PRO VALVE

Resilient Seated Butterfly Valves

Series 500 Butterfly Valves

PRO VALVE®

Features and Benefits

- Resilient seat provides bi-directional bubble tight close off ANSI Class VI.
- Phenolic backed cartridge seat provides a positive seal against standard ANSI flanges.
- Advanced stem seal design is achieved with pre-loaded U-cup elastomer o-ring, with chamfered lip and V-style sealing edges.
- Ductile iron one piece body with extended neck for insulation. Exterior body is epoxy coated for excellent chemical resistance.
- Solid stainless steel disc with polished edge for lower seating and unseating torques. Low profile disc achieves minimum flow restriction and low pressure loss.
- Dead end service set screws lock the seat to the body to ensure the seat will not blow out.
- Designed to comply with MSS SP-67 and API 609 specifications.

4575 Damascus Rd, Memphis, TN 38118
VALVE VT TECK
www.valveteck.com
F (901)363-1123 | P (901)794-5790

Series 500 Butterfly Valves

PRO VALVE®

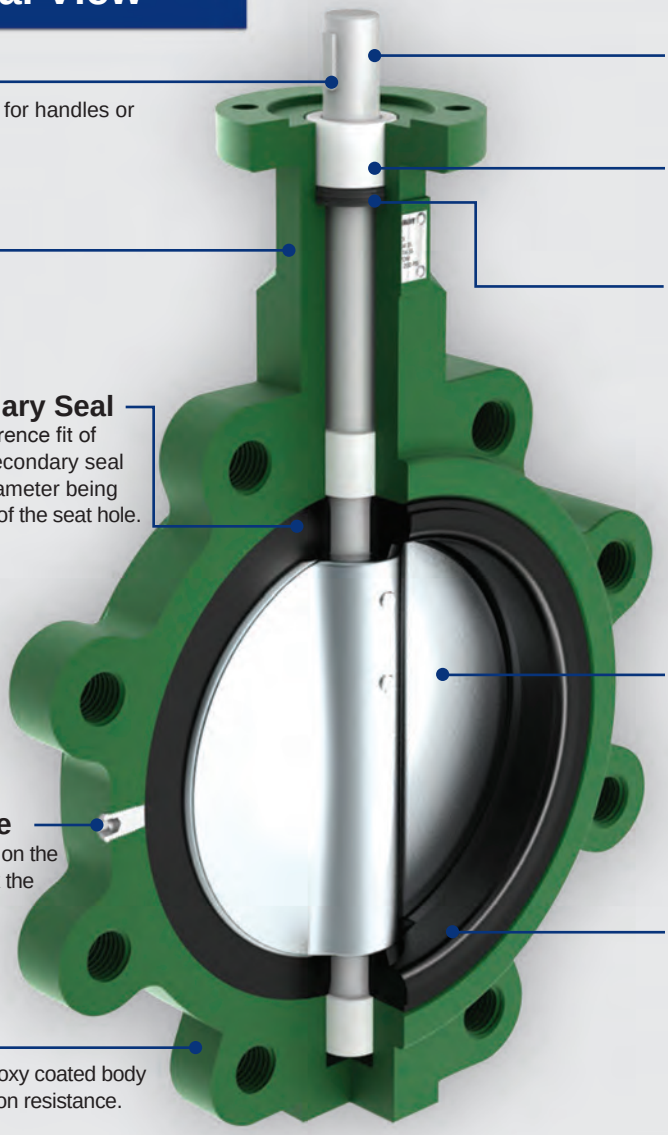
Performance

- Wafer or Lug style body (2” - 30”)
- Wafer body features alignment holes
- Full flanged body (36” - 60”)
- Pressure rating bubble tight:
  (2” - 12” 200 psi)
  (14” - 60” 150 psi)
- Compatible with ANSI 125 / 150 flanges
- Bi-directional dead-end capability with support of blind flange.
- Velocity limits 30 ft/sec

Markets Served

- HVAC
- Chemical / Petrochemical
- Steel Manufacturing
- Steel Processing
- Power and Utilities
- Food and Beverage

Sectional View



Key Drive
Strong mechanical driver for handles or actuators.

Neck
Extended neck allows for 2” of piping insulation.

Primary / Secondary Seal
Primary seal is an interference fit of the seat and disc hub. Secondary seal is created by the stem diameter being greater than the diameter of the seat hole.

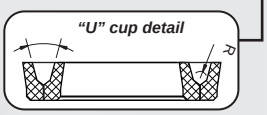
Dead-End Service
Set screws are positioned on the outer body housing to lock the seat in place.

Body
One-piece wafer or lug epoxy coated body achieves excellent corrosion resistance.

Shaft
One-piece shaft for stable and accurate disc positioning.

Stem Bushing (3-Pieces)
Non-corrosive PTFE, for shaft support and positive shaft alignment.

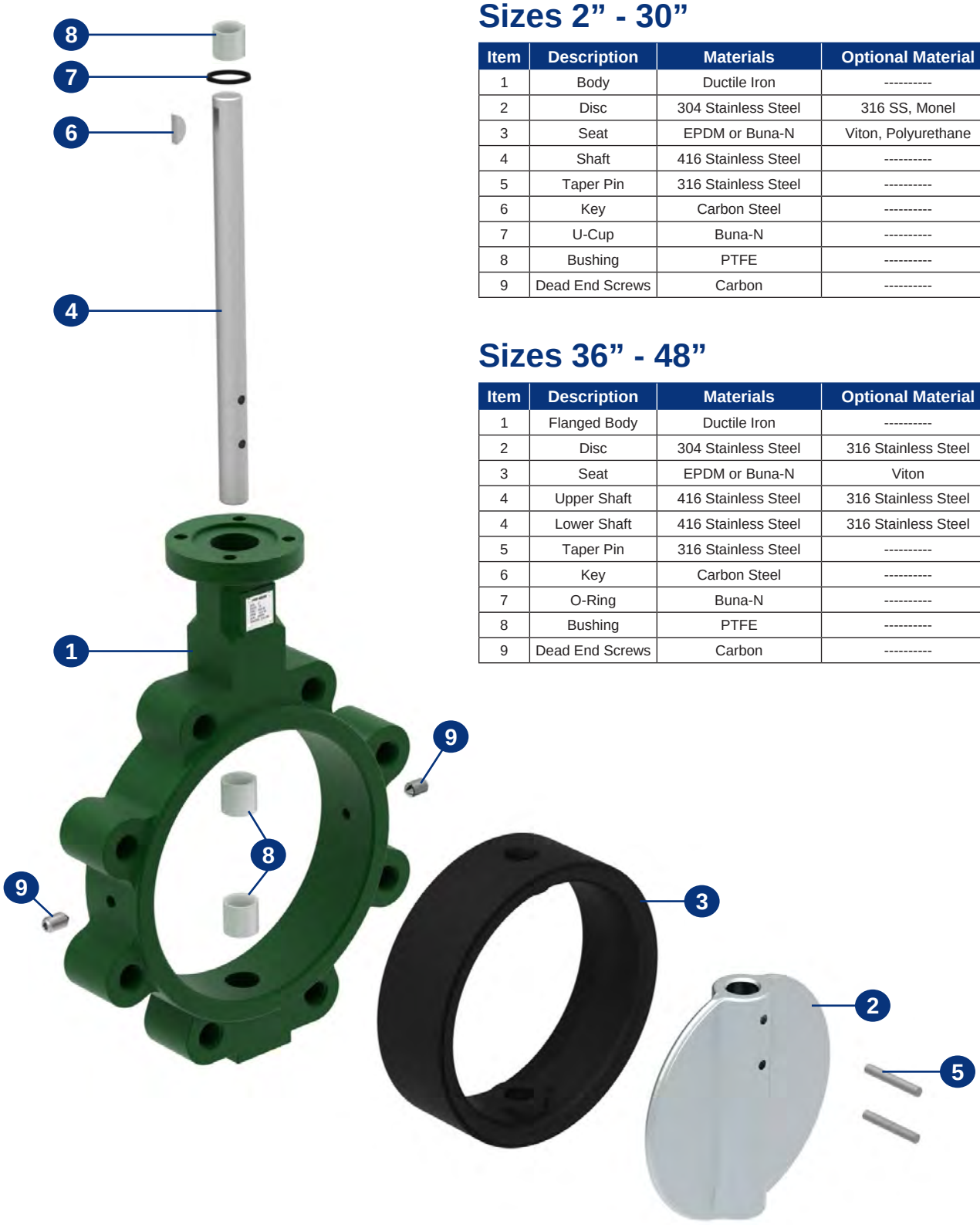
Stem Seal
Double “U” cup stem seal is self adjusting and seals positive.



