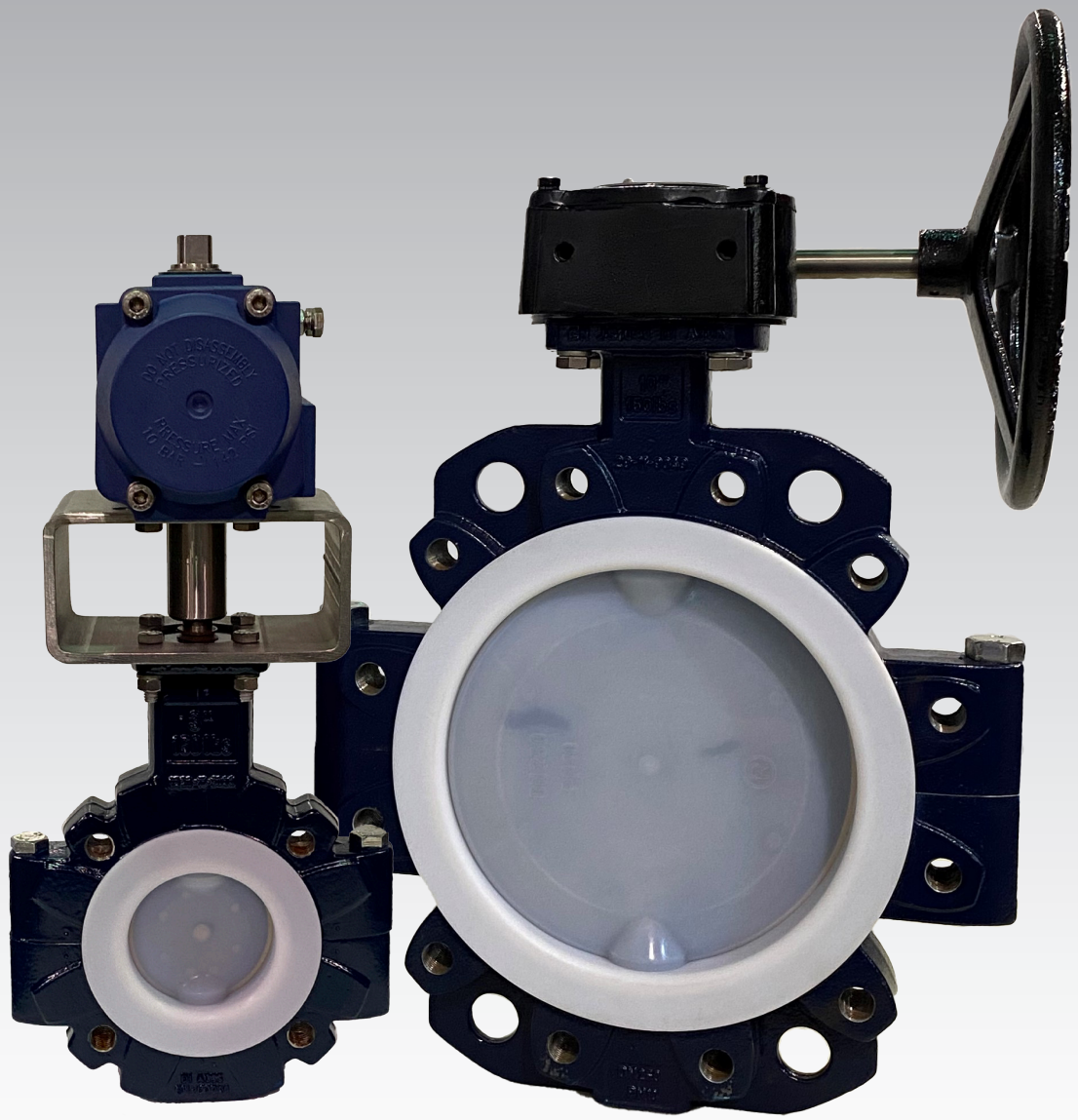
AEGIS®

BFV Series



Fully Lined Butterfly Valves Engineered
for Industries' Most Hazardous &
Corrosive Services

