MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

VVF53.40-25C

FLANGED TWO PORT CONTROL VALVE

Used with the applicable ACVATIX VVF53 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens ACVATIX 2- and 3-port valves with flanged connections, PN 25; A6V14669668_enAP_c, 2025-01-20; English; official source https://sid.siemens.com/v/u/A6V10356762

SIEMENS

VVF53..C
VVF53..K..

VXF53..C

ACVATIX™

2- and 3-port valves with flanged connections, PN 25

VVF53..C VXF53..C

From the large-stroke valve line

- **High-performance valves for medium temperatures from -20…220 °C**
- **Valve body of nodular cast iron EN-GJS-400-18-LT or higher**
- **DN 15…250**
- **k_{vs} 0.16…630 m^3/h**
- **Flange type 21, flange design B**
- **VVF53..K.. with pressure compensation to handle high differential pressure**
- **Equipable with electro-motoric actuators SAX.., SAV.. or electro-hydraulic actuators SKD.., SKB.., SKC..**

Use

In boiler, district heating and refrigeration plants, cooling towers, heating groups, and in air handling units as control or shutoff valves.
For use in closed or open hydraulic circuits (observe cavitation).

Type summary

	Valves				Actuators	SAX.. [3]		SKD.. [2]		SKB..		SAV.. [3]		SKC..	
					Stroke	20 mm						40 mm			
	PN 25 PN 16 [1]				Positioning force	800 N		1000 N		2800 N		1600 N		2800 N	
					Data sheet	N4501		N4561		N4664		N4503		N4566	
	⋈	Stock no.	DN	k_{vs} [m³/h]	S_V	Δp_s	Δp_{max}	Δp_s	Δp_{max}	Δp_s	Δp_{max}	Δp_s	Δp_{max}	Δp_s	Δp_{max}
						[kPa]									
Fluids Preferred flow direction A-AB with fluids for low noise operation and high kvs-values with all actuator types	**VVF53.15-0.16C**	S55208-V164	15	0.16	> 50	2500	1200	2500	1200	2500	1200	-	-	-	-
	VVF53.15-0.2C	S55208-V165	15	0.2											
	VVF53.15-0.25C	S55208-V166	15	0.25											
	VVF53.15-0.32C	S55208-V167	15	0.32											
	VVF53.15-0.4C	S55208-V168	15	0.4											
	VVF53.15-0.5C	S55208-V169	15	0.5											
	VVF53.15-0.63C	S55208-V170	15	0.63											
	VVF53.15-0.8C	S55208-V171	15	0.8											
	VVF53.15-1C	S55208-V172	15	1											
	VVF53.15-1.25C	S55208-V173	15	1.25											
	VVF53.15-1.6C	S55208-V174	15	1.6	> 100										
	VVF53.15-2C	S55208-V175	15	2											
	VVF53.15-2.5C	S55208-V176	15	2.5											
	VVF53.15-3.2C	S55208-V177	15	3.2											
	VVF53.15-4C	S55208-V178	15	4											
	VVF53.20-6.3C	S55208-V179	20	6.3											
	VVF53.25-5C	S55208-V180	25	5		1600		2100							
	VVF53.25-6.3C	S55208-V181	25	6.3											
	VVF53.25-8C	S55208-V182	25	8											
	VVF53.25-10C	S55208-V183	25	10											
	VVF53.32-16C	S55208-V184	32	16		900	750	1200	1100						
	VVF53.40-12.5C	S55208-V185	40	12.5		550	500	750	650	2000		1250	1150		
	VVF53.40-16C	S55208-V186	40	16											
	VVF53.40-20C	S55208-V187	40	20											
	VVF53.40-25C	S55208-V188	40	25											
	VVF53.50-31.5C	S55208-V189	50	31.5		350	300	450	400	1200	1150	750	700		
	VVF53.50-40C	S55208-V190	50	40											
	VVF53.65-63C	S55208-V191	65	63		-	-	-	-	-	-	450	400	700	650
	VVF53.80-100C	S55208-V192	80	100								250	225	450	400
	VVF53.100-160C	S55208-V193	100	160								160	125	300	250
	VVF53.125-250C	S55208-V194	125	250								125	90	175	160
	VVF53.150-400C	S55208-V195	150	400								80	60	125	100
Fluids and Steam Compensated valves are optimized for a single flow direction for fluids and steam. DN 50..150: AB-A DN 200/250: A-AB	**VVF53.50-40KC**	S55208-V196	50	40	> 100	-	-	2500	1250	2500	1250	-	-	-	-
	VVF53.65-63KC	S55208-V197	65	63				-	-	-	-			2500	1250
	VVF53.80-100KC	S55208-V198	80	100											
	VVF53.100-150KC	S55208-V199	100	150											
	VVF53.125-220KC	S55208-V200	125	220											
	VVF53.150-315KC	S55208-V201	150	315											
	VVF53.200-450K	S55208-V161	200	450	> 50									1200	800
	VVF53.250-630K	S55208-V162	250	630										1000	800

[1] DN 15…50: Flange dimensions for PN 16 and PN 25
DN 65…250: Flange dimensions only for PN 25

[2] Usable up to a max. medium temperature of 150 °C

[3] Usable up to a max. medium temperature of 130 °C

DN = Nominal size
k_{vs} = Flow nominal value of cold water (5...30 °C) through the fully opened valve (H_{100}) at a differential pressure of 100 kPa (1 bar)
S_v = Rangeability
Δp_s = Maximum permissible differential pressure at which the motorized valve still closes securely against the pressure
Δp_{max} = Maximum permissible differential pressure across the valve's throughport for the entire positioning range of the motorized valve

