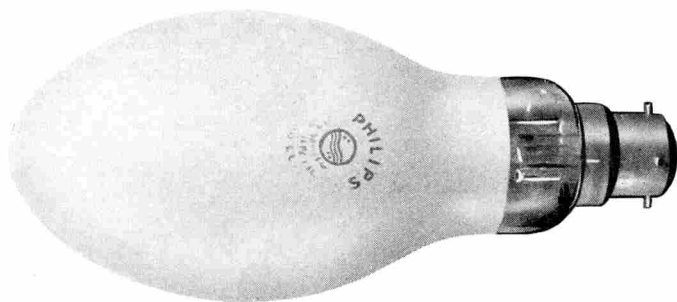




## MERCURY FLUORESCENT LAMPS (MBF/U)



A comprehensive range of eight ratings in isothermal envelopes internally coated with a specially developed phosphor giving maximum efficiency combined with optimum colour correction. They incorporate many of the exclusive features such as twin auxiliary electrodes and mechanical caps used in Philips MB/U lamps. Ideal for both industrial and street lighting applications where good colour and high efficiency is required.

Rating Watts	List Price £ s. d.	Pkg. Qty.	Lumens		Dimensions (mm)		Lamp		Cap	Ballast	P.F.C. Capacitor $\phi$
			Initial	A.T.L.	O.A.L.	Dia.	V.	Amps			
50	1 9 6	12	1700	1550	125	55	95	0.6	E.S.	L4050 $\diamond$	L4008 $\odot$
80	2 1 0	12	3100	2850	152	70	115	0.8	3-pin B.C. 3-pin B.C. or G.E.S.	L4080 $\diamond$	L4008 $\odot$
125	2 8 3	12	5400	5000	172	75	125	1.15		L4125 $\diamond$	L4008 $\odot$
250	3 18 0	12	11500	11000	220	90	135	2.0	G.E.S.	L4250 $\diamond$	L4013 $\odot$
400	5 18 0	12	20500	19200	282	120	140	3.2	G.E.S.	L4400 $\diamond$	L4020 $\odot$
700	10 0 0	12	36000	34500	320	140	140	5.6	G.E.S.	L4700 $\diamond$	2 $\times$ L4020
1100 $\odot$	13 0 0	4	52000	49000	400	165	145	7.3	G.E.S.	L4999 $\diamond$	3 $\times$ L4020
2000 $\odot$	21 0 0	1	125000	118000	435	185	270	8.0	G.E.S.	L4991 $\star$	L4661

$\diamond$  With Polyester Filling.

Voltage Grading: None.

50w to 1000w. All lamps suitable for 200/250v 50 c/s A.C.

2000w suitable for 380/440v 50 c/s A.C.

$\phi$  Giving correction to  $> 0.8$ .

Burning Position: Any.

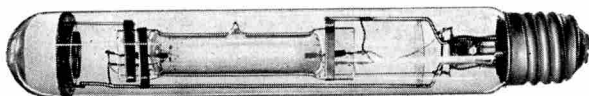
The "Average Through Life" values are for the first 5000 hours life to provide guidance for lighting design purposes.

$\odot$  Made in Holland.

$\star$  Made in Belgium.



## MERCURY LAMPS (MB/U)



The use of quartz discharge tubes in the 250w and 400w ratings makes Philips Mercury Lamps even more suitable for public and industrial lighting and makes the former MA/V types obsolete. A 25% increase in efficiency, combined with universal burning position for the entire range, is obtained.

The 250w and 400w ratings make magnetic arc deflectors unnecessary.

Twin auxiliary electrodes ensure reliable starting, even at  $-40^{\circ}\text{C}$ .

Use Philips control gear with Polyester filling.

Rating W	List Price		Pkg. Qty.	Lumens		Dimensions (mm.)			Lamp		Cap	Ballast	P.F.C. $\phi$ Capaci- tor
	£	s. d.		Intl.	ATL	OAL	Dia.	LCL	V	A			
80	2	1 0	12	3100	2850	148	70	94	115	0.8	3 pin B.C.	L4080 $\diamond$	L4008 $\odot$
125	2	8 3	12	5400	4950	168	75	107	125	1.15	3 pin B.C.	L4125 $\diamond$	L4008 $\odot$
250	2	17 6	12	11500	10600	290	48	170	135	2.0	G.E.S.	L4250 $\diamond$	L4013 $\odot$
400	3	2 6	12	20500	18800	330	48	190	140	3.2	G.E.S.	L4400 $\diamond$	L4020 $\odot$
1000 $\odot$	11	0 0	4	52000	48000	372	65	240	145	7.3	G.E.S.	L4999 $\diamond$	3 $\times$ L4020

$\diamond$  With Polyester Filling.

Voltage Grading: None.