ASSOCIATE
CHLORINE
INSTITUTE
MEMBERS

ISO 9001:2015

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BFV Valve	Standard Features	Optional Features
Application	Reliable Isolation & Control of Extremely Corrosive Liquids and Gas	
Conforming Standards	API 609, ASME B16.5, B16.34/42, SIL-3, ISO 15848, MSS SP-25, Chlorine Pamphlet #6	
Size	2"-16"	
Body	A-395 Ductile Iron	
Body Lining	Paraflon®	PTFE
Disc/Lining	Duplex/Pure PFA	Titanium
External Coating	3 - Component Epoxy Paint	
Temperature	-40°F to 400°F	
Process Sealing	Gas Tested, Bubble Tight per API598/EN12266-1-P12 Leakage Rate A	
Stem Sealing	Top & Bottom Mechanical Shaft Sealing System	
Max Pressure Rating	145 PSI	
Connection Type	ASME 150# Flanged	PN6, PN10
Control Characteristics	≈ Equal Percentage	
Flow Direction	Bi-directional	
Cleaning Preperation	Chlorine Cleaned Optional	
Country of Origin	Germany	

Design Features

- Top & Bottom Mechanical Shaft Sealing System
- Chlorine Institute Pamphlet 6 Conformance
- Superior Permeation and Cold Flow Resistance
- Mechanically Locked Valve Linings/Full Vacuum Rating
- Enhanced 360° Radially Loaded Elastomeric Energizers
- Molded & Symmetrically Machined Disc/Liner
- PTFE Coated, Permanently Lubricated Bearings
- ATEX Group II, Explosive Surrounding Conformance Design
- Bi-directional Zero Leakage(Dead-end Service)
- One Piece, Blow-out Proof Disc and Stem Design
- ISO 5211 Actuator Mounting
- Stainless Steel Lockable Lever Handles
- Low Operating Torque
- SIL-3 & ISO 15848-1Fugitive Emission Certified
- TA Luft VDI 2440 Section 5.2.6.4 Certified
- Environmentally Safe, Maintenanace Free Design

Chlorine and HCL Valves

AEGIS' BFV Series lined butterfly valves are ideally suited for the stringent performance requirements demanded with isolating and controlling wet and dry chlorine gas as well as hydrochloric acid. Valves for these hazardous chemicals are thoroughly cleaned, dried and packaged per our factory procedures and conform to Chlorine Institute Pamphlet 6 requirements. Our environmentally safe, mechanical shaft sealing technology and Paraflon® body lining, offers industries using these highly regulated chemicals unparalleled performance and reliability. Paraflon®, Aegis' fully fluorinated molecular enhanced PTFE polymer, provides superior permeation and cold flow resistance.

Safety Stem Seal

AEGIS' BFV Series valves are designed to offer long-term, maintenance-free security against the harmful effects of fugitive emissions. These valves have been Certified to ISO-15848-1 with Helium to tightness class BH for elastomeric seals and are rated to Safety Integrity Level 3 (SIL-3), proving reliability and integrity in extreme conditions.

Applications

AEGIS' BFV Series valves are routinely specified for hazardous services such as:

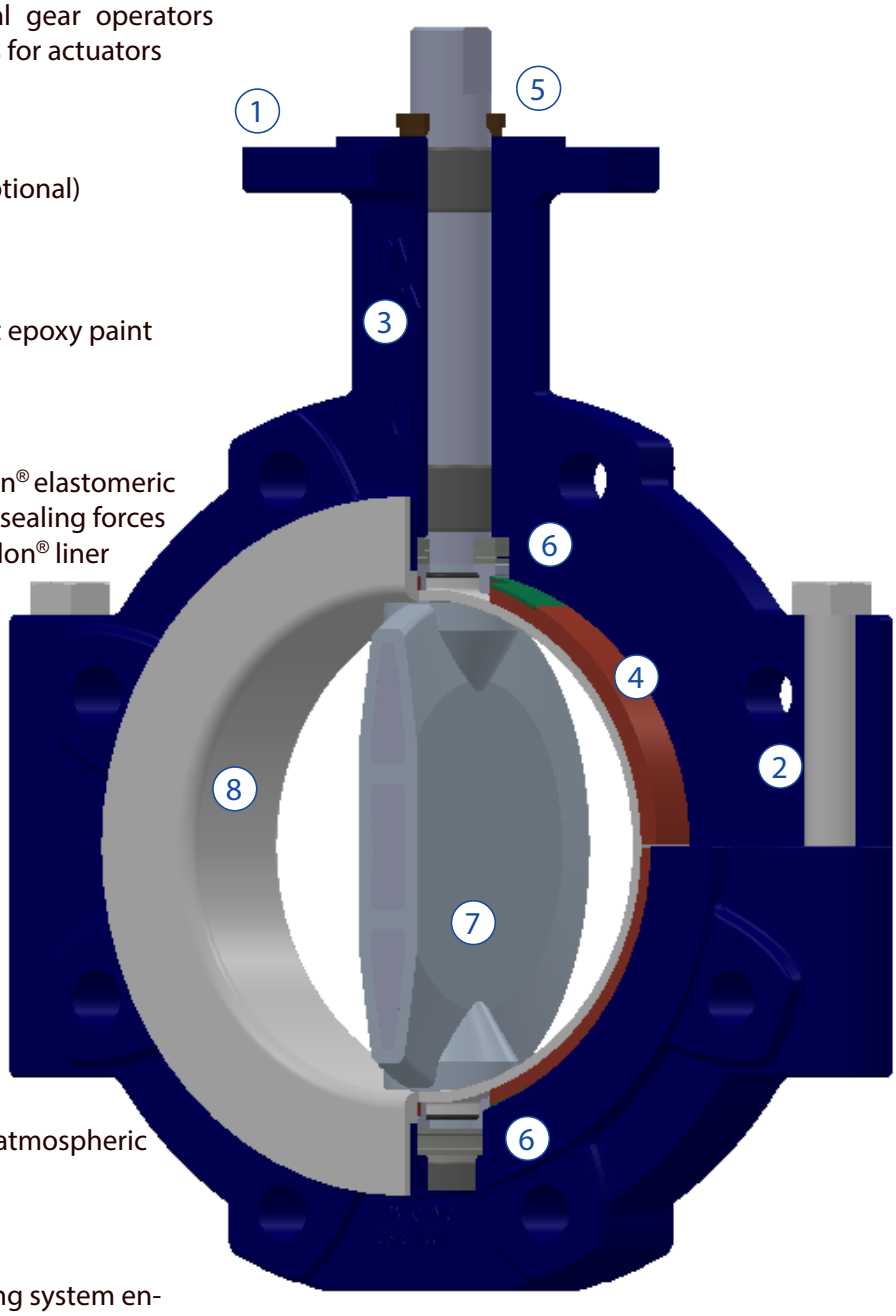
- Acetic Acid
- Alcohols
- Anolyte
- Brine
- Bromine
- Caustic
- Catholyte
- Chlorine Gas
- Chlorine Condensate
- Chlorinated Brine
- Chlorinated Organics
- Chlorine Dioxide
- Chlorinated Solvents
- Chlorosulfonic Acid
- Deionized Water
- Ethylene Dichloride
- Ferric Chloride
- Hydrobromic Acid
- Hydrochloric Acid
- Hydrofluoric Acid
- Hydrogen Peroxide
- Nitric Acid
- Oleum
- Phosgene Gas
- Phosphoric Acid
- Sodium Hypochlorite
- Sulfuric Acid
- Spent Acid
- Vinyl Chloride Monomer
- Triethanolamine

1 ISO 5211 Mounting Flange
Facilitates direct mounting of manual gear operators and stainless steel brackets & couplings for actuators

2 High-Quality Bolting
ASTM A193-B7 (Standard), Alloy 20 (Optional)

3 External Corrosion Protection
Provided by a highly corrosion resistant epoxy paint system

4 Zero Leakage Performance
Our enhanced 360° radially-loaded Viton® elastomeric energizer transfers uniform permanent sealing forces to the entire circumference of our Paraflon® liner

