



ST ALUMINUM SERIES

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Howell Aluminum Butterfly Valve

Easy to Actuate

SPECIFICATIONS:

- Wafer Boot Style
- Lightweight, 1 Piece body design.
- Alignment holes fit both ANSI and TTMA bolt patterns.
- Resilient seat with moulded o-ring eliminates the need for flange gaskets.
- ISO 5211 Direct Mounting Pad
- Pinless Disc is 316 Stainless Steel. Spherically machined and polished for extended seat life and zero leakage/bubble tight shut off.
- Secure Stem Retainer Plate provides blowout-proof protection.
- Durable 316 Stainless Steel Stem available in both “Double D” and “Square” design.
- Available with Electric and Pneumatic Actuators, Double Acting / Spring Return.
- Size Range: 2” to 12”

**Ideal for
Transportation Industry**



STANDARDS:

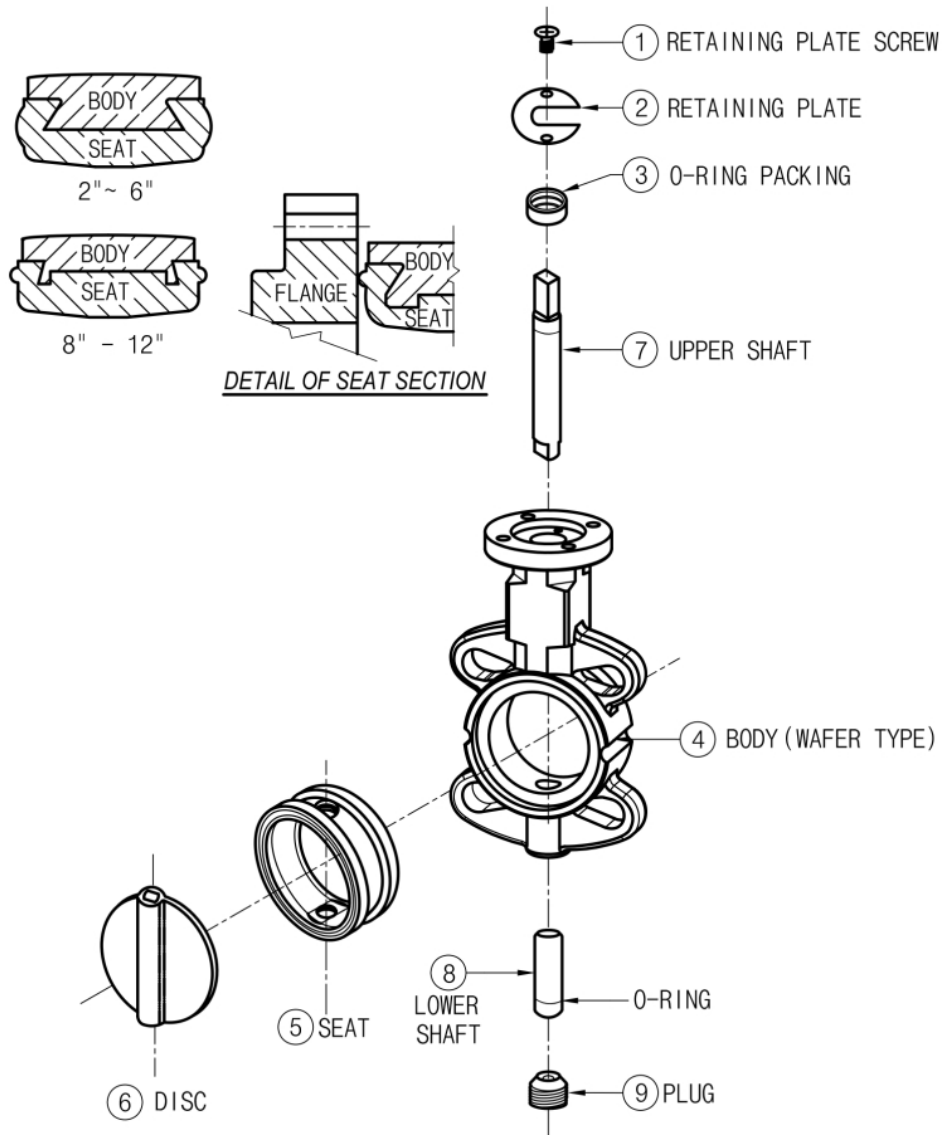
Basic Design complies with API 609, MSS SP-67, BS 5155, ISO5752, and DIN 3202K1

