Resilient Seat Butterfly Valves
Quick Selection Guide

Honeywell

Large Capacity.
Small Dimensions.

NEW FROM HONEYWELL:

RESILIENT SEAT BUTTERFLY VALVES

Rounding out the Honeywell valve line, Honeywell Butterfly Valves give you a compact choice for moving a lot of water in heating, cooling and ventilation control applications. Perfect for chiller and other high-water-flow applications, Honeywell Butterfly Valves let you move as much as 20,000 gallons per minute from a 20" valve.

Honeywell Butterfly Valves are compact and easy to handle, yet engineered for long-term, reliable performance. The nylon-coated disk squeezes the food-grade resilient rubber seat for tight close-off. Plus, the close-off rating is triple what's been previously available on most models using Honeywell Direct Coupled Actuators!

Best of all, Honeywell has simplified and streamlined the ordering process, so not only can you meet all your valve needs from one source, you'll be able to order them quickly and easily.

Count on Honeywell for a complete line of valves, including new Honeywell Butterfly Valves for high-water-flow HVAC applications.

- Enhanced new line, with easy-to-follow nomenclature and ordering.
- Compact, yet powerful.
- New two-way manually operated valves for end-of-line service, with choice of lever or geared operator.
- Use Honeywell actuators on Butterfly Valves up to 8".

HONEYWELL BUTTERFLY VALVES ARE LOADED WITH BENEFITS

Feature	Benefit
High flow and high close-off	Able to handle high-capacity applications
Compact size	Lighter weight than a globe valve; easier to handle; fits easily into smaller spaces
Pneumatic actuators available in 80 psi	Higher close-off than most butterfly valves in the industry
2", 2-1/ 2" and 3" upgraded to 175 psi, bubble-tight close-off	Three times the close-off potential previously available on Honeywell butterfly valves
Functional OS numbering system	Simplifies product selection
Peroxide-cured EPDM rubber seat	Compliant rubber provides a bubble-tight close-off
Works with a variety of actuators	Gives you the flexibility to choose the most effective actuator for your application
Nylon-coated disk	Offers protection against the elements and reduces operating friction for lower actuator torque requirements and higher close-off ratings
Manual shut-off valves for end-of-line service	Ease of system fill, balancing, shut-off and drainage
Manual shut-off valves have 250 psi close-off	Fits high-rise applications
Temperature range covering chilled and hot water	Cover a wide variety of applications with one valve family
Nylon disk coating and EPDM combination flange gasket/ valve seat	Suitable for closed or open systems with oxygenated water, such as a cooling tower
Corrosion resistant	Durable design for long-term performance
Ultraviolet resistant	Protection in outdoor applications
Floating, modulating control, low and line-volt two-position pneumatic, pneumatic positioner, electro-pneumatic servo	Variety of control interfaces gives you more flexibility
Manual operators are standard	Override valve manually when needed
Manual valves have a choice of operators (wheel or notch lever)	Flexibility to be used as a balancing valve with the notch lever
Extended neck	Allows for 2" of piping insulation
3-way configurations available in globe valve or zone valve porting	Lets you easily match the right pipe configuration to the job
3-way valve assemblies may be field-configured for mixing or diverting applications	Cover a diverse range of applications
Pneumatic positioners and electro-pneumatic servo interfaces available	Assure position accuracy regardless of supply line

MODEL NUMBER SPECIFICATION

VF F 2 J W 1 Y 2 B

VF

VF = Valve, butterFly (resilient seat)

Connection

F = Flanged (lugged) to ANSI Dimensional Standards

Body Type

1 = 2-way (Spring return, normally open)
2 = 2-way (Non-spring return; Spring return normally closed or N.C./N.O. field selectable)
3 = 3-way (A-B-AB porting)
6 = 3-way (A-AB-B porting)

Body Size

	Inch	Metric Equivalent
F	2	DN 50
G	2-1/2	DN 65
H	3	DN 80
J	4	DN 100
K	5	DN 125
L	6	DN 150
M	8	DN 200
N	10	DN 250
P	12	DN 300
R	14	DN 350
S	16	DN 400
T	18	DN 450
U	20	DN 500

Disk Size and Close-Off

V = Undercut disk, 50 psi close-off
W = Full cut disk, high close-off

Actuator

A	Floating/2-position (24 V NEMA 2; 120 V NEMA 4X/6)	Electric
B	Modulating 0/2 – 10 Vdc (24 V NEMA 2; 120 V NEMA 4X/6)	
C	24 Vac 2-position spring return	
D	Floating/modulating spring return (24 V NEMA 2)	
E	120 Vac 2-position spring return	
P	Low pressure pneumatic spring return	Pneumatic
R	High pressure pneumatic bi-directional (push-pull)	
S	High pressure pneumatic spring return	
X	Manual operation, no actuator	

Actuator Enclosure

2	NEMA 2 Direct coupled actuator	Electric
4	NEMA 4 Waterproof	
X	NEMA 4X Waterproof, corrosion-resistant	
8	Spring range, 8 – 13 psi Low pressure actuators	Pneumatic
C	24 Vac solenoid High pressure actuators	
D	Electro-pneumatic positioner High pressure actuators	
E	120 Vac solenoid High pressure actuators	
P	Pnuematic positioner	
X	2-position control High pressure actuators	
G	Geared wheel operator	Manual
L	Lever operator	

Trim

Y = Nylon 11-coated disk EPDM seat/seal

Temperature-Pressure Rating

1 = Up to 175 psi close-off
2 = 250 psi close-off (manual models only)

Flanged Bodies, Actuated

Pipe Size	Model No.			Cv [kvs]	
In. [mm]	2-Way/3-Way			@ 60°	@ 90°
2 [DN50]	VFF...	1, 2... 3, 6...	F...	61 [53]	144 [125]
2-1/2 [DN65]		1, 2... 3, 6...	G...	107 [93]	282 [244]
3 [DN80]		1, 2... 3, 6...	H...	154 [133]	461 [399]
4 [DN100]		1, 2... 3, 6...	J...	274 [237]	841 [728]
5 [DN125]		1, 2... 3, 6...	K...	428 [370]	1376 [1,190]
6 [DN150]		1, 2... 3, 6...	L...	567 [491]	1850 [1,600]
8 [DN200]		1, 2... 3, 6...	M...	1081 [935]	3316 [2,868]
10 [DN250]		1, 2... 3, 6...	N...	1710 [1,479]	5430 [4,697]
12 [DN300]		1, 2... 3, 6...	P...	2563 [2,217]	8077 [6,987]
14 [DN350]		1, 2... 3, 6...	R...	3384 [2,927]	10538 [9,115]
16 [DN400]		1, 2... 3, 6...	S...	4483 [3,878]	13966 [12,081]
18 [DN450]		1, 2... 3, 6...	T...	5736 [4,962]	17214 [14,890]
20 [DN500]		1, 2... 3, 6...	U...	7144 [6,180]	22339 [19,323]

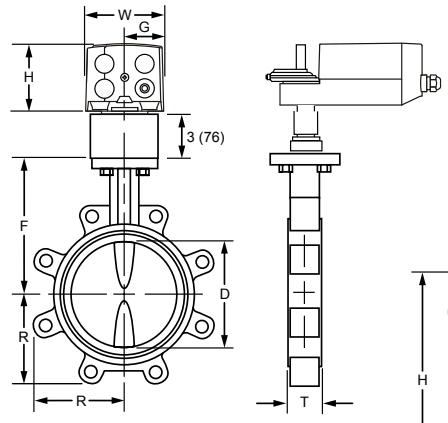
Operating Torque, in.-lb. [Nm]

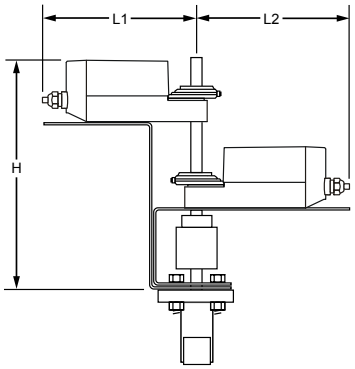
Pipe Size	Full Cut Disk (...W1Y...)			Under Cut Disk (...V1Y...)		
In. [mm]	Close-Off	2-Way	3-Way	Close-Off	2-Way	3-Way
2 [DN50]	175 psid [1200 kPa]	126 [14]	151 [17]	Only full cut disk models (high close-off) available in these body sizes		
2-1/2 [DN65]		150 [17]	180 [20]			
3 [DN80]		180 [20]	216 [24]			
4 [DN100]		372 [42]	446 [50]	50 psid [345 kPa]	180 [20]	216 [24]
5 [DN125]		468 [53]	562 [64]		312 [35]	374 [42]
6 [DN150]		564 [64]	677 [77]		456 [52]	547 [62]
8 [DN200]		1,224 [138]	1,469 [166]		564 [64]	677 [77]
10 [DN250]		2,637 [298]	3,164 [358]		1,128 [127]	1,354 [153]
12 [DN300]		4,132 [467]	4,958 [560]		2,074 [234]	2,489 [281]
14 [DN350]	150 psid [1034 kPa]	5,864 [663]	7,037 [796]		3,000 [339]	3,600 [407]
16 [DN400]		8,182 [924]	9,818 [1,109]		3,880 [438]	4,656 [526]
18 [DN450]		10,819 [1,222]	12,983 [1,466]		4,788 [541]	5,746 [649]
20 [DN500]		14,091 [1,592]	16,909 [1,910]		6,243 [705]	7,492 [846]

