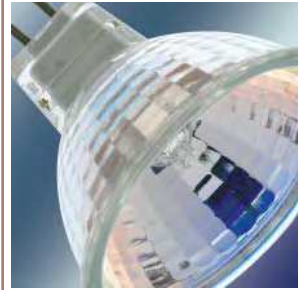


Halogen





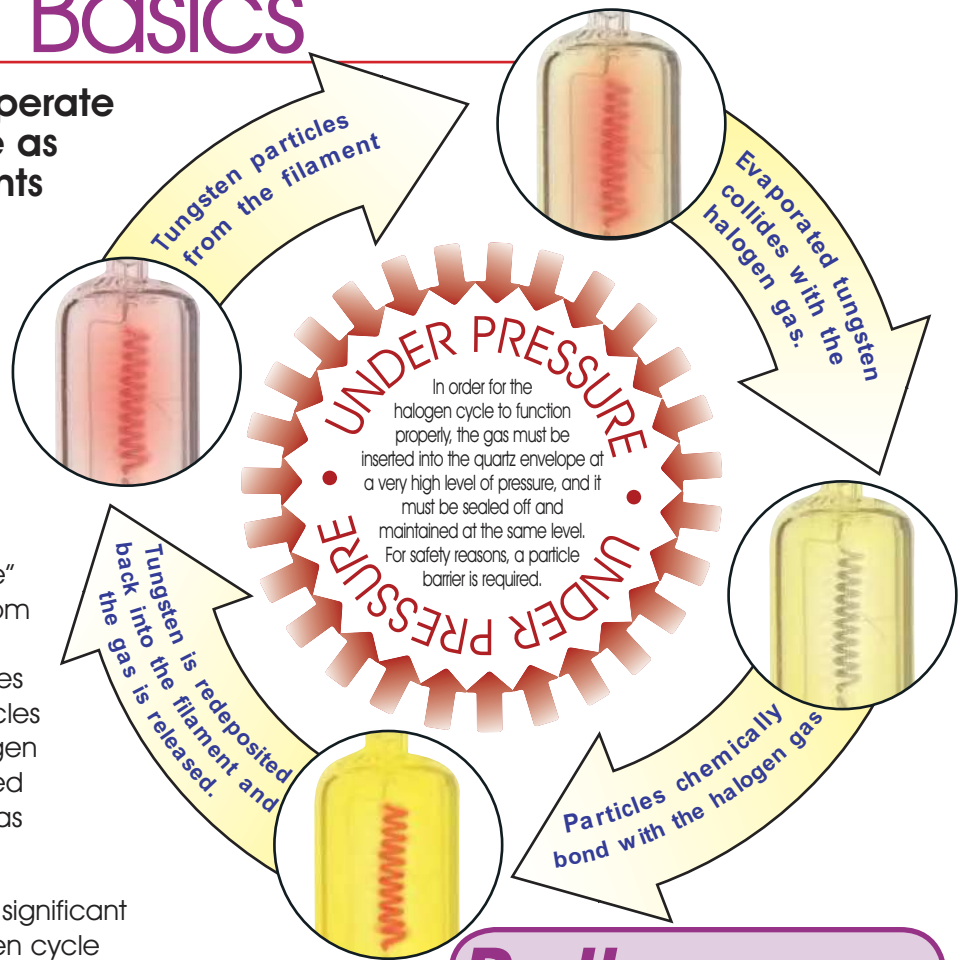
Halogen Basics

Halogen light bulbs operate on the same principle as standard incandescents heating the tungsten filament until it glows but from there, halogens improve upon the process.

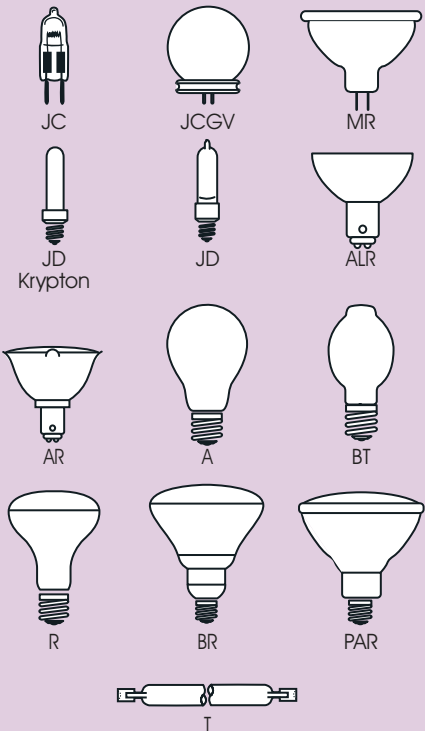
HOW IT WORKS

Operation of halogen lamps is based on the "Halogen Cycle" (see right). Tungsten particles from the bulb's filament evaporate. The evaporated tungsten collides with the halogen gas. The particles chemically bond with the halogen gas. Tungsten is then redeposited back to the filament and the gas is re-released.

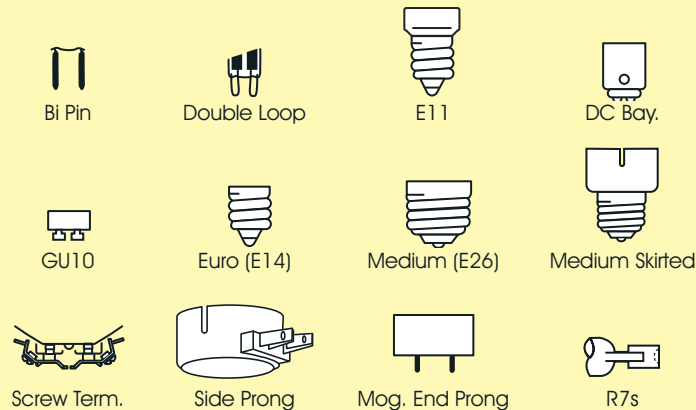
The operating temperature is a significant factor to ensure that the halogen cycle performs properly. The interior wall of the bulb must be above 250° C and less than 1,100° C. Additionally, the filament of the lamp must reach at least 2,000° C. To reach this temperature, the interior wall must be in close proximity to the tungsten filament.



Bulb shapes



Base Types



Big Benefits

Halogen lamps offer a combination of benefits that make them an appealing alternative to standard incandescents in many applications.

Brilliant, White Light:

Halogen lamps deliver a crisp, white light. Not only is the quantity of the light greater than a standard incandescent of comparable wattage, but the quality of the light creates a higher contrast for reading and other tasks. This also makes halogen perfect for display, accent and general lighting.

Color Temperature & Rendering:

Since halogens are incandescent lamps, their CRI of 100 will render colors accurately and will match the color temperature of other light sources in the 3000K range.

Long Life:

Standard incandescent lamps and halogen lamps both use tungsten filaments. However, the filament in the standard lamp evaporates over time, causing it to weaken and eventually break. The gases inside halogen lamps allow the evaporated tungsten to find its way back to the filament and redeposit, ensuring a long life of 2,000 hours or more.

Lumen Maintenance:

Compared to standard incandescent lamps, halogens offer superior lumen performance throughout the life of the lamp.

What Is a Halogen?

Halogens are five non-metallic elements found in Group 7 of the periodic table. The term "halogen" means "salt former" and compounds containing halogens are called "salts."

The halogens are: Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I) and Astatine (At).

GA	7A	H
O	F	Ne
S	Cl	Ar
Se	Br	Kr
Te	I	Xe
Po	At	Rn



HANDS OFF!

While conventional incandescent lamps can be handled with bare hands, halogen bulbs should not. Since the quartz envelope, or bulb, of the lamp reaches high temperatures, the oils and salts from skin will deteriorate and weaken the bulb.

If your hands should come in contact with the bulb, use a small amount of rubbing alcohol and a soft cloth to clean the lamp. Allow time for the bulb to dry before using.

DIMMING DYNAMICS

Halogen lamps can be dimmed using a conventional incandescent dimmer. However, using a dimmer actually has an adverse effect on the lamps.

Standard incandescents benefit from being used with a dimmer due to the reduced voltage being applied to the filament. Halogen lamp filaments need to be operated at higher temperatures (250 degrees Celsius or higher) for the lamp to function properly. When a halogen lamp is used on a dimmer, the filament will not reach this temperature and the halogen cycle will not work.



Halogen lamps that are dimmed to low levels for extended periods of time will begin to blacken on the inside wall of the bulb. This will reduce light output and life. It is possible to restore the bulb to a certain degree of its original state by running the lamp non-dimmed every so often. This allows the halogen cycle to clean the inside of the bulb.



Bi Pin Lamps

Bi Pin Lamps 12 and 24 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Flmnt	Initial Lumens	Average Rated Hours	Pkg Type	Pack	Notes
5		G4	S3179	5T3/CL	12	Clear	1 1/4"	32	C-6	50	2000	Box	48	
10		G4	S3171	10T3/CL	12	Clear	1 1/4"	32	C-6	120	2000	Box	48	
			S3459	10T3/CL	12	Clear	1 1/4"	32	C-6	120	2000	CD/1	12	
			S1908	10T3/F	12	Frost	1 1/4"	32	C-6	100	2000	Box	48	
20		G4	S3120	20T3/CL	12	Clear	1 1/4"	32	C-6	320	2000	Box	48	
			S3468	20T3/CL	12	Clear	1 1/4"	32	C-6	320	2000	CD/1	12	
			S3420	20T3/CL/2PK	12	Clear	1 1/4"	32	C-6	320	2000	CD/2	12	
			S1909	20T3/F	12	Frost	1 1/4"	32	C-6	300	2000	Box	48	
			S1986	20T3/CL/24V	24	Clear	1 1/4"	32	CC-6	260	2000	Box	48	
35		GY6.35	S3160	35T4/CL	12	Clear	1 9/16"	41	C-6	600	2000	Box	48	
			S3469	35T4/CL	12	Clear	1 9/16"	41	C-6	600	2000	CD/1	12	
			S1910	35T4/F	12	Frost	1 9/16"	41	C-6	550	2000	Box	48	
50		GY6.35	S3121	50T4/CL	12	Clear	1 9/16"	41	C-6	900	2000	Box	48	
			S3470	50T4/CL	12	Clear	1 9/16"	41	C-6	900	2000	CD/1	12	
			S3421	50T4/CL/2PK	12	Clear	1 9/16"	41	C-6	900	2000	CD/2	12	
			S1911	50T4/F	12	Frost	1 9/16"	41	C-6	850	2000	Box	48	
			S1987	50T4/CL/24V	24	Clear	1 9/16"	41	CC-6	850	2000	Box	48	
75		GY6.35	S3156	75T4/CL	12	Clear	1 9/16"	41	C-6	1350	2000	Box	48	
			S3471	75T4/CL	12	Clear	1 9/16"	41	C-6	1350	2000	CD/1	12	
			S1912	75T4/F	12	Frost	1 9/16"	41	C-6	1290	2000	Box	48	

