1.0	B9A	TI
EM840	401 237 808 0000	00	4*1 235 6*6		6.3	22	250	250	0.5	†0.5	B9A	TI
EMG1	472 381 100 0000	00	452 361 100		6.3	4.5	20	20	7	4	B7G	P
EQ80	741 238 114 0000	00	541 236 114		6.3	1	250	20	0.9	0.7	B9A	N
ER4	002 300 000 0000	90	002 300 000	D1	4				3		B4	D
EW60	290 000 103 0000	00	280 000 103		6.3				120		B9G	R
EY51	023 000 000 0000	90	023 000 000	D1	6.3				3		D	
EY70	092 013 090 0000	00	082 813 080		6.3				30		B8D	R
EY80	001 230 009 0000	00	**1 23* **8		6.3				120		B9A	R
EY81	000 230 009 0000	10	*** 23* **8	C	6.3				120		B9A	R
EY82	001 230 009 0000	00	**1 23* **8		6.3				180		B9A	R
EY83	000 230 009 0000	10	*** 23* **8	C	6.3						B9A	D
EY84	001 230 000 0000	90	**1 23* ***	D1	6.3				120		B9A	R
EY86	230 232 032 0000	90	23* 232 *32	D1	6.3				0.8		B9A	D
EY87	230 232 032 0000	90	23* 232 *32	D1	6.3				0.8		B9A	D
EY88	000 230 009 0000	10	*** 23* **8	C1	6.3				120		B9A	R
EY89	001 230 009 0000	00	**1 23* **8		6.3				120		B9A	R
EY91	912 390 000 0000	00	812 380 000		6.3				60		B7G	R
EY92	002 390 100 0000	00	002 380 100		6.3				60		B7G	R
EY500	090 230 990 0000	10			6.3				180		B9D	R
EY3000	023 100 000 0000	90	023 100 000	D1	6.3				120		8SC	R
EY3000N	023 100 000 0000	90	023 100 000	D	6.3				120		8SC	R
EYY13	230 239 0X0 0000	00	230 238 090		6.3				120		F8	RR
EZ1	023 190 0X0 0000	00	023 180 090		6.3				30		8SC	RR
EZ3	023 190 0X0 0000	00	023 180 090		6.3				60		8SC	RR
EZ11	X02 300 190 0000	00	902 300 180		6.3				30		F8	RR
EZ12	X02 300 190 0000	00	902 300 180		6.3				60		F8	RR
EZ22	209 00X 130 0000	00	208 009 130		6.3				60		B8B	RR
Z33	029 0X0 310 0000	00	028 090 310		6.3				60		A08	RR
Z35	029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
Z40	290 00X 130 0000	00	280 *09 130		6.3				30		B8A	RR
Z80	901 230 X00 0000	00	9*1 23* 8**		6.3				30		B9A	RR

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	VCM163 Tester only: TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4: TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
EZ81	X01 230 900 0000	00	9*1 23* 8**		6.3				60		B9A	RR
EZ82	X01 230 900 0000	00	9*1 23* 8**		6.3				30		B9A	RR
EZ90	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
EZ900	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
F2A11	802 301 470 0000	00	602 301 450		6.3	6.5	250	250	100	18	F8	P
F5	842 300 000 0000	00	642 300 000		4	40	300		40	6	B4	T
F10	842 300 000 0000	00	642 300 000		4	15	300		30	5.5	B4	T
F100	842 370 000 0000	00	642 350 000		4	16	250	250	42	2.5	B5	P
F109	284 300 000 0000	00	264 300 000		1.5	14.5	200		6.2	11.5	UX4	T
F109A	284 300 000 0000	00	642 300 000		1.5	14.5	200		6.2	1.2	B5	T
F109A	842 300 000 0000	00	264 300 000		1.5	14.5	200		6.3	1.2	UX4	T
F203	842 300 000 0000	00	264 300 000		2.5	50	300		36	2	UX4	T
F203	284 300 000 0000	00	642 300 000		2.5	56	300		36	2	B4	P
F209	842 300 000 0000	00	642 300 000		2.5	21	250		5.2	0.9	B4	T
F209	284 300 000 0000	00	264 300 000		2.5	21	250		5.2	0.9	UX4	T
F209A	842 310 000 0000	00	642 310 000		2.5	21	250		5	1	B5	T
F215	284 130 000 0000	00	264 130 000		2.5	6	150		6.5	2	UX5	T
F215	842 310 000 0000	00	642 310 000		2.5	6	150		6.5	2	B5	T
F242	287 130 000 0000	40	265 130 000	G1	2.5	1.3	200	100	1.5	0.9	UX5	P
F410	842 300 000 0000	00	642 300 000		4	15	300		13.5	2.8	B4	T
F443	842 370 000 0000	00	642 350 000		4	30	400	200	45	3.2	B5	P
F460	842 310 000 0000	00	642 310 000		4	2	250		10	5.5	B5	T
F704	842 300 000 0000	00	642 300 000		7.5	84	400		55	2.1	B5	T
F707	842 300 000 0000	00	642 300 000		7.5	84	400		55	2.1	B4	T
F707	284 300 000 0000	00	264 300 000		7.5	84	400		55	2.1	UX4	T
F708	284 300 000 0000	00	264 300 000		7.5	44	400		16	1.6	UX4	T
F/7001	412 387 100 0000	00	412 365 100		6.3		150	125	35	4.8	B7G	P
FC2	845 230 X00 0000	40	645 230 700	G1	2		150 150	50 75	2 0.9	0.2	B7	O
FC2A	845 230 X00 0000	40	645 230 700	G1	2		150 150	50 50	1.2 0.7	0.3	B7	O
FC4	845 231 X00 0000	40	645 231 700	G1	4	4 4	90 250	90 90	2 1.6	1 1	B7	O
FC13	023 184 7X0 0000	40	023 164 570	G1	13	3 2	90 200	75 75	2 2.6	1.3 0.6	8SC	O
FC13C	845 231 X00 0000	40	645 231 700	G1	13	3 2	90 200	75 75	2 2.6	1.3	B7	O
FC141	20X 840 730 0000	40	207 640 530	G1	1.4		90	90	0.5		M08	H
FH2118	187 472 300 0000	40	165 452 300	G1	20	2	200	80	3		C7	P
FT4	028 740 310 0000	00	026 540 310		4	6	250	250	0.5	†1.0	A08	TI
FW1	9X3 200 000 0000	00	893 200 000		4				30		B4	RR
FW3	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
FW4/500	9X2 300 000 0000	00	982 300 000		4				120		B5	RR
FW4/800	X92 300 000 0000	00	982 300 000		4				60		B5	RR
FY	842 370 000 0000	00	642 350 000		4	10	250	250	32	5	B5	P
FZ1	023 190 0X0 0000	00	023 180 090		13				30		8SC	RR
G	284 300 000 0000	00	264 300 000		5	3	200		0.2		UX4	T
G/6C4	802 384 100 0000	00	602 364 100		6.3	8.5	250		10.5	2.2	B7G	T
G/25L6	028 740 310 0000	00	026 540 310		25	8.2	200	125	46	8	A08	P
G/50C5	142 347 800 0000	00	142 345 600		50	7.5	150	100	49	7.5	B7G	P
G84	290 300 000 0000	00	280 300 000		2.5				60		UX4	R

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
G407	842 300 000 0000	00	642 300 000		4	4	150		4	1.3	B4	T
G431	9X2 300 000 0000	00	892 300 000		4				30		B5	RR
G459	023 090 0X0 0000	00	023 080 090		4				60		8SC	RR
G460	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
G470	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
G504	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
G660	023 1X0 090 0000	00	023 190 080		6.3				30		8SC	RR
G715	902 300 000 0000	00	802 300 000		7.5				120		B4	T
G837	207 411 300 0000	80	204 411 300	A1	12.6	85	400		60	3.5	B7G	P
G1380	023 190 0X0 0000	00	023 180 090		12				30		8SC	RR
G1404	902 300 000 0000	00	802 300 000		4				120		B4	R
G1503	9X2 300 000 0000	00	892 300 000		2.5				30		B4	RR
G2004	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
G2005	9X2 300 000 0000	00	892 300 000		5				60		B4	RR
G2080	902 310 000 0000	00	023 100 080		20				60		8SC	R
G2080	023 100 090 0000	00	802 310 000		20				60		B5	R
G2504	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
G3060	123 1X0 090 0000	00	123 190 080		30				60		8SC	RR
G4004	9X2 300 000 0000	00	892 300 000		4				120		B4	R
G4100	902 300 000 0000	00	802 300 000		4				120		B4	R
G4120	9X2 300 000 0000	00	892 300 000		4				60		B5	RR
G4120N	9X2 300 000 0000	00	892 300 000		4				60		B4	R
G4180	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
G/5749	412 387 100 0000	00	412 365 100		6.3	1	250	100	11	4.4	B7G	P
G/5750	412 388 400 0000	00	412 366 400		6.3	2	100		11	7	B7G	H
G/6042	481 581 230 0000	00	461 471 230		25	8	250		9	2.6	A08	TT
G6059	041 230 871 0000	00	041 230 651		6.3	3	250	100	2	1.2	B7G	P
G/6060	851 228 413 0000	00	741 226 413		6.3	2	250		10	5.5	B9G	TT
G/6061	041 230 871 0000	00	*41 230 651		6.3	13	300	225	35	3.7	B9A	P
G/6062	801 237 144 0000	00	601 235 144		6.3	7.5	250	250	45	7	B9A	P
G6066	412 39X 800 0000	00	412 389 600		6.3	3	250	250	1	1.2	B7G	DDT
G/6100	802 384 100 0000	00	602 364 100		6.3	8.5	250		10.5	2.2	B7G	T
G/6132	041 230 871 0000	00	*41 230 651		6.3	4.5	250	250	40	11	B9A	P
G/6157	001 230 000 0000	90	**1 23* ***	D1	6.[illegible]				120		B9A	R
G/6158	854 228 413 0000	00	644 226 413		6.[illegible]	4.5	250		6	2.3	B9A	TT
G/6180	481 581 230 0000	00	461 471 230		6.3	8	250		9	2.6	A08	TT
G/6516	412 380 700 0000	00	412 360 500		6.3	12.5	250	250	16	2.6	B7G	P
GG1	299 00X X30 0000	00	288 009 930		4				30		B8B	RR
GN24	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
□ GT1C	842 310 000 0000	00	642 310 000		4	4 7	100 200		30 60	†3kΩ	B5	THY
GY11	333 022 200 0000	90	333 022 200	D1	2.5				30		F8	R
GY501	200 320 032 0000	90	200 320 032		3.15						B9D	D
GZ30	020 X09 030 0000	00	020 908 030		5				60		A08	RR
GZ31	020 X09 030 0000	00	020 908 030		5				120		A08	RR
GZ32	030 90X 020 0000	00	030 809 020		5(5.7)				60		A08	RR
GZ33	030 90X 020 0000	00	030 809 020		5				120		A08	RR
GZ37	030 X09 020 0000	00	030 908 020		5(5.7)				120		A08	RR
GZ40	290 00X 130 0000	00	28* **9 130		5				30		B8A	RR
H2	842 300 000 0000	00	642 300 000		2	1	150		2.5	0.8	B4	T
H2D	892 3X0 000 0000	40	682 390 000	G1	2	1.5	150		3.5	1.3	B5	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
H4	842 300 000 0000	00	642 300 000		4	4	150		4	1.3	B4	T
H4D	90X 231 800 0000	40	216 809 300	G1	4	3	200		4.5	2.7	B7	DDT
H4D	218 90X 300 0000	40	809 231 600	G1	4	2.5	200		5.5	2.7	B7	DDT
H12	842 300 000 0000	00	642 300 000		2	1.3	100		0.6	1	SM4	T
H13	023 100 080 0000	40	023 100 060	G1	13	4	200		6	2.5	A08	T
H20	842 310 000 0000	00	642 310 000		20	1.6	200		0.2	1	B5	T
H30	000 231 800 0000	40	000 231 600	G1	13	1.5	250		7.5	6	B7	T
H42	000 231 800 0000	40	000 231 600	G1	4	2	250		1	1.5	B7	T
H42	218 000 300 0000	40	216 000 300	G1	4	2	250		1	1.5	B7	T
H63	020 800 310 0000	40	020 600 310	G1	6.3	2	250		1	1.6	A08	T
H141D	208 090 030 0000	40	206 080 030	G1	1.4	1	90		0.1	0.2	M08	DT
H145	287 024 300 0000	00	265 024 300		1.4	2	90	90	0.3	0.42	B7G	P
H210	842 300 000 0000	00	642 300 000		2	3	150		1.1	1.1	B4	T
H406D	742 300 000 0000	80	542 300 000	A1	4	1.5	200	75	4	0.8	B4	P
H407spec.	842 300 000 0000	00	642 300 000		4	9	150		3.5	0.9	B4	T
H410	842 300 000 0000	00	642 300 000		4	3	150		0.5	0.6	B4	T
H410D	842 300 000 0000		642 300 000		4	3	150		0.5	0.6	B4	T
H412	842 300 000 0000	00	642 300 000		4	9	150		5	1.2	B4	T
H607	842 300 000 0000	00	642 300 000		6.3	1	100			0.4	B4	T
H1818D	742 310 000 0000	80	542 310 000	A1	20	2	200	100	3	2	B5	P
H1918D	742 310 000 0000	80	542 310 000	A1	20	2	200	60	4	1	B5	P
H2518D	742 310 000 0000	80	542 310 000	A1	20	2.5	250	100	3.5	2	B5	P
H2618D	742 310 000 0000	80	542 310 000	A1	20	2.5	250	100	5	2	B5	P
H4080D	742 310 000 0000	80	542 310 000	A1	4	1.5	200	75	4	2.5	B5	P
H4111D	742 310 000 0000	80	542 310 000	A1	4	2.5	250	100	3.5	2	B5	P
H4125D	742 310 000 0000	80	542 310 000	A1	4	2	200	100	6	1	B5	P
H4129D	742 310 000 0000	80	542 310 000	A1	4	2.5	250	100	5	2	B5	P
HAA91	192 310 X00 0000	00	182 310 900		12						B7G	DD
HABC80	9Y1 23X 148 0000	00	8†1 239 146		19	3	250		1	1.2	B9A	DDDT
HAD	X09 231 800 0000	40	908 231 600	G1	13	2.5	200		3.3	2	B7	DDT
HBC90	412 39X 800 0000	00	412 389 600		12.5	3	250		1	1.2	B7G	DDT
HBC91	412 39X 800 0000	00	412 389 600		12.5	2	250		1.2	1.6	B7G	DDT
HCH81	751 238 584 0000	00	541 237 464		12.6	[2.5	100 250	90	4 3	2 0.6]	B9A	TH
HD2	842 300 000 0000	00	642 300 000		2	5	200		5	1	B4	T
HD2	892 3X0 000 0000	40	682 390 000	G1	2	2.5	150		3.5	1.3	B5	DDT
HD14	038 090 200 0000	40	036 080 200	G1	1.4	0	90		0.1	0.2	A08	DT
HD21	892 3X0 000 0000	40	682 390 000	G1	2	1.5	150		1.8	1.5	B5	DDT
HD22	892 3X0 000 0000	40	682 390 000	G1	2	2	150		1.8	1.5	B5	DDT
HD23	982 3X0 000 0000	40	682 390 000	G1	2	1	150		1	1	B5	DDT
HD23	892 3X0 000 0000	40	862 390 000	G1	2	2	150		1	1.4	B5	DDT
HD24	892 3X0 000 0000	40	682 390 000	G1	2	1.5	150		0.8	1	B5	DDT
HD30	724 332 800 0000	00	524 332 600		1.2	75	150	125		1.7	B7G	P
HD93	230 232 032 0000	90	23* 232 *32	D1	1.2				1		B9A	D
HD96	021 040 310 0000	80	021 040 310	A1	25	22.5	250	150	55	5.5	A08	P
HF61	280 074 130 0000	00	26* *54 130		6.3	2.6	250	100	6	2.2	B8A	P
HF62	280 174 130 0000	00	260 154 130		6.3	2	250	250	10	9	B8A	P
HF85	141 230 871 0000	00	141 230 651		12.5	2.3	200	125	11.4	6.1	B9A	P
HF93	412 387 100 0000	00	412 365 100		12.5	1	250	100	11	4.4	B7G	P
HF121	280 074 130 0000	00	26* 054 130		12.5	3	200	125	1.2	2.3	B8A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
HK90	412 388 100 0000	00	412 365 100		6.3	0	100	100	11	7	B7G	H
HL2	842 300 000 0000	00	642 300 000		2	1.5	150		2.2	1.5	B4	T
HL2	023 004 080 0000	00	023 004 060		2	1.5	150		2.2	1.5	8SC	T
HL2K	842 300 000 0000	00	642 300 000		2	1.5	150		2.2	1.5	B4	T
HL2S	023 004 080 0000	00	023 004 060		2	1.5	150		2.2	1.5	8SC	T
HL3	208 040 030 0000	00	206 040 030		2	1.5	125		0.5	1.5	M08	T
HL4	842 310 000 0000	00	642 310 000		4	4.5	250		5	3.5	B5	T
HL4+	842 310 000 0000	00	642 310 000		4	4.5	250		5	4.9	B5	T
HL4G	000 231 800 0000	40	000 231 600	G1	4	4.5	250		5	3.5	B7	T
HL4GS	023 100 080 0000	40	023 100 060	G1	4	4.5	250		5	3.5	8SC	T
HL13	023 100 080 0000	40	023 100 060	G1	13	13.7	200		5	3.3	8SC	T
HL13	000 231 800 0000	40	000 231 600	G1	13	2.7	200		6	3.5	B7	T
HL13C	000 231 800 0000	40	000 231 600	G1	13	3.7	200		5	3.3	B7	T
HL13G	023 004 080 0000	40	023 004 060	G1	13	5.5	250		6	2.5	8SC	T
HL13S	023 100 080 0000	40	023 100 060	G1	13	3	200		6	3.5	8SC	T
HL21	842 300 000 0000	00	642 300 000		2	3	150		1.7	1.5	B4	T
HL21DD	892 3X0 000 0000	40	682 390 000	G1	2	2	150		2	1.3	B5	DDT
HL22	208 040 030 0000	00	206 040 030		2	2	150		2	1.3	M08	T
HL22DD	208 090 X30 0000	40	206 080 930	G1	2	2	150		2	1.3	M08	DDT
HL23	208 040 030 0000	00	206 040 030		2	1.5	150		1.5	1.2	M08	T
HL23DD	208 090 X30 0000	40	206 080 930	G1	2	1.5	150		0.6	1.2	M08	DDT
HL41	218 040 030 0000	00	216 040 030		4	3.1	250		2.2	3.4	M08	T
HL41DD	218 0X0 930 0000	40	216 090 830	G1	4	3.1	250		2.2	2.6	M08	DDT
HL42DD	218 0X0 930 0000	40	216 090 830	G1	4	0.2	200		2.8	2.9	M08	DDT
HL84	041 230 807 0000	00	*41 23* 6*5		30	12.5	200	175	70	10	B9A	P
HL90	412 387 400 0000	00	412 365 400		19	12.5	250	250	45	4.1	B7G	P
HL92	142 347 800 0000	00	142 345 600		50	7.5	150	125	49	7.5	B7G	P
HL94	142 347 800 0000	00	142 345 600		30	6.7	100	100	43	9.2	B7G	P
HL133	218 000 030 0000	40	216 000 030	G1	13	3.3	200		6	2.9	M08	T
HL133DD	218 0X0 930 0000	40	216 090 830	G1	13	2.5	200		1.5	2.5	M08	DDT
HL134DD	218 090 X30 0000	40	216 080 930	G1	13	5	250		7	2.5	M08	DDT
HL210	842 300 000 0000	00	642 300 000		2	1	100		1.1	0.7	B4	T
HL410	842 300 000 0000	00	642 300 000		4	6	150		1.2	0.8	B4	T
HL607	842 300 000 0000	00	642 300 000		6.3	1	100			1	B4	T
HL1320	000 231 800 0000	40	000 231 600	G1	13	3.3	200		6	3	B7	T
HLA1	842 310 000 0000	00	642 310 000		4	1	200		5	8	B5	T
HLA2	842 310 000 0000	00	642 310 000		4	2.5	200		6	5.5	B5	T
HLB1	842 300 000 0000	00	642 300 000		2	3	150		2	1.5	B5	T
HL/DD1320	90X 231 800 0000	40	809 231 600	G1	13	3	200		4.3	1.9	B7	DDT
HM20	842 310 000 0000	00	642 310 000		20	3.3	250		6	2.5	B5	T
HM71	271 084 130 0000	00	251 064 130		12.6	15	200	200	0.4	†5.0	B8B	TI
HM85	401 237 80X 0000	00	401 235 607		12.6	18	250	200	0.5	†0.47	B9A	TI
HN309	841 238 175 0000	00	641 237 154		12	[2 9	250 150	 150	2.8 24	2.2 5.6]	B9A	TP
HP2	548 230 800 0000	00	446 230 700		2	1	150		8.5		B7	TT
HP6	412 381 700 0000	00	412 361 500		6.3	[2 1.5	250 200	250 150	10 4	7.5 6.4]	B7G	PP
HP13	081 231 700 0000	40	061 231 500	G1	13	1	250	100	8	3.5	B7	P
HP13S	023 110 780 0000	40	023 110 560	G1	13	1	250	100	8	3.5	8SC	P
HP210	742 300 000 0000	80	542 300 000	A1	2	1.5	150	150	1.9	1.9	B4	P
HP210	041 230 700 0000	80	041 230 500	A1	2	1.5	150	150	1.9	1.9	B7	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
HP210NC	742 300 000 0000	80	542 300 000	A1	2	1	150	150	1.9	1.9	B4	P
HP210NC	041 230 700 0000	80	041 230 500	A1	2	1	150	150	1.9	1.9	B7	P
HP211	041 230 700 0000	80	041 230 500	A1	2	1	150	150	2.6	1.7	B7	P
HP211C	742 300 000 0000	80	542 300 000	A1	2	1	150	150	2.6	1.7	B4	P
HP215	742 300 000 0000	80	542 300 000	A1	2	1.5	150	80	1.5	1.2	B4	P
HP215	041 230 700 0000	80	041 230 500	A1	2	1.5	150	80	1.5	1.2	B7	P
HP415	742 310 000 0000	80	041 231 500	A1	4	2	250	100	8	2.7	B7	P
HP417	041 231 700 0000	80	041 231 500	A1	4	2	250	100	8	2.7	B7	P
HP1018	180 172 300 0000	40	160 152 300	G1	10	3	250	100	2.3	1.3	B7	P
HP1118	180 172 300 0000	40	160 152 300	G1	10	3	250	100	8.2	1.6	B7	P
HP2018	742 310 000 0000	80	542 310 000	A1	20	2	200	100	4	3.5	B5	P
HP2018	041 231 700 0000	80	041 231 500	A1	20	2	200	100	4	3.5	B7	P
HP2118	742 310 000 0000	80	041 230 500	A1	20	2	200	100	5	3.5	B7	P
HP2118	041 230 700 0000	80	542 310 000	A1	20	2	200	100	5	3.5	B5	P
HP4100	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	3.5	B5	P
HP4101	041 231 700 0000	80	041 231 500	A1	4	2	200	100	3.5	3.5	B7	P
HP4101	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3.5	3.5	B5	P
HP4101C	041 231 700 0000	80	542 310 000	A1	4	2	200	100	3.5	2.8	B5	P
HP4101C	742 310 000 0000	80	041 231 500	A1	4	2	200	100	3.5	2.8	B7	P
HP4105	041 231 700 0000	80	542 310 000	A1	4	2	250	100	4.5	3	B5	P
HP4105	041 231 700 0000	80	041 231 500	A1	4	2	250	100	4.5	3	B7	P
HP4106	041 231 700 0000	80	041 231 500	A1	4	2	200	100	5	3.5	B7	P
HP4106	742 310 000 0000	80	542 310 000	A1	4	2	200	100	5	3.5	B5	P
HP4106C	742 310 000 0000	80	041 231 500	A1	4	2	200	100	5	3.5	B7	P
HP4106C	041 231 700 0000	80	542 310 000	A1	4	2	200	100	5	3.5	B5	P
HP4115	041 231 700 0000	80	041 231 500	A1	4	2	200	100	4.3	2.2	B7	P
HP4115	742 310 000 0000	80	542 310 000	A1	4	2	200	100	4.3	3.2	B5	P
HPT	412 381 700 0000	00	412 361 500		6.3	[2 1.5	250 200	250 150	10 4	7.5 6.4]	B7G	P
HR1	200 300 000 0000	90	2** 3** *00	D1	0.6				0.05		B7G	D
HR2	842 300 000 0000	00	642 300 000		2	2	150		12	0.6	B4	T
HR2	112 311 100 0000	90	112 311 100	D1	4				5		B7G	R
HR2S	023 004 080 0000	00	023 004 060		2	2	150		1.2	0.6	8SC	T
HR3	112 311 100 0000	90	112 311 100	D1	4				15		B7G	R
HR4	112 311 100 0000	90	112 311 100	D1	4				30		B7G	R
HR6	030 000 020 0000	90	030 000 020	D1	4				60		A08	R
HR7	020 000 030 0000	90	020 000 030	D1	4				30		A08	R
HR8	030 000 020 0000	90	030 000 020	D1	4				30		A08	R
HR11	020 000 030 0000	90	020 000 030	D1	4						A08	D
HR210	842 300 000 0000	00	642 300 000		2	1.5	200		1	1.3	B4	T
HR406	842 300 000 0000	00	642 300 000		4	3	200		1	1.5	B4	T
HR410	841 300 000 0000	00	641 300 000		4	3	200		1	1.5	B4	T
HSD	90X 231 800 0000	40	809 231 600	G1	13	3	200		6	2.7	B7	DDT
HVR1	002 300 000 0000	90	002 300 000	D1	2				5		B4	R
HVR2	003 200 000 0000	90	003 200 000	D1	4				3		B4	R
HVR2A	003 200 000 0000	90	003 200 000	D1	2(2.5)				3		B4	R
HVU1	002 300 000 0000	90	002 300 000	D1	4				3		B4	R
HY24	284 300 000 0000	00	264 300 000		2	45	200		20		UX4	T
HY61	274 130 000 0000	80	254 130 000	A1	6.3	14	300	250	83	6.5	UX5	P
HY65	030 740 210 0000	80	030 540 210	A1	6.3	45	350	200	63		A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
HY90	002 396 100 0000	00	002 386 100		27.5				60		B7G	R
HY113	284 030 000 0000	00	264 030 000		1.4	4.5	60		0.4	0.2	UX5	T
HY125	384 720 000 0000	00	364 520 000		1.4	3	60	50	0.9	0.3	UX5	P
HY615	020 000 310 0000	84	020 000 310	A1/G1	6.3	35	300		20		A08	T
HY866	290 300 000 0000	00	280 300 000		2.5				120		UX4	R
HZ50	290 300 000 0000	00	280 300 000		13				60		UX4	R
IF860	141 230 871 0000	00	141 230 651		20		200	200	8.5	6.6	B9A	P
IL861	041 230 871 0000	00	041 230 651		20		200	200	20	11	B9A	P
IRV120/350S	023 190 0X0 0000	00	023 180 090		4				60		8SC	RR
IW2	9X3 200 000 0000	00	893 200 000		4				30		B4	RR
IW2A	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
IW3	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
IW4/500	9X3 200 000 0000	00	893 200 000		4				60		B4	RR
K2/DD	892 3X0 000 0000	40	682 300 000		2	3.8	150		4	1.6	B5	DDT
K4	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
K23A	892 3X0 000 0000	40	682 390 000	G1	2	5.5	150		2.5	1.4	B5	DDT
K23B	892 3X0 000 0000	40	682 390 000	G1	2	1.5	150		1.4	1.2	B5	DDT
K24	287 130 000 0000	40	265 130 000	G1	2.5	1.5	200	75	2	0.8	UX5	P
K27	284 130 000 0000	00	264 130 000		2.5	4.5	90		3	1	UX5	T
K30A	842 300 000 0000	00	642 300 000		2	3	150		1.5	0.8	B4	T
K30B	842 300 000 0000	00	642 300 000		2	7.5	150		4	0.9	B4	T
K30C	842 300 000 0000	00	642 300 000		2	1.5	150		2	1.4	B4	T
K30D	842 300 000 0000	00	642 300 000		2	3	150		4	1.5	B4	T
K30E	842 300 000 0000	00	642 300 000		2	4.5	150		2	1.5	B4	T
K30G	842 300 000 0000	00	642 300 000		2	7	150		6	3.5	B4	T
K33A	084 235 800 0000	00	064 234 700		2	0	150		3		B7	TT
K33B	548 230 800 0000	00	446 230 700		2	1.5	125		3	2.1	B7	TT
K40B	742 300 000 0000	80	542 300 000	A1	2		150	75	2	1.5	B4	P
K40N	041 230 700 0000	80	542 300 000	A1	2		150	90	2.5	1.4	B4	P
K40N	742 300 000 0000	80	041 230 500	A1	2		150	90	2.5	1.4	B7	P
K50M	041 231 700 0000	80	041 231 500	A1	2	5	150	125	3	1.5	B7	P
K50N	084 237 700 0000	40	064 235 500	G1	2	1.5	150	60	2	1.4	B7	P
K70B	842 370 000 0000	00	642 350 000		2	[illegible]	150	150	9.5	2.5	B5	P
K70D	842 370 000 0000	00	642 350 000		2	[illegible]	150	150	5	4	B5	P
K77A	487 230 785 0000	00	465 230 574		2	10.5	150	150	2.5	4	B9	PP
K77B	548 237 800 0000	00	446 235 700		2	11.7	150	150	3.8		B7	PP
K80A	845 230 X00 0000	00	645 230 700	G1	2	[	150 150	50 75	2 1	]	B7	O
K80B	845 230 X00 0000	00	645 230 700	G1	2	[	150 150	150 150	2.1 0.7	]	B7	O
K435/10	842 300 000 0000	00	642 300 000		4	3	300		50	5	B4	T
K450/50	842 300 000 0000	00	642 300 000		4	50	400		120	5	B4	T
K1658	742 310 000 0000	80	542 310 000	A1	7	25	400	225	50	3.2	B5	P
K1694	842 300 000 0000	00	642 300 000		4	3.5	200		6	2.6	B4	T
KBC1			023 098 060	G1	2	4.5	150		2.5	1	8SC	DDT
KBC32	038 X90 200 0000	40	036 980 200	G1	2		100		2.4	1.2	A08	DDT
KC1	023 004 080 0000	00	023 004 060		2	1.5	150		1.2	0.6	8SC	T
KC3	023 004 080 0000	00	023 004 060		2	2.8	150		3	2.5	8SC	T
KC4	023 004 080 0000	00	023 004 060		2	1.5	150		2.2	1.4	8SC	T
KC50	842 300 000 0000	00	642 300 000		2	1	40		0.2	0.4	SM4	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
KC51	842 300 000 0000	00	642 300 000		2	2	40		1.2	0.5	SM4	T
KCF30	038 748 200 0000 038 750 200 0000	50 50	037 546 200	G1	2	1.0 2.5	100 150	80	3.7 1.5	1.6 0.9	A08	TP
KCH1	023 084 780 0000 023 005 780 0000	50 50	023 064 570	G1	2	0.5 5	90 90	60	3 1	1.5 0.9	8SC	TH
KD50	842 300 000 0000	00	642 300 000		2	2.8	40		1.8	0.6	SM4	T
KDD1	023 084 580 0000	00	023 074 460		2		90		0.8	0.8	8SC	TT
KE50	742 300 000 0000	80	542 300 000	A1	2	2	150	50	0.8	0.6	Sm4	P
KF1	070 412 300 0000	80	050 412 300	A1	2	1	150	150	3	1.8	C7	P
KF2	070 412 300 0000	80	050 412 300	A1	2	1	150	150	3	1.3	C7	P
KF3	023 010 780 0000	40	023 010 560	G1	2	1	90	90	1	0.5	8SC	P
KF4	023 010 780 0000	40	023 010 560	G1	2	1	90	90	1.2	0.7	8SC	P
KF7	023 004 700 0000	80	023 004 500	A1	2	1.5	90	90	1.8	0.7	8SC	P
KF8	023 004 700 0000	80	023 004 500	A1	2	1	90	90	1.5	0.6	8SC	P
KF35	028 710 300 0000	40	026 510 300	G1	2	1.5	150	60	1.4	1.1	A08	P
KH1	023 071 780 0000	40	023 051 560	G1	2	1.5	90	60	2.1	1.4	8SC	P
KK2	023 084 780 0000	40	023 064 560	G1	2	1	90	50	2		8SC	O
KK2G	028 748 300 0000	40	026 546 300	G1	2	1	90	50	2		A08	O
KK32	03X 748 200 0000	00	037 546 200	G1	2		150 150	50 50	2.1 0.7		A08	O
KL1	842 370 000 0000	00	642 350 000		2	4.5	90	90	8	1.7	B5	P
KL1	032 004 780 0000	00	032 004 560		2	4.5	90	90	8	1.7	8SC	P
KL2	023 004 780 0000	00	023 004 560		2	7.5	90	90	11	1.8	8SC	P
KL4	023 004 780 0000	00	023 004 560		2	2.5	100	100	5	2	8SC	P
KL4G	038 740 200 0000	00	036 540 200		2	2.5	90	90	4.7	1.8	A08	P
KL5	032 004 780 0000	00	032 004 560		2	4	90	90	4.8	1.4	8SC	P
KL35	038 740 200 0000	00	036 540 200		2	4.5	150	150	5.6	2.2	A08	P
KLL3	523 784 780 0000	00	423 564 570		2	12	150	150	8		8SC	PP
KLL32	028 548 370 0000	00	026 447 350		2	11.3	150	150	3.8	2.6	A08	PP
KM84	401 237 808 0000	00	4*1 235 6*6		4.2	22	250	250	0.5	†0.5	B9A	TI
KR5	284 730 000 0000	00	264 530 000		6.3	9	150	150	14	1.9	UX5	P
KR20	284 413 000 0000	00	264 413 000		2.5		250		3.5	1.4	UX6	T
KR22	284 413 000 0000	00	264 413 000		6.3		250		3.5	1.4	UX6	T
KR25	284 413 000 0000	00	264 413 000		2.5	16.5	250	250	34	2.2	UX6	P
KR28	29X 130 000 0000	00	289 130 000		6.3				30		UX5	RR
KR31	291 300 000 0000	00	281 300 000		10				120		UX4	R
KT2	842 370 000 0000	00	642 350 000		2	4.5	150	150	7.5	2.5	B5	P
KT8	742 310 000 0000	80	542 310 000	A1	6.3	16	250	250	72	6	B5	P
KT16	028 740 230 0000	00	026 540 230		1.4	4.5	90	90	8.8	1.9	A08	P
KTKT21	842 370 000 0000	00	642 350 000		2	2.5	150	125	5.3	5.3	B5	P
KT24	842 370 000 0000	00	642 350 000		2	3.5	150	125	5	3.2	B5	P
KT30	047 231 800 0000	00	045 231 600		13	12	250	250	40	3.9	B7	P
KT31	307 221 800 0000	40	305 221 600	G1	13	4	200	175	40	10	B7	P
KT32	028 740 310 0000	00	026 540 310		26	7.6	150	150	75	9	A08	P
KT33	328 740 210 0000	00	326 540 210		13	13.2	200	200	60	10	A08	P
KT33C	328 740 210 0000	00	326 540 210		13	7	200	175	92	10	A08	P
KT35	328 740 210 0000	00	326 540 210		13	11.5	200	200	50	10	A08	P
KT36	020 740 310 0000	80	020 540 310	A1	26	10	150	150	60	11	A08	P
KT41	047 231 800 0000	00	045 231 600		4(5)	4.4	250	250	40	10.5	B7	P
KT42	047 231 800 0000	00	045 231 600		4	16.5	250	250	34	2.5	B7	P
KT44	041 231 700 0000	80	041 231 500	A1	4(5)	25	250	250	85	6.3	B7	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
KT61	028 740 310 0000	00	026 540 310		6.3	4.4	250	250	40	10.5	A08	P
KT63	028 740 310 0000	00	026 540 310		6.3	16.5	250	250	34	2.5	A08	P
KT66	028 740 310 0000	00	026 540 310		6.3	15	250	250	65	6.3	A08	P
KT67	278 001 403 0000	00	256 001 403		6.3	9	250	175	80	13	B9G	P
KT71	028 740 310 0000	00	026 540 310		48	9.8	200	175	70	10	A08	P
KT72	028 740 310 0000	00	026 540 310		16	12.5	200	175	30	2.5	A08	P
KT73	028 740 310 0000	00	026 540 310		6.3	4.5	200	175	35	2.5	A08	P
KT74	028 740 310 0000	00	026 540 310		16	12.5	200	175	30	2.5	A08	P
KT76	028 740 310 0000	00	026 540 310		15	13	200	175	35	2.5	A08	P
KT77	028 740 310 0000	00	026 540 310		6.3		250	250	100	11.5	A08	P
KT81	287 004 130 0000	00	265 004 130		6.3	4.4	250	250	40	10.5	B88	P
KT88	028 740 310 0000	00	026 540 310		6.3	20	250	250	57	8	A08	P
KT101	287 004 130 0000	00	265 004 130		80	9.5	200	175	70	10	B88	P
KTW61	028 710 310 0000	40	026 510 310	G1	6.3	4	250	100	10	2.9	A08	P
KTW62	028 700 310 0000	40	026 500 310	G1	6.3	3	250	100	8	2.8	A08	P
KTW63	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	7.6	1.5	A08	P
KTW73	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	6.5	1.7	A08	P
KTW73M	028 700 310 0000	40	026 500 310	G1	6.3	3	250	100	6.5	1.7	A08	P
KTW74	028 710 310 0000	40	026 510 310	G1	13	3	250	100	7.6	1.5	A08	P
KTW74M	028 700 310 0000	40	026 500 310	G1	13	3	250	100	7.6	1.5	A08	P
KTZ41	081 231 700 0000	40	061 231 500	G1	4	1.5	250	250	18	12	B7	P
KTZ63	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	2	1.2	A08	P
KTZ73	028 700 310 0000	40	026 500 310	G1	6.3	3	250	100	2	1.5	A08	P
KTZ73M	028 700 310 0000	40	026 500 310	G1	6.3	3	250	100	2	1.5	A08	P
KZ	902 310 000 0000	00	802 310 000		20				60		B5	R
L2	842 300 000 0000	00	642 300 000		2	4.5	150		9	1.6	B4	T
L2/B	842 300 000 0000	00	642 300 000		2	3.8	150		4	1.5	B4	T
L2D	842 310 000 0000	00	642 310 000		2	4.5	150		2	1.5	B5	T
L2/DD	892 3X0 000 0000	00	682 390 000	G1	2	3.8	150		4	1.6	B5	DDT
L4	842 300 000 0000	00	642 300 000		4	16	250		20	3.2	B4	T
L5A/201K	412 381 700 0000	00	412 361 500		6.3	3.3	200	200	7.1	4	B7G	P
L5A/202F	412 381 700 0000	00	412 361 500		6.3	3.3	200	200	7.1	4	B7G/F	P
L5A/210K	412 381 700 0000	00	412 361 500		6.3	5	100	100	12.5	4	B7G	P
L5A/210F	412 381 700 0000	00			6.3	5	100	100	12.5	4	B7G/F	P
L5A/220K	801 227 413 0000	00	601 225 413		5	10	150	150	28	4.4	B9A	P
L5B/280D	028 741 310 0000	00	*26 541 310		6.3	8.5	150	150	200	13.5	A08	P
L11	842 300 000 0000	00	642 300 000		1	12	100		2.8	0.6	B4	T
L12	842 300 000 0000	00	642 300 000		2	3	40		2.2	0.8	Sm4	T
L21	842 300 000 0000	00	642 300 000		2	6	150		3.2	1.8	B4	T
L21DD	892 3X0 000 0000	40	682 390 000	G1	2	3	150		5.2	1.8	B5	DDT
L22DD	208 090 X30 0000	40	206 080 930	G1	2	4.2	150		4	1.6	A08	DDT
L30	042 231 800 0000	00	042 231 600		13	8	200		25	4.2	B7	T
L42MD	842 370 000 0000	00	642 350 000		4	20	250	250	22	2.5	B5	P
L63	028 040 310 0000	00	026 040 310		6.3	8	250		9	2.6	A08	T
L77	802 384 100 0000	00	6*2 364 100		6.3	8.5	250		10.5	2.2	B7G	T
L210	842 300 000 0000	00	642 300 000		2		150			0.9	B4	T
L408	842 300 000 0000	00	642 300 000		4	3	150		5	1.5	B4	T
L410	842 300 000 0000	00	642 300 000		4	4	150		4.3	1.5	B4	T
L412	842 300 000 0000	00	642 300 000		4	1.5	200		3	1.2	B4	T
L413	842 300 000 0000	00	642 300 000		4	16	200		12	1.8	B4	T
L414	842 300 000 0000	00	642 300 000		4	8	150		12	2.8	B4	T
L415	842 300 000 0000	00	642 300 000		4	10	200		8	2	B4	T
L416D	843 200 000 0000	70	643 200 000	G2	4	13	250	80	12	1.4	B4	P
L427D	842 370 000 0000	00	642 350 000		4	42	300	200	20	1.5	B5	P
L486D	842 370 000 0000	00	642 350 000		4	15	250	250	35	2.7	B5	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
L491	842 370 000 0000		642 350 000		4	40	400	200	30	1.8	B5	P
L491D	842 370 000 0000	00	642 350 000		4	40	400	200	30	1.8	B5	P
L495	942 370 000 0000	00	842 350 000		4	30				5	B5	D
L497D	842 370 000 0000	00	642 350 000		4	30	400	200	45	3.2	B5	P
L510D	842 370 000 0000	00	642 350 000		5	17	200	150	12	1.3	B5	P
L2318	842 370 000 0000	00	642 350 000		20	18	200	200	20	1.7	B5	P
L4150D	842 310 000 0000	40	642 310 000	G1	4	15	250	250	24	2.5	B5	P
LA	384 720 000 0000	00	364 520 000		6.3	12	200	175	22	2.2	UX5	P
LD210	842 300 000 0000	00	642 300 000		2	4.5	150		3	1.3	B4	T
LD410	842 300 000 0000	00	642 300 000		4	6	200		4	1.8	B4	T
LG5	219 0X0 130 0000	00	218 090 130		6.3				120		A08	RR
LG6	219 0X0 130 0000	00	218 090 130		12				30		B8B	RR
LG14	123 000 000 0000	90	123 000 000	D1	6.3				5		B3G	R
LK430	842 300 000 0000	00	642 300 000		4	32	250		20	1.9	B4	T
LK460	842 300 000 0000	00	642 300 000		4	40	250		30	2.2	B4	T
LK4110	842 300 000 0000	00	642 300 000		4	36	400		30	2.7	B4	T
LK4112	842 300 000 0000	00	642 300 000		4	21.6	250		48	3.5	B4	T
LK4200	842 300 000 0000	00	642 300 000		4	36	400		45	4	B4	T
LL2	842 300 000 0000	00	642 300 000		2	2.5	150		3	2.5	B4	T
LL2S	023 004 080 0000	00	023 004 060		2	2.5	150		3	2.6	8SC	T
LL4	842 310 000 0000	00	642 310 000		4	10	350		18	3.5	B5	T
LL610	842 370 000 0000	00	642 350 000		5	17	200	150	12	1.3	B5	P
LN119	415 238 175 0000	00	414 237 516		50	[0 16	100 200	200	3.5 35	2.5 6.4]	B9A	TP
LN152	841 238 175 0000	00	641 237 154		6.3	[2.3 6.7	100 200	175	4.0 15.0	1.4 3.2]	B9A	TP
LN309	841 238 175 0000	00	641 237 154		12.5	[8.5 8.0	250 200	175	10.5 30	2.2 4.5]	B9A	TP
LN319	841 238 175 0000	00	641 237 154		13	[9	200 200	175	10 32	3.4 6.5]	B9A	TP
LN329	857 238 114 0000	00	645 237 114		9	[2 2	100 200	175	14 10	5 6.2]	B9A	TP
LP2	842 300 000 0000	00	642 300 000		2	4.5	150		10	3.6	B4	T
LP4	842 300 000 0000	00	642 300 000		4	36	250		48	5.5	B4	T
LP25	842 300 000 0000	00	642 300 000		4	31	400		50	7.5	B4	T
LP220	842 300 000 0000	00	642 300 000		2	4.5	·50		5	3.5	B4	P
LS5	842 300 000 0000	00	642 300 000		4.7	47	400		25		B4	T
LS5A	842 300 000 0000	00	642 300 000		5.2		400		33	0.9	B4	T
LS6A	842 300 000 0000	00	642 300 000		6.3	91	400		64	2.3	B5	T
LS7	842 300 000 0000	00	642 300 000		4	4	150		21	2.4	B5	T
LS8	842 300 000 0000	00	642 300 000		4	8	150			1.3	B4	T
LS8A	842 300 000 0000	00	742 300 000		4	8	150		26	3	B4	T
LS9B	842 300 000 0000	00	642 300 000		2	1.5	150		8	0.6	B4	T
LS826	284 310 000 0000	00	246 310 000		6.3	1.1	100		7.5	5	B8B	T
LU4A	842 300 000 0000	00	642 300 000		4	16	200		12	1.8	B4	T
LZ319	857 238 114 0000	00	645 237 114		9	[2 2	100 200	175	14 10	5 6.2]	B9A	TP
L496D	842 370 000 0000	00	642 350 000								B5	D
LZ329	857 238 114 0000	00	645 237 114		9	[2.0 2.0	100 200	175	14 10	5 6]	B9A	TP
M0465	847 231 900 0000	00	645 231 700	G1	4	[1.5	75 250	75	2 21.6	]	B7	O

