



PE300BFX & PE322BFX CERMAX® XENON SHORT-ARC LAMPS



CERMAX

Key Features

- High-intensity illumination
- Power range of 180-320 Watts
- 1000 hour warranty
2000 hours typical
- Broad spectral range with 5900° Kelvin color temperature
- Universal 7-hole base
- High-output PE322BFX available

Applications

- Medical and industrial fiber optic illuminators
- Machine vision
- Infrared and visible spotlights/beacons
- Spectroscopy
- Microscopy
- UV Curing
- Video projection
- Solar simulation
- Wafer inspection

The PE300BFX and high-output PE322BFX offer a 1000 warranty and a universal 7-hole base for integration into a wide range of systems.

Excelitas Technologies® introduced its' Cermamax® Xenon lamp technology to the market in the 1980's; since this time, Cermamax has become the industry standard for compact Xenon short arc lamps. Commemorating the 45th anniversary of the Cermamax brand, Excelitas introduces the PE300BFX and PE322BFX.

Compared to the flagship PE300BFA lamp, the PE300BFX and PE322BFX utilize advancements in material science and enhanced manufacturing controls to offer a 1000 hour warranty. The universal base also offers a wider range of mounting options to support more system designs. While the PE300BFX meets the same output performance as the PE300BFA, the PE322BFX features a 10% higher output, which is maintained over its lifetime.

Cermamax Xenon lamps from Excelitas feature a short-arc plasma paired with an internal reflector encased in a rugged and compact ceramic body. This construction incorporates the ideal approach to achieve high-intensity focused output, making Cermamax the ideal choice for clinical or hospital diagnostic and surgical endoscopes, microscopes, high brightness projection systems, and other demanding applications.

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PE300BFX & PE322BFX

CERMAX® XENON SHORT-ARC LAMPS

PE300BFX & PE322BFX

Operational Specifications

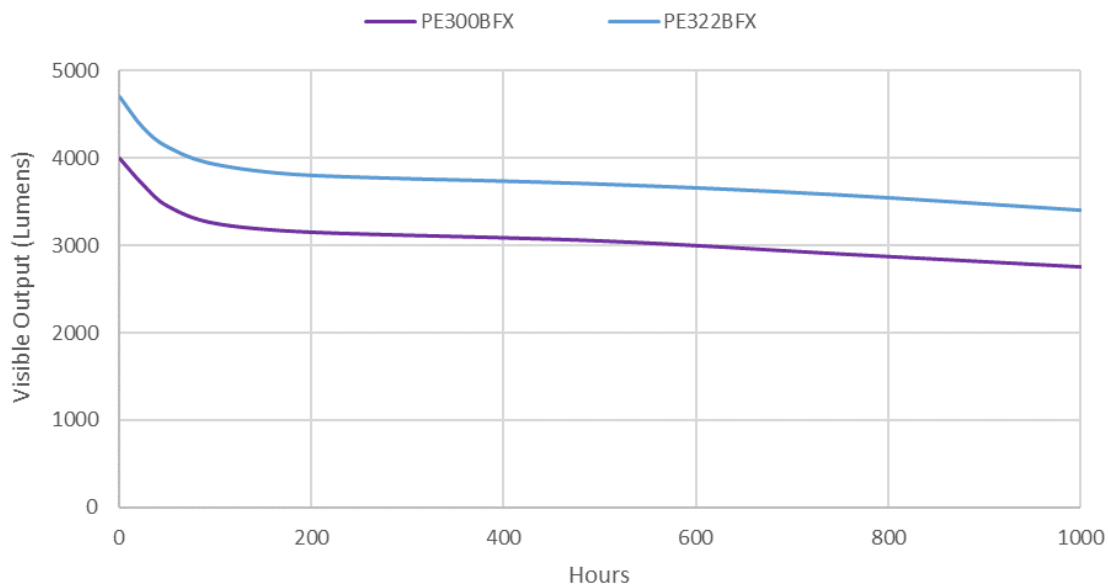
Description	Nominal	Range
Power	300 Watts	180-320 Watts
Current	21 amps (DC)	10-22 amps (DC)
Operating Voltage	14 volts (DC)	13-16 volts (DC)
Ignition Voltage	23-35 kilovolts (system dependent)	
Temperature	150° C (Maximum)	
Lifetime	1000 hour warranty, 2000 hours typical	

