Sfb: (63)

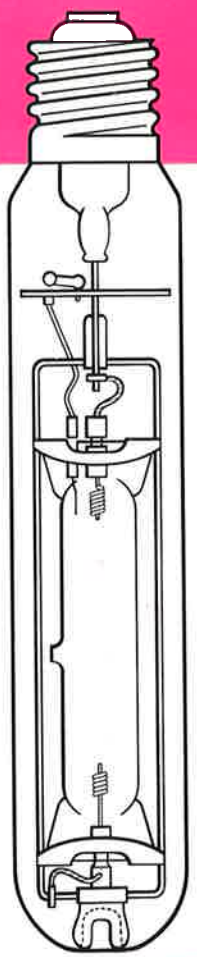
UDC: 628 94/95

Osram-GEC Mercury Lamps

The range

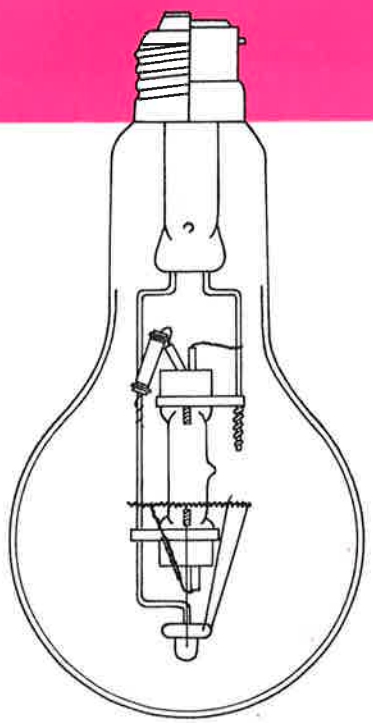
MB/U

The original type of mercury lamp. Still used in certain special installations especially for streetlighting and floodlighting where the clear version gives a linear light source which can be optically controlled.



MBFT/V

The blended Truelite range is designed for use in commercial and industrial lighting where good quality of light combined with long life is essential. The lamp consists of a fluorescent coated envelope, a mercury discharge tube, and a tungsten filament. Excellent colour rendering is obtained by excitation of the fluorescent coating combined with the light from the tungsten filament. The filament, besides emitting light, acts as a ballast in series with the discharge thus dispensing with the necessity for an external choke.



MBI

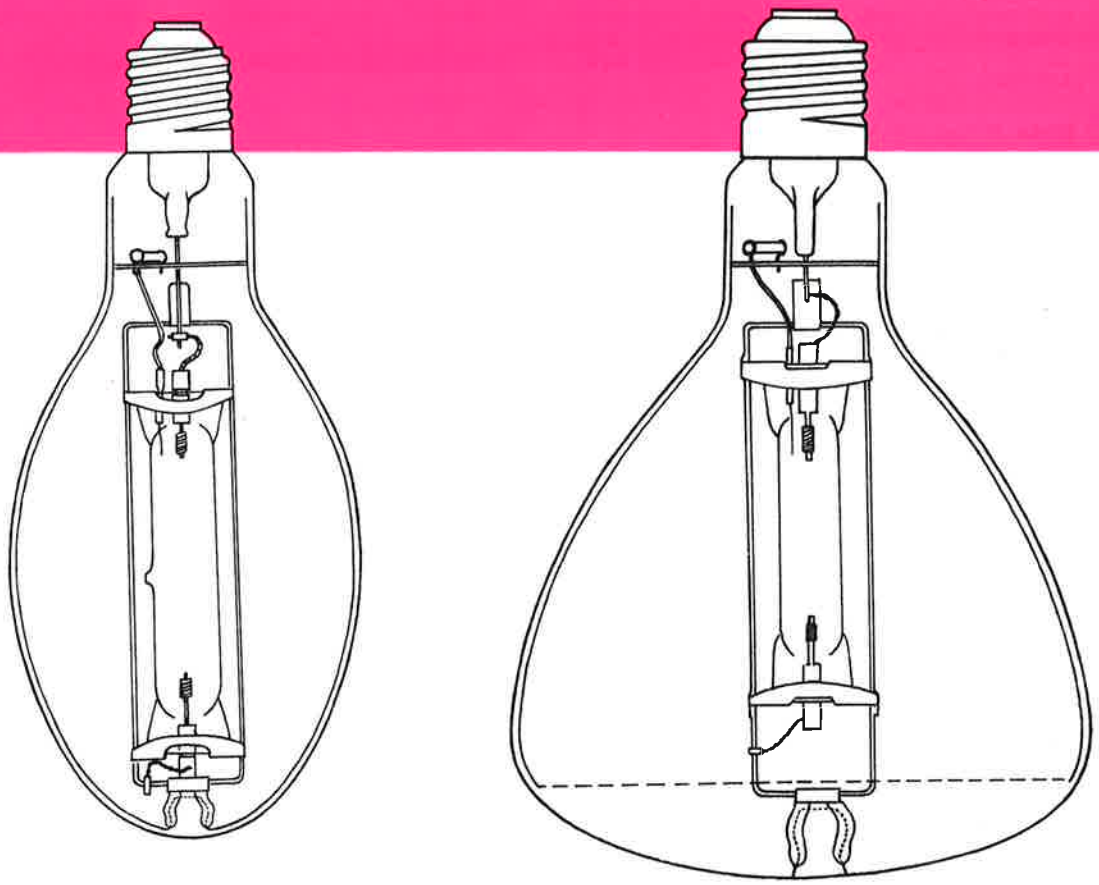
Coloured halide lamps are ideally suitable for floodlighting and other applications where a saturated coloured light is essential. Ease of optical control is provided by the compact high brightness source.

