

▼ Shown from left to right: V152, V66, V82, V161, V42, V17



Your Hydraulic Control Solution



Valve Applications

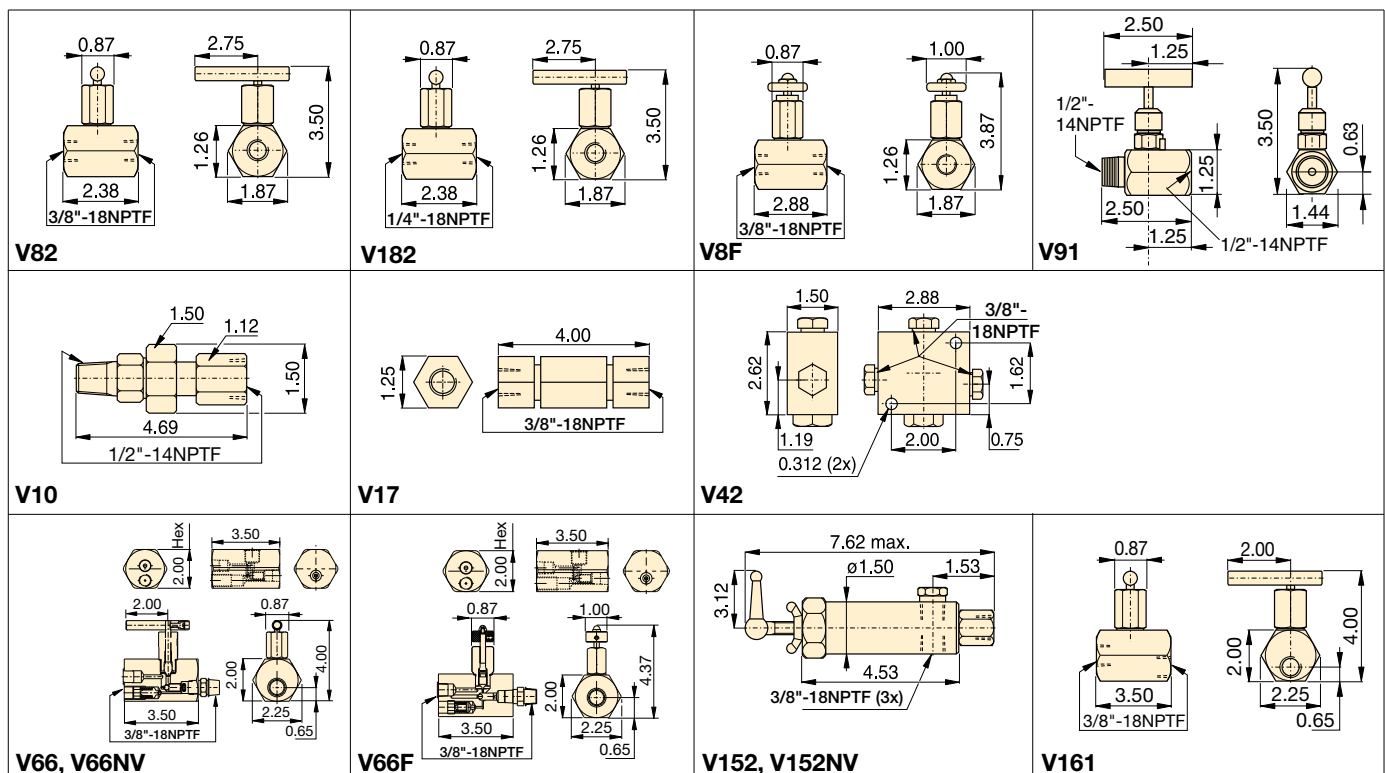
To see these valves used in typical hydraulic circuits, please see our "Yellow Pages".

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▼ The V152 Pressure Relief Valve limits the pressure or force developed in the hydraulic system.



- All valves are rated for 10,000 psi operating pressure
- All valves feature NPTF porting to insure against leakage at rated pressure
- All valves are painted, coated, or plated for corrosion resistance
- Viton® seals (in V66NV and V152NV) for high temperature applications, nickel-plated for maximum corrosion resistance



Valve Dimensions in inches.

Flow and Pressure Control Valves



Premounted Manifold

For two or four port manifold with integral flow control valves, see the manifold page of the System Components section.

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Fittings

















For additional fittings see the fitting page of the System Components section.

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V Series



Maximum Operating Pressure:
10,000 psi

Valve Type and Model Number	Description	Hydraulic Symbol
Needle Valve V82 V182F V8F	 <p>V82: To control cylinder speed. Can also be used as shut-off valve for temporary load holding. $\frac{3}{8}$" NPTF female ports. V182: Same as V82, but with $\frac{1}{4}$" NPTF female ports. Also suitable for gauge snubbing. V8F: Similar to V82, but with very fine metering for precise flow control. Not recommended as shut-off valve.</p>	
Snubber Valve V91	 <p>V91: Adjustable for metering oil out of a gauge to prevent snapping of gauge pointer when load or pressure is suddenly released. Also suitable as shut-off valve to protect the gauge during high cycling applications. $\frac{1}{2}$" NPTF male and female threads for use with GA1, GA2 or GA4 gauge adaptors.</p>	
Auto Damper® Valve V10	 <p>V10: To be used when gauge pressure must be monitored during high cycle applications. Creates a flow resistance when load is released suddenly. No adjustments are necessary. $\frac{1}{2}$" NPTF male and female threads for use with GA1, GA2 or GA4 gauge adaptors.</p>	
Check Valve V17	 <p>V17: Ruggedly built to resist shock and operate with low pressure drop. Closes smoothly without pounding. $\frac{3}{8}$" NPTF female ports.</p>	
Pilot Operated Check Valve V42	 <p>V42: Can be mounted at the cylinder to hold the load in case of system pressure loss. Normally used with double-acting cylinders where pilot port receives pressure from a Tee-fitting in the cylinder retract line. $\frac{3}{8}$" NPTF female ports. Pilot pressure ratio 14% (6.5:1).</p>	
Manually Operated Check Valve V66, V66NV* V66F	 <p>V66, V66NV: For load holding applications with single- and double-acting cylinders. Valves allow oil to flow back to tank when cylinder retracts. V66NV with Viton seals, nickel-plated. V66F: Similar to V66, but with very fine metering capability for precise flow control. V66F not designed for load holding applications.</p>	
Pressure Relief Valve V152 V152NV*	 <p>V152: Limits pressure developed by the pump in hydraulic circuit, thus limiting the force created by other components. Valve opens whenever preset pressure is reached. To increase pressure setting, turn handle clockwise. Includes: <ul style="list-style-type: none"> • 3 ft return line hose kit • $\pm 3\%$ repeatability • 800-10,000 psi adjustment range. </p>	
Sequence/Pressure Differential Valve V161	 <p>V161: To control oil flow to a secondary circuit. Flow is blocked until system pressure rises to the V161 setting. When this pressure level is reached, the V161 opens to allow flow to the secondary circuit. A pressure differential is always maintained between the primary and secondary circuit. Min. operating pressure: 2000 psi.</p>	

* See page 64 for more information about products for use in high temperature and extreme environment applications.