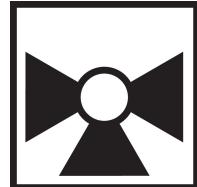


Butterfly Valve with Grooved types

- 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

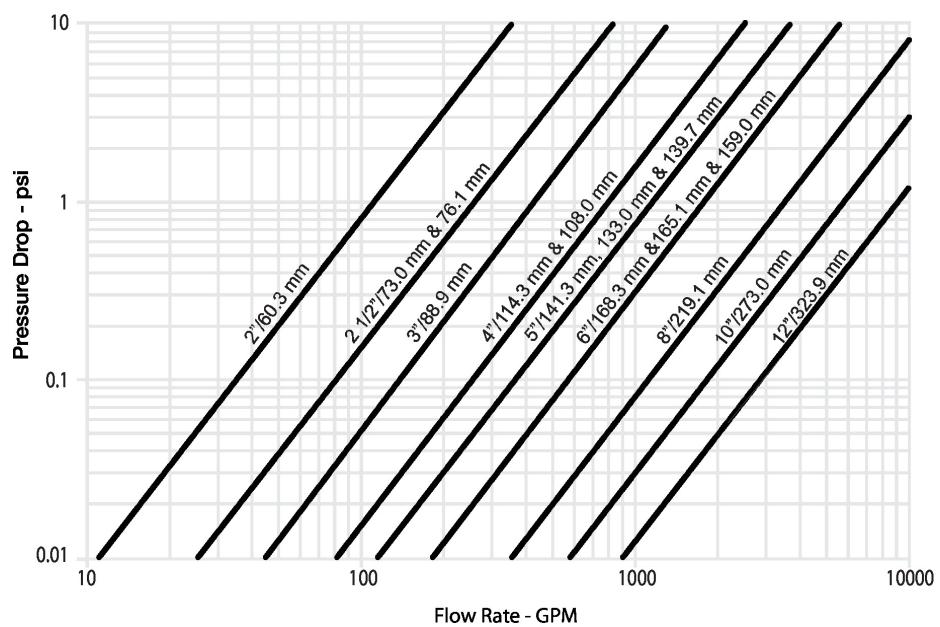
Type	DN
F750VIC	50

Technical data

	Functional data	Valve size [mm]	2" [50]
	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 linear	
	Leakage rate	0%	
	Pipe connection	Grooved ANSI/AWWA (c606)	
	Servicing	maintenance-free	
	Flow Pattern	3-way Mixing/Diverting	
	Controllable flow range	90° rotation	
	Cv	115	
	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	GMB(X)
		Spring	AF 2*AFB(X)

