

# HVAC CONTROL PRODUCTS Valves

# Plant Valves

# **VFB Butterfly Valves**

DN15...500, PN16

VFB Butterfly Valves Series 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 also bidirectional, allowing positive shutoff with the flow in either direction.

#### **Features**

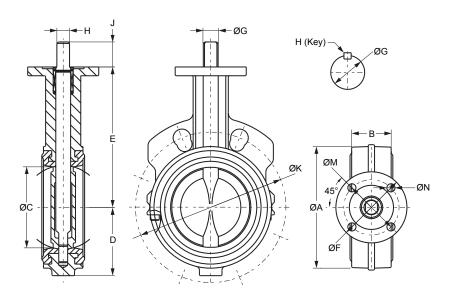
- Low Seating/Unseating Torques
   Reduce actuator torque and size requirements, particularly with
   lower-pressure rated valves
- Bubble-Tight Shutoff
   Ensures positive closure when needed
- Broad Range of Pre-Assembled Actuators
   Offers a wide selection for new and replacement electric and pneumatic actuators
- High-Integrity Components
   Provide quality valve assemblies, combining long cycle life with optimal engineered functional designs
- Fluid Temperature Limits
   -29 °C to 121 °C
- Flow Characteristics
   Modified Equal Percentage





**Valves** 

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# Two-Way Valve Dimensions (in mm)

Valve Size	Valve Size												Valve Net Weight**	Top Flange ISO	K*	Number of holes on Flange	K*	Number of holes on Flange	K*	Number of holes on Flange
(mm)	(inch)	Α	В	С	D	Е	F	M	N	G	Н	J	(kg)	5211		PN6		PN10		PN16
25	1	60	30	32	43	25	65	50	7	10	8	25	1	F05	75	4 x M10	85	4 x M12	85	4 x M12
32	1-1/4	70	32	41	53	25	65	50	7	10	8	25	1,15	F05	90	4 x M12	100	4 x M16	100	4 x M16
40	1-1/2	80	32	47	55	25	65	50	7	10	8	25	2.75	F05	100	4 x M12	110	4 x M16	110	4 x M16
50	2	94	42	51	56	140	90	70	10	14	10	32	3.05	F07	110	4 x M12	125	4 x M16	125	4 x M16
65	2-1/2	106	45	64	63	152	90	70	10	14	10	32	4.05	F07	130	4 x M12	145	4 x M16	145	4 x M16
80	3	124	45	76	71	159	90	70	10	14	10	32	4.3	F07	150	4 x M16	160	8 x M16	160	8 x M16
100	4	154	51	102	87	178	90	70	10	16	11	32	4.85	F07	170	4 x M16	180	8 x M16	180	8 x M16
125	5	179	55	127	102	190	90	70	10	19	13	32	7.2	F07	200	8 x M16	210	8 x M16	210	8 x M16
150	6	206	55	146	115	203	90	70	10	19	13	32	9.5	F07	225	8 x M16	240	8 x M20	240	8 x M20
200	8	267	59	197	146	241	150	125	14	22	16	32	12	F07	280	8 x M16	295	8 x M20	295	12 x M20
250	10	324	67	248	181	273	150	125	14	30	22	51	17	F12	335	12 x M16	350	12 x M20	355	12 x M24
300	12	378	77	298	206	311	150	125	14	30	22	51	20	F12	395	12 x M20	400	12 x M20	410	12 x M24
350	14	433	78	337	238	346	150	125	14	35	10x10***	51	23	F12	445	12 x M20	460	16 x M20	470	16 x M24
400	16	488	102	387	273	375	150	125	14	35	10x10***	51	27	F12	495	16 x M20	515	16 x M24	525	16 x M27
450	18	536	114	438	305	406	210	165	21	50	10x12***	64	30	F16			565	20 x M24	585	20 x M27
500	20	591	127	489	356	436	210	165	21	50	10x12***	64	33	F16			650	20 x M24	650	20 x M30

#### Note

- \* Disc chordal dimension at valve face.
- \*\* Net weight is for valve only (no actuator).
- \*\*\* Key: the key is needed to link the actuator. It is inside the package of the valve. Dimensions in mm (high x width).