Disc
Hand polished edge provides bubble tight close off and assures minimum torque and longer seat life.

Seat
Phenolic backed seat is non-collapsible, stretch resistant, and blow out proof. Seat face negates need for gaskets.

Bill of Materials



Sizes 2” - 30”

Item	Description	Materials	Optional Material
1	Body	Ductile Iron	----------
2	Disc	304 Stainless Steel	316 SS, Monel
3	Seat	EPDM or Buna-N	Viton, Polyurethane
4	Shaft	416 Stainless Steel	----------
5	Taper Pin	316 Stainless Steel	----------
6	Key	Carbon Steel	----------
7	U-Cup	Buna-N	----------
8	Bushing	PTFE	----------
9	Dead End Screws	Carbon	----------

Sizes 36” - 48”

Item	Description	Materials	Optional Material
1	Flanged Body	Ductile Iron	----------
2	Disc	304 Stainless Steel	316 Stainless Steel
3	Seat	EPDM or Buna-N	Viton
4	Upper Shaft	416 Stainless Steel	316 Stainless Steel
4	Lower Shaft	416 Stainless Steel	316 Stainless Steel
5	Taper Pin	316 Stainless Steel	----------
6	Key	Carbon Steel	----------
7	O-Ring	Buna-N	----------
8	Bushing	PTFE	----------
9	Dead End Screws	Carbon	----------

Resilient Seats

EPDM (Peroxide Cured)

Continuous Operating Range -20° to 275° F

EPDM (Ethylene Propylene Diene Monomer) is a hydrocarbon elastomer. Has good resistance to ozone, deionized water, strong and oxidizing chemicals. EPDM is used in a wide range of applications including hot and cold water and low pressure 15# steam.

BUNA-N

Continuous Operating Range +10° to 200° F

Buna-N (Nitrile) elastomers have high tensile strength, low compression set and good resistance to aging. Buna-N is a general service seat with good resistance to water, air, oils, greases, hydraulic fluids and hydrocarbons. Not recommended for gasolines.

Viton® (Dupont)

Continuous Operating Range +0° to 400° F

Viton elastomer has good resistance to acids, oils / aromatic hydrocarbons, and high temperature. Not for Steam service.

Polyurethane

Continuous Operating Range +0° to 176° F

Polyurethane elastomer has good resistance to abrasive materials. Rigid phenolic backed seat will withstand severe impact and recover without tearing.

The valve body is yellow color to ensure easy identification of poly seated valves.

Engineering Data

Seating Torques (In Lbs.)

Valve Size	Standard Disc Differential Pressure				Undercut Diff. Press.
	50 PSI ΔP Bushing	100 PSI ΔP Bushing	150 PSI ΔP Bushing	200 PSI ΔP Bushing	100 PSI ΔP Bushing
	PTFE	PTFE	PTFE	PTFE	PTFE
2”	100	106	111	115	-----
2½”	151	163	176	186	-----
3”	207	220	232	248	-----
4”	290	323	357	389	159
5”	423	481	540	601	266
6”	599	691	783	796	336
8”	1,060	1,183	1,307	1,371	819
10”	1,671	1,872	2,074	2,175	903
12”	2,568	2,795	3,023	3,150	1443
14”	2,640	3,070	3,500	-----	-----
16”	4,260	4,880	5,500	-----	-----
18”	6,287	7,243	8,200	-----	-----
20”	8,360	9,180	10,000	-----	-----
24”	15,427	16,813	18,200	-----	-----
30”	27,313	29,407	31,500	-----	-----

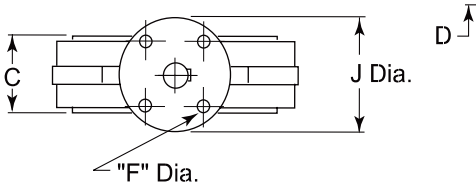
Notes:

1. All torques shown on the chart were derived from torque testing at 60°F. Torques using dry gases, multiply these numbers by 1.6. Torques involving other media, please consult factory.
2. Safety factor should be added when sizing actuators. For actuator sizing, Pro Valve recommends that these values be multiplied by 1.25.
3. For polyurethane resilient seated butterfly valves multiply the numbers shown by 2.0.

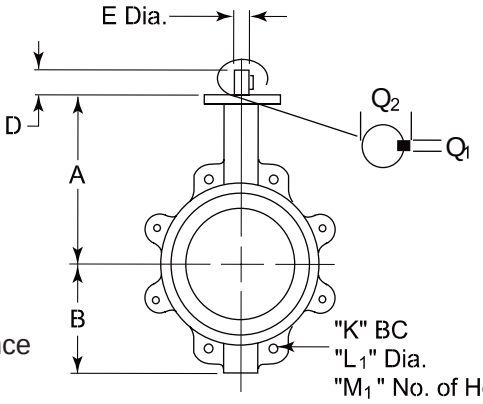
Cv Values - Sizing Coefficients (US-GPM @ 1ΔP)

Size	10°	20°	30°	40°	50°	60°	70°	80°	90°
2”	0.06	3	7	15	27	44	70	105	115
2½”	0.10	6	12	25	45	75	119	178	196
3”	0.20	9	18	39	70	116	183	275	302
4”	0.30	17	36	78	139	230	364	546	600
5”	0.50	29	61	133	237	392	620	930	1022
6”	0.80	45	95	205	366	605	958	1437	1579
8”	2	89	188	408	727	1202	1903	2854	3136
10”	3	151	320	694	1237	2047	3240	4859	5340
12”	4	234	495	1072	1911	3162	5005	7507	8250
14”	6	338	715	1549	2761	4568	7230	10844	11917
16”	8	464	983	2130	3797	6282	9942	14913	16388
18”	11	615	1302	2822	5028	8320	13168	19752	21705
20”	14	791	1674	3628	6465	10698	10931	25396	27908
24”	22	1222	2587	5605	9989	16528	26157	39236	43116
30”	37	2080	4406	9546	17010	28147	44545	66818	73426

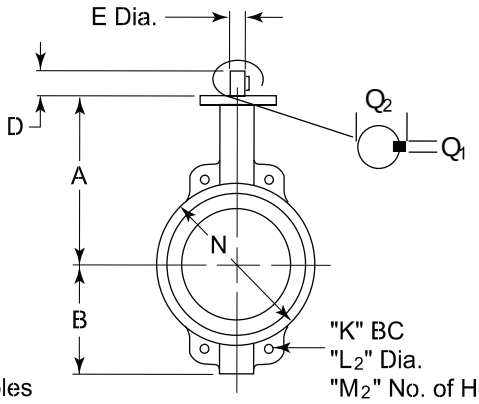
Dimensions 2”- 30”



