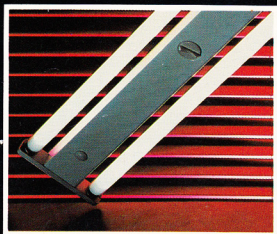
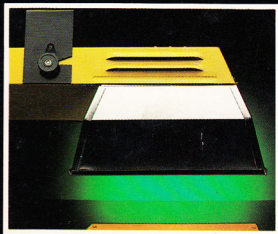
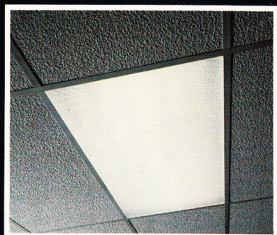
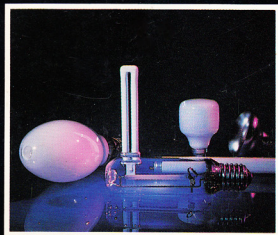


# Osram-GEC

## LIGHTING CATALOGUE



**LOOKING AT ENERGY SAVING  
IN A DIFFERENT LIGHT.**

# INTRODUCTION

## FILM, TELEVISION, STUDIO AND LOCATION LIGHTING AND OTHER INCANDESCENT LAMPS FOR SPECIALISED APPLICATIONS

For many years the name GEC has been associated with film, television and stage lighting. The comprehensive range of studio, theatre and location lighting featured in this catalogue is the result of close collaboration with luminaire manufacturers and studio and theatre lighting technicians.

### MEI LOCATION AND STUDIO LIGHTING

GEC's unique Coolseal principle was first introduced to the MEI range of lamps in 1982. The Coolseal technique dissipates heat away from the molybdenum quartz seal within the end caps by dispersing heat through an etched area along the surface of the seals, and further reduces seal temperatures when used with cooling fins. The lamp is also available with flying leads, so that electrical contact can be made in a low temperature area of the luminaire away from the end seal. This technique virtually eliminates oxidation and early lamp failure.

### TUNGSTEN HALOGEN STUDIO LAMPS

Tungsten halogen lamps balanced for a colour temperature of 3200K, in both quartz and hard glass, are widely used in film and television studios. For the twin filament hard glass lamps, GEC are introducing the principle of 'Flexi-Pins' to give a more reliable lamp performance. This allows the pins to take up misalignment of the individual lampholder sockets, helping to ensure good mechanical and electrical contact but, most important, avoiding undesirable stresses in the lamp base.

Recently introduced the CP82 rated at 500W is specially designed for the new small luminaires which can be concealed on the set to light specific details and create special effects.

### LAMPS FOR AIRFIELD LIGHTING

A range of lamps designed specifically for Airfield and Airport lighting, for all applications, including approach, runway and taxiway.

### SPECIAL APPLICATIONS

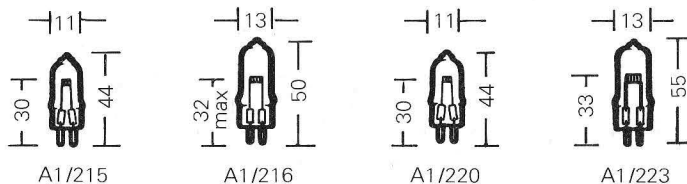
Lamps for Lighthouses and Operating Theatres are only made to special order.

#### Notes:

- (A) In line with international standardisation the quoted lamp lives have been established in open rack conditions.
- (B) The operating angles quoted are recommended maximum values for these conditions. Operation, where there is insufficient ventilation around the lamps, may result in some reduction of quoted lives, especially where lamps are burnt at the extreme angles.  
  
Operating angles are measured from the cap in a vertical plane, at right angles to the plane of the filament.
- (C) Lamps dimensions in mm show maximum length, maximum bulb diameter, nominal light centre length (L.C.L.) and in the case of linear lamps maximum clearance length and maximum diameter excluding pips.
- (D) Where ANSI codes are shown the GEC lamp will have at least the same cap, wattage and light centre position as the ANSI type, but there may be small differences with other parameters.

