

F650VIC Technical Data Sheet

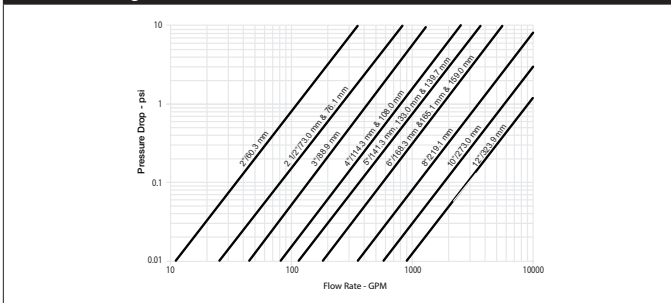
Pressure Enhanced Rubber Seat



Technical Data	
Fluid	chilled, hot water, up to 60% glycol
Flow characteristic	modified equal percentage
Controllable flow range	90° rotation
Valve Size [mm]	2" [50]
Pipe connection	grooved ANSI/AWWA (c606)
Housing	Ductile cast iron ASTM A536
Body finish	black alkyd enamel
Stem	416 stainless steel
Spindle bearing	fiberglass with TFE lining
Seat	EPDM
Disc	electroless nickel coated ductile iron
Body Pressure Rating	ANSI Class Grooved AWWA, 300 psi
ANSI Class	Grooved AWWA
Rangeability Sv	100:1
Maximum Velocity	20 FPS
Cv	115
Weight	3.3 lb [1.5 kg]
Fluid Temp Range (water)	-22...250°F [-30...120°C]
Leakage rate	0%
Maintenance	maintenance-free

Close-off pressures are variable and actuator dependent, consult Select Pro and/or Price Guide for specifics.

Flow/Mounting Details



Application

These valves are designed to meet the needs of HVAC and commercial applications requiring bubble tight shut-off for liquids. Typical applications include chiller isolation, cooling tower isolation, change-over systems, large air handler coil control, bypass and process control applications. The large Cv values provide for an economical control valve solution for larger flow applications. Designed for use in Victaulic® piping systems.

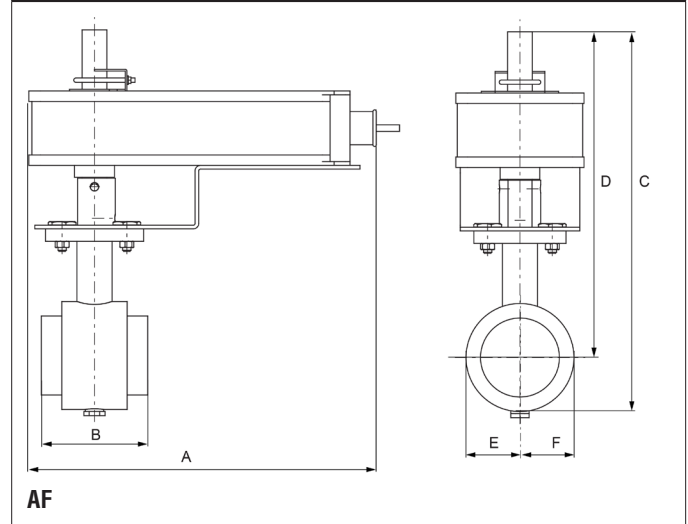
Jobsite Note

Valve assembly should be stored in a weather protected area prior to installation. Reference the butterfly valve installation instruction for additional information.

Flow/Cv					
Cv 30°	Cv 40°	Cv 50°	Cv 60°	Cv 70°	Cv 90°
7	14	23	36	60	115

Suitable Actuators		
	Non-Spring	Spring
F650VIC	AMB(X), GRB(X)	AF

Dimensions (Inches [mm])

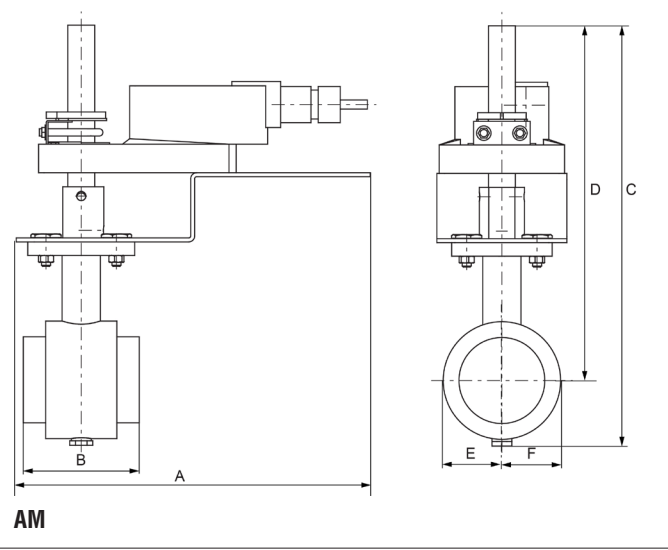


A	B	C	D	E	F
10.5" [267]	3.2" [82]	11.6" [294]	9.8" [248]	1.6" [40]	

