



## New Design Features

- Redesigned degeed position indication plate for Lever type valves
- Molded valve body tag holes
- Increased internal sealing performance

## Standard Features (Sizes 1-1/2" – 14")

- 316SS Stem with full disc engagement
- Full seat design eliminates gaskets
- Seat overtightening prevention
- Lockout-Tagout – lever handle molded padlock provision and 2-molded valve body tag holes
- Highly visible 0° to 90° position indicator with 19 fine adjustment locking positions
- ISO 5211 F07 – F14 bolt circle on top flange
- Polypropylene stem retainer
- Spherical disc design
- Non-wetted stem and body - Isolated from the media
- Plasgear™ operator

## Options

- Pneumatically and electrically actuated with accessories
- 2" square operating nuts
- Stem extensions
- Chain operators
- Manual limit switches
- Speed Handle™ - For Plasgear™ operator
- Lug style [ stainless steel 316 ] for blocking and end-of-the line applications

## Specifications

- Sizes:** Lever: 1-1/2" – 8"  
Gear: 1-1/2" – 14"
- Models:** Wafer Style
- Operators:** Lever and Gear
- Bodies:** PVC, CPVC PP and PVDF
- Discs:** PVC, CPVC PP and PVDF
- Seats:** EPDM, FKM, and Nitrile
- Seals:** Same as seating material
- Stems:** 316 stainless steel, Titanium, Hastelloy C® ‡

**PVC/PP/EPDM Models  
NSF-61 Certified**

‡ Trademark of Cabot Corporation

## Parts List (Lever: Sizes 1-1/2" – 8")

PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Body	1	PVC, CPVC, PP, PVDF
2	Disc	1	PVC, CPVC, PP, PVDF
183	Seat bush (A)	1	PVC, PP, PVDF*
184	Seat bush (B)	1	PVC, PP, PVDF*
3	Seat	1	EPDM, FKM, NBR
6	O-ring ( C )	1	EPDM, FKM, NBR
185	O-ring (I)	4	EPDM, FKM, NBR
7	Stem	1	Stainless Steel 316
8	Stem Retainer	1	PP
157	Screw (F)	4	Stainless Steel 304
16	Handle	1	PP
16A	Metal Handle Insert	1	Stainless Steel 316L
17	Handle Lever	1	PPG
18	Pin	1	PPG
19	Spring	1	Stainless Steel 304
20	Washer (A)	1	Stainless Steel 304
21	Bolt (B)	1	Stainless Steel 304
22	Locking Plate	1	PPG
23	Screw (B)	4	Stainless Steel 304
24	Cap (A)	1	PP

\* Used for CPVC and PVDF

## Parts List (Gear: Sizes 1-1/2" – 14")

PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Body	1	PVC, CPVC, PP, PVDF
2	Disc	1	PVC, CPVC, PP, PVDF
183	Seat bush (A)	1	PVC, PP, PVDF*
184	Seat bush (B)	1	PVC, PP, PVDF*
3	Seat	1	EPDM, FKM, NBR
6	O-ring ( C )	1	EPDM, FKM, NBR
185	O-ring (I)	4	EPDM, FKM, NBR
7	Stem	1	Stainless Steel 316
8	Stem Retainer	1	PP
157	Screw (F)	4	Stainless Steel 304
25	Gearbox	1	Plasgear™
28	Bolt ( C )	4	Stainless Steel 304
158	Gasket	1	EPDM

\* Used for CPVC and PVDF

## Cv Values

Nominal Size		CV values at various opening degrees		
Inches	mm	30°	60°	90°
1-1/2"	40	4	43	71
2"	50	7	73	120
2-1/2"	65	15	153	250
3"	80	18	183	300
4"	100	28	287	470
5"	125	49	506	830
6"	150	66	671	1100
8"	200	150	1525	2500
10"	150	232	2355	3860
12"	300	342	3477	5700
14"	350	386	3928	6440

