

# HIGH PERFORMANCE BUTTERFLY VALVE

**LCS6822 (Class 150)**

**LCS7822 (Class 300)**

## APPLICATIONS

Ideally suited for Commercial, Industrial and Mechanical HVAC Services

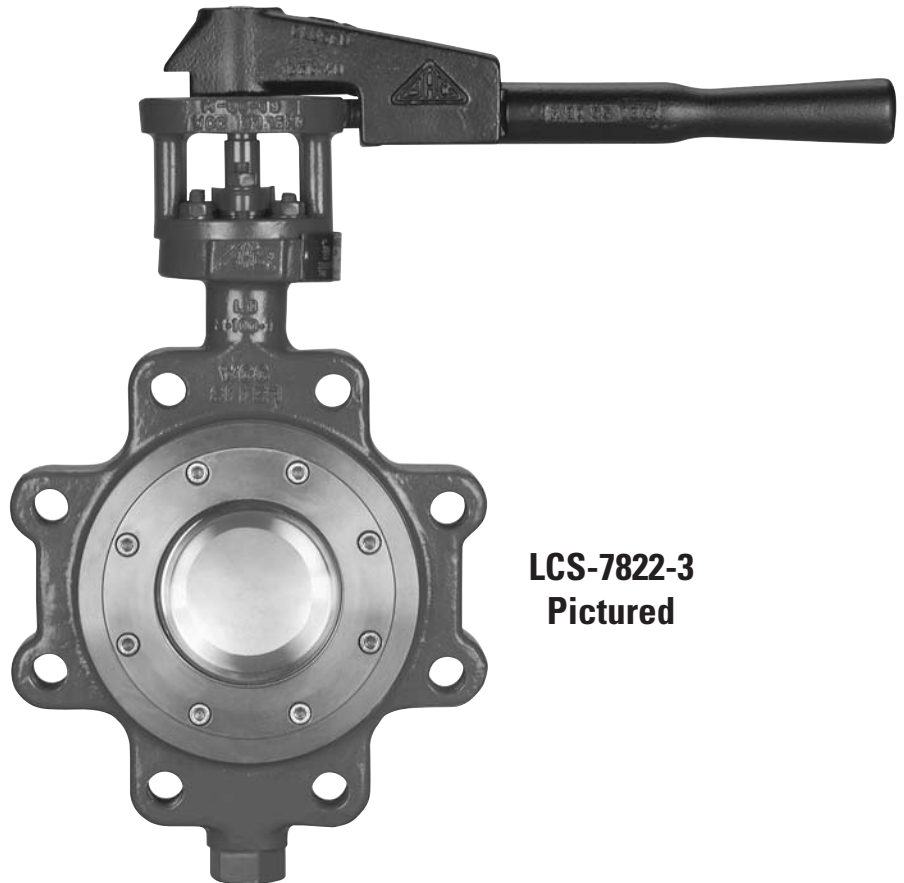
- Heating Hot Water
- Condenser Water
- Glycol
- Chilled Water
- Compressed Air
- Steam - 2" - 8" only  
50 psi Max. SWP
- Chemical Process
- Isolation and Throttling

## MATERIALS & CONSTRUCTION

- Body constructed of carbon steel
- Stainless steel disc and stem
- Seats and seals of PTFE for exceptional chemical and heat resistance
- Unique stem to disc connection increases mechanical strength
- Silicone is not used in the manufacture of this valve
- ISO 5211 Actuation Mounting

## DESIGN CRITERIA

- MSS SP-68 (Design)
- MSS SP-25 (Markings)
- API 609 Seat Pressure/  
Temperature Ratings
- ASME/ANSI B16.34A, Body  
Pressure/Temperature Ratings
- ASME/ANSI B16.5 Flange  
Dimensions
- ISO 5211, EN 12116 Actuator  
Mounting Top Works
- ANSI Class 150 and Class 300
- Dual Offset Design



**LCS-7822-3  
Pictured**

## Sample Specification

Valves shall meet the requirements of MSS SP-68, High Pressure Butterfly Valves with Offset Design. Unless otherwise indicated, full lug type valves suitable for bi-directional end of line service (dead end) at full rated pressure, without the need of a downstream flange. ANSI Class 150 or 300, Carbon Steel Body, Stainless Steel Disc, Stainless Steel or Duplex Steel Stem, PTFE or Graphite Seals. Permanently lubricated bearings of 316 Stainless Steel with Graphite. 2½" to 6" shall have lever lock operator, 8" and larger shall have gear operators or Pneumatic/Electric Actuators

