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DOERING

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 1203290

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, atmosphere filter is omitted.

PRESSURE DROP / FLOW



3PS SERIES

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

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.

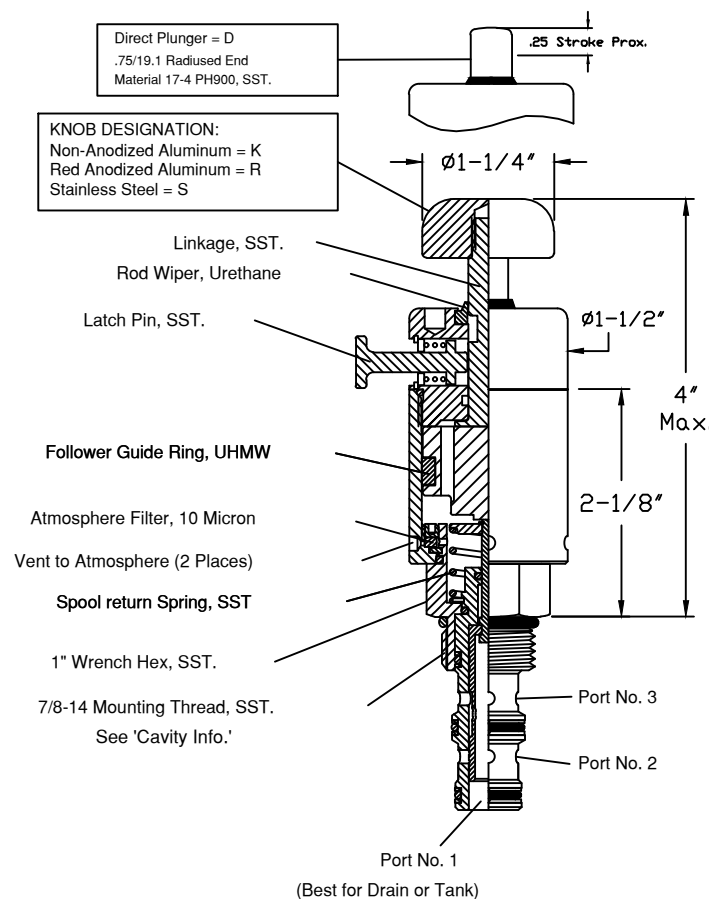
It is ideal to connect the No. 1 Port of
 the valve to the lowest pressure port,
 typically the Tank port. Any pressure
 on No. 1 Port will act upon the spool
 linkage and is additive to the spring

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.



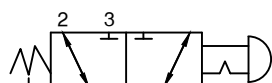
DOERING CARTRIDGE VALVE ORDERING INFORMATION:

Order P/N 54H237MOL# # #####

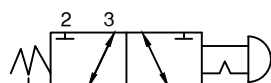
DIRECT PLUNGER OR KNOB DESIGNATION:

SPOOL DESIGNATION:

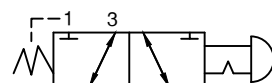
Material: When Blank (includes Brass, Aluminum and Stainless Steel)
 SS (includes Brass and Stainless Steel)
 SS316 (includes Brass, 17-4 and 316 Stainless Steel)



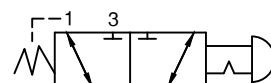
Spool Designation = 0



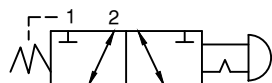
Spool Designation = 1



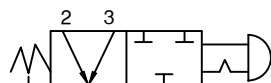
Spool Designation = 2



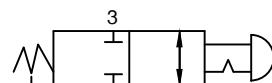
Spool Designation = 5



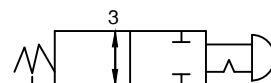
Spool Designation = 6



Spool Designation = 7



Spool Designation = 8
 N/C 2 Way Spool
 Connect 1 to Drain.



Spool Designation = 9
 N/O 2 Way Spool
 Connect 1 to Drain.

SPEC. SHEET NO. 1202800 REV. 09