Enclosed Bi Pin Lamps 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Description	Finish	MOL Inches	Flmnt	Initial Lumens	Average Rated Hours	Pkg Type	Pack	Notes
20		G4	S3193	20JCGV-G12	12	Ball-Lite	White	2 7/32"	C-6	340	2000	Box	200/25	
			S3187	20JCGV-G14	12	Ball-Lite	White	2 7/32"	C-6	320	2000	Box	250/25	
		GX5.3	S3190	20JCVL-G14	12	Longneck Ball-Lite	White	2 9/16"	C-6	320	2000	Box	200/25	
			S4354	20MR16/FROST	12	Soft-Lite	Frost	1 7/8"		320	2000	Box	12	5

Halogen Lamps



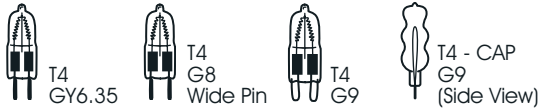
Enclosed Bi Pin Lamps 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Description	Finish	MOL Inches	Flmnt	Initial Lumens	Average Rated Hours	Pkg Type	Pack	Notes
35	G14	GX5.3	S3188	35JCGV-G14	12	Ball-Lite	White	2 7/32"	C-6	620	2000	Box	250/25	
			S3191	35JCVL-G14	12	Longneck Ball-Lite	White	2 9/16"	C-6	620	2000	Box	250/25	
	MR16	GX5.3	S4355	35MR16/FROST	12	Soft-Lite	Frost	1 7/8"		620	2000	Box	12	5
50	G14	GX5.3	S3189	50JCGV-G14	12	Ball-Lite	White	2 7/32"	C-6	940	2000	Box	200/25	
			S3192	50JCVL-G14	12	Longneck Ball-Lite	White	2 9/16"	C-6	940	2000	Box	200/25	
	MR16	GX5.3	S4356	50MR16/FROST	12	Soft-Lite	Frost	1 7/8"		940	2000	Box	12	5

Bi Pin Lamps - 120 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Flmnt	Initial Lumens	Average Rated Hours	Pkg Type	Pack	Notes
20	T4	G8	S4610	20T4/CL/G8	120	Clear	1 13/16"	46	CC-2V	180	2000	Box	48	
25	T4	GY6.35	S3197	25T4/CL	120	Clear	1 31/32"	50	CC-2V	240	2000	Box	48	
		G8	S4611	25T4/CL/G8	120	Clear	1 13/16"	46	CC-2V	240	2000	Box	48	
35	T4	GY6.35	S3164	35T4/CL	120	Clear	1 31/32"	50	CC-2V	400	2000	Box	48	
			S3418	35T4/CL	120	Clear	1 31/32"	50	CC-2V	400	2000	CD/1	12	
	G8	S4620	35T4/CL/G8	120	Clear	1 13/16"	46	CC-2V	400	2000	Box	48		
		S3540	35T4/CL/G8	120	Clear	1 13/16"	46	CC-2V	400	2000	CD/1	12		
50	T4	GY6.35	S3167	50T4/CL	120	Clear	1 31/32"	50	CC-2V	750	2000	Box	48	
			S3427	50T4/CL	120	Clear	1 31/32"	50	CC-2V	750	2000	CD/1	12	
	G8	S4612	50T4/CL/G8	120	Clear	1 13/16"	46	CC-2V	750	2000	Box	48		
		S3541	50T4/CL/G8	120	Clear	1 13/16"	46	CC-2V	750	2000	CD/1	12		
75	T4	GY6.35	S3168	75T4/CL	120	Clear	2 3/8"	60	CC-2V	1250	2000	Box	48	
			S3428	75T4/CL	120	Clear	2 3/8"	60	CC-2V	1250	2000	CD/1	12	
	G8	S4613	75T4/CL/G8	120	Clear	2 9/32"	58	CC-8	1250	2000	Box	48		
		S3542	75T4/CL/G8	120	Clear	2 9/32"	58	CC-8	1250	2000	CD/1	12		

halogen lamps



Bi Pin Lamps - 120 Volt (cont.)

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Fmnt	Initial Lumens	Average Rated Hours	Pkg Type	Pack	Notes
100		GY6.35	S1924	100T4/CL	120	Clear	2 3/8"	60	CC-2V	1600	2000	Box	48	
			S3419	100T4/CL	120	Clear	2 3/8"	60	CC-2V	1600	2000	CD/1	12	
		G8	S4622	100T4/CL/G8	120	Clear	2 9/32"	58	CC-8	1600	2000	Box	48	
			S3543	100T4/CL/G8	120	Clear	2 9/32"	58	CC-8	1600	2000	CD/1	12	

Double Loop G9 – 120 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Fmnt	Initial Lumens	Average Rated Hours	Pkg Type	Pack	Notes
20		G9	S4614	20T4/G9/CL	120	Clear	1 25/32"	45	CC-2V	180	2000	Box	48	
25		G9	S4615	25T4/G9/CL	120	Clear	1 25/32"	45	CC-2V	240	2000	Box	48	
35		G9	S4621	35T4/G9/CL	120	Clear	1 25/32"	45	CC-2V	400	2000	Box	48	
			S3544	35T4/G9/CL	120	Clear	1 25/32"	45	CC-2V	400	2000	CD/1	12	
40		G9	S4357 ▲	40CAP/G9/CL	120	Clear	1 25/32"	45	CC-2V	500	2000	CD/1	10	4
			S4358 ▲	40CAP/G9/FR	120	Frost	1 25/32"	45	CC-2V	450	2000	CD/1	10	4
50		G9	S4616	50T4/G9/CL	120	Clear	1 25/32"	45	CC-2V	750	2000	Box	48	
			S3545	50T4/G9/CL	120	Clear	1 25/32"	45	CC-2V	750	2000	CD/1	12	
60		G9	S4359 ▲	60CAP/G9/CL	120	Clear	1 27/32"	47	CC-2V	800	2000	CD/1	10	4
			S4360 ▲	60CAP/G9/FR	120	Frost	1 27/32"	47	CC-2V	720	2000	CD/1	10	4
75		G9	S4617	75T4/G9/CL	120	Clear	2 7/32"	56	CC-8	1250	2000	Box	48	
			S3546	75T4/G9/CL	120	Clear	2 7/32"	56	CC-8	1250	2000	CD/1	12	
100		G9	S4642	100T4/G9/CL	120	Clear	2 7/32"	56	CC-8	1600	2000	Box	48	
			S3547	100T4/G9/CL	120	Clear	2 7/32"	56	CC-8	1600	2000	CD/1	12	

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Halogen Lamps



E11 – DC Bay

Single Ended - E11 MiniCan - E12 Cand - E14 Euro - B15D DC Bay

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Filament	Initial Lumens	Avg Rated Hours	Pkg Type	Pack	Notes
20		E11	S4486	KX20CL/3M/MC	120	Clear	2 5/16"	59	CC-8	200	3000	Box	10	1
			S4489	KX20FR/3M/MC	120	Frost	2 5/16"	59	CC-8	200	3000	Box	10	1
		E12	S4480	KX20CL/3M/E12	120	Clear	2 7/16"	63	CC-8	200	3000	Box	10	1
			S4483	KX20FR/3M/E12	120	Frost	2 7/16"	63	CC-8	200	3000	Box	10	1
		DC Bay.	S4492	KX20CL/3M/DC	120	Clear	2 1/4"	58	CC-8	200	3000	Box	10	1
			S4495	KX20FR/3M/DC	120	Frost	2 1/4"	58	CC-8	200	3000	Box	10	1
35		E11	S3165	35Q/CL/MC	120	Clear	2 5/16"	58	CC-2V	400	2000	Box	12	
			S1913	35Q/FR/MC	120	Frost	2 5/16"	58	CC-2V	360	2000	Box	12	
		DC Bay.	S1979	35Q/CL/DC	120	Clear	2 3/32"	53	CC-2V	400	2000	Box	12	
			S1980	35Q/FR/DC	120	Frost	2 3/32"	53	CC-2V	360	2000	Box	12	
40		E11	S4487	KX40CL/3M/MC	120	Clear	2 5/16"	59	CC-8	560	3000	Box	10	1
			S4490	KX40FR/3M/MC	120	Frost	2 5/16"	59	CC-8	560	3000	Box	10	1
		E12	S4481	KX40CL/3M/E12	120	Clear	2 7/16"	63	CC-8	560	3000	Box	10	1
			S4484	KX40FR/3M/E12	120	Frost	2 7/16"	63	CC-8	560	3000	Box	10	1
		DC Bay.	S4493	KX40CL/3M/DC	120	Clear	2 1/4"	58	CC-8	560	3000	Box	10	1
			S4496	KX40FR/3M/DC	120	Frost	2 1/4"	58	CC-8	560	3000	Box	10	1
50		E11	S3162	50Q/CL/MC	120	Clear	2 5/16"	58	CC-2V	750	2000	Box	12	
			S3198	50Q/CL/MC	130	Clear	2 5/16"	58	CC-2V	750	2000	Box	12	
			S1914	50Q/F/MC	120	Frost	2 5/16"	58	CC-2V	675	2000	Box	12	
		DC Bay.	S1981	50Q/CL/DC	120	Clear	2 3/32"	53	CC-2V	750	2000	Box	12	
			S1982	50Q/F/DC	120	Frost	2 3/32"	53	CC-2V	675	2000	Box	12	

halogen lamps

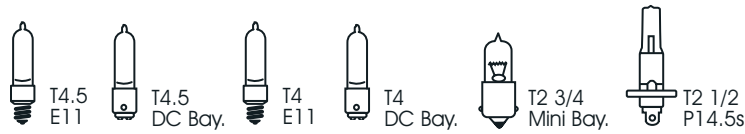


Single Ended - E11 MiniCan - E12 Cand - E14 Euro - B15D DC Bay (cont.)

