

Xenon Lamps

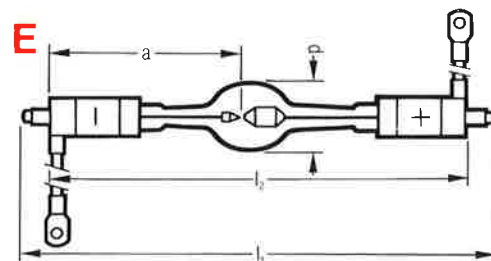
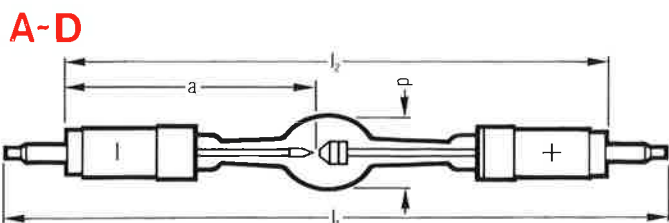
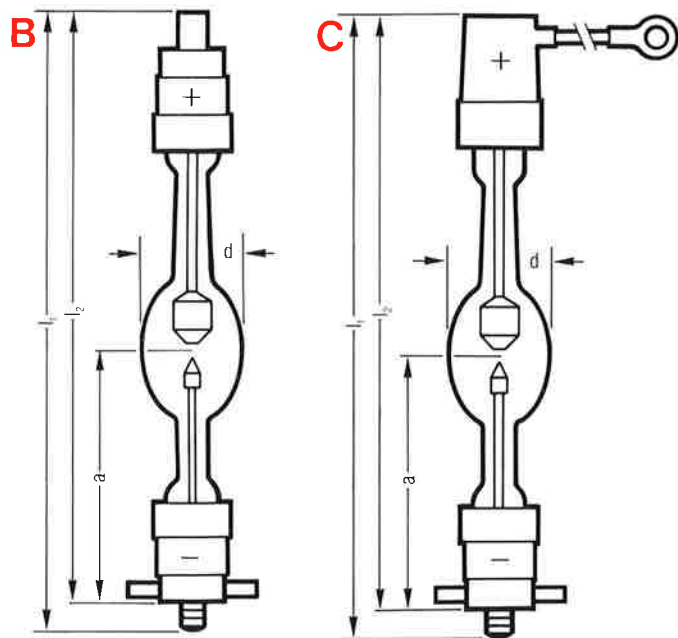
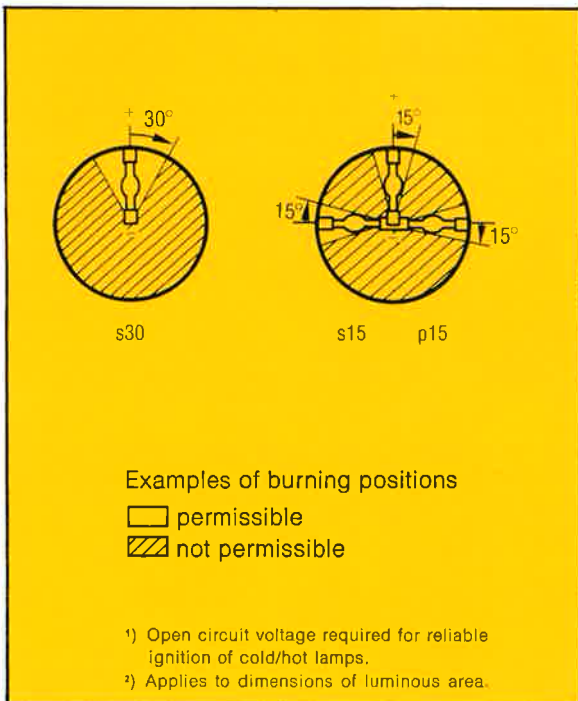


