

AUTOMATED AND MANUAL BUTTERFLY VALVES



CAST IRON BFVS

WITH STANDARD STAINLESS STEEL DISC AND STEM







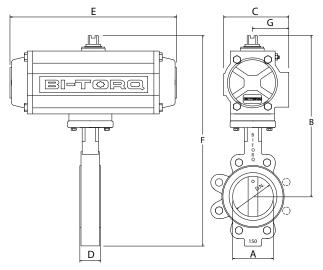
3-WAY TEE LINKAGES

SERVING THE VALVE AUTOMATION INDUSTRY SINCE 1995
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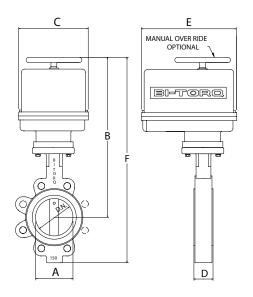


Automated Cast Iron Butterfly Valves





ALL STANDARD PNEUMATIC ACTUATORS SIZED FOR 80 PSI SUPPLY; PLEASE CONSULT OUR SALES STAFF FOR OTHER COMBINATIONS.



- Wafer and lug style cast iron BFVS 2" through 12"
- SS stem and disc as standard
- ullet EPDM, BUNA-N, VITON $^{\hbox{\scriptsize (R)}}$ or PTFE $^{\hbox{\scriptsize (R)}}$ seats
- Direct mount for low profile, cost-efficient operation
- Pneumatic, electric and gear operators

PNEUMATIC ACTUATORS

В	С	D	Е	F	G	ACTUATOR
10.30	3.17	1.69	6.38	13.45	1.77	PN-63DA
2" 10.85	3.17	1.81	6.38	14.35	1.77	PN-63DA
11.09	3.17	1.81	6.38	14.83	1.77	PN-63DA
12.46	3.17	2.05	6.38	16.95	1.77	PN-63DA
140	8 4.17	2.20	9.35	19.08	2.30	PN-85DA
14.59	4.17	2.20	9.35	20.06	2.30	PN-85DA
16.44	4.85	2.36	10.69	23.33	2.68	PN-100DA
" 19.60	5.83	2.68	14.41	27.59	3.15	PN-125DA
" 22.89	7.35	3.07	16.93	32.42	3.94	PN-161DA
	10.30 10.85 11.09 12.46 14.00 14.59 16.44 19.60	10.30 3.17 2" 10.85 3.17 11.09 3.17 12.46 3.17 14.08 4.17 14.59 4.17 16.44 4.85 " 19.60 5.83	10.30 3.17 1.69 2" 10.85 3.17 1.81 11.09 3.17 1.81 12.46 3.17 2.05 1408 4.17 2.20 14.59 4.17 2.20 16.44 4.85 2.36 " 19.60 5.83 2.68	10.30 3.17 1.69 6.38 2" 10.85 3.17 1.81 6.38 11.09 3.17 1.81 6.38 12.46 3.17 2.05 6.38 14.08 4.17 2.20 9.35 14.59 4.17 2.20 9.35 16.44 4.85 2.36 10.69 " 19.60 5.83 2.68 14.41	10.30 3.17 1.69 6.38 13.45 2" 10.85 3.17 1.81 6.38 14.35 11.09 3.17 1.81 6.38 14.83 12.46 3.17 2.05 6.38 16.95 14.08 4.17 2.20 9.35 19.08 14.59 4.17 2.20 9.35 20.06 16.44 4.85 2.36 10.69 23.33 " 19.60 5.83 2.68 14.41 27.59	10.30 3.17 1.69 6.38 13.45 1.77 2" 10.85 3.17 1.81 6.38 14.35 1.77 11.09 3.17 1.81 6.38 14.83 1.77 12.46 3.17 2.05 6.38 16.95 1.77 14.08 4.17 2.20 9.35 19.08 2.30 14.59 4.17 2.20 9.35 20.06 2.30 16.44 4.85 2.36 10.69 23.33 2.68 19.60 5.83 2.68 14.41 27.59 3.15