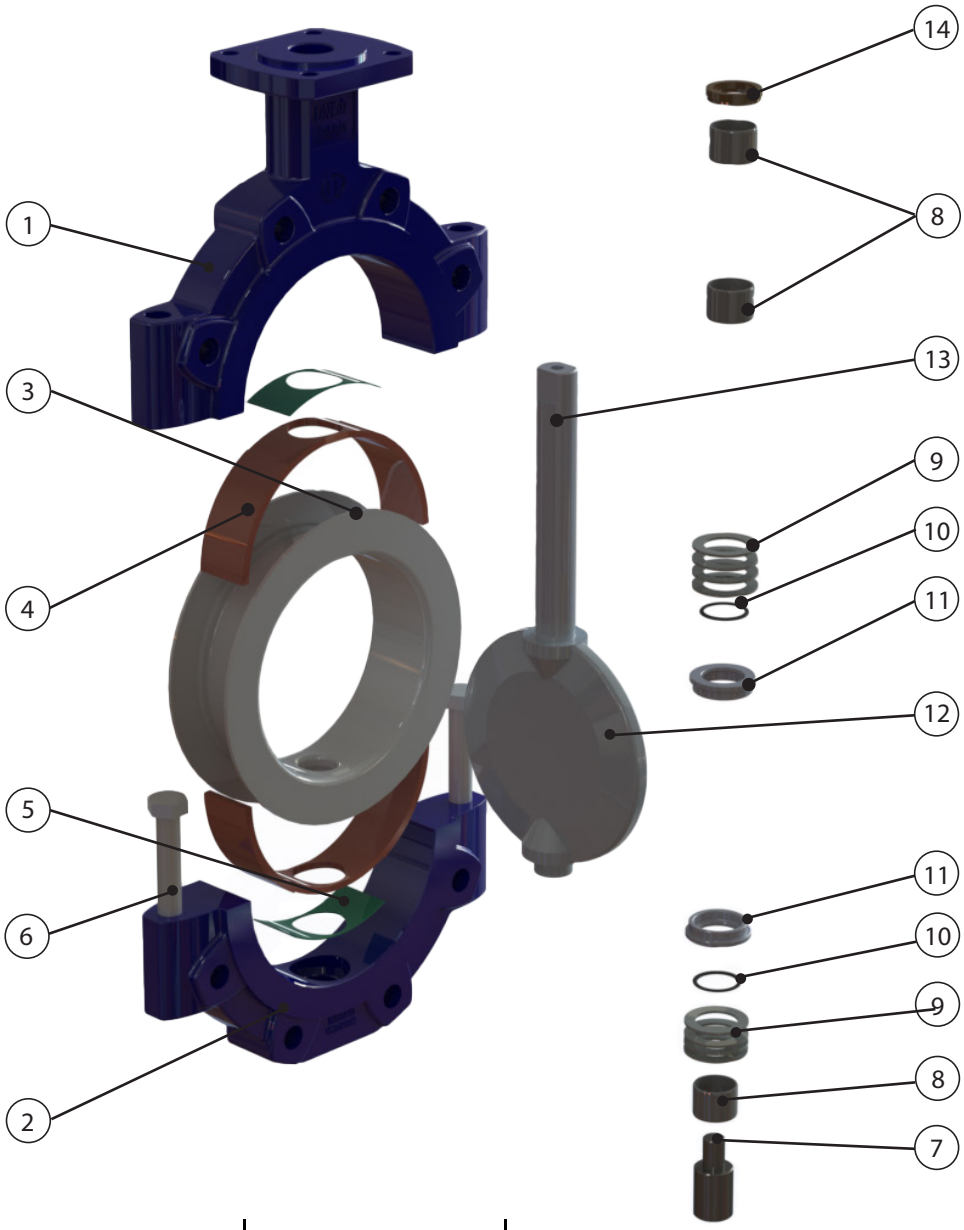


5 Atmospheric Seals
Protects the interior components from atmospheric moisture

6 Dynamically-Loaded Shaft Seal
Top and bottom mechanical shaft sealing system ensures world-class environmental protection

