# DEUTERIUM ARC LAMP - P705
## UV Light Source for Spectroscopy – 3 volt

### Instrument

**Aktec / Beckman / Biorad / Joyce Loebl / Kontron**
**LDC / Varian / Waters / Saitron / Spectra Physics / Turner**

### Electrical

| | | |
|---|---|---|
| Filament/Heater Voltage | Start | 3.0 VDC |
| | Operating | 1.5 - 2.0 VDC |
| Filament/Heater Current | | 4.5A Max |
| Discharge/Arc Voltage | Strike | @25° > 350 VDC |
| | Operating | 60 - 90 VDC |
| Discharge/Arc Current | | 10 - 300mA |
| Terminals | | Spade Terminal |

### Optical

| | |
|---|---|
| Window | UV Transmitting Borosilicate |
| Aperture type | 1mm Circular |
| Wavelength range | 185nm - 400nm |
| Noise | $< 1 \times 10^{-4}$ Absorption units |
| Drift | $< 3 \times 10^{-3}$ Absorption units |



Ø28.5±0.75

90 max

50±2

200±5

terminal
20
7
6

FILAMENT (Black)    ANODE (Red)

Dimensions in millimetres

### Operational life

When radiant energy reaches 50% of the initial energy. Typical life 2000 hours
Deuterium lamps are guaranteed for a period of one year from date of delivery or 2000 hours usage, which ever comes first.
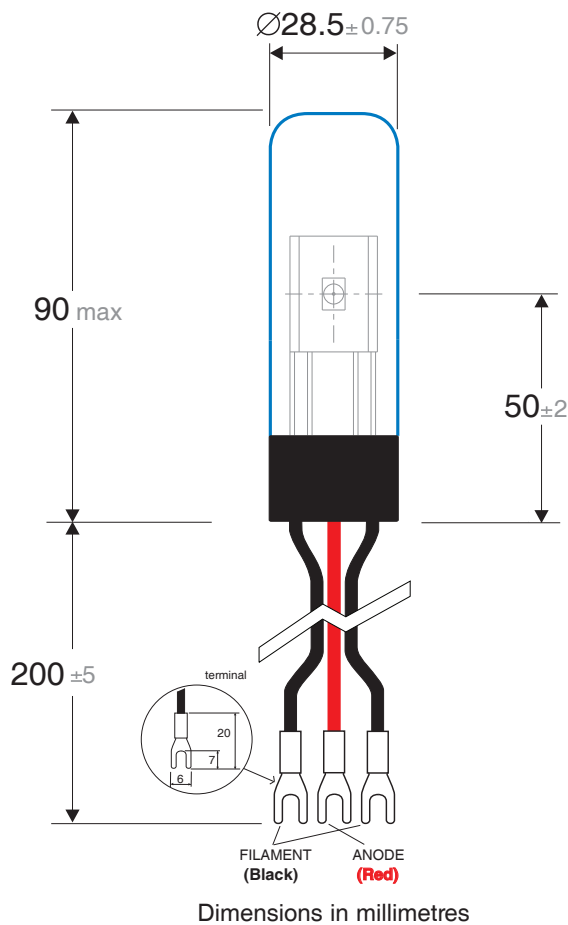
### Warranty

Free of charge replacement lamp will be provided where Photron is satisfied the following conditions have been adhered to.
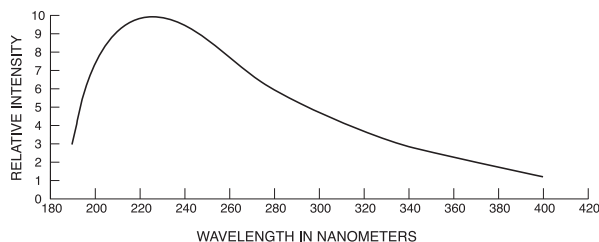
- Lamp is returned to supplier freight paid.
- Lamp has been operated within our recommended specifications.
- Lamp has not failed due to accidental, misuse or transit damage.
- If a replacement lamp is supplied the validity of guarantee shall commence from delivery date of original lamp.

### Spectrum of Deuterium Emissions



RELATIVE INTENSITY

WAVELENGTH IN NANOMETERS

### Precautions for use

- Do not subject the lamp to mechanical shock.
- Ensure glass envelope is free from foreign material. Lamp may be wiped using alcohol liquid.
- Caution! UV transmitting window is very thin. Handle with care.
- Care must be taken not to contact lamp with bare hand, temperature can reach over 200°C during operation.
- UV Radiation is harmful to the eyes. Do not observe light output directly.
- Deuterium lamps operate at high voltages. Extreme caution is required to prevent electrical shock.