

STANDARDS

- Approved according to European Directive 97/23/CE
- ASME Class 150: 285 psi @ 100F (5400-150 Series)
- ASME Class 300: 740 psi @ 100F (5400-300 Series)
- Sealed at both plug and stem
- Cavity-free design
- Locked in linear
- Bi-directional

J Flow Controls 5400 Series Teflon or PFA Lined Sleeved Plug Valve

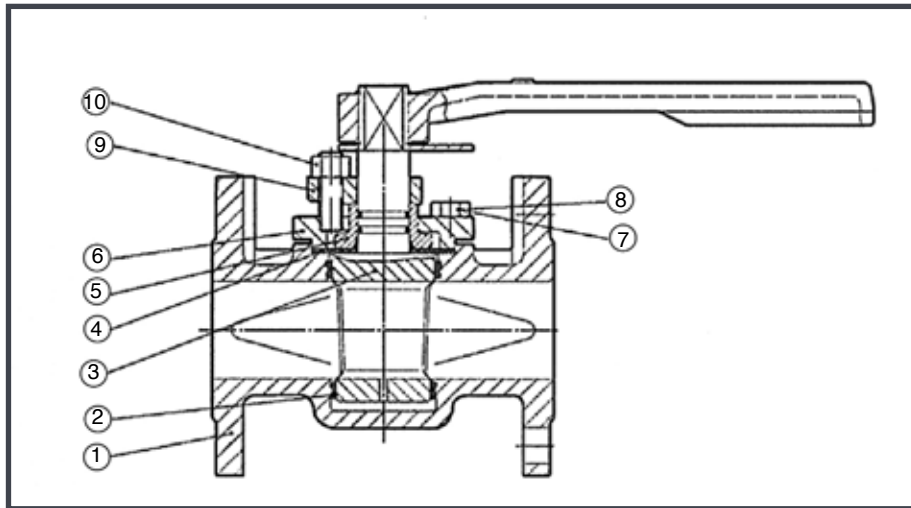
FEATURES & BENEFITS

- PTFE sleeve retained by the special 360 degree metal lips around the ports
- There is no cavity in the plug valve for accumulating the medium
- Bi-directional inline bubble-tight seal is independent of line pressure, more convenient for valve installation and usage
- End connections: flanged, butt-weld, threaded and socket-weld
- With the structure of double sealing grooves with sealing rings, the high integrity bubble-tight seal is provided both inline and to atmosphere

APPLICATIONS & INDUSTRIES

- Pipeline applications
- Petrochemical
- Chemistry
- Pharmacy
- Chemical fertilizer

SPECIFICATIONS - CLASS 150/300 CAST STEEL



No	Part Name	Materials		
1	Body	A216-WCB	A351-CF8	A351-CF8m
2	Sleeve (Seat Ring)	PTFE, TFM, CTFM, UHMWPE, PEEK		
3	Plug	ECB, A105, Monel, CF8, CF8M, CF3, CF3M		
4	Gasket*	RPTFE, UHMWPE, PEEK		
5	Gland	A182-F6	F304	F316
6	Cover	WCB	CF8	CF8M
7	Cover Bolts	A193-B7	A193-B7M	
8	Nuts	A194-2H	A194 Gr. 8	
9	Gland Flange	A216-WCB	A351-CF8	
10	Flange Bolts	A194-2H	A194 Gr.8	
* Enclosed is a condensed table. For complete options, contact J Flow Controls				

Connections:

- Flanged end face-to-face length and dimensions meet ASME B16.10 & ASME B16.5
- Butt-weld end-to-end length meets ASME B16.25
- Socket weld end-to-end length meets ASME B16.11

