



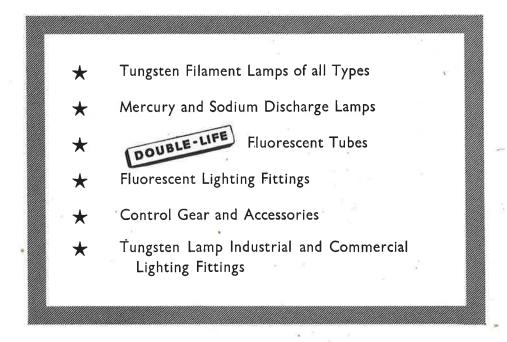
LAMPS and TUBES

ISSUED SEPT 1956

PRICE LIST AND CATALOGUE

EKCO-ENSIGN

products include



Detailed information and literature available on request from any of the addresses below

EKCO-ENSIGN ELECTRIC LTD., 45 ESSEX STREET, STRAND, LONDON, W.C.2

Phone: CITY 8951

Grams: EKCOLIGHT, ESTRAND, LONDON

Cables: EKCOLIGHT, LONDON

Sales Offices, Illuminating Engineering Departments, Showrooms and Depots:

SOUTHERN: (Sales Office, Illuminating Engineering Dept. and Showroom) 45 Essex Street, Strand, London, W.C.2 Tel: City 8951 (Stores, Service Dept. and Trade Counter) Fawe Street, Morris Road, Poplar, London, E.14. NORTHERN: Blackett Street, Manchester, 12

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Issued September 1956

ENGO LAMPS GATALOGUE

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B.S.I. Licence for EKCO Tungsten Filament Lamps

All Ekco lamp factories are licensed to manufacture general service tungsten filament lamps under the British Standard Institution's Certification Scheme.

The Institution is satisfied that the quality control arrangements in each factory ensure that lamps meet the requirements of British Standard 161 - 1956. Independent tests undertaken at the National Physical Laboratory also maintain a constant check on the quality of Ekco lamp production.



List Prices

		List I					
Group I Wattage	$ \begin{array}{c} 200, 210, \\ 240, 250, \end{array} $	200, 210, 220, 230, 240, 250, 260 volts*		10, 115, 0 volts*	6, 12, 25, 35, 50, 55, 60, 65, 75, 150 volts*		
15 or 25	Clear 1/6½	Pearl 1/6½	Clear 1/6 ½	Pearl 1/6½	Clear 1/11	Pearl 1/11	
40 or 60	$1/4\frac{1}{2}$	$1/4\frac{1}{2}$	$1/6\frac{1}{2}$	$1/6\frac{1}{2}$	2/3	2/3	
75	1/10	1/10	2/-	2/-	3/-	3/-	
100	1/10	1/10	2/-	2/-	3/3	3/3	
150	2/7	2/7	2/9	2/9	5/-	5/-	
200	3/9	3/9	4/3	4/3	7/6	7/6	
300	7/6	8/6	8/-	9/-	11/-	12/-	
500	. 10/-	11/-	10/6	11/6	14/-		
750	14/6	16/-	14/6	16/-	19/-	_	
1000	16/-		16/-	160			
1500	22/6		22/6	See 'V	oltage Ranges', page 5		

Stand	ard Voltages: 200	0, 210, 220, 230, 24	0, 250, 260 - B.C.	Pearl bulbs on
Wattage	40w.	60w.	75w.	100w.
List Price	1/9	1/9	$2/1\frac{1}{2}$	2/1½

This lamp is suitable for locations where a small amount of light is required, such as in children's or in invalids' bedrooms. It can also be used in such situations as landings and stairways. Its current consumption is exceedingly small and its life is several thousand hours.

Group I		
Standard Voltage	200/250	List
Wattage	5-8 according to applied voltage	Price
Bulb (Pearl only)	55 mm. (2 3/16 in.) diameter	1/8
Сар	B.C.	

THEATRE BATTEN LAMPS

(Samiloff Type)

Group I			
Wattage	60	100	150
List Price	2/6	2/9	5/-

Standard Voltages: 100, 110, 120, 130, 200, 210, 220, 230, 240, 250

Dimensions for all sizes:

Length: 137 mm. (5 $\frac{5}{8}$ in.). Diam: 75 mm. (2 $\frac{15}{6}$ in.) Light centre length: 120 mm. (4 $\frac{3}{4}$ in.) Standard cap – B.C. (B22d/25 \times 26)

区份(民) SILVERLIGHT & SOFTLIGHT LAMPS



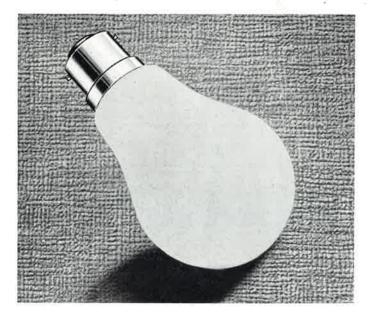
A lamp with an internal silica coating, giving maximum diffusion with minimum loss of light. Eminently suitable for domestic interiors and all places where a soft diffused shadowfree light is required.

Standard Voltages: 200, 210, 220, 230 240, 250, 260. Dimensions as General Service Lamps.

Wattage	40	60	100	150	200
Сар	B.C.	B.C.	B.C.	B.C.	E.S.
List Price	1/71	1/71	2/1	3/1	4/3

Coloured lamps with an internal silica coating are available in 200/220, 230/240, 250/260 volts 15w. and 25w. sizes (both bulbs 55 mm. dia.) in colours as given on page 4.

List Price $1/8\frac{1}{2}$



SORTEIGHT LAMPS

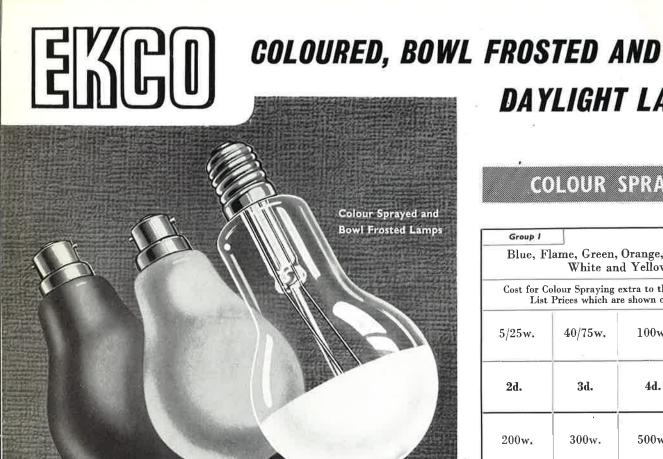
A soft toned lamp for use in the home and all other locations where a restful atmosphere is needed.

Standard Voltages 200/220, 230/240, 250/260

Dimensions as general service lamps.

Group I			
Wattage	60	100	150
Сар	B. C.	B.C.	B.C.
List Price	$1/7\frac{1}{2}$	2/1	3/1

DIMENSIONS AND DATA FOR GENERAL SERVICE LAMPS ARE GIVEN ON PAGE FIVE



DAYLIGHT LAMPS

COLOUR SPRAYED

Group I											
Blue, F	Blue, Flame, Green, Orange, Pink, Red, White and Yellow										
	Cost for Colour Spraying extra to the Clear Lamp List Prices which are shown on page 2										
5/25w.	40/75w.	100w.	150w.								
2d.	3d.	4d.	9d.								
200w.	300w. 500w.		750w.								
1/6	1/9	2/3	2/6								

BOWL FROSTED

Group I	st for Bowl Fr	osting extra to which are sho	o the Clear La wn on page 2	amp List Price	s
200w.	300w.	500w.	750w.	1000w.	1500w.
1/-	1/3	1/6	1/9	2/6	2/6

NATURAL COLOURED CLASS

Dimensions as general service lamps. Cap - B.C. (B22d/25×26) Standard voltages - 100, 110, 120, 130, 200, 210, 220, 230, 240, 250, 260

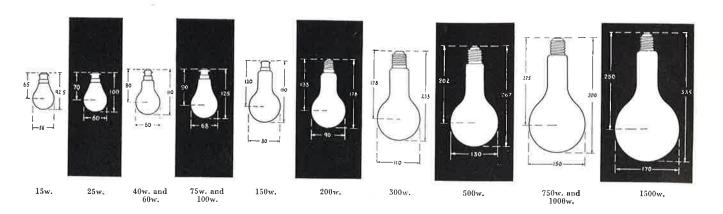
Group I	List Price							
Wattage	Ruby	Green	Amber	Blue				
15 25	6/6	4/-	3/6	3/-				
40 60	6/6	3/9	3/3	2/9				
100	8/-	4/9	4/-	3/3				

Dimensions as general service lamps. The blue glass bulb filters the excess of red in the normal tungsten lamp. The colour of the light approximates to the north sky daylight and is helpful for colour grading. To compensate for the absorption by the blue glass, about double the wattage, which would be required with clear or pearl lamps, should be employed.

Group I	Standard Voltages: 100, 110, 120, 130, 200, 210, 220, 230, 240, 250, 260											
Wattage 15/25 40 60 75 100 150 200 300 50								500				
†Standard	d cap	B.C.	B.C.	B.C.	B.C.	B.C.	B.C. or E.S.	E.S.	G.E.S.	G.E.S.		
List Price		2/8	2/5	2/5	3/3	3/6	5/-	7/9	12/-	15/6		

† B.C. (B22d/25×26), E.S. (E27/25), G.E.S. (E40/45).

DIMENSIONAL OUTLINES OF GENERAL SERVICE LAMPS



GENERAL SERVICE LAMP DATA

LIGHT OUTPUT

Nominal average lumens throughout life at 240v.*

Wattage	25	40	60	75	100	150	200	300	500	750	1000	1500
Single Coil	200	325	575	780	1160	1960	2720	4300	7700	12400	17300	27500
Coiled Coil	·	390	665	880	1260	-	-	-	/ - :	-		-

^{*} These values are intended only to afford a practical guidance for the design of lighting installations. Specific values will be found in the current issue of British Standard 161 - 1956

VOLTAGE RANGES

All general service lamps are available in the standard voltages given at the top of the price list between the limits shown on page 2, except coiled coil silverlight and softlight lamps which are made only for 200-260v. The lamps should preferably be used in the cap-up position, particularly in the larger sizes.

Wattage	15	25	40	60	75	100	150
Standard Voltages	6-260	6-260	6-260	12-260	25-260	35–260	35-260
Wattage	200	300	500	750	1000	1500	
Standard Voltages	60-260	60-260	60–260	60-260	100-260	100-260	

DIMENSIONS

Wattage Standard Cap†		Overall Length		Bulb Dia	Bulb Diameter		Light Centre Length*		Neck Diameter	
-	-	mm.	in.	mm.	in.	mm.	in.	mm.	in.	
15	B.C.	92·5±3·5	$3\frac{5}{8}$	55±1	$2\frac{3}{16}$	65±3	$2\frac{1}{2}$	-	_	
25	B.C.	100 ± 3.5	$3\frac{15}{16}$	60±1	$2\frac{3}{8}$	70±3	$2\frac{3}{4}$	44 max.	$1\frac{3}{4}$	
40 & 60	B.C.	110±3·5	4 5	60±1	$2\frac{3}{8}$	80±3	$3\frac{1}{8}$	44 max.	13	
75 & 100	B.C.	125±3·5	478	68±1	$2\frac{11}{16}$	90±3	$3\frac{1}{2}$	51 max.	2	
150	B.C.	160±4·5	$6\frac{1}{4}$	80±1	3 1 8	120±4	$4\frac{3}{4}$	39±1	1 1	
200	E.S.	173±5•5	6 13	80±1	3 1/8	133±5	51/4	39±1	$1\frac{1}{2}$	
300	G.E.S.	233±7	91/8	110±1·5	4 5	178±6	7	50±1	1 15	
500	G.E.S.	267±8	$10\frac{1}{2}$	130±1·5	5 1	202±7	$7\frac{15}{16}$	52±1	2	
750	G.E.S.	300±9	113	150±1·5	5 7	225 ± 8	8 7	55±1	$2\frac{3}{16}$	
1000	G.E.S.	300+9	$11\frac{3}{4}$	150±1·5	5 7	225±8	87/8	55±1	2 3	
1500	G.E.S.	335±9	$13\frac{1}{4}$	170±1·5	$6\frac{11}{16}$	250±8	9 13	60±1	238	

^{*} In the case of Pearl lamps, the tolerance on light centre length for 15w. to 100w. inclusive is ± 5 mm.

[†] B.C. $(B22d/25 \times 26)$, E.S. (E27/25), G.E.S. (E40/45).

JOYLIGHTS AND

CO Joy Lights

DECORATION LIGHTS

(O)YAZI CILITS

Group VI

Comprising a set of 12 shades and 13 3-watt lamps (1 spare lamp per set) wired in series for 200/250 volts, with B.C. plastic adaptor.

25/- per set plus $5/1\frac{1}{2}d$. purchase tax.

Spare lamps 1/- each plus $2\frac{1}{2}d$. purchase tax



Group VI

Comprising a set of 12 3-watt lamps (plus 1 spare lamp per set) wired in series for 200/250 volts, with B.C. plastic adaptor. 17/1d. per set plus 3/6d. purchase tax.

Spare lamps 1/- each plus $2\frac{1}{2}d$, purchase tax

Note: All prices quoted in this catalogue are list prices to which Purchase Tax, where applicable, must be added. For details see page 32.

page six



CANDLE LAMPS

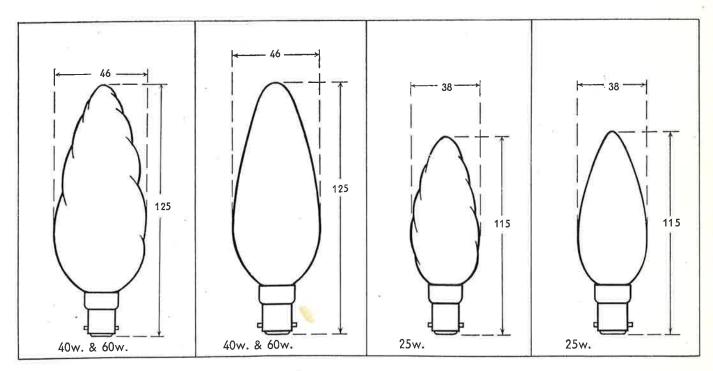
Standard Voltages: 100, 110, 120, 130, 200/220, 230/240, 250/260

Standard caps: B.C., S.B.C., S.E.S.

Group I		Length		Diam.		List Price	
Watt-	Shape	Leng	tn	Dia	m.	CI	Colour
age		in.	Clear	Sprayed or Frosted			
*25	Olive, plain	115±5	$4\frac{1}{2}$	38±2	$1\frac{1}{2}$	2/6	3/
25	Olive, twisted	115±5	$4\frac{1}{2}$	38±2	$1\frac{1}{2}$	3/-	3/6
40 & 60	Olive, plain	125±5	5	46±2	1 13	3/-	3/6
40 & 60	Olive, twisted	125±5	5	46±2	1 13	3/6	4/-



^{*} Also available 50v. and 60-80v. Clear 4/9. Colour Sprayed and Frosted 4/11



EKGO

NEON LAMPS



NEW CASES

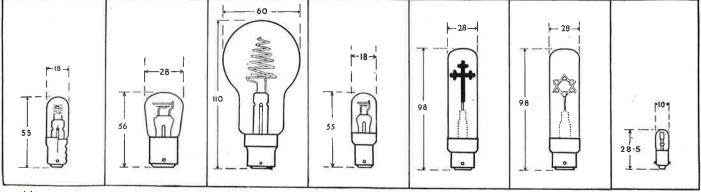
Standard Voltages: 100/130, 200/260

For use on A.C. or D.C.

The Ekco Neon Lamp has a long life and can be operated in any position.

Group I					Dim	ensions			
Туре		Wattage Standard Cap		Len	gth	Diameter		List Price	
19				mm.	in.	mm.	în,		
Cruciform (Re	ed Lacquered)	1.0	B.C. (B22d/25×26)	98±2	3 7	28±1	11	5/-	
Star of David	(Red Lacquered)	1.0	B.C. (B22d/25 × 26)	98±2	37	28±1	11	5/-	
Normal Light	ing	5.0	B.C. (B22d/25 × 26)	115±5	412	60±1	23	4/6	
I D'	Large Disc 0.5 Small Spiral 0.5	0.5	B.C. (B22d/22)	56±3	2 3 18	28±1	11/8		
		0.3	E.S. (E27/25)	58±4	2 6 16	28±1	11	4/-	
		0.5	S.B.C. (B15/24×17)	54±3	$2\frac{1}{8}$	18±1	118		
Indicators		S.E.S. (E14/25×17)	56±4	2 3	18±1	11	4/-		
	Small Disc	0.5	S.B.C. (B15/24×17)	54±3	21/8	18±1	18		
Sittan Disc		S.E.S. (E14/25×17)	56±4	2 3	18±1	118	4/-		
	Indicator— Miniature*		M.B.C. (BA9s/13)	28·5±1·5	118	10±1	13 32	4/-	

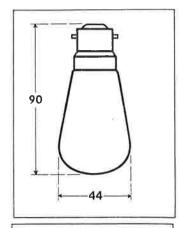
* For use on 200/260v, supplies must be in series with one megohm resistor.

