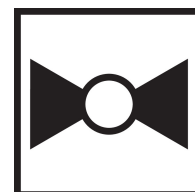


Butterfly Valve with Grooved types

- Disc electroless nickel coated ductile iron
- Bubble tight shut-off
- Resilient seat
- Valve face-to-face dimensions comply with AWWA (c606) & MSS-SP-67
- Completely assembled and tested, ready for installation
- VIC-300 Masterseal is manufactured by the Victaulic Company.



5-year warranty



Type overview

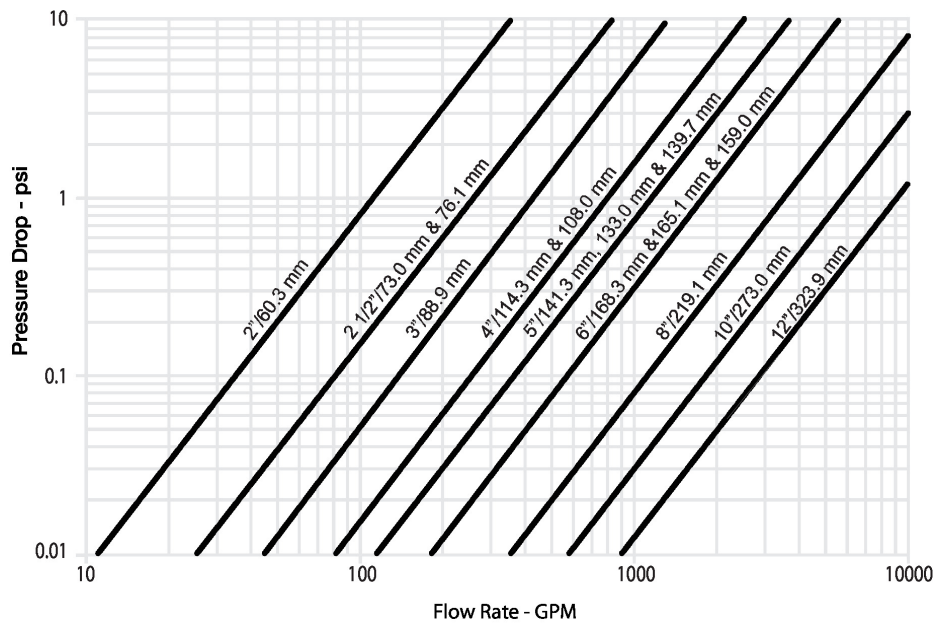
Type	DN
F665VIC	65

Technical data

Functional data	Valve size [mm]	2.5" [65]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	-30...120°C [-22...250°F]
	Body Pressure Rating	ANSI Class Grooved AWWA, 300 psi
	Flow characteristic	modified equal percentage
	Leakage rate	0%
	Pipe connection	Grooved ANSI/AWWA (c606)
	Servicing	maintenance-free
	Flow Pattern	2-way
	Controllable flow range	90° rotation
	Cv	260
	Maximum Velocity	20 FPS
Materials	Valve body	Ductile cast iron ASTM A536
	Body finish	black alkyd enamel
	Stem	416 stainless steel
	Stem seal	fiberglass with TFE lining
	Seat	EPDM
	Disc	electroless nickel coated ductile iron
Suitable actuators	Non Fail-Safe	AMB(X) GRCB(X) GMB(X)
	Spring	AFB(X)