	Valves				Actuators	SAX.. [5]		SKD.. [2]		SKB..		SAV.. [5]		SKC..	
					Stroke	20 mm						40 mm			
	PN 25 PN 16 [1]				Positioning force	800 N		1000 N		2800 N		1600 N		2800 N	
					Data sheet	N4501		N4561		N4664		N4503		N4566	
		Stock no.	DN	k_{vs} [m³/h]	S_V	Δp_s	Δp_{max}	Δp_s	Δp_{max}	Δp_s	Δp_{max}	Δp_s	Δp_{max}	Δp_s	Δp_{max}
						[kPa]									
Steam [3] Exclusive flow direction AB-A for steam. Also useful for maximum close-off pressure Dp_S and maximum differential pressure in operation (Dp_{max}) with fluids. Use with electro-hydraulic actuators only	**VVF53.15-0.16C** [4]	S55208-V164	15	0.16	> 50	-	-	2500	1200	2500	1200	-	-	-	-
	VVF53.15-0.2C	S55208-V165	15	0.2											
	VVF53.15-0.25C	S55208-V166	15	0.25											
	VVF53.15-0.32C	S55208-V167	15	0.32											
	VVF53.15-0.4C	S55208-V168	15	0.4											
	VVF53.15-0.5C	S55208-V169	15	0.5											
	VVF53.15-0.63C	S55208-V170	15	0.63											
	VVF53.15-0.8C	S55208-V171	15	0.8											
	VVF53.15-1C	S55208-V172	15	1											
	VVF53.15-1.25C	S55208-V173	15	1.25											
	VVF53.15-1.6C	S55208-V174	15	1.6											
	VVF53.15-2C	S55208-V175	15	2	> 100										
	VVF53.15-2.5C	S55208-V176	15	2.5											
	VVF53.15-3.2C	S55208-V177	15	3.2											
	VVF53.15-4C [4]	S55208-V178	15	3.6											
	VVF53.20-6.3C [4]	S55208-V179	20	5											
	VVF53.25-5C	S55208-V180	25	5											
	VVF53.25-6.3C	S55208-V181	25	6.3											
	VVF53.25-8C	S55208-V182	25	8											
	VVF53.25-10C [4]	S55208-V183	25	8											
	VVF53.32-16C [4]	S55208-V184	32	15											
	VVF53.40-12.5C	S55208-V185	40	12.5					1000						
	VVF53.40-16C	S55208-V186	40	16											
	VVF53.40-20C	S55208-V187	40	20											
	VVF53.40-25C [4]	S55208-V188	40	23											
	VVF53.50-31.5C	S55208-V189	50	31.5					600						
	VVF53.50-40C	S55208-V190	50	40											
	VVF53.65-63C	S55208-V191	65	63				-	-	-	-			2500	1000
	VVF53.80-100C	S55208-V192	80	100											750
	VVF53.100-160C [4]	S55208-V193	100	150											500
	VVF53.125-250C [4]	S55208-V194	125	220											300
	VVF53.150-400C [4]	S55208-V195	150	360											200
		Stock no.	DN	k_{vs} [m³/h]	S_V	Δp_{max} [kPa] A→AB	AB→A	A→AB	AB→A	A→AB	AB→A	A→AB	AB→A	A→AB	AB→A
Fluids	**VXF53.15-1.6C**	S55208-V202	15	1.6	> 100	1200	200	1200	200	1200	200	-	-	-	-
	VXF53.15-2.5C	S55208-V203	15	2.5											
	VXF53.15-4C	S55208-V204	15	4											
	VXF53.20-6.3C	S55208-V205	20	6.3											
	VXF53.25-6.3C	S55208-V206	25	6.3											
	VXF53.25-10C	S55208-V207	25	10											
	VXF53.32-16C	S55208-V208	32	16		750		1100							
	VXF53.40-16C	S55208-V209	40	16		500		650				1150	200		
	VXF53.40-25C	S55208-V210	40	25											
	VXF53.50-40C	S55208-V211	50	40		300	100	400		1150		700			
	VXF53.65-63C	S55208-V212	65	63		-	-	-	-	-	-	400	100	650	200
	VXF53.80-100C	S55208-V213	80	100								225	50	400	200
	VXF53.100-160C	S55208-V214	100	160								125		250	150
	VXF53.125-250C	S55208-V215	125	250								90		160	100
	VXF53.150-400C	S55208-V216	150	400								60		100	70

[1] DN 15…50: Flange dimensions for PN 16 and PN 25
DN 65…150: Flange dimensions only for PN 25
[2] Usable up to a max. medium temperature of 150 °C
[3] Operate with opposite flow direction with steam
[4] Reduced k_{vs} value
[5] Usable up to a max. medium temperature of 130 °C

Note When using a stem heating element with a medium temperature of below –5 °C, the stem sealing gland must be replaced. In this case, the sealing gland must be ordered separately.

DN	Stock number
DN 15…50	4 284 8806 0
DN 65…150	4 679 5629 0

Spare parts, Rev.-No. See page 18

Accessories

Product number	Stock number	Description	Note	
ASZ6.6	S55845-Z108	Stem heating element	Required for medium temperatures < 0 °C	
-	4 284 8806 0	Stem sealing gland	When using valves of the V..F53..C lines DN 15…50 with a stem heating element and a medium temperature below -5 °C, the stem sealing gland must be replaced. With the gland 428488060 the valve can be used with water, water with antifreeze and brines between -20 °C and 150 °C.	
-	4 679 5629 0	Stem sealing gland	When using valves of the V..F53..C lines DN 65…150 with a stem heating element and a medium temperature below -5 °C, the stem sealing gland must be replaced. With the gland 467956290 the valve can be used with water, water with antifreeze and brines between -20 °C and 150 °C.	

