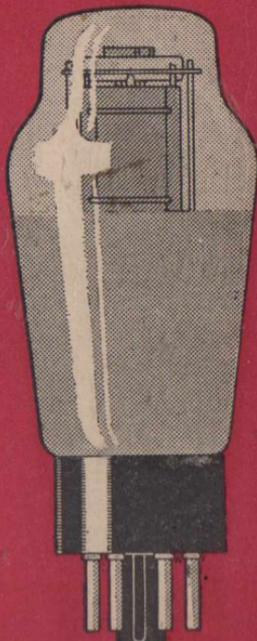
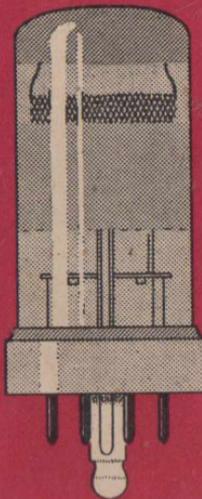
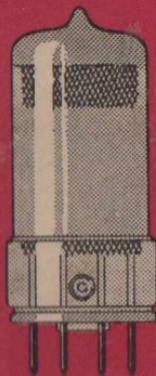


# RADIO AND TELEVISION VALVE EQUIVALENTS MANUAL

1952 - 53

B.B. BABANI.

BERNARDS



No 116

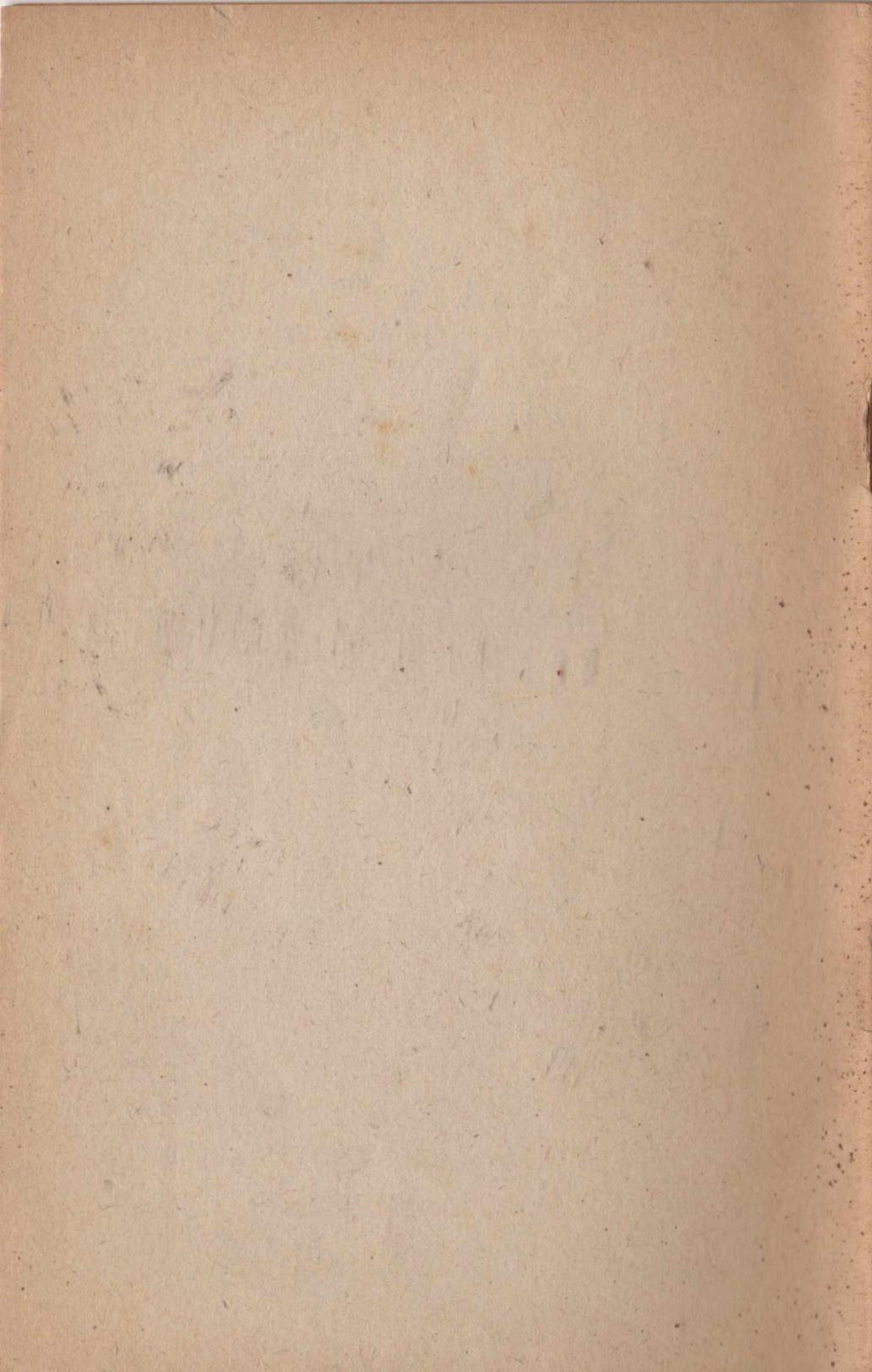
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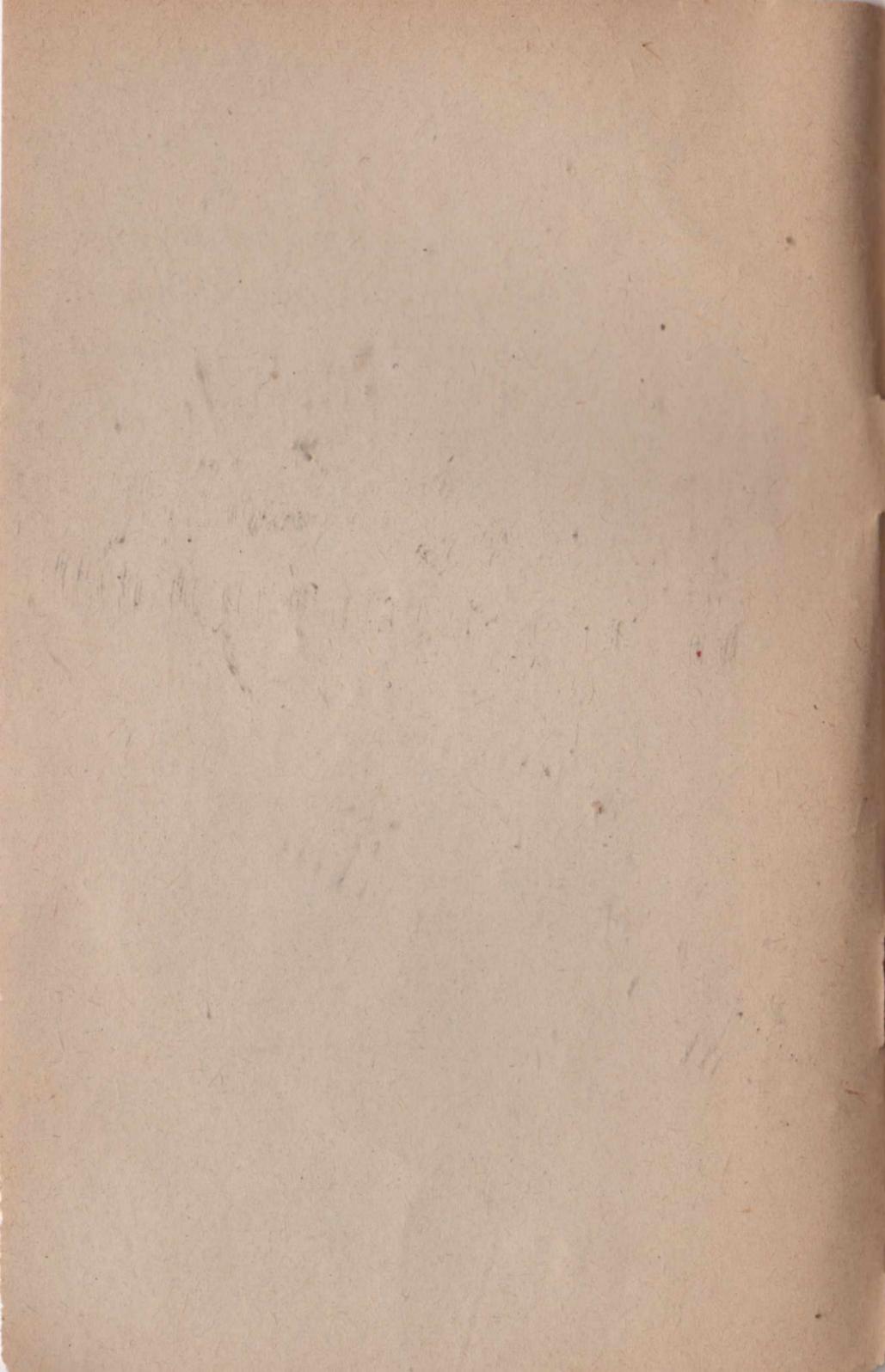
CONTINENTAL

SERVICE  
TYPE





*Radio and Television  
Valve Equivalents  
Manual*



RADIO & TELEVISION  
VALVE EQUIVALENTS  
MANUAL

*Compiled by*

**B. B. BABANI**

*LONDON*

**BERNARDS (Publishers) LTD.**

**BERNARDS RADIO MANUALS No. 116**

General Editor : W. J. MAY



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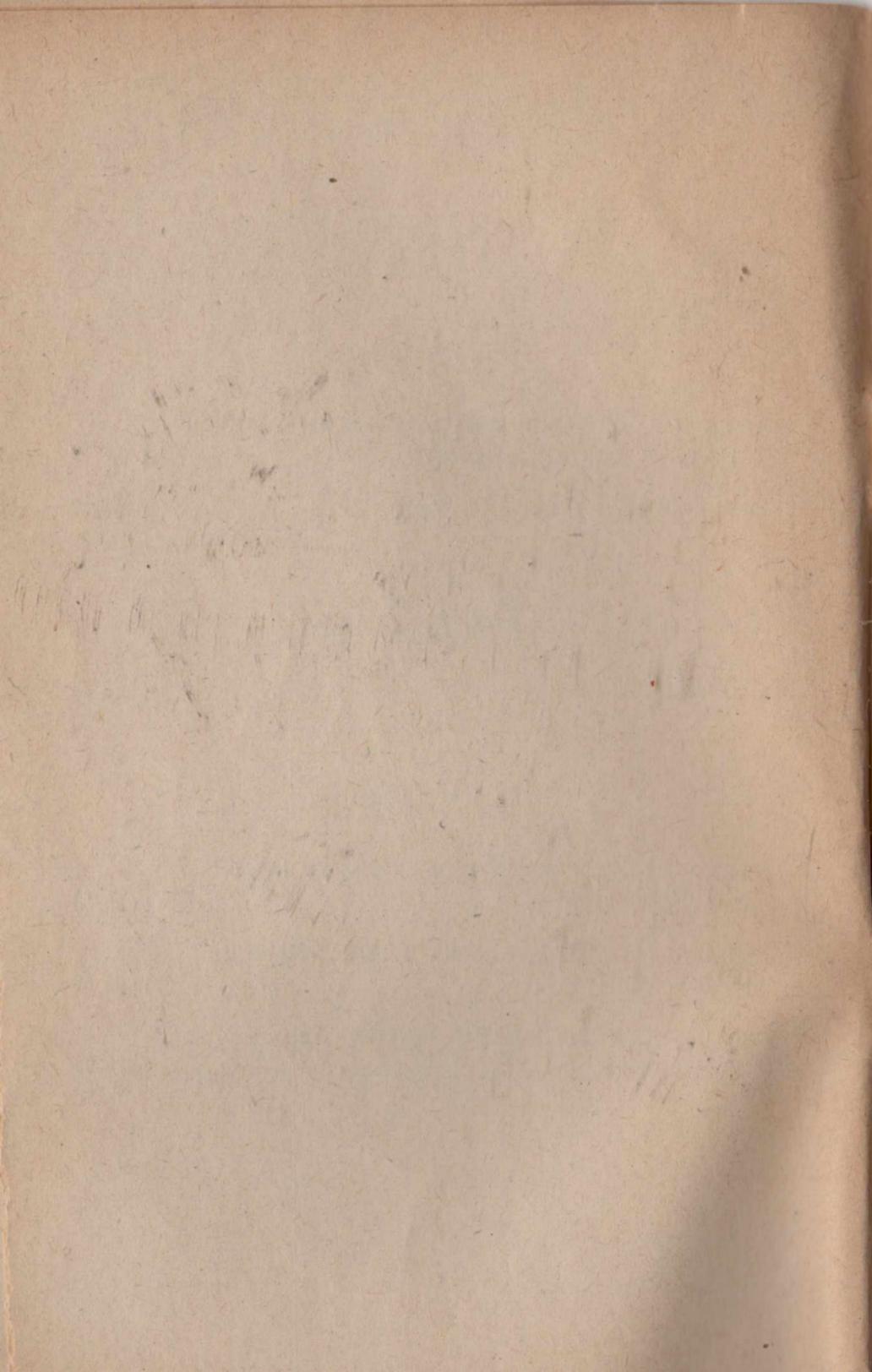
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## INTRODUCTION

During the last few years the ever-increasing number of valve types produced both in this country and America has made the Valve Equivalent Manual a virtual necessity to both the serviceman and home constructor.

The book is in three parts. Part 1 is an index of British and American valves having direct equivalents; Part 2 is a complete equivalents list of these valve types; Part 3 is an extensive list of British and American Army, Navy, Air Force and CV types with their commercial equivalents. So that the tables shall be truly comprehensive a Commercial Type to CV listing has been included. In order that the tables shall be as complete and up to date as possible, a supplementary list of 1952/53 types has been included at the end of Parts 1 and 3. It was not found possible to include these in the main indexing as details arrived too late for the original compilation. It will be found that certain valves in the supplementary index have the maker's name added. These valves will not be found in the equivalents section, Part 2, though they are equivalents of the valves in the section No. quoted. EXAMPLE:—EF95 Mullard is shown in the supplementary index as having equivalent types listed in Section 59, Part 2. Reference to this section shows that the valve is identical with the 6AK5 and, with the exception of the heater rating, is the equivalent of the 6AG5.

Valves having a direct equivalent requiring no physical changes when substituting the equivalent, appear in Part 1. It is pointed out, however, that whilst no changes may be needed in the nature of an altered valve base, change of filament voltage, or change of screen, plate, or bias resistors, in certain cases—as when substituting an equivalent frequency changer or RF Pentode, etc.—it may be necessary, for maximum efficiency, to re-align the associated tuned circuits. This is often the case when two valves of an identical type number from the same manufacturer are substituted for one another, and is, in fact, a recommended practice.

*Using Parts 1 and 2.* It is required to find a direct equivalent of MVS/PENB. All that is necessary is to look up this valve in the Index (Part 1). Opposite the valve type, two numbers will be found, namely, 53 and 54.

Reference is then made to Part 2 under sections 53 and 54, where it will be found that the valve may be substituted by any of those shown in those sections.

It will be seen, however, that in certain cases the alternative valves available are sometimes utilised at different filament current, and every valve shown in Part 2 has its filament current indicated. This is particularly important when substituting valves in AC/DC receivers.

It will also be seen that Part 2 gives the type of base used, the filament voltage and the maker's name.

The bases have been indicated by the accepted designation and the only base that may require explanation is the "P" Base, such as appears in section 77. "P" is the accepted abbreviation for the Continental peripheral or side contact base, having 5 or 8 contacts.

It should be noted that American manufacturers often quote short grid base valves as replacements for variable mu or remote cut-off types and this fact should be borne in mind when selecting replacements for AVC stages.

B. B. BABANI.

## I-6SJ7

VALVE TYPE NO.	EQUIVALENTS SECTION NO.	VALVE TYPE NO.	EQUIVALENTS SECTION NO.	VALVE TYPE NO.	EQUIVALENTS SECTION NO.
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1A3	90	2Y2	248	6BE6	12
1A4	41			6BE7	243
1A5G	184	3A4	179	6C4	148
1A6	4	3A5	168	6C5	151
1A7	2			6C6	71
1B4	41	3B7	{ 228	6C31	17
1B7	2	3D6	187	6D1	93
1C1	1	3LF4	187	6D2	99
1C5	184	3Q4	182	6D6	71
1C6	4	3Q5	185	6D8	14
1C7	8	3S4	183	6E5	239
1D5	264	3V4	180	6E8	17
1D5G	45	4/100BU	270	6F5	150
1D7	8	4D1	153	6F6	209
1E4	135	4THA	10	6F11	72
1E5G	45	4XP.	163	6F12	56
1F2	36			6F13	73
1F3	35	5AZ4	277	6G5	241
1FD9	124	5B1	39	6H5	239
1G4	135	5B/250A	202	6H6	100
1G5G	192	5T4	276	6J5	151
1H5	104	5U4	276	6J6	169
1J5G	192	5V4	277		{ 62
1L4	36	5W4	277	6J7	63
1LA4	186	5Y3	277	6J8	18
1LA6	3	5Z3	275	6K6	207
1LB4	186	5Z4	277	6K7	60
1LC6	3	6A4	201	6K8	18
1N5	37	6A5	167	6L5	151
1P10	183	6A6	232	6L6	208
1P11	180	6A8	16	6L7	13
1Q5	184	6AB5	239	6L34	149
1R4	91	6AB6	233	6M1	241
1R5	1	6AB7	66	6N5	239
1S4	181	6AC7	65	6N6	233
1S5	124	6AF5	152	6N7	234
1T4	35	6AG5	59	6N8	127
1T5	184	6AG6	207	6P5	152
1V	251	6AJ7	65	6P25	207
		6AK5	59	6Q7	110
2A3	161	6AL5	99	6R7	111
2D2	95	6AM5	204	6S7	61
2D4	96	6AM6	56	6SC7	171
2D4A	97	6AQ6	108	6SD7	69
2D4B	98	6AS6	58	6SE7	69
2D13A	103	6AV6	108	6SG7	69
2D13C	102	6B4	167	6SH7	69
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2X2	248	6B6	{ 112	6SJ7	70

## 6SK7-44IU

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6SK7	70		{ 252	20A1	10
6SL7	171	7Z4	{ 281	24/A	46
6SN7	170	8A1	48	25A6	219
6SQ7	113	8D2	85	25L6	220
6SR7	109	8D3	56	25RE	258
6SS7	70			25X6	283
6ST7	109	9A1	52	25Y4	259
6SU7	171	9D2	83	25Y5	258
6SZ7	113	9D6	57	25Z4	259
6T7	112	10C1	33	25Z6	283
6TH8	17	10D1	102		
6U5	241	10F3	89	26B6	32
6U6	205	10F9	86	26D6	32
6U7	60	10LD11	123	27	140
6V6	207	10P13	225		
6W5	279			32	40
6W6	205	11A1	107	34	40
	{ 60	11A2	107		
6W7	62	11D3	120	35	46
	279	11D5	119	35Z4	261
6X5	205	12A	166	36	55
6Y6	205				
6Z3	251	12AT7	{ 173	37	147
6Z4	278		{ 176	39	55
6ZY5	279	12B7	81	40	146
		12C8	128	40PPA	223
7A2	197	12J7	80	40SUA	264
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7A7	75	12K8	24		
7A8	22	12Q7	118	41	203
7B5	212	12SJ7	79	41FP	142
7B6	117	12SK7	79	41MH	144
7B7	76	12SN7	174	41MHF	141
7B8	22	12SX7	174	41MHL	144
7C5	212	12Z3	254	41MLF	141
7C6	116	13DHA	120	41MP	142
7C7	76	13PGA	28	41MPG	9
7D3	223	13SPA	85	41MRC	144
7D6	221	13VPA	83	41MSG	48
7D8	215				{ 141
7D9	204	14A7	81	41MTL	144
7G7	75	14AF7	175	41MXP	165
7H7	75	14B8	25	41PGD	9
7J7	22	14C7	81	41STH	10
7L7	75	14J7	25		
7S7	22	14N7	175	42	203
7T7	75	14S7	25	42MP/PEN	198
7V7	74	14Z3	254	42OT	198
7W7	74	15A2	9	43IU	267
7Y4	281	15D1	28	44	55
7Y7	280	15D2	28	44IU	268

