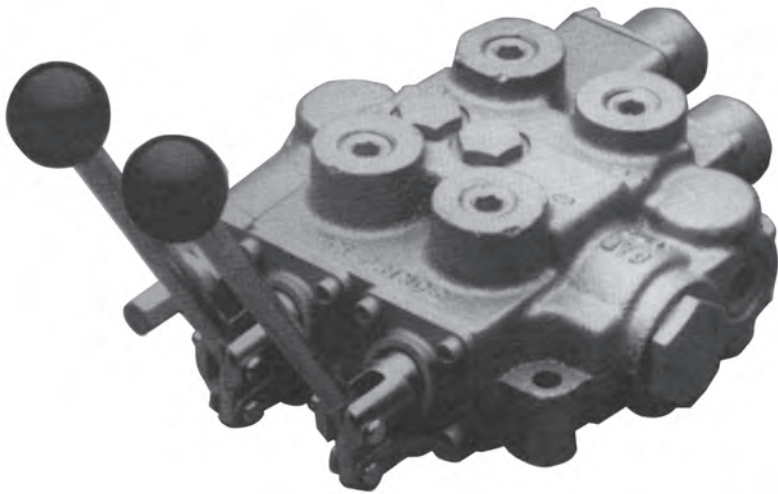
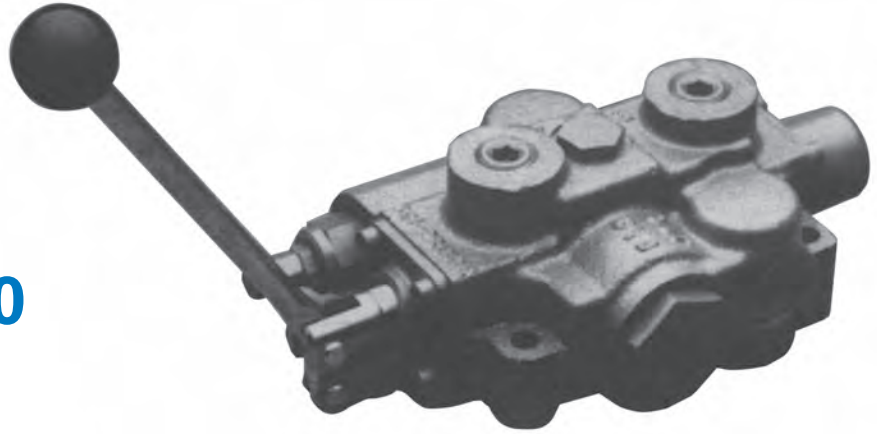


