# METALARC® POWERBALL® ECOLOGIC®

High CRI, Ceramic Metal Halide PAR Lamps



METALARC® POWERBALL® ECOLOGIC® 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 them to be used in a wide variety of applications.

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

#### **Key Features & Benefits**

- · Excellent CRI, up to 95, yields more natural colors
- Offer up to 15,000 hours rated average life and last 4X longer than halogen lamps
- Lower thermal output than tungsten halogen lamps having similar light output
- · Superior color stability over the life of the lamp
- · Improved lamp-to-lamp color consistency\*

- METALARC PRO-TECH® design for open fixture applications
- Open fixture rated products improve fixture efficiency and simplify mainte-
- UV-Stop 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

\*Compared to quartz metal halide lamps of similar wattage

SYLVANIA METALARC POWERBALL ECOLOGIC lamps are designed to pass the Federal Toxic Characteristic Leaching Procedure (TCLP1) criteria for classification as non-hazardous waste in most states.



- <sup>1</sup> TCLP test results are based on NEMA LL Series standards and are available on request.
- <sup>2</sup> Regulations may vary. Check your local and state regulations.

#### **Product Availability**

Wattage	Bulb Shape	
20	PAR20, PAR30LN	
39	PAR20, PAR30LN	
70	PAR30LN, PAR38	
100	PAR38	
150	PAR38	

### **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 control systems.

#### **Application Notes**

1. METALARC PRO-TECH POWERBALL Ceramic PAR20, PAR30LN and PAR38 lamps are rated for use in both open and enclosed fixtures.



## **Specification Data**

Catalog #	Type
Project	
Comments	
Prepared by	Date

## **Ordering Information**

Item Number	Ordering Abbreviation	Watts	Bulb	Base	ANSI Code⁴	Average Rated Life (hrs.)	Initial Lumens	Initial MBCP	Beam Angle	CCT	CRI
64859	MCP20PAR20/U/830/SP/EC0 PB <sup>1, 5</sup>	20	PAR20	Med.	C156/0	12000	900	15000	8°	3000K	82
64860	MCP20PAR20/U/830/FL/EC0 PB1,5	20	PAR20	Med.	C156/0	12000	900	2650	30°	3000K	82
64879	MCP20PAR30LN/U/830/SP/EC0 PB <sup>1, 5</sup>	20	PAR30LN	Med.	C156/0	12000	1200	24000	10°	3100K	82
64878	MCP20PAR30LN/U/830/FL/EC0 PB1,5	20	PAR30LN	Med.	C156/0	12000	1200	4000	30°	3100K	82
64824	MCP39PAR20/U/830/SP/EC0 PB1,2	39	PAR20	Med.	C130/0	12000	2000	20000	10°	3000K	87
64826	MCP39PAR20/U/830/FL/EC0 PB1,2	39	PAR20	Med.	C130/0	12000	2000	5000	30°	3000K	87
64880	MCP39PAR30LN/U/830/SP/EC0 PB1,2	39	PAR30LN	Med.	C130/0	12000	2300	39600	10°	3000K	85
64881	MCP39PAR30LN/U/830/FL/ECO PB1,2	39	PAR30LN	Med.	C130/0	12000	2300	8000	30°	3000K	85
64885	MCP39PAR30LN/U/830/VWFL/EC0 PB1,2	39	PAR30LN	Med.	C130/0	12000	2300	3500	46°	3000K	85
64201	MCP70PAR30LN/U/930/SP/EC0 PB1,2	70	PAR30LN	Med.	C139/0, C98/0	12000	3600	42000	12°	3000K	95
64202	MCP70PAR30LN/U/930/FL/EC0 PB <sup>1, 2</sup>	70	PAR30LN	Med.	C139/0, C98/0	12000	3600	12000	30°	3000K	95
64230	MCP70PAR30LN/U/930/VWFL/EC0 PB1,2	70	PAR30LN	Med.	C139/0, C98/0	12000	3400	5000	46°	3000K	95
64749	MCP70PAR38/U/830/SP/EC0 PB3	70	PAR38	Med. Skt.	C139/0, C98/0	15000	4300	40000	15°	3000K	88
64750	MCP70PAR38/U/830/FL/EC0 PB3	70	PAR38	Med. Skt.	C139/0, C98/0	15000	4300	16000	25°	3000K	88
64751	MCP70PAR38/U/830/VWFL/EC0 PB3	70	PAR38	Med. Skt.	C139/0, C98/0	15000	4300	3500	65°	3000K	88
64752	MCP100PAR38/U/830/SP/EC0 PB <sup>3</sup>	100	PAR38	Med. Skt.	C90/0, C140/0	15000	6500	58000	15°	3000K	88
64753	MCP100PAR38/U/830/FL/EC0 PB <sup>3</sup>	100	PAR38	Med. Skt.	C90/0, C140/0	15000	6500	25000	25°	3000K	88
64754	MCP100PAR38/U/830/VWFL/EC0 PB <sup>3</sup>	100	PAR38	Med. Skt.	C90/0, C140/0	15000	6500	6000	60°	3000K	88
64841	MCP150PAR38/U/830/SP/EC0 PB3	150	PAR38	Med. Skt.	C102/0, C142/0	15000	9100	50000	15°	3000K	88
64842	MCP150PAR38/U/830/FL/EC0 PB <sup>3</sup>	150	PAR38	Med. Skt.	C102/0, C142/0	15000	9100	28000	25°	3000K	88
64843	MCP150PAR38/U/830/VWFL/EC0 PB <sup>3</sup>	150	PAR38	Med. Skt.	C102/0, C142/0	15000	9100	6500	65°	3000K	88

