

A
G.E.C.
PRODUCT
MADE IN ENGLAND



Osram

THE WONDERFUL LAMP



THE WONDERFUL LAMP

REDUCTIONS IN PRICES

Operating on and from Thursday, Sept. 1st, 1938

TYPE.	WATTS.	VOLTS.			
		35 to 55	60/85	150	100/130 AND 200/260
STANDARD PEARL ..	15	2/6 to 2/1	2/6 to 2/1	2/6 to 2/1	1/9 to 1/6
	25	2/6 .. 2/1	2/6 .. 2/1	2/2 .. 2/1	1/7 .. 1/6
	75				2/3 .. 1/10
	100	5/3 .. 4/6	5/3 .. 4/6		2/3 .. 2/-
STANDARD VACUUM do. CLEAR do. SPRAYED	15			2/6 to 2/3	1/9 .. 1/8
	25			2/4 .. 2/3	1/9 .. 1/8
	25				1/11 .. 1/9
STANDARD CLEAR GAS FILLED	25	2/6 to 2/3	2/6 to 2/3		1/9 .. 1/8
	75				2/6 .. 2/-
	100	5/6 .. 5/-	5/6 .. 5/-		2/6 .. 2/3
	200		12/3 .. 10/6		6/6 .. 5/6
	300		15/6 .. 13/3		10/- .. 9/-
	500		19/6 .. 16/6		12/6 .. 11/6
	750		24/- .. 20/-		16/- .. 15/-
STANDARD OPAL ..	15	2/10 to 2/4	2/10 .. 2/4		1/10 .. 1/9
	25	2/10 .. 2/4	2/10 .. 2/4		2/9 .. 2/2
	75				2/9 .. 2/4
	100	6/- .. 5/3	6/- .. 5/3		7/6 .. 6/6
	200		13/9 .. 12/6		11/3 .. 10/3
	300		17/6 .. 15/-		14/- .. 13/-
	500		22/- .. 18/6		
STANDARD SPRAYED ..	25				1/10 .. 1/9
	75				2/9 .. 2/2
	100				2/9 .. 2/4
	200				7/4 .. 6/6
	300				11/2 .. 10/3
	500				13/9 .. 13/-
STANDARD DAYLIGHT ..	100				3/6 .. 3/3
	300				12/9 .. 11/6
SIGN TYPE 28 or 44 m/m ..					
	CLEAR	15	2/6 to 2/3	2/6 to 2/3	2/6 to 2/3
	SPRAYED	15	2/9 .. 2/6	2/9 .. 2/6	2/9 .. 2/6
	DAYLIGHT BLUE ..	15	3/2 .. 2/9	3/2 .. 2/9	3/2 .. 2/9
	NAT. COLOUR GREEN ..				
	ETC.	15	3/1 .. 2/10	3/1 .. 2/10	2/4 .. 2/3
	NAT. COLOUR RED ETC.	15	3/4 .. 3/1	3/4 .. 3/1	2/7 .. 2/6

In addition to the above List the prices of the following lamps have been reduced. NOTE.—These new prices are not shown in the Catalogue.

NATURAL COLOUR GLASS LAMPS (Gas-filled). Page 27. 100 watt. 100/130 and 200/260 volts	GREEN, BLUE or AMBER 3/3	RUBY 3/9
DAYLIGHT BLUE and NATURAL COLOUR GLASS for Signs and Decorations (Vacuum) 25 watt. 100/130 and 200/260 volts	GREEN, BLUE or AMBER 2/3	RUBY 2/6



REGD. TRADE MARK

ELECTRIC LAMPS

O.S. SECTION

14th Edition

1st September, 1938.

OSRAM on an electric lamp is more than a trade mark. It signifies the product of the best methods of electric lamp manufacture, is the Hall Mark of quality and the guarantee of a unique lamp service.

OSRAM, in a word, is the epitome of long experience—of widespread investigations and tests carried out at the G.E.C. Research Laboratories at Wembley—of the most up-to-date processes and discoveries which, in combination, have produced the OSRAM Electric Lamp.

MADE IN ENGLAND.

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 to Great Britain and Northern Ireland.

Manufacturers, Wholesale only

THE GENERAL ELECTRIC CO., LTD.

MAGNET HOUSE, KINGSWAY, LONDON, W.C.2.

Telephone: TEMple Bar 8000 (90 lines).

Telegrams: "Electricity, Westcent, London."

Cablegrams: "Polyphase, London."

Branches throughout Great Britain and all the principal markets of the World.



OSRAM—G.E.C. LAMP WORKS, HAMMERSMITH, LONDON.



OSRAM—G.E.C. LAMP WORKS, WEMBLEY.



ELECTRIC LAMPS

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ELECTRIC LAMPS

FOREWORD

The central idea which governs the manufacture of Osram lamps is the maintenance of the highest standard of quality and the closest degree of uniformity of performance which can be attained, and considerations of cost are not allowed to interfere with the achievement of this main object.

The standards by which the quality of Osram lamps is gauged are the British Standard Specifications 161 (1937) and 555 (1935). Samples from every batch of lamps made are tested not only for correct rating but for actual life performance, with the definite aim of ensuring that the quality of every batch shall be at least equal to the requirements of the specifications. Thus very large quantities of lamps are yearly tested to destruction as part of the rigid system of control which ensures the maintenance of these standards.

In addition, exacting tests are applied step by step throughout the manufacture, not only of the lamps themselves, but of their component parts, a procedure which is possible only when, as with Osram lamps, the manufacturers are themselves the producers of every one of the materials and parts they use.

The factories of The General Electric Company Limited are equipped not only for the production of Osram Lamps, but for every constituent part required for these Lamps. Brass caps are made at Chesterfield; glass bulbs, tube and rod are manufactured by automatic bulb blowing and tube and rod drawing machines, which ensure uniformity of product, at the Lemington-on-Tyne and Wembley Glass Works of the Company. Tungsten filaments and argon gas used in the manufacture of Osram lamps, are produced at the Osram Works, where also leading-in conductors and filament supports are manufactured. It is due to the fact that The General Electric Co., Ltd. controls within its own factories the manufacture of every requisite item from the tungsten filament to the finished lamp, that it is enabled to maintain at all times the high and uniform quality of the Osram lamp.

Recognising the value of research, The General Electric Co., Ltd. has erected large and fully equipped Research Laboratories at Wembley, Middlesex, and a substantial portion of these laboratories is devoted specially to research in connection with electric lamps.

In a "Lamp Development" section of these laboratories every new idea in lamp making is scientifically investigated. These laboratories ensure, from the manufacturers' point of view, that new developments in electric lighting will not go unperceived, and, from the users' point of view, that continual progress is being made in efficiency and reliability.



ELECTRIC LAMPS

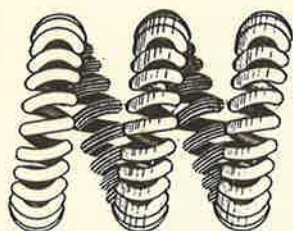


Fig. 1.

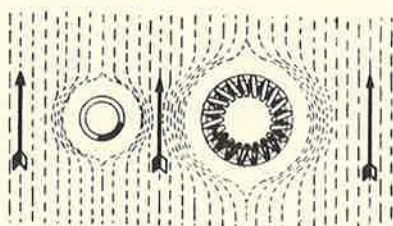


Fig. 2.

OSRAM COILED COIL LAMPS

*Made under British Patents: 226,455, and other
British Patents granted, and pending.*

The application of electricity to the problems of everyday life is the subject of constant research, and in the field of lighting this research has brought two great benefits—a steady reduction in the cost of electric lamps, and a definite increase in their efficiency.

“More Light for Less Current” is the ideal, and Coiled Coil lamps represent remarkable progress in this direction.

The principle of the incandescent filament is retained, but in these lamps the filament, after being coiled, is coiled again upon itself, as shown in the illustration (Fig. 1). Thus the total filament surface exposed to the inert gas surrounding it is reduced, and less current is needed to maintain its brilliance. The Coiled Coil lamps, by this method of construction, give up to 20 per cent. more light for the same current consumption, with normal length of life.

The diagram (Fig. 2) shows to scale the relative diameters of the ordinary coiled filament and of the “Coiled Coil” filament and the surrounding gas layers. The diameter being larger in the second case, it might at first be supposed that losses would be greater, but the sectional diagrams do not show the reduction of effective filament length, which much more than compensates for the increased diameter.

The high standard of quality which characterises all G.E.C. products is applied rigorously in the manufacture of Osram Coiled Coil lamps, and the claims made for them are unconditionally guaranteed by The General Electric Company, Ltd.

Osram lamps which incorporate the “Coiled Coil” filament are 40, 60, 75 and 100 watts with Pearl, Clear or Opal bulbs in the 100/130 and 200/260 volt range.

GENERAL LIGHTING SERVICE
CANDLE
TURN DOWN
STRIP LITE AND TUBULAR LAMPS
ARCHITECTURAL
SIGN AND DECORATIVE TYPES
G.E.C. LAMPS
TRACTION
OSGLIM AND ROBERTSON
PROJECTOR
CAR BULBS
FLASH LIGHT
MINERS AND DECORATIVE OUTFITS
ULTRA VIOLET
OSIRA



ELECTRIC LAMPS

SALES DEPOTS

ABERDEEN	Magnet House, 32, Market Street Telephone No. Central 2770/1
BELFAST	Magnet House, Queen Street Telephone No. Belfast 25656 (3 lines)
BIRMINGHAM	Magnet House, Moor Street Telephone No. Midland 4421/8 (8 lines)
BLACKBURN	Magnet House, 40/42, Darwen Street Telephone No. 4141/2 (2 lines)
BLACKPOOL	Magnet House, 24, Birley Street Telephone No. 3233 (2 lines)
BRIGHTON	Regent Hill, Western Road Telephone No. 3277/8
BRISTOL	Magnet House, 26, Victoria Street, 1 Telephone No. 24551 (3 lines)
CARDIFF	Magnet House, Castle Arcade and Womanby Street Telephone No. 2620
CORK	Magnet House, Grand Parade Telephone No. 823
CROYDON	516, London Road Telephone No. Thornton Heath 3246
DUBLIN	Magnet House, Trinity Street Telephone No. 21335/6/7/8
DUNDEE	26/30, North Lindsay Street Telephone No. 2168/9 (2 lines)
EDINBURGH	Magnet House, 8, George Street Telephone No. 23241/5
GLASGOW	Magnet House, 71, Waterloo Street, C.2 Telephone No. Central 9250
GLOUCESTER	Magnet House, 2, St. Aldate Street Telephone No. 3017
HULL	Magnet House, 164, 166, 168, George Street Telephone No. Central 34625/6
INVERNESS	14, Falcon Square Telephone No. 830
IPSWICH	Electric House, Lloyds Avenue Telephone No. 3771/2/3 (3 lines)
LEEDS	Magnet House, Wellington Street Telephone No. 20671 (3 lines)
LEICESTER	Magnet House, 33, Rutland Street Telephone No. 58111/2
LIVERPOOL	Magnet House, Church Alley Telephone No. Royal 5380 (6 lines)
MANCHESTER	Magnet House, Victoria Bridge Telephone No. Blackfriars 3434 (8 lines)
MIDDLESBROUGH	Magnet House, 52/58, Corporation Road Telephone No. 3621/2
NEWCASTLE-ON-TYNE	Magnet House, Gallowgate Telephone No. 25160/1/2/3/4
NOTTINGHAM	Magnet House, 25, Stoney Street Telephone No. 43547/8/9 and 43540
PLYMOUTH	Magnet House, 175, Union Street Telephone No. 60226 (3 lines)
READING	72/74, Castle Street Telephone No. 3237/8
SHEFFIELD	Magnet House, Fitzalan Square, 1 Telephone No. 25101/2/3
SOUTHAMPTON	Magnet House, Commercial Road. Telephone No. 5631/2/3
STOKE-ON-TRENT	Magnet House, South Wolfe Street Telephone No. 48575/6 (2 lines)
SWANSEA	Magnet House, Northampton Place Telephone No. 5026/7/8 (3 lines)

Head Office: Magnet House, Kingsway, London, W.C.2.

Telephone: TEMple Bar 8000 (90 lines). Telegrams: "Electricity, Westcent, London."
Cablegrams: "Polyphase, London."



ELECTRIC LAMPS STANDARD VOLTAGES

GROUP I.

Below are given the voltages which have been standardized for Group I. Lamps from 25 to 260 volts. The prices of Group I. Lamps shown in this catalogue apply only to the standard voltages in each range.

Prices of lamps for other voltages will be quoted on application.

OSRAM GASFILLED LAMPS.	
Voltage Range.	Standard Voltages.
25—30	25, 30
35—55	35, 40, 45, 50, 55
60—85	60, 65, 70, 75, 80, 85
100—130	100, 105, 110, 115, 120, 125, 130
200—260	200, 210, 220, 230, 240, 250, 260
OSRAM VACUUM LAMPS.	
Voltage Range.	Standard Voltages.
25—30	25, 30
60—85	60, 65, 70, 75, 80, 85
100—130	100, 105, 110, 115, 120, 125, 130
200—260	200, 210, 220, 230, 240, 250, 260
ROBERTSON CARBON FILAMENT LAMPS.	
Voltage Range.	Standard Voltages.
100—130	100, 105, 110, 115, 120, 125, 130
200—260	200, 210, 220, 230, 240, 250, 260



ELECTRIC LAMPS

STANDARD PACKAGES

The ordering of lamps in standard packages cannot be recommended too strongly as it expedites delivery and reduces transit breakages. All lamps are stocked ready packed in the quantities shown in the accompanying schedule, so that they can be despatched at a moment's notice.

FIBERITE STORAGE BINS.

For transit, in addition to the individual packing, the lamps are packed in strong fiberite boxes. These boxes are of a convenient size, shape and substance to be stacked one on top of the other and used as storage bins, thus effecting considerable saving both in time and space.

SCHEDULE OF STANDARD PACKING.

	Watts	Voltage range	Quantity in standard package
OSRAM LAMPS (Gasfilled)	15	25 to 55	100
	25	25 to 130	100
	40	25 to 260	100
	60	25 to 260	100
	75	100 to 260	50
	100	35 to 260	50
	150	35 to 260	50
	200	35 to 260	24
	300	35 to 260	12
	500	35 to 260	12
	750	100 to 260	12
	1000	100 to 260	12
	1500	100 to 260	12
OSRAM LAMPS (Vacuum)	15	100 to 260	100
	25	100 to 260	100
	40	100 to 260	100
OSRAM LAMPS (Automobile)	Type	Bulb diameter	Quantity in standard package
	Headlight	m/m	
	Sidelight	38	12
	Tail-light	23 and 19	12
	Indicator	15	25
	Festoon	11 and 8	12
G.E.C. Type "B"	Watts	Voltage Range	
	25		
	40	100/130	100
	60	200/260	100
	100		50



ELECTRIC LAMPS PACKING, DELIVERY & BREAKAGES IN TRANSIT

Quantity	District.	Packing.	Delivery.	Transit breakages.
Groups I., II., III., V., VI., VIII. and IX. Any quantity.	Inside G.E.C. free delivery areas.*	FREE	FREE	
Group I. Lamps to the list value of NOT less than £1 sent to one address Groups II., V., VI. and VIII. Lamps to the list value of NOT less than £1 sent to one address.	Outside G.E.C. free delivery area.	FREE	FREE	Replaced or credited at G.E.C. option.†
Group III. Standard boxes of 100 lamps.	Anywhere in the United Kingdom, by post.	FREE	FREE	
Group I. Lamps to the list value of LESS than £1. Groups II., V., VI. and VIII. Lamps to the list value of LESS than £1. Group III. LESS than 100 lamps	Outside G.E.C. free delivery areas.*	FREE	Charged at cost.	At purchasers' risk.

† Transit breakages must be returned Carriage Paid, within 7 days, and G.E.C. advice note number quoted.

The Company does not accept responsibility for the safe custody of, or undertake to return, lamps forwarded for examination.

* G.E.C. FREE DELIVERY AREAS

Within 20 miles of the G.P.O., London.

