Mazda

AEI
Lamp and Lighting Co Ltd

Lamp Catalogue

1959-60

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General Lighting Service
Sections A1 — A6

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Sections A7 and A8

Electric Discharge
Sections A9 — A12

SECTION B

Car and Battery Operated
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SECTION C

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Contents

Lamp Groups

For discount and similar purposes all electric lamps have been divided into the following groups. The convenience of this classification has promoted its use throughout the trade.

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Infra Red
Locomotive Headlight
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Pearl (G.L.S.)
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Photo-enlarger
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Projector Class B1, B2, E and F
Projector Class G
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Reflector Spotlight and Floodlight
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Traffic Signal
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Tubular Floodlight

Group 2
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Motor Side and Tail
Motor Stop, Indicator and Festoon
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Group 4
Cycle Dynamo
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Telephone
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Fluorescent
Mercury Vapour
Sodium Vapour
Group 10
Radio Panel
Certain Aircraft Indicator
Unclassified
Cold Cathode
Electronic Flash
Photoflash

Silverlight

Lamp Watts	Nominal Average Lumens throughout Life*
Coiled Coil	
40	370
60	630
100	1200
Single Coil	
150	1860
200	2580

G.L.S. Clear and Pearl

Watts	Nominal Average* Lumens Throughout Life	
	200-260V Rated at 240V	100-130V Rated at 110V
Coiled Coil		
40	390	—
60	665	—
75	880	—
100	1260	—
Single Coil		
15	112	133
25	200	228
40	325	449
60	575	759
75	780	1000
100	1160	1400
150	1960	2230
200	2720	3090
300	4300	4950
500	7700	8960
750	12400	14270
1000	17300	19640
1500	27500	—

* These values are intended to provide practical guidance for design purposes.

British Standards

Wherever British Standards exist, the lamps shown in this catalogue are made to comply with the provisions of such standards.

Lamp Fuses

All Mazda G.L.S. lamps within the range 200-260 volt, 40-1500 watts incorporate fuses for the protection of local fuses.

Lamp Caps

Certain variations in the standard caps listed in this catalogue can be undertaken to special order.
Advice and prices on application.

Special Etching

When Mazda Group 1 lamps are supplied specially marked with the name, letter or symbol of a User customer, the following extras apply

For quantities of less than 1000 identical lamps at one delivery .. **3d. each List Extra**

For quantities of 1000 and over identical lamps at one delivery .. **Free of Charge**

Prices in this catalogue apply only in the United Kingdom and The Company reserve the right to change, without notice, the design or specification of equipment shown in the catalogue or supplied by them. All equipment is offered subject to the Company's Standard Conditions of Sale.

Standard Packing Quantities

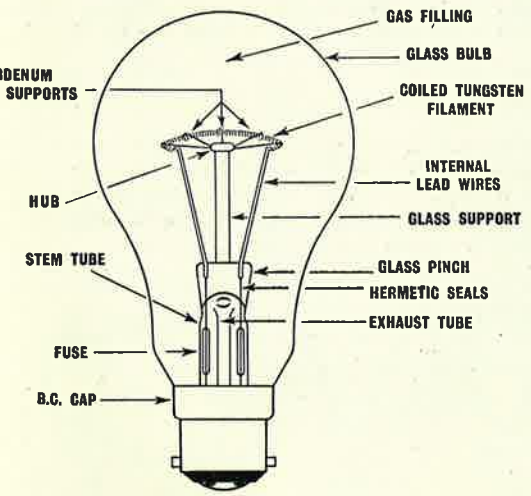
Lamps are supplied packed in the quantities stated below

Type of Lamp	Section	Wattages and Packing Quantities													
		15 watt	25 watt	40 watt	60 watt	75 watt	100 watt	150 watt	200 watt	250 watt	300 watt	500 watt	750 watt	1000 watt	1500 watt
G.L.S. Single Coil, Clear 200-260 volts	A1	25	25	25	25	25	25	25	25	—	12	9	6	6	4
G.L.S. Single Coil, Clear Other voltages	A1	50	50	50	50	50	50	50	50	—	12	9	6	6	4
G.L.S. Single Coil, Pearl 200-260 volts	A1	25	25	25	25	25	25	25	25	—	12	9	—	—	—
G.L.S. Single Coil, Pearl Other voltages	A1	50	50	50	50	50	50	50	50	—	12	9	—	—	—
G.L.S. Coiled Coil, Clear or Pearl 200-260 volts	A1	—	—	25	25	25	25	—	—	—	—	—	—	—	—
Rough Service, Clear or Pearl	A2	—	—	50	50	—	50*	—	—	—	—	—	—	—	—
Silverlight 200-260 volts	A1	—	—	25	25	—	25	25	25	—	—	—	—	—	—
Netabulb	A1	—	—	—	15	—	25	25	—	—	—	—	—	—	—
Pearl Pink	A1	—	—	—	25	—	25	25	—	—	—	—	—	—	—
Colour Sprayed	A4	50	50	50	50	50	50	50	50	—	12	9	6	6	4
Daylight Blue	A2	—	—	50	50	—	50	—	—	—	—	—	—	—	—
Reflector Spot	A6	—	—	—	—	24	24	6	—	6	—	6	—	—	—
Candle	A4	—	24	24	24	—	—	—	—	—	—	—	—	—	—

Double Cap Tubular 30 or 60W are packed in quantities of 25
Architectural and Longlite „ „ „ „ „ 25
28 mm Sign, 0·5W Neon (B.C.) & Switchboard Indicator „ „ „ „ „ 50

Fluorescent. All fluorescent tubes are packed in quantities of 25 with the exception of the 125W 8 ft. tubes which are packed in quantities of 12.

* Pearl only.



COMPONENT PARTS OF NORMAL G.L.S. LAMP

Resale Price Maintenance

All our lamps and fluorescent tubes are sold on condition that they are resold only at our list prices, subject to the discount and terms specified by us from time to time. In addition the full amount of purchase tax must be charged.

Delivery Conditions

Packing and delivery of lamps is free of charge.

This Company will credit or replace lamps broken in transit between their store and the customer's premises provided they are advised at once and the lamps returned, carriage paid, within seven days of date of dispatch, the Company's dispatch note number to be quoted. The Company will not accept responsibility for safe custody of such returned lamps. Claims for transportation and breakage allowance can be entertained by the Company only on their own consignments.

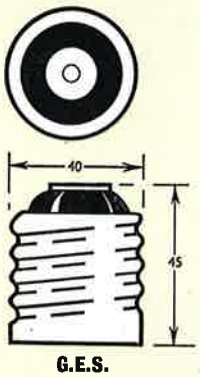
General Lighting Service

60W Clear

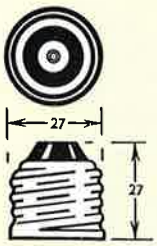
60W Netabulb

60W Silverlight

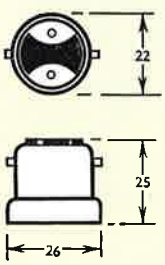
Dimensions in millimetres



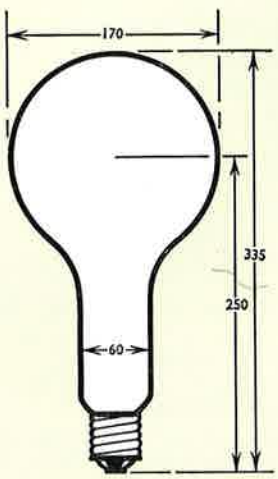
G.E.S.



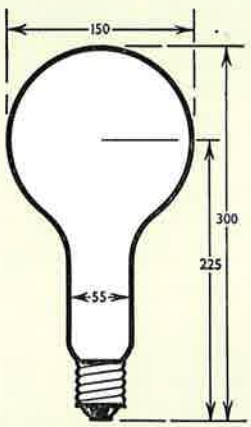
E.S.



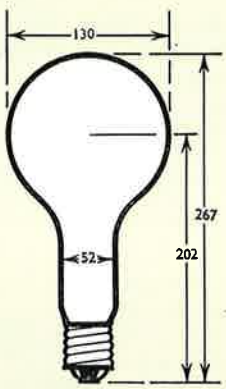
B.C.



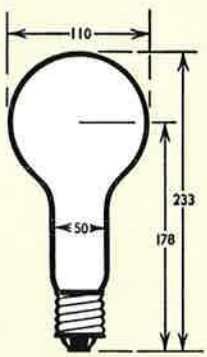
1500W G.E.S.



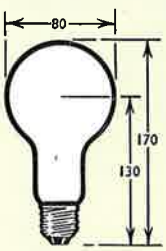
750W & 1000W G.E.S.



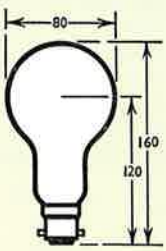
300W G.E.S.



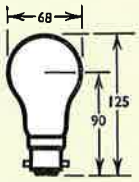
300W G.E.S.



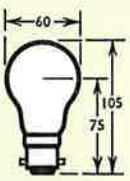
200W E.S.



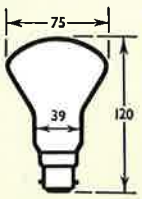
150W B.C.



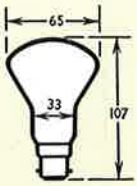
75W & 100W B.C.



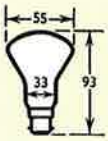
15W, 25W, 40W, 60W B.C.



150W B.C. Netabulb



100W B.C. Netabulb

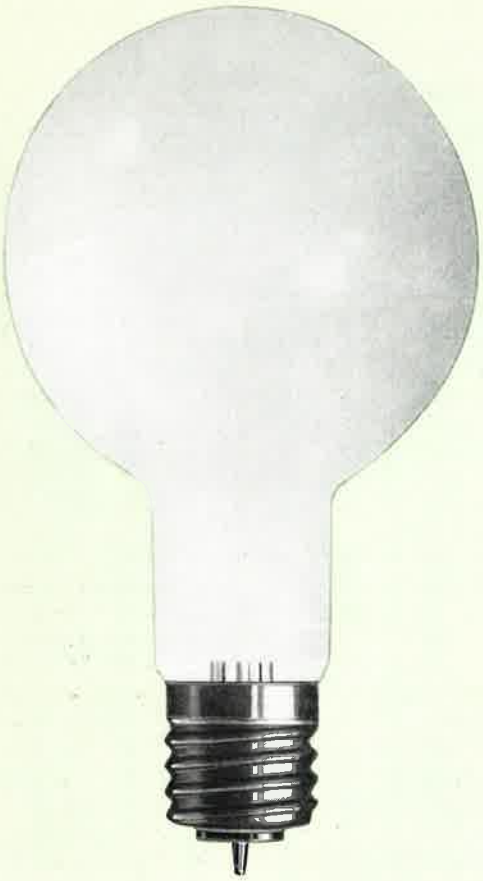


60W B.C. Netabulb

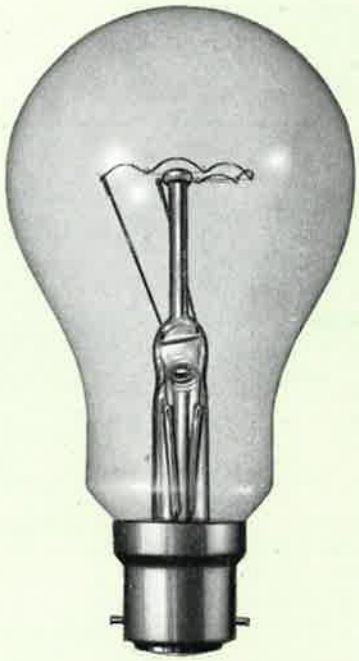
Finish	Watts	Cap	Coiled Coil	Single Coil							
			Voltages and List Prices								
			200-260 in 10 volt steps		200-260 in 10 volt steps		110 & 120		100 & 130		25 & 50	
			s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Clear	15	B.C. or E.S.	—		1	6½	1	6½	1	6½	3	0
	25		—		1	4	1	4	1	6½	3	0
	40		1	3½	1	2½	1	2½	1	8½	3	0
	60		1	3½	1	2½	1	2½	1	8½	3	0
	75		1	11	1	10	1	10	2	2	—	
	100		1	6	1	5	1	5	2	2	4	0
	150		—		1	11	1	11	2	11	—	
	200	E.S. or B.C.	—		2	11½	2	11½	4	3	—	
	300	G.E.S.	—		6	9†	6	9†	8	0†	—	
	500		—		8	6†	8	6†	10	6†	—	
	750		—		14	6†	14	6†	14	6†	—	
	1000		—		16	0†	16	0†	16	0†	—	
	1500		—		22	6†	22	6†	22	6†	—	
Pearl	15	B.C. or E.S.	—		1	6½	1	6½	1	6½	3	0
	25		—		1	4	1	4	1	6½	3	0
	40		1	3½	1	2½	1	2½	1	8½	3	0
	60		1	3½	1	2½	1	2½	1	8½	3	0
	75		1	11	1	10	1	10	2	2	—	
	100		1	6	1	5	1	5	2	2	4	0
	150		—		1	11	1	11	2	11	—	
	200	E.S. or B.C.	—		2	11½	2	11½	4	3	—	
	300	G.E.S.	—		7	9†	7	9†	9	0†	—	
	500		—		9	6†	9	6†	11	6†	—	
Silverlight *Patent 653,323*			200/210, 220/230, 240, 250V									
	40	B.C. or E.S.	1	5½	—		—		—		—	
	60		1	5½	—		—		—		—	
	100		1	8	—		—		—		—	
	150		—		2	5	—		—		—	
	200	E.S. or B.C.	—		4	3	—		—		—	
Netabulb			200/210, 220/230, 240, 250V									
	60	B.C.	1	5½	—		—		—		—	
	100	B.C.	1	8	—		—		—		—	
	150	B.C. or E.S.	2	5	—		—		—		—	
	150‡		1	11	—		—		—		—	
Pearl Pink			200/210, 220/230, 240, 250V									
	60	B.C.	—		1	7½	—		—		—	
	100		—		2	1	—		—		—	
	150		—		2	9	—		—		—	

* **Purchase Tax** must be added to all prices shown in these columns except those marked thus † which are not subject. For the exact amount of tax to be added see TABLE A on the inside back cover.

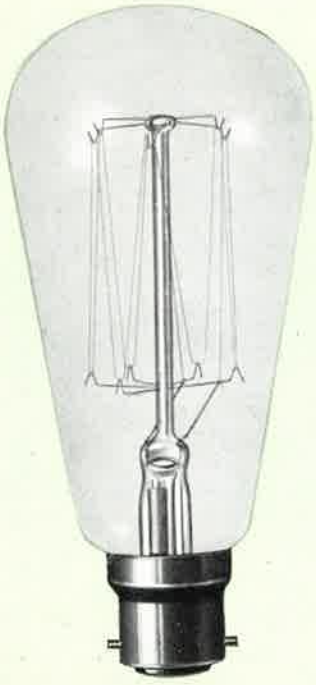
‡ **Pearl only.** Other Netabulbs have Silverlight finish.



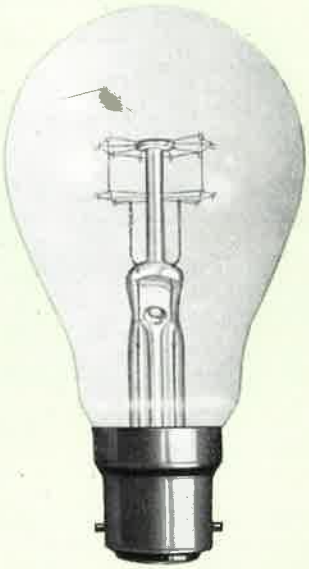
Hospital Theatre



Daylight Blue



Navigation



Rough Service

Rough Service
These lamps have special filaments which are retained in position by a greater number of supports than are used in lamps for general lighting purposes.

They are designed to operate at a slightly lower efficiency in order to increase mechanical strength. They will withstand severe vibration or continual movement.

Daylight Blue
Manufactured from natural coloured blue glass these lamps give an illumination approaching North Sky light. The excess red light of ordinary tungsten filament output is filtered by this glass and so provides light which is most useful where colour discrimination is required.

Navigation
These lamps are vacuum and have a filament of squirrel-cage construction. They are suitable for use in ship's side lanterns.

Hospital Operating Theatre
This double filament lamp has been designed for use in the operating theatre where mains supply faults must not interefere with the surgeon's work; the auxiliary filament gives 100-watt output on a 12-volt emergency supply.

Pearl or Clear Single Coil

Watts	Voltages	Cap	Dimensions		List* Price
			Length mm	Diam. mm	s. d.
40	110, 120, 200/210, 220/230, 240, 250, 260	B.C. or E.S.	110	60	2 0
60			117·5	65	2 0
100			125	68	2 9

* **Purchase Tax** must be added to the prices in this column. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.

Dimensions as Section A1

Watts	Cap	Voltages and List Prices*
		200/210, 220/230, 240/250
		s. d.
40	B.C.	4 0
60		4 0
100		5 6

* **Purchase Tax** must be added to the prices in these columns. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.

Straight Filament

Watts	Voltages	Cap	Dimensions		List* Price
			Length mm	Diam. mm	s. d.
40	110, 120, 210, 220, 230	B.C. or E.S.	140 max.	63 max.	4 9
60			150 max.	70 max.	5 0

* **Purchase Tax** must be added to the prices in this column. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.

Double Filament

Filament	Watts	Voltages	Cap	Dimensions			Objective Life Hours	List* Price
				Length mm	Diam. mm	L.C.L. mm		s. d.
Emergency	100	12	Special Screw Contact	215	121	135	100	34 3
Mains	150	210-30-40-250				160	1000	

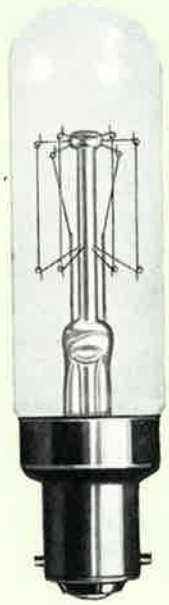
* **Purchase Tax** is chargeable on the price of the Hospital Operating Theatre lamp. For the exact amount of purchase tax to be added, see TABLE A on the inside back cover.

Tubular

Architectural Light Tube
⅛ Circle

Double Cap Tubular

Maxtrip



Single Cap Tubular

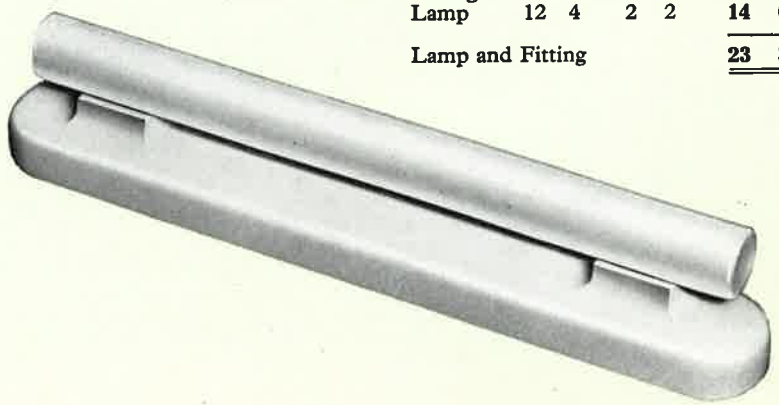
Light Tube Lampholder

Special lampholders (Cat. No. C85699) are required for Light Tubes; they are of excellent workmanship and form an integral part of the lamp.
List Price 7s. 0d. per pair

Architectural Light Tube Fitting

The popular Light Tube Fitting complete with 12″ tube.

	Price		P.T.		Total	
	s.	d.	s.	d.	s.	d.
Fitting	7	6	1	3	8	9
Lamp	12	4	2	2	14	6
Lamp and Fitting					23	3



Architectural
These lamps provide a bright yet warm light and they are used extensively for decorative purposes in shops and stores—to add charm to bars, aquaria etc., or to provide that necessary extra light for wall mirrors or show cases.

Colour Sprayed Architectural
Lamps can be supplied in Red, Blue, Green, Yellow, Pink or Amber, 3/- per foot list extra.

Tubular
Tubular lamps are useful for picture and showcase lighting where space is limited. They are generally used in conjunction with some suitable form of reflector in order to direct the light onto the object to be illuminated without the filament being visible.

Watts	Nominal Length in.	Distance between Round-peg Side Caps mm	Dimensions Length mm	Dimensions Diam. mm	List Prices* 200/210, 220/230, 240/250 volts s.	List Prices* 200/210, 220/230, 240/250 volts d.	List Prices* 110 & 120 volts s.	List Prices* 110 & 120 volts d.
Straight Lengths (White Opal)								
35	12	229	305	30	**12**	**4**	**12**	**4**
60	20	424	500	30	**19**	**0**	**19**	**0**
75	24	534	610	30	**22**	**6**	**22**	**6**
110	36	839	915	30	**30**	**0**	—	
150	48	1144	1220	30	**35**	**0**	—	
Curves $\frac{1}{8}$, $\frac{1}{4}$ or $\frac{1}{2}$ Circle (White Opal)								
60	20	$\frac{1}{8}$ Circle 416 $\frac{1}{4}$ Circle 393 $\frac{1}{2}$ Circle 309	500§	30	**30**	**0**	**30**	**0**
Maxtrip—Clear (Opalized 6d. extra)								
30	10	200	252	25	**5**	**9**	**5**	**9**
60					**6**	**6**	**6**	**6**

§ Centre line of curve.

* **Purchase Tax** must be added to the prices in these columns. For the exact amount of purchase tax to be added, see TABLE A on the inside back cover.

Watts	Cap	Dimensions Length mm ±3	Dimensions Diam. mm ±1	Voltages and List Prices* 200/210, 220/230, 240/250 s.	Voltages and List Prices* 200/210, 220/230, 240/250 d.	Voltages and List Prices* 110, 120 s.	Voltages and List Prices* 110, 120 d.
Single Cap—Clear only							
15	B.C.	51	25	**3**	**9**	**3**	**9**
	S.B.C.	51					
25	B.C.	86	25	**3**	**9**	**3**	**9**
	S.B.C.	92					
Double Cap—Clear (Coloured† and Frosted 6d. List Extra)							
30	Centre Contact	221 or 284	25	**5**	**9**	**5**	**9**
60		284 (all ± 1 mm)	25	**6**	**0**	**6**	**0**

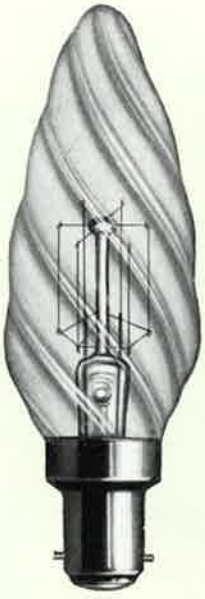
* **Purchase Tax** must be added to the prices in these columns. For the exact amount of purchase tax to be added, see TABLE A on the inside back cover.

† Colours: Red, Blue, Green, Yellow, Pink or Amber.

Cand-lite

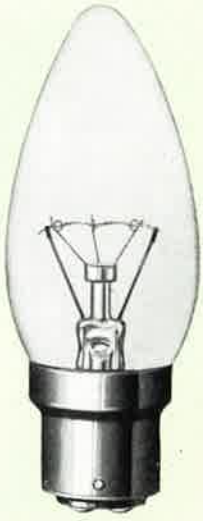
Coloured G.L.S.

45mm Round Bulb



Twisted Olive
Clear

Plain Olive
Silverlight



Plain Olive
Clear B.C. cap

Plain Olive Candle
There are many uses for these attractive lamps including supplementary lighting in foyers, bars and similar places where an intimate atmosphere is envisaged. They are also extensively used in candelabra and in shaded wall-light fittings. All 60W, 40W and 25W Silverlight ratings are gas-filled and have coiled coil filaments for improved efficiency.

Twisted Olive Candle
These lamps have an apparent twist to the glass bulb and may of course are used in applications similar to those suggested for Plain Olives. All 60W and 40W ratings are gasfilled and have coiled coil filaments.

† Colours
Plain or Twisted Candle are available Flame, Amber or Pink. Coloured G.L.S. are available White, Red, Blue, Green, Yellow, Flame, Orange, Pink or Amber.

Watts	Cap	Dimensions		Finish	Voltages and List Prices*	
		Length mm	Diam. mm		200/210, 220/230, 240,250¶ s. d.	110, 120 s. d.
Plain Olive						
25	B.C.	91±3·5	35±1	Clear	2 6	2 6
				Frosted	3 0	3 0
	S.B.C.	95±3·5		Silverlight	3 0	3 0
				Coloured †	3 0	3 0
40	B.C.	91±3·5	35±1	Clear	3 0	3 0
				Frosted	3 6	3 6
	S.B.C.	95±3·5		Silverlight	3 6	3 6
				Coloured †	3 6	3 6
60	B.C.	126±5	45±2	Clear	3 0	3 0
				Frosted	3 6	3 6
	S.B.C.	128±5		Coloured †	3 6	3 6
Twisted Olive						
25	B.C.	99±5	35±1	Clear	3 0	3 0
				Frosted	3 6	3 6
	S.B.C.	102±5		Coloured †	3 6	3 6
40	B.C. or S.B.C.	122±5	45±1	Clear	3 6	3 6
				Frosted	4 0	4 0
60‡		127±5	55±1	Coloured †	4 0	4 0
Longlite						
40 or 60	B.C.	302±2 (12 in.)	37±1	Opalized	8 6	8 6
25	B.C. or S.B.C.	72±3	45±1	Clear or Pearl	2 0	—
40	B.C. or S.B.C.	75±3	45±1	Clear or Pearl	2 3	—
				Silverlight	2 9	—
60	E.S.	435	50 max. (taper)	Opal	16 4	—
Single Coil						
15 25	B.C. or E.S.	105	60	Coloured †	1 11	1 11
40 60	B.C.	105	60	Coloured †	1 9	1 9
75 100		125	68		2 3	2 3

¶ The separate voltages of 240 and 250 apply to all lamps listed on this page except Longlite, Cand-lite and Coloured G.L.S. which have a dual voltage—240/250.

* **Purchase Tax** must be added to the prices in these columns. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.

‡ 60W Twisted Olive are also available with 45±1 mm dia. bulbs in Clear or Frosted Finishes.

Sign and Neon

Neon Indicator
Type I

Neon Nightlight
Type N

Switchboard Indicator

Sign 44 mm

Sign 28 mm

Sign Lamps

These lamps are ideal for festive illumination at the seaside, in parks and for the exterior or interior decoration of such buildings as halls, cinemas and theatres.

Neon

These lamps are used where light output is of secondary importance but where a steady bright glow and low power consumption are required.

The night light, type N, is most suitable for sick rooms and children's nurseries; it is quite safe and gives just the required amount of light without being distracting.

The indicator type of neon lamp is for use on domestic appliances such as cookers or refrigerators. It clearly indicates whether a circuit is open or closed.

Watts	Cap	Dimensions		Voltages and List Prices*					
		Length mm	Diameter mm	200/210, 220/230, 240/250 s.	d.	120 s.	d.	110 s.	d.
Clear									
15	B.C.	57±4	28±1	1	10	1	10	1	10
	E.S.	59±4							
	S.B.C.	63±4							
	S.E.S.	65±4							
Coloured. Red, White, Blue, Amber, Green, Yellow, Flame, Orange or Pink or Outside Frosted									
15	B.C.	57±4	28±1	2	2½	2	2½	2	2½
	S.B.C.	59±4							

Watts	Cap	Dimensions		Voltages and List Prices*					
		Length mm	Diameter mm	200/210, 220/230, 240/250 s.	d.	120 s.	d.	110 s.	d.
Coloured. Red, White, Blue, Green, Orange or Yellow									
15	B.C.	90±3·5	44±2	2	2½	—		2	2½
	E.S.	92±3·5							

* **Purchase Tax** must be added to the prices in these columns. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.

Watts	Voltages	Cap	Filament	Dimensions		List§ Price	
				Length mm	Diam. mm	s.	d.
Neon Type N							
5	200/220 230/240 250/260	B.C.	Beehive	125 max.	61 max.	6	0
Neon Type I							
0·5	200/260	B.C. S.B.C.	Beehive	56 54	28 18	4	0

§ **Purchase Tax** not chargeable.

Watts	Voltages	Cap	Filament	Dimensions		List* Price	
				Length mm	Diam. mm	s.	d.
—	100/130 or 200/260‡	B.C.	Staggered Wreath Double Tier	56	28	2	6

* **Purchase Tax** must be added to the price of this lamp. For the exact amount to be added see TABLE A on the inside back cover.

‡ One lamp only is available in each of these voltage ranges, and will be marked 100/130 or 200/260 volts respectively. Lamps are marked 'Switchboard Indicator' and no wattage specified.

NOTE: Switchboard Indicator lamps are available sprayed in colours at **2s. 10½d.** list.

Infra Red and Reflector

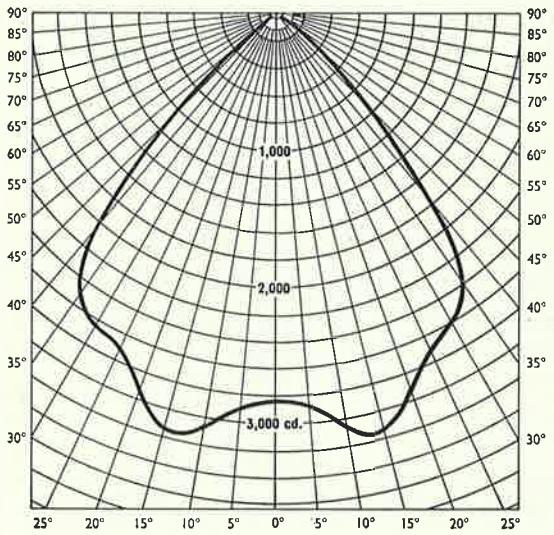
Quartz Infra Red

75W Reflector Spotlight

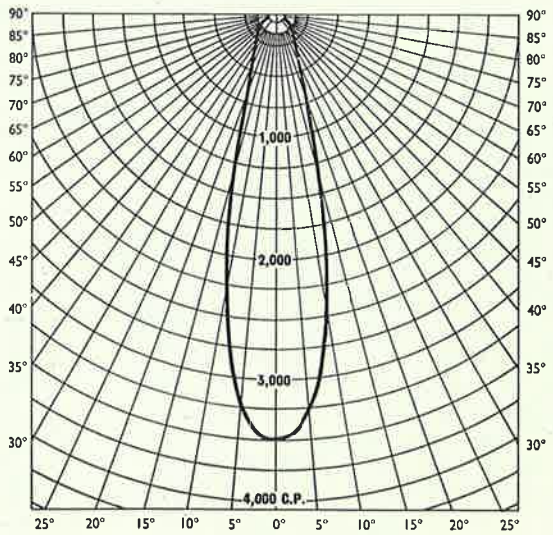
150W Infra Red
with Internal Reflector

Carbon Filament Heater

Polar Curves of Candle power



500W Reflector Floodlight



150W Reflector Spotlight

Infra Red
For many years this form of heating has held its own for industrial stove enamelling or baking of all kinds. A large proportion of manufacturers believe that only by the thorough internal heating that these lamps give, can a first class enamel 'skin' of very good quality be obtained.

The farmer too, has found that Infra Red lamps provide light and adequate warmth to protect the health of his livestock. They are safe to use and require no attention or maintenance.

Radiant Heat
This 60-watt lamp is specially designed to use in clinical apparatus employed for heat therapy in hospitals and clinics. (*Not illustrated.*)

Radiator
These lamps are tubular in shape and they are sprayed a warm flame colour. They are suitable for airing cupboards or similar places where both light and heat are required.

Quartz Infra-red
These tubular lamps are used in all applications where a high concentration of radiant heat is needed. Broadly speaking, these fall under five major headings.

Evaporation of water.
Evaporation of solvents.
Mass heating.
Baking.
Short time cyclic heating.

Carbon Heaters
These lamps are useful as small sources of Infra-red radiation, for electro-medical purposes, and they can also be used as resistances for battery charging.

Reflector Lamps
These lamps with the 'built-in' reflector have become a necessity in modern shop and shop window lighting, not only because of their usefulness for emphasizing items for display but also because they blend so well with fluorescent or other forms of general lighting. They are also widely used in workshops and display boards and the 75-watt lamp with B.C. cap has many applications in the home.

Watts	Voltages	Cap	Dimensions: Length mm	Dimensions: Diameter mm	List* Price s.	d.
Infra Red Lamps with Internal Reflector Parabolic Bulb						
150	100/130, 200/250	E.S. Cementless	178 ±4	126±1·5	12	6
250	100/130, 200/250	E.S. Cementless	178 ±4	126±1·5	17	9
Infra Red Lamps without Internal Reflector Round Bulb						
250	100/130, 200/250	E.S.	178±5·5	90±1	7	9
Radiant Heat Round Bulb						
60	110, 120, 200/260	B.C. or E.S.	117·5±3·5	65±1	2	3
Radiator Tubular Bulb. Sprayed Flame. Carbon Filament						
250	110, 120, 200/220, 230/250	B.C.	290 max.	64±1	20	0
Carbon Filament Heaters						
65	100/115, 200/210, 220/230, 240/250	B.C. or E.S.	110 ±3	60±1	5	0
130	100/115, 200/210, 220/230, 240/250	B.C. or E.S.	117·5±3	65±1	5	6
200	100/115, 200/210, 220/230, 240/250	B.C. or E.S.	156 ±5	80±1	6	2

* **Purchase Tax** must be added to the prices in this column unless exemption has been obtained. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.

Watts	Voltages	Cap	Dimensions: Length mm	Dimensions: Diameter mm	List§ Price s.	d.
500	100/130	Special	205±3	10±1	68	0
1000	230/250	Special	350±5	10±1	84	0

§ **Purchase Tax** not chargeable.

and

Watts	Volts	Cap	Dimensions: Length mm	Dimensions: Diameter mm	Dimensions: Light Centre Length	List* Price s.	d.
Reflector Floodlight (Dispersed Beam)							
75	110, 120, 200, 210, 220, 230, 240, 250	E.S.	130±3	95±1	88·5±2	8	0
75	110, 120, 200, 210, 220, 230, 240, 250	B.C.	129±3	95±1	87 ±2	8	0
75	24	E.S.	130±3	95±1	88·5±2	12	6
100	110, 120, 200, 210, 220, 230, 240, 250	E.S.	130±3	95±1	88·5±2	8	0
100	110, 120, 200, 210, 220, 230, 240, 250	B.C.	129±3	95±1	87 ±2	8	0
150	110, 120, 200, 210, 220 230, 240, 250	E.S.	178±4	126±1·5	105±3	12	0
Reflector Spotlight (Concentrated)							
150	110, 120, 200, 210, 220, 230, 240, 250	E.S.	178±4	126±1·5	105±3	12	0
250	110, 120, 200, 210, 220, 230, 240, 250	E.S.	178±4	126±1·5	105±3	22	6
High Bay Reflector							
500¶	210, 230, 240, 250	G.E.S.	312±6	187±3	165±2	52	6

¶ Floodlight only and NOT subject to purchase tax.
* **Purchase Tax** must be added to the prices in this column. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.

The Hot Cathode Tubular Fluorescent Lamp

THE TUBULAR fluorescent lamp consists of a cylindrical glass tube coated on the inside with fluorescent materials (phosphors). An electrode is sealed into each end of the tube and the connections to each electrode are brought out to the lamp cap. The electrode is made of a coil of tungsten wire, coated with a mixture of alkaline earth oxides which freely emits electrons when heated; this coil acts as the cathode. Two small fins are placed on each side of the cathode to act as the anode during the appropriate half cycle. After the tube has been evacuated a drop of mercury is introduced into the tube, also a small quantity of argon gas to help to initiate the arc between the cathodes.

Two methods of starting are in common use, switch start and instant start, both involve the heating of the cathodes.

The operation of starting consists in forcing electrons to pass along the tube from end to end, thereby forming the conducting passage or 'arc' between the cathode and anode.

In the case of switch start circuits, it is necessary to pass a current through the electrodes to heat them and to apply a voltage sufficiently high to cause the arc to strike.

When using the instant start method, however, a special instant start transformer is employed both to heat the electrodes and ensure the correct starting and running conditions for the lamp. It is important that for instant start, conditions for the movement of electrons along the tube are just right. An electrical charge on the lamp may be sufficient to repel electrons and thus prevent starting and it is for this reason that the lamp is either externally 'siliconed' or a metallic stripe is affixed to lamps intended for instant start circuits.

To cater for the various requirements of specific installations there are at present six standard white colours of fluorescent lamps, viz., Daylight, Natural, Warm White, De Luxe Warm White, Colour Matching, and 3500°K. Confusion often arises between colour appearance of light sources and the colour rendering of objects seen under them, and it must be remembered when looking at a lamp that the eye can easily be deceived and apparently similar light sources may give different colour rendering and vice versa. We recommend obtaining the advice of our illuminating engineers as to best colour of lamp to suit individual lighting problems.

