

11. Cartridges & Seat Valves

Series	Function	Model	Size	Flow (GPM)		Max. Pressure (PSI)	Subplate mounted	Threaded Body	SAE flange mounted	Cartridge	Page
				Nominal	Maximum						
CVD CVC	Relief (DIN 24342)	CVD05	NG16	40	53	5000	-	-	-	●	11 - 2
		CVD08	NG25	53	79	5000	-	-	-	●	
		CVD10	NG32	119	159	5000	-	-	-	●	
CUD CUC	Unload (DIN 24342)	CUD08	NG25	53	79	5000	-	-	-	●	11 - 3
		CUD10	NG32	119	159	5000	-	-	-	●	
C1D C1C	Seat Valve on/off (DIN 24342)	C1D05	NG16	40	53	5000	-	-	-	●	11 - 4
		C1D08	NG25	82	106	5000	-	-	-	●	
		C1D10	NG32	132	198	5000	-	-	-	●	
		C1D12	NG40	251	330	5000	-	-	-	●	
		C1D16	NG50	449	661	5000	-	-	-	●	
		C1D20	NG63	753	1057	5000	-	-	-	●	
		C1D24	NG80	1110	1585	5000	-	-	-	●	
		C1D32	NG100	1744	2642	5000	-	-	-	●	
CAR	Seat Valve on/off	CAR4	½"	40	48	5000	-	-	-	●	11 - 6
		CAR2	1 ½"	119	159	5000	-	-	-	●	
D4S	Seat Valve on/off	D4S03	⅜"	40	48	5000	●	●	-	-	11 - 7
		D4S06	¾"	71	95	5000	●	●	-	-	
		D4S10	1 ¼"	119	159	5000	●	●	-	-	
D5S	Seat Valve on/off (2 ports)	D5S06	¾"	40	48	5000	-	-	●	-	11 - 8
		D5S08	1"	71	95	5000	-	-	●	-	
		D5S10	1 ¼"	119	159	4000	-	-	●	-	
	Seat Valve on/off (3 ports)	D5S06	¾"	40	48	5000	-	-	●	-	
		D5S08	1"	71	95	5000	-	-	●	-	
		D5S10	1 ¼"	119	159	4000	-	-	●	-	
		D5S12	1 ½"	159	211	3000	-	-	●	-	



CAR Series Cartridge - Seat Valve

159 GPM – 5000 PSI max.

Key sheet Example : **CAR2-H-342-1**

1. **CAR2-H-342-1** Series

Size	½"	1 ½"
Nominal flow (GPM)	40	119
Maximum flow (GPM)	48	159
Series	CAR4	CAR2

2. **CAR2-H-342-1** Mounting

	Code	CAR	
		4	2
Main valve (spool, sleeve, spring)	K	●	●
Main valve + cap, Y1 = G ¼"	H	●	●
Main valve + plug on top (G-thread)	O	●	
Main valve + top plug (1 ⅛"-12UNF)	T	●	
Main valve + bottom plug (G-thread)	U	●	●
Main valve + bottom plug (1 ⅛"-12UNF)	B	●	

3. **CAR2-H-342-1** Sleeve

AA = 95%, AB = 5%	1
AA = 60%, AB = 40%	3

4. **CAR2-H-342-1** Spool

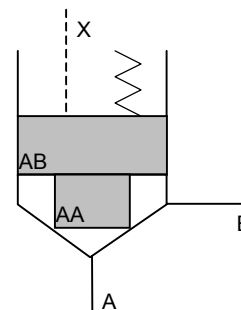
		Code	CAR	
			4	2
Closed bottom	15 ° chamfer	1	●	●
	45 ° chamfer	4	●	●
	45 ° chamfer, 2 holes in line	5	●	●
15 ° chamfer + 0.03" orifice		2	●	
	15 ° chamfer + 0.05" orifice			●
Throttle spool	10 ° chamfer	B		●
	3 ° chamfer	C		●

5. **CAR2-H-342-1** Spring (PSI)

Pressure (PSI)	Sleeve 1		Sleeve 3			
	A → B		A → B		B → A	
Code	CAR4	CAR2	CAR4	CAR2	CAR4	CAR2
1	41	51	94	94	138	160
2	7	7	15	15	22	25
3	4	4	9	9	13	15
4	32	32	58	51	80	87
5	-	131	-	232	-	406
6	17	17	29	32	44	55
7	44	-	116	-	174	-

6. **CAR2-H-342-1** Seal class

Buna N : Mineral oil	1
Others	Denison Hydraulics



Spool & Sleeve selection table			
Function	Type	CAR4	CAR2
Directional & Flow Control	A → B	CAR4-**-144-1	CAR2-**-144-1
	A → B or B → A	CAR4-**-344-1	CAR2-**-344-1
Pressure control	-	CAR4-**-114-1	CAR2-**-114-1
Flow control	Spool B (10 °)	CAR4-**-3B*-1	CAR2-**-3B*-1
	Spool C (3 °)	-	CAR2-**-3C*-1
Pressure Unloading	-	CAR4-**-124-1	CAR2-**-124-1
Check Valve	Direct	CAR4-**-14*-1	CAR2-**-14*-1
	Pilot operated	CAR4-**-34*-1	CAR2-**-34*-1