



# The best LED solution for High Intensity Discharge (HID) HPL lamp replacement

## MASTER - LED HID HPL

Philips Master LED HPL lamps offer an easy and short payback LED solution to replace High Intensity Discharge (HID) lamps. The products bring the energy efficiency and long lifetime benefits of LED to HID HPL replacement and provide instant saving and low initial investment. With the right lamp size and light distribution, you can easily retrofit Master LED HPL urban lamps and bypass the existing ballast while enhancing the lighting quality.

### Benefits

- Cost saving with short payback time
- Low initial investment
- Enhance lighting quality with easy adoption

### Features

- High energy efficiency
- Lifetime 50,000hrs
- IP65 product (IP rated sockets required for outdoor application)
- Surge protection 2KV
- Omnidirectional light around lamp
- Right lamp size and lighting distribution for direct retrofit
- Bypass ballast and save additional energy
- Pleasant white light with CRI 80

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## Application

- Parking Garages
- Parks and Plazas
- Road and Street

## Warnings and Safety

- Please refer to the installation guide or consult a Philips Lighting representative for wiring diagram and instructions.

## Versions

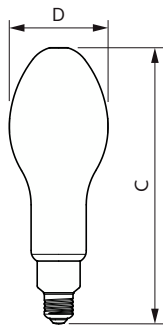
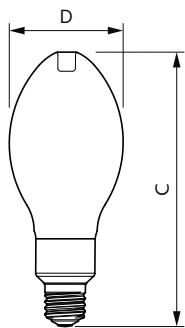


LEDTForce MAS HPL ED90 E40



LEDTForce MAS HPL ED75 E27

## Dimensional drawing

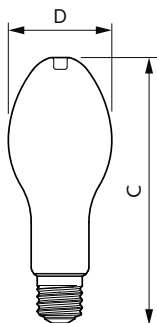


| Product                              | D     | C      |
|--------------------------------------|-------|--------|
| MAS LED HPL M 2.8Klm 19W 830E27 FR G | 71 mm | 186 mm |
| MAS LED HPL M 3Klm 19W 840 E27 FR G  | 71 mm | 186 mm |

| Product                                 | D     | C      |
|---|-------|--------|
| MAS LED HPL M 3.8Klm 24W 830 E27 FR G   | 91 mm | 249 mm |
| MAS LED HPL M 4Klm 24W 840 E27 FR G     | 91 mm | 249 mm |
| MAS LED HPL M 5.6Klm 33.5W 830 E27 FR G | 91 mm | 249 mm |
| MAS LED HPL M 6Klm 33.5W 840 E27 FR G   | 91 mm | 249 mm |

# MASTER - LED HID HPL

## Dimensional drawing



| Product                                 | D     | C      |
|---|-------|--------|
| MAS LED HPL M 5.6Klm 33.5W 830 E40 FR G | 91 mm | 238 mm |
| MAS LED HPL M 6Klm 33.5W 840 E40 FR G   | 91 mm | 238 mm |

### General Information

|                  |                |
|------------------|----------------|
| Switching Cycle  | 50,000         |
| Nominal lifetime | 50,000 hour(s) |

### Light Technical

|                                       |               |
|---------------------------------------|---------------|
| Beam Angle (Nom)                      | 300 degree(s) |
| Color rendering index (CRI)           | 80            |
| LLMF At End Of Nominal Lifetime (Nom) | 70 %          |

### Operating and Electrical

|                     |             |
|---------------------|-------------|
| Input Frequency     | 50 to 60 Hz |
| Line Frequency      | 50 to 60 Hz |
| Starting Time (Nom) | 0.5 s       |

### Temperature

|                           |               |
|---------------------------|---------------|
| Ambient temperature range | -30 to +45 °C |
|---------------------------|---------------|

### Controls and Dimming

|          |    |
|----------|----|
| Dimmable | No |
|----------|----|

### Mechanical and Housing

|             |                    |
|-------------|--------------------|
| Bulb Finish | Frosted            |
| Bulb Shape  | Tube, single-ended |

### General Information

| Order Code   | Full Product Name                       | Cap-Base |
|--------------|---|----------|
| 929003530902 | MAS LED HPL M 3.8Klm 24W 830 E27 FR G   | E27      |
| 929003531002 | MAS LED HPL M 4Klm 24W 840 E27 FR G     | E27      |
| 929003531102 | MAS LED HPL M 5.6Klm 33.5W 830 E27 FR G | E27      |
| 929003531202 | MAS LED HPL M 6Klm 33.5W 840 E27 FR G   | E27      |
| 929003531302 | MAS LED HPL M 5.6Klm 33.5W 830 E40 FR G | E40      |
| 929003531402 | MAS LED HPL M 6Klm 33.5W 840 E40 FR G   | E40      |
| 929003530702 | MAS LED HPL M 2.8Klm 19W 830E27 FR G    | E27      |
| 929003530802 | MAS LED HPL M 3Klm 19W 840 E27 FR G     | E27      |

