The LMW Series Manual Changeover is an economical ultra high-purity gas delivery system for installations not requiring automatic changeover operation. The LMW Series system is designed with a two-stage brass bar stock regulator for two cylinder banks that can be manually switched from an in-service to a reserve cylinder. When the in-service cylinder is exhausted, it can be shut off and the reserve cylinder can be manually opened to replenish the supply. Isolation and vent valves allow the empty cylinder to be replaced and purged without any interruption of gas supply to the process.

**Standard Features**
- Diaphragm Seal Isolation and Purge Valves allow cylinder replacement without interrupting gas flow.
- Ultra High Purity, Diffusion Resistant Design assures maximum diffusion resistance, maintaining gas purity.
- Double-Braided (all metal) Stainless Steel Flexible Hoses maintain gas purity and provide ease of connecting cylinders.
- Check Valves (built into CGA connection) prevent discharge of gas from pigtail during cylinder change-out.

**Optional Features**
- Outlet Filter traps foreign matter protecting downstream components from contamination and reduces maintenance.
- Relief Valve protects regulator components from the effects of overpressurization.

**Specifications**
- Maximum Inlet Pressure: 3000 psig
- Operating Temp. Range: -40°F to 140°F
- Regulator:
  - Inlet Pressure Gauge (dual scale): 0–4000 psig / 0–275 bar
  - Delivery Pressure Range: See Table I
  - Delivery Pressure Gauge: See Table I
  - Filter: 40 micron
  - Gauge Size: 2" Dial
  - Flow Coefficient: \( Cv = 0.05 \)
- Outlet Connection:
  - \( \frac{1}{4} \)" NPT female (on outlet valve)
- Inlet Connection: CGA connection as specified
- Valves: SGS460N Series (page 137)
- Flexible Hose (all metal):
  - 30" long, 0.285" nominal ID, 0.445" nominal OD
- Inlet Connections: CGA connection (as specified) with check valve
- Plugged Access Port: \( \frac{1}{4} \)" NPT female (on manifold block)

**Table I**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Delivery Pressure Range (psig)</th>
<th>Outlet Pressure Gauge (psig)</th>
<th>Delivery Pressure Gauge (psig)</th>
<th>Delivery Pressure Gauge (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMW-B-30-(CGA)</td>
<td>2–30</td>
<td>-30&quot; Hg–0–60</td>
<td>-1–0–4</td>
<td></td>
</tr>
<tr>
<td>LMW-B-75-(CGA)</td>
<td>4–75</td>
<td>-30&quot; Hg–0–100</td>
<td>-1–0–7</td>
<td></td>
</tr>
<tr>
<td>LMW-B-150-(CGA)</td>
<td>10–150</td>
<td>-30&quot; Hg–0–200</td>
<td>-1–0–14</td>
<td></td>
</tr>
</tbody>
</table>

Where 

**Materials of Construction**
- Regulator, Block and Valves: Brass Bar Stock
- Diaphragms and CGA Fittings: Brass
- Regulator Filter: Bronze
- Bracket: 12-Gauge Hot Rolled Steel with Powder Coat Epoxy Finish
- Flexible Hose (all metal): Type 316L SS inner core with Type 321 SS double overbraid and Type 316 SS welded end fittings
- Seats:
  - Check Valves: EPDM
  - Regulator and Valves: PCTFE

**Optional Equipment**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relief Valves (installed)</td>
<td>RV5572-45i</td>
</tr>
<tr>
<td>for LMW-B-30</td>
<td>RV5572-90i</td>
</tr>
<tr>
<td>for LMW-B-75</td>
<td>RV5572-175i</td>
</tr>
<tr>
<td>for LMW-B-150</td>
<td>SG6113i</td>
</tr>
<tr>
<td>Outlet Filter (installed)</td>
<td></td>
</tr>
</tbody>
</table>

Laser Gas Equipment for Industrial Lasers – See pages 68–69 for additional information