NIBCO Figure Number LCS6822 (Class 150)

# High Performance Butterfly Valve Series 6822 & 7822

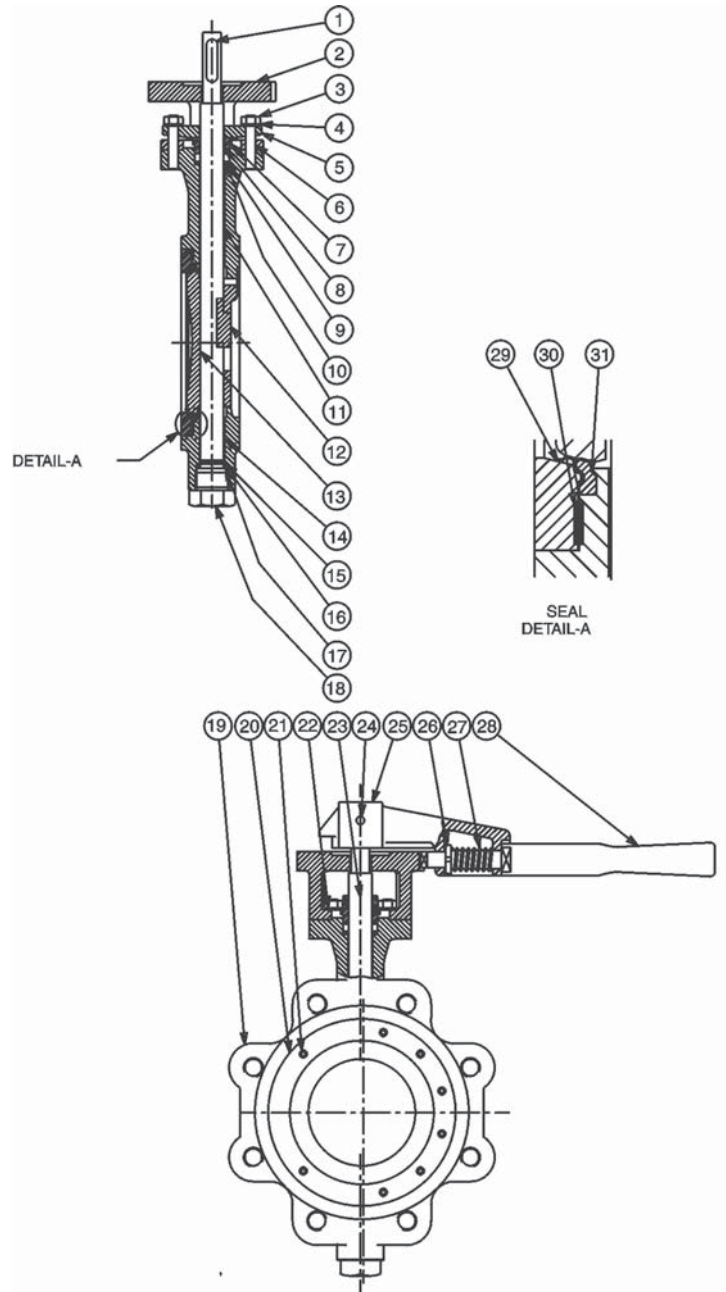
Carbon Steel Body • Stainless Steel Disc and Stem • ISO 5211 Actuation Mounting

