BB

MSR 2000 SA

MSR 400 SA/700 SA

MSR 1200 SA

Features

High-efficiency short-arc metal halide lamps designed for optimum light collection.
They combine the high luminous efficacy, very compact arc with high luminance and excellent colour characteristics required for a variety of spotlighting and projection applications.
MSR Short Arc lamps can be operated on magnetic ballasts.
However, best performance of the MSR SA range is achieved with power stabilised electronic ballasts.The run-up time is maximum two minutes.
Their restrike time is 5-10 minutes, depending on cooling conditions. Dimming is not possible.
In view of their high internal working pressure, these lamps must only be operated in closed luminaires. They radiate a considerable amount of ultraviolet; the luminaire lenses must block this, and no radiation must be spilled through ventilation slots.

Application

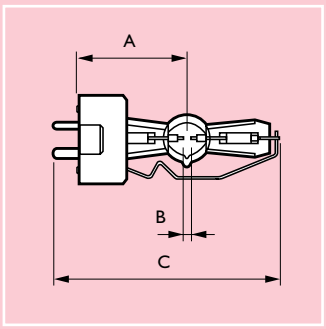
- Entertainment.

Philips P3 technology

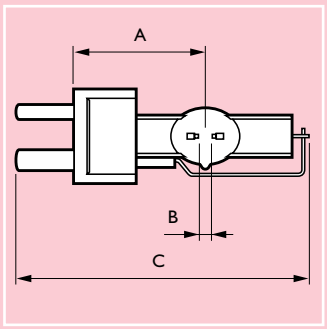
- Reliability, through longer lifetime and fewer early failures.
- Quality, through excellent storage characteristics and consistent performance over time.
- Freedom in both luminaire design and burning position.

Type	Lamp wattage	Cap/ base	Lumen output	Efficacy source	Chromaticity coordinates		Colour rendering index	Colour temp.	Burning position*)	Average lamp life	Replacement before hrs	Minimum ignition supply voltage	Lamp current	Ordering number
	W		lm	lm/W	x	y	R_a	K		h		V	A	
MSR 400 SA	400	GY9.5	30000	75	.330	.342	75	5600	ANY	750	1000	207	8.40	9281 702 05100
MSR 700 SA	700	GY9.5	55000	80	.330	.342	80	5600	ANY	750	1000	207	11.0	9281 703 05100
MSR 1200 SA	1200	GY22	96000	80	.330	.342	80	5600	ANY	750	1000	207	13.8	9281 709 05100
MSR 2000 SA	2000**	GY22	155000	86	.320	.330	> 80	6000	ANY	750	1000	207	20.0	9281 732 05100

*) *Tip at side*
**) *Lamp can be operated at 2000 W for max 50% of specified average lifetime*
Nominal values measured in horizontal burning position in an integrating sphere on a magnetic ballast.



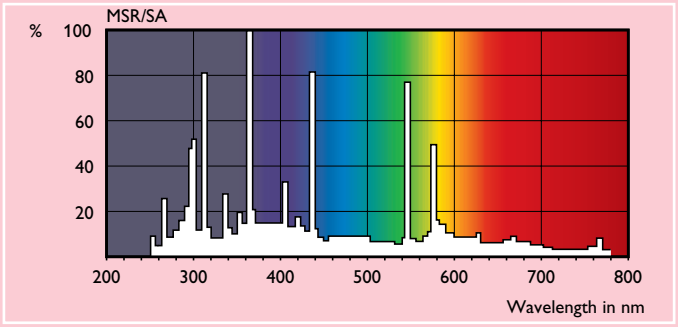
MSR 400 SA / MSR 700 SA



MSR 1200 SA
MSR 2000 SA

Dimensions in mm

Type	A	B	C max.
MSR 400 SA	36.5 ± 0.5	3.0	80
MSR 700 SA	39.0 ± 0.5	4.0	85
MSR 1200 SA	59.0 ± 0.5	7.0	135
MSR 2000 SA	59.0 ± 1.0	7.0	135



Spectral power distribution

Ballast specifications

Type of lamp	Impedance Ω	Current A	Ballast losses W
MSR 400 SA		electronic ballast only	
MSR 700 SA		electronic ballast only	
MSR 1200 SA		electronic ballast only	
MSR 2000 SA		electronic ballast only	

Ignitor Specifications

Type	Vp (kV) min.	Vp (kV) max.	Min. Ignation time (sec)
MSR 400 SA	2	4.5	20
MSR 700 SA	2	4.5	20
MSR 1200 SA	2	5	20
MSR 2000 SA	2.5	5	20

Maximum permissible temperatures (degr. C)

Type	Pinch	Bulb
MSR 400 SA	500	1000
MSR 700 SA	500	1000
MSR 1200 SA	500	1000
MSR 2000 SA	500	1000

Type	ΔVla (V)
MSR 400 SA	+1V/-3V
MSR 700 SA	+1V/-3V
MSR 1200 SA	+1V/-3V
MSR 2000 SA	+1V/-3V