

# MH/HPI Metal halide

HPI Plus



HPI

### Product Description

- Quartz metal halide lamps with opalized outer bulb

### Product Feature

- 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 color appearance demonstrating good color stability
- "S"-type for direct retrofit for HPL lamps
- "P"-type for use without protective front shield

### Product Benefit

- 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 color temperature

### Application

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

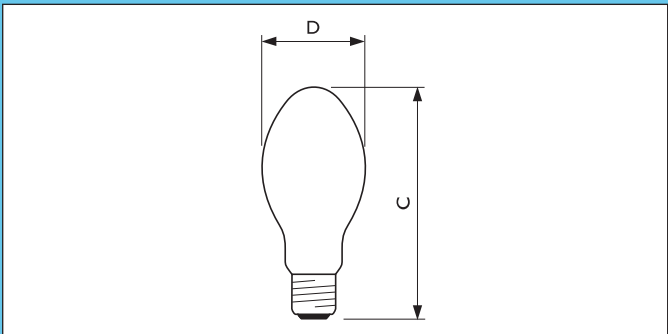
### Luminaires

- HPI Plus BU-P and BUS-P suitable for use in open luminaires
- For other HPI Plus lamps a protective front glass is required

### System

- Can be run on HPI-gear as well as on SON-gear ("Plus"-concept). The results in both light output and color temperature are different
- HPI Plus BUS and BUS-P types require an HPL-ballast and no ignitor

Dimensions in mm



Product ID	Overall length	Diameter
	C max.	D max.
250W	226	91
400W	290	122

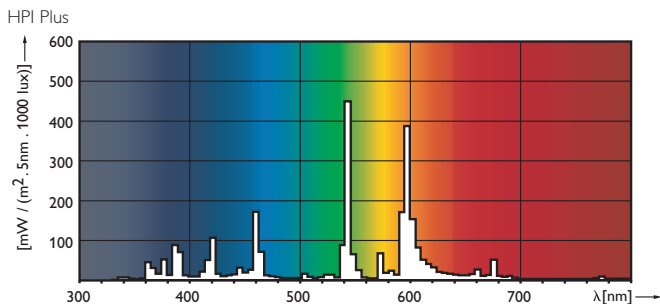
### Preferred selection

Product ID	Rated Lamp Wattage (W)	Lamp Current EL (A)	Lamp Voltage (V)	Mains Voltage Stable Operation (V)	Cap Base	Color Temperature HPL/SON (K)	Color Rendering Index (R <sub>a</sub> )
MASTER HPI Plus 250W/745 BU E40 SLV	250	2.2	128	198	E40	4500/4000	69
MASTER HPI Plus 250W/745 BU-P E40 CRP	250	2.2	128	198	E40	4500/4000	69
MASTER HPI Plus 250W/767 BU E40 CRP	250	2.2	128	198	E40	6700/5400	69
MASTER HPI Plus 400W/745 BU E40 SLV	400	3.4	125	198	E40	4500/4000	69
MASTER HPI Plus 400W/745 BU-P E40 CRP	400	3.4	125	198	E40	4500/4000	69
MASTER HPI Plus 400W/745 BUS E40 SLV	400	3.4	125	198	E40	4500/4000	69
MASTER HPI Plus 400W/767 BU E40 CRP	400	3.4	125	198	E40	6700/5400	69
MASTER HPI Plus 400W/745 BUS-P E40 CRP	400	3.4	125	198	E40	4500/4000	69

Product ID	Chromaticity Coordinate X	Chromaticity Coordinate Y	Bulb Finish	Luminous Flux Lamp EM/CuFe HPL/SON (lm)	Luminous Efficacy Lamp EM (lm/W)	Lamp Current Run-Up (A)
MASTER HPI Plus 250W/745 BU E40 SLV	359	354	Coated	18000/25500	72	3.9
MASTER HPI Plus 250W/745 BU-P E40 CRP	380	354	Coated	18000/25500	72	3.9
MASTER HPI Plus 250W/767 BU E40 CRP	308	318	Coated	18000/25500	72	3.9
MASTER HPI Plus 400W/745 BU E40 SLV	380	374	Coated	35000/42500	82	6
MASTER HPI Plus 400W/745 BU-P E40 CRP	360	362	Coated	35000/42500	82	6
MASTER HPI Plus 400W/745 BUS E40 SLV	360	362	Coated	35000/42500	82	6
MASTER HPI Plus 400W/767 BU E40 CRP	308	318	Coated	35000/42500	82	6
MASTER HPI Plus 400W/745 BUS-P E40 CRP	360	362	Coated	35000/42500	82	6

Product ID	Ignition Peak Voltage HPL/SON (V)	Ignition Supply Voltage (V)	Cap-Base Temperature (C)	Bulb Temperature (C)	Nett Weight Product In Grams (gr)
MASTER HPI Plus 250W/745 BU E40 SLV	750/5000	198	250	350	185
MASTER HPI Plus 250W/745 BU-P E40 CRP	750/5000	198	250	260	190
MASTER HPI Plus 250W/767 BU E40 CRP	750/5000	198	250	350	250
MASTER HPI Plus 400W/745 BU E40 SLV	750/5000	198	250	350	265
MASTER HPI Plus 400W/745 BU-P E40 CRP	750/5000	198	250	260	240
MASTER HPI Plus 400W/745 BUS E40 SLV	NA	198	250	350	265
MASTER HPI Plus 400W/767 BU E40 CRP	750/5000	198	250	350	250
MASTER HPI Plus 400W/745 BUS-P E40 CRP	NA	198	250	260	240

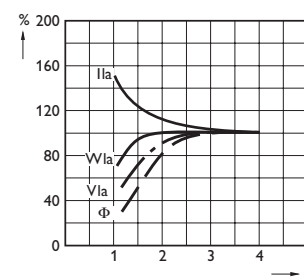
### Spectral power distribution



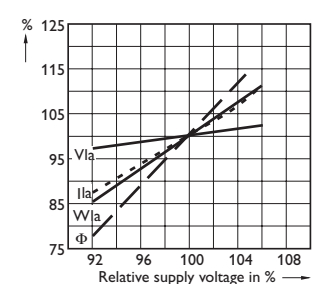
### Performance diagrams

#### HPI Plus

#### Lamp performance during run up



#### Effects of mains voltage variations



$I_{la}$  = Lamp current  
 $\Phi$  = Luminous Flux  
 $V_{la}$  = Lamp Voltage  
 $W_{la}$  = Lamp Wattage