

H.I.D. lamps

MASTER HPI (-T)



HPI Plus BU



HPI-T Plus

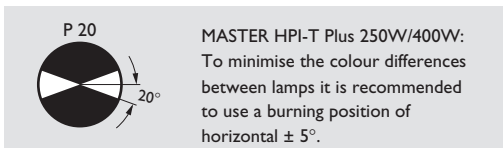
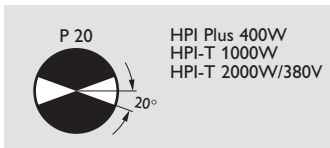
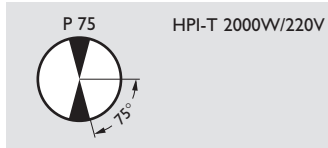
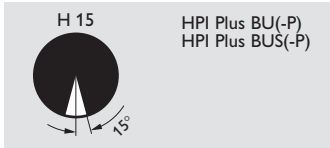


HPI-T 1000 W



HPI-T 2000 W

Burning positions



HPI/HPI Plus lamps are single ended metal halide lamps consisting of a quartz discharge tube, containing high pressure mercury and a mixture of metal halides, which is housed in a hard glass outer envelope, fitted with a standard screw base. They are available in either ovoid coated or clear tubular versions. They offer a unique combination of a natural white colour appearance, and high luminous efficacy both initially and through their long lives, giving many years of reliable operation, and making them an ideal lamp choice for many applications.

Their high luminous efficacy reduces the number of luminaires needed, minimising installation and energy costs, while the excellent lumen maintenance and lamp life ensures high maintained illuminance levels and minimal maintenance costs. The colour point is on the black body locus giving a natural white light colour appearance. This combined with good colour rendering makes it easy to distinguish colours and ensures a pleasant ambience and user comfort.

The excellent colour stability through life ensures good colour uniformity over time even with spot replacements. All lamps require a suitable ballast and ignitor (except -S types), and must be housed in enclosed luminaires (except -P types).

The HPI Plus lamps are designed to operate on both HPL and SON gear.

HPI Plus on HPL gear

When operated on HPL gear, the HPI Plus lamps are light technically and electrically retrofit with existing HPI lamps.

HPI Plus on SON gear

When operated on SON gear, the HPI Plus lamps run at a higher lamp power, increasing the luminous flux and the luminous efficacy, reducing investment and energy costs.

The colour temperature reduces, which is more attractive for retail applications.

SON gear compatibility allows the possibility to replace SON(Comfort) lamps, offering a low cost opportunity to upgrade from yellow to white light, and also allows the replacement of competitors metal halide lamps which are typically operated on SON gear.

The HPI Plus 400 W BUS and HPI Plus 400 W BUS-P lamps are specially designed self (S) starting lamps requiring no external ignitor, saving on costs. This makes them especially suitable for direct replacement of Mercury (HPL) lamps. The HPI Plus 400 W BU-P and HPI Plus 400 W BUS-P lamps are specially designed protected (P) versions, suitable for use in open luminaires, i.e. no expensive front glass is needed. The teflon coating ensures that in the rare event of the discharge tube shattering, the glass is contained within the teflon coating and can still be easily removed.

Inherent to metal halide technology, some visible colour differences may exist between individual lamps. To minimise these differences the burning position of the lamps should be within ± 5 degrees of the nominal specified.

Applications

HPI-T/HPI-T Plus

- sportslighting, floodlighting of buildings and monuments, arealighting e.g. harbour, building sites, canopy lighting e.g. petrol stations, and horticultural lighting.

