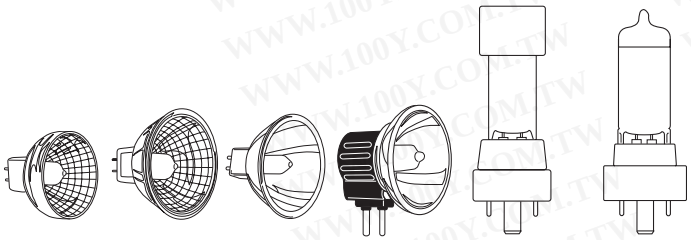
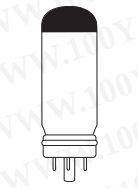
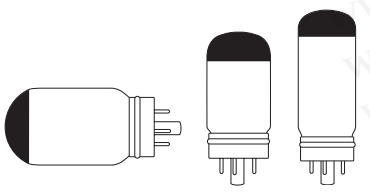
Lamp Locator



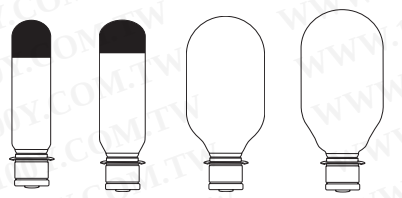
Quartzline® Projection Lamps



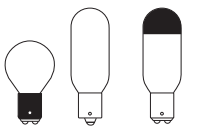
Incandescent Projection Lamps / 4-Pin Base



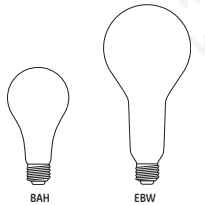
Incandescent Projection Lamps / 4-Pin Base – Proximity Reflector



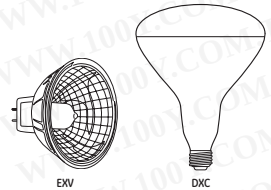
Incandescent Projection Lamps / Medium Prefocus Base



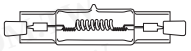
Incandescent Projection Lamps / Single or Double Contact Bayonet Base



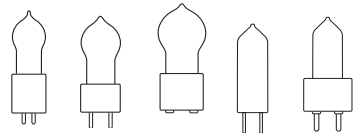
Standard Photofloods



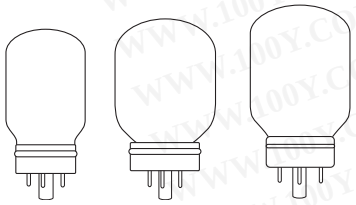
Reflector Photofloods



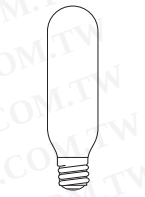
Quartzline® Projection Lamps



Quartzline® Projection Lamps – Single-Ended

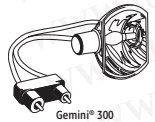


Incandescent Projection Lamps / 4-Pin Base – Focusing Reflector



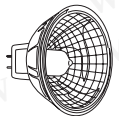
Incandescent Projection Lamps / Misc.

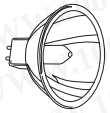
Lamp Locator (continued)

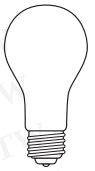


High-Intensity Gemini® Arc Lamps

High-Intensity MARC™ Arc Lamps



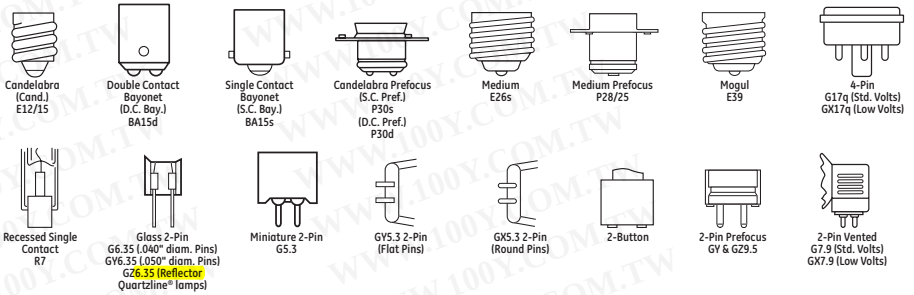




Enlarger & Printer Lamps

Base Identification

Typical bases used on Projection lamps in this catalog are shown below along with their names and common abbreviations. Where the base is an ANSI standard type, the ANSI reference code (which is the same as the IEC base code) is also shown. ANSI reference codes conform to American National Standard C81.10. C81.30. C81.50 specifications for electric lamp bases and lampholders. Illustrations are not to scale.



Light Center Length (LCL)

Light center length is the distance from the center of the light source to the point indicated below for the lamp base used. It is a measurement to which the lamp is designed and is subject to the manufacturer's tolerances.

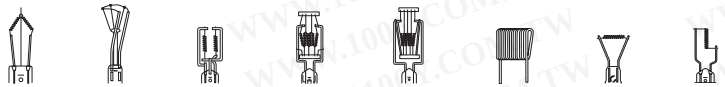
Base Type	LCL Reference
All Screw Bases	Bottom base contact
Medium Prefocus	Top of base fins
S.C. or D.C. Bayonet	Top of base pins
2-Pin Prefocus	Bottom of base ceramic
Miniature 2-Pin	Bottom of base pins
Glass 2-Pin	Bottom of base pins
2-Button	Top of ceramic base to top of filament coil

Base Type	LCL Reference
2-Pin Vented	Bottom of base ceramic to lamp optical axis
4-Pin	Bottom edge of base cup
Locking 4-Pin	Bottom edge of base cup
S.C. , or D.C. Candelabra Prefocus	Plane of locating bosses on prefocus collar

Projection Lamps

Filament Identification

The configuration of the filament in all tungsten filament lamps (including Quartzline®) is identified by a prefix letter and a suffix number. The prefix letter indicates whether the filament wire is a single coil (C) or a coiled coil (CC). The suffix number indicates the form or arrangement of the filament coil or coils on its support structure. Illustrations are not to scale.



C-2V CC2-V | C-9 | 2C-8 2CC-8 | C-13 | C-13D | C-6 Oval | C-6 CC-6 | C-8 CC-8

Introduction

General Electric Projection Lamps are designed for a wide variety of applications...and now extending well beyond the original picture-taking and audio-visual projection uses into such fields as: fiber optical systems, graphic arts, video camera lights, airport runway markers, micrographics, photo printers and enlargers, medical/scientific instruments and many others.