Product features

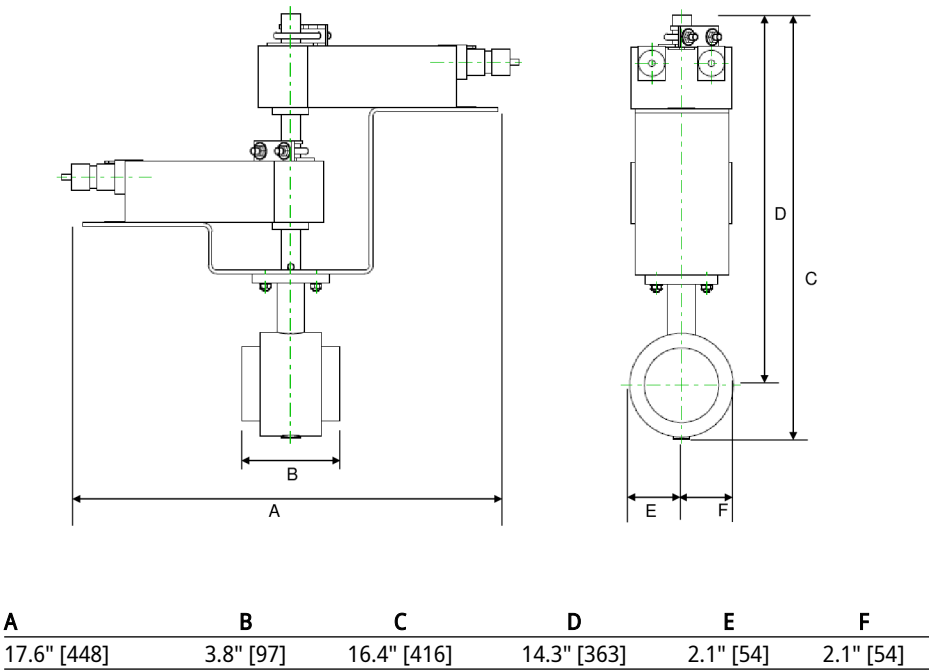
Flow/Mounting details

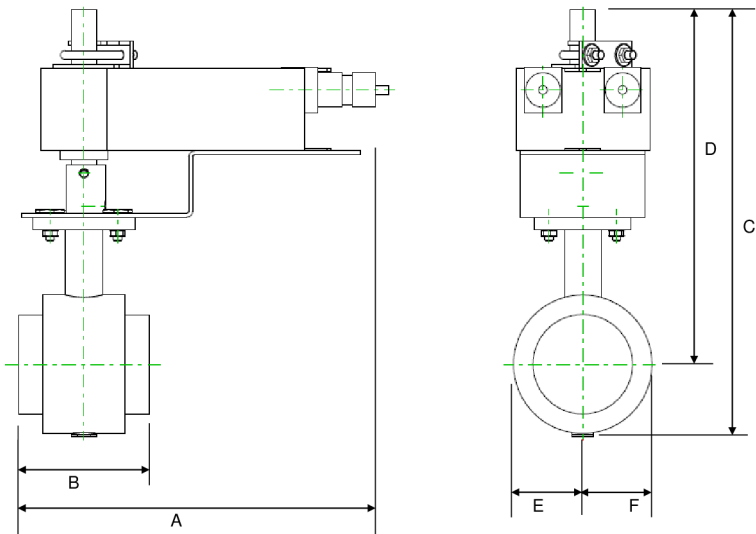


Dimensions

Type	DN	Weight
F665VIC	65	6.4 lb [2.9 kg]

