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250	1000057	BHB	59
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50	1000062	BLX	19
100	1000065	BMV	19
75	1000066	BNF	19
1000	1000068	BRH	34
3	1000070	BRK	24
50	1000071	BRL	39
1200	1000072	BRN	45
500	1000077	BSH	30
6	1000079	BSS/BSB	24
1200	1000082	BTG	45
500	1000083	BTL	46
500	1000084	BTM	46
750	1000085	BTN	46
750	1000086	BTP	46
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625	1000089	BVE	43
1000	1000091	BVT	46
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35	1000260	EAJ	19
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250	1000343	EPL	39
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50	1000405	EXN/FG	60
50	1003689	EXN/FG/EUROSAVER	64
50	1002249	EXN/FG/WS/4200	65
50	1003225	EXN/FG/WS/5300	65
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500	1000466	EYX	47
225	1003034	EZF/K	57
650	1000471	FAD	34
420	1000472	FAL	34
500	1000476	FBG/FBD	38
150	1000479	FBT*	47
250	1000480	FBV*	47
650	1000482	FBX	34
1000	1000483	FBY	34
650	1000485	FCA*	34
600	1000486	FCB	34
500	1000488	FCL	30
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100	1000490	FCR	41
150	1000492	FCS	39
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50	1000546	FML	56
600	1000547	FMR	43
35	1003673	FMT/FG/EUROSAVER	64
35	1000549	FMT/C/A	62
35	1000550	FMT/C/A/FG	62
35	1000551	FMT/FG	60
35	1000548	FMT/FRB	60
35	1000556	FMV/C/A	62
35	1000557	FMV/C/A/FG	62
35	1000559	FMV/FG	60
35	1003674	FMV/FG/EUROSAVER	64
35	1000552	FMV/FRA	60
35	1000564	FMW	60
35	1003675	FMW/50/FG/EUROSAVER	64
35	1000565	FMW/60	60
35	1001682	FMW/60/C/A	62
35	1001683	FMW/60/C/A/FG	62
35	1000566	FMW/60/FG	60
35	1000570	FMW/C/A	62
35	1000571	FMW/C/A/FG	62
35	1000573	FMW/FG	60
35	1003676	FMW/FG/EUROSAVER	64
35	1003340	FMW/FG/WS/4200	65
35	1003341	FMW/FG/WS/5300	65
300	1000578	FNA	44
50	1000580	FNC/FG	65
50	1000582	FND/FG	65
50	1000584	FNE/FG	65
50	1000586	FNF/FG	65
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275	1000588	FNT	39
50	1000589	FNV	60
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20	1000620	FTC/FG	53
20	1000621	FTD	53
20	1000622	FTD/FG	53
35	1000623	FTE	53
35	1000624	FTE/FG	53
35	1000625	FTF	53
35	1000626	FTF/FG	53
35	1000627	FTH	53
35	1000628	FTH/FG	53
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750	1000676	HPL-750/77V	51
375	1000666	HPL-375/115V+	51
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575	1002283	HPL-575/120X+	51
750	1003144	HPL-750/120V+	51
750	1003178	HPL-750/120X+	51
375	1003182	HPL-375/230X+*	51
575	1000673	HPL-575/230V+	51
575	1002233	HPL-575/230X+	51
750	1002289	HPL-750/230V+	51
750	1003179	HPL-750/230X+*	51
375	1003183	HPL-375/240X+*	51
575	1000674	HPL-575/240V+*	51
575	1002234	HPL-575/240X+*	51
750	1003184	HPL-750/240V+*	51
750	1003180	HPL-750/240X+*	51
750	1003336	QXL-77V-750W	51
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400	1003022	HX-400	42
400	1003023	HX-401	42
575	1000543	HX-600/FLK	42
575	1002196	HX-601	42
J – R7s-12 Base (OAL≈ 80.3mm)			
100	1000698	J120V-100W/79MM SHORT	29
100	1000721	J130V-100W/79MM SHORT	29
100	1000762	J240V-100W/79MM SHORT	29
150	1001734	J12V-150WA/80	29
150	1000701	J120V-150W/79MM SHORT	29
150	1000723	J130V-150W/79MM SHORT	29
150	1000751	J230V-150W/79MM SHORT	29
150	1000765	J240V-150W/79MM SHORT	29
200	1000703	J120V-200W/79MM SHORT	29
200	1000705	J120V-200WF/79MM SHORT	29
200	1000725	J130V-200W/79MM SHORT	29
250	1001737	J120V-250WG/83*	29
250	1000707	J120V-250W/79MM SHORT	29
250	1000773	J240V-250W/79MM SHORT*	29
300	1000709	J120V-300W/79MM SHORT	29
300	1000727	J130V-300W/79MM SHORT	29
J – R7s-12 Base (OAL≈ 119.6mm)			
100	1000697	J120V-100W/119MM LONG	30
100	1000720	J130V-100W/119MM LONG	30
100	1000761	J240V-100W/119MM LONG*	30
150	1000719	J12V-150WG	30
150	1000700	J120V-150W/119MM LONG	30
150	1000722	J130V-150W/119MM LONG	30
150	1000764	J240V-150W/119MM LONG*	30
200	1000702	J120V-200W/119MM LONG	30
200	1000724	J130V-200W/119MM LONG	30
200	1000770	J240V-200W/119MM LONG	30
250	1000706	J120V-250W/119MM LONG	30
300	1000777	J24V-300WG*	30
300	1000779	J32V-300WG	30
300	1000291	EHM, J120V-300W	30
300	1000296	EHZ, J120V-300WF	30
300	1000726	J130V-300W/119MM LONG	30
300	1000756	J230V-300W	30
500	1000488	FCL, J120V-500W	30
500	1000712	J120V-500W/6*	30
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500	1000224	DVS, J130V-500WB	30
500	1000736	J220V-500WE	30
500	1000077	BSH, J240V-500WN	30
750	1000738	J220V-750WB1	30
J – R7s-12 Base (OAL≈ 191.1mm)			
1000	1000695	J120V-1000WB	30
1000	1000739	J225V-1000WB	30
1000	1000258	DZX, J240V-1000WB*	30
J – R7s-12 Base (OAL≈ 256.1mm)			
1000	1000740	J225V-1000WB1*	31
1000	1000758	J240V-1000WB1	31
1500	1000699	J120V-1500WB	31
1500	1000750	J230V-1500WB	31
1500	1000243	DYD, J240V-1500WB	31
1500	1000778	J277V-1500WB	31
J – R7s-12 Base (OAL≈ 332.4mm)			
2000	1000752	J230V-2000WB*	31
JA – P14.5s Base			
55	1000790	JA12V-55W (H1)	35
70	1000800	JA24V-70W*	35
100	1000785	JA12V-100W (H1)	35
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5	1000832	JC12V-5W/BA9S	36
10	1000810	JC12V-10W/BA9S	36
20	1000819	JC12V-20W/BA9S	36
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75	1000916	JCD24V-75W	36
75	1000917	JCD28V-75W/WGB	36
75	1000986	JCV120V-75WGB	36
75	1000987	JCV120V-75WGBF	36
100	1000968	JCV120V-100WGB	36
100	1000969	JCV120V-100WGBF	36
100	1000364	ESR, JCV120V-100WGB2	36
100	1000374	ETD, JCV120V-100WGB2F	36
125	1000814	JC12V-125WB/BA15D*	36
150	1000373	ETC, JCV120V-150WGB	36
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200	1000512	FEV, JCV120V-200WGB2	36
200	1001803	JCV230V-200WGB	36
250	1000365	ESS, JCV120V-250WGB	36
250	1000372	ETB, JCV120V-250WGBF	36
250	1000990	JCV130V-250WGBF*	36
500	1000979	JCV120V-500WGB	36
500	1000980	JCV120V-500WGBF	36
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5	1000833	JC12V-5W/G4	37
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10	1000856	JC6V-10W/G4	37
10	1000857	JC6V-10WH3 (64223)	37
10	1000531	FHD/ESA, JC6V-10W	37
10	1003030	JC12V-10W/G4	37
10	1000811	JC12V-10W/G4	37
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20	1000866	JC6V-20W/G4	37
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30	1000867	JC6V-30W/G4	37
35	1000825	JC12V-35WB/G4	37
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50	1000837	JC14.5V-50WC	38
80	1000253	DYT, JC19V-80W*	38
100	1000649	GCC, JC12V-100WC5	38
100	1000255	DZB, JC12V-100W*	38
125	1000605	FSH, JCV120V-125WB	38
175	1000330	EML, JC24V-175W*	38
200	1000648	GCB, JCD30V-200WC1	38
250	1000453	EYH/FKT, JCD120V-250WB	38
250	1000647	GCA, JCV120V-250WC	38
300	1000899	JCD120V-300WCP	38
360	1000442	EYB, JCD82V-360W	38
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500	1000476	FBG/FBD, JCD120V-500WCP	38
600	1000246	DYH, JCD120V-600WCP	38
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30	1000868	JC6V-30WT1*	39
35	1000823	JC12V-35W	39
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650	1000907	JCD120V-650WL*	40
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300	1001762	JCD120V-300W (ref. 64514)	40
300	1000974	(FNS) JCV120V-300WC (64512)	40
650	1000983	JCV120V-650WC	40
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100	1000806	JC12V-100W	41
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300	1000886	JCD100V-300WC*	43
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80	1000303	EJY, JCR19V-80W	56
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12	1000615	FTA, JDR/M12V-12W/G/NSP9.5	53
12	1000616	FTA/FG, JDR/M12V-12W/G/VNSP9.5/FG	53
20	1000617	FTB, JDR/M12V-20W/G/SP10	53
20	1000618	FTB/FG, JDR/M12V-20W/G/SP10/FG	53
20	1000619	FTC, JDR/M12V-20W/G/SP17	53
20	1000620	FTC/FG, JDR/M12V-20W/G/SP17/FG	53
20	1000621	FTD, JDR/M12V-20W/G/FL30	53
20	1000622	FTD/FG, JDR/M12V-20W/G/FL30/FG	53
35	1000623	FTE, JDR/M12V-35W/G/SP12	53
35	1000624	FTE/FG, JDR/M12V-35W/G/SP12/FG	53
35	1000625	FTF, JDR/M12V-35W/G/SP20	53
35	1000626	FTF/FG, JDR/M12V-35W/G/SP20/FG	53
35	1000627	FTH, JDR/M12V-35W/G/FL30	53
35	1000628	FTH/FG, JDR/M12V-35W/G/FL30/FG	53
20	1001001	JDR/M24V-20W/SP12*	53
20	1001002	JDR/M24V-20W/SP12/FG	53
20	1000999	JDR/M24V-20W/SP19	53
20	1001000	JDR/M24V-20W/SP19/FG	53
20	1001003	JDR/M24V-20W/FL30	53
20	1001004	JDR/M24V-20W/FL30/FG	53
20	1001007	JDR/M24V-35W/SP13*	53
35	1001008	JDR/M24V-35W/SP13/FG	53
35	1001005	JDR/M24-35W/SP19	53
35	1001010	JDR/M24V-35W/FL30/FG	53
JDR – MR-16, E11 Base			
100	1002223	JDR120V-100W/FL36*	67
JDR – MR-16, E17 Base			
75	1001032	JDR120V-75WL/SP12	67
75	1001030	JDR120V-75WL/NFL24	67
75	1001033	JDR120V-75WL/FL38	67
100	1001013	JDR120V-100WL/SP13	67
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JDR – MR-16, E17 Base			
100	1001011	JDR120V-100WL/NFL24	67
100	1001016	JDR120V-100WL/FL38	67
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60	1001021	JDR120V-60W/FL38	67
75	1001834	JDR120V-75W/SP14	67
75	1001022	JDR120V-75W/NFL20/FG	67
75	1001031	JDR120V-75W/NFL24	67
75	1001836	JDR120V-75W/FL30	67
75	1001029	JDR120V-75W/FL30/FG	67
100	1001014	JDR120V-100WL/SP10	67
100	1001012	JDR120V-100WL/NFL20	67
100	1001017	JDR120V-100WL/FL30	67
JP – R7s Base (OAL ≈ 119.6mm)			
500	1000502	FDN, JP120V-500WCF6	32
500	1000500	FDN, JP120V-500WC6	32
500	1001084	JP220V-500WC*	32
550	1001089	JP225V-550WC*	32
750	1000327	EMD, JP120V-750WCF	32
750	1000299	EJG, JP120V-750WC	32
800	1000329	EMF, JP240V-800WCF	32
800	1000328	EME, JP240V-800WC1UA	32
1000	1000489	FCM, JP120V-1000WC1	32
1000	1000533	FHM, JP120V-1000WCF1	32
1000	1000298	EJD, JP185V-1000WS*	32
800	1001081	JP125V-800W*	33
500	1000652	GDA, JP120V-500WC2	33
500	1000653	GDA/220V, JP220V-500WC2/UA*	33
500	1000654	GDA/240V, JP245V-500WC	33
1000	1000523	FFT, JP120V-1000WC2	33
1500	1000529	FGT, JP120V-1500WCF	33
1500	1000499	FDB, JP120V-1500WC	33
2000	1000524	FFW, JP120V-2000WC	33
1000	1000310	EKM, JP225V-1000WCL*	33
1250	1001086	JP225V-1250WC1*	33
JPD – R7s-18, RX7s** Base			
150	1001106	JPD25V-150WG1	34
300	1000292	EHP, JPD120V-300WG	34
375	1000230	DWZ, JPD30V-375W	34
400	1000293	EHR, JPD120V-400WG	34
400	1000498	FDA, JPD120V-400W	34
420	1000472	FAL, JPD120V-420WC	34
420	1000518	FFM, JPD120V-420WC1	34
600	1000486	FCB, JPD120V-600WD	34
600	1000517	FFJ, JPD120V-600WCG	34
600	1000508	FEA, JPD240V-600WC*	34
650	1000471	FAD, JPD120V-650WC	34
650	1000482	FBX, JPD120V-650WCF	34
650	1000229	DWY/FAB, JPD120V-650WS	34
650	1000485	FCA, JPD120V-650WSF*	34
650	1001103	JPD220V-650WC*	34
800	1000238	DXX/220V, JPD220V-800WC1	34
800	1000240	DXX/240V, JPD240V-800WC	34
1000	1000236	DXW, JPD120V-1000WC5	34
1000	1000234	DXN, JPD120V-1000WS1	34
1000	1000511	FER, JPD120V-1000WC6**	34
1000	1000228	DWT, JPD120V-1000WB1**	34
1000	1000068	BRH, JPD120V-1000WC1	34
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JPD – R7s-18 Base			
1000	1000241	DYA, JPD120V-1000WC2	34
1000	1000483	FBY, JPD120V-1000WC5F	34
1000	1001102	JPD220V-1000WC	34
1050	1000322	ELJ, JPD120V-1050WS*	34
2000	1000516	FEY, JPD120V-2000WC	34
2000	1000515	FEX/240V, JPD240V-2000WC1*	34
JR – 12V, MR-16, GU5.3 Base			
10	1001107	JR12V-10W/NFL21	60
10	1001108	JR12V-10W/NFL21/FG	60
10	1003154	JR12V-10W/FL32	60
10	1002143	JR12V-10W/NFL24/A	62
20	1000366	ESX, JR12V-20W/SP12	60
20	1000370	ESX/FG, JR12V-20W/SP12/FG	60
20	1000028	BBF, JR12V-20W/NFL24	60
20	1000037	BBF/FG, JR12V-20W/NFL24/FG	60
20	1000000	BAB, JR12V-20W/FL36	60
20	1000014	BAB/FG, JR12V-20W/FL36/FG	60
20	1000001	BAB/60, JR12V-20W/WFL60	60
20	1000004	BAB/60/FG, JR12V-20W/WFL60/FG	60
35	1000548	FMT, JR12V-35W/SP12	60
35	1003673	FMT/FG/EUROSAVER	64
35	1000551	FMT/FG, JR12V-35W/SP12/FG	60
35	1000552	FMV, JR12V-35W/NFL24	60
35	1000559	FMV/FG, JR12V-35W/NFL24/FG	60
35	1003674	FMV/FG/EUROSAVER	64
35	1000564	FMW, JR12V-35W/FL36	60
35	1000573	FMW/FG, JR12V-35W/FL36/FG	60
35	1003676	FMW/FG/EUROSAVER	64
35	1003675	FMW/50/FG/EUROSAVER	64
35	1000565	FMW/60, JR12V-35W/WFL60	60
35	1000566	FMW/60/FG, JR12V-35W/WFL60/FG	60
37	1003706	JR12V-37W/SP/FG/IR	63
37	1003705	JR12V-37W/NFL/FG/IR	63
37	1003704	JR12V-37W/FL/FG/IR	63
37	1003707	JR12V-37W/WFL/FG/IR	63
50	1000398	EXN, JR12V-50W/FL36	60
50	1000405	EXN/FG, JR12V-50W/FL36/FG	60
50	1003689	EXN/FG/EUROSAVER	64
50	1000416	EXT, JR12V-50W/SP12	60
50	1000419	EXT/FG, JR12V-50W/SP12/FG	60
50	1003690	EXT/FG/EUROSAVER	64
50	1000424	EXZ, JR12V-50W/NFL24	60
50	1000430	EXZ/FG, JR12V-50W/NFL24/FG	60
50	1003691	EXZ/FG/EUROSAVER	64
50	1000589	FNV, JR12V-50W/WFL60	60
50	1000592	FNV/FG, JR12V-50W/WFL60/FG	60
50	1003692	FNV/FG/EUROSAVER	64
50	1003710	JR12V-50W/SP/FG/IR	63
50	1003709	JR12V-50W/NFL/FG/IR	63
50	1003708	JR12V-50W/FL/FG/IR	63
50	1003711	JR12V-50W/WFL/FG/IR	63
75	1000451	EYF, JR12V-75W/SP12	61
75	1000452	EYF/FG, JR12V-75W/SP12/FG	61
75	1000454	EYJ/EZZ, JR12V-75W/NFL24	61
75	1000455	EYJ/EZZ/FG, JR12V-75W/NFL24/FG	61
75	1000444	EYC, JR12V-75W/FL36	61
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75	1000446	EYC/60/FG, JR12V-75W/WFL60/FG	61
JR – 24V, MR-16, GU5.3 Base			
20	1001112	JR24V-20W/SP12*	61
20	1001114	JR24V-20W/FL36	61
35	1003110	JR24V-35W/SP12*	61
35	1003111	JR24V-35W/NFL24*	61
35	1003112	JR24V-35W/FL36	61
50	1003113	JR24V-50W/SP12	61
50	1003114	JR24V-50W/NFL24	61
50	1003115	JR24V-50W/FL36	61
75	1003281	JR24V-75W/FL36/FG	61
50	1000580	FNC/FG, JR12V-50W/FG	65
50	1000582	FND/FG, JR12V-50W/FG	65
50	1000584	FNE/FG, JR12V-50W/FG	65
50	1000586	FNF/FG, JR12V-50W/FG	65
50	1003132	EXT/OR/FG, JR12V-50W/FG	65
50	1003200	EXT/MG/FG, JR12V-50W/FG	65
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42	1000461	EYR, JR12V-42W/SP12	61
42	1000462	EYS, JR12V-42W/NFL23	61
42	1000460	EYP, JR12V-42W/FL38	61
65	1000595	FPA, JR12V-65W/SP13	61
65	1000596	FPB, JR12V-65W/FL38	61
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1000	1003273	VL1K240V, JS240V-1000WC/V*	48
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2000	1000094	BWA, JS120V-2000W/G38	49
2000	1000155	CYX, JS120V-2000WC	49
5000	1000215	DPY, JS120V-5000WC	49
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150	1001883	JT120V-150WG*	50
250	1001141	JT120V-250WG	50
250	1001142	JT120V-250WGF*	50
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500	1003516	JT220V-550WC1/E40*	50
1000	1001134	JT120V-1000WB	50
1000	1003361	JT120V-1000WC	50
1000	1003517	JT220V-1000WC1/E40*	50
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150	5001381	MHL-150	72

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1200	5000062	MHL-1000/1	72
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100	5000789	MHR-100D/L	75
150	5000834	MHR-150N	75
250	5001377	MHR-250N	75
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20	1003116	MR-8 12V-20W/N/FG	52
20	1003117	MR-8 12V-20W/W/FG	52
35	1003118	MR-8 12V-35W/N/FG	52
35	1003119	MR-8 12V-35W/W/FG	52
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300	1001453	300PAR56/MFL	68
300	1001457	300PAR56/WFL	68
500	1001282	Q500PAR56/NSP*	68
500	1001281	Q500PAR56/MFL	68
500	1001284	Q500PAR56/WFL	68
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500	1001495	500PAR64/NSP	68
500	1001493	500PAR64/MFL, EMEP base	68
500	1001497	500PAR64/WFL	68
1000	1000519	FFN, PAR64/VNSP	68
1000	1000520	FFP, PAR64/NSP	68
1000	1000521	FFR, PAR64/MFL	68
1000	1000522	FFS, PAR64/WFL	68
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1.6	1003732	Direct LED Light Engine / Red	18
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3.8	1003734	Direct LED Light Engine / Green	18
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3.5	1003729	Fiber LED Light Engine / Blue	18
3.8	1003730	Fiber LED Light Engine / Green	18
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4	1003602	SYNERGIE, MR16, NFL24, DL	14
4	1003603	SYNERGIE, MR16, FL34, DL	14
4	1003604	SYNERGIE, MR16, WFL50, DL	14
4	1003609	SYNERGIE, MR16, SP12, NW	14
4	1003610	SYNERGIE, MR16, NFL24, NW	14
4	1003611	SYNERGIE, MR16, FL34, NW	14
4	1003612	SYNERGIE, MR16, WFL50, NW	14
4	1003605	SYNERGIE, MR16, SP12, WW	14
4	1003606	SYNERGIE, MR16, NFL24, WW	14
4	1003607	SYNERGIE, MR16, FL34, WW	14
4	1003608	SYNERGIE, MR16, WFL50, WW	14
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1000	5000177	UA-DF1	28
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150	5001452	UHI-S150/E26/GREEN*	70
150	5001498	UHI-S150/E26/MAGENTA*	70
175	5001455	UHI-S175/E26/BLUE	70
175	5001454	UHI-S175/E26/GREEN	70
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250	5001484	UHI-S250/E39/BLUE	70
250	5001485	UHI-S250/E39/GREEN*	70
250	5001486	UHI-S250/E39/MAGENTA*	70
400	5000947	UHI-S400BL, BLUE	70
400	5000946	UHI-S400GR, GREEN	70
400	5000948	UHI-S400MG, MAGENTA	70
1000	5001189	UHI-S1000BL, BLUE	70
1000	5001188	UHI-S1000GR, GREEN*	70
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1200	5002013	USR-1200/2	74
2500	5000280	USR-2500 HR	74
4000	5002014	USR-4000 HR*	74
UXL			
300	5000343	UXL-300D-0*	76
300	5000346	UXL-302D-0	76
350	5000350	UXL-351E-0	76
500	5000360	UXL-500D-0*	76
500	5000362	UXL-502HS-0	76
550	5000368	UXL-553	76
1000	5002060	UXL-10S*	76
1000	5002061	UXL-16S	76
1000	5001075	UXL-10SB	76
1000	5000316	UXL-1000D-0*	76
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1450	5001435	UXL-16SCB*	77
1750	5000337	UXL-2000PR*	77
2000	5001062	UXL-20FS	77
2000	5001434	UXL-20SC	77
2000	5001063	UXL-2000FS	77
2000	5000336	UXL-2000HA*	77
2000	5001688	UXL-2000HR	77
2500	5001077	UXL-25SC	77
3000	5001079	UXL-30SC	77
3000	5001064	UXL-3000FS	78
3000	5002175	UXL-3000HR	78
4000	5000631	UXL-40SC	78
4000	5002082	UXL-40SCH	78
4000	5002074	UXL-4000HA*	78
5000	5002044	UXL-50SC*	78
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20	1000532	64250 use FHE/ESB, JC6V-20W/G4	37
300	1000974	64512 use JCV120V-300WC (FNS)	40
300	1001762	64514 use JCD120V-300W	40
300	1002253	64516 use JCD220V-300W	39
650	1000983	64535 use JCV120V-650WC	40
1000	1001822	64573 use JCV120V-1000WC4	40
50	1000071	64610 use BRL	39
75	1000929	64617 use JCR/M12V-75W/HO	54
100	1000921	64624 use JCR/M12V-100W	54
100	1000490	64625 use FCR, JC12V-100W	41
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150	1000492	64640 use FCS, JC24V-150WUI	39
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150	1000503	64664 use FDS/DZE, JC24V-150W	43
400	1002141	64664 use EVD/L, JC36V-400H1	39
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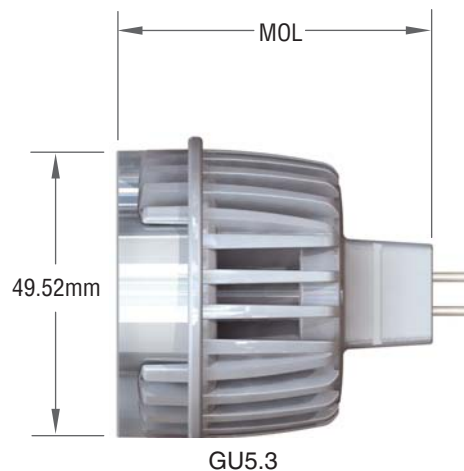
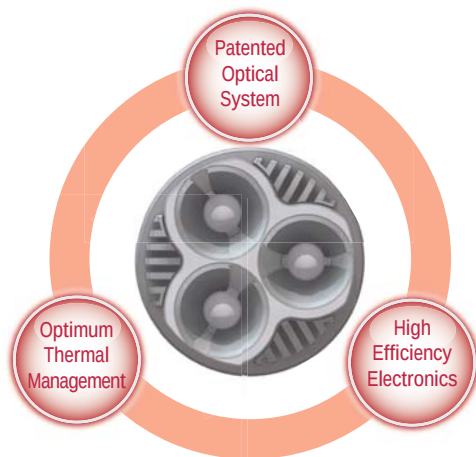
MR-16 SYNERGIE™ LED SERIES

- 80% Energy-Savings vs. Halogen MR-16
- Long Life 50,000 Hours Average Life
- Replacement for Halogen MR-16
- Dimmable
- Low Voltage 12 Volts
- Cool Beam – Cool Operation
- No UV, IR or Mercury
- Lead Free, RoHS Compliant

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension		Color Temp K	Beam		Avg Life h	Burn Position
			MOL mm	CRI		Angle	Spread		
SYNERGIE™, LED Reflector 2-Pin Base – GU5.3									
4	1003601	SYNERGIE LED MR16, SP12, DL	49.46	70	6500	12°	Spot	50000	Univ
4	1003602	SYNERGIE LED MR16, NFL24, DL	48.00	70	6500	24°	Narrow Flood	50000	Univ
4	1003603	SYNERGIE LED MR16, FL34, DL	48.26	70	6500	34°	Flood	50000	Univ
4	1003604	SYNERGIE LED MR16, WFL50, DL	46.23	70	6500	50°	Wide Flood	50000	Univ
4	1003609	SYNERGIE LED MR16, SP12, NW	49.46	80	4200	12°	Spot	50000	Univ
4	1003610	SYNERGIE LED MR16, NFL24, NW	48.00	80	4200	24°	Narrow Flood	50000	Univ
4	1003611	SYNERGIE LED MR16, FL34, NW	48.26	80	4200	34°	Flood	50000	Univ
4	1003612	SYNERGIE LED MR16, WFL50, NW	46.23	80	4200	50°	Wide Flood	50000	Univ
4	1003605	SYNERGIE LED MR16, SP12, WW	49.46	80	3100	12°	Spot	50000	Univ
4	1003606	SYNERGIE LED MR16, NFL24, WW	48.00	80	3100	24°	Narrow Flood	50000	Univ
4	1003607	SYNERGIE LED MR16, FL34, WW	48.26	80	3100	34°	Flood	50000	Univ
4	1003608	SYNERGIE LED MR16, WFL50, WW	46.23	80	3100	50°	Wide Flood	50000	Univ

From the world leader in MR-16 lamp technology comes the world's most efficient solid state LED MR-16 lamp. Synergie's™ state-of-the-art technology allows this 4W LED MR-16 to directly replace 20-25W halogen MR-16s. No false claims, just outstanding performance that yields 80% energy-savings. In fact, Synergie™ is the first LED MR-16 lamp to meet the efficiency requirements of California's stringent Title 24 regulations.

Rated at 50,000 hours, Synergie™ has a true life rating of more than 10 times that of standard MR-16 lamps on the market today. Synergie™ is the premium choice for those applications where frequency of lamp changes and cost of ownership are significant factors.



