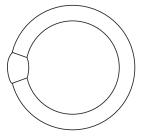
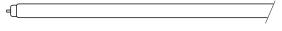
Lamp Locator (not drawn to scale)



T9 Circline (1-1/8" diameter) 4-Pin Base (G10q)



T5 (5/8" diameter) Miniature Bi-Pin Base (G5)



T6 (3/4" diameter) Single Pin Base (Fa8)



T8 (1" diameter) Single Pin Base (Fa8)



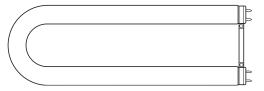
T8 (1" diameter) Medium Bi-Pin Base (G13)



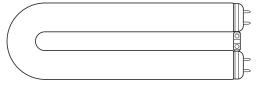
T8 (1" diameter) Recessed Double Contact Base (R17d)



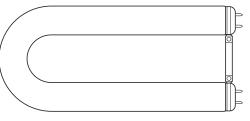
T10 (11/4" diameter) Recessed Double Contact Base (R17d)



Mod-U-Line® T8/U6 (1" diameter) Medium Bi-Pin Base (G13)



 $\rm Mod\text{-}U\text{-}Line^{\otimes}$ T12/U3 (11/2" diameter) Medium Bi-Pin Base (G13)



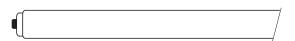
Mod-U-Line® T12/U6 (1-1/2" diameter) Medium Bi-Pin Base (G13)



T12 (1-1⁄2" diameter) Single Pin Base (Fa8)



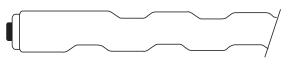
T12 (1-1/2" diameter) Medium Bi-Pin Base (G13)



T12 (1-1/2" diameter) Recessed Double Contact Base (R17d)



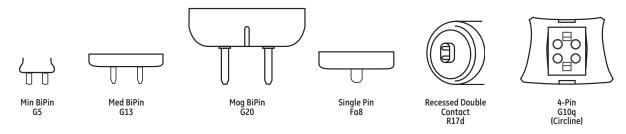
T17 (2-1/8" diameter) Mogul Bi-Pin (G20)



Power Groove® (2-1/8" diameter) Recessed Double Contact Base (R17d)

Fluorescent Lamps

Base Identification



Introduction

GE introduced the first fluorescent lamp in 1939. Today, these lamps have become almost a universal standard in office and other lighting applications. The characteristics of fluorescent lamps vary widely according to the lamp type. In general, fluorescent lamps have the following advantages:

• Low Operating Cost:

Efficient, fluorescent lamps can cost significantly less to operate over their lifetime than incandescent lamps. Many common linear fluorescent lamps now have energy-saving versions often designated in this catalog by Watt-Miser® (WM).

Long Life:

Life ratings for fluorescent lamps range from 36,000 to 55,000 hours based on the industry standard of 3 burning hours per start, except where noted.

• Light Quality:

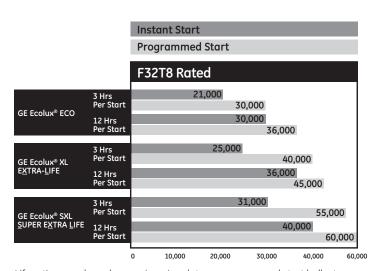
GĒ Starcoat® T5 and T8 lamps offer higher color rendering and lumen maintenance of 92%-95%.

• Flexibility:

Fluorescent lamps are available in a wide range of sizes, shapes, color performance, and wattage ratings.

Fast Starting

Rapid Start and Instant Start lamps typically start within 1 second of being turned on.



Life ratings are based on engineering data on programmed start ballasts with lamps cycled every 3 operating hours.

