



Product Description

MASTER HPI Plus

Quartz metal halide lamps with opalized outer bulb

Benefits

- High safety and comfort level, maintained over life
- Minimal maintenance cost
- Initial investment saving options with "Plus"-concept and "S" and "P"-types
- Adjustable atmosphere creation by using appropriate colour temperature

Features

- Ovoid, internally white coated outer bulb
- Unique 3-band technology resulting in high luminous efficacy, both initially and over long lifetime
- Available in cool white and daylight colour appearance demonstrating good colour stability
- "S"-type for direct retrofit for HPL lamps
- "P"-type for use without protective front shield

Application

- High bay lighting, e.g. industrial workshops, exhibition halls, hypermarkets, shopping malls, DIY stores, churches, airports and train stations

Warnings and Safety

- Use only in totally enclosed luminaire, even during testing (IEC61167, IEC 62035, IEC60598)
- The luminaire must be able to contain hot lamp parts if the lamp ruptures
- For use with control gear designed for high-pressure mercury or sodium lamps
- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

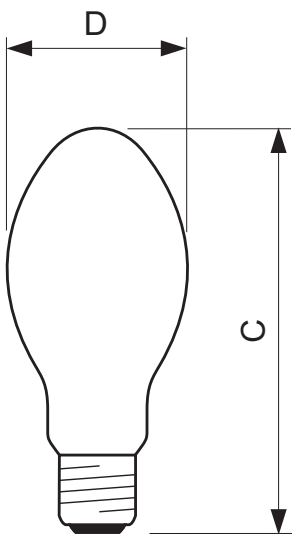
PHILIPS

Related products



HPI, E40

Dimensional drawing



MASTER HPI Plus 400W/645 BU E40 1SL

Product	C (Max)	D (Max)
HPI Plus 400W/645 BU E40	284	121.5
HPI Plus 400W/667 BU E40	290	122
HPI Plus 250W/645 BU E40	226	91
HPI Plus 250W/667 BU E40	226	91
HPI Plus 400W/645 BU-P E40	290	117.5
HPI Plus 250W/645 BU-P E40	218	90
HPI Plus 400W/645 BU E40	290	122
HPI Plus 250W/645 BU E40	226	91

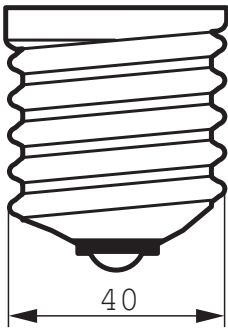
General Characteristics (1/2)

Order code	Full product name	System Description	Cap-Base	Bulb	Bulb Finish	Burning Position	Life to 5% failures	Life to 10% failures	Life to 20% failures	Life to 50% failures	LSF EM 2000h Rated, 12h cycle
182524 10	MASTER HPI Plus 400W/645 BU E40 1SL	Base-Up	GES	BD120	Coated	h15	5000 hr	7500 hr	11000 hr	20000 hr	99 %
207371 10	MASTER HPI Plus 400W/667 BU E40 1SL	Base-Up	GES	BD120	Coated	h15	5000 hr	7500 hr	11000 hr	20000 hr	99 %
181145 15	MASTER HPI Plus 250W/645 BU E40 1SL	Base-Up	GES	BD90	Coated	h15	5000 hr	7500 hr	11000 hr	20000 hr	99 %
207395 15	MASTER HPI Plus 250W/667 BU E40 1SL	Base-Up	GES	BD90	Coated	h15	5000 hr	7500 hr	11000 hr	20000 hr	99 %
211439 10	MASTER HPI Plus 400W/645 BU-P E40 1SL	Base-Up/Protected	GES	ED-37	Coated	h15	5000 hr	7500 hr	11000 hr	20000 hr	99 %
211477 15	MASTER HPI Plus 250W/645 BU-P E40 1SL	Base-Up/Protected	GES	ED-28	Coated	h15	5000 hr	7500 hr	11000 hr	20000 hr	99 %
203373 10	MASTER HPI Plus 400W/645 BU E40 1SL	Base-Up	GES	BD120	Coated	h	5000 hr	7500 hr	11000 hr	20000 hr	%
203434 15	MASTER HPI Plus 250W/645 BU E40 1SL	Base-Up	GES	BD90	Coated	h	5000 hr	hr	10000 hr	20000 hr	%

