## **Jrungsram**<sup>™</sup>

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DATA SHEE<sup>-</sup>

# LED HID 18-120W

## **Product information**

LED HID lamps represent a safe, reliable and energy efficient alternative to HID lamps, specifically for outdoor and industrial applications. Our range offers retrofit replacement for a wide wattage range of E27 and E40 lamp installations. With the classic shape and optimized light distribution, customers can experience high quality LED solution for their existing fixtures without tools or costly upgrades. The new line features a passive cooling system, increasing the energy efficiency of the lamps and thus resulting in reduced operating costs, which savings are also supported by the increased service life of the products ensured by the high quality chips and the active temperature management.

### **Specification Features**

#### Long life

- 50 000 hours rated life (L70)
- Lasts 2-4x longer than typical HID lamps
- Active temperature management inside the lamp to ensure long life for this high power LED lamp

#### **High efficiency**

- Outstanding energy efficiency up to 140 lm/w
- E energy efficiency rating
- Uses 33% less energy compared to a 150W CMH lamp

#### High Quality lighting effect

- High uniformity of light with optimized light distribution
- Available with a CRI of 80 (vs CRI of 25 of the HPS lamps)

#### **Environmentally Conscious**

• Energy efficient lamp that contains no lead or mercury

#### **Features**

- 18-120W LED HID lamp delivers up to 33% energy saving
- High light output of 16 000 lumens
- Available in 3000K/4000K/6500K
- IP20 rating
- Can be operated on 100-240V Mains Voltage without HID ballast

## Accessories (included in the pack)

- Tether kit (safety wire kit) for 54W and above
- Installation guide

## **Application areas**



Street and Pedestrian



Commercial areas City beautification Architectural



Industrial

## **IEC standards**

#### CE Safety related standards:

IEC 62560:2012+A1:2015	Self-ballasted LED-lamps for general lighting services by voltage > 50 V – Safety specifications
IEC 60598-1:2014+A1:2017	Luminaires. Part 1: General requirements and tests
IEC 60598-2-1:1979+A1:1987	Luminaires. Part 2: Particular requirements. Section One: Fixed general purpose luminaires
IEC 62471:2008	Photobiological safety of lamps and lamp systems
IEC/TR 62778:2014	Photobiological safety of lamps and lamp systems – Part 2: Guidance on manufacturing requirements relating to non-laser optical radiation safety
IEC 60061-1:2014	Lamp caps and holders together with gauges for the control of interchangeability and safety
EN 62493:2015	Assessment of lighting equipment related to human exposure to electromagnetic field

#### EMC related standard:

EN 55015:2019	Limits and methods of measurement of radio disturbance characteristics of electrical lighting
EN 61547:2009	Specification for equipment for general lighting purposes. EMC Immunity requirements
EN 61000-3-2:2019	Limits for harmonic current emissions (equipment rated current <=16A)
EN 61000-3-3:2013+A1:2019	Limitation of voltage fluctuations and flicker in low voltage supply systems (equipment rated current <=16A)