GE	OSRAM/SYLVANIA	PHILIPS				
Aquarium/Terrarium	_	_				
Chroma 50	Design 50®	Colortone 50				
covRguard®	_	Tuff Away®				
Ecolux®	Ecologic	Alto				
Gro & Sho™/Plant & Aquarium	GRO-LUX®	Agro-Lite				
Kitchen and Bath ULTRA™	Interior Design® (D30)	Softone Pastel FL (SPEC 30)				
Mod-U-Line®	Curvalume®	U-Bent				
Power Groove®	_	_				
Specification Series (SP)	Designer® Series (D)	SPEC Series				
Specification Series (SPX)	Designer® "800" Series	Ultralume™				
Starcoat®	_	_				
T5	Pentron®	Silhouette™				
T8	Octron®	TL70/TL80™				
T10/1500MA	VHO/LT	_				
/1500	VHO	VHO				
Watt-Miser®	SuperSaver®	Econ-o-Watt				
Watt-Miser® Plus	SuperSaver Plus®	_				
XL	XP	Plus				

ATTENTION: This brand-name cross-reference chart is provided only as a quick reference. Other lamp company brand listings may only represent a near equivalent, versus an identical match to GE Lighting brands. Individual lamp manufacturers' performance specifications and product offerings should be consulted. Lamp performance may be affected by environmental conditions, ballast type and/or other auxiliary equipment.

See www.gelighting.com e-Catalog for a comprehensive cross-reference tool.

Projection

Product Information

GE T5 Starcoat® Ecolux® Lamps (pg 4-8)

- Used in a variety of applications from indirect fixtures in commercial office buildings to warehouses and manufacturing facilities
- Many combinations of wattage and length provide flexibility of fixture design and ceiling layout
- Longer rated life at 30,000 hours
- TCLP compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA)

GE Ultra Energy Saving T5 Lamps (pg 4-8 to 4-9)

- High Output Watt-Miser®: Over 5% energy savings versus standard Starcoat® T5 HO lamps. Same lumen output. Great for use in high-bay systems.
- High Efficiency Watt-Misers®: Over 5% energy savings versus standard Starcoat® T5 HE lamps. Same lumen output. Available in four different lengths.
- High Lumen T5: 5% greater lumen output versus standard Starcoat® F28WT5 lamps. Same wattage. Great for new commercial troffers.
- Excellent color rendering 85 CRI
- TCLP compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA).

GE Ultra Energy Saving Ecolux® T5 High Output 47 Watt Watt-Miser® (pg 4-9)

- GE's highest efficiency and lowest wattage T5 HO combination at 102 LPW
- Relamp existing full wattage 54W lamp with the 47W T5 lamp and saves energy
- TCLP compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA)

GE T8 Starcoat® Ecolux® Lamps (pgs 4-9 to 4-10)

- More light over life 94-95% lumen maintenance
- Enhanced color rendering...available in 700 and 800 series
- High system efficiency, relative to T12, delivers significant energy cost savings
- TCLP Compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA)

GE Starcoat® Ecolux® XL Extra-Life and SXL Super Long Life lamps (pgs 4-9 to 4-10)

• Same great features of the T8 Starcoat® Ecolux®...with longer life... up to 67% longer than standard T8 lamps

GE Ultra Energy Saving T8 Lamps 2ft and 3ft T8 Watt-Misers® (pg 4-10 to 4-11)

- Energy-saving alternative to standard 2ft and 3ft T8 lamps. Up to 12% energy savings versus standard F17T8 and/or F25T8 lamps, with approximately 10% light loss.
- Excellent color rendering 80+ CRI
- TCLP compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA).

GE Ultra Energy Saving T8 Lamps 4ft T8 25 Watt Lamp (pg 4-11)

- Lowest wattage 4ft T8 currently available.
- Longer rated life at 50,000 hours depending on ballast type and burn cycle
- Operates on any ANSI compliant T8 Instant Start or Programmed Start ballast; also approved on GE UltraStart® PRS ballast
- Excellent color rendering 80+ CRI
- TCLP compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA)
- Approximately 10% less light

GE Ultra Energy Saving T8 Lamps T8 28W UltraMax® (pg 4-11)

- Highly efficient T8 system utilizing the new 28W T8 lamp designed for optimal use on the GE UltraMax® ballast product family
- Operates on any ANSI compliant T8 Instant Start or Programmed Start ballast
- Also approved for use on GE UltraStart® PRS ballast
- 80+ CRI (Color Rendering Index) and TCLP compliant
- Approximately 4% less light