## A1 Tungsten Halogen Projector

**Application:** Cine, Filmstrip and Slide Projectors. Micrographic and Disco Lighting.

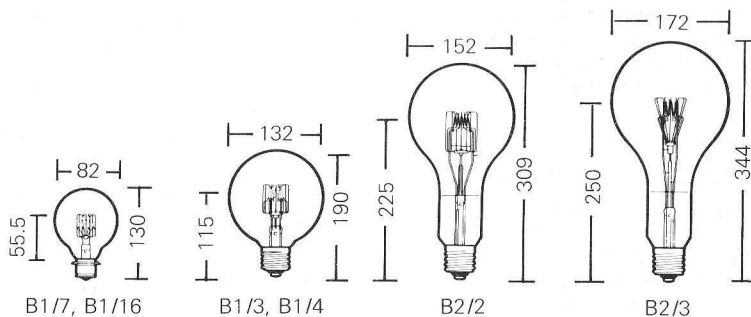


**Objective Life:** 50 hours.

**Pinch Temperature:** 450°C.

Lamp Type	Ansi Code	Watts	Volts	Cap	Nominal Lumens	Operating Position	Standard Pack
A1/220	BRL	50	12	G6.35	1400	VBD to Horizontal	40
A1/215	FCR	100	12	GY6.35	3000	VBD to Horizontal	40
A1/216	FCS	150	24	G6.35	5000	VBD to Horizontal	40
A1/223	EHJ	250	24	G6.35	8500	VBD to Horizontal	40

## Class B1/B2 Non-halogen Obstruction Lighting and Floodlighting Lamps

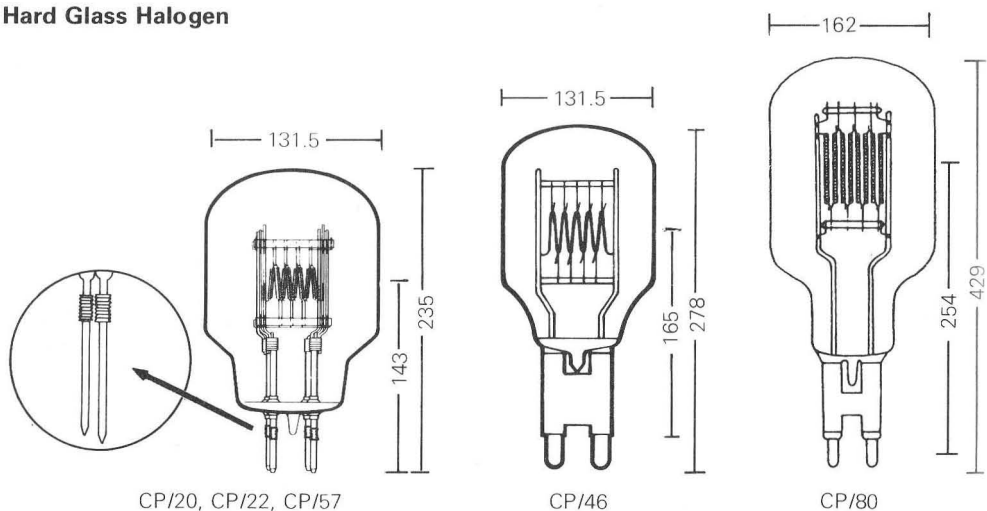


B1/7 and B1/16 complement GEC range of Airfield Lamps (see page 239).

Lamp Type	Watts	Volts	Cap	Nominal Lumens	Objective Life (Hrs)	Operating Position	Standard Pack
B1/7	250	115	P28s	3600	800	VBD ± 135°	6
		230	P28s	3100	800	VBD ± 135°	6
		240	P28s	3100	800	VBD ± 135°	6
		250	P28s	3100	800	VBD ± 135°	6
B1/16 (J1/67)	250	240	P28s	2400	5000	VBD ± 135°	6
B1/3	500	240	E40	7250	800	VBD ± 135°	6
B1/4	1000	240	E40	16500	800	VBD ± 135°	6
B2/2	1000	240	E40	16500	800	Any	6
B2/3	1500	240	E40	26250	800	Any	4

**Applications:** TV, Video and Film Studios where controlled colour temperature for sensitised material balanced for 3200K is required.

## Hard Glass Halogen



**Type:** All GEC CP Class lamps are Tungsten Halogen, which eliminates bulb blackening, giving almost 100% lumen maintenance and colour temperature throughout life.