VALVE TYPE NO.	EQUIVALENTS SECTION NO.	VALVE TYPE NO.	EQUIVALENTS SECTION NO.	VALVE TYPE NO.	EQUIVALENTS SECTION NO.
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50Y6	285	220HPT	189	A30D	144
50Z7	285	220/OT	189	A36A	141
51	46	220P	158	A36C	10
52	201	220PA	158	A39A	10
53KU	276	220PT	190	A40M	238
54KU	277	220SG	39	A50A	49
56	140	220TH	5	A50B	48
57	47	220VS	38	A50M	53
58	47	220VSG	38	A50N	52
63ME	241	230PT	190	A50P	50
63SPT	78	230XP	159	A70B	54
64ME	240	240B	230	A70C	197
71A	166	240QP	235	A70D	198
76	147	244V	141	A70E	198
77	71	302THA	31	A80A	199
78	71	332PEN	222	A80M	9
83	275	354V	141	AC/2HL	9
84	278	402OT	224	AC/2PEN	144
104V	142	402PEN	224	AC/2PENDD	198
117L7	286	408BU	269	AC/4PEN	130
117M7	286	420TDD	130	AC/5PEN	199
117N7	287	442BU	272	AC/104	200
117P7	287	460BU	273	AC/DD	163
154V	142	484V	142	AC/HL	97
202DDT	120	506BU	269	AC/HLDD	141
202STH	31	807	202	AC/ME	107
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210DET	136	904V	144	ACO44	160
210HF	139	994V	142	ACO54	163
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210LF	{ 138	1232	75	ACO84	163
210PG	136	1275	275	AC/P	142
210PGA	6	1291	{ 228	AC/P1	142
210RC	7	1294	{ 231	AC/P4	165
210SPG	139	1299	91	AC/PEN	143
210SPT	{ 43	1852	187	AC/S2PEN	197
210VPA	{ 44	1853	65	AC/SG	48
210VPT	43	A11B	66	AC/SGVM	48
215P	157	A11C	267	AC/SP3	49
		A11D	268	AC/TH1	51
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APP4B	198	DCC90	168	DL93	179
APP4E	199	DD4	97	DL94	180
APP4G	196	DD4D	98	DL95	182
APV4	267		99	DL145	123
AS4120	48	DD6	{ 101	DN41	130
AS4125	49	DD6G	99	DN143	131
AZ31	274	DD13	102	DO24	162
B21	229	DD13S	103	DO26	162
B36	174	DD465	96	DO30	164
B63	232	DD620	101	DS	154
B65	170	DDA41	97	DW2	269
C10B	255	DDPP4B	130	DW3	272
C20C	102	DDPP4M	129	DW4	273
C23B	120	DDPP6Bs	132	DW4/350	272
C27D	134	DDPP39	133	DW4/500	273
C30B	153	DDPP39M	134	EA50	93
C36A	31	DDT	107	EA71	94
C36B	31	DDT2	106	EA76	94
C36C	31	DDT2A	105	EAF42	125
C39A	242	DDT2B	106	EB34	100
C50B	85	DDT4	107	EB91	99
C50N	83	DDT6s	114	EBC3	114
C70D	221	DDT13	120	EBC33	111
C70E	221	DDT13s	121	EBC41	115
C80B	28	DF33	37	EBF80	127
CB215	230	DF70	34	EBL1	132
CB220	229	DF91	35	EBL21	131
CCH35	17	DF92	36	EC91	149
CK502AX	177	DH30	119	ECC32	172
CK505AX	34	DH42	107	ECC33	172
CK506AX	178	DH63	110	ECC35	171
CK5694	234	DH73	112	ECC81	{ 173
CK5725	58	DH76	118	ECC91	{ 176
CK5726	99	DH77	108	ECC91	169
CL4	218	DH81	117	ECH2	15
CL33	222	DH142	122	ECH3	15
CY31	256	DH147	111	ECH21	23
D1	92	DH149	116	ECH33	17
D4	144	DH150	115	ECH35	{ 17
D41	97	DK32	2	ECH42	20
D63	100	DK91	1	EF5	77
D77	99	DL33	185	EF9	77
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VALVE TYPE NO.	EQUIVALENTS SECTION NO.	VALVE TYPE NO.	EQUIVALENTS SECTION NO.	VALVE TYPE NO.	EQUIVALENTS SECTION NO.
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EF38	64	HD24	106	K30K	137
EF39	64			K33A	230
EF41	72	HL2	{ 137	K33B	229
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EF50	78	HL2K	138	K40N	38
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EF92	57	HL4G	145	K50N	43
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EL32	206	HL21	137	K80A	6
EL33	207	HL21DD	106	K80B	7
EL35	208		{ 137	KT2	189
EL37	208	HL210	139	KT24	191
EL41	211	HL1320	153	KT30	215
EL42	210	HLA1	144	KT31	216
EL91	204	HLA2	141	KT32	220
EM1	242	HLB1	{ 137	KT33	219
EM34	240	HLDD1320	120	KT41	198
EQ80	243			KT42	197
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EZ35	279	HP6	56	KT63	209
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		K30B	136	LP4	163
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## ME4s-PP2018

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MH4105	9	OM3	100	PM1HF	139
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PT25	200	S24	39	TH2321	31
PT41	195	S30C	163	TP4	11
PT41B	193	S30D	160	TSP4	51
PTA	194	S215	188	TT4	142
PTS	215	S215/M	39	TT4A	142
PTZ	216	S215VM	38	TV4	238
PV4	221	SD	97	TV4A	238
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PV30	260	SGA1	48	TX21	31
PV30s	284	SP2	44	U10	269
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PV4200	269	SP4	{ 48	U12/14	273
PX4	273	SP4B	53	U14	273
PX25	163	SP6	53	U16	244
PX25A	162	SP13	56	U18/20	270
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QP22A	236	SP13B	87	U24	247
QP22B	235	SP13C	85	U30	282
QP230	235	SP13s	85	U31	259
QP240	236	SP210	87	U50	277
QPT2	235	SP220	44	U52	276
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R12	250	SU2150A	245	U149	281
R42	253	T4D	246	U150	280
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R2018	277	TDD2A	106	U404	266
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RV120/500	272	TDD13	107	UAF42	126
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RZ	271	TH2	120	UCH42	30
S2	255	TH4A	5	UF41	86
S4V	188	TH4B	10	UF42	89
S4VB	48	TH21C	10	UL41	226
S11A	48		31	UL46	226
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# URI-ZDI7

VALVE TYPE NO.	EQUIVALENTS SECTION NO.	VALVE TYPE NO.	EQUIVALENTS SECTION NO.	VALVE TYPE NO.	EQUIVALENTS SECTION NO.
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UR3	262	VP13C	83	X65	18
UR3C	284	VP13K	83	X66	18
UU3	267	VP21	43	X73/M	14
UU4	267	VP210	43	X76/M	24
UU5	268	VP215	42	X77	12
UU9	280	VP1320	26	X81/M	22
UU60/250	269	VP1322	83	X142	30
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UY41	263	VPT4	52	X147	17
V20	255	VPT4B	50	X148	22
V20s	257	VPTA	84	X150	20
V21/7000	249	VPTS	82	Y61	241
V503	164	VS2	38	Y62	241
V914	97	VS24/K	38	Y63	241
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VHT2	6	VX2	43	Z14	37
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		W21	43	Z22	44
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VHTA	28	W31	82	Z77	56
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VME4	237	W76	80	Z150	73
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		W143	75		
VMS4B	49	W145	86		
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VO13	28	W150	72		
VO13s	29	WD142	126		
VP2	42	WD150	125		
VP2B	43	X14	2		
VP2D	43	X17	1		
		X21	{ 6 7		
VP4	{ 49 52	X22	6		
		X23	5		
VP4A	50	X24	5		
VP4B	54	X30	27		
VP4C	52	X32	27		
VP6	57	X41	10		
VP12D	128	X42	9		

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6AU6	294	5750	Brimar 12	ECC83	304
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21A6	292	DP61 Ferranti	59	Z145	293
62DDT	295	ECB40	295	Z152	290
62TH Cossor	20	EC41	296	ZD152	127

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
1	1.4	B7G	ICI	Mazda	.05
	1.4	B7G	IR5	Am. & Brit.	.05
	1.4	B7G	DK91	Ever Ready	.05
	1.4	B7G	DK91	Mullard	.05
	1.4	B7G	X17	Osram	.05
2	1.4	I.O.	1A7	Am. & Brit.	.05
	1.4	I.O.	1B7	U.S.A.	.1
	1.4	I.O.	DK32	Ever Ready	.05
	1.4	I.O.	DK32	Mullard	.05
	1.4	I.O.	X14	Osram	.05
3	1.4	B8G	1LA6	U.S.A.	.05
	1.4	B8G	1LC6	U.S.A.	.05
4	2	UX6	1A6	U.S.A.	.06
	2	UX6	IC6	U.S.A.	.12
5	2	B7	220TH	Cossor	.2
	2	B7	TH2	Mullard	.23
	2	B7	X23	Osram	.3
	2	B7	X24	Osram	.2
6	2	B7	210PG	Cossor	.1
	2	B7	FC2	Mullard	.1
	2	B7	K80A	Ever Ready	.1
	2	B7	VHT2	Ferranti	.1
	2	B7	VHT2A	Ferranti	.1
	2	B7	VO2	Tungsram	.13
	2	B7	X21	Osram	.1
	2	B7	X22	Osram	.15
7	2	B7	210PGA	Cossor	.1
	2	B7	210SPG	Cossor	.1
	2	B7	FC2A	Mullard	.13
	2	B7	K80B	Ever Ready	.13
	2	B7	VHT2A	Ferranti	.1
	2	B7	X21	Osram	.1
8	2	I.O.	1C7	U.S.A.	.12
	2	I.O.	1D7	U.S.A.	.06

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>9</b>	4	B7	15A2	Brimar	.65
	4	B7	41MPG	Cossor	1.0
	4	B7	41PGD	Cossor	1.0
	4	B7	A80A	Ever Ready	.65
	4	B7	A80M	Ever Ready	.65
	4	B7	FC4	Mullard	.65
	4	B7	MH4105	Tungsram	.5
	4	B7	MX40	Osram	1.0
	4	B7	VHT4	Ferranti	.65
	4	B7	VO4	Tungsram	.65
4	B7	X42	Osram	.6	
<b>10</b>	4	B7	4THA	Cossor	1.5
	4	B7	20A1	Brimar	1.2
	4	B7	41STH	Cossor	1.15
	4	B7	A36A	Ever Ready	1.0
	4	B7	A36C	Ever Ready	1.45
	4	B7	AC/THI	Mazda	1.3
	4	B7	TH4A	Tungsram	1.45
	4	B7	TH4B	Mullard	1.45
	4	B7	TH4B	Tungsram	1.45
	4	B7	TX4	Tungsram	1.0
4	B7	X41	Osram	1.2	
<b>11</b>	4	B9	AC/TP	Mazda	1.25
	4	B9	TP4	Mullard	1.2
	4	B9	TP4	Tungsram	1.25
<b>12</b>	6.3	B7G	6BE6	Am. & Brit.	.3
	6.3	B7G	X77	Osram	.3
<b>13</b>	6.3	I.O.	6L7	U.S.A.	.3
	6.3	I.O.	X64	Osram	.3
<b>14</b>	6.3	I.O.	6D8	U.S.A.	.15
	6.3	I.O.	X73M	Osram	.16
<b>15</b>	6.3	P	ECH2	Mullard	.95
	6.3	P	ECH3	Mullard	.2
<b>16</b>	6.3	I.O.	6A8	U.S.A.	.3
	6.3	I.O.	X63	Osram	.3

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
17	6.3	I.O.	6C31	Mazda	.85
	6.3	I.O.	6E8	Tungsram	.3
	6.3	I.O.	6TH8	Tungsram	.6
	6.3	I.O.	CCH35	Ever Ready	.2
	6.3	I.O.	CCH35	Mullard	.2
	6.3	I.O.	ECH33	Mullard	.2
	6.3	I.O.	ECH35	Mullard	.3
	6.3	I.O.	ECH35	Tungsram	.3
	6.3	I.O.	OM10	Cossor	.2
6.3	I.O.	X147	Marconi	.3	
18	6.3	I.O.	6J8	U.S.A.	.3
	6.3	I.O.	6K8	Am. & Brit.	.3
	6.3	I.O.	ECH35	Mullard	.3
	6.3	I.O.	ECH35	Tungsram	.3
	6.3	I.O.	X61M	Osram	.3
	6.3	I.O.	X65	Osram	.3
	6.3	I.O.	X66	Osram	.34
19	6.3	I.O.	AG8	Cossor	.2
	6.3	I.O.	EK32	Mullard	.2
	6.3	I.O.	OM8	Cossor	.2
20	6.3	B8A	ECH42	Mullard	.225
	6.3	B8A	X150	Marconi	.225
21	6.3	P	EK2	Mullard	.2
	6.3	P	EK2	Tungsram	.2
	6.3	P	VO6S	Tungsram	.2
22	6.3	B8G	7A8	U.S.A.	.15
	6.3	B8G	7B8	U.S.A.	.3
	6.3	B8G	7J7	U.S.A.	.15
	6.3	B8G	7S7	U.S.A.	.3
	6.3	B8G	X81M	Osram	.3
	6.3	B8G	X148	Marconi	.3
23	6.3	B8G	ECH21	Mullard	.33
	6.3	B8G	X143	Marconi	.3
24	12.6	I.O.	12K8	Am. & Brit.	.15
	12.6	I.O.	X76M	Osram	.16
25	12.6	B8G	14B8	U.S.A.	.15
	12.6	B8G	14J7	U.S.A.	.15
	12.6	B8G	14S7	U.S.A.	.15

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>26</b>	13	B7	VP1320	Mazda	.2
	13	B7	VPTA	Ferranti	.2
<b>27</b>	13	B7	VHTS	Ferranti	.3
	13	B7	X30	Osram	.3
	13	B7	X32	Osram	.3
<b>28</b>	13	B7	13PGA	Cossor	.2
	13	B7	15D1	Brimar	.2
	13	B7	15D2	Brimar	.15
	13	B7	C80B	Ever Ready	.2
	13	B7	FC13C	Mullard	.2
	13	B7	VHTA	Ferranti	.2
	13	B7	VO13	Tungfram	.2
<b>29</b>	13	P	FC13	Mullard	.2
	13	P	VO13S	Tungfram	.2
<b>30</b>	14	B8A	UCH42	Mullard	.1
	14	B8A	X142	Marconi	.1
<b>31</b>	20	B7	202STH	Cossor	.2
	30	B7	302THA	Cossor	.2
	21	B7	C36A	Ever Ready	.2
	29	B7	C36B	Ever Ready	.2
	29	B7	C36C	Ever Ready	.2
	21	B7	TH21C	Mullard	.2
	29	B7	TH22C	Mullard	.2
	29	B7	TH29	Tungfram	.2
	30	B7	TH30	Tungfram	.2
	29	B7	TH30C	Mullard	.2
	23	B7	TH2321	Mazda	.2
21	B7	TX21	Tungfram	.2	
<b>32</b>	26	B7G	26B6	U.S.A.	.07
	26	B7G	26D6	U.S.A.	.07
<b>33</b>	28	B8A	10C1	Mazda	.1
	28	B8A	X145	Marconi	.1
<b>34</b>	.625	Wires	CK505AX	Raytheon	.03
	.625	Wires	DF70	Mullard	.025

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>35</b>	1.4	B7G	1F3	Mazda	.05
	1.4	B7G	1T4	Am. & Brit.	.05
	1.4	B7G	DF91	Ever Ready	.05
	1.4	B7G	DF91	Mullard	.05
	1.4	B7G	W17	Osram	.05
<b>36</b>	1.4	B7G	1F2	Mazda	.05
	1.4	B7G	1L4	U.S.A.	.05
	1.4	B7G	DF92	Mullard	.05
<b>37</b>	1.4	I.O.	IN5	U.S.A.	.05
	1.4	I.O.	DF33	Mullard	.05
	1.4	I.O.	Z14	Osram	.05
<b>38</b>	2	B4	220VS	Cossor	.2
	2	B4	220VSG	Cossor	.2
	2	B4	K40N	Ever Ready	.18
	2	B4	PM12M	Mullard	.18
	2	B4	PM12V	Mullard	.15
	2	B4	S215VM	Mazda	.15
	2	B4	SE211c	Tungram	.12
	2	B4	VS2	Ferranti	.15
	2	B4	VS24/K	Osram	.15
<b>39</b>	2	B4	5B1	Brimar	.2
	2	B4	215SG	Cossor	.15
	2	B4	220SG	Cossor	.2
	2	B4	K40B	Ever Ready	.18
	2	B4	PM12	Mullard	.15
	2	B4	PM12A	Mullard	.18
	2	B4	S21	Osram	.1
	2	B4	S22	Osram	.2
	2	B4	S23	Osram	.1
	2	B4	S24	Osram	.15
	2	B4	S215/M	Mazda	.15
	2	B4	SS210	Tungram	.12
<b>40</b>	2	UX4	32	U.S.A.	.06
	2	UX4	34	U.S.A.	.06
<b>41</b>	2	UX4	1A4	U.S.A.	.06
	2	UX4	1B4	U.S.A.	.06
<b>42</b>	2	B7	K50M	Ever Ready	.2
	2	B7	VP2	Mullard	.18
	2	B7	VP215	Mazda	.18

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
43	2	B7	210VPA	Cossor	·1
	2	B7	210VPT	Cossor	·1
	2	B7	HP211c	Tungsrām	·12
	2	B7	K50N	Ever Ready	·135
	2	B7	VP2B	Mullard	·14
	2	B7	VP2D	Tungsrām	·1
	2	B7	VP21	Osram	·1
	2	B7	VP210	Mazda	·1
	2	B7	VPT2	Ferranti	·1
	2	B7	VX2	Tungsrām	·13
	2	B7	W21	Osram	·1
44	2	B7	210SPT	Cossor	·1
	2	B7	HP210nc	Tungsrām	·12
	2	B7	KTZ21	Osram	·1
	2	B7	SP2	Mullard	·18
	2	B7	SP2D	Tungsrām	·12
	2	B7	SP210	Mazda	·1
	2	B7	SPT2	Ferranti	·1
	2	B7	Z21	Osram	·1
	2	B7	Z22	Osram	·1
45	2	I.O.	1D5G	U.S.A.	·06
	2	I.O.	1E5G	U.S.A.	·06
46	2·5	UX5	24/A	U.S.A.	1·75
	2·5	UX5	35	U.S.A.	1·75
	2·5	UX5	51	U.S.A.	1·75
47	2·5	UX6	57	U.S.A.	1·0
	2·5	UX6	58	U.S.A.	1·0
48	4	B5	8A1	Brimar	1·0
	4	B5	41MSG	Cossor	1·0
	4	B5	A50A	Ever Ready	1·0
	4	B5	AC/S2PEN	Mazda	1·0
	4	B5	AC/SG	Mazda	1·0
	4	B5	AS4120	Tungsrām	1·0
	4	B5	HP4101c	Tungsrām	1·0
	4	B5	MS4	Osram	1·0
	4	B5	MS4B	Osram	1·0
	4	B5	MSG/LA	Cossor	1·0
	4	B5	MSP4	Osram	1·0
	4	B5	MS/PEN	Cossor	1·0
	4	B5	S4V	Mullard	1·0
	4	B5	S4VB	Mullard	1·0
	4	B5	SGA1	Brimar	1·0
	4	B5	SP4	Mullard	1·0
4	B5	SPT4A	Ferranti	1·0	

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
49	4	B5	A40M	Ever Ready	1.0
	4	B5	AC/SGVM	Mazda	1.0
	4	B5	AS4125	Tungsrām	1.2
	4	B5	MM4V	Mullard	1.0
	4	B5	MV/SG	Cossor	1.0
	4	B5	VMS4B	Osram	1.0
	4	B5	VP4	Mullard	1.0
	4	B5	VSGA1	Brimar	1.0
50	4	B5	A50N	Ever Ready	1.2
	4	B5	AC/VP2	Mazda	.65
	4	B5	HP4115c	Tungsrām	1.0
	4	B5	MVS/PEN	Cossor	1.0
	4	B5	VMP4G	Osram	1.0
	4	B5	VP4A	Mullard	1.0
	4	B5	VP4A	Tungsrām	.65
	4	B5	VPT4B	Ferranti	1.0
51	4	B7	AC/SP3	Mazda	1.0
	4	B7	TSP4	Mullard	1.3
52	4	B7	9A1	Brimar	1.0
	4	B7	A50M	Ever Ready	1.0
	4	B7	AC/VP1	Mazda	.65
	4	B7	HP4105	Tungsrām	1.0
	4	B7	HP4106c	Tungsrām	1.0
	4	B7	MVS/PEN	Cossor	1.0
	4	B7	VMP4	Osram	1.0
	4	B7	VMP4G	Osram	1.0
	4	B7	VP4	Mullard	1.0
	4	B7	VP4C	Tungsrām	.65
4	B7	VPT4	Ferranti	1.0	
53	4	B7	A50B	Ever Ready	.65
	4	B7	MS/PENB	Cossor	1.0
	4	B7	SP4	Tungsrām	.65
	4	B7	SP4B	Mullard	.65
	4	B7	SP4B	Tungsrām	.65
54	4	B7	A50P	Ever Ready	.65
	4	B7	AC/VP2	Mazda	.65
	4	B7	MVS/PENB	Cossor	1.0
	4	B7	VP4	Tungsrām	.65
	4	B7	VP4B	Mullard	.65
	4	B7	VP4B	Tungsrām	.65
	4	B7	W42	Osram	.6

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
55	6.3	UX5	36	U.S.A.	.3
	6.3	UX5	39	U.S.A.	.3
	6.3	UX5	44	U.S.A.	.3
56	6.3	B7G	6AM6	Brimar	.3
	6.3	B7G	6AM6	Cossor	.3
	6.3	B7G	6F12	Mazda	.3
	6.3	B7G	8D3	Brimar	.3
	6.3	B7G	EF91	Mullard	.3
	6.3	B7G	HP6	Tungfram	.3
	6.3	B7G	SP6	Cossor	.3
6.3	B7G	Z77	Osram	.3	
57	6.3	B7G	9D6	Brimar	.2
	6.3	B7G	EF92	Mullard	.2
	6.3	B7G	VP6	Cossor	.2
	6.3	B7G	W77	Osram	.2
58	6.3	B7G	6AS6	U.S.A.	.175
	6.3	B7G	CK5725	Raytheon	.175
59	6.3	B7G	6AG5	U.S.A.	.3
	6.3	B7G	6AK5	U.S.A.	.175
60	6.3	I.O.	6K7	Am. & Brit.	.3
	6.3	I.O.	6U7	U.S.A.	.3
	6.3	I.O.	6W7	U.S.A.	.15
	6.3	I.O.	KTW63	Osram	.3
	6.3	I.O.	W63	Osram	.3
61	6.3	I.O.	6S7	U.S.A.	.15
	6.3	I.O.	KTW61	Osram	.3
62	6.3	I.O.	6J7	Am. & Brit.	.3
	6.3	I.O.	6W7	U.S.A.	.15
	6.3	I.O.	EF37	Mullard	.2
	6.3	I.O.	OM5A	Cossor	.2
63	6.3	I.O.	6J7	Am. & Brit.	.3
	6.3	I.O.	KTZ63	Osram	.3
	6.3	I.O.	Z63	Osram	.3

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
64	6.3	I.O.	EF38	Mullard	.2
	6.3	I.O.	EF39	Mullard	.2
	6.3	I.O.	OM6	Cossor	.2
	6.3	I.O.	OM7	Cossor	.2
	6.3	I.O.	W147	Marconi	.2
65	6.3	I.O.	6AC7	U.S.A.	.45
	6.3	I.O.	6AJ7	U.S.A.	.45
	6.3	I.O.	1852	U.S.A.	.45
66	6.3	I.O.	6AB7	U.S.A.	.45
	6.3	I.O.	1853	U.S.A.	.45
67	6.3	I.O.	EF36	Mullard	.2
	6.3	I.O.	OM5	Cossor	.2
68	6.3	I.O.	EF37A	Mullard	.2
	6.3	I.O.	Om5B	Cossor	.2
69	6.3	I.O.	6SD7	U.S.A.	.3
	6.3	I.O.	6SE7	U.S.A.	.3
	6.3	I.O.	6SG7	U.S.A.	.3
	6.3	I.O.	6SH7	U.S.A.	.3
70	6.3	I.O.	6SJ7	U.S.A.	.3
	6.3	I.O.	6SK7	U.S.A.	.3
	6.3	I.O.	6SS7	U.S.A.	.15
71	6.3	UX7	6C6	U.S.A.	.3
	6.3	UX7	6D6	U.S.A.	.3
	6.3	UX7	77	U.S.A.	.3
	6.3	UX7	78	U.S.A.	.3
72	6.3	B8A	6F11	Mazda	.2
	6.3	B8A	EF41	Mullard	.2
	6.3	B8A	W150	Marconi	.2
73	6.3	B8A	6F13	Mazda	.35
	6.3	B8A	EF42	Mullard	.33
	6.3	B8A	Z150	Marconi	.33
74	6.3	B8G	7V7	U.S.A.	.45
	6.3	B8G	7W7	U.S.A.	.45
	6.3	B8G	1231	U.S.A.	.45