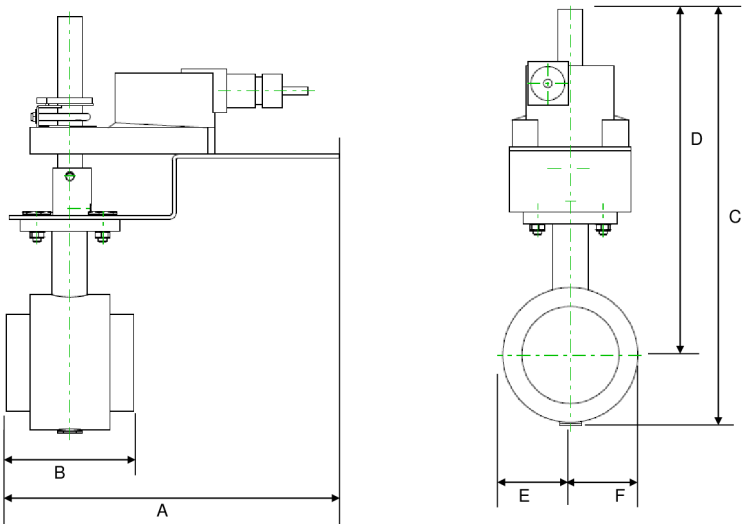
2*AF





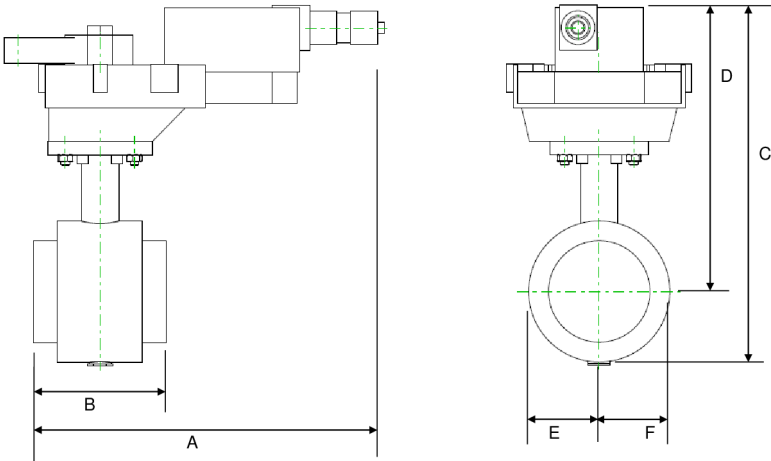
AF

A	B	C	D	E	F
10.7" [273]	3.8" [97]	12.3" [312]	10.2" [260]	2.1" [54]	2.1" [54]



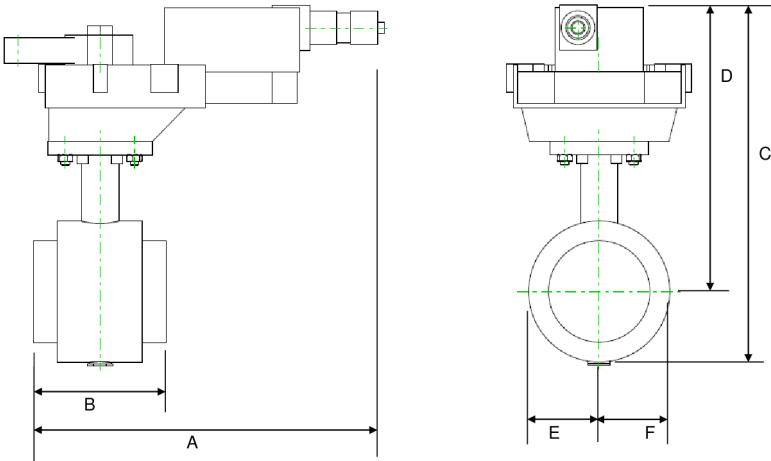
AM

A	B	C	D	E	F
9.9" [251]	3.8" [97]	12.3" [312]	10.2" [260]	2.1" [54]	2.1" [54]



GM

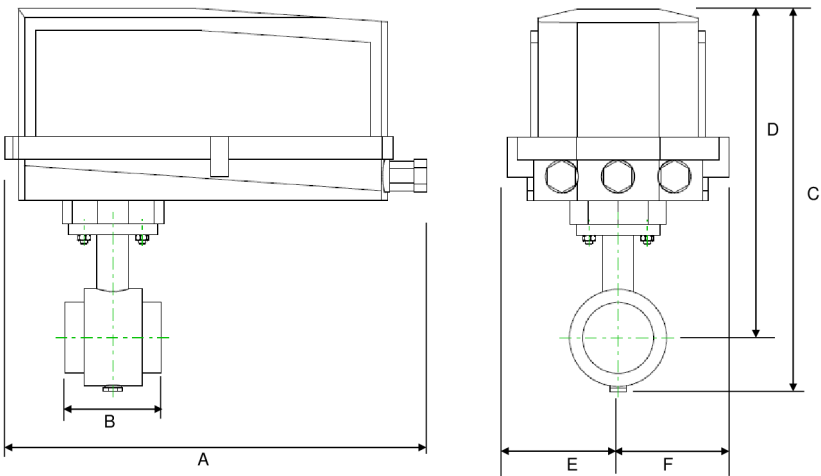
A	B	C	D	E	F
9.9" [251]	3.8" [97]	12.3" [312]	10.2" [260]	2.1" [54]	2.1" [54]