MODEL RD5000

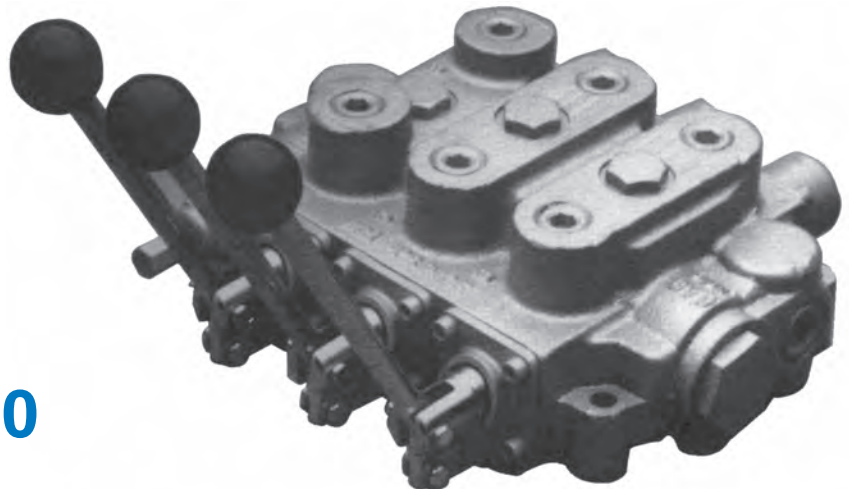
MONO-BLOCK

Directional Control Valves
1, 2, 3 Spool

Model RD5100

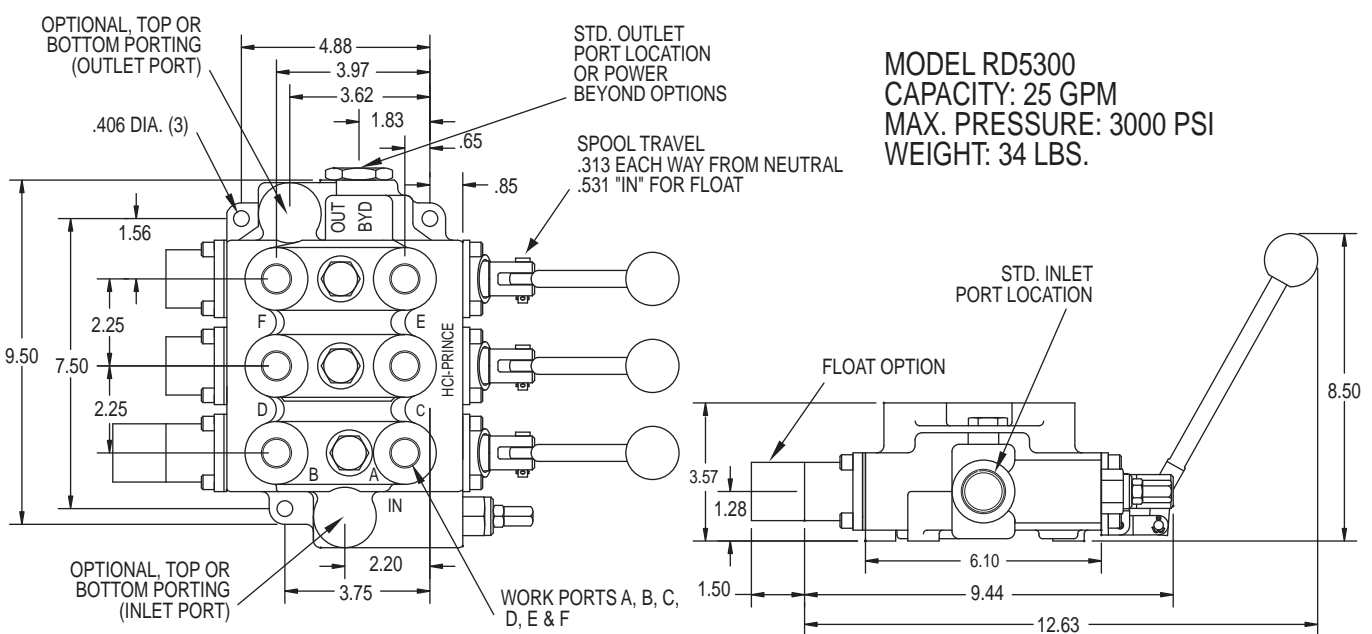
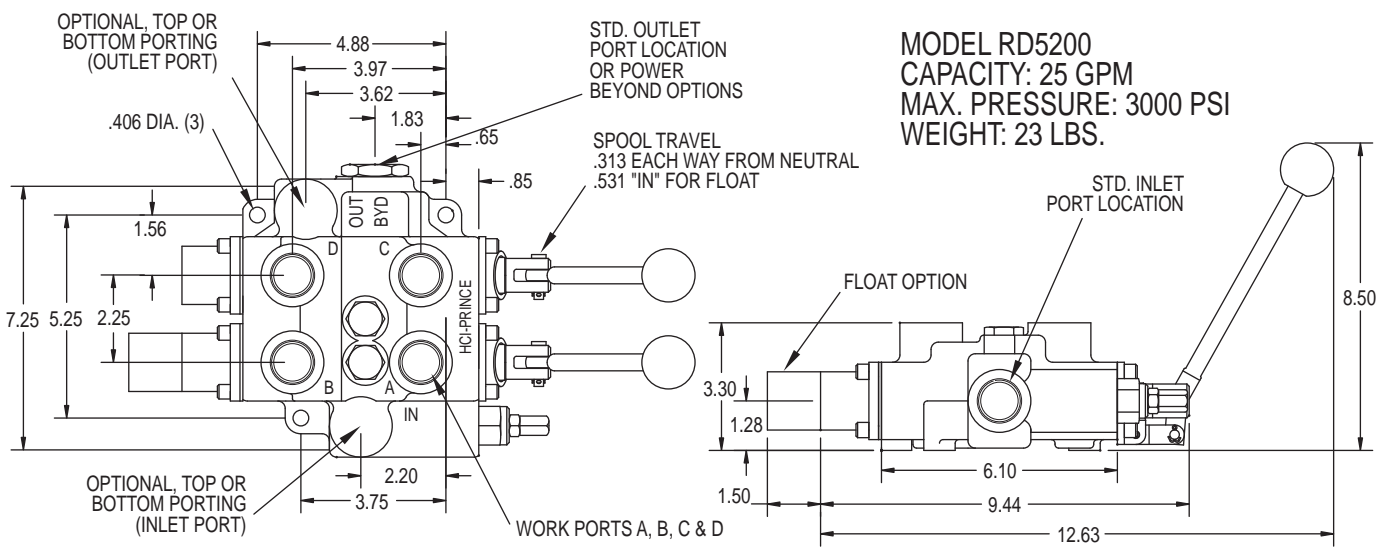
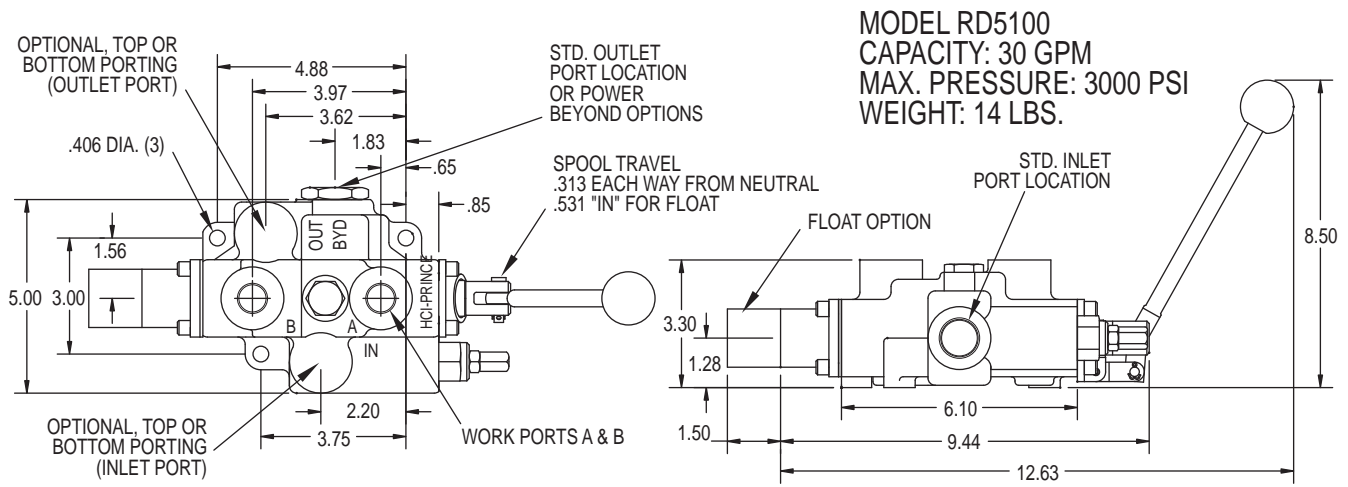


