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

Description

VF Series Three-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.

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

Repair Information

If the Three-Way, Industrial-Grade, Non-Spring-Return, VA-907x 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.



Three-Way, Industrial-Grade, Non-Spring-Return, VA-907x Series Electric Actuated, Standard-Pressure, Standard-Temperature Butterfly Valves

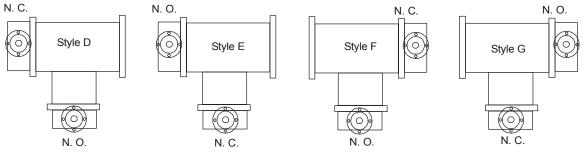
Actuator				AC 120 V Powered Actuator		AC 24 V Powered Actuator	
Size, in.	Cv at 90°	Cv at 60°	Closeoff Pressure psig	On/Off	0 VDC to 10 VDC Proportional	On/Off	0 VDC to 10 VDC Proportional
	Tł	nree-Way, No	on-Spring Re	turn ¹ – 150 or 175 psig	g Closeoff Pressure;	75 psig Dead-End Serv	vice
2	144	61	175	VFD-020HB-722D	VFD-020HB-702N	VFD-020HB-722D4	VFD-020HB-702N4
2-1/2	282	107	175	VFD-025HB-722D	VFD-025HB-702N	VFD-025HB-722D4	VFD-025HB-702N4
3	461	154	175	VFD-030HB-722D	VFD-030HB-702N	VFD-030HB-722D4	VFD-030HB-702N4
4	841	274	175	VFD-040HB-722D	VFD-040HB-702N	VFD-040HB-722D4	VFD-040HB-702N4
5	1,376	428	175	VFD-050HB-722D	VFD-050HB-702N	VFD-050HB-722D4	VFD-050HB-702N4
6	1,850	567	175	VFD-060HB-724D	VFD-060HB-704N	VFD-060HB-725D4	VFD-060HB-705N4
8	3,316	1,081	175	VFD-080HB-725D	VFD-080HB-705N	VFD-080HB-725D4	VFD-080HB-705N4
10	5,430	1,710	175	VFD-100HB-727D	VFD-100HB-707N	VFD-100HB-727D4	VFD-100HB-707N4
12	8,077	2,563	175	VFD-120HB-727D	VFD-120HB-707N		
	Т	hree-Way, N	lon-Spring R	eturn ¹ – 50 psig Close	off Pressure; Not Rat	ed for Dead-End Servi	ce
4	841	274	50	VFD-040LB-722D	VFD-040LB-702N	VFD-040LB-722D4	VFD-040LB-702N4
5	1,376	428	50	VFD-050LB-722D	VFD-050LB-702N	VFD-050LB-722D4	VFD-050LB-702N4
6	1,850	567	50	VFD-060NB-722D	VFD-060NB-702N	VFD-060NB-722D4	VFD-060NB-702N4
8	3,316	1,081	50	VFD-080NB-722D	VFD-080NB-702N	VFD-080NB-722D4	VFD-080NB-702N4
10	5,430	1,710	50	VFD-100LB-725D	VFD-100LB-705N	VFD-100LB-725D4	VFD-100LB-705N4
12	8,077	2,563	50	VFD-120LB-726D	VFD-120LB-706N	VFD-120LB-727D4	VFD-120LB-707N4

Selection Chart

 Code numbers listed are three-way valves, style D. For styles E, F, or G, change the D in the third digit of the code number to the desired style. Example: VFE-xxxx-xxxx, VFF-xxxx-xxxx, or VFG-xxxxx-xxxx (see the following figure).

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



Three-Way Valve Body Styles

Technical Specifications

Thr		, Non-Spring-Return, VA-907x Series Electric Actuated, andard-Temperature Butterfly Valve Assemblies ¹		
Service		Hot, Chilled, or Condenser Water, and 50/50 Glycol Solutions (Not designed for use in steam applications.)		
Body Styles and Sizes		Three-Way, 2 in. through 12 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 VF Series Standard-Pressure, Standard-Temperature Butterfly Valves Product Bulletin (LIT-977205P).		
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		
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.