H (ft)		12°			
Ø (ft)	E (fc)	DL	NW	WW	
0.66	3.3	399	344	309	
Maximum Intensity (Cd)		4,229	3,646	3,275	

H (ft)		24°			
Ø (ft)	E (fc)	DL	NW	WW	
1.31	3.3	136	105	97	
Maximum Intensity (Cd)		1,442	1,113	1,028	

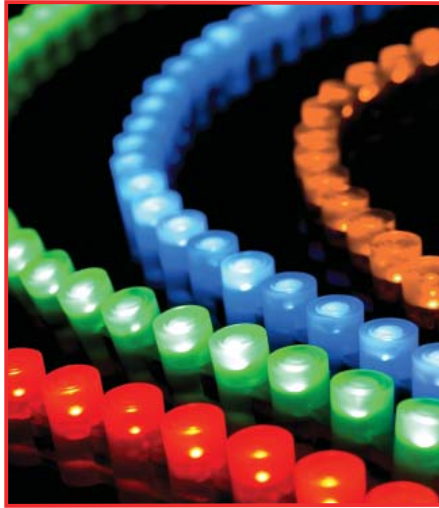
H (ft)		34°			
Ø (ft)	E (fc)	DL	NW	WW	
2.00	3.3	62	49	41	
Maximum Intensity (Cd)		657	519	435	

H (ft)		50°			
Ø (ft)	E (fc)	DL	NW	WW	
3.06	3.3	40	28	25	
Maximum Intensity (Cd)		424	297	265	

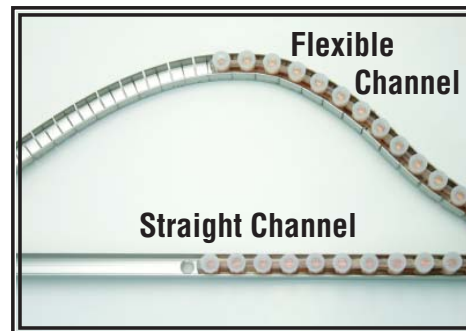
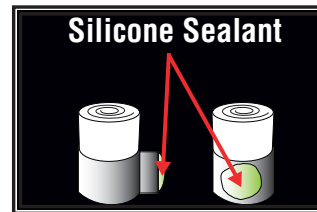
CHROMA-LUX™ SERIES

- Flexible Construction
- Long Life 50,000 Hours Average Life
- Quick & Easy Installation
- Low Profile
- Cool Operation
- UV & IR Free
- Environmentally Friendly
- Water Resistant

Watts (W)	Ushio Ordering Code	Ushio Lamp Description	Operating (V)	Height (mm)	Length (mm)	Width (mm)	Weight (oz)	Environmental Standard
CHROMA-LUX™								
6	1003664	6W CHROMA-LUX/RED	12V DC	12.95	949.96	7.11	2.4 oz.	IP67
6	1003663	6W CHROMA-LUX/ORANGE	12V DC	12.95	949.96	7.11	2.4 oz.	IP67
6	1003662	6W CHROMA-LUX/GREEN	12V DC	12.95	949.96	7.11	2.4 oz.	IP67
6	1003661	6W CHROMA-LUX/BLUE	12V DC	12.95	949.96	7.11	2.4 oz.	IP67
N/A	1003666	CHROMA-LUX AL STRAIGHT CHANNEL	N/A	10.16	949.96	10.16	–	–
N/A	1003665	CHROMA-LUX AL FLEXIBLE CHANNEL	N/A	10.16	949.96	10.16	–	–



CHROMA-LUX™

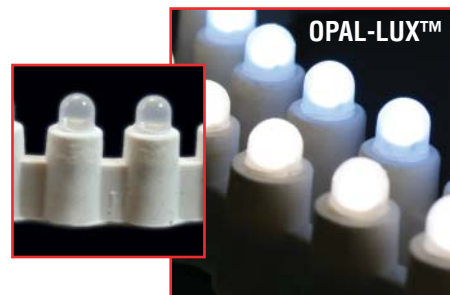


PEARL-LUX™ & OPAL-LUX™ SERIES

- Architectural Grade
- Silicone Coated – IP67 Rated
- Flexible
- Easy to Install
- Cool Operations
- Energy Efficient
- No UV, IR or Mercury
- Long Life Up to 50,000 Hours Average Life
- Lead Free, RoHS Compliant

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions				Viewing Angle degree	Approx Lumens lm	Color Temp K	Commercial Life h
			Volts (V)	Height (mm)	Length (mm)	Width (mm)				
PEARL-LUX™ LED STRINGS										
6	1003620	6W PEARL-LUX / WARM WHITE	12	16.51	999.99	7.87	45°	83	2700	50,000
6	1003621	6W PEARL-LUX / WHITE	12	16.51	999.99	7.87	45°	180	6500	50,000
N/A	1003622	PEARL-LUX STRAIGHT CHANNEL	N/A	10.92	999.99	20.01	N/A	N/A	N/A	N/A
N/A	1003623	PEARL-LUX FLEXIBLE CHANNEL	N/A	10.92	999.99	20.01	N/A	N/A	N/A	N/A
N/A	1003643	PEARL-LUX STR. ALUM. CHANNEL	N/A	10.92	999.99	20.01	N/A	N/A	N/A	N/A
N/A	1003644	PEARL-LUX FLEX ALUM. CHANNEL	N/A	10.92	999.99	20.01	N/A	N/A	N/A	N/A
OPAL-LUX™ LED STRINGS										
6.6	1003720	6W OPAL-LUX/WARM WHITE	12	16.51	999.99	7.11	100°	74	3200	35,000
6.6	1003719	6W OPAL-LUX/WHITE	12	16.51	999.99	7.11	100°	198	7000	35,000

All dimensions shown in inches unless otherwise noted.



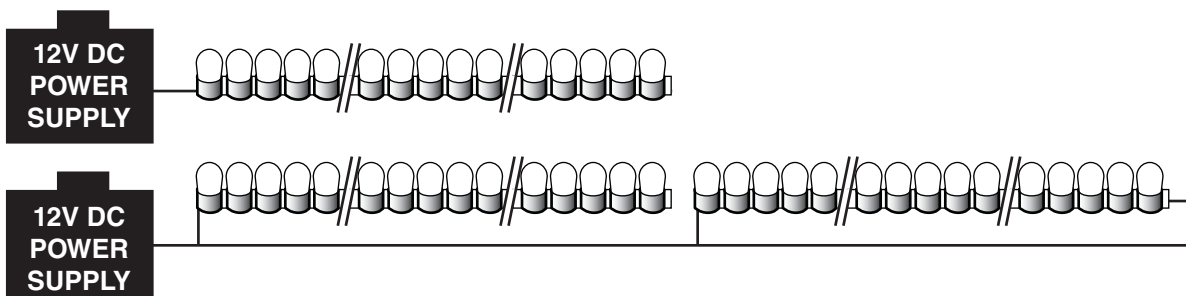
INSTALLATION INFORMATION:

Power Supply Information

1. The LED strings contain no protection against short circuits, overload or overheating. Therefore, it is absolutely necessary to operate the strings on an electrically stable power supply with protection against the above mentioned safety risks.
2. The LED strings require a 12V DC power supply. Each LED string has a maximum load rating of 6 watts for Pearl-Lux™ and 7 watts for Opal-Lux™.
3. Never operate an LED load in excess of the capacity of the power supply.

Electrical Connection

1. The LED strings are equipped with polarized wires. To ensure correct electrical polarity, connect the low voltage load side of the power supply to the LED strings. When finished you may use silicone, shrink tubing, electrical tape or a wire nut to properly manage and protect the contact. Incorrect electrical polarity may destroy the strings.
2. Up to 3 LED strings can be connected in series to a single power supply connection. For large installations you may connect multiple (3 string sets) in parallel.



U-LED™ SERIES

- Innovative LED filament design
- Long Life 40,000 Hours Average Life
- No UV, IR or Mercury
- Lead Free



Watts	Ushio	Ushio	Volts	Dimensions mm		Approx Lumens	Color Temp	Avg Life	Burn Position	Fig No
	Ordering	Lamp		Dia	MOL					
	Code	Description		(A)	(B)					
ULED™, Mini Candelabra Base – E12										
0.6	1003701	U-LED Candle	120	32.0	101.1	36	2700	40,000	Univ	1
0.6	1003702	U-LED Globe	120	50.0	76.2	36	2700	40,000	Univ	2

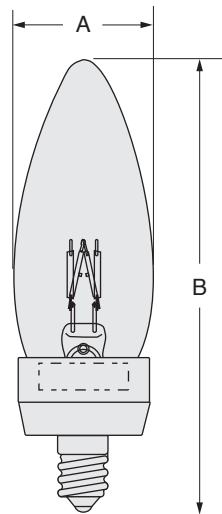


Fig.1

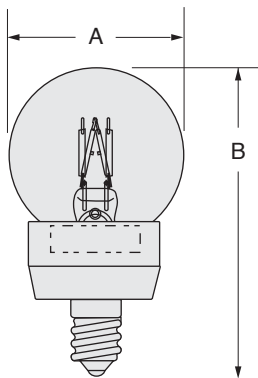


Fig.2

DLS & FLS LED SYSTEM Engineered Lighting Solutions

- Energy-Savings
- Dimmable
- Long Life
- Waterproof
- Low Voltage

Watts	Ushio Ordering Code	Ushio Lamp Description	Luminous Intensity (lm) @ 350mA	Forward Voltage	Max DC Forward Current	Color Temp K	Color Spectrum	CRI
DLS LED								
3.3	1003731	Direct LED Light Engine / White	139	3.3V @ 1000mA	1500mA	6500	—	75
1.6	1003732	Direct LED Light Engine / Red	45.7	2.3V @ 700mA	700mA	—	620-630nm	—
3.5	1003733	Direct LED Light Engine / Blue	30.6	3.5V @ 1000mA	1000mA	—	465-480nm	—
3.8	1003734	Direct LED Light Engine / Green	93.9	3.8V @ 1000mA	1000mA	—	520-535nm	—
FLS LED								
3.3	1003727	Fiber LED Light Engine / White	139	3.3V @ 1000mA	1500mA	6500		75
1.6	1003728	Fiber LED Light Engine / Red	45.7	2.3V @ 700mA	700mA	—	620-630nm	—
3.5	1003729	Fiber LED Light Engine / Blue	30.6	3.5V @ 1000mA	1000mA	—	465-480nm	—
3.8	1003730	Fiber LED Light Engine / Green	93.9	3.8V @ 1000mA	1000mA	—	520-535nm	—
	1003752	Fiber LED 10mm Fiber Cable (Fiber is sold in 8 foot sections)						
	1003740	Fiber LED 10mm Fiber-Optic Cable Cap						
	1003741	Fiber LED Reflective Material Sheet (23.62"W X 59.05"H)						
	1003742	Fiber LED Reflective White Optic Sheet (Cut to size and sold by linear feet)						
Power Supplies for DLS & FLS								
	1003735	20W 700mA Low Volt Power Supply						
	1003736	20W 1000mA Low Volt Power Supply						
	1003737	25W 700mA Low Volt Power Supply						
	1003738	25W 1040mA Low Volt Power Supply						

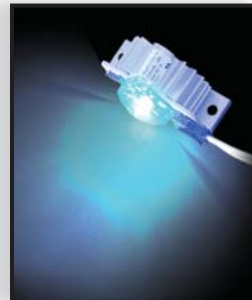
Lumen Maintenance 70% @ 50,000 Hours (@350mA)
Maximum Fiber Length (per module): 4-8 feet
Fiber Diameter 10mm
Engine Dimensions: 2.25" Wide; 1.5" Height; 1.6" Deep
Module Weight 45g (1.6 oz.)

Max Junction Temperature 150°C
Certifications: RoHS Compliant; UL List for damp & wet locations
Power Supply: 12-36V Constant current drivers (class 2)
Fastening: Mechanical or adhesive

FLS LED



DLS LED

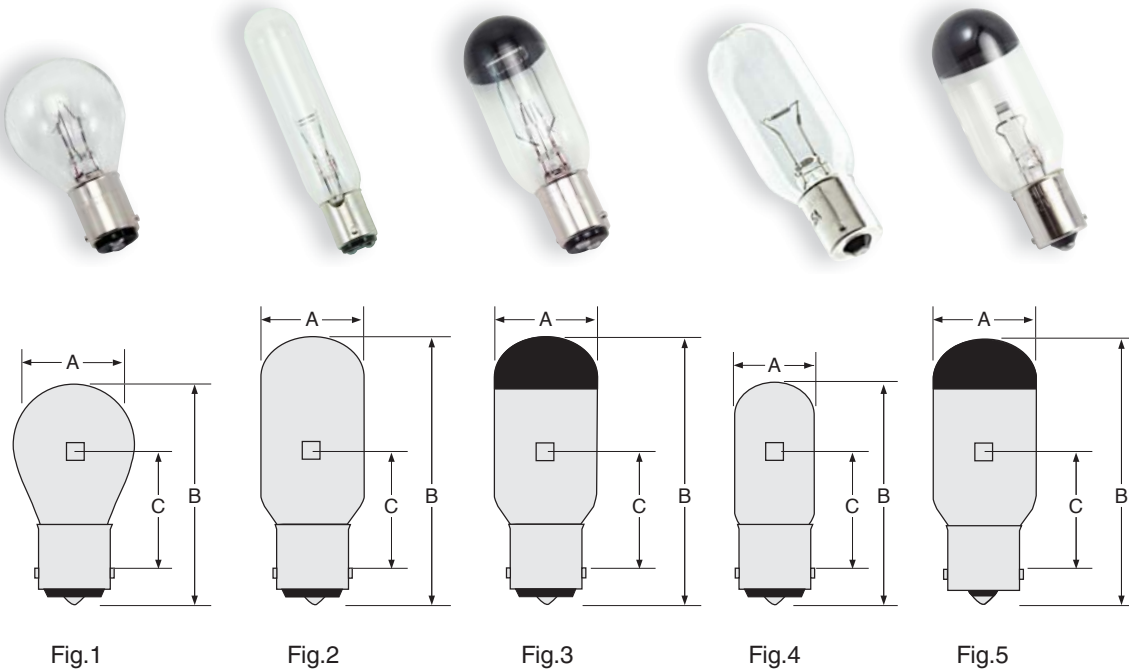


SLIDE, FILM & OPTICAL PROJECTION LAMPS

- Double Contact Bayonet Base - BA15d
- Single Contact Bayonet Base BA15s
- Operate Base Down (except as noted)

Watts	Ushio	Ushio	Volts	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
	Ordering Code	Lamp Description		Dia	MOL	LCL						
				(A)	(B)	(C)						
Double Contact Bayonet Base – BA15d												
30	1000060	BLC	120	35	60.3	34.9	CC-2V	400	2775	50	BD/Hor	1
35	1000260	EAJ	12	20	101.6	47.6	C-8	650	—	300	Univ	2
50	1000062	BLX	120	35	60.3	34.9	CC-2V	780	2850	50	BD/Hor	1
75	1000066	BNF	120	35	60.3	34.9	CC-2V	1300	2900	50	BD/Hor	1
75	1000128	CBX/CBS	120	25	79.4	34.9	CC-13	1250	2950	50	BD	3
100	1000132	CEA/CEB/CDK	120	25	78.0	35.0	CC-13	1800	2970	50	BD	3
150	1000135	CGP/CFK	120	25	92.1	34.9	CC-13	2900	3100	50	BD	3
200	1000051	BEJ	120	38	66.7	34.9	CC-2V	4600	3100	25	BD	2
Single Contact Bayonet Base – BA15s												
50	1000103	BXR*	10	25	78.0	40.5	C-6	900	—	100	—	4
75	1000100	BXE	10	25	75.0	44.5	C-8	1700	—	100	BD	3
100	1000065	BMV	120	35	60.3	34.9	CC-13	1860	2950	50	BD/Hor	1
100	1000131	CDS/CDX	120	25	79.4	34.9	CC-13	1800	2900	50	BD	5
120	1000133	CEM	120	25	79.4	34.9	CC-13	1950	3000	200	BD	5
150	1000136	CHK	120	25	92.1	34.9	CC-13	2995	2850	500	BD	5
300	1000137	CLS/CLG	120	27	104.8	34.9	C-13	7700	3200	25	BD	5
300	1000139	CMV/CMT	120	27	104.8	34.9	C-13D	7300	3100	25	BD	5
300	1000151	CYC	120	29.5	81.0	34.9	C-13	7400	3150	25	BD	5

* Special Order Item



• Mogul Screw Base - E39

Watts	Ushio	Ushio	Volts	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
	Ordering Code	Lamp Description		Dia (A)	MOL (B)	LCL (C)						
Mogul Screw Base – E39												
1000	1001611	DKZ	120	164.0	330	241.3	CC-8	28000	3200	750	Univ	1
1000	1000213	DPT	120	64.0	230	125.0	C-13	29000	3200	50	BD	2
1000	1000219	DRW	120	64.0	230	125.0	C-13D	27400	3250	25	BD	2

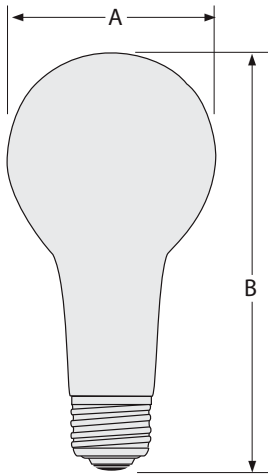


Fig.1

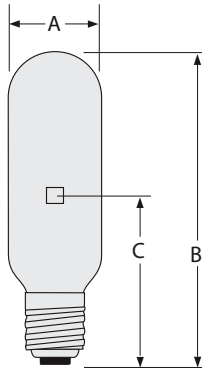


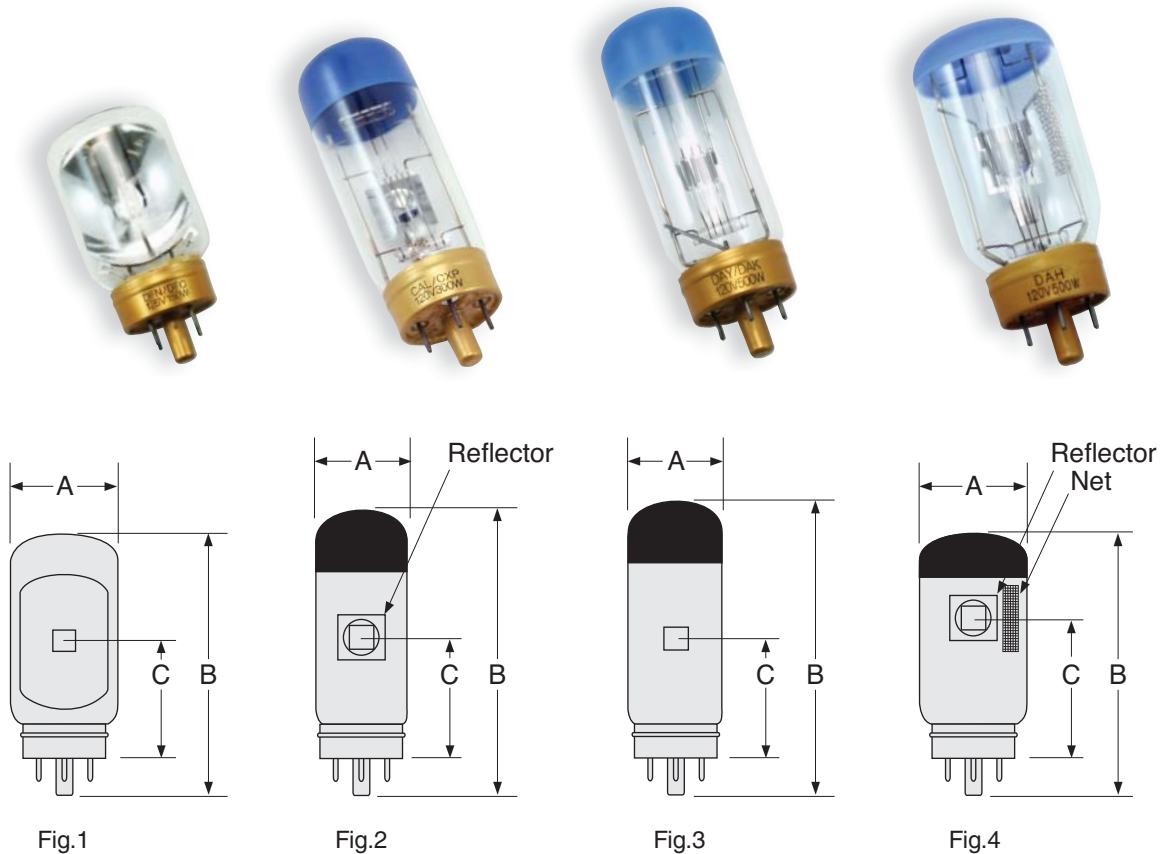
Fig.2

- 4-Pin Base - G17q-7, GX17q-7
- 1 9/16" (39.7mm), 1 3/4" (44.5mm) Light Center Length
- Proximity & Opaque Reflector Lamps



Watts	Ushio	Ushio	Volts	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
	Ordering Code	Lamp Description		Dia (A)	MOL (B)	LCL (C)						
4-Pin Base – G17q-7 - 1 9/16" (39.7mm), 1 3/4" (44.5mm) LCL												
80	1000192	DGB/DMD	30	38.0	85.7	39.7	CC-6 ●	—	3200	15	BD	1
150	1000188	DFN/DFC	125	38.0	81.0	39.7	CC-6 ●	—	3150	15	Horiz	1
300	1000119	CAL/CXP	120	32.0	101.6	39.7	C-13 ●	—	3200	25	BD	2
500	1000164	DAY/DAK	120	32.0	104.0	39.7	C-13D ○	12500	3200	25	BD	3
500	1000156	CZA/CZB	120	32.0	101.6	39.7	C-13D ○	—	3300	25	BD	2
500	1000161	DAH	120	38.0	93.0	44.5	C-13D ●	—	3300	200	Horiz	4
500	1000183	DEK/DFW/DHN	120	38.0	89.0	44.5	C-13D ●	—	3200	25	Horiz	4
4-Pin Base – GX17q-7 - 1 9/16" (39.7mm) LCL												
150	1000165	DCA	21.5	38.0	90.5	39.7	CC-6 ●	—	3250	15	BD/Hor	1

- Opaque Reflector
○ Proximity Reflector



- 4-Pin Base - G17t-7
- 1 9/16" (39.7mm) Light Center Length
- Proximity & Opaque Reflector Lamps

Watts	Ushio Ordering Code	Ushio Lamp Description	Volts	Dimensions mm			Filament Type	Color Temp K	Avg Life h	Burn Position	Fig No
				Dia	MOL	LCL					
				(A)	(B)	(C)					
4-Pin Base – G17t-7 - 1 9/16" (39.7mm) LCL											
500	1000047	BCK	120	19.5	88.9	39.7	C-13D ○	3250	50	BD/Hor	1

○ Proximity Reflector

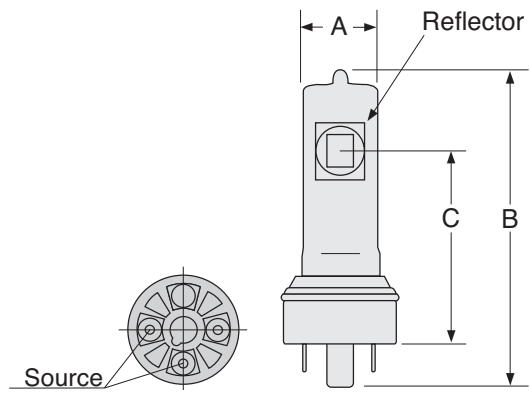


Fig.1

FILM & OVERHEAD PROJECTION LAMPS

- Medium Prefocus Base - P28s
- 2 3/16" (55.5mm) & 3 1/2" (88.9mm) Light Center Length
- Medium Screw Base - E26
- 3" (76mm) Light Center Length

Watts	Ushio	Ushio	Volts	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
	Ordering	Lamp		Dia	MOL	LCL						
	Code	Description		(A)	(B)	(C)						
Medium Prefocus Base – P28S - 2 3/16" (55.5mm) LCL												
500	1000160	CZX/DAB	120	32.0	146	55.6	C-13D	12500	3200	25	BD	1
500	1000179	DEB	120	38.0	144	88.9	C-13D	9000	2850	800	BU	2
500	1000205	DMX	120	64.0	144	55.5	C-13	13200	3200	50	BD	3
500	1000211	DNW	120	64.0	145	55.5	C-13	10000	3050	500	BD/Hor	3
750	1000170	DDB/DDW	120	38.0	146	55.6	C-13D	20000	3250	25	BD	1
750	1000212	DPJ*	120	64.0	144	55.5	C-13D	19500	3200	25	BD	3
1000	1000217	DRB/DRC	120	64.0	144	55.5	C-13	28000	3250	50	BD	3
1000	1000218	DRS	120	64.0	144	55.5	C-13D	27400	3250	25	BD	3
1000	1000227	DWK	230	64.0	146	55.6	C-13	25000	3100	50	BD	3
Medium Screw Base – E26 - 3" (76mm) LCL												
500	1000204	DMS	120	64.0	144	76.2	C-13	13200	3200	50	BD	4
750	1000169	DCX	120	38.0	139.7	76.2	C-13D	19500	3200	25	BD	5

* Special Order Item

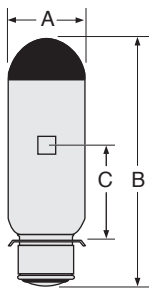


Fig.1

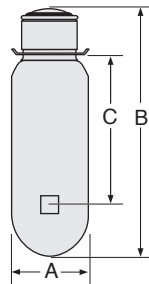


Fig.2

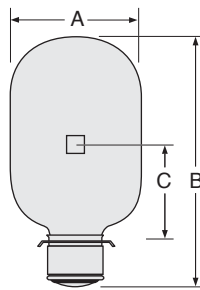


Fig.3

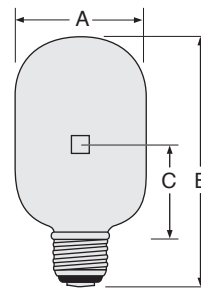


Fig.4

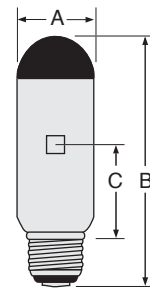


Fig.5

- Projection Sound Lamps
- Single Contact Prefocus Base - P30s
- Mogul Prefocus Base - P40s

Watts	Ushio Ordering Code	Ushio Lamp Description	Volts	Amps	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
					Dia	MOL	LCL						
					(A)	(B)	(C)						
Single Contact Prefocus Base – P30s													
3	1000025	BAK*	4	0.75	16	50	28.5	C-6	30	—	200	Univ	1
3	1000070	BRK	4	0.75	16	60	28.5	C-8	30	—	50	Univ	1
6	1000079	BSS/BSB	6	1.0	16	55	28.5	C-8	70	—	100	Univ	1
34	1000099	BXB*	8.5	4.0	25	78	41.3	C-8	36	—	100	BD/Hor	1
50	1000148	CXL/CXR	8	—	43	96	47.0	C-6	36	3200	25	BD	2
Mogul Prefocus Base – P40s													
1500	1000221	DTJ	120	—	64	242	87.3	C-13D	42500	3200	25	BD	3

* Special Order Item

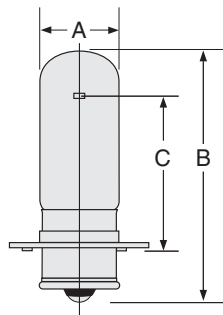


Fig.1

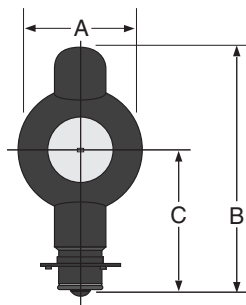


Fig.2

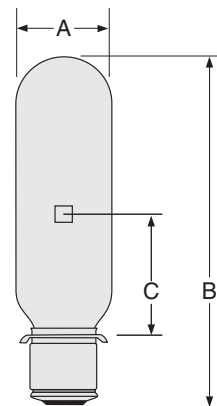
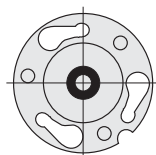


Fig.3



• Medium Screw Base - E26

Watts	Ushio	Ushio	Volts	Dimensions mm		Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
	Ordering	Lamp		Dia	MOL					
	Code	Description		(A)	(B)					
Medium Screw Base – E26										
75	1001266	PH140, S-14	120	44.0	86.0	1150	2900	50	Univ	1
75	1001267	PH211, A-21	115-125	67.0	126.0	1000	3000	100	Univ	2
150	1001268	PH212, A-21	115-125	67.0	126.0	2300	3050	100	Univ	2
250	1001269	PH213, A-21 NO.1	115-125	67.0	126.0	7000	3400	3	Univ	2

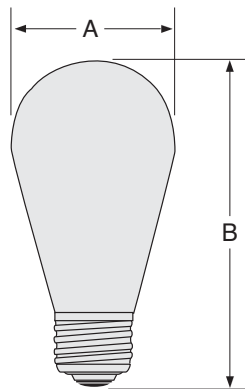


Fig.1

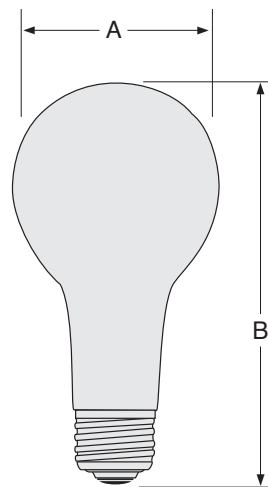


Fig.2

- Medium Screw Base - E26
- Inside Frosted & Blue Bulbs
- 115-120 Volts

Watts	Ushio Ordering Code	Ushio Lamp Description	Volts	Dimensions mm		Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Application	Fig No
				Dia (A)	MOL (B)						
Medium Screw Base – E26											
250	1000026	BBA, A-21 NO.1	120	67.0	126.0	8500	3400	3	Univ	Photoflood	1
250	1000046	BCA, A-21 NO. B1 BLUE	120	67.0	126.0	2970	5760	3	Univ	Photoflood	1
250	1000265	ECA, A-23	120	75.0	140.0	6500	3200	20	Univ	Photoflood	1
300	1000024	BAH, INC115V-300W	115	66.68	125.4	9300	3200	20	Univ	Photocopy	1
500	1000263	EBV, PS-25 NO.2	120	80.0	152.0	17000	3400	6	Univ	Photoflood	2
500	1000264	EBW, PS-25 NO. B2/BLUE	120	80.0	152.0	6680	4840	6	Univ	Photoflood	2
500	1000266	ECT, PS-25 3200K	120	79.38	152.0	13650	3200	60	Univ	Photoflood	2

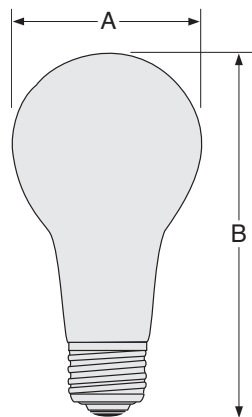


Fig.1

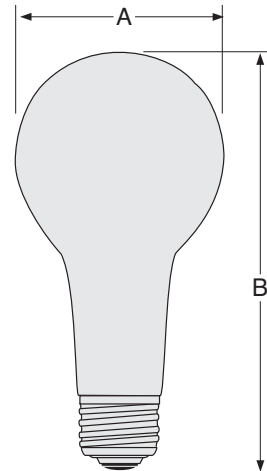


Fig.2

- Medium Screw Base - E26
- 120 Volts



Watts	Ushio	Ushio	Volts	Dimensions mm		Color	Avg	Burn	Fig
	Ordering	Lamp		Dia	MOL	Temp	Life	Position	No
	Code	Description		(A)	(B)	K	h		
Medium Screw Base – E26									
500	1000231	DXB, INC120V-500W	120	127.0	168.3	3400	6	Univ	1

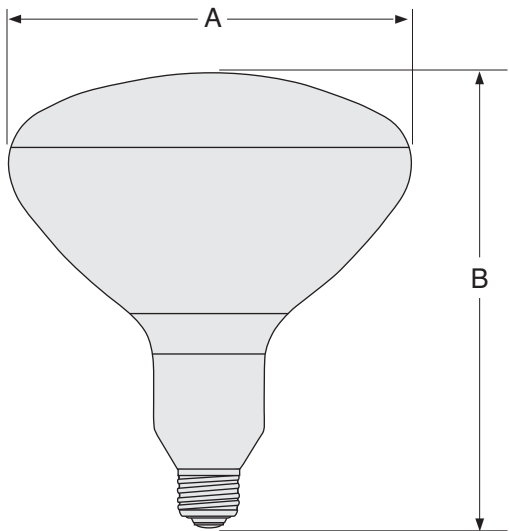


Fig.1

Ushio Ordering Code	Ushio Lamp Description	Watts	Volts	System Cross Reference
Entertainment Flash				
5000916	UA-AF1, 1000W, 400V	1000	400	Dataflash H01
5000177	UA-DF1, 1000W, 400V	1000	400	Dataflash S01



J

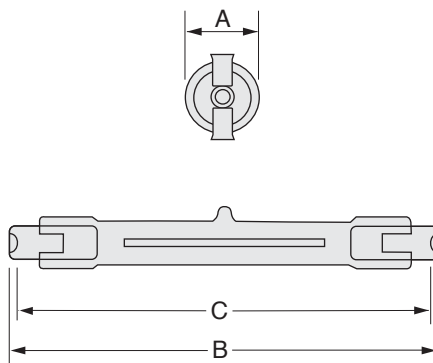
- Only for Use in Approved Enclosed Halogen Fixtures
- Recessed Single Contact
- Compact CC-8 & Linear C-8 Filaments
- Even, Linear Illumination



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Avg Life h	Bulb Finish
			Dia (A)	MOL (B)	C-to-C (C)				
R7s-12 Base - MOL ≈ 3 1/8" (80.3mm) – T2.5, T4*									
100	1000698	J120V-100W/79MM SHORT	8.0	80.3	74.9	CC-8	1450	1500	Clear
100	1000721	J130V-100W/79MM SHORT	8.0	80.3	74.9	CC-8	1450	1500	Clear
100	1000762	J240V-100W/79MM SHORT	8.0	80.3	74.9	CC-8	1250	1500	Clear
150	1001734	J12V-150WA/80*	12.0	85.5	80.0	C-8	2700	2000	Clear
150	1000701	J120V-150W/79MM SHORT	8.0	80.3	74.9	CC-8	2400	1500	Clear
150	1000723	J130V-150W/79MM SHORT	8.0	80.3	74.9	CC-8	2400	2000	Clear
150	1000751	J230V-150W/79MM SHORT	8.0	80.3	74.9	CC-8	1950	1500	Clear
150	1000765	J240V-150W/79MM SHORT	8.0	80.3	74.9	CC-8	1950	1500	Clear
200	1000703	J120V-200W/79MM SHORT	8.0	80.3	74.9	CC-8	3460	2000	Clear
200	1000705	J120V-200WF/79MM SHORT	8.0	80.3	74.9	CC-8	3400	2000	Frosted
200	1000725	J130V-200W/79MM SHORT	8.0	80.3	74.9	CC-8	3460	2000	Clear
250	1001737	J120V-250WG/83*	8.0	—	80.0	C-8	4000	2000	Clear
250	1000707	J120V-250W/79MM SHORT	8.0	80.3	74.9	CC-8	4500	2000	Clear
250	1000773	J240V-250W/79MM SHORT*	8.0	80.3	74.9	CC-8	3800	2000	Clear
300	1000709	J120V-300W/79MM SHORT	8.0	80.3	74.9	CC-8	5900	2000	Clear
300	1000727	J130V-300W/79MM SHORT	8.0	80.3	74.9	CC-8	5900	2000	Clear

* Special Order Item

With greater economy through long life and high output, J series of lamps are ideal for flood lighting wide areas for both indoor and outdoor lighting installations.