Pipe Size		
In. [mm]	...2A/B	...2
2 [DN50]	175 [1,206]	
2-1/2 [DN65]		
3 [DN80]		
4 [DN100]		
5 [DN125]	175* [1,206]	
6 [DN150]		
8 [DN200]	50* [345]	
10 [DN250]	Not Availa	
12 [DN300]		
14 [DN350]		
16 [DN400]		
18 [DN450]		
20 [DN500]		

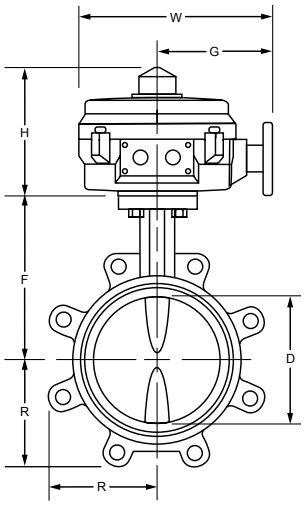
* Dual actuators

2-WAY

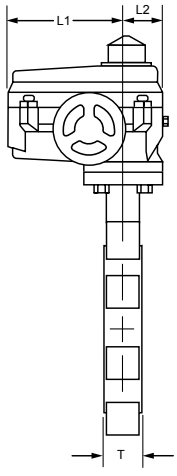




2-way valve with Direct Coupled Single and Tandem Actuators (VFF2...2A/2B/2C/2D/2E)

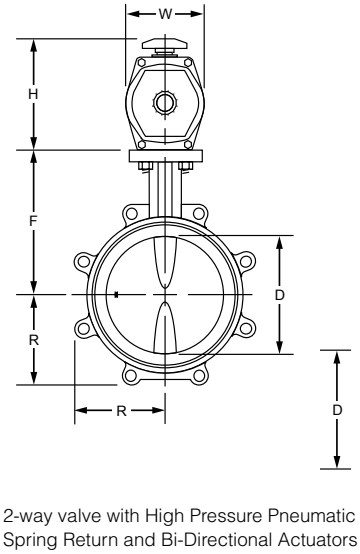


2-way valve with NEMA 4-4x industrial-grade actuator, with integral heater and manual override (VFF2...4A/4B/XA/XB)

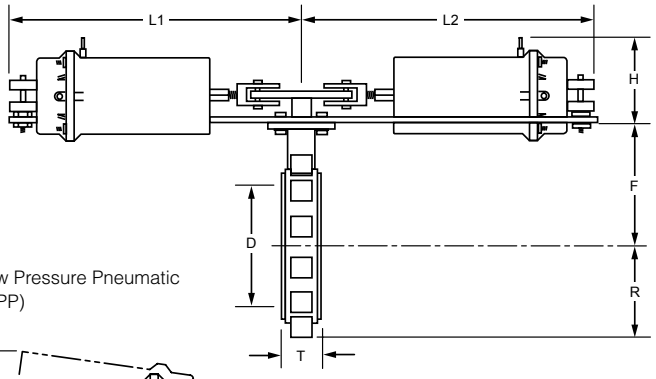


Maximum Available Close-Off by Actuator Code, psi [kPa]

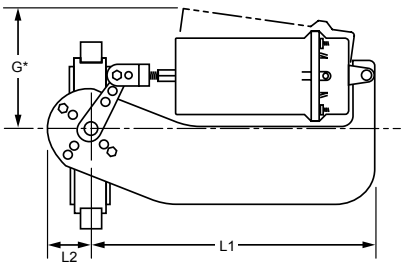
2-Way								3-Way						
C/D/E	...XA/B	...4A/B	...8P/PP	..GX	...LX	...XR/PR	...XS/PS	...2A/B	...2C/D/E	...XA/B	...4A/B	...8P/PP	...XR/PR	...XS/PS
175 [1,206]	175 [1,206]	Not Available	175 [1,206]	250 [1,723]	250 [1,723]	175 [1,206]	175 [1,206]	175 [1,206]	175 [1,206]	175 [1,206]	Not Available	175 [1,206]	175 [1,206]	175 [1,206]
									175* [1,206]					
50 [345]								175* [1,206]	50* [345]					
50* [345]			175* [1,206]					50* [345]				175* [1,206]		
			50* [345]									50* [345]		
able	150 [1,034]							Not Available		50 [345]				150 [1,034]
	50 [345]	150			N/A		150 [1,034]				150 [1,034]		150 [1,034]	50 [345]
		[1,034]												



2-way valve with High Pressure Pneumatic Spring Return and Bi-Directional Actuators (VFF...PR/PS/XR/XS)



2-way valve with Low Pressure Pneumatic Actuators (VFF...8P/PP)



Body Dimensions, inches [mm]. See figures A-F

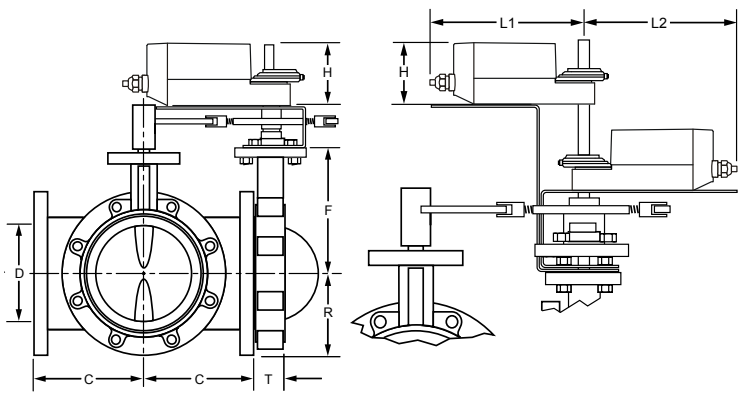
Pipe Size	D	R	F	T	C (3-Way)	Flange Bolts		
In. [mm]	I.D.	Radius	Neck	Thickness	Face-C/L	No.	C/L Dia.	Thread
2 [DN50]	2 [51]	2-/4 [58]	5-1/2 [140]	1-5/8 [41]	4-1/2 [114]	4	4-3/4 [121]	5/8-11
2-1/2 [DN65]	2-1/2 [64]	2.57 [65]	6 [152]	1-3/4	5 [127]		5-1/2 [140]	
3 [DN80]	3 [76]	2-1/4 [71]	6-1/4 [159]	[45]	5-1/2 [140]		6 [152]	
4 [DN100]	4 [102]	4.09 [104]	7 [178]	2 [51]	6-1/2 [165]	8	7-1/2 [191]	
5 [DN125]	5 [127]	4.61 [117]	7-1/2 [191]	2-1/8	7-1/2 [191]		8-1/2 [216]	3/4-10
6 [DN150]	5-3/4 [146]	5 [129]	8- [203]	[54]	8 [203]		9-1/2 [241]	
8 [DN200]	7-3/4 [197]	6 [154]	9-1/2 [241]	2-1/2	9 [229]		11-3/4 [298]	
10 [DN250]	9-3/4 [248]	7-1/4 [195]	10-3/4 [273]	[64]	11 [279]	12	14-1/4 [362]	7/8-9
12 [DN300]	11-3/4 [298]	9 [229]	12-1/4 [311]	3	12 [305]		17 [432]	
14 [DN350]	13-1/4 [337]	9.93 [252]	13-5/8 [346]	[76]	14 [356]		18-3/4 [476]	1-8
16 [DN400]	15-1/4 [387]	11-/4 [287]	14-3/4 [375]	4 [102]	15 [381]	16	21-1/4 [540]	
18 [DN450]	17-1/4 [438]	12.16 [309]	16 [406]	4-1/4 [108]	16-1/2 [419]		22-3/4 [578]	1 1/8-7
20 [DN500]	19-1/4 [489]	14 [356]	17-1/4 [438]	5 [127]	18 [457]	20	25 [635]	

Pipe Size			2-
In. [mm]	...2A/B	...2C/D/E	...4/
2 [DN50]	3 [76]	3 [76]	6- [1
2-1/2 [DN65]			
3 [DN80]			
4 [DN100]			
5 [DN125]	11-1/4 [300]	11-1/4 [300]	
6 [DN150]			8 [2
8 [DN200]			
10 [DN250]			
12 [DN300]			8- [2
14 [DN350]			
16 [DN400]			
18 [DN450]			[4
20 [DN500]			

* Larger valve bodies and high close-off rat
Where dimensions overlap, the larger valu

