

Lug & Wafer Style Butterfly Valves

Quadrant BFV-A, BFV-C, & BFV-D Datasheet



Lug & Wafer Style Butterfly Valves Series BFV-D



Series BFV-D
2" to 48" Sizes

Certified by USCG to
meet all requirements
of CFR 46 category B

Features

- Standard ASTM A536 Ductile Iron Bodies
- Unique ISO 5211 Pattern and Square Stem*
- Seat Retaining Bolts on Lug Valves
Provide 200 PSI Dead-End Service
Without Downstream Flange
- Standard Grease Fitting for Stem Lubrication
- 2"-24" Rated @ 200 PSI,
28" to 48" Rated @ 150 PSI
- Fully Compliant to API 609 and MSS SP-67
- Standard 416 SS Shaft

Ratings

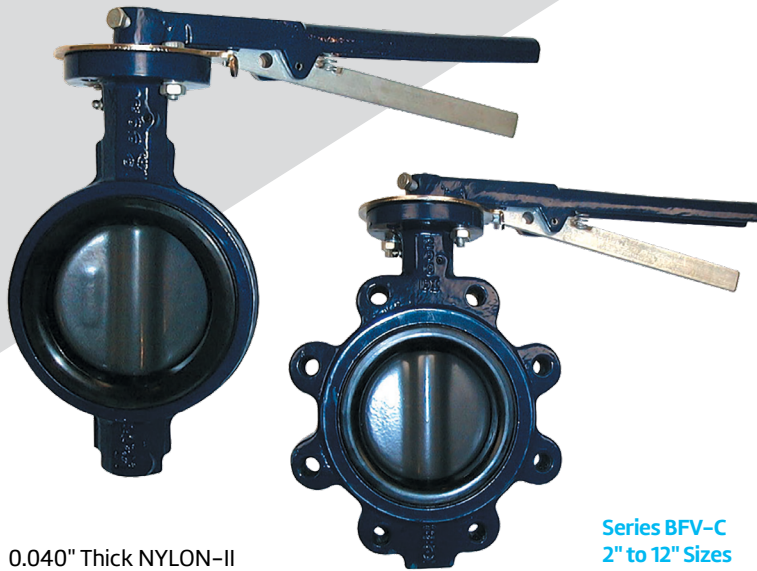
2"-24" BUNA: 200 PSIG @ 180°F
28"-48" BUNA: 150 PSIG @ 180°F
2"-24" EPDM: 200 PSIG @ 250°F
28"-48" EPDM: 150 PSIG @ 250°F
2"-24" VITON: 200 PSIG @ 375°F
28"-48" VITON: 150 P SIG @ 375°F

Materials of Construction

| Part* | Description | Standard Material |
|-------|------------------------|--|
| 1 | Body | ASTM A536 Ductile Iron |
| 2 | Disc | See Page 7 |
| 3 | Shaft | 416 SS or 316 SS w/CF8M disc |
| 4 | Bearings | Fiberglass Backed PTFE |
| 5 | Pins(s) | 416 SS or 316 SS w/CF8M disc |
| 6 | Seat Assembly | Buna-N, EPDM or VITON (Phenolic Supported) |
| 7 | Set Screws (Not shown) | Plated Carbon Steel (Lug only) |
| 8 | Stop Plate (Not shown) | Plated Carbon Steel |
| 9 | Fasteners (Not shown) | Plated Carbon Steel |
| 10 | Handle Assembly | Ductile Iron |
| 11 | Lube Fitting | Plated Carbon Steel |
| 12 | O-Ring | Buna-N |

* See drawings on page 5.

