# Butterfly Valves

## 141/143 SERIES

### GENERAL PURPOSE/ECONOMY BUTTERFLY VALVES

Apollo® 141/143 Series valves are ideal for use in industrial and HVAC/mechanical markets. 141 Series is a wafer style valve (2" - 30"); 143 Series is a companion lug (2" - 30"). Both are rated at 200 PSI (2"-12") and 150 PSI (14"-30") bubble-tight shut-off between flanges. These valves are designed for reliable performance in hot and cold water applications, treated or untreated, on-off or throttling, control isolation, flow balance or diversion tasks. Valves are 100 percent factory tested in both operational directions. They feature an extended neck length to provide a minimum 2" clearance between valve top plate and pipe flange. 141/143 Series meet MSS SP-67. All 143 series valves are equipped with retainer screws for dead-end service at full rated pressure. Available with three disc materials: Nickel-Plated Ductile Iron, Aluminum Bronze and Stainless Steel. Available with two seat materials: EPDM and Buna-N.

**141**
**Wafer**

**143**
**Lug**

### FEATURES

- Ductile iron body ASTM A536
- 416SS shaft
- Compatible with ANSI 125# and 150# flanges
- Sizes 2” to 12” have square drive stem for ease of direct mounting actuators.
- ISO 5211 top plate allows choice of Apollo® actuators and manual operators
- MSS SP67
- AWWA C504 Sec 5

Select the valve model number **1 4 1 - 0 6 - D B E 1 (S) 1**

**SERIES NUMBER**
141 - Wafer Body
143 - Lug Body

**SIZE (In.)**
02 - 2
25 - 2.5
03 - 3
04 - 4
05 - 5
06 - 6
08 - 8
10 - 10
12 - 12
14 - 14
16 - 16
18 - 18
20 - 20
24 - 24
30 - 30

**BODY MATERIAL**
D - Ductile Iron

**DISC MATERIAL**
B - Aluminum Bronze
D - Ductile Iron A536 Nickel Plated
S - Stainless Steel, CF8M

**SEAT MATERIAL**
E - EPDM
N - BUNA-N

**SHAFT MATERIAL**
1 - 416 SS

**SQUARE SHAFT**
2” - 12” Only
14” - 30” Blank

**OPERATOR**
0 - None
1 - 10 Position Handle
2 - Gear Operator
3 - Infinite Position Handle
4 - Locking Handle
5 - Gear Operator w/Chainwheel
7 - Locking Gear Operator
8 - Locking Gear Operator w/Chainwheel

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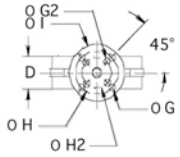
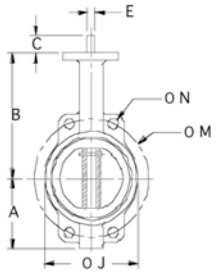
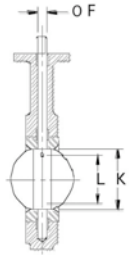


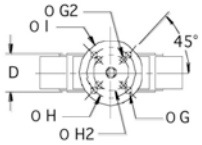



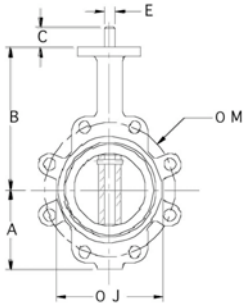



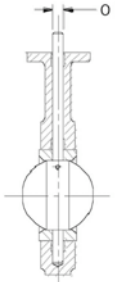

### DOUBLE-D AND KEYED STEM

| Size (in) | Size (mm) | Dimensions A | B | C | D | E | ØF | G | G2 | Key |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 50 | 3.25 | 6.375 | 1.25 | 1.75 | 0.394 | 0.496 | 0.375 | -- | -- |
| 2-1/2 | 65 | 3.75 | 6.880 | 1.25 | 1.88 | 0.394 | 0.496 | 0.375 | -- | -- |
| 3 | 80 | 4.00 | 7.130 | 1.25 | 1.88 | 0.394 | 0.496 | 0.375 | -- | -- |
| 4 | 100 | 4.88 | 7.880 | 1.25 | 2.13 | 0.472 | 0.621 | 0.375 | -- | -- |
| 5 | 125 | 5.38 | 8.380 | 1.25 | 2.25 | 0.551 | 0.745 | 0.375 | -- | -- |
| 6 | 150 | 5.88 | 8.880 | 1.25 | 2.25 | 0.551 | 0.745 | 0.375 | -- | -- |
| 8 | 200 | 7.13 | 10.250 | 1.75 | 2.50 | 0.669 | 0.870 | 0.563 | 0.438 | -- |
| 10 | 250 | 8.25 | 11.500 | 1.88 | 2.75 | 0.866 | 1.120 | 0.563 | 0.438 | -- |
| 12 | 300 | 9.75 | 13.250 | 1.88 | 3.13 | 0.866 | 1.244 | 0.563 | -- | -- |
| 14 | 350 | 11.00 | 14.500 | 1.88 | 3.13 | 0.945 | 1.244 | 0.563 | -- | -- |
| 16 | 400 | 12.00 | 15.750 | 2.00 | 3.50 | | 1.313 | 0.563 | -- | .313 sq |
| 18 | 450 | 14.38 | 16.630 | 2.00 | 4.25 | | 1.500 | 0.813 | -- | .375 sq |
| 20 | 500 | 14.63 | 18.880 | 2.50 | 5.25 | | 1.625 | 0.813 | -- | .375 sq |
| 24 | 600 | 18.00 | 22.130 | 2.75 | 6.13 | | 2.000 | 0.813 | -- | .500 sq |
| 30 | 750 | 25.00 | 25.500 | 4.00 | 6.88 | -- | 2.500 | 0.813 | -- | .500 sq |