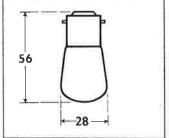


EKGO

SIGN, PYGMY SIGN, and SWITCHBOARD INDICATOR LAMPS







15 w.

* Natural coloured glass pygmy sign lamps are supplied to order. They are not normally held in stock.

Group I	Overall Length of Lamps				
Standard Cap	mm.	in.			
B.C.	56±3	2 3 16			
E.S.	58±3	21			
S.B.C.	62±3	2 7/16			
S.E.S.	64±3	$2\frac{1}{2}$			

Туре	25, 50, 60, 65, 75, 150 volts	110, 130, 200/220, 230/240 250/260 volts
Clear Colour Sprayed *Natural ruby glass *Natural green glass *Natural amber glass *Natural blue glass	2/5 2/7 6/- 5/3 5/3 5/-	1/10 2/- 5/6 4/9 4/9 4/6

SWITCHBOARD INDICATOR LAMPS

These lamps are similar in all respects to B.C. Pygmy Sign lamps except that they have a life of several thousand hours. The nominal wattage is 15, but this will vary according to voltage. The lamps are marked 'Switchboard Indicator'.

List Price				
Clear	Colour Sprayed			
2/3	2/5			
2/3	2/5			
	Clear 2/3			

Standard cap - B.C.

SIGN LAMPS

15 w.

Standard voltages 100/110, 120/130, 200/220, 230/240, 250/260.

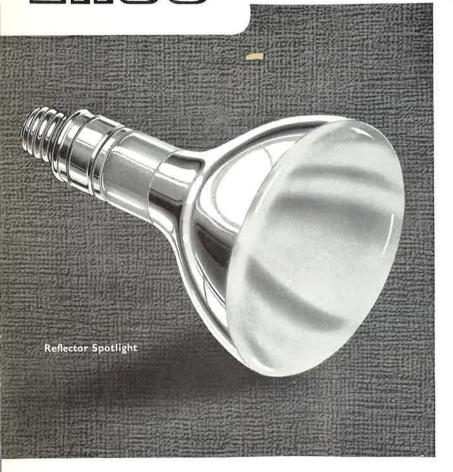
Diam. 44 mm. Overall length 90 mm.

Standard Cap - B.C. or E.S.

	List Price				
Voltage	Clear	† Colour Sprayed			
100/130	1/10	2/1			
200/260	1/7	1/10			

[†] Colour range as detailed on page 4.

SPOTLIGHT AND FLOODLIGHT
REFLECTOR LAMPS

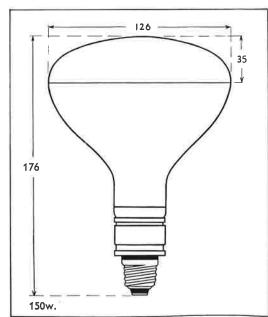


These lamps are made in two types – a spotlight reflector lamp and a floodlight reflector lamp. They are designed primarily for use in shop lighting, in windows and in interiors, to pick out individual displays and features.

The upper part of the lamp has an interior metal coating which does not tarnish and which, therefore, maintains its efficiency throughout the life of the lamp, while the lower part has a satin frosted finish.

Standard Voltages: 110, 200, 210, 220, 230, 240, 250

Group I	Wind		Length		Diam	List	
Туре	tage	Сар	mm.	in.	mm.	in.	Price
Spotlight	150	E.S.	176±6·5	6 15 16	126±1·5	4 15	15/6
Floodlight	150	E.S.	176±6·5	6 15	126±1·5	$4\frac{15}{16}$	15/6
Spotlight	75	B.C.	129±3	5 16	95±1	$2\frac{7}{16}$	7/-



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TUBULAR LAMPS

Standard Voltages: 110, 120, 200/220, 230/240, 250/260.

Standard Cap - Single contact (S 15s)

Diameter for all sizes 25 ±1 mm. (1 in.)

Colour spraying – standard colours as for clear lamps – see page 4

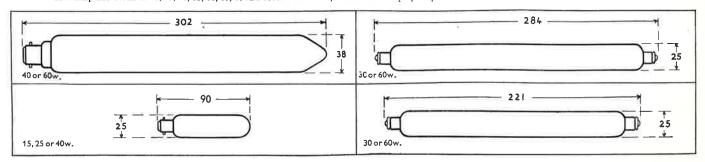
Group I	Len	gth	List Price		
Wattage	mm.	in.	Clear	Colour Sprayed	
30	221±1	8 11 16	5/9	6/1	
30	284±1	$11\frac{3}{16}$	5/9	6/1	
60	221 ± 1	8 11/16	6/-	6/4	
60	284±1	$11\frac{3}{16}$	6/-	6/4	



Standard Voltages: 15w. and 25w.: 110, 120, 200/220, 230/240, 250/260. 40w. and 60w.: 200/220, 230/240, 250/260 Colour spraying – standard colours as for clear lamps – see page 4

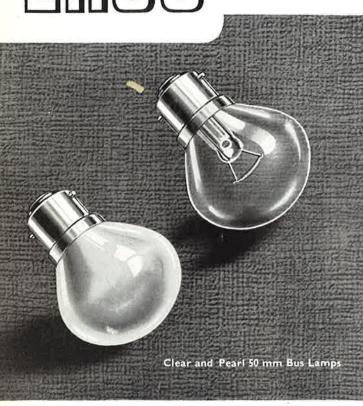
Group I	Len	Length		neter	0 1 10	T D.
Wattage	mm.	in.	mm.	in.	Standard Cap	List Price
15, 25* or 40	90±3	35/8	25±1	1	B.C., S.B.C., E.S., S.E.S.	Clear 3/9 Colour Sprayed 4/-
40 or 60	302±3	$11\frac{7}{8}$	38±1	$1\frac{1}{2}$	B.C.	Opal 8/6 Opal Colour Sprayed 9/6

^{* 25}w. lamp also available 25, 35, 50, 55, 60, 65, 75 and 150v. List Price 4/9 Clear. Colour Sprayed 5/-



EKGO

TRACTION LAMPS



TRANS CONTRACTOR

Group I

Some of the lamps shown in the Bus, Coach and Yacht section above are suitable for Train Lighting.

Several other sizes of Train Lighting Lamps are available.

Details and prices on application.

Standard voltages: 30, 35, 40 Cap – B.C. Clear or Pearl

Group I	List Price						
Wattage	22 mm. bulb	38 mm. bulb	50 mm. bulb				
6	2/6	2/6 2/9	2/6				
$\begin{array}{c} 15 \\ 20 \end{array}$		2/9 3/-	2/9 3/ -				
36		4/-	4/-				

Standard Cap - B.C. or S.B.C. Clear or Pearl

Group II		List	Price
Voltage	Wattage	38 mm. bulb	50 mm. bulb
12	10	2/4	2/4
12	12	2/-	2/4
12	20		2/9
12	24		2/11
12	36	-	2/11
24	12	2/1	2/1
24	15	2/9	2/9
24	20	2/4	2/9
24	24	2/11	2/11
24	36	2/11	2/11
24	48	3/6	3/6
24	60	5/10	5/10

TRACTION LAMPS

Group I

All traction lamps are designed to withstand voltage fluctuations and rough usage met under service conditions

Dimensions of all lamps listed on this page are as follows:

Diam, 22 mm. (7/8 in.)

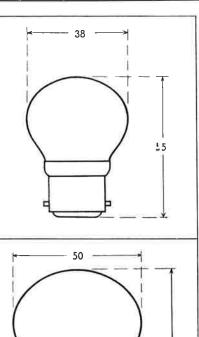
Overall length 37 mm. $(1\frac{1}{2} \text{ in.})$

Diam. 40 mm. (1 $\frac{9}{16}$ in.)
Overall length

55 mm. (2 ³/₁₆ in.) Diam. 50 mm.

 $(1\frac{15}{16}$ in.) Overall length

68 mm. $(2\frac{11}{16} \text{ in.})$



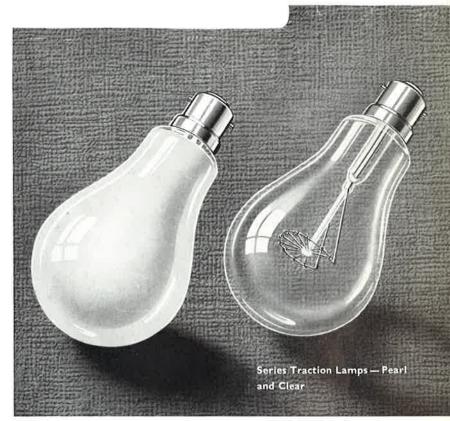
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SERIES TRACTION LAMPS

Group I

These lamps are marked with their rated current and only those having the same current should be connected to each other in series.

Standard Voltages: 100, 110, 120, 130 Standard Cap - B.C., E.S.



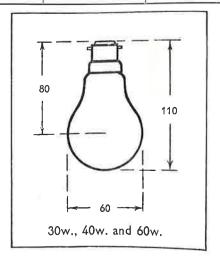
CLEAR OR PEARL

Current	Nominal	Len	gth	Diamo	List	
Amps Wattage	Wattage	mm.	in.	mm.	in.	Price
0.27	30	110±3·5	$4\frac{5}{16}$	60±1	23/8	1/9
0.35	40	110±3·5	$4\frac{5}{16}$	60±1	23/8	1/9
0.52	60	110±3·5	$4\frac{5}{16}$	60±1	$2\frac{3}{8}$	1/9

TRACTION LAMPS

Group I

All traction lamps are designed to withstand voltage fluctuations and rough usage met under service conditions

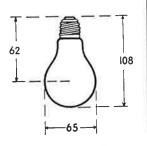


EKGO

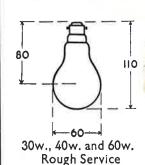
ROUGH SERVICE AND TRAFFIC

SIGNAL LAMPS



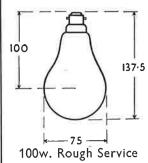


60w. E.S. Traffic Signal





60w. B.C. Traffic Signal



ROUGH SERVICE LAMPS

The Ekco Rough Service Lamp has the filament supported in a special manner to withstand vibration and other severe conditions. Standard Cap - B.C. or E.S. Clear or Pearl.

Special sizes and requirements made to order. Old type 60w. bulb to special order for government departments and similar bodies.

Group I		Lengt	Diamete r		List Price			
Wattage	Туре	mm.	in.	mm.	in.	25, 35, 50, 55, 60, 65, 75 and 150 volts	100, 110, 120, 130 volts	200, 210, 220, 230, 240, 250, 260 volts
25	Vacuum	100±3·5	3 15	60±1	23/8	2/9	2/-	2/-
30	Vacuum	110±3·5	4 5 16	60±1	$2\frac{3}{8}$	2/9	1/9	_
40 and 60	Vacuum	110±3·5	$4\frac{5}{16}$	60±1	$2\frac{3}{8}$	2/9	2/-	2/-
100	Gasfilled	137·5±3·5	5 3	75±1	$2\frac{15}{16}$		=	2/9

TRAFFIC SIGNAL LAMPS

For use in road traffic signals.

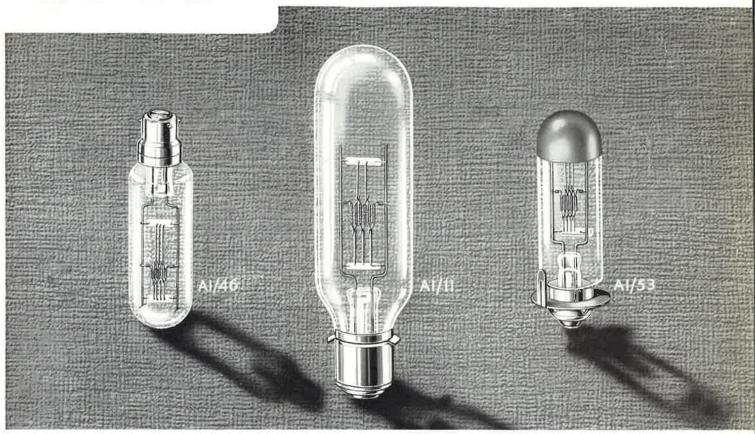
Standard Voltages: 100, 105, 110, 115, 120, 125, 130, 200, 210, 220, 230, 240, 250, 260 volts

Clear bulbs only

Wattage	Length	Diameter	Light Centre Length	Stan- dard Cap	List Price
60	mm. 117·5±3·5	mm. 65±1	mm. 85±3	B.C.	2/-
60	108±3·5	65±1	62±3	E.S.	2/-



PROJECTOR LAMPS - Class Al



Group I

The EKCO Projector Lamp is a high efficiency, compact light source for use in film projectors. To obtain the best service from the lamp, the following points should be carefully noted:

BURNING POSITION

MAKE SURE THE LAMP IS IN ITS CORRECT BURNING POSITION.

SUPPLY VOLTAGE

CHECK THE LAMP SUPPLY VOLTAGE FREQUENTLY; a 1 per cent increase may reduce lamp life by 12 per cent.

VIBRATION

MAKE SURE THE LAMP IS NOT SUBJECTED TO VIBRATION. The lamp filament becomes brittle and fragile with use.

DO NOT MOVE THE LAMP UNTIL IT IS QUITE COLD. Movement when the lamp is hot may set up stresses in the lamp leading to failure at the next switching.

COOLING

CHECK THE COOLING SYSTEM FREQUENTLY to ensure that there is no obstruction or deflection of the cooling air stream.

SWITCHING ON

The use of a series resistor to permit gradual raising of the filament to full brightness is recommended. Elimination of the initial surge current (as much as eight times the running current) will prolong lamp life.

LAMP RATING

In cases where screen illumination is higher than is necessary with a lamp of the specified voltage rating, increased life will be obtained by using a lamp of higher voltage, or by operating the lamp at a voltage below its rated value by adjustment of the resistor or transformer.

CLASS A1-TUBULAR BULB

						DIMENSI	ONS			N · 1	
Lamp Ref. No.	Wattage	Voltages	CAP Name	Number	Diam.	Overall Length mm.	Light Centre Longth nim.	Filament	Objective Average Life Hrs.	Nominal Efficiency Lumens per Watt	List Price
A1/72	10	20	Pathé		15±1	57±3	25±0·5	Coiled Coil - Transverse	100	14	4,9
A 1/1	25	50	Small bayonet centre contact	B15s/17	16±1	57±3	29±2	Coiled Coil - Transverse	50	18	4/9
A1/19	50†	100, 110, 115	Small bayonet	BA15d	25 ± I	76±3	34·5±2	Coiled Coil - Flat Grid - Vee Coil Sections	50	17	7/3
A1/20	50†	100, 110, 115	Small Edison screw	E14/23 × 15	25±1	78±3	43±3	Coiled Coil - Flat Grid - Vee Coil Sections	50	17	7/3
A1/2	50†	100, 110, 115	Small bayonet centre contact	B15s/17	25±1	76±3	34·5±2	Coiled Coil – Flat Grid – Vee Coil Sections	50	17	7/3
A1/2A	50	100, 110, 115	Small bayonet centre contact	B15s/17	25±1	76±3	34·5 ± 2	Coiled Coil - Flat Grid - Vec Coil Sections - offset	50	17	7/3
A1/3	100+	30	Medium Pre-focus	P28/25	25±1	133±7	55·5±0·5	Flat Grid – Parallel Coil Sections – offset	50	23	12/9
A1/4	100+	12, 100, 110, 115, 200, 210, 220, 230, 240, 250	Medium Pre-focus	P28/25	25±1	133±7	55·5±0·5	12v Flat Grid - Vec Coil Sections, 100/115v Coiled Coil - Flat Grid - Vec Coil Sections, 200/250v Coiled Coil - Flat Grid - Vec Coil Sections	50	12v24 100/115v. -17·5 200/250v. -15	12/9
A1/4N	100†	200, 210, 230, 240, 250	Small bayonet centre contact	B158	25±1	87 ± 5	34·5 ± 2	Coiled Coil - Flat Grid - Vee Coil Sections	50	17	12/9
A1/21	100†	100, 110, 115	Small bayonet centre contact	B15s	25±1	76±5	34·5 ± 2	Coiled Coil – Flat Grid – Vee Coil Sections	50	17	12/9
A1/22	100†	100, 110, 115	Small Edison screw	$E14/23 \times 15$	25±1	80±5	45±5	Coiled Coil - Flat Grid - Vee Coil Sections	50	17	12/9
AI/23	100†	12, 100, 110, 115, 200, 210, 220, 230, 240, 250	Edison screw	E27/25	25±1	128±7	75±5	12v. – Flat Grid – Vee Coil Sections. 100/115v. – Coiled Coil – Flat Grid – Vee Coil Sections. 200/250v. – Coiled Coil – Flat Grid – Vee Coil Sections	50	12v24 100/115v. -18·5 200/250v. -16	11/9
A1/121	100+	100, 110, 115	Small bayonet	BA15d	25±1	76±5	34·5±2	Coiled Coil – Flat Grid – Vee Coil Sections	50	17	12/9
A1/12	200+	50, 100, 110, 115	Edison screw	E27/25	32±2	128±7	75±5	Flat Grid - Parallel Coil Sections	50	50v24 100/115v. -22	50v. 23/- 100/115v 18/6
A1/13	200†	50, 100, 110, 115	Medium Pre-focus	P28/25	32±2	133±7	55·5±0·5	Flat Grid – Parallel Coil Sections	50	50v24 100/115v. -22	50v. 24/- 100/115v 19/6
A1/81	200	110	Pathé	-	32 ± 2	133±7	58±0·5	Coiled Coil - Twin Pillar - Parallel Coil Sections - offset	50	=	19/6
A1/112	200	50	Edison screw	E27/25	32 ± 2	128±7	75±5	Flat Grid – Parallel Coil Sections – offset	50	24	23 -
A1/113	200†	50	Medium Pre-focus	P28/25	32±2	133±7	55·5±0·5	Flat Grid - Parallel Coil Sections - offset	50	24	24/-
A1/5	250†	50, 100, 110, 115, 200, 210, 220, 230, 240, 250	Medium Pre-focus	P28/25	32±2	133±7	55·5±0·5	50v Flat Grid - Parallel Coil Sections. 100/115v Coiled Coil - Twin Pillar - Parallel Coil Sections. 200/250v Coiled Coil - Flat Grid - Vee Coil Sections	50	50v23·5 100/115v. -22·5 200/250v. -20	50v. 24/- 100v. and up 23/-
A1/I4	250†	50, 100, 110, 115, 200, 210, 220, 230, 240, 250	Edison screw	E27/25	32±2	128±7	75±5	50v Flat Grid - Parallel Coil Sections. 100/115v Coiled Coil - Twin Pillar - Parallel Coil Sections. 200/250v Flat Grid - Vee Coil Sections	50	50v.—25 100/115v. -24 200/250v. -20	50v. 23/- 100/250v 22/-
A1/15	250†	50	Medium Pre-focus	P28/25	32±2	133±7	55·5±0·5	Flat Grid – Parallel Coil Sections – offset	50	25	24,'-
A1/16	250†	50	Edison screw	E27/25	32±2	128±7	75±5	Flat Grid – Parallel Coil Sections – offset	50	25	23/-
A1/6	300*†	100, 110, 115	Medium Pre-focus	P28/25	32±2	133±7	55·5±0·5	Coiled Coil – Twin Pillar – Parallel Coil Sections	25	25	28/6
A1/6HV	300*†	200, 210, 220, 230, 240, 250	Medium Pre-focus	P28/25	32±2	133±7	55·5±0-5	Coiled Coil – Twin Pillar – Parallel Coil Sections	25	21	28,6
A1/35	300*†	100, 110, 115	Edison screw	E27/25	32 ± 2	12d±7	75 ± 5	Coiled Coil – Twin Pillar – Parallel Coil Sections	25	25	27/6

