



## INTRODUCTION

## Welcome to the latest catalogue from Fusion Lamps...

A very warm welcome to the new and eagerly awaited sixth edition of the Fusion Lamps catalogue. Fusion Lamps have been established now for over 20 years and have become a trusted and reliable source for one of the most extensive ranges of lamps available in the UK

With over 1000+ product lines from stock, Fusion Lamps have been consistently one of the front runners in providing innovative, cost saving and maintenance saving solutions for its wide customer base. This includes its vast choice of LED options.

In this exciting new edition, Fusion Lamps covers every area of LED lamp replacements, whether domestic, commercial or industrial applications. In a very overcrowded supplier market place with much confusion and vast choice, this catalogue tries to provide the end user with a clear understanding of energy saving against existing applications, showing clear cost savings.

Fusion lamps fully appreciate the importance of service and availability in today's fast paced world of e-commerce and as such now offers an on line quotation facility on our website:

#### fusion-lamps.co.uk



Fusion Lamps
Millfield Industrial Estate,
Arksey Lane, Bentley, Doncaster,
South Yorkshire DN5 0SJ

So, whether it's via the website, or by speaking direct to one of our dedicated technical support team, please feel free to contact us at any time to discuss your energy saving requirements.







...life is brighter

Products offered for sale may differ from those described in this catalogue due to later production, changes in specification, components or place of manufacture.

Our policy is one of constant development and improvement. Whilst every effort is made to make the catalogue accurate at the date of printing, specification and/or appearance may be changed in the interest of continuing improvement.

Fusion Lamps would like to acknowledge the help and support of its staff, customers and suppliers in providing information towards the publication of this catalogue. All products are subject to availability and are correct at the time of print. Errors and omissions excepted.

Fusion Lamps reserve the right to change and/or update products and specifications without prior notice.
© 2022 Fusion Lamps

## INTRODUCTION



### **CONTACT US...**

### **Technical Support**

Fusion Lamps are proud to offer over 20 years' experience in technical support from our internal sales team.

This technical support is also backed up by dedicated Business Development Managers who specialise in lamp solutions.

### **Customer Service**

Fusion Lamps has a dedicated department open from 7:30am to 5.30pm, 5 days a week, Monday to Friday.

All staff are continuously trained to offer the highest quality service which we have become renowned for over the last 20 years. Our customers can be confident in our continued support.



With over 1000+ product lines available in stock, our experienced despatch team enable products to be delivered at a rapid pace!





### Phone | Email | Web | Social



+44 (0)1302 822 833

Our Sales Office & Technical Help Desk is open from 7.30am-5.30pm Monday-Friday.



info@fusion-lamps.co.uk For all general enquiries.



fusion-lamps.co.uk

For up-to-date information and technical specifications, please visit our website.





**@Fusion\_LandL** Follow us on Twitter for all of our latest News.

**► YouTube Fusion Lamps and Luminaires** 





## **CONTENTS**

## **LED Lamps** Range

| Candle Range Essential Range 3W Candle Essential Range 6W Candle Essential Range 7W Candle 5W Candle - Clear 5W Candle - Opal  | 10<br>11<br>12<br>13                   |
|--|--|
| Golfball Range   | 16                                     |
| GLS Range Essential Range 6W GLS 6W GLS Essential Range 9.5W GLS 8.5W GLS 8.5W GLS with Dusk to Dawn Sensor 9.5W GLS 12.5W GLS   | 19<br>20<br>21<br>22<br>23<br>24<br>25 |
| Reflector Range  | 27<br>28                               |
| Globe Range  |  |
| GU10 Range   | 32<br>33<br>34<br>35<br>36<br>37       |
| PAR Range PAR16 PAR20 PAR30 PAR38 PAR38  | 40<br>41<br>42                         |
| Filament Range Filament Candle Filament Golfball Filament GLS Filament GLS Crown Silver Filament ST58 & ST64 Squirrel Cage Filament Amber Globe 95mm & 125mm 1 & 2W LED Festoon Filament Lamp Filament Cooker Hood | 45<br>46<br>47<br>48<br>49<br>50<br>51 |
| MR11 & MR16 Range  | 54<br>55<br>56<br>57                   |

| 221mm & 284mm Striplights   | . 60                                 |
|---|--------------------------------------|
| <b>AR111 Range</b>  |                                      |
| Linear Range78mm & 118mm Linear   | . <b>6</b> 4                         |
| GX53, Capsules & Pygmy Range  | . 63<br>. 69<br>. 70<br>. 7          |
| 2D Range  | . 74                                 |
| Compact Range   | . 77<br>. 78                         |
| Tube Range T5 Glass Tubes T8 Glass Tubes T8 Glass Tubes CCT Switchable LED Tube Installation Guide  | . 81<br>. 82<br>. 83                 |
| HID Replacement Range.  8W G12 HID Replacement.  11W & 15W HID Replacement.  20W HID Replacement.  30W HID Replacement.  60W HID Replacement.  85W HID Replacement.  100W HID Replacement.  120W HID Replacement. | . 86<br>. 87<br>. 88<br>. 89<br>. 90 |
| Coloured Range  | . 95<br>. 96<br>. 97                 |
| Accessories & Specialist Range  | 101                                  |

## **CONTENTS**



## **General Lamps** Range

| U3 |
|----|
| 04 |
| 05 |
| 06 |
| 07 |
| 08 |
| 09 |
| 10 |
| 11 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |
|    |
| 17 |
| 18 |
| 19 |
| 20 |
| 21 |
| 22 |
| 23 |
| 24 |
| 25 |
| 26 |
| 27 |
| 28 |
| 29 |
| 30 |
| 31 |
| 32 |
| 33 |
| 34 |
| 35 |
| 36 |
| 37 |
|    |



## Have you changed to LED?...

### Features & Benefits:

- Low power consumption
- Up to 95% energy saving
- Long lamp life (up to 30,000hrs) can last up to x30 times longer than incandescent lamps
- Up to 3 Year credible guarantee
- Low surface temperature
- No UV output
- Robust product
- Instant start, no warm-up period
- Operating temperature -20°C to +40°C (ideal for cold environments)
- Environmentally friendly

As more traditional lamps are banned under the UK/ EU legislation, the conventional means of judging light output by wattage will be replaced by lumens.

A lumen is an amount of light emitted by a source.

### How much will LEDs save?

LED lamps can save up to 95% in energy consumption, plus maintenance and replacement lamp costs.

## Why do some LED's cost more than others?

Scan the QR Code to see the difference between high quality and poor quality built LED lamps.





Scan here to see a YouTube video.

### What are the different colour types?

The colour of lamps is measured on a temperature scale in Kelvins. The higher the Kelvin, the cooler the colour.

The lower the Kelvin, the warmer the colour - i.e. 3000K incandescent is warm/orange in colour.

| 6,500K             | 5,000K   | 4,000K        | 3,500K        | 3,000K | 2,700K               |
|--------------------|----------|---------------|---------------|--------|----------------------|
| DAYLIGHT<br>DELUXE | DAYLIGHT | COOL<br>WHITE | WHITE<br>WARM | WHITE  | WARM WHITE<br>DELUXE |

### **Benefits of Retrofit Lamps**

Over recent years, the introduction of LED technology has given customers a choice to make if they wish to change to this energy and maintenance saving solution.

The choice is, 'do I go for an LED fixture with a built-in light source or alternatively go for a retrofit LED lamp?'

Below are just a few reasons to choose retrofit LED lamps over LED fixtures complete:

### Cost Effective & Quicker Return on Investment: LED

lamps are a much more cost effective solution, which usually leads to a quicker return on investment.

**Ease & Cost of Installation:** Retrofitting LED lamps is often as easy as taking the old lamp out and putting the new lamp in – typically resulting in low or no associated installation costs.

#### **Easily Maintained & Low Cost of Maintenance:**

When an LED lamp comes to the end of its life, simply remove and replace it. No need to worry about the costs of electrical or cosmetic work usually associated with changing complete LED fixtures.





With ever increasing energy costs and associated environmental issues, it has never been more important to consider energy efficient lamp sources.

The Fusion range of LED lamps have the benefit of extended lamp life, together with low running costs and reduced maintenance, resulting in energy savings up to 95% when compared to inefficient counterparts.

These savings are clearly stated along with the technical specification of each lamp. By simply retrofitting Fusion LED lamps, you can reduce your lighting costs and together, we can help to protect the environment.

### ...life is brighter

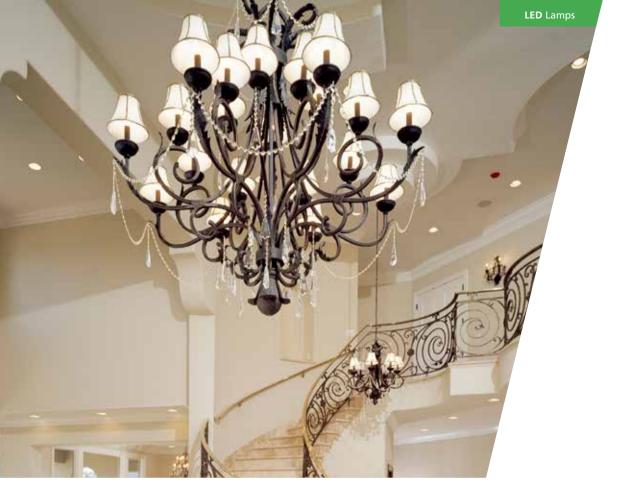


### **Energy Saving Values**



**Note:** Savings do not include cost of replacement lamps, or maintenance costs. All figures are based on an electricity charge of £0.34 per kWh.





# Candle Range

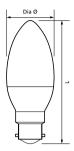


## Essential Range 3W Candle

### **Features and Benefits**

- Up to 90% energy savings
- Polycarbonate cover
- Suitable replacement for a 25W incandescent lamp







Energy Saving Values
per lamp over 15,000 hours

£112.20

3W LED Candle = £15.30
25W Incandescent
Candle = £127.50

| Product Ref | Watts | Voltage<br>Rating | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|-------------------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)               |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| FC3BC/OP    | 3     | 230               | B22 | 15,000    | 260lm            | 260lm           | 2700K Warm White | 180             | No       | 102 | 37 | F                |
| FC3ES/OP    | 3     | 230               | E27 | 15,000    | 260lm            | 260lm           | 2700K Warm White | 180             | No       | 102 | 37 | F                |
| FC3SBC/OP   | 3     | 230               | B15 | 15,000    | 260lm            | 260lm           | 2700K Warm White | 180             | No       | 100 | 37 | F                |
| FC3SES/OP   | 3     | 230               | E14 | 15,000    | 260lm            | 260lm           | 2700K Warm White | 180             | No       | 100 | 37 | F                |

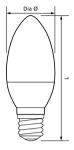


## Essential Range 6W Candle

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 40W incandescent lamp







Energy Saving Values per lamp over 15,000 hours 6W LED Candle = £30.60 **40W Incandescent** Candle = £204.00

| Product Ref  | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|--------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|              | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| FC6BC/OP     | 6     | 230     | B22 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 180             | No       | 100 | 38 | F                |
| FC6ES/OP     | 6     | 230     | E27 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 180             | No       | 100 | 38 | F                |
| FC6SBC/OP    | 6     | 230     | B15 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 180             | No       | 100 | 38 | F                |
| FC6SES/OP    | 6     | 230     | E14 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 180             | No       | 100 | 38 | F                |
| FC6BC/OP/D   | 6     | 230     | B22 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 180             | Yes      | 100 | 38 | F                |
| FC6ES/OP/D   | 6     | 230     | E27 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 180             | Yes      | 100 | 38 | F                |
| FC6SES/OP/D  | 6     | 230     | E14 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 180             | Yes      | 100 | 38 | F                |
| FC6BC/OP/CW  | 6     | 230     | B22 | 15,000    | 550lm            | 550lm           | 4000K Cool White | 180             | No       | 100 | 38 | F                |
| FC6ES/OP/CW  | 6     | 230     | E27 | 15,000    | 550lm            | 550lm           | 4000K Cool White | 180             | No       | 100 | 38 | F                |
| FC6SBC/OP/CW | 6     | 230     | B15 | 15,000    | 550lm            | 550lm           | 4000K Cool White | 180             | No       | 100 | 38 | F                |
| FC6SES/OP/CW | 6     | 230     | E14 | 15,000    | 550lm            | 550lm           | 4000K Cool White | 180             | No       | 100 | 38 | F                |









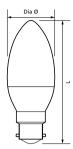


## Essential Range 7W Candle

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 60W incandescent lamp







Energy Saving Values
per lamp over 15,000 hours **£270.30**7W LED Candle = £35.70
60W Incandescent
Candle = £306.00

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| FC7BC/OP    | 7     | 230     | B22 | 15,000    | 806lm            | 806lm           | 2700K Warm White | 150             | No       | 112 | 38 | E                |
| FC7ES/OP    | 7     | 230     | E27 | 15,000    | 806lm            | 806lm           | 2700K Warm White | 150             | No       | 112 | 38 | E                |
| FC7SBC/OP   | 7     | 230     | B15 | 15,000    | 806lm            | 806lm           | 2700K Warm White | 150             | No       | 113 | 38 | E                |
| FC7SES/OP   | 7     | 230     | E14 | 15,000    | 806lm            | 806lm           | 2700K Warm White | 150             | No       | 113 | 38 | E                |

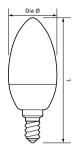


## 5W Candle - Clear

### **Features and Benefits**

- Up to 90% energy savings
- Polycarbonate cover
- Suitable replacement for a 40W incandescent lamp









CRLED/CAN/SES/CL/DIM

| Product Ref          | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|----------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|                      | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| CRLED/CAN/BC/CL      | 5     | 230     | B22 | 25,000    | 420lm            | 420lm           | 2700K Warm White | 170             | No       | 95  | 35 | G                |
| CRLED/CAN/ES/CL      | 5     | 230     | E27 | 25,000    | 420lm            | 420lm           | 2700K Warm White | 170             | No       | 95  | 35 | G                |
| CRLED/CAN/SBC/CL     | 5     | 230     | B15 | 25,000    | 420lm            | 420lm           | 2700K Warm White | 170             | No       | 105 | 35 | G                |
| CRLED/CAN/SES/CL     | 5     | 230     | E14 | 25,000    | 420lm            | 420lm           | 2700K Warm White | 170             | No       | 105 | 35 | G                |
| CRLED/CAN/BC/CL/DIM  | 5     | 230     | B22 | 25,000    | 420lm            | 420lm           | 2700K Warm White | 170             | Yes      | 95  | 35 | G                |
| CRLED/CAN/ES/CL/DIM  | 5     | 230     | E27 | 25,000    | 420lm            | 420lm           | 2700K Warm White | 170             | Yes      | 95  | 35 | G                |
| CRLED/CAN/SBC/CL/DIM | 5     | 230     | B15 | 25,000    | 420lm            | 420lm           | 2700K Warm White | 170             | Yes      | 105 | 35 | G                |
| CRLED/CAN/SES/CL/DIM | 5     | 230     | E14 | 25,000    | 420lm            | 420lm           | 2700K Warm White | 170             | Yes      | 105 | 35 | G                |













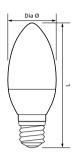
## 5W Candle - Opal

### **Features and Benefits**

- Up to 90% energy savings
- Polycarbonate cover
- Suitable replacement for a 40W incandescent lamp









CRLED/CAN/ES

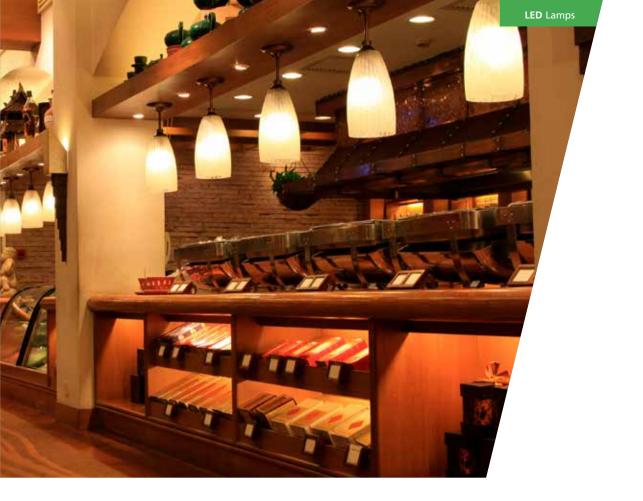
Energy Saving Values per lamp over 25,000 hours
£297.50

5W LED Candle = £42.50
40W Incandescent
Candle = £340.00

| Product Ref          | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|----------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|                      | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| CRLED/CAN/BC         | 5     | 230     | B22 | 25,000    | 470lm            | 470lm           | 2700K Warm White | 150             | No       | 95  | 35 | F                |
| CRLED/CAN/ES         | 5     | 230     | E27 | 25,000    | 470lm            | 470lm           | 2700K Warm White | 150             | No       | 95  | 35 | F                |
| CRLED/CAN/SBC        | 5     | 230     | B15 | 25,000    | 470lm            | 470lm           | 2700K Warm White | 150             | No       | 105 | 35 | F                |
| CRLED/CAN/SES        | 5     | 230     | E14 | 25,000    | 470lm            | 470lm           | 2700K Warm White | 150             | No       | 105 | 35 | F                |
| CRLED/CAN/BC/DIM     | 5     | 230     | B22 | 25,000    | 470lm            | 470lm           | 2700K Warm White | 150             | Yes      | 95  | 35 | F                |
| CRLED/CAN/ES/DIM     | 5     | 230     | E27 | 25,000    | 470lm            | 470lm           | 2700K Warm White | 150             | Yes      | 95  | 35 | F                |
| CRLED/CAN/SBC/DIM    | 5     | 230     | B15 | 25,000    | 470lm            | 470lm           | 2700K Warm White | 150             | Yes      | 105 | 35 | F                |
| CRLED/CAN/SES/DIM    | 5     | 230     | E14 | 25,000    | 470lm            | 470lm           | 2700K Warm White | 150             | Yes      | 105 | 35 | F                |
| CRLED/CAN/BC/CW      | 5     | 230     | B22 | 25,000    | 485lm            | 485lm           | 4000K Cool White | 150             | No       | 95  | 35 | F                |
| CRLED/CAN/ES/CW      | 5     | 230     | E27 | 25,000    | 485lm            | 485lm           | 4000K Cool White | 150             | No       | 95  | 35 | F                |
| CRLED/CAN/SBC/CW     | 5     | 230     | B15 | 25,000    | 485lm            | 485lm           | 4000K Cool White | 150             | No       | 105 | 35 | F                |
| CRLED/CAN/SES/CW     | 5     | 230     | E14 | 25,000    | 485lm            | 485lm           | 4000K Cool White | 150             | No       | 105 | 35 | F                |
| CRLED/CAN/BC/CW/DIM  | 5     | 230     | B22 | 25,000    | 485lm            | 485lm           | 4000K Cool White | 150             | Yes      | 95  | 35 | F                |
| CRLED/CAN/ES/CW/DIM  | 5     | 230     | E27 | 25,000    | 485lm            | 485lm           | 4000K Cool White | 150             | Yes      | 95  | 35 | F                |
| CRLED/CAN/SBC/CW/DIM | 5     | 230     | B15 | 25,000    | 485lm            | 485lm           | 4000K Cool White | 150             | Yes      | 105 | 35 | F                |
| CRLED/CAN/SES/CW/DIM | 5     | 230     | E14 | 25,000    | 485lm            | 485lm           | 4000K Cool White | 150             | Yes      | 105 | 35 | F                |



14



# **Golfball** Range



## Essential Range 6W Golf Ball

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 40W incandescent lamp







FDR6SES/OP

Energy Saving Values
per lamp over 15,000 hours

£173.40

6W LED Golf Ball = £30.60
40W Incandescent
Golf Ball = £204.60

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| FDR6BC/OP   | 6     | 230     | B22 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 220             | No       | 80 | 45 | F                |
| FDR6ES/OP   | 6     | 230     | E27 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 220             | No       | 80 | 45 | F                |
| FDR6SBC/OP  | 6     | 230     | B15 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 220             | No       | 80 | 45 | F                |
| FDR6SES/OP  | 6     | 230     | E14 | 15,000    | 525lm            | 525lm           | 2700K Warm White | 220             | No       | 80 | 45 | F                |

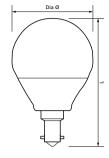


## 5W Golf Ball - Opal

### **Features and Benefits**

- Up to 90% energy savings
- Polycarbonate cover
- Suitable replacement for a 40W incandescent lamp







CRLED/G45/SBC

Energy Saving Values per lamp over 25,000 hours
£297.50

5W LED Golf Ball = £42.50
40W Incandescent
Golf Ball = £340.00

| Product Ref          | Watts | Voltage | Сар | Lamp<br>Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle° | Dimmable | L  | Ø  | Energy<br>Rating |
|----------------------|-------|---------|-----|--------------|------------------|-----------------|------------------|----------------|----------|----|----|------------------|
|                      | (W)   | (V)     |     | (hrs)        |                  |                 |                  |                |          | (m | m) |                  |
| CRLED/G45/BC         | 5     | 230     | B22 | 25,000       | 470lm            | 470lm           | 2700K Warm White | 150            | No       | 82 | 45 | F                |
| CRLED/G45/ES         | 5     | 230     | E27 | 25,000       | 470lm            | 470lm           | 2700K Warm White | 150            | No       | 82 | 45 | F                |
| CRLED/G45/SBC        | 5     | 230     | B15 | 25,000       | 470lm            | 470lm           | 2700K Warm White | 150            | No       | 84 | 45 | F                |
| CRLED/G45/SES        | 5     | 230     | E14 | 25,000       | 470lm            | 470lm           | 2700K Warm White | 150            | No       | 84 | 45 | F                |
| CRLED/G45/BC/DIM     | 5     | 230     | B22 | 25,000       | 470lm            | 470lm           | 2700K Warm White | 150            | Yes      | 82 | 45 | F                |
| CRLED/G45/ES/DIM     | 5     | 230     | E27 | 25,000       | 470lm            | 470lm           | 2700K Warm White | 150            | Yes      | 82 | 45 | F                |
| CRLED/G45/SBC/DIM    | 5     | 230     | B15 | 25,000       | 470lm            | 470lm           | 2700K Warm White | 150            | Yes      | 84 | 45 | F                |
| CRLED/G45/SES/DIM    | 5     | 230     | E14 | 25,000       | 470lm            | 470lm           | 2700K Warm White | 150            | Yes      | 84 | 45 | F                |
| CRLED/G45/BC/CW      | 5     | 230     | B22 | 25,000       | 485lm            | 485lm           | 4000K Cool White | 150            | No       | 82 | 45 | F                |
| CRLED/G45/ES/CW      | 5     | 230     | E27 | 25,000       | 485lm            | 485lm           | 4000K Cool White | 150            | No       | 82 | 45 | F                |
| CRLED/G45/SBC/CW     | 5     | 230     | B15 | 25,000       | 485lm            | 485lm           | 4000K Cool White | 150            | No       | 84 | 45 | F                |
| CRLED/G45/SES/CW     | 5     | 230     | E14 | 25,000       | 485lm            | 485lm           | 4000K Cool White | 150            | No       | 84 | 45 | F                |
| CRLED/G45/BC/CW/DIM  | 5     | 230     | B22 | 25,000       | 485lm            | 485lm           | 4000K Cool White | 150            | Yes      | 82 | 45 | F                |
| CRLED/G45/ES/CW/DIM  | 5     | 230     | E27 | 25,000       | 485lm            | 485lm           | 4000K Cool White | 150            | Yes      | 82 | 45 | F                |
| CRLED/G45/SBC/CW/DIM | 5     | 230     | B15 | 25,000       | 485lm            | 485lm           | 4000K Cool White | 150            | Yes      | 84 | 45 | F                |
| CRLED/G45/SES/CW/DIM | 5     | 230     | E14 | 25,000       | 485lm            | 485lm           | 4000K Cool White | 150            | Yes      | 84 | 45 | F                |





# **GLS** Range

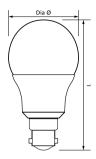


## Essential Range 6W GLS

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 40W incandescent lamp
- Ideal for bedrooms, living rooms and other domestic applications









| Prod | luct Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|------|----------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|      |          | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| F6BC | СР       | 6     | 230     | B22 | 15,000    | 545lm            | 545lm           | 2700K Warm White | 270             | No       | 112 | 60 | F                |
| F6ES | SP       | 6     | 230     | E27 | 15,000    | 545lm            | 545lm           | 2700K Warm White | 270             | No       | 112 | 60 | F                |
| F6BC | CP/CW    | 6     | 230     | B22 | 15,000    | 560lm            | 560lm           | 4000K Cool White | 270             | No       | 112 | 60 | F                |
| F6ES | SP/CW    | 6     | 230     | E27 | 15,000    | 560lm            | 560lm           | 4000K Cool White | 270             | No       | 112 | 60 | F                |

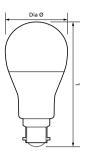


### 6W GLS

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 40W incandescent lamp









CRLED/GLS6ES

| Product Ref      | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|                  | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| CRLED/GLS6BC     | 6     | 230     | B22 | 25,000    | 520lm            | 520lm           | 2700K Warm White | 250             | No       | 108 | 55 | F                |
| CRLED/GLS6ES     | 6     | 230     | E27 | 25,000    | 520lm            | 520lm           | 2700K Warm White | 250             | No       | 109 | 55 | F                |
| CRLED/GLS6BC/DIM | 6     | 230     | B22 | 25,000    | 520lm            | 520lm           | 2700K Warm White | 250             | Yes      | 108 | 55 | F                |
| CRLED/GLS6ES/DIM | 6     | 230     | E27 | 25,000    | 520lm            | 520lm           | 2700K Warm White | 250             | Yes      | 109 | 55 | F                |

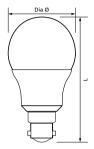


## Essential Range 9.5W GLS

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 60W incandescent lamp







Energy Saving Values per lamp over 15,000 hours 60W Incandescent GLS= £306.00

| Product Ref  | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|--------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|              | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| F9.5BCP      | 9.5   | 230     | B22 | 15,000    | 900lm            | 900lm           | 2700K Warm White | 270             | No       | 118 | 60 | F                |
| F9.5ESP      | 9.5   | 230     | E27 | 15,000    | 900lm            | 900lm           | 2700K Warm White | 270             | No       | 118 | 60 | F                |
| F9.5BCP/D    | 9.5   | 230     | B22 | 15,000    | 900lm            | 900lm           | 2700K Warm White | 270             | Yes      | 118 | 60 | F                |
| F9.5ESP/D    | 9.5   | 230     | E27 | 15,000    | 900lm            | 900lm           | 2700K Warm White | 270             | Yes      | 118 | 60 | F                |
| F9.5BCP/CW   | 9.5   | 230     | B22 | 15,000    | 915lm            | 915lm           | 4000K Cool White | 270             | No       | 118 | 60 | F                |
| F9.5ESP/CW   | 9.5   | 230     | E27 | 15,000    | 915lm            | 915lm           | 4000K Cool White | 270             | No       | 118 | 60 | F                |
| F9.5BCP 110V | 9.5   | 110     | B22 | 15,000    | 900lm            | 900lm           | 2700K Warm White | 270             | No       | 118 | 60 | F                |
| F9.5ESP 110V | 9.5   | 110     | E27 | 15,000    | 900lm            | 900lm           | 2700K Warm White | 270             | No       | 118 | 60 | F                |









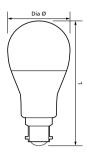


### 8.5W **GLS**

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 60W incandescent lamp









**Energy Saving Values** per lamp over 25,000 hours 8.5W LED GLS = £72.25 60W Incandescent GLS= £510.00

| Product Ref           | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-----------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|                       | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| CRLED/GLS8.5BC        | 8.5   | 230     | B22 | 25,000    | 810lm            | 810lm           | 2700K Warm White | 250             | No       | 116 | 60 | F                |
| CRLED/GLS8.5ES        | 8.5   | 230     | E27 | 25,000    | 810lm            | 810lm           | 2700K Warm White | 250             | No       | 116 | 60 | F                |
| CRLED/GLS8.5BC/DIM    | 8.5   | 230     | B22 | 25,000    | 810lm            | 810lm           | 2700K Warm White | 250             | Yes      | 116 | 60 | F                |
| CRLED/GLS8.5ES/DIM    | 8.5   | 230     | E27 | 25,000    | 810lm            | 810lm           | 2700K Warm White | 250             | Yes      | 116 | 60 | F                |
| CRLED/GLS8.5BC/CW     | 8.5   | 230     | B22 | 25,000    | 840lm            | 840lm           | 4000K Cool White | 250             | No       | 116 | 60 | F                |
| CRLED/GLS8.5ES/CW     | 8.5   | 230     | E27 | 25,000    | 840lm            | 840lm           | 4000K Cool White | 250             | No       | 116 | 60 | F                |
| CRLED/GLS8.5BC/CW/DIM | 8.5   | 230     | B22 | 25,000    | 840lm            | 840lm           | 4000K Cool White | 250             | Yes      | 116 | 60 | F                |
| CRLED/GLS8.5ES/CW/DIM | 8.5   | 230     | E27 | 25,000    | 840lm            | 840lm           | 4000K Cool White | 250             | Yes      | 116 | 60 | F                |
| CRLED/GLS8.5BC 110V   | 8.5   | 110     | B22 | 25,000    | 810lm            | 810lm           | 2700K Warm White | 250             | No       | 116 | 60 | F                |
| CRLED/GLS8.5ES 110V   | 8.5   | 110     | E27 | 25,000    | 810lm            | 810lm           | 2700K Warm White | 250             | No       | 116 | 60 | F                |