Within 10 miles of the G.P.O., in the following towns :—

Aberdeen
Accrington
Ashford (Kent)
Aylesbury
Barrow
Bedford
Belfast
Birkenhead
Birmingham
Blackburn
Blackpool
Bournemouth
Bradford
Brighton
(including Lewes)
Bristol
Burnley
Burnslem
Cambridge
Canterbury
Cardiff
Carlisle
Carmarthen
Cheltenham

Chester
Chesterfield
Colchester
Colwyn Bay
Cork
Coventry
Croydon
Darlington
Derby
Doncaster
Dorchester
Dublin
Dundee
Eastbourne
Edinburgh
Exeter
Glasgow
Gloucester
Grimsby
Guildford
Guiseley
Halifax
Hanley
Hastings

Huddersfield
Hull
Inverness
Ipswich
Kendall
Lancaster
Leeds
Leicester
Lincoln
Liverpool
Llandudno
Maidstone
Manchester
Middlesbrough
Newcastle-on-Tyne
Newport (Mon.)
Northampton
Norwich
Nottingham
Oxford
Peterborough
Plymouth
Portsmouth
Preston

Reading
Rhyl
Rotherham
Rugby
Salisbury
Sheffield
Southampton
Southend-on-Sea
Southport
South Shields
Stockton-on-Tees
Stoke-on-Trent
Sunderland
Swansea
Taunton
Tonbridge
Tunbridge Wells
Wakefield
Walsall
Wolverhampton
Worthing



ELECTRIC LAMPS

STANDARD LAMP CAPS

The illustrations below show the standard types of lamp caps fitted to OSRAM lamps together with the names by which they are known. The letters in brackets are the abbreviations used for these names throughout this catalogue.



Bayonet (B.C.)



Goliath Edison Screw (G.E.S.)



Edison Screw (E.S.)



Small Bayonet (S.B.C.)



Small Edison Screw (S.E.S.)



Prefocus



Miniature Edison Screw (M.E.S.)

Scale :—Half size.

LIST OF EXTRA CHARGES ON LIST PRICES FOR VARIATIONS FROM STANDARD PRACTICE

GROUP I.

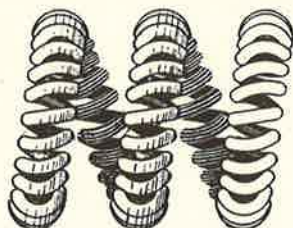
Variation from standard	Group I.		
	OSRAM		ROBERTSON.
	Vacuum.	Gasfilled.	Carbon.
VARNISHING	10%	10%	—
SILVERING	Price quoted	on application	—
*CAPS: For S.B.C., S.E.S., S.C.C., in place of B.C., E.S., C.C. (See also exceptions for Sign Lamps on pages 27, 28 and 29)	2d. each.	2d. each.	2d. each.
For G.E.S. in place of B.C. or E.S. Caps or vice versa	—	1/- each.	—

* S.B.C., S.E.S. and S.C.C. Caps cannot be supplied for higher wattages than 40 watts.



ELECTRIC LAMPS
FOR GENERAL LIGHTING SERVICE
GROUP I.

COILED COIL LAMPS



A portion of an OSRAM Coiled Coil filament highly magnified.

Osram Coiled Coil lamps give more light for the same current consumed than ordinary single coil gasfilled lamps.

Osram Coiled Coil lamps are guaranteed to comply in every detail with the British Standard Specifications No. 161-1937 for Coiled Coil lamps.

The approximate extra light given by Osram Coiled Coil lamps over single coil lamps is up to 20% for 40 watt lamps, up to 15% for 60 watt lamps, up to 12½% for 75 watt lamps, and up to 10% for 100 watt lamps.

EXAMPLE.

**LIGHT OUTPUT OF OSRAM 230 Volt COILED COIL AND
230 Volt SINGLE COIL LAMPS.**

Type of Lamp.	Wattage and approx. Light Output in Lumens.			
	40 watts.	60 watts.	75 watts.	100 watts.
OSRAM Coiled Coil Lamps ...	415	700	930	1340
„ Single Coil Lamps ...	345	610	820	1210
Extra light given by OSRAM COILED COIL LAMPS	70	90	110	130

For description of the Coiled Coil filament see page 5.

OSRAM COILED COIL LAMPS
100—130 and 200—280 Volts.

TYPE	WATTAGES & PRICE PER LAMP			
	40 watts	60 watts	75 watts	100 watts
PEARL	1/7	1/7	1/10	2/0
CLEAR	1/9	1/9	2/0	2/3
OPAL	1/10	1/10	2/2	2/4

For dimensions see page 13.



ELECTRIC LAMPS **FOR GENERAL LIGHTING SERVICE** **GROUP I.**

PEARL OSRAM LAMPS

The Pearl, or inside frosted bulbs, are recognised as standard for 15 to 100 watts General Lighting Service Lamps by the British Standards Institution in B.S.S. 161—1937, with which specification PEARL OSRAM Lamps comply in every detail.



25 watts



100 watts

STANDARD VOLTAGES AND PRICE PER LAMP									
Standard Watts	Standard Cap	100, 105, 110, 115, 120, 125, 130, 200, 210, 220, 230, 240, 250 and 260 Volts		25 and 30 Volts		35, 40, 45, 50 and 55 Volts		60, 65, 70, 75, 80 and 85 Volts	
		s.	d.	s.	d.	s.	d.	s.	d.
15	B.C.	1	6	2	1	2	1	2	1
25		1	6	2	1	2	1	2	1
*40		1	7	2	6	2	6	2	6
*60		1	7	3	0	3	0	3	0
*75		1	10	—	—	—	—	—	—
*100		2	0	—	—	4	6	4	6
150		3	6	—	—	—	—	—	—

NOTE: In the above table the 15 watts size for 60 to 260 volts and the 25 watts size for 200 to 260 volts are vacuum type.

* These lamps (100/130 & 200/260 volt) are made with the "Coiled Coil" filament (see pages 5 and 11).

For Extras see page 10. For Dimensions and Light Output see pages 13 and 15.

For PEARL OSRAM Traction Lamps see pages 32-33.

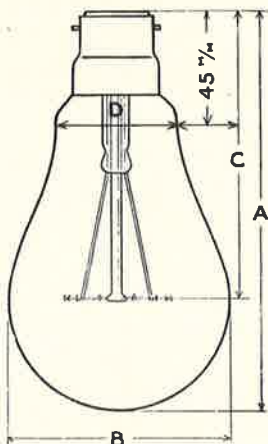


ELECTRIC LAMPS FOR GENERAL LIGHTING SERVICE

GROUP I.

PEARL AND CLEAR OSRAM LAMPS

15 to 100 watts.



Dimensional Diagram 15-100 watts.

DIMENSIONS AND LIGHT OUTPUT										
Standard watts	Voltage range	Approx. lumens	Length		Bulb diameter		Cap contact to filament centre		Neck diameter	
			A		B		C		D	
			Tolerance $\pm 3 \frac{1}{2}$ m/m		Tolerance ± 1 m/m		Tolerance ± 3 m/m		Tolerance ± 1 m/m	
			m/m	ins.	m/m	ins.	m/m	ins.	m/m	ins.
15	25 and 30	155	92.5	$3 \frac{5}{8}$	55	$2 \frac{1}{8}$	65	$2 \frac{1}{2}$	30	$1 \frac{1}{8}$
	35-55	145								
	60-130	†140								
	200-260	†118								
25	25 and 30	290	100	$3 \frac{1}{8}$	60	$2 \frac{1}{8}$	70	$2 \frac{1}{4}$	33	$1 \frac{1}{8}$
	35-55	275								
	60-85	260								
	100-130	240								
40	25 and 30	540	110	$4 \frac{1}{8}$	60	$2 \frac{3}{8}$	80	$3 \frac{1}{8}$	33	$1 \frac{1}{8}$
	35-55	515								
	60-85	470								
	100-130	470								
60	25 and 30	870	117.5	$4 \frac{3}{8}$	65	$2 \frac{1}{2}$	85	$3 \frac{1}{8}$	35	$1 \frac{1}{8}$
	35-55	835								
	60-85	790								
	100-130	790								
75	25 and 30	*870	125	$4 \frac{3}{8}$	70	$2 \frac{3}{8}$	90	$3 \frac{1}{2}$	39	$1 \frac{1}{2}$
	35-55	*910								
	60-85	1480								
	100-130	1400								
100	25 and 30	1500	137.5	$5 \frac{1}{8}$	75	$2 \frac{3}{8}$	100	$3 \frac{3}{8}$	39	$1 \frac{1}{2}$
	35-55	*1320								
	60-85	1480								
	100-130	1500								

* These light output figures are for coiled coil filament lamps. The remainder are for single coil lamps.

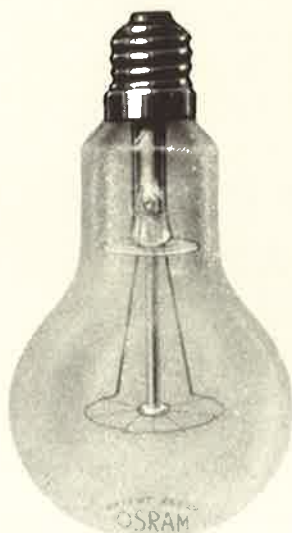
† These lamps are Vacuum, remainder Gasfilled.



ELECTRIC LAMPS

FOR GENERAL LIGHTING SERVICE

GROUP I.



200 watts
OSRAM Gasfilled Lamp.
E.S. Cap.

CLEAR GASFILLED LAMPS

Standard watts	Standard cap	STANDARD VOLTAGES AND PRICE PER LAMP								
		100, 105, 110, 115, 120, 125, 130, 200, 210, 220, 230, 240, 250 and 260 Volts			25 and 30 Volts	35, 40, 45, 50 and 55 Volts		60, 65, 70, 75, 80 and 85 Volts		
		£	s.	d.		s.	d.	s.	d.	
*+40	B.C.		1	9	2	9	2	9	2	9
*+60	B.C.		1	9	3	3	3	3	3	3
*+75	B.C.		2	0	—	—	—	—	—	—
*+100	B.C.		2	3	—	—	5	0	5	0
150	B.C.		3	6	—	—	7	9	9	0
200	E.S.		5	6	—	—	9	6	10	6
300	G.E.S.		9	0	—	—	12	3	13	3
500	G.E.S.		11	6	—	—	15	6	16	6
750	G.E.S.		15	0	—	—	—	—	—	—
1000	G.E.S.		16	0	—	—	—	—	—	—
1500	G.E.S.	1	2	6	—	—	—	—	—	—

For EXTRAS see page 10.

* These lamps (100/130 volts and 200/260 volts) are made with the coiled-coil filament (see pages 5 and 11).

† The dimensions and light output figures of the 40, 60, 75 and 100-watt sizes are the same as those shown on page 13 for PEARL OSRAM Lamps which are the recognised standards for these wattages, and should be used in preference to clear lamps for General Lighting Service. For dimensions of the other sizes see page 15.



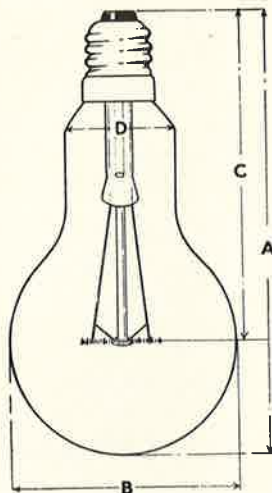
ELECTRIC LAMPS

FOR GENERAL LIGHTING SERVICE

GROUP I.

CLEAR GASFILLED LAMPS

150 to 1500 watts.



Dimensional Diagram
150-1500 watts.

DIMENSIONS AND LIGHT OUTPUT

Standard watts	Voltage range	Approx. lumens	Length		Bulb diameter		Cap contact to filament centre		Neck diameter	
			A		B		C		D	
			m/m	ins.	m/m	ins.	m/m	ins.	m/m	ins.
150	35-55 60-85 100-130 200-260	2370 2240 2130 2030	160±4.5	6½	80±1	3½	120±4	4½	39±1	1½
200	35-55 60-85 100-130 200-260	3340 3250 2960 2900	178±5.5	7	90±1	3½	133±5	5½	45±1	1¾
300	35-55 60-85 100-130 200-260	5300 5220 4770 4720	233±7	9½	110±1.5	4½	178±6	7	50±1	1⅞
500	35-55 60-85 100-130 200-260	9550 9200 8700 8470	267±8	10½	130±1.5	5½	202±7	7⅞	52±1	2
750	35-55 60-85 100-130 200-260	— — — 13610	300±9	11¾	150±1.5	5¾	225±8	8¾	55±1	2⅞
1000	100-130 200-260	19300 19100	300±9	11¾	150±1.5	5¾	225±8	8¾	55±1	2⅞
1500	100-130 200-260	30300 30300	335±9	13¼	170±1.5	6⅞	250±8	9⅞	60±1	2⅞



ELECTRIC LAMPS

FOR GENERAL LIGHTING SERVICE

GROUP I.



60 watts
OSRAM Opal Lamp.

OPAL LAMPS (GASFILLED)

Standard watts	Standard cap	VOLTAGE RANGES AND PRICE PER LAMP.	
		100 to 130 Volts and 200 to 260 Volts	
		s.	d.
†25	B.C.	1	9†
*40	B.C.	1	10
*60	B.C.	1	10
*75	B.C.	2	2
*100	B.C.	2	4
150	B.C.	4	0
200	E.S.	6	6
300	G.E.S.	10	3
500	G.E.S.	13	0

Standard watts	Dimensions			
	Length		Diameter	
	m/m	ins.	m/m	ins.
25	100 ±3.5	3 ¹⁵ / ₁₆	55	2 ³ / ₁₆
40	110 ±3.5	4 ⁵ / ₁₆	60	2 ³ / ₈
60	117.5 ±3.5	4 ¹ / ₂	65	2 ¹ / ₂
75	125 ±3.5	4 ⁷ / ₈	70	2 ³ / ₄
100	137.5 ±3.5	5 ¹ / ₈	75	2 ¹⁵ / ₁₆
150	178 ±5	6 ¹ / ₂	90	3 ¹ / ₂
200	200 ±5	7 ¹ / ₂	110	4 ¹ / ₁₆
300	267 ±8	10 ¹ / ₂	130	5 ¹ / ₈
500	300 ±9	11 ¹ / ₂	150	5 ⁷ / ₈

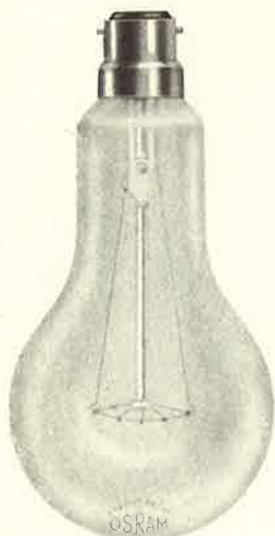
† 100 to 130 volts only.

* These lamps are made with the coiled-coil filament (see pages 5 and 11).



ELECTRIC LAMPS FOR GENERAL LIGHTING SERVICE

GROUP I.



150 watts
OSRAM Daylight Lamp.

DAYLIGHT LAMPS (GASFILLED)

OSRAM Daylight lamps have special blue glass bulbs which produce a light corresponding closely to a north sky light, making them very useful for lighting purposes where colour discrimination is important.

When substituting Daylight lamps for Standard lamps, it generally will be found necessary to use lamps of a higher wattage to compensate for the light absorbed by the blue glass.

Standard watts	Standard cap	VOLTAGE RANGES AND PRICE PER LAMP	
		100 to 130 Volts and 200 to 260 Volts	
60	B.C.	s. 2	d. 3
100	B.C.	3	3
150	B.C.	4	9
300	G.E.S.	11	6

For EXTRAS see page 10.

The dimensions of these lamps are the same as those of the corresponding clear lamps given on pages 13 and 15.



ELECTRIC LAMPS

FOR GENERAL LIGHTING SERVICE

GROUP I.



25 watts
OSRAM Vacuum Lamp.

CLEAR VACUUM LAMPS

While for certain types of fittings and lighting service clear lamps can be used for all General Lighting purposes the PEARL OSRAM Lamps shown on pages 11 and 12 are recommended in preference.