Howell Aluminum butterfly valves are tested to API 598, MSS-SP-61

- Shell: 400 psig, Closure: 180 psig

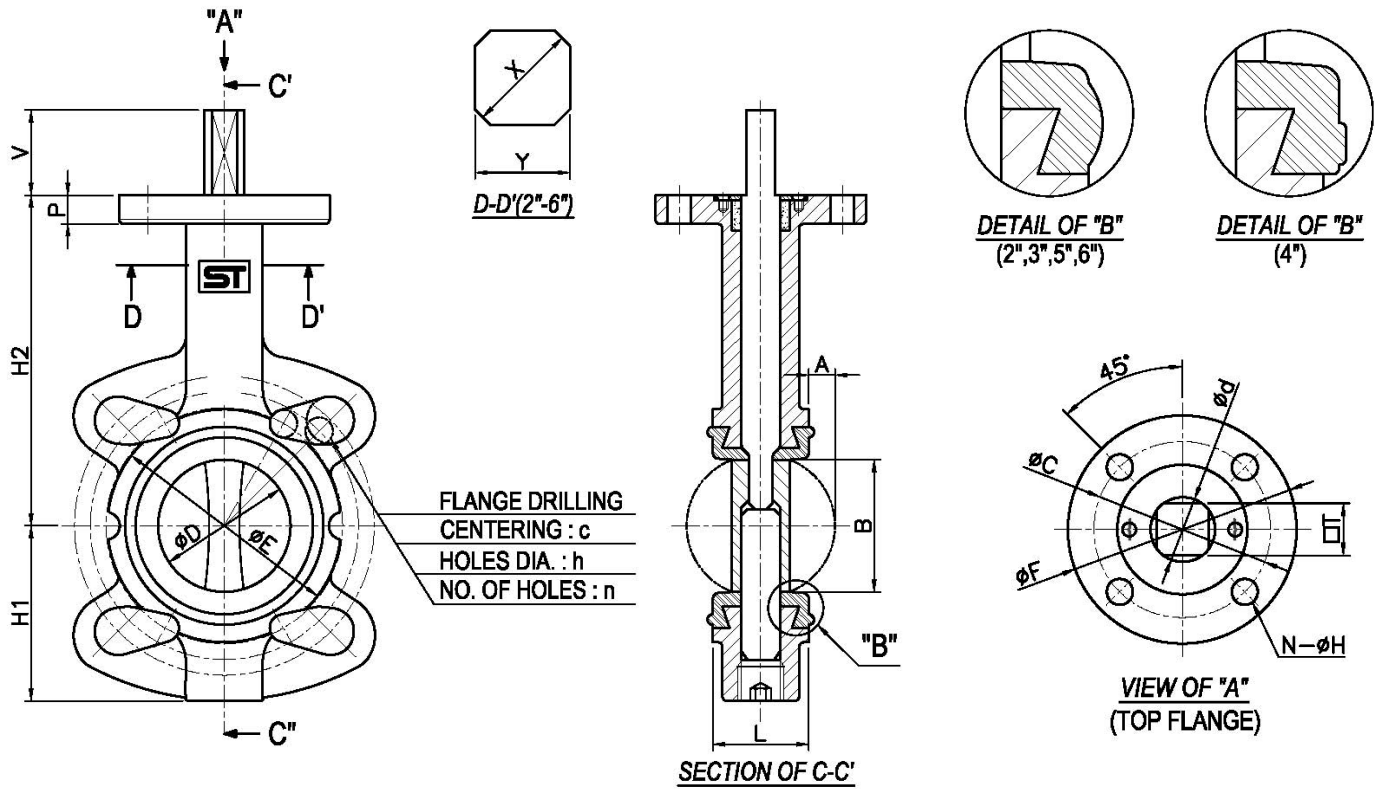
Howell reserves the right to alter design specifications without notice.

