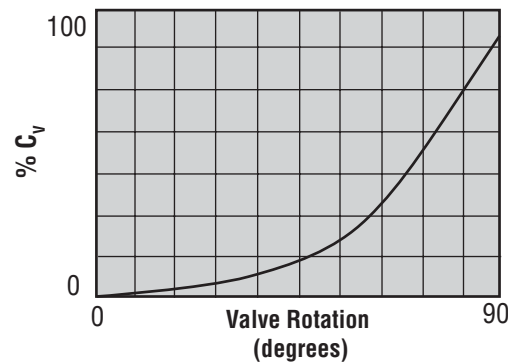


Round Port Control Valves



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
1/4" 3/8" 1/2" 3/4" 1" 1 1/4" 1 1/2" 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
1/2" 3/4" 1" 1 1/2" 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_L	0	.78	.74	.71	.67	.62	.56	.49	.38	.26	.15

F_L = Liquid Pressure Recovery Factor X_L = 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 continual development of our product range, we reserve the right to alter the information contained in this brochure as required.

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can (and often does) provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Operation Maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

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