

2- and 3-port valves with flanged connections, PN 40

2- and 3-port valves with flanged connections, PN 40

V..F63..



VVF63..
VVF63..K



VXF63..

From the large-stroke valve line

- High-performance valves for medium temperatures of $-25 \dots 220 \text{ } ^\circ\text{C}$
- Valve body of cast steel GP240GH
- DN 15...150
- $k_{vs} 0.2 \dots 315 \text{ m}^3/\text{h}$
- Flange type 21, flange design B
- Equipable with 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 | | | | SKD.. ¹⁾ | | SKB.. | | SKC.. | | |
|---|-------------------------------|-------------------|---------------------|-------|--------------|---------------------|--------------|------------------|--------------|------------------|-------|------|
| | | Stroke | | | | 20 mm | | 40 mm | | 40 mm | | |
| | PN 40 | Positioning force | | | | 1000 N | | 2800 N | | 2800 N | | |
| | | Data sheet | | | | N4561 | | N4664 | | N4566 | | |
|  | Stock no. | DN | k_{vs} | S_v | Δp_s | Δp_{max} | Δp_s | Δp_{max} | Δp_s | Δp_{max} | | |
| | | | [m ³ /h] | | | | | | | | [kPa] | |
| Liquids Preferred flow direction A-AB with liquids for low noise operation and high k_{vs} values with all actuator types | VVF63.15-0.2 ²⁾ | S55210-V100 | 15 | 0.2 | > 50 | 4000 | 2000 | 4000 | 2000 | - | - | |
| | VVF63.15-0.32 ²⁾ | S55210-V101 | 15 | 0.32 | | | | | | | | |
| | VVF63.15-0.5 ²⁾ | S55210-V102 | 15 | 0.5 | | | | | | | | |
| | VVF63.15-0.8 ²⁾³⁾ | S55210-V103 | 15 | 0.8 | | | | | | | | |
| | VVF63.15-1.25 ²⁾³⁾ | S55210-V104 | 15 | 1.25 | | | | | | | | |
| | VVF63.15-2 ²⁾³⁾ | S55210-V105 | 15 | 2 | | | | | | | | |
| | VVF63.15-3.2 ²⁾³⁾ | S55210-V106 | 15 | 3.2 | | | | | | | | |
| | VVF63.20-6.3 | S55210-V107 | 20 | 6.3 | | | | | | | | 3500 |
| | VVF63.25-5 ²⁾³⁾ | S55210-V108 | 25 | 5 | | | | | | | | 2100 |
| | VVF63.25-8 ²⁾³⁾ | S55210-V109 | 25 | 8 | | | | | | | | |
| | VVF63.32-16 | S55210-V110 | 32 | 16 | 1200 | 1100 | 3200 | | | | | |
| | VVF63.40-12.5 ²⁾ | S55210-V111 | 40 | 12.5 | 750 | 650 | 2000 | 1800 | | | | |
| | VVF63.40-20 ²⁾ | S55210-V112 | 40 | 20 | | | | | | | | |
| | VVF63.50-31.5 ²⁾ | S55210-V113 | 50 | 31.5 | > 100 | 450 | 400 | 1200 | 1150 | | | |
| | VVF63.65-50 ²⁾ | S55210-V114 | 65 | 50 | - | - | - | - | 700 | 650 | | |
| | VVF63.80-80 ²⁾ | S55210-V115 | 80 | 80 | 450 | 400 | | | | | | |
| | VVF63.100-125 ²⁾ | S55210-V116 | 100 | 125 | 300 | 250 | | | | | | |
| | VVF63.125-200 ²⁾ | S55210-V117 | 125 | 200 | 175 | 160 | | | | | | |
| VVF63.150-315 ²⁾ | S55210-V118 | 150 | 315 | 125 | 100 | | | | | | | |
| Liquids and Steam Compensated valves are optimized for a single flow direction for liquids and steam. DN 50..150: AB-A | VVF63.50-40K | VVF63.50-40K | 50 | 36 | > 100 | 4000 | 1500 | 4000 | 2000 | - | - | |
| | VVF63.65-63K | VVF63.65-63K | 65 | 63 | | | | | | | | |
| | VVF63.80-100K | VVF63.80-100K | 80 | 100 | | | | | | | | |
| | VVF63.100-150K | VVF63.100-150K | 100 | 150 | | | | | | | | |
| | VVF63.125-220K | VVF63.125-220K | 125 | 220 | > 50 | - | - | - | - | 4000 | 2000 | |
| VVF63.150-315K | VVF63.150-315K | 150 | 315 | | | | | | | | | |

- 1) Usable up to a max. medium temperature of 150 °C
- 2) Valves with supplemental designation ..F (e.g. VVF63.25-10F) - with special flange can be ordered exclusively for France.
- 3) Valves with supplemental designation ..L (e.g. VVF63.25-10L) - with parabolic plug can be ordered for special applications (low noise).