Lug Style



Wafer Style

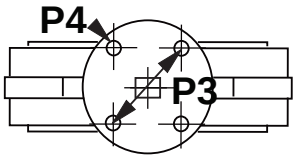


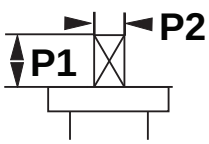
Inch

Inch MM	Lug Wt. Lbs	Wafer Wt. Lbs	A	B	C	D	E	F	G	J	K	L_1*	L_2*	M_1*	M_2*	N	Q_1	Q_2
2” 50	7	6	6⅜ 161.93	3¼ 82.50	1¾ 44.45	1¼ 31.75	½ 12.70	⅜ 9.53	2.76 70	3½ 90	4¾ 120.65	⅝-11	11/16 17.46	4	4	4 101.6	.118 3	.543 13.8
2½ 65	8	7	6⅞ 174.63	3½ 88.90	1⅞ 47.63	1¼ 31.75	½ 12.70	⅜ 9.53	2.76 70	3½ 90	5½ 139.70	⅝-11	11/16 17.46	4	4	4¾ 120.65	.118 3	.543 13.8
3” 80	14	10	7⅛ 180.98	3⅞ 98.40	1⅞ 47.63	1¼ 31.75	½ 12.70	⅜ 9.53	2.76 70	3½ 90	6 152.40	⅝-11	11/16 17.46	4	4	5⅛ 130.18	.118 3	.543 13.8
4” 100	26	13	7⅞ 200.03	4½ 114.30	2⅛ 53.98	1¼ 31.75	⅝ 15.88	⅜ 9.53	2.76 70	3½ 90	7½ 190.50	⅝-11	11/16 17.46	8	4	6¾ 171.45	.157 4	.680 17.27
5” 125	28	18	8⅜ 212.73	5 127	2¼ 57.15	1¼ 31.75	¾ 19.05	⅜ 9.53	2.76 70	3½ 90	8½ 215.90	¾-10	13/16 20.64	8	4	7¾ 196.85	.196 5	.824 20.92
6” 150	31	20	8⅞ 225.43	5½ 139.70	2¼ 57.15	1¼ 31.75	¾ 19.05	⅜ 9.53	2.76 70	3½ 90	9½ 241.30	¾-10	13/16 20.64	8	4	8⅝ 219.08	.196 5	.824 20.92
8” 200	49	32	10¼ 260.35	7 177.80	2½ 63.50	1¾ 44.45	⅞ 22.23	7/16 11.11	4.02 102	6 150	11¾ 298.45	¾-10	13/16 20.64	8	4	10⅜ 268.29	.196 5	.949 24.1
10” 250	72	42	11½ 292.10	8 203.20	2¾ 69.85	1¾ 44.45	1⅛ 28.58	7/16 11.11	4.02 102	6 150	14¼ 361.95	⅞-9	15/16 23.81	12	4	13⅛ 331.79	.315 8	1.24 31.45
12” 300	105	70	13¼ 336.55	9½ 241.30	3⅛ 79.38	1¾ 44.45	1¼ 31.75	7/16 11.11	4.02 102	6 150	17 431.80	⅞-9	15/16 23.81	12	4	16⅛ 409.58	.315 8	1.36 34.6
14” 350	155	95	14½ 368.30	10½ 266.70	3⅛ 79.38	1¾ 44.45	1¼ 31.75	½ 12.70	4.92 125	6 150	18¾ 476.25	1-8	1 1/16 26.99	12	4	17⅛ 434.98	.393 10	1.36 34.6
16” 400	195	117	15¾ 400.05	12¾ 323.80	3½ 88.90	2 50.80	1 5/16 33.34	½ 12.70	4.92 125	6 150	21¼ 539.75	1-8	1 1/16 26.99	16	4	20 508.00	.393 10	1.44 36.5
18” 450	230	165	16⅝ 422.28	14⅜ 365.10	4¼ 107.95	2 50.80	1½ 38.10	11/16 17.50	5.51 140	8¼ 210	22¾ 577.85	1⅛-7	1¼ 31.75	16	4	21⅜ 542.93	.393 10	1.57 40
20” 500	396	275	18⅞ 479.43	14 355.60	5¼ 133.35	2½ 63.50	1⅝ 41.28	11/16 17.50	5.51 140	8¼ 210	25 635.00	1⅛-7	1¼ 31.76	20	4	23 5/16 592.14	.472 12	1.74 44.15
24” 600	610	440	22⅛ 561.98	16⅞ 428.60	6⅛ 155.58	2¾ 69.85	2 50.80	⅞ 22.20	6.50 165	8¼ 210	29½ 749.30	1¼-7	1¼ 31.75	20	4	27⅞ 708.03	.629 16	2.15 54.65
30” 800	1050	740	26 660	21¼ 539.80	6¾ 171.45	2⅝ 66.70	2 5/32 55	11/16 17.50	10 254	11⅞ 300	36 914.40	1¼-7	1¼ 31.75	28	4	34⅜ 873.13	.629 16	2.32 59

• L1 and M1 refer to Lug valves, L2 and M2 refer to Wafer Style. “C” dimension is listed with elastomer in the relaxed condition. Approximately 1/8” total compression is required for proper sealing with pipe flanges. Valves are designed for installation between ANSI B16.1 Class 125 (Iron) and B16.5 Class 150 (Steel) flanges. Gaskets are not needed, and should not be used since the seat face seals against the mating flange.
• Q1 Woodruff Key (Metric)

Polyurethane Valve / Top Works

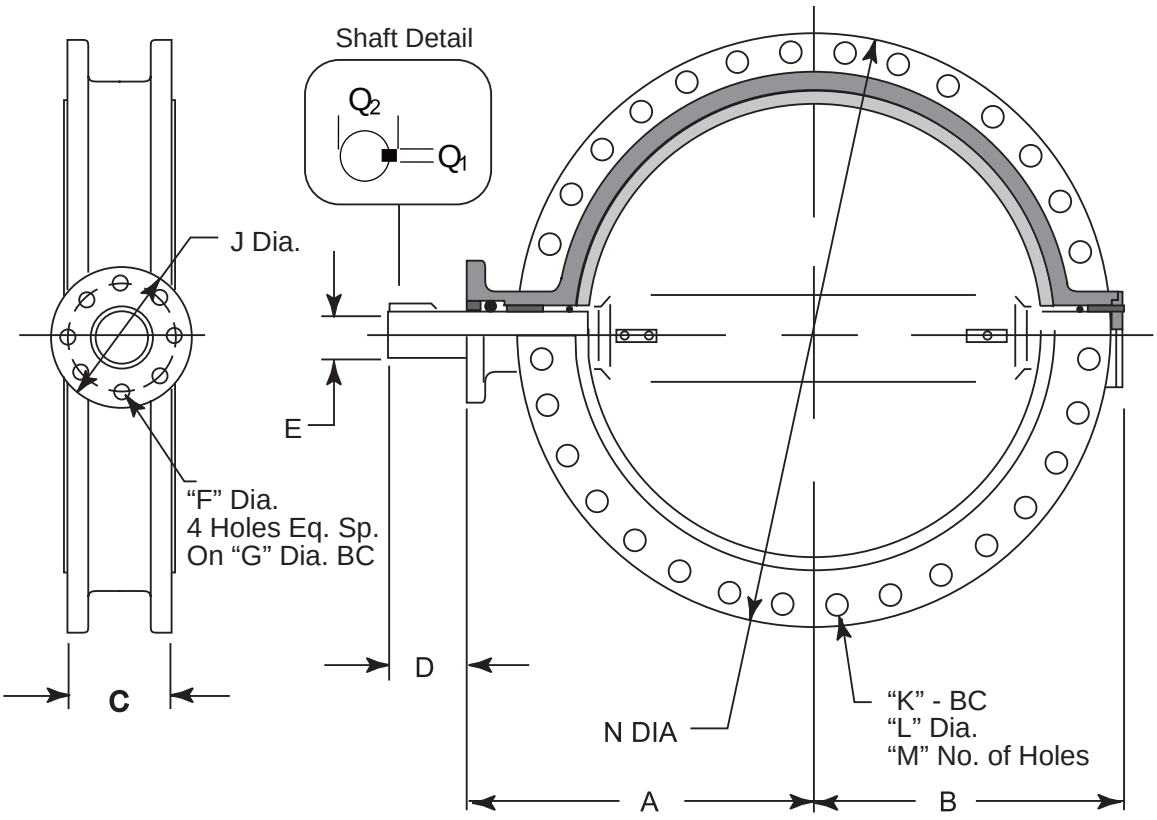




Inch

Size	P1	P2	P3	P4
2”- 4”	1.25	0.433 11 mm	2.76 70 mm	.354 9 mm
5”- 6”	1.25	0.551 14 mm	2.76 70 mm	.354 9 mm
8”	1.25	0.669 17 mm	4.02 102 mm	.472 12 mm
10”	1.62	0.866 22 mm	4.02 102 mm	.472 12 mm
12”	2.00	1.063 27 mm	4.02 102 mm	.472 12 mm