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# Plant Valves VFB Butterfly Valves

### **Ordering Codes**

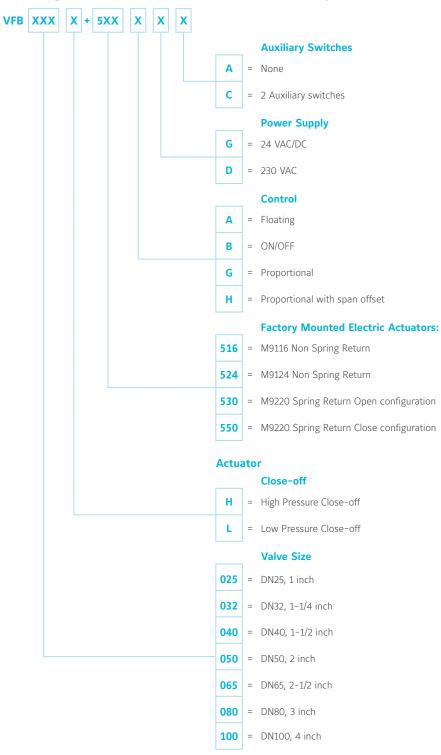
Codes	Pody Sizo	Valve Size (inch)	Kvs Value	Max Δp (kPa) Close-off Pressure
	Body Size			10 Bar all other sizes)
VFB025H	DN25	1	52	10 Dai ali ottiei sizes)
				1000
VFB032H	DN32	1 1/4	72	1000
VFB040H	DN40	1 ½	126	
VFB050H	DN50	2	124	
VFB065H	DN65	2 ½	243	
VFB080H	DN80	3	397	
VFB100H	DN100	4	723	
VFB125H	DN125	5	1083	1200
VFB150H	DN150	6	1591	
VFB200H	DN200	8	2852	
VFB250H	DN250	10	4670	
VFB300H	DN300	12	6946	
VFB350H	DN350	14	9063	
VFB400H	DN400	16	12044	1000
VFB450H	DN450	18	14804	1000
VFB500H	DN500	20	19212	
Lov	v Pressure Clo	se-off (3,5 Ba	r from DN100	) to DN500)
VFB100L	DN100	4	723	
VFB125L	DN125	5	1083	
VFB150L	DN150	6	1591	
VFB200L	DN200	8	2852	
VFB250L	DN250	10	4670	250
VFB300L	DN300	12	6946	350
VFB350L	DN350	14	9063	
VFB400L	DN400	16	12044	
VFB450L	DN450	18	14804	
VFB500L	DN500	20	19212	



**Valves** 

# Plant Valves VFB Butterfly Valves

# **Ordering Codes with M9000 Actuators Assembly**





**Valves** 

Plant Valves VFB Butterfly Valves

#### **Available Combination:**

# VBF Valves with M9000 Actuators and necessary linkage code

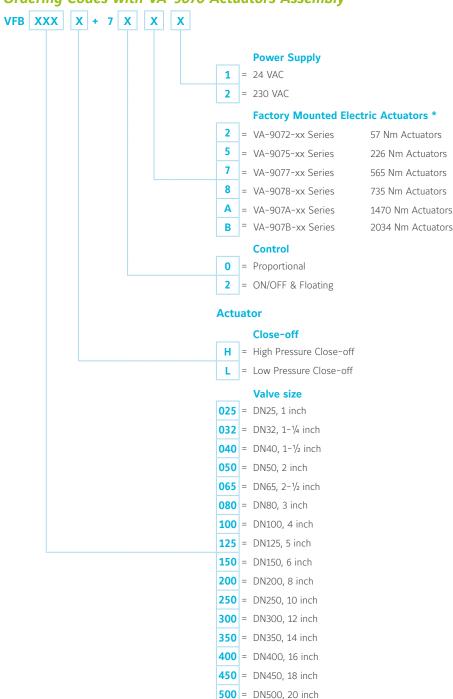
				Non Spri	ng Return	Spring Return			
				Torque (Nm)					
	JCI VI	B Valves		16	24	20			
Ordering Codes Valves	DN	Inches	MAX Close-off Pressure (bar)	M9116	M9124	M9220			
VFB025H	25	1"	12	M9100-100A		M9200-100A			
VFB032H	32	1-1/4"	12	M9100-100A		M9200-100A			
VFB040H	40	1-1/2"	12	M9100-100A		M9200-100A			
VFB050H	50	2"	12	M9100-100B		M9200-100B			
VFB065H	65	2-1/2"	12	M9100-100B		M9200-100B			
VFB080H	80	3"	12		M9100-100B	M9200-100B			
VFB100L	100	4"	3.5		M9100-100C	M9200-100C			