CLASS A1 - TUBULAR BULB (Continued)

			CAR			DIMENSI	ONS				
Ref. No.	Wattage	Voltages	CAP		Diam.	Overall Length	Light Centre	Filament	Objective Average Life	Efficiency Lumens	List Price
			Name	Number	mini.	mm.	Length mm.		Hrs.	per Watt	
A1/86	300*†	100, 110, 115	Large Bell and Howell	B.H.46	32±2	128±7	59±0-5	Bi-plane	25	22	35/
A1/39	400*†	100, 110, 115	Medium Pre-focus	P28/25	32±2	133±7	55·5±0-5	Bi-plane	25	23	35/-
A1/40	400*†	100, 110, 115	Edison screw	E27/25	32±2	128±7	75±5	Bi-plane	25	23	34/-
A1/87	400*†	110, 115	Small Bell and Howell	В.Н.38	32±2	128±7	59±0.5	Bi-plane	25	23	35/-
A1/7	590*†	100, 110, 115	Medium Pre-focus	P28/25	32±2	133±7	55·5±0·5	Bi-plane	25	25.5	37/6
A1/7HV	500*†	200, 210, 220, 230, 240, 250	Medium Pre-focus	P28/25	32 ± 2	133±7	55·5±0-5	Bi-plane	25	22-5	37/6
A·1/8	500	100, 110, 115, 200, 210, 220, 230, 240, 250	Medium Pre-focus	P28/25	64±1	133±7	55·5±0·5	100/115v Flat Grid - Vee Coil Sections. 200/250v Coiled Coil - Flat Grid - Vee Coil Sections	50	100/115 _{V*} -23 200/250 _V , -22·5	27/6
A1/42	500	100, 110, 115, 200, 210, 220, 230, 240, 250	Edison screw	E27/25	64±2	128±7	75±5	100/115v Flat Grid - Vce Coil Sections. 200/250v Coiled Coil - Flat Grid - Vce Coil Sections	50	100/115v. -25 200/250v. -23	26/6
A1/43	500	100, 110, 115, 200, 210, 220, 230, 240, 250	Goliath Edison screw	E40/45	64±2	135±10	90±5	100/115v Flat Grid - Vec Coil Sections, 200/250v Coiled Coil - Flat Grid - Vec Coil Sections	50	100/115v. -25 200/250v. -23	26/6
A1/44	500	100, 110, 115, 200, 210, 220, 230, 240, 250	Large Pre-focus	P40/41	64±2	140±10	50±0·5	100/115v Flat Grid - Vec Coil Sections, 200/250v Coiled Coil - Flat Grid - Vec Coil Sections	50	100/115v. -25 200/250v. -23	29/-
A1/46	500#‡	100, 110, 115	3 pin B.C.	B22 – 3 pin	37±1	140±2	95±1	Bi-plane	25	25	37/-
A1/47	500*†	100, 110, 115, 210, 240, 250	Small Bell and Howell	B.H.38	32±2	128 ± 7	59±0·5	Bi-plane	25	24	37/-
A1/48	500*†	100, 110, 115	Edison screw	E27/25	32±2	128±7	75±5	Bi-plane	25	24	36/-
A1/153	500	100, 110, 115	3 fin ring	-	38 max.	145±8	81±0·5	Bi-plane – offset	25	24	38/-
A1/160	500*†	100, 110, 115	Large Bell and Howell	B.H.46	32±2	128±7	59±0.5	Bi-plane	25	24	37/-
A1/9	750*†	100, 110, 115	Medium Pre-focus	P28/25	38±2	133±7	55·5±0·5	Bi-plaue	25	26 75	42/6
A1/9HV	750*†	200, 210, 220, 230, 240, 250	Medium Pre-focus	P28/25	38±2	133±7	55·5±0·5	Bi-plane	25	25	42,6
A1/52	750*‡	100, 110, 115	3 lug ring	E27 – 3 fin	38 max.	145±8	81±0·5	Bi-plane	25	28	43/6
A1/53	750*†	100, 110, 115, 200, 210, 220, 230, 240, 250	Large Bell and Howell	B.H.46	38±2	128±7	59±0.5	Bi-plane	25	28	42/6
A1/54	750*†	100, 110, 115, 200, 210, 220, 230, 240, 250	Edison screw	E27/25	38±2	128±7	75±5	Bi-plane	25	28	41/6
A1/11	1000	100, 110, 115, 200, 210, 220, 230, 240, 250	Large Pre-focus	P40/41	64±2	235±10	84±0·5	Flat Grid – Parallel Coil Sections	50	100/115v. -24·5 200/250v. -24	35/6
A1/57	1000	100, 110, 115, 200, 210, 220, 230, 240, 250	Goliath Edison screw	E40/45	64±2	230±10	120±5	Flat Grid – Parallel Coil Sections	50	100/115 _V , -26 200/250 _V , -24	33/-
A1/59	1000*†	100, 110, 115, 200, 210, 220, 230, 240, 250	Medium Pre-focus	P28/25	38±2	133±7	55·5±0·5	Bi-plane	25	27	49/6
A1/91	1000*†	100, 110, 115	Large Bell and Howell	B.H.46	38±2	128±7	59±0·5	Bi-plane	25	28	49/6

Burning position: vertical, cap down except lamps marked ‡, which must burn vertically, cap up.

Voltages shown in italics are to order.

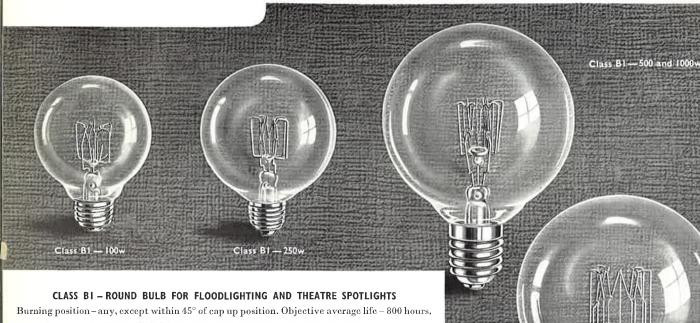
^{*} Forced cooling is necessary for these lamps so that no part of the wall of the bulb exceeds a temperature of 500°C.

[†] Crown of bulb with opaque coating.



PROJECTOR LAMPS - Classes BI, B2 & E

Class B2 - 500 and 1000w



Standard Voltages 100, 110, 115, 200, 210, 220, 230, 240, 250.

Group I	Wattage	Standard	Diameter	Overall	Light		nal Efficiency ons per Watt	List
Lamp Ref. No.	wattage	Спр	Diameter	Length	Centre Length	100, 110, 115v.	200, 210, 220, 230, 240, 250v.	Price
B1/1 B1/2 B1/3 B1/4	100 250 500 = 1000	E.S. (E27/25) E.S. (E27/25) G.E.S. (E40/45) G.E.S. (E40/45)	mm. 80 ± 2 95 ± 2 130 ± 5 130 ± 5	$\begin{array}{c} \text{nm.} \\ 115 \pm 10 \\ 125 \pm 10 \\ 180 \pm 10 \\ 180 \pm 10 \end{array}$	75±5 75±5 75±5 115±5 115±5	12 14·5 16 17·5	10 12·5 14·5 16	10/- 19/3 25/3 33/-

CLASS B2 - STANDARD GENERAL SERVICE BULB WITH BUNCHED FILAMENT (FLOODLIGHTING)

Burning position – any. Objective average life – 800 hours. Standard Voltages 100, 110, 115, 200, 210, 220, 230, 240, 250.

Group I		Standard	Diameter	Overall				List
Ref. No.	Wattage	Сар	Dameter	Length	Centre Length		200, 210, 220, 230, 240, 250v	Price
B2/1 B2/2	500 1000	G.E.S. (E40/45) G.E.S. (E40/45)	mm. 130±5 150±5	mm. 267 ± 8 300 ± 9	202 ± 7 225 ± 8	16 17-5	14·5 16	25/3 33/-

CLASS E-ROUND BULB WITH GRID FILAMENT FOR EPIDIASCOPES

Burning position – any, except within 45° of cap down position.

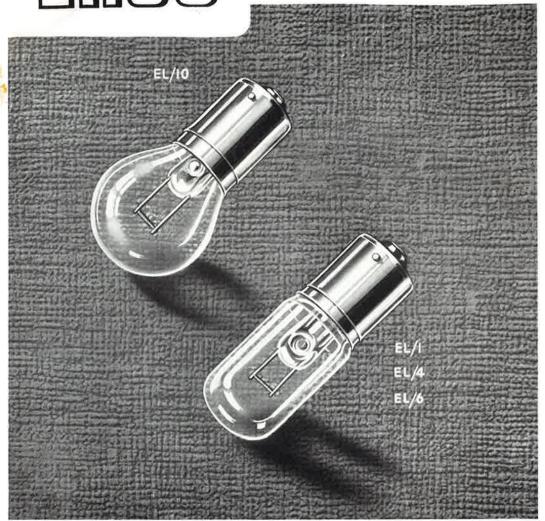
Objective average life – 100 hours. Standard Voltages 115, 200, 210, 220, 230, 240, 250.

Group I		Standard		Overall Light		Nomi Lum	Nominal Efficiency Lumens per Watt		
Ref. No.	Wattage	Cap	Diameter	Length	Centre Leugth	115v.	200, 210, 220 230, 240, 250v.	List Price	
			nın.	mm.	mm.				
E1/1	500	Medium Pro-focus (P28/25)	100 <u>+</u> 2	135±10	60±:0·5	22	20+6	31/3	
E1/3	500	E.S. (E27/25)	100 ± 2	135±10	85 <u>-</u> ⊨ 0∙5	22	20.6	30/3	

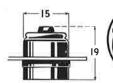
Voltages shown in italics are to order.

EKGO

PROJECTOR LAMPS - Class G



The Ekco Exciter Lamp is most carefully manufactured, particular attention being given to producing a robust high efficiency filament and an accurate light centre length.



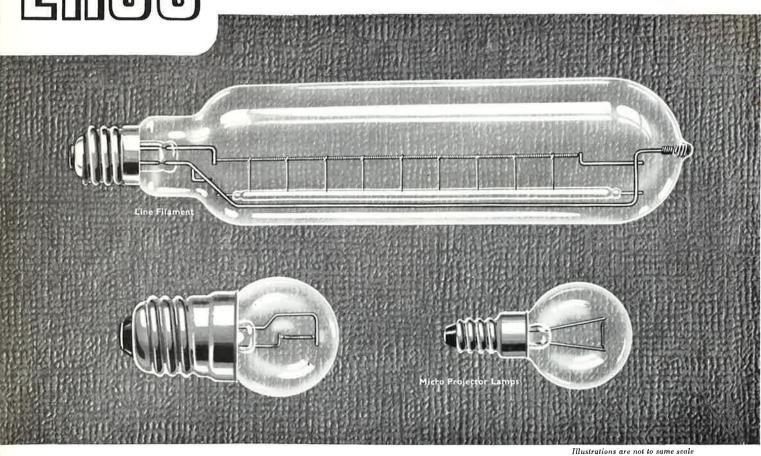


Cap P15s/19

Exciter lamps for sound film apparatus. Burning position - vertical, cap down.

Group I Lamp Ref. No.	B.S. No.	Voltage	Current amps.	Nominal Efficiency Lumens per Watt	Objective Average Life Hours	Overall Length mm.	Diameter mm.	Light Centre Length mm.	Cap	List Price
EL/1 EL/1A EL/4 EL/4A EL/5 EL/6 EL/6A EL/7 EL/9 EL/10 EL/10A EL/10B EL/10C EL/10D	G/8 G/7 G/11 G/10 G/12 G/13 G/15 G/4 G/2 G/1 G/19 G/29 G/29 G/23 G/23 G/5 G/30	8 8 10 10 10 10 10 10 6 4 4 4 4 4 4 5 6 6	4 4 5 5 7.5 7.5 7.5 7.5 1 0.75 0.75 0.75 0.75 0.75 6.65 1	20 20 22 22 22 23·5·5 23·5 12 12 12 12 12 12 12 12 12 12 12 12 12	100 100 100 100 100 100 100 100 50 50 50 50 100 10	$\begin{array}{c} 75 \pm 3 \\ 40 \pm 2 \\ 48 \pm 3 \\ 48 \pm 3 \\ 48 \pm 3 \\ 57 \pm 3 \\ 49 \pm 3 \\ 75 \pm 3 \\ 57 \pm 3 \\ 52 \pm 3 \\ \end{array}$	$\begin{array}{c} 25\pm 1 \\ 18\pm 1 \\ 25\pm 1 \\ 15\pm 1 \\ 16\pm 1 \\ 25\pm 1 \\ 25\pm 1 \\ 16\pm 1 \\ 25\pm 1 \\ 16\pm 1 \\ 18\pm 1 \\ \end{array}$	$\begin{array}{c} 44\pm 1 \\ 37 \cdot 3\pm 0 \cdot 5 \\ 41\pm 1 \\ 37 \cdot 3\pm 0 \cdot 5 \\ 44\pm 1 \\ 41\pm 1 \\ 37 \cdot 3\pm 0 \cdot 5 \\ 44\pm 1 \\ 21 \cdot 5\pm 0 \cdot 5 \\ 32\pm 1 \cdot 5 \\ 28 \cdot 5\pm 0 \cdot 5 \\ 31 \cdot 75 \pm 0 \cdot 75 \\ 28 \cdot 5\pm 0 \cdot 5 \\ 32\pm 1 \cdot 5 \\ 31 \cdot 5\pm 1 \\ 41\pm 0 \cdot 5 \\ 28 \cdot 5\pm 0 \cdot 5 \\ 31 \pm 1 \cdot 5 \end{array}$	BA15s/21 P15s/19 BA15s/21 P15s/19 BA15s/21 BA15s/21 BA15s/21 BA15s/17 BA15s/21 P15s/19 BA15s/17 P15s/19 BA15s/17 P15s/19 BA15d BA15s/21 P15s/19 BA15s/21	6/- 7/- 8/- 9/- 8/- 8/- 6/- 7/- 6/- 7/- 6/- 7/- 6/- 7/-

PROJECTOR LAMPS - Class F and FL



Class F

For use in microprojection, microscope illumination and small home cinemas.

