

••••• **INNOVATION AT WORK FOR YOU** •••••

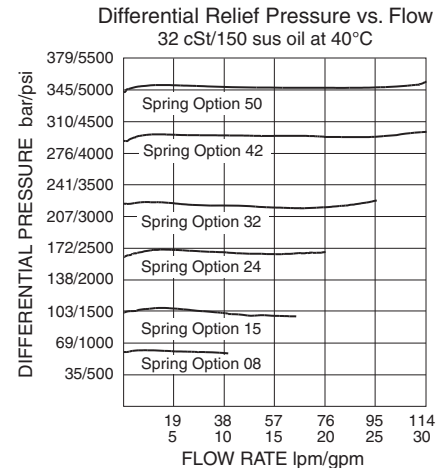
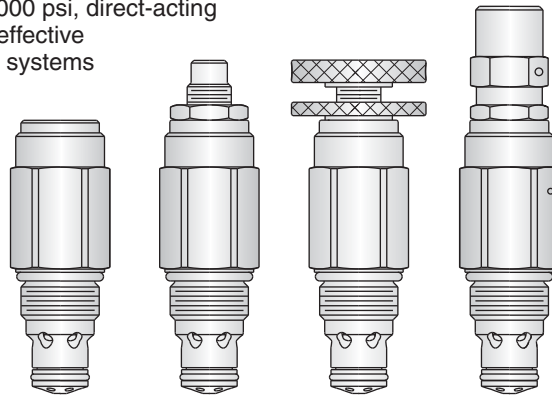
**New RVD50-20 Direct-Acting High Performance Relief Valve**

**N**ew high performance, 5000 psi, direct-acting relief valves provide an effective pressure limiting solution for systems requiring dynamic relief, low hysteresis, low pressure rise, and low internal leakage.

The RVD50-20 is suitable as a regulating device due to its low pressure rise (see chart) and extremely low hysteresis of less than 1%. Any application requiring a consistent relief setting will benefit from the new

RVD series valves, which are built to very tight tolerances and accurate dimensions. Their high reseal characteristic ensures suitability in applications where dynamic relief is required. A low internal leakage rate of 5 dpm at 80% of crack pressure ensures cylinders will not droop in load-holding or port relief applications.

The RVD50-20 has a fixed height adjuster and integral spring setting shoulder that compress the internal spring to the desired pressure range. Therefore the height of the adjuster does not change and the screw is prohibited from backing out of the valve when being adjusted under pressure. The valve's poppet and damping chamber provide stability for smooth, quiet relief and low pressure rise characteristics. The valve does not incorporate the use of dynamic seals. This reduces noise, and improves the reseal and hysteresis characteristics of the valve.



This lack of internal seals also assures very low overshoot of the pressure setting (9.5 percent at 5000 psi) and minimal response time.

The RVD50-20 has six spring ranges with settings up to 5075 psi to ensure precise differential relief that is specific to the machine and allows the valve to operate with low pressure rise regardless of flow rating. The RVD50-20 should be considered in all new dynamic relief applications, especially those that require low pressure rise.

HydraForce is the leader in hydraulic cartridge valves and electro-hydraulic systems in the heavy duty equipment OEM markets. For additional information, visit us at [www.hydraforce.com](http://www.hydraforce.com)

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Features	Benefits
Adjustment screw cannot be completely backed out of the valve.	Adjustments can be made safely under pressure.
All HydraForce standard RV valve adjustment options are available.	Utilizes familiar and easy-to-use adjustment options.
Integral Damping Chamber.	Improved stability for quieter, more efficient system relief.
Very low internal leakage.	Cylinders will not droop in load-holding or port relief applications.
Direct-acting.	Faster response.
Over travel limiter.	Prevents the poppet from sliding out of the guide.
Six spring ranges available.	System pressure rated to 350 bar/5075 psi.*
Low pressure rise and hysteresis.	Can be used in all dynamic relief applications regardless of static or dynamic load conditions.
Industry-standard cavities.	No new tooling costs and direct interchange with other HydraForce reducing/relieving cartridges.
Endurance tested to 1 million cycles at full rated flow and pressure.	Long life without wear or decreased performance over time.

\*Exceeding the maximum flow rate of a spring setting will cause valve failure.

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