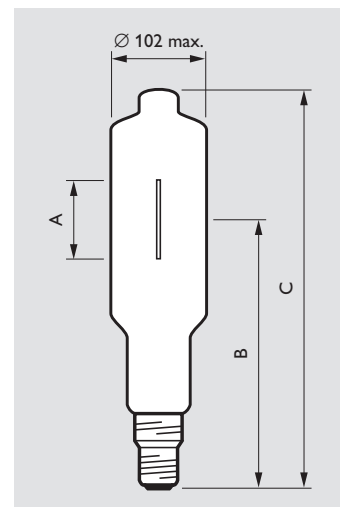
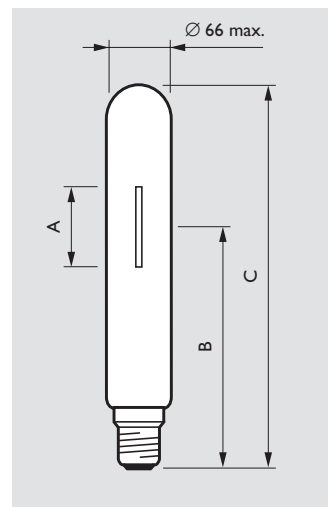
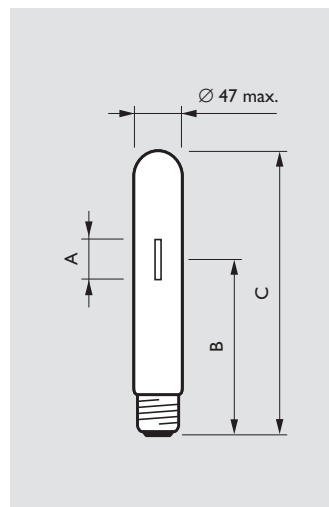
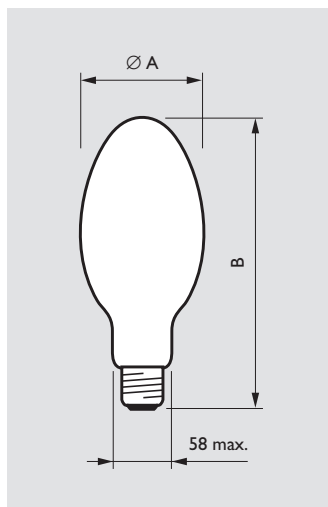
HPI Plus

- indoor high bay lighting, e.g. industrial workshops, exhibition halls, hypermarkets, shopping malls, DIY stores, churches and also the entrances of airports and stations.



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Dimensions in mm

Type	A max.	B max.
Cap/base E40		
HPI Plus 250W	91	226
HPI Plus 400W	122	284

Type	A max.	B max.	C max.
Cap/base E40			
HPI-T Plus 250W	29	158	257
HPI-T Plus 400W	40	172	286

Type	A max.	B max.	C max.
Cap/base E40			
HPI-T 1000W	80	240	382

Type	A max.	B max.	C max.
Cap/base E40			
HPI-T 2000W/220V	89	290	430
HPI-T 2000W/380V	135	260	430

HPI/HPI Plus/HPI-T on HPL gear

Commercial name	W		Lamp wattage	Lamp voltage	Cap/base	Correlated colour temperature K	Colour rendering index	Lumen output lm
			W	V				
MASTER HPI Plus								
MASTER HPI Plus	250W	BU	256	128	E40	4300	69	19 000
MASTER HPI Plus	400W		390	125	E40	4300	69	30 000
MASTER HPI Plus	400W	BU	400	125	E40	4300	69	35 000
MASTER HPI Plus	400W	BU-P	400	125	E40	4300	69	35 000
MASTER HPI Plus	400W	BUS	400	125	E40	4300	69	35 000
MASTER HPI Plus	400W	BUS-P	400	125	E40	4300	69	35 000
MASTER HPI-T / HPI-T Plus								
MASTER HPI-T Plus	250W		245	128	E40	4500	65	19 000
MASTER HPI-T Plus	400W		390	125	E40	4300	65	35 000
HPI-T PRO	1000W		985	130	E40	4300	65	85 000
HPI-T PRO	2000W	/220V	1960	130	E40	4600	65	189 000
HPI-T PRO	2000W	/380V	1930	240	E40	4300	65	183 000