Lug & Wafer Style Butterfly Valves Series BFV-C



0.040" Thick NYLON-II
coated ductile iron disc
available on BFV-C

Series BFV-C 2" to 12" Sizes

Certified by USCG to
meet all requirements
of CFR 46 category B

Features

- Standard ASTM A536 Ductile Iron Bodies
- Unique ISO 5211 Pattern and Square Stem*
- Seat Retaining Bolts on Lug Valves
Provide 200 PSI Dead-End Service
Without Downstream Flange
- Standard Grease Fitting for Stem Lubrication
- All Sizes Rated @ 200 PSI
- Fully Compliant to API 609 and MSS SP-67
- Standard 416 SS
- Shaft with Internal Drive
- Internal Shaft to Disc Drive
Eliminates Disc Pin(s)

Ratings

BUNA-N Seat: 200 PSIG @ 180°F

EPDM Seat: 200 PSIG @ 250°F

VITON Seat: 200 PSIG @ 375°F

Materials of Construction

| Part* | Description | Standard Material |
|-------|------------------------|--|
| 1 | Body | ASTM A536 Ductile Iron |
| 2 | Disc | See Page 5 |
| 3 | Shaft | 416 SS or 316 SS w/CF8M disc |
| 4 | Bearings | Fiberglass Backed PTFE |
| 6 | Seat Assembly | Buna-N, EPDM or VITON (Phenolic Supported) |
| 7 | Set Screws (Not shown) | Plated Carbon Steel (Lug only) |
| 8 | Stop Plate (Not shown) | Plated Carbon Steel |
| 9 | Fasteners (Not shown) | Plated Carbon Steel |
| 10 | Handle Assembly | Ductile Iron |
| 11 | Lube Fitting | Plated Carbon Steel |
| 12 | O-Ring | Buna-N |

* See drawings on page 5.

Lug & Wafer Style Butterfly Valves Series BFV-A



Series BFV-A 2" to 12" Sizes

Certified by USCG to meet all requirements of CFR 46 category A

Features

- ASTM A-395 Ductile Iron Bodies
- Unique ISO 5211 Mounting Pattern and Square Stem*
- Lug Style Valves have Seat Retaining Bolts allowing Dead-End Service without Downstream Flange
- Standard Grease Fitting for Stem Lubrication and Corrosion Protection
- Available with Buna-N, EPDM or VITON seats
- Standard 316 SS Stem
- Ductile Iron, Aluminum Bronze, or CF8M Discs
- All sizes rated at 200 PSI
- Standard NACE MR01-75, 2000 Revision Compliance
- 2-Piece Shaft and "thin" Disc for Low Pressure Drop
- Fully Compliant with API 609
- Fully Compliant with MSS SP-67
- 304 SS Lock Plates Available
- Standard Locking Handle Accepts Common $\frac{5}{16}$ " Hasp Locks

Ratings

BUNA-N Seat: 200 PSIG @ 180°F

EPDM Seat: 200 PSIG @ 250°F

VITON Seat: 200 PSIG @ 375°F

Materials of Construction

| Part* | Description | Standard Material |
|-------|------------------------|--|
| 1 | Body | ASTM A536 Ductile Iron |
| 2 | Disc | See Page 5 |
| 3 | Shaft | ASTM A276 316 SS |
| 4 | Bearings | Fiberglass Backed PTFE |
| 5 | Seat Assembly | Buna-N, EPDM or VITON (Phenolic Supported) |
| 6 | Set Screws (Not shown) | Plated Carbon Steel (Lug only) |
| 7 | Roll Pins | Plated Carbon Steel |
| 8 | Stop Plate (Not shown) | Plated Carbon Steel |
| 9 | Fasteners (Not shown) | Plated Carbon Steel |
| 10 | Handle Assembly | Ductile Iron |
| 11 | Lube Fitting | Plated Carbon Steel |
| 12 | O-Ring | Buna-N |

* See drawings on page 5.