Group I			Nor	ninal Dimensi	ons) - ·			
Cat. No.	Voltage	Wattage	Diameter mm.	Overall Length mm.	Light Centre Length mm.	Сар	Nominal Lumens	Life Hrs.	List Price
F/24	6	24	38+2	57+5	47±5	E27/25	430	100	4/
F/10	6	24	38±2	60±5	50±5	E14/23 × 15	430	100	4/-
F/10	12	24	38±2	60±5	50+5	E14/23×15	430	100	4/-
F/3	12	24	38±2	60±5	44+5	B15d/24×18	430	100	4/-
F/25	6	30	35±2	63±5	53±5	E27/35 × 30	630	25	6/6
F/26	6	30	35±2	65 + 5	47±5	E14/23 × 15	465	200	6/6
F/1	6	30	35±2	57±5	47±5	E14/23 × 15	630	25	6/6
F/2	6	48	35 ± 2	57±5	40 + 3	B15d/24 × 18	890	100	8/3
F/7	8	48	35 ± 2	60±5	41±3	E14/23×15	1050	25	8/3
F/4	12	48	50±2	70±5	40±3	E14/23×15	890	100	6/-
F/13	12	48	50±2	68±7	38±5	E27/25	890	100	6/-
F/14	12	100	60±2	85±5	55±5	E27/25	1950	100	13/3

Voltages shown in italics are to order.

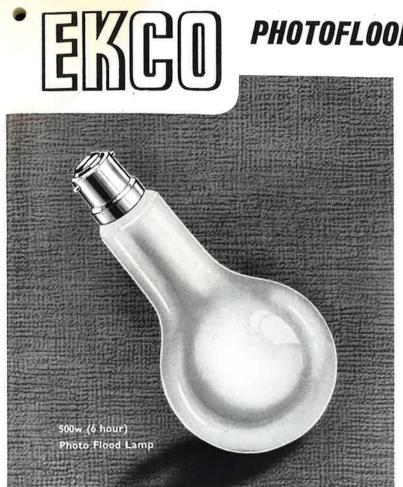
Group I Lamp Ref. No.	Wattage	Standard Voltages	Standard Cap	Diameter mm.	Overall Length mm.	Filament	Objective Average Life (hours)	List Price
FL/1	500	115, 200, 210, 220,	G.E.S.	90±1	355±10	Straight	1000	38/6
FL/2	1000	230, 240, 250 115, 200, 210, 220, 230, 240, 250	G.E.S.	90±1	390±10	Line Straight Line	1000	49/6

Voltages shown in italics are to order.

LINE FILAMENT LAMPS

Class FL

These lamps have a 'Line Filament'. Used in suitable fittings, the beam has a very narrow vertical divergence and a wide horizontal spread. Such fittings have many uses in floodlighting and theatre lighting schemes. Burning position horizontal.



PHOTOFLOOD AND ENLARGING LAMPS

ENLARGING LAMPS

Standard Voltages: 110, 210, 230, 240, 250.

Cap - B.C. or E.S. Average life 100 hours.

Group I Watts	Overall Length mm.	Bulb Diameter mm.	List Price
150	117	65	4/6

Voltages shown in italics are to order.

The filaments of these lamps run at an extremely high temperature and produce light especially suitable for commercial and indoor photography.

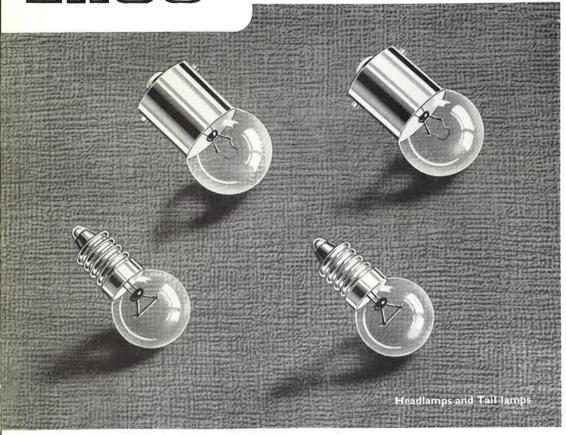
The bulbs are pearl finish.

A safety fuse is fitted in the cap.

Group I	TI.	Standard	Approx.	Length		Diameter		Standard	Approx. Colour	List Price
Wattage	Туре	Voltages	Life	mm.	in.	mm.	in.	Cap	Temperature	
272	PH/1	100–110 200–220 230–240 250–260	3 hrs.	117·5±3·5	4L	65±1	$2\frac{9}{16}$	B.C. or E.S.	3,300°K	2/6
500	PH/2	$100-110 \\ 200-220 \\ 230-240 \\ 250-260$	10 hrs.	160±4·5	бт	80±1	31/8	B.C. or E.S.	3,300°K	6/6
500	PH/B	100–110 200–220 230–240 250–260	100 hrs.	178±5·5	7	90±1	$3\frac{1}{2}$	E.S.	3,150°K	22/-

EKCO

CYCLE DYNAMO LAMPS



Robust and reliable lamps for all 6v. Cycle Dynamo Sets and hand lamps. All bulbs clear finish. Packed 50 lamps per carton.

Group IV					
Voltage Curren amps.		Bulb Diameter mm.	Finish	Сар	List Price
6	0.3	18±1	Clear	S.C.C.	1/4
6	0.5	18±1	Clear	s.c.c.	1/4
6	0.3	15±1	Clear	M.E.S.	8d.
6	0.5	15±1	Clear	M.E.S.	8d.
8	0.15	11 or 15	Clear	M.E.S.	8d.

TAIL LAMPS

Group IV					
Voltage	Current amps.	Bulb Diameter mm.	Finish	Сар	List Price
6	0.04	11±1	Clear	M.E.S.	8d.
6	0.04	15±1	Clear	M.E.S.	8d.
6	0.03	15±1	Clear	M.E.S.	8d.
6	0.10	11±1	Clear	M.E.S.	8d.
6	0.25	11±1	Clear	M.E.S.	8d.
		_			



Standard cap - M.E.S. Clear round bulbs

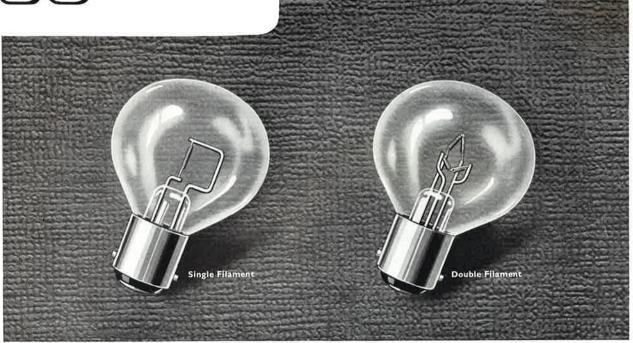
Group III Volts	Amps	Diameter ± 1 mm.	Overall Length max, mm.	List Price
2·5 2·5	0·2 0·3	11	24 24	4d.
3·5 3·5	0·15 0·3	11 11	24 24 24	4d. 4d. 4d.
4·0 4·5	0·3 0·3	11 15	24 27·5	4d. 4d.

Standard cap - M.E.S. Clear bulbs

Group X Volts	Amps	Bulb diameter	Overall Length	Bulb Shape	List Price
3·5 6·0 6·2 6·3 6·3 6·5 8·0 4·0 6·2 6·3 6·5	0·15 0·04 or 0·06 0·3 0·11 0·15 0·3 0·15 0·3 0·15 0·3	11 11 15 11 11 11 or 15 11 or 15 10 10 10	23 27·5 23 23 23 23 or 27·5 23 or 27·5 28·5 28·5 28·5 28·5	Round Round Round Round Round Round Tound Tubular Tubular Tubular	7d. 1/- 7d. 7d. 7d. 7d. 9d. 1/- 7d. 7d.

EKCO

CAR BULBS



Overall length 56 mm. – bulb diam. 38 mm., except lamps marked with an asterisk which are $63 \text{ mm.} \times 50 \text{ mm}$.

B.C. available at same price as S.B.C.

Axial Filaments

Group II	W/- **	S.C.	G.	S.B.C.		
Voltage	Wattage	Lamp Ref. No.	List Price	Lamp Ref. No.	List Price	
6	18	11	3/-	_	3/1	
6	24	106	2/6	109	2/7	
6	30		2/9		2/10	
6	36	108	2/9	111	2/10	
12	24	1	2/6	4	2/7	
12	36	2	2/6	5	2/7	
12	48	23	4/-	27	4/1	
12	60*	90	5/6	26	5/7	
24	24		-	122	2/7	
24	36	621	2/6	123	2/7	
24	48	623	4/-	140	4/1	
24	60*	124	5/6	128	5/7	

Overall length 56 mm. - bulb diam. 38 mm. Cap - S.B.C.

0			W												
0	Ø		2	1	3	23	19	10	111	2 14	2	W.	7.7.	3 1/3	13/1
9	Ø	9	6	2.11	1	12	12	10	111	1.11	1	11.	31/	3 11	3.20

Double Transverse Filaments

Group II			
Voltage	Wattage	Lamp Ref. No.	List Price
6	18/18	180	4/6
6	24/24	168	3/6
6	=30/30	169	3/6
6	36/36	170	3/6
12	36/36	171	3/6
24	36/36	194	4/3

ENGO CAR BULBS



BRITISH PREFOCUS HEADLAMPS

Axial and Transverse Filaments

Overall length 62 mm. Bulb diam, 28 mm. Caps: single contact P22s/21 - double contact P22d/21

Group II				Lama	
Voltage	Wattage	Сар	Filament	Lamp Ref. No.	List Price
6	36	Single Contact	Axial	172	3/9
6	36	Single Contact	Transverse	173	3/9
12	36	Single Contact	Axial	162	3/9
12	38	Single Contact	Transverse	325	3/9
12	38	Double Contact	Transverse	326	3/9
12	48	Single Contact	Axial	185	4/6
12	48	Single Contact	Transverse	323	4/6
24	44	Double Contact	Transverse	330	4/6
24	44	Double Contact	Axial	331	4/6

Overall length 62 mm. Bulb diam. 28 mm. Caps - double contact P22d/21

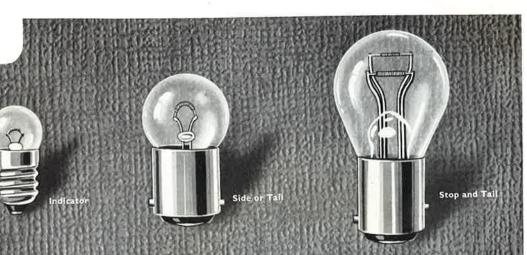
BRITISH PREFOCUS HEADLAMPS

Double Transverse Filaments

Group II	777	T D. C N.	Dipping Ar		
Voltage	Wattage	Lamp Ref. No.	Dip	Drive	List Price
6 6 6 12 12 12 24	24/24 30/24 36/36 42/36 44/38 48/48 44/38	166 312 306 354 358 302 359	Vertical Vertical Left Left Left Left Left Left Left	Either Either R/Hand R/Hand R/Hand R/Hand	4/9 5/- 4/6 4/6 5/4 6/9 5/7

EXCO

CAR BULBS



Group II Voltage	Wattage	Сар	Filament	Lamp Ref. No.	List Price
6	18	S.C.C.	Transverse	317	3/9
12	18	S.C.C.	Transverse	221	3/6
12	21	S.C.C.	Transverse	382	3/–
12	24	S.C.C.	Transverse	199	3/6

Overall length 46 mm. - bulb diameter 25 mm.

Overall length 46 mm. - bulb diameter 25 mm.

Group II	Wattage	Сар	Filament	Lamp Ref. No.	List Price
Voltage	Wattage	Cup	1 IIIIIICAT	Zamp Atom 1.01	
6	18/6	S.B.C.	Transverse and Bow	383	3/6
6	18/6 18/6 21/6	S.B.C.*	Transverse and Bow	384	3/6
12	21/6	S.B.C.	Transverse and Bow	381	3/6
12	21/6	S.B.C.*	Transverse and Bow	380	3/6 3/9
24	24/6	S.B.C.*	Transverse and Bow	334	3/9

^{*} Offset pins (B15d/19).

Group II		Bulb	Overall	S.C.	C	S.B.C.		
Voltage	Wattage	Diameter mm.	Length mm.	Lamp Ref. No.	List Price	Lamp Ref. No.	List Price	
6 6 12 12 24† 6	3 6 4 6 6 3 4	18 18 18 18 18 15	32·5 32·5 32·5 32·5 32·5 27·5 27·5	200 205 	1/4 1/6 1/7 1/4 1/4 1/5* 1/5*	204 206 ———————————————————————————————————	1/5 1/7 1/8 1/5 1/5	

* M.C.C. Cap.

† B.C. Cap available at same price. Lamp Reference No. 638.

Group II	D. 11		M.E.S.	Сар	M.C.C. Cap		
Voltage	Wattage	Bulb diameter mm.	Lamp Ref. No.	List Price	Lamp Ref. No.	List Price	
6 12 12 16 24	3·0 2·2 2·2 3·0 2·8	11 11 15 15 15	990 987 986 985 993	1/1 1/1 1/1 2/3 1/4	641 643 645 647 651	1/2 1/2 1/2 2/6 1/5	

				Dime	nsions	
Voltage	Wattage	Lamp Ref. No.	Сар	Length mm.	Diameter mm.	List Price
6 6 12 12 12 24 24 24 24	3 6 3 6 6 6	255 253 256 254 653 654 260	\$7/8 \$8.5/8 \$7/8 \$8.5/8 \$8.5/8 \$8.5/8 \$8.5/8	35·5 38·0 35·5 38·0 38·0 44·0	7·5 11·0 7·5 11·0 11·0 11·0	2/3 2/7 2/3 2/7 2/6 3/10 2/7

Festoon

⁺ With supported Filament.

EKCO

TELEPHONE SWITCHBOARD INDICATOR LAMPS

These lamps are made in accordance with British Standard 1050, 1953,

'Visual Indicator Lamps', except the 12v lamp which has a tungsten filament.

Length:

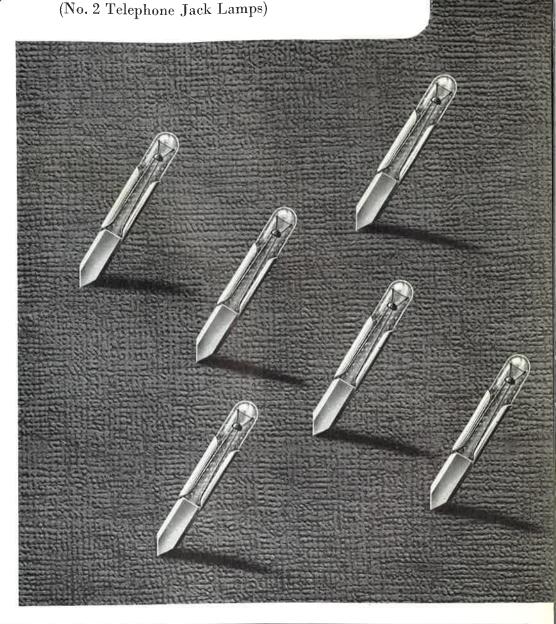
Standard 1·75 in. (44·5 mm.) Alternative 1·5 in.

(38 mm.)

Diameter over plates: 0.275 in. (7 mm.) nominal

Diameter of bulb: 0.245 in. (6.25 mm.) nominal

Average specified life: 1,000 hours.



	En	d Pieces	T	T
Amps	Colour	Colour Code*	Lumens	List Price
0.250	Green	267	3.7	2/2
0.041	Grey	631	0.7	2/2
0.100	Red†	538	3.0	2/2
0.045	Orange	557	1.8	2/2
0.100	Yellow	355	6.0	2/2
	0.041 0.100 0.045	Amps Colour 0.250 Green 0.041 Grey 0.100 Red† 0.045 Orange	Colour Colour Code* 0·250 Green 267 0·041 Grey 631 0·100 Red† 538 0·045 Orange 557	Amps Colour Colour Code* Lumens 0.250 Green 267 3.7 0.041 Grey 631 0.7 0.100 Red† 538 3.0 0.045 Orange 557 1.8

* BS.381C. Colours for ready-mixed paints.

† Alternative - Yellow mottle

EKCO

SODIUM LAMPS



All lamps with appropriate control gear, are suitable for 200/250v. supplies and are fitted with ceramic bayonet caps-45w., 60w. and 85w. with B22/S and 140w. with B22/M.

Group IX		Nominal	Lumens		Dimensions			List Price			
Lamp Wattage	Wattage with Gear	Initial	Average through Life	$egin{array}{c} ext{Overall} \ ext{Length} \ \pm 10 \ ext{mm.} \end{array}$	Diameter ±2 mm.	Light Centre Length ±10 mm.	Lamp	Vacuum Jacket	Lamp and Jacket		
45 60 85	65 80 105	2,610 4,020 6,200	2,250 3,420 5,525	238 300 415	50 50 50	140 170 230	40/- 45/- 60/-	21/9 24/6 29/3	61/9 69/6 89/3		
140	165	10,250	9,100	518	65	280	65/-	33/-	98/-		

Operating Directions:

The lamp must be fitted into a vacuum jacket of the correct size.

The position of operation should be approximately horizontal but slightly cap up or:

45w. and 60w. sizes - from approximately horizontal (slightly cap up) to vertical cap up.

85w. and 140w. sizes - from approximately horizontal (slightly cap up) to 20° above the horizontal (cap up).

The cap must never be lower than the lamp tube.



MERCURY LAMPS - Types MA/V & MB/U



Illustrations are not to scale.

Standard Voltages - 200/220, 230/240. 250 A.C.

