

SURE SEAL SERIES **600-622** BUTTERFLY VALVE

SIZES 2" - 48"
Cartridge Seated Butterfly Valves
Making a big difference to your bottom line.



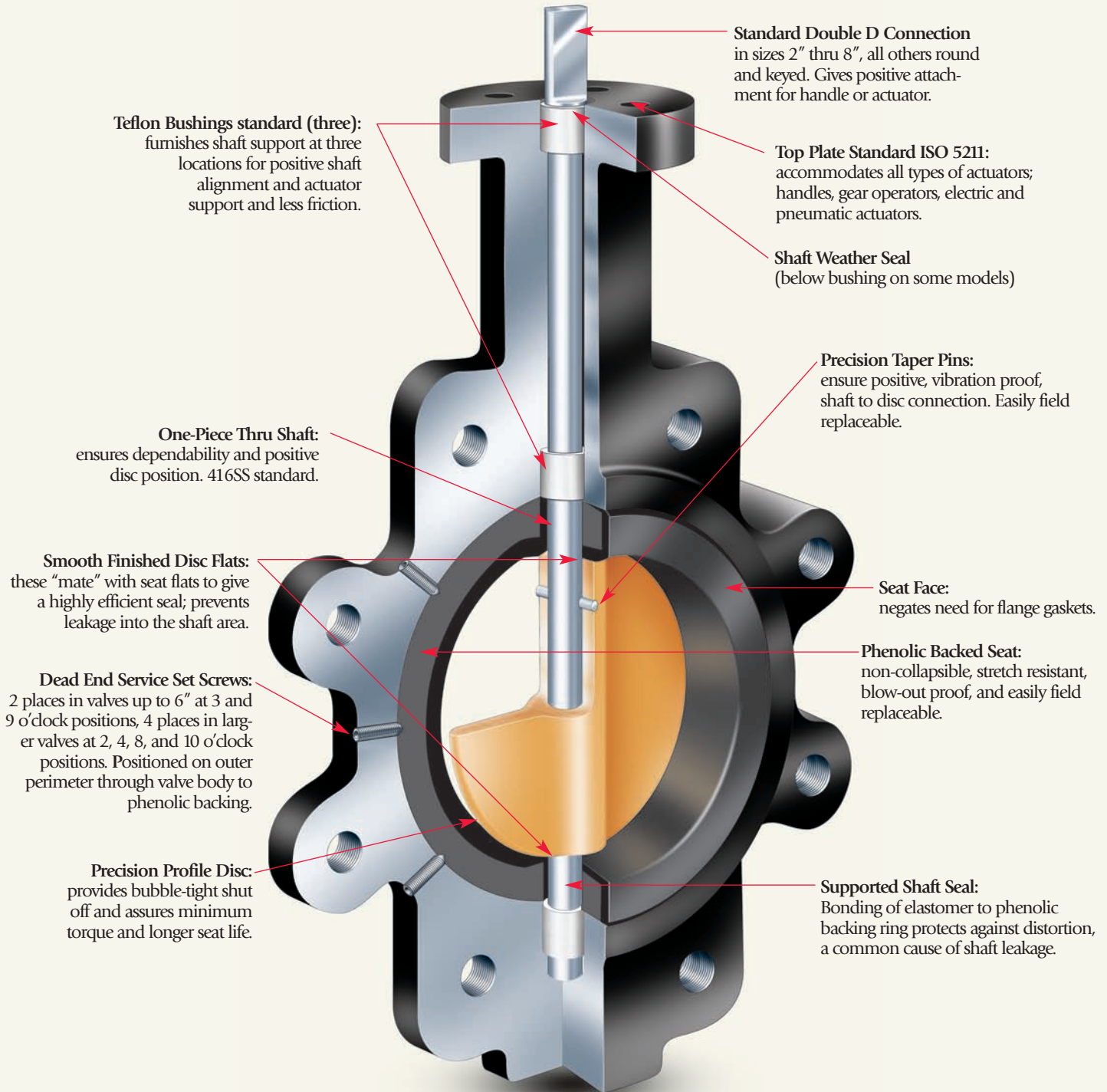
SURE SEAL INCORPORATED IS PROUD TO BE
ISO 9001
certified



**The Smartest Priced
Valve In Our Line**

Sure Seal 600-622 Series Butterfly Valve

- HVAC/ATC
- Chemical/Petrochemical Processing
- Food and Beverage Industry
- Power and Utilities
- Pulp and Paper Industry



Valve Seating Torques (in lbs)