## Wt. (lbs.)

Nominal Size		PVC		CPVC		PP		PVDF	
Inches	mm	Lever	Gear	Lever	Gear	Lever	Gear	Lever	Gear
1-1/2"	40	2.9	7.5	-	-	2.4	6.8	3	7.7
2"	50	3.3	7.7	3.3	7.8	2.6	7.3	3.7	8.4
2-1/2"	65	3.8	8.4	-	-	3	7.5	4.2	8.8
3"	80	4.2	8.6	4.2	8.6	3.5	8	4.9	9.3
4"	100	5.5	10	5.5	10	4.4	8.8	6.4	10.8
5"	125	10.8	14.3	-	-	8.8	12.3	12.6	16.1
6"	150	12.8	16.3	13	16.5	10.1	13.7	15.2	18.7
8"	200	20.5	23.6	20.5	24	16.3	19.6	24.3	27.6
10"	250	-	32.4	-	-	-	27	-	41
12"	300	-	61.7	-	-	-	53	-	76
14"	350	-	67	-	-	-	58	-	81

## Vacuum Service-Lever Vacuum Service-Gear

Nominal Size		Inches of Mercury
Inches	mm	
1-1/2"	40	-29.92
2"	50	-29.92
2-1/2"	65	-29.92
3"	80	-29.92
4"	100	-29.92
5"	125	-29.92
6"	150	-29.92
8"	200	-29.92

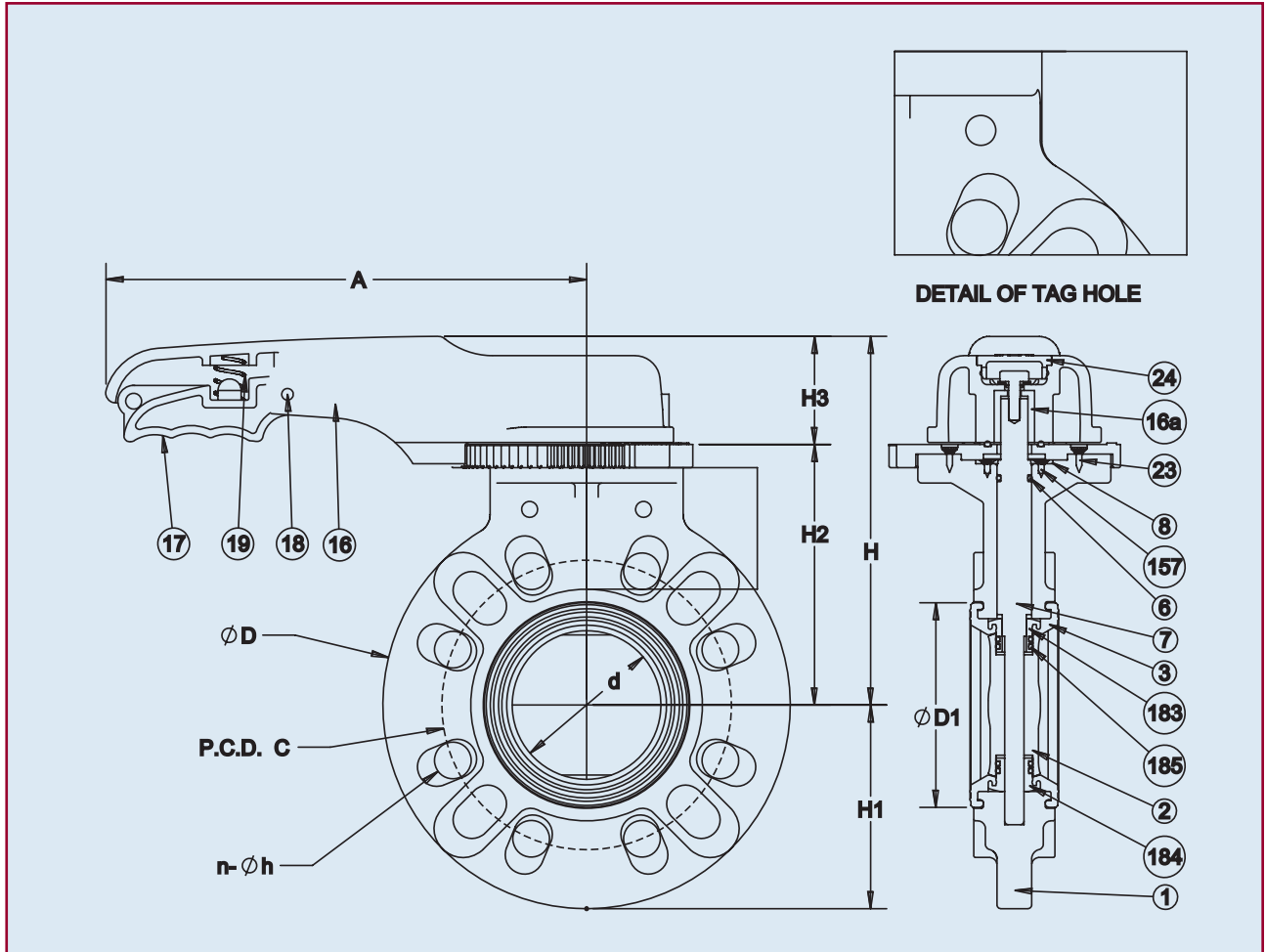
Nominal Size		Inches of Mercury
Inches	mm	
1-1/2"	40	-29.92
2"	50	-29.92
2-1/2"	65	-29.92
3"	80	-29.92
4"	100	-29.92
5"	125	-29.92
6"	150	-29.92
8"	200	-29.92
10"	250	-29.92
12"	300	-23.62
14"	350	-23.62