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Filament	Initial Lumens	Avg Rated Hours	Pkg Type	Pack	Notes
60		E11	S4488	KX60CL/3M/MC	120	Clear	2 5/16"	59	CC-8	960	3000	Box	10	1
			S4491	KX60FR/3M/MC	120	Frost	2 5/16"	59	CC-8	950	3000	Box	10	1
		E12	S4482	KX60CL/3M/E12	120	Clear	2 7/16"	63	CC-8	960	3000	Box	10	1
	S4485		KX60FR/3M/E12	120	Frost	2 7/16"	63	CC-8	950	3000	Box	10	1	
		DC Bay.	S4494	KX60CL/3M/DC	120	Clear	2 1/4"	58	CC-8	960	3000	Box	10	1
			S4497	KX60FR/3M/DC	120	Frost	2 1/4"	58	CC-8	950	3000	Box	10	1
75		E11	S3157	75Q/CL/MC	120	Clear	2 11/16"	68	CC-8	1250	2000	Box	12	
			S3484	75Q/CL/MC	120	Clear	2 11/16"	68	CC-8	1250	2000	CD/1	12	
			S1915	75Q/F/MC	120	Frost	2 11/16"	68	CC-8	1125	2000	Box	12	
		DC Bay.	S3159	75Q/CL/DC	120	Clear	2 13/32"	61	CC-8	1250	2000	Box	12	
			S3432	75Q/CL/DC	120	Clear	2 13/32"	61	CC-8	1250	2000	CD/1	12	
			S1919	75Q/F/DC	120	Frost	2 13/32"	61	CC-8	1125	2000	Box	12	
100		E11	S3107	100Q/CL/MC	120	Clear	2 11/16"	68	CC-8	1600	2000	Box	12	
			S3485	100Q/CL/MC	120	Clear	2 11/16"	68	CC-8	1600	2000	CD/1	12	
			S1916	100Q/FR/MC	120	Frost	2 11/16"	68	CC-8	1440	2000	Box	12	
		E14	S3132	100Q/CL/E14	120	Clear	2 15/16"	74	CC-8	1600	2000	Box	12	
			S3491	100Q/CL/E14	120	Clear	2 15/16"	74	CC-8	1600	2000	CD/1	12	
				DC Bay.	S3147	100Q/CL/DC	120	Clear	2 13/32"	61	CC-8	1600	2000	Box
	S3488	100Q/CL/DC			120	Clear	2 13/32"	61	CC-8	1600	2000	CD/1	12	
	S1920	100Q/F/DC			120	Frost	2 13/32"	61	CC-8	1440	2000	Box	12	
		T4 Long DC Bay.	S4361	100Q/CL/DC	120	Clear	3 3/8"	86	CC-2V	1600	2000	Box	10	2

halogen lamps

Halogen Lamps

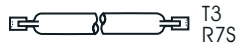


Single Ended - E11 MiniCan - E12 Cand - E14 Euro - B15D DC Bay (cont.)

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Filament	Initial Lumens	Avg Rated Hours	Pkg Type	Pack	Notes
150		E11	S3108	150Q/CL/MC	120	Clear	2 23/32"	69	CC-8	2400	2000	Box	12	
			S3486	150Q/CL/MC	120	Clear	2 23/32"	69	CC-8	2400	2000	CD/1	12	
			S1917	150Q/F/MC	120	Frost	2 23/32"	68	CC-8	2160	2000	Box	12	
		E14	S3133	150Q/CL/E14	120	Clear	3 1/32"	77	CC-8	2400	2000	Box	12	
			S3492	150Q/CL/E14	120	Clear	3 1/32"	77	CC-8	2400	2000	CD/1	12	
			S3122	150Q/CL/DC	120	Clear	2 13/32"	61	CC-8	2400	2000	Box	12	
		DC Bay.	S3489	150Q/CL/DC	120	Clear	2 13/32"	61	CC-8	2400	2000	CD/1	12	
			S1921	150Q/F/DC	120	Frost	2 13/32"	61	CC-8	2160	2000	Box	12	
250		E11	S3109	250Q/CL/MC	120	Clear	3 5/32"	80	CC-8	4350	2000	Box	12	
			S3487	250Q/CL/MC	120	Clear	3 5/32"	80	CC-8	4350	2000	CD/1	12	
			S1918	250Q/F/MC	120	Frost	3 5/32"	80	CC-8	3915	2000	Box	12	
		E14	S3134	250Q/CL/E14	120	Clear	3 11/32"	85	CC-8	4350	2000	Box	12	
			S3493	250Q/CL/E14	120	Clear	3 11/32"	85	CC-8	4350	2000	CD/1	12	
			S3123	250Q/CL/DC	120	Clear	2 27/32"	72	CC-8	4350	2000	Box	12	
		DC Bay.	S3490	250Q/CL/DC	120	Clear	2 27/32"	72	CC-8	4350	2000	CD/1	12	
			S1922	250Q/F/DC	120	Frost	2 27/32"	72	CC-8	3915	2000	Box	12	
500		E11	S3181	500Q/CL	120	Clear	3 15/32"	88	CC-8	8500	2000	Box	12	
			S4362 ▲	500Q/CL/MC/EVR	120	Clear	3 3/4"	95	CC-8	10450	2000	Box	12	3
			S3182	500Q/F	120	Frost	3 15/32"	88	CC-8	7650	2000	Box	12	
		DC Bay.	S4363 ▲	500Q/MC/EYX	120	Frost	3 3/4"	95	CC-8	10100	2000	Box	12	3
			S1983	500Q/CL	120	Clear	3 3/4"	95	CC-8	8500	2000	Box	12	
			S1984	500Q/F	120	Frost	3 3/4"	95	CC-8	7650	2000	Box	12	

Specialty Single Ended Lamps

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Filament	Initial Lumens	Avg Rated Hours	Pkg Type	Pack	Notes
5		Mini Bay	VJ020 ▲	64111	12	Clear	1 9/32"	33	C-6	50	240	Slve	10	10
55		P14.5s	VM010 ▲	64150	120	Clear	2 7/16"	63	C-8	1000	350	Slve	10	11



Linear Double Ended Lamps

Double Ended J-Style

Watts	Bulb	Base	Satco Product Number	Lamp Code	Volts	Finish	MOL Inches	MOL mm	Filament	Average Rated Hours	Initial Lumens	Pkg Type	Pack
75		R7S	S3199	75T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	1200	Box	12
			S3183	75T3Q/CL	130	Clear	3 1/8"	78 mm	C-8	2000	1200	Box	12
100		R7S	S3146	100T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	1650	Box	12
			S3480	100T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	1650	CD/1	12
			S3422	100T3Q/CL/2PK	120	Clear	3 1/8"	78 mm	C-8	2000	1650	CD/2	12
			S3166	100T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	1650	Box	12
			S3431	100T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	1650	CD/1	12
150		R7S	S3135	150T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	2600	Box	12
			S3481	150T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	2600	CD/1	12
			S3423	150T3Q/CL/2PK	120	Clear	3 1/8"	78 mm	C-8	2000	2600	CD/2	12
			S3142	150T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	2600	Box	12
			S3494	150T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	2600	CD/1	12
200		R7S	S3145	200T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	3200	Box	12
			S3482	200T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	3200	CD/1	12
			S3136	200T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	3200	Box	12
			S3495	200T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	3200	CD/1	12
250		R7S	S3184	250T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	3950	Box	12
			S3426	250T3Q/CL	120	Clear	3 1/8"	78 mm	C-8	2000	3950	CD/1	12
300		R7S	S3104	300T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	5000	Box	12
			S3496	300T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	5000	CD/1	12
			S3430	300T3Q/CL/2PK	120	Clear	4 11/16"	118 mm	C-8	2000	5000	CD/2	12
			S3410	300T3Q/CL/3PK	120	Clear	4 11/16"	118 mm	C-8	2000	5000	CD/3	12
			S1925	300T3Q/CL	130	Clear	4 11/16"	118 mm	C-8	2000	5000	Box	12
			Blade	S3180	300T3Q/CL	120	Clear	5 13/16"	145 mm	C-8	2000	5000	Box
	S3429	300T3Q/CL		120	Clear	5 13/16"	145 mm	C-8	2000	5000	CD/1	12	
500		R7S	S3105	500T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	9500	Box	12
			S3497	500T3Q/CL	120	Clear	4 11/16"	118 mm	C-8	2000	9500	CD/1	12
			S3433	500T3Q/CL/2PK	120	Clear	4 11/16"	118 mm	C-8	2000	9500	CD/2	12
			S3411	500T3Q/CL/3PK	120	Clear	4 11/16"	118 mm	C-8	2000	9500	CD/3	12
			S1926	500T3Q/CL	130	Clear	4 11/16"	118 mm	C-8	2000	9500	Box	12
	Blade	S1923	500T3Q/CL	120	Clear	5 13/16"	145 mm	C-8	2000	9500	Box	12	
1500		R7S	S3106	1500T3Q/CL	240	Clear	10 1/16"	254 mm	C-8	2000	33000	Box	12


halogen lamps

Halogen Lamps





MR8, MR11, MR16 Lamps


MR8 Bi Pin Base 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
10		GZ4	S4646	10MR8/NSP	NSP 9		12	Y		2000	N	C-6	1 1/4"	Box	12	
			S4645	10MR8/NFL	NFL 23		12	Y		2000	N	C-6	1 1/4"	Box	12	


MR11 Bi Pin Base 6, 12, & 24 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
5		GZ4	S4628	5MR11/NFL	NFL 30		6	Y		2000			1 1/4"	Box	12	
			S3194	5MR11/NSP	NSP 9		12		200	2000		C-6	1 1/4"	Box	12	

10		GZ4	S4629	10MR11/NFL	NFL 30		6	Y		2000			1 1/4"	Box	12	
			S3195	10MR11/SP	SP 12		12		650	2000		C-6	1 1/4"	Box	12	

20		GZ4	S3150	20MR11/NSP	NSP 9	FTB	12		2500	2000		C-6	1 1/4"	Box	12	
			S3152	20MR11/SP	SP 12	FTC	12		1750	2000		C-6	1 1/4"	Box	12	
			S3464	20MR11/SP	SP 12	FTC	12		1750	2000	Y	C-6	1 1/4"	CD/1	12	
			S1990	20MR11/SP/C	SP 12	FTC/C/24	24	Y	1750	2000	Y	C-6	1 1/4"	Box	12	
			S3154	20MR11/NFL	NFL 24	FTD	12		700	2000		C-6	1 1/4"	Box	12	
			S3465	20MR11/NFL	NFL 24	FTD	12		700	2000	Y	C-6	1 1/4"	CD/1	12	
			S3424	20MR11/NFL/2PK	NFL 24	FTD	12		700	2000	Y	C-6	1 1/4"	CD/2	12	
			S1950	20MR11/NFL/C	NFL 24	FTD/C	12	Y	700	2000		C-6	1 1/4"	Box	12	
			S1988	20MR11/NFL/C	NFL 24	FTD/C/24	24	Y	700	2000	Y	C-6	1 1/4"	Box	12	
			S4124	20MR11/FL/FR/C	FL 36		12	Y		2000	Y	C-6	1 1/4"	Box	12	

SOFT RAY

35		GZ4	S3151	35MR11/NSP	NSP 9	FTE	12		4500	2000		C-6	1 1/4"	Box	12				
			S1991	35MR11/NSP/C	NSP 9	FTE/C/24	24	Y	4500	2000	Y	C-6	1 1/4"	Box	12				
			S3153	35MR11/SP	SP12	FTF	12		2500	2000		C-6	1 1/4"	Box	12				
			S3466	35MR11/SP	SP12	FTF	12		2500	2000	Y	C-6	1 1/4"	CD/1	12				
			S3155	35MR11/NFL	NFL 24	FTH	12		1550	2000		C-6	1 1/4"	Box	12				
			S3467	35MR11/NFL	NFL 24	FTH	12		1550	2000	Y	C-6	1 1/4"	CD/1	12				
			S3425	35MR11/NFL/2PK	NFL 24	FTH	12		1550	2000	Y	C-6	1 1/4"	CD/2	12				
			S1951	35MR11/NFL/C	NFL 24	FTH/C	12	Y	1550	2000		C-6	1 1/4"	Box	12				
			S1989	35MR11/NFL/C	NFL 24	FTH/C/24	24	Y	1550	2000	Y	C-6	1 1/4"	Box	12				
						S4125	35MR11/FL/FR/C	FL 36		12	Y		2000	Y	C-6	1 1/4"	Box	12	

SOFT RAY

halogen lamps



MR11
DC Bay.



