

METALARC® PULSE START

High Lumen Maintenance, Reduced Color Shift, Premium Metal Halide Lamps



SYLVANIA METALARC® PULSE START 175, 200, 250, 320, 320/350, 350/400, 400, 750 and 1000 watt lamps provide less color shift, high lumen maintenance and a long life. Their premium performance provides opportunities for higher maintained illumination levels and substantial energy savings. Additional increases in optical efficiency may be gained by fixture designs using compact outer jacket configurations. All high wattage pulse start lamps, 200W-1000W, are lead free.

SYLVANIA METALARC PULSE START lamps combine new metal halide lamp technology with proven ignitor technology. The result is a more transparent arc tube over life yielding less color shift and high lumen maintenance..

Key Features & Benefits

METALARC PULSE START Lamps

- Excellent lumen maintenance
- Quicker hot restrike*
- Long average rated life

175 Watt PULSE START

- 50% longer life than standard 175 watt
- 21% higher initial lumens and >50% higher mean lumens than standard product
- Available in universal operating position

200 Watt PULSE START

- 20% energy savings over 250 watt lamp
- Available with Compact ET23.5 version for higher luminaire efficiency

250 Watt PULSE START

- 20,000 hour life rating for MS types (doubles the life of standard 250 watt)
- MP type has 50% longer life than standard 250 watt
- Available with PRO-TECH® design for open fixture use
- Available in universal operating position

320 Watt PULSE START

- 100 initial lumens per watt for clear lamps
- May be operated base-up through horizontal
- Compact ED28 size allows higher luminaire efficiency

320/350 Watt PULSE START

- Available in PRO-TECH design for open fixture use
- Lamp can be operated on 320 or 350 watt ballast

350/400 Watt PULSE START

- Incorporates PRO-TECH design for open fixture use
- Lamp can be operated on 350 or 400 watt ballast

400 Watt PULSE START

- 24% higher mean lumens than the M400/U and 16% higher mean lumens than the MS400/BU-ONLY
- Less color shift over lamp life*
- Available with Compact ED28 version for higher luminaire efficiency
- Available in universal operating position

750 Watt PULSE START

- 25% energy savings over standard 1000 watt metal halide
- Compact BT37 outer jacket

1000 Watt PULSE START

- Compact BT37 outer jacket
- Available in universal operating position

*Compared to standard metal halide lamps.



Application Information

Applications

- Ambient lighting: Industrial and Commercial
- Canopy lighting
- Flood lighting
- Parking lots
- Security lighting

Application Notes

Operating orientation: Base-up only or base down only within 15° of vertical. 320W and 750W lamps may be operated base-up through horizontal. M250/PS/U/ED28, M400/PS/U/ED37, M400/PS/U/ED28 and M1000/U/PS/BT37 may be operated in any operating position.

Socket Information

Lamps operate in standard mogul HID sockets rated to withstand 4000 volt pulses. Exclusionary mogul sockets are recommended for the METALARC PRO-TECH (MP) versions.

Ballast Information

All lamps will operate on ANSI Pulse Start ballasts with ignitors for metal halide lamps as noted in the Ordering and Specification Information section (page 3 of this PIB).

Fixtures

Consult your local fixture agent for available fixtures.

Ordering Information

Item Number	Ordering Abbreviation	Watts	Finish	Bulb	Base	ANSI2 Code	Average Rated Life (hrs.)	Initial Lumens	Mean Lumens	CRI	Color Temp	Lamp Efficacy (LPW)
64171												91H
64822	MS750/C/PS/BU-HOR/BT37	750	Coated	BT37	E39	M149/E ³	20,000V 9,000H	75,000V 65,000H	63,000V 53,000H	70	3700K	100V 87H
64351												108H