## Pressure vs. Temperature (psi, water, non-shock)\*

Body		PVC	PVC PP,PVDF		CPVC CPVC				PP PP,PVDF		PVDF PVDF			
Disc		PVC	30°F	121°F	30°F	141°F	161°F	177°F	-5°F	141°F	-5°F	141°F	176°F	211°F
Nominal Size		30°F	120°F	140°F	140°F	160°F	176°F	195°F	140°F	175°F	140°F	175°F	210°F	250°F
Inches	mm													
1-1/2"	40	150	150	70	-	-	-	-	150	100	150	100	85	75
2"	50	150	150	70	150	120	100	55	150	100	150	100	85	75
2-1/2"	65	150	150	70	-	-	-	-	150	100	150	100	85	75
3"	80	150	150	70	150	120	100	55	150	100	150	100	85	75
4"	100	150	150	45	150	120	100	55	150	100	150	100	85	75
5"	125	150	150	45	-	-	-	-	150	100	150	100	85	75
6"	150	150	150	45	150	120	100	55	150	100	150	100	85	75
8"	200	150	150	40	150	120	100	55	150	85	150	85	75	60
10"	250	150	150	40	-	-	-	-	150	85	150	85	75	60
12"	300	100	100	30	-	-	-	-	100	60	100	60	45	30
14"	350	100	100	30	-	-	-	-	100	45	100	45	30	15

\*FKM seat butterfly valves have a low temperature limit of 23°F, regardless of body/disc material.

