

# METALARC® POWERBALL® CERAMIC

High CRI, Ceramic Metal Halide Lamps



**METALARC POWERBALL CERAMIC lamps meet today's color critical needs by combining conventional metal halide pulse start characteristics such as good efficacy and long life with improved lamp to lamp color consistency and high CRI.**

Compared to conventional quartz metal halide products, SYLVANIA ceramic arc tube metal halide lamps exhibit less color variation and higher efficacy. Their high mean lumens, excellent color characteristics and compact size allow for use in a wide variety of applications.

METALARC POWERBALL CERAMIC lamps operate on existing ANSI specified magnetic ballasts and on compatible electronic ballasts. The lamps can be used in appropriate existing fixtures for metal halide lamps of similar wattages and configurations.

## Application Information

### Applications

Retail stores, Malls, Lobbies, Office areas, Landscape lighting, Accent lighting, Display lighting, Studio lighting

### Fixtures

Contact your local fixture agent for available fixtures.

### Ballast Information

Contact your OSRAM SYLVANIA representative for a list of compatible electronic operating systems.

## Advantages of Ceramic Arc Tube Technology

- Excellent CRI, greater than 80, yields more natural colors
- Long life and high efficacy
- Lower thermal output than tungsten halogen lamps having similar light output
- Superior color stability over the life of the lamp: 200K maximum color shift
- Improved lamp to lamp color consistency\*
- METALARC PRO-TECH® design for open fixture applications
- Open fixture rated products improve fixture efficiency and simplify maintenance
- UV-Stop\*\* shroud technology significantly reduces UV output and minimizes discoloration and fading of materials
- Pulse start arc tube technology
- Ideal for open recessed cans or track lighting fixtures
- Compact light sources improve fixture optics

\* Compared to quartz metal halide lamps of similar wattage

\*\* MCP250W has a reduced-UV shroud

## Product Availability

Wattage	Bulb Shapes	Pro-Tech
39	PAR20, PAR30LN	YES
39	T6, TC	NO
70	E17***, PAR30LN, PAR38***	YES
70	T6, TC	NO
100***	E17, PAR38	YES
150***	E17	YES
150	T6, T7	NO
250***	BT28	YES

\*\*\* Utilizes advanced ceramic arc tube shape and construction yielding enhanced performance

### Application Notes

1. METALARC POWERBALL CERAMIC PRO-TECH E17, BT28, PAR20, PAR30LN, and PAR38 lamps are rated for use in both open and enclosed fixtures.
2. METALARC POWERBALL CERAMIC T6/G12, TC and double-ended products must be operated in enclosed fixtures capable of containing particles as hot as 1200°C.

## Ordering and Specification Information

Item Number	Ordering Abbreviation	Watts	Bulb	Base	ANSI Code <sup>4</sup>	Avg. Rated Life (hrs)	Initial Lumens	Mean Lumens	CCT	CRI
64791	MC39TC/U/G8.5/830 <sup>2,6</sup>	39	TC	BiPin G8.5	M130/E	9000	3300	2640	3000K	82
64363	MC39T6/U/G12/830 <sup>2,6</sup>	39	T6	G12	M130/E	9000	3300V/3400H	2720	3000K	82
64792	MC70TC/U/G8.5/830 <sup>2,6</sup>	70	TC	BiPin G8.5	M98/E, M139/E <sup>3</sup>	9000	6600	5280	3000K	83
64361	MC70T6/U/G12/830 <sup>2,6</sup>	70	T6	G12	M98/E, M139/E <sup>3</sup>	9000	6600	5280	3000K	83
64338	MC70T6/U/G12/940 <sup>2,6</sup>	70	T6	G12	M98/E, M139/E <sup>3</sup>	9000	5800	4640	4200K	90
64359	MC150T6/U/G12/830 <sup>2,6</sup>	150	T6	G12	M102/E, M142/E <sup>3</sup>	9000	14,000	11,200	3000K	85
64337	MC150T6/U/G12/940 <sup>2,6</sup>	150	T6	G12	M102/E, M142/E <sup>3</sup>	9000	12,700	10,160	4200K	90

Item Number	Ordering Abbreviation	Watts	Bulb	Base	ANSI Code <sup>4</sup>	Avg. Rated Life (hrs)	Initial Lumens	Mean Lumens	CCT	CRI
64793	MC70T6/DE/830 <sup>8</sup>	70	T6	R7S RSC	M139/E <sup>3</sup>	12,000	6500	5040	3000K	83
64794	MC150T7/DE/830 <sup>9</sup>	150	T7	R7S RSC	M142/E <sup>3</sup>	12,000	13,500	10,800	3000K	85