MR16
GX5.3

MR11 DC Bayonet Base 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		DC Bay.	S1954	20MR11/SP/DC	SP 12	FST/C	12	Y	1750	2000	Y	C-6	1 5/8"	Box	12	
			S1952	20MR11/NFL/DC	NFL 24	FSV/C	12	Y	700	2000	Y	C-6	1 5/8"	Box	12	
35		DC Bay.	S1955	35MR11/SP/DC	SP 12	GDY/C	12	Y	2550	2000	Y	C-6	1 5/8"	Box	12	
			S1953	35MR11/NFL/DC	NFL 24	GDZ/C	12	Y	1550	2000	Y	C-6	1 5/8"	Box	12	

MR16 Bi Pin 12 & 24 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		GX5.3	S1957	20MR16/NSP	NSP 9	ESX	12		4100	2000	Y	C-8	1 7/8"	Box	12	
			S3460	20MR16/NSP	NSP 9	ESX	12		4100	2000	Y	C-8	1 7/8"	CD/1	12	
			S1967	20MR16/NSP/C	NSP 9	ESX/C	12	Y	4100	2000	Y	C-8	1 7/8"	Box	12	
			S1995	20MR16/NSP/C	NSP 9	ESX/C	24	Y	4100	2000	Y	C-8	1 7/8"	Box	12	
			S1956	20MR16/FL	FL 36	BAB	12		700	2000	Y	C-6	1 7/8"	Box	12	
			S3461	20MR16/FL	FL 36	BAB	12		700	2000	Y	C-6	1 7/8"	CD/1		
			S1966	20MR16/FL/C	FL 36	BAB/C	12	Y	700	2000	Y	C-6	1 7/8"	Box	12	
			S1992	20MR16/FL/C	FL 36	BAB/C	24	Y	700	2000	Y	C-8	1 7/8"	Box	12	
			S4120	20MR16/FL/FR/C	FL 36		12	Y	288	2000	Y	C-6	1 7/8"	Box	12	
35		GX5.3	S1958	35MR16/NSP	NSP 9	FRB	12		7000	2000	Y	C-6	1 7/8"	Box	12	
			S4364	35MR16/NSP/C	NSP 9	FRB/C	12	Y	7000	2000	Y	C-6	1 7/8"	Box	12	
			S1996	35MR16/NSP/C	NSP 9	FRB/C	24	Y	7000	2000	Y	C-6	1 7/8"	Box	12	
			S1959	35MR16/FL	FL 36	FMW	12		1250	2000	Y	C-6	1 7/8"	Box	12	
			S4365	35MR16/FL/C	FL 36	FMW/C	12	Y	1250	2000	Y	C-6	1 7/8"	Box	12	
			S1993	35MR16/FL/C	FL 36	FMW/C	24	Y	700	2000	Y	C-6	1 7/8"	Box	12	
			S4121	35MR16/FL/FR/C	FL 36		12	Y	520	2000	Y	C-6	1 7/8"	Box	12	
50		GX5.3	S1961	50MR16/NSP	NSP 9	EXT	12		10000	2000	Y	C-6	1 7/8"	Box	12	
			S3462	50MR16/NSP	NSP 9	EXT	12		10000	2000	Y	C-6	1 7/8"	CD/1	12	
			S3170	50MR16/NSP/C	NSP 9	EXT/C	12	Y	10000	2000	Y	C-8	1 7/8"	Box	12	
			S1997	50MR16/NSP/C	NSP 9	EXT/C	24	Y	10000	2000	Y	C-8	1 7/8"	Box	12	
			S1962	50MR16/NFL	NFL 18	EXZ	12		4400	2000	Y	C-6	1 7/8"	Box	12	
			S1960	50MR16/FL	FL 36	EXN	12		1700	2000	Y	C-8	1 7/8"	Box	12	
			S3463	50MR16/FL	FL 36	EXN	12		1700	2000	Y	C-8	1 7/8"	CD/1	12	
			S3169	50MR16/FL/C	FL 36	EXN/C	12	Y	1700	2000	Y	C-8	1 7/8"	Box	12	
			S1994	50MR16/FL/C	FL 36	EXN/C	24	Y	1700	2000	Y	C-8	1 7/8"	Box	12	
			S4122	50MR16/FL/FR/C	FL 36		12	Y	820	2000	Y	C-6	1 7/8"	Box	12	
			S1963	50MR16/WFL	WFL 60	FNV	12		2200	2000	Y	C-6	1 7/8"	Box	12	
65		GX5.3	S1965	65MR16/NSP	NSP 9	FPA	12		9530	2000	Y	C-6	1 7/8"	Box	12	
			S1969	65MR16/NSP/C	NSP 9	FPA	12	Y	9500	2000	Y	C-8	1 7/8"	Box	12	
			S1964	65MR16/FL	FL 36	FPB	12		3600	2000	Y	C-6	1 7/8"	Box	12	
			S1968	65MR16/FL/C	FL 36	FPB	12	Y	3600	2000	Y	C-6	1 7/8"	Box	12	
			S4123	65MR16/FL/FR/C	FL 36		12	Y	880	2000	Y	C-6	1 7/8"	Box	12	

SOFT RAY

SOFT RAY

SOFT RAY

SOFT RAY



Halogen Lamps



MR16 Bi Pin Aluminized Reflector 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		GU5.3	S2603	20MR16/B/NSP	NSP 8	ESX	12		4650	4000	Y	AX	1 3/4"	Box	10	6
			S2604	20MR16/B/C/NSP	NSP 8	ESX/C	12	Y	4400	4000	Y	AX	1 3/4"	Box	10	6
			S2601	20MR16/B/FL	FL 35	BAB	12		625	4000	Y	AX	1 3/4"	Box	10	6
			S2602	20MR16/B/C/FL	FL 35	BAB/C	12	Y	600	4000	Y	AX	1 3/4"	Box	10	6
35		GU5.3	S2606	35MR16/B/SP	SP10	FRB	12		8700	4000	Y	AX	1 3/4"	Box	10	6
			S2605	35MR16/B/FL	FL 35	FMW	12		1300	4000	Y	AX	1 3/4"	Box	10	6
50		GU5.3	S2610	50MR16/B/SP	SP 11	EXT	12		10500	4000	Y	AX	1 3/4"	Box	10	6
			S2611	50MR16/B/C/SP	SP 11	EXT/C	12	Y	10000	4000	Y	AX	1 3/4"	Box	10	6
			S2609	50MR16/B/NFL	NFL25	EXZ	12		3000	4000	Y	AX	1 3/4"	Box	10	6
			S2607	50MR16/B/FL	FL 35	EXN	12		1900	4000	Y	AX	1 3/4"	Box	10	6
			S2608	50MR16/B/C/FL	FL 35	EXN/C	12	Y	1800	4000	Y	AX	1 3/4"	Box	10	6
65		GU5.3	S2614	65MR16/B/SP	SP 10	FPA	12		12500	4000	Y	AX	1 3/4"	Box	10	6
			S2613	65MR16/B/NFL	NFL 25	FPC	12		3600	4000	Y	AX	1 3/4"	Box	10	6
			S2612	65MR16/B/FL	FL 40	FPB	12		2100	4000	Y	AX	1 3/4"	Box	10	6

MR16 Bi Pin Hard Coated Dichroic Reflector 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		GU5.3	S2616	20MR16/T/SP	SP 10	ESX	12		5000	4000	Y	AX	1 3/4"	Box	10	7
			S2615	20MR16/T/FL	FL 40	BAB	12		700	4000	Y	AX	1 3/4"	Box	10	7
			S2617	20MR16/T/WFL	WFL 60		12		350	4000	Y	AX	1 3/4"	Box	10	7
35		GU5.3	S2620	35MR16/T/SP	SP 10	FRB	12		8300	4000	Y	AX	1 3/4"	Box	10	7
			S2619	35MR16/T/NFL	NFL 25		12		3100	4000	Y	AX	1 3/4"	Box	10	7
			S2618	35MR16/T/FL	FL 40	FMW	12		1250	4000	Y	AX	1 3/4"	Box	10	7
			S2621	35MR16/T/WFL	WFL 60		12		650	4000	Y	AX	1 3/4"	Box	10	7
50		GU5.3	S2624	50MR16/T/SP	SP 10	EXT	12		11500	4000	Y	AX	1 3/4"	Box	10	7
			S2623	50MR16/T/NFL	NFL 25	EXZ	12		3200	4000	Y	AX	1 3/4"	Box	10	7
			S2622	50MR16/T/FL	FL 40	EXN	12		2000	4000	Y	AX	1 3/4"	Box	10	7
			S2625	50MR16/T/WFL	WFL 60	FNV	12		1000	4000	Y	AX	1 3/4"	Box	10	7
65		GU5.3	S2628	65MR16/T/SP	SP 10	FPA	12		14000	4000	Y	AX	1 3/4"	Box	10	7
			S2627	65MR16/T/NFL	NFL 25	FPC	12		4000	4000	Y	AX	1 3/4"	Box	10	7
			S2626	65MR16/T/FL	FL 40	FPB	12		2100	4000	Y	AX	1 3/4"	Box	10	7
			S2629	65MR16/T/WFL	WFL 60		12		1050	4000	Y	AX	1 3/4"	Box	10	7

Don't see the lamp you need? Call Customer Service 1-800-43-SATCO



MR16 Bi Pin Energy Saver 12 Volt with Infrared Reflective Coating

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		GU5.3	S2632 ▲	20MR16/IR/SP	SP 10		12	Y	6000	4000	Y	AX	1 3/4"	Box	20	8
			S2631 ▲	20MR16/IR/NFL	NFL 25		12	Y	2300	4000	Y	AX	1 3/4"	Box	20	8
			S2630 ▲	20MR16/IR/FL	FL 40		12	Y	1000	4000	Y	AX	1 3/4"	Box	20	8
			S2633 ▲	20MR16/IR/WFL	WFL 60		12	Y	450	4000	Y	AX	1 3/4"	Box	20	8
37		GU5.3	S2636 ▲	37MR16/IR/SP	SP 10		12	Y	12500	4000	Y	AX	1 3/4"	Box	20	8
			S2635 ▲	37MR16/IR/NFL	NFL 25		12	Y	4400	4000	Y	AX	1 3/4"	Box	20	8
			S2634 ▲	37MR16/IR/FL	FL 40		12	Y	2200	4000	Y	AX	1 3/4"	Box	20	8
			S2637 ▲	37MR16/IR/WFL	WFL 60		12	Y	1100	4000	Y	AX	1 3/4"	Box	20	8
50		GU5.3	S2640 ▲	50MR16/IR/SP	SP 10		12	Y	15000	4000	Y	AX	1 3/4"	Box	20	8
			S2639 ▲	50MR16/IR/NFL	NFL 25		12	Y	5700	4000	Y	AX	1 3/4"	Box	20	8
			S2638 ▲	50MR16/IR/FL	FL 40		12	Y	2850	4000	Y	AX	1 3/4"	Box	20	8
			S2641 ▲	50MR16/IR/WFL	WFL 60		12	Y	1430	4000	Y	AX	1 3/4"	Box	20	8