General Characteristics (2/2)

Order code	Full product name	LSF EM 4000h Rated, 12h cycle	LSF EM 6000h Rated, 12h cycle	LSF EM 8000h Rated, 12h cycle	LSF EM 12000h Rated, 12h cycle	LSF EM 16000h Rated, 12h cycle	LSF EM 20000h Rated, 12h cycle
182524 10	MASTER HPI Plus 400W/645 BU E40 1SL	96 %	93 %	88 %	76 %	63 %	50 %
207371 10	MASTER HPI Plus 400W/667 BU E40 1SL	96 %	93 %	88 %	76 %	63 %	50 %
181145 15	MASTER HPI Plus 250W/645 BU E40 1SL	96 %	93 %	88 %	76 %	63 %	50 %
207395 15	MASTER HPI Plus 250W/667 BU E40 1SL	96 %	93 %	88 %	76 %	63 %	50 %
211439 10	MASTER HPI Plus 400W/645 BU-P E40 1SL	96 %	93 %	88 %	76 %	63 %	50 %
211477 15	MASTER HPI Plus 250W/645 BU-P E40 1SL	96 %	93 %	88 %	76 %	63 %	50 %
203373 10	MASTER HPI Plus 400W/645 BU E40 1SL	%	%	%	%	%	%
203434 15	MASTER HPI Plus 250W/645 BU E40 1SL	%	%	%	%	%	%

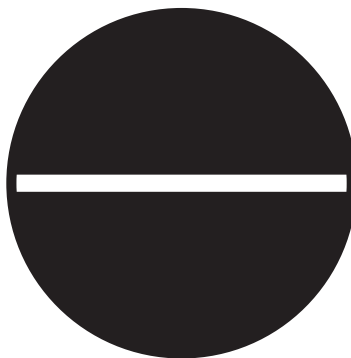
Installation diagrams



E40



h15



h

Light Technical Characteristics (1/3)

Order code	Full product name	Colour Code	Colour Rendering Index	Colour Designation	Colour Temperature	Lamp Luminous Flux EM	Luminous Flux EM 25°C, Rated	Lamp Luminous Efficacy EM	Lum Efficacy Rated EM 25°C	Lumen Maintenance 2000h	Lumen Maintenance 5000h
182524 10	MASTER HPI Plus 400W/645 BU E40 1SL	645	65 Ra8	Cool White	4500 K	-	32500 Lm	-	82 Lm/W	-	-
207371 10	MASTER HPI Plus 400W/667 BU E40 1SL	667	69 Ra8	Daylight	6700 K	-	32500 Lm	-	82 Lm/W	-	-
181145 15	MASTER HPI Plus 250W/645 BU E40 1SL	645	65 Ra8	Cool White	4500 K	-	18000 Lm	72 Lm/W	72 Lm/W	-	-
207395 15	MASTER HPI Plus 250W/667 BU E40 1SL	667	69 Ra8	Daylight	6700 K	-	18000 Lm	-	72 Lm/W	-	-
211439 10	MASTER HPI Plus 400W/645 BU-P E40 1SL	645	65 Ra8	Cool White	4500 K	-	32500 Lm	-	82 Lm/W	-	-
211477 15	MASTER HPI Plus 250W/645 BU-P E40 1SL	645	65 Ra8	Cool White	4500 K	-	18000 Lm	-	72 Lm/W	-	-
203373 10	MASTER HPI Plus 400W/645 BU E40 1SL	645	65 Ra8	Cool White	4500 K	32500 Lm	Lm	82 Lm/W	Lm/W	90 %	80 %
203434 15	MASTER HPI Plus 250W/645 BU E40 1SL	645	65 Ra8	Cool White	4500 K	18000 Lm	Lm	72 Lm/W	Lm/W	90 %	80 %

Light Technical Characteristics (2/3)