Model RD5200



Model RD5300

MODEL RD5000 DIMENSIONAL DATA



VALVES

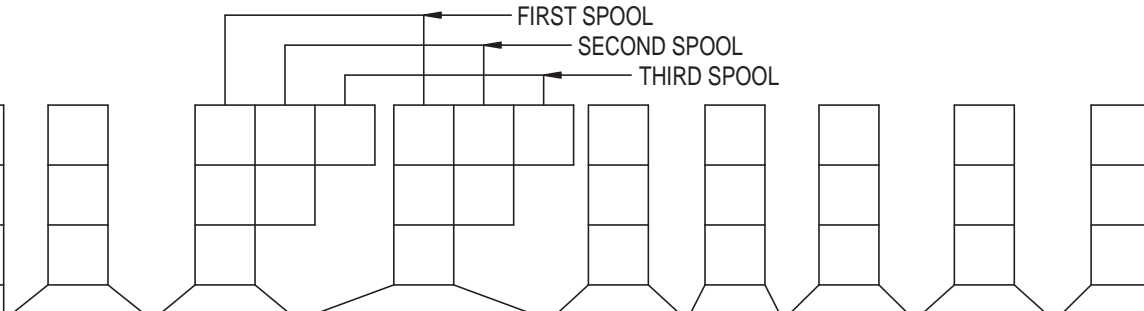
RD5000 ORDER CODE

SPECIAL VALVES AVAILABLE:

RD5000 Mono-block Valves other than the standard models listed can be made to order. Use the order code matrix below to generate a model number that meets your requirements. Special features not listed can often be made to your specifications. A minimum order quantity may apply to special valves. Please consult your sales representative.