Item Number	Ordering Abbreviation	Watts	Bulb	Base	ANSI Code <sup>4</sup>	Avg. Rated Life (hrs)	Initial Lumens	Mean Lumens	CCT	CRI
64739	MCP70/U/MED/830 <sup>6</sup>	70	E17	Med.	M98/O, M139/O <sup>3</sup>	12,000	5900	4700	3000K	88
64740	MCP70/C/U/MED/830 <sup>6</sup>	70	E17	Med.	M98/O, M139/O <sup>3</sup>	12,000	5500	4400	3000K	88
64743	MCP100/U/MED/830 <sup>6</sup>	100	E17	Med.	M90/O, M140/O	12,000	9000	7200	3000K	85
64744	MCP100/C/U/MED/830 <sup>6</sup>	100	E17	Med.	M90/O, M140/O	12,000	8500	6900	3000K	85
64786	MCP250/PS/BU-ONLY/940 <sup>6</sup>	250	BT28	EX 39	M153/O, M138/O <sup>7</sup>	15,000	24,000	19,200	4000K	94
64821	MCP250/C/PS/BU-ONLY/940 <sup>6,8</sup>	250	BT28	EX 39	M153/O, M138/O <sup>7</sup>	15,000	22,500	18,000	4000K	94

Item Number	Ordering Abbreviation	Watts	Bulb	Base	ANSI Code <sup>4</sup>	Avg. Rated Life (hrs)	Initial Lumens	Initial MBCP	Beam Angle	CCT	CRI
64747	MCP39PAR20/U/830/SP <sup>2,6</sup>	39	PAR20	Med.	M130/O	9000	2000	22,000	10°	2900K	85
64748	MCP39PAR20/U/830/FL <sup>2,6</sup>	39	PAR20	Med.	M130/O	9000	2000	5000	30°	2900K	85
64755	MCP39PAR30LN/U/830/SP <sup>2,6</sup>	39	PAR30LN	Med.	M130/O	9000	2300	39,600	10°	2900K	85
64756	MCP39PAR30LN/U/830/FL <sup>2,6</sup>	39	PAR30LN	Med.	M130/O	9000	2300	7400	30°	2900K	85
64745	MCP70PAR30LN/U/830/SP <sup>2,6</sup>	70	PAR30LN	Med.	M98/O, M139/O <sup>3</sup>	9000	4400	46,000	12°	2900K	85
64746	MCP70PAR30LN/U/830/FL <sup>2,6</sup>	70	PAR30LN	Med.	M98/O, M139/O <sup>3</sup>	9000	4400	13,200	30°	2900K	85
64749	MCP70PAR38/U/830/ECO/SP <sup>6</sup>	70	PAR38	Med. Skt	M98/O, M139/O <sup>3</sup>	10,000	4300	40,000	15°	3000K	85
64750	MCP70PAR38/U/830/ECO/FL <sup>6</sup>	70	PAR38	Med. Skt	M98/O, M139/O <sup>3</sup>	10,000	4300	16,000	25°	3000K	85
64751	MCP70PAR38/U/830/ECO/VWFL <sup>6</sup>	70	PAR38	Med. Skt	M98/O, M139/O <sup>3</sup>	10,000	4300	3500	65°	3000K	85
64752	MCP100PAR38/U/830/ECO/SP <sup>6</sup>	100	PAR38	Med. Skt	M90/O, M140/O	12,000	6500	58,000	15°	3000K	85
64753	MCP100PAR38/U/830/ECO/FL <sup>6</sup>	100	PAR38	Med. Skt	M90/O, M140/O	12,000	6500	25,000	25°	3000K	85
64754	MCP100PAR38/U/830/ECO/VWFL <sup>100</sup>	100	PAR38	Med. Skt	M90/O, M140/O	12,000	6500	6000	65°	3000K	85

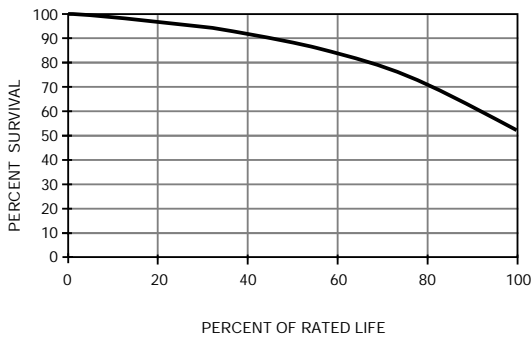
- Clear and coated versions of MCP150/U/MED/830 ceramic products will become available in 2002. Contact your local OSRAM SYLVANIA sales representative for availability.
- Thermally protected ballasts are required to operate this lamp.
- Nominal open circuit voltage of 230V or higher is required.
- Contact your local OSRAM SYLVANIA representative for compatible electronic ballasts.
- Ask your local sales representative for product availability.
- Use with 4000V pulse rated socket only.
- When operated on a ballast having a sustaining voltage less than 270V, lamp life may be significantly reduced.
- Lamps may be operated on ANSI M98 or M85 Compliant Ballasts (Nominal OCV of 230V or higher is required).
- Lamps may be operated on ANSI M102 or M81 Compliant Ballasts (Nominal OCV of 230V or higher is required).

