



BYB Series Industrial Butterfly Valves Lever Operated Only



2" to 8" • Bodies - PVC, CPVC, PPL, and PVDF • Disks - CPVC, PPL, and PVDF



A Better Butterfly Valve

Hayward's BYB Series Industrial Butterfly Valves 2" through 8" are rated at a full 150 PSI. Unlike other plastic butterfly valves, these valves are constructed from a one piece body that incorporates slot designed bolt holes to accommodate ANSI and DIN pipe flanges. Their heavy duty construction stands up to the most demanding applications.

Extra Features, No Extra Cost

BYB Series Butterfly Valves feature a stainless steel stem and a lever handle with a built in lockout feature.

Better Sealing

Other plastic butterfly valves have only a thin o-ring on the disk to seal the valve, but Hayward valves feature a full body double liner seal and a liner retention slot. This means that the process media never contacts the valve body. And you can count on the full liner seal to perform reliably, year after year.

No Metal, No Corrosion

These valves have no metal in contact with the process media. They cannot corrode or rust – nor will they contaminate sensitive fluids flowing through them.

Features

- Rated at 150 PSI
- Stainless Steel Stem
- Fully Supported Flange Bolt Holes
- FPM or EPDM Liners
- Wafer Body Design
- Slot Design for ANSI, DIN

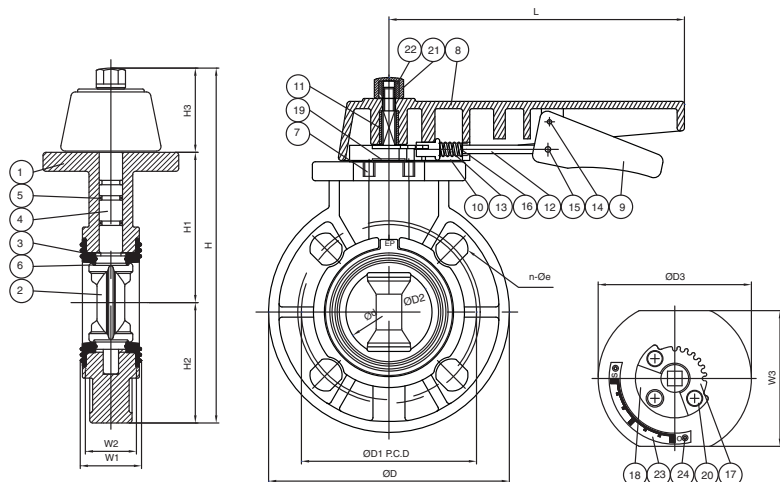
Options

- Gear Operators
- Actuation Available
- Type 316 SS or 304 SS Stems



Technical Information

Lever Handle Operator



Parts List Lever Handle Operator Butterfly Valves

- | | |
|---------------------|-----------------------|
| 1. Body | 13. Spring |
| 2. Disc | 14. Spring Pin |
| 3. Seat Seal | 15. Spring Pin |
| 4. Stem | 16. Washer |
| 5. Stem O-Ring | 17. Locking Plate |
| 6. Disc O-Ring | 18. Gear Seat |
| 7. Insert Nut 2"-6" | 19. Stem Washer 2"-5" |
| 8. Large Handle | 20. Bolt |
| 9. Small Handle | 21. Nut |
| 10. Spring Lock | 22. Insert Nut |
| 11. Handle Insert | 23. Level |
| 12. Handle Lever | 24. Rivet |

Dimensions - Inches / Millimeters (Lever Handle Operator)

Size	D1	n-Øe	D	D2	D3	L	H	H1	H2	H3	W1	W2	W3
2 / 50	4.76 / 121	4-19	6.50 / 165	2.22 / 56.5	4.13 / 105	7.83 / 199	9.78 / 248.5	4.06 / 103	3.25 / 82.5	2.48 / 63	1.69 / 43	1.38 / 35	3.70 / 94
2-1/2 / 65	5.51 / 140	4-19	7.28 / 185	2.74 / 69.5	4.72 / 120	7.83 / 199	10.53 / 267.5	4.45 / 113	3.64 / 92.5	2.44 / 62	1.81 / 46	1.42 / 36	3.70 / 94
3 / 80	5.98 / 152	4-19	7.87 / 200	3.13 / 79.5	4.84 / 123	7.83 / 199	10.91 / 277	4.53 / 115	3.94 / 100	2.44 / 62	1.81 / 46	1.42 / 36	3.70 / 94
4 / 100	9.25 / 191	8-19	9.02 / 229	4.04 / 102.5	5.31 / 135	9.92 / 252	12.44 / 316	5.33 / 135.5	4.51 / 114.5	2.60 / 66	2.20 / 56	1.85 / 47	3.94 / 100
5 / 125	8.50 / 216	8-22	10.12 / 257	5.12 / 130	6.46 / 164	11.69 / 297	14.70 / 373.5	6.50 / 165	5.06 / 128.5	3.15 / 80	2.72 / 69	2.24 / 57	4.33 / 110
6 / 150	9.49 / 241	8-22	11.22 / 285	6.02 / 153	6.65 / 169	11.69 / 297	15.93 / 404.5	6.97 / 177	5.61 / 142.5	3.27 / 83	2.78 / 70.5	2.44 / 62	3.94 / 100
8 / 200	11.73 / 298	8-22	13.50 / 343	7.99 / 203	7.91 / 201	11.69 / 297	18.29 / 464.5	8.27 / 210	6.75 / 171.5	3.27 / 83	3.35 / 85	2.99 / 76	4.80 / 122

