

Section 4

Diaphragm Valve Accessories



Contained in this section:

Accessories for:

- Manual Valves
- Actuated Valves

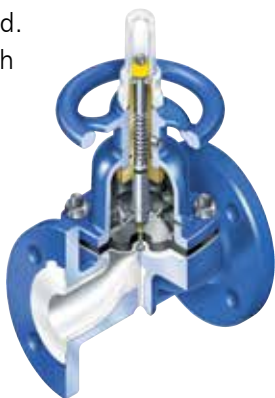
Accessories for Manually Operated Valves

Manual Valve Bonnet Assembly Selections

O-Ring Sealed Bonnet

Provides a secondary seal which retains fluids or gases within the valve bonnet in the event of diaphragm failure. A standard sealed bonnet is recommended for hazardous materials which will not damage bonnet shell, bushing or spindle (stem). On corrosive fluids or gases, either non-sealed bonnets or in cases where the fluids or gases must be contained, more corrosion-resistant materials should be utilized. All sealed bonnets are provided with v-notch vent plugs to provide a safe and easy method of checking diaphragm integrity.

If a sealed bonnet is used and the bonnet assembly cannot handle the line media for a prolonged period of time, contact ITT for recommendations.



Handwheel Locking Device

Secures valve in position so that it may not be operated unless unlocked and disengaged.



Chain Wheel Operated

Uses standard sprocket rim, guide and chain. Available 1/2"-12", weir or straightway.



Extended Stem

Available in all sizes. Not available with solid plastic bodies.



Direct Loaded Bonnet

An economical approach to automatic on-off operation. Ideal for multi-valve panel operation of batching systems, water and waste treatment systems. Furnished with or without pilot solenoid utilizing pneumatic or hydraulic operation. Available in sizes 1/2"-3" for pressures up to 100 psi. Suitable for all standard weir body materials. See Actuator section for details.



Other Available Options

Bonnet Assemblies of:

- Stainless Steel
- Ductile Iron
- Bronze
- PAS (Polyarylsulfone) Plastic

Gear Boxes

Especially suitable for large size valves with high line pressures this accessory reduces the amount of force required to manually operate the valve.

Vacuum Preparation

Dia-Flo® diaphragm valves are capable of bubble-tight shut-off down to 0.1 micron. Elastomer or PTFE diaphragms may be used. The standard weir valve design with elastomer diaphragm is capable of in-leakage of less than 1×10^{-6} atmcc/sec, and on special order it can be furnished with a substantially lower in-leak rate.

Accessories for Pneumatically Operated Valves

Positioners

For stable and accurate positioning of the actuator stem for precise control of flow through the valve.



Conoflow Positioner



Pneumatic Moore Positioner with Gauges



Digital positioner with Fieldbus Communications Protocol

Limit Switches

For determining valve position remotely. Choose from a wide range of mechanical or proximity options including models suitable for hazardous locations.



Honeywell Micro-Switch BAF1-2RN



Proximity Westlock Switch Mod 3



SO 2.0 Switch Pack



Value Switch Pack (VSP) Mechanical and Proximity Switch

Accessories for Pneumatically Operated Valves

Solenoids

Used to control valve activation, solenoid valves are available in 3-way normally closed or open models as well as 4-way for double-acting actuators.



Asco Solenoid Valve

Filter Regulators

Used to provide clean, regulated air pressure to instruments, controls and actuators.



Conoflow Filter Regulator with Gauge

Speed Control Valves

To control the rate at which automated pneumatic valves operate.



Schraeder Speed Control Valve Option

Transducers

Accept a variety of electrical input signals and convert them to proportional output signals of typically 3–15 psi.



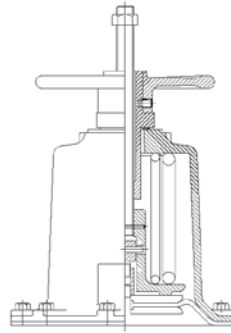
Conoflow Transducer

Accessories for Pneumatically Operated Valves



PI POSITION INDICATOR

Metal rod in a plastic tube indicates whether the valve is open or closed. Furnished as a standard on all valves equipped with positioners. Position indicators can be furnished for field installation. Available on all Dia-Flo® air motors.