Standard watts	Type of filament	Standard cap	VOLTAGE RANGES AND PRICE PER LAMP			
			100 to 130 Volts		200 to 260 Volts	
15 25 40	Coil Coil Coil	} B.C. {	s.	d.	s.	d.
			1	8	1	8
			1	11	1	11

CAPS: Edison screw caps are fitted if required without extra charge.
For Extras see page 10.

DIMENSIONS AND LIGHT OUTPUT.

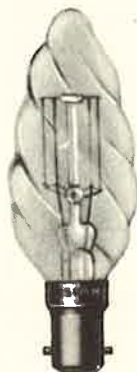
Standard watts	Voltage ranges	Approx. lumens	Length		Bulb diameter		Cap contact to filament centre	
			Tolerance $\pm 3\frac{1}{2}$ m/m		Tolerance ± 1 m/m		Tolerance ± 3 m/m	
15	100-130 200-260	140 118	m/m	ins.	m/m	ins.	m/m	ins.
			92.5	$3\frac{1}{2}$	55	$2\frac{1}{4}$	65	$2\frac{1}{2}$
25	200-260	215	100	$3\frac{1}{2}$	60	$2\frac{1}{4}$	70	$2\frac{1}{2}$



ELECTRIC LAMPS **FOR SPECIAL LIGHTING SERVICE** **GROUP I.**



40 watts
OSRAM
 Candle Lamp.
 Plain
 (Gasfilled)



25 watts
OSRAM
 Candle Lamp.
 Twisted
 (Vacuum)

CANDLE LAMPS **PLAIN AND TWISTED**

These candle lamps are supplied with either clear or coloured bulbs.

The 25 watts lamps are vacuum type and the 40 watts gasfilled.

The flame coloured lamps give a warm, mellow light, and are a very pleasing variation from the clear lamps.

Standard watts	Length		Diameter		Shape	Finish	VOLTAGE RANGES AND PRICE PER LAMP			
							100—130 & 200—260 Volts		50 Volts	
	m/m	ins.	m/m	ins.			s.	d.	s.	d.
25	105	4 1/8	35	1 3/8	Plain } Twisted }	Clear	3	0	3	6
	±5	—	±2	—		*Coloured	3	4	3	11
25	105	4 1/8	35	1 3/8	Plain } Twisted }	Clear	3	6	—	—
	±5	—	±2	—		*Coloured	3	11	—	—
40	130	5 1/8	45	1 3/4	Plain } Twisted }	Clear	3	6	—	—
	±5	—	±2	—		*Coloured	3	11	—	—
40	144	5 3/8	55	2 3/16	Plain } Twisted }	Clear	4	0	—	—
	±5	—	±2	—		*Coloured	4	5	—	—

STANDARD CAP: S.B.C. When specially ordered Std. B.C. or S.E.S. caps can be fitted without extra charge.

SERIES BURNING.—When lamps are required for burning in series, this fact should be stated.

*** STANDARD COLOURS SPRAYED :—**Red, pink, orange, yellow, green, blue, flame tint, and white.

CANDLE
 TURN DOWN
 STRIPLITE AND TUBULAR LAMPS
 ARCHITECTURAL
 SIGN AND DECORATIVE TYPES
 G.E.C. LAMPS
 TRACTION
 OSGILM AND ROBERTSON
 PROJECTOR
 CAR BULBS
 FLASH LIGHT
 MINERS AND DECORATIVE
 ULTRA VIOLET
 OSIRIS



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.



OSRAM "Gothic"
Candle Lamp.



OSRAM "Huntalite"
Candle Lamp.

GOTHIC CANDLE LAMPS

The OSRAM Gothic Candle Lamp is a complete novelty in lamp design and an artistic alternative to the ordinary candle lamp. Its geometrical shape makes it particularly appropriate for certain period and modernist types of fittings.

Standard watts	Finish	Length		Diameter		VOLTAGE RANGES AND PRICE PER LAMP	
		Tolerance ± 3 m/m		Tolerance ± 2 m/m		100—130 and 200—260 Volts	
25	Ivory or Flame tint	m/m 108	ins. 4 $\frac{1}{2}$	m/m 53	ins. 2 $\frac{1}{4}$	s. 4	d. 6

STANDARD CAP: B.C.

"HUNTALITE" CANDLE LAMPS

Standard Watts	Length (Tolerance ± 10 m/m)				Diameter Tolerance ± 2 m/m		Voltage Ranges and Price per lamp			
	100 to 130 volts		200 to 260 volts		100 to 130 and 200 to 260 volts		50 volts		100-130 & 200-260 volts	
20	m/m 209	ins. 8 $\frac{1}{4}$	m/m 222	ins. 8 $\frac{3}{4}$	m/m 32	ins. 1 $\frac{1}{4}$	s. 6	d. 6	s. 6	d. 0
40	268	10 $\frac{1}{4}$	268	10 $\frac{1}{4}$	45	1 $\frac{1}{2}$	—	—	6	0

Unless otherwise specified, these lamps will be supplied with small bayonet caps and rated for parallel burning.



ELECTRIC LAMPS FOR SPECIAL LIGHTING SERVICE

GROUP I



OSRAM OPAL
Turn-down Lamp.

OSRAM TURN-DOWN LAMPS (VACUUM)

OSRAM Turn-Down Lamps are made to meet the many cases where it is an advantage to be able to regulate the light in a room—such as in bedrooms, sick rooms, night nurseries, etc.

They have two filaments, the brighter of which consumes 25 watts, and by simply pulling one or other of the switch cords the light can be increased or decreased as desired.

The bulbs are made of opal glass, which diffuses the light and produces a restful light absolutely free from glare.

Maximum Watts	Cap	Finish	Approx. Dimensions				VOLTAGE RANGES & PRICE PER LAMP	
			Length		Diameter		100-130 & 200-260 volts	
			m/m	ins.	m/m	ins.	s.	d.
25	B.C.	Opal	105	4 $\frac{1}{8}$	60	2 $\frac{3}{8}$	4	3

TURN
DOWN
STRIPLITE
AND
TUBULAR
LAMPS
ARCHITECTURAL
SIGN
AND
DECORATIVE
TYPES
G.E.C.
LAMPS
TRACTION
OSGLIM
AND
Robertson
Projector
CAR
BULBS
FLASH
LIGHT
MINERS
AND
DECORATIVE
OUTLETS
ULTRA
VIOLET
OSIRA



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE.

GROUP I.



PEARL OSRAM (Gasfilled).
Photo-Flood Lamp.

PEARL OSRAM PHOTO-FLOOD LAMPS (GASFILLED)

SERIES "S" and "N.N."

The filaments of these lamps run at an extremely high temperature, which results in the production of a light especially suitable for indoor photography. The series "S" lamp will enable approximately 2,000 feet of ciné film to be exposed, or about 300 ordinary photographs to be taken; this represents a life of 2 hours, compared with 6 hours for the "NN" type lamp.

The smaller lamp is fitted with a standard bayonet cap and is no larger than the 60-watt Pearl OSRAM lamp, so that it can be used in any ordinary electric light fitting. A safety fuse is incorporated in the caps for protection in the case of accidental breakage.

Standard Voltages	Nom-inal watts	Series	Standard cap	Dimensions				PRICE PER LAMP	
				Length		Diameter			
				Tolerance ± 3.5 m/m		Tolerance ± 1 m/m		s.	d.
100-125	} 275	" S "	B.C.	m/m	ins.	m/m	ins.		
200-210				117.5	4 $\frac{5}{8}$	65	2 $\frac{1}{2}$	2	6
220-230	} 500	" NN "	E.S.	160 ± 4.5		80		6	0
240-250						3			

OSRAM PHOTOGRAPHIC LAMPS

(GASFILLED)

SERIES "B"

These are internally frosted, high efficiency lamps made on similar lines to the Photo-Flood Lamps described above. To meet the exacting requirements of professional photographers, for which they are especially suitable, they give a powerful light and last for approximately 100 hours. For best results these lamps should be used in conjunction with a reflector.

Voltage ranges	Standard watts	Standard cap	Dimensions				PRICE PER LAMP	
			Length		Diameter			
			Tolerance ± 3.5 m/m		Tolerance ± 1.5 m/m		£	s. d.
100-130 and 200-260 volts	500	E.S.	m/m	ins.	m/m	ins.	1	0 0
			172	6 $\frac{7}{8}$	100	3 $\frac{11}{16}$		

Particulars of special reflectors for use with these lamps will be sent on application



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.

STRIPLITE LAMPS



OSRAM Striplite Lamps have spiralized tungsten filaments burning in a vacuum. The tubes are lighted uniformly throughout their length.

Standard watts	Length		Diameter		VOLTAGE RANGES and PRICE PER LAMP 100-130, 200-260 volts			
	Tolerance ± 1 m/m		Tolerance ± 1 m/m		Clear		Colour sprayed	
	m/m	ins.	m/m	ins.	s.	d.	s.	d.
30	221 284	8 $\frac{1}{8}$ 11 $\frac{1}{8}$	25 25	1 1	4	0	4	9
60	284	11 $\frac{1}{8}$	25	1	4	9	5	9
100	308	12 $\frac{1}{8}$	46	1 $\frac{1}{8}$	6	9	7	6

STANDARD CAPS: Centre Contact. The 60 and 100-watt sizes can be supplied if required with clip contact caps at 3d. per lamp extra.

STANDARD COLOURS: Red, Orange, Yellow, Green, Blue, Flame, Pink, White.

For prices and particulars of special trough reflectors, for use with OSRAM "Striplite" lamps, see G.E.C. Catalogue, Fittings Accessories Section F (2).

TUBULAR LAMPS



OSRAM Clear Tubular Lamp.
(Approximately $\frac{1}{3}$ full size)

OPAL TUBULAR LAMPS are useful for positions where it is not practicable to employ a double capped lamp.

STANDARD COLOURS SPRAYED ON OPAL:—Blue, Green, Yellow, Amber, Orange, Flame and Pink.



OSRAM Opal Tubular Lamp.
(Approximately $\frac{1}{3}$ full size)

Standard Watts.	Standard Cap.	Length ± 3 m/m		Diameter ± 1 m/m		Voltage Range and Price per Lamp		
						100-130 volts and 200-260 volts		
						Clear	White Opal	Coloured
25	*S.B.C.	m/m 92	in. 3 $\frac{1}{2}$	m/m 25	in. 1	s. 3 d. 0	s. — d. —	s. — d. —
40 60	†B.C.	302	11 $\frac{1}{8}$	38	1 $\frac{1}{2}$	—	5 0	5 6

* B.C. or S.E.S. at same price if specially ordered.

† E.S. at same price if specially ordered.

STRIPLITE AND TUBULAR LAMPS
ARCHITECTURAL TYPES
SIGN AND DECORATIVE TYPES
G.E.C. LAMPS
TRACTION
OSGLIM AND ROBERTSON
PROJECTOR
CAR BULBS
FLASH LIGHT
MINERS AND DECORATIVE
ULTRA VIOLET
OSIRA



ELECTRIC LAMPS FOR SPECIAL LIGHTING SERVICE

GROUP I.

ARCHITECTURAL LAMPS

100-130 and 200-260 volts.



STANDARD STRAIGHT LENGTHS AND PRICE PER LAMP

Length		Diameter 30 m/m (1 $\frac{1}{8}$ ins.)				Diameter 40 m/m (1 $\frac{1}{2}$ ins.)			
m/m	Ins.	Watts	Opal	Coloured Opal	Colour Sprayed	Watts	Opal	Coloured Opal	† Colour Sprayed
305	12	35	£ s. d. 10 6	£ s. d. 12 0	£ s. d. 11 6	60	£ s. d. 14 9	£ s. d. 16 3	£ s. d. 16 0
500	19 $\frac{1}{8}$	60	14 6	16 9	15 6	100	1 0 3	1 2 3	1 1 9
610	24	75	16 0	18 6	17 0	120	1 2 6	1 4 9	1 3 9
*915	36	110	1 1 0	1 4 6	1 3 0	180	1 9 6	1 13 6	1 12 6
*1220	48	150	1 5 6	1 9 3	1 7 6	240	1 15 9	1 19 3	1 18 6

* 200-260 volts only.

† Standard colours: Same as for Striplite Lamps on page 23.

STANDARD CURVES AND PRICE PER LAMP

	Diameter 30 m/m (1 $\frac{1}{8}$ ins.)				Diameter 40 m/m (1 $\frac{1}{2}$ ins.)			
	Watts	Opal	Coloured Opal	Colour Sprayed	Watts	Opal	Coloured Opal	Colour Sprayed
Radius 25" $\frac{1}{4}$ circle	60	£ s. d.	£ s. d.	£ s. d.	100	£ s. d.	£ s. d.	£ s. d.
Radius 12 $\frac{1}{2}$ " $\frac{1}{2}$ circle		1 0 0	1 3 0	1 2 0		1 8 0	1 10 9	1 10 9
Radius 6 $\frac{1}{4}$ " $\frac{3}{4}$ circle								
Right angle bend		1 3 6	1 7 0	1 5 6		1 13 0	1 16 3	1 15 9

For Standard Curves the overall length measured along the centre line of the lamp is 500 m/m (19 $\frac{1}{8}$ in.).
COLOURED OPAL STANDARD COLOURS: Red, Pink, Orange, Yellow, Green, White and Flame.

STANDARD CAPS, round peg type. Flat-sided caps, will also be supplied without extra charge.

PRICES FOR OTHER LENGTHS AND CURVES ON APPLICATION.

Maximum length 48 inches.

Lamps exceeding 24 inches in length are only available in 200-260 volts.

ALPHABETICAL LAMPS FOR WORD AND SIGN BUILDING

The introduction of two standard size range of letters (12in. and 20in.) greatly facilitates the creation of attractive signs in white or coloured tubing at reasonable cost. Simplicity of wiring and installation, as well as ease of maintenance, are features which weigh heavily in favour of this type of lighting.

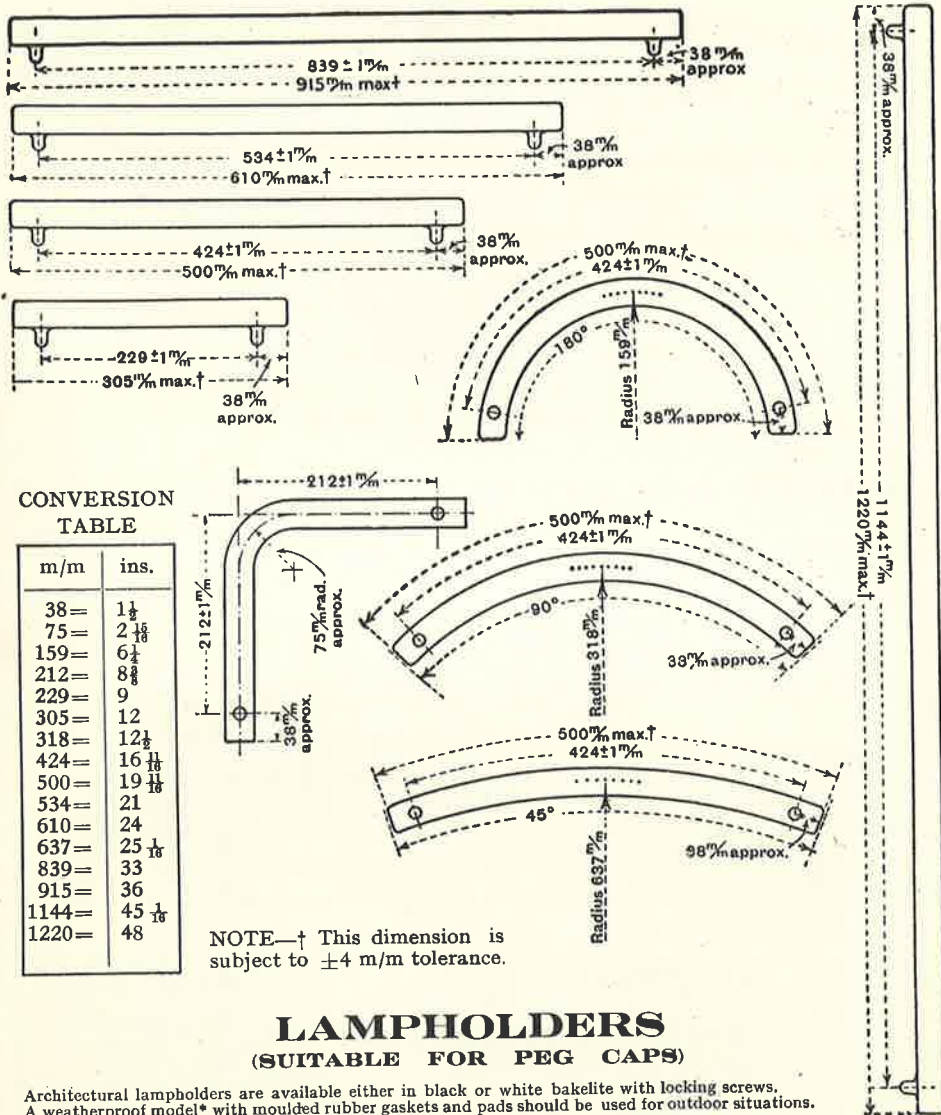
Prices of the component parts of each letter are given in a separate OSRAM Catalogue No. OS 7943.

