

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

Description

VF Series Standard-Pressure, Standard-Temperature Butterfly Valves are designed for control of hot water, chilled water, 50% glycol solutions and condenser water in a wide range of HVAC applications.

Features

- non-spring return (drive open, drive closed)
- ANSI Class 125/150 flanges
- valve body: cast iron
- disc: ductile iron coated with Nylon 11
- valve stem: 2 through 12 in. 416 stainless steel; 14 through 20 in. 304 stainless steel
- seat: EPDM
- fluid temperature rating: -40 to 250°F
- actuator ambient temperature rating: -40 to 150°F

- actuator resolution: 100 positions
- manual opener: standard
- internal heater: standard
- modulating input: 4 to 20 mA or 0 to 10 VDC
- 120 VAC input voltage
- NEMA 4X water-tight, corrosion-resistant enclosure
- thermal overload protection

Repair Information

If the VF Series Two-Way, Industrial Grade, Non-Spring Return, Electrically Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve Assembly fails to operate within its specifications, replace the unit. For a replacement valve, contact the nearest Johnson Controls® representative.



Two-Way Valve with Industrial-Grade Non-Spring Return, VA-907x Series Electric Actuator

Selection Chart

VF Series Two-Way, Industrial Grade, Non-Spring Return, Electrically Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve Assemblies

Actuator				On/Off	0 to 10 VDC Proportional
Size, in.	Cv at 90°	Cv at 60°	Closeoff		
Two-Way Butterfly Valve Assemblies – 150 or 175 psig Closeoff Pressure; 75 psig Dead-End Service					
2	144	61	175	VFC-020HB-721D	VFC-020HB-701N
2-1/2	282	107	175	VFC-025HB-721D	VFC-025HB-701N
3	461	154	175	VFC-030HB-721D	VFC-030HB-701N
4	841	274	175	VFC-040HB-722D	VFC-040HB-702N
5	1,376	428	175	VFC-050HB-723D	VFC-050HB-703N
6	1,850	567	175	VFC-060HB-723D	VFC-060HB-703N
8	3,316	1,081	175	VFC-080HB-725D	VFC-080HB-705N
10	5,430	1,710	175	VFC-100HB-726D	VFC-100HB-706N
12	8,077	2,563	175	VFC-120HB-727D	VFC-120HB-707N
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-928D	VFC-180HC-908N
20	22,339	7,144	150	VFC-200HC-928D	VFC-200HC-908N
Two-Way Butterfly Valve Assemblies – 50 psig Closeoff Pressure; Not Rated for Dead-End Service					
4	841	274	50	VFC-040LB-721D	VFC-040LB-701N
5	1,376	428	50	VFC-050LB-722D	VFC-050LB-702N
6	1,850	567	50	VFC-060LB-722D	VFC-060LB-702N
8	3,316	1,081	50	VFC-080LB-723D	VFC-080LB-703N
10	5,430	1,710	50	VFC-100LB-725D	VFC-100LB-705N
12	8,077	2,563	50	VFC-120LB-726D	VFC-120LB-706N
14	10,538	3,384	50	VFC-140LC-727D	VFC-140LC-707N
16	13,966	4,483	50	VFC-160LC-727D	VFC-160LC-707N
18	17,214	5,736	50	VFC-180LC-728D	VFC-180LC-708N
20	22,339	7,144	50	VFC-200LC-728D	VFC-200LC-708N

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

VF Series Two-Way, Industrial Grade, Non-Spring Return, Electrically Actuated, Standard-Pressure, Standard-Temperature Butterfly Valve Assemblies		
Service¹		Hot Water, Chill Water, Condenser Water, and 50/50 Glycol Solutions
Fluid Temperature Limits	Water	-40 to 250°F (-40 to 121°C)
	Steam	Not Rated for Steam Service
Maximum Closeoff	2 through 12 in. Type "H"	175 psig (1,206 kPa) Bidirectional 75 psig (517 kPa) Dead-End Service
	14 through 20 in. Type "H"	150 psig (1,034 kPa) Bidirectional 75 psig (517 kPa) Dead-End Service
	4 through 12 in. Type "L"	50 psig (345 kPa) Bidirectional Not Rated for Dead-End Service
Flow Characteristics		Equal Percentage
Maximum Fluid Velocity		30 ft/second (9 m/second)
End Connection		Fully Lugged, designed to be installed between ANSI 125/150 lb flanges
Actuator Ambient Operating Temperature Limits		-40 to 150°F (-40 to 66°C) Internal Actuator heater is provided standard
Actuator Input Voltage		120 VAC
Actuator Enclosure Rating		NEMA 4X
Materials	Body	Cast Iron, Red Epoxy finish
	Disc	Ductile Iron Coated with Nylon 11
	Seat	Ethylene Propylene Diene Monomer (EPDM)
	Stem	416 Stainless Steel (2 through 12 in.) 304 Stainless Steel (14 through 20 in.)

1. Refer to VDI 2035 Standard for recommended proper water treatment.