



# Passion creates the show

Lighting solutions for studio, stage and TV

[osram.com/entertainment](https://osram.com/entertainment)



Lighting solutions for studio, stage and TV

# Setting the stage for great art

Stage fright? Not any more. Our products for studio, stage and TV guarantee a smooth and dynamic lighting design – and they offer award-winning technologies. We provide the perfect supporting cast in the form of HMI®, HTI®, Lok-it!® and halogen studio lamps. Our powerful and effective lighting solutions will benefit the entertainment industry at every level, from professional film productions to small theatrical events. Prestigious awards – such as the Oscar®, the Primetime Emmy® Engineering Award and the PLASA Innovation Award – have encouraged us to maintain the highest standards in lighting for the entertainment industry. Our many years of experience, broad product range and history of innovation provide the perfect platform for continued success.



HMI® lamps for film and television were awarded in Hollywood an OSCAR® in 1987. Since 1928 OSRAM has been producing lamps for stage lighting, film work and cinema projection.



Acknowledging its outstanding performance and continuous improvement in HMI® technology for the TV industry, OSRAM was awarded the Primetime Emmy® Engineering Award by the Academy of Television Arts & Sciences.







KANSAS  
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# Light is action HMI® – every director's darling

For 55 years, OSRAM HMI® metal halide discharge lamps have been meeting the toughest demands of the film and TV industry. Their technology has received several awards and has become an integral part of film sets around the world.



## HMI®

HMI® lamps are AC-operated metal halide discharge lamps, which have excellent color rendering and photometric integrity throughout their life.

- High intensity light simulates daylight color temperature of 6000 K with a CRI >90
- Enormous luminous flux of up to 2.3 million lm
- Very high luminous efficacy of up to 100 lm/W
- Mechanically robust with eXtreme Seal (XS) technology, up to 450°C at the pinch seal
- Capable of hot restrike ignition
- Available in wattages from 200 to 24000 W, single-ended or double-ended

## Perfect light whatever the time – day or night.

With an extremely bright light, providing up to 100 lumens per watt, OSRAM HMI® lamps generate a color temperature that closely matches sunlight. It reveals true colors and facilitates daytime filming outdoors. OSRAM HMI® lamps are up to five times more efficient than an incandescent light.





### HMI® DIGITAL

Whether using analog or digital film, shooting in modes of 1000 Hz and higher, OSRAM's HMI® DIGITAL line has a lamp for your production. While specially designed to accommodate evolving, high-speed film technology, HMI® DIGITAL still provides every feature needed to light traditional film productions, as well as theatre stages.

- Flicker-free when used with high-speed electronic ballasts (1000 Hz and higher)
- Suited for both analog and digital film production
- Up to 99.9 % less UV emissions (from models equipped with UV-Stop)
- Color temperature of 6000 K for realistic, naturally-lit scenes
- High color rendering index of 90+, exposing true-to-life colors
- Extremely bright light of up to 100 lumens/ watt
- Hot restart capability
- Improved stability and design
- Robust stems, resulting in less breakage during transport
- Round moly-foil construction that evenly distributes heat and current, thus extending lamp life<sup>1)</sup>
- Splash-proof carrying case is re-usable and allows lamps to be transported safely<sup>1)</sup>



HMI® packaging

### Typical applications

- Film, TV and video productions
- Stage lighting (theatre, opera etc.)
- Exhibition lighting
- Lighting for major events
- Professional photography

### Typical luminaires

- Follow and moving-head spotlights
- Fresnel luminaires
- PAR/open luminaires
- Soft and flood lighting

1) 6000-18000 W

# Light is excellent Studio halogen lamps

Our studio, stage and TV halogen lamps are excellent examples of the technical advances that can still be achieved in the development of lamps. The key to their success is the combination of high-quality quartz and state-of-the-art lamp technologies. The result is a powerful and economical solution for stage, film and TV lighting.