Selection Chart

Size	Body Material	Disc Material	Stem Material*	Liner	Operator	Pressure Rating
2" to 8"	PVC, CPVC, PPL, & PVDF	CPVC, PPL, & PVDF	410 SSSL	FPM or EPDM	Lever	150 PSI @ 70°F Non-Shock

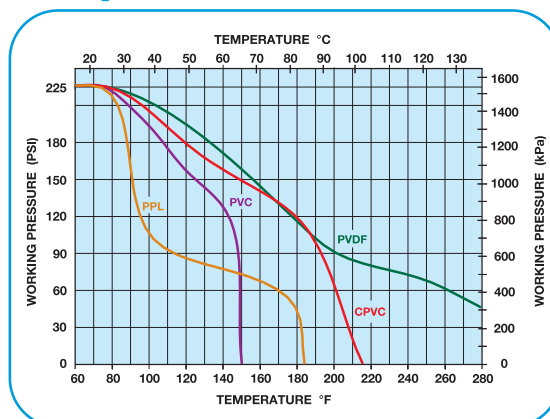
*Type 316 SS or 304 SS stems available. Consult factory.

Pressure Loss Calculation Formula

$$\Delta P = \left[\frac{Q}{Cv} \right]^2$$

ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

Operating Temperature/Pressure





BYB Series Industrial Butterfly Valves

Gear Operated Only



2" to 24" Bodies - PVC, CPVC, PPL, and PVDF
Disks - CPVC, PPL, and PVDF



Designed for Performance and Flexibility

Industrial Series Butterfly Valves from Hayward are specially designed to take into account application parameters encountered in larger size piping systems. The rugged, one piece body stands up to high flow rates and elevated stress conditions. The valve features a full face liner that eliminates the need for expensive flange gaskets. The valve itself is fully lined and the Type 410 stainless steel stem is completely isolated from the process media.

The valve's molded design makes for exceptional application flexibility. Because both the body and the disc can be molded in a variety of materials, it is easy and cost effective to assemble a valve that conforms to the requirements of special, demanding applications.

Easy Installation, Easy Operation

Because these valves are significantly lighter than metal equivalents, installation is relatively easy and can often be accomplished by one person. Positive manual valve operation is ensured by the heavy duty, high torque output gear box. Removal of the gear box allows a variety of pneumatic and electric actuators to be installed on the large mounting pad. If a particular actuator does not mount directly to the valve stem, a variety of adapters and mounting accessories are available so that most actuators can be installed.

Replacement for Metal Valves

All plastic construction means the valves will never stick, fail, or jam due to rust or corrosion – making them an excellent alternative to metal valves in many applications.

Features

- Stainless Steel Stem
- Choice of FPM or EPDM Liners
- High Torque Gear Box
- Easily Modified for Unique Applications
- Replaces Metal Valves

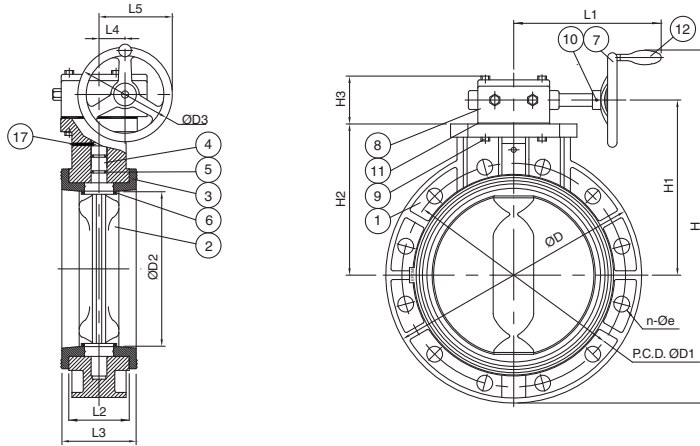
Options

- Actuation Available
- Type 316 SS and 304 SS Stems



Technical Information

Gear Box Operator



Parts List Gear Box Operator Butterfly Valves

- | | |
|------------------|------------------|
| 1. Body | 10. Spring Pin |
| 2. Disc | 11. Packing |
| 3. Seat Seal | 12. Small Handle |
| 4. Stem | 13. Key |
| 5. Stem O-Ring | 14. Seal |
| 6. Disc O-Ring | 15. Metal Stat |
| 7. Handwheel | 16. Insert Nut |
| 8. Gear Box | 17. Pin |
| 9. Bolt & Washer | |