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>75</b>	6.3	B8G	7A7	U.S.A.	.3
	6.3	B8G	7G7	U.S.A.	.45
	6.3	B8G	7H7	U.S.A.	.3
	6.3	B8G	7L7	U.S.A.	.3
	6.3	B8G	7T7	U.S.A.	.3
	6.3	B8G	1232	U.S.A.	.45
	6.3	B8G	EF22	Mullard	.2
	6.3	B8G	W81	Osram	.3
	6.3	B8G	W143	Marconi	.2
6.3	B8G	W148	Marconi	.2	
<b>76</b>	6.3	B8G	7B7	U.S.A.	.15
	6.3	B8G	7C7	U.S.A.	.15
	6.3	B8G	W149	Marconi	.15
<b>77</b>	6.3	P	EF5	Mullard	.2
	6.3	P	EF9	Mullard	.2
<b>78</b>	6.3	B9G	63SPT	Cossor	.3
	6.3	B9G	EF50	Mullard	.3
	6.3	B9G	Z90	Osram	.3
<b>79</b>	12.6	I.O.	12SJ7	U.S.A.	.15
	12.6	I.O.	12SK7	U.S.A.	.15
<b>80</b>	12.6	I.O.	12K7	U.S.A.	.15
	12.6	I.O.	12J7	U.S.A.	.15
	12.6	I.O.	W76	Osram	.16
<b>81</b>	12.6	B8G	12B7	U.S.A.	.15
	12.6	B8G	14A7	U.S.A.	.15
	12.6	B8G	14C7	U.S.A.	.15
<b>82</b>	13	B7	VPTS	Ferranti	.3
	13	B7	W30	Osram	.3
	13	B7	W31	Osram	.3
<b>83</b>	13	B7	9D2	Brimar	.2
	13	B7	13VPA	Cossor	.2
	13	B7	C50N	Ever Ready	.2
	13	B7	HP13	Tungsrām	.2
	13	B7	VP13B	Tungsrām	.2
	13	B7	VP13C	Mullard	.2
	13	B7	VP13K	Tungsrām	.2
13	B7	VP1322	Mazda	.2	

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>84</b>	13	B7	VP13	Tungsrarn	.2
	13	B7	VPTA	Ferranti	.2
<b>85</b>	13	B7	8D2	Brimar	.2
	13	B7	13SPA	Cossor	.2
	13	B7	C50B	Ever Ready	.2
	13	B7	SP13	Tungsrarn	.2
	13	B7	SP13A	Mullard	.2
	13	B7	SP13B	Tungsrarn	.2
	13	B7	SP13C	Mullard	.2
<b>86</b>	13	B8A	10F9	Mazda	.1
	13	B8A	UF41	Mullard	.1
	13	B8A	UF41	Tungsrarn	.1
	13	B8A	W145	Marconi	.1
<b>87</b>	13	P	SP13	Mullard	.2
	13	P	SP13S	Tungsrarn	.2
<b>88</b>	13	P	HP13S	Tungsrarn	.2
	13	P	VP13A	Mullard	.2
<b>89</b>	21	B8A	10F3	Mazda	.1
	21	B8A	UF42	Mullard	.1
	21	B8A	Z142	Marconi	.1
<b>90</b>	1.4	B7G	1A3	Am. & Brit.	.15
	1.4	B7G	DA90	Mullard	.15
<b>91</b>	1.4	B8G	1R4	U.S.A.	.15
	1.4	B8G	1294	U.S.A.	.15
<b>92</b>	4	B3G	D1	Mazda	.2
	4	B3G	T4D	Mullard	.2
<b>93</b>	6.3	B3G	6D1	Mazda	.15
	6.3	B3G	EA50	Mullard	.15
<b>94</b>	6.3	B5B	EA71	Mullard	.15
	6.3	B5B	EA76	Mullard	.15

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
95	2	B5	2D2	Mullard	.09
	2	B5	220DD	Cossor	.2
96	4	B5	2D4	Mullard	.65
	4	B5	DD465	Tungfram	.65
97	4	B5	2D4A	Mullard	.65
	4	B5	A20B	Ever Ready	.65
	4	B5	AC/DD	Mazda	1.0
	4	B5	D41	Osram	.3
	4	B5	DD4	Cossor	.75
	4	B5	DD4	Tungfram	.65
	4	B5	DDA41	Brimar	.65
	4	B5	SD	Ferranti	.3
98	4	B7	2D4B	Mullard	.35
	4	B7	DD4D	Tungfram	.4
99	6.3	B7G	6AL5	Am. & Brit.	.3
	6.3	B7G	6D2	Mazda	.3
	6.3	B7G	CK5726	Raytheon	.3
	6.3	B7G	D77	Osram	.3
	6.3	B7G	DD6	Cossor	.3
	6.3	B7G	DD6	Ferranti	.3
	6.3	B7G	DD6G	Tungfram	.3
100	6.3	B7G	EB91	Mullard	.3
	6.3	I.O.	6H6	Am. & Brit.	.3
	6.3	I.O.	D63	Osram	.3
	6.3	I.O.	EB34	Mullard	.2
101	6.3	I.O.	OM3	Cossor	.2
	6.3	B5	DD6	Tungfram	.2
	6.3	B5	DD620	Mazda	.2
102	6.3	B5	ZD	Ferranti	.2
	13	B5	2D13C	Mullard	.2
	13	B5	10D1	Brimar	.2
	13	B5	C20C	Ever Ready	.2
103	13	B5	DD13	Tungfram	.2
	13	P	2D13A	Mullard	.2
	13	P	DD13S	Tungfram	.2

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>104</b>	1.4	I.O.	1H5	Am. & Brit.	.05
	1.4	I.O.	DAC32	Mullard	.05
	1.4	I.O.	HD14	Osram	.05
<b>105</b>	2	B5	DDT2A	Tungsrarn	.1
	2	B5	HD21	Osram	.2
<b>106</b>	2	B5	210DDT	Cossor	.1
	2	B5	DDT2	Tungsrarn	.1
	2	B5	DDT2B	Tungsrarn	.1
	2	B5	H2D	Ferranti	.1
	2	B5	HD22	Osram	.2
	2	B5	HD23	Osram	.15
	2	B5	HD24	Osram	.1
	2	B5	HL21DD	Mazda	.15
	2	B5	K23A	Ever Ready	.1
	2	B5	K23B	Ever Ready	.12
	2	B5	L21DD	Mazda	.1
	2	B5	TDD2	Mullard	.1
2	B5	TDD2A	Mullard	.12	
<b>107</b>	4	B7	11A1	Brimar	1.0
	4	B7	11A2	Brimar	1.0
	4	B7	A23A	Ever Ready	.65
	4	B7	AC/HLDD	Mazda	1.0
	4	B7	DDT	Cossor	1.0
	4	B7	DDT4	Tungsrarn	.65
	4	B7	DH42	Osram	.6
	4	B7	H4D	Ferranti	1.0
	4	B7	MHD4	Osram	1.0
4	B7	TDD4	Mullard	.65	
<b>108</b>	6.3	B7G	6AQ6	U.S.A.	.15
	6.3	B7G	6AV6	U.S.A.	.3
	6.3	B7G	DH77	Osram	.3
<b>109</b>	6.3	I.O.	6SR7	U.S.A.	.3
	6.3	I.O.	6ST7	U.S.A.	.15
<b>110</b>	6.3	I.O.	6B6	U.S.A.	.3
	6.3	I.O.	6Q7	U.S.A.	.3
	6.3	I.O.	DH63	Osram	.3

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
111	6.3	I.O.	6R7	U.S.A.	.3
	6.3	I.O.	DH147	Marconi	.2
	6.3	I.O.	DL63	Osram	.3
	6.3	I.O.	EBC33	Mullard	.2
	6.3	I.O.	EBC33	Tungsrarn	.2
	6.3	I.O.	OM4	Cossor	.2
112	6.3	I.O.	6B6	U.S.A.	.3
	6.3	I.O.	6T7	U.S.A.	.15
	6.3	I.O.	DH73	Osram	.16
113	6.3	I.O.	6SQ7	U.S.A.	.3
	6.3	I.O.	6SZ7	U.S.A.	.15
114	6.3	P	DDT6S	Tungsrarn	.2
	6.3	P	EBC3	Mullard	.2
115	6.3	B8A	DH150	Marconi	.23
	6.3	B8A	EBC41	Mullard	.23
116	6.3	B8G	7C6	U.S.A.	.15
	6.3	B8G	DH149	Marconi	.15
117	6.3	B8G	7B6	U.S.A.	.3
	6.3	B8G	DH81	Osram	.3
118	12.6	I.O.	12Q7	U.S.A.	.15
	12.6	I.O.	DH76	Osram	.16
119	13	B7	11D5	Brimar	.15
	13	B7	DH30	Osram	.3
	13	B7	HSD	Ferranti	.3
120	13	B7	11D3	Brimar	.2
	13	B7	13DHA	Cossor	.2
	20	B7	202DDT	Cossor	.2
	13	B7	C23B	Ever Ready	.2
	13	B7	DDT13	Tungsrarn	.2
	13	B7	HAD	Ferranti	.2
	13	B7	HLDD1320	Mazda	.2
	13	B7	TDD13C	Mullard	.2

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>121</b>	13	P	DDT13S	Tungram	.2
	13	P	TDD13	Mullard	.2
<b>122</b>	14	B8A	DH142	Marconi	.1
	14	B8A	UBC41	Mullard	.1
<b>123</b>	15	B8A	10LD11	Mazda	.1
	15	B8A	DL145	Marconi	.1
<b>124</b>	1.4	B7G	1FD9	Mazda	.05
	1.4	B7G	1S5	Am. & Brit.	.05
	1.4	B7G	DAF91	Ever Ready	.05
	1.4	B7G	DAF91	Mullard	.05
	1.4	B7G	ZD17	Osram	.05
<b>125</b>	6.3	B8A	EAF42	Mullard	.2
	6.3	B8A	WD150	Marconi	.2
<b>126</b>	12.6	B8A	UAF42	Mullard	.1
	12.6	B8A	WD142	Marconi	.1
<b>127</b>	6.3	B9A	6N8	U.S.A.	.3
	6.3	B9A	EBF80	Mullard	.3
<b>128</b>	12.6	I.O.	12C8	U.S.A.	.15
	12.6	I.O.	VP12D	Ferranti	.15
<b>129</b>	4	B7	A27D	Ever Ready	2.25
	4	B7	DDPP4M	Tungram	2.0
	4	B7	PEN4DD	Mullard	2.25
<b>130</b>	4	B7	420TDD	Cossor	2.0
	4	B7	A27D	Ever Ready	2.25
	4	B7	AC/2PENDD	Mazda	2.0
	4	B7	DDPP4B	Tungram	2.0
	4	B7	DN41	Osram	2.3
	4	B7	PT4D	Ferranti	2.0
<b>131</b>	6.3	B8G	DN143	Marconi	.8
	6.3	B8G	EBL21	Mullard	.8

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>132</b>	6.3	P	DDPP6Bs	Tungsrarn	1.4
	6.3	P	EBL1	Mullard	1.5
	6.3	P	EBL1	Ever Ready	1.5
	6.3	P	EBL1	Tungsrarn	1.5
<b>133</b>	39	B7	DDPP39	Tungsrarn	.2
	40	B7	PENDD4020	Mazda	.2
<b>134</b>	44	B7	C27D	Ever Ready	.2
	39	B7	DDPP39M	Tungsrarn	.2
	44	B7	PEN40DD	Mullard	.2
<b>135</b>	1.4	I.O.	IE4	U.S.A.	.05
	1.4	I.O.	IG4	U.S.A.	.05
<b>136</b>	2	B4	210DET	Cossor	.1
	2	B4	210LF	Cossor	.1
	2	B4	K30B	Ever Ready	.1
	2	B4	K30D	Ever Ready	.1
	2	B4	K30E	Ever Ready	.1
	2	B4	L2	Mazda	.1
	2	B4	L21	Osram	.1
	2	B4	LD210	Tungsrarn	.1
	2	B4	LL2	Tungsrarn	.2
	2	B4	PM1LF	Mullard	.1
2	B4	PM2D	Mullard	.1	
<b>137</b>	2	B4	210HL	Cossor	.1
	2	B4	HL2	Ferranti	.1
	2	B4	HL2	Mazda	.1
	2	B4	HL2	Osram	.1
	2	B4	HL21	Osram	.1
	2	B4	HL210	Mazda	.1
	2	B4	HLB1	Brimar	.1
	2	B4	K30K	Ever Ready	.1
2	B4	PM2HL	Mullard	.1	
<b>138</b>	2	B4	210HL	Cossor	.1
	2	B4	HL2	Mazda	.1
	2	B4	HL2	Tungsrarn	.13
	2	B4	HL2/K	Osram	.1
	2	B4	HLB1	Brimar	.1
	2	B4	K30C	Ever Ready	.1
	2	B4	PM1HL	Mullard	.1
	2	B4	PM2HL	Mullard	.1
2	B4	PM2DX	Mullard	.1	

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>139</b>	2	B5	210HF	Cossor	.1
	2	B5	210RC	Cossor	.1
	2	B5	H2	Mazda	.1
	2	B5	H2	Osram	.1
	2	B5	H210	Osram	.1
	2	B5	HL210	Mazda	.1
	2	B5	HL210	Osram	.1
	2	B5	HR210	Tungsrām	.1
	2	B5	K30A	Ever Ready	.1
	2	B5	PM1A	Mullard	.1
2	B5	PM1HF	Mullard	.1	
<b>140</b>	2.5	UX5	27	U.S.A.	1.75
	2.5	UX5	56	U.S.A.	1.0
<b>141</b>	4	B5	41MHF	Cossor	1.0
	4	B5	41MLF	Cossor	1.0
	4	B5	41MTL	Cossor	1.0
	4	B5	244v	Mullard	.65
	4	B5	354v	Mullard	.65
	4	B5	A30D	Ever Ready	.65
	4	B5	AC/HL	Mazda	1.0
	4	B5	D4	Ferranti	1.0
	4	B5	HL4+	Tungsrām	.65
	4	B5	HLA2	Brimar	1.0
4	B5	MH4	Osram	1.0	
4	B5	MHL4	Osram	1.0	
<b>142</b>	4	B5	41FP	Cossor	1.0
	4	B5	41MP	Cossor	1.0
	4	B5	104V	Mullard	1.0
	4	B5	154V	Mullard	.65
	4	B5	484V	Mullard	1.0
	4	B5	994V	Mullard	.65
	4	B5	AC/P	Mazda	1.0
	4	B5	L4	Ferranti	1.0
	4	B5	LL4	Tungsrām	1.2
	4	B5	ML4	Osram	1.0
4	B5	PA1	Brimar	1.1	
4	B5	TT4	Mullard	1.0	
4	B5	TT4A	Mullard	1.0	
<b>143</b>	4	B5	AC/P4	Mazda	1.0
	4	B5	LL4C	Tungsrām	1.2

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>144</b>	4	B5	41MH	Cossor	1.0
	4	B5	41MHL	Cossor	1.0
	4	B5	41MRC	Cossor	1.0
	4	B5	41MTL	Cossor	1.0
	4	B5	904V	Mullard	.65
	4	B5	A30B	Ever Ready	.65
	4	B5	AC/2HL	Mazda	1.0
	4	B5	D4	Ferranti	1.0
	4	B5	HLA1	Brimar	1.0
	4	B5	MH41	Osram	1.0
<b>145</b>	4	B7	H42	Osram	.6
	4	B7	HL4G	Tungsram	.65
<b>146</b>	5	UX4	40	U.S.A.	.25
	5	UX4	O1A	U.S.A.	.25
	5	UX4	OOA	U.S.A.	.25
<b>147</b>	6.3	UX5	37	U.S.A.	.3
	6.3	UX5	76	U.S.A.	.3
<b>148</b>	6.3	B7G	6C4	U.S.A.	.15
	6.3	B7G	L77	Osram	.15
<b>149</b>	6.3	B7G	6L34	Mazda	.3
	6.3	B7G	EC91	Mullard	.3
<b>150</b>	6.3	I.O.	6F5	U.S.A.	.3
	6.3	I.O.	H63	Osram	.3
<b>151</b>	6.3	I.O.	6C5	U.S.A.	.3
	6.3	I.O.	6J5	U.S.A.	.3
	6.3	I.O.	6L5	U.S.A.	.15
	6.3	I.O.	L63	Osram	.3
<b>152</b>	6.3	I.O.	6AF5	U.S.A.	.3
	6.3	I.O.	6P5	U.S.A.	.3

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>153</b>	13	B7	4D1	Brimar	.2
	13	B7	C30B	Ever Ready	.2
	13	B7	DA	Ferranti	.2
	13	B7	HL13	Tungsrarn	.2
	13	B7	HL13C	Mullard	.2
	13	B7	HL1320	Mazda	.2
<b>154</b>	13	B7	DS	Ferranti	.3
	13	B7	H30	Osram	.3
<b>155</b>	13	P	HL13	Mullard	.2
	13	P	HL13s	Tungsrarn	.2
<b>156</b>	20	B5	H20	Mullard	.18
	20	B5	HL20	Mullard	.18
	20	B5	R2018	Tungsrarn	.18
<b>157</b>	2	B4	215P	Cossor	.15
	2	B4	P215	Mazda	.15
	2	B4	P215	Osram	.15
	2	B4	P215	Tungsrarn	.15
	2	B4	PM2	Mullard	.2
<b>158</b>	2	B4	220P	Cossor	.2
	2	B4	220PA	Cossor	.2
	2	B4	K30G	Ever Ready	.2
	2	B4	L2	Ferranti	.2
	2	B4	LP2	Osram	.2
	2	B4	LP220	Tungsrarn	.2
	2	B4	P2	Osram	.2
	2	B4	P215	Mazda	.15
	2	B4	P220	Mazda	.2
	2	B4	P220A	Mazda	.2
	2	B4	P240	Osram	.2
	2	B4	PB1	Brimar	.2
	2	B4	PM2	Mullard	.2
	2	B4	PM2A	Mullard	.2
	2	B4	PM202	Mullard	.2
2	B4	PM252	Mullard	.3	
<b>159</b>	2	B4	230XP	Cossor	.3
	2	B4	LP2	Ferranti	.2
	2	B4	P2/B	Osram	.2
	2	B4	P220A	Mazda	.2
	2	B4	PM202	Mullard	.2
	2	B4	PM252	Mullard	.3
	2	B4	SP220	Tungsrarn	.2

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>160</b>	2	B4	2P	Cossor	2.0
	2	B4	2XP	Cossor	2.0
	2	B4	ACO42	Mullard	2.0
	2	B4	PA20	Mazda	2.0
	2	B4	S30D	Ever Ready	2.0
<b>161</b>	2.5	UX4	2A3	U.S.A.	2.5
	2.5	UX4	45	U.S.A.	1.5
<b>162</b>	4	B4	DO24	Mullard	1.85
	4	B4	DO26	Mullard	2.0
	4	B4	P27/500	Tungsrarn	2.0
	4	B4	PP5/400	Mazda	2.0
	4	B4	PX25	Osram	2.0
<b>163</b>	4	B4	4XP	Cossor	1.0
	4	B4	ACO44	Mullard	1.0
	4	B4	ACO54	Mullard	1.0
	4	B4	ACO64	Mullard	1.0
	4	B4	ACO84	Mullard	1.0
	4	B4	AC104	Mullard	1.0
	4	B4	LP4	Ferranti	1.0
	4	B4	P12/250	Tungsrarn	1.0
	4	B4	PP3/250	Mazda	1.0
	4	B4	PX4	Osram	1.0
4	B4	S30C	Ever Ready	1.0	
<b>164</b>	4	B4	DA30	Osram	2.0
	4	B4	DO30	Mullard	2.0
	4	B4	PA40	Mazda	2.0
	4	B4	PX25A	Osram	2.0
	4	B4	V503	Mazda	2.0
<b>165</b>	4	B5	41MXP	Cossor	1.0
	4	B5	AC/P1	Mazda	1.0
	4	B5	O54V	Mullard	1.0
<b>166</b>	5	UX4	12A	U.S.A.	.25
	5	UX4	71A	U.S.A.	.25
<b>167</b>	6.3	I.O.	6A5	U.S.A.	1.0
	6.3	I.O.	6B4	U.S.A.	1.0

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
168	1·4/2·8	B7G	3A5	Am. & Brit.	·22/·11
	1·4/2·8	B7G	DCC90	Mullard	·22/·11
169	6·3	B7G	6J6	Am. & Brit.	·45
	6·3	B7G	ECC91	Mullard	·45
170	6·3	I.O.	6SN7	Am. & Brit.	·6
	6·3	I.O.	B65	Osram	·6
171	6·3	I.O.	6SC7	U.S.A.	·3
	6·3	I.O.	6SL7	U.S.A.	·3
	6·3	I.O.	6SU7	U.S.A.	·3
	6·3	I.O.	ECC35	Mullard	·4
172	6·3	I.O.	ECC32	Mullard	·95
	6·3	I.O.	ECC33	Mullard	·2
173	6·3	B9A	12AT7	U.S.A.	·3
	6·3	B9A	ECC81	Mullard	·3
174	12·6	I.O.	12SN7	Am. & Brit.	·3
	12·6	I.O.	12SX7	U.S.A.	·3
	12·6	I.O.	B36	Osram	·3
175	12·6	B8G	14AF7	U.S.A.	·15
	12·6	B8G	14N7	U.S.A.	·3
176	12·6	B9A	12AT7	U.S.A.	·15
	12·6	B9A	ECC81	Mullard	·15
177	1·25	Wires	CK502AX	Raytheon	·03
	1·25	Wires	DL71	Mullard	·025
178	1·25	Wires	CK506AX	Raytheon	·045
	1·25	Wires	DL72	Mullard	·025