Commercial name	W		Lamp current	Maximum permissible base/pinch temperature degr.C	Maximum permissible bulb temperature degr.C	Nett weight g	Icos code	EOC
			A					
MASTER HPI Plus								
MASTER HPI Plus	250W	BU	2.20	250	350	190	ME-250-H-E40-V	181145
MASTER HPI Plus	400W		3.40	250	350	245	ME-400-H-E40-/H	181084
MASTER HPI Plus	400W	BU	3.40	250	350	250	ME-400-H-E40-V	182524
MASTER HPI Plus	400W	BU-P	3.40	250	260	240	ME/T-400-H-E40-V	194824
MASTER HPI Plus	400W	BUS	3.40	250	350	250	ME-400-H/I-E40-V	181114
MASTER HPI Plus	400W	BUS-P	3.40	250	260	240	ME/T-400-H/I-E40-V	193179
MASTER HPI-T / HPI-T Plus								
MASTER HPI-T Plus	250W		2.15	250	550	180	MT-250-H-E40-/H	179890
MASTER HPI-T Plus	400W		3.40	250	600	185	MT-400-H-E40-/H	179906
HPI-T PRO	1000W		8.25	300	600	410	MT-1000-H-E40-/H	183736
HPI-T PRO	2000W	/220V	16.50	300	600	580	MT-2000-H-E40-/H	183767
HPI-T PRO	2000W	/380V	8.60	300	600	600	MT-2000-H-E40-/H	183798

BU=Vertical base up operation (H15)

S=Self starting i.e. no external ignitor required, minimising control gear costs.

P=Protected with teflon coating i.e. suitable for open luminaires, eliminating the need for an expensive front glass.



H.I.D. lamps

MASTER HPI (-T)

HPI Plus on SON gear

Commercial name	W		Lamp wattage W	Lamp voltage V	Cap/base	Correlated colour temperature K	Colour rendering index	Lumen output lm
MASTER HPI Plus								
MASTER HPI Plus	250W	BU	302	128	E40	3800	69	25 500
MASTER HPI Plus	400W		445	125	E40	3800	69	35 000
MASTER HPI Plus	400W	BU	454	125	E40	3800	69	42 500
MASTER HPI Plus	400W	BU-P	454	125	E40	3800	69	42 500
MASTER HPI Plus	400W	BUS	454	125	E40	3800	69	42 500
MASTER HPI Plus	400W	BUS-P	454	125	E40	3800	69	42 500
MASTER HPI-T Plus								
MASTER HPI-T Plus	250W		295	128	E40	4000	65	23 000
MASTER HPI-T Plus	400W		445	125	E40	4000	65	38 000

Commercial name	W		Lamp current A	Maximum permissible base/pinch temperature degr.C	Maximum permissible bulb temperature degr.C	Nett weight g	lcos code	EOC
MASTER HPI Plus								
MASTER HPI Plus	250W	BU	2.55	250	350	190	ME-250-H-E40-IV	181145
MASTER HPI Plus	400W		3.85	250	350	245	ME-400-H-E40-H	181084
MASTER HPI Plus	400W	BU	3.85	250	350	250	ME-400-H-E40-IV	182524
MASTER HPI Plus	400W	BU-P	3.85	250	260	240	ME/T-400-H-E40-IV	194824
MASTER HPI Plus	400W	BUS	3.85	250	350	250	ME-400-H/I-E40-IV	181114
MASTER HPI Plus	400W	BUS-P	3.85	250	260	240	ME/T-400-H/I-E40-IV	193179
MASTER HPI-T Plus								
MASTER HPI-T Plus	250W		2.50	250	550	180	MT-250-H-E40-H	179890
MASTER HPI-T Plus	400W		3.80	250	600	185	MT-400-H-E40-H	179906

BU=Vertical base up operation (H15)

