

VF Series Two-Way, Industrial-Grade, Non-Spring Return, VA-907x Series Electric Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve Assemblies

Description

VF Series Two-Way, Industrial-Grade, Non-Spring Return, VA-907x Series Electric Actuated, Standard-Pressure, Standard-Temperature Butterfly Valves are specifically designed for a wide range of Heating, Ventilating, and Air Conditioning (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 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.

- compatible with all types of American National Standards Institute (ANSI) 125/150 slip-on and weld-neck flanges
- high-integrity components

Repair Information

If the Two-Way, Industrial-Grade, Non-Spring Return, VA-90xx Series Electric Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve 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.



Two-Way, Industrial-Grade, Non-Spring Return, VA-90xx Series Electric Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve Assemblies

Features

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

Selection Chart

Two-Way Valves with Industrial-Grade, Non-Spring Return, VA-90xx Series Electric Actuators

Actuator				AC 120 V Powered Actuator		AC 24 V Powered Actuator	
Size, in.	Cv at 90°	Cv at 60°	Closeoff Pressure psig	On/Off	0 VDC to 10 VDC Proportional	On/Off	0 VDC to 10 VDC Proportional
Two-Way, Non-Spring Return – 150 or 175 psig Closeoff Pressure; 75 psig Dead-End Service							
2	144	61	175	VFC-020HB-722D	VFC-020HB-702N	VFC-020HB-722D4	VFC-020HB-702N4
2-1/2	282	107	175	VFC-025HB-722D	VFC-025HB-702N	VFC-025HB-722D4	VFC-025HB-702N4
3	461	154	175	VFC-030HB-722D	VFC-030HB-702N	VFC-030HB-722D4	VFC-030HB-702N4
4	841	274	175	VFC-040HB-722D	VFC-040HB-702N	VFC-040HB-722D4	VFC-040HB-702N4
5	1,376	428	175	VFC-050HB-722D	VFC-050HB-702N	VFC-050HB-722D4	VFC-050HB-702N4
6	1,850	567	175	VFC-060HB-722D	VFC-060HB-702N	VFC-060HB-722D4	VFC-060HB-702N4
8	3,316	1,081	175	VFC-080HB-725D	VFC-080HB-705N	VFC-080HB-725D4	VFC-080HB-705N4
10	5,430	1,710	175	VFC-100HB-726D	VFC-100HB-706N	VFC-100HB-727D4	VFC-100HB-707N4
12	8,077	2,563	175	VFC-120HB-727D	VFC-120HB-707N	VFC-120HB-727D4	VFC-120HB-707N4
14	10,538	3,384	150	VFC-140HC-728D	VFC-140HC-708N	—	—
16	13,966	4,483	150	VFC-160HC-927D	VFC-160HC-907N	—	—
18	17,214	5,736	150	VFC-180HC-927D	VFC-180HC-907N	—	—
20	22,339	7,144	150	VFC-200HC-928D	VFC-200HC-908N	—	—
Two-Way, Non-Spring Return – 50 psig Closeoff Pressure; Not Rated for Dead-End Service							
4	841	274	50	VFC-040LB-722D	VFC-040LB-702N	VFC-040LB-722D4	VFC-040LB-702N4
5	1,376	428	50	VFC-050LB-722D	VFC-050LB-702N	VFC-050LB-722D4	VFC-050LB-702N4
6	1,850	567	50	VFC-060NB-722D	VFC-060NB-702N	VFC-060NB-722D4	VFC-060NB-702N4
8	3,316	1,081	50	VFC-080NB-722D	VFC-080NB-702N	VFC-080NB-722D4	VFC-080NB-702N4
10	5,430	1,710	50	VFC-100LB-725D	VFC-100LB-705N	VFC-100LB-725D4	VFC-100LB-705N4
12	8,077	2,563	50	VFC-120LB-726D	VFC-120LB-706N	VFC-120LB-727D4	VFC-120LB-707N4
14	10,538	3,384	50	VFC-140LC-726D	VFC-140LC-706N	VFC-140LC-727D4	VFC-140LC-707N4
16	13,966	4,483	50	VFC-160LC-727D	VFC-160LC-707N	VFC-160LC-727D4	VFC-160LC-707N4
18	17,214	5,736	50	VFC-180LC-727D	VFC-180LC-707N	—	—
20	22,339	7,144	50	VFC-200LC-728D	VFC-200LC-708N	—	—

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products. © 2019 Johnson Controls. www.johnsoncontrols.com

VF Series Two-Way, Industrial-Grade, Non-Spring Return, VA-907x Series Electric Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve Assemblies (Continued)

Technical Specifications

Two-Way, Industrial-Grade, Non-Spring Return, VA-907x Series Electric 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	250 psig (1723 kPa)	
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 150°F (-29°C to 65°C)
Enclosure Rating	National Electrical Manufacturers' Association (NEMA) 4	

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