## Light Technical

| Order Code   | Full Product Name                       | Correlated Color  |            |               |
|--------------|---|-------------------|------------|---------------|
|              |   | Temperature (Nom) | Color Code | Luminous Flux |
| 929003530902 | MAS LED HPL M 3.8Klm 24W 830 E27 FR G   | 3000 K            | 830        | 3,850 lm      |
| 929003531002 | MAS LED HPL M 4Klm 24W 840 E27 FR G     | 4000 K            | 840        | 4,000 lm      |
| 929003531102 | MAS LED HPL M 5.6Klm 33.5W 830 E27 FR G | 3000 K            | 830        | 5,600 lm      |
| 929003531202 | MAS LED HPL M 6Klm 33.5W 840 E27 FR G   | 4000 K            | 840        | 6,000 lm      |

| Order Code   | Full Product Name                       | Correlated Color  |            |               |
|--------------|---|-------------------|------------|---------------|
|              |   | Temperature (Nom) | Color Code | Luminous Flux |
| 929003531302 | MAS LED HPL M 5.6Klm 33.5W 830 E40 FR G | 3000 K            | 830        | 5,600 lm      |
| 929003531402 | MAS LED HPL M 6Klm 33.5W 840 E40 FR G   | 4000 K            | 840        | 6,000 lm      |
| 929003530702 | MAS LED HPL M 2.8Klm 19W 830E27 FR G    | 3000 K            | 830        | 2,850 lm      |

# MASTER - LED HID HPL

| Order Code   | Full Product Name                   | Correlated Color  |            |               |
|--------------|-------------------------------------|-------------------|------------|---------------|
|              |                                     | Temperature (Nom) | Color Code | Luminous Flux |
| 929003530802 | MAS LED HPL M 3Klm 19W 840 E27 FR G | 4000 K            | 840        | 3,100 lm      |

## Operating and Electrical

| Order Code   | Full Product Name                       | Power Consumption |
|--------------|---|-------------------|
| 929003530902 | MAS LED HPL M 3.8Klm 24W 830 E27 FR G   | 24 W              |
| 929003531002 | MAS LED HPL M 4Klm 24W 840 E27 FR G     | 24 W              |
| 929003531102 | MAS LED HPL M 5.6Klm 33.5W 830 E27 FR G | 33.5 W            |
| 929003531202 | MAS LED HPL M 6Klm 33.5W 840 E27 FR G   | 33.5 W            |

| Order Code   | Full Product Name                       | Power Consumption |
|--------------|---|-------------------|
| 929003531302 | MAS LED HPL M 5.6Klm 33.5W 830 E40 FR G | 33.5 W            |
| 929003531402 | MAS LED HPL M 6Klm 33.5W 840 E40 FR G   | 33.5 W            |
| 929003530702 | MAS LED HPL M 2.8Klm 19W 830E27 FR G    | 19 W              |
| 929003530802 | MAS LED HPL M 3Klm 19W 840 E27 FR G     | 19 W              |

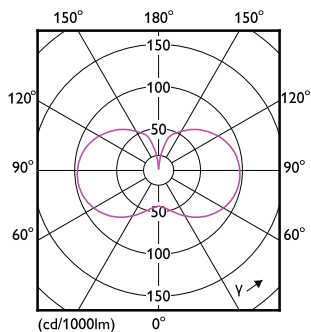
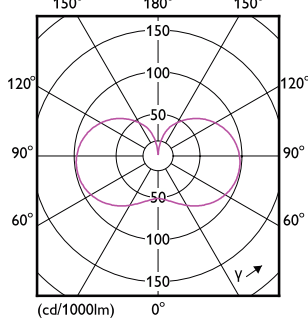
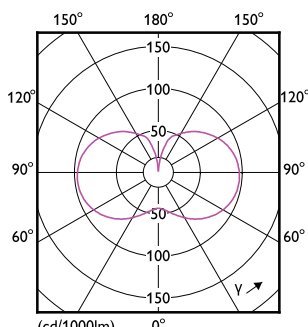
## Temperature

| Order Code   | Full Product Name                       | T-Case Maximum (Nom) |
|--------------|---|----------------------|
| 929003530902 | MAS LED HPL M 3.8Klm 24W 830 E27 FR G   | 55 °C                |
| 929003531002 | MAS LED HPL M 4Klm 24W 840 E27 FR G     | 55 °C                |
| 929003531102 | MAS LED HPL M 5.6Klm 33.5W 830 E27 FR G | 65 °C                |
| 929003531202 | MAS LED HPL M 6Klm 33.5W 840 E27 FR G   | 65 °C                |

| Order Code   | Full Product Name                       | T-Case Maximum (Nom) |
|--------------|---|----------------------|
| 929003531302 | MAS LED HPL M 5.6Klm 33.5W 830 E40 FR G | 65 °C                |
| 929003531402 | MAS LED HPL M 6Klm 33.5W 840 E40 FR G   | 65 °C                |
| 929003530702 | MAS LED HPL M 2.8Klm 19W 830E27 FR G    | 60 °C                |
| 929003530802 | MAS LED HPL M 3Klm 19W 840 E27 FR G     | 60 °C                |

## Approval and Application

| Order Code   | Full Product Name                       | Energy Consumption kWh/1000 h |
|--------------|---|-------------------------------|
| 929003530902 | MAS LED HPL M 3.8Klm 24W 830 E27 FR G   | 24 kWh                        |
| 929003531002 | MAS LED HPL M 4Klm 24W 840 E27 FR G     | 24 kWh                        |
| 929003531102 | MAS LED HPL M 5.6Klm 33.5W 830 E27 FR G | 34 kWh                        |
| 929003531202 | MAS LED HPL M 6Klm 33.5W 840 E27 FR G   | 34 kWh                        |
| 929003531302 | MAS LED HPL M 5.6Klm 33.5W 830 E40 FR G | 34 kWh                        |
| 929003531402 | MAS LED HPL M 6Klm 33.5W 840 E40 FR G   | 34 kWh                        |
| 929003530702 | MAS LED HPL M 2.8Klm 19W 830E27 FR G    | 19 kWh                        |
| 929003530802 | MAS LED HPL M 3Klm 19W 840 E27 FR G     | 19 kWh                        |



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