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>179</b>	1·4/2·8	B7G	3A4	Am. & Brit.	·2/·1
	1·4/2·8	B7G	DL93	Mullard	·2/·1
<b>180</b>	1·4/2·8	B7G	1P11	Mazda	·1/·05
	1·4/2·8	B7G	3V4	U.S.A.	·1/·05
	1·4/2·8	B7G	DL94	Mullard	·1/·05
	1·4/2·8	B7G	N19	Osram	·1/·05
<b>181</b>	1·4	B7G	1S4	Am. & Brit.	·1
	1·4	B7G	DL91	Mullard	·1
<b>182</b>	1·4/2·8	B7G	3Q4	Am. & Brit.	·1/·05
	1·4/2·8	B7G	DL95	Mullard	·1/·05
	1·4/2·8	B7G	N18	Osram	·1/·05
<b>183</b>	1·4/2·8	B7G	1P10	Mazda	·1/·05
	1·4/2·8	B7G	3S4	Am. & Brit.	·1/·05
	1·4/2·8	B7G	DL92	Ever Ready	·1/·05
	1·4/2·8	B7G	DL92	Mullard	·1/·05
	1·4/2·8	B7G	N17	Osram	·1/·05
<b>184</b>	1·4	I.O.	1A5G	U.S.A.	·05
	1·4	I.O.	1C5	U.S.A.	·1
	1·4	I.O.	1Q5	U.S.A.	·1
	1·4	I.O.	1T5	U.S.A.	·05
	1·4	I.O.	DL35	Mullard	·1
	1·4	I.O.	N14	Osram	·1
<b>185</b>	1·4/2·8	I.O.	3Q5	Am. & Brit.	·1/·05
	1·4/2·8	I.O.	DL33	Mullard	·1/·05
	1·4/2·8	I.O.	N16	Osram	·1/·05
<b>186</b>	1·4	B8G	1LA4	U.S.A.	·05
	1·4	B8G	1LB4	U.S.A.	·05
<b>187</b>	1·4/2·8	B8G	3D6	U.S.A.	·1/·05
	1·4/2·8	B8G	3LF4	U.S.A.	·1/·05
	1·4/2·8	B8G	1299	U.S.A.	·1/·05
<b>188</b>	2	B4	215SG	Cossor	·15
	2	B4	PM12	Mullard	·15
	2	B4	S2	Ferranti	·15
	2	B4	S21	Osram	·15
	2	B4	S215	Osram	·18
	2	B4	SG215	Mazda	·15

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
189	2	B5	220HPT	Cossor	.2
	2	B5	220/OT	Cossor	.2
	2	B5	K70B	Ever Ready	.15
	2	B5	KT2	Osram	.2
	2	B5	PEN220	Mazda	.2
	2	B5	PENB1	Brimar	.2
	2	B5	PM22	Mullard	.2
	2	B5	PM22A	Mullard	.15
	2	B5	PP2	Tungfram	.14
	2	B5	PT2	Ferranti	.2
2	B5	PT2	Osram	.2	
190	2	B5	220PT	Cossor	.2
	2	B5	230PT	Cossor	.3
	2	B5	PEN220A	Mazda	.2
	2	B5	PM22C	Mullard	.3
	2	B5	PP225	Tungfram	.26
191	2	B5	K70D	Ever Ready	.3
	2	B5	KT24	Osram	.2
	2	B5	PEN231	Mazda	.3
	2	B5	PM22D	Mullard	.3
192	2	I.O.	1G5G	U.S.A.	.12
	2	I.O.	1J5G	U.S.A.	.12
193	4	B5	PENA1	Brimar	1.0
	4	B5	PM24	Mullard	.15
	4	B5	PM24A	Mullard	.275
	4	B5	PM24M	Mullard	1.1
	4	B5	PP4	Tungfram	1.1
	4	B5	PT4	Osram	1.0
	4	B5	PT41	Cossor	1.0
194	4	B5	PM24B	Mullard	1.0
	4	B5	PM24C	Mullard	1.0
	4	B5	PM24D	Mullard	2.0
	4	B5	PT41B	Cossor	1.0
195	4	B5	PM24E	Mullard	2.0
	4	B5	PT25	Osram	2.0
196	4	B7	APP4G	Tungfram	2.0
	4	B7	N43	Osram	2.0

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>197</b>	4	B7	7A2	Brimar	1.2
	4	B7	A70B	Ever Ready	1.35
	4	B7	AC/PEN	Mazda	1.0
	4	B7	APP4A	Tungfram	1.2
	4	B7	KT42	Osram	1.0
	4	B7	MKT4	Osram	1.0
	4	B7	MP/PEN	Cossor	1.0
	4	B7	MP/PENA	Cossor	1.0
	4	B7	MPT4	Osram	1.0
	4	B7	PEN4VA	Mullard	1.35
<b>198</b>	4	B7	7A3	Brimar	2.0
	4	B7	42MP/PEN	Cossor	2.0
	4	B7	42OT	Cossor	2.0
	4	B7	A70C	Ever Ready	2.0
	4	B7	A70D	Ever Ready	1.95
	4	B7	AC/2PEN	Mazda	1.75
	4	B7	APP4B	Tungfram	2.0
	4	B7	KT41	Osram	2.0
	4	B7	N41	Osram	2.0
	4	B7	PEN4VB	Mullard	1.1
4	B7	PENA4	Mullard	1.95	
4	B7	PT4	Ferranti	2.0	
<b>199</b>	4	B7	A70E	Ever Ready	2.1
	4	B7	AC/4PEN	Mazda	1.75
	4	B7	APP4E	Tungfram	2.0
	4	B7	PEN428	Mullard	2.1
	4	B7	PENB4	Mullard	2.1
<b>200</b>	4	B7	AC/5 PEN	Mazda	1.75
	4	B7	PT10	Cossor	2.0
<b>201</b>	6.3	UX5	6A4	U.S.A.	.3
	6.3	UX5	52	U.S.A.	.3
<b>202</b>	6.3	UX5	5B/250A	S.T.C.	.9
	6.3	UX5	807	Am. & Brit.	.9
	6.3	UX5	QVO5-25	Mullard	.9
<b>203</b>	6.3	UX6	41	U.S.A.	.4
	6.3	UX6	42	U.S.A.	.7

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>204</b>	6.3	B7G	6AM5	Am. & Brit.	.2
	6.3	B7G	7D9	Brimar	.2
	6.3	B7G	EL91	Mullard	.2
	6.3	B7G	N77	Osram	.2
	6.3	B7G	N144	Marconi	.2
<b>205</b>	6.3	I.O.	6U6	U.S.A.	.75
	6.3	I.O.	6W6	U.S.A.	1.25
	6.3	I.O.	6Y6	U.S.A.	1.25
<b>206</b>	6.3	I.O.	EL32	Mullard	.2
	6.3	I.O.	OM9	Cossor	.2
<b>207</b>	6.3	I.O.	6AG6	Am. & Brit.	1.25
	6.3	I.O.	6K6	U.S.A.	.4
	6.3	I.O.	6P25	Mazda	1.1
	6.3	I.O.	6V6	Am. & Brit.	.45
	6.3	I.O.	EL33	Mullard	.9
	6.3	I.O.	KT61	Osram	.95
	6.3	I.O.	N147	Marconi	.9
	6.3	I.O.	PP6BG	Tungram	1.2
<b>208</b>	6.3	I.O.	6L6	Am. & Brit.	.9
	6.3	I.O.	EL35	Mullard	1.35
	6.3	I.O.	EL37	Mullard	1.4
	6.3	I.O.	KT66	Osram	1.27
	6.3	I.O.	N66	Osram	1.27
<b>209</b>	6.3	I.O.	6F6	Am. & Brit.	.7
	6.3	I.O.	KT63	Osram	.7
	6.3	I.O.	N63	Osram	.7
<b>210</b>	6.3	B8A	EL42	Mullard	.2
	6.3	B8A	N151	Marconi	.2
<b>211</b>	6.3	B8A	EL41	Mullard	.65
	6.3	B8A	N150	Marconi	.65
<b>212</b>	6.3	B8G	7B5	U.S.A.	.4
	6.3	B8G	7C5	U.S.A.	.45
	6.3	B8G	KT81	Marconi	.95
<b>213</b>	6.3	P	EL2	Mullard	.2
	6.3	P	EL2	Tungram	.2
	6.3	P	PP6AS	Tungram	.2

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
214	6.3	P	EL3	Mullard	.9
	6.3	P	EL3	Tungsram	.9
	6.3	P	PP6BS	Tungsram	1.2
215	13	B7	7D8	Brimar	.65
	13	B7	KT30	Osram	.3
	13	B7	N30	Osram	.3
	13	B7	PEN13C	Mullard	.5
	13	B7	PEN1340	Mazda	.4
	13	B7	PP13A	Tungsram	.3
	13	B7	PTA	Ferranti	.3
216	13/26	B7	KT31	Osram	.6/-.3
	13/26	B7	N31	Osram	.6/-.3
	13/26	B7	PTS	Ferranti	.6/-.3
217	20	B5	PEN20	Mullard	.18
	20	B5	PP2018	Tungsram	.18
218	33	P	CL4	Mullard	.2
	24	P	PEN26	Mullard	.2
	24	P	PP24S	Tungsram	.2
219	25	I.O.	25A6	U.S.A.	.3
	25	I.O.	KT33	Osram	.3
220	25	I.O.	25L6	U.S.A.	.3
	25	I.O.	KT32	Osram	.3
221	40	B7	7D6	Brimar	.2
	35	B7	C70D	Ever Ready	.2
	35	B7	C70E	Ever Ready	.2
	33	B7	PEN36C	Mullard	.2
	35	B7	PEN3520	Mazda	.2
	35	B7	PP35	Tungsram	.2
	40	B7	PTZ	Ferranti	.2
222	33	I.O.	332PEN	Cossor	.2
	33	I.O.	CL33	Ever Ready	.2
	33	I.O.	CL33	Mullard	.2
	33	I.O.	CL33	Tungsram	.2
223	40	B7	7D3	Brimar	.2
	40	B7	40PPA	Cossor	.2

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
224	40	B7	402OT	Cossor	.2
	40	B7	402PEN	Cossor	.2
	35	B7	PP34	Tungsram	.2
225	40	B8A	10P13	Mazda	.1
	40	B8A	N145	Marconi	.1
226	45	B8A	N142	Marconi	.1
	45	B8A	UL41	Mullard	.1
	45	B8A	UL46	Mullard	.1
227	48	I.O.	50L6	U.S.A.	.15
	48	I.O.	KT71	Osram	.16
228	1.4	B8G	3B7	U.S.A.	.22
	1.4	B8G	1291	U.S.A.	.22
229	2	B7	B21	Osram	.2
	2	B7	CB220	Tungsram	.25
	2	B7	K33B	Ever Ready	.2
	2	B7	PD220A	Mazda	.2
	2	B7	PM2BA	Mullard	.2
230	2	B7	220B	Cossor	.2
	2	B7	240B	Cossor	.4
	2	B7	CB215	Tungsram	.22
	2	B7	HP2	Ferranti	.2
	2	B7	K33A	Ever Ready	.2
	2	B7	PD220	Mazda	.2
	2	B7	PM2B	Mullard	.2
231	2.8	B8G	3B7	U.S.A.	.11
	2.8	B8G	1291	U.S.A.	.11
232	6.3	UX7	6A6	U.S.A.	.8
	6.3	UX7	B63	Osram	.8
233	6.3	I.O.	6AB6	U.S.A.	.5
	6.3	I.O.	6N6	U.S.A.	.8

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>234</b>	6.3	I.O.	6N7	U.S.A.	.8
	6.3	I.O.	CK5694	Raytheon	.8
<b>235</b>	2	B7	240QP	Cossor	.4
	2	B7	K77B	Ever Ready	.5
	2	B7	QP21	Osram	.4
	2	B7	QP22B	Mullard	.3
	2	B7	QP230	Mazda	.3
	2	B7	QPT2	Ferranti	.4
<b>236</b>	2	B9	K77A	Ever Ready	.5
	2	B9	QP22A	Mullard	.45
	2	B9	QP240	Mazda	.45
<b>237</b>	4	B7	AC/ME	Mazda	.5
	4	B7	VME4	Tungsrarn	.5
<b>238</b>	4	P	A39A	Ever Ready	.3
	4	P	ME4S	Tungsrarn	.3
	4	P	TV4	Mullard	.3
	4	P	TV4A	Mullard	.3
<b>239</b>	6.3	UX6	6AB5	U.S.A.	.15
	6.3	UX6	6E5	U.S.A.	.3
	6.3	UX6	6H5	U.S.A.	.3
	6.3	UX6	6N5	U.S.A.	.15
<b>240</b>	6.3	I.O.	64ME	Cossor	.2
	6.3	I.O.	EM34	Mullard	.2
<b>241</b>	6.3	I.O.	6G5	Tungsrarn	.3
	6.3	I.O.	6M1	Mazda	.3
	6.3	I.O.	6U5	Brimar	.3
	6.3	I.O.	63ME	Cossor	.3
	6.3	I.O.	VFT6	Ferranti	.3
	6.3	I.O.	Y61	Osram	.3
	6.3	I.O.	Y62	Osram	.3
	6.3	I.O.	Y63	Osram	.3
	6.3	I.O.	Y64	Osram	.3
<b>242</b>	6.3	P	C39A	Ever Ready	.2
	6.3	P	EM1	Mullard	.2
	6.3	P	ME6s	Tungsrarn	.2
	6.3	P	TV6	Mullard	.2

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
243	6.3	B9A	6BE7	U.S.A.	.2
	6.3	B9A	EQ80	Mullard	.2
244	2	B4	HVR1	Mullard	.29
	2	B4	SU2130	Cossor	1.0
	2	B4	U16	Osram	1.0
245	2	B4	SU2150	Cossor	1.15
	2	B4	U21	Osram	1.85
246	2	B4	HVR2A	Mullard	1.5
	2	B4	SU2150A	Cossor	1.5
	2	B4	VLS61	Brimar	1.2
247	2	I.O.	SU25	Cossor	.5
	2	I.O.	U24	Mazda	.15
248	2.5	UX4	2X2	U.S.A.	1.75
	2.5	UX4	2Y2	U.S.A.	1.75
	2.5	UX4	879	U.S.A.	1.75
249	4	B4	HVR2	Mullard	.65
	4	B4	V21/7000	Tungram	.65
250	4	B7G	HR2	Ferranti	.5
	4	B7G	R10	Brimar	.5
251	6.3	UX4	1	U.S.A.	.3
	6.3	UX4	1V	U.S.A.	.3
	6.3	UX4	6Z3	U.S.A.	.3
252	6.3	B8G	7Z4	U.S.A.	.9
	6.3	B8G	U82	Osram	.6
253	6.3	B2G	EY51	Mullard	.08
	6.3	B2G	R12	Brimar	.08
	6.3	B2G	SU61	Cossor	.08
254	12.6	UX4	12Z3	U.S.A.	.3
	12.6	UX4	14Z3	U.S.A.	.3

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>255</b>	20	B5	C10B	Ever Ready	.2
	20	B5	RZ	Ferranti	.2
	20	B5	UR1C	Mullard	.2
	20	B5	V20	Tungsram	.2
<b>256</b>	20	I.O.	CY31	Ever Ready	.2
	20	I.O.	CY31	Mullard	.2
	30	I.O.	OM1	Cossor	.2
	20	I.O.	U201	Mazda	.2
<b>257</b>	20	P	UR1	Mullard	.2
	20	P	V20S	Tungsram	.2
<b>258</b>	25	UX6	25RE	Cossor	.3
	25	UX6	25Y5	U.S.A.	.3
<b>259</b>	26	I.O.	25Y4	U.S.A.	.15
	26	I.O.	25Z4	U.S.A.	.3
	26	I.O.	U31	Osram	.3
<b>260</b>	29	P	PV29S	Tungsram	.2
	29	P	UR2	Mullard	.2
<b>261</b>	35	I.O.	35Z4	U.S.A.	.15
	30	I.O.	U76	Osram	.16
<b>262</b>	30	P	PV30S	Tungsram	.2
	30	P	UR3	Mullard	.2
<b>263</b>	31	B8A	U142	Marconi	.1
	31	B8A	UY41	Mullard	.1
<b>264</b>	40	B5	1D5	Brimar	.2
	40	B5	40SUA	Cossor	.2
	40	B5	U4020	Mazda	.2
<b>265</b>	40	I.O.	40Z5	U.S.A.	.15
	40	I.O.	45Z5	U.S.A.	.15
<b>266</b>	40	B8A	U145	Marconi	.1
	40	B8A	U404	Mazda	.1

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
267	4	B4	431U	Cossor	2.5
	4	B4	A11B	Ever Ready	2.5
	4	B4	A11D	Ever Ready	2.5
	4	B4	APV4	Tungsrarn	2.0
	4	B4	IW4/350	Mullard	2.0
	4	B4	MU12	Osram	2.5
	4	B4	R2	Brimar	2.5
	4	B4	R42	Ferranti	2.5
	4	B4	UU3	Mazda	2.0
4	B4	UU4	Mazda	2.2	
268	4	B4	44IU	Cossor	2.5
	4	B4	A11C	Ever Ready	2.4
	4	B4	IW4/500	Mullard	2.5
	4	B4	MU12/14	Osram	2.5
	4	B4	MU14	Osram	2.5
	4	B4	R3	Brimar	2.5
	4	B4	UU5	Mazda	2.3
269	4	B4	408BU	Cossor	1.0
	4	B4	506BU	Cossor	1.0
	4	B4	DW2	Mullard	1.0
	4	B4	PV495	Tungsrarn	1.1
	4	B4	R1	Brimar	1.0
	4	B4	S11A	Ever Ready	1.0
	4	B4	U10	Osram	1.0
	4	B4	UU60/250	Mazda	1.0
270	4	B4	4/100BU	Cossor	2.5
	4	B4	45IU	Cossor	3.5
	4	B4	FW4/500	Mullard	3.0
	4	B4	U18/20	Osram	3.0
271	4	B4	FW4/800	Mullard	3.0
	4	B4	RV200/600	Tungsrarn	2.8
272	4	B4	442BU	Cossor	2.5
	4	B4	DW3	Mullard	2.0
	4	B4	DW4/350	Mullard	2.0
	4	B4	PV4	Tungsrarn	2.0
	4	B4	R4	Ferranti	2.5
	4	B4	RV120/350	Tungsrarn	2.0
	4	B4	S11D	Ever Ready	2.0
	4	B4	U12	Osram	2.5
	4	B4	UU120/350	Mazda	2.0

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>273</b>	4	B4	460BU	Cossor	2.5
	4	B4	DW4	Mullard	2.0
	4	B4	DW4/500	Mullard	2.0
	4	B4	PV4200	Tungsram	2.0
	4	B4	R3	Brimar	2.5
	4	B4	R4A	Ferranti	2.5
	4	B4	RV120/500	Tungsram	2.0
	4	B4	U12/14	Osram	2.5
	4	B4	U14	Osram	2.5
	4	B4	UU120/500	Mazda	2.5
<b>274</b>	4	I.O.	AZ31	Mullard	1.1
	4	I.O.	U143	Marconi	1.1
<b>275</b>	5	UX4	5Z3	Am. & Brit.	3.0
	5	UX4	83	U.S.A.	3.6
	5	UX4	1275	U.S.A.	1.75
<b>276</b>	5	I.O.	5T4	U.S.A.	3.0
	5	I.O.	5U4	U.S.A.	3.0
	5	I.O.	53KU	Cossor	2.8
	5	I.O.	U52	Osram	3.0
<b>277</b>	5	I.O.	5AZ4	U.S.A.	2.0
	5	I.O.	5V4	U.S.A.	2.0
	5	I.O.	5W4	U.S.A.	1.5
	5	I.O.	5Y3	U.S.A.	2.0
	5	I.O.	5Z4	U.S.A.	2.0
	5	I.O.	54KU	Cossor	2.0
	5	I.O.	GZ32	Mullard	2.0
	5	I.O.	R52	Ferranti	2.0
	5	I.O.	U50	Osram	2.0
<b>278</b>	6.3	UX5	6Z4	U.S.A.	.5
	6.3	UX5	84	U.S.A.	.5
<b>279</b>	6.3	I.O.	6W5	U.S.A.	.9
	6.3	I.O.	6X5	U.S.A.	.5
	6.3	I.O.	6ZY5	U.S.A.	.3
	6.3	I.O.	EZ35	Mullard	.6
	6.3	I.O.	U70	Osram	.8
	6.3	I.O.	U147	Marconi	.6

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>280</b>	6.3	B8A	7Y7	U.S.A.	.56
	6.3	B8A	EZ40	Mullard	.56
	6.3	B8A	U150	Marconi	.56
	6.3	B8A	UU9	Mazda	.63
<b>281</b>	6.3	B8G	7Y4	U.S.A.	.5
	6.3	B8G	7Z4	U.S.A.	.9
	6.3	B8G	U149	Marconi	.5
<b>282</b>	25	B7	PV25	Tungsrarn	.3
	25	B7	U30	Osram	.3
<b>283</b>	25	I.O.	25X6	U.S.A.	.15
	25	I.O.	25Z6	U.S.A.	.3
<b>284</b>	30	B7	PV30	Tungsrarn	.2
	30	B7	UR3C	Mullard	.2
<b>285</b>	50	I.O.	50Y6	U.S.A.	.15
	50	I.O.	50Z7	U.S.A.	.15
<b>286</b>	117	I.O.	117L7	U.S.A.	.09
	117	I.O.	117M7	U.S.A.	.09
<b>287</b>	117	I.O.	117N7	U.S.A.	.09
	117	I.O.	117P7	U.S.A.	.09
<b>288</b>	6.3	B7G	6BA6	Am. & Brit.	.3
	6.3	B7G	EF93	Mullard	.3
<b>289</b>	19.0	B9A	19X3	U.S.A.	0.3
	19.0	B9A	PY80	Mullard	0.3
	19.0	B9A	U152	Marconi	0.3
<b>290</b>	6.3	B9A	6BX6	U.S.A.	0.3
	6.3	B9A	EF80	Mullard	0.3
	6.3	B9A	Z152	Marconi	0.3