Dimensions 36”- 48”

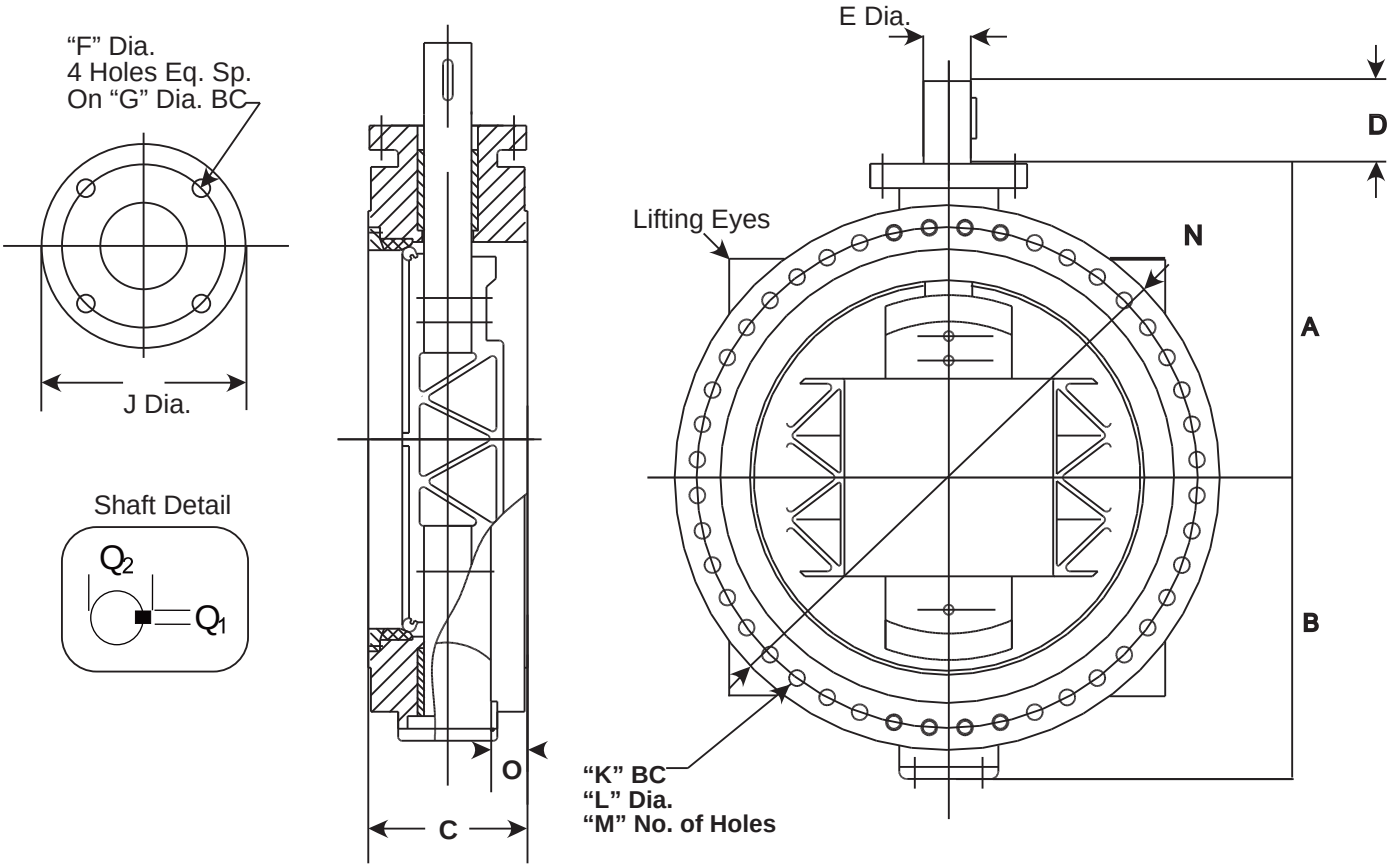


Double Flanged Design

Inch

Inch	Double Flanged Wt. lbs.	A	B	C	D	E	F	G	J	K	L	M	N	Q1	Q2
36”	1213	28⅜	25¼	8¼	4⅔	3	¾	10	11 13/16	42¾	1⅝	32	46	13/16	5 5/16
42”	2150	33⅞	29 13/16	10¼	6	3¾	⅞	11¾	13 13/16	49½	1⅝	36	53	1	4⅛
48”	2954	37	33	11⅛	6	4 3/16	⅞	11¾	13 13/16	56	1⅝	44	59½	1⅛	4⅝

Dimensions 60”



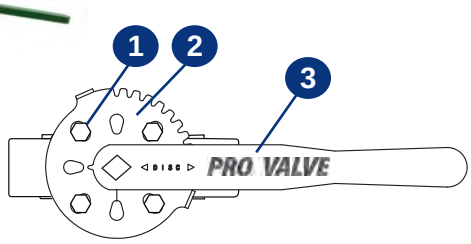
Double Flanged Design / AWWA C504

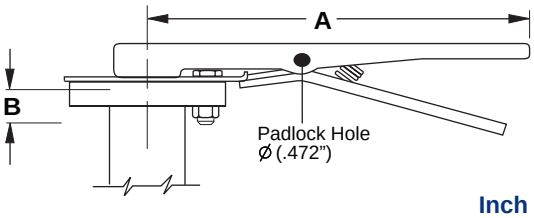
Inch

Inch	Double Flanged Wt. lbs.	A	B	C	D	E	F	G	J	K	L	M	N	O	Q1
60”	4565	43	41 5/16	15	5½	6	1 5/16	16	18 11/16	69¼	1⅞	44	73	3.15	1¼

Handle / Gear

Locking 10-Position Handle





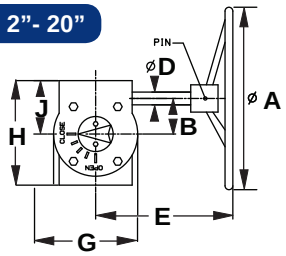
No.	QTY	Description	Material
1	1	Bolts	Steel
2	1	Ratchet Plate	Steel
3	1	Lever	Ductile Iron

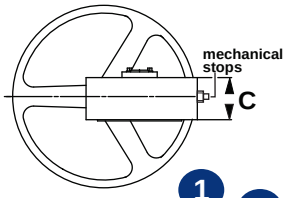
Inch

Fig. Number	Size	A	B	WT
PV 2-3 HDL	2"- 3"	10.51	1.06	2 lb
PV 4 HDL	4"	10.51	1.06	2 lb
PV 5-6 HDL	5"- 6"	10.51	1.06	2 lb
PV 8 HDL	8"	13.89	1.18	4 lb
PV 10 HDL	10"	13.89	1.18	4 lb
PV 12 HDL	12"	13.89	1.18	4 lb

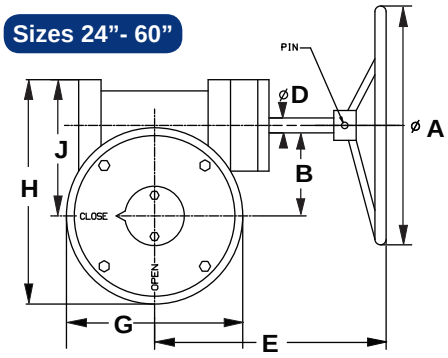
Manual Gear Operator

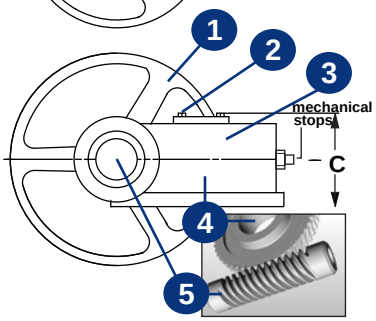
Sizes 2"- 20"





Sizes 24"- 60"





