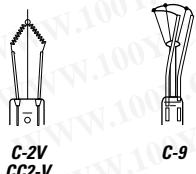




FILAMENT IDENTIFICATION

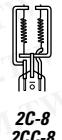
The configuration of the filament in all tungsten filament lamps (including Quartzline®) is identified by a prefix letter and a suffix number. The prefix letter indicates whether the filament wire is a single coil (C) or a coiled coil (CC). The suffix number indicates the form or arrangement of the filament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



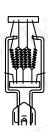
C-2V
CC2-V



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.

CAUTION NOTICE

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 8-13.

Important Notice

This catalog contains accumulated data to September 2003. 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 alphabetical lamp index (pages 8-6 – 8-7). 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.

勝特力材料 886-3-5753170
胜特力电子(上海) 86-21-54151736
胜特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

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
• Precise rim reference	• Quick lamp installation • Accurate snap-in alignment	• Front/Rear Screen Projection
• Faceted reflector	• Efficient beam for brighter image • Uniform screen image • Precision beam control	• Microfilm
• Halogen Quartzline® lamp	• Whiter and brighter light • No bulb blackening/blistering • Constant light output through life • Stable color temperature	• Overhead Projection • 16mm Movie • 8mm Movie • Film Strip • 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.



Order Code	Description	Watts	Volts	Bulb Shape	Base	Table No.	Page No.
INDEX-ANSI CODED GE PROJECTION LAMPS (CONTINUED)							
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
37412 ELB		80	30	MR16	GX5.3 2-Pin	4	10
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	GY7.9 2-Pin	5	10
42612 EML		175	24	T4	G5.3 2-Pin	7	10
40017 EMM/EKS		250	24	MR14	GY7.9 2-Pin	5	10
ENA USE EKP/ENA							
ENC USE ENW/ENC							
38685 ENG		300	120	MR16	GY5.3 2-Pin	3	9
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	10
41430 EPN		35	12	MR16	GX5.3 2-Pin	3	9
19897 EPR		500	120	T6	TF	7	10
41729 EPT		42	10.8	MR16	GX5.3 2-Pin	3	9
41882 EPV		90	14.5	MR16	GX5.3 2-Pin	3	9
41702 EPW		360	100	MR16	GY5.3 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	11
10099 EVV		120	6.6A	T4	GZ9.5 2-Pin	8	11
11110 EVW		250	82	MR16	GY5.3 2-Pin	3	9
11132 EWF		200	24	MR16	GX5.3 2-Pin	3	10
11427 EWR		150	6.6A	T4	GZ9.5 2-Pin	8	11
11478 EXL		30	6.6A	T3.5	GZ9.5 2-Pin	8	11
11482 EXM		45	6.6A	T3.5	GZ9.5 2-Pin	8	11
12092 EXR		300	82	MR13	GX5.3 2-Pin	2	9
12003 EXV		100	12	MR16	GX5.3 2-Pin	3	10
12095 EXW		300	82	MR13	GX5.3 2-Pin	2	9
11750 EXX		250	120	MR16	GY5.3 2-Pin	3	10
12097 EXY		250	82	MR13	GX5.3 2-Pin	2	9
13152 EYA		200	82	MR16	GY5.3 2-Pin	3	10
12696 EYB		360	82	T3.5	G5.3 2-Pin	7	11
19322 EYB-5		360	86	T3.5	G5.3 2-Pin	7	11
13617 EYH/FKT		250	120	G6	G5.3 2-Pin	7	11