When ordering replacement parts it is essential to quote the catalogue number of the lamps. Standard metal letters for signs are described in this catalogue.



ARCHITECTURAL LAMPS

DIMENSIONS OF STANDARD TUBES WITH PEG TYPE CAPS



LAMP HOLDERS

(SUITABLE FOR PEG CAPS)

Architectural lamp holders are available either in black or white bakelite with locking screws. A weatherproof model* with moulded rubber gaskets and pads should be used for outdoor situations.

*When mounting these holders on conduit boxes it is essential to use C4511 bakelite discs.

Catalogue No.	Finish	Price per pair	
S 1347	Black Bakelite with Locking Screws	s. 2	d. 8
S 1347	White	4	8
S 1347a	Black Bakelite with weatherproof Gaskets and Pads	4	8
A 40	Black Bakelite Circular Pattern	3	0

Bakelite Discs. Catalogue No. C4511
Drilled at 2-inch centres for use with Malleable Iron B.S. Conduit Boxes, 7/4 per dozen.

ARCHITECTURAL
SIGN AND DECORATIVE
G.E.C. LAMPS
TRACTION
OSGLIM AND ROBERTSON
PROJECTOR
CAR BULBS
FLASH LIGHT
MINERS AND OUTDOOR
ULTRA VIOLET
OSIRA



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE
GROUP I.



100 watts WHITE OSRAM
Gasfilled Lamp.

WHITE & COLOUR SPRAYED LAMPS (GASFILLED)

OSRAM Colour Sprayed Lamps are standard lamps, the bulbs of which have been coated with a layer of unglazed china, which produces a very highly diffused light.

Standard colours :—

- 1.—White. 2.—Red. 3.—Pink. 4.—Orange. 5.—Yellow. 6.—Green.
7.—Blue. 8.—Flame Tint.

They will be found an ideal means of obtaining coloured light in the Home, Theatre, Cinema, Ballroom, Hotel, Restaurant, Shop Window, etc.

Standard watts	Standard cap	VOLTAGE RANGES and PRICE PER LAMP	
		100-130 and 200-260 Volts	
		s.	d.
40	B.C.	1	10
60	B.C.	1	10
100	B.C.	2	4
150	B.C.	4	0
200	E.S.	6	6
†300	G.E.S.	10	3
†500	G.E.S.	13	0
†750	G.E.S.	17	9

The 100-watt to 750-watt sizes can also be supplied bowl sprayed white if required at the same prices as above.

† These wattages are supplied in white only.

The dimensions of these lamps are the same as those of the corresponding wattages shown on pages 13 and 15.



ELECTRIC LAMPS
FOR SPECIAL LIGHTING SERVICE
GROUP I.

NATURAL COLOUR GLASS LAMPS
(GASFILLED)
FOR THEATRE BATTENS AND CONCEALED COLOUR LIGHTING
IN CINEMAS, ETC.

Standard watts	Standard cap	COLOUR, VOLTAGE RANGES and PRICE PER LAMP			
		100-130 and 200-260 Volts			
		Green, Blue or Amber		Ruby	
40	B.C.	s. 2	d. 4	s. 2	d. 7
60	"	2	4	2	7
100	"	3	6	4	0

CAUTION :—These bulbs, being gasfilled, should not be used out-of-doors unless protected from the weather.

The dimensions of these lamps are the same as those of the corresponding Pearl lamps shown on page 13.

DAYLIGHT BLUE AND NATURAL COLOUR
GLASS FOR SIGNS AND DECORATIONS
(VACUUM)

Standard watts	Standard cap	COLOUR, VOLTAGE RANGES & PRICE PER LAMP					
		100-130 volts and 200-260 volts					
		Daylight Blue		Green, Blue, or Amber		Ruby	
15	} B.C. or E.S. {	s. 2	d. 2	s. 2	d. 3	s. 2	d. 6
25		—	—	2	4	2	7

DIMENSIONS.

Standard watts	Length		Diameter	
	m/m	ins.	m/m	ins.
15	90±3.5	3½	44±2	1¾
25	100±3.5	3⅞	60±1	2¾

NON-STANDARD CAPS.—If specially ordered, 15 watt sign lamps can be fitted with S.B.C., S.E.S., or S.C.C. caps at 1d. per lamp extra.



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE
GROUP I.



15 watt OSRAM Sign Type Lamp.
(Inside Colour Sprayed.)



40 watt OSRAM Inside Colour
Sprayed Lamp.

INSIDE COLOUR SPRAYED (VACUUM)

(Pat. No. 302170)

The colouring of these lamps is sprayed on the inside of the bulb and is as permanent as natural coloured glass.

Standard watts	Standard cap	Length		Diameter		VOLTAGE RANGES and PRICE PER LAMP			
						100-130 Volts		200-260 Volts	
15	B.C. or E.S.	m/m	ins.	m/m	ins.	s.	d.	s.	d.
25		90±3.5	3½	44±2	1½	1	9	1	9
40		110±3.5	4½	60±1	2½	—	—	1	9
		110±3.5	4¾	60±1	2¾	2	0	2	0

STANDARD COLOURS :—White, Red, Pink, Orange, Yellow, Green, Blue and Flame Tint.

These Lamps can be supplied outside colour sprayed at the same price if specially required. For Natural Colour Glass Lamps see page 27.

CLEAR

Standard watts	Standard cap	Length Tolerance ± 3.5 m/m		Diameter Tolerance ± 2 m/m		VOLTAGE RANGES and PRICE PER LAMP.			
						100-130 Volts		200-260 Volts	
10	B.C. or E.S.	m/m	ins.	m/m	ins.	s.	d.	s.	d.
15		90	3½	44	1½	1	9	1	8
						1	8	—	8

NON-STANDARD CAPS.—If specially ordered, 15 watt sign lamps can be fitted with S.B.C., S.E.S., or S.C.C. caps at 1d. per lamp extra.



ELECTRIC LAMPS FOR SPECIAL LIGHTING SERVICE

GROUP I.



OSRAM PYGMY
Sign Lamp.



OSRAM Low Voltage
Series Sign Lamp.

OSRAM PYGMY SIGN LAMP

This exceptionally small lamp is specially designed for signs, illuminated score boards, totalisators, indicators, berth lights, etc., and for outlining detail in signs with parallel burning lamps in place of series lamps. Burnt-out lamps can be located immediately, as when a lamp fails none of the other lamps in the circuit is affected.

Standard watts	Standard cap	Length B.C. Tolerance ± 3 m/m	Diameter Tolerance ± 1 m/m	VOLTAGE RANGES and PRICE PER LAMP			
				100-130 and 200-260 Volts			
				Clear		Colour Sprayed	
		m/m ins. 2 $\frac{3}{16}$	m/m ins. 1 $\frac{1}{8}$	s.	d.	s.	d.
15	*B.C. or S.E.S.	$\left\{ \begin{array}{l} 56 \\ 63 \end{array} \right.$ S.E.S. $2 \frac{1}{2}$	28	1	8	1	9

STANDARD COLOURS.—White, Red, Pink, Orange, Yellow, Green, Blue, and Flame Tint.

*S.B.C. Caps can be fitted if required without extra charge.

LOW VOLTAGE SERIES BURNING

This type of lamp is suitable for use in signs where space does not permit a standard sign lamp to be used, being specially suitable for outlining detail in large signs. Each lamp contains a short circuiting device which comes into action immediately the filament breaks and keeps the rest of the lamps in the series alight. This enables the broken lamp to be located at once. Supplied with clear bulb and also in the standard colours listed above.

Voltage	Watts	Amps.	Length	Diam. of Bulb.	Standard	PRICE per Lamp (Clear)		PRICE (Sprayed) All Colours	
			m/m	m/m.		s.	d.	s.	d.
14	7	0.5	62 ± 4	38 ± 2	S.E.S.	1	3	1	5



ELECTRIC LAMPS
FOR SPECIAL LIGHTING SERVICE
GROUP I.



OSRAM Decoration Lamp.

DECORATION TYPE LAMPS
(VACUUM)
INSIDE COLOUR SPRAYED
 (Pat. No. 302170)

These lamps are specially made for occasions where service is only required for a short period—such as Fêtes, Carnivals and Seaside Illuminations, etc.

Standard Colours :—Red, Orange, Yellow, Pink, Green, Blue, Flame and White.

Watts.	Cap.	Length.		Diameter.		VOLTAGE RANGE AND PRICE PER LAMP.	
		m/m	ins.	m/m	ins.	200/260 volts.	
15 25	} B.C. or E.S.	90±3.5	3½	44±2	1½	s. 1	d. 1
		110±3.5	4½	60±1	2½	1	1

***LOW VOLTAGE SERIES BURNING**
(OUTSIDE COLOUR SPRAYED)

		m/m	ins.	m/m	ins.	14 volts.	
						s.	d.
7	S.E.S.	62±4	2½	38±2		1	0

* With short circuiting cut-out.

G.E.C.

REGD. TRADE MARK.

TYPE "B" LAMPS

GROUP VIII.



The 40 watt G.E.C. Type "B" Lamp.

A single Coil Lamp of good performance manufactured specially to meet the demand where initial cost is the primary consideration.

PEARL

Volts	Watts	Cap	PRICE PER LAMP	
100, 105, 110, 115,	25	B.C.	s.	d.
120, 125, 130	40		1	0
200, 210,	60		1	0
220, 230,	100		1	0
240, 250,			1	6
260				



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.



OSRAM Traction Lamp.
(Clear Vacuum).



PEARL OSRAM.
Gasfilled Traction Lamp.

SERIES TRACTION LAMPS

TRAMCAR, TRAIN LIGHTING, ETC.

OSRAM Traction Lamps are specially designed to withstand the voltage fluctuations, rough usage, vibration and other severe conditions met with in traction service.

All OSRAM Traction Lamps are marked with their rated current in amperes and only those having the same current rating should be connected up to each other in series.

When ordering Traction Lamps for tram or train lighting please state: (i) maximum voltage; (ii) minimum voltage; (iii) nominal voltage; (iv) wattage of lamp; (v) number of lamps in series.

PEARL OSRAM-GASFILLED

These lamps are internally frosted in the same manner as the Standard PEARL OSRAM Lamps. They give a brighter and better light than the vacuum lamps and eliminate glare.

Ampere rating	Nominal watts	Length		Diameter		Standard voltages and PRICE PER LAMP	
		Tolerance ± 3.5 m/m		Tolerance ± 1 m/m		100, 110, 120, 130 Volts	
0.35	40	m/m	ins.	m/m	ins.	s.	d.
0.52	60	110	$4\frac{1}{8}$	60	$2\frac{1}{8}$	1	8
		117.5	$4\frac{1}{4}$	65	$2\frac{1}{2}$		

CLEAR VACUUM (STRAIGHT FILAMENT)

Ampere rating	Nominal watts	Length		Diameter		Standard voltages and PRICE PER LAMP	
		Tolerance ± 3.5 m/m		Tolerance ± 1 m/m		100, 110, 120, 130 Volts	
0.27	30	m/m	ins.	m/m	ins.	s.	d.
0.35	40	110	$4\frac{1}{8}$	60	$2\frac{1}{8}$	1	10

Standard Caps :—B.C. or E.S.



Osram Inside Colour Sprayed Decoration Lamps are available in a wide range of colours to suit any seasonal lighting scheme.

They are ideal for :—Seaside Resorts, Bandstands, Tea Gardens, Bathing Pools, Road Houses, Exhibitions, Fetes and Public Celebrations.

Full particulars and prices are given on page 30.



OSRAM

ELECTRIC



Opal



Candle Lamp
(plain)



Candle Lamp
(twisted)



Ivory Tinted
Candle Lamp
(Gothic)



Opal Tubular
Lamp

"Huntalite"
Candle Lamp

Architectural Lamp
(Price List on application)

OSRAM *Coiled Coil* LAMPS GIVE U

ram

C LAMPS



Pearl



Clear



Colour Sprayed



Pygmy



Standard
Sign Lamp
(Inside Colour Sprayed)

OSRAM LAMPS are the result of nearly 50 years of Research and Development Work in the perfecting of **DEPENDABLE LIGHTING**.

Their Brilliancy and Reliability—renowned for every lighting purpose—is guaranteed by **The General Electric Co., Ltd.**, the **LARGEST ELECTRICAL MANUFACTURING ORGANISATION IN THE BRITISH EMPIRE**.



"Striplite" Lamp

UP TO 20% MORE LIGHT—NO EXTRA COST

TRACTION

OSGLIM
AND
Robertson

Projector

CAR
BULBS

FLASH
LIGHT

MINERS
DECORATIVE

ULTRA
VIOLET

OSIRA

Osram

DECORATION LAMP OUTFITS



OSRAM Decoration Lights
OS 2003/4



OSRAM Fairy Lights
OS 2121



OSRAM Party Lights
OS 2102

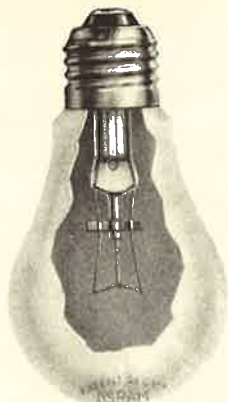
FOR FULL DETAILS AND PRICES SEE PAGES 56, 57 and 58



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.



PEARL OSRAM
Low Voltage, Long Series Traction Lamp.
(Gasfilled.)

EXTRA LOW VOLTAGE LONG SERIES TRACTION LAMPS (GASFILLED)

These lamps are a new departure in Traction Lamps. They are made for connection in series of 10 to 15 lamps.

The small voltage drop across each lamp enables a thicker and stronger filament to be used, so that these lamps are even more robust than the ordinary traction type.

A further advantage is that each lamp is fitted with a short-circuiting device, which only comes into action when a lamp fails, so that the rest of the series is unaffected and the burnt-out lamp can be located at once.

These lamps are only supplied with E.S. caps, and should only be used with the G.E.C. Patent short-circuiting lampholders, which enable lamps to be changed without putting out the rest of the lamps in the series.

VOLTS	Nominal watts	Length		Diam.		Standard cap	PRICE PER LAMP			
		Tolerance ± 3.5 m/m		Tolerance ± 1 m/m			Pearl		Clear	
		m/m	ins.	m/m	ins.		s.	d.	s.	d.
40 50 }	40	110	4 $\frac{5}{16}$	60	2 $\frac{3}{8}$	} E.S.	1	9	1	11
40 50 }	60	117.5	4 $\frac{1}{2}$	65	2 $\frac{1}{2}$					

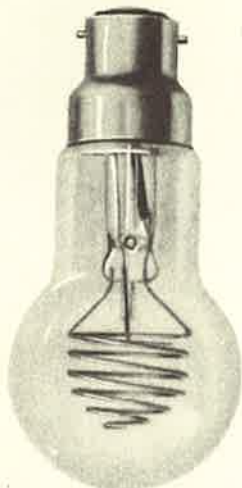
PEARL OSRAM SHIP LAMPS

The Pearl OSRAM Lamps shown on page 12 are recommended for ship lighting. The filaments of these lamps are tempered by a special heat treatment, which makes them capable of standing up to rough service. Their size and shape are suitable for the fittings usually installed on ships. The frosted bulbs eliminate all glare—a matter of great importance in ship lighting, where lamps have to be fixed in low positions and come into the line of vision. The frosting being on the inside of the bulb, the exterior is quite smooth and easily kept clean.