Inch

Size	Weight	Ratio	A	B	C	D	E	G	H	J
2-6"	23	30:1	11⅜	2½	3⅛	¾	9⅛	5¾	6¾	3⅞
8-14"	28	50:1	11⅜	3	3⅛	¾	8¾	6¾	7⅝	4½
16-18"	63	80:1	11⅜	4¾	4⅝	1.00	9⅝	10	11⅛	6⅛
20-24"	116	300:1	11⅜	4¾	5⅞	1.00	13¼	10⅞	11¾	7½
30-36"	212	704:1	15¾	5½	6¼	1⅛	14.0	11½	15.0	9¼
42"	254	704:1	17¾	6⅜	6¾	1⅛	14⅞	13⅜	16½	9⅞
48"	419	800:1	17¾	9¼	8¼	1⅛	18¾	19⅝	19⅞	12¾
60"	933	1200:1	19⅝	13⅝	11¼	1⅛	23⅝	28½	29¼	19½

4575 Damascus Rd, Memphis, TN 38118
www.valveteck.com
F (901)363-1123 | P (901)794-5790

Figure Number

Manual Butterfly Valve

Series	Size	Type	Body	Pressure	Disc	Shaft	Bushing	Seat	Operator
PV	04	L	2	0	4	4	3	5	G
1	2	3	4	5	6	7	8	9	10

1. Series
PV = Pro Valve Resilient Butterfly

2. Size
02 = 2.0”
2.5 = 2.5”
03 = 3.0”
to
60 = 60”

3. Body Type
W = Wafer
L = Lugged (36” and above double flanged)

4. Body Material
2 = Ductile Iron

5. Pressure Rating
0 = 200 psi (2”-12”)
3 = 100 psi undercut
6 = 150 psi (14”- 30”)

6. Disc Material
4 = 304 Stainless (CF8)
3 = 316 Stainless (CF8M)

7. Shaft
4 = 416 Stainless

8. Bushing
3 = PTFE

9. Seat
5 = EPDM
1 = Buna-N
6 = Viton / Hi-Temp
7 = Polyurethane

10. Operator
X = Bare Shaft
2 = Locking Handle
4 = Infinite Lockable Adjustment
G = Worm Gear

Warranty: Each Pro Valve resilient seated butterfly valve is warranted from defects in material and workmanship under normal use and service for a period of (1) year from date of purchase. (See our complete terms and conditions)

Automated Butterfly Valve

Series	Assembly	Size	Close Off	Construction	Actuator	Controls	Accessories
BF	2	04	F	A	82	E	F
1	2	3	4	5	6	7	8

1. Series
BF = Butterfly

2. Assembly
2 = 2-Way

3. Size
02 = 2”
25 = 2.5”
through
24” = 24”

4. Close Off
F = Full Rated Lug / 200 PSI
W = Full Rated Wafer / 200 PSI
U = Undercut Lug / 100 PSI
R = Reduced Rated / 150 PSI
14” and above 150 psi max

5. Construction
A = 304 Stainless Disc / EPDM Seat
N = 304 Stainless Disc / Buna-N Seat
V = 304 Stainless Disc / Viton Seat
P = 316 Stainless Disc / Poly Seat

6. Actuator
41 = Electric Non-Spring (120 VAC)**
44 = Electric Fail-Safe (120 VAC)
81 = Double Acting Pneumatic
82 = Spring Return Pneumatic

7. Controls
Electric Actuator
O = On/Off
E = Modulating (0-10 VDC or 4-20 ma)

Pneumatic Actuator
O = On/Off
E = Modulating Electronic (4-20 ma)
P = Modulating Pneumatic (3-15 PSI)

8. Accessories
Electric Actuator
C = Cycle Timer
D = Digital Board High Resolution
F = Feedback
K = POT (5K Ohms feedback)
J = Manual Override Kill box
T = Local Control Station

Pneumatic Actuator
S = EP Solenoid Valve (120 VAC)
T = EP Solenoid Valve (24 VDC)
R = EP Solenoid Valve (24 VAC)
L = Limit Switch, 2-SPDT, with Visual
C = EP with Limit Switch Pre Wired
Q = Limit Switch with Feedback
E = Speed Controls

Note 1: **Other Voltages Available

Warranty: Each Pro Valve resilient seated assembly is warranted from defects in material and workmanship under normal use and service for a period of (1) year from date of purchase. (See our complete terms and conditions)

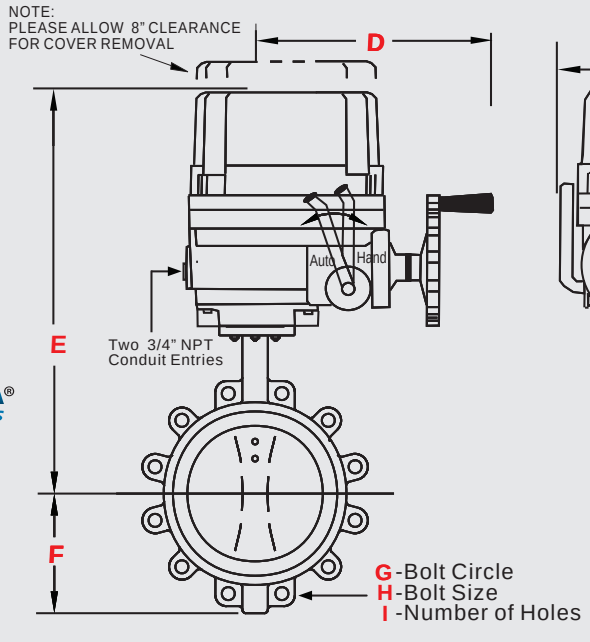
120 VAC Electric

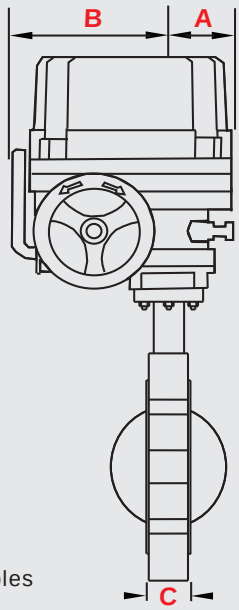
PRO VALVE®

2-Way

ELECTRA® ACTUATORS

ETL® ETL 3102145





Standard Assembly: Ductile Iron Body, 304 Stainless Disc, EPDM Seat, On/Off, 120 VAC, with Heater, Manual Override, 2-SPDT Switches Modulating Service Change Last O to E in Model Number, accessories see page 10.