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 k_{vs} / k_{vr}

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 | | | | SKD.. ¹⁾ | | SKB.. | | SKC.. | |
|--|----------------------------|-------------------|---------------------------------|-------|--------------|---------------------|--------------|------------------|--------------|------------------|---|
| | | Hub | | | | 20 mm | | 40 mm | | | |
| | PN 40 | Positioning force | | | | 1000 N | | 2800 N | | 2800 N | |
| | | Data sheet | | | | N4561 | | N4664 | | N4566 | |
|  | Stock no. | DN | k_{vs} [m ³ /h] | S_v | Δp_s | Δp_{max} | Δp_s | Δp_{max} | Δp_s | Δp_{max} | |
| | | | | | [kPa] | | | | | | |
| Steam ²⁾ Exclusive flow direction AB-A for steam. Also useful for maximum close-off pressure Δp_s and maximum differential pressure in operation (Δp_{max}) with liquids. | VVF63.15-0.2 ²⁾ | S55210-V100 | 15 | 0.2 | > 50 | 4000 | 2000 | 4000 | 2000 | - | - |
| | VVF63.15-0.32 | S55210-V101 | 15 | 0.32 | | | | | | | |
| | VVF63.15-0.5 | S55210-V102 | 15 | 0.5 | | | | | | | |
| | VVF63.15-0.8 | S55210-V103 | 15 | 0.8 | | | | | | | |
| | VVF63.15-1.25 | S55210-V104 | 15 | 1.25 | | | | | | | |
| | VVF63.15-2 | S55210-V105 | 15 | 2 | | | | | | | |
| | VVF63.15-3.2 | S55210-V106 | 15 | 3.2 | | | | | | | |
| | VVF63.20-6.3 ³⁾ | S55210-V107 | 20 | 5 | | | | | | | |
| | VVF63.25-5 | S55210-V108 | 25 | 5 | | | | | | | |
| | VVF63.25-8 | S55210-V109 | 25 | 8 | | | | | | | |
| | VVF63.32-16 | S55210-V110 | 32 | 15 | | | | | | | |
| | VVF63.40-12.5 | S55210-V111 | 40 | 12.5 | | | | | | | |
| | VVF63.40-20 | S55210-V112 | 40 | 20 | | | | | | | |
| | VVF63.50-31.5 | S55210-V113 | 50 | 31.5 | | | | | | | |
| | VVF63.65-50 | S55210-V114 | 65 | 50 | | | | | | | |
| | VVF63.80-80 | S55210-V115 | 80 | 80 | | | | | | | |
| | VVF63.100-125 | S55210-V116 | 100 | 125 | | | | | | | |
| | VVF63.125-200 | S55210-V117 | 125 | 200 | | | | | | | |
| VVF63.150-315 ³⁾ | S55210-V118 | 150 | 280 | | | | | | | | |

| | Valves | Actuators | | | | SKD.. ¹⁾ | SKB.. | SKC.. | | | | |
|---|---------------|-------------------|--|----------------|---|---------------------|---|--------|---|---|---|-----|
| | | Stroke | | | | 20 mm | | 40 mm | | | | |
| | PN 40 | Positioning force | | | | 1000 N | 2800 N | 2800 N | | | | |
| | | Data sheet | | | | N4561 | N4664 | N4566 | | | | |
|  | Stock no. | DN | k _{vs} | S _v | Δp _{max} | | | | | | | |
| | | | | | [m ³ /h] | [kPa] | | | | | | |
| | | |  | |  | |  | |  | |  | |
| Liquids | VXF63.15-1.6 | S55210-V131 | 15 | 1.6 | > 100 | 2000 | 200 | 2000 | 200 | - | - | |
| | VXF63.15-2.5 | S55210-V132 | 15 | 2.5 | | | | | | | | |
| | VXF63.15-4 | S55210-V133 | 15 | 4 | | | | | | | | |
| | VXF63.20-6.3 | S55210-V134 | 20 | 6.3 | | | | | | | | |
| | VXF63.25-6.3 | S55210-V135 | 25 | 6.3 | | | | | | | | |
| | VXF63.25-10 | S55210-V136 | 25 | 10 | | | | | | | | |
| | VXF63.32-16 | S55210-V137 | 32 | 16 | | | 1100 | | | | | |
| | VXF63.40-16 | S55210-V138 | 40 | 16 | | | 650 | | | | | |
| | VXF63.40-25 | S55210-V139 | 40 | 25 | | | | | | | | |
| | VXF63.50-31.5 | S55210-V140 | 50 | 31.5 | | | 400 | | 1150 | | | |
| | VXF63.65-50 | S55210-V141 | 65 | 50 | | | - | - | - | - | 650 | 200 |
| | VXF63.80-80 | S55210-V142 | 80 | 80 | | | | | | | 400 | 200 |
| | VXF63.100-125 | S55210-V143 | 100 | 125 | | | | | | | 250 | 150 |
| | VXF63.125-200 | S55210-V144 | 125 | 200 | | | | | | | 160 | 100 |
| | VXF63.150-315 | S55210-V145 | 150 | 315 | | | | | | | 100 | 70 |

