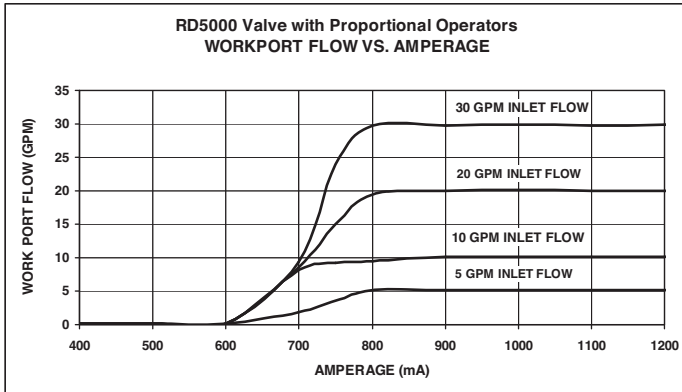
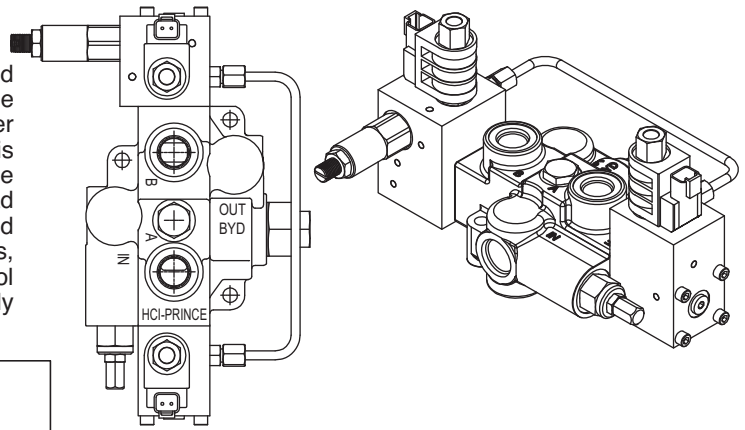
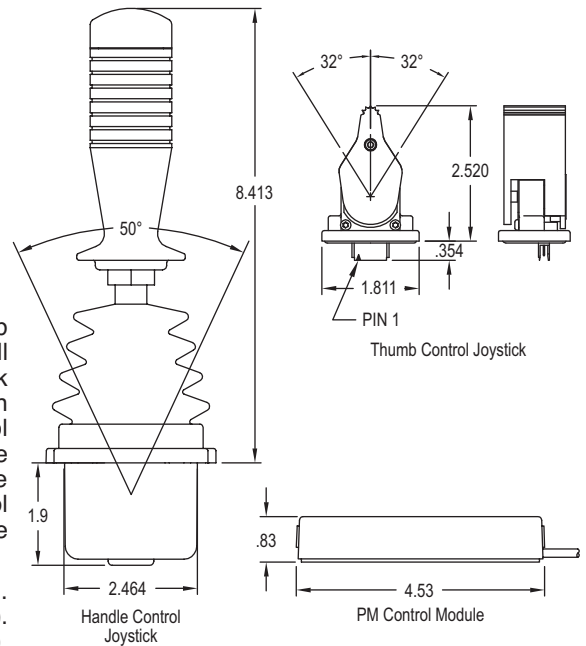


RD5000 SERIES VALVE WITH PROPORTIONAL OPERATORS

The RD5000 valve is available with proportional solenoid operators. The valve will allow controlled starts and stops of the work port flow as well as control of the work port flow rate over a limited metered range. Pilot pressure to initiate spool shift is provided internally by means of a pressure build-up cartridge in the power beyond port. Once the spool shift is initiated, load induced pressure is required to regulate the spool position and flow. By increasing the current through one of the solenoids, increasing pressure is applied to a spool end, causing the spool to shift against spring bias. Full spool shift is at approximately 1200 mA - 12 VDC (600 mA - 24 VDC).



The RD5000 proportional operators are typically controlled with a thumb or handle control and a PWM control module. Prince offers a small thumb control joystick (671300076) and a larger handle control joystick (671300077). A PWM control module (671300075) that can be used in conjunction with these joysticks is also offered by Prince. The control module provides a performance enhancing dither to the current. The minimum and maximum current from the module can also be set to minimize the dead band before work port flow starts and to maximize the control resolution. Additional controls are available. Please contact sales at Prince Manufacturing for additional information.



The connector on the thumb joystick is a Molex #CGRID/SL (7 male pins). The connector on the handle joystick is a Deutsch #HD14-9-16P (9 male pins). The connector on the PWM control module is a Deutsch #DT04-8P (8 male pins). A harness is needed to connect the joystick, PWM module, and coils.

RD51	PORT SIZE	SPOOL TYPE	SPOOL ATTACHMENTS	RELIEF VALVE	INLET LOCATION	OUTLET LOCATION	POWER BEYOND	PROPORTIONAL SOLENOID COIL
RD51 Single Spool	6 #12 SAE In/Out #10 SAE Work	C 4 Way, 3 Position Tandem Center	A 3 Position, Spring Center to Neutral	1 No Relief	A End	4 END	H Open Center Pressure Build-up	DP12Q 12VDC Dual Spades DP12L 12VDC Dual Lead Wires DP12H 12VDC DIN-43650 DP12D 12VDC Integral Deutsch DP24Q 24VDC Dual Spades DP24L 24VDC Dual Lead Wires DP24H 24VDC DIN-43650 DP24D 24VDC Integral Deutsch DP11H 110VAC DIN-43650
* For other non-standard relief settings, please specify: * RD516CA5A4H-DP12H-25 The last two digits are relief pressure in hundreds (example: 25=2500 PSI). All relief settings are at 10 gpm & 105°F. ** Often used with no relief. Review application				5 * Differential Poppet Adjustable 1500-3000 PSI Set at 2000 PSI			D ** Closed Center Conversion Plug Installed	
The RD5000 proportional operated valve is offered in two standard models as shown below. Additional options as well as two and three spool versions are available. Please contact sales at Prince Manufacturing Corp. for additional information RD516CA5A4H-DPxxx RD516CA1A4D-DPxxx								