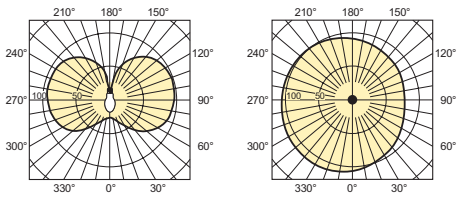
Order code	Full product name	Lumen Maintenance 10000h	Lumen Maintenance 20000h	LLMF EM 2000h Rated	LLMF EM 4000h Rated	LLMF EM 6000h Rated	LLMF EM 8000h Rated	LLMF EM 12000h Rated	LLMF EM 16000h Rated	LLMF EM 20000h Rated	Chromaticity Coordinate X
182524 10	MASTER HPI Plus 400W/645 BU E40 1SL	-	-	90 %	82 %	77 %	73 %	68 %	63 %	60 %	367 -
207371 10	MASTER HPI Plus 400W/667 BU E40 1SL	-	-	90 %	82 %	77 %	73 %	68 %	63 %	60 %	308 -
181145 15	MASTER HPI Plus 250W/645 BU E40 1SL	-	-	90 %	82 %	77 %	73 %	68 %	63 %	60 %	365 -
207395 15	MASTER HPI Plus 250W/667 BU E40 1SL	-	-	90 %	82 %	77 %	73 %	68 %	63 %	60 %	308 -
211439 10	MASTER HPI Plus 400W/645 BU-P E40 1SL	-	-	90 %	82 %	77 %	73 %	68 %	63 %	60 %	367 -
211477 15	MASTER HPI Plus 250W/645 BU-P E40 1SL	-	-	90 %	82 %	77 %	73 %	68 %	63 %	60 %	365 -
203373 10	MASTER HPI Plus 400W/645 BU E40 1SL	70 %	60 %	%	%	%	%	%	%	%	367 -
203434 15	MASTER HPI Plus 250W/645 BU E40 1SL	75 %	%	%	%	%	%	%	%	%	359 -

Light Technical Characteristics (3/3)

Order code	Full product name	Chromaticity Coordinate Y
182524 10	MASTER HPI Plus 400W/645 BU E40 1SL	374 -
207371 10	MASTER HPI Plus 400W/667 BU E40 1SL	318 -
181145 15	MASTER HPI Plus 250W/645 BU E40 1SL	363 -
207395 15	MASTER HPI Plus 250W/667 BU E40 1SL	318 -
211439 10	MASTER HPI Plus 400W/645 BU-P E40 1SL	374 -

Order code	Full product name	Chromaticity Coordinate Y
211477 15	MASTER HPI Plus 250W/645 BU-P E40 1SL	363 -
203373 10	MASTER HPI Plus 400W/645 BU E40 1SL	374 -
203434 15	MASTER HPI Plus 250W/645 BU E40 1SL	354 -