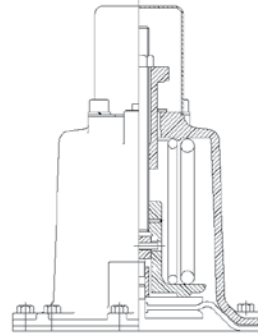
HWO HANDWHEEL OPENING DEVICE

An emergency opening device for fail close valves that includes travel stop. This option is available on all fail close actuators.



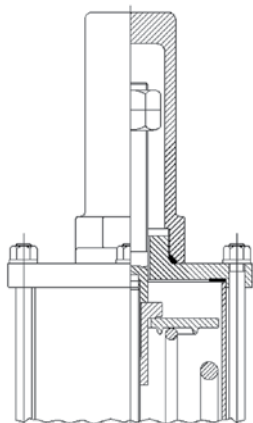
AO ADJUSTABLE OPENING STOP

The external threaded bolt can be beadjusted to limit the opening of the valve. In an emergency the valve can also be closed using this device. Available on all #25 and larger actuators.



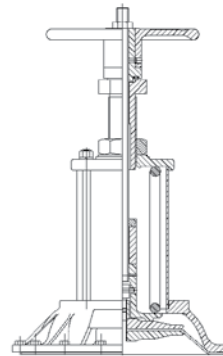
WO WRENCH OPENING DEVICE

Similar to the handwheel opening device except a wrench replaces the handwheel. Includes travel stop. This option is available on all fail close actuators except #250.



ATS ADJUSTABLE TRAVEL STOP

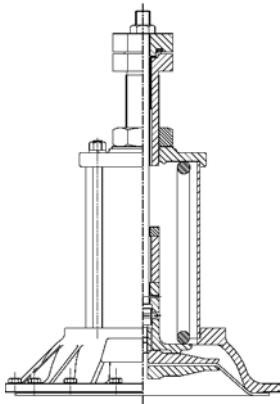
Field or factory adjustable closing travel stop will prevent over closure of the valve due to the use of excessive air pressure. Adjustable travel stops are standard on all #25 and larger failclose actuators. It is optional for #12 fail close actuators as well as for all failopen and double acting actuators.



TOHO ADJUSTABLE OPENING STOP AND HANDWHEEL OPENING DEVICE

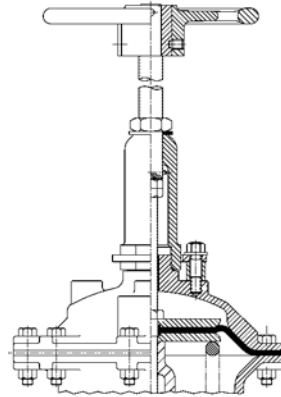
A combination device which includes an opening stop, travel stop and a hand wheel to manually open the valve, if necessary. Available only on fail close actuators. This option available on all fail close actuators except #250.

Accessories for Dia-Flo[®] Pneumatic Actuators



TOWO ADJUSTABLE OPENING STOP AND WRENCH OPENING DEVICE

Similar to the V/TOHO except awrench is utilized to open the valve in lieu of a handwheel. Available only on fail close actuators #12-75.



THC ADJUSTABLE OPENING, ADJUSTABLE TRAVEL STOP AND HANDWHEEL CLOSING DEVICE

A combination device which includes an opening stop, closing stop and handwheel to manually close the valve. Available on fail open and double acting actuators #25 and larger



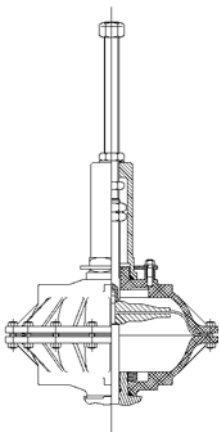
HWC HANDWHEEL CLOSING DEVICE

This accessory will limit the opening of the valve and can be closed manually with the handwheel. Available with fail open and double acting actuators #25 and larger.



TOHC ADJUSTABLE OPENING, ADJUSTABLE TRAVEL STOP AND HANDWHEEL CLOSING DEVICE

Special device only for #12 fail open and double acting actuator. This accessory performs the same function as the V/THC. (Can be used instead of AO, HWC, TO or THC for #12 actuators.)



TO ADJUSTABLE OPENING STOP AND ADJUSTABLE TRAVEL STOP

A Combination device which includes both an opening stop and a closing stop. Available on fail open and double acting actuators #25 and larger.