Sfb: (63)

UDC: 628 94/95

Osram-GEC Low Pressure Sodium Lamps



Leadership in Sodium Lighting

The low pressure sodium lamp is the most efficient light source made in terms of lumens per watt hence its importance in street lighting.

Osram introduced a jacketed lamp in the 30's and in 1955 was first in the world to introduce the Integral lamp.

The design principles of the Integral lamp formed the development basis of current advanced Sodium lamp technology and permitted the rapid increase of efficiency in modern Sodium lamps.

Osram substantiated their lead again in 1968 with the introduction of Super SOX and this major innovation has established a new concept in efficiency and reliability.

The three principal types are marketed by Osram and this leaflet gives details of these ranges.

Life

All Osram Low Pressure Sodium Lamps are individually guaranteed for 4000 hours with an objective life of 6000 hours.

Control Gear

Sodium lamps must be operated in conjunction with suitable control gear. A complete range of ballasts and capacitors are available, including gear for 240V only, tapped operation and in drip-proof form. Full details of control gear and lanterns on application to G.E.C. (Street Lighting) Ltd., East Lane, Wembley, Middlesex.

Burning Positions: SOI/H

45W and 60W ratings must be operated between 20° above horizontal (cap down) to vertical (cap up). 85W and 140W ratings must be operated within 20° of the horizontal.

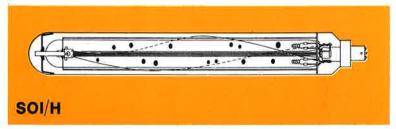
SLI/H

All ratings must be operated within 20° of the horizontal.

SUPER SOX

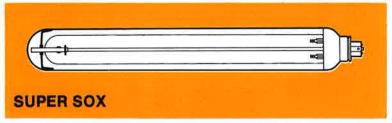
All ratings can be operated between 20° above horizontal (cap down) to vertical (cap up).

The range



The Integral lamp was a major development from the SO/H and was introduced by Osram in 1955.

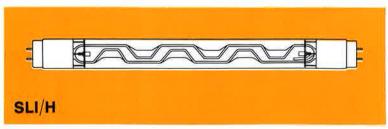
The arc tube is sealed hermetically in the outer jacket giving a more efficient robust lamp than the SO/H. Heat retaining sleeves are fitted to the limbs of the arc tube, improved starting provided by two wires spiralled around the arc tube.



The Super SOX range is a radical development from SOX and re-rated SOX.

The SOX principle derives from the SOI/H Integral lamp, but with improved heat retention provided by an indium oxide film on the inner surface of the outer jacket.

May be used to replace SO/H and SOI/H without change of gear or lanterns.



Fundamentally differing from integral lamps, the linear lamps are double ended, with the arc tube indented at regular intervals, serving as Sodium reservoirs to ensure Sodium distribution over life and maximum surface area.

Super SOX ___ the inside story Rugged Mycalex Ceramic protected BC cap Lead-in wire Triple coil cathodes for long life Dimple free construction of U-bend arc tube -Outer glass non staining envelope with glass internal heat reflecting layer____ Constant wattage through life. Constant luminous efficiency through life. Increased reliability. The dimples in the original SOX and re-rated SOX lamps were employed as Sodium reservoirs in an attempt to ensure Sodium vapour distribution through life. Now by Osram design breakthrough and unique manufacturing processes, construction has been simplified and correct through-life Sodium vapour distribution ensured without the necessity of lightmasking dimples. 35W 55W 135W Rating 90W 180W Initial & Nickel plated Design 4,500 7,500 12,500 21,500 31,500 arc tube support Lumens assembly___ Nett 3- 4-0 3-15-0 4-12-0 5-12-0 9- 6-0 Trade 4.60 5.60 9 30 Price

Specifications

SOI/H

Lamp Rating	Lighting Design Lumens	Сар	Overall Length m.m.	Diameter m.m.	Standard Packing Quantity	Nett Trade Price
45W 60W 85W 140W	2,800 3,900 6,400 10,600	Mycalex B.C. B.C. B.C. B.C.	238±10 300±10 415±10 518±10	50 ± 2 50 ± 2 50 ± 2 65 ± 2	12 12 12 6	f s d fdec 3- 8-0 3·40 3-17-0 3·85 4-12-0 4·60 5- 5-0 5·25

SLI/H

Lamp Rating	Lighting Design Lumens	Сар	Overall Length m.m. Cap Face to Pin Tip	Diameter m.m.	Standard Packing Quantity	Nett Trade Price
60W 160W 200W	5,700 18,000 20,000	Bipin Bipin Bipin	419 } 902	38±2 38±2 38±2	25 1 1	f s d fdec 3-16-0 3.80 5-12-7 5.63 6-10-0 6.50

SUPER SOX

Lamp Rating	Initial & Lighting Design Lumens	Сар	Maximum Overall Length m.m.	Diameter m.m.	Packing Quantity	Nett Trade Price
35W 55W 90W 135W 180W	4,500 7,500 12,500 21,500 31,500	Mycalex B.C. B.C. B.C. B.C. B.C.	310 425 528 775 1,120	50 ± 2 50 ± 2 65 ± 2 65 ± 2 65 ± 2	12 12 6 6 9	£ s d fdec 3- 4-0 3·20 3-15-0 3·75 4-12-0 4·60 5-12-0 5·60 9- 6-0 9·30

The information given above is typical and must not be considered a guarantee of individual lamp characteristics or performance.

The material listed in this publication is subject to the Company's terms of business and condition of sale, a copy of which may be obtained on request.

Prices apply only in Great Britain and Northern Ireland.

c 1970 Osram (G.E.C.) Ltd.

Osram (S.C.) Limited P.O. Box 17, East Lane, Wembley, Middlesex HA9 7PG

Area addresses
London, Home Counties and
Southern
East Lane, Wembley, Middlesex.
01-904 4321
Design Centre for lighting schemes
P.O. Box 17.
East Lane, Wembley, Middlesex.
01-904 4321
Midlands
Electric Avenue, Witton,
Birmingham 6.
021-327 1571

32 Victoria Street, Bristol.
02-722 6671/8
11 Brunswick Road, Plymouth,
Devon.
Plymouth 60226/8
South Wales
Sales Office
Empire House, Mount Stuart Square.
Cardiff 37331/3

South West

North West and North Wales Lea Green Road, St. Helens, Lancs. St. Helens 24090 Telephone Sales Office Trafford Park Manchester M17 1PR Trafford Park 2431 Ext. 3261/2 Yorkshire 25 Dewsbury Road, Ossett, Yorkshire. 09-243 4161 North East
E138 Team Valley Trading Estate,
Gateshead, NE11 OUE.
063-287 8575
Scotland
77 Grove Park Street,
Glasgow NW.
041-332 7011
Northern Ireland
273a Donegall Road. Belfast.
Belfast 25656/8

Osram-GEC-the one you can trust

1976 Revised Oct 1970 Printed in England