MBW/U

This is a mercury lamp in which practically all visible radiation is absorbed by the "black glass" bulb, and the radiation transmitted is restricted almost exclusively to the wavelength 3650A. The lamp can be used to excite fluorescence in certain powders and paints. Articles can be marked so that the marking is invisible under normal light but visible under the lamp. The black glass lamp can be used to detect the presence of certain kinds of oil and grease, and alterations in documents.

MBF/U and MBFR/U

The mercury fluorescent range of lamps are available in the standard types and in the reflector or Toplite type. The latest development being the Truelite range of lamps which employ a new phosphor giving even better colour rendering and appearance.
These lamps are available in the full MBF/U range of 50-1000w.



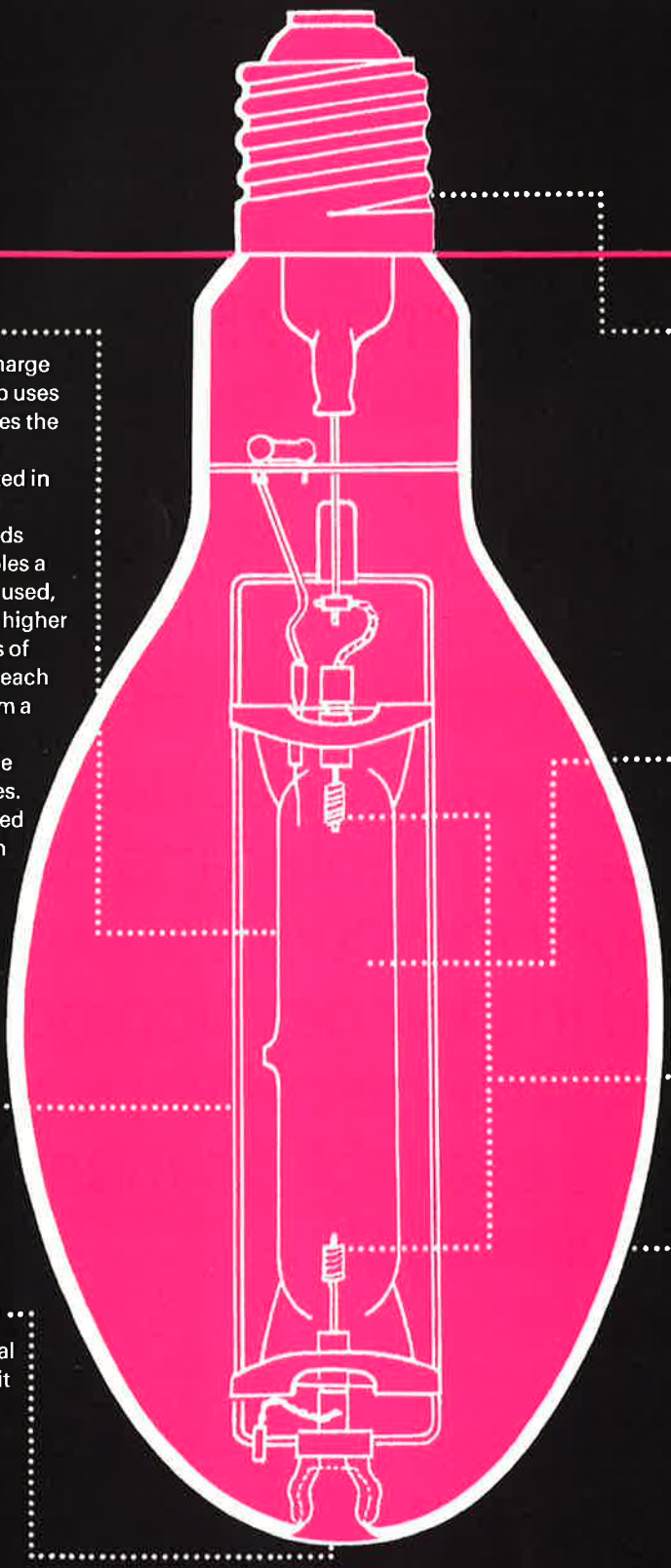
Operating characteristics

Normal mains volt lamps will operate satisfactorily at -10°C with a supply voltage of 200 volts and at -50°C with a supply voltage of 240 volts.
Lamps will reach 80% of their quoted lumen output about six minutes after striking. If the lamps are switched off and on again, they will take about six minutes before re-striking.

Control gear

With the exception of the MBFT/V, all lamps shown here need control gear to limit the current to the lamp and to correct the power factor of the load. A stabiliser is also required for the MBI lamp.

New Truelite - the inside story



Arc tube

This is where the actual discharge takes place. The Truelite lamp uses pure silica for this tube. It gives the following major advantages:

1. The arc tube can be operated in any position.

2. The special silica withstands much greater heat. This enables a higher vapour pressure to be used, and results in a considerably higher lumen output. Small sections of molybdenum are sealed into each end of the arc tube. They form a permanent seal, and act as electrical conductors from the lead-in wires to the electrodes.

3. Ultra violet energy produced by the mercury discharge can be transmitted through the arc tube. This then activates the phosphor coating on the outer envelope, giving improved colour appearance.

Support Frame and lead wires