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MATERIALS LIST:

Item	Description	Material	Code No.	Standard	Remarks
1	Retaining Plate Screw	Carbon Steel		ASTM A283D-A36	Galvanized
2	Retaining Plate	Carbon Steel		ASTM A283D-A36	Galvanized
3	O-Ring Package	Same As Seat Material			
4	Body	Aluminium	AL	ASTM A319	
5	Seat				Working Temperature
		EPDM - Black / White		ASTM D2000	-30°~110°C / -20°~230°F
		Buna-N (NBR) - Black / White		ASTM D2000	-20°~90°C / -5°~195°F
		Viton		ASTM D2000	-10°~160°C / 15°~320°F
	High Temperature EPDM		ASTM D2000	-30°~130°C / -20°~265°F	
6	Disc	Stainless Steel	CF8M	ASTM A351	
7	Upper Stem	Stainless Steel	410 SS	ASTM A276	
			316 SS	ASTM A276	
8	Lower Stem		304 SS	ASTM A276	
9	Plug	Carbon Steel		ASTM A283D-A36	



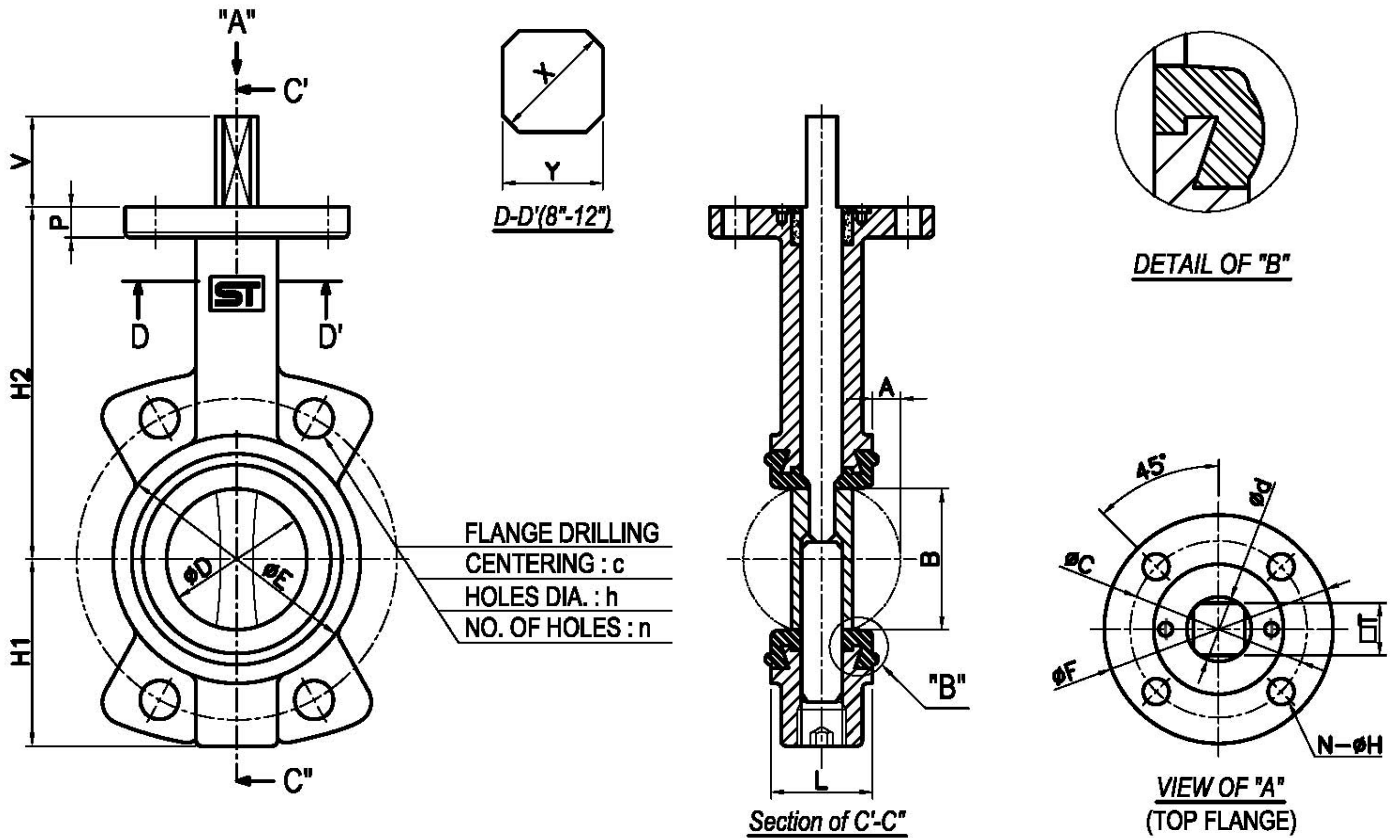
DIMENSIONS:

Size	Outline Dimensions														Neck			
	H1		H2		ØD		ØE		A		B		L		X		Y	
IN	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
2"	3.0	75	5.2	133	2.0	52	3.7	94	0.2	5	1.9	49	1.7	43	1.5	38	1.6	40
3"	3.3	84	5.7	145	3.1	80	4.8	123	0.7	17	3.0	77	1.8	46	1.5	38	1.6	40
4"	3.7	95	6.6	167	3.9	100	5.8	147	0.9	24	3.8	97	2.0	52	1.5	38	1.6	40
5"	4.3	110	7.5	191	4.9	125	6.8	173	1.4	35	4.8	122	2.2	56	1.8	45	1.7	42
6"	5.6	143	8.1	207	5.9	151	8.0	202	1.9	47	5.8	148	2.2	56	1.8	45	1.7	42

Size	Top Flange & Stem													N - # of Holes	ØH		ISO5211 (F)
	V		P		ØF		ØC		Ød		□ T		IN		MM		
IN	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	
2"	0.6	15	0.6	14	3.5	90	2.8	70	0.6	14	0.4	11	4	0.4	9	F07	
3"	0.6	15	0.6	14	3.5	90	2.8	70	0.6	14	0.4	11	4	0.4	9	F07	
4"	0.7	18	0.6	16	3.5	90	2.8	70	0.6	16	0.6	14	4	0.4	9	F07	
5"	0.7	18	0.6	16	3.5	90	2.8	70	0.7	18	0.6	14	4	0.4	9	F07	
6"	0.7	18	0.6	16	3.5	90	2.8	70	0.7	18	0.6	14	4	0.4	9	F07	

DRILLING:

Size	T.T.M.A 1						T.T.M.A 2						ANSI 150 LBS					
	c		n	h		c		n	h		c		n	h				
IN	IN	MM		IN	MM	IN	MM		IN	MM	IN	MM		IN	MM			
2"	4.25	108	4	0.44	11	3.75	95	6	0.44	11	4.75	121	4	0.75	19			
3"	4.87	124	6	0.44	11	4.87	124	8	0.44	11	6.00	152	4	0.75	19			
4"	7.00	178	6	0.56	14	5.87	149	8	0.44	11	7.50	191	8	0.75	19			
5"	7.87	200	6	0.56	14						8.50	216	8	0.87	22			
6"	9.00	229	8	0.56	14						9.50	241	8	0.87	22			



DIMENSIONS:

Size	Outline Dimensions														Neck			
	H1		H2		ØD		ØE		A		B		L		X		Y	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
8"	6.6	168	9.4	240	7.7	197	9.9	251	2.7	68	7.6	194	2.4	60	1.9	48	1.8	45
10"	8.0	203	11.3	286	9.7	247	12.5	318	3.5	90	9.6	244	2.7	68	2.4	62	2.2	57
12"	9.5	242	12.3	313	11.6	296	14.3	362	4.3	109	11.5	293	3.1	78	2.4	62	2.2	57