	А	В	С	D	E	F	G	ACTUATOR
URN	2"	10.95	3.72	1.69	8.15	14.10	2.07	PN-75SR
5	2-1/2"	11.50	3.72	1.81	8.15	15.00	2.07	PN-75SR
	3"	12.19	4.17	1.81	9.35	15.93	2.30	PN-85SR
RE	4"	14.07	4.85	2.05	10.69	18.56	2.68	PN-100SR
IJ	5"	14.59	4.85	2.20	10.69	19.59	2.68	PN-100SR
RING	6"	16.75	5.83	2.20	14.41	222.22	3.15	PN-125SR
2	8"	18.09	5.83	2.36	13.38	24.98	3.15	PN-125SR
SP	10"	21.12	7.35	2.68	16.93	29.11	3.94	PN-161SR
J.	12"	28.06	8.82	3.07	20.94	37.59	4.41	PN-201SR*

^{*}INCLUDES CARBON STEEL MOUNTING KIT

ELECTRIC ACTUATORS

А	В	С	D	Е	F	ACTUATOR
2"	12.22	4.25	1.69	6.88	15.37	BI-200-A-4-P1
2-1/2"	12.77	4.25	1.81	6.88	16.27	BI-200-A-4-P1
3"	13.01	4.25	1.81	6.88	16.75	BI-300-A-4-P1
4"	16.50	7.00	2.05	7.00	20.99	BI-400-A-4-P1
5"	17.02	7.00	2.20	7.00	22.02	BI-1000-A-4-P1*
6"	17.53	7.00	2.20	7.00	23.00	BI-1000-A-4-P1*
8"	18.87	7.00	2.36	7.00	25.76	BI-1500-A-4-P1*
10"	27.13	10.00	2.68	10.00	35.12	BI-3800-A-4-P1**
12"	28.90	10.00	3.07	10.00	38.43	BI-3800-A-4-P1**

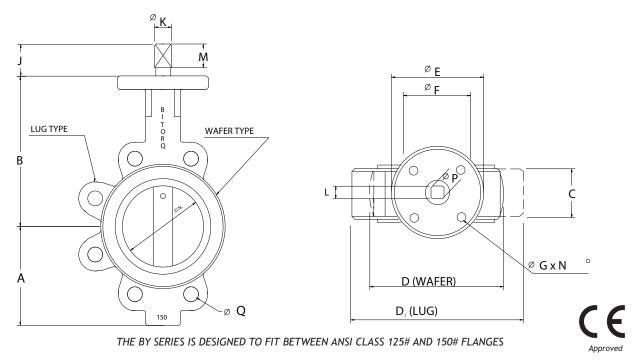
ALL ELECTRIC ACTUATOR DIMENSIONS ARE FOR NEMA 4 ENCLOSURES. FOR NEMA 7 ENCLOSURE DIMENSIONS, PLEASE CONSULT OUR SALES STAFF.

