



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 Highbay application. The solution gives you the LED benefits of energy-efficiency and long-lifetime, plus they come for a low initial investment. 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

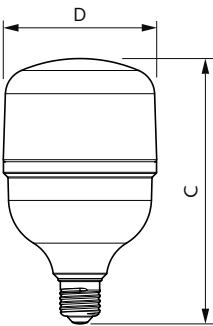
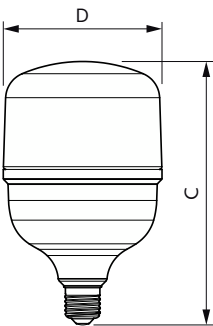
- EM version requires an EM ballast to operate. Please refer to the installation guide or consult a Philips Lighting representative.

Versions



LEDTForce MV T70 E27

Dimensional drawing

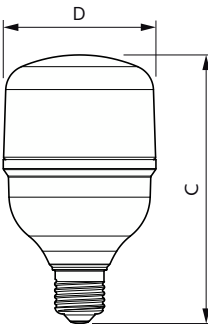
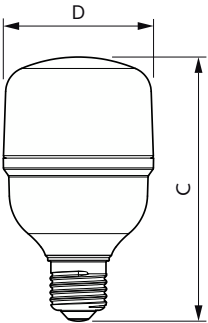


Product	D	C
TForce ESS LED HB MV 3.5Klm 35W 865 E27	102 mm	174 mm
TForce ESS LED HB MV 3.5Klm 35W 865 E27	102 mm	174 mm

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 2Klm 20W 865 E27	72 mm	125 mm

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
929003632108	TForce ESS LED HB MV 4.5Klm 45W 865 E27	4,500 lm
929003712708	TForce ESS LED HB MV 4.5Klm 45W 865 E27	4,500 lm
929003631908	TForce ESS LED HB MV 2.7Klm 25W 865 E27	2,700 lm
929003712508	TForce ESS LED HB MV 2.5Klm 25W 865 E27	2,500 lm
929003632008	TForce ESS LED HB MV 3.5Klm 35W 865 E27	3,500 lm
929003712608	TForce ESS LED HB MV 3.5Klm 35W 865 E27	3,500 lm
929003631808	TForce ESS LED HB MV 2Klm 20W 865 E27	2,000 lm

Operating and Electrical

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Order Code	Full Product Name	Line Frequency	Power
			Consumption
929003632108	TForce ESS LED HB MV 4.5Klm 45W 865 E27	50 to 60 Hz	45 W
929003712708	TForce ESS LED HB MV 4.5Klm 45W 865 E27	-	45 W
929003631908	TForce ESS LED HB MV 2.7Klm 25W 865 E27	50 to 60 Hz	25 W
929003712508	TForce ESS LED HB MV 2.5Klm 25W 865 E27	-	25 W

Temperature

Order Code	Full Product Name	T-Case Maximum (Nom)
929003632108	TForce ESS LED HB MV 4.5Klm 45W 865 E27	77 °C
929003712708	TForce ESS LED HB MV 4.5Klm 45W 865 E27	78 °C
929003631908	TForce ESS LED HB MV 2.7Klm 25W 865 E27	77 °C
929003712508	TForce ESS LED HB MV 2.5Klm 25W 865 E27	78 °C

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
929003632108	TForce ESS LED HB MV 4.5Klm 45W 865 E27	T120
929003712708	TForce ESS LED HB MV 4.5Klm 45W 865 E27	T120
929003631908	TForce ESS LED HB MV 2.7Klm 25W 865 E27	T80
929003712508	TForce ESS LED HB MV 2.5Klm 25W 865 E27	T80

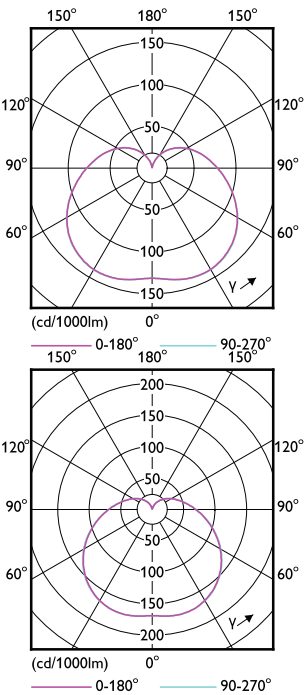
Approval and Application

Order Code	Full Product Name	Ambient temperature range
929003632108	TForce ESS LED HB MV 4.5Klm 45W 865 E27	-20 °C to 45 °C
929003712708	TForce ESS LED HB MV 4.5Klm 45W 865 E27	-20 to +45 °C
929003631908	TForce ESS LED HB MV 2.7Klm 25W 865 E27	-20 °C to 45 °C
929003712508	TForce ESS LED HB MV 2.5Klm 25W 865 E27	-20 to +45 °C
929003632008	TForce ESS LED HB MV 3.5Klm 35W 865 E27	-20 °C to 45 °C
929003712608	TForce ESS LED HB MV 3.5Klm 35W 865 E27	-20 to +45 °C
929003631808	TForce ESS LED HB MV 2Klm 20W 865 E27	-20 °C to 45 °C

Order Code	Full Product Name	Line Frequency	Power
			Consumption
929003632008	TForce ESS LED HB MV 3.5Klm 35W 865 E27	50 to 60 Hz	35 W
929003712608	TForce ESS LED HB MV 3.5Klm 35W 865 E27	-	35 W
929003631808	TForce ESS LED HB MV 2Klm 20W 865 E27	50 to 60 Hz	20 W

Order Code	Full Product Name	T-Case Maximum (Nom)
929003632008	TForce ESS LED HB MV 3.5Klm 35W 865 E27	78 °C
929003712608	TForce ESS LED HB MV 3.5Klm 35W 865 E27	79 °C
929003631808	TForce ESS LED HB MV 2Klm 20W 865 E27	82 °C

Order Code	Full Product Name	Bulb Shape
929003632008	TForce ESS LED HB MV 3.5Klm 35W 865 E27	T100
929003712608	TForce ESS LED HB MV 3.5Klm 35W 865 E27	T100
929003631808	TForce ESS LED HB MV 2Klm 20W 865 E27	T70



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