3-WAY

3-way valve with Direct Coupled Single and Tandem Actuators (VFF3...2A/2B/2C/2D/2E)

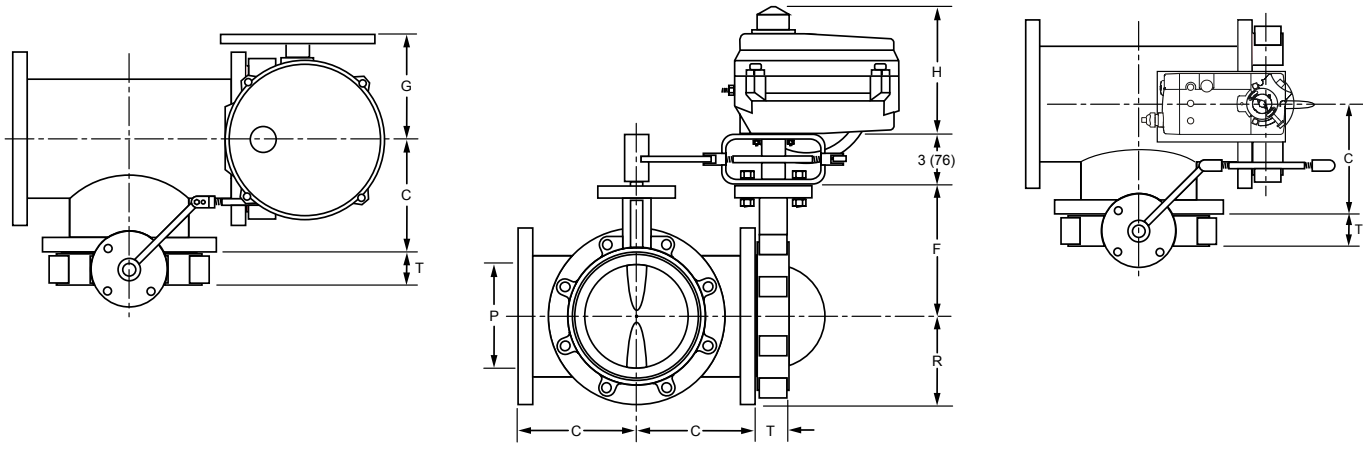


Selected Actuator Heights*, In. [mm]

2-Way Valve, by Actuator Code					3-Way Valve Assembly, by Actuator Code						
A~XB	...8P	...PP	...XR/XS	...PR/PS	...2A/B	...2C/D/E	...4A/XB	...8P	...PP	...XR/XS	...PR/PS
-1/4 170]	3 [79]	6-/4 [160]	4-/4 [109]	10-/4 [262]	3 [76]	3 [76]	6-1/4 [170]	3 [79]	6-/4 [160]	4-/4 [109]	10-/4 [262]
								6-1/8 [175]	10 [254]	5-/8 [132]	11-/8 [285]
	6-1/8 [175]	10 [254]	5-/8 [132]	11-/8 [285]		11-1/4 [300]			10-/8 [257]	5-1/2 [141]	11-1/2 [293]
										6-1/8 [176]	12-1/8 [328]
3-/8 206]		10-/8 [257]	5-1/2 [141]	11-1/2 [293]	11-1/4 [300]		8-/8 [206]			7-1/4 [196]	13-1/4 [349]
			6-1/8 [176]	12-1/8 [328]						9-/8 [238]	15-/8 [391]
			7-1/4 [196]	13-1/4 [349]						11-1/8 [295]	17-1/8 [447]
-1/4 224]			9-/8 [238]	15-/8 [391]			8-1/4 [224]			13-/2 [342]	19-1/2 [495]
16 406]			11-1/8 [295]	17-1/8 [447]			16 [406]				
			13-/2 [342]	19-1/2 [495]							

tings require higher torque. Largest dimensions are shown for installation planning.
ue represents dual, or the larger actuators.

3-way valve with NEMA 4x industrial-grade actuator, with integral heater and manual override (VFF...4A/4B/XA/XB)



2-Way Electrically-Actu

Non-Spring Return

Actuator Features	Floating				M
	MN6134A1003	Industrial Actuators		MN7234A2008	
	NEMA 2	NEMA 4X	NEMA 4	NEMA 2	N
24 Vac	•			•	
120 Vac		•	•		
2-Position Control	•	•	•	•	
Floating Control	24 Vac	120 Vac	120 Vac	24 Vac	
2-10 Vdc Control				•	
0-10 Vdc Control				•	
4-20 mA Control				•	
Manual Override		•	•		
Conduit Connection	•	•	•	•	
Waterproof		•	•		
Corrosion Resistant		•	•		
Anti-Condensate Heater		•	•		
Spring Return					

Valve Size (inches)	Close-Off (psid)	Cv [kvs] @ 60˚	Cv [kvs] @ 90˚					F
2	175	61 [53]	144 [125]	VFF2FW1Y2A	VFF2FW1YXA		VFF2FW 1Y2B	VF
	250							
2-1/2	175	107 [93]	282 [244]	VFF2GW1Y2A	VFF2GW1YXA		VFF2GW1Y2B	VF
	250							
3	175	154 [133]	461 [399]	VFF2HW1Y2A	VFF2HW1YXA		VFF2HW1Y2B	VF
	250							
4	50	274 [237]	841 [727]	VFF2JV1Y2A	VFF2JV1YXA		VFF2JV1Y2B	VF
	175			VFF2JW1Y2A	VFF2JW1YXA		VFF2JW1Y2B	VF
	250							
5	50	428 [370]	1376 [1,190]	VFF2KV1Y2A*	VFF2KV1YXA		VFF2KV1Y2B*	VF
	175			VFF2KW1Y2A	VFF2KW1YXA		VFF2KW1Y2B	VF
	250							
6	50	567 [490]	1,850 [1,600]	VFF2LW1Y2A**	VFF2LV1YXA		VFF2LW1Y2B**	VF
	175			VFF2LW1Y2A	VFF2LW1YXA		VFF2LW1Y2B	VF
	250							
8	50	1,081 [935]	3,316 [2,868]	VFF2MV1Y2A	VFF2MV1YXA		VFF2MV1Y2B	VF
	175				VFF2MW1YXA			VF
	250							
10	50	1,710 [1,479]	5,430 [4,697]		VFF2NV1YXA			VF
	175				VFF2NW1YXA			VF
	250							
12	50	2,563 [2,217]	8,077 [6,987]		VFF2PV1YXA			VF
	175				VFF2PW1YXA			VF
	250							
14	50	3,384 [2,927]	10,538 [9,115]		VFF2RV1YXA			VF
	150				VFF2RW1YXA			VF
	250							
16	50	4,483 [3,878]	13,966 [12,081]		VFF2SV1YXA			VF
	150					VFF2SW1Y4A		
	250							
18	50	5,736 [4,962]	17,214 [14,890]		VFF2TV1YXA			VF
	150					VFF2TW1Y4A		
	250							
20	50	7,144 [6,180]	22,339 [19,323]			VFF2UV1Y4A		
	150					VFF2UW1Y4A		
	250							

*Chilled water service only. ** Use full cut valves — requires same actuator torque.

Valve Size	Cv [kvs] at Disk Rotation								
	0˚	10˚	20˚	30˚	40˚	50˚	60˚	70˚	80˚
2" [DN50]	0 [0]	1 [1]	7 [6]	16 [14]	27 [23]	43 [37]	61 [53]	84 [72]	114 [98]
3" [DN65]	0 [0]	2 [1]	11 [10]	24 [21]	43 [37]	67 [58]	107 [92]	163 [140]	223 [192
3" [DN80]	0 [0]	2 [2]	15 [13]	35 [30]	61 [53]	96 [83]	154 [132]	267 [230]	364 [313
4" [DN100]	0 [0]	3 [3]	27 [23]	62 [53]	109 [94]	171 [147]	274 [236]	496 [427]	701 [603
5" [DN125]	0 [0]	5 [4]	43 [37]	98 [84]	170 [146]	268 [231]	428 [368]	775 [667]	1,146 [986
6" [DN150]	0 [0]	6 [5]	56 [48]	129 [111]	225 [194]	354 [304]	567 [488]	1,025 [882]	1,542 [1,32
8" [DN200]	0 [0]	12 [10]	102 [88]	241 [207]	421 [362]	680 [585]	1,081 [930]	1,862 [1,601]	2,842 [2,44
10" [DN250]	0 [0]	19 [16]	162 [139]	382 [329]	667 [574]	1,076 [925]	1,710 [1,471]	2,948 [2,535]	4,525 [3,89
12" [DN300]	0 [0]	27 [23]	235 [202]	555 [477]	1,005 [864]	1,594 [1,371]	2,563 [2,204]	4,393 [3,778]	6,731 [5,78
14" [DN350]	0 [0]	34 [29]	299 [257]	756 [650]	1,320 [1,135]	2,149 [1,848]	3,384 [2,910]	5,939 [5,108]	9,974 [8,57
16" [DN400]	0 [0]	45 [39]	397 [341]	1,001 [861]	1,749 [1,504]	2,847 [2,448]	4,483 [3,855]	7,867 [6,766]	11,761 [10,1
18" [DN450]	0 [0]	58 [50]	507 [436]	1,281 [1,102]	2,237 [1,924]	3,643 [3,133]	5,736 [4,933]	10,065 [8,656]	14,496 [12,4
20" [DN500]	0 [0]	72 [62]	632 [544]	1,595 [1,372]	2,786 [2,396]	4,536 [3,901]	7,144 [6,144]	12,535 [10,780]	18,812 [16,1

