

# METALARC PRO-TECH® POWERBALL® ECOLOGIC®

## High CRI, Ceramic Metal Halide PAR Lamps



METALARC PRO-TECH 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 PRO-TECH 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
- Offers up to 15,000 hours rated average life and last 5X 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 maintenance
- 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

ECOLOGIC® is a comprehensive program of OSRAM SYLVANIA focused on addressing environmental issues at all stages of lamp life.



SYLVANIA METALARC PRO-TECH POWERBALL ECOLOGIC lamps are designed to pass the Federal Toxic Characteristic Leaching Procedure (TCLP<sup>1</sup>) criteria for classification as non-hazardous waste in most states.<sup>2</sup>

### Product Offering

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

<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

### Application Information

#### Applications

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

#### Application Notes

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

#### Fixtures

Contact your local fixture agent for available fixtures.

#### Ballast Information

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



## Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	Date

## Ordering Information

Item Number	Ordering Abbreviation	Watts	Bulb	Base	Average ANSI Code <sup>4</sup>	Rated Life (hrs.)	Initial Initial Lumens	MBCP (cd)	Beam Angle	CCT	CRI
64859	MCP20PAR20/U/830/SP/ECO PB <sup>1,5</sup>	20	PAR20	Med.	C156/0	12,000	900	15,000	8°	3000K	82
64860	MCP20PAR20/U/830/FL/ECO PB <sup>1,5</sup>	20	PAR20	Med.	C156/0	12,000	900	2,650	30°	3000K	82
64879	MCP20PAR30LN/U/830/SP/ECO PB <sup>1,5</sup>	20	PAR30LN	Med.	C156/0	12,000	1,200	21,000	10°	3100K	82
64878	MCP20PAR30LN/U/830/FL/ECO PB <sup>1,5</sup>	20	PAR30LN	Med.	C156/0	12,000	1,200	4,000	30°	3100K	82
64895	MCP39PAR20/U/940/SP/ECO PB <sup>1,2</sup>	39	PAR20	Med.	C130/0	12,000	1,850	16,000	10°	4200K	90
64896	MCP39PAR20/U/940/FL/ECO PB <sup>1,2</sup>	39	PAR20	Med.	C130/0	12,000	1,850	4,000	30°	4200K	90
64824	MCP39PAR20/U/830/SP/ECO PB <sup>1,2</sup>	39	PAR20	Med.	C130/0	12,000	2,000	20,000	10°	3000K	87
64826	MCP39PAR20/U/830/FL/ECO PB <sup>1,2</sup>	39	PAR20	Med.	C130/0	12,000	2,000	5,000	30°	3000K	87
64897	MCP39PAR30LN/U/940/SP/ECO PB <sup>1,2</sup>	39	PAR30LN	Med.	C130/0	12,000	2,200	36,000	10°	4200K	90
64898	MCP39PAR30LN/U/940/FL/ECO PB <sup>1,2</sup>	39	PAR30LN	Med.	C130/0	12,000	2,200	7,500	30°	4200K	90
64880	MCP39PAR30LN/U/830/SP/ECO PB <sup>1,2</sup>	39	PAR30LN	Med.	C130/0	12,000	2,300	39,600	10°	3000K	85
64881	MCP39PAR30LN/U/830/FL/ECO PB <sup>1,2</sup>	39	PAR30LN	Med.	C130/0	12,000	2,300	8,000	30°	3000K	85
64885	MCP39PAR30LN/U/830/VWFL/ECO PB <sup>1,2</sup>	39	PAR30LN	Med.	C130/0	12,000	2,300	3,500	46°	3000K	85
64222	MCP70PAR30LN/U/940/SP/ECO PB <sup>1,2</sup>	70	PAR30LN	Med.	C139/0	12,000	4,000	70,000	9°	4200K	90
64224	MCP70PAR30LN/U/940/FL/ECO PB <sup>1,2</sup>	70	PAR30LN	Med.	C139/0	12,000	4,000	13,000	27°	4200K	90
64201	MCP70PAR30LN/U/930/SP/ECO PB <sup>1,2</sup>	70	PAR30LN	Med.	C139/0	12,000	3,600	42,000	12°	3000K	95
64202	MCP70PAR30LN/U/930/FL/ECO PB <sup>1,2</sup>	70	PAR30LN	Med.	C139/0	12,000	3,600	12,000	30°	3000K	95
64230	MCP70PAR30LN/U/930/VWFL/ECO PB <sup>1,2</sup>	70	PAR30LN	Med.	C139/0	12,000	3,400	5,000	46°	3000K	95
64749	MCP70PAR38/U/830/SP/ECO PB <sup>3</sup>	70	PAR38	Med. Skt.	C98/0, C139/0	15,000	4,300	40,000	15°	3000K	88
64750	MCP70PAR38/U/830/FL/ECO PB <sup>3</sup>	70	PAR38	Med. Skt.	C98/0, C139/0	15,000	4,300	16,000	25°	3000K	88
64751	MCP70PAR38/U/830/VWFL/ECO PB <sup>3</sup>	70	PAR38	Med. Skt.	C98/0, C139/0	15,000	4,300	3,500	65°	3000K	88
64752	MCP100PAR38/U/830/SP/ECO PB <sup>3</sup>	100	PAR38	Med. Skt.	C90/0, C140/0	15,000	6,500	58,000	15°	3000K	88
64753	MCP100PAR38/U/830/FL/ECO PB <sup>3</sup>	100	PAR38	Med. Skt.	C90/0, C140/0	15,000	6,500	25,000	25°	3000K	88
64754	MCP100PAR38/U/830/VWFL/ECO PB <sup>3</sup>	100	PAR38	Med. Skt.	C90/0, C140/0	15,000	6,500	6,000	60°	3000K	88
64841	MCP150PAR38/U/830/SP/ECO PB <sup>3</sup>	150	PAR38	Med. Skt.	C102/0	15,000	9,100	50,000	15°	3000K	88
64842	MCP150PAR38/U/830/FL/ECO PB <sup>3</sup>	150	PAR38	Med. Skt.	C102/0	15,000	9,100	28,000	25°	3000K	88
64843	MCP150PAR38/U/830/VWFL/ECO PB <sup>3</sup>	150	PAR38	Med. Skt.	C102/0	15,000	9,100	6,500	65°	3000K	88