¹⁾ Usable up to a max. medium temperature of 150 °C

²⁾ Operate with opposite flow direction with steam

³⁾ Reduced k_{vs} value

Note

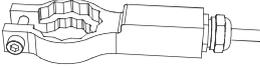
When using a steam heating element with a medium temperature below -5 °C, the stem sealing gland must be replaced. In this case, the sealing gland must be ordered separately.

| DN | Stock no. |
|-------------|--------------|
| DN 15...50 | 4 284 8806 0 |
| DN 65...150 | 4 679 5629 0 |

See also

 Revision numbers [[▶ 20](#)]

Accessories

| Type | Stock no. | Description | Note | |
|--------|--------------|-----------------------|---|---|
| ASZ6.6 | S55845-Z108 | Steam heating element | Required for medium temperatures < 0 °C |  |
| - | 4 284 8806 0 | Steam sealing gland | When using valves of the V..F63.. 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 anti-freeze and brines between -25 °C and 150 °C. |  |
| - | 4 679 5629 0 | Steam sealing gland | When using valves of the V..F63.. 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 anti-freeze and brines between -25 °C and 150 °C. |  |

Spare parts

| Type | DN | Stock no. | Notes | |
|--------------------------------|-------------|---------------|---|---|
| VVF63.. VXF63.. VVF63..K | DN 15...50 | 74 284 0061 0 | Standard version with FEPM O-ring for medium temperatures between -5 °C and 220 °C. | |
| VVF63.. VXF63.. VVF63..K | DN 65...150 | S55846-Z114 | Standard version with FEPM O-ring for medium temperatures between -5 °C and 220 °C. | |
| VVF63.. VXF63.. | DN 15...50 | 4 284 8806 0 | When operating with medium temperatures below -5 °C. With the gland 428488060, the valve can be used with water, water with anti-freeze and brines between -25 °C and 150 °C. |  |
| VVF63.. VXF63.. | DN 65...150 | 4 679 5629 0 | When operating with medium temperatures below -5 °C. With the gland 467956290, the valve can be used with water, water with anti-freeze and brines between -25 °C and 150 °C. |  |

Equipment combinations

| Type | Stock no. | Stroke | Positioning force | Operating voltage | Positioning signal | Spring return time | Positioning time | LED | Manual adjuster | Auxiliary functions | |
|-----------------|-----------------|------------|-------------------|-------------------|-------------------------------------|--------------------|--------------------------------|-----|------------------------------|---------------------|----|
| 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: 10 s | x | | | 3) |
| SKD62 SKD62U | SKD62 SKD62U | | | | | 15 s | | | | | |
| SKD62UA | SKD62UA | | | | | | | | | | |
| SKD82.50 | SKD82.50 | 3-position | - | | | 120 s | | | - | 1), 2), | |

| Type | Stock no. | Stroke | Positioning force | Operating voltage | Positioning signal | Spring return time | Positioning time | LED | Manual adjuster | Auxiliary functions | | | |
|-----------------------|-----------------------|------------|-------------------------------------|-------------------|-------------------------------------|--------------------|---------------------------------|------|------------------------------|---------------------|---------|------------------------------|---------|
| SKD82.50U | SKD82.50U | | | | | 8 s | | | | | | | |
| SKD82.51 SKD82.51U | SKD82.51 SKD82.51U | | | | | | | | | | | | |
| 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 | x | | | 3) | | |
| SKB62 SKB62U | SKB62 SKB62U | | | | | 10 s | | | | | | | |
| SKB62UA | SKB62UA | | | 3-position | | - | 120 s | - | | | 1), 2), | | |
| SKB82.50 SKB82.50U | SKB82.50 SKB82.50U | | | | | 10 s | | | | | | | |
| SKB82.51 SKB82.51U | SKB82.51 SKB82.51U | | | 40 mm | 2800 N | AC 230 V | 3-position | - | | 120 s | - | Turn, position is maintained | 1), 2), |
| SKC32.60 | SKC32.60 | | | | | | | 18 s | | | | | |
| SKC60 | SKC60 | AC 24 V | 0...10 V 4...20 mA 0...1000 Ω | | | - | Opening: 120 s Closing: 20 s | x | | 3) | | | |
| SKC62 SKC62U | SKC62 SKC62U | | | | | 20 s | | | | | | | |
| SKC62UA | SKC62UA | 3-position | | | | - | 120 s | - | | 1), 2), | | | |
| SKC82.60 SKC82.60U | SKC82.60 SKC82.60U | | | | | 18 s | | | | | | | |
| SKC82.61 SKC82.61U | SKC82.61 SKC82.61U | | | | | | | | | | | | |