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>291</b>	6.3	B9A	6AB8	U.S.A.	0.3
	6.3	B9A	ECL80	Mullard	0.3
	6.3	B9A	LN152	Marconi	0.3
<b>292</b>	21.5	B9A	21A6	U.S.A.	0.3
	21.5	B9A	N152	Marconi	0.3
	21.5	B9A	PL81	Mullard	0.3
<b>293</b>	22.0	B8A	10F1	Mazda	0.1
	22.0	B8A	Z145	Marconi	0.1*
<b>294</b>	6.3	B7G	6AU6	U.S.A.	0.3
	6.3	B7G	EF94	Mullard	0.3
<b>295</b>	6.3	B8A	62DDT	Cossor	0.2
	6.3	B8A	EBC40	Mullard	0.2
<b>296</b>	6.3	B8A	67PT	Cossor	0.2
	6.3	B8A	EC41	Mullard	0.2
<b>297</b>	1.4	B7G	1AC6	U.S.A.	0.05
	1.4	B7G	DK92	Mullard	0.05
	1.4	B7G	X18	M.O.	0.05
<b>298</b>	1.25	B9A	1E3	U.S.A.	0.22
	1.25	B9A	DC80	Mullard	0.22
<b>299</b>	6.3	B9A	6CJ6	U.S.A.	1.05
	6.3	B9A	EL81	Mullard	1.05
<b>300</b>	6.3	Wires	6K4	U.S.A.	0.15
	6.3	Wires	EC70	Mullard	0.15
<b>301</b>	6.3	B9A	6Q4	U.S.A.	0.48
	6.3	B9A	EC80	Mullard	0.45
<b>302</b>	6.3	B9A	6R4	U.S.A.	0.2
	6.3	B9A	EC81	Mullard	0.2
<b>303</b>	6.3 or 12.6	B9A	12AU7	U.S.A.	0.3 or 0.15
	6.3 or 12.6	B9A	6067	Brimar	0.3 or 0.15
	6.3 or 12.6	B9A	ECC82	Mullard	0.3 or 0.15

SECTION	Filament Voltage	Base	Valve Type No.	Maker	Filament Current in Amperes
<b>304</b>	6.3 or 12.6	B9A	12AX7	U.S.A.	0.3 or 0.15
	6.3 or 12.6	B9A	6057	Brimar	0.3 or 0.15
	6.3 or 12.6	B9A	ECC83	Mullard	0.3 or 0.15
<b>305</b>	16.5	B9A	16A5	U.S.A.	0.3
	16.5	B9A	PL82	Mullard	0.3
<b>306</b>	15	B9A	15A6	U.S.A.	0.3
	15	B9A	PL83	Mullard	0.3
<b>307</b>	19	B9A	19Y3	U.S.A.	0.3
	19	B9A	PY82	Mullard	0.3
<b>308</b>	0.625	B5A	DF66	Mullard	0.015
	0.625	B5A	CK512AX	U.S.A.	0.02
<b>309</b>	1.25	B5A	DL66	Mullard	0.015
	1.25	B5A	CK523AX	U.S.A.	0.03
<b>310</b>	25	I.O.	13D1	Brimar	0.15
	25	I.O.	6042	Brimar	0.15
<b>311</b>	6.3	B7G	6AT6	U.S.A.	0.3
	6.3	B7G	6066	Brimar	0.3
<b>312</b>	6.3	B7G	6X4	U.S.A.	0.6
	6.3	B7G	6063	Brimar	0.6
<b>313</b>	6.3	B9A	6BW6	U.S.A.	0.45
	6.3	B9A	6061	Brimar	0.45
<b>314</b>	6.0	B9A	5763	Brimar	0.75
	6.0	B9A	6062	Brimar	0.75
<b>315</b>	6.3	B9A	6BR7	U.S.A.	0.15
	6.3	B9A	8D5	Brimar	0.15
	6.3	B9A	6059	Brimar	0.15
<b>316</b>	6.3	B9A	6BS7	U.S.A.	0.15
	6.3	B9A	8D7	Brimar	0.15

# SERVICE VALVES AND THEIR COMMERCIAL EQUIVALENTS

In the valve equivalent list that follows, it should be mentioned that the numbers quoted are not in every case the exact commercial equivalents. Many are special development types having no commercial currency, and manufacturers often will not supply data on these, most of which are represented by the numbers E1148, V1906, etc.

The letter in brackets that immediately follows the commercial equivalent indicates the name of the manufacturer. The key to the letters is as follows :

- |                                   |                               |
|-----------------------------------|-------------------------------|
| A—American                        | M—Mullard                     |
| B—British Thomson-Houston         | N—British Navy                |
| C—Cossor                          | O—Marconi Osram Valve Co.     |
| D—Mazda                           | P—Philips                     |
| E—Ediswan                         | Q—Hivac                       |
| F—Electrical & Musical Industries | R—Cin-tel                     |
| G—G.E.C. (Great Britain)          | S—Standard Telephone & Cables |
| H—Ministry of Supply              | T—Tungsram                    |
| J—Canadian                        | V—Telefunken                  |
| K—Marconi Wireless Telegraph Co.  | W—French                      |
| L—Ferranti                        |                               |

British Army No.	Commercial Equivalent	British Army No.	Commercial Equivalent	British Army No.	Commercial Equivalent
AD1	DLS10 (E)	ARP6	SP4 (M)	ARS6	S625 (O)
AR4	HL210 (D)	ARP7	42MPT (C)	ARS7	VS24 (O)
AR5	LP2 (O)	ARP8	AC4/Pen (D)	ARS8	PM12V (M)
AR6	LP2 (O)	ARP9	Pen1340 (D)	ARTH2	ECH35 (M)
AR7	4D1 (S)	ARP9a	7D8 (S)	ARTP1	TP22 (D)
AR8	HL23DD (D)	ARP10	PenA4 (M)	ARTP2	TP25 (D)
AR9	L21 (O)	ARP11	TSP4 (M)	AT20	MZ05-20 (M)
AR10	TDD2A (M)	ARP12	VP23 (D)	AT35	* DET25 (O)
AR11	4019B (S)	ARP13	VP21 (O)	AT37	ACT6 (F)
AR12	4020A (S)	ARP14	220PT (C)	ATP10	4061A (S)
AR13	4022AR (S)	ARP15	KTW63 (O)	ATP35	PV1-35 (M)
AR14	220RC (C)	ARP16	6J7 (A)	ATP75	PT6 (O)
AR15	220LF (C)	ARP17	6F6 (A)	ATP100	4069A (S)
AR16	220B (C)	ARP18	KT24 (O)	ATS25	807 (A)
AR17	MH4 (O)	ARP19	SP41 (D)	ATS25A	807 (A)
AR20	4021B (S)	ARP20	SP42 (D)	ATS70	4282B (S)
AR21	EBC33 (M)	ARP21	Z62 (O)	AU1	U18 (O)
ARD2	D1 (D)	ARP22	116/Pen (C)	AU3	U12-14 (O)
ARD4	D42 (O)	ARP23	HP4101 (T)	AU3A	MU14 (O)
ARDD1	10D1 (S)	ARP24	220VPT (C)	AU4	U17 (O)
ARDD3	6H6 (A)	ARP25	KT41 (O)	AU6	GU5 (O)
ARDD5	EB34 (M)	ARP26	KT44 (O)	AU8	U22 (O)
ARH1	X64 (O)	ARP33	MSP4 (O)	AW2	7475 (M)
ARPI	KT2 (O)	ARP34	EF39 (M)	AW3	S130 (C)
ARP2	SP2 (M)	ARP35	EF50 (M)	AW4	STV280/40 (O)
ARP3	9D2 (S)	ARP36	SP61 (D)	AW5	ME41 (D)
ARP4	SP210 (D)	ARP37	QP25 (D)	AW6	EM31 (M)
ARP5	VP2 (M)	ARP38	KTZ73 (O)		

