High-Purity ChangeOver Systems

Model 8RCS

8RCS Series changeover systems provide continuous flow of gas between a primary and a secondary or backup supply. When a primary gas supply has been depleted, the changeover unit automatically switches to the secondary supply. The Model 8RCS features a built-in line regulator that ensures constant delivery pressure. Both models incorporate dual diffusion-resistant regulators with packless inlet valves to allow the supply banks to be completely isolated. This system is available in brass or stainless steel and equipped with a stainless steel bracket for wall mounting.

Benefits/Features
- Protects gas purity with diffusion-resistant regulators designed for high-purity applications.
- Prevents gas outages caused by empty cylinders.
- Eliminates wasted gas due to premature cylinder changeouts.
- Improves operating efficiency of process by increasing uptime and reducing labor costs.
- Isolates gas source completely during changeout through use of diaphragm valves.
- Provides constant delivery pressure during changeover.
- Compact design allows for tight space requirements.

Specifications

**Changeover Regulator**

| Inlet Pressure: | 3000 psig (207 bar) maximum |
| Switchover Pressure: | 200 psig (14 bar) |
| Operating Temperature Range: | -40°F to 140°F (-40°C to 60°C) |
| Flow Coefficient: | Cv = 0.06 |
| Flow Capacity: | 240 SCFH (N₂) maximum |

**Line Regulator**

| Inlet Pressure: | 3000 psig (207 bar) maximum |

**Operating Temperature Range:**
-40°F to 140°F (-40°C to 60°C)
Flow Coefficient: 
Outlet Connection: 1/4" NPT Female
Gauge Size: 2" (53 mm) face
Weight: 13 lbs. (5.9 kg)

**Materials of Construction**
- **Body:** Brass or 316 Stainless Steel
- **Diaphragm:** 316 Stainless Steel
- **Gauges:** Brass or stainless steel
- **Bonnet:** Brass or 300 Stainless Steel
- **Seat and Seals:** PTFE
- **Pigtails:** 36" flexible stainless steel with brass or 316L CGA fittings as appropriate

**Optional Equipment**
- Annunciator
- Flash arrester
- Flow limit shutoff valves
- Pressure relief valves
- Pressure switches
- Check valves (2 required – one for each pigtail)

**Model 8RCS**

<table>
<thead>
<tr>
<th>Brass</th>
<th>Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q8-RCS-B-D-1(*)</td>
<td>Q8-RCS-S-D-1(*)</td>
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**Gas Service**

<table>
<thead>
<tr>
<th>CGA Connection**</th>
<th>Code</th>
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<tbody>
<tr>
<td>Air</td>
<td>590</td>
</tr>
<tr>
<td>Argon, helium or nitrogen</td>
<td>580</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>320</td>
</tr>
<tr>
<td>Hydrogen, methane or carbon monoxide</td>
<td>350†</td>
</tr>
<tr>
<td>Oxygen</td>
<td>540†</td>
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</table>

**Other cylinder connections are available – please contact your Air Liquide representative.**

† If your system requires CGA 350 (flammable) or CGA 540 (oxygen), an explosion-proof switch should be used. Contact your Air Liquide representative for more information.

Option: Indicating pressure switch gauges with annunciator can be added to this system by placing an A at the end of the part number (i.e. Q8-RCS-B-D-N2A)