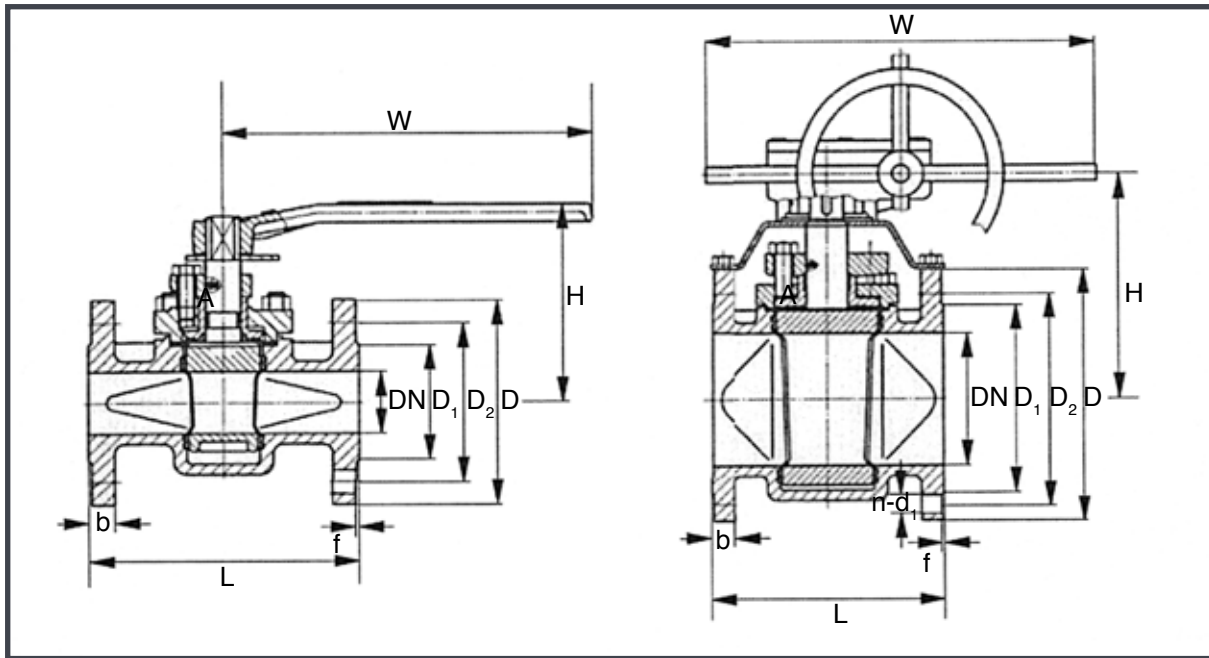
Flow Coefficients

- The table below presents the Flow Coefficients for the 5400 Series sleeved plug valves. The number represents the flow required to produce 1 psig pressure drop across the valve. The testing data are gained under valves in the full open position. The various degrees of open are available upon request.
- To know specific fluid characteristics such as specific gravity, density, or compressibility factor allows the verification of the pressure drop across a known valve. Or conversely, in the absence of a valve size and knowing an acceptable pressure drop under the described flow conditions it is possible to select an appropriately sized valve.

Size	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14	16
Rated Cv	7.4	19.5	48.8	X	83.5	153	X	322	555	955	1859	2361	3400	3430	7000
Torque (in-lbs)	35.4	35.4	83.2	95.6	159	204	204	230	646	1673	3656	6931	7321	10357	14048