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
1	DC51 (M)	86	V1507 (H)	185	PM202 (M)
3	E1228 (G)	87	KRN2 (F)	187	U19 (O)
5	GU21 (O)	88	DV32 (S)	188	E1436 (G)
6	E1148 (G)	89	E1380 (G)	190	DLS10 (E)
8	E1248 (G)	90	E1368 (G)	191	E1494 (G)
9	AL60 (M)	92	E1232 (G)	192	E1481 (G)
12	E1191 (G)	93	V625 (P)	199	NT99 (N)
13	BT9B (B)	94	DS103 (O)	200	MZ2-200 (D)
15	E1266 (G)	100	V1924 (E)	201	V630 (H)
16	S25A (S)	105	E1371 (G)	207	ACP4 (E)
18	DET19 (O)	110	VS68 (H)	208	E1487 (G)
19	EHT1 (O)	114	E1265 (G)	214	E1531 (G)
20	V1906 (D)	115	E1415 (G)	215	E1497 (G)
21	VP41 (D)	116	KR6/1 (F)	216	VR150 (A)
22	BT45 (B)	117	E1417 (G)	219	E1046 (O)
24	HL41 (O)	118	SP61 (D)	221	E1516 (G)
25	4242A (S)	119	XJ (Q)	222	E1489 (G)
26	813 (A)	121	V1920 (E)	225	ACT17 (O)
27	4357A (S)	122	E1336 (G)	229	E1336 (G)
28	ACT9 (O)	123	E1330 (G)	230	DV55 (S)
29	E1235 (G)	124	807 (A)	235	U23 (O)
30	4270A (S)	125	V2024 (E)	236	E1465 (G)
31	U20 (M)	126	E1362 (G)	240	E1496 (G)
32	866 (A)	127	S30A (O)	242	GS18 (R)
33	4077A (S)	128	SU750 (C)	243	4045A (S)
34	MR10 (O)	129	KRN2A (F)	244	4046A (S)
39	S22AF (S)	131	V884 (E)	245	4328D (S)
41	E1267 (G)	133	6C4 (A)	248	GS16 (R)
42	E1256 (G)	135	DDR3 (H)	249	4019A (S)
45	S130P (C)	136	7D9 (S)	250	CMG25RS (O)
46	8011 (A)	138	EF91 (M)	257	E1457 (G)
49	3B/501A (S)	139	V738 (H)	259	E1495 (G)
51	E1320 (G)	140	6AL5 (A)	260	SP61 (D)
52	E1231 (G)	142	U2 (O)	261	2T/270K (S)
53	S26A (S)	143	U3 (O)	278	E1606 (G)
54	VU133A (H)	144	U4 (O)	281	X61M (O)
55	E1190 (G)	145	U5 (O)	283	6AL5 (A)
57	E1271 (G)	147	U7 (O)	285	VA35 (R)
58	E1273 (G)	148	U8 (O)	290	E1527 (G)
63	E1323 (G)	152	GU21 (O)	302	ECH22 (M)
64	E1342 (G)	153	E1411 (G)	303	EF22 (M)
65	PEN25 (D)	154	E1419 (O)	304	EL22 (M)
66	RL37 (M)	155	E1190 (G)	305	EF51 (M)
72	V1120 (E)	161	VS26 (O)	315	TY1-50 (M)
73	V1120B (E)	171	W21 (O)	324	GU8 (O)
74	XP (Q)	172	E1468 (G)	327	EF52 (M)
75	4313C (S)	173	DDR2 (H)	344	E1323 (O)
78	E1474 (G)	174	E1459 (G)	346	EZ22 (M)
79	E1379 (G)	175	XSG1.5 (Q)	347	EBC21 (M)
82	S27A (S)	176	XP1.5 (Q)	358	EF37 (M)
84	3B/102B (S)	178	E1458 (G)	379	ACT19 (M)
85	V2023 (E)	181	ECC31 (M)	380	EF54 (M)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
384	DET5 (O)	525	12A6 (A)	585	6C6 (A)
385	CK502 (A)	526	12A6GT (A)	586	EL37 (M)
386	CK505 (A)	527	DA60 (K)	587	6Q7G (A)
387	CK506 (A)	529	12AH7GT (A)	588	6Q7 (A)
391	LS650 (S)	531	12C8 (A)	589	6Q7GT (A)
394	EM34 (M)	532	GU11 (K)	590	6SJ7G (A)
409	A1820 (O)	533	CAT17c (K)	591	6SJ7 (A)
410	K3A (L)	534	12J5 (A)	592	6SJ7GT (A)
412	A800 (O)	535	12J5GT (A)	593	GZ32 (M)
418	MX2 (F)	537	12SA7 (A)	594	6SH7 (A)
419	DET18 (K)	538	12SA7GT (A)	595	6SH7GT (A)
421	CAT20c (K)	540	12SC7 (A)	596	45 (A)
423	25SN7 (T)	541	8016 (A)	597	879 (A)
424	QQE06/40 (M)	543	12SK7 (A)	598	715C (A)
426	EY51 (M)	544	12SK7GT (A)	599	1851 (A)
428	5B/251M (S)	545	AC/SP3 (D)	600	5CP1 (A)
430	29C1 (D)	546	12SQ7 (A)	601	5BP1 (A)
431	85A1 (M)	547	12SQ7GT (A)	602	3AP1 (A)
438	G120/1B (S)	548	LP2 (O)	603	10 (A)
443	CK505AX (A)	549	25A6 (A)	604	30 (A)
444	MZ1-75 (M)	550	25A6GT (A)	606	37 (A)
445	5J/180E (S)	551	25L6G (A)	608	41 (A)
446	3Q/260E (S)	552	25L6 (A)	609	42 (A)
447	4078GA (S)	553	25L6GT (A)	610	45 (A)
450	EL38 (M)	554	D63 (O)	611	56 (A)
452	6AT6 (A)	555	25Z5 (A)	612	57 (A)
453	6BE6 (A)	556	QP25 (D)	613	58 (A)
454	6BA6 (A)	557	D42 (O)	614	75 (A)
455	12AT7 (A)	558	25Z6 (A)	615	76 (A)
491	12AU7 (A)	559	25Z6GT (A)	616	77 (A)
492	12AX7 (A)	560	TSP4 (M)	617	80 (A)
493	6X4 (A)	561	35L6 (A)	618	83 (A)
500	6T7G (A)	562	35L6GT (A)	619	84 (A)
501	EBF32 (M)	563	DA30 (O)	620	211 (A)
502	LD210 (T)	564	35Z3 (A)	621	801 (A)
503	5W4DT (A)	565	35Z3GT (A)	622	802 (A)
504	6U5/6G5 (A)	567	35Z5 (A)	623	803 (A)
505	MT16 (K)	568	35Z5GT (A)	624	804 (A)
506	GL8023 (A)	569	ECC35 (M)	625	805 (A)
508	1B49 (A)	570	3Q/191E (S)	626	808 (A)
509	6V6G (A)	571	50L6GT (A)	627	810 (A)
510	6V6 (A)	572	6X5G (A)	628	811 (A)
511	6V6GT (A)	573	6X5 (A)	629	814 (A)
512	6W7G (A)	574	6X5GT (A)	630	826 (A)
515	6Y6G (A)	575	5U4G (A)	631	828 (A)
516	3GP1 (A)	578	6A8G (A)	632	829 (A)
517	OZ4A (A)	579	6A8 (A)	634	832 (A)
518	AC/VP1 (D)	580	6A8GT (A)	635	833 (A)
519	PEN4DD (M)	581	6C5G (A)	636	836 (A)
520	VP2B (M)	582	6C5 (A)	637	837 (A)
522	7B7 (A)	583	6C5GT (A)	638	838 (A)
523	12Y4 (A)	584	G546 (R)	639	843 (A)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
640	860 (A)	704	RK20A (A)	770	1F7GV (A)
641	861 (A)	705	1D5GP (A)	771	1G5G (A)
642	872 (A)	706	6U7G (A)	772	1G6G (A)
643	874 (A)	707	HK54 (A)	773	1G6GT (A)
644	875 (A)	708	161 (O)	774	1H4G (A)
645	876 (A)	709	RX235 (A)	775	1LA6 (A)
647	884 (A)	710	368A (A)	776	1LB4 (A)
648	885 (A)	711	32 (A)	777	1LC5 (A)
649	956 (A)	712	38 (A)	778	1LC6 (A)
650	958 (A)	716	8013A (A)	779	1LD5 (A)
651	991 (A)	717	5R4GY (A)	780	1LH4 (A)
652	1603 (A)	718	5FP7 (A)	781	1LN5 (A)
653	1611 (A)	719	2J21A (A)	782	1R5 (A)
654	1612 (A)	723	1619 (A)	783	1S4 (A)
655	1613 (A)	724	816 (A)	784	1S5 (A)
656	1616 (A)	725	1B24 (A)	785	1T4 (A)
657	1620 (A)	726	35Z3 (A)	786	1T5 (A)
658	1622 (A)	727	1N21 (A)	787	2A7 (A)
659	1625 (A)	728	1P5GT (A)	788	832A (A)
660	6AC7 (A)	729	5V4G (A)	789	3C24 (A)
661	6AB7 (A)	730	6A3 (A)	790	2AP1 (A)
662	8012 (A)	731	6F6GT (A)	792	2C22 (A)
663	8025 (A)	732	6W4 (A)	793	2C33 (A)
664	9002 (A)	734	228A (A)	794	2D2 (M)
665	9003 (A)	735	845 (A)	795	2D4A (M)
666	9004 (A)	736	905 (A)	796	2D13C (M)
667	9005 (A)	737	906 (A)	797	2D21 (A)
668	35T (A)	738	953 (A)	798	2E22 (A)
669	279A (A)	739	3AP1/1A (A)	802	2C26 (A)
670	645 (A)	740	5MP1 (A)	803	2V3 (A)
676	7206A (A)	741	5LP1 (A)	804	2V3G (A)
677	701A (A)	742	FG67 (A)	805	50Y6GT (A)
679	703A (A)	745	HK24 (A)	807	3A4 (A)
683	316A (A)	747	6AC7 (A)	808	3A5 (A)
684	274B (A)	750	O1A (A)	809	3A/105B (S)
686	VR105 (A)	751	HY75 (A)	811	1291 (A)
687	GL446B (A)	752	OA4G (A)	812	3B22 (A)
688	2C43 (A)	753	1A3 (A)	814	3BP1 (A)
690	RK48A (A)	754	1A4P (A)	815	1299 (A)
691	357A (A)	755	1A5G (A)	816	3DP1 (A)
692	OZ4 (A)	756	1A5GT (A)	817	3EP1 (A)
693	HF300 (A)	757	1A6 (A)	818	3Q4 (A)
694	12SG7 (A)	758	1B4P (A)	819	3Q5 (A)
695	700B (A)	759	1B5 (A)	820	3S4 (A)
696	700C (A)	760	1B7GT (A)	821	4A1 (A)
697	12SJ7 (A)	761	1B22 (A)	822	EL3C (P)
698	12SJ7GT (A)	764	1D5 (A)	823	4C29 (A)
699	700D (A)	765	1D7G (A)	824	HK257 (A)
700	12SR7 (A)	766	1E5GT (A)	825	4SHA (C)
701	ESA892 (E)	767	1F4 (A)	826	4THA (C)
702	830B (A)	768	1F5G (A)	828	4TPB (C)
703	12K8 (A)	769	1F6 (A)	829	4TPB (C)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
830	4TSP (C)	889	7D8 (A)	948	32L7 (A)
832	5AP1 (A)	890	7E5 (A)	949	33 (A)
833	89 (A)	891	7E6 (A)	977	TwinCV55 (G)
834	5B/300B (S)	892	7E7 (A)	995	6AJ5 (A)
836	5BP4 (A)	893	7F7 (A)	996	1637 (A)
837	12C8SPEC (A)	894	1232 (A)	998	2000T (A)
838	5CP7 (A)	895	7H7 (A)	999	3C22 (A)
839	5GP1 (A)	896	7K7 (A)	1000	VR109A (H)
840	5H4 (A)	897	7J7 (A)	1018	215SG (C)
841	5U4GT (A)	898	7N7 (A)	1019	PM2 (M)
842	5W4G (A)	899	7Q7 (A)	1020	220P (C)
843	6AB5 (A)	900	7R7 (A)	1021	210LF (C)
844	6AC5G (A)	901	7Y4 (A)	1022	220PA (C)
845	6AC5GT (A)	902	7W7 (A)	1023	230XP (C)
846	6AC7 (A)	904	892R (A)	1025	DET25 (O)
847	6AF6G (A)	905	9HP7 (A)	1027	210LF (C)
848	6AG5 (A)	906	1602 (A)	1028	220VSG (C)
849	6AJ7 (A)	908	12A5 (A)	1029	ESU150 (E)
850	6AK5 (A)	909	12A7 (A)	1030	4060A (S)
851	6B4G (A)	910	12A8GT (A)	1032	220B (C)
852	6C4 (A)	911	12B8GT (A)	1034	DET3 (O)
854	6C7 (A)	913	12DP7 (A)	1035	QP21 (O)
855	6C21 (A)	914	12DP7 (A)	1037	MH4 (O)
856	6G8G (A)	915	12FP7 (A)	1038	MHL4 (O)
857	6H7 (J)	916	12H6 (A)	1039	MU14 (O)
858	6J6 (A)	917	12J7 (A)	1040	PX25 (O)
859	6J8G (A)	918	12K7 (A)	1041	PM12M (M)
860	6K5G (A)	919	12SF5 (A)	1042	210LF (C)
861	6K5GT (A)	920	12SF5GT (A)	1043	210PG (C)
862	6L5G (A)	921	12SF7 (A)	1044	210DDT (C)
864	6P7G (A)	922	12SH7 (A)	1045	X56 (O)
865	6SD7GT (A)	924	12SL7 (A)	1046	PT25H (O)
866	6SJ7Y (A)	925	12SN7 (A)	1047	TZ05-20 (M)
867	6SR7 (A)	927	12Z3 (A)	1049	210SPT (C)
870	6V7G (A)	929	13SPA (C)	1050	HL2K (O)
871	6Z5 (A)	930	14F7 (A)	1051	Pen220A (D)
872	6Z7G (A)	931	15 (A)	1052	EL32 (M)
873	6ZY5G (A)	932	2C40 (A)	1053	EF39 (M)
875	2C21 (A)	933	4C30 (A)	1054	EB34 (M)
876	7A6 (A)	934	4B30 (A)	1055	EBC33 (M)
877	7A7 (A)	936	24A (A)	1056	EF36 (M)
878	7A8 (A)	937	25A7 (A)	1057	EK32 (M)
879	7B4 (A)	938	25AC5 (A)	1058	E960 (O)
880	7B5 (A)	939	25B6 (A)	1059	955 (A)
881	7B5LT (A)	940	25B8 (A)	1060	807 (A)
882	7B6LM (A)	941	HK24 (A)	1061	RK34 (A)
883	7B8LM (A)	942	25Y5 (A)	1062	TY1-50 (M)
884	7BP7 (A)	943	26 (A)	1064	U12-14 (O)
885	7C5 (A)	944	27 (A)	1065	SP61 (D)
886	7C5LT (A)	945	28D7 (A)	1066	P61 (D)
887	7C6 (A)	946	28D7GT (A)	1067	6J5 (A)
888	7D7 (A)	947	31 (A)	1068	STV280/40 (O)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
1069	STV280/80 (O)	1136	EF54 (M)	1219	DA100 (O)
1070	7475 (M)	1137	EC52 (M)	1220	4033A (S)
1071	5U4 (A)	1141	DPQ (C)	1221	PZ1-75 (M)
1072	GU5 (O)	1143	GT1A (O)	1222	ACT6 (F)
1073	H63 (O)	1151	PM3 (M)	1223	DET5 (O)
1074	6J7 (A)	1152	PM4DX (M)	1233	DET5 (O)
1075	KT66 (O)	1153	PM254 (M)	1235	DET12 (O)
1076	DA41 (O)	1154	PM4DX (M)	1237	PM24D (M)
1077	EM31 (M)	1155	DEQ (O)	1238	PM24D (M)
1078	D1 (D)	1156	DEQ (O)	1240	PZ1-35 (M)
1079	KT8 (O)	1158	PM14 (M)	1246	PM202 (M)
1080	4307A (S)	1159	PM14 (M)	1250	4279A (S)
1081	4052A (S)	1160	ML4 (O)	1252	4212E (S)
1082	220TH (C)	1161	ML4 (O)	1253	E1161 (O)
1083	210VPT (C)	1163	PD220A (D)	1256	E1232 (O)
1087	14L (C)	1164	AC/SG (D)	1261	RX3-120 (M)
1088	832 (A)	1165	VMS4 (O)	1262	GU1 (C)
1090	E1046 (O)	1166	LP2 (O)	1263	RG1-125 (M)
1091	EF50 (M)	1167	PM24A (M)	1264	U18 (O)
1092	EA50 (M)	1168	ACO44 (M)	1265	U15 (O)
1095	954 (A)	1169	VMP4G (O)	1266	U15 (O)
1096	5B/502A (S)	1170	D41 (O)	1267	U4020 (D)
1097	ECR60 (M)	1171	AT4 (M)	1268	5Y3 (A)
1098	E960T (O)	1174	KT42 (O)	1279	MU2 (O)
1099	X66 (O)	1175	AP4 (M)	1280	X64 (O)
1100	KTW62 (O)	1176	ZA1 (O)	1281	KTW61 (O)
1101	MHLD6 (O)	1178	D030 (M)	1282	MSP4 (O)
1102	BL63 (O)	1179	ML4 (O)	1283	SP4 (M)
1103	EM35 (M)	1180	244V (M)	1285	ECC31 (M)
1104	PT15 (O)	1181	KT41 (O)	1286	EL35 (M)
1105	ML6 (O)	1182	H42 (O)	1287	KT32 (O)
1106	9D2 (S)	1183	W42 (O)	1288	DET12 (O)
1107	15D2 (S)	1184	A373 (O)	1290	SU2150A (C)
1108	8D2 (S)	1186	6F6 (A)	1291	SU2150A (C)
1109	4D1 (S)	1187	D41 (O)	1296	MU14 (O)
1110	S130 (C)	1188	N43 (O)	1300	10D1 (S)
1113	U17 (O)	1189	AC6/Pen (D)	1301	6H6 (A)
1117	41MTL (C)	1190	2 x ACP4 (D)	1302	D42 (O)
1118	KT2 (O)	1191	KTZ41 (O)	1303	HL210 (D)
1119	DDL4 (C)	1192	Z62 (O)	1304	LP2 (O)
1120	SU2150A (C)	1193	X65 (O)	1306	HL23DD (D)
1121	T41 (D)	1194	X41 (O)	1307	L21 (O)
1122	41MXP (C)	1195	KTW63 (O)	1308	TDD2A (M)
1123	EF8 (M)	1196	AC5/PenDD (D)	1309	4019B (S)
1124	HP4101 (T)	1197	RL18 (M)	1310	4020A (S)
1125	MS/PenB (C)	1198	ACP4 (D)	1311	4022AR (S)
1126	4SH (C)	1200	202 (O)	1312	220RC (C)
1127	Pen46 (D)	1201	4317 (S)	1313	220LF (C)
1128	GT1C (O)	1202	304 (O)	1314	DLS10 (E)
1129	MS/Pen (C)	1206	D060 (M)	1316	4012B (S)
1130	HL23 (D)	1207	ES450 (E)	1317	S625 (O)
1134	HVR2 (M)	1208	PM256 (M)	1318	VS24 (O)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
1319	PM12V (M)	1426	EK2 (M)	1574	SP41 (D)
1320	SP2 (M)	1427	EF9 (M)	1575	U52 (O)
1321	9D2 (S)	1428	EBC3 (M)	1576	KT44 (O)
1322	SP210 (D)	1429	EL2 (M)	1577	KT44 (O)
1323	VP2 (M)	1430	ACSP3 (E)	1578	EF50 (M)
1324	SP4 (M)	1431	ACT16 (O)	1579	954 (A)
1325	42MPT (C)	1432	CMG25 (O)	1588	23D (C)
1326	AC4/Pen (D)	1433	EC31 (M)	1600	CAT1 (O)
1327	Pen1340 (D)	1434	EM4 (M)	1601	CAR (O)
1328	7D8 (S)	1435	GU20 (O)	1602	CAR4 (O)
1329	PenA4 (M)	1437	KT44 (O)	1606	CAT2 (O)
1330	TSP4 (M)	1438	KT61 (O)	1610	MT4 (O)
1331	VP23 (D)	1439	MT9F (O)	1611	MR4 (O)
1332	VP21 (O)	1440	MT9L (O)	1614	ES1500 (E)
1333	220PT (C)	1441	MT12A (O)	1618	ES250M (E)
1334	KT24 (O)	1442	MT14 (O)	1619	4212D (S)
1335	SP41 (D)	1443	U10 (O)	1620	DET6 (O)
1336	SP42 (D)	1444	42SPT (C)	1628	GU8 (O)
1337	116/Pen (C)	1445	4012A (S)	1642	DER (O)
1338	220VPT (C)	1446	4017B (S)	1650	LS5A (O)
1340	KT44 (O)	1447	4030C (S)	1656	LS8 (O)
1341	MSP4 (O)	1448	4043C (S)	1658	LS9B (O)
1342	QP25 (D)	1449	4064B (S)	1661	DL (O)
1343	KTZ73 (O)	1450	4228A (S)	1665	DH (O)
1344	TP22 (D)	1451	4274A (S)	1667	LS8A (O)
1345	TP25 (D)	1452	4300A (S)	1669	P625 (O)
1347	ECH35 (M)	1454	225DU (C)	1673	HL2 (O)
1356	U22 (O)	1455	225DU (C)	1677	ACS2 (D)
1359	ME41 (D)	1456	Pen383 (E)	1678	HLA2 (S)
1361	MZ05-20 (M)	1457	VP133 (E)	1683	MKT4 (O)
1363	DET16 (O)	1458	4IMP (C)	1684	APP4C (T)
1364	807 (A)	1459	MU2 (O)	1691	DDL4 (C)
1365	4282B (S)	1460	X41 (O)	1695	DH30 (O)
1369	4061A (S)	1461	U22 (D)	1696	B21 (O)
1370	PV1-35 (M)	1462	A915 (O)	1697	X41 (O)
1371	PT6 (O)	1463	CBL31 (M)	1698	A819 (O)
1372	4069A (S)	1464	EF39 (M)	1701	XLO (Q)
1374	807 (A)	1466	P57 (W)	1702	XP (Q)
1400	C1C (P)	1469	Z22 (O)	1715	EBC3 (M)
1401	CL33 (M)	1470	3P/270B (S)	1718	ACTP (D)
1402	CY31 (M)	1471	4049A (S)	1720	XL1.5 (Q)
1403	DD41 (E)	1472	CMG25 (O)	1721	XP1.5 (Q)
1404	EF36 (M)	1473	CMG25 (O)	1722	A901 (O)
1414	VP41 (D)	1474	CE20 (A)	1727	Z22 (O)
1415	4011A (S)	1502	KT32 (O)	1732	ML4 (O)
1418	10D1 (S)	1503	KT33C (O)	1733	4018AG (S)
1419	11D3 (S)	1505	MH41 (O)	1734	3Q/213E (S)
1420	4078A (S)	1567	2C25 (A)	1749	205D (A)
1422	3D/100A (S)	1568	4062A (S)	1750	33A/100A (S)
1423	9D2 (S)	1569	R3 (S)	1751	34 (A)
1424	20A1 (S)	1572	807 (A)	1752	35/51 (A)
1425	7D5 (A)	1573	4074B (S)	1753	35A5 (A)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
1754	35TG (A)	1824	1Q5G (A)	1941	6K7G (A)
1755	1626 (A)	1826	1Q5GT (A)	1942	6K7 (A)
1756	1629 (A)	1829	1T5GT (A)	1943	6K7GT (A)
1757	9001 (A)	1831	2A3 (A)	1944	6K8G (A)
1758	1L4 (A)	1834	2A5 (A)	1945	6K8 (A)
1759	2C26A (A)	1837	2B7 (A)	1946	6K8GT (A)
1761	3FP7 (A)	1843	2Y2 (A)	1947	6L6G (A)
1762	6AK6 (A)	1846	5T4 (A)	1948	6L6 (A)
1763	6J4 (A)	1849	5W4 (A)	1950	6L7G (A)
1764	CE2 (A)	1851	5X4G (A)	1951	6L7 (A)
1769	2A6 (A)	1852	5X4 (A)	1953	6N6G (A)
1770	7A4 (A)	1854	5Y3G (A)	1954	6N6 (A)
1771	39/44 (A)	1856	5Y3GT (A)	1956	6N7G (A)
1772	47 (A)	1857	5Y4G (A)	1957	6N7 (A)
1773	82 (A)	1861	5Z3 (A)	1958	6N7GT (A)
1774	112A (A)	1863	5Z4G (A)	1960	6R6G (A)
1775	36 (A)	1864	5Z4 (A)	1962	6R7G (A)
1776	6D7 (A)	1867	6A6 (A)	1963	6R7 (A)
1777	7C7 (A)	1870	6A7 (A)	1964	6R7GT (A)
1778	101D (A)	1873	6AB7 (A)	1966	6SA7 (A)
1779	102D (A)	1876	1852 (A)	1967	6SA7GT (A)
1780	Twin30 (A)	1878	6AD7G (A)	1969	6SC7 (A)
1781	310B (A)	1882	6AG7 (A)	1970	6SC7GT (A)
1782	340A (A)	1885	6B5 (A)	1972	6SF5 (A)
1783	9JP1 (A)	1887	6B6G (A)	1973	6S5GT (A)
1784	6AK7 (A)	1891	6B7 (A)	1974	6S7G (A)
1789	5FP7 (A)	1893	6B8G (A)	1975	6S7 (A)
1790	7Z4 (A)	1894	6B8 (A)	1978	6SG7 (A)
1791	5JP1 (A)	1896	6C8G (A)	1981	6SK7 (A)
1794	759 (A)	1900	6D6 (A)	1982	6SK7GT (A)
1796	DW4/350 (M)	1902	6D8G (A)	1985	6SL7GT (A)
1797	4081A (S)	1906	6E5 (A)	1988	6SN7GT (A)
1798	2051 (A)	1908	6F5G (A)	1990	6SQ7 (A)
1799	350B (A)	1909	6F5 (A)	1991	6SQ7GT (A)
1800	1A7G (A)	1910	6F5GT (A)	1993	6SS7 (A)
1802	1A7GT (A)	1911	6FG (A)	1995	6ST7G (A)
1803	1C5G (A)	1912	6F6 (A)	1996	6ST7 (A)
1804	CV137	1915	6F7 (A)	1999	1V (A)
1805	1C5GT (A)	1917	6F8G (A)	2106	DL66 (M)
1806	1D5GT (A)	1918	6F8 (A)	2107	DF66 (M)
1811	1D8GT (A)	1926	6G6G (A)	2126	3V/420B (S)
1812	1E7G (A)	1929	6H6G (A)	2129	5763 (A)
1813	2DP1 (A)	1930	6H6 (A)	2130	4D21 (A)
1814	5LP1 (A)	1931	6H6GT (A)	2131	4-250A (A)
1815	6Q5G (A)	1932	6J5G (A)	2132	90AV (M)
1816	6Y3G (A)	1933	6J5 (A)	2133	90CG (M)
1817	1G4 (A)	1934	6J5GT (A)	2134	90CV (M)
1818	1H5G (A)	1935	6J7G (A)	2500	35Z4GT (A)
1819	6P5GT (A)	1936	6J7 (A)	2501	40 (A)
1820	1H5GT (A)	1937	6J7GT (A)	2502	41FP (C)
1821	1N5G (A)	1938	6K6G (A)	2503	41MH (C)
1823	1N5GT (A)	1940	6K6GT (A)	2504	41MHL (C)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
2505	41MPG (C)	2589	250TH (A)	2660	809 (A)
2506	41MPT (C)	2591	100TH (A)	2661	812 (A)
2508	41STH (C)	2592	256B (A)	2663	815 (A)
2511	420T (C)	2593	257A (A)	2664	822 (A)
2512	420TDD (C)	2594	258B (A)	2665	825 (A)
2514	43 (A)	2595	259A (A)	2666	829B (A)
2529	45IU (C)	2597	262B (A)	2668	846 (A)
2530	45Z5 (A)	2598	264A (A)	2669	849 (A)
2531	46 (A)	2599	264C (A)	2670	849H (A)
2532	49 (A)	2600	267B (A)	2671	851 (A)
2533	50 (A)	2601	271A (A)	2672	852 (A)
2534	50L6 (A)	2602	272A (A)	2673	857B (A)
2535	53 (A)	2603	274A (A)	2674	863 (A)
2536	53A (A)	2604	275A (A)	2675	864 (A)
2537	55 (A)	2605	282A (A)	2676	865 (A)
2538	59 (A)	2608	300A (A)	2679	866JR (A)
2539	61P (C)	2609	300B (A)	2680	868 (A)
2541	71A (A)	2610	303 (O)	2683	878 (A)
2543	73 (A)	2611	304TH (A)	2685	880 (A)
2544	78 (A)	2612	307A (A)	2686	889 (A)
2545	79 (A)	2613	310A (A)	2687	889R (A)
2546	81 (A)	2614	311A (A)	2688	891R (A)
2547	83V (A)	2615	313C (A)	2689	893R (A)
2548	84 (A)	2616	314A (A)	2690	904V (M)
2549	85 (A)	2617	323A (A)	2691	913 (A)
2552	100TH (A)	2618	327A (A)	2692	918 (A)
2553	101F (A)	2619	328A (A)	2693	929 (A)
2554	111A (A)	2620	329A (A)	2694	930 (A)
2556	117L7 (A)	2621	330B (A)	2695	931 (A)
2557	117N7 (A)	2622	331A (A)	2696	931A (A)
2558	117Z6 (A)	2623	332A (A)	2697	935 (A)
2560	121A (A)	2624	337A (A)	2700	957 (A)
2561	122A (A)	2625	338A (A)	2701	958A (A)
2562	164V (M)	2626	346A (A)	2704	7E5/1201 (A)
2563	204A (A)	2627	349A (A)	2705	1203 (A)
2565	2050 (A)	2628	349B (A)	2706	7C4/1203A (A)
2566	205E (A)	2629	350A (A)	2707	1231 (A)
2567	205F (A)	2630	351A (A)	2709	1294 (A)
2569	210DET (C)	2631	352A (A)	2710	3D6/1299 (A)
2570	210HF (C)	2632	354A (A)	2711	1500T (A)
2571	210HL (C)	2633	362A (A)	2712	1609 (A)
2574	210VPA (C)	2634	367 (A)	2713	1610 (A)
2576	4C21 (A)	2636	375A (A)	2714	1614 (A)
2577	212E (A)	2637	388A (A)	2715	1630 (A)
2579	218 (A)	2640	405BU (C)	2716	6SC7(SEL) (A)
2580	220C (C)	2643	2C40 (A)	2717	1729 (M)
2581	220/OT (C)	2644	460BU (C)	2718	1876 (P)
2582	220VS (C)	2645	506BU (C)	2719	1924 (P)
2584	231D (A)	2654	715A (A)	2721	2050 (A)
2586	240B (C)	2655	715B (A)	2722	3025 (A)
2587	242C (A)	2657	800 (A)	2723	869B (A)
2588	244A (A)	2658	806 (A)	2725	09 (C)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
2733	3951 (A)	2887	DAC1 (M)	3500	HL210 (O)
2734	4003A (S)	2889	DD620 (C)	3501	HL610 (O)
2735	4015A (S)	2890	DDT (T)	3502	HL1320 (D)
2743	4033AF (S)	2891	DE5 (O)	3503	HLDD1320 (D)
2745	4050AG (S)	2892	DE5B (O)	3505	HY114B (A)
2746	4064A (S)	2895	DET1SW (O)	3506	HY615 (A)
2751	4096AB (S)	2899	DET9 (O)	3515	KB2 (M)
2755	4251AX (S)	2900	DET10 (O)	3516	KK2 (M)
2756	4260A (S)	2907	DF1 (M)	3519	KT30 (O)
2759	4304 (S)	2909	DH73M (O)	3520	KT31 (O)
2760	430B (S)	2910	DK1 (M)	3527	KTW73M (O)
2761	4304BB (S)	2911	DL2 (M)	3529	KTZ41 (O)
2765	4673 (P)	2912	DL63 (O)	3530	KTZ73 (O)
2767	4960 (P)	2925	EBF2 (M)	3531	L2 (D)
2768	8003 (A)	2926	EBL31 (M)	3532	L21 (O)
2769	9006 (A)	2927	EC50 (M)	3533	L22DD (D)
2800	A40 (C)	2929	ECH3 (M)	3534	L30 (O)
2801	A40/N3 (M)	2930	ECH33 (M)	3537	L600 (A)
2803	A915 (O)	2936	4B22 (A)	3538	L610 (O)
2804	A915A (O)	2938	EL33 (M)	3541	LS6A (O)
2805	A924 (C)	2940	EL36 (M)	3546	MHD4 (O)
2806	AC/2HL (D)	2941	EL50 (M)	3552	MPT4K (O)
2807	AC/2HL (D)	2944	ESU1500 (E)	3553	MS4B (O)
2808	AC/Pen (D)	2945	ESU75 (E)	3554	MPT42 (O)
2809	AC/5Pen (D)	2946	ESU150 (E)	3561	MS/Pen (C)
2811	AC/HL (D)	2947	ESU300 (E)	3562	MSP41 (O)
2812	AC/HL (D)	2948	ESU450 (E)	3563	MT11SW (O)
2813	AC/HLDD (D)	2949	F123A (A)	3564	MT12 (O)
2815	AC/P (D)	2950	129B (A)	3565	ME41 (D)
2819	AC/S (D)	2954	FC2A (M)	3567	MU1 (D)
2820	AC/SP1 (D)	2955	FC4 (M)	3571	MVSPen (C)
2822	AC/SG (D)	2956	FC13C (M)	3572	MVSPenB (C)
2823	AC/SP3 (D)	2959	3B21 (A)	3573	MZ05/20 (M)
2824	AC/SPen (D)	2960	FP54 (A)	3574	MZ1/76 (M)
2825	ACT6 (O)	2967	8020 (A)	3576	MX40 (O)
2827	ACT10 (O)	2973	GU7 (O)	3578	PM22D (M)
2830	AC/TH1 (D)	2977	H2 (O)	3579	PT5E (O)
2832	AC/VP2 (D)	2978	H12 (O)	3581	V1501 (D)
2833	AF3 (P)	2979	H30 (O)	3582	VP4B (M)
2836	APP4G (T)	2981	H410 (O)	3583	5HP1 (A)
2837	APP4G (T)	2982	H610 (O)	3587	705A (A)
2839	AR300 (A)	2985	HD24 (O)	3590	708A (A)
2860	AZ1 (P)	2986	HD203A (A)	3593	713 (A)
2861	AZ2 (P)	2987	HF100 (A)	3594	717A (A)
2862	AZ31 (P)	2988	HF200 (A)	3596	CE302 (A)
2864	B21 (O)	2989	HK354E (A)	3599	829A (A)
2865	B30 (O)	2991	HL2 (O)	3600	902 (A)
2869	3JP7 (A)	2994	HL23 (D)	3601	7193 (A)
2871	CAT6 (O)	2995	HL23DD (D)	3620	P220 (D)
2872	CAT9 (O)	2996	HL41DD (D)	3621	P410 (O)
2874	CK1005 (A)	2998	HL133 (D)	3622	P610 (O)
2875	CL4 (P)	2999	HL133DD (D)	3623	PA40 (D)

