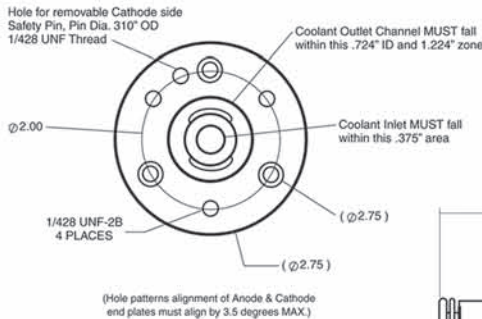




Electrical & Photometric Data

| SPECIFICATION: | SX120001 | SX150001 | SX20000D | SX32000D |
|--|-----------------|-----------------|---------------------------|---------------------------|
| Lamp Electrical Data: | | | | |
| Lamp Power Size (Watts) | 12,000 | 15,000 | 20,000 | 32,000 |
| Arc Voltage Range (Vdc) | 31-36 | 32-38 | 36-43 | 43-49 |
| Lamp Current Range (Min-Max)/Amps | 275-375 | 275-400 | 275-525 | 325-700 |
| Lamp Warranty (hours/starts) at rated power | | | | |
| | 1200 / 300 | 1200 / 300 | 500/250 @ 18-20kW | 200* / 100 |
| | | | 400/200 @ 20.1-22kW | When Operated as follows: |
| (Starting & stand-by Current for 12 & 15K) | (220-270 Amps) | (220-270 amps) | 350/175 @ 22.1-23kW | 0-67 hours @ 600 Amps |
| | | | 300/150 @ 23.1-24kW | 68-135 hours @ 650 Amps |
| | | | 250/125 @ 24.1-25kW | 136-200 hours @ 700 Amps |
| | | | (which ever occurs first) | |
| PHOTOMETRIC BRIGHTNESS - Cd/sq mm | | | | |
| | 375 Amps | 400 Amps | 525 Amps | 700 Amps |
| .25mm circular area at Cathode tip | 7400 | 8300 | 11,000 | 14,000 |
| 2.0 mm circular area at Cathode tip | 3900 | 4200 | 7000 | 8000 |
| 3.0mm H x 6.0mm L rectangle at Cathode tip | 1700 | 1850 | 3000 | 4000 |

Superior Quartz lamps have longer life and stability due to cooling inlets that allow the greatest coolant flow available.



Coolant Specifications

| SPECIFICATION: | SX120001 | SX150001 | SX20000D | SX32000D |
|--|-----------|-----------|-----------|-----------|
| FLOW RATES Min / Max (Gallons / Minute) | | | | |
| Anode and Cathode in Series: | 4.0 / 6.0 | 4.0 / 6.0 | 5.0 / 6.0 | 5.0 / 6.0 |
| Anode: | 4.0 / 6.0 | 4.0 / 6.0 | 5.0 / 6.0 | 5.0 / 6.0 |
| Cathode: | 3.5 / 6.0 | 3.5 / 6.0 | 3.5 / 6.0 | 3.5 / 6.0 |
| COOLANT PRESSURE (PSIG) | | | | |
| Max Lamp & System Pressure | 250 | 250 | 250 | 250 |
| Anode & Cathode in Series: | | | | |
| Min Pressure Drop Across Lamp: | 70 | 70 | 90 | 90 |
| Nominal Anode Input Pressure | 120 | 120 | 140 | 140 |
| Nominal Cathode Output Pressure | 25 | 25 | 30 | 30 |
| Minimum Cathode Output Pressure | 20 | 20 | 25 | 25 |
| Anode & Cathode Cooled Separately: | | | | |
| Minimum Pressure Drop Across Lamp | 35 | 35 | 40 | 40 |
| Nominal Anode Input Pressure | 120 | 120 | 140 | 140 |
| Nominal Cathode Input Pressure | 70 | 70 | 90 | 90 |
| Nominal Cathode Output Pressure | 25 | 25 | 30 | 30 |
| Minimum Cathode Output Pressure | 20 | 20 | 25 | 25 |

Coolant: Deionized or distilled water with a maintained specific conductance of 50 micromhos per cm. maximum. Outdoor searchlight lamp - a mixture of ethylene glycol and deionized or distilled water may be used. Filter: 10 microns at anode inlet for deionized or distilled water. 25 microns for ethylene glycol and deionized or distilled water mixture.

Contact the Engineering Dept. for specific lamp mounting information.

Mechanical Data

| SPECIFICATION: | SX120001 | SX150001 | SX20000D | SX32000D* |
|--|------------------------|------------------------|-----------------------|-----------------------|
| DIMENSIONS: | | | | |
| Overall Lamp Length A: (+/- .156" / 4mm) | 18.86" / 479mm | 18.86" / 479mm | 19.00" / 483mm | 19.00" / 483mm |
| Negative End to Cathode Tip B: | 9.26" / 235mm | 9.26" / 235mm | 9.26" / 235mm | 9.26" / 235mm |
| Arc Gap - Cold C: | 384" (10mm) (+/- .01") | 432" (11mm) (+/- .01") | 511" (13mm) (+/- .03) | 511" (13mm) (+/- .03) |
| Vessel Diameter | 4.50" (114mm) O.D. | 4.50" (114mm) O.D. | 5.375" (136.5mm) O.D. | 5.375" (136.5mm) O.D. |
| Lamp Weight: | 11 lbs. (5 kG) | 11 lbs. (5 kG) | 12 lbs. (5.5 kG) | 12 lbs. (5.5 kG) |

