

# SJ-400

stainless steel butterfly valve



**SJ-400W**  
2" - 8"



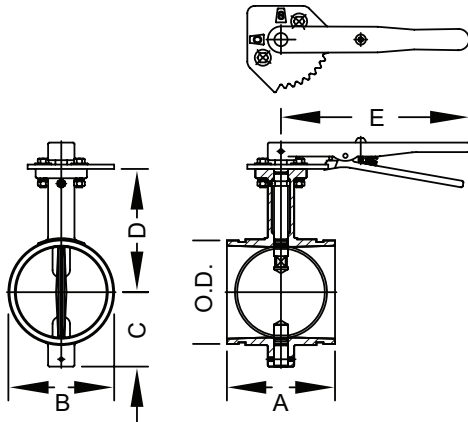
**SJ-400L**  
2" - 8"



Job Name:	
Job Location:	
Engineer:	
Contractor:	
Tag:	
PO#:	
Rep#:	
Wholesale Dist.:	

the model SJ-400-L butterfly valve is a grooved-end stainless steel butterfly valve designed for 300 PSI service, supplied with a 10-position locking lever handle. the end-to-end dimensions conform to MSS SP-67. the body is investment cast in grade CF8M (type 316) to ASTM A743 with integral neck and ISO mounting top flange. the neck height allows for insulation up to two inches. the disc is a dual-seal type, encapsulated either with gr. E-PW EPDM for cold and hot water services or with GT. T nitrile for oil services. SJ-400-L butterfly valves with standard disc and gr. e-pw epdm seat are ul classified to nsf/ansi 61 and nsf/ansi 372.

the model SJ-400-W butterfly valve is a grooved-end stainless steel butterfly valve designed for 300 PSI service, supplied with a worm gear operator. the ISO5211 mounting pad allows for the mounting of power actuators. the end-to-end dimensions conform to MSS SP-67. the body is available in grade CF8M (type 316) to ASTM A743 with integral neck and ISO mounting top flange. the disc is a dual-seal type, encapsulated with GR. E EPDM for cold and hot water services.

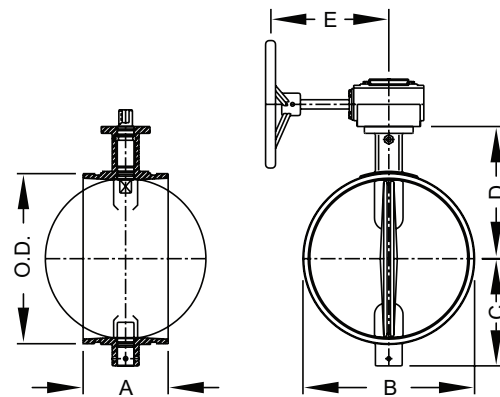


### dimensions SJ-400L

NOMINAL SIZE	PIPE O.D.	MAX. WORKING PRESSURE (CWP)*	DIMENSIONS					OPERATING TORQUE	WEIGHT <sup>^</sup>
			A	B	C	D	E		
2	2.375	300	3.19	2.52	2.48	4.17	7.56	78	5
50	60.3	20	81	64	63	106	192	8.8	2.3
2-1/2	2.875	300	3.81	3.15	2.677	4.28	7.56	84	7
65	73	20	97	80	68	111	192	9.5	3.2
76.1 mm	3.000	300	3.81	3.15	2.677	4.28	7.56	84	7
	76.1	20	97	80	68	111	192	9.5	3.2
3	3.5	300	3.81	3.622	2.992	4.97	7.56	95	6.6
80	88.9	20	97	92	76	126	192	10.7	3.5
4	4.5	300	4.56	4.646	3.504	5.33	9.92	200	11
100	114.3	20	116	118	89	135	252	22.6	5
165.1 mm	6.500	300	5.81	6.772	4.488	6.62	9.92	310	20.2
	216.3	20	148	172	114	168	252	34.9	9.2
6	6.625	300	5.81	6.772	4.488	7.25	13.46	310	20.2
150	168.3	20	148	172	114	184	342	34.9	9.2
200 JIS	8.516	300	5.24	8.74	5.512	8.2	13.46	400	26.8
	216.3	20	133	222	140	208	342	45.1	12.2
8	8.625	300	5.24	8.74	5.512	8.2	13.46	400	26.8
200	219.1	20	133	222	140	208	342	45.1	12.2
10	10.75	150	6.3	11.16	7.32	9.25	14.02	1500	31.3
250	273	10	160	284	186	235	356	170	28.3
12	12.75	150	6.56	13.15	6.39	10.24	14.02	2000	66
300	323.9	10	166	334	213	260	356	226	40

\*Working pressure is for connection with cut- or roll-grooved schedule Sch. 40S pipe.

<sup>^</sup>The weight includes the lever handle.