**Valves** 

# Plant Valves VFB Butterfly Valves

# Ordering Codes with VA-9070 Actuators Assembly



<sup>\*</sup> See VA-9070 Product Bulletin for more details



**Valves** 

Plant Valves VFB Butterfly Valves

#### **Available combination:**

#### **VBF Valves with VA-9070 Series Actuators**

				Power Supply 230 VAC					Power Supply 24 VAC			
				Torque (Nm)								
JCI	VFB V	alves		57	226	735	1470	2034	57	226	565	
Ordering Codes Valves	DN	Inches	MAX Close-off Pressure (bar)	VA-9072	VA-9075	VA-9078	VA-907A	VA-907B	VA-9072	VA-9075	VA-9077	
VFB025H	25	1	12	•					•			
VFB032H	32	1-1/4	12	•					•			
VFB040H	40	1-1/2	12	•					•			
VFB050H	50	2	12	•					•			
VFB065H	65	2-1/2	12	•					•			
VFB080H	80	3	12	•					•			
VFB100H	100	4	12	•					•			
VFB125H	125	5	12	•					•			
VFB150H	150	6	12		•					•		
VFB200H	200	8	12		•					•		
VFB250H	250	10	12			•					•	
VFB300H	300	12	10			•					•	
VFB350H	350	14	10			•						
VFB400H	400	16	10				•					
VFB450H	450	18	10				•					
VFB500H	500	20	10					•				
VFB100L	100	4	3.5	•					•			
VFB125L	125	5	3.5	•					•			
VFB150L	150	6	3.5	•					•			
VFB200L	200	8	3.5		•					•		
VFB250L	250	10	3.5		•					•		
VFB300L	300	12	3.5			•					•	
VFB350L	350	14	3.5			•					•	
VFB400L	400	16	3.5			•					•	
VFB450L	450	18	3.5			•					•	
VFB500L	500	20	3.5			•						

See VA-9070 Product Bulletin for more details.

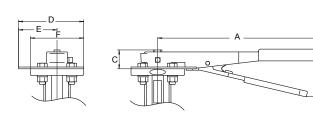


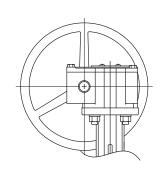
**Valves** 

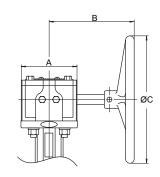
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### **Dimensions for Ten-Position Manual Handle**

# **Dimensions for Gear-Operated Manual Hand Wheel**







Valve Size (mm)	Valve Size (inch)	Code Number*	A	В	С
25 to 40	1/2" to 1-1/2"	VF-998-100	196	60	25
50 to 80	2" to 3"	VF-998-101	270	80	32
100	4"	VF-998-102	270	80	32
125 to 150	5" to 6"	VF-998-103	270	80	32
200	8"	VF-998-104	298	80	32
250 to 300	10" to 12"	VF-998-105	298	80	51

Valve Size (mm)	Valve Size (inch)	Code Number*	A	В	С
50 to 150	2" to 6"	VF-998-303	90	136	203
200	8"	VF-998-304	150	190	203
250 to 300	10" to 12"	VF-998-305	150	190	203
350 to 400	14" to 16"	VF-998-307	150	303	305
450 to 500	18" to 20"	VF-998-308	210	379	305

### Note

<sup>\*</sup> Kit includes a manual gear operator, adaptor (if required), and mounting hardware.