## SIZES 2½" THROUGH 24"

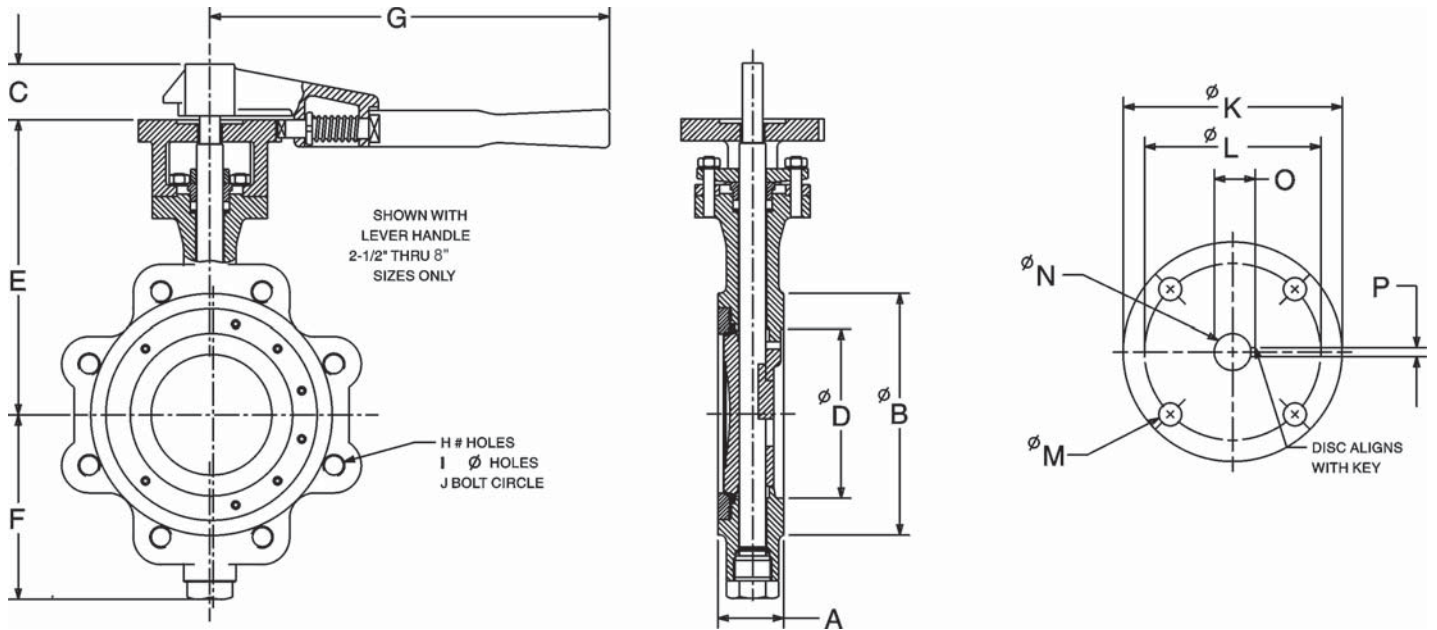
ANSI Class 150 & 300

### MATERIAL LIST

PART	SPECIFICATION
1. Actuator Key	Stainless Steel ASTM A276 UNS S31600
2. Top Plate	Carbon Steel ASTM A216 WCC
3. Gland Stud Nuts	Stainless Steel DIN 934 A2 UNS S30400
4. Washer	Stainless Steel DIN 125 A2 UNS S30400
5. Gland Flange	Stainless Steel ASTM A351 CF8
6. Gland Stud Bolt	Stainless Steel DIN 976 A2-70 UNS S30400
7. Gland Follower	Stainless Steel ASTM A276 UNS S31600
8. Gland Follower Sleeve	PTFE
9. Packing	Graphite
10. Top Bearing Ring	Stainless Steel ASTM A276 UNS S31600
11. Top Bearing	UNS S31600/Graphite/PTFE
12. Disc Key	Stainless Steel ASTM A276 UNS S31600
13. Disc	Stainless Steel ASTM A351 CF8M
14. Bottom Bearing	UNS S31600/Graphite/PTFE
15. Plug Thrust Washer	PTFE
16. Bottom Bearing Ring	Stainless Steel ASTM A276 UNS S31600
17. Plug Gasket	Graphite
18. Plug	Stainless Steel ASTM A276 UNS S31600
19. Body	Carbon Steel ASTM A216 WCC
20. Seat Ring Carrier	Carbon Steel
21. Seat Ring Screw	Stainless Steel DIN 912 A4 UNS S31600
22. Top Plate Stud Bolt	Stainless Steel DIN 976 A2-70 UNS S30400
23. Stem	Stainless Steel UNS S31803 or 17-4PH
24. Cup-Point Setscrew	Stainless Steel DIN 934 A2 UNS S30400
25. Lever	Nodular Iron GGG-40
26. Lock Pin	Carbon Steel Zinc Plated
27. Lever Spring	Stainless Steel UNS S30100
28. Handle	Nodular Iron GGG-40
29. Metal Seat	Stainless Steel ASTM A240 UNS S31600
30. Seat Gaskets	Graphite
31. Seat	PTFE Mod.



