



# 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.

# MASTER HPI Plus

## Controls and Dimming

Dimmable	No
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## General Information

Cap-Base	E40
Life To 10% Failures (Nom)	7500 h
Life To 20% Failures (Nom)	11000 h
Life To 50% Failures (Nom)	20000 h
Life To 5% Failures (Nom)	5000 h
LSF 12000 h Rated	76 %
LSF 16000 h Rated	63 %
LSF 2000 h Rated	99 %
LSF 20000 h Rated	50 %
LSF 4000 h Rated	96 %
LSF 6000 h Rated	93 %
LSF 8000 h Rated	88 %
Operating Position	H15
System Description	Base-Up

## Luminaire Design Requirements

Bulb Temperature (Max)	350 °C
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## Light Technical

LLMF 12000 h Rated	68 %
LLMF 16000 h Rated	63 %
LLMF 2000 h Rated	90 %
LLMF 20000 h Rated	60 %
LLMF 4000 h Rated	82 %
LLMF 6000 h Rated	77 %
LLMF 8000 h Rated	73 %

## Mechanical and Housing

Bulb Finish	Coated glass
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## Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Nom)
928074309891	MASTER HPI Plus 400W/645 BU E40 1SL/6	446 kWh	67 mg
928074409894	MASTER HPI Plus 400W/667 BU E40 1SL/6	434 kWh	67 mg
928076709891	MASTER HPI Plus 250W/645 BU E40 1SL/12	282 kWh	47 mg
928076809894	MASTER HPI Plus 250W/667 BU E40 1SL/12	278 kWh	47 mg

## Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928074309891	MASTER HPI Plus 400W/645 BU E40 1SL/6	3.4 A	135 V	115 V	125 V
928074409894	MASTER HPI Plus 400W/667 BU E40 1SL/6	3.4 A	135 V	115 V	125 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928076709891	MASTER HPI Plus 250W/645 BU E40 1SL/12	2.2 A	138 V	118 V	128 V
928076809894	MASTER HPI Plus 250W/667 BU E40 1SL/12	2.2 A	138 V	118 V	128 V

## Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated) (Nom)
928074309891	MASTER HPI Plus 400W/645 BU E40 1SL/6	405 W
928074409894	MASTER HPI Plus 400W/667 BU E40 1SL/6	405 W

Order Code	Full Product Name	Power (Rated) (Nom)
928076709891	MASTER HPI Plus 250W/645 BU E40 1SL/12	256 W
928076809894	MASTER HPI Plus 250W/667 BU E40 1SL/12	253.0 W

# MASTER HPI Plus

## Light Technical (1/2)

Order Code	Full Product Name	Chromaticity		Colour		Order Code	Full Product Name	Chromaticity		Colour	
		Coordinate X (Nom)	Coordinate Y (Nom)	Code	Designation			Coordinate X (Nom)	Coordinate Y (Nom)	Code	Designation
928074309891	MASTER HPI Plus 400W/645 BU E40 1SL/6	367	374	645	Cool White (CW)	928076709891	MASTER HPI Plus 250W/645 BU E40 1SL/12	365	363	645	Cool White (CW)
928074409894	MASTER HPI Plus 400W/667 BU E40 1SL/6	310	341	667	Daylight	928076809894	MASTER HPI Plus 250W/667 BU E40 1SL/12	308	318	667	Daylight

## Light Technical (2/2)

Order Code	Full Product Name	Correlated Colour Temperature (Nom)	Colour		Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)	Ratio Scotopic/Photopic Lumens
			Rendering Index (Nom)	Rendering Index (Nom)				
928074309891	MASTER HPI Plus 400W/645 BU E40 1SL/6	4500 K	65	80	80 lm/W	-	32500 lm	1.50
928074409894	MASTER HPI Plus 400W/667 BU E40 1SL/6	6700 K	60	80	80 lm/W	-	32500 lm	2.00
928076709891	MASTER HPI Plus 250W/645 BU E40 1SL/12	4500 K	65	66	66 lm/W	15300 lm	17000 lm	1.50
928076809894	MASTER HPI Plus 250W/667 BU E40 1SL/12	6700 K	69	72	72 lm/W	-	18000 lm	2.00

## Mechanical and Housing

Order Code	Full Product Name	Bulb Shape	Order Code	Full Product Name	Bulb Shape
928074309891	MASTER HPI Plus 400W/645 BU E40 1SL/6	BD120	928076709891	MASTER HPI Plus 250W/645 BU E40 1SL/12	BD90
928074409894	MASTER HPI Plus 400W/667 BU E40 1SL/6	BD120	928076809894	MASTER HPI Plus 250W/667 BU E40 1SL/12	BD90

