

Two-Way, Industrial-Grade, Non-Spring-Return, V-909x Series High-Pressure Pneumatically Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve Assemblies

Description

VF Series Two-Way, Industrial-Grade, Non-Spring-Return, V-909x Series High-Pressure Pneumatically Actuated, Standard-Pressure, Standard-Temperature Butterfly Valves are specifically designed for a wide range of HVAC applications, including two-position and modulating control of hot, chilled, or condenser water, and 50/50 glycol solutions. All valves are factory tested for bubble-tight shutoff at 100% of the fully rated pressure. These valves are also bidirectional, allowing positive shutoff with the flow in either direction.

Refer to the *VF Series Standard-Pressure, Standard-Temperature Butterfly Valves Product Bulletin (LIT-977205P)* for important product application information.

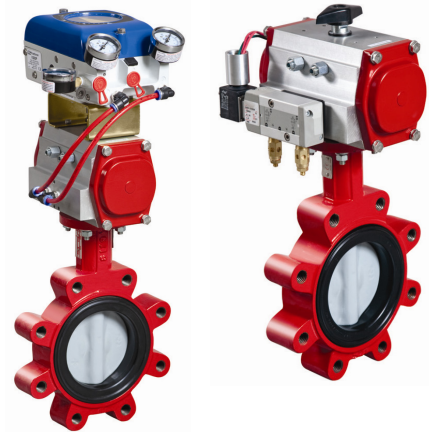
Features

- low seating/unseating torques
- bubble-tight shutoff
- broad range of pre-assembled actuators

- compatible with all types of American National Standards Institute (ANSI) 125/150 slip-on and weld-neck flanges
- high-integrity components
- air supply pressure of 70 psig to 90 psig (80 psig nominal; 140 psig maximum)
- valve assemblies for on/off applications come standard with a 24 VAC or 120 VAC solenoid valve with speed controls
- valve assemblies for proportional applications come standard with a valve actuator positioner

Repair Information

If the VF Series Butterfly Valve Assembly fails to operate within its specifications, refer to the *VF Series Standard-Pressure, Standard-Temperature Butterfly Valves Product Bulletin (LIT-977205P)* for a list of repair parts available.



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Selection Chart

Valve Code Number	Actuator				On/Off ¹	Proportional (with Positioner)
	Size, in.	Cv at 90°	Cv at 70°	Closeoff Pressure, psig		
Two-Way, Non-Spring Return — 150 or 175 psig Closeoff Pressure; 75 psig Dead-End Service						
VFC-020HB	2	144	84	175	VFC-020HB-020C	VFC-020HB-020B
VFC-025HB	2-1/2	282	163	175	VFC-025HB-020C	VFC-025HB-020B
VFC-030HB	3	461	267	175	VFC-030HB-020C	VFC-030HB-020B
VFC-040HB	4	841	496	175	VFC-040HB-030C	VFC-040HB-030B
VFC-050HB	5	1,376	775	175	VFC-050HB-030C	VFC-050HB-030B
VFC-060HB	6	1,850	1,025	175	VFC-060HB-030C	VFC-060HB-030B
VFC-080HB	8	3,316	1,862	175	VFC-080HB-042C	VFC-080HB-042B
VFC-100HB	10	5,430	2,948	175	VFC-100HB-060C	VFC-100HB-060B
VFC-120HB	12	8,077	4,393	175	VFC-120HB-060C	VFC-120HB-060B
VFC-140HC	14	10,538	5,939	150	VFC-140HC-060C	VFC-140HC-060B
VFC-160HC	16	13,966	7,867	150	VFC-160HC-070C	VFC-160HC-070B
VFC-180HC	18	17,214	10,065	150	VFC-180HC-070C	VFC-180HC-070B
VFC-200HC	20	22,339	12,535	150	VFC-200HC-080C	VFC-200HC-080B
Two-Way, Non-Spring Return — 50 psig Closeoff, Not Rated for Dead-End Service						
VFC-040LB	4	841	496	50	VFC-040LB-030C	VFC-040LB-030B
VFC-050LB	5	1,376	775	50	VFC-050LB-030C	VFC-050LB-030B
VFC-060LB	6	1,850	1,025	50	VFC-060NB-030C	VFC-060NB-030B
VFC-080LB	8	3,316	1,862	50	VFC-080NB-042C	VFC-080NB-042B
VFC-100LB	10	5,430	2,948	50	VFC-100LB-042C	VFC-100LB-042B
VFC-120LB	12	8,077	4,393	50	VFC-120LB-042C	VFC-120LB-042B
VFC-140LC	14	10,538	5,939	50	VFC-140LC-060C	VFC-140LC-060B
VFC-160LC	16	13,966	7,867	50	VFC-160LC-060C	VFC-160LC-060B
VFC-180LC	18	17,214	10,065	50	VFC-180LC-070C	VFC-180LC-080B
VFC-200LC	20	22,339	12,535	50	VFC-200LC-070C	VFC-200LC-070B

1. On/off assemblies come with a 120 VAC solenoid valve and speed controls. If a 24 VAC solenoid valve is desired, change the **C** at the end of the code number to an **E**.

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Technical Specifications

Two-Way, Industrial-Grade, Non-Spring-Return, V-909x Series High-Pressure Pneumatically Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve Assemblies¹		
Service		Hot, Chilled, or Condenser Water, and 50/50 Glycol Solutions (Not Designed for Use in Steam Applications)
Body Styles and Sizes		Two-Way, 2 in. through 20 in., Fully Lugged
Fluid Temperature Limits		-20°F to 250°F (-29°C to 121°C)
Body Pressure Rating		175 psig
Maximum Fluid Velocity		30 ft/second (9 m/second)
Rangeability		Refer to the <i>VF Series Standard-Pressure, Standard-Temperature Butterfly Valves Product Bulletin (LIT-977205P)</i> .
Leakage		Bubble Tight
Flow Characteristics		Modified Equal Percentage
Materials	Body	Cast Iron, ASTM A126 Class B
	Tee (Three-Way Valves Only)	Cast Iron
	Disc	Ductile Iron, Nylon 11 Coated, ASTM A536 Gr 65-45-12
	Seat	Ethylene Propylene Diene Monomer (EPDM)
	Stem	416 Stainless Steel (2 in. through 12 in.) 304 Stainless Steel (14 in. through 20 in.)
Ambient Temperature Limits	Storage	-20°F to 150°F (-29°C to 66°C), Preferably 40°F to 85°F (4°C to 29°C)
	Operating	-20°F to 200°F (-29°C to 95°C)

1. Refer to the *VF Series Standard-Pressure, Standard-Temperature Butterfly Valves Product Bulletin (LIT-977205P)* for actuator specifications.