Adapter type	Stock number	Bolts included	Description	VXF41..	
ALF41B15	S55845-Z110	4x M12x90 mm	Adapter for replacing 3-port valves VXF41.. by VXF53..C • Due to different dimensions of the bypass flange • Every valve to be replaced requires an adapter • Adapter is supplied with the required number and size of bolts and nuts as well as two suitable flat sealings Replace 3-port valves VXF41.., DN 65…150 by 3-port valves VXF43.. (data sheet N4404).	DN 15	DN 15
ALF41B25	S55845-Z111	4x M12x90 mm		DN 25	
ALF41B40	S55845-Z112	4x M16x90 mm		DN 40	
ALF41B50	S55845-Z113	4x M16x90 mm		DN 50	

Equipment combinations

Product number	Description	Stroke	Positioning force	Operating voltage	Positioning signal	Spring return time	Positioning time	LED	Manual adjuster	Auxiliary functions
SAX31.00	S55150-A105	20 mm	800 N	AC 230 V	3-position	-	120 s	-	Push and fix	1), 2),
SAX31.03	S55150-A106						30 s			
SAX61.03 **SAX61.03U**	S55150-A100 S55150-A100-A100			AC/DC 24 V	0…10 V 4…20 mA 0…1000 Ω					3), 4)
SAX81.00	S55150-A102				3-position	-	120 s	-	Push and fix	1), 2),
SAX81.03 **SAX81.03U**	S55150-A103 S55150-A103-A100						30 s			
SKD32.21	SKD32.21	20 mm	1000 N	AC 230 V	3-position	8 s	Opening: 30 s Closing: 10 s	-	Turn, Position is maintained	1), 2),
SKD32.50	SKD32.50					-	120 s			
SKD32.51	SKD32.51					8 s				
SKD60	SKD60			AC 24 V	0…10 V 4…20 mA 0…1000 Ω	-	Opening: 30 s Closing: 15 s	✓		3)
SKD62 **SKD62U**	SKD62 SKD62U					15 s				
SKD62UA	SKD62UA									5)
SKD82.50 **SKD82.50U**	SKD82.50 SKD82.50U				3-position	-	120 s	-		1), 2),
SKD82.51 **SKD82.51U**	SKD82.51 SKD82.51U					8 s				
SKB32.50	SKB32.50	20 mm	2800 N	AC 230 V	3-position	-	120 s	-	Turn, Position is maintained	1), 2),
SKB32.51	SKB32.51					10 s				
SKB60	SKB60			AC 24 V	0…10 V 4…20 mA 0…1000 Ω	-	Opening: 120 s Closing:10 s	✓		3)
SKB62 **SKB62U**	SKB62 SKB62U					10 s				
SKB62UA	SKB62UA									5)
SKB82.50 **SKB82.50U**	SKB82.50 SKB82.50U				3-position	-	120 s	-		1), 2),
SKB82.51 **SKB82.51U**	SKB82.51 SKB82.51U					10 s				
SAV31.00	S55150-A112	40 mm	1600 N	AC 230 V	3-position	-	120 s	-	Push and fix	1), 2), 6)
SAV61.00 **SAV61.00U**	S55150-A110 S55150-A110-A100			AC/DC 24 V	DC 0...10 V DC 4...24 mA 0...1000 Ω			✓		1), 3), 6), 7)
SAV81.00 **SAV81.00U**	S55150-A111 S55150-A111-A100				3-position			-		1), 2), 6)
SKC32.60	SKC32.60	40 mm	2800 N	AC 230 V	3-position	-	120 s	-	Turn, Position is maintained	1), 2),
SKC32.61	SKC32.61					18 s				
SKC60	SKC60			AC 24 V	0…10 V 4…20 mA 0…1000 Ω	-	Opening: 120 s Closing: 20 s	✓		3)
SKC62 **SKC62U**	SKC62 SKC62U					20 s				
SKC62UA	SKC62UA									5)
SKC82.60 **SKC82.60U**	SKC82.60 SKC82.60U				3-position	-	120 s	-		1), 2),
SKC82.61 **SKC82.61U**	SKC82.61 SKC82.61U					18 s				

1) Auxiliary switch (optional)
2) Potentiometer (optional)
3) Position feedback, forced control, selection of valve characteristic
4) Optional: Sequence control, selection of acting direction
5) Plus sequence control, stroke limitation, and selection of acting direction
6) Stem heating element (optional)
7) Function module (optional)

Ordering

Example

Product number	Stock number	Description
VVF53.20-6.3C	S55208-V179	2-port valve with flange, PN 25
SKD62	SKD62	Electro-hydraulic actuator

Delivery: Valves, actuators and accessories are packed and delivered as separate items.

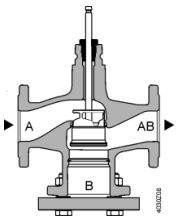
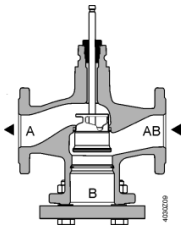
Note: Counter-flanges, bolts and gaskets must be provided on site.

Product documentation

Mounting Instructions	A5W00739629A	DN 15…150
	A5W90000815	DN 200, DN 250
Basic documentation	A6V10423210	Contains background information and technical basic knowledge of VVF53..C valves

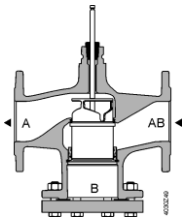
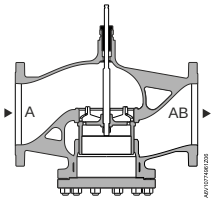
The illustrations below show the basic design of the valves. Constructional features, such as the shape of plugs, may differ.

2-port valves

Fluids	**Steam**
Closing against the pressure	Closing with the pressure
 **A → AB** For use with all actuators	 **A ← AB** Use with electro-hydraulic actuators only

2-port valves pressure compensated

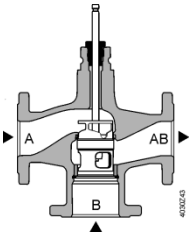
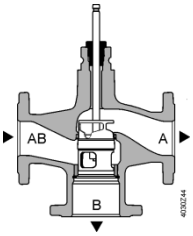
The VVF53..K.. valves use a pressure-compensated plug. This enables the same type of actuators to be used for the control of volumetric flow at higher differential pressures.