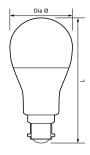


### 8.5W GLS with Dusk to Dawn Sensor

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 60W incandescent lamp
- Built-in dusk to dawn sensor











| Product Ref        | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø   |
|--------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|-----|
|                    | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | ım) |
| CRLED/GLS8.5BC/SEN | 8.5   | 230     | B22 | 25,000    | 810lm            | 810lm           | 2700K Warm White | 150             | No       | 124 | 65  |
| CRLED/GLS8.5ES/SEN | 8.5   | 230     | E27 | 25,000    | 810lm            | 810lm           | 2700K Warm White | 150             | No       | 124 | 65  |

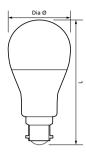


### 9.5W **GLS**

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 75W incandescent lamp









Energy Saving Values
per lamp over 25,000 hours

£556.75
9.5W LED GLS = £80.75
75W Incandescent
GLS = £637.50

| Product Ref        | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L   | Ø  |
|--------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|
|                    | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |
| CRLED/GLS9.5BC     | 9.5   | 230     | B22 | 25,000    | 1055lm           | 1055lm          | 2700K Warm White | 250             | No       | 122 | 65 |
| CRLED/GLS9.5ES     | 9.5   | 230     | E27 | 25,000    | 1055lm           | 1055lm          | 2700K Warm White | 250             | No       | 122 | 65 |
| CRLED/GLS9.5BC/DIM | 9.5   | 230     | B22 | 25,000    | 1055lm           | 1055lm          | 2700K Warm White | 250             | Yes      | 122 | 65 |
| CRLED/GLS9.5ES/DIM | 9.5   | 230     | E27 | 25,000    | 1055lm           | 1055lm          | 2700K Warm White | 250             | Yes      | 122 | 65 |

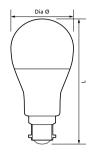


### 12.5W **GLS**

### **Features and Benefits**

- Up to 85% energy savings
- Polycarbonate cover
- Suitable replacement for a 100W incandescent lamp





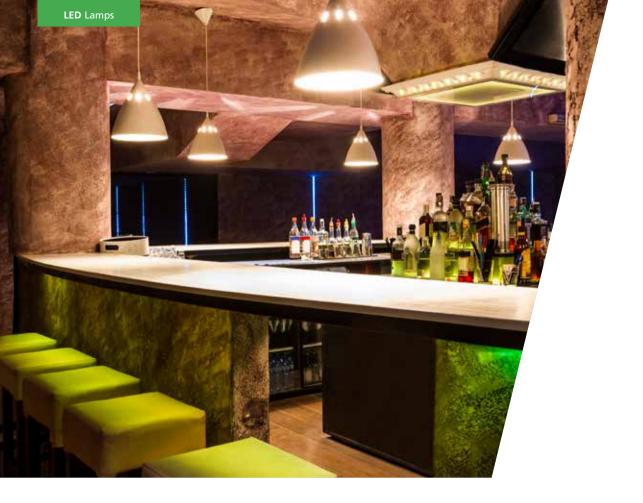




Energy Saving Values
per lamp over 25,000 hours **£743.75**12.5W LED GLS = £106.25
100W Incandescent
GLS= £850.00

| ı | Product Ref     | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|---|-----------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|   |                 | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| Г | CRLED/GLS12.5BC | 12.5  | 230     | B22 | 25,000    | 1521lm           | 1521lm          | 2700K Warm White | 150             | No       | 131 | 70 | E                |
|   | CRLED/GLS12.5ES | 12.5  | 230     | E27 | 25,000    | 1521lm           | 1521lm          | 2700K Warm White | 150             | No       | 131 | 70 | Е                |





# **Reflector** Range

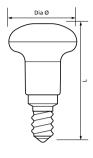


## Essential Range Reflector

### **Features and Benefits**

- Up to 95% energy savings
- Suitable replacements for R39/30W, R50/40W, R63/60W & R80/60W incandescent lamp









Energy Saving Values per lamp over 15,000 hours

£137.70

3W LED R39 = £15.30 30W Incandescent R39 = £153.00 Energy Saving Values per lamp over 15,000 hours

£178.50

5W LED R50 = £25.50 40W Incandescent R50 = £204.00

Energy Saving Values per lamp over 15,000 hours

7W LED R63 = £35.70 60W Incandescent R63 = £306.00 Energy Saving Values

£255.00

10W LED R80 = £51.00 60W Incandescent R80 = £306.00

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| FR39        | 3     | 230     | E14 | 15,000    | 180lm            | 180lm           | 2700K Warm White | 120             | No       | 67  | 39 | G                |
| FR50        | 5     | 230     | E14 | 15,000    | 455lm            | 455lm           | 2700K Warm White | 120             | No       | 86  | 50 | G                |
| FR63        | 7     | 230     | E27 | 15,000    | 640lm            | 640lm           | 2700K Warm White | 120             | No       | 106 | 63 | G                |
| FR80        | 10    | 230     | E27 | 15,000    | 860lm            | 860lm           | 2700K Warm White | 120             | No       | 116 | 80 | G                |



### Reflector

#### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacements for R39/30W, R50/40W, R63/60W & R80/60W incandescent lamp







**Energy Saving Values** per lamp over 25,000 hours

5W LED R50 = £42.50 40W Incandescent R50 = £340.00

Energy Saving Values per lamp over 25,000 hours

3W LED R39 = £25.50 30W Incandescent R39 = £255.00

**Energy Saving Values** per lamp over 25,000 hours

7.5W LED R63 = £63.75 60W Incandescent R63 = £510.00

**Energy Saving Values** per lamp over 25,000 hours

9W LED R80 = £76.50 60W Incandescent R80 = £510.00

| Product Ref   | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|---------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|               | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| CRLED/R39     | 3     | 230     | E14 | 25,000    | 240lm            | 240lm           | 3000K Warm White | 120             | No       | 67  | 39 | G                |
| CRLED/R50     | 5     | 230     | E14 | 25,000    | 400lm            | 400lm           | 3000K Warm White | 120             | No       | 86  | 50 | G                |
| CRLED/R50/DIM | 5     | 230     | E14 | 25,000    | 400lm            | 400lm           | 3000K Warm White | 120             | Yes      | 86  | 50 | G                |
| CRLED/R63     | 7.5   | 230     | E27 | 25,000    | 700lm            | 700lm           | 3000K Warm White | 120             | No       | 105 | 63 | F                |
| CRLED/R63/DIM | 7.5   | 230     | E27 | 25,000    | 700lm            | 700lm           | 3000K Warm White | 120             | Yes      | 105 | 63 | F                |
| CRLED/R80     | 9     | 230     | E27 | 25,000    | 860lm            | 860lm           | 3000K Warm White | 120             | No       | 116 | 80 | F                |
| CRLED/R80/DIM | 9     | 230     | E27 | 25,000    | 860lm            | 860lm           | 3000K Warm White | 120             | Yes      | 116 | 80 | F                |



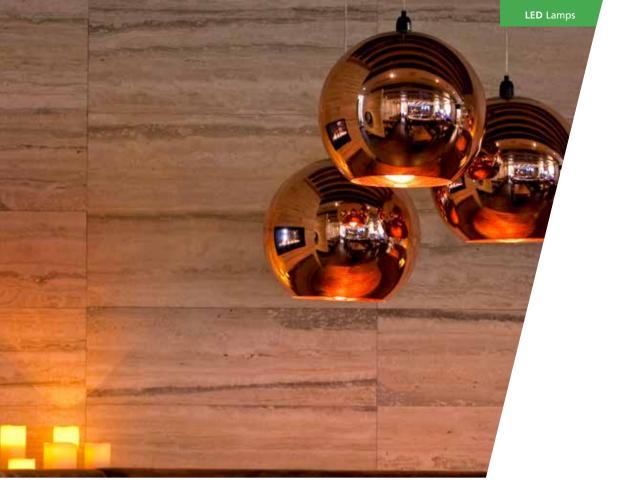












# **Globe** Range

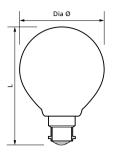


### **Globe**

### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 60W incandescent lamp
- Retro-fit size
- Ideal for decorative, retail and display lighting









| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| EDLED/G95BC | 8     | 230     | B22 | 15,000    | 750lm            | 750lm           | 2700K Warm White | 320             | No       | 140 | 95 | F                |
| EDLED/G95ES | 8     | 230     | E27 | 15,000    | 750lm            | 750lm           | 2700K Warm White | 320             | No       | 140 | 95 | F                |



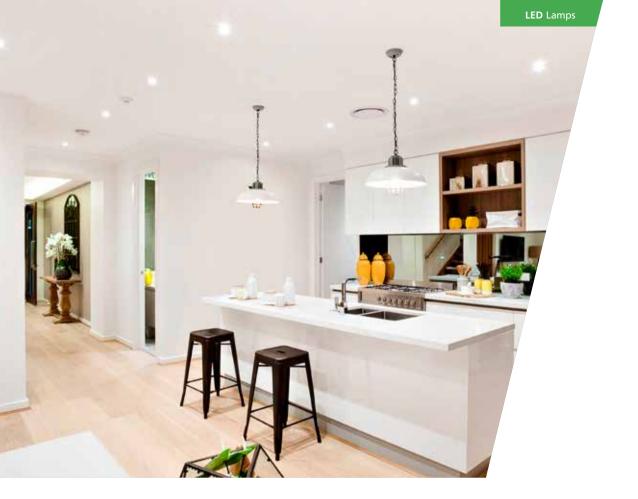












# **GU10** Range



### 4W GU10 Mini

### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacements for 35W halogen lamps
- Ideal for kitchens, living rooms and other domestic applications









|    | Product Ref   | Watts | Voltage | Сар  | Lamp Life |       | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø   | Energy<br>Rating |
|----|---------------|-------|---------|------|-----------|-------|-----------------|------------------|-----------------|----------|----|-----|------------------|
|    |               | (W)   | (V)     |      | (hrs)     |       |                 |                  |                 |          | (r | nm) |                  |
| -[ | FGU10/PAR11WW | 4     | 230     | GU10 | 20,000    | 225lm | 275lm           | 3000K Warm White | 38              | No       | 48 | 34  | G                |



## Essential Range 3W GU10 - 10 Pack

### **Features and Benefits**

- Up to 95% energy savings
- Suitable replacements for 35W halogen lamps
- Ideal for kitchens, living rooms and other domestic applications







Energy Saving Values
per lamp over 20,000 hours **£217.60**3W LED GU10 = £20.40
35W Halogen GU10 = £238.00

| Product Ref  | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|--------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|              | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| FGU10/WW/10P | 3     | 230     | GU10 | 20,000    | 250lm            | 300lm           | 3000K Warm White | 38              | No       | 56 | 50 | F                |
| FGU10/CW/10P | 3     | 230     | GU10 | 20,000    | 250lm            | 300lm           | 4000K Cool White | 38              | No       | 56 | 50 | F                |

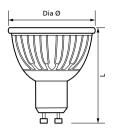


## Essential Range 5W GU10 - 10 Pack

### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 50W halogen lamp
- Ideal for kitchens, living rooms and other domestic applications







Energy Saving Values per lamp over 20,000 hours 50W Halogen GU10 = £340.00

| Product Ref     | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L    | Ø  | Energy<br>Rating |
|-----------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|------|----|------------------|
|                 | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (mm) |    |                  |
| FGU10/5WW/10P   | 5     | 230     | GU10 | 20,000    | 320lm            | 350lm           | 3000K Warm White | 38              | No       | 56   | 50 | G                |
| FGU10/5CW/10P   | 5     | 230     | GU10 | 20,000    | 300lm            | 350lm           | 4000K Cool White | 38              | No       | 56   | 50 | G                |
| FGU10/5DW/10P   | 5     | 230     | GU10 | 20,000    | 300lm            | 350lm           | 6000K Daylight   | 38              | No       | 56   | 50 | G                |
| FGU10/5WW/10P/D | 5     | 230     | GU10 | 20,000    | 420lm            | 500lm           | 3000K Warm White | 38              | Yes      | 56   | 50 | F                |
| FGU10/5CW/10P/D | 5     | 230     | GU10 | 20,000    | 420lm            | 500lm           | 4000K Cool White | 38              | Yes      | 56   | 50 | F                |
| FGU10/5DW/10P/D | 5     | 230     | GU10 | 20,000    | 420lm            | 500lm           | 6000K Daylight   | 38              | Yes      | 56   | 50 | F                |

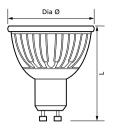


## Essential Range 4W GU10

### **Features and Benefits**

- Up to 95% energy savings
- Suitable replacement for a 50W halogen lamp
- Ideal for general lighting (i.e. kitchens, bedrooms etc)







**Energy Saving Values** 

| Product Ref | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|-------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|             | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| FGU10/WW    | 4     | 230     | GU10 | 20,000    | 310lm            | 350lm           | 3000K Warm White | 30              | No       | 56 | 50 | F                |
| FGU10/CW    | 4     | 230     | GU10 | 20,000    | 310lm            | 350lm           | 4000K Cool White | 30              | No       | 56 | 50 | F                |
| FGU10/DW    | 4     | 230     | GU10 | 20,000    | 310lm            | 350lm           | 6000K Daylight   | 30              | No       | 56 | 50 | F                |
| FGU10/WW/D  | 4     | 230     | GU10 | 20,000    | 340lm            | 370lm           | 3000K Warm White | 38              | Yes      | 56 | 50 | F                |
| FGU10/CW/D  | 4     | 230     | GU10 | 20,000    | 345lm            | 380lm           | 4000K Cool White | 38              | Yes      | 56 | 50 | F                |
| FGU10/DW/D  | 4     | 230     | GU10 | 20,000    | 350lm            | 390lm           | 6000K Daylight   | 38              | Yes      | 56 | 50 | F                |









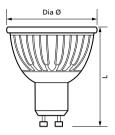


### 5W Glass GU10

### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 50W halogen lamp
- Looks just like a halogen GU10







Energy Saving Values
per lamp over 15,000 hours

£229.50

SW LED GU10 = £25.50

50W Halogen GU10 = £255.00

| Product Ref  | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L    | Ø  | Energy<br>Rating |
|--------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|------|----|------------------|
|              | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (mm) |    |                  |
| FGU10/G/WW   | 5     | 230     | GU10 | 15,000    | 340lm            | 500lm           | 3000K Warm White | 38              | No       | 56   | 50 | G                |
| FGU10/G/CW   | 5     | 230     | GU10 | 15,000    | 340lm            | 500lm           | 4000K Cool White | 38              | No       | 56   | 50 | G                |
| FGU10/G/WW/D | 5     | 230     | GU10 | 15,000    | 340lm            | 500lm           | 3000K Warm White | 38              | Yes      | 56   | 50 | G                |
| FGU10/G/CW/D | 5     | 230     | GU10 | 15,000    | 340lm            | 500lm           | 4000K Cool White | 38              | Yes      | 56   | 50 | G                |



### 5W GU10 Flood & Wide Flood

#### **Features and Benefits**

- Up to 90% energy savings
- Equivalent replacement for a 50W halogen lamp







Energy Saving Values per lamp over 25,000 hours **£382.50**5W LED GU10 = £42.50

50W Halogen GU10 = £425.00

| Product Ref          | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|----------------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|                      | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| EDLED/GU10/5WW       | 5     | 230     | GU10 | 25,000    | 395lm            | 500lm           | 3000K Warm White | 38              | No       | 56 | 50 | F                |
| EDLED/GU10/5CW       | 5     | 230     | GU10 | 25,000    | 400lm            | 510lm           | 4000K Cool White | 38              | No       | 56 | 50 | F                |
| EDLED/GU10/5DW       | 5     | 230     | GU10 | 25,000    | 405lm            | 520lm           | 6000K Daylight   | 38              | No       | 56 | 50 | F                |
| EDLED/GU10/5WW/DIM   | 5     | 230     | GU10 | 25,000    | 395lm            | 500lm           | 3000K Warm White | 38              | Yes      | 56 | 50 | F                |
| EDLED/GU10/5CW/DIM   | 5     | 230     | GU10 | 25,000    | 400lm            | 510lm           | 4000K Cool White | 38              | Yes      | 56 | 50 | F                |
| EDLED/GU10/5DW/DIM   | 5     | 230     | GU10 | 25,000    | 405lm            | 520lm           | 6000K Daylight   | 38              | Yes      | 56 | 50 | F                |
| EDLED/GU10WF/5WW     | 5     | 230     | GU10 | 25,000    | 405lm            | 500lm           | 3000K Warm White | 60              | No       | 56 | 50 | F                |
| EDLED/GU10WF/5CW     | 5     | 230     | GU10 | 25,000    | 410lm            | 510lm           | 4000K Cool White | 60              | No       | 56 | 50 | F                |
| EDLED/GU10WF/5WW/DIM | 5     | 230     | GU10 | 25,000    | 405lm            | 500lm           | 3000K Warm White | 60              | Yes      | 56 | 50 | F                |
| EDLED/GU10WF/5CW/DIM | 5     | 230     | GU10 | 25,000    | 410lm            | 510lm           | 4000K Cool White | 60              | Yes      | 56 | 50 | F                |

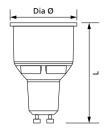


### 7W **74mm GU10**

#### **Features and Benefits**

- Up to 90% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp







Energy Saving Values per lamp over 20,000 hours **£292.40**7W LED GU10 = £47.60

50W Halogen GU10 = £340.00

| Product Ref  | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|--------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|              | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| FGU10WW/74MM | 7     | 230     | GU10 | 20,000    | 600lm            | 600lm           | 3000K Warm White | 38              | No       | 74 | 50 | F                |
| FGU10CW/74MM | 7     | 230     | GU10 | 20,000    | 600lm            | 600lm           | 4000K Cool White | 38              | No       | 74 | 50 | F                |
| FGU10DW/74MM | 7     | 230     | GU10 | 20,000    | 600lm            | 600lm           | 6500K Daylight   | 38              | No       | 74 | 50 | F                |





# PAR Range



#### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 40W halogen lamp
- Retro-fit size
- Ideal for accent, retail and display lighting









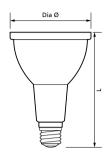
| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
|             | 1     | 230     | E14 | 20.000    | 380lm            | 400lm           | 3000K Warm White | 38              | No       |    | 50 | A+               |



#### **Features and Benefits**

- Up to 90% energy saving
- Suitable replacement for a 50W halogen lamp
- Retro fit size
- Ideal for accent, retail and display lighting







Energy Saving Values
per lamp over 25,000 hours

£374-00

6W LED PAR20 = £51.00
50W Halogen PAR20 = £425.00

| Pi   | roduct Ref  | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|------|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|      |             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| CRLE | D/PAR20     | 6     | 230     | E27 | 25,000    | 420lm            | 480lm           | 3000K Warm White | 24              | No       | 91 | 63 | G                |
| CRLE | D/PAR20/DIM | 6     | 230     | E27 | 25,000    | 420lm            | 480lm           | 3000K Warm White | 24              | Yes      | 91 | 63 | G                |



#### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 75W halogen lamp
- Retro-fit size
- Ideal for accent, retail and display lighting







Energy Saving Values per lamp over 25,000 hours

£552.50

10W LED PAR30 = £85.00
75W Halogen PAR30 = £637.50

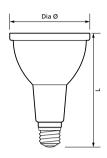
|   | Product Ref     | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|---|-----------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|   |                 | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| ſ | CRLED/PAR30     | 10    | 230     | E27 | 25,000    | 720lm            | 800lm           | 3000K Warm White | 30              | No       | 93 | 95 | G                |
|   | CRLED/PAR30/DIM | 10    | 230     | E27 | 25,000    | 720lm            | 800lm           | 3000K Warm White | 30              | Yes      | 93 | 95 | G                |



### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 80W to 120W incandescent lamp
- Retro-fit size
- Ideal for accent, retail and display lighting
- Suitable for outdoor use in a certified IP rated fitting







Energy Saving Values per lamp over 25,000 hours **£892.50**15W LED PAR38 = £127.50
120W Halogen PAR38 = £1020.00

| Product Ref      | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø   | Energy<br>Rating |
|------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|-----|------------------|
|                  | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m)  |                  |
| CRLED/PAR38      | 15    | 230     | E27 | 25,000    | 1100lm           | 1200lm          | 3000K Warm White | 30              | No       | 135 | 121 | F                |
| CRLED/PAR38/DIM  | 15    | 230     | E27 | 25,000    | 1100lm           | 1200lm          | 3000K Warm White | 30              | Yes      | 135 | 121 | F                |
| CRLED/PAR38 110V | 15    | 230     | E27 | 25,000    | 1100lm           | 1200lm          | 3000K Warm White | 30              | No       | 135 | 121 | F                |





# Filament Range



Dia Ø

### Filament Candle

#### **Features and Benefits**

- Up to 95% energy savings
- Suitable replacement for a 40W incandescent lamp
- Clear and amber versions available
- Gives a sparkling effect, ideal for chandeliers





EDLED/FCAN4SBC/A/DIM





| Product Ref           | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст                     | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-----------------------|-------|---------|-----|-----------|------------------|-----------------|-------------------------|-----------------|----------|-----|----|------------------|
|                       | (W)   | (V)     |     | (hrs)     |                  |                 |                         |                 |          | (m  | m) |                  |
| EDLED/FCAN4BC         | 4     | 230     | B22 | 15,000    | 470lm            | 470lm           | 2700K Warm White        | 300             | No       | 100 | 35 | E                |
| EDLED/FCAN4ES         | 4     | 230     | E27 | 15,000    | 470lm            | 470lm           | 2700K Warm White        | 300             | No       | 100 | 35 | Е                |
| EDLED/FCAN4SBC        | 4     | 230     | B15 | 15,000    | 470lm            | 470lm           | 2700K Warm White        | 300             | No       | 100 | 35 | E                |
| EDLED/FCAN4SES        | 4     | 230     | E14 | 15,000    | 470lm            | 470lm           | 2700K Warm White        | 300             | No       | 100 | 35 | Е                |
| EDLED/FCAN4BC/DIM     | 4     | 230     | B22 | 15,000    | 470lm            | 470lm           | 2700K Warm White        | 300             | Yes      | 100 | 35 | E                |
| EDLED/FCAN4ES/DIM     | 4     | 230     | E27 | 15,000    | 470lm            | 470lm           | 2700K Warm White        | 300             | Yes      | 100 | 35 | Е                |
| EDLED/FCAN4SBC/DIM    | 4     | 230     | B15 | 15,000    | 470lm            | 470lm           | 2700K Warm White        | 300             | Yes      | 100 | 35 | E                |
| EDLED/FCAN4SES/DIM    | 4     | 230     | E14 | 15,000    | 470lm            | 470lm           | 2700K Warm White        | 300             | Yes      | 100 | 35 | Е                |
| EDLED/FCAN4BC/CW      | 4     | 230     | B22 | 15,000    | 485lm            | 485lm           | 4000K Cool White        | 300             | No       | 100 | 35 | E                |
| EDLED/FCAN4ES/CW      | 4     | 230     | E27 | 15,000    | 485lm            | 485lm           | 4000K Cool White        | 300             | No       | 100 | 35 | Е                |
| EDLED/FCAN4SBC/CW     | 4     | 230     | B15 | 15,000    | 485lm            | 485lm           | 4000K Cool White        | 300             | No       | 100 | 35 | E                |
| EDLED/FCAN4SES/CW     | 4     | 230     | E14 | 15,000    | 485lm            | 485lm           | 4000K Cool White        | 300             | No       | 100 | 35 | Е                |
| EDLED/FCAN4BC/A/DIM*  | 4     | 230     | B22 | 15,000    | 320lm            | 320lm           | 2200K Deluxe Warm White | 300             | Yes      | 100 | 35 | G                |
| EDLED/FCAN4ES/A/DIM*  | 4     | 230     | E27 | 15,000    | 320lm            | 320lm           | 2200K Deluxe Warm White | 300             | Yes      | 100 | 35 | G                |
| EDLED/FCAN4SBC/A/DIM* | 4     | 230     | B15 | 15,000    | 320lm            | 320lm           | 2200K Deluxe Warm White | 300             | Yes      | 100 | 35 | G                |
| EDLED/FCAN4SES/A/DIM* | 4     | 230     | E14 | 15,000    | 320lm            | 320lm           | 2200K Deluxe Warm White | 300             | Yes      | 100 | 35 | G                |



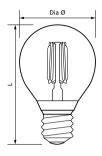
\*Amber version

### Filament Golf Ball

### **Features and Benefits**

- Up to 95% energy savings
- Suitable replacement for a 40W incandescent lamp
- Gives a sparkling effect









Energy Saving Values per lamp over 15,000 hours 40W Incandescent Golf Ball = £204.00

| Product Ref         | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|---------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|                     | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| EDLED/FG45/4BC      | 4     | 230     | B22 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | No       | 78 | 45 | E                |
| EDLED/FG45/4ES      | 4     | 230     | E27 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | No       | 78 | 45 | E                |
| EDLED/FG45/4SBC     | 4     | 230     | B15 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | No       | 78 | 45 | E                |
| EDLED/FG45/4SES     | 4     | 230     | E14 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | No       | 78 | 45 | E                |
| EDLED/FG45/4BC/DIM  | 4     | 230     | B22 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | Yes      | 78 | 45 | E                |
| EDLED/FG45/4ES/DIM  | 4     | 230     | E27 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | Yes      | 78 | 45 | E                |
| EDLED/FG45/4SBC/DIM | 4     | 230     | B15 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | Yes      | 78 | 45 | E                |
| EDLED/FG45/4SES/DIM | 4     | 230     | E14 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | Yes      | 78 | 45 | E                |













### Filament GLS

#### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 40W, 60W & 75W incandescent lamp
- Gives a sparkling effect









**Energy Saving Values** per lamp over 15,000 hours 4W LED GLS = £20.40 40W Incandescent GLS = £204.00

Energy Saving Values per lamp over 15,000 hours 6W LED GLS = £30.60 60W Incandescent GLS = £306.00

Energy Saving Values per lamp over 15,000 hours 8W LED GLS = £40.80 75W Incandescent GLS = £382.50

| Product Ref       | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|                   | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| EDLED/FGLS4BC     | 4     | 230     | B22 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | No       | 108 | 60 | E                |
| EDLED/FGLS4ES     | 4     | 230     | E27 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | No       | 108 | 60 | E                |
| EDLED/FGLS4BC/DIM | 4     | 230     | B22 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | Yes      | 108 | 60 | E                |
| EDLED/FGLS4ES/DIM | 4     | 230     | E27 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 300             | Yes      | 108 | 60 | E                |
| EDLED/FGLS6BC     | 6     | 230     | B22 | 15,000    | 810lm            | 810lm           | 2700K Warm White | 300             | No       | 108 | 60 | D                |
| EDLED/FGLS6ES     | 6     | 230     | E27 | 15,000    | 810lm            | 810lm           | 2700K Warm White | 300             | No       | 108 | 60 | D                |
| EDLED/FGLS6BC/DIM | 6     | 230     | B22 | 15,000    | 810lm            | 810lm           | 2700K Warm White | 300             | Yes      | 108 | 60 | D                |
| EDLED/FGLS6ES/DIM | 6     | 230     | E27 | 15,000    | 810lm            | 810lm           | 2700K Warm White | 300             | Yes      | 108 | 60 | D                |
| EDLED/FGLS6BC/CW  | 6     | 230     | B22 | 15,000    | 820lm            | 820lm           | 4000K Cool White | 300             | No       | 108 | 60 | D                |
| EDLED/FGLS6ES/CW  | 6     | 230     | E27 | 15,000    | 820lm            | 820lm           | 4000K Cool White | 300             | No       | 108 | 60 | D                |
| EDLED/FGLS8BC     | 8     | 230     | B22 | 15,000    | 1055lm           | 1055lm          | 2700K Warm White | 300             | No       | 108 | 60 | E                |
| EDLED/FGLS8ES     | 8     | 230     | E27 | 15,000    | 1055lm           | 1055lm          | 2700K Warm White | 300             | No       | 108 | 60 | E                |
| EDLED/FGLS8BC/DIM | 8     | 230     | B22 | 15,000    | 1055lm           | 1055lm          | 2700K Warm White | 300             | Yes      | 108 | 60 | E                |
| EDLED/FGLS8ES/DIM | 8     | 230     | E27 | 15,000    | 1055lm           | 1055lm          | 2700K Warm White | 300             | Yes      | 108 | 60 | E                |







