

METALARC PRO-TECH®

Open Fixture Metal Halide Lamps



- Full range of wattages from 50 through 175 watts in a medium base and from 175 through 1000 watts in a mogul base
- METALARC PRO-TECH design – glass shroud for containment and UV-reduction
- Open or enclosed fixture operation
- Universal operating position on low-wattage lamps
- Up to 20,000 hours average rated life
- Lower maintenance costs
- Lower initial luminaire cost
- Reduced luminaire dirt depreciation
- Dedicated sockets for 50 through 1000 watt lamps
- Available in clear and coated
- PAR38 version available to provide high illumination levels to accent featured displays and provide architectural highlighting

SYLVANIA METALARC PRO-TECH lamps allow added flexibility by incorporating open fixture technology to a full complement of lamp wattages.

The METALARC PRO-TECH metal halide lamps were created to fill the need for a safe light source for applications where a protective lens on the metal halide fixture was either impractical or detrimental to fixture design. The METALARC PRO-TECH lamp design enhances safety in open or enclosed fixtures and includes a shroud around the arc tube and, in some cases, a thicker walled outer jacket. In addition, METALARC PRO-TECH lamps have a reduction in UV output compared to standard metal halide lamps.

With the benefit of open fixtures, these high output METALARC PRO-TECH lamps are ideal for higher ceiling applications where enclosed fixtures might previously have been necessary. The use of open fixtures means more light output over life and lower maintenance costs because there are no lenses to gather dirt and dust, thus extending lamp replacement procedures.

Product Availability

Available Wattages	Outer Jacket	Fixture
50, 70, 100, 150, 175, 250, 400, and 1000 watts	Clear and Coated	Open or Enclosed

Lamp Comparison

Lamp Type	Fixture	Initial Lumens	Mean Lumens	Avg. Rated Life (hrs.)	Color Temp.
SYLVANIA/MP250/BU-ONLY	Open or Enclosed	23,000	17,000	10,000	4000K
Standard/250 Watt MH	Enclosed Only	22,000	17,000	10,000	4200K

Application Information

Applications

Ambient lighting for industrial, commercial and retail
 Malls
 Lobbies, atriums
 Flood lighting
 Security lighting
 Parking lots

Sockets

1. To prevent relamping with standard metal halide lamps, a special socket is available with open fixtures for all lamp types.
2. Operating orientation: Consult product description and lamp catalog.

Fixtures

Consult your local fixture agent for available fixtures.



Ordering and Specification Information

METALARC PRO-TECH®

Item Number	Ordering Abbreviation	Watts	Finish	Bulb	Base ⁶	ANSI Code	Average Rated Life (hours) ²		Initial Lumens	Mean Lumens	Color Temp.	CRI
							Vertical	HOR				
64587	MP50/U/MED	50	Clear	E17	Med.	M110/O	20,000	10,000	3450	1900	3000K	70
64588	MP50/C/U/MED	50	Coated	E17	Med.	M110/O	20,000	10,000	3200	1820	2900K	70
64547	MP70/U/MED	70	Clear	E17	Med.	M98/O	15,000	10,000	5200	3400	3000K	75
64546	MP70/C/U/MED	70	Coated	E17	Med.	M98/O	15,000	10,000	4700	3100	2900K	75
64625	MPD70/U/MED/840	70	Clear	E17	E26 Med.	M98/O	7500	6000	5500	4000	4200K	80
64621	MPD70/C/U/MED/840	70	Coated	E17	E26 Med.	M98/O	7500	6000	5100	3800	4000K	82
64417	MP100/U/MED	100	Clear	E17	Med.	M90/O	15,000	10,000	8500	5525	3000K	75
64418	MP100/C/U/MED	100	Coated	E17	Med.	M90/O	15,000	10,000	7900	5800	2900K	75
64426	MPD100/U/MED/840	100	Clear	E17	E26 Med.	M90/O	7500	6000	8400	5800	4200K	82
64433	MPD100/C/U/MED/840	100	Coated	E17	E26 Med.	M90/O	7500	6000	7700	5500	4000K	82
64402	MP150/U/MED	150	Clear	E17	Med.	M102/O	15,000	10,000	12,900	10,000	3000K	75
64406	MP150/C/U/MED	150	Coated	E17	Med.	M102/O	15,000	10,000	11,600	9000	2900K	75
64403	MPD150/U/MED/840	150	Clear	E17	E26 Med.	M102/O	7500	6000	12,500	11,000	4200K	88
64425	MPD150/C/U/MED/840	150	Coated	E17	E26 Med.	M102/O	7500	6000	11,500	9500	4000K	88
64733	MP175/MED/BU-ONLY	175	Clear	E17	Med.	M57/O	10,000	–	14,400	10,800	3600K	65
64773	MP175/BU-ONLY	175	Clear	BT28	EX39 ¹	M57/O	10,000	–	14,400	10,200	4000K	65
64774	MP175/C/BU-ONLY	175	Coated	BT28	EX39 ¹	M57/O	10,000	–	12,800	7800	3800K	70
64404	MP250/BU-ONLY	250	Clear	BT28	EX39 ¹	M58/O	10,000	–	23,000	17,000	4000K	65
64405	MP250/C/BU-ONLY	250	Coated	BT28	EX39 ¹	M58/O	10,000	–	20,000	14,350	3800K	70
64705	MP400/BU-ONLY	400	Clear	BT37	EX39 ¹	M59/O	20,000	–	40,000	26,000	3600K	65
64706	MP400/C/BU-ONLY	400	Coated	BT37	EX39 ¹	M59/O	20,000	–	38,500	25,000	3400K	70
64717	MP400/BD-ONLY	400	Clear	BT37	EX39 ¹	M59/O	20,000	–	40,000	26,000	3600K	65
64714	MP1000/BU-ONLY	1000	Clear	BT56	EX39 ¹	M47/O	15,000	–	109,000	87,500	3500K	65
64716	MP1000/C/BU-ONLY	1000	Coated	BT56	EX39 ¹	M47/O	15,000	–	102,000	82,000	3200K	70

