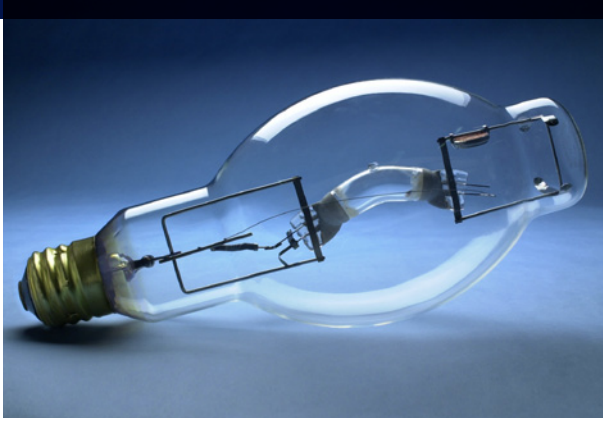


SUPER METALARC®

Metal Halide Lamps



SYLVANIA SUPER METALARC lamps provide a higher light output than comparable standard metal halide lamps. The SUPER METALARC metal halide lamps are designed for use where an increased light output and a longer life is required.

Available in 175, 250, 400, and 1000 watts, in both clear and phosphor coated outer jackets, SUPER METALARC lamps are ideal for numerous applications and are offered with a warm 3200K phosphor for use in retail applications.

SUPER METALARC lamps are optimized for horizontal, base-up or base-down operation. The uniquely designed arc tube results in a peak performance and a substantial increase in initial and mean lumens.

Key Features & Benefits

- Improved arc tube design
- Increased light output
- Up to 20,000 hours average rated life
- Energy efficient — up to 115 LPW
- Color stability
- Position oriented mogul bases (horizontal types)
- Available in clear and coated
- Lead-free welded bases

Product Offering

| Wattage | Finish | Base | Bulb Shapes |
|---------|----------------|-------------|-------------|
| 175 | Clear / coated | POM | BT28 |
| 250 | Clear / coated | POM | BT28 |
| 400 | Clear / coated | POM / Mogul | BT37 |
| 1000 | Clear / coated | Mogul | BT56 |

System Comparison

METALARC SUPER 400 Watt versus standard M400/U

| Lamp Type | Efficacy | Initial Lumens | Mean Lumens | Avg. Rated Life (hrs) |
|--------------------|-----------|----------------|-------------|-----------------------|
| SYLVANIA MS400/HOR | 97.5 Lm/W | 39,000 | 26,000 | 20,000 |
| Standard M400/U* | 80 Lm/W | 32,000 | 20,500 | 15,000 |

* Horizontal Operation

Application Information

Applications

- Atriums
- Flood lighting
- Industrial, commercial and retail
- Lobbies
- Parking lots
- Security lighting
- Shopping malls

Application Notes

1. SUPER METALARC 175, 250, and some 400 watt lamps are for use in horizontal burning positions. These lamps operate in position oriented mogul bases.
2. SUPER METALARC 400 and 1000 watts lamps can be used either in a base-up or base-down position. These lamps operate in standard HID mogul sockets.
3. Some SUPER METALARC lamps operate vertically within 15°, and may be operated in OPEN fixtures ("S" rated).

Fixtures

Contact your local fixture agent for available fixtures.

Ballast Information

SUPER METALARC lamps operate on the same ANSI ballasts as the standard metal halide lamps they replace.

