

HIGH PRESSURE COMPACT SOURCE XENON DISCHARGE LAMP TYPE XE/D 2kW D.C. REF. 98-1520

98-201

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98-1521 (Ozone free)

GENERAL DESCRIPTION

The 2kW Xenon Discharge lamp consists essentially of an arc burning between tungsten electrodes in a high pressure of pure Xenon contained in a quartz bulb. It is designed to operate from a constant current (or constant power) d.c. supply. The light source is very bright and compact and emits radiation virtually in a continuum extending from the ultra-violet, through the visible to the infra-red. There is a pronounced peak in the near infra-red at about 900nm. Thus the lamp is a powerful source of ultra-violet and infra-red as well as light. The colour of the visible radiation is very similar to noon sunlight having an approximate colour temperature of 5600° K. Colour rendering is excellent. The light output may be modified over a wide range by adjusting the power input without appreciably altering the colour of the light. On starting the lamp approximately full light output is given immediately. The combined characteristics of high brightness, high efficiency, good colour and colour rendering of the compact source Xenon lamp can at the present time be matched only by the high intensity carbon arc. The Xenon lamp has a much longer life and is very much more convenient to operate than the carbon arc. Running costs are of the same order.

GENERAL APPLICATIONS

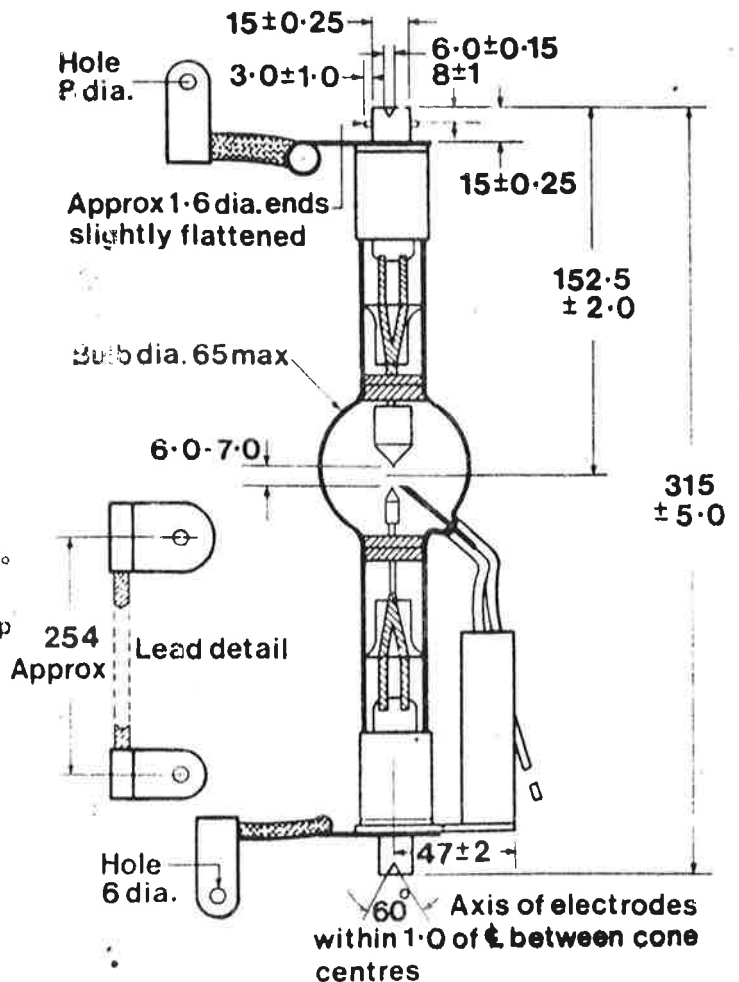
- Cinematography.
- Cine projectors.
- Colour matching.
- Fadeometer testing.
- Solar simulators.
- Arc imaging furnaces.
- Graphic arts.
- Optical instruments.
- Laboratory and general scientific purposes.

PHYSICAL CHARACTERISTICS

| | |
|-----------------------------------|---|
| Arc length | 6.5 ± 0.5 |
| Overall length: | 315 ± 5. |
| L.C.L. from end of uppermost cap: | 152.5 ± 2. |
| Bulb diam. max: | 65. |
| Axiality: | ± 1.0 |
| Operating position: | Vertical/Horizontal ± 15° |
| Weight: | .870 gm |
| Caps: | At both ends a special cap with cone centre for mounting and a flexible lead. |

ELECTRICAL CHARACTERISTICS

| | |
|-------------------------------------|---------------|
| Lamp rating (watts): | 2000 |
| Supply voltage: | 35v d.c.(min) |
| Supply ripple content (r.m.s. max): | 5% |
| Lamp operating voltage (volts): | 23.5 |
| Lamp operating current (amps): | 85 |



All dimensions in mm