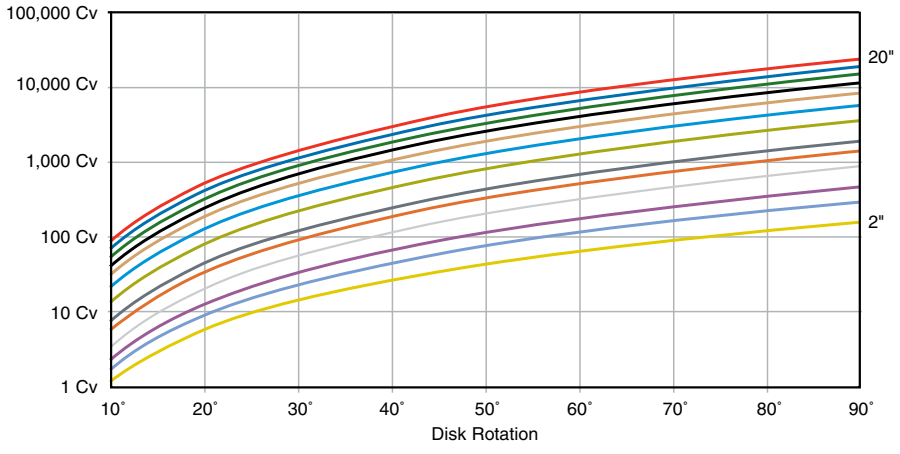
uated Control Butterfly Valves

Modulating		Spring Return, N.C.(default)/N.O. 2-Position		Modulating	Valve Only End-of-Line Service	
Industrial Actuators		MS8120A1007	MS4120A1001	MS7520A2007		
NEMA 4X	NEMA 4	Low Voltage	Line Voltage	NEMA 2	Lever	Gear
		•		•		
•	•		•			
		•	•	•		
				24 Vac		
•	•			•		
•	•			•		
•	•			•		
•	•				•	•
•	•	•	•			
•	•					
•	•					
•	•					
		•	•	•		
Resilient-Seat, Nylon 11-coated Disk, Lugged Fittings						
F2FW1YXB		VFF2FW1Y2C	VFF2FW1Y2E	VFF2FW1Y2D		
					VFF2FW2YLX	VFF2FW2YGX
F2GW1YXB		VFF2GW1Y2C	VFF2GW1Y2E	VFF2GW1Y2D		
					VFF2GW2YLX	VFF2GW2YGX
F2HW1YXB		VFF2HW1Y2C	VFF2HW1Y2E	VFF2HW1Y2D		
					VFF2HW2YLX	VFF2HW2YGX
FF2JV1YXB		VFF2JV1Y2C	VFF2JV1Y2E	VFF2JV1Y2D		
F2JW1YXB						
					VFF2JW2YLX	VFF2JW2YGX
F2KV1YXB		VFF2KV1Y2C*	VFF2KV1Y2E*	VFF2KV1Y2D*		
F2KW1YXB						
					VFF2KW2YLX	VFF2KW2YGX
FF2LV1YXB						
F2LW1YXB						
					VFF2LW2YLX	VFF2LW2YGX
F2MV1YXB						
F2MW1YXB						
					VFF2MW2YLX	VFF2MW2YGX
FF2NV1YXB						
F2NW1YXB						
					VFF2NW2YLX	VFF2NW2YGX
FF2PV1YXB						
F2PW1YXB						
					VFF2PW2YLX	VFF2PW2YGX
FF2RV1YXB						
F2RW1YXB						
						VFF2RW2YGX
FF2SV1YXB						
	VFF2SW1Y4B					
						VFF2SW2YGX
FF2TV1YXB						
	VFF2TW1Y4B					
						VFF2TW2YGX
	VFF2UV1Y4B					
	VFF2UW1Y4B					
						VFF2UW2YGX

	90˚
	144 [124]
]	282 [243]
]	461 [397]
]	841 [723]
6]	1,376 [1,183]
26]	1,850 [1,591]
44]	3,316 [2,852]
92]	5,430 [4,670]
39]	8,077 [6,946]
78]	10,538 [9,063]
15]	13,966 [12,011]
467]	17,214 [14,804]
78]	22,339 [19,212]

When a Butterfly Valve starts moving, the disc is still in the seat until around 7˚ or 8˚. As the disc comes out of the seat, the curve climbs fairly steeply until about 20˚. After that, the curve follows the equal percentage curve very closely until around 60˚. At that point you've got nearly full flow and from there on precise control is hard to achieve (the curve starts to flatten back out).

VFF Flow Characteristics



3-Way Electrically-Actu

Actuator Features	Non-Spring Return			
	Floating			M
	MN6134A1003	Industrial Actuators		MN7234A2008
	NEMA 2	NEMA 4X	NEMA 4	NEMA 2
24 Vac	•			•
120 Vac		•	•	
2-Position Control	•	•	•	•
Floating Control	24 Vac	120 Vac	120 Vac	24 Vac
2-10 Vdc Control				•
0-10 Vdc Control				•
4-20 mA Control				•
Manual Override		•	•	
Conduit Connection	•	•	•	•
Watertight		•	•	
Corrosion Resistant		•	•	
Anti-Condensate Heater		•	•	
Spring Return				

Valve Size (inches)	Close-Off (psid)	Cv [kvs] @ 60°	Cv [kvs] @ 90°					Resilient-Seat, Ny
2	175	61 [53]	144 [125]	VFF3FW1Y2A	VFF3FW1YXA		VFF3FW1Y2B	VFI
2-1/2	175	107 [93]	282 [244]	VFF3GW1Y2A	VFF3GW1YXA		VFF3GW1Y2B	VFI
3	175	154 [133]	461 [399]	VFF3HW1Y2A	VFF3HW1YXA		VFF3HW1Y2B	VFI
4	50	274 [237]	841 [727]	VFF3JV1Y2A	VFF3JV1YXA		VFF3JV1Y2B	VF
	175			VFF3JW1Y2A	VFF3JW1YXA		VFF3JW1Y2B	VFI
5	50	428 [370]	1,376 [1,190]	VFF3KW1Y2A*	VFF3KV1YXA		VFF3KW1Y2B*	VF
	175			VFF3KW1Y2A	VFF3KW1YXA		VFF3KW1Y2B	VFI
6	50	567 [490]	1,850 [1,600]	VFF3LV1Y2A	VFF3LV1YXA		VFF3LV1Y2B	VF
	175				VFF3LW1YXA			VFI
8	50	1,081 [935]	3,316 [2,868]		VFF3MV1YXA			VFI
	175				VFF3MW1YXA			VFI
10	50	1,710 [1,479]	5,430 [4,697]		VFF3NV1YXA			VF
	175				VFF3NW1YXA			VFI
12	50	2,563 [2,217]	8,077 [6,987]		VFF3PV1YXA			VF
	175				VFF3PW1YXA			VFI
14	50	3,384 [2,927]	10,538 [9,115]		VFF3RV1YXA	VFF3RV1Y4A		VF
	150					VFF3RW1Y4A		
16	50	4,483 [3,878]	13,966 [12,081]		VFF3SV1YXA	VFF3SV1Y4A		VF
	150					VFF3SW1Y4A		
18	50	5,736 [4,962]	17,214 [14,890]			VFF3TV1Y4A		
	150					VFF3TW1Y4A		
20	50	7,144 [6,180]	22,339 [19,323]			VFF3UV1Y4A		
	150					VFF3UW1Y4A		