GE Ultra Energy Saving T8 Lamps T8 32W High Lumen Lamps (HL) (pg 4-11)

- 5-8% more lumens than GE 32W T8 SP and SPX
- 3100 initial lumens allows you to increase light levels over a standard T8 or the option to implement a de-lamp or de-fixture strategy
- 33% longer life over GE F32T8
- 80+ CRI (Color Rendering Index) and TCLP compliant

GE 8' T8 Lamps (pg 4-11 to 4-12)

 Single-pin based lamps designed to operate on Instant Start Ballast

GE 8' T8 Watt-Miser® Plus and 49W Energy Saving Lamps (pg 4-11)

- One of the most efficient fluorescent products available, up to 107 LPW
- Energy savings...8.5% to 17% less energy consumed than standard F96T8 lamps
- Watt-Miser® Plus has same light output as standard lamps;
 49W is approximately 14% less light
- Excellent color rendering 80+ CRI
- Watt-Miser® Plus lamp reduces wattage to 54W per lamp

GE 8' T8 High Output Lamps (pg 4-12)

- High system efficiency delivers 38% energy cost savings
- 50% longer life than T12 high output lamps
- Wide choice of color options
- Operate at 400mA

Fluorescent Lamps

Product Information (continued)

GE T8 Mod-U-Line® U-Shaped Fluorescent Lamps (pg 4-12)

- Primarily used in 2x2 fixtures with prismatic or parabolic lenses
- Lower energy cost...36% energy cost savings vs. F40T12 U-Tubes
- New Watt-Miser® version saves even more money!
- Longer lamp life than T12 Mod-U-Line® 20,000 hours
- 700 and 800 Series

GE Energy Saving Mod-U-Line® U-Shaped Fluorescent Lamps (pg 4-12)

- Primarily used in 2x2 fixtures with prismatic or parabolic lenses
- Relamp existing F31T8 Mod-U-Line® with F29T8 or F26T8 Mod-U-Line® and save up to 16% in energy
- Longer lamp life than T12 Mod-U-Line® 24,000 hours
- Approximately 8 to 17% less light

GE 4' T12 Watt-Miser® Ecolux® Energy Saving Lamps (WM) (pg 4-14)

- Energy-saving replacement for all standard T12 fluorescent lamps
- 12% to 20% savings in energy costs vs. standard fluorescent with approximately 15% light loss
- TCLP compliant, lowering disposal costs where applicable (state and local regulations vary, consult your state EPA)

GE T12 High Output Lamps (pg 4-15 to 4-16)

- High light output and long life
- Produces about 45% more initial lumens than standard lamps of the same size
- Usually operated at 800mA

GE T12 Very High Output Lamps (pg 4-16)

- Where high light levels are required factories, warehouses, gymnasiums, open areas
- Rapid Start, operated at 1500mA

covRguard® Shatter Resistant Fluorescent Lamps (pg 4-17)

- Polycarbonate shield helps to contain shattered glass particles if lamp is broken, protecting people, food and other valuable items
- UV-blocking properties guard against fading and UV degradation
- Available in a variety of colors for decorative and architectural applications

GE Cold-Temperature Lamps (pg 4-19)

- Specifically designed for cold-temperature applications such as freezers and coolers, display cases and outdoor areas
- Available in T5, T8, T10 and T12 versions
- Rated nominal watts and initial lumens are peak values. Actual watt and lumen values may be somewhat lower in service, depending on ambient conditions.

GE Appliance Lamps (pg 4-20)

• Designed for intermittent service in appliances such as oven hoods and microwaves

GE Blacklight/Blacklight Blue Lamps (pg 4-20)

- Blacklight (BL) lamps are commonly used in insect traps
- Blacklight Blue (BLB) lamps are often used decoratively in disco lighting and theatrical applications. These lamps are produced with a special dark blue glass that filters most visible light.