DN 50…150 Fluids and Steam	**DN 200, DN 250 Fluids and Steam**
Closing with the pressure	Closing against the pressure
 **A ← AB** Use with electro-hydraulic actuators only	 **A → AB** Use with electro-hydraulic actuators only

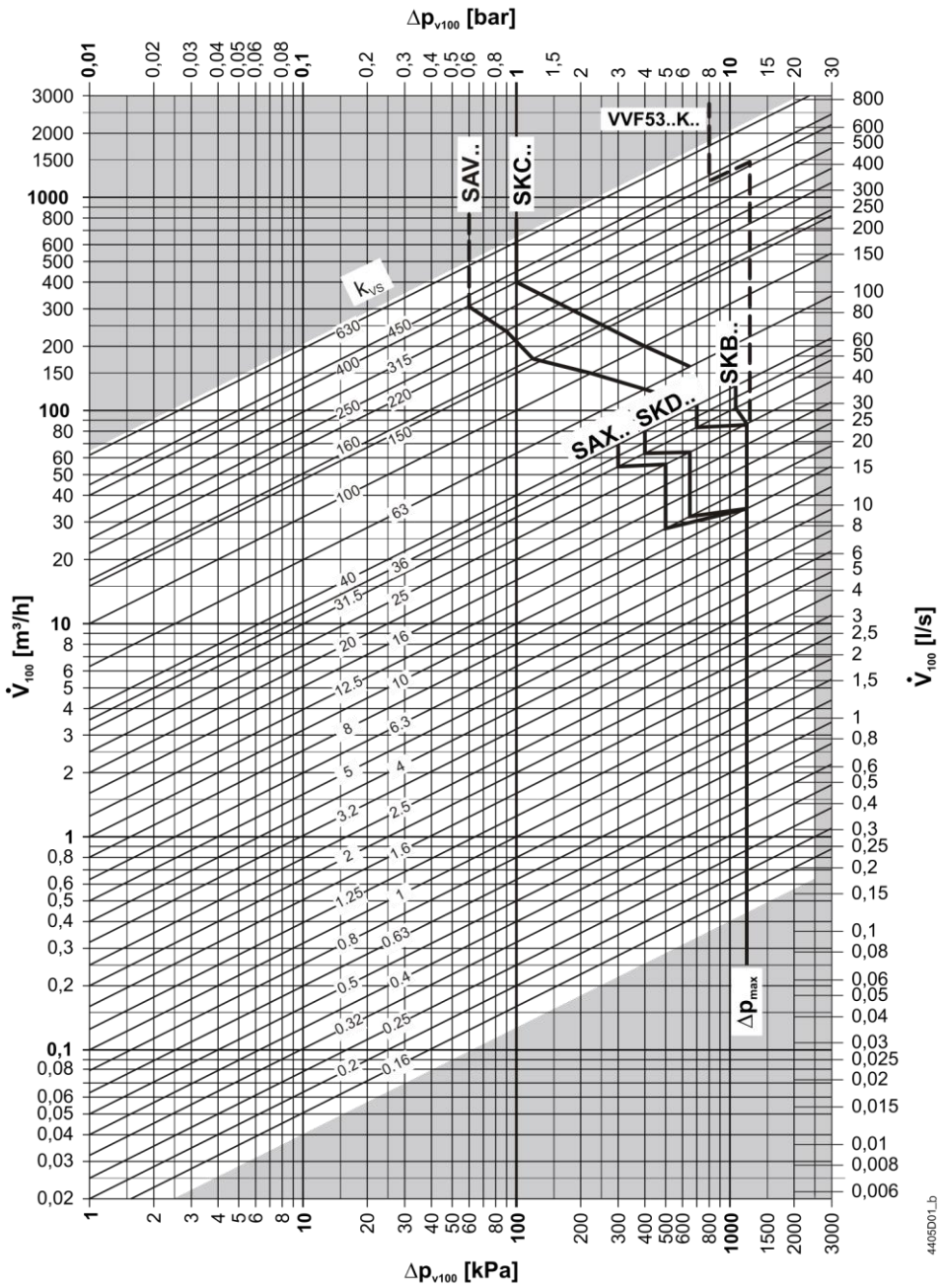
Note

2-port valves do not become 3-port valves by removing the blank flange!

3-port valves

Fluids	
Mixing valve	Diverting valve
 **A → AB** **B**	 **AB → A** **B**

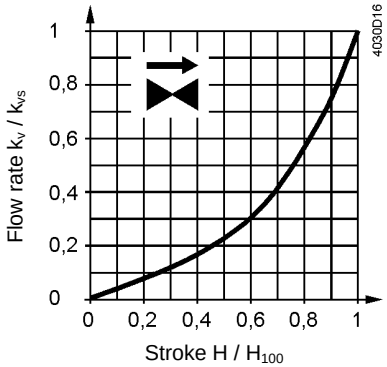
Flow chart



Δp_{max} values apply for the mixing function. Δp_{max} values for the diverting function see table “Type summary”, on page 2

Δp_{max} values for k_{vs} value 16, DN 32, see table "Type summary", on page 2

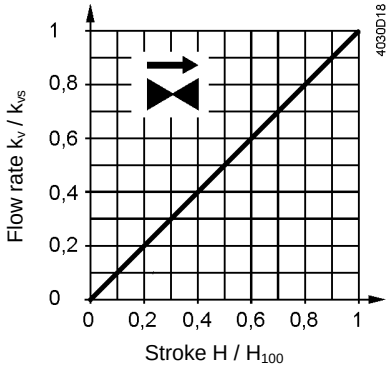
Valve characteristics
2-port valves



0…30 %: Linear
30…100 %: Equal percentage
n_{gl} = 3 to VDI / VDE 2173

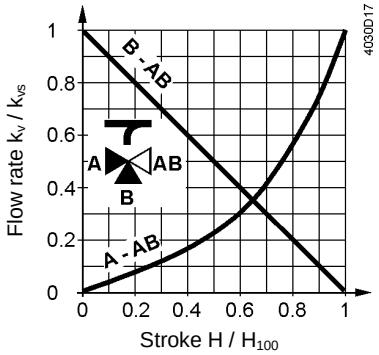
For high k_{vs} values the valve characteristic is optimized for maximum volumetric flow k_{V100}.