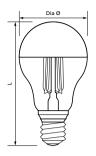


### Filament GLS Crown Silver

### **Features and Benefits**

- Up to 85% energy savings
- Suitable replacement for a 40W incandescent crown silver lamp











| Prod    | duct Ref   | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|---------|------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|         |            | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| EDLED/F | FGLS6BC/CS | 6     | 230     | B22 | 15,000    | 600lm            | 600lm           | 2700K Warm White | 300             | No       | 108 | 60 | F                |
| EDLED/F | FGLS6ES/CS | 6     | 230     | E27 | 15,000    | 600lm            | 600lm           | 2700K Warm White | 300             | No       | 108 | 60 | F                |

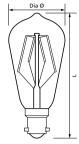


## Filament ST58 & ST64 Squirrel Cage

### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 40W incandescent squirrel cage lamp
- Clear and Amber versions available









**Energy Saving Values** per lamp over 15,000 hours 4W LED ST58 = £20.40 40W Incandescent Squirrel Cage = £204.00

| Product Ref          | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|----------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|                      | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| EDLED/FST58/4BC      | 4     | 230     | B22 | 15,000    | 400lm            | 400lm           | 2200K Warm White | 300             | No       | 132 | 58 | F                |
| EDLED/FST58/4ES      | 4     | 230     | E27 | 15,000    | 400lm            | 400lm           | 2200K Warm White | 300             | No       | 132 | 58 | F                |
| EDLED/FST58/4BC/DIM  | 4     | 230     | B22 | 15,000    | 400lm            | 400lm           | 2200K Warm White | 300             | Yes      | 132 | 58 | F                |
| EDLED/FST58/4ES/DIM  | 4     | 230     | E27 | 15,000    | 400lm            | 400lm           | 2200K Warm White | 300             | Yes      | 132 | 58 | F                |
| EDLED/FST58A/4BC     | 4     | 230     | B22 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | No       | 132 | 58 | G                |
| EDLED/FST58A/4ES     | 4     | 230     | E27 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | No       | 132 | 58 | G                |
| EDLED/FST58A/4BC/DIM | 4     | 230     | B22 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | Yes      | 132 | 58 | G                |
| EDLED/FST58A/4ES/DIM | 4     | 230     | E27 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | Yes      | 132 | 58 | G                |
| EDLED/FST64/4BC      | 4     | 230     | B22 | 15,000    | 400lm            | 400lm           | 2200K Warm White | 300             | No       | 143 | 64 | F                |
| EDLED/FST64/4ES      | 4     | 230     | E27 | 15,000    | 400lm            | 400lm           | 2200K Warm White | 300             | No       | 143 | 64 | F                |
| EDLED/FST64/4BC/DIM  | 4     | 230     | B22 | 15,000    | 400lm            | 400lm           | 2200K Warm White | 300             | Yes      | 143 | 64 | F                |
| EDLED/FST64/4ES/DIM  | 4     | 230     | E27 | 15,000    | 400lm            | 400lm           | 2200K Warm White | 300             | Yes      | 143 | 64 | F                |
| EDLED/FST64A/4BC     | 4     | 230     | B22 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | No       | 143 | 64 | G                |
| EDLED/FST64A/4ES     | 4     | 230     | E27 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | No       | 143 | 64 | G                |
| EDLED/FST64A/4BC/DIM | 4     | 230     | B22 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | Yes      | 143 | 64 | G                |
| EDLED/FST64A/4ES/DIM | 4     | 230     | E27 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | Yes      | 143 | 64 | G                |







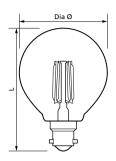


### Filament Amber Globe 95mm & 125mm

### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 40W incandescent globe











Energy Saving Values
per lamp over 15,000 hours

£183.60

4W LED 95mm Globe = £20.40
40W Incandescent 95mm
Globe = £204.00

| Product Ref          | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø   | Energy<br>Rating |
|----------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|-----|------------------|
|                      | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m)  |                  |
| EDLED/FG95A/4BC/DIM  | 4     | 230     | B22 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | Yes      | 140 | 95  | G                |
| EDLED/FG95A/4ES/DIM  | 4     | 230     | E27 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | Yes      | 140 | 95  | G                |
| EDLED/FG125A/4BC/DIM | 4     | 230     | B22 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | Yes      | 160 | 125 | G                |
| EDLED/FG125A/4ES/DIM | 4     | 230     | E27 | 15,000    | 320lm            | 320lm           | 2200K Warm White | 300             | Yes      | 160 | 125 | G                |

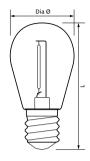


## **1&2W LED Festoon Filament Lamp**

#### **Features and Benefits**

- Up to 95% energy savings
- Suitable replacement for festoon or string lighting systems









FFF2ES/5P

Energy Saving Values
per lamp over 15,000 hours **£71.4.0**1W LED Filament = £5.10
15W Incandescent
Lamp = £76.50

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| FFF1ES/5P   | 1     | 230     | ES  | 15,000    | 90lm             | 90lm            | 2700K Warm White | 360             | No       | 85 | 45 | F                |
| FFF2ES/5P   | 2     | 230     | ES  | 15.000    | 180lm            | 180lm           | 2700K Warm White | 360             | No       | 85 | 45 | F                |

Note: \* Related products from Luminaires

| Product Ref | Description                                       |
|-------------|---|
| FF5M1M*     | 5MTR 230V Festoon, 1MTR Spacing x 5 Drop Pendants |
| FF5M0.5M*   | 5MTR 230V Festoon 0.5MTR Spacing x 10 Pendants    |
| FFPC*       | 3MTR 230V Festoon Power Cable                     |
| FFGWKIT*    | 20M Festoon Catenary Guide Wire Kit               |



fusion-luminaires.co.uk





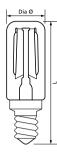


### Filament Cooker Hood

### **Features and Benefits**

- Up to 95% energy savings
- Suitable replacement for a 40W cooker hood lamp







Energy Saving Values
per lamp over 15,000 hours
£193.80
2W LED Cooker Hood = £10.20
40W Incandescent
Lamp = £204.00

| Product Ref    | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|----------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|                | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| EDLED/FHOODSES | 2     | 230     | E14 | 15,000    | 180lm            | 180lm           | 2700K Warm White | 300             | No       | 80 | 25 | F                |





# MR11 & MR16 Range



#### **Features and Benefits**

- Can operate AC/DC 12V
- Up to 90% energy savings
- Suitable replacement for a 20W & 35W halogen lamp









| Product Ref  | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|--------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|              | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| CRLED/MR11WW | 4     | 12      | GU4 | 25,000    | 225lm            | 275lm           | 3000K Warm White | 38              | No       | 42 | 34 | G                |
| CRLED/MR11CW | 4     | 12      | GU4 | 25,000    | 230lm            | 280lm           | 4000K Cool White | 38              | No       | 42 | 34 | G                |
| CRLED/MR11DW | 4     | 12      | GU4 | 25,000    | 235lm            | 285lm           | 6000K Daylight   | 38              | No       | 42 | 34 | G                |



#### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 35W halogen lamp
- Broadly compatible with existing electromagnetic & electronic halogen transformers









| Product Ref    | Watts | Voltage | Сар   | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|----------------|-------|---------|-------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|                | (W)   | (V)     |       | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| CRLED/MR16/4WW | 4     | 12      | GU5.3 | 25,000    | 245lm            | 315lm           | 3000K Warm White | 38              | No       | 48 | 50 | G                |
| CRLED/MR16/4CW | 4     | 12      | GU5.3 | 25,000    | 250lm            | 320lm           | 4000K Cool White | 38              | No       | 48 | 50 | G                |
| CRLED/MR16/4DW | 4     | 12      | GU5.3 | 25,000    | 255lm            | 325lm           | 6000K Daylight   | 38              | No       | 48 | 50 | G                |



#### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 50W halogen lamp
- Broadly compatible with existing electromagnetic & electronic halogen transformers
- Ideal for accent and general lighting (eg; hotels, shops, offices)







Energy Saving Values per lamp over 25,000 hours

£382.50

5W LED MR16 = £42.50

50W Halogen MR16 = £425.00

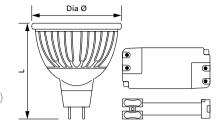
| Product Ref    | Watts | Voltage | Сар   | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|----------------|-------|---------|-------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|                | (W)   | (V)     |       | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| CRLED/MR16/5WW | 5     | 12      | GU5.3 | 25,000    | 315lm            | 395lm           | 3000K Warm White | 38              | No       | 48 | 50 | G                |
| CRLED/MR16/5CW | 5     | 12      | GU5.3 | 25,000    | 320lm            | 400lm           | 4000K Cool White | 38              | No       | 48 | 50 | G                |
| CRLED/MR16/5DW | 5     | 12      | GU5.3 | 25,000    | 325lm            | 405lm           | 6000K Daylight   | 38              | No       | 48 | 50 | G                |



### **5W MR16 Dimmable Kit**

#### **Features and Benefits**

- Up to 85% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Dimmable (when used in conjunction with included driver)
- Ideal for accent and general lighting (eg; hotels, shops, offices)







Energy Saving Values per lamp over 25,000 hours

£382.50

5W LED MR16 = £42.50

50W Halogen MR16 = £425.00

| Product Ref     | Watts | Voltage | Сар   | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|-----------------|-------|---------|-------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|                 | (W)   | (V)     |       | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| EDLEDKIT/DIM    | 5     | 230     | GU5.3 | 25,000    | 320lm            | 400lm           | 4000K Cool White | 38              | Yes      | 48 | 50 | G                |
| EDLEDKIT/DIM/WW | 5     | 230     | GU5.3 | 25,000    | 315lm            | 395lm           | 3000K Warm White | 38              | Yes      | 48 | 50 | G                |

Note: Image shown is for illustrative purpose only - product subject to slight change.

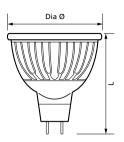
<sup>\*230</sup>V supply to driver, 24V supply to lamp from driver.



#### **Features and Benefits**

- Up to 90% energy savings
- Equivalent replacement for a 50W halogen lamp
- Broadly compatible with existing electromagnetic & electronic halogen transformers







Energy Saving Values per lamp over 25,000 hours **£365.50**7W LED MR16 = £59.50

50W Halogen MR16 = £425.00

| Product Ref    | Watts | Voltage | Сар   | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|----------------|-------|---------|-------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|                | (W)   | (V)     |       | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| CRLED/MR16/7WW | 7     | 12      | GU5.3 | 25,000    | 470lm            | 555lm           | 3000K Warm White | 38              | No       | 48 | 50 | G                |
| CRLED/MR16/7CW | 7     | 12      | GU5.3 | 25,000    | 475lm            | 560lm           | 4000K Cool White | 38              | No       | 48 | 50 | G                |
| CRLED/MR16/7DW | 7     | 12      | GU5.3 | 25,000    | 480lm            | 565lm           | 6000K Daylight   | 38              | No       | 48 | 50 | G                |





## Striplights & Architectural Range

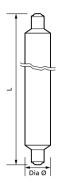


## 221mm & 284mm Striplights

#### **Features and Benefits**

- Up to 90% energy saving
- Suitable replacement for 30W or 60W incandescent striplights
- Ideal for retro fitting into picture lights, shaver lights and under cupboard lights







Energy Saving Values per lamp over 20,000 hours

£176.80

4W LED Striplight = £27.20
30W Incandescent
Striplight = £204.00

Energy Saving Values per lamp over 20,000 hours

£367.20

6W LED Striplight = £40.80

60W Incandescent

Striplight = £408.00

| Product Ref | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| CRLED/221   | 4     | 230     | S15s | 20,000    | 350lm            | 350lm           | 3000K Warm White | 150             | No       | 221 | 26 | F                |
| CRLED/284   | 6     | 230     | S15s | 20,000    | 550lm            | 550lm           | 3000K Warm White | 150             | No       | 284 | 26 | F                |

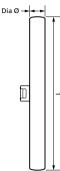


### 300mm & 500mm Architectural

### **Features and Benefits**

- Up to 90% energy saving
- Suitable replacement for 35W & 60W incandescent architectural lamps







Energy Saving Values per lamp over 25,000 hours

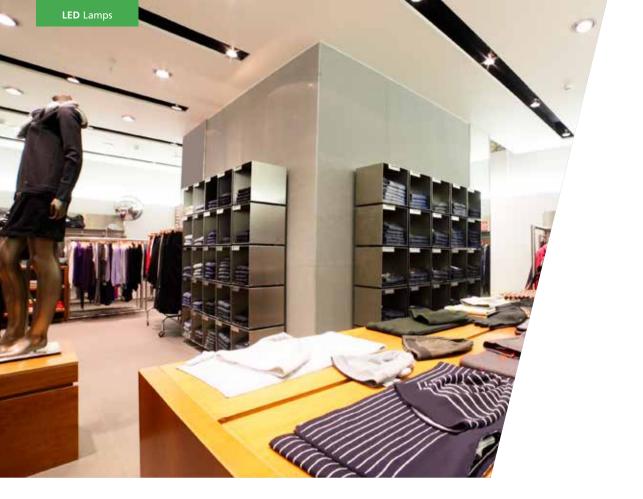
5W LED Architectural = £42.50 35W Incandescent Striplight = £297.50 Energy Saving Values
per lamp over 25,000 hours

£442.00

8W LED Architectural = £68.00
60W Incandescent
Striplight = £510.00

| Product Ref      | Watts | Voltage | Сар  | Lamp<br>Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|------------------|-------|---------|------|--------------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|                  | (W)   | (V)     |      | (hrs)        |                  |                 |                  |                 |          | (m  | m) |                  |
| EDLED/S14D/300MM | 5     | 230     | S14d | 25,000       | 440lm            | 440lm           | 3000K Warm White | 120             | No       | 300 | 30 | F                |
| EDLED/S14D/500MM | 8     | 230     | S14d | 25,000       | 720lm            | 720lm           | 3000K Warm White | 120             | No       | 500 | 30 | F                |
| EDLED/S14S/300MM | 5     | 230     | S14s | 25,000       | 440lm            | 440lm           | 3000K Warm White | 120             | No       | 300 | 30 | F                |
| EDLED/S14S/500MM | 8     | 230     | S14s | 25,000       | 720lm            | 720lm           | 3000K Warm White | 120             | No       | 500 | 30 | F                |





# **AR111** Range

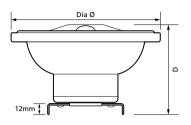


### 12W **AR111**

#### **Features and Benefits**

- Up to 75% energy savings
- Suitable replacement for a 50W halogen lamp
- Ideal for retail and display lighting







EDLED/AR111/12

Energy Saving Values
per lamp over 25,000 hours

£323.00

12W LED AR11 = £102.00
50W Halogen AR11 = £425.00

| Product Ref          | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø   | Energy<br>Rating |
|----------------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|----|-----|------------------|
|                      | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (m | m)  |                  |
| EDLED/AR111/12*      | 12    | 12      | G53  | 25,000    | 1000lm           | 1000lm          | 3000K Warm White | 24              | No       | 65 | 111 | G                |
| EDLED/AR111/12/DIM** | 12    | 24      | G53  | 25,000    | 1000lm           | 1000lm          | 3000K Warm White | 24              | Yes      | 65 | 111 | G                |
| EDLED/AR111/12GU10   | 12    | 230     | GU10 | 25,000    | 1000lm           | 1000lm          | 3000K Warm White | 24              | No       | 73 | 111 | G                |

Note: \*It is advised that an appropriate LED driver is used with this product.

Try our **LED DRIVER 18W** on page 102

\*\*Supplied complete with dimmable driver - Lamp and driver MUST be used together.





# **Linear** Range

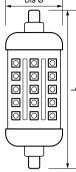


### 78mm & 118mm **Linear**

#### **Features and Benefits**

- Up to 95% energy saving
- Suitable replacements for 120W and 400W halogen lamps
- Ideal for retro fitting into floodlights and uplighters







Energy Saving Values
per lamp over 25,000 hours

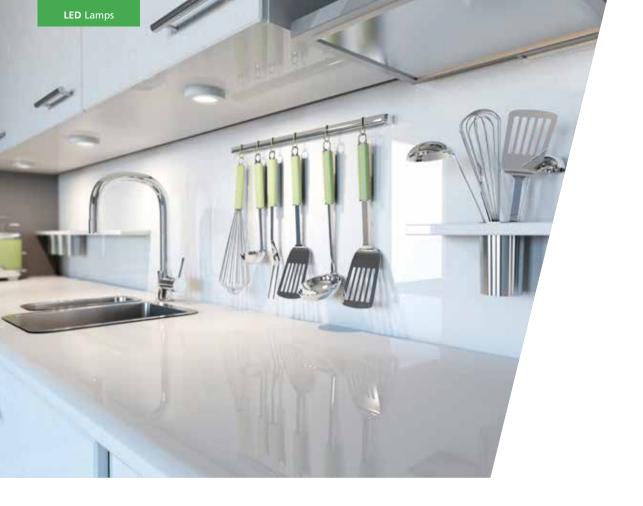
£977.50

SW LED Linear = £42.50
120W Liner Halogen = £1020.00

Energy Saving Values
per lamp over 25,000 hours **£3323.50**9W LED Linear = £76.50
400W Liner Halogen = £3400.00

| Product Ref    | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø    | Energy<br>Rating |
|----------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|-----|------|------------------|
|                | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m  | m)   |                  |
| CRLED/78WW     | 5     | 230     | R7s | 25,000    | 450lm            | 450lm           | 3000K Warm White | 220             | No       | 78  | 23.5 | F                |
| CRLED/118WW    | 9     | 230     | R7s | 25,000    | 1000lm           | 1000lm          | 3000K Warm White | 220             | No       | 118 | 23.5 | E                |
| CRLED/78       | 5     | 230     | R7s | 25,000    | 500lm            | 500lm           | 6000K Daylight   | 220             | No       | 78  | 23.5 | F                |
| CRLED/118      | 9     | 230     | R7s | 25,000    | 1050lm           | 1050lm          | 6000K Daylight   | 220             | No       | 118 | 23.5 | E                |
| CRLED/118 110V | 9     | 110     | R7s | 25,000    | 1050lm           | 1050lm          | 6000K Daylight   | 220             | No       | 118 | 23.5 | F                |





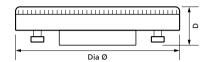
# GX53, Capsules & Pygmy Range



### **GX53**

#### **Features and Benefits**

- Up to 55% energy saving
- Suitable replacement for a 9W compact fluorescent lamp







Energy Saving Values
per lamp over 25,000 hours

£42.50

4W LED GX53 = £34.00
9W Compact Fluorescent
GX53 = £76.50

| Product Ref  | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|--------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|              | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| EDLED/GX53WW | 4     | 230     | GX53 | 25,000    | 360lm            | 360lm           | 3000K Warm White | 120             | No       | 27 | 74 | F                |
| EDLED/GX53CW | 4     | 230     | GX53 | 25,000    | 363lm            | 363lm           | 4000K Cool White | 120             | No       | 27 | 74 | F                |
| EDLED/GX53DW | 4     | 230     | GX53 | 25,000    | 365lm            | 365lm           | 6000K Daylight   | 120             | No       | 27 | 74 | F                |

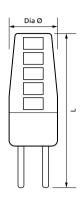


## Essential Range G4 2-Pack

#### **Features and Benefits**

- 10 super bright SMDs
- Up to 90% energy saving
- Suitable replacement for a 10W or 20W halogen lamp
- Ideal for use in under cupboard lighting and bed-side table lamps







Energy Saving Values per lamp over 15,000 hours 2W LED G4 = £10.20 20W Halogen G4 = £102.00

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| FG4/2P      | 2     | 12      | G4  | 15,000    | 200lm            | 200lm           | 3000K Warm White | 330             | No       | 36 | 10 | F                |
| FG4CW/2P    | 2     | 12      | G4  | 15,000    | 210lm            | 210lm           | 4000K Cool White | 330             | No       | 36 | 10 | F                |

Note: Suitable for use with most standard 12V transformers.

If not compatible, try our **LED DRIVER 18W** on page 102











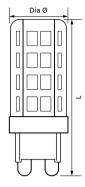


## Essential Range G9 2-Pack

#### **Features and Benefits**

- 51 super bright SMDs
- Up to 95% energy saving
- Suitable replacement for a 40W halogen lamp







Energy Saving Values per lamp over 15,000 hours
£187.17

3.3W LED G9 = £16.83
40W Halogen G9 = £204.00

|   | Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|---|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
| 1 |             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| ſ | FG9/2P      | 3.3   | 230     | G9  | 15,000    | 350lm            | 350lm           | 3000K Warm White | 330             | No       | 49 | 17 | Е                |
|   | FG9CW/2P    | 3.3   | 230     | G9  | 15,000    | 350lm            | 350lm           | 4000K Cool White | 330             | No       | 49 | 17 | Е                |

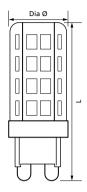


## Essential Range G9 Dimmable

### **Features and Benefits**

- 32 super bright SMDs
- Up to 95% energy saving
- Suitable replacement for a 40W halogen lamp









| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| FG9/D       | 4.4   | 230     | G9  | 15,000    | 470lm            | 470lm           | 3000K Warm White | 320             | Yes      | 59 | 18 | F                |
| FG9CW/D     | 4.4   | 230     | G9  | 15,000    | 480lm            | 480lm           | 4000K Cool White | 320             | Yes      | 59 | 18 | F                |



### **GY6.35**

### **Features and Benefits**

- 12 super bright SMDs (2.6W)
- 18 super bright SMDs (4.5W)
- Up to 95% savings
- Suitable replacement for 35W and 50W halogen lamps







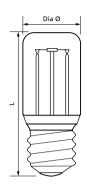
| Product Ref   | Watts | Voltage | Сар    | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|---------------|-------|---------|--------|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|               | (W)   | (V)     |        | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| FGY6.35/2.6CW | 2.6   | 12      | GY6.35 | 15,000    | 300lm            | 300lm           | 4000K Cool White | 320             | No       | 40 | 15 | F                |
| FGY6.35/2.6WW | 2.6   | 12      | GY6.35 | 15,000    | 300lm            | 300lm           | 2700K Warm White | 320             | No       | 40 | 15 | F                |
| FGY6.35/4.5CW | 4.5   | 12      | GY6.35 | 15,000    | 470lm            | 470lm           | 4000K Cool White | 320             | No       | 50 | 18 | F                |
| FGY6.35/4.5WW | 4.5   | 12      | GY6.35 | 15,000    | 470lm            | 470lm           | 2700K Warm White | 320             | No       | 50 | 18 | F                |

## **Pygmy**

### **Features and Benefits**

- Up to 90% energy savingst
- Suitable replacement for a 15W incandescent pygmy lamp
- Ideal for appliances (i.e. cooker hoods and fridges)









Energy Saving Values per lamp over 15,000 hours

£68\_85

1.5W LED Pygmy = £7.65

15W Incandescent Fridge Lamps = £76.50

Energy Saving Values per lamp over 15,000 hours
£196.35
1.5W LED Pygmy = £7.65
40W Cookerhood Lamp = £204.00

| Product Ref    | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|----------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
|                | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
| EDLED/FPT20SBC | 1.5   | 230     | B15 | 15,000    | 150lm            | 150lm           | 2700K Warm White | 300             | No       | 62 | 20 | F                |
| EDLED/FPT20SES | 1.5   | 230     | E14 | 15,000    | 150lm            | 150lm           | 2700K Warm White | 300             | No       | 62 | 20 | F                |
| EDLED/FPT28BC  | 1.8   | 230     | B22 | 15,000    | 180lm            | 180lm           | 2700K Warm White | 300             | No       | 60 | 28 | F                |
| EDLED/FPT28ES  | 1.8   | 230     | E27 | 15,000    | 180lm            | 180lm           | 2700K Warm White | 300             | No       | 60 | 28 | F                |





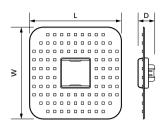
# 2D Range



### **2D**

### **Features and Benefits**

- Up to 50% energy savings
- Suitable replacements for 16W, 28W & 38W 2D fluorescent lamps
- Can be used with PIRs and other presence or light level detectors (lamp life is not reduced when used with PIRs, unlike fluorescent counterparts)
- Ideal for general lighting (eg; hotels, care homes, offices)







Energy Saving Values per lamp over 30,000 hours

£102.00

8W LED 2D = £81.60

16W 2D & Control Gear

(2W) = £183.60

Energy Saving Values per lamp over 30,000 hours

£173.40

14W LED 2D = £142.80 28W 2D & Control Gear (3W) = £316.20 Energy Saving Values per lamp over 30,000 hours

£244.80

18W LED 2D = £183.60 38W 2D & Control Gear (4W) = £428.40

| Product Ref   | Watts | Voltage | Сар   | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | Dimmable | L  | Ø   | Energy<br>Rating |
|---------------|-------|---------|-------|-----------|------------------|-----------------|------------------|-----------------|----------|----|-----|------------------|
|               | (W)   | (V)     |       | (hrs)     |                  |                 |                  |                 |          | (m | m)  |                  |
| CRLED/2D8/2P  | 8     | 230     | GR8   | 30,000    | 800lm            | 800lm           | 4000K Cool White | 120             | No       | 33 | 140 | F                |
| CRLED/2D8/4P  | 8     | 230     | GR10q | 30,000    | 800lm            | 800lm           | 4000K Cool White | 120             | No       | 33 | 140 | F                |
| CRLED/2D14/2P | 14    | 230     | GR8   | 30,000    | 1400lm           | 1400lm          | 4000K Cool White | 120             | No       | 32 | 190 | F                |
| CRLED/2D14/4P | 14    | 230     | GR10q | 30,000    | 1400lm           | 1400lm          | 4000K Cool White | 120             | No       | 32 | 190 | F                |
| CRLED/2D18/4P | 18    | 230     | GR10q | 30,000    | 2000lm           | 2000lm          | 4000K Cool White | 120             | No       | 32 | 190 | Е                |



### **2D LED Installation Guide**

#### **New Installation**

- i. Connect live and neutral to the pins on opposite sides as shown in the diagram below.
- ii. Install the LED 2D replacement into fixture.

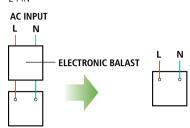
2 PIN



### **Retrofit Installation: High Frequency**

Remove electronic ballast and wire as shown in the diagram below:

2 PIN



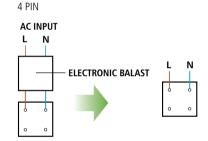
4 PIN



### Retrofit Installation: Switch Start

- i. Remove the fluorescent starter.
- ii. Install the LED 2D replacement into fixture.

(For optimal energy savings, by passing the ballast is recommended - see New Installation)







# **Compact** Range

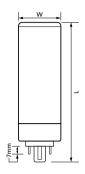


# Double Compact

### **Features and Benefits**

- Up to 75% energy savings
- Rotating end cap
- Suitable replacement for 18W & 26W compact fluorescent lamp
- Ideal for use in downlights in commercial applications







Energy Saving Values
per lamp over 25,000 hours

£170.00

8W LED Double Compact
Replacement = £68.00
26W Double Compact
& Control Gear (2W) = £238.00

| Product Ref  | Watts | Voltage | Сар       | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|--------------|-------|---------|-----------|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|              | (W)   | (V)     |           | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| CRLED/G24-2P | 8     | 230     | G24 2-Pin | 25,000    | 800lm            | 800lm           | 4000K Cool White | 100             | No       | 145 | 35 | F                |
| CRLED/G24-4P | 8     | 230     | G24 4-Pin | 25,000    | 800lm            | 800lm           | 4000K Cool White | 100             | No       | 145 | 35 | F                |

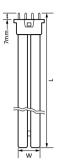


## Long Compact

### **Features and Benefits**

- Up to 70% energy savings
- Suitable replacement for 18W & 55W compact fluorescent lamps
- Ideal for use in commercial and retail applications







Energy Saving Values
per lamp over 20,000 hours
£272.00
20W LED Long Compact
Replacement = £136.00
55W Long Compact
& Control Gear (5W) = £408.00

| Product Ref | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|------|-----------|------------------|-----------------|------------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)     |      | (hrs)     |                  |                 |                  |                 |          | (m  | m) |                  |
| EDLED/PLL8  | 8     | 230     | 2G11 | 20,000    | 900lm            | 900lm           | 4000K Cool White | 200             | No       | 225 | 45 | E                |
| EDLED/PLL12 | 12    | 230     | 2G11 | 20,000    | 1350lm           | 1350lm          | 4000K Cool White | 200             | No       | 315 | 45 | E                |
| EDLED/PLL16 | 16    | 230     | 2G11 | 20,000    | 1800lm           | 1800lm          | 4000K Cool White | 200             | No       | 415 | 45 | E                |
| EDLED/PLL20 | 20    | 230     | 2G11 | 20,000    | 2350lm           | 2350lm          | 4000K Cool White | 200             | No       | 540 | 45 | E                |



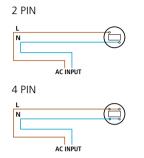
## **Double Compact LED Installation Guide**

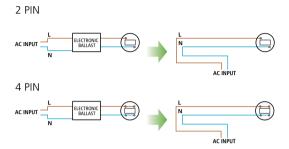
### **Installation Guide**

- i. Connect live and neutral to the pins on opposite sides as shown in the diagram below.
- ii. Install the LED double compact replacement into fixture.