## Ordering Guide

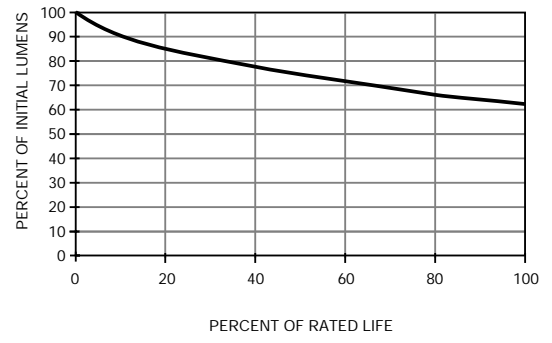
MCP	70	/	U	/	MED	/	830	/	XXX
M=METALARC	Wattage:		Operating		Base: Medium,		80+ CRI		Beamspread
C=CERAMIC	39, 70, 100, 150		position:		Medium Skirted,		3000K		SP=Spot
P=PRO-TECH	and 250 watts		Universal		EX 39 or G12 base				FL=Flood
									VWFL=Wide Flood

## Technical Information

Typical Mortality Curve

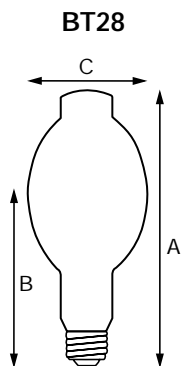
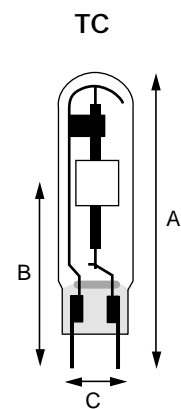
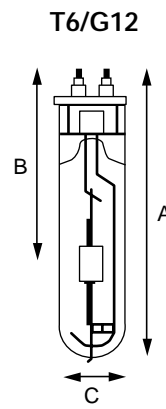
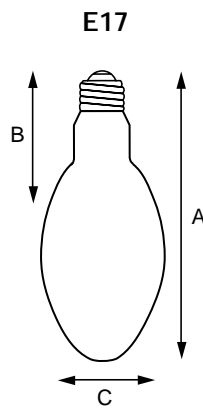
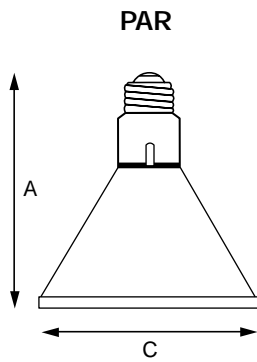
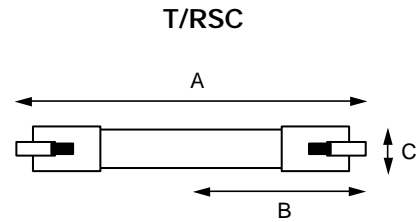


Typical Lumen Maintenance Curve



## Dimensions

	(A) MOL	(B) LCL	(C) Bulb Diameter
TC	3.20"	2.00"	0.56"
T6/G12	4.13"	2.20"	0.75"
T6/RSC	4.50"	2.50"	0.75"
T7/RSC	5.20"	2.60"	0.88"
E17	5.44"	3.41"	2.13"
BT28	8.31"	5.00"	3.50"
PAR20	3.65"	N/A	2.54"
PAR30LN	4.75"	N/A	3.79"
PAR38	5.31"	N/A	4.75"



**Sample Specification**

Lamp(s) shall be (a)  
METALARC ceramic lamp(s)  
and shall be constructed  
with a ceramic arc-tube.  
Lamp(s) shall have a CRI of  
greater than 80 and shall  
exhibit a maximum color  
shift of  $\pm 200\text{K}$  over life.

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WARNING: This lamp can cause serious skin burn and eye inflammation from shortwave Ultraviolet radiation if the outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.

Visit our website: [www.sylvania.com](http://www.sylvania.com)

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