



INSTALLATION SHEET FOR DS DIRECTIONAL CONTROL VALVES KEEP WITH PRODUCT UNTIL INSTALLED

ADDITIONAL SHEETS MAY BE PRINTED OUT FROM OUR WEBSITE WWW.BRAND-HYD.COM UNDER PRODUCT INSTALLATION SECTION

Mounting Surface – The valve must be mounted on a flat surface. It is important not to bend or twist the casting when mounting because this may cause the spool to bind.

Can I paint my valve? – Painting a valve is okay as long as the following precautions are taken: 1- All ports must be plugged and 2- the spool must be masked or taped off completely. Any paint on the spool will cause leakage when it chips off. Warranty is void if any valve is returned with paint on the spool.

Which port sizes are available? – The DS series valves are available in #8, #10, or #12 SAE port sizes only. Mixing port sizes is not an option when ordering this valve. Port size also correlates to the valve flow rates: #8 SAE – 10gpm (38 lpm), #10 SAE – 18gpm (68 lpm), and #12 SAE – 26gpm (98 lpm). If equipped, the pilot port and drain port will be #4 SAE.

When do I need the external drain? – The external drain is only used on Electrically Actuated “DS” valves where operating pressures are greater than 3600 psi (248 bar) but does not exceed 4500 psi (310 bar). The internal drain plug can be swapped out with the external drain plug (opposite the coil) if the spool seems to “stick” at higher pressures. Note: pilot, knob, and lever actuated valves are rated to 4500 psi (310 bar).

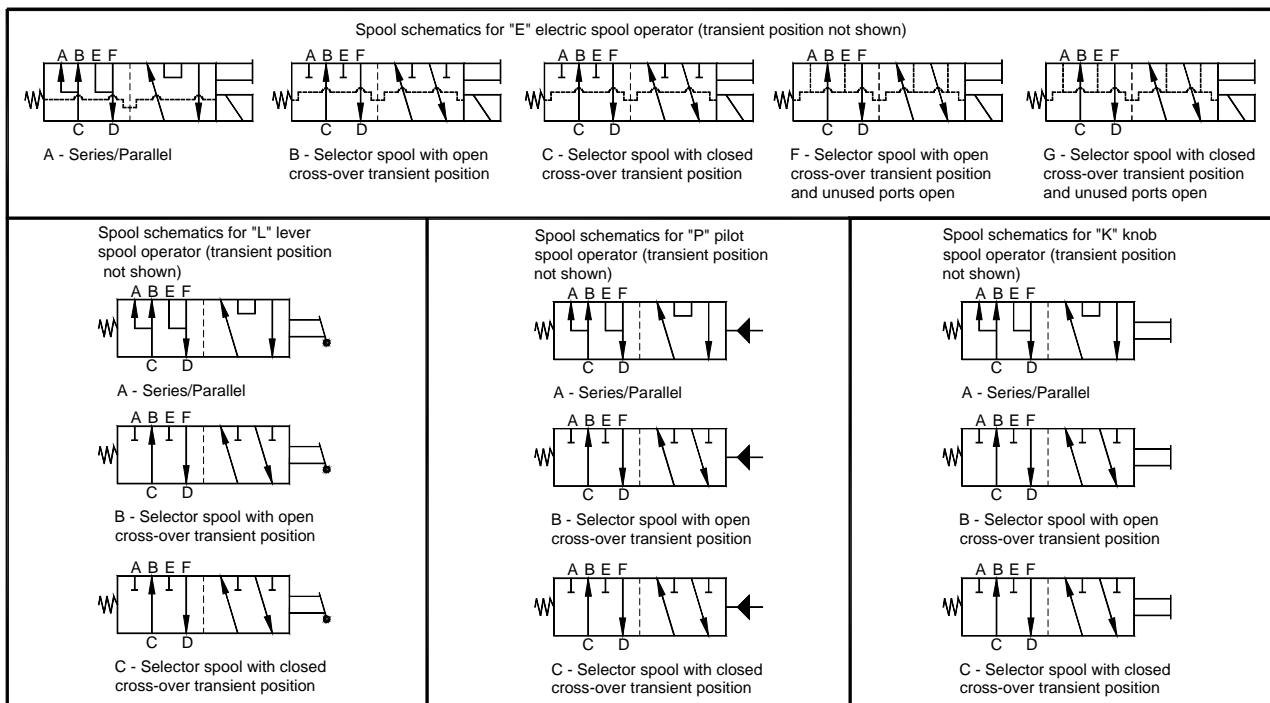
What is the pilot pressure for the pilot operated valve? – The pilot operated valve requires 150 psi pilot pressure.