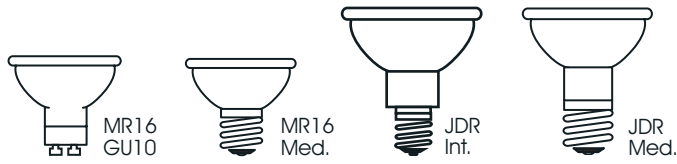
MR16 DC Bayonet 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		DC Bay.	S1971	20MR16/DC/NSP	NSP 9		12	Y	4100	2000	Y	C-8	1 7/8"	Box	12	
			S1970	20MR16/DC/FL	FL 36		12	Y	700	2000	Y	C-6	1 7/8"	Box	12	
50		DC Bay.	S1973	50MR16/DC/NSP	NSP 9		12	Y	4100	2000	Y	C-8	1 7/8"	Box	12	
			S1972	50MR16/DC/FL	FL 36		12	Y	1700	2000	Y	C-8	1 7/8"	Box	12	
65		DC Bay.	S1975	65MR16/DC/NSP	NSP 9		12	Y	9500	2000	Y	C-8	1 7/8"	Box	12	
			S1974	65MR16/DC/FL	FL 36		12	Y	10000	2000	Y	C-8	1 7/8"	Box	12	

MR16 Bi Pin 120 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		GX5.3	S1976	20MR16/FL	FL 36		120	Y	700	2000	Y	CC-8	1 7/8"	Box	12	
		G8	S4626	20MR16/FL	FL 36		120	Y	700	2000			CC-8	1 7/8"	Box	12
35		GX5.3	S1977	35MR16/FL	FL 36		120	Y	1250	2000	Y	CC-8	1 7/8"	Box	12	
		G8	S4627	35MR16/FL	FL 36		120	Y	1250	2000			CC-8	1 7/8"	Box	12
50		GX5.3	S1978	50MR16/FL	FL 36		120	Y	1700	2000	Y	CC-8	1 7/8"	Box	12	
		G8	S4618	50MR16/FL	FL 36		120	Y	1700	2000			CC-8	1 7/8"	Box	12

Halogen Lamps



MR16 GU10 (Twist Base) 120 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		GU10	S3515	20MR16/GU10/FL	FL 36		120	Y	700	2000		CC-8	1 7/8"	Box	12	
			S3500	20MR16/GU10/FL	FL 36		120	Y	700	2000	Y	CC-8	1 7/8"	CD/1	12	
			S4127	20MR16/GU10/FL/FR	FL 36		120	Y		2000	Y	CC-8	1 7/8"	Box	12	
35		GU10	S3516	35MR16/GU10/FL	FL 36		120	Y	1250	2000		CC-8	1 7/8"	Box	12	
			S3501	35MR16/GU10/FL	FL 36		120	Y	1250	2000	Y	CC-8	1 7/8"	CD/1	12	
			S4128	35MR16/GU10/FL/FR	FL 36		120	Y		2000	Y	CC-8	1 7/8"	Box	12	
50		GU10	S3517	50MR16/GU10/FL	FL 36		120	Y	1700	2000		CC-8	1 7/8"	Box	12	
			S3502	50MR16/GU10/FL	FL 36		120	Y	1700	2000	Y	CC-8	1 7/8"	CD/1	12	
			S4129	50MR16/GU10/FL/FR	FL 36		120	Y		2000	Y	CC-8	1 7/8"	Box	12	

MR16 & JDR Screw Base 120 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Avg. Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.	Notes
20		Med.	S4623	20MR16/FL/MED	FL 36		120	Y	700	2000	Y	CC-8	1 7/8"	Box	12	
35		Med.	S4624	35MR16/FL/MED	FL 36		120	Y	1250	2000	Y	CC-8	1 7/8"	Box	12	
50		Med.	S4625	50MR16/FL/MED	FL 36		120	Y	1700	2000	Y	CC-8	1 7/8"	Box	12	
			JDR	Med.	S3139	50JDR/FL	FL 36		120	Y	1500	2000	Y	CC-8	2 7/8"	Box
75		Int.	S3115		75JDR/N/FL	FL 36		120	Y	1650	2000	Y	CC-8	2 7/8"	Box	12
			S3434	75JDR/N/FL	FL 36		120	Y	1650	2000	Y	CC-8	2 7/8"	CD/1	12	
		Med.	S3113	75JDR/FL	FL 36		120	Y	1650	2000	Y	CC-8	2 7/8"	Box	12	
			S3438	75JDR/FL	FL 36		120	Y	1650	2000	Y	CC-8	2 7/8"	CD/1	12	
100		Int.	S3116	100JDR/N/FL	FL 36		120	Y	1950	2000	Y	CC-8	2 7/8"	Box	12	
			S3435	100JDR/N/FL	FL 36		120	Y	1950	2000	Y	CC-8	2 7/8"	CD/1	12	
		Med.	S3114	100JDR/FL	FL 36		120	Y	1950	2000	Y	CC-8	2 7/8"	Box	12	
			S3439	100JDR/FL	FL 36		120	Y	1950	2000	Y	CC-8	2 7/8"	CD/1	12	

halogen lamps



Aluminum Reflector Lamps

ALR Closed Aluminum Reflector 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Average Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.
20		DC Bay	\$2642 ▲	20ALR12/NSP/CLR	NSP 6	GBD	12	Y	6400	2000	Y	C-8	1 3/8"	Box	50
			\$2643 ▲	20ALR12/SP/FRST	SP18	GBE	12	Y	1000	2000	Y	C-8	1 3/8"	Box	50
			\$2644 ▲	20ALR12/FL/FRST	FL34	GBF	12	Y	350	2000	Y	C-8	1 3/8"	Box	50
50		DC Bay	\$2646 ▲	50ALR18/SP/CLR	SP 10	GBJ	12	Y	12000	2000	Y	C-8	2 1/4"	Box	50
			\$2645 ▲	50ALR18/NFL/FRST	NFL 22	GBK	12	Y	2000	2000	Y	C-8	2 1/4"	Box	50

AR70 Aluminum Reflector 12 Volt

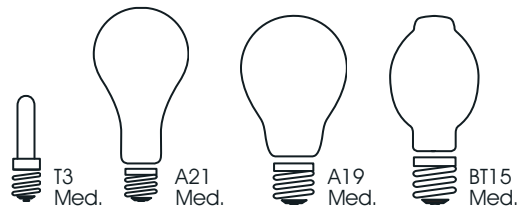
Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Average Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.
20		DC Bay	\$4680 ▲	20AR70/SP8	SP 8		12		7700	3000	Y	C-8	1 15/16"	Box	10
			\$4681 ▲	20AR70/FL25	FL 25		12		900	3000	Y	C-8	1 15/16"	Box	10
50		DC Bay	\$4682 ▲	50AR70/SP8	SP 8		12		12500	3000	Y	C-8	1 15/16"	Box	10
			\$4683 ▲	50AR70/FL25	FL 25		12		2600	3000	Y	C-8	1 15/16"	Box	10

AR111 Aluminum Reflector 6 & 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	ANSI	Volts	Lens	CBCP	Average Rated Hours	UV Block	Filament	MOL	Pkg Type	Ctn.
35		G53	\$4685 ▲	35AR111/SSP4/6V	SSP 4		6		30000	3000	Y	C-8	2 3/8"	Box	6
			\$4684 ▲	35AR111/SSP4	SSP 4		12		40000	3000	Y	C-8	2 3/8"	Box	6
			\$4686 ▲	35AR111/SP8	SP 8		12		14000	3000	Y	C-8	2 5/16"	Box	6
			\$4687 ▲	35AR111/FL25	NFL 25		12		2500	3000	Y	C-8	2 5/16"	Box	6
50		G53	\$4688 ▲	50AR111/SSP4	SSP 4		12		45000	3000	Y	C-8	2 3/8"	Box	6
			\$4689 ▲	50AR111/SP8	SP 8		12		20000	3000	Y	C-8	2 1/4"	Box	6
			\$4690 ▲	50AR111/FL25	NFL 25		12		4000	3000	Y	C-8	2 5/16"	Box	6
75		G53	\$4691 ▲	75AR111/SP8	SP 8		12		30000	3000	Y	C-8	2 1/4"	Box	6
			\$4692 ▲	75AR111/FL25	NFL 25		12		5300	3000	Y	C-8	2 5/16"	Box	6
			\$4693 ▲	75AR111/WFL45	WFL 45		12		2000	3000	Y	C-8	2 3/16"	Box	6
100		G53	\$4694 ▲	100AR111/SP8	SP 8		12		48000	3000	Y	C-8	2 1/4"	Box	6
			\$4695 ▲	100AR111/FL25	NFL 25		12		8500	3000	Y	C-8	2 5/16"	Box	6
			\$4696 ▲	100AR111/WFL45	WFL 45		12		2800	3000	Y	C-8	2 3/16"	Box	6

halogen lamps

Halogen Lamps



Tubular and "A" Style

Medium Base Tubular and "A" Style Replacements

Watts	Bulb	Base	Satco Product Number	Lamp Code	Finish	Volts	MOL	Initial Lumens	Avg. Rated Hours	Pkg Type	Mstr Case/ Inner Pk	Notes
20		Med.	\$4308	KX20CL/3M/E26	Clear	120	2 3/4"	200	3000	Box	10	1
			\$4309	KX20FR/3M/E26	Frost	120	2 3/4"	200	3000	Box	10	1
30/ 70/ 100		Med.	\$4505	30/100A/HAL	White	120	5 1/16"	295/ 785/ 1080	4000	Sleeve	36/12	
40		Med.	\$4310	KX40CL/3M/E26	Clear	120	2 3/4"	560	3000	Box	10	1
			\$4311	KX40FR/3M/E26	Frost	120	2 3/4"	560	3000	Box	10	1
42		Med.	\$1943	42A/CAP	Frost	120	4 3/8"	570	3500	Box	12	
			\$2648	42A/CAP	Frost	130	4 3/8"	570	3500	Box	12	
50		Med.	\$2647	50A/HAL/CRYSTAL	Crystal	120	4 3/8"	860	2500	Box	12	
50/ 100/ 150		Med.	\$4506	50/150A/HAL	White	120	5 1/16"	585/ 1400/ 1985	4000	Sleeve	36/12	
52		Med.	\$1944	52A/CAP	Frost	120	4 3/8"	770	3500	Box	12	
			\$2649	52A/CAP	Frost	130	4 3/8"	770	3500	Box	12	
60		Med.	\$1946	60A/HAL	Frost	120	4 3/8"	960	3000	Box	12	
				Med.	\$4603	60/BT15/CL	Clear	120	4"	700	5000	CD/1
	\$4600	60/BT15/W			White	120	4"	600	5000	CD/1	60/6	
		Med.	\$4312	KX60CL/3M/E26	Clear	120	2 3/4"	960	3000	Box	10	1
\$4313			KX60FR/3M/E26	Frost	120	2 3/4"	960	3000	Box	10	1	

Don't see the lamp you need? Call Customer Service 1-800-43-SATCO

When using a 130 Volt Lamp on a 120 Volt line, life is extended by approx. 2.5 times and lumens are reduced approx. 20%

halogen lamps

Halogen Lamps

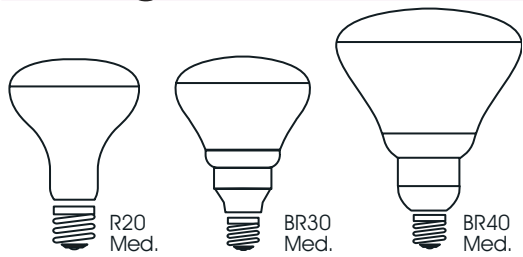


Medium Base Tubular and "A" Style Replacements (cont.)