# High Performance Butterfly Valve Series 6822



## ANSI CLASS 150

### DIMENSIONS — WEIGHTS

Size	A		B		C		D		E		F		G		Holes
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	
2½	1.87	47.50	4.80	122	1.18	30.0	2.5	64	6.7	171	4.3	108	9.8	250	4
3	1.97	50.00	5.28	134	1.69	43.0	2.9	75	8.3	210	5.2	131	11.8	300	4
4	2.19	55.50	6.18	157	1.69	43.0	3.4	87	9.0	228	5.4	137	11.8	300	8
5	2.36	60.00	7.40	188	1.57	40.0	4.7	119	10.6	268	6.0	152	15.7	400	8
6	2.36	60.00	8.60	218	1.57	40.0	5.7	144	10.6	268	6.6	168	15.7	400	8
8	2.64	67.00	10.67	271	2.13	54.0	7.6	194	11.4	290	7.6	192	15.7	400	8
10	2.83	72.00	12.76	324	2.13	54.0	9.3	236	13.7	347	9.4	238	—	—	12
12	3.31	84.00	15.00	381	2.13	54.0	11.3	286	15.7	398	10.8	275	—	—	12
14	3.62	92.00	16.26	413	2.80	71.0	12.0	305	17.2	437	11.9	303	—	—	12
16	4.02	102.00	18.50	470	3.15	80.0	14.2	360	18.7	476	13.3	339	—	—	16
18	4.49	114.00	20.98	533	3.15	80.0	16.1	410	20.7	526	14.4	367	—	—	16
20	5.00	127.00	22.99	584	3.54	90.0	18.1	459	23.4	594	15.7	399	—	—	20
24	6.06	154.00	27.24	692	3.94	100.0	21.9	556	25.5	648	18.6	473	—	—	20

Size	I		J		K		L		M		N		O		P		Weight	
	In.	Hole Threads	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
2½	5/8"	-11 UNC	5.50	140	3.2	80	1.97	50.0	0.26	6.6	0.47	12.0	0.53	13.5	0.16	4.0	18	8
3	5/8"	-11 UNC	6.00	152	3.7	95	2.76	70.0	0.35	9.0	0.55	14.0	0.63	16.1	0.20	5.0	20	9
4	5/8"	-11 UNC	7.50	190	3.7	95	2.76	70.0	0.35	9.0	0.55	14.0	0.63	16.1	0.20	5.0	33	15
5	3/4"	-10 UNC	8.50	216	5.1	130	4.02	102.0	0.43	11.0	0.79	20.0	0.89	22.5	0.24	6.0	40	18
6	3/4"	-10 UNC	9.50	241	5.1	130	4.02	102.0	0.43	11.0	0.79	20.0	0.89	22.5	0.24	6.0	55	25
8	3/4"	-10 UNC	11.75	298	5.1	130	4.02	102.0	0.43	11.0	0.79	20.0	0.89	22.5	0.24	6.0	71	32
10	7/8"	-9 UNC	14.25	362	5.9	150	4.92	125.0	0.51	13.0	1.02	26.0	1.14	28.9	0.31	8.0	110	50
12	7/8"	-9 UNC	17.00	432	6.9	175	5.51	140.0	0.67	17.0	1.22	31.0	1.35	34.3	0.39	10.0	165	75
14	1"	-8 UN	18.75	476	8.3	211	6.50	165.0	0.83	21.0	1.50	38.0	1.63	41.3	0.39	10.0	243	110
16	1"	-8 UN	21.25	540	8.3	211	6.50	165.0	0.83	21.0	1.89	48.0	2.03	51.5	0.55	14.0	386	175
18	1 1/8"	-8 UN	22.75	578	8.3	211	6.50	165.0	0.83	21.0	2.13	54.0	2.28	57.8	0.63	16.0	683	310
20	1 1/8"	-8 UN	25.00	635	11.8	300	10.00	254.0	0.67	17.0	2.28	58.0	2.43	61.8	0.63	16.0	849	385
24	1 1/4"	-8 UN	29.50	749	11.8	300	10.00	254.0	0.67	17.0	2.72	69.0	2.90	73.6	0.79	20.0	1036	470