| Size (in.) | Dimensions H | H2 | I | J | K | L | N (141) | M | # Holes | Tap UNC |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 2.756 | -- | 3.54 | 4.00 | 2.09 | 1.113 | 0.688 | 4.75 | 4 | .625-11 |
| 2-1/2 | 2.756 | -- | 3.54 | 4.75 | 2.54 | 1.706 | 0.688 | 5.50 | 4 | .625-11 |
| 3 | 2.756 | -- | 3.54 | 5.13 | 3.09 | 2.450 | 0.688 | 6.00 | 4 | .625-11 |
| 4 | 2.756 | -- | 3.54 | 6.75 | 4.09 | 3.488 | 0.688 | 7.50 | 8 | .625-11 |
| 5 | 2.756 | -- | 3.54 | 7.75 | 4.85 | 4.296 | 0.813 | 8.50 | 8 | .750-10 |
| 6 | 2.756 | -- | 3.54 | 8.63 | 6.13 | 5.697 | 0.813 | 9.50 | 8 | .750-10 |
| 8 | 4.921 | 4.015 | 5.91 | 10.56 | 7.89 | 7.468 | 0.813 | 11.75 | 8 | .750-10 |
| 10 | 4.921 | 4.015 | 5.91 | 13.06 | 9.89 | 9.484 | 0.938 | 14.25 | 12 | .875-9 |
| 12 | 4.921 | -- | 5.91 | 16.00 | 11.89 | 11.456 | 0.938 | 17.00 | 12 | .875-9 |
| 14 | 4.921 | -- | 5.91 | 17.13 | 13.38 | 13.000 | 1.060 | 18.75 | 12 | 1.00-8 |
| 16 | 4.921 | -- | 5.91 | 20.00 | 15.38 | 14.970 | 1.060 | 21.25 | 16 | 1.00-8 |
| 18 | 6.496 | -- | 8.27 | 21.38 | 17.38 | 16.847 | 1.250 | 22.75 | 16 | 1.125-7 |
| 20 | 6.496 | -- | 8.27 | 23.31 | 19.38 | 18.650 | 1.250 | 25.00 | 20 | 1.125-7 |
| 24 | 6.496 | -- | 8.27 | 27.88 | 23.38 | 22.558 | 1.380 | 29.50 | 20 | 1.125-7 |
| 30 | 10.000 | -- | 11.81 | 34.38 | 29.38 | 28.590 | 1.380 | 36.00 | 24 | 1.125-7 |




### SQUARE STEM (NOW STANDARD 2" - 12")

| Size (in) | Size (mm) | Dimensions A | B | C | D | E | ØF | G | G2 | Key |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 50 | 3.25 | 6.375 | 0.60 | 1.75 | 0.433 | 0.433 | 0.375 | -- | -- |
| 2-1/2 | 65 | 3.75 | 6.880 | 0.60 | 1.88 | 0.433 | 0.433 | 0.375 | -- | -- |
| 3 | 80 | 4.00 | 7.130 | 0.60 | 1.88 | 0.433 | 0.433 | 0.375 | -- | -- |
| 4 | 100 | 4.88 | 7.880 | 0.70 | 2.13 | 0.433 | 0.433 | 0.375 | -- | -- |
| 5 | 125 | 5.38 | 8.380 | 0.70 | 2.25 | 0.551 | 0.551 | 0.375 | -- | -- |
| 6 | 150 | 5.88 | 8.880 | 0.70 | 2.25 | 0.551 | 0.551 | 0.375 | -- | -- |
| 8 | 200 | 7.13 | 10.250 | 0.70 | 2.50 | 0.669 | 0.669 | 0.563 | 0.438 | -- |
| 10 | 250 | 8.25 | 11.500 | 0.81 | 2.75 | 0.866 | 0.866 | 0.563 | 0.438 | -- |
| 12 | 300 | 9.75 | 13.250 | 0.95 | 3.13 | 0.866 | 0.866 | 0.563 | 0.438 | -- |

| Size (in.) | Dimensions H | H2 | I | J | K | L | N (141) | M | # Holes | Tap UNC |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 2.756 | -- | 3.54 | 4.00 | 2.09 | 1.113 | 0.688 | 4.75 | 4 | .625-11 |
| 2-1/2 | 2.756 | -- | 3.54 | 4.75 | 2.54 | 1.706 | 0.688 | 5.50 | 4 | .625-11 |
| 3 | 2.756 | -- | 3.54 | 5.13 | 3.09 | 2.450 | 0.688 | 6.00 | 4 | .625-11 |
| 4 | 2.756 | -- | 3.54 | 6.75 | 4.09 | 3.488 | 0.688 | 7.50 | 8 | .625-11 |
| 5 | 2.756 | -- | 3.54 | 7.75 | 4.85 | 4.296 | 0.813 | 8.50 | 8 | .750-10 |
| 6 | 2.756 | -- | 3.54 | 8.63 | 6.13 | 5.697 | 0.813 | 9.50 | 8 | .750-10 |
| 8 | 4.921 | 4.015 | 5.91 | 10.56 | 7.89 | 7.468 | 0.813 | 11.75 | 8 | .750-10 |
| 10 | 4.921 | 4.015 | 5.91 | 13.06 | 9.89 | 9.484 | 0.938 | 14.25 | 12 | .875-9 |
| 12 | 4.921 | -- | 5.91 | 16.00 | 11.89 | 11.456 | 0.938 | 17.00 | 12 | .875-9 |