Watts	Bulb	Base	Satco Product Number	Lamp Code	Finish	Volts	MOL	Initial Lumens	Avg. Rated Hours	Pkg Type	Mstr Case/ Inner Pk	Notes	
72		A19 Med.	S1945 ▲	72A/CAP	Frost	120	4 3/8"	1150	3500	Box	12		
			S2650 ▲	72A/CAP	Frost	130	4 3/8"	1150	3500	Box	12		
75		A19 Med.	S1947 ▲	75A/HAL	Frost	120	4 3/8"	1300	3000	Box	12		
			S1942 ▲	75A/HAL/CRYSTAL	Crystal	120	4 3/8"	1330	3000	Box	12		
		BT15 Med.	S4601	75/BT15/W	White	120	4"	800	5000	CD/1	60/6		
			T10 Med.	S3472	75T10Q/CL	Clear	120	4"	1050	2000	CD/1	12	
				S3476	75T10Q/F	Frost	120	4"	1420	2000	CD/1	12	
100		A19 Med.	S1948 ▲	100A/HAL	Frost	120	4 3/8"	1800	3000	Box	12		
				BT15 Med.	S4602	100/BT15/W	White	120	4"	1200	5000	CD/1	60/6
	T10 Med.	S3473			100T10Q/CL	Clear	120	4"	1500	2000	CD/1	12	
		S3477			100T10Q/F	Frost	120	4"	1450	2000	CD/1	12	
150		T10 Med.	S3474	150T10Q/CL	Clear	120	4"	2500	2000	CD/1	12		
			S3478	150T10Q/F	Frost	120	4"	2300	2000	CD/1	12		
		BT15 Med.	S4604	150/BT15/W	White	120	4"	1600	5000	CD/1	60/6		
			T10 Med.	S3475	250T10Q/CL	Clear	120	4"	4200	2000	CD/1	12	
				S3479	250T10Q/F	Frost	120	4"	3900	2000	CD/1	12	






halogen lamps

Halogen Lamps



Reflector Flood Lamps

Medium Base Reflector Floods

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Spread	Volts	Avg Rated Hours	Initial Lumens	MOL	Pkg Type	Mstr Case/ Inner Pk
50		Med.	S4500	50R20/FL/HAL	FL 70	120	2500	450	4"	Sleeve	48/6
60		Med.	S4501	60BR30/FL/HAL	FL 80	120	2500	730	5 3/8"	Sleeve	48/6
			S4401	60BR30/FL/HAL	FL 80	130	2500	730	5 3/8"	Sleeve	48/6
75		Med.	S4502	75BR30/FL/HAL	FL 80	120	2500	900	5 3/8"	Sleeve	48/6
			S4402	75BR30/FL/HAL	FL 80	130	2500	900	5 3/8"	Sleeve	48/6
		Med.	S4504	75BR40/FL/HAL	FL 90	120	2500	900	6 1/2"	Sleeve	24/6
100		Med.	S4503	100BR40/FL/HAL	FL 90	120	2500	1400	6 1/2"	Sleeve	24/6



PAR14
Med.



PAR16
Med.



Halogen Par Lamps

PAR14 and PAR16

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Fimnt	MOL	Pkg Type	Ctn.	Notes																																																																																											
35	PAR14	Med.	S4658 ▲	35PAR14/CAP/FL	WFL 50	Clear	120	85	300	2000	CC-8	2 7/16"	Box	6																																																																																												
45	PAR16	Med	S2200	45PAR16/HAL/NFL	NFL 30	Clear	120	1250	360	2500	CC-8	3 3/16"	Box	15																																																																																												
																S2300	45PAR16/HAL/NFL	NFL 30	Clear	130	1250	360	2500	CC-8	3 3/16"	Box	15																																																																															
60	PAR16	Med.	S2202	60PAR16/HAL/NSP	NSP 10	Clear	120	4700	550	2500	CC-8	3 3/16"	Box	15																																																																																												
																▲	60PAR16/CAP/NSP	NSP 10	Clear	120	5000	650	2000	CC-8	2 7/8"	Box	15																																																																															
																													S2302	60PAR16/HAL/NSP	NSP 10	Clear	130	4700	550	2500	CC-8	3 3/16"	Box	15																																																																		
																																										▲	60PAR16/CAP/NSP	NSP 10	Clear	130	5000	650	2000	CC-8	2 7/8"	Box	15																																																					
																																																							S2201	60PAR16/HAL/NFL	NFL 30	Clear	120	2000	550	2500	CC-8	3 3/16"	Box	15																																								
																																																																				▲	60PAR16/CAP/NFL	NFL 30	Clear	120	1300	650	2000	CC-8	2 7/8"	Box	15																											
																																																																																	S2301	60PAR16/HAL/NFL	NFL 30	Clear	130	2000	550	2500	CC-8	3 3/16"	Box	15														
																																																																																														▲	60PAR16/CAP/NFL	NFL 30	Clear	130	1300	650	2000	CC-8	2 7/8"	Box	15	
SOFTRAY																																																																																																										
													75	PAR16	Med.	S2204	75PAR16/HAL/NSP	NSP 10	Clear	120	7000	800	2500	CC-8	3 3/16"	Box	15																																																																															
																													▲	75PAR16/CAP/NSP	NSP 10	Clear	120	7500	900	2000	CC-8	2 7/8"	Box	15																																																																		
																																										S2304	75PAR16/HAL/NSP	NSP 10	Clear	130	7000	800	2500	CC-8	3 3/16"	Box	15																																																					
																																																							▲	75PAR16/CAP/NSP	NSP 10	Clear	130	7500	900	2000	CC-8	2 7/8"	Box	15																																								
																																																																				S2203	75PAR16/HAL/NFL	NFL 30	Clear	120	2750	800	2500	CC-8	3 3/16"	Box	15																											
																																																																																	▲	75PAR16/CAP/NFL	NFL 30	Clear	120	1900	900	2000	CC-8	2 7/8"	Box	15														
																																																																																														S2303	75PAR16/HAL/NFL	NFL 30	Clear	130	2750	800	2500	CC-8	3 3/16"	Box	15	
S4109	75PAR16/HAL/FL/FROST	FL 38	Frost	120	1000	725	2500	CC-8	2 7/8"	Box	15																																																																																															
													SOFTRAY																																																																																													

halogen lamps

Halogen Lamps



PAR20
Med.

PAR20

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Flmnt	MOL	Pkg Type	Ctn.	Notes
35		Med.	S4909 ▲	35PAR20/CAP/NSP	NSP 10	Clear	120	3000	360	2500	CC-8	3 1/4"	Box	15	9
			S4661 ▲	35PAR20/CAP/NSP	NSP 10	Clear	130	3000	360	2500	CC-8	3 1/4"	Box	15	9
			S4908 ▲	35PAR20/CAP/NFL	NFL 30	Clear	120	800	360	2500	CC-8	3 1/4"	Box	15	9
			S4663 ▲	35PAR20/CAP/NFL	NFL 30	Clear	130	800	360	2500	CC-8	3 1/4"	Box	15	9
			S4910 ▲	35PAR20/CAP/WFL	WFL 40	Clear	120	500	360	2500	CC-8	3 1/8"	Box	15	9
			S4665 ▲	35PAR20/CAP/WFL	WFL 40	Clear	130	500	360	2500	CC-8	3 1/8"	Box	15	9

50		Med.	S2206	50PAR20/HAL/NSP	NSP 10	Clear	120	4700	450	2500	CC-8	3 1/4"	Box	15	
			S4913 ▲	50PAR20/CAP/NSP	NSP 10	Clear	120	6200	550	2500	CC-8	3 1/4"	Box	15	9
			S2306	50PAR20/HAL/NSP	NSP 10	Clear	130	4700	450	2500	CC-8	3 1/4"	Box	15	
			S4914 ▲	50PAR20/CAP/NSP	NSP 10	Clear	130	6200	550	2500	CC-8	3 1/4"	Box	15	9
			S2205	50PAR20/HAL/NFL	NFL 34	Clear	120	1300	450	2500	CC-8	3 1/4"	Box	15	
			S4911 ▲	50PAR20/CAP/NFL	NFL 30	Clear	120	1400	550	2500	CC-8	3 1/4"	Box	15	9
			S2305	50PAR20/HAL/NFL	NFL 34	Clear	130	1300	450	2500	CC-8	3 1/4"	Box	15	
			S4912 ▲	50PAR20/CAP/NFL	NFL 30	Clear	130	1400	550	2500	CC-8	3 1/4"	Box	15	9
			S4100	50PAR20/HAL/FL/FROST	FL 38	Frost	120	750	450	2500	CC-8	3 1/4"	Box	15	
			S4200	50PAR20/HAL/FL/FROST	FL 38	Frost	130	750	450	2500	CC-8	3 1/4"	Box	15	
			S4666 ▲	50PAR20/CAP/WFL40	WFL 40	Clear	120	900	550	2500	CC-8	3 1/8"	Box	15	9

SOFT RAY

SOFT RAY

halogen lamps



PAR30 Short Neck

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Fimnt	MOL	Pkg Type	Ctn.	Notes
50		Med.	\$2209	50PAR30/HAL/NSP	NSP 9	Clear	120	6500	520	2500	CC-8	3 5/8"	Box	15	
			\$4919 ▲	50PAR30/CAP/NSP	NSP 9	Clear	120	8800	660	2500	CC-8	3 5/8"	Box	15	9
			\$2309	50PAR30/HAL/NSP	NSP 9	Clear	130	6500	520	2500	CC-8	3 5/8"	Box	15	
			\$4920 ▲	50PAR30/CAP/NSP	NSP 9	Clear	130	8800	660	2500	CC-8	3 5/8"	Box	15	9
			\$2207	50PAR30/HAL/NFL	NFL 34	Clear	120	1350	520	2500	CC-8	3 5/8"	Box	15	
			\$4917 ▲	50PAR30/CAP/NFL	NFL 25	Clear	120	2300	660	2500	CC-8	3 5/8"	Box	15	9
			\$2307	50PAR30/HAL/NFL	NFL 34	Clear	130	1350	520	2500	CC-8	3 5/8"	Box	15	
			\$4918 ▲	50PAR30/CAP/NFL	NFL 25	Clear	130	2300	660	2500	CC-8	3 5/8"	Box	15	9
			<i>SOFT RAY</i> \$4101	50PAR30/HAL/FL/FROST	FL 38	Frost	120	1050	520	2500	CC-8	3 5/8"	Box	15	
			<i>SOFT RAY</i> \$4201	50PAR30/HAL/FL/FROST	FL 38	Frost	130	1050	520	2500	CC-8	3 5/8"	Box	15	
			\$4915 ▲	50PAR30/CAP/FL	FL 40	Clear	120	1300	660	2500	CC-8	3 5/8"	Box	15	9
			\$4916 ▲	50PAR30/CAP/FL	FL 40	Clear	130	1300	660	2500	CC-8	3 5/8"	Box	15	9
			\$2208	50PAR30/HAL/WFL	WFL50	Clear	120	750	520	2500	CC-8	3 5/8"	Box	15	
			\$2308	50PAR30/HAL/WFL	WFL50	Clear	130	750	520	2500	CC-8	3 5/8"	Box	15	