When are “unused open-port” spools (types F&G) beneficial? – In selector spools F and G, the unused ports are open to prevent line cavitation during motor freewheel.

When are closed cross-over spools used as opposed to open cross-over? – Closed cross-over transient position spools are recommended for switching flow between cylinders to help prevent cylinders from shifting while in the transient position.

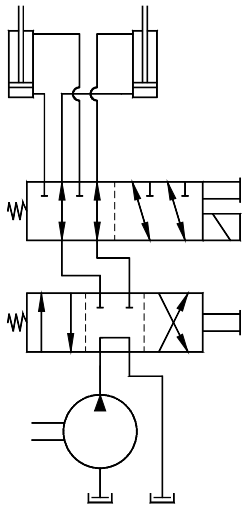
How do I assemble a handle to the valve? – If the enclosed lever handle is desired, the handle actuator will already be installed on the valve. When you receive the valve, simply screw the supplied lever handle into the threaded handle actuator.

DS – Spool Schematics

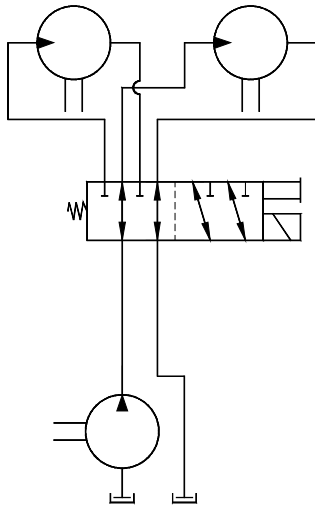




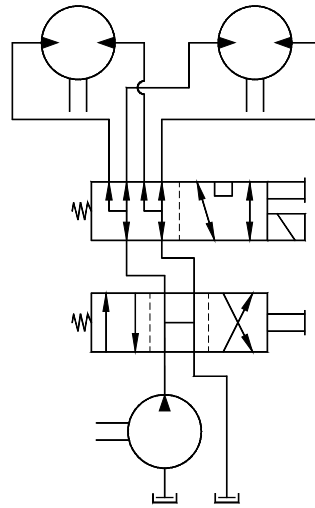
DS – Common Double Selector Applications



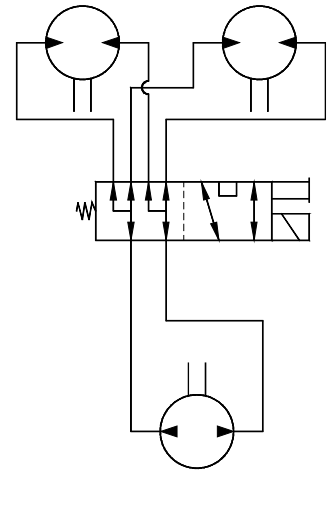
Selector spool – used to extend and retract two separate cylinders with one directional control valve



