SYLVANIA METALARC PRO-TECH® and METALARC PULSE START low wattage E17 and PAR38 lamp’s premium performance provides opportunities for higher maintained illumination levels and substantial energy savings.

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. 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.

The METALARC enclosed rated E17 lamps provide a solution for enclosed rated fixtures and contain all the benefits of the pulse start technology including reduction in color shift over the life of the lamp, better lumen maintenance and potentially longer life.

OSRAM SYLVANIA offers the most comprehensive lamp and ballast system solutions. For compatible SYLVANIA ballasts please refer to our Lamp and Ballast Catalog or contact your local SYLVANIA representative.

### Key Features & Benefits

- Full range of wattages from 50 to 175 watts
  - 70W, 100W, 150W and 175W lamps available for enclosed rated fixtures
- Medium base lamps
- Universal operating position
- Up to 20,000 hours average rated life
- Available in clear and coated
- PAR38 version available to provide high illuminance levels for featured displays and architectural high-lighting
- METALARC PRO-TECH design – glass shroud for containment and UV-reduction – suitable for use in open or enclosed fixtures
  - NEC 2005 and later revisions require new construction and/or major renovations
  - To use open rated lamps with EX39 sockets in open fixtures, OR
  - Fixtures with a lens
  - Lower maintenance costs
  - Lower initial luminaire cost
  - Reduced luminaire dirt depreciation
  - Dedicated exclusionary medium socket for 50-150 watts with open rated lamps
  - Retrofits into standard sockets

### Product Offering

<table>
<thead>
<tr>
<th>Wattages</th>
<th>Outer Jacket</th>
<th>Fixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>50, 70, 100, 150</td>
<td>Clear and Coated</td>
<td>Open or Enclosed Rated</td>
</tr>
<tr>
<td>70, 100, 150, 175</td>
<td>Clear and Coated</td>
<td>Enclosed Rated Only</td>
</tr>
</tbody>
</table>

### Application Information

**Applications**
- Ambient lighting for industrial and retail
- Flood lighting
- Lobbies, atriums
- Malls
- Parking lots
- Security lighting

**Sockets**
1. To prevent relamping an open fixture with standard metal halide lamps, a special socket is available with open fixtures for all lamp types.
2. Operating orientation: 50-150W operate in the universal orientation. 175W is for base up only applications.

**Fixture**
Consult your local fixture agent for available fixtures.
### METALARC PRO-TECH® PULSE START

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Ordering Abbreviation</th>
<th>Watts</th>
<th>Finish</th>
<th>Bulb</th>
<th>Base</th>
<th>ANSI Code</th>
<th>Average Rated Life (hr.)</th>
<th>Initial Lumens</th>
<th>Mean Lumens</th>
<th>Color Temp.</th>
<th>CRI</th>
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<tbody>
<tr>
<td>64507</td>
<td>MP50/U/MED</td>
<td>50</td>
<td>Clear</td>
<td>E17</td>
<td>Med.</td>
<td>M110/0</td>
<td>20,000</td>
<td>10,000</td>
<td>3,450</td>
<td>1,600</td>
<td>3000K</td>
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<td>Coated</td>
<td>E17</td>
<td>Med.</td>
<td>M110/0</td>
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<td>10,000</td>
<td>3,000</td>
<td>1,350</td>
<td>2900K</td>
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<td>E17</td>
<td>Med.</td>
<td>M98/0</td>
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<td>10,000</td>
<td>5,200</td>
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<tr>
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<td>Med.</td>
<td>M98/0</td>
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<td>4,700</td>
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<tr>
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<td>MPD70/U/MED/840</td>
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<td>Med.</td>
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### METALARC® PULSE START (Rated for enclosed fixtures)

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Ordering Abbreviation</th>
<th>Watts</th>
<th>Finish</th>
<th>Bulb</th>
<th>Base</th>
<th>ANSI Code</th>
<th>Average Rated Life (hr.)</th>
<th>Initial Lumens</th>
<th>Mean Lumens</th>
<th>Color Temp.</th>
<th>CRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>64836</td>
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<tr>
<td>64818</td>
<td>M100/U/MED</td>
<td>100</td>
<td>Clear</td>
<td>E17</td>
<td>Med.</td>
<td>M90/E</td>
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<td>64785</td>
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<td>Clear</td>
<td>E17</td>
<td>Med.</td>
<td>M102/E</td>
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### METALARC PRO-TECH PULSE START PAR38/ECO®