Osglim

REGD. TRADE MARK

ELECTRIC NEON DISCHARGE LAMPS GROUP 1.



Osglim Lamp
(Lighting Type).
(Half size.)



Osglim Tubular
Switch Indicator Lamp.
(Full size.)



Osglim Small
Indicator Lamp
(Full size.)

These Neon discharge lamps are manufactured in a number of different types, of which those in most general use are listed below. The lighting type is specially suitable for burning in positions where a dim illumination is constantly required, and is, therefore, an ideal night light. The large indicator lamp is designed for use with domestic appliances such as cookers, where it is desirable for the indicator to give a more conspicuous light than that given by the smaller type, and for the lamp to have a full size bayonet cap. Particulars of other types will be sent on application.

Type	Standard watts	Standard cap	Dimensions				* PRICE PER LAMP	
			Length		Diameter		s.	d.
			m/m	ins.	m/m	ins.		
LIGHTING	5	B.C.	110 ± 5	4 ³ / ₁₆	55 ± 2	2 ¹ / ₁₆	3	1
LETTER							3	4
FIGURE							3	4
PHOTOGRAPHIC (with Bulb varnished Ruby)							3	4
INDICATOR	0.5	B.C.	56 ± 3	2 ¹ / ₄	28 ± 1	1 ¹ / ₈	2	6
		S.B.C.	55 ± 3	2 ¹ / ₁₆	18 ± 1	¹ / ₂	2	6

* Voltages :—200/220, 230/240, 250/260 Volts.

TUBULAR SWITCH INDICATOR LAMPS

These small indicator lamps are made for incorporation in switches, the lamp being wired so that it glows when the switch is in the "off" position. This makes it easy to find the switch in the dark, and is specially convenient in hotels, boarding houses, etc., where the rooms are chiefly used by people who are not familiar with the positions of the switches.

Standard voltages	Standard watts	Standard cap	Dimensions				PRICE PER LAMP			
			Length		Diameter		Clear		Sprayed	
			m/m	ins.	m/m	ins.	s.	d.	s.	d.
200/220 230/240 250	0.2	S.E.S.	28 ± 2	$1 \frac{1}{8}$	12 ± 1	$\frac{1}{2}$	2	0	2	1

CAUTION—These Switch lamps must only be used in series with approximately 200,000 ohms resistance.

ROBERTSON ELECTRIC LAMPS

CARBON FILAMENT

GROUP I.



ROBERTSON Lamp.



ROBERTSON
Flame-colour
Radiator Lamp.

LIGHTING TYPE.

Nominal candle power	Standard cap	Approx. total watts		Dimensions				Voltage Ranges and PRICE PER LAMP	
		Voltage range		Length		Diam.		100-130 and 200-260 volts	
		100-130 Volts	200-260 Volts						
8 16 32	} B.C. {	30	36	m/m	ins.	m/m	ins.	s.	d.
		56	66	110	4 1/8	60	2 3/8	1	6
		115	136	117.5	4 1/4	65	2 1/2	1	9

RADIATOR LAMPS

(VERTICAL PATTERN)

Robertson radiator lamps are supplied with flame-coloured bulbs, which give a red glow very similar to that of a coal fire, and create an atmosphere of cosiness, comfort and warmth.

Standard watts	Standard cap	Dimensions				Voltage range and PRICE PER LAMP	
		Length		Diameter		*100-250 Volts	
250	B.C.	m/m	ins.	m/m	ins.	s.	d.
		285	11 1/4	57	2 1/4	4	3

Large bayonet caps (1 in. diameter) can be fitted if desired without extra charge.

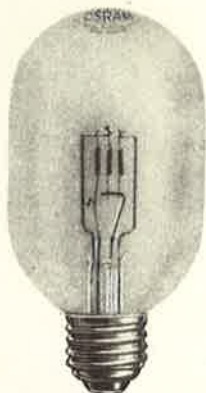
* STANDARD VOLTAGES : 100/110, 115/125, 200/220, 230/250.



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.



A full range of
Osram Projector
Lamps is incor-
porated in Osram
Projector Lamp
Catalogue O.S.
7906.



250 watts (Class A.1) OSRAM
Gasfilled Projector Lamp.
(Illustration approximately half full size.)

100 watts (Class A.1) OSRAM
Gasfilled Projector Lamp.
(Illustration approximately half full size.)

GASFILLED PROJECTOR LAMPS

Specially designed for accurate projection work.

CLASS A.1 TUBULAR. GRID FILAMENT. VERTICAL BURNING.

These lamps have grid filaments and must be burned vertically, cap below. Tilting the lamp results in reduction of burning life. Suitable for OPTICAL LANTERNS, SPOTLIGHTS, PHOTOGRAPHIC ENLARGING, ADVERTISING PROJECTORS, HOME CINEMAS, ETC.

Voltage	Watts	Dimensions m/m			Approx. area of filament W'dth x Height	Standard Cap	PRICE PER LAMP		
		Overall length ±10	Diam. ±2	Light centre length ±5					
30	100	135	32	75	6 x 6	E.S.	£	s.	d.
	250	135	64	75	8 x 8	E.S.	1	10	9
	600	230	64	120	13 x 12	G.E.S.	1	12	6
	900	230	64	120	14 x 12	G.E.S.	1	15	0
50	200	135	32	75	6 x 7	E.S.	1	1	0
	250	135	32	75	7 x 8	E.S.	1	1	0
	500	135	64	75	14 x 12	E.S. or G.E.S.	1	6	0
100	300	135	32	55.6	10 x 9	Prefocus	1	6	0
110	500	135	32	55	*9 x 9	Prefocus	1	17	6
110	750	135	38	55	*10 x 10	Prefocus	2	2	6
100 and 110	100	135	25	75	10 x 9	B.C. or E.S.	1	10	9
	250	135	32	55.6	11 x 10	Prefocus	1	1	0
	250	135	64	75	11 x 10	E.S.	1	0	0
	500	135	64	75	13 x 16	E.S. or G.E.S.	1	4	0
	1000	230	64	120	16 x 15	G.E.S.	1	10	0
200 to 260	100	135	25	75	8 x 13	B.C. or E.S.	1	10	9
	250	135	64	75	11 x 13	E.S.	1	0	0
	500	135	64	75	15 x 18	E.S. or G.E.S.	1	0	0
	1000	230	64	120	17 x 20	G.E.S.	1	10	0

* Biplane filament.

Prefocus Caps where not standard can be supplied at 1/- extra.

CAUTION.—It is essential for projector lamps to be used in the position for which they are designed, and for the apparatus in which they are used to be well ventilated, otherwise their life may be seriously reduced.



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.



100 watts (Class A.2) OSRAM
Gasfilled Projector Lamp.



1,500 watts (Class A.2) OSRAM
Gasfilled Projector Lamp.

GASFILLED PROJECTOR LAMPS

Specially designed for accurate projection work.

CLASS A.2. ROUND BULB. GRID FILAMENT. VERTICAL BURNING, CAP DOWN.

The round bulb causes a small reduction in optical efficiency by keeping the reflector further away from the filament than in Class A.1, listed on page 36. These lamps may be tilted slightly without reducing their life. Suitable for STAGE LINES, SPOTLIGHTS, ETC.

Voltage	Watts	Dimensions m/m			Approx. area of filament Width x H'th	Cap	PRICE PER LAMP		
		Overall length ±10	Diam. ±2	Light centre length ±5					
20 and 110	80	m/m 80	m/m 60	m/m 35	m/m †9	S.B.C.	£	s.	d.
	100	115	75	80	10 × 13	E.S.		8	6
	250	160	90	115	11 × 10	E.S.		10	9
	500	250	120	190	13 × 16	G.E.S.	1	0	0
	1000	300	150	220	17 × 23	G.E.S.	1	7	6
	1500	335	170	250	22 × 32	G.E.S.	1	18	0
	2000	350	200	250	26 × 34	G.E.S.	2	12	6
200 to 260	3000	395	240	275	30 × 35	G.E.S.	3	16	0
	100	115	70	80	8 × 18	E.S.	5	5	0
	250	160	90	115	11 × 13	E.S.			
	500	250	120	190	15 × 18	G.E.S.	1	0	0
	1000	300	150	220	20 × 36	G.E.S.	1	7	6
	1500	335	170	250	26 × 38	G.E.S.	1	18	0
	2000	350	200	250	22 × 35	G.E.S.	2	15	0
	3000	395	240	275	30 × 42	G.E.S.	4	6	0
							5	15	0

† Line filament.

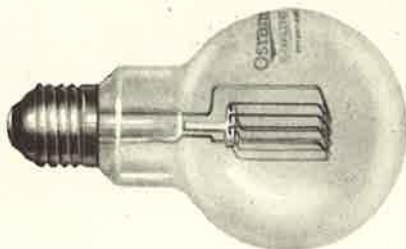
CAUTION.—It is essential for projector lamps to be used in the position for which they are designed, and for the apparatus in which they are used to be well ventilated, otherwise their life may be seriously reduced.



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.



100 watts (Class A.3) OSRAM
Gasfilled Projector Lamp.

GASFILLED PROJECTOR LAMPS

CLASS A.3.

ROUND BULB. GRID FILAMENT. HORIZONTAL BURNING.

Similar to Class A.2, but designed for horizontal burning. Suitable for Spotlights, Stage Limes, Medical Examination Tubes, Advertising Projectors, etc.

Voltage	Watts	Dimensions m/m			Approx. area of filament Width × Height	Cap	PRICE PER LAMP
		Overall length ±10	Diam. ±2	Light centre length ±5			
100 and 110	100	m/m	m/m	m/m	m/m	E.S.	£ s. d.
	250	115	75	95	10 × 15	E.S.	10 9
	500	160	90	120	13 × 13	E.S.	1 0 0
	1000	250	120	205	15 × 18	G.E.S.	1 7 6
	1500	300	150	240	17 × 23	G.E.S.	1 18 0
		335	170	265	22 × 32	G.E.S.	2 12 6
200 to 260	100	115	70	95	10 × 13	E.S.	10 9
	250	160	90	120	14 × 15	E.S.	1 0 0
	500	250	120	205	20 × 15	G.E.S.	1 7 6
	1000	300	150	240	20 × 36	G.E.S.	1 18 0
	1500	335	170	265	26 × 38	G.E.S.	2 15 0

Ventilation.—Owing to concentration of filament and small size of bulb, it is important that the lantern should be ventilated, otherwise the life of the lamp may be seriously reduced.

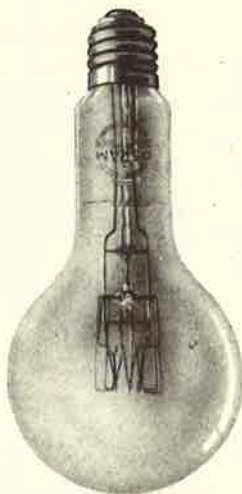


ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE
GROUP I.



250 watts (Class B.1) OSRAM
Gasfilled Projector Lamp.
(Illustration approximately one-third
full size.)



500 watts (Class B.2) OSRAM
Projector Lamp.
(Illustration approximately one-quarter
full size.)

GASFILLED PROJECTOR LAMPS

CLASS B1.

ROUND BULB. BUNCH FILAMENT. FLOODLIGHTING TYPE.

These lamps may be used at any angle except within 45° of vertical (cap upwards). They are suitable for floodlighting and also for types of theatre spotlights in which ability to withstand rough usage is more important than high optical efficiency.

Voltage	Watts	Dimensions m/m			Approx. area of filament Width x Height	Cap	PRICE PER LAMP		
		Overall Length ±10	Diam. ±2	Light centre length ±5					
100 to 130	100	m/m 130	m/m 80	m/m 75	m/m 10×11	E.S.	£	s.	d.
	250	122	95	75	8×11	E.S.			9 0
	500	180	130	115	11×14	G.E.S.			17 6
	1000	180	130	115	18×23	G.E.S.			1 3 0
200 to 260	100	130	80	75	10×10	E.S.			1 10 0
	250	135	95	75	11×10	E.S.			9 0
	500	180	130	115	15×15	G.E.S.			17 6
	1000	180	130	115	20×25	G.E.S.			1 3 0

CLASS B2.

STANDARD GENERAL SERVICE BULB. BUNCH FILAMENT.

These Lamps can be used in any position.

200 to 260	500 1000	267±8 300±9	130±1.5 150±1.5	202±7 225±8	15×20 25×25	G.E.S. G.E.S.	1 3 0 1 10 0
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CAR BULBS
FLASH LIGHT
MINERS AND DECORATIVE
ULTRA VIOLET
OSIRA



500 watts (Class E) OSRAM Gasfilled
Epidiascope Lamp.
(Illustration approximately one-third
full size).

Osram

ELECTRIC LAMPS FOR SPECIAL LIGHTING SERVICE

GROUP I.

GASFILLED PROJECTOR LAMPS



24 watts (Class F)
OSRAM Gasfilled Projector Lamp.

CLASS E. ROUND BULB. GRID FILAMENT. EPIDIASCOPE TYPE.

This class is specially designed for EPIDIASCOPE apparatus. It is suitable also for spotlight and shop window projectors, which have to be rotated through wide angles. They can be used safely in any position up to 45° from vertical cap downwards.

Voltage	Watts	Dimensions m/m			Approx. area of filament Width × H'ght	Cap	PRICE PER LAMP		
		Overall length ± 10	Diam. ± 2	Light centre length ± 5			£	s.	d.
100 and 110	500	m/m 135	m/m 100	m/m 85	m/m 13 × 16	E.S.	1	10	0
200 to 260		150	100	85	15 × 18	E.S.	1	10	0

CLASS F. EXTRA LOW VOLTAGE. ROUND BULB

These lamps, though of low wattage, give a very intense, concentrated light. They are specially suitable for all purposes where small dimensions in the apparatus employed is of primary importance. The 8 and 24 watts lamps have straight filaments, the 48 and 100 watts grid filaments. The 48 and 100 watts sizes are designed for vertical burning.

Voltage	Watts	Dimensions m/m			Approx. area of filament Width × H'ght	Cap	PRICE PER LAMP	
		Max. Overall length ± 10	Diam. ± 2	Light centre length ± 5			s.	d.
4	8	62	38	50	*4	S.E.S.	3	9
6	24	60	38	50	*4	E.S.	4	3
12	24	55	38	45	*6	S.B.C.	3	9
12	48	70	50	40	4 × 3	E.S.	3	9
†12	100	135	32	75	5 × 6	E.S.	10	9

* Filament length.

† Tubular bulb.



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.



32 watts (Class G)
OSRAM
Exciter Lamp (Gasfilled).

GASFILLED PROJECTOR LAMPS

CLASS G. EXCITER LAMPS FOR SOUND FILM APPARATUS.

These lamps are intended for use in conjunction with Photo-cells for sound reproduction and similar purposes.

Of tubular bulb shape they are designed for burning vertically, cap down, and it is essential they should be used in this position only.

Owing to concentration of filament and small size of bulb it is important that the lantern in which this lamp is used should be ventilated. Otherwise the life of the lamp may be seriously reduced.

Code numbers	Voltage	Watts	Apparatus for which suitable	Cap	PRICE PER LAMP	
8450	8	32	British Acoustic	A.S.C.C.	s. 5	d. 6
8456	8	32	B.T.P.	"	5	6
85450	8.5	34	—	"	6	0
105475	10	50	R.C.A.	A.S.C.C.	7	6
1075475	10	75	R.C.A.	"	7	6

DIMENSIONS.

Code numbers	Length	Diameter	Filament centre to cap central contact plate
	Tolerance ± 2 m/m	Tolerance ± 2 m/m	Tolerance ± 1.5 m/m
8450	m/m 76	m/m 26	m/m 50
8456	76	26	56
85450	76	26	56
105475	76	26	47
1075475	76	26	47



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP I.

OSRAM PROJECTOR LAMPS

Recommended for use in some of the most widely used projectors.