R7s-12

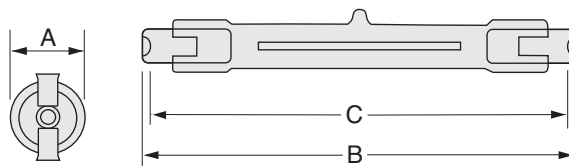
J

- Only for Use in Approved Enclosed Halogen Fixtures
- Recessed Single Contact Base - R7s-12
- Compact CC-8 & Linear C-8 Filaments
- T2.5 & T4



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
			Dia (A)	MOL (B)	C-to-C (C)					
R7s-12 Base MOL≈ 4 11/16" (119.6mm) – T 2.5										
100	1000697	J120V-100W/119MM LONG	8.0	119.6	114.2	C-8	1450	2750	1500	Clear
100	1000720	J130V-100W/119MM LONG	8.0	119.6	114.2	C-8	1450	2750	1500	Clear
100	1000761	J240V-100W/119MM LONG*	8.0	119.6	114.2	C-8	1250	—	1500	Clear
150	1000719	J12V-150WG	8.0	119.6	114.2	C-8	2400	2900	1500	Clear
150	1000700	J120V-150W/119MM LONG	8.0	119.6	114.2	C-8	2400	2800	1500	Clear
150	1000722	J130V-150W/119MM LONG	8.0	119.6	114.2	C-8	2400	2850	1500	Clear
150	1000764	J240V-150W/119MM LONG*	8.0	119.6	114.2	C-8	1950	2750	1500	Clear
200	1000702	J120V-200W/119MM LONG	8.0	119.6	114.2	C-8	2850	2900	2000	Clear
200	1000724	J130V-200W/119MM LONG	8.0	119.6	114.2	C-8	2850	2900	2000	Clear
200	1000770	J240V-200W/119MM LONG	8.0	119.6	114.2	C-8	3200	2850	1500	Clear
250	1000706	J120V-250W/119MM LONG	8.0	119.6	114.2	C-8	4500	2900	2000	Clear
300	1000777	J24V-300WG*	8.0	119.6	114.2	C-8	5000	2900	1500	Clear
300	1000779	J32V-300WG	8.0	119.6	114.2	C-8	5000	2900	1500	Clear
300	1000291	EHM, J120V-300W	8.0	119.6	114.2	C-8	5900	3000	2000	Clear
300	1000296	EHZ, J120V-300WF	8.0	119.6	114.2	C-8	5770	3000	2000	Frosted
300	1000726	J130V-300W/119MM LONG	8.0	119.6	114.2	C-8	5900	—	2000	Clear
300	1000756	J230V-300W	8.0	119.6	114.2	CC-8	4800	2900	2000	Clear
500	1000488	FCL, J120V-500W	8.0	119.6	114.2	C-8	10000	3000	2000	Clear
500	1000712	J120V-500W/6*	8.0	119.6	114.2	C-8	11000	3000	2000	Clear
500	1000497	FCZ, J120V-500WF	8.0	119.6	114.2	C-8	10700	3000	2000	Frosted
500	1000224	DVS, J130V-500WB	8.0	119.6	114.2	C-8	10500	3000	2000	Clear
500	1000736	J220V-500WE	12.0	119.6	114.2	C-8	9500	3000	2000	Clear
500	1000077	BSH, J240V-500WN	10.0	119.6	114.2	C-8	9500	2950	2000	Clear
750	1000738	J220V-750WB1	8.0	119.6	114.2	C-8	16100	3050	1500	Clear
MOL ≈ 7 1/2" (191.1mm) – T 2.5, T4*										
1000	1000695	J120V-1000WB*	12.0	191.1	185.7	C-8	22000	3000	2000	Clear
1000	1000739	J225V-1000WB	8.0	191.1	185.7	C-8	22000	3050	2000	Clear
1000	1000258	DZX, J240V-1000WB*	8.0	191.1	185.7	C-8	22000	3050	2000	Clear

* Special Order Item



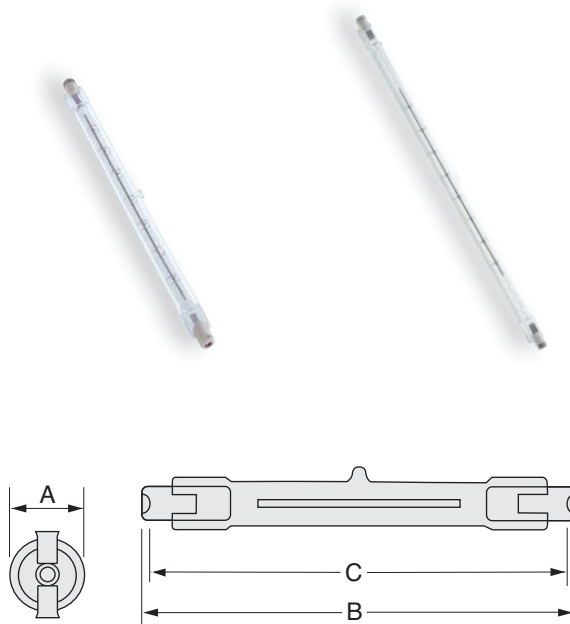
R7s-12

J

- Only for Use in Approved Enclosed Halogen Fixtures
- Recessed Single Contact Base - R7s-12
- Operate Horizontal $\pm 4^\circ$
- T2.5

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
			Dia	MOL	C-to-C					
			(A)	(B)	(C)					
R7s-12 Base – MOL $\approx 10 \frac{5}{64}$ " (256.1mm)										
1000	1000740	J225V-1000WB1*	8.0	256.1	250.7	C-8	22000	3050	2000	Clear
1000	1000758	J240V-1000WB1	8.0	256.1	250.7	C-8	21500	3050	2000	Clear
1500	1000699	J120V-1500WB	8.0	256.1	250.7	C-8	35000	3050	2000	Clear
1500	1000750	J230V-1500WB	8.0	256.1	250.7	C-8	35000	3000	2000	Clear
1500	1000243	DYD, J240V-1500WB	8.0	256.1	250.7	C-8	33000	3050	2000	Clear
1500	1000778	J277V-1500WB	8.0	256.1	250.7	C-8	31500	3050	2000	Clear
MOL $\approx 13 \frac{5}{32}$ " (334.4mm)										
2000	1000752	J230V-2000WB*	8.0	334.4	322.0	C-8	44000	—	2000	Clear

* Special Order Item



R7s-12

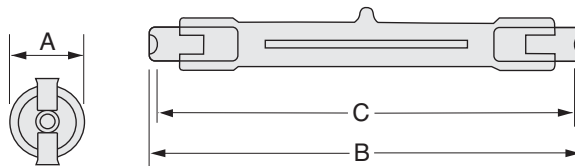
JP

- Only for Use in Approved Enclosed Halogen Fixtures
- Recessed Single Contact Base - R7s-12
- Operate Horizontal $\pm 4^\circ$
- T2.5, T3 & T4



Watts	Ushio	Ushio	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
	Ordering Code	Lamp Description	Dia (A)	MOL (B)	C-to-C (C)					
R7s-12 Base – MOL ≈ 4 11/16" (119.6mm)										
500	1000502	FDN, JP120V-500WCF6	12.0	119.6	114.2	C-8	12500	3200	400	Frosted
500	1000500	FDF, JP120V-500WC6	12.0	119.6	114.2	C-8	13250	3200	400	Clear
500	1001084	JP220V-500WC*	12.0	119.6	114.2	C-8	12500	3200	200	Clear
550	1001089	JP225V-550WC*	12.0	119.6	115.6	C-8	14000	3200	250	Clear
750	1000327	EMD, JP120V-750WCF	12.0	119.6	114.2	C-8	19500	3200	400	Frosted
750	1000299	EJG, JP120V-750WC	12.0	119.6	114.2	C-8	20600	3200	400	Clear
800	1000329	EMF, JP240V-800WCF	12.0	119.6	114.2	C-8	21400	3200	250	Frosted
800	1000328	EME, JP240V-800WC1UA	12.0	119.6	114.2	C-8	22000	3200	250	Clear
1000	1000489	FCM, JP120V-1000WC1	12.0	119.6	114.2	C-8	27000	3200	300	Clear
1000	1000533	FHM, JP120V-1000WCF1	12.0	119.6	114.2	C-8	26000	3200	300	Frosted
1000	1000298	EJD, JP185V-1000WS*	12.0	119.6	114.2	C-8	33600	3350	100	Clear

* Special Order Item



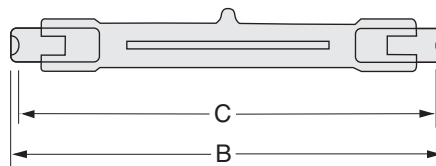
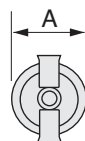
R7s-12

JP

- Only for Use in Approved Enclosed Halogen Fixtures
- Recessed Single Contact Base - R7s
- Operate Horizontal $\pm 4^\circ$
- T3 & T4



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
			Dia (A)	MOL (B)	C-to-C (C)					
R7s-12 Base – MOL ≈ 5" (127.1mm)										
800	1001081	JP125V-800W	10.0	127.1	121.7	C-8	26000	3400	25	Clear
MOL ≈ 5 5/16" (135.2mm)										
500	1000652	GDA, JP120V-500WC2	12.0	135.2	129.8	C-8	11000	3100	100	Clear
500	1000653	GDA/220V, JP220V-500WC2/UA	12.0	135.2	129.8	C-8	13000	3200	75	Clear
500	1000654	GDA/240V, JP245V-500WC	12.0	135.2	129.8	C-8	11000	3150	100	Clear
MOL ≈ 6 19/32" (167.4mm)										
1000	1000523	FFT, JP120V-1000WC2	12.0	167.4	163.3	C-8	27000	3200	300	Clear
1500	1000529	FGT, JP120V-1500WCF	13.0	167.4	162.0	C-8	40200	3200	400	Frosted
1500	1000499	FDB, JP120V-1500WC	13.0	167.4	162.0	C-8	41200	3200	400	Clear
MOL ≈ 6 21/32" (169.3mm)										
2000	1000524	FFW, JP120V-2000WC	14.0	169.3	163.9	C-8	57000	3200	125	Clear
MOL ≈ 7 9/16" (191.1mm)										
1000	1000310	EKM, JP225V-1000WCL	12.0	191.1	140.0	C-8	25000	3200	200	Clear
1250	1001086	JP225V-1250WC1	12.0	191.1	185.7	C-8	33500	3200	200	Clear



R7s-12

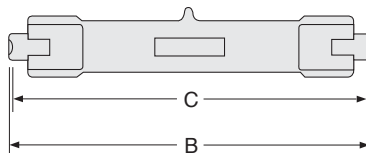
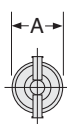
JPD

- Only for Use in Approved Enclosed Halogen Fixtures
- Recessed Single Contact Base - R7s-18 & RX7s Base
- Universal Burn Position



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
			Dia (A)	MOL (B)	C-to-C (C)					
Recessed Single Contact Base – R7s-18, RX7s**										
150	1001106	JPD25V-150WG1 fused	15.0	66.7	64.7	CC-8	2700	2900	3000	Clear
300	1000292	EHP, JPD120V-300WG	15.0	80.3	74.9	CC-8	5650	2900	2000	Clear
375	1000230	DWZ, JPD30V-375W	15.0	80.3	74.9	CC-8	7500	3000	1000	Clear
400	1000293	EHR, JPD120V-400WG	15.0	80.3	74.9	CC-8	7750	2900	2000	Clear
400	1000498	FDA, JPD120V-400W	15.0	80.3	74.9	CC-8	10400	3200	200	Clear
420	1000472	FAL, JPD120V-420WC	14.0	66.7	62.0	CC-8	11000	3200	75	Clear
420	1000518	FFM, JPD120V-420WC1	15.0	80.3	74.9	CC-8	11000	3200	75	Clear
600	1000486	FCB, JPD120V-600WD	15.0	95.0	89.6	CC-8	17000	3250	75	Clear
600	1000517	FFJ, JPD120V-600WCG	15.0	66.7	61.3	CC-8	17000	3200	75	Clear
600	1000508	FEA, JPD240V-600WC	15.0	95.0	89.6	CC-8	15000	3200	75	Clear
650	1000471	FAD, JPD120V-650WC	15.0	80.3	74.9	CC-8	16500	3200	100	Clear
650	1000482	FBX, JPD120V-650WCF	15.0	80.3	74.9	CC-8	16000	3200	100	Frosted
650	1000485	FCA, JPD120V-650WSF*	15.0	80.3	74.9	CC-8	19000	3400	35	Frosted
650	1000229	DWY/FAB, JPD120V-650WS	15.0	80.3	74.9	CC-8	20000	3400	25	Clear
650	1001103	JPD220V-650WC*	15.0	80.3	74.9	CC-8	16300	3200	75	Clear
800	1000238	DXX/220V, JPD220V-800WC1	15.0	80.3	74.9	CC-8	20500	3200	75	Clear
800	1000240	DXX/240V, JPD240V-800WC	15.0	80.3	74.9	CC-8	20500	3200	75	Clear
1000	1000236	DXW, JPD120V-1000WC5	18.0	95.0	89.6	CC-8	28000	3200	150	Clear
1000	1000234	DXN, JPD120V-1000WS1	18.0	95.0	89.6	CC-8	31000	3400	50	Clear
1000	1000511	FER, JPD120V-1000WC6**	19.0	143.5	138.1	CC-8	27500	3200	500	Clear
1000	1000228	DWT, JPD120V-1000WB1**	19.0	143.5	138.1	CC-8	23400	3000	2000	Clear
1000	1000068	BRH, JPD120V-1000WC1	18.0	95.0	89.6	CC-8	30000	3350	75	Clear
1000	1000241	DYA, JPD120V-1000WC2	18.0	109.5	104.1	CC-8	28000	3200	200	Clear
1000	1000483	FBY, JPD120V-1000WC5F	18.0	95.0	89.6	CC-8	26000	3200	150	Frosted
1000	1001102	JPD220V-1000WC	18.0	95.0	89.6	CC-8	25000	3200	120	Clear
1050	1000322	ELJ, JPD120V-1050WS*	16.0	119.6	114.2	CC-8	30000	3200	75	Clear
2000	1000516	FEY, JPD120V-2000WC	29.0	143.5	138.1	CC-8	57000	3200	400	Clear
2000	1000515	FEX/240V, JCD240V-2000WC1*	29.0	143.5	138.1	CC-8	50000	3200	300	Clear

* Special Order Item



R7s-18

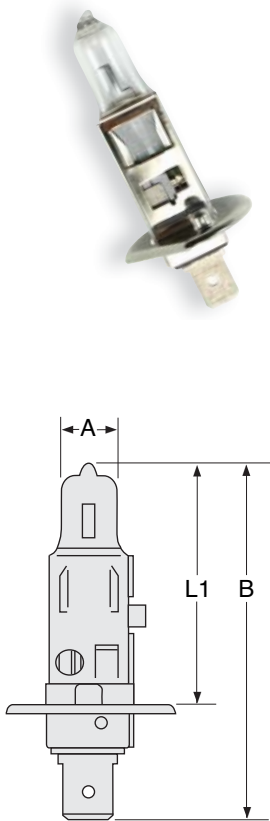


JA

- Only for Use in Approved Enclosed Halogen Fixtures
- P14.5s Base
- 12 & 28 Volts

Watts	Ushio	Ushio	Volts	Dimensions mm			Filament Type	Luminous Flux lm	Color Temp K	Avg Life h
	Ordering Code	Lamp Description		Dia (A)	MOL (B)	Length (L1)				
P14.5s Base										
55	1000790	JA12V-55W H1-55	12	8.5	67.5	25.25	C-8	1550	3000	150
70	1000800	JA24V-70W*	28	8.5	49.0	—	—	1900	—	15
100	1000785	JA12V-100W H1-100	12	8.5	67.5	25.25	C-8	2700	3050	50

* Special Order Item



P14.5s

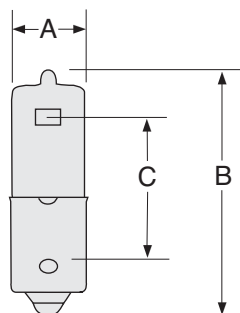
JC, JD, JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- Single Contact Bayonet Base - BA9s
- Double Contact Bayonet Base - BA15d
- Universal Burn Position

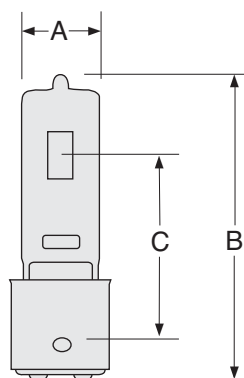


Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
			Dia (A)	MOL (B)	LCL (C)					
Single Contact Bayonet Base – BA9s										
5	1000832	JC12V-5W/BA9S	9.0	28.0	15.0	C-2R	80	3000	240	Clear
10	1000810	JC12V-10W/BA9S	9.0	28.0	15.0	C-6	200	—	240	Clear
20	1000819	JC12V-20W/BA9S	8.0	30.0	13.5	C-6	340	2900	2000	Clear
Double Contact Bayonet Base – BA15d										
60	1000915	JCD24V-60W	12.5	60.5	35.0	CC-6	1260	—	500	Clear
75	1000916	JCD24V-75W	11.0	55.0	34.9	CC-6	1600	3100	500	Clear
75	1000917	JCD28V-75W/WGB	13.5	63.5	35.0	CC-6	1400	2950	2000	Clear
75	1000986	JCV120V-75WGB	12.0	59.0	35.0	CC-8	1200	2800	1000	Clear
75	1000987	JCV120V-75WGBF	14.0	72.0	35.0	CC-8	1125	2850	1000	Frosted
100	1000968	JCV120V-100WGB	13.0	62.0	35.0	CC-8	1600	2800	2000	Clear
100	1000969	JCV120V-100WGBF	13.0	62.0	35.0	CC-8	1550	2800	2000	Frosted
100	1000364	ESR, JCV120V-100WGB2	13.0	62.0	35.0	CC-2V	1800	2850	750	Clear
100	1000374	ETD, JCV120V-100WGB2F	13.0	62.0	35.0	CC-2V	1750	2850	750	Frosted
125	1000814	JC12V-125WB/BA15D*	15.0	49.0	28.8	C-8	1900	2800	1000	Clear
150	1000373	ETC, JCV120V-150WGB	13.0	62.0	35.0	CC-8	2800	2900	2000	Clear
150	1000362	ESP, JCV120V-150WGB2	13.0	62.0	35.0	CC-2V	2800	2900	1000	Clear
150	1000376	ETF, JCV120V-150WGBF	13.0	62.0	35.0	CC-8	2700	2900	2000	Frosted
200	1000512	FEV, JCV120V-200WCB2	13.0	62.0	35.0	CC-2V	5500	3200	50	Clear
200	1001803	JCV230V-200WGB	15.0	63.0	35.1	CC-8	5000	2800	2000	Clear
250	1000365	ESS, JCV120V-250WGB	13.0	76.0	41.0	CC-8	5000	3000	2000	Clear
250	1000372	ETB, JCV120V-250WGBF	13.0	76.0	41.0	CC-8	4800	3000	2000	Frosted
250	1000990	JCV130V-250WGBF*	13.0	76.0	41.0	CC-8	4800	3000	2000	Frosted
500	1000979	JCV120V-500WGB	13.0	87.0	54.0	CC-8	10450	2950	2000	Clear
500	1000980	JCV120V-500WGBF	13.0	87.0	54.0	CC-8	10100	2950	2000	Frosted

* Special Order Item



BA9s



BA15d



JC

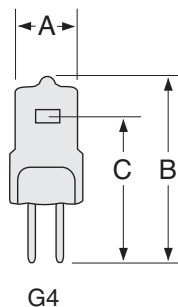
- Only for Use in Approved Enclosed Halogen Fixtures
- Miniature 2-Pin Base - G4
- Universal Burn Position



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
			Dia	MOL	LCL					
			(A)	(B)	(C)					
Miniature 2-Pin Base – G4										
5	1000874	JC6V-5W/G4*	9.0	28.0	19.5	C-6	100	3006	50	Clear
5	1000833	JC12V-5W/G4	9.0	28.0	19.5	C-2R	60	2720	2000	Clear
8	1000878	JC6V-8W/G4*	9.0	28.0	19.5	C-6	163	3168	50	Clear
10	1000856	JC6V-10W/G4	9.0	30.0	19.5	C-6	130	2850	2000	Clear
10	1000857	JC6V-10WH3 (64223)	8.0	31.0	19.5	C-6	150	2900	300	Clear
10	1000531	FHD/ESA, JC6V-10W	9.0	30.0	19.5	C-6	200	3200	100	Clear
10	1003030	JC12V-10W/G4	9.0	30.0	19.5	C-6	120	2800	2000	Clear
10	1000811	JC12V-10W/G4	9.0	28.0	19.5	C-2R	140	2900	2000	Clear
10	1000813	JC12V-10WF/G4	9.0	30.0	19.5	C-6	115	2800	2000	Frosted
10	1000812	JC12V-10W/G4	9.0	28.0	19.5	C-2R	175	2916	300	Clear
15	1000861	JC6V-15W/G4	9.0	28.0	19.5	C-6	300	3138	100	Clear
20	1000532	FHE/ESB, JC6V-20W	9.0	30.0	19.5	C-6	450	3200	100	Clear
20	1000866	JC6V-20W/G4	9.0	30.0	19.5	C-6	280	2850	2000	Clear
20	1000821	JC12V-20W/G4	9.0	30.0	19.5	C-6	350	2850	2000	Clear
20	1000804	JC12V-20W/G4	9.0	30.0	19.5	C-8	350	2850	2000	Clear
20	1000820	JC12V-20WF/G4	9.0	30.0	19.5	C-6	330	2900	2000	Frosted
20	1000844	JC24V-20W/G4	9.0	30.0	19.5	C-6	280	2850	2000	Clear
30	1000867	JC6V-30W/G4	9.0	30.0	19.25	C-6	800	3300	50	Clear
35	1000825	JC12V-35WB/G4	9.0	30.0	19.5	C-6	650	2900	2000	Clear

* Special Order Item

Originally developed as light sources for optical instruments, JC lamps feature an overall compact design with precise LCL placement. The exceptional brightness of this compact lamp make this series an ideal choice for task light applications.



JC, JCD & JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- Miniature 2-Pin Base - G5.3

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Bulb Finish	Fig No
			Dia	MOL	LCL							
			(A)	(B)	(C)							
Miniature 2-Pin Base – G5.3												
30	1000254	DZA, JC10.8V-30W	11.5	51.0	27.0	C-6	600	3100	400	BD/Hor	Clear	1
50	1000837	JC14.5V-50WC	11.5	55.0	32.0	CBar6	1250	3200	100	BD/Hor	Clear	1
80	1000253	DYT, JC19V-80W*	11.5	51.0	27.0	CBar6	2600	3350	25	BD/Hor	Clear	1
100	1000649	GCC, JC12V-100WC5	11.5	57.0	32.0	CBar6	2900	3300	200	BD/Hor	Clear	1
100	1000255	DZB, JC12V-100W*	11.5	51.0	27.0	CBar6	3100	3400	50	BD/Hor	Clear	1
125	1000605	FSH, JCV120V-125WB	11.5	57.0	32.0	CC-8	2500	3000	200	BD/Hor	Clear	4
175	1000330	EML, JC24V-175W*	13.5	57.2	27.0	CBar6	5600	3200	125	BD/Hor	Clear	1
200	1000648	GCB, JCD30V-200WC1	11.5	57.0	32.0	CC-6	5300	3200	200	BD/Hor	Clear	2
250	1000453	EYH/FKT, JCD120V-250WB	22.0	63.5	36.5	CC-6	6050	3050	150	BD/Hor	Clear	3
250	1000647	GCA, JCV120V-250WC	11.5	57.0	32.0	CC-8	5880	3200	200	BD/Hor	Clear	4
300	1000899	JCD120V-300WCP	22.0	62.0	37.0	CC-6	7350	3200	100	BD/Hor	Clear	3
360	1000442	EYB, JCD82V-360W	11.5	57.0	31.8	CC-8	10000	3300	75	BD/Hor	Clear	2
360	1000443	EYB-5, JCD86V-360WS	11.5	57.0	31.8	CC-8	10000	3300	75	BD/Hor	Clear	2
500	1000476	FBG/FBD, JCD120V-500WCP	22.0	76.0	44.5	CC-6	13200	3200	50	BD/Hor	Clear	3
600	1000246	DYH, JCD120V-600WCP	22.0	63.0	36.5	CC-6	17000	3200	75	BD/Hor	Clear	3
650	1000225	DVY, JCD120V-650WSP	22.0	63.0	36.5	CC-6	20000	3400	25	BD/Hor	Clear	3
650	1000247	DYJ, JCD230V-650WSP*	24.0	63.5	42.9	2CC-8	20000	3400	20	BD/Hor	Clear	5

* Special Order Item

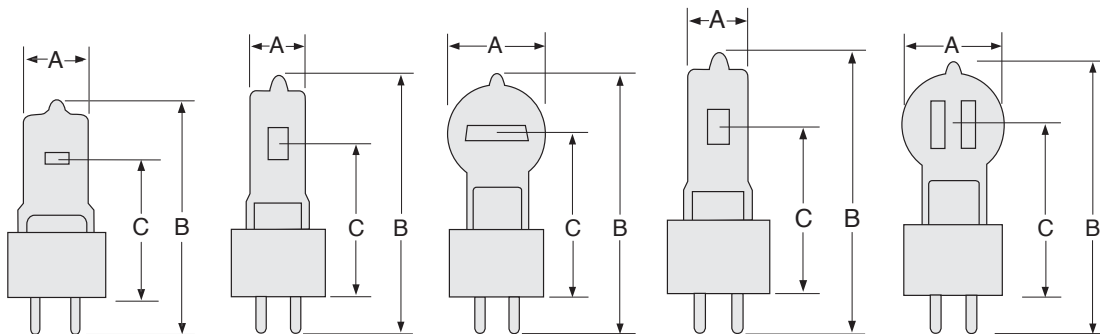


Fig.1

Fig.2

Fig.3

Fig.4

Fig.5

JC, JCD & JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- 2-Pin Base - G6.35

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Bulb Finish	Fig No
			Dia (A)	MOL (B)	LCL (C)							
2-Pin Base – G6.35												
20	1000822	JC12V-20W	11.0	44.0	30.0	C-6	280	2850	2000	Univ	Clear	1
30	1000868	JC6V-30WT1*	11.5	44.0	28.0	C-6	600	3200	100	Univ	Clear	1
35	1000823	JC12V-35W	11.0	44.0	30.0	C-6	650	2900	2000	Univ	Clear	1
50	1000071	BRL, JC12V-50W	11.5	44.0	30.0	CBar6	1600	3400	50	BD/Hor	Clear	2
50	1000829	JC12V-50WF	10.5	44.0	30.0	C-6	840	3000	2000	Univ	Frosted	1
50	1000830	JC12V-50WG1.0	11.0	44.0	30.0	C-6	900	2900	2000	Univ	Clear	1
50	1000848	JC24V-50W	10.5	44.0	30.0	C-6	750	2950	2000	Univ	Clear	1
75	1000834	JC12V-75W	11.0	44.0	30.0	C-6	2200	3300	2000	Univ	Clear	1
100	1000839	JC24V-100W	11.0	44.0	30.0	CC-6	1800	3000	2000	Univ	Clear	1
100	1000892	JCD120V-100W/A	13.5	50.0	30.0	CC-6	2000	3000	150	BD/Hor	Clear	3
150	1000492	FCS, JC24V-150WUI	13.5	50.0	32.0	CBar6	5000	—	50	BD/Hor	Clear	2
150	1000505	FDV, JC24V-150W	13.5	50.0	30.0	CBar6	4300	3300	100	BD/Hor	Clear	2
150	1000537	FHY, JC24V-150W	13.5	50.0	30.0	CBar6	3700	3100	1000	BD/Hor	Clear	2
150	1000920	JCD40V-150WB*	13.5	50.0	30.0	CC-6	2800	3950	500	BD/Hor	Clear	1
150	1000371	ESY, JCD100V-150WB	13.5	50.0	33.0	CC-6	3300	3075	200	BD/Hor	Clear	1
150	1000893	JCD120V-150WB	14.0	50.0	30.0	CC-6	3200	3075	100	BD/Hor	Clear	1
250	1000290	EHJ, JC24V-250W	13.5	55.0	33.0	CBar6	8500	3400	50	BD/Hor	Clear	1
250	1000382	EVC/FGX, JC24V-250W	13.0	52.0	35.0	CBar6	8400	3400	300	Univ	Clear	1
250	1000343	EPL, JCV30V-250WS1	10.0	50.0	24.5	CC-8	7500	3400	6	Univ	Clear	4
275	1000588	FNT, JC24V-275W	13.5	55.0	33.0	CBar6	10000	3400	75	BD/Hor	Clear	2
300	1000216	DRA, JCD120V-300W	16.0	50.0	33.0	CC-6	6900	3100	300	BD/Hor	Clear	3
300	1002253	JCD220V-300W	22.0	65.0	37.0	2CC-8	7200	3150	50	BD/Hor	Clear	1
400	1000383	EVD, JC36V-400WS1	16.0	60.0	36.0	CBar6	16000	3400	50	BD/Hor	Clear	2
400	1002141	EVD/L, JC36V-400H1	18.0	60.0	36.0	CBar6	14500	3400	100	BD/Hor	Clear	2