Projecting the perfect image

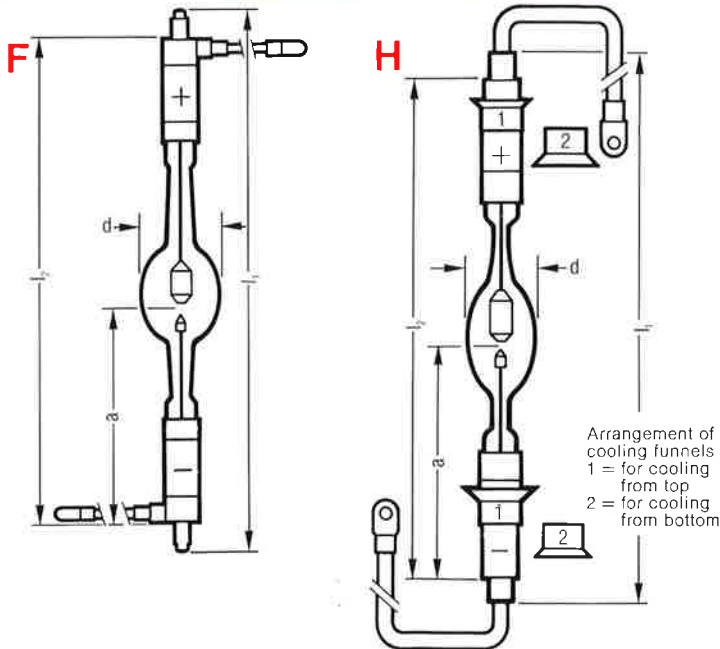
THORN EMI SHORT ARC XENON LAMPS

A COMPREHE

| Lamp (Order reference) | | 250W 98-0352 V | 500W 98-1005 V-H | 700W 98-1352 H-V | 900W 98-1361 V | 1000W 98-1432 H-V | 1000W 98-1432 H.S.C. | 1000W 98-1431 H-V | 1600W 98-1475 H.S. |
|---|--------------------|----------------------|------------------------|------------------------|----------------------|-------------------------|----------------------------|-------------------------|--------------------------|
| Supply voltage ¹⁾ min. U_v | V | 55/65 | 60/80 | 65/75 | 60/70 | 65/75 | 65/75 | 65/75 | 65/75 |
| Operating Voltage approx. U_L | V | 16.5 | 18 | 19 | 20 | 20 | 20 | 20 | 22 |
| Current J_L | A | 15 | 28 | 37 | 45 | 50 | 50 | 50 | 65 |
| Power P_L | W | 250 | 500 | 700 | 900 | 1000 | 1000 | 1000 | 1450 |
| Luminous flux ϕ | lm | | 14500 | 20000 | 30000 | 32000 | 32000 | 32000 | 60000 |
| Light intensity I | cd | 530 | 1450 | 2000 | 3000 | 3000 | 3000 | 3000 | 5500 |
| Average luminance ²⁾ L | cd/cm ² | 26000 | 40000 | 40000 | 50000 | 60000 | 60000 | 60000 | 70000 |
| Current J_L | A | — | — | — | 53 | — | — | — | — |
| Luminous flux ϕ | lm | — | — | — | 39000 | — | — | — | — |
| Light intensity I | cd | — | — | — | 3900 | — | — | — | — |
| Average luminance ²⁾ L | cd/cm ² | — | — | — | 6200 | — | — | — | — |
| Current control range | A | 15 | 17-30 | 30-45 | 30-53 | 30-55 | 30-55 | 30-55 | 45-70 |
| Average life (h) at | vertical s | 1200 | 2000 | 1500 | 2000 | 1500 | 1500 | 1500 | 1500 |
| burning position | horizontal p | — | 2000 | 1500 | — | 1500 | 1500 | 1500 | 1500 |
| Burning position | | S 15 | S 30-P 30 | S 20-P 20 | S 30 | S 20-P 20 | S 20-P 20 | S 20-P 20 | S 20-P 20 |
| Arc stabilization | | Required | —Required | — — | — | — — | — — | — — | — — |
| Forced cooling | | — | Required | Required | — | Required | Required | Required | Required |
| Luminous area w x h | mm | — | 0.9 x 2.5 | 1.1 x 2.9 | 1.1 x 3.3 | 1.1 x 2.8 | 1.1 x 2.8 | 1.1 x 2.8 | 1.3 x 3.3 |
| Diameter d | mm | 29.5 | 35 | 40 | 40 | 40 | 40 | 40 | 46.5 |
| Length l_1 | max. mm | 130 | 190 | 235/236 | 325 | 235 | 236 | 235 | 236 |
| Length l_2 | max. mm | 130 | 165 | 205/222 | 277 | 205 | 222 | 205 | 222 |
| Distance a | mm | 61 | 76 | 96.5 | 125 | 96.5 | 96.5 | 96.5 | 96.5 |
| Fig. No. | | A | A | B - C | A | B | C | B | B |
| Ozone Free | | OFR | OFR | OFR | OFR | OFR | OFR | OFR | OFR |