For product lines:
- VVF53.125-200C
- VVF53.125-250C
- VVF53.125-220KC
- VVF53.150-315C
- VVF53.150-400C
- VVF53.150-315KC
- VVF53.200-450K
- VVF53.250-630K



0…100 %: Linear

3-port valves



Throughport A-AB
0...30 %: Linear
30...100 %: Equal percentage
n_{gl} = 3 to VDI / VDE 2173

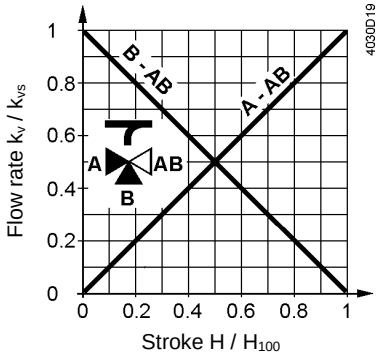
For high k_{vs} values the valve characteristic is optimized for maximum volumetric flow k_{V100}.

Bypass B-AB
0...100 %: Linear

Port AB = constant volumetric flow
Port A = variable volumetric flow
Port B = Bypass (variable volumetric flow)

Mixing: Volumetric flow from port A and port B to port AB
Diverting: Volumetric flow from port AB to port A and port B

For product lines:
- VXF53.125-250C
- VXF53.150-400C

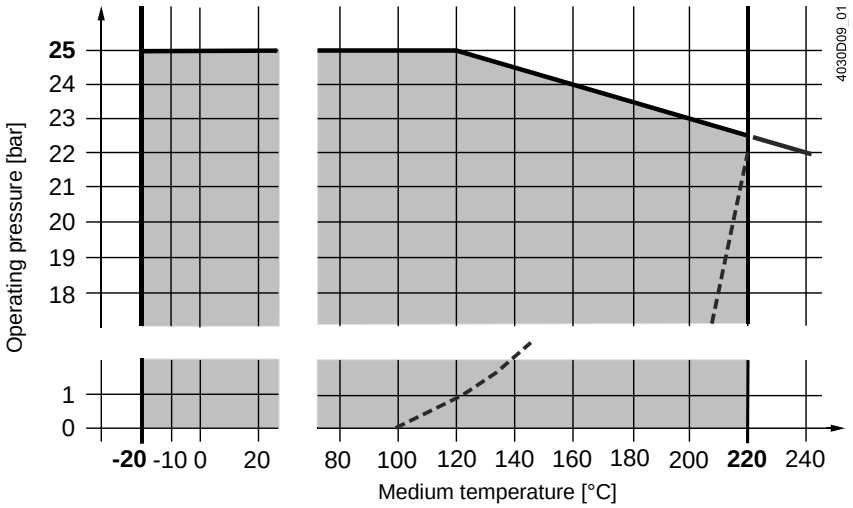


Throughport A-AB
0...100 %: Linear

Bypass B-AB
0...100 %: Linear

Operating pressure and medium temperature

Fluids
with V..F53..C



--- Curve for saturated steam; steam forms below this line

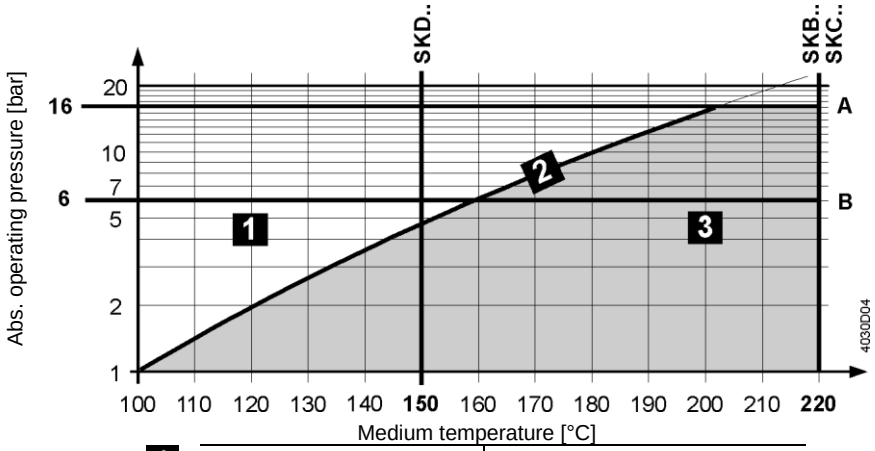
—·· Operating pressure according to EN 1092, valid for 2-port valves with blank flange

Operating pressure and operating temperatures according to ISO 7005, EN 1092 and EN 12284

Notes

All relevant local directives must be observed

Saturated steam
Superheated steam
with VVF53..C



1	Water	-
2	Wet steam	To be avoided
3	Saturated steam Superheated steam	Permissible operating range
A	Subcritical pressure ratio	
B	Supercritical pressure ratio	

Medium compatibility and temperature ranges

Medium	Temperature range T_{min} [°C]	Temperature range T_{max} [°C]	Valve VVF53..C	Valve VVF53..K..	Valve VXF53..C	Note
Cold water	1	25	■	■	■	-
Low-temperature hot water	1	130	■	■	■	-
High-temperature hot water [1]	130	150	■	■	■	-
	150	180	■	■	■	-
	180	220	■	■	■	
Water with antifreeze	-5	150	■	■	■	V..F53: With a medium temperature of below -5 °C, the stem sealing gland must be replaced by DN 15…50: 428488060 DN 65…150: 467956290
	-10	150	■	-[3]	■	
	-20	150	■	-[3]	■	
Cooling water [2]	1	25	■	■	■	-
Brines	-5	150	■	■	■	V..F53: With a medium temperature of below -5 °C, the stem sealing gland must be replaced by DN 15…50: 428488060 DN 65…150: 467956290
	-10	150	■	-[3]	■	
	-20	150	■	-[3]	■	
Saturated steam	100	150	■	■	-	-
	100	220	■	■	-	-
Superheated steam	120	150	■	■	-	-
	120	220	■	■	-	-
Heat transfer oils	20	220	■	■	■	On the basis of mineral oil
Super-clean water (demineralized and deionized)	1	150	-	-	-	

