GENERAL INFORMATION

The model 873 is a piston type hand 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 permitting very easy in field servicing. The low cost poppet cartridge (pictured on the opposite side of this sheet) is factory preassembled. It contains the more critical valving elements of the regulator thus eliminating in-field servicing problems. The regulator is self venting but is optionally available without the vent. This regulator design was developed for gas mixers for commercial diving where high flow, very precise pressure control and high reliability are needed. They have served this application for many years. It is available with different size sensing pistons resulting in a complete range of outlet pressures. A highly sensitive dome loaded version rated to 6000 PSI is also available.

TECHNICAL SPECIFICATIONS

- Maximum inlet pressure: 6000 PSI (40 MPa)
- Outlet pressure - from 0 to:
  - model 873-150: 150 PSI
  - model 873-400: 400 PSI
  - model 873-1500: 1500 PSI
  - model 873-5000: 5000 PSI
  - model 873-D: 6000 PSI
- Flow coefficient ($C_v$): 0.8 (0.23” orifice)
- Rise of outlet pressure with drop of inlet pressure: 1 PSI per 1000 PSI for model 873-150
- Materials:
  - body and cap: aluminum
  - internals: brass, stainless
  - seals: Buna N, nylon
- Fittings:
  - 1/2” NPT outlet port
  - 1/4” NPT inlet & gauge ports
- Size:
  - 3 inch dia. x 5 inch long

Aqua Environment Inc.
PO Box 935, Stinson Beach, CA. 94970, (415) 453 8157
TYPICAL APPLICATIONS

- Operation of high flow, low pressure equipment such as sirens from high pressure air tanks. Here use of high pressure air eliminates dependency on electrical power in an emergency.
- Component testing
- Air tank fill stations
- Fire fighting air systems
- Instrumentation and calibration panels
- Process industry control
- Shipboard and off shore air and gas control
- Aircraft service equipment
- Electronic industry rare gas flow
- Vehicle CNG stations
- Precision gas mixing equipment