



# Basic Valve Specifications

A full installation and operations manual is available  
on our website [www.continentalhydraulics.com](http://www.continentalhydraulics.com)



**CAUTION** – Before performing any service operation on any Directional Control Valve, be sure that all pressure has been relieved from BOTH SIDES of the system.



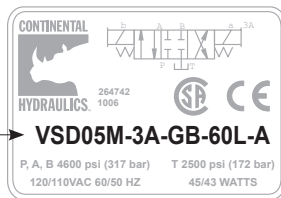
**CAUTION** – Before performing any service operation on any Directional Control Valve, disconnect or lock off power supply.



**CAUTION** – Before manually actuating any Directional Control Valve, be sure that any resulting machine function will not endanger persons or equipment.

### PRODUCT IDENTIFICATION

Each Directional Control Valve has an Ordering Code printed on its cover label. See Figure 1 for the location of the Ordering Code.



Ordering Code →

Figure 1

### GENERAL SPECIFICATIONS

Petroleum, water-based fluids (not more than 40% water) and most phosphate esters. Other fluids may be acceptable, but special O-rings may be required.

#### FLUID TEMPERATURE RANGE

Fluid temperature up to 200° F. (93° C.) will not appreciably affect valve performance. However, for safety reasons, temperatures above 130° F. (54° C.) are not recommended.

#### RECOMMENDED OPERATING VISCOSITY

80 to 350 SUS (16 to 70 CS).

#### FILTRATION

ISO 18/16/13 or better.

#### MOUNTING POSITION

Any unrestricted position acceptable. Horizontal mounting preferred.

#### NFPA FLOW PATH/ACTUATING PATTERN

SOLENOID ACTUATED:

Actuating operator a - connects flow to cylinder port A.

Actuating operator b - connects flow to cylinder port B.

**NOTE:** NFPA flow path/actuating pattern is reversed for spool code "L".

### GENERAL INFORMATION

**SOLENOID ACTUATED** – Spring centered and spring offset valve types will be spring positioned unless actuated continuously. Detented, no-spring valves may be actuated momentarily. When solenoid is not actuated, the spool will remain in last position attained, provided there is no severe shock, vibration or pressure surge.

Pressure surges in a common tank line serving these and other valves can be great enough to cause inadvertent valve shifting. This is particularly critical in the no-spring, detented type valves. Separate tank lines may be necessary.

**NOTE:** Any sliding spool valve held shifted under pressure for long periods may stick and not spring return due to fluid residue formation. To prevent sticking, valves should be cycled periodically.

#### Preventive Maintenance

After Directional Control Valves have been put in operation, provide periodic inspection and maintenance. The check points listed below will assist you in extending the life of your Continental valves.

**Fluid Operating Temperature** – Fluid temperature at the reservoir during operation should be kept between 100° F. and 130° F. (37° C. and 54° C.).

**Fluid Cleanliness** – Control particle contamination by changing or cleaning all filter elements periodically BEFORE they become clogged and start to by-pass.

**Electrical Inspection** – Periodically check to assure proper voltage, and that all electrical connections are making good contact.

**After Extended Shutdowns** – Some types of hydraulic fluids become tacky after long periods of non-use. Manually actuate valves several times after extended shutdowns to assure that all components move freely before powering up.

**CAUTION** – Before manually actuating any Directional Control Valve, be sure that any resulting machine function will not endanger persons or equipment.

#### Mounting Bolt Recommended Torque

<b>D03</b>	<b>10-24</b>	<b>4.0 lbs-ft(5.4Nm)</b>
<b>D05</b>	<b>1/4-20</b>	<b>6.0 lbs-ft(8.13Nm)</b>
<b>D05A</b>	<b>1/4-20</b>	<b>6.0 lbs-ft(8.13Nm)</b>
<b>D05B</b>	<b>1/4-20</b>	<b>6.0 lbs-ft(8.13Nm)</b>
<b>D07</b>	<b>1/4-20</b>	<b>6.0 lbs-ft(8.13Nm)</b>
	<b>3/8-16</b>	<b>29.5 lbs-ft (40Nm)</b>
<b>D08</b>	<b>1/2-13</b>	<b>51.0 lbs-ft(69Nm)</b>
<b>D10</b>	<b>3/4-10</b>	<b>240.0 lbs-ft(325Nm)</b>