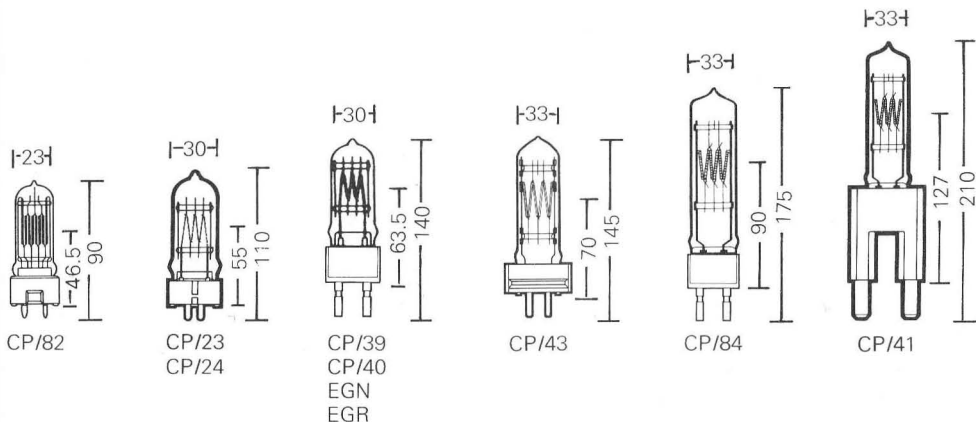
**Flexi-Pin:** GEC's twin filament lamps CP20, CP22 and CP57 incorporate the flexible pin principle.

**Operating Temperature:** Glass base not to exceed 400°C.

Lamp Type	Ansi Code	Watts	Volts	Cap	Nominal Lumens	Objective Life (Hrs)	Operating Position
CP22		1250/1250	115/120	GX38q	29000/62500	100	VBD ± 45°
			220, 240	GX38q	27000/56000	100	VBD ± 45°
CP57		1250/2500	220, 240	GX38q	26000/59000 90,000 combined	100	VBD ± 45°
CP20		2500/2500	115/120	GX38q	65000/140000	100	VBD ± 45°
			220, 240	GX38q	59000/127000	100	VBD ± 45°
CP46	FCN	5000	115/120	G38	137500	400	VBD ± 45°
			220, 240	G38	130000	400	VBD ± 45°
CP80	EBA	10000	115/120	G38	290000	400	VBD ± 45°
			220, 240	G38	280000	400	VBD ± 45°

**Application:** TV, Video and Film Studios where controlled colour temperature for sensitised material balanced for 3200K is required.

## Quartz Halogen



**Operating Temperature:** Quartz pinch not to exceed 400°C.

Lamp Type	Ansi Code	Watts	Volts	Cap	Nominal Lumens	Objective Life (Hrs)	Operating Position
—	EGN	500	120	G22	13000	100	VBD ± 90°
CP82		500	115/120	GY9.5	12500	150	VBD ± 90°
			220, 240	GY9.5	12500	150	VBD ± 90°
CP39	FKG	650	115/120	G22	16900	100	VBD ± 90°
	FKH	650	220,240	G22	16900	100	VBD ± 90°
CP23		650	220, 240	GX9.5	16900	100	VBD ± 90°
—	EGR	750	120	G22	20000	200	VBD ± 90°
CP24		1000	115/120	GX9.5	27000	200	VBD ± 90°
			220, 240	GX9.5	26000	200	VBD ± 90°
CP40		1000	115/120	G22	27000	200	VBD ± 90°
	FKJ		220, 240	G22	26000	200	VBD ± 90°
CP41	CYX	2000	115/120	G38	55000	400	VBD ± 90°
	FKK		220, 240	G38	53000	400	VBD ± 90°
CP43		2000	115/120	GY16	55000	400	VBD ± 90°
			220,240	GY16	53000	400	VBD ± 90°
CP84		2000	115/120	G22	55000	400	VBD ± 90°
			220, 240	G22	53000	400	VBD ± 90°

# LOCATION LIGHTING

*Class MEI 5600K*

**Application:** Daylight filming, Electronic News Gathering, TV Studios, Outside Broadcasts, Special Effects, Theatre Stage Lighting, Overhead Projection and for use where a colour temperature of 5600K is required to supplement daylight.

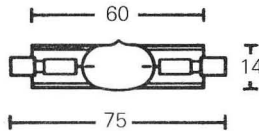
**Type:** Metal halide discharge lamp.

**Bulb:** Quartz.

**Ballast:** A suitable ballast and ignitor must be used with these lamps.

**Luminaire:** Lamp must be operated in a totally enclosed luminaire so avoiding exposure to ultra violet radiation.

## MEI 200

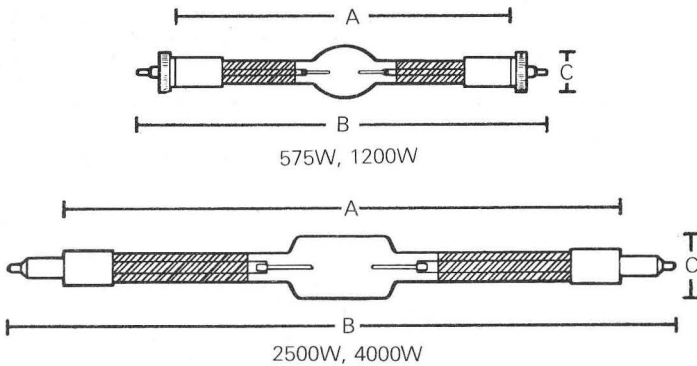


Watts	Cap	Operating Position	Nominal Lumens	Objective Average Life
200	X515	Horiz $\pm$ 15	16000	300

## MEI COOLSEAL

GEC started manufacturing standard MEI lamps seven years ago, and in 1982 invented the important Coolseal principle specifically to overcome the problems of molybdenum to quartz seals overheating within the end caps.