75		Med.	\$2212	75PAR30/HAL/NSP	NSP 9	Clear	120	10500	900	2500	CC-8	3 5/8"	Box	15	
			\$4924 ▲	75PAR30/CAP/NSP	NSP 9	Clear	120	15400	1130	2500	CC-8	3 5/8"	Box	15	9
			\$2312	75PAR30/HAL/NSP	NSP 9	Clear	130	10500	900	2500	CC-8	3 5/8"	Box	15	
			\$4925 ▲	75PAR30/CAP/NSP	NSP 9	Clear	130	15400	1130	2500	CC-8	3 5/8"	Box	15	9
			\$2210	75PAR30/HAL/NFL	NFL 34	Clear	120	2300	900	2500	CC-8	3 5/8"	Box	15	
			\$4923 ▲	75PAR30/CAP/NFL	NFL 25	Clear	120	4000	1130	2500	CC-8	3 5/8"	Box	15	9
			\$2310	75PAR30/HAL/NFL	NFL 34	Clear	130	2300	900	2500	CC-8	3 5/8"	Box	15	
			\$4924 ▲	75PAR30/CAP/NFL	NFL 25	Clear	130	4000	1130	2500	CC-8	3 5/8"	Box	15	9
			<i>SOFT RAY</i> \$4102	75PAR30/HAL/FL/FROST	FL38	Frost	120	1600	900	2500	CC-8	3 5/8"	Box	15	
			<i>SOFT RAY</i> \$4202	75PAR30/HAL/FL/FROST	FL38	Frost	130	1600	900	2500	CC-8	3 5/8"	Box	15	
			\$4921 ▲	75PAR30/CAP/FL	FL 40	Clear	120	2100	1130	2500	CC-8	3 5/8"	Box	15	9
			\$4922 ▲	75PAR30/CAP/FL	FL 40	Clear	130	2100	1130	2500	CC-8	3 5/8"	Box	15	9
			\$2211	75PAR30/HAL/WFL	WFL 50	Clear	120	950	900	2500	CC-8	3 5/8"	Box	15	
			\$2311	75PAR30/HAL/WFL	WFL 50	Clear	130	950	900	2500	CC-8	3 5/8"	Box	15	

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Halogen Lamps



PAR30-L
Med.

PAR30 Long Neck

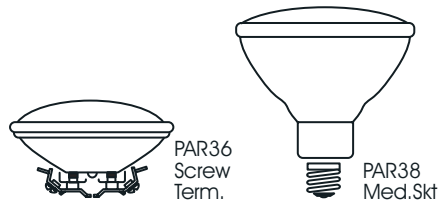
Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Flmnt	MOL	Pkg Type	Ctn.	Notes
35	PAR30-L	Med.	S2655 ▲	35PAR30LN/CAP/NSP	NSP 9	Clear	120	5700	450	2500	CC-8	4 1/2"	Box	15	9
			S2654 ▲	35PAR30LN/CAP/WFL	WFL 50	Clear	120	450	450	2500	CC-8	4 1/2"	Box	15	9

50	PAR30-L	Med.	S2215	50PAR30L/HAL/NSP	NSP 9	Clear	120	6500	520	2500	CC-8	4 1/2"	Box	15	
			S4931 ▲	50PAR30LN/CAP/NSP	NSP 9	Clear	120	8800	660	2500	CC-8	4 1/2"	Box	15	9
			S2315	50PAR30L/HAL/NSP	NSP 9	Clear	130	6500	520	2500	CC-8	4 1/2"	Box	15	
			S4932 ▲	50PAR30LN/CAP/NSP	NSP 9	Clear	130	8800	660	2500	CC-8	4 1/2"	Box	15	9
			S2213	50PAR30L/HAL/NFL	NFL 34	Clear	120	1350	520	2500	CC-8	4 1/2"	Box	15	
			S4929 ▲	50PAR30LN/CAP/NFL	NFL 25	Clear	120	2300	660	2500	CC-8	4 1/2"	Box	15	9
			S2313	50PAR30L/HAL/NFL	NFL 34	Clear	130	1350	520	2500	CC-8	4 1/2"	Box	15	
			S4930 ▲	50PAR30LN/CAP/NFL	NFL 25	Clear	130	2300	660	2500	CC-8	4 1/2"	Box	15	9
			S4103	50PAR30L/HAL/FL/FROST	FL 38	Frost	120	1200	520	2500	CC-8	4 1/2"	Box	15	
			<i>SOFTRAY</i> S4203	50PAR30L/HAL/FL/FROST	FL 38	Frost	130	1200	520	2500	CC-8	4 1/2"	Box	15	
			<i>SOFTRAY</i> S2214	50PAR30L/HAL/WFL	WFL 50	Clear	120	750	520	2500	CC-8	4 1/2"	Box	15	
			S4927 ▲	50PAR30LN/CAP/WFL	WFL 50	Clear	120	900	660	2500	CC-8	4 1/2"	Box	15	9
			S2314	50PAR30L/HAL/WFL	WFL 50	Clear	130	750	520	2500	CC-8	4 1/2"	Box	15	
			S4928 ▲	50PAR30LN/CAP/WFL	WFL 50	Clear	130	900	660	2500	CC-8	4 1/2"	Box	15	9

75	PAR30-L	Med.	S2218	75PAR30L/HAL/NSP	NSP 9	Clear	120	10500	900	2500	CC-8	4 1/2"	Box	15	
			S4937 ▲	75PAR30LN/CAP/NSP	NSP 9	Clear	120	15400	1130	2500	CC-8	4 1/2"	Box	15	9
			S2318	75PAR30L/HAL/NSP	NSP 9	Clear	130	10500	900	2500	CC-8	4 1/2"	Box	15	
			S4938 ▲	75PAR30LN/CAP/NSP	NSP 9	Clear	130	15400	1130	2500	CC-8	4 1/2"	Box	15	9
			S4935 ▲	75PAR30LN/CAP/NFL	NFL 25	Clear	120	4000	1130	2500	CC-8	4 1/2"	Box	15	9
			S4936 ▲	75PAR30LN/CAP/NFL	NFL 25	Clear	130	4000	1130	2500	CC-8	4 1/2"	Box	15	9
			S2216	75PAR30L/HAL/NFL	NFL 34	Clear	120	2300	900	2500	CC-8	4 1/2"	Box	15	
			S2316	75PAR30L/HAL/NFL	NFL 34	Clear	130	2300	900	2500	CC-8	4 1/2"	Box	15	
			<i>SOFTRAY</i> S4104	75PAR30L/HAL/FL/FROST	FL 38	Frost	120	1600	900	2500	CC-8	4 1/2"	Box	15	
			<i>SOFTRAY</i> S4204	75PAR30L/HAL/FL/FROST	FL 38	Frost	130	1600	900	2500	CC-8	4 1/2"	Box	15	
			S2217	75PAR30L/HAL/WFL	WFL 50	Clear	120	950	900	2500	CC-8	4 1/2"	Box	15	
			S4933 ▲	75PAR30LN/CAP/WFL	WFL 50	Clear	120	1100	1130	2500	CC-8	4 1/2"	Box	15	9
			S2317	75PAR30L/HAL/WFL	WFL 50	Clear	130	950	900	2500	CC-8	4 1/2"	Box	15	
			S4934 ▲	75PAR30LN/CAP/WFL	WFL 50	Clear	130	1100	1130	2500	CC-8	4 1/2"	Box	15	9

Customer Service 1-800-43-SATCO

When using a 130 Volt Lamp on a 120 Volt line, life is extended by approx. 2.5 times and lumens are reduced approx. 20%



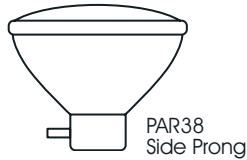
PAR36 12 Volt

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Fimnt	MOL	Pkg Type	Ctn.	Notes
36		Screw Term.	S4807 ▲	36PAR36/CAP/VNSP	SP 5	Clear	12	17000	500	4000	CC-8	2 3/4"	Box	12	
			S4808 ▲	36PAR36/CAP/NSP	SP 13	Clear	12	3500	500	4000	CC-8	2 3/4"	Box	12	
			S4809 ▲	36PAR36/CAP/WFL	FL 32	Clear	12	1000	500	4000	CC-8	2 3/4"	Box	12	
50		Screw Term.	S4806 ▲	50PAR36/CAP/NSP	SP 6	Clear	12	25000	700	4000	CC-8	2 3/4"	Box	12	

PAR38

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Fimnt	MOL	Pkg Type	Ctn.	Notes
45		Med.Skt.	S2220	45PAR38/HAL/NSP	NSP 9	Clear	120	5000	450	2500	CC-8	5 5/16"	Box	15	
			S4941 ▲	45PAR38/CAP/NSP	NSP 9	Clear	120	10000	560	2500	CC-8	5 5/16"	Box	15	9
			S2320	45PAR38/HAL/NSP	NSP 9	Clear	130	5000	450	2500	CC-8	5 5/16"	Box	15	
			S4942 ▲	45PAR38/CAP/NSP	NSP 9	Clear	130	10000	560	2500	CC-8	5 5/16"	Box	15	9
			S2219	45PAR38/HAL/FL	FL 30	Clear	120	1100	450	2500	CC-8	5 5/16"	Box	15	
			S4939 ▲	45PAR38/CAP/FL	FL 30	Clear	120	1500	560	2500	CC-8	5 5/16"	Box	15	9
			S2319	45PAR38/HAL/FL	FL 30	Clear	130	1100	450	2500	CC-8	5 5/16"	Box	15	
			S4940 ▲	45PAR38/CAP/FL	FL 30	Clear	130	1500	560	2500	CC-8	5 5/16"	Box	15	9
			S4105	45PAR38/HAL/FL/FROST	FL 38	Frost	120	1000	450	2500	CC-8	5 5/16"	Box	15	
			S4205	45PAR38/HAL/FL/FROST	FL 38	Frost	130	1000	450	2500	CC-8	5 5/16"	Box	15	
S2956 ▲	45PAR38/CAP/WFL	WFL 50	Clear	130	700	560	2500	CC-8	5 5/16"	Box	15	9			
60		Med.Skt.	S4945 ▲	60PAR38/CAP/NSP	NSP 9	Clear	120	16000	850	3000	CC-8	5 5/16"	Box	15	9
			S4946 ▲	60PAR38/CAP/NSP	NSP 9	Clear	130	16000	850	3000	CC-8	5 5/16"	Box	15	9
			S4943 ▲	60PAR38/CAP/FL	FL 30	Clear	120	2500	850	3000	CC-8	5 5/16"	Box	15	9
			S4944 ▲	60PAR38/CAP/FL	FL 30	Clear	130	2500	850	3000	CC-8	5 5/16"	Box	15	9
			S4106	60PAR38/HAL/FL/FROST	FL 38	Frost	120	1400	600	2500	CC-8	5 5/16"	Box	15	
			S4206	60PAR38/HAL/FL/FROST	FL 38	Frost	130	1400	600	2500	CC-8	5 5/16"	Box	15	

