

# METALARC® POWERBALL® Ceramic

## High CRI, Ceramic Metal Halide Tubular Single & Double-Ended Lamps



### Key Features & Benefits

#### Advantages of POWERBALL Ceramic Arc Tube Technology

- Excellent CRI, up to 95, 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
- Improved lamp-to-lamp color consistency\*
- UV-Stop technology significantly reduces UV output and minimizes discoloration and fading of materials
- Pulse start arc tube technology
- Strong G8.5 bases on TC lamps allow for more robust handling
- Compact light sources improve fixture optics
- QUICK 60+® System Warranty when paired with QUICKTRONIC® MH electronic metal halide ballasts

\* Compared to quartz metal halide lamps of similar wattage

METALARC POWERBALL Ceramic T 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 Ceramic 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.

To maximize energy savings, system performance and system warranty, consider operating these lamps on QUICKTRONIC MH electronic metal halide ballasts.

### Product Offering

Wattage	Bulb Shape
20	T4.5
39	T4.5, T6
70	T4.5, T6
100	T6
150	T7.5

### Application Information

#### Applications

- Accent/track lighting
- Displays
- Facade lighting
- Indirect luminaires
- Landscape luminaires
- Recessed downlights
- Studio lighting

#### Application Notes

1. METALARC POWERBALL Ceramic T4.5, T6, T7.5 and double-ended products must be operated in enclosed fixtures capable of containing particles as hot as 1200°C.

#### Ballast Information

Contact your OSRAM SYLVANIA representative or visit [www.sylvania.com](http://www.sylvania.com) for a list of compatible electronic control systems and download the latest Ballast Technology & Specification Guide.

## Specification Data

Fixture Description:	Type
Project/Job:	
SYLVANIA lamp:	
SYLVANIA ballast:	
Notes:	

## Ordering Information

### For Enclosed Rated Fixtures

Item Number	Ordering Abbreviation	Watts	Bulb	Base	ANSI <sup>4</sup> Code	Average Rated Life (hr.) <sup>5</sup>	Initial Lumens	Mean Lumens	CCT	CRI	Lamp Efficacy (LPW)
64975*	MC20TC/U/G8.5/830 PB <sup>1,3</sup>	20	T4.5	G8.5	C156/E	15,000	1,700	1,275	3000K	83	85
64971*	MC39TC/U/G8.5/830 PB <sup>1,2</sup>	39	T4.5	G8.5	C130/E	15,000	3,400	2,720	3000K	82	87
64963*	MC39T6/U/G12/930 PB <sup>1</sup>	39	T6	G12	C130/E	15,000	3,100	2,470	3000K	93	72
64970*	MC39T6/U/G12/830 PB <sup>1,2</sup>	39	T6	G12	C130/E	15,000	3,400	2,720	3000K	82	87
64965*	MC39T6/U/G12/940 PB <sup>1,2</sup>	39	T6	G12	C130/E	15,000	3,300	2,640	4200K	86	85
64974*	MC70TC/U/G8.5/930 PB <sup>1,2</sup>	70	T4.5	G8.5	C139/E	15,000	6,300	5,040	3000K	95	90
64969*	MC70T6/U/G12/830 PB <sup>1,2</sup>	70	T6	G12	C139/E	15,000	7,000	5,600	3000K	87	100
64964*	MC70T6/U/G12/930 PB <sup>1,2</sup>	70	T6	G12	C139/E	15,000	6,400	5,120	3000K	95	91
64967*	MC70T6/U/G12/940 PB <sup>1,2</sup>	70	T6	G12	C139/E	15,000	6,700	5,360	4200K	93	96
64160	MC100T6/U/G12/830 PB	100	T6	G12	C191/E	15,000	9,500	7,600 <sup>6</sup>	3000K	85	95
64968*	MC150T7.5/U/G12/830 PB <sup>1</sup>	150	T7.5	G12	C142/E	15,000	15,500	12,400	3000K	89	103
64966*	MC150T7.5/U/G12/940 PB <sup>1</sup>	150	T7.5	G12	C142/E	15,000	14,500	11,600	4200K	95	97
64972*	MC70T6/DE/830 PB <sup>2</sup>	70	T6	R7S RSC	C139/E	15,000	6,900	5,520	3000K	88	99
64973*	MC150T7.5/DE/830 PB	150	T7.5	RX7S RSC	C142/E	15,000	14,800	11,840	3000K	91	99