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
M0495	123 184 760 0000	40	123 174 560	G1	4	[1.5 8.5	90 250	75	1.6	]	8SC	O
M3057	041 230 871 0000	00	041 230 651		6.3	4.5	200	200	30	9	B9A	P
M8079	1X2 310 900 0000	00	192 310 800		6.3				5		B7G	RR
M8080	802 384 100 0000	00	602 365 100		6.3	8.5	250		10.5	2.2	B7G	T
M8081	882 345 100 0000	00	672 344 100		6.3	0.8	100		8.5	5.3	B7G	TT
M8082	412 380 700 0000	00	412 360 500		6.3	12.4	250	250	16	2.6	B7G	P
M8083	412 381 700 0000	00	412 361 500		6.3	[2 1.5	250 200	250 150	10 4	7.65 6.4	] B7G	P
M8091	001 230 000 0000	90	**1 23* ***	D1	6.3				120		B9A	R
M8096	801 237 144 0000	00	601 235 144		6.3	7.5	250	250	45	7	B7A	P
M8097	912 314 800 0000	00	812 314 600		6.3	2.8	200		7.5	2.8	B7G	DT
M8099	412 314 800 0000	00	412 314 600		6.3	2	250		6	8.5	B7G	T
M8100	412 387 100 0000	00	412 365 100		6.3	2.3	150	150	7	4.3	B7G	P
M8101	412 387 100 0000	00	412 365 100		6.3	1	250	100	11	4.4	B7G	P
M8121	412 183 710 0000	00	412 163 510		6.3	1.4	100	100	7	5	B8D	P
M8122	412 873 180 0000	00	412 653 160		6.3	2	100	100	7.5	5	B8D	P
M8123	291 390 000 0000	00	281 380 000		6.3				5		B8D	R
M8125	412 183 710 0000	00	412 163 510		6.3	2	100	100	3	2.5	B8D	P
M8135	412 300 871 0000	00	412 3** 651		6.3	4.5	250	250	40	11	B9A	P
M8136	851 228 413 0000	00	741 226 413		6.3	8.5	250		8.5	2.2	B9A	TT
M8137	851 228 413 0000	00	741 226 413		6.3	2	250		1.2	1.6	B9A	TT
M8138	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
M8156	482 803 180 0000	00	462 603 160		6.3	2	100		13	5.5	B8D	T
M8157	287 711 413 0000	00	265 511 413		6.3	30	300	250	25	1.9	B9G	P
M8161	412 381 700 0000	00	412 361 500		6.3	2.5	250	200	8	2.5	B7G	P
M8162	851 228 413 0000	00	741 226 413		6.3	1.5	200		8.5	6.5	B9A	TT
M8178	402 013 080 0000	00	402 013 060		6.3		100		8.5	5.8	B8D	T
M8180	412 380 700 0000	00	412 360 500		6.3	2	250	250	10	7.5	B7G	P
M8195	701 238 014 0000	00	501 236 014		6.3	1	250	100	3	1.8	B9A	P
M8196	412 287 100 0000	00	412 265 100		6.3	2	150	125	5.5	3.5	B7G	P
M8212	192 310 X00 0000	00	182 310 900		6.3				5		B7G	RR
M8245	412 387 400 0000	00	412 365 400		6.3	12.5	250	250	45	4.1	B7G	P
M8248	412 344 800 0000	00	412 344 600		6.3	1.35	150		13.5	13.5	B7G	T
MAZ41	090 00X 230 0000	00	*8* **9 23*		4				30		A08	RR
MC1	423 080 000 0000	00	423 060 000		1.9	1.5	100		4	0.8	8SC	T
ME2	842 370 000 0000	00	642 350 000		2	12	200	200	13		B5	P
ME25	842 370 000 0000	00	642 350 000		4	30	400	300	60		B5	P
ME4S	023 104 780 0000	00	023 104 560		4	5	250	250		†2.0	8SC	TI
ME6S	023 104 780 0000	00	023 104 560		6.3	5	250	250		†2.0	8SC	TI
ME25	842 370 000 0000	00	642 350 000		4	30	400	300	60		B5	P
ME41	218 040 730 0000	00	216 040 530		4	22.5	250	250	0.2	†1.0	M08	TI
ME91	218 040 730 0000	00	216 040 530		9	17	150	150	0.2	†1.0	M08	TI
ME920	047 231 800 0000	00	045 231 600		9	19	200	175	0.2	†1.0	B7	TI
ME1400	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	1	1.8	A08	P
MH4	842 310 000 0000	00	642 310 000		4	2	200		8	3	B5	T
MH40	842 310 000 0000	00	642 310 000		4	3	200		2.7	2.4	B5	T
MH41	842 310 000 0000	00	642 310 000		4	1.5	200		5.2	6	B5	T
MH206	847 230 800 0000	40	645 230 600	G1	2	3	150	75	3.2		B7	H
MH1118	847 231 800 0000	40	645 231 600	G1	10	3	200	100	3.5		B7	H
MH4105	847 231 800 0000	40	645 231 600	G1	4	3	200	100	7.5		B7	H
MHD4	X09 231 800 0000	40	908 231 600	G1	4	4	200		2	1.9	B7	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
MHL4	842 310 000 0000	00	642 320 000		4	8	250		8	2.5	B5	T
MHLD6	028 9X0 310 0000	40	026 890 310	G1	6.3	5	200		11.5	3	A08	DDT
MKT4	047 231 800 0000	00	045 231 600		4	11	250	200	32	3	B7	P
MKT4	842 310 000 0000	70	642 310 000	G2	4	11	250	200	32	3	B5	P
ML4	842 310 000 0000	00	642 310 000		4	16	250		14	3.2	B5	T
ML6	842 310 000 0000	00	642 310 000		6.3	8	200		24	3.8	B5	T
ML40	842 310 000 0000	00	642 310 000		4	3	200			3	B5	T
MM4V	742 310 000 0000	80	542 310 000	A1	4	1.5	200	125	6	2.5	B5	P
MM20	742 310 000 0000	80	542 310 000	A1	20		200	100	6	3.5	B5	P
MP2	842 300 000 0000	00	642 300 000		2	12	150		12.5	3	B4	T
MP4	[080 231 700 0000 008 231 700 0000	40 50]	067 231 500	G1	4		250	150	8	2.5	B7	PP
MP/Pen	047 231 800 0000	00	045 231 600		4	16	250	250	3	3.5	B7	P
MP/Pen	842 310 000 0000	70	642 310 000	G2	4	16	250	250	30	3.5	B5	P
MPT4	047 231 800 0000	00	045 231 600		4	9	250	200	32	3	B7	P
MPT4	842 310 000 0000	40	642 310 000	G1	4	9	250	200	32	3	B5	P
MR1	902 300 000 0000	00	802 300 000		4				120		B4	R
MR4	842 300 000 0000	00	642 300 000		4	3	200		6	2.5	B4	T
MS4	742 310 000 0000	80	542 310 000	A1	4	1.5	250	75	2.4	1.1	B5	P
MS4B	742 310 000 0000	80	542 310 000	A1	4	1	200	75	3.4	3	B5	P
MS4C	742 310 000 0000	80	542 310 000	A1	4	1	200	75	3.4	3.2	B5	P
MSG/HA	742 310 000 0000	80	542 310 000	A1	4	1.5	200	80	2.1	2	B5	P
MSG/LA	742 310 000 0000	80	542 310 000	A1	4	1.5	200	75	5.2	3.7	B5	P
MSP4	742 310 000 0000	80	041 231 500	A1	4	1.8	200	100	3.4	2.4	B7	P
MSP4	041 231 700 0000	80	542 310 000	A1	4	1.8	200	100	3.4	2.4	B5	P
MSP41	742 310 000 0000	80	542 310 000	A1	4	4	250	250	8.5	3.2	B5	P
MSP41	041 231 700 0000	80	041 231 500	A1	4	4	250	250	8.5	3.2	B7	P
MS/Pen	041 231 700 0000	80	041 231 500	A1	4	1.5	200	100	4.8	2.8	B7	P
MS/Pen	742 310 000 0000	80	542 310 000	A1	4	1.5	200	100	4.8	2.8	B5	P
MS/PenA	742 310 000 0000	80	542 310 000	A1	4	2.5	200	150	9	4	B5	P
MS/PenA	041 231 700 0000	80	041 231 500	A1	4	2.5	200	150	9	4	B7	P
MS/PenB	081 231 700 0000	40	061 231 500	G1	4	1.5	200	100	4.8	2.8	B7	P
MSVPen	041 231 700 0000	80	041 231 500	A1	4	1.5	200	100	4.3	2.2	B7	P
MSVPenB	081 231 700 0000	40	061 231 500	G1	4	1.5	200	100	4.3	2.2	B7	P
MU1	002 300 000 0000	90	002 300 000	D1	4				60		B4	R
MU2	002 300 000 0000	90	002 300 000	D1	2				2		B4	R
MU12	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
MU4250	232 300 000 0000	90	232 300 000	D1	4				120		B4	R
MVSG	742 310 000 0000	80	542 310 000	A1	4	1.5	200	75	7.5	2.5	B5	P
MVSPen	742 310 000 0000	80	542 310 000	A1	4	2	250	125	5.1	2.3	B5	P
MX40	847 231 900 0000	00	645 231 700	G1	4	[1 3	150 250	75 75	 4.5	0.15 2.0]	B7	TH
MZ05-20	842 300 000 0000	00	642 300 000		6.3	12	350		45	4.2	B4	T
N14	038 740 200 0000	00	036 540 200		1.4	7.5	90	90	7	1.5	A08	P
N15	028 740 230 0000	00	026 540 230		1.4	7	90	90	7	1.5	A08	P
N16	028 740 230 0000	00	026 540 230		1.4	4.5	90	90	9.5	2.1	A08	P
N17	284 738 200 0000	00	264 536 200		1.4	7	90	75	7.4	1.5	B7G	P
N18	384 728 300 0000	00	364 526 300		1.4	4.5	90	90	9.5	2.1	B7G	P
N19	387 024 300 0000	00	365 024 300		1.4	4.5	90	90	7.7	2	B7G	P
N25	387 024 300 0000	00	365 *24 300		1.4	5.2	90	90	5	1.4	B7G	P
N30	047 231 800 0000	00	045 231 600		13	12	250	250	40	0.9	B7	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
N31	207 331 800 0000	40	205 331 600	G1	13	4.4	200	175	40	10	B7	P
N34	107 231 800 0000	40	105 231 600	G1	13		250	250	40	10.5	B7	P
N37	412 380 700 0000	00	412 360 500		13	8	200	150	50	10	B7G	P
N40	047 231 800 0000	00	045 231 600		4	3.5	250	250	32	2.9	B7	P
N41	047 231 800 0000	00	045 231 600		4	3.5	250	250	32	10	B7	P
N42	047 231 800 0000	00	045 231 600		4	16.5	250	250	34	2.5	B7	P
N43	007 231 800 0000	40	005 231 600	G1	4(5)	4.5	250	250	40	10	B7	P
N63	028 740 310 0000	00	026 540 310		6.3	16.5	250	250	34	2.5	A08	P
N66	028 740 310 0000	00	026 540 310		6.3	15	250	250	85	6.3	A08	P
N77	412 380 700 0000	00	412 360 500		6.3	12	250	250	20	2.6	B7G	P
N78	412 380 700 0000	00	412 360 500		6.3	5.5	250	250	35	10	B7G	P
N108	412 380 700 0000	00	412 36* 500		40	8	200	150	50	10	B7G	P
N118	230 074 130 0000	00	23* *54 130		40	6	150	150	30	7.5	B9A	P
N119	041 230 807 0000	00	*41 23* 6*5		45	12.5	200	175	70	10	B9A	P
N142	281 074 130 0000	00	261 054 130		45	9.5	200	175	54.5	9.5	B8A	P
N144	412 380 700 0000	00	412 360 500		6.3	12	250	250	20	2.6	B7G	P
N145	281 074 130 0000	00	261 054 130		40	6.3	200	150	29	7.5	B8A	P
N147	028 740 310 0000	00	026 540 310		6.3	6	250	250	36		A08	P
N148	287 004 130 0000	00	265 004 130		6.3	12.5	250	250	45	9.4	B8A	P
N150	281 074 130 0000	00	261 054 130		6.3	7	250	250	36	10	B8A	P
N151	281 047 130 0000	00	261 045 130		6.3	13.5	250	250	22.5	2.9	B8A	P
N152	041 230 071 0000	80	*41 23* *51	A1	20	28	200	200	40	6	B9A	P
N153	741 231 800 0000	00	541 231 600		5	2.3	200	175	36	10	B9A	P
N154	041 230 807 0000	00	*41 23* 6*5		16	14.2	200	200	45	8.2	B9A	P
N155	441 231 817 0000	00	441 231 615		6.3	10.8	225	225	26	3.2	B9A	P
N308	020 740 310 0000	80	02* 54* 310	A1	25	8.2	100	100	100	14	A08	P
N309	741 231 800 0000	00	541 231 600		15	2.3	200	175	36	10	B9A	P
N339	041 230 071 0000	80	*41 23* *51	A1	21.5	13	150	150	50	8.5	B9A	P
N349	041 230 071 0000	80	*41 23* *51	A1	20	12	150	150	5	8.5	B9A	P
N369	041 230 807 0000	00	041 23* 6*5		12.6	10.3	200	175	31	8.3	B9A	P
N379	041 230 807 0000	00	*41 23* 6*5		15		200	175	70	10	B9A	P
N709	041 230 807 0000	00	*41 23* 6*5		6.3	7.3	250	250	48	11.3	B9A	P
N727	412 387 400 0000	00	412 365 400		6.3	4.5	250	250	45	4.1	B7G	P
NDD40	902 310 000 0000	00	802 310 000		4						B4	D
NEP51	023 110 780 0000	40	023 110 560	G1	4	3	250	100	8	2.2	8SC	P
NF2	023 110 780 0000	40	023 110 560	G1	12.5	2	200	100	3	2.1	8SC	P
NF3	023 110 780 0000	40	023 110 560	G1	12.5	2	200	100	4.5	2.3	8SC	P
NG320	002 300 000 0000	90	002 400 000	D1	2						B5	D
NG3020	002 300 000 0000	90	002 300 000	D1	2				5		B4	R
NHP51	023 100 780 0000	40	023 100 560	G1	4	2.5	250	100	3.5	2	8SC	P
NLP61	023 104 780 0000	00	023 104 560		4	7	250	250	4	9	8SC	P
NLP62	020 314 780 0000	00	020 314 560		4	14	250	250	72	9	8SC	P
NSS42	742 310 000 0000	80	542 310 000	A1	4	2.5	250	100	3.5	2	B5	P
NSS183	742 310 000 0000	80	542 310 000	A1	20	2.5	200	100	3.5	2	B5	P
NT51	023 100 080 0000	40	023 100 060	G1	4	5	250		6	2.5	8SC	T
NVS4	742 310 000 0000	80	542 310 000	A1	4	2	200	100	6	1	B5	P
NW4	842 310 000 0000	00	642 310 000		4	2.5	200		2.5	1	B5	T
OO	384 200 000 0000	00	364 200 000		5		40		1	0.6	UX4	T
O1	384 200 000 0000	00	364 200 000		5	4.5	90		2.5		UX4	T
O1AA	384 200 000 0000	00	364 200 000		5	4.5	90		3.2	0.9	UX4	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
015/400	842 300 000 0000	00	642 300 000		4	35	400		40	4.5	B4	T
054V	842 310 000 0000	00	642 310 000		4		100			4	B5	T
084	842 300 000 0000	00	642 300 000		4	4	150		4	1.3	B4	T
0202	845 230 000 0000	00	645 230 000	G1	2	[	150 150	50 75	2 0.95	0.2]	B7	O
0406	845 231 X00 0000	00	645 231 700	G1	4	[4 4	90 250	90 90	2 1.6	1 1]	B7	O
01307	023 174 780 0000	40	023 154 560	G1	4	1.5	200	90	8	3	8SC	P
0BC3	041 9X8 231 0000	00	041 896 231		12.5	2	250		1	1.1	A08	DDT
0BF2	208 791 X30 0000	40	206 571 930	G1	9	2	200	100	6	1.8	A08	DDP
0CH4	218 741 830 0000	50	217 544 630	G1	15	[	100		3.5		A08	TH
						2	200	100	3	0.75]		
0F1	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	8.5	1.8	A08	P
0F9	209 701 130 0000	40	206 510 130	G1	8.5	2.5	200	100	6	2.2	A08	P
0M1	020 090 310 0000	00	020 080 310		30				120		A08	R
0M3	029 1X0 310 0000	00	028 190 310		6.3						A08	DD
0M4	028 X90 310 0000	40	026 980 310	G1	6.3	5	250		5.5	2.2	A08	DDT
0M5	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	3	1.8	A08	P
0M5C	028 710 310 0000	40	026 510 310	G1	6.3	2	250	100	3	1.8	A08	P
0M6	028 710 310 0000	40	026 510 310	G1	6.3	2.5	250	100	6	2	A08	P
0M9	028 700 310 0000	40	026 500 310	G1	6.3	18	260	250	32	2.8	A08	P
0M10	[028 748 310 0000 028 750 310 0000	50 50	] 027 546 310	G1	6.3	[2.0 2.0	100 250	 100	5.4 5.0	2.2 2.4]	A08	TH
0P41	047 231 800 0000	00	045 231 600		4	12.5	250	250		9.1	B7	P
0P42	047 231 800 0000	00	045 231 600		4	6.2	250	250		10.5	B7	P
0S6/300	842 370 000 0000	00	642 350 000		4	20	300	150	22	2	B5	P
0S18/600	023 114 700 0000	80	023 114 500	A1	6.3	14	250	275	72	8.5	8SC	P
0SW2190	021 417 380 0000	00	021 415 360		6.3	2	300	150	10	9	A08	P
0SW2192	120 417 380 0000	00	120 415 360		6.3	3	300	150	30	11	A08	P
0SW3105	041 9X8 230 0000	00	041 896 230		6.3	2	250		0.9	1.1	A08	DDT
0SW3106	028 740 310 0000	00	026 540 310		6.3	12.5	250	250	45	4.1	A08	P
0SW3107	020 90X 030 0000	00	020 809 030		5				60		A08	RR
0SW3108	028 740 310 0000	00	026 540 310		6.3	14	250	250	72	6	A08	P
0SW3109	029 1X0 300 0000	00	028 190 300		6.3						A08	DD
0SW3111	021 417 380 0000	00	021 415 360		6.3	3	250	100	9.2	2	A08	P
0SW3112	028 040 310 0000	00	026 040 310		6.3	8	250		9	2.6	A08	T
P2	842 300 000 0000	00	642 300 000		2	6	100		12	3.5	B4	T
P4	842 300 000 0000	00	642 300 000		4	21	250		30	2.8	B4	T
P6M0	023 104 780 0000	00	023 104 560		6.3	14	250	250	72	9	8SC	P
P12/250	842 300 000 0000	00	642 300 000		4	44	250		60	6	B4	T
P15/250	842 300 000 0000	00	642 300 000		4	44	250		60	6	B4	P
P15/250S	023 004 080 0000	00	023 004 060		4	44	250		60	6	8SC	T
P24/450	842 300 000 0000	00	642 300 000		7.5	70	400		55	2.1	B4	T
P25/400	842 300 000 0000	00	642 300 000		6.3	100	350		70	3.7	B4	T
P25/500	842 300 000 0000	00	642 300 000		6.3	90	400		65	3	B4	T
P26/500	842 300 000 0000	00	642 300 000		4	100	400		62.5	4.2	B4	T
P27/500	842 300 000 0000	00	642 300 000		4	27	400		62.5	8.5	B4	T
P30/500	842 300 000 0000	00	642 300 000		4	100	400		60	4	B4	T
P41	218 040 030 0000	00	216 040 030		4	11.8	250		16	4.5	M08	T
P43M	842 370 000 0000	00	642 350 000		4	17	250	250	26	2.5	B5	P
P61	218 040 030 0000	00	216 040 030		6.3	11.8	250		16	4.5	M08	T