5400 Series Teflon or PFA Lined Sleeved Plug Valve

DIMENSIONS - CLASS 150, FLANGED ENDS, CAST STEEL



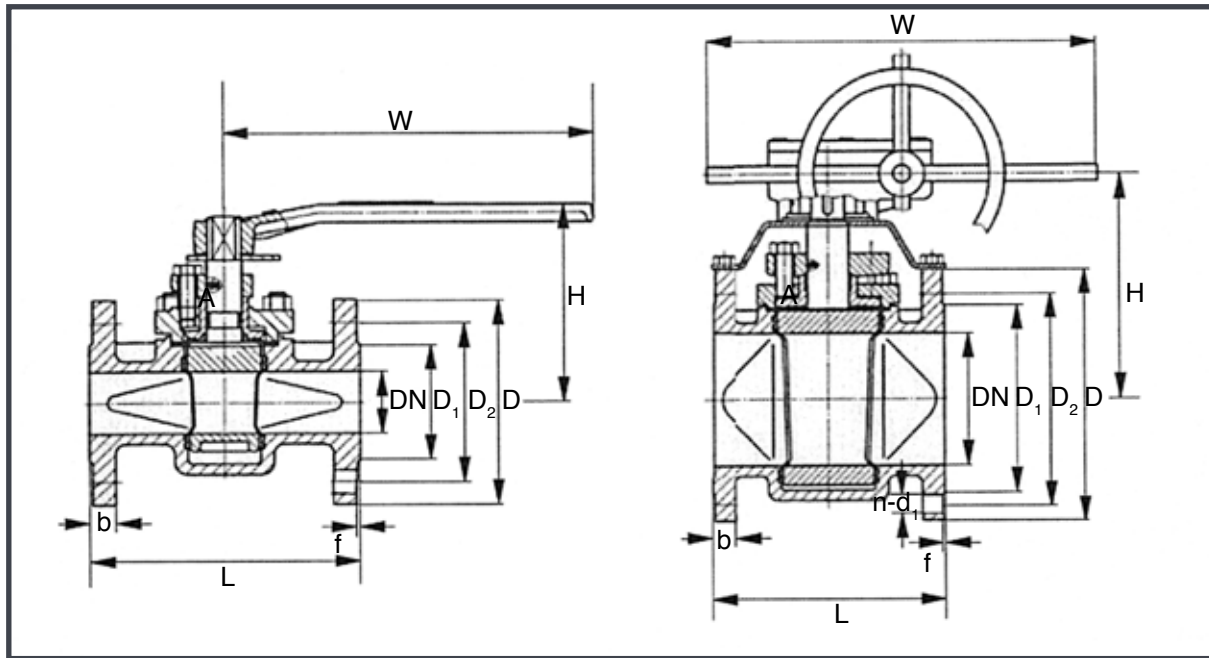
Size (in)	L	D	D ₁	D ₂	f	b	n**·d ₁	W	H	Wt
1/2	4.25	3.50	2.38	1.38	0.08	0.43	0.16-0.59	4.72	3.35	4.4
3/4	4.61	3.86	2.76	1.69	0.08	0.43	0.16-0.59	5.51	3.74	6.6
1	5.00	4.25	3.13	2.01	0.08	0.47	0.16-0.59	5.51	4.13	9.9
1-1/4	5.51	4.61	3.50	2.52	0.08	0.51	0.16-0.59	7.87	4.53	11.5
1-1/2	6.50	5.00	3.88	2.87	0.08	0.59	0.16-0.59	9.84	4.92	16.5
2	7.01	5.98	4.74	3.62	0.08	0.63	0.16-0.75	9.84	5.51	24
2-1/2	7.48	7.01	5.49	4.13	0.08	0.71	0.16-0.75	11.81	5.91	38
3	7.99	7.48	6.00	5.00	0.08	0.75	0.16-0.75	11.81	7.28	40
4	9.02	9.02	7.50	6.18	0.08	0.94	0.31-0.75	13.78	7.87	75
5	10.0	10.0	8.5	7.32	0.08	0.94	0.31-0.87	13.78	8.46	86
6	10.5	11.0	9.5	8.5	0.08	1.02	0.31-0.87	7.87*	17.91	150
8	11.5	13.5	11.75	10.6	0.08	1.14	0.31-0.87	9.45*	19.49	254
10	13.0	16.0	14.25	12.76	0.08	1.22	0.47-0.98	11.02*	21.85	430
12	14.0	19.0	17.0	15.0	0.08	1.26	0.47-0.98	12.60*	23.82	672
14	27.0	21.0	18.7	16.26	0.08	1.38	0.47-1.14	12.60*	26.77	716
16	30.0	23.5	21.3	18.5	0.08	1.46	0.63-1.14	14.18*	28.15	1865
18	34.0	25.0	22.8	21.0	0.08	1.57	0.63-1.28	15.75*	29.72	1951