Apparatus	Type of OSRAM Projector Lamp recommended.
A	
Pattern 45 "Miniature" Spotlight	250w. Class B.1 round bulb with E.S. cap.
Pattern 44 "Baby" Spotlight	500w. Class B.1 round bulb with G.E.S. cap.
Pattern 43 Focus Lantern	1,000w. Class B.1 round bulb with G.E.S. cap.
Pattern 50 "Pageant" Lantern	1,000w. Class A.1 tubular or Class B.1 with G.E.S. cap.
Pattern 43a "Batten" Focus Lantern	1,000w. Class A.1 tubular or Class B.1 with G.E.S. cap.
Pattern 51 "Optical Effect" Lantern	1,000w. Class A.1 tubular with G.E.S. cap.
Pattern 27 "Float Baby" Spot	100w. or 250w. Class B.1 round bulb with E.S. cap.
Pattern 52 2,000w. Focus Lantern	2,000w. round bulb Cinema Studio Spotlight lamp with G.E.S. cap.
Pattern 73 Mirror Spot	1,000w. Class A.1 or B.1 projector lamp with G.E.S. cap.
Pattern 41 Photo. Flood... ..	1,000w. Class A.1 projector lamp with G.E.S. cap.
Pattern 46B Photo Spot	2,000w. cinema studio projector lamp with G.E.S. cap.
B	
Optical Lanterns (all types)	Class A.1 and A.3 with E.S. cap.
Focuslite Outfits (all types)	Class A.1 and A.3 with E.S. cap.
No. 51 Self-contained Mirror Bowl	500w. Class A.1 with E.S. cap.
No. 54 Spotlight	100w. Class A.3 with E.S. cap.
No. 55 Spotlight	250w. Class A.1 with E.S. cap.
No. 58 Spotlight	500w. Class A.1 with E.S. cap.
No. 59 Spotlight	1,000w. Class A.1 with G.E.S. cap.
No. 61 Cabaret Flood	500w. General Service with G.E.S. cap.
No. 150 Floodlight	300w. to 500w. General Service with G.E.S. cap.
No. 63 Searchlight	500w. Class A.1 with E.S. cap.
No. 157/161 Floodlight	500w. Photographic with E.S. cap.
C	
Monolite Lantern Outfits	250w. or 500w. Class A.1 tubular projector lamp with E.S. cap.
"Alpha" or SS 100 Projector	60v. 100w. Class A.1 projector lamp with E.S. cap.
"Silent Sixteen" SS 180 Projector	60v. 180w. Class A.1 projector lamp with E.S. cap.
"Super Cine" SS 250 Projector	50v. 250w. Class A.1 projector lamp with prefocus cap.
Ensign "50" Projector	60v. 50w. Class A.1 tubular projector lamp with small bayonet cap.
Ensign "100B" Projector	100v. 100w. Class A.1 projector lamp with prefocus cap and 25 mm. bulb.
Ensign "300B" Projector	100v. 300w. Class A.1 projector lamp with prefocus cap.
"Optiscope" Lantern No. 6	250w. or 500w. Class A.1 tubular projector lamp, silver backed, with E.S. cap.
"Optiscope" Lantern No. 9	250w. or 500w. Class A.1 tubular projector lamp, silver backed, with E.S. cap.
D	
Kodascope "A"	50v. 200w. or 250w. Class A.1 tubular with prefocus or E.S. cap.
Kodascope "B"	50v. 200w. or 250w. Class A.1 tubular with prefocus cap.
Kodascope "C"	100v. 100w. Class A.1 tubular with prefocus cap and 25 m/m bulb.
Kodascope "D" and "E"	100v. 300w. Class A.1 projector lamp with prefocus cap.
Kodascope "L"	100v. 300w., 110v. 500w., 110v. 750w. Class A.1 with prefocus cap.
Kodatoy	115v. 50w. Class A.1 projector lamp with A.S.C.C. cap.
Kodalite "A" and "B"	500w. Class A.1 with prefocus cap.
Kodalite "E"	500w. photographic lamp with E.S. cap.
Kodak Spotlite	500w. Class A.1 or Class E with E.S. cap.
E	
Pathescope "B" Projector	110v. 200w. Class A.1 projector lamp with special "Pathe" cap.
Pathescope "Imp"	19v. 10w. Type C small tubular projector lamp.
Pathescope "Ace"	16v. 8w. round bulb projector lamp.
Pathescope "Ace"	18v. 9w. round bulb projector lamp.
Pathescope "Rex"	16v. 128w. round bulb projector lamp.

A Apparatus manufactured and supplied by The Strand Electric & Engineering Co., Ltd.

B Apparatus manufactured and supplied by Cinema Traders, Ltd.

C Apparatus manufactured and supplied by Ensign, Ltd.

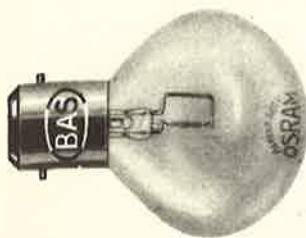
D Apparatus manufactured and supplied by Kodak, Ltd.

E Apparatus manufactured and supplied by Pathescope, Ltd.

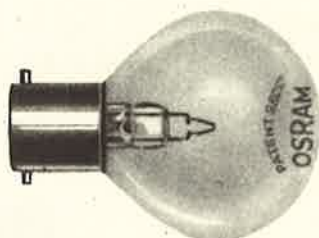
For prices of Lamps see pages 36, 37, 38, 39 & 40, where not mentioned particulars will be sent on application.

Osram

CAR BULBS GROUP II.



OSRAM **(BAS)** Type
Headlight Bulb
(Gasfilled).



"V" Filament Headlight
Bulb (Gasfilled).

SINGLE FILAMENT HEADLIGHT BULBS

4, 6 and 12 VOLT

For 13.5 volt and 24 volt bulbs, see page 50.

Volts	Watts	Amps	Diameter of Bulb	British (S.C.C.) Cap †				
				Catalogue No. *		Price each		
				Line filament	"V" filament	Clear	Cadmium Yellow *	Daylight Blue *
4	8	2	m/m 38	OS 4800	—	s. d. 2 9	s. d. —	s. d. —
6	12	2	38	OS 7000 (BAS 1)	—	2 5	—	—
	18	3		OS 7002 (BAS 2)	OS 6180	2 0	—	—
	24	4		OS 7004	OS 6124 †	2 0	2 6	2 6
	30	5		—	OS 8000 †	2 6	—	—
	36	6		OS 6360	OS 6366	3 0	3 9	—
12	24	2	38	OS 7010 (BAS 3)	OS 1224 †	2 0	—	—
	36	3		OS 7012 (BAS 4)	OS 1236 †	2 0	2 6	2 6
	48	4		OS 7014	—	3 0	3 9	—
	60	5		OS 7998	—	4 0	—	—
			50					

* Catalogue Nos. of Cadmium Yellow bulbs are followed by letter "Y."

" " Daylight Blue bulbs " " "B."

" " Satin-etched bulbs " " "E."

† Generally required with satin-etched bulbs. For extra price, see below.

EXTRAS.

Satin-etching of bulb 1d. extra

U-filament (36 watts and 48 watts only) 3d. "

† S.B.C., A.S.C.C. or A.S.B.C. cap 1d. "

Bosch cap 3d. "

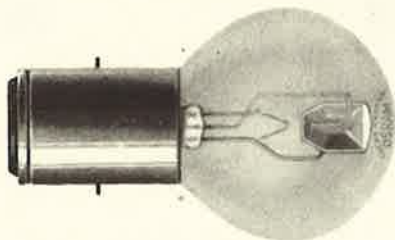
3-pin C.C. cap 1½d. "

CAR BULBS
FLASH LIGHT
MINERS
DECORATIVE
ULTRA
VIOLET
OSRAM



CAR BULBS

GROUP II.



GRAVES TYPE ANTI-DAZZLE HEADLIGHT BULBS

6 and 12 VOLT

For 13.5 volt bulbs, see page 50.

These are twin filament bulbs, fitted with a special form of internal reflector. When switched on to the driving filament a full, brilliant beam is obtained. When the anti-dazzle filament is switched on, the top half of the beam is cut off and the driving light is concentrated on the road. This type is the standard anti-dazzle device adopted by most European countries.

Volts	Watts	Amps.	Dia. of Bulb	Cap	Catalogue No.	PRICE EACH		
						Clear	Satin-etched	Cad-mium
6	12 & 12	2 & 2	m/m 40	Bosch {	OS 6121L	s. d. 3 6	s. d. —	s. d. —
	18 & 18	3 & 3			OS 8008L	3 6	—	—
	24 & 18	4 & 3			OS 8010L	3 3	—	4 1*
	36 & 24	6 & 4			OS 6015L	4 0	—	—
12	24 & 24	2 & 2	40	Bosch {	OS 8014L	—	3 6	—
	36 & 24	3 & 2			OS 8015L	—	3 3	4 1*

* Catalogue Nos. of Cadmium Yellow Bulbs are the same as above followed by letter "Y"

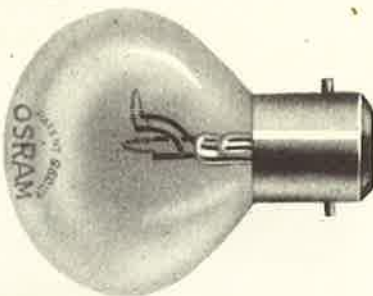
Osram

CAR BULBS

GROUP II.



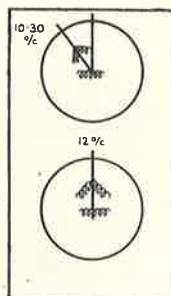
OSRAM Bi-Focal Bulb, with
American prefocus cap.
Made under British Letters
Patent 425653.



OSRAM British Motor Cycle
Bi-Focal Bulb.

BI-FOCAL ANTIDAZZLE HEADLIGHT BULBS

These bulbs have twin "V" shaped filaments which are switched on alternately by means of a changeover or "dipping" switch. The anti-dazzle filament is located above the main filament and, in the 12 o'clock position, produces a "dipped" beam. The 10.30 o'clock filament produces a beam which is both "dipped" and turned towards the near side of the road. The main or lower filament provides the normal driving beam. British cars usually require the 10.30 o'clock type. American cars and British motor cycles use the 12 o'clock type.



Filament
Positions
Looking at crown
of bulb.

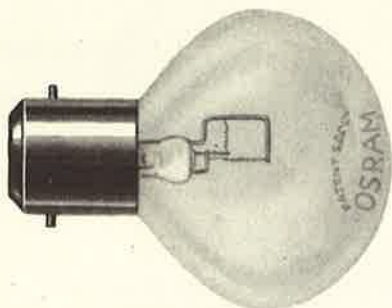
Location of filaments (see diagram)	Volts	Watts	Amps.	Cap	Catalogue No.	PRICE EACH (Clear bulb)
12 o'clock position	6	12 & 12	2 & 2	S.B.C.	OS 6122B	s. d. 3 6
		18 & 18	3 & 3	A.S.B.C.	OS 7146	3 0
		24 & 24	4 & 4	S.B.C.	OS 6242*	2 9
				A.S.B.C.	OS 7147*	2 9
		36 & 24	6 & 4	Prefocus	OS 7147P	3 3
				A.S.B.C.	OS 6324	2 9
				Prefocus	OS 6324P	3 3
	12	36 & 24	3 & 2	A.S.B.C.	OS 1362	3 0
				Prefocus	OS 1362P	3 6
10-30 o'clock position	6	24 & 24	4 & 4	S.B.C.	OS 6240*	2 9
	12	24 & 24	2 & 2	S.B.C.	OS 1240	3 9
		36 & 36	3 & 3	S.B.C.	OS 1360	5 0

* Supplied also in Cadmium Yellow Bulb, (add Y to Cat. No.) Price each **3/5**.

Osram

CAR BULBS

GROUP II



OSRAM Twin-Filament
Combined Head and Side Bulb
(Gasfilled).



OSRAM combined Tail and Stoplight
Bulb for American cars.

COMBINED HEAD & SIDELIGHTS

Volts	Watts	Amps.	Dia. of bulb	British (S.B.C.) Cap		American (A.S.B.C.) Cap	
				Cat. No.	PRICE EACH	Cat. No.	PRICE EACH
6	12 & 3 18 & 3	2 & .5 3 & .5	m/m 38	OS 7099	s. d. 3 6	OS 7129	s. d. 3 6
				OS 6183	3 3	OS 6184	3 3
12	24 & 6 36 & 6	2 & .5 3 & .5	38	OS 7101	3 6	—	—
				OS 7097	3 6	—	—

COMBINED STOP & TAIL LIGHTS

Volts	Watts	Amps.	Dia. of bulb	Cap	Catalogue No.	PRICE EACH
6	18 & 3	3 & .5	m/m 25	A.S.B.C.*	OS 6185	s. d. 2 0
12	18 & 3	1.5 & .25	25	A.S.B.C.	OS 1218	2 6

* A.S.B.C. with offset (staggered) pins, 3d. extra.

STOPLIGHT (SINGLE FILAMENT)

Volts	Watts.	Amps.	Dia. of bulb	Cap	Catalogue No.	PRICE EACH
6	12	2	m/m 25	A.S.C.C.	OS 126	s. d. 2 0



CAR BULBS

GROUP II.



OSRAM Tubular Bulb
with Bosch Cap.



OSRAM Side, Tail and
Dash Bulb (Gasfilled).

SIDE, TAIL AND DASH

Volts	Watts	Amps.	Dia. of Bulb	British (S.C.C.) Cap†		American (A.S.C.C.) Cap†	
				Catalogue No.	PRICE EACH	Catalogue No.	PRICE EACH
3	2	0.66	m/m 19	—	—	OS 7110	s. d. 1 9
4	3	0.75	19	OS 7128	1 8	OS 7171	1 9
6	3	0.5	19	OS 7123 (BAS 8)	1 0	OS 7114	1 1
	6	1.0		OS 7144 (BAS 9)	1 2	OS 7184	1 3
8	4	0.5	19	OS 7125	1 8	OS 7116	1 9
12	4	0.33	19	OS 7126	1 3	—	—
	6	0.5		OS 7168 (BAS 10)	1 0	—	—

† S.B.C. or A.S.B.C. Cap (Double Pole) .. 1d. extra

TUBULAR

Volts	Watts	Amps.	Dia. of Bulb	Cap	Catalogue No.	PRICE EACH
12	6	.5	m/m 19	{ S.C.C. or S.B.C.	OS 7224	s. d. 2 9
				{ Bosch	OS 7032	3 0



CAR BULBS

GROUP II.



OSRAM Indicator
Bulb
(12 m/m Flat).



OSRAM Indicator
Bulb
(15 m/m Round).



OSRAM
Panel Bulb.
M.C.C. Cap.



OSRAM
Indicator Bulb
(12 m/m flat).

PANEL & WARNING LIGHTS*

(INDICATOR TYPE)

Volts	Watts	Amps.	Diam. and shape of bulb	British (M.E.S.) Cap		American (M.C.C.) Cap	
				Cat. No.	PRICE EACH	Cat. No.	PRICE EACH
					s. d.		s. d.
2†	1.5	0.75	15 m/m round	OS 7577	1 10	—	—
4	2	0.5	15 m/m round	OS 7582	1 6	—	—
6	1	0.16	11 m/m round	—	—	OS 610	1 6
	1.8	0.3	12 m/m flat	OS 618	1 6	OS 619	1 6
	2.5	0.42	14 m/m round	—	—	OS 625	1 6
	3	0.5	15 m/m round	OS 7584	1 0	—	—
8	1.6	0.2	15 m/m round	OS 7588	1 6	—	—
12	2.4	0.2	15 m/m round	OS 7592	1 0	—	—
	3.6	0.3	12 m/m flat	OS 123	1 6	OS 124	1 6
16	3	0.2	15 m/m round	OS 7954	1 6	—	—

* For 2.5 v. and 3.5 v. warning lights for use in series with a resistance, as used on many British cars, see page 53.

† This bulb is also suitable for some types of Police Lamp and Mine Inspection Lamps.



CAR BULBS

GROUP II.



OSRAM Festoon Bulb
(7.5 m/m × 37 m/m).



OSRAM Festoon Bulb
(11 m/m × 45 m/m).