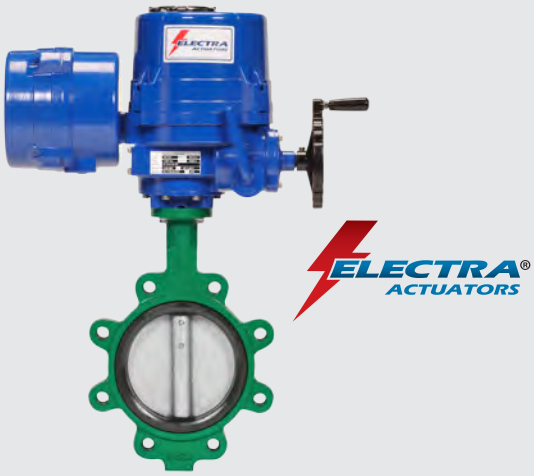
Assembly Specification				Speed 90°		Amp draw	41 Series Operator		Assembly Dimensions inch / mm								
Size in / DN	Model Number	Close off psi / Bar	Wt. lb / Kg	On/Off (sec.)	Mod. (sec.)	On/Off Mod.	On/Off	Mod.	A	B	C	D	E	F	G	H	I
2" 50	BF202FA410	200 14	37 17	22	75	2.38	700-00	700-01	3½ 89.0	5½ 140.0	1¾ 44.5	10½ 267.0	16⅝ 422.3	3¼ 82.6	4¾ 120.7	⅝-11 UNC	4
2½" 65	BF225FA410	200 14	38 17	22	75	2.38	700-00	700-01	3½ 89.0	5½ 140.0	1⅞ 47.6	10½ 267.0	17⅛ 434.9	3¾ 95.2	5½ 139.7	⅝-11 UNC	4
3" 80	BF203FA410	200 14	44 20	22	75	2.38	700-00	700-01	3½ 89.0	5½ 140.0	1⅞ 47.6	10½ 267.0	17⅜ 441.3	4.0 101.6	6.0 152.4	⅝-11 UNC	4
4" 100	BF204FA410	200 14	56 25	22	75	2.38	700-00	700-01	3½ 89.0	5½ 140.0	2⅛ 53.9	10½ 267.0	18⅛ 460.4	4⅞ 123.8	7½ 190.5	⅝-11 UNC	8
5" 125	BF205FA410	200 14	58 26	22	75	2.38	700-01	700-01	3½ 89.0	5½ 140.0	2¼ 57.2	10½ 267.0	20⅝ 523.9	5⅜ 136.5	8½ 215.9	¾-10 UNC	8
6" 150	BF206FA410	200 14	70 32	22	75	2.38	700-01	700-01	3½ 89.0	5½ 140.0	2¼ 57.2	10½ 267.0	21⅛ 536.6	5⅞ 149.2	9½ 241.3	¾-10 UNC	8
8" 200	BF208FA410	200 14	100 45	22	75	2.87	700-02	700-02	3½ 89.0	5½ 140.0	2½ 63.5	10½ 267.0	21¾ 550.4	7⅛ 180.9	11¾ 298.5	¾-10 UNC	8
8"-U 200	BF208UA410	100 7	100 45	22	75	2.38	700-01	700-01	3½ 89.0	5½ 140.0	2½ 63.5	10½ 267.0	21¾ 550.4	7⅛ 180.9	11¾ 298.5	¾-10 UNC	8
10" 250	BF210FA410	200 14	124 56	26	75	3.38	700-03	700-03	4.0 102.0	5½ 140.0	2¾ 69.9	11¼ 286.0	23.0 582.1	8¼ 209.6	14¼ 361.9	⅞-9 UNC	12
10"-U 250	BF210UA410	100 7	124 56	26	75	3.38	700-03	700-03	4.0 102.0	5½ 140.0	2¾ 69.9	11¼ 286.0	23.0 582.1	8¼ 209.6	14¼ 361.9	⅞-9 UNC	12
12" 300	BF212FA410	200 14	159 72	32	75	4.55	700-06	700-06	4.0 102.0	6⅜ 162.0	3⅛ 79.4	11¼ 286.0	24¾ 626.6	9¾ 247.7	17.0 431.8	⅞-9 UNC	12
12"-U 300	BF212UA410	100 7	159 72	26	75	3.38	700-03	700-03	4.0 102.0	6⅜ 162.0	3⅛ 79.4	11¼ 286.0	24¾ 626.6	9¾ 247.7	17.0 431.8	⅞-9 UNC	12
14" 350	BF214RA410	150 10	214 97	32	75	4.55	700-06	700-06	4.0 102.0	6⅜ 162.0	3⅛ 79.4	11¼ 286.0	26.0 658.3	11.0 279.4	18¾ 476.3	1-8 UNC	12
16" 400	BF216RA410	150 10	260 118	32	75	7.20	700-12	700-12	4⅜ 111.1	7⅜ 186.0	3½ 88.9	12⅛ 307.0	28⅛ 715.10	12.0 304.8	21¼ 539.8	1-8 UNC	16
18" 450	BF218RA410	150 10	294 133	97	97	7.20	700-30	700-30	5¼ 133.0	7⅜ 186.0	4¼ 133.4	12⅛ 307.0	46¾ 1187.5	14⅜ 365.2	22¾ 577.9	1⅛-7 UNC	16
20" 500	BF220RA410	150 10	568 258	97	97	7.20	700-30	700-30	5¼ 133.0	7⅜ 186.0	5¼ 133.4	12⅛ 307.0	46¾ 1187.5	14⅝ 371.5	25.0 635.0	1⅛-7 UNC	20
24" 600	BF224RA410	150 10	783 355	97	97	7.20	700-30	700-30	5¼ 133.0	7⅜ 186.0	6⅛ 155.6	12⅛ 307.0	46¾ 1187.5	18.0 457.2	29½ 749.3	1¼-7 UNC	20

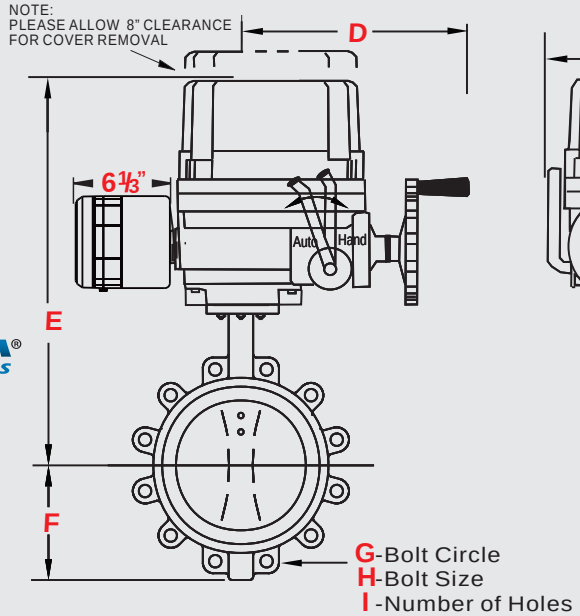
Note: Electrical diagram located under Electra actuator brochure.

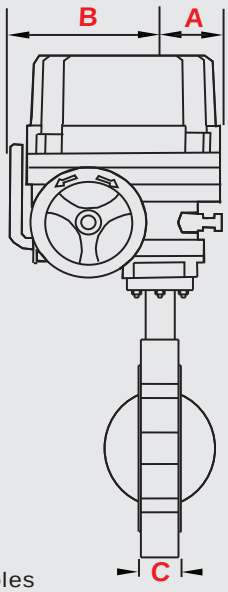
120 VAC Electric Fail-Safe

PRO VALVE®

2-Way







Standard Assembly: Ductile Iron Body, 304 Stainless Disc, EPDM Seat, On/Off, 120 VAC, with Heater, Manual Override, 2-SPDT Switches Modulating Service Change Last O to E in Model Number, accessories see page 10. Specify: Fail Open or Fail Closed.

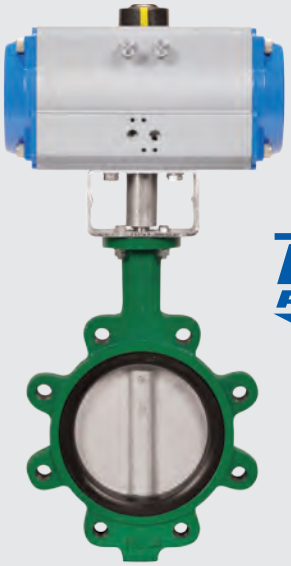
Assembly Specification				Speed 90°	Amp draw	44 Series Operator	Assembly Dimensions inch / mm								
Size in / DN	Model Number	Close off psi / Bar	Wt. lb / Kg	On/Off Mod.	On/Off Mod.	On/Off Mod.	A	B	C	D	E	F	G	H	I
2" 50	BF202FA440	200 14	36 16	33 Seconds	2.4	FS-800-02	3½ 89.0	5½ 140.0	1¾ 44.5	10.4 264	16⅝ 422.3	3¼ 82.6	4¾ 120.7	⅝-11 UNC	4
2½" 65	BF225FA440	200 14	37 17	33 Seconds	2.4	FS-800-02	3½ 89.0	5½ 140.0	1⅞ 47.6	10.4 264	17⅛ 434.9	3¾ 95.2	5½ 139.7	⅝-11 UNC	4
3" 80	BF203FA440	200 14	43 20	33 Seconds	2.4	FS-800-02	3½ 89.0	5½ 140.0	1⅞ 47.6	10.4 264	17⅜ 441.3	4.0 101.6	6.0 152.4	⅝-11 UNC	4
4" 100	BF204FA440	200 14	55 25	33 Seconds	2.4	FS-800-02	3½ 89.0	5½ 140.0	2⅛ 53.9	10.4 264	18⅛ 460.4	4⅞ 123.8	7½ 190.5	⅝-11 UNC	8
5" 125	BF205FA440	200 14	57 26	33 Seconds	2.4	FS-800-02	3½ 89.0	5½ 140.0	2¼ 57.2	10.4 264	18⅝ 473	5⅜ 136.5	8½ 215.9	¾-10 UNC	8
6" 150	BF206FA440	200 14	60 27	33 Seconds	2.4	FS-800-02	3½ 89.0	5½ 140.0	2¼ 57.2	10.4 264	19⅛ 486	5⅞ 149.2	9½ 241.3	¾-10 UNC	8
8" 200	BF208FA440	200 14	100 45	33 Seconds	2.4	FS-800-02	3½ 89.0	5½ 140.0	2½ 63.5	10.4 264	21¾ 550.4	7⅛ 180.9	11¾ 298.5	¾-10 UNC	8
10" 250	BF210FA440	200 14	124 56	34 Seconds	3.8	FS-800-03	4.0 102.0	5½ 140.0	2¾ 69.9	11¼ 286.0	23.0 582.1	8¼ 209.6	14¼ 361.9	⅞-9 UNC	12
12" 300	BF212FA440	200 14	159 72	34 Seconds	5.0	FS-800-05	4.0 102.0	6⅜ 162.0	3⅛ 79.4	11¼ 286.0	24¾ 626.6	9¾ 247.7	17.0 431.8	⅞-9 UNC	12
12"-U 300	BF212UA440	100 7	159 72	34 Seconds	3.8	FS-800-03	4.0 102.0	6⅜ 162.0	3⅛ 79.4	11¼ 286.0	24¾ 626.6	9¾ 247.7	17.0 431.8	⅞-9 UNC	12

