RG873V
HIGH PRESSURE REGULATOR

- Precise pressure control
- Up to 1000 psig control with GP series control valves
- 0-6000 psig control as a stand alone
- Excellent stability
- Relieving capability

DESCRIPTION

The model RG873V is a Piston type dome-loading regulator. It utilizes a balanced poppet design for high flow and minimum effect of inlet pressure on outlet pressure. The poppet assembly is contained in a cartridge with internal filtration for easy in field changing. The regulator is self-venting.

OPERATION

Outlet pressure is adjusted by applying pressure to the dome port. When reducing the pressure the regulator will self vent via the vent hole near the cap. This is normal. When reducing set pressure, reduce pressure to below the new setting then increase pressure to the new setting. Typically a Proportion Air electro-pneumatic control valve pilots the regulator with the desired pressure.

FLOW CHARACTERISTICS

(500 psig or more inlet pressure)

<table>
<thead>
<tr>
<th>Flow, SCFM</th>
<th>Outlet Pressure at Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>50</td>
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<tr>
<td>100</td>
<td>100</td>
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<td>150</td>
<td>100</td>
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</tbody>
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SPECIFICATIONS

PERFORMANCE
- Type: Air piloted Piston Relieving.
- Maximum Inlet pressure:
  - RG873V: 6000 PSI (413.7 bar)
  - RG873V-02: 800 PSI (55 bar)
- Outlet pressure:
  - RG873V: 0 to 6000 PSI (413.7 bar)
  - RG873V-02: CONSULT FACTORY
- Flow coefficient (Cv): 0.8 (equivalent to 0.23" orifice)
- Rise of outlet pressure with drop of inlet pressure: 1 PSI/1000 PSI

PHYSICAL
- Materials:
  - Body and cap: Aluminum
  - Internals: Brass, Stainless
  - Seals: KEL-F, Viton
  - Port Sizes: 1/4" NPT Inlet & Gauge
  - 1/2" NPT Outlet
- Temperature range: 32-158 °F (0-70 °C)

DIMENSIONS
- Size: 3" Diameter x 4.1 " Length
DIMENSIONS

Dome Load

1/4 NPT .60" from centerline
orientation arbitrary

Vent Port
.094" dia. on centerline

3.0"

4.0"

Outlet
1/2 NPT
1 Plc.

.82"

Inlet
1/4 NPT
3 Pcs every 60 deg.

.82"

PROPORTION-AIR, INC.
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ORDERING INFORMATION

RG873V - O2
MODEL
BLANK = STANDARD
O2 = CLEAN FOR OXYGEN SERVICE

BKT-01
BRACKET

H979-DV1
REPAIR KIT*
* Standard RG873V only