FESTOON OR TRAFFICATOR

Volts	Watts	Amps.	Dimensions		Catalogue No.	PRICE EACH	
			Overall Length	Diam.		s.	d.
6	3	.5	m/m 37	m/m 7.5	OS 6338	1	6
	6	1.0	38	11	OS 638	1	9
	6	1.0	45	11	OS 7268	2	0
12	3	.25	37	7.5	OS 1233	1	6
	6	.5	38	11	OS 1238	1	9
	6	.5	45	11	OS 7282	2	0

MOTORISTS' SPARE BULB CASES



These cases have been designed for the convenience of motorists, who should always carry spare bulbs on their cars. Bulbs can be carried in these cases without the slightest risk of breakage.

Capacity :—Seven Bulbs (2 head, 2 side or tail, 1 festoon, 1 ignition warning, and 1 panel bulb).

OSRAM Motorists' Spare Bulb Case.

Price (without lamps)

each **3/-**



MOTOR BUS, TROLLEY BUS AND COMMERCIAL VEHICLE BULBS

GROUP II.

BUS HEADLIGHTS

(GASFILLED)

Bulbs for 35 volt trolley buses are shown on page 52.

Volts	Watts	Dia. of Bulb	Type	Cap	Catalogue No.	PRICE EACH
12	For 12 volt headlight bulbs See page 43.		Where controlled voltage lighting sets are installed, 13.5 volt headlight bulbs are recommended.			
13.5	24	m/m 38	Single filament. Clear bulb.. Clear bulb.. Cadmium Yellow	S.B.C.*	OS 1352	2 3
	36	38			OS 1353 OS 1353Y	2 3 2 9
13.5	36 & 24	40	Graves type (Anti-dazzle) Clear bulb.. Cadmium Yellow	Bosch	OS 1354 OS 1354Y	4 0 5 0
	24	38	Single filament. Clear bulb.. Clear bulb..	S.B.C.	OS 2424 OS 2436	3 0 3 0
24	36 & 24	40	Graves type (Anti-dazzle). Clear bulb..	Bosch	OS 2437	4 6

* Also available with other caps.

REAR, WING & DESTINATION BOARD LIGHTS SPECIAL BUS TYPE.

Bulbs for 35 trolley buses are shown on page 52.

Volts	Watts	Amps.	Dia. of bulb	Cap	Catalogue No.	PRICE EACH
12	6	0.5	m/m 25	S.B.C.*	OS 7214	s. d. 1 6
24	6	0.25	23	S.B.C.*	OS 246	2 0

* Available with B.C. caps without extra charge.



BUS, COACH AND YACHT LIGHTING BULBS

GROUP II



INTERIOR LIGHTING

Volts	Watts	Amps.	Dia. of Bulb*	Cap	PRICE EACH			
					Pearl or Clear		Opal	
12	10	0.83	$\left\{ \begin{array}{l} \text{m/m} \\ 38 \\ 50 \end{array} \right.$	B.C. or S.B.C.	s. d. 2 6 2 3	s. d. 2 10 2 6		
	12†	1.0	$\left\{ \begin{array}{l} 38 \\ 50 \end{array} \right.$	B.C. or S.B.C.	2 0 1 10	2 3 2 1		
24	12	0.5	$\left\{ \begin{array}{l} 38 \\ 50 \end{array} \right.$	B.C. or S.B.C.	2 6 2 3	2 10 2 7		
	15	0.625	$\left\{ \begin{array}{l} 38 \\ 50 \end{array} \right.$	B.C. or S.B.C.	2 4 2 1	2 7 2 4		
	20	0.83	$\left\{ \begin{array}{l} 38 \\ 50 \end{array} \right.$	B.C. or S.B.C	2 4 2 1	2 7 2 4		

* Unless otherwise specified, 50 m/m bulb will be supplied.

† Made in accordance with B.S.S. 555/1935.



TROLLEY BUS BULBS

FOR 35 VOLT BUSES

GROUP I



Pearl OSRAM Interior Lighting Trolley Bus Bulb
(Gasfilled)



OSRAM Panel Bulb
(23 m/m diam.).

Description	Volts	Watts	Dia. of bulb	Type	Cap	PRICE EACH	
						s.	d.
Head	35	20	m/m 50	Clear	B.C.	3	3
Side	35	6	38	Clear	B.C.	2	4
Tail or Stop ..	35	15	50	Clear	B.C.	2	2
Panel	35	6	23	Clear	S.B.C.	2	1
Interior	35	15	50	Pearl Opal	B.C.	2	2
					B.C.	2	6
Destination Board	35	15	50	Daylight Blue	B.C.	3	3



ELECTRIC BULBS

FOR SPECIAL LIGHTING SERVICE

GROUP III.



OSRAM
Tubular Radio
Panel Bulb.



OSRAM
Flashlight Bulb.
Flat. Clear.



OSRAM
Flashlight Bulb.
Flat. Half Opal.



OSRAM
Flashlight Bulb
Focussing Type.

FLASHLIGHT BULBS

NON-FOCUSSING TYPE.

Flat Bulbs with M.E.S. Caps. (Packed in boxes of 50).

Volts	Amps.	Diameter m/m	Shape of Bulb	PRICE EACH	
				Clear	Half Opal
1.25	.20	12	Flat	2½d.	—
2.0	.30	12	"	2½d.	—
2.0	.60	15	"	2½d.	—
††2.2	.25	12	"	—	2½d.
††2.2	.29	12	"	2½d.	2½d.
†2.5	.20	12	"	2½d.	2½d.
†3.5	.15	12	"	2½d.	—
3.5	.30	12 & 15	"	2½d.	2½d.

† These bulbs are used for CAR IGNITION WARNING LIGHTS in series with an appropriate resistance.
†† Specially designed for use with small capacity 2-cell batteries.

FOCUSSING TYPE.

(Packed in boxes of 50).

For Spotlight Torches, Pilot Lamps for wireless receivers, Battery Cycle Lamps, etc.

Volts	Amps.	Diam. m/m	Shape of Bulb	PRICE EACH
				Clear only
††2.2	.29	12	Round	3d.
2.5	.20	12	"	
2.5	.3	12	"	
*3.5	.15	12	"	
3.5	.3	12	"	
4.0	.3	12	"	4d.
4.0	.5	15	"	
4.5	.3	15	"	
**6.2	.3	15	Round	
***6.5	.3	12	"	

TUBULAR RADIO PANEL BULBS

Volts	Amps.	Bulb		Cap	PRICE EACH
		Diam. m/m	Overall m/m		
2	0.1	10	30	M.E.S.	8d.
4	0.3	10	30	M.E.S.	8d.
**6.2	0.3	10	30	M.E.S.	6d.
***6.5	0.3	10	30	M.E.S.	6d.

†† Specially designed for use with small capacity 2-cell batteries.

* Recommended for fuse bulbs on wireless receivers.

** Specially suitable for pilot lamps on wireless receivers, in which case they should be used on a 4-v. circuit, and also for series burning with .2 amp. Universal valves.

*** Recommended for series burning with .3 amp. Universal valves, and on 6 volts.

Special prices will be quoted for quantities of 100 bulbs and over of one type and rating of any of the above bulbs.



ELECTRIC LAMPS FOR SPECIAL LIGHTING SERVICE

GROUP V.



OSRAM Miners' Bulb, with taper peg cap. For Acid Accumulator. 2.5v. 25 m/m Bulb. 2v. & 4v. 26 m/m Bulb.

OSRAM Bulb For Alkaline Accumulators. 2.5v. 25 m/m Bulb.

Pearl OSRAM Miners' Bulb With S.E.S. (E14) cap. 2v. & 4v. 26 m/m Bulb.

All Osram Miners' bulbs listed below have been approved by H.M. Mines Dept., after having passed exacting tests. They bear the Mines Dept. official stamp



MINERS' LAMP BULBS

MINES DEPARTMENT CATEGORY 1. (B.S.S. 535)

For use in :—	Ratings		Dimensions		Std. Cap	PRICE EACH			
	Volts	Amps.	Diam. ± 1 m/m	Ov. Length ± 2 m/m		Clear		Pearl	
(a) (c) Cap Lamp ..	2	1.0	18	31	E.10	s.	d.	s.	d.
Hand Lamp ..	2.5	1.5	25	52	E.14	1	6	—	—
Hand " ..	2.5	1.75	25	50	953	1	6	1	6
Hand " ..	4	0.75	26	52	E.14	1	6	1	6
Hand " ..	4	1.0	28	50	953	1	6	1	6
Hand " ..	4	1.0	28	44	E.14	1	6	1	6
Hand " ..	4	1.0	28	51	Taper Peg	1	6	1	6
Hand " ..	4	1.0	28	54(b)	E.14	1	6	1	6
Hand " ..	4	1.0	28	54(b)	Taper Peg	1	6	1	6
(a) (d) Cap ..	4	.55 & .55	25	48	B.A.15D	2	0	2	0

MINES DEPARTMENT CATEGORY 2.

(a) (c) Cap Lamp ..	2	0.85	21(Squat)	28.5 ± 1.5	E.10	1	10	—	—
(a) Cap " ..	2	0.85	26	44	E.14	1	6	1	6
(a) Cap " ..	2.5	.5	18	31	E.10	1	8	—	—
(a) (c) Cap " ..	2.5	1.0	21	34	E.10	1	10	1	10
(a) Cap " ..	2.5	1.0	26	44	E.14	1	8	1	8
Cap " ..	2.5	1.0	25	46.5	953	1	10	1	10
Cap " ..	2.5	1.25	21	34	E.10	1	10	—	—
(a) (c) Cap Lamp ..	4	0.65	18	31	E.10	1	8	—	—
(d) Cap " ..	2.5	1.0 & .75	25	48	B.A.15D	2	6	2	6

- (a) Cap lamp bulbs will not comply with the Mines Department's regulations if used in Hewers hand lamps.
- (b) With pip.
- (c) May be supplied one third crown frosted without extra charge.
- (d) Twin filaments.



ELECTRIC LAMPS

FOR SPECIAL LIGHTING SERVICE

GROUP V.

KRYPTON-FILLED MINERS' BULBS



2.5 volt 1.5 amp.
Cap 953



4 volt 1 amp.
Cap E 14



4 volt 0.75 amp.
Taper Peg Cap

OSRAM Krypton-filled Miners' Bulbs are the latest contribution to the improvement of working conditions in mines.

These bulbs give 20% more light without any increase in current consumption, and without in any way reducing the life of the bulb. The increased light output has also been achieved without adding to the weight of the miner's equipment, as there is no need for larger batteries.

The extra light is obtained by using Krypton gas—a rare gas found in the atmosphere in the proportion of one part in a million—which reduces the energy lost by the filament through convection and conduction of the gas, so that more energy is available to produce light.

They have been fully tested and approved by H.M. Mines Department certifying that they give the 20% additional light claimed. They bear the Mines Department official stamp.



Rating		Dimensions		Cap	Price each	
Volts	Amps.	Diam. ± 1 m/m	Overall Length ± 2 m/m		Clear or Pearl	
		m/m	m/m		s.	d.
2.5	1.5	16	46	E14	1	11
			44	953		
2.5	1.75	16	46	E14		
			44	953		
4	0.75	16	46	E14		
			47	Taper Peg		
4	1.0	16	46	E14		
			47	Taper Peg		



DECORATION LAMP OUTFITS GROUP VI.

"DECORATION LIGHTS" FOR CONTINUOUS BURNING

100/125 volts ; 200/230 volts ; 240/250 volts.

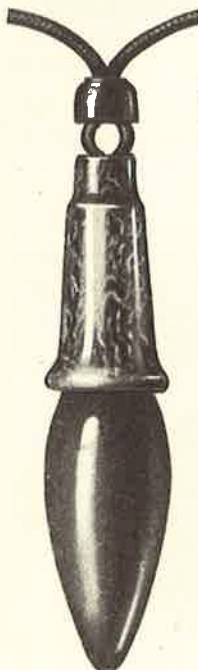
See illustration
in colour
opposite page 33.



OSRAM Decoration Lights.
OS **2003/4**

OSRAM Decoration Lights are constructed with the best materials obtainable to ensure complete SAFETY. They are especially suitable for RESTAURANTS and SNACK BARS, BALLROOMS and PUBLIC HALLS, SHOP INTERIORS and WINDOW DISPLAYS, CHRISTMAS TREES.

Brightly coloured olive-shaped (14 v. 7 w.) Osram Decoration Lamps are used, each fitted with automatic cut-out so that in the event of a lamp failing, it can be immediately located, since the other lamps keep burning. Well-shrouded bakelite lampholders, spaced 2ft. apart, are wired with heavily-insulated and braided flexible terminating in a 6ft. length and bakelite adaptor for attaching to ordinary lighting point. Bead device at the back of each lampholder ensures easy fixing in position on Christmas Trees, etc.



14v 7w Olive Shaped
Lamp showing Bake-
lite holder, flexible
and fixing bead.
(* full size approx.)

Outfit No.	1	3	4
Voltage	100—125	200—230	240—260
No. of Lamps			
In circuit ..	8	16	17
Spare	1	2	1
Catalogue No. ..	OS 2001	OS 2003	OS 2004
Price complete ..	12/6	19/6	19/6

Spare Lamps—14v 7w olive-shaped) : Red, orange, yellow, green, blue, and white. Catalogue No. OS **2000** .. **1/-** each

ACCESSORIES

- Autumn Leaves.** Price per Box.
Box of 1 dozen yds.
(Cat. No. OS**2501**) **7/6**
Dahlia Shades. Box of 8 (for
Decoration Outfit No. 1 only) **3/6**
Box of 18 Assorted colours
(Cat. No. OS **2503**) .. **7/-**
Box of 18 Silver finish
(Cat. No. OS**2504**) .. **7/-**
Waterlily Shades. Box of 8 (for
Decoration Outfit No. 1 only) **2/9**
Box of 18 Assorted colours
(Cat. No. OS **2505**) .. **5/6**



DAHLIA SHADE



DECORATION LAMP OUTFITS

GROUP VI.

“PARTY LIGHTS”

SERIES “A” NURSERY RHYMES.

200/250 volts.

(See coloured illustration opposite page 33).

This Outfit comprises twelve miniature Bell-Shades in six attractive colours which are attached to Cone Type (19v. 3w.) Lamps, fitted in coloured holders and wired together with multi-coloured flex to a B.C. adaptor. The Bells are translucent and each bears a delightful coloured representation of some well-known English Nursery Rhyme.

Osram Party Lights will be found invaluable for parties of all kinds—Christmas, Birthday, etc., where they will aid in diffusing an atmosphere of good cheer.

Cat. No. OS **2102** .. 12/6 complete
Spare Lamps (19v. 3w. Cone-shaped clear bulb) 6d. each
Spare Bell Shades (12 different designs) 5d. each



OSRAM Party Lights Cat. No. OS **2102**

CHRISTMAS LIGHTS

(OUTFIT No. 5).

200/250 volts.

A reliable lamp outfit comprising twelve Osram Decoration Lamps in assorted colours (and one spare), coloured bakelite lampholders spaced 12in. apart, bead device for easy fixing on Christmas Trees and well braided flexible terminating in a bakelite adaptor.

Cat. No. OS **2105** .. 7/6 complete.
Spare Lamps (19v. 3w. Cone-shaped—red, orange, yellow, green, blue and white) 6d. each



OSRAM Christmas Lights.
Cat. No. OS **2105**



DECORATION LAMP OUTFITS

GROUP VI.

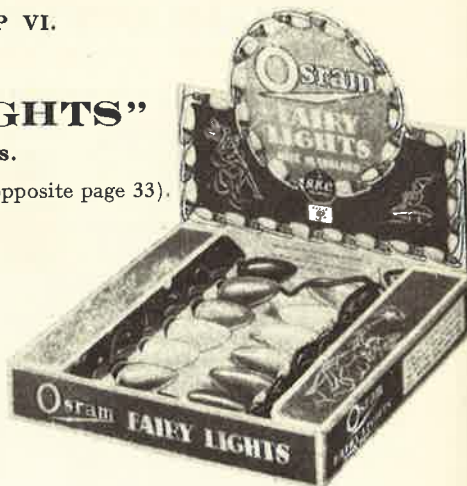
"FAIRY LIGHTS"

200/250 volts.

(See coloured illustration opposite page 33).

Low price combined with SAFETY are the outstanding features of this latest addition to the Osram range of Decoration Outfits.