Ordering Information

| Item Number | Ordering Abbreviation | Watts | Bulb | Base | ANSI Code | Average Rated Life (hrs) | Initial Lumens | Mean Lumens ¹ | CCT | CRI | Lamp Efficacy (LPW) |
|-------------|-----------------------|-------|------|---------------------|-----------|--------------------------|----------------|--------------------------|-------|-----|---------------------|
| 64439 | MS175/HOR | 175 | BT28 | P.O.M. ² | M57/E | 10,000 | 15,000 | 8000 | 4200K | 65 | 86 |
| 64448 | MS250/HOR | 250 | BT28 | P.O.M. ² | M58/E | 10,000 | 23,000 | 15,000 | 4200K | 65 | 92 |
| 64445 | MS400/HOR | 400 | BT37 | P.O.M. ² | M59/E | 20,000 | 39,000 | 25,000 | 4200K | 65 | 98 |
| 64443 | MS400/HOR/BT-28 | 400 | BT28 | P.O.M. ² | M59/E | 20,000 | 39,000 | 26,000 | 4200K | 65 | 98 |
| 64450 | MS400/BU-ONLY | 400 | BT37 | E39 Mogul | M59/S | 20,000 | 42,000 | 26,000 | 4000K | 65 | 105 |
| 64452 | MS400/C/BU-ONLY | 400 | BT37 | E39 Mogul | M59/S | 20,000 | 42,000 | 24,700 | 3600K | 70 | 105 |
| 64454 | MS400/3K/BU-ONLY | 400 | BT37 | E39 Mogul | M59/S | 20,000 | 35,000 | 22,000 | 3200K | 70 | 88 |
| 64435 | MS1000/BU-ONLY | 1000 | BT56 | E39 Mogul | M47/S | 18,000 | 115,000 | 92,000 | 4000K | 65 | 115 |
| 64436 | MS1000/BD-ONLY | 1000 | BT56 | E39 Mogul | M47/S | 18,000 | 115,000 | 92,000 | 4000K | 65 | 115 |

- In actual applications on a CWA ballast the mean lumens will be higher.
- Position-oriented mogul base
- 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 rated enclosed luminaires.

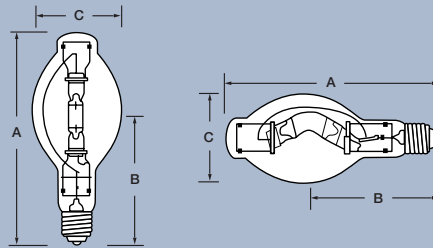
S = When operated within 15 degrees of vertical, this lamp may be operated in an open luminaire provided the installation is not near people or flammable or combustible material, otherwise it must be operated in a suitably enclosed fixture.

Ordering Guide

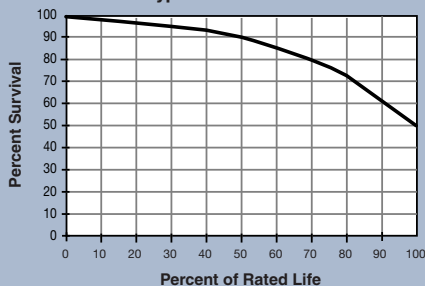
| MS | 400 | / | — | / | HOR | / | BT-28 |
|--------------|---------------|---|-------------|---|--------------------------|---|----------------|
| SUPER | Wattage: | | Finish: | | Operating Position | | Bulb Shape |
| METALARC | 175, 250, | | ___ = Clear | | BU-ONLY = Base up only | | ___ = Standard |
| Metal Halide | 400 and 1000W | | C = Coated | | BD-ONLY = Base down only | | BTxx = Compact |
| | | | | | HOR = Horizontal | | |

Technical Information

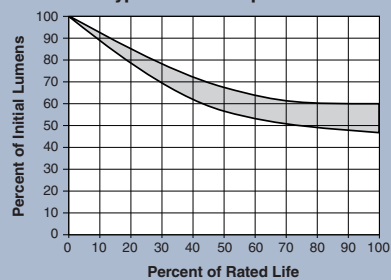
| Bulb Shape | (A) MOL | (B) LCL | (C) Bulb Diameter |
|------------|---------|---------|-------------------|
| BT28 | 8 5/16" | 5" | 3 1/2" |
| BT37 | 11 1/2" | 7" | 4 5/8" |
| BT56 | 15 3/8" | 9 1/2" | 7" |



Typical Survival Curve



Typical Lumen Depreciation



Ultraviolet Radiation Exposure

WARNING! THIS LAMP 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 Inc.

Specification Data

| |
|-------------|
| Catalog # |
| Type |
| Project |
| Comments |
| Prepared by |
| Date |

Sample Specification

Lamp(s) shall be (a) SUPER METALARC® MS400/HOR having 39,000 initial lumens. Lamp construction shall have a CRI of at least 65 and 4200K correlated color temperature.

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