7 Robust Pure PFA Lining
Minimum 3mm thick, machined and interlocked to the Duplex stainless steel disc core, low friction and torque values on Paraflon® body liner and PFA lined disc

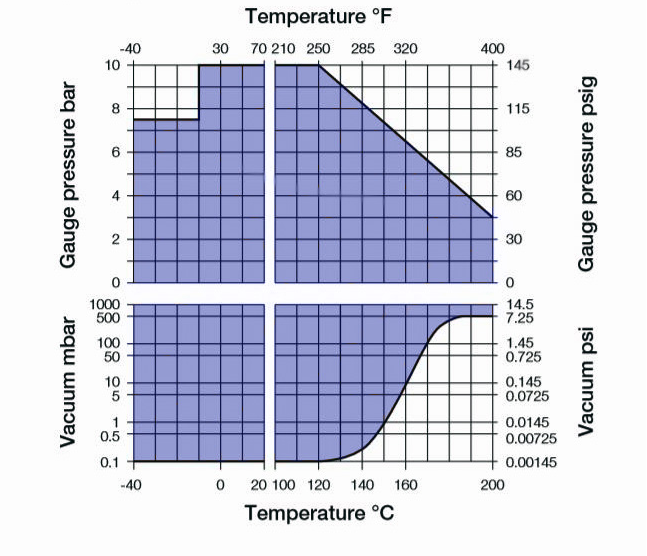
8 Paraflon® Liner
Molded and machined, features superior permeation resistance and physical properties, wide sealing surfaces for flanges with large radii



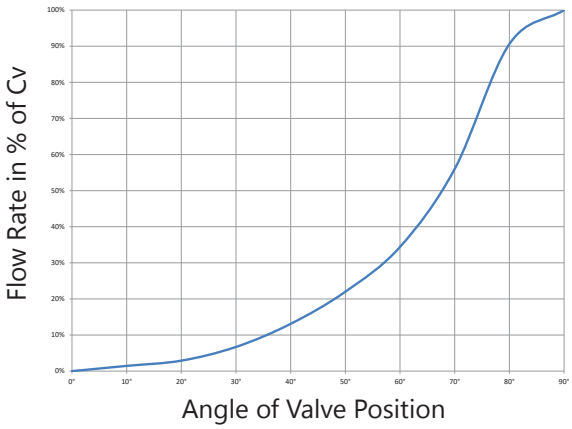
Item #	Description	Std. Material
1	Upper Body	Ductile Iron A395
2	Lower Body	Ductile Iron A395
3	Body Lining	Paraflon®
4	Elastomeric Energizer	Viton
5	Pressure Gasket	Aramide
6	Body Bolts	A193 B7
7	Guide Pin	A582 430F SS
8	Coated Bearing	304 SS
9	Belleville Washer	A666 301 SS
10	O-Ring	Viton
11	Thrust Ring	CF8 SS
12	Disc Lining	Pure PFA
13	Disc Core	Duplex SS A890 1A
14	Atmospheric Seal	Fluororubber

Valve Size	C_v Values Based on Degrees Open and Valve Size							
	20°	30°	40°	50°	60°	70°	80°	90°
2"	1	7	15	28	48	78	121	140
3"	6	26	55	96	147	230	308	329
4"	13	31	61	108	181	288	480	531
6"	43	98	191	322	502	818	1323	1461
8"	72	198	412	620	1062	1597	2577	2916
10"	99	332	596	1028	1690	2628	4301	4757
12"	185	490	973	1605	2689	4232	6681	7586
14"	268	711	1410	2330	3845	6140	9693	11009
16"	344	909	1806	2982	4940	7281	12407	14097