Valve Size (inches)	Close-Off (psid)	Cv [kvs] @ 60°	Cv [kvs] @ 90°					Resilient-S
2	175	61 [53]	144 [125]	VFF6FW1Y2A	VFF6FW1YXA		VFF6FW1Y2B	VFI
2-1/2	175	107 [93]	282 [244]	VFF6GW1Y2A	VFF6GW1YXA		VFF6GW1Y2B	VFI
3	175	154 [133]	461 [399]	VFF6HW1Y2A	VFF6HW1YXA		VFF6HW1Y2B	VFI
4	50	274 [237]	841 [727]	VFF6JV1Y2A	VFF6JV1YXA		VFF6JV1Y2B	VF
	175			VFF6JW1Y2A	VFF6JW1YXA		VFF6JW1Y2B	VFI
5	50	428 [370]	1,376 [1,190]	VFF6KW1Y2A*	VFF6KV1YXA		VFF6KW1Y2B*	VF
	175			VFF6KW1Y2A	VFF6KW1YXA		VFF6KW1Y2B	VFI
6	50	567 [490]	1,850 [1,600]	VFF6LV1Y2A	VFF6LV1YXA		VFF6LV1Y2B	VF
	175				VFF6LW1YXA			VFI
8	50	1,081 [935]	3,316 [2,868]		VFF6MV1YXA			VFI
	175				VFF6MW1YXA			VFI
10	50	1,710 [1,479]	5,430 [4,697]		VFF6NV1YXA			VF
	175				VFF6NW1YXA			VFI
12	50	2,563 [2,217]	8,077 [6,987]		VFF6PV1YXA			VF
	175				VFF6PW1YXA			VFI
14	50	3,384 [2,927]	10,538 [9,115]		VFF6RV1YXA	VFF6RV1Y4A		VF
	150					VFF6RW1Y4A		
16	50	4,483 [3,878]	13,966 [12,081]		VFF6SV1YXA	VFF6SV1Y4A		VF
	150					VFF6SW1Y4A		
18	50	5,736 [4,962]	17,214 [14,890]			VFF6TV1Y4A		
	150					VFF6TW1Y4A		
20	50	7,144 [6,180]	22,339 [19,323]			VFF6UV1Y4A		
	150					VFF6UW1Y4A		

* Use full cut valves, requires same actuator torque.
** Recommended for cooling applications only.

uated Control Butterfly Valves

Spring Return, N.C.(A-port default)/N.O.					Valve Only End-of-Line Service	
Modulating		2-Position		Modulating		
Industrial Actuators		MS8120A1007	MS4120A1001	MS7520A2007		
NEMA 4X	NEMA 4	Low Voltage	Line Voltage	NEMA 2	Lever	Gear
		•		•		
•	•		•			
		•	•	•		
				24 Vac		
•	•			•		
•	•			•		
•	•			•		
•	•				•	•
•	•	•	•			
•	•					
•	•					
•	•					
		•	•	•		
Nylon 11-Coated Disks, Lugged Fittings, A-B-AB (Globe Valve) Porting						
F3FW1YXB		VFF3FW1Y2C	VFF3FW1Y2E	VFF3FW1Y2D	Use A Pair Of 2-Way Valves With Standard Flanged Tee	
F3GW1YXB		VFF3GW1Y2C	VFF3GW1Y2E	VFF3GW1Y2D		
F3HW1YXB		VFF3HW1Y2C	VFF3HW1Y2E	VFF3HW1Y2D		
F3JV1YXB		VFF3JV1Y2C	VFF3JV1Y2E	VFF3JV1Y2D		
F3JW1YXB						
F3KV1YXB		VFF3KV1Y2C**	VFF3KV1Y2E**	VFF3KV1Y2D**		
F3KW1YXB						
F3LV1YXB						
F3LW1YXB						
F3MV1YXB						
F3MW1YXB						
F3NV1YXB						
F3NW1YXB						
F3PV1YXB						
F3PW1YXB						
F3RV1YXB	VFF3RV1Y4B					
	VFF3RW1Y4B					
F3SV1YXB	VFF3SV1Y4B					
	VFF3SW1Y4B					
	VFF3TV1Y4B					
	VFF3TW1Y4B					
	VFF3UV1Y4B					
	VFF3UW1Y4B					
Seat, Nylon 11-Coated Disks, Lugged Fittings, A-AB-B Porting						
F6FW1YXB		VFF6FW1Y2C	VFF6FW1Y2E	VFF6FW1Y2D	Use A Pair Of 2-Way Valves With Standard Flanged Tee	
F6GW1YXB		VFF6GW1Y2C	VFF6GW1Y2E	VFF6GW1Y2D		
F6HW1YXB		VFF6HW1Y2C	VFF6HW1Y2E	VFF6HW1Y2D		
F6JV1YXB		VFF6JV1Y2C	VFF6JV1Y2E	VFF6JV1Y2D		
F6JW1YXB						
F6KV1YXB		VFF6KV1Y2C**	VFF6KV1Y2E**	VFF6KV1Y2D**		
F6KW1YXB						
F6LV1YXB						
F6LW1YXB						
F6MV1YXB						
F6MW1YXB						
F6NV1YXB						
F6NW1YXB						
F6PV1YXB						
F6PW1YXB						
F6RV1YXB	VFF6RV1Y4B					
	VFF6RW1Y4B					
F6SV1YXB	VFF6SV1Y4B					
	VFF6SW1Y4B					
	VFF6TV1Y4B					
	VFF6TW1Y4B					
	VFF6UV1Y4B					
	VFF6UW1Y4B					

2-Way P

Actuator Features	Spring Return				
	20 psi				
	8-13 Spring	Positioner	Standard	Electro-Pneumatic Solenoid	
24 Vac				•	
120 Vac					•
2-Position Control				•	•
Modulating Control	•	•	•		
2-10 Vdc Control			•		
0-10 Vdc Control			•		
4-20 mA Control			•		
Manual Override			•		
Conduit Connection				•	•
Waterproof Enclosure					
Spring Return	•	•	•	•	•

Valve Size (inches)	Close-Off (psid)	Cv [kvs] @ 60˚	Cv [kvs] @ 90˚					Resilient-
2	175	61 [53]	144 [125]	VFF1FW1Y8P	VFF1FW1YPP	VFF1FW1YXS	VFF1FW1YCS	VFF1FW1Y
2-1/2	175	107 [93]	282 [244]	VFF1GW1Y8P	VFF1GW1YPP	VFF1GW1YXS	VFF1GW1YCS	VFF1GW1Y
3	175	154 [133]	461 [399]	VFF1HW1Y8P	VFF1HW1YPP	VFF1HW1YXS	VFF1HW1YCS	VFF1HW1Y
4	50	274 [237]	841 [727]	VFF1JV1Y8P	VFF1JV1YPP	VFF1JV1YXS	VFF1JV1YCS	VFF1JV1YE
	175			VFF1JW1Y8P	VFF1JW1YPP	VFF1JW1YXS	VFF1JW1YCS	VFF1JW1YI
5	50	428 [370]	1,376 [1,190]	VFF1KV1Y8P	VFF1KV1YPP	VFF1KV1YXS	VFF1KV1YCS	VFF1KV1YI
	175			VFF1KW1Y8P	VFF1KW1YPP	VFF1KW1YXS	VFF1KW1YCS	VFF1KW1Y
6	50	567 [490]	1,850 [1,600]	VFF1KW1Y8P	VFF1KW1YPP	VFF1LV1YXS	VFF1LV1YCS	VFF1LV1YE
	175			VFF1KW1Y8P	VFF1KW1YPP	VFF1LW1YXS	VFF1LW1YCS	VFF1LW1YI
8	50	1,081 [935]	3,316 [2,868]	VFF1KV1Y8P	VFF1KV1YPP	VFF1MV1YXS	VFF1MV1YCS	VFF1MV1Y
	175			VFF1KW1Y8P	VFF1KW1YPP	VFF1MW1YXS	VFF1MW1YCS	VFF1MW1Y
10	50	1,710 [1,479]	5,430 [4,697]	VFF1KV1Y8P	VFF1KV1YPP	VFF1NV1YXS	VFF1NV1YCS	VFF1NV1YI
	175					VFF1NW1YXS	VFF1NW1YCS	VFF1NW1Y
12	50	2,563 [2,217]	8,077 [6,987]			VFF1PV1YXS	VFF1PV1YCS	VFF1PV1YE
	175					VFF1PW1YXS	VFF1PW1YCS	VFF1PW1Y
14	50	3,384 [2,927]	10,538 [9,115]			VFF1RV1YXS	VFF1RW1YCS	VFF1RV1YE
	150*					VFF1RW1YXS	VFF1RW1YCS	VFF1RW1Y
16	50	4,483 [3,878]	13,966 [12,081]			VFF1SV1YXS	VFF1SV1YCS	VFF1SV1YE
	150*					VFF1SW1YXS	VFF1SW1YCS	VFF1SW1Y
18	50	5,736 [4,962]	17,214 [14,890]			VFF1TV1YXS	VFF1TV1YCS	VFF1TV1YE
	150*					VFF1TW1YXS	VFF1TW1YCS	VFF1TW1Y
20	50	7,144 [6,180]	22,339 [19,323]			VFF1UV1YXS	VFF1UV1YCS	VFF1UV1YI
	150*					VFF1UW1YXS	VFF1UW1YCS	VFF1UW1Y