The information contained in this section is designed to provide end-users, equipment manufacturers and lamp distributors and dealers with:

- Essential technical data on GE Projection Lamps (Quartzline®, Incandescent, MARC™ and Photoflood)
- Suggested substitutes for improved performance or discontinued lamps

The majority of Projection Lamps described herein are characterized by:

- Precisely manufactured, tailored filaments maximizing source brightness, optimum performance in precision optical devices
- High light-generating efficacy (lumens per watt)...to help minimize power requirements and heat generation
- Prefocus type bases, or rim-reference mounting for Multi-Mirror® lamps...to position the filament accurately in relation to the associated optics
- Design life Rated Life (per ANSI Standard)
- Lamps with internal or external reflectors (as in Multi-Mirror® and some 4-pin projection lamps) permitting high-efficiency illumination system designs with a minimum of additional optical control elements

Manufacturers and designers of equipment requiring lamps should select lamps of established design whenever possible for maximum economy, as well as for ease of replacement by their customers through regular trade channels. General Electric offers application engineering assistance to all customers for applying lamps in product design. Contact your local GE Lamp Representative for additional information or assistance.

Warning and Caution Notices Information

As with any product, certain precautions should be observed in the handling and use of GE Projection Lamps to provide optimum performance and safety. These are given in the Caution Notices that are printed on page 10-12.

Important Notice

This catalog contains accumulated data to March 2008. Additional information is constantly being uncovered through research and testing, which may modify the data given herein. This is particularly true of newer lamps. For the latest lamp design data and information, contact your General Electric Lamp Representative.

The data and suggested applications contained in this catalog, as well as any additional information our representative may be able to furnish, are for general information only and are not intended and should not be taken as representations or warranties as to the suitability of a lamp for any particular application or use in any particular equipment, nor are our representatives authorized to make any such representations or give any such warranties.

Applications and conditions of use are many and varied, and beyond our control. We cannot possibly have the same degree of knowledge that the purchaser has with respect to the design of his equipment and the conditions of its use. Therefore, it is up to the purchaser to make his own determination as to the suitability of a lamp for his intended application or use and to assume the responsibility for that determination.

General Electric desires to supply the best possible products at all times. For this reason, General Electric reserves the right to make changes in its products when it believes such changes will improve its products.

General Information

General Electric Projection Lamps are briefly described in the ANSI lamp index (pages 10-6– 10-7). More extensive descriptive and performance data are found in the lamp tables, which are organized as "families" of lamps with one or more features in common – such as Multi-Mirror® Quartzline®, Single-Ended Quartzline®, 4-Pin Based Incandescent, Photoflood, etc. Within each table, lamps are listed alphabetically by GE Lamp Code.

GE Multi-Mirror® Quartzline® Projection Lamps

Invented By GE For Optimized Projection System Performance, the Multi-Mirror® and its new companion, the Mini Multi-Mirror®, are reflector halogen Quartzline® lamps with innovative GE features that result in better system efficiency, screen uniformity, lamp-to-lamp consistency and relamping convenience.

Feature	Benefit	Applications
• Dichroic reflector	• Cool light beam • Efficient light reflection	• Slide Projection • Front/Rear Screen Projection
• Precise rim reference	• Quick lamp installation	• Microfilm
• Accurate snap-in alignment		• Overhead Projection
• Faceted reflector	• Efficient beam for brighter image • Uniform screen image • Precision beam control	• 16mm Movie • 8mm Movie • Film Strip
• Halogen Quartzline® lamp	• Whiter and brighter light • No bulb blackening/blistering • Constant light output through life • Stable color temperature	• Enlargers/Printers • Fiber Optics • Medical/Scientific Instruments • Video Camera Lights • Airport Runways • Display

Each GE Multi-Mirror® lamp type is optically tailored to its application. First, the appropriate type of multi-faceted reflector is determined. Then a filament tube developed, using advanced Quartzline® technology. Finally, the two are combined, using sophisticated, computerized precision-assembly techniques. The result – consistently high performance...lamp after lamp after lamp.