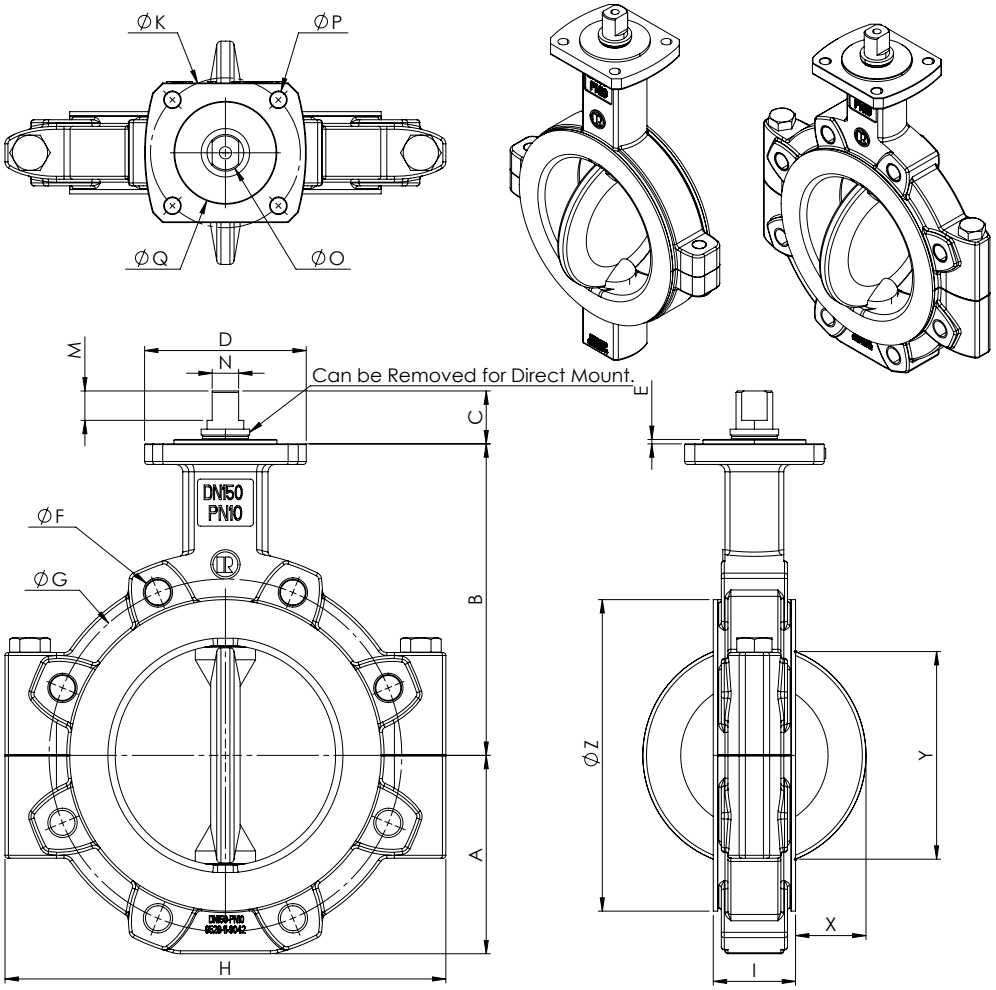
Valve Size	Break Torque		Max. Allowable Stem Torque Duplex	
	N-m	In.-Lb.	N-m	In.-Lb.
2"	20	177	100	885
3"	46	407	180	1593
4"	63	558	360	3186
6"	128	1133	725	6417
8"	185	1637	775	6859
10"	287	2540	1435	12701
12"	410	3629	1775	15710
14"	550	4868	3000	26552
16"	650	5753	3500	30977