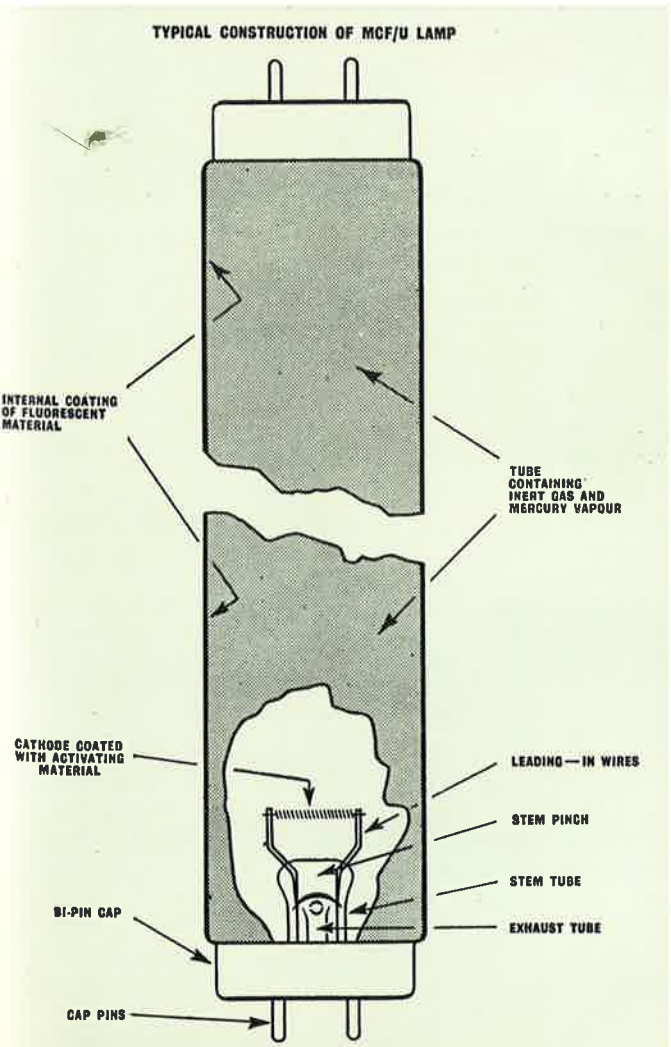
Hot and Cold Cathode lamps are essentially the same except that cold cathode lamps are provided with a large unheated cathode, not coated with any emissive material, and starting is effected by the application of a high voltage across the lamp. There is a considerable voltage drop at the cathodes which results in a reduced overall efficiency, compared with the equivalent hot cathode lamp.

Watts and Nom'l Length	Caps	Dimensions		Electrical Characteristics			Lumen Output of Lamps †											
							Colour Matching		Daylight		Natural		3500°K White		Warm White		Deluxe W/White	
		Max. Overall Length	Diam.	Av. Lamp Volts at 100 hr.	Lamp Operating Current	Lamp Starting Current	Init. at 100 hr.	Av. thro' 5000 hr.	Init. at 100 hr.	Av. thro' 5000 hr.	Init. at 100 hr.	Av. thro' 5000 hr.	Init. at 100 hr.	Av. thro' 5000 hr.	Init. at 100 hr.	Av. thro' 5000 hr.	Init. at 100 hr.	Av. thro' 5000 hr.
		in.	in.		(amps)													
4 6″	Min. Bi-pin	5·91	0·5	31V±4	—	—	64	58	80	70	72	62	—	—	88	80	64	58
6 9″	,,	8·91	0·5	48V±4	0·145 nom.	0·18 nom.	159	138	207	180	180	153	—	—	222	198	159	138
8 12″	,,	11·91	0·5	58V±4	—	—	224	192	288	252	256	216	—	—	312	280	224	192
15 18″	Medium Bi-pin	17·78	1·0	57V±4	0·3 nom.	0·4-0·65	495	405	690	600	555	450	690	615	690	600	450	330
20 2′	,,	23·78	1·5	60V±4	0·35 nom.	0·4-0·7	720	620	1000	900	780	680	1020	920	1020	920	660	460
30 3′	,,	35·78	1·0	104V±5	0·34 nom.	0·4-0·65	1290	1080	1800	1620	1410	1320	1890	1680	1890	1680	1200	960
40 2′	,,	23·78	1·5	48V±4	0·88 nom.	1·0-1·6	1240	1000	1720	1440	1320	1080	1760	1480	1760	1480	1120	760
40 4′	,,	47·78	1·5	108V±5	0·41 nom.	0·5-0·75	1840	1600	2640	2320	2000	1760	2720	2400	2720	2400	1680	1440
50 5′	,,	59·62	1·0	*160V±5	0·41 nom.	0·4-0·65	—	—	—	—	2400	2050	—	—	—	—	—	—
80 5′	B.C. or Medium Bi-pin	60·25 59·62	1·5	106V±5	0·85 nom.	1·0-1·6	3520	3040	5120	4480	3840	3360	5280	4640	5280	4640	3200	2640
125 8′	B.C. or Medium Bi-pin	96·25 94·06	1·5	*160V±10	0·91 inductive	1·0-1·6	5750	5000	8125	7125	6375	5375	8250	7375	8250	7375	5250	4500

* Signifies for applied voltage of 320V.
125 watt—8 ft. Starting voltage—370V nom.

† In free air conditions at 20°C (68°F) at rated wattage.

NOTE: Bi-pin 8 ft. lamps are not available Colour Matching or De-luxe Warm White.



Fluorescent Tubes Guarantee

Tubes within the range 15W to 125W

Any fluorescent tube failing within twelve months from the date of purchase by the user (or prior to 3000 hours burning, whichever is the shorter) except through misuse will be replaced free of charge.

Essential Control Gear

All Electric Discharge Lamps are designed to operate on standard supply voltages using appropriate lamp auxiliary gear. Circuit diagrams and relative control gear will be found in Sections A15 and A16.

Fluorescent

15W 1½′

20W or 40W 2′

30W 3′

40W 4′

50W 5′

80W 5′

80W 5′

125W 8′

125W 8′

4W 6″ Woods Glass

6W 9″ Woods Glass

4W 6″

6W 9″

Standard Straight Fluorescent Tubes

Our extensive range of fluorescent tubes includes sizes to suit the majority of fluorescent fittings in use today. 'Universal' tubes can be used on Switch Start or Instant Start circuits.

Recent additions to the range are the reflector type tubes which have internal coating to give a high percentage of downward illumination and the 50W 5 ft. tube which is only 1″ in diameter, the latter is designed for use with showcase fittings, where a limited depth is available.

Ultra Violet Tubes

These tubes emit a large proportion of energy as invisible u.v. radiation in the 3650Å band. They can be used for the excitation of fluorescent materials and paints thus having various applications such as the examination of documents, laundry marks, stains and many laboratory uses. They can be used for advertising purposes and for instrument panel excitation as is used in some aircraft today.

The MCFW/U lamps are black in appearance because they have a 'Wood's Glass' envelope which absorbs most of the visible light.

In the case of the MCF/U-Ultra-Violet tubes, they are white in appearance because no filter is incorporated in the glass envelope; an *external* 'Wood's Glass' filter must be used if visible light is not required.

Circular Fluorescent

40W Fluorescent Circle lamps are available in Deluxe Warm White at a list price of 45/-*.

These lamps have an outside diameter of 403 mm and a tube outside diameter of 32 mm. They have special lampholder supports as shown in Section A 16.

Standard Straight Tubes — *Universal*

Watts	Nominal Length	Colours Available	List Price s.	d.*
125	8 ft.	Warm White, Natural, Colour Matching or 3500°K White, Daylight or Deluxe Warm White	17	6¶
80	5 ft.		13	0
†50	5 ft.	Warm White	17	3
40	4 ft.	Daylight,	11	9
40	2 ft.	Natural,	11	0
30	3 ft.	Colour Matching,	11	0
20	2 ft.	Deluxe Warm White	10	6
15	18″	or 3500°K White	9	9
8	12″	Warm White, Daylight,	7	6
6	9″	Natural, Colour Matching	7	6
4	6″	or Deluxe Warm White	11	6
Coloured Tubes				
80	5 ft.	Red, Blue, Green or Yellow	17	6

MCFA/U. All 'Universal' tubes are available also MCFA/U which indicates Instant Start with external stripe connected to both caps, at fitting potential. 125W 8 ft. is MCFCR/U.

† 50W 5 ft. lamps are only available in Natural colour.

NOTE: Bi-pin 8 ft. lamps are not available Colour Matching or De-luxe Warm White.

Reflector Tubes

Watts	Nominal Length	Colours Available	List Prices MCFER/U s.	d.	MCFCR/U s.	d.
80	5 ft.	Warm White, Daylight, Natural, Colour Matching, Deluxe Warm White	14	9	—	
40	4 ft.	or 3500°K White	13	9	—	
40	2 ft.	Warm White or Natural	13	0	—	
20	2 ft.	Warm White or Daylight	12	6	—	
125	8 ft.	Warm White, Daylight, Natural or 3500°K White	—		20	0¶

Reflector Tubes are available MCFAR/U which indicates Instant Start with external stripe connected to both caps, at fitting potential. 125W 8 ft. is MCFCR/U.

Ultra Violet Tubes

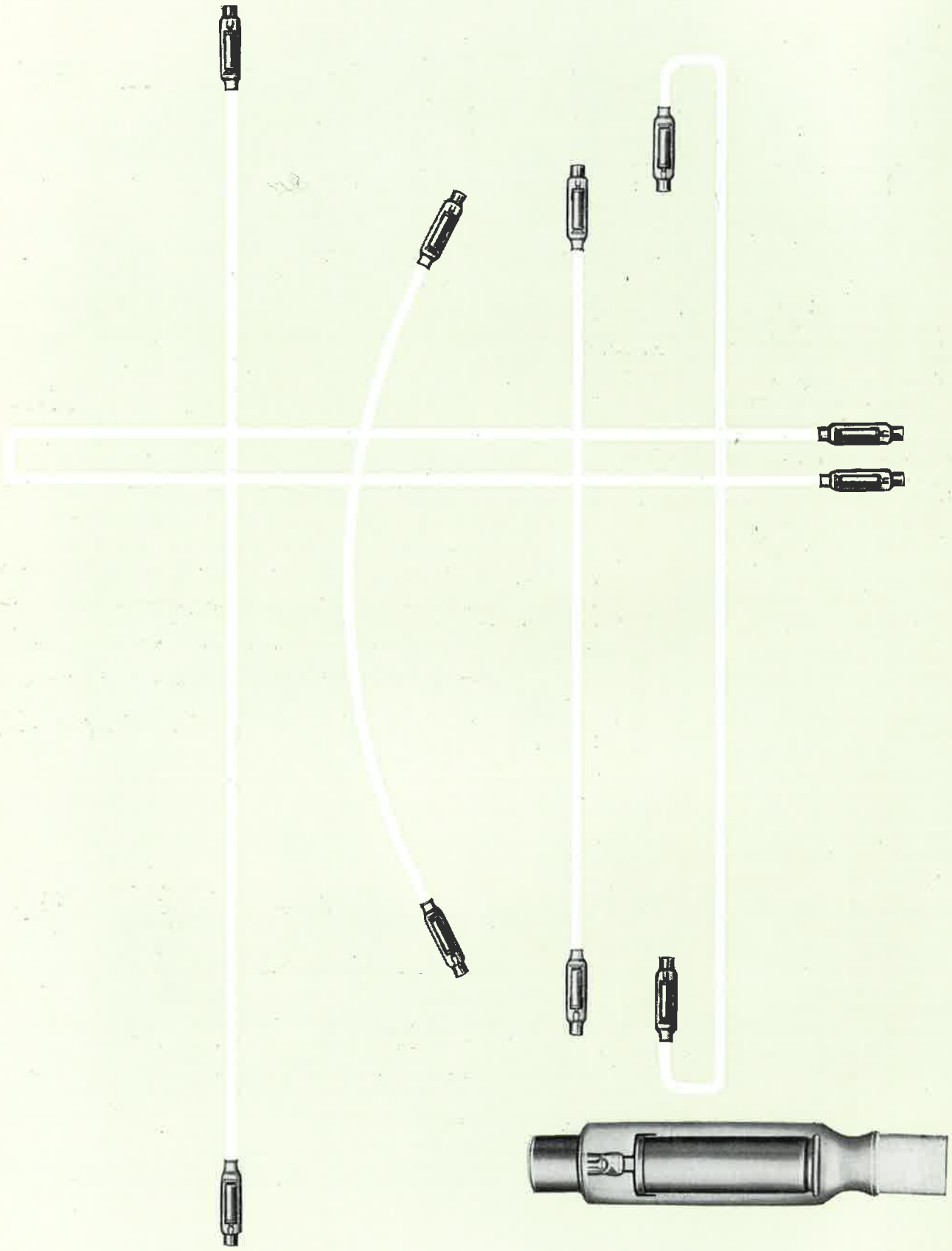
Watts and Nominal Length	Colours Available	MCF/U (Ultra-Violet) Non-filter Envelope s.	d.*	MCFW/U (Ultra-Violet) Black Envelope s.	d.*
80 5 ft.	u.v.3650Å	19	0	—	
40 4 ft.		17	9	—	
40 2 ft.		17	0	—	
15 18″		15	9	—	
6 9″		—		50	0
4 6″		—		38	0

* **Purchase Tax** must be added to the prices in these columns. For the exact amount of tax to be added see TABLE A on the inside back cover.

¶ 125W 8 ft. lamps are NOT subject to purchase tax.

Mazda fluorescent tubes are designed to operate on standard supply voltages, using appropriate lamp auxiliary gear. Details of circuits and auxiliary gear will be found in Sections A15 and A16.

Cold Cathode



Cold Cathode Fluorescent

Cold Cathode tubes have a number of advantages which makes them suitable for specific applications. These are:

A wide colour range.
Long Life.
Low surface brightness.
High efficiency.

The long life in particular is an advantage where the light sources are comparatively inaccessible for cleaning and maintenance.

The standard tubes are generally operated in combinations of three or four and operated at higher voltages than standard fluorescent tubes. We supply a range of standard fittings which house the control gear required to operate the tubes and provide the necessary light control (see Fluorescent Fittings Catalogue AF 211).

Our Lighting engineers should be consulted if there is any doubt as to the practicability of certain sizes or colours.

Colours	CLASS A Standard Length	CLASS B Short Lengths	CLASS C Off-set Electrodes	CLASS D Curved Tubes	CLASS H Hairpin Tubes
Standard Colours					
White, Warm White, Deluxe Warm White, Daylight, Natural, Intermediate, Gold	**38/6d.**	**49/9d.**	**62/3d.**	**116/-**	**45/6d.**
Colour Matching	**47/6d.**	**49/9d.**	**62/3d.**	—	—
Cerise	**47/6d.**	—	—	—	—
Non-standard Colours					
Red, Light Green, Light Blue, Sky Blue, Ivory	—	**49/9d.**	**62/3d.**	**116/-**	**Non applicable**
Dark Green, Ruby Red, Dark Blue	—	**84/9d.**	**98/3d.**	**Prices on applic'n**	

Purchase Tax not chargeable.

NOTE: Where tubes are required for outdoor use there will be an extra charge of 5/9d. list per tube (all classes).

Tube Types

Class A. Straight tubes 20 mm dia. Overall length 9′ 6″. Illuminated length 8′ 6″. Straight on electrode. Standard lengths with standard colours.

Class B. Straight tubes 20 mm dia. Shorter than standard length ; straight on electrode. Also standard lengths with non-standard colours.

Class C. Straight tubes up to 8′ 6″ illuminated length but with off-set electrodes i.e. parallel to tube or at right angles to it.

Class D. Any curved or bent tube up to 8′ 6″ illuminated length (one bend only) with electrodes in any position.

Class H. Standard Hairpin tube. Overall length from electrode end to outside of bend 4′ 9″. Illuminated length 8′ 6″ from electrode to electrode. Tube centres between limbs limited to the following dimensions:
$2\frac{5}{8}$″, $2\frac{3}{4}$″, 3″, $3\frac{1}{2}$″ or 4″.

Technical Data

Tube* Watts	Tube Current	Colour	Lumens per watt at 100 hours	Average lumens per watt (i.e. through 15,000 hours)	Luminance Cd/sq. in. at 100 hours
67·5	120 mA	White	43·5	35	4·1
		Warm White	45	37	4·3
		Deluxe Warm White	32	24·5	3·0
		Daylight	42	35	3·9
		Natural	36	30	3·3
		Intermediate	42	35	3·9
		Colour Matching	32	24·5	3·0
50	60 mA	Gold	13·5	12·5	0·85

* **NOTE:** These are tube watt figures only.
Total circuits watts are dependent on the lamp combination and type of gear used.

Electric Discharge Lamps

THE ELECTRIC discharge lamp produces visible radiation and/or ultra violet by the change of energy levels of the electrons within the atoms of gas or vapour forming the ionized path between the electrodes.

There are many gases and vapours which can be used, but for the purpose of general illumination it is necessary to consider two vapours only, namely, those resulting from heated metallic mercury or sodium.

Although the construction and operation of these lamps vary somewhat, the basic principles are the same. In each case it is necessary to initiate the arc and having done so, prevent it from building up to such proportions that the lamp is destroyed.

Mercury Vapour Lamps

The four main types of Mercury Vapour lamps are MA, MB, ME, and MCF. The latter type covers Fluorescent Tubular lamps which are described in the previous sections.

Type MA

These lamps consist of a tubular bulb containing an electrode at either end, a measured quantity of mercury and some argon gas. A third or auxiliary electrode is connected through a very high resistance to the electrode at the far end of the lamp. The complete bulb assembly is then sealed into a larger bulb which is capped.

On connection of the mains voltage across the main electrodes, the close proximity of the auxiliary electrode to a main electrode enables preliminary ionization to be established to initiate the main arc discharge. The main electrodes containing a thermionic emissive pellet support the arc discharge which in turn starts vapourization of the mercury until the lamp is running in a super heat condition.

To prevent excessive building up of the main discharge it is essential to incorporate a choke or similar limiting device in the circuit.

The group of MA type lamps include:—

MA/V with soft glass outer. This lamp can only be burned in the vertical position unless magnetic arc control is used to prevent the arc bowing upwards.

MA/U with soft glass outer. This lamp can be burned in positions other than vertical without magnetic arc control as it has a special glass inner to withstand the increased temperature caused by the bowing arc.

MA/V and **MA/U** with hard glass outer. Identical to the lamps above with the exception of a glass envelope which allows the lamp to be used in applications where there are rapid changes in temperature.

Type MB

These lamps are similar in operation to the **MA** lamps but the light source is more compact and the inner tube is made of quartz.

MB/U These lamps can be burned in any position; they have pearl bulbs of the same shape and dimensions of similarly rated tungsten G.L.S. lamps.

MBW/U The passage of ultra violet radiation through quartz enables this further type of lamp to be constructed. The outer bulb is made of Woods glass which blocks dangerous radiation and visible light but allows the passage of light in the ultra violet wavelength.

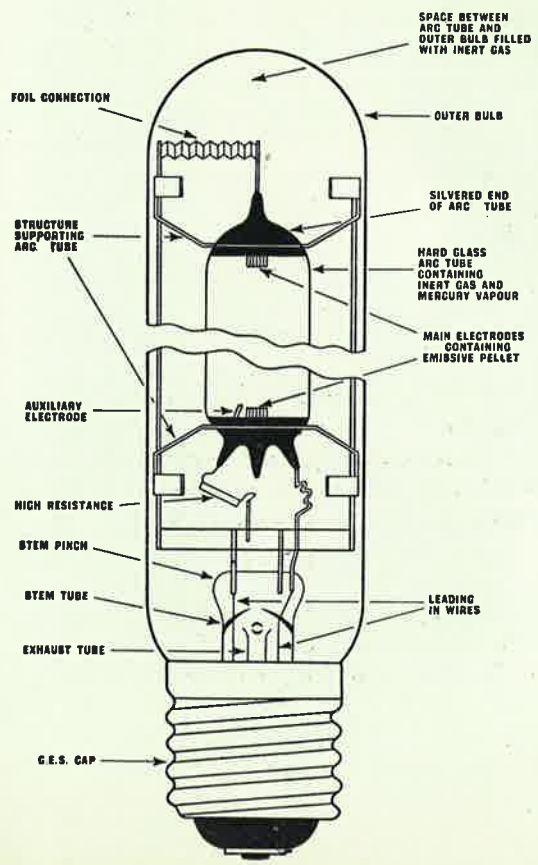
Type ME

These lamps incorporate the main features of the previous types, but have an exceedingly short arc length and the very high brightness necessary for certain projection work. They are available either with complete glass envelope or with a metal box outer, the box is fitted with a window.

Technical Data

Rating		Electrical Characteristics			Lumen Output		Average Life (Hours)
Wattage Type	Voltage	Lamp Operating Voltage	Operating Current	Starting Current	(Initial) at 100 hours	Average through life	
80W MB/U	200/220 230/240 250	95/120 110/140 125/155	1·0A to 0·6A	1·5A to 1·0A	2960	2480	5000
125W MB/U	200/220 230/240 250	95/125 115/150 135/165	1·5A to 0·9A	2·0A to 1·5A	5250	3875	5000
250W MA/V	100 110 120 130	55/65 60/70 65/75 70/80	4·6A to 3·6A	7·0A to 5·5A	8500	7000	1500
250W MA/V and MA/U	200/220 230/240 250	107/125 125/150 135/160	2·4A to 1·8A	5·0A to 4·0A	9250(MA/V) *8250(MA/U)	8750(MA/V) *7500(MA/U)	5000
250W MA/H	200/220 230/240 250	95/115 95/115 95/115	3·8A	5·0A to 4·0A	8250	7500	5000
400W MA/V	100 110 120 130	60/67 65/75 70/80 75/85	6·8A to 5·4A	12·0A to 9·0A	16,000	12,800	1500
400W MA/V and MA/U	200/220 230/240 250	110/130 130/155 140/165	3·7A to 2·8A	6·5A to 4·5A	16,800(MA/V) *15,200(MA/U)	15,600(MA/V) *13,200(MA/U)	5000
400W MA/H	200/220 230/240 250	95/115 95/115 95/115	4·2A	12·0A to 9·0A	15,200	13,200	5000
1000W MA/H	200/220 230/240 250	110/130 130/155 140/165	9·0A to 7·1A	12·0A approx.	47,000	43,000	5000

TYPICAL CONSTRUCTION OF M.A. LAMP



* These figures are for horizontal operation: vertical operation will give approximately 10% greater efficiency with no shortening of life. The time required for these lamps to reach full brilliance is approximately 8 to 9 minutes.

The starting current values given represent the short-circuit current at nominal supply voltages of the standard chokes used to operate the lamps. The incorporation of power factor correction capacitors in the lamp circuits would result in these values being lowered.

Coding of Electric Discharge Lamps

The lamp coding letters in Sections A10 to A13 indicate the following:

M = Mercury Discharge

A = Glass Envelope loaded above 10 watts/cm of arc length

B = Quartz Envelope loaded below 100 watts/cm of arc length

D = Quartz Envelope with forced liquid cooling

E = Quartz Envelope loaded above 100 watts/cm of arc length

F = Internal Fluorescent Coating

T = Tungsten Filament

W = Black Glass Visible Light absorbing and cutting off short wave u.v. radiation

The suffix to the code letters has the following meaning:

/D = Vertical Cap-down burning

/H = Horizontal burning

/U = Any position burning

/V = Vertical Cap-up burning

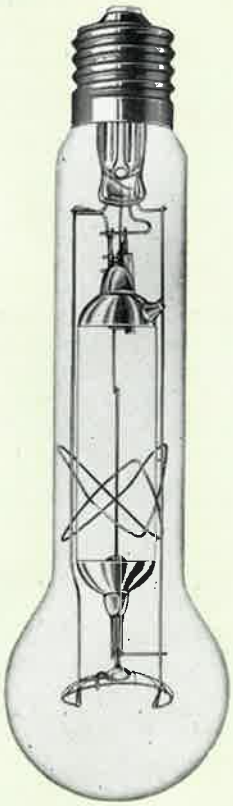
Mercury Vapour

1000W MA/H

400W MA/V, MA/U or MA/H

125W MBW/U

80W MB/U



300W MAT/V

Mercury Vapour
For streetlighting and many kinds of industrial lighting, the high lumen/watt ratio of these lamps has made them a necessity where economical operation and high light output are the most important considerations.

The MA type have refinements of construction which put them in a class alone. They have Double Helix Electrodes where each electrode is designed to protect its emissive pellet; the mercury filling is micrometer controlled to ensure life and light output and the recent introduction of a new arc tube mount obviates point suspension and gives greatly increased resistance to external vibration.

Black Glass—Type MBW/U
The special glass of this Ultra Violet Filter lamp absorbs practically all visible light but allows free passage to u.v. radiation at the 3650Å wavelength. The lamp can be used for excitation of fluorescent materials and has many applications in various scientific and industrial processes.

Watts	A.C. Voltages	Cap	Dimensions Length mm	Diam. mm	L.C.L. mm	List§ Price s.	d.
MA/V (Tubular Bulb, Burning position Vertical unless arc controlled)							
250	100, 110, 120, 130, 200/220, 230/240, 250	G.E.S. (E40/45)	290	51 max.	170	**54**	**0**
400			330	51 max.	190	**59**	**0**
MA/U (Tubular Bulb)							
250	200/220, 230/240, 250	G.E.S. (E40/45)	290	51 max.	170	**57**	**6†**
400			330	51 max.	190	**62**	**6†**
MA/H (Tubular Bulb)							
250	200/220, 230/240, 250	G.E.S. (E40/45)	290	51 max.	170	**64**	**6**
400			330	51 max.	190	**71**	**0**
1000		S22/19 at one end S22s/21 with locating ring at the other	476±3	40 max.	—	**110**	**0**
MB/U (Round Bulb, Pearl finish)							
80	200/220, 230/240, 250	3-pin B.C. (B22/31 × 30) or (B22/25 × 26)	160	80	113	**39**	**6**
125			178	90	128	**45**	**0**
MBW/U (Round Bulb, Ultra Violet Filter—Black Glass)							
125	200/220, 230/240, 250	3-pin B.C. (B22/31 × 30) or (B22/25 × 26)	178	90	128	**63**	**0**

§ **Purchase Tax** not chargeable.

† These prices are for soft glass outers. Hard glass outers are also available and the lamp list prices are 250W **69/-** and 400W **75/-**.

NOTE: Technical information on the above lamps will be found in the Introductory pages to this Section.

Mercury Vapour/Tungsten
By using the tungsten filament to limit the current as well as to emit light, a lamp has been developed to provide high output and good colour rendering properties without need for additional lamp auxiliary gear.

Watts	A.C. Voltage	Cap	Dimensions Length mm	Diam. mm	L.C.L. mm	List§ Price s.	d.
MBT/U‡ (Pearl Round Bulb, Combined Tungsten and Mercury Vapour)							
200	200, 210, 220, 230, 240, 250	E.S.(E27/25) or B.C.(B22/25× 26)	178	90	D125 F133	**50**	**0**
MAT/V (Tubular Bulb, Combined Tungsten and Mercury Vapour)							
300	200, 210, 220, 230, 240, 250	G.E.S. (E40/45)	285±15	D50±1 F85±1	max. D160 F225	**60**	**0**
500			355±20	D60±1 F100±1	D202 F325	**70**	**0**

§ **Purchase Tax** not chargeable. ‡ Inside Silica-coated Lamps are also available, **9d. List Extra.**
D—Discharge Portion, F—Filament Portion.

Technical Data

Wattage and Type	Lumen Output Initial	Lumen Output Average through life	Average Life (hours)
200W MBT/U	3400	2800	3000
300W MAT/V	6300	5400	3000
500W MAT/V	12500	10500	3000

PRICE REDUCTIONS
Section A9 MA Lamps
Please note new reduced prices for Mercury Vapour MA lamps with effect from 22nd February, 1960.

MA/V Soft Glass	MA/V or MA/H Hard Glass
250W **49/-**	250W **59/6**
400W **54/-**	400W **66/-**
MA/U Soft Glass	**MA/U Hard Glass**
250W **52/6**	250W **64/-**
400W **57/6**	400W **70/-**

Mercury Vapour

80W MBF/U

400W MBF/U

400W MAF/V

400W MBF/U
Elliptical

Mercury Vapour/Fluorescent

The light from the ordinary mercury discharge lamp, because of the small emission of red light, has a distorting effect upon certain colours. It is impossible for instance, to distinguish between reds and various shades of brown. The mercury vapour lamp with fluorescent bulb has been developed to meet requirements where a good degree of colour rendering is important, and further lamp development by our engineers has brought about even better colour rendering.

Watts	A.C. Voltage	Cap	Dimensions Length mm	Dimensions Diam. mm	Dimensions Neck Diam. mm	List§ Price s.	List§ Price d.
MAF/V Iso-thermal Bulb							
400	200/220, 230/240, 250	G.E.S. (E40/45)	335	165	52 max.	**81**	**6**
MBF/U (Round Bulb)							
80	200/220, 230/240, 250	3-pin B.C. (B22/31×30) or B22/25×26)	160	80	39	**48**	**6**
125	200/220, 230/240, 250	G.E.S. (E40/45) or 3-pin B.C.(B22/31×30)	190 178	90 90	42·5 max.	**59**	**0**
250‡	200/220, 230/240, 250	G.E.S.(E40/45)	220±7	89±1·5	51 max.	**99**	**0**
400‡	200/220, 230/240, 250	G.E.S.(E40/45)	280±6	115±2	51 max.	**130**	**0**
MBF/U (Elliptical Bulb)							
400	200/220, 230/240, 250	G.E.S. (E40/45)	280±6	120±2	51 max.	**130**	**0**

§ **Purchase Tax** not chargeable. ‡ Tubular Bulb see illustration.

Technical Data

Rating: Wattage and Type	Rating: A.C. Voltage	Electrical Characteristics: Lamp Operating Volts	Electrical Characteristics: Operating Current	Electrical Characteristics: Starting Current	Lumen Output: (Initial) at 100 hours	Lumen Output: Average through Life	Average Life (Hours)
80 MBF/U	200/220 230/240 250	95/120 110/140 125/155	1·0A to 0·6A	1·5A to 1·0A	2960	2600	5000
125 MBF/U	200/220 230/240 250	95/125 115/150 135/165	1·5A to 0·9A	2·0A to 1·5A	5313	4438	5000
250 MBF/U	200/220 230/240 250	107/125 125/150 135/160	2·6A to 1·7A	4·0A to 3·0A	11,000	10,250	5000
400 MBF/U	200/220 230/240 250	110/130 130/155 140/165	4·0A to 2·6A	7·0A to 5·0A	19,200	17,600	5000
400 MAF/V	200/220 230/240 250	110/130 130/155 140/165	3·7A to 2·8A	6·5A to 4·5A	12,800	12,000	5000

Note: The starting current values given in the table on the right represent the short circuit current at nominal supply voltage of the standard chokes used to operate the lamps. The incorporation of power factor correction capacitors in the lamp circuits would result in these values being lowered.

Run up time 80W 125W—4 minutes. 250W to 400W—7-8 minutes.

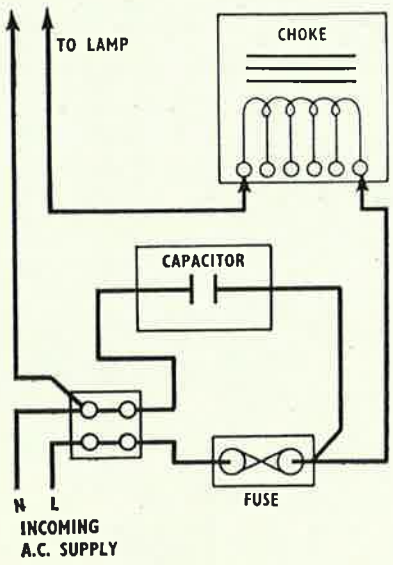
ME/D Compact Source

Glass Envelope

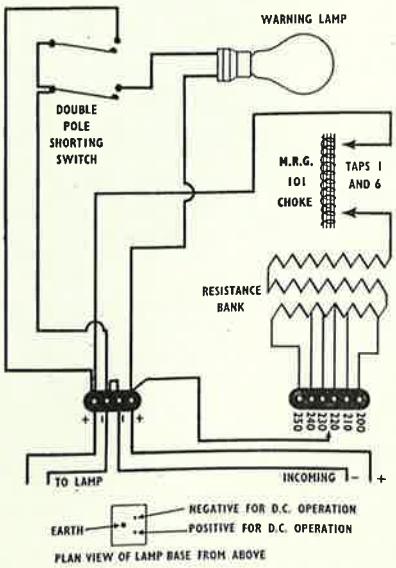
Box Type
P28/25 Cap

Box Type
3-pin Cap

Circuit Diagrams



A.C. Operation



D.C. Operation

ME/D Mercury Vapour

The Type ME/D high pressure mercury vapour compact source lamp consists of a quartz bulb containing two tungsten electrodes between which an arc of high brightness burns steadily. The lamp is available in three forms:

1 The Prefocus lamp in which the quartz bulb is mounted in an oval metal 'case' having two apertures through which the light emerges. The lamp has a light centre length of 55·5 mm and is fitted with a medium prefocus cap making it interchangeable with Class A1 Tungsten Projector lamps.

2 A lamp in a tubular glass envelope fitted with a 5-amp 3-pin base.

3 A lamp in a robust metal box fitted with a toughened glass window and having a 5-amp 3-pin cap. The light centre length is 80 mm.

The chief characteristics of the ME/D compact source lamps are as follows:—

a A small concentrated source of high brightness which burns steadily.

b Operation over a long life with only slight deterioration in light output.

c Radiation of a high actinic value and low heat content.

Lampholders:

Prefocus Lampholder .. **T 957**
3-pin Lampholder .. **M 252**

Watts	A.C. or D.C. Voltages	Description	Cap	Dimensions: Length mm	Dimensions: Diameter mm	Dimensions: L.C.L. mm	List§ Price s.	List§ Price d.
ME/D (Concentrated Light Source, Mercury Vapour)								
250	200/250	Glass Envelope	3-pin	135±3a	50±2	85±1	**310**	**0**
250	200/250	Box Type	P28/25	103 max.c	43×34b	55·5±0·5	**430**	**0**
250	200/250	Box Type	3-pin	130±3a	64×55	80±1	**430**	**0**

§ **Purchase Tax** not chargeable.
(a) Excluding Pins. (b) With a 5·5 mm projection on the major axis opposite the L.C.L.
(c) From cap flange to end of 'case'.

BRIGHTNESS DATA OF VARIOUS LIGHT SOURCES FOR PROJECTION

Type of Lamp		Approximate Brightness Candles per sq. cm
General Service Tungsten Filament Lamp (Clear) ..		500—1000
Tungsten Filament Projector Lamp		1000—3000
Low Intensity Carbon Arc		10,000—25,000
High Intensity Carbon Arc		30,000—100,000
ELECTRIC DISCHARGE LAMPS	SIZE OF SOURCE	
Type MA 400 watts	160 mm × 7 mm ..	150
„ MB 125 „	30 mm × 2 mm ..	800
„ ME/D 250 „	3·75mm × 1·5 mm ..	20,000
„ ME/D 1000 „	5·5 mm × 2·5 mm ..	40,000

There are many applications for these lamps. They may be summarized as follows:

In optical instruments such as projection microscopes for visual examination, gear profile projectors, and similar instruments.

In projection microscopes for microphotography.

In film printers.

In lantern slide or film projectors for monochrome film.

As a light source for examining polished metal or glass surfaces. Small flaws or defects in the surface may be observed by reflection of the light from this lamp from the surface to be tested, or in the case of transparent materials, by observing their shadows cast upon a screen.

On 190-260V alternating current supplies, the ME/D Lamp should be operated in conjunction with a Choke (Type MRG 101) and a power-factor correction Capacitor (Type C 82604) 60 mfd.

Tappings

Before placing the MRG 101 Choke (or AM 3000 Control Box) in service the tappings should be adjusted to the supply voltage shown below.

A.C. 50-cycle Supply Volts ..	190	200	210	220	230	240	250	260
Tappings ..	2—4	1—4	3—5	2—5	1—5	3—6	2—6	1—6

On 190-260V direct current supplies, the ME/D Lamp should be operated with a Control Box (Type AM 3000), which includes all necessary lamp control gear.

Operation

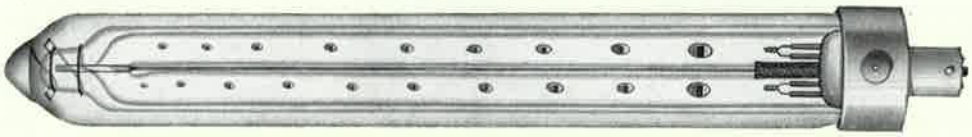
(1) To Start:—Short-circuiting switch should be closed, switch on supply and then open short-circuiting switch after a fraction of a second's delay.

(2) It is important that the polarity connections to the lamp be correct.