## **The culmination of years of experience: technical perfection**

Our studio, stage and TV halogen lamps not only meet stringent requirements in terms of luminous flux, luminous efficacy and color temperature, but also through economic and durable operating demands. They are compact, heat-resistant and can be used in many operating positions. Halogen lamps are manufactured from high-quality components and feature biplanar technology. Thanks to biplanar technology, the 1000 W studio halogen lamps for example have an up to 50 % higher luminous intensity in spotlight settings.



### Halogen lamps

OSRAM studio, stage and TV halogen lamps offer high luminous efficacy with low power consumption, and a relatively high proportion of visible light compared with infrared thermal radiation.

- High output from 500 to 20000 W
- High luminance
- Constant color temperature throughout their lifetime (3000-3400 K depending on type)
- Instant light
- Operation at line voltage
- Dimmable
- Eco-friendly: halogen lamps contain no mercury, i.e. no special waste disposal requirements

### Pinch technology

This innovative design fixes the filament in place over the molded pinch points of the quartz bulb itself. By removing the mounting hooks and quartz bridges used in the past, the mechanical stability of the filament is improved and more resistant to vibration and shock.

- Protected against vibrations by new type of filament holder
- Very robust lamp design
- Improved durability
- Reduction of components and higher purity within the lamp
- Improvement of the halogen cycle



### Typical luminaires

- PAR/open luminaires
- Fresnel lens luminaires
- Soft and flood lighting
- Follow and moving-head spotlights
- Color changers

### Typical applications

- Film, TV and video productions
- Stage lighting (theatre, opera etc.)
- Exhibition lighting
- Lighting for major events
- Professional photography

## Light is breathtaking HPL® and Lok-it!®

Thanks to its incomparable efficiency, our halogen HPL lamp has made a name for itself on stage and in TV studios. And our halogen Lok-it!® enables users to replace lamps in no time at all.



### **Non-stop entertainment with HPL**

The HPL "X" versions of the 575 W and 750 W types have approximately five times longer life than the standard versions. The unique filament design guarantees that these versions make optimal use of the light they generate.

### **Lok-it!®. The all-around talent.**

The bayonet base and lampholder system of the Lok-it!® family of lamps allow for a one-handed lamp replacement within just a few seconds. Lok-it!® lampholders can be easily installed in luminaires and ensure an extremely strong and vibration-proof connection with the lamp base during operation and transportation. The versatile Lok-it!® system enables the user to choose freely between individual lamp technologies (halogen or discharge lamps).





**HPL**

The special filament design increases the life of the high-performance halogen lamp.

- Less maintenance with long-life versions
- Solid nickel pins for precise alignment of the lamp in the holder
- Reinforced pinch seal for extra mechanical stability
- Special metal heat sink for improved heat dissipation and optimized life

**Typical luminaires**

- Spotlights
- PAR luminaires
- Fresnel
- Striplights

**Typical applications**

- Theatre, TV, studio
- Entertainment and architecture lighting



**Lok-it!®**

Using a standardized bayonet design, the PGJX50, PGJX28, and PGJX36 lamp bases are easily inserted, turned, and locked into place in the corresponding lamp holders, providing for a quick lamp replacement, particularly in areas where luminaires are difficult to access.

- Studio halogen lamp 1200 W with PGJX50 base
- Standardized design
- Safe electrical and mechanical contact
- Compact form
- Robust and vibration resistant

**Typical luminaires**

- Follow and moving-head spotlights

**Typical applications**

- Theatre, TV, studio
- Entertainment and architecture lighting
- Professional photography



# Light is entertainment in full spectrum

Whether in concerts, light shows, theaters, operas, clubs or TV studios - there is a wide range of applications that high-performance lamps need to cover. That is why we have enhanced our Lok-it!® Power Series family to meet an even broader range of applications. Now there are specific lamps suited to the specific needs of the production - all easily identifiable from one another by the name, label, and the lamp base itself.