Flow Curve



Dimensions



Valve Size	A	B	C	ØD	E	n X ØF (Lug)	ØG	H (Lug)	H (Wafer)	I	M	N	ØO	ØP	ØQ	ØK	X	Y	ØZ	Ø of Bore
2"	2.83	5.31	1.18	2.95	0.12	4 X 5/8"-11	4.76	5.98	5.31	1.69	0.59	0.39	0.55	0.39	2.17	2.76	0.16	1.10	3.54	1.97
3"	3.50	6.30	1.18	2.95	0.12	4 X 5/8"-11	6.02	8.15	7.01	1.81	0.59	0.43	0.63	0.39	2.17	2.76	0.69	2.64	5.04	3.15
4"	3.94	6.89	1.18	2.95	0.12	8 X 5/8"-11	7.52	9.29	8.07	2.05	0.63	0.47	0.79	0.39	2.17	2.76	0.96	3.43	5.91	3.94
6"	5.04	8.35	1.42	4.33	0.12	8 X 3/4"-10	9.53	11.81	10.55	2.2	0.79	0.71	0.98	0.47	2.76	4.02	1.89	5.59	8.35	5.91
8"	6.50	9.13	1.42	4.33	0.12	8 X 3/4"-10	11.77	13.86	12.83	2.36	0.79	0.71	0.98	0.47	2.76	4.02	2.80	7.60	10.43	7.87
10"	7.68	10.71	1.69	5.31	0.12	12 X 7/8"-9	14.25	17.09	14.96	2.68	0.98	0.87	1.18	0.55	3.35	4.92	3.62	9.57	12.40	9.84
12"	8.86	11.69	1.69	5.31	0.12	12 X 7/8"-9	17.01	20.47	17.79	3.07	0.98	0.87	1.26	0.55	3.35	4.92	4.41	11.50	14.37	11.81
14"	10.16	13.19	1.97	6.10	0.16	12 X 1"-8	18.74	21.97	19.68	3.62	1.38	0.98	1.38	0.71	3.94	5.51	5.39	13.50	16.93	13.78
16"	11.10	14.17	1.97	6.10	0.16	16 X 1"-8	21.26	24.80	22.24	4.02	1.38	1.18	1.57	0.71	3.94	5.51	5.91	15.32	18.90	15.75

Other Sizes may be available.



Actuator/LimitSwitch Package



Electro-Pneumatic



Actuator/Positioner Package



Electro-Pneumatic Positioner



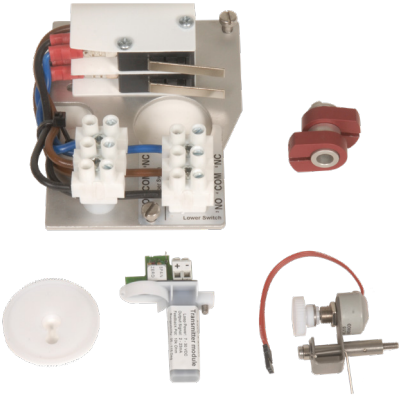
Pneumatic Positioner



Digital Positioner



Pressure Regulator



Feedback Module



Position Indicator

Ordering Information

___ - BFV - ___ - ___

1 2 3

1	Size
	2" ↔ 16"

2	Valve Specification
	Standard Valve
	Body
	A395 Ductile Iron
	Disc/Liner
	Duplex/Pure PFA
P	**Body Liner**
	*Paraflon® (Optional PTFE)
	Elastomeric Energizer
	Viton (Optional Silicon)
	Connection Type
	ASME 150#
T	Standard Valve with Titanium Stem/Disc

3	Body Style
L	Lug
W	Wafer

Operators
Bare Shaft
Hand Lever
Manual Gear
Double Acting Actuator
Fail Close Actuator
Fail Open Actuator

Accessories
Pneumatic Positioner
Electro-Pneumatic Positioner
Proximity Switch Box
Micro Limit Switch
Solenoid Valve
Filter Regulator w/ Gauge
Manual Override
Cleaning
Chlorine

NOTES:
Operators, Accessories, Cleaning and Optional Materials shall be specified upon request of quote. Other Size & Material options may be available upon request.

***Paraflon®:** Aegis' fully fluorinated molecular enhanced PTFE polymer is engineered to significantly improve valve performance by offering enhanced physical properties, improved temperature ratings and resistance to permeation and cold flow.

Ordering Example

Part#: 4-BFV-P-L

RFQ: 4" Aegis® BFV Lug Syle Body with Paraflon® Liner and Pure PFA lined Duplex SS Stem/Disc

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Accurate as of: 7/10/2021

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IDEX FLUID & METERING

Aegis Flow Technologies L.L.C.
6041 Industrial Dr. - 70734
Geismar, LA USA - 225-673-9990