



Damper Style Butterfly Valve

Standard Features

- For venting and flow control
- Highly corrosion resistant
- Low weepage
- Working temperature: -20° F – 250° F
- Maximum working pressure:

Sizes 1-1/2" – 3":	100 psi
Sizes 4" – 6":	70 psi
Size 8"	50 psi
Sizes 10" – 16"	40 psi
Sizes 18" – 24"	30 psi

Options

- Pneumatically and electrically actuated with accessories
- Gear operators for 1-1/2" - 6"
- 2" square nut on valve stem
- 2" square nut on gear
- Stem extensions (single stem and two-piece stem)
- Locking device
- Chain operated
- Other thermoplastic materials:

PVC body/ PP disc/PVC stem:

Sizes 1-1/2" – 14"

Temperature Range: 30 – 120° F

Max. Working Pressure:

Sizes 1-1/2" – 8": 15 psi

Sizes 10" – 14": 7 psi

PP body/PP disc/PP stem:

Sizes 1 - 1/2" – 24"

Temperature Range: - 5 ° F – 175 ° F

Max Working Pressure:

Sizes 1-1/2" – 8": 15 psi

Sizes 10" – 24": 7 psi

Specifications

Sizes: 1-1/2" – 24"

Model: Wafer Style

Operator: Lever: 1-1/2" – 8"

Gear: 8" – 24"

Body: PVDF

Disc: PVDF

Seal: PTFE ("V"-Packing)

Stem: Titanium

Parts List (Lever: Sizes 1-1/2" – 8")

PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Body	1	PVDF
2	Disc	1	PVDF
3	Stem	1	Titanium
4	V – Packing	1 set	PTFE
5	Bush	1	PTFE
6	Gland	1	PVDF
7	Screw (B)	1	Stainless Steel 304
8	Handle	1	PP
8a	Spring	1	Stainless Steel 304
8b	Handle Lever	1	Stainless Steel 304
8c	Pin	1	Stainless Steel 304
9	Washer	1	Stainless Steel 304
10	Nut	1	Stainless Steel 304
1a	Locking Plate	1	Stainless Steel 304
1b	Screw (A)	3	Stainless Steel 304



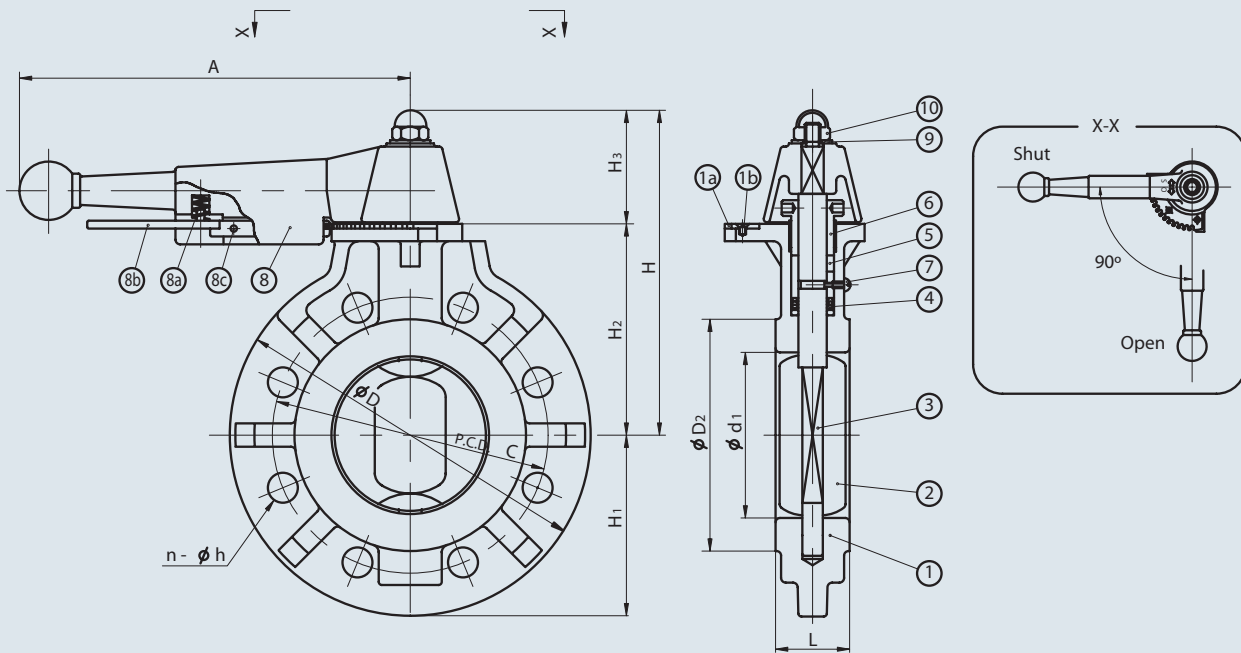
OPTIONAL
PVC DAMPER STYLE

Sample Specification

All Damper Style butterfly valves shall be of PVDF body and disc with low weepage rate. The stem shall be of Titanium and V-packing of PTFE. PVDF shall conform to ASTM D3222 Cell Classification Type II. The operators shall be lever (1-1/2" thru 8") or gear (8" thru 24"). The butterfly valves shall be wafer style, Valves shall be rated to 100 psi (1-1/2" – 3"), 75 psi (4" – 6"), 60 psi (8"), 45 psi (10" – 16"), and 30 psi (18" – 24") at 70 degrees F., as manufactured by Asahi/America.

Lever Operated Damper

Butterfly Valves



Dimensions (Lever: Sizes 1-1/2" – 8")

NOMINAL SIZE		ANSI CLASS 150											
INCHES	mm	d1	C	n	h	D	D2	L	H	H1	H2	H3	A
1 1/2	40	1.57	3.88	4	0.62	5.91	3.27	1.26	6.54	2.95	3.78	2.76	8.62
2	50	1.97	4.75	4	0.75	6.50	3.50	1.38	6.77	3.27	4.02	2.76	8.62
2 1/2	65	2.64	5.50	4	0.75	7.28	4.13	1.46	7.17	3.66	4.41	2.76	8.62
3	80	3.07	6.00	4	0.75	7.87	4.72	1.46	7.32	3.94	4.57	2.76	8.62
4	100	3.94	7.50	8	0.75	9.02	5.94	1.85	8.03	4.53	5.28	2.76	9.80
5	125	4.92	8.50	8	0.88	10.00	7.09	2.24	10.43	5.00	6.42	4.02	12.72
6	150	5.83	9.50	8	0.88	11.22	8.50	2.44	10.94	5.63	6.93	4.02	12.72
8	200	7.64	11.75	8	0.88	13.39	10.40	2.99	12.28	6.69	8.27	4.02	12.72

Cv Values

NOMINAL SIZE		Cv (at various opening degrees)		
INCHES	mm	30°	60°	90°
1 1/2	40	2.9	43.3	71
2	50	3.9	56.1	92
2 1/2	65	5.9	85.4	140
3	80	9.3	134.2	220
4	100	15.1	231	380
5	125	30.9	445	730
6	150	46.6	671	1100
8	200	106	1425	2500

Pressure vs. Temp.

Body		PVDF
Disc		PVDF
NOMINAL SIZE		-40° F 250° F
INCHES	mm	PSI
1 1/2	40	100
2	50	100
2 1/2	65	100
3	80	100
4	100	75
5	125	75
6	150	75
8	200	60

Weight (POUNDS)

NOMINAL SIZE		LEVER OPERATED
INCHES	mm	
1 1/2	40	2.20
2	50	3.30
2 1/2	65	3.75
3	80	3.75
4	100	5.29
5	125	9.92
6	150	12.13
8	200	41.89

Troubleshooting

What if weepage through disc increases?

1. Body or disc abraded. Replace defective part.
2. Travel stop is not set correctly. (May require travel stop adjustment).

What if fluid leaks between body and mating flange?

1. Bolts not tightened properly. Retighten diagonally and uniformly.

What if fluid leaks from gland?

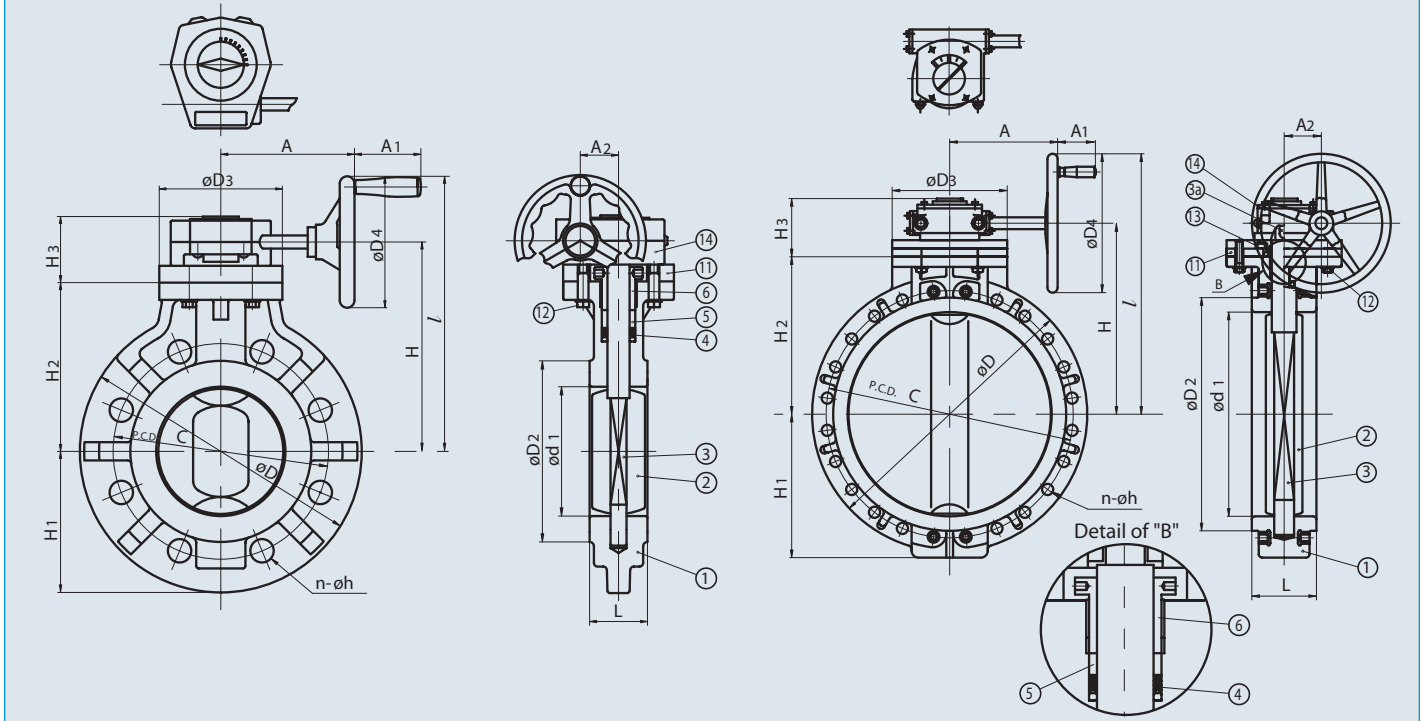
1. Gland is loose. Retighten packing holder.
2. V-packing is abraded. Replace V-packing.

What if valve cannot be operated?

1. Lever, gear box or stem damaged. Replace defective part.

Gear Operated Damper

Butterfly Valves



Dimensions (Gear: Sizes 8" - 24")

NOMINAL SIZE		ANSI CLASS 150																	
INCHES	mm	d1	C	n	h	D	D2	D3	D4	L	H1	H2	H3	H	l	A	A1	A2	
8	200	7.64	11.75	8	0.88	13.39	10.40	7.87	7.87	2.99	6.69	8.27	3.15	10.04	13.19	6.57	3.15	1.85	
10	250	9.72	14.25	12	1.00	15.98	12.64	7.87	7.87	3.78	7.99	9.45	3.15	11.22	15.16	7.63	3.74	2.36	
12	300	11.73	17.00	12	1.00	19.02	14.57	9.25	9.84	4.57	9.63	11.69	3.50	13.39	18.31	8.35	3.74	2.99	
14	350	13.66	18.75	12	1.12	20.47	16.54	9.25	9.84	4.57	10.24	11.81	3.50	13.46	18.39	8.35	3.74	2.99	
16	400	15.51	21.25	16	1.12	23.62	18.50	9.25	9.84	6.18	11.81	13.78	3.50	15.39	20.31	8.35	3.74	2.99	
18	450	17.36	22.75	16	1.25	24.80	20.67	13.39	16.14	6.57	12.40	14.57	7.20	18.50	26.57	12.56	3.35	4.33	
20	500	19.21	25.00	20	1.25	27.52	22.64	13.39	16.14	6.97	13.78	15.75	7.20	19.69	27.76	12.56	3.35	4.33	
24	600	23.62	29.50	20	1.38	32.01	27.01	13.39	16.14	7.76	16.69	18.31	7.20	22.24	30.31	12.56	3.35	4.33	

Parts List (Gear: Sizes 8" - 24")

PARTS			
NO.	DESCRIPTION	PCS.	MATERIAL
1	Body	1	PVDF
2	Disc	1	PVDF
3	Stem	1	Titanium
4	V - Packing	1 set	PTFE
5	Bush	1	PTFE (sizes 14"-24") PVDF (sizes 8"-12")
6	Gland	1	PVDF
11	Spacer	1	CPVC
12	Bolt (A)	1	Stainless Steel 304
13	Bolt (B)	1	Stainless Steel 304
14	Gear Box	1	Powder Coated Aluminium
3a	Key	1	Stainless Steel 304

(NOTE: GEAR OPERATED VALVE IS STANDARD 8" - 16"; SIZES 1-1/2" - 6" ARE OPTIONS.)

Pressure vs. Temp./Cv/ Weight (LBS.)

Body			PVDF		NOMINAL SIZE	Cv	NOMINAL SIZE		GEAR OPERATED
Disc			PVDF				NOMINAL SIZE		
NOMINAL SIZE			-40° F 250° F				INCHES mm		
INCHES	mm	PSI	INCHES	mm	INCHES	mm	INCHES	mm	
8	200	60	8	200	2500	8	200	46.30	
10	250	45	10	250	3600	10	250	55.12	
12	300	45	12	300	5160	12	300	84.22	
14	350	45	14	350	6440	14	350	89.73	
16	400	45	16	400	8340	16	400	119.05	
18	450	30	18	450	10890	18	450	122.35	
20	500	30	20	500	14060	20	500	138.89	
24	600	30	24	600	18500	24	600	186.29	