GR

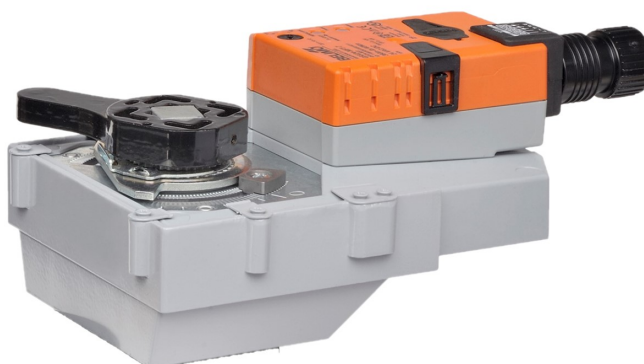
A	B	C	D	E	F
10.8" [275]	3.8" [97]	10.2" [260]	8.1" [206]	2.1" [54]	2.1" [54]

Dimensions



GR N4

A	B	C	D	E	F
14.1" [358]	3.8" [97]	13.6" [345]	11.5" [292]	2.1" [54]	2.1" [54]



5-year warranty



Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption in operation	8 W
	Power consumption in rest position	2.5 W
	Transformer sizing	11 VA
	Electrical Connection	1/2" NPT conduit connector, screw terminals
	Overload Protection	electronic throughout 0...90° rotation
Functional data	Direction of motion motor	selectable with switch 0/1
	Manual override	external push button
	Angle of rotation	90°
	Angle of rotation note	adjustable with mechanical stop
	Running Time (Motor)	35 s / 90°
	Running time motor note	constant, independent of load
	Noise level, motor	45 dB(A)
	Position indication	integrated into handle
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU
	Quality Standard	ISO 9001
	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Servicing	maintenance-free
Weight	Weight	2.8 lb [1.3 kg]
Materials	Housing material	Galvanized steel and plastic housing

Footnotes †Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3

Accessories

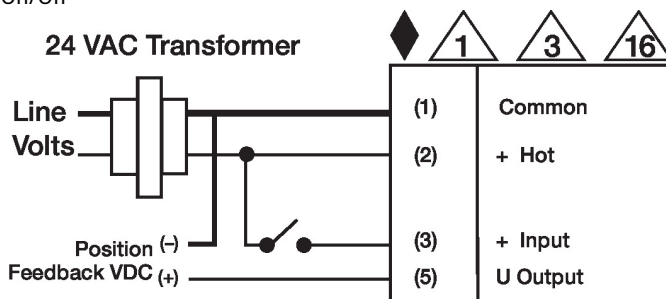
Electrical accessories	Description	Type
	Battery backup system, for non-spring return models	NSV24 US
	Battery, 12 V, 1.2 Ah (two required)	NSV-BAT
	Auxiliary switch 1x SPDT add-on	S1A
	Auxiliary switch 2x SPDT add-on	S2A
	Feedback potentiometer 140 Ω add-on, grey	P140A GR
	Feedback potentiometer 1 k Ω add-on, grey	P1000A GR
	Feedback potentiometer 10 k Ω add-on, grey	P10000A GR
	Feedback potentiometer 2.8 k Ω add-on, grey	P2800A GR
	Feedback potentiometer 500 Ω add-on, grey	P500A GR
	Feedback potentiometer 5 k Ω add-on, grey	P5000A GR

Electrical installation

- Provide overload protection and disconnect as required.
- Actuators may also be powered by DC 24 V.
- For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.
- IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).
- Actuators are provided with a numbered screw terminal strip instead of a cable.
- Meets cULus requirements without the need of an electrical ground connection.
- Warning! Live electrical components!**
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

Wiring diagrams

On/Off



Floating Point