Sodium Vapour

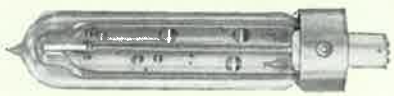
Linear Sodium

140 watt



85 watt

60 watt



45 watt

Sodium Vapour

These lamps have been highly praised for streetlighting and certain industrial applications both for their high light output and economy. To ensure complete protection and steady ambient temperature of the inner sodium tube, the latest improvements to the clear glass vacuum jacket include a protective metal cap covering the glass tip, a firm centring device and many other modifications. Our technicians are constantly seeking new ways to improve lamp life and efficiency.

Watts	A.C. Voltages	Cap B.C. Ceramic	Overall Dimensions		List Price §	
			Length mm	Diameter mm	Inner only s. d.	Complete with clear outer jacket s. d.
45	100/250	B22 Small	238	50	**40 0**	**61 9**
60		B22 Small	300	50	**45 0**	**69 6**
85		B22 Small	415	50	**60 0**	**89 3**
140		B22 Medium	518	65	**65 0**	**98 0**

§ **Purchase Tax** not chargeable.

Linear Sodium

This lamp comprises a discharge tube of special glass and of special formation with regard to both shape and cross section.

The very high lumen output of the lamp gives higher intensities and affords far greater economy.

Watts	A.C. Voltages	Cap	Overall Length mm	Diameter mm	List Price§ s. d.
200	200/250	Medium Bi-pin	909	38	**110 0**

§ **Purchase Tax** not chargeable.

Technical Data of the above lamps

Average life 4000 hours

Watts	Electrical Characteristics			Lumen Output	
	Operating Volts	Operating Current	Starting Current	at 100 hours	Average Through Life
45	65/90	0·6A	0·54A	2610	2250
60	95/125	0·6A	0·54A	4020	3420
85	150/180	0·6A	0·54A	6205	5525
140	155/190	0·9A	0·81A	10,220	9100
200 Linear	136	1·6A	1·6A	20,000	18,400

The time required for the lamps to reach full brilliance is of the order of 20 minutes.

Operating Position

45 and 60 watt lamps—from 5° above horizontal with cap down, to vertical with cap up.

85 and 140 watt lamps—from 5° above horizontal with cap down, to 20° below horizontal with cap up.

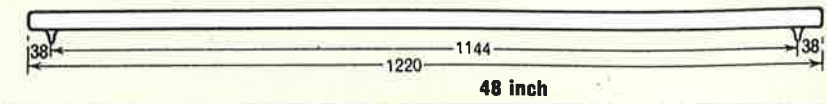
200 watt—Horizontal.

Sodium Vapour lamps are designed to operate on standard supply voltages using appropriate control gear.

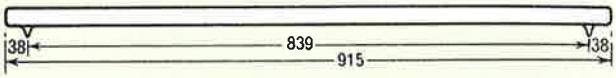
Lamp Outlines

Dimensions in Millimetres

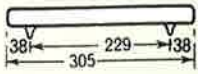
ARCHITECTURAL LIGHT TUBES



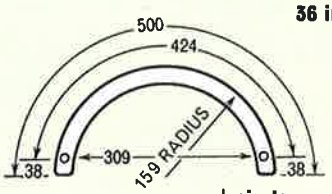
48 inch



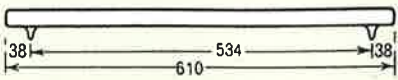
36 inch



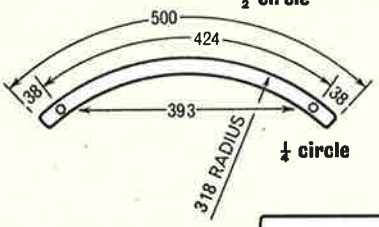
12 inch



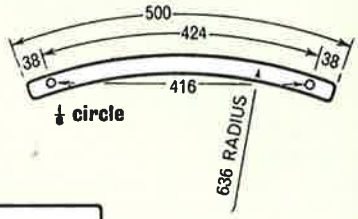
½ circle



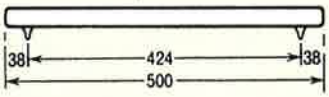
24 inch



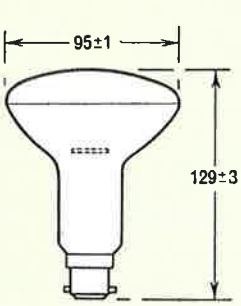
¼ circle



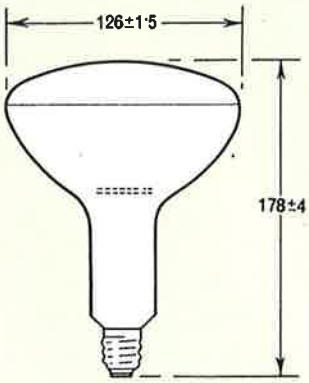
¼ circle



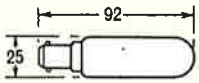
20 inch



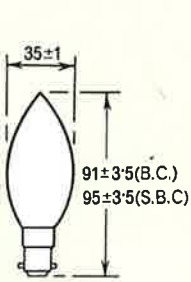
75 & 100W Reflector



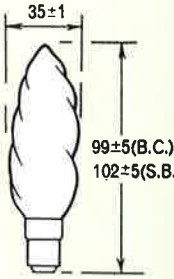
150W Reflector 250W I. Red



25W Single Cap Tubular

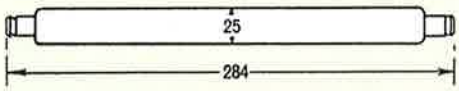


25 & 40W
Plain Candle

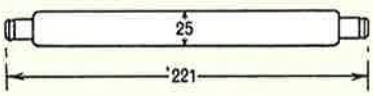


25W
Twisted Candle

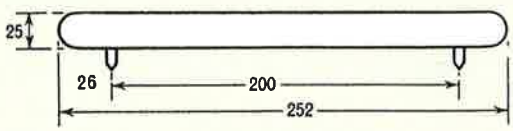
40 & 60W Longlite



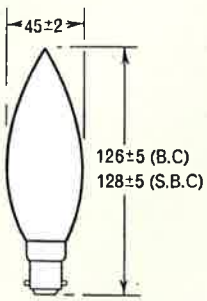
30 & 60W Double Cap Tubular



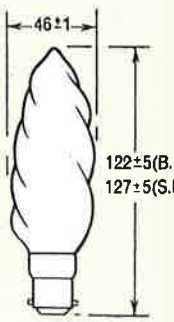
30W Double Cap Tubular



30 & 60W Maxtrip



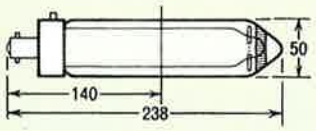
60W
Plain Candle



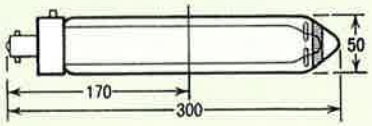
40 & 60W
Twisted Candle
(Alternative Diameters
45±1 or 55±1)

Lamp Outlines

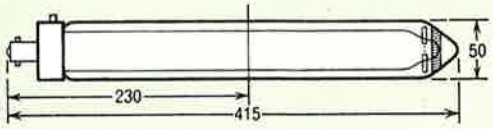
Dimensions in Millimetres



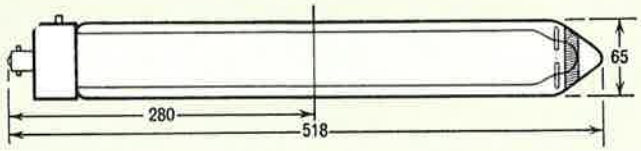
45W Sodium



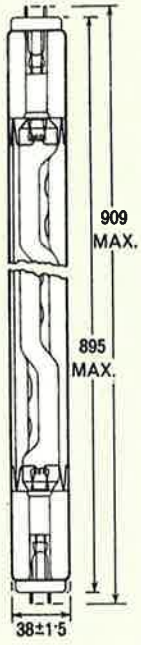
60W Sodium



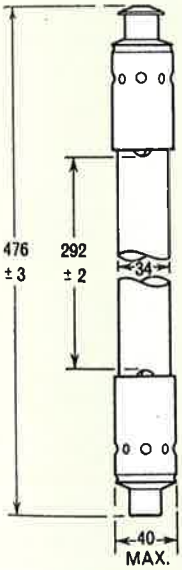
85W Sodium



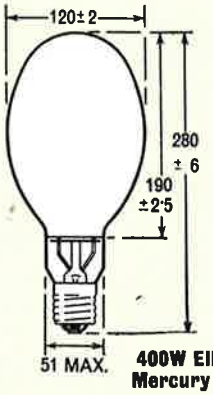
140W Sodium



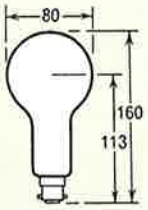
200W
Linear Sodium



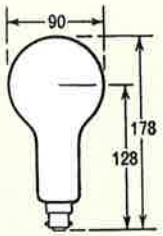
1000W Mercury
MA/H



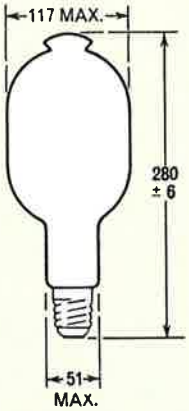
400W Elliptical
Mercury MBF/U



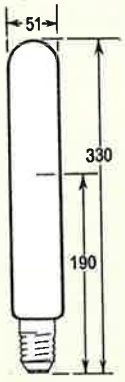
80W Mercury
MB/U or MBF/U

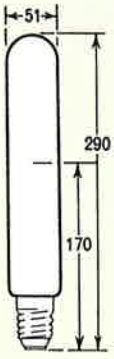


125W Mercury
MB/U & MBF/U

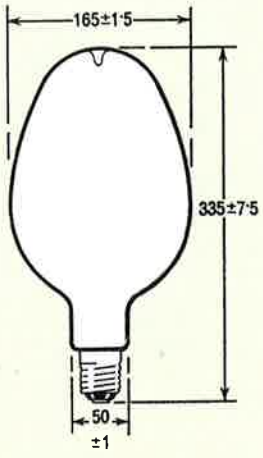


400W Mercury
MBF/U





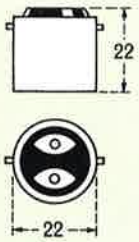
400W Mercury 250W
MA/V, MA/U or MA/H



400W Mercury
MAF/V

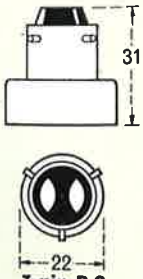
Lamp Caps

B.C.
B22/25 × 26



B.C.
B22/22

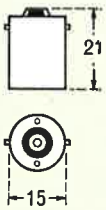
3-pin B.C.
B22/25 × 26



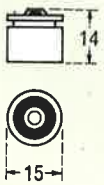
3-pin B.C.
B22/31 × 30

S.B.C.
B15/24 × 17

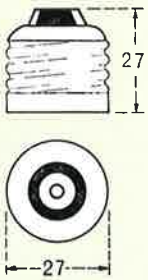
S.B.C.
B15/27 × 22



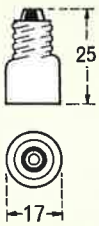
S.C.C.
BA15s/21



S.C.C.
S15s/14



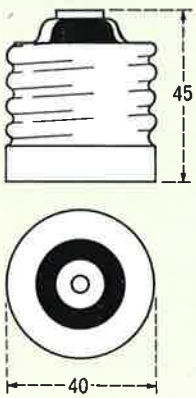
E.S.
E27/27



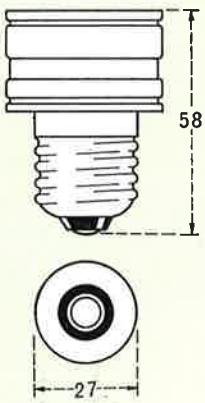
S.E.S.
E14/25 × 17

S.E.S.
E14/23 × 15

M.E.S.
E10/18



G.E.S.
E40/45



G.E.S.
E27/58 × 38

Lamp Cap Code

B.C. — Bayonet
S.B.C. — Small Bayonet
S.C.C. — Small Centre Contact
E.S. — Edison Screw
S.E.S. — Small Edison Screw
M.E.S. — Miniature Edison Screw
G.E.S. — Goliath Edison Screw

The dimension code indicates, firstly by letter, the type of cap. The first two figures indicate the nominal outer diameter of the cap barrel or screw thread in millimetres. The next two figures indicate the overall length and the last two, the diameter of the flange.

FLUORESCENT SWITCH START CIRCUITS

1

Lamp Watts	Choke Type MRL 200 Volts	210/220 Volts	230/240 Volts	250 Volts	Capacitor PL	Starter
80 5′	301	301	104	301	11C/2, 11D/1 or 11F/1	STB 26
40 4′	201	201	202	203	12A/3	
30 3′	202	202	203	205	12A/3	
20 2′	203	204	205	206	12A/3	
15 1½′	205	205-206	206	—	12A/3	

2

Lamp Watts	Choke Type MRL 200/210 220 Volts	230/240 Volts	250 Volts	Capacitor PL	Starter
Two **80** 5′	Two 301	103 (B) & 104 (A)	Two 301	51	Two STB 26

3

Lamp Watts	Choke Type MRL 200/210 220 Volts	230/240 Volts	250 Volts	Capacitor PL	Starter
Two **40** 4′	Two 201	Two 202	Two 203	11C/2 or 11D/1 or 11F/1	Two STB 26

4

Lamp Watts	Choke Type MRL 200 VOLTS	210	220	230	240	250	Capacitor PL	Starter
40 2′	301	301	104	104	301	—	11C/2	Two ST23
20 2′	201	201	202	202	204	204	12A/3	ST25
15 1½′	202	202	204	205	206	206	12A/3	ST25

FLUORESCENT INSTANT START CIRCUITS

5

Lamp Watts	Choke/Transformer MKL 200 VOLTS	210	220	230	240	250	Capacitor PL
80 5′	101	101	101	102	102	103	11C/2 or 11D/1 or 11F/1
40 4′	201	201	201	202	202	203	12A/3
30 3′	202	202	202	203	203	203	12A/3

6

Lamp Watts	Choke/Transformer MKL 200 VOLTS	210	220	230	240	250	Capacitor PL
Two **40** 4′	Two 201	Two 201	Two 201	Two 202	Two 202	Two 203	11C/2 or 11D/1 or 11F/1

7

Lamp Watts	Choke/Transformer MKL 200 VOLTS	210	220	230	240	250	Capacitor PL
Two **40** 2′	—	—	—	104	104	—	11C/2

8

Lamp Watts	Choke/Transformer MKL 200 VOLTS	210	220	230	240	250	Capacitor PL
Two **20** 2′	—	—	—	204	204	—	12A/3

FLUORESCENT SWITCHLESS CIRCUIT

9

Lamp Watts	Choke Type MRL 200 VOLTS	210	220	230	240	250	Capacitor PL
80 5′	—	—	—	101	101	302	32A/1 With MB 6357 Transformer and C 87079 R.I.S.

10

Lamp Watts	Choke & Transformer 230 VOLTS	240	250	Capacitor PL	R.I.S. Capacitor
125 8′	MC 208 & MRJ 306	MC 208 & MRJ 307	MC 208 & MRJ 307	26A/2	C88507

COLD CATHODE CIRCUITS

	Lamp	Transformer	Capacitor
11	8′-6″ lamps @ 120 mA	3 lamp 200/210 / 230/240 } Two MB 637	PL28A/2
12	8′-6″ lamps @ 120 mA	4 lamp 200/250 } Two MB 563	Two PL 26A/2

SODIUM VAPOUR LAMP CIRCUITS

	Lamp Watts	Voltage	Transformer	Capacitor
15	200 Linear	200/250	MCG 116 Circuit includes ST42 Thermal Relay	PL28A/2/S
16	**140**	190/260	MCG 112	PL31A/2/S
	140	220/250	MCG 107	PL31A/2/S
	85	190/260	MCG 113	PL26A/2/S
	85	220/250	MCG 109	PL26A/2/S
	60	190/260	MCG 113	PL26A/2/S
	60	220/250	MCG 109	PL26A/2/S
	45	190/260	MCG 113	PL27B/1/S
	45	220/250	MCG 109	PL27B/1/S

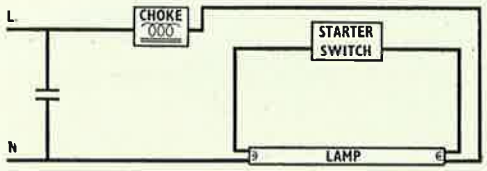
MERCURY VAPOUR LAMP CIRCUITS

	Lamp Watts	Choke	Voltage	Capacitor
13	**1000**	Two MRG 525 wired in parallel	200/250	C82602
14	**400**	MRG 509	100/120	C82606
	400	MRG 516	190/250	PL28A/2/S
	250	MRG 510	100/120	C82604
	250	MRG 517	190/250	PL27B/1/S
	125	MRG 518	190/250	PL23A/3/S
	125	MRJ 501 Slim Section	230/250	PL22A/3/S
	80	MRG 522	190/250	PL11C/4/S
	80	MRJ 401 Slim Section	230/250	PL11C/4/S

Circuit Diagrams

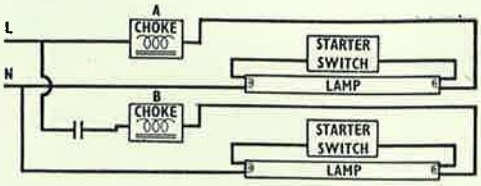
The Fluorescent Instant Start circuits 5, 6, 7, 8 and 10 are for use with lamps having integral metal strip or silicone coated lamps in an earthed filling. In low temperatures, dusty atmospheres, and where lamps are used remote from earthed metal, metal-striped lamps are necessary.

1



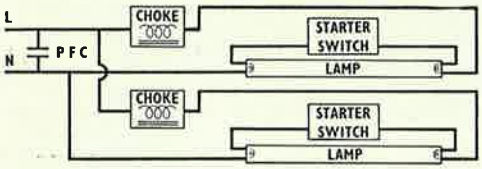
Fluorescent Switch Start single lamp choke controlled circuit, shunt power factor correction to 0·85 lagging.

2



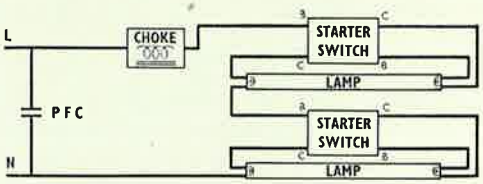
Fluorescent Switch Start phase displaced twin lamp lead lag circuit, with near unity power factor.

3



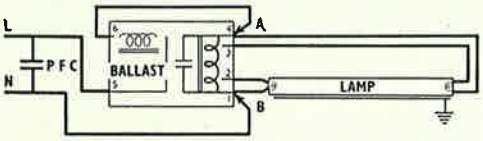
Fluorescent Switch Start circuit for two 40W 4′ lamps in parallel controlled by two chokes with shunt power factor correction to 0·85 lagging.

4



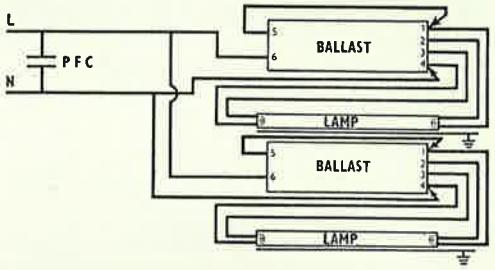
Fluorescent Switch Start circuit for two lamps in series controlled by one choke with shunt power factor correction to 0·85 lagging.

5



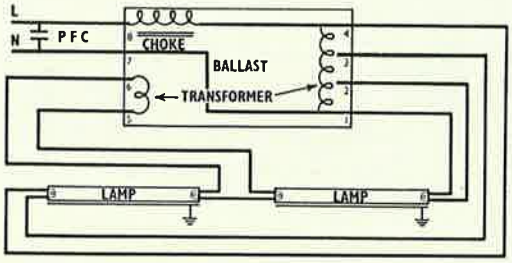
Fluorescent Instant Start single lamp circuit employing combined choke/transformer ballast unit, shunt power factor correction.

6



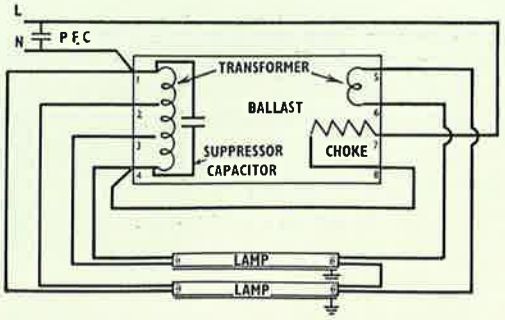
Fluorescent Instant Start twin lamp circuit employing two combined choke/transformer ballast units. Shunt power factor correction.

7

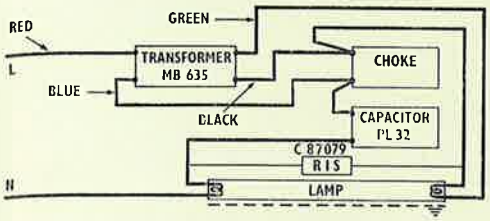


Fluorescent Instant Start circuit for two lamps in series controlled by one combined choke/transformer ballast unit. Shunt power factor correction to 0·85 lagging.

8

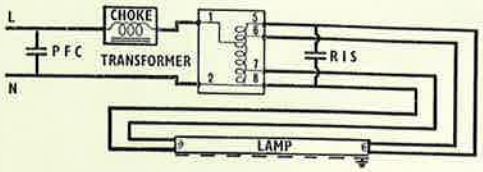


Fluorescent Instant Start circuit for two lamps in series controlled by one combined choke/transformer ballast unit. Shunt power factor correction to 0·85 lagging.

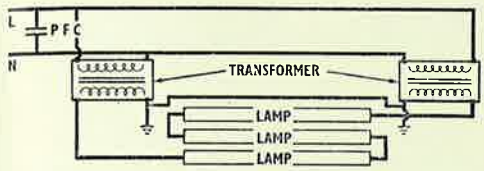


Fluorescent Switchless circuit.

10

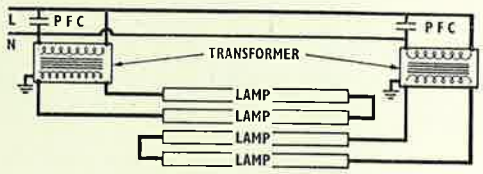


Fluorescent Instant Start single lamp circuit employing separate choke and starting transformer. Shunt power factor correction to 0·85 lagging. This lamp need not be earthed.

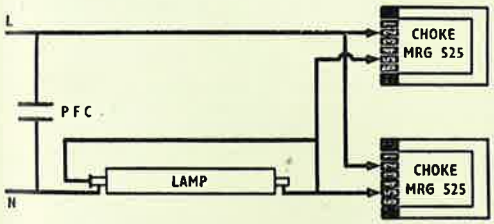


Cold Cathode, 3-lamp circuit.

12

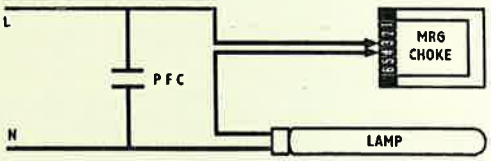


Cold Cathode 4-lamp circuit.

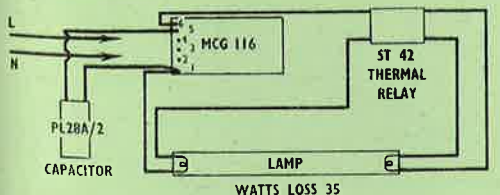


Mercury Vapour 1000W.

14

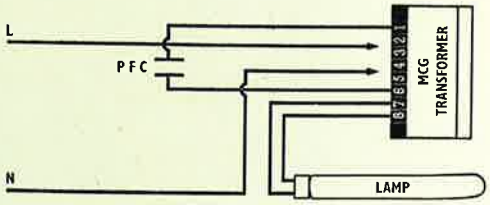


Mercury Vapour 80W to 400W.



Linear Sodium 200W.

16



Sodium SO/H.

Auxiliary Gear

CHOKES

Cat. No.	Voltage	Lamp
MRL 301	200/250	**80W** 5′
MRL 301	200/240	2 × **40W** 2′
MRL 103	230/240	**80W** 5′ L/L cir't
MRL 104	230/240	**80W** 5′
MRL 104	220/230	2 × **40W** 2′
MRL 201	200/220	**40W** 4′
MRL 201	200/210	2 × **20W** 2′
MRL 202	230/240	**40W** 4′
MRL 202	200/220	**30W** 3′
MRL 202	220/230	2 × **20W** 2′
MRL 202	200/210	2 × **15W** 1½′
MRL 203	250	**40W** 4′
MRL 203	230/240	**30W** 3′
MRL 203	200	**20W** 2′
MRL 204	210/220	**20W** 2′
MRL 204	220	2 × **15W** 1½′
MRL 204	240/250	2 × **20W** 2′
MRL 205	250	**30W** 3′
MRL 205	230/240	**20W** 2′
MRL 205	200/210	**15W** 1½′
MRL 205	230	2 × **15W** 1½′
MRL 206	250	**20W** 2′
MRL 206	220/230	**15W** 1½′
MRL 206	240/250	2 × **15W** 1½′

Cat. No.	Voltage	Lamp
MRG 101	190/260	**250W** ME/D
MRG 525	200/250	1kW MA, 2 per lamp
MRG 516	190/250	**400W** MA
MRG 509	100/120	**400W** MA
MRG 517	190/250	**250W** MA
MRG 510	100/120	**250W** MA
MRG 518	190/250	**125W** MB
MRG 522	190/250	**80W** MB

Cat. No.	Voltage	Lamp
MRJ 501	230/250	**125W** MB
MRJ 401	230/250	**80W** MB
MRJ 306	230/250	**125W** MCFC/U
MRJ 307	230/250	with 1 MC208

BALLASTS

Cat. No.	Voltage	Lamp
MKL 101	200/220	**80W** 5′
MKL 102	230/240	**80W** 5′
MKL 103	250	**80W** 5′
MKL 201	200/220	**40W** 4′
MKL 202	230/240	**40W** 4′
MKL 203	250	**40W** 4′
MKL 104	230/240	2 × **40W** 2′
MKL 204	230/240	2 × **20W** 2′

STARTER SWITCHES

Cat. No.	Type	Lamp Range
ST 26	Glow a.c.	**80W** 5′ **40W** 4′ **30W** 3′ **20W** 2′ **15W** 1½′
STB 26	Glow a.c.	**80W** 5′ **40W** 4′ **30W** 3′ **20W** 2′ **15W** 1½′
ST 23	Air-break a.c./d.c.	**80W** 5′ **40W** 2′
ST 24	„ „	**40W** 4′
ST 25	„ „	**30W** 3′ **20W** 2′ **15W** 1½′
ST 43	a.c. only	**125W** 8′
ST 42	Thermal Relay a.c. only	**200W** Linear Sodium

ST starters have large canisters, STB have small canisters.

CAPACITORS

Cat. No.	mfd.	Work'g Voltage	Type
PL11A/3	7·5	250	Terminals
PL11C/2	7·5	250	Terminals
PL11D/1	7·5	250	Solder Tags
PL11F/1	7·5	250	Solder Tags
PL11C/4	7·5	250	Leads
PL12A/3	3·25	250	Terminals
PL22A/3	10	250	Leads
PL26A/2	13	250	Leads
PL 27B/1	15	250	Leads
PL 28A/2	20	250	Leads
PL 51	7	450	Terminals
PL 32A/1	12	250	Terminals

All the above capacitors incorporate fused connections except PL 11F/1 & PL 51. If fixing straps are required, add suffix 'S' to catalogue number.

For power factor correction of MC F/U lamp circuits and Electric Discharge Circuits	C 82601	30	260	With Leads
	C 82602	40	„	„
	C 82603	50	„	„
	C 82604	60	„	„
	C 82605	70	„	„
	C 82606	80	„	„
	C 82607	90	„	„
	C 82608	100	„	„
	C 82609	120	„	„
	C 82610	140	„	„
	C 82611	160	„	„
Radio Suppressor Capacitors	C 87079	0·02	250	MCF lamps **80W** 5′
	C 88507	0·02	370	**125W** 8′

TRANSFORMER

Cat. No.	Voltage	Lamp
MCG 107	220/250	**140W** SO/H
MCG 109	220/250	**45/60/85W** SO/H
MCG 112	190/260	**140W** SO/H
MCG 113	190/260	**45/60/85W** SO/H
MCG 116	200/250	**200W** Linear Sodium
For Switchless Start Circuits	MB 635	230/250	**80W** MCF
For **125W** 8′ Instant Start Circuit	MC 208	230/250	**125W** 8′

STARTER SOCKETS

Cat. No.	Description
C 77900	For all starter switches with large canisters and for Thermal Relay ST 42

Cat. No.	Description
A 18281	For all starter switches with small canisters.

Electric Discharge and Fluorescent circuits will be found in Section A15.

Prices of auxiliary gear or technical information concerning Lighting Equipment or Circuits can be obtained from your nearest agent or office of The A.E.I. Lamp and Lighting Co., Ltd.

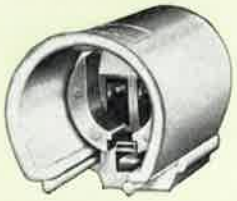
Catalogue No.	Description (*Prices and Full details on Application*)
C 83145	Medium Bi-pin (Fluorescent Lamps)
C 86486	Medium Bi-pin Compact (Fluorescent Lamps)
A 17452	G.E.S. Skirted (Tungsten Lamps)
A 17453	G.E.S. Unskirted (Tungsten Lamps)
C 86267	Fixed B.C. (Fluorescent Lamps)
C 84456/7	Circular Fluorescent holder and supports
—	Bi-pin (Fluorescent Lamps)
C 79205	White circular type Bi-pin (Fluorescent Lamps)
C 76551	B.C. Rubber Sleeve (Fluorescent Lamps)
C 84164	Porcelain B.C. (Sodium Lamps)
C 87973	Neoprene sleeve for above
C 77969	Medium Bi-pin Rubber Sleeve (Fluorescent Lamps)
C 88505	Medium Prefocus (Projector Lamps)
C 88542	} Pair of holders for 1-kW MA/H Lamp
C 88543	}

C83145

C86486

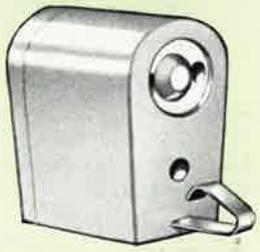
A17452

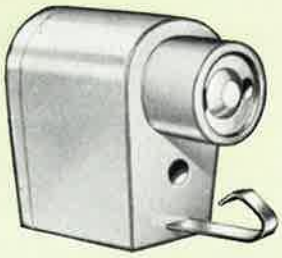
A17453



C86267

C84456/7





BI-PIN LAMPHOLDER

Fixed Type

Spring Loaded Type

C79205

C76551

C84164 & C87973

C77969

C88505

C88542

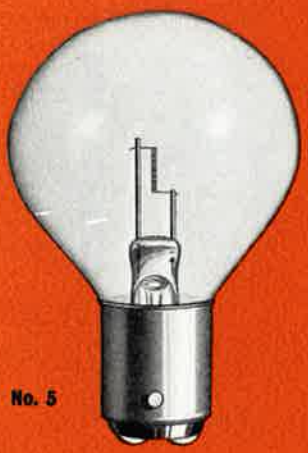
A.E.I. Lamp and Lighting Co. Ltd.

Melton Road, Leicester

	Telegraphic Address	*Telephone Number*
Melton Road, Leicester	LAMPLITE	Leicester 61531
132/135 Long Acre, W.C.2	LAMPLITE RAND	Covent Garden 2831
44 Fitzroy Road, N.W.1	LAMPLITE N.W.I.	Primrose 7750
133 Fitzroy Street, Cambridge	LAMPLITE	Cambridge 54370 Cambridge 57366
Culver Street, Colchester	LAMPLITE	Colchester 2843
17 Dorset Place, Hastings	LAMPLITE	Hastings 2734
Bedford House, Bedford Road, Guildford	LAMPLITE	Guildford 67742
220 High Road, Leytonstone, E.11	LAMPLITE E.II	Maryland 4784/5
90 St. Aldates, Oxford	LAMPLITE	Oxford 41871
54 St. Vincent Street, Southsea, Portsmouth	LAMPLITE	Portsmouth 22628
74 Oxford Road, Reading	LAMPLITE	Reading 52700
33 Carlton Crescent Southampton	LAMPLITE	Southampton 27401/2/3
National Provincial Bank Buildings, West Bute St., Cardiff	LAMPLITE	Cardiff 27495
6 Gwennyth Street, Cathays, Cardiff	SPEDILAMP	Cardiff 20795
63 Wind Street, Swansea	LAMPLITE	Swansea 50430 and 50439
1/5 Trinity Street, Bristol, 2	LAMPLITE	Bristol 51494
Chapel Street, Regent Street, Plymouth	LAMPLITE	Plymouth 61915 and 62417
53 Pitt Street, Glasgow, C.2	LAMPLITE	City 6585/90
Showroom 74 Waterloo Street, Glasgow, C.2	LAMPLITE	Central 6585/90
26/28 Holloway Head, Birmingham, 1	LAMPLITE	Midland 7921/5
5 Campbell Street, Leicester	LAMPLITE	Granby 291/2
Stoke Road, Stoke-on-Trent	TRENTLITE	Stoke-on-Trent 47537/8
17 Grosvenor Street, Cheltenham	LAMPLITE	Cheltenham 2776
71/73 Lower Parliament Street, Nottingham	LAMPLITE	Nottingham 51115
46 Wellington Street, Leeds	LAMPLITE	Leeds 31541/4
Short Street, Middlesbrough	LAMPLITE	Middlesbrough 45287/8
Mazda Buildings, Campo Lane, Sheffield	LAMPLITE	Sheffield 23086
24 Northumberland Road, Newcastle	LAMPLITE	Newcastle 26060/2
Trafford Park Road, Trafford Park, Manchester, 17	LAMPLITE TRAFFORD PARK	Trafford Park 3281
Ashburton Road, Trafford Park, Manchester, 17	LAMPLITE TRAFFORD PARK	Trafford Park 3281
27/29 Stanley Street, Liverpool, 1	LAMPLITE	Central 4371/5
40 Parkgate Road, Chester	LAMPLITE	Chester 26411/2
Strand Road, Preston	LAMPLITE	Preston 86701
8 Edward Street, Blackpool	LAMPLITE	Blackpool 26936
Westminster Bank Chambers, Oxford Street Workington	LAMPLITE	Workington 93
12 Thistle Street, Edinburgh	LAMPLITE	Caledonian 3888/9
17 Baltic Street, Dundee	LAMPLITE	Dundee 5600
12 Adelaide Street, Belfast	LAMPLITE	Belfast 29368/9

Contents

Ordinary Headlight



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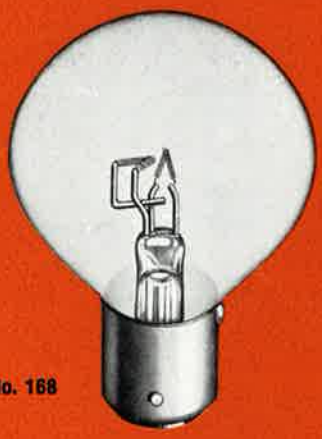

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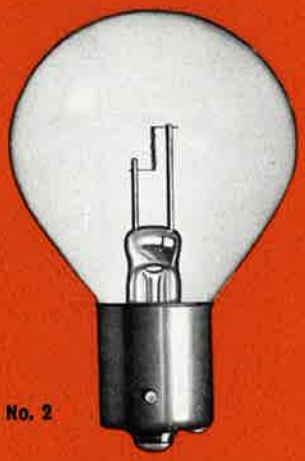

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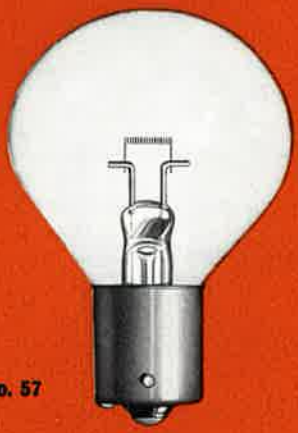
No. 194

No. 128



No. 57

Dimensions in millimetres

S.B.C.
BA.15d/17

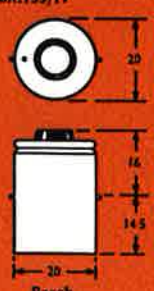
S.B.C.
BA.15d/21

S.C.C.
BA.15s/17

3-pin B.C.
BA.21d

3-pin B.C.
BA.21s

Bosch
BA.20d



Bosch
BA.20s

B.C.
B22/22

Ordinary Headlight Bulbs
Although the Prefocus cap headlight lamps shown in Section B2 are now used almost exclusively, there are still many vehicles equipped with other types of lampholder.

171 & 194

Of the comprehensive range of Mazda Ordinary Headlight lamps covering many types of cap and various wattages, there are two lamps which are used much more extensively than the others. These are, No. 171 a 12-volt 36/36-watt lamp and No. 194 a 24-volt 36/36-watt lamp.

386 & 387

For those vehicles equipped with 6-volt electrical systems, more than a dozen Ordinary Headlamps are listed of Single and Double Filament types. This group includes two lamps which have been designed especially for Scooter headlights. These are Nos. 386 and 387.