All lamps suitable for 200/250v 50 c/s A.C.

$\phi$  Giving correction to  $> 0.8$ .

Burning Position: Any.

The "Average Through Life" values are for the first 5000 hours life to provide guidance for lighting design purposes.

$\odot$  Made in Holland.



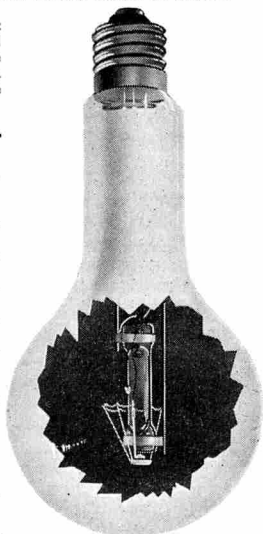
## BLENDED LAMPS (MBTL)

These replace the former MBT/U Lamp, they are the same size but with new features: the life is doubled and the lumen output greater than the old lamps.

By a judicious blend of the tungsten filament and mercury discharge tube, the lamp operates from the mains to give "instant-start" light output with no control gear.

The 250w and 500w ratings use a specially developed phosphor on the inside of the envelopes to give extra red light for improved colour rendition. The 160w is silica coated for diffuse white output.

They are most suitable for industrial, commercial and public lighting where their long life and independence of external control gear is an advantage, particularly where maintenance or accessibility is a problem. After switching off there will be a short restarting delay of two or three minutes. These lamps are not suitable for operation on D.C. mains.



Rating Watts	160	250	500 Ⓞ
List Price	£ s. d. 2 8 0	£ s. d. 2 16 3	£ s. d. 5 5 0
Initial Lumens	2900	5500	12500
A.T.L. Lumens	2560	4840	11000
O.A.L. mm	178	233	267
Diameter mm	90	110	130
Lamp Voltage	As mains voltage		
Lamp Current	0.65	1.05	2.2
Cap	B.C. or E.S.	G.E.S.	G.E.S.
Packing Qty.	12	12	6

Voltage Grading:  
160w and 250w: 240v/250v.  
500w: 230/240v.

Power factor > 0.96.

Burning Position: Vertical (cap up). (Any position if supply regulation good.)

The "Average Through Life" values are for the first 6000 hours life, to provide guidance for lighting design purposes.

**The 100w MBT/U is not part of the above range, and remains unchanged.**

Rating	List Price	Initial	A.T.L.	O.A.L. mm.	Dia. mm.	Lamp Voltage	Lamp Current	Cap
		Lumens						
100w	£ s. d. 2 8 0	1300	1250	152	70	As Mains Voltage	0.45	B.C. or E.S.

Voltage Grading: 230v/240v only.  
Packing Qty. 32

Burning Position: Any.

Ⓞ Made in Holland.



## MERCURY FLUORESCENT INTERNAL REFLECTOR LAMPS (MBFR/U)

The new shape Philips internally reflectorised mercury fluorescent lamps are ideally suited for high-bay mounting where maintenance is a problem. This new range—the largest available—has a new titanium dioxide reflector surface (first introduced in the Philips Reflectalite lamps) inside the lamp and is therefore independent of atmospheric pollution and maintains its high efficiency throughout the long reliable life of the lamp. The fluorescent coating is applied to the inside of this reflector.



Rating W	125⊙	250⊙	400⊙	700⊙	1000⊙
List Price	£ s. d. 3 10 0	£ s. d. 4 15 0	£ s. d. 6 15 0	£ s. d. 11 10 0	£ s. d. 15 10 0
O.A.L. mm.	185	257	297	320	370
Diameter mm.	125	165	180	200	220
Lamp Voltage v	125	135	140	140	145
Lamp Current a	1.15	2.0	3.2	5.6	7.3
Cap	E.S. or 3 pin B.C.	G.E.S.	G.E.S.	G.E.S.	G.E.S.
Ballast	L4125◇	L4250◇	L4400◇	L4700◇	L4999
Capacitor φ	L4008⊙	L4013⊙	L4020⊙	2 × L4020	3 × L4020
Packing Qty.	9	5	5	4	1

◇ With Polyester Filling.

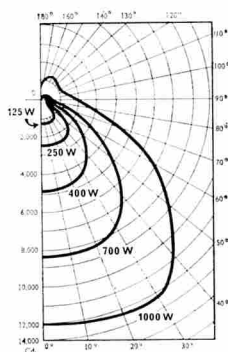
φ Giving Correction to > 0.8.

Voltage Grading: None. All lamps suitable for 200/250v. 50 c/s A.C.

Note: Due to the preferential distribution of these lamps, calculations of illumination levels should be based on the polar curve. For this reason lumen output figures are not given.

Note: A special version of the 400w is available for Horticultural purposes. Full details on request from your local Philips Sales Office.