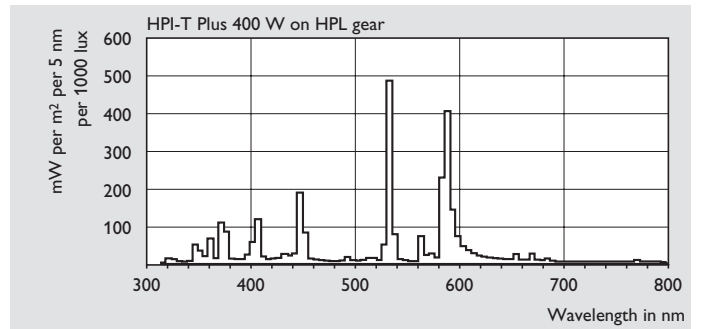
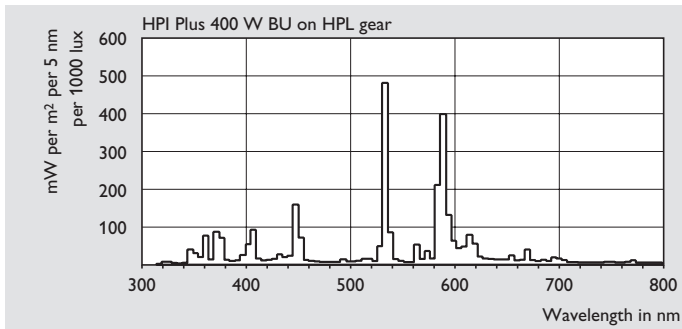
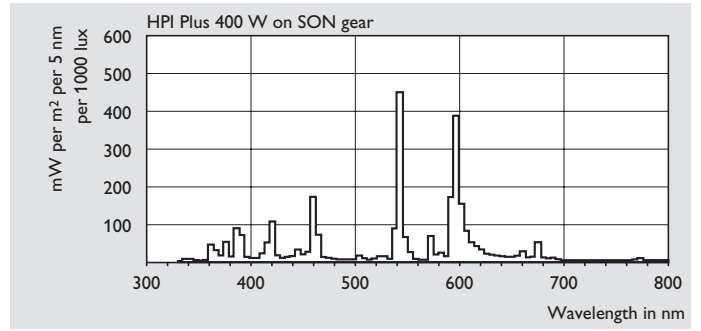
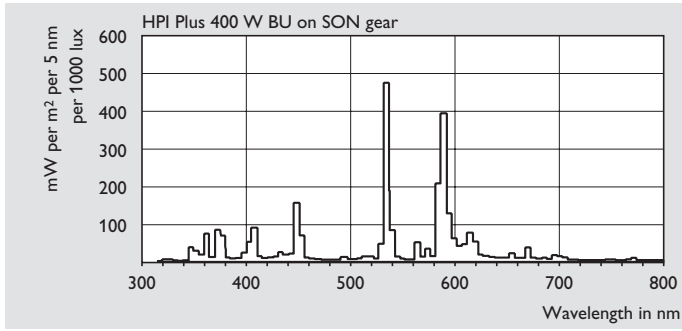
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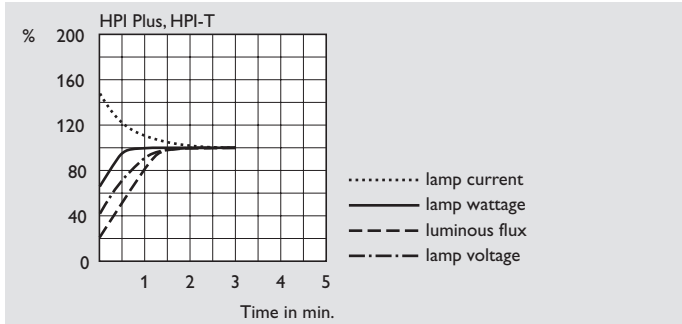


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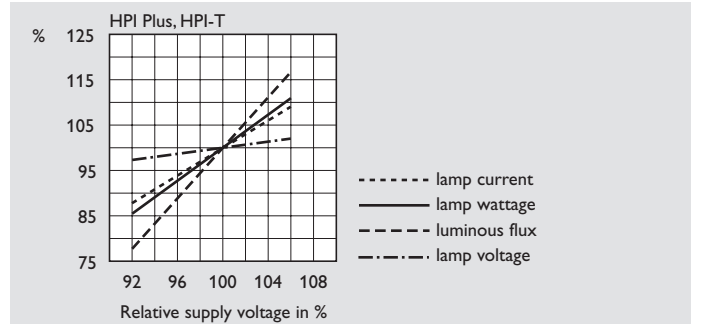
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Spectral power distributions



Lamp performance during run-up



Effects of mains voltage variations