[1] Differentiation due to saturated steam curve
[2] Open circuits
[3] VVF53..K.. can't be used with media below -5 °C due to the compensation sealing material

Fields of use

Fields of use		Valve VVF53..C	Valve VXF53..C
Generation	Boiler plants	■	■
	District heating plants	■	-
	Refrigeration plants	■	■
	Cooling towers [1]	■	■
Distribution	Heating groups	■	■
	Air handling units	■	■

[1] Open circuits

Engineering notes

Mounting location

Preferably mount the valves at the return, as the temperature is lower there and the strain on the stem sealing gland is lower.

Dirt trap

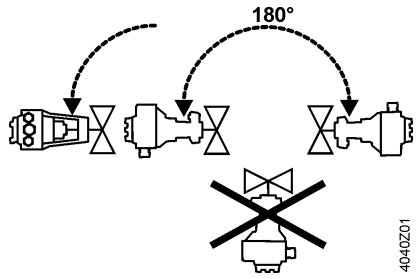
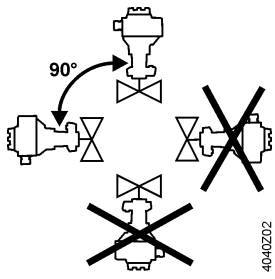
Mount a dirt filter or dirt trap before the valve to ensure proper functioning, and a long service life of the valve.
Remove dirt, welding beads, etc. from the valves and pipes.

Cavitation

Cavitation can be avoided by limiting the pressure differential across the valve depending on the medium temperature and the prepressure.

Mounting notes

Mounting position

Indoors	Outdoors [1]
	

[1] Only in combination with weather shield ASK39.1 and actuators SAX..

Mounting positions apply to both 2- and 3-port valves.

Commissioning notes

⚠ **The valve may be put into operation only if actuator and valve are correctly assembled.**

Note

Ensure that actuator stem and valve stem are rigidly connected in all positions.

Function check

Valve	Throughport A→AB or AB→A	Bypass B→AB
Valve stem extends	Closes	Opens
Valve stem retracts	Opens	Closes

Maintenance notes

The valves are maintenance-free.

⚠ When servicing valves or actuators:

- Deactivate the pump and turn off the power supply
- Close the shutoff valves
- Fully reduce the pressure in the piping system and allow pipes to completely cool down

If necessary, disconnect the electrical wires.

Disposal

Do not dispose of the device as unsorted municipal waste.

- Special handling of individual components may be mandated by law or make ecological sense.
- Observe all local and currently applicable laws and regulations.

Warranty

Application-related technical data are guaranteed only when the valves are used in connection with the Siemens actuators listed under "Equipment combinations ", on page 5.
When used with actuators of other manufacture, any warranty by Siemens becomes void.

Technical Data

Functional data	PN class	PN 25
	Connection	Flange
	Operating pressure	See Section "Operating pressure and medium temperature" on page 10
	Valve characteristics [1]	See section "Valve characteristics", on page 9
	Leakage rate Throughport	DN 15…150: 0…0.01 % of k_{vs} value (Class IV) DN 200, DN 250: 0…0.02 % of k_{vs} value
	Bypass Bypass	0.5…2 % of k_{vs} value with SKD.., SKB.., SKC.. 0…0.05 % of k_{vs} value with SAX.., SAV..
	Permissible media	See table "Medium compatibility and temperature ranges", on page 11
	Medium temperature	-20…220 °C [2] VVF53..K..: -5…220 ° C
	Rangeability	DN 15, k_{vs} ≤ 1.25 m³/h: >50 DN 15...150: >100 DN 200, DN 250: >50
	Nominal stroke	Up to DN 50: 20 mm From DN 65: 40 mm
Materials	Valve body	DN 15…150: EN-GJS-400-18-LT DN 200, DN 250: ASTM A216WCB(GP240GH)
	Blank flange VVF..	DN 15…250: P265GH (EN 10028-2)
	Valve stem, seat, plug	Stainless steel
	Stem sealing gland	Stainless steel DN 15…150: FEPM (silicone-free) DN 200, DN 250: PTFE (not silicone-free)
	Compensation sealing	Stainless steel DN 50…150: FEPM (silicone-free) DN 200, DN 250: PTFE+carbon (not silicone-free)
	Adapter ALF41B..	Steel S235JRG2
Norms and directives	Pressure Equipment Directive Pressure Accessories	PED 2014/68/EU Scope: Article 1, section 1 Definition: Article 2, section 5
	Fluid group 2:	
	≤ DN 40	without CE-marking, as per article 4, section 3 (sound engineering practice) [3]
	DN 50…100	Category I, Module A, with CE-marking, as per article 14, section 2
	DN 125	Category I,Management by Category II, Module A2, with CE-marking, as per article 14, section 2
	DN 150, DN 200, DN 250	Category II, Module A2, with CE-marking, as per article 14, section 2 notified body number 0035
	EU Conformity (CE)	
	DN 50…150	A5W00724689A [4]
	DN 200, DN 250	A5W90001026 [4]
	PN class	ISO 7268
	Operating pressure	ISO 7005, DIN EN 12284
	Flanges	ISO 7005
	Length of flanged valves	DIN EN 558-1, line 1
	Valve characteristic	VDI 2173