The Coolseal technique considerably reduces the temperature at the end of the seal, which increases the life of the lamp. The surface of the seal is etched so that the heat which normally travels along the seal from the bulb to cap by the light pipe effect, is dispersed.



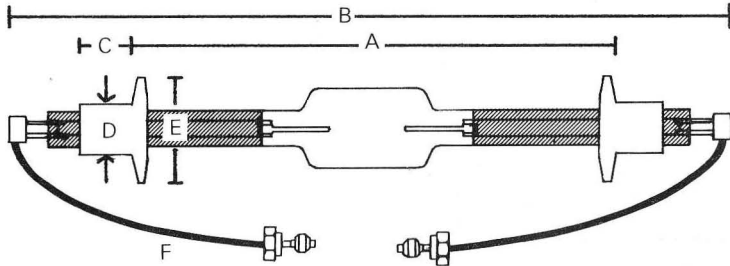
Watts	Cap	Operating Position	Nominal Lumens	Objective Average Life	A	B	C
575	SFc10.5-4	Any	49000	750	115	145	21
1200	SFc15.5-6	Any	110000	750	180	220	27
2500	SFa21-12	Horiz $\pm$ 15	240000	500	290	355	30
4000	SFa21-12	Horiz $\pm$ 15	410000	500	340	405	38

**MEI COOLSEAL WITH FLYING LEADS**

As a result of the Coolseal development and the consequent reduction of temperature of each seal, the need for expensive cooling fins has been eliminated. The MEI lamp with flying leads may now be held in position by simple clips fixed to a flexible mounting which helps to protect the lamp if the luminaire is dropped. The lamp caps have been removed and replaced by flying leads so that the electrical contacts can be made in a low temperature area of the luminaire away from the end seal.

**8kW**

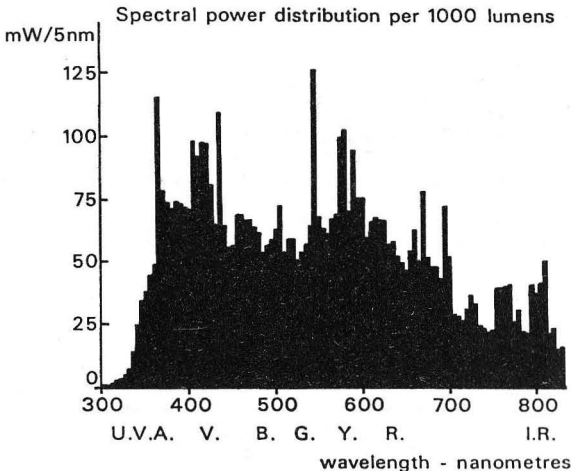
The 8 kilowatt MEI Lamp is the first light source capable of replacing the traditional Brute carbon arc lamp. It has been designed for infill lighting in daylight conditions to simulate daylight during outside broadcasts and for special effect lighting in film and TV studios.



**Cap:** Flying leads.

Watts	Operating Position	Nominal Lumens	Objective Average Life	Dimensions in mm						Terminals All 1mm Pitch
				A	B ± 5	C	D	E	F	
575	Any	49000	750	80	120	8	15	26	70	8mm dia
1200	Any	110000	750	116	174	14	20	35	70	8mm dia
2500	Horiz ± 15	240000	500	190	298	25	25	50	70	12mm dia
4000	Horiz ± 15	410000	500	240	360	25	25	50	70	12mm dia
8000	Horiz ± 15	800000	500	311	530	25	41	65	120	12mm dia