Initial Output at Nominal Power

Description	PE300BFA	PE300BFX	PE322BFX
Peak Intensity	5.2×10^5 Candelas	5.2×10^5 Candelas	5.2×10^5 Candelas
Radiant Output	50 Watts	50 Watts	50 Watts
Visible Output (nom)	4000 Lumens	4000 Lumens	4650 Lumens
Visible Output (min)	3810 Lumens	3810 Lumens	4100 Lumens
Visible Output (min @ end of rated life)	1905 Lumens	1905 Lumens	2050 Lumens
Lifetime	500 Hours	1000 Hours	1000 Hours
Color Temperature	5900° Kelvin	5900° Kelvin	5900° Kelvin

Typical Lifetime

PE300BFX & PE322BFX

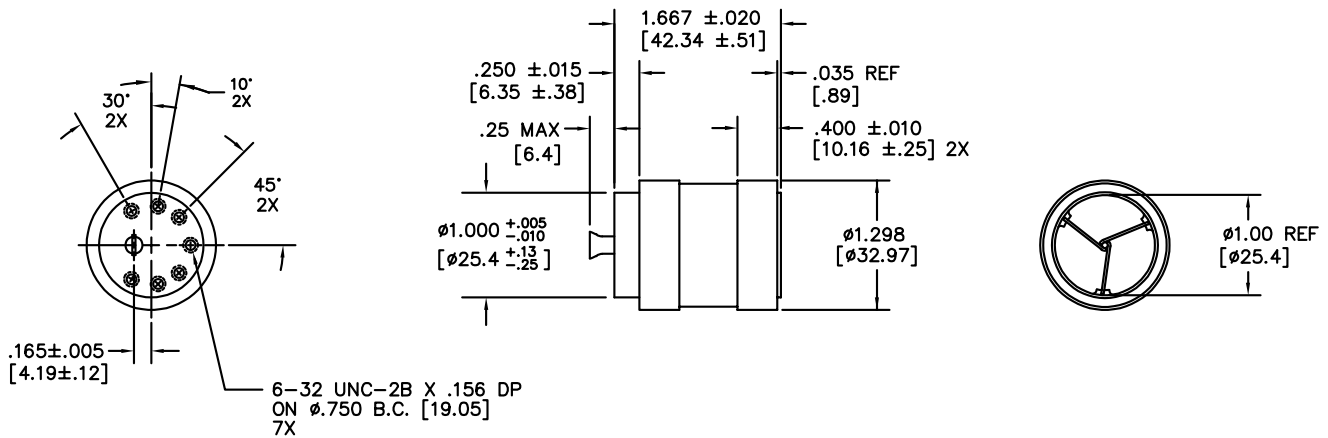


PE300BFX & PE322BFX

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Mechanical Dimensions

PE300BFX & PE322BFX



DIMENSIONS IN BRACKETS ARE IN MILLIMETERS.