VALVE TYPE NUMBER	PIN CONNECTIONS				CHARACTERISTICS						BASE	VALVE CLASS
	VCM163 Tester only		CT160, VT160 VCM Mk 1,2,3 & 4									
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
P215	842 300 000 0000	00	642 300 000		2		150			1.4	B4	T
P220	842 300 000 0000	00	642 300 000		2	7.5	150		6	3	B4	T
P220A	842 300 000 0000	00	642 300 000		2	14	150		15	2.7	B4	T
P222	842 300 000 0000	00	642 300 000		2	10.5	150		6	3	B4	T
P225	842 370 000 0000	00	642 350 000		2	4.5	150	150	5.6	2.2	B5	P
P240	842 300 000 0000	00	642 300 000		2	24	150		18	1.1	B4	T
P240A	842 300 000 0000	00	642 300 000		2	21	150		25	5	B4	T
P310	287 013 000 0000	40	265 013 000	G1	10	3	150	150	5.5	1.8	UX6	P
P410	842 300 000 0000	00	642 300 000		4	12	150		7	1.3	B4	T
P414	842 300 000 0000	00	642 300 000		4	16	100		14	2.8	B4	T
P415	842 300 000 0000	00	642 300 000		4	25	150		14	1.5	B4	T
P420	842 300 000 0000	00	642 300 000		4	85	400		50	6	B4	T
P421	842 370 000 0000	00	642 350 000		4	11	200	75	12	1.5	B5	P
P422	842 370 000 0000	00	642 350 000		1	20	250	250	22	2.5	B5	P
P425	842 370 000 0000	00	642 350 000		4	25	300	200	20	1.7	B5	P
P425			642 300 000		4	16.5	150		17	1.9	B4	T
P430	284 300 000 0000	00	264 300 000		4	30	200		25	2.2	UX4	T
P434	032 004 780 0000	00	032 004 560		4	17	250	250	36	2.5	8SC	P
P435	842 370 000 0000	00	642 350 000		4	17	250	250	30	3	B5	P
P440	842 370 000 0000	00	642 350 000		4	30	400	200	45	5	B5	P
P440N	842 310 000 0000	00	045 231 600		4	22	250	250	26	2.8	B7	P
P440N	047 231 800 0000	00	642 310 000		4		250	250	20	2.5	B5	P
P441N	047 231 800 0000	00	045 231 600		4	22	250	250	36	2.8	B7	P
P455	284 300 000 0000	00	264 300 000		4	15	250		30	5.5	UX4	T
P455	023 100 870 0000	00	023 100 650		4	25	250	250	36	2.6	8SC	P
P460	842 300 000 0000	00	642 300 000		4	40	200		50	3.5	B4	T
P469	047 231 800 0000	00	045 231 600		4	14	250	275	72	8.5	B7	P
P495	047 231 800 0000	00	045 231 000		4	6	200	200	32		B7	P
P496	047 231 800 0000	00	045 231 600		4	6	200	200	32	9.5	B7	P
P520	842 370 000 0000	00	642 350 000		5	17	200	150	12	1.3	B5	P
P625	842 300 000 0000	00	642 300 000		6.3	26	250		24	2.5	B4	T
P625A	842 300 000 0000	00	642 300 000		6.3	39	200		25	2.3	B4	T
P625B	842 300 000 0000	00	642 300 000		6.3	1	200			2.8	B4	T
P626	023 100 780 0000	40	023 100 560	G1	6.3	32	250	250	26	2.5	8SC	P
P628	023 100 780 0000	40	023 100 560	G1	6.3	17	250	250	56	2.5	8SC	P
P650	842 300 000 0000	00	642 300 000		6.3	1	100		37	2.7	B4	T
P861	29X 130 000 0000	00	289 130 000		6.3				30		UX5	RR
P1320	023 100 780 0000	00	023 100 560		13	20	250	250	22	1.9	8SC	P
P2018	842 310 000 0000	00	642 310 000		20	15	200		20	4	B5	T
P2020N	842 310 000 0000	70	642 310 000	G2	20	18	200	200	20	1.7	B5	P
P2060	023 140 780 0000	00	023 140 560		24	19	200	100	40	3.2	8SC	P
P2460	842 310 000 0000	70	642 310 000	G2	24	19	200	100	40		B5	P
P3580	047 231 800 0000	00	045 231 600		33	8.5	200	200	45	8	B7	P
P4100	842 300 000 0000	00	642 300 000		4	40	400		30		B4	T
PA20	842 300 000 0000	00	642 300 000		2	36	300		49	5.2	B4	T
PA1	842 310 000 0000	00	642 310 000		4	10	200		40	5	B5	P
PA40	842 300 000 0000	00	642 300 000		4	90	400		200	10	B4	T
PAB1	023 1Y0 X90 0000	00	023 1†0 980		6.3						8SC	DDD
PABC80	YX1 239 148 0000	00	†91 238 146		9.5	2.3	200		1	1.4	B9A	DDDT
PB1	234 800 000 0000	00	234 600 000		2	4	150		11.5	3.8	B4	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
PB495	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
PBF2	028 9X7 310 0000	40	026 895 310	G1	6.3	3	250	100	5.8	1.2	A08	DDF
PC86	841 234 148 0000	00	641 234 146		3.8	1.5	200		12	14	B9A	T
□PCC88	841 238 510 0000	00	641 237 510		6.3	1.2	90		15	12.5	B9A	TT
PC92	802 304 100 0000	00	602 304 100		3.2	2	250		10	5	B7G	T
PC93	842 314 800 0000	00	642 314 600		4.7	4	100		16	8	B9A	P
PC95	142 380 100 0000	00	142 360 100		3.6	1.2	200		10	10.5	B7G	T
PC96	412 314 800 0000	00	412 314 600		3.1	1	200		11.5	6.7	B7G	T
PC97	142 380 100 0000	00	142 360 100		4.5	1	150		14	16	B7G	T
PC900	412 380 100 0000	00	412 360 100		4	1	150		12	15	B7G	T
PCC84	158 234 118 0000	00	147 234 116		7	3.0	90		14	6	B9A	TT
PCC85	841 238 510 0000	00	641 237 410		9	2.1	200		10	5.8	B9A	TT
□PCC88	841 238 510 0000	00	641 237 510		6.3	1.2	90		15	12.5	B9A	TT
PCC89	148 235 118 0000	00	147 234 116		7.2	1.2	90		15	12	B9A	TT
PCC186	841 228 513 0000	00	641 227 413		7.2	8.5	250		10.5	2.2	B9A	TT
PCC189	841 238 510 0000	00	641 237 410		7.6	1.4	90		15	12.5	B9A	TT
PCC805	148 235 118 0000	00	146 234 117		7	1.2	90		15	9	B9A	TT
PCC806	148 235 118 0000	00	146 234 117		7	1.2	90		15	16.5	B9A	TT
PCE80	841 238 751 0000	00	641 237 541		10		200 200	200	10 10	3.4 12.5	B9A	TP
PCE82	841 238 751 0000	00	641 237 541		10	4.9 2.9	150 200	200	10 10	3.7 12.5	B9A	TP
PCE800	841 238 751 0000	00	641 237 541		9.4	7.8 2.7	200 200	200	10 10	3.4 7.5	B9A	TP
PCF80	857 238 114 0000	00	645 237 114		9	2 2.0	100 200	175	14.0 10.0	5.0 6.2	B9A	TP
PCF82	857 238 114 0000	00	645 237 114		9.5	1.0 1.0	150 250	0 100	18 10	8.5 5.2	B9A	TP
PCF84	415 238 718 0000	00	576 234 141		9	2 0	100 200	175	14 8	2.5 2.5	B9A	TP
PCF86	151 234 887 0000	00	141 234 675		8	3 1.2	100 200	150	14 10	6 12	B9A	TP
PCF87	178 238 415 0000	00	157 236 414		7.4	3.2 2.5	100 125	125	15 10	8.5 11	B9A	TP
PCF200	114 123 878 5000	00	114 123 756	Adap 13 G	8	1 1.7	175 160	135	8.5 13	5 12	B10B	TP
PCF800	178 238 415 0000	00	157 236 414		9	2.2 2.4	100 200	150	15 10	5 8.5	B9A	TP
PCF801	151 238 784 0000	00	141 237 564		8.5	3 1.2	100 200	125	15 10	8.5 10.5	B9A	TP
PCF802	857 238 114 0000	00	645 237 114		9.0	2.0 1.0	200 100	100	3.5 6.0	3.5 5.5	B9A	TP
PCF803	151 238 784 0000	00	141 237 564		9	3	100 150	100	15 10	9 11	B9A	TP
PCF805	878 231 514 0000	00	657 231 414		7.4	3 1.5	100 150	150	14 10	5.5 11	B9A	TP
PCF806	151 238 784 0000	00	141 237 564		8	3 1.2	100 200	150	14 10	5.5 12	B9A	TP
PCF808	878 231 514 0000	00	657 231 414		7.4	3 1.7	100 150	150	14 12	5.5 14.5	B9A	TP
PCH200	114 723 851 8000	00	114 523 741	Adap 13 A1	9	1 0	100 12.6	12.6	9 0.8	8.8 -	B10B	TH
PCL81	471 238 815 0000	00	451 237 614		12.6	1.9 6.5	150 200	200	1.3 30	1.6 8.7	B9A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
PCL82	415 238 718 0000	00	414 237 516		16	1.5 11	200 200	 175	1.7 41	2.4 7.5	B9A	TP
PCL83	841 238 175 0000	00	641 237 154		12.5	8.5 9.0	250 200	0 175	10.5 30	2.2 4.7	B9A	TP
PCL84	481 238 157 0000	00	461 237 145		15	1.7 2.9	200 200	 200	3 18	4 10	B9A	TP
PCL85	841 238 715 0000	00	541 237 514		18	0.85 15	100 175	 175	5 41	5.5 7	B9A	TP
PCL86	417 238 158 0000	00	415 237 146		14.5	1.7 5.7	250 250	 250	1.2 39	1.6 10.5	B9A	TP
PCL88	415 238 718 0000	00	414 237 516		16	2.1	200 200	 200	10	3.4	B9A	TP
PCL200	841 123 875 0000	00	641 123 654		16	1.5 2.1	200 200	 150	8.5 40	5.2 28	B10B	TP
PCL800	415 238 718 0000	00	414 237 516		16	2.1 18	100 200	 200	10 45	4.3 7.5	B9A	TP
PCL805	841 238 715 0000	00	641 237 514		18	0.85 15	100 170	 170	5 41	5.5 7	B9A	TP
PC03/3A	023 014 700 0000	80	023 014 500	A1	2		300	125		1.4	8SC	P
PC03/3B	023 014 700 0000	80	023 014 500	A1	4		300	125		1.4	8SC	P
PC05/15	023 014 700 0000	80	023 014 500	A1	4		400	250	40	1.3	8SC	P
PD220	548 230 800 0000	00	446 230 700		2	1.2	150		0.8	0.9	B7	TT
PD220A	548 230 800 0000	00	446 230 700		2	3	140		5	1.5	B7	TT
PD500	100 230 040 0000	80	1** 230 040	A1	7.3	10	400		1.6	0.14	B9D	T
PDD2	284 79X 130 0000	00	264 589 130		6.3	6	250	250	36	9	A08	DDP
PE04-10	023 114 700 0000	80	023 114 500	A1	12		400	300	27	7.5	8SC	P
PE05-15	023 114 700 0000	80	023 114 500	A1	12				40	1.5	8SC	P
PE05-25	278 130 000 0000	80	256 130 000	A1	12.6	80	400	200	70		B5B	P
PE06/40P	123 114 700 0000	80	123 114 500	A1	6.3	40	400	300	40	4	8SC	P
PE1-100	247 811 300 0000	00	245 611 300		12	33	400	250	40	6	B7A	P
Pen4DD	X19 238 700 0000	40	918 236 500	G1	4(5)	6	250	250	36	9.5	B7	DDP
Pen4V	842 310 000 0000	70	642 310 000	G2	4	10	250	200	35	3	5B	P
Pen4VA	047 231 800 0000	00	642 310 000	G2	4	22	250	250	36	2.8	B5	P
Pen4VA	842 310 000 0000	70	045 231 600		4	20	250	250	36	2.8	B7	P
Pen4VB	047 231 800 0000	00	045 231 600		4	5.8	250	250	36	9.5	B7	P
Pen4VX	842 310 000 0000	70	642 310 000	G2	4	15	350	200	22	3.5	B5	P
Pen13	023 100 780 0000	40	023 100 560	G1	13	14	200	200	25	2.5	8SC	P
Pen13A	023 110 780 0000	40	023 110 560	G1	33	8.5	200	200	45	8	8SC	P
Pen13C	047 231 800 0000	00	045 231 600		13	11	250	250	32	6.5	B7	P
Pen20	842 310 000 0000	70	642 310 000	G2	20	18	200	200	20	1.7	B5	P
Pen24	028 740 030 0000	00	206 540 030		2	3.3	200	125	5	4	M08	P
Pen25	208 740 030 0000	00	206 540 030		2	3.6	200	125	5	3	M08	P
Pen26	023 100 780 0000	40	023 100 560	G1	24	19	200	100	40	3.1	8SC	P
Pen36A	145 231 800 0000	00	145 231 600		35	8.5	200	200	45	8	B7	P
Pen36C	047 231 800 0000	00	045 231 600		33	8.5	200	200	45	8	B7	P
Pen40DD	X19 238 700 0000	40	918 236 500	G1	44	8.5	200	200	45	8	B7	DDP
Pen44	218 740 030 0000	00	216 540 030		4	11	300	275	70	10.6	M08	P
Pen45	218 740 030 0000	00	216 540 030		4	8.5	250	250	49	8.8	M08	P
Pen45DD	218 7X0 930 0000	40	216 590 830	G1	4	8.5	250	250	40	8.8	M08	DDP
Pen46	210 740 030 0000	80	210 540 030	A1	4(5)	8	300	225	63	8.5	M08	P
Pen141	208 740 030 0000	00	206 540 030		1.4	9	90	90	5.5	1.4	M08	P
Pen220	842 370 000 0000	00	642 350 000		2	4.9	150	150	9	2.2	B5	P
Pen220A	842 370 000 0000	00	642 350 000		2	9	150	150	18	2.2	B5	P
Pen230	842 370 000 0000	00	642 350 000		2	4.5	150	125	6	2.2	B5	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
Pen231	842 370 000 0000	00	642 350 000		2	2.5	150	125	5	4.4	B5	P
Pen383	218 740 030 0000	00	216 540 030		38	10	200	175	64	10.5	M08	P
Pen384	218 740 030 0000	00	216 540 030		38	7	150	125	40	7.8	M08	P
Pen425	842 370 000 0000	00	642 350 000		4	25	300	200	20	1.7	B5	P
Pen428	047 231 800 0000	00	045 231 600		4(5)	13.8	250	250	72	8.5	B7	P
Pen453DD	218 7X0 930 0000	40	216 590 830	G1	45	10	200	175	64	10.5	M08	DDP
Pen650	023 114 700 0000	80	023 114 500	A1	6.3	24	400	300	30	5	8SC	P
Pen1340	047 231 800 0000	00	045 231 600		13	8.6	250	250	41	6.4	B7	P
Pen2020	023 100 780 0000	40	023 100 560	G1	20	19	200	100	40	3.1	8SC	P
Pen3520	047 231 800 0000	00	045 231 600		35	8	200	200	40	7.3	B7	P
Pen3820	047 231 800 0000	00	045 231 600		38	10	150	175	64	10.5	B7	P
PenA1	842 370 000 0000	00	642 350 000		4	16.5	250	250	32	3	B5	P
PenA4	007 231 800 0000	00	005 231 600	G1	4	5.8	250	250	36	9.5	B7	P
PenA4	047 231 800 0000	40	045 231 600		4	5	250	250	40	9.1	B7	P
PenB1	842 370 000 0000	00	642 350 000		2	4.5	150	150	8.5	2.5	B5	P
PenB4	047 231 800 0000	00	045 231 600		4(5)	14	250	275	72	8.5	B7	P
PenDD61	98X 231 700 0000	40	869 231 500	G1	6.3	5.3	250	250	32	8.5	B7	DDP
PenDD1360	X89 231 700 0000	40	968 231 500	G1	13	5.3	250	250	32	8.2	B7	DDP
PenDD2530	98X 231 700 0000	40	869 231 500	G1	25	7.8	250	250	43	7.8	B7	DDP
PenDD4020	X89 231 700 0000	40	968 231 500	G1	40	7.7	250	250	43	7.8	B7	DDP
PenDD4021	X89 231 700 0000	40	968 231 500	G1	45	10	200	175	64	10.5	B7	DDP
PF9	028 710 310 0000	40	026 510 310	G1	6.3	3.5	250	100	7.5	1.7	A08	P
PF83	701 238 014 0000	00	501 236 014		4.5	2	60	50	1.9		B9A	P
PF86	701 238 014 0000	00	501 236 014		4.5	2	250	150	3	2	B9A	P
PF462	041 230 700 0000	80	041 230 500	A1	2	1	150	150	3	1.9	B7	P
PF472	041 230 700 0000	80	041 230 500	A1	2	0.5	150	150	2.5	1.7	B7	P
PFL200	517 823 147 80000	00	415 623 145	Adap 13 A2	16.5	[2.6 2.3	175 150	175 150	30 10	21 8.6]	B10B	PP
PL11	802 301 470 0000	00	602 301 450		17.5	10.5	200	200	53	9	F8	P
PL33	028 740 310 0000	00	026 540 310		19	5.3	250	250	32	9	A08	P
PL36	020 740 310 0000	80	*20 540 310	A1	25	8.2	100	100	100	14	A08	P
PL38	120 740 310 0000	80	120 540 310	A1	30	5.5	200	200	75	13.5	A08	P
PL81	041 230 071 0000	80	*41 23* *51	A1	21.5	28	200	200	40	6	B9A	P
PL81A	041 230 071 0000	80	*41 23* *51	A1	21.5	24.5	150	150	45	6	B9A	P
PL81F	041 230 071 0000	80	*41 23* *51	A1	21.5	2[illegible]	200	200	30	6	B9A	P
PL82	041 230 807 0000	00	041 230 605		16	14.2	200	200	45	7.6	B9A	P
PL83	741 231 800 0000	00	541 231 60*		15	2,3	200	175	36	10	B9A	P
PL84	041 230 807 0000	00	*41 23* 6*5		15	12.5	200	175	70	10	B9A	P
PL95	412 387 400 0000	00	412 365 400		4.5	9	250	250	24	5	B7G	P
PL136	721 441 270 0000	80	521 441 450	A1	35	12	100	100	90	19	A08	P
PL183	741 231 840 0000	00	541 231 640		12.6	2.1	150	225	40	25	B9A	P
PL300	721 441 370 0000	80	521 441 350	A1	35	22.5	200	150	100	10	B8A	P
PL302	020 740 3[illegible]0 0000	80	02* 340*310	A1	25	12	100	100	60	20	A08	P
PL500	441 237 710 0000	80	441 235 51*	A1	20	18	150	150	70	10	B9D	P
PL502	441 237 710 0000	80	441 235 510	A1	35	30	200	200	100	2.0	B9D	P
PL504	441 237 710 0000	80	441 235 510	A1	27	20	150	150	70	11	B9D	P
PL505	417 237 141 0000	80	415 235 141	A1	40	35	150	150	100	10	B9D	P
PL508	407 238 140 0000	00	4*5 236 14*		17.0	18	200	200	60	6	B9D	P
PL509	407 237 041 0000	80	405 235 041	A1	40	37	160	160	80	14	B9D	P
PL802	141 237 871 0000	00	141 235 651		16.0	0.9	170	170	30	40	B9A	P
PL820	041 231 771 0000	80	041 231 551	A1	21.5	22	200	175	45	6.2	B9A	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only		PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
PLL80	748 235 187 0000	00	546 234 175		12	9	250	250	24	6	B9A	PP
PM04	412 387 100 0000	00	412 365 100		6.3	1.2	250	100	11	4.4	B7G	P
PM05	412 387 100 0000	00	412 365 100		6.3	2.3	150	150	7	4.3	B7G	P
PM07	412 381 700 0000	00	412 361 500		6.3	2	250	250	10	7.5	B7G	P
PM1A	842 300 000 0000	00	642 300 000		2		100		1	1.2	B4	T
PM1HF	842 300 000 0000	00	642 300 000		2	3	150		1.5	0.8	B4	T
PM1HL	842 300 000 0000	00	642 300 000		2	1.5	150		2.3	1.2	B4	T
PM1LF	842 300 000 0000	00	j642 300 000		2	6	150		3	0.9	B4	T
PM2	842 300 000 0000	00	642 300 000		2	7	100		4	0.9	B4	T
PM2A	842 300 000 0000	00	642 300 000		2	6	160		5	2	B4	T
PM2B	548 230 800 0000	00	446 230 700		2	1	150		3	2.5	B7	TT
PM2DL	842 300 000 0000	00	642 300 000		2	4.5	150		2	1.5	B4	T
PM2DX	842 300 000 0000	00	642 300 000		2	5	150		2.3	1.1	B4	T
PM2HL	842 300 000 0000	00	642 300 000		2	1.5	150		2.2	1.4	B4	T
PM3	842 300 000 0000	00	642 300 000		4		100		2	1.1	B4	T
PM4DX	842 300 000 0000	00	642 300 000		4		100		1.5	2	B4	T
PM5	208 748 130 0000	00	206 546 130		6.3	[15 5	200 200	200 200		†1.0 †1.0]	A08	TI
PM12	742 300 000 0000	80	542 300 000	A1	2	0	150	75	4	1.1	B4	P
PM12A	742 300 000 0000	80	542 300 000	A1	2	1	150	75	2	1.5	B4	P
PM12M	742 300 000 0000	80	542 300 000	A1	2	1	150	90	1.4	1.4	B4	P
PM12V	742 300 000 0000	80	542 300 000	A1	2		150	90		0.7	B4	P
PM14			542 300 000	A1	4		150	75	2.7	0.8	B4	P
PM14V	742 300 000 0000	80	542 300 000	A1	4		150	75	2.7	0.8	B4	P
PM14L	842 300 000 0000	00	642 300 000		2	1.5	150		2.3	1.2	B4	T
PM22	842 370 000 0000	00	642 350 000		2	10	150	150	15	1.3	B5	P
PM22A	842 370 000 0000	00	642 350 000		2	4.5	150	150	5.6	2.2	B5	P
PM22C	842 370 000 0000	00	642 350 000		2	16	150	150	23	3	B5	P
PM22D	842 370 000 0000	00	642 350 000		2	2.4	150	150	5	3	B5	P
PM24	842 310 000 0000	70	642 310 000	G2	4	11	150	150	20	1.7	B5	P
PM24A	842 370 000 0000	00	642 350 000		4	22.5	300	200	20		B5	P
PM24B	842 370 000 0000	00	642 350 000		4	40	400	300	30	2.1	B5	P
PM24C	842 370 000 0000	00	642 350 000		4	20	400	200		3	B5	P
PM24D	842 370 000 0000	00	642 350 000		4(5)	35	400	200	50	4	B5	P
PM24DC	842 370 000 0000	00	642 350 000		4(5)	42	300	200	20	1.5	B5	P
PM24E	842 370 000 0000	00	642 350 000		4	40	300	300	83	3.9	B5	P
PM24M	842 370 000 0000	00	642 350 000		4	17	250	250	30	3	B5	P
PM84	401 237 808 0000	00			4.2	22	250	250	0.5		B9A	TI
PM202	842 300 000 0000	00	642 300 000		2	14	150		14	3.5	B4	T
PM252	842 300 000 0000	00	642 300 000		2	2	150		14	3.7	B4	T
PM254	842 300 000 0000	00	642 300 000		4	21	200		15		B4	T
PM256	842 300 000 0000	00	642 300 000		6.3	27	250		20		B4	T
PN2	842 370 000 0000	00	642 350 000		2	7.5	150	150	6		B5	P
PP2	842 300 000 0000	70	642 300 000	G2	2	5	150	150	7	2.1	B4	P
PP2	842 370 000 0000	00	642 350 000		2	5	150	150	7	2.1	B5	P
PP2S	023 004 780 0000	00	023 004 560		2	5	150	150	7	2.1	8SC	P
PP3/250	842 300 000 0000	00	642 300 000		4	37	300		48	5.2	B4	T
PP4	842 370 000 0000	00	642 350 000		4	15	250	250	36	3	B4	P
PP4S	842 370 000 0000	00	032 004 560		4	15	250	250	36	3	8SC	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
PP4S	032 004 780 0000	00	642 350 000		4	15	250	250	36	3	B5	P
PP5/400	842 300 000 0000	00	642 300 000		4(5)	32	400		62	8.2	B4	T
PP6AS	023 104 780 0000	00	023 104 560		6.3	18	250	250	32	2.8	8SC	P
PP6B	287 413 000 0000	00	265 413 000		6.3	6	250	250	36	10	UX6	P
PP6BG	028 740 310 0000	00	026 540 310		6.3	6	250	250	36	10	A08	P
PP6BS	028 740 310 0000	00	026 540 310		6.3	6	150	250	36	9	A08	P
PP6C	028 740 310 0000	00	026 540 310		6.3	12	250	200	36	10	A08	P
PP6E	047 231 800 0000	00	045 231 600		6.3	17	500	275	72	8.5	B7	P
PP13A	047 231 800 0000	00	045 231 600		13	12	200	200	40	2.6	B7	P
PP13S	023 100 780 0000	40	023 100 560	G1	13	14	200	200	25	3.5	8SC	P
PP24	007 231 800 0000	40	005 231 600	G1	24	19	200	100	40	3	B7	P
PP24S	023 100 780 0000	40	023 100 560	G1	24	19	200	100	40	3	8SC	P
PP34	007 231 800 0000	40	005 231 600	G1	35	6.5	200	200	45	8.5	B7	P
PP34S	023 100 780 0000	40	023 100 560	G1	35	6.5	200	200	45	8.5	8SC	P
PP35	047 231 800 0000	00	045 231 600		35	6.5	200	200	45	8.5	B7	P
PP36	147 231 800 0000	00	145 231 600		35	6.5	200	200	45	8.5	B7	P
PP37	007 231 800 0000	40	005 231 600	G1	35	9.5	200	100	45	8.5	B7	P
PP60	028 740 310 0000	00	026 540 310		6.3	15	250	250	85	6.3	A08	P
PP215	842 370 000 0000	00	642 350 0000		2	4.5	90	90	8	1.7	8SC	P
PP215S	032 004 780 0000	00	032 004 560		2.	4.5	90	90	8	1.7	8SC	P
PP220	842 300 000 0000	00	642 300 000		2	12	150		12.5	3	B4	T
PP222	842 370 000 0000	00	642 350 000		2	6	150	150	12	2.5	B5	P
PP225	842 370 000 0000	00	642 350 000		2	12	150	150	18	2	B5	P
PP225S	023 004 780 0000	00	023 004 560		2	12	150	125	18	2	8SC	P
PP415	842 370 000 0000	00	642 350 000		4	12	200	200	12	1.8	B5	P
PP416	842 370 000 0000	00	642 350 000		4	12	200	75	10	2	B5	P
PP430	842 370 000 0000	00	642 350 000		4	25	200	200	20	2	B5	P
PP431	842 370 000 0000	00	642 350 000		4	20	250	250	22	1.9	B5	P
PP472	041 230 700 0000	80	041 230 500	A1	2	0.5	150	150	2.5	1.7	B7	P
PP2018	842 310 000 0000	70	642 310 000	G2	20	18	200	200	20	2.5	B5	P
PP2018	047 231 800 0000	00	045 231 600		20	18	200	200	20	2.5	B7	P
PP2101	384 720 000 0000	00	364 520 000		2	3	150	150	7	2.1	UX5	P
PP3521	040 231 800 0000	00	040 231 600		35	25	200		70	6.3	B7	T
PP4100	842 370 000 0000	00	642 350 000		4	40	400	300	30	3	B5	P
PP4101	842 370 000 0000	00	642 350 000		4	14	250	250	36	3.5	B5	P
PP4118	180 472 300 0000	00	160 452 300		40	10	200	175	35	6.5	C7	P
PT	047 231 800 0000	00	045 231 600		4	6	250	250	32.5	7.5	B7	P
PT2	842 370 000 0000	00	642 350 000		2	4.5	150	125	5.3	2.6	B5	P
PT2	842 300 000 0000	70	642 300 000	G2	2	4.5	150	150	6.5	2.5	B4	P
PT2A	842 370 000 0000	00	642 350 000		2	10.5	150	150	18		B5	P
PT2K	842 370 000 0000	00	642 350 000		2	4.5	150	150	9.5	2.5	B5	P
PT4	842 370 000 0000	00	642 350 000		4	17	250	250	30	3	B5	P
PT4	047 231 800 0000	00	045 231 600		4	6	250	250	36	9.5	B7	P
PT4	218 047 300 0000	00	216 045 300		4	6	250	250	31	7	B7	P
PT4D	X89 231 700 0000	40	968 231 500	G1	4	6	250	250	32.5	7.5	B7	DDP
PT5	047 231 800 0000	00	045 231 600		26	7	250	250	36	9	B7	P
PT10	047 231 800 0000	00	045 231 600		3	7.5	250	250	40	9	B7	P
PT12	204 731 102 0000	80	204 531 102	A1	10	15	250	250	62	6	B9	P
PT15	742 310 000 0000	80	542 310 000	A1	6.3	25	300	300	40	2.8	B5	P
PT16	842 370 000 0000	00	642 350 000		4	15	300	300	55	4.8	B5	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
PT25	842 370 000 0000	00	642 350 000		4	22	400	200	62	4	B5	P
PT25H	842 370 000 0000	00	642 350 000		5	16	400	300	62	6.5	B5	P
PT41	842 370 000 0000	00	642 350 000		4	12.5	250	200	30	3	B5	P
PT41B	842 370 000 0000	00	642 350 000		4	40	400	300	30	2.2	B5	P
PT225	842 370 000 0000	00	642 350 000		2	6	150	150	8	2.3	B5	P
PT225	842 300 000 0000	70	642 300 000	G2	2	6	150	150	8	2.3	B4	P
PT240	842 370 000 0000	00	642 350 000		2	9	150	150	16	2.5	B5	P
PT250	842 370 000 0000	00	642 350 000		2	15	250	250	40		B5	P
PT425	842 370 000 0000	00	642 350 000		4	7.5	150	150	15	2	B5	P
PTA	047 231 800 0000	00	045 231 600		13	10	250	250	32	4	B7	P
PTAD	X89 231 700 0000	40	968 231 500	G1	4	6	250	250	7	7	B7	DDP
PTE11	287 004 130 0000	00	265 004 130		18	3	210	210	20	11	B8G	P
PTS	047 231 800 0000	00	045 231 600		26	5.5	250	250	40	6	B7	P
PTS	007 231 800 0000	40	005 231 600	G1	26	8.2	250	250	32	6	B7	P
PTSA	98X 231 700 0000	40	869 231 500	G1	26	5.5	200	200	40		B7	DDP
PTSD	X89 231 700 0000	40	968 231 500	G1	26	5	250	200	40	6	B7	DDP
PTT120P	841 238 510 0000	00	641 237 410		18	1.5	250		10	5.5	B8D	TT
PTT141	802 441 443 0000	00	602 441 443		6.3	1.2	150		22	25	B9A	T
PTT202	412 378 010 0000	00	412 356 010		18	2.2	200	200	8	5.5	B8D	P
PTT203	028 710 310 0000	40	026 510 310	G1	18	5	200	200	35	8.5	A08	P
PTT203P	028 700 310 0000	40	026 500 310	G1	18	5	200	200	35	8.5	A08	P
PTT208P	412 378 110 0000	00	412 356 110		18	4.5	200	200	18	6	B8D	P
PTT212P	412 378 010 0000	00	412 356 010		18	1.6	200	200	10.5	8.5	B8D	P
PTT213P	412 378 010 0000	00	412 356 010		6.3	1.6	200	200	10.5	8.5	B8D	P
PTT214P	412 387 110 0000	00	412 365 110		6.3	1.8	150	150	12.5	13.5	B8D	P
PTT216	402 108 073 0000	00	402 106 053		6.3	1.8	150	150	12.5	13.5	B8D	P
PTT217	123 141 718 0000	00	123 141 516		6.3	1.6	150	150	12.5	16	B9A	P
PTT241P	412 378 000 0000	00	412 356 *00		6.3	2.9	250	225	34	12.5	B8D	P
PTT243P	421 378 130 0000	00	421 356 130		6.3	1.5	150	150	26	28	B8D	P
PTT244P	817 141 230 0000	00	615 141 230		18	1.5	150	150	26	27	B8D	P
PTZ	007 231 800 0000	40	005 231 600	G1	40	5.5	250	200	40	7.5	B7	P
PV06-20	400 237 100 0000	80	400 235 100	A1	6.3	40	200	300	40	4	B7	P
PV06-25	401 237 100 0000	80	401 235 100	A1	6.3	40	200	300	40	4	B7	P
PV1-35	401 237 100 0000	80	401 235 100	A1	12	25	250	200	40	2	B7	P
PV4	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
PV25	0X1 231 900 0000	00	091 231 800		25				60		B7	RR
PV29	0X1 231 900 0000	00	091 231 800		30				60		B7	RR
PV29S	123 190 0X0 0000	00	123 180 090		30				60		8SC	RR
PV30	0X1 231 900 0000	00	091 231 800		30				30		B7	RR
PV30A	123 190 0X0 0000	00	123 180 090		30				30		8SC	RR
PV30S	123 1X0 090 0000	00	123 190 080		30				60		8SC	RR
PV75/1000	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
PV200/600	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
PV400	902 300 000 0000	00	802 300 000		4				30		B4	R
PV430	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
PV3018	1X0 912 300 0000	00	190 812 300		30				60		C7	RR
PV86	9X2 310 000 0000	00	892 310 000		6.3				60		B5	RR
PX2	842 300 000 0000	00	642 300 000		2	22	150		22	1.5	B5	T
PX4	842 300 000 0000	00	642 300 000		4	43	300		43	6	B4	T
PX5	842 300 000 0000	00	642 300 000		4	34	400		62.5	6.5	B4	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
PX25	842 300 000 0000	00	642 300 000		4(5)	31	400		40	7.5	B4	T
PX25A	842 300 000 0000	00	642 300 000		4(5)	100	400		62.5	3.7	B4	T
PX41	842 300 000 0000	00	642 300 000		4	40	250		49	6	B4	T
PX230	842 300 000 0000	00	642 300 000		2	15	150		17.5	3.5	B4	T
PX230SW	802 300 000 0000	40	602 300 000	G1	2	15	150		18	3.5	B4	T
PX240	842 300 000 0000	00	642 300 000		2	32	200		25	3	B4	T
PX2100	842 300 000 0000	00	642 300 000		7.5	30	400		18	1.6	SM4	T
PY31	020 090 310 0000	00	020 080 310		17				120		A08	R
PY32	029 090 310 0000	00	026 060 310		29				180		A08	R
PY71	200 900 030 0000	10	200 800 030	C	21				120		B8B	R
PY80	001 230 009 0000	00	001 230 008		19				180		B9A	R
PY81	000 230 009 0000	10	*** 23* **8	C	17				120		B9A	R
PY82	001 230 009 0000	00	**1 23* **8		19				180		B9A	R
PY83	000 230 009 0000	10	*** 23* **8	C	20				120		B9A	R
PY88	000 230 009 0000	10	*** 23* **8	C	26				120		B9A	R
PY300	029 090 310 0000	00	028 08* 310		29				180		A08	R
PY500	090 230 099 0000	10	*8* 23* 88*	C	42		10		150		B9D	D
PY500A	090 230 990 0000	10	*8* 23* 88*	C	42		10		150		B9D	D
PY800	000 230 009 0000	10	*** 23* **6	C	19				120		B9A	R
PY801	000 230 009 0000	10	*** 23* **6	C1	19				170		B9A	R
PZ	284 730 000 0000	00	264 530 000		2.5	16.5	250	250	31	2.5	UX5	P
PZO3-3	401 237 000 0000	80	401 235 000	A1	4	25	300	125	25	1.4	B7	P
PZ05-15	401 237 000 0000	80	401 235 000	A1	4		400	150	40	1.2	B7	P
PZ30	02X 193 210 0000	00	029 183 210		26				120		A08	RR
PZH	287 413 000 0000	00	265 413 000		2.5	16.5	250	250	34	2.2	UX6	P
QA2400	412 381 700 0000	00	412 361 500		6.3	2.5	200	200	8	2.5	B7G	P
QA2401	802 384 100 0000	00	6*2 364 100		6.3	8.5	250		10.5	2.2	B7G	T
QA2402	412 380 700 0000	00	412 36* 500		6.3	13.5	250	250	16	2.6	B7G	P
QA2403	412 381 700 0000	00	412 361 500		6.3	2.0 1.6	250 200	250 150	10.0 4.0	7.5 6.4	B7G	P
QA2404	1X2 310 900 0000	00	192 310 800		6.3				3		B7G	DD
QA2405	241 878 153 0000	00	241 657 143		6.3	14	250	150	30	3.9	B9G	PP
QA2406	581 228 413 0000	00	471 226 413		6.3	2	250		10	5.5	B9A	TT
QA2407	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
QA2408	581 481 230 0000	00	471 461 230		6.3	8	250		9	2.6	A08	TT
QB65	481 581 230 0000	00	461 471 230		6.3	8	250		9	2.6	A08	TT
QB309	841 228 513 0000	00	641 227 413		6.3	2	250		10	5.5	B9A	TT
QB329	X41 228 413 0000	00	741 226 413		12.6	8.5	250		10.5	2.2	B9A	TT
QB339	X41 228 413 0000	00	741 226 413		12.6	2	250		1.2	1.6	B9A	TT
QC05/35	237 242 300 0000	80	235 242 300	A1	1.6		200	200	100	7	A08	P
QD77	192 310 X00 0000	00	182 310 900		6.3						B7G	DD
QE04/10	287 711 413 0000	00	265 511 413		6.3	12	300	150	25	1.9	B9G	P
QE05	127 141 300 0000	80	125 141 300	A1	6.3		200	200	100	7	A08	P
QE06/50	274 130 000 0000	80	254 130 000	A1	6.3	14	200	250	83	6.5	UX5	P
QL77	802 384 100 0000	00	6*2 364 100		6.3	8.5	250		10.5	2.2	B7G	T
QN77	412 380 700 0000	00	412 360 500		6.3	12.5	250	250	16	2.6	B7G	P
QP21	548 237 800 0000	00	446 235 700		2	4.5	150	150	11	2.3	B7	PP
QP22A	487 230 785 0000	00	465 230 574		2	12	150	150	3	4	B9	PP
QP22B	458 237 800 0000	00	446 235 700		2	11.7	150	150	3.8		B7	PP
QP25	208 745 830 0000	00	207 544 630		6.3	2	150	125	10	3	M08	PP
QP230	548 237 800 0000	00	446 235 700		2	9.6	150	125	4.6	3	B7	PP
QP240	487 230 785 0000	00	465 230 574		3	5	150	150	25	4	B9	PP
QQ03/12	801 237 144 0000	00	602 235 144		6.3		300	250	45	7	B9A	P
QQC03/14	415 238 782 0000	00	412 657 240		3.1		200	200	30	3.2	B9A	PP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
QQC04/15	283 824 740 0000	00	263 724 540		6.3	14	200	200	20	2	B8B	P
QQE02-5	415 228 783 0000	00	415 226 573		6.3	5	250	200	25	10.5	B9A	PP
QQE03-12	514 228 783 0000	00	414 226 573		6.3	15	200	200	30	3.3	B9A	PP
QQE03/20	257 134 200 0000	88	245 134 200	A1/A2	6.3	17	400	200	20	2.5	B7A	PP
QQE04-20	247 135 200 0000	88	245 134 200	A1/A2	6.3	26	400	250	30	3	B7A	PP
QQE06-40	257 134 200 0000	88	245 134 200	A1/A2	6.3		400	250	30	3.4	B7A	PP
QQV02-6	415 228 783 0000	00	414 226 573		6.3	5	250	200	25	10.5	B9A	PP
QQV03-10	514 228 783 0000	00	414 226 573		6.3	10	200	150	30	3.3	B9A	PP
QQV03-20	247 135 200 0000	88	245 134 200	A1/A2	6.3	17	300	200	20	2.5	B7A	PP
QQV03-25	257 104 300 0000	88	345 124 300	A1/A2	6.3	15	400		40	2.5	B7A	PP
QQV04-15	257 134 200 0000	88	245 134 200	A1/A2	6.3	27	400	250	30	3	B7A	PP
QQV04-20	251 731 420 0000	88	241 531 420	A1/A2	6.3	23	400	200	25	4	B7A	PP
QQV06-40	247 135 200 0000	88	245 134 200	A1/A2	6.3		400	250	30	3.4	B7A	PP
QQV07-40	247 135 200 0000	88	245 134 200	A1/A2	6.3		300	250	25	1.9	B7A	PP
QQV07-50	257 104 300 0000	88	345 124 300		6.3		400	250	100	4.5	B7A	PP
QQV07-50	347 125 300 0000	88	345 124 300	A1/A2	6.3		400	250	100	4.5	B7A	PP
QQZ03-20	247 105 200 0000	88	245 1*4 200	A1/A2	1.6		300	250	40	4	B7A	PP
QQZ04-15	283 825 740 0000	00	273 625 540		3	10	300	200	20	2	B8B	PP
QQZ06-40	257 304 200 0000	88	245 3*4 200	A1/A2	2.1		200	200	30	4.5	B7A	PP
Q/U37	023 000 000 0000	90	023 000 000	D1	1.4						B3G	D
Q/U452	230 000 000 0000	90	230 000 000	D1	2··						B3G	D
QU456	230 000 000 0000	90	328 000 000		6.3						B3G	D
QV03-12	801 237 144 0000	00	602 235 144		6.3	7.5	250	250	45	7	B9A	P
QV04-7	287 711 413 0000	00	265 511 413		6.3	30	300	250	25	1.9	B9G	P
QV04-12	801 237 144 0000	00	601 235 144		6.3	7.5	250	250	45	7	B9A	P
QV04-15	247 135 200 0000	88	245 134 200	A1/A2	6.3	60	400	250	90		B7A	PP
QV04-20	241 731 520 000	88	241 531 420	A1/A2	6.3	22	400	200	25	4	A08	PP
QV05-25	274 130 000 0000	80	254 130 000	A1	6.3	12.5	300	250	83	6.5	UX5	P
QV06-20	127 141 310 0000	80	125 141 310	A1	6.3	28	200	200	100	7	A08	P
QW77	412 381 700 0000	00	412 361 500		6.3	2.5	200	200	8	2.5	B7G	P
QZ06-20	237 242 300 0000	80	235 242 300		1.6		200	100	100		A08	T
QZ77	412 381 700 0000	00	412 361 500		6.3	2	250	250	10	7.6	B7G	P
R1	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
R2	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
R4B	902 300 000 0000	00	802 300 000		4				60		B4	R
R10	112 311 100 0000	90	112 311 100	D1	1				5		B7G	R
R11	002 300 000 0000	90	002 300 000	D1	4				5		B4	R
R12	023 000 000 0000	90	023 000 000	D1	6.3				0.1		B3G	D
R13A	029 0X0 310 0000	00	028 090 310		13				30		A08	RR
R14	029 1X3 210 0000	00	028 193 210		26				120		A08	RR
R16	123 000 000 0000	90	123 000 000	D1	1.4				2		B3G	D
R17	001 230 000 0000	90	**1 23* ***	D1	6.3				120		B9A	R
R19	230 232 032 0000	90	230 232 032	D1	1.2						B9A	D
R20	230 232 032 0000	90	23* 232 *32	D1	2						B9A	R
R41	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
R43	9X2 300 000 0000	00	892 300 000		4				180		B4	RR
R52	030 90X 020 0000	00	030 809 020		5				60		20mA	RR
R80	284 300 000 0000	00	264 300 000		4	24	250		20	4	UX4	T
R116	028 740 310 0000	40	026 540 310	G1	10	2.2	200	200	8		A08	P
R120	028 040 310 0000	00	026 040 310		6.3		250		60	6.4	A08	T
R122N	028 710 310 0000	40	026 510 310	G1	18		200	200	8	5.5	A08	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only		PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
R123	028 700 310 0000	40	026 500 310	G1	18		200	200	35	8.5	A08	P
R125C	028 9X0 310 0000	40	026 890 310	G1	18	5.5	250		5	2.5	A08	DDT
R126F	028 710 310 0000	40	026 510 310	G1	18		200	200	6	1.7	A08	P
R128	029 1X0 310 0000	00	028 190 310		18						A08	DD
R134	028 741 310 0000	00	026 541 310		18		200	200	18	6	A08	P
R142	412 378 010 0000	00	412 356 010		6.3		200	200	10.5	8.5	B8D	P
R143	412 378 010 0000	00	412 356 010		6.3		200	200	8	5.5	B8D	P
R144	412 381 700 0000	00	412 361 500		6.3	2	250	250	10	7.6	B7G	P
R145	412 378 010 0000	00	412 356 010		18		200	200	8	5.5	B8D	P
R147	412 378 110 0000	00	412 356 110		18		200	200	18	6	B8D	F
R148	841 238 510 0000	00	641 237 410		18		250		10	5.5	B8D	TT
R150	123 141 718 0000	00	123 141 516		6.3	1.6	150	150	12.5	16	B9A	P
R236	028 710 300 0000	40	026 510 300	G1	1.2	2	100	100	1	0.5	A08	P
R242P	400 123 080 0000	00	400 123 060		6.3	4.5	150		15	4.3	B5A	T
R244	402 013 080 0000	00	402 013 060		6.3		150		13		B8D	T
R265	412 380 710 0000	00	412 360 510		6.3		100	100	7.5	5	B8D	P
R271	412 183 710 0000	00	412 163 510		6.3	2	150	125	5.2	3.2	B8D	P
R290	020 090 030 0000	00	020 080 030		1.2				5		A08	D
R2018	842 310 000 0000	00	642 310 000		20	2.5	200		2.5	3	B5	T
R5559	802 101 413 0000	00	6*2 1*1 413		6.3	1.5	150		25	25	B5D	T
RA	9X2 310 000 0000	00	892 310 000		13				30		B5	RR
RA1	384 200 000 0000	00	364 200 000		15	4.5	90		4.5	1.2	UX4	T
RB350/80	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
RB500/120	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
RB650/250	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
RC5B	023 009 080 0000	40	023 008 060	G1	12.6	0	100		24	6	8SC	DT
RC5C	023 009 080 0000	40	023 008 060	G1	2.4	0	100		24	6	8SC	DT
RE034	842 300 000 0000	00	642 300 000		4	3	200		2	1.2	B4	T
RE052	842 300 000 0000	00	642 300 000		2	3	150		1	1	B4	T
RE054	842 300 000 0000	00	642 300 000		4	4	150		4	1.3	B4	T
RE062	842 300 000 0000	00	642 300 000		2	9	150		4	1	B4	T
RE074	842 300 000 0000	00	642 200 000		4	9	150		3.5	0.9	B4	
RE074D	842 300 000 0000	00	642 300 000		4	3	150		3.5	0.5	B5	T
RE074N	842 300 000 0000	00	642 300 000		4	9	150		3.5	0.9	B4	T
RE076	842 300 000 0000	00	642 300 000		6.3	9	150		4	1.5	B4	T
RE084	842 300 000 0000	00	642 200 000		4	4	150		4	1.5	B4	T
RE114	842 300 000 0000	00	642 300 000		4	15	150		13	1.3	B4	T
RE122	842 300 000 0000	00	264 300 000		2	4.5	150		3	1.3	UX4	T
RE122	284 300 000 0000	00	642 300 000		2	19	150		7	1.2	B4	T
RE124	842 300 000 0000	00	642 300 000		4	18	150		11	1.6	B4	T
RE134	842 300 000 0000	00	642 300 000		4	17	250		12	2	B4	T
RE144	842 300 000 0000	00	642 300 000		4	9	150		2	0.7	B4	T
RE304	842 300 000 0000	00	642 300 000		4	32	250		20	1.9	B4	T
RE402B	084 235 800 0000	00	064 234 700		2	0	150		3		B7	TT
RE404	842 300 000 0000	00	642 300 000		3.5	125	200			0.6	B4	T
RE604	842 300 000 0000	00	642 300 000		4	45	250		40	2.5	B4	T
REL39	402 387 100 0000	00	402 365 100		6.3	2	300	150	10	9	B7G	P
REN704	872 310 000 0000	40	652 310 000	G1	4		100		2	1.2	B5	P
REN904	842 310 000 0000	00	642 310 000		4	3.5	200		6	2.4	B5	T
REN914	842 310 000 0000	00	642 310 000		4	1.5	200		0.2		B5	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
REN924	842 310 000 0000	90	642 310 000	D1	4	3	200		6	2	B5	DT
REN1004	842 310 000 0000	00	642 310 000		4		200			1.5	B5	T
REN1104	842 310 000 0000	00	642 310 000		4	16	200		12	1.3	B5	T
REN1814	842 310 000 0000	00	642 310 000		20	1.6	200		0.2	1	B5	T
REN1817D	872 310 000 0000	40	652 310 000	G1	20		100	100		1.1	B5	P
REN1821	842 310 000 0000	00	642 310 000		20	3	200		6	2.3	B5	T
REN1822	842 310 000 0000	00	642 310 000		20	18	200		15	1.6	B5	P
REN1826	842 310 000 0000	90	642 310 000	D1	20	3	200		6	1.8	B5	DT
RENS1204	742 310 000 0000	80	542 310 000	A1	4	2	200	60	4	1	B5	P
RENS1214	742 310 000 0000	80	542 310 000	A1	4	2.2	200	100	6	1	B5	P
RENS1224	184 772 300 0000	40	164 552 300	G1	4	1.5	200	125	3	0.6	C7	P
RENS1234	187 472 300 0000	40	165 452 300	G1	4	2	200	75	3	1.8	C7	P
RENS1264	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2	B5	P
RENS1264 /B1	[742 300 000 0000	80	542 300 000	A1	4	2	200	100	3	2	B4	T
RENS1274D	842 310 000 0000	70	642 310 000	G2	4	18	250	250	24	2.5	B5	P
RENS1284	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2.5	B5	P
RENS1294	742 310 000 0000	80	542 310 000	A1	4	2	200	100	4.5	2	B5	P
RENS1374D			642 310 000	G2	4	18	250	250	24	2.5	B5	P
RENS1384	842 310 000 0000	70	642 310 000	G2	4	22	250	250	36	2.8	B5	P
RENS1818	742 310 000 0000	80	542 310 000	A1	20	2	200	100	3	2	B5	P
RENS1819	742 310 000 0000	80	542 310 000	A1	20		200	60	4	1	B5	P
RENS1823D	842 310 000 0000	70	642 310 000	G2	20	18	200	200	20	1.7	B5	P
RENS1884	742 310 000 0000	80	542 310 000	A1	20	2	200	100	3	2.4	B5	P
RENS1894	742 310 000 0000	80	542 310 000	A1	20	2.2	200	100	4	1.8	B5	P
RES094	742 300 000 0000	80	542 300 000	A1	4	2	200	75	4	7	B5	P
RES105	842 300 000 0000	70	642 300 000	G2	5	15	200	150	12	1.3	B4	P
RES164	842 370 000 0000	00	642 350 000		4	11.5	250	75	12	1.4	B5	P
RES174D	842 300 000 0000	70	642 300 000	G2	4	19	250	150	12	1.3	B4	P
RES212	842 370 000 0000	00	642 350 000		2	4.4	150	125	6	2.2	B5	P
RES364	842 370 000 0000	00	642 350 000		4	2.5	300	200	20	1.7	B5	P
RES374	842 370 000 0000	00	642 350 000		4	42	300	200	20	1.5	B5	P
RES664D	842 370 000 0000	00	642 350 000		4	40	400	200	30	1.9	B5	P
RES964	842 370 000 0000	00	642 350 000		4	15	250	250	36	2.8	B5	P
RFG5	003 200 000 0000	90	003 200 000	D1	6						F8	R
RFP8/14	041 231 700 0000	80	041 231 500	A1	4	20	400	250	35	4	B7	P
RFP8/14	742 310 000 0000	80	542 310 000	A1	4	20	400	250	35	4	B5	P
RG250/ 1000	[002 300 000 0000	90	002 300 000	D1	4				120		B4	R
RG250/ 3000	[290 300 000 0000	00	280 300 000		2.5				120		UX4	R
RGN354	902 300 000 0000	00	802 300 000		4				15		B4	R
RGN504	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
RGN564	902 300 000 0000	00	802 300 000		4				30		B4	RR
RGN1054			892 300 000		4				30		B4	RR
RGN1074	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
RGN1304	902 300 000 0000	00	802 300 000		4				60		B4	R
RGN1404	092 300 000 0000	00	082 300 000		4				120		B4	R
RGN1503	9X2 300 000 0000	00	892 300 000		2.5				30		B4	RR
RGN2504	9X2 300 000 0000	00	893 300 000		4				60		B4	RR
RGN4004	9X2 300 000 0000	00	892 300 000		4				120		B4	RR