Lug & Wafer Style Butterfly Valves

Quadrant BFV-A, BFV-C, & BFV-D

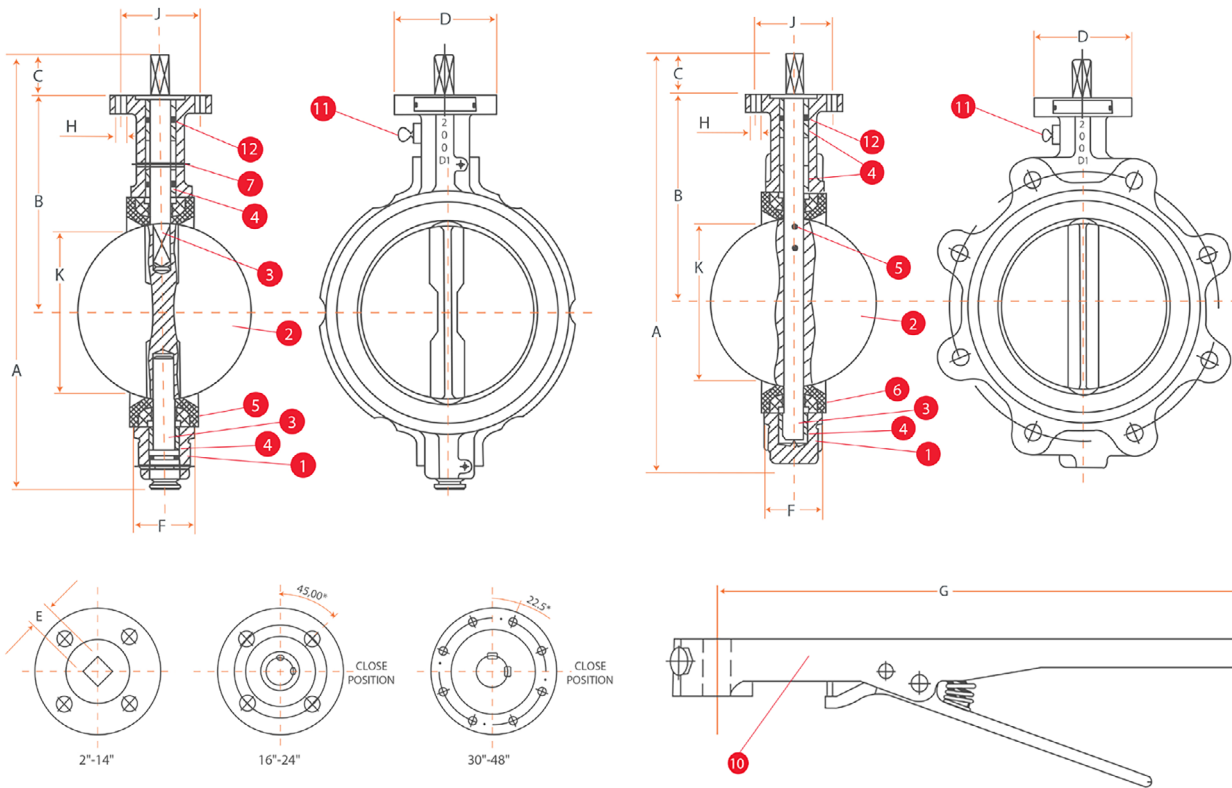


Dimensions, Weights, Cv Factors & Torques

| Size | "A" BFV-A & C | "A" BFV-D | "B" BFV-A & C | "B" BFV-D | "C" | "D" DIA | "E" SQUARE OR "E" STEM DIA (16" UP) | "F" | "G" |
|--------|------------------|--------------|------------------|--------------|------|------------|-------------------------------------|-------|------|
| 2" | 8.4 | 10.8 | 3.9 | 6.3 | 1.26 | 3.03 | 11MM | 1.69 | 9.0 |
| 2-1/2" | 9.2 | 11.7 | 4.5 | 6.9 | 1.26 | 3.03 | 11MM | 1.81 | 9.0 |
| 3" | 9.9 | 12.2 | 4.9 | 7.1 | 1.26 | 3.03 | 11MM | 1.81 | 9.0 |
| 4" | 11.8 | 13.7 | 6.0 | 7.9 | 1.26 | 3.62 | 11MM | 2.06 | 11.0 |
| 5" | 12.3 | 14.7 | 6.0 | 8.4 | 1.26 | 3.62 | 14MM | 2.19 | 11.0 |
| 6" | 13.3 | 15.7 | 6.5 | 8.9 | 1.26 | 3.62 | 14MM | 2.19 | 11.0 |
| 8" | 16.8 | 18.9 | 8.1 | 10.2 | 1.77 | 4.92 | 19MM | 2.38 | 15.0 |
| 10" | 19.8 | 21.3 | 10.0 | 11.5 | 1.77 | 5.91 | 22MM | 2.69 | 17.0 |
| 12" | 22.2 | 24.6 | 10.9 | 13.3 | 1.77 | 5.91 | 27MM | 3.06 | 17.0 |
| 14" | 26.8 | 26.8 | 14.5 | 14.5 | 1.77 | 5.91 | 27MM | 3.06 | -- |
| 16" | -- | 29.9 | -- | 15.8 | 2.02 | 7.76 | 33.15 (5/16" KEYS) | 4.00 | -- |
| 18" | -- | 31.6 | -- | 16.6 | 2.02 | 7.76 | 37.95MM (3/8" KEYS) | 4.50 | -- |
| 20" | -- | 35.7 | -- | 18.9 | 2.53 | 7.76 | 41.12MM (3/8" KEYS) | 5.00 | -- |
| 24" | -- | 43.0 | -- | 22.2 | 2.76 | 10.97 | 50.62MM (1/2" KEYS) | 6.06 | -- |
| 30" | -- | 50.7 | -- | 26.0 | 2.60 | 11.81 | 63.35MM (18MM KEYS) | 6.50 | -- |
| 36" | -- | 58.8 | -- | 28.4 | 4.65 | 11.81 | 75.0MM (20MM KEYS) | 7.88 | -- |
| 42" | -- | 70.3 | -- | 33.8 | 5.91 | 11.81 | 95.0MM (25MM KEYS) | 9.88 | -- |
| 48" | -- | 77.0 | -- | 37.1 | 5.91 | 13.78 | 105.0MM (28MM KEYS) | 10.88 | -- |



Lug & Wafer Style Butterfly Valves Quadrant BFV-A, BFV-C, & BFV-D



Dimensions, Weights, Cv Factors & Torques

