



V5412B

Butterfly Valves

APPLICATION

In combination with rotary actuators VMM and VRM, the butterfly valves V5421B are suitable for heating and cooling applications as well as boiler management systems.

SPECIAL FEATURES

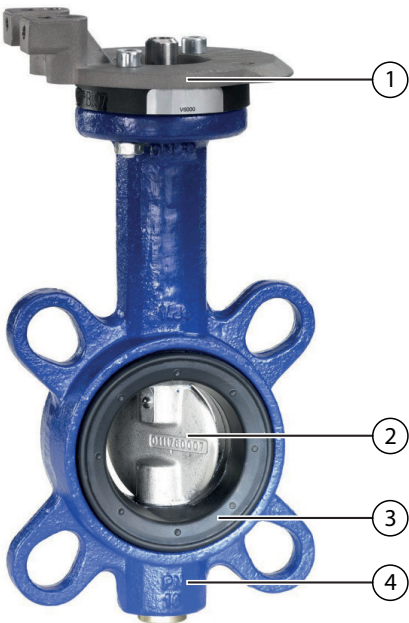
- Suitable for VMM and VRM actuators
- No separate linkage required
- Easy mounting
- Centric Butterfly Valve with elastomer liner
- Wide DN-range
- For heating water containing up to 50% glycol
- Corrosion-resistant design



TECHNICAL DATA

Pressure values	
Nominal static pressure:	PN6, PN10, or PN16 bar
Max. pressure drop:	dependent on type
Specifications	
Body construction:	Wafer form
Valve size:	DN25...DN150
Leakage rate:	bubble-tight as per DIN EN 12266-1 (DIN 3230/3)
Temperature range:	dependent on type

CONSTRUCTION

Overview	Components	Materials
	1 Linkage	Cast stainless steel
	2 Rotary disc	stainless steel 1.4581 (DN25-80) ductile iron GGG40 (DN100-150) coating: DeltaMagni
	3 Liner	EPDM
	4 Housing	Ductile iron GGG40, blue
Not depicted components:		
	Shaft	Stainless steel 1.4021

METHOD OF OPERATION

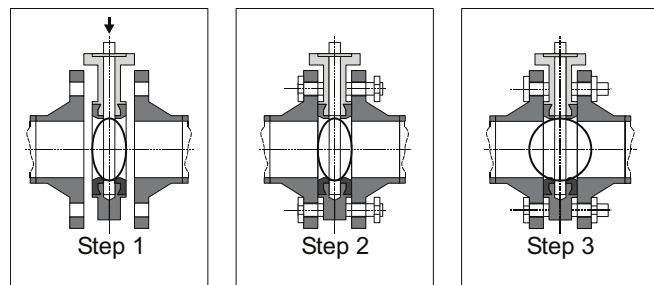
The butterfly valve can shut on/off liquid flow by turning the rotary disc 0...90° rotary angle. Preferred use of these valves in boiler cascade systems where boiler supply flow is to shut off in case of non-heat requirements.

Note: For safety reason, do not leave the valve without actuator while the line is under pressure.

INSTALLATION GUIDELINES

Setup requirements

- Spread the valve's flanges to facilitate installation. The valve's disc must be partially open
- Set all stay-bolts while keeping the valve's disc slightly open and without tightening the nuts
- Open the valve's disc completely. Ensure that the piping is aligned. Tighten diagonally opposite the nuts until the flanges are in contact with the body of the valve. Never use gaskets or grease. Never weld the flanges after the valve has been installed