Dimensions - Inches / Millimeters

Size	D1	n-Oe	D	D2	D3	H	H1	H2	H3	L1	L2	L3	L4	L5
2 / 50	4.76 / 121	4-19	6.50 / 165	2.22 / 56.5	6.26 / 159	11.30 / 287	4.92 / 125	4.06 / 103	2.09 / 53	5.51 / 140	1.36 / 34.5	1.69 / 43	1.63 / 41.5	4.76 / 121
2-1/2 / 65	5.51 / 140	4-19	7.28 / 185	2.74 / 69.5	6.26 / 159	12.09 / 307	5.31 / 135	4.45 / 113	2.09 / 53	5.51 / 140	1.46 / 37	1.81 / 46	1.63 / 41.5	4.76 / 121
3 / 80	5.98 / 152	4-19	7.87 / 200	3.13 / 79.5	6.26 / 159	12.17 / 309	5.39 / 137	4.53 / 115	2.09 / 53	5.51 / 140	1.46 / 37	1.81 / 46	1.63 / 41.5	4.76 / 121
4 / 100	7.52 / 191	8-19	9.02 / 229	4.04 / 102.5	6.26 / 159	13.84 / 351.5	5.79 / 147	5.33 / 135.5	2.09 / 53	5.51 / 140	1.85 / 47	2.20 / 56	1.63 / 41.5	4.76 / 121
6 / 150	9.49 / 241	8-22	11.22 / 285	6.02 / 153	7.95 / 202	18.23 / 463	8.70 / 221	6.97 / 177	3.05 / 77.5	11.20 / 284.5	2.44 / 62	2.78 / 70.5	2.36 / 60	6.34 / 161
8 / 200	11.73 / 298	8-22	13.50 / 343	7.99 / 203	7.95 / 202	20.67 / 525	10.00 / 254	8.27 / 210	3.05 / 77.5	11.20 / 284.5	2.99 / 76	3.35 / 85	2.36 / 60	6.34 / 161
10 / 250	14.25 / 362	12-25	16.18 / 411	10.04 / 255	7.95 / 202	23.27 / 591	11.26 / 286	9.53 / 242	3.05 / 77.5	11.20 / 284.5	3.76 / 95.5	4.29 / 109	2.36 / 60	6.34 / 161
12 / 300	17.01 / 432	12-25	19.29 / 490	12.19 / 309.5	9.84 / 250	27.80 / 706	13.54 / 344	11.89 / 302	2.99 / 76	12.99 / 330	4.59 / 116.5	5.24 / 133	2.36 / 60	7.28 / 185
14 / 350	18.74 / 476	12-29	20.87 / 530	14.17 / 360	9.84 / 250	28.82 / 732	13.46 / 342	11.81 / 300	3.07 / 78	12.99 / 330	4.45 / 113	5.00 / 127	2.36 / 60	7.28 / 185
16 / 400	21.26 / 540	16-29	23.62 / 600	15.65 / 397.5	11.81 / 300	34.21 / 869	16.73 / 425	13.78 / 350	4.72 / 120	13.90 / 353	6.00 / 152.5	6.57 / 167	3.19 / 81	9.09 / 231
18 / 450	22.76 / 578	16-32	24.80 / 630	17.81 / 452.5	11.81 / 300	35.83 / 910	17.52 / 445	14.57 / 370	4.61 / 117	13.90 / 353	6.44 / 163.5	7.05 / 179	3.19 / 81	9.09 / 231
20 / 500	25.00 / 635	20-32	27.40 / 696	19.76 / 502	15.98 / 406	40.83 / 1037	19.13 / 486	16.14 / 410	5.63 / 143	15.35 / 390	6.69 / 170	7.44 / 189	4.72 / 120	12.72 / 323
24 / 600	29.8 / 750	20-35	32.01 / 813	23.74 / 603	15.98 / 406	44.00 / 1120	20.20 / 513	18.31 / 465	5.24 / 133	13.78 / 350	7.52 / 191	8.27 / 210	5.31 / 135	13.18 / 335

Selection Chart

Size	Body Material	Disc Material	Seals	Operators	Pressure Rating
2"-10"	PVC, CPVC, PPL and PVDF	CPVC, PPL or PVDF	EPDM or FPM	Gearbox	150 PSI @ 70°F Non-Shock
12"	PVC, CPVC, PPL and PVDF	CPVC, PPL or PVDF	EPDM or FPM	Gearbox	100 PSI @ 70°F Non-Shock
14"-16"	PVC, CPVC, PPL and PVDF	CPVC, PPL or PVDF	EPDM or FPM	Gearbox	86 PSI @ 70°F Non-Shock
18"	PVC, CPVC, PPL and PVDF	CPVC, PPL or PVDF	EPDM or FPM	Gearbox	72 PSI @ 70°F Non-Shock
20"-24"	PVC, CPVC, PPL and PVDF	CPVC, PPL or PVDF	EPDM or FPM	Gearbox	51 PSI @ 70°F Non-Shock

Operating Temperature/Pressure