* Special Order Item

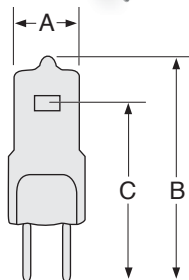


Fig.1

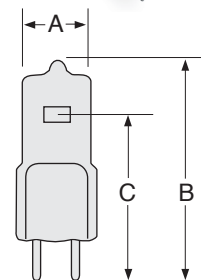


Fig.2

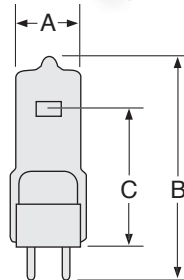


Fig.3

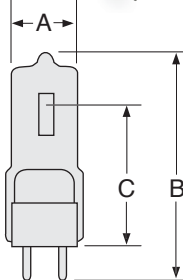


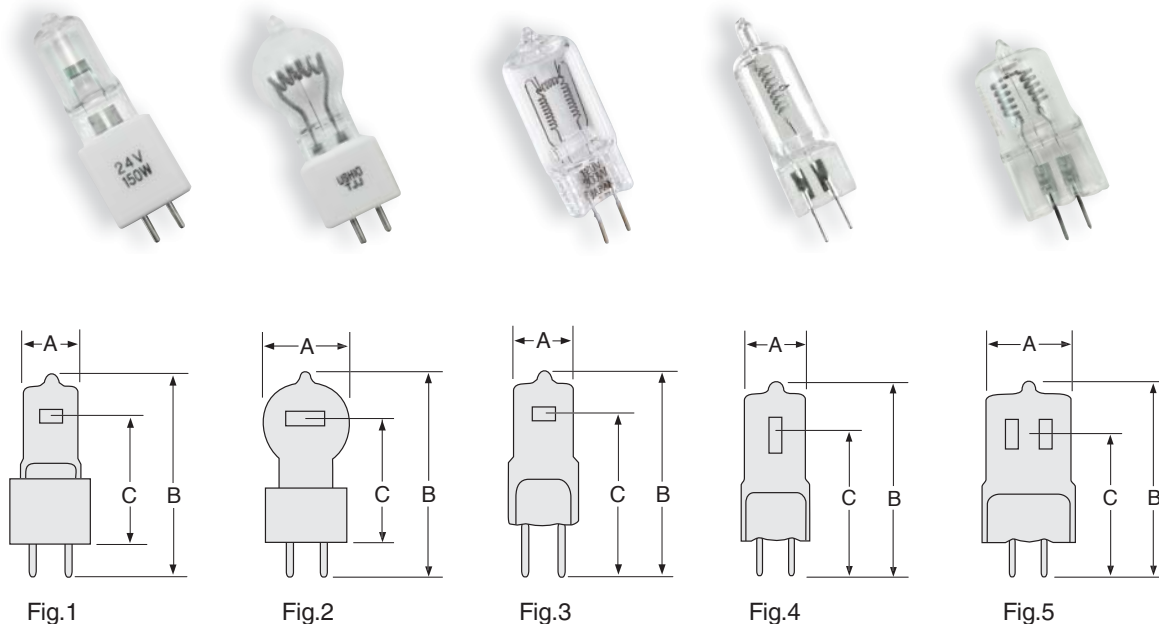
Fig.4

JC, JCD & JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- 2-Pin Base - G6.35/15X19 & GX6.35

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Bulb Finish	Fig No
			Dia (A)	MOL (B)	LCL (C)							
2-Pin Base – G6.35/15X19												
150	1000843	JC24V-150WL-H	13.5	61.0	37.0	CBar6	4800	3400	50	BD/Hor	Clear	1
300	1000897	JCD120V-300WC/LP*	22.0	62.0	37.0	CC-6	7500	3200	70	BD/Hor	Clear	2
300	1000900	JCD120V-300WL*	22.0	63.0	37.0	CC-6	7500	3200	150	BD/Hor	Clear	2
650	1000890	JCD100V-650WL	22.0	63.0	37.0	CC-6	17750	3200	150	BD/Hor	Clear	2
650	1000907	JCD120V-650WL*	22.0	62.0	37.0	CC-6	17750	3200	150	BD/Hor	Clear	2
2-Pin Base – GX6.35												
300	1001762	JCD120V-300W (ref. 64514)	19.5	57.5	37.0	Special	7700	3200	75	BD/Hor	Clear	3
300	1000974	(FNS) JCV120V-300WC (64512)	16.0	57.5	30.0	CC-8	8100	3200	30	BD/Hor	Clear	4
650	1000983	JCV120V-650WC	24.0	57.5	30.0	2CC-8	1700	3200	100	BD/Hor	Clear	5
1000	1001822	JCV120V-1000WC4	23.0	67.5	38.0	2CC-8	27000	3200	100	BD/Hor	Clear	5

* Special Order Item



JC & JCD

- Only for Use in Approved Enclosed Halogen Fixtures
- 2-Pin Base - GY6.35

Watts	Ushio	Ushio	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Bulb Finish	Fig No
	Ordering	Lamp	Dia	MOL	LCL							
	Code	Description	(A)	(B)	(C)							
2-Pin Base – GY6.35												
35	1000824	JC12V-35W	11.0	44.0	30.0	C-8	650	2900	2000	BD/Hor	Clear	1
35	1003486	JC12V-35WF	11.0	44.0	30.0	C-8	650	2900	2000	BD/Hor	Frosted	1
35	1000902	JCD120V-35W	11.0	55.0	38.0	CC-2V	500	2800	1500	BD/Hor	Clear	2
50	1000827	JC12V-50W	11.0	44.0	30.0	C-6	1000	3000	2000	Univ	Clear	3
50	1000828	JC12V-50W	11.0	44.0	30.0	C-8	1000	3000	2000	Univ	Clear	3
50	1003487	JC12V-50WF	11.0	44.0	30.0	C-8	1000	3000	2000	Univ	Frosted	3
50	1000905	JCD120V-50W	11.0	55.0	38.0	CC-2V	700	2800	1500	BD/Hor	Clear	2
75	1000835	JC12V-75W	11.0	44.0	30.0	C-6	1600	3000	2000	Univ	Clear	3
75	1000908	JCD120V-75W	11.5	55.0	38.0	CC-8	1100	2850	1500	BD/Hor	Clear	4
100	1000806	JC12V-100W	11.0	44.0	30.0	C-6	2300	3000	2000	Univ	Clear	3
100	1000807	JC12V-100WG	11.0	44.0	30.0	C-8	2300	3000	2000	Univ	Clear	1
100	1000381	EVA, JC12V-100H20	11.5	44.0	30.0	CBar6	2400	3000	2000	BD/Hor	Clear	3
100	1000490	FCR, JC12V-100W	11.0	44.0	30.0	CBar6	3400	3300	50	BD/Hor	Clear	3
100	1000507	FDX, JC12V-100WCG2	11.5	44.0	30.0	CBar6	3500	3300	50	Univ	Clear	5
300	1000545	FLW, JC24V-300WA-H	13.5	55.0	30.0	CBar6	10450	3500	50	Univ	Clear	5
300	1000846	JC24V-300WB	17.5	55.0	33.0	CBar6	6600	3050	1000	Univ	Clear	3

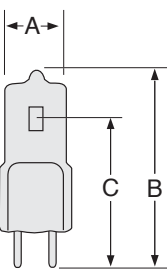


Fig.1

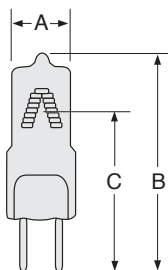


Fig.2

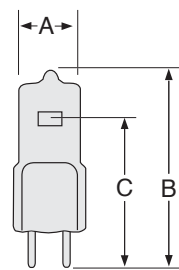


Fig.3

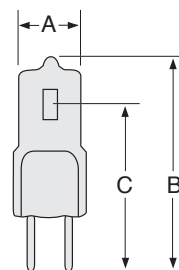


Fig.4

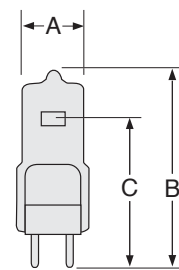


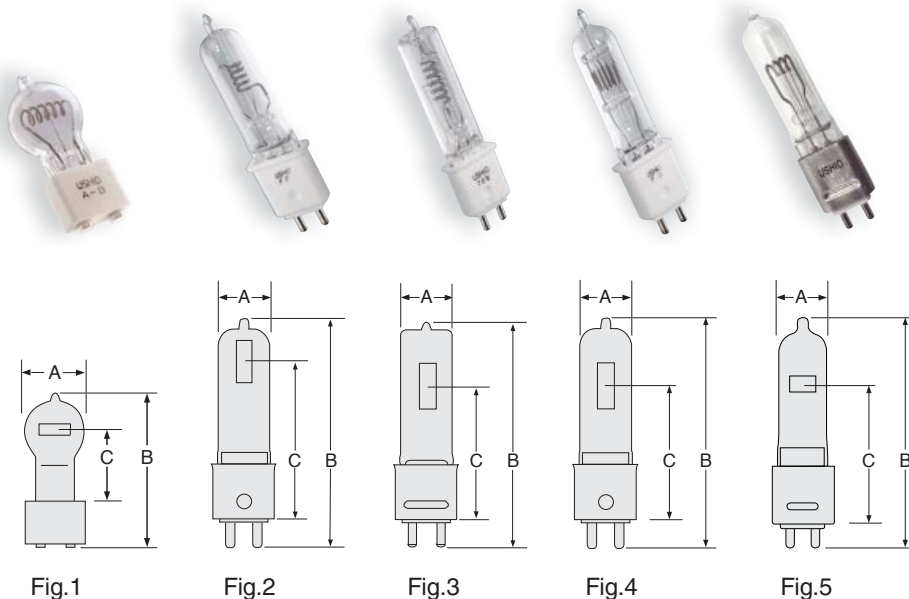
Fig.5

JCD, JCS & JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- 2 Button Base - G9.5
- Medium 2-Pin Base - G9.5

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
			Dia (A)	MOL (B)	LCL (C)						
2 Button Base – G9.5											
600	1000248	DYP, JCD120V-600WM	22.0	60.0	21.9	CC-6	17000	3200	75	BD/Hor	1
Medium 2-Pin Prefocus Base – G9.5											
400	1003023	HX-401, JCV115V-400WBM	19.0	104.0	60.3	CC-8	8500	3050	1500	Univ	2
400	1003022	HX-400, JCV115V-400WCM	19.0	104.0	60.3	CC-8	10000	3200	300	Univ	2
500	1000286	EHC/EHB, JCV120V-500WCM	13.5	101.0	60.3	CC-8	12700	3200	300	Univ	3
500	1000287	EHD, JCV120V-500WBH	13.5	101.0	60.3	CC-8	10000	3000	2000	Univ	3
500	1001814	JCV220V-500WBM	15.0	102.0	60.3	CC-8	10500	3000	400	Univ	3
500	1000997	JCV240V-500WBM*	15.0	102.0	60.3	CC-8	10500	3000	400	Univ	3
575	1000543	FLK, HX-600, JCV115V-575WCM	18.0	104.0	60.5	CC-8	16500	3200	300	Univ	2
575	1003584	SPH115V-575W, JCD115V-575WCM	19.0	104.0	60.3	CC-6	16500	3250	300	Univ	5
575	1003585	SPH115V-575WLL, JCD115V-575WBM	19.0	104.0	60.3	CC-6	14000	3050	800	Univ	5
575	1002196	HX-601, JCV115V-575WBM	19.0	104.0	60.3	CC-8	12800	3050	1500	Univ	2
600	1000665	GLC/HP-600, JCS115V-600WCM	20.0	101.6	60.0	C-13D	15600	3200	300	Univ	4
700	1000998	JCV240V-700WCH	19.5	102.0	60.3	CC-8	18000	3200	350	Univ	3
750	1000097	BWM, JCS120V-750WC1	22.0	114.3	60.3	C-13D	21000	3200	250	BD/Hor	4
750	1000288	EHF, JCV120V-750WCH	15.0	104.0	60.3	CC-8	20400	3200	300	Univ	3
750	1000289	EHG, JCV120V-750WBH	19.0	104.0	60.3	CC-8	15400	3000	2000	Univ	3
1000	1000098	BWN, JCS120V-1000WC1	22.0	114.3	60.3	C-13D	28500	3200	200	Univ	4
1000	1000494	FCV, JCV120V-1000WCF	19.0	104.0	60.3	CC-8	26500	3200	300	Univ	3
1000	1000509	FEL, JCV120V-1000WCH	19.0	104.0	60.3	CC-8	27500	3200	375	Univ	3
1000	1000510	FEP, JCV240V-1000WCH	19.0	101.0	60.3	CC-8	25500	3200	300	Univ	3
1200	1000972	JCV120V-1200WCH	22.0	104.0	60.3	CC-8	33000	3250	200	Univ	3

* Special Order Item



JC, JCD, JCS & JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- 2-Pin Prefocus Base - GY9.5

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Bulb Finish	Fig No
			Dia (A)	MOL (B)	LCL (C)							
2-Pin Prefocus Base – GY9.5												
80	1000171	DDJ/DZZ, JC10V-80W*	11.5	51.0	27.0	CBar6	1700	3150	1000	BD/Hor	Clear	1
100	1000459	EYL, JC12V-100WC4	11.5	62.0	36.5	CBar6	2900	3300	50	BD/Hor	Clear	1
100	1000504	FDT, JC12V-100W	11.5	57.0	27.0	CBar6	2900	3300	50	BD/Hor	Clear	1
132	1000176	DDP, JC22V-132W*	13.5	57.0	33.4	CBar6	3900	3250	125	BD/Hor	Clear	1
150	1000309	EKL, JCD21V-150W*	11.5	51.0	27.0	CC-6	4650	3350	40	BD/Hor	Clear	1
150	1000503	FDS/DZE, JC24V-150W	14.0	57.2	33.4	CBar6	5000	3400	50	BD/Hor	Clear	1
250	1000245	DYG, JCD30V-250WS	19.9	63.5	36.5	CC-6	8000	3400	15	BD/Hor	Clear	1
300	1000886	JCD100V-300WC*	22.0	63.0	36.5	CC-6	7500	3200	150	BD/Hor	Clear	2
300	1000540	FKW, JCS120V-300WC/UA	23.0	90.4	46.5	C-13	7800	3200	200	Univ	Clear	3
420	1000304	EKB, JCD120V-420WC	22.0	63.0	36.5	CC-6	11000	3200	75	BD/Hor	Clear	2
500	1000629	FTK, JCD120V-500WCT	22.0	65.3	36.5	CC-6	13500	3100	200	BD/Hor	Clear	1
500	1000914	JCD240V-500WC	24.0	62.0	36.5	2CC-8	12500	3200	50	BD/Hor	Clear	4
500	1000285	EHA, JCS120V-500W	19.5	76.0	36.5	C-13D	—	3200	75	BD/Hor	Clear	5
500	1000603	FRG, JCS120V-500WC1	23.0	90.4	46.5	C-13D	13000	3200	150	Univ	Clear	3
575	1003326	JCS120V-575WC	25.0	90.0	46.5	8-C-13D	15500	3200	300	BD	Clear	3
575	1003327	JCS120V-575WX	25.0	90.0	46.5	8-C-13D	12000	3200	1500	BD	Clear	3
600	1000251	DYS/DYV/BHC, JCD120V-600WC	22.0	63.0	36.5	CC-6	17000	3200	75	BD/Hor	Clear	2
600	1000252	DYS-5, JCD125V-600WC	22.0	63.0	36.5	CC-6	13750	3200	75	BD/Hor	Clear	2
600	1000547	FMR, JCV120V-600WGY	17.0	88.9	50.8	CC-8	12500	3000	2000	BD/Hor	Clear	6
625	1000089	BVE, JCS120V-625W	19.5	89.0	44.5	C-13D	—	3350	75	BD/Hor	Clear	5
650	1000305	EKD, JCD120V-650WS	19.9	66.0	36.5	CC-6	20000	3400	25	BD/Hor	Clear	2
650	1000604	FRK, JCS120V-650WC/UA	22.5	90.4	46.5	C-13D	17500	3200	200	Univ	Clear	3
650	1000249	DYR/220V, JCD220V-650WC1	24.0	63.0	36.5	2CC-8	16500	3200	50	BD/Hor	Clear	4
650	1000250	DYR/240V, JCD240V-650WC2	24.0	63.0	36.5	2CC-8	16500	3200	50	BD/Hor	Clear	4
800	1000909	JCD120V-800WC	24.0	62.0	36.5	CC-6	19500	3200	75	BD/Hor	Clear	2
900	1000088	BVA, JCS120V-900W	23.0	95.0	44.5	C-13D	—	3300	75	BD/Hor	Clear	3

* Special Order Item

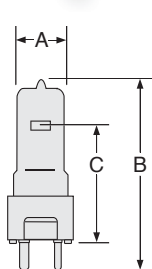


Fig.1

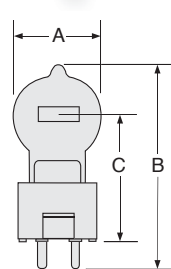


Fig.2

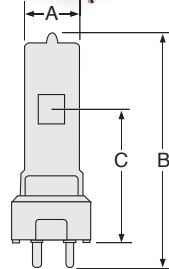


Fig.3

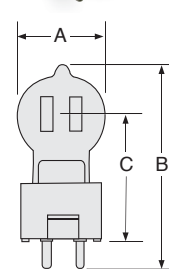


Fig.4

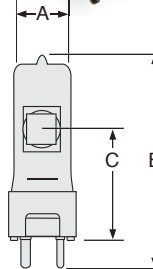


Fig.5

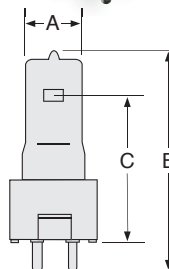


Fig.6

JCD, JCP & JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- Medium 2-Pin Prefocus Base - GY9.5/15x19
GY9.5/16X21, GY9.5/16X24 & GZ9.5

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
			Dia (A)	MOL (B)	LCL (C)						
Medium 2-Pin Prefocus Base – GY9.5/15x19											
300	1000896	JCD120V-300WC	22.0	63.5	36.5	CC-6	7500	3200	100	BD/Hor	1
Medium 2-Pin Prefocus Base – GY9.5/16x21											
300	1000912	JCD230V-300WC	24.0	63.5	36.5	2CC-8	7050	3150	75	BD/Hor	2
500	1000903	JCD120V-500WC	22.0	62.0	36.5	CC-6	13000	3200	100	BD/Hor	1
650	1000906	JCD120V-650WC*	22.0	63.0	36.5	CC-6	17750	3200	75	BD/Hor	1
Medium 2-Pin Prefocus Base – GY9.5/16X24											
650	1002110	JCP100V-650WCC	19.5	76.0	36.5	C-13D	18750	3300	75	BD/Hor	3
Medium 2-Pin Prefocus Base – GZ9.5											
300	1000578	FNA, JCV120V-300WGY	16.0	88.9	50.8	CC-8	5800	3000	2000	BD/Hor	4

* Special Order Item

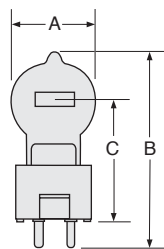


Fig.1

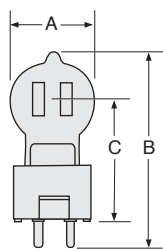


Fig.2

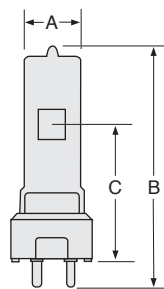


Fig.3

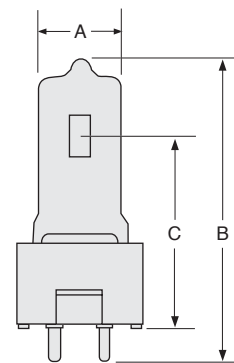


Fig.4

JCS

- Only for Use in Approved Enclosed Halogen Fixtures
- 4-Pin Base - G17t-7
- Standard Voltage (120 volts)
- Monoplane Filament

Watts	Ushio	Ushio	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
	Ordering Code	Lamp Description	Dia	MOL	LCL						
			(A)	(B)	(C)						
4-Pin Base – G17t-7											
1200	1000072	BRN, JCS120V-1200W	23.0	95.0	38.7	C-13D	—	3350	20	BD/Hor	1
1200	1000082	BTG, JCS120V-1200W	23.0	95.0	39.7	C-13D 	38200	3350	20	BD	1

○ Proximity Reflector

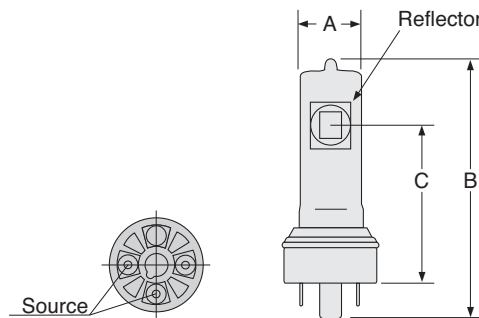


Fig. 1

JCS & JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- Medium Prefocus Base - P28s
- Mogul Prefocus Base - P40s
- 120 Volts

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
			Dia (A)	MOL (B)	LCL (C)						
Medium Prefocus Base – P28s (C-13D Filament)											
500	1000083	BTL, JCS120V-500WBP28	19.5	127.0	55.5	C-13D	11000	3050	500	BD/Hor	1
500	1000084	BTM, JCS120V-500WCP28	19.5	127.0	55.5	C-13D	13000	3200	100	BD/Hor	1
500	1000208	FMC/DNS, JCS120V-500WB2P28	19.5	156.0	88.9	C-13D	11000	3050	500	Univ	2
750	1000085	BTN, JCS120V-750WBP28	23.0	127.0	55.5	C-13D	17000	3050	500	BD/Hor	1
750	1000086	BTP, JCS120V-750WCP28	23.0	127.0	55.5	C-13D	20000	3200	200	BD/Hor	1
750	1000209	FMD/DNT, JCS120V-750WB2P28	23.0	156.0	88.9	C-13D	17000	3050	500	Univ	2
1000	1000087	BTR, JCS120V-1000WCP28	23.0	127.0	55.5	C-13D	28500	3200	250	BD/Hor	1
1000	1000210	FME/DNV, JCS120V-1000WC2P28*	23.0	156.0	88.9	C-13D	27500	3200	200	Univ	2
Medium Prefocus Base – P28s (CC-8 Filament)											
500	1000273	EGC/EGD, JCV120V-500WC*	14.0	152.0	88.9	CC-8	12700	3150	500	Univ	3
500	1000274	EGE, JCV120V-500WB	14.0	152.0	88.9	CC-8	10450	3000	2000	Univ	3
750	1000275	EGF, JCV120V-750WC	16.0	152.0	88.9	CC-8	20400	3200	500	Univ	3
750	1000276	EGG, JCV120V-750WB	16.0	152.0	88.9	CC-8	15750	3000	2000	Univ	3
1000	1000278	EGJ, JCV120V-1000WC	19.5	152.0	88.9	CC-8	27500	3200	500	Univ	3
1000	1000279	EGK, JCV120V-1000WCF	19.5	152.0	88.9	CC-8	26500	3200	500	Univ	3
1000	1000280	EGM, JCV120V-1000WB**	19.0	152.0	88.9	CC-8	21500	3000	2000	Univ	3
Mogul Prefocus Base – P40s											
1000	1000091	BVT, JCS120V-1000WBP40	23.0	177.8	100.0	C-13D	23000	3050	500	Univ	4
1000	1000092	BVV, JCS120V-1000WCP40	23.0	177.8	100.0	C-13D	27500	3200	200	Univ	4
1000	1000214	DPW, JCS120V-1000W	64.0	241.3	87.3	C-13	2800	3200	50	BD	7
1500	1000145	CWZ, JCS120V-1500W	35.0	190.0	100.0	C-13D	38500	3200	325	Univ	5
1500	1000220	DTA, JCS120V-1500WCP40	25.0	203.0	87.3	C-13D	39000	3200	100	BD	6
2000	1000093	BVW, JCS120V-2000WCP40	35.0	203.2	100.0	C-13	57500	3200	300	Univ	6

* Frosted Envelope

* Special Order Item

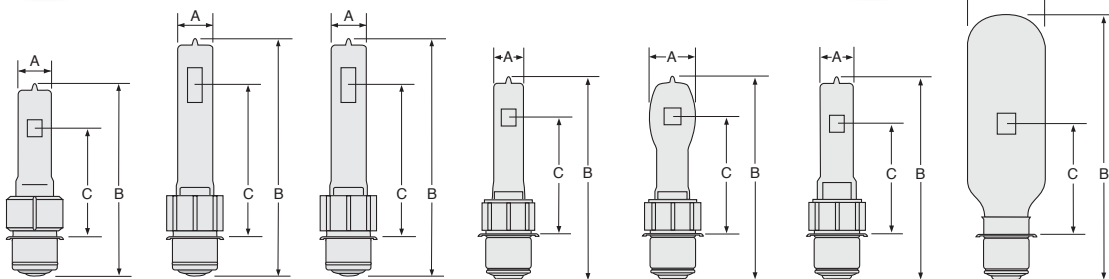


Fig.1

Fig.2

Fig.3

Fig.4

Fig.5

Fig.6

Fig.7

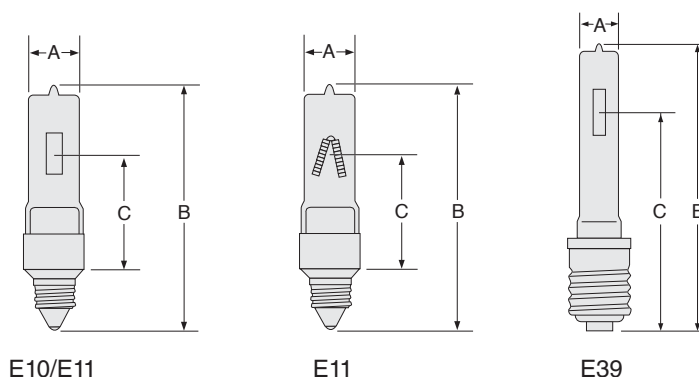
JCV

- Only for Use in Approved Enclosed Halogen Fixtures
- Minican Screw Base - E10/E11
- Mogul Screw Base - E39
- Universal Burn Position



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
			Dia (A)	MOL (B)	LCL (C)					
Mini Candelabra Base – E10										
150	1000479	FBT, JCV30V-150W*	11.5	60.0	27.5	CC-8	5000	3400	6	Clear
250	1000480	FBV, JCV30V-250WS*	11.5	60.0	27.5	CC-8	7850	3400	6	Clear
Mini Candelabra Base - E11										
75	1000988	JCV120V-75WGSN	12.0	69.0	32.0	CC-8	1125	2800	1000	Clear
75	1000989	JCV120V-75WGSNF	12.0	65.0	32.0	CC-8	1170	2850	1000	Frosted
100	1000970	JCV120V-100WGSN	14.0	69.0	32.0	CC-8	1600	2850	1000	Clear
100	1000971	JCV120V-100WGSNF	14.0	69.0	32.0	CC-8	1550	2800	2000	Frosted
100	1000361	ESN, JCV120V-100WGSN2	13.0	71.0	35.0	CC-2V	1800	2850	750	Clear
150	1000377	ETG, JCV120V-150WGSN	13.0	71.0	35.0	CC-8	2800	2900	2000	Clear
150	1000378	ETH, JCV120V-150WGSNF	13.0	71.0	35.0	CC-8	2700	2900	2000	Frosted
150	1000359	ESL, JCV120V-150WGSN2	13.0	71.0	35.0	CC-2V	2800	2900	1000	Clear
250	1000294	EHT, JCV120V-250WGSN	13.5	80.0	41.3	CC-8	5000	3000	2000	Clear
250	1000360	ESM, JCV120V-250WGSNF	13.0	80.0	41.0	CC-8	4800	3000	2000	Frosted
250	1000991	JCV130V-250WGSN	13.0	80.0	41.0	CC-8	5000	3000	2000	Clear
250	1001809	JCV130V-250WGSNF	13.0	80.0	41.0	CC-8	4850	3000	2000	Frosted
300	1000961	JCV100V-300WGS*	15.0	78.0	42.0	CC-8	4650	2850	3000	Clear
300	1001813	JCV120V-300WGS*	15.0	78.0	42.0	CC-8	4650	2950	1500	Clear
325	1000295	EHV, JCV120V-325WBS	13.0	80.0	41.0	CC-8	7800	3100	500	Clear
400	1000976	JCV120V-400WGSN	13.0	92.0	51.0	CC-8	8250	2950	2000	Clear
400	1000977	JCV120V-400WGSNF	13.0	92.0	51.0	CC-8	7850	2950	2000	Frosted
500	1000384	EVR, JCV120V-500WGS	13.0	92.0	51.0	CC-8	10450	2950	2000	Clear
500	1000466	EYX, JCV120V-500WGSF	13.0	92.0	51.0	CC-8	9500	3000	2000	Frosted
500	1000465	EYW, JCV130V-500WGS	13.0	92.0	51.0	CC-8	10000	3000	2000	Clear
500	1000464	EYV, JCV130V-500WGSF	13.0	92.0	51.0	CC-8	9500	3000	2000	Frosted
500	1000995	JCV230V-500WGS*	13.0	92.0	50.8	CC-8	9000	2950	2000	Clear
750	1000463	EYT, JCV120V-750WB1	13.0	95.0	51.0	CC-8	18500	3050	500	Clear
1000	1000967	JCV120V-1000WC3*	13.5	100.0	51.0	CC-8	26000	3200	300	Clear
Mogul Screw Base – E39										
2000	1000095	BWF, JCV120V-2000W	25.0	190.5	133.4	CC-8	59000	3200	500	Clear
2000	1000096	BWG, JCV120V-2000W*	25.0	190.5	133.4	CC-8	57200	3200	500	Frosted