Valve Size (inches)	Close-Off (psid)	Cv [kvs] @ 60˚	Cv [kvs] @ 90˚					Resilient-S
2	175	61 [53]	144 [125]	VFF2FW1Y8P	VFF2FW1YPP	VFF2FW1YXS	VFF2FW1YCS	VFF2FW1Y
2-1/2	175	107 [93]	282 [244]	VFF2GW1Y8P	VFF2GW1YPP	VFF2GW1YXS	VFF2GW1YCS	VFF2GW1Y
3	175	154 [133]	461 [399]	VFF2HW1Y8P	VFF2HW1YPP	VFF2HW1YXS	VFF2HW1YCS	VFF2HW1Y
4	50	274 [237]	841 [727]	VFF2JV1Y8P	VFF2JV1YPP	VFF2JV1YXS	VFF2JV1YCS	VFF2JV1YE
	175			VFF2JW1Y8P	VFF2JW1YPP	VFF2JW1YXS	VFF2JW1YCS	VFF2JW1YI
5	50	428 [370]	1,376 [1,190]	VFF2KV1Y8P	VFF2KV1YPP	VFF2KV1YXS	VFF2KV1YCS	VFF2KV1YI
	175			VFF2KW1Y8P	VFF2KW1YPP	VFF2KW1YXS	VFF2KW1YCS	VFF2KW1Y
6	50	567 [490]	1,850 [1,600]	VFF2KW1Y8P	VFF2KW1YPP	VFF2LV1YXS	VFF2LV1YCS	VFF2LV1YE
	175			VFF2KW1Y8P	VFF2KW1YPP	VFF2LW1YXS	VFF2LW1YCS	VFF2LW1YI
8	50	1,081 [935]	3,316 [2,868]	VFF2KV1Y8P	VFF2KV1YPP	VFF2MV1YXS	VFF2MV1YCS	VFF2MV1Y
	175			VFF2KW1Y8P	VFF2KW1YPP	VFF2MW1YXS	VFF2MW1YCS	VFF2MW1Y
10	50	1,710 [1,479]	5,430 [4,697]	VFF2KV1Y8P	VFF2KV1YPP	VFF2NV1YXS	VFF2NV1YCS	VFF2NV1YI
	175					VFF2NW1YXS	VFF2NW1YCS	VFF2NW1Y
12	50	2,563 [2,217]	8,077 [6,987]			VFF2PV1YXS	VFF2PV1YCS	VFF2PV1YE
	175					VFF2PW1YXS	VFF2PW1YCS	VFF2PW1Y
14	50	3,384 [2,927]	10,538 [9,115]			VFF2RV1YXS	VFF2RW1YCS	VFF2RV1YE
	150*					VFF2RW1YXS	VFF2RW1YCS	VFF2RW1Y
16	50	4,483 [3,878]	13,966 [12,081]			VFF2SV1YXS	VFF2SV1YCS	VFF2SV1YE
	150*					VFF2SW1YXS	VFF2SW1YCS	VFF2SW1Y
18	50	5,736 [4,962]	17,214 [14,890]			VFF2TV1YXS	VFF2TV1YCS	VFF2TV1YE
	150*					VFF2TW1YXS	VFF2TW1YCS	VFF2TW1Y
20	50	7,144 [6,180]	22,339 [19,323]			VFF2UV1YXS	VFF2UV1YCS	VFF2UV1YI
	150*					VFF2UW1YXS	VFF2UW1YCS	VFF2UW1Y

*Full cut valves with bi-directional pneumatic actuators.

Pneumatically-Actuated Control Butterfly Valves

				Non-Spring Return (Bidirectional)			
				80 psi			
	Positioner	E-P Positioner	Standard	Electro-Pneumatic Solenoid		Positioner	E-P Positioner
		•		•			•
					•		
				•	•		
	•	•				•	•
			•				
			•				
		•	•				•
			•				
		•		•	•		•
		•					•
	•	•				•	
Seat, Nylon 11-Coated Disk, Lugged Fittings, Normally Open							
ES	VFF1FW1YPS	VFF1FW1YDS	Use VFF2 Models For Bi-Directional Pneumatic Operation				
ES	VFF1GW1YPS	VFF1GW1YDS					
ES	VFF1HW1YPS	VFF1HW1YDS					
ES	VFF1JV1YPS	VFF1JV1YDS					
ES	VFF1JW1YPS	VFF1JW1YDS					
ES	VFF1KV1YPS	VFF1KV1YDS					
ES	VFF1KW1YPS	VFF1KW1YDS					
ES	VFF1LV1YPS	VFF1LV1YDS					
ES	VFF1LW1YPS	VFF1LW1YDS					
ES	VFF1MV1YPS	VFF1MV1YDS					
ES	VFF1MW1YPS	VFF1MW1YDS					
ES	VFF1NV1YPS	VFF1NV1YDS					
ES	VFF1NW1YPS	VFF1NW1YDS					
ES	VFF1PV1YPS	VFF1PV1YDS					
ES	VFF1PW1YPS	VFF1PW1YDS					
ES	VFF1RV1YPS	VFF1RV1YDS					
ES	VFF1RW1YPS	VFF1RW1YDS					
ES	VFF1SV1YPS	VFF1SV1YDS					
ES	VFF1SW1YPS	VFF1SW1YDS					
ES	VFF1TV1YPS	VFF1TV1YDS					
ES	VFF1TW1YPS	VFF1TW1YDS					
ES	VFF1UV1YPS	VFF1UV1YDS					
ES	VFF1UW1YPS	VFF1UW1YDS					
Seat, Nylon 11-Coated Disk, Lugged Fittings, Normally Closed							
ES	VFF2FW1YPS	VFF2FW1YDS	VFF2FW1YXR	VFF2FW1YCR	VFF2FW1YER	VFF2FW1YPR	VFF2FW1YDR
ES	VFF2GW1YPS	VFF2GW1YDS	VFF2GW1YXR	VFF2GW1YCR	VFF2GW1YER	VFF2GW1YPR	VFF2GW1YDR
ES	VFF2HW1YPS	VFF2HW1YDS	VFF2HW1YXR	VFF2HW1YCR	VFF2HW1YER	VFF2HW1YPR	VFF2HW1YDR
ES	VFF2JV1YPS	VFF2JV1YDS	VFF2JV1YXR	VFF2JV1YCR	VFF2JV1YER	VFF2JV1YPR	VFF2JV1YDR
ES	VFF2JW1YPS	VFF2JW1YDS	VFF2JW1YXR	VFF2JW1YCR	VFF2JW1YER	VFF2JW1YPR	VFF2JW1YDR
ES	VFF2KV1YPS	VFF2KV1YDS	VFF2KV1YXR	VFF2KV1YCR	VFF2KV1YER	VFF2KV1YPR	VFF2KV1YDR
ES	VFF2KW1YPS	VFF2KW1YDS	VFF2KW1YXR	VFF2KW1YCR	VFF2KW1YER	VFF2KW1YPR	VFF2KW1YDR
ES	VFF2LV1YPS	VFF2LV1YDS	VFF2LV1YXR	VFF2LV1YCR	VFF2LV1YER	VFF2LV1YPR	VFF2LV1YDR
ES	VFF2LW1YPS	VFF2LW1YDS	VFF2LW1YXR	VFF2LW1YCR	VFF2LW1YER	VFF2LW1YPR	VFF2LW1YDR
ES	VFF2MV1YPS	VFF2MV1YDS	VFF2MV1YXR	VFF2MV1YCR	VFF2MV1YER	VFF2MV1YPR	VFF2MV1YDR
ES	VFF2MW1YPS	VFF2MW1YDS	VFF2MW1YXR	VFF2MW1YCR	VFF2MW1YER	VFF2MW1YPR	VFF2MW1YDR
ES	VFF2NV1YPS	VFF2NV1YDS	VFF2NV1YXR	VFF2NV1YCR	VFF2NV1YER	VFF2NV1YPR	VFF2NV1YDR
ES	VFF2NW1YPS	VFF2NW1YDS	VFF2NW1YXR	VFF2NW1YCR	VFF2NW1YER	VFF2NW1YPR	VFF2NW1YDR
ES	VFF2PV1YPS	VFF2PV1YDS	VFF2PV1YXR	VFF2PV1YCR	VFF2PV1YER	VFF2PV1YPR	VFF2PV1YDR
ES	VFF2PW1YPS	VFF2PW1YDS	VFF2PW1YXR	VFF2PW1YCR	VFF2PW1YER	VFF2PW1YPR	VFF2PW1YDR
ES	VFF2RV1YPS	VFF2RV1YDS	VFF2RV1YXR	VFF2RV1YCR	VFF2RV1YER	VFF2RV1YPR	VFF2RV1YDR
ES	VFF2RW1YPS	VFF2RW1YDS	VFF2RW1YXR	VFF2RW1YCR	VFF2RW1YER	VFF2RW1YPR	VFF2RW1YDR
ES	VFF2SV1YPS	VFF2SV1YDS	VFF2SV1YXR	VFF2SV1YCR	VFF2SV1YER	VFF2SV1YPR	VFF2SV1YDR
ES	VFF2SW1YPS	VFF2SW1YDS	VFF2SW1YXR	VFF2SW1YCR	VFF2SW1YER	VFF2SW1YPR	VFF2SW1YDR
ES	VFF2TV1YPS	VFF2TV1YDS	VFF2TV1YXR	VFF2TV1YCR	VFF2TV1YER	VFF2TV1YPR	VFF2TV1YDR
ES	VFF2TW1YPS	VFF2TW1YDS	VFF2TW1YXR	VFF2TW1YCR	VFF2TW1YER	VFF2TW1YPR	VFF2TW1YDR
ES	VFF2UV1YPS	VFF2UV1YDS	VFF2UV1YXR	VFF2UV1YCR	VFF2UV1YER	VFF2UV1YPR	VFF2UV1YDR
ES	VFF2UW1YPS	VFF2UW1YDS	VFF2UW1YXR	VFF2UW1YCR	VFF2UW1YER	VFF2UW1YPR	VFF2UW1YDR