Bolting



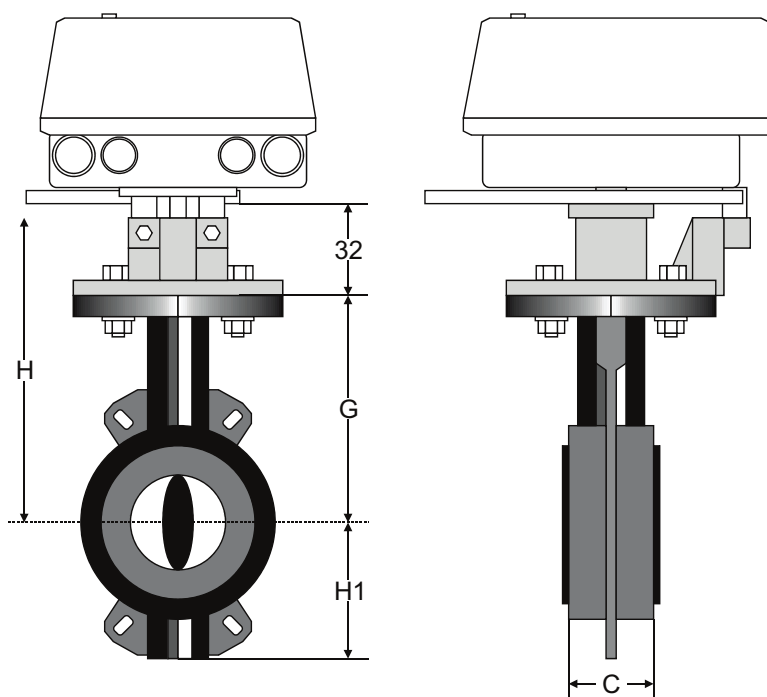
DN	PN6		PN10		PN16	
	bolts	n	bolts	n	bolts	n
25	M 10x80	4	M 12x90	4	M 12x90	4
32	M 12x80	4	M 16x90	4	M 16x90	4
40	M 12x80	4	M 16x90	4	M 16x90	4
50	M 12x90	4	M 16x90	4	M 16x100	4
65	M 12x90	4	M 16x110	4	M 16x110	4
80	M 16x100	4	M 16x110	8	M 16x110	8
100	M 16x110	4	M 16x120	8	M 16x120	8
125	M 16x120	8	M 16x130	8	M 16x130	8
150	M 16x120	8	M 20x130	8	M 20x130	8

TECHNICAL CHARACTERISTICS

DN	KV-value (m ³ /h) at opening angle							
	20°	30°	40°	50°	60°	70°	80°	90°
25, 32	-	1	2.5	6.5	11.6	17.6	22.2	26
40	-	1.1	5.5	14.4	26.7	39.5	48.3	49.6
50	-	4.2	13	26.3	50.3	86.9	108.5	116
65	0.4	8.8	22.9	43.3	78.5	143.6	223.5	259
80	1.1	14.2	39.8	75.5	128.6	211.2	330	337
100	10.5	45.3	87.9	155.1	267.2	481.4	711.3	763
125	11.7	61.6	122.3	222.3	373.8	589.5	899.5	1030
150	25.2	83.9	177.4	319.9	567.4	1638	1638	1790

DIMENSIONS

Overview



Order number	DN	Dimensions				Weight [kg]	
		H	H1	C	G	valve	valve + actuator
V5421B1009	25	153	58	33	128	1.7	3.2
V5421B1017	32	153	58	33	128	1.7	3.2
V5421B1025	40	159	66	33	134	2.0	3.5
V5421B1033	50	165	69	43	140	2.4	3.9
V5421B1041	65	175	81	46	150	3.0	4.5
V5421B1058	80	183	100	46	158	3.6	5.1
V5421B1066	100	204	109	52	179	4.4	5.9
V5421B1074	125	221	124	56	196	7.0	8.5
V5421B1082	150	237	140	56	212	9.0	10.5

Note: All dimensions in mm unless stated otherwise.

ORDERING INFORMATION

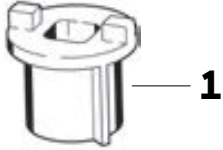
The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

Options

DN	k _{vs} -value (m ³ /h)	Δp (kPa)	Temperature range (°C)	Order number	Suitable actuators		
					230 Vac floating	24 Vac floating	24 Vac, 0...10 V
25	25	1600	-10...+120	V5421B1009	VMM20	VMM20	VRM20
32	26	1600	-10...+120	V5421B1017	VMM20	VMM20	VRM20
40	50	1600	-10...+120	V5421B1025	VMM20	VMM20	VRM20
50	116	1000	-10...+120	V5421B1033	VMM20	VMM20	VRM20
65	259	1000	-10...+120	V5421B1041	VMM20	VMM20	VRM20
80	377	1000	-10...+120	V5421B1058	VMM30	VMM30	-
100	763	800	-10...+120	V5421B1066	VMM40	VMM40	-
125	1030	600	0...+90	V5421B1074	VMM40	VMM40	-
150	1790	400	0...+90	V5421B1082	VMM40	VMM40	-

Spare Parts

Butterfly valves V5421B, from 2008 onwards

Overview	Description	Dimension	Part No.
	1 Link adapters		
		DN25 - DN150	VCU-SET