* Special order item



JS

- Only for Use in Approved Enclosed Halogen Fixtures
- 2-Pin Base - GY16
- Bipost Base - G22



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
			Dia (A)	MOL (B)	LCL (C)						
2-Pin Base – GY16											
2000	1000631	FTM, JS220V-2000WCGY*	42.0	145.0	70.0	C-13	54000	3200	400	Univ	1
Medium Bipost Base – G22											
500	1000281	EGN, JS120V-500WC	23.0	117.0	63.5	C-13D	13000	3200	100	BD/Hor	2
750	1000282	EGR, JS120V-750WC (CP39)	23.0	127.0	63.5	C-13D	21000	3200	200	BD/Hor	2
1000	1000283	EGT, JS120V-1000WC (CP40)	23.0	127.0	63.5	C-13D	28500	3200	200	BD/Hor	2
1000	1003248	VL1K-115V, JS115V-1000WC/V	22.0	140.0	72.5	8-C-13-D	28500	3200	300	Univ	2
1000	1003273	VL1K-240V, JS240V-1000WC/V*	22.0	140.0	72.5	8-C-3-D	28500	3200	300	Univ	2

* Special Order Item

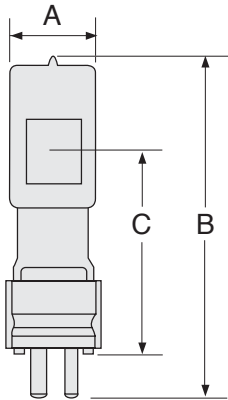


Fig.1

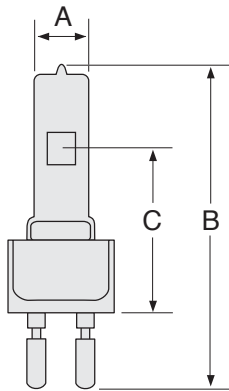


Fig.2

JS

- Only for Use in Approved Enclosed Halogen Fixtures
- Mogul Bipost Base - G38



Watts	Ushio	Ushio	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Burn Position	Fig No
	Ordering Code	Lamp Description	Dia (A)	MOL (B)	LCL (C)						
Mogul Bipost Base – G38											
1000	1000154	CYV, JS120V-1000WC2	23.0	200.0	127.0	C-13	28500	3200	200	BD/Hor	1
1500	1000150	CXZ, JS120V-1500W*	40.0	210.0	127.0	C-13	44500	3200	400	BD	2
2000	1000094	BWA, JS120V-2000W/G38	25.0	203.2	127.0	CC-8	54000	3200	500	Univ	3
2000	1000155	CYX, JS120V-2000WC	40.0	210.0	127.0	C-13	59000	3200	300	BD/45°	2
5000	1000215	DPY, JS120V-5000WC	60.0	268.0	165.0	C-13	145000	3200	500	BD/45°	4
10000	1000222	DTY, JS120V-10000WC	80.0	391.0	254.0	C-13	285000	3200	500	BD/45°	5
10000	1000223	DTY/220V, JS220V-10000WG38	80.0	400.0	254.0	C-13	290000	3200	400	BD/45°	5
20000	1002288	BCM (208V) JS208V-20000W/C	100.0	550.0	354.0	C-13	580000	3200	400	BD/45°	6
20000	1002165	BCM, JS225V-20000W	100.0	550.0	354.0	C-13	580000	3200	400	BD/45°	6

* Special Order Item

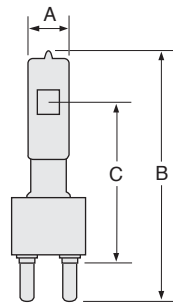


Fig.1

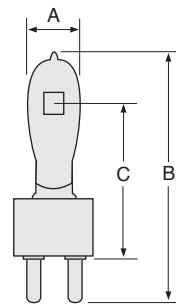


Fig.2

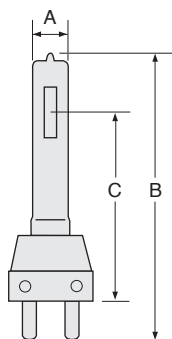


Fig.3

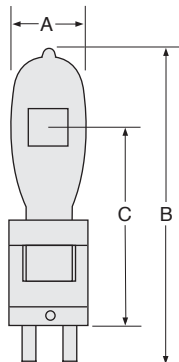


Fig.4

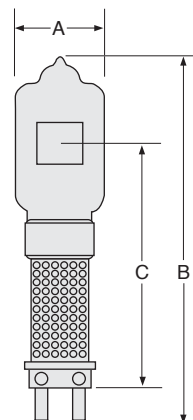


Fig.5

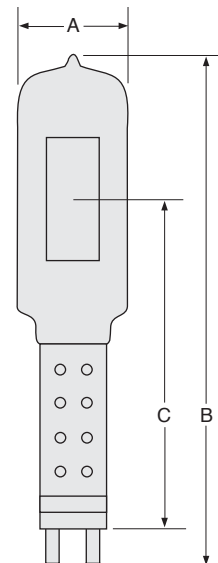


Fig.6

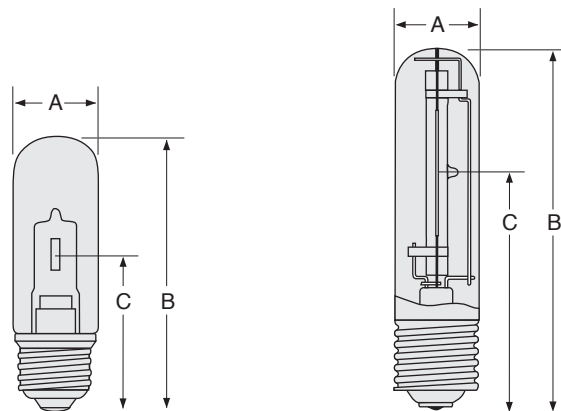
JT

- Only for Use in Approved Enclosed Halogen Fixtures
- Medium Screw Base - E26
- Mogul Screw Base - E39/E40
- Double Envelope
- 120 Volt (except as noted)
- Universal Burn Position

Watts	Ushio	Ushio	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h	Bulb Finish
	Ordering Code	Lamp Description	Dia	MOL	LCL					
			(A)	(B)	(C)					
Medium Screw Base – E26 Compact Version										
100	1001137	JT120V-100WG	31.0	85.0	51.0	CC-8	1600	2800	1500	Clear
150	1001883	JT120V-150WG*	31.0	85.0	54.0	CC-8	2800	2800	2000	Clear
250	1001141	JT120V-250WG	31.0	105.0	58.0	CC-8	5000	2950	2000	Clear
250	1001142	JT120V-250WGF*	31.0	105.0	58.0	CC-8	4850	2950	2000	Frosted
Mogul Screw Base – E39/E40										
500	1001143	JT120V-500WB	40.0	193.0	123.0	C-8	11000	3200	2000	Clear
500	1003516	JT220V-500WC1/E40*	42.0	195.0	123.0	C-8	12500	3200	200	—
1000	1001134	JT120V-1000WB	42.0	260.0	157.0	C-8	22000	3050	2000	Clear
1000	1003361	JT120V-1000WC/E40	42.0	195.0	123.0	C-8	25000	3200	150	Clear
1000	1003517	JT220V-1000WC1/E40*	42.0	195.0	123.0	C-8	25000	3200	200	—
1000	1001889	JT240V-1000WB*	42.0	260.0	175.0	C-8	21500	3400	2000	Clear

* Special Order Item

JT type Halogen lamps are double enveloped lamps in which a Halogen lamp serves as an inner tube.



E26 - Clear or Frosted
Compact Version

E39 and E40

HPL+ SERIES - for ETC Source Four™, Source Four JR™ & Source Four PAR QXL SERIES - for ETC Revolution

- Only for Use in Approved Enclosed Halogen Fixtures
- More Fixture Light Output Using Less Electrical Energy
- Integral Heat Sink Base
- Low Seal Temperature

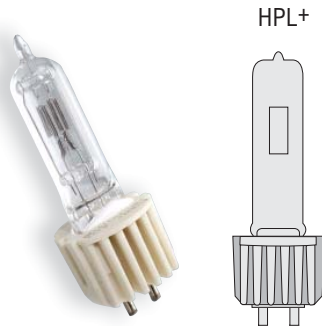
Watts	Ushio Ordering Code	Ushio Lamp Description	Description	Dimensions mm			Filament Type	Approx Lumens lm	Color Temp K	Avg Life h
				Dia (A)	MOL (B)	LCL (C)				
77 Volt										
550	1000668	HPL-550/77V+	JS77V-550WC	18.35	104	60.3	4-C8	16170	3250	300
550	1000669	HPL-550/77X+	JS77V-550WX	18.35	104	60.3	4-C8	12160	3050	2000
750	1000676	HPL-750/77V	JS77V-750WC	18.35	104	60.3	4-C8	22950	3250	300
115 Volt										
375	1000666	HPL-375/115V+	JS115V-375WC	18.35	104	60.3	4-C8	10540	3250	300
375	1000667	HPL-375/115X+	JS115V-375WX	18.35	104	60.3	4-C8	8000	3050	1000
575	1000670	HPL-575/115V+	JS115V-575WC	18.35	104	60.3	4-C8	16520	3250	300
575	1000671	HPL-575/115X+	JS115V-575WX	18.35	104	60.3	4-C8	12360	3050	2000
750	1000675	HPL-750/115V+	JS115V-750WC	18.35	104	60.3	4-C8	21900	3250	300
750	1003153	HPL-750/115X+	JS115V-750WX	18.35	104	60.3	4-C8	16400	3050	1500
120 Volt										
575	1000672	HPL-575/120V+	JS120V-575WC	18.35	104	60.3	4-C8	16520	3250	300
575	1002283	HPL-575/120X+	JS120V575WX	18.35	104	60.3	4-C8	12360	3050	2000
750	1003144	HPL-750/120V+	JS120V-750WC	18.35	104	60.3	4-C8	21900	3250	300
750	1003178	HPL-750/120X+	JS120V-750WX	18.35	104	60.3	4-C8	16400	3050	1500
230 Volt										
375	1003182	HPL-375/230X+	JS230V-375WXN*	18.35	104	60.3	6-C8	7250	3000	1000
575	1000673	HPL-575/230V+	JS230V-575WCN	18.35	104	60.3	6-C8	14900	3200	400
575	1002233	HPL-575/230X+	JS230V-575WXN	18.35	104	60.3	6-C8	11780	3050	1500
750	1002289	HPL-750/230V+	JS230V-750WCN	18.35	104	60.3	6-C8	19750	3200	300
750	1003179	HPL-750/230X+	JS230V-750WXN*	18.35	104	60.3	6-C8	15600	3050	1500
240 Volt										
375	1003183	HPL-375/240X+	JS240V-375WXN*	18.35	104	60.3	6-C8	7250	3000	1000
575	1000674	HPL-575/240V+	JS240V-575WCN*	18.35	104	60.3	6-C8	14900	3200	400
575	1002234	HPL-575/240X+	JS240V-575WXN*	18.35	104	60.3	6-C8	11780	3050	1500
750	1003184	HPL-750/240V+	JS240V-750WCN*	18.35	104	60.3	6-C8	19750	3200	300
750	1003180	HPL-750/240X+	JS240V-750WXN*	18.35	104	60.3	6-C8	15600	3050	1500
77 Volt										
750	1003336	QXL-77V-750W	JS77V-750WC/QXL	18.35	104	60.3	4-C8	22950	3250	300

* Special Order Item

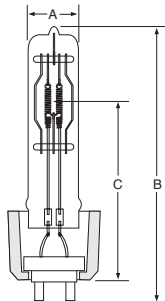
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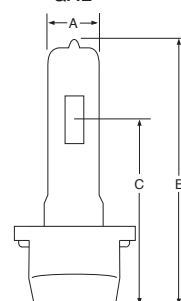
Top View



HPL+



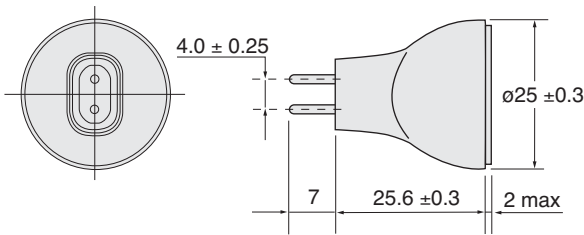
QXL



MR-8

- Only for Use in Approved Halogen Fixtures
 - 25mm, Dichroic Coating, Faceted Mirror Reflector
 - Miniature 2-Pin Base - GZ4
 - Low Voltage - 12 Volts
- Universal Burn Position

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions	Color	Beam			Ave Life h
			MOL	Temp	Angle	Spread	Max CP	
			mm	K			cd	
Miniature 2-Pin Base – GZ4 with Front Glass Cover								
20	1003116	MR-8 12V-20W/NSP10/FG	34.6	3050	10°	Narrow Spot	1700	2000
20	1003117	MR-8 12V-20W/NFL23/FG	34.6	3050	23°	Narrow Flood	800	2000
35	1003118	MR-8 12V-35W/SP13/FG	34.6	3050	13°	Spot	2300	2000
35	1003119	MR-8 12V-35W/NFL26/FG	34.6	3050	26°	Narrow Flood	1400	2000



GZ4

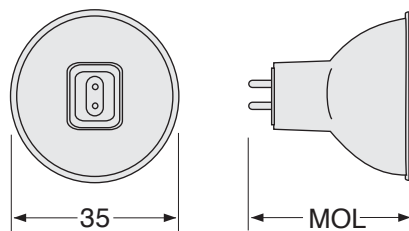
MR-11

- Only for Use in Approved Halogen Fixtures
- 35mm, Dichroic Coating, Faceted Mirror Reflector
- Miniature 2-Pin Base - GZ4
- 12 & 24 Volts
- Universal Burn Position
- Available with Front Glass Cover (FG)



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions	Color Temp K	Angle	Beam	Max CP cd	Ave Life h
			MOL mm			Spread		
Miniature 2-Pin Base – GZ4								
12	1000615	FTA, JDR/M12V-12W/G/NSP9.5	35.0	2925	9.5°	Narrow Spot	2300	2000
12	1000616	FTA/FG, JDR/M12V-12W/G/NSP9.5/FG	35.0	2925	9.5°	Narrow Spot	2300	2000
20	1000617	FTB, JDR/M12V-20W/G/SP10	35.0	2925	10°	Spot	3000	2000
20	1000618	FTB/FG, JDR/M12V-20W/G/SP10/FG	40.9	2925	10°	Spot	3000	2000
20	1000619	FTC, JDR/M12V-20W/G/SP17	35.0	2925	17°	Spot	1400	2000
20	1000620	FTC/FG, JDR/M12V-20W/G/SP17/FG	35.0	2925	17°	Spot	1400	2000
20	1000621	FTD, JDR/M12V-20W/G/FL30	35.0	2925	30°	Flood	600	2000
20	1000622	FTD/FG, JDR/M12V-20W/G/FL30/FG	40.9	2925	30°	Flood	600	2000
35	1000623	FTE, JDR/M12V-35W/G/SP12	35.0	2950	12°	Spot	4800	2000
35	1000624	FTE/FG, JDR/M12V-35W/G/SP12/FG	40.9	2950	12°	Spot	4800	2000
35	1000625	FTF, JDR/M12V-35W/G/SP20	35.0	2950	20°	Spot	2400	2000
35	1000626	FTF/FG, JDR/M12V-35W/G/SP20/FG	40.9	2950	20°	Spot	2400	2000
35	1000627	FTH, JDR/M12V-35W/G/FL30	35.0	2950	30°	Flood	1300	2000
35	1000628	FTH/FG, JDR/M12V-35W/G/FL30/FG	40.9	2950	30°	Flood	1300	2000
24 Volt, Miniature 2-Pin Base – GZ4								
20	1001001	JDR/M24V-20W/SP12*	35.0	2925	12°	Spot	2200	2000
20	1001002	JDR/M24V-20W/SP12/FG	40.9	2925	12°	Spot	2200	2000
20	1000999	JDR/M24V-20W/SP19	35.0	2925	19°	Spot	1150	2000
20	1001000	JDR/M24V-20W/SP19/FG	40.9	2925	19°	Spot	1150	2000
20	1001003	JDR/M24V-20W/FL30	35.0	2925	30°	Flood	500	2000
20	1001004	JDR/M24V-20W/FL30/FG	35.0	2925	30°	Flood	500	2000
35	1001007	JDR/M24V-35W/SP13*	35.0	2925	13°	Spot	2100	2000
35	1001008	JDR/M24V-35W/SP13/FG	40.9	2925	13°	Spot	2100	2000
35	1001005	JDR/M24-35W/SP19	35.0	2925	19°	Spot	1700	2000
35	1001010	JDR/M24V-35W/FL30/FG	35.0	2950	30°	Flood	850	2000

* Special Order Item



GZ4

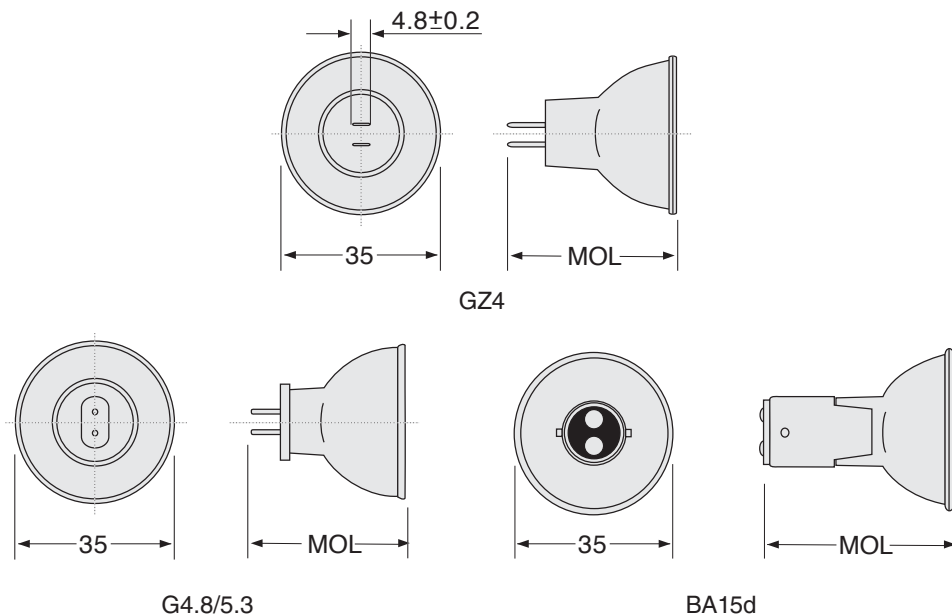
MR-11

- Only for Use in Approved Enclosed Halogen Fixtures
- Miniature 2-Pin Base - GZ4, 2-Pin Base - G4.8/5.3 & Double Contact Bayonet Base - BA15d
- Low Voltage
- Universal Burn Position
- Faceted (except as noted)



Watts	Ushio Ordering Code	Ushio Lamp Description	Reflector Type	Dimensions	Filament Type	Color Temp K	Beam			Ave Life h
				MOL mm			Angle	Spread	Max CP cd	
Miniature 2-Pin Base – GZ4										
10	1000931	JCR/M6V-10WN/FG*	Faceted	40.8	C-6	3050	8.5°	Narrow Spot	3000	200
15	1000932	JCR/M6V-15W/FG/XX MR11	Faceted	35.0	C-6	3050	17°	Spot	—	500
20	1000934	JCR/M6V-20W	Faceted	33.3	C-6	3200	20°	Spot	1800	50
35	1000930	JCR/M14V-35W	Specular	36.0	C-6	—	—	—	—	50
50	1000926	JCR/M12V-50W	Specular	35.0	C-8	—	—	—	—	50
2-Pin Base – G4.8/5.3										
75	1000929	JCR/M12V-75W/HO	Specular	37.0	C-8	—	—	—	—	50
100	1000921	JCR/M12V-100W	Specular	37.0	C-8	3400	—	—	—	25
Double Contact Bayonet Base – BA15d										
20	1000607	FSS, JDR/M12V-20W/BA/NSP10		44.0	C-6	2900	10°	Narrow Spot	4000	2000
20	1000608	FSS/FG, JDR/M12V-20W/BA/NSP10/FG		46.5	C-6	2900	10°	Narrow Spot	4000	2000
20	1000609	FST, JDR/M12V-20W/BA/SP17		44.0	C-6	2900	17°	Spot	1400	2000
20	1000610	FST/FG, JDR/M12V-20W/BA/SP17/FG		46.5	C-6	2900	17°	Spot	1400	2000
20	1000611	FSV, JDR/M12V-20W/BA/FL30		44.0	C-6	2900	30°	Flood	600	2000
20	1000612	FSV/FG, JDR/M12V-20W/BA/FL30/FG		46.5	C-6	2900	30°	Flood	600	2000
35	1000655	GDX, JDR/M12V-35W/BA/NSP10		44.9	C-6	2900	10°	Narrow Spot	4500	2000
35	1000656	GDX/FG, JDR/M12V-35W/BA/NSP10/FG		48.0	C-6	2900	10°	Narrow Spot	4500	2000
35	1000657	GDY, JDR/M12V-35W/BA/SP20		45.0	C-6	3000	20°	Spot	2100	2000
35	1000658	GDY/FG, JDR/M12V-35W/BA/SP20/FG*		48.0	C-6	3000	20°	Spot	2100	2000
35	1000659	GDZ, JDR/M12V-35W/BA/FL30		44.9	C-6	2950	30°	Flood	1600	2000
35	1000660	GDZ/FG, JDR/M12V-35W/BA/FL30/FG		48.0	C-6	2950	30°	Flood	1600	2000

* Special Order Item

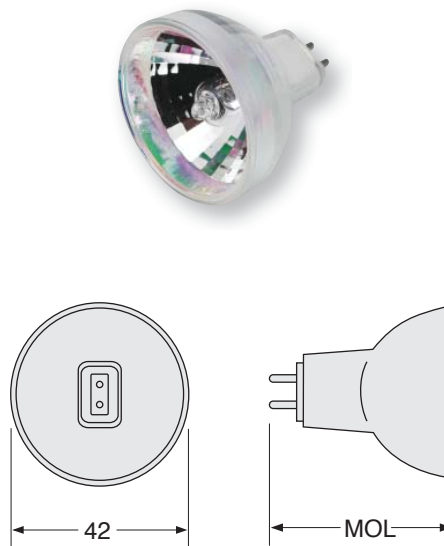


JCR

- Only for Use in Approved Enclosed Halogen Fixtures
- Focused Beam for Optical Applications
- 2-Pin Base - GX5.3
- 42mm Dichroic Coated Reflector
- Operate Base Down to Horizontal

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions MOL mm	Reflector Type	Filament Type	Working Distance mm	Center Screen Illuminance lx	Color Temp K	Avg Life h	Burn Position
2-Pin Base – GX5.3 MR-13 Reflector										
250	1000423	EXY, JCR82V-250W	44.5	Faceted	CC-8	152.4	610	3250	250	BD/Hor
300	1000414	EXR, JCR82V-300W	44.5	Faceted	CC-8	152.4	1100	3350	35	BD/Hor
300	1000421	EXW, JCR82V-300W	44.5	Faceted	CC-8	152.4	1200	3400	15	BD/Hor
300	1000535	FHS, JCR82V-300W	44.5	Faceted	CC-8	152.4	1000	3300	70	BD/Hor

Center Screen Illuminance - Approximate value for reference only



GX5.3

JCR

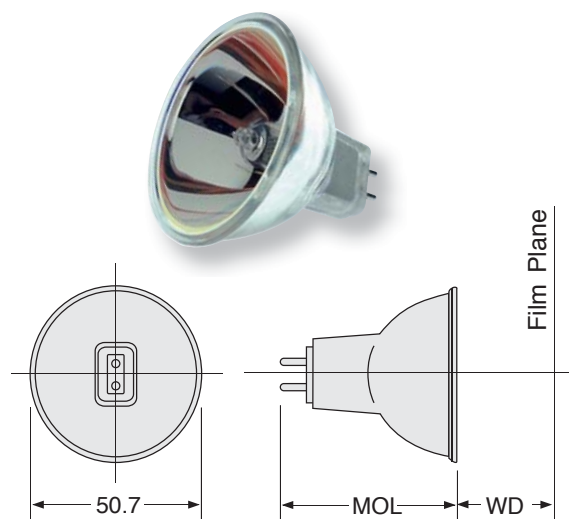
- Focused Beam for Optical Applications
- Only for Use in Approved Enclosed Halogen Fixtures
- 2-Pin Base - GX5.3
- 50mm Dichroic Coated Reflector



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions MOL mm	Reflector Type	Filament Type	Working Distance mm	Luminous Intensity cd	Center Screen Illuminance lx	Color Temp K	Avg Life h	Burn Position
2-Pin Base – GX5.3 Base											
30	1000315	EKZ, JCR10.8V-30W	44.5	Specular	CC-6	38.1	—	400	3100	200	BD/Hor
30	1000538	FJX, JCR13.8V-30W*	44.5	Faceted	CC-6	108	—	—	3150	500	BD/Hor
35	1000344	EPN, JCR12V-35W	44.5	Specular	C-6	9.0	—	350	3300	50	BD/Hor
42	1000346	EPT, JCR10.8V-42W	44.5	Faceted	CC-6	38.1	—	250	2900	8000	BD/Hor
50	1000335	ENL, JCR12V-50W	44.5	Faceted	C-6	38.1	2000	—	3000	4000	Univ
50	1000197	DJT, JCR13.8V-50W	44.5	Faceted	CC-6	152.0	—	538	3150	1000	BD/Hor
50	1000350	EPZ, JCR13.8V-50W	44.5	Specular	CC-6	108	—	—	3150	1000	BD/Hor
50	1000546	FML, JCR13.8V-50W	44.5	Faceted	CC-6	214.3	—	230	3150	1000	Univ
50	1000339	ENZ, JCR30V-50W	44.5	Specular	CC-6	29.0	—	650	3400	25	BD/Hor
80	1000174	DDM, JCR19V-80W	44.5	Faceted	CC-6	152.4	—	680	3350	50	BD/Hor
80	1000303	EJY, JCR19V-80W	44.5	Specular	CC-6	38.1	—	—	3400	25	BD/Hor
80	1000307	EKG, JCR19V-80W	44.5	Specular	CC-6	44.5	—	700	3400	25	BD/Hor
80	1000336	ENW/ENC, JCR19V-80W	44.5	Specular	CC-6	44.5	—	600	3200	400	BD/Hor
80	1000177	DDS, JCR21V-80W	44.5	Faceted	CC-6	165.0	—	646	3125	500	BD/Hor
80	1000312	EKP, JCR30V-80W	44.5	Faceted	CC-6	44.5	—	750	3400	25	BD/Hor
80	1000317	ELB, JCR30V-80W	44.5	Specular	CC-6	29.0	—	900	3400	15	BD/Hor
85	1000180	DED, JCR13.8V-85W	44.5	Specular	C-8	165.0	—	1000	3150	1000	BD/Hor
90	1000347	EPV, JCR14.5V-90W	44.5	Stippled	CC-6	155.2	—	1345	3150	500	BD/Hor
90	1000349	EPX, JCR14.5V-90W	44.5	Stippled	CC-6	165.1	—	538	3150	500	BD/Hor
100	1000326	EMC, JCR12V-100W	44.5	Faceted	CC-6	26.5	—	—	3200	200	BD/Hor
100	1000420	EXV, JCR12V-100W	44.5	Faceted	C-6	—	4500	—	3350	50	BD/Hor
120	1000311	EKN, JCR17.7V-120W	44.5	Specular	CC-6	38.1	—	1000	3200	120	BD/Hor

* Special Order Item

Center Screen Illuminance - Approximate value for reference only



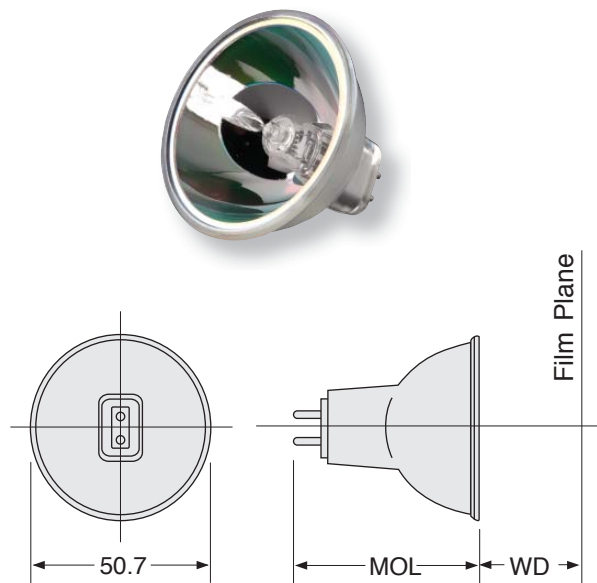
GX5.3

JCR

- Focused Beam for Optical Applications
- Only for Use in Approved Enclosed Halogen Fixtures
- 2-Pin Base - GX5.3
- 50mm Dichroic Coated Reflector

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions MOL mm	Reflector Type	Filament Type	Working Distance mm	Luminous Intensity cd	Center Screen Illuminance lx	Color Temp K	Avg Life h	Burn Position
2-Pin Base – GX5.3 Base											
150	1000173	DDL, JCR20V-150W	44.5	Faceted	CC-6	194.5	—	400	3150	500	BD/Hor
150	1001628	EKE/HO, JCR21V-150W	44.5	Specular	CC-6	43.0	—	—	3250	200	BD/Hor
150	1000297	EJA, JCR21V-150W	44.5	Specular	CC-6	28.0	—	—	3400	40	BD/Hor
150	1000301	EJM, JCR21V-150W	44.5	Specular	CC-6	38.1	—	—	3400	40	BD/Hor
150	1000302	EJV, JCR21V-150W	44.5	Specular	CC-6	44.5	—	1500	3400	40	BD/Hor
150	1000306	EKE, JCR21V-150W	44.5	Specular	CC-6	44.5	—	900	3250	200	BD/Hor
150	1003370	EKE/L, JCR21V-150W 10H/5	44.5	Specular	CC-6	—	—	—	—	1000	BD
150	1000319	ELD/EJN, JCR21V-150W	44.5	Stippled	CC-6	50.8	—	320	3400	40	BD/Hor
150	1002247	ELD/K, JCR21V-150W	44.5	Stippled	CC-6	165.0	—	—	3400	40	BD/Hor
200	1000300	EJL, JCR24V-200W	44.5	Specular	CC-6	31.7	—	1100	3400	50	BD/Hor
200	1000314	EKX, JCR24V-200W	44.5	Stippled	CC-6	139.7	—	—	3400	25	BD/Hor
225	1003034	EZF/K, JCR69V-225W	44.5	Faceted	CC-8	152.4	—	500	—	500	BD/Hor
250	1000318	ELC, JCR24V-250W	44.5	Specular	CC-6	31.7	—	1500	3400	50	BD/Hor
250	1003106	ELC-3, JCR24V-250W	44.5	Specular	CC-6	31.8	—	960	3400	300	BD/Hor
250	1003264	ELC-5, JCR24V-250W	44.5	Specular	CC-6	31.8	—	960	3400	500	BD/Hor
250	1001037	ELC/C, JER24V-250W	44.5	Specular	CC-6	31.8	—	800	3400	50	BD/Hor

