

High Capacity Selector Valve 82216-A1

GENERAL DESCRIPTION

This simple and compact three-way valve "selects" a pneumatic signal from one of two admission ports, blocks the other admission port, and directs air flow through the discharge port. It is particularly suited for performing "sequence" functions in a pneumatic engine safety control system.

SPECIFICATIONS

Construction: Brass body; Nylon Shuttle, Buna-N O-Ring. Connections: 1/4" NPT (female).

Maximum Over-Pressure Rating: 200 psi.

CAUTION: Do not exceed maximum pressure.

Minimum Transfer

Pressure: 3 psi.

Maximum Cv: 1.6 maximum.

Ordering Information:

Specify: 82216-A1

INSTALLATION

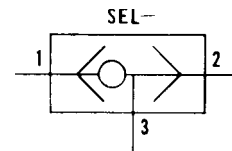
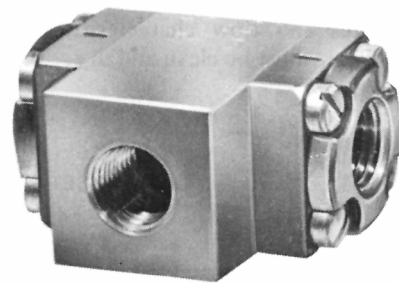
A. GENERAL

Tubing and fittings used to connect valve must be free of chips, dirt, moisture and other foreign matter. If thread compound or shellac is used, apply only above second or third male thread in moderate amount. Do not allow compound to be deposited inside of valve.

For continuous, trouble-free operation, supply to the valve must be clean and dry.

B. MOUNTING

When installing the No. 82216-A1 Selector Valve, care must be taken to prevent any foreign matter from entering ports.



J.I.C. Symbol

The valve may be installed in any position and should be securely mounted.

C. CONNECTIONS

For connections, consult system schematic.

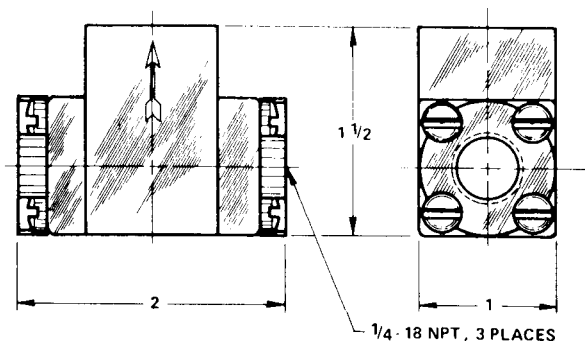


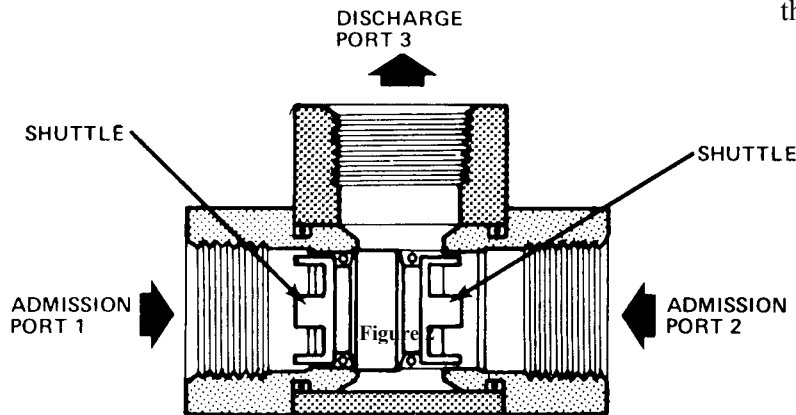
Figure 1

OPERATION - See figure 2

In the event of the admission of a pneumatic signal from Admission Port 2, the nylon shuttle moves under the impact force of the air stream to close the unpressurized Admission Port 1, a free egress of air from Discharge Port 3 occurs. Should Admission Port 1 be pressurized, the reverse-action of the shuttle then blocks the unpressurized Admission Port 2 and free egress of air from discharge Port 3 occurs.

This valve can select a signal from one of two air supply lines to selectively activate a pneumatic circuit.

While it is possible to use this selector valve with components other than those we manufacture, it is strongly recommended that Fulton Sylphon components be used, since orifice sizes and flow characteristics are carefully matched. Supply air must be clean and dry.



MAINTENANCE

- A. If excessive leakage occurs at valve seat, remove end caps and clean interior with a soft, dry cloth.
- B. If valve does not function properly due to contamination by foreign matter, disassemble and clean all metal parts with non-flammable solvent and dry thoroughly.
- C. After reassembly, check for external leakage and retighten assembly screws as necessary. Gasket cement should not be used to seal leaks due to the possibility of clogging small passages and orifices elsewhere in the system or possible damage which might change the operational characteristics of the diaphragm.

CAUTION:

If cleaning is required, do not subject shuttle to cleaning fluid, acetone or any halogenated hydrocarbons such as degrease liquids, etc. Clean only with a soft, dry cloth.

This assembly must be replaced as a unit rather than being repaired in the field.

Robertshaw

U.S.A. and CANADA

Robertshaw Industrial Products Division

1602 Mustang Drive

Maryville, TN 37801

Phone: (865) 981-3100 Fax: (865) 981-3168

<http://www.robertshawindustrial.com>

Exports

Invensys Appliance Controls

2809 Emerywood Parkway

P.O. Box 26544

Richmond, Virginia 23261-6544

Phone: (804) 756-6500 Fax: (804) 756-6561