* Dimension larger than 6" with gear operator

** n = Number of holes on the flange

5400 Series Teflon or PFA Lined Sleeved Plug Valve

DIMENSIONS - CLASS 300, FLANGED ENDS, CAST STEEL



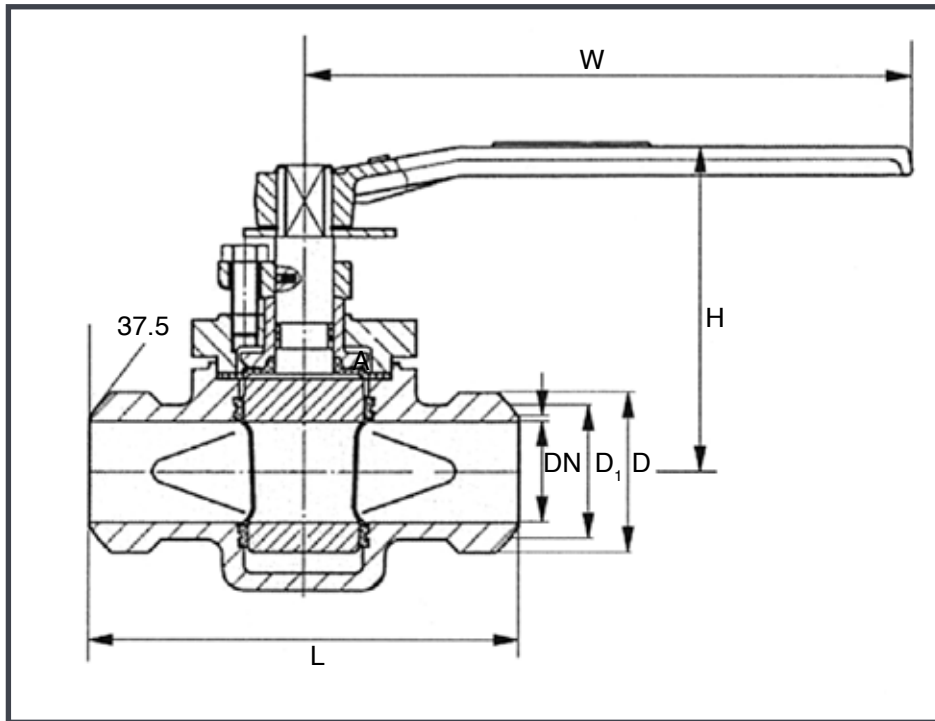
Size (in)	L	D	D ₁	D ₂	f	b	n**·d ₁	W	H	Wt
1/2	5.51	3.74	2.62	1.38	0.08	0.59	0.16-0.59	6.3	3.35	5.5
3/4	5.98	4.61	3.25	1.69	0.08	0.63	0.16-0.75	6.3	3.74	8
1	6.50	4.88	3.50	2.01	0.08	0.71	0.16-0.75	7.87	4.13	11
1-1/4	7.01	5.24	3.87	2.52	0.08	0.75	0.16-0.75	9.84	4.53	13
1-1/2	7.48	6.14	4.51	2.87	0.08	0.83	0.16-0.87	9.84	4.92	19
2	8.50	6.50	5.00	3.62	0.08	0.91	0.31-0.75	11.81	5.51	29
2-1/2	9.49	7.48	5.87	4.13	0.08	1.02	0.31-0.75	11.81	5.91	33
3	11.14	8.27	6.63	5.00	0.08	1.14	0.31-0.87	13.78	7.28	53
4	12.01	10.00	7.87	6.18	0.08	1.26	0.31-0.87	13.78	7.87	60
5	15.00	10.98	9.25	7.32	0.08	1.38	0.31-0.87	15.75	8.46	88
6	15.87	12.52	10.63	8.5	0.08	1.46	0.47-0.87	7.87*	18.81	143
8	16.50	15.00	12.99	10.6	0.08	1.65	0.47-0.87	9.45*	19.50	320
10	17.99	17.52	15.25	12.76	0.08	1.89	0.63-1.14	11.02*	22.05	562
12	19.76	20.51	17.76	15.0	0.08	2.00	0.63-1.26	12.60*	24.01	716
14	30.0	23.0	20.25	16.26	0.08	2.13	0.79-1.26	14.17*	27.0	783

