



The perfect stage for your creativity

Powerful metal halide lamps for
architainment: HSR® and HSD®



SEE THE WORLD IN A NEW LIGHT

OSRAM





HSR® and HSD®: light for arch

HSR® and HSD® from OSRAM are single-ended, non-hot restrikeable metal halide lamps with outer bulbs for creative effect and architecture lighting.

The stage is set for HSR® and HSD®. HSR® and HSD® provide the right special effects for night clubs, TV studios, pop concerts, musicals and theatre productions and also for illuminating architectural features.

The rugged and compact design of the lamp and the thermal and mechanical stability of the internal components ensure simple handling and safe operation, even under difficult conditions.

A patented filling system is used for the HSD® 575/72 and HSD® 250/78 which considerably reduces devitrification. A newcomer to this family is the HSD® 250/80. It has a colour temperature of 8000 K and provides a cool bluish white light.

The HSR® 575/60, HSR® 575/72 and HSD® 575/72 have all been upgraded with improved cold start properties.

These lamps require a starting pulse of only 1.5 kV so they will start reliably even with weak igniters.

Ideal for entertainment: HSR® with extra high luminous efficacy

- Extra high luminous efficacy of up to 90 lm/W
- Low devitrification of the discharge bulb wall
- Constant luminous intensity and colour temperature throughout the life of the lamp
- Daylight character (6000 K) and “bright light” character (7200 K)
- Can be operated on ECGs or chokes
- Simple and reliable cold starting
- Four wattages from 400 to 1200 W

Ideal for archtainment: HSD® with extra long life

- Extra long average life of 2000 to 3000 hours
- Low devitrification of the discharge bulb wall
- Constant luminous intensity and colour temperature throughout the life of the lamp
- Daylight character (6000 K) and “bright light” character (7000 K–8000 K)
- Can be operated on ECGs or chokes
- Simple and reliable cold starting
- Four wattages from 150 to 575 W



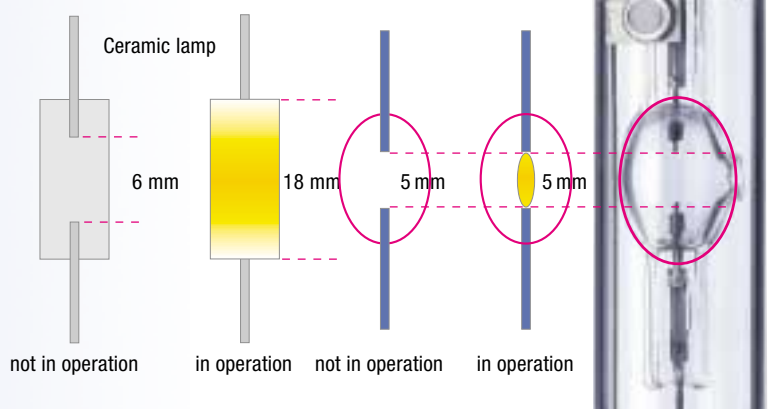


Architecture and entertainment.

Setting new standards: HSD® 150/70 with UV filter and G12 base

The OSRAM HSD® 150/70 is the first lamp in the HSD® family to come with its own UV filter – there is no need for any additional filters. Because of its high luminous efficacy – thanks to innovative short-arc technology – and its long average life of 2000 or 3000 hours (if operated on an ECG), the HSD® 150/70 is an ideal choice for effect and architectural lighting.

Short-arc technology means more light for the same wattage



Your benefit: Special features of the HSD® 150/70:

- “Bright light” character at 7000 K
- Innovative short-arc technology with an electrode gap of only 5.5 mm
- High luminance of 15,000 cd/cm²: particularly effective in luminaires with optical systems (e.g. condenser lenses)
- High efficiency: more light for the same power consumption
- Fewer luminaires for the same amount of light, resulting in reduced costs
- G 12 base: compatible with standard 150 W ceramic lamps
- Can be used as upgrades in existing luminaires: the design, dimensions and electrical data are compatible with standard single-ended ceramic lamps
- UV filter quartz: reduced material stresses, greater operational safety
- Universal operating position: luminaires can be positioned and moved without restriction; ideal for moving-head spotlights
- Long average life, typical of HSD® lamps, of 3000 hours (if operated on an ECG)
- Simple operation with standard electronic or conventional control gear: Optimum system operation with POWERTRONIC® PTU 150/220-240 electronic control gear from OSRAM



HSR® and HSD® metal halide lamps

Long life, primarily for applications in the commercial and effect lighting sector. With outer quartz jacket provides for ease of handling. No hot restart.