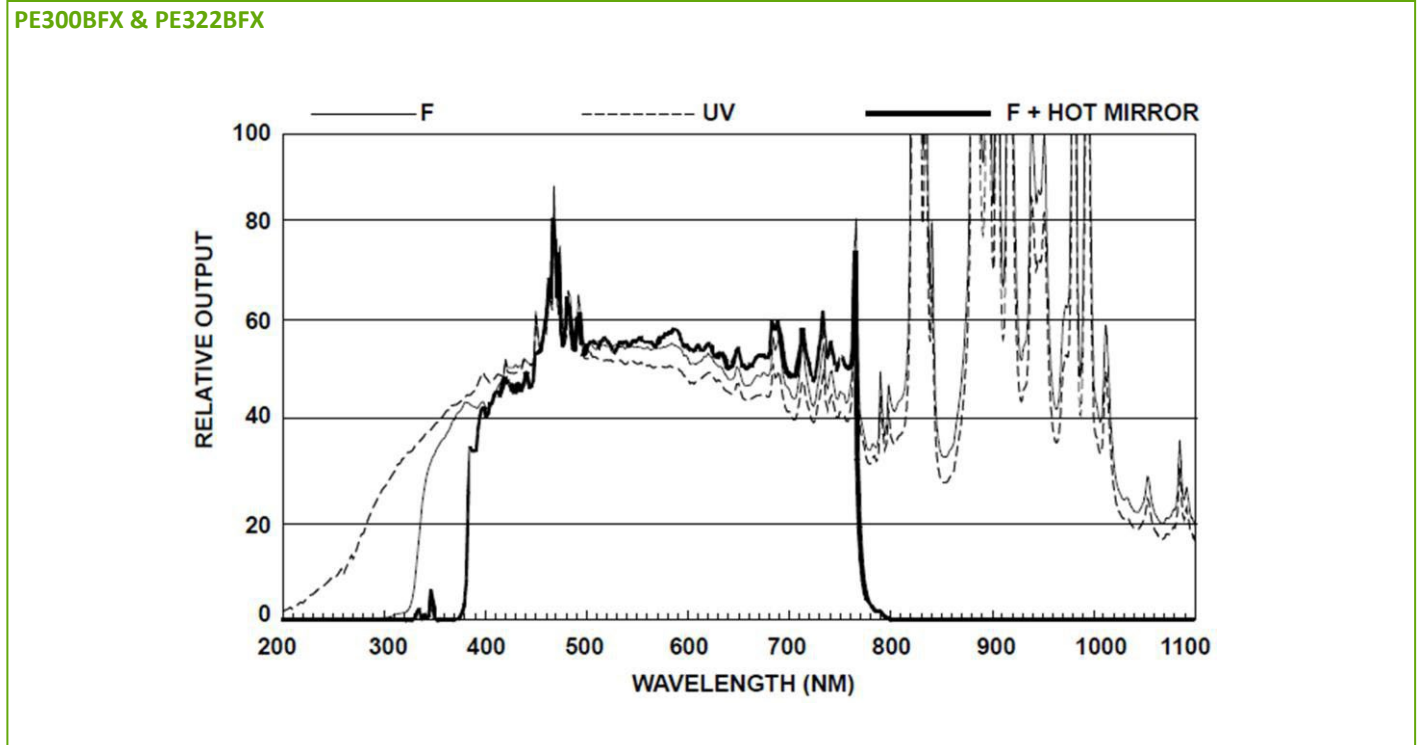
NOTES:

1. Lamp must not be operated with window facing upwards within 45° of vertical.
2. Seal temperature must not exceed 150°C .
3. Current/power regulated power supplies and Excelitas lamp housing units are recommended.
4. Lamp must be operated within recommended current and power range. Over-powering may lead to arc instability, hard starting and premature aging.
5. Hot mirror assembly is available for IR filtering.
6. Cermax Xenon lamps are much safer to use than their quartz xenon arc lamp equivalents. However, caution must be practiced when operating lamps because they are under high pressure, require high voltage, reach temperatures up to 200°C , and their IR and UV radiation can cause skin burns and eye damage. Please read the Hazard Sheet included with each lamp shipment.

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Spectral Output



About Excelitas Technologies

Excelitas is the leading provider of advanced, life-enriching technologies that make a difference, serving global market leaders in the life sciences, advanced industrial, next-generation semiconductor, aerospace and defense end markets. Headquartered in Pittsburgh, PA, USA, Excelitas is an essential partner in the design, development and manufacture of photonic technologies, offering leading-edge innovation in sensing, detection, imaging, optics and specialty illumination for customers worldwide.

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