ANSI Coded GE Projection Lamps Index

Order Code	Description	Watts	Volts	Bulb Shape	Base	Table No.	Page No.
BAB USE Q20MR16CG40BAB							
10933	BAB/PH	20	12	MR16	GX5.3 2-Pin	3	9
40886	BAH	300	115	A21	Medium	18	11
40563	BBA	250	118	A21	Medium	18	11
40564	BCA	250	118	A21	Medium	18	11
36178	BCK	500	120	T6	G17q 4-Pin	6	10
40658	BHB	250	120	MR14	G7.9 2-Pin	5	10
BHC USE DYS/DYV/BHC							
29140	BLC	30	118	S11	D. C. Bay.	15	11
30232	BLK	30	125	S11	Cand.	18	11
29156	BLX	50	118	S11	D. C. Bay.	15	11
32137	BNF	75	120	S11	D. C. Bay.	15	11
29604	BRH	1000	120	T5	R7s	9	10
18234	BRL	50	12	T3.5	G6.35 2-Pin	7	10
30421	BXB	34	8.5	T8	S. C. Pref.	16	11
29525	CAL	300	120	T10	G17q 4-Pin	11	10
29380	CAR	150	120	T10	G17q 4-Pin	11	10
29171	CAX	50	118	T8	D. C. Bay.	15	11
29169	CAX	50	130	T8	D. C. Bay.	15	11
CBS USE CBX/CBS							
29208	CBX/CBS	75	118	T8	D. C. Bay.	15	11
29257	CDD	100	120	T8	S. C. Bay.	14	11
29266	CDJ	100	118	T8	D. C. Bay.	15	11
29244	CEB	100	118	T8	D. C. Bay.	15	11
43330	CEM	120	120	T8	S. C. Bay.	14	11
29664	CZA/CZB	500	120	T10	G17q 4-Pin	11	11
CZB USE CZA/CZB							
29677	CZX/DAB	500	120	T10	Med. Pref.	13	11
DAB USE CZX/DAB **DAK USE DAT/DAK**							
40214	DAT/DAK	400	120	T10	G17q 4-Pin	10	10
29695	DAY/DAK	500	120	T10	G17q 4-Pin	10	10
29360	DCA	150	21	T12	GX17q 4-Pin	12	11
29364	DCH/DJA/DFP	150	120	T12	G17q 4-Pin	12	11
43537	DDL	150	20	MR16	GX5.3 2-Pin	3	9
43206	DDM	80	19	MR16	GX5.3 2-Pin	3	9
43988	DDS	80	21	MR16	GX5.3 2-Pin	3	9
43950	DED	85	13.8	MR16	GX5.3 2-Pin	3	9
29737	DEK/DFW/DHN	500	120	T12	G17q 4-Pin	11	10
DFC USE DFN/DFC							
36122	DFE	80	30	T12	GX17q 4-Pin	12	11
29386	DFN/DFC	150	125	T12	G17q 4-Pin	12	11
DFP USE DHC/DJA/DFP **DFW USE DEK/DFW/DHN** **DFZ USE DLD/DFZ** **DHN USE DEK/DFW/DHN** **DHX USE DLS/DLG/DHX** **DJA USE DHC/DJA/DFP**							
29338	DJL	150	120	T14	G17q 4-Pin	12	11
44854	DJT	50	13.8	MR16	GX5.3 2-Pin	3	9
40216	DLD/DFZ	80	30	T14	GX17q 4-Pin	12	11
DLG USE DLS/DLG/DHX							
29366	DLS/DLG/DHX	150	22	T14	GX17q 4-Pin	12	11
40161	DNE	150	120	MR16	G7.9 2-Pin	5	10
39742	DNF	150	21	MR16	GX7.9 2-Pin	5	10
29959	DPT	1000	120	T20	Mogul	17	11
29968	DRB	1000	118	T20	Med. Pref.	13	11
29947	DRS	1000	120	T20	Med. Pref.	13	11
30304	DVY	650	120	G6	G5.3 2-Pin	7	10
30151	DXB	500	120	R40	Medium	19	11
30145	DXC	500	120	R40	Medium	19	11
36952	DXX	800	230	T4	R7s	9	10
36953	DXX	800	240	T4	R7s	9	10
30364	DYH	600	120	G7	G5.3 2-Pin	7	10
32071	DYP	600	120	G7	2-Button	7	10
33248	DYR	650	220	G7	GZ9.5 2-Pin Pf	7	10
33250	DYR	650	240	G7	GZ9.5 2-Pin Pf	7	10
32955	DYS/DYV/BHC	600	120	G7	GZ9.5 2-Pin Pf	7	10
DYV USE DYS/DYV/BHC							
19479	DYS-5	600	120	G7	GZ9.5 2-Pin Pf	7	10
37346	DZA	30	10.8	T3.5	G5.3 2-Pin	7	10
37695	DZE/FDS	150	24	T4	GZ9.5 2-Pin Pf	7	10
30202	EAJ	35/25	12	T6.4	D.C. Bay.	15	11
30281	EAL	500	120	R40	Medium	19	11
40566	EBV	500	118	PS25	Medium	18	11
40567	EBW PH/B2	500	118	PS25	Medium	18	11
40565	ECA	250	120	A23	Medium	18	11
40568	ECT	500	120	PS25	Medium	18	11
21276	EFM	50	8	MR16	GZ6.35 2-Pin	3	9
21277	EFN	75	12	MR16	GZ6.35 2-Pin	3	9
21278	EFP	100	12	MR16	GZ6.35 2-Pin	3	9
21279	EFR	150	15	MR16	GZ6.35 2-Pin	3	9
37527	EHA	500	120	T6	GZ9.5 2-Pin Pf	7	10
14874	EHJ	250	24	T4	G6.35 2-Pin	7	10
32882	EJA	150	21	MR16	GX5.3 2-Pin	4	9
29150	EJL	200	24	MR16	GX5.3 2-Pin	3	9
29151	EJM	150	21	MR16	GX5.3 2-Pin	3	9
EJN USE ELD/EJN							
32831	EJV	150	21	MR16	GX5.3 2-Pin	4	9
32886	EJY	80	19	MR16	GX5.3 2-Pin	4	9
35200	EKE	150	21	MR16	GX5.3 2-Pin	3	9
35800	EKP/ENA	80	30	MR16	GX5.3 2-Pin	3	9
EKS USE EMM/EKS							
36899	EKX	200	24	MR16	GX5.3 2-Pin	3	9
36902	EKZ	30	10.8	MR16	GX5.3 2-Pin	3	9
37462	ELC	250	24	MR16	GX5.3 2-Pin	3	9
15377	ELC/500	250	24	MR16	GX5.3 2-Pin	3	9
22023	ELC/C	250	24	MR16	GX5.3 2-Pin	3	9
38306	ELD/EJN	150	21	MR16	GX5.3 2-Pin	3	9
38476	ELH	300	120	MR16	GY5.3 2-Pin	3	9
ELR USE ELS/ELR							
41885	ELS/ELR	50	18	MR14	GX7.9 2-Pin	5	10
42612	EML	175	24	T4	G5.3 2-Pin	7	10
40017	EMM/EKS	250	24	MR14	GX7.9 2-Pin	5	10
ENA USE EKP/ENA **ENC USE ENW/ENC**							
38686	ENH	250	120	MR16	GY5.3 2-Pin	3	9
25475	ENL	50	12	MR16	GX5.3 2-Pin	3	9
40248	ENW/ENC	80	19	MR16	GX5.3 2-Pin	3	9
41705	ENX	360	82	MR16	GY5.3 2-Pin	3	9
19475	ENX-5	360	86	MR16	GY5.3 2-Pin	3	9
40598	ENZ	50	30	MR16	GX5.3 2-Pin	4	9
41430	EPN	35	12	MR16	GX5.3 2-Pin	3	9
41729	EPT	42	10.8	MR16	GX5.3 2-Pin	3	9
41882	EPV	90	14.5	MR16	GX5.3 2-Pin	3	9
42614	EPX	90	14.5	MR16	GX5.3 2-Pin	3	9
41874	ERV	340	36	MR16	GX5.3 2-Pin	3	9
43756	ESD	150	120	MR16	GY5.3 2-Pin	3	9
11698	ESJ	85	82	MR16	GY5.3 2-Pin	3	9
11322	ETJ	250	120	MR16	GY5.3 2-Pin	3	9
38311	ETT	1000	120	T5	R7s	9	10
41164	EVD	400	36	T6	GY6.35 2-Pin	7	10
10099	EVV	120	6.6A	T4	GZ9.5 2-Pin	8	10
11110	EVW	250	82	MR16	GY5.3 2-Pin	3	9
11427	EWR	150	6.6A	T4	GZ9.5 2-Pin	8	10
11478	EXL	30	6.6A	T3.5	GZ9.5 2-Pin	8	10
11482	EXM	45	6.6A	T3.5	GZ9.5 2-Pin	8	10
12092	EXR	300	82	MR13	GX5.3 2-Pin	2	9
12003	EXV	100	12	MR16	GX5.3 2-Pin	3	9