Order Code	Description	Watts	Volts	Bulb Shape	Base	Table No.	Page No.
INDEX-ANSI CODED GE PROJECTION LAMPS (CONTINUED)							
23522 EZA		30	6.6A	MR16	GX5.3 2-Pin	3	10
41783 EZA/4		32	6.6A	MR16	Wire Term.	3	10
23071 EZC		45	6.6A	MR16	GX5.3 2-Pin	3	10
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	10
15243 EZL		200	6.6A	T4	GZ9.5 2-Pin	8	11
29581 FAL		420	120	T4	R7s	9	11
FBD USE FBG/FBD							
33663 FBG/FBD		500	120	G6	G5.3 2-Pin	7	11
29598 FCB		600	120	T4	R7s	9	11
14876 FCR		100	12	T3	GY6.35 2-Pin	7	11
13598 FCS		150	24	T4	G6.35 2-Pin	7	11
FDS USE DZE/FDS							
35321 FDT		100	12	T3	GZ9.5 2-Pin Pf	7	11
36878 FDV		150	24	T4	G6.35 2-Pin	7	11
29592 FFJ		600	120	T4	R7s	9	11
30276 FFM		420	120	T4	R7s	9	11
47614 FHS		300	82	MR13	GX5.3 2-Pin	2	9
47914 FHX		25	13.8	MR16	GX5.3 2-Pin	3	10
FKT USE EYH/FKT							
30894 FLS		28	12	MR11	GZ4 2-Pin	1	9
31964 FLT		28	13.8	MR11	GZ4 2-Pin	1	9
19886 FLW		300	24	T4	GY6.35 Ceramic	7	11
14887 FML		50	13.8	MR16	GX5.3 2-Pin	3	10
18241 FNT/100		275	24	T4	G6.35 2-Pin	7	11
21613 FXL		410	82	MR16	GY5.3 2-Pin	3	10
11134 GEMINI 300(EZG)		300	35	PAR20	Special 2-Pin Plug	21	13
39936 MARC 350-16T EZT		350	45	PAR24	Special 2-Pin Plug	21	13
30162 PH/111A		75	125	S11	S.C. Bay.	20	13
43220 PH/140		75	120	S14	Medium	20	13
40569 PH/211		75	120	A21	Medium	20	13
40570 PH/212		150	120	A21	Medium	20	13
40571 PH/213		250	120	A21	Medium	20	13
30124 PXA 50		4000		T3	WireTerm/Ceramic	21	13
30129 PXA/80		8000		T3	WireTerm/Ceramic	21	13



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 include the lamp bulb and all rigid parts of the base. Since the listed lengths include maximum tolerances, actual lamps are generally slightly shorter.

Bulb

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 12-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 8-9 – 8-13.

Base

Projection Lamp base illustrations appear on page 8-3, 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

Typical filament configurations for Projection Lamps are shown on page 8-4, along with an explanation of the filament designation system.

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 lumen output.

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.

Additional Information

Typical application and/or other important information.

Bulb Shape	Base	Watts	Order Code Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Burn Position	Additional Information	Footnote	Typical Working Distance (WxH)	Source Size (WxH)
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QUARTZLINE® MULTI-MIRROR® REFLECTORS

MR-16 FACETED DICHROIC REFLECTOR. 2" DIAMETER (51MM). TABLE 3.

MR16 GX5.3 2-Pin	55 43986	DDF	17	20	CC-6	1.75	300	3100	HD	Enlarger, Projection	A	2.19
------------------	----------	-----	----	----	------	------	-----	------	----	----------------------	---	------

DDF

ANSI Code.



Bulb Shape	Base	Order Watts	Code	Description	Case Volts	Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	Burn Position	Additional Information	Typical Source Working Footnote	Size Distance (WxH)
QUARTZLINE® MULTI-MIRROR® REFLECTORS																
MR-11 FACETED DICHROIC REFLECTOR. 1 1/8" DIAMETER (35MM). TABLE 1.																
MR11	GZ4 2-Pin	28	30894	FLS	12	10	CC-6	1.38		1000	3000	HD	Microfilm	A		
		31964		FLT	13.8	10	CC-6	1.38		500	3050	HD	Microfilm	A		
MR-13 FACETED DICHROIC REFLECTOR. 1 1/2" 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	55	43986	DDF	17	20	CC-6	1.75		300	3100	HD	Enlarger, Projection	A	2.19	
		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	41251	EFM	8	20	C-6	1.75		50	3300	HD	8mm projection	A	1.25		
	75	41252	EFN	12	20	CC-6	1.75		50	3350	HD	8mm projection	A	1.25		
	100	41253	EFP	12	20	CC-6	1.75		50	3350	HD	8mm projection	A	1.25		
	150	41254	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		
	300	38685	ENG	120	20	CC-8	1.75		15	3450	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		
GY5.3 2-Pin	360	41702	EPW	100	20	CC-8	1.75		75	3250	HD	Overhead projection	A	11.75		
	90	42614	EPX	14.5	20	CC-6	1.75		500	3150	HD	Microfilm	A	6.50		
GY5.3 2-Pin	340	41874	ERV	36	20	CC-8	1.75		75	3300	HD	Overhead projection	A	11.75		
	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		
GY5.3 2-Pin	250	11110	EVW	82	20	CC-8	1.75		50	3300	H22	Overhead projection	A	11.75		



