

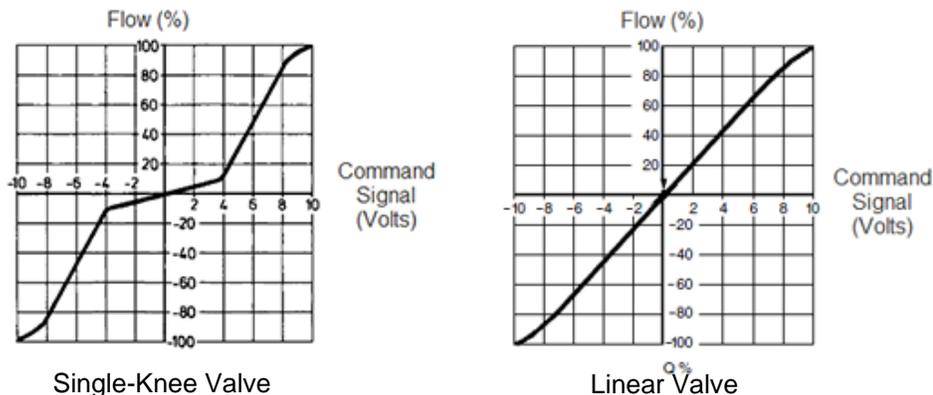
FOR IMMEDIATE RELEASE

Delta Valve Linearization for Hydraulic Motion Control Retrofits

February 25, 2011 – Battle Ground, WA – Delta Computer Systems, Inc. announces the addition of Single-Point Valve Linearization for Delta’s RMC75 and RMC150 Motion Controllers. Valve linearization is an important feature in retrofit applications when using an existing non-linear valve versus purchasing a new linear valve. This is because Valve Linearization can compensate for non-linear valve characteristics by making the valve appear more linear.

Motion controller closed loop PID control algorithms expect that a hydraulic axis will produce a flow linearly proportional to the Control Output voltage, which is what a linear valve does. Because of this, Delta always recommends use of a linear valve in motion control applications. If the flow is not linearly proportional—such as in a non-linear valve—the gains and related system responses will not be able to achieve optimum control. If a linear valve cannot be used, valve linearization can add real value by mitigating this problem.

When using Delta’s RMCTools software, the RMC75 and RMC150 motion controllers provide single-point valve linearization to compensate for valves with one sharp "knee" or "kink" in the flow versus command signal diagram, as shown in the **Single-Knee Valve** diagram below. This valve linearization typically results in a marked improvement in control. Using this method for other non-linear valve types, such as progressive valves, will provide some improvement, but may not provide optimum control.



Delta’s Valve Linearization improves hydraulic valve applications

“If a designer cannot use a linear valve, Delta’s addition of the Valve Linearization feature helps makes tuning easier.” stated Steve Nylund, Delta’s CEO. “And when retrofitting a machine, using a non-linear valve instead of a preferred linear valve may be the only choice in some applications.” Nylund added.

The high performance motion control products that Delta designs, manufactures and markets are used worldwide for hydraulic, pneumatic and electric closed-loop control in a wide array of single and multi-axis applications, including testing, food, energy, automotive, entertainment, plastics, materials, aerospace, metals, forest products and others.

About Delta Computer Systems: For more than 28 years, Delta has supplied motion controllers, color sensors, and other industrial products that enable OEMs & integrators to build better machines. For more information contact Bill Savela, Delta Computer Systems, Inc. 1818 SE 17th Street, Battle Ground, WA. 98604. P 360-254-8688, fax 360-254-5435, or email technicalsales@deltamotion.com. Editor: Please indicate **DELTA Valve Linearization** for inquiry identification.