GE Gold Lamps (pg 4-21)

- Effectively blocks all UV emissions below 520nm
- Available in covRquard®
- Used in photo-sensitive applications such as semi-conductor assembly and darkrooms

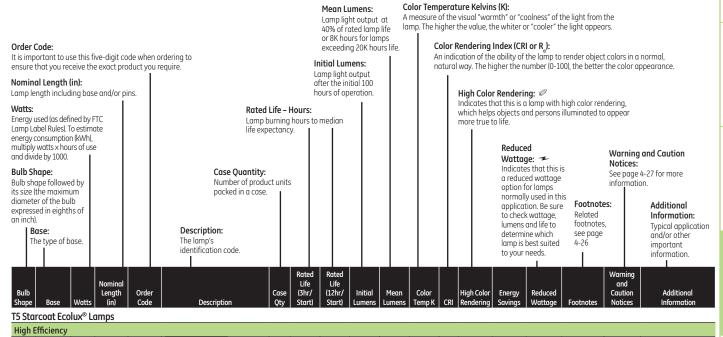
GE Germicidal Lamps (pg 4-21)

- Clear lamps with special UV transmitting glass
- The 254nm radiation from appropriately designed and installed devices using the lamps can inactivate many forms of bacteria and other organisms
- Used in air, water and surface purification devices

Headings in this catalog section

The following terms and descriptions can help you when checking Fluorescent lamp specifications and when ordering products. Within each product line, lamps are divided into families, within these

families, lamps are then listed by wattage, then bulb, and then by base. There are exceptions to this ordering among the specialty lamps listed.

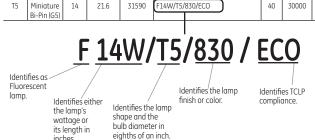


36000

1350

1240

3000



WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

- 1. Identify bulb shape by using table on page 4-3.
- 2. Measure bulb diameter using ruler in Appendix section page D-1 to determine width in eighths of an inch.

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- 3. Identify base type using table on page 4-4.
- Find your lamp in the table containing the bulb shape, size and base.