	Leakage rate	Throughport, Bypass according to EN 60534-4 / EN 1349	
	Water treatment	VDI 2035	
Environmental conditions			
	Storage: IEC 60721-3-1	Class	1K3
		Temperature	-15…55 °C
		Rel. humidity	5…95 % r.h.
	Transport: IEC 60721-3-2	Class	2K3, 2M2
		Temperature	-30…65 °C
		Rel. humidity	< 95 % r.H.
	Operation: IEC 60721-3-3	Class	3K5, 3Z11
		Temperature	-15…55 °C
		Rel. humidity	5…95 % r.h.
Environmental compatibility	The product environmental declaration A5W02123515A[4], A5W02123892A[4], A5W00735647A[4], and A5W90001031[4] contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).		
Dimensions / Weight	Dimensions	See „Dimensions“, page 15 + 16	
	Weight	See „Dimensions“, page 15 + 16	

[1] For certain valve lines and high k_{vs} values, the valve characteristic is optimized for maximum volumetric flow k_{V100}

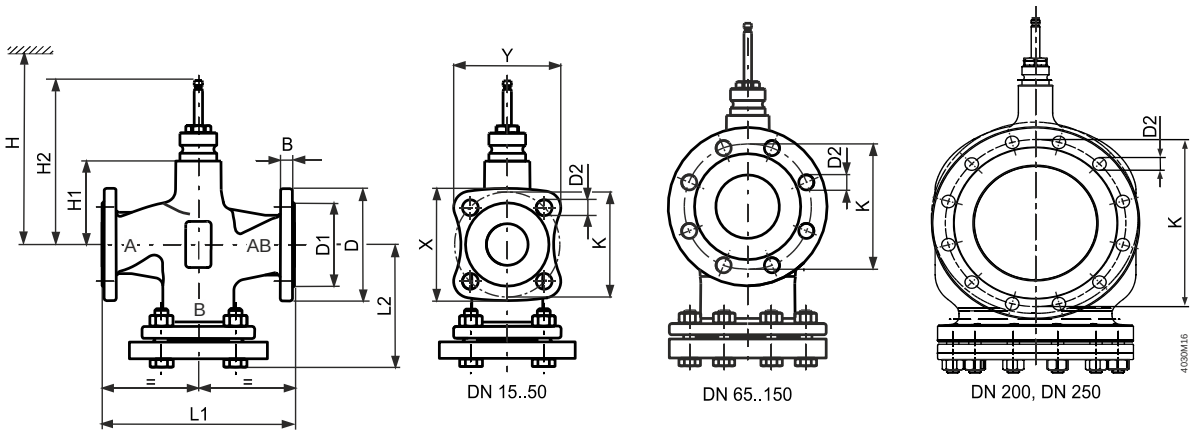
[2] With SAX.. and SAV..: Usable up to a max. medium temperature of 130 °C
With SKD..: Usable up to a max. medium temperature of 150 °C
For medium temperatures < -5 °C, the stem sealing gland must be replaced, please see on page 4.

[3] Valves where PS x DN ≤ 1000, do not require special testing and cannot carry the CE label.

[4] The documents can be downloaded from http://www.siemens.com/bt/download

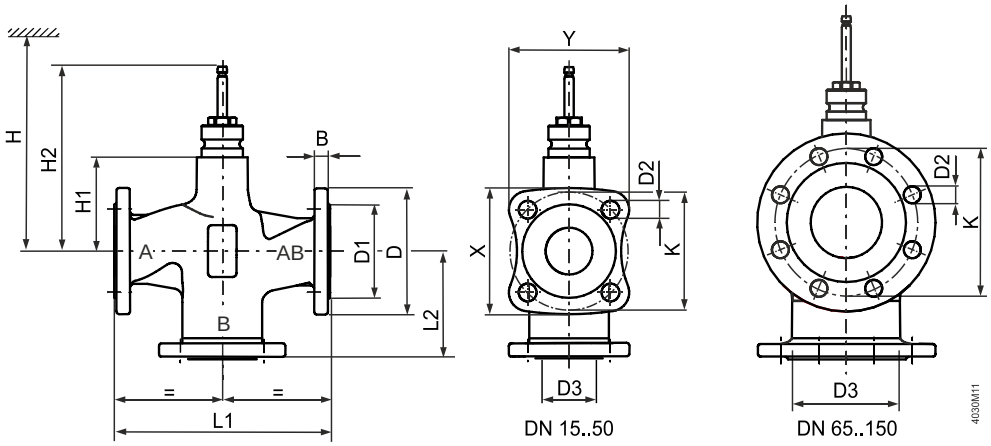
Dimensions

VVF53..



Product number	DN	kg	B	Ø D	Ø D1	Ø D2	L1	L2	X	Y	Ø K	H1	H2	H				
														SAX..	SKD..	SKB..	SAV..	SKC..
VVF53..C	15	4.2	12	95	46	14 (4x)	130	87.5	79	76	65	63	159.5	505	563	638	-	-
	20	5.3	14	105	56	14 (4x)	150	99.5	86.6	83	75	63	144.4	505	563	638	-	-
	25	6.1	13	115	65	14 (4x)	160	104.5	94.4	90.1	85	63	159.5	505	563	638	-	-
	32	8.7	15	140	76	19 (4x)	180	119	115.6	110.7	100	60	156.5	502	560	635	-	-
	40	10.1	14	150	84	19 (4x)	200	129	123.2	117.8	110	60	156.5	502	560	635	525	-
	50	13.6	14	165	99	19 (4x)	230	146	135.2	128.4	125	100	196.5	542	600	675	565	-
	65	22	14	185	118	19 (8x)	290	178	-	-	145	115	231.5	-	-	-	580	690
	80	27.4	14	200	132	19 (8x)	310	190	-	-	160	115	231.5	-	-	-	580	690
	100	38.2	14	235	156	23 (8x)	350	212.5	-	-	190	146	262.5	-	-	-	611	721
	125	53.1	14	270	184	28 (8x)	400	242	-	-	220	159	275.5	-	-	-	624	734
	150	73.4	14	297	211	28 (8x)	480	284	-	-	250	186.5	303	-	-	-	652	762
VVF53..K..	50	13.6	14	165	99	19 (4x)	230	146	135.2	128.4	125	100	196.5	-	600	675	-	-
	65	22	14	185	118	19 (8x)	290	178	-	-	145	115	231.5	-	-	-	-	690
	80	27.6	14	200	132	19 (8x)	310	190	-	-	160	115	231.5	-	-	-	-	690
	100	38.6	14	235	156	23 (8x)	350	212.5	-	-	190	146	262.5	-	-	-	-	721
	125	53.8	14	270	184	28 (8x)	400	242	-	-	220	159	275.5	-	-	-	-	734
	150	75	14	297	211	28 (8x)	480	284	-	-	250	186.5	303	-	-	-	-	762
	200	133	30	360	274	26 (12X)	600	265	-	-	310	243	359.5	-	-	-	-	818
	250	200	32	425	330	30 (12X)	730	290	-	-	370	275	391.5	-	-	-	-	850