- Notes:
- The circuit must include overcurrent protection (i.e., Thermally Switched Ballast).
  - Minimum open circuit voltage for starting is measured with the ignitor in the circuit, minimum open circuit voltage is 209 VRMS.
  - Lamps with medium skirt base are not compatible with exclusionary medium sockets.
  - 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.
  - Designed for operation only on electronic ballasts.

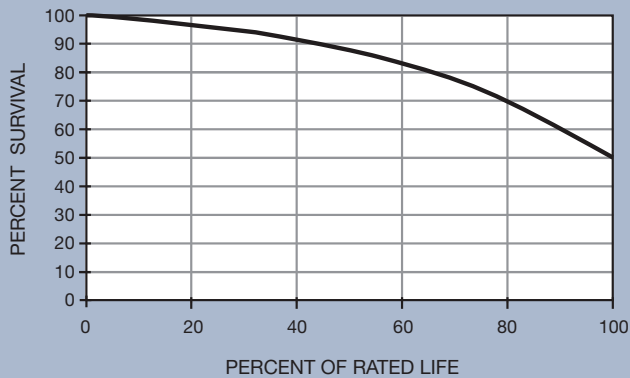
- General Notes:
- Contact your local OSRAM SYLVANIA representative for compatible electronic ballasts.
  - All ceramic lamps should be used with 4000V pulse rated socket only.