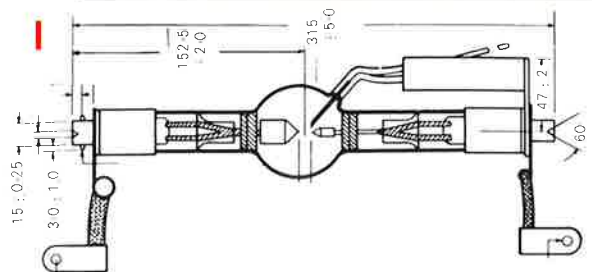
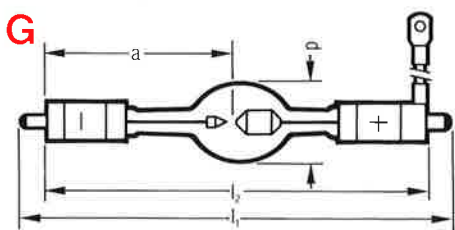


| 1600W 98-1475 H.S.C. | 1600W 98-1477 V | 2000W 98-1516 H-V | 2000W 3 ELEC. 98-1521 | 2500W 98-1841 V | 2500W 98-1842 H | 3000W V-H 98-1902 H-S 98-1903 | 4000W 98-1910 V | 4000W 98-1911 V - HS | 6500W 98-1915 V |
|----------------------------|-----------------------|-------------------------|-----------------------------|-----------------------|-----------------------|-------------------------------------|-----------------------|----------------------------|-----------------------|
| 65/75 | 65/75 | 85/110 | 35 | 75/85 | 70/90 | 85/110 | 85/110 | 75/100 | 85/110 |
| 22 | 25 | 29 | 23.5 | 30 | 28 | 30 | 33 | 30 | 41 |
| 65 | 65 | 70 | 85 | 83 | 90 | 100 | 120 | 135 | 160 |
| 1450 | 1600 | 2000 | 2000 | 2500 | 2500 | 3000 | 4000 | 4000 | 65000 |
| 60000 | 60000 | 80000 | 65000 | 100000 | 100000 | 130000 | 180000 | 155000 | 325000 |
| 5500 | 6000 | 7500 | 6500 | 9500 | 10000 | 12000 | 19000 | 17000 | 32000 |
| 70000 | 65000 | 75000 | 70000 | 61000 | 80000 | 85000 | 70000 | 90000 | 95000 |
| — | 75 | — | — | 95 | — | — | 140 | — | — |
| — | 77000 | — | — | 124000 | — | — | 230000 | — | — |
| — | 7400 | — | — | 11700 | — | — | 24000 | — | — |
| — | 80000 | — | — | 72000 | — | — | 85000 | — | — |
| 45-70 | 45-75 | 50-85 | 50-85 | 60-95 | 70-100 | 60-110 | 60-140 | 80-150 | 80-160 |
| 1500 | 2000 | 2000 | 1500 | 1500 | 1500 | 1500 | 1000 | 800 | 500 |
| 1500 | — | 2000 | 1500 | — | 1200 | 1200 | — | 800 | — |
| S 20-P 20 | S 30 | S 30-P 30 | S 15-P 15 | S 30 | S 30-P 20 | S 30-P 30 | S 15 | S 20-P 20 | S 10 |
| — | Required | Required | Required | — | — | Required | — | — | — |
| Required | — | Required | Required | — | Required | — | Required | Required | Required |
| 1.5 x 3.3 | 1.4 x 4.0 | 1.3 x 4.8 | — | 1.5 x 6.0 | 1.5 x 4.5 | 1.7 x 5.7 | 2.0 x 7.5 | 1.9 x 6.0 | 2.3 x 9.0 |
| 46.5 | 52 | 60 | 69 | 57 | 60 | 66 | 60 | 70 | 61 |
| 236 | 370 | 370 | 315 | 428 | 342 | 428/342 | 432 | 410 | 483 |
| 222 | 322 | 322 | 286 | 382 | 302 | 382/302 | 384 | 370 | 434 |
| 96.5 | 145 | 145 | 163 | 171 | 147 | 171/148 | 180 | 174 | 205 |
| C | D | E | I | F | G | E-G | H | G | H |
| OFR | OFR | OFR | OFR | OFR | OFR | OFR | | OFR | |



| Matt Screen (0.8 Gain) | | 1.6 Gain Screen | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| Xenon Lamps in Kilowatts | Screen Width Meters Feet | Xenon Lamps in Kilowatts | Screen Width Meters Feet |
| 4.0 | 2.0 | 1.0 | 1.0 |
| 3.0 | 3.0 | 1.6 | 1.6 |
| 2.0 | 4.0 | 2.0 | 2.0 |
| 1.6 | 5.0 | 3.0 | 3.0 |
| 1.0 | 6.5 | 4.0 | 4.0 |
| | 8.0 | | |
| | 10.0 | | |
| | 13.0 | | |
| | 16.5 | | |
| | 20.0 | | |
| | 23.0 | | |
| | 26.5 | | |
| | 29.5 | | |
| | 33.0 | | |
| | 36.0 | | |
| | 39.5 | | |
| | 43.5 | | |
| | 46.0 | | |
| | 49.5 | | |
| | 52.5 | | |
| | 56.0 | | |
| | 59.0 | | |

Screen Illumination
Screens somewhat larger than those shown above can be illuminated to these standards if bulbs are used at their maximum current.