ANSI Coded GE Projection Lamps Index (continued)

Order Code	Description	Watts	Volts	Bulb Shape	Base	Table No.	Page No.
ENA USE EKP/ENA **ENC USE ENW/ENC (continued)**							
12095	EXW	300	82	MR13	GX5.3 2-Pin	2	9
11750	EXX	250	120	MR16	GY5.3 2-Pin	3	9
12097	EXY	250	82	MR13	GX5.3 2-Pin	2	9
12696	EYB	360	82	T3.5	G5.3 2-Pin	7	10
19322	EYB-5	360	86	T3.5	G5.3 2-Pin	7	10
13617	EYH/FKT	250	120	G6	G5.3 2-Pin	7	10
41783	EZA/4	32	6.6A	MR16	Wire Term.	3	9
23071	EZC	45	6.6A	MR16	GX5.3 2-Pin	3	9
15832	EZF/EZJ	225	68	MR13	GX5.3 2-Pin	2	9
EZJ USE EZF/EZJ							
15477	EZK	150	120	MR16	GY5.3 2-Pin	3	9
15243	EZL	200	6.6A	T4	GZ9.5 2-Pin	8	10
29581	FAL	420	120	T4	R7s	9	10
FBD USE FBG/FBD							
33663	FBG/FBD	500	120	G6	G5.3 2-Pin	7	10
29598	FCB	600	120	T4	R7s	9	10
14876	FCR	100	12	T3	GY6.35 2-Pin	7	10
13598	FCS	150	24	T4	G6.35 2-Pin	7	10
FDS USE DZE/FDS							
35321	FDT	100	12	T3	GZ9.5 2-Pin Pf	7	10
36878	FDV	150	24	T4	G6.35 2-Pin	7	10
29592	FFJ	600	120	T4	R7s	9	10
30276	FFM	420	120	T4	R7s	9	10
47614	FHS	300	82	MR13	GX5.3 2-Pin	2	9
47914	FHX	25	13.8	MR16	GX5.3 2-Pin	3	9
FKT USE EYH/FKT							
30894	FLS	28	12	MR11	GZ4 2-Pin	1	9
25261	FLT	28	13.8	MR11	GZ4 2-Pin	1	9
19886	FLW	300	24	T4	GY6.35 Ceramic	7	10
14887	FML	50	13.8	MR16	GX5.3 2-Pin	3	9
18241	FNT/100	275	24	T4	G6.35 2-Pin	7	10
21613	FXL	410	82	MR16	GY5.3 2-Pin	3	9
80853	GCA	250	120	T3.5	G5.3	7	10
11134	GEMINI 300(EZG)	300	35	PAR20	Special 2-Pin Plug	21	11
39936	MARC 350-16T EZT	350	45	PAR24	Special 2-Pin Plug	21	11
30162	PH/111A	75	125	S11	S.C. Bay.	20	11
43220	PH/140	75	120	S14	Medium	20	11
40569	PH/211	75	120	A21	Medium	20	11
40570	PH/212	150	120	A21	Medium	20	11
40571	PH/213	250	120	A21	Medium	20	11

Headings in this catalog section

The following terms and descriptions can help you when checking Projection lamp specifications and when ordering products. Within each product line, lamps are divided into families. Within families, lamps are listed by ANSI code.

Maximum Overall Length (MOL):
This dimension includes the lamp bulb and all rigid parts of the base. Since the listed lengths include maximum tolerances, actual lamps are generally slightly shorter.

ANSI Codes:
These are 3-letter codes assigned by the American National Standards Institute. They provide a system of assuring mechanical and electrical interchangeability among similarly coded lamps from various manufacturers. General Electric uses the assigned ANSI Codes as Lamp Ordering Codes for most Projection Lamps.

Multiple-ANSI-Coded Projection Lamps:
Some GE Projection Lamps have an ordering code comprising two or more 3-letter ANSI codes – such as EMJ/EKS and DYS/DVV/BHC. The first code is the ANSI code, the secondary codes identify the multiple-coded lamp can directly replace. Only the first code appears on the lamp itself. Multiple-coded lamps are so-designated by General Electric for the convenience of the customer.

Bulb Shape:
Projection Lamp bulb designations use a combination of letters and numerals to indicate bulb shape and maximum diameter in eighths of an inch. For example: a "T12" bulb is Tubular-shaped and twelve-eighths of an inch, or 1-1/2" in diameter. Illustrations of typical Projector Lamps and their respective bulb designations are shown in the tables of lamp families, pages 10-2 – 10-3.

Base:
Projection Lamp base illustrations appear on page 10-4, along with their common trade names and abbreviations, plus their letter-number ANSI/IEC designations where applicable.

Watts (or Amps):
This column shows the rated power consumption (watts) of the lamp at its design voltage. A few lamps, in Table 8, are rated in terms of current (amperes) drawn initially at their rated voltage. The watts shown for the lamps in Table 8 are the approximate initial values for operation at rated amperes.

Order Code:
It is important to use this five-digit code when ordering to ensure that you receive the exact product you require.

Description:
This is a 3-letter or letter-number code uniquely identifying the lamp for ordering purposes. In some instances, lamps with 3-letter (ANSI) codes are offered in more than one design voltage, in which case the voltage required should also be specified when ordering.

Volts:
The voltage shown is the design voltage of the lamp, on which the life and wattage ratings are based. Lamps are available only in the design voltage(s) shown. When ordering lamps listed for more than one voltage, be sure to specify the voltage required (supply voltage variation can significantly affect lamp life).

Case Quantity:
Number of product units packed in a case.

Filament Design:
Typical filament configurations for Projection Lamps are shown on page 10-4, along with an explanation of the filament designation system.