3-Way P

Spring Return, A-Port Normally Closed

Actuator Features	20 psi				
	Standard	Positioner	Standard	Electro-Pneumatic Solenoid	
24 Vac				•	
120 Vac					•
2-Position Control				•	•
Modulating Control	•	•			
2-10 Vdc Control			•		
0-10 Vdc Control			•		
4-20 mA Control			•		
Manual Override			•		
Conduit Connection				•	•
Waterproof Enclosure					
Spring Return	•	•	•	•	•

Valve Size (inches)	Close-Off (psid)	Cv [kvs] @ 60˚	Cv [kvs] @ 90˚	Resilient-Seat, N				
2	175	61 [53]	144 [125]	VFF3FW1Y8P	VFF3FW1YPP	VFF3FW1YXS	VFF3FW1YCS	VFF3FW1Y
2-1/2	175	107 [93]	282 [244]	VFF3GW1Y8P	VFF3GW1YPP	VFF3GW1YXS	VFF3GW1YCS	VFF3GW1Y
3	175	154 [133]	461 [399]	VFF3HW1Y8P	VFF3HW1YPP	VFF3HW1YXS	VFF3HW1YCS	VFF3HW1Y
4	50	274 [237]	841 [727]	VFF3JV1Y8P	VFF3JV1YPP	VFF3JV1YXS	VFF3JV1YCS	VFF3JV1YE
	175			VFF3JW1Y8P	VFF3JW1YPP	VFF3JW1YXS	VFF3JW1YCS	VFF3JW1YI
5	50	428 [370]	1,376 [1,190]	VFF3KW1Y8P	VFF3KW1YPP	VFF3KV1YXS	VFF3KV1YCS	VFF3KV1YI
	175			VFF3KW1Y8P	VFF3KW1YPP	VFF3KW1YXS	VFF3KW1YCS	VFF3KW1Y
6	50	567 [490]	1,850 [1,600]	VFF3KV1Y8P	VFF3KV1YPP	VFF3LV1YXS	VFF3LV1YCS	VFF3LV1YE
	175			VFF3KW1Y8P	VFF3KW1YPP	VFF3LW1YXS	VFF3LW1YCS	VFF3LW1YI
8	50	1,081 [935]	3,316 [2,868]	VFF3KV1Y8P	VFF3KV1YPP	VFF3MV1YXS	VFF3MV1YCS	VFF3MV1Y
	175					VFF3MW1YXS	VFF3MW1YCS	VFF3MW1Y
10	50	1,710 [1,479]	5,430 [4,697]			VFF3NV1YXS	VFF3NV1YCS	VFF3NV1YI
	175					VFF3NW1YXS	VFF3NW1YCS	VFF3NW1Y
12	50	2,563 [2,217]	8,077 [6,987]			VFF3PV1YXS	VFF3PV1YCS	VFF3PV1YE
	175					VFF3PW1YXS	VFF3PW1YCS	VFF3PW1Y
14	50	3,384 [2,927]	10,538 [9,115]			VFF3RV1YXS	VFF3RV1YCS	VFF3RV1YI
	150					VFF3RW1YXS	VFF3RW1YCS	VFF3RW1Y
16	50	4,483 [3,878]	13,966 [12,081]			VFF3SV1YXS	VFF3SV1YCS	VFF3SV1YE
	150							
18	50	5,736 [4,962]	17,214 [14,890]			VFF3TV1YXS	VFF3TV1YCS	VFF3TV1YE
	150							
20	50	7,144 [6,180]	22,339 [19,323]			VFF3UV1YXS	VFF3UV1YCS	VFF3UV1YI
	150							
Valve Size (inches)	Close-Off (psid)	Cv [kvs] @ 60˚	Cv [kvs] @ 90˚	Resilient-S				
2	175	61 [53]	144 [125]			VFF6FW1YXS	VFF6FW1YCS	VFF6FW1Y
2-1/2	175	107 [93]	282 [244]			VFF6GW1YXS	VFF6GW1YCS	VFF6GW1Y
3	175	154 [133]	461 [399]			VFF6HW1YXS	VFF6HW1YCS	VFF6HW1Y
4	50	274 [237]	841 [727]			VFF6JV1YXS	VFF6JV1YCS	VFF6JV1YE
	175					VFF6JW1YXS	VFF6JW1YCS	VFF6JW1YI
5	50	428 [370]	1,376 [1,190]			VFF6KV1YXS	VFF6KV1YCS	VFF6KV1YI
	175					VFF6KW1YXS	VFF6KW1YCS	VFF6KW1Y
6	50	567 [490]	1,850 [1,600]			VFF6LV1YXS	VFF6LV1YCS	VFF6LV1YE
	175					VFF6LW1YXS	VFF6LW1YCS	VFF6LW1YI
8	50	1,081 [935]	3,316 [2,868]			VFF6MV1YXS	VFF6MV1YCS	VFF6MV1Y
	175					VFF6MW1YXS	VFF6MW1YCS	VFF6MW1Y
10	50	1,710 [1,479]	5,430 [4,697]			VFF6NV1YXS	VFF6NV1YCS	VFF6NV1YI
	175					VFF6NW1YXS	VFF6NW1YCS	VFF6NW1Y
12	50	2,563 [2,217]	8,077 [6,987]			VFF6PV1YXS	VFF6PV1YCS	VFF6PV1YE
	175					VFF6PW1YXS	VFF6PW1YCS	VFF6PW1Y
14	50	3,384 [2,927]	10,538 [9,115]			VFF6RV1YXS	VFF6RV1YCS	VFF6RV1YI
	150					VFF6RW1YXS	VFF6RW1YCS	VFF6RW1Y
16	50	4,483 [3,878]	13,966 [12,081]			VFF6SV1YXS	VFF6SV1YCS	VFF6SV1YE
	150							
18	50	5,736 [4,962]	17,214 [14,890]			VFF6TV1YXS	VFF6TV1YCS	VFF6TV1YE
	150							
20	50	7,144 [6,180]	22,339 [19,323]			VFF6UV1YXS	VFF6UV1YCS	VFF6UV1YI
	150							