Light technical

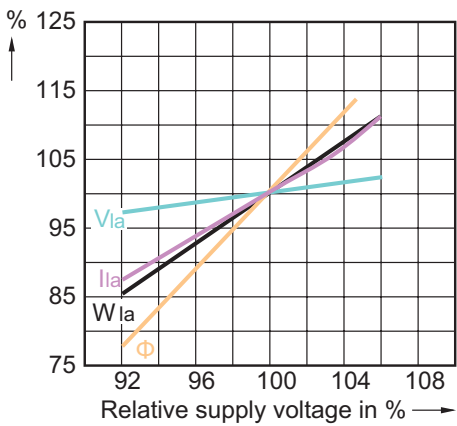


HPI

Electrical Characteristics

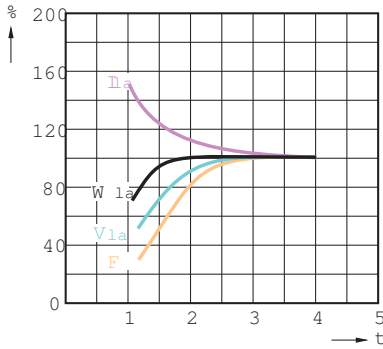
Order code	Full product name	Lamp Wattage	Lamp Wattage EM 25°C, Nominal	Lamp Wattage EM 25°C, Rated	Lamp Voltage	Lamp Current EM	Dimmable	Ratio scotopic/ photopic lumens
182524 10	MASTER HPI Plus 400W/645 BU E40 1SL	400 W	400.0 W	395.0 W	125 V	3.4 A	no	1.50 -
207371 10	MASTER HPI Plus 400W/667 BU E40 1SL	400 W	400.0 W	395.0 W	125 V	3.4 A	no	2.00 -
181145 15	MASTER HPI Plus 250W/645 BU E40 1SL	250 W	250.0 W	253.0 W	128 V	2.2 A	no	1.50 -
207395 15	MASTER HPI Plus 250W/667 BU E40 1SL	250 W	250.0 W	253.0 W	128 V	2.2 A	no	2.00 -
211439 10	MASTER HPI Plus 400W/645 BU-P E40 1SL	400 W	400.0 W	395.0 W	125 V	3.4 A	no	1.50 -
211477 15	MASTER HPI Plus 250W/645 BU-P E40 1SL	250 W	250.0 W	253.0 W	128 V	2.2 A	no	1.50 -
203373 10	MASTER HPI Plus 400W/645 BU E40 1SL	400 W	400.0 W	395.0 W	125 V	3.4 A	no	-
203434 15	MASTER HPI Plus 250W/645 BU E40 1SL	250 W	250.0 W	253.0 W	128 V	2.2 A	no	-

Performance diagrams

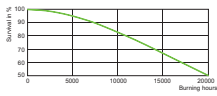


HPI

Performance diagrams

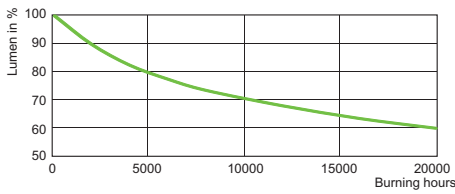


HPI



HPI 250 W, 400 W

Life Expectancy



HPI 250 W, 400 W Lumen Maintenance

Environmental Characteristics

Order code	Full product name	Energy Efficiency Label (EEL)	Mercury (Hg) Content	Energy consumption kWh/1000h
182524 10	MASTER HPI Plus 400W/645 BU E40 1SL	A+	67 mg	434 kWh
207371 10	MASTER HPI Plus 400W/667 BU E40 1SL	A+	67 mg	434 kWh
181145 15	MASTER HPI Plus 250W/645 BU E40 1SL	A	47 mg	278 kWh
207395 15	MASTER HPI Plus 250W/667 BU E40 1SL	A	47 mg	278 kWh
211439 10	MASTER HPI Plus 400W/645 BU-P E40 1SL	A+	67.2 mg	434 kWh
211477 15	MASTER HPI Plus 250W/645 BU-P E40 1SL	A	46.5 mg	278 kWh
203373 10	MASTER HPI Plus 400W/645 BU E40 1SL	A+	67 mg	434 kWh
203434 15	MASTER HPI Plus 250W/645 BU E40 1SL	A	47 mg	278 kWh

Luminaire Design Requirements

Order code	Full product name	Cap-Base Temperature	Bulb Temperature
182524 10	MASTER HPI Plus 400W/645 BU E40 1SL	250 (max) C	350 (max) C
207371 10	MASTER HPI Plus 400W/667 BU E40 1SL	250 (max) C	350 (max) C
181145 15	MASTER HPI Plus 250W/645 BU E40 1SL	250 (max) C	350 (max) C
207395 15	MASTER HPI Plus 250W/667 BU E40 1SL	250 (max) C	350 (max) C
211439 10	MASTER HPI Plus 400W/645 BU-P E40 1SL	250 (max) C	260 (max) C
211477 15	MASTER HPI Plus 250W/645 BU-P E40 1SL	250 (max) C	260 (max) C
203373 10	MASTER HPI Plus 400W/645 BU E40 1SL	250 (max) C	350 (max) C
203434 15	MASTER HPI Plus 250W/645 BU E40 1SL	250 (max) C	350 (max) C



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data subject to change