Light Center Length (LCL):
This dimension defines the location of the filament in relation to the base. It is measured from the geometric center of the filament to a specified point on, or plane through, the base. Light Center Length is subject to manufacturing tolerances. Reference points/planes from which LCL is measured are tabulated on page 10-4 for the various styles of lamp bases.

Rated Life:
Life ratings of Projection Lamps are based on closely controlled laboratory tests of lamps, at their rated voltage, over a long period of production time. Rated Life is not necessarily the same as service life; mechanical shock and vibration, voltage fluctuation, temperature and other environmental factors may result in shorter service life. As with any median value, some individual lamps will operate longer and some will operate shorter, than their Rated Life (supply voltage variation can significantly affect lamp life).

Initial Lumens:
The value shown is based on spherical photometry, at rated voltage, of lamps that have been seasoned for approximately 15% (or minimum of 2 hours) or more of their rated average life.

Source Size:
This is defined as the dimensions of the rectangular area, centered on the lamp axis, within which all luminous parts of the filament lie, when viewed perpendicular to the axis of the filament coil or to the plane of C-13 and C-13D filaments.

Typical Working Distance:
For Multi-Mirror® and other reflector Quartzline® lamps and MARC™ lamps, the Working Distance shown is the distance from the front surface of the reflector rim to the film plane, in the optical system for which the lamp was first designed. In most cases, it provides a uniform plane of light for the intended aperture.

Color Temperature:
The radiation within the visible spectrum from tungsten filament lamps is similar in spectral distribution to that from a "blackbody" at specific color temperatures. The Color Temperatures shown are approximate initial values in degrees Kelvin (K) for lamps operated at rated voltage.

CBCP (Center Beam Candlepower):
For reflector type lamps, Center Beam Candlepower is the intensity (candelas) at the center or maximum intensity of the beam.

Operating Position:
For good performance, lamps must be used within specified limitations on operating position. The following abbreviations are used in the lamp tables to indicate these limits:
BD = Base Down. Operate only vertical, base down.
HD = Base Down to Horizontal. Do not operate base above horizontal.
H22 = Operate base down to 22° base up.
U = Operate in any position.

Warning and Caution/Footnote:
See page 10-12 for explanation.

Additional Information:
Typical application and/or other important information.

Bulb Shape	Base	Watts	Order Code	Description	Volts	Case Qty	Filament Design	MOL (in)	LCL (in)	Rated Life (hrs)	Initial Lumens	Color Temp K	CBCP	Burn Position	Additional Information	Warning and Caution/ Footnote	Typical Working Distance	Source Size (W x H)
Quartzline® Multi-Mirror® Reflectors																		
MR-11 Faceted Dichroic Reflector. 1-3/8" Diameter (35mm). Table 1.																		
MR11	GZ4 2-Pin	28	30894	FLS	12	10	CC-6	1.38		1000		3000		HD	Microfilm	A		

FLS
ANSI Code.

