



# Ideal for HPI/SON/HPL LED replacement in Highbay application

## TrueForce LED Industrial and Retail (Highbay – HPI/SON/HPL)

Philips TrueForce LED Industrial and Retail lamps give you a quick and easy payback solution to replace HID lamps in High-bay applications. The solution gives you the LED benefits of energy-efficiency and long-lifetime, plus the initial investment is low. With unique lamp design and compatibility, you can directly retrofit HID lamps with TrueForce LED lamps without changing the fixtures or gear. Multiple beam angle options and high colour-rendering index enhance the lighting distribution while creating a comfortable, safe and high-productivity environment.

### Benefits

- Instant upgrade and easy to install - less time consuming and safer working at height
- Great payback (<2 years) and extended energy savings of 65% vs. existing conventional systems
- Low initial investment

### Features

- Direct lamp replacement solution without changing the fixture or gear
- High energy efficiency with directional light
- Long lifetime 50,000hrs for operation efficiency
- Crispy white light 4000K, CRI80 for better visual colour
- Product weight < 1,3kg

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## Application

- Industrial - factories, warehouses, distribution centres
- Retail - hyper markets, shopping malls
- Others - transportation hubs, convention centres, sport/city halls

## Warnings and Safety

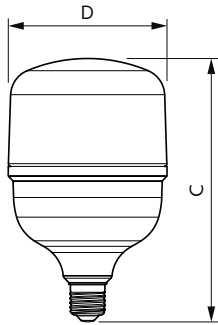
- EM version requires an EM ballast to operate. Please refer to the installation guide or consult a Philips Lighting representative.

## Versions

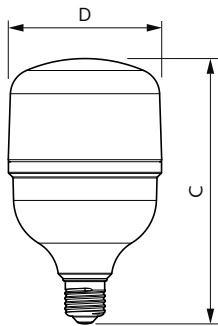


LEDTForce Entry GC T120

## Dimensional drawing



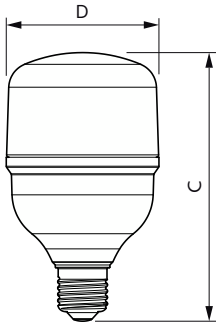
Product	D	C
TForce ESS LED HB MV 3.5Klm 35W 865 E27	102 mm	174 mm
TForce ESS LED HB MV 3.5Klm 35W 865 E27	102 mm	174 mm



Product	D	C
TForce ESS LED HB MV 4.5Klm 45W 865 E27	121 mm	199 mm
TForce ESS LED HB MV 4.5Klm 45W 865 E27	121 mm	199 mm

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## Dimensional drawing



Product	D	C
TForce ESS LED HB MV 2.5Klm 25W 865 E27	82 mm	141 mm
TForce ESS LED HB MV 2.7Klm 25W 865 E27	82 mm	141 mm

General Information	
Cap-Base	E27
Switching Cycle	50,000
Nominal lifetime	15,000 hour(s)
Light Technical	
Beam Angle (Nom)	180 degree(s)
Correlated Color Temperature (Nom)	6500 K
Color rendering index (CRI)	80
Color Code	865
LLMF At End Of Nominal Lifetime (Nom)	70 %
Operating and Electrical	
Input Frequency	50 to 60 Hz
Starting Time (Nom)	0.5 s
Controls and Dimming	
Dimmable	No
Mechanical and Housing	
Bulb Finish	Frosted

## Light Technical

Order Code	Full Product Name	Luminous Flux
19021400	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	4,500 lm
26014600	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	4,500 lm
19017700	TrueForce ESS LED HB MV 2.7Klm 25W 865 E27	2,700 lm
26010800	TrueForce ESS LED HB MV 2.5Klm 25W 865 E27	2,500 lm
19019100	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	3,500 lm
26012200	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	3,500 lm

## Operating and Electrical

Order Code	Full Product Name	Line Frequency	Power Consumption
19021400	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	50 to 60 Hz	45 W
26014600	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	-	45 W
19017700	TrueForce ESS LED HB MV 2.7Klm 25W 865 E27	50 to 60 Hz	25 W