Halogen Lamps



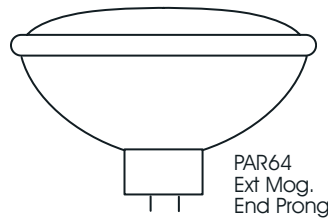
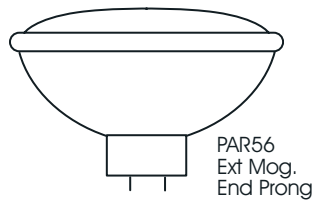
PAR38

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Flmnt	MOL	Pkg Type	Ctn.	Notes
75		Med. Skt.	S2222	75PAR38/HAL/NSP	NSP 9	Clear	120	12000	900	2500	CC-8	5 5/16"	Box	15	
			S4966 ▲	75PAR38/CAP/NSP	NSP 9	Clear	120	19200	1060	2500	CC-8	5 5/16"	Box	15	9
			S2322	75PAR38/HAL/NSP	NSP 9	Clear	130	12000	900	2500	CC-8	5 5/16"	Box	15	
			S4967 ▲	75PAR38/CAP/NSP	NSP 9	Clear	130	19200	1060	2500	CC-8	5 5/16"	Box	15	9
			S2221	75PAR38/HAL/FL	FL 30	Clear	120	2500	900	2500	CC-8	5 5/16"	Box	15	
			S4964 ▲	75PAR38/CAP/FL	FL 30	Clear	120	3150	1060	2500	CC-8	5 5/16"	Box	15	9
			S2321	75PAR38/HAL/FL	FL 30	Clear	130	2500	900	2500	CC-8	5 5/16"	Box	15	
			S4965 ▲	75PAR38/CAP/FL	FL 30	Clear	130	3150	1060	2500	CC-8	5 5/16"	Box	15	9
			S2957 ▲	75PAR38/CAP/WFL	WFL 50	Clear	130	1300	1060	2500	CC-8	5 5/16"	Box	15	9

90		Med. Skt.	S2224	90PAR38/HAL/NSP	NSP 9	Clear	120	14000	1150	2500	CC-8	5 5/16"	Box	15	
			S4970 ▲	90PAR38/CAP/NSP	NSP 9	Clear	120	19500	1310	2500	CC-8	5 5/16"	Box	15	9
			S2324	90PAR38/HAL/NSP	NSP 9	Clear	130	14000	1150	2500	CC-8	5 5/16"	Box	15	
			S4971 ▲	90PAR38/CAP/NSP	NSP 9	Clear	130	19500	1310	2500	CC-8	5 5/16"	Box	15	9
			S4950 ▲	90PAR38/CAP/WSP	WSP 12	Clear	120	14300	1310	2500	CC-8	5 5/16"	Box	15	9
			S4951 ▲	90PAR38/CAP/WSP	WSP 12	Clear	130	14300	1310	2500	CC-8	5 5/16"	Box	15	9
			S2958 ▲	90PAR38/CAP/NFL	NFL 25	Clear	130	4700	1310	2500	CC-8	5 5/16"	Box	15	9
			S2223	90PAR38/HAL/FL	FL 30	Clear	120	3000	1150	2500	CC-8	5 5/16"	Box	15	
			S4968 ▲	90PAR38/CAP/FL	FL 30	Clear	120	3500	1310	2500	CC-8	5 5/16"	Box	15	9
			S2323	90PAR38/HAL/FL	FL 30	Clear	130	3000	1150	2500	CC-8	5 5/16"	Box	15	
			S4969 ▲	90PAR38/CAP/FL	FL 30	Clear	130	3500	1310	2500	CC-8	5 5/16"	Box	15	9
			S4107	90PAR38/HAL/FL/FROST	FL 38	Frost	120	2200	1150	2500	CC-8	5 5/16"	Box	15	
			S4207	90PAR38/HAL/FL/FROST	FL 38	Frost	130	2200	1150	2500	CC-8	5 5/16"	Box	15	
			S4667 ▲	90PAR38/CAP/WFL	WFL 50	Clear	130	1600	1310	2500	CC-8	5 5/16"	Box	15	9
			S4674 ▲	90PAR38/CAP/3WSP	WSP 12	Clear	120	14300	1310	2500	CC-8	4 5/16"	Box	15	9
			S4675 ▲	90PAR38/CAP/3FL	FL 30	Clear	120	3500	1310	2500	CC-8	4 5/16"	Box	15	9

halogen lamps

Halogen Lamps



PAR38

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Fimnt	MOL	Pkg Type	Ctn.	Notes
120	PAR38	Med. Skt.	S2226	120PAR38/HAL/NSP	NSP 9	Clear	120	20000	1600	2500	CC-8	5 5/16"	Box	15	
			S4974 ▲	120PAR38/CAP/SP	SP 10	Clear	120	22500	1800	3000	CC-8	5 5/16"	Box	15	9
			S2326	120PAR38/HAL/NSP	NSP 9	Clear	130	20000	1600	2500	CC-8	5 5/16"	Box	15	
			S4975 ▲	120PAR38/CAP/SP	SP 10	Clear	130	22500	1800	3000	CC-8	5 5/16"	Box	15	9
			S2225	120PAR38/HAL/FL	FL 30	Clear	120	4500	1600	2500	CC-8	5 5/16"	Box	15	
			S4972 ▲	120PAR38/CAP/FL	FL 30	Clear	120	4600	1800	3000	CC-8	5 5/16"	Box	15	9
			S2325	120PAR38/HAL/FL	FL 30	Clear	130	4500	1600	2500	CC-8	5 5/16"	Box	15	
			S4973 ▲	120PAR38/CAP/FL	FL 30	Clear	130	4600	1800	3000	CC-8	5 5/16"	Box	15	9
			S2960 ▲	120PAR/CAP/WFL	WFL 50	Clear	120	2000	1800	3000	CC-8	5 5/16"	Box	15	9

250	PAR38	Med. Skt.	S4948 ▲	250PAR38/CAP/SP	SP 10	Clear	120	46500	3600	4500	CC-8	5 5/16"	Box	6	
			S4947 ▲	250PAR38/CAP/FL	FL 30	Clear	120	9000	3600	4500	CC-8	5 5/16"	Box	6	

PAR56 and PAR64

Watts	Bulb	Base	Satco Product Number	Lamp Code	Beam Pattern	Finish	Volts	CBCP	Initial Lumens	Avg. Rated Hours	Fimnt	MOL	Pkg Type	Ctn.	Notes
500	PAR56	Mog. End Pr	S4668 ▲	500PAR56Q/NSP	NSP 15	Clear	120	78500	8800	4000	CC-6	5"	Box	12	
			S4669 ▲	500PAR56Q/MFL	MFL 30	Clear	120	40000	8800	4000	CC-6	5"	Box	12	
			S4670 ▲	500PAR56Q/WFL	WFL 60	Clear	120	19500	8800	4000	CC-6	5"	Box	12	

1000	PAR64	Mog. End Pr	S4671 ▲	1000PAR64Q/NSP	NSP 20	Clear	120	135000	19400	4000	CC-6	6"	Box	6	
			S4672 ▲	1000PAR64Q/MFL	MFL 30	Clear	120	82000	19400	4000	CC-6	6"	Box	6	
			S4673 ▲	1000PAR64Q/WFL	WFL 60	Clear	120	23000	19400	4000	CC-6	6"	Box	6	

halogen lamps

Halogen Lamps Notes

General Halogen Notes

■ = Product by a manufacturer other than Satco

▲ = Product by one of the Primary lamp manufacturers

CD/1 = Carded or Clamshell – 1 lamp per card

CD/2 = Carded or Clamshell – 2 lamps per card

CD/3 = Carded or Clamshell – 3 lamps per card

Open Fixture Warning

Unless otherwise stated, all non-enclosed halogen lamps carry the following warning, "A suitable protective shield, screening technique, or both must be used to protect people and surroundings from the possibility of a lamp shattering and from possible ultraviolet radiation". Enclosed halogen lamps include PAR and BR lamps, "A", T10 Double Envelope, and BT15 lamps, Lensed MR11 and MR16 lamps, and BallLites.

Rated Life

There is a common misconception that the "Rated Life" of a halogen lamp is a measure of how long the lamp should burn, this is not true. The rated life of a lamp is the point where 50% of the bulbs have burned out, and 50% are still burning, under laboratory conditions. For example, the S4968 (90PAR/CAP/FL) is rated at 2500 hours, this means, some will burn out at 1250 hours, some will last 3750 hours, but ½ will still be burning at 2500 hours, under laboratory conditions. Since halogen PAR lamps are notoriously susceptible to vibration related failures, their rated life may not be accurate in real life circumstances, including high vibration areas such as industrial applications.

Halogen Notes

- 1 Krypton/Xenon filled lamps provide bright white light similar to Halogen, without a UV hazard. These lamps are fully dimmable without performance loss.
- 2 Extra tall lamp, with a porcelain spacer designed to create distance between the heat of the filament and the fixture socket. These lamps are primarily used in high-end European import fixtures.
- 3 Commercial grade product.
- 4 Suitable for use in unshielded fixtures. Consult most recent luminaire standards for your area to determine luminaire requirements.
- 5 These lamps feature a frosted reflector and frosted integral cover glass, designed for decorative glass pendant fixtures. They provide light in all directions, without the striations of backlight color common to MR16 lamps.
- 6 Features an aluminized reflector, creating consistent color over the life of the lamp. Heat is transmitted out the front of the lamp.
- 7 Features a hard coated dichroic reflector, creating consistent color over the life of the lamp. Heat is transmitted through the back of the reflector.
- 8 Features MR16 IR technology, increasing light output, or saving energy. The hard coated dichroic reflector creates consistent color over the life of the lamp. Heat is transmitted through the back of the reflector.
- 9 High Performance PAR lamps, feature a spiral reflector/lens system providing a smoother uniform beam pattern, with superior beam control and sharp cutoff of light.
- 10 Primarily used in automotive and linear lighting applications.
- 11 Primarily used in automotive applications. Also used in Tizio desk lamps manufactured prior to 1993.