Bulb Shape	Base	Watts	Order Code	Description	Volts	Case Qty	Filament Design	MOL (in)	LCL (in)	Rated Life (hrs)	Lumens Initial	Color Temp K	CBCP	Burn Position	Additional Information	Warning and Caution/ Footnote	Typical Working Distance	Source Size (W x H)
Quartzline® Multi-Mirror® Reflectors																		
MR-11 Faceted Dichroic Reflector, 1-3/8" Diameter (35mm), Table 1																		
MR11	GZ4 2-Pin	28	30894	FLS	12	10	CC-6	1.38		1000		3000		HD	Microfilm	A		
			25261	FLT	13.8	10	CC-6	1.38		500		3050		HD	Microfilm	A		
MR-13 Faceted Dichroic Reflector, 1-2/3" Diameter (42mm), Table 2																		
MR13	GX5.3 2-Pin	300	12092	EXR	82	20	CC-8	1.75		35		3350		HD	Slide Projection	A	6.00	
			12095	EXW	82	20	CC-8	1.75		15		3450		HD	Slide Projection	A	6.00	
		250	12097	EXY	82	20	CC-8	1.75		200		3200		HD	Slide Projection	A	6.00	
		225	15832	EZF/EZJ	68	20	CC-8	1.75		350				HD	Color Printer	A, R		
		300	47614	FHS	82	20	CC-8	1.75		70		3300		HD	Slide Projection	A	6.00	
MR-16 Faceted Dichroic Reflector, 2" Diameter (51mm), Table 3																		
MR16	GX5.3 2-Pin	20	10933	BAB/PH	12	20	C-6	1.88		2000		2900		HD	Flood	A	5.00	
		150	43537	DDL	20	20	C-6	1.75		500		3150		HD	Microfilm	A	7.75	
		80	43206	DDM	19	20	CC-6	1.75		50		3350		HD	Slide Projection	A	6.00	
		80	43988	DDS	21	20	CC-6	1.75		1000		3125		HD	Microfilm	A	6.50	
		85	43950	DED	13.8	20	C-6	1.75		1000		3150		HD	Microfilm	A	6.50	
		50	44854	DJT	13.8	20	CC-6	1.75		1000		3150		HD	Microfilm	A	6.00	
	GZ6.35 2-Pin	50	21276	EFM	8	20	C-6	1.75		50		3300		HD	8mm Projection	A	1.25	
		75	21277	EFN	12	20	CC-6	1.75		50		3350		HD	8mm Projection	A	1.25	
		100	21278	EFP	12	20	CC-6	1.75		50		3350		HD	8mm Projection	A	1.25	
		150	21279	EFR	15	20	CC-6	1.75		50		3350		HD	8mm Projection	A	1.25	
	GX5.3 2-Pin	200	29150	EJL	24	20	CC-6	1.75		50		3400		HD	16mm, Color Printer	A	1.25	
		150	29151	EJM	21	20	CC-6	1.75		40		3350		HD	8mm Projection	A	1.50	
		150	35200	EKE	21	20	CC-6	1.75		250		3250		HD	8mm Projection, Fiber Optics	A	1.75	
		80	35800	EKP/ENA	30	20	CC-6	1.75		25		3350		HD	8mm Projection	A	1.75	
		200	36899	EKX	24	20	CC-6	1.75		25		3400		HD	Microfilm	A	5.50	
		30	36902	EKZ	10.8	20	C-6	1.75		200		3100		HD	16mm Projection	A	1.50	
		250	37462	ELC	24	20	CC-6	1.75		50		3400		HD	Fiber Optics, Color Printer	A	1.25	
		250	22023	ELC/C	24	20	CC-6	1.75		50		3400		HD	Fiber Optics, Color Printer	A	1.25	
		250	15377	ELC/500	24	20	CC-6	1.75		500		3350		HD	Fiber Optics, Disco	A	1.25	
		150	38306	ELD/EJN	21	20	CC-6	1.75		40		3350		HD	Microfilm	A	6.50	
	GY5.3 2-Pin	300	38476	ELH	120	20	CC-8	1.75		35		3350		HD	Slide Projection	A	6.00	
		250	38686	ENH	120	20	CC-8	1.75		175		3250	11700	HD	Slide Projection	A	6.00	
	GX5.3 2-Pin	50	25475	ENL	12	20	C-6	1.75		4000		3050		HD	Fiber Optics, Display Lighting	A	1.50	
		80	40248	ENW/ENC	19	20	CC-6	1.75		200		3200		HD	8mm Projection	A	1.75	
	GY5.3 2-Pin	360	41705	ENX	82	20	CC-8	1.75		75		3300		HD	Overhead Projection	A	11.75	
			19475	ENX-5	86	20	CC-8	1.75		75		3300		HD	Overhead Projection	A		
	GX5.3 2-Pin	35	41430	EPN	12	20	C-6	1.75		50		3300		HD	8mm Projection	A	1.13	
		42	41729	EPT	10.8	20	C-6	1.75			10000		2900	HD	Fiber Optics	A	1.50	
		90	41882	EPV	14.5	20	CC-6	1.75			500		3150	HD	Microfilm	A	6.13	
			42614	EPX	14.5	20	CC-6	1.75			500		3150	HD	Microfilm	A	6.50	
MR16	GX5.3 2 Pin	340	41874	ERV	36	20	CC-8	1.75			75		3300	HD	Overhead Projection	A	11.75	
	GY5.3 2-Pin	150	43756	ESD	120	20	CC-8	1.75			12		3350	HD	Enlarger, Projection	A	1.75	
		85	11698	ESJ	82	20	CC-8	1.75			40		3350	HD	Enlarger, Projection	A	1.75	
		250	11322	ETJ	120	20	CC-8	1.75			175		3300	HD	Fiber Optics	A	1.50	
		250	11110	EVW	82	20	CC-8	1.75		50		3300	H22		Overhead Projection	A	11.75	
	GX5.3 2-Pin	100	12003	EXV	12	20	CC-6	1.75		50	3100	3350	3100	U	Camera Light	A		
		250	11750	EXX	120	20	CC-8	1.75		25	6750	3300	6750	U	Camera Light	A		
	Wire Term.	32	41783	EZA/4	6.6A	20	C-8	1.75		1000		2900	4500	HD	Airport	A		
	GX5.3 2-Pin	45	23071	EZC	6.6A	20	C-8	1.75		1000		2950		HD	Airport	A		
	GY5.3 2-Pin	150	15477	EZK	120	20	CC-8	1.75		200		3200	3600	U	Camera Light	A		
	GX5.3 2-Pin	25	47914	FHX	13.8	20	CC-6	1.75		250		3200		HD	Microfilm	A	4.13	
		50	14887	FML	13.8	20	CC-6	1.75		1000		3150		HD	Microfilm	A	8.44	
	GY5.3 2-Pin	410	21613	FXL	82	20	CC-8	1.75		38		3300		HD	Overhead Projection	A	11.75	
	2-Pin w/Leads	150	25137	Q150MR 16-15/ LEADS	15	20	C-8	1.88		150		3400		HD		A	1.75	
Quartzline® Reflector Lamps																		
MR-16 Smooth Dichroic Reflector, 2" Diameter (51mm), Table 4																		
MR16	GX5.3 2-Pin	150	32882	EJA	21	20	CC-6	1.75		40		3350		HD	Fiber Optics	A	1.10	
		150	32831	EJV	21	20	CC-6	1.75		40		3350		HD	8mm Projection Printer	A	1.75	
		80	32886	EJV	19	20	CC-6	1.75		25		3400		HD	Fiber Optics	A	1.50	
		50	40598	ENZ	30	20	CC-6	1.75		25		3450		HD	8mm Projection	A	1.25	