Ordinary Single Filament

Lamp No.	Volts	Watts	List* Price s.	d.	Cap	Filament	Dimensions Length mm	Dimensions Diameter mm
106	6	24	2	6	S.C.C.	Axial	56	38
109	6	24	2	6	S.B.C.	,,	56	38
108	6	36	2	9	S.C.C.	,,	56	38
374‡	6	36	4	0	S.C.C.	,,	56	38
75	6	36	2	9	S.C.C.	Transverse	56	38
111	6	36	2	9	S.B.C.	Axial	56	38
608§	6	36	3	0	S.C.C.	Transverse	56	38
1	12	24	2	6	S.C.C.	Axial	56	38
4	12	24	2	6	S.B.C.	,,	56	38
2	12	36	2	6	S.C.C.	,,	56	38
57	12	36	2	6	S.C.C.	Transverse	56	38
375‡	12	36	3	9	S.C.C.	Axial	56	38
5	12	36	2	6	S.B.C.	,,	56	38
615§	12	36	3	0	S.C.C.	,,	56	38
27	12	48	4	0	S.B.C.	,,	56	38
96	12	48	4	3	Bosch (Single)	,,	65	38
90	12	60	5	6	S.C.C.	,,	63	50
26	12	60	5	6	S.B.C.	,,	63	50
122	24	24	2	6	S.B.C.	,,	56	38
620	24	24	2	6	B.C.	,,	56	38
621	24	36	2	6	S.C.C.	,,	56	38
123	24	36	2	6	S.B.C.	,,	56	38
622	24	36	2	6	B.C.	,,	56	38
623	24	48	4	0	S.C.C.	,,	56	38
140	24	48	4	0	S.B.C.	,,	56	38
624	24	48	4	0	B.C.	,,	56	38
128	24	60	5	6	S.B.C.	,,	63	50
124	24	60	5	6	S.C.C.	,,	63	50

* **Purchase Tax** see note below. § Special Light Centre length. ‡ Cadmium Yellow Bulb.
NOTE: 12V Ordinary Single Filament Headlight bulbs are available with B.C. caps and at the same price as the equivalent rating with S.B.C cap.

Ordinary Double Filament

Lamp No.	Volts	Watts	List* Price s.	d.	Cap	Filament	Dimensions Length mm	Dimensions Diameter mm
386	6	15 & 15	4	6	S.B.C.†	Axial ¶	47	25
387	6	18 & 18	4	6	S.B.C.†	,, ¶	47	25
180	6	18 & 18	4	6	S.B.C.	Inverted Vee	56	38
168	6	24 & 24	3	6	S.B.C.	,, ,,	56	38
183	6	24 & 24	3	9	Bosch (Double)	,, ,,	65	38
169	6	30 & 30	3	6	S.B.C.	,, ,,	56	38
170	6	36 & 36	3	6	S.B.C.	,, ,,	56	38
171	12	36 & 36	3	6	S.B.C.	,, ,,	56	38
376‡	12	36 & 36	4	9	S.B.C.	,, ,,	56	38
182	12	36 & 36	3	9	Bosch (Double)	,, ,,	65	38
194	24	36 & 36	4	3	S.B.C.	Transverse	56	38
671	24	44 & 38	5	0	S.B.C.	,,	56	38

* **Purchase Tax** must be added to the prices in these columns. For the exact amount of tax to be added see TABLE B on the inside back cover.
† Unequal Pins. ¶ Axial and Transverse. ‡ Cadmium Yellow Bulb.

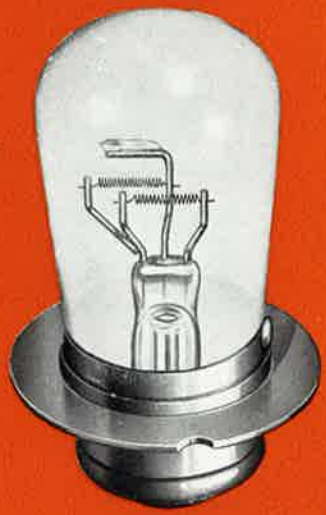
Prefocus Headlight

No. 359

No. 354

No. 323

No. 416 U.E.C.

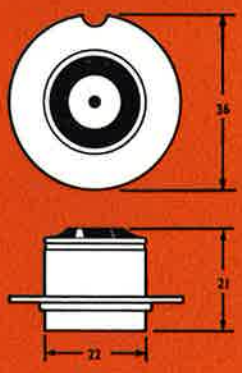


No. 414

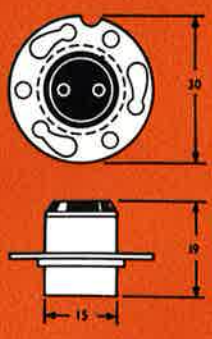
No. 632

Dimensions in millimetre

British Prefocus
P22d/21



British Prefocus
P22s/21



American Type Prefocus
P15d/19

Prefocus Headlight Bulbs
The extensive use of prefocus car bulbs is an indication of the advantages of a fixed filament position.

354

The Double Filament British Prefocus bulb No. 354 has been fitted to the majority of British cars manufactured during the past ten years. Not only is it a strong favourite in the U.K. but has a great demand in countries importing British made cars and employing the right hand driving position.

414

A more recent development from the No. 354 is the No. 414. It has a shielded filament and provides a more powerful driving light without increased glare. No. 414 is interchangeable with No. 354 in the majority of existing double-dip headlights.

No. 414 is being fitted as standard by a number of British car manufacturers.

416 & 417

This Unified European Cap is a prefocus type recently accepted for common application in Europe by the International Electro-technical Commission.

British Prefocus

Lamp No.	Volts	Watts	List* Price s. d.	Filament	Contact	Dipping Arrange'ts Dip	Dipping Arrange'ts Drive
Single Filament. Length 64 mm max. Diameter 28± 1 mm							
172	6	**36**	**3 9**	Axial	Single	Not applicable	
173	6	**36**	**3 9**	Transverse	Single		
162	12	**36**	**3 9**	Axial	Single		
325†	12	**38**	**3 9**	Transverse	Single		
326†	12	**38**	**3 9**	Transverse	Double		
323	12	**48**	**4 6**	Transverse	Single		
600‡	12	**48**	**5 9**	Transverse	Single		
185	12	**48**	**4 6**	Axial	Single		
685‡	12	**48**	**5 9**	Axial	Single		
331†	24	**44**	**4 6**	Axial	Double		
606†	24	**44**	**4 6**	Transverse	Single		
330†	24	**44**	**4 6**	Transverse	Double		
601†‡	24	**44**	**5 9**	Transverse	Double		
Double Filament. Length 64 mm max. Diameter 28±1 mm							
166	6	**24 & 24**	**4 9**	Transverse	Double	Vertical	Either
312	6	**30 & 24**	**5 0**	Transverse	Double	Vertical	Either
373	6	**30 & 24**	**5 0**	Transverse	Double	Left	R/Hand
306	6	**36 & 36**	**4 6**	Transverse	Double	Left	R/Hand
356	6·4	**45 & 35**	**5 6**	Transverse	Double	Left	R/Hand
425	12	**24 & 24**	**5 3**	Transverse	Double	Vertical	Either
427	12	**36 & 24**	**5 6**	Transverse	Double	Left	R/Hand
408(f)	12	**38 & 21**	**6 3**	Transverse	Double	—	—
409‡	12	**38 & 21**	**7 6**	Transverse	Double	—	—
354	12	**42 & 36**	**4 6**	Transverse	Double	Left	R/Hand
355	12	**42 & 36**	**4 6**	Transverse	Double	Right	L/Hand
603‡	12	**42 & 36**	**5 9**	Transverse	Double	Left	R/Hand
604‡	12	**42 & 36**	**5 9**	Transverse	Double	Right	L/Hand
358†	12	**44 & 38**	**5 4**	Transverse	Double	Left	R/Hand
367	12	**44 & 38**	**5 4**	Transverse	Double	Vertical	Either
302¶	12	**48 & 48**	**6 9**	Transverse	Double	Left	R/Hand
414	12	**50 & 40**	**5 0**	Trans. Shielded	Double	Left	R/Hand
415	12	**50 & 40**	**5 0**	Trans. Shielded	Double	Right	L/Hand
404§	12	**60 & 36**	**7 0**	Transverse	Double	Left	R/Hand
406§	12	**60 & 36**	**7 0**	Transverse	Double	Right	L/Hand
359†	24	**44 & 38**	**5 6**	Transverse	Double	Left	R/Hand
332†	24	**44 & 38**	**5 6**	Transverse	Double	Right	L/Hand
416	12	**60 & 40**	**9 6**	Trans. Shielded	U.E.C.	Left	R/Hand
417	12	**60 & 40**	**9 6**	Trans. Shielded	U.E.C.	Right	L/Hand

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.
† For Commercial Vehicles only. ‡ Cadmium Yellow Bulb. § 38 mm dia. bulb.
¶ Both filaments are offset. (f) Fog lamp and Flashing Indicator.
U.E.C. Unified European Cap.

American Type Prefocus

Lamp No.	Volts	Watts	List* Price s. d.	Filament	Cap	Dimensions Length mm	Dimensions Diameter mm
2778	6	**24**	**3 6**	Axial	American Prefocus	58	38
2788	6	**24**	**3 6**	Transverse		58	38
669	6	**36**	**3 6**	Axial		58	38
667	6	**36**	**3 6**	Transverse		58	38
670	12	**36**	**3 6**	Axial		58	38
668	12	**36**	**3 6**	Transverse		58	38
632	12	**36 & 36**	**4 0**	Transverse¶		58	38
2809	24	**36**	**4 3**	Axial		58	38
2808	24	**36**	**4 3**	Transverse		58	38

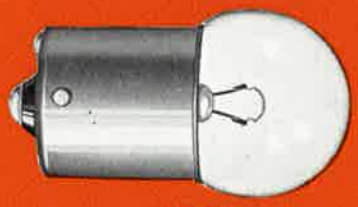
* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover. ¶ Or Inverted Vee.

Ancillary Car Bulbs

No. 381
Stop-Tail
Flasher-Tail

No. 382
Stop, Flasher,
Reversing

No. 638
Side and Tail

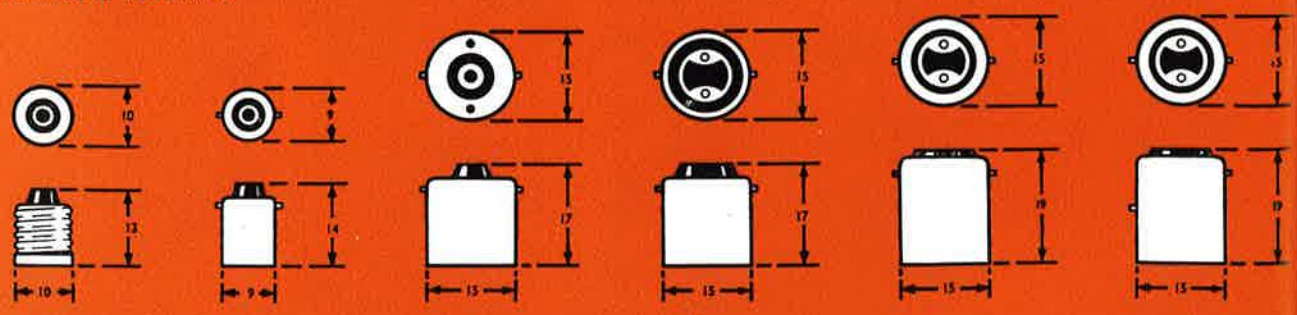


No. 207
Side and Tail

No. 256
Festoon

No. 2208
Side and Tail

Dimensions in millimetres



M.E.S.
E10/13

M.C.C.
BA. 9s/14

S.C.C.
BA. 15s/17

S.B.C.
BA. 15d/17

S.B.C.
BA. 15d/19

S.B.C. Index
BA. 15d/19

Few doubt that the modern style of direction indication by flashing lamps is the most sure and the most efficient, but the reliability of the system is dependent largely on the quality of the lamps. Mazda combined Stop and Tail lamps are world-famous for their efficiency and reliability. The same high standard of workmanship has gone into the construction of lamps for Stop or Flashing Indication.

380 & 381

The most popular for 12-volt cars are the 380 and 381 double filament Stop-Tail or Flasher-Tail lamps; also the 335 and 382 single filament Stop or Flasher lamps.

All car bulbs are designed to withstand vibrations and shocks of much greater magnitude than occurs in normal service, to ensure that they retain their efficiency even under severe operating conditions.

149 & 638

24-volt 6 watt lamps Numbers 149, 150 and 638 have two filaments arranged in series and a special construction to withstand shocks and vibration experienced with heavy commercial vehicles.

Festoon lamps are suitable for many old and new makes of car for roof lights or trafficator.

Stop or Stop Tail *Transverse Filament*

Lamp No.	Volts	Watts	List* Price s.	List* Price d.	Cap	Dimensions Length mm	Dimensions Diameter mm
Single Filament							
317	6	18	3	9	S.C.C.	47	25
2726	6/8	15 CP	3	9	S.C.C.	47	25
2721	6/8	21 CP	3	9	S.C.C.	47	25
2722	6/8	21 CP	3	9	S.B.C.	47	25
2701	12/16	15 CP	3	9	S.B.C.	47	25
2705	12/16	21 CP	3	9	S.B.C.	47	25
2704	12/16	21 CP	3	9	S.C.C.	47	25
335	12	21	3	0	S.B.C.	47	25
382	12	21	3	0	S.C.C.	47	25
333	24	24	3	9	S.B.C.	47	25
339	24	24	3	9	S.C.C.	47	25
Double Filament							
383	6	6 & 18	3	6	S.B.C.	47	25
384	6	6 & 18	3	6	S.B.C. Index	47	25
2703	6/8	3 & 21 CP	3	6	S.B.C. Index	47	25
2715	6/8	3 & 21 CP	3	6	S.B.C.	47	25
380	12	6 & 21	3	6	S.B.C. Index	47	25
381	12	6 & 21	3	6	S.B.C.	47	25
2706	12/16	6 & 21 CP	3	6	S.B.C. Index	47	25
2714	12/16	6 & 21 CP	3	6	S.B.C.	47	25
334	24	6 & 24	3	9	S.B.C. Index	47	25
692	24	6 & 24	3	9	S.B.C.	45·5	25
337	28	7 & 30	7	0	S.B.C. Index	47	25

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.

Side and Tail *Bow Filament*

Lamp No.	Volts	Watts	List* Price s.	List* Price d.	Cap	Dimensions Length mm	Dimensions Diameter mm
200	6	3	1	4	S.C.C.	32·5	18
204	6	3	1	4	S.B.C.	32·5	18
988	6	3	1	5	M.C.C.	28	15
951	6	6	1	7	M.C.C.	28	15
205	6	6	1	6	S.C.C.	32·5	18
206	6	6	1	6	S.B.C.	32·5	18
2215	6/8	2 CP	1	3	M.C.C.	28	15
2202	6/8	3 CP	1	4	S.C.C.	35·5	18
2203	6/8	3 CP	1	4	S.B.C.	35·5	18
2206	6/8	6 CP	1	6	S.C.C.	35·5	18
2207	6/8	6 CP	1	6	S.B.C.	35·5	18
222	12	4	1	5	M.C.C.	28	15
207	12	6	1	4	S.C.C.	32·5	18
209	12	6	1	4	S.B.C.	32·5	18
225	12	6	1	6	S.B.C.	32·5	18
226§	12	6	1	6	S.C.C.	32·5	18
989	12	6	1	5	M.C.C.	28	15
2204	12/16	3 CP	1	4	S.C.C.	35·5	18
2205	12/16	3 CP	1	4	S.B.C.	35·5	18
2208	12/16	6 CP	1	4	S.C.C.	35·5	18
2209	12/16	6 CP	1	4	S.B.C.	35·5	18
637	16	6	2	0	S.B.C.	32·5	18
149	24	6	1	4	S.C.C.	32·5	18
150	24	6	1	4	S.B.C.	32·5	18
638	24	6	1	4	B.C.	37	18

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.
§ Anti-vibration.

Festoon

Lamp No.	Volts	Watts	List* Price s.	List* Price d.	Cap	Dimensions Length mm	Dimensions Diameter mm
255	6	3	2	3	S7/8	35·5	7·5
253	6	6	2	7	S8·5/8	38	11
256	12	3	2	3	S7/8	35·5	7·5
254	12	6	2	7	S8·5/8	38	11
653	24	6	2	6	S8·5/8	38	11
654¶	24	6	3	10	S8·5/8	38	11
260	24	6	2	7	S8·5/8	44	11

* **Purchase Tax** must be added to the prices in these columns. For the exact amount of tax to be added see TABLE B on the inside back cover. ¶ With Supported Filament.

Indicator

No. 993
Indicator
Supported Filament

No. 987
Indicator
Bow Filament

Radio Panel
Round Bulb

Radio Panel
Tubular Bulb

No. 2105
Capless Indicator

No. 280
Lilliput Indicator

Telephone Visual

Telewriter

Listed in this section are lamps used mainly to give visual guidance or warning signals to the driver or operator. Examples of some lamp applications can be seen on the car illustration in Section B9.

280

A very small but highly efficient lamp listed in the Indicator group is No. 280. It has been widely adopted for use in cars for instrument lighting and warning-to-driver purposes. Because of its small dimensions, it is also used for applications such as Railway Signalling Indicator boards.

2105

This capless lamp is becoming increasingly popular for instrument panel and warning-to-driver purposes. The amount of space needed for holding and energizing the lamp is minimized and lamp insertion or removal is simplified.

Radio Panel

The extensive range of Radio Panel Lamps has been developed to provide the radio mechanic with the correct replacement lamp for almost any type of receiver.

Telephone Visuals

It should be noted that these lamps have special caps as will be seen by the illustration. They are made to the exacting requirements of the British Post Office and comply with BS. 1050. They are used extensively in telephone switchboards.

Telewriter Lamps

These lamps are used for general 'indication' purposes particularly for mimic diagrams on indicator boards as used by British Railways for tracing paths of trains.

Indicator (Panel, Instrument, Warning)

Lamp No.	Volts	Watts	List* Price s.	List* Price d.	Cap	Dimensions Length mm	Dimensions Diameter mm
2026	6/8	1 CP	1	2	M.C.C.	23·5	11
982	6	1·8	1	6	M.E.S.	23	11
640	6	1·8	1	6	M.C.C.	23·5	11
981	6	3	1	3	M.E.S.	27·5	15
990	6	3	1	1	M.E.S.	23	11
641	6	3	1	2	M.C.C.	23·5	11
950	6	6	1	3	M.E.S.	27·5	15
280	12	1·5	1	9	Lilliput E.S.	15	6·75
643	12	2·2	1	2	M.C.C.	23·5	11
645	12	2·2	1	2	M.C.C.	28	15
986	12	2·2	1	1	M.E.S.	27·5	15
987	12	2·2	1	1	M.E.S.	23	11
2105	12	2·2		11	Capless	18	11
647	16	3	2	3	M.C.C.	28	15
985	16	3	2	2	M.E.S.	27·5	15
650	24	2·8	1	4	M.E.S.	23	11
651	24	2·8	1	5	M.C.C.	28	15
993	24	2·8	1	4	M.E.S.	27·5	15
2018	24	2·8	1	7	M.E.S.	28·5	10
2020	24	2·8	1	8	M.C.C.	29	10

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.

Radio Panel

Lamp No.	Volts	Amps	List* Price s.	List* Price d.	Cap	Dimensions Length mm	Dimensions Diameter mm
2083	6	0·01	1	0	M.E.S.	23	11
2058	6	0·06	1	0	M.E.S.	23	11
2019	6·2	0·3		7	M.E.S.	27·5	15
2025†	6·2	0·3		7	M.E.S.	28·5	10
— †	6·2	0·3		7	M.C.C.	28·5	10
2094	6·3	0·11		7	M.E.S.	23	11
2074†	6·3	0·15		7	M.C.C.	29	10
2028†	6·5	0·3		7	M.E.S.	28·5	10
2029	6·5	0·3		7	M.E.S.	23	11
2030	6·5	0·3		7	M.C.C.	23·5	11
2037	6·5	0·3		7	M.E.S.	27·5	15

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.

† Tubular Bulbs, all others are round.

Telephone Visuals

Lamp No.	Volts	Amps	List‡ Price s.	List‡ Price d.	Filament	Cap	Dimensions Length mm	Dimensions Diameter mm
—	6	0·04	2	2	No. 2 Metal	Side Contact plates & End pieces	44	6·5
—	17	0·045	2	2	No. 2 Metal		44	6·5
—	24	0·10	2	2	No. 2 Metal		44	6·5
—	12	0·117	2	9	No. 2 Carbon	Side Contact plates & End pieces	44	6·5
—	36	0·075	2	9	No. 2 Carbon		44	6·5
—	40	0·068	2	9	No. 2 Carbon		44	6·5
—	50	0·107	2	9	No. 2 Carbon		44	6·5

Telewriter

Lamp No.	Volts	Amps	List‡ Price s.	List‡ Price d.	Filament	Cap	Dimensions Length mm	Dimensions Diameter mm
—	24	0·05	3	1	Metal	M.E.S.	33	11 max.
—	24	0·10	3	1	Metal	M.E.S. or M.C.C.	33	11 max.
—	50	0·05	3	1	Metal		33	11 max.
—	50	0·10	3	1	Metal		33	11 max.

‡ **Purchase Tax at 18·3%** must be added to these prices.

Cycle Dynamo

No. 2014
Cycle Head

No. 2031
Lens End Flashlight

No. 991
Cycle Tail

No. 970
Flashlight

No. 2046
Prefocus Flashlight

Speedometer

Dimensions in millimetres

S.C.C.
BA.15s/17

M.C.C.
BA.9s/14

M.E.S.
E10/13

Cycle Dynamo

Among the lamps listed on this page will be found one to suit any type of cycle lighting equipment in use today. A combination of correctly rated lamps front and rear will give a well balanced and reliable lighting system.

952 & 953

A recent improvement in design has been effected with the 6V 0·04 amp Tail Lamp No. 991 (illustrated) and 6V 0·5 amp Headlight lamps Nos. 952 and 953. By firm anchoring of the filament the new design offers much improved resistance to service shock and improved beam candle-power in the horizontal plane; the filament position with respect to the axis of the lamp lens is rigidly controlled.

Recent studies have tended to show that a well defined beam correctly angled for a cycle front lamp is of greater value to the cyclist than the more frequently used soft-focus lamp. The prefocus cycle-head bulbs No. 952 and 953 ensure location of the filament in the correct focus of the reflector.

Motor Cycle Speedometer

This lamp is used mostly in speedometers for motor cycles or autocycles, etc., but many manufacturers have included the illuminated type of speed indicator for bicycles. The lamp gives sufficient output without glare.

Flashlight Lamps

Listed here are lamps to suit all sizes and makes of torch and cycle lamp. The lens-end lamp is designed to provide the fountain pen type of small torch with a concentrated 'circle' of light, making full use of the small amount of current available.

Cycle Dynamo

Lamp No.	Volts	Amps	List* Price s. d.	Finish	Cap	Diameter mm
Headlight Lamps						
2012	6	0·25	8	Granulated	M.E.S.	15
2056	6	0·3	8	Clear	M.E.S.	15
2013	6	0·3	8	Granulated	M.E.S.	15
979	6	0·3	1 4	Clear	S.C.C.	18
2014	6	0·45	8	Granulated	M.E.S.	15
2057	6	0·45	8	Clear	M.E.S.	15
2225	6	0·5	8	Clear	M.E.S.	15
—	6	0·5	8	Granulated	M.E.S.	15
980	6	0·5	1 4	Clear	S.C.C.	18
952	6	0·5	8	Clear	M.E.S. Pref. (Vac.)	15
953	6	0·5	8	Clear	M.E.S. Pref. (Gas)	15
Tail Light Lamps and Battery Operated						
—	1·5	0·15	8	Clear	M.E.S.	15
996	3·5	0·15	8	Clear	M.C.C.	15
991	6	0·04	8	Clear	M.E.S.	11
998	6	0·10	8	Clear	M.E.S.	11

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.

Speedometer *(Motor Cycle, Auto Cycle & Scooter)*

Lamp No.	Volts	Amps	List* Price s. d.	Finish	Cap	Diameter mm
2030	6·5	0·3	7	Clear	M.C.C.	11

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.

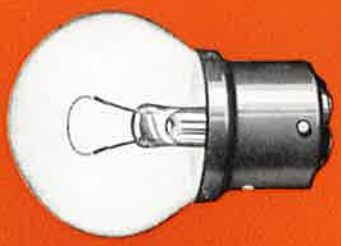
Flashlight Lamps

Lamp No.	Volts	Amps	List* Price s. d.	Finish	Cap	Diameter mm
Ordinary Flashlight						
390	1·5	0·2	4	Clear	M.E.S.	11
2000	2·0	0·6	8	Clear	M.E.S.	15
970	2·5	0·2	4	Clear	M.E.S.	11
972	2·5	0·3	4	Clear	M.E.S.	11
974	3·5	0·15	4	Clear	M.E.S.	11
977	3·5	0·3	4	Clear	M.E.S.	11
2008	4·0	0·3	4	Clear	M.E.S.	11
2004	4·5	0·3	4	Clear	M.E.S.	15
2003	5·0	0·15	8	Clear	M.E.S.	15
Lens End Flashlight						
2031	2·2	0·25	7	Clear	M.E.S.	9·5 max.
Prefocus Flashlight						
2055	2·5	0·2	7½	Clear	Special Prefocus	11 max.
2046	2·5	0·3	7½	Clear	Special Prefocus	11 max.
2061	3·5	0·3	7½	Clear	Special Prefocus	11 max.

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.

Transport

Locomotive Headlight



Trolley Bus

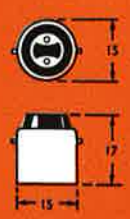
Bus Interior

Trolley Bus Indicator

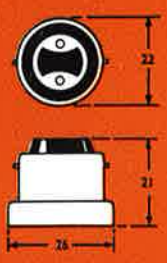
Train Interior

Dimensions in millimetres

B.C.
B 22/22



S.B.C.
BA. 15d/17



B.C.
B 22/21 × 26

Bus Interior
Most of the lamps in this range are pearl or internally white-coated to counter glare to passengers; interior lamps are available in standard voltages with two varieties of cap.

Trolley Bus
These lamps have been designed mainly for use in trolley buses but they are used extensively on other low voltage systems where small diameter bulbs are required.

Train
These lamps are specially designed to withstand the vibration which is encountered in trains, particularly when running at high speeds.

Locomotive
These lamps have specially designed filaments which ensures satisfactory operation and service in Headlight equipment on Locomotives.

Bus Interior

Lamp No.	Volts	Watts	Finish	Cap	Diameter mm	List* Price s.	d.
—	12	12	Clear	B.C.	38 or 50	2	0
—	12	12	Clear	S.B.C.	38	2	0
—	12	12	Pearl	B.C.	38 or 50	2	0
—	12	12	Pearl	S.B.C.	38 or 50	2	0
—	24	12	Clear	B.C.	38 or 50	2	1
—	24	12	Clear	S.B.C.	38 or 50	2	1
—	24	12	Pearl	B.C.	38 or 50	2	1
—	24	12	Pearl	S.B.C.	38	2	1
—	24	12	Inside White	B.C.	38 or 50	2	5
—	24	15	Clear	B.C.	38	2	6
—	24	15	Pearl	B.C.	38 or 50	2	6
—	24	15	Pearl	S.B.C.	38	2	6
—	24	20	Clear	B.C.	38 or 50	2	4
—	24	20	Clear	S.B.C.	38	2	4
—	24	20	Pearl	B.C.	38 or 50	2	4
—	24	20	Pearl	S.B.C.	38 or 50	2	4

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.

30, 35 & 40 volt Trolley Bus

Lamp No.	Watts	Description	Finish	Cap	Diameter mm	List* Price s.	d.
—	6	Indicator	Clear	B.C.	22	2	6
—	6		Clear	S.B.C.	22		
—	6		Clear	B.C.	38		
—	6		Clear	S.B.C.	38		
—	6		Pearl	B.C.	38		
—	12	Interior	Clear	B.C.	50	3	0
—	12		Pearl	B.C.	50		
—	15	Interior	Clear	B.C.	50	2	9
—	15		Pearl	B.C.	50		
—	20		Clear	B.C.	38		
—	20		Pearl	B.C.	38		
—	20		Pearl	B.C.	50		
—	36	Headlight	Clear	B.C.	38	4	0
—	36		Clear	S.B.C.	38		
—	36		Pearl	B.C.	38		
—	36		Clear	B.C.	50		
—	36		Clear	S.B.C.	50		
—	36		Pearl	B.C.	50		

* **Purchase Tax** must be added to the prices in this column. For the exact amount of tax to be added see TABLE B on the inside back cover.

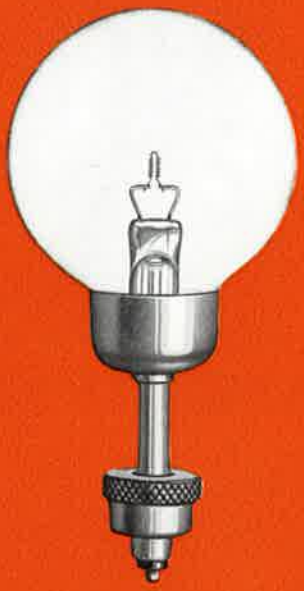
Train Interior *Pearl*

Lamp No.	Volts	Watts	List Price s.	d.	Cap	Dimensions Length mm	Dimensions Diameter mm
—	24	15	Prices on application		B.C.	68	50
—	24	60			B.C.	92·5	55

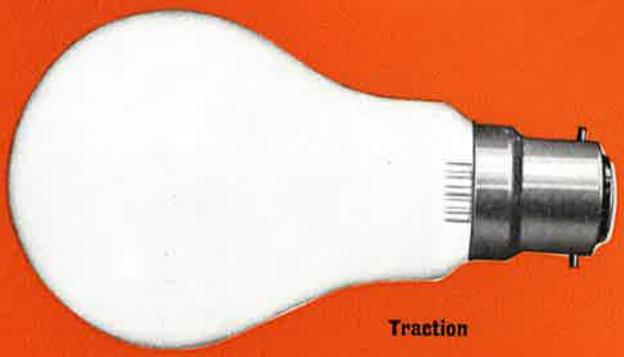
Locomotive Headlight

Lamp No.	Volts	Watts	List Price s.	d.	Cap	Dimensions Length mm	Dimensions Diameter mm
—	24	150	Prices on application		E.S.	116	79
—	32	150			E.S.	116	79
—	110	150			E.S.	102	70
—	32	250			E.S.	116	79

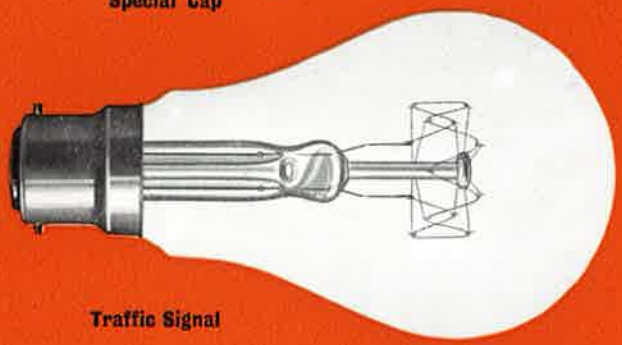
Traction and Signal



Aldis Morse Signalling
Special Cap



Traction

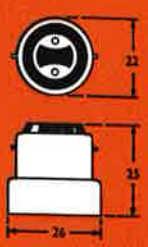


Traffic Signal

Railway Signal

Dimensions in millimetres

S.B.C.
BA. 15d/17



B.C.
B 22/25 × 26

E.S.
E 27/27

Traction
Produced for operation in series in tube-trains, tramcars and other public service transport, traction lamps have an accurately rated amperage to ensure uniform performance.

Traffic Signal
These lamps are suitable for red, amber and green signals; they withstand the repetitive on/off usage over a long period of time.

Railway Signal
Designed for maximum reliability, these lamps are used extensively in British and Overseas Railway systems.

Morse Signalling
A specially designed lamp to suit the Aldis Signalling apparatus, this lamp combines a comparatively high output with long life.

Traction *Series Burning*

Nominal Watts	Rated Amps	Volts	Cap	Finish	Length mm	Diameter mm	List* Price s.	d.
40	0·35	120, 130	B.C.	Pearl	110	60	**1**	**9**
40	0·35	110, 120	B.C.	Clear				
40	0·35	110	E.S.	Clear				
60	0·52	110, 120	B.C.	Clear				
60	0·52	120	B.C.	Pearl				
60	0·52	100, 110	E.S.	Clear				

* **Purchase Tax** must be added to the price in this column. For the exact amount of tax to be added see TABLE A on the inside back cover.

Traffic Signal *Clear*

Watts	Volts	Cap	Length mm	Diameter mm	List Price* s.	d.
60	210, 250	B.C.	108	65	**2**	**0**
60	210, 230, 240, 250	E.S.	108	65	**2**	**0**

* **Purchase Tax** must be added to the prices of these lamps. For the exact amount of tax to be added see TABLE A on the inside back cover.

Railway Signal

Lamp No.	Watts	Volts	List Price s.	d.	Cap	Dimensions Length mm	Diameter mm
—	**25**	110	Prices on application		3-pin B.C.	75	50

Aldis Morse Signalling

Lamp No.	Watts	Volts	List† Price s.	d.	Cap	Dimensions Length mm	Diameter mm
—	**36**	12	**15**	**0**	Special Aldis	100	50
—	**36**	24	**15**	**0**			

† **Purchase Tax** of 2s. 5d. must be added to the prices in this column.

Aircraft and Miners'

Aircraft Instrument
28V 3·5W

Miners' Handlamp
4V 0·75 amp

Aircraft Navigation
28V 24W

Miners'
Cap Lamp
3·75V 1·0 &
1·0 amp

Aircraft
General Service
28V 7W

Miners' Lamps

Rating		Diameter	Length	Cap	List Price Each	
Volts	Amps	mm	mm		s.	d.
Argon—Double Filament **Cap Lamp** (Clear Bulb)						
4·0	**0·55 & 0·55**	25	49	BA.15d/21	**2**	**9**
4·0	**0·8 & 0·8**	25	49	BA.15d/21	**2**	**9**
Krypton—Single Filament **Cap Lamp** (Clear Bulb)						
3·6	**1·0**	18	30·5	E 10/13	**2**	**6**
3·75	**1·0**	18	45·5	E 14/23	**3**	**3**
4·0	**0·55**	18	30·5	E 10/13	**3**	**3**
4·0	**0·8**	18	30·5	E 10/13	**2**	**6**
4·0	**1·0**	18	30·5	E 10/13	**3**	**0**
4·8	**0·8**	18	30·5	E 10/13	**3**	**0**
Krypton—Double Filament **Cap Lamp** (Clear Bulb)						
2·5	**1·0 & 1·0**	18	40	BA.15d/17	**3**	**6**
3·6	**1·0 & 0·5**	18	40	BA.15d/17	**3**	**6**
3·75	**1·0 & 1·0**	18	40	BA.15d/17	**3**	**6**
Krypton—Single Filament **Handlamp** (Pearl Bulb)†						
2·5	**1·5**	18	43·5	953	**3**	**0**
2·5	**1·5**	18	45·5	E14/23	**3**	**0**
2·5	**1·75**	18	43·5	953	**3**	**0**
2·5	**1·75**	18	45·5	E14/23	**3**	**0**
4·0	**0·75**	18	45·5	E14/23	**3**	**0**
4·0	**0·75**	18	47·0a	Peg	**3**	**0**
4·0	**1·0**	18	45·5	E14/23	**3**	**0**

† Supplied with fuse in the cap. (a) With Pip.
E14 = E14/23 × 15 = S.E.S. E10 = E10/13 = M.E.S. 953 = Special S.C.C. BA.15d/17 or BA.15d/21 = S.B.C.
All the Miners' Lamps listed above are approved by the Mines Department and are exempt from Purchase Tax, except where the lamps are purchased for uses other than mining. Tax at 18·3% of the list price must be added in these cases.

Aircraft

The lamps listed are of robust construction and designed to meet the special requirements of this service. The adoption of 28 volt supply on modern Civil Aircraft has necessitated the production of a complete range of 28 volt lamps, some of which are designed to withstand the known vibration conditions prevalent in jet aircraft.

In this range there is a lamp suitable for every purpose.

Miners'

The provision of safe and adequate lighting at the coal-face is essential for both the visual comfort of the miner and for efficient coal production.

The problem of the manufacture of bulbs for this purpose has engaged the attention of our lamp engineers for many years and in consequence the efficiency of the miners' lamp has increased considerably since its conception. The use of the gas Krypton with which many of these lamps are filled, enables the highest possible light output to be obtained from the limited battery power available. The bulbs listed comprise types and ratings suitable for use in all makes of Miners' Cap and Hand lamps.

Miners' Lamps listed on Facing Page.