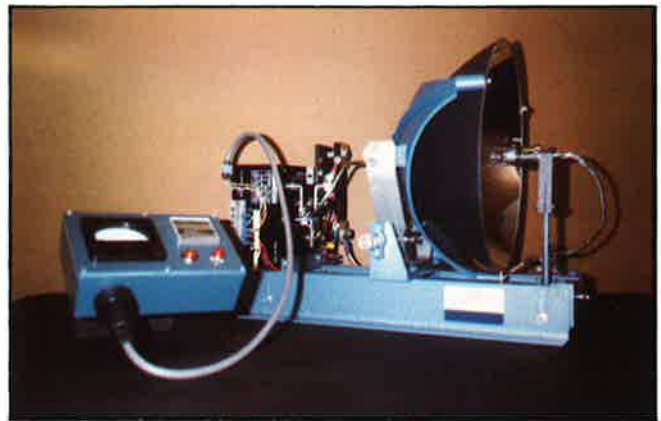


LAMP REFERENCE TABLE

| THORN Xe | OSRAM XBO | PHILIPS CSX | USHIO UXL | TUNGSRAM XHP | TOSHIBA XD | ORC XM | WACOM KXO | HANOVA CH |
|-------------|--------------|----------------|--------------|-----------------|---------------|--------------|--------------|--------------|
| 98.1005 | 500 W/H | 500 W H | 5-S | 500 W/H | (550 S/1) | | | 500/HS |
| 98.1352 | 700 W/HS | 700 W HS | 7-S | 700/HS | | XM 750 HS | | 700/HS |
| 98.1352 | 700 W/HSC | 700 W HSC | 7-SC | 700/HSC | | | | |
| 98.1361 | 900 W | 900 W | 900 | 900 | 900 | XM 900 H/V | 900 F | 900/V |
| 98.1431 | 1000 W/HS | 1000 W HS | 10-S | 1000/HS | 1000S/H | XM 1000 HS | 1000 HSF | 1000/HS |
| 98.1431 | 1000 W/HSC | 1000 W HSC | 10-SC | 1000/HSC | (1000 S/HC) | | | |
| 98.1477 | 1600 W | 1600 W | 1600 | 1600 | 1600 | XM 1600 V | 1600 F | 1600/V |
| 98.1475 | 1600 W/HS | 1600 W HS | 16-S | 1600/HS | 1600 S/H | XM 1600 HS | (1600 HMF) | 1600/HS |
| 98.1475 | 1600 W/HSC | 1600 W HSC | 16-SC | 1600/HSC | (1600 S/HC) | XM 1600 HSC | | 1600/HWL |
| 98.1516 | 2000 W/HS | | | | | XM 2000 HS | | |
| 98.1841 | 2500 W | 2500 W | 2500 | 2500 | 2500 | XM 2500 H/VC | 2500 F | 2500/VWL |
| 98.1842 | 2500 W/HS | 2500 W HSC | 25-SC | | 2500 S/H | XM 2500 HS | 2500 HSF | 2500/HS |
| 98.1902 | 3000 W/H | 3000 W HC | | | | XM 3000 H/VC | 3000 HF | 3000/HWL |
| 98.1903 | 3000 W/HS | | | | | XM 3000 HS | | |
| 98.1910 | 4000 W | | 4000 K | 4000 | | | 4000 F | 4200/VWL |
| 98.1915 | 6500 W | | | | | | 6500 F | |

Total commitment

As a member of the THORN EMI Company and one of Europe's largest manufacturers of lighting components, THORN EMI Lamps & Components Limited is in the enviable position of being able to offer a unique facility to customers, backed up by over 50 years of lighting and technical experience. Our commitment to research and development is well known and Xenon lamps represent just one aspect of high pressure discharge lamp development.



Attention!

When handling Xenon lamps, face mask and gloves must be worn when lamphouse doors are opened for maintenance, cleaning or changing lamps. Should a lamp fail for any reason during operation it is imperative to let it cool down some 20 minutes before attempting to replace.

1025 Conversion Unit

Most carbon arcs can be converted to Xenon bulb operation. The THORN EMI Conversion Unit M1025 has been specially designed to a size that will enable it to be installed in the majority of carbon arc lamphouses.

The conversion block, together with its pre-wired Electronic Control Unit, Door Safety Switch, and other accessories, provide a complete package for the conversion of carbon arcs to that of horizontally operated Xenon bulbs.

The above include the Electronic Control Unit containing the Ammeter, Time Elapse Meter, Mains Neon Light Indicator, Strike and Meter Switches, the E53 Mirror, Safety Door Switch and full instructions for installation and alignment. The whole package is supplied in one case measuring 59 x 36 x 36cm approx.

THORN EMI Lamps and Components

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