Bulb Shape	Base	Watts	Order Code Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Burn Position	Additional Information	Typical Working Distance	Source Size (WxH)	Footnote
QUARTZLINE® MULTI-MIRROR® REFLECTORS (CONTINUED)																	
MR-16 FACETED DICHROIC REFLECTOR. 2" DIAMETER (51MM). TABLE 3. (CONTINUED)																	
MR16	GX5.3 2-Pin	200	11132 EWF	24	20	CC-8	1.75		50	3300	H22	Overhead projection	A	11.75			
		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			
		200	13152 EYA	82	20	CC-8	1.75		50	3300	HD	Enlarger	A				
		30	23522 EZA	6.6A	20	C-8	1.75		1000	2900	HD	Airport	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			
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 proj., printer	A	1.75			
		80	32886 EJY	19	20	CC-6	1.75		25	3400	HD	Fiber Optics	A	1.50			
		37412	ELB	30	20	CC-6	1.75		18	3400	HD	8mm projection	A	1.25			
		50	40598 ENZ	30	20	CC-6	1.75		25	3450	HD	8mm projection	A	1.25			
MR-14 (1 3/4" DIAMETER) OR MR-16 (2" DIAMETER) DICHROIC REFLECTOR. 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				
		36117	CBA	120	24	C-13D	3.62	1.75	50	3200	HD	Slide Projection. Opaque	A, C, 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			
T6	GZ9.5 2-Pin Pf	600	38675 BVE	120	24	C-13D	3.50	1.75	75	3200	HD		A, D	.35 x .35			
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 DYL	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 projector	A			
TF		500	19897 EPR	120	24	C-13D	1.56	2.68	50	3250	HD		A	.31 x .30			



Bulb Shape	Base	Order Watts	Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens	Color Temp. K	Burn Position	Additional Information	Typical Footnote	Source Working Size Distance (WxH)
QUARTZLINE® SINGLE-ENDED (CONTINUED)																
APPLICATIONS: PROJECTION, MICROFILM, STUDIO, ETC. TABLE 7. (CONTINUED)																
T3.5	G5.3 2-Pin	360 12696	EYB		82	24	CC-8	2.25	1.25	75	10000	3300	HD		A	.30 x .20
		19322	EYB-5		86	24	CC-8	2.25	1.25	75	3200		HD		A	.30 x .20
G6	G5.3 2-Pin	250 13617	EYH/FKT		120	24	CC-6	2.50	1.44	200	6000	3000	HD		A	.55 x .17
		500 33663	FBG/FBD		120	24	CC-6	3.00	1.75	50	13200	3200	U		A	.50 x .20
T3	GY6.35 2-Pin	100 14876	FCR		12	100	C-6 Oval	1.75	1.18	50	2800	3300	HD		A	.20 x .15
T4	G6.35 2-Pin	150 13598	FCS		24	100	C-6 Oval	2.00	1.18	50	4500	3300	HD		A	.25 x .15
T3	GZ9.5 2-Pin Pf	100 35321	FDT		12	24	C-6 Oval	2.12	1.06	50	2900	3300	HD		A	.23 x .15
T4	G6.35 2-Pin	150 36878	FDV		24	24	C-6 Oval	2.00	1.19	100	4300	3050	U		A	.25 x .15
	GY6.35 Ceramic	300 19886	FLW		24	48	C-6 Oval	2.15	1.21	50	10200	3500	HD		A	.34 x .23
	G6.35 2-Pin	275 18241	FNT/100		24	100	C-6 Oval	2.25	1.31	50	10000	3400	HD		A	.14 x .28
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	.25 x .12
		150 11427	EWR		6.6A	24	C-6 Oval	2.50	1.54	500	4100	3200	BD	Airport	A	.25 x .16
T3.5	GZ9.5 2-Pin	30 11478	EXL		6.6A	24	C-8	1.75	1.00	1000	375	2900	HD	Airport	A	.05 x .13
		45 11482	EXM		6.6A	24	C-8	1.75	1.00	1000	750	2950	HD	Airport	A	.06 x .19
T4	GZ9.5 2-Pin	200 15243	EZL		6.6A	24	C-6 Oval	2.50	1.54	500	5000	3100	BD	Airport	A	.28 x .19
QUARTZLINE® DOUBLE-ENDED PROJECTION. TABLE 9.																
T5	R7s	1000 29604	BRH		120	24	CC-8	3.75		60	30000	3350	U	Overhead Projection	A	.70 x .21
T4	R7s	375 29578	DWZ		30	24	CC-8	3.13		1000	7500	3000	U	Bowling Projector	A	.35 x .18
		800 36952	DXX		230	24	CC-8	3.13		75	21400	3200	U	Copyboard, Studio	A	.90 x .17
		36953	DXX		240	24	CC-8	3.13		75	21400	3200	U	Copyboard, Studio	A	.90 x .17
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	.35 x .17
		600 29598	FCB		120	24	CC-8	3.75		120	17000	3250	U	Overhead Projection	A	.45 x .18
		29592	FFJ		120	24	CC-8	2.63		85	17000	3250	U	Printer	A	.60 x .17
		420 30276	FFM		120	24	CC-8	3.13	0.50	90	11000	3200	U	Copyboard	A	.50 x .25
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	A, I	
														Gold Top (opaque)		
T12	G17q 4-Pin	500 29737	DEK/DFW/DHN		120	24	C-13D	3.62	1.75	25		3250	HD	Slide Projection.	A, H, I	
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/DFP		120	24	CC-6	3.38	1.56	15		3150	BD	8mm Projection	A	2.25
		80 36122	DFE		30	24	CC-8	3.19	1.56	15		3400	HD	8mm Projection	A	2.25
		150 29386	DFN/DFC		125	24	CC-8	3.19	1.56	15		3150	HD	8mm Projection	A	2.25