\*64975 formerly 64882, 64971 formerly 64791, 64963 formerly 64162, 64970 formerly 64363, 64965 formerly 64325, 64974 formerly 64825, 64969 formerly 64361, 64964 formerly 64200, 64967 formerly 64338, 64968 formerly 64359, 64966 formerly 64337, 64972 formerly 64793, 64973 formerly 64794.

- 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.
- Designed for operation only on electronic ballasts.
- The first letter of an ANSI high-intensity discharge lamp designation represents the lamp type. "M" represents quartz metal halide lamps and "C" represents ceramic metal halide lamps. Following the lamp type, there is a number representing the electrical characteristics of the ballast. "M" or "C" lamps with the same electrical numbers will operate on the same ballasts (per ANSI C78.380-2007). For example, a 150W ceramic metal halide lamp that is intended to operate on a ballast intended for M102 quartz metal halide lamps would have the designation C102.
- Performance based on electronic ballast operation.
- Preliminary data.

#### General Notes:

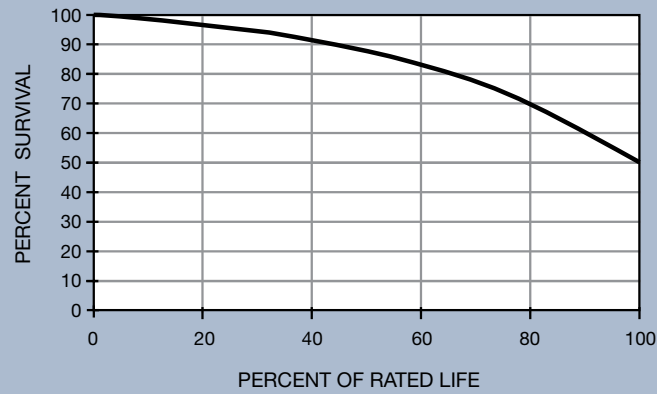
- Contact your local OSRAM SYLVANIA representative for compatible electronic ballasts.
- All ceramic lamps should be used with 4000V pulse rated socket only.
- No special handling requirements during installation (i.e., gloves not required). Always follow normal safety precautions during installation.

## Ordering Guide

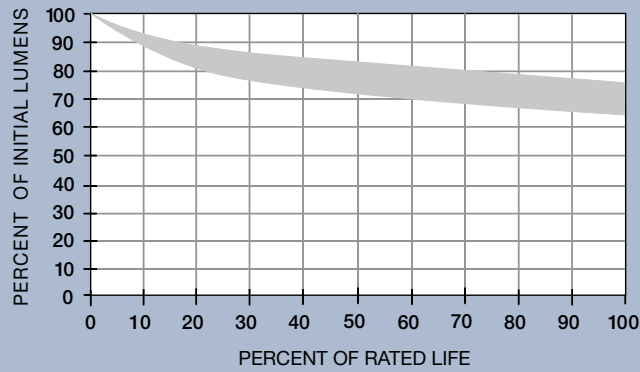
MC	70	T6	/	DE	/	U	/	G12	/	830	PB
M=METALARC® C=Ceramic	Wattage: 20, 39, 70 100, 150	Bulb Shape: T4.5 (TC), T6 T7.5	/	_ = Single Ended DE = Double Ended	/	Operating position: Universal	/	Base: G8.5, G12	/	8=80+ CRI 9=90+ CRI 30=3000K CCT 40=4200K CCT	PB=POWERBALL®