Order Code	Full Product Name	Line Frequency	Power Consumption
26010800	TrueForce ESS LED HB MV 2.5Klm 25W 865 E27	-	25 W
19019100	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	50 to 60 Hz	35 W
26012200	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	-	35 W

## Temperature

Order Code	Full Product Name	T-Case Maximum (Nom)
19021400	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	77 °C

Order Code	Full Product Name	T-Case Maximum (Nom)
26014600	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	78 °C

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Order Code	Full Product Name	T-Case Maximum (Nom)
19017700	TrueForce ESS LED HB MV 2.7Klm 25W 865 E27	77 °C
26010800	TrueForce ESS LED HB MV 2.5Klm 25W 865 E27	78 °C

Order Code	Full Product Name	T-Case Maximum (Nom)
19019100	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	78 °C
26012200	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	79 °C

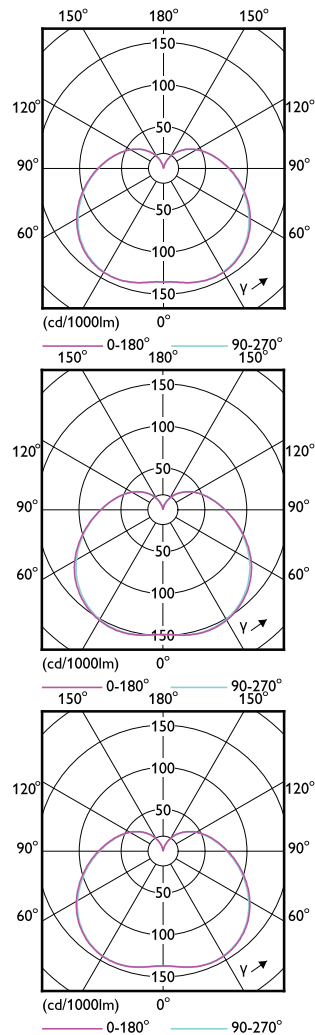
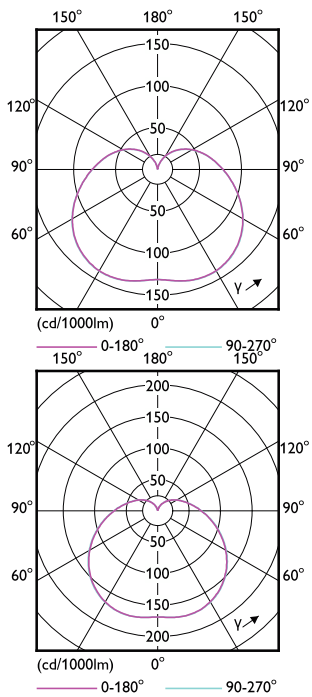
## Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
19021400	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	T-shape T120
26014600	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	T-shape T120
19017700	TrueForce ESS LED HB MV 2.7Klm 25W 865 E27	T-shape T80

Order Code	Full Product Name	Bulb Shape
26010800	TrueForce ESS LED HB MV 2.5Klm 25W 865 E27	T-shape T80
19019100	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	T-shape T100
26012200	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	T-shape T100

## Approval and Application

Order Code	Full Product Name	Ambient temperature range	Energy Consumption kWh/1000 h
19021400	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	-20 °C to +45 °C	45 kWh
26014600	TrueForce ESS LED HB MV 4.5Klm 45W 865 E27	-20 to +45 °C	45 kWh
19017700	TrueForce ESS LED HB MV 2.7Klm 25W 865 E27	-20 °C to +45 °C	25 kWh
26010800	TrueForce ESS LED HB MV 2.5Klm 25W 865 E27	-20 to +45 °C	25 kWh
19019100	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	-20 °C to +45 °C	35 kWh
26012200	TrueForce ESS LED HB MV 3.5Klm 35W 865 E27	-20 to +45 °C	35 kWh



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