Selector spool – used to rotate two uni-directional motors individually



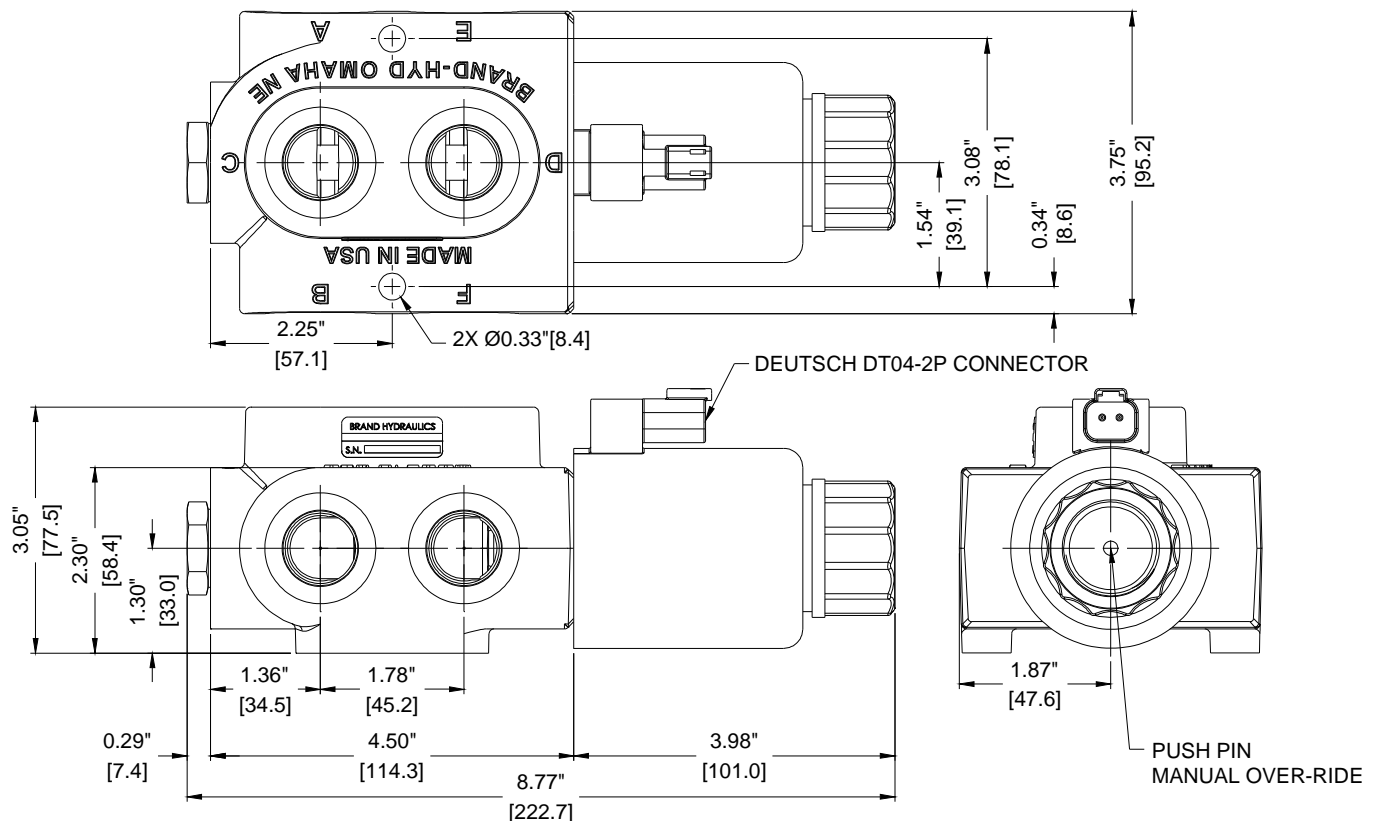
Series/Parallel spool – used to rotate two bi-directional motors in series or parallel with one directional control valve



Series/Parallel spool – used to rotate two bi-directional motors in series or parallel with one bi-directional pump

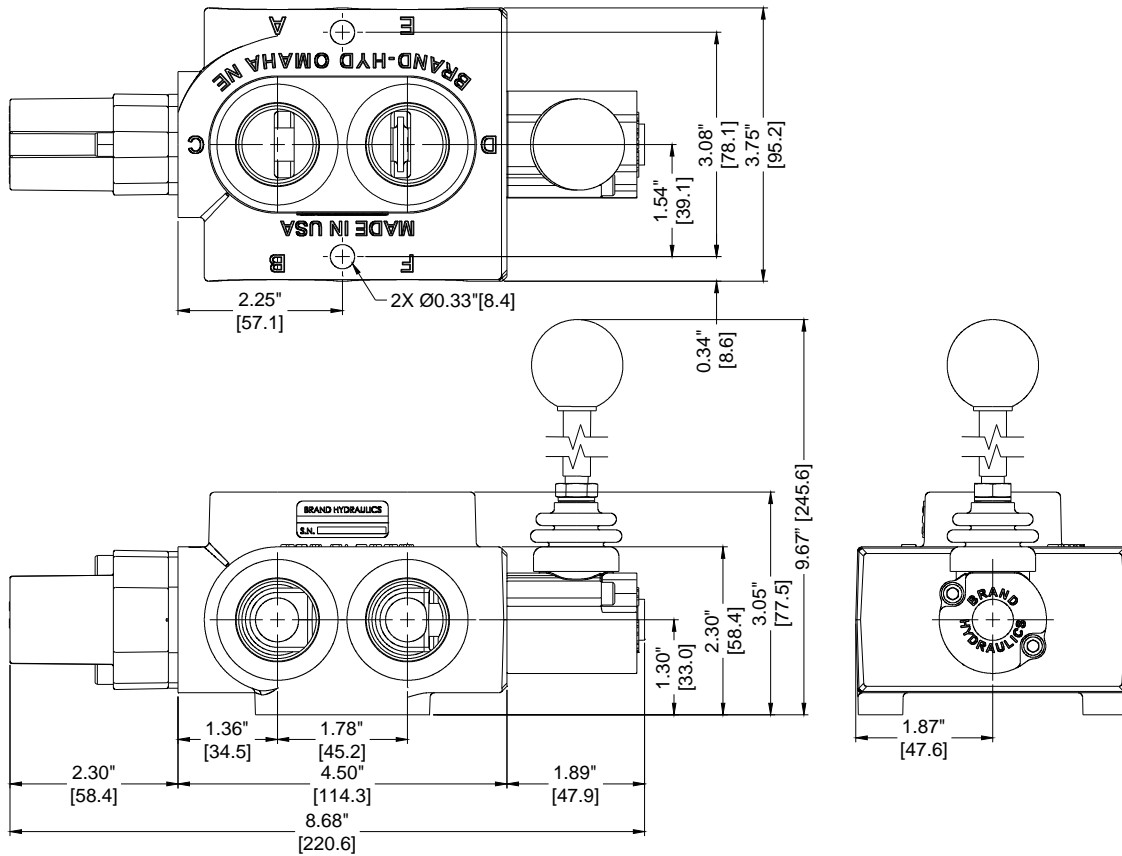
DS – Dimensional Data (inches & [millimeters])

