Flow and Pressure Control Valves

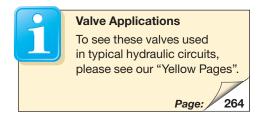


▼ Shown from left to right: V-152, V-66, V-82, V-161, V-42, V-17



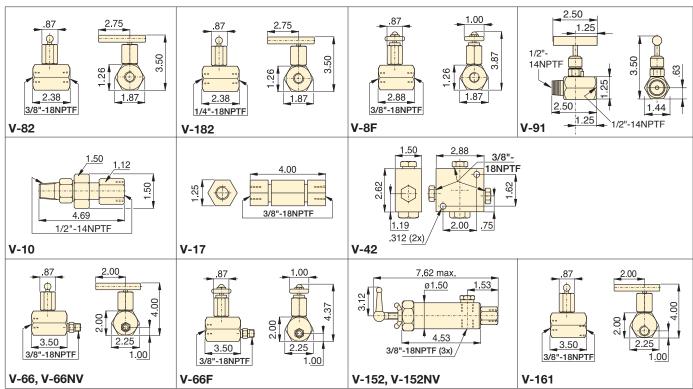
- All valves are rated for 10,000 psi operating pressure
- All valves feature NPTF porting to insure against leakage at rated pressure
- All valves are painted, coated, or plated for corrosion resistance

Your Hydraulic Control Solution



▼ The V-152 Pressure Relief Valve limits the pressure or force developed in the hydraulic system.





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.



Series



Maximum Operating Pressure:

10,000 psi

Valve Type and Model Number		Description		Hydraulic Symbol
Needle Valve V-82 V-182F V-8F	1	V-82: To control cylinder speed. Can also be used as shut-off valve for temporary load holding. %" NPTF female ports. V-182: Same as V-82, but with	1/4" NPTF female ports. Also suitable for gauge snubbing. V-8F: Similar to V-82, but with very fine metering for precise flow control. Not recommended as shut-off valve.	#
Snubber Valve V-91	1	V-91: 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. ½" NPTF male and female threads for use with GA-1, GA-2 or GA-4 gauge adaptors.	#
Auto Damper® Valve V-10		V-10: 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. 1/2" NPTF male and female threads for use with GA-1, GA-2 or GA-4 gauge adaptors.	
Check Valve V-17		V-17: Ruggedly built to resist shock and operate with low pressure drop. Closes smoothly without pounding. %" NPTF female ports.		
Pilot Operated Check Valve V-42		V-42: 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. %" NPTF female ports. Pilot pressure ratio 14% (6.5:1).	
Manually Operated Check Valve V66, V66NV* V-66F		V-66, 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.	V-66F: Similar to V-66, but with very fine metering capability for precise flow control. V-66F not designed for load holding applications.	
Pressure Relief Valve V-152 V-152NV*	THERMACE	V-152: 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: • 3 ft return line hose kit • ±3% repeatability • 800-10,000 psi adjustment range.	
Sequence Valve V-161	-	V-161: To control oil flow to a secondary circuit. Flow is blocked until system pressure rises to the V-161 setting. When this pressure level is reached, the V-161 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 54 for more information about products for use in high temperature and extreme environment applications.