### **Retrofit Installation: High Frequency**

Remove electronic ballast and wire as shown in the diagram below:

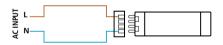




### **Long Compact LED Installation Guide**

#### **New Installation**

- i. Connect live and neutral to the end pins as shown in the diagram below.
- ii. Install the LED PLL into fixture.

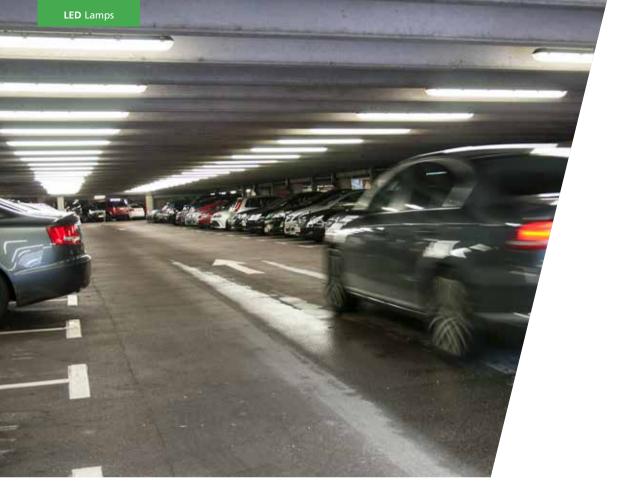


### **Retrofit Installation: High Frequency**

Remove electronic ballast and wire as shown in the diagram below:



NB: Switch start control gear must be bypassed - see New Installation.



# **Tube** Range

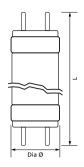


### **T5 Glass Tubes**

### **Features and Benefits**

- Up to 75% energy saving
- Built-in LED driver
- Light weight glass construction







Energy Saving Values
per lamp over 25,000 hours **£578.00**20W LED Tube = £170.00
80W T5 & Control Gear
(8W) = £748.00

| Product Ref      | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L    | Ø  | Energy<br>Rating |
|------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|------|----|------------------|
|                  | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m   | m) |                  |
| EDLEDTUBET5/8CW  | 8     | 230     | G5  | 25,000    | 880              | 880             | 4000K Cool White | 200             | No       | 562  | 17 | E                |
| EDLEDTUBET5/12CW | 12    | 230     | G5  | 25,000    | 1320             | 1320            | 4000K Cool White | 200             | No       | 862  | 17 | E                |
| EDLEDTUBET5/16CW | 16    | 230     | G5  | 25,000    | 1760             | 1760            | 4000K Cool White | 200             | No       | 1162 | 17 | E                |
| EDLEDTUBET5/20CW | 20    | 230     | G5  | 25,000    | 2200             | 2200            | 4000K Cool White | 200             | No       | 1462 | 17 | E                |

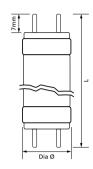


### **T8 Glass Tubes**

### **Features and Benefits**

- Up to 70% energy saving
- Built-in LED driver
- Light weight glass construction (2ft 6ft) polycarbonate & aluminum (8ft)
- c/w LED starter for use in retro-fit installations









| Product Ref      | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L    | Ø  | Energy<br>Rating |
|------------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|------|----|------------------|
|                  | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m   | m) |                  |
| EDLEDTUBE/G2FT   | 9     | 230     | G13 | 25,000    | 900lm            | 900lm           | 4000K Cool White | 300             | No       | 604  | 28 | F                |
| EDLEDTUBE/G3FT   | 14    | 230     | G13 | 25,000    | 1500lm           | 1500lm          | 4000K Cool White | 300             | No       | 909  | 28 | F                |
| EDLEDTUBE/G4FT   | 18    | 230     | G13 | 25,000    | 1950lm           | 1950lm          | 4000K Cool White | 300             | No       | 1214 | 28 | F                |
| EDLEDTUBE/G5FT   | 24    | 230     | G13 | 25,000    | 2600lm           | 2600lm          | 4000K Cool White | 300             | No       | 1514 | 28 | F                |
| EDLEDTUBE/G6FT   | 30    | 230     | G13 | 25,000    | 3400lm           | 3400lm          | 4000K Cool White | 300             | No       | 1778 | 28 | E                |
| EDLEDTUBE/8FT/CW | 36    | 230     | G13 | 25,000    | 3900lm           | 3900lm          | 4000K Cool White | 200             | No       | 2400 | 28 | F                |

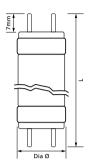


### **T8 Glass Tubes CCT Switchable**

### **Features and Benefits**

- Up to 70% energy saving
- Built-in LED driver
- Light weight glass construction
- c/w LED starter for use in retro-fit installations







Energy Saving Values
per lamp over 25,000 hours

£357.00

24W LED Tube = £204.00
58W T8 & Control Gear
(8W) = £561.00

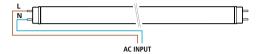
| Product Ref       | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ                 | Beam<br>Angle ° | Dimmable | L    | Ø  | Energy<br>Rating |
|-------------------|-------|---------|-----|-----------|------------------|-----------------|---------------------|-----------------|----------|------|----|------------------|
|                   | (W)   | (V)     |     | (hrs)     |                  |                 |                     |                 |          | (m   | m) |                  |
| EDLEDTUBE/G2FT/CC | 9     | 230     | G13 | 25,000    | 945lm            | 945lm           | 3000K, 4000K, 6500K | 300             | No       | 602  | 28 | F                |
| EDLEDTUBE/G3FT/CC | 14    | 230     | G13 | 25,000    | 1540lm           | 1540lm          | 3000K, 4000K, 6500K | 300             | No       | 907  | 28 | E                |
| EDLEDTUBE/G4FT/CC | 18    | 230     | G13 | 25,000    | 1980lm           | 1980lm          | 3000K, 4000K, 6500K | 300             | No       | 1212 | 28 | E                |
| EDLEDTUBE/G5FT/CC | 24    | 230     | G13 | 25,000    | 2640lm           | 2640lm          | 3000K, 4000K, 6500K | 300             | No       | 1512 | 28 | E                |
| EDLEDTUBE/G6FT/CC | 30    | 230     | G13 | 25,000    | 3300lm           | 3300lm          | 3000K, 4000K, 6500K | 300             | No       | 1776 | 28 | E                |



### **LED Tube Installation Guide**

#### **New Installation**

- i. Connect live and neutral to one end of light fixture
- ii. Install the LED tube into fixture



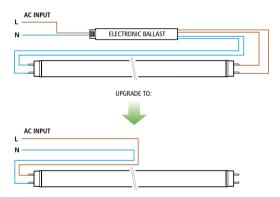
N.B: The power supply must go to the end of the tube marked 'AC Input'

### **Retrofit Installation: Switch Start**

- i. Remove the fluorescent starter as shown below and replace with the LED starter provided
- ii. Install the LED tube

### **Retrofit Installation: High Frequency**

Remove electronic ballast and re-wire as shown in the diagram below.



N.B: The power supply must go to the end of the tube marked 'AC Input'

### **Retrofit Installation: Switch Start**

- i. Remove the fluorescent starter as shown below and replace with the LED starter provided
- ii. Install the LED tube







# **HID Replacement** Range

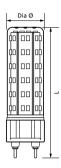


## **8W G12 HID Replacement**

### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for 35W-70W HID lamps
- Can be used in enclosed fittings
- Ideal for retro-fitting into track lighting and wall washing style fittings







**Energy Saving Values** per lamp over 25,000 hours 8W LED G12 = £68.00 70W HID & Control Gear (16W) = £731.00

|   | Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ              | Beam<br>Angle ° | Dimmable | L  | Ø  | Energy<br>Rating |
|---|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|----------|----|----|------------------|
| 1 |             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 |          | (m | m) |                  |
|   | FHIDG12     | 8     | 230     | G12 | 25,000    | 1100lm           | 1100lm          | 4000K Cool White | 270             | No       | 95 | 30 | D                |

Note: Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.











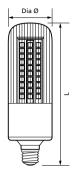


# 11W & 15W HID Replacement

### **Features and Benefits**

- 57 super bright SMDs
- Up to 90% energy savings
- Suitable replacement for a 70W HID lamp
- Can be used in enclosed fittings
- Ideal for retro-fitting into bollards, bulkheads etc







Energy Saving Values
per lamp over 25,000 hours

£637.50

11W LED HID = £93.50
70W HID & Control Gear
(16W) = £731.00

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ            | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|----------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                |                 |          | (m  | m) |                  |
| EDLED/HID11 | 11    | 230     | E27 | 25,000    | 1150lm           | 1150lm          | 6000K Daylight | 300             | No       | 165 | 65 | F                |
| EDLED/HID15 | 15    | 230     | E27 | 25,000    | 1575lm           | 1575lm          | 6000K Daylight | 300             | No       | 165 | 65 | F                |

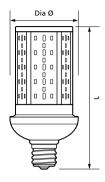
Note: Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.



### **Features and Benefits**

- 84 super bright SMDs
- Up to 80% energy saving
- Suitable replacement for 70W HID lamps
- Can be used in enclosed fittings
- Ideal for retro-fitting into miniature high bays, floodlights and lanterns







Energy Saving Values
per lamp over 25,000 hours

£561.00

20W LED HID = £170.00
70W HID & Control Gear
(16W) = £731.00

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ            | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|----------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                |                 |          | (m  | m) |                  |
| FHID20/E27  | 20    | 230     | E27 | 25,000    | 2600lm           | 2600lm          | 6000K Daylight | 300             | No       | 178 | 93 | E                |

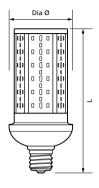
**Note:** Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder. **Temperature Control System** The temperature of the lamp is precisely maintained due to its unique aluminium structure, coupled with an intelligent temperature control system built in to the LED Driver to maintain the optimum temperature. This enables it to be used in enclosed fittings.



### **Features and Benefits**

- 84 super bright SMDs
- Up to 85% energy saving
- Suitable replacement for 70W 150W HID lamps
- Can be used in enclosed fittings
- Ideal for retro-fitting into low bays, high bays, floodlights and street lighting







Energy Saving Values
per lamp over 25,000 hours
£1232.50
30W LED HID = £255.00
150W HID & Control Gear
(25W) = £1487.50

|   | Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ            | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|---|-------------|-------|---------|-----|-----------|------------------|-----------------|----------------|-----------------|----------|-----|----|------------------|
|   |             | (W)   | (V)     |     | (hrs)     |                  |                 |                |                 |          | (m  | m) |                  |
| ſ | FHID30/E27  | 30    | 230     | E27 | 25,000    | 3900lm           | 3900lm          | 6000K Daylight | 300             | No       | 188 | 93 | E                |
|   | FHID30      | 30    | 230     | E40 | 25,000    | 3900lm           | 3900lm          | 6000K Daylight | 300             | No       | 208 | 93 | E                |

**Note:** Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder. **Temperature Control System** The temperature of the lamp is precisely maintained due to its unique aluminium structure, coupled with an intelligent temperature control system built in to the LED Driver to maintain the optimum temperature. This enables it to be used in enclosed fittings.



### **Features and Benefits**

- 156 super bright SMDs
- Up to 80% energy savings
- Suitable replacement for a 250W HID lamp
- Can be used in enclosed fittings
- Ideal for retro-fitting into lowbays, highbays, floodlights and streetlights







**Energy Saving Values** 60W LED HID = £510.00 250W HID & Control Gear (25W) = £2337.50

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ            | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|----------------|-----------------|----------|-----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                |                 |          | (m  | m) |                  |
| FHID60      | 60    | 230     | E40 | 25.000    | 8000lm           | 8000lm          | 6000K Daylight | 300             | No       | 280 | 93 | F                |

Note: Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder. Temperature Control System The temperature of the lamp is precisely maintained due to its unique aluminium

structure, coupled with an intelligent temperature control system built in to the LED Driver to maintain the optimum temperature. This enables it to be used in enclosed fittings.









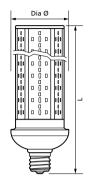




### **Features and Benefits**

- 182 super bright SMDs
- Up to 80% energy savings
- Suitable replacement for 250W 400W HID lamps
- Can be used in enclosed fittings
- Ideal for retro-fitting into lowbays, highbays, floodlights and streetlights







Energy Saving Values per lamp over 25,000 hours

£2932.50

85W LED HID = £722.50

400W HID & Control Gear
(30W) = £3655.00

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ            | Beam<br>Angle ° | Dimmable | L   | Ø   | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|----------------|-----------------|----------|-----|-----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                |                 |          | (m  | m)  |                  |
| FHID85      | 85    | 230     | E40 | 25,000    | 11000lm          | 11000lm         | 6000K Daylight | 300             | No       | 285 | 106 | E                |

Note: Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.

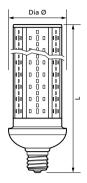
**Temperature Control System** The temperature of the lamp is precisely maintained due to its unique aluminium structure, coupled with an intelligent temperature control system built in to the LED Driver to maintain the optimum temperature. This enables it to be used in enclosed fittings.



### **Features and Benefits**

- 210 super bright SMDs
- Up to 80% energy savings
- Suitable replacement for 250W 400W HID lamps
- Can be used in enclosed fittings
- Ideal for retro-fitting into lowbays and highbays







Energy Saving Values per lamp over 25,000 hours 100W LED HID = £850.00 400W HID & Control Gear (30W) = £3655.00

|    | Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ            | Beam<br>Angle ° | Dimmable | L   | Ø   | Energy<br>Rating |
|----|-------------|-------|---------|-----|-----------|------------------|-----------------|----------------|-----------------|----------|-----|-----|------------------|
| -1 |             | (W)   | (V)     |     | (hrs)     |                  |                 |                |                 |          | (m  | m)  |                  |
| ſ  | FHID100     | 100   | 230     | E40 | 25,000    | 13000lm          | 13000lm         | 6000K Daylight | 300             | No       | 288 | 120 | E                |

Note: Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.

Temperature Control System The temperature of the lamp is precisely maintained due to its unique aluminium structure, coupled with an intelligent temperature control system built in to the LED Driver to maintain the optimum temperature. This enables it to be used in enclosed fittings.











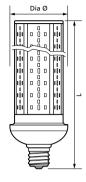




### **Features and Benefits**

- 210 super bright SMDs
- Up to 75% energy saving
- Suitable replacement for a 400W HID lamp
- Can be used in enclosed fittings
- Ideal for retro-fitting into lowbays and highbays







Energy Saving Values per lamp over 25,000 hours

£2635.00

120W LED HID = £1020.00
400W HID & Control Gear
(30W) = £3655.00

| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ            | Beam<br>Angle ° | Dimmable | L   | Ø   | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|----------------|-----------------|----------|-----|-----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                |                 |          | (m  | m)  |                  |
| FHID120     | 120   | 230     | E40 | 25,000    | 15000lm          | 15000lm         | 6000K Daylight | 300             | No       | 288 | 120 | E                |

**Note:** Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder. **Temperature Control System** The temperature of the lamp is precisely maintained due to its unique aluminium structure, coupled with an intelligent temperature control system built in to the LED Driver to maintain the optimum temperature. This enables it to be used in enclosed fittings.





# **Coloured** Range

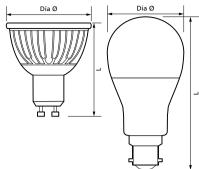


# Colour Changing GLS & GU10

### **Features and Benefits**

- Up to 95% energy savings
- Ideal for mood and general lighting (eg; restaurants, hotels and domestic applications)







Energy Saving Values
per lamp over 25,000 hours

£391.00

4W LED GU10
Coloured = £34.00
50W Halogen GU10
Coloured = £425.00

| ı | Product Ref | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ         | Beam<br>Angle ° | Dimmable | L   | Ø  | Energy<br>Rating |
|---|-------------|-------|---------|------|-----------|------------------|-----------------|-------------|-----------------|----------|-----|----|------------------|
| 1 |             | (W)   | (V)     |      | (hrs)     |                  |                 |             |                 |          | (m  | m) |                  |
|   | FGLSBC/CC   | 9     | 230     | B22  | 25,000    | 850lm            | 850lm           | 3000K & RGB | 180             | Yes      | 123 | 60 | F                |
|   | FGLSES/CC   | 9     | 230     | E27  | 25,000    | 850lm            | 850lm           | 3000K & RGB | 180             | Yes      | 123 | 60 | F                |
|   | FGU10/CC    | 4     | 230     | GU10 | 25,000    | 300lm            | 300lm           | 3000K & RGB | 130             | Yes      | 56  | 50 | G                |

### Operation

- Various colour, dimming and effect operations available via the remote control provided.
- Up to a maximum of 20 products can be operated within the colour sequence.
- Remote range approximately 4 meters.



### **GU10**

### **Features and Benefits**

- Up to 90% energy savings
- Suitable replacement for a 50W halogen lamp
- Ideal for mood lighting (eg; restaurants, retail, etc)





| Product Ref | Watts | Voltage | Сар  | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст   | Beam<br>Angle ° | Dimmable | L  | Ø  |
|-------------|-------|---------|------|-----------|------------------|-----------------|-------|-----------------|----------|----|----|
|             | (W)   | (V)     |      | (hrs)     |                  |                 |       |                 |          | (m | m) |
| FGU10/BL    | 5     | 230     | GU10 | 20,000    | 45lm             | 45lm            | Blue  | 38              | No       | 55 | 50 |
| FGU10/GR    | 5     | 230     | GU10 | 20,000    | 45lm             | 45lm            | Green | 38              | No       | 55 | 50 |
| FGU10/RE    | 5     | 230     | GU10 | 20,000    | 45lm             | 45lm            | Red   | 38              | No       | 55 | 50 |

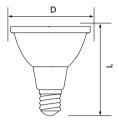


### **PAR38**

### **Features and Benefits**

- Suitable for outdoor use in a certified IP rated fitting
- Available in the following colours: Blue / Green / Red







| Product Ref   | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | ССТ   | Beam<br>Angle ° | Dimmable | L   | Ø   |
|---------------|-------|---------|-----|-----------|------------------|-----------------|-------|-----------------|----------|-----|-----|
|               | (W)   | (V)     |     | (hrs)     |                  |                 |       |                 |          | (m  | m)  |
| CRLED/PAR38BL | 8     | 230     | E27 | 30,000    | 58lm             | 60lm            | Blue  | 30              | No       | 135 | 122 |
| CRLED/PAR38GR | 8     | 230     | E27 | 30,000    | 322lm            | 330lm           | Green | 30              | No       | 135 | 122 |
| CRLED/PAR38RE | 8     | 230     | E27 | 30,000    | 171lm            | 176lm           | Red   | 30              | No       | 135 | 122 |



8W LED PAR38 Coloured = £81.60 80W Incandescent PAR38 Coloured = £816.00

### 1W Golf Ball

### **Features and Benefits**

- Suitable for indoor or outdoor use in a certified IP Rated fitting
- Available in the following colours: Blue / Amber / Green / Magenta / Red / Warm White/ Yellow



| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст     | Beam<br>Angle ° | Dimmable | L  | Ø  |
|-------------|-------|---------|-----|-----------|------------------|-----------------|---------|-----------------|----------|----|----|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |         |                 |          | (m | m) |
| FDRBC/BL    | 1     | 230     | B22 | 25,000    | 6lm              | 6lm             | Blue    | 240             | No       | 69 | 45 |
| FDRBC/AM    | 1     | 230     | B22 | 25,000    | 43lm             | 43lm            | Amber   | 240             | No       | 69 | 45 |
| FDRBC/GR    | 1     | 230     | B22 | 25,000    | 43lm             | 43lm            | Green   | 240             | No       | 69 | 45 |
| FDRBC/MA    | 1     | 230     | B22 | 25,000    | 22lm             | 22lm            | Magenta | 240             | No       | 69 | 45 |
| FDRBC/RE    | 1     | 230     | B22 | 25,000    | 11lm             | 11lm            | Red     | 240             | No       | 69 | 45 |
| FDRBC/WH    | 1     | 230     | B22 | 25,000    | 85lm             | 85lm            | White   | 240             | No       | 69 | 45 |
| FDRBC/YE    | 1     | 230     | B22 | 25,000    | 105lm            | 105lm           | Yellow  | 240             | No       | 69 | 45 |
| FDRES/BL    | 1     | 230     | E27 | 25,000    | 6lm              | 6lm             | Blue    | 240             | No       | 69 | 45 |
| FDRES/AM    | 1     | 230     | E27 | 25,000    | 43lm             | 43lm            | Amber   | 240             | No       | 69 | 45 |
| FDRES/GR    | 1     | 230     | E27 | 25,000    | 43lm             | 43lm            | Green   | 240             | No       | 69 | 45 |
| FDRES/MA    | 1     | 230     | E27 | 25,000    | 22lm             | 22lm            | Magenta | 240             | No       | 69 | 45 |
| FDRES/RE    | 1     | 230     | E27 | 25,000    | 11lm             | 11lm            | Red     | 240             | No       | 69 | 45 |
| FDRES/WH    | 1     | 230     | E27 | 25,000    | 85lm             | 85lm            | White   | 240             | No       | 69 | 45 |
| FDRES/YE    | 1     | 230     | E27 | 25,000    | 105lm            | 105lm           | Yellow  | 240             | No       | 69 | 45 |



### 8W GLS

### **Features and Benefits**

- Suitable for indoor or outdoor use in a certified IP Rated fitting
- Available in the following colours: Amber / Blue / Green / Magenta / Red / 3000K Warm White / Yellow



| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст     | Beam<br>Angle ° | Dimmable | L   | Ø  |
|-------------|-------|---------|-----|-----------|------------------|-----------------|---------|-----------------|----------|-----|----|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |         |                 |          | (m  | m) |
| FGLSBC/AM   | 8     | 230     | B22 | 25,000    | 487lm            | 487lm           | Amber   | 200             | No       | 109 | 60 |
| FGLSBC/BL   | 8     | 230     | B22 | 25,000    | 51lm             | 51lm            | Blue    | 200             | No       | 109 | 60 |
| FGLSBC/GR   | 8     | 230     | B22 | 25,000    | 433lm            | 433lm           | Green   | 200             | No       | 109 | 60 |
| FGLSBC/MA   | 8     | 230     | B22 | 25,000    | 223lm            | 223lm           | Magenta | 200             | No       | 109 | 60 |
| FGLSBC/RE   | 8     | 230     | B22 | 25,000    | 215lm            | 215lm           | Red     | 200             | No       | 109 | 60 |
| FGLSBC/WH   | 8     | 230     | B22 | 25,000    | 750lm            | 750lm           | White   | 200             | No       | 109 | 60 |
| FGLSBC/YE   | 8     | 230     | B22 | 25,000    | 691lm            | 691lm           | Yellow  | 200             | No       | 109 | 60 |
| FGLSES/AM   | 8     | 230     | E27 | 25,000    | 487lm            | 487lm           | Amber   | 200             | No       | 109 | 60 |
| FGLSES/BL   | 8     | 230     | E27 | 25,000    | 51lm             | 51lm            | Blue    | 200             | No       | 109 | 60 |
| FGLSES/GR   | 8     | 230     | E27 | 25,000    | 433lm            | 433lm           | Green   | 200             | No       | 109 | 60 |
| FGLSES/MA   | 8     | 230     | E27 | 25,000    | 223lm            | 223lm           | Magenta | 200             | No       | 109 | 60 |
| FGLSES/RE   | 8     | 230     | E27 | 25,000    | 215lm            | 215lm           | Red     | 200             | No       | 109 | 60 |
| FGLSES/WH   | 8     | 230     | E27 | 25,000    | 750lm            | 750lm           | White   | 200             | No       | 109 | 60 |
| FGLSES/YE   | 8     | 230     | E27 | 25,000    | 691lm            | 691lm           | Yellow  | 200             | No       | 109 | 60 |





# Accessories & Specialist Range



### **Flicker Flame**

### **Features and Benefits**

- The flicker flame LED lamps produce an extremely realistic flame effect which would create a fantastic atmosphere to many outdoor spaces
- Built-in gravity sensor to allow use in both upward and downward facing fixtures
- Ideal for lantern fittings (e.g. pubs, hotels and residential areas)







Scan the QR code to watch a demonstration video.



| Product Ref   | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст                    | Beam<br>Angle ° | Dimmable | L   | Ø  |
|---------------|-------|---------|-----|-----------|------------------|-----------------|------------------------|-----------------|----------|-----|----|
|               | (W)   | (V)     |     | (hrs)     |                  |                 |                        |                 |          | (m  | m) |
| FFLED/ES      | 4-10  | 230     | E27 | 25,000    | 465lm            | 465lm           | 1838K Ultra Warm White | 300             | No       | 130 | 52 |
| FFLED/ES/MINI | 3-8   | 230     | E27 | 25,000    | 300lm            | 300lm           | 1800K Ultra Warm White | 300             | No       | 115 | 36 |



### **Accessories**

A range of Fusion Lamps accessories to complement the LED range. A specific driver for efficient safe operation, along with adaptors for cap conversions and retro-fitting, saving the cost of changing the whole luminaire, turning a standard fitting into an energy saving and cost effective solution.









| Product Ref    | Description                             |
|----------------|---|
| LED DRIVER 18W | 12V LED Driver 18W Max Constant Voltage |
| B15/E27        | Adaptor: B15 (SBC) to E27 (ES)          |
| B22/E27        | Adaptor: B22 (BC) to E27 (ES)           |
| E14/E27        | Adaptor: E14 (SES) to E27 (ES)          |
| E40/E27        | Adaptor: E40 (GES) to E27 ES)           |
| G9/E27         | Adaptor: G9 to E27 (ES)                 |
| GU10/B22       | Adaptor: GU10 to B22 (BC)               |
| GU10/E27       | Adaptor: GU10 to E27 (ES)               |
| E27/E40        | Adaptor: E27 (ES) to E40 (GES)          |
| E27/G24-q      | Adaptor: E27 (ES) to G24-q (4-pin)      |
| E27/B22        | Adaptor: E27 (ES) to B22 (BC)           |
| E14/B22        | Adaptor: E14 (SES) to B22 (BC)          |

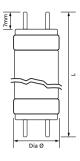






# Triphosphor **T8**

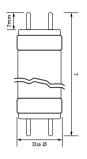




| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | L    | Ø   | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|------|-----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 | (m   | im) |                  |
| EDF15/835   | 15    | 230     | G13 | 20,000    | 960lm            | 960lm           | 3500K White      | 360             | 450  | 26  | G                |
| EDF15/840   | 15    | 230     | G13 | 20,000    | 960lm            | 960lm           | 4000K Cool White | 360             | 450  | 26  | G                |
| EDF18/830   | 18    | 230     | G13 | 20,000    | 1350lm           | 1350lm          | 3000K Warm White | 360             | 604  | 26  | G                |
| EDF18/835   | 18    | 230     | G13 | 20,000    | 1350lm           | 1350lm          | 3500K White      | 360             | 604  | 26  | G                |
| EDF18/840   | 18    | 230     | G13 | 20,000    | 1350lm           | 1350lm          | 4000K Cool White | 360             | 604  | 26  | G                |
| EDF18/865   | 18    | 230     | G13 | 20,000    | 1250lm           | 1250lm          | 6500K Daylight   | 360             | 604  | 26  | G                |
| EDF30/830   | 30    | 230     | G13 | 20,000    | 2450lm           | 2450lm          | 3000K Warm White | 360             | 909  | 26  | G                |
| EDF30/835   | 30    | 230     | G13 | 20,000    | 2450lm           | 2450lm          | 3500K White      | 360             | 909  | 26  | G                |
| EDF30/840   | 30    | 230     | G13 | 20,000    | 2450lm           | 2450lm          | 4000K Cool White | 360             | 909  | 26  | G                |
| EDF30/865   | 30    | 230     | G13 | 20,000    | 2300lm           | 2300lm          | 6500K Daylight   | 360             | 909  | 26  | G                |
| EDF36/830   | 36    | 230     | G13 | 20,000    | 3350lm           | 3350lm          | 3000K Warm White | 360             | 1214 | 26  | G                |
| EDF36/835   | 36    | 230     | G13 | 20,000    | 3350lm           | 3350lm          | 3500K White      | 360             | 1214 | 26  | G                |
| EDF36/840   | 36    | 230     | G13 | 20,000    | 3350lm           | 3350lm          | 4000K Cool White | 360             | 1214 | 26  | G                |
| EDF36/865   | 36    | 230     | G13 | 20,000    | 3050lm           | 3050lm          | 6500K Daylight   | 360             | 1214 | 26  | G                |
| EDF58/830   | 58    | 230     | G13 | 20,000    | 5250lm           | 5250lm          | 3000K Warm White | 360             | 1514 | 26  | G                |
| EDF58/835   | 58    | 230     | G13 | 20,000    | 5250lm           | 5250lm          | 3500K White      | 360             | 1514 | 26  | G                |
| EDF58/840   | 58    | 230     | G13 | 20,000    | 5250lm           | 5250lm          | 4000K Cool White | 360             | 1514 | 26  | G                |
| EDF58/865   | 58    | 230     | G13 | 20,000    | 5000lm           | 5000lm          | 6500K Daylight   | 360             | 1514 | 26  | G                |
| EDF70/835   | 70    | 230     | G13 | 20,000    | 6200lm           | 6200lm          | 3500K White      | 360             | 1778 | 26  | G                |
| EDF70/840   | 70    | 230     | G13 | 20,000    | 6200lm           | 6200lm          | 4000K Cool White | 360             | 1778 | 26  | G                |
| EDF70/865   | 70    | 230     | G13 | 20,000    | 5800lm           | 5800lm          | 6500K Daylight   | 360             | 1778 | 26  | G                |