Projection Lamps

Bulb Shape	Base	Watts	Order Code	Description	Volts	Case Qty	Filament Design	MOL (in)	LCL (in)	Rated Life (hrs)	Lumens Initial	Color Temp K	CBCP	Burn Position	Additional Information	Warning and Caution/ Footnote	Typical Working Distance	Source Size (W x H)
Quartzline® Reflector Lamps (continued)																		
MR-14 (1-3/4" Diameter – 44mm) or MR-16 Dichroic Reflector (2" Diameter – 51mm) 2-Pin Vented Base, Table 5																		
MR14	G7.9 2-Pin	250	40658	BHB	120	24	CC-8	1.67		25		3350		HD	16mm Projection	A	2.63	
MR16	G7.9 2-Pin	150	40161	DNE	120	24	CC-8	1.77		12		3350		HD	8mm Projection	A	2.75	
	GX7.9 2-Pin	150	39742	DNF	21	24	CC-8	1.77		25		3400		HD	8mm Projection	A	2.75	
MR14	GX7.9 2-Pin	50	41885	ELS/ELR	18	24	CC-8	1.41		650		3100		HD	Microfilm	A	4.75	
		250	40017	EMM/EKS	24	24	CC-8	1.66		50		3400		HD	16mm Projection	A	2.63	
Quartzline® Single-Ended																		
4-Pin Slide Projection, Table 6																		
T6	G17q 4-Pin	500	36178	BCK	120	24	C-13D	3.25	1.56	50		3200		HD	Slide Projection	A, D		
Applications: Projection, Microfilm, Studio, Etc, Table 7																		
T3.5	G6.35 2-Pin	50	18234	BRL	12	100	C-6	1.72	1.17	50	1400	3400		U		A		
G6	G5.3 2-Pin	650	30304	DVY	120	24	CC-6	2.48	1.44	25	20000	3300		HD		A, E		.50 x .20
G7	G5.3 2-Pin	600	30364	DYH	120	24	CC-6	2.50	1.44	75	17000	3200		U		A		.50 x .25
	2-Button	600	32071	DYP	120	24	CC-6	2.25	1.00	75	17000	3200		HD		A		.50 x .25
	GZ9.5 2-Pin Pf	650	33248	DYR	220	24	2CC-8	2.50	1.44	50	16500	3200		U		A		.45 x .45
			33250	DYR	240	24	2CC-8	2.50	1.44	50	16500	3200		U		A		.45 x .45
		600	19479	DYS-5	120	24	CC-6	2.50	1.44	150	15500	3200		HD		A		.45 x .45
			32955	DYS/DYV/ BHC	120	24	CC-6	2.50	1.44	75	17000	3200		HD		A		.50 x .25
T3.5	G5.3 2-Pin	30	37346	DZA	10.8	24	C-6	2.00	1.06	400	530	3100		HD		A		.15 x .05
T4	GZ9.5 2-Pin Pf	150	37695	DZE/FDS	24	24	C-6 Oval	2.68	1.31	100	4000	3250		HD		A		.25 x .15
T6	GZ9.5 2-Pin Pf	500	37527	EHA	120	24	C-13D	3.00	1.44	50		3300		HD		A, D		.35 x .35
T4	G6.35 2-Pin	250	14874	EHJ	24	100	C-6 Oval	2.25	1.31	50	8000	3400		HD		A		.30 x .15
	G5.3 2-Pin	175	42612	EML	24	24	C-6	2.12	1.06	125	5000	3200		HD		A		.21 x .19
T6	GY6.35 2-Pin	400	41164	EVD	36	24	C-6	2.34	1.40	50	14500	3200		HD	Overhead Projection	A		
T3.5	G5.3 2-Pin	360	12696	EYB	82	24	CC-8	2.25	1.25	75	10000	3300		HD		A		
			19322	EYB-5	86	24	CC-8	2.25	1.25	75		3200		HD		A		
G6	G5.3 2-Pin	250	13617	EYH/FKT	120	24	CC-6	2.50	1.44	200	6000	3000		HD		A		
		500	33663	FBG/FBD	120	24	CC-6	3.00	1.75	50	13200	3200		U		A		
T3	GY6.35 2-Pin	100	14876	FCR	12	100	C-6 Oval	1.75	1.18	50	2800	3300		HD		A		
T4	G6.35 2-Pin	150	13598	FCS	24	100	C-6 Oval	2.00	1.18	50	4500	3300		HD		A		
T3	GZ9.5 2-Pin Pf	100	35321	FDT	12	24	C-6 Oval	2.12	1.06	50	2900	3300		HD		A		
T4	G6.35 2-Pin	150	36878	FDV	24	24	C-6 Oval	2.00	1.19	100	4300	3050		U		A		
	GY6.35	300	19886	FLW	24	48	C-6 Oval	2.15	1.21	50	10200	3500		HD		A		
	G6.35 2-Pin	275	18241	FNT/100	24	100	C-6 Oval	2.25	1.31	50	10000	3400		HD		A		
T3.5	G5.3	250	80853	GCA	120	12	CC-8	2.24	1.26	200	5700	3200		U		A		
Quartzline® Single-Ended – Amp Rated, Table 8																		
T4	GZ9.5 2-Pin	120	10099	EVV	6.6A	24	C-6 Oval	2.50	1.54	500	3150	3200		BD	Airport	A		
		150	11427	EWR	6.6A	24	C-6 Oval	2.50	1.54	500	4100	3200		BD	Airport	A		
T3.5	GZ9.5 2-Pin	30	11478	EXL	6.6A	24	C-8	1.75	1.00	1000	375	2900		HD	Airport	A		
		45	11482	EXM	6.6A	24	C-8	1.75	1.00	1000	750	2950		HD	Airport	A		
T4	GZ9.5 2-Pin	200	15243	EZL	6.6A	24	C-6 Oval	2.50	1.54	500	5000	3100		BD	Airport	A		
Quartzline® Double-Ended Projection, Table 9																		
T5	R7s	1000	29604	BRH	120	24	CC-8	3.75		60	30000	3350		U	Overhead Projection	A		
T4	R7s	800	36952	DXX	230	24	CC-8	3.13		75	21400	3200		U	Copyboard, Studio	A		
			36953	DXX	240	24	CC-8	3.13		75	21400	3200		U	Copyboard, Studio	A		
T5	R7s	1000	38311	ETT	120	24	CC-8	3.75		70		3350		U	Spec. (PH1000H)	A		
T4	R7s	420	29581	FAL	120	24	CC-8	2.63		90	11000	3200		U	Printer	A		
		600	29598	FCB	120	24	CC-8	3.75		120	17000	3250		U	Overhead Projection	A		
			29592	FFJ	120	24	CC-8	2.63		85	17000	3250		U	Printer	A		
		420	30276	FFM	120	24	CC-8	3.13	0.50	90	11000	3200		U	Copyboard	A		
Incandescent Projection																		
4-Pin Base, Table 10																		
T10	G17q 4-Pin	400	40214	DAT/DAK	120	24	C-13D	4.00	1.56	25	9800	3200		BD	Slide Projection	A		
		500	29695	DAY/DAK	120	24	C-13D	4.00	1.56	30	12500	3200		BD	Slide Projection	A, J		
4-Pin Base – Proximity Reflector, Table 11																		
T10	G17q 4-Pin	300	29525	CAL	120	24	C-13	4.00	1.56	25		3200		BD	Slide, Film Strip	A, I		
		150	29380	CAR	120	24	2CC-8	3.13	1.31	15		3100		BD	Slide, Film Strip	A, J		
		500	29664	CZA/CZB	120	24	C-13D	4.00	1.56	25		3300		BD	Slide Projection, Gold Top (opaque)	A, I		
T12	G17q 4-Pin	500	29737	DEK/DFW/	120	24	C-13D	3.62	1.75	25		3250		HD	Slide Projection	A, H, I		

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 10-12).