#### Footnotes

- $1. The \ circuit \ must \ include \ overcurrent \ protection \ (i.e., Thermally \ Switched \ Ballast).$
- 2. Minimum open circuit voltage for starting is measured with the ignitor in the circuit, minimum open circuit voltage is 209 VRMS.
- 3. Lamps with medium skirt base are not compatible with exclusionary medium sockets.
- 4. The first letter of the ANSI code represents the lamp type; "C" for ceramic metal halide and "M" for quartz metal halide. The numbers following the lamp type refer to the electrical characteristics required by the ballast to start and operate the lamp reliably. Ceramic, "C", or quartz, "M" lamps with the same electrical characteristic number will operate on the same ballast (per ANSI C78.380-2007). For example, a 150W ceramic lamp with a C102 designation will operate on a ballast intended for a 150W quartz lamp with an M102 designation.
- 5. Designed for operation only on electronic ballasts.

#### General Notes:

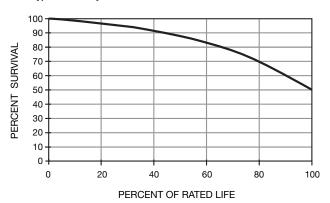
- Contact your local OSRAM SYLVANIA representative for compatible electronic ballasts.
- All ceramic lamps should be used with 4000V pulse rated socket only.

## **Ordering Guide**

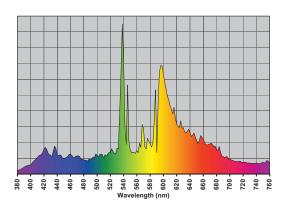
MCP	39	PAR30LN	1	U	1	930	1	SP	1	ECO	РВ
M=METALARC C=CERAMIC P=PRO-TECH	Wattage: 20, 39, 70, 100, 150	Bulb Shape: PAR20, PAR30LN PAR38		Operating position: Universal		8 = 80 + CRI 9 = 90 + CRI 30 = 3000K		Beam Spre SP=Spot, F NFL=Narro VWFL=Wid	L=Flood w Flood	<i>'</i>	PB=Powerball

## **Technical Information**

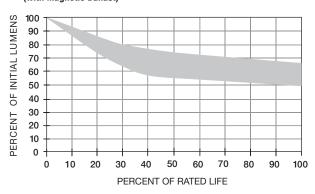
#### **Typical Mortality Curve**



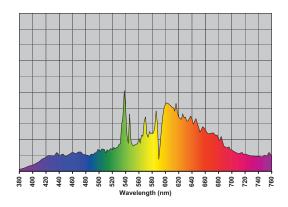
#### Typical Spectral Power Distribution (CRI = 80+)



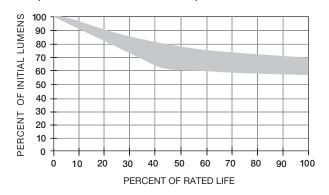
## Typical Lumen Maintenance Curve (with Magnetic Ballast)



Typical Spectral Power Distribution (CRI = 90+)

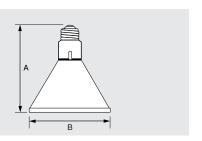


## Typical Lumen Maintenance Curve (with QUICKTRONIC Electronic Ballasts)



## **Lamp Dimensions**

	(A) MOL	(B) Bulb Diameter
PAR20	3.65" (92.7 mm)	2.54" (64.5 mm)
PAR30LN	4.76" (120.9 mm)	3.75" (95.3 mm)
PAR38	5.32" (135.1 mm)	4.76" (120.9 mm)



## **Sample Specification**

Lamp(s) shall be METALARC® POWERBALL® CERAMIC 70PAR30LN/U/930/SP lamp(s), and shall be constructed with a ceramic arc-tube with initial lumens of 3400. Lamp(s) shall have a CRI of 95, CCT of 3000K, and shall exhibit a maximum color shift of ±150K over life. Lamps shall be rated for open fixture use.

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Visit our website: www.sylvania.com

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.