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
3624	PE7B (B)	3739	TX3-200 (M)	3847	RS250 (V)
3625	PE8 (B)	3740	TX5-400 (M)	3848	RS260 (V)
3626	Pen4B (M)	3741	TZ2-300 (M)	3849	RS217 (V)
3630	Pen44 (D)	3742	TZ20 (A)	3850	RS207 (V)
3631	Pen45DD (D)	3743	U5 (O)	3851	RS253 (V)
3633	Pen231 (D)	3744	U6 (O)	3852	RS285 (V)
3634	Pen428 (M)	3747	U15 (O)	3853	RS15 (V)
3635	Pen1340 (D)	3750	U22 (D)	3854	RS47 (V)
3636	Pen1346 (D)	3751	U21 (O)	3855	RS329 (V)
3638	PenA4 (M)	3752	U30 (O)	3857	RS283A (V)
3641	PM1HL (M)	3753	U31 (O)	3858	RS18 (V)
3642	PM1LF (M)	3756	U600 (D)	3859	RV271A (V)
3643	PM2A (M)	3758	UR3C (M)	3860	RS282 (V)
3645	PM2DX (M)	3759	UU4 (D)	3862	RS55 (V)
3647	PM22A (M)	3761	UU7 (D)	3868	RSQ15/40 (V)
3648	PM24E (M)	3787	VP2 (M)	3869	RSQ15/5 (V)
3649	PM22 (M)	3788	VP4 (M)	3871	RS254 (V)
3652	PT5 (O)	3790	VP13C (M)	3872	RS255 (V)
3653	PT6 (O)	3792	VP23 (D)		
3654	PT11 (O)	3793	VP24 (D)		
3655	PT425 (O)	3794	VP210 (D)		
3656	PT425 (O)	3795	VP215 (D)		
3657	PV05-15 (M)	3796	VP1322 (D)		
3658	PV1-35 (M)	3798	VR75 (A)		
3667	RG1-250 (M)	3799	VR90 (A)		
3670	RG4-100 (M)	3800	VS2 (O)		
3672	RK28 (A)	3802	VS24 (O)		
3673	RK28A (A)	3803	VS24K (O)		
3674	RK31 (A)	3804	W21 (O)		
3677	RK47 (A)	3805	W30K (O)		
3679	RK49 (A)	3806	W31 (O)		
3680	RK60 (A)	3810	WD30 (O)		
3681	RK62 (A)	3816	X21 (O)		
3683	RKR47 (A)	3817	X21 (O)		
3688	2C33 (A)	3818	X22 (O)		
3690	RZ1-150 (M)	3819	X24 (O)		
3691	S23 (O)	3820	X24 (O)		
3692	S23 (O)	3821	X31 (O)		
3695	S215 (C)	3822	X31 (O)		
3696	S215A (C)	3823	X41 (O)		
3698	S610 (O)	3825	X63 (O)		
3702	SG215 (C)	3826	X65 (O)		
3703	SP4B (M)	3830	XH1.5 (Q)		
3704	SP13C (M)	3831	XL2 (Q)		
3715	SW5 (C)	3832	XP2 (Q)		
3721	T4D (M)	3833	XSG2.0 (Q)		
3722	T20 (A)	3834	XW2 (Q)		
3723	T41 (E)	3836	Z21 (O)		
3724	T200 (A)	3837	Z21 (O)		
3726	TDD2A (M)	3838	Z62 (O)		
3727	TDD4 (M)	3845	RS366 (V)		
3735	TP26 (D)	3846	RS261 (V)		

British Navy No.	Commercial Equivalent	British Navy No.	Commercial Equivalent	British Navy No.	Commercial Equivalent
NGT1	DPQ (C)	NR54	AP4 (M)	NR94	ACP4 (D)
NGT2	GT1C (O)	NR55	4D1 (S)	NR95	KT32 (O)
NGT4	GT1A (O)	NR56	D030 (M)	NS1	STV280/80 (O)
NR15	PM3 (M)	NR57	ML4 (O)	NS3	202 (O)
NR15A	PM4DX (M)	NR58	244V (M)	NS4	4713 (S)
NR16	PM254 (M)	NR59	KT41 (O)	NS5	304 (O)
NR16A	PM4DX (M)	NR60	H42 (O)	NT18	D060 (M)
NR18	DEQ (C)	NR61	W42 (O)	NT20	PM256 (M)
NR22	PM14 (M)	NR66	D41 (O)	NT36	DA100 (O)
NR23	PM14 (M)	NR67	X64 (O)	NT37	4033A (S)
NR26	MHL4 (O)	NR68	6Q7 (A)	NT38A	PZ1-75 (M)
NR27	ML4 (O)	NR69	EM35 (M)	NT39	ACT6 (F)
NR27A	ML4 (O)	NR70	HP4101 (T)	NT40	DET5 (O)
NR28	PM2 (M)	NR71	MS/Pen (C)	NT58	DET12 (O)
NR31	MH4 (O)	NR72	N43 (O)	NT62	PM24D (M)
NR35	PD220A (D)	NR73	ECC31 (M)	NT65A	PZ1-35 (M)
NR37	AC/SG (D)	NR74	AC6/Pen (D)	NT82	PM202 (M)
NR38	VMS4 (O)	NR75	2×ACP4 (D)	NU3	U12-14 (O)
NR39	KT2 (O)	NR76	KTZ41 (O)	NU5	RX3-120 (M)
NR41	210VPT (C)	NR77	EL35 (M)	NU12	U18 (O)
NR42	LP2 (O)	NR78	6C5 (A)	NU13	U15 (O)
NR43	PM24A (M)	NR79	Z62 (O)	NU16	GU5 (O)
NR44	AC044 (M)	NR81	6K7 (A)	NU17	MU14 (O)
NR45	VMP4G (O)	NR82	X65 (O)	NU18	U17 (O)
NR46	D41 (O)	NR83	6J7 (A)	NU20	5Y3 (A)
NR47	PX25 (O)	NR84	X41 (O)	NU31	MU2 (O)
NR48	EBC33 (M)	NR85	6F6 (A)	NU33	SU2150A (C)
NR49	EF36 (M)	NR86	KTW63 (O)	NU34	HVR2 (M)
NR50	AT4 (M)	NR87	AC5/PenDD (D)		
NR53	KT42 (O)	NR88	RL18 (M)		

## SUPPLEMENTARY CV TYPES 1952/53

C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer	C.V. No.	Commercial Equivalent and Manufacturer
437	KT67 (O)	1899	6L18 (D)	3882	EBC41 (M)
1830	1B3 (A)	1901	6F11 (D)	3883	EAF42 (M)
1832	OA2 (A)	1919	6F14 (D)	3884	ECC40 (M)
1833	OB2 (A)	1920	6LD20 (D)	3885	EF40 (M)
1839	6F13 (D)	1921	U24 (D)	3886	EF41 (M)
1847	19H4 (D)	1928	12BA6 (A)	3887	EF42 (M)
1848	20A2 (D)	1949	6D4 (A)	3888	ECH42 (M)
1850	6L19 (D)	1955	EF91 (M)	3889	EL41 (M)
1853	6P25 (D)	1959	50C5 (A)	3890	EL42 (M)
1855	UU9 (D)	1961	12AU6 (A)	3891	EZ40 (M)
1862	6AQ5 (A)	2217	6K25 (D)	3892	AZ41 (P)
1865	EC81 (M)	3839	Z66 (O)		
1886	EC80 (M)	3881	EB41 (M)		

R.A.F. No.	Commercial Equivalent	R.A.F. No.	Commercial Equivalent	R.A.F. No.	Commercial Equivalent
VGT121	T41 (D)	VR82	220TH (C)	VS70	7475 (M)
VGT128	GT1C (O)	VR83	210VPT (C)	VT20	220P (C)
VI77	EM31 (M)	VR91	EF50 (M)	VT23	230XP (C)
VI103	EM35 (M)	VR91A	EF50 (M)	VT25	DET25 (O)
VR18	215SG (C)	VR92	EA50 (M)	VT45	X56 (O)
VR19	PM2 (M)	VR95	954 (A)	VT50	HL2K (O)
VR21	210LF (C)	VR95A	954 (A)	VT51	Pen220A (D)
VR22	220PA (C)	VR99	X66 (O)	VT52	EL32 (M)
VR27	210LF (C)	VR100	KTW62 (O)	VT60	807 (A)
VR28	220VSG (C)	VR101	MHLD6 (O)	VT60A	807 (A)
VR32	220B (C)	VR102	BL63 (O)	VT61	RK34 (A)
VR35	QP21 (O)	VR105	ML6 (O)	VT61A	4074B (S)
VR37	MH4 (O)	VR106	9D2 (S)	VT62	TY1-50 (M)
VR38	MHL4 (O)	VR107	15D2 (S)	VT73	H63 (O)
VR40	PX25 (O)	VR108	8D2 (S)	VT74	6J7 (A)
VR41	PM12M (M)	VR109	4D1 (S)	VT75	KT66 (A)
VR43	210PG (C)	VR117	41MTL (C)	VT76	DA41 (O)
VR44	210DDT (C)	VR118	KT2 (O)	VT79	KT8 (O)
VR45	X56 (O)	VR119	DDL4 (C)	VT80	4307A (S)
VR46	PT25H (O)	VR122	41MXP (C)	VT81	4052A (S)
VR47	TZ05-20 (M)	VR123	EF8 (M)	VT88	832 (A)
VR49	210SPT (C)	VR124	HP4101 (T)	VT96	5B/502A (S)
VR53	EF39 (M)	VR125	MS/PenB (C)	VT104	PT15 (O)
VR54	EB34 (M)	VR126	4SH (C)	VT127	Pen46 (D)
VR55	EBC33 (M)	VR129	MS/Pen (C)	VU29	ESU150 (E)
VR56	EF36 (M)	VR130	HL23 (D)	VU39	MU14 (O)
VR57	EK32 (M)	VR136	EF54 (M)	VU39A	R3 (S)
VR59	955 (A)	VR137	EC52 (M)	VU64	U12-14 (O)
VR65	SP61 (D)	VR502	KT32 (O)	VU71	5U4 (A)
VR65A	SP41 (D)	VR503	KT33C (O)	VU72	GU5 (D)
VR66	P61 (D)	VR505	MH41 (O)	VU113	U17 (O)
VR67	6J5 (A)	VS68	STV280/40(O)	VU120	SU2150A (C)
VR78	D1 (D)	VS69	STV280/80(O)	VU134	HVR2 (M)

V.T. No.	Commercial Equivalent	V.T. No.	Commercial Equivalent	V.T. No.	Commercial Equivalent
1	WE203A	57	57	97	5W4
2	WE205B	58	58	98	6U5/6G5
4B	211	60	850	99	6F8G
4C	211SPEC	62	801/801A	100	807
5	WE215A	63	46	100A	807SPEC
6	212A	64	800	101	837
7	WX12	65	6C5	103	6SQ7
8	UV204	65A	6C5G	104	12SQ7
17	860	66	6F6	105	6SC7
19	861	66A	6F6G	106	803
22	204A	67	30SPEC	107	6V6
24	864	68	6B7	107A	6V6GT/G
25	10	69	6D6	107B	6V6G
25A	10Y-10SPEC	70	6F7	108	450TH
26	22	72	842	109	2051
27	30	73	843	111	5BP4/1802P4
28	24A	74	5Z4	112	6AC7/1852
29	27	75	75	114	5T4
30	01A	76	76	115	6L6
31	31	77	77	115A	6L6G
33	33	78	78	116	6SJ7
34	207	80	80	116A	6SJ7GT
35	35/51	83	83	116B	6SJ7Y (SPEC)
36	36	84	84/6Z4	117	6SK7
37	37	86	6K7	117A	6SK7GT/G
38	38	86A	6K7G	118	832
39	869	86B	6K7GT	119	2X2/879
39A	869A	87	6L7	120	954
40	40	87A	6L7G	121	955
41	851	88	6R7	124	1A5GT
42	872	88A	6R7G	125	1C5GT
42A	872A	88B	6R7GT	126	6X5
43	845	89	89	126A	6X5G
44	32	90	6H6	126B	6X5GT/G
45	45	90A	6H6GT/G	128	1630
46	866	91	6J7	129	304TL
46A	866A	91A	6J7GT	130	250TL
47	47	92	6Q7	131	12SK7
48	41	92A	6Q7G	132	12K8
49	39/44	93	6B8	133	12SR7
50	50	93A	6B8G	134	12A6
51	841	94	6J5	135	12J5GT
52	45SPEC	94A	6J5G	135A	12J5
54	34	94D	6J5GT/G	136	1625
55	865	95	2A3	137	1626
56	56	96	6N7	138	1629

V.T. No.	Commercial Equivalent	V.T. No.	Commercial Equivalent	V.T. No.	Commercial Equivalent
139	OD3/VR150	185	3D6/1299	228	8012
141	WL531	187	575A	229	6SL7GT
143	805	188	7E6	230	350A
144	813	189	7F7	231	6SN7GT
145	5Z3	190	7H7	232	E1148
146	1N5GT	191	316A	233	6SR7
147	1A7GT	192	7A4	234	114B
148	1D8GT	193	7C7	235	615
149	3A8GT	194	7J7	236	836
150	6SA7	195	1005	237	957
150A	6SA7GT/G	196	6W5G	238	956
151	6A8G	197A	5Y3GT/G	239	1LE3
151B	6A8GT	198A	6G6G	240	710A
152	6K6GT/G	199	6SS7	241	7E5/1201
152A	6K6G	200	OC3/VR105	243	7C4/1203A
153	12C8Y (SPEC)	201	25L6	244	5U4G
154	814	201C	25L6GT/G	245	2050
161	12SA7	202	9002	246	918
162	12SJ7	203	9003	247	6AG7
163	6C8G	204	3C24	248	3CP1/1808P1
164	1619	205	6ST7	249	1006
165	1624	206A	5V4G	250	EF50
166	371A	207	12AH7GT	251	WL441 Series
167	6K8	208	7B8	252	923
167A	6K8G	209	12SG7	254	304TH
168A	6Y6G	210	1S4	255	705A
169	12C8	211	6SG7	256	GL486
170	1E5GP	212	958	257	K-7
171	1R5	213A	6L5G	259	829
172	1S5	214	12H6	260	OA3/VR-75
173	1T4	215	6E5	264	3Q4
174	3S4	216	816	266	1616
175	1613	217	811	267	WL578
176	6AB7/1853	218	100TH	268	12SC7
177	1LH4	220	250TH	269	717A
178	ILC6	221	3Q5GT	277	417
179	1LN5	222	884	279	GY2
180	3LF4	223	1H5GT	282	ZG489
181	7Z4	224	2C34-RK34	286	832A
182	3B7/1291	225	307A	287	815
183	1R4/1294	226	3EP1/1806P1	288	12SH7
184	OB3/VR90	227	7184	289	12SL7GT

# COMMERCIAL VALVES HAVING SERVICE EQUIVALENTS WITH C.V., BRITISH ARMY, NAVY OR R.A.F. TYPE NUMBERS

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
O1A	750	1N5	1821	3BP1	814
O9	2725	1N5GT	1823	3C22	999
OA2	1832	1N21	727	3C24	789
OA4G	752	1P5GT	728	3D6	2710
OB2	1833	1Q5G	1824	3D/100A	1422
OZ4	692	1Q5GT	1826	3DP1	816
OZ4-A	517	1R5	782	3EP1	817
1A3	753	1S4	783	3FP7	1761
1A4P	754	1S5	784	3GP1	516
1A5G	755	1T4	785	3JP7	2869
1A5GT	756	1T5	786	3P/270B	1470
1A6	757	1T5GT	1829	3Q4	818
1A7G	1800	1V	1999	3Q5	819
1A7GT	1802	2A3	1831	3Q/191E	570
1B3	1830	2A5	1834	3Q/213E	1734
1B4P	758	2A6	1769	3Q/260E	446
1B5	759	2A7	787	3S4	820
1B7GT	760	2AP1	790	3V/420B	2126
1B22	761	2B7	1837	4-250A	2131
1B24	725	2C21	875	4A1	821
1B49	508	2C22	792	4B22	2936
1C5G	1803	2C25	1567	4B30	933
1C5GT	1805	2C26	802	4C21	2576
1D5	764	2C26A	1759	4C29	823
1D5GP	705	2C33	793	4C30	934
1D5GT	1806		3688		1109
1D7G	765	2C40	932	4D1	AR7
1D8GT	1811		2643		NR55
1E5GT	766	2C43	688		VR109
1E7G	1812	2D2	794	4D21	2130
1F4	767	2D4A	795	4SH	1126
1F5G	768	2D13C	796		VR126
1F6	769	2D21	797	4SHA	825
1F7GV	770	2DP1	1813	4THA	826
1G4	1817	2E22	798	4TPB	828
1G5G	771	2J21A	719		829
1G6G	772	2T/270K	261	4TSP	830
1G6GT	773	2V3	803	5AP1	832
1H4G	774	2V3G	804	5B/251M	428
1H5G	1818	2Y2	1843	5B/300B	834
1H5GT	1820	3A4	807	5B/502A	1096
1L4	1758	3A5	808		VT96
1LA6	775	3A/105B	809	5BP1	601
1LB4	776	3AP1/1A	739	5BP4	836
1LC5	777		602	5CP1	600
1LC6	778	3B21	2959	5CP7	838
1LD5	779	3B22	812	5FP7	718
1LH4	780	3B/102B	84		1789
1LN5	781	3B/501A	49	5GP1	839

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
5H4	840	6AT6	452	6J5GT	1934
5HP1	3583	6B4G	851	6J6	858
5J/180E	445	6B5	1885		1074
5JP1	1791	6B6G	1887		1936
5LP1	{ 741	6B7	1891	6J7	ARP16
	{ 1814	6B8	1894		NR83
5MP1	740	6B8G	1893		VT74
5R4GY	717	6BA6	454	6J7G	1935
5T4	1846	6BE6	453	6J7GT	1937
5U4	{ 1071	6C4	{ 133	6J8G	859
	{ VU71		{ 852	6K5G	860
5U4G	575	6C5	{ 582	6K5GT	861
5U4GT	841		{ NR78	6K6G	1938
5V4G	729	6C5G	581	6K6GT	1940
5W4	1849	6C5GT	583	6K7	{ 1942
5W4DT	503	6C6	585		{ NR81
5W4G	842	6C7	859	6K7G	1941
5X4	1852	6C8G	1896	6K7GT	1943
5X4G	1851	6C21	855	6K8	1945
5Y3	{ 1268	6D4	1949	6K8G	1944
	{ NU20	6D6	1900	6K8GT	1946
5Y3G	1854	6D7	1776	6K25	2217
5Y3GT	1856	6D8G	1902	6L5G	862
5Y4G	1857	6E5	1906	6L6	1948
5Z3	1861	6F5	1909	6L6G	1947
5Z4	1864	6F5G	1908	6L7	1951
5Z4G	1863	6F5GT	1910	6L7G	1950
6A3	730		{ 1186	6L18	1899
6A6	1867		{ 1911	6L19	1850
6A7	1870	6F6	{ 1912	6LD20	1920
6A8	579		{ ARP17	6N6	1954
6A8G	578		{ NR85	6N6G	1953
6A8GT	580	6F6GT	731	6N7	1957
6AB5	843	6F7	1915	6N7G	1956
6AB7	{ 661	6F8	1918	6N7GT	1958
	{ 1873	6F8G	1917	6P5GT	1819
6AC5G	844	6F11	1901	6P7G	864
6AC5GT	845	6F13	1839	6P25	1853
	{ 660	6F14	1919	6Q5G	1815
6AC7	{ 747	6G5	504	6Q7	{ 588
	{ 846	6G6G	1926		{ NR68
6AD7G	1878	6G8G	856	6Q7G	587
6AF6G	847		{ 1301	6Q7GT	589
6AG5	848	6H6	{ 1930	6R6G	1960
6AG7	1882		{ ARDD3	6R7	1963
6AJ5	995	6H6G	1929	6R7G	1962
6AJ7	849	6H6GT	1931	6R7GT	1964
6AK5	850	6H7	857	6S5GT	1973
6AK6	1762	6J4	1763	6S7	1975
6AK7	1784		{ 1067	6S7G	1974
6AL5	{ 140	6J5	{ 1933	6SA7	1966
	{ 283		{ VR67	6SA7GT	1967
6AQ5	1862	6J5G	1932		

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
6SC7	{ 1969	7C5LT	886	12FP7	915
	{ 2716	7C6	887	12H6	916
6SC7GT	1970	7C7	1777	12J5	534
6SD7GT	865	7D5	1425	12J5GT	535
6SF5	1972	7D7	888	12J7	917
6SG7	1978	7D8(A)	889	12K7	918
6SH7	594	7D8(S)	{ 1328	12K8	703
6SH7GT	595		{ APR9A	12SA7	537
6SJ7	591	7D9	136	12SA7GT	538
6SJ7G	590	7E5	{ 890	12SC7	540
6SJ7GT	592		{ 2704	12SF5	919
6SJ7Y	866	7E6	891	12SF5GT	920
6SK7	1981	7E7	892	12SF7	921
6SK7GT	1982	7F7	893	12SG7	694
6SL7GT	1985	7H7	895	12SH7	922
6SN7GT	1988	7K7	896	12SJ7	697
6SQ7	1990	7J7	897	12SJ7GT	698
6SQ7GT	1991	7N7	898	12SK7	543
6SR7	867	7Q7	899	12SK7GT	544
6SS7	1993	7R7	900	12SL7	924
6ST7	1996	7W7	902	12SN7	925
6ST7G	1995	7Y4	901	12SQ7	546
6T7G	500	7Z4	1790	12SQ7GT	547
6U5	504	8D2	{ 1108	12SR7	700
6U7G	706		{ VR108	12Y4	523
6V6	510		{ 1106	12Z3	927
6V6G	509		{ 1321	13SPA	929
6V6GT	511	9D2	{ 1423	14F7	930
6V7G	870		{ ARP3	14L	1087
6W4	732		{ VR106	15	931
6W7G	512	9HP7	905	15D2	{ 1107
6X4	493	9JP1	1783		{ VR107
6X5	573	10	603	19H4	1847
6X5G	572		{ 1300	20A1	1424
6X5GT	574	10D1	{ 1418	20A2	1848
6Y3G	1816		{ ARDD1	23D	1588
6Y6G	515	11D3	1419	24A	936
6Z5	871	12A5	908	25A6	549
6Z7G	872	12A6	525	25A6GT	550
6ZY5G	873	12A6GT	526	25A7	937
7A4	1770	12A7	909	25AC5	938
7A6	876	12A8GT	910	25B6	939
7A7	877	12AH7GT	529	25B8	948
7A8	878	12AT7	455	25L6	552
7B4	879	12AU6	1961	25L6G	551
7B5	880	12AU7	491	25L6GT	553
7B5LT	881	12AX7	492	25SN7	423
7B6LM	882	12B8GT	911	25Y5	942
7B7	522	12BA6	1928	25Z5	555
7B8LM	883	12C8	{ 531	25Z6	558
7BP7	884		{ 837	25Z6GT	559
7C4	2706	12DP7	{ 913	26	943
7C5	885		{ 914	27	944