## **Specification summary**

Product Code	Product Code (Direct Shipment)	Product Description	Rated Wattage (W)	Base	ССТ (К)	Rated Lumens (lm)	Life L70 (hrs)	CRI (Ra)	Energy Efficiency Class	Burn Position	Pack Qty (pcs)
93119621	93119534	LED HID 18W/830/E27/PC 1/24 TU	18	E27	3000	2250	50000	80	E	universal	24
93119622	93119535	LED HID 18W/840/E27/PC 1/24 TU	18	E27	4000	2400	50000	80	E	universal	24
93119623	93119596	LED HID 18W/865/E27/PC 1/24 TU	18	E27	6500	2310	50000	80	E	universal	24
93119624	93119597	LED HID 22W/830/E27/PC 1/24 TU	22	E27	3000	2750	50000	80	E	universal	24
93119625	93119598	LED HID 22W/840/E27/PC 1/24 TU	22	E27	4000	2930	50000	80	E	universal	24
93119626	93119599	LED HID 22W/865/E27/PC 1/24 TU	22	E27	6500	2820	50000	80	E	universal	24
93119627	93119600	LED HID 27W/830/E27/PC 1/24 TU	27	E27	3000	3370	50000	80	E	universal	24
93119628	93119601	LED HID 27W/840/E27/PC 1/24 TU	27	E27	4000	3600	50000	80	E	universal	24
93119629	93119602	LED HID 27W/865/E27/PC 1/24 TU	27	E27	6500	3460	50000	80	E	universal	24
93119630	93119603	LED HID 36W/830/E27/PC 1/12 TU	36	E27	3000	4500	50000	80	E	universal	12
93119631	93119604	LED HID 36W/840/E27/PC 1/12 TU	36	E27	4000	4800	50000	80	E	universal	12
93119632	93119605	LED HID 36W/865/E27/PC 1/12 TU	36	E27	6500	4620	50000	80	E	universal	12
93119633	93119606	LED HID 45W/830/E27/PC 1/12 TU	45	E27	3000	5620	50000	80	E	universal	12
93119634	93119607	LED HID 45W/840/E27/PC 1/12 TU	45	E27	4000	6000	50000	80	E	universal	12
93119635	93119608	LED HID 45W/865/E27/PC 1/12 TU	45	E27	6500	5770	50000	80	E	universal	12
93119636	93119609	LED HID 54W/830/E27/PC 1/12 TU	54	E27	3000	6740	50000	80	Е	universal	12
93119637	93119610	LED HID 54W/840/E27/PC 1/12 TU	54	E27	4000	7200	50000	80	Е	universal	12
93119638	93119611	LED HID 54W/865/E27/PC 1/12 TU	54	E27	6500	6930	50000	80	E	universal	12
93119639	93119612	LED HID 80W/830/E40/PC 1/4 TU	80	E40	3000	9990	50000	80	E	universal	4
93119640	93119613	LED HID 80W/840/E40/PC 1/4 TU	80	E40	4000	10660	50000	80	E	universal	4
93119641	93119614	LED HID 80W/865/E40/PC 1/4 TU	80	E40	6500	10260	50000	80	E	universal	4
93119642	93119615	LED HID 100W/830/E40/PC 1/4 TU	100	E40	3000	12490	50000	80	E	universal	4
93119643	93119616	LED HID 100W/840/E40/PC 1/4 TU	100	E40	4000	13330	50000	80	E	universal	4
93119644	93119617	LED HID 100W/865/E40/PC 1/4 TU	100	E40	6500	12820	50000	80	E	universal	4
93119645	93119618	LED HID 120W/830/E40/PC 1/4 TU	120	E40	3000	14990	50000	80	E	universal	4
93119646	93119619	LED HID 120W/840/E40/PC 1/4 TU	120	E40	4000	15990	50000	80	E	universal	4
93119647	93119620	LED HID 120W/865/E40/PC 1/4 TU	120	E40	6500	15390	50000	80	E	universal	4



\*according to regulation 2019/2015

## **Electrical and Photometric Characteristics**

Ambient temperature range	-25°C to +50°C				
Number of switching cycles	>15 000				
Lumen maintenance at B50	70%				
Color consistency	<6 steps				
Dimmable	No				
Fixture rating	Indoor: open fixture with dry conditions Outdoor: enclosed fixture only				
Starting time	<0.5sec				
Weight	297-1574g				
Lamp Voltage	100-240V				
Lamp Power Factor	>0.9				
Cooling	Passive cooling				

#### **Dimensions (mm)**

Lamp Description	Overall Length (mm)	Diameter (mm)
LED HID 18W/8xx/E27/PC	147	61
LED HID 22W/8xx/E27/PC	154	61
LED HID 27W/8xx/E27/PC	167	61
LED HID 36W/8xx/E27/PC	183	85
LED HID 45W/8xx/E27/PC	212	85
LED HID 54W/8xx/E27/PC	217	85
LED HID 80W/8xx/E40/PC	225	120
LED HID 100W/8xx/E40/PC	250	120
LED HID 120W/8xx/E40/PC	265	120

### **Operation and maintenance**

Store and use the lamps the same way as standard HID lamps.

- Lamps should be kept free from contamination.
- Switch off mains supply before installing/removing lamp.
- Good condition of the lamp-holder contacts is important to ensure proper operation of lamp.
- Use in Indoor open fixture with dry condition, Outdoor enclosed fixture only.
- Not for use in emergency lighting circuits.
- Re-wiring of fixture to bypass HID ballast, ignitor, capacitor is needed for this lamp

We in Tungsram Operations Kft. are constantly developing and improving our products. For this reason, all product descriptions in this catalogue are intended as a general guide, and we may change specifications from time to time in the interest of product development, without prior notification or public announcement. All descriptions in this publication present only general particulars of the goods to which they refer and shall not form part of any contract. Data in this guide has been obtained in controlled experimental conditions. However, Tungsram cannot accept any liability arising from the reliance on such data to the extent permitted by law. LED HID Passive cooling Datasheet – October 2021