MODEL RD5000 ORDER CODE MATRIX:

Fill each box with one letter or number from each column to generate a model number
Note that first all spools are listed then all spool attachments.



MODEL NUMBER	PORT SIZE	SPOOL TYPE	SPOOL ATTACHMENTS	RELIEF VALVE	INLET LOCATION	OUTLET LOCATION	POWER BEYOND	HANDLE
RD51 Single Spool	2 3/4 NPTF In/Out 1/2 NPTF Work	A 3 Way, 3 Position Open Center	A 3 Position Spring Center to Neutral	1 No Relief	A End	1 END (with Power Beyond Option A)	A Not Provided (only available with outlet location 1)	1 With Complete Handle Assembly
RD52 Two Spool	3 3/4 NPTF In/Out 3/4 NPTF Work	C 4 Way, 3 Position Tandem Center	B 3 Position Detent (No Centering Spring)	2 Differential Poppet Non-Adjustable Set at 1000 PSI	B Top	2 TOP	B Conversion Plug Installed	2 Less Handle Only
RD53 Three Spool	5 #12 SAE In/Out #12 SAE Work	E 4 Way, 3 Position Open Center Motor Spool	C Friction Detent (Detented in Neutral Only)	3 Differential Poppet Non-Adjustable Set at 2000 PSI		4 END (with Power Beyond Option B, C, D, F) Standard	C Power Beyond Plug Installed with 3/4 NPTF	3 Without Handle Assembly
	6 #12 SAE In/Out #10 SAE Work	G** 4 Way, 4 Position Tandem Center Float Spool	D Rotary Actuator w/Center Detent (only available w/Handle 3 and Spool J)	4 Differential Poppet Adjustable 500-1500 PSI Set at 1000 PSI			D° Closed Center Conversion Plug Installed	RD5200 5*** Bent Joystick Handle
	Other Ports Please Specify	J 4 Way, 3 Position Tandem Center Rotary Actuator (Spool Attachment D Only)	E Pressure Release Detent 1 Position Detent, Spool "out" Only, Spring Center to Neutral	5 Differential Poppet Adjustable 1500-3000 PSI Set at 2000 PSI			F Power Beyond Plug Installed with #12 SAE	6*** Straight Joystick Handle
Spool option "G", and spool attachment "F", and "G" are available on the first spool only. Spool option "G" must be ordered with spool attachment option "G".			F Pressure Release Detent 2 Position Detent, Spool "in" and "out", Spring Center to Neutral					Joystick can be installed on RD5300 on special order
			G** 4 Position, Spring Center to Neutral, Detent Spool In for Float Position					
			H Spring Center Pneumatic Actuator					
			N 1 Position Detent Spool "out" Spring Center to Neutral					
			P 2 Position Detent Spool "in and out", Spring Center to Neutral	* For other Relief Settings Please Specify				
			R 3 Position Spring Center with Micro-Switch and Boot (actuates with spool in or out movement)					
			S 2 Position Detent "Neutral and out", No "in" Position					

***RD532CCCAA5A4B1-25**

The last two digits are Relief pressure in hundreds
Example: 25=2500 psi, all relief settings are at 10 GPM & 105°F.

*** Joystick handle will operate both spools using only one lever handle. The two spools can be operated either independently or simultaneously depending on handle movement.

° Often used with no relief. Review application.

RD5000 PRESSURE DROP, RELIEF CURVE AND STANDARD FEATURES

STANDARD FEATURES

- * Economical monoblock construction of high tensile strength gray cast iron.
- * Load check on each spool,
- * Hard chrome plated spool.
- * Optional 4 Position Float on 1st spool.