Aircraft

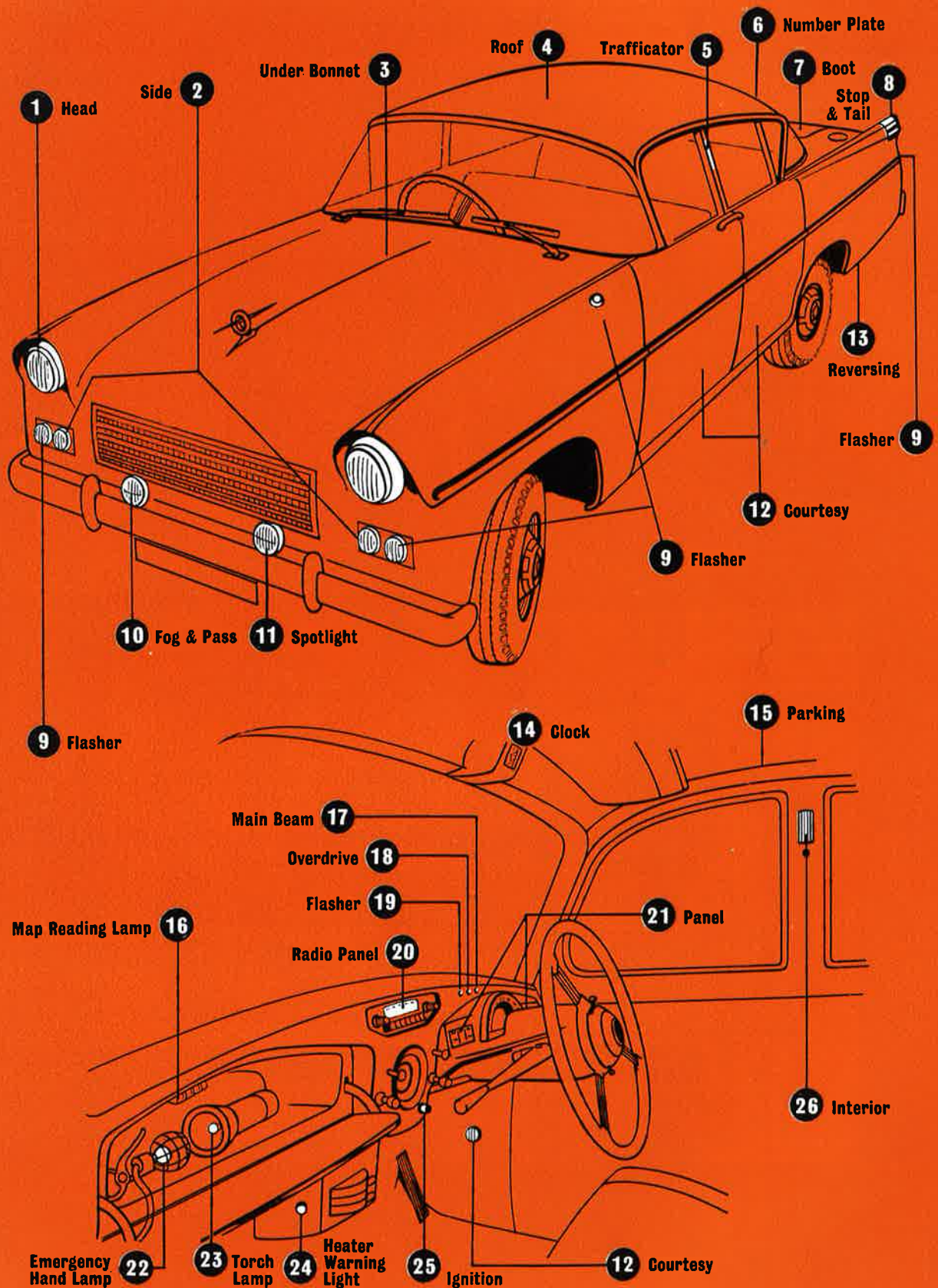
Inter-Service Number	Volts	Watts	Cap	Finish	Dimensions Length mm	Dimensions Diam. mm	List* Price s.	List* Price d.
General Purpose								
X 951109	3	**0·24**	M.E.S.	Clear	23	11	**1**	**0**
X 951110	6	**0·24**	M.E.S.	Clear	23	11	**1**	**0**
X 951225	6·5	**2·36**	M.E.S.	Clear	23	11		**7**
X 951219	12	**2·2**	M.E.S.	Clear	27·5	15	**1**	**1**
X 951220	12	**2·2**	M.E.S.	Red Lacquered	27·5	15	**1**	**3**
X 953247	12	**2·2**	M.E.S.	Clear	23	11	**1**	**1**
X 952248	12	**6**	S.B.C.	Clear	32·5	18	**1**	**5**
X 952261	12	**7**	S.B.C.	Clear	32·5	18	**3**	**0**
X 952293	12	**12**	S.B.C.	Clear	56	38	**2**	**4**
X 951230	24	**2·8**	M.E.S.	Clear	27·5	15	**1**	**6**
X 952254	24	**6**	S.B.C.	Clear	32·5	18	**1**	**6**
X 952298	24	**15**	S.B.C.	Clear	56	38	**2**	**9**
X 959118	28	**1·1**	Midget Flange	Clear	13	6	**4**	**2**
X 951271	28	**3·5**	M.C.C.	Clear	29	10	**2**	**9**
X 951284	28	**3·5**	M.E.S.	Clear	28·5	10	**2**	**9**
—	28	**7**	S.C.C.	Clear	32·5	18	**3**	**10**
—	28	**7**	S.B.C.	Clear	32·5	18	**3**	**10**
—	28	**12**	S.B.C.	Clear	46	25	**8**	**5**
X 953292	28	**12**	S.C.C.	Clear	46	25	**8**	**5**
—	28	**24**	S.B.C.	Clear	56	38	**5**	**8**
—	28	**24**	S.C.C.	Clear	56	38	**5**	**7**
Navigation								
X 952272	12	**10**	S.B.C.	Clear	46	25	**3**	**6**
X 953217	12	**20**	S.B.C.	Clear	57 max.	38 max.	**4**	**0**
X 952276	24	**10**	S.B.C.	Clear	46	25	**4**	**6**
X 952431	28	**24**	S.B.C.	Clear	57 max.	38 max.	**4**	**6**
X 952445	28	**40**	S.C.C.	Clear	60 max.	36 max.	**7**	**6**
Identification								
X 952401	12	**30**	S.B.C.	Pearl	58	27	**5**	**0**
X 952603	12	**80**	S.B.C.	Pearl	58	38	**7**	**0**
X 953202	24	**16**	S.B.C.	Pearl	46	25	**3**	**6**
X 952404	24	**30**	S.B.C.	Pearl	58	27	**5**	**6**
X 952604	24	**80**	S.B.C.	Pearl	58	38	**7**	**6**
Taxying								
X 952417	12	**36**	S.B.C.	Clear	56	38	**2**	**7**
X 952511	24	**60**	S.B.C.	Clear	56	38	**6**	**0**

* **Purchase Tax** must be added to the prices of the above lamps. For the exact amount of tax to be added see TABLE B on the inside back cover.

Aircraft Landing Lamps

Inter-Service Number	Volts	Watts	Cap	Finish	Dimensions Length mm	Dimensions Diam. mm	List* Price s.	List* Price d.
X 954717	26	**240**	Med. Pref.	Clear	95	60	**29**	**0§**
X 956705	26	**350**	Large Pref.	Clear	120	75	**33**	**0**
—	26	**420**	Large Pref.	Clear	122	75	**39**	**0**

§ **Purchase Tax** must be added to the price of this lamp in accordance with TABLE A on the inside back cover. Other Landing lamps are exempt from tax.


1 Head
Side 2
Under Bonnet 3
Roof 4
Trafficator 5
6 Number Plate
7 Boot
8 Stop & Tail
13 Reversing
Flasher 9
12 Courtesy
9 Flasher
10 Fog & Pass
11 Spotlight
9 Flasher
14 Clock
15 Parking
Main Beam 17
Overdrive 18
Flasher 19
Map Reading Lamp 16
Radio Panel 20
21 Panel
26 Interior
Emergency Hand Lamp 22
23 Torch Lamp
24 Heater Warning Light
25 Ignition
12 Courtesy

Car Light Points

With examples of the most frequently used Mazda Bulbs

		Section
1	**Headlight** Ordinary Headlight, British Prefocus Headlight or American Type Prefocus .. .. **Examples** 1, 2, 4, 5, 27, 354, 404, 414, 416, 667, 668, 669, 670	B1 & B2
2	**Side Lights** Side and Tail Lamps **Examples** 200, 204, 207, 989	B3
3	**Under Bonnet** Festoon or Side and Tail **Examples** 254, 256, 637, 638	B3
4	**Roof** Festoon or Side and Tail **Examples** 254, 256, 637, 638	B3
5	**Trafficator** Festoon **Examples** 253, 254, 256, 654	B3
6	**Number Plate** Side and Tail **Examples** 637, 989	B3
7	**Boot** Festoon or Side and Tail **Examples** 254, 256, 637, 638	B3
8	**Stop & Tail** Stop, Stop-tail, Flasher-tail or Tail lamps **Examples** 380, 381, 382	B3
9	**Flasher** Flashers only 335, 382	B3
10	**Fog and Pass** Ordinary or Prefocus Single Filament Headlight **Examples** 57, 185, 323, 325, 667	B1 & B2
11	**Spotlight** Ordinary or Prefocus Single Filament Headlight **Examples** 57, 185, 323, 325	B1 & B2
12	**Courtesy** Festoon or Side and Tail **Examples** 254, 256, 637, 638	B3
13	**Reversing** Stop Lights, Single Filament **Examples** 339, 382	B3
14	**Clock** Indicator Type **Examples** 280, 643, 981, 985	B4
15	**Parking** Indicator Type **Examples** 280, 987	B4
16	**Map Reading** Festoon or Side and Tail **Examples** 254, 256, 637, 638	B3
17	**Main Beam** Indicator Type or Flashlight Type **Examples** 280, 643, 651, 970, 981	B4 & B5
18	**Overdrive** Indicator or Flashlight **Examples** 280, 643, 651, 970, 981	B4 & B5
19	**Flasher** Warning of flasher operating Indicator Type 280, 981, 986	B4
20	**Radio Panel** Radio panel lamps **Examples** 2028, 2030, 2037, 2058	B4
21	**Panel** Oil, Petrol reserve etc. Indicator or Flashlight Type **Examples** 280, 643, 651, 970, 981	B4 & B5
22	**Handlamp** Indicator Type **Examples** 981, 985, 986	B4
23	**Torch** Flashlight Lamps **Examples** 970, 972, 974, 977	B5
24	**Heater Warning Light** Indicator Type or Flashlight Type **Examples** 280, 643, 651, 970, 981	B4 & B5
25	**Ignition** Indicator Type **Examples** 280, 643, 651, 981	B4
26	**Interior** Festoon or Side and Tail **Examples** 254, 256, 637, 638	B3

Numerical Index

Ref. No.	List* Price s.	d.	Volts	Watts	Description
1	2	6	12	24	Ordinary Headlight S.C.C.
2	2	6	12	36	,, ,, S.C.C.
4	2	6	12	24	,, ,, S.B.C.
5	2	6	12	36	,, ,, S.B.C.
26	5	6	12	60	,, ,, S.B.C.
27	4	0	12	48	,, ,, S.B.C.
57	2	6	12	36	,, ,, S.C.C.
75	2	9	6	36	,, ,, S.C.C.
90	5	6	12	60	,, ,, S.C.C.
96	4	3	12	48	,, ,, Bosch
106	2	6	6	24	,, ,, S.C.C.
108	2	9	6	36	,, ,, S.C.C.
109	2	6	6	24	,, ,, S.B.C.
111	2	9	6	36	,, ,, S.B.C.
122	2	6	24	24	,, ,, S.B.C.
123	2	6	24	36	,, ,, S.B.C.
124	5	6	24	60	,, ,, S.C.C.
128	5	6	24	60	,, ,, S.B.C.
140	4	0	24	48	,, ,, S.B.C.
149	1	4	24	6	Side S.C.C.
150	1	4	24	6	,, S.B.C.
162	3	9	12	36	Prefocus Headlight
166	4	9	6	24 & 24	,, ,,
168	3	6	6	24 & 24	Ordinary Headlight S.B.C.
169	3	6	6	30 & 30	,, ,, S.B.C.
170	3	6	6	36 & 36	,, ,, S.B.C.
171	3	6	12	36 & 36	,, ,, S.B.C.
172	3	9	6	36	Prefocus Headlight
173	3	9	6	36	,, ,,
180	4	6	6	18 & 18	Ordinary Headlight S.B.C.
182	3	9	12	36 & 36	,, ,, Bosch
183	3	9	6	24 & 24	,, ,, ,,
185	4	6	12	48	Prefocus Headlight
194	4	3	24	36 & 36	Ordinary Headlight S.B.C.
200	1	4	6	3	Side S.C.C.
204	1	4	6	3	,, S.B.C.
205	1	6	6	6	,, S.C.C.
206	1	6	6	6	,, S.B.C.
207	1	4	12	6	,, S.C.C.
209	1	4	12	6	,, S.B.C.
222	1	5	12	4	,, M.C.C.
225	1	6	12	6	,, S.B.C.
226	1	6	12	6	,, S.C.C.
253	2	7	6	6	Festoon
254	2	7	12	6	,,
255	2	3	6	3	,,
256	2	3	12	3	,,
260	2	7	24	6	,,
280	1	9	12	1·5	Indicator E5/8
302	6	9	12	48 & 48	Prefocus Headlight
306	4	6	6	36 & 36	,, ,,
312	5	0	6	30 & 24	,, ,,
317	3	9	6	18	Stop S.C.C.
323	4	6	12	48	Prefocus Headlight
325	3	9	12	38	,, ,,
326	3	9	12	38	,, ,,
330	4	6	24	44	,, ,,
331	4	6	24	44	,, ,,
332	5	6	24	44 & 38	,, ,,
333	3	9	24	24	Stop S.B.C.
334	3	9	24	6 & 24	,, S.B.C. Index
335	3	0	12	21	,, S.B.C.
337	7	0	28	7 & 30	,, S.B.C. Index
339	3	9	24	24	,, S.C.C.
354	4	6	12	42 & 36	Prefocus Headlight
355	4	6	12	42 & 36	,, ,,
356	5	6	6·4	45 & 35	,, ,,
358	5	4	12	44 & 38	,, ,,
359	5	6	24	44 & 38	,, ,,
367	5	4	12	44 & 38	,, ,,
373	5	0	6	30 & 24	,, ,,

Ref. No.	List* Price s.	d.	Volts	Watts	Description
374	4	0	6	36	Ordinary Headlight S.C.C.
375	3	9	12	36	,, ,, S.C.C.
376	4	9	12	36 & 36	,, ,, S.B.C.
380	3	6	12	6 & 21	Stop S.B.C. Index
381	3	6	12	6 & 21	,, S.B.C.
382	3	0	12	21	,, S.C.C
383	3	6	6	6 & 18	,, S.B.C.
384	3	6	6	6 & 18	,, S.B.C. Index
386	4	6	6	15 & 15	Scooter Headlight S.B.C.‡
387	4	6	6	18 & 18	,, ,, S.B.C.‡
390		4	1·5	0·2a	Flashlight M.E.S.
404	7	0	12	60 & 36	Prefocus Headlight
406	7	0	12	60 & 36	,, ,,
408	6	3	12	38 & 21	,, ,,
409	7	6	12	38 & 21	,, ,,
414	5	0	12	50 & 40	,, ,,
415	5	0	12	50 & 40	,, ,,
416	9	6	12	60 & 40	,, ,,
417	9	6	12	60 & 40	,, ,,
425	5	3	12	24 & 24	,, ,,
427	5	6	12	36 & 24	,, ,,
600	5	9	12	48	,, ,,
601	5	9	24	44	,, ,,
603	5	9	12	42 & 36	,, ,,
604	5	9	12	42 & 36	,, ,,
606	4	6	24	44	Prefocus Headlight
608	3	0	6	36	Ordinary Headlight S.C.C.
615	3	0	12	36	,, ,, S.C.C.
620	2	6	24	24	,, ,, B.C.
621	2	6	24	36	,, ,, S.C.C.
622	2	6	24	36	,, ,, B.C.
623	4	0	24	48	,, ,, S.C.C.
624	4	0	24	48	,, ,, B.C.
632	4	0	12	36 & 36	American Prefocus Head
637	2	0	16	6	Side S.B.C.
638	1	4	24	6	,, B.C.
640	1	6	6	1·8	Indicator M.C.C.
641	1	2	6	3	,, ,,
643	1	2	12	2·2	,, ,,
645	1	2	12	2·2	,, ,,
647	2	3	16	3	,, ,,
650	1	4	24	2·8	Indicator M.E.S.
651	1	5	24	2·8	,, M.C.C.
653	2	6	24	6	Festoon
654	3	10	24	6	,,
667	3	6	6	36	American Prefocus Head.
668	3	6	12	36	,, ,, ,,
669	3	6	6	36	,, ,, ,,
670	3	6	12	36	,, ,, ,,
671	5	0	24	44 & 38	Ordinary Headlight S.B.C.
685	5	9	12	48	Prefocus Headlight
692	3	9	24	6 & 24	Stop S.B.C.
950	1	3	6	6	Indicator M.E.S.
951	1	7	6	6	Side M.C.C.
952		8	6	0·5a	Cycle Dynamo Head.
953		8	6	0·5a	,, ,, ,,
970		4	2·5	0·2a	Flashlight M.E.S.
972		4	2·5	0·3a	,, ,,
974		4	3·5	0·15a	,, ,,
977		4	3·5	0·3	,, ,,
979	1	4	6	0·3a	Cycle Dynamo Head.
980	1	4	6	0·5a	,, ,, ,,
981	1	3	6	3	Indicator M.E.S.
982	1	6	6	1·8	,, ,,
985	2	2	16	3	,, ,,
986	1	1	12	2·2	,, ,,
987	1	1	12	2·2	,, ,,
988	1	5	6	3	Side M.C.C.
989	1	5	12	6	,, ,,
990	1	1	6	3	Indicator M.E.S.
991		8	6	0·04a	Cycle Dynamo Tail

* **Purchase Tax** must be added to these prices. For the exact amount of tax to be added see TABLE B on the inside back cover.

Cadmium Yellow. ‡ Unequal pins.

Ref. No.	List* Price s.	d.	Volts	Watts	Description
993	1	4	24	2·8	Indicator M.E.S.
996		8	3·5	0·15a	Cycle Dynamo Tail
998		8	6	0·10a	,, ,, ,,
2000		8	2	0·6a	Flashlight M.E.S.
2003		8	5·0	0·15	,, ,,
2004		4	4·5	0·3	,, ,,
2008		4	4	0·3	,, ,,
2012		8	6	0·25a	Cycle Dynamo Head
2013		8	6	0·3a	,, ,, ,,
2014		8	6	0·45a	,, ,, ,,
2018	1	7	24	2·8	Indicator M.E.S.
2019		7	6·2	0·3a	Radio Panel M.E.S.
2020	1	8	24	2·8	Indicator M.C.C.
2025		7	6·2	0·3a	Radio Panel M.E.S.
2026	1	2	6/8	1CP	Indicator M.C.C.
2028		7	6·5	0·3a	Radio Panel M.E.S.
2029		7	6·5	0·3a	,, ,, M.E.S.
2030		7	6·5	0·3a	,, ,, M.C.C.
2031		7	2·2	0·25a	Lens End Flashlight
2037		7	6·5	0·3a	Radio Panel M.E.S.
2046		7½	2·5	0·3a	Prefocus Flashlight
2055		7½	2·5	0·2a	Prefocus Flashlight
2056		8	6	0·3a	Cycle Dynamo Head.
2057		8	6	0·45a	,, ,, ,,
2058	1	0	6	0·06a	Radio Panel M.E.S.
2061		7½	3·5	0·3a	Prefocus Flashlight
2074		7	6·3	0·15a	Radio Panel M.C.C.

Ref. No.	List* Price s.	d.	Volts	Watts	Description
2083	1	0	6	0·04a	Radio Panel M.E.S.
2094		7	6·3	0·11a	,, ,, ,,
2105		11	12	2·2	Indicator Capless
2202	1	4	6/8	3CP	Side S.C.C.
2203	1	4	6/8	3CP	,, S.B.C.
2204	1	4	12/16	3CP	,, S.C.C.
2205	1	4	12/16	3CP	,, S.B.C.
2206	1	6	6/8	6CP	,, S.C.C.
2207	1	6	6/8	6CP	,, S.B.C.
2208	1	4	12/16	6CP	,, S.C.C.
2209	1	4	12/16	6CP	,, S.B.C.
2215	1	3	6/8	2CP	,, M.C.C.
2225		8	6	0·5a	Cycle Dynamo Head.
2701	3	9	12/16	15CP	Stop S.B.C.
2703	3	6	6/8	3 & 21CP	Stop S.B.C. Index
2704	3	9	12/16	21CP	,, S.C.C.
2705	3	9	12/16	21CP	,, S.B.C.
2706	3	6	12/16	6 & 21CP	,, S.B.C. Index
2714	3	6	12/16	6 & 21CP	,, S.B.C.
2715	3	6	6/8	3 & 21CP	,, ,,
2721	3	9	6/8	21CP	,, S.C.C.
2722	3	9	6/8	21CP	,, S.B.C.
2726	3	9	6/8	15CP	Stop S.C.C.
2778	3	6	6	24	American Prefocus Head
2788	3	6	6	24	,, ,, ,,
2809	4	3	24	36	,, ,, ,,
2808	4	3	24	36	,, ,, ,,

* **Purchase Tax** must be added to these prices. For the exact amount of tax to be added see TABLE B on the inside back cover.

Mazda British Equivalents of American Car Bulbs

American Bulb Reference Number	Mazda Equivalent Reference Number	Description	Volts	Rating	Cap	List* Price s.	d.
51	2026	Side and Tail	6/8	1CP	M.C.C.	1	2
55	2215	,, ,,	6/8	2CP	M.C.C.	1	3
63	2202	,, ,,	6/8	3CP	S.C.C.	1	4
64	2203	,, ,,	6/8	3CP	S.B.C.	1	4
67	2204	,, ,,	12/16	3CP	S.C.C	1	4
68	2205	,, ,,	12/16	3CP	S.B.C.	1	4
81	2206	,, ,,	6/8	6CP	S.C.C.	1	6
82	2207	,, ,,	6/8	6CP	S.B.C.	1	6
87	2726	Car Interior	6/8	15CP	S.C.C	3	9
89	2208	Side and Tail	12/16	6CP	S.C.C.	1	4
90	2209	,, ,,	12/16	6CP	S.B.C.	1	4
94	2701	Car Interior	12/16	15CP	S.B.C.	3	9
1016	2706	Stop/Tail or Flasher	12/16	6/21 CP	S.B.C. Index	3	6
1129	2721	Car Interior, Signal Marker	6/8	21CP	S.C.C.	3	9
1130	2722	,, ,, ,, ,,	6/8	21CP	S.B.C.	3	9
1141	2704	Flasher, Reversing or Stop	12/16	21CP	S.C.C.	3	9
1142	2705	Car Interior, Signal Marker	12/16	21CP	S.B.C.	3	9
1154	2703	Stop/Tail or Flasher	6/8	3/21CP	S.B.C. Index	3	6
1158	2715	,, ,, ,,	6/8	3/21CP	S.B.C.	3	6
1176	2714	,, ,, ,,	12/16	6/21CP	S.B.C.	3	6

* **Purchase Tax** must be added to these prices. For the exact amount of tax to be added see TABLE B on the inside back cover.

Standard Packing Quantities

Car bulbs are supplied packed in the quantities stated below

Bulb Diameter mm	Bulb Type	Standard Packing Quantity	Section in Catalogue
38	Ordinary Headlight Bulbs	12	B 1
50	" " "	12	B 1
28	British Prefocus Headlight Bulbs	12	B 2
11	Festoon	100 (10 corrugated strips of 10 lamps)	B 3
15	Side and Tail	12	B 3
18	" " "	12	B 3
25	Stop and Stop/Tail	12	B 3
6·75	No. 280 Indicator	50 (5 Trays of 10 lamps)	B 4
11	Indicator	12	B 4
15	"	12	B 4
11 & 15	Miniature lamps, Radio panel, Cycle Dynamo, Telephone visuals etc.	50 (5 Trays of 10 lamps)	B 4 & B 5
11	Flashlight Bulbs	50 (5 Trays of 10 lamps)	B 5

Extras

Certain lamps in this catalogue are available with non-standard finish and/or non-standard caps. Where such alternatives are available, the following extra charges to list prices will be made.

Colour Spraying and External Frosting

	Price Each Extra List s.	d.
10 mm, 11 mm and 15 mm bulbs		6
18 mm bulbs and above	1	0

Caps

Quantities of less than 1000 identical lamps

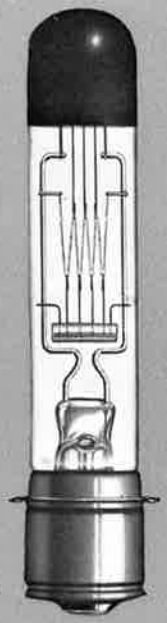
MES, MCC		6
BC, ES, SBC, SCC, SBC Index, ASBC, ASCC, 3-pin BC, Bosch, SES, APF	1	0

Extra for 1000 and over identical lamps — **On application**

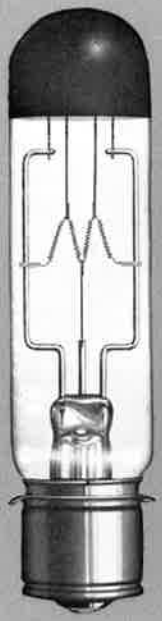
Contents

Projector Class A1

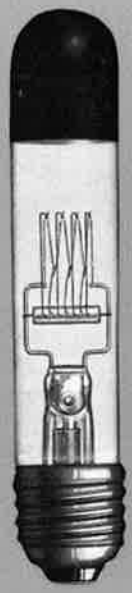
A1/186
100W 12V



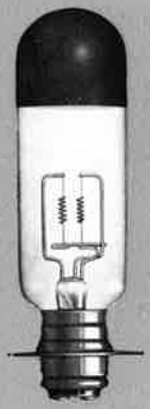
A1/4
100W 240V



A1/5
250W 230V



A1/23
100W 200V

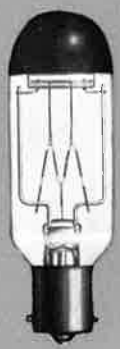


A1/127
200W 100V

A1/167
150W 230V

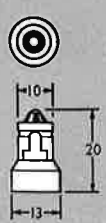
A1/132
75W 30V

A1/72
10W 20V

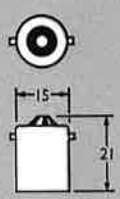


A1/21
100W 230V

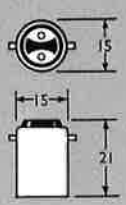
Dimensions in millimetres



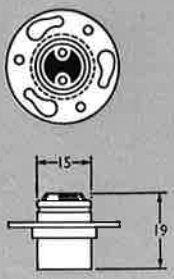
Pathe T piece
A1/72



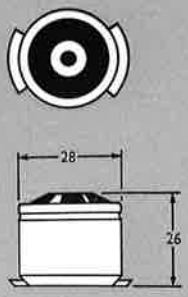
S.C.C.
BA15s/21



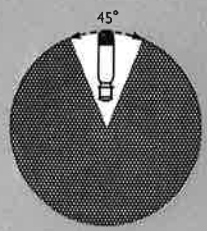
S.B.C.
BA15d/21



Prefocus
P15/19



Prefocus
P28/25



Burning Position

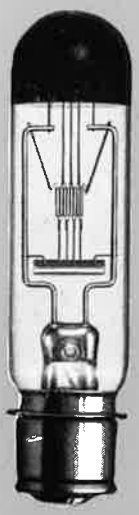
This diagram indicates the burning position for all lamps listed in Section C1.

Class A1 *Burning position, cap down.*

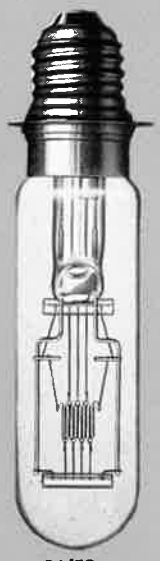
Lamp Ref. No.	Watts	Voltages	Objective Life Hrs.	Cap	Cooling	Finish	Dimensions: Length mm	Dimensions: Diam. mm	Dimensions: L.C.L. mm	Special Features	List Price † £ s. d.
A1/ 72	**10**	20	100	Pathe	Natural	Clear	57±3	15±1	25 ±0·5	—	**6 9**
A1/131	**10**	20	100	M.E.S.	,,	,,	57±3	15±1	35 ±2	—	**6 6**
A1/158	**19**	19	100	M.E.S.	,,	,,	57±3	15±1	35 ±2	—	**6 3**
A1/ 1	**25**	50	50	S.C.C.	,,	,,	57±3	16±1	29 ±2	—	**7 0**
A1/ 2	**50**	115	50	S.C.C.	,,	,,	76±3	25±1	34·5±2	—	**15 0**
A1/ 19	**50**	115	50	S.B.C.	,,	,,	76±3	25±1	34·5±2	—	**15 0**
A1/132	**75**	30	50	S.C.C.	,,	,,	76±5	25±1	34 ±2	—	**19 6**
A1/ 186	**100**	12	25	S.C.C.	,,	Black Top	76±5	25±1	34·5±2	Flat Mandrel Filament	**18 3**
A1/ 21	**100**	12, 100, 110, 115, 210, 230, 240, 250	50	S.C.C.	,,	,,	76±5	25±1	34·5±2	—	**18 3**
A1/ 4	**100**	12, 100, 110, 115, 210, 230, 240, 250	50	Prefocus	,,	Clear	133±7	25±1	55·5±0·5	—	**19 6**
A1/135	**100**	24	100	S.B.C.	,,	,,	75±3	25±1	55 ±2	—	**19 6**
A1/ 3	**100**	30	50	Prefocus	,,	Black Top	133±7	25±1	55·5±0·5	Offset Filament	**19 6**
A1/121	**100**	115, 210, 230 240, 250	50	S.B.C.	,,	,,	76±3	25±1	34·5±2	—	**18 3**
A1/ 23	**100**	12, 100, 110, 115, 200, 220, 230 240, 250	50	E.S.	,,	,,	128±7	25±1	75 ±5	—	**19 6**
A1/136	**108**	6	50	E.S.	,,	Clear	128±7	32±1	75 ±5	Offset Filament	**2 1 6**
A1/167	**150**	115, 210, 230, 240, 250	50	S.C.C.	,,	Black Top	87±5	25±1	34·5±2	—	**1 1 9**
A1/168	**150**	115, 210, 230, 240, 250	50	S.B.C.	,,	,,	87±5	25±1	34·5±2	—	**1 2 9**
A1/175	**150**	115, 230, 240, 250	50	Prefocus	,,	,,	133±7	25±1	55·5±0·5	—	**1 5 0**
A1/107	**150**	20	25	S.C.C.	Forced	Clear	87±5	25±1	34·5±2	—	**1 12 0**
A1/104	**150**	12	50	Prefocus	Natural	Black Top	133±7	25±1	55·5±0·5	Solid Source	**1 6 0**
A1/182	**150**	230, 240, 250	25	Valve Base	,,	,,	76 max.	30 max.	33·5±1	—	**1 10 0**
A1/151	**200**	50	50	S.C.C.	,,	,,	87±5	25±1	34·5±2	—	**1 7 9**
A1/ 13	**200**	50, 110	50	Prefocus	,,	,,	133±7	32±2	55·5±0·5	—	**1 7 9**
A1/113	**200**	50	50	Prefocus	,,	,,	133±7	32±2	55·5±0·5	Offset Filament	**1 7 9**
A1/ 25	**200**	115, 210, 230 240, 250	25	S.B.C.	Forced	Black Top	87±5	25±1	34·5±2	—	**1 5 0**
A1/ 26	**200**	100, 115, 230, 240, 250	25	S.C.C.	,,	,,	87±5	25±1	34·5±2	—	**1 5 0**
A1/ 27	**200**	115	25	Pref. S.C.C.	,,	,,	87±5	25±1	31·5±0·5	—	**1 5 0**
A1/127	**200**	100, 115	25	Pref. S.B.C.	,,	,,	87±5	25±1	31·5±0·5	—	**1 5 0**
A1/ 81	**200**	110	50	Pathe	,,	,,	133±7	32±1	58 ±0·5	Offset Filament	**1 7 9**
A1/ 85	**250**	32, 50	50	Small Bell & Howell	Natural	,,	128±7	32±2	59 ±0·5	—	**1 12 0**
A1/ 14	**250**	100, 115, 230, 240, 250	50	E.S.	,,	,,	128±7	32±2	75 ±5	—	**1 10 0**
A1/ 15	**250**	50	50	Prefocus	,,	,,	133±7	32±2	55·5±0·5	Offset Filament	**1 10 0**
A/1 5	**250**	50, 55	50	Prefocus	,,	,,	133±7	32±2	55·5±0·5	—	**1 10 0**
A1/ 5	**250**	110, 115, 200, 210, 220, 230, 240, 250	50	Prefocus	,,	,,	133±7	32±2	55·5±0·5	—	**1 7 9**
A1/106	**250**	12, 24	50	Prefocus	,,	,,	133±7	32±2	55·5±0·5	Solid Source	**1 19 0**
A1/ 37	**300**	100, 115	25	S.C.C.	Forced	,,	100±5	25±1	34·5±2	—	**1 13 0**
A1/ 37	**300**	210, 230, 240, 250	25	S.C.C.	,,	,,	100±5	27±1	34·5±2	—	**1 13 0**
A1/ 6	**300**	100, 110, 115	25	Prefocus	,,	,,	133±7	32±2	55·5±0·5	—	**1 14 3**
A1/154¶	**300**	210-30-40-250	50	Prefocus	,,	,,	133±7	32±2	55·5±0·5	—	**1 14 3**
A1/178¶	**300**	230, 240, 250	25	Valve Base	,,	,,	98±4	32±1	39·7±1	—	**2 0 0**
A1/ 86	**300**	110, 115	25	Large Bell & Howell	,,	,,	128±7	32±2	59 ±0·5	Bi-plane Filament	**2 2 0**
A1/183	**300**	230, 240, 250	25	S.C.C.	,,	,,	77±3	32±1	34·5±1	—	**1 13 0**

† **Purchase Tax** not chargeable.
¶ Illustrated in Section C2.

Projector Class A1

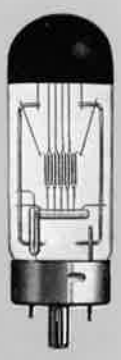


A1/7
500W 115V

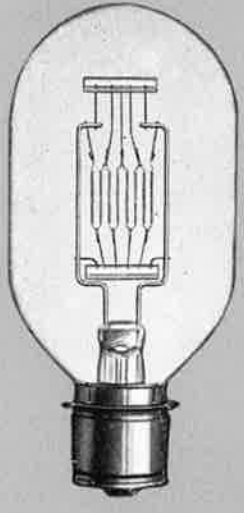


A1/52
750W 110V

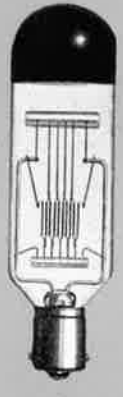
A1/154
300W 230V
Details in Section C1



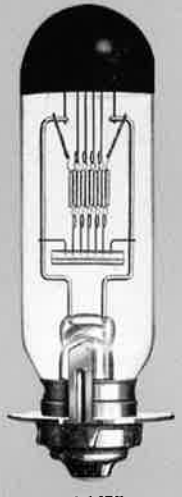
A1/180
500W 240V



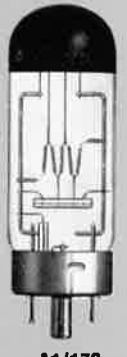
A1/8
500W 110V



A1/176
500W 230V

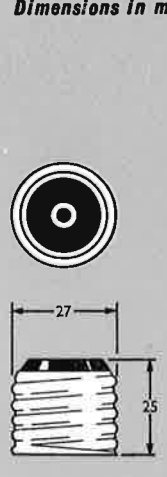


A1/53
750W 110V



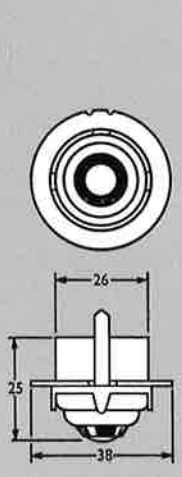
A1/178
300W 240V
Details in Section C1

Dimensions in millimetres

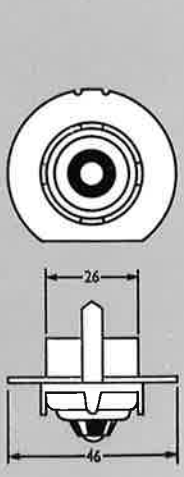


E.S.
E27/25

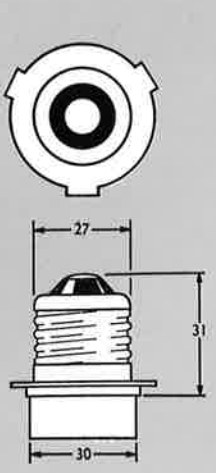
Prefocus
P28/25



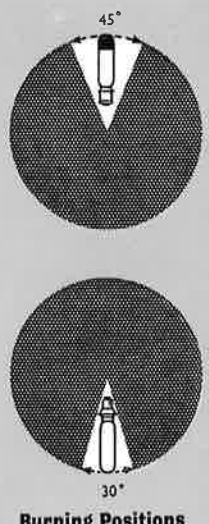
Small Bell & Howell
BH38



Large Bell & Howell
BH46



3-fin Ring



Burning Positions

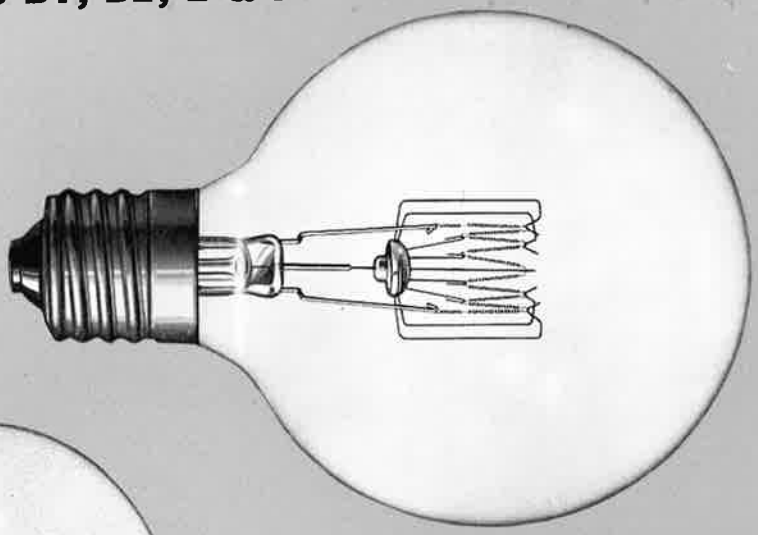
The upper diagram gives the bu
position for all lamps listed in Se
C2 except A1/46 and A1/52 r
sented in the lower diagram.