VXF53..C



Product number	DN	kg	B	Ø D	Ø D1	Ø D2	Ø D3 [1]	L1	L2	X	Y	Ø K	H1	H2	H				
															SAX..	SKD..	SKB..	SAV..	SKC..
VXF53..C	15	3.2	12	95	46	14 (4x)	25	130	65	79	76	65	63	159.5	505	563	638	-	-
	20	4.0	14	105	56	14 (4x)	35	150	75	86.6	83	75	63	159.5	505	563	638	-	-
	25	4.6	13	115	65	14 (4x)	38	160	80	94.4	90.1	85	63	159.5	505	563	638	-	-
	32	6.1	15	140	76	19 (4x)	46	180	90	115.6	110.7	100	60	156.5	502	560	635	-	-
	40	7.2	14	150	84	19 (4x)	57	200	100	123.2	117.8	110	60	156.5	502	560	635	525	-
	50	9.7	14	165	99	19 (4x)	69	230	115	135.2	128.4	125	100	196.5	542	600	675	565	-
	65	16.3	14	185	118	19 (8x)	86	290	145	-	-	145	115	231.5	-	-	-	580	690
	80	20.6	14	200	132	19 (8x)	100	310	155	-	-	160	115	231.5	-	-	-	580	690
	100	28.1	14	235	156	23 (8x)	123	350	175	-	-	190	146	262.5	-	-	-	611	721
	125	38.5	14	270	184	28 (8x)	149	400	200	-	-	220	159	275.5	-	-	-	624	734
	150	54.9	14	297	211	28 (8x)	174	480	240	-	-	250	186.5	303	-	-	-	652	762

[1] Interior opening of the bypass port

Stem sealing gland

Product No	DN	Stock number	Comments
VVF53..C VXF53..C	DN 15…50	74 284 0061 0	Standard version with FEPM-O-ring for medium temperatures between -5 °C and 220 °C.
VVF53..C VXF53..C	DN 15…50	4 284 8806 0	Water with antifreeze and brines between -20 °C and 150 °C.
VVF53..C VXF53..C VVF53..KC	DN 65…150	S55846-Z114	Standard version with FEPM-O-ring for medium temperatures between -5 °C and 220 °C.
VVF53..C VXF53..C	DN 65…150	4 679 5629 0	Water with antifreeze and brines between -20 °C and 150 °C.

All series			
Product No	**DN**	**Stock number**	**Comments**
VVF53.. K	DN 200, DN 250	4 679 5630 0	Standard version with PTFE sleeve for medium temperatures between -5 °C and 220 °C.

Revision numbers

Product number	Valid from rev. no.	Product number	Valid from rev. no.	Product number	Valid from rev. no.
VVF53.15-0.16C	..A	**VVF53.50-40KC**	..A	**VXF53.15-1.6C**	..A
VVF53.15-0.2C	..A	**VVF53.65-63KC**	..A	**VXF53.15-2.5C**	..A
VVF53.15-0.25C	..A	**VVF53.80-100KC**	..A	**VXF53.15-4C**	..A
VVF53.15-0.32C	..A	**VVF53.100-150KC**	..A	**VXF53.20-6.3C**	..A
VVF53.15-0.4C	..A	**VVF53.125-220KC**	..A	**VXF53.25-6.3C**	..A
VVF53.15-0.5C	..A	**VVF53.150-315KC**	..A	**VXF53.25-10C**	..A
VVF53.15-0.63C	..A	**VVF53.200-450K**	..A	**VXF53.32-16C**	..A
VVF53.15-0.8C	..A	**VVF53.250-630K**	..A	**VXF53.40-16C**	..A
VVF53.15-1C	..A			**VXF53.40-25C**	..A
VVF53.15-1.25C	..A			**VXF53.50-40C**	..A
VVF53.15-1.6C	..A			**VXF53.65-63C**	..A
VVF53.15-2C	..A			**VXF53.80-100C**	..A
VVF53.15-2.5C	..A			**VXF53.100-160C**	..A
VVF53.15-3.2C	..A			**VXF53.125-250C**	..A
VVF53.15-4C	..A			**VXF53.150-400C**	..A
VVF53.20-6.3C	..A				
VVF53.25-5C	..A				
VVF53.25-6.3C	..A				
VVF53.25-8C	..A				
VVF53.25-10C	..A				
VVF53.32-16C	..A				
VVF53.40-12.5C	..A				
VVF53.40-16C	..A				
VVF53.40-20C	..A				
VVF53.40-25C	..A				
VVF53.50-31.5C	..A				
VVF53.50-40C	..A				
VVF53.65-63C	..A				
VVF53.80-100C	..A				
VVF53.100-160C	..A				
VVF53.125-250C	..A				
VVF53.150-400C	..A				

Issued by
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