* Dimension larger than 6" with gear operator

** n = Number of holes on the flange

5400 Series Teflon or PFA Lined Sleeved Plug Valve

DIMENSIONS - CLASS 150/300, BUTT-WELD ENDS CAST STEEL



Class 150

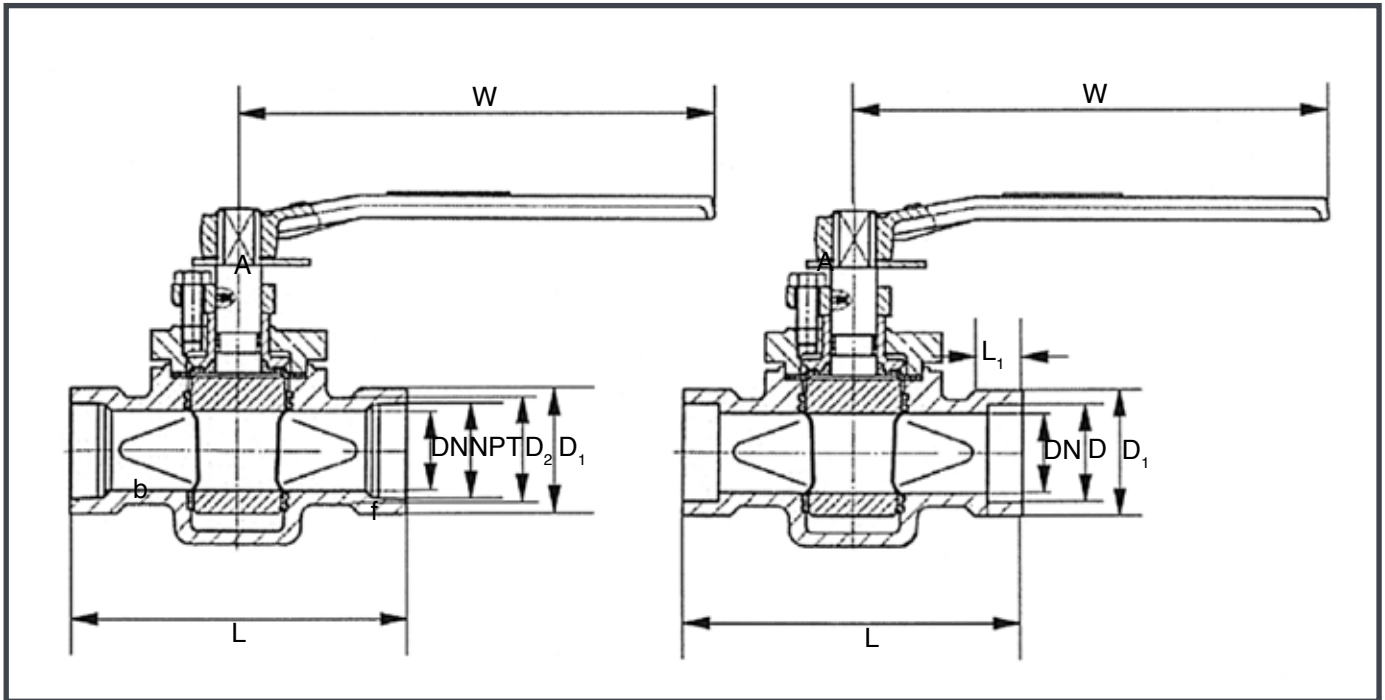
Size (in)	L	D ₁	D	W	H	Weight
1/2	6.50	1.10	0.98	6.30	3.35	7
3/4	7.48	1.30	1.18	6.30	3.35	9
1	8.50	1.50	1.38	7.48	3.54	9
1-1/4	9.02	1.77	1.65	7.48	3.94	13
1-1/2	9.50	2.20	1.97	9.45	4.33	19
2	10.51	2.76	2.44	12.0	4.72	20
2-1/2	12.0	3.46	2.95	12.0	5.12	26
3	13.0	4.09	3.58	17.7	5.31	30
4	14.0	4.96	4.61	23.6	5.91	58