Class A1 *Burning position, cap down except where indicated.*

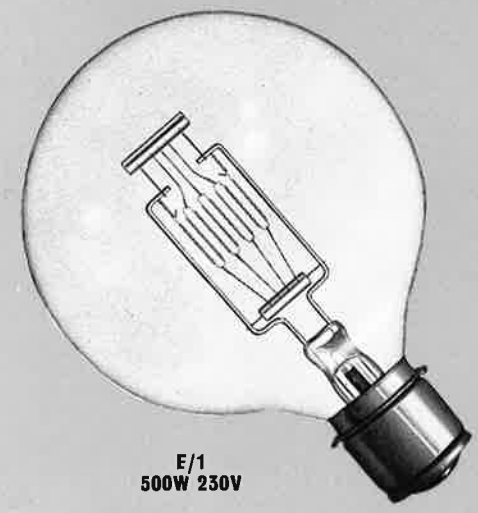
Lamp Ref. No.	Watts	Voltages	Objective Life Hrs.	Cap	Cooling	Finish	Dimensions: Length mm	Dimensions: Diam. mm	Dimensions: L.C.L. mm	Special Features	List Price † £ s. d.
A1/ 39	400	110	25	Prefocus	Forced	Black Top	133±7	32±2	55·5±0·5	Bi-plane Filament	2 3 6
A1/ 87	400	110, 115	25	Small Bell & Howell	,,	,,	128±7	32±2	59 ±0·5	Bi-plane Filament	2 3 6
A1/ 42	500	100, 110, 115, 210, 220, 230, 240, 250	50	E.S.	Natural	Clear	128±7	64±2	75 ±5	—	1 13 0
A1/ 8	500	100, 110, 115, 200, 210, 220, 230, 240, 250	50	Prefocus	,,	,,	133±7	64±2	55·5±0·5	—	1 13 0
A1/176	500	115, 210, 220, 230, 240, 250	25	S.C.C.	Forced	Black Top	100±5	30±1	34·5±2	Bi-plane Filament	2 2 0
A1/180	500	230, 240, 250	25	Valve Base	,,	,,	98±4	32±1	39·7±1	Bi-plane	2 15 0
A1/ 46	500	110	25	3-pin B.C.	,,	Clear	142 max.	38 max.	95	Offset, Bi-plane Filament Cap-up Burning	2 8 3
A1/ 47	500	110, 115, 210, 220, 230, 240, 250	25	Small Bell & Howell	,,	Black Top	128±7	32±2	59 ±0·5	Bi-plane Filament	2 7 0
A1/160	500	110, 115, 230, 240, 250	25	Large Bell & Howell	,,	,,	128±7	32±2	59 ±0·5	Bi-plane Filament	2 7 0
A1/ 7	500	110, 115, 200, 210, 220, 230, 240, 250	25	Prefocus	,,	,,	133±7	32±2	55·5±0·5	Bi-plane Filament	2 6 0
A1/ 43	500	110, 220, 230, 240, 250	50	G.E.S.	Natural	Clear	135±10	64±2	90 ±5	—	1 14 6
A1/ 52	750	110	25	3-fin Ring	Forced	,,	145±8	38 max.	81 ±0·5	Offset Bi-plane Filament Cap-up Burning	2 13 0
A1/ 53	750	110, 115, 200, 220, 230, 240, 250	25	Large Bell & Howell	,,	Black Top	128±7	38±2	59 ±0·5	Bi-plane Filament	2 13 0
A1/ 9	750	110, 115, 210, 220, 230, 240, 250	25	Prefocus	,,	,,	133±7	38±2	55·5±0·5	Bi-plane Filament	2 13 0
A1/111	900	24, 30	50	G.E.S.	Natural	Clear	230±10	64±2	120 ±5	—	3 2 6
A1/ 10	900	30	50	Mogul Prefocus	,,	,,	235±10	64±2	84 ±0·5	—	3 2 6
A1/ 92	1000	100	25	Large Bell & Howell	Forced	Black Top	175±5	38±2	78 ±0·5	Bi-plane Filament	3 5 0
A1/ 11	1000	110, 115, 220, 230, 240, 250	50	Mogul Prefocus	Natural	Clear	235±10	64±2	84 ±0·5	—	2 10 0
A1/ 57	1000	110, 115, 220, 230, 240, 250	50	G.E.S.	,,	,,	230±10	64±2	120 ±5	—	2 10 0
A1/ 59	1000	110, 115, 220, 230, 240, 250	25	Prefocus	Forced	Black Top	133±7	38±2	55·5±0·5	Bi-plane Filament	3 2 0
A1/ 91	1000	115, 230, 240, 250	25	Large Bell & Howell	,,	,,	128±7	38±2	59 ±0·5	Bi-plane Filament	3 2 0
A1/ 58	1000	110, 115, 230, 240, 250	25	Prefocus	Natural	Clear	133±7	64±2	55·5±0·5	Bi-plane Filament	3 2 0

† **Purchase Tax** not chargeable.

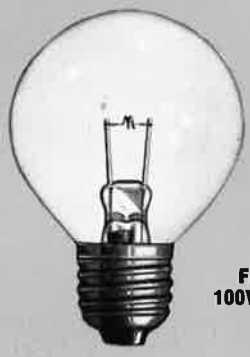
Projector Class B1, B2, E & F



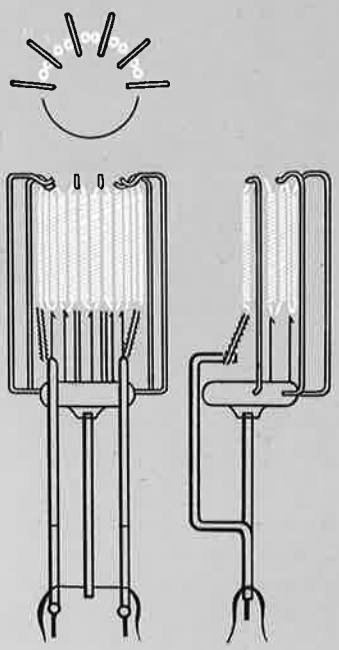
B1/3
500W 230V



E/1
500W 230V

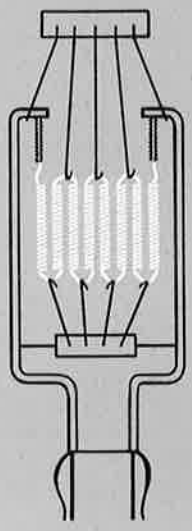


F/14
100W 12V

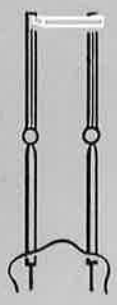


Bunch Filament

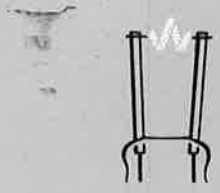
Side View



8-section Grid



Ribbon Filament
Transverse



Coiled Coil
Transverse

Class B 1

These lamps are particularly suitable for use with parabolic mirrors and they are employed generally for stage and theatre lighting and the floodlighting of tall buildings or hoardings, etc. They have concentrated bunch filaments of small area and a comparatively long life.

Class B 2

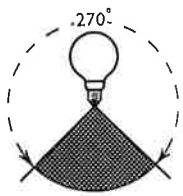
For similar applications applying to B 1 lamps, B 2 have a longer L.C.L. and can be burned in any position.

Class E, Epidiascope

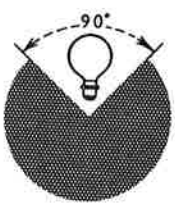
Episcope and epidiascope apparatus for the projection and magnification of small objects, lantern slides etc., all use this type of lamp. They are also suitable for spotlight and shop window projectors which have to be rotated through wide angles.

Class F, Micro-projection

Class F lamps have been specially designed to the requirements of micro-projection. Being of low voltage, they can be conveniently operated from batteries or from the mains through a suitable resistance or transformer. Microscope illumination, small home cine projectors, sound recording are but a few of the many purposes for which these lamps may be used.



Burning position for Class B1 & F



Burning position for Class E

Class B1, B2 & E

Lamp Ref. No.	Watts	Voltages	Cap	Dimensions: Length mm	Dimensions: Diam. mm	Dimensions: L.C.L. mm	Objective Life Hours	List Price s.	List Price d.
B1 (Burning position any, except within 45° of cap up)									
B1/1	**100**	115, 210, 230, 240, 250	E.S.	115±10	80±2	75±5	800	**16**	**0***
B1/2	**250**	110, 115, 210, 220, 230, 240, 250	E.S.	115±10	80±2	75±5	800	**25**	**0***
B1/3	**500**	115, 210, 230, 240, 250, 260	G.E.S.	180±10	130±5	115±5	800	**34**	**0**
B1/4	**1000**		G.E.S.	180±10	130±5	115±5	800	**46**	**6**
B2 (Burning position—any)									
B2/1	**500**	230, 240, 250	G.E.S.	267±8	130±5	202±7	800	**34**	**0**
B2/2	**1000**		G.E.S.	300±9	150±5	225±8	800	**42**	**0**
E (Burning position any, within 45° of cap down)									
E/1	**500**	110, 230, 240, 250	Prefocus	135±10	100±5	60±0·5	100	**37**	**6**
E/3	**500**	110, 210, 230, 240	E.S.	135±10	100±5	85±5	100	**36**	**6**

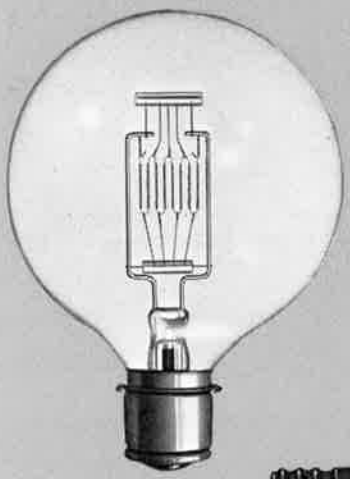
* **Purchase Tax** must be added to the prices of these lamps only. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.

Class F

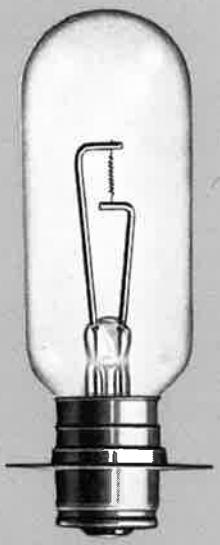
Lamp Ref. No.	Watts	Voltages	Objective Life Hours	Cap	Dimensions: Length mm	Dimensions: Diam. mm	Dimensions: L.C.L. mm	Special Features	List* Price s.	List* Price d.
F/30	**8**	4	100	S.E.S.	62±5	35±2	52±5	—	**7**	**6**
F/ 5	**9**	18	100	M.E.S.	36±3	18±1	25±2	—	**5**	**0**
F/ 8	**12**	12	100	S.B.C.	57±5	37 max.	40±3	—	**7**	**0**
F/29	**18**	6	100§	S.B.C.	46±2·5	25±1	28·5±1·5	—	**9**	**6**
F/24	**24**	6	100	E.S.	57±5	38±2	47±5	—	**6**	**3**
F/10	**24**	6 or 12	100	S.E.S.	60±5	38±2	50±5	—	**7**	**6**
F/ 3	**24**	12	100	S.B.C.	60±5	38±2	44±5	—	**6**	**3**
F/11	**24**	12	100	S.E.S.	60±5	38±2	41±3	—	**6**	**3**
F/23	**30**	6	200	E.S.	63±5	35±2	53±5	—	**10**	**0**
F/25	**30**	6	25	E.S.	63±5	35±2	53±5	—	**10**	**0**
F/ 1	**30**	6	25	S.E.S.	57±5	35±2	47±5	—	**10**	**0**
F/41	**30**	6	25	S.B.C.	58±5	35±2	40±5	—	**10**	**0**
F/54	**30**	6	100	S.B.C.	60±5	38±2	53±5	Solid Source	**10**	**0**
F/56	**30**	6	100	E.S.	65±5	38±2	56±5	Solid Source	**10**	**0**
F/53	**48**	6	100	Prefocus	61±5	35±2	21±0·5	—	**13**	**9**
F/ 2	**48**	6	100	S.B.C.	60±5	35±2	40±3	—	**12**	**6**
F/52	**48**	6	100	S.E.S.	62±3	35±2	49±2	—	**12**	**6**
F/ 7	**48**	8	100	S.E.S.	60±5	40±3	41±3	—	**12**	**6**
F/ 4	**48**	12	100	S.E.S.	70±5	50±2	40±3	—	**12**	**6**
F/13	**48**	12	100	E.S.	70±5	50±2	38±5	—	**12**	**6**
F/38	**48**	12	100	S.B.C.	60±5	38±2	40±3	—	**12**	**6**
F/57	**48**	6	100	S.B.C.	60±5	38±2	53±5	Solid Source	**12**	**6**
F/58	**48**	6	100	S.E.S.	60±5	38±2	53±5	Solid Source	**12**	**6**
F/59	**48**	6	100	E.S.	65±5	38±2	56±5	Solid Source	**12**	**6**
F/ 9	**48**	8	100	S.E.S.	64±4	39·5±2	45±2	—	**12**	**6**
F/14	**100**	12	100	E.S.	85±5	60±2	55±5	—	**20**	**0**
F/15	**108**	6	50	Prefocus	139±7	32±2	65±0·5	Ribbon Fil. Ax.	**47**	**6**
F/16	**108**	6	50	E.S.	135±4	32±2	86±3	Ribbon Fil. Ax.	**47**	**6**
F/46	**108**	6	50	Prefocus	139±7	32±2	65±0·5	Ribbon Fil. Hor.	**51**	**3**
F/47	**108**	6	50	E.S.	135±4	32±2	86±3	Ribbon Fil. Hor.	**47**	**6**

* **Purchase Tax** must be added to the prices of these lamps. For the exact amount of purchase tax to be added see TABLE A on the inside back cover.
§ At 6·5 volts.

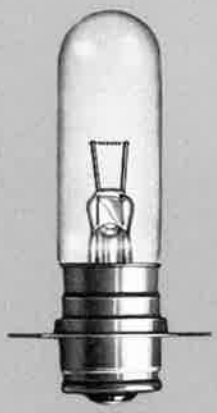
Projector Class G & High Wattage



500W 230V
Theatre Spotlight

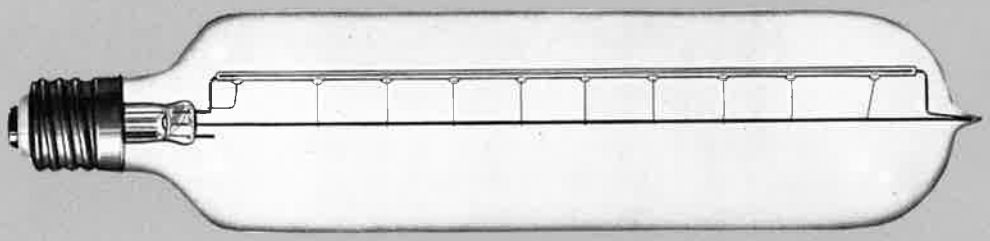


6·5A 5V G/23
Class G Exciter

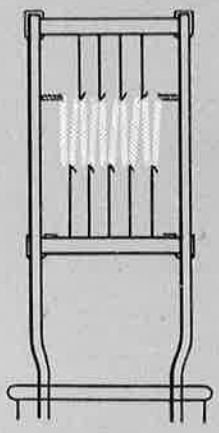


0·75A 4V G/29
Class G Exciter

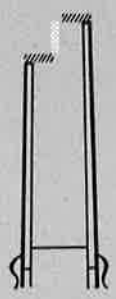
0·75A 4V G/19
Class G Exciter



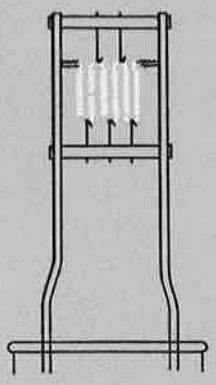
500W 250V Tubular Floodlight



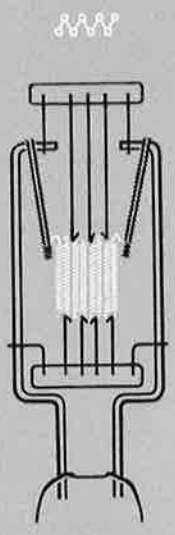
10-section Grid



Axial Coil

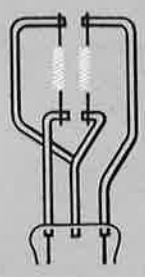


6-section Grid



Bi-plane

Transverse
Coil



Twin Coiled Coil
(Offset)

Side view

Glass G, Exciter

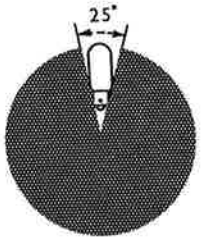
For reproduction in sound film apparatus a low voltage lamp of high efficiency and robust construction is necessary. The Class G lamps listed here are ideal for this class of work and are manufactured with extreme accuracy and careful attention to such details as the centring of the filament and its luminous intensity so as to comply with the rigid requirements of sound film projection.

Theatre Spotlight

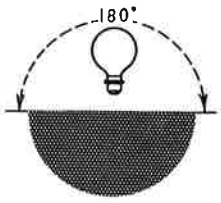
These lamps have a filament of flat grid construction. They are used particularly for spotlights in theatres or cinemas but they can be used for similar applications where a suitable reflector and housing will make full use of the compact, bright light source.

Tubular Floodlight

There are many instances where a wide-angle flood beam is required, such as in film studios where the Tubular Floodlight is used in conjunction with a trough reflector to give a fan shaped beam.



Burning position for Class G Lamps



Burning position for Class T Lamps

Class G *Must not be burned cap up*

Lamp Ref. No.	Amps	Voltages	Cap	Dimensions			Objective Life Hours	List Price †
				Length mm	Diameter mm	L.C.L. mm		s. d.
G/18	0·2	7	Prefocus S.C.C.	57±3	16±1	28·5±0·5	100	9 3
G/31	0·75	4	Prefocus S.B.C.	48±3	25±1	28·5±0·5	50	10 9
‡G/27	0·75	4	Prefocus S.C.C.	57±3	16±1	28·5±0·5	50	7 3
G/19	0·75	4	S.C.C.	48±3	15±1	31·75±0·75	50	7 3
G/29	0·75	4	Prefocus S.C.C.	57±3	16±1	28·5±0·5	50	8 6
G/ 2	0·75	4	S.C.C.	48±3	25±1	32±1·5	50	9 3
‡G/ 4	1·0	6	S.C.C.	40±2	18±1	21·5±0·5	100	9 3
‡G/ 5	1·0	6	Prefocus S.C.C.	57±3	16±1	28·5±0·5	100	9 3
G/16	1·0	27	S.C.C.	75±3	25±1	41±1	100	13 9
G/ 6	2·0	8	S.C.C.	75±3	25±1	44±1	100	9 3
G/37	2·0	8	Prefocus S.C.C.	75±3	25±1	37·3±0·5	100	10 6
G/ 8	4·0	8	S.C.C.	75±3	25±1	44±1	100	9 3
G/ 7	4·0	8	Prefocus S.C.C.	75±3	25±1	37·3±0·5	100	11 0
G/36	5·0	6	S.C.C. Pathe Collar	52±2	18±1	27±0·5	100	13 0
G/11	5·0	10	S.C.C.	75±3	25±1	41±1	100	12 3
G/10	5·0	10	Prefocus S.C.C.	75±3	25±1	37·3±0·5	100	13 9
G/12	5·0	10	S.C.C.	75±3	25±1	44±1	100	12 3
G/ 3	6·0	4	S.C.C.	60 max.	18±1	30±0·5	100	10 0
‡G/22	6·0	4	S.C.C.	49±3	25±1	31·5±1	100	10 0
G/23	6·5	5	Prefocus S.C.C.	75±3	25±1	41±0·5	50	12 3
G/14	7·5	10	S.C.C.	75±3	25±1	41±1	100	12 3
G/13	7·5	10	Prefocus S.C.C.	75±3	25±1	37·3±0·5	100	13 9
G/15	7·5	10	S.C.C.	75±3	25±1	44±1	100	12 6
G/32	7·8	10·5	Prefocus S.C.C.	75±3	25±1	37·3±5·0	25	16 0

† **Purchase Tax** not chargeable.
‡ Axial filaments. All others are Transverse.

Theatre Spotlight Class T

Lamp Ref. No.	Watts	Voltages	Cap	Dimensions			Objective Life Hours	List† Price
				Length mm	Diameter mm	L.C.L. mm		s. d.
T/3	250	210, 230, 240, 250	Prefocus	119±5	76±2	55·5±0·5	200	24 6
T/1	500	115, 210, 230, 240, 250	Prefocus	130±10	95±5	55·5±0·5	200	33 9
T/2	1000	210, 230, 240, 250	Mogul Prefocus	190±10	130±5	84±0·5	200	42 9

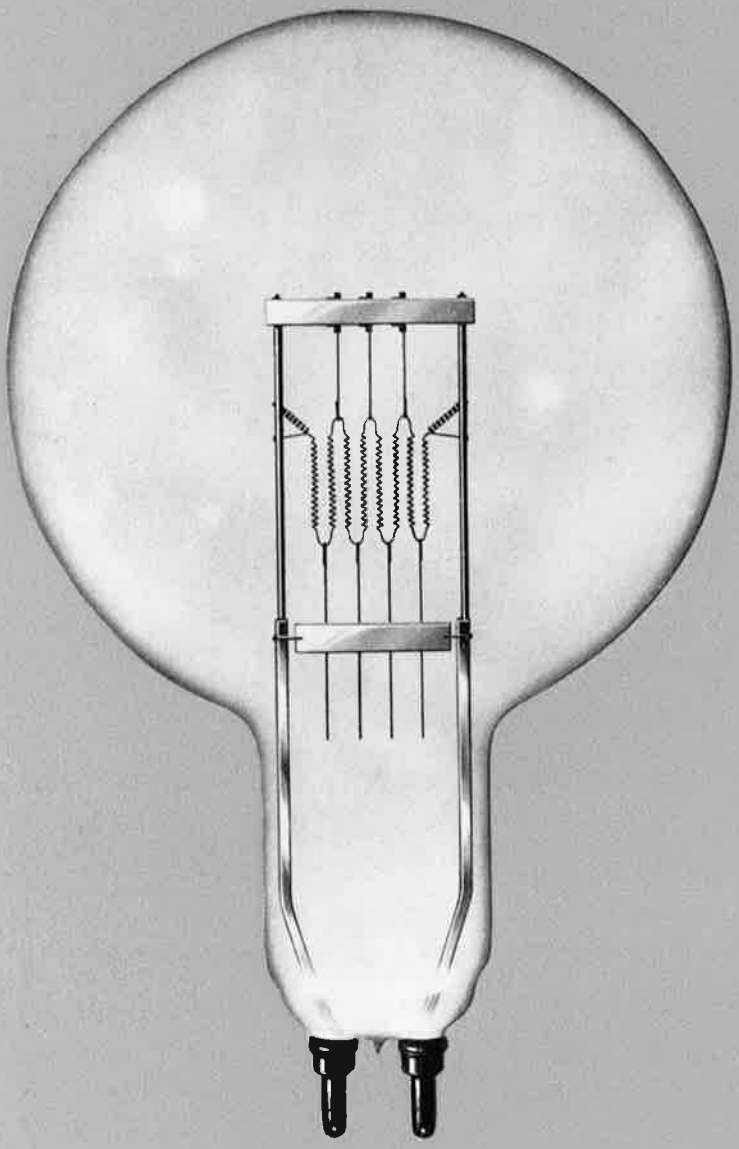
† **Purchase Tax** not chargeable.

Tubular Floodlight Class FL *Must be burned horizontally*

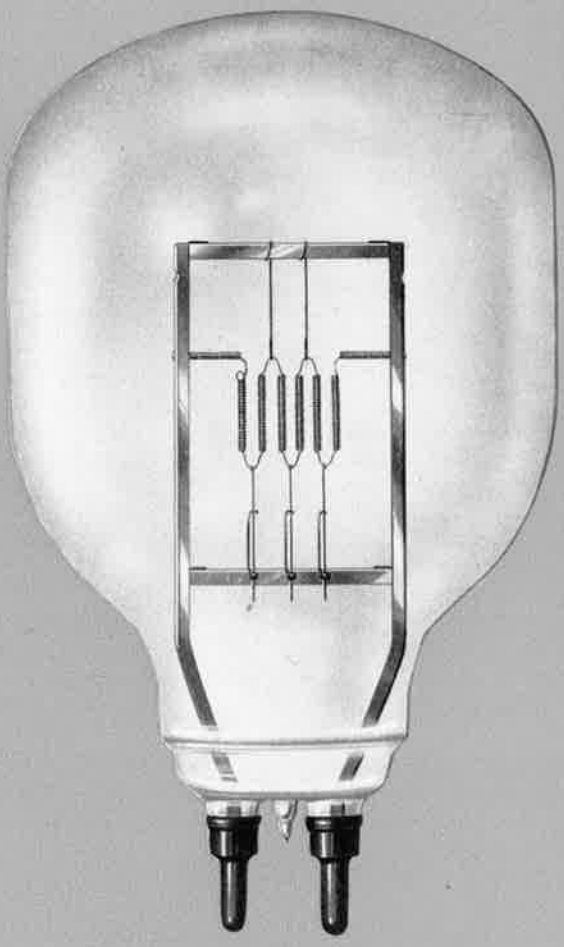
Lamp Ref. No.	Watts	Voltages	Cap	Dimensions		Objective Life Hours	List† Price
				Length mm	Diameter mm		s. d.
FL/1	500	230, 240, 250	G.E.S.	355±10	90±2	1000	65 0
FL/2	1000			390±10	90±2	1000	70 0

† **Purchase Tax** not chargeable.

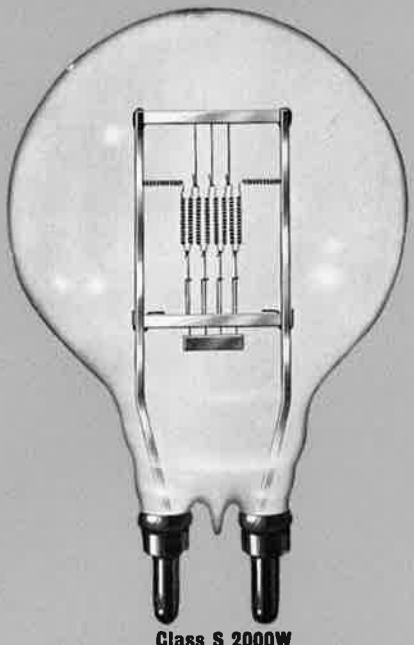
Photographic Studio Lamps



Class CP 10,000W

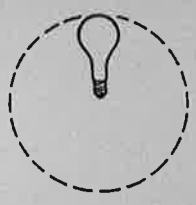


Class S 5000W

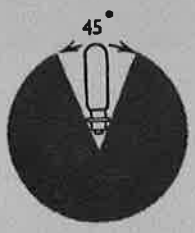


Class S 2000W

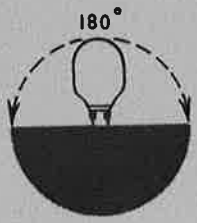
Burning Positions



Any
CP/1, CP/2,
CP/3, CP/4



Cap-down
CP/8, CP/11



Cap-down
CP/12, CP/13
CP/14, CP/15
& Class S

Studio

All studio lamps supplied by this company fully meet the exacting requirements of film production whether sound or silent, in black and white, or in colour. They are silent in operation. Their light is definite and constant in colour, bringing out the full possibilities of the various film emulsions. They have concentrated light sources of high intrinsic brilliancy, giving the powerful light concentration so necessary for efficient spotlight work, and their absolute reliability has resulted in their adoption almost exclusively by the British film industry.

Studio Lamps Class CP

Lamp Ref. No.	Watts	Cap	Finish	Dimensions			Average Effective Life		List† Price
				Length mm	Diameter mm	L.C.L. mm	at 115 volts	at 230, 240, 250 volts	£ s. d.
Colour Photography—For use with colour film at 3200°K. Voltages 115, 230, 240, 250									
CP/ 1	275	B.C. or E.S.	Pearl	105±3·5	60±1	80±3	5 to 8	5 to 8	**2 9**
CP/ 2	500	B.C. or E.S.	Pearl	160±4·5	80±1	120±3·5	25	15	**7 0**
CP/ 8	500	Prefocus	Clear	133±7	64±2	55·5±0·5	30	15	**1 13 0**
CP/11	750	Prefocus	Clear	133±7	64±2	55·5±0·5	30	20	**3 10 0**
CP/ 3	1000	G.E.S.	Pearl	300±9	150±1·5	225±8	30	20	**18 0**
CP/ 4	1500	G.E.S.	Pearl	335±9	170±1·5	250±8	50	25	**1 4 6**
CP/12	2000	Bi-post	Clear	232±6	152±2	127±2	50	50	**7 10 0**
CP/13	5000	Bi-post	Clear	335±6	203±2	165±2	75	75	**20 0 0**
CP/14	10,000	Bi-post	Clear	490 max.	300±2	254±2	100	100	**38 0 0**
CP/15	20,000	Special	Clear	693±10	380±5	420±10	100	100	**90 0 0**

Studio Lamps Class S

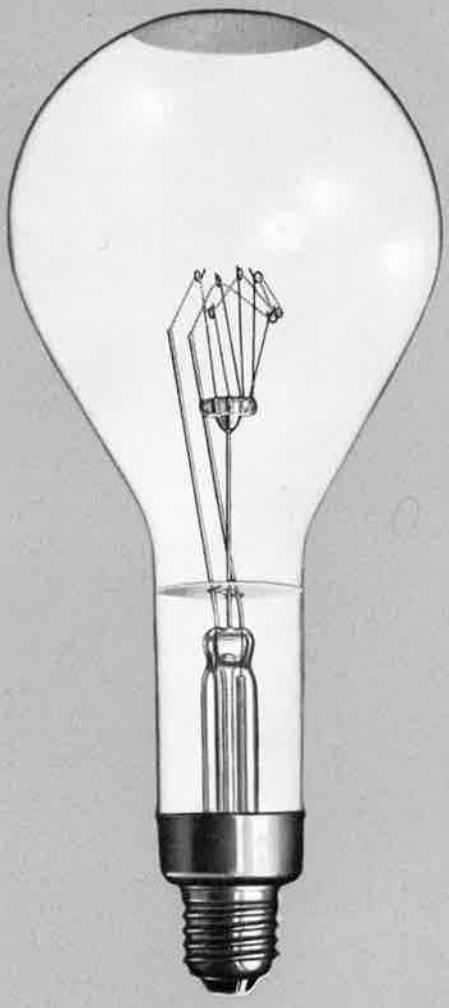
Lamp Ref. No.	Watts	Cap	Dimensions			Objective Life Hours	List† Price
			Length mm	Diameter mm	L.C.L. mm		£ s. d.
Suitable for 'Black and White' reproduction.						**Voltages 115, 230, 240, 250**	
S/4	**1000**	Bi-post	232±6	152·5±2	127±2	100	**6 10 0**
S/1	**2000**	Bi-post	232±6	152·5±2	127±2	100	**7 10 0**
S/2	**5000**	Bi-post	335±6	203±2	165±2	100	**20 0 0**

† **Purchase Tax** not chargeable.

Photographic Flood & Enlarger

Reflector Photospot

Enlarger
Internally Coated White



Enlarger
2" Spot-frosted

Photographic Pearl

Flood and Enlarger

Photoflood and Photographic Pearl lamps illuminate the subject with evenly distributed brilliance; the 275W B.C. lamp is fitted with fuses for use in ordinary household sockets. The 500W Photographic Pearl lamp is available with the ever popular round bulb.

The range of enlarger lamps include the Internally Coated White lamps which give a bright well-diffused light. The high wattage spot-frosted has a clear bulb with the filament obscured by a small circle of frosting.

Reflector Photospot and Photoflood

These lamps have been designed to meet the requirements of photographers who specialize in colour photography and their colour temperature is guaranteed.

The Photospot gives a narrow concentrated beam of light whereas the Photoflood gives an even well dispersed beam.

Photoflood Pearl

Lamp Ref. No.	Watts	Voltages	Cap	Dimensions		Objective Life Hours	List† Price
				Length mm	Diam. mm		s. d.
PP/1	275	100/110, 200/210, 220/230, 240/250	B.C. or E.S.	105±3·5	60±1	2	2 9
PP/2	500	100/110, 200/210, 220/230, 240/250	B.C. or E.S.	160	80	10	7 0

† **Purchase Tax** not chargeable.

Photographic Pearl

Lamp Ref. No.	Watts	Voltages	Cap	Dimensions		Objective Life Hours	List† Price
				Length mm	Diam. mm		s. d.
—	500	110, 210, 230, 250	E.S.	175	100	100	22 0

† **Purchase Tax** not chargeable.

Enlarger Lamps

Lamp Ref. No.	Watts	Voltages	Cap	Dimensions		Objective Life Hours	List† Price
				Length mm	Diam. mm		s. d.
Photographic Enlarger (Pearl)							
—	100	24	E.S.	126·5±3·5	68±1	100	13 9*
Photographic Enlarger (Internally Coated White)							
—	150	110, 210, 230, 240, 250	B.C. or E.S.	126·5±3·5	68±1	100	4 3*
Photographic Enlarger (2 in. Spot Frosted)							
—	400	110, 210, 230, 250	E.S.	253	110	100	27 6†

* **Purchase Tax** must be added to the prices of these lamps. For the exact amount of purchase tax to be added, see TABLE A on the inside back cover.

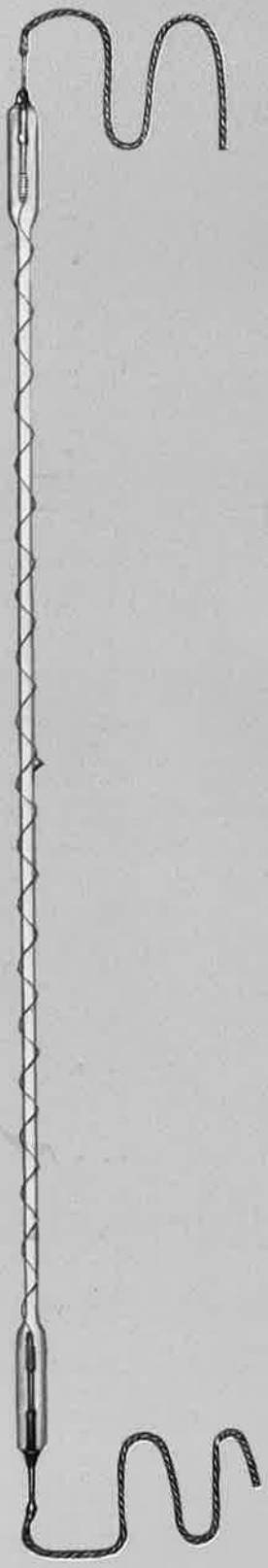
† **Purchase Tax** not chargeable.

