Evans Components provides an economical, reliable and more compact solution for construction purge gas metering used in high-purity welding and testing for Semiconductor & Solar applications. The Evans Metering Manifold replaces costly multi-component assemblies with an exclusive all welded “Integrated Manifold” design. All components are integrated into a single compact, lightweight unit which eliminates assembly time, reduces number of mechanical connections/welds, and cost. Elimination of the number of mechanical connections reduces risk of potential hazing and discoloration of weld zones, and improves reliability. All Evans Metering Manifolds are UHP cleaned, packaged in a clean room and 100% helium leak tested.

**Features**

- Lower cost than conventional assemblies.
- Fewer mechanical connections and welds provide unmatched leak integrity.
- Improved dry-down characteristics.
- 10 Ra Electropolished manifold
- Compact design provides room for up to 8-metering valves with 16” OAL, thus fitting on standard sub-fab columns
- Welded metering valves eliminate potential of removal/leakage
- Helium leak tested to 1 x 10⁻⁹ scc/sec
Important Specifications for Metering Valve

- Max working pressure: 1000 psig (68.9 bar)
- Working temperature: -10°F to 400°F (-23°C to 204°C)
- Flow coefficient (Cv): 0.03
- Orifice size: 0.056 in (1.42 mm)
- Stem taper: 3°
- Turns to open: 8 to 10
- Handle type: Vernier
- Bubble tight shutoff not available

DM SERIES PURGE MANIFOLD - PART NUMBER DESCRIPTION

<table>
<thead>
<tr>
<th>CA</th>
<th>4M</th>
<th>8V</th>
<th>4HV</th>
<th>X(OPTIONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA - Series</td>
<td>4M - Metering valves</td>
<td>8V - 1/2” Manifold with MVCR x FVCR connections</td>
<td>4HV - 1/4” High flow MVCR inlet branch connection</td>
<td>X - No branch connection</td>
</tr>
<tr>
<td>4MC - 4 Valves/VCR caps</td>
<td>8MC - 8 Valves/VCR caps</td>
<td>8VC - 1/2” Manifold with VCR cap/plug</td>
<td>R - UHP Regulator</td>
<td></td>
</tr>
</tbody>
</table>

Optional panel mount with regulator & UHP Gauge

Flow Coefficient at Turns Open