Pneumatically-Actuated Control Butterfly Valves

			Non-Spring Return				
			80 psi				
	Positioner	E-P Positioner	Standard	Electro-Pneumatic Solenoid		Positioner	E-P Positioner
		•		•			•
					•		
				•	•		
	•	•				•	•
			•				
			•				
		•	•				•
			•				
		•		•	•		•
		•					•
	•	•				•	•
Nylon 11-Coated Disks, Lugged Fittings, A-B-AB (Globe Valve) Porting							
ES	VFF3FW1YPS	VFF3FW1YDS	VFF3FW1YXR	VFF3FW1YCR	VFF3FW1YER	VFF3FW1YPR	VFF3FW1YDR
ES	VFF3GW1YPS	VFF3GW1YDS	VFF3GW1YXR	VFF3GW1YCR	VFF3GW1YER	VFF3GW1YPR	VFF3GW1YDR
ES	VFF3HW1YPS	VFF3HW1YDS	VFF3HW1YXR	VFF3HW1YCR	VFF3HW1YER	VFF3HW1YPR	VFF3HW1YDR
ES	VFF3JV1YPS	VFF3JV1YDS	VFF3JV1YXR	VFF3JV1YCR	VFF3JV1YER	VFF3JV1YPR	VFF3JV1YDR
ES	VFF3JW1YPS	VFF3JW1YDS	VFF3JW1YXR	VFF3JW1YCR	VFF3JW1YER	VFF3JW1YPR	VFF3JW1YDR
ES	VFF3KV1YPS	VFF3KV1YDS	VFF3KV1YXR	VFF3KV1YCR	VFF3KV1YER	VFF3KV1YPR	VFF3KV1YDR
ES	VFF3KW1YPS	VFF3KW1YDS	VFF3KW1YXR	VFF3KW1YCR	VFF3KW1YER	VFF3KW1YPR	VFF3KW1YDR
ES	VFF3LV1YPS	VFF3LV1YDS	VFF3LV1YXR	VFF3LV1YCR	VFF3LV1YER	VFF3LV1YPR	VFF3LV1YDR
ES	VFF3LW1YPS	VFF3LW1YDS	VFF3LW1YXR	VFF3LW1YCR	VFF3LW1YER	VFF3LW1YPR	VFF3LW1YDR
ES	VFF3MV1YPS	VFF3MV1YDS	VFF3MV1YXR	VFF3MV1YCR	VFF3MV1YER	VFF3MV1YPR	VFF3MV1YDR
ES	VFF3MW1YPS	VFF3MW1YDS	VFF3MW1YXR	VFF3MW1YCR	VFF3MW1YER	VFF3MW1YPR	VFF3MW1YDR
ES	VFF3NV1YPS	VFF3NV1YDS	VFF3NV1YXR	VFF3NV1YCR	VFF3NV1YER	VFF3NV1YPR	VFF3NV1YDR
ES	VFF3NW1YPS	VFF3NW1YDS	VFF3NW1YXR	VFF3NW1YCR	VFF3NW1YER	VFF3NW1YPR	VFF3NW1YDR
ES	VFF3PV1YPS	VFF3PV1YDS	VFF3PV1YXR	VFF3PV1YCR	VFF3PV1YER	VFF3PV1YPR	VFF3PV1YDR
ES	VFF3PW1YPS	VFF3PW1YDS	VFF3PW1YXR	VFF3PW1YCR	VFF3PW1YER	VFF3PW1YPR	VFF3PW1YDR
ES	VFF3RV1YPS	VFF3RV1YDS	VFF3RV1YXR	VFF3RV1YCR	VFF3RV1YER	VFF3RV1YPR	VFF3RV1YDR
ES	VFF3RW1YPS	VFF3RW1YDS	VFF3RW1YXR	VFF3RW1YCR	VFF3RW1YER	VFF3RW1YPR	VFF3RW1YDR
ES	VFF3SV1YPS	VFF3SV1YDS	VFF3SV1YXR	VFF3SV1YCR	VFF3SV1YER	VFF3SV1YPR	VFF3SV1YDR
			VFF3SW1YXR	VFF3SW1YCR	VFF3SW1YER	VFF3SW1YPR	VFF3SW1YDR
ES	VFF3TV1YPS	VFF3TV1YDS	VFF3TV1YXR	VFF3TV1YCR	VFF3TV1YER	VFF3TV1YPR	VFF3TV1YDR
			VFF3TW1YXR	VFF3TW1YCR	VFF3TW1YER	VFF3TW1YPR	VFF3TW1YDR
ES	VFF3UV1YPS	VFF3UV1YDS	VFF3UV1YXR	VFF3UV1YCR	VFF3UV1YER	VFF3UV1YPR	VFF3UV1YDR
			VFF3UW1YXR	VFF3UW1YCR	VFF3UW1YER	VFF3UW1YPR	VFF3UW1YDR
Seat, Nylon 11-Coated Disks, Lugged Fittings, A-AB-B Porting							
ES	VFF6FW1YPS	VFF6FW1YDS	VFF6FW1YXR	VFF6FW1YCR	VFF6FW1YER	VFF6FW1YPR	VFF6FW1YDR
ES	VFF6GW1YPS	VFF6GW1YDS	VFF6GW1YXR	VFF6GW1YCR	VFF6GW1YER	VFF6GW1YPR	VFF6GW1YDR
ES	VFF6HW1YPS	VFF6HW1YDS	VFF6HW1YXR	VFF6HW1YCR	VFF6HW1YER	VFF6HW1YPR	VFF6HW1YDR
ES	VFF6JV1YPS	VFF6JV1YDS	VFF6JV1YXR	VFF6JV1YCR	VFF6JV1YER	VFF6JV1YPR	VFF6JV1YDR
ES	VFF6JW1YPS	VFF6JW1YDS	VFF6JW1YXR	VFF6JW1YCR	VFF6JW1YER	VFF6JW1YPR	VFF6JW1YDR
ES	VFF6KV1YPS	VFF6KV1YDS	VFF6KV1YXR	VFF6KV1YCR	VFF6KV1YER	VFF6KV1YPR	VFF6KV1YDR
ES	VFF6KW1YPS	VFF6KW1YDS	VFF6KW1YXR	VFF6KW1YCR	VFF6KW1YER	VFF6KW1YPR	VFF6KW1YDR
ES	VFF6LV1YPS	VFF6LV1YDS	VFF6LV1YXR	VFF6LV1YCR	VFF6LV1YER	VFF6LV1YPR	VFF6LV1YDR
ES	VFF6LW1YPS	VFF6LW1YDS	VFF6LW1YXR	VFF6LW1YCR	VFF6LW1YER	VFF6LW1YPR	VFF6LW1YDR
ES	VFF6MV1YPS	VFF6MV1YDS	VFF6MV1YXR	VFF6MV1YCR	VFF6MV1YER	VFF6MV1YPR	VFF6MV1YDR
ES	VFF6MW1YPS	VFF6MW1YDS	VFF6MW1YXR	VFF6MW1YCR	VFF6MW1YER	VFF6MW1YPR	VFF6MW1YDR
ES	VFF6NV1YPS	VFF6NV1YDS	VFF6NV1YXR	VFF6NV1YCR	VFF6NV1YER	VFF6NV1YPR	VFF6NV1YDR
ES	VFF6NW1YPS	VFF6NW1YDS	VFF6NW1YXR	VFF6NW1YCR	VFF6NW1YER	VFF6NW1YPR	VFF6NW1YDR
ES	VFF6PV1YPS	VFF6PV1YDS	VFF6PV1YXR	VFF6PV1YCR	VFF6PV1YER	VFF6PV1YPR	VFF6PV1YDR
ES	VFF6PW1YPS	VFF6PW1YDS	VFF6PW1YXR	VFF6PW1YCR	VFF6PW1YER	VFF6PW1YPR	VFF6PW1YDR
ES	VFF6RV1YPS	VFF6RV1YDS	VFF6RV1YXR	VFF6RV1YCR	VFF6RV1YER	VFF6RV1YPR	VFF6RV1YDR
ES	VFF6RW1YPS	VFF6RW1YDS	VFF6RW1YXR	VFF6RW1YCR	VFF6RW1YER	VFF6RW1YPR	VFF6RW1YDR
ES	VFF6SV1YPS	VFF6SV1YDS	VFF6SV1YXR	VFF6SV1YCR	VFF6SV1YER	VFF6SV1YPR	VFF6SV1YDR
			VFF6SW1YXR	VFF6SW1YCR	VFF6SW1YER	VFF6SW1YPR	VFF6SW1YDR
ES	VFF6TV1YPS	VFF6TV1YDS	VFF6TV1YXR	VFF6TV1YCR	VFF6TV1YER	VFF6TV1YPR	VFF6TV1YDR
			VFF6TW1YXR	VFF6TW1YCR	VFF6TW1YER	VFF6TW1YPR	VFF6TW1YDR
ES	VFF6UV1YPS	VFF6UV1YDS	VFF6UV1YXR	VFF6UV1YCR	VFF6UV1YER	VFF6UV1YPR	VFF6UV1YDR
			VFF6UW1YXR	VFF6UW1YCR	VFF6UW1YER	VFF6UW1YPR	VFF6UW1YDR

GUIDE SPECIFICATION
ACTUATED BUTTERFLY VALVE

Valve housing shall consist of polyester-coated cast iron, with a static pressure rating no less than 250 psi at 250˚ F. Valve housing shall mount to ANSI Class 125/150 flanges. Valve disk shall consist of Nylon 11 coated cast iron disk. Valve shall have a blow-out proof stem with two EPDM O-rings. Actuated valve shall have resilient tongue-and-groove EPDM combination valve seat and flange seal with minimum, bubble-tight close-off pressure of no less than 150 psi, or no less than 50 psi with undercut disk and two mating flanges. Manually operated valve shall have gear or lever operator with minimum, bubble-tight close-off pressure of no less than 250 psi.

Three-way valve assemblies shall consist of a pair of two-way valves operated by a common actuator and valve linkage. Three way valves shall have a porting configuration of A-B-AB [or: A-AB-B].

Valves will be suitable for control of hot water, or chilled water-glycol mixture up to 50% concentration. Flow control characteristic shall be modified equal percentage.

VALVE ACTUATOR

Actuator shall provide minimum torque required for full valve shut-off position. Wiring terminals or pigtail leads shall be provided for installation to control signal and power wiring.

Electric control valve actuator shall accept analog modulating, floating (tri-state), or two-position line or low voltage signal as indicated in the control sequence. Low voltage and spring return actuators shall be provided by Honeywell. Electric actuator enclosures shall be rated NEMA 2 or NEMA 4X with integral hand-wheel and anti-condensate heater.

Pneumatic control valve actuator shall accept low pressure signal for proportional control, or 20 [or: 80] psi air pressure signal for two-position control in a spring [or non-spring] return configuration. Actuators shall be supplied with optional pneumatic positioner (or: electro-pneumatic solenoid; or: electro-pneumatic servo) interface.

Automation and Control Solutions
In the US:
Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422-3992

In Canada:
Honeywell Limited
35 Dynamic Drive
Toronto, Ontario M1V 4Z9
customer.honeywell.com

63-9683
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Honeywell