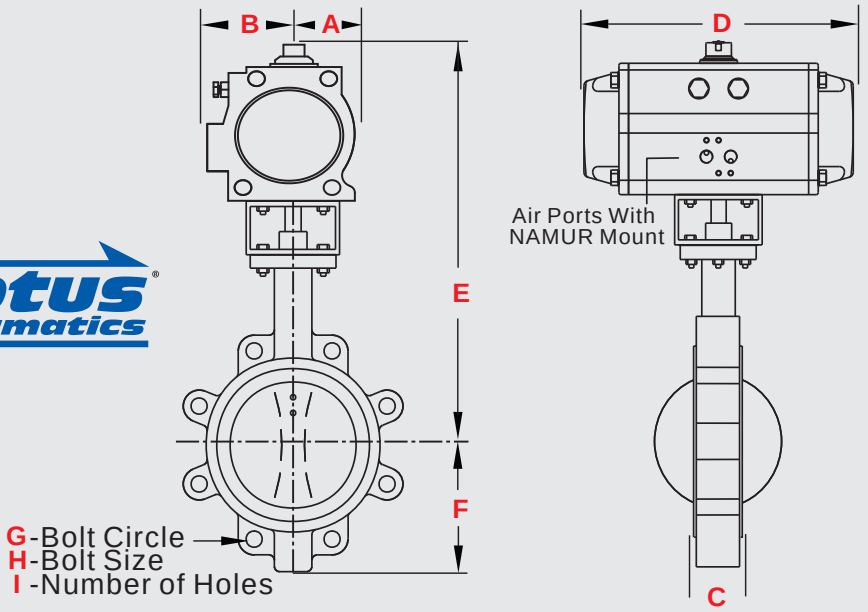
Note: Wiring Diagrams Located in Electra Fail-Safe Brochure.

Pneumatic / Double Acting (80 psi)

PRO VALVE®

2-Way





Standard Assembly: Ductile Iron Body, 304 Stainless Disc, EPDM Seat, Double Acting Actuator Modulating Service Change Last O to E (4-20 ma) or P (3-15 psi), in model number, accessories see page 10.

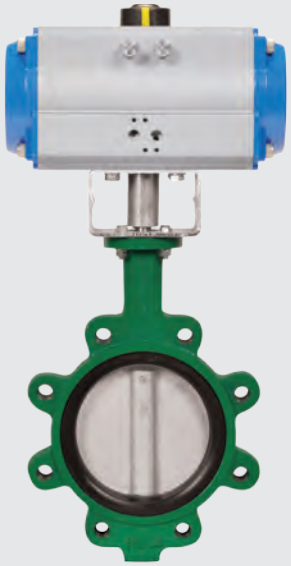
Assembly Specification				Speed 90°		Air Ports (NPT)	81 Series Operator	Assembly Dimensions inch / mm								
Size in / DN	Model Number	Close off psi / Bar	Wt. lb / Kg	Air Open (sec.)	Air Close (sec.)		On/Off Mod.	A	B	C	D	E	F	G	H	I
2" 50	BF202FA810	200 14	15 7	0.3	0.3	¼"	63 DA	1½ 36.0	1⅞ 47.0	1¾ 44.5	6½ 168	13¾ 349.2	3¼ 82.5	4¾ 120.7	⅝-11 UNC	4
2½" 65	BF225FA810	200 14	16 7	0.3	0.3	¼"	63 DA	1½ 36.0	1⅞ 47.0	1⅞ 47.6	6½ 168	14¼ 361.9	3¾ 95.3	5½ 139.7	⅝-11 UNC	4
3" 80	BF203FA810	200 14	22 10	0.3	0.3	¼"	63 DA	1½ 36.0	1⅞ 47.0	1⅞ 47.6	6½ 168	14½ 368.4	4.0 101.6	6.0 152.4	⅝-11 UNC	4
4" 100	BF204FA810	200 14	36 16	0.4	0.4	¼"	75 DA	1⅝ 46.0	2¼ 57.0	2⅛ 53.9	8.0 204	16 406.4	4⅞ 123.8	7½ 190.5	⅝-11 UNC	8
5" 125	BF205FA810	200 14	43 20	0.5	0.5	¼"	88 DA	2 50.0	2⅓ 58.5	2¼ 57.2	10¼ 262	17 431.8	5⅜ 136.5	8½ 215.9	¾-10 UNC	8
6" 150	BF206FA810	200 14	46 21	0.7	0.7	¼"	100 DA	2¼ 57.5	2⅝ 64.0	2¼ 57.2	10½ 268	17½ 444.5	5⅞ 149.2	9½ 241.3	¾-10 UNC	8
8" 200	BF208FA810	200 14	76 35	0.9	0.9	¼"	125 DA	2¾ 67.5	3.0 74.5	2½ 63.5	11¾ 301	22 558.8	7⅛ 180.9	11¾ 298.5	¾-10 UNC	8
8"-U 200	BF208UA810	100 7	65 30	0.7	0.7	¼"	100 DA	2¼ 57.5	2⅝ 64.0	2½ 63.5	10½ 268	20¼ 514.4	7⅛ 180.9	11¾ 298.5	¾-10 UNC	8
10" 250	BF210FA810	200 14	104 47	1.3	1.3	¼"	135 DA	3.0 75.0	3.0 77.0	2¾ 69.9	15¼ 390	23¼ 590.6	8¼ 209.6	14¼ 361.9	⅞-9 UNC	12
10"-U 250	BF210UA810	100 7	96 44	0.7	0.7	¼"	100 DA	2¼ 57.5	2⅝ 64.0	2¾ 69.9	10½ 268	21½ 546.1	8¼ 209.6	14¼ 361.9	⅞-9 UNC	12
12" 300	BF212FA810	200 14	145 70	1.3	1.3	¼"	135 DA	3.0 75.0	3.0 77.0	3⅛ 79.4	15¼ 290	26½ 673.1	9¾ 247.7	17 431.8	⅞-9 UNC	12
12"-U 300	BF212UA810	100 7	137 62	0.9	0.9	¼"	125 DA	2¾ 67.5	3.0 74.5	3⅛ 79.4	11¾ 301	25 635.0	9¾ 247.7	17 431.8	⅞-9 UNC	12
14" 350	BF214RA810	150 10	195 89	1.6	1.6	¼"	160 DA	3½ 87.0	3½ 87.0	3⅛ 79.4	18.0 458	27½ 698.5	11.0 279.4	18¾ 476.3	1-8 UNC	12
16" 400	BF216RA810	150 10	260 118	2.2	2.2	¼"	200 DA	4.0 103	4.0 103	3½ 88.9	20¾ 525	28¾ 730.2	12.0 304.8	21¼ 539.8	1-8 UNC	16
18" 450	BF218RA810	150 10	300 136	2.9	2.9	¼"	300 DA	4½ 113	4½ 113	4¼ 107.95	21.0 532	25 635.0	14⅜ 365.2	22¾ 577.9	1⅛-9 UNC	16
20" 500	BF220RA810	150 10	600 272	3.8	3.8	¼"	500 DA	5.0 130	5.0 130	5¼ 133.4	23¾ 602	27½ 698.5	14⅝ 371.5	25.0 635.0	1¼-7 UNC	20
24" 600	BF216RA810	150 10	800 363	4.5	4.5	¼"	600 DA	5¾ 147	5¾ 147	6⅛ 155.6	28½ 722	28¾ 730.2	18.0 457.2	29½ 749.3	1¼-7 UNC	20