Bulb Shape	Base	Watts	Order Code	Description	Volts	Case Qty	Filament Design	MOL (in)	LCL (in)	Rated Life (hrs)	Lumens Initial	Color Temp K	CBCP	Burn Position	Additional Information	Warning and Caution/ Footnote	Typical Working Distance	Source Size (W x H)
Incandescent Projection (continued)																		
4-Pin Base – Focusing Reflector, Table 12																		
T12	GX17q 4-Pin	150	29360	DCA	21	24	CC-6	3.56	1.56	15		3250		HD	8mm Projection	A, I	1.75	
	G17q 4-Pin	150	29364	DCH/DJA/	120	24	CC-6	3.38	1.56	15		3150		BD	8mm Projection	A	2.25	
	GX17q 4-Pin	80	36122	DFE	30	24	CC-8	3.19	1.56	15		3400		HD	8mm Projection	A	2.25	
	G17q 4-Pin	150	29386	DFN/DFC	125	24	CC-8	3.19	1.56	15		3150		HD	8mm Projection	A	2.25	
T14	G17q 4-Pin	150	29338	DJL	120	24	CC-8	3.50	1.56	15		3150		HD	8mm Projection	A	1.75	
	GX17q 4-Pin	80	40216	DLD/DFZ	30	24	CC-6	3.50	1.56	15		3400		HD	8mm Projection	A, K	1.75	
		150	29366	DLS/DLG/	22	24	CC-6	3.44	1.56	15		3250		HD	8mm Projection	A, K	1.75	
Medium Prefocus Base, ANSI Base Designation: P28/25, Table 13																		
T10	Med. Pref.	500	29677	CZX/DAB	120	24	C-13D	5.75	2.19	25	12500	3200		BD	8mm Projection	A, J		
T20	Med. Pref.	1000	29968	DRB	118	24	C-13	5.75	2.19	25	32000	3350		BD	Overhead Projection	A		
			29947	DRS	120	24	C-13D	5.75	2.19	25	28500	3325		BD	Overhead Projection	A		
Single Contact Bayonet Base, ANSI Base Designation: BA15S, Table 14																		
T8	S. C. Bay.	100	29257	CDD	120	24	CC-2V	3.13	1.38	50	2000	2975		BD	Slide Projection	A		
		120	43330	CEM	120	24	2CC-8	3.13	1.38	200	1950	3000		BD	Wheel Align Projection	A, J		
Double Contact Bayonet Base, ANSI Base Designation: BA15D, Table 15																		
S11	D. C. Bay.	30	29140	BLC	118	120	CC-2V	2.38	1.38	50	400	2775		U	Editor Projection			
		50	29156	BLX	118	120	CC-2V	2.38	1.38	50	780	2850		HD	Toy Projection			
		75	32137	BNF	120	120	CC-2V	2.38	1.38	25	1300	2900		HD	Toy Projection			
T8	D. C. Bay.	50	29171	CAX	118	24	CC-2V	3.13	1.38	50	775	2875		BD	Optical Projection			
		50	29169	CAX	130	24	CC-2V	3.13	1.38	50	775	2875		BD	Optical Projection			
		75	29208	CBX/CBS	118	24	CC-13	3.13	1.38	50	1200	2925		BD	Slide Projection	A, J		
		100	29266	CDJ	118	24	CC-2V	3.13	1.38	50	2000	2975		BD	Slide Projection	A		
			29244	CEB	118	24	CC-13	3.13	1.38	50	1850	2975		BD	Slide Projection	A		
T6:4	D.C. Bay.	35	30202	EAJ	12	24	C6	4.00	1.77	300	620			U	Flashtube Modeling	A, L		
Single Contact Prefocus Base, ANSI Base Designation: P30S, Table 16																		
T8	S. C. Pref.	34	30421	BXB	8.5	24	C-8	3.13	1.63	100	690			HD	Sound Reproduction, Filament Offset 3/16" from base axis			
Miscellaneous, Table 17																		
T20	Mogul	1000	29959	DPT	120	12	C-13	9.06	4.75	50	28000	3200		BD	Opaque Projection	A		
Photoflood																		
Standard, Table 18																		
A21	Medium	300	40886	BAH	115	24	C-9	4.94		20	9000	3200		U	Photocopy, Inside Frost	A		
		250	40563	BBA	118	24	C-9	4.94		3	8000	3400		U	No. 1 Photoflood, Frost	A		
			40564	BCA	118	24	C-9	4.94		3	5000	4800		U	No. B1 Blue, Inside Frost	A		
S11	Cand.	30	30232	BLK	125	120	CC-2V	2.25		50	400	2700		U	Photocopy, Inside Frost	A		
PS25	Medium	500	40566	EBV	118	24	C-9	6.94		6	17000	3400		U	No. 2, Inside Frost	A		
			40567	EBW PH/B2	118	24	C-9	6.94		6	10500	4800		U	No. B2, Blue, Inside Frost	A		
A23	Medium	250	40565	ECA	120	24	C-9	6.00		20	6500	3200		U	Inside Frost	A		
PS25	Medium	500	40568	ECT	120	24	C-9	6.94		60	13650	3200		U	Inside Frost	A		
Reflector, Table 19																		
R40	Medium	500	30151	DXB	120	24	CC-2V	6.63		6		3300	45000		Spot Beam, 15 Degrees	A, Q		
			30145	DXC	120	24	C-9	6.63		6		3300	5500		Flood Beam, 90 Degrees	A, Q		
			30281	EAL	120	24	CC-2V	6.63		15		3200	6800		Medium Beam, 60 Degrees	A, Q		
Enlarger and Printer, Table 20																		
S11	S.C. Bay.	75	30162	PH/111A	125	120		2.38		15	1120	2900		HD	Enlarger, White	A		
S14	Medium	75	43220	PH/140	120	120		3.38		35	1150	2900		U	Enlarger, White	A		
A21	Medium	75	40569	PH/211	120	24		4.94		65	1000	3000		U	Enlarger, White	A		
		150	40570	PH/212	120	24		4.94		100	2300	3050		U	Enlarger, White	A		
		250	40571	PH/213	120	24		4.94		3	7000	3400		U	Enlarger, White	A		
Gemini® and Marc™, Table 21																		
PAR20	Special 2-Pin Plug	300	11134	GEMINI	35	4				75		6000		H	Replaces MARC 300/16A	A, O	1.46	
PAR24	Special 2-Pin Plug	350	39936	MARC	45	4				50	50	5000		H		A, O	2.05	

For the most up-to-date product information, see www.gelighting.com. To convert inches to millimeters, multiply by 25.4.
All footnotes, warning and caution notices found at the end of this section (page 10-12).