TCP PRO Dimmable SpringLamp® Series Specification

Dimmable Compact Fluorescent	HPF, Dimmable

Catalog Number	
Notes	Type

Applications:

Suggested Dimmer:
Designed for 600 watt slide or rotary dimmer switch.
Please call with other dimming system compatibility questions.

Perfect for most dimmable applications: Use where a standard incandescent is used.

- Table Lamps
- Floor Lamps
- Ceiling Fixtures
- Wall Sconces
- Vanities
- Recessed Cans
- Track Lighting

Special Application Options: (Ordering Suffix)

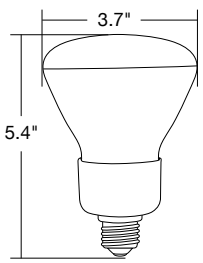
- 3000˚K (30K), 3500˚K (35K), 4100˚K (41K), 5000˚K (50K), 6500˚K (65K)
- Long Neck 1.65" (165), 1.75" (175), 2.25" (225)
- Wet location (WL)
- Shatter Resistant (SS)
- Pink (P) and Soft Pink (SP) ***Please call for availability.***

Features and Benefits

- Uniform and smooth dimming from 100–20%
- Optimized electronics maximizes lamp life
- 10,000 hours Springlamps, 8,000 hours Covered Bulbs
- Excellent high lumens/watt ratio
- Springlamps UL approved for enclosed fixtures 23watt and below
- HPF Rated > .90 and FCC compliant at full power
- Designed to run at cooler operating temperature maximizing lamp life
- Intelligent circuit design automatically turns bulb off at preset position for zero low-end flicker
- Modifies cathode operation during dim mode which extends lamp life
- End-of-life circuit design meets EURO IEC and new UL standard, 1993, 3rd Edition
- Shuts bulb off automatically if it senses any lamp starting issues or end of life conditions

Specifications (at full brightness)

End of Life Protection	Yes
Ballast Type	Electronic
Starting Method	Modified Rapid Start
Input Line Voltage	120VAC
Input Line Frequency	50/60HZ
Lamp Life (rated)	10,000 Hours (SpringLamps)
	12,000 Hours (Covered Bulbs)
Color Temperature	2700ºK
Color Rendering Index	82
Minimum Starting Temperature	-20ºF, -29ºC
Maximum Operating Temperature	160ºF, 71ºC
U.L. / C.U.L. Listed	Yes
FCC Compliance	Patt 18, Subpart C
Lamp Operating Frequency	45 KHZ
Lamp Current Crest Factor	<1.60
Maximum Open Circuit Voltage	600V
Total Harmonic Distortion	<33%
High Power Factor Rated	>.90



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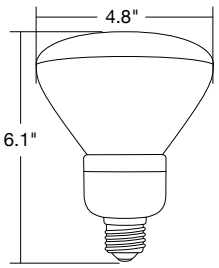

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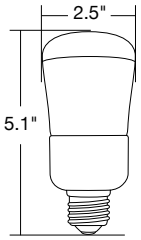

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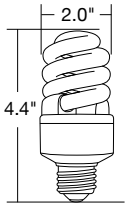

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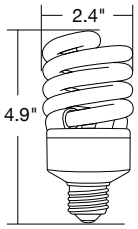

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Warranties and Certifications:

Covered 12 MONTH WARRANTY

SpringLamps® 15 MONTH WARRANTY

ISO 9002 CERTIFIED

c UL us

RoHS Compliant

Item #	Description	Incandescent Wattage Comparison	Initial Lumens	M.O.L. (inches)	Diameter (inches)	Lamp Life (Hours)	Input Line Current	Power Factor	Dimming Range
40114	14 Watt Dimmable Full Spring	60	850	4.4	2.0	10,000	.21	.90	100-20%
40123	23 Watt Dimmable Full Spring	100	1500	4.9	2.4	10,000	.21	.90	100-20%
2R2014DIM	14 Watt Dimmable R20 Flood	50	410	5.1	2.5	8,000	.15	.90	100-20%
2R3016DIM	16 Watt Dimmable R30 Flood	65	650	5.4	3.7	8,000	.15	.90	100-20%
2R4019DIM	19 Watt Dimmable R40 Flood	85	900	6.1	4.8	8,000	.15	.90	100-20%

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TCP PRO Dimmable SpringLamp® FAQ

