

# BUSH & WILTON, INC.

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## Rotary Valve Capacities

RV-CAP JH 4-99

IF, OF & BS Rotary Valves			
Model	Inlet Size	HP	Capacity per Rev.
IF/OF 10	4	1/4-1/2	0.04
IF/OF/BS 15	6	1/2	0.10
IF/OF/BS 20	8	1/2	0.24
IF/OF/BS 25	10	1/2- 3/4	0.46
IF/OF/BS 30	12	1-1/2 - 2	0.79
IF/OF/BS 35	14	1-1/2 - 2	1.37
IF/OF 40	16	1-1/2 - 2	2.09
IF/OF 45	18	2 - 3	3.26
IF 60	24	3 - 7.5	5.50
IF 60x75	24x30	call	6.77
IF 60x90	24x36	call	8.24

100% Capacity in Cubic Feet per Hour at the Indicated RPM							
6 rpm	12.5	15.5	18	21	25	31	36
13	26	33	38	44	53	66	76
36	75	93	108	126	150	186	216
85	177	219	254	297	353	438	509
167	349	432	502	586	697	865	1004
286	596	739	858	1001	1192	1478	1716
492	1024	1270	1475	1721	2048	2540	2950
752	1567	1943	2257	2633	3134	3886	4513
1174	2446	3032	3522	4109	4891	6065	-
1979	4123	5113	5937	6927	8246	10225	-
2437	5077	6295	7310	8529	10153	-	-
2966	6180	7663	8899	10383	12360	-	-

SR Series - Tapered Rotary Valve			
Model	Inlet Size	HP	Capacity per Rev. [1]
SR 15	6	1/2	0.05
SR 20	8	1/2	0.14
SR 25	10	3/4	0.32
SR 30	12	3/4	0.47
SR 35	14	1	0.90
SR 40	16	1	1.33

100% Capacity in Cubic Feet per Hour at the Indicated RPM							
6 rpm	12.5	15.5	18	21	25	31	36
19	40	50	58	67	80	99	115
49	101	126	146	170	203	251	292
115	239	296	344	401	478	592	688
167	349	432	502	586	698	865	1004
324	675	837	972	1134	1350	1674	1944
479	998	1237	1436	1676	1995	2474	-

[1] capacities are for fabricated rotors - cast iron rotors have approximately 8% less capacity

SRTO Series - Twin-Outlet Rotary Valve			
Model	Inlet Size	HP	Capacity per Rev.
SRTO 15/30	6	0.5	0.22
SRTO 20/35	8	0.75	0.38
SRTO 25/40	10	1	0.60
SRTO 30/45	12	1.5	1.07
SRTO 35/50	14	2	1.65

100% Capacity in Cubic Feet per Hour at the Indicated RPM							
6 rpm	12.5	15.5	18	21	25	31	36
79	165	205	238	277	330	-	-
137	285	353	410	479	570	-	-
216	450	558	648	756	900	-	-
385	803	995	1156	1348	-	-	-
594	1238	1535	1782	2079	-	-	-

SRD Series - Dust Collector Rotary Valve			
Model	Inlet Size	HP	Capacity per Rev.
SRD 15	6	1/2	0.06
SRD 20	8	1/2	0.18
SRD 25	10	1/2 - 3/4	0.41
SRD 30	12	1/2 - 3/4	0.59

100% Capacity in Cubic Feet per Hour at the Indicated RPM							
6 rpm	12.5	15.5	18	21	25	31	36
-	-	-	-	-	44	-	-
-	-	-	-	-	133	-	-
-	-	-	-	-	309	-	-
-	-	-	-	-	441	-	-

**IMPORTANT NOTE!** "Fill Efficiency" is a function Bulk Density and the ability of the material to flow and fill the rotor pockets.

- Settled versus Aerated Bulk Density may be much lower than expected especially for light material such as carbon black.
- Differential Pressure, especially vacuum above or pressure below the valve will cause an upward air flow through the valve and aerate the product. *This can reduce valve capacity to 50% to 75%.*
- Poor flowing and cohesive materials will reduce pocket fill efficiency and capacity.