Valve Size	Standard Disc Differential Pressure								Undercut Diff. Press	
	50PSI Δ P Bushing		100PSI Δ P Bushing		150PSI Δ P Bushing		200PSI Δ P Bushing		75PSI Δ P Bushing	
	Bronze	Teflon	Bronze	Teflon	Bronze	Teflon	Bronze	Teflon	Bronze	Teflon
2"	106	100	117	106	129	111	140	117	-	-
2 1/2"	152	150	166	163	181	176	195	189	-	-
3"	213	207	230	220	248	232	265	244	-	-
4"	321	290	386	323	450	357	515	390	-	-
5"	481	423	598	481	715	540	832	598	-	-
6"	692	599	878	691	1,063	783	1,248	875	-	-
8"	1,326	1,060	1,716	1,183	2,106	1,307	2,496	1,430	1,124	819
10"	2,239	1,671	3,010	1,872	3,780	2,074	4,550	2,275	1,363	909
12"	3,959	2,568	4,953	2,795	5,948	3,023	6,942	3,250	2,457	1,445
14"	4,881	2,640	6,226	3,070	7,570	3,500	-	-	4,400	2,300
16"	7,020	4,260	8,580	4,880	10,140	5,500	-	-	5,900	3,600
18"	10,105	6,287	12,202	7,243	14,300	8,200	-	-	8,300	5,500
20"	13,923	8,360	16,582	9,180	19,240	10,000	-	-	11,100	6,700
24"	23,617	15,427	26,953	16,813	30,290	18,200	-	-	17,500	12,100
30"	39,721	27,313	43,391	29,407	47,060	31,500	-	-	27,300	21,100
36"	54,667	-	57,035	-	59,400	-	-	-	39,600	-
42"	82,460	-	86,034	-	89,600	-	-	-	60,000	-
48"	CONSULT FACTORY									

All torque values shown on chart are for "wet" (water and other non-lubricating media) on-off service. For "dry" service (non-lubricating, dry gas media), multiply values by 1.6. For "lubed" service (clean, non-abrasive lubricating media), multiply values by 0.85. When sizing actuators for single valve applications, use Teflon Bushings/200PSI torque values and multiply by 1.25. When sizing actuators for three-way "tee" applications, use Teflon Bushings/200PSI torque values and multiply by 1.5. Under certain conditions, hydrodynamic torque can meet or exceed seating and unseating torques. When designing valve systems, hydrodynamic torque must be considered to help ensure correct selection of actuation.

Cv Values-Valve Sizing Coefficients (us-GPM@1 Δ P)

Size	10°	20°	30°	40°	50°	60°	70°	80°	90°	
2"	0.06	3	7	15	27	44	70	105	115	
2 1/2"	0.10	6	12	25	45	75	119	178	196	
3"	0.20	9	18	39	70	116	183	275	302	
4"	0.30	17	36	78	139	230	364	546	600	
5"	0.50	29	61	133	237	392	620	930	1022	
6"	0.80	45	95	205	366	605	958	1437	1579	
8"	2	89	188	408	727	1202	1903	2854	3136	
10"	3	151	320	694	1237	2047	3240	4859	5340	
12"	4	234	495	1072	1911	3162	5005	7507	8250	
14"	6	338	715	1549	2761	4568	7230	10844	11917	
16"	8	464	983	2130	3797	6282	9942	14913	16388	
18"	11	615	1302	2822	5028	8320	13168	19752	21705	
20"	14	791	1674	3628	6465	10698	16931	25396	27908	
24"	22	1222	2587	5605	9989	16528	26157	39236	43116	
30"	37	2080	4406	9545	17010	28147	44545	66818	73426	
36"	260	3050	6730	12740	20220	32500	52500	79600	87500	
42"	350	4095	9040	17108	27150	43640	70500	106890	117500	
48"	CONSULT FACTORY									

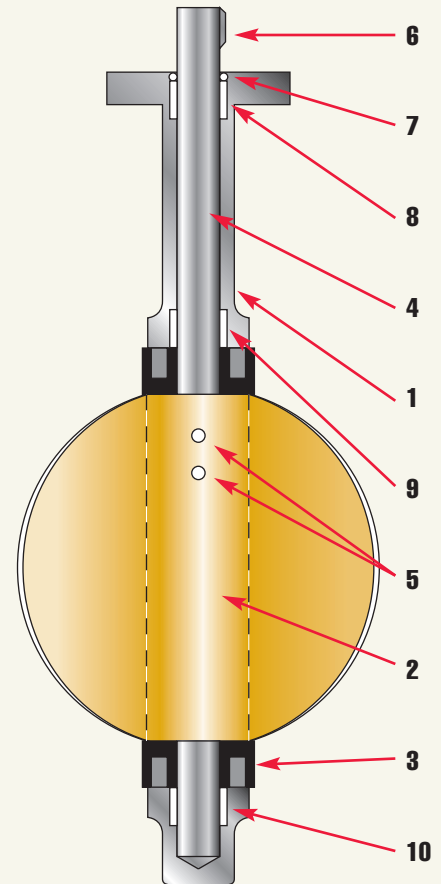
Materials 2" - 48"