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
RH	081 231 700 0000	40	061 231 500	G1	4	1.7	250	100	7.9	7	B7	P
RK10	284 300 000 0000	00	264 300 000		7.5	100	350		50		UX4	T
RK15	284 300 000 0000	00	264 300 000		2.5	33	250		22	2.3	UX4	T
RK16	284 130 000 0000	00	264 130 000		2.5	28	250		26	2.6	B4	T
RK19	200 300 000 0000	9X	200 300 000	D1/D2	7.5				120		UX4	RR
RK21	200 300 000 0000	90	200 300 000	D1	2.5				120		UX4	R
RK24	384 200 000 0000	00	364 200 000		2	13.5	200		8	1.6	UX4	T
RK39	274 130 000 0000	80	254 130 000	A1	6.3	14	300	250	83	6.5	UX5	P
RK60	200 300 000 0000	9X	200 300 000	D1/D2	5				120		UX4	RR
RL2T2	238 400 000 0000	00	236 400 000		1.9	1.5	100		15	2.4	5AA	T
RL7	287 114 113 0000	00	265 114 113		6.3	1.7	250	250	10	7.7	B9G	P
RL12P2	287 114 113 0000	00	265 114 113		12.6	6	150	150	15	2.3	B9G	P
RL15A	710 423 208 0000	00	510 423 206		2.4	20	350	200	57		B9A	P
RL16	241 800 003 0000	00	241 600 003		6.3	2.5	250		10	6.5	B9G	T
RL18	123 000 000 0000	00	123 000 000		6.3	3.3	200		7.5	2.9	B3G	T
RL37	244 884 413 0000	00	244 664 413		6.3	1.5	250		10	9	B9G	T
RO337	9X2 300 000 0000	00	892 300 000		2.5				30		B4	RR
RO481	902 300 000 0000	00	802 300 000		4				120		B4	R
RO534	9X2 300 000 0000	00	892 300 000		5				60		B4	RR
RO771	902 300 000 0000	00	802 300 000		7.5				120		B4	R
RRAF	842 300 000 0000	00	642 300 000		4	2	100		4	1.4	B4	T
RRBF	842 300 000 0000	00	642 300 000		4	2.5	100		10	1.2	B4	T
RS	902 310 000 0000	00	802 310 000		3				60		B5	R
RS242	842 300 000 0000	00	642 300 000		3.8	5	400		70	3	B4	T
RS1009	247 135 200 0000	88	245 134 200	A1/A2	6.3	25	400	250	30	3.4	B7A	PP
RS1019	247 235 200 0000	88	245 134 200	A1/A2	6.3	20	400	250	20	2.5	B7A	PP
RSAF	742 300 000 0000	80	542 300 000	A1	4	1	150	75	4.5	1.2	B4	T
RT1-2	842 300 000 0000	00	642 300 000		4	2.6	150		26	2.5	B4	T
RT2	842 300 000 0000	00	642 300 000		4	4	200		18	1.7	B4	T
RT3	842 300 000 0000	00	642 300 000		4	2.3	300		15	2.8	B4	T
RTR4141	028 710 310 0000	40	026 510 310	G1	5.2	3	250	100	2.5	1.2	A08	P
RTR4142	028 710 310 0000	40	026 510 310	G1	5.2	8	250	125	15	2.7	A08	P
RTR4341	081 231 700 0000	40	061 231 500	G1	21	2.2	150	8	8	8	B4	P
RTR4342	007 231 800 0000	40	005 231 600	G1	21	5.8	150	125	48	9	B7	P
RV12P2000	470 812 310 0000	00	450 612 310		12.6	2.3	200	75	1.8	1.5	B7	P
RV120/250	9X2 300 000 0000	00	892 300 000		12.6	2.3	200	75	1.8	1.5	B7	P
RV120/350S	023 090 0X0 0000	00	023 080 090		4				60		8SC	RR
RV120/500S	023 090 0X0 0000	00	023 080 090		4				60		8SC	RR
RV200/600	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
RV210	042 310 000 0000	80	042 310 000	A1	4	53	400		70	5.8	B5	T
RX21	200 030 000 0000	90	200 030 000	D1	2.5				120		UX5	R
RX215	39X 200 000 0000	00	389 200 000		2.5				5		UX4	RR
RZ	023 100 090 0000	00	023 100 080		20				60		8SC	R
S2	742 300 000 0000	80	542 300 000	A1	2	1	150	60	2.3	1.1	B4	P
S2P20	801 227 413 0000	00	601 225 413		5	10	150	150	28	4.4	B9A	P
S4V	742 310 000 0000	80	542 310 000	A1	4	1	200	75	1.5	1.1	B5	P
S4VA	742 310 000 0000	80	542 310 000	A1	4	1.5	200	100	2.8	2	B5	P
S4VB	742 310 000 0000	80	542 310 000	A1	4	1.5	200	125	4.6	2.5	B5	P
S6F12	412 381 700 0000	00	412 361 500		6.3	2	250	250	10	7.5	B7G	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
S6F17	412 381 700 0000	00	412 361 500		6.3	5	100	100	12.5	4	B7G	P
S6F17F	412 381 700 0000	00	412 361 500		6.3		200	200	17	4	B7G/F	P
S6F33	412 381 700 0000	00	412 361 500		6.3	3.3	200	200	7.1	4	B7G	P
S11E12	028 741 310 0000	00	*26 541 310		6.3	8.5	150	150	200	13.5	A08	P
S12	742 300 000 0000	80	542 300 000	A1	2	1	100	30	2.5	0.7	SM4	P
S19G6	012 300 000 0000	90	*12 3** *00	D1	4				30		B7G	R
S21	742 300 000 0000	80	542 300 000	A1	2	1.5	150	75	2	1.1	B4	P
S22	742 300 000 0000	80	542 300 000	A1	2	1.5	150	75	1.5	1.7	B4	P
S23	742 300 000 0000	80	542 300 000	A1	2	1.5	150	75	2.8	1.1	B4	P
S24	742 300 000 0000	80	542 300 000	A1	2	1	150	75	3.2	1.4	B4	P
S30C	842 300 000 0000	00	642 300 000		4	38	300		50	5	B4	T
S30D	842 300 000 0000	00	642 300 000		2	38	300		50	5	B4	T
S207	742 300 000 0000	80	542 300 000	A1	2	1.5	200	100	3	0.7	B4	P
S208	542 300 000 0000	80	542 300 000	A1	2		200	100	2	0.8	B4	P
S209	023 010 780 0000	40	023 010 560	G1	2	0.5	150	125	2.4	0.7	8SC	P
S210	842 300 000 0000	70	642 300 000	G2	2	1.5	150	90	3	1.2	B4	P
S213	742 300 000 0000	80	542 300 000	A1	2	0.5	150	90	3	1.3	B4	P
S215	742 300 000 0000	80	542 300 000	A1	1	1	150	90		0.9	B4	P
S215A	742 300 000 0000	80	542 300 000	A1	2	1	150	60	2	1.1	B4	P
S215B	742 300 000 0000	80	542 300 000	A1	2	1	150	60	1.5	1.2	B4	P
S215VM	742 300 000 0000	80	542 300 000	A1	2	1.4	150	60	1	0.8	B4	P
S217	742 300 000 0000	80	041 230 500	A1	2	0.5	150	150	2.5	1.7	B7	P
S217	041 230 700 0000	80	542 300 000	A1	2	0.5	150	150	2.3	1.7	B4	P
S218	041 230 700 0000	80	041 230 500	A1	2	0.5	150	150	3	1.9	B7	P
S220	742 300 000 0000	80	542 300 000	A1	2		150	75	4	1.1	B4	P
S310A	287 113 000 0000	40	265 113 000	G1	10	3	150	150	5.5	1.9	UX6	P
S311A	287 130 000 0000	40	265 130 000	G1	10	15	150	150	30	2.8	UX5	P
S328A	287 113 000 0000	40	265 113 000	G1	7.5	3	150	150	5.5	1.9	UX6	P
S329A	287 130 000 0000	40	265 130 000	G1	7.5	15	150	150	30	2.8	UX5	P
S329L	287 113 000 0000	40	265 113 000	G1	7.5	50	150	125	30	2.8	UX6	P
S406/7	742 300 000 0000	80	542 300 000	A1	4	2	200	150	1.5	1	B4	P
S408	742 300 000 0000	80	542 300 000	A1	4	1.5	200	75	4	0.7	B4	P
S409	742 300 000 0000	80	542 300 000	A1	4	1.5	200	75	4	8.8	B4	P
S410	742 300 000 0000	80	542 300 000	A1	4	1.5	200	75	4	1	B4	P
S410N	742 310 000 0000	80	542 310 000	A1	4	2	200	60	4	1	B5	P
S412N	742 310 000 0000	80	542 310 000	A1	4	1.3	200	100	1.5	1	B5	P
S415N	742 310 000 0000	80	542 310 000	A1	4	2	200	100	6	1	B5	P
S420	081 231 700 0000	40	061 231 500	G1	4	3	250	250	11.5		B7	P
S423	023 110 780 0000	40	023 110 560	G1	4	3	250	100	8	1.8	8SC	P
S424	023 110 780 0000	40	023 110 560	G1	4	2	250	100	3	2.1	8SC	P
S430N	742 310 000 0000	80	542 310 000	A1	4	1.3	200	100	1.5	0.9	B5	P
S431N	742 310 000 0000	80	542 310 000	A1	4	1.5	250	100	3	2	B5	P
S432N	023 110 780 0000	40	023 110 560	G1	4	3	250	100	2.5	2.2	8SC	P
S434N	742 310 000 0000	80	542 310 000	A1	4	2	200	100	4.5	2.3	B5	P
S434N	041 231 700 0000	80	041 231 500	A1	4	1.5	200	100	4.5	2	B7	P
S435N	742 310 000 0000	80	041 231 500	A1	4	2	200	100	3	2.3	B7	P
S435N	041 231 700 0000	80	542 310 000	A1	4	2	200	100	3	2.3	B5	P
S440	081 231 700 0000	40	061 231 500	G1	4	2.4	250	250	4.1	3.5	B7	P
S493	742 310 000 0000	80	542 310 000	A1	4	2	200	100	4		B5	P
S495	742 310 000 0000	80	542 310 000	A1	4	2	200	100	6	2.5	B4	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS,
S617	023 110 780 0000	40	023 110 560	G1	6.3	3	250	100	2.5	2.2	8SC	P
S620	023 110 780 0000	40	023 110 560	G1	6.3	2.5	250	100	3.5	2	8SC	P
S1323	023 110 780 0000	40	061 231 500	G1	13	3	200	100	8	1.9	B7	P
S1323	081 231 700 0000	40	023 110 560	G1	13	3	200	100	8	1.9	8SC	P
S1324	081 231 700 0000	40	061 231 500	G1	13	2	200	100	3	2.4	B7	P
S1327	023 110 780 0000	40	023 110 560	G1	13	2.5	250	100	3.5	2	8SC	P
S1328	023 110 780 0000	40	023 110 560	G1	13	2	200	100	3	2.4	8SC	P
S2010N	742 310 000 0000	80	542 310 000	A1	20	2	200	60	4	1	B5	P
S2108	041 231 700 0000	80	041 231 500	A1	20	3	200	60	4	1.2	B7	P
S2108	742 310 000 0000	80	542 310 000	A1	20	3	200	60	4	1.2	B5	P
S2030N	742 310 000 0000	80	542 310 000	A1	20	2	200	100	3	2	B5	P
S2035N	742 310 000 0000	80	542 310 000	A1	20	2.5	250	100	3.5	2	B5	P
S2043	742 310 000 0000	80	542 310 000	A1	20	2.5	250	100	5	2	B5	P
S2020A	274 300 000 0000	00	254 300 000		2	1	150		1.3	0.6	UX4	T
S2020B	842 300 000 0000	00	642 300 000		2	1	150		1.3	0.6	UX4	T
S4021A	284 300 000 0000	00	264 300 000		4	8	150		20	3	UX4	T
S4021B	842 300 000 0000	00	642 300 000		4	8	150		20	3	B4	T
S4022AR	238 400 000 0000	00	236 400 000		4	4.5	150		5	2.2	UX4	T
S4022B	842 300 000 0000	00	642 300 000		4	4.5	150		5	2.2	B4	T
S4045A	842 370 000 0000	00	642 350 000		5	70	250	75	45	1.5	B5	P
SD	9X2 310 000 0000	00	892 310 000		5						B5	DD
SD2	842 300 000 0000	00	642 300 000		2	1.5	150		2.2	1.4	B4	T
SD6	092 310 000 0000	00	*82 310 *00		6.3				5		B7G	R
SD61	213 000 000 0000	90	123 000 000	D1	6.3				5		B3G	D
SD917	402 013 080 0000	00	402 013 060		6.3	3.6	100		1.4	2.7	B8A	T
SD917A	402 013 090 0000	00	402 013 080		6.3	4.7	100		1.4	2.7	B8A	T
SE211	742 300 000 0000	80	542 300 000	A1	2	1	150	75	1	1.5	B4	P
SE2018	742 310 000 0000	80	542 310 000	A1	20	3	200	60	4	1.2	B5	P
SE2118	742 310 000 0000	80	542 310 000	A1	20	24	200	100	3	3	B5	P
SG2	742 300 000 0000	80	542 300 000	A1	2		150	75	2.5	1	B4	P
SG215	742 300 000 0000	80	542 300 000	A1	2	1.5	150	75	2.7	1	B4	P
SG215VM	742 300 000 0000	80	542 300 000	A1	2	1.5	150	75		1.5	B4	P
SG220SW	872 300 000 0000	40	652 300 000	G1	2	1.5	150	75	2.4	1.5	B4	P
SG2150	742 300 000 0000	80	542 300 000	A1	2	1.5	150	75	1.5	1.1	B4	P
SGA1	742 310 000 0000	80	542 310 000	A1	4		200	100	6	3	B5	P
SN1016	412 183 710 0000	00	412 163 510		6.3	1.5	100	100	7.5	5	B8D	P
SN954	092 913 090 0000	00	082 813 080		6.3				30		B8A	R
SN956B	023 990 000 0000	00	023 880 000		1.2						B3G	D
SN1007	412 183 710 0000	00	412 163 510		6.3	0.8	100	100	5.3	3.2	B8A	P
SN1038A	412 183 710 0000	00	412 163 510		6.3	1.4	100	100	7	5	B8D	P
SN1039	412 387 100 0000	00	412 365 100		6.3	2	120	120	7.5	5	B7G	P
SN1039A	412 387 100 0000	00	412 365 100		6.3	1.4	100	100	7	5.1	B7G	P
SO1	284 300 000 0000	00	264 300 000		15	40.5	200		21	1.5	UX4	T
SO2	284 300 000 0000	00	264 300 000		7.4	88	400		55	2.1	UX4	T
SO401	002 300 000 0000	84	002 300 000	A	4		400			2	B4	T
SP2	041 230 700 0000	80	041 230 500	A1	2		150	150	3	1.8	B7	P
SP2B	081 230 700 0000	40	061 230 500	G1	2	1	150	150	2.6	0.8	8SC	P
SP2BS	032 004 780 0000	00	032 004 560		2	0.5	150	150	2.6	0.8	8SC	P
SP2D	081 230 700 0000	40	061 230 500	G1	2	1	150	150	1.4	1.7	B7	P
SP2D	742 300 000 0000	80	542 300 000	A1	2	1	150	125	1.5	1.7	B4	P
SP2V	041 230 700 0000	80	041 230 500	A1	2		150	75	2.9	1.1	B7	P