Safety Notes

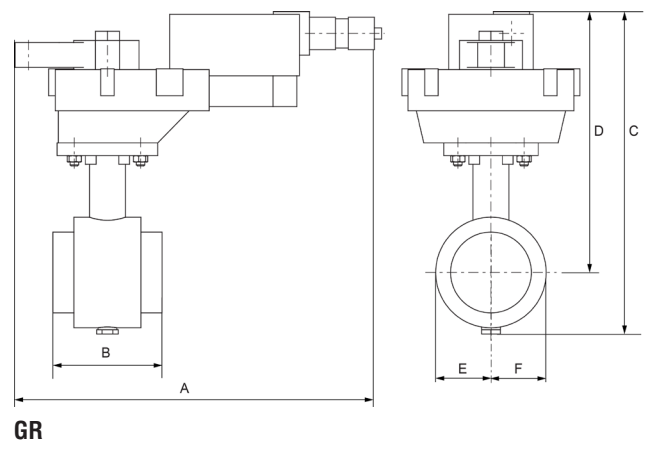
WARNING: For Belimo products sold in California: these products do or may contain chemicals which are known to the State of California to cause cancer and or birth defects or other reproductive harms. For more information see www.p65warnings.ca.gov.

Dimensions (Inches [mm])



A	B	C	D	E	F
9.8" [249]	3.2" [82]	11.6" [294]	9.8" [248]	1.6" [40]	

Dimensions (Inches [mm])

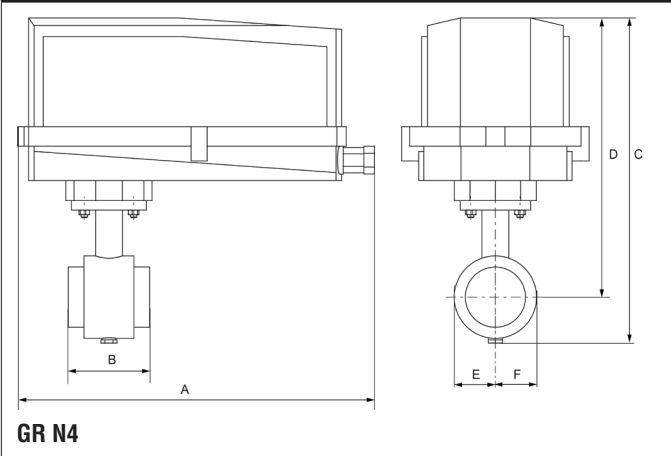


A	B	C	D	E	F
10.8" [275]	3.2" [82]	9.5" [241]	7.7" [196]	1.6" [40]	

F650VIC Technical Data Sheet

Pressure Enhanced Rubber Seat

Dimensions (Inches [mm])

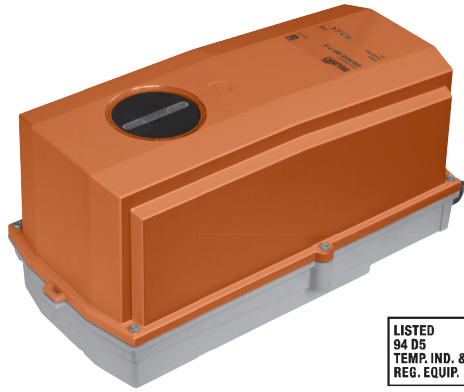


GR N4

A	B	C	D	E	F
14.1" [358]	3.2" [82]	12.8" [325]	11.0" [279]	1.6" [40]	

GRCX120-3 N4 Technical Data Sheet

On/Off, Floating Point, Non-Spring Return, AC 100...240 V



5-year warranty



Technical Data

Power Supply	100...240 VAC, $\pm 20\%$, 50/60 Hz, DC, $\pm 10\%$
Power consumption in operation	6 W
Power consumption in rest position	2 W
Transformer sizing	11 VA (class 2 power source)
Electrical Connection	18 GA appliance cable, 3 ft [1 m], with 1/2" conduit connector
Overload Protection	electronic throughout 0...90° rotation
Input Impedance	600 Ω
Angle of rotation	90°, adjustable with mechanical stop
Direction of rotation motor	reversible with built-in switch
Position indication	Mechanically, 5...20 mm stroke
Manual override	under cover
Running Time (Motor)	35 s, constant, independent of load
Ambient humidity	max. 95% r.H., non-condensing
Ambient temperature	-22...122°F [-30...50°C]
Storage temperature	-40...176°F [-40...80°C]
Degree of Protection	IP66/67, NEMA 4X, UL Enclosure Type 4X
Housing material	Polycarbonate
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Noise level, motor	45 dB(A)
Maintenance	maintenance-free
Quality Standard	ISO 9001
Weight	9.92 lb [4.5 kg]

†Rated Impulse Voltage 2.5kV, Type of Action 1.AA, Control Pollution Degree 3.

Safety Notes

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Wiring Diagrams

✂ INSTALLATION NOTES

- Actuators with appliance cables are numbered.
- Provide overload protection and disconnect as required.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- 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.

