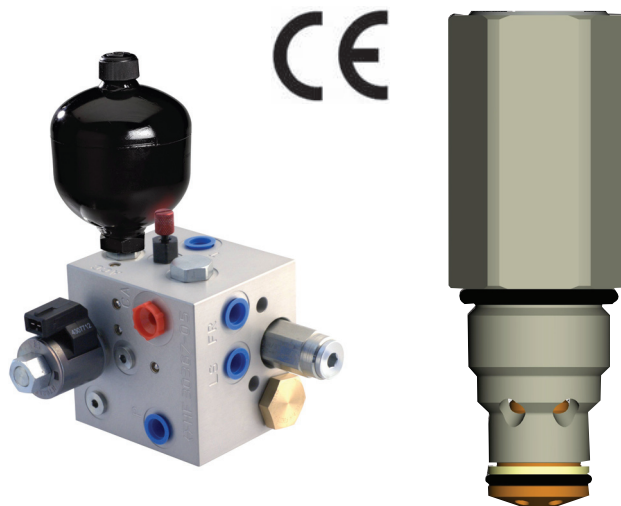
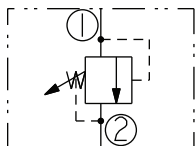




New PED-certified Hydraulic Cartridge Valve for Pressure Limiting Accumulator Circuits in Off-Highway Suspensions

HydraForce has released a new, high pressure, direct-acting, poppet-type, hydraulic safety relief valve that is suitable for use as a safety accessory in Category IV Group 2 applications as rated by the European Commission (EC) Pressure Equipment Directive (PED) 97/23/EC. It has an operating pressure of 385 bar (5575 psi) and flow rate up to 113 lpm (30 gpm). The new RVD50-20P cartridge valve is ideal for use as a pressure limiting device for hydraulic circuit protection. It blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to force the poppet from its seat. This valve offers fast response to load changes in accumulator charging hydraulic circuits for hydrostatic brakes, off-highway suspensions, wind turbines and other applications requiring low hysteresis, low pressure rise, and low internal leakage.



The tamper-proof, PED-certified RVD50-20P cartridge valve is ideal for off-highway suspension, hydrostatic brake, wind turbine, and other applications requiring low leakage and hysteresis.

Features	Benefits
Meets PED certification for European Commission (EC) Pressure Equipment Directive (PED 97/23/EC) suitable for use as a safety accessory in PED Category IV Group 2 applications.	Can be specified in the European market for applications which require the highest safety level of the European Pressure Equipment Directive (PED).
Six spring ranges available - 08, 15, 24, 32, 42 and 50 - ranging from 13.7 bar/200 psi up to 350 bar/5075 psi.	Versatility and flexibility in application with flows and pressures to suit the need.
Tamper-proof, sealed housing.	Safe and secure. No maintenance required. Corrosion-resistant. Weatherproof.
Standard VC10-2 cavity.	Standard, stocked housings can be used. No new tooling.
Operating pressure to 385 bar/5575 psi.	Can be specified for high-pressure applications.
Superior plating capable of withstanding 960 hours minimum salt spray to red rust per ASTM B117.	Long life; no worries about wear or decreased performance over time.
Internal leakage rate of 0.25 cc/minute (5 drops/minute) max to 80% of nominal setting.	Low internal leakage.
Designed, inspected and tested to HydraForce quality standards with 5-year warranty. (See full warranty statement in the catalog.)	Performance guaranteed for five years.

For detailed information and specifications, visit www.hydraforce.com or contact your local HydraForce representative at www.hydraforce.com/Distributors/World.htm

**HYDRAFORCE HYDRAULIC SYSTEMS
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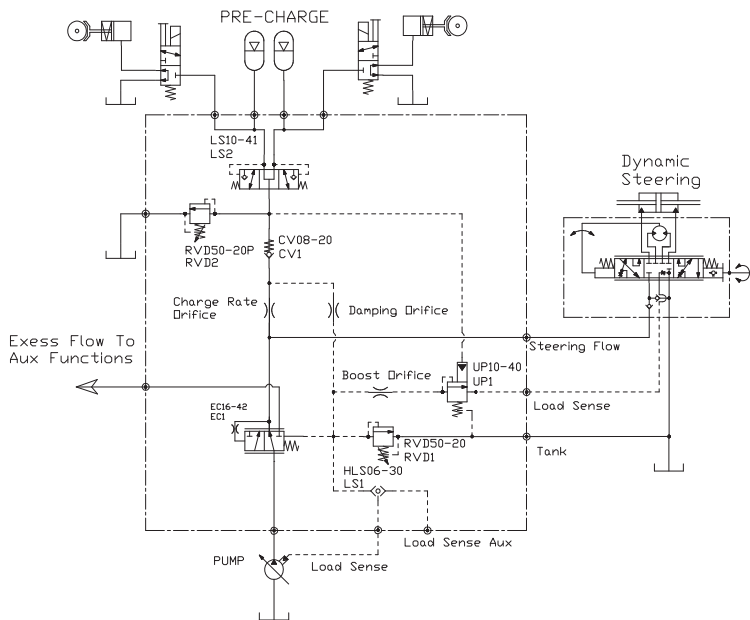
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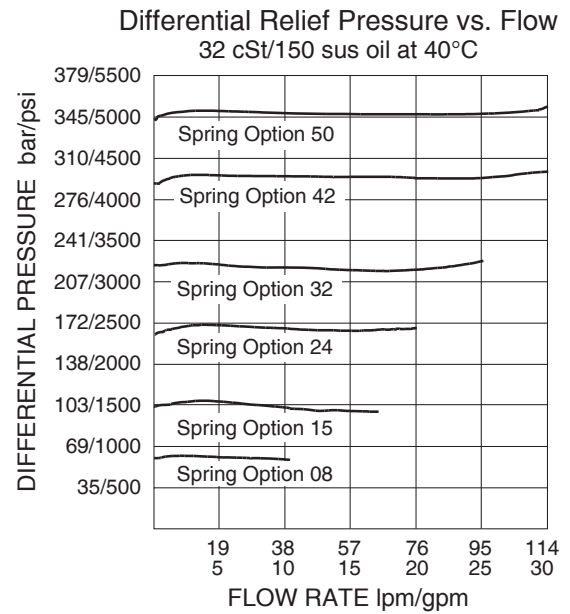
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This dynamic accumulator charging circuit protects the accumulators.



PERFORMANCE CHART illustrates the maximum flow rate with the various spring options available for the RVD50-20 PED-certified cartridge valve.

The hydraulic schematic above depicts how the PED-certified RVD50-20P valve is used in a circuit to protect the accumulators. Hydraulic flow from the pump is controlled by the load-sensing EC16-42 pressure compensator valve, which provides priority flow to the steering unit while allowing excess flow to be used for auxiliary functions.

The UP10-40 unloading pilot valve near the compensator allows flow for dynamic steering. If steering “bottoms out”, the RVD50-20 valve opens to relieve excess flow to tank.

The HLS06-30 valve communicates the load signal of the accumulator charge function to the LS pump in order to provide adequate charge flow to the accumulator.

The LS10-41 shuttle valve is used in the case of accumulator failure; should one of the accumulators fail, the LS10-41 will shift over to protect the operational accumulator. When pressure at one of the two load ports exceeds the other, the poppets shuttle to give priority flow and pressure to the port with the highest load.

The PED-certified RVD50-20P protects the accumulator circuit by providing dynamic response to pressure spikes and relieving excess pressure to tank. The valve has fast response to pressure spikes and low leakage, which helps reduce the number of accumulator charging cycles throughout the life of the machine.