Bulb Shape	Base	Watts	Order Code Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Burn Position	Additional Information	Typical Working Footnote	Source Size Distance (WxH)
INCANDESCENT PROJECTION (CONTINUED)																
4-PIN BASE – FOCUSING REFLECTOR. TABLE 12. (CONTINUED)																
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/ DHX	22	24	CC-6	3.44	1.56	15	3250	HD	8mm Projection.	A, K	1.75		
		200	29405 DSW	24	24	CC-8	3.38	1.56	25	3300	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		
T12	Med. Pref.	750	29836 DDB	125	24	C-13D	5.75	2.19	25	19500	3250	BD	16mm Projection.	A, J		
T20	Med. Pref.	1000	29968 DRB	118	24	C-13	5.75	2.19	25	32000	3350	BD	Overhead projection	A		
			29979 DRC	120	24	C-13	5.75	2.19	50	30000	3250	BD	Overhead and opaque 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		
		25				C6			300	420						
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 $\frac{3}{16}$ " 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		



Bulb Shape	Base	Order Watts	Code	Description	Case Volts	Filament Qty.	MOL	LCL	Rated Life Hours	Lumens	Color Temp. K	Burn Position	Additional Information	Typical Working Footnote	Source Size Distance (WxH)
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PHOTOFLOOD (CONTINUED)

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 & 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

PULSED XENON ARC, GEMINI®, AND MARC™. TABLE 21.

T3	WireTerm/ Ceramic	4000	30124	PXA 50	6	4.63			125000	6000	U	Graphic Arts	A, B
		8000	30129	PXA/80	6	4.63			240000	6000	U	Graphic Arts	A, B
PAR20 Special 2-Pin Plug		300	11134	GEMINI 300(EZG)	35	4			75	6000	H	Replaces MARC 300/16A.	A, O 1.46
PAR24 Special 2-Pin Plug		350	39936	MARC 350-16T EZT	45	4			50	50	5000	H	A, O 2.05

POWER SUPPLY TO OPERATE GEMINI® AND MARC™ LAMPS

For information on the special power supply used to operate these lamps, contact:

Scientecular Lab Company
 98 McKinney Avenue
 Central Islip, NY 11722-4120
 (516) 232-3345

NAPS/Fortron Source
 328 Ley Road, Suite 300
 Ft. Wayne, IN 46808
 (219) 471-1368
 Fax: (219) 471-1368

WARNING AND CAUTION NOTICES

A

▲ WARNING

Risk of electrical shock

- Turn power off before inspection, installation or removal

Risk of fire

- Keep combustible material away from lamp
- Use in enclosed fixtures rated for this product

Pressurized lamp-unexpected rupture may cause injury, fire, or property damage

- Do not exceed 110% of rated voltage
- Avoid direct water/liquid contact
- Use in enclosed fixtures rated for this product
- Do not use lamp if outer glass is scratched or broken

▲ CAUTION

Risk of burn

- Allow lamp/fixtures to cool before handling
- Turn off power before installing lamp

Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in enclosed container

FOOTNOTES

Footnote

B Pulsed Xenon lamps emit high levels of ultraviolet (UV) radiation and must be completely enclosed in an interlocked system with all walls made of UV absorbing material. The lamp must be made inoperative before the system is opened. The operator or user should never be exposed to the high level of UV radiation emitted by PXA lamps.

C Opaque Ceramic top on bulb.

D Proximity Reflector.

E Ultraviolet absorbing bulb.

F Heat resistant glass bulb.

G Collector grid.

I Gold Top (opaque).

J Black Top (opaque).

K Dichroic reflector.

L Two-filament lamp.

M Filament offset 3 3/8" from base axis.

O Should not be operated for periods of less than three minutes.

Q Approximate beam spread to 1/2 center-beam intensity.

R Red-enhanced dichroic filter.