Item	Description	Materials	Optional Materials
1	Body	Cast Iron	Ductile Iron
2	Disc	Ductile Iron	Aluminum Bronze, 316 Stainless Steel, Monel
3*	Seat	Buna-N or EPDM	Hypalon, Viton
4	Shaft	416 Stainless Steel	316 Stainless Steel, Monel
5*	Taper Pin	316 Stainless Steel	Monel
6	Key	Carbon Steel	No option available
7*	O - Ring	Buna-N	No option available
8	Bushing	Teflon	Luberized Bronze
9	Bushing	Teflon	Luberized Bronze
10	Bushing	Teflon	Luberized Bronze

*ENP plated for 2" - 12" valves. *Recommended spare parts.

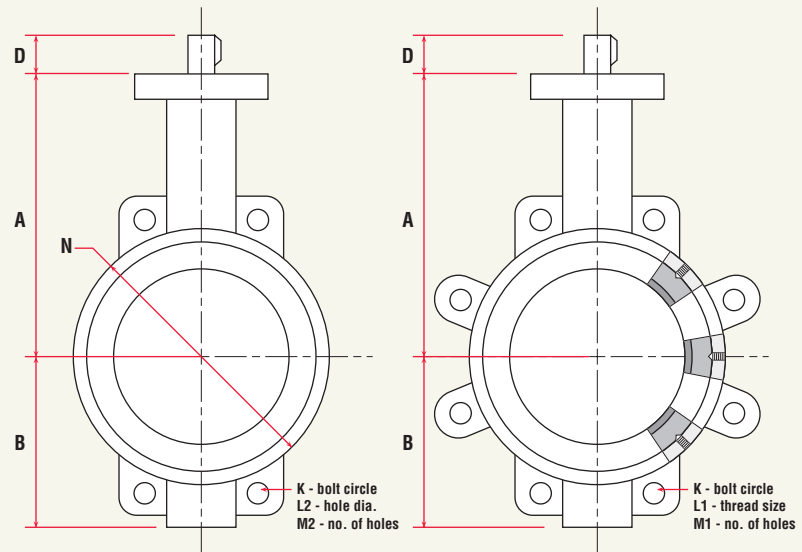
Material	Temperature Rating °F
Buna-N	+10 to 180
EPDM	-30 to 275
High Temperature Viton®	+10 to 400

Seat materials are capable of withstanding lower temperatures without damage. However, the elastomer becomes hard and torques increase. Some flow media may further restrict the published temperature limits and/or significantly reduce seat life.

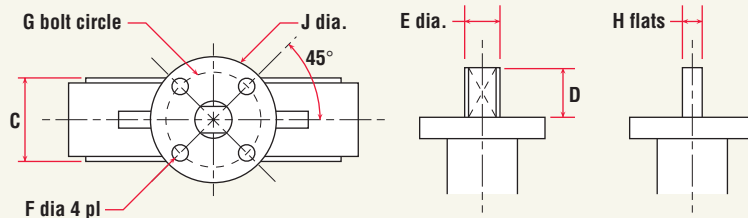


Series 600-622 Butterfly Valves

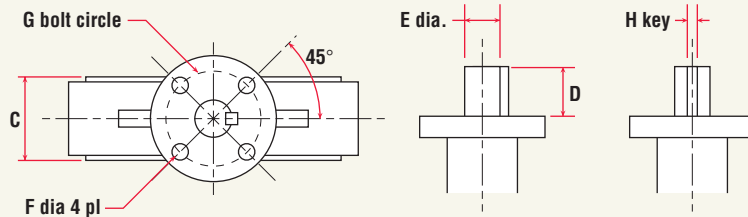
- Available in Wafer or Lug style body (2" to 48")
- Wafer body features four alignment holes
- Pressure ratings for tight shut-off at temperatures up to the maximum limit of the seat material:
 - 2" to 12" - 200psi
 - 14" to 48" - 150psi
- Ideal for on - off or throttling services
- Available with handles (2" to 12"), manual gear operators (2" to 48"), and electric or pneumatic actuators (2" to 48")
- Operator can be mounted parallel or perpendicular to pipeline
- Designed to comply with MSS SP - 67 and API609. For exact valve measurements, see dimension table
- Compatible with ANSI125/150 flanges



2" thru 8"



10" thru 48"