## Ordering Guide

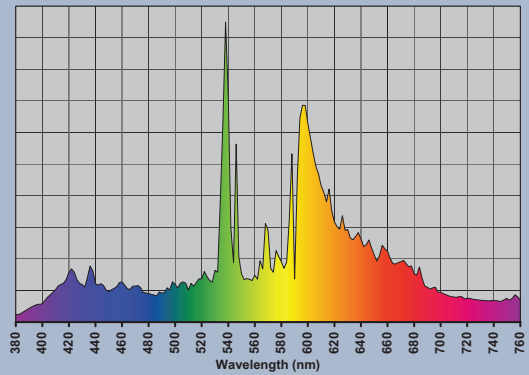
MCP	39	PAR30LN	/	U	/	830	/	SP	/	ECO	PB
M=METALARC®	Wattage:	Bulb Shape:		Operating		8 = 80+ CRI		Beam Spread		ECOLOGIC®	PB=POWERBALL®
C=CERAMIC	20, 39, 70,	PAR20, PAR30LN		position:		9 = 90+ CRI		SP=Spot, FL=Flood,			
P=Protected	100, 150	PAR38		Universal		30 = 3000K, 3100K CCT		NFL=Narrow Flood,			
(METALARC PRO-TECH®)						40 = 4200K CCT		VWFL=Wide Flood			

## Technical Information

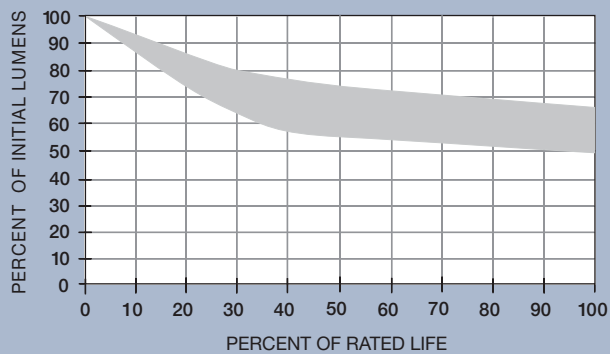
Typical Mortality Curve



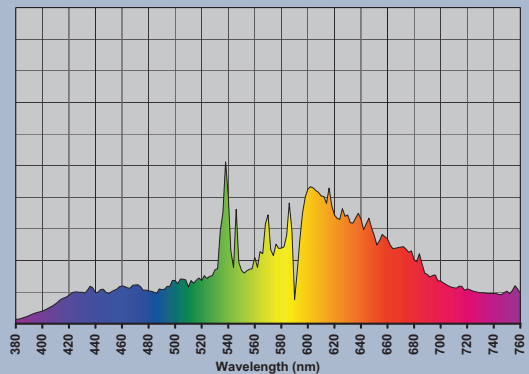
Typical Spectral Power Distribution (CRI = 80+)



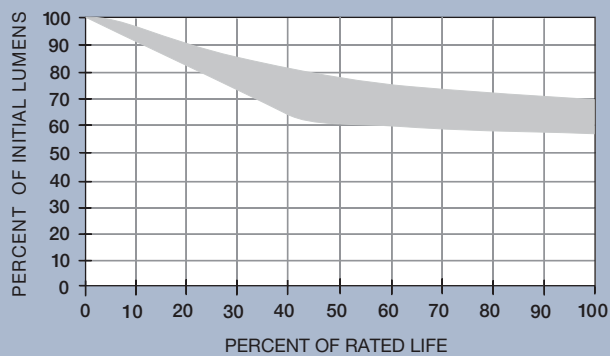
Typical Lumen Maintenance Curve  
(with Magnetic Ballast)



Typical Spectral Power Distribution (CRI = 90+)

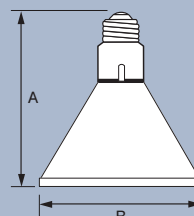


Typical Lumen Maintenance Curve  
(with QUICKTRONIC® Electronic Ballasts)



## 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 PRO-TECH® POWERBALL® ECOLOGIC® CERAMIC 70PAR30LN/U/930/SP/ECO PB lamp(s), and shall be constructed with a spherical ceramic arc-tube with initial lumens of 3600. Lamp(s) shall have a CRI of 95, CCT of 3000K, and shall exhibit a maximum color shift of  $\pm 150K$  over life. Lamps shall be rated for open fixture use.

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[www.sylvania.com](http://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.

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