Center Screen Illuminance - Approximate value for reference only



GX5.3

JCR

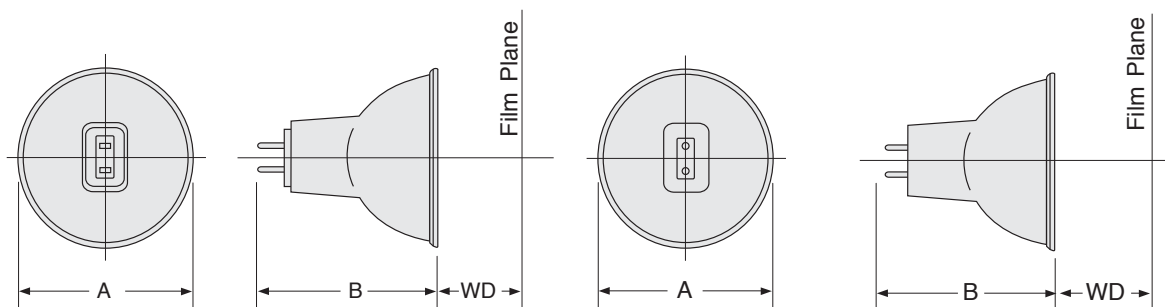
- Focused Beam for Optical Applications
- Only for Use in Approved Enclosed Halogen Fixtures
- Oval 2-Pin Base - GY5.3, 2-Pin Base - GZ6.35
- 50mm Dichroic Coated Reflector

- Operate Base Down to Horizontal



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm		Reflector Type	Filament Type	Working Distance mm	Color Temp K	Avg Life h	Burn Position
			Dia (A)	MOL (B)						
Oval 2-Pin Base – GY5.3										
85	1000357	ESH, JCR82V-85W	50.67	44.5	Stippled	CC-8	152.0	2950	250	BD/Hor
85	1000358	ESJ, JER82V-85W	50.67	44.5	Specular	CC-8	32.0	3350	40	BD/Hor
150	1000356	ESD, JCR120V-150W	50.67	44.5	Stippled	CC-8	44.5	3350	12	BD/Hor
150	1000940	JCR120V-150W/B	50.67	44.5	Stippled	CC-8	—	3050	100	BD/Hor
200	1000441	EYA, JCR82V-200W	50.67	44.5	Faceted	CC-8	38.1	3300	50	BD/Hor
250	1000386	EVW, JCR82V-250W	50.67	44.5	Faceted	CC-8	298.5	3300	50	BD/Hor
250	1000333	ENH, JCR120V-250W	50.67	44.5	Faceted	CC-8	152.4	3250	175	BD/Hor
250	1000379	ETJ, JCR120V-250W	50.67	44.5	Specular	CC-8	36.5	3250	175	BD/Hor
250	1000422	EXX, JCR120V-250W*	50.67	44.5	Stippled	CC-8	298.5	3300	75	BD/Hor
300	1000321	ELH, JCR120V-300W	50.67	44.5	Stippled	CC-8	154.3	3350	35	BD/Hor
300	1000332	ENG, JCR120V-300W	50.67	44.5	Stippled	CC-8	152.4	3450	15	BD/Hor
300	1000458	EYK, JCR120V-300W	50.67	44.5	Specular	CC-8	31.7	3300	60	BD/Hor
360	1000542	FLE, JCR82V-360W U/D	50.67	44.5	Faceted	CC-8	209.6	3300	75	BD/Hor
360	1000337	ENX, JCR82V-360W	50.67	44.5	Faceted	CC-8	298.5	3300	75	BD/Hor
360	1000338	ENX-5, JCR86V-360W	50.67	44.5	Faceted	CC-8	298.5	3300	75	BD/Hor
410	1000636	FXL, JCR82V-410W	50.67	44.5	Faceted	CC-8	298.5	3300	75	BD/Hor
2-Pin Base – GZ6.35										
50	1000268	EFM, JCR8V-50W*	49.7	42.0	—	C-6	32.0	3350	50	BD/Hor
75	1000270	EFN, JCR12V-75W	50.0	42.0	Specular	C-6	32.0	3400	50	BD/Hor
100	1000271	EFP, JCR12V-100W	50.0	42.0	Specular	C-6	32.0	3400	50	BD/Hor
100	1003003	JCR12V-100W/H10	50.0	42.0	Specular	C-8	36.0	3100	1000	BD/Hor
150	1000272	EFR, JCR15V-150W	50.0	42.0	Specular	C-8	32.0	3400	50	BD/Hor

* Special Order Item



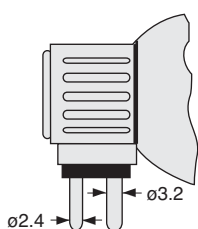
GY5.3

GZ6.35

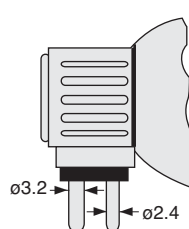
JCR

- Only for Use in Approved Enclosed Halogen Fixtures
- Operate in Horizontal Position
- 2-Pin Vented Base - G7.9
- 2-Pin Vented Base - GX7.9
- 45mm & 57mm Dichroic Coated Reflector

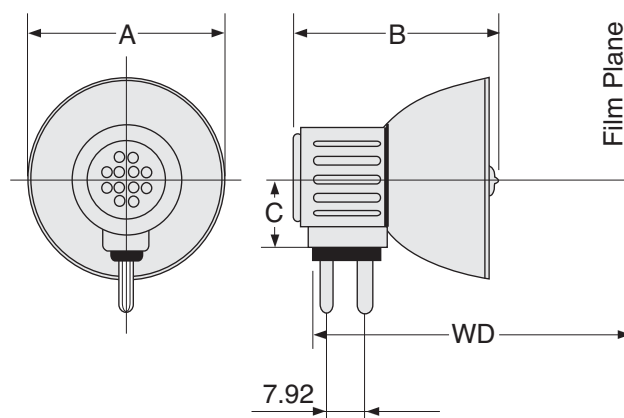
Watts	Ushio	Ushio	Dimensions mm			Reflector Type	Filament Type	Working Distance mm	Color Temp K	Avg Life h	Burn Position
	Ordering Code	Lamp Description	Dia	MOL	Ref.						
			(A)	(B)	(C)						
MR-14 & MR-18, 2-Pin Vented Base – G7.9 Line Voltage											
150	1000206	DNE, JCR120V-150W	57.2	49.9	15.9	Specular	CC-8	69.1	3350	12	Horiz
250	1000057	BHB, JCR120V-250W	44.5	47.5	15.9	Specular	CC-8	65.8	3400	50	Horiz
MR-18, 2-Pin Vented Base – GX7.9 Low Voltage											
150	1000207	DNF, JCR21V-150W	57.2	45.1	15.9	Specular	CC-6	69.1	3400	25	Horiz
150	1000325	ELZ, JCR21V-150W	57.2	45.1	15.9	Specular	CC-6	69.1	3350	60	Horiz



G7.9



GX7.9

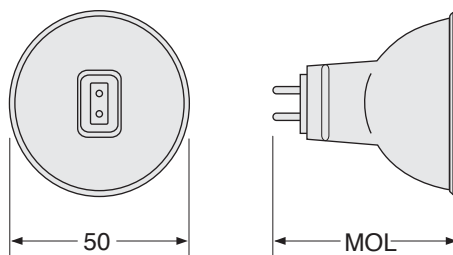


JR 12V - EUROSTAR™ SERIES

- Only for Use in Approved Halogen Fixtures
- Titanium Oxide Coated Reflector
- Axial Filament
- Low Voltage - 12 Volts
- Consistent Color
- Integrated UV Protection
- Precisely Focused Light Cone
- Cool Beam Effect
- Available with Front Glass Cover (/FG)



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension	Filament Type	Beam		Color Temp K	Avg Life h	Burn Position
			MOL mm		Angle	Max CP cd			
EUROSTAR™ 2-Pin Base – GU5.3									
10	1001107	JR12V-10W/NFL21	45.2	C-8	21°	600	2800	1500	Univ
10	1001108	JR12V-10W/NFL21/FG	45.2	C-8	21°	600	2800	1500	Univ
10	1003154	JR12V-10W/FL32	45.2	C-8	32°	400	2800	1500	Univ
20	1000366	ESX, JR12V-20W/SP12	45.2	C-8	12°	3500	2950	5000	Univ
20	1000370	ESX/FG, JR12V-20W/SP12/FG	45.2	C-8	12°	3500	2950	5000	Univ
20	1000028	BBF, JR12V-20W/NFL24	45.2	C-8	24°	1200	2950	5000	Univ
20	1000037	BBF/FG, JR12V-20W/NFL24/FG	45.2	C-8	24°	1200	2950	5000	Univ
20	1000000	BAB, JR12V-20W/FL36	45.2	C-8	36°	600	2950	5000	Univ
20	1000014	BAB/FG, JR12V-20W/FL36/FG	45.2	C-8	36°	600	2950	5000	Univ
20	1000001	BAB/60, JR12V-20W/WFL60	45.2	C-8	60°	270	2950	5000	Univ
20	1000004	BAB/60/FG, JR12V-20W/WFL60/FG	45.2	C-8	60°	270	2950	5000	Univ
35	1000548	FMT/FRB, JR12V-35W/SP12	45.2	C-8	12°	6000	2950	5000	Univ
35	1000551	FMT/FG, JR12V-35W/SP12/FG	45.2	C-8	12°	6000	2950	5000	Univ
35	1000552	FMV/FRA, JR12V-35W/NFL24	45.2	C-8	24°	2300	2950	5000	Univ
35	1000559	FMV/FG, JR12V-35W/NFL24/FG	45.2	C-8	24°	2300	2950	5000	Univ
35	1000564	FMW, JR12V-35W/FL36	45.2	C-8	36°	1300	2950	5000	Univ
35	1000573	FMW/FG, JR12V-35W/FL36/FG	45.2	C-8	36°	1300	2950	5000	Univ
35	1000565	FMW/60, JR12V-35W/WFL60	45.2	C-8	60°	510	2950	5000	Univ
35	1000566	FMW/60/FG, JR12V-35W/WFL60/FG	45.2	C-8	60°	510	2950	5000	Univ
50	1000416	EXT, JR12V-50W/SP12	45.2	C-8	12°	11000	3000	5000	Univ
50	1000419	EXT/FG, JR12V-50W/SP12/FG	45.2	C-8	12°	11000	3000	5000	Univ
50	1000424	EXZ, JR12V-50W/NFL24	45.2	C-8	24°	3600	3000	5000	Univ
50	1000430	EXZ/FG, JR12V-50W/NFL24/FG	45.2	C-8	24°	3600	3000	5000	Univ
50	1000398	EXN, JR12V-50W/FL36	45.2	C-8	36°	2000	3000	5000	Univ
50	1000405	EXN/FG, JR12V-50W/FL36/FG	45.2	C-8	36°	2000	3000	5000	Univ
50	1000589	FNV, JR12V-50W/WFL60	45.2	C-8	60°	850	3000	5000	Univ
50	1000592	FNV/FG, JR12V-50W/WFL60/FG	45.2	C-8	60°	850	3000	5000	Univ



GU5.3

JR 12V & 24V - EUROSTAR™ SERIES

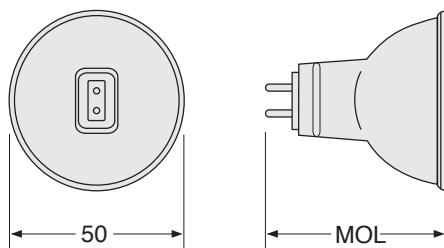
- Only for Use in Approved Halogen Fixtures
- 50mm Diameter Dichroic Coated Reflector
- 2-Pin Base - GU5.3, GX5.3
- 12 & 24 Volts
- Available with Front Glass Cover (/FG)
- Consistent Color



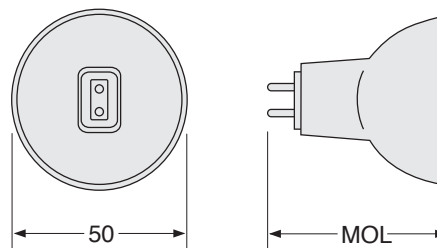
Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension	Filament Type	Beam		Color Temp K	Avg Life h	Burn Position
			MOL mm		Angle	Max CP cd			
EUROSTAR™ 2-Pin Base – GU5.3									
75	1000451	EYF, JR12V-75W/SP12	45.2	C-8	12°	13000	3000	5000	Univ
75	1000452	EYF/FG, JR12V-75W/SP12/FG	45.2	C-8	12°	13000	3000	5000	Univ
75	1000454	EYJ/EZZ, JR12V-75W/NFL24	45.2	C-8	24°	4800	3050	5000	Univ
75	1000455	EYJ/EZZ/FG, JR12V-75W/NFL24/FG	45.2	C-8	24°	4800	3000	5000	Univ
75	1000444	EYC, JR12V-75W/FL36	45.2	C-8	36°	2700	3000	5000	Univ
75	1000447	EYC/FG, JR12V-75W/FL36/FG	45.2	C-8	36°	2700	3000	5000	Univ
75	1000445	EYC/60, JR12V-75W/WFL60	45.2	C-8	60°	1220	3000	5000	Univ
75	1000446	EYC/60/FG, JR12V-75W/WFL60/FG	45.2	C-8	60°	1220	3000	5000	Univ
EUROSTAR™ 24V, 2-Pin Base – GU5.3									
20	1001112	JR24V-20W/SP12**	45.2	C-6	12°	3500	2925	2500	Univ
20	1001114	JR24V-20W/FL36*	45.2	C-6	36°	600	2925	2500	Univ
35	1003110	JR24V-35W/SP12**	45.2	C-6	12°	4600	2900	3500	Univ
35	1003111	JR24V-35W/NFL24**	45.2	C-6	24°	1600	2900	3500	Univ
35	1003112	JR24V-35W/FL36*	45.2	C-6	36°	900	2900	3500	Univ
50	1003113	JR24V-50W/SP12*	45.2	C-6	12°	7000	2950	4000	Univ
50	1003114	JR24V-50W/NFL24*	45.2	C-6	24°	2900	2950	4000	Univ
50	1003115	JR24V-50W/FL36*	45.2	C-6	36°	1600	2950	4000	Univ
75	1003281	JR24V-75W/FL36/FG	45.2	C-6	36°	2500	2900	3000	Univ
EUROSTAR™ 2-Pin Base – GX5.3									
42	1000461	EYR, JR12V-42W/SP12	46.0	CC-6	12°	9000	3000	4000	Univ
42	1000462	EYS, JR12V-42W/NFL23	46.0	CC-6	23°	2800	3000	4000	Univ
42	1000460	EYP, JR12V-42W/FL38	46.0	CC-6	38°	1400	3000	4000	Univ
65	1000595	FPA, JR12V-65W/SP13	46.0	CC-6	13°	11500	3050	4000	Univ
65	1000596	FPB, JR12V-65W/FL38	46.0	CC-6	38°	2000	3050	4000	Univ

* Front glass versions available

* Special Order Item



GU5.3



GX5.3

EUROSTAR™ REFLEKTO™ SERIES

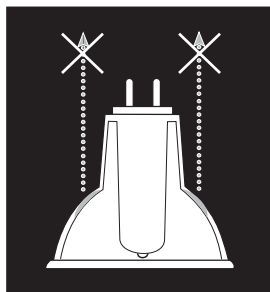
- Only for Use in Approved Halogen Fixtures
- Axial Filament
- Universal Burn Position
- Aluminized Multimirror Reflector
- Consistent Color
- Available with Front Glass Cover (/FG)
- Low Voltage - 12 Volts
- Integrated UV Protection
- Precisely Focused Light Cone
- Less heat to back of the lamp



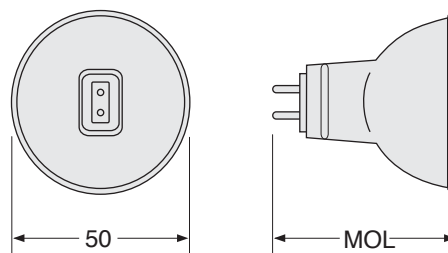
Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension	Color	Beam			Avg Life h	
			MOL mm	Temp K	Angle	Spread	Max CP cd		
EUROSTAR™ REFLEKTO™ Multimirror Reflector 2-Pin Base – GU5.3									
10	1002143	JR12V-10W/NFL24/A, EUROSTAR-REFLEKTO	45.2	2800	24°	Narrow Flood	400	1200	
20	1000368	ESX/C/A, EUROSTAR-REFLEKTO	45.2	2950	12°	Spot	3500	3500	
20	1000369	ESX/C/A/FG, EUROSTAR-REFLEKTO	45.2	2950	12°	Spot	3500	3500	
20	1000033	BBF/C/A/FG, EUROSTAR-REFLEKTO	45.2	2950	24°	Narrow Flood	1200	3500	
20	1000009	BAB/C/A, EUROSTAR-REFLEKTO	45.2	2950	36°	Flood	600	3500	
20	1000010	BAB/C/A/FG, EUROSTAR-REFLEKTO	45.2	2950	36°	Flood	600	3500	
35	1000549	FMT/C/A, EUROSTAR-REFLEKTO	45.2	2950	12°	Spot	6000	3500	
35	1000550	FMT/C/A/FG, EUROSTAR-REFLEKTO	45.2	2950	12°	Spot	6000	3500	
35	1000556	FMV/C/A, EUROSTAR-REFLEKTO	45.2	2950	24°	Narrow Flood	2300	3500	
35	1000557	FMV/C/A/FG, EUROSTAR-REFLEKTO	45.2	2950	24°	Narrow Flood	2300	3500	
35	1000570	FMW/C/A, EUROSTAR-REFLEKTO	45.2	2950	36°	Flood	1300	3500	
35	1000571	FMW/C/A/FG, EUROSTAR-REFLEKTO	45.2	2950	36°	Flood	1300	3500	
35	1001682	FMW/60/C/A, EUROSTAR-REFLEKTO	45.2	2950	60°	Wide Flood	510	3500	
35	1001683	FMW/60/C/A/FG, EUROSTAR-REFLEKTO	45.2	2950	60°	Wide Flood	510	3500	
50	1000417	EXT/C/A, EUROSTAR-REFLEKTO	45.2	3000	12°	Spot	11000	3500	
50	1000418	EXT/C/A/FG, EUROSTAR-REFLEKTO	45.2	3000	12°	Spot	11000	3500	
50	1000427	EXZ/C/A, EUROSTAR-REFLEKTO	45.2	3000	24°	Narrow Flood	3600	3500	
50	1000428	EXZ/C/A/FG, EUROSTAR-REFLEKTO	45.2	3000	24°	Narrow Flood	3600	3500	
50	1000402	EXN/C/A, EUROSTAR-REFLEKTO	45.2	3000	36°	Flood	2000	3500	
50	1000403	EXN/C/A/FG, EUROSTAR-REFLEKTO	45.2	3000	36°	Flood	2000	3500	
50	1000590	FNV/C/A, EUROSTAR-REFLEKTO	45.2	3000	60°	Wide Flood	850	3500	
50	1000591	FNV/C/A/FG, EUROSTAR-REFLEKTO	45.2	3000	60°	Wide Flood	850	3500	

Reflektol™ lamps are made with an aluminum dichroic deposition process for an 80% reduction in heat emission through the back of the lamp.

With no light diffusion from back-spill, all visible light is projected through the front of the lamp. Excellent for high light output requirements.



60° Beam Spread



GU5.3

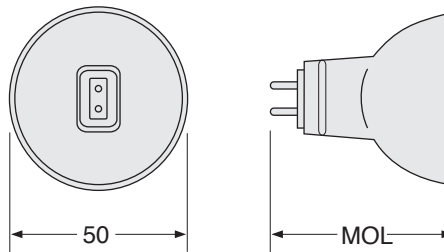
EUROSTAR™ IR SERIES

- IR Technology Provides Up to 30% Energy-Savings
- Long Life 5,000 Hours Average Life
- 50mm Diameter Multi-layer Titanium Oxide Coating
- UV-Cut Halogen Capsule
- Universal Burn Position

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension	Color Temp K	Beam			Avg Life h
			MOL		Angle	Spread	Max CP cd	
			mm					
EUROSTAR™ IR 2-Pin Base – GU5.3								
37	1003706	JR12V-37W/SP/FG/IR	50.5	3000	9°	Spot	13000	5,000
37	1003705	JR12V-37W/NFL/FG/IR	50.5	3000	25°	Narrow Flood	4400	5,000
37	1003704	JR12V-37W/FL/FG/IR	50.5	3000	35°	Flood	2200	5,000
37	1003707	JR12V-37W/WFL/FG/IR	50.5	3000	60°	Wide Flood	1100	5,000
50	1003710	JR12V-50W/SP/FG/IR	50.5	3000	9°	Spot	15500	5,000
50	1003709	JR12V-50W/NFL/FG/IR	50.5	3000	25°	Narrow Flood	5700	5,000
50	1003708	JR12V-50W/FL/FG/IR	50.5	3000	35°	Flood	2800	5,000
50	1003711	JR12V-50W/WFL/FG/IR	50.5	3000	60°	Wide Flood	1400	5,000



The exceptional performance of the **Eurostar™ IR lamps** is a direct result of the unique capsule design and the thin film coatings that allow visible light to pass through the glass envelope while reflecting the infrared energy back to the filament. Because of this, the capsule maintains an optimum operating temperature and reduces the energy used by the lamp.



GU5.3

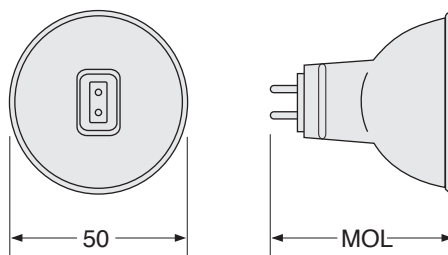
EUROSAVER™ SERIES

- Up to 30% Energy-Savings
- Only for Use in Approved Halogen Fixtures
- 50mm Diameter Multi-layer Titanium Oxide Coating
- UV-Cut Halogen Capsule
- 12 Volts
- 2-Pin Base - GU5.3
- Universal Burn Position
- Integrated Front Glass Cover (/FG)

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension	Color Temp K	Angle	Beam		Avg Life h
			MOL mm			Spread	Max CP cd	
EUROSAVER™ 2-Pin Base – GU5.3								
35	1003673	FMT/FG/EUROSAVER	45.20	3000	9°	Spot	11000	4000
35	1003674	FMV/FG/EUROSAVER	45.20	3000	20°	Narrow Flood	3600	4000
35	1003676	FMW/FG/EUROSAVER	45.20	3000	32°	Flood	2000	4000
35	1003675	FMW/50/FG/EUROSAVER	45.20	3000	50°	Wide Flood	850	4000
50	1003690	EXT/FG/EUROSAVER	45.20	3000	9°	Spot	13000	4000
50	1003691	EXZ/FG/EUROSAVER	45.20	3000	20°	Narrow Flood	4800	4000
50	1003689	EXN/FG/EUROSAVER	45.20	3000	32°	Flood	2700	4000
50	1003692	FNW/FG/EUROSAVER	45.20	3000	50°	Wide Flood	1220	4000



Eurosaver™ energy-saving halogen MR-16 lamps allow users the flexibility of choosing an energy-saving option or an increased brightness alternative.



GU5.3

SPECIALTY LAMPS

- Only for Use in Approved Halogen Fixtures
- 50mm Diameter Multilense Reflector
- UV-Cut Halogen Capsule
- Low Voltage - 12 Volts
- 2-Pin Base - GU5.3
- Universal Burn Position
- Integrated Front Glass Cover (/FG)

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension	Color Temp K	Angle	Beam		Avg Life h
			MOL mm			Spread	Max CP cd	
WHITESTAR™ High Color Temperature 2-Pin Base – GU5.3								
35	1003340	FMW/FG/WS/4200, WHITESTAR	45.2	4200	36°	Flood	600	4000
35	1003341	FMW/FG/WS/5300, WHITESTAR	45.2	5300	36°	Flood	500	4000
50	1002286	EXZ/FG/WS/4200, WHITESTAR	45.2	4200	24°	Narrow Flood	2000	4000
50	1002249	EXN/FG/WS/4200, WHITESTAR	45.2	4200	36°	Flood	1200	4000
50	1002287	EXT/FG/WS/4700, WHITESTAR	45.2	4700	12°	Spot	5000	4000
50	1003225	EXN/FG/WS/5300, WHITESTAR	45.2	5300	36°	Flood	600	4000
50	1003224	EXZ/FG/WS/5300, WHITESTAR	45.2	5300	24°	Narrow Flood	1100	4000
50	1003226	EXT/FG/WS/6500, WHITESTAR	45.2	6500	12°	Spot	3300	4000
POPSTAR™ Colored Dichroic Lens 2-Pin Base – GU5.3				Color				
50	1000580	FNC/FG, JR12V-50W/FG	45.2	Yellow	12°	Spot	9000	4000
50	1000582	FND/FG, JR12V-50W/FG	45.2	Red	12°	Spot	2000	4000
50	1000584	FNE/FG, JR12V-50W/FG	45.2	Green	12°	Spot	4400	4000
50	1000586	FNF/FG, JR12V-50W/FG	45.2	Blue	12°	Spot	2200	4000
50	1003132	EXT/OR/FG, JR12V-50W/FG	45.2	Orange	12°	Spot	5000	4000
50	1003200	EXT/MG/FG, JR12V-50W/FG	45.2	Magenta	12°	Spot	4400	4000

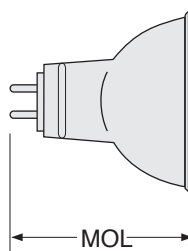
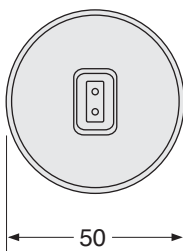


WHITESTAR™



POPSTAR™

Whitestar™ 4200K lamp was designed to provide a full spectrum MR-16 for display and task lighting. This high color temperature lamp projects a high luminous intensity with low ultraviolet and infrared emissions to protect artwork and valuable merchandise.



GU5.3

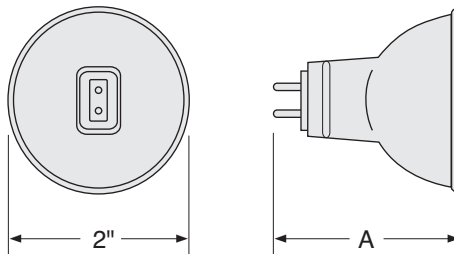
JCR - FIBERLINE™ SERIES

- Only for Use in Approved Enclosed Halogen Fixtures
- Focused Beam for Optical Applications
- 50mm Dichroic Coated Reflector
- 2-Pin Base - GU5.3
- Universal Burn Position

Watts	Ushio Ordering Code	Ushio Lamp Description	Dimension MOL (A)	Reflector Type	Filament Type	Working Distance (mm)	Luminous Flux* lm	Color Temp K	Avg Life h	Burn Position
FIBERLINE™ 2-Pin Base – GU5.3										
50	1003125	JCR12V-50W/FO, ENL/HO	44.9	Specular	C-8	40.0	360	3000	4000	Univ
75	1003239	JCR12V-75W/FO	44.9	Specular	C-8	40.0	500	3000	3500	Univ

* In 13mm fiber (fill factor 100)

The **Fiberline™** MR-16 lamps have the high luminous output and long lifetime needed for fiber illuminators and other optical applications. The filaments and elliptical reflectors are precision aligned for optimal light concentrations into an optical aperture or fiber bundle. The UV cut quartz capsule reduces damage to synthetic fibers or optical elements in the fixture.