- * Differential poppet style relief, adjustable from 1500 to 3000 psi (also available in low pressure version adjustable from 500 to 1500 psi)
- * Power beyond and closed center capability.
- * Reversible handle.

RD5100 SINGLE SPOOL VALVE PRESSURE DROP VALUES

110 SUS OIL AT 115°F			
FLOW (GPM)	Δ P-PSI		
	INLET TO OUTLET	INLET TO A OR B	A OR B TO OUTLET
5	2	8	3
10	5	17	6
15	9	35	12
20	21	58	21
25	26	86	34

RD5200 TWO SPOOL VALVE PRESSURE DROP VALUES

110 SUS OIL AT 115°F				
FLOW (GPM)	Δ P-PSI			
	INLET TO OUTLET	INLET TO WORK PORTS	A OR B TO OUTLET	C OR D TO OUTLET
5	3	11	2	2
10	8	22	8	5
15	16	38	15	11
20	28	57	27	19
25	44	83	43	29

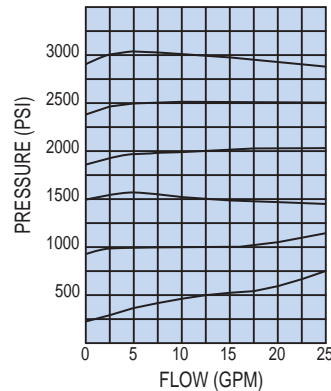
RD5300 THREE SPOOL VALVE PRESSURE DROP VALUES

110 SUS OIL AT 115°F							
FLOW (GPM)	Δ P-PSI						
	INLET TO OUTLET	INLET TO A OR B	INLET TO C OR D	INLET TO E OR F	A OR B TO OUTLET	C OR D TO OUTLET	E OR F TO OUTLET
5	2	9	9	11	4	3	2
10	10	18	20	25	14	9	6
15	22	33	41	49	32	22	13
20	37	56	68	78	51	36	21
25	58	83	101	118	76	55	32

SPECIFICATIONS

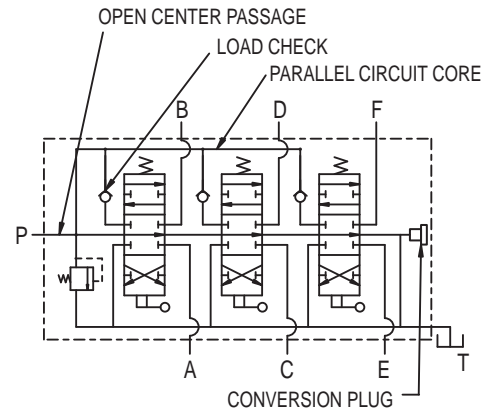
PARALLEL CIRCUIT (RD-5200 & RD-5300)	
MAXIMUM OPERATING PRESSURE	3000 PSI
MAXIMUM OPERATING TEMPERATURE	180°F
MAXIMUM TANK PORT PRESSURE	500 PSI
RECOMMENDED SYSTEM FILTRATION.....	ISO 4406 19/17/14
FLOW RATING.....	30 GPM RD5100
	25 GPM RD5200
	25 GPM RD5300
WEIGHT	14 LBS RD5100
	23 LBS RD5200
	34 LBS RD5300

RD5000 RELIEF VALVE 110 SUS OIL AT 115°F



PARALLEL CIRCUIT VALVES:

Both the RD-5200 Two-Spool and RD-5300 Three-Spool Valves are parallel circuit valves. When any one of the spools is shifted it blocks off the open center passage thru the valve. The oil then flows into the parallel circuit core making oil available to all spools. If more than one spool is fully shifted then oil will go to the spool with the lowest pressure requirements. However, it is possible to meter the flow to the spool with the least load and power two unequal loads.