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
28D7	945	50	2533	205D	{ 1749
28D7GT	946	50C5	1959		{ 2565
29C1	430	50L6	2534	205E	2566
30	604	50L6GT	571	205F	2567
31	947	50Y6GT	805	210DDT	{ 1044
32	711	53	2535		{ VR44
32L7	948	53A	2536	210DET	2569
33	949	55	2537	210HF	2570
33A/100A	1750	56	611	210HL	2571
34	1751	57	612		{ 1027
35/51	1752	58	613		{ 1042
35A5	1753	59	2538	210LF	{ 1021
35L6	561	61P	2539		{ VR21
35L6GT	562	71A	2541		{ VR27
35T	668	73	2543	210PG	{ 1043
35TG	1754	75	614		{ VR43
35Z3	{ 564	76	615	210SPT	{ 1049
	{ 726	77	616		{ VR49
35Z3GT	565	78	2544	210VPA	2574
35Z4GT	2500	79	2545		{ 1083
35Z5	567	80	617	210VPT	{ NR41
35Z5GT	568	81	2546		{ NR83
36	1775	82	1773		{ 620
37	606	83	618	211	
38	712	83V	2547	212E	2577
39/44	1771	84	{ 619	215SG	{ 1018
40	2501		{ 2548		{ VR18
41	608	85	2549	218	2579
41FP	2502	85A1	431		{ 1032
41MH	2503	89	833	220B	{ AR16
41MHL	2504	90AV	2132		{ VR32
41MP	1458	90CG	2133	220C	2580
41MPG	2505	90CV	2134	220LF	{ 1313
41MPT	2506	100TH	{ 2552		{ AR15
41MTL	{ 1117		{ 2591	220/OT	2581
	{ VR117	101D	1778	220P	{ 1020
41MXP	{ 1122	101F	2553		{ VT20
	{ VR122	102D	1779	220PA	{ 1022
41STH	2508	111A	2554		{ VR22
42	609	112A	1774	220PT	{ 1333
42MPT	{ 1325	116/Pen	{ 1337		{ ARP14
	{ ARP7		{ ARP22	220RC	{ 1312
42OT	2511	117L7	2556		{ AR14
42OTDD	2512	117N7	2557	220TH	{ 1082
42SPT	1444	117Z6	2558		{ VR82
43	2514	121A	2560	220VPT	{ 1338
45	{ 596	122A	2561		{ ARP24
	{ 610	129B	2950	220VS	2582
45IU	2529	161	708	220VSG	{ 1028
45Z5	2530	164V	2562		{ VR28
46	2531	202	{ 1200	225DU	{ 1454
47	1772		{ NS3		{ 1455
49	2532	204A	2563	228A	734

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
230XP	{ 1023	352A	2631	829	632
	VT23	354A	2632	829A	3599
231D	2584	357A	691	829B	2666
240B	2586	362A	2633	830B	702
242C	2587	367	2634		{ 634
244A	2588	368A	710	832	1088
244V	{ 1180	375A	2636		VT88
	NR58	388A	2637	832A	788
250TH	2589	405BU	2640	833	635
256B	2592	460BU	2644	836	636
257A	2593	506BU	2645	837	637
258B	2594	645	670	838	638
259A	2595	700B	695	843	639
262B	2597	700C	696	845	735
264A	2598	700D	699	846	2668
264C	2599	701A	672	849	2669
267B	2600	703A	679	849H	2670
271A	2601	705A	3587	851	2671
272A	2602	708A	3590	852	2672
274A	2603	713	3593	857B	2673
274B	684	715A	2654	860	640
275A	2604	715B	2655	861	641
279A	669	715C	598	863	2674
282A	2605	717A	3594	864	2675
300A	2608	759	1794	865	2676
300B	2609	800	2657	866	32
303	2610	801	621	866JR	2679
304	{ 1202	802	622	868	2680
	NS5	803	623	869B	2723
304TH	2611	804	624	872	642
307A	2612	805	625	874	643
310A	2603	806	2658	875	644
310B	1781		124	876	645
311A	2614		1060	878	2683
313C	2615		1364	879	597
314A	2616		1374	880	2685
316A	683	807	1572	884	647
323A	2617		ARS25	885	648
327A	2618		ARS25A	889	2686
328A	2619		VT60/A	889R	2687
329A	2620		626	891R	2688
330B	2621	808	2660	892R	904
331A	2622	809	627	893R	2689
332A	2623	810	628	902	3600
337A	2624	811	2661	904V	2690
338A	2625	812	26	905	736
340A	1782	813	629	906	737
346A	2626	814	2663	913	2691
349A	2627	815	724	918	2692
349B	2628	816	2664	929	2693
350A	2629	822	2665	930	2694
3502	1799	825	630	931	2695
351A	2630	826	631	931A	2696
		828			

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
935	2697	4017B	1446	4270A	30
953	738	4018AG	1733	4274A	1451
954	{ 1095	4019A	249	4279A	1250
	1579	4019B	{ 1309	4282B	1365
955	{ VR95/A	4020A	{ AR11	4283B	ATS70
	1059		{ 1310	4300A	1452
956	649	4021B	{ AR12	4304	2759
			{ AR20	4304B	2760
957	2700	4022AR	{ 1316	4304BB	2761
958	650		{ 1311	4304CB	1062
958A	2701	4030C	{ AR13	4307A	{ 1080
991	651		1447	4313C	{ VT80
1201	2704	4033A	{ 1220		75
1203	2705	4033AF	{ NT37	4316A	683
1203A	2706		2743	4317	{ 1201
1231	2707	4045A	243	4328A	{ NS4
1232	894	4046A	244		2619
1291	811	4049A	1471	4328D	245
1294	2709	4050AG	2745	4357A	27
1299	{ 815	4052A	{ 1081	4673	2765
	2710		{ VT81	4960	2767
1500T	2711	4056A	1025	5763	2129
1602	906	4060A	1030	7193	3601
1603	652	4061A	{ 1369	7206A	676
1609	2712	4062A	{ ATP10	7475	{ 1070
1610	2713		1568		8003
1611	653	4064A	2746	8011	
1612	654	4064B	1449		2768
1613	655	4066A	1181	8012	46
1614	2714	4069A	{ 1372	8013A	662
1616	656	4074A	{ ATP100	8016	716
1619	723		18	8020	541
1620	657	4074B	{ 1573	8025	2967
1622	658	4077A	{ VT61A	9001	663
1625	659		33	9002	1757
1626	1755	4078A	1420	9003	664
1629	1756	4078AG	447	9004	665
1630	2715	4081	2749	9005	666
1637	996	4081A	1797	9006	667
1729	2717	4094A	1620	A40	2769
1851	599	4096AB	2751	A40/N3	2800
1852	1876	4102D	1641	AC/2HL	2801
1876	2718	4104D	1694	AC4/Pen	2806/7
1924	2719	4201	1097	AC5/Pen	{ 1326
2000T	998	4203	1587		
2050	2721	4205E	1648	AC6/Pen	{ 2809
2051	1798	4212D	1619		
3025	2722	4212E	1252	AC/HLDD	{ NR87
3951	2733	4228A	1450		
4003A	2734	4242A	25	AC/HLDD	{ 2811/2
4011A	1415	4251AX	2755		
4012A	1445	4260A	2756		
4015A	2735	4264A	2598		

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
ACO44	{ 1168	CAT1	1600		{ 384
	NR44	CAT2	1606	DET5	{ 1223
AC/P	2815	CAT6	2871		{ 1233
	{ 1198	CAT9	2872		NT40
ACP4	207	CAT17C	533	DET6	{ 1620
	NR94	CAT20C	421	DET9	{ 2899
AC/Pen	2808	CBL31	1463	DET10	{ 2900
AC/S	2819	CE2	1764		{ 1235
AC/S2	1677	CE20	1474	DET12	{ 1288
	{ 1164	CE302	3596		NT58
AC/SG	2822	CK502	385	DET16	{ 1363
	NR37	CK505	386	DET18	{ 419
AC/SP1	2820	CK505AX	443	DET19	{ 18
	{ 545	CK506	387		{ 1025
AC/SP3	1430	CK1005	2874	DET25	{ AT35
	2823	CL4	2875		VT25
AC/SPen	2824	CL33	1401	DF1	{ 2907
	{ 1222	CMG25	1432	DF66	{ 2107
ACT6	2825	CMG25RS	250	DH	{ 1665
	AT37	CY31	1402	DH30	{ 1695
	NT39			DH73M	{ 2909
ACT9	28			DK1	{ 2910
ACT10	2827		{ 1078	DL	{ 1661
ACT16	1431	D1	ARD2	DL2	{ 2911
ACT17	225		VR78	DL63	{ 2912
ACT19	379		1070	DL66	{ 2106
AC/TH1	2830	D41	1187	DO30	{ 1178
ACTP	1718		NR46		{ NR56
AC/VP1	518		NR66	DO60	{ 1206
AC/VP2	2832	D42	557		NT18
AF3	2833		1302	DPQ	{ 1141
AL60	9	D63	554		NGT1
AP4	{ 1175	DA30	563	DW4/350	{ 1796
	NR54	DA41	{ 1076	EA50	{ 1092
APP4C	1684		VT76		{ VR92
APP4G	2836/7	DA60	527	EAF42	{ 3883
AR300	2839	DA100	{ 1219		{ 1054
AT4	{ 1171		NT36	EB34	{ ARDD5
	NR50	DAC1	2887		VR54
AZ1	2860	DC51	1	EB41	{ 3881
AZ2	2861	DD41	1403	EBC3	{ 1428
AZ31	2862	DD620	2889		{ 1715
AZ41	3892		{ 1119	EBC21	{ 347
B21	{ 1696	DDL4	1691		{ 1055
	2864		VR119	EBC33	{ AR21
B30	2865	DDT	2890		NR48
BL63	{ 1102	DE5	2891		VR55
	VR102	DE5B	2892	EBC41	{ 3882
BT9B	13	DEQ	{ 1156/7	EBF2	{ 2925
BT45	22		NR18	EBF32	{ 501
CIC	1400	DER	1642	EBL31	{ 2926
CAR1	1601	DET1SW	2895	EC31	{ 1433
CAR4	1602	DET3	1034	EC50	{ 2927

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
EC52	{ 1137 VR137	EL32	{ 1052 VT52	GU8	{ 324 1628
EC80	1886	EL33	2938	GU11	532
EC81	1865	EL35	{ 1286 NR77	GU20	1435
ECC31	{ 181 1285 NR73	EL36	2940	GU21	{ 5 152
ECC35	569	EL38	450	GZ32	593
ECC40	3884	EL41	3889	H2	2977
ECH3	2929	EL42	3890	H12	2978
ECH22	302	EL50	2941	H30	2979
ECH33	2930	EM4	1434	H41	24
ECH35	{ 1347 ARTH2	EM31	{ 1077 AW6	H42	{ 1182 NR60
ECH42	3888	EM34	{ VI77 394	H63	{ 1073 VT73
ECR60	1097	EM35	{ 1103 NR69	H410	2981
EF8	{ 1123 VR123	ES250M	{ VI103 1618	H610	2982
EF9	1427	ES450	1207	HD24	2985
EF22	303	ES1500	1614	HD203A	2986
EF36	{ 1056 1404 NR49 VR56	ESA892	701	HF100	2987
EF37	{ 358 586	ESU75	2945	HF200	2988
EF39	{ 1053 1464 ARP34 VR53	ESU150	{ 1029 2946 VU29	HF300	693
EF40	3885	ESU300	2947	HK24	745
EF41	3886	ESU450	2948	HK54	707
EF42	3887	ESU500	2948	HK257	824
EF50	{ 1091 1578 ARP35 VR91/A	ESU1500	2944	HK354E	2989
EF51	305	EY51	426	HL2	{ 1673 2991
EF52	327	EZ22	346	HL2K	{ 1050 VT50
EF54	{ 380 1136 VR136	EZ40	3891	HL23	{ 1130 2994
EF91	{ 138 1955	F123A	2949	HL23DD	{ VR130 1306
EHT1	19	FC2A	2954	HL23DD	{ 2995 AR8
EK2	1426	FC4	2955	HL41DD	2996
EK32	{ 1057 VR57	FC13C	2956	HL133	2998
EL2	1429	FG67	742	HL133DD	2999
EL3C	822	FP54	2960	HL210	{ 1303 3500
EL22	304	GTIC	{ 1143 NGT4	HL610	3501
		GU1	{ 1128 NGT2	HL1320	3502
		GU5	{ VGT128 1262	HLDD1320	3503
		GU7	{ 1072 AU6	HLA2	1678
			{ NU16 VU72	HP4101	{ 1124 NR70
			2973	HVR2	{ VR124 ARP23
					{ 1134 NU34
					VU134

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
HY75	751	L22DD	3533	MS/PenB	{ 1125
HY114B	3505	L30	3534		{ VR125
HY615	3506	L600	3537	MT4	1610
K3A	410	L610	3538	MT9F	1439
KB2	3515	LD210	502	MT9L	1440
KK2	3516		548	MT11SW	3563
			1166	MT12	3564
KT2	{ 1118	LP2	{ 1304	MT12A	1441
	{ ARP1		{ AR5	MT14	1442
	{ NR39		{ AR6	MT16	505
	{ VR118		{ NR42	MU1	3567
KT8	{ 1079				
	{ VT79	LS5A	1650		{ 1279
KT24	{ 1334	LS6A	3541	MU2	{ 1459
	{ ARP18	LS8	1656		{ NU31
KT30	3519	LS8A	1667		{ 1296
KT31	3520	LS9B	1658	MU14	{ AU3A
	{ 1287	LS650	391		{ NU17
KT32	{ 1502				{ VU39
	{ NR95		{ 1359	MVSPen	3571
	{ VR502	ME41	{ 3565	MVSPenB	3572
KT33C	{ 1503		{ AW5	MX2	418
	{ VR503		{ 1037	MX40	3576
	{ 1181	MH4	{ NR31	MZ1-75	444
KT41	{ ARP25		{ AR17	MZ1-76	3574
	{ NR59		{ VR37	MZ2-200	200
KT42	{ 1174	MH41	{ 1505		{ 1361
	{ NR53		{ VR505	MZO5-20	{ 3573
	{ 1340	MHD4	3546		{ AT20
KT44	{ 1437		{ 1038		
	{ 1576/7	MHL4	{ NR26	N43	{ 1188
	{ ARP26		{ VR38		{ NR72
KT61	1438	MHLD6	{ 1101	P61	{ 1066
KT66	{ 1075		{ VR101		{ VR66
	{ VT75	MKT4	1683	P220	3620
KT67	437		{ 1160/1	P410	3621
KTW61	1281	ML4	{ 1732	P610	3622
	{ 1100		{ NR27/A	P625	1669
KTW62	{ ARP15		{ NR57	PA40	3623
	{ VR100	ML6	{ 1105	PD220A	{ 1163
	{ 1195		{ VR105		{ NR35
KTW63	{ ARP15	MPT4K	3552	PE7B	3624
	{ NR86	MPT42	3554	PE8	3625
KTW73M	3527	MR4	1611	Pen4B	3626
	{ 1191	MR10	34	Pen4DD	519
KTZ41	{ 3529	MS4B	3553	Pen25	65
	{ NR76		{ 1282	Pen44	3630
	{ 1343	MSP4	{ 1341	Pen45DD	3631
KTZ73	{ 3530		{ ARP33	Pen46	{ 1127
	{ ARP38	MSP41	3562		{ VT127
L2	3531		{ 1129	Pen220A	{ 1051
	{ 1307	MS/Pen	{ 3561		{ VT51
L21	{ 3532		{ NR71	Pen231	3633
	{ AR9		{ VR129	Pen383	1456
				Pen428	3634

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
Pen1340	{ 1327 3635 ARP9	PX25	{ 1040 NR47 VR40	RX3-120	{ 1261 NU5
Pen1346	{ 3636 1329	PZ1-35	{ 1240 NT65A	RX235	709
PenA4	{ 3638 ARP10	PZ1-75	{ 1221 NT38A	RZ1-150	3690
PM1HL	3641	QP21	{ 1035 VR35	S22AF	39
PM1LF	3642			S23	3691/2
PM2	{ 1019 NR28 VR19	QP25	{ 556 1342 ARP37	S25A	16
PM2A	3643	QQEO6/40	424	S26A	53
PM2DX	3645	R3	{ 1569 VU39A	S27A	82
PM3	{ 1151 NR15	RG1-250	{ 1263 3667	S30A	127
PM4DX	{ 1152/4 NR15A/16A	RG4-100	3670	S130	{ 1110 AW3
PM12M	{ 1041 VR41	RK20A	704	S130P	45
PM12V	{ 1319 ARS8	RK28	3672	S215	3695
PM14	{ 1158/9 NR22/3	RK28A	3673	S215A	3696
PM22	3649	RK31	3674	S610	3698
PM22A	3647	RK34	{ 1061 VT61	S625	{ 1317 ARS6
PM22D	3578	RK47	3677	SG215	3702
PM22E	3648	RK48A	690	SP2	{ 1320 ARP2
PM24A	{ 1167 NR43	RK49	3679	SP4	1283
PM24D	{ 1237/8 NT62	RK60	3680	SP4B	1324
PM202	1246	RK62	3681	SP4C	{ ARP6 3703
PM254	{ 1153 NR16	RL18	{ 1197 NR88	SP13C	3704
PM256	{ 1208 NT20	RL37	66	SP41	{ 1335 1574
PT5	3652	RS15	3853	SP41	ARP19
PT5E	3579	RS18	3858	SP42	VR65A
PT6	{ 1371 3653 ATP75	RS47	3854	SP42	{ 1336 ARP20
PT11	3654	RS55	3862	SP42	118
PT15	{ 1104 VT104	RS207	3850	SP61	260
PT25H	{ 1046 VR46	RS217	3849	SP61	1605
PT425	3655/6	RS250	3847	SP61	ARP36
PV1-35	{ 1370 3658 ATP35	RS253	3851	SP210	VR65
PVO5-15	3657	RS254	3871	SP210	{ 1322 ARP4
		RS255	3872	STV280/40	1068
		RS260	3848	STV280/80	{ AW4 VS68
		RS261	3846	STV280/80	VS69
		RS271A	3859	SU750	NS1
		RS282	3860	SU750	128
		RS283A	3857	SU2150A	{ 1069 1120
		RS285	3852	SU2150A	1290/1
		RS329	3855	T4D	NU33
		RS366	3845	T20	VU120
		RSQ15/5	3869		3721
		RSQ15/40	3868		3722

Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent	Commercial Valve Type	Service Equivalent
T41	1121	U20	31	W30K	3805
	3723	U21	3751	W31	3806
T200	VGT121	U22	1356	W42	1183
	3724		3750	WD30	NR61
TDD2A	1308	U23	3750	X21	3810
	3726		235	X22	3816/7
TDD4	AR10	U24	1921	X24	3818
TP22	1344	U30	3752	X31	3819/20
	ARTP1	U31	3753	X41	3821/2
TP25	1345	U52	1575		X56
	ARTP2	U600	3756	1697	
TP26	3735	U4020	1267	X61M	1460
	560	UR3C	3758		3823
TSP4	1330	UU4	3759	X63	NR84
	ARP11	UU7	3761		1045
TX3-200	3739	UU9	1855	X64	VR45
TX5-400	3740	VMP4G	1169		VT45
TY1-50	315	VMS4	NR45	X65	281
	1062		1165		3825
TZ2-300	VT62	VP2	NR38	X66	1280
	3741		3787		ARH1
TZ20	3742	VP2B	3787	X65	NR67
TZ05-20	1047		VP4		520
	U2	142	VP4B	3788	X65
U3	143	VP13C	3582	NR82	
U4	144	VP21	3790	X66	1099
U5	145	VP23	1332		X66
	3743		3792	XH1.5	
U6	3744	VP24	3793	X66	XJ
U7	146		3793		
U8	147	VP41	3793	X66	119
U10	1443		21		3793
	U12-14	1064	VP133	1414	X66
AU3		1457		XP1.5	
U15	NU3	VP210	1457	X66	1702
	VU64	VP215	1457		176
U17	1265/6	VP1322	1457	X66	1721
	3747	VR75	1457		3832
U18	NU13	VR90	1457	X66	175
	1113	VR105	1457		3833
U19	AU4	VR150	1457	X66	3834
	NU18	VS2	1457		1103
U20	VU113	VS24	1457	X66	3836/7
	1264	VS24K	1457		1469
U21	AU1	W21	1457	X66	1727
	NU12	W21	1457		1192
U22	187		1457	X66	3838
			1457		ARP21

# MANUFACTURERS TRADE NAMES AND ADDRESSES

## BRITISH

BRIMAR	Standard Telephones & Cables Ltd., Footscray, Sidcup, Kent.
COSSOR	A. C. Cossor Ltd., Cossor Works, Highbury Grove, London, N.5.
FERRANTI	Ferranti Ltd., Hollinwood, Lancs.
HIVAC	Hivac Ltd., Greenhill Crescent, Harrow-on-the-Hill, Middlesex.
MARCONI } EMITRON }	E.M.I. Ltd., Hayes, Middlesex.
MAZDA	Edison Swan Electric Co. Ltd., 155, Charing Cross Road, London, W.C.2.
MULLARD	Mullard Ltd., Century House, Shaftesbury Avenue, London, W.C.2.
OSRAM	G.E.C. Ltd., Magnet House, Kingsway, London, W.C.2.
TUNGSRAM	British Tungfram Radio Works Ltd., West Road, London, N.17.

## AMERICAN

G.E.	General Electric Company of America, Schenectady 5, New York, U.S.A.
HYTRON	Hytron Radio & Electronics Corp., 76, Lafayette Street, Salem, Mass., U.S.A.
RADIOTRON	R.C.A., Harrison, New Jersey, U.S.A.
RAYTHEON	Raytheon Manufacturing Co., Chapel Street, Newton 58, Mass., U.S.A.
SYLVANIA	Sylvania Electric Products Inc., 500, 5th Avenue, New York 18, N.Y., U.S.A.
TUNG-SOL	Tung-Sol Lamp Works Inc., 95, 8th Avenue, Newark, New Jersey, U.S.A.

## CONTINENTAL

MAZDA	Compagnie de Lampes, 29, Rue de Lisbonne, Paris (8), France.
PHILIPS	N.V. Philips Gloeilampenfabrieken, Eindhoven, Holland.
TELEFUNKEN	Telefunken G.m.b.H., Hannover, Lavesstrasse 3, Germany.
VALVO	Philips Valvo Werke G.m.b.H., Hamburg, Germany.





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