Group IX				Nomi		
Lamp Wattage	Class	Bulb Finish	Сар	Initial	Average through Life	List Price
80	MB/U	Pearl	3-pin B.C.	3,000	2,350	39/6
125	MB/U	Pearl	3-pin B.C.	5,300	3,900	45/-
250	MA/V	Clear	G.E.S.	8,750	7,750	54/
400	MA/V	Clear	G.E.S.	16,800	13,600	59/-
80	MBF/U	Fluorescent	3-pin B.C.	3,000	2,350	48/6
125	MBF/U	Fluorescent	3-pin B.C.	5,300	3,900	59/-
250	MBF/U	Fluorescent	G.E.S.	10,000	8,500	120/-
400	MBF/U	Fluorescent	G.E.S.	18,000	16,800	180/_

Operating Positions:

MB/U and MBF/U type - any.
MA/V types - vertical cap up or cap down - horizontally in lanterns fitted with magnetic deflectors.
When used outside, these lamps must be protected from rain.

Dimensions for Mercury Lamps

	C)	Wi-tt with Coop	Dime	Dimensions - mm.			
Rating Watts	Class	Wattage with Gear	Overall Length	Dia,	L.C.L.		
80 125 250 400	MB/U MB/U MA/V MA/V	90 138 270 425	$\begin{array}{c} 160 \!\pm\! 4.5 \\ 178 \!\pm\! 5.5 \\ 290 \!\pm\! 8 \\ 330 \!\pm\! 8 \end{array}$	$80\pm 1 \\ 90\pm 1 \\ 48\pm 3 \\ 48\pm 3$	$113\pm4 \\ 128\pm5 \\ 170\pm8 \\ 190\pm8$		
80 125 250 400	MBF/U MBF/U MBF/U MBF/U	90 138 270 425	160 ± 4.5 178 ± 5.5 227 ± 7 290 ± 8	$80\pm 1 \\ 90\pm 1 \\ 90\pm 1 \\ 120\pm 1 \cdot 5$	$120{\pm}4$ $133{\pm}5$ $145{\pm}7$ $185{\pm}8$		



THE EKCO RANGE

Standard Fluorescent Tubes, up to and including the 5 ft. size, are available in six 'whites' and five colours. Peach and ultra-violet tubes are also obtainable.

The latest additions to the range are the reflector tubes and the 8 ft. tube.

WHITES

White (3500° K) tubes are recommended for all general lighting purposes because they are of a colour between daylight and warm white. They combine a pleasant appearance with good colour rendering of most materials and their efficiency is the highest of the 'white' range.

Warm White tubes provide light of a warmer tone than white, daylight or natural tubes and they are recommended for use in commerce and industry, particularly where the colour of the other tubes appears to be somewhat 'cold'. Their efficiency is nearly equal to white (3500°K) tubes.

De-Luxe Warm White tubes radiate a soft mellow light which is kind to the complexion and makes food, furnishings and other commodities look attractive. They blend well with tungsten lighting and are eminently suitable for restaurants, cinema and theatre foyers, entrance lobbies and the home, and also other locations where a cordial intimate atmosphere is desirable.

Peach Tubes have been superseded by de-luxe warm white tubes, but all sizes of peach tubes are still available.

Daylight tubes are used mainly in industry to supplement inadequate natural lighting and to provide artificial daylight conditions after dark.

Natural tubes are for use in commerce and industry where the discrimination and grading of colours are of importance. They give a close approximation to natural daylight.

Northlight (6500° K Colour Matching) tubes simulate north

sky daylight and are suitable for many colour matching purposes.

COLOURS

Five standard colours are available: green, gold, blue, red, and pink. Two and three section coloured tubes can be manufactured in bulk quantities, to order. For three section tubes, the centre section must be white.

U.V. TUBE

Ultra-violet tubes are for the irradiation of fluorescent paints and similar substances and a screen of Woods glass or similar material is required to filter out the visible light. The radiation from these tubes is normally harmless, but prolonged exposure of the eyes to the rays should be avoided.

Ultra-violet tubes are available only in 80w. 5 ft., 40w. 4 ft. and 20w. 2 ft. sizes.

REFLECTOR TUBES

Available in white (3500° K), warm white and natural only in 80w. 5 ft. and 40w. 4 ft. sizes, these reflector tubes are similar to a standard tube, except that the major portion is covered with an internal white reflector backing which directs all the light through a window of approximately 120°.

125w. 8 ft. TUBE

Available in white, warm white, daylight and natural, this tube is for use in installations requiring long continuous lines of light.

DOUBLE-LIFE GUARANTEE

EKCO 'double-life' fluorescent tubes have a rated average life of 5,000 hours. Subject to use with approved control gear under correct operating conditions, tubes failing through defective material or workmanship will be credited in full or replaced free of charge, at our option, should failure occur within tweive months of the date of purchase or a life of 3,000 hours, whichever is the less.

Pro-rata replacement or credit for tubes failing between 3,000 and 5,000 hours will not be given. Experience has shown that the number of tubes failing at this stage is compensated

for by the many tubes lasting beyond 5,000 hours.

TECHNICAL DATA**

Group IX					30w.	3 ft.	40 9.6	20w. 2 ft.	15w.	1½ ft.
Tube Type	125w.	8 ft.	80w. 5 ft.	40w. 4 ft.	l≟″dia.	I" dia,	40w. 2 ft.	20W, 2 It.	1½" dia.	l" dia.
Overall Length - inches	94-06 max.	96 ± 0·25	60±0·25	47 25 max.	35 25 max.	35 35 max.	23 25 max.	23 25 max.	1735 max.	1735 max.
Diameter - inches	1·5 ±	0.06	1.5±0.06	1·5 ± 0·06	1·5 ± 0·06	1.0 ± 0.04	1·5 ± 0·06	1·5±0·06	1.5±0.06	1.0±0.04
Length (end of pin to opposite cap face) - inches	93.66 - 93.80	_	-	471 - 4713	351 - 3513	351 - 3513	$23\frac{1}{2} - 23\frac{13}{32}$	$23\frac{1}{2} - 23\frac{13}{32}$	$17\frac{1}{2} - 17\frac{13}{32}$	$17\frac{1}{2} - 17\frac{13}{32}$
Length between lamp faces - inches	93-5 max.		-	47 7 max.	35 7 max.	35 7 max.	23 7 max.	23 7 max.	17 max.	17 ₃₂ niax.
Cap	Bi-pin	Bayonet	1	1	t	1	1	1	- ‡	‡
Rated Consumption Watts	12	5	80	40	30	30	40	20	15	15
Rated average life (specified test conditions) - hours	5,00	00 =	5000	5000	5000	5000	5000	5000	5000	5000
Tube voltage approx.	16	0	106	108	85	105	50	60	48	55
Tube current amps. approx.	0.8	5	0.85	0.41	0.39	0.35	0-88	0.37	0.37	0.35
Supply voltage range	200 2	50+	200/250+	200/250+	200/250+	200/250+	100/250*	100/250*	100/250*	100/250*

- * Normally run in series pairs on 200/250v. or singly on 100/125v.
- + For supplies below 200v. suitable Control Gear can be supplied to order.
- ** In Free Air (draught free) at 20°C. (68°F.)
- † The 8 st. and 5 st. lamps are available with either bayonet or medium bi-pin caps. All other sizes of tubes have medium bi-pin caps only.

LIGHT OUTPUT AND EFFICIENCIES**

Light outputs are in lumens and efficiencies, shown in brackets, are in lumens per watt.

Time	Tube Type	125w. 8 ft.	80w. 5 ft.	40w, 4 ft,	30w.	3 ft.	40w. 2 ft.	20w. 2 ft.	15w.	1½ ft.
			00 W. 0 It.	20111 2 251	1½" dia.	1" dia.	15111		1½" dia.	1" dia.
100 hrs.	White Warm White De-Luxe Warm White Daylight Natural Northlight Reflector – White Reflector – Warm White Reflector – Natural	8000 (64) 7875 (63) 7625 (61) 6000 (48)	4800 (60) 4720 (59) 3200 (40) 4560 (57) 3680 (46) 3520 (44) 4400 (55) 4320 (54) 3360 (42)	2560 (64) 2520 (63) 1680 (42) 2440 (61) 1920 (48) 1800 (45) 2320 (58) 2280 (57) 1760 (44)	1770 (59) 1740 (58) 1170 (39) 1680 (56) 1350 (45) 1260 (42)	1800 (60) 1770 (59) 1200 (40) 1710 (57) 1380 (46) 1290 (42)	1800 (45) 1760 (44) 1120 (28) 1720 (43) 1320 (33) 1240 (31)	1040 (52) 1020 (51) 660 (33) 1000 (50) 780 (39) 720 (36)	690 (46) 675 (45) 435 (29) 660 (44) 495 (33) 465 (31)	675 (45) 660 (44) 435 (29) 645 (43) 495 (33) 465 (31)
*Average to 5,000 hrs.	White Warm White De-Luxe Warm White Daylight Natural Northlight Reflector – White Reflector – Warm White Reflector – Natural	7125 (57) 7000 (56) 6750 (54) 5125 (41)	4320 (54) 4240 (53) 2640 (33) 4080 (51) 3200 (40) 3040 (38) 3920 (49) 3840 (48) 2880 (36)	2320 (58) 2280 (57) 1440 (36) 2200 (55) 1680 (42) 1600 (40) 2080 (52) 2040 (51) 1520 (38)	1590 (53) 1560 (52) 990 (33) 1500 (50) 1170 (39) 1110 (37)	1560 (52) 1530 (51) 960 (32) 1470 (49) 1140 (38) 1080 (36)	1480 (37) 1440 (36) 880 (22) 1400 (35) 1040 (26) 1000 (25)	940 (47) 920 (46) 560 (28) 900 (45) 680 (34) 620 (31)	615 (41) 600 (40) 360 (24) 585 (39) 420 (28) 375 (25)	555 (37) 540 (36) 345 (23) 525 (35) 390 (26) 360 (24)
5,000 hrs.	White Warm White De-Luxe Warm White Daylight Natural Northlight Reflector – White Reflector – Warm White Reflector – Natural	‡	4000 (50) 3920 (49) 2320 (29) 3760 (47) 2960 (37) 2800 (35)	2160 (54) 2120 (53) 1320 (33) 2040 (51) 1560 (39) 1520 (38)	1470 (49) 1410 (47) 840 (28) 1380 (46) 1080 (36) 1050 (35)	1440 (48) 1380 (46) 810 (27) 1350 (45) 1920 (34) 960 (32)	1320 (33) 1280 (32) 720 (18) 1240 (31) 880 (22) 840 (21)	880 (44) 860 (43) 480 (24) 840 (42) 620 (31) 560 (28)	570 (38) 555 (37) 315 (21) 540 (36) 390 (26) 360 (24)	495 (33) 480 (32) 270 (18) 465 (31) 330 (22) 330 (22)

^{*} Approx. equal to the efficiency at 2,000 hours.

QUICKSTART AND INSTANT START TUBES

Three types of tubes are available as below:

Standard. This is the tube for all switchstart circuits and it is normally supplied unless other types are ordered.

Quickstart (Sylcoated). This tube has a colourless water repellent coating and should be used in Quickstart circuits where there is an earthed metal surface along the length of the tube and not more than \(\frac{1}{2}\) away from it.

The details given against every Ekco fluorescent lighting fitting indicate which type of tube is required for Quickstart operation.

Gold, red and U.V. tubes are not available as Quickstart tubes.

Instant Start (Metal Strip). This tube is required for a Quickstart circuit when there is not an adjacent earthed surface permitting the use of the Quickstart (sylcoated) tube. The metal strip must be earthed and this is normally carried out by means of an earthed lampholder.

Where Instant Start (metal strip) tubes are recommended for Ekco fluorescent lighting fittings one of the lampholders on the fitting is earthed.

PRICE LIST

Tube Size	125w. 8 ft.	80w. 5 ft.	40w. 4 ft.	30w. 3 ft. 1½" and 1" dia.	40w. 2 ft.	20w. 2 ft.	15w. 1½ ft. 1½" and 1" dia
Whites	25/-*	13/-	11/9	11/-	11/-	10/6	9/9
Purchase Tax		2/8	2/5	2/3	2/3	2/2	2/-
Colours and U.V.*		17/6	17/-	16/6	16/-	15/-	15/-
Purchase Tax	_	3/7	3/6	3/5	3/31/2	3/1	3/1
Reflector Tubes		14/9	13/9	-		-	-
Purchase Tax	- i* -	3/04	2/10				-

^{*} Restricted range only - see page 30 opposite.

EXTRAS: Quickstart (Sylcoated) 6d. extra per tube plus 1½d. Purchase Tax (except 40w. 2 ft. where the Standard Type is Sylcoated). Instant Start (Metal Strip) 1/- extra per tube plus 2½d. Purchase Tax (Stock sizes 80w. 5 ft. and 40w. 4 ft. Others to order).

Satisfactory operation of Ekco fluorescent tubes is assured with control gear manufactured or approved by Ekco-Ensign Electric Ltd.
Ekco 80w. and 125w. fluorescent tubes are normally supplied in cartons of 12 tubes. All other sizes in cartons of 24.

⁺ To be announced.

^{**} In Free Air (draught free) at 20°C. (68°F.).

GENERAL INFORMATION

LAMP CAPS

LAMP CAP DESIGNATIONS. The letter at the commencement denotes the type of cap, such as 'B' bayonet, or 'E' Edison screw. The next two figures give the nominal outer diameter of the cap barrel or screw thread in millimetres. The small letter, if any, before the oblique stroke, such as 'd' or 's', indicates double or single pole. The two figures following the oblique give the nominal overall length of the cap, and the figures after the 'x' give the nominal diameter of the flange, if any.

LAMP CAP CODE. The following abbreviations are those used throughout this Catalogue and should be specified on all orders.

B.C.—Bayonet

S.B.C.—Small Bayonet

S.E.S.—Small Edison Screw

G.E.S.—Goliath Edison Screw C.C.—Centre Contact S.C.C.—Small Centre Contact E.S.—Edison Screw

VARIATIONS FROM STANDARD CAPS. Extra charges on List Prices for variations from Standard Caps:

For S.B.C., S.E.S., or S.C.C. in place of B.C., E.S., or C.C.

For G.E.S., in place of B.C. or E.S. or vice-versa

3d. each 1/- each

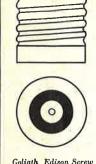
STANDARD CONTAINERS

15-40 watts .. 100 per carton 60-100 watts 50 or 100 per carton 150 watts 50 per carton 200 watts 50 per carton 300 watts 24 per carton 500-1,000 watts 12 per carton 1,500 watts 6 per carton Candles & Striplites 50 per carton

12 per display carton Economy Lamps 96 per container

Cycle Dynamo & Flash Lamps 50 per carton Ordering by these strand quantities is strongly recon. nded.

ORDERING. Please state clearly on all orders: 1. Quantity; Voltage; 3. Wattage; 4. Type of Lamps; 5. Finish; 6. Cap types. Example: 100, 230v. 60w. G.F. Pearl B.C.



Goliath Edison Screw (G.E.S.) E40/45





Edison Screw (E.S.)E27/25



























Small SmallBayonet Cap Centre (S.B.C.)Contact $B15/27 \times 22$ (S.C.C.)

S15s/14



Small Bayonet Cap (S.B.C.) $B15/24 \times 17$



Bayonet Cap (B.C.) B22/22



Bayonet Cap (B.C.) $B22d/25 \times 26$

PURCHASE TAX SCHEDULE - Operating from Oct. 27,1955

Purchase Tax is chargeable on list prices, as follows: Groups 1 and 6 (up to and including 250w.) 20.5%. Groups 2 and 4 19.1%. Radio Panel and Flash Lamp Bulbs 17.6%. Projector Lamps B1/1, B1/2 and Class 'F' Micro Projector 20.5%. Projector Lamps, Classes Al, E, Fl and G, also Neon, Sodium and Mercury Discharge Lamps are free of purchase tax. The following tables have been compiled for quick reference, the tax being quoted to the nearest ad. Where Tungsten Filament Lamps are purchased in quantities, the tax must be calculated as a percentage of the gross list value. The tax on quantities of Fluorescent Tubes must be calculated on the basis of Tax per tube.