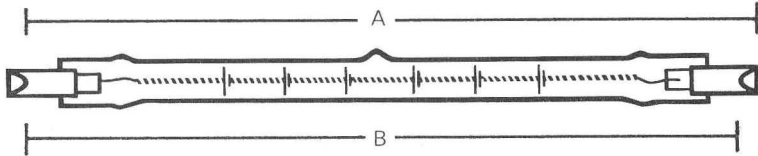
**MEI – At 5600K**



# STUDIO LIGHTING

## Class P2 Linear

**Application:** For use with sensitised material balanced to 3200K in TV, Video, Film and Photographic Studios.



**Type:** Quartz Tungsten Halogen

**Cap:** R7s-15

**Operating Temperature:** Pinch seal not to exceed 400°C

**Max Bulb Diameter:** 12mm (Excluding Pip)

**Recommended Fusing:** Rapid Acting HBC Type

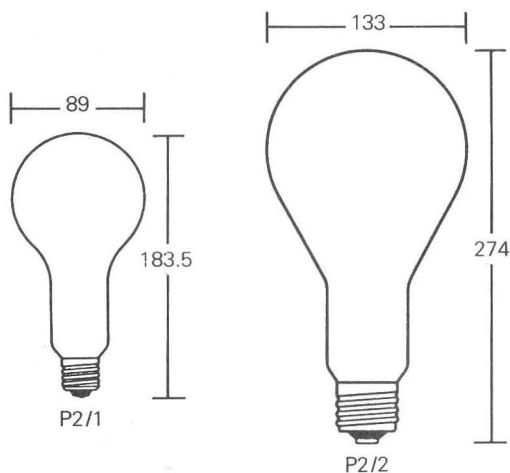
Lamp Code	Ansi Code	Watts	Volts	Finish	Nominal Lumens	Obj. Life (Hrs)	Operating Position	Contact to ceramic Max A (mm)	Contact to Contact B $\pm 1.6$ (mm)	Recommended Fusing
P2/10		625	115/120	Frosted	15000	200	Horiz $\pm 4^\circ$	189.1	185.7	10A
				Frosted	15625	200	Horiz $\pm 4^\circ$	189.1	185.7	4A
				Frosted	15625	200	Horiz $\pm 4^\circ$	189.1	185.7	4A
P2/15		625	240/250	Frosted	16250	75	Horiz $\pm 15^\circ$	117.6	114.2	4A
P2/11		800	115/120	Clear or Frosted	21600	150	Horiz $\pm 15^\circ$	117.6	114.2	10A
				Clear or Frosted	21000	150	Horiz $\pm 15^\circ$	117.6	114.2	6A
				Clear or Frosted	21000	150	Horiz $\pm 15^\circ$	117.6	114.2	6A
	EME/EMF									
P2/7		1000	220/230	Clear	26000	200	Horiz $\pm 4^\circ$	189.1	185.7	6A
				Clear	26000	200	Horiz $\pm 4^\circ$	189.1	185.7	6A
P2/28	FCM	1000	120	Clear	27000	400	Horiz $\pm 4^\circ$	117.6	114.2	10A
P2/29	FHM	1000	120	Frosted	27000	400	Horiz $\pm 4^\circ$	117.6	114.2	10A
P2/12		1250	115/120	Clear	33500	200	Horiz $\pm 4^\circ$	189.1	185.7	16A
				Clear	33500	200	Horiz $\pm 4^\circ$	189.1	185.7	10A
				Clear	33500	200	Horiz $\pm 4^\circ$	189.1	185.7	10A



## Class P2

Photographic

**Application:** Designed for use with sensitised material balanced for 3200K.

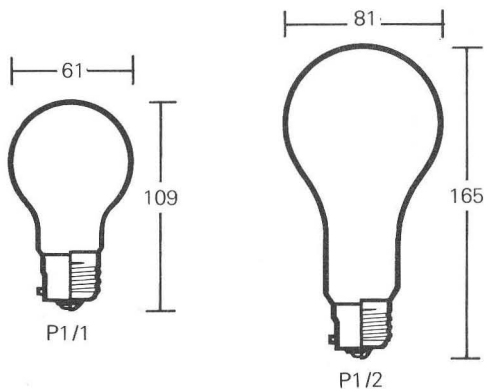


Lamp Type	Watts	Volts	Cap	Finish	Nominal Lumens	Objective Life (Hrs)	Operating Position	Standard Pack
P2/1	500	240	E27	Pearl	11500	100	Any	12
P2/2	1000	240	E40	Pearl	22000	100	Any	10

## Class P1

Photoflood

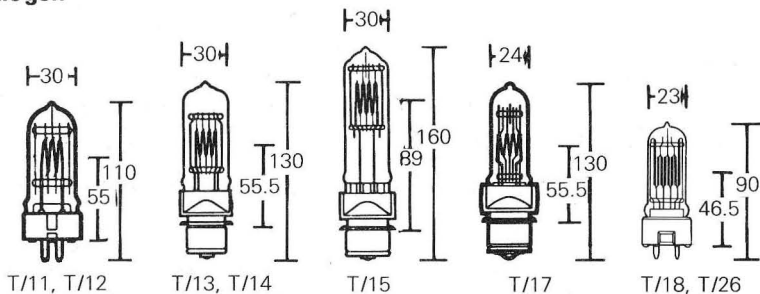
**Application:** Indoor photography with black and white or colour film.