Fluorescent Lamps

Bulb			Nominal Length	Order		Case	Rated Life (3 hr/	Rated Life (12 hr/	Initial	Mean	Color		High Color		Reduced		Warning and Caution	Additional
Shape		Watts		Code	Description	Qty	start)	start)	Lumens	Lumens	Temp K	CRI	Rendering	Savings	Wattage	Footnotes	Notices	Information
	emperati																	
T12	Output (80 Recessed	85 85	72.0	46199	F72T12/CW/HO-CT	8	12000		6150	5350	4100	60	Ι		Г	11,13,17	101	Plastic Jacket
112	Double	110	96.0	11918	F96T12/CW/HO/CT	15	12000		8900	7740	4100	60				11,13,17	101	Flustic Jucket
	Contact	110	96.0	11919	F96T12/D/HO/CT	15	12000		7600	6610	6500	75				11,13,17	101	
F10 1/	(R17d)					13	12000		7000	0010	0500	13				11,15,17	101	
T10 V6					Double Contact	26	0000	Т	C200		4100	-co				4	101	
	Recessed Double	110	48.0 60.0	10742 17135	F48T10/CW F60T10/SP30	24	9000		6200 8500		4100 3000	60 70				4	101 101	
	Contact	135	60.0	39157	F60T10/SP30	24	6000		7000		4100	60				4	101	
	(R17d)	135	60.0	13002	F60T10/CW 6PK	6	6000		7000		4100	60				4	101	
		135	60.0	46197	F60T10/CW-CT	12	6000		6790		4100	60				4,13,17	101	Plastic Jacket
		160	72.0	13776	F72T10/CW 15PK	15	9000		9700		4100	60				4	101	Tiddle deket
		160	72.0	46198	F72T10/CW-CT	8	9000		9400		4100	60				4,13,17	101	Plastic Jacket
12 V	erv High O				Double Contact		3000		3 .00	L	1200	- 00				1,20,21	101	Tradite duction
T12	Recessed	110	48.0	34206	F48T12/CW/1500/0	24	10000	Τ	7000		4100	60				4	101	
110	Double	110	48.0	46195	F48T12CW/VHO/CT	12	10000		6790		4100	60				4,15,17	101	Plastic Jacket
	Contact	170	72.0	13762	F72T12CW1500/0	15	10000		10800		4100	60				4	101	riddic dance
	(R17d)	170	72.0	46200	F72T12CW/VHO/CT	8	10000		10470		4100	60				4,15,17	101	Plastic Jacket
		220	96.0	13788	F96T12/CW/1500/0	15	10000		14400		4100	60				4	101	riddic denec
		220	96.0	46202	F96T12CW/VHO-CT	8	10000		13960		4100	60				4,15,17	101	
nnlic	ınce Lamı				1,000,000,000											1,000		
8	ince Earny	73																
T8	Medium	18	22.0	10257	F22T8/D/4	24	7500	1	925	790	6500	75					101	Daylight
10	Bi-Pin	18	24.0	17705	F24T8/CW/4 6PK	24	7500		1150	1040	4100	60					101	Daylight
	(G13)	19	26.0	10702	F26T8/CW/4	24	7500		1275	1085	4100	60					101	
		19	26.0	38199	F26T8/CW/4 6PK	24	7500		1275	1085	4100	60					101	
		19	28.0	17704	F28T8/CW/4 6PK	24	7500		1350	1145	4100	60					101	
		19	30.0	10349	F30T8/CW/4	24	7500		1375	1170	4100	60					101	
12					1.0000000000000000000000000000000000000													
T12	Medium	21	30.0	10355	F30T12/CW	24	7500	Ι	1350	1220	4100	60					101	
112	Bi-Pin	25	28.0	10282	F25T12CW/28 6PK	24	7500		1550	1390	4100	60					101	
	(G13)	25	28.0	10286	F25T12/D/28	24	7500		1450	1310	6500	75					101	Daylight
		25	33.0	38201	F25T12/CW/33 6PK	24	7500		1860	1675	4100	60					101	
		25	33.0	10299	F25T12/D/33	24	7500		1600	1440	6500	75					101	Daylight
		25	33.0	10293	F25T12/WW/33	24	7500		1910	1720	3000	52					101	Warm White
Slack	light/Blac	ckliaht													-			
Black		chilgin	Diuc Lui	прэ														
T8	Medium	15	18.0	35884	F15T8/BL 6PK	24	7500	Ι							Ι	8	105	Blacklight, UVA Sour
	Bi-Pin (G13)	17	24.0	72759	F17T8/BLB/6PK	24	7000									8	105	Blacklight Blue, UV
			2 1.0	72.33	1110,023,011		7000									Ů	103	Source, Intergal Do Blue Filter
T12	Medium	20	24.0	10244	F20T12/BL 6PK	24	9000									8	105	Blacklight, UVA Sou
	Bi-Pin (G13)	40	22.5	40537	F40BL/U/3	12	14000									8	105	Blacklight, UVA Source, Mod-U-Line®, 3-5/8 Spacing Between Legs
		40	48.0	10526	F40BL 6PK	24	20000									8	105	Blacklight, UVA Sou
Black	light Blue																	
T5	Miniature Bi-Pin (G5)	4	6.0	10019	F4T5/BLB	24	5000									8	101	Blacklight Blue, UV Source, Integral Da Blue Filter
	, , , , ,	8	12.0	10077	F8T5/BLB	24	5000									8	101	Blacklight Blue, UV Source, Integral Do Blue Filter
T8	Medium Bi-Pin (G13)	15	18.0	35885	F15T8/BLB 6PK	24	7500									8	101	Blacklight Blue, UV Source, Integral Da Blue Filter
T12	Medium Bi-Pin (G13)	20	24.0	34747	F20T12/BLB 6PK	24	9000									8	101	Blacklight Blue, UV Source, Integral Da Blue Filter
	(013)	40	48.0	10531	F40BLB 6PK	24	20000									8	101	Blacklight Blue, UV. Source, Integral Da Blue Filter