

Gear Box Butterfly Valve

FEATURES

- Available in CPVC, PVC, PVDF and PP construction
- Bolt pattern meets standard ANSI requirements
- Sizes available 8" to 12"
- Seats EPDM or Viton® (FPM)
- Corrosion resistant materials of construction
- Excellent flow characteristics
- Lower flow loss
- Lower torque and greater sealing capacity
- With clear indication of disc opening degree
- Working pressure (8"~10") 150psi (12") 100psi
- 8" valve is available in lever handle



The Gear Box Valve is ideally suited for flow control in a minimum piping space.

Butterfly Valve - Part Numbers

| SIZE | 8" Lever Handle | 8" Gear Operated | 10" | 12" |
|----------------------|-----------------|------------------|----------|----------|
| MM | 200 mm | 200 mm | 250 mm | 300 mm |
| Material PVC/EPDM | 31350019 | 31350019G | 31350020 | 31350022 |

Operating Pressures (PSI)

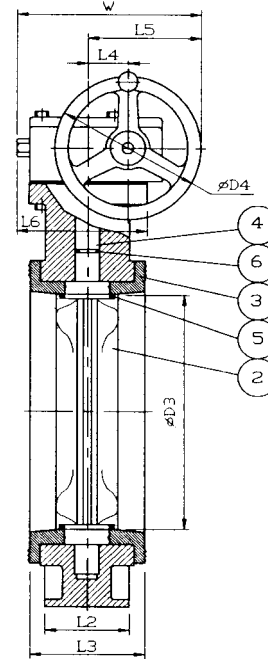
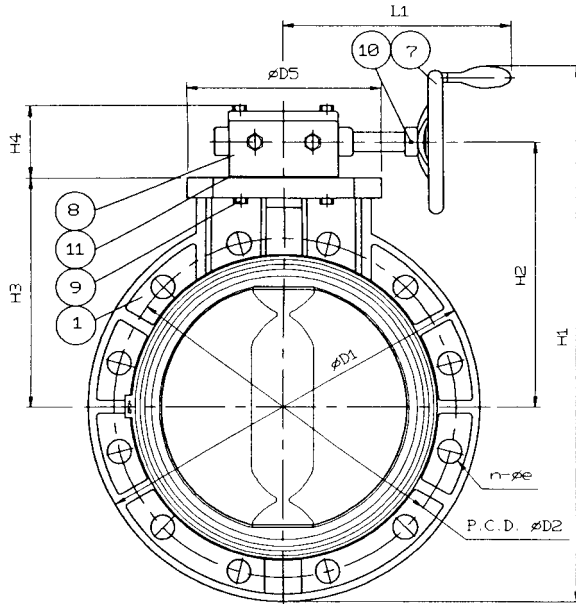
| Valve Size | PVC BODY/PP DISC | | | PP BODY/PP DISC | | PVDF/PVDF |
|------------|--------------------|---------------|---------------|----------------------|---------------|------------------------|
| | 0-50 C 30-120 F | 60 C 140 F | 83 C 180 F | -20-60 C -5-140 F | 80 C 175 F | -40-120 C -40-250 F |
| 8" | 150 | 40 | 20 | 150 | 85 | 100 |
| 10" | 150 | 40 | 20 | 150 | 85 | 60 |
| 12" | 100 | 30 | 15 | 100 | 60 | 60 |

Fluid Flow Coefficient Cv*

| Valve Size | | Degrees/Open | | | | | | | | |
|------------|-----|--------------|-----|-----|-----|------|------|------|------|------|
| | | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| in | mm | | | | | | | | | |
| 8" | 200 | 31 | 80 | 142 | 291 | 375 | 792 | 1348 | 1825 | 1930 |
| 10" | 250 | 60 | 145 | 262 | 525 | 700 | 1432 | 2415 | 3220 | 3495 |
| 12" | 300 | 85 | 227 | 395 | 755 | 1040 | 2075 | 3540 | 4620 | 5005 |

Cv* is the number of GPM of water at 73°F that will pass through a given flow restriction at a pressure drop of 1 psi.

Gear Box Butterfly Valve Specifications



Bolt Torques

| Valve Size (in) | Valve Size (mm) | Flange Bolt Torques (Ft./Lbs.) |
|-----------------|-----------------|--------------------------------|
| 8" | 200 | 40 |
| 10" | 250 | 40 |
| 12" | 300 | 43 |

Dimensions

| SIZE | 8" 200 mm | 10" 250 mm | 12" 300 mm |
|------|------------|------------|------------|
| D1 | 343 | 411 | 490 |
| D2 | DIN 295 | 350 | 400 |
| | ANSI 298.5 | 362 | 432 |
| | JIS 290 | 355 | 400 |
| D3 | 200 | 255 | 311 |
| D4 | 200 | 200 | 250 |
| D5 | 200 | 205 | 236 |
| H1 | 540 | 590 | 712 |
| H2 | 250 | 280 | 337 |
| H3 | 210 | 240 | 297 |
| H4 | 76 | 76 | 76 |
| L1 | 277 | 278 | 282 |
| L2 | 68 | 68 | 106 |
| L3 | 87 | 110 | 132 |
| L4 | 57 | 57 | 61 |
| L5 | 157 | 157 | 186 |
| L6 | 130 | 130 | 190 |
| W | 240 | 240 | 244 |
| n-øe | DIN 8-23 | 12-23 | 12-23 |
| | ANSI 8-23 | 12-25 | 12-25 |
| | JIS 12-23 | 12-25 | 16-25 |

Components and Materials

| Part No. | Component | Qty | Material |
|----------|---------------|-----|----------------------------|
| 1 | Body | 1 | PVC, CPVC, PVDF, PP, PP+MP |
| 2 | Disc | 1 | PVC, CPVC, PVDF, PP, PP+MP |
| 3 | Seat | 1 | EPDM, FPM, NBR |
| 4 | Stem | 1 | SUS 410 |
| 5 | O-Ring | 2 | EPDM, NBR, Viton® |
| 6 | O-Ring | 2 | EPDM, NBR, Viton® |
| 7 | Handwheel | 1 | FC 20 |
| 8 | Gear Box | 1 | CI Powder Paint |
| 9 | Bolt & Washer | 4 | Sus 304 |
| 10 | Spring Pin | 1 | Steel |
| 11 | Packing | 1 | EPDM |

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