EKCO TUNGSTEN FILAMENT LAMPS

Groups 1 and 6

List Price	New P.T.	List Price		List Price	New P.T.	List Price	New P.T.	List Price	New P.T.	List Price	
6d. 9d.	1½d. 2d.	1/9 1/9½	4½d. 4½d.	2/9 2/10	7d. 7d.	4/3 4/5	10½d. 11d.	7/9 8/-	1/7 1/7½	16/6 17/- 17/1	3/4½ 3/6
1/- 1/1 1/2	2½d. 3d. 3d.	1/10 1/11 2/-	4½d. 5d. 5d.	2/11 3/- 3/1	7½d. 7½d. 8d.	4/6 4/9 4/11	11d. 1/∹ 1/-	8/6 9/- 9/6	1/9 1/10 1/11½	17/6 18/6	$\begin{vmatrix} 3/6 \\ 3/7 \\ 3/9 \frac{1}{2} \end{vmatrix}$
1/3 1/4 1/44	3d. 3½d. 3½d.	$2/1 \ 2/1 \ 2/2 \ 2/2$	5d. 5½d. 5½d.	3/2 3/3 3/4	8d. 8d. 8½d.	5/- 5/3	$\frac{1/0\frac{1}{2}}{1/1}$ $\frac{1/2\frac{1}{2}}{1}$	9/9 10/- 10/6	$\frac{2}{-2}$ $\frac{2}{0}$ $\frac{1}{2}$ $\frac{2}{2}$	19/3 25/- 28/6	3/11 5/11 5/10
1/5 1/6	31d. 4d.	2/3 2/4	5½d. 6d.	3/5 3/6	8½d. 8½d.	5/9 6/- 6/1	1/3 1/3	11/-	2/3 2/5	20,0	0/10
1/61 1/7 1/71	4d. 4d. 4d.	2/5 2/6 2/7	6d. 6½d. 6½d.	3/7 3/9 3/11	9d. 9½d. 10d.	6/4 6/6 7/-	1/3½ 1/4 1/5½	13/- 15/- 15/6	2/8 3/1 3/2		
1/8	4d.	2/8	6½d.	4/-	10d.	7/6	$1/6\frac{1}{2}$	16/-	3/31		

AUTO & CYCLE DYNAMO LAMPS Groups 2 and 4

List	New	List		List	New
Price	P.T.	Price		Price	P.T.
4d. 7d. 8d. 8½d. 9d. 1/- 1/1 1/3 1/4 1/5 1/6 1/7 1/8 2/-	1d. 11d. 11d. 11d. 11d. 2d. 2d. 2dd. 3d. 3dd. 3dd. 4dd. 4dd.		5½d. 5½d. 6d. 6d. 6d. 6½d. 6½d. 7d. 7d. 8½d. 9¼d. 9¼d.	4/6 4/9 5/- 5/6 5/7 5/9 6/- 6/3 6/6 6/9	$\begin{array}{c} 10\frac{1}{2}d.\\ 11d.\\ 11\frac{1}{2}d.\\ 1/0\frac{1}{2}\\ 1/1\\ 1/12\\ 1/2\\ 1/2\\ 1/3\\ 1/3\frac{1}{2}\\ 1/3\\ 1/3\frac{1}{2}\\ \end{array}$

EKCO FLUORESCENT TUBES

Tube Type	List Price	New P.T.
5ft. 80w. Standard	13 0 11 9	2 B 2 5
3ft. 30w. Standard	$\begin{array}{cccc} 11 & 0 \\ 11 & 0 \\ 10 & 6 \end{array}$	2 3 2 3 2 2
18" 15w. Standard 5ft. 80w. Coloured, U.V. & Coronation	9 9	2 0 3 7
4ft. 40w. Coloured, U.V. & Coronation 3ft. 30w. Coloured 2ft. 40w. Coloured	17 0 16 6 16 0	3 6 3 5 3 31
2ft. 20w. Coloured & U.V 18" 15w. Coloured	15 0 15 0 15 0	3 1 3 1
EXTRAS Quickstart (Sylcoated) Instant Start (Metal Strip)	6 1 0	1± 2±

CONDITIONS OF SALE

All orders for Lighting Products are accepted and executed on the understanding that the purchaser is bound by the following Conditions of Sale which shall constitute a binding contract,

PRICES AND DISCOUNT. Subject to alteration by us without notice. All lighting Products will be invoiced at prices current at the date of despatch by us irrespective of prices ruling at the time of acceptance of order. Re-sellers of our Lighting Products shall sell our Lighting Products at our current prices less the appropriate discounts as authorised by us and not otherwise.

PAYMENT. 21 per cent settlement discount allowed for payment of accounts (less Purchase Tax) not later than the end of the month following date of invoice, unless otherwise stated by us in writing. Approved purchasers desiring to open credit accounts should furnish two satisfactory trade references and name and address of Bankers.

CARRIAGE ND ACKING. Tungsten Filament Lamps, Fluorescent Tuhes, Sodium and Mercury Discharge Lamps, Fluorescent Fittings, Control Gear, Plastalux Shades, and Tungsten Industrial Reflectors delivered carriage free to any part of Great Britain and Northern Irel. ad. Tungsten Glass Diffusing Units of a net value of £10 and over will a delivered free. Orders of less than £10 net value will be charged with carriage and packing. All packing cases used will be charged and credited on return to the sending Depot.

When special delivery arrangements are requested, the difference between goods and special rates will be charged.

LOSS OR DAMAGE IN TRANSIT. In the event of loss or damage in transit, it is essential that carriers and our despatching depot be advised

within three days of receipt of goods.

Irrespective of conditions of packing, goods and packing should be held for inspection by carriers before return. After inspection, carriers should accept goods for return to sending depot, carriage free.

The following details should be sent to us:

Advice Note number Date consignment received.

Carrier's name.

Date carrier advised. Condition of package. Damage or shortage.

In the event of non-delivery carriers and our despatching depot should be advised within ten days of date of advice note.

EKCO-ENSIGN ELECTRIC LTD, will not be responsible for goods lost or damaged in transit unless these directions are observed.

or damaged in transit unless these directions are observed.

DELIVERY. Every effort will be made on our part to meet customers' demands as regards deliveries and it must be understood that all orders are accepted by us on this understanding and that we are not to be held responsible in damages or otherwise for failure or delay in delivery resulting wholly or in part from fire, strikes or from any breakdown in transit that may occur either to or from our Works or from the unavoidable total or partial stoppage of works, or from war or failure in supply of raw material or from any other cause beyond our reasonable control. Goods supplied to customers firm orders cannot be returned without our written consent.

DEFAULT. We shall have the right to discontinue delivery and also at our discretion to determine the contract in respect of any undelivered goods if the customer defaults in payment.

goods if the customer defaults in payment.

GUARANTEE. Ekco and Ensign lamps, fittings and control gear conform
with the current British Standards, where applicable, and to the highest
standards of efficiency and manufacture. Any Ekco or Ensign lamps,
fittings or control gear proved defective through faulty material or
workmanship, will be replaced or the value credited at our option
provided that they have been used under the correct operating conditions and that such lamps, fittings and control gear are returned to our
nearest Depot carriage paid and duly advised. We shall not be responsible
or answerable for any personal injuries or consequential or resulting
liability, damage or loss arising from any defects of our products.

EXPORT. No Lighting Products supplied hereunder shall be exported directly or indirectly without our written consent. Such consent, when given, will be subject to our Conditions for Export Sales.

ECAL CONSTRUCTION. This contract shall be construed according to the law of England and if any question dispute or difference shall arise between the parties hereto in respect of the construction of this Agreement of their respective rights duties or liabilities hereunder the same shall be referred to a single arbitrator in London in case the parties can agree upon one but otherwise the same shall be referred to arbitration in London under the provision of the Arbitration Acts 1889 to 1934 or any statutory modification or re-enactment thereof which said provisions whall also applied the same of a reference the spikers the spikers. shall also apply to the case of a reference to a single arbitrator.

DESIGN ALTERATIONS. The equipment and lamps supplied may vary slightly in detail from the illustrations and descriptions as the result of improvement in design or changes in technique.

LAMP GROUPS CLASSIFICATION

Group I

Aircraft Landing Broadside Candle and Tubular Clear (G.L.S.) Colour Sprayed (G.L.S.) Hospital Theatre Infra Red Light Tubes (other than fluorescent) Pearl (G.L.S.) Photo-pearl, Photo-flood Photo-peart, Finter-noon Photo-enlarger Projector Class A1 Projector Class A3, B1, E and F Projector Class G Reflector Spotlight and Floodlight Sign Silverlight and Softlight Studio (photographic) Switchboard Indicator Theatre Spotlight Traction and Rough Service Traffic Signal
Tubular Floodlight (Class FL Projector)

Group II

Aircraft Lamps (except landing and certain indicator) Bus Interior
Car Headlamps
Car Side and Tail
Car Stop, Indicator and Festoon Police

Group III Flashlamps

Group IV

Cycle Dynamo

Group V

Miners

Group VI Decoration Sets

Group VII

Certain Aircraft Indicator

Group IX

Fluorescent Tubes Mercury Vapour Sodium Vapour

Group X

Radio Panel Certain Aircraft Indicator

Unclassified

Cold Cathode



LAMPS and TUBES

ISSUED SEPT 1956

PRICE LIST AND CATALOGUE

EKCO LAMPS

Price List

SEPTEMBER 1956

Per Pro
ELECTRICAL & RADIO FACTORS (Scuntherpo)

B.S.I. Licence for Ekco Tungsten Filament Lamps.

All Ekco lamp factories are licensed to manufacture general service tungsten filament lamps under the British Institution's Certification Scheme.

The Institution is satisfied that the quality control arrangements in each factory ensure that lamps meet the requirements of British Standard 161-1956. Independent tests undertaken at the National Physical Laboratory also maintain a constant check on the quality of Ekco lamp production.

GENERAL SERVICE LAMPS

SINGLE COIL

Colour Spraying (Blue, Flame, Green, Orange, Pink, Red, White and Yellow.

Extra cost per lamp above Clear Lamp list prices:

list prices:		
5/25w.		2d.
40/75w.		3d.
100w.		4d.
150w.	100	9d.
200w.		1/6
300w.	1 / 100	1/9
500w.		2/3
750w.	204	2 6
Bowl Frosting:	244	2 6
200w.		17
	1044	1/-
13 300w.	200	1/3
500w.	100	1/6
750w.	200	1/9
1000w.	440	2/6

Group I	Standard	200, 210, 220, 230, 240, 250,		100, 11	0, 115,	6, 12, 25, 35, 50, 55, 60, 65, 75,	
Wattage	Сар		volts	120, 13	0 volts		volts
15 or 25	B.C.	Clear	Pearl 1/6½	Clear	Pearl 1/6½	Clear 1/11	Pearl I/II
40 or 60	B.C.	1/41	1/41	1/61	1/61	2/3	2/3
75	B.C.	1/10	1/10	2/-	2/-	3/	3/-
100	B.C.	1/10	1/10	2/-	2/-	3/3	3/3
150	B.C.	2/7	2/7	2/9	2/9	5/-	5/-
200	E.S.	3/9	3/9	4/3	4/3	7/6	7/6
300	G.E.S.	7/6	8/6	8/-	9/-	11/-	12/-
500	G.E.S.	10/-	11/-	10/6	11/6	14/-	\
750	G.E.S.	14/6	16/-	14/6	16/-	19/-	
1000	G.E.S.	16/-		16/-	-		-
1500	G.E.S.	22/6	_	22/6	_		

[•]Minimum lower voltages vary with size of lamp—see main EKCO lamp catalogue.

SILVERLIGHT LAMPS

A lamp with an internal silica coating, giving maximum diffusion with minimum loss of light. Eminently suitable for domestic interiors and all places where a soft diffused shadow free light is required.

Group I Voltages: 200, 210, 220, 230, 240, 250, 260					
Wattage	40	60	100	150	200
Cap.	B.C.	B.C.	B.C.	B.C.	E,S.
List Price	I /7½	I /7½	2/1	3,1	4/3

Colour lamps with an internal silica coating are available in 200/260v. 15w. and 25w. sizes (both bulbs 55 mm. dia.) in colours:—Blue, Flame, Green, Orange, Pink, Red, White and Yellow. List Price—I/8½d.

SOFTLIGHT LAMPS

A soft toned lamp for use in the home and all other locations where a restful atmosphere is needed.

Group 1 Voltages: 200/220, 230/240, 250/260				
Wattage Cap	60 B.C.	100 B.C.	150 B.C.	
List Price	1/75	2/1	3/1	

COILED COIL

Group 1 200, 210, 220, 230, 240, 250, 260 volts - Standard cap - B.C. Pearl bulbs only					
40w.	60w.	75w.	100w.		
1/9	1/9	2/I±	2/I ½		

ECONOMY LAMPS

Voltage range	200/260	List
Wattage	5-8 according to applied voltage	
Bulb (Pearl only)	55 mm. (2 ³ / ₁₆ in.) diameter	Price
Сар	B.C.	1/8

THEATRE BATTEN LAMPS

(Samiloff Type)

Group I V Dimensions for a	Il sizes: Length: 5	20, 130, 200, 210, 220 in. Diam.: 2 18 in. l dard cap - B.C.), 230, 240, 250 light centre length:
Wattage	60	100	150
List Price	2/6	2/9	5/-

Note: All prices quoted are list prices to which Purchase Tax, where applicable, must be added as shewn in P.T. Schedule on page 12.



GENERAL SERVICE LAMPS

SINGLE COIL

Colour Spraying (Blue, Flame, Green, Orange, Pink, Red, White and Yellow.

Extra cost per lamp above Clear Lamp

list prices:		
5/25w.		2d.
40/75w.	100	3d.
100w.		4d.
150w.	1990	9d.
	0.04	
200w.	41 1999	1/6
300w.	-	1/9
500w.		2/3
750w.		2 6
	200	
Bowl Frosting	:	
200w.	1000	1/-
300w.		1/3
500w.	2000	1/6
750w.		1/9
1000w.	4.6.0	2/6
1500w.		2/6

Group I	Standard	200, 210, 220, 230, 240, 250,		100, 11	100, 110, 115,		6, 12, 25, 35, 50, 55, 60, 65, 75,	
Wattage	Сар		volts		0 volts		volts	
15 or 25	B.C.	Clear	Pearl 1/61	Clear 1/6½	Pearl	Clear I/II	Pearl I/II	
40 or 60	B.C.	1/41	1/4	1/61	1/61	2/3	2/3	
75	B.C.	1/10	1/10	2/-	2/-	3/-	3/-	
100	B.C.	1/10	1/10	2/-	2/-	3/3	3/3	
150	B.C.	2/7	2/7	2/9	2/9	5/-	5/-	
200	E.S.	3/9	3/9	4/3	4/3	7/6	7/6	
300	G.E.S.	7/6	8/6	8/-	9/-	11/-	12/-	
500	G.E.S.	10/-	11/-	10/6	11/6	14/	-	
750	G.E.S.	14/6	16/-	14/6	16/	19/-	122	
1000	G.E.S.	16/-	_	16/-	-	_	_	
1500	G.E.S.	22/6	_	22/6	_		1	

[•]Minimum lower voltages vary with size of lamp—see main EKCO lamp catalogue.

SILVERLIGHT LAMPS

A lamp with an internal silica coating, giving maximum diffusion with minimum loss of light, Eminently suitable for domestic interiors and all places where a soft diffused shadow free light is required.

Group I	Voltages:	200, 210, 220	, 230, 240, 2	50, 260	
Wattage	40	60	100	150	200
Cap.	B.C.	B.C.	B.C.	B.C.	E.S.
List Price	1/71/2	1/71/2	2/1	3, I	4/3

Colour lamps with an internal silica coating are available in 200/260v. 15w. and 25w. sizes (both bulbs 55 mm. dia.) in colours:—Blue, Flame, Green, Orange, Pink, Red, White and Yellow. List Price—I/8¼d.

SOFTLIGHT LAMPS

A soft toned lamp for use in the home and all other locations where a restful atmosphere is needed.

Group 1 Voltages: 200/220, 230/240, 250/260					
Wattage Cap	60 B.C.	100 B.C.	150 B.C.		
List Price	1/7½	2/1	3/1		

COILED COIL

Group 1 200, 210, 220, 230, 240, 250, 260 volts - Standard cap - B.C. Pearl bulbs only					
40w.	60w.	75w.	100w.		
1/9	1/9	2/I½	2/1½		

ECONOMY LAMPS

Voltage range	200/260	List
Wattage	5-8 according to applied voltage	
Bulb (Pearl only)	55 mm. (2 ³ / ₁₆ in.) diameter	Price
Сар	B.C.	I /8

THEATRE BATTEN LAMPS

(Samiloff Type)

Group I \ Dimensions for a	Il sizes: Length: 5]	20, 130, 200, 210, 220 in. Diam.: 2 ii in. L dard cap - B.C.), 230, 240, 250 Light centre length:
Wattage	60	100	150
List Price	2/6	2/9	5/-

Note: All prices quoted are list prices to which Purchase Tax, where applicable, must be added as shewn in P.T. Schedule on page 12.



ROUGH SERVICE LAMPS

Group I	The vibrati			lamp has the filament so conditions. Standard Cap oulb to special order for Gover		
	1		1		List Price	
Wattage	Length ins.	Diam.	Туре	25, 35, 50, 55, 60, 65, 75 and 150 volts	100, 110, 120, 130 volts	200, 210, 220, 230, 240 250, 260 volts
25	3 16	23	Vacuum	2/9	2/-	2/-
30	4-6	21	Vacuum	2/9	1/9	-
40 & 60	45	23	Vacuum	2/9	2/	2/-
100	5 8	2+8	Gasfilled			2/9

All Ecko traction lamps are designed to withstand voltage fluctuations and rough usage met under service conditions.