The arc tube is supported by strong, specially designed, nickel-plated frames with metal braid electrical connections.

Dimpled construction

Holds arc Tube to ensure axial alignment and reduces transit damage.

Cap

The cap is coated with an advanced anti-corrosive nickel-plating. It is secured to the outer envelope by a unique method involving a special key way. Together with the use of high-temperature capping cement, this ensures that cap failures or loose caps are virtually impossible under normal operating conditions.

Gas filling

The lamp uses vaporised mercury in the arc tube. To assist striking, there is also a small amount of argon. The space between the outer and inner tube contains an inert gas-filling which eliminates oxidation of the arc tube seals

Electrodes

Special coatings on the main electrodes ensure reliability, good starting and long life.

Outer envelope

The secret of the new Truelite lamp is the coating inside the outer envelope. Osram have developed a remarkable new phosphor which gives a more faithful colour reproduction than has hitherto been possible with mercury lamps

Specification for the Truelite range

Lamp Rating	Supply Voltage	Initial Lumens	Lighting Design Lumens	Cap	Bulb Diameter mm	Overall Length mm	Light Centre Length mm	Standard Packing Quantity	Recmd Price
50W	200/250V	1950	1750	ES	55±1	126±4	90±4	25	£1 13 0
80W	200/250V	3450	3175	ES or 3 Pin BC	70±1	161±4	103±4	25	£2 5 0
125W	200/250V	5700	5500	ES or 3 Pin BC	75±1	174±4	112±4	25	£2 13 0
125W	200/250V	5700	5500	GES	"	188±4	126±4	25	£2 13 0
250W	200/250V	13000	12100	GES	90±1	223±4	150±4	25	£4 5 0
400W	200/250V	22500	21700	GES	120±1.5	280±5	177±5	25	£6 10 0
700W	220/250V	39000	35000	GES	141±2	315±5	208±5	1	£11 5 0
1000W	220/250V	54000	51000	GES	165±2	400±10	208±5	1	£14 0 0
1000W	400/450V	58500	54000	GES	165±2	345±5	212±5	1	£14 0 0

Osram Mercury Lamps

Leadership in Mercury lighting.

The findings of more than thirty years of research, development and experience with high pressure mercury vapour lamps by Osram-GEC Limited, have gone into the production of this booklet. Osram is in a unique position in this field - the Company invented mains voltage high pressure mercury vapour lamps, and has led in their development since. Today a wide range of lamps and equipment is available to meet every lighting requirement.