| SIZE DIA | "H" DIA | "J" DIA | "K" DIA (Disc Chord) | ISO Pattern | WT-LBS Wafer | WT-LBS LUG | MAX TORQUE (IN-LBS) | | CV FACTOR BFV-A | CV FACTOR BFV-D & C |
|-------------|------------|------------|-------------------------|----------------|-----------------|---------------|-----------------------|-------|--------------------|------------------------|
| | | | | | | | WET | DRY | | |
| 2" | 0.28 x 4 | 1.97 | 1.27 | F05 | 7.5 | 10.3 | 109 | 119 | 145 | 125 |
| 2-1/2" | 0.28 x 4 | 1.97 | 1.82 | F05 | 9.0 | 11.2 | 122 | 153 | 225 | 200 |
| 3" | 0.28 x 4 | 1.97 | 2.54 | F05 | 10.0 | 12.3 | 157 | 200 | 325 | 302 |
| 4" | 0.39 x 4 | 2.76 | 3.40 | F07 | 12.8 | 21.8 | 283 | 410 | 620 | 600 |
| 5" | 0.39 x 4 | 2.76 | 4.35 | F07 | 17.4 | 26.0 | 561 | 849 | 1125 | 1022 |
| 6" | 0.39 x 4 | 2.76 | 5.31 | F07 | 19.1 | 33.3 | 742 | 1014 | 1950 | 1579 |
| 8" | 0.47 x 4 | 4.02 | 7.58 | F10 | 34.1 | 45.1 | 1344 | 1901 | 3250 | 3136 |
| 10" | 0.55 x 4 | 4.92 | 9.52 | F12 | 48.4 | 65.1 | 2344 | 3693 | 5500 | 5340 |
| 12" | 0.55 x 4 | 4.92 | 11.49 | F12 | 77.7 | 94.2 | 3968 | 6311 | 8500 | 8250 |
| 14" | 0.55 x 4 | 4.92 | 12.68 | F12 | 90.5 | 123.5 | 5310 | 8243 | -- | 11920 |
| 16" | 0.71 x 4 | 5.51 | 14.96 | F14 | 135 | 212 | 8727 | 13488 | -- | 16390 |
| 18" | 0.71 x 4 | 5.51 | 16.85 | F14 | 175 | 269 | 10628 | 16796 | -- | 21700 |
| 20" | 0.71 x 4 | 5.51 | 18.62 | F14 | 283 | 446 | 13277 | 21412 | -- | 27900 |
| 24" | 0.91 x 4 | 6.50 | 22.52 | F16 | 415 | 596 | 17332 | 27955 | -- | 43100 |
| 30" | 0.71 x 4 | 10.00 | 28.58 | F25 | 926 | 926 | 33336 Wet @ 150 PSID | | -- | 73426 |
| 36" | 0.71 x 4 | 10.00 | 33.11 | F25 | 1455 | 1455 | 46528 Wet @ 150 PSID | | -- | 87500 |
| 42" | 0.71 x 4 | 10.00 | 39.33 | F25 | 1976 | 1976 | 79864 Wet @ 150 PSID | | -- | 117500 |
| 48" | 0.87 x 8 | 11.73 | 44.37 | F30 | 2822 | 2822 | 111112 Wet @ 150 PSID | | -- | 154000 |