Reflector Photospot and Photoflood *For use with colour film at 3250°K*

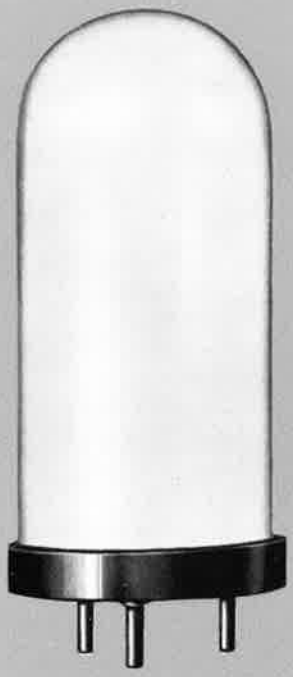
Lamp Ref. No.	Watts	Voltages	Cap	Dimensions		Objective Life Hours	List† Price
				Length mm	Diam. mm		s. d.
RF1	275	230, 240, 250	B.C.	130·5±3	95±1	5 to 8	10 6
RS2	500	115, 230, 240	E.S.	178±5	125±1	25	22 0
RF2	500	115, 230, 240	E.S.	178±5	125±1	25	22 0

† **Purchase Tax** not chargeable.

Photo-Xenon

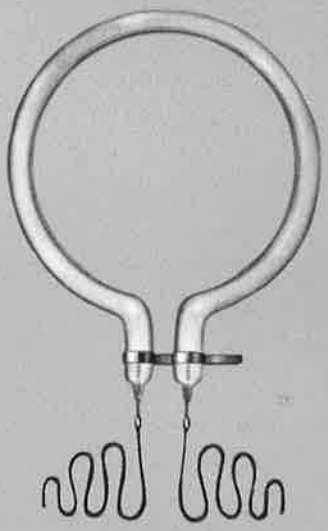


FA 23

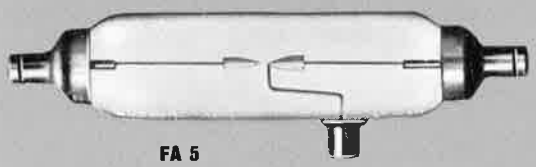


FA 1 & FA 21

FA 2 & FA 2S



FA 4 & FA 15



FA 5

FA 6

FA 7, FA 7S & FA 9

FA7/S1

FA 10 & FA 12

FA 14

FA 25 & FA 27

FA 26

FA 1. A high-power flash tube for studio use. Provision is made to incorporate a modelling lamp within the arc tube jacket.

FA 2. A flash tube of high output, used and specially suitable for studio and professional units.

FA 2S. Designed specially for stroboscopic applications giving very stable operation with high efficiency over a wide range of frequency.

FA 4. A circular type flash tube suitable for mounting round the camera lens or objective. For specialized photography such as in photographing deep cavities, etc.

FA 5. A compact source flash tube which may also be operated to give a steady source of light to enable an optical system to be adjusted. The tube will operate from a condenser discharge or alternatively it may be pulsed direct from the supply mains. It has many scientific applications.

FA 6. One of the most popular flash tubes, it is widely used in many of the portable flash units today, and is suitable for the amateur.

FA 7. This tube gives efficient light output over the range of 100-200 watt seconds.

FA 7S. A lamp for stroboscopic applications.

FA7/S1. A lamp for stroboscopic application with a 10 × 9 mm top trigger contact.

FA 9. A tube suitable for the larger portable flash units. It has a high efficiency when operated at 100-200 watt-seconds.

FA 10 and FA 12. Designed especially for the amateur, these tubes have low operating voltage.

FA 14. Suitable for studio use, this tube has provision for a modelling light.

FA 15. Similar in design and applications as **FA 4** this tube has an operating voltage of 1000.

FA 21. Similar to **FA 1** and also having provision for a modelling lamp, this tube has an operating voltage of 1000.

FA 23. A bare quartz lamp suitable for use with photo-chemical processes.

FA 25. A tube for low voltage amateur work and professional portable equipment. It has integral pin construction.

FA 26. A high power studio lamp with a quartz spiral dissipating 4000 joules and having provision for a modelling lamp.

FA 27. Tubes of the integral base construction of **FA 10** and **FA 12.**

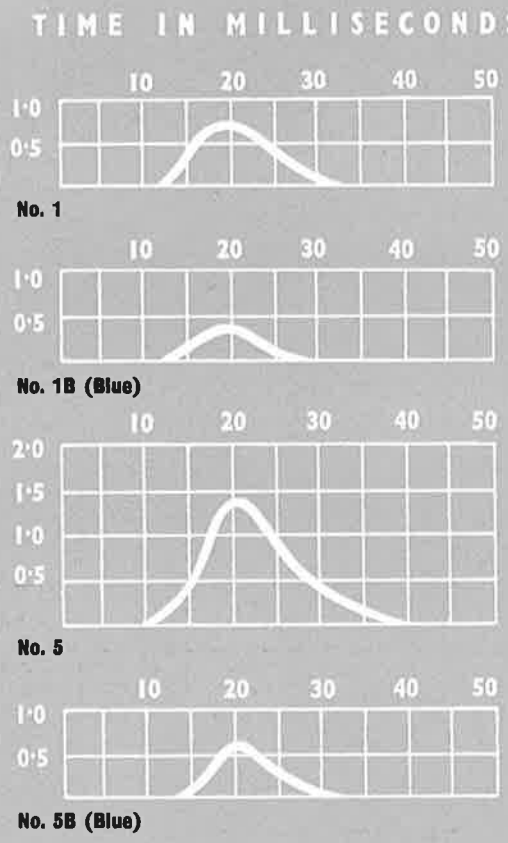
FA 29 (Not Illustrated). A bare quartz helix flash tube for special work in colour film studios.

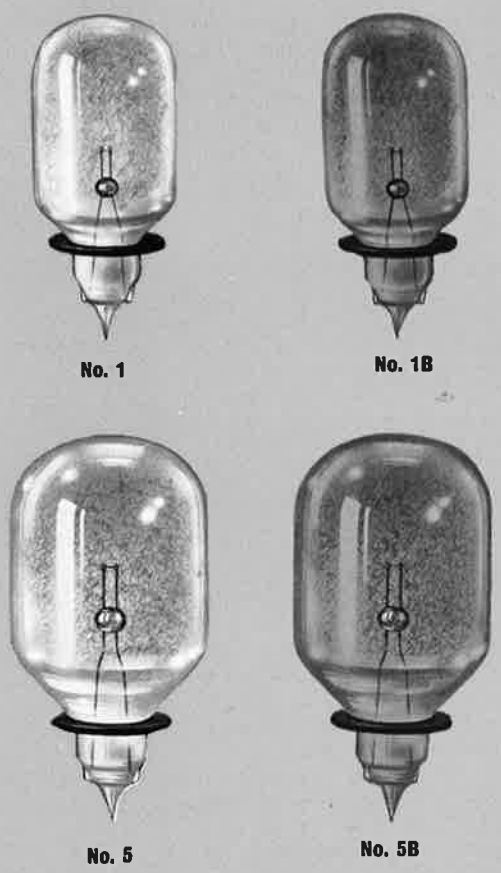
Xenon Electronic Flash Tubes

No.	Dimens. mm		Max. Rating	Approx. Minimum Trigger Voltage kV	Operating Voltage		*Rate of Flash at Maximum Dissipation	Flash Duration (micro-sec.)		Capacitance in μf at normal operating volts	Base	List Price ‡
	Length Excl'ng Pins	Diam. of Glass	watts × sec.		Max.	Min.		Above 1/10 peak	Above 1/2 peak			£ s. d.
FA 1	150±7	66±4	1000	8	2700	2000	1 in 10 sec.	1250	600	320	3-pin Special	**10 10 0**
FA 2	90±5	46±2	500	8	2700	2000	1 in 10 sec.	870	300	160	3-pin 5-amp	**5 10 0**
FA 2s	90±5	46±2	—	8	2500	1500	300 per sec.	—	—	—	3-pin 5-amp	**7 10 0**
FA 4	70 mm inside dia. of circle		200	3	2700	2000	1 in 10 sec.	294	127	64	Flexible Leads	**4 0 0**
FA 5	148±4 (overall)	32 max.	150	10	2000	1000	1 in 10 sec.	250	65	—	0·359″ Ferrules	**12 10 0**
FA 6	70±2	31±2	100	3	1100	800	1 in 10 sec.	410†	180†	200	UX 4-pin	**4 15 0**
FA 7	80±2	31±2	100-200	3	2700	2000	1 in 10 sec.	800	290	64	UX 4-pin	**5 10 0**
FA 7s	80±2	31±2	—	3	2500	1500	300 per sec.	—	—	—	UX 4-pin	**6 0 0**
FA7/S1	90±2	31±2	—	3	2500	1500	300 per sec.	—	—	—	UX 4-pin with top trigger contact	**6 10 0**
FA 9	80±2	31±2	200	3·5	1100	800	1 in 10 sec.	2000†	770†	400	UX 4-pin	**5 10 0**
FA 10	50±2 (overall)	—	100	3·5	270	200	1 in 10 sec.	2620†	865†	2750	2-pin 2-amp	**2 15 0**
FA 12	50±2 (overall)	—	50	3·5	200	145	1 in 10 sec.	3200†	1200†	3100	2-pin 2-amp	**2 15 0**
FA 14	92±5	66±4	200	3·5	1100	800	1 in 10 sec.	2000†	770†	400	3-pin Special	**7 0 0**
FA 15	70 mm inside diameter of circle		400	3·5	1100	800	1 in 10 sec.	2600†	790†	800	Flexible Leads	**4 5 0**
FA 21	150±7	66±4	1600	8	1100	800	1 in 10 sec.	8000†	2400†	3200	3-pin Special	**12 10 0**
FA 23	550 max. Light Length 460		2500	8	2700	2000	1 in 10 sec.	—	—	800	Flexible Leads	**21 0 0**
FA 25	62±2	—	100	3·5	1100	800	1 in 10 sec.	410†	180†	200	2-pin 2-amp	**3 5 0**
FA 26	150±7	66±4	4000	8	2700	2000	1 in 10 sec.	—	—	1280	3-pin Special	**23 0 0**
FA 27	62±2	—	100	3·5	500	400	1 in 10 sec.	—	—	800	2-pin 2-amp	**3 5 0**
FA 29	203±6	—	15000	8	2700	2500	1 in 30 sec.	—	—	—	Special Flange	**90 0 0**

* Tested to 5000 flashes for single flash operation; stroboscopic tubes have been tested to 100 hours.
† With electrolytic capacitors.
‡ **Purchase Tax** not chargeable.

The vertical representation is light intensity in millions of lumens





Exposure guide numbers—Colour Film
The following tables show the guide numbers indicating distance/aperture relation when using Mazda Photoflash bulbs with colour film.

Colour Photography

Open Flash or 1/25 sec. Colour Film	Clear Flash Bulbs				Blue Flash Bulbs	
	No. 1		No. 5		No. 1B	No. 5B
	Filter Code A	No Filter Req'd	Filter Code B	No Filter Req'd	No Filter Req'd	No Filter Req'd
Agfacolor Reversal CT18 ..	—	—	—	—	65	100
Agfacolor Reversal CK ..	40	—	65	—	—	—
Dufaycolor	—	—	—	—	30	50
Ektachrome E1-D ..	—	—	—	—	30	50
Ektachrome -B ..	25	—	50	—	—	—
Ektachrome E2-D ..	—	—	—	—	50	80
Ektachrome -F ..	—	60	—	100	—	—
Ferraniacolor	—	—	—	—	40	65
Gevacolor R5	—	—	—	—	65	100
Ilford Colour D	—	—	—	—	32	50
Ilford Colour F	—	40	—	65	—	—
Kodachrome A	30	—	50	—	—	—
Kodachrome D	—	—	—	—	30	50
Super Anscochrome D ..	—	—	—	—	100	160
Super Anscochrome 3200	140	—	220	—	—	—
Raycolor D	—	—	—	—	40	65
Raycolor A	40	—	65	—	—	—

Filter Code A
One Kodak Wratten 81C or Ilford 171.

Comparative Films Speeds

A.S.A. and Weston III	B.S.I. (B.S. log)	Weston Master II & early models	European Scheiner	Din.
3	16	2·5	17	6/10
4	17	3	18	7/10
5	18	4	19	8/10
6	19	5	20	9/10
8	20	6	21	10/10
10	21	8	22	11/10
12	22	10	23	12/10
16	23	12	24	13/10
20	24	16	25	14/10
25	25	20	26	15/10
32	26	24	27	16/10
40	27	32	28	17/10
50	28	40	29	18/10
64	29	50	30	19/10
80	30	64	31	20/10
100	31	80	32	21/10
125	32	100	33	22/10
160	33	125	34	23/10
200	34	160	35	24/10
250	35	200	36	25/10
320	36	250	37	26/10
400	37	320	38	27/10
500	38	400	39	28/10
650	39	500	40	29/10
800	40	650	41	30/10
1000	41	800	42	31/10

Adaptor-ejector
Mazda capless photoflash bulbs (No. 1 and No. 5), dispense with the usual metal cap and are designed to fit into flash guns to take the capless bulbs.
Capless photoflash bulbs are made in Germany.

Open Flash Technique
Existing domestic lighting should not interfere with exposure providing it is not too bright. Arrange your subject at the required distance and set the aperture in accordance with guide numbers shown in the table or on the carton.

1. Insert photoflash bulb into holder.
2. Focus camera.
3. Set camera shutter to 'Time' (T) or 'Bulb' (B).
4. Open shutter.
5. Fire flash-gun.
6. Close shutter.

Synchronized Flash
Synchronized Flash differs from open flash in that the entire process is automatic. Only one operation is required to open the shutter, fire the photoflash bulb and close the shutter. However, you should ascertain the type of synchronization with which your camera is equipped, and use only the photoflash bulbs recommended.

1. Connect the flash-gun to the camera.
2. Insert photoflash bulb into holder.
3. Set shutter speed.
4. Set aperture.
5. Focus camera.
6. If necessary, cock shutter.
7. Trip shutter to fire photoflash bulb.
8. Wind on film and re-set for next picture.

Note: With a synchronized flash-gun you do not need to reduce the room lighting, as the shutter is not open long enough for it to affect the film.

Photoflash Characteristics

	No. 1	No. 1B	No. 5	No. 5B
Peak Lumens, Million Lumens	0·6	0·3	1·4	0·7
Time to peak, Milliseconds	18	18	20	20
Time to half peak, Milliseconds	13	13	12	12
Duration at half peak, Milliseconds	10	10	12	12
Light Output, Lumen Seconds	6500	4000	18,000	10,000
Colour Temperature, °K	4000	6000	4000	6000
Operating Voltage	3–42	3–42	3–42	3–42
Length of Lamp, mm	51	51	62	62
Diameter of Lamp, mm	23	23	31	31
Speed Class	M	M	M	M
Cap	Capless	Capless	Capless	Capless
List Price each†	**8d.**	**8d.**	**9d.**	**10d.**

† **Purchase Tax** not chargeable.

Exposure Guide Numbers

In the table below will be found the guide number to suit a given film speed using any particular Mazda clear photoflash bulb. The guide number is the f. number or 'stop' multiplied by the distance in feet between photoflash bulb and subject. These guide numbers hold good providing—

1. A 6″ diameter reflector is used.
2. Exposure is made in a fairly large room or hall with medium coloured walls and furnishings giving a moderate degree of reflected light.
3. The subject is of medium tone or colour.
4. Frontal-lighting conditions exist, with the photoflash bulb in proximity to the camera/subject axis.

Note: For pictures taken in a small room with light coloured walls, reduce the lens aperture by one stop. For large and dark interiors or out of doors, use one stop larger.

Guide Numbers *Clear Bulbs—Monochrome Film*

Photoflash Bulb	Shutter Speed	Tungsten Film Speed BS 22-24°	BS 25-27°	BS 28-30°	BS 31-33°	BS 34-36°
No. 1	1/25 th second	60	80	120	160	240
	1/30 th ,,	60	80	120	160	240
	1/50 th ,,	40	60	80	120	160
	1/100th ,,	40	60	80	120	160
	1/125th ,,	40	60	80	120	160
	1/200th ,,	30	40	60	80	120
	1/250th ,,	30	40	60	80	120
	1/300th ,,	30	40	60	80	120
	1/500th ,,	20	30	40	60	80
No. 5	1/25 th second	100	130	200	260	400
	1/30 th ,,	100	130	200	260	400
	1/50 th ,,	65	100	130	200	260
	1/100th ,,	65	100	130	200	260
	1/125th ,,	65	100	130	200	260
	1/200th ,,	50	65	100	130	200
	1/250th ,,	50	65	100	130	200
	1/300th ,,	50	65	100	130	200
	1/500th ,,	30	50	65	100	130

Guide Numbers *Blue Lacquered Bulbs*

Shutter Speed	Film Speed BS 21°–22° No. 1B	BS 21°–22° No. 5B	BS 23°–24° No. 1B	BS 23°–24° No. 5B	BS 25°–26° No. 1B	BS 25°–26° No. 5B	BS 27°–28° No. 1B	BS 27°–28° No. 5B
1/25th–1/30th sec.	30	50	40	65	50	80	65	100
1/50th–1/125th sec.	25	40	30	50	40	64	50	80
1/200th–1/300th sec.	—	25	—	40	25	45	40	50
1/400th–1/500th sec.	—	—	—	25	—	30	25	40

Mazda Projector Lamps for Cine Projectors

ACE	VOLTS	WATTS	CAP	REF. NO.
Specto Standard	50	200	MPF	A1/13
Specto Educational	50	250	MPF	A1/5
Gem	12	100	Pathé	A1/156
ACTINA				
Ditmar 'DUO'	200/250	300	MPF	A1/154
AGFA				
Movector 'Billy', SS.50	100/115	100	SCC	A1/21
Movector	100	200	SCC	A1/26
SS. 50	100	100	SCC	A1/21
SS.100	100	200	SCC	A1/26
Record	110	20	SCC	A1/2
A, AS	30	100	MPF	A1/3
AL	50	250	MPF	A1/5
Movector 8	12	100	SCC	A1/21
ALEF				
—	25	25	SCC	A1/165
AMPRO				
A	110	500	MPF	A1/7
J, JD, JS	110, 115	500	MPF	A1/7
K, KD, KS, NC, UC	110, 115	750	MPF	A1/9
YC	110	1000	MPF	A1/59
Imperial	110	750	MPF	A1/9
Amprosound L, M, N, U	115	500	MPF	A1/7
Amprosound, L, N, U	115	750	MPF	A1/9
Amprosound UA, UAB, XA, Y, YA, YSA	115	500	MPF	A1/7
Amprosound UA, UAB, XA, Y, YA, YSA	115	750	MPF	A1/9
Amprosound, XA, Y, YA, YSA	100	1000	MPF	A1/59
Premier 10	110	750	MPF	A1/9
Premier 20	110	750	MPF	A1/9
Premier 20	110	1000	MPF	A1/59
Repeater	110	500	MPF	A1/7
Repeater	110	750	MPF	A1/9
Stylist	110	750	MPF	A1/9
Stylist	110	1000	MPF	A1/59
Educational	200/250	500	MPF	A1/7
New Educational	200/250	500	MPF	A1/7
New Educational	200/250	750	MPF	A1/9
New Educational	200/250	1000	MPF	A1/59
Major Mk. I, II, III, IV	110	750	MPF	A1/9
Major Mk. I, II, III, IV	110	1000	MPF	A1/59
AUTOCRAT				
One	50	250	MPF	A1/15
ASTOR				
—	110	500	MPF	A1/7
BAUR				
Pantalux	110	500	MPF	A1/7
T10	12	100	SCC	A1/21
BEAM-ECHO				
Danson, 540, 540M	115	500	MPF	A1/7
Danson, 540, 540M	115	750	MPF	A1/9
Viking	200/250	750	MPF	A1/9

BELL & HOWELL	VOLTS	WATTS	CAP	REF. NO.
57A, 57B, 57C, 57D, 57E, 57F, 57G and 57H	50	250	BH38	A1/85
57M, 57N	110	300	BH46	A1/86
57JL, 57J	110	400	BH38	A1/87
57JS, 57LS, 57JJ	110	750	BH46	A1/53
57R, 57S	110	500	BH38	A1/47
57RT, 57ST, 57RU, 57SU	110	750	BH46	A1/53
129A, 129B, 129C, 129D, 129E	110	750	BH46	A1/53
130A, B, C, D, E, F, G	100	1000	BH46	A1/92
122B	110	400	BH38	A1/87
Filmomaster	110	750	BH46	A1/53
Diplomat	110	750	BH46	A1/53
Showmaster	110	750	BH46	A1/53
Vocational	110	500	BH38	A1/47
Auditorium	100	1000	BH46	A1/92
Filmosound 138, 120D, 120K	110	750	BH46	A1/53
Filmosound 120A, B, C	110	500	BH46	A1/160
Filmosound 130	100	1000	BH46	A1/92
Filmosound Commercial, Academy	110	750	BH46	A1/53
Filmosound Utility, Victory	110	750	BH46	A1/53
Filmosound Master	110	750	BH46	A1/53
Filmosound Auditorium	100	1000	BH46	A1/92
Model 156, 179	110	750	BH46	A1/53
Model 156, 179	110	1000	BH46	A1/91
BTH				
Sound SRB	110	300	MPF	A1/6
301	115	750	MPF	A1/9
401	115	750	MPF	A1/9
450	115	750	MPF	A1/9
451	115	750	MPF	A1/9
452	200/250	750	MPF	A1/9
CARPENTER				
Standard	110	750	MPF	A1/9
Junior	110	750	MPF	A1/9
Deluxe	110	750	MPF	A1/9
Deluxe	110	1000	MPF	A1/59
CORONET				
Model I	40	15	SCC	A1/73
Model II	40	15	SCC	A1/73
Model IIA	115	50	SCC	A1/2
DANSON				
D23	115	300	MPF	A1/6
D23A	115	500	MPF	A1/7
D23A	115	750	MPF	A1/9
540, 540M	115/230	500	MPF	A1/7
540, 540M	115/230	750	MPF	A1/9
101	115/230	750	MPF	A1/9
DEBRIE				
D16 Professional	110	750	ES 3 fin	A1/52
D16 Silent	110	750	ES 3 fin	A1/52
D16 8 watt	110	750	ES 3 fin	A1/52
D16 15 watt	110	750	ES 3 fin	A1/52
D16 Essex	110	750	ES 3 fin	A1/52
D16 25 watt	110	750	ES 3 fin	A1/52

DE VRY	VOLTS	WATTS	CAP	REF. NO.
CS and SS Sound	110/115	500	MPF	A1/7
CS and SS Sound	110/115	750	MPF	A1/9
CS and SS Sound	110/115	1000	MPF	A1/59
D	50	250	MPF	A1/5
DEKKO				
—	50	25	SCC	A1/1
118A, 118B	110	500	MPF	A1/7
118C	110	750	MPF	A1/9
126C, 119C	110	750	MPF	A1/9
119A, 119B	110	500	MPF	A1/7
126A, 126B	110	500	MPF	A1/7
48	115	50	SCC	A1/2
DITMAR				
Duo	200/250	250	MPF	A1/5
Duo	110	500	MPF	A1/7
Duo	110	250	MPF	A1/5
Duo	110	300	MPF	A1/6
Duo	200/250	300	MPF	A1/154
Duo 2960	110, 115	750	MPF	A1/9
DURNOS				
L	115	750	MPF	A1/9
L	115	1000	MPF	A1/59
ENSIGN				
100B	110	100	MPF	A1/4
300B	110	300	MPF	A1/6
Super-Sixteen	50	250	ES	A1/14
Duo Silent	110/115	500	MPF	A1/7
Sound	110/115	750	MPF	A1/9
EUMIG				
P.111	115	250	MPF	A1/5
P.111	200/250	250	MPF	A1/5
P.111	100	300	MPF	A1/6
P.25	200/250	250	MPF	A1/5
P.25	110	400	MPF	A1/39
P.8	12	100	SCC	A1/21
P.26	110	500	MPF	A1/7
G-B BELL & HOWELL				
601	110/115	1000	BH46	A1/53
601	110/115	1000	BH46	A1/91
601 Compact	110/115	750	BH46	A1/53
601 Compact	110/115	1000	BH46	A1/91
602	110/115	750	BH46	A1/53
606 Screenmaster	110	400	BH38	A1/87
606M	110/115	500	BH38	A1/47
606H	200/250	500	BH38	A1/47
613	110/115	750	BH46	A1/53
613M	110/115	750	BH46	A1/53
613H	200/250	750	BH46	A1/53
621	110/115	750	BH46	A1/53
621	110/115	1000	BH46	A1/91
621 Compact	110/115	750	BH46	A1/53
621 Compact	110/115	1000	BH46	A1/91
622	110/115	750	BH46	A1/53
622	110/115	1000	BH46	A1/91
622 Compact	110/115	750	BH46	A1/53
622 Compact	110/115	1000	BH46	A1/91
625	110/115	500	MPF	A1/7
625H	200/250	500	MPF	A1/7
626	200/250	750	BH46	A1/53
626	200/250	1000	BH46	A1/91
630	110/115	750	BH46	A1/53

G-B BELL & HOWELL *—continued*	VOLTS	WATTS	CAP	REF. NO.
630	110/115	1000	BH46	A1/91
640 Filmosound	110	750	BH46	A1/53
640 Filmosound	110	1000	BH46	A1/91
G.B.				
N. Portable	100/110	1000	GES	A1/57
GEBESCOPE				
Model A	50	200	MPF	A1/13
Model A	50	250	MPF	A1/5
Model B	50	200	MPF	A1/13
Model B	50	250	MPF	A1/5
Model C	50	250	MPF	A1/5
Model F-16 Silent	115	500	MPF	A1/7
Model H16	110	750	BH46	A1/53
Model L516	110	500	3 pin BC	A1/46
GUILDHALL TRADING CO.				
Guild-Arc	110	500	MPF	A1/7
Guild-Arc	110	750	MPF	A1/9
HOLMES				
Sound	110/115	500	MPF	A1/7
Sound	110/115	750	MPF	A1/9
Sound	110	1000	MPF	A1/59
Portable	110	1000	Mog Pref	A1/11
KEYSTONE				
A72	110	300	MPF	A1/6
A75	110	500	MPF	A1/7
A81	110	750	MPF	A1/9
L8	110	300	MPF	A1/6
L8	110	500	MPF	A1/7
J8	110	300	MPF	A1/6
A82	115	750	MPF	A1/9
C18	115	300	SCC	A1/37
K160	115	750	MPF	A1/9
KODAK				
A	50	200	ES	A1/12
A	50	200	MPF	A1/13
A	50	250	MPF	A1/5
AM5	115	400	MPF	A1/39
AVO71	115	400	MPF	A1/39
AV151	115	500	MPF	A1/7
AV151E	115	300	MPF	A1/6
B (Self thread)	50	200	MPF	A1/13
B (Self thread)	50	250	MPF	A1/5
B Conversion	50	200	MPF	A1/13
B Conversion	110	400	MPF	A1/39
B Conversion	110	500	MPF	A1/7
C Business Kodascope	115	100	MPF	A1/4
C Business Kodascope	100	300	MPF	A1/6
C Business Kodascope	100	400	MPF	A1/39
Model C	100	400	MPF	A1/39
D	100	300	MPF	A1/6
D	100/110	400	MPF	A1/39
E and EE	110	300	MPF	A1/6
E and EE	110	400	MPF	A1/39
E and EE	110	500	MPF	A1/7
E and EE	110	750	MPF	A1/9
F	115	750	MPF	A1/9
FB	115	750	MPF	A1/9
FB25	115	750	MPF	A1/9
FB40	115	750	MPF	A1/9

Mazda Projector Lamps for Cine Projectors (continued)

KODAK—*continued*	VOLTS	WATTS	CAP	REF. NO.
FS10	115	500	MPF	A1/7
FS10N	115	500	MPF	A1/7
G and GA	110	300	MPF	A1/6
G and GA	110	400	MPF	A1/39
G and GA	110	500	MPF	A1/7
G and GA	110	750	MPF	A1/9
K	50	250	MPF	A1/5
K	100	300	MPF	A1/6
K	110	500	MPF	A1/7
K	110	750	MPF	A1/9
L	100	300	MPF	A1/6
L	100/110	400	MPF	A1/39
L	110	500	MPF	A1/7
L	110	750	MPF	A1/9
S5, 2 and SFA	115	750	MPF	A1/9
S151	115	500	MPF	A1/7
8-20 Universal	110	50	SCC	A1/2
8-20 Universal	110	100	SCC	A1/21
8-25	100	100	SCC	A1/21
8-30	100	100	SCC	A1/21
8-33	110/115	300	MPF	A1/6
8-33	110/115	400	MPF	A1/39
8-33	110/115	500	MPF	A1/7
8-35 Home	100	200	SCC	A1/26
8-40 Home de Luxe	100	200	SCC	A1/26
8-45	100	300	SCC	A1/37
8-46	100	200	SCC	A1/26
8-50	110	200	MPF	A1/13
8-50	110/115	300	MPF	A1/6
8-50R	100	200	MPF	A1/13
8-70, 70A, 70R, 70AR	110/115	300	MPF	A1/6
8-70, 70A, 70R, 70AR	110/115	400	MPF	A1/39
8-70, 70A, 70R, 70AR	110/115	500	MPF	A1/7
8-71	110/115	300	MPF	A1/6
8-71	110/115	400	MPF	A1/39
8-71	110/115	500	MPF	A1/7
8-71	110/115	750	MPF	A1/9
8-71	110/115	1000	MPF	A1/59
8-80	100	300	MPF	A1/6
8-80	110/115	300	MPF	A1/6
8-90, 90A, 90R, 90AR	110/115	300	MPF	A1/6
8-90, 90A, 90R, 90AR	110/115	400	MPF	A1/39
8-90, 90A, 90R, 90AR	110/115	500	MPF	A1/7
8-90, 90A, 90R, 90AR	110/115	750	MPF	A1/9
8-500	115	500	MPF	A1/7
16/10, 16/10R, 16/20	115	300	MPF	A1/6
16/10, 16/10R, 16/20	115	400	MPF	A1/39
16/10, 16/10R, 16/20	115	500	MPF	A1/7
16/10, 16/10R, 16/20	115	750	MPF	A1/9
16/10, 16/10R, 16/20	115	1000	MPF	A1/59
Analyst BP 16R	115	500	MPF	A1/7
Brownie 8-45	100	300	SCC	A1/37
Home 8	100	200	SCC	A1/26
Home Deluxe	100	200	SCC	A1/26
Kodatoy	115	50	SCC	A1/2
Kodatoy	110	100	SCC	A1/21
Pageant	115	1000	MPF	A1/59
Royal BP16	115	750	MPF	A1/9
Special	115	300	MPF	A1/6
Special	115	400	MPF	A1/39
LEECH				
Viking	200/250	500	MPF	A1/7
Viking	200/250	750	MPF	A1/9
MEOPTA				
Atom 8, Almo 8	125	200	SCC	A1/26
Op. 8	12	100	SCC	A1/21
Op. 16	115	500	MPF	A1/7
Meo	210/250	500	MPF	A1/7
Optilux	210/250	500	MPF	A1/7

MICRO TECNICA	VOLTS	WATTS	CAP	REF. NO.
Astro	200/250	500	MPF	A1/7
Comet Son	200/250	500	MPF	A1/7
Micron XXV	200/250	750	MPF	A1/9
Micron 600	115	1000	MPF	A1/59
Supercomet	200/250	500	MPF	A1/7
NORIS				
8, 9·5 mm	200/250	100	MPF	A1/21
Marvel Super	200/250	500	MPF	A1/7
Synchro Super 8	200/250	500	MPF	A1/7
Super 100	12	100	SCC	A1/186
PAILLARD-BOLEX				
C	110	250	MPF	A1/5
CA	110	400	MPF	A1/39
D	110	250	MPF	A1/5
D	110	400	MPF	A1/39
DA	110	400	MPF	A1/39
DUTRA	110	750	MPF	A1/9
DUSBA	110	500	MPF	A1/7
G	110	500	MPF	A1/7
G	110	750	MPF	A1/9
G3 TRIOH	110	500	MPF	A1/7
G16	110	500	MPF	A1/7
G816 DUHOH	110	500	MPF	A1/7
GESBA	110	500	MPF	A1/7
GETRA	110	750	MPF	A1/9
GEHOH	110	500	MPF	A1/7
M8	110	500	MPF	A1/7
M8	110	750	MPF	A1/9
M8/R	110	500	MPF	A1/7
M8/R	110	750	MPF	A1/9
P	110	250	MPF	A1/5
PA	110	400	MPF	A1/39
TRUBA	110	500	MPF	A1/7
TRIRA	110	750	MPF	A1/9
PATHESCOPE				
Ace	20	10	Pathé	A1/72
Ace	20	20	MES	A1/158
Home Movie	20	10	Pathé	A1/72
Imp	20	10	Pathé	A1/72
Kid	20	10	Pathé	A1/72
Marginan	115	500	MPF	A1/7
Mark IX	12	100	SCC	A1/186
MarkXVI	12	100	SCC	A1/186
PSM16	115	1000	MPF	A1/59
Princess	20	10	Pathé	A1/72
Pathe Baby 60-9	110	500	MPF	A1/7
Pax	110	400	MPF	A1/39
PM15	115	1000	MPF	A1/59
200B	110	200	Pathé	A1/81
200B plus	110	200	Pathé	A1/81
SIEMENS				
H8	50	250	MPF	A1/15
Sixteen-Nine	50	250	MPF	A1/15
Standard Model II	50	250	MPF	A1/15
2000	100	1000	MPF	A1/59
S.P.				
Standard	110	300	MPF	A1/6
Wundatone	110	300	MPF	A1/6
SOFIL				
Minor	50	200	SCC	A1/151
Deluxe	50	200	SCC	A1/151

SOUND-SERVICES	VOLTS	WATTS	CAP	REF. NO.
Talkiestrip	200/250	250	MPF	A1/5
Brook	115	750	MPF	A1/9
Brooklet	115	750	MPF	A1/9
SPECTO				
Analysing	50	250	MPF	A1/15
Dual 8-16	30	100	MPF	A1/3
Dual 9·5-16	30	100	MPF	A1/3
Educational AC 9·5	50	250	MPF	A1/15
Educational AC/DC 9·5	115	250	MPF	A1/5
Educational AC 16	50	250	MPF	A1/15
Educational AC/DC 16	115	250	MPF	A1/5
Educational Dual AC 9·5-16	50	250	MPF	A1/15
Educational Dual AC/DC 9·5-16	115	250	MPF	A1/5
Standard 8	110	200	MPF	A1/13
Standard 9·5	30	100	MPF	A1/3
500 8	115	500	MPF	A1/7
500 9·5	115	500	MPF	A1/7
500 16	115	500	MPF	A1/7

SPECTO—*continued*	VOLTS	WATTS	CAP	REF. NO.
500 Dual 9·5-16	115	500	MPF	A1/7
750 16	115	750	MPF	A1/9
VICTOR				
Animataphone	115	500	MPF	A1/7
Animataphone 24B, 25C	110	750	MPF	A1/9
Animataphone 24B, 25C	110	1000	MPF	A1/59
Grey Line	110	750	MPF	A1/9
Grey Line	110	1000	MPF	A1/59
Silent	115	500	MPF	A1/7
Silent	110	750	MPF	A1/9
ZEISS IKON				
Kinox	50	200	MPF	A1/13
Kinox	110	500	MPF	A1/7
Movilux B	110	300	MPF	A1/6
Movilux 8	110	300	MPF	A1/6

Mazda Exciter Lamps for Cine Projectors

AMPRO	VOLTS	AMPS	CAP	REF. NO.
L.M.U.Y, UA, UAB	7	0·2	Pref SCC	G/18
UA, UAB, XA, YA	6	1·0	Pref SCC	G/5
YSA Premier 10	6	1·0	Pref SCC	G/5
Premier 20 Repeater	6	1·0	Pref SCC	G/5
Stylist: Universal	4	0·75	Pref SCC	G/27
Standard: Convertible	4	0·75	Pref SCC	G/27
Major	4	0·75	Pref SCC	G/27
PA2 Amplifier	7	0·2	Pref SCC	G/18
PA3 Amplifier	6	1·0	Perf SCC	G/5
AUTOCRAT				
One	6	1·0	Pref SCC	G/5
BELL & HOWELL				
Filmosound 138	4	0·75	SCC	G/19
120A, B & C, D & K 130	4	0·75	SCC	G/19
Commercial Academy	4	0·75	SCC	G/19
Utility, Victory	4	0·75	SCC	G/19
Master, Auditorium	4	0·75	SCC	G/19
156, 179, 601	4	0·75	SCC	G/19
609	4	0·75	SCC	G/19
185, 202, 285, 621	4	0·75	Pref SCC	G/29
BTH				
301	4	6·0	SCC	G/22
401	4	6·0	SCC	G/22
450	4	6·0	SCC	G/22
451	4	6·0	SCC	G/22
452	4	6·0	SCC	G/22
450X	4	6·0	SCC	G/22
451X	4	6·0	SCC	G/22