METALARC PRO-TECH PAR38/ECO®

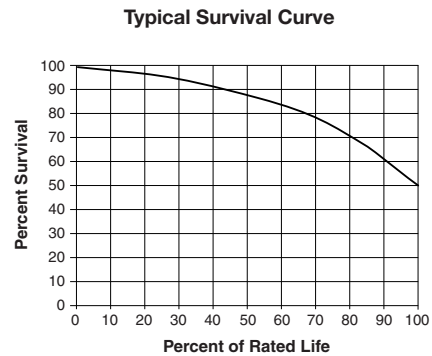
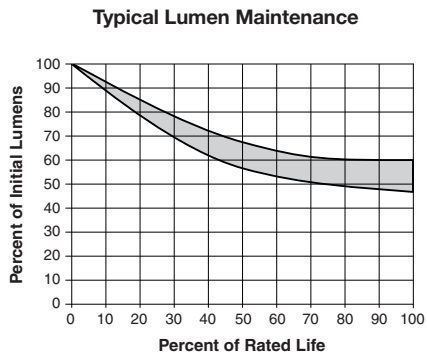
Item Number	Ordering Abbreviation	Watts	ANSI Code	Beam Angle/ CBCP	Initial Lumens	Av. Rated Life (hrs.)	Color Temp.	CRI ⁵
64590	MP70PAR38/U/SP20/ECO ^{6,7}	70	M98/O	20°/18,000	3400	8500	3200K	75
64592	MP70PAR38/U/FL35/ECO ^{6,7}	70	M98/O	35°/10,000	3400	8500	3200K	75
64594	MP70PAR38/U/VWFL65/ECO ^{6,7}	70	M98/O	65°/3,000	3400	8500	3200K	75
64580	MP100PAR38/U/SP20/ECO ^{6,7}	100	M90/O	20°/26,000	5800	8500	3000K	75
64582	MP100PAR38/U/FL35/ECO ^{6,7}	100	M90/O	35°/12,000	5800	8500	3000K	75
64584	MP100PAR38/U/VWFL65/ECO ^{6,7}	100	M90/O	65°/4,500	5800	8500	3000K	75
64593	MP150PAR38/U/SP20/ECO ^{6,7}	150	M102/O	20°/34,000	8800	8500	3200K	75
64597	MP150PAR38/U/FL35/ECO ^{6,7}	150	M102/O	35°/17,000	8800	8500	3200K	75
64599	MP150PAR38/U/VWFL65/ECO ^{6,7}	150	M102/O	65°/7,500	8800	8500	3200K	75

Notes:

1. Exclusionary mogul base.
2. Average rated life based on 10 hours per start operating on an ANSI ballast.
3. All 50, 70, 100, and 150 watt lamps must be operated in a 4000V pulse rated socket.
4. TCLP claims based on OSRAM SYLVANIA's TCLP test protocol. Some states and localities have lower limits than the Federal TCLP standard and have different disposal regulations for mercury containing lamps.
5. For higher CRI, use SYLVANIA METALARC POWERBALL CERAMIC lamps.
6. All PAR38 lamps listed above have an E26 medium skirt base. Note this base is not compatible with exclusionary medium sockets.
7. See Beam Spread Design Guide for footcandle diagrams.
8. For lamp wattages of 360W and greater, it is recommended that lampholders with nickel-plated copper alloy center contacts (with spring) should be used rather than electrical contacts made of stainless steel.