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
SP4(TUNG)	081 231 700 0000	40	061 231 500	G1	4	2	200	100	3	2.3	B7	P
SP4(MUL)	041 231 700 0000	80	041 231 500	A1	4	2	200	100	3	2.3	B7	P
SP4	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2.3	B5	P
SP4A	041 231 700 0000	80	041 231 500	A1	4	2	250	100	3	2.4	B7	P
SP4B	081 231 700 0000	40	061 231 500	G1	4	2.4	250	250	4	3.4	B7	P
SP4C	023 110 780 0000	40	023 110 560	G1	4	2.4	250	250	4	3.4	8SC	P
SP4S	023 110 780 0000	40	023 110 560	G1	4	2	250	100	3	2.5	8SC	P
SP6	412 381 700 0000	00	412 361 500		6.3	[2 1.4	250 200	250 150	10 4	7.5 6.4]	B7G	P
SP6S	023 110 780 0000	40	023 110 560	G1	6.3	2	250	100	3	2	8SC	P
SP13	081 231 700 0000	80	061 231 500	A1	13	2	200	100	3.3	2.2	B7	P
SP13	023 110 780 0000	40	023 110 560	G1	13	2	200	100	3.3	2.2	8SC	P
SP13C	081 231 700 0000	40	061 231 500	G1	13	2.2	200	200	2.5	2.8	B7	P
SP13S	023 110 780 0000	40	023 110 560	G1	13	2	150	100	3	2.4	8SC	P
SP20	742 310 000 0000	80	542 310 000	A1	20		200	100	4.5	3.5	B5	P
SP22	208 710 030 0000	40	206 510 030	G1	2	1	150	125	1.1	1.2	M08	P
SP35	023 110 780 0000	40	023 110 560	G1	35	8	200	200	41	7	8SC	P
SP41	218 710 030 0000	40	216 510 030	G1	4	1.5	200	200	10.9	8.5	M08	P
SP42	218 710 030 0000	40	216 510 030	G1	4	1.3	200	125	20	8.4	M08	P
SP61	218 710 030 0000	40	216 510 030	G1	6.3	1.5	200	200	10.9	8.5	M08	P
SP62	218 710 030 0000	40	216 510 030	G1	6.3	1.3	200	100	16	9	M08	P
SP65	023 110 780 0000	40	023 110 560	G1	6.3	2	250	100	3	2.1	8SC	P
SP141	208 700 030 0000	40	206 500 030	G1	1.4	1	90	90	1.3	0.8	M07	P
SP181	218 710 030 0000	40	216 510 030	G1	18	1.5	200	200	10.9	8.5	M08	P
SP210	041 230 700 0000	80	041 230 500	A1	2	1	125	125	1.1	1.2	B7	P
SP215	041 230 700 0000	80	041 230 500	A1	2	1.5	150	80	2.1	1.6	B7	P
SP220	842 300 000 0000	00	642 300 000		2	12	150		14	3	B4	T
SP514	401 108 073 0000	00	402 106 053		6.3	1.7	150	150	12.3	13.5	B9A	P
SP804E	211 043 000 0000	80	211 043 000	A	6.3	15	400	40	4		UX6	T
SP804F	211 043 000 0000	84	211 043 000	A	6.3	15	400		40	4	UX6	T
SP1320	041 231 700 0000	80	041 231 500	A1	13	1.5	150	100	4.4	2	B7	P
SP2220	041 231 700 0000	80	041 231 500	A1	22	3	250	200	4.9	2.7	B7	P
SPT2	041 230 700 0000	80	041 230 500	A1	2	1	125	125	2.8	1.5	B7	P
SPT4A	041 231 700 0000	80	041 231 500	A1	4	1 5	250	100	2	2.3	B7	P
SPTA	081 231 400 0000	40	061 231 400	G1	13	2.5	200	100	2.2	1.4	B7	P
SPTA	041 231 700 0000	80	041 231 500	A1	13	2.5	250	100	2.2	1.4	B7	T
SPTS	041 231 700 0000	80	041 231 500	A1	13	1.5	250	100	2	3	B7	P
SR2	842 300 000 0000	00	642 300 000		2	16	200		10	3	B4	T
SR4	842 310 000 0000	00	642 310 000		4	20	250		20	4	B5	T
SRS4451	247 135 200 0000	88	245 134 200	A1/A2	6.3	25	400	250	30	3.4	B7A	PP
SS210C	742 300 000 0000	80	542 300 000	A	2	1	150	175	0.6	1.4	B4	P
SS210D	842 300 000 0000	00	642 300 000		2	4.5	150		2	1.6	B4	T
SS210DDT	892 3X0 000 0000	40	682 390 000	G1	2	5.5	150		2.4	1.4	B5	DDT
SS210HF	842 300 000 0000	00	642 300 000		2	4	150		1	0.8	B4	T
SS210HL	842 300 000 0000	00	642 300 000		2	1.5	150		21.4	12.5	B4	T
SS220P	842 300 000 0000	00	642 300 000		2	12	150		6	1.5	B4	T
SS220PA	842 300 000 0000	00	642 300 000		2	6	150		8	3.5	B4	T
SS220SP	842 300 000 0000	00	642 300 000		2	12	150		14	3.5	B4	T
SS2018	742 310 000 0000	80	542 310 000	A1	20	3	200	100	3	3	B5	P
ST507	802 441 443 0000	00	602 441 443		6.3	1.2	150		23	25	B9A	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
SU25	020 000 300 0000	90	*2* 0** 3*0	D1	2						A08	D
SU42	030 000 020 0000	90	030 000 020	D1	4						A08	R
SU45	112 311 100 0000	90	112 311 100	D1	4				30		B7G	R
SU61	023 000 000 0000	90	023 000 000	D1	6.3				0.35		B3G	D
SU3130	002 300 000 0000	90	002 300 000	D1	2						B4	D
SW1	902 300 000 0000	00	802 300 000		4				30		B4	R
SWG2	872 300 000 0000	40	652 300 000	G1	2		150	75		1.5	B4	P
T2	842 300 000 0000	00	642 300 000		2	1	100			1	B4	T
T2M05	882 345 100 0000	00	672 344 100		6.3	[0 3	100 150		8.5 5	5.3 4.5]	B7G	TT
T4D	123 000 000 0000	90	123 000 000	D1	4				5		B3G	D
T5D	123 000 000 0000	90	123 000 000	D1	6.3				5		B3G	D
T6D	213 000 000 0000	90	213 000 000	D1	6.3				5		B3G	R
T13U	023 100 080 0000	40	023 100 060	G1	13	4	200		5.9	2.6	8SC	T
T41	218 040 030 0000	00	216 040 030		4		100		30	2k	M08	THY
T113	842 300 000 0000	70	642 300 000	G2	3	3	12	12	0.2	0.2	B4	P
T116	842 300 000 0000	70	642 300 000	G2	1.2	3	12	12	0.2	0.2		
T134	742 300 000 0000	80	542 300 000	A1	4	1	150	75				
T136	842 300 000 0000	00	642 300 000		4	8	200		6	1.6	B4	T
T151	842 300 000 0000	70	642 300 000	G2	4	15	200	150	12	1.8	B4	P
T204	023 004 080 0000	00	023 004 060		2	1	150		1.8	0.6	8SC	T
T223	023 004 080 0000	00	023 004 060		2	2	125		3	2.5	8SC	T
T435	023 100 080 0000	40	023 100 060	G1	4	5	250		6	2.5	8SC	T
T460	023 004 080 0000	00	023 004 060		4	45	250		60	6	8SC	T
T635	023 100 080 0000	40	023 100 060	G1	6.3	16	250		20	2.2	8SC	T
T1335	023 100 080 0000	40	023 100 060	G1	13	4.5	225		6	2.5	8SC	T
TB13	902 310 000 0000	00	802 310 000		13						B5	D
TB032	842 300 000 0000	00	642 300 000		2	30	150		12	1.5	B4	T
TB052	842 300 000 0000	00	642 300 000		2	15	150		7	1.2	B4	T
TB062	842 300 000 0000	00	642 300 000		2	10.5	150		13	2	B4	T
TB102	842 300 000 0000	00	642 300 000		2	4	150		5	1.3	B4	T
TB122	842 300 000 0000	00	642 300 000		2	4.5	150		6	3.5	B4	T
TB172	842 300 000 0000	00	642 300 000		2	4.5	150		4	1.4	B4	T
TB282	842 300 000 0000	00	642 300 000		2	1.5	150		2	1.3	B4	T
TB402	548 230 800 0000	00	446 230 700		4		150		6		B7	TT
TB452	742 300 000 0000	80	542 300 000	A1	2		150	75	2	1.5	B4	P
TB552	742 300 000 0000	80	542 300 000	A1	2		150	75	4	1.5	B4	P
TB622	742 300 000 0000	80	542 300 000	A1	2		150	90	2	1.4	B4	P
TB9920	842 310 000 0000	00	642 310 000		20	1.5	200		0.2	4	B5	T
TBC14	90X 231 800 0000	40	809 231 600	G1	4	7	250		4	2	B7	DDT
TBC113	90X 231 800 0000	40	809 231 600	G1	13	5	200		4	3.6	B7	DDT
TC05-25	842 300 000 0000	00	642 300 000		4		400		65	2.2	B4	T
TC432	842 370 000 0000	00	642 350 000		2	4.5	150	150	9.5	2.5	B5	P
TC432	842 300 000 0000	70	642 300 000	G2	2	4.5	150	150	9.5	2.5	B4	P
TD05-12	021 010 310 0000	84	*21 010 310	A1/G1	6.3		150		10	4	A08	T
TD044	842 300 000 0000	00	642 300 000		4	40	250		40	3	B4	T
TD2	842 300 000 0000	00	642 300 000		2	7	150		4	0.9	B4	T
TDD1C	023 19X 080 0000	00	023 189 060		13	5	200		4	2	B7	DDT
TDD13	023 19X 080 0000	40	023 189 060	G1	13	1	100			2.9	8SC	DDT
TDD25	90X 231 800 0000	40	809 231 600	G1	25	1	100		4	2	B7	DDT

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
TE2	029 0X0 310 0000	00	028 090 310		26				30		A08	RR
TE3	029 0X0 310 0000	00	028 090 310		12				30		A08	RR
TE5	029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
TE094	842 310 000 0000	00	642 310 000		4	16	200		12	1.3	B5	T
TE104	842 300 000 0000	00	642 300 000		4	26	400		61	4	B4	T
TE244	842 310 000 0000	00	642 310 000		4	3.5	200		6	2.4	B5	T
TE384	842 310 000 0000	00	642 310 000		4	2	200		3	1.5	B5	T
TE424	742 310 000 0000	80	542 310 000	A1	4		200	100	3	2	B5	P
TE434	842 370 000 0000	00	642 350 000		4	14	250	250	36		B5	P
TE464	041 231 700 0000	80	041 231 500	A1	4		200	100	3	2.5	B7	P
TE474	041 231 700 0000	80	041 231 500	A1	4	1.5	200	100	4.5	2	B7	P
TE534	842 310 000 0000	70	642 310 000	G2	4	15	250	250	24		B5	P
TE564	041 231 700 0000	80	041 231 500	A1	4	1.5	200	100	4.5	2.2	B7	P
TE634	047 231 800 0000	00	045 231 600		4	22	250	250	36		B7	P
TE994	842 310 000 0000	00	642 310 000		4	1.6	250		4	4	B5	T
TF64	081 231 700 0000	40	061 231 500	G1	4	2.7	250	250	11	2	B7	P
TF104	842 300 000 0000	00	642 300 000		4	36	400		61	4	B4	T
TH1	288 475 131 0000	00	276 454 300		6.3	[	100		4		] B8B	TH
						4	250	150	4			
TH4	[847 231 800 0000	50	] 645 231 700	G1	4	[2	150		6	1.2	] B7	TH
	057 231 800 0000	50				2	200	100	3.5			
TH13C	[847 231 800 0000	50	] 645 231 700	G1	13	[2	150		6	1.2	] B7	TH
	057 231 800 0000	50				1.5	250	75	4.0	1.8		
TH21C	[847 231 800 0000	50	] 645 231 700	G1	21	[2	150		6	1.2	] B7	TH
	057 231 800 0000	50				1.5	250	75	4	1.8		
TH22C	[847 231 800 0000	50	] 645 231 700	G1	29	[	150		5	6	] B7	TH
	057 231 800 0000	50				2	250	100	3.5			
TH29	[847 231 800 0000	50	] 645 231 700	G1	29	[2	100		12.0	4.5	] B7	TH
	057 231 800 0000	50				2	250	100	3.5			
TH30	[847 231 800 0000	50	] 645 231 700	G1	30	[	100		9.5	5.5	] B7	TH
	057 231 800 0000	50				2	150					
TH30C	[847 231 800 0000	50	] 645 231 700	G1	29	[	250	100	3.5		] B7	TH
	057 231 800 0000	50				2.5	250	100	3.25			
TH31	[218 840 730 0000	50	] 217 740 530	G1	4	[3	100		10.2	4	] M08	TH
	218 050 730 0000	50				3	250	100	3	3		
TH41	[218 840 730 0000	50	] 217 640 530	G1	4	[3	100		10.2	4	] M08	TH
	218 050 730 0000	50				3	250	100	3	3.1		
TH62	[028 748 310 0000	50	] 027 546 310	G1	6.3	[2	100		4.4	2.4	] A08	TH
	028 750 310 0000	50				2	250	100	3			
TH232	[847 231 800 0000	00	] 645 231 700		23	[	75		4.5		] B7	TH
	057 231 800 0000	00				3	150	100	3			
TH233	[218 840 730 0000	50	] 217 640 530	G1	23	[2	100		14	2.1	] M08	TH
	218 050 730 0000	50				2	150	100	2.6	3		
TH401	184 872 300 0000	50	174 652 300	G1	4	[2	150		11	2	] C7	TH
						2	75	75	2.5			
TH2320	[847 231 800 0000	50	] 645 231 700	G1	23	[	100		4.5	5.3	] B7	TH
	057 231 800 0000	50				3	150	100	3			
TH2321	[847 231 800 0000	50	] 645 231 700	G1	23	[	100		4	5.2	] B7	TH
	057 231 800 0000	50				2	150	100	2.6	3		
TH2620	[847 231 800 0000	50	] 645 231 700	G1	26	[1	100			5.3	] B7	TH
	057 231 800 0000	50				1	250	100		3.9		
TK406	023 104 780 0000	00	023 104 560		4	5	250	250	0.1	†2.0	8SC	TI
Ø TM05	882 345 100 0000	00	672 344 100		6.3	[0.8	100		8.5	5.3	] B7G	TT
						3	150		5	4.5		

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
TM12	412 344 800 0000	00	412 344 600		6.3		150		15	12	B7G	T
TP4	781 231 840 0000	50	571 231 640	G1	4	3 5	150 250	200	1.5 5.5	1.4 1.6	B9	TP
TP22	781 230 840 0000	50	571 230 640	G1	2	1 1	100 150	60	0.8 1.2	1.2 1	B9	TP
TP23	841 230 800 0000 051 230 800 0000	50	645 230 700	G1	2	1 1.5	100 150	60	4.5 1	2.1 1	B7	TP
TP25	208 840 730 0000 208 050 730 0000	50 50	207 640 530	G1	2	1 1.5	100 150	60	3.7 1	1.5 1	M08	TP
TP26	208 840 730 0000	50	207 640 530	G1	2	1 1	150 150	75	2.2 1.5	1.5 15.	M08	TP
TP230	781 230 840 0000	50	561 230 740	G1	2		100 150	75	20 4.3	1.1 1.3	B9	TP
TP443	842 370 000 0000	00	642 350 000		4	22	250	250	36	5	B5	P
TP1340	781 231 840 0000	50	571 231 640	G1	13	5	200 250	250	2 6.5	1.4 2.1	B9	TP
TP2620	081 231 840 0000	50	571 231 640	G1	26	2.5 4	250 250	200	1.5 6.5	1.4 3.4	B9	TP
TS49	281 704 130 0000	00	261 504 130		20	4.5	250	150	15	6	B8B	P
TS51	412 387 100 0000	00	412 365 100		6.3	2.3	150	150	7	4.3	B7G	P
⊙ TS52	882 345 100 0000	00	672 344 100		6.3	0.8 3	100 150		8.5 5	5.3 4.5	B7G	TT
TS53	741 238 001 0000	00	541 236 ** 1		18	1.8	200	100	15	10	B9A	P
TS54	741 238 001 0000	00	541 236 ** 1		6.3	1.7	200	125	10	9	B9A	P
TSE4	081 231 700 0000	40	061 231 500	G1	4	2.5	250	150	8	14.5	B7	P
TSP4	081 231 700 0000	40	061 231 500	G1	4	2.5	200	700	8	4.7	B7	P
TT2	222 933 3X0 0000	00	222 833 390		4.4						A08	DD
TT4	842 310 000 0000	00	642 310 000		4	16	250		20	3.2	B5	T
TT4A	842 310 000 0000	00	642 310 000		4	9	250		20	4.1	B5	T
TT11	020 470 310 0000	80	020 450 310	A1	6.3	11	250	150	30	3.5	A08	P
TT12	204 731 102 0000	80	204 531 102	A1	19	13	250	250	72	6	B9G	P
TT14	204 071 103 0000	80	204 051 103	A1	6.3	13	250	250	72	6	B9G	P
TT15	241 878 153 0000	00	241 657 143		6.3	14	250	150	30	3.9	B9G	PP
TT19	241 878 153 0000	00	241 657 143		19	16.5	250	150	30	3.9	B9G	PP
TT20	247 135 200 0000	88	245 134 200	A1/A2	6.3	17	400	200	20	2.5	B7A	PP
TT21	020 740 310 0000	80	020 540 310	A1	6.3	30	300	300	80	7	A08	P
TT22	020 740 310 0000	80	020 540 310	A1	12.6	30	300	300	80	7	A08	P
TT23	415 228 783 0000	00	414 226 573		6.3		150	150	25	10.5	B9A	PP
TT24	514 228 783 0000	00	414 226 573		6.3		250	200	30	3.3	B9A	PP
TT25	247 818 352 0000	88	245 617 342	A1/A2	6.3		400	250	30	3.4	B7A	PP
TT210	023 085 480 0000	00	023 074 460		2		150		1.5		8SC	TT
TV4	023 140 780 0000	00	023 104 560		4	21	250	250	0.2	†1.0	8SC	TI
TV6	023 104 780 0000	00	023 104 560		6.3	5	250	250	0.09	12.0	8SC	TI
TVD3 10	452 310 000 0000	88	442 310 000	A1/A2	6.3	17	300		17	3.2	B5	TT
TW1	902 310 000 0000	00	802 310 000		20				60		B5	R
TW2	9X2 310 000 0000	00	892 310 000		30				60		B5	RR
TX4	847 231 800 0000 057 231 800 0000	50 50	645 231 700	G1	4	5 1.5	150 300	90	9 5.5	1.5	B7	TH
TX21	847 231 800 0000 057 231 800 0000	50 50	645 231 700	G1	21	2 1.5	150 250	90	15 5.5	2.5	B7	TH
TX41	847 231 800 0000 057 231 800 0000	50 50	645 231 700	G1	4	3 2.5	100 250	100	9 3.2	3.8	B7	TH