## Miniature **T5**

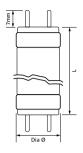




| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст         | Beam<br>Angle ° | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|-------------|-----------------|-----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |             |                 | (m  | m) |                  |
| EDF4/835    | 4     | 230     | G5  | 5,000     | 160lm            | 160lm           | 3500K White | 360             | 150 | 16 | G                |
| EDF6/35     | 6     | 230     | G5  | 5,000     | 260lm            | 260lm           | 3500K White | 360             | 225 | 16 | G                |
| EDF8/35     | 8     | 230     | G5  | 5,000     | 380lm            | 380lm           | 3500K White | 360             | 300 | 16 | G                |
| EDF13/35    | 13    | 230     | G5  | 5,000     | 800lm            | 800lm           | 3500K White | 360             | 525 | 16 | G                |



# Triphosphor **T5**

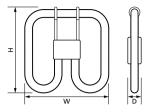




| Product Ref | Watts | Voltage | Сар | Lamp Life | Useful<br>Lumens | Total<br>Lumens | сст              | Beam<br>Angle ° | L    | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|------------------|-----------------|------------------|-----------------|------|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                  |                 |                  |                 | (m   | m) |                  |
| EDF14/830   | 14    | 230     | G5  | 24,000    | 1250lm           | 1250lm          | 3000K Warm White | 360             | 549  | 16 | G                |
| EDF14/835   | 14    | 230     | G5  | 24,000    | 1250lm           | 1250lm          | 3500K White      | 360             | 549  | 16 | G                |
| EDF14/840   | 14    | 230     | G5  | 24,000    | 1250lm           | 1250lm          | 4000K Cool White | 360             | 549  | 16 | G                |
| EDF14/865   | 14    | 230     | G5  | 24,000    | 1140lm           | 1140lm          | 6500K Daylight   | 360             | 549  | 16 | G                |
| EDF21/830   | 21    | 230     | G5  | 24,000    | 1900lm           | 1900lm          | 3000K Warm White | 360             | 849  | 16 | G                |
| EDF21/840   | 21    | 230     | G5  | 24,000    | 1900lm           | 1900lm          | 4000K Cool White | 360             | 849  | 16 | G                |
| EDF24/840   | 24    | 230     | G5  | 24,000    | 1800lm           | 1800lm          | 4000K Cool White | 360             | 549  | 16 | G                |
| EDF28/830   | 28    | 230     | G5  | 24,000    | 2620lm           | 2620lm          | 3000K Warm White | 360             | 1149 | 16 | G                |
| EDF28/840   | 28    | 230     | G5  | 24,000    | 2620lm           | 2620lm          | 4000K Cool White | 360             | 549  | 16 | G                |
| EDF35/830   | 35    | 230     | G5  | 24,000    | 3300lm           | 3300lm          | 3000K Warm White | 360             | 1449 | 16 | G                |
| EDF35/835   | 35    | 230     | G5  | 24,000    | 3300lm           | 3300lm          | 3500K White      | 360             | 1449 | 16 | G                |
| EDF35/840   | 35    | 230     | G5  | 24,000    | 3300lm           | 3300lm          | 4000K Cool White | 360             | 1449 | 16 | G                |
| EDF39/840   | 39    | 230     | G5  | 24,000    | 3005lm           | 3005lm          | 4000K Cool White | 360             | 849  | 16 | G                |
| EDF49/835   | 49    | 230     | G5  | 24,000    | 4312lm           | 4312lm          | 3500K White      | 360             | 1449 | 16 | G                |
| EDF49/840   | 49    | 230     | G5  | 24,000    | 4312lm           | 4312lm          | 4000K Cool White | 360             | 1449 | 16 | G                |
| EDF54/840   | 54    | 230     | G5  | 24,000    | 4412lm           | 4412lm          | 4000K Cool White | 360             | 1149 | 16 | G                |
| EDF80/840   | 80    | 230     | G5  | 24,000    | 6200lm           | 6200lm          | 4000K Cool White | 360             | 1449 | 16 | G                |



## **Fluorescent 2D**



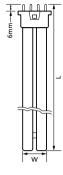




| Product Ref | Watts | Voltage | Сар   | Lamp Life | Total<br>Lumens | сст         | L    | Ø   | Energy<br>Rating |
|-------------|-------|---------|-------|-----------|-----------------|-------------|------|-----|------------------|
|             | (W)   | (V)     |       | (hrs)     |                 |             | (mm) |     |                  |
| B16/835/2P  | 16    | 230     | GR8   | 10,000    | 1060lm          | 3500K White | 141  | 138 | G                |
| B16/835/4P  | 16    | 230     | GR10q | 10,000    | 1060lm          | 3500K White | 141  | 138 | G                |
| B28/835/2P  | 28    | 230     | GR8   | 10,000    | 2000lm          | 3500K White | 207  | 205 | G                |
| B28/835/4P  | 28    | 230     | GR10q | 10,000    | 2000lm          | 3500K White | 207  | 205 | G                |
| B38/835/4P  | 38    | 230     | GR10q | 10,000    | 2550lm          | 3500K White | 207  | 205 | G                |



# 4 Pin Long Compact



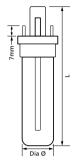




| Product Ref | Watts | Voltage | Сар  | Lamp Life | Total<br>Lumens | сст              | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|------|-----------|-----------------|------------------|-----|----|------------------|
|             | (W)   | (V)     |      | (hrs)     |                 |                  | (m  | m) |                  |
| EDL18/83    | 18    | 230     | 2G11 | 10,000    | 1206lm          | 3000K Warm White | 225 | 40 | G                |
| EDL18/835   | 18    | 230     | 2G11 | 10,000    | 1206lm          | 3500K White      | 225 | 40 | G                |
| EDL18/84    | 18    | 230     | 2G11 | 10,000    | 1206lm          | 4000K Cool White | 225 | 40 | G                |
| EDL18/865   | 18    | 230     | 2G11 | 10,000    | 1098lm          | 6500K Daylight   | 225 | 40 | G                |
| EDL24/83    | 24    | 230     | 2G11 | 10,000    | 1800lm          | 3000K Warm White | 320 | 40 | G                |
| EDL24/835   | 24    | 230     | 2G11 | 10,000    | 1800lm          | 3500K White      | 320 | 40 | G                |
| EDL24/84    | 24    | 230     | 2G11 | 10,000    | 1800lm          | 4000K Cool White | 320 | 40 | G                |
| EDL36/83    | 36    | 230     | 2G11 | 10,000    | 2916lm          | 3000K Warm White | 415 | 40 | G                |
| EDL36/835   | 36    | 230     | 2G11 | 10,000    | 2916lm          | 3500K White      | 415 | 40 | G                |
| EDL36/84    | 36    | 230     | 2G11 | 10,000    | 2916lm          | 4000K Cool White | 415 | 40 | G                |
| EDL36/865   | 36    | 230     | 2G11 | 10,000    | 2628lm          | 6500K Daylight   | 415 | 40 | G                |
| EDL40/83    | 40    | 230     | 2G11 | 10,000    | 3320lm          | 3000K Warm White | 535 | 40 | G                |
| EDL40/835   | 40    | 230     | 2G11 | 10,000    | 3320lm          | 3500K White      | 535 | 40 | G                |
| EDL40/84    | 40    | 230     | 2G11 | 10,000    | 3320lm          | 4000K Cool White | 535 | 40 | G                |
| EDL55/83    | 55    | 230     | 2G11 | 10,000    | 4510lm          | 3000K Warm White | 535 | 40 | G                |
| EDL55/835   | 55    | 230     | 2G11 | 10,000    | 4510lm          | 3500K White      | 535 | 40 | G                |
| EDL55/84    | 55    | 230     | 2G11 | 10,000    | 4510lm          | 4000K Cool White | 535 | 40 | G                |
| EDL55/865   | 55    | 230     | 2G11 | 10,000    | 4070lm          | 6500K Daylight   | 535 | 40 | G                |



# 2 Pin Single Compact



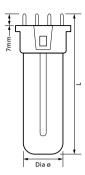




| Product Ref | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст              | L   | Ø   | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|-----------------|------------------|-----|-----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                 |                  | (m  | ım) |                  |
| ED5PL82     | 5     | 230     | G23 | 10,000    | 260lm           | 2700K Warm White | 105 | 28  | G                |
| ED5PL84     | 5     | 230     | G23 | 10,000    | 260lm           | 4000K Cool White | 105 | 28  | G                |
| ED7PL82     | 7     | 230     | G23 | 10,000    | 405lm           | 2700K Warm White | 135 | 28  | G                |
| ED7PL84     | 7     | 230     | G23 | 10,000    | 405lm           | 4000K Cool White | 135 | 28  | G                |
| ED9PL82     | 9     | 230     | G23 | 10,000    | 583lm           | 2700K Warm White | 164 | 28  | G                |
| ED9PL84     | 9     | 230     | G23 | 10,000    | 583lm           | 4000K Cool White | 164 | 28  | G                |
| ED11PL82    | 11    | 230     | G23 | 10,000    | 897lm           | 2700K Warm White | 233 | 28  | G                |
| ED11PL84    | 11    | 230     | G23 | 10,000    | 897lm           | 4000K Cool White | 233 | 28  | G                |



# 4 Pin Single Compact





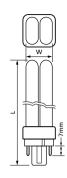


| Product Ref | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | ССТ              | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|-----------------|------------------|-----|----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                 |                  | (m  | m) |                  |
| ED5PL4P82   | 5     | 230     | 2G7 | 10,000    | 260lm           | 2700K Warm White | 88  | 28 | G                |
| ED5PL4P84   | 5     | 230     | 2G7 | 10,000    | 260lm           | 4000K Cool White | 88  | 28 | G                |
| ED7PL4P82   | 7     | 230     | 2G7 | 10,000    | 405lm           | 2700K Warm White | 120 | 28 | G                |
| ED7PL4P84   | 7     | 230     | 2G7 | 10,000    | 405lm           | 4000K Cool White | 120 | 28 | G                |
| ED9PL4P82   | 9     | 230     | 2G7 | 10,000    | 583lm           | 2700K Warm White | 149 | 28 | G                |
| ED9PL4P84   | 9     | 230     | 2G7 | 10,000    | 583lm           | 4000K Cool White | 149 | 28 | G                |
| ED11PL4P82  | 11    | 230     | 2G7 | 10,000    | 897lm           | 2700K Warm White | 218 | 28 | G                |
| ED11PL4P84  | 11    | 230     | 2G7 | 10,000    | 897lm           | 4000K Cool White | 218 | 28 | G                |



# 2 Pin **Double Compact**



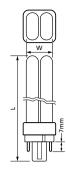




| Product Ref | Watts | Voltage | Сар    | Lamp Life | Total<br>Lumens | сст              | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|--------|-----------|-----------------|------------------|-----|----|------------------|
|             | (W)   | (V)     |        | (hrs)     |                 |                  | (m  | m) |                  |
| EDD10/82    | 10    | 230     | G24d-1 | 10,000    | 600lm           | 2700K Warm White | 116 | 28 | G                |
| EDD10/835   | 10    | 230     | G24d-1 | 10,000    | 600lm           | 3500K White      | 116 | 28 | G                |
| EDD10/84    | 10    | 230     | G24d-1 | 10,000    | 600lm           | 4000K Cool White | 116 | 28 | G                |
| EDD13/82    | 13    | 230     | G24d-1 | 10,000    | 897lm           | 2700K Warm White | 137 | 28 | G                |
| EDD13/835   | 13    | 230     | G24d-1 | 10,000    | 897lm           | 3500K White      | 137 | 28 | G                |
| EDD13/84    | 13    | 230     | G24d-1 | 10,000    | 897lm           | 4000K Cool White | 137 | 28 | G                |
| EDD18/82    | 18    | 230     | G24d-2 | 10,000    | 1206lm          | 2700K Warm White | 153 | 28 | G                |
| EDD18/835   | 18    | 230     | G24d-2 | 10,000    | 1206lm          | 3500K White      | 153 | 28 | G                |
| EDD18/84    | 18    | 230     | G24d-2 | 10,000    | 1206lm          | 4000K Cool White | 153 | 28 | G                |
| EDD18/865   | 18    | 230     | G24d-2 | 10,000    | 1098lm          | 6500K Daylight   | 153 | 28 | G                |
| EDD26/82    | 26    | 230     | G24d-3 | 10,000    | 1716lm          | 2700K Warm White | 173 | 28 | G                |
| EDD26/835   | 26    | 230     | G24d-3 | 10,000    | 1716lm          | 3500K White      | 173 | 28 | G                |
| EDD26/84    | 26    | 230     | G24d-3 | 10,000    | 1716lm          | 4000K Cool White | 173 | 28 | G                |
| EDD26/865   | 26    | 230     | G24d-3 | 10,000    | 1560lm          | 6500K Daylight   | 173 | 28 | G                |



# 4 Pin **Double Compact**



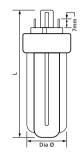




| Product Ref | Watts | Voltage | Сар    | Lamp Life | Total<br>Lumens | сст              | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|--------|-----------|-----------------|------------------|-----|----|------------------|
|             | (W)   | (V)     |        | (hrs)     |                 |                  | (m  | m) |                  |
| EDDE10/82   | 10    | 230     | G24d-1 | 10,000    | 600lm           | 2700K Warm White | 116 | 28 | G                |
| EDDE10/835  | 10    | 230     | G24d-1 | 10,000    | 600lm           | 3500K White      | 116 | 28 | G                |
| EDDE10/84   | 10    | 230     | G24d-1 | 10,000    | 600lm           | 4000K Cool White | 116 | 28 | G                |
| EDDE13/82   | 13    | 230     | G24d-1 | 10,000    | 897lm           | 2700K Warm White | 137 | 28 | G                |
| EDDE13/835  | 13    | 230     | G24d-1 | 10,000    | 897lm           | 3500K White      | 137 | 28 | G                |
| EDDE13/84   | 13    | 230     | G24d-1 | 10,000    | 897lm           | 4000K Cool White | 137 | 28 | G                |
| EDDE18/82   | 18    | 230     | G24d-2 | 10,000    | 1206lm          | 2700K Warm White | 153 | 28 | G                |
| EDDE18/835  | 18    | 230     | G24d-2 | 10,000    | 1206lm          | 3500K White      | 153 | 28 | G                |
| EDDE18/84   | 18    | 230     | G24d-2 | 10,000    | 1206lm          | 4000K Cool White | 153 | 28 | G                |
| EDDE18/865  | 18    | 230     | G24d-2 | 10,000    | 1098lm          | 6500K Daylight   | 153 | 28 | G                |
| EDDE26/82   | 26    | 230     | G24d-3 | 10,000    | 1716lm          | 2700K Warm White | 173 | 28 | G                |
| EDDE26/835  | 26    | 230     | G24d-3 | 10,000    | 1716lm          | 3500K White      | 173 | 28 | G                |
| EDDE26/84   | 26    | 230     | G24d-3 | 10,000    | 1716lm          | 4000K Cool White | 173 | 28 | G                |
| EDDE26/865  | 26    | 230     | G24d-3 | 10,000    | 1560lm          | 6500K Daylight   | 173 | 28 | G                |



# 2 Pin Triple Compact



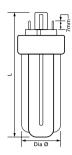




| Product Ref | Watts | Voltage | Сар     | Lamp Life | Total<br>Lumens | ССТ              | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|---------|-----------|-----------------|------------------|-----|----|------------------|
|             | (W)   | (V)     |         | (hrs)     |                 |                  | (m  | m) |                  |
| EDT13/84    | 13    | 230     | GX24d-1 | 10,000    | 806lm           | 4000K Cool White | 110 | 45 | G                |
| EDT18/82    | 18    | 230     | GX24d-2 | 10,000    | 1206lm          | 2700K Warm White | 125 | 45 | G                |
| EDT18/84    | 18    | 230     | GX24d-2 | 10,000    | 1206lm          | 4000K Cool White | 125 | 45 | G                |
| EDT26/82    | 26    | 230     | GX24d-3 | 10,000    | 1749lm          | 2700K Warm White | 145 | 45 | G                |
| EDT26/84    | 26    | 230     | GX24d-3 | 10,000    | 1749lm          | 4000K Cool White | 145 | 45 | G                |



# 4 Pin Triple Compact







| Product Ref | Watts | Voltage | Сар     | Lamp Life | Total<br>Lumens | сст              | L   | Ø  | Energy<br>Rating |
|-------------|-------|---------|---------|-----------|-----------------|------------------|-----|----|------------------|
|             | (W)   | (V)     |         | (hrs)     |                 |                  | (m  | m) |                  |
| EDTE13/82   | 13    | 230     | GX24q-1 | 10,000    | 806lm           | 2700K Warm White | 103 | 45 | G                |
| EDTE13/84   | 13    | 230     | GX24q-1 | 10,000    | 806lm           | 4000K Cool White | 103 | 45 | G                |
| EDTE18/82   | 18    | 230     | GX24q-2 | 10,000    | 1206lm          | 2700K Warm White | 118 | 45 | G                |
| EDTE18/84   | 18    | 230     | GX24q-2 | 10,000    | 1206lm          | 4000K Cool White | 118 | 45 | G                |
| EDTE26/82   | 26    | 230     | GX24q-3 | 10,000    | 1749lm          | 2700K Warm White | 138 | 45 | G                |
| EDTE26/84   | 26    | 230     | GX24q-3 | 10,000    | 1749lm          | 4000K Cool White | 138 | 45 | G                |
| EDTE32/82   | 32    | 230     | GX24q-3 | 10,000    | 2112lm          | 2700K Warm Whit  | 139 | 49 | G                |
| EDTE32/84   | 32    | 230     | GX24q-3 | 10,000    | 2112lm          | 4000K Cool White | 139 | 49 | G                |
| EDTE42/82   | 42    | 230     | GX24q-4 | 10,000    | 2814lm          | 2700K Warm White | 165 | 49 | G                |
| EDTE42/84   | 42    | 230     | GX24q-4 | 10,000    | 2814lm          | 4000K Cool White | 165 | 49 | G                |



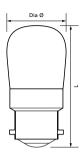


# **Incandescent** Pygmy



# Clear **Pygmy**









| Product Ref | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст              | L  | Ø  |
|-------------|-------|---------|-----|-----------|-----------------|------------------|----|----|
|             | (W)   | (V)     |     | (hrs)     |                 |                  | (m | m) |
| EDP15BC/CL  | 15    | 230     | B22 | 1,000     | 80lm            | 2700K Warm White | 60 | 28 |
| EDP15SBC/CL | 15    | 230     | B15 | 1,000     | 80lm            | 2700K Warm White | 53 | 26 |
| EDP15SES/CL | 15    | 230     | E14 | 1,000     | 80lm            | 2700K Warm White | 60 | 22 |

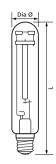




# **HID** Range



### **SON Tubular**



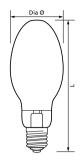


| Product Ref    | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст              | L   | Ø  | Energy<br>Rating |
|----------------|-------|---------|-----|-----------|-----------------|------------------|-----|----|------------------|
|                | (W)   | (V)     |     | (hrs)     |                 |                  | (m  | m) |                  |
| ED50SONT/HO    | 50    | 230     | E27 | 28,000    | 3800lm          | 2000K Warm White | 156 | 39 | G                |
| ED70SONT/HO    | 70    | 230     | E27 | 32,000    | 6600lm          | 2000K Warm White | 156 | 39 | F                |
| ED70SONT/HO/I* | 70    | 230     | E27 | 28,000    | 6600lm          | 2000K Warm White | 156 | 39 | F                |
| ED100SONT/HO   | 100   | 230     | E40 | 32,000    | 10000lm         | 2000K Warm White | 211 | 47 | F                |
| ED150SONT/HO   | 150   | 230     | E40 | 32,000    | 16500lm         | 2000K Warm White | 211 | 47 | F                |
| ED250SONT/HO   | 250   | 230     | E40 | 32,000    | 32500lm         | 2000K Warm White | 257 | 47 | E                |
| ED400SONT/HO   | 400   | 230     | E40 | 32,000    | 56500lm         | 2000K Warm White | 292 | 47 | E                |

**Note: \*** With internal igniter



# SON **Elliptical**





| Product Ref    | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст              | L   | Ø   | Energy<br>Rating |
|----------------|-------|---------|-----|-----------|-----------------|------------------|-----|-----|------------------|
|                | (W)   | (V)     |     | (hrs)     |                 |                  | (m  | m)  |                  |
| ED50SONE/HO    | 50    | 230     | E27 | 28,000    | 3700lm          | 2000K Warm White | 156 | 71  | G                |
| ED70SONE/HO    | 70    | 230     | E27 | 28,000    | 600lm           | 2000K Warm White | 156 | 71  | G                |
| ED70SONE/HO/I* | 70    | 230     | E27 | 32,000    | 5600lm          | 2000K Warm White | 156 | 71  | G                |
| ED100SONE/HO   | 100   | 230     | E40 | 28,000    | 9500lm          | 2000K Warm White | 196 | 76  | F                |
| ED150SONE/HO   | 150   | 230     | E40 | 28,000    | 16000lm         | 2000K Warm White | 227 | 91  | F                |
| ED250SONE/HO   | 250   | 230     | E40 | 28,000    | 29500lm         | 2000K Warm White | 227 | 91  | F                |
| ED400SONE/HO   | 400   | 230     | E40 | 28,000    | 51775lm         | 2000K Warm White | 292 | 121 | E                |

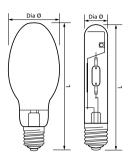
Note: \* With internal igniter



### Dual **Plus**

### **Features and Benefits**

• Suitable for use on most mercury and sodium ballasts in conjunction with the appropriate ignitor

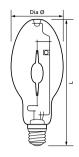




| Product Ref | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст                 | L   | Ø   | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|-----------------|---------------------|-----|-----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                 |                     | (m  | m)  |                  |
| EDHPIE250P  | 250   | 230     | E40 | 15,000    | 19000lm         | 4500K Neutral White | 227 | 91  | G                |
| EDHPIE400P  | 400   | 230     | E40 | 15,000    | 32000lm         | 4500K Neutral White | 284 | 121 | G                |
| EDHPIT250P  | 250   | 230     | E40 | 15,000    | 18000lm         | 4500K Neutral White | 257 | 47  | G                |
| EDHPIT400P  | 400   | 230     | E40 | 15,000    | 32000lm         | 4500K Neutral White | 285 | 47  | G                |



## Ceramic **Elliptical**

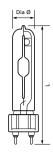




| Product Ref | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст                 | L   | Ø   | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|-----------------|---------------------|-----|-----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                 |                     | (m  | ım) |                  |
| EDCMHE70NW  | 70    | 230     | E27 | 20,000    | 6000lm          | 4200K Neutral White | 141 | 55  | G                |
| EDCMHE150NW | 150   | 230     | E27 | 20,000    | 14000lm         | 4200K Neutral White | 141 | 55  | F                |



### Ceramic **G12**

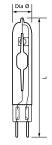




| Product Ref | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст                 | L   | Ø   | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|-----------------|---------------------|-----|-----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                 |                     | (m  | im) |                  |
| EDCMHT35NW  | 35    | 230     | G12 | 12,000    | 3400lm          | 4200K Neutral White | 99  | 19  | F                |
| EDCMHT35WW  | 35    | 230     | G12 | 12,000    | 3400lm          | 3000K Warm White    | 99  | 19  | F                |
| EDCMHT70NW  | 70    | 230     | G12 | 12,000    | 6500lm          | 4200K Neutral White | 99  | 19  | F                |
| EDCMHT70WW  | 70    | 230     | G12 | 12,000    | 7000lm          | 3000K Warm White    | 99  | 19  | F                |
| EDCMHT150NW | 150   | 230     | G12 | 12,000    | 13500lm         | 4200K Neutral White | 100 | 23  | G                |
| EDCMHT150WW | 150   | 230     | G12 | 12,000    | 14000lm         | 3000K Warm White    | 100 | 23  | F                |



### Ceramic **G8.5**





| Product Ref | Watts | Voltage | Сар  | Lamp Life | Total<br>Lumens | сст                 | L  | Ø  | Energy<br>Rating |
|-------------|-------|---------|------|-----------|-----------------|---------------------|----|----|------------------|
|             | (W)   | (V)     |      | (hrs)     |                 |                     | (m | m) |                  |
| EDCMHTC35NW | 35    | 230     | G8.5 | 12,000    | 3100lm          | 4200K Neutral White | 85 | 14 | G                |
| EDCMHTC35WW | 35    | 230     | G8.5 | 12,000    | 3400lm          | 3000K Warm White    | 85 | 14 | F                |
| EDCMHTC70NW | 70    | 230     | G8.5 | 12,000    | 6500lm          | 4200K Neutral White | 85 | 14 | F                |
| EDCMHTC70WW | 70    | 230     | G8.5 | 12,000    | 7000lm          | 3000K Warm White    | 85 | 14 | F                |



### Ceramic **Double Ended**

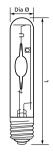




| Product Ref  | Watts | Voltage | Сар  | Lamp Life | Total<br>Lumens | ССТ                 | L   | Ø  | Energy<br>Rating |
|--------------|-------|---------|------|-----------|-----------------|---------------------|-----|----|------------------|
|              | (W)   | (V)     |      | (hrs)     |                 |                     | (m  | m) |                  |
| EDCMHTD150NW | 150   | 230     | RX7s | 12,000    | 13000lm         | 4200K Neutral White | 136 | 23 | G                |
| EDCMHTD150WW | 150   | 230     | RX7s | 12,000    | 13500lm         | 3000K Warm White    | 136 | 23 | G                |
| EDCMHTD70NW  | 70    | 230     | RX7s | 12,000    | 6000lm          | 4200K Neutral White | 117 | 20 | G                |
| EDCMHTD70WW  | 70    | 230     | RX7s | 12,000    | 6500lm          | 3000K Warm White    | 117 | 20 | F                |



### Ceramic **Tubular**

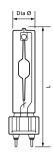




| Product Ref  | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст                 | L   | Ø   | Energy<br>Rating |
|--------------|-------|---------|-----|-----------|-----------------|---------------------|-----|-----|------------------|
|              | (W)   | (V)     |     | (hrs)     |                 |                     | (m  | im) |                  |
| EDCMHTT150NW | 150   | 230     | E40 | 20,000    | 14000lm         | 4200K Neutral White | 211 | 47  | F                |



### Quartz **G12**

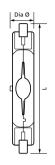




| Product Ref | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст                 | L   | Ø   | Energy<br>Rating |
|-------------|-------|---------|-----|-----------|-----------------|---------------------|-----|-----|------------------|
|             | (W)   | (V)     |     | (hrs)     |                 |                     | (m  | ım) |                  |
| ED150G12NW  | 150   | 230     | G12 | 10,000    | 14500lm         | 4200K Neutral White | 103 | 23  | F                |
| ED150G12WW  | 150   | 230     | G12 | 10,000    | 14000lm         | 3000K Warm White    | 110 | 23  | Α                |
| ED70G12NW   | 70    | 230     | G12 | 10,000    | 6600lm          | 4200K Neutral White | 96  | 23  | F                |