Lamp Type	Watts	Volts	Cap	Finish	Nominal Lumens	Objective Life (Hrs)	Operating Position	Standard Pack
P1/1	275	240	E27, B22	Pearl	8000	3	Any	25
P1/2	500	240	E27, B22	Pearl	15000	6	Any	25

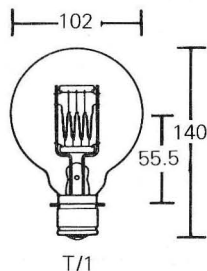
**Application:** Theatre, Cinema, Conference Centres, Art and Leisure Centres, Lecture and Educational Halls.

## Quartz Halogen



Lamp Type	Watts	Volts	Cap	Nominal Lumens	Colour Temp. (K)	Objective Life (Hrs)	Operating Position	Replaces	Standard Pack
T/17	500	115/120	P28s	9500	2950	750	VBD ± 90°	T1	50
		220, 240	P28s	9500	2950	750	VBD ± 90°	T1	50
T/18	500	115/120	GY9.5	11000	3050	300	VBD ± 90°		32
		220,240	GY9.5	11000	3050	300	VBD ± 90°		32
T/12	650	115/120	GX9.5	13500	3050	750	VBD ± 90°		50
		220, 240	GX9.5	13500	3050	750	VBD ± 90°		50
T/13	650	220, 240	P28s	13500	3050	750	VBD ± 90°		50
T/26	650	115/120	GY9.5	15000	3100	400	VBD ± 90°		32
		220, 240	GY9.5	15000	3100	400	VBD ± 90°		32
T/11	1000	220, 240	GX9.5	23000	3100	750	VBD ± 90°		50
T/14	1000	115/120	P28s	23000	3100	750	VBD ± 90°	T6	50
		220, 240	P28s	23000	3100	750	VBD ± 90°	T6	50
T/15	1000	115/120	P28s	23000	3100	750	Any	T4	50
		220, 240	P28s	23000	3100	750	Any	T4	50

## Non Halogen



Lamp Type	Watts	Volts	Cap	Nominal Lumens	Objective Life (Hrs)	Operating Position	Standard Pack
T/1	500	230, 240	P28s	9750	200	VBD ± 90°	10

## Quartz Halogen

**Operating Temperature:** Pinch not to exceed 350°C.

Lamp Type	Watts	Amps	Cap	Nominal Lumens	Objective Life (Hrs)	Operating Position	Max Length	Max Dia.	LCL
J1/59	36	6.0	G6.35	610	600	VBD ± 90°	45	11	33
J1/57	45	6.6	G6.35	840	600	VBD ± 90°	45	11	33
J1/58	100	6.6	G6.35	2300	600	VBD ± 90°	47	13.5	33
J1/66	100	8.33	G6.35	2300	600	VBD ± 90°	47	13.5	33
J1/39	200	6.6	G6.35	4700	600	VBD ± 90°	47	13.5	33
J1/65	200	8.33	G6.35	4700	600	VBD ± 90°	47	13.5	33
J1/40	200	6.6	R7s-15	4200	1000	Any	63.6*	12	—
J1/42 EL55TH	200	6.6	P28s	3700	1000	Any	130	33	55.5
J1/50 EL39TH	200	8.33	P28s	3700	1000	Any	130	33	55.5
J1/51	200	8.33	R7s-15	4200	1000	Any	63.6*	12	—

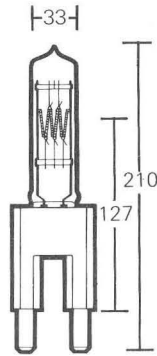
\*Clearance length only.