© Ralph Larrmann/NPO/NOS/AVROTROS

## OSRAM Lok-it!® Power Series:

The OSRAM Lok-it!® Power Series packs a lot of power. The lamps offer a high CRI of 90 across the range and special features, such as boosting or improved thermal resistance, the Lok-it!® Power Series has never been so powerful. Designed to give you broader versatility to meet the needs of a wide array of applications, the latest Power Series lamps provide top performance you can rely on.

### The OSRAM Lok-it!® Power Series offers:

- Natural tone of light with CRI of 90 (Brilliant: 95)
- Compact size and short arc gap for use in smaller and brighter fixtures
- Higher luminous efficiency than standard HID lamps
- Optimized filling for uniform light emission and reduced output in the green wavelengths common to HID lamps
- “Plug-and-play” base PGJX28 or PGJX36
- OSRAM PGJX28 and PGJX36 ceramic bases allow a high resistance to high voltage up, to 35kV

### Triple Power Effect

The OSRAM Lok-it!® Power Series comes with Triple Power, identified by the symbols which appear on the outside of the box:



#### Power Color

New filling, as well as optimized electrodes and bulb geometry, make for a CRI as high as 95.



#### Power Heat

With ZrO<sub>2</sub> coating, eXtreme Seal (XS) Technology and additional improvements, achieving thermal re-sistance of ~500° C is now possible.



#### Power Boost

The improved ceramic base and burner design with an optimized filling, allows the lamp to be driven higher on demand.



A clearly defined spotlight sets the stage for a vivid concert experience with natural and brilliant lighting.



© Ralph Larmann

## The right lamp for every job

In addition to the standard Lok-it!® PS, there are two other versions: Lok-it!® PS Brilliant with a CRI of 95, and Blue with an intense color temperature of 7500 K.

Name	Feature	Benefit	Key Application
Lok-it!®/PS	950 h	Stable performance and reliability	Concert lighting
Lok-it!®/PS Brilliant	CRI 95	Life-like colors and natural skin tones	Theatre lighting
Lok-it!®/PS Blue	7500 K	Bright whites for cutting through the other colors on stage	Concert lighting

The lamps can also be identified by the color on the bottom of the base making it easier than ever to choose the right lamp.



### Lok-it!® PS

The standard lamps of the Lok-it!® series comes with a cutout in the base, which enables improved heat management in the moving head.



### Lok-it!® PS Brilliant

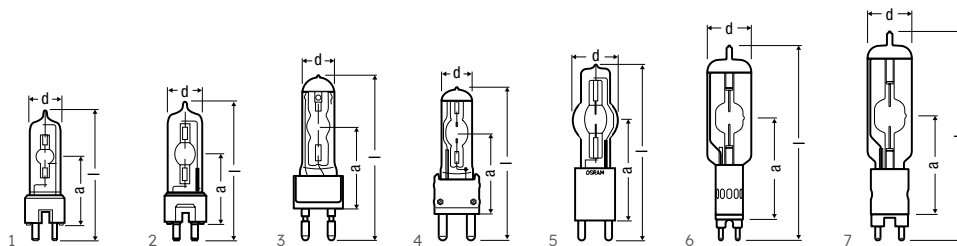
When color brilliance has to be key, the Lok-it!® PS Brilliant lamps impress with lifelike colors, thanks to their high CRI of 95.



### Lok-it!® PS Blue

Crisp light at the switch of a button? The Lok-it!® PS Blue delivers 7500 Kelvin light-power.

