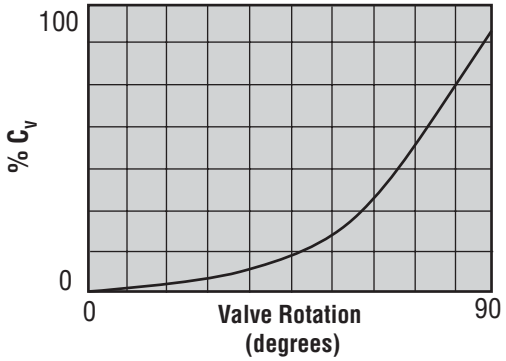
FLOWSERVE

Worcester Controls

FCD WCABR1033-01
(Part PB RP)

Round Port Control Valves

For applications involving moderate pressure drops and temperatures, Flowserve offers standard round port control valves in three-piece, wafer, and flanged valve body configurations. Standard seat material is Polyfill® with other resilient materials available. Shutoff is bubbletight. Control characteristic is equal percentage.



How To Order

Standard (Round Seat) Control Valves

Valve Size	Valve Series	Body, Pipe Ends	Ball & Stem	Round Port Seats	Body Seals	End Connection
¼" ⅜" ½" ¾" 1" 1¼" 1½" 2"	**S44** - Three-piece ANSI Class 600	**1** - Brass **4** - Carbon Steel **6** - 316 Stainless Steel	**6** - Stainless Steel Ball with 17-4 Stainless Steel Stem	**P** - Polyfill	**M** - TFE coated 316 Stainless Steel "S" Gasket	**SE** - Screwed Ends (NPT) **SW** - Socket Weld Ends (Carbon Steel and S.S only) **BW1** - Butt Weld 316L Stainless Steel, Sch. 10 **BW4** - Butt Weld Carbon Steel, Sch. 40 **TE** - Solder/Sweat Ends Brass only
½" ¾" 1" 1½" 2"	**S51** - Flanged ANSI Class 150 **S52** - Flanged ANSI Class 300	**4** - Carbon Steel **6** - 316 Stainless Steel	**6** - Stainless Steel Ball with 17-4 Stainless Steel Stem	**P** - Polyfill	**T** - TFE	**150** - ANSI Class 150 (51) **300** - ANSI Class 300 (52)
3" 4" 6"	**4** - Wafer	**4** - Carbon Steel **6** - 316 Stainless Steel	**6** - Stainless Steel Ball and Stem	**P** - Polyfill	**T** - TFE	**151** - For use between 150 lb. ANSI flanges **301** - For use between 300 lb. ANSI flanges
3" 4" 6" 8" 10"	**51** - Flanged ANSI Class 150 **52** - Flanged ANSI Class 300	**4** - Carbon Steel **6** - 316 Stainless Steel	**6** - Stainless Steel Ball and Stem	**P** - Polyfill (3" - 6") **R** - Reinforced TFE (8" & 10")	**T** - TFE	**150** - ANSI Class 150 (51) **300** - ANSI Class 300 (52)

Selection/Sizing Information

Flow Coefficient - C_v - Standard Seat Control Valves (Round Port)

Valve Size	Line Size	0 (0)	10 (9)	20 (18)	30 (27)	40 (36)	50 (45)	60 (54)	70 (63)	80 (72)	90 (81)	100 (90)
½"	½	0	.15	.29	.46	.70	1.09	1.76	2.60	4.30	6.40	8.00
	¾		.13	.26	.39	.62	.97	1.57	2.31	3.83	5.69	7.12
	1		.13	.24	.38	.58	.90	1.46	2.16	3.57	5.31	6.64
¾"	¾	0	.21	.43	.70	1.05	1.62	2.64	4.00	6.40	9.60	12.00
	1		.19	.39	.64	.96	1.47	2.40	3.64	5.82	8.74	10.92
	1½		.17	.34	.56	.84	1.30	2.11	3.20	5.12	7.68	9.60
1"	1	0	.58	1.15	1.90	2.80	4.30	7.00	10.50	17.0	26.0	32.0
	½		.45	.90	1.48	2.18	3.35	5.46	8.19	13.3	20.3	24.9
	2		.42	.83	1.37	2.02	3.10	5.04	7.56	12.24	18.7	23.1
1¼"	1¼	0	.83	1.65	2.67	4.05	6.50	10.0	15.2	24.6	36.0	46.0
	1½		.77	1.53	2.48	3.77	6.05	9.30	14.14	22.9	33.5	42.8
	2		.68	1.35	2.19	3.32	5.33	8.20	12.46	20.2	29.5	37.7
1½"	1½	0	1.48	2.95	4.75	7.20	11.0	18.0	27.0	44.0	65.5	82.0
	2		1.24	2.48	3.99	6.05	9.2	15.1	22.7	36.9	55.0	68.9
	3		.99	2.00	3.18	4.82	7.4	12.06	18.1	29.5	43.9	54.9
2"	2	0	2.16	4.33	6.95	10.5	16.2	26.4	39.6	64.0	96.0	120
	3		1.77	3.55	5.70	8.61	13.3	21.6	32.5	52.5	78.7	98.4
	4		1.6	3.20	5.14	7.77	11.99	19.5	29.3	47.4	71.1	88.8
3"	3	0	6.4	12.6	20.2	31.1	47.4	77.8	115	187	280	350
	4		4.6	9.1	14.5	22.4	34.1	56.0	82.9	134	201	252
	6		3.5	6.9	11.1	17.1	26.1	42.8	63.3	103	154	192
4"	4	0	13.1	26.0	42.1	63.1	97.2	159	238	385	575	720
	6		7.5	16.9	27.4	41.0	63.2	103	154	251	374	467
	8		7.2	14.3	23.1	34.7	53.5	87.4	131	212	316	396
6"	6	0	18.4	36.7	59.0	90.0	138	224	338	545	815	1020
	8		16.2	32.3	51.9	79.2	121.4	197.1	297.4	479.6	717.2	897.6
	10		14.4	28.6	46.0	70.2	107.6	174.7	263.6	425.1	635.7	795.6
8"	8	0	34.0	68.0	109.0	165.0	254.0	415.	620	1010	1500	1880
	10		31.9	63.9	102.5	155.1	238.8	390.1	582.8	949.4	1410	1767.2
	12		29.5	57.1	91.6	138.6	213.4	348.6	520.8	848.4	1260	1580

C_v is defined as the flow of liquid in gallons per minute through a valve with a pressure drop of 1 psi across the valve.

F_L	0	.92	.91	.91	.90	.86	.86	.72	.65	.61	.50
X_t	0	.78	.74	.71	.67	.62	.56	.49	.38	.26	.15

F_L = Liquid Pressure Recovery Factor X_t = Pressure Drop Ratio Factor (Gas)

CAUTION: Ball valves can retain pressurized media in the body cavity when closed, Use care when disassembling. Always open valve to relieve pressure prior to disassembly.
Due to the continuous development of our product range, we reserve the right to alter the information contained in this brochure as required.

For more information about Flowserve Corporation, visit www.flowserve.com or call USA 1 800 225 6989.

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