REV.

001

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.

Fits standard cavity. See "CAVITY INFO."

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. Anodized Aluminum Components

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

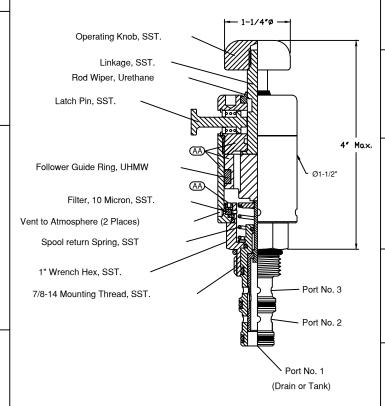
force and effects the shift force required. See "SHIFT FORCE NOTES:".

SHIFT FORCE NOTES:

10 to 15 Pounds of Force is required to shift the valve spool with zero pressure on Port No. 1
Pressure on Port No. 1 will increase
Shift Force Requirement by the following:
(.012 X PSI at Port No. 1.)
Valve is designed for operation using
Port No. 1 as Drain or Tank Port.

Maximum PSI at Port 1, 150 PSI.

DOERING CARTRIDGE VALVE



External Seal Replacement Kit, SRK-8543 Includes Buna-N Seals and Teflon Back Up Rings. Does not include Urethane Rod Wiper.

Components with Key Ref. AA are Anodized Aluminum material.

HOUSING &

MANIFOLD INFO.
Single Station Housings (Sub-Plates) illustrated
Reference Housing Spec. Sheet No. 1200673 for
Housing Drawing S8543 at www.doering.com.
Choose from Aluminum or Stainless materials.
Multi Station and Custom Housings or Manifolds

CAVITY INFO.

Cavity C-8543 (Industry 10-3)
Reference Cavity Spec. Sheet No. 1200634 for
Cavity Drawing C-8543 at www.doering.com
Form Tool: FT-8543 Call for source information.

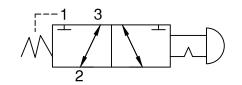
RATINGS

- 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

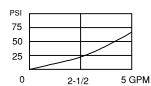
INSTALLATION

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.

FUNCTIONAL SYMBOL



PRESSURE DROP / FLOW



3PS SERIES

3 Way Spool, Directional Control, Manually Operated, Latching Valve

DOERING CARTRIDGE VALVE Order No. 1202533