Size	Top Flange & Stem													N - # of Holes	ØH		ISO5211 (F)
	V		P		ØF		ØC		Ød		□T		IN		MM		
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM					
8"	0.8	21	0.7	17	3.5	90	2.8	70	0.9	22	0.7	17	4.0	0.4	9	F07	
10"	0.8	21	0.8	20	4.9	125	4.0	102	1.0	25	0.9	22	4.0	0.4	11	F10	
12"	0.9	24	0.8	20	4.9	125	4.0	102	1.1	28	0.9	22	4.0	0.4	11	F10	

DRILLING:

Size	T.T.M.A						ANSI 150 LBS					
	c		n	h		h	c		n	h		
	IN	MM		IN	MM		IN	MM		IN	MM	
8"	11.63	295	8	0.69	18	11.75	299	8	0.87	22		
10"	13.75	349	8	0.69	18	14.25	362	12	1.00	25		
12"	16.75	426	12	0.69	18	17.00	432	12	1.00	25		





PART NUMBER MATRIX

HOW TO ORDER:

1	SERIES
STC71	Boot, Wafer Style

2	DISC MATERIAL
1	304 S.S.
2	D.I. Nickel Plated
3	316 S.S.
4	304L S.S.
5	316L S.S.
6	Bronze
7	Aluminum Bronze
X	Special

3	STEM MATERIAL
1	304 S.S.
2	316 S.S.
3	410 S.S.
4	K-Monel
X	Special

4	SEAT
1	EPDM
2	Black BUNA (NBR)
3	White EPDM
4	Viton
5	Silicon
6	HT EPDM
7	Neoprene
8	Hypalon
9	Natural Rubber
10	Teflon
11	White BUNA (NBR) *

5	OPERATOR
0	Bare Shaft
1	Lever Handle
2	Infinite Handle
3	Gear Operator
4	Pneumatic Double Acting
5	Pneumatic Spring Return
6	Electric
X	Special

6	- SIZE
2	2"
212	2-1/2"
3	3"
4	4"
5	5"
6	6"
8	8"
10	10"
12	12"

7	- ACTUATOR
D3	HDA-65 Pneumatic Double Acting
D4	HDA-80 Pneumatic Double Acting
D5	HDA-100 Pneumatic Double Acting
D6	HDA-125 Pneumatic Double Acting
D7	HDA-140 Pneumatic Double Acting
D8	HDA-160 Pneumatic Double Acting
D9	HDA-210 Pneumatic Double Acting
S3	HSR-65 Pneumatic Spring Return
S4	HSR-80 Pneumatic Spring Return
S5	HSR-100 Pneumatic Spring Return
S6	HSR-125 Pneumatic Spring Return
S7	HSR-140 Pneumatic Spring Return
S8	HSR-160 Pneumatic Spring Return
S9	HSR-210 Pneumatic Spring Return

Note, add "L" to prefix for low temperature actuator (-40°C). Example:

D3L HDA-65 LT Pneumatic Double Acting

8	- ACCESSORIES / OPTIONS
4L	Nema 4 Limit Switch
7L	Nema 7 Limit Switch
4S1	Nema 4 Namur Solenoid Valve 120vac
4S2	Nema 4 Namur Solenoid Valve 24vdc
7S1	Nema 7 Namur Solenoid Valve 120vac
7S2	Nema 7 Namur Solenoid Valve 24vdc
4S0	Nema 4 Namur Solenoid Valve special voltage
7S0	Nema 7 Namur Solenoid Valve special voltage

Contact Howell for full actuator and accessory specifications

* White BUNA Seat is Standard

Part#	Description
STC7132111-3	ST ALUM WAF BFV 316 DISC WHT BUNA, LEVER 3"
STC7132114-3-D3	ST ALUM WAF BFV 316 DISC WHT BUNA, 3" CW HDA65 ACTUATOR

Actuated Assemblies

The following page is a guide for the common product codes for the actuated Howell Butterfly Valve assemblies. These automated packages are sized for on/off service of 150 psi line pressure of water. Correct valve and actuator selection is required for reliable operation and will vary for different applications. Conditions that affect the valve operating torque include operation frequency, media type, pressure and temperature.