Lug & Wafer Style Butterfly Valves

Quadrant BFV-A, BFV-C, & BFV-D



Numbering System How to order Series BFV-A, BFV-C, & BFV-D

| BFV | W | | D | B | 4 | | E | | C | | PH | | 300 | | | | | |
|--------|------------|-------------------------------------|---------------|--|---------------|----------------------------------|---------------|-------------------------|--------------------|----------------------------------|-----------|---------|-------------|---------------|------|--------------|-----|-----|
| Series | Body Style | | Body Material | | Disc Material | | Stem Material | | Seat/Seal Material | | Body Coat | | Handle Type | | Size | | | |
| BFV | W | Wafer | A | A395 Ductile (2-12") | D | Ductile Iron (536) Nickel Plated | 4 | 416 SS | B | Buna-N | P | Painted | PH | 10 Pos. Lever | 200 | 2" | | |
| | L | Lug | | | | | 3 | 316 SS | E | EPDM | | | | | C | Epoxy Coated | 250 | 2½" |
| | | | | | | | M | Monel | F | VITON | | | | | | | 300 | 3" |
| | C | A536 Ductile Internal Drive (2-12") | B | Aluminum Bronze (C954) | S | CF8M Stainless | N | No Coating | BH | Infinite Position Locking Handle | 400 | 4" | | | | | | |
| | | | | | | | | | | | 600 | 6" | | | | | | |
| | | | | | | | | | | | 800 | 8" | | | | | | |
| | D | A536 Ductile (2-48") | N | 0.040" Thick Nylon-11 Coated Ductile Iron (BFV-C Only) | GO | Gear Operator | PA | Double Acting Pneumatic | A00 | 10" | | | | | | | | |
| | | | | | | | | | B00 | 12" | | | | | | | | |
| | | | | | | | | | C00 | 14" | | | | | | | | |
| | S | CF8M Stainless | SA | Spring Return Pneumatic | D00 | 16" | | | | | | | | | | | | |
| | | | | | E00 | 18" | | | | | | | | | | | | |
| | | | | | F00 | 20" | | | | | | | | | | | | |
| | BS | Bare Stem | G00 | 24" | | | | | | | | | | | | | | |
| | | | I00 | 30" | | | | | | | | | | | | | | |
| | | | K00 | 36" | | | | | | | | | | | | | | |
| M00 | | | 42" | | | | | | | | | | | | | | | |
| N00 | | | 48" | | | | | | | | | | | | | | | |



About ASC Engineered Solutions

ASC Engineered Solutions is defined by quality—in its products, services and support. With more than 1,400 employees, the company's portfolio of precision-engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Anvil Services, Basic-PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPPI®, Gruvlok®, J.B. Smith, Merit®, North Alabama Pipe, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF® and SprinkFLEX®. With headquarters in Commerce, CA, and Exeter, NH, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI.



asc-es.com

Building connections that last™