Dimensions 2" - 48"

Valve Size	A	B	C	D	E	F	G	H	J	K	L [*]	L [*]	M [*]	M [*]	N
2"	6 3/8	3 1/4	1 3/4	1 1/4	1/2	3/8	2 3/4	3/8	3 9/16	4 3/4	5/8 - 11	11/16	4	4	4
2 1/2"	6 7/8	3 3/4	1 7/8	1 1/4	1/2	3/8	2 3/4	3/8	3 9/16	5 1/2	5/8 - 11	11/16	4	4	4 3/4
3"	7 1/8	4	1 7/8	1 1/4	1/2	3/8	2 3/4	3/8	3 9/16	6	5/8 - 11	11/16	4	4	5 1/8
4"	7 7/8	4 7/8	2 1/8	1 1/4	5/8	3/8	2 3/4	7/16	3 9/16	7 1/2	5/8 - 11	11/16	8	4	6 3/4
5"	8 3/8	5 3/8	2 1/4	1 1/4	3/4	3/8	2 3/4	1/2	3 9/16	8 1/2	3/4 - 10	13/16	8	4	7 3/4
6"	8 7/8	5 7/8	2 1/4	1 1/4	3/4	3/8	2 3/4	1/2	3 9/16	9 1/2	3/4 - 10	13/16	8	4	8 5/8
8"	10 1/4	7 1/8	2 1/2	1 3/4	7/8	9/16	4 15/16	5/8	5 7/8	11 3/4	3/4 - 10	13/16	8	4	10 9/16
10"	11 1/2	8 1/4	2 3/4	2	1 1/8	9/16	4 15/16	1/4 x 1/4	5 7/8	14 1/4	7/8 - 9	15/16	12	4	13 1/16
12"	13 1/4	9 3/4	3 1/8	2	1 1/8	9/16	4 15/16	1/4 x 1/4	5 7/8	17	7/8 - 9	15/16	12	4	16
14"	14 1/2	11	3 1/8	3	1 1/4	9/16	4 15/16	5/16 x 5/16	5 7/8	18 3/4	1 - 8	1 1/16	12	4	17 1/8
16"	15 3/4	12	3 1/2	3	1 5/16	9/16	4 15/16	3/8 x 3/8	5 7/8	21 1/4	1 - 8	1 1/16	16	4	20
18"	16 5/8	14 3/8	4 1/4	4 1/4	1 1/2	13/16	6 1/2	3/8 x 3/8	8 1/4	22 3/4	1 1/8 - 7	1 1/4	16	4	21 3/8
20"	18 7/8	14 5/8	5 1/4	4 1/4	1 5/8	13/16	6 1/2	3/8 x 3/8	8 1/4	25	1 1/8 - 7	1 1/4	20	4	23 5/16
24"	22 1/8	18	6 1/8	4 1/4	2	13/16	6 1/2	1/2 x 1/2	8 1/4	29 1/2	1 1/4 - 7	1 3/8	20	4	27 7/8
30"	25.98	22.05	6 13/16	4 1/4	2 1/2	13/16	10	5/8 x 5/8	11 13/16	36	1 1/4 - 7	1 3/8	24	4	38.75
36"	28.35	25.83	8.31	4.65	2.95	0.688	10	3/4 x 3/4	11.81	42.75	1 1/2 - 6	1 5/8	28	4	46
42"	33.78	30.60	10.25	5.91	3.35	0.688	10	7/8 x 7/8	11.81	49.50	1 1/2 - 6	1 5/8	32	4	53
48"	37.04	34.82	11.25	5.91	4.13	0.875	11.73	1 1/8 x 1 1/8	13.78	56.00	1 1/2 - 6	1 5/8	40	4	59.5

*L₁ and M₁ refer to Lug style valve, L₂ and M₂ refer to Wafer style. "C" Dimension is listed with elastomer in the relaxed condition. Approximately 1/8" total compression is required for proper sealing with pipe flanges. Valves are designed for installation between ANSI B16.1 Class 125 (Iron) and B16.5 Class 150 (Steel) flanges. Gaskets are not needed, and should not be used, since the seat face seals against the mating flange.

Purchasers are expected to make their own tests to determine the suitability of these products for their particular purposes. The data represented in this flyer is for general information only. Manufacturer is not responsible for acceptability of these products in regard to individual system requirements. For specific performance data and correct materials selection, please contact your Sure Seal Dealer. ©1998 Sure Seal, Incorporated • Printed in the USA

Rt. 2, Box 2242 • Mineral Point, Missouri 63660 • (573) 438-5000 • Fx (573) 438-4853
www.suresealinc.com • ssi@suresealinc.com