DS10BE1SN shown below:

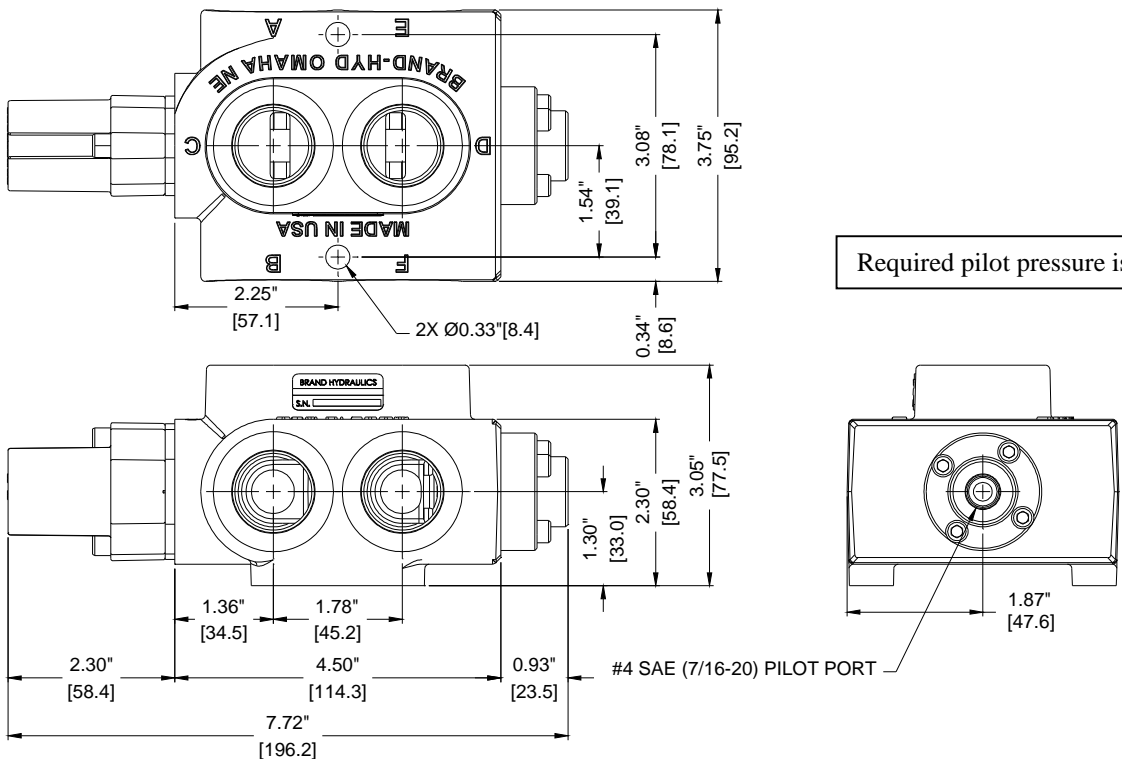




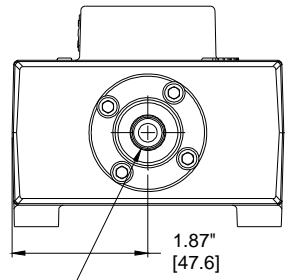
DS12ALD shown below:



DS12BPS shown below:



Required pilot pressure is 150psi





DS08BK shown below:

