

## Damper Style Butterfly Valve

Specifications	
<b>Sizes:</b>	1-1/2" - 24"
<b>Model:</b>	Wafer Style
<b>Operator:</b>	Lever: 1-1/2" - 8" Gear: 8" - 24"
<b>Body:</b>	PVDF
<b>Disc:</b>	PVDF
<b>Seal:</b>	PTFE ("V"-Packing)
<b>Stem:</b>	Titanium

### 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":	55 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

### 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



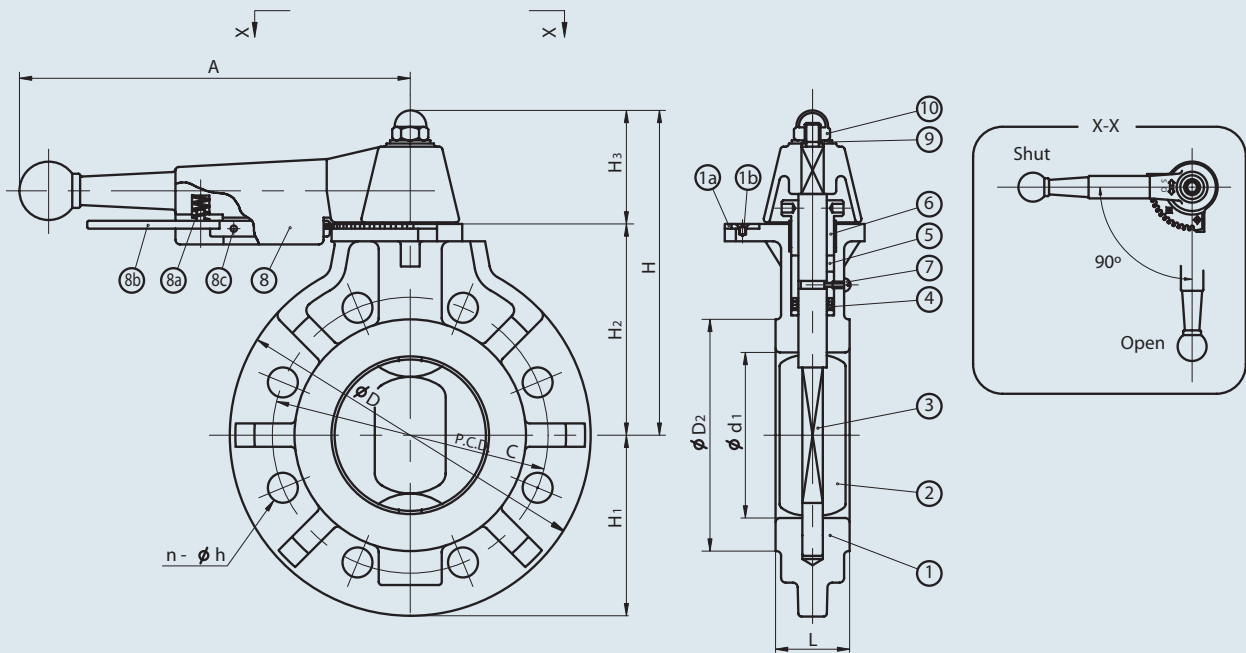
OPTIONAL  
PVC DAMPER STYLE

### 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 Inc.

# Lever Operated Damper

# Butterfly Valves



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

## Cv Values

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

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?