## Non Halogen

Lamp Type	EL	Watts	Amps	Cap	Nominal Lumens	Objective Life (Hrs)	Operating Position	Max Length	Max Dia.	LCL
J1/3		30	6.6	P28s	420	400	VBD ± 30°	103	33	38
J1/6	EL36	36	6.0	BA15d	560	60	Any	60	39	28.5
J1/7	EL40	36	6.0	BA20s	560	50	VBD	69	39	28.5
J1/13		45	6.6	P28s	640	400	VBD	103	33	38
J1/14		45	6.6	BA20s	640	400	VBD	69	39	30
J1/16	EL48	48	8.0	BA15d	815	50	VBD ± 90°	60	39	28.5
J1/24		100	6.6	P28s	1400	400	VBD ± 30°	100	38	38.5
J1/27		100	6.6	BA20s	2200	40	VBD ± 90°	95	61	43
J1/33	EL50	100	8.33	BA20s	2100	50	VBD ± 90°	93	61	43
J1/35	EL56	100	8.33	P28s	2100	50	VBD	112	66	55.5
J1/43		200	6.6	P28s	4200	120	VBD	146	38	55.5
J1/48	EL55	200	6.6	P28s	3700	200	VBD ± 135°	130	82	55.5
J1/52	EL39	200	8.33	P28s	3700	200	VBD ± 135°	130	82	55.5
J1/67		250	240 Volts	P28s	2400	5000	VBD ± 135°	130	82	55.5
J1/56		300	36 Volts	P28s	3700	500	VBD ± 90°	130	81	55.5

# SPECIAL APPLICATIONS

## Aero Beacon (Quartz Halogen)



ARB

Lamp Type	Watts	Volts	Cap	Nominal Lumens	Objective Life (Hrs)	Operating Position	Standard Pack
ARB	1550	100	G38	3400	2500	VBD	1

## Operating Theatre

Lamp Type	Watts	Volts	Cap	Filament	Nominal Lumens	Objective Life (Hrs)	Max Length	Max Dia	LCL
905	150	24	E27	Axial	2625	500	122	82	76

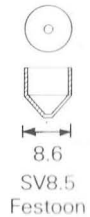
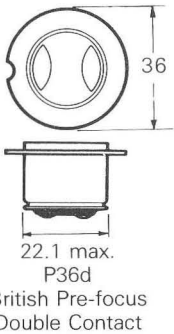
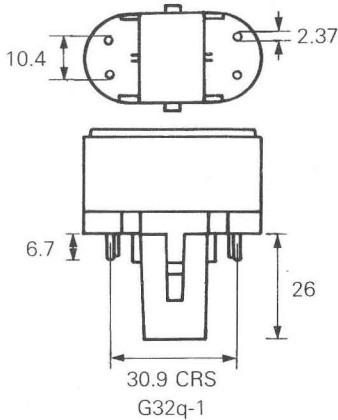
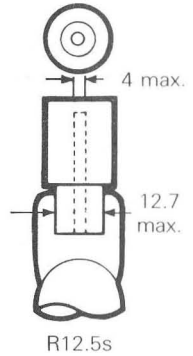
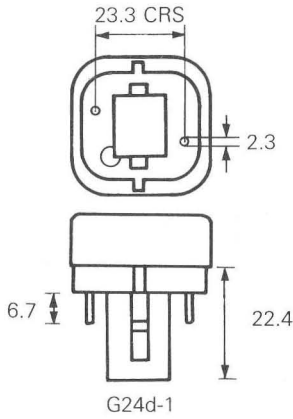
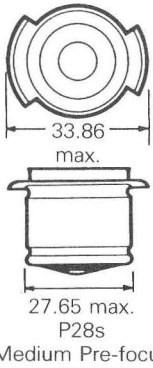
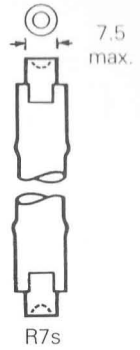
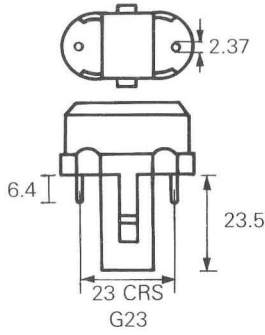
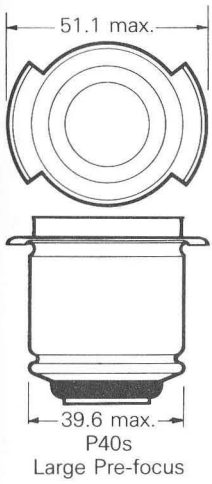
## Lighthouse

GEC's range of Lighthouse lamps comply to British Standards where applicable. Further details are available on application.

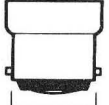
## Aero Landing

GEC's range of Aero Landing lamps comply with British M.O.D. Defence Standards. The company also has Civil Aviation Authority approval for these types. Further details are available on application.