## Technical Information

Typical Mortality Curve

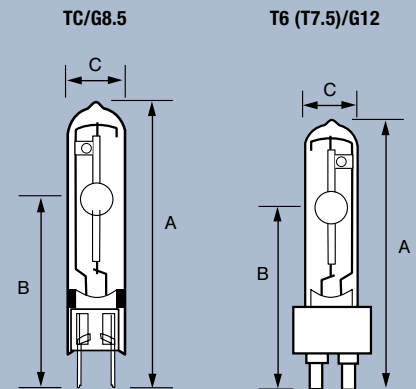
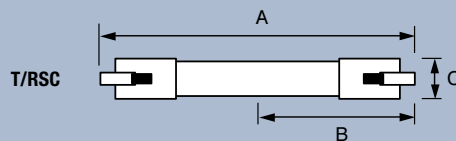


Typical Lumen Maintenance Curve



## Lamp Dimensions

Lamp Shape	Lamp Wattage	(A) MOL	(B) LCL	(C) Bulb Diameter
TC	20, 39, 70	3.19" (81mm)	2.05" (52mm)	0.591" (15mm)
T6/G12	39, 70	3.94" (100mm)	2.20" (56mm)	0.748" (19mm)
T6/G12	100	4.13" (105mm)	2.20" (56mm)	0.748" (19mm)
T7.5/G12	150	4.13" (105mm)	2.20" (56mm)	0.984" (25mm)
T6/RSC	70	4.50" (120mm)	2.25" (60mm)	0.827" (20mm)
T7.5/RSC	150	5.20" (138mm)	2.60" (69mm)	0.945" (23mm)



## Related Literature

QUICKTRONIC MH 20W-100W Electronic Metal Halide Systems (Literature Code: ECS054)

QUICKTRONIC QHE MH 20W-39W Super Mini Electronic Metal Halide Systems (Literature Code: ECS124)

## Sample Specification

Lamp(s) shall be METALARC® POWERBALL® Ceramic MC70T6/U/ G12/830 lamp(s), and shall be constructed with a spherical shaped ceramic arc-tube with initial lumens of 7000. Lamp(s) shall have an average rated life of 15,000 hours, CRI of 87, CCT of 3000K, and shall exhibit a maximum color shift of  $\pm 150K$  over life. Lamps shall be rated for open fixture use.

Lamps shall be operated on QUICKTRONIC® MH electronic metal halide ballasts and the system shall be covered by the SYLVANIA QUICK 60+® System Warranty.

### United States

**OSRAM SYLVANIA**  
100 Endicott Street  
Danvers, MA 01923  
1-800-LIGHTBULB

#### Trade

Phone: 800-255-5042  
Fax: 800-255-5043

#### National Accounts

Phone: 800-562-4671  
Fax: 800-562-4674

#### OEM/Special Markets

Phone: 800-762-7191  
Fax: 800-762-7192

#### Retail

Phone: 800-842-7010  
Fax: 800-842-7011

#### SYLVANIA Lighting Services

Phone: 800-323-0572  
Fax: 800-537-0784

#### Display/Optic

Phone: 888-677-2627  
Fax: 855-543-1043

### Canada

**OSRAM SYLVANIA LTD.**  
2001 Drew Road  
Mississauga, ON L5S 1S4  
1-800-LIGHTBULB

#### Trade

Phone: 800-263-2852  
Fax: 800-667-6772

#### OEM/Special Markets/Display/Optic

Phone: 800-265-2852  
Fax: 800-667-6772

#### Retail

Phone: 800-720-2852  
Fax: 800-667-6772

#### SYLVANIA Lighting Services

Phone: 800-663-4268  
Fax: 866-239-1278

### Mexico

**OSRAM MEXICO**  
Tultitlan/Edo de Mexico  
Phone: 011-52-55-58-99-18-50

### ENCELIUM® Products

#### United States

Phone: 201-508-1570  
Fax: 201-508-1589

#### Canada

Phone: 905-731-7678  
Fax: 905-731-1401

[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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Specifications subject to change without notice.