QUESTIONS	ANSWERS
Q: Do TCP Dimmable Series products dim exactly like an incandescent lamp?	**A:** NO! TCP Dimmable Series products have slightly different dimming characteristics due to the electronics of a CFL vs. an incandescent filament 1) They will dim down to 20% of light output vs. zero for incandescents. 2) Electronic components do not respond in the same manner as a heated incandescent filament therefore there will be a difference in visual operational characteristics
Q: Do TCP's Dimmable Series product work on ordinary incandescent dimmers?	**A:** YES! TCP's Dimmable Series lamps are designed to work with standard 600w rotary or slide incandescent dimmers that are currently available in the market and are less than 10 years old.
Q: Will TCP's Dimmable Series product work on every incandescent dimmer ever made?	**A:** NO! Although TCP's Dimmable Series product has been approved for use with incandescent dimmers, there are certain types of dimmers that have proven to be incompatible. Shortened lamp life will occur if these dimmers are used.
Q: How can I tell if a dimmer is not compatible with a TCP Dimmable SpringLamp®?	**A:** Generally speaking, certain programmable electronic and/or remote control dimmers are not compatible. Additionally, high wattage dimmers are typically incompatible because of different voltage regulation and manufacturing tolerances. Illuminated (glow-in-the-dark) dimmers are usually incompatible with dimmable CFLs.
Q: Can TCP recommend a compatible dimmer?	**A:** Although TCP is not at liberty to recommend one manufacturer or brand over another, basic lab testing and real-world experience has shown that 600 Watt max, mid-grade, non-illuminated slide dimmers function well.
Q: Will TCP's Dimmable Series product flicker at the low level as other CFL Dimmable product does?	**A:** NO! TCP's Dimmable series product contains a low end shut off which turns the lamp off at 20% of the light level. This stops the flickering at the low end and enhances lamp life.
Q: Why is it important to control the low end dim level for TCP's Dimmable Series product?	**A:** There are two reasons: 1) Lamp performance instability in the form of flickering is displeasing to the human eye 2) Continuous flickering will significantly shorten lamp life.
Q: Does the performance of TCP's Dimmable Series product rely on the quality of a dimmer?	**A:** YES! Consideration must be given to the age and quality of a dimmer if it to be used with a TCP Dimmable Series product. Because of the recent push to save energy, newer dimmers are more likely to be CFL compatible. Older dimmers are not as capable of withstanding voltage spikes, which, if used, would ultimately damage the circuitry in the TCP Dimmable Series product.
Q: Can 1000 watt or larger commercial grade dimmers be used with TCP's Dimmable Series product?	**A:** NO! Most commercial grade dimmers are manufactured to be used with incandescent lamps which have a large resistive load when energized. Since CFL's do not have this characteristic there is not enough current going back to the dimmer for it to work correctly.
Q: How do you properly use TCP's Dimmable Series product?	**A:** 1) **Turning on:** Insure light level is set to max then turn it on, then dim down to desired level 2) **Turn off:** Can be turned off at any light level
Q: Will it damage the lamps if they are turned on at too low a level and they don't come on?	**A:** NO! Simply move the dimming level up till the lamps turn on then dim down to desired level.
Q: What is the warranty and average life of TCP's Dimmable SpringLamp®?	**A:** TCP's Dimmable Series product is warranted for 12 months for covered lamps and 15 months for Springlamps. Using accepted industry standards, the average life is 10,000 hours for Springlamps and 8,000 hours for covered lamps.
Q: Can TCP's Dimmable SpringLamps® be used in 3-way lamp sockets?	**A:** NO! TCP's Dimmable Series product will not perform like a 3way bulb in a 3way socket.
Q: Will frequent dimming significantly shorten the life of a TCP Dimmable Series product?	**A:** NO! Frequent dimming will not significantly reduce the life of the TCP Dimmable Series product.
Q: Can the TCP Dimmable SpringLamps® be used with a touch lamp?	**A:** NO! Touch lamps are actually controlled by a 3-way switch, so the same rules as the 3-way switch apply in this case.
Q: How many TCP Dimmable SpringLamps® can be used on the same dimmer?	**A:** To compensate for "inrush current" (timed in milliseconds, the initial flow of electrical current that is needed to start the CFL), TCP recommends dividing the dimmer's rated wattage in half and then using that wattage number to outfit the fixture. For example: 600Watt Dimmer ÷ 2 = 300Watts TCP's 23W Dimmable CFL: 300 ÷ 23 = 13 lamps TCP's 14W Dimmable CFL: 300 ÷ 14 = 21 lamps TCP's 16W Dimmable CFL: 300 ÷ 16 = 18 lamps TCP's 19W Dimmable CFL: 300 ÷ 19 = 15 lamps NOTE: Since every dimmer is manufactured differently there may be some variance in these numbers. The above examples are a rough estimate only.

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