Twelve coloured Osram Lamps are fitted in neat bakelite holders spaced 12in. apart. A bakelite adaptor enables the set to be immediately connected to any ordinary lighting point.



OSRAM Fairy Lights.

OS 2121

Catalogue No. OS 2121 5/- complete

Spare Lamps (19v. 3w. Cone-shaped)—red, orange, yellow, green, blue, and white.

PRICE 6d. each

CHRISTMAS TREE TABLE CENTRE

200/250 volts.

An illuminated centre piece for the table which has a wide appeal to children at Christmas time, or in fact at any festive gathering.

It consists of an artificial Christmas Tree of English manufacture, mounted on a decorative painted base, and wired complete with 5ft. of extension flexible and adaptor, 12 green bakelite lampholders, twelve Osram cone type Decoration Lamps in assorted colours and one spare lamp.



OSRAM Christmas Tree Table Centre.

OS 2108

Catalogue No. OS 2108 12/6 complete

Spare Lamps (19v. 3w. Cone-shaped), red, orange, yellow, green, blue, and white.

Catalogue No. 2100 6d.



ELECTRIC LAMPS
FOR SPECIAL LIGHTING SERVICE
GROUP I.



OSRAM Ultra-Violet Lamp.

OSRAM ULTRA-VIOLET LAMP

The Osram ultra-violet lamp comprises a tungsten filament with an arc in mercury vapour between cylindrical tungsten electrodes. The greater part of the light and infra-red rays is radiated from these incandescent electrodes, and the ultra-violet rays radiate from the arc stream between them. The filament ensures automatic striking of the arc.

The lamp's radiation has a close affinity to that of sunlight, and as such can be used, when concentrated on the human body, for purposes of a general tonic or for the treatment of specific diseases.

The lamp is designed for use on alternating current (50 cycles) only, in conjunction with a specially designed transformer. Voltages 100/105, 200/220, 230/250.

Standard Watts	Standard Cap	Approximate Dimensions				PRICE PER LAMP		
		Length		Diameter		£	s.	d.
		m/m	ins.	m/m	ins.			
300	G.E.S.	165	6½	70	2¾	2	10	0

Particulars of Osram Ultra-violet lamp standard for use with above lamp will be forwarded on request.

OSIRA

REGD. TRADE MARK.

HIGH PRESSURE MERCURY VAPOUR ELECTRIC DISCHARGE LAMPS

Made in England by the G.E.C. under one or more of the following British Patents:—344497, 384067, 391971, 397162, 405605, 410787, 415570, 426129 and other British Patents and pending Patent applications.

A G.E.C. Invention.

The Osira H.P.M.V. Lamp was invented and developed in the Research Laboratories of The General Electric Co., Ltd. at Wembley, Middlesex, and were first put into operation for street lighting on June 22nd 1932, in East Lane, Wembley. This was the first public lighting installation in the world in which this type of lamp was used.

Principle of Operation.

Osira H.P.M.V. lamps constitute the most important recent advance in the technique of light production. The light is produced not because the gas or vapour is very hot but by the discharge of electricity through a mixture of gases which includes mercury vapour at a higher pressure than has been practical hitherto.



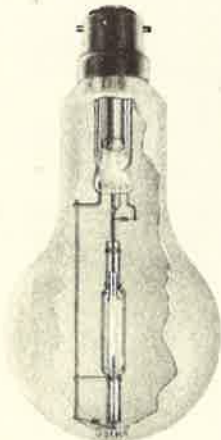
400 WATT OSIRA
H.P.M.V. LAMP.

Efficiency.

Osira H.P.M.V. lamps give 3 times as much light as ordinary gasfilled tungsten filament lamps of equivalent wattage; for instance the 400 watt Osira Mercury Discharge lamp gives practically the same light as a 1,000 watt Osram Incandescent lamp. Thus by using these lamps the illumination can be greatly increased without adding to the amount of electricity consumed.

Electricity Supply.

Osira Lamps can only be used on alternating current supplies of voltages from 200 to 260 volts.



80 WATT
OSIRA LAMP.

Choke Coils.

The characteristics of these OSIRA lamps are similar to those of an electric arc, i.e., they have a "negative" resistance and consequently they must always be used in conjunction with a specially designed choke.

Power Factor.

The power factor of lamp and G.E.C. choke is about 0.6 but by suitable condensers this can be raised to between 0.8 and 0.9.

Switching.

When first switched on Osira lamps pass about twice their normal burning current and take roughly between two and five minutes, according to wattage, to attain full brightness.

If the electricity supply is interrupted the lamp will have to cool down before it will light up again which it will do automatically if the switch is left on.

OSIRA

HIGH PRESSURE MERCURY VAPOUR ELECTRIC DISCHARGE LAMPS—CONT.

Fuses.

The provision of separate fuses for each lamp is recommended.

Wiring.

Osira lamps are arranged for parallel burning, each lamp must have a G.E.C. choke coil in series with it, preferably on the phase side of the lamp.

If a condenser is used for power factor correction it should be connected across the mains on the mains side of the choke.

Burning Position.

The standard lamps are made for burning in the cap-up position only, but if specially ordered, lamps can be supplied for burning cap-down.

Running Characteristics and Dimensions.

Lamp Rating Watts	Approx. starting current at 230 volts		Average current when burning at full brightness at 230 volts	
	Without Condenser	With Condenser	Without Condenser	With Condenser
80	amps. 1.3	amps. 0.8	amps. 0.8	amps. 0.45
125	1.7	1.1	1.0	0.6
250	4½	3½	2	1.3
400	5½	4	3.2	2.2

Standard Watts	LIGHT OUTPUT AND DIMENSIONS.						
	Approx. light output in Lumens	Overall Length		Overall diameter		Length from cap centre contact to end of light column nearer cap	
		m/m	ins.	m/m	ins.	m/m	ins.
80	3040	160±4.5	6½	80±1	3½	120±4	4¾
125	5000	178±5.5	7	90±1	3½	133±5	5¼
250	9000	290±10	11½	50±1	1½	177±13	7
400	18000	325±15	12¾	50±1	1½	190±8	7½

PRICES.

Standard Voltages	Standard Watts	Standard Cap	PRICE PER LAMP		
			£	s.	d.
200/210, 220	80	3 PIN B.C.	1	10	0
230, 240/250	125	3 PIN B.C.	1	15	0
	250	G.E.S.	1	17	6
	400	G.E.S.	2	0	0

For particulars of Chokes and Condensers for use with Osira discharge lamps see page 63.

OSIRA

REGD. TRADE MARK

400 WATT FLUORESCENT HIGH PRESSURE MERCURY VAPOUR ELECTRIC DISCHARGE LAMP



OSIRA 400 watt
Fluorescent Lamp
Cone Shaped

Manufactured under one or more of the following British Letters Patent and other British Patents and pending applications : 344,497, 384,067, 391,971, 397,162, 401,846, 405,605, 410,787, 422,364, 430,437.

While employing the same principles as the popular 400 watt Osira High Pressure Mercury Vapour Electric Discharge lamp, the new Fluorescent lamp has been designed with special consideration for the actual colour of the light given.

The principle involved is the use of a coating of fluorescent powder on the inner side of the outer bulb, which converts the invisible ultra-violet rays into visible rays at the red end of the spectrum. Consequently, this lamp gives a light which has an improved red colour content.

Two types of bulb, the cone shape and the tubular shape, are standard for this lamp. The tubular bulb has been designed for use in certain streetlighting lanterns and other fittings which possibly would not accommodate the cone-shape bulb.

Watts	Initial Light Output	Initial Lumens per watt.	Dimensions		Cap	PRICE each
			Overall Length	Diameter		
400 Cone	15,200	38	m/m 330	m/m 165	G.E.S.	£ s. d. 2 15 0
			±15	±3		
			325	115		
400 Tubular	14,800	37	±15	±2	G.E.S.	2 15 0

CHOKES AND CONDENSERS

The following particulars apply to both the Cone shaped and the Tubular bulb lamps.

Voltage Ranges, 200/210, 220, 230 and 240/250.

LAMPS		CHOKES		CONDENSERS	
Watts	Rating	Type	PRICE each	Type	PRICE each
400	200/210 v. or 220 v.	Z.1871.L	£ s. d. 2 14 0	Z.1854 20 mfd.	£ s. d. 1 5 0
	230 v. or 240/250 v.	Z.1871.H	2 14 0	Z.1854 20 mfd.	1 5 0

RUNNING CHARACTERISTICS

These apply to both the Cone shaped and the Tubular bulb lamps.

Watts	Approx. amps. starting current (at 230 v.)		Average amps. running current (at 230 v.)	
	5.5	without condenser	3.0	without condenser
400	4.0	with condenser	2.2	with condenser

125 WATT OSIRA LAMP IN BLACK GLASS BULB

This lamp is designed to produce the ultra-violet radiation which causes certain types of powders and paints to fluoresce. It can be used in a variety of ways—in window displays, stage shows, and seaside illumination devices. Posters treated with fluorescent powders take on richer and more attractive colours when subjected to the influence of the ultra-violet rays radiated by the lamp.

Watts	Dimensions m/m			Standard Voltages 200—250
	Diameter	Overall length	Light Centre Length	PRICE EACH
125	90 ± 1	178 ± 5.5	133 ± 5	£ s. d. 2 12 6

Details of choke and condenser for use with this lamp will be forwarded on application.

OSIRA

HIGH PRESSURE MERCURY VAPOUR ELECTRIC DISCHARGE LAMP ACCESSORIES

G.E.C. TAPPED CHOKE COILS

These G.E.C. Choke Coils have been specially designed for, and must always be used with OSIRA High Pressure Mercury Vapour Lamps.

They are provided with tapplings in steps of 5 Volts.

CHOKE COIL PRICES.

Lamp Rating Watts	Lamp Voltages Covered	Catalogue No.	PRICE EACH		
80	200/210, 220 230, 240/250	*Z.1820 Type B	£	s.	d.
		*Z.1821H	3	9	6
125	200/210, 220 230, 240/250	*Z.1831L	2	2	0
		*Z.1831H	2	2	0
250	200/210, 220 230, 240/250	*Z.1862L	2	10	0
		*Z.1862H	2	10	0
400	200/210, 220 230, 240/250	*Z.1872L	2	14	0
		*Z.1872H	2	14	0

* Waxfilled, totally enclosed type.

G.E.C. METAL CLAD CONDENSERS

These Condensers are totally enclosed and of the highest quality.

They are designed, when used with one OSIRA High Pressure Mercury Vapour Lamp and Choke, to raise the Power Factor of the unit to over 0.8.

Lamp Rating Watts	Voltages	Recommended Capacity in M.F.D.	Catalogue No.
80	200/220	10	Z.1850
	230/250	7½	Z.1849
125	200/220	12½	Z.1851
	230/250	10	Z.1850
250	200/250	15	Z.1852
400	200/250	20	Z.1854
PRICE, EACH ; Z.1849 16/- Z.1850 18/- Z.1851 20/- Z.1852 22/- Z.1854 25/-			

Full details of characteristics, wiring instructions, circuit diagram, technical notes and fittings recommended will be found in the G.E.C. Catalogues Z.(1) for Exterior Lighting and F.7093 for Interior Lighting.

OSIRA FLOODLIGHTING LAMPS

GROUP IX.



"Osira" Floodlighting Lamp.

The special advantages which these lamps possess over other forms of floodlighting lamps are :—

1. **Economy.** The light generated by them is itself coloured, thus obviating the use of coloured media which invariably absorb a large percentage of the light given by ordinary light sources.
2. **Brilliance.** The light given by them is more brilliant and the colours more vivid than that obtained by other methods.

STANDARD COLOURS :—Red, Light Blue, Dark Blue, Light Green, Dark Green and Yellow (Sodium).

ESSENTIAL ACCESSORIES :—Tesla Coil, Filament Transformer and Choke Coil. (Tesla Coil not necessary for Yellow).

PRICES.

Colour	Approx. Watts	Voltage	PRICE PER LAMP		
			£	s.	d.
Red	400	200/250	3	0	0
Light Blue	250				
Dark Blue	250				
Light green	250				
Dark green	250	200/250	3	1	6*
Sodium yellow	100	200/250			
Red	150	200/250	2	2	6
Light blue, etc. to Dark green	100				

* With Detachable Jacket.

Colour	Watts	DIMENSIONS					
		Length		Diameter of luminous column		Length of luminous column	
		m/m	ins.	m/m	ins.	m/m	ins.
Red	400	1180±19	46 $\frac{3}{4}$	37	1 $\frac{7}{8}$	865±5	34
Blue, etc. ...	250	1180±19	46 $\frac{3}{4}$	26	1 $\frac{1}{8}$	865±5	34
Yellow	100	425±20	16 $\frac{1}{2}$	50±2	1 $\frac{3}{4}$	235±10	9
Red	150	690±10	27	{ 37±1.5 } 26±1.5	1 $\frac{3}{8}$	430±5	16 $\frac{1}{2}$
Blue, etc. ...	100	690±10	27	55±5	1	430±5	16 $\frac{1}{2}$

Prices and particulars of Tesla Coils, Chokes and Filament Transformers for Osira Floodlighting Lamps will be forwarded on application.

OSIRA LABORATORY LAMPS

GROUP IX.

Many operations which are carried out in physical and chemical laboratories require the use of a light source giving a line spectrum which can be used as a source of known wavelengths for calibration purposes, or from which a single line can be isolated for work requiring monochromatic radiation. To cover these fields the General Electric Company Ltd. has produced a range of special OSIRA electric discharge lamps, particulars of which are contained in leaflet No. OS7196 obtainable on application.

THE GENERAL ELECTRIC CO., LTD., OF ENGLAND

Known throughout the world as the



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EASTLEIGH, ERITH, NORTHAMPTON AND LEMINGTON-ON-TYNE.**

RESEARCH LABORATORIES : WEMBLEY.

HOME BRANCHES :

	Address	Telephone No.
ABERDEEN	Magnet House, 32, Market Street	Central 2770/1
BELFAST	Magnet House, Queen Street	25656 (3 lines)
BIRMINGHAM	Magnet House, Moor Street	Midland 4421/8 (8 lines)
BLACKBURN	Magnet House, 40/42, Darwen Street	4141/2 (2 lines)
BLACKPOOL	Magnet House, 24, Birley Street	3233 (2 lines)
BRIGHTON	Regent Hill, Western Road	3277/8
BRISTOL	Magnet House, 26, Victoria Street	24551 (3 lines)
CARDIFF	Magnet House, Castle Arcade & Womanby St.	2620
CORK	Magnet House, Grand Parade,	823
CROYDON	516, London Road	Thornton Heath 3246
DUBLIN	Magnet House, Trinity Street	71141/2/3/4
DUNDEE	26/30, North Lindsay Street	2168/9 (2 lines)
EDINBURGH	Magnet House, 8, George Street	23241/2/3/4/5
GLASGOW	Magnet House, 71, Waterloo Street	Central 9250
GLOUCESTER	Magnet House, 2, St. Aldate Street	3017
HULL	Magnet House, 164, 166, 168, George Street	Central 34625/6
INVERNESS	14, Falcon Square	830
IPSWICH	Electric House, Lloyds Avenue	3771/2/3 (3 lines)
LEEDS	Magnet House, Wellington Street	20671 (3 lines)
LEICESTER	Magnet House, 33, Rutland Street	58111/2
LIVERPOOL	Magnet House, Church Alley	Royal 5380 (6 lines)
MANCHESTER	Magnet House, Victoria Bridge	Blackfriars 3434 (8 lines)
MIDDLEBROUGH	Magnet House, 52/58, Corporation Road	3621/2
NEWCASTLE-ON-TYNE	Magnet House, Gallowgate	25160/1/2/3/4
NOTTINGHAM	Magnet House, 25, Stoney Street	43547/8/9 and 43540
PLYMOUTH	Magnet House, 175, Union Street	60226 (3 lines)
READING	72/74 Castle Street	3237/8
SHEFFIELD	Magnet House, Fitzalan Square	25101/2/3
SOUTHAMPTON	Magnet House, Commercial Road	5631/2/3
STOKE-ON-TRENT	Magnet House, South Wolfe Street	48575/6 (2 lines)
SWANSEA	Magnet House, Northampton Place	5026/7/8 (3 lines)

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