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	TOP CAP	CT160, VT160, VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
TY86F	230 232 032 0000	90	23' 232 '32	D1	7.5						B9A	R
TZ40	204 300 000 0000	80	204 300 000	A1	7.5	1	100			0.4	UX4	T
U4C	842 300 000 0000	00	642 300 000		4	12	200		35	3.2	B4	T
U4E	842 300 000 0000	00	642 300 000		4	40	400		45	4	B4	T
U4F	842 300 000 0000	00	642 300 000		4	40	400		45	4	B4	T
U5	9X2 300 000 0000	00	892 300 000		5				15		B4	RR
U8	9X2 300 000 0000	00	892 300 000		7.5				60		B4	RR
U9	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
U10	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
U12	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
U14	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
U15	902 300 000 0000	00	802 300 000		6.3				120		B4	R
U16	002 300 000 0000	90	002 300 000	D1	2				5		B4	R
U17	002 300 000 0000	90	002 300 000	D1	5				30		B4	R
U19	002 300 000 0000	90	002 300 000	D1	4				60		B4	R
U19/23	002 300 000 0000	90	002 300 000	D1	4				60		B4	R
U22	200 000 030 0000	90	200 000 030	D1	2				5		M08	R
U22FH	200 000 030 0000	90	200 000 030	D1	2						M08	D
U23	002 300 000 0000	90	002 300 000	D1	4				60		B4	R
U24	030 000 200 0000	90	030 000 200	D1	2				1		A08	R
U25	023 000 000 0000	90	023 000 000	D1	2				120		B3G	D
U26	3X1 221 900 0000	00	391 221 800		13				60		B7	RR
U26	231 232 132 0000	90	231 232 132	D1	2				0.2		B9A	D
U27	002 300 000 0000	90	002 300 000	D1	4				30		B4	R
U29	002 300 000 0000	90	002 300 000	D1	2				5		B5	R
U30	3X1 221 900 0000	00	391 221 800		13				60		B7	RR
U30/250	902 300 000 0000	00	802 300 000		4				30		B4	R
U31	020 090 310 0000	00	020 080 310		26				120		A08	R
U33	002 300 000 0000	90	002 300 000	D1	2				2		B4	R
U35	020 000 030 0000	90	020 000 030	D1	1.4				2		A08	R
U37	023 000 000 0000	90	023 000 000	D1	1.4				0.5		B2G	D
U41	020 000 300 0000	90	'2' 0'0 3'0	D1	1.2				1		A08	D
U43	023 000 000 0000	90	023 000 000	D1	6.3				0.5		B2G	D
U49	230 232 032 0000	90	230 232 032	D1	2				0.2		B9A	D
U51	030 X09 020 0000	00	030 908 020		5				120		A08	RR
U52	030 X09 020 0000	00	030 908 020		5				60		A08	RR
U52IT	009 0X0 230 0000	00	008 090 230		5				60		A08	RR
U54	030 X09 020 0000	00	030 908 020		5				60		A08	RR
U60	020 000 300 0000	90	'2' *** 3'0	D1	6.3						A08	D
U60/500	9X2 300 000 0000	00	892 300 000		4				60		B4	R
U65/550	902 300 000 0000	00	802 300 000		7.5				60		B4	R
U70	029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
U71	020 090 310 0000	00	020 080 310		30				60		A08	R
U74	020 090 310 0000	00	020 080 310		30				120		A08	R
U77	020 90X 020 0000	00	'20 809 020		5				180		A08	RR
U78	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
U81	00X 009 230 0000	00	009 008 230		6.3				60		B8B	RR
U84	00X 009 230 0000	00	009 **8 230		4				30		B8B	RR
U101	290 009 130 0000	00	280 008 130		50				120		B8B	R
U107	291 009 300 0000	00	281 008 300		40				60		B7G	R

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT180 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
U118	290 000 130 0000	00	280 *** 130		40				60		B8A	R
*U119	001 230 009 0000	00	**1 23* **8		38				120		B9A	R
U120/500	9X2 300 000 0000	00	892 300 000		2				120		B4	R
U134	029 1X0 310 0000	00	028 190 310		13				60		A08	RR
U142	290 000 130 0000	00	280 000 130		31				60		B8A	R
U143	020 X09 030 0000	00	020 908 030		4				30		A08	RR
U145	290 000 130 0000	00	280 000 130		40				60		B8A	R
U147	029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
U149	20X 009 130 0000	00	209 008 130		6.3				30		B8B	RR
U150	290 00X 130 0000	00	280 009 130		6.3				30		B8A	RR
U152	001 230 009 0000	00	001 230 008		19				120		B9A	R
U153	000 230 009 0000	10	*** 23*.**8	C	17				120		B9A	R
U154	001 230 009 0000	00	**1 23* **8		19				120		B9A	RR
U191	000 090 230 0000	10	0** 080 230	C1	19				120		A08	R
U192	001 230 009 0000	00	**1 23* **6		19				120		B9A	R
U193	000 230 009 0000	10	*** 23* **6	C1	19				120		B9A	R
U201	020 090 310 0000	00	020 080 310		20				60		A08	R
U251	000 230 009 0000	10	*** 23* **8	C	25				120		B9A	R
U281	020 090 310 0000	00	020 080 310		28				120		A08	R
U282	001 000 230 0000	90	001 000 230	D1	28				120		A08	R
U291	029 090 310 0000	00	028 08* 310		29				180		A08	R
U301	000 090 230 0000	10	0** 080 230	C	30				120		A08	R
U309	001 230 009 0000	00	**1 23* **8		20				120		B9A	R
U329	000 230 009 0000	10	*** 23* **8	C	25				120		B9A	R
U381	001 230 009 0000	00	**1 23* **8		38				120		B9A	R
U403	201 090 030 0000	00	201 080 030		40				120		M08	R
U404	290 000 130 0000	00	280 *** 130		40				60		B8A	R
U415	842 300 000 0000	00	642 300 000		4	10.5	150		5	1.4	B4	T
U418	842 300 000 0000	00	642 300 000		4	13	150		10	1.6	B4	T
U650	902 300 000 0000	00	802 300 000		6.3				30		B4	R
U709	901 230 X00 0000	00	8*1 23* 9**		6.3				60		B9A	RR
U718	2X0 009 130 0000	00	29* **8 130		6.3				60		B8A	RR
U801	129 9XX 310 0000	00	128 899 310		80				120		A08	RR
U2140P	3X1 221 900 0000	00	391 221 800		13				60		B7	RR
U4020	902 310 000 0000	00	802 310 000		40				120		B5	R
UA55	827 415 738 0000	00	625 414 537		55	6	90	90	36	7	B9A	PP
UAA11	023 19X 100 0000	00	023 189 100		22				5		B5C	DD
UAA91	192 310 X00 0000	00	182 310 900		19				5		B7G	RR
UAA171	120 913 0X0 0000	00	120 813 090		25				5		B8B	DD
UABC80	Y91 23X 148 0000	00	181 239 146		28	1	100		0.8	1.4	B9A	DDDT
UAF21	287 914 130 0000	00	265 814 130		20	2	250	100	6	2.8	B8A	DP
UAF41	289 174 130 0000	00	268 154 130		13	2	200	90	5	2	B8A	DP
UB41	201 X09 130 0000	00	201 908 130		19				5		B8A	RR
UB91	192 310 X0C 0000	00	182 310 900		19						B7G	DD
UBC1	208 091 X30 0000	40	206 081 930	G1	13	1.7	200		3	2	A08	DDT
UBC41	284 0X9 130 0000	00	264 098 130		14	1.6	200		1.5	1.6	B8A	DDT
UBC81	841 239 0X0 0000	00	641 238 09*		14	1.5	200		1.5	1.6	B9A	DDT
UBF2	208 791 X30 0000	40	206 581 930	G1	12.5	2	250	100	5	1.8	A08	DDP
UBF11	9X2 381 470 0000	00	892 361 450		20	2	200	75	5	1.8	F8	DDP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
UBF15	9X2 381 470 0000	00	892 361 450		27	2	250	100	12	5	F8	DDP
UF80	741 238 9X1 0000	00	541 236 891		17	2	200	125	5	2.2	89A	DDP
UBF89	741 238 9X1 0000	00	541 236 891		19	2	200	100	9	3.8	89A	DDP
UBF171	9X2 741 380 0000	00	892 541 360		20	3.2	250	75	6	1.8	88B	DDP
UBL1	206 791 X30 0000	40	206 581 930	G1	55	11.5	200	200	55	8.5	A08	DDP
UBL21	284 7X9 130 0000	00	264 598 130		55	13	200	200	55	8	88B	DDP
UBL3	023 19X 780 0000	40	023 189 560	G1	55	6	100	100	29	7.5	85C	DDP
UBL71	284 79X 130 0000	00	264 589 130		55	5.2	250	250	44	9.5	88B	DDP
UC80	414 234 484 0000	00	414 234 464		12		150		12.5	14	89A	T
UC92	802 304 100 0000	00	602 304 100		9.5	1	200		11.5	6.4	B7G	T
UC95	142 360 100 0000	00	142 360 100		10.8	1.2	200		10	10.5	B7G	T
UC96	412 314 800 0000	00	412 314 600		9.3	1	200		11.5	6.7	B7G	T
UCC84	148 234 118 0000		147 234 116		21	1.5	90		12	6	89A	TT
UCC85	841 238 510 0000	00	641 237 410		26	2.1	200		10	5.8	89A	TT
UCC88	841 238 510 0000	00	641 237 410		21	1.2	90		15	12.5	89A	TT
UCC89	148 235 118 0000	00	146 234 117		21.6	1.2	90		15	12	89A	TT
UCC189	841 238 510 0000	00	641 237 410		21	1.2	90		15	12.5	89A	TT
UCF12	218 745 830 0000	50	642 371 450		20	1 2	100 200	100	5	3 2	F8	TP
UCF80	857 238 114 0000	00	645 237 114		27	2 2	100 200	175	14 10	5 6.2	89A	TP
UCH4	218 745 830 0000	50	217 544 630	G1	20	2 2	100 200	100	6 5.2	3 2.2	A08	TH
UCH5	123 814 780 0000	50	123 644 570	G1	20	2 2	100 250	100	6.3 6.5	2.7 2.6	85C	TH
UCH11	842 381 570 0000 052 381 570 0000	00 00	642 371 450		20	2 2	100 250	100	5 4.7	2.4 2.5	F8	TH
UCH21	288 475 131 0000	00	276 454 131		20	7 2	100 200	90	6.4 5.2	2.2 2.2	88B	TH
UCH41	288 474 130 0000 280 575 130 0000	00 00	276 454 130		14	2 2	100 200	90	6.4 2.7	2.2 1.7	88A	TH
UCH43	288 475 130 0000 280 575 130 0000	00 00	276 454 130		14	2 2	100 200	75	5 8	2 2.2	88A	TH
UCH71	288 475 131 0000	00	276 454 131		20	2 2	100 200	90	16.4 5.2	2.2 2.2	88B	TH
UCH80	741 238 885 0000	00	541 236 764		*4.5	2	75 250	85	5.1 3		89A	TP
UCH81	741 238 185 0000	00	541 236 764		19	3 2.6	100 200	125	5 7.6	2.3 2.4	89A	TP
UCH717	842 755 380 0000	00	642 544 370		20	2.5	200 200	100	3 2	0.7	88B	TP
UCL11	572 381 480 0000	00	452 371 460		60	2 8.5	200 200	200	2 45	2.1 9	F8	TP
UCL81	471 238 815 0000	00	451 237 614		39	1.9 7	150 200	200	1.3 30	1.6 8.7	89A	TP
UCL82	415 238 718 0000	00	414 237 516		50	1 16	200 200	200	3.7 35	2.5 6.4	89A	TP
UCL83	841 238 175 0000	00	641 137 154		40	1.5 9.5	200 200	175	2.4 30	2.5 5.5	89A	TP
UCL84	481 238 157 0000	00	461 237 145		45	1.7 2.1	200 200	175	3 18	4	89A	TP
UCL86	417 238 158 0000	00	415 237 146		44	1.7 7	250 250	250	1.2 36	1.6 10	89A	TP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
UD2	842 300 000 0000	00	642 300 000		2	12	150		14	2.5	B4	T
UDDL71	023 19X 780 0000	40	023 189 560	G1	44	10	200	200	60	9	8SC	DD
UDH	902 310 000 0000	00	803 310 000		20				60		B5	R
UDP12	023 190 780 0000	40	023 180 560	G1	40	10	200	200	60	9	8SC	DP
UDP13	028 790 310 0000	40	026 580 310	G1	40	10	200	200	60	9	A08	DP
UDT1	023 19X 080 0000	40	023 189 060	G1	15	3	200		10.3	3	8SC	DD
UE1	023 100 090 0000	00	023 100 080		25				60			
UE2	123 190 0X0 0000	00	123 180 090		50				60		8SC	RR
UE13	020 090 310 0000	00	020 080 310		25				60		A08	R
UE100	209 000 130 0000	00	208 0*0 130		50						A08	R
UEL11	572 381 780 0000	40	452 371 560	G	48	6	100 200	300 200	2.4 22	1.6 5	F8	PP
UF5	023 110 780 0000	40	023 110 560	G1	12.5	2.5	100	100	3.2	2.2	8SC	P
UF6	023 110 780 0000	40	023 110 560	G1	12.5	20	100	100	3	1.8	8SC	P
UF8	208 711 130 0000	40	206 511 130	G1	12	2	200		6	1.6	B8B	P
UF9	208 701 130 0000	40	206 501 130	G1	12.5	2.5	200	100	6	2.2	A08	P
UF10	023 110 780 0000	40	023 110 560	G1	12.5	2.4	200	100	5.5	2.4	8SC	P
UF11	802 301 470 0000	00	602 301 450		15	2	200	75	6	2.2	F8	P
UF14	812 370 140 0000	00	612 350 140		25	5	200	200	12	7	F8	P
UF15	812 301 470 0000	00	612 301 450		25	2	200	100	12	5.5	F8	P
UF21	287 104 130 0000	00	265 104 130		12.5	2.5	200	100	6	2.2	B8B	P
UF40	280 047 130 0000	00	260 045 130		12.6	2	200	150	3	1.8	B8D	P
UF41	280 074 130 0000	00	26* *54 130		12.5	3	200	175	7.2	2.3	B8A	P
UF42	280 174 130 0000	00	260 154 130		21	2	200	175	10	8.5	B8A	P
UF43	280 174 130 0000	00	260 154 130		21	2	200	125	15	6.3	B8A	P
UF80	141 230 871 0000	00	141 230 651		19	2	200	170	10	7.4	B9A	P
UF81	741 238 000 0000	00	541 236 000		12.6	2.5	250	125	6	2.2	B9A	P
UF85	141 231 871 0000	00	141 231 651		19	2	200	100	9.7	5.9	B9A	P
UF86	701 238 014 0000	00	501 236 014		12.6	2	200	150	3	1.8	B9A	P
UF89	041 230 871 0000	00	041 230 651		12.6	2	200	100	9	3.8	B9A	P
UF172	112 740 380 0000	00	112 540 360		30	2	200	100	4.5	3	B8B	P
UF174	112 740 380 0000	00	112 540 360		30	3	200	150	12	8	B8B	P
UF175	112 740 380 0000	00	112 540 360		30	2	200	75	10	5.7	B8B	P
UF183	141 230 871 0000	00	141 230 651		18.9	2	200	90	12	12.5	B9A	P
UF184	141 230 871 0000	00	141 230 651		18.9	2.5	200	200	10	15	B9A	P
UH3	023 110 780 0000	00	023 110 560		13	3	250	100	8	2.2	8SC	P
UH4	9X3 200 000 0000	00	893 200 000		4				5		B5	RR
UHPS1	023 110 780 0000	00	023 110 560		13	2.5	250	100	3.5	2	8SC	P
UL1	108 740 130 0000	00	206 540 130		60	11.5	200	200	55	8.5	A08	P
UL2	023 104 780 0000	00	023 104 560		35	5	200	200	20	7	8SC	P
UL11	802 301 470 0000	00	602 301 450		45	14	200	200	45	9	F8	P
UL12	802 301 470 0000	00	602 301 450		60	8	200	125	75	12	F8	P
UL21	287 004 130 0000	00	265 004 130		45	13	200	200	55	8	B8B	P
UL22	287 004 130 0000	00	265 004 130		46	10	200	175	61	9	B8B	P
UL41	280 074 130 0000	00	26* *54 130		45	9	200	175	54	9.5	B8A	P
UL43	280 174 130 0000	00	260 154 130		50	2.6	250	250	36	10	B8A	P
UL44	200 174 130 000	80	200 154 130	A1	45	13.5	200	175	28.5	7	B8A	P
UL46	281 074 130 0000	00	261 054 130		45	9	200	175	54	9.5	B8A	P
UL71	284 700 130 0000	00	264 500 130		45	5.2	200	200	22	6.5	B8B	P
UL84	041 230 807 0000	00	*41 23* 6*5		45	12.5	200	175	70	10	B9A	P
UL171	102 741 380 0000	00	102 541 360		55	8.5	200	200	45	9	B8D	P

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	VCM163 Tester only — TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4 — TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
ULL80	748 235 187 0000	00	546 234 175		25		250	250	24		B9A	PP
ULP	842 310 000 0000	00	642 310 000		13	20	250		27	4	B5	T
ULP51	823 147 000 0000	00	623 145 000		40	17	250	250	36	2.5	8SC	P
ULP61	023 100 780 0000	40	023 100 560	G1	33	8	200	200	55	9	8SC	P
UM4	208 748 130 0000	00	206 546 130		12.6	4.2 12.5	200 200	200 200		†1.0 †1.0	A08	TI
UM11	208 748 130 0000	00	206 546 130		15	4.2 12.5	200 200	200 200		†1.0 †1.0	A08	TI
UM34	028 748 310 0000	00	026 456 310		12.6	4.2 12.5	250 250	250 250		†1.0 11.0	A08	TI
UM80	410 230 807 0000	00	41* 23* 6*5		19	14	200	200	0.4	†0.5	B9A	TI
UM81	410 230 807 0000	00	41* 23* 6*5		19	14	200	200	0.4	†0.5	B9A	TI
UM84	401 237 808 0000	00	4*1 235 6*6		12.6	22	250	250	0.4	†0.5	B9A	TI
UM85	401 237 808 0000	00	401 235 607		19	13	200		1	†0.2	B9A	TI
UM85	401 237 80X 0000	00	401 235 607		19	13	200	200	1	0.2	B9A	
UN955	213 480 000 0000	00	213 460 000		6.3	7	250		6.3	2.2	5AA	T
UP			892 300 000		4				30		B4	RR
UP2	023 140 780 0000	00	023 140 560		25	19	200	100	40	3	8SC	P
UP6	023 100 780 0000	40	023 100 560	G1	35	8	200	200	55	9	8SC	P
UP13	028 740 310 0000	00	026 540 310		35	8	200	200	55	9	A08	P
UP13	040 231 700 0000	80	040 231 500	A1	13	1	200	100		3	B7	P
UP35U	023 100 780 0000	40	023 100 560	G1	35	8	200	200	55	9	8SC	P
UPX	842 310 000 0000	00	642 310 000		25	34	250		38	7	B5	T
UQ80	741 235 114 0000	00	541 236 114		12	1	250	20	0.9	7	B9A	P
UR1	023 100 090 0000	00	023 100 080		20				60		8SC	R
UR1C	902 310 000 0000	00	802 310 000		20				60		B5	R
UR2	123 190 0X0 0000	00	123 180 090		30				60		8SC	RR
UR3C	9X1 231 900 0000	00	091 231 800		30				60		B7	RR
UT2	023 100 080 0000	40	023 100 060	G1	15	5	100		6	3	8SC	T
UTH4	523 184 780 0000	50	423 164 570	G1	17	2.5	100 200	90	4 3	2 0.8	8SC	TH
UTH12	523 184 780 0000	50	423 164 570	G1	17	2.5	100 250	30	4 3	2 0.7	8SC	TH
UU2	9X2 300 000 0000	00	892 230 000		4				30		B4	RR
UU3	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
UU5	9X2 300 000 0000	00	892 300 000		4(5)				60		B4	RR
UU6	209 0X0 030 0000	00	208 090 030		4				60		M08	RR
UU7	209 0X0 030 0000	00	209 090 030		4				60		M08	RR
UU8	209 0X0 030 0000	00	208 090 030		4				120		M08	RR
UU9	2X0 009 130 0000	00	290 008 130		6.3				30		B8A	RR
UU10	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
UU12	901 230 X00 0000	00	8*1 23* 9**		6.3				60		B9A	RR
UU30/250	9X2 300 000 0000	00	892 300 000		4				15		B4	RR
UVG51	123 1X0 090 0000	00	123 190 080		30				60		8SC	RR
UY1	399 029 120 0000	00	388 028 120		50				120		A08	R
UY1NS	309 020 120 0000	00	3*8 02* 120		50				120		A08	R
UY2	023 190 000 0000	00	023 180 000		26				30		F8	R
UY3	023 100 090 0000	00	023 100 080		50				120		8SC	R
UY4	023 100 090 0000	00	023 100 080		35				30		8SC	R
UY11	902 300 100 0000	00	802 300 100		50				120		F8	R
UY21	290 900 130 0000	00	280 80* 130		50				120		B8B	R
UY22	290 909 130 0000	00	280 80 130		26				60		B8B	R

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
UY31	020 090 310 0000	00	020 080 310		50				120		A08	R
UY42	290 000 130 0000	00	280 *0* 130		31				60		B8A	R
UY82	001 230 009 0000	00	**1 23* **8		55				180		B9A	R
UY85	001 230 009 0000	00	**1 23* **8		38				120		B9A	R
UY89	101 230 009 0000	00	1*1 23* **8		31				60		B9A	R
UY91	912 390 900 0000	00	812 380 800		26				60		B7G	R
UY92	002 390 100 0000	00	**2 38* 100		26				60		B7G	R
V2M70	902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
V20	902 310 000 0000	00	802 310 000		20				60		B5	R
V20/7000	002 300 000 0000	90	002 300 000	D1	4				15		B4	R
V20S	023 100 090 0000	00	023 100 080		20				60		8SC	R
V22/7000	000 010 100 0000	90	000 010 100	D1	6.3				5		B8B	D
V25	091 231 X00 0000	00	081 231 900		25				60		B7	RR
V30	902 310 000 0000	00	802 310 000		30				120		B5	R
V30/1	002 300 000 0000	90	002 300 000	D1	2						B4	D
V41	090 00X 230 0000	00	*8* **9 230		4				30		B8B	RR
V51	290 00X 130 0000	00	280 009 130		5				30		B8A	RR
V61	290 00X 130 0000	00	28* **9 130		6.3				30		B8A	RR
V99	283 400 000 0000	00	283 400 000		3	4.5	90		2.5	0.4	UX4	T
V226	041 230 700 0000	80	041 230 500	A1	6.3	5	400	250	14	3	B7	P
V245	041 240 700 0000	80	041 240 500	A1	3		250	250	16	5	B7	P
V248A	200 740 030 0000	80	200 540 030	A1	2	10	150	150	32	5.2	M08	P
V311	290 000 130 0000	00	28* *** 130		31				60		B8A	R
V312	802 310 000 0000	40	602 310 000	G1	4	4.8	250		6	2.3	B5	T
V339	000 231 800 0000	40	000 231 600	G1	4		250			1.7	B7	T
V453	218 710 030 0000	40	216 510 030	G1	4	1.8	250	100	4.5	2	M08	P
V503	842 300 000 0000	00	642 300 000		4	85	400		100	4.5	B4	T
V877	218 710 030 0000	40	216 510 030	G1	6.3	4	200	200	6.7	3.4	M08	P
V884	412 381 700 0000	00	412 361 500		6.3	2.5	250	200	8	2.5	B7G	P
V914	9X2 310 000 0000	00	892 310 000		4						B5	DD
V960	002 300 000 0000	90	002 300 000	D1	4				60		B4	R
V1120	047 231 000 0000	80	045 231 000	A1	6.3	9.8	200	200	40	8.7	B7	P
V1120B	040 231 700 0000	80	040 231 500	A1	4(5)	9.8	200	200	40	8.7	B7	P
V1906	002 300 000 0000	90	002 300 000	D1	4(5)				60		B4	R
V1928	112 311 100 0000	90	112 311 100	D1	4				5		B7G	R
V2018	002 300 000 0000	90	002 300 000	D1	20				30		B4	R
V2118	902 310 000 0000	00	802 310 000		20				60		B5	R
V4200	802 300 000 0000	00	802 300 000		4				120		B4	R
VBF11	9X2 381 470 0000	00	892 361 450		35	2	200	75	5	1.9	F8	DDP
VC1	023 100 080 0000	40	023 189 060	G1	55	2	200		6	3	8SC	DDT
VC1	023 19X 080 0000	40	023 189 060		55	2	200		6	3	8SC	DDT
VCH11	842 381 570 0000 052 381 570 0000	00 00	642 371 450		40		100 250	 90	4 3	2 0.7	F8	TH
VCL11	572 381 480 0000	00	452 371 460		90	0.5 4.5	100 200	 200	2 12	2.4 5	F8	TH
VDS	742 310 000 0000	80	542 310 000	A1	16	2	200	75		1.6	B5	P
VDS8	742 310 000 0000	80	542 310 000	A1	16	1	200	75	5	3	B5	P
VEG51	023 100 090 0000	00	023 100 080		20				60		8SC	R
VEL11	472 381 780 0000	50	452 371 560		90	 6	100 200	30 200	2.4 22	1.6 5	F8	PP
VF3	023 110 780 0000	40	023 110 560	G1	55	2.5	250	100	5	2	8SC	P
VF14	812 370 140 0000	00	612 340 140		60	4.5	250	250	12	7	F8	P

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only — SELECTOR SWITCH	VCM163 Tester only — TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 — SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4 — TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
VFT4	028 740 310 0000	00	026 540 310		4	22	250	250	0.2	†1.0	A08	TI
VG406	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
VG411	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
VG421	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
VG2908	9X2 300 000 0000	00	892 300 000		2.5				30		B4	RR
VG3016	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
VG3630	9X2 300 000 0000	00	892 300 000		4				120		B4	RR
VG5006	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
VG5007	023 090 0X0 0000	00	023 080 090		4				60		8SC	RR
VG5107	902 300 0X0 0000	00	802 300,090		4				60		F8	RR
VH2	912 390 100 0000	00	812 380 100		6.3				5		B7G	D
VH3	142 384 100 0000	00	142 364 100		6.3	4.5	150		13	5	B7G	T
VH5	412 387 100 0000	00	412 385 100		6.3	2	200	125	7.7	5.1	B7G	P
VHP13	041 231 700 0000	80	041 231 500	A1	13	1.5	200	100	4	2	B7	P
VHT2	847 230 800 0000	40	645 230 600	G1	2		150	75			B4	H
VHT2A	847 230 800 0000	40	645 230 600	G1	2		150	50			B7	H
VHT4	747 231 800 0000	40	545 231 600	G1	4	3	200	100	3.6		B7	H
VHTA	123 184 770 0000	40	123 164 550	G1	13	1.5	250	100	3.2		8SC	H
VHTA	747 231 800 0000	40	545 231 600	G1	13	1.5	200	100	3.2		B7	H
VHTS	847 231 700 0000	40	645 231 500	G1	13	3	200	100	2.6		B7	H
VHTS	747 231 800 0000	40			13	3	200	100			B7	H
VL1	023 100 780 0000	40	023 100 560	G1	55	14	200	200	25	2.2	8SC	P
VL4	023 100 780 0000	40	023 100 560	G1	110	8.5	200	200	45	8	8SC	P
VLS61	002 300 000 0000	90	002 300 000	D1	2				3		B4	R
VM1	200 000 300 0000	90	2** 00* 300	D1	1.4						B7G	D
VM3R	047 231 800 0000	00	045 231 600		4	22	250	250	0.2		B7	TI
VM4V	742 310 000 0000	80	542 310 000	A1	4	1	200	80	14	2.4	B5	P
VME4	047 231 800 0000	00	045 231 600		4	22	250	250		†1.0	B7	TI
VMP4	041 231 700 0000	80	041 231 500	A1	4	2	250	100	3	3.5	B7	P
VMP4	742 310 000 0000	80	542 310 000	A1	4	1	250	100	5	3.5	B5	P
VMP4G	041 231 700 0000	80	041 231 500	A1	4	2	250	100	8	2.7	B7	P
VMS4	742 310 000 0000	80	542 310 000	A1	4	1	200	80	11	2.1	B5	P
VMS4B	742 310 000 0000	80	542 310 000	A1	4	1	200	80	5.2	2.4	B5	P
VO2	847 320 800 0000	40	645 320 600	G1	2		150	90	1.8		B7	O
VO2S	023 084 780 0000	40	023 064 560	G1	2		150	50	2		8SC	O
VO4	847 231 700 0000	40	645 231 500	G1	4	1.5	250	75	1.6		B7	O
VO4S	023 174 780 0000	40	023 154 560	G1	4	1.5	250	75	1.6		8SC	O
VO6	123 184 780 0000	40	123 164 560	G1	6.3	3	100	100	4.6		8SC	O
VO13	847 231 700 0000	40	645 231 500	G1	13	1.5	250	75	1.6		B7	O
VO13S	123 174 780 0000	40	123 154 560	G1	13	1.5	250	75	1.6		8SC	O
VO13J	023 184 780 0000	50	023 164 570	G1	13	[1 1	100 200	75	1	1.2 1.7	] B7	TH
VP2	041 230 700 0000	80	041 230 500	A1	2	1	150	150	3	1.5	B7	P
VP2B	081 230 700 0000	40	061 230 500	G1	2	1.5	150	150	1.6	0.7	B7	P
VP2B	032 004 780 0000	00	065 231 500	G1	2	1.5	150	60	2	1.4	B7	H
VP2B	087 231 700 0000	40	032 004 560		2	15	150	150	2.5	0.7	8SC	P
VP2BS	032 010 780 0000	40	032 010 560	G1	2	1	150	150	2.5	0.7	8SC	P
VP2D	081 230 700 0000	40	061 230 500	G1	2	1.5	150	75	1.3	2	B7	P
VP3	023 110 780 0000	40	023 110 560	G1	55	2.5	250	100	5	2	8SC	P
VP4	041 231 700 0000	80	542 310 000	A1	4	2	200	100	4.5	2.3	B5	P
VP4	041 231 700 0000	80	041 231 500	A1	4	2	200	100	4.5	2.3	B7	P
VP4C	041 231 700 0000	80	041 231 500	A1	4	2	250	250	11.5	4	B7	P