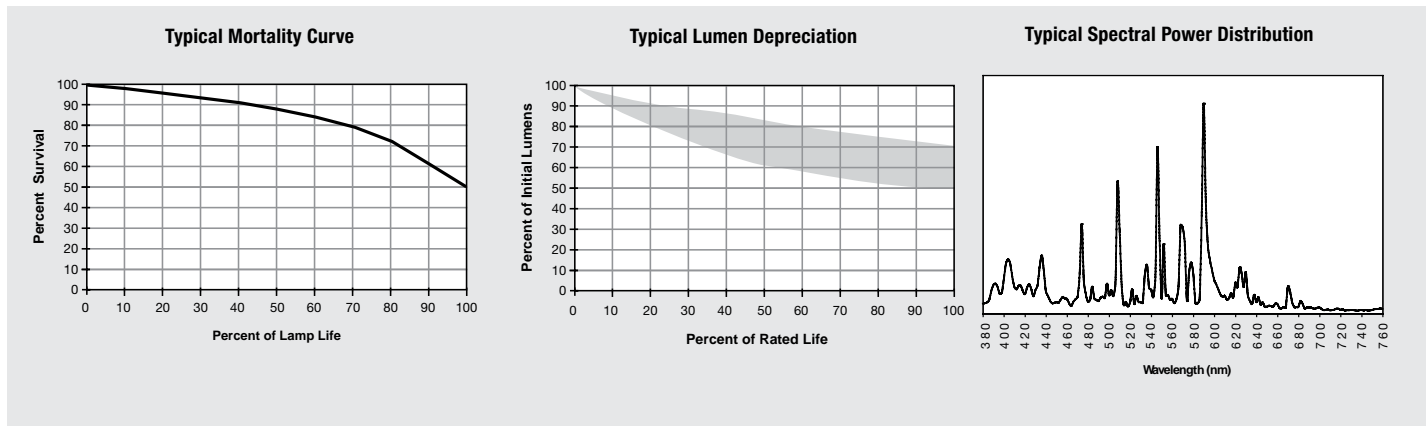
*64043 formerly 64319, 64044 formerly 64838, 64046 formerly 64320, 64047 formerly 64578, 64048 formerly 64617, 64049 formerly 64507, 64050 formerly 64646, 64051 formerly 64188, 64052 formerly 64189, 64053 formerly 64191, 64054 formerly 64321, 64055 formerly 64525, 64056 formerly 64527

- Notes:
1. Based on 10 hrs/start operating cycle. On 120 hrs/start, life rating increases from 20,000 to 30,000 hours and mean lumen point is at 12,000 hrs.
 2. For lamps with 2 ANSI codes, the first is the new ANSI code and the second is the original code.
 3. When operated on ballasts having a sustaining voltage less than 310V, lamp life may be significantly reduced.
 4. Contact your local OSRAM SYLVANIA sales representative for availability.
 5. When operated on ballasts having a sustaining voltage less than 270V, lamp life may be significantly reduced.
 6. 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.
- E = Lamps classified as E-type are to be used ONLY in suitably enclosed luminaires. See lamp warning.
O = Lamps classified as O-type, comply with ANSI standard C78.389 for containment testing and may be used in open luminaires. See lamp warning.
S = When operated within 15 degrees of vertical, this lamp may be operated in an open luminaire provided the installation is not near people or flammable or combustible material, otherwise it must be operated in a suitably enclosed luminaire. See lamp warning.

Ordering Guide

MS	320	/	—	/	PS	/	BU-ONLY
M = METALARC Metal Halide	Wattage: 175, 200, 250,		Finish: = Clear		PULSE START		BU-ONLY = Base up only
S = SUPER high output	320, 320/350,		C = Coated				U = Universal
P = METALARC PRO-TECH® open fixture rated	350/400, 400, 750 or 1000 watts						BD-ONLY = Base down only
							BU-HOR = Base up - Horizontal

Technical Information



Lamp Dimensions

Ordering Abbreviation	(A) MOL	(B) LCL	(C) Bulb Diameter
ED17	5"	3"	2-1/8"
ET23.5	6-29/32"	4-1/2"	2-15/16"
BT28/ED28	8-5/16"	5"	3-1/2"
BT37/ED37	11-1/2"	7"	4-5/8"

The diagram illustrates the dimensions of two lamp models. Dimension A is the total height, B is the height of the base, and C is the diameter of the bulb. The left lamp is smaller, and the right lamp is larger.

Sample Specification

400 Watt: Lamp(s) shall be (a) 400W METALARC® PULSE START lamp(s) exhibiting initial lumens of 42,000 with a 74% mean lumen maintenance and capable of operating on a M155/M135 ballast. Lamp construction shall include a lead-free welded base with a maximum temperature of 250°C.

Safety Information

WARNING! THESE LAMPS CAN CAUSE SERIOUS SKIN BURN AND EYE INFLAMMATION FROM SHORT-WAVE ULTRAVIOLET RADIATION IF THE OUTER ENVELOPE (GLASS BULB) 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 punctured or broken are commercially available from OSRAM SYLVANIA Products Inc. THESE LAMPS CONFORM TO FEDERAL STANDARD 21 CFR 1040.30 in the U.S. AND SOR/80-381 in Canada.