The above drawing shows a symbol for a Three-Spool Valve Model Number RD532CCCAA5A4B1

RD5000 ORDERING INFORMATION

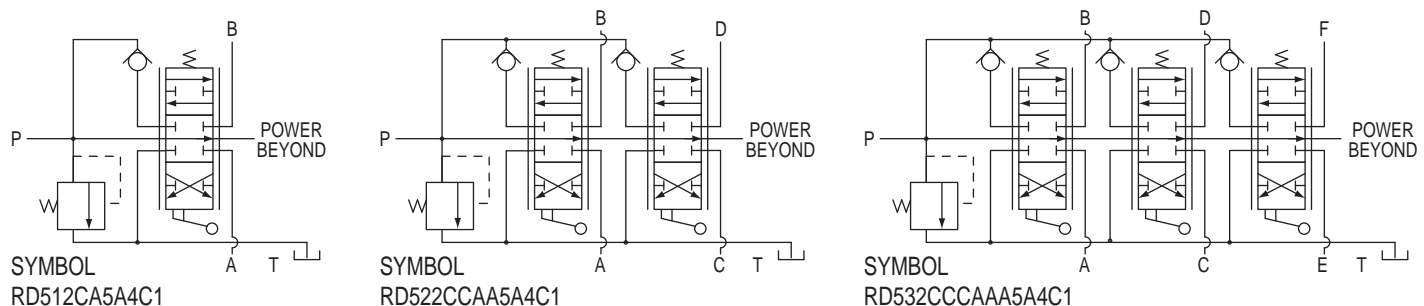
STANDARD VALVES AVAILABLE: All standard valves have end inlet and outlet locations, power beyond conversion plug, complete handle assemblies, and adjustable differential poppet relief.

VALVE PART NUMBER	SPOOL TYPE					IN/OUT PORT SIZE	WORK PORT SIZE		RELIEF SETTING
	1st SPOOL CONFIGURATION			2nd SPOOL CONFIG.	3rd SPOOL CONFIG.		3/4 NPTF	1/2 NPTF	
	FLOAT SPOOL ¹	3 POSITION 4 WAY ²	3 POSITION 4 WAY DETENTED ³	3 POSITION 4 WAY ²	3 POSITION 4 WAY ²				
RD512GG5A4B1	X					X	X		2000 PSI @ 10 GPM
RD512CA5A4B1		X				X	X		2000 PSI @ 10 GPM
RD513GG5A4B1	X					X		X	2000 PSI @ 10 GPM
RD513CA5A4B1		X				X		X	2000 PSI @ 10 GPM
RD513CB5A4B1			X			X		X	2000 PSI @ 10 GPM
RD522GCGA5A4B1	X			X		X	X		2000 PSI @ 10 GPM
RD522CCAA5A4B1		X		X		X	X		2000 PSI @ 10 GPM
RD532GCCGAA5A4B1	X			X	X	X	X		2000 PSI @ 10 GPM
RD532CCCAA5A4B1		X		X	X	X	X		2000 PSI @ 10 GPM

1. Four position, four way, tandem center, detented "in" the float position. Spring center to neutral from work positions. Work ports blocked in neutral.
2. Tandem center. Spring center to neutral from work positions. Work ports blocked in neutral.
3. Tandem center, 3 position detent. Work ports blocked in neutral.

MISC. AND FIELD CONVERSION KITS FOR MODEL RD-5000 VALVES

MATRIX CODE	MATRIX CODE	MATRIX CODE
660150001 A SPRING CENTER KIT	660250006 1 NO RELIEF PLUG	660350001 HANDLE CLEVIS
660150002 B 3 POSITION DETENT KIT	660250003 4 LOW PRESSURE ADJUSTABLE RELIEF CARTRIDGE	660551001 RD5100 SEAL KIT
660150003 C FRICTION DETENT KIT	660250002 5 HIGH PRESSURE ADJUSTABLE RELIEF CARTRIDGE	660552001 RD5200 SEAL KIT
660150018 N 1 POSITION DETENT SPOOL OUT W/ SPRING CENTER	660312005 D CLOSED CENTER CONVERSION PLUG	660553001 RD5300 SEAL KIT
660150020 P 2 POSITION DETENT W/ SPRING CENTER KIT	660150015 LOAD CHECK KIT	660150011 6 STRAIGHT JOYSTICK HANDLE KIT
660312003 B CONVERSION PLUG	660150045 R SPRING CENTER WITH MICRO-SWITCH KIT	660150012 5 45° BENT JOYSTICK HANDLE PARTS
660312004 C POWER BEYOND PLUG 3/4 NPTF	660150004 1 HANDLE HARDWARE KIT	660150014 G FLOAT HARDWARE KIT
660312008 F POWER BEYOND PLUG #12 SAE		660552002 AUTO CYCLE SEAL KIT



VALVES