Technical data

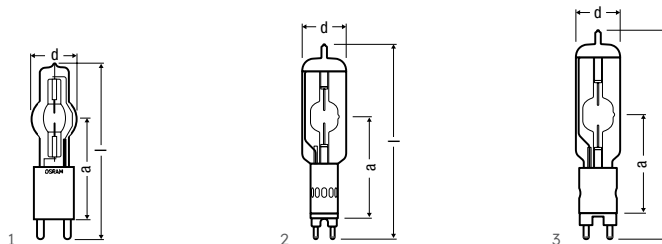


**HMI® DIGITAL lamp types**

Product reference	Product number	W	V	A		lm	t(h)	K		LCL a (mm)		
									d (mm)		l (mm)	No.
HMI® DIGITAL 200W	4052899984110	200	69	2.9	GZY9.5	16000	200	6900 <sup>1)</sup>	19.2	39	80	1
HMI® DIGITAL 400W	4052899984127	400	75	5.3	GZZ9.5	32500	650	6700 <sup>1)</sup>	23	60	110	2
HMI® DIGITAL 575W	4052899984134	575	94	6.1	G22	49000	1000	6400 <sup>1)</sup>	30	70	145	3
HMI® DIGITAL 800W	4052899984141	800	95	8.4	G22	69000	1000	6300 <sup>1)</sup>	30	70	145	3
HMI® DIGITAL 1200W	4052899984196	1200	100	12	G38	110000	1000	6800 <sup>1)</sup>	40.4	107	200	4
HMI® DIGITAL 1600W	4062172294911	1600	155	10.3	G22	144000	750	7250 <sup>1)</sup>	40	85	173	3
HMI® DIGITAL 1800W	4052899984202	1800	140	12.9	G38	165000	750	6500 <sup>1)</sup>	40.4	107	200	4
HMI® DIGITAL 2500W	4052899984295	2500	118	24.5	G38	220000	500	6300 <sup>1)</sup>	60	127	220	5
HMI® DIGITAL 4000W	4052899984301	4000	200	24	G38	387000	500	6000 <sup>1)</sup>	75	141	250	5
HMI® DIGITAL 6000W	4062172005890	6000	121	50	GX38	600000	500	6000 <sup>1)</sup>	74	210	360	6
HMI® DIGITAL 9000W	4062172001908	9000	165	56	GX38	875000	400	6000 <sup>1)</sup>	80	210	380	6
HMI® DIGITAL 18000W	4008321098955	18000	225	88	GX51	1600000	350	6000 <sup>1,2)</sup>	100	260	495	7

1) Average value on electronic ballast

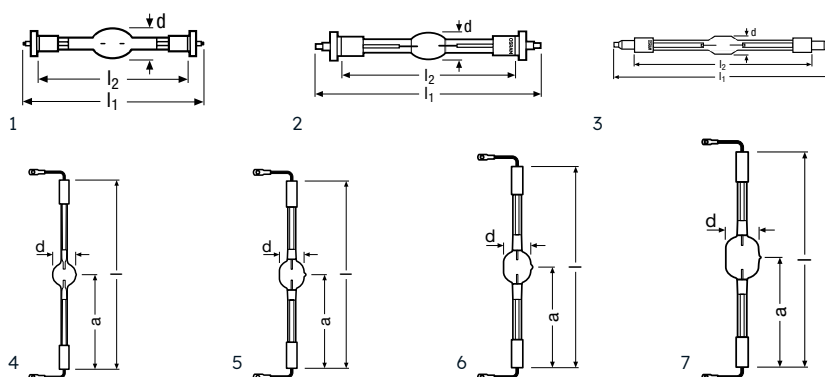
2) Preliminary data



**HMI®, single-ended**

Product reference	Product number	W	V	A	t(h)	lm	K						
								d (mm)	l (mm)	h max. (mm)			No.
HMI 2500 W/SE/XS	4050300284293	2500	115	25.6	500	240000	6000	60	225	290	p30	G38	1 1
HMI 4000 W/SE/XS	4008321244314	4000	200	24	500	380000	6000	75	250	340	p15	G38	1 1
HMI 12000 W/SE/XS	4050300650418	12000	160	84	500	1150000	6000	100	260	460	s135	GX38	1 2
HMI 18000 W/SE GX51	4008321098955	18000	225	88	350	1600000	6000	100	260	495	s135	GX51	1 3