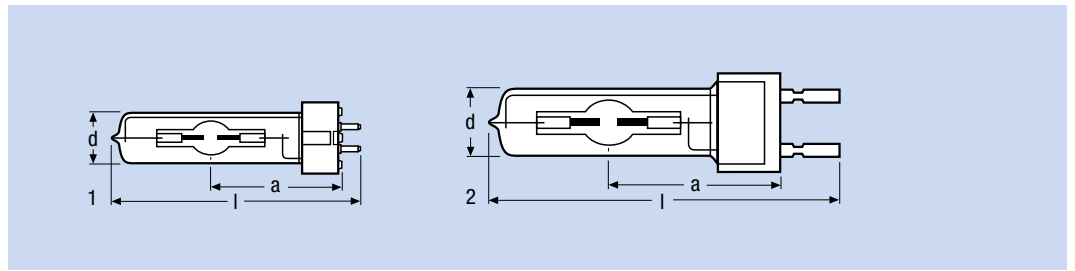
Ideal for:

- Event and night club lighting
- Projected advertising
- Trade fair and exhibition lighting
- Architectural and effect lighting

Safety:

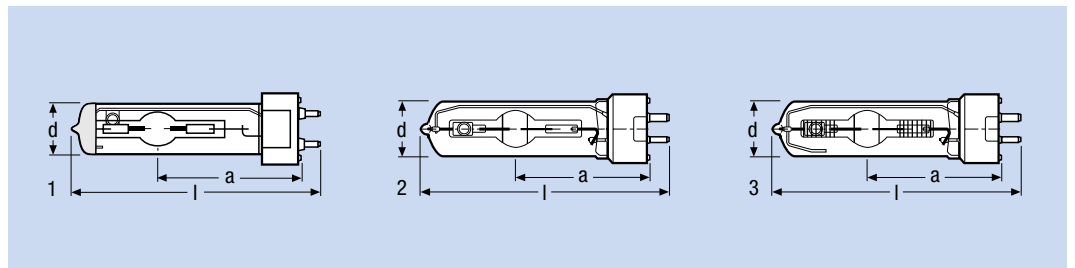
Because HSD® and HSR® lamps emit UV radiation and operate at positive pressure the following lamps must only be operated in an appropriate and fully enclosed luminaires. For lamps without UV filters, measures should be taken to ensure that UV radiation is reduced to an acceptable level.

Technical data for HSR®



Type	HSR 400/60	HSR 575/60	HSR 575/72	HSR 700/60	HSR 1200/60
Rated wattage	400 W	575 W	575 W	700 W	1200 W
Lamp voltage	67 V	95 V	95 V	72 V	100 V
Operating current	7 A	7 A	7 A	11 A	13.8 A
Luminous flux	33000 lm	49000 lm	49000 lm	58000 lm	110000 lm
Colour temperature	6000 K	6000 K	7200 K	6000 K	6000 K
Colour rendering index	CRI > 85	CRI > 85	CRI > 85	CRI > 85	CRI > 85
Average lamp life ¹⁾	1000 h	1000 h	1000 h	1000 h	1000 h
Length l max.	110 mm	125 mm	125 mm	155 mm	175 mm
LCL a	62 mm	65 mm	65 mm	75 mm	85 mm
Diameter d max.	23 mm	30 mm	30 mm	30 mm	40 mm
Base	GX 9.5	GX 9.5	GX 9.5	G 22	G 22/28x50
Fig. no.	1	1	1	2	2

Technical data for HSD®



Type	HSD 150/70	HSD 200/60	HSD 250/60	HSD 250/78	HSD 250/80	HSD 575/72
Rated wattage	150 W	200 W	250 W	250 W	250 W	575 W
Lamp voltage	97 V	70 V	90 V	90 V	90 V	86 V
Operating current	1.8 A	3.3 A	3.1 A	3.1 A	3.1 A	7.6 A
Luminous flux	12000 lm	13000 lm	17000 lm	17000 lm	17000 lm	45000 lm
Colour temperature	7000 K	6000 K	6000 K	7800 K	8000 K	7200 K
Colour rendering index	CRI > 85	CRI > 80	CRI > 85	CRI > 85	CRI > 85	CRI > 85
Average lamp life ¹⁾	3000 h	2000 h	2000 h	3000 h	3000 h	3000 h
Length l max.	105 mm	108 mm	108 mm	108 mm	108 mm	135 mm
LCL a	56 mm	55 mm	55 mm	55 mm	55 mm	65 mm
Diameter d max.	20 mm	23 mm	23 mm	23 mm	23 mm	30 mm
Base	G12	GY 9.5	GY 9.5	GY 9.5	GY 9.5	GY 9.5
Fig. no.	1	2	2	2	2	3

¹⁾ If operated on ECG; 2000 h if operated on choke

Picture credits:

Arag-Tower, A&L lighting (Germany) Kauners disco, mondiale publishing ltd (England), Chicago Bridge, Martin Professional (Germany), European Song Contest, Riga 2003, Spectra (Sweden), Arched gate Mexiko, Arcos Vallarta, Studio Due (Italy), disco LIVE! Bratislava, mondiale publishing ltd (England); Châtres Cathedral, Paris, Clay Paky (Italy)

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