^{*}INCLUDES DECLUTCHABLE MANUAL OVERRIDE

^{**}INCLUDES DECLUTCHABLE MANUAL OVERRIDE AND MOUNTING KIT



Dimensions and Materials



DIMENSIONS

SIZE	ISO	А	В	С	D (WAFER)	D (LUG)	EØ	FØ	G x No.	J	кø	L	М	Q (LUG ONLY)	WEIGHT (LBS.) LUG	WEIGHT (LBS.) WAFER
2"	F07	3.15	6.34	1.69	4.02	5.98	3.54	2.76	0.354 x 4	1.023	0.551	0.433	0.669	4 x 5/8-11	8.4	5.5
2-1/2"	F07	3.50	6.89	1.81	4.76	6.74	3.54	2.76	0.354 x 4	1.023	0.551	0.433	0.669	4 x 5/8-11	9.2	7.0
3"	F07	3.74	7.13	1.81	5.47	7.87	3.54	2.76	0.354 x 4	1.023	0.551	0.433	0.669	4 x 5/8-11	10.3	7.9
4"	F07	4.49	7.87	2.05	6.30	9.02	3.54	2.76	0.354 x 4	1.181	0.709	0.551	0.826	8 x 5/8-11	15.8	10.8
5"	F07	5.00	8.39	2.20	7.48	10.00	3.54	2.76	0.354 x 4	1.181	0.709	0.551	0.826	8 x 3/4-10	21	15.4
6"	F07	5.47	8.90	2.20	8.46	11.02	3.54	2.76	0.354 x 4	1.299	0.866	0.669	0.945	8 x 3/4-10	23	17.2
8"	F07	6.89	10.24	2.36	10.59	13.50	3.54	2.76	0.472 x 4	1.299	0.866	0.669	0.945	8 x 3/4-10	40	29
10"	F10	7.99	11.50	2.68	13.11	15.98	4.92	4.02	0.472 x 4	1.850	1.102	0.866	0.945	12 x 7/8-9	59	42.2
12"	F10	9.53	13.27	3.07	15.08	19.02	4.92	4.02	0.472 x 4	1.850	1.102	0.866	0.945	12 x 7/8-9	88	71.5

OPTIONAL BUTTERFLY VALVES AVAILABLE THROUGH 24". HIGH PERFORMANCE, ALL STAINLESS AND SANITARY VALVES ALSO AVAILABLE.

WITH 10 POSITION PLATE OPEN OPEN

ALL MANUAL VALVES INCLUDE A 10-POSITION HANDLE. CAST IRON GEAR OPERATORS ARE ALSO AVAILABLE.

BILL OF MATERIALS

DESCRIPTION	QTY	MATERIAL
BODY	1	CAST IRON
BOTTOM BUSHING	1	BRONZE
SHAFT	1	316 SS
SEAT	1	EPDM, BUNA, VITON, PTFE
DISC	1	316 SS
TAPER PINS	1-2	316 SS
NAME PLATE	1	316 SS
RIVETS	2	316 SS
TOP BUSHING	1	BRONZE
O-RING	1	EPDM

SPECIFICATIONS

DESIGN AND STANDARDS:

MSS-SP67, API 609 FLANGE ENDS ANSI B16.1

WORKING PRESSURE:

225 PSI TO 8" 150 PSI 10"-12"

SHELL TEST:

350 PSI

SEAL TEST:

250 PSI

WORKING TEMPERATURE: EPDM: -30°F TO +275°F

BUNA-N: +10°F TO +180° VITON®: 0°F TO 350°F PTFE: -20°F to +250°F



Features and Benefits

ISO MOUNTING PAD

The true ISO pad allows for direct mounting of a variety of gears, pneumatic and electric actuators, and a 10 position manual handle.

BUSHING

The stem bushing helps to reduce torque and isolate stem from valve body.

SHAFT SEAL

An EPDM o-ring creates a bubble tight design while limiting contact areas between the body and shaft.

DISC

A 316 SS disc is standard on all BY and MY series models. Aluminum bronze and cast iron discs also are available upon request.

BODY

The cast iron body is epoxy coated for a durable, attractive finish. A fully encapsulated body gives total protection, with the body never coming into contact with the fluid.



A square shaft allows for mounting to true ISO mount pneumatic and electric actuators as well as gear operators.

ANTI-BLOWOUT DESIGN

The standard shaft is 316 SS and never comes into contact with the media. The one piece design ensures positive disc positioning.

EXTENDED NECK

The elongated neck shaft creates added heat resistance.

SEAT LINER

EPDM, BUNA-N, Viton®, and PTFE liners are available. The seat face guarantees a perfect seal with the flanges without additional joints or gaskets.

BOLTING

Standard flange locating holes allow for quick installation and correct alignment. The standard valve is designed to ANSI standards.