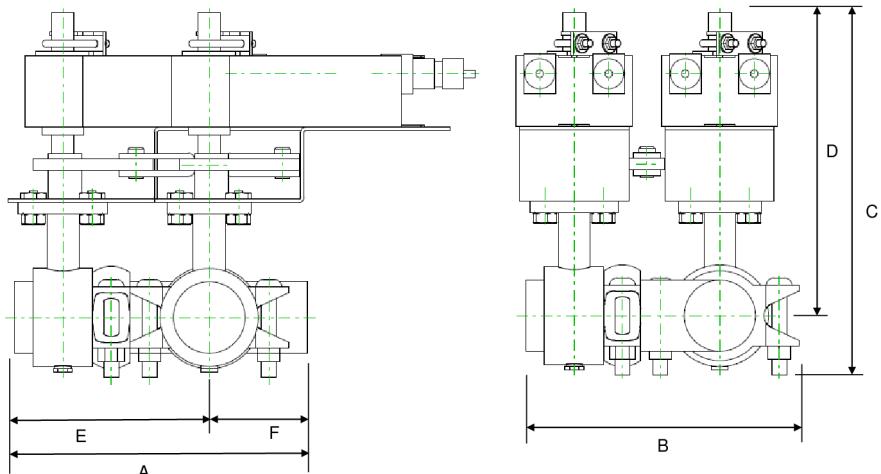
Product features

Flow/Mounting details



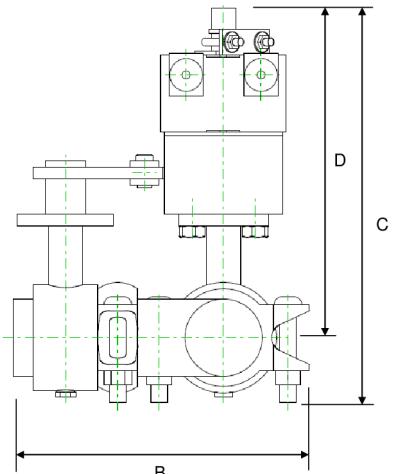
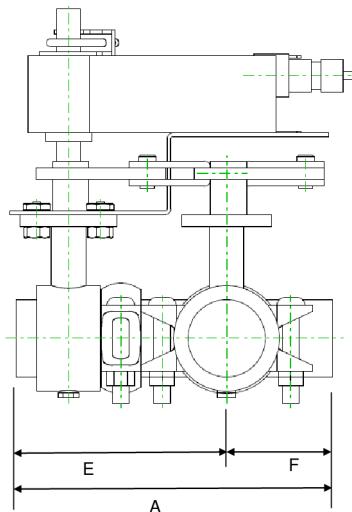
Dimensions

Type	DN	Weight
F750VIC	50	30 lb [14 kg]



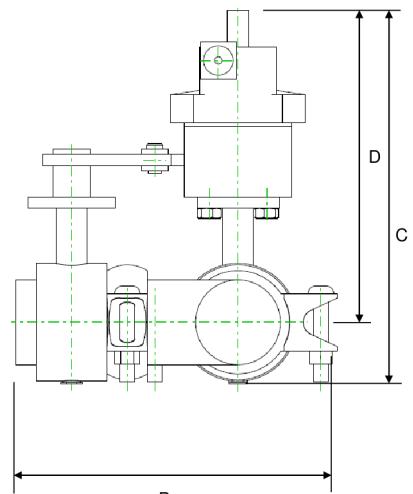
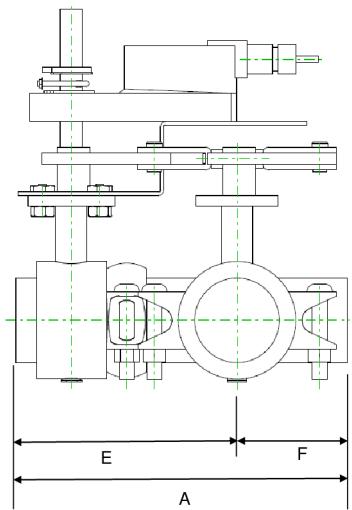
2AF

A	B	C	D	E	F
15.3" [388]	9.1" [231]	11.6" [294]	9.8" [248]	6.5" [165]	3.3" [85]



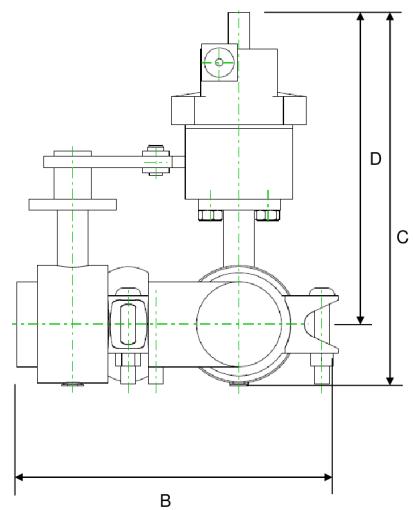
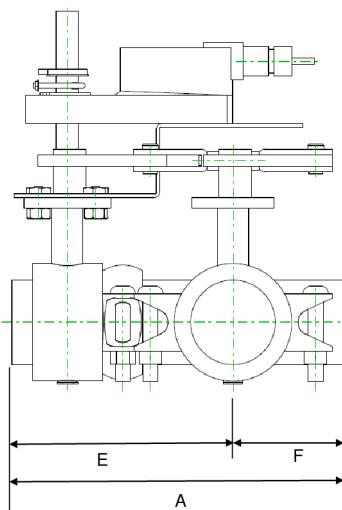
AF

A	B	C	D	E	F
10.4" [264]	9.1" [231]	11.9" [302]	10.1" [256]	6.5" [165]	3.3" [85]