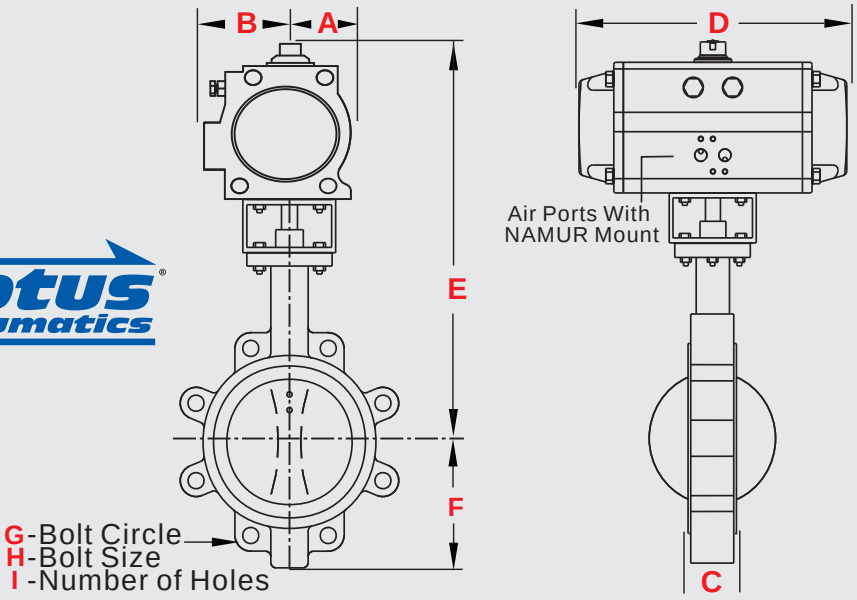
Note: Pneumatic Actuator detail located under Notus Pneumatic brochure.

Pneumatic / Spring Return (80 psi)

PRO VALVE®

2-Way





Standard Assembly: Ductile Iron Body, 304 Stainless Disc, EPDM Seat, Spring Return Actuator Modulating Service Change Last O to E (4-20 ma) or P (3-15 psi), in model number, accessories see page 10.

Assembly Specification				Speed 90°		Air Ports (NPT)	81 Series Operator	Assembly Dimensions inch / mm								
Size in / DN	Model Number	Close off psi / Bar	Wt. lb / Kg	Air Open (sec.)	Air Close (sec.)		On/Off Mod.	A	B	C	D	E	F	G	H	I
2" 50	BF202FA820	200 14	21 10	0.6	0.6	¼"	75 SR	1¾ 46.0	2¼ 57.0	1¾ 44.5	8.0 204	14½ 368.3	3¼ 82.5	4¾ 120.7	⅝-11 UNC	4
2½" 65	BF225FA820	200 14	22 10	0.6	0.6	¼"	75 SR	1¾ 46.0	2¼ 57.0	1⅞ 47.6	8.0 204	15 381.0	3¾ 95.3	5½ 139.7	⅝-11 UNC	4
3" 80	BF203FA820	200 14	31 14	0.9	0.9	¼"	88 SR	2.0 50.0	2¼ 58.5	1⅞ 47.6	10¼ 262	15¾ 400.1	4 101.6	6 152.4	⅝-11 UNC	4
4" 100	BF204FA820	200 14	47 21	1.1	1.1	¼"	100 SR	2¼ 57.5	2½ 64	2⅛ 53.9	10½ 268	16½ 419.1	4⅞ 123.8	7½ 190.5	⅝-11 UNC	8
5" 125	BF205FA820	200 14	61 28	1.4	1.4	¼"	125 SR	2¾ 67.5	3.0 74.5	2¼ 57.2	11¾ 301	19 482.6	5⅜ 136.5	8½ 215.9	¾-10 UNC	8
6" 150	BF206FA820	200 14	64 29	1.9	1.9	¼"	135 SR	3.0 75.0	3.0 77.0	2¼ 57.2	15¼ 390	19½ 495.3	5⅞ 149.2	9½ 241.3	¾-10 UNC	8
8" 200	BF208FA820	200 14	93 42	2.2	2.2	¼"	160 SR	3½ 87.0	3½ 87.0	2½ 63.5	18.0 458	23⅜ 593.7	7⅛ 180.9	11¾ 298.5	¾-10 UNC	8
8"-U 200	BF208UA820	100 7	83 38	1.9	1.9	¼"	135 SR	3.0 75.0	3.0 77.0	2½ 63.5	15¼ 390	22 558.8	7⅛ 180.9	11¾ 298.5	¾-10 UNC	8
10" 250	BF210FA820	200 14	183 83	3.0	3.0	¼"	200 SR	4.0 103.0	4.0 103.0	2¾ 69.9	20¾ 525	24½ 622.3	8¼ 209.6	14¼ 361.9	⅞-9 UNC	12
10"-U 250	BF210UA820	100 7	121 55	1.9	1.9	¼"	135 SR	3.0 75.0	3.0 77.0	2¾ 69.9	15¼ 390	23⅛ 587.4	8¼ 209.6	14¼ 361.9	⅞-9 UNC	12
12" 300	BF212FA820	200 14	249 113	4.1	4.1	¼"	300 SR	4½ 113.0	4½ 113.0	3⅛ 79.4	21.0 532	27 685.8	9¾ 247.7	17 431.8	⅞-9 UNC	12
12"-U 300	BF212UA820	100 7	184 84	2.2	2.2	¼"	160 SR	3½ 87.0	3½ 87.0	3⅛ 79.4	18.0 458	26⅓ 668.8	9¾ 247.7	17 431.8	⅞-9 UNC	12
14" 350	BF214RA820	150 10	299 136	4.1	4.1	¼"	300 SR	4½ 113.0	4½ 113.0	3⅛ 79.4	21.0 532	29¼ 742.9	11 279.4	18¾ 476.3	1-8 UNC	12
16" 400	BF216RA820	150 10	342 155	5.0	5.0	¼"	500 SR	5.0 130.0	5.0 130.0	3½ 88.9	23¾ 602	31 787.4	12.0 304.8	21¼ 539.8	1-8 UNC	16
18" 450	BF218RA820	150 10	184 84	5.5	5.5	¼"	600 SR	5¾ 147.0	5¾ 147.0	4¼ 107.95	28½ 722	26⅓ 668.8	14⅜ 365.2	22¾ 577.9	1⅛-9 UNC	16
20" 500	BF220RA820	150 10	299 136	-	-	¼"	HPD25-SR	8¾ 223.0	8¾ 223.0	5¼ 133.4	41¼ 1046	36½ 925.0	14⅝ 371.5	25.0 635.0	1¼-7 UNC	20
24" 600	BF224RA820	150 10	342 155	-	-	¼"	HPD30-SR	9¼ 232.0	9¼ 232.0	6⅛ 155.6	63¼ 1609	40½ 1027	18 457.2	29½ 749.3	1¼-7 UNC	16

Note: Pneumatic Actuator detail located under Notus Pneumatic brochure.

PRO VALVE®

We Control Flow

4575 Damascus Road • Memphis, Tennessee • Phone 901-794-5790 Fax 901-363-1123
WWW.VALVETECK.COM