

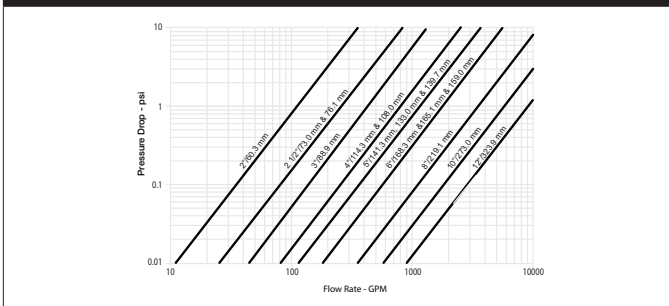
# F650VIC, 2", 2-Way Victaulic Butterfly Valve Pressure Enhanced Rubber Seat



### Technical Data

Service	chilled, hot water, up to 60% glycol
Flow Characteristic	modified equal percentage
Controllable Flow Range	90° rotation
Size [mm]	2" [50]
End Fitting	Grooved ANSI/AWWA (C606)
Body	ductile iron ASTM A536 grade 65-45-12
Body Finish	black alkyd enamel
Stem	stainless steel
Stem Bearing	fiberglass with TFE lining
Seat	EPDM
Shaft	416 stainless steel
Disc	electroless nickel coated ductile iron
Body Pressure Rating [psi]	300
Media Temperature Range (Water)	-22°F to 250°F [-30°C to 120°C]
Close-Off Pressure	200 psi
Rangeability	100:1
Maximum Velocity	20 FPS
Cv	115
Weight	3.3 lb [1.5 kg]
Leakage	0%
Servicing	maintenance free

### Flow Pattern



### 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 insulation, 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

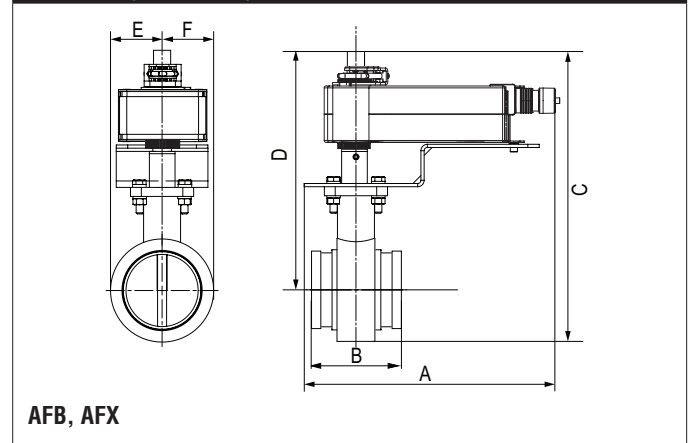
Valve assembly should be stored in a weather protected area prior to installation. Reference the butterfly valve installation instruction for additional information.

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), SY1	AFB(X)

### Dimensions (Inches [mm])



A	B	C	D	E	F
10.6" [270]	3.23" [82]	11.75" [298.5]	10.125" [257.2]	1.6" [41]	

Date created, 10/21/2016 - Subject to change. © Belimo Aircontrols (USA), Inc.

# GRCB24-3

## On/Off Floating Point, Non-Spring Return, 24 V



Technical Data	
Power Supply	24 VAC ± 20%, 50/60 Hz, 24 VDC ± 10%
Power Consumption Holding	2 W
Transformer Sizing	6 VA (class 2 power source)
Electrical Connection	3ft [1m], 18 GA plenum rated cable with 1/2" conduit connector protected NEMA 2 (IP54)
Overload Protection	electronic throughout 0° to 95° rotation
Operating Range Y	on/off, floating point
Input Impedance	600 Ω
Angle of Rotation	90°
Direction of Rotation (Motor)	reversible with built-in switch
Position Indication	reflective visual indicator (snap on)
Manual Override	external push button
Running Time (Motor)	35 sec constant, independent of load
Ambient Humidity	5 to 95% RH non-condensing
Ambient Temperature Range	-22°F to 122°F [-30°C to 50°C]
Storage Temperature Range	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2, IP54, UL enclosure type 2
Housing Material	UL94-5VA
Agency Listings†	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	3.5 lb [1.6 kg]

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

#### Wiring Diagrams

#### ✂️ INSTALLATION NOTES

- Ⓐ Actuators with appliance cables are numbered.
- ⚠️ 1 Provide overload protection and disconnect as required.
- ⚠️ 3 Actuators may also be powered by 24 VDC.
- ⚠️ 6 Actuators Hot wire must be connected to the control board common. Only connect common to neg. (-) leg of control circuits. Terminal models (-T) have no-feedback.
- ⚠️ 11 Actuators may be connected in parallel if not mechanically linked. 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.