Class 300

Size (in)	L	D ₁	D	W	H	Weight
1/2	6.50	1.10	0.98	6.30	3.35	8
3/4	7.48	1.30	1.18	7.48	3.54	10
1	8.50	1.50	1.38	7.48	3.94	14
1-1/4	9.02	1.77	1.65	9.45	4.33	16
1-1/2	9.50	2.20	1.97	12.0	4.72	20
2	10.51	2.76	2.44	12.0	5.12	21
2-1/2	12.0	3.46	2.95	15.9	5.32	27
3	13.0	4.09	3.58	19.6	5.91	31
4	14.0	4.96	4.61	23.6	6.30	60

5400 Series Teflon or PFA Lined Sleeved Plug Valve

DIMENSIONS - CLASS 150/300, SOCKET-WELD & THREADED



Class 150

Size (in)	L	L ₁	D	D ₂	D ₁	W	H	Weight
1/2	6.50	0.39	0.86	1.10	1.26	6.30	3.35	7
3/4	7.48	0.51	1.07	1.30	1.50	6.30	3.35	8
1	8.50	0.51	1.34	1.50	1.81	7.48	3.54	12
1-1/4	9.02	0.51	1.69	1.77	2.17	7.48	3.94	13
1-1/2	9.19	0.51	1.91	2.20	2.48	9.45	4.33	15
2	10.51	0.63	2.42	2.76	2.99	12.01	4.72	16
2-1/2	12.0	0.63	2.92	3.46	3.74	12.0	5.12	24
3	13.0	0.63	3.55	4.10	4.49	17.7	5.32	29
4	14.0	0.75	4.56	4.96	5.75	23.6	5.90	58

Class 300

Size (in)	L	L ₁	D	D ₂	D ₁	W	H	Weight
1/2	6.50	0.39	0.86	1.10	1.26	6.30	3.35	8
3/4	7.48	0.51	1.07	1.30	1.50	7.48	3.54	9
1	8.50	0.51	1.34	1.50	1.81	7.48	3.94	12
1-1/4	9.02	0.51	1.69	1.77	2.17	7.48	4.33	14
1-1/2	9.19	0.51	1.91	2.20	2.48	9.45	4.72	16
2	10.51	0.63	2.42	2.76	2.99	12.0	5.12	20
2-1/2	12.0	0.63	2.92	3.46	3.74	12.0	5.32	26
3	13.0	0.63	3.55	4.10	4.49	17.7	5.91	32
4	14.0	0.75	4.56	4.96	5.75	23.6	5.63	60

5400 Series Teflon or PFA Lined Sleeved Plug Valve

HOW TO ORDER

Sizes		Series	Body, Ball & Stem	Port	Body Seal
3	1/2"	54	23 WCB, CF8M Ball & Stem	F Full	T Super Teflon
4	3/4"		33 CF8M	R Reduced	F PTFE
5	1"				M Metal Seated
0	1-1/4"				U UHMWPE
6	1-1/2"				P PEEK
7	2"				
8	3"				
9	4"				
A	6"				
B	8"				
C	10"				
D	12"				

Seats		End Connection		Options	
T	Super Teflon	F1	ANSI 150*	GO	Gear Operator
F	PTFE	F3	ANSI 300*	SE	Stem Extension
M	Metal Seated	BW	Butt Weld		
U	UHMWPE	SW	Socket Weld		
P	PEEK	FT	NPT		



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