- 1) Auxiliary switch (optional)
- 2) Potentiometer (optional)
- 3) Position feedback, forced control, selection of valve characteristic
- 4) Plus sequence control, stroke limitation, selection of acting direction

Ordering (Example)

| Type | Stock no. | Description |
|-------------|-------------|---------------------------------------|
| VXF63.32-16 | S55210-V137 | 3-port valve with flange, PN 40, DN32 |

Delivery

Valves, actuators, and accessories are packed and delivered separately.

Note

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

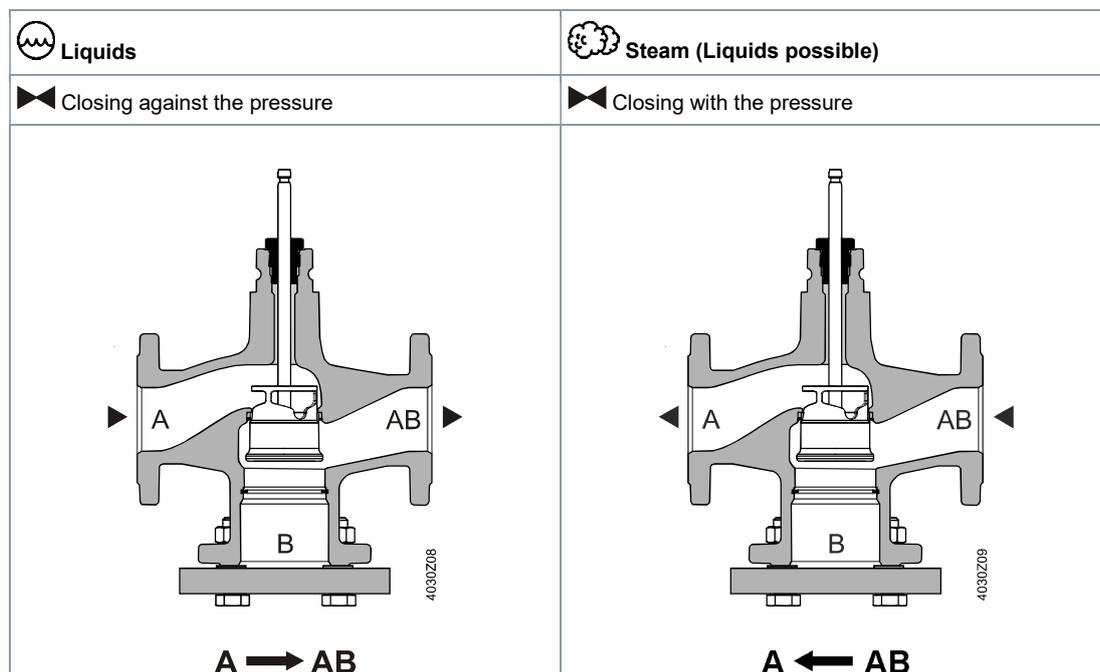
Product documentation

| Title | Content | Document ID |
|--|---|------------------------|
| Mounting instructions Valves VVF.. VXF.. | Mounting instructions: DN 15...150 | M4030 74 319 0749 0 |
| Valves VVF..., VXF..., VVG41..., VXG41..., VVI41..., VXI41.. | Basic documentation: Contains background information and general technical basics of valves | P4030 |

Technical design

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

2-port valves



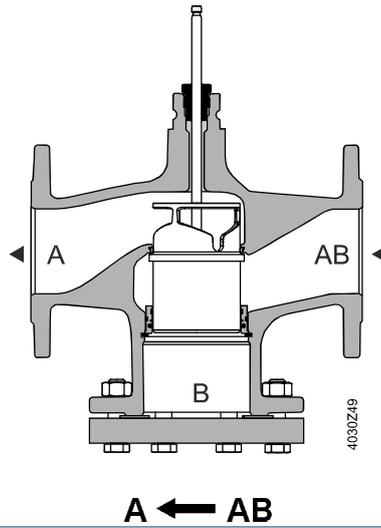
2-port valