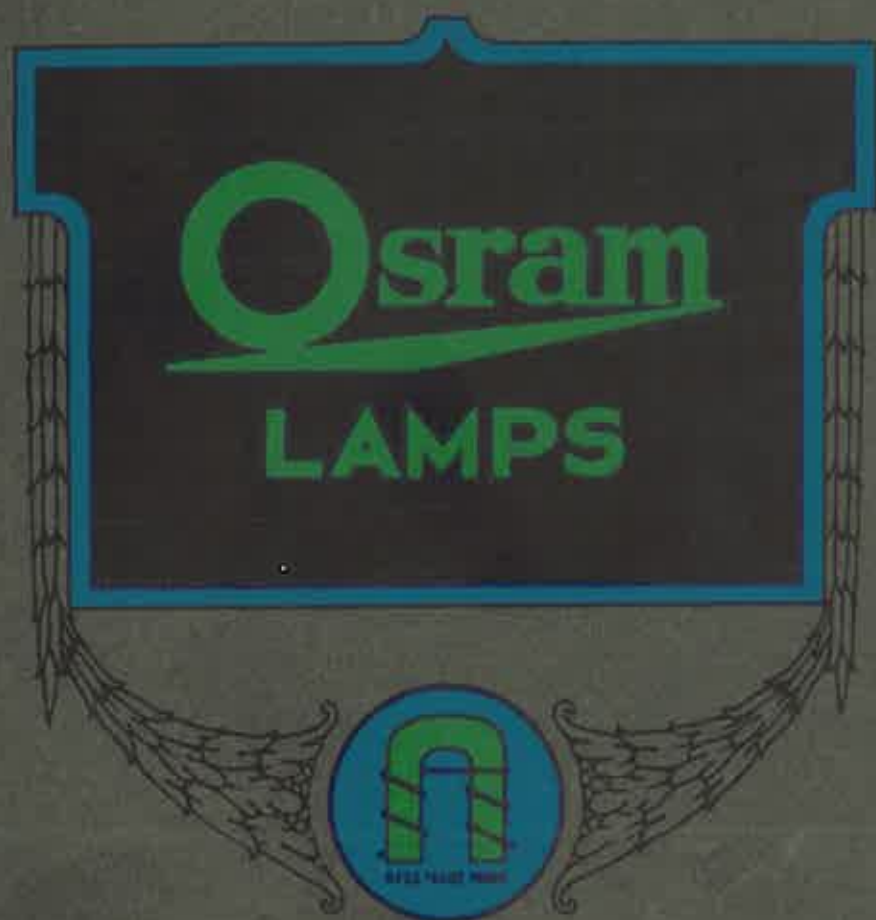


REDUCED PRICES

1st MARCH, 1932.



ENGLAND.

THE GENERAL ELECTRIC CO., LTD.

TERMS OF BUSINESS AND CONDITIONS OF SALE.

L—HOW TO ORDER.

WHEN ORDERING—

- Quote Section Letter and Catalogue No. If special quotation has been submitted, give quotation reference also.
- State whether order to be sent in one consignment only, or whether immediate delivery is to be made of what is in stock.
- If it is not imperative that the exact articles specified be sent, add the words "or similar."

TELEPHONE ORDERS—

The telephone number of the G.E.C. Head Office, Magnet House, Kingsway, is TRIMPLE 8000 (70 lines). That of each of the Company's branches will be found on page 4 of the cover of the principal G.E.C. Catalogue Sections. The Company is prepared to execute orders from its customers received by telephone, but in the interests of customers themselves all such orders should be confirmed in writing. All Orders confirming Verbal Orders should be plainly marked "Confirmation."

CORRESPONDENCE—

Owing to the variety of the goods handled by the Company, letters and telegrams dealing with orders should specify—

- Order number and date.
- The nature of the goods, or the section of the catalogue concerned.

2.—A WARNING.

Instances have occurred where Shippers, Merchants, Contractors, and others receiving orders, specifications, and orders for goods described merely by reference to letters and numbers contained in the Company's Catalogue, have quoted for or supplied the goods of other manufacturers under the said letters and numbers. The Directors of the Company have been advised that such action is a fraud upon the Company's rights, and have been successful in obtaining an injunction and damages in proceedings taken in the Chancery Division of the High Court of Justice. The injunction restrained (inter alia) the use of employment in connection with electrical goods not manufactured or supplied by the Plaintiffs, of letters or figures having reference to the Plaintiffs' Catalogue, so as to induce the belief that such goods are manufactured or supplied by the Plaintiffs.

While inviting all persons engaged in the electrical trade to make frequent reference to the Company's Catalogue as a standard work on electrical materials and goods, the Directors feel bound to issue this warning against an improper use of the Catalogue.

3.—GENERAL CONDITIONS OF SALE.

The Company will use its best endeavours to execute Orders in time, but under no circumstances will be responsible for late delivery. The Catalogue prices are those ruling on date of issue and are subject to alteration without notice.

The Company reserves the right to cancel any uncompleted Order of expedient delivery in the event of any of the buyer's engagements not being duly met, or if it has reason to believe that such engagements may not be met.

RETURNS.—Goods cannot be taken back later than 10 days from date of Invoice.

Returned goods will not be accepted unless accompanied or preceded by an Advice Note.

Advice Note must state reason for the return of goods, the date, reference letter and number of the Invoice on which the goods were charged.

The acceptance of returned goods does not necessarily entitle to credit for same. Credit can only be given when the claim has been examined and found correct.

Goods should not be returned in cases consigned as "empty," since, if so marked, they are very liable to get lost in transit, or overlooked, in which case the Company will not hold itself responsible, and no credit can be given.

BREAKAGE, DAMAGE AND PILFERAGE.—Except in special cases the Company does not hold itself responsible for any loss or damage in transit.

Goods should be examined immediately on delivery, and in case of breakage, damage, or pilferage the Consignee should notify the Carrier immediately, and lodge a claim within three days of delivery, keeping the boxes or damaged articles for examination.

In the case of non-delivery a claim must be lodged with the Carrier within fourteen days of despatch.

ALLEGED SHORTAGE.—Claims for alleged shortage can only be entertained if received within three days of receipt of goods and if accompanied by fullest possible particulars of case, number, condition, etc.

CONSEQUENTIAL DAMAGE.—Whilst every care is taken to ensure correct execution of orders, and whilst any faulty goods are of course replaced, the Company will not entertain claims for consequential damage, loss of time sustained, or cost of repairs sustained without previous consent.

SUBSTITUTION OF IMPROVED DESIGNS.—The Company will supply that pattern which experience has shown to be the best, instead of invariably sending exactly the one that may be ordered.

DIMENSIONS AND DRAWINGS.—Although all dimensions and drawings appearing in the Company's Catalogue have been compiled with every possible care, no guarantee is given that same will not be departed from or varied without notice.

HOME ORDERS.

TERMS OF PAYMENT.—Ledger accounts will be opened upon satisfactory references being furnished.

Accounts are payable monthly subject to a cash discount of 2½%, if paid during the month following delivery, unless otherwise agreed (except Electrical Plant P Section of the Company's Catalogue, which is strictly Net).

No Cash Discount will be allowed off Overdue Accounts or Accounts under (1).

Cheques, Postal and Money Orders to be made payable to The General Electric Company, Limited, and crossed as follows:—
"Mistaken Bank, London"

DELIVERY.—Goods are delivered free within our Van Delivery areas. Outside these areas orders of the value of £10 and upwards will be sent carriage free within the usual delivery areas of the Railway Companies in Great Britain.

(Overseas—Our extensive Van Deliveries cover a radius of approximately 12 miles from the G.P.O., London, and in the case of most of our Provincial Branches, approximately 6 miles from their local G.P.O.)

CASES.—All cases and packing materials are charged at cost price, full value being allowed if returned in good condition and cartage paid within one month, and duly advised; only two-thirds value will be allowed on machinery cases.

EXPORT ORDERS.

TERMS OF PAYMENT.—Unless otherwise arranged, customers are requested to provide for payment through a London Bank against Bill of Lading.

Payment for orders received from Export Houses in Great Britain will be 2½ per cent Cash within seven days or Net monthly account (except Electrical Plant P Section and Order Lamp G Section of the Company's Catalogue, which are strictly Net).

DELIVERY.—Free Warehouse or Works. ELECTRICAL PLANT free on rails Birmingham. Extra charge for delivery f.o.b., over and packing.

THESE TERMS ARE SUBJECT TO MODIFICATION BY SPECIAL CONDITIONS RELATING TO DIFFERENT DEPARTMENTS, DETAILS OF WHICH WILL BE SENT ON REQUEST.



ROBERTSON & OSGLIM LAMPS

Made in England

OS

Section
7th EDITION

Revised
March 1st. 1932.

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The prices in this catalogue apply only in Great Britain, Northern Ireland and the Irish Free State.

THE GENERAL ELECTRIC CO., LTD.

Head Office: MAGNET HOUSE, KINGSWAY, LONDON, W.C.2.

Telephone: TEMple Bar 8000 (70 lines).

Telegrams: "Electricity, Westcent, London."

Cablegrams: "Polyphase, London."

Works:—WITTON, BIRMINGHAM, MANCHESTER, COVENTRY, SOUTHAMPTON, ERITH, WEMBLEY, LONDON, Etc.

BRANCHES THROUGHOUT GREAT BRITAIN AND IN ALL PRINCIPAL MARKETS OF THE WORLD.



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



THE PEARL OSRAM SIMPLIFIED LINE LAMP FACTORY, WEMBLEY.

Guarantee



The General Electric Company Ltd., guarantees that OSRAM Lamps are made only from the best materials as scheduled hereunder, are manufactured throughout in England, and comply in every respect with the specification for Tungsten Lamps, No. 161 of the British Standards Institution.

SCHEDULE.

TUNGSTEN FILAMENTS. MOLYBDENUM SUPPORTS.

Manufactured at the OSRAM-G.E.C. Lamp Works, Hammersmith, from Scheelite (Tungsten Ore) and Molybdenite (Molybdenum Ore) imported from Australia and New Zealand.

GLASS BULBS. TUBING AND STEM RODS.

Manufactured at the OSRAM-G.E.C. Glass Works, Wembley, Middlesex, and Lemington-on-Tyne, from raw materials obtained in Great Britain. The Pearl finish (inside frosting of the Pearl OSRAM bulb) is also executed at these works by a patent acid etching process.

LEAD-IN WIRES.

Manufactured at the OSRAM-G.E.C. Lamp Works, Hammersmith, from Nickel and Copper from Canada and Iron from Great Britain.

CAPS.

Manufactured at the G.E.C. Allied Works, Lamp Caps, Ltd., Chesterfield, from raw materials obtained from Australia, Canada, Great Britain and India.

ARGON GAS.

Manufactured at the OSRAM-G.E.C. Lamp Works, Hammersmith, for filling Gasfilled Lamps.

WORKMANSHIP.

OSRAM Lamps are the product of the finest workmanship, and the equipment at the OSRAM Lamp Works represents the latest developments in the science of lamp manufacture.

RESEARCH.

To further ensure the high and consistent quality of OSRAM Lamps, the product is continuously submitted to inspection for over 150 possible defects and to rigorous tests, a proportion of which are to destruction, by skilled scientists at the Research Laboratories of the General Electric Company, Ltd., Wembley, Middlesex.

Osram

Electric Lamps.

STANDARD PACKAGES.



STANDARD PACKAGES.

The ordering of lamps in standard packages cannot be recommended too strongly as it facilitates 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 moments notice.

OSRAM Gasfilled Lamps.

Each OSRAM gasfilled lamp is enclosed in a neat carton which holds the lamp securely, thus reducing to a minimum the risk of handling and storage breakages.

PEARL OSRAM Lamps

PEARL OSRAM lamps are enclosed in special cartons to render them easily distinguishable from all other types

OSRAM Vacuum Lamps.

Each clear bulb OSRAM vacuum lamp is enclosed in a corrugated wrapper which while offering equal protection to the cartons in handling, enables it to be readily distinguished from a gasfilled lamp.

FIBERITE STORAGE BINS.

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

OSRAM Automobile Lamps.

These lamps are packed separately in miniature cartons, which can be conveniently stored in either garage or car. For transit and storage they are then packed in cardboard boxes in quantities as shown in the accompanying schedule.

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
	1000	100 to 260	12
	1500	100 to 260	12
OSRAM LAMPS (Vacuum)	15	60 to 260	100
	25	100 to 260	100
	40	100 to 260	100
OSRAM LAMPS (Automobile)	Type.	Bulb diameter.	Quantity in standard package.
	Headlight Sidelight Tail-light Indicator Festoon	m/m 38	12
		23 & 19	12
		15	25
		17	25



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OSRAM
ELECTRIC
LAMPS.

Electric Lamps.

PACKING, DELIVERY & BREAKAGES IN TRANSIT.

Quantity.	District.	Packing.	Delivery.	Transit Breakages.
Groups I., II., III., V. and VI. Any quantity.	Inside G.E.C. free delivery areas.*	FREE	FREE	Replaced or credited at G.E.C. option.†
Group I. Lamps to the list value of NOT less than £2 sent to one address Groups II., V. & VI. Lamps to the List value of NOT less than £1 to one address.	Inside Railway Company's free delivery areas.	FREE	FREE	
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 £2. Groups II., V. & VI. 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 12 miles of the G.P.O., London.

Within 6 miles of the G.P.O., in the following towns :—

Aberdeen
Accrington
Ashford (Kent)
Bedford
Belfast
Birmingham
Blackburn
Blackpool
Bradford
Brighton
Bristol
Burslem
Cardiff
Chesterfield

Colchester
Cork
Coventry
Croydon
Derby
Doncaster
Dublin
Dundee
Edinburgh
Exeter
Glasgow
Gloucester
Grimsby
Huddersfield

Hull
Ipswich
Leeds
Leicester
Lincoln
Liverpool
Manchester
Middlesbrough
Newcastle-on-Tyne
Newport (Mon.)
Norwich
Nottingham
Plymouth
Portsmouth

Preston
Reading
Rotherham
Rugby
Sheffield
Southampton
Stoke-on-Trent
Sunderland
Swansea
Taunton
Tonbridge
Tunbridge Wells
Worthing



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 voltages 140 to 180 volts will be quoted on application.

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

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.	2d. each	2d. each	2d. each
For G.E.S. in place of B.C. or E.S. Caps or vice versa	—	1/- each	—

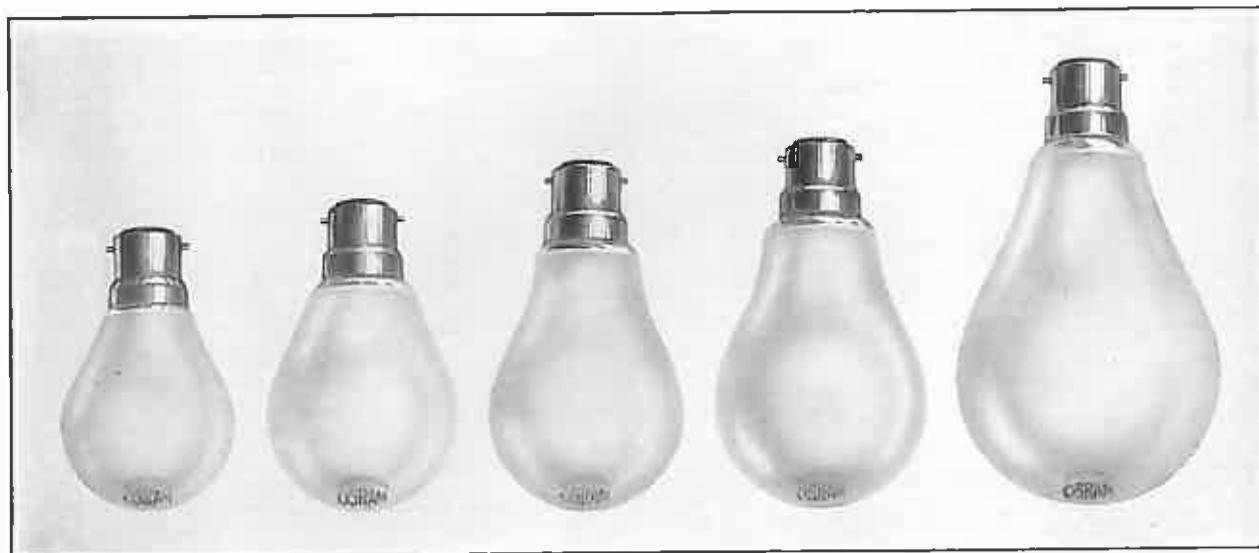
*S.B.C., S.E.S. and S.C.C. Caps cannot be supplied for higher wattages than 40 watts.



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OSRAM
ELECTRIC
LAMPS.

Electric Lamps.

PROGRESS.



15 watts

25 watts

40 watts

60 watts

100 watts

THE PEARL OSRAM SIMPLIFIED LINE.

PEARL OSRAM LAMPS—the latest development of electric lighting—are cheaper than clear lamps, and superior to clear lamps for almost every lighting purpose, for the following reasons :—1. They give highly diffused light, free from glare. 2. The diffusing surface or frosting is inside the bulb and cannot get dirty. The outside is perfectly smooth, and can be wiped clean in a moment. 3. The amount of light lost during the process of being diffused is so small—less than 2%—that it is undetectable except with accurate photometers. 4. The Pearl finish takes on the tint of its surroundings, by virtue of which it harmonises perfectly with any colour scheme. 5. The bulbs are artistic and uniform in shape throughout the complete range.

TEMPERED FILAMENTS.

The filaments of Osram Lamps are now tempered like steel, which special treatment renders them exceptionally strong and rigid. The introduction of this new process in their manufacture means that Osram Lamps are now even stronger, more reliable and more brilliant than they have ever been.

TEMPERED FOR :

GREATER STRENGTH,
GREATER RELIABILITY,
GREATER BRILLIANCE.

THE PEARL OSRAM SIMPLIFIED LINE IS A STRAIGHT LINE—the shortest distance between the need for perfect lighting and its attainment.



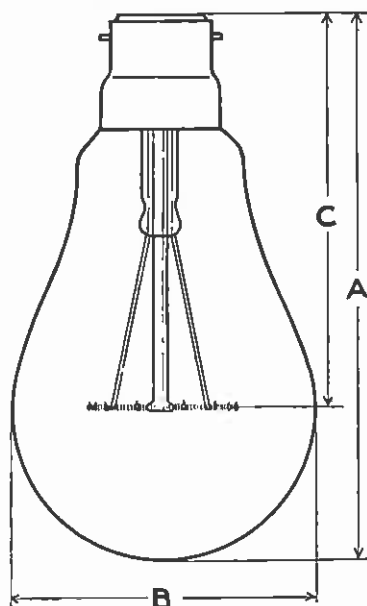
Electric Lamps.

FOR GENERAL LIGHTING SERVICE.
GROUP I.

PEARL OSRAM LAMPS.

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

STANDARD WATTS	STANDARD CAP	STANDARD VOLTAGES AND PRICE PER LAMP.							
		25 and 30 volts.		35, 40, 45, 50 and 55 volts.		60, 65, 70, 75 and 80 volts.		100, 105, 110, 115, 120, 125, 130, 200, 210, 220, 230, 240, 250 and 260 volts.	
		s.	d.	s.	d.	s.	d.	s.	d.
15	B.C.	2	1	2	6	2	10	2	0
25		2	6	2	6	2	6	1	9
40		2	6	2	6	2	6		
60		3	0	3	0	3	0		
75		—	—	—	—	—	—	2	6
100		—	—	5	3	5	3		



Dimensional Diagram
15—100 watts.

DIMENSIONS AND LIGHT OUTPUT.								
Standard watts.	Voltage range.	Approx. lumens.	Length A		Bulb diameter B		Cap Contact to Filament Centre C	
			Tolerance ± 3 1/4 m/m		Tolerance ± 1 m/m		Tolerance ± 3 m/m	
			m/m	ins.	m/m	ins.	m/m	ins.
15	25-30	175	92.5	3 1/8	55	2 3/16	65	2 1/2
	35-55	152						
	60-130	127						
	200-260	108						
25	25-30	318	100	3 1/8	60	2 3/8	70	2 3/4
	35-55	293						
	60-80	256						
	100-130	230						
40	200-260	203	110	4 1/16	60	2 3/8	80	3 1/8
	25-30	548						
	35-55	509						
	60-80	467						
60	100-130	440	117.5	4 5/8	65	2 1/2	85	3 5/16
	200-260	340						
	25-30	880						
	35-55	815						
75	60-80	754	125	4 1/4	70	2 3/4	90	3 1/2
	100-130	744						
	200-260	606						
	100-130	960						
100	200-260	817	137.5	5 1/8	75	2 15/16	100	3 13/16
	35-55	1473						
	60-80	1358						
	100-130	1330						
	200-260	1190						

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.
THE PEARL OSRAM LAMPS, WITH THESE EXCEPTIONS ARE GASFILLED.
For Extras see page 6. For PEARL OSRAM Traction Lamps see page 17.



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OSRAM
ELECTRIC
LAMPS.

Electric Lamps.

FOR GENERAL LIGHTING SERVICE.

GROUP I.

CLEAR GASFILLED LAMPS.

Standard watts.	Standard cap.	STANDARD VOLTAGES AND PRICE PER LAMP.							
		25 and 30 Volts.		35, 40, 45, 50 and 55 Volts.		60, 65, 70, 75 and 80 Volts.		100, 105, 110, 115, 120, 125, 130, 200, 210, 220, 230, 240, 250 and 260 Volts.	
		s.	d.	s.	d.	s.	d.	s.	d.
*40	B.C.	2	9	2	9	2	9	1	11
*60	B.C.	3	3	3	3	3	3	1	11
*100	B.C.	—	—	5	6	5	6	3	0
150	B.C.	—	—	7	9	9	0	5	0
200	E.S.	—	—	9	6	12	3	7	6
300	G.E.S.	—	—	12	3	15	6	10	0
500	G.E.S.	—	—	15	6	19	6	12	6
1000	G.E.S.	—	—	—	—	—	—	16	0
1500	G.E.S.	—	—	—	—	—	—	22	6

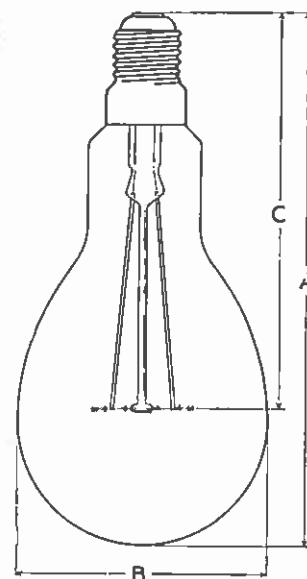
For EXTRAS see page 6.

*—The dimensions and light output figures of the 40, 60, and 100 watt sizes are the same as those shown on page 8 for PEARL OSRAMS, which latter lamps are the recognised standards for these wattages, and should be used in preference to clear lamps for General Lighting Service.



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

Standard watts	DIMENSIONS AND LIGHT OUTPUT.							
	Voltage Range.	Approx. Lumens.	Maximum Dimensions.				Approx. Dimen.	
			A		B		C	
			m/m	ins.	m/m	ins.	m/m	ins.
150	35-55	2371	165	6½	79	3⅛	120	4⅛
	60-80	2180						
	100-130	2130						
	200-260	1920						
200	35-55	3320	213	8⅜	95	3¼	150	5⅞
	60-80	3057						
	100-130	2960						
	200-260	2660						
300	35-55	5292	248	9¾	110	4⅜	180	7⅞
	60-80	4920						
	100-130	4770						
	200-260	4260						
500	35-55	9465	280	11	130	5⅛	205	8⅛
	60-80	8858						
	100-130	8700						
	200-260	7700						
1000	100-130	19300	340	13⅜	165	6½	250	9⅞
	200-260	17400						
1500	100-130	30300	340	13⅜	165	6½	250	9⅞
	200-260	27900						



Dimensional Diagram
150—1500 watts.



Electric Lamps.

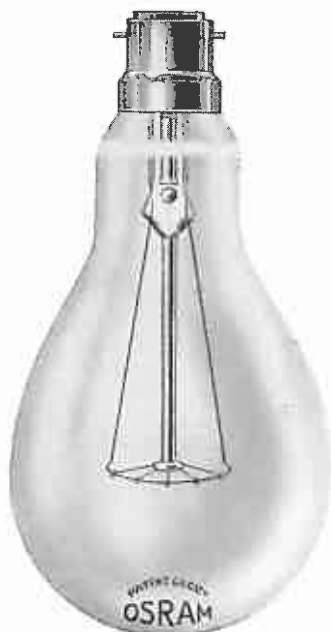
FOR GENERAL LIGHTING SERVICE.

GROUP I.

DAYLIGHT LAMPS (GASFILLED.)

OSRAM Daylight lamps have special blue glass bulbs, which produce a light corresponding very 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 will generally be found necessary to use lamps of a higher wattage to compensate for the light absorbed by the blue glass.



150 watts
OSRAM Daylight Lamp.

Standard watts.	Standard cap.	VOLTAGE RANGE AND PRICE PER LAMP.	
		100 to 130 Volts and 200 to 260 Volts.	
60	B.C.	s. 2	d. 5
100	B.C.	4	0
150	B.C.	6	9
300	G.E.S.	12	9

For EXTRAS see page 6. For dimensions see pages 8 and 9.

CLEAR VACUUM LAMPS.

While for certain types of fittings and lighting service clear lamps are necessary ; for all General Lighting purposes the Pearl Osram Lamps shown on page 8 are recommended in preference.

Standard watts.	Type of Filament.	Standard cap.	VOLTAGE RANGE AND PRICE PER LAMP.	
			100—130 Volts and 200—260 Volts.	
15	Coil	B.C.	s. 2	d. 0
25	"		1	11
40	Cage		1	11

CAPS: Edison screw and centre contact bayonet caps are fitted if required without extra charge.
For EXTRAS see page 6.

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	127.5 108	m/m. 92.5	Ins. 3 $\frac{1}{8}$	m/m. 55	Ins. 2 $\frac{3}{16}$	m/m. 65	Ins. 2 $\frac{1}{2}$
25	100—130 200—260	230 203	100	3 $\frac{1}{8}$	60	2 $\frac{1}{8}$	70	2 $\frac{3}{4}$
40	100—130 200—260	372 348	136.5	5 $\frac{1}{2}$	62	2 $\frac{7}{16}$	—	—



25 watts
OSRAM Vacuum Lamp.

Osram

Electric Lamps.

FOR SPECIAL LIGHTING SERVICES.

GROUP I.

CANDLE LAMPS.

PLAIN AND CRINKLED.

These candle lamps are supplied with either clear or flame tinted bulbs.

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



OSRAM
Candle Lamp,
Plain.

Standard watts.	Length.		Diameter		Shape.	Finish.	VOLTAGE RANGE AND PRICE PER LAMP.							
							25 & 30 Volts.		50 Volts.		60-80 Volts.		100-130 & 200-260 Volts.	
	m/m	ins.	m/m	ins.			s.	d.	s.	d.	s.	d.	s.	d.
25	100 + 8	3 1/8	35 + 2	1 1/8	Plain	Clear	3	0	3	6	4	0	3	0
						Flametint	3	4	3	11	4	5	3	4
					Crinkled	Clear	—	—	—	—	—	—	3	6
						Flametint	—	—	—	—	—	—	3	11
40	130 + 5	5 1/8	45 + 2	1 1/4	Plain	Clear	—	—	—	—	—	—	3	6
						Flametint	—	—	—	—	—	—	3	11

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.



OSRAM
Candle Lamp,
Crinkled.

GOTHIC CANDLE LAMPS.

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



OSRAM "Gothic"
Candle Lamp.

Standard watts.	Finish.	Length.		Diameter.		PRICE PER LAMP.	
		Tolerance ± 3 m/m.		Tolerance ± 2 m/m		100—130 & 200—260 Volts.	
		m/m	ins.	m/m	ins.	s.	d.
25	Ivory or Flame tint	108	4 $\frac{1}{4}$	53	2 $\frac{1}{8}$	4	6

STANDARD CAP: B.C. When specially ordered E.S., S.B.C., or S.E.S. caps can be fitted at an extra charge of 2d. each.

"HUNTALITE" CANDLE LAMPS.

Standard watts.	100-130 Volts.		200-260 Volts.		VOLTAGE RANGE AND PRICE PER LAMP (including opal tube).			
	Length.		Length.		50 Volts.		100-130 & 200-260 Volts.	
	m/m	m/m	m/m	m/m	s.	d.	s.	d.
20	209 \pm 10	32 \pm 2	222 \pm 10	32 \pm 2	6	6	} 6	0
40	268 \pm 10	45 \pm 2	268 \pm 10	45 \pm 2	—	—		

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



OSRAM
"Huntalite"
Candle Lamp



Electric Lamps.

FOR SPECIAL LIGHTING SERVICES.

GROUP I.

TUBULAR LAMPS.

CLEAR.



OSRAM
Clear Tubular Lamp.

Standard watts.	Length.		Diameter.		VOLTAGE RANGE and PRICE PER LAMP.					
	Tolerance ± 3 m/m.		Tolerance ± 1 m/m.		50 Volts.		60-80 Volts.		100-130 and 200-260 Volts.	
25	m/m 92	ins. $3\frac{5}{8}$	m/m 25	ins. 1	s. 3	d. 6	s. 4	d. 0	s. 3	d. 0

CAPS: Standard, S.B.C. When specially ordered B.C. or S.E.S. can be fitted without extra charge.

OPAL.

Osram Opal tubular lamps with long bulbs have been developed for showcase lighting, architectural panel lighting and modern tubular fittings where it is not practicable to employ the Striplite lamps with two caps.

Standard watts	Length.		Diameter.		VOLTAGE RANGE and PRICE PER LAMP.	
	Tolerance ± 3 m/m.		Tolerance ± 1 m/m.		100-130 and 200-260 Volts.	
40	m/m 302	ins. $11\frac{7}{8}$	m/m 38	ins. $1\frac{1}{2}$	s. 6	d. 0

CAPS: Standard B.C. When specially ordered E.S. caps can be supplied without extra charge.

STRIPLITE LAMPS.



Standard watts.	Voltage Range.	Length.		Diameter.		PRICE PER LAMP.	
		Tolerance ± 2 m/m.		Tolerance ± 1 m/m.			
30	100-130 200-260	m/m 221	ins. $8\frac{11}{16}$	m/m 25	ins. 1	4	0
60		284	$11\frac{3}{16}$	25	1		
100		284	$11\frac{3}{16}$	25	1	4	9
		309	$12\frac{1}{8}$	46	$1\frac{13}{16}$	7	6

OSRAM
Opal Tubular
Lamp.

(Approximately
 $\frac{1}{2}$ full size).

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

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



Electric Lamps.

FOR SPECIAL LIGHTING SERVICES.

GROUP I.

WHITE AND COLOUR SPRAYED.

(GASFILLED).

Sprayed OSRAM Lamps are standard lamps, the bulbs of which have been coated with a layer of unglazed china. The WHITE OSRAM Lamp is recommended when very highly diffused light is required.

These OSRAM Gasfilled Lamps are supplied in the following standard colours :—

1.—White. 2.—Red. 3.—Orange. 4.—Yellow. 5.—Green. 6.—Blue. 7.—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 RANGE and PRICE PER LAMP.	
		100—130 and 200—260 Volts.	
		s.	d.
40	B.C.	2	0
60	B.C.	2	0
100	B.C.	3	2
150	B.C.	5	9
200	E.S.	8	4
†300	G.E.S.	11	2
†500	G.E.S.	13	9

The 100 watt to 500 watt sizes can also be supplied bowl sprayed white if required at the same prices as above.

†—These wattages are supplied in white only.

NATURAL COLOUR GLASS.

FOR THEATRE BATTENS AND CONCEALED COLOUR LIGHTING IN CINEMAS, ETC.

Standard watts.	Type.	COLOUR, VOLTAGE RANGE and PRICE PER LAMP.			
		100—130 and 200—260 Volts.			
		Green, Blue or Amber.		Ruby or other tints.	
		s.	d.	s.	d.
40	GASFILLED	2	6	2	9
60	"	2	6	2	9
100	"	4	0	4	6

For Vacuum Type natural colour glass lamps see page 14.

For dimensions of Gasfilled colour sprayed and natural colour glass lamps see also pages 8 and 9.

OSGLIM ELECTRIC LAMPS

(Pat. Nos. 155783, 135485, 135486, 138642).

These lamps are manufactured in five different types, viz., Lighting, Letter, Figure, Photographic and Indicator. The Lighting type is specially suitable for burning in positions where a dim illumination is constantly required, and is, at the same time, 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.

Type.	Standard watts.	Standard cap.	Approx. Dimensions.				*PRICE PER LAMP.	
			Length.		Diameter.		s.	d.
			m/m	ins.	m/m	ins.		
LIGHTING	5	B.C.	125	4 $\frac{1}{8}$	56	2 $\frac{3}{16}$	3	1
LETTER							3	4
FIGURE							3	4
PHOTO- GRAPHIC (with Ruby Bulb)							3	4
INDICATOR { Large Small	0.5	B.C.	58	2 $\frac{1}{4}$	28	1 $\frac{1}{8}$	3	6
		S.B.C.	58	2 $\frac{1}{4}$	18	$\frac{3}{4}$	3	0

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



100 Watts
WHITE OSRAM
Gasfilled Lamp.



OSGLIM Lamp
(Lighting Type)
(Half Size)



OSGLIM Small
Indicator Lamp.



OSGLIM Large
Indicator Lamp.
(Full Size).



Electric Lamps.

FOR SPECIAL LIGHTING SERVICES.

GROUP I.

SIGN AND DECORATION LAMPS.

OSRAM Sign lamps can be supplied in the following finishes: Clear, Colour Sprayed and Natural Colour glass. OSRAM Daylight Blue sign type lamps are especially useful in signs for creating a brilliant contrast.

CLEAR AND COLOUR SPRAYED.

Standard watts.	Standard caps.	Length. B.C. or E.S.	Diameter.	VOLTAGE RANGE & PRICE PER LAMP.			
				100-130 volts.		200-260 volts.	
				Clear.	Colour Sprayed.	Clear.	Colour Sprayed.
		m/m	m/m	s. d.	s. d.	s. d.	s. d.
10 } 15 }	B.C. or E.S.	90±3.5	44±2	2 0 2 0	2 1	2 0	2 1
*15(Pygmy)	B.C., E.S., or S.E.S.	56±3 S.E.S. 59±3	28±1	2 0	2 1	2 0	2 1

STANDARD COLOURS.—White, Red, Orange, Yellow, Green, Blue.

* OSRAM PYGMY SIGN LAMP.

This exceptionally small lamp is specially designed for signs, illuminated score boards, totalisators, indicators, etc., and for outlining detail in signs with parallel burning lamps in place of series lamps. Burnt out lamps can be located immediately. When a lamp fails no other lamp in the circuit is effected. See above table for prices.

DAYLIGHT BLUE AND NATURAL COLOUR GLASS.

Stand- ard watts.	Stand- ard cap.	Length.	Diameter.	COLOUR, VOLTAGE RANGE & PRICE PER LAMP.					
				100-130 volts and 200-260 volts.					
				Daylight Blue.		Green, Blue, or Amber.		Ruby and other Tint.	
		m/m	m/m	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
15 } 25 } 40 }	B. C. or E. S.	90±3.5 100±3.5 110±3.5	44±2 60±1 60±1	2 6 — 2 6	2 7 2 6 —	2 10 2 9 —	—	—	—

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

For Gasfilled Natural Colour Glass Lamps see page 13.

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. Supplied in the same colours as the colour sprayed sign lamps listed above.

Voltage.	Watts.	Amps.	Diam. of Bulb.	Standard Cap.	PRICE Per Lamp (Clear).		PRICE (Sprayed) All Colours.	
					s. d.	s. d.	s. d.	s. d.
14	7	0.5	25±1m/m	S.E.S. or S.B.C.	1 3	1 3	1 5	1 5

COLOUR CAPS AND HOODS.

These colour caps and hoods fit standard 10 and 15 watts clear Osram coil filament sign lamps.

	Approx. Dimensions.		COLOURS AND PRICE PER CAP OR HOOD.	
	Overall Length.	Diameter.	Ruby, Blue, Amber, Green and Opal.	
			s. d.	s. d.
Colour Cap	m/m	m/m	1	3 each.
Colour Hood	42	60		
	85	65		



OSRAM Sign Lamp.



OSRAM PYGMY Sign Lamp.



OSRAM low voltage Series Sign Lamp.



Colour Cap.



15 (OS)
OSRAM
ELECTRIC
LAMPS.

Electric Lamps.

FOR SPECIAL LIGHTING SERVICES.

GROUP I.

GASFILLED PROJECTOR LAMPS.

OSRAM Projector Lamps are specially designed for accurate projection work.

CLASS A.1. TUBULAR. VERTICAL BURNING.

These lamps 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.	Max. Dimensions.			Type of Filament.	Area of Filament.	Cap.	PRICE EACH.	
		Overall length.	Diam.	Filament Centre to Cap Contact				s.	d.
12	100	140	32	75	Grid Straight spiral	5 × 6	E.S.	10	9
	300	140	64	75		18m/m long	G.E.S.	32	6
30	100	134	32	75	Grid	6 × 6	E.S.	12	0
	250	134	64	75		8 × 8	"	22	6
	600	240	64	120		13 × 12	G.E.S.	38	0
	900	240	64	120		14 × 12	"	35	0
50	200	140	32	60	Grid	6 × 7	E.S.	21	0
	250	140	32	60		7 × 8	"	22	6
	500	134	64	75		14 × 12	E.S. or G.E.S.	26	0
60	100	144	25	77	Grid	5 × 7	E.S.	12	6
	150	140	32	75		6 × 7	"	17	6
100 and 110	100	134	32	75	Grid	10 × 9	B.C. or E.S.	10	9
	250	134	64	75		11 × 10	E.S.	20	0
	500	134	64	75		13 × 16	E.S. or G.E.S.	25	0
	1000	240	64	120		16 × 15	G.E.S.	32	0
200 to 260	100	134	32	75	Grid	8 × 13	B.C. or E.S.	10	9
	250	134	64	75		11 × 13	E.S.	21	0
	500	134	64	75		15 × 18	E.S. or G.E.S.	25	0
	1000	240	64	120		15 × 23	G.E.S.	32	0



250 Watts (Class A.1) OSRAM Gasfilled Projector Lamp.

CLASS A.2. ROUND BULB. VERTICAL BURNING.
The round bulb causes a small reduction in optical efficiency by keeping the reflector further away from the filament than in Class A.1. These lamps, however, may be tilted slightly without reducing their life. Suitable for STAGE LIMES, SPOTLIGHTS, ETC.

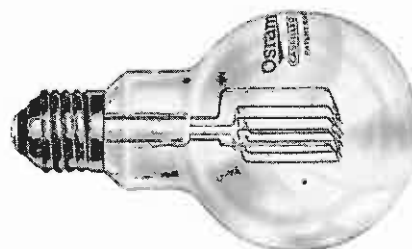
Voltage.	Watts.	Max. Dimensions.			Type of Filament.	Area of Filament.	Cap.	PRICE EACH.	
		Overall length.	Diam.	Filament Centre to Cap Contact				s.	d.
100 and 110	100	125	75	80	Grid	10 × 13	E.S.	10	9
	250	160	90	115	"	11 × 10	E.S.	20	0
	500	250	120	190	"	13 × 16	G.E.S.	28	6
	1000	310	150	225	"	17 × 23	G.E.S.	39	0
	1500	345	170	250	"	22 × 32	G.E.S.	52	6
200 to 260	100	125	75	80	Grid	8 × 18	E.S.	10	9
	250	160	90	115	"	11 × 13	E.S.	21	0
	500	250	120	190	"	15 × 18	G.E.S.	30	0
	1000	310	150	225	"	20 × 36	G.E.S.	40	0
	1500	345	170	250	"	26 × 38	G.E.S.	55	0



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

CLASS A.3. ROUND BULB. 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.	Max. Dimensions.			Type of Filament.	Area of Filament.	Cap.	PRICE EACH.	
		Overall length.	Diam.	Filament Centre to Cap Contact				s.	d.
100 and 110	100	125	75	95	Grid	10 × 13	E.S.	10	9
	250	160	90	120	"	13 × 13	E.S.	20	0
	500	250	120	205	"	15 × 18	G.E.S.	28	6
	1000	300	150	240	"	17 × 23	G.E.S.	39	0
	1500	335	170	270	"	22 × 32	G.E.S.	52	6
200 to 260	100	125	75	95	Grid	10 × 15	E.S.	10	9
	250	160	90	120	"	14 × 15	E.S.	21	0
	500	250	120	205	"	20 × 15	G.E.S.	30	0
	1000	300	150	240	"	20 × 36	G.E.S.	42	0
	1500	335	170	270	"	26 × 38	G.E.S.	57	6



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

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.

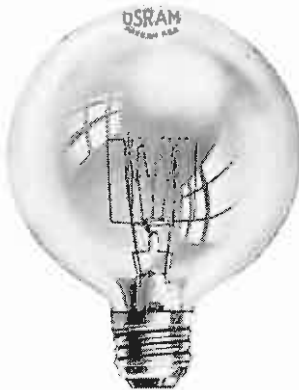


Electric Lamps.

FOR SPECIAL LIGHTING SERVICES.
GROUP I.

GASFILLED PROJECTOR LAMPS. CLASS B. ROUND BULB. FLOODLIGHTING TYPE.

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



250 Watts
(Class B) OSRAM
Gasfilled Projector Lamp.

Voltage.	Watts.	Maximum Dimensions.			Type of Filament.	Area of Filament.	Cap.	PRICE EACH.	
		Overall length.	Diam.	Filament Centre to Cap Contact.				s.	d.
100 to 130	100	m/m 130	m/m 80	m/m 75	Bunch	m/m 10×10	E.S.	9	0
	250	133	95	75	"	8×11	"	19	0
	500	190	130	115	"	11×14	G.E.S.	25	0
	1000	190	130	115	"	18×23	"	32	0
200 to 260	100	130	80	75	Bunch	10×11	E.S.	9	0
	250	133	95	75	"	11×10	"	19	0
	500	190	130	115	"	15×15	G.E.S.	25	0
	1000	190	130	115	"	20×25	"	32	0

CLASS E. ROUND BULB. 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.



500 Watts (Class E)
OSRAM Gasfilled
Epidiascope Lamp

Voltage.	Watts.	Maximum Dimensions.			Type of Filament.	Area of Filament.	Cap.	PRICE EACH.	
		Overall length.	Diam.	Filament Centre to Cap Contact.				s.	d.
100 and 110	500	m/m 150	m/m 100	m/m 85	Grid	m/m 13×16	E.S. or G.E.S.	35	0
200 to 260	500	150	100	85	Grid	15×18	E.S. or G.E.S.	37	6

CLASS F. EXTRA LOW VOLTAGE. ROUND BULB. HORIZONTAL BURNING.

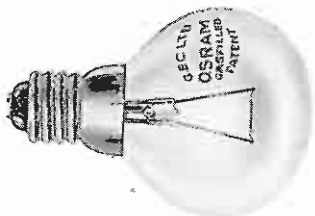
These lamps, though of low wattage, give a very intense, concentrated light. They are specially suitable for the smaller forms of home cinemas: for delicate surgical and ophthalmic inspection work, and for all purposes where reduction in size of the apparatus employed is of primary importance.

Voltage.	Watts.	Maximum Dimensions.			Length of Filament.	Cap.	PRICE EACH.	
		Overall length.	Diam.	Filament Centre to Cap Contact.			s.	d.
4	8	m/m 60	m/m 38	m/m 50	2	S.E.S.	3	9
6	24	60	38	50	4	E.S.	4	3
12	24	60	38	50	6	S.E.S.	3	9
*12	48	70	50	40	†4×3	E.S.	3	9

*—This lamp is designed for vertical burning, and has twin filaments.
†—Filament area.

CLASS G. EXCITER LAMPS FOR SOUND FILM APPARATUS.

These lamps must be burned vertically, cap down.



24 Watts (Class F)
OSRAM Gasfilled Projector
Lamp.

Voltage.	Watts.	Length.	Diam.	Filament Centre to Cap Central Contact Plate.	Apparatus for which suitable.	Cap.	PRICE EACH.	
		Tolerance. ± 2 m/m	Tolerance ± 1 m/m	Tolerance. ± 1.5 m/m			s.	d.
8	32	m/m 78	m/m 25	m/m 50	British Acoustic	A.S.C.C.	5	6
	32	78	25	56	B.T.P.	"	5	6
	34	78	25	56	—	"	6	0
10	50	78	25	48.5	R.C.A.	A.S.C.C.	7	6
10	75	78	25	50	—	"	7	6

CAUTION.—Projector lamps should be used in the correct position, and well ventilated, otherwise their life may be seriously reduced.



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



Electric Lamps.

FOR SPECIAL LIGHTING SERVICES.
GROUP I.

SERIES TRACTION LAMPS.

For 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.

CLEAR VACUUM. (STRAIGHT FILAMENT)

Ampere Rating.	Nominal watts.	Length.		Diam.		Standard cap.	Standard Voltages and PRICE PER LAMP	
		Tolerance + 3.5 m/m.		Tolerance + 1 m/m.			100, 110, 120, 130 volts.	
		m/m	ins.	m/m	ins.		s.	d.
0.27	30	110	4 $\frac{5}{16}$	60	2 $\frac{3}{8}$	B.C. or E.S.		
0.35	40						2	0

PEARL OSRAM. SERIES TRACTION. (GASFILLED).

These 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.		Diam.		Standard cap.	Standard Voltages and PRICE PER LAMP.	
		Tolerance ± 3.5 m/m.		Tolerance ± 1 m/m.			100, 110, 120, 130 volts	
		m/m	ins.	m/m	ins.		s.	d.
0.35	40	110	4 ³ / ₁₆	60	2 ³ / ₈	B.C. or E.S.		
0.52	60	117.5	4 ⁵ / ₈	65	2 ¹ / ₂		1	11

PEARL OSRAM SHIP LAMPS.

The Pearl OSRAM Lamps shown on page 8 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.

ROBERTSON ELECTRIC LAMPS.

(CARBON FILAMENT).

Nominal candle power.	Standard cap.	Approx. total watts.		Maximum Dimensions.		Voltage Range and PRICE PER LAMP.	
		Voltage range.		Length.	Diam.	100 to 130 and 200 to 260 volts.	
		100-130 volts.	200-260 volts.			s.	d.
8	B.C.	30	36	4 $\frac{1}{8}$	2 $\frac{1}{2}$		
16		56	66			1	6
32		115	136			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.	Approx. Dimensions.				Voltage range and PRICE PER LAMP.	
		Length.		Diameter.		* 100—250 volts.	
		m/m	ins.	m/m	ins.	s.	d.
250	B.C.	285	11 $\frac{1}{2}$	57	2 $\frac{1}{2}$	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.

17 (OS)
OSRAM AND
ROBERTSON
ELECTRIC LAMPS.



OSRAM Traction Lamp
(Clear Vacuum).



PEARL OSRAM
Gasfilled Traction Lamp.



ROBERTSON Lamp.



ROBERTSON
Flame-colour
Radiator Lamp.



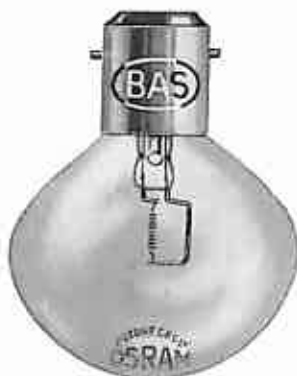
AUTOMOBILE LAMPS.

GROUP II.

BAS TYPES.

Standardised in accordance with Specification No. 6R of the Society of Motor Manufacturers and Traders (I.A.E. Data Sheet 104R).

All BAS Lamps are marked **BAS**



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

HEADLIGHT.

(GASFILLED).

Volts.	Watts.	Amps.	Diam. of Bulb.	BRITISH CAP.			AMERICAN CAP.		
				Catalogue No.	BAS No.	PRICE PER LAMP.	Catalogue No.	PRICE PER LAMP.	
6	12	2	m/m 38	S 7000	BAS 1	s. d. 2 6	S 7017	s. d. 2 7	
"	18	3	38	S 7002	BAS 2	2 3	S 7018	2 4	
12	24	2	38	S 7010	BAS 3	2 3	—	—	
* "	36	3	38	S 7012	BAS 4	2 6	—	—	

* Supplied with 3-pin C.C. caps at 2/7½ each, or hollow tubular caps for old type Fiat Cars at 2/10 each, or with Bosch type caps for new type Fiat Cars at 2/10 each.

SIDE, TAIL AND DASH.

(GASFILLED).



OSRAM **BAS** Type
Side, Tail and Dash Lamp
(Gasfilled).

Volts.	Watts.	Amps.	Diam. of Bulb.	BRITISH CAP.			AMERICAN CAP.		
				Catalogue No.	BAS No.	PRICE PER LAMP.	Catalogue No.	PRICE PER LAMP.	
6	3	0.5	m/m 19	S 7123	BAS 8	s. d. 1 3	S 7114	s. d. 1 4	
6	6	1.0	23	S 7144	BAS 9	—	S 7184	—	
12	6	0.5	23	S 7168	BAS 10	—	—	—	

HEADLIGHT.

ADDITIONAL SIZES (GASFILLED).

Volts.	Watts.	Amps.	Diam. of Bulb.	BRITISH CAP.		AMERICAN CAP.	
				Catalogue No.	PRICE PER LAMP.	Catalogue No.	PRICE PER LAMP.
4	6	1.5	m/m 38	S 6995	s. d. 2 9	S 7011	s. d. 2 9
4	8	2	38	S 4800	2 9	—	—
6	4.5	0.75	38	S 6450	2 9	—	—
6	4.5	0.75	38	S 6451	3 6	—	—
6	6	1	38	S 8020	2 9	S 8021	2 9
†6	24	4	38	S 7004	2 6	S 7019	2 6
6	30	5	38	S 8000	4 0	S 8001	4 0
8	16	2	38	—	—	S 7021	3 6
12	36	3	38	S 1236	3 0	—	—
BLUE BULB HEADLIGHT LAMPS. (GASFILLED).							
6	24	4	38	S 8050	3 2	S 8052	3 2
12	36	3	38	S 8051	3 2	—	—

† Supplied with 3-pin C.C. caps at 2/7½ each.



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OSRAM
ELECTRIC
LAMPS.

Automobile Lamps.

GROUP II.

ANTI-DAZZLE HEADLIGHT LAMPS.

YELLOW SPRAYED TYPE. (GASFILLED).

These are Standard OSRAM Headlight Lamps, the top half of the bulbs being sprayed with a thin layer of yellow unglazed china, which changes the upper or dazzling portion of the beam into a softly diffused yellow beam, which in no way impairs the vision of approaching motorists and pedestrians. The full driving light is maintained on the road. These lamps are also very effective for driving in fog.

WITH S.B.C. AND S.C.C. CAPS FOR BRITISH AND AMERICAN CARS.

Volts.	Watts.	Amps.	Diameter of Bulb.	BRITISH CAP.			AMERICAN CAP.		
				Cat. No.	PRICE.		Cat. No.	PRICE.	
			m/m		s.	d.		s.	d.
6	18	3	38	S 7610	3	0	S 7623	3	1
6	24	4	38	S 7611	3	3	S 7615	3	3
12	36	3	38	S 7612	3	3	—	—	—
*6	12 & 3	2 & .5	38	S 7618	4	3	S 7620	4	3
*12	24 & 6	2 & .5	38	S 7619	4	3	—	—	—

S 7611 and S 7612 can be supplied with 3-pin c.c. caps for use on French cars at 1½d. each extra.

* Twin Filament Lamps.

LUCAS-GRAVES PATENT. (GASFILLED).

BRITISH PATENT No. 210105.

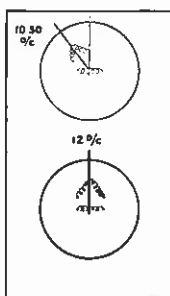
IRISH FREE STATE PATENT No. 210105.

These are twin filament lamps, fitted with a special form of internal reflector. When switched on to the driving filament a full, brilliant driving 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.

Volts.	Watts.	Amps.	Diameter of Bulb.	Standard Finish.	BOSCH TYPE CAP.		
					Cat. No.	PRICE.	
			m/m			s.	d.
6	12 & 12	2 & 2	38	Clear	S 6121 L	4	3
	18 & 18	3 & 3	38		S 8002 L		
	24 & 18	4 & 3	38		S 8004 L		
12	24 & 24	2 & 2	38	Satin-etched	S 8005 L	4	3
12	36 & 24	3 & 2	38		S 8006 L		

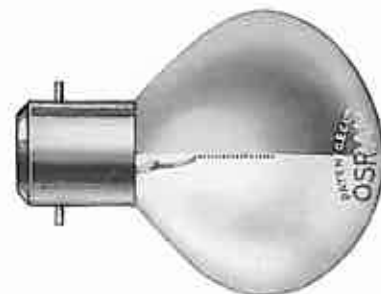
BI-FOCAL TYPES. (GASFILLED).

These lamps have twin V shaped filaments of equal wattage located one above the other. Normally only the lower filament is alight. By switching over to the upper filament the beam of light is "dipped." Bi-Focal lamps are made in three types. (i) American type, with corrugated bulbs and the auxiliary filament parallel to the main filament. (ii) British car type, with the auxiliary filament in the 10.30 position. The main or lower filament produces the normal driving beam but the upper filament gives a beam which is both dipped and twisted towards the near side of the road. (iii) British motor cycle type, with the auxiliary filament in the 12 o'clock position which produces a dipped beam.

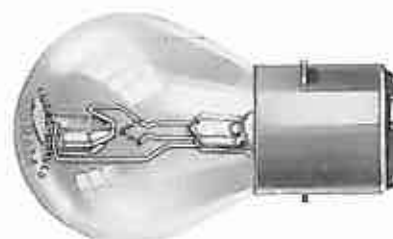


Filament positions.

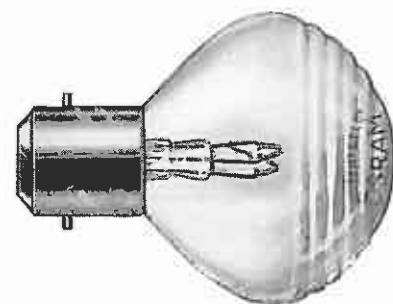
Type.	Volts.	Watts.	Amps.	Cat. No.	PRICE PER LAMP.	
American corrugated bulb	6	18 & 18	3 & 3	S 7146	3	9
		24 & 24	4 & 4	S 7147	3	6
British car type (gasfilled) anti-dazzle filament located at 10.30 position	6	24 & 24	4 & 4	S 6240	3	6
	12	24 & 24	2 & 2	S 1240	4	3
	12	36 & 36	3 & 3	S 1360	5	0
British motor cycle type (gasfilled) anti-dazzle filament located at 12 o'clock position	4	12 & 12	3 & 3	S 4122	4	0
	6	24 & 24	4 & 4	S 6242	3	6



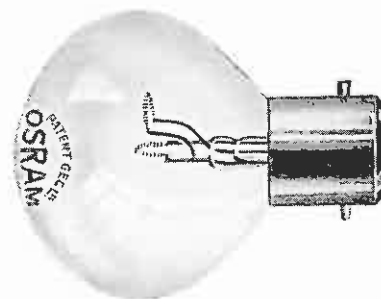
OSRAM
Anti-Dazzle Headlight Lamp
Yellow Sprayed (Gasfilled).



Lucas-Graves Patent
Anti-Dazzle Headlamp (Gasfilled)
with Bosch type cap.



American Corrugated Bulb
Bi-Focal Lamp.



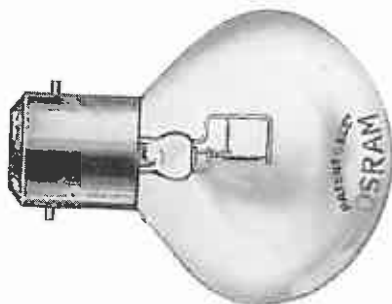
British Motor Cycle
Bi-Focal Lamp.



Automobile Lamps.

GROUP II.

TWIN-FILAMENT COMBINED HEAD & SIDE LIGHT (GASFILLED).



OSRAM Twin-Filament
Head and Side Lamp
(Gasfilled)

Volts.	Watts.	Amps.	Diam. of bulb.	BRITISH CAP.		AMERICAN CAP.	
				Cat. No.	PRICE PER LAMP.	Cat. No.	PRICE PER LAMP.
6	12 & 3	2 & .5	38	S 7099	3 6	S 7139	3 6
6	18 & 3	3 & .5	38	S 6183		S 6184	
12	24 & 6	2 & .5	38	S 7101		—	
12	36 & 6	3 & .5	38	S 7097		—	

SIDE, TAIL & DASH.

ADDITIONAL SIZES.



OSRAM Side, Tail and Dash Lamp.

Volts.	Watts.	Amps.	Diameter of bulb.	BRITISH CAP.		AMERICAN CAP.	
				Cat. No.	PRICE PER LAMP.	Cat. No.	PRICE PER LAMP.
2	1	0.5	19	S 7230	1 8	—	1 8
*3	2	0.66	19	—		S 7110	
4	3	0.75	19	S 7128		S 7171	
8	4	0.5	19	S 7128		S 7116	
12	4	0.33	19	S 7126	—	—	—

*Used two in series on 6/7 volts on some American cars. One lamp acts as tail light, the other as an indicator lamp on dashboard.



OSRAM Festoon Lamp.

FESTOON.

Catalogue No.	Volts.	Watts.	Amps.	Max. Dimensions.		PRICE PER LAMP.	
				Overall Length	Diameter		
S 7268	6	6	1.0	45	17	s.	d.
S 7282	12	6	0.5			2	6

COIL IGNITION INDICATOR WITH M.E.S. CAPS.



OSRAM
Indicator Lamp.

Catalogue No.	Volts.	Watts.	Amps.	Diam. of bulb.	PRICE PER LAMP.	
*S 7577	2	1.5	0.75	15	s.	d.
S 7582	4	2	0.5	15	1	10
S 7584	6	3	0.5	15	1	8
S 7588	8	1.6	0.2	15	1	8
S 7592	12	2.4	0.2	15	1	8
S 7554	16	3.0	0.2	15	1	8

* This lamp is also suitable for some types of police and mine inspection lamps.

TUBULAR.

Volts.	Watts.	Amps.	BRITISH CAP. S.B.O. or S.C.C.		BOSCH TYPE CAP.		FIAT CAP. (OLD TYPE)	
			Cat. No.	PRICE per lamp.	Cat. No.	PRICE per lamp.	Cat. No.	PRICE per lamp.
12	6	0.5	S 7224	2 9	S 7032	3 1	S 7016	3 1

Fiat Cap (Old Type). Bosch Type Cap.
OSRAM Tubular Lamps.



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OSRAM
ELECTRIC
LAMPS.

AUTOMOBILE LAMPS. GROUP II.

MOTOR BUS LAMPS. HEADLIGHT, GASFILLED.

Volts.	Watts.	Bulb Diameter.	Type.	Cap.	PRICE PER LAMP.	
					s.	d.
13.5	36	38 m/m	Single filament (Clear)	B.C. or S.B.C.	2	10
13.5	36 & 24	40 m/m	Lucas-Graves Satin Etched	Bosch	4	6

INTERIOR LIGHTING, GASFILLED.

Volts.	Watts.	Amps.	Diam. of Bulb.	PRICE PER LAMP.			
				Pearl or Clear.		Opal.	
				s.	d.	s.	d.
12	10	0.85	38 or 50 m/m	2	6	2	10
12	12	1	38 or 50 m/m	2	8	2	6

INTERIOR LIGHTING, VACUUM (CLEAR ONLY).

Volts.	Watts.	Amps.	Diam. of Bulb.	s.	d.
12	12	1	38 m/m	1	0

REAR, WING and DESTINATION BOARD LAMPS (CLEAR ONLY).

Volts.	Watts.	Amps.	Diam. of Bulb.	Cat. No.	s.	d.
12	6	0.5	26 m/m	S 7214	1	8

STORAGE BINS.

ENAMELLED STEEL. MADE IN ENGLAND.
STORAGE CAPACITY.

374 OSRAM LAMPS PER BIN.

SPECIFICATION.—These storage bins provide excellent facilities for storing OSRAM automobile lamps. They are exceedingly compact, measuring only 14 ins. high by 16 ins. wide, and 10 ins. deep, and are strongly made. As the unit bins have no projecting parts they can be assembled together to give any storage capacity that may be required.

Price of Bin (exclusive of lamps) **10/-** nett per bin.

LAMP-TESTING OUTFIT, consisting of ash wood box, mounted with fuse, S.B.C., S.C.C., 3-pin C.C., and twin-filament S.B.C. lampholders with change-over switch.

Price of lamp-testing outfit £0 17 0 nett.

Price of accumulator only (6 volt, 20 A.H. actual)

Cat. O. 505 £1 8 8 nett.

Price (inclusive) for storage bin, lamp-testing

outfit and accumulator £2 15 0 nett.

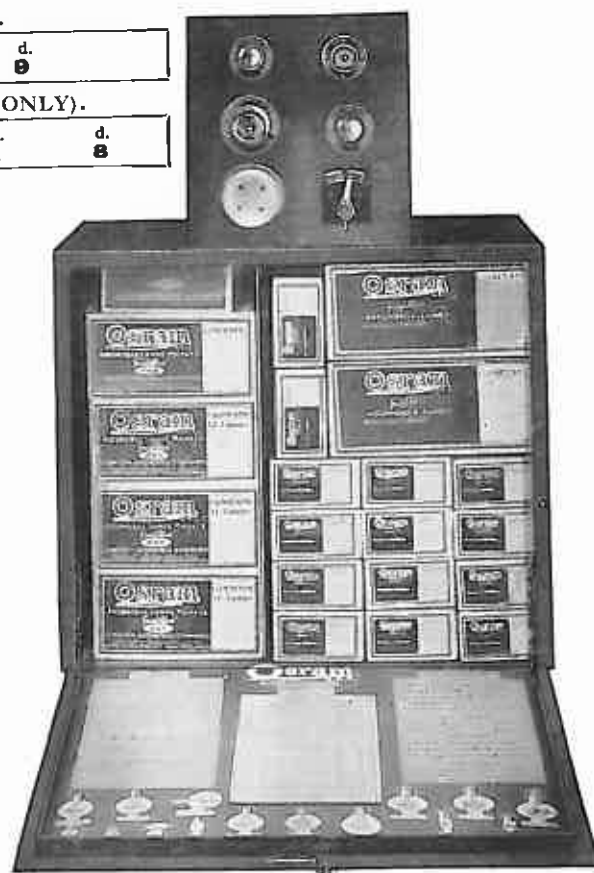
Lamps extra according to requirements.



OSRAM Motorists' Spare Lamp Case.
(Japanned Steel)



Pearl OSRAM Motor Bus Lamp
(Gasfilled).



View of OSRAM bin and testing set.

MOTORISTS' SPARE LAMP CASES.

These cases have been designed for the convenience of motorists who should always carry spare lamps on their cars. Lamps can be carried in them without the slightest risk of breakage.

These will take 2 head, 2 side or tail, 1 festoon and 1 ignition indicator lamp.

Price (without lamps) **3/-** each.



Electric Lamps.

FOR SPECIAL LIGHTING SERVICE.

FLASHLIGHT LAMPS.

GROUP III.

STANDARD TYPE.

Volts.	Amps.	Diameter. m/m	Shape of Bulb.	PRICE EACH.	
				Clear.	Half Opal.
1.25	.25	12	Flat	7d.	—
2	.3	12	"	7d.	—
2	.6	15	"	7d.	—
*2.5	.2	12	"	3½d.	4½d.
*2.5	.2	15	"	6d.	—
3.5	.15	12	"	6d.	7d.
3.5	.3	12 & 15	"	3½d.	4½d.
4	.3	12	"	7d.	—
4	.3	15	"	6d.	—
4	.5	15	"	7d.	—
†4.5	.3	15	"	7d.	—



OSRAM Flashlight Lamps.

STANDARD CAPS: M.E.S.

* Recommended for use on 2 volt accumulators.

† Recommended for use on 4 volt accumulators.

SPOTLIGHT AND PILOT LAMP TYPE.

These lamps have closely coiled filaments, accurately located, and give a correctly focussed beam in all standard spotlight or focussing type torches.

Volts.	Amps.	Diameter. m/m	Shape.	PRICE EACH. Clear only.
2.5	0.3	12	Round	6d.
3.5		12	Round	6d.
*6.2	0.3	15	Round	9d.

*—This lamp is also suitable for continuous burning at 4 volts as a pilot lamp or for illuminating the dials of wireless receivers.

MINERS' HAND LAMPS.

GROUP V.

These bulbs are designed to meet the special requirements of electric lamps for use in collieries and mines, and can be supplied with caps suitable for use in any make of miners' electric hand lamp and pipless bulbs 27 m/m dia. for use in CAP lamps without extra charge.

The 2 volt. 1 ampere lamp shown in heavy type below is the standard miners' lamp, and complies in every respect with British Standard Specification No. 377, which has been approved by the Mines' Department of H.M. Home Office.

VACUUM TYPE (PEARL OR CLEAR).

Catalogue No.	Volts.	Watts.	Amps.	Max. overall dimensions.		Standard cap.	PRICE per lamp.	
				Length. m/m	Diameter. m/m		s.	d.
* S 7301	2	2.0	1.0	48	27	S.E.S.	1	5
S 7309	2	2.0	1.00	48	27	Taper peg		
† S 7300	2	1.7	0.85	48	27	S.E.S.	1	6
† S 7307	2	1.7	0.85	48	27	Taper peg		
S 7310	2.4	2.0	0.85	48	27	S.E.S.		
S 7311	2.4	2.0	0.85	48	27	S.C.C.		
S 7312	2.4	2.4	1.0	48	27	S.E.S.		

GASFILLED TYPE FOR ALKALINE LAMPS (CLEAR).†

S 7313	2.5	3.125	1.25	48	27	"Peg."	2	0
S 7314	2.5	4.375	1.75	48	27	S.B.C. or	2	0
S 7315	2.5	3.75	1.5	48	27	S.E.S.	2	3

*—British Standard Miners' Lamp, Pearl (Inside Frosted). Supplied Clear at the same price.

†—With Pearl Bulbs 10% extra.



OSRAM Flashlight Lamp. Flat Bulb. Clear.



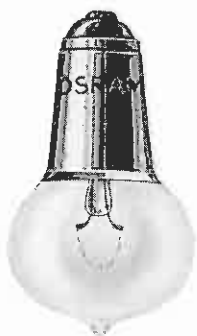
OSRAM Flashlight Lamp. Flat Bulb. Half Opal.



OSRAM Spotlight Type Flashlight Bulb.



Pearl OSRAM Standard Miners' Lamp S 7301 With S.E.S. cap.



OSRAM Miners' Lamp With taper peg cap.

Osram

Electric Lamps.

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OSRAM
ELECTRIC
LAMPS.

GROUP VI.

OLIVE SHAPE LAMP DECORATION OUTFITS.

Complete with Coloured OSRAM Lamps.* Flexible, Holders and Adaptor for connecting to any B.C. lampholder.

* Standard colours : Red, Orange, Yellow, Green, Blue and White.

They are ideal for decorating Christmas Trees, Ballrooms, Restaurants, Shop Windows, etc., and for all indoor festivities, their decorative effect being increased greatly by the addition of the artificial flowers and Autumn leaves listed below.

These outfits are supplied in two forms :—

- I. Catalogue Nos. 1—4. Unmounted for hanging in festoons or decorating Christmas Trees.
- II. Mounted on asbestos papier maché (fireproof) plaques, forming complete decorative units.

FESTOON OUTFITS.

Voltage.	Number of Lamps per Outfit.	PRICE per complete outfit.		
		With 14v. 7w. OSRAM Olive Shape Lamps.	s.	d.
100—125	8 in series and one spare lamp ..	Cat. No. 1	12	6
200—210	15 in series and three spare lamps ..	Cat. No. 2	22	0
220—230	17 in series and one spare lamp ..	Cat. No. 3		
240—250	18 in series (no spares)	Cat. No. 4		

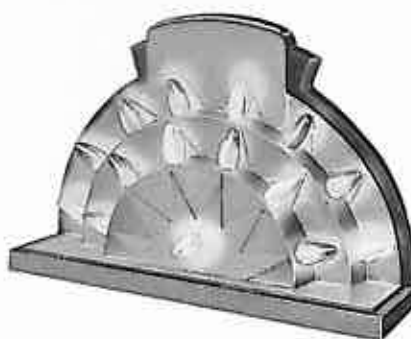


OSRAM OLIVE Shape
Decoration Lamp.
14v. 7w. M.E.S. cap.
Full Size.

MOUNTED OUTFITS.



OCTAGONAL SHIELD.



RAINBOW STAND.

* Standard Voltages.	Particulars of Lamps.	Price per set of Lamps including wiring.		Price of Rainbow Stand or Shield.		Price of Complete Outfit.	
		s.	d.	s.	d.	s.	d.
200—210	18 14-volt 7-watt OSRAM Olive Shape decoration lamps, connected in series. Standard colours : Red, Orange, Yellow, Green, Blue and White.	22	0	5	6	27	6
220—230							
240—250							

* Other voltages made up to order at the same price.
Spare lamps 1/1 each.

ARTIFICIAL FLOWERS.

These flowers greatly enhance the appearance of the OSRAM OLIVE shaped lamps shown above. They are made in different tints to match the colours of the lamps.

PRICES.

Dahlias.		Water Lilies.	
Set of 8 Shades, per set	3/6	per set	2/9
Set of 18 " " "	7/-	" "	5/6



ARTIFICIAL FLOWERS
(Water Lily).



OSRAM on an electric lamp is more than a trade mark. It 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.

OSRAM means "Made in England" and signifies the product of the best methods of electric lamp manufacture.



G.E.C. RESEARCH LABORATORIES, WEMBLEY.

SEPARATE SECTIONS OF CATALOGUE.

SECTION

P ELECTRIC PLANT

- (3) WITTON Direct Current Motors
- (4) WITTON Induction Motors
- (7) G.E.C. Electric Lighting Sets

- X (1) Switchboards
- (2) Air-break Switchgear (Unenclosed).
- (3) Air-break Circuit-breakers, Relays, etc.
- (5) Motor Starters
- (7) Motor Controllers
- (8) Contactor Starters
- (9) Small Transformers
- (10) Contactors, Relays and Accessories

X & Y Ironclad Switchgear

M Measuring Instruments

- V (3) MAGNET Electric Fans
- (4) WITTON Fractional H.P. Motors

OS OSRAM and ROBERTSON Lamps

OV OSRAM Valves

S MAGNET Electric Lighting Supplies

- SF (1) Illuminated Signs
- (2) Flashers and Accessories for Illuminated Signs

- W (1) Wires and Cables
- (2) MAGNET Wiring Systems
- (3) Wiring Supplies

WO Overhead Line Fittings

C MAGNET Conduit and Conduit Fittings

- F (1) Electric Light Fittings
- (2) Electric Light Fittings Accessories
- (3) Glassware
- (4) Industrial and Street Lighting Fittings and Accessories

- D (1) MAGNET Household Electric Appliances
- (2) MAGNET Electric Fires
- (3) MAGNET Domestic Electric Cooking Equipment

- H (2) MAGNET Electrically Heated Industrial Appliances
- (3) MAGNET Industrial and Commercial Electric Cooking Equipment

- L (1) Electric Bells, Batteries, and Accessories
- (3) Colliery Signalling, Miners' Hand Lamps

K Telephones and Fire Alarms

- BC (1) GECOPHONE Radio Receivers, Loud Speakers, Components and Accessories.

Any of the above will be sent on receipt of application stating which section is required.