DAYLIGHT AND NATURAL COLOURED GLASS LAMPS

NATURAL COLOURED **GLASS LAMPS**

		Cap - B.C.		
Wattage		List	Price	
	Ruby	Green	Amber	Blue
15 and 25	6/6	4/-	3/6	3/-
40 and 60	6/6	3/9	3/3	2/9
100	8/-	4/9	4/_	3/3

DAYLIGHT LAMPS

Group I	100, 110), 120,	130, 20	0, 210,	220, 2	230, 240,	250,	260 voi	ts
Wattage	15/25	40	60	75	100	150	200	300	500
Standard cap	B.C.	B.C.	B.C.	B.C.	B.C.	B.C. or E.S.	E.S.	G.E.S.	G.E.S.
List Price	2/8	2/5	2/5	3/3	3/6	5/-	7/9	12/-	15/6

DECORATIVE LIGHTS FOR ALL FESTIVE OCCASIONS

JOYLIGHTS

DECORATION LIGHTS

Comprising a set of 12 shades and 13 3-watt lamps (1 spare lamp per set) wired in series for 200/250 volts, with B.C. plastic adaptor. 25/- per set plus 5/1½ purchase tax. Spare lamps 1/- each plus 2½d. Purchase Tax.

Comprising 12 3-watt lamps (plus 1 spare lamp per set) wired in series for 200/250 volts, with B.C. plastic adaptor. 17/1 per set plus 3/6 purchase tax. Both sets are packed in an attractive and colourful display carton. Spare lamps 1/- each plus 2½d. Purchase Tax.

CANDLE LAMPS

CANDLE LAMPS

Group I	tandard Voltages: Stand	100, 110, 120, 1 dard caps: B.C	30, 200/220, 2 ., S.B.C., S.E.S	30/240, 2 S.	50/260	
				List Price		
Watt- age	' Shape	Length ins.	Diam. ins.	Clear	Colour Sprayed or Frosted	
25	Olive, plain *	41	11	2/6	3/-	
25	Olive, twisted	41	11	3/-	3/6	
40	Olive, plain	51	13	3/-	3/6	
40	Olive, twisted	51	2 3	3/6	4/-	

Also available 50v, and 60/80v. Clear 4/9, Colour Sprayed or Frosted 4/11.

Note: All prices quoted are list prices to which Purchase Tax, where applicable, must be added as shewn in P.T. Schedule on page 12.









Page 3

SIGN, PYGMY SIGN & SWITCHBOARD INDICATOR LAMPS

PYGMY SIGN LAMPS

Group I Standard Cap	Diameter ins.	Overall Length of Lamps ins.
B.C.	11	2 1
E.S.	11	21
S.B.C.	18	2 7
S.E.S.	11	21/2

Type I5 w.	25, 50, 60, 65, 75, 150 volts	110, 130, 200/220 230/240, 250/260 volts
Clear	2/5	1/10
Colour Sprayed	2/7	2/-
*Natural ruby glass	6/-	5/6
*Natural green glass	5/3	4/9
*Natural amber glass	5/3	4/9
*Natural blue glass	5/-	4/6

^{*} Natural coloured glass pygmy sign lamps are supplied to order. They are not normally held in stock.

SWITCHBOARD INDICATOR LAMPS

These lamps are similar in all respects to B.C. Pygmy Sign lamps except that they have a life of several thousand hours. The nominal wattage is 15, but this will vary according to voltage. The lamps are marked "Switchboard Indicator".

Class	The second secon	
Clear	Colour Sprayed	
2/3	2/5 2/5	
2/3		
	A COURT OF THE COU	

SIGN LAMPS

Dia. 44 mm.
Overall length 90 mm.
Standard cap—B.C. or E.S.
Standard Voltages: 100/110, 120/130, 200/220, 230/240, 250/260, 15w.

	Li	st Price
Voltage	Clear	*Colour Sprayed
100/130	1/10	2/1
200/260	1/7	1/10

^{*} Colour range on page 2

TUBULAR LAMPS

TUBULAR double cap

Standard Cap - Single contact (\$ 15s). 110, 120, 200/220, 230/240, 250/260 volts. Diameter for all sizes 25 ± Imm. (I in.), Colour spraying - standard colours as for clear lamps.

Group I	Len	Length		ist Price
Wattage	mm.	in.	Clear	Colour Sprayed
30	221±1	8 #	5/9	6/1
30	284±1	11%	5/9	6/1
60	221±1	8#	6/-	6/4
60	284+1	11&	6/-	6/4

TUBULAR single cap

Standard Voltages: 15w. and 25w.: 110, 120, 200/220, 230/240, 250/260 volts. 40 and 60w.: 200/220, 230/240, 250/260 volts. Colour spraying – standard colours as for clear lamps.

Group I	Length	Diam.		
Wattage	in.	In.	Standard Cap	List Price
15 or 25*	3 8	T	B.C., S.B.C., E.S. S.E.S.	Clear 3/9 Colour Sprayed 4/-
40 or 60	117	1 1/2	B.C.	Opal 8/6 Opal Colour Sprayed

* 25w. lamp also available. 23, 35, 50, 55, 60, 65 75 150v List price 4/9 clear. Colour sprayed 5/-

Note: All prices quoted are list prices to which Purchase Tax, where applicable, must be added as shewn in P.T. Schedule on page 12.











NEON LAMPS

NEON LAMPS

Not subject to Purchase Tax.

		Standard 100/130,	voltages 200/260,	Dime	nsions	List
		Wattage	Standard Cap	Length ins.	Diam.	Price
	Red Lacquered)	1.0	B.C.	37	11	5/-
	(Red Lacquered)	1-0	B.C.	37	11	5/-
Normal Lig	hting	5.0	B.C.	41	21	4/6
	Large Disc	0.5	B.C. E.S.	2 1	1	4/-
	Small Spiral	0.5	S.B.C.	2-½ 2½	11	-
Indicators	Sman Spiral	0.2	S.E.S.	2 %	11	4/-
	Small Disc	0.5	S.B.C.	21	11	41
		0.3	S.E.S.	2 %	11	4/-
	Indicator— Miniature *		M.B.C.	11	13 32	4/-

For use on 200/260v, supplies—must be in series with a one megohm resistor.



SPOTLIGHT & FLOODLIGHT

Group / Standard Voltages: 110 200, 210, 220, 230, 240, 250,

Туре	Wattage	Сар	Length		Diamet	er	List
1770	accage	Сар	mm.	ins.	mm.	ins.	Price
Spotlight	150	E.S.	176±6-5	615	126+1.5	415	15/6
Floodlight	150	E.S.	176±6-5	615	126+1.5	415	15/6
Spotlight	75	B.C.	129±3	5-1-	95 + I	2-7	7/-

TRACTION LAMPS

BUS, COACH & YACHT LAMPS

Group II		List	Price
Voltage	Wattage	38 mm. bulb	50 mm. bulb
12	10	2/4	2/4
12	12	2/-	2/4
12	20		2/9
12	24	-	2/11
12	36	_	2/11
24	12	2/1	2/1
24	15	2/9	2/9
24	20	2/4	2/9
24	24	2/11	2/11
24	36	2/11	2/11
24	48	3/6	3/6
24	60	5/10	5/10

TROLLEY BUS LAMPS

Standard Voltages: 30, 35, 40. Cap—B.C. (B22d/21 × 26) Clear or Pearl.

Group I			
Wattage	22 mm. bulb	38 mm. bulb	50 mm, bulb
6	2/6	-	_
6		2/6	2/6
15		2/9	2/9
20		3/-	3/-
36	-	4/-	4/-











TRACTION LAMPS (continued)

LAMPS FOR TRAMCARS, TRAINS & SIMILAR LOCATIONS (Series Traction Lamps)

These lamps are marked with their rated current and only those having the same current should be connected to each other in series.

100, 110, 120, 130 volts. Standard Cap - B.C., E.S.

CLEAR OR PEARL

Group I			1	List
Current-Amps	Nominal Wattage	Length, ins.	Diam., ins.	Price
0.27	30	4 &	2 8	1/9
0-35	40	4 %	2	1/9
0.52	60	48	2 %	1/9

TRAFFIC SIGNAL LAMPS

Group ! For use in road traffic signals Standard Voltages: 100, 105, 110, 115, 120, 125, 130, 200, 210, 220, 230, 240, 250, 260 volts. Clear bulbs only.						
Wattage	Length	Diameter	Light Centre Length	Standard Cap	List Price	
60	mm. 117·5±3·5	mm. 65±1	85±3	B.C.	2/-	
60	108±3·5	65±1	62±3	E.S.	2/-	

All Ekco traction lamps are designed to withstand voltage fluctuations and rough usage met under service conditions.

PROJECTOR LAMPS

CLASS A1 (Tubular Bulbs)—for film and slide projectors.

CLASS B1 (Round Bulb)—for floodlights, theatre spotlights.

CLASS B2 (General Service Bulb)—Bunched filaments for floodlights.

CLASS E (Round Bulb)—Grid filament for epidiascopes.

CLASS F (Round Bulbs)—For microscopes and similar apparatus.

CLASS FL (Tubular Bulbs)—Line filament for horizon and similar floodlights.

CLASS G (Pear & Tubular Bulbs)—Exciter lamps for sound film apparatus.

For full details of all Ekco Projector Lamps, see illustrated catalogue, ref. TC/56.











TELEPHONE SWITCHBOARD INDICATOR LAMPS

TELEPHONE SWITCHBOARD INDICATOR LAMPS

These lamps are made in accordance with British Standard 1050, 1953, 'Visual Indicator Lamps', except the 12v. lamp which has a tungsten filament.

Average specified life:

1,000 hours.

Group VII		En	End Pieces		List
Volts	Amps	Colour	Colour Code*	Lumens	Price
4	0.250	Green	267	3.7	2/2
6	0.041	Grey	631	0.7	2/2
12	0.100	Red†	538	3.0	2/2
17	0.045	Orange	557	1.8	2/2
24	0.100	Yellow	355	6.0	2/2

^{*} B.S. 381C, Colours for ready-mixed paints.

FLASH LAMPS & RADIO PANEL LAMPS

FLASHLAMPS

Standard Cap M.E.S. —clear round bulbs

Group X			Overall Length	List
Volts	Amps	Diameter ± 1 mm.	max. mm.	Price
4.5	0.3	15	27.5	4d.
4.0	0.3	11	24	4d.
3.5	0.3	- 0	24	4d.
3.5	0.15	11	24	4d.
2.5	0.3	11	24	4d.
2.5	0.2	- 11	24	4d.

RADIO PANEL LAMPS

Standard Cap M.E.S. —clear bulbs

Group X Volts	Amps	Bulb Diameter ± 1 mm.	Overall Length	Bulb Shape	List Price
3-5	0.15	- 11		Round	7d.
6	0.04 or 0.06	H		Round	1/-
6-2	0.3	15		Round	I/− 7d.
6-3	0.11	H		Round	7d.
6-3	0-15	- 11		Round	7d,
6.5	0.3	II or I5	1	Round	7d.
8	0.15	II or IS		Round	9d.
4	0.3	10		Tubular	1/-
6.2	0.3	10		Tubular	I/- 7d.
6.3	0-15	10		Tubular	7d.
6.5	0.3	10		Tubular	7d.

PHOTOFLOOD & PHOTOGRAPHIC LAMPS

PHOTOFLOOD LAMPS

Group I	275	500	500	
Standard Voltages	100/110, 200/210, 220/230, 240/250			
Approximate Life	3 hrs.	10 hrs.	100 hrs.	
Standard Cap	B.C. or E.S.	B.C. or E.S.	E.S.	
List Price	2/6	6/6	22/-	

HIGH INTENSITY OPAL ENLARGING LAMP

Standard Voltages: 110, 210, 230, 240, 250. Cap: B.C. or E.S. Average life 100 hours.

Watts	List Price
150	4/6











[†] Alternative-Yellow mottle,

CYCLE DYNAMO LAMPS

HEADLAMPS

TAIL LAMPS

Group IV Voltage	Current	Сар	List Price
6	amps. 0·3	s.c.c.	1/4
6	0·5 0·3	S.C.C.	1/4 8d.
6	0.5	M.E.S. M.E.S.	8d.
8	0.12	M.E.S.	8d.

Group IV Voltage	Current	Сар	List Price
6	amps. 0.04	M.E.S. M.E.S.	8d. 8d.
6	0·04 0·03	M.E.S.	8d.
6	0.10	M.E.S. M.E.S.	8d. 8d.

CAR BULBS

SINGLE FILAMENT **HEADLAMPS**

Axial Filaments

Overall length 56 mm,—bulb diam. 38 mm., except lamps marked with an asterisk which are 63 mm, × 50 mm.

B.C. available at same price as S.B.C.

Group II Voltage	Wattage	S.C.	C.	S,B.C.		
	Wattage	Lamp Ref. No.	List Price	Lamp Ref. No.	List Price	
6	18	H	3/-	_	3/1	
6	24	106	2/6	109	2/7	
6	30		2/9		2/10	
6	36	108	2/9	113	2/10	
12	24	1	2/6	4	2/7	
12	36	2	2/6	5	2/7	
12	48	23	4/-	27	4/1	
12	60*	90	5/6	26	5/7	
24	24	1 - 1	T-manual V	122	4/7	
24	36	621	2/6	123	2/7	
24	48	623	4/-	140	4/1	
24	60*	124	5/6	128	5/7	

Wattage

24/24 30/30 36/36 36/36 36/36

DOUBLE FILAMENT **HEADLAMPS**

Double Transverse Filaments

Overall length 56 mm -bulb

Cap—S.B.C	5
SINGLE	
FILAME	NT

Filaments

Overall length 62 mm.-bulb diam. 28 mm.
Caps—single contact P22s/21—double contact P22d/21.

SINGLE	Group II		10		1	
FILAMENT	Voltage	Wattage	Сар	Filament	Lamp Ref. No.	List Pric
BRITISH	6	36 36	Single Contact Single Contact	Axial Transverse	172	3/9
PREFOCUS	12	36 38	Single Contact Single Contact	Axial Transverse	162 325	3/9
HEADLAMPS	12	38 48	Double Contact Single Contact	Transverse Axial	326 185	3/9
Axial and Transverse	12	48 44	Single Contact Single Contact Double Contact	Transverse Transverse	323 330	4/6
Filamente	24	44	Double Contact	Axial	331	4/6

Group II

DOUBLE FILAMENT **BRITISH PREFOCUS HEADLAMPS**

Double Transverse Filaments

Overall length 62 mm.—bulb diam, 28 mm.
Caps—double contact P22d/21,

Caps—doub	le contact P22d	/
STOP	LAMPS	

Overall length 46 mm - bulb diameter 25 mm

Group II Voltage	Wattage	Lamp Ref. No.	List Price
6 -	24/24	166	4/9
6	30/24	312	\$/-
6	36/36	306	4/6
12	42/36	354	4/6
12	44/38	358	5/4
12	48/48	302	6/9
24	44/38	359	5/7

Group II Voltage	Wattage	Сар	Filament	Lamp Ref. No.	List Price
6	18	s.c.c.	Transverse	317	3/9
12	18 21	S.C.C.	Transverse Transverse	221 382	3/6 3/-
12	24	S.C.C.	Transverse	199	3/6



Lamp Ref. No.

168 169 170

List Price











STOP & TAIL LAMPS

Overall length 46 mm. -- bulb diameter 25 mm.

Group II		_			
Voltage	Wattage	Сар	Filament	Lamp Ref. No	List Price
6	18 & 6	S.B.C.	Transverse & Bow	383	3/6
6	18 & 6	S.B.C.*	Transverse & Bow	384	3/6
12	21 & 6	S.B.C.	Transverse & Bow	381	3/6
12	21 & 6	S.B.C.*	Transverse & Bow	380	3/6
24	24 & 6	S.B.C.*	Transverse & Bow	334	3/9

* Offset pins (B15d/19)

SIDE OR TAIL LAMPS

Group II		Bulb	Overall	S.C.	S.C.C.		С.
Voltage	Wattage	Diam. mm.	Length mm.	Lamp Ref, No.	List Price	Lamp Ref. No.	List Price
6	3	18	32-5	200	1/4	204	1/5
6	6	18	32.5	205	1/6	206	1/7
12	4	18	32.5	\ <u></u>	1/7		1/8
12	6	18	32-5	207	1/4	209	1/5
24†	6	18	32.5	149	1/4	150	1/5
6	3	15	27.5	988	1/5*		- 7
ıž	4	15	27.5	222	1/5*		_

* M.C.C. Cap. † B.C. Cap available at same price. Lamp Reference No. 638.

INDICATOR LAMPS

Group II			M.E.S.	Сар	M.C.C. Cap	
Voltage	Wattage	Bulb Diam, mm.	Lamp Ref. No.	List Price	Lamp Ref. No.	List Price
6 12	3-0 2-2	H	990 987	1/1	641	1/2
12 16	2 2 3 0	15 15	986 985	2/3	645 647	2/6
24	2-8	15	993	1/4	651	1/5

FESTOON (TRAFFICATOR) LAMPS

Voltage Wattage				Dime	ensions	
	Lamp Ref. No. Cap	Сар	Length mm.	Diameter mm.	List Price	
6	3	255	S7/8	35-5	7.5	2/3
6	6	253	S8.5/8	38	1.1	2/7
12	3	256	S7/8	35.5	7.5	2/3
12	6	254	58,5/8	38	11	2/7
24	6	653	\$8.5/8	38	11	2/6
†24	6	654	\$8.5/8	38	11	3/10
24	6	260	58.5/8	44	11	2/7

† With Supported Filament.

MERCURY LAMPS

EKCO MERCURY LAMPS

Types MA/V, MB/U and MBF/U

Standard Voltages— 200/220, 230/240, 250 A.C.