Please contact Howell for full actuator and accessory specifications and:

- Modulating applications
- Dry or slurry media service



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PRODUCT CODES FOR ACTUATED ASSEMBLIES

PNEUMATIC DOUBLE ACTING

WAFER STYLE WITH WHITE BUNA (NBR) SEAT

Size	Sized for 80 PSI	Sized for 60 PSI
2"	STC7132114-2-D3	STC7132114-2-D3
2-1/2"	STC7132114-212-D3	STC7132114-212-D3
3"	STC7132114-3-D3	STC7132114-3-D3
4"	STC7132114-4-D3	STC7132114-4-D3
5"	STC7132114-5-D3	STC7132114-5-D4
6"	STC7132114-6-D3	STC7132114-6-D4
8"	STC7132114-8-D4	STC7132114-8-D5
10"	STC7132114-10-D5	STC7132114-10-D6
12"	STC7132114-12-D5	STC7132114-12-D6

PNEUMATIC SPRING RETURN

Size	Sized for 80 PSI	Sized for 60 PSI
2"	STC7132115-2-S3	STC7132115-2-S3
2-1/2"	STC7132115-212-S3	STC7132115-212-S3
3"	STC7132115-3-S3	STC7132115-3-S4
4"	STC7132115-4-S4	STC7132115-4-S4
5"	STC7132115-5-S4	STC7132115-5-S5
6"	STC7132115-6-S4	STC7132115-6-S5
8"	STC7132115-8-S5	STC7132115-8-S6
10"	STC7132115-10-S6	STC7132115-10-S7
12"	STC7132115-12-S6	STC7132115-12-S7

WAFER STYLE WITH BLACK BUNA (NBR) SEAT

Size	Sized for 80 PSI	Sized for 60 PSI
2"	STC713224-2-D3	STC713224-2-D3
2-1/2"	STC713224-212-D3	STC713224-212-D3
3"	STC713224-3-D3	STC713224-3-D3
4"	STC713224-4-D3	STC713224-4-D3
5"	STC713224-5-D3	STC713224-5-D4
6"	STC713224-6-D3	STC713224-6-D4
8"	STC713224-8-D4	STC713224-8-D5
10"	STC713224-10-D5	STC713224-10-D6
12"	STC713224-12-D5	STC713224-12-D6

Size	Sized for 80 PSI	Sized for 60 PSI
2"	STC713225-2-S3	STC713225-2-S3
2-1/2"	STC713225-212-S3	STC713225-212-S3
3"	STC713225-3-S3	STC713225-3-S4
4"	STC713225-4-S4	STC713225-4-S4
5"	STC713225-5-S4	STC713225-5-S5
6"	STC713225-6-S4	STC713225-6-S5
8"	STC713225-8-S5	STC713225-8-S6
10"	STC713225-10-S6	STC713225-10-S7
12"	STC713225-12-S6	STC713225-12-S7

PNEUMATIC DOUBLE ACTING

WAFER STYLE WITH HIGH TEMPERATURE EPDM SEAT

Size	Sized for 80 PSI	Sized for 60 PSI
2"	STC713264-2-D3	STC713264-2-D3
2-1/2"	STC713264-212-D3	STC713264-212-D3
3"	STC713264-3-D3	STC713264-3-D3
4"	STC713264-4-D3	STC713264-4-D3
5"	STC713264-5-D3	STC713264-5-D4
6"	STC713264-6-D3	STC713264-6-D4
8"	STC713264-8-D4	STC713264-8-D5
10"	STC713264-10-D5	STC713264-10-D6

PNEUMATIC SPRING RETURN

Size	Sized for 80 PSI	Sized for 60 PSI
2"	STC713265-2-S3	STC713265-2-S3
2-1/2"	STC713265-212-S3	STC713265-212-S3
3"	STC713265-3-S3	STC713265-3-S4
4"	STC713265-4-S4	STC713265-4-S4
5"	STC713265-5-S4	STC713265-5-S5
6"	STC713265-6-S4	STC713265-6-S5
8"	STC713265-8-S5	STC713265-8-S6
10"	STC713265-10-S6	STC713265-10-S7