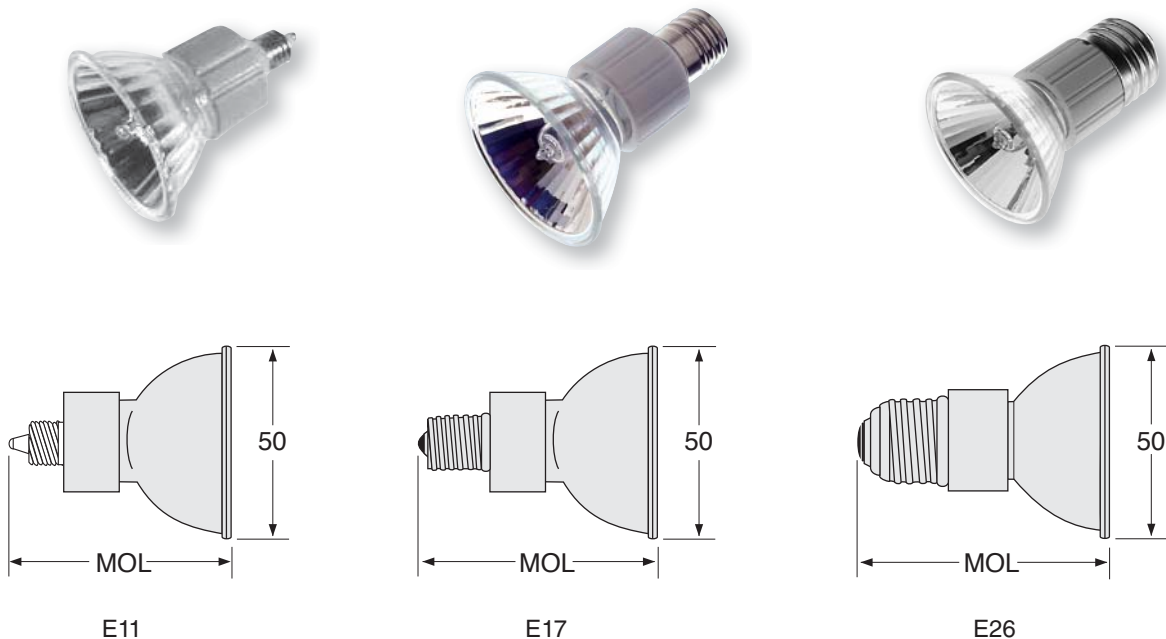
GU5.3

JDR

- Only for Use in Approved Enclosed Halogen Fixtures
- 50mm Dichroic Coated Reflector
- Line Voltage - 120 Volts
- Operate Base Up
- Mini Candelabra Screw Base - E11
- Intermediate Screw Base - E17
- Medium Screw Base - E26

Watts	Ushio Ordering Code	Ushio Lamp Description	ANSI Code	Dimensions	Beam			Color Temp K	Avg Life h
				MOL	Angle	Spread	Max CP cd		
				mm					
Minican Screw Base - E11									
100	1002223	JDR120V-100W/FL36		68	36°	Wide	3000	3000	2000
Intermediate Screw Base - E17									
75	1001032	JDR120V-75WL/SP14	FSA	75	14°	Narrow	5000	3000	2000
75	1001030	JDR120V-75WL/NFL24	FSB	75	24°	Medium	1800	3000	2000
75	1001033	JDR120V-75WL/FL38	FSD	75	38°	Wide	1300	3000	2000
100	1001013	JDR120V-100WL/SP12	FSC	75	14°	Narrow	7100	3000	2000
100	1001011	JDR120V-100WL/NFL24	FSE	75	24°	Medium	4200	3000	2000
100	1001016	JDR120V-100WL/FL38	FSF	75	38°	Wide	2800	3000	2000
Medium Screw Base - E26									
60	1001021	JDR120V-60W/FL28		71	28°	Flood	—	3150	2000
75	1001834	JDR120V-75WL/SP14		75	14°	Narrow	5000	3000	2000
75	1001022	JDR120V-75W/NFL20/FG*		75	20°	Medium	2800	3000	2000
75	1001031	JDR120V-75WL/NFL24		75	24°	Medium	2800	3000	2000
75	1001836	JDR120V-75WL/FL30		75	30°	Wide	2100	3000	2000
75	1001029	JDR120V-75W/FL30/FG*		75	30°	Wide	2100	3000	2000
100	1001014	JDR120V-100WL/SP10		75	10°	Narrow	6300	3000	2000
100	1001012	JDR120V-100WL/NFL20		75	20°	Medium	4200	3000	2000
100	1001017	JDR120V-100WL/FL30		75	30°	Wide	2500	3000	2000

* Front glass versions available



PAR 46, 56, & 64

- Only for Use in Approved Enclosed Halogen Fixtures
- PAR 46 - 5 3/4" Diameter; PAR 56 - 7" Diameter; PAR 64 - 8" Diameter
- Universal Burn Position



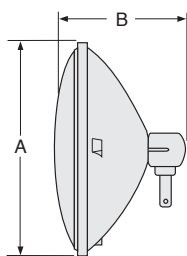
Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm		Approx	Approx	Approx	Beam Spread	Color Temp K	Ave Life h
			Dia (A)	MOL (B)	Field Angle Degrees ¹	Field Beam Degrees ²	Field Lumens lm ³			
PAR 46 – Medium Side Prong Base - Incandescent										
200	1001441	200PAR46/3NSP*	143.1	101.6	—	—	—	Narrow Spot	2750	2000
200	1001439	200PAR46/3MFL	142.3	101.6	—	—	—	Medium Flood	2750	2000
PAR 56 – Mogul End Prong (GX16d) Base										
300	1001456	300PAR56/NSP	178.6	127.0	—	—	1800	Narrow Flood	2750	2000
300	1001453	300PAR56/MFL	178.6	127.0	34x19	23x11	2100	Medium Flood	2750	2000
300	1001457	300PAR56/WFL	178.6	127.0	57x27	37x18	2200	Wide Flood	2750	2000
500	1001282	Q500PAR56/NSP*	178.6	127.0	32x15	13x8	4000	Narrow Spot	2950	4000
500	1001281	Q500PAR56/MFL	178.6	127.0	42x20	26x10	4800	Medium Flood	2950	4000
500	1001284	Q500PAR56/WFL	178.6	127.0	66x34	44x20	6400	Wide Flood	2950	4000
PAR 64 – Extended Mogul End Prong (GX16d) Base										
500	1001495	500PAR64/NSP	205.0	152.4	—	—	6500	Narrow Spot	2850	2000
500	1001493	500PAR64/MFL	205.0	152.4	—	—	6500	Medium Flood	3000	2000
500	1001497	500PAR64/WFL	205.0	152.4	—	—	6500	Wide Flood	2850	2000
1000	1000519	FFN, PAR64/VNSP	205.7	152.4	24x10	12x6	11000	Very Narrow Spot	3150	800
1000	1000520	FFP, PAR64/NSP	205.7	152.4	26x14	14x7	12000	Narrow Spot	3150	800
1000	1000521	FFR, PAR64/MFL	205.7	152.4	44x21	28x12	14000	Medium Flood	3150	800
1000	1000522	FFS, PAR64/WFL	205.7	152.4	71x45	48x24	19000	Wide Flood	3150	800

* Special Order Item

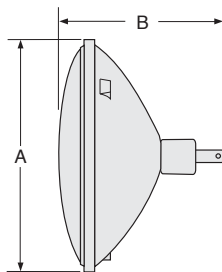
¹ Beam Spread at 10% peak candle power

² Beam Spread at 50% peak candle power

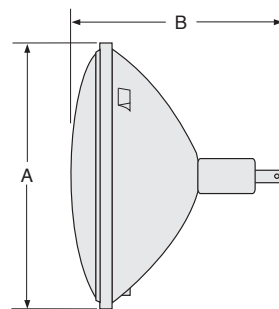
³ Measured within field angle



Medium
Side Prongs



Mogul End Prong
GX16d



Extended Mogul End Prong
GX16d

BLACKLIGHT BLUE FLUORESCENT LAMPS

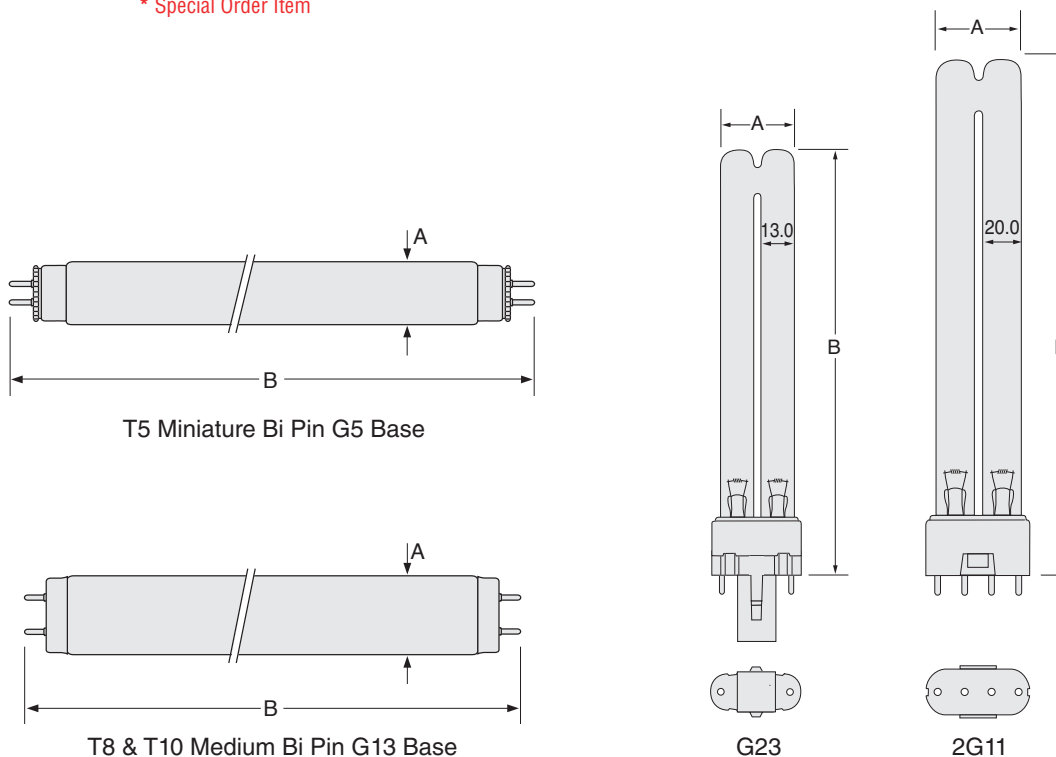
- Fluorescent Lamps
- High CRI



Watts	Ushio Ordering Code	Ushio Lamp Description	Dimensions mm		Amperage A	Volts V	Spectral Peak (nm)	UV Output (W)	Avg Life h	Base Type
			Dia (A)	MOL (B)						
BLACKLIGHT BLUE T-5 DIAMETER										
4.5	3000106	F4T5BLB	15.5	134.5	0.170	29	306	0.5	3000	G5
6	3000111	F6T5BLB*	15.5	210.5	0.160	42	368	1.0	3000	G5
7.2	3000116	F8T5BLB	15.5	287.0	0.145	57	368	1.2	3000	G5
BLACKLIGHT BLUE T-8 DIAMETER										
9.5	3000305	F10T8BLB	25.5	330.0	0.230	46	368	1.5	4000	G13
15.0	3000078	F15T8BLB*	25.5	436.0	0.305	55	368	2.6	4000	G13
30.5	3000148	F30T8BLB*	25.5	893.0	0.355	99	368	6.3	4000	G13
BLACKLIGHT BLUE T-10 DIAMETER										
19	3000306	F20T10/BLB**	32.5	588.5	0.360	58	368	3.7	4000	G13
39.5	3000138	F40T10/BLB/R*(RAPID START)	32.5	1198.0	0.420	106	368	8.1	5000	G13
BLACKLIGHT BLUE, COMPACT										
7.0	3000330	FPX7BLB*	28.0	115.0	0.180	45	368	1.0	4000	G23
9.0	3000325	FPX9BLB*	28.0	145.0	0.180	59	368	1.4	4000	G23
18.0	3000327	FPX18KBLB*	40.0	225.0	0.375	58	368	3.3	4000	2G11

* Preheat

* Special Order Item



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Manage in Accord with Disposal Laws
See: www.lamprecycle.org

COLORLITE™ SERIES

- Consistent Color
- High Color Saturation
- No Color Filter or Gels Required for Fixture
- 6,000 Hours Useful Life

Please see Safety and Handling Instructions on page 81.



Watts	Ushio	Ushio	Volts V	Amperage A	Dimensions mm			Luminous			ANSI Ballast/ Fixture	Burn Position
	Ordering Code	Lamp Description			Dia (A)	MOL (B)	LCL (C)	Flux lm	Wavelength nm	Saturation %		
Single Ended Mogul Screw Base – E39												
250	5001484	UHI-S250/E39/BLUE	—	3.00	46	225	150	5400	465	66	M80/E*	Univ
250	5001485	UHI-S250/E39/GREEN*	—	3.00	46	225	150	21000	530	50	M80/E*	Univ
250	5001486	UHI-S250/E39/MAGENTA*	—	3.00	46	225	150	11000	-560	29	M80/E*	Univ
400	5000947	UHI-S400BL, BLUE	—	3.25	46	275	175	8000	465	66	M59/E	Univ
400	5000946	UHI-S400GR, GREEN	—	3.25	46	275	175	35000	535	63	M59/E	Univ
400	5000948	UHI-S400MG, MAGENTA	—	3.25	46	275	175	21000	-500	25	M59/E	Univ
1000	5001189	UHI-S1000BL, BLUE	—	4.10	76	340	220	22000	455	61	M47/E	H±60°
1000	5001188	UHI-S1000GR, GREEN*	—	4.10	76	340	220	92000	535	60	M47/E	H±60°
Single Ended Medium Screw Base – E26												
150	5001453	UHI-S150/E26/BLUE*	—	1.80	54	138	86	3900	470	70	M102/E	Univ
150	5001452	UHI-S150/E26/GREEN*	—	1.80	54	138	86	12500	530	46	M102/E	Univ
150	5001498	UHI-S150/E26/MAGENTA*	—	1.80	54	138	86	7500	-530	43	M102/E	Univ
175	5001455	UHI-S175/E26/BLUE	—	1.50	54	138	86	3900	470	70	M57/E	Univ
175	5001454	UHI-S175/E26/GREEN	—	1.50	54	138	86	12500	530	46	M57/E	Univ
Double Ended Base – RX7s												
150	5000821	UHI-150BL, BLUE	95	1.80	23	132	66	3000	465	56	M81/E	H±45°
150	5000822	UHI-150GR, GREEN*	95	1.80	23	132	66	9500	535	50	M81/E	H±45°

* Special Order Item

/E = Enclosed Fixture Required

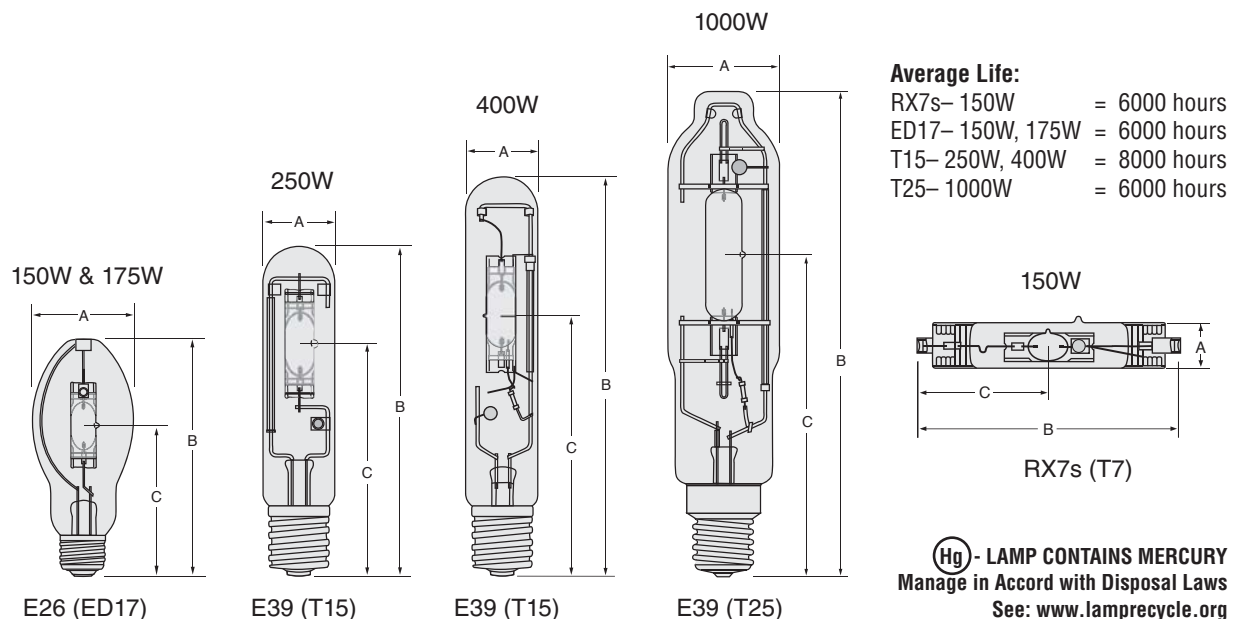
Recommended Ignition Voltage: 4kV

* Need ignitor with 4kV

Lamp should be switched off for at least 15 minutes/week

Use only in fixtures installed with safety glass

Use only in fixtures installed with tempered safety glass.



EUROSPOT™ SERIES

- Color Stable
- High Efficacy - 80 Lm/W
- Long Life - 10,000 Hours Average
- Compact Design

- 80 Color Rendering Index
- UV Protection

Please see Safety and Handling Instructions on page 81.

Watts	Ushio	Ushio	Volts V	Amperage A	Dimensions mm				Color Temp K	Luminous Flux lm	Avg Life h*	ANSI
	Ordering	Lamp			Dia	MOL	LCL	Arc				Ballast/
	Code	Description			(A)	(B)	(C)	Gap				Fixture
Axial - Arc 99mm, Long length 2-Pin Base – G12												
75	5000439	UHI-S75DW/UV	95	0.9	23	99	56	8.5	3000	6000	10000	M98/E
150	5000950	UHI-S150DW/A/UV	95	1.8	23	99	56	6.5	3000	13000	10000	M102/E
150	5000875	UHI-S150DM/A/UV	95	1.8	23	99	56	6.5	4200	13000	10000	M102/E

Burn Position: Universal 360°

Recommended Ignition Voltage: 4kV

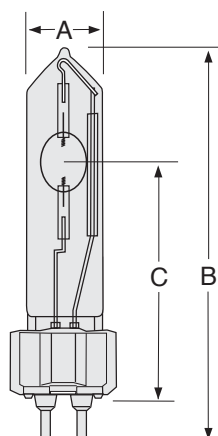
Lamp should be switched off for at least 15 minutes/week

Use only in fixtures installed with safety glass

/E = Enclosed Fixture Required

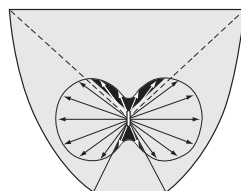
Lamp Code Suffix Designation

DW =Warm White
DM =Cool White

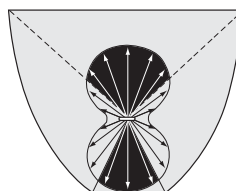


G12

USHIO has incorporated an axial arc-tube which not only increases raw lumen output, but allows light to be more efficiently collected within a reflector



Axial, low stray light portion: approximately 30% higher luminous efficiency can be attained by axial arrangement



Transverse, high stray light portion; stray light leads to dazzle or loss

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MHL

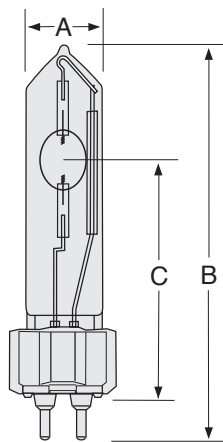
- For Blacklight Special Effects
- Only Use in UV Protective Housing!

Please see Safety and Handling Instructions on page 81.



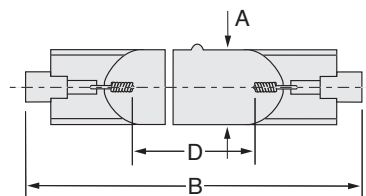
Watts	Ushio	Ushio	Volts	Spectral Range	Dimensions mm			Arc	Avg	Base
	Ordering	Lamp			Dia	MOL	LCL			
	Code	Description	V		(A)	(B)	(C)	(D)	h	
Single Ended Metal Halide - G12 Base										
70	5001468	MHL-70	95	300-450nm	23.0	102	56	—	500	G12
150	5001381	MHL-150	95	300-450nm	23.0	102	56	—	500	G12
Double Ended Metal Halide										
250	5000089	MHL-250	125	300-450nm	15.5	68	—	15.5	500	RSC
450	5000114	MHL-450	140	300-450nm	16.3	105	—	31.0	500	RSC
1200	5000061	MHL-1000	120	400-450nm	25.0	130	—	24.0	500	Ceramic Base w/AMP Connector
1200	5000062	MHL-1000/1	135	350-370nm	23.0	147	—	68.0	500	

70W & 150W



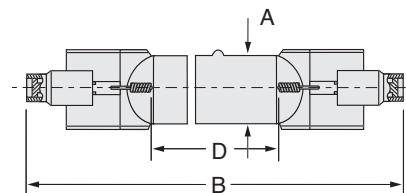
G12

250W



R7s

450W, 600W & 1200W



R7s

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Manage in Accord with Disposal Laws
See: www.lamprecycle.org

UMI & SMH

- High Brightness
- 5600K Daylight Color Temperature

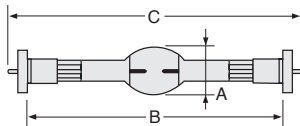
Please see Safety and Handling Instructions on page 81.



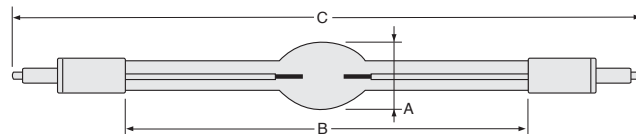
Watts	Ushio Ordering Code	Ushio Lamp Description	Volts V	Amperage A	Arc Gap	Dimensions mm			Luminous Flux lm	Color Temp K	Avg Life h	Base Type	Burn Position
						Dia (A)	LCL (B)	MOL (C)					
UMI – Double Ended Metal Halide													
575	5000250	• UMI-575/GS*	95	7.0	7	21	115	145	49000	5600	750	SFc10-4 M4	Univ
1200	5000235	UMI-1200/HB	100	13.8	7	21	115	145	110000	5600	750	SFc 10-4 M4	Univ
1200	5000234	• UMI-1200/GS	100	13.8	10	27	180	220	110000	5600	750	SFc 15.5-6 0.5	Univ
2500	5000241	• UMI-2500/GS*	115	25.6	14	30	290	355	240000	5600	500	SFa 21-12	H $\pm$ 15°
4000	5000245	UMI-4000*	200	24.0	34	38	340	405	410000	5600	500	SFa 21-12 ••	H $\pm$ 15°
6000	5000251	UMI-6000*	125	55.0	20	52	—	450	650000	5600	300	25.4x50.8	H $\pm$ 15°
SMH EmArc® Enhanced Metal Arc – Double Ended Metal Halide													
850	5001477	SMH-850/D2	90	9.4	3.5	21	105	136	70000	6000	1000	—	—

* Special Order Item

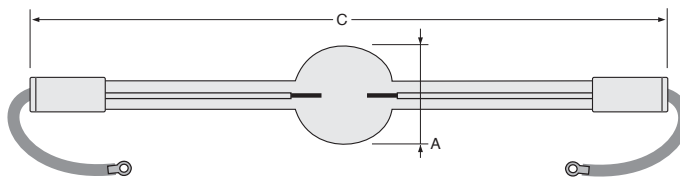
- Gap Short Version
- 165mm (x2) lead wire with 8mm diameter ring terminal



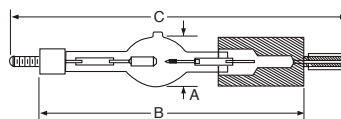
UMI-575/GS UMI-1200/GS, HB



UMI-2500/GS UMI-4000



UMI-6000



SMH-850/D2

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Manage in Accord with Disposal Laws
See: www.lamprecycle.org

UMR, USD & USR

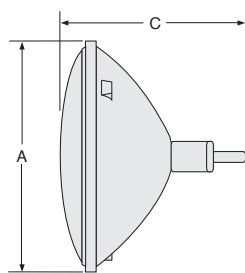
- Compact Design
- High Brightness
- Daylight Color Temperature
- Universal Burn Position

Please see Safety and Handling Instructions on page 81.

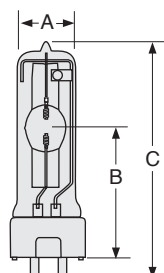


Watts	Ushio	Ushio	Volts	Arc	Nominal Dimensions mm			Luminous	Color	Avg	
	Ordering	Lamp		Gap	Dia	LCL	MOL				
	Code	Description	V		(A)	(B)	(C)	lm	K	h	Type
UMR – Single Ended Metal Halide											
1200	1003283	UMR-1200/PAR64/6K 100	100	—	204.2	—	176	85000	6000	1000	G38
USD – Single Ended Metal Halide											
250	5002003	USD-250/2	95	5	23	55	108	18000	8500	2000	GY9.5
USR – Single Ended Metal Halide											
575	5000283	USR-575/BE	95	7	30	70	145	49000	5600	750	G22
575	5002008	USR-575/2	95	7	30	65	125	44000	7800	1000	GX9.5
700	5002010	USR-700SA	70	4	30	39	85	56000	5600	750	GY9.5
1200	5000278	USR-1200 HR*	100	11	42	107	200	110000	5600	750	G38
1200	5002013	USR-1200/2	100	10	38.5	112	169	105000	7200	800	G22/30X53
2500	5000280	USR-2500 HR	115	14	60	127	240	240000	5600	500	G38
4000	5002014	USR-4000 HR*	200	20	75	127	250	380000	6000	500	G38

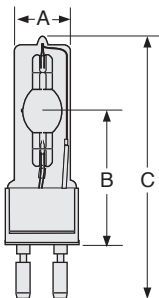
* Special Order Item



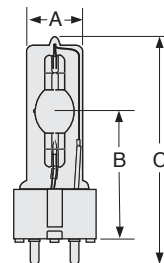
UMR-1200/PAR64/6K



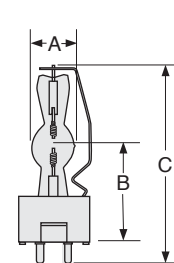
USD-250/2S



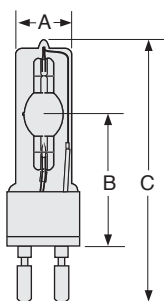
USR-575BE



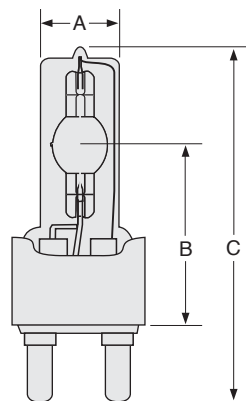
USR-575/2



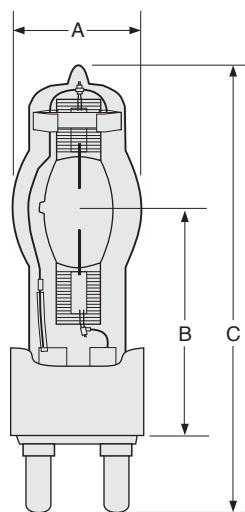
USR-700/SA



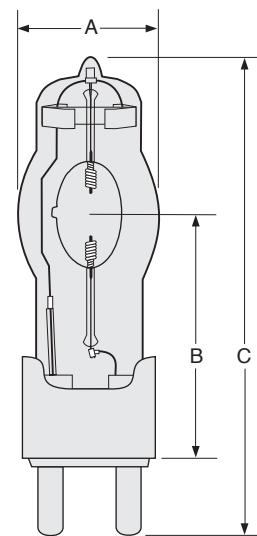
USR-1200/2



USR-1200 HR



USR-2500 HR



USR-4000 HR

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MHR

- Cold Mirror Reflector
- Compact Design
- Standard AMP Connector

Please see Safety and Handling Instructions on page 81.

Watts	Ushio	Ushio	Ignition			Luminous Flux through Aperature			Color		Avg	ANSI
	Ordering	Lamp	Volts	Voltage	Amperage	ø13mm	ø10mm	ø25mm	Temp	CRI	Life	Ballast/ Fixture
	Code	Description	V	kV	A	distance 42mm lm*	distance 44mm lm*	distance 33mm lm**				
AMP Connector												
100	5000789	MHR-100D/L	95	4	1.2	1600	1800	4600	5200	72	6000	M90/E
150	5000834	MHR-150N	95	4	1.8	2000	2200	5300	4200	75	6000	M81/E
250	5001377	MHR-250N	100	4	3.0	3500	—	—	4200	72	4000	M80/E

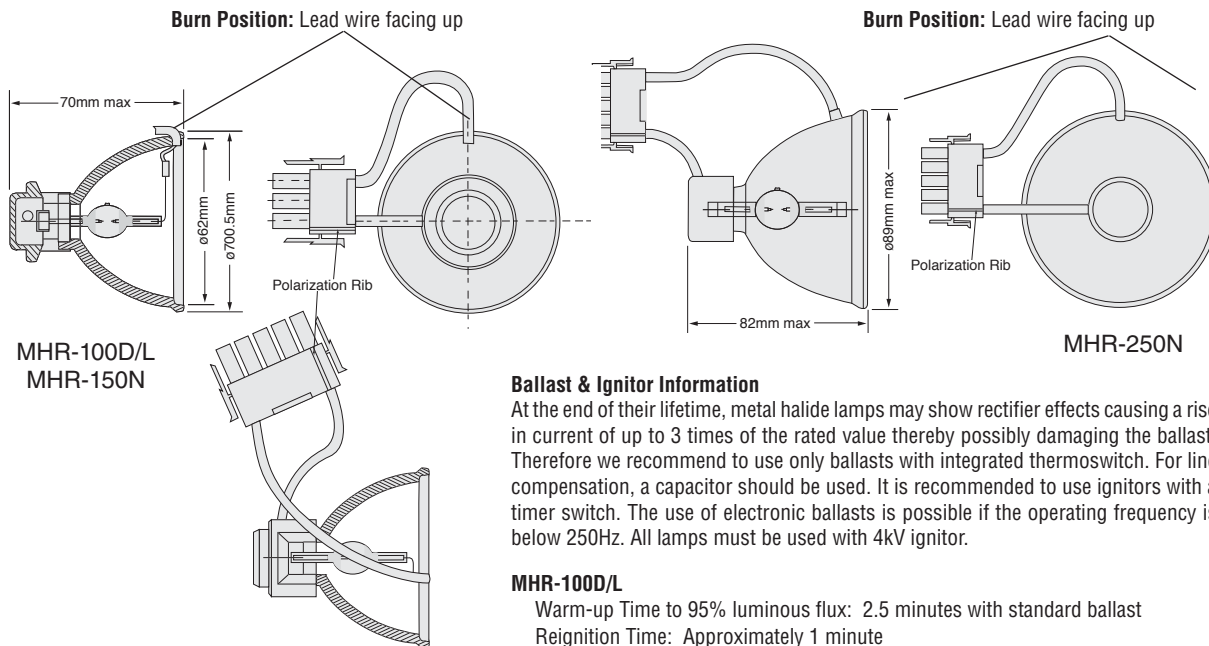
Optimal distance from reflector to fiber
(with ø13mm fiber bundle):
100W & 150W: 42mm
250W: 53mm

Length of Base Lead Wire: Approx. 75mm

Base Type: AMP Universal Mate-N-Lok
MHR-100D/L: 3 channel plug
MHR-150N: 5 channel plug
MHR-250N: 5 channel plug

/E = Enclosed Fixture Required

* Measurement taken with optical sphere
** Measurement taken through fiber bundle
▲ (ø13mm; distance 53mm)



MHR-100D/L
MHR-150N

MHR-250N

Ballast & Ignitor Information

At the end of their lifetime, metal halide lamps may show rectifier effects causing a rise in current of up to 3 times of the rated value thereby possibly damaging the ballast. Therefore we recommend to use only ballasts with integrated thermoswitch. For line compensation, a capacitor should be used. It is recommended to use ignitors with a timer switch. The use of electronic ballasts is possible if the operating frequency is below 250Hz. All lamps must be used with 4kV ignitor.

MHR-100D/L

Warm-up Time to 95% luminous flux: 2.5 minutes with standard ballast
Reignition Time: Approximately 1 minute

MHR-150N

Warm-up Time: 3 minutes
Reignition Time: Approximately 2 minutes

MHR-250N

Warm-up Time: 10 minutes
Reignition Time: Approximately 7 minutes

Warning!

The lamp emits UV radiation which can cause serious eye and skin damage. Therefore, the lamp must be used only in closed lamp houses.

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UXL

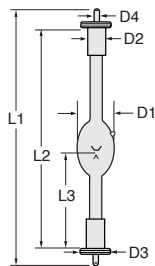
- 300 - 1000 Watts
- Searchlight
- Followspot
- Projection

Please see Safety and Handling Instructions on page 82.