### Quartz **Double Ended**

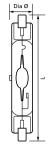




| Watts | Voltage           | Сар                           | Lamp Life                               | Total<br>Lumens   | ССТ  | L  | Ø  | Energy<br>Rating   |
|-------|-------------------|-------------------------------|---|---|--|--|--|--|
| (W)   | (V)               |                               | (hrs)                                   |   |  | (m   | m)   |  |
| 150   | 230               | RX7s                          | 10,000                                  | 14500lm   | 4200K Neutral White  | 135  | 23   | F  |
| 150   | 230               | RX7s                          | 10,000                                  | 11250lm   | 3000K Warm White   | 135  | 23   | Α  |
| 70    | 230               | RX7s                          | 10,000                                  | 5600lm  | 4200K Neutral White  | 117  | 20   | G  |
|       | (W)<br>150<br>150 | (W) (V)<br>150 230<br>150 230 | (W) (V)<br>150 230 RX7s<br>150 230 RX7s | (W) (V) (hrs)<br>150 230 RX7s 10,000<br>150 230 RX7s 10,000 | (W)         (V)         (hrs)         Lumens           150         230         RX7s         10,000         14500lm           150         230         RX7s         10,000         11250lm | (W)         (V)         (hrs)           150         230         RX7s         10,000         14500lm         4200K Neutral White           150         230         RX7s         10,000         11250lm         3000K Warm White | (W)         (V)         Lumens         (m           150         230         RX7s         10,000         14500lm         4200K Neutral White         135           150         230         RX7s         10,000         11250lm         3000K Warm White         135 | Lumens         (mm)           150         230         RX7s         10,000         14500lm         4200K Neutral White         135         23           150         230         RX7s         10,000         11250lm         3000K Warm White         135         23 |



### Coloured Metal Halide

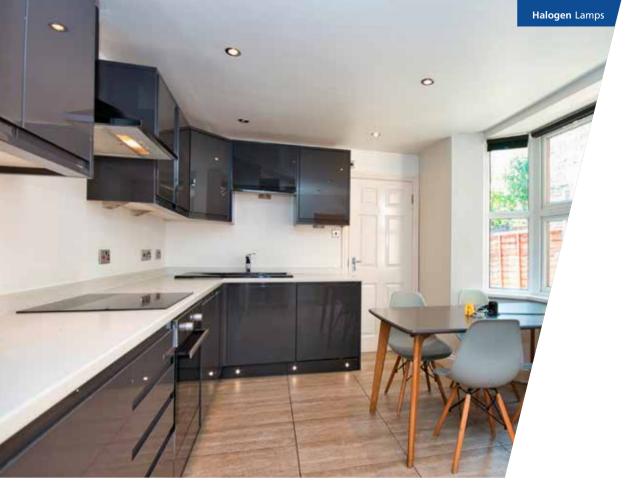






| Product Ref  | Watts | Voltage | Сар  | Lamp Life | сст     | L   | Ø  |
|--------------|-------|---------|------|-----------|---------|-----|----|
|              | (w)   | (V)     |      | (hrs)     |         | (m  | m) |
| EDHQITS150BL | 150   | 230     | RX7s | 10,000    | Blue    | 135 | 24 |
| EDHQITS150GR | 150   | 230     | RX7s | 10,000    | Green   | 135 | 24 |
| EDHQITS150MA | 150   | 230     | RX7s | 10,000    | Magenta | 135 | 24 |
| EDHQITS70BL  | 70    | 230     | RX7s | 10,000    | Blue    | 114 | 20 |
| EDHQITS70GR  | 70    | 230     | RX7s | 10,000    | Green   | 114 | 20 |
| EDHQITS70MA  | 70    | 230     | RX7s | 10,000    | Magenta | 114 | 20 |

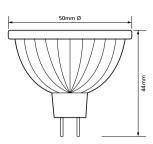




# **Halogen** Range



### MR11 & MR16







| Product Ref | Watts | Voltage | Сар   | Lamp Life | Total<br>Lumens | сст              | Beam<br>Angle ° | L  | Ø   |
|-------------|-------|---------|-------|-----------|-----------------|------------------|-----------------|----|-----|
|             | (W)   | (V)     |       | (hrs)     |                 |                  |                 | (m | im) |
| EDM262LL    | 20    | 12      | GU4   | 4,000     | 205lm           | 2900K Warm White | 25              | 35 | 35  |
| EDM266LL    | 35    | 12      | GU4   | 4,000     | 430lm           | 2900K Warm White | 25              | 35 | 35  |
| EDM258LL    | 40    | 12      | GU5.3 | 4,000     | 530lm           | 2900K Warm White | 30              | 44 | 50  |
| EDM269LL    | 20    | 12      | GU5.3 | 4,000     | 205lm           | 2900K Warm White | 30              | 45 | 50  |
| EDM281LL    | 35    | 12      | GU5.3 | 4,000     | 430lm           | 2900K Warm White | 30              | 45 | 50  |



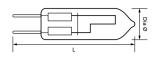


| Product Ref      | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст                   | L   | Ø   | Energy<br>Rating |
|------------------|-------|---------|-----|-----------|-----------------|-----------------------|-----|-----|------------------|
|                  | (W)   | (V)     |     | (hrs)     |                 |                       | (m  | im) |                  |
| ED1000110        | 1000  | 110     | R7s | 2,000     | 18000lm         | 2900K Warm White      | 189 | 11  | G                |
| ED1500110        | 1500  | 110     | R7s | 2,000     | 33000lm         | 2900K Warm White      | 254 | 11  | G                |
| ED1500240        | 1500  | 230     | R7s | 2,000     | 33000lm         | 2900K Warm White      | 254 | 11  | G                |
| ED300110         | 300   | 110     | R7s | 2,000     | 5000lm          | 2900K Warm White      | 118 | 11  | G                |
| ED500110         | 500   | 110     | R7s | 2,000     | 9500lm          | 2900K Warm White      | 118 | 11  | G                |
| ED750110         | 750   | 110     | R7s | 2,000     | 16500lm         | 2900K Warm White      | 189 | 11  | G                |
| ED750240         | 750   | 240     | R7s | 2,000     | 16500lm         | 2900K Warm White      | 189 | 11  | G                |
| EDHES48240/78MM  | 48    | 230     | R7s | 2,000     | 750lm           | 2900K Warm White      | 78  | 12  | G                |
| EDHES80240       | 80    | 230     | R7s | 2,000     | 1380lm          | 2900K Warm White      | 118 | 12  | G                |
| EDHES80240/78MM  | 80    | 230     | R7s | 2,000     | 1380lm          | 2900K Warm White      | 78  | 12  | G                |
| EDHES120240      | 120   | 230     | R7s | 2,000     | 2220lm          | 2900K Warm White      | 118 | 12  | G                |
| EDHES120240/78MM | 120   | 230     | R7s | 2,000     | 2220lm          | 2900K Warm White      | 78  | 12  | G                |
| EDHES400240      | 400   | 230     | R7s | 2,000     | 8550lm          | 2900K Warm White      | 118 | 12  | G                |
| BK1000110        | 1000  | 110     | R7s | 2,000     | 22000lm         | 2900K Warm White      | 189 | 11  | G                |
| BK1500110        | 1500  | 110     | R7s | 2,000     | 33000lm         | 2700-3000K Warm White | 254 | 11  | G                |
| BK1500240        | 1500  | 230     | R7s | 2,000     | 33000lm         | 2900K Warm White      | 254 | 11  | G                |
| BK150110/78MM    | 150   | 110     | R7s | 2,000     | 2600lm          | 2900K Warm White      | 78  | 11  | G                |
| BK750110         | 750   | 110     | R7s | 2,000     | 16500lm         | 2900K Warm White      | 189 | 11  | G                |



### **Low Voltage Capsule**



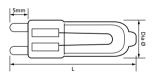


| Product Ref | Watts | Voltage | Сар    | Lamp<br>Life | Total<br>Lumens | ССТ              | L  | Ø   | Energy<br>Rating |
|-------------|-------|---------|--------|--------------|-----------------|------------------|----|-----|------------------|
|             | (W)   | (V)     |        | (hrs)        |                 |                  | (m | ım) |                  |
| EDM32ESL    | 40    | 12      | GY6.35 | 2,000        | 905lm           | 2900K Warm White | 42 | 10  | G                |
| EDM47ESL    | 16    | 12      | G4     | 2,000        | 280lm           | 2900K Warm White | 32 | 8   | G                |
| EDM75ESL    | 28    | 12      | GY6.35 | 2,000        | 580lm           | 2900K Warm White | 42 | 10  | G                |
| EDM91ESL    | 8     | 12      | G4     | 2,000        | 104lm           | 2900K Warm White | 32 | 8   | G                |









| Product Ref  | Watts | Voltage | Сар | Lamp<br>Life | Total<br>Lumens | сст              | L    | Ø  | Energy<br>Rating |
|--------------|-------|---------|-----|--------------|-----------------|------------------|------|----|------------------|
|              | (W)   | (V)     |     | (hrs)        |                 |                  | (m   | m) |                  |
| EDHP18CL/ESL | 18    | 230     | G9  | 2,000        | 204lm           | 2700K Warm White | 42.8 | 13 | G                |
| EDHP33CL/ESL | 33    | 230     | G9  | 2,000        | 460lm           | 2700K Warm White | 42.8 | 13 | G                |

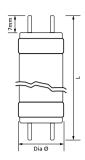




# **Specialist** Range



## T5/T8 Fly killer





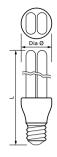


**Note:** It is recommended that insect killer lamps are changed every 12 months as UV levels deteriorate over the life of the lamp

| Product Ref | Watts | Voltage | Сар | Lamp Life | L   | Ø  |
|-------------|-------|---------|-----|-----------|-----|----|
|             | (W)   | (V)     |     | (hrs)     | (m  | m) |
| EDF15/FK    | 15    | 230     | G13 | 8,000     | 452 | 26 |
| EDF18/FK    | 18    | 230     | G13 | 8,000     | 600 | 26 |
| EDF8/FK     | 8     | 230     | G5  | 8,000     | 300 | 16 |



## **ES Fly Killer**





Note: It is recommended that insect killer lamps are changed every 12 months as UV levels deteriorate over the life of the lamp

| Product Ref | Watts | Voltage | Сар | Lamp Life | L    | Ø  |
|-------------|-------|---------|-----|-----------|------|----|
|             | (W)   | (V)     |     | (hrs)     | (mm) |    |
| T13ES/FK    | 13    | 230     | E27 | 10,000    | 165  | 41 |

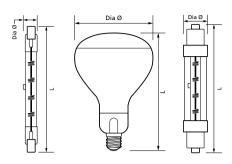








### Heat **Lamps**

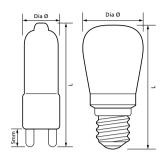




| Product Ref  | Watts | Voltage | Сар | Lamp Life | сст              | L   | Ø   |
|--------------|-------|---------|-----|-----------|------------------|-----|-----|
|              | (W)   | (V)     |     | (hrs)     |                  | (m  | m)  |
| EDIR250ES/CL | 250   | 230     | E27 | 5,000     | 2700K Warm White | 185 | 125 |
| IR300CL      | 300   | 230     | R7s | 1,000     | Clear            | 118 | 10  |
| IR300CL/P    | 300   | 230     | R7s | 1,000     | Clear            | 118 | 19  |



# Appliance **Lamps**











| Product Ref   | Watts | Voltage | Сар | Lamp Life | Total<br>Lumens | сст                     | L  | Ø   |
|---------------|-------|---------|-----|-----------|-----------------|-------------------------|----|-----|
|               | (W)   | (V)     |     | (hrs)     |                 |                         | (n | ım) |
| EDFRIDGE15SES | 15    | 230     | E14 | 1,000     | 80lm            | 2700 - 3000K Warm White | 58 | 22  |
| EDHOOD40SES   | 40    | 230     | E14 | 1,000     | 420lm           | 2700 - 3000K Warm White | 86 | 25  |
| EDOVEN15SES   | 15    | 230     | E14 | 1,000     | 66lm            | 2700 - 3000K Warm White | 55 | 25  |
| EDOVEN25SES   | 25    | 230     | E14 | 1,000     | 100lm           | 2700 - 3000K Warm White | 55 | 25  |
| EDOVEN40G9    | 40    | 230     | G9  | 2,000     | 460lm           | 2700 - 3000K Warm White | 43 | 13  |
| EDOVEN40SES   | 40    | 230     | E14 | 1,000     | 380lm           | 2700 - 3000K Warm White | 76 | 45  |
| OVEN40ES      | 40    | 230     | E27 | 1,500     | 360lm           | 2700 - 3000K Warm White | 70 | 45  |



### **FUSION LAMPS WARRANTY**



#### **Warranty Period**

At Fusion Lamps we offer a warranty on many of our LED products, the warranty period can vary from 1 – 3 years.

The warranty period commences from the date the product was purchased and proof of purchase will be required to redeem the warranty. This purchase must have been made from a Fusion Lamps authorised wholesaler and not procured second hand at an auction or by any other means.

### **Warranty Terms And Conditions**

Fusion Lamps will repair or replace a faulty or defective product within the warranty period. A product is deemed faulty or defective if it fails to illuminate or alternatively if the lumen output falls outside of the stated lumen maintenance. For LED Lamps this is often L70/B50. If the product has been discontinued or is no longer available, we will provide a product with the closest available specification but Fusion Lamps is not responsible for any miss match with any other products on site.

The warranty does not cover damage due to misuse or negligence, accidental damage, acts of god, water damage, general wear & tear and installations in violation of any applicable standard code (eq.BS 7671) or instructions.

The warranty only covers products applied within "intended" or "normal use" as defined below:

- The operating conditions are in accordance with the information supplied on the packaging, instructions or Fusion Lamps website.
- The warranty is based on a maximum operating period of 14 hours per day.
- The ambient temperature never exceeds the operating temperature range of -20°C to +40°C.
- The relative humidity in the installation doesn't exceed 80% RH, or exceed the IP rating of the lamp / luminaire.
- Lamps are not subjected to more than the stated switching cycles on the packaging.
- Lamps that are used in a luminaire should have a minimum 10mm air flow around the lamp excluding the cap.
- The electrical installation in which the lamp or luminaire operates is not subjected to voltage fluctuations exceeding 230V +10% or -6%.

Fusion Lamps are not liable for any consequential costs such as labour, transport, loss of profit and access equipment in relation to this warranty.

At Fusion Lamps' request, access shall be given to the installation to carry out further investigations in to the failure cause and applicability of the warranty.

In the event of a failure or defect occurring, the product shall be returned to Fusion Lamps, Millfield Industrial Estate, Bentley, Doncaster, South Yorkshire, United Kingdom, DN5 0SJ. The carriage cost to return the product shall be covered by the customer. Upon receiving the product Fusion Lamps will be allowed time to investigate the source of the problem.

If it is concluded that the issue is due to manufacturing or material defect, Fusion Lamps will repair or replace the product, the carriage cost for the replacement will be covered by Fusion Lamps. NB. Only faulty or defective products will be replaced.

Fusion Lamps reserves the right to make the final decision on the validity of the claim.



| B15/E27              | 102  | CRLED/GLS6ES          | 20  |
|----------------------|------|-----------------------|-----|
| B16/835/2P           |      | CRLED/GLS6ES/DIM      |     |
| B16/835/4P           |      | CRLED/GLS8.5BC        |     |
|                      |      |                       |     |
| B22/E27              |      | CRLED/GLS8.5BC 110V   |     |
| B28/835/2P           |      | CRLED/GLS8.5BC/CW     |     |
| B28/835/4P           |      | CRLED/GLS8.5BC/CW/DIM |     |
| B38/835/4P           | .107 | CRLED/GLS8.5BC/DIM    | 22  |
| BK1000110            | .131 | CRLED/GLS8.5BC/SEN    | 23  |
| BK1500110            | .131 | CRLED/GLS8.5ES        | .22 |
| BK1500240            |      | CRLED/GLS8.5ES 110V.  |     |
| BK150110/78MM        |      | CRLED/GLS8.5ES/CW     |     |
|                      |      |                       |     |
| BK300110             |      | CRLED/GLS8.5ES/CW/DIM |     |
| BK750110             |      | CRLED/GLS8.5ES/DIM    | 22  |
| CRLED/118            | 65   | CRLED/GLS8.5ES/SEN    | 23  |
| CRLED/118 110V       | 65   | CRLED/GLS9.5BC        | 24  |
| CRLED/118WW          | 65   | CRLED/GLS9.5BC/DIM    | 24  |
| CRLED/221            |      | CRLED/GLS9.5ES        |     |
| CRLED/284            |      | CRLED/GLS9.5ES/DIM    |     |
|                      |      |                       |     |
| CRLED/2D14/2P        |      | CRLED/MR11CW          |     |
| CRLED/2D14/4P        |      | CRLED/MR11DW          |     |
| CRLED/2D18/4P        |      | CRLED/MR11WW          |     |
| CRLED/2D8/2P         | 74   | CRLED/MR16/4CW        | 55  |
| CRLED/2D8/4P         |      | CRLED/MR16/4DW        | .55 |
| CRLED/78             |      | CRLED/MR16/4WW        |     |
| CRLED/78             |      |                       |     |
|                      |      | CRLED/MR16/5CW        |     |
| CRLED/CAN/BC         |      | CRLED/MR16/5DW        |     |
| CRLED/CAN/BC/CL      |      | CRLED/MR16/5WW        |     |
| CRLED/CAN/BC/CL/DIM  | 13   | CRLED/MR16/7CW        | 58  |
| CRLED/CAN/BC/CW      | 14   | CRLED/MR16/7DW        | 58  |
| CRLED/CAN/BC/CW/DIM  |      | CRLED/MR16/7WW        |     |
| CRLED/CAN/BC/DIM     |      | CRLED/PAR16SES        |     |
| CRLED/CAN/ES         |      | CRLED/PAR20           |     |
|                      |      |                       |     |
| CRLED/CAN/ES/CL      |      | CRLED/PAR20/DIM       |     |
| CRLED/CAN/ES/CL/DIM  |      | CRLED/PAR30           |     |
| CRLED/CAN/ES/CW      | 14   | CRLED/PAR30/DIM       | 42  |
| CRLED/CAN/ES/CW/DIM  | 14   | CRLED/PAR38           | 43  |
| CRLED/CAN/ES/DIM     | 14   | CRLED/PAR38 110V      | 43  |
| CRLED/CAN/SBC        | 14   | CRLED/PAR38/DIM       |     |
| CRLED/CAN/SBC/CL     |      | CRLED/PAR38BL         |     |
| CRLED/CAN/SBC/CL/DIM |      | CRLED/PAR38GR         |     |
|                      |      |                       |     |
| CRLED/CAN/SBC/CW     |      | CRLED/PAR38RE         |     |
| CRLED/CAN/SBC/CW/DIM |      | CRLED/R39             |     |
| CRLED/CAN/SBC/DIM    | 14   | CRLED/R50             | 28  |
| CRLED/CAN/SES        | 14   | CRLED/R50/DIM         | 28  |
| CRLED/CAN/SES/CL     | 13   | CRLED/R63             | 28  |
| CRLED/CAN/SES/CL/DIM | 13   | CRLED/R63/DIM         | 28  |
| CRLED/CAN/SES/CW     |      | CRLED/R80             |     |
| CRLED/CAN/SES/CW/DIM |      | CRLED/R80/DIM         |     |
|                      |      |                       |     |
| CRLED/CAN/SES/DIM    |      | E14/B22               |     |
| CRLED/G24-2P         |      | E14/E27               |     |
| CRLED/G24-4P         |      | E27/B22               |     |
| CRLED/G45/BC         | 17   | E27/E40               | 102 |
| CRLED/G45/BC/CW      | 17   | E27/G24-Q             | 102 |
| CRLED/G45/BC/CW/DIM  | 17   | E40/E27               | 102 |
| CRLED/G45/BC/DIM     |      | ED1000110             |     |
| CRLED/G45/ES         |      | ED100SONE/HO          |     |
|                      |      |                       |     |
| CRLED/G45/ES/CW      |      | ED100SONT/HO          |     |
| CRLED/G45/ES/CW/DIM  |      | ED11PL4P82            |     |
| CRLED/G45/ES/DIM     |      | ED11PL4P84            |     |
| CRLED/G45/SBC        | 17   | ED11PL82              | 109 |
| CRLED/G45/SBC/CW     | 17   | ED11PL84              |     |
| CRLED/G45/SBC/CW/DIM |      | ED1500110             |     |
| CRLED/G45/SBC/DIM    |      | ED1500240             |     |
| CRLED/G45/SES        |      | ED150G12NW            |     |
|                      |      |                       |     |
| CRLED/G45/SES/CW     |      | ED150G12WW            |     |
| CRLED/G45/SES/CW/DIM |      | ED150SONE/HO          |     |
| CRLED/G45/SES/DIM    |      | ED150SONT/HO          |     |
| CRLED/GLS12.5BC      | 25   | ED250SONE/HO          |     |
| CRLED/GLS12.5ES      | 25   | ED250SONT/HO          | 118 |
| CRLED/GLS6BC         |      | ED300110              | 131 |
| CDLED/CLCCDC/DIM     | 20   | ED 400CONE/LIO        | 110 |