CARPENTER	VOLTS	AMPS	CAP	REF. NO.
De Luxe	6	1·0	Pref SCC	G/5
DANSON				
540	6	5·0	SCC	G/30
DURNOS				
16 mm	4	6·0	SCC	G/22
GUILD-ARC				
Oehmichen	8	4·0	SCC	G/8
PATHESCOPE				
Pax Son	6	5·0	Special	G/36
ROSS				
B	10	7·5	SCC	G/14
B1	8	4·0	SCC	G/8
B2 arc	8	4·0	Pref SCC	G/7
Mc arc	8	4·0	Pref SCC	G/7
VICTOR				
Greyline	5	6·5	Pref SCC	G/23

Mazda Lamps for Filmstrip, Slide and Epidiascope Projectors

ADIESCOPE	VOLTS	WATTS	CAP	REF. NO.
Universal	12	100	MPF	A1/4
Universal	110	100	MPF	A1/4
Universal	200/250	100	MPF	A1/4
AGFA				
Karator 'U'	200/250	250	MPF	A1/5
Opticus	210/250	100	MPF	A1/175
Opticus 100	210/250	100	SCC	A1/21 or A1/186
CP35	210/250	150	SCC	A1/167
CP36	210/250	150	SCC	A1/167
ALDIS				
Aldislite	200/250	100	SCC	A1/21
Aldiscope 500	100/115	500	MPF	A1/8
Aldiscope 500	200/250	500	MPF	A1/8
Aldiscope 1000	100/115	1000	MPF	A1/58
Aldiscope 1000	200/250	1000	MPF	A1/58
Aldisette 1	210/250	150	SCC	A1/167
Aldisette 2	210/250	150	SCC	A1/167
Aldisette 3	210/250	300	SCC	A1/37
Aldislite	210/250	100	SCC	A1/21
Belshazzar Epidiascope	100/115	500	MPF	A1/8
Belshazzar Epidiascope	200/250	500	MPF	A1/8
Minor	12	100	MPF	A1/4
Minor	100/115	100	MPF	A1/4
Minor	200/250	100	MPF	A1/4
One Thousand	100/115	1000	MPF	A1/59
One Thousand	200/250	1000	MPF	A1/59
Seven-Fifty	100/115	750	MPF	A1/9
Seven-Fifty	200/250	750	MPF	A1/9
Star 300	100/115	300	MPF	A1/6
Star 300	200/250	300	MPF	A1/154
Star 500	100/115	500	MPF	A1/7
Star 500	200/250	500	MPF	A1/7
5 Star 1000	100/115	500	MPF	A1/7
5 Star 1000	100/115	750	MPF	A1/9
5 Star 1000	100/115	1000	MPF	A1/59
5 Star 1000	200/250	500	MPF	A1/7
5 Star 1000	200/250	750	MPF	A1/9
5 Star 1000	200/250	1000	MPF	A1/59
Super-Six 300	200/250	300	MPF	A1/154
Super-Six 750	200/250	750	MPF	A1/9
Super-Six 1000	200/250	1000	MPF	A1/59
Superaldisette	200/250	500	SCC	A1/176
Two-Fifty	100/115	250	MPF	A1/5
Two-Fifty	200/250	250	MPF	A1/5
500 Epivisor	100/115	500	MPF	A1/8
500 Epivisor	200/250	500	MPF	A1/8
1000 Epivisor	100/115	1000	MPF	A1/58
1000 Epivisor	200/250	1000	MPF	A1/58
Aldis Automatic	200/250	500	Valve Base	A1/180
Aldis Automatic Deluxe	200/250	500	Valve Base	A1/180
AMPLION				
'100'	200/250	100	MPF	A1/4
ARGUS				
Argus '200'	200/250	200	SCC	A1/26
Argus '300'	200/250	300	SCC	A1/37
AVISO				
24 × 38 Slide Projector	100/115	250	MPF	A1/5
24 × 38 Slide Projector	200/250	250	MPF	A1/5
BAKER				
Epidiascope	200/250	500	ES	E/3

CORFIELD	VOLTS	WATTS	CAP	REF. NO.
35mm Slide Projector	100/115	250	MPF	A1/5
35mm Slide Projector	200/250	250	MPF	A1/5
35mm Slide Projector	100/115	300	MPF	A1/6
35mm Slide Projector	200/250	300	MPF	A1/154
35mm Slide Projector	12	100	MPF	A1/4
2 × 2 Projector	100/115	250	MPF	A1/5
2 × 2 Projector	200/250	250	MPF	A1/5
2 × 2 Projector	200/250	300	MPF	A1/154
DUFAY				
Film/Slide	110	100	MPF	A1/4
Film/Slide	110	200	MPF	A1/13
Film/Slide	110	250	MPF	A1/5
F/S (External Transformer)	30	100	MPF	A1/3
F/S (External Transformer)	50	200	MPF	A1/13
F/S (External Transformer)	50	250	MPF	A1/5
E.D.P.				
Filmstrip	12	100	MPF	A1/4
Filmstrip	200/250	100	MPF	A1/4
E.S.A.				
'Amp' Projector	100/115	250	MPF	A1/5
'Amp' Projector	200/250	250	MPF	A1/5
'Amp' Projector	100/115	300	MPF	A1/6
'Amp' Projector	200/250	300	MPF	A1/6
ELITE				
HJ 250	200/250	100	MPF	A1/4
HJ 250	200/250	250	MPF	A1/5
HJ 250	200/250	300	MPF	A1/154
HJ 300	200/250	100	MPF	A1/4
HJ 300	200/250	250	MPF	A1/5
HJ 300	200/250	300	MPF	A1/154
HJ 500	110	500	MPF	A1/7
HJ 750	110	750	MPF	A1/9
Epidiascope	110	750	MPF	A1/9
Epidiascope	110	1000	MPF	A1/59
Epidiascope (Mains)	200/250	750	MPF	A1/9
Epidiascope (Mains)	200/250	1000	MPF	A1/59
Episcope	110	750	MPF	A1/9
Episcope	110	1000	MPF	A1/59
Episcope (Mains)	200/250	750	MPF	A1/9
Episcope (Mains)	200/250	1000	MPF	A1/59
2500/3000W Epidiascope				
2500W—2 @—	110/115	750	MPF	A1/9
and—2 @—	200/250	500	MPF	A1/7
3000W—2 @—	110/115	1000	MPF	A1/59
and—2 @—	200/250	500	MPF	A1/7
G.B. KERSHAW				
Filmslide 38	12	100	MPF	A1/4
Kershaw 250	100/115	250	MPF	A1/5
Kershaw 250	200/250	250	MPF	A1/5
Kershaw 250	100/115	300	MPF	A1/6
Kershaw 250	200/250	300	MPF	A1/154
Roto Film	200/250	250	MPF	A1/5
Hi-Lyte 250	200/250	250	MPF	A1/5
Hi-Lyte 300	200/250	300	MPF	A1/154
Hi-Lyte 707	200/250	300	SCC	A1/183
Hi-Lyte 750	200/250	750	MPF	A1/9
Hi-Lyte 66	200/250	500	MPF	A1/7
Hi-Lyte 66	200/250	750	MPF	A1/9
Daylight	200/250	750	MPF	A1/9

GNOME	VOLTS	WATTS	CAP	REF. NO.
713 Projector 35mm	200/250	300	MPF	A1/154
711 Projector 35mm	200/250	300	MPF	A1/154
716E Projector 35mm	210/250	300	SCC	A1/37
715E One Fifty 35mm	210/250	150	SCC	A1/167
714BE Companion 35mm	210/250	150	SCC	A1/167
717 Alphax 35mm	210/250	300	SCC	A1/37
717 Alphax 35mm	210/250	500*	SCC	A1/176
718 Alphax Minor 35mm	210/250	150	SCC	A1/167
721 Alphax Major 2¼ Sq.	210/250	300	SCC	A1/37
721 Alphax Major 2¼ Sq.	210/250	500*	SCC	A1/176
724 Alphax IV 35 mm	200/250	300	SCC	A1/37
724VB Alphax IV 35 mm	200/250	300	Valve base	A1/178
725 Alphax Baby 35mm	210/250	150	SCC	A1/167
728 Alphax II 150 35mm	210/250	150	SCC	A1/167
729 Alphax III 300 35mm	210/250	300	SCC	A1/37
729 Alphax 111 50035mm	210/250	500†	SCC	A1/176
729VB Alphax III 35 mm	200/250	300	Valve base	A1/178
729VB Alphax III 35 mm	200/250	500*	Valve base	A1/180
HAYNOR				
Palomar	200/250	100	MPF	A1/4
Ortox	200/250	100	SCC	A1/21
Kinderman	210/250	150	SCC	A1/167
Kinderman	210/250	300	SCC	A1/37
HILGER				
Spekker Absorptiometer	12	100	MPF	A1/4
Inspection	12	100	ES	F/14
HUNTER				
Filmstrip	200/250	100	MPF	A1/4
IMAGEE				
Filmslide	100/115	100	MPF	A1/4
Filmslide	200/250	100	MPF	A1/4
ILFORD				
Portable	200/250	100	SCC	A1/21
JOHNSON				
Autolux 300	200/250	300	SCC	A1/183
Autoscope 1	10	75	SCC	G/14
Autoscope 1A	100	300	MPF	A1/6
Autoscope 3	110	500	MPF	A1/7
Autoscope Publicity	110	500	MPF	A1/7
Braun PA1	200/250	150	SCC	A1/167
Diascope Miniature	100/115	100	MPF	A1/4
Diascope Miniature	200/250	100	MPF	A1/4
Diascope Miniature	100/115	250	MPF	A1/5
Diascope Miniature	200/250	250	MPF	A1/5
Diascope Standard	100/115	100	MPF	A1/4
Diascope Standard	200/250	100	MPF	A1/4
Diascope Standard	100/115	250	MPF	A1/5
Diascope Standard	200/250	250	MPF	A1/5
Diascope S 2¼	100/115	100	MPF	A1/4
Diascope S 2¼	200/250	100	MPF	A1/4
Episcope Mk. II	110	500	ES	E/3
Episcope Mk. II	200/250	500	ES	E/3
Fafix	110	50	SCC	A1/2
Fafix II	200/250	100	SCC	A1/21
Fafix 150	200/250	150	SCC	A1/167
Optiscope 12, 12S, and 125	100/115	250	MPF	A1/5
Optiscope 12, 12S, and 125	200/250	250	MPF	A1/5
Optiscope 12, 12S, and 125	100/115	500	MPF	A1/8

JOHNSON —*continued*	VOLTS	WATTS	CAP	REF. NO.
Optiscope 12, 12S, and 125	200/250	500	MPF	A1/8
Optiscope 1000	110	1000	MPF	A1/59
Optiscope 1000	200/250	1000	MPF	A1/59
Optiscope 1000	110	1000	MPF	A1/58
Optiscope 1000	200/250	1000	MPF	A1/58
SS35 Enlarger	10	75	SCC	G/14
Super Zett	100/115	250	MPF	A1/5
Super Zett	200/250	250	MPF	A1/5
Super Zett	110	500	MPF	A1/7
Zett 66 and 66N	200/250	250	MPF	A1/5
Zett 66 and 66N	200/250	300	MPF	A1/154
Zett 150	200/250	100	SCC	A1/21
Zett 150	200/250	150	SCC	A1/167
Zett 250N	200/250	250	MPF	A1/5
Zett 250N	200/250	300	MPF	A1/154
Zett 250N	200/250	500	MPF	A1/7
KODAK				
'Highlux' II	100	200	SCC	A1/26
'Highlux' III	100/115	300	SCC	A1/37
Kodaslide, Model A	100/115	250	MPF	A1/5
Kodaslide, Model A	200/250	250	MPF	A1/5
Kodaslide, Model A	110	200	MPF	A1/13
Kodaslide, Models 1-2	110/115	100	SCC	A1/21
Kodaslide, Model 5	100/115	250	MPF	A1/5
Kodaslide, Model 5	200/250	250	MPF	A1/5
Kodaslide, Model 5	100/115	300	MPF	A1/6
Kodaslide, Model 5	200/250	300	MPF	A1/154
Kodaslide Home Projector	200/250	150	SCC	A1/167
Merit	100/115	100	SCC	A1/21
Master Model	100/115	300	MPF	A1/6
Master Model	100/115	400	MPF	A1/39
Master Model	100/115	500	MPF	A1/7
Master Model	110/115	750	MPF	A1/9
Master Model	110/115	1000	MPF	A1/59
Retina	12/250	100	MPF	A1/4
Retina	100/250	250	MPF	A1/5
Retina	100/115	300	MPF	A1/6
Retina	200/250	300	MPF	A1/6
Spotlight	100/115	500	ES	A1/42
Spotlight	200/250	500	ES	A1/42
Spotlight	110	500	ES	E/3
Spotlight	200/250	500	ES	E/3
LEECH				
'300' Film/Slide	200/250	300	MPF	A1/154
'750' Film/Slide	200/250	750	MPF	A1/9
Enbeeco Profile	200/250	100	MPF	A1/4
Micro Projector	115	100	SBC	A1/121
LEITZ				
VIII C, Prado	115/250	150	MPF	A1/175
VIII C, Prado	100/250	100	MPF	A1/4
VIII S	100/250	100	MPF	A1/4
VIII S	100/250	250	MPF	A1/5
Epidiascope	110	500	ES	E/3
Prado S	200/250	150	MPF	A1/175
Prado S with Blower	200/250	250	MPF	A1/5
Prado S with Blower	200/250	300	MPF	A1/154
M.P.P.				
Film/Slide	200/250	100	MPF	A1/4
NEOKON				
De Luxe	100/250	100	MPF	A1/4
De Luxe	100/250	250	MPF	A1/5
Fireside	100/250	100	MPF	A1/4
Universal	100/250	100	MPF	A1/4
Universal	100/250	250	MPF	A1/5

* 2 Heat Filters must be used.

† 1 Heat Filter must be used.

Mazda Lamps for Filmstrip, Slide and Epidiascope Projectors (continued)

NEWTON	VOLTS	WATTS	CAP	REF. NO.
Adaptable Diascope	100/115	500	MPF	A1/8
Adaptable Diascope	200/250	500	MPF	A1/8
Diascope D	100/115	500	MPF	A1/8
Diascope D	200/250	500	MPF	A1/8
Diascope FS1/500	12	24	SES	F/11
Diascope FS2/1000	50	250	MPF	A1/5
Epidiascope NA	100/115	500	MPF	E/1
Epidiascope NA	200/250	500	MPF	E/1
Epidiascope NA	100/115	750	MPF	A1/9
Epidiascope NA	200/250	750	MPF	A1/9
Epidiascope WF50	100/115	500	MPF	A1/8
Epidiascope WF50	200/250	500	MPF	A1/8
Epidiascope WG50	100/115	500	MPF	A1/8
Epidiascope WG50	200/250	500	MPF	A1/8
Hand Episcope	110	500	MPF	A1/7
Hand Episcope	100/115	500	MPF	A1/8
Hand Episcope	200/250	500	MPF	A1/8
Lightmaster	100/115	250	MPF	A1/5
Lightmaster	200/250	250	MPF	A1/5
Lightmaster	200/250	300	MPF	A1/154
Profile Projector	12	100	ES	F/14
Projection Microscope I	100	100	SBC	A1/121
Projection Microscope II	100	200	SBC	A1/25
Rotavisor	110	500	MPF	A1/7
Wigmore Junior	100/115	250	MPF	A1/5
Wigmore Junior	200/250	250	MPF	A1/5
NORIS				
Junior Filmslide	200/250	150	SCC	A1/167
Companion 2X2	200/250	150	SCC	A1/167
Junior 2X2	200/250	150	SCC	A1/167
Airflow 300	200/250	300	SCC	A1/37
66	200/250	150	SCC	A1/167
PHOTAX				
Diatom. Stereo.	100/115	100	MPF	A1/4
Diatom. Stereo.	200/250	100	MPF	A1/4
Rada	200/250	150	SCC	A1/167
PULLIN				
P.P.I	100/115	100	MPF	A1/4
P.P.I	200/250	100	MPF	A1/4
P.P.I	100/115	250	MPF	A1/5
P.P.I	200/250	250	MPF	A1/5
P.P.II	12	100	MPF	A1/4
P.P.IIA	100/115	250	MPF	A1/5
P.P.IIA	200/250	250	MPF	A1/5

PULLIN —*continued*	VOLTS	WATTS	CAP	REF. NO.
P.P.IIA	115	500	MPF	A1/7
P.P.III	100/115	250	MPF	A1/5
P.P.III	200/250	250	MPF	A1/5
P.P.III	115	500	MPF	A1/7
ROSS ENSIGN LTD.				
Epidiascope Junior	100/115	500	ES	A1/42
Epidiascope Junior	200/250	500	ES	A1/42
Epidiascope Standard	200/250	1000	GES	A1/57
Raymaster Filmslide	200/250	100	MPF	A1/4
SAVAGE & PARSONS				
Eduscope	200/250	250	MPF	A1/5
T250	115	250	MPF	A1/7
Super 500	110	500	MPF	A1/7
SILBER				
EKA 185	200/250	100	SCC	A1/21
P.150	200/250	150	SCC	A1/167
SPECTO				
Colorslide	200/250	150	SCC	A1/167
WATSON				
Film/Slide	100/115	100	MPF	A1/4
Film/Slide	200/250	100	MPF	A1/4
Regulite Microscope	6	30	ES	F/25
School Micro Projector	6	24	SES	F/10
WATSON MANASTY				
Skolascope	10	75	SCC	G/14
ZEISS				
Aviso 24× 38 FS	100/115	250	MPF	A1/5
Aviso 24× 38 FS	200/250	250	MPF	A1/5
Ikolux 500	200/250	500	MPF	A1/7
Ikolux 500	110	500	MPF	A1/7
Ikolux 300	200/250	300	MPF	A1/154
Ikolux 300	110	300	MPF	A1/6

Mazda Lamps for Film, Television and Stage Lighting

ALDIS BROS. LTD.	VOLTS	WATTS	CAP	REF. NO.
Line Light Projector	100/250	1000	GES	FL/2
CREMER				
'500' Spotlight	200/250	500	ES	E/3
G.E.C.				
Z300 Spotlight	115/250	100	SBC	A1/121
Z300 Spotlight	115/250	150	SBC	A1/168
Z122/Z 122R	100/250	500	MPF	A1/8
Z122/Z 122R	230	500	MPF	CP/8
Z122/Z 122R	230/250	500	MPF	T/1
Z122/Z 122R	115/250	500	MPF	E/1
Z143/Z 143R	115/250	2000	Bi-post	CP/12 or S/1
Z151/Z 151R	115/250	5000	Bi-post	CP/13 or S/2
Z241/Z242 Scoop	230	500	MPF	CP/8
Z241/Z242 Scoop	115, 230	1000	GES	CP/3
Z241/Z242 Scoop	115	1500	GES	CP/4
Z243, 6-Light Flood	100/250	275	ES	PP/1
Z243, 6-Light Flood	230/250	275	ES	CP/1
Z5 Photoflood Unit	100/250	500	ES or ES	PP/2 or Ph. Pearl
Z5 Photoflood Unit	250	500	ES	CP/2
Z101 3-Light Unit	100/250	500	ES or ES	PP/2 or Ph./Pearl
Z101 3-Light Unit	230	500	ES	CP/2
KODAK				
Industrial Spotlight	115/250	2000	Bi-post	S/1
'Modelite' Studio Floodlight	115	500	GES	B1/3
Focusing Spotlight (Old Model)	110/250	500	ES	E/3
Focusing Spotlight (Old Model)	100/250	500	ES	A1/142
Focusing Spotlight (New Model)	100/250	500	MPF	A1/8
Counter Balanced Spotlight	110/250	500	MPF	E/4
Counter Balanced Spotlight	100/250	500	MPF	A1/8
'Kodatron' Modelling Light	100/110	100	SBC	A1/121
LINES & JONES LTD.				
Spotlight	200/250	500	ES	E/3
MAJOR EQUIPMENT LTD.				
Float Spotlight (F.S.2)	200/250	100	ES	B1/1
Float Spotlight (F.S.2)	200/250	250	ES	B1/2
250W Spotlight (S.2)	200/250	250	ES	B1/2
500W Spotlight (S.5)	200/250	500	GES	B1/3
1000W Spotlight	200/250	1000	GES	A1/57
1000W Spotlight	200/250	1000	GES	B1/4
2000W Soft Edge Spotlight	200/250	2000	Bi-post	S/1
2000W Double Mirror Spotlight (2K)	200/250	2000	Bi-post	S/1
1000W Double Mirror Spotlight (DMS 10)	200/250	1000	P40	B1/15

MAJOR EQUIPMENT LTD.—*continued*	VOLTS	WATTS	CAP	REF. NO.
1000W Double Mirror Spotlight (DMS 10)	200/250	1000	Mog Pref	A1/11
Acting Area Lantern (AA10)	200/250	500	GES	B1/3
Acting Area Lantern (AA10)	200/250	1000	GES	B1/4
Vignette Spotlight (V.10)	200/250	1000	GES	B1/4
Vignette Spotlight (V.10)	200/250	1000	GES	A1/57
Vignette Spotlight (V.10)	200/250	1000	Mog Pref	A1/11
Horizon Floodlight (H.F.10)	200/250	500	GES	FL/1
Horizon Floodlight (H.F.10)	200/250	1000	GES	FL/2
Effects Projector (E.P.10)	200/250	1000	GES	B1/4
Effects Projector (E.P.10)	200/250	1000	GES	A1/57
Effects Projector (E.P.10)	200/250	1000	Mog Pref	A1/11
MOLE-RICHARDSON				
Midget (Type 404 & 1404)	115	100	SBC	A1/121
Midget (Type 404 & 1404)	115/250	150	SBC	A1/168
Baby Solarspot	100/250	500	MPF	A1/8
Baby Solarspot	115/250	500	Bi-post	S/3
Junior Solarspot	115/250	1000	Bi-post	S/4
Junior Solarspot	115/250	2000	Bi-post	S/1
Junior Solarspot	115	2000	Bi-post	CP/12
Senior Solarspot	115/250	5000	Bi-post	S/2
Senior Solarspot	115	5000	Bi-post	CP/12
'Tenner'	115	10000	Bi-post	CP/14
Rifle Lamp	100/130	1000	Angle Burning GLS	
Rifle Lamp	100/130	1500		
Rifle Lamp	200/260	1000		
Rifle Lamp	200/260	1500		
Broadside Lamp	100/130	500	GES	G.L.S.
Broadside Lamp	200/260	500	GES	G.L.S.
Broadside Lamp	110	1000	GES	G.L.S.
Broadside Lamp (20)	100/130	1000	GES	G.L.S.
Broadside Lamp (20)	200/260	1000	GES	G.L.S.
Broadside Lamp (20)	100/130	1500	GES	G.L.S.
Broadside Lamp (20)	200/260	1500	GES	G.L.S.
Cinelite	100/260	750	GES	G.L.S.
Cinelite	100/250	500	ES	PP/2
Basher	100/250	500	ES	PP/2
Basher	100/250	500	ES	P/Pearl
5-Light Strip	100/250	500	ES	PP/2
5-Light Strip	110/250	500	ES	P/Pearl
STRAND ELECTRIC & ENGINEERING CO. LTD.				
Baby Mirror Spot	100/250	500	MPF	A1/8
Acting Area Flood	200/250	500	GES	B1/3
Acting Area Flood	200/250	1000	GES	B1/4
Float Spotlight	200/250	100	ES	B1/1
Float Spotlight	200/250	250	ES	B1/2
Miniature Spotlight	200/250	250	ES	B1/2
Baby Spotlight	200/250	500	GES	B1/3

STRAND ELECTRIC & ENGINEERING CO. LTD.—*continued*	VOLTS	WATTS	CAP	REF. NO.
Stage Spotlight	200/250	1000	GES	B1/4
Stage Spotlight	200/250	1000	GES	A1/57
Soft Edge Spotlight	200/250	1000	Bi-post	S/4
Soft Edge Spotlight	200/250	2000	Bi-post	S/1
Prefocus Mirror Spotlight	200/250	1000	Mog Pref	A1/11
Mirror Spotlight (73)	200/250	1000	Mog Pref	A1/11
F.O.H. Spotlight	200/250	1000	Mog Pref	A1/11
Pageant Lantern	200/250	1000	GES	A1/57
Pageant Lantern	200/250	1000	GES	B1/4
Optical Effects Projector	200/250	1000	Mog Pref	A1/11
Long Range Spotlight	200/250	1000	Mog Pref	A1/11
Narrow Angle Spotlight	200/250	1000	GES	A1/57
Narrow Angle Spotlight	200/250	1000	GES	B1/4
TRIXALE PHOTO EQUIPMENT LTD.				
100-Watt Spotlights	115	100	SBC	A1/121
250-Watt Spotlights	100/115	250	MPF	A1/5
250-Watt Spotlights	200/250	250	MPF	A1/5
500-Watt Spotlights	100/115	500	MPF	A1/8
500-Watt Spotlights	200/250	500	MPF	A1/8
1000-Watt Spotlights	100/115	1000	Mog Pref	A1/11
1000-Watt Spotlights	200/250	1000	Mog Pref	A1/11

TRIXALE PHOTO EQUIPMENT LTD.—*continued*	VOLTS	WATTS	CAP	REF. NO.
2000-Watt Spotlights	115/250	2000	Bi-post	S/1
2000-Watt Spotlights	115	2000	Bi-post	CP/12
5000-Watt Spotlights	115/250	5000	Bi-post	S/2
5000-Watt Spotlights	115	5000	Bi-post	CP/13
Duplex Floodlights	200/260	500	GES	G.L.S.
Duplex Floodlights	200/260	1000	GES	G.L.S.
Duplex Floodlights	200/260	1500	GES	G.L.S.
Photoflood Reflectors	200/260	275	ES	PP/1
Photoflood Reflectors	200/260	500	ES	PP/2
Photoflood Reflectors	200/260	500	ES	P/Pearl
WALTER CO. LTD. (DE WALCO)				
Baby Focusing Spotlight	100/250	250	ES	B1/2
500-Watt Focusing Spotlight	110/250	500	ES	E/3
1000-Watt Focusing Spotlight	100/250	500	GES	B1/3
1000-Watt Focusing Spotlight	100/250	1000	GES	B1/4
Overhead Batten Focusing Spotlights	100/250	500	GES	B1/3
Overhead Batten Focusing Spotlights	100/250	1000	GES	B1/4
Portable Floodlights	100/250	500	ES	PP/2
Spectrola	100/250	500	GES	B1/3
Spectrola	100/250	1000	GES	B1/4

A.E.I. Lamp and Lighting Company Limited

Melton Road, Leicester

	Telegraphic Address	*Telephone Number*
Headquarters		
Melton Road, Leicester	LAMPLITE	Leicester 61531
Southern Region		
132/135 Long Acre, W.C.2	LAMPLITE RAND	Covent Garden 2831
44 Fitzroy Road, N.W.1	LAMPLITE N.W.I	Primrose 7750
133 Fitzroy Street, Cambridge	LAMPLITE	Cambridge 54370 Cambridge 57366
Culver Street, Colchester	LAMPLITE	Colchester 2843
17 Dorset Place, Hastings	LAMPLITE	Hastings 2734
Bedford House, Bedford Road, Guildford	LAMPLITE	Guildford 67742
220 High Road, Leytonstone, E.11	LAMPLITE E.II	Maryland 4784/5
90 St. Aldates, Oxford	LAMPLITE	Oxford 41871
54 St. Vincent Street, Southsea, Portsmouth	LAMPLITE	Portsmouth 22628
74 Oxford Road, Reading	LAMPLITE	Reading 52700
33 Carlton Crescent, Southampton	LAMPLITE	Southamp'n 27401/2/3
South-West Region		
National Provincial Bank Buildings, West Bute St., Cardiff	LAMPLITE	Cardiff 27495
6 Gwennyth Street, Cathays, Cardiff	SPEDILAMP	Cardiff 20795
63 Wind Street, Swansea	LAMPLITE	Swansea 50430 and 50439
1/5 Trinity Street, Bristol, 2	LAMPLITE	Bristol 51494
Chapel Street, Regent Street, Plymouth	LAMPLITE	Plymouth 61915 and 62467
Scotland and N. Ireland Region		
53 Pitt Street, Glasgow, C.2	LAMPLITE	City 6585/90
Showroom : 74 Waterloo Street, Glasgow, C.2	LAMPLITE	City 6585/90
12 Thistle Street, Edinburgh	LAMPLITE	Caledonian 3888/9
17 Baltic Street, Dundee	LAMPLITE	Dundee 5600
18 Adelaide Street, Belfast	LAMPLITE	Belfast 29368/9

	Telegraphic Address	*Telephone Number*
Midland Region		
26/28 Holloway Head, Birmingham, 1	LAMPLITE	Midland 7921/5
5 Campbell Street, Leicester	LAMPLITE	Granby 291/2
Stoke Road, Stoke-on-Trent	TRENTLITE	Stoke-on-Trent 47537/8
17 Grosvenor Street, Cheltenham	LAMPLITE	Cheltenham 2776
71/73 Lower Parliament Street, Nottingham	LAMPLITE	Nottingham 51115
North-East Region		
46 Wellington Street, Leeds	LAMPLITE	Leeds 31541/4
Short Street, Middlesbrough	LAMPLITE	Middlesbrough 45287/8
Mazda Buildings, Campo Lane, Sheffield	LAMPLITE	Sheffield 23086
24 Northumberland Road, Newcastle	LAMPLITE	Newcastle 26060/2
North-West Region Including Isle of Man		
Trafford Park Road, Trafford Park, Manchester, 17	LAMPLITE TRAFFORD PARK	Trafford Park 3281
Ashburton Road, Trafford Park, Manchester, 17	LAMPLITE TRAFFORD PARK	Trafford Park 3281
27/29 Stanley Street, Liverpool, 1	LAMPLITE	Central 4371/5
40 Parkgate Road, Chester	LAMPLITE	Chester 26411/2
Strand Road Works, Preston	LAMPLITE	Preston 86701
8 Edward Street, Blackpool	LAMPLITE	Blackpool 26936
38 South William Street, Workington	LAMPLITE	Workington 93

Mazda General Lighting Service, Fluorescent and Reflector Lamps

Clear and Pearl G.L.S.

Finish	Watts	Cap	Coiled Coil 200-260 volts in 10-volt steps List Price s. d.	Single Coil 200-260 volts in 10-volt steps List Price s. d.
Clear or Pearl	15	B.C. or E.S.	—	1 6½
	25		—	1 4
	40		1 3½	1 2½
	60		1 3½	1 2½
	75		1 11	1 10
	100		1 6	1 5
	150		—	1 11
Clear	200	E.S. or B.C.	—	2 11½
	300	G.E.S.	—	6 9
	500		—	8 6
	750		—	14 6
	1000		—	16 0
	1500		—	22 6
Pearl	200	E.S. or B.C.	—	2 11½
	300	G.E.S.	—	7 9
	500		—	9 6

† **Purchase Tax** is not chargeable on lamps above 200W. P.T. must be charged in accordance with Table A opposite for all lamps of 200W and below.

Netabulb, Silverlight and Pearl Pink

Finish	Watts	Cap	Coiled Coil 200/210, 220/230, 240, 250 volts List Price s. d.	Single Coil 200/210, 220/230, 240, 250 volts List Price s. d.
Netabulb	60	B.C.	1 5½	—
	100		1 8	—
	150	B.C. or E.S.	2 5	—
	150*		1 11	—
Silverlight	40	B.C. or E.S.	1 5½	—
	60		1 5½	—
	100		1 8	—
	150		—	2 5
	200	E.S. or B.C.	—	4 3
Pearl Pink	60	B.C.	—	1 7½
	100		—	2 1
	150		—	2 9

Purchase Tax is chargeable in accordance with Table A opposite on all the above lamps.
* Pearl only, other Netabulbs have Silverlight finish.

Universal Fluorescent Tubes

Colours Available	Watts and Nominal Length	Cap	List Price s. d.
Warm White, Daylight, Natural, Colour Matching Deluxe Warm White or 3500°K White	80W 5′	Med. Bi-pin	13 0
	80W 5′	B.C.	13 0
	50W 5′†	Med. Bi-pin	17 3
	40W 4′	,, ,,	11 9
	40W 2′	,, ,,	11 0
	30W 3′	,, ,,	11 0
	20W 2′	,, ,,	10 6
	15W 18″	,, ,,	9 9

Purchase Tax is chargeable in accordance with Table A opposite on all the above tubes.
† Natural only.

Mazda Universal Fluorescent Tubes have an external water repellent coating; with the appropriate lamp auxiliary gear they will operate on either switch start or instant start circuits.

Rough Service *(Pearl or Clear)*

Watts	Voltages	Cap	List Price s. d.
40	110, 120, 200/210, 220/230, 240, 250, 260	B.C. or E.S.	2 0
60			2 0
100†			2 9

Purchase Tax is chargeable in accordance with Table A opposite on all Rough Service lamps.
† Pearl only.

Reflector Lamps

Spotlight—Concentrated Beam
Floodlight—Dispersed Beam

Watts	Voltages	Cap	List Price s. d.
75	110, 200, 210, 220, 230, 240, 250	E.S. or B.C.	8 0
75	24	E.S.	12 6
100	200, 210, 220, 230, 240, 250	E.S. or B.C.	8 0
150	110, 200, 210, 220, 230, 240, 250	E.S.	12 0
250	110, 120, 200, 210, 220, 230, 240, 250	E.S.	22 6
500‡	200, 210, 220, 230, 240, 250	G.E.S.	52 6‡

Purchase Tax is chargeable in accordance with Table A opposite on all the above lamps except the [redacted] 500W which are exempt.
‡ Floodlight only.

Table A
Lamps in Groups 1 and 9

LIST PRICE Over		LIST PRICE Not Over		Tax to be added		LIST PRICE Over		LIST PRICE Not Over		Tax to be added	
s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
	8½	1	0		2	12	9	13	3	2	3
1	0	1	3½		2½	13	3	13	9	2	4
1	3½	1	6		3	13	9	14	3	2	5
1	6	1	8½		3½	14	3	14	9	2	6
1	8½	2	0		4	14	9	15	2	2	7
2	0	2	2		4½	15	2	15	8	2	8
2	2	2	6		5	15	8	16	2	2	9
2	6	2	8½		5½	16	2	16	8	2	10
2	8½	2	11		6	16	8	17	2	2	11
2	11	3	2		6½	17	2	17	8	3	0
3	2	3	5		7	17	8	18	1	3	1
3	5	3	8		7½	18	1	18	7	3	2
3	8	3	11		8	18	7	19	1	3	3
3	11	4	2		8½	19	1	19	7	3	4
4	2	4	5		9	19	7	20	0	3	5
4	5	4	8		9½	20	0	20	6	3	6
4	8	4	11		10	20	6	21	0	3	7
4	11	5	2		10½	21	0	21	6	3	8
5	2	5	5		11	21	6	22	0	3	9
5	5	5	8		11½	22	0	22	6	3	10
5	8	5	11	1	0	22	6	23	0	3	11
5	11	6	6	1	1	23	0	23	6	4	0
6	6	6	11	1	2	23	6	24	0	4	1
6	11	7	5	1	3	24	0	24	6	4	2
7	5	7	11	1	4	24	6	25	0	4	3
7	11	8	4	1	5	25	0	26	0	4	5
8	4	8	10	1	6	26	0	27	0	4	7
8	10	9	4	1	7	27	0	28	0	4	9
9	4	9	10	1	8	28	0	29	0	4	11
9	10	10	4	1	9	29	0	30	0	5	1
10	4	10	10	1	10	30	0	31	0	5	3
10	10	11	4	1	11	31	0	32	6	5	6
11	4	11	9	2	0	32	6	34	0	5	9
11	9	12	3	2	1	34	0	35	6	6	0
12	3	12	9	2	2						

Table B
Lamps in Groups 2, 3, 4 and 10

LIST PRICE Over		LIST PRICE Not Over		Tax to be added	
s.	d.	s.	d.	s.	d.
	7		7		1
	9½		9½		1½
1	1	1	1		2
1	4	1	4		2½
1	7½	1	7½		3
1	10	1	10		3½
2	1½	2	1½		4
2	4½	2	4½		4½
2	8	2	8		5
2	11	2	11		5½
3	2	3	2		6
3	5½	3	5½		6½
3	8½	3	8½		7
3	11½	3	11½		7½
4	3	4	3		8
4	6	4	6		8½
4	9	4	9		9
5	0	5	0		9½
5	3	5	3		10
5	7	5	7		10½
5	10	5	10		11
6	1	6	1		11½
6	4	6	4	1	0
6	11	6	11	1	1
7	5	7	5	1	2
8	0	8	0	1	3
8	6	8	6	1	4
9	0	9	0	1	5
9	6	9	6	1	6
		10	0	1	7

To assist retailers selling direct to the public, Tables A and B show the fixed amount which must be added to the list price of lamps which are subject to Purchase Tax. These amounts have been agreed by the Central Price Regulation Committee.

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Lamp and Lighting Co Ltd