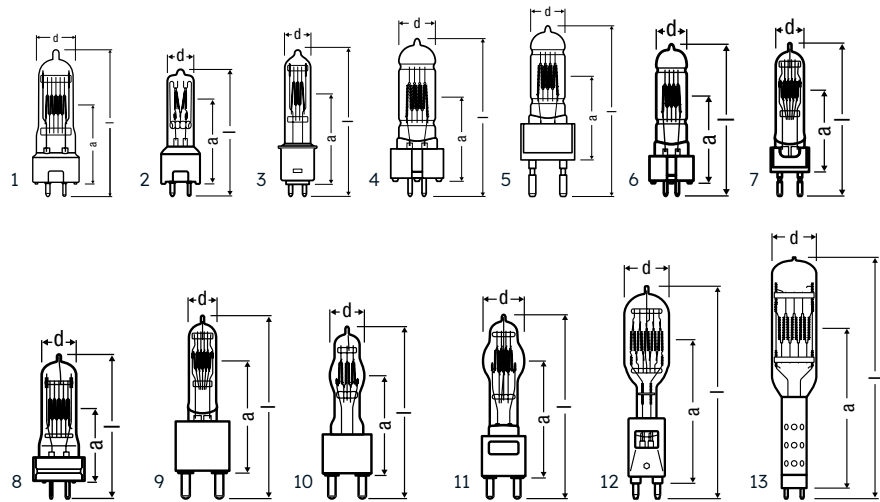




**HMI®**, double-ended

Product reference	Product number	W	V	A	t [h]	Im	K	Ø [mm]	l [mm]	l1 max. [mm]				
HMI 575 W/DXS	4008321285102	575	95	7	1000	49000	6000	21	135	115	Any	SFc10-4	1	1
HMI 1200 W/DXS	4008321931153	1200	100	13.8	1000	110000	6000	27	220	180	Any	SFc15.5	1	2
HMI 2500 W/S XS	4050300025780	2500	115	25.6	500	240000	6000	31.5	210	150	p30	SFa21-12	1	3
HMI 2500 W/DXS	4008321182197	2500	115	25.6	500	240000	6000	31.5	355	290	p30	SFa21	1	3
HMI 4000 W/DXS	4008321210203	4000	200	24	500	380000	6000	36	405	340	p15	SFa21	1	3
HMI 6000 W/DXS	4008321210210	6000	125	55	500	570000	6000	54	450	-	p15	S25.5	1	4
HMI 12000 W/DXS	4008321210227	12000	160	84	500	1150000	6000	64	470	-	p15	S30	1	5
HMI 18000 W/DXS	4008321370280	18000	229	79	500	1700000	6000	77	500	-	p15	S30	1	6
HMI 24000 W/DXS	4008321355805	24000	280	86	500	2300000	6000	83	500	-	p15	S30	1	7

## Technical data



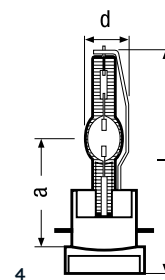
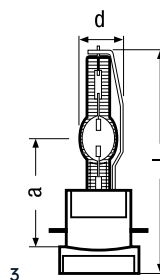
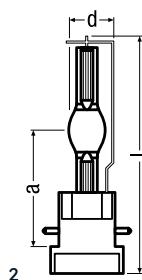
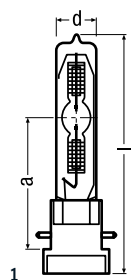
### Halogen studio lamps