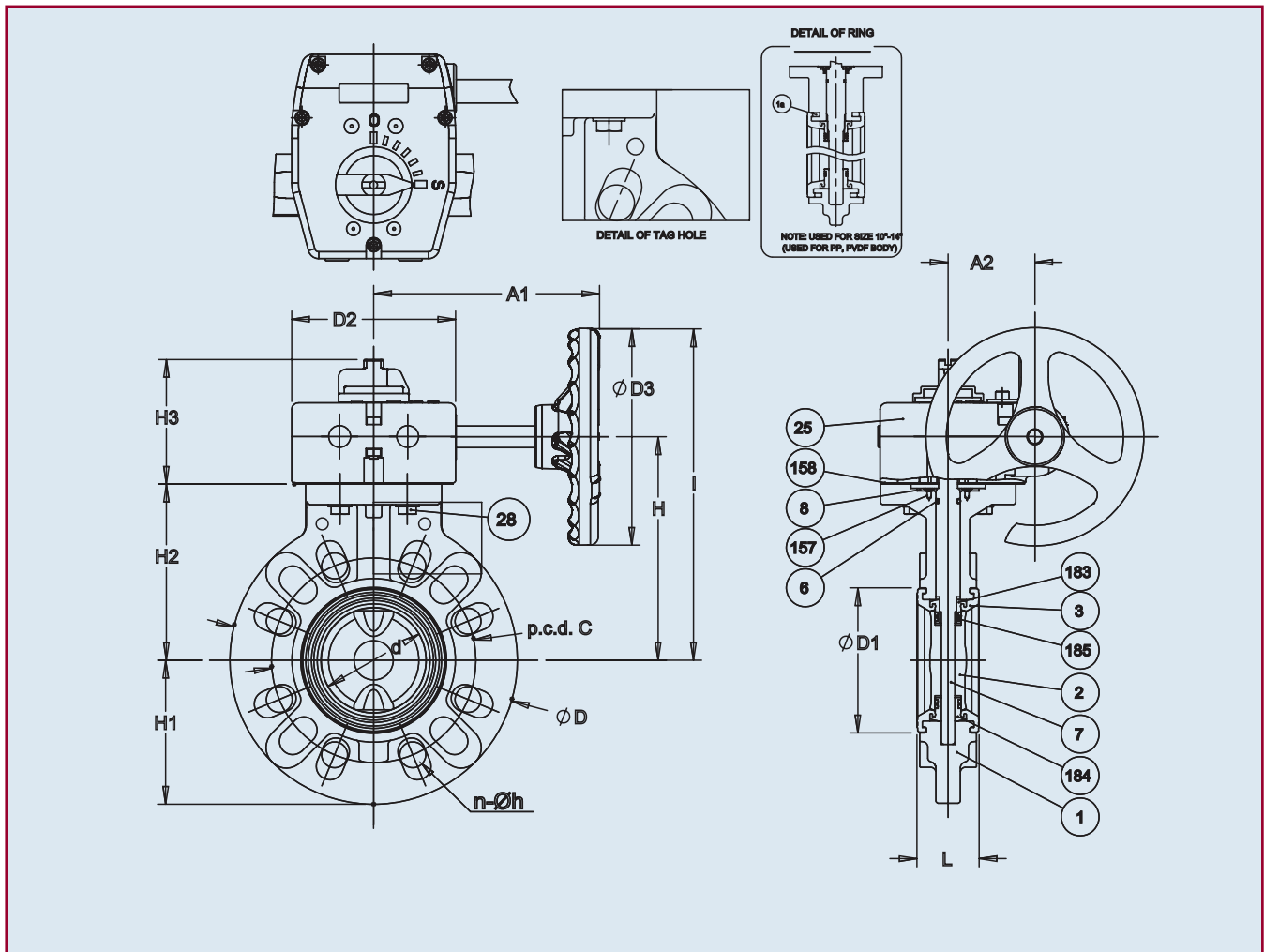
\*\* For Lug style data consult factory



## Dimensions (Sizes 1-1/2" – 8") (in.)

Nominal Size		d	ANSI Class 150			D	D1	L	H	H1	H2	H3	A
Inches	mm		C	n	h								
1-1/2"	40mm	1.77	3.88	4	0.62	5.91	2.83	1.54	6.14	2.95	3.94	2.20	8.66
2"	50mm	2.20	4.75	4	0.75	6.50	3.23	1.65	6.54	3.25	4.33	2.20	8.66
2-1/2"	65mm	2.72	5.50	4	0.75	7.28	3.78	1.81	6.93	3.64	4.72	2.20	8.66
3"	80mm	3.03	6.00	4	0.75	8.31	4.17	1.81	7.52	4.15	5.31	2.20	9.84
4"	100mm	4.02	7.50	8	0.75	9.37	5.31	2.20	8.11	4.69	5.91	2.20	9.84
5"	125mm	5.08	8.50	8	0.88	10.39	6.69	2.60	9.33	5.20	6.61	2.72	12.60
6"	150mm	5.91	9.50	8	0.88	11.22	7.52	2.80	9.92	5.61	7.20	2.72	12.60
8"	200mm	7.68	11.75	8	0.88	13.39	9.53	3.43	11.14	6.69	8.43	2.72	15.75

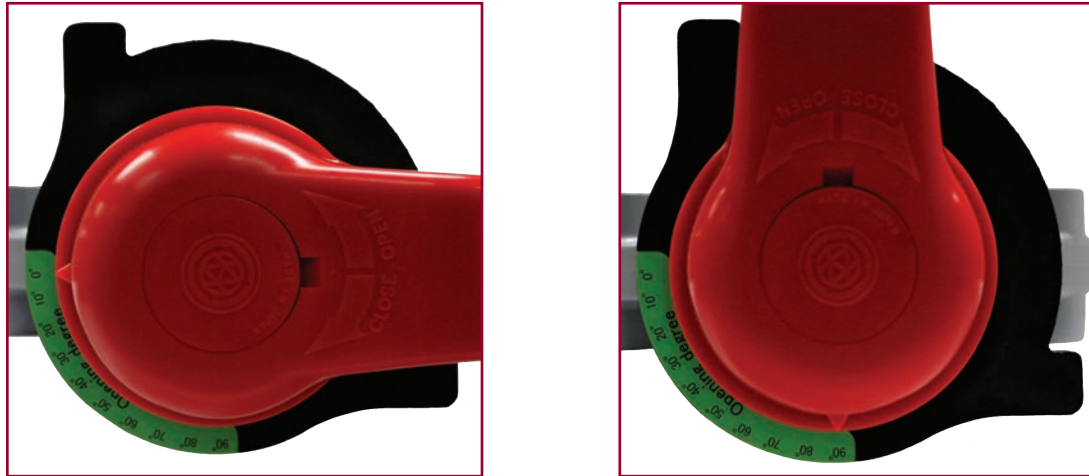
Note: The shape and appearance of assembly differ a little with nominal size compared to the drawing



## Dimensions (Sizes 1-1/2" – 14") (in.)

Nominal Size		d	ANSI Class 150			D	D1	D2	D3	L	H	H1	H2	H3	I	A1	A2	Number of handle rotations	Gear Box Type
Inches	mm		C	n	h														
1-1/2"	40mm	1.77	3.88	4	0.62	5.91	2.83	4.80	6.30	1.54	5.12	2.95	3.74	3.54	8.27	6.57	2.52	9.5	Type 241
2"	50mm	2.20	4.75	4	0.75	6.50	3.23	4.80	6.30	1.65	5.51	3.25	4.13	3.54	8.66	6.57	2.52		
2-1/2"	65mm	2.72	5.50	4	0.75	7.28	3.78	4.80	6.30	1.81	5.91	3.64	4.53	3.54	9.06	6.57	2.52		
3"	80mm	3.03	6.00	4	0.75	8.31	4.17	4.80	6.30	1.81	6.50	4.15	5.12	3.54	9.65	6.57	2.52		
4"	100mm	4.02	7.50	8	0.75	9.37	5.31	4.80	6.30	2.20	7.09	4.69	5.71	3.54	10.24	6.57	2.52		
5"	125mm	5.08	8.50	8	0.88	10.39	6.69	4.80	6.30	2.60	7.68	5.20	6.30	3.54	10.83	6.57	2.52		
6"	150mm	5.91	9.50	8	0.88	11.22	7.52	4.80	6.30	2.80	8.27	5.61	6.89	3.54	11.42	6.57	2.52		
8"	200mm	7.68	11.75	8	0.88	13.39	9.53	4.80	6.30	3.43	9.49	6.69	8.11	3.54	12.64	6.57	2.52		
10"	250mm	9.84	14.25	12	1.00	16.57	11.89	4.80	6.30	4.33	10.87	8.31	9.49	3.62	14.02	6.57	2.52		
12"	300mm	11.93	17.00	12	1.00	19.21	14.17	7.40	11.81	5.08	13.39	9.61	11.73	4.25	19.29	10.71	3.90	Type 243	
14"	350mm	13.82	18.75	12	1.12	21.22	15.47	7.40	11.81	5.08	14.45	10.63	12.80	4.25	20.35	10.71	3.90		

Note: The shape and appearance of assembly differ a little with nominal size compared to the drawing



Position Indication Closed - 0° to Open - 90° in 10° increments

## Sample Specification

Butterfly valves shall be Type-57P PVC, CPVC, PP or PVDF body with PVC, CPVC, PP or PVDF disc and either EPDM, Nitrile or FKM seat & seals. The liner shall be full seat design fully molded around the body where as only the disc and seat are wetted parts, feature raised convex rings on the face and is intended to be utilized as the mating flange gaskets. Valve shall have a spherical disc design with disc bushings with double O-ring seals for a high cycle life and ultimate sealing. Valve body shall have integral molded body stops and seat relief area to prevent over-tightening of the mating flanges from influencing valve operating torque. Valves shall accept flat faced flanges in accordance with ANSI B16.5 bolt pattern for 150 lb flanges. Valve stem shall be 316 SS, have PP stem retainer for valve stem retention, be non-wetted, and have engagement over the full length of the spherically designed disc. Valves shall be equipped with either Lever handle or Plasgear™ operator for manual operation. For lockout applications, the valve lever handle (sizes 1/1/2" – 8") shall have a molded provision for a padlock. The valve body shall feature 2 molded tag holes for the user. Valves sizes 1-1/2" – 14" shall feature a molded ISO 5211 bolt pattern for accessory mounting. PVC shall conform to ASTM D1784, Cell Classification 12454A, CPVC to ASTM D1784, Cell Classification 23567A, PP to ASTM D4101 Cell Classification PPO210B67272, and PVDF to ASTM D3222-91A, Cell Classification Type II.