| ED500110   | .131   | EDF14/865   | 106  |
|--|--|---|--|
| ED50SONE/HO  | 119  | EDF15/835   | 104  |
| ED50SONT/HO  |  | EDF15/840   |  |
|  |  |   |  |
| ED5PL4P82  |  | EDF15/FK  |  |
| ED5PL4P84  | .110   | EDF18/830   | 104  |
| ED5PL82  | 109  | EDF18/835   | 102  |
|  |  | EDF18/840   |  |
| ED5PL84  |  |   |  |
| ED70G12NW  | .126   | EDF18/865   |  |
| ED70SONE/HO  | .119   | EDF18/FK  | 134  |
| ED70SONE/HO/I  | 119  | EDF21/830   |  |
|  |  | EDF21/840   |  |
| ED70SONT/HO  |  |   |  |
| ED70SONT/HO/I  | .118   | EDF24/840   | 106  |
| ED750110   | .131   | EDF28/830   | 106  |
| ED750240   |  | EDF28/840   |  |
|  |  |   |  |
| ED7PL4P82  |  | EDF30/830   |  |
| ED7PL4P84  | .110   | EDF30/835   | 104  |
| ED7PL82  | .109   | EDF30/840   | 104  |
| ED7PL84  |  | EDF30/865   |  |
|  |  |   |  |
| ED9PL4P82  |  | EDF35/830   |  |
| ED9PL4P84  | .110   | EDF35/835   | 106  |
| ED9PL82  | 109  | EDF35/840   | 106  |
|  |  | EDF36/830   |  |
| ED9PL84  |  |   |  |
| EDCMHE150NW  |  | EDF36/835   |  |
| EDCMHE70NW   | .121   | EDF36/840   | 104  |
| EDCMHT150NW  |  | EDF36/865   |  |
|  |  |   |  |
| EDCMHT150WW  |  | EDF39/840   |  |
| EDCMHT35NW   | .122   | EDF4/835  | 105  |
| EDCMHT35WW   | .122   | EDF49/835   | 106  |
| EDCMHT70NW   |  | EDF49/840   |  |
|  |  |   |  |
| EDCMHT70WW   | .122   | EDF54/840   |  |
| EDCMHTC35NW  | .123   | EDF58/830   | 104  |
| EDCMHTC35WW  | 123  | EDF58/835   | 102  |
| EDCMHTC70NW  |  | EDF58/840   |  |
|  |  |   |  |
| EDCMHTC70WW  | .123   | EDF58/865   |  |
| EDCMHTD150NW   | .124   | EDF6/35   | 105  |
|  |  |   |  |
| FDCMHTD150WW   |  |   | 102  |
| EDCMHTD150WW   | .124   | EDF70/835   |  |
| EDCMHTD70NW  | .124<br>.124   | EDF70/835   | 104  |
|  | .124<br>.124   | EDF70/835   | 104  |
| EDCMHTD70NWEDCMHTD70WW   | .124<br>.124<br>.124   | EDF70/835   | 104<br>104   |
| EDCMHTD70NW<br>EDCMHTD70WW<br>EDCMHTT150NW   | .124<br>.124<br>.124<br>.125   | EDF70/835<br>EDF70/840<br>EDF70/865<br>EDF8/35  | 104<br>104<br>105  |
| EDCMHTD70NW<br>EDCMHTD70WW<br>EDCMHTT150NW<br>EDD10/82   | .124<br>.124<br>.124<br>.125<br>.111   | EDF70/835<br>EDF70/840<br>EDF70/865<br>EDF8/35<br>EDF8/FK   | 104<br>104<br>105<br>134   |
| EDCMHTD70NW<br>EDCMHTD70WW<br>EDCMHTT150NW<br>EDD10/82<br>EDD10/835  | .124<br>.124<br>.124<br>.125<br>.111   | EDF70/835<br>EDF70/840<br>EDF70/865<br>EDF8/35<br>EDF8/FK<br>EDF80/840  | 104<br>104<br>105<br>134   |
| EDCMHTD70NW<br>EDCMHTD70WW<br>EDCMHTT150NW<br>EDD10/82   | .124<br>.124<br>.124<br>.125<br>.111   | EDF70/835<br>EDF70/840<br>EDF70/865<br>EDF8/35<br>EDF8/FK   | 104<br>104<br>105<br>134   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84   | .124<br>.124<br>.124<br>.125<br>.111<br>.111   | EDF70/835   | 104<br>105<br>134<br>106<br>137  |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82  | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111                                 | EDF70/835   | 104<br>105<br>134<br>106<br>137  |
| EDCMHTD70NW EDCMHTT070WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111                         | EDF70/835 EDF70/840 EDF70/865 EDF8/35 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240/78MM  | 104<br>105<br>134<br>106<br>137<br>131   |
| EDCMHTD70NW  | .124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111                         | EDF70/835 EDF70/840 EDF70/865 EDF8/35 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240/78MM EDHES160240  | 104<br>105<br>134<br>106<br>137<br>131   |
| EDCMHTD70NW EDCMHTT070WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835   | .124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111                         | EDF70/835 EDF70/840 EDF70/865 EDF8/35 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240/78MM  | 104<br>105<br>134<br>106<br>137<br>131   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/835 EDD13/835 EDD18/84 EDD13/84 EDD18/82   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111                 | EDF70/835 EDF70/840 EDF70/865 EDF8/76 EDF8/7K EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240/78MM EDHES160240 EDHES230240  | 104<br>105<br>134<br>106<br>137<br>131<br>131  |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD13/84 EDD13/84 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/85  | .124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111         | EDF70/835 EDF70/840 EDF70/865 EDF8/35 EDF8/FK EDF80/840 EDFRIDGE15SES EDHE5120240 EDHE5120240/78MM EDHES160240 EDHES230240 EDHES5300240 EDHES400240   | 104<br>104<br>105<br>137<br>137<br>131<br>131<br>131   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD13/84 EDD13/84 EDD18/85 EDD18/84 EDD18/84 EDD18/82 EDD18/82 EDD18/84   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835<br>EDF70/840<br>EDF70/865<br>EDF8/35<br>EDF8/FK<br>EDF80/840<br>EDFRIDGE15SES<br>EDHE5120240<br>EDHES120240/78MM<br>EDHES160240<br>EDHES230240<br>EDHES48240/78MM   | 104<br>104<br>134<br>137<br>131<br>131<br>131<br>131   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD13/84 EDD18/82 EDD18/82 EDD18/82 EDD18/82 EDD18/82 EDD18/82 EDD18/82 EDD18/84 EDD18/85 EDD18/85  | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDRIDGE15SES EDHES120240 EDHES120240/78MM EDHES30240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES80240   | 104<br>104<br>105<br>1134<br>1131<br>1131<br>1131<br>1131  |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD13/84 EDD13/84 EDD18/85 EDD18/84 EDD18/84 EDD18/82 EDD18/82 EDD18/84   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835<br>EDF70/840<br>EDF70/865<br>EDF8/35<br>EDF8/FK<br>EDF80/840<br>EDFRIDGE15SES<br>EDHE5120240<br>EDHES120240/78MM<br>EDHES160240<br>EDHES230240<br>EDHES48240/78MM   | 104<br>104<br>105<br>1134<br>1131<br>1131<br>1131<br>1131  |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/83 EDD13/835 EDD13/835 EDD18/835 EDD18/82 EDD18/82 EDD18/835 EDD18/84 EDD18/84 EDD18/865 EDD18/865 EDD26/82   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES40240 EDHES40240 EDHES40240 EDHES40240 EDHES40240 EDHES40240 EDHES400240 EDHES40240 EDHES40240 EDHES40240 EDHES40240 EDHES40240 EDHES40240 EDHES40240 EDHES80240 EDHES80240 EDHES80240   | 104<br>104<br>1105<br>1134<br>1131<br>1131<br>1131<br>1131   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD18/835 EDD18/84 EDD18/84 EDD18/82 EDD18/835 EDD18/84 EDD18/835 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/85 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/85 EDD18/84 EDD18/84 EDD18/85 EDD18/84 EDD18/865 EDD18/865   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDHES120240 EDHES120240/78MM EDHES120240 EDHES230240 EDHES480240 EDHES480240 EDHES480240 EDHES80240 EDHES80240 EDHES80240 EDHES80240/78MM EDHOOD40SES   | 104<br>104<br>105<br>134<br>131<br>131<br>131<br>131<br>131<br>131   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD13/84 EDD18/84 EDD18/82 EDD18/82 EDD18/85 EDD18/865 EDD18/865 EDD18/865 EDD126/82 EDD26/835 EDD26/84   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF8/75 | 104<br>104<br>1105<br>1137<br>1131<br>1131<br>1131<br>1131<br>1137   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD13/84 EDD18/82 EDD18/82 EDD18/82 EDD18/82 EDD18/82 EDD18/835 EDD18/84 EDD18/84 EDD18/865 EDD26/82 EDD26/835 EDD26/84 EDD26/865   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHE5120240 EDHE5120240/78MM EDHES160240 EDHES230240 EDHES230240 EDHES230240 EDHES400240 EDHES400240 EDHES400240 EDHES40025 EDHES80240/78MM EDHOOD40SES EDHP18CL/ESL EDHP33CL/ESL   | 104<br>104<br>1105<br>1134<br>1106<br>1131<br>1131<br>1131<br>1131<br>1132<br>1132   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD13/84 EDD18/84 EDD18/82 EDD18/82 EDD18/85 EDD18/865 EDD18/865 EDD18/865 EDD126/82 EDD26/835 EDD26/84   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF8/75 | 104<br>104<br>1105<br>1134<br>1106<br>1131<br>1131<br>1131<br>1131<br>1132<br>1132   |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/84 EDD13/84 EDD13/84 EDD18/82 EDD18/82 EDD18/82 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/865 EDD26/835 EDD26/835 EDD26/84 EDD26/84 EDD26/865 EDD26/865   | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES400240 EDHES80240/78MM   | 104<br>104<br>1134<br>1137<br>1131<br>1131<br>1131<br>1131<br>1132<br>1132   |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/82 EDD18/82 EDD18/865 EDD18/84 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDD26/82 EDD26/865  | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/7K EDF80/840 EDRNDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES120240 EDHES40240 EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES80240 EDHES48240/78MM EDHES80240 EDHES80240 EDHES80240/78MM EDHOOD40SES EDHP18CL/ESL EDHP18CL/ESL EDHP1E550P EDHP1E400P  | 104<br>104<br>105<br>1134<br>1131<br>1131<br>1131<br>1131<br>1132<br>1132<br>1120  |
| EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDDE10/882 EDDE10/882 EDDE10/8835 EDDE10/8835 EDDE10/8835 EDDE10/8835 EDDE10/8835  | .124<br>.124<br>.124<br>.125<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111<br>.111 | EDF70/835 EDF70/840 EDF70/865 EDF870/865 EDF8/7K EDF80/840 EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240/78MM EDHES120240 EDHES230240 EDHES480240 EDHES480240 EDHES480240 EDHES480240 EDHES480240 EDHES480240 EDHES480240 EDHES480240 EDHES80240/78MM EDHOOD40SES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP1E250P EDHP1E400P EDHP1T250P   | 104<br>104<br>1105<br>1134<br>1131<br>1131<br>1131<br>1131<br>1132<br>1132<br>1120   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDCMHTT150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/82 EDD18/82 EDD18/85 EDD18/85 EDD18/865 EDD18/865 EDD26/82 EDD26/835 EDD26/865 EDD26/865 EDDE10/82 EDDE10/82 EDDE10/882 EDDE10/884 EDDE10/885 EDDE10/884 EDDE10/885 EDDE10/884 EDDE10/885 EDDE10/884 EDDE10/885 EDDE10/884 EDDE10/884 EDDE10/884  | .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                               | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHE5120240 EDHE5120240 EDHE5120240 EDHES10240 EDHES230240 EDHES230240 EDHES300240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES80240/78MM EDHOOD40SES EDHP18ES0/FES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP18CDP EDHP1E50P EDHP1E50P EDHP1T50P EDHP1T50P   | 104<br>104<br>1105<br>1137<br>1131<br>1131<br>1131<br>1131<br>1132<br>1132<br>1120<br>1120   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDDE10/882 EDDE10/882 EDDE10/8835 EDDE10/8835 EDDE10/8835 EDDE10/8835 EDDE10/8835  | .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                               | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHE5120240 EDHE5120240 EDHE5120240 EDHES10240 EDHES230240 EDHES230240 EDHES300240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES80240/78MM EDHOOD40SES EDHP18ES0/FES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP18CDP EDHP1E50P EDHP1E50P EDHP1T50P EDHP1T50P   | 104<br>104<br>1105<br>1137<br>1131<br>1131<br>1131<br>1131<br>1132<br>1132<br>1120<br>1120   |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD13/84 EDD18/82 EDD18/85 EDD18/865 EDD18/865 EDD26/835 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/85 EDD26/865 EDD26/865 EDDE10/885 EDDE10/884  | .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                               | EDF70/835 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES30240 EDHES30240 EDHES30240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHESB0240/78MM EDHODD40SES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP18CJOP EDHPIT250P EDHPIT250P EDHPIT250P EDHPIT400P EDHPIT3150BL  | 10 <sup>2</sup><br>110 <sup>2</sup><br>113 <sup>2</sup><br>1137<br>1131<br>1131<br>1131<br>1131<br>1132<br>1120<br>1120<br>1120                                      |
| EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDDE1/885 EDD26/84 EDDE1/885   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240/78MM EDHES160240 EDHES30240 EDHES230240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES40025 EDHP18CLESE EDHP18CLESE EDHP18CLESE EDHP18CLESE EDHP18CLESE EDHP1E50P EDHP1E400P EDHP1T400P EDHP1T4150B EDHQITS150BR   | 104<br>1104<br>1105<br>1134<br>1137<br>1131<br>1131<br>1131<br>1132<br>1132<br>1120<br>1120<br>1120  |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70NW EDCMHTD70NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDD26/865 EDD26/864 EDD26/865 EDDE10/82 EDDE10/82 EDDE10/835 EDDE10/84 EDDE13/82 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/865 EDF87/85 EDF8/75 EDF8/75 EDF8/76 EDF80/840 EDRNDGE155E5 EDHE5120240 EDHE5120240 EDHE5120240 EDHE5120240 EDHES30240 EDHE5400240 EDHE5400240 EDHE5480240 EDHE5480240 EDHE5480240 EDHE5480240 EDHES48240/78MM EDHOOD405E5 EDHP18CL/E5L EDHP18CL/E5L EDHP18CL/E5L EDHP1E500P EDHPIT400P EDHPIT400P EDHQITS150BL EDHQITS150BL EDHQITS150BR EDHQITS150MA  | 104<br>104<br>1105<br>1134<br>1131<br>1131<br>1131<br>1131<br>1131<br>1131<br>1120<br>1120   |
| EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDDE1/885 EDD26/84 EDDE1/885   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240/78MM EDHES160240 EDHES30240 EDHES230240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES40025 EDHP18CLESE EDHP18CLESE EDHP18CLESE EDHP18CLESE EDHP18CLESE EDHP1E50P EDHP1E400P EDHP1T400P EDHP1T4150B EDHQITS150BR   | 104<br>104<br>1105<br>1134<br>1131<br>1131<br>1131<br>1131<br>1131<br>1131<br>1120<br>1120   |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70NW EDCMHTD70NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDD26/865 EDD26/864 EDD26/865 EDDE10/82 EDDE10/82 EDDE10/835 EDDE10/84 EDDE13/82 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84   | .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                               | EDF70/835 EDF70/840 EDF70/865 EDF87/85 EDF8/75 EDF8/75 EDF8/76 EDF80/840 EDRNDGE155E5 EDHE5120240 EDHE5120240 EDHE5120240 EDHE5120240 EDHES30240 EDHE5400240 EDHE5400240 EDHE5480240 EDHE5480240 EDHE5480240 EDHE5480240 EDHES48240/78MM EDHOOD405E5 EDHP18CL/E5L EDHP18CL/E5L EDHP18CL/E5L EDHP1E500P EDHPIT400P EDHPIT400P EDHQITS150BL EDHQITS150BL EDHQITS150BR EDHQITS150MA  | 104<br>104<br>1105<br>1134<br>1131<br>1131<br>1131<br>1131<br>1131<br>1131<br>1128<br>1128   |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD150NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/82 EDD18/82 EDD18/85 EDD18/84 EDD18/84 EDD18/865 EDD26/82 EDD26/835 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/865 EDDE10/835 EDDE10/835 EDDE10/835 EDDE10/84 EDDE13/82 EDDE13/84 EDDE13/82 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE18/82 EDDE18/84 EDDE18/835 EDDE18/835 EDDE18/835   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/755 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHE5120240 EDHE5120240 EDHE5120240 EDHES30240 EDHES30240 EDHES30240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE580240/78MM EDHOOD40SES EDHP18E0L/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP1E250P EDHPIE400P EDHPIT250P EDHPIT250P EDHPIT250P EDHPIT3150BL EDHQITS150BL EDHQITS150MA EDHOUTS150MA EDHOUTS150MM EDHOUTS150MM EDHOUTS150MM  | 104<br>1104<br>1105<br>1134<br>1106<br>1137<br>1131<br>1131<br>1131<br>1131<br>1132<br>1120<br>1120<br>1120  |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD7150NW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/82 EDD18/82 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/865 EDD26/835 EDD26/835 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/85 EDDE10/82 EDDE10/82 EDDE10/82 EDDE10/835 EDDE10/84 EDDE13/835 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/885 EDDE18/885 EDDE18/885 EDDE18/885   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHE5120240 EDHE5120240 EDHE5120240 EDHE530240 EDHES30240 EDHES400240 EDHES400240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE580240/78MM EDHES80240/78MM EDHES80240/78MM EDHPE580240/78MM EDHPE580240/78MM EDHPE580240/78MM EDHPE580240/78MM EDHPOOD405ES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP16400P EDHPIT250P EDHPIT250P EDHPIT400P EDHPIT5150R EDHQITS150GR EDHQITS150GR EDHQITS150MA EDHQITS150NW EDHQITS150WW EDHQITS150W  | 104<br>1104<br>1105<br>1134<br>1106<br>1137<br>1131<br>1131<br>1131<br>1131<br>1132<br>1128<br>1128<br>1128  |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/835 EDD18/84 EDD18/84 EDD18/84 EDD18/865 EDD26/82 EDD26/82 EDD26/84 EDD26/865 EDD26/865 EDD26/865 EDD210/82 EDDE10/82 EDDE10/82 EDDE10/835 EDDE10/84 EDDE10/84 EDDE13/82 EDDE13/835 EDDE10/84 EDDE13/835 EDDE11/84 EDDE13/84 EDDE13/835 EDDE11/84 EDDE13/835 EDDE11/84 EDDE13/835 EDDE11/84 EDDE13/835 EDDE11/844 EDDE13/835 EDDE11/8485 EDDE18/844 EDDE18/845 EDDE18/845 EDDE18/845 EDDE18/845 EDDE18/865 EDDE18/865 EDDE18/865  | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES30240 EDHES400240 EDHES400240 EDHES400240 EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES80240 EDHES48210/F8MM EDHES80240 EDHES80240 EDHES80240 EDHP18CIVESL EDHP18CIVESL EDHP18CIVESL EDHP1E250P EDHP1E400P EDHP1T400P EDHP1T400P EDHP1T400P EDHQITS150MA EDHQITS150MA EDHQITS150MA EDHQITS150MA EDHQITS150MW EDHQITS70BL EDHQITS70BL EDHQITS70BL EDHQITS70BL   | 104<br>1104<br>1105<br>1134<br>1106<br>1137<br>1131<br>1131<br>1131<br>1137<br>1132<br>1128<br>1128<br>1128<br>1128<br>1128<br>1128<br>1128                          |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD7150NW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/82 EDD18/82 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/865 EDD26/835 EDD26/835 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/85 EDDE10/82 EDDE10/82 EDDE10/82 EDDE10/835 EDDE10/84 EDDE13/835 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/885 EDDE18/885 EDDE18/885 EDDE18/885   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHE5120240 EDHE5120240 EDHE5120240 EDHE530240 EDHES30240 EDHES400240 EDHES400240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE5400240 EDHE580240/78MM EDHES80240/78MM EDHES80240/78MM EDHPE580240/78MM EDHPE580240/78MM EDHPE580240/78MM EDHPE580240/78MM EDHPOOD405ES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP16400P EDHPIT250P EDHPIT250P EDHPIT400P EDHPIT5150R EDHQITS150GR EDHQITS150GR EDHQITS150MA EDHQITS150NW EDHQITS150WW EDHQITS150W  | 104<br>1104<br>1105<br>1134<br>1106<br>1137<br>1131<br>1131<br>1131<br>1137<br>1132<br>1128<br>1128<br>1128<br>1128<br>1128<br>1128<br>1128                          |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/835 EDD18/84 EDD18/84 EDD18/84 EDD18/865 EDD26/82 EDD26/82 EDD26/84 EDD26/865 EDD26/865 EDD26/865 EDD210/82 EDDE10/82 EDDE10/82 EDDE10/835 EDDE10/84 EDDE10/84 EDDE13/82 EDDE13/835 EDDE10/84 EDDE13/835 EDDE11/84 EDDE13/84 EDDE13/835 EDDE11/84 EDDE13/835 EDDE11/84 EDDE13/835 EDDE11/84 EDDE13/835 EDDE11/844 EDDE13/835 EDDE11/8485 EDDE18/844 EDDE18/845 EDDE18/845 EDDE18/845 EDDE18/845 EDDE18/865 EDDE18/865 EDDE18/865  | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES30240 EDHES400240 EDHES400240 EDHES400240 EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES48240/78MM EDHES80240 EDHES48210/F8MM EDHES80240 EDHES80240 EDHES80240 EDHP18CIVESL EDHP18CIVESL EDHP18CIVESL EDHP1E250P EDHP1E400P EDHP1T400P EDHP1T400P EDHP1T400P EDHQITS150MA EDHQITS150MA EDHQITS150MA EDHQITS150MA EDHQITS150MW EDHQITS70BL EDHQITS70BL EDHQITS70BL EDHQITS70BL   | 104<br>1104<br>1105<br>1134<br>1137<br>1131<br>1131<br>1131<br>1131<br>1131<br>1132<br>1128<br>1128  |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD750NW EDD10/82 EDD10/82 EDD10/84 EDD13/82 EDD13/835 EDD13/835 EDD18/835 EDD18/84 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDD26/865 EDD26/865 EDD26/865 EDDE10/884 EDDE10/884 EDD18/885 EDD18/885 EDD18/885 EDD26/885 EDD26/886 EDD26/886 EDD26/886 EDD26/886 EDD26/886 EDDE10/882 EDDE10/882 EDDE10/885 EDDE10/885 EDDE10/885 EDDE10/885 EDDE10/884 EDDE13/885 EDDE13/885 EDDE13/885 EDDE13/884 EDDE13/882 EDDE13/884 EDDE18/885 EDDE18/885 EDDE18/885 EDDE18/8865 EDDE18/8865 EDDE18/8865 EDDE18/8865 EDDE18/8865 EDDE18/8865 EDDE18/8865 EDDE18/885 EDDE18/885 EDDE18/885 EDDE18/885 EDDE18/885 EDDE18/885 EDDE18/885 EDDE26/882 EDDE26/885 EDDE26/885  | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/865 EDF87/855 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240/78MM EDHES160240 EDHES230240 EDHES230240 EDHES230240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES500240 EDHES500240 EDHES500240 EDHES80240/78MM EDHOOD40SES EDHP18C1/ESL EDHP18C1/ESL EDHP18C1/ESL EDHP1E250P EDHPIE400P EDHPIE400P EDHPIT50P EDHPIT400P EDHQITS150BL EDHQITS150MA EDHQITS150MA EDHQITS150NW EDHQITS150NW EDHQITS70BL EDHQITS70BL EDHQITS70MA EDHQITS70MA EDHQITS70MA  | 104<br>1104<br>1105<br>1106<br>1137<br>1131<br>1131<br>1131<br>1131<br>1131<br>1132<br>1128<br>1128  |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/82 EDD18/82 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/865 EDD26/835 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/85 EDDE10/82 EDDE10/82 EDDE10/835 EDDE10/84 EDDE13/835 EDDE10/84 EDDE13/835 EDDE10/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE18/84 EDDE18/85 EDDE26/835 EDDE26/84 EDDE26/84 EDDE26/84 EDDE26/84 EDDE26/84   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES30240 EDHES30240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHESB0240/78MM EDHODA0SES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP1250P EDHPIE400P EDHPIT250P EDHPIT250P EDHPIT400P EDHQITS150BL EDHQITS150MA EDHQITS150NW EDHQITS150NW EDHQITS150NW EDHQITS70RB EDHQITS70RB EDHQITS70RB EDHQITS70RB EDHQITS70RA EDHQITS70NW   | 1104<br>1104<br>1105<br>1106<br>1106<br>1107<br>1113<br>1131<br>1131<br>1137<br>1136<br>1126<br>1126<br>1127<br>1128<br>1128<br>1128<br>1128<br>1128<br>1128<br>1128 |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD26/82 EDD26/835 EDD26/84 EDD26/84 EDD26/865 EDD26/84 EDDE10/885 EDDE10/88   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES30240 EDHES30240 EDHES400240 EDHES400240 EDHES400240 EDHES40E16 EDHES80240/78MM EDHES80240/78MM EDHES80240/78MM EDHES80240 EDHES80240/F8MM EDHOOD40SES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP1750P EDHPIT400P EDHPIT400P EDHPIT450P EDHPIT450R EDHQITS150MA EDHQITS150MA EDHQITS150MA EDHQITS150MV EDHQITS70BL EDHQITS70GR EDHQITS70MA EDHQITS70MW EDIR250ES/CL EDL18/83  | 1104<br>1104<br>1105<br>1106<br>1106<br>1107<br>1113<br>1131<br>1131<br>1137<br>1137<br>1137<br>1137   |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/82 EDD18/82 EDD18/84 EDD18/84 EDD18/84 EDD18/84 EDD18/865 EDD26/835 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/84 EDD26/85 EDDE10/82 EDDE10/82 EDDE10/835 EDDE10/84 EDDE13/835 EDDE10/84 EDDE13/835 EDDE10/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE13/84 EDDE18/84 EDDE18/85 EDDE26/835 EDDE26/84 EDDE26/84 EDDE26/84 EDDE26/84 EDDE26/84   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES30240 EDHES30240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHES400240 EDHESB0240/78MM EDHODA0SES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP1250P EDHPIE400P EDHPIT250P EDHPIT250P EDHPIT400P EDHQITS150BL EDHQITS150MA EDHQITS150NW EDHQITS150NW EDHQITS150NW EDHQITS70RB EDHQITS70RB EDHQITS70RB EDHQITS70RB EDHQITS70RA EDHQITS70NW   | 1104<br>1104<br>1105<br>1106<br>1106<br>1107<br>1113<br>1131<br>1131<br>1137<br>1137<br>1137<br>1137   |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70NW EDCMHTD70NW EDCMHTD70NW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD18/865 EDD26/82 EDD26/84 EDD26/865 EDD26/84 EDD18/84 EDD18/84 EDD18/865 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDD26/865 EDDE10/884 EDDE13/884 EDDE13/885 EDDE13/885 EDDE13/885 EDDE18/8865 EDDE18/885 EDDE18/865 EDDE18/865 EDDE18/865 EDDE18/865 EDDE18/865 EDDE26/885 | .124 .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                     | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/FK EDF8/FK EDF80/840 EDRIDGE15SES EDHES120240 EDHES1202240 EDHES1202240 EDHES160240 EDHES302240 EDHES400240 EDHES48240/78MM EDHES482240/78MM EDHES482240/78MM EDHES482240/78MM EDHES482240/78MM EDHES80240 EDHES482240/78MM EDHES80240 EDHESB0240/78MM EDHOOD40SES EDHP18CL/ESL EDHP18CL/ESL EDHP18CJESL EDHP1E250P EDHPIE400P EDHPIT400P EDHPIT400P EDHQITS150BL EDHQITS150BL EDHQITS150MA EDHQITS150MA EDHQITS150MA EDHQITS150W EDHQITS70BL EDHQITS70BL EDHQITS70BL EDHQITS70GR EDHQITS70MA EDHQITS70MA EDHQITS70MA EDHQITS70MA EDHQITS70MA EDHQITS70NW EDIBIES0ES/CL EDL18/83 EDL18/835   | 1104<br>1104<br>1105<br>1106<br>1106<br>1107<br>1108<br>1108<br>1108<br>1108<br>1108<br>1108<br>1108   |
| EDCMHTD70NW EDCMHTD70NW EDCMHTD70WW EDCMHTD70WW EDD10/82 EDD10/82 EDD10/835 EDD10/84 EDD13/82 EDD13/835 EDD13/84 EDD18/835 EDD18/84 EDD18/865 EDD26/82 EDD26/835 EDD26/84 EDD26/84 EDD26/865 EDD26/84 EDDE10/885 EDDE10/88   | .124 .124 .124 .124 .125 .111 .111 .111 .111 .111 .111 .111                          | EDF70/835 EDF70/840 EDF70/840 EDF70/865 EDF8/75 EDF8/75 EDF8/FK EDF80/840 EDFRIDGE15SES EDHES120240 EDHES120240 EDHES120240 EDHES30240 EDHES30240 EDHES400240 EDHES400240 EDHES400240 EDHES40E16 EDHES80240/78MM EDHES80240/78MM EDHES80240/78MM EDHES80240 EDHES80240/F8MM EDHOOD40SES EDHP18CL/ESL EDHP18CL/ESL EDHP18CL/ESL EDHP1750P EDHPIT400P EDHPIT400P EDHPIT450P EDHPIT450R EDHQITS150MA EDHQITS150MA EDHQITS150MA EDHQITS150MV EDHQITS70BL EDHQITS70GR EDHQITS70MA EDHQITS70MW EDIR250ES/CL EDL18/83  | 1104<br>1104<br>1105<br>1106<br>1106<br>1107<br>1108<br>1108<br>1108<br>1108<br>1108<br>1108<br>1108   |



| FDL24/02             | 00  | EDIED FOTE A MAD CIDIA |     |
|----------------------|-----|------------------------|-----|
| EDL24/831            |     | EDLED/FST58A/4BC/DIM   |     |
| EDL24/8351           |     | EDLED/FST58A/4ES       | .49 |
| EDL24/841            | 08  | EDLED/FST58A/4ES/DIM   | 49  |
| EDL36/831            |     | EDLED/FST64/4BC        |     |
| EDL36/835            |     |                        |     |
|                      |     | EDLED/FST64/4BC/DIM    |     |
| EDL36/841            |     | EDLED/FST64/4ES        |     |
| EDL36/8651           | 80  | EDLED/FST64/4ES/DIM    | .49 |
| EDL40/831            | 08  | EDLED/FST64A/4BC       | 49  |
| EDL40/8351           |     | EDLED/FST64A/4BC/DIM   |     |
|                      |     |                        |     |
| EDL40/841            |     | EDLED/FST64A/4ES       |     |
| EDL55/831            | 80  | EDLED/FST64A/4ES/DIM   | .49 |
| EDL55/8351           | 08  | EDLED/G95BC            | 30  |
| EDL55/841            |     | EDLED/G95ES            |     |
| EDL55/865            |     |                        |     |
|                      |     | EDLED/GU10/5CW         |     |
| EDLED/AR111/12       |     | EDLED/GU10/5CW/DIM     |     |
| EDLED/AR111/12/DIM   | .63 | EDLED/GU10/5DW         | .37 |
| EDLED/AR111/12GU10   | .63 | EDLED/GU10/5DW/DIM     | 37  |
| EDLED/FCAN4BC        |     | EDLED/GU10/5WW         |     |
| EDLED/FCAN4BC/A/DIM  |     |                        |     |
|                      |     | EDLED/GU10/5WW/DIM     |     |
| EDLED/FCAN4BC/CW     |     | EDLED/GU10WF/5CW       |     |
| EDLED/FCAN4BC/DIM    | .45 | EDLED/GU10WF/5CW/DIM   | .37 |
| EDLED/FCAN4ES        |     | EDLED/GU10WF/5WW       |     |
| EDLED/FCAN4ES/A/DIM  |     | EDLED/GU10WF/5WW/DIM   |     |
| EDLED/FCAN4ES/CW     |     |                        |     |
|                      |     | EDLED/GX53CW           |     |
| EDLED/FCAN4ES/DIM    |     | EDLED/GX53DW           |     |
| EDLED/FCAN4SBC       | .45 | EDLED/GX53WW           | .67 |
| edled/fcan4sbc/a/dim |     | EDLED/HID11            |     |
| EDLED/FCAN4SBC/CW    |     | EDLED/HID15            |     |
| EDLED/FCAN4SBC/DIM   |     |                        |     |
|                      |     | EDLED/PLL12            |     |
| EDLED/FCAN4SES       |     | EDLED/PLL16            | .78 |
| EDLED/FCAN4SES/A/DIM | .45 | EDLED/PLL20            | .78 |
| edled/fcan4ses/cw    | .45 | EDLED/PLL8             | 78  |
| EDLED/FCAN4SES/DIM   |     | EDLED/S14D/300MM       |     |
| EDLED/FG125A/4BC/DIM |     | EDLED/S14D/S00MM       |     |
|                      |     |                        |     |
| EDLED/FG125A/4ES/DIM |     | EDLED/S14S/300MM       |     |
| EDLED/FG45/4BC       |     | EDLED/S14S/500MM       | .61 |
| EDLED/FG45/4BC/DIM   | .46 | EDLEDKIT/DIM           | .57 |
| EDLED/FG45/4ES       | .46 | EDLEDKIT/DIM/WW        | 57  |
| EDLED/FG45/4ES/DIM   |     | EDLEDTUBE/8FT/CW       |     |
| EDLED/FG45/4SBC      |     |                        |     |
|                      |     | EDLEDTUBE/G2FT         |     |
| EDLED/FG45/4SBC/DIM  |     | EDLEDTUBE/G2FT/CC      | .83 |
| EDLED/FG45/4SES      | .46 | EDLEDTUBE/G3FT         | .82 |
| EDLED/FG45/4SES/DIM  | .46 | EDLEDTUBE/G3FT/CC      | .83 |
| EDLED/FG95A/4BC/DIM  |     | EDLEDTUBE/G4FT         |     |
| EDLED/FG95A/4ES/DIM  |     |                        |     |
|                      |     | EDLEDTUBE/G4FT/CC      |     |
| EDLED/FGLS4BC        |     | EDLEDTUBE/G5FT         |     |
| EDLED/FGLS4BC/DIM    | .47 | EDLEDTUBE/G5FT/CC      | .83 |
| EDLED/FGLS4ES        | .47 | EDLEDTUBE/G6FT         | 82  |
| EDLED/FGLS4ES/DIM    |     | EDLEDTUBE/G6FT/CC      |     |
| EDLED/FGLS6BC        |     | EDLEDTUBETS/12CW       |     |
| EDLED/FGLS6BC/CS     |     |                        |     |
|                      |     | EDLEDTUBET5/16CW       |     |
| EDLED/FGLS6BC/CW     |     | EDLEDTUBET5/20CW       | .81 |
| EDLED/FGLS6BC/DIM    | .47 | EDLEDTUBET5/8CW        | .81 |
| EDLED/FGLS6ES        |     | EDM258LL 1             |     |
| EDLED/FGLS6ES/CS     |     | EDM262LL 1             |     |
| EDLED/FGLS6ES/CW     |     |                        |     |
|                      |     | EDM266LL               |     |
| EDLED/FGLS6ES/DIM    |     | EDM269LL               |     |
| EDLED/FGLS8BC        | .47 | EDM281LL1              | 30  |
| EDLED/FGLS8BC/DIM    | .47 | EDM32ESL1              | 132 |
| EDLED/FGLS8ES        |     | EDM47ESL 1             |     |
| EDLED/FGLS8ES/DIM    |     |                        |     |
|                      |     | EDM75ESL               |     |
| EDLED/FHOODSES       | 70  | EDM91ESL1              |     |
| EDLED/FPT20SBC       | .72 | EDOVEN15SES1           | 37  |
| EDLED/FPT20SES       | .72 | EDOVEN25SES1           | 37  |
| EDLED/FPT28BC        |     | EDOVEN40G91            |     |
| EDLED/FPT28ES        |     |                        |     |
|                      |     | EDOVEN40SES            |     |
| EDLED/FST58/4BC      |     | EDP15BC/CL1            |     |
| EDLED/FST58/4BC/DIM  |     | EDP15SBC/CL1           | 16  |
| EDLED/FST58/4ES      | .49 | EDP15SES/CL1           | 16  |
| EDLED/FST58/4ES/DIM  |     | EDT13/84               |     |
| FDI FD/FST58A/4BC    |     |                        | 113 |



| EDT18/84         | 112 | FG4CW/2P        | 60  |
|------------------|-----|-----------------|-----|
| EDT26/82         |     | FG9/2P          |     |
| EDT26/84         |     | FG9/D           |     |
|                  |     | FG9CW/2P        |     |
| EDTE13/82        |     |                 |     |
| EDTE13/84        |     | FG9CW/D         |     |
| EDTE18/82        |     | FGLSBC/AM       |     |
| EDTE18/84        |     | FGLSBC/BL       |     |
| EDTE26/82        |     | FGLSBC/CC       |     |
| EDTE26/84        |     | FGLSBC/GR       |     |
| EDTE32/82        |     | FGLSBC/MA       | 99  |
| EDTE32/84        | 114 | FGLSBC/RE       | 99  |
| EDTE42/82        | 114 | FGLSBC/WH       | 99  |
| EDTE42/84        | 114 | FGLSBC/YE       | 99  |
| F6BCP            | 19  | FGLSES/AM       | 99  |
| F6BCP/CW         | 19  | FGLSES/BL       | 99  |
| F6ESP            | 19  | FGLSES/CC       | 95  |
| F6ESP/CW         |     | FGLSES/GR       |     |
| F9.5BCP          |     | FGLSES/MA       |     |
| F9.5BCP 110V     |     | FGLSES/RE       |     |
| F9.5BCP/CW       |     | FGLSES/WH       |     |
| F9.5BCP/D        |     | FGLSES/YE       |     |
| F9.5ESP          |     | FGU10/5CW/10P   |     |
| F9.5ESP 110V     |     | FGU10/5CW/10F   |     |
|                  |     |                 |     |
| F9.5ESP/CW       |     | FGU10/5DW/10P   |     |
| F9.5ESP/D        |     | FGU10/5DW/10P/D |     |
| FC3BC/OP         |     | FGU10/5WW/10P   |     |
| FC3ES/OP         |     | FGU10/5WW/10P/D |     |
| FC3SBC/OP        |     | FGU10/BL        |     |
| FC3SES/OP        |     | FGU10/CC        |     |
| FC6BC/OP         |     | FGU10/CW        |     |
| FC6BC/OP/CW      |     | FGU10/CW/10P    |     |
| FC6BC/OP/D       |     | FGU10/CW/D      | 35  |
| FC6ES/OP         | 11  | FGU10/DW        | 35  |
| FC6ES/OP/CW      | 11  | FGU10/DW/D      | 35  |
| FC6ES/OP/D       | 11  | FGU10/G/CW      | 36  |
| FC6SBC/OP        | 11  | FGU10/G/CW/D    | 36  |
| FC6SBC/OP/CW     | 11  | FGU10/G/WW      | 36  |
| FC6SES/OP        | 11  | FGU10/G/WW/D    | 36  |
| FC6SES/OP/CW     | 11  | FGU10/GR        | 96  |
| FC6SES/OP/D      |     | FGU10/PAR11WW   |     |
| FC7BC/OP         |     | FGU10/RE        |     |
| FC7ES/OP.        |     | FGU10/WW        |     |
| FC7SBC/OP        |     | FGU10/WW/10P    |     |
| FC7SES/OP        |     | FGU10/WW/D      |     |
| FDR6BC/OP        |     | FGU10CW/74MM    |     |
| FDR6ES/OP        |     | FGU10DW/74MM    |     |
| FDR6SBC/OP       |     | FGU10WW/74MM    |     |
| FDR6SES/OP       |     | FGY6.35/2.6CW   |     |
| FDRBC/AM         |     | FGY6.35/2.6WW   |     |
| FDRBC/BL         |     | FGY6.35/4.5CW   |     |
| FDRBC/GR         |     | FGY6.35/4.5CW   |     |
|                  |     | FHID100         |     |
| FDRBC/MAFDRBC/RE |     |                 |     |
|                  |     | FHID120         |     |
| FDRBCA/F         |     | FHID20/E27      |     |
| FDRBC/YE         |     | FHID30          |     |
| FDRES/AM         | 98  | FHID30/E27      | 89  |
| FDRES/BL         |     | FHID60          |     |
| FDRES/GR         |     | FHID85          |     |
| FDRES/MA         |     | FHIDG12         |     |
| FDRES/RE         |     | FR39            |     |
| FDRES/WH         |     | FR50            |     |
| FDRES/YE         |     | FR63            |     |
| FF5M0.5M         |     | FR80            |     |
| FF5M1M           | 51  | G9/E27          |     |
| FFF1ES/5P        |     | GU10/B22        |     |
| FFF2ES/5P        | 51  | GU10/E27        | 102 |
| FFGWKIT          | 51  | IR300CL         | 136 |
| FFLED/ES         | 101 | IR300CL/P       | 136 |
| FFLED/ES/MINI    |     | LED DRIVER 18W  | 102 |
| FFPC             |     | OVEN40ES        |     |
| FG4/2P           |     | T13ES/FK        |     |