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Ordering Abbreviation</th>
<th>Watts</th>
<th>ANSI Code</th>
<th>Beam Angle/ CBOP</th>
<th>Initial Lumens</th>
<th>Average Rated Life (hr.)</th>
<th>Color Temp.</th>
<th>CRI</th>
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</thead>
<tbody>
<tr>
<td>64592</td>
<td>MP70PAR38/U/FL35/ECO</td>
<td>70</td>
<td>M98/0</td>
<td>35°/10,000</td>
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<td>64580</td>
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<td>M90/0</td>
<td>20°/26,000</td>
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<td>8,500</td>
<td>3000K</td>
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<tr>
<td>64582</td>
<td>MP100PAR38/U/FL35/ECO</td>
<td>100</td>
<td>M90/0</td>
<td>35°/12,000</td>
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<td>8,500</td>
<td>3000K</td>
<td>75</td>
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<tr>
<td>64584</td>
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<td>M90/0</td>
<td>65°/4500</td>
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<td>8,500</td>
<td>3200K</td>
<td>75</td>
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</tbody>
</table>

Notes:
1. Average rated life based on 10 hours per start operating on an ANSI ballast.
2. All 50, 70, 100, 150 and 175 watt lamps must be operated in a 4000V pulse rated socket.
3. 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.
4. For higher CRI, use SYLVANIA METALARC POWERBALL® CERAMIC lamps.
5. All PAR38 lamps listed above have an E26 medium skirt base. Note this base is not compatible with exclusionary medium sockets.

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.
E = Lamps classified as E-type are to be used only in suitably rated enclosed luminaires.
### Technical Information

#### Typical Lumen Maintenance Curve

- **Graph:**
  - X-axis: Percent of Rated Life
  - Y-axis: Percent of Initial Luminous Flux
  - Trend lines showing maintenance over time.

#### Typical Survival Curve

- **Graph:**
  - X-axis: Percent of Rated Life
  - Y-axis: Percent Survival
  - Trend lines showing survival over time.

### Lamp Dimensions

#### E17

- **Dimensions:**
  - A: Height (5.4” (137.2mm))
  - B: Diameter (3.4” (86.4mm))
  - C: Diameter (2.1” (53.3mm))

#### PAR38

- **Dimensions:**
  - A: Height (5.3” (134.6mm))
  - B: Diameter (N/A)
  - C: Diameter (4.75” (120.7mm))

### Ordering Guide

#### E17

<table>
<thead>
<tr>
<th>MP</th>
<th>MP=METALARC PRO-TECH For Open and Enclosed Fixture</th>
<th>Wattage: 50, 70, 100, 150, 175</th>
<th>_ = Clear</th>
<th>U = Universal</th>
<th>Base: MED = Medium</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M=METALARC®</td>
<td>PAR38</td>
<td>U</td>
<td>Operating Position:</td>
<td>Operating Position:</td>
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<tr>
<td></td>
<td>For Enclosed Fixture</td>
<td>70, 100, 150</td>
<td>U</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Bulb Shape</td>
<td>Beam Spread</td>
<td>Beam Angle</td>
<td>ECOLOGIC®</td>
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<tr>
<td></td>
<td></td>
<td>PAR38</td>
<td>SP</td>
<td>20°</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>SP = Spot</td>
<td>20 = 20°</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FL = Flood</td>
<td>35 = 35°</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WWFL = Very Wide Flood</td>
<td>65 = 65°</td>
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</tr>
</tbody>
</table>

#### Expanded Line of SYLVANIA METALARC PRO-TECH and PULSE START lamps

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 and or enclosed rated fixtures. Please visit SYLVANIA.com for more information and download a copy of the latest Product Information Bulletin.
METALARC PRO-TECH PULSE START Lamp(s) shall be (a) METALARC PRO-TECH PULSE START Lamp(s) constructed with an arc tube shroud and shall be designed for open fixture operation and reduced UV output.

METALARC® PULSE START Lamp(s) shall be (a) 150W METALARC PULSE START lamp(s) exhibiting initial lumens of 14,000 with a 60% mean lumen maintenance and capable of operating on a M102/E ballast. Lamp construction shall include a lead-free welded base.

METALARC PRO-TECH PULSE START PAR38/ECO® Lamp(s) shall be (a) METALARC PRO-TECH PULSE START 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 temperature of 3200K, a maximum color shift of ±200K over life, and a CRI of 75. Lamp(s) shall pass the existing Federal TCLP limits.

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OEM/Special Markets
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Fax: 800-762-7192
Retail
Phone: 800-842-7010
Fax: 800-842-7011
SYLVANIA Lighting Services
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Fax: 800-537-0784
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Fax: 855-543-1043
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Fax: 800-667-6772
Retail
Phone: 800-720-2852
Fax: 800-667-6772
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Fax: 866-239-1278
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ENCELIUM Technologies
United States
Phone: 201-928-2400
Fax: 201-928-4028
Canada
Phone: 905-731-7678
Fax: 905-731-1401
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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