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only		PIN CONNECTIONS: CT160, VT160 VCM Mk 1,2,3 & 4		CHARACTERISTICS						BASE	VALVE CLASS
	SELECTOR SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ		
VP4S	023 110 780 0000	40	023 110 560	G1	4	2	250	100	8	1.8	8SC	P
VP4S	081 231 700 0000	40	061 231 500	G1	4	3	250	100	8	1.8	B7	P
VP6	412 381 700 0000	00	412 361 500		6.3	2.5	250	200	8	2.1	B7G	P
VP6	081 231 700 0000	40	061 231 500	G1	6.3	3	250	100	7.5	1.7	B7	P
VP6S	023 110 780 0000	40	023 110 560	G1	6.3	3	250	100	7.5	1.8	8SC	P
VP12D	028 X97 310 0000	40	026 985 310	G1	13	3	250	125	9	1.1	A08	DDP
VP13	041 231 700 0000	80	041 231 500	A1	13	1.5	200	100	6.3	3	B7	P
VP13	081 231 700 0000	40	061 231 500	G1	13	3	200	100	8	2.8	B7	P
VP13A	023 110 780 0000	40	023 110 560	G1	13	2	200	100	4	2.2	8SC	P
VP13B	081 231 700 0000	40	061 231 500	G1	13	2	200	200	9	2.2	B7	P
VP13S	081 231 700 0000	40	061 231 500	G1	13	3	200	100	8	2.8	B7	P
VP13S	023 110 780 0000	40	023 110 560	G1	13	3	200	100	8	2.8	8SC	P
VP20	742 310 000 0000	80	542 310 000	A1	20	2	200	100	4	2.2	B5	P
VP21	041 230 700 0000	80	041 230 500	A1	2	1	150	60	1.8	1.1	B7	P
VP22	208 710 030 0000	40	206 510 030	G1	2	1.5	150	60	1.2	0.8	M08	P
VP41	218 710 030 0000	40	216 510 030	G1	4	2.7	250	250	7.7	2	M08	P
VP41	081 231 700 0000	40	061 231 500	G1	4	3.3	250	250	11	2	B7	P
VP133	218 710 030 0000	40	216 510 000	G1	13	2.7	150	150	8	2.1	M08	P
VP210	041 230 700 0000	80	041 230 500	A1	2	1.5	150	60	1.1	0.8	B7	P
VP210	742 300 000 0000	80	542 300 000	A1	2	1.5	150	60	1.1	0.8	B4	P
VP215	742 300 000 0000	80	542 300 000	A1	2	1.5	150	75	2	0.7	B4	P
VP215	041 230 700 0000	80	041 230 500	A1	2	1.5	150	75	2	0.7	B7	P
VP215B	081 230 700 0000	40	061 230 500	G1	2	1.5	150	125	1.5	1	B7	P
VP215C	041 230 700 0000	80	041 230 500	A1	2	1.5	150	125	1.5	1	B7	P
VP1320	041 231 700 0000	80	041 231 500	A1	13	2.7	250	100	5	2	B7	P
VP1321	041 231 700 0000	80	041 231 500	A1	13	2.8	200	200	7.4	2	B7	P
VP1322	081 231 700 0000	40	061 231 500	G1	13	2.8	250	200	7.4	2	B7	P
VPT2	742 300 000 0000	80	542 300 000	A1	2	1.5	150	60	1.5	1.1	B4	P
VPT2	041 230 700 0000	80	041 230 500	A1	2	1.5	150	60	1.5	1.1	B7	P
VPT4	041 231 700 0000	80	542 310 000	A1	4	3	250	100	5.5	2	B5	P
VPT4	742 310 000 0000	80	041 231 500	A1	4	3	250	100	5.5	2	B7	P
VPT4B	041 231 700 0000	80	041 231 500	A1	4	3	250	100	6	3.2	B7	P
VPTA	041 231 700 0000	80	041 231 500	A1	13	2	250	100	4.2	2.9	B7	P
VPTS	041 231 700 0000	80	041 231 500	A1	13	3	200	100	5.5	2.6	B7	P
VPU1	080 231 700 0000	40	060 231 500	G1	13	.	250	200		3.5	B7	P
VSGA1	742 310 000 0000	80	542 310 000	A1	4	1.5	200	100	7	6.1	B5	P
VT1	842 310 000 0000	00	642 310 000		4	5	200		5	2	B5	T
VT2	842 310 000 0000	00	642 310 000		4	2	200		3	1.9	B5	T
VT121	285 310 000 0000	00	264 310 000		6.3	7	250		6.3	2.2	5AA	T
VTF6	028 740 310 0000	00	026 540 310		6.3	22	200	200	0.2	11.0	A08	TI
VTP4	742 310 000 0000	80	542 310 000	A1	4	3	200	100	5.5	2	B5	P
VX2	081 237 700 0000	40	061 235 500	G1	2	1	150	60	1	0.5	B7	H
VX2S	023 017 780 0000	40	023 015 560	G1	2	1	150	60	1	0.5	8SC	H
VX4	717 231 800 0000	40	515 231 600	G1	4	2	250	75	1.8	0.5	B7	H
VX4S	023 117 780 0000	40	023 115 560	G1	4	2	250	75	1.8	0.5	8SC	H
VX6S	023 117 780 0000	40	023 115 560	G1	6.3	3	250	100	1.9	4	8SC	P
VX13	717 231 800 0000	40	515 231 600	G1	13	2	250	75	1.8		B7	P
VX13S	023 117 780 0000	40	023 115 560	G1	13	2	250	75	1.8		8SC	H
VX8045	402 183 700 0000	00	402 163 500		6.3	1.4	100	100	7	5	B8D	P
VX8046	402 873 180 0000	00	402 653 160		6.3	2	100	100	7.5	5.3	B8D	P

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160, VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V ↑Ra MΩ	BASE	VALVE CLASS
VX8054	412 073 700 0000	00	412 053 500		6.3	9	100	100	31	5	B8D	P
VY1	023 100 090 0000	00	023 100 080		55				60		8SC	R
VY2	023 190 000 0000	00	023 180 000		30				15		8SC	R
VY2N	023 100 090 0000	00	023 100 080		30				15		8SC	R
W4	842 300 000 0000	00	642 300 000		4	7.5	150		3	1.2	B4	T
W4-500	9X2 300 000 0000	00	892 300 000		4				60		B4	RR
W30	041 231 700 0000	80	041 231 500	A1	13	1	250	250	12	4	B7	P
W31	041 231 700 0000	80	041 231 500	A1	13	3	250	100	8	2.7	B7	P
W42	081 231 700 0000	40	061 231 500	G1	4	3	250	100	7.6	1.5	B7	P
W61	028 710 310 0000	40	026 510 310	G1	6.3	3	250	75	8.5	2.9	A08	P
W63	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	7.6	1.5	A08	P
W101	287 104 130 0000	00	265 104 130		19	3	250	100	8	2.8	B8B	P
W107	412 381 700 0000	00	412 361 500		12.5	7.5	200	200	8	2.5	B7G	P
W119	141 230 871 0000	00	141 730 651		13	1.3	200	100	13	4.4	B9A	P
W145	280 174 130 0000	00	260 154 130		13	2.5	200	100	7	2.3	58A	P
W148	287 140 130 0000	00	265 140 130		6.3	2.5	250	150	9.5	2.8	B8B	P
W149	287 104 130 0000	00	265 104 130		6.3	3	250	100	8.5	1.8	B8B	P
W213	842 300 000 0000	00	642 300 000		2	7.5	150		1	1.2	B4	T
W216	040 120 780 0000	00	040 120 560		2	1.5	150	90	3	1.2	B7	P
W318	90X 231 800 0000	40	809 231 600	G1	4	2	100		3.5	2.5	B7	DOT
W406	842 300 000 0000	00	642 300 000		4	7.5	150		3	1.2	B4	T
W411	842 300 000 0000	00	642 300 000		4	2.5	150		3	2.2	B4	T
W412	842 300 000 0000	00	642 300 000		4	7.5	150		3	1.2	B4	T
W415N	842 310 000 0000	00	642 310 000		4	2.5	200		2.5	1	B5	T
W420	842 300 000 0000	00	642 300 000		4	4	150		4	1.3	B4	T
W4080	842 310 000 0000	00	642 310 000		4	2.5	200		2.5	1	B5	T
W4110	842 310 000 0000	00	642 310 000		4	1.5	200		1	3	B5	T
WD2	842 300 000 0000	00	642 300 000		2	2.5	150		1	1	B4	T
WD30	780 231 9X0 0000	40	560 231 890	G1	13	1	250	100	7	2.6	B9	DDP
WD40	780 231 9X0 0000	40	560 231 890	G1	4	1	250	100	7	3.5	B9	DDP
WD70	741 238 9X1 0000	00	541 236 891		6.3	2	250	90	5	2.2	B9A	DDP
WD119	741 238 9X1 0000	00	541 236 891		19	1.5	200	100	11	4.5	B9A	DDP
WD142	289 174 130 0000	00	268 154 130		13	2	200	90	5	2.1	B8A	DP
WD150	289 174 130 0000	00	268 154 130		6.3	2	250	100	5	2.1	B8A	DP
WD709	741 238 9X1 0000	00	541 236 891		6.3	2	250	90	5	2.2	B9A	DDP
WE23	742 310 000 0000	80	542 310 000	A1	4	2	200	100	3	2.5	B5	P
WE24	742 310 000 0000	80	542 310 000	A1	4		200	100	3	2.5	B5	P
WE27	842 310 000 0000	00	642 310 000		4	3.5	200		6	2.4	B5	T
WE28	842 310 000 0000	00	642 310 000		4	1.5	200		1	2.5	B5	T
WE29	842 310 000 0000	90	642 310 000	D1	4	3	200		6	2	B5	DT
WE30	842 370 000 0000	00	642 350 000		4	15	250	250	36	2.8	B5	P
WE33	023 110 780 0000	40	023 110 560	G1	4	3	100	250	8	1.9	8SC	P
WE35	023 004 780 0000	00	023 004 560		4	15	250	250	15	2.8	8SC	P
WE37	023 19X 080 0000	40	023 189 060	G1	4	7	250		4	2	8SC	DOT
WE38	023 104 780 0000	00	023 104 560		4	6	250	250	36	9	8SC	P
WE39	023 100 080 0000	40	023 100 060	G1	4	5.5	250		6	2.5	8SC	P
WE51	9X2 300 000 0000	00	892 300 000		4				30		B4	RR
WE52	9X2 300 000 0000	00	892 300 000		2				60		B4	RR
WE53	023 090 0X0 0000	00	023 080 090		4				60		8SC	RR
WE54	023 090 0X0 0000	00	023 080 090		4				30		8SC	RR

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
WE350A	274 130 000 0000	80	254 130 000	A1	6.3	4.5	400	250	83	6.5	UX5	P
WE377	02X 190 310 0000	00	029 180 310		117				60		A08	RR
WE403A	412 387 100 0000	00	412 365 100		6.3	2.3	150	150	7	4.3	B7G	P
WHTS	957 231 800 0000	50	745 231 600	G1	13	[1 1	150 250	75		0.6 1.5]	B7	TH
WT210-0006	[02X 190 310 0000	00	029 180 310		6.3						A08	DD
WT210-0007	[028 740 310 0000	00	026 540 310		6.3	18	350	250	54	5.2	A08	P
WT210-0012	[2X9 300 000 0000	00	298 300 000		5				60		UX4	RR
WT210-0013	[29X 300 000 0000	00	289 300 000		5				120		UX4	RR
WT210-0019	[29X 300 000 0000	00	298 300 000		5				120		UX4	RR
WT210-0021	[029 0X0 310 0000	00	028 090 310		6.3				30		A08	RR
WT210-0025	[02X 190 310 0000	00	029 180 310		117				60		A08	RR
WT210-0029	[028 040 310 0000	00	026 040 310		6.3	8	250		8	2	A08	T
WT210-0037	[128 479 310 0000	00	126 458 310		117	[5.2	100	100	60 43	5.3]	A08	RP
WT210-0040	[902 30X 100 0000	00	802 309 100		6.3				30		B7G	RR
WT210-0042	[030 90X 020 0000	00	030 809 020		5				60		A08	RR
WT210-0048	[020 90X 030 0000	00	020 809 030		5				120		A08	RR
WT210-0081	[021 417 380 0000	00	021 415 360		6.3	2	250	100	3	1.7	A08	P
WT210-0082	[028 740 310 0000	00	026 540 310		6.3	12.5	250	250	45	4.1	A08	P
WT210-0083	[218 4X9 130 0000	00	216 498 130		6.3	2	250		2.3	1.6	B8B	DDT
WT210-0084	[028 456 310 0000	00	027 446 310		6.3	5	250		3	1.6	A08	TT
WT210-0085	[412 387 400 0000	00	412 365 400		50	7.5	150	100	49	7.5	B7G	P
WT210-0087	[028 748 310 0000	50	027 546 310	G1	6.3	[1 3	100 250	100	8 4	2.5 1.2]	A08	TH
WT210-0089	[028 740 310 0000	00	026 540 310		6.3	9	200	175	15	2.3	A08	P
WT210-0090	[287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	2	1.2	UX6	P
WT210-0094	[481 581 230 0000	00	461 471 230		6.3	8	250		9	2.6	A08	TT
WT210-0108	[481 581 230 0000	00	461 471 230		6.3	31.5	150		100	9	A08	TT
WT210-0148	[02X 090 310 0000	00	029 080 310		6.3				60		A08	RR
WT389	038 740 320 0000	00	036 540 320		1.4	[4.6 8	90 250	90	8 8	2 2]	A08	P
WT390	028 040 310 0000	00	026 040 310		6.3		150		5.5		A08	T
WT-T102	020 90X 030 0000	00	020 809 030		5				60		A08	RR

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	PIN CONNECTIONS CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
WT-T122	021 417 380 0000	00	021 415 360		6.3	3	250	100	3	1.6	A08	P
WT-T123	028 740 310 0000	00	026 540 310		6.3	12.5	250	250	45	4.1	A08	P
WT-T124	218 4X9 130 0000	00	216 498 130		6.3	2	250		2.3	1.6	B8B	DOT
WT-T125	028 458 310 0000	00	027 446 310		6.3	5	250		3	1.6	A08	TT
WT-T126	412 387 400 0000	00	412 365 400		50	7.5	150	100	49	7.5	B7G	P
WT-T128	020 048 310 0000 028 700 310 0000	50 50	027 546 310	G1	6.3	1 3	100 250	100	8 4	2.5 1.2	A08	TH
WT-T130	028 740 310 0000	00	026 540 310		6.3	9	200	175	15	2.3	A08	P
WT-T131	287 113 000 0000	40	265 113 000	G1	6.3	3	250	100	2	1.2	UX6	P
WT-T135	020 90X 030 0000	00	020 809 030		5				120		A08	RR
X14	028 748 300 0000	40	026 546 300	G1	1.4		90	50	1.8	0.5	A08	H
X17	288 424 300 0000	00	266 424 300		1.4	4	75		4.5	1.2	B7G	H
X18	288 484 300 0000	00	266 464 300		1.4	4	75		4	1.2	B7G	H
X21	847 230 800 0000	40	645 230 600	G1	2		150	75			B7	H
X22	847 320 800 0000	40	645 320 600	G1	2		150	75			B7	H
X23	841 230 800 0000 051 230 800 0000	50 50	645 231 700	G1	2	1.5	100 150	60	2.1 0.7		B7	TH
X24	841 230 800 0000 251 230 800 0000	50 50	645 231 700	G1	2	1.5	100 150	60	2.1 0.7		B7	TH
X30	847 231 800 0000	40	645 231 600	G1	13	3	150	75	7		B7	H
X31	841 231 800 0000 051 231 800 0000	50 50	645 231 700	G1	13		150 250	75	2.2 2.3		B7	TH
X41	841 231 800 0000 051 231 800 0000	50 50	645 231 700	G1	4	6 3	150 250	75	5 2.3	1.4 1.4	B7	TH
X42	842 231 800 0000	40	642 231 600	G1	4	3	250	100	7	2	B7	H
X61	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	2 2	100 250	100	5.4 3	2.2 0.7	A08	TH
X61M	028 748 310 0000 028 750 310 0000	50 50	027 546 310		6.3	2 2	100 250	100	7.5 8	2.6 2.6	A08	TH
X63	028 747 310 0000	40	026 545 310	G1	6.3	3	250	100	6	1.6	A08	H
X64	028 740 310 0000	40	026 540 310	G1	6.3	3	250	100	5.3	1.1	A08	H
X65	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	1 3	100 250	100	8 4	2.5 1.2	A08	TH
X66	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	1 3	100 250	100	8 4	2.5 1.2	A08	TH
X71	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	15	3	100 250	100			A08	TH
X73	028 748 310 0000	40	026 546 310	G1	6.3	3	150	75			A08	H
X75	028 748 310 0000	40	026 546 310	G1	15		150	75			A08	H
X76	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	13	1 3	100 250	100	8 4	2.5 1.2	A08	TH
X77	412 388 100 0000	00	412 366 100		6.3	2	100		12	6.5	B7G	H
X78	752 388 400 000 752 380 500 0000	00 00	542 376 400		6.3	2 1	100 150	75	5 5.3	2.2 2.2	B7G	TH
X79	751 238 480 0000 751 238 500 0000	00 00	541 237 46*		6.3	2 3	100 250	75	5 10	2.2 3	B9A	TH
X81	288 475 130 0000 280 575 130 0000	00 00	265 454 130		6.3	1 2	100 250	100	4.8 4	1.4 2	B8B	TH
X99	284 300 000 0000	00	264 300 000		3	4.5	90		2.5	0.4	UX4	T
X101	288 475 130 0000 280 575 130 0000	50 50	276 454 130	G1	19	2	100 250	100	3 3		B8B	TH
X107	412 387 400 0000	00	412 365 400		19		100	250	4		B7G	O

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
X108	752 388 400 0000 752 380 500 0000	00 00	542 376 400		19	2 1	100 250	75	5 5.3	2.2 2.2	B7G	TH
X109	751 238 480 0000 751 238 500 0000	00 00	541 237 46*		19	2 3	100 250	75	5 2.9	2.2	B9A	TH
X118	288 475 130 0000 280 575 130 0000	00 00	276 454 130		28	2.5	100 200	100	5 3	4 2.5	B9A	TH
X119	751 238 184 0000	00	541 237 164		19	1 2.2	100 200	100	13.5	3.7 2.3	B9A	TP
X142	288 475 130 0000 280 575 130 0000	00 00	276 454 130		14	2 2	100 200	75	5 8	2 2.2	B8A	TH
X143	288 475 130 0000 280 575 130 0000	00 00	276 454 131		6.3	2 2	100 250	90	6.3 5.3	2.4 2.2	B8B	TH
X145	288 475 130 0000 280 575 130 0000	00 00	276 545 130		28	3.3 2.5	100 200	100	6 8	2 2.5	B8A	TH
X147	028 748 310 0000 028 750 310 0000	50 50	027 546 310	G1	6.3	2 2	100 250	100	5.4 5	2.2 2.4	A08	TH
X148	288 475 130 0000 280 575 130 0000	00 00	276 454 130		6.3	1 2	100 250	100	4.8 4	1.4 2	B8B	TH
X150	288 475 130 0000 280 575 130 0000	00 00	276 454 130		6.3	2 2	100 250	100	5 8	2.6 2.2	B8A	TH
X719	751 238 084 0000	00	541 237 164		6.3	3 2	100 250	100	5 6.5	2.3 2.3	B9A	TH
X727	412 388 100 0000	00	412 366 100		6.3	2	100		11	7	B7G	H
X6030	020 990 330 0000	00	020 880 330		3						B8B	D
XC88	414 234 484 0000	00	414 234 464		2		150		12.5	14	B9A	T
XC95	142 380 100 0000	00	142 360 100		1.8	1.2	200		10	10.5	B7G	T
XCC82	841 228 513 0000	00	641 227 413		6.3	0	100		11.8	3.1	B9A	TT
XCC89	148 235 118 0000	00	146 234 117		3.6	1.2	100		15	12	B9A	TT
XCC189	851 238 410 0000	00	741 236 410		4.5	1.2	90		15	12.5	B9A	TT
XCF80	857 238 114 0000	00	645 237 114		4.5	2	100 200	150	14 10	5 6.2	B9A	TP
XCF82	857 238 114 0000	00	645 237 114		4.8	1	150 200	100	18 10	8.5 5.2	B9A	TP
XCL82	415 238 718 0000	00	414 237 516		8	0	100 200	150	3.5 41	2.5 7.5	B9A	TP
XCL84	481 238 157 0000	00	461 237 145		7.8	1.7 2.9	200 200	200	3 18	4 10.4	B9A	TP
XCL85	841 238 715 0000	00	641 237 514		8.6	0.8	100 200	150	5 41	6.5 7.5	B9A	TP
XCL86	417 238 158 0000	00	415 237 146		7.5	1.7 7	250 250	250	1.2 36	16 10	B9A	TP
XD	842 300 000 0000	00	642 300 000		2	1.5	75		0.7	0.8	SM4	T
XD1.5V	842 300 000 0000	00	642 300 000		1.5		50		0.4	0.4	SM4	T
XD2.0V	842 300 000 0000	00	642 300 000		2	1	60		0.5	0.6	SM4	T
XE2	823 000 000 0000	00	623 000 000		1.25	2.9	12		0.1	0.1	B3G	T
XE4	823 000 000 0000	00	623 000 000		1.25	2	12		0.23	0.12	B3G	T
XF80	141 230 871 0000	00	141 230 651		3.4	2	200	175	10	7.2	B9A	P
XF85	141 230 871 0000	00	141 230 651		3.4	2	250	100	10	6	B9A	P
XF86	701 238 014 0000	00	501 236 014		2.5	2	250	150	3	2.3	B9A	P
XF94	412 387 100 0000	00	412 365 100		3.1	1.0	250	150	10.8	5.2	B7G	P
XF183	141 230 871 0000	00	141 230 651		3.6	2	200	90	12	12.5	B9A	P
XF184	141 230 871 0000	00	141 230 651		3.6	2.5	200	200	10	15	B9A	P
XFG1	824 300 000 0000	00	624 300 000		1.5		40		1.5		B5A	T

VALVE TYPE NUMBER	PIN CONNECTIONS: VCM163 Tester only: SELECTOR SWITCH	VCM163 Tester only: TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4: SELECTOR SWITCH	CT160, VT160 VCM Mk 1,2,3 & 4: TOP CAP	CHARACTERISTICS: V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
XFR1	872 430 000 0000	00	652 430 000		1.2		40	40	3	2	B5A	P
XFR2	872 430 000 0000	00	652 430 000		1.2		60	60	1.8	1.9	B5A	P
XFR3	824 300 000 0000	00	624 300 000		1.2	5	150		4	1.7	B5	T
XFR5	872 430 000 0000	00	652 430 000		1.2		60	60	1.8	1.1	B5A	P
XFW10	873 420 000 0000	00	653 120 000		0.6		20	20			B5A	P
XFW20	872 430 000 0000	00	652 430 000		0.6		20	20			B5A	P
XFW30	873 420 000 0000	00	653 420 000		0.6		20	20			B5A	P
XFW40	873 420 000 0000	00	653 420 000		0.6		20	20			B5A	P
XFW50	873 420 000 0000	00	653 420 000		0.6		20	20			B5A	P
XFY10	873 420 000 0000	00	653 420 000		1.3	1.3	20	20	0.5	0.4	B5A	P
XFY11	873 420 000 0000	00	653 420 000		1.2		20	20	0.3	0.4	B5A	P
XFY12	873 420 000 0000	00	653 420 000		1.2	0.5	20	20	0.3	0.4	B5A	P
XFY14	873 420 000 0000	00	653 420 000		1.2	6.5	60	60	3.1	0.6	B5A	P
XFY15	873 420 000 0000	00	653 420 000		1.2	6.5	60	60	3	0.6	B5A	P
XFY20	873 420 000 0000	00	653 420 000		0.6		20	20			B5A	P
XFY21	873 420 000 0000	00	653 420 000		1.2		20	20	0.4	0.4	B5A	P
XFY22	873 420 000 0000	00	653 420 000		1.2	1.2	20	20	0.3	0.4	B5A	P
XFY23	873 420 000 0000	00	653 420 000		1.2	2	20	20	0.4	0.3	B5A	P
XFY31	873 420 000 0000	00	653 420 000		1.2		20	20	0.4	0.4	B5A	P
XFY32	873 420 000 0000	00	653 420 000		1.2	1.5	20	20	0.4	0.3	B5A	P
XFY33	873 420 000 0000	00	653 420 000		1.2	2	20	20	0.4	0.3	B5A	P
XFY34	873 420 000 0000	00	653 420 000		1.2	4	40	40	1.5	0.6	B5A	P
XFY35	873 420 000 0000	00	653 420 000		1.2	1.5	40	40	0.7	0.6	B5A	P
XFY41	873 420 000 0000	00	653 420 000		1.2	1.2	40	30	0.3	0.4	B5A	P
XFY43	873 420 000 0000	00	653 420 000		1.2	2	20	20	0.4	0.3	B5A	P
XFY51	873 420 000 0000	00	653 420 000		1.2		20	20	0.2	0.3	B5A	P
XFY53	873 420 000 0000	00	653 420 000		1.2	3	20	20	0.5	0.3	B5A	P
XFY53M	873 420 000 0000	00	653 420 000		1.2	3	20	20	0.5	0.3	B5A	P
XFY54	873 420 000 0000	00	653 420 000		1.2	2	20	20	0.3	0.3	B5A	P
XH2.0V	842 300 000 0000	00	642 300 000		2	1	60		0.5	0.6	SM4	T
XHP1.5V	284 830 000 0000	50	264 730 000	G1	1.5	[4.5 0	50 50		1.7 0.5	0.7 0.5]	SM5	TT
XL	842 300 000 0000	00	642 300 000		2	1.5	75		1.5	0.9	SM4	T
XL01.5	842 300 000 0000	00	642 300 000		1.5	1	60		0.9	0.7	SM4	T
XL01.5V	041 230 807 0000	00	*41 23* 6*5		8	7.3	250	250	48	11.3	B9A	P
XL1.5	842 300 000 0000	00	642 300 000		1.5	1	60		0.7	0.6	SM4	T
XL2.0V	842 300 000 0000	00	642 300 000		2	1	60		1	0.8	SM4	T
XL36	842 300 000 0000	00	642 300 000		1.5	4.5	50		1.7	0.7	SM4	T
XL84	802 384 100 0000	00	6*2 364 100		2	1	50		1.1	0.9	B7G	T
XL86	020 740 310 0000	80	*2* 540 310	A1	12.8	8.3	100	100	77	11	A08	P
XP	842 300 000 0000	00	642 300 000		2	4.5	100		9.5	1	SM4	T
XP1.5V	842 300 000 0000	00	642 300 000		1.5	4	60		1.8	0.8	SM4	T
XP2	842 300 000 0000	00	642 300 000		2	4.5	75		4	1	SM4	T
XPH1.5	284 930 000 0000	50	264 730 000	G1	1.5	[4.5 0	50 50		1.7 0.5	0.7 0.5]	SM5	TT
XR2	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	7	1.9	B8D	P
XR4	208 037 240 0000	00	206 035 240		1.2	7.5	150	125	7	1.9	B8D	P
XR6	412 183 710 0000	00	412 163 510		6.3	1.4	100	100	7	5	B8D	P
XR7	412 873 180 0000	00	412 653 160		6.3	2	100	100	7.5	5.5	B8D	P
XR8	482 803 180 0000	00	462 603 160		6.3	2.5	100		8	4.2	B8D	T

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
XR9	852 113 480 0000	00	742 113 460		6.3	1.8	100		8.5	5	B8B	TT
XSG	742 300 000 0000	80	542 300 000	A1	2	1	150	60	1.4	0.7	Sm4	P
XSG1.5V	742 300 000 0000	80	542 300 000	A1	1.5	0	50	30	0.5	0.3	Sm4	P
XSG2.0V	742 300 000 0000	80	542 300 000	A1	2	0	60	30	0.6	0.4	Sm4	P
XVS2.0V	742 300 000 0000	80	542 300 000	A1	2	0	60	30	0.4	0.3	Sm4	P
XW1.5	274 830 000 0000	00	254 630 000		1.5	0	60	30	0.7	0.5	Sm5	P
XW1.5	271 830 000 0000	40	251 630 000	G1	1.5	0	50	50	0.7	0.5	Sm5	P
XW2.0V	274 830 000 0000	00	254 630 000		2	0	60	50	0.9	0.6	Sm5	P
XW075A	873 420 000 0000	00	653 420 000		0.6		40	30	0.3	0.2	B5A	P
XW075B	873 420 000 0000	00	653 420 000		0.6		40	30	0.2	0.2	B5A	P
XXB	208 458 320 0000	00	206 447 320		1.4		90		4.5	1.3	B8B	TT
XXD	218 458 130 0000	00	216 447 130		12.5	10	250		9	2.1	B8B	TT
XXFM	284 19X 130 0000	00	264 189 130		6.3	2	250		1.5	1.5	B8B	DDT
XXL	280 004 130 0000	00	260 004 130		6.3	8	250		8	2.3	B8B	T
XY	274 830 000 0000	00	254 630 000		2	3	75	75	4	1.2	SM5	P
XY1.4A	873 420 000 0000	00	653 420 000		1.4	4.5	40	40	1.8	0.5	B5A	P
XY1.4B	873 420 000 0000	00	653 420 000		1.2	4.5	40	40	1.6	0.6	B5A	P
XY1.4C	873 420 000 0000	00	653 420 000		1.2	1.5	40	40	0.5	0.5	B5A	P
XY1.5	274 830 000 0000	00	254 630 000		1.5	1.5	40	40	1.7	1	SM5	P
XY2.0V	248 730 000 0000	00	246 530 000		2	2	60	50	1.7	1.4	SM5	P
XY14B	873 420 000 0000	00	653 420 000		1.2	4.5	40	40	0.3	0.6	B5A	P
XY14CC	873 420 000 0000	00	653 420 000		1.2	1.5	40	40	0.5	0.5	B5A	P
XY88	000 230 009 0000	10	*** 23* **8	C	16				120		B9A	R
Y13	047 231 800 0000	00	045 231 600		13	20	250	250	40	3.9	B7	P
Y25	400 230 080 0000	00	4*0 320 060		1.4	34	250		0.09	†2.2	B8A	TI
Y61	028 740 310 0000	00	026 540 310		6.3	22	250	250	0.2	†1.0	A08	TI
Y62	028 740 310 0000	00	026 540 310		6.3	22	250	250		†1.0	A08	TI
Y63	028 740 310 0000	00	026 540 310		6.3	22	250	250	0.2	†1.0	A08	TI
Y64	028 740 310 0000	00	026 540 310		6.3	22	250	250		†1.0	A08	TI
Y65	028 740 310 0000	00	026 540 310		6.3	11	250	250		†1.0	A08	TI
Y119	410 270 807 0000	00	41* 25* 6*5		19	14	200	200	0.4	†0.5	B9A	
Y220	842 300 000 0000	70	642 300 000	G2	2	4.5	150	150	10.5	2.5	B4	P
Y220	842 370 000 0000	00	642 350 000		2	4.5	150	150	10.5	2.5	B5	P
Y230	842 370 000 0000	00	642 350 000		2	3	150	150	5		B5	P
YA1000	230 232 032 0000	80	230 232 032	A1	4				180		B9A	R
YC88	414 234 484 0000	00	414 234 464		2.6		160		12.5	14	B9A	T
YC95	142 380 100 0000	00	142 360 100		2.2	1.2	200		10	10.5	B7G	T
YCC89	148 235 118 0000	00	146 234 117		4.8	1.9	100		15	12	B9A	TT
YCL82	415 238 718 0000	00	414 237 516		10.8	[0	100 200	 150	3.5 41	2.5 7.5]	B9A	TP
YCL84	481 238 157 0000	00	461 237 145		10	[1.7	200 200	 150	3 18	4 11]	B9A	TP
YCL86	417 238 158 0000	00	415 237 146		10	[1.7 7	250 250	 250	1.2 36	1.6 10]	B9A	TP
YD2	842 300 000 0000	00	642 300 000		2	4.5	150		6	3	B4	T
YF183	141 230 871 0000	00	141 230 651		4.2	2	200	100	12	12.5	B9A	P
YF184	141 230 871 0000	00	141 230 651		4.2	2.5	200	200	10	15	B9A	P
YL84	041 230 807 0000	00	*41 23* 6*5		8	7.3	250	250	48	11.3	B9A	P
YL86	041 230 807 0000	00	041 23* 6*5		8	12.5	200	200	75	10	B9A	P
YL1000	014 237 188 0000	00	014 235 166		1.1	6.5	100	100	30	4.3	B9A	P
YL1020	247 105 200 0000	88	245 1*4 200	A1/A2	1.6		300	250	40	4	B7A	PP