Product reference	Product number	ANSI	LIF	W	V	t[h]	K	Ø [mm]	l [mm]	LCL a [mm]				
64673	4052899015463	FSL	CP/81	300	230	200	3100	18	80	46.5	Any	GY9.5	12	2
64673	4052899015487	FSK	CP/81	300	240	200	3100	18	80	46.5	Any	GY9.5	12	2
64670	4008321624017	GCV	T/25	500	230	300	3000	23	90	46.5	s90	GY9.5	12	1
64670	4008321624031	GCV	T/25	500	240	300	3000	23	90	46.5	s90	GY9.5	12	1
64674	4052899015500	FRH	CP/82	500	230	200	3200	18	80	46.5	Any	GY9.5	12	2
64674	4052899015524	FRJ	CP/82	500	240	200	3200	18	80	46.5	Any	GY9.5	12	2
64680	4008321098573		A1/244	500	230	50	3200	22	75	36.5	Any	GY9.5	12	1
64680	4008321098597		A1/244	500	240	50	3200	22	75	36.5	Any	GY9.5	12	1
64716	4008321623973	GKV		600	230	250	3050	19	101	60.5	s90	G9.5	12	3
64716	4008321623997	GKV		600	240	250	3050	19	101	60.5	s90	G9.5	12	3
64717	4008321624215	FRL	CP/89	650	230	150	3200	23	90	46.5	s90	GY9.5	12	1
64717	4008321624239	FRM	CP/89	650	240	150	3200	23	90	46.5	s90	GY9.5	12	1
64718	4008321624253	GCT	T/27	650	230	400	3000	23	90	46.5	s90	GY9.5	12	1
64718	4008321624277	GCT	T/27	650	240	400	3000	23	90	46.5	s90	GY9.5	12	1
64719	4008321638076		T/12	650	230	750	3000	26	110	55	s90	GX9.5	20	4
64720	4008321638090		CP/23	650	230	100	3200	26	110	55	s90	GX9.5	20	4
64721	4008321638113	FKH	CP/39	650	230	100	3200	26	140	63.5	s90	G22	20	5
64678	4008321624055			800	230	250	3200	19	101	60.5	s90	G9.5	12	3
64752	4008321624475	FWS	T/29	1200	230	400	3000	27	125	67	s90	GX9.5	20	6
64752	4008321624499	FWS	T/29	1200	240	400	3000	27	125	67	s90	GX9.5	20	6
64754	4008321624529		CP/90	1200	230	200	3200	27	125	67	s90	GX9.5	20	6
64756	4008321624550		CP/93	1200	230	200	3200	26	140	63.5	s90	G22	20	5
93723	4008321370594		CP/110	1200	80	300	3200	22	120.7	63.5	s135	2 pins	12	7
64777	4008321632197		CP/92	2000	230	400	3200	35	175	90	s90	G22	12	7
64787	4008321653994		CP/75	2000	230	400	3200	35	160	75	s90	G22	12	7
64788	4008321632173	FTM	CP/72	2000	230	400	3200	35	145	70	s90	GY16	12	8
64788	4008321632180	FTM	CP/72	2000	240	400	3200	35	145	70	s90	GY16	12	8
64789	4008321654021	FKK	CP/73	2000	230	400	3200	35	210	127	s90	G38	6	9
64789	4008321654038	FKK	CP/73	2000	240	400	3200	35	210	127	s90	G38	6	9
64796	4008321653987		CP/91	2500	230	400	3200	35	175	90	s90	G22	12	7
64797	4052899129542			3000	230	400	3200	45	210	127	s90	G38	6	10
64805	4052899129580		CP/85	5000	120	400	3200	60	279.4	165	s90	G38	6	11
64805	4052899129566		CP/85	5000	230	400	3200	60	279	165	s90	G38	6	11
64805	4052899129573		CP/85	5000	240	400	3200	61	279	165	s90	G38	6	11
64815	4050300780696	ECR	CP/83	10000	230	350	3200	80	400	254	s45	G38	6	12
64818	4008321792051	BCM	CP/99	20000	230	350	3200	100	550	354	s45	G38	4	13



To access the energy label and product information sheet please visit our electronic product catalogue  
[https://www.osram.com/ecat/Halogen%20lamps-Entertainment-Specialty%20Lighting/com/en/GPS01\\_3169907/](https://www.osram.com/ecat/Halogen%20lamps-Entertainment-Specialty%20Lighting/com/en/GPS01_3169907/)