### TERMS & CONDITIONS

#### 1. Interpretation

In these Conditions, the following words shall have the following meanings: Buyer means the person, firm or company who places an Order with the Seller; Customer Agreement means the Credit Account Application overleaf and any and all agreements made between the Buyer and the Seller for the supply of

Goods means any goods (or instalment or part thereof) howsoever ordered by the Buyer from the Seller:

Guarantee means the guarantee embedded in the Seller's Credit Account Application.

Guarantor means the person who enters into the Guarantee embedded in the Seller's Credit Account Application.

Order means any order sent to the Seller by the Buyer for the supply of Goods and/or Services;

Seller means Lancaster Holdings Ltd (CRN:11089637) whose registered office is at Georgina Mackie House, 141 Farmer Ward Road, Kenilworth, Warwickshire CV8 2SU:

Services means any services (or instalment or part thereof) howsoever ordered by the Buyer from the Seller.

A reference to a particular law is a reference to it as it is in force for the time being taking account of any amendment, extension, application or re-enactment and includes any subordinate legislation for the time being in force made under

#### Basis of Sale

- (a) An Order shall be accepted entirely at the discretion of the Seller and if accepted will only be accepted on the basis of these Conditions which shall (together with such conditions as may be expressly incorporated by reference herein or as may be agreed in writing by the Buyer and the Seller) form the entire agreement between the Buyer and Seller to the exclusion of any other conditions (including any terms or conditions which the Buyer purports to apply under any purchase order, confirmation of order, specification or other document).
- Each Order which the Seller accepts (by way only of issue of the Seller's standard order acknowledgement form or on delivery of the Goods and/or performance of the Services (as the case may be) to the Buyer's address shown in the Order) shall constitute a separate legally binding contract between the Seller and the Buyer.
- No addition, variation or substitution of these Conditions shall bind the Seller or form any part of any contract unless expressly accepted in writing by an authorised representative of the Seller
- The Seller's employees or agents are not authorised to make any representations with regard to the subject matter of any contract between the Seller and the Buyer. In entering into a contract with the Seller, the Buyer acknowledges that if it relies on any representation, advice or recommendation given by the Seller, its employees or agents to the Buyer as to the Goods and/or the Services (as the case may be) it does so entirely at the Buyer's own risk.

#### 3. Specification

- (a) The Buyer shall be responsible to the Seller for ensuring the accuracy of the terms of any Order and specification submitted by the Buyer and for checking and ensuring the accuracy of any order acknowledgment form issued by the
- The Buyer shall not be entitled to rely on any typographical, clerical or other error or omission in any sales literature, quotations, price-list, acceptance of offer, invoice or other document or information issued by the Seller which the Buyer acknowledges shall not form part of or be incorporated by reference into any contract between the Seller and the Buyer. Any such error or omission shall be subject to correction without any liability on the part of the Seller.
- (c) The Seller reserves the right to make changes in the specification of the Goods and/or the Services (as the case may be) which are required to conform with any applicable statutory or regulatory requirements and which do not materially affect quality or performance.
- If the Goods are to be manufactured or any process is to be applied to the Goods by the Seller in accordance with a specification submitted by the Buyer, the Buyer shall indemnify the Seller against all loss, damages costs and expenses awarded against or incurred by the Seller in settlement of any claim for infringement of any patent, copyright, design, trade mark or other industrial or intellectual property rights of any other person which result from the Seller's use of the Buyer's specification.

#### 4 Price of Goods and Services

- (a) The price for the Goods and/or the Services (as the case may be) shall be:
- the Seller's price set out in the Seller's quotation issued to the Buyer; or
- in the absence of any such quotation, the Seller's standard price for the Goods or Services (subject to any discount in accordance with clause 4(g)): Any prices quoted are valid for only 30 days from the date of quotation or until earlier acceptance by the Buyer, after which they may be altered by the Seller

- without giving notice to the Buyer.
- Any quotation or estimate given by the Seller is an indication given in good faith and shall not become binding upon the Seller unless subsequently confirmed by the Seller in writing
- All prices quoted are based on information available at the date of quotation and the Seller reserves the right to vary prices at any time without notice prior to the date of issue of the relevant invoice and the price payable by the Buyer shall be the price applicable at the date of the invoice.
- Unless otherwise stated, the price of the Goods and/or the Services (as the case may be) is exclusive of VAT and any other taxes and the cost of carriage and any other matters all of which the Buyer shall pay to the Seller in addition.
- In the event of any increase in cost to the Seller which is beyond the control of the Seller (including (without limitation) any increases imposed upon the Seller by its own suppliers) and/or any variation or suspension of the work which is agreed to by the Seller upon the Buyer's request, or if the Buyer's instructions are incorrect or insufficient, the Seller shall be entitled to adjust the price of the Goods and/or the Services (as the case may be) to reflect the costs involved, and to adjust delivery dates as appropriate.
- The Seller shall be entitled to bring an action for the price of the Goods and/or the Services (as the case may be) or part thereof notwithstanding that delivery and/or performance may not have taken place and/or that ownership in the Goods has not passed to the Buyer.
- The Seller at its absolute discretion may decide to apply a discount in such amount as it may think fit to the price for the Goods and/or Services. The amount of any discount shall be recorded in the invoice issued to the Buyer.

#### 5. Payment

- The Seller shall be entitled to invoice the Buyer for the price of the Goods and/ or the Services (as the case may be) at any time prior, on or following delivery of the Goods and/or performance of the Services (as the case may be) unless the Buyer wrongfully fails to take delivery of the Goods in which event the Seller shall be entitled to invoice the Buyer for the full amount at any time after the Seller has notified the Buyer that the Goods are ready for collection or (as the case may be) the Seller has tendered delivery of the Goods.
- Until a Credit Account has been opened by the Seller in favour of the Buyer, the Buyer shall pay the price for the Goods and/or the Services (as the case may be) on or prior to delivery and (where applicable) upon receipt of the Seller's
- The time of payment of the price shall be of the essence of any contract between the Seller and the Buyer.
- A Buyer in whose favour a Credit Account has been opened shall, unless otherwise agreed in writing by the Seller, pay the price for the Goods and/or the Services (as the case may be) on or before the 28th day (or the next working day if the 28th day of a particular month is a Saturday or a Sunday) of the month following the date of the Seller's invoice.
- No payment shall be deemed to have been received until the Seller has received cleared funds. All payments payable to the Seller under the contract between the Seller and the Buyer shall become due immediately on its termination despite any other provision.
- Where payment is not made by the due date, regardless of its other remedies, the Seller shall be entitled to (i) cancel the contract between the Seller and the Buver or suspend any further deliveries to the Buver; and (ii) claim interest and /or compensation for reasonable debt recovery costs under the Late Payment of Commercial Debts (Interest) Act 1998 as amended and supplemented by the Late Payment of Commercial Debts Regulations 2002.
- In the event that the Seller is, for whatever reason, unable to claim interest and/ or compensation under the Late Payment of Commercial Debts (Interest) Act 1998 as amended and supplemented by the Late Payment of Commercial Debts Regulations 2002, the Seller reserves the right to charge the Buyer interest (both before and after any judgment) on the amount unpaid at the rate of 4% (four per cent) per annum above the base rate from time to time of the Bank of England, accruing on a daily basis until payment is made in full, and for such purposes, the Buyer and the Seller agree that such rate is reasonable and reflects a genuine pre-estimate of the loss that the Seller would incur as a result of any default by the Buyer to make payment on the due date.
- If any payment is dishonoured or countermanded by the Buyer, the Seller shall have the right to charge the Buyer an administration fee of £25.00 (or such other fee as may be notified to the Buyer from time to time).
- Any claim by the Buyer that an invoice rendered by the Seller is in the incorrect amount or contains any other error must be notified to the Seller in writing within 7 days of the date of the invoice. If the Buyer does not notify the Seller accordingly, the Buyer shall not be entitled to claim that the invoice is incorrect or contains any other error whatsoever.

#### Delivery

Delivery of the Goods shall be made by the Buyer collecting the Goods at the Seller's premises or, if some other place for delivery is agreed by the Seller, by the Seller delivering the Goods to that place.

### **TERMS & CONDITIONS**



- (b) Any delivery date quoted is given in good faith, but the Seller shall not be responsible for any delay in delivery of the Goods and/or the performance of the Services (as the case may be) howsoever caused. Time for delivery shall not be of the essence of the contract between the Seller and the Buyer and the Seller shall not be liable for any delay in delivery howsoever caused.
- (c) The Seller shall be entitled to make delivery by instalments (in which case each delivery shall constitute a separate contract), and to invoice the Buyer separately for each instalment. Failure by the Seller to deliver any one or more of the instalments in accordance with these Conditions or any claim by the Buyer in respect of any one or more instalments shall not entitle the Buyer to treat the contract as a whole between the Seller and the Buyer as repudiated.
- (d) Except in the case of delivery at the Seller's premises, the Buyer shall at its own expense use all reasonable endeavours to ensure that the Seller is able to freely access and make any deliveries to any other place for delivery at such time(s) as may be specified by the Seller. Any failure by the Buyer to comply with the provisions of this condition or to otherwise accept delivery (save upon such grounds for rejection as are specified in the law relating to the Sale of Goods) shall be deemed to be a breach of contract. Any additional costs incurred by the Seller in re-delivering the Goods (either to the originally agreed place for delivery or to such other place as may be reasonably requested by the Buyer) will be charged to the Buyer.
- (e) The quantity of any consignment of Goods as recorded by the Seller upon despatch from the Seller's premises shall be conclusive evidence of the quantity received by the Buyer on delivery unless the Buyer can provide conclusive evidence proving the contrary.
- (f) Notwithstanding the provisions of condition 8(e), the Seller shall not be liable for any under-delivery of Goods in whole or in part (even if caused by the Seller's negligence) unless the Buyer gives written notice to the Seller of the under-delivery within 48 hours of the date when the Goods are delivered to the Buyer (as recorded by the Seller) or, if there is no such record, when the Goods would in the ordinary course of events have been received. Any liability of the Seller for under-delivery of the Goods shall be limited to replacing the Goods within a reasonable time or issuing a credit note at the pro rata contract rate against any invoice raised for such Goods.

#### 7. Risk and Title

- (a) Risk of damage to or loss of the Goods shall pass to the Buyer at the time of
- (b) Notwithstanding delivery and the passing of risk in the Goods, or any other provisions in these Conditions, ownership in the Goods shall not pass to the Buyer until the Seller has received in full (in cash or cleared funds) all sums due to it in respect of the Goods and all other sums which are or which become due to the Seller from the Buyer on any account.
- (c) Until ownership of the Goods has passed to the Buyer in accordance with these Conditions, the Buyer shall:
- (i) hold the Goods on a fiduciary basis as the Seller's bailee;
- (iii) store the Goods (at no cost to the Seller) separately from all other Goods of the Buyer or any third party in such a way that they remain readily identifiable as the Seller's property;
- (iii) not destroy, deface or obscure any identifying mark or packaging on or relating to the Goods:
- (iv) maintain the Goods in satisfactory condition insured on the Seller's behalf for their full price against all risks to the reasonable satisfaction of the Seller (and produce the policy of insurance to the Seller on request); and
- (v) hold the proceeds of the insurance referred to in condition 7(c) (iv) on trust for the Seller and not mix them with any other money, nor pay the proceeds into an overdrawn bank account.
- (d) The Buyer may resell the Goods before ownership has passed to it solely on the following conditions:
- (i) any sale shall be effected in the ordinary course of the Buyer's business at full market value and the Buyer shall hold such part of the proceeds of sale as represent the amount owed by the Buyer to the Seller on behalf of the Seller and the Buyer shall immediately account to the Seller accordingly; and
- (ii) any such sale shall be a sale of the Seller's property on the Buyer's own behalf and the Buyer shall deal as principal when making such a sale.
- (e) The Buyer's right to possession of the Goods shall terminate immediately if:

  (i) the Buyer has a bankruptcy order made against him or makes an arrangement or composition with his creditors, or otherwise takes the benefit of any statutory provision for the time being in force for the relief of insolvent debtors, or (being a body corporate) convenes a meeting of creditors (whether formal or informal), or enters into liquidation (whether voluntary or compulsory) except a solvent voluntary liquidation for the purpose only of reconstruction or amalgamation, or has a receiver and/or manager, administrator or administrative receiver appointed of its undertaking or any part thereof, or documents are filed with the court for the appointment of an administrator of the Buyer or notice of intention to appoint an administrator is given by the Buyer or its directors or by a qualifying floating charge holder (as defined in paragraph 14 of Schedule B1 to the Insolvency Act 1986), or a resolution is passed or a petition presented to any court for the winding-up of the Buyer or for the granting of an administration

- order in respect of the Buyer, or any proceedings are commenced relating to the insolvency or possible insolvency of the Buyer; or
- (ii) the Buyer suffers or allows any execution, whether legal or equitable, to be levied on his/fits property or obtained against him/ft, or fails to observe or perform any of his/fts obligations under the Contract or any other contract between the Seller and the Buyer, or is unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986 or the Buyer ceases to trade;
- (iii) the Buyer encumbers or in any way charges any of the Goods.
- (f) The Buyer grants the Seller, its agents and employees an irrevocable licence at any time to enter any premises where the Goods are or may be stored in order to inspect them, or, where the Buyer's right to possession has terminated, to recover them.
- (g) Where the Seller is unable to determine whether any Goods are the goods in respect of which the Buyer's right to possession has terminated, the Buyer shall be deemed to have sold all goods of the kind sold by the Company to the Buyer in the order in which they were invoiced to the Buyer.
- (h) On termination of the contract between the Seller and the Buyer, howsoever caused, the Seller's (but not the Buyer's) rights contained in this condition 7 shall remain in effect.
- Following the transfer of ownership of the Goods to the Buyer in accordance with these Conditions, the Buyer shall (where applicable) (i) be responsible for financing the collection, treatment, recovery and environmentally sound disposal of all WEEE (as hereinafter defined) arising or deriving from the Goods; and all WEEE arising or deriving from goods placed on the market prior to 13 August 2005 where such goods are to be replaced by the Goods and the Goods are of an equivalent type or are fulfilling the same function as that of such goods; (ii) comply with all additional obligations placed upon the Buyer by the Waste Electrical and Electronic Equipment Regulations 2006 ("the WEEE Regulations") by virtue of the Buyer accepting the responsibility set out in section (i) above; (iii) provide the Buyer's WEEE compliance scheme operator with such data, documents, information and other assistance as such compliance scheme operator may from time to time reasonably require to enable such compliance scheme operator to satisfy the obligations assumed by it as a result of the Buyer's membership of such scheme; and (iv) be responsible for all costs and expenses arising from and relating to its obligations set out in this paragraph (except in respect of Goods which constitute gas discharge lamps, in which case an upfront and 'visible' charge will have been levied at the outset and the Buyer undertakes to contact the compliance scheme operator of the gas discharge lamp branded manufacturer to arrange compliance with the WEEE Regulations on that basis). Terms used in this Condition shall have the meaning ascribed thereto in the WEEE Regulations.

#### 8. Additional Terms of Guarantee

- (a) All sums of money which may not be recoverable from the Guarantor on the footing of the guarantee whether by reason of legal limitation on the Buyer or any other circumstance shall nevertheless be recoverable from the Guarantor as principal debtor and shall be paid on demand.
- (b) A demand for payment or any other notice to the Guarantor may be made by any authorised officer of the Seller by letter addressed to the Guarantor and delivered to it's registered office or residential address and if sent by post shall be deemed to have been made at noon the following day after the letter was nosted.
- (c) This Guarantee shall be a continuing security and the Guarantor shall remain liable for all sums due by the Buyer notwithstanding any event which absolves the Buyer from liability. The Guarantor shall remain liable notwithstanding any alteration to the Customer Agreement or any terms applying thereto, which may be agreed between the Seller and the Buyer.
- (d) Until payment in full by the Guarantor of all sums due to the Seller by the Buyer, the Guarantor shall not be entitled to participate in any security held or money received by the Seller on account of such balance.
- (e) This Guarantee may be terminated and the Guarantor's liability shall be fixed at the expiration of one calendar month after receipt by the Seller from the Guarantor of notice in writing to terminate it. It shall be lawful for the Seller to continue the account with the Buyer notwithstanding such termination and the Guarantor shall remain liable for any amount due at the date of termination of this Guarantee.
- (f) The Guarantor may be released absolutely from the Guarantee upon written application to the Seller. Any such release shall be at the Seller's absolute discretion and shall be on such terms including as to the date of release that the Seller may specify. Any settlement discharge or release between the Guarantor and the Seller shall be conditional upon no security or payment to the Seller by the Buyer or any other person being avoided or reduced due to insolvency laws or otherwise.
- (g) The Seller may at any time without giving notice to or obtaining the consent of the Guarantor refuse or grant further credit to the Buyer for any period and compound with give time for payment grant other indulgence or make any



### **TERMS & CONDITIONS**

- other arrangements with the Buyer, give up modify exchange or abstain from perfecting or taking advantage of or enforcing any security guarantee and discharge any parties thereto and realise any securities in such manner as the Seller may think expedient.
- (h) All costs charges and expenses incurred by the Seller in obtaining payment of the moneys secured under this guarantee (and so that any taxation of the Seller's costs charges and expenses shall be on a full indemnity basis) shall be recoverable from the Guarantor as a debt.

#### 9. Warranties and Liability

- (a) The Seller warrants that, except in relation to intellectual property rights of third parties, it has good title to the Goods and (subject to the conditions set out below) the Goods shall correspond with their written specification (if any) at the time of delivery and will be free from material defects in materials and workmanship for a period of 12 months or separately stated period from delivery, provided that the Seller shall be under no liability:
- in respect of any defect arising from any drawing, design, specification or stipulation of the Buyer; or
- (ii) in respect of any defect or lack of performance arising from fair wear and tear, wilful damage, negligence, abnormal working conditions, failure to follow Seller's instructions, or misuse, alteration or repair of the Goods without the Seller's approval: or
- (iii) in respect of parts or materials not manufactured by the Seller, in respect of which the Buyer shall only be entitled to the benefit of any warranty or guarantee which is given by the manufacturer to the Seller; or
- (iv) if the full price for the Goods has not been paid by the due date for payment.
- (b) The Seller warrants that the Services will be provided using reasonable care and skill and, as far as reasonably possible, in accordance with the contract between the Seller and the Buyer.
- (c) Subject as expressly provided in these Conditions, and except where the Goods and/or Services (as the case may be) are supplied to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977), all warranties, conditions or other terms implied by statute or common law are excluded to the fullest extent permitted by law.
- (d) Where the Goods and/or the Services (as the case may be) are supplied under a consumer transaction (as defined by the Consumer Transactions (Restrictions on Statements) Order 1976) the statutory rights of the Buyer are not affected by these Conditions.
- (e) Any claim by the Buyer arising from any defect in the quality or condition of the Goods or their failure to correspond with the agreed specification shall (whether or not delivery is refused by the Buyer) be notified to the Seller in writing within 7 days of delivery or (where the defect or failure was not apparent on reasonable inspection) within a reasonable time of the defect or failure becoming apparent. If delivery is not refused, and the Buyer does not notify the Seller accordingly, the Buyer shall not be entitled to reject the Goods and the Seller shall have no liability for such defect or failure, and the Buyer shall be bound to pay the contract price as if the Goods had been delivered in accordance with the contract between the Seller and the Buyer.
- (f) Where the Seller accepts a claim made by the Buyer in respect of the Goods made in accordance with these Conditions, the Buyer's right shall be to a full or partial credit note (in relation to Goods purchased on credit account) full or partial refund (in relation to Goods purchased by cash) or replacement of the Goods (or the part(s) in question), at the Seller's option, but the Seller shall have no further liability to the Buyer.
- (g) Except in respect of death or personal injury caused by the Seller's negligence, the Seller shall not be liable to the Buyer by reason of any representation (unless fraudulent), or any implied warranty, condition, or other term, or any tortious act (including negligence) or any duty at common law, or under the express terms of the contract between the Seller and the Buyer, or in any manner what course.
- (i) for any indirect, special or consequential loss or damage;
- for any economic loss including loss of profits, loss of business, depletion of goodwill and/or similar losses, loss of anticipated savings, loss of goods, loss of contract, loss of use; or loss of /or corruption of data or information, howsoever caused and even if foreseeable by the Seller; which in either case may arise out of, or in connection with the supply of the Goods and/or the Services or their use or resale by the Buyer (and whether caused by the negligence of the Seller, its employees or agents or otherwise) save as may be expressly provided in these Conditions.
- (h) The entire liability of the Seller under or in connection with the contract between the Seller and the Buyer shall not exceed the price of the Goods and/or the Services (as the case may be) save as expressly provided in these Conditions.
- (i) Any repair, replacement or refund of any monies made by the Seller to the Buyer shall not under any circumstances be deemed to be an admission of any liability on the part of the Seller to the Buyer (or any third party), and shall be without prejudice to the rights of the Seller which the Seller hereby reserves in full should it make any such repairs, replacements or refunds of monies.
- (j) The Seller shall not be liable to the Buyer, or be deemed to be in breach of contract by reason of any delay in performing, or any failure to perform any of

the Seller's obligations in relation to any Goods and/or Services (as the case may be) if the delay or failure is due to any cause beyond the Seller's reasonable control

#### 10. Design and Drawings

- (a) All figures, statements, advice, recommendations, drawings, designs, suggestions and specifications contained or referred to in any documents supplied by the Seller to the Buyer are given in good faith, but shall be approximate only, and shall not (unless the Seller specifically warrants the same in writing) be warranted to be accurate. All such matters should be checked and verified for accuracy and suitability by the Buyer, and accordingly the Seller accepts no liability or responsibility whatsoever in relation to such matters unless specifically warranted in writing in the manner referred to above.
- (b) The Seller will make available information required in relation to the design, construction and testing of the Goods as is reasonably necessary for the Buyer to take appropriate steps to see that the Goods will be, when installed, safe and not constitute a risk to the health of any person provided always that the Buyer shall indemnify, and keep indemnified, the Seller against all claims, costs, actions, damages or liabilities resulting directly or indirectly (including economic and consequential loss) for any claim brought against the Seller arising out of the use of the Goods.

#### 11. Termination/Suspension

- (a) The Buyer shall not be entitled to cancel the contract between the Seller and the Buyer and if the Buyer purports to do so it shall indemnify the Seller for all losses, costs and expenses incurred by the Seller in relation to the contract.
- (b) Without prejudice to any other right or remedy, the Seller shall be entitled to suspend forthwith further performance and/or terminate contractual relations with the Buyer without any liability to the Buyer if the Buyer:
- (i) is in breach of any of these Conditions or (in the absolute opinion of the Seller) is likely to breach any Condition herein; or
- (ii) becomes insolvent, has a receiver appointed over the whole or any part of its assets, enters into any compound with creditors, or has an order made or resolution passed for it to be wound up (otherwise than in furtherance of a scheme for amalgamation or reconstruction) or if the ownership or control of it shall pass into the hands of any other legal person, or an event analogous occurs in respect of the Buyer in any jurisdiction to which the Buyer is subject.

#### 12. General

- (a) The Seller is a member of a group of companies and accordingly the Seller may perform any of its obligations or exercise any of its rights hereunder by itself or through any other member of its group.
- (b) The Seller shall be entitled to subcontract the whole or any part of its obligations under the contract between the Seller and the Buyer to any third party which it may at its absolute discretion determine but any subcontract shall not relieve the Seller of its obligations hereunder.
- (c) Any notice required or permitted to be given by either party to the other under these Conditions shall be given in writing and addressed to the other party at its registered office, principal place of business or at such other address as may be notified to the other party from time to time.
- (d) No waiver by the Seller of any breach of contract by the Buyer shall be considered a waiver of any subsequent breach of the same or any other
- (e) If any term of these Conditions prove illegal or unenforceable in whole or part, such term shall be deemed excised from these conditions without effect upon the validity of the remainder of these Conditions.
- (f) A person who is not a party to the contract between the Seller and the Buyer has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce or enjoy the benefit of any term of such contract.
- (g) In addition to these Conditions of Sale, Orders placed via the Seller's website shall be subject to any legal terms and notices published there by the Seller.
- (h) These Conditions and the contract between the Buyer and Seller shall be governed by the laws of England, and the English Courts shall have exclusive jurisdiction.

Products offered for sale may differ from those described in this catalogue due to later production, changes in specification, components or place of manufacture.

Our policy is one of constant development and improvement.

Whilst every effort is made to make the catalogue accurate at the date of printing, specification and/or appearance may be changed in the interest of continuing improvement.

Fusion Lamps would like to acknowledge the help and support of its staff, customers and suppliers in providing information towards the publication of this catalogue. All products arr subject to availability and are correct at the time of print. Errors and omissions excepted.

Fusion Lamps reserve the right to change and or update products and specifications without prior notice.