VALVE TYPE NUMBER	PIN CONNECTIONS VCM163 Tester only SELECTOR SWITCH	TOP CAP	CT160, VT160 VCM Mk 1,2,3 & 4 SELECTOR SWITCH	TOP CAP	CHARACTERISTICS V_h V	V_{g1} V	V_a V	V_{g2} V	I_a mA	gm mA/V †Ra MΩ	BASE	VALVE CLASS
YL1030	247 305 200 0000	88	245 3*4 200	A1/A2	2.1		200	200	30	4.5	B7A	PP
YL1060	247 135 200 0000	88	245 134 200	A1/A2	6.3	15	300	250	95	5	B7A	PP
YL1080	425 238 782 0000	00	424 236 572		1.6		200	200	30	3.3	B9A	PP
YL1130	423 878 324 0000	00	423 756 324		1.1		200	200	40	7	B9A	PP
YL1150	701 423 100 0000	80	245 611 300		6.3		400	250	100	35	B7A	P
YL1190	431 878 235 0000	00	432 756 234		1.5		150	150	45	9.5	B9D	PP
YL1200	247 811 300 0000	00	245 611 300		12.6	17	100	250	100		B7A	P
YL1240	415 228 783 0000	00	414 227 563		6.75		400	200	30	3.3	B9A	PP
YY88	000 230 009 0000	10	*** 23* **8	C	22				180		B9A	R
Z14	038 700 200 0000	40	036 500 200	G1	1.4	1	100	100	0.5	0.6	A08	P
Z21	742 300 000 0000	80	041 230 500	A1	2	1	150	150	1.1	1.2	B7	P
Z21	041 230 700 0000	80	542 300 000	A1	2	1	150	150	1.1	1.2	B7	P
Z22	041 230 700 0000	80	041 230 500	A1	2	0	150	150	2.5	1.4	B7	P
Z22Met	041 230 700 0000	80	041 230 500	A1	2	0	150	150	2.5	1.4	B7	P
Z26	047 231 800 0000	00	045 231 600		26	5.5	250	250	32	7.5	B7	P
Z62	028 710 310 0000	40	026 510 310	G1	6.3	2	300	150	10	7.5	A08	P
Z63	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	2	1.2	A08	P
Z66	028 710 310 0000	40	026 510 310	G1	6.3	1.5	200	200	10.9	8.5	A08	P
Z73	028 710 310 0000	40	026 510 310	G1	6.3	3	250	100	6.5	1.7	A08	P
Z77	412 381 700 0000	00	412 361 500		6.3	[2 1.5	250 200	250 150	10 4	7.5 6.4]	B7G	P
Z90	278 101 403 0000	00	256 101 403		6.3	2	250	250	10	6	B9G	P
Z142	280 174 130 0000	00	260 154 130		21	2	200	200	10	8.5	B8A	P
Z145	281 714 130 0000	00	261 514 130		22	1.8	200	200	10	9	B8A	P
Z150	280 174 130 0000	00	260 154 130		6.3	2	250	250	10	9.5	B8A	P
Z152	141 230 871 0000	00	141 230 651		6.3	2	200	200	10	7.4	B9A	P
Z220	842 370 000 0000	00	642 350 000		2	7.5	150	150	15	2	B4	P
Z220	842 300 000 0000	70	642 300 000	G2	2	7.5	150	150	15	2	B5	P
Z309	141 223 871 0000	00	141 223 651		6.3	2	250	250	20	15	B9A	P
Z319	141 231 877 0000	00	141 321 655		6.3	2	350	250	12.5	11.5	B9A	P
Z329	141 230 871 0000	00	141 230 651		7.3	1.9	200	175	10	8.8	B9A	P
Z359	141 230 871 0000	00	141 230 651		12	2	250	250	20	15	B9A	P
Z719	141 230 871 0000	00	141 230 651		6.3	2	200	175	10	7.4	B9A	P
Z729	701 238 014 0000	00	501 236 014		6.3	1	250	100	2	1.8	B9A	P
Z749	141 230 871 0000	00	141 230 651		6.3	1.9	200	175	10	9.2	B9A	P
Z759	141 023 871 0000	00	141 023 651		6.3	2	250	250	15	15	B9A	P
ZD	9X2 310 000 0000	00	892 310 000		13						B5	DD
ZD2	842 300 000 0000	00	642 300 000		2	12	150		7	1	B4	T
ZD17	209 784 300 0000	00	208 564 300		1.4	1	90	90	2.7	0.6	B7G	DP
ZD25	209 784 300 0000	00	2*8 564 300		1.4	1.5	60	60	0.2	0.2	B7G	DP
ZD152	741 238 9X1 0000	00	541 236 891		6.3	2	250	90	5	2.2	B9A	DDP

APPENDIX I

TEST DATA FOR HIGH VOLTAGE RECTIFIERS

The following procedure should be adopted when testing high voltage rectifiers.

Make insulation checks with valve cold end 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 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 SWITCH	TOP CAP	SELECTOR SWITCH	TOP CAP	Vf	Anode Volts (Max.)	Ia mA (Min.)	Valve Holder	Type	Remarks
	VCM 163 only		VCM.s Mk 1-4 incl and CT/VT 160							
†1B3	020 000 300 0000	80	020 000 300	A1	1.25	200	6	A08	R	
†1Z2	232 232 300 0000	80	232 232 300	A1	1.4			B7G	R	
†2V3	020 000 300 0000	80	020 000 300	A1	2.5(3)			A08	R	
†2V3G	020 000 300 0000	80	020 000 300	A1	2.5(3)			A08	R	
†2X2	200 300 000 0000	80	200 300 000	A1	2.5(3)	100	10	UX4	R	
†2Y2	200 300 000 0000	80	200 300 000	A1	2.5	100	10	UX4	R	
†3B24	320 200 000 0000	80	320 200 000	A1	2.5	60	10	UX4	R	
†6W2	230 000 000 0000	80	230 000 000	A1	6.3	100	9	Nil	R	
†225DU	082 323 000 0000 002 323 800 0000	00 00	082 323 600		2	40	20	B7	RR	Test A1 & A2
†405BU	802 300 000 0000 082 300 000 0000	00 00	672 300 000		4	40	20	B4	RR	Test A1 & A2
†732A	230 300 000 0000	80	230 300 000	A1	2.5	60	10	UX4	R	
†879	200 300 000 0000	80	200 300 000	A1	2.5	100	10	UX4	R	
†1876	123 000 800 0000	00	123 000 700		4			8SC	R	
†1877	002 300 000 0000	80	002 300 000	A1	4	100	10	B4	R	
†8016	020 000 300 0000	80	020 000 300	A1	1.25	200	6	A08	R	
†8020	200 300 000 0000	80	200 300 000	A1	5	100	22	B4	R	
†CE230	320 200 000 0000	80	320 200 000	A1	2.5	60	10	UX4	R	
†EY51	230 000 000 0000	80	230 000 000	A1	6.3	100	9	B3G	R	
†HVR2	002 300 000 0000	80	002 300 000	A1	4	100	10	B4	R	
†HVR2A	002 300 000 0000	80	002 300 000	A1	2(2.5)	100	10	B4	R	
†R12	230 000 000 0000	80	230 000 000	A1	6.3	100	9	B3G	R	
†SU61	230 000 000 0000	80	230 000 000	A1	6.3	100	9	B3G	R	
†SU2150	002 300 000 0000	80	002 300 000	A1	2(2.5)	60	4	B4	R	
†SU2150A	002 300 000 0000	80	002 300 000	A1	2	200	50	B4	R	
†U17	002 300 000 0000	80	002 300 000	A1	4	40	35	B4	R	
†U19	002 300 000 0000	80	002 300 000	A1	4(5)	40	70	B4	R	
†U21	002 300 000 0000	80	002 300 000	A1	2	60	4	B4	R	
†U22	200 000 030 0000	80	200 000 030	A1	2(3)	60	4	M08	R	
†U23	002 300 000 0000	80	002 300 000	A1	4(5)	40	100	B4	R	
†U24	020 000 300 0000	80	020 000 300	A1	2	20	0.5	A08	R	
†U41	020 300 000 0000	80	020 300 000	A1	1.25	200	6	A08	R	
†U43	230 000 000 0000	80	230 000 000	A1	6.3	100	9	Nil	R	
†U151	230 000 000 0000	80	230 000 000	A1	6.3	100	9	Nil	R	
†V21/7000	002 300 000 0000	80	002 300 000	A1	4	100	10	B4	R	
†V960	002 300 000 0000	80	002 300 000	A1	4	80	90	B4	R	
†V1906	002 300 000 0000	80	002 300 000	A1	4(5)	60	100	B4	R	
†V1907	002 300 000 0000	80	002 300 000	A1	4	150	70	B4	R	
†V1913	002 300 000 0000	80	002 300 000	A1	4(5)	40	100	B4	R	
†V1920	002 300 000 0000	80	002 300 000	A1	4(5)	100	90	B4	R	
†VL51	002 300 000 0000	80	002 300 000	A1	4	100	10	B4	R	
†CV317	322 322 222 0000	80	322 322 222	A1	4	60	80	B9G	R	
†CV121	002 300 000 0000	80	002 300 000	A1	4(5)	100	90	B4	R	

APPENDIX II

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 the value shows signs of back emission from anode to G_3. This phenomenon can be recognised by the anode current apparently decreasing as the valve heats.

G Valves on the B8D base when leads are cut, should be tested either by insertion in a B8D Adaptor, or leads lengthened and tested in the same way as those with flexible leads, by using the special 9 clip valve holder.

H Tests on tuning indicators should not be made until the resistor value (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 VCM 163 only	TOP CAP	Vf	Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Base	Type	Remarks
CV16	234 000 000	A_1	4	1	250		6	4.2	Disc seal	T	Min slope See Note A
CV53	234 000 000	A_1	4	1	250		6	4.2	Disc seal	T	Min slope See Note A
CV82	234 000 000	A_1	4	3	250		20	3.7	Disc seal	T	See Note A Min slope
CV88	See Note C		6.3	0	250		4	5	Disc seal	T	See Note C
CV93	See Note C		1.4	0	20			0.7	Disc seal	T	See Note C
CV105	020 000 030	D_1	6.3				30		A08	R	
CV122	632 400 000		1.4	0	100			0.8	Special	T	See Note D
CV132	412 361 500		6.3	1.8	250	100	6.3	2	B7G	H	
CV201	021 540 300	A_1	(2.5)	10	250	150	25	3.3	A08	P	
CV229	623 400 000		1.4	0	100			0.8	Special	T	See Note D
CV243	042 350 000		(5)	40	75	75	45	1.5	B5	P	
CV273	346 000 000	H–	6.3	4	250		28	8.5	Disc seal	T	
CV354	346 000 000	H–	6.3	2	250		10	6.5	Disc seal	T	
CV384	642 300 000		(5)	30	400		62	7.5	B4	T	
CV1155	642 300 000		4	0	75		0.7	0.2	B4	T	
CV1223	642 300 000		(5)	30	400		62	7.5	B4	T	
CV1508	002 300 000	A_1	(5)	40	100				B4	R	
CV1584	642 310 000		4	3.5	200		5.4	3.1	B5	T	
CV2000	412 361 500		6.3	[2 2	250 200	250 150	10 4	7.5 6.4	] B8D	P	See Notes J & E
CV2001	412 361 500		6.3	[2 1.5	250 200	250 150	10 4	7.5 6.4	] B8D	P	See Notes J & E
CV2002	412 360 500		6.3	13.5	250	250	16	2.6	Spec	P	See Note J
CV2003	412 360 500		6.3	13.5	250	250	16	2.6	Spec	P	See Note J
CV2004	192 310 800		6.3				5		Spec	RR	See Note J
CV2005	192 310 800		6.3				5		Spec	RR	See Note J
CV2007	741 226 413		6.3	8.5	250		10.5	2.2	Spec	TT	See Note J

VALVE	SELECTOR SWITCH	TOP CAP	Vf	Neg. Grid Volts	Anode Volts	Screen Volts	Ia mA	mA/V	Base	Type	Remarks
CV2008	412 300 600		6.3	2.2	150		10	8	Spec	TT	See Note J
CV2009	412 314 600		6.3	1.5	250		10	8.5	Spec	T	See Note J
CV2010	762 344 100		6.3	1	100		8.5	5.6	Spec	TT	See Note J
CV2101	741 226 413		6.3	2	250		1.2	1.6	Spec	TT	See Note J
CV2013	041 230 651		6.3	4.5	250	250	40	11	Spec	P	See Note J
CV2014	601 235 144		6.3	7.5	250	250	45	7	Spec	P	See Note J
CV2015	256 101 403		6.3	7	250	250	10	6	B9G	P	See Note J
CV2016	741 226 413		6.3	2	250		10.5	5.5	Spec	TT	See Note J
CV2017	412 361 500		6.3	4	200	200	5.8	3.5	Spec	P	See Note J
CV2020	412 365 100		6.3	2	150	125	7.5	5	Spec	P	See Note J
CV2021	902 308 100		6.3				30		Spec	R	See Note J
CV2022	441 230 561		6.3	12.5	250	250	45	4.1	Spec	P	See Note J
CV2023	412 361 500		6.3	2.5	250	200	8	2.5	Spec	P	See Note J
CV2024	412 366 100		6.3	2	100		11	7	Spec	H	See Note J
CV2025	412 361 500		6.3	2 1.5	250 200	250 150	10 4	7.5 6.4	Spec	P	See Note J
CV2101	040 230 650		1.25	0	75	75	2	1	B8D	P	See Note J
CV2156	241 657 143		19	14	250	150	30	3.9	B9G	PP	
CV2204	346 000 000	H–	6.3	1	250		20	3	Disc seal	T	min slope
CV2207	346 000 000	H–	6.3	1	250		20	3	Disc seal	T	min slope
CV2231	*41 23* *51	A_1	6.3	12.5	150	150	50	8.5	B9A	P	
CV2243	041 230 651		6.3	2	200	125	17	8.4	B9A	P	
CV2267	Not known		6.3				30		Spec	RR	See Note C
CV2268	Not known		6.3	2	250	250	10	7.5	Spec	P	See Note C
CV2277	*41 23* 651		26.5	13	100	100	90	9.5	B9A	P	
CV2838	Not known	A_1/G_1	2		60			0.3	Special	T	See Note C
CV4036	001 230 000	D_1	6.3				120		B9A(F)	R	
CV4046	241 756 143		6.3	14	150	125	30	3.9	B9G	PP	
VU508	002 300 000	A_1	(5)		40		100		B4	R	

APPENDIX I

THE "AVO"
VALVE TESTER TYPE 160

Schedule of Spare Parts

INTRODUCTION

Throughout the past decade the Avo Valve Tester Type 160 has proved itself to be unrivalled for versatility and reliability. It is, however, inevitable that this instrument will fail from time to time and, when it does, we are anxious to ensure that it is repaired to the highest possible standard. We have, therefore, produced this schedule of spares which will form a useful guide to the trained engineer who has the task of servicing this instrument.

Procedure for ordering spare parts.

If you will kindly follow the procedure set out below, delays will not occur due to the exchange of unnecessary correspondence.

1. State the part number of the items required, also the quantity.
2. State the serial number of the instrument. This will be found on an identification label attached to the instrument.
3. When ordering spare parts for the movement assembly, the movement serial number must also be stated.

Overseas users of our instruments should send their requirements to our Agents on their territory.

If the spares are required for use in Great Britain, application should be made direct to our Spares Department.

MAIN ASSEMBLY 40508—C

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	40508-B	Complete Case Assembly		1
2	40508-B1	Case Top Assembly		1
3	40508-B2	Case Bottom Assembly		1
4	40462-A	Chassis Assembly (see below for breakdown details)		1
5	14740-4	Metal Foot for item 2		4
6	14740-3	Metal Foot for item 3		4
7	13714-3	Spacing Washer for items 5 & 6		8
8	40374-2	Gasket for Valve Panel Assembly		1
9	40510-A	Valve Panel Assembly (see page 44 for breakdown details)		1
10	40507-1	Seal between items 3 & 4		1
11	20970-A	Hinge Assembly		2
12	20970-B	Clasp Assembly		2
13	14635-3	Release Block for item 12		2
14	14011-1	Mains Lead		1
15	11237-E	Top Cap Lead		2
16	14746	Identity Label		1
17	11727-5	Handle Clamp		2
18	14555-1	Dust Excluder		1
19	11727-A	Handle Assembly		1
20	11596-1	Rubber Foot		4
21	14773-2	Rubber Foot Support		4

CHASSIS ASSEMBLY 40462-A

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1		Negative Grid Volts Assembly (see page 40 for breakdown details)		1
2	15220-A	Knob Assembly (see page 45 for breakdown details)		7
3	40650-B	Movement Assembly (see page 41 for breakdown details)		1
4	40471-A	Mains Adjuster		1
5	14627-2	Cover for item 4		1
6	40465-A	Mutual Conductance Control Assembly (see page 42 for breakdown details)		1
7	14663-2	Indicator Pillar		1
8	PVC100	5-way Connector Lead (2 feet per instrument) ..		1
9	13845-3	Handle		2

CHASSIS ASSEMBLY 40462-A (*Contd.*)

Item No.	Part No.	Description	Circuit Ref.	Qty. off
10	13846-5	Handle Bush for item 9		4
11	N.82	Stiff Nut		4
12	20888-1	End Frame		2
13	20967-A	Component Board Assembly (see page 42 for breakdown details)		1
14	14274-1	"L" Shaped Mounting Bracket		6
15	13701-9	Movement Mounting Pillar..		2
16	10266-1	2BA Tag for item 15		2
17	14558-2	Anode Current Potentiometer	RV4	1
18	40464-A	Anode Current Switch (see page 43 for breakdown details)	S9	1
19	20909-1	Electrode Selector Switch	S8	1
20	14822-3	Circuit Selector Switch	S7	1
21	12239-6	Fuse (2 amperes)	F1, F2	2
22	12049-89	Fuse Holder		2
23	12049-88	Fuse Holder Cap		2
24	50010-14	Indicator Lamp 6.3V, 0.3A	LP1	1
25	13698-1	Indicator Lamp Assembly complete		1
26	20911-1	Screen Volt Switch	S5	1
27	13657-1	Toggle Switch	S1, S2	2
28	14010-1	Input Plug		1
29	14822-2	Heater Volt Switch	S4	1
30	20911-1	Anode Volt Switch	S6	1
31	40468-2	Front Panel		1
32	11310-A	Tag Board Assembly		2
33	20901-B	L.T. Transformer Assembly	T2	1
34	20892-1	Transformer Angle		1
35	20899-B	H.T. Transformer Assembly	T1	1
36	20908-A	Lamp Board Assembly		1
37	40466-A	Relay Assembly (see page 43 for breakdown details)		1
39	14653-1	Lamp (200V red) for item 36		1

NEGATIVE GRID VOLTAGE CONTROL

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	14267-1	Knob		1
2	S.745	Screw 6BA Tin-plated		1
3	W.39	Coiled Washer 6BA		1
4	14670-2	Knob Carrier		1
5	20245-52	Spring Dowel..		1
6	14711-2	Spindle		1
7	14275-2	Bush		1
8	13908-2	Hexagonal Locknut		1

NEGATIVE GRID VOLTAGE CONTROL (*Contd.*)

Item No.	Part No.	Description	Circuit Ref.	Qty. off
9	14631-3	Friction Washer		2
10	W.3	Washer 4BA		1
11	14669-2	Collar		1
12	N.77	Hexagonal Locknut 4BA Tinplated		2
13	14630-1	Cover		1
14	S.867	Instrument Head Screw 8BA		3
15	14559-2	Negative Grid Volts Dial		1
16	13920-2	Dial Flange		1
17	A.1510	Cheesehead Screw 4BA Tinplated		5
18	14632-4	Friction Disc		1
19	S.869	Countersunk Screw 8BA Tinplated		3
20	13917-1	Clamp Plate		1
21	14560-1	Cursor..		1
22	S.740	Cheesehead Screw 6BA Tinplated		2
23	14710-2	Pillar		2
24	13843-10	Pillar		2
25	14557-1	Potentiometer Strap		1
26	14558-1	Potentiometer	RV2	1

MOVEMENT ASSEMBLY 40650-B

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	40537-2	Moulded Front Cover		1
2	40538-A	Moulded Case Rear		1
3	12730-2	Window Glass		1
4	30006-W	Swamp Bobbin		1
5	14824-3	Scale-Plate		1
6	21124-D	Moving Coil Assembly complete		1
7	10194-B	Fixed Jewel Assembly		1
8	10184-B	Sprung Jewel Assembly		1
9	10191-4	Zero Adjuster		1
10	10158-4	Pivot		2
11	10075-16	Hair Spring		2

MUTUAL CONDUCTANCE CONTROL ASSEMBLY 40465-A

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	14630-1	Cover		1
2	20969-1	Ma/V Dial		1
3	14666-2	Dial Support		1
4	S.1512	Screw, 4BA (secures items 2 & 3)		1
5	20902-1	Dial Housing		1
6	14660-2	Drive Bracket		1
7	14659-2	Drive Pin		1
8	N.5	Hexagonal Nut, 5BA Nickel-plated (for item 7) ..		2
9	14652-1	Switch Wafer		1
10	14662-1	Potentiometer	RV1	1
11	40465-34	Resistor Board (tag)		1
12	12049-381	Resistor 70Ω ± 1%	R2	1
13	12049-382	Resistor 500Ω ± 1%	R5	1
14	12049-387	Resistor 22kΩ ± 2%	R14	1
15	20907-2	Telephone Mechanism		1

COMPONENT BOARD ASSEMBLY 20967-A

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	20967-29	Board (tagged)		1
2	12049-380	Resistor 2.34kΩ ± 1%	R1	1
3	12049-398	Resistor 1.32MΩ ± 1%	R3, R4	2
4	12241-12	Valve Type D77 (CV140)	V1, V2	2
5	13738-1	Valve Holder, B7G		2
6	13819-1	Valve Can		2
7	13062-2	Link		1
8	14709-A	Resistor 200Ω ± 0.5%	R10	1
9	12049-400	Resistor 8kΩ ± 5%	R11	1
10	12049-401	Resistor 500Ω ± 3.5%	R12	1
11	12049-404	Capacitor 8μF electrolytic	C3	1
12	13699-1	Clip for item 11		1
13	13659-6	Insuloid Clip		1
14	12049-439	Resistor 700Ω ± 1%	R6	1
15	12049-402	Capacitor 0.04μF	C1	2
16	12049-384	Resistor 330kΩ ± 2%	R7	1
17	12049-403	Capacitor 0.02μF	C2	1
18	12049-385	Resistor 10kΩ ± 2%	R8	1
19	13935-1	Spindle Lock		1
20	10770-9	Potentiometer 500Ω	RV3	1
21	12049-237	Resistor 10kΩ ± 10%	R36	1

RELAY ASSEMBLY 40466-A

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	40466-24	Relay Board (tagged)		1
2	14655-2	Nylock Anchor Plate (4BA)		1
3	14548-4	Contact		1
4	14650-A	Contact Screw		1
5	10466-2	Contact		1
6	14647-2	Armature Spring		1
7	11832-5	Split Pin		2
8	14648-2	Spring		1
9	14644-2	Spring Retainer		2
10	14643-2	Armature		1
11	14642-2	Pole Piece		1
12	14646-2	Contact Spring		1
13	20885-A	Wound Bobbin		1
14	14645-2	Armature Retainer		1
15	20885-B	Wound Bobbin		2
16	13658-2	Anchor Plate		1

ANODE CURRENT SWITCH ASSEMBLY 40464

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	40464-1	Anode Current Switch		1
2	12049-29	Resistor 80Ω ± 2%	R15-R23	9
3	12049-388	Resistor 240Ω ± 2%	R24-R26	3
4	12049-389	Resistor 600Ω ± 2%	R27	1
5	12049-390	Resistor 3kΩ ± 2%	R28	1
6	12049-391	Resistor 15kΩ ± 2%	R29	1
7	12049-392	Resistor 814kΩ ± 2%	R30	1
8	12049-393	Resistor 406kΩ ± 2%	R31	1
9	12049-394	Resistor 202kΩ ± 2%	R32	1
10	12049-395	Resistor 100kΩ ± 2%	R33	1
11	12049-396	Resistor 31.5kΩ ± 2%	R34	1
12	12049-397	Resistor 4.35kΩ ± 2%	R35	1

VALVE PANEL ASSEMBLY 40510

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	40140-9	Valve Holder, UX6		1
2	40140-13	Valve Holder, Hivac 5-pin		1
3	40140-4	Valve Holder, UX4		1
4	40140-12	Valve Holder, Hivac 4-pin		1
5	40140-3	Valve Holder, UX7 (large)		1
6	40140-20	Valve Holder, UX7 (small)		1
7	40140-6	Valve Holder, UX5		1
8	40140-7	Valve Holder, Mazda Octal		1
9	40140-1	Valve Holder, British 9-pin		1
10	40140-14	Valve Holder, B7G		1
11	40140-11	Valve Holder, B8A		1
12	40140-10	Valve Holder, 8-pin side contact		1
13	40140-19	Valve Holder, B9A		1
14	40140-16	Valve Holder, B8G		1
15	40140-5	Valve Holder, British 4/5-pin		1
16	40140-8	Valve Holder, International Octal		1
17	10281-1	Valve Holder, B9G		1
18	40140-2	Valve Holder, British 7-pin		1
19	40509-1	Valve Holder, B3G		1
20	40166-3	Escutcheon for item 22		1
21	14651-1	Grommet		2
22	40157-C	Roller Selector Switch		1
23	20903-A	Top Cap Escutcheon		1
24	20968-1	Ceramic Valve Holder Segment		17
25	30008-62	Bakelite Washer for item 24		34
26	14714-A	Valve Holder Spring Assembly for item 24 ..		8
27	14719-B	Valve Holder Spring Assembly (short) for item 24)		9
28	30008-63	Bakelite Washer for item 24		17
29	14264-2	Collar for item 24		17
30	40506-3	Valve Holder Panel		1
31	14745-1	Warning Label		1
32	11310-B	Tag Board Assembly		2
33	14732-2	Plug Block		1
34	14273-1	Tool Clip		1
35	14746	Identity Label		1
36	11673-3	Pillars for item 32		4
37	14750-2	Pillars adjacent to item 22		2
38	14747-1	Ferroxcube Bead		22
39	13561-1	Insulating Plug for item 37		2
40	14739-2	Special Screw for item 37		2
41	14745-2	Warning Label		1

KNOB ASSEMBLY 15220-A

Item No.	Part No.	Description	Circuit Ref.	Qty. off
1	14267-1	Knob		1
2	14268-4	Knob Skirt, silver with marker line		1
3	14266-6	Knob Carrier		1
4	14269-4	Retaining Nut		1
5	15066-2	Knob Washer, between items 2 & 4		1
6	20245-52	Spring Dowel..		1
7	S.745	Screw, knob securing		1
8	W.39	Spring Washer 6BA double coil		1

Circuit Ref. No.	Value	Tol %	Type
R1	2.34K Ω	1	b
R2	70 Ω	1	a
R3, R4	2 resistors Matched 1.32M Ω	1	a
R5	500 Ω	1	a
R6	730 Ω	2	c
R7	0.33M Ω	2	e
R8	10K Ω	2	e
R9	10K Ω	1	a
R10	200 Ω	2½	f
R11	8K Ω	5	c
R12	500 Ω	2½	d
R13	22K Ω	2	e
R15	80 Ω	2	e
R16	80 Ω	2	e
R17	80 Ω	2	e

Circuit Ref. No.	Value	Tol %	Type
R18	80 Ω	2	e
R19	80 Ω	2	e
R20	80 Ω	2	e
R21	80 Ω	2	e
R22	80 Ω	2	e
R23	80 Ω	2	e
R24	240 Ω	2	e
R25	240 Ω	2	e
R26	240 Ω	2	e
R27	600 Ω	2	e
R28	3K Ω	2	e
R29	15K Ω	2	e
R30	814K Ω	2	e
R31	406K Ω	2	e
R32	202K Ω	2	e
R33	100K Ω	2	e
R34	31.5K Ω	2	e

Circuit Ref. No.	Value	Tol %	Type
R35	4.35K Ω	2	e
RV1	2.5k Ω		
RV2	10K Ω		
RV3	500 Ω		
RV4	90 Ω		
	μFd	Wkg. volts	
C1	.02	400	
C2	.02	200	
C3	8	450	
V1	D77		
V2	D77		
F1	2 amp		
F2	2 amp		
LP1	6.5V, 0.3A		
LP2	15W, 200V Red.		

FIG 10

a High Stability Carbon Resistor. ± 1%. Welwyn Type A3611.

b As above but Welwyn Type A3623 (3/4 W.)

c Vitreous Wire Wound Resistor. ± 5%. Welwyn Type AW3111 (¼ W.)

d As above but ±2½%.

e High Stability Carbon Resistor. ± 2%. Welwyn Type A3611. (¼ W.)

f Vitreous Wire Wound Resistor. ±2½%. Welwyn Type AW3111 (¼ W.) Overwound by AVO.