LIGHT DISTRIBUTION  
DIAGRAM



⊙ Made in Holland.



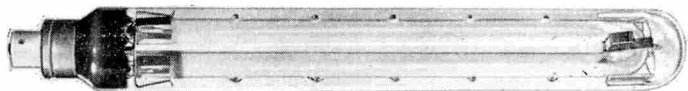
## INTEGRAL SODIUM LAMPS (SOX)

Philips new SOX lamps are the logical development of the highly efficient SOI/H lamps. SOX are the most efficient lamps available in the world and are interchangeable with the SOI/H and SO/H. This new efficiency is obtained by an exclusive, optimum tin oxide coating, giving up to 150 lm/W.

They operate on the same control gear as SOI/H-SO/H equivalents and fit the same lanterns. A new 200w rating has an output of 30,000 lumens and operates from the normal 200w H.P.F. ballast—also used for the new 150w SOX.

Dimple construction, single B.C. cap, fully interchangeable, triple coil cathode—all features are designed to give a longer, more light giving life.

You can choose more light at the same cost or even lower cost, or the same light with considerable saving.

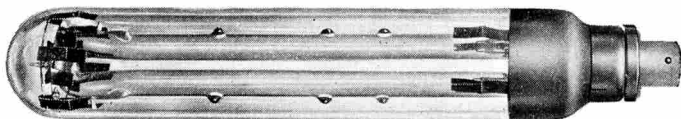


Rating	List Price £ s. d.	Pkg. Qty.	Lumens		Dimensions (mm.)		Lamp		Cap
			Intl.	ATL	OAL	Dia.	V	A	
40w	3 6 0	9	4300	4085	310	52	75	0.6	} B.C.
60w	4 2 0	9	7200	6840	425	52	115	0.6	
100w	4 9 0	9	12000	11400	528	67	125	0.9	
150w	6 0 0	9	20200	19190	775	62	185	0.9	
200w	9 0 0	9	30000	28500	1120	65	265	0.9	

Made in Great Britain and Holland.



## INTEGRAL SODIUM LAMPS (SOI/H)



Philips integral sodium lamps incorporate a special form of construction to maintain optimum performance and the "dimple" design of the discharge tube, whilst permitting a wider tolerance in the operating position, ensures correct distribution of the metallic sodium throughout the long life of the lamp. Being physically and electrically interchangeable with the separate vacuum jacket type lamps they hold an unrivalled position as the most efficient interchangeable sources until full release of the new SOX lamps (A56).

Rating W	List Price £ s. d.	Pkg. Qty.	Lumens		Dimensions (mm.)			Lamp		Cap
			Intl.	ATL	OAL	Dia.	LCL	V	A	
45	2 19 0	9	3300	3100	257	52	160	80	0.6	} B.C.
60	3 6 0	9	4900	4700	310	52	190	105	0.6	
85	4 2 0	9	7900	7400	425	52	240	160	0.6	
140	4 9 0	9	13000	12200	528	67	290	160	0.9	
200	6 0 0	9	21500	20000	775	62	420	260	0.9	

Voltage Grading: None. All lamps suitable for 200/250v 50 c/s A.C.

Operating Position: 45w and 60w; from 20° above horizontal (cap down) to vertical (cap up).  
85w, 140w and 200w; from 20° above horizontal (cap down) to 20° below horizontal (cap up).

The "Average Through Life" values are for the first 4000 hours life (which is guaranteed) to provide guidance for lighting design purposes. The average rated life is 6000 hours for all ratings.

⊙ Made in Holland.



## SODIUM LAMPS (SO/H)



Philips Sodium lamps are extensively used for public lighting, flood lighting and industrial lighting where colour discrimination is not required. They give up to five times more light than ordinary lamps of similar consumption and excellent visibility is obtained with increased visual acuity, enhanced contrast and freedom from glare. All Philips SO/H lamps incorporate triple-coil electrodes leading to improved lives and greater reliability.

Rating W	List Price £ s. d.	Pkg. Qty.	Lumens		L.C.L. mm.	Lamp		Cap
			Intl.	A.T.L.		V	A	
45	2 0 0	9	2610	2250	140	80	0.6	B.C.
60	2 5 0	9	4020	3420	170	110	0.6	B.C.
85	3 0 0	9	6200	5525	230	165	0.6	B.C.
140	3 5 0	9	10250	9100	280	165	0.9	B.C.

Voltage Grading: None. All lamps suitable for 200/250v 50 c/s A.C.

Operating Position: 45/60w: horizontal to vertical (cap up).  
85/140w: horizontal to 20° below (cap up).

The "Average Through Life" values are for the first 4000 hours life (which is guaranteed) to provide guidance for lighting design purposes. The average rated life is 6000 hours for all ratings.