

**HAYWARD****Flow Control Systems**

# 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

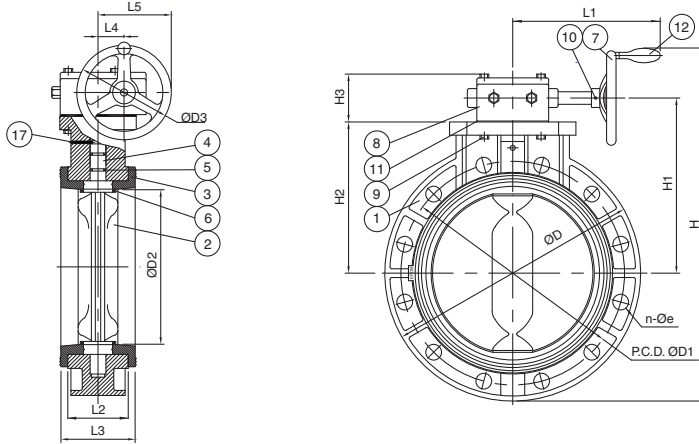
### **Options**

- 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-Øe	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