Specifications

Mercury Lamps MB/U *Average Life 7500 Hours*

Lamp Rating	Supply Voltage	Initial Lumens	Lighting Design Lumens	Bulb Finish	Cap	Bulb Diameter mm	Overall Length mm	Light Centre Length mm	Standard Packing Quantity	Recmd. Price
80W	200/250V	3120	2700	Pearl	ES or 3 Pin BC	80±1	161±4	103±4	25	£2 5 0
125W	200/250V	5200	4900	Pearl	ES or 3 Pin BC	88±1	174±4	112±4	25	£2 13 0
250W	200/250V	12000	11000	Clear	GES	51±1	250±5	170±5	25	£3 8 0
400W	200/250V	20500	20000	Clear	GES	51±1	280±5	177±5	25	£3 16 0
1000W	400/450V	56000	52000	Clear	GES	165±2	345±5	212±5	1	£12 0 0

Mercury Halide Lamps MB1 *Average Life 3000 Hours*

Lamp Rating	Colour	Supply Voltage	Initial Lumens	Lighting Design Lumens	Cap	Bulb Diameter mm	Overall Length mm	Light Centre Length mm	Standard Packing Quantity	Recmd. Price
400W	Blue	230/250V	8000	6000	GES	65±2	280±8	175	1	£13 6 0
400W	Green	230/250V	26000	23000	GES	65±2	280±8	175	1	£13 6 0

MBFT/V Blended Truelite *Average Life 6000 Hours*

Lamp Rating	Supply Voltage	Initial Lumens	Lighting Design Lumens	Cap	Bulb Diameter mm	Overall Length mm	Light Centre Length mm	Standard Packing Quantity	Recmd. Price
100W	220/230V 240/250V	1400	1250	BC or ES	70±1	164±4	115±5	12	£2 10 0
160W	220/230V 240/250V	2900	2700	ES or BC	75±1	174±4	112±4	12	£2 12 0
250W	220/230V 240/250V	5500	4840	GES	110±1.5	233±7	178±6	6	£3 0 0

MBW/U Black glass *Average Life 1500 Hours*

Lamp Rating	Supply Voltage	Cap	Bulb Diameter mm	Overall Length mm	Light Centre Length mm	Standard Packing Quantity	Recmd. Price
125W	200/250V	3 Pin BC	90±1	174±4	112±4	25	£3 7 6

Mercury Fluorescent Lamps MBF/U Available in Standard or Truelite versions

Standard type *Average Life 7500 Hours*

Lamp Rating	Supply Voltage	Initial Lumens	Lighting Design Lumens	Cap	Bulb Diameter mm	Overall Length mm	Light Centre Length mm	Standard Packing Quantity	Recmd. Price
80W	200/250V	3120	2850	ES or 3 Pin BC	70±1	161±4	103±4	25	£2 5 0
125W	200/250V	5200	5000	ES or 3 Pin BC	75±1	174±4	112±4	25	£2 13 0
125W	200/250V	5200	5000	GES	75±1	188±4	126±4	25	£2 13 0
250W	200/250V	12000	11000	GES	90±1	223±4	150±4	25	£4 5 0
400W	200/250V	21000	20000	GES	120±1.5	280±5	177±5	25	£6 10 0
700W	220/250V	37000	34000	GES	141±2	315±5	208±5	1	£11 5 0
1000W	220/250V	52000	49000	GES	165±2	400±10	208±5	1	£14 0 0
1000W	400/450V	56000	52000	GES	165±2	345±5	212±5	1	£14 0 0

For Truelite range (MBF/U) see inside page 4

MBFR/U type *Average Life 7500 Hours*

250W	200/250V	11250	10250	GES	166±2	245±5	-	1	£5 10 0
400W	200/250V	19000	17200	GES	181±2	270±5	-	1	£7 10 0
700W	220/250V	33600	30800	GES	201±2	305±7	-	1	£12 18 0
1000W	400/450V	52000	45000	GES	248±2.5	343±7	-	1	£15 16 0

The material listed in this publication is offered subject to the Company's terms of business and conditions of sale, a copy of which may be obtained on request. Prices apply only in Great Britain and Northern Ireland. Details of streetlighting lanterns or interior lighting fittings can be obtained from the addresses below.

Osram-GEC Limited/Area offices

Southern Region	**London, Home Counties and Southern** East Lane, Wembley, Middlesex.	01-904 4321
	Telephone sales office 2, Brunswick Place, Southampton.	Southampton 25634
	Design Centre for lighting schemes P.O. Box No. 17, East Lane, Wembley, Middlesex.	01-904 4321
Midland and South West Region	**Midlands** Electric Avenue, Witton, Birmingham, 6.	021-327 1571
	East Midlands *Lamp Depot & Sales Office* 25 Stoney Street, Nottingham. NG1 ILR	Nottingham 55912/6
	South West 32 Victoria Street, Bristol.	Bristol 26671/8
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	South Wales *Sales Office* Empire House, Mount Stuart Square, Cardiff	Cardiff 37331/5
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