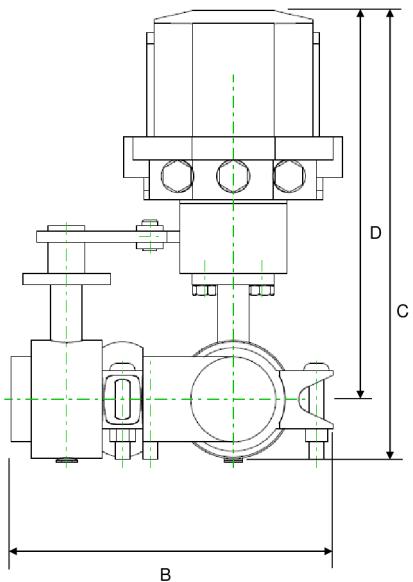
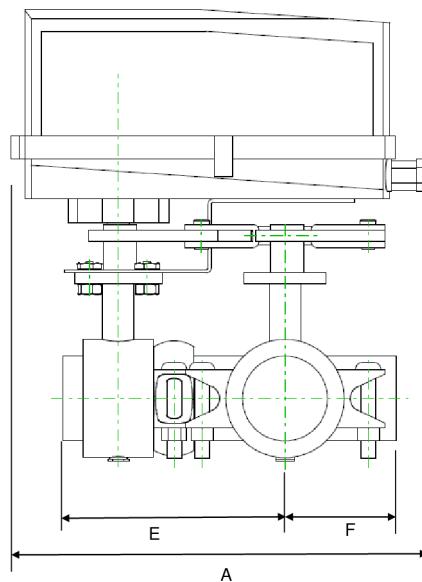
AM

A	B	C	D	E	F
9.7" [246]	9.1" [231]	11.9" [302]	10.1" [256]	6.5" [165]	3.3" [85]



GM

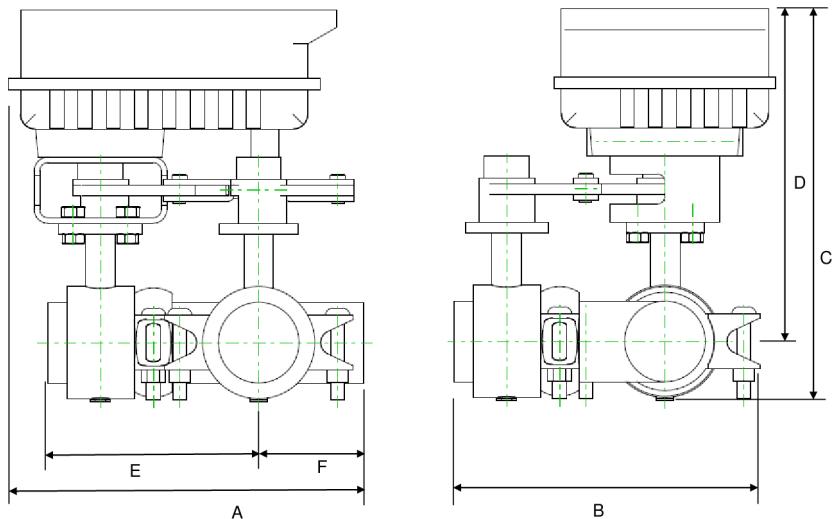
A	B	C	D	E	F
9.7" [246]	9.1" [231]	11.9" [302]	10.1" [256]	6.5" [165]	3.3" [85]



GM N4

A	B	C	D	E	F
14.1" [358]	9.1" [231]	14.5" [368]	12.7" [323]	6.5" [165]	3.3" [85]

Dimensions



PRB(X)

A	B	C	D	E	F
12.0" [304]	9.1" [231]	13.2" [335]	11.4" [290]	6.5" [165]	3.3" [85]

MFT/programmable, Non fail-safe, 24 V



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	3.5 W
	Power consumption in rest position	1.3 W
	Transformer sizing	6 VA
	Electrical Connection	18 GA plenum cable, 3 ft [1 m], with 1/2" NPT conduit connector (10 ft [3 m] and 16 ft [5 m] available)
	Overload Protection	electronic throughout 0...95° rotation
Functional data	Operating range Y	2...10 V
	Operating range Y note	4...20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)
	Input impedance	100 kΩ for 2...10 V (0.1 mA), 500 Ω for 4...20 mA, 1500 Ω for PWM, On/Off and Floating point
	Operating range Y variable	Start point 0.5...30 V End point 2.5...32 V
	Operating modes optional	variable (VDC, PWM, on/off, floating point)
	Position feedback U	2...10 V
	Position feedback U note	Max. 0.5 mA
	Position feedback U variable	VDC variable
	Direction of motion motor	selectable with switch 0/1
	Manual override	external push button
	Angle of rotation	Max. 95°
	Angle of rotation note	adjustable with mechanical stop
	Running Time (Motor)	150 s / 90°
	Running time motor variable	90...350 s
	Noise level, motor	45 dB(A)
	Position indication	Mechanical, integrated, two-section
Safety data	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