O = Lamps classified as O-type, comply with ANSI Standard C78.387 for containment testing and may be used in open luminaries.
See lamp warning.

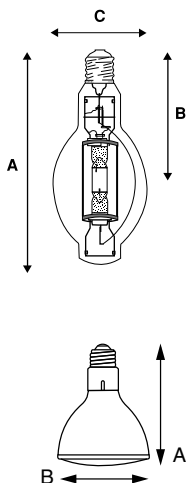
Technical Information



Ordering Guide

MP	400	/	_____	/	BU-ONLY	/	_____
METALARC	Wattage:		Finish:		Operating Position:		Base:
PRO-TECH®	50, 70, 100,		___ = Clear		Base Up Only		___ = Mogul
Open Fixture	150, 175, 250,		C = Coated		Base Down Only		MED = Medium
Metal Halide	400, 1000				Universal		

Dimensions



Bulb Shape	(A) MOL	(B) LCL	(C) Diameter
E17	5.4"	3.4"	2.1"
BT28	8.3"	5.0"	3.5"
BT37	11.5"	7.0"	4.6"
BT56	15.4"	9.5"	7.0"
PAR38	5.3"	N/A	4.75"

Expanded Line of SYLVANIA METALARC PRO-TECH Products

In addition to the line of METALARC PRO-TECH lamps listed, OSRAM SYLVANIA offers a line of METALARC® POWERBALL® CERAMIC, METALARC Pulse Start and METALARC SUPERSAVER® lamps for use in open fixtures. Consult Product Information Bulletins HID035, HID021 and HID022 for additional information.

Sample Specifications

METALARC PRO-TECH®

Lamp(s) shall be (a)
METALARC PRO-TECH
Lamp(s) constructed with
an arc tube shroud and
shall be designed for
open fixture operation
and reduced UV output.

METALARC PRO-TECH PAR38/ECO®

Lamp(s) shall be (a)
METALARC PRO-TECH
PAR38/ECO lamp(s) for
use in open or enclosed
luminaires with an 8,500-
hour average rated life.
Lamp(s) shall exhibit a
correlated color temp-
erature of 3200K, a
maximum color shift of
±200K over life, and a
CRI of 75. Lamp(s) shall
pass the existing Federal
TCLP limits.

OSRAM SYLVANIA
National Customer
Service and Sales Center
18725 N. Union Street
Westfield, IN 46074

Industrial & Commercial

Phone: 1-800-255-5042
Fax: 1-800-255-5043

National Accounts

Phone: 1-800-562-4671
Fax: 1-800-562-4674

OEM/Specialty Markets

Phone: 1-800-762-7191
Fax: 1-800-762-7192

Photo-Optic

Phone: 1-888-677-2627
Fax: 1-800-762-7192

In Canada
OSRAM SYLVANIA LTD.
Headquarters
2001 Drew Road
Mississauga, ON L5S 1S4

Industrial & Commercial

Phone: 1-800-263-2852
Fax: 1-800-667-6772

Special Markets

Phone: 1-800-265-2852
Fax: 1-800-667-6772

2005 National Electric Code (NEC) Impacts HID Systems

Changes for HID luminaires:

The 2005 NEC (Code 70 Article 410.73(F)(5)) requires a protected (ANSI Type-O) lamp and socket for all new installations or remodels of indoor open-rated (ANSI Type-O) metal halide luminaires. ANSI Type E and Type-S metal halide lamps are only permissible for enclosed rated luminaires. Thick glass parabolic aluminized reflector (PAR) lamps are exempt from this code change.

Adoption of the 2005 NEC:

The 2005 NEC went into effect on January 1, 2005. However, not all state or local governments adopt a revised edition of the NEC immediately. Once the 2005 NEC is adopted in the jurisdiction, electrical inspectors will apply the requirements of the code as part of the inspection process for new construction and renovations that require an electrical permit.