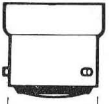
# STANDARD CAPS



# STANDARD CAPS



22.15 max.  
B22d (BC)  
Bayonet Cap



22.15 max.  
B22d-3  
3 pin Bayonet Cap



15.3 max.  
BA15s (SCC)  
Small Centre Contact



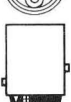
15.25 max.  
B15d (SBC)  
Small Bayonet Cap



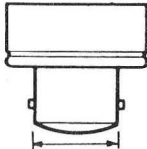
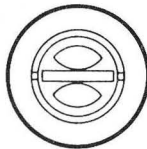
9.25 max.  
BA9s (MCC)  
Miniature Centre  
Contact



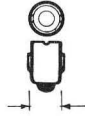
15.25 max.  
S15s  
Single Contact Cap  
for Striplite



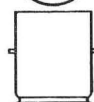
15.25 max.  
BAY15d  
Bayonet Automobile



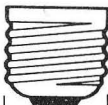
22 max.  
BY22d  
Sodium Bayonet Cap



7.1 max.  
BA7s  
Bayonet Automobile



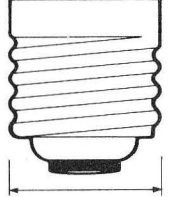
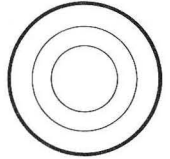
20.10 max.  
BA20s  
Bosch



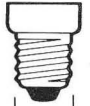
26.45 max.  
E27 (ES)  
Edison Screw



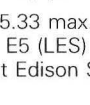
9.53 max.  
E10 (MES)  
Miniature Edison Screw



39.5 max.  
E40 (GES)  
Goliath Edison Screw

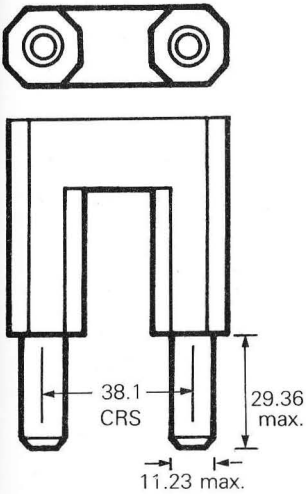


13.89 max.  
E14 (SES)  
Small Edison Screw

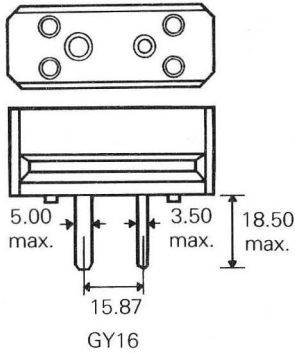


5.33 max.  
E5 (LES)  
Lilliput Edison Screw

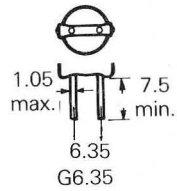
# STANDARD CAPS



G38 Large Bi-post



GY16

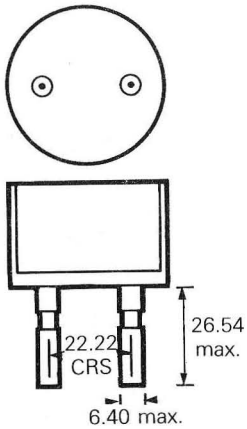


G6.35

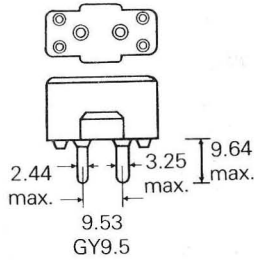
OTHER  
MEASUREMENTS  
AS G6.35



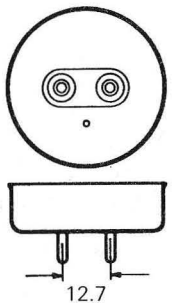
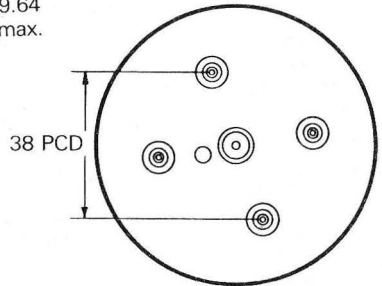
GY6.35



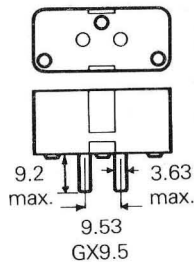
G22 Medium Bi-post



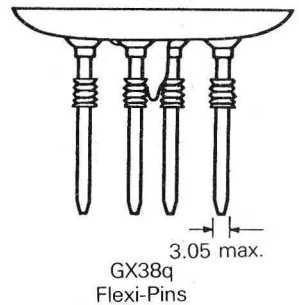
GY9.5



G13 Medium Bi-post



GX9.5



GX38q  
Flexi-Pins