

OPERATION AND MAINTENANCE MODEL 1094 HIGH FLOW, AIR OPERATED VALVE

The Model 1094 air operated valve is an open or shut valve for air or gas lines up to 6000 PSI. A one inch thread section and mounting nut are provided permitting a variety of ways to mount the valve. A one inch hole in a panel or mounting plate is required.

The pressure operated cylinder at the top of the valve can be operated by any 125 PSI pressure source (air, gas, or liquid). Adding an inexpensive, low pressure solenoid valve converts the 1094 valve to a solenoid valve where low pressure air is available.

valve. The one inch thread at the bottom of the valve can be used to mount the valve through a one inch hole in a panel or mounting plate provided by the user. Actuating pressure for the 1094 valve can be any non-corrosive gas or liquid at any pressure between 120 and 5000 PSI. Pressure must be relieved for the valve to shut. If an electric solenoid is used, use the three way type to relieve control pressure to the valve. The valve is NOT shipped oxygen clean and should NOT be used for oxygen service as provided. Consult the factory for details on oxygen service.

TECHNICAL SPECIFICATIONS

Maximum pressure, inlet	6000 PSI
differential	6000 PSI
outlet	6000 PSI
Ports, inlet	1/4" MNPT
outlet	1/4" FMPT
Flow coefficient (Cv)	0.8 (.23" orifice)
Materials, body	anodized aluminum
internals	brass & stainless
seals	Viton(TM) & KEL-F
Actuating pressure	120 PSI at 5000 PSI in and out 65 PSI at 5000 PSI in and 0 PSI out
Maximum allowable actuating pressure	5000 PSI

INSTALLATION

Use a suitable pipe thread sealant such as teflon tape on inlet and outlet threads. Do not over torque. Moderate torque applied with a 6 or 8 inch wrench is ample. Use ample teflon tape - 3 or 4 turns not 1 or 2 turns on pipe threads. The inlet is the male thread and outlet is the female thread at the side of the

MAINTENANCE & REPAIR

CAUTION As with any regulator or valve, particulates or moisture can plug or freeze the internal filter or valve seat. This can occur when upstream dryers are not changed or remain unused for long periods allowing corrosion materials to accumulate. In critical applications where it is important not to lose flow, a larger particulate filter should be used upstream. Also an orifice such as the Aqua model 796 should be used downstream. This reduces the tendency to freeze when moisture is present. Consult factory for details. The user should establish time intervals for changing the valve cartridge, filter and upstream dryers based on experience and service conditions. No representation is made herein as to time intervals as each use is unique. Back-up systems should be used in very critical applications since field maintenance is hard to insure. The poppet cartridge 895 is a factory assembled item and should be replaced if required and not disassembled unless absolutely necessary. Spare cartridges are available at a nominal cost and should be kept on hand if rapid repairs are required. Under severe conditions repacking of seals items 12, 14, and 15 with Cristo lub per the drawing may periodically be required. IN ALL CASES THE UNIT CAN BE RETURNED TO THE FACTORY OR DEALER FOR REPAIR UNDER WARRANTY IF APPLICABLE OR AT A NOMINAL CHARGE. Maintenance or repairs should only be done by qualified personnel in a clean environment by following the drawings and parts lists herein.

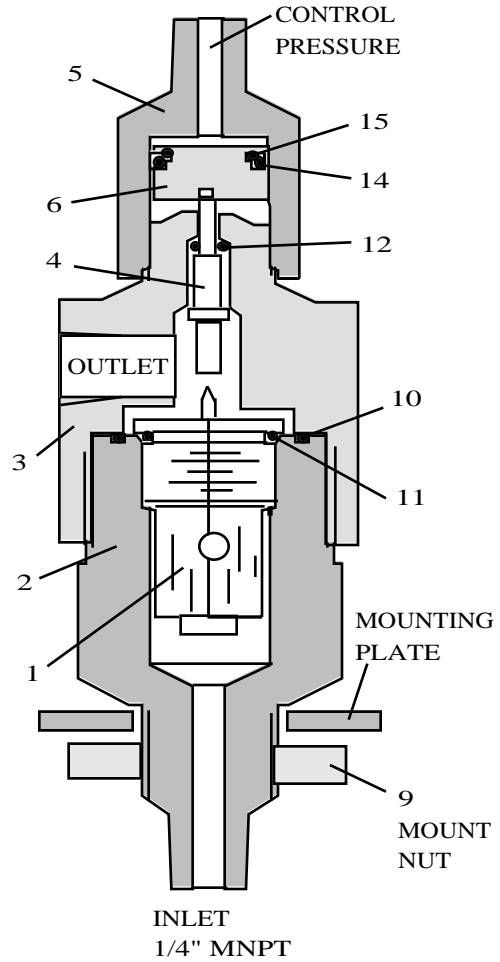
AIR OPERATED, HIGH FLOW VALVE MODEL 1094 ASSEMBLY & DISASSEMBLY

PARTS LIST

ITEM	QTY	PART NO.	DESCRIPTION
1	1	895	poppet cartridge assy
2	1	1070	body
3	1	1070	cap
4	1	815	stem
5	1	850	cylinder cap
6	1	851	piston
7		delete	
8		delete	
9	1	1094-9	1" x 14, jam nut, plt stl
10	1	1094-10	2-028 viton, 90 duro seal
11	1	1094-11	2-020 viton, 90 duro seal
12	1	1094-12	2-006 viton, 90 duro seal
13		delete	
14	1	1094-14	2-115 viton 90 duro seal
15	1	1094-15	2-113 viton 70 duro seal cut through (note 5)
16		1094-16	repair kit - includes items 1,4,10,11, 12,14,15

NOTES

1. Use Dow 111 grease on O rings and threads except seals 12, 14, & 15. Fully pack these with Cristo lub MCG 121 or 111 or equivalent.
2. Technical bulletin - 1089
3. Cut through one side of O ring item 15 to insure it acts only as an expander and not as a seal.
4. Drawing 896 "poppet cartridge" is part of this drawing



REVISIONS
090805 revisions recommended by A. N. Contopoulos