Introduction

Offset Print HPA UV-A: Medium-pressure metal halide lamps

DR. FISCHER HPA lamps, optimized for the UV-A bandwith (315 to 400 nm), are ideal for reprography and photochemical processes. Their high radiant efficiency and high arc-stability ensure cost-efficient and reliable usage. They provide the ideal optimal light source for contact copying of images from transparent film to UV-sensitive carriers such as film, offset plates, printed circuit boards and microfilms. These DR. FISCHER HPA lamps are also perfectly suitable for photochemical

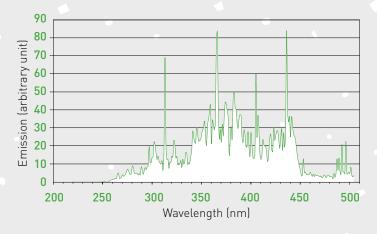
process applications such as the UV-curing of glues, resins and pigmented lacquers.

Applications Integration in systems Reprography photochemical processes Measures must be taken to protect eyes and skin from UV-B and UV-C light which are emitted by the lamps. Plate-making, • UV-curing of glues, resins, pigmented lacquers, · Printed circuits. Copying of images • Film, ■ Bulb temperature should be kept between 750 and 950°C, · Offset plates, Microfilms. with maximum 350°C at the pinches. This might require forced air cooling adapted to power level. ■ DR. FISCHER HPA lamps are made of ozone-free quartz and are constructed to generate an optimum UV-A spectrum.

Characteristics of HPA lamps:

| Features | Benefits | | | | | |
|--|--|--|--|--|--|--|
| Spectrum is optimized for UV-A radiation | Best match with UV-A photo sensitizers | | | | | |
| No ozone production | Best environmental choice | | | | | |

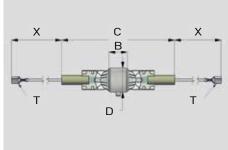
HPA Typical Spectrum of an iron doped lamp



Products

HPA products





Pinch Seal

| 12NC | Type # | W att W | Volt V | Lamp Current A | UV-A ^(*) irrad. at 0h μW/cm2 | Arc length mm (B) | Total length mm (C) | Bulb diame- ter mm (D) | Base | Cables +/-5 mm (X) | Terminal (T) | Qty Box pc |
|----------------|--------------|-------------------|------------------|----------------------|---|----------------------------|------------------------------|------------------------------------|------|--------------------------|-----------------|--------------------------------|
| 9280 756 06002 | HPA 1000/20R | 1,100 | 120 | 10.5 | 1,780 | 21 | 129 | 30 | 10 | 100/100 | straight faston | 4 |
| 9280 805 06054 | HPA 1200 | 1,200 | 125 | 10.5 | 2,240 | 83 | 147 | 30 | 8 | 195/195 | stripped end | 4 |
| 9280 810 06002 | HPA 1001R | 1,150 | 130 | 10.0 | 2,000 | 26 | 137 | 25 | 10 | 110/110 | straight faston | 4 |
| 9280 563 06002 | HPA 2020S | 2,000 | 240 | 8.7 | 515 | 83 | 185 | 28 | 10 | 350/350 | stripped end | 4 |

^(*) UV irradiation measured perpendicular to lamp axis at 1 m distance with a relative spectral sensitivity according to IEC. UV-A is the wavelength range between 315-400 nm.

Shrink Seal

| 12NC | Type # | Retrofit lamp | W att <i>W</i> | Volt V | Lamp Current A | Arc length mm | Total Length mm | Bulb diameter mm | Base | Cables +/-5 mm | Terminal |
|------------|---------------|-----------------------|--------------------------|------------------|----------------------|---------------------|-----------------------|------------------------|------|-------------------|-------------|
| | | | | | | (B) | (C) | (D) | | (X) | (T) |
| UV-1211-00 | HPA 130/120-S | Natgraph - NG 1300 Fe | 15,500 | 1,700 | 10 | 1,338 | 1,486 | 23 | 19 | 100/100 | eyelet 5 mm |
| UV-1211-10 | HPA 110/120-S | Natgraph - NG 1100 Fe | 14,000 | 1,550 | 10 | 1,170 | 1,321 | 23 | 19 | 100/100 | eyelet 5 mm |
| UV-1211 | HPA 90/120-S | Natgraph - NG 900 Fe | 11,000 | 1,270 | 10 | 960 | 1,095 | 23 | 19 | 100/100 | eyelet 5 mm |