Technical data

Safety data	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...149°F [-30...65°C]	
Storage temperature	-40...176°F [-40...80°C]	
Servicing	maintenance-free	
Weight	Weight	1.8 lb [0.83 kg]
Materials	Housing material	Galvanized steel and plastic housing

Footnotes †Rated Impulse Voltage 800V, Type action 1, 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
Service tool, with ZIP-USB function, for programmable and communicative Belimo actuators, VAV controller and HVAC performance devices		ZTH US

Electrical installation

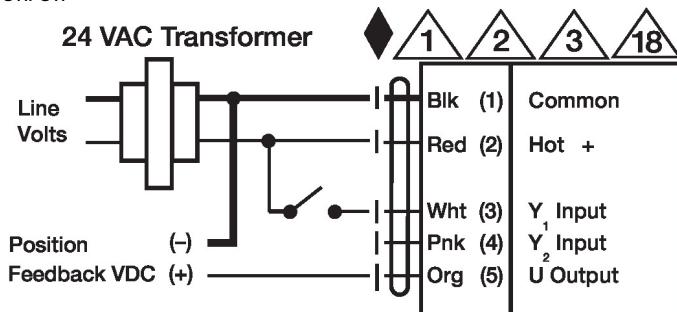
 **INSTALLATION NOTES**

-  **A** Actuators with appliance cables are numbered.
-  **1** Provide overload protection and disconnect as required.
-  **3** Actuators may also be powered by DC 24 V.
-  **5** Only connect common to negative (-) leg of control circuits.
-  **7** A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.
-  **8** Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 V line.
-  **10** 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.
-  **11** Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.
-  **12** IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).
-  **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.

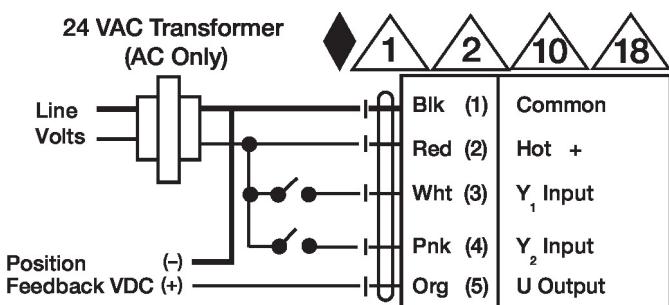
Electrical installation

Wiring diagrams

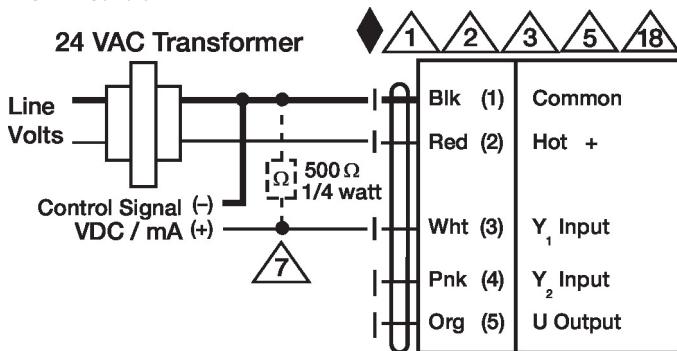
On/Off



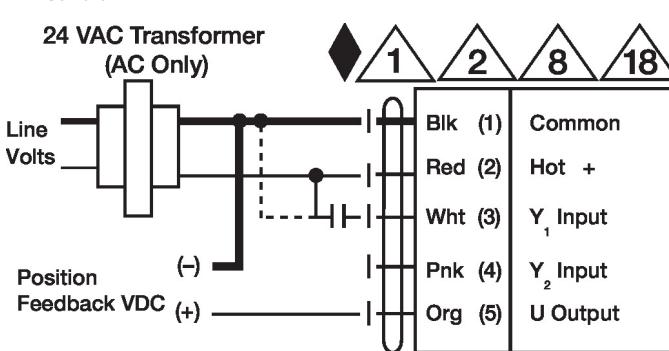
Floating Point



VDC/mA Control



PWM Control



Override Control