Lamp Class Wattage	Class	Class Bulb Cap Finish	Con	Nomina	List	
	Class		Initial	Average through life	Price	
80	MB/U	Pearl	3-pin B.C.	3,000	2.350	39/6
125	MB/U	Pearl	3-pin B.C.	5,300	3,900	45/-
250	MA/V	Clear	G.E.S.	8,750	7,750	54/-
400	MA/V	Clear	G.E.S.	16,800	13,600	59/-
80	MBF/U	Fluor	3-pin B.C.	3.000	2.350	48/6
125	MBF/U	Fluor.	3-pin B.C.	5,300	3.900	59/-
250	MBF/U	Fluor.	G.E.S.	10,000	8,500	120/-
400	MBF/U	Fluor.	G.E.S.	18,000	16,800	180/-

SODIUM LAMPS

All lamps, with appropriate control gear, are suitable or 200/250 V. supplies and are fitted with ceramic bayonet caps—45, 60 and 85W, with B22/S and 140W, with B22/M.

Group IX		Nomina	Lumens		Dimensions		List Price		
Lamp Wattage	Wattage with Gear	Initial	Average through life	Overall Length ± 10 mm.	Diameter ± 2 mm.	Light Centre Length ± 10 mm.	Lamp	Vacuum Jacket	Lamp and Jacket
45	65	2,610	2,250	238	50	140	40/-	21/9	61/9
60	80	4,020	3,420	300	50	170	45/-	24/6	69/6
85	105	6,200	5,525	415	50	230	60/-	29/3	89/3
140	165	10,250	9,100	518	65	28	65/-	33/-	98/-

Note: All prices quoted are list prices to which Purchase Tax, where applicable, must be added as shewn in P.T. Schedule on Page 12.









THE EKCO RANGE

Standard Fluorescent tubes, up to and including the 5ft. size, are available in six 'whites' and five colours. Peach and ultra-violet tube are also obtainable.

The latest additions to the range are the reflector tubes and the 8ft, tube,

White (3500°K) tubes are recommended for all general lighting purposes because they are of a colour between daylight and warm white. They combine a pleasant appearance with good colour rendering of most materials and their efficiency is the highest of the 'white' range. WHITES

Warm White tubes provide light of a warmer tone than white, daylight or natural tubes and they are recommended for use in commerce and industry, particularly where the colour of the other tubes appears to be somewhat 'cold'. Their efficiency is nearly equal to white (3500°K) tubes.

De-Luxe Warm White tubes radiate a soft mellow light which is kind to the complexion and makes food, furnishings and other commodities look attractive. They blend well with tungsten lighting and are eminently suitable for restaurants, cinema and theatre foyers, entrance lobies and the home, and also other locations where a cordial, intimate atmosphere is desirable.

Peach Tubes have been superseded by de-luxe warm white tubes, but all sizes of peach tubes are still available.

Daylight (4500°K) tubes are used mainly in industry to supplement inadequate natural lighting and to provide artificial daylight conditions after dark

Natural tubes are for use in commerce and industry where the discrimination and grading of colours are of importance. They give a close approximation to natural daylight.

Northlight (6500°K Colour Matching) tubes simulate north sky daylight and are suitable for many colour matching purposes.

Five standard colours are available, Green, gold, blue, red, and pink. Two and three section coloured tubes can be manufactured in bulk quantities, to order. For three section tubes, the centre section must be white.

Ultra-Violet tubes are for the irradiation of fluorescent paints and similar substances and a screen of Woods glass or similar material is required to filter out the visible light. The radiation from these tubes is normally harmless, but prolonged exposure of the eyes to the s should be avoided.

Ultra-violet tubes are available only in 80w. 5ft., 40w. 4ft. and 20w. 2ft. sizes.

Available in white (3500°K), warm white and natural only in 80w. 5ft. and 40w. 4ft. sizes, these reflector tubes are similar to a standard tube, except that the major portion is covered with an internal white reflector backing which directs all the light through a window of approximately 120°.

125W. 8FT. TUBE

Available in White, Warm White, Daylight and Natural only, this tube is for use in installations requiring long continuous lines of light.

OUICKSTART & INSTANT START TUBES

Three types of tubes are available as below:-

1. Standard

This is the tube for all switchstart circuits and it is normally supplied unless other types are ordered.

2. Quickstart (Sylcoated)

This tube has a colourless water repellant coating and should be used in Quickstart circuits where there is an earthed metal surface along the length of the tube and not more than 2" away from it.

The details given against every Ekco fluorescent lighting fitting indicate which type of tube is required for Quickstart operation. Gold, Red and Ultra Violet tubes are not available as Quickstart tubes.

3. Instant Start (Metal Strip)

This tube is required for a Quickstart circuit when there is not an adjacent earthed surface permitting the use of the Quickstart (sylcoated) tube. The metal strip must be earthed and this is normally carried out by means of an earthed lampholder. Where Instant Start (metal strip) tubes are recommended for Ekco fluorescent lighting fittings one of the lampholders on the fitting is earthed.

PRICE LIST

Tube Size	125w. 8ft.	80w. 5ft.	40w. 4ft.	30w. 3ft. I≟″ and I″ dia.	40w. 2ft.	20w. 2ft.	15w. 1½ft. 1½" and 1" dia.
Whites	25/~	13/	11/9 2/5	11/- 2/3	11/- 2/3	10/6 2/2	9/9 2/-
Colours* Ultra Violet Purchase Tax	<u> </u>	17/6 17/6 3/7	17/- 17/- 3/6	16/6 — 3/5	16/- 3/3½	15/- 15/- 3/1	15/- - 3/1
Reflector Tubes Purchase Tax	=	14/9 3/0½	13/9 2/10	=			

* U.V. Tubes available only in 5ft., 4ft. and 20w. 2 ft. sizes.

EXTRAS: Quickstart (Sylcoated) 6d. extra per tube plus 1½d. Purchase Tax (except 40w. 2ft. where the Standard Type is Sylcoated).

Instant start (Metal Strip) 1/- extra per tube plus 24d. Purchase Tax. (Stock sizes 80w. 5ft. and 40w. 4ft. Others to order).

Satisfactory operation of Ekco fluorescent tubes is assured with control gear manufactured or approved by Ekco-Ensign Electric Ltd. Ekco 80w. fluorescent tubes are normally supplied in cartons of 12 tubes. All other sizes in cartons of 24.

DOUBLE-LIFE GUARANTEE

EKCO 'double-life' fluorescent tubes have a rated average life of 5,000 hours. Subject to use with approved control gear under correct operating conditions, tubes failing through defective material or workmanship will be credited in full or replaced free of charge, at our option, should failure occur within twelve months of the date of purchase or a life of 3,000 hours, whichever is the less.

Pro-rata replacement or credit for tubes failing between 3,000 and 5,000 hours will not be given. Experience has shown that the number of tubes failing at this stage is compensated for by the many tubes lasting beyond 5,000 hours.

CONDITIONS OF SALE

All orders for Lighting Products are accepted and executed on the understanding that the purchaser is bound by the following conditions of

All orders for Lighting Products are accepted and executed on the understanding that the purchaser is bound by the following conditions of Sale which shall constitute a binding contract.

PRICES AND DISCOUNTS.—Subject to alteration by us without notice. All Lighting Products will be invoiced at prices current at the date of despatch by us irrespective of prices ruling at the time of acceptance of order. Re-sellers of our Lighting Products shall sell our Lighting Products at our current prices less the appropriate discounts as authorised by us and not otherwise.

PAYMENT.—2½ per cent settlement discount allowed for payment of accounts (less Purchase Tax) not later than the end of the month following date of invoice, unless otherwise stated by us in writing.

Approved purchasers desiring to open credit accounts should furnish two satisfactory trade references and name and address of Bankers.

CARRIAGE AND PACKING.—Tungsten Filament lamps. Fluorescent Tubes, Sodium and Mercury Discharge lamps, Fluorescent Fittings, Control Gear, Plastalux Shades, and Tungsten Industrial Reflectors delivered carriage free to any part of Great Britain and Northern Ireland.

Tungsten Glass Diffusing Units of a nett value of £[0 and over will be delivered free. Orders of less than £[0 nett value will be charged with carriage and packing. All packing cases used will be charged and credited on return to the sending Depot.

When special delivery arrangements are requested, the difference between goods and special rates will be charged. LOSS OR DAMAGE IN TRANSIT.—In the event of loss or damage in transit, it is essential that carriers and our despatching depot be advised within three days of receipt of goods.

Irrespective of conditions of packing, goods and packing should be held for inspection by carriers before return. After inspection, carriers should accept goods for return to sending depot, carriage free.

The following details should be sent to us:—

Advice Note number.

Condition of package.

In the event of non-delivery, carriers and our despatching depot should be advised within ten days of date of advice note.

EKCO-ENSIGN ELECTRIC LTD. will not be responsible for goods lost or damaged in transit unless the above directions are observed.

DELIVERY.—Every effort will be made on our part to meet customers' demands as regards deliveries and it must be understood that all orders are accepted by us on this understanding and that we are not to be held responsible in damages or otherwise for failure or delay in delivery resulting wholly or in part from fire, strikes or from any breakdown in transit that may occur either to or from our Works or from the unavoidable total or partial stoppage of works, or from war or failure in supply of raw materials or from any other cause beyond our reasonable control.

DEFAULT — We shall have the right to disconsinue delivery and also at our discreption to determine the contract in respect of early undelivery delivery and also at our discreption to determine the contract in respect of early undelivery delivery and also at our discreption to determine the contract in respect of early undelivery delivery.

DEFAULT.—We shall have the right to discontinue delivery and also at our discretion to determine the contract in respect of any undelivered goods

DEFAULT.—We shall have the right to discontinue delivery and also at our discretion to determine the contract in respect of any undelivered goods if the customer defaults in payment.

GUARANTEE.—Ekco and Ensign lamps, fittings and control gear conform with the current British Standards, where applicable, and to the highest standards of efficiency and manufacture. Any Ekco or Ensign lamps, fittings or control gear proved defective through faulty material or workmanship will be replaced or the value credited at our option provided that they have been used under the correct operating conditions and that such lamps, fittings and control goar are returned to our nearest Depot carriage paid and duly advised. We shall not be responsible or answerable for any personal injuries or consequential or resulting liability, damage, or loss arising from any defects of our products.

EXPORT.—No Lighting Products supplied hereunder shall be exported directly or indirectly without our written consent. Such consent, when given, will be subject to our Conditions for Export Sales.

LEGAL CONSTRUCTION.—This contract shall be construed according to the law of England and if any question dispute or difference shall arise between the parties hereto in respect of the construction of this Agreement of their respective rights duties or liabilities hereunder the same shall be referred to a single arbitrator in London in case the parties can agree upon one but otherwise the same shall be referred to arbitration in London under the provision of the Arbitration Acts 1889 to 1934 or any statutory modification or re-enactment thereof which said provisions shall also apply to the case of a reference to a single arbitrator.

DESIGN ALTERATIONS.—The equipment and lamps supplied may vary slightly in detail from the illustrations and descriptions as the result of improvement in design or changes in technique.

All prices quoted in this list are list prices to which Purchase Tax, where applicable, must be added

All prices quoted in this list are list prices to which Purchase Tax, where applicable, must be added
* All EKCO Lamps are guaranteed to conform to current British Standards.

GENERAL INFORMATION

LAMP CAPS The following abbreviations are those used throughout this folder and should be specified on all orders: B.C.—Bayonet, G.E.S.—Goliath Edison Screw, S.B.C.—Small Bayonet, C.C.—Centre Contact, E.S.—Edison Screw, S.C.C.—Small Centre Contact, S.E.S.—Small Edison Screw

VARIATIONS FROM STANDARD CAPS. Extra charges on List Prices for variations from Standard Caps: For S.B.C., S.E.S., or S.C.C. in place of B.C., E.S., or C.C. ... 3d. each For G.E.S., in place of B.C. or E.S. or vice-versa I/- each

STANDARD CONTAINERS

15-40 watts			100 per carton	60-100 watts 5	0 or	100 per carton
150 watts			50 per carton	200 watts		50 per carton
300 watts	***		24 per carton	500-1,000 watts		
1,500 watts	***	9.666	6 per carton	Candles and Striplite		50 per carton

Economy Lamps ... 12 per display carton, 96 per container Cycle Dynamo and Flash Lamps ... 50 per carton

Ordering by these standard quantities is strongly recommended

ORDERING Please state clearly on all orders: (1) Quantity; (2) Voltage; (3) Wattage;

(4) Type of Lamps; (5) Finish; (6) Cap types.

Example: 100, 230v. 60w. G.F. Pearl B.C.

PURCHASE TAX SCHEDULE

NEW PURCHASE TAX SCHEDULES — Operating from October 27th, 1955

Purchase Tax is chargeable on list prices, as follows:—Groups 1 & 6 (up to and including 250w.) 20.5% Groups 2 & 4 19.1% Radio Panel and Flash Lamp Bulbs 17.6% Projector Lamps B1/I, B1/2 and Class 'F' Micro Projector 20.5% Projector Lamps, Classes AI, E, FL and G, also Neon, Sodium and Mercury Discharge Lamps are free of purchase tax. The following tables have been compiled for quick reference, the tax being quoted to the nearest 1/2 d. Where Tungsten Filament Lamps are purchased in quantities, the tax must be calculated as a percentage of the gross list value. The tax on quantities of Fluorescent Tubes must be calculated on the basis of Tax per tube.

EKCO TUNGSTEN FILAMENT LAMPS

Groups I and 6

List Price	New P.T.	List Price	New P.T.	List Price	New P.T.	List Price	New P.T.	List Price	New P.T.	List Price	New P.T.
6d 9d I/- I/I I/2	l ¼d 2d 2¼d 3d 3d	1/9 1/9½ 1/10 1/11 2/-	4½d 4½d 4½d 5d 5d	2/9 2/10 2/11 3/-	7d 7d 7¼d 7¼d 8d	4/3 4/5 4/6 4/9 4/11	10½d 11d 11d 1/- 1/-	7/9 8/- 8/6 9/- 9/6	1/7 1/7½ 1/9 1/10	16/6 17/- 17/1 17/6 18/6	3/4½ 3/6 3/6 3/7 3/9½
1/3 1/4 1/4½ 1/5	3d 31d 31d 31d 4d	2/1 2/1½ 2/2 2/3	5d 51d 51d 51d 6d	3/2 3/3 3/4 3/5	8d 8d 8¼d 8¼d	5/- 5/3 5/9 6/-	1/0½ 1/1 1/2½ 1/3	9/9 10/- 10/6 11/-	2/- 2/0½ 2/2 2/3 2/5	19/3 25/- 28/6	3/114 5/14 5/10
1/6 1/6½ 1/7 1/7½ 1/8	4d 4d 4d 4d 4d	2/5 2/6 2/7 2/8	6d 6½d 6½d 6½d	3/7 3/9 3/11 4/-	9d 9½d 10d 10d	6/4 6/6 7/- 7/6	1/3½ 1/4 1/5½ 1/6%	13/- 15/- 15/6 16/-	2/8 3/I 3/2 3/34		

EKCO FLUORESCENT TUBES

Group 9

Tube Type	List	Price	New P.T.		
		s.	d.		d.
5ft. 80w. Standard	4.60	13	0		8
4ft. 40w. Standard	400	11	9	2	5
3ft. 30w. Standard	***	111	0	2	3
2ft. 40w. Standard	7.00	l ii	0	2	3
2ft. 20w. Standard		10	6	2	
8" I5w. Standard	342		9	<u>-</u>	ō
5ft. 80w. Coloured, U.V. &			- 1	_	•
Coronation		17	6	3	7
4ft. 40w. Coloured, U.V. &		.,	•	_	•
499.00		17	0	,	6
76 70 6 1	***		-	3	
3ft, 30w. Coloured	1550	16	-		
2ft. 40w. Coloured	***	16	_	3	31/2
2ft, 20w, Coloured & U.V.		15	0	3	1
18" 15w. Coloured		15	0	3	1
EXTRAS	12.50	1			
Quickstart (Sylcoated)			6		11
			T		21
Instant Start (Metal Strip)		- 1	ő		2

AUTO & CYCLE DYNAMO LAMPS

Groups 2 and 4

List Price	New P.T.	List Price	New P.T.	List Price	New P.T.	
4d	Id	2/3	5åd	4/6	10åd	
7d	Hd	2/4	5åd	4/9	Hd	
8d	Hd	2/6	6d	5/-	IIåq	
8ld	Hd	2/7	6d	5/6	1/01	
9d	2d	2/8	6d	5/7	1/1	
1/-	24d	2/9	6åd	5/9	1/11	
1/1	2 d	2/10	6ld	6/-	1/2	
1/3	3d	3/-	7d	6/3	1/21/2	
1/4	3d	3/1	7d	6/6	1/3	
1/5	3 d	3/6	8d	6/9	1/31/2	
1/6	3 d	3/9	81d	- '	′ -	
1/7	4d	4/-	9ld			
1/8	4d	4/1	9åd			
2/-	41d	4/3	lod			

Ref: TL/56

Issued Sept. 1956

EKCO-ENSIGN ELECTRIC LIMITED

45 ESSEX STREET, STRAND, LONDON, W.C.2.

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