**Lok-it!® lamp types**

Product Name	Product Number	W	V	A	t <sub>[h]</sub>	lm
<b>Lok-it!® metal halide lamp</b>						
Lok-it!® HSD 300W/80/P28	4008321644831	300	95	3.2	2000	20500
Lok-it!® HTI 400W/60/P28	4008321605481	400	65	6.2	750	30000
Lok-it!® HTI 700W/60/P28	4008321510549	700	60	11.6	750	50000
Lok-it!® HTI 700W/75/P50	4008321485205	700	68	10.3	750	50000
Lok-it!® HTI 700W/75/P28	4052899179790	700	68	10.3	750	50000
Lok-it!® HTI 1500W/60/P50	4008321553416	1500	100	15	750	130000
Lok-it!® HTI 1500W/60/P50 M3W	4008321818997	1500	100	15	750	130000
Lok-it!® HTI 1600W/60/P50	4062172123488	1650	93	17.4	750	140000
Lok-it!® HTI 2000 W/60/P50	4062172133098	2000	107	18.6	1000	165000
Lok-it!® HTI 2000 W/75/P50	4062172133111	2000	100	20	1000	155000

<b>Lok-it!® Power Series</b>						
Lok-it!® 1000/PS	4052899965157	1000	85	11.8	950	85000
Lok-it!® 1000/PS Blue	4052899965171	1000	85	11.8	750	75000
Lok-it!® 1000/PS Brilliant	4052899965164	1000	85	11.8	750	82000
Lok-it!® 1400/PS Brilliant	4052899965195	1400	95.5	14.7	750	118000
Lok-it!® 1700/PS	4052899965201	1700	84.5	20	750	135000
Lok-it!® 1800/PS Brilliant	4062172047081	1800	88	20.5	750	148000
Lok-it!® 2000/PS Brilliant	4062172169561	2000	107.5	18.6	750	165000

Product Name	K	R <sub>a</sub>	∅ (mm)	l (mm)	LCL ∅ (mm)	+	PGJX	No.
<b>Lok-it!® metal halide lamp</b>								
Lok-it!® HSD 300W/80/P28	8700	> 70	23	121	67	5	PGJX28	1
Lok-it!® HTI 400W/60/P28	6500	> 80	23	103	56	3.4	PGJX28	2
Lok-it!® HTI 700W/60/P28	5800	> 70	23	112	56	4	PGJX28	2
Lok-it!® HTI 700W/75/P50	7250	> 75	24	125	65	4	PGJX50	3
Lok-it!® HTI 700W/75/P28	6700	> 75	23	112	56	4	PGJX28	2
Lok-it!® HTI 1500W/60/P50	6000	> 85	29	128	65	6.1	PGJX50	3
Lok-it!® HTI 1500W/60/P50 M3W	6100	> 85	29	130	67	7	PGJX50	3
Lok-it!® HTI 1600W/60/P50	5800	> 92	28	128	65	5.5	PGJX50	3
Lok-it!® HTI 2000 W/60/P50	6000	95	29	130	67	7	PGJX50	3
Lok-it!® HTI 2000 W/75/P50	7500	77	29	130	67	7	PGJX50	3

<b>Lok-it!® Power Series</b>								
Lok-it!® 1000/PS	5800	> 80	28	112.5	56	5.5	PGJX36	4
Lok-it!® 1000/PS Blue	7500	> 70	28	112.5	56	5.5	PGJX36	4
Lok-it!® 1000/PS Brilliant	5900	> 92	28	112.5	56	5.5	PGJX36	4
Lok-it!® 1400/PS Brilliant	5800	> 93	28	120	60	5.3	PGJX28	4
Lok-it!® 1700/PS	5600	> 92	26	121	60	5.2	PGJX28	4
Lok-it!® 1800/PS Brilliant	5600	> 92	28.5	121	60	5.2	PGJX28	4
Lok-it!® 2000/PS Brilliant	6000	95	28.5	121	60	7	PGJX28	4



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