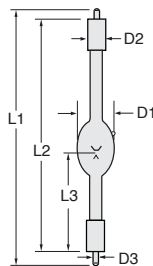
Watts	Ushio Ordering Code	Ushio Lamp Description	Rated Amps	Current Control Range A	Volts V	Forced Air Cooling m/sec	Arc Gap	Diameter mm				Length mm			Avg Life h
								(D1) max	(D2)	(D3)	(D4)	(L1)	(L2)	(L3)	
Xenon Short Arc															
300	5000343	UXL-300D-0*	15	14-16	20	—	2.6	25	13	19	M5P0.9	175	150	65	1000
300	5000346	UXL-302-0	15	8-15	20		2.6	25	13	NO 10-32 UNF	—	174	150	85	900
350	5000350	UXL-351E-0	16	15-17	22	3-6	2.9	22	13	—	M8	133	120	66.5	1000
500	5000360	UXL-500D-0*	25	17-25	20	4-6	4.0	29	20	M8P1.25	M8P1.25	234	204	95	1500(V) / 1200(H)
500	5000362	UXL-502HS-0	31	21-31	14	7-8	0.9	30	15	4	—	148	135	65	1200
550	5000368	UXL-553	25	17-25	22	7-8	3.1	30	15	M6P1.0	—	161	135	65	1500
1000	5002060	UXL-10S*	50	30-55	20	4-6	4.2	40	25	11	5/16-18 UNC	245	214	98.5	—
1000	5002061	UXL-16S	65	45-70	22	4-6	4.0	46.5	25	11	5/16-18 UNC	245	214	98.5	—
1000	5001075	UXL-10SB	50	30-55	20	4-6	4.2	40	25	11	5/16-18 UNC	245	214	98.5	1500
1000	5000316	UXL-1000D-0*	45	32-47	22	—	5.0	40	25	M10 P1.25	M8 P1.25	315	275	125	1500

* Special Order Item



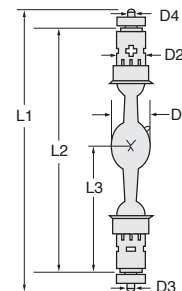
UXL-300D-0

Burn Position: Vertical $\pm 15^\circ$



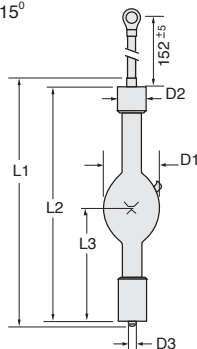
UXL-302-0

Burn Position: Vertical $\pm 30^\circ$



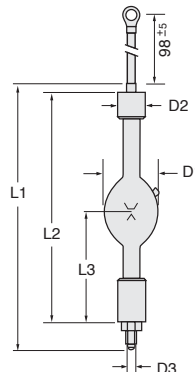
UXL-500D-0 / UXL-1000D-0

Burn Position:
Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$



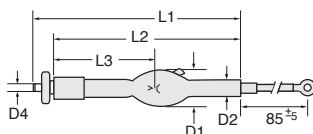
UXL-502HS-0

Burn Position: Vertical $\pm 15^\circ$



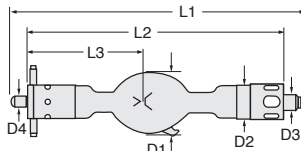
UXL-553

Burn Position:
Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$



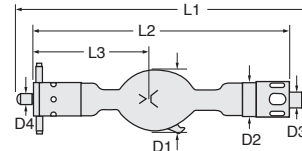
UXL-351E-0

Burn Position: Horizontal $\pm 15^\circ$



UXL-10S / UXL-16S

Burn Position: Horizontal $\pm 15^\circ$



UXL-10SB / UXL-16SB

Burn Position: Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$

UXL

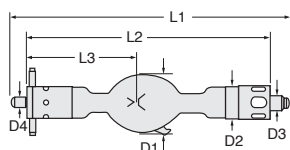
- 1430 - 3000 Watts
- Searchlight
- Followspot
- Projection

Please see Safety and
Handling Instructions
on page 82.



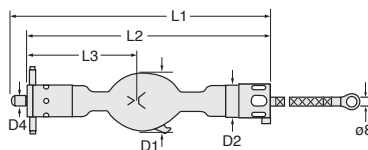
Watts	Ushio Ordering Code	Ushio Lamp Description	Rated Amps	Current Control Range A	Volts V	Forced Air Cooling m/sec	Arc Gap	Diameter mm				Length mm			Avg Life h
								(D1) max	(D2)	(D3)	(D4)	(L1)	(L2)	(L3)	
Xenon Short Arc															
1430	5001076	UXL-16SB	65	45-70	22	4-6	4.0	46.5	25	11	5/16-18 UNC	245	214	98.5	1500
1450	5001435	UXL-16SCB*	65	45-70	22	4-6	4.0	46.5	25	w/lead wire(L:270)	5/16-18 UNC	233	220	98.5	1500
1750	5000337	UXL-2000PR*	70	56-70	25	6-9	6.0	45	25.4	—	10	365	320	145	2000
2000	5001062	UXL-20FS	80	50-85	25	10-13	6.0	60	27	7.8	9.4	342	302	147	2000
2000	5001434	UXL-20SC	70	50-85	29	5-10	5.5	60	27	7.9	9.5	342	302	147.0	2000
2000	5001063	UXL-2000FS	70	50-85	29	10-13	6.0	55	27	12	10	370	320	145.0	2000
2000	5000336	UXL-2000HA*	80	60-85	25	7-10	6.0	52	27	M14 P1.5	14	370	320	145.0	2000
2000	5001688	UXL-2000HR	70	50-85	29	4-6	6.0	60	27	12	10	370	320	145.0	—
2500	5001077	UXL-25SC	90	70-100	28	10-13	6.0	60	25	7.9	9.5	342	300	147.0	1500(V) / 1200(H)
3000	5001079	UXL-30SC	100	60-110	30	5-10	6.0	60	27	7.9	9.5	342	302	147.0	1500(V) / 1200(H)

* Special Order Item



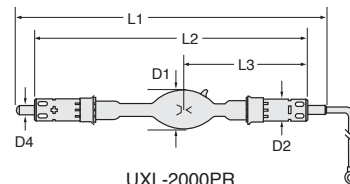
UXL-16SB

Burn Position: Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$



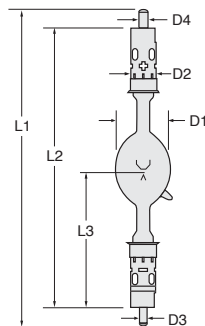
UXL-16SCB

Burn Position: Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$



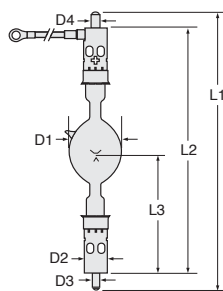
UXL-2000PR

Burn Position: Horizontal $\pm 10^\circ / \sim 45^\circ$



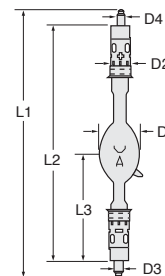
UXL-20FS

Burn Position:
Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$



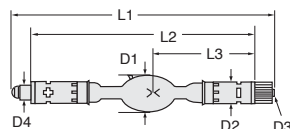
UXL-20SC

Burn Position:
Horizontal $\pm 30^\circ$ Vertical $\pm 30^\circ$



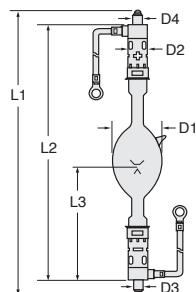
UXL-2000FS

Burn Position:
Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$



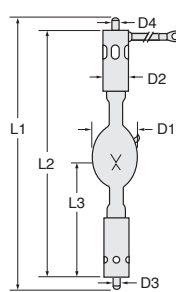
UXL-2000HA

Burn Position: Horizontal $\pm 15^\circ$



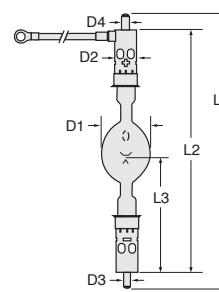
UXL-2000HR

Burn Position:
Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$



UXL-25SC / UXL-40SC

Burn Position:
Horizontal $\pm 15^\circ$ Vertical $\pm 15^\circ$



UXL-30SC

Burn Position:
Horizontal $\pm 30^\circ$ Vertical $\pm 30^\circ$

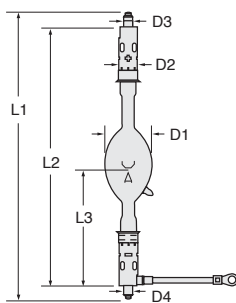
UXL

- 3000 - 7000 Watts
- Searchlight
- Followspot
- Projection

Please see Safety and
Handling Instructions
on page 82.

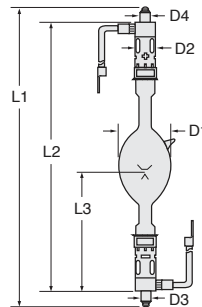
Watts	Ushio Ordering Code	Ushio Lamp Description	Rated Amps	Current Control Range A	Volts V	Forced Air Cooling m/sec	Arc Gap	Diameter mm				Length mm			Avg Life h
								(D1) max	(D2)	(D3)	(D4)	(L1)	(L2)	(L3)	
Xenon Short Arc															
3000	5001064	UXL-3000FS	100	60-100	30	10-13	7.0	70	27	13	14	428	—	171.0	1200
3000	5002175	UXL-3000HR	100	60-100	26	10-13	7.0	70	27	14	13	428	382	167.5	—
4000	5000631	UXL-40SC	135	80-150	29	10-13	7.0	70	30	7.9	9.5	410	370	174.5	800
4000	5002082	UXL-40SCH	135	80-150	29	10-13	—	70	30	7.9	9.4	410	370	174.5	—
4000	5002074	UXL-4000HA*	130	100-140	31	10-13	7.0	65	28	M14 P1.5	14	428	380	170	—
5000	5002044	UXL-50SCA*	140	100-150	35	10-13	8.0	70	30	7.85	9.4	413	370	171.0	—
6000	5000943	UXL-60SC	160	120-170	37	10-13	9.0	80	30	9.4	7.85	433	392	176.0	500
6000	5000370	UXL-6000HK*	155	100-160	32	10-13	8.0	70	32	30	—	462	—	214	600
7000	5000634	UXL-70SC	160	120-170	42	10-13	10.0	80	30	7.9	9.4	433	392	171.0	500

* Special Order Item



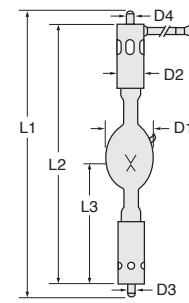
UXL-3000FS

Burn Position:
Horizontal $\pm 15^\circ$
Vertical



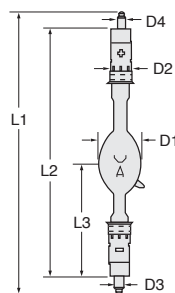
UXL-3000HR

Burn Position:
Horizontal $\pm 15^\circ$



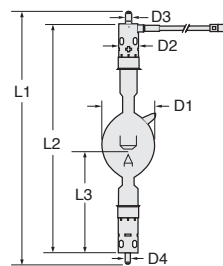
UXL-40SC / UXL-40SCH

Burn Position:
Horizontal $\pm 15^\circ$
Vertical $\pm 15^\circ$



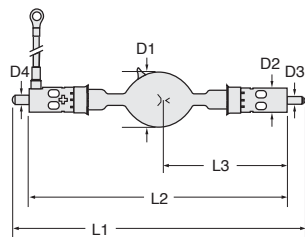
UXL-4000HA

Burn Position:
Horizontal $\pm 15^\circ$



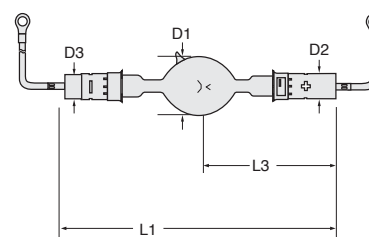
UXL-60SC / UXL-50SC

Burn Position:
Horizontal $\pm 15^\circ$ Vertical



UXL-70SC

Burn Position:
Horizontal $\pm 15^\circ / 45^\circ$



UXL-6000HK-0

Burn Position:
Horizontal $\pm 10^\circ$

E/T/C AUDIOVISUEL	WATTAGE	USHIO LAMP	ORDER CODE
pigi Xenon Projector 5/7K	6000	UXL-60SC	5000943
pigi Xenon Projector 5/7K	7000	UXL-70SC	5000634
L.P. ASSOCIATES	WATTAGE	USHIO LAMP	ORDER CODE
2KW Sky Dancer	2000	UXL-20SC	5001434
4KW Sky Dancer	4000	UXL-40SC	5000631
7KW Sky Dancer	7000	UXL-70SC	5000634
2KW XELAMP Architectural Spotlight	2000	UXL-20SC	5001434
4KW XELAMP Architectural Spotlight	4000	UXL-40SC	5000631
7KW XELAMP Architectural Spotlight	7000	UXL-70SC	5000634
LYCIAN STAGE LIGHTING	WATTAGE	USHIO LAMP	ORDER CODE
Lycian 1290XLT	2000	UXL-20SC	5001434
Lycian 1293 X3K	3000	UXL-30SC	5001079
Lycian 1294 SuperArc 4K	4000	UXL-40SC	5000631
PHOEBUS MANUFACTURING	WATTAGE	USHIO LAMP	ORDER CODE
Imarc	200	SMR-202/D1	5001466
Imarc 850	850	SMH-850/D2	5001477
Silverbeam Cirrus	850	SMH-850/D2	5001477
Silverbeam PSL-14 2K Xenon	2000	UXL-20SC	5001434
Silverbeam PSL-20 4K Xenon	4000	UXL-40SC	5000631
Silverbeam PSL-20 7K Xenon	7000	UXL-70SC	5000634
Silverbeam 360 2KW	2000	UXL-20SC	5001434
Silverbeam 360 4KW	4000	UXL-40SC	5000634
Silverbeam 360 7KW	7000	UXL-70SC	5000634
SKY CANNON	WATTAGE	USHIO LAMP	ORDER CODE
SC1-600 and SC4-600	600	SMH-600/SC1	5001335
SC1-850 and SC4-850	850	SMH-850/SC1	5001470
SKYVIEW	WATTAGE	USHIO LAMP	ORDER CODE
AdLight	850	SMH-850/D2	5001477
SPACE CANNON ILLUMINATION	WATTAGE	USHIO LAMP	ORDER CODE
25kW	2500	UXL-25SC	5001077
30kW	3000	UXL-30SC	5001079
40kW	4000	UXL-40SC	5000631
70kW	7000	UXL-70SC	5000634
STRONG INTERNATIONAL	WATTAGE	USHIO LAMP	ORDER CODE
Radiance	850	SMH-850/SB1	5001634
Super Trouper	1000	UXL-10SB	5001075
Super Trouper	1600	UXL-16SB	5001076
Xenon Super Trouper	2000	UXL-2000FS	5001063
Super Trouper II Short version	2000	UXL-20FS	5001062
Gladiator II	2500	UXL-25SC	5001077
Xenon Gladiator III	3000	UXL-3000FS	5001064
Gladiator IV	4000	UXL-40SC	5000631
SYNCROLITE ENTERTAINMENT TECHNOLOGY	WATTAGE	USHIO LAMP	ORDER CODE
MX1000	850	SMH-850/D2	5001477
SX2K	2000	UXL-20SC	5001434
SX3K-2	3000	UXL-30SC	5001079
SXB-5/2	5000	UXL-50SC/A	5002044
SS7K	7000	UXL-70SC	5000634
SX7K	7000	UXL-70SC	5000634
SXB-8/2	7000	UXL-70SC	5000634

RATINGS		DIMENSIONS		BURN POSITION (BURN POS)	
W	Watts	LL	Light Length (filament length)	BD	Base Down
V	Volts	LCL	Light Center Length	BD/45	Within 45° of vertical base down
kV	Kilovolts	C-to-C	Contact to Contact	BD/Hor	Base Down to Horizontal
A	Amps	MOL	Maximum Overall Length	BU	Base Up
h	Hours	Dia	Diameter	Horiz	Horizontal
K	Kelvin	Max	Maximum	H±10	Within ±10° of horizontal position
lm	Lumens	All dimensions are approximate measurements in millimeters (mm)		H±15	Within ±15° of horizontal position
lm/W	Lumens per Watt			H+10/-45	+10°; -45° of horizontal position
lx	Center Screen Illuminance			H+15/-45	+15°; -45° of horizontal position
cd	Candela			H±60	Within ±60° of horizontal position
cp	Candle Power			V±15	Within ±15° of vertical position
CRI	Color Rendering Index			V±30	Within ±30° of vertical position
m/sec	Meters per Second			Univ	Universal Burn Position

SAFETY AND HANDLING

TUNGSTEN HALOGEN AND INCANDESCENT LAMPS

- Always wear eye protection when installing Halogen lamps. Some Halogen lamps have internal pressures of several atmospheres.
- Halogen lamps operate at extremely high temperatures that can cause serious physical injuries and property damage.
- Only use Halogen lamps in Halogen-approved fixtures. Fixtures should fully contain any parts of the halogen lamp upon the event of a lamp burst.
- Do not use Halogen lamps in close proximity of paper, cloth or other combustible materials that can cause a fire hazard.
- Lamps are very fragile, do not drop, crush, bend or shake them.
- Do not touch the Halogen bulb surface or inside reflectors with your bare hands. Oils from skin can lead to breakage or shorten the life of the lamp. Use clean gloves or lint free cloth for installation and removal.
- Clean any dirt, oil, or lint away from the lamp with alcohol and a lint free cloth or tissue. Any foreign particles or materials on the bulb surface can cause hot spots on the bulb and result in lamp failure.
- Never touch the lamp when it is on, or soon after it has been turned off, as it is hot and will cause serious burns.
- Do not look directly at the operating lamp for any period of time; this may cause serious eye injury.
- Always turn off the electrical power before inserting, removing, or cleaning the lamp.
- Affix the lamp securely in the socket. Improper installations will cause electrical arcing, overheating and short life to lamp and socket. Replace lamp holders and sockets when necessary.
- Keep the temperature of the Halogen lamp seal below 350° C.
- Keep the temperature of the Halogen bulb wall above 250° C.
- Keep the temperature of the Halogen lamp bulb wall below 800° C.
- Make sure lamps of specified wattage and voltage are only used in appropriately rated fixtures. Unspecified use will lead to short lamp life, breakage and overheating of fixture.
- Lamps should not be operated beyond the total rated voltage. Avoid the use of dimmers that may drive your lamp over its rated voltage.
- Operate the lamp only in the indicated burn position. Failure to do so will lead to overheating and short life of the lamp.
- Use an external fuse when required.
- Do not allow one lamp to directly expose another. This may lead to overheating and shortened lamp life.

METAL HALIDE DISCHARGE LAMPS

- Always wear eye protection when installing Metal Halide discharge lamps. Some Metal Halide discharge lamps have high internal pressure even while cold.
- Metal Halide discharge lamps emit ultraviolet radiation which is harmful to eyes and skin!
- Metal Halide discharge lamps should only be used in enclosed fixtures with ultraviolet absorbing filter glass. Failure to do so may cause serious skin burn and eye damage. Do not use these lamps in fixtures where any unfiltered light is emitted from the fixture. Do not operate these lamps if the ultraviolet absorbing filter glass is broken or not installed.
- Metal Halide discharge lamps should only be operated in an enclosed fixture that safely contains all lamp parts in the event of a lamp burst or rupture. These lamps operate at a high internal pressure and at high temperatures. A lamp burst can occur causing physical injury and property damage.
- Lamps should never be operated beyond their rated useful life. The risk of a lamp burst increases with lamp age, temperature, improper operation and improper handling.
- Never bump, drop, apply excessive stress, or scratch the lamp. This could cause the lamp to burst! Do not operate any lamps with any traces of scratches, cracks, or physical damage.
- Never operate a lamp above or below its rated current or voltage. This may cause the lamp to leak or burst.
- Always turn off the electrical power before inserting, removing, or cleaning the lamp.
- Clean any dirt, oil, or lint away from the lamp with alcohol and a lint free cloth or tissue.
- Electrical connections should be clean and in good condition. Replace lamp holders and sockets when needed. Affix the lamp securely in the socket. Improper installations will cause electrical arcing, overheating and short life to lamp and socket.
- Never touch the lamp when it is on, or soon after it has been turned off, as it is hot and will cause serious burns. Lamps should be allowed to cool for a minimum of ten (10) minutes after the lamp is turned off.
- Do not use lamp in close proximity of paper, cloth or other combustible material that can cause a fire hazard.
- Do not look directly at the operating lamp for any period of time; this may cause serious eye injury.
- Metal Halide discharge lamps contain mercury. USHIO strives to preserve the environment and make efficient use of resources. Please refer to your local environmental laws regarding disposal and recycling of mercury containing lamps. For more information, please go to www.lamprecycle.org.



(Hg) - CONTAINS MERCURY. Manage in Accord with Disposal Laws

Metal Halide, Fluorescent and High Pressure Sodium discharge lamps contain Mercury. USHIO realizes the importance of lamp recycling and we encourage all lamps to be properly disposed of in order to help preserve the environment and our Earth's precious natural resources. Please refer to your local environmental laws regarding disposal and recycling of Mercury containing lamps. To learn more about lamp recycling requirements in your area, you can contact your state environmental authorities or visit www.lamprecycle.org.

R - NON SELF-EXTINGUISHING LAMP

WARNING: This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. Complies with the USA Federal Standard 21 CFR 1040.30 and Canada Standard SOR/80-381.

REFERS TO AQUALITE™ METAL HALIDE LAMPS ONLY

R - NON SELF-EXTINGUISHING LAMP

WARNING: This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Complies with the USA Federal Standard 21 CFR 1040.30 and Canada Standard SOR/80-381.

HIGH PRESSURE XENON ARC LAMPS

WARNING!

- Xenon arc lamps could burst when not in operation causing serious injuries! It is critical to follow safety instructions when handling Xenon arc lamps!
- Xenon arc lamps have a high internal pressure. Depending upon the lamp, the internal pressure can exceed 10 ATM or 147 PSI, even when not in operation.
- Always wear eye/face and body protection when handling Xenon arc lamps!
- Never bump, drop, apply excessive stress, or scratch the lamp. This could cause the lamp to burst!
- Always transport the lamp in the provided protective case or cover until installation!
- Save the protective case or cover and packaging materials (box) for lamps that have been used to their rated service life. Use the protective case when disposing of the lamps.
- Never touch the lamp when it is on, or soon after it has been turned off, as it is hot and will cause serious burns. Lamps should be allowed to cool for a minimum of ten (10) minutes after the lamp is turned off.
- Always operate the lamp in closed, protective housings.
- Do not look directly at the operating lamp for any length of time; this may cause serious eye injury.
- Do not use lamp in close proximity of paper, cloth or other combustible material that can cause a fire hazard.
- Some Xenon arc lamps produce Ozone that is considered toxic at relatively high concentration levels. Use ozone-producing lamps in lamp housings equipped with exhaust systems.
- Never operate a lamp above or below its rated current or voltage. This may cause the lamp to leak or burst.
- Affix the lamp in the correct polarity according to the lamp and fixture design.
- Affix lamps by hand tightening only. Do not use any tools to tighten nuts or the lamp itself. Any excessive stress to the lamp will cause a burst.
- Electrical connections should be clean and in good condition. Replace lamp holders and sockets when needed. Fix the lamp and its lead wire firmly to the terminals.
- Clean any dirt, oil, or lint away from the lamp with alcohol and a lint free cloth or tissue.
- Xenon arc lamps should not be used beyond their rated service life. Operation beyond the rated service life will cause the lamp to burst.
- The lamp must be operated under the specified conditions such as lamp amperage, voltage, and cooling conditions.
- Do not overcool the lamp. Air should never be directly forced on the bulb because uneven cooling will result.
- Recommended cooling methods are: air flow, N₂ gas flow, heat sink and an exhaust duct.
- The lamp base temperature must be kept below 200° C.

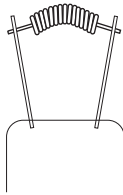
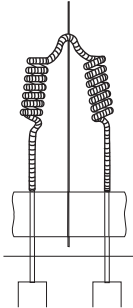
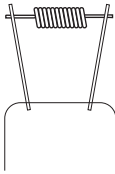
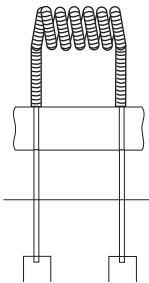
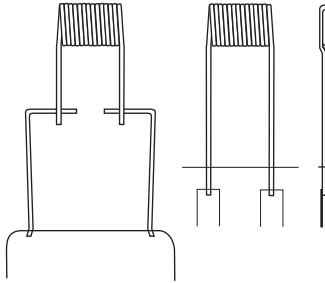
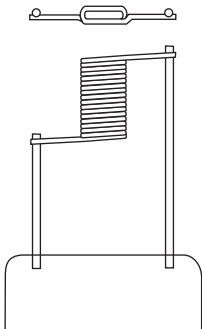
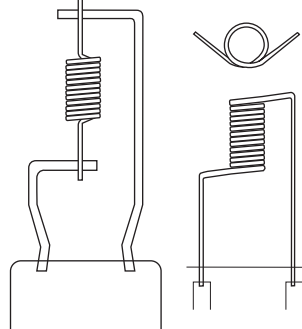
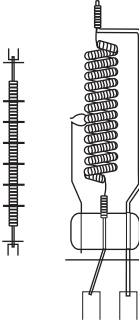
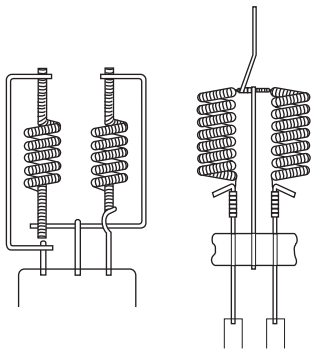
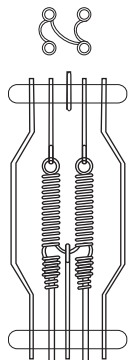
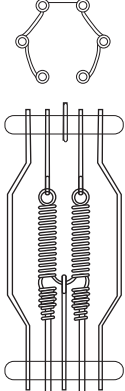
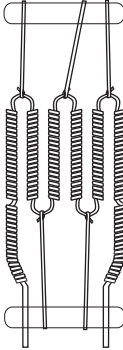
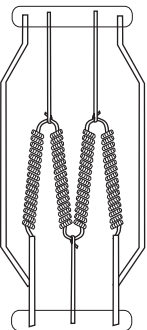
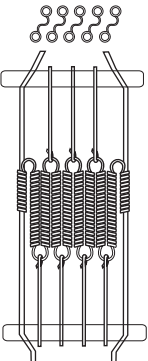
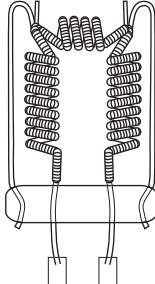
Xenon arc lamp disposal

- Xenon arc lamps must be disposed of in a careful and proper manner in order to prevent injury.
 1. Wear a protective mask, leather gloves and protective clothing when handling a spent lamp.
 2. Place the used lamp in its original protective case and original cardboard packaging (box) that was provided when the lamp was new.
 3. Firmly attach tape around the original cardboard box to seal the lamp securely.
 4. From approximately three (3) feet in height, drop the cardboard box, with the lamp and protective case inside, onto a hard floor to break the lamp.
 5. Shake the cardboard box to determine if the lamp is broken.

The specifications in this publication supersede all previously published specifications and may be subject to change for design and specification improvement without prior notice.

LAMP BASE TYPES

G22/28X42	G22/30X53	G38	G17q-7	G17t-7	GX17q-7
P14.5s	P28s	P30s	P40s	Fc2	R7s-12 / R7s-18
RX7s					

C-2R	CC-2V	C-6	CC-6	CBar6 (CF-6)
				
CBar8		C8		CC-8
				
2CC-8		4-C8	6-C8	C-13
				
CC-13		C-13D	SPECIAL	
				

Sockets for Single and Double Ended Quartz Halogen Lamps

Description	Volts	Amps	Lamp Type
Order Code	Lead Wire Spec		
Sockets for Single Ended Halogen Lamps			
Miniature Bipin — 4.0mm Pin Spacing			
GZ4 Base — 1.0mm Pin Diameter			
1000109* C-14B	0.75X150L	24V 3A	JC
Miniature 2-Pin (Blade) Base — 5.33mm Pin Spacing			
G5.3-4.8 Base — 0.5mm x 4.8mm Pin Dimensions			
1000111* C-21	2.50X150L	125V 6A	JCR/M-50, 75, 10W
2-Pin Base — 5.33mm Pin Spacing			
GX5.3 or GU5.3 Base — 1.6mm Pin Diameter			
1002142 C-33U	0.75X150L	24V 7A	MR-16, GU5.3
1000114 C-5	1.25X160L	125V 15A	JCD, MR-16
1000115 C-5(A)	1.25X300L	125V 15A	JCD, MR-16
1001414 S-221	(rim mount)		
G6.35 Base — 6.35mm Pin Spacing			
G6.35 Base — 1.25mm Pin Diameter			
1000681* J-11(A)	1.25X160L	125V 10A	JC, JCR
Sockets for Single Ended Halogen Lamps			
Medium 2-Pin Base — 9.53mm Pin Spacing			
G9.5 Base - 3.17mm Pin Diameter			
1002225* 3.17 Contacts for J-10 Socket		250V 10A	
1000112 C-3	1.25X300L	125V 10A	JCD, JCV
1000113 C-3(A)	1.25X1000L	125V 10A	JCD, JCV
1000679 J-10		250V 10A	JCD, JCV
2-Pin Prefocus Base — 9.53mm Pin Spacing			
GY9.5 Base — 3.2mm, 2.4mm Pin Diameters			
1000690 J-9G		250V 10A	JCD
1003123 J-9G/4	W/4" UL Leadwire	250V 10A	JCD
2-Pin Base — 12.0mm Pin Spacing			
G12 Base — 2.35mm Pin Diameter			
1000638* G12/3801	Screw Fixing	230L	UHI
2-Pin Base — 22.22mm Pin Spacing			
G22 Base — 6.35mm Pin Diameter			
1003149 G22		1000V 20A	JS
2-Pin Base — 38.1mm Pin Spacing			
G38 Base — 11.1mm Pin Diameter			
1003150* G38		1000V 40A	JS
Minican Screw Base			
E11 Base — 10.7mm Diameter Screw			
1000683 J-12CS(A)	0.75X150L UL	125V 6A	JCV
Medium Prefocus Base			
P28 Base — 27.4mm Base Diameter			
1001264 P28S	Lamp Socket	250V 10A	JCS, JS
Sockets for Double Ended Halogen Lamps			
Recessed Single Contact Base			
R7S Base — 7.0mm Base Diameter			
1000117 C-8	2.00X150L	250V 10A	J, JP, JPD

* Special Order Item



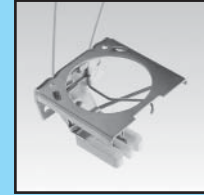
C-21



C-33U



C-5



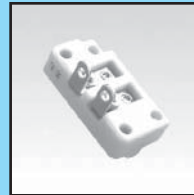
S-221



J-11 (A)



C-3



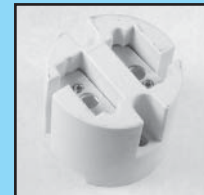
J-9G



J-10



G-12/3801



G-22



G-38



P28S



C8

