

DESCRIPTION

A 2 or 3-Way, manual, push to shift, latching in the shifted position, spring-return, screw-in, directional hydraulic cartridge valve, spool design.

FEATURES

Actuator mechanism may be rotated 360° for ease of access to Latch Release Pin. Ability to rotate is for access only. Valve does **NOT** latch by rotating!

Actuator area is isolated from system ports through a 10 Micron sintered filter.

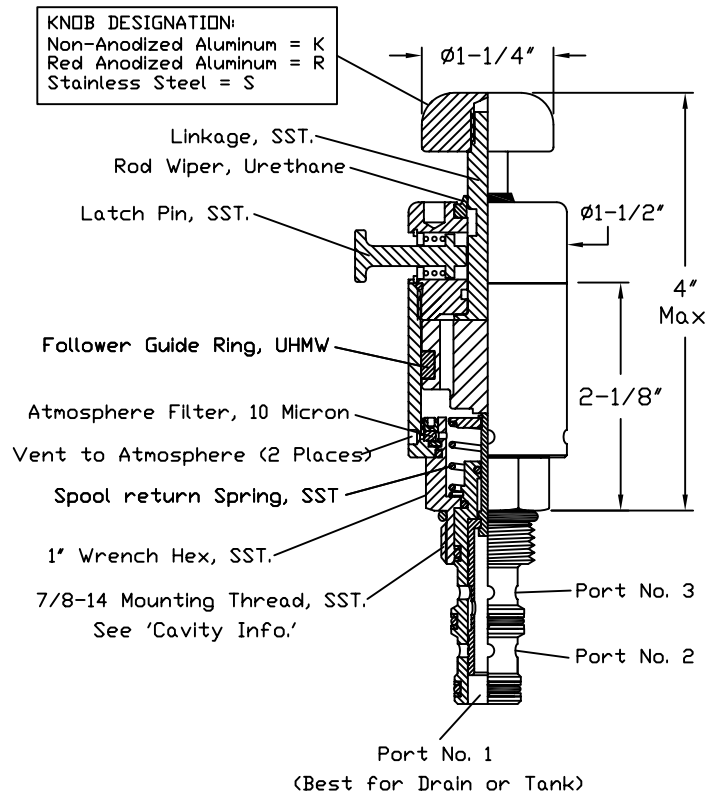
OPERATION

Once the valve is fully actuated, it is held in the actuated position until released by pulling the Latch Release Pin. Upon pulling the latch release pin, the valve spring returns the spool to the normal position as illustrated by the corresponding functional symbol selected. It is ideal to connect the No. 1 Port of the valve to the lowest pressure port, typically the Tank port. Any pressure on No. 1 Port will act upon the spool linkage and is additive to the spring force and effects the shift force required. See "SHIFT FORCE NOTES".

SHIFT FORCE NOTES:

10 to 15 Pounds of Force is required to shift the valve spool with zero pressure on port no. 1. Any pressure on Port No. 1 will increase Force Requirement by .012 X PSI at Port No. 1.

DOERING CARTRIDGE VALVE



Cavity & Housing

Cavity & Tooling C-8543 (10-3); See Spec. Sheet 1200634

Line Mount Housings; See Spec. Sheet 1200673 & 1201903

Panel Mount Housings & Spacers; See Spec. Sheets 1202983 and 1202990

Cavity & Housing information found at www.doering.com Cavities, Housing & Manifolds.

Doering Co. also manufactures multi function and multi station housings and manifolds.

Please call for assistance.

RATINGS

- Pressures to 3,000 PSIG, Ports 2 & 3 Only
- Pressure to 150 PSIG, Port No. 1
- Use No. 1 Port for Drain or Tank.

Caution, Port 1 Pressure effects Shift Force. See "SHIFT FORCE NOTES" for more detail. Temperature: -40° to 120°C

INSTALLATION

Install Cartridge valve using 1" wrench. Valve should screw in freely to the Mount Seal. Final tightening 20 to 30 foot pounds torque. Use lubricant on external oil seals and mounting threads.

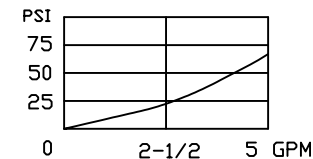
OPTIONS

All Stainless Steel option, add -SS to Part Number. Stainless Steel Wetted Area Only, add -S to Part Number. Stainless Steel Actuator Area Only, add -PS to Part Number.

Standard seals are Buna-N with Teflon back up rings. Optional seals include EP, Viton, Teflon and others.

Vents to atmosphere (2 Places 180° apart). T Option provides 10-32 Threaded ports at these locations. With T option, Key 6. Sintered Bronze filter, is omitted from the assembly.

PRESSURE DROP / FLOW



3PS SERIES

2 and 3 Way Spool, Directional Control, Manually Operated, Latching Valves

CARTRIDGE VALVE ORDERING INFORMATION:

Order P/N 54H237MOL##

└─ SPOOL DESIGNATION:
└─ KNOB DESIGNATION:

