**HOW TO SELECT A VERSA VALVE**

Every letter and digit in the product number of a Versa Valve has significant meaning. For example, the product number shown below (VSG-4522-U-14-A120) indicates the following:

<table>
<thead>
<tr>
<th>V</th>
<th>S</th>
<th>G</th>
<th>4</th>
<th>5</th>
<th>2</th>
<th>2</th>
<th>U —</th>
<th>14 —</th>
<th>A120</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEUMATIC</td>
<td>SPRING</td>
<td>SOLENOID</td>
<td>FOUR-WAY</td>
<td>1/2&quot; NPT</td>
<td>SIDE PORTS (INPILOT)</td>
<td>TWO POSITION</td>
<td>UPRIGHT STYLE</td>
<td>SOLENOID OPERATOR EQUIPPED WITH SILENCER/DUST EXCLUDER NUT</td>
<td>120/60 COIL</td>
</tr>
</tbody>
</table>

**BASIC PRODUCT NUMBER**

### V Series "V" Valve
- Pneumatic service to 200 psi (14 bar)

### T Series "T" Valve
- Hydraulic service to 500 psi (35 bar)

**ACTUATING DEVICES**

<table>
<thead>
<tr>
<th>ACTUATING DEVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON LEFT END OF VALVE LOOKING AT INLET</td>
</tr>
<tr>
<td>ON RIGHT END OF VALVE LOOKING AT INLET</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FUNCTIONAL TYPE OF VALVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALVE PORT SIZE</td>
</tr>
</tbody>
</table>

**V** Series “V" Valve

- Special actuator of any type. Letter indicates position of actuator relative to right and left end of body. Suffix detail is required to designate specific actuator

**S** Series “T” Valve

- Spring Centering (for 3 position manually operated valves)

**G**

- Spring Centering from one offset position only (for 3 position manually operated valves). Spring pulls spool to center

**4**

- Spring Centering from one offset position only (for 3 position manually operated valves). Spring pushes spool to center

**5**

- Spring (for toe operation)

**2**

- Solenoid-Pilot/2 position

**3**

- Hand Lever (offset lever)

**4**

- Palm Button

**5**

- Pilot-Spring Centering (for 3 position pilot operated valves)

**6**

- Differential Pilot Return

**7**

- Hand Lever (centerline lever)

**8**

- Non-return Device (for manually operated valves — allows valve to be positioned anywhere without detents)

**P**

- Pressure Pilot/2 position (for bleed pilot also use suffix detail “-1")

**R**

- Reverse Spring Return (for manually operated valves). Spring pulls valve spool

**S**

- Spring Return. Spring pushes valve spool

**T**

- Treadle (for heal-toe operation)

**U**

- Three-Detent (for manually operated valves)

**W**

- Diaphragm-Pilot/2 position

**X**

- Solenoid-Pilot Spring Centering (for 3 position solenoid operated valves)

**Y**

- Diaphragm-Pilot Spring Centering (for 3 position diaphragm operated valves)

**Z**

- Two-Detent (for manually operated valves)

**2**

- Two-Way

**3**

- Three-Way

**4**

- Four-Way

**5**

- Five-Way (Dual Pressure Four-Way)

**7**

- Two-Outlet (Directional Three-Way-Diverter)

**8**

- Two-Inlet (Directional Three-Way-Selector)

**2 1/8" NPT**

**3 1/4" NPT**

**4 1/2" NPT**

**5 3/4" NPT**

**6 1" NPT**

**7 1 1/4" NPT**

**Basic valve size**

For sizes 1/8 TO 1/2: ISO 228/1 "G" type threads are indicated by additional use of suffix "-2B". Contact factory for availability.
<table>
<thead>
<tr>
<th>BODY DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 SIDEPORTED–EXPLOT</td>
</tr>
<tr>
<td>Body with integral, pipe threaded ports. This type of body is directly connected to pressure lines and is used for mechanical, manual and EXPilot* type solenoid or pilot actuated valves.</td>
</tr>
<tr>
<td>1 SUBPLATE MOUNTING–EXPLOT</td>
</tr>
<tr>
<td>Body-ported for subplate mounting. This type of body is screw-connected to a subplate or manifold that is connected to pressure lines and is used for mechanical, manual and EXPilot* type solenoid or pilot actuated valves.</td>
</tr>
<tr>
<td>2 SIDEPORTED – INPilot</td>
</tr>
<tr>
<td>Body same as “0” above, except it has an auxiliary internal passage to supply INPilot** type solenoid or pilot actuators.</td>
</tr>
<tr>
<td>3 SUBPLATE MOUNTING–INPilot</td>
</tr>
<tr>
<td>Body same as “1” above, except it has an internal auxiliary passage to supply INPilot** type solenoid and pilot actuators.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPOOL DETAILS (Flow patterns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWO-WAY or THREE-WAY VALVES Two Position</td>
</tr>
<tr>
<td>1 Normally Closed (actuating device must be on right end of valve)</td>
</tr>
<tr>
<td>2 Normally Open (actuating device must be on left end of valve)</td>
</tr>
<tr>
<td>THREE-WAY VALVES Three Position</td>
</tr>
<tr>
<td>1 All ports blocked in center position</td>
</tr>
<tr>
<td>2 Standard flow pattern: inlet alternately open to one cylinder port; opposite cylinder port automatically open to exhaust.</td>
</tr>
<tr>
<td>3 All ports open</td>
</tr>
<tr>
<td>FOUR-WAY VALVES Two Position</td>
</tr>
<tr>
<td>1 Standard flow pattern: inlet port open (alternately) to one cylinder port; opposite cylinder port alternately to exhaust.</td>
</tr>
<tr>
<td>2 Standard flow pattern: each inlet port open (alternately) to one cylinder port; opposite cylinder port open (alternately) to exhaust.</td>
</tr>
<tr>
<td>3 All ports blocked</td>
</tr>
<tr>
<td>SEPARATOR &amp; SELECTOR VALVES 2-Position</td>
</tr>
<tr>
<td>1 All ports blocked in center position</td>
</tr>
</tbody>
</table>

**SUPPLEMENTARY ADAPTATIONS TO VERSA SERIES V & T VALVES**

- **Actuator Orientation:**
  - -216A thru -216G, Hand Lever, page V-10.1
  - -226, Cam actuator, page V-10.2
  - -227A thru -227C, Pilot actuator, page V-10.2
  - -3470, Treadle actuator, page V-56 thru 61

- **Coil/Coil Housing:**
  - -243, Grommeted housing, page V-3.3
  - -HC, -HCC, DIN connector, page V-3.5 & 3.8
  - -HT, Class H coil, page V-3.8 & 70.1
  - -P, Plug-in coil
  - -PS, Potted coil, page V-10.4 & 70.1

- **Combination Actuators:**
  - -113, -113L, Hand/2-detent, page V-69.1
  - -114, -114L, Hand/3-detent, page V-69.1
  - -115, Palm button/2-detent, page V-69.1
  - -130, -130A, -130L, Hand/spring return, page V-69.2, V-69.1
  - -136, Palm button/spring return, page V-69.1
  - -138, Solenoid/spring return, page V-69.3
  - -150, Pilot/2-detent, page V-69.2
  - -159, Pilot/spring return, page V-69.3
  - -173, Solenoid/spring return, page V-69.3

<table>
<thead>
<tr>
<th>SUFFIX DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suffix details indicate modifications or variations to the basic valve. When specifying simply add those suffix details required in alphabetical and/or numerical order.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CODE</th>
<th>COIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>U-14</td>
</tr>
</tbody>
</table>

**SELECTOR CHART**

**Examples:**
- 24V60 = 024
- 120V60 = 120
- 24VDC = 204

See page V-3.5 for specific coil and codes.

**Solenoide actuated valves require a Coil Code that indicates the specific coil current/frequency and voltage.**

- **Rating Code:**
  - **A** = 60Hz frequency
  - **D** = Direct Current (DC)
  - **E** = 50Hz frequency

Three numbers follow the Rating Code to indicate voltage:

- **Examples:**
  - 24V60 = 024
  - 120V60 = 120
  - 24VDC = 204

See page V-10.4 for Voltage Code.

- **Seals:**
  - -3, Continuous duty solenoid/high temp core, fluorocarbon FKM, page V-3.6 & 10.4
  - -11, High nitrile NBR, page V-3.1, 3.4 & 3.6
  - -31, U-cup pilot, page V-3.3
  - -155, Fluorocarbon FKM, page V-3.1, 3.4 & 3.6
  - -EP, Ethylene propylene EPR, page V-3.1

- **Special service/lubrication:**
  - -1, Bled pilot, page V-4.7
  - -10, Electroless nickel plating-internal, page V-3.1
  - -14, Silencer/dustproof cover seal nut, page V-10.4
  - -21, INPilot/EXPilot
  - -33, Retainer cap, page V-65
  - -55A, FDA approved silicone grease, page V-3.4
  - -55M, Silicone grease, page V-3.4
  - -973, Electroless nickel plating-external, page V-3.1
  - -200, Plus pressure rating to 200 psi (14 bar), page V-3.3
  - -H, Threaded solenoid exhaust, page V-10.4 & 70.1
  - -H500, Hydraulic solenoid rated to 450 psi (31 bar), page V-3.3