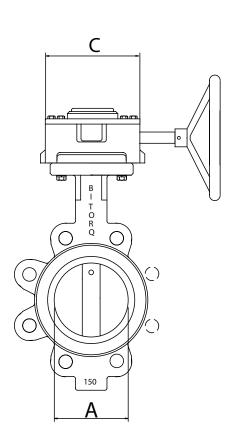


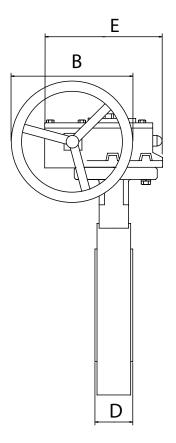
10 throttling positions are available with each standard handle on manually operated valves. The ergonomic design allows for easy operation on all sizes. A padlocking device is optional with all lever handles.





Gear Operated Butterfly Valves





MY SERIES BFV WITH DN SERIES CAST IRON GEAR OPERATOR

Α	В	С	D	Е	GEAR
2"	6.00	4.13	1.69	5.00	DN50
2-1/2"	6.00	4.13	1.81	5.00	DN65
3"	6.00	4.13	1.81	5.00	DN80
4"	6.00	4.13	2.05	5.00	DN100
5"	8.00	4.13	2.20	5.00	DN125
6"	8.00	4.13	2.20	5.00	DN150
8"	9.45	6.00	2.36	6.96	DN200
10"	9.45	6.00	2.68	6.96	DN250
12"	9.45	6.00	3.07	6.96	DN300



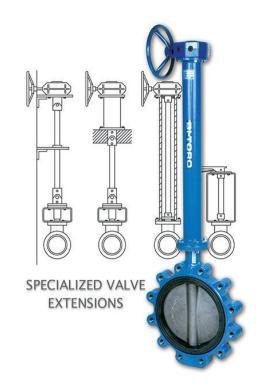
Available with Chainwheel Operators



Butterfly Valve Extensions

Customized stem extensions are designed for use inside tanks, coffer dams, tank sides or catwalks where the valve handwheel, gear operator or actuator must be extended for operator accessibility. A mounting bracket complete with thrust bearing is furnished to carry the weight of the extension and eliminate load on the valve stem. All extensions over three feet are supplied with universal couplings to compensate for misalignment at installation. One additional mounting bracket is provided at the top of the extension for the operator plus one stabilizing bracket per six feet of extension.

BI-TORQ also offers a complete line of free standing extensions and stem extensions with a steadying pedestal for use in buried or underwater service lines. These extensions are ideal for marine or agricultural applications. As is the case with our standard stem extensions, we offer both epoxy coated carbon and stainless steel construction.



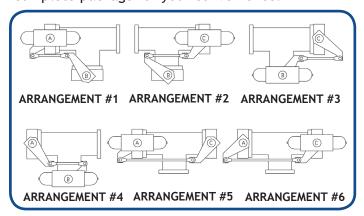
Three Way Tee-Linkage Assemblies

An economic alternative to large multi-port ball valves



Available with pneumatic and electric actuators

Our unique 3-way tee-linkages utilize quality products and superior engineering to create an economic and effective assembly. Ideal for HVAC and diverting applications, our tee-linkage assembly is a big cost saver over expensive three-way ball valves. Add a positioner or fieldbus system and you can create a fully modulating system. All of our assemblies come complete with butterfly valves, actuators, tees and full mounting hardware. As is the case with all of our automated products, we will assemble and test the complete package for your convenience.





Automation Accessories

BI-TORQ VALVE AUTOMATION OFFERS A WIDE VARIETY OF ACCESSORIES FOR OUR AUTOMATED BUTTERFLY VALVE ASSEMBLIES. ALL ACCESSORY COMPONENTS ARE MOUNTED AND TESTED ON THE ACTUATOR BY OUR TRAINED FACTORY PERSONNEL.





ANALOG (3-15 PSI & 4-20MA)
AND SMART POSITIONERS



LIMIT SWITCH POSITION INDICATORS



NAMUR MOUNT SOLENOIDS



CUSTOMIZED ASSEMBLIES



STAINLESS STEEL VERSIONS TOO!







MORE QUALITY VALVE AUTOMATION PRODUCTS















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