

MBF de luxe High Pressure Mercury Lamp
80W, 125W, 250W, 400W

Identification

Applications

The greatly improved colour appearance makes these lamps eminently suitable for use in commercial interiors such as: Offices, Shops and Supermarkets, Lift Lobbies and Reception Foyers, Public Concourses.

Description

The high pressure mercury discharge operates in a fused silica (quartz) arc tube which is mounted in an outer glass elliptical bulb coated on the inside with a fluorescent phosphor. The phosphor converts the ultra-violet radiation from the discharge into visible light and also diffuses the arc.

Dimensions

	80W	125W	250W	400W
Overall Length (max.) mm	154	175	227	286
Diameter (max.) mm	71	76	91	122
Cap	E27/27	E27/27	E40/45	E40/45
Bulb Glass	Soft	Soft	Hard	Hard
Operating Position	Universal	Universal	Universal	Universal
Weight of Mercury Per Lamp (Max.)	14mg	19mg	38mg	60mg

Advantages

In comparison with ordinary mercury lamps, MBF de luxe lamps have an excellent colour appearance. This improvement is achieved by the use of a special phosphor which particularly enhances the light output in the red end of the spectrum giving a warm natural light. MBF de luxe lamps are directly interchangeable with standard mercury lamps of equivalent rating.

Performance

Electrical Characteristics

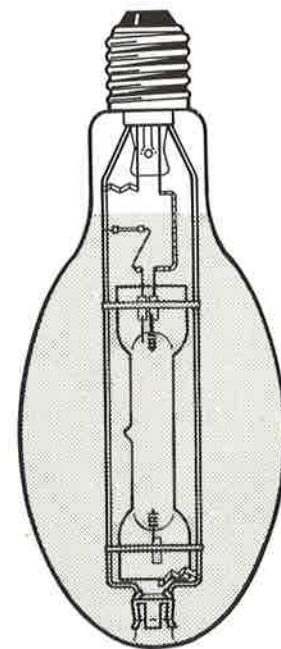
	80W	125W	250W	400W
Lamps Volts	115	125	135	140
Lamp Current (amps)	0.80	1.15	3.25	5.6

Luminous Characteristics

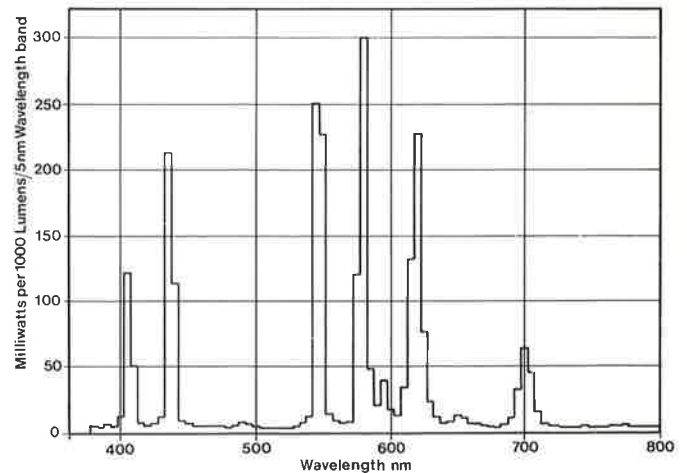
	80W	125W	250W	400W
Lumens 100 hours	3850	6500	14,000	24,000
Lumens 2000 hours	3650	6200	13,300	22,800
Average Luminance cd/cm ²	5	9	10	12
Chromaticity Co-ordinates x	0.390	0.390	0.400	0.400
y	0.370	0.370	0.385	0.385
Correlated Colour Temperature	3600K	3600K	3600K	3600K
Percentage Red	16	16	16	16
Colour Rendering Index Ra	53	53	50	50

Control Gear (240V 50HZ)

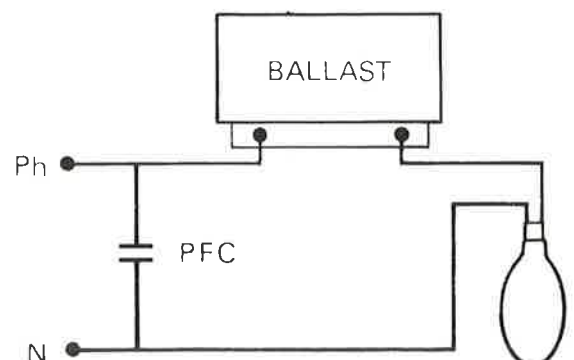
	80W	125W	250W	400W
Ballast	G53333.4	G53306.4	G53315.4	G53309.4
Capacitor	GC2383	GC2383	GC2370	GC2331



SPECTRAL POWER DISTRIBUTION MBF DE LUXE



CIRCUIT DIAGRAM



Starting and Operating

Although these lamps start immediately, they require 5 – 7 minutes to warm up and achieve full output. If a lamp is switched off it requires a few minutes to cool before it will re-start.

Guidance for Luminaire Manufacturers

Temperature Limits	80W – 125W	250W – 400W
Maximum permissible bulb temperature	375°C	450°C
Maximum permissible cap temperature	210°C	250°C

Packing

	80W	125W	250W	400W
Individual Carton Dimensions mm	70 x 70 x 165	74 x 74 x 177	113 x 113 x 267	128 x 128 x 330
Individual Weight kg	.063	.083	.160	.230
Bulk Pack Dimensions mm	445 x 445 x 185	465 x 465 x 185	580 x 240 x 280	655 x 275 x 340
No. in Outer Pack	36	36	10	10
Weight kg	3.24	4.12	3.10	4.22

British and International Standards

Lamps conform to the following standards where applicable.

BS 3677	High pressure mercury vapour lamps
IEC 188	High pressure mercury vapour lamps
BS 5101	Part 1 lamp caps
IEC 61-1	Lamp caps

Operation and Maintenance

Guide for the Safe Installation, Operation and Disposal of High Pressure Mercury Lamps.

Before Use

Always isolate the equipment from the electricity supply before inserting or replacing a lamp.

Check that the replacement lamp is the correct type for the application. This includes checking that the lamp voltage (if applicable), wattage and cap are suitable for use in the circuit and with the control gear.

Ensure that the lamp is correctly located in the lampholder and the glass bulb is not scratched during insertion.

During Use

For all lamps (unless indicated to the contrary by the manufacturer) prevent rain, snow, condensation droplets or water splashing on the lamp as these may cause the bulb to shatter.

If the outer bulb is broken the lamp must not be operated.

Where mercury discharge lamps are used for prolonged periods in close proximity to eyes and skin there may be a slight possibility of a low level UV radiation hazard. Suitable protection should be employed.

Disposal

These lamps should be broken in a container. Precautions must be taken against flying glass or other fragments. The operation should be carried out outdoors (or in a well-ventilated area). With high pressure mercury lamps it is not necessary to break up the inner arc tube. The debris of large quantities of lamps must be disposed of in accordance with the rules of the Local Authority.

Thorn Lighting reserve the right to alter the specification without prior notice or public announcement.