### dimensions SJ-400W

NOMINAL SIZE	PIPE O.D.	MAX. WORKING PRESSURE (CWP)*	DIMENSIONS					OPERATING TORQUE	WEIGHT <sup>^</sup>
			A	B	C	D	E		
2	2.375	300	3.19	2.520	2.480	4.17	6.00	78	11.0
50	60.3	20	81	64	63	106	152	8.8	5.0
2-1/2	2.875	300	3.81	3.150	2.677	4.28	6.00	84	13.0
65	73.0	20	97	80	68	111	152	9.5	5.9
76.1 mm	3.000	300	3.81	3.150	2.677	4.28	6.00	84	13.0
	76.1	20	97	80	68	111	152	9.5	5.9
3	3.500	300	3.81	3.622	2.992	4.97	6.00	95	12.6
80	88.9	20	97	92	76	126	152	10.7	5.7
4	4.500	300	4.56	4.646	3.504	5.33	6.00	200	17.0
100	114.3	20	116	118	89	135	152	22.6	7.7
165.1 mm	6.500	300	5.81	6.772	4.488	6.62	6.00	310	26.2
	165.1	20	148	172	114	168	152	34.9	11.9
6	6.625	300	5.81	6.772	4.488	7.25	6.00	310	26.2
150	168.3	20	148	172	114	184	152	34.9	11.9
200 JIS	8.516	300	5.24	8.740	5.512	8.20	6.00	400	32.8
	216.3	20	133	222	140	208	152	45.1	14.8
8	8.625	300	5.24	8.740	5.512	8.20	6.00	400	32.8
200	219.1	20	133	222	140	208	152	45.1	14.8
10	10.750	150	6.30	11.16	7.320	9.25	8.00	1500	42.3
250	273.0	10	160	284	186	235	203	170	19.2
12	12.750	150	6.56	13.15	6.390	10.24	8.00	2000	77.0
300	323.9	10	166	334	213	260	203	226	34.9

\*Working pressure is for connection with cut- or roll-grooved schedule Sch. 40S pipe.

<sup>^</sup>The weight includes the lever handle.

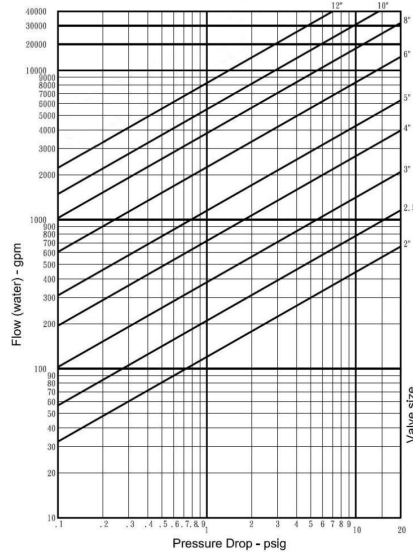
## FLOW DATA

Equivalent length and Cv values for flow of water are shown below (water temperature at +86°F or +30°C)  
This chart should be used as a general guide.

## Cv VALUES

NOMINAL SIZE	EQUIVALENT LENGTH ON SCH. 40 PIPE*	CV VALUES
IN	FEET (METER)	
2	8.1 (2.48)	120
2½	8.1 (2.48)	210
3	8.4 (2.56)	380
4	8.3 (2.53)	720
5	9.8 (2.99)	1150
6	7.4 (2.26)	2250
8	11.0 (3.35)	3800
10	10.5 (3.20)	5500
12	12.0 (3.66)	8250

\*At 15 feet/sec. (4.6m/s) velocity of water.



## MATERIAL SPECIFICATIONS

### BODY AND END CAP:

- Gr. CF8M (Type 316) stainless steel to ASTM A743 or A351 or A744 which is UL classified in accordance with NSF/ANSI 61 and NSF/ANSI 372 for potable water use to temperature 180°F (82°C).

### STEM:

- Stainless steel Type 410 to ASTM A582.

### DISC:

- Gr. CF8M (Type 316) encapsulated with Gr. E-pw EPDM.

### DISC ENCAPSULATION:

- Grade "E-pw" EPDM: EPDM Rubber is classified in accordance with NSF/ANSI 61 and NSF/ANSI 372 for potable water use to temperature 180°F (82°C)
- Gr. E EPDM.
- Gr. T Nitrile.

### O-RINGS:

- R-PTFE

## GENERAL NOTES

- Maximum Working Pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods. Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
- Max. End Load is calculated based on the maximum working pressure (CWP).
- Field Joint Test: For one time only the system may be tested hydrostatically at 1.5 times the maximum working pressure listed (AWWA C606 5.2.3).
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- Products manufactured by Shurjoint are warranted solely to the original Buyer for eighteen months (18) months from date of shipment or one (1) year from date of installation, whichever is sooner.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.