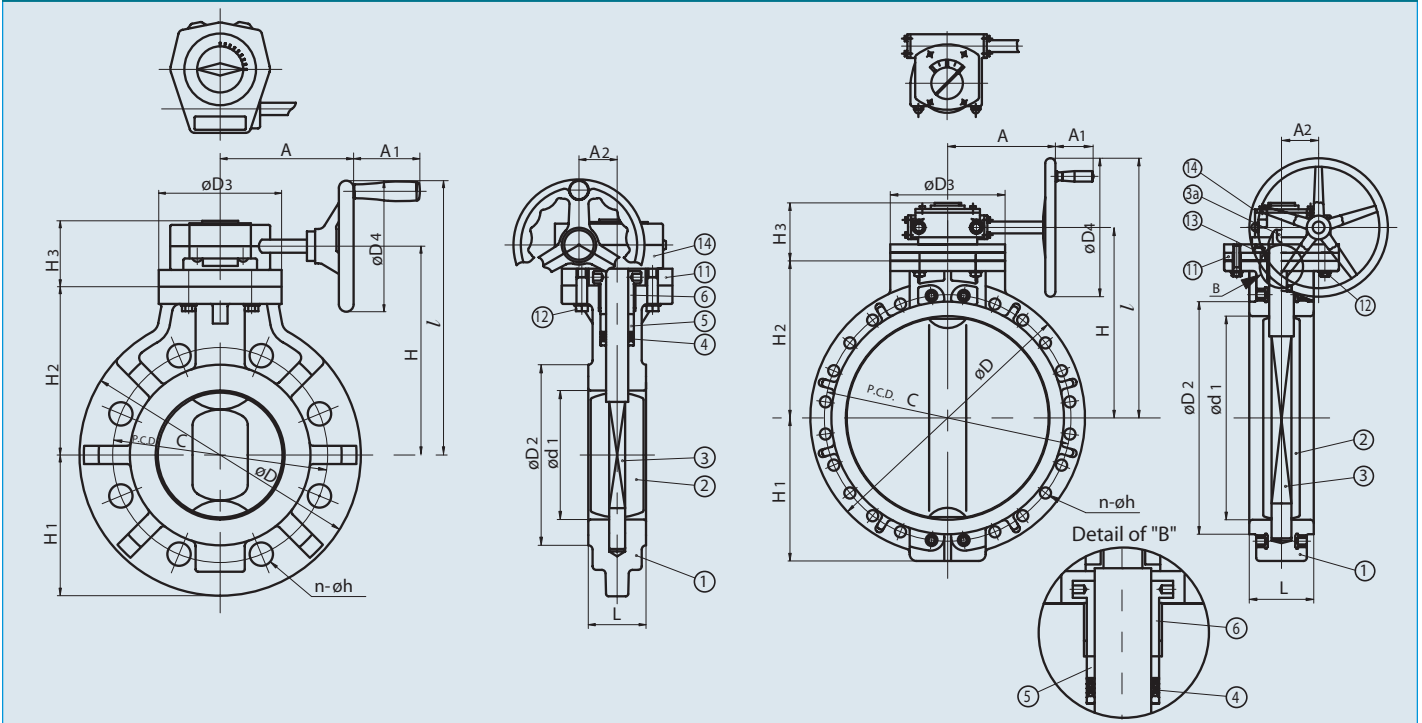
1. Gland is loose. Retighten packing holder.
2. V-packing is abraded. Replace V-packing.

### 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					D	D2	D3	D4	L	H1	H2	H3	H	l	A	A1	A2
	INCHES	mm	d1	C	n													
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			Disc			NOMINAL SIZE			Cv	NOMINAL SIZE			GEAR OPERATED
NOMINAL SIZE			NOMINAL SIZE			NOMINAL SIZE							
INCHES	mm	PSI	INCHES	mm	PSI	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
8	200	60	8	200	60	8	200	2500	8	200	46.30	8	200
10	250	45	10	250	45	10	250	3600	10	250	55.12	10	250
12	300	45	12	300	45	12	300	5160	12	300	84.22	12	300
14	350	45	14	350	45	14	350	6440	14	350	89.73	14	350
16	400	45	16	400	45	16	400	8340	16	400	119.05	16	400
18	450	30	18	450	30	18	450	10890	18	450	122.35	18	450
20	500	30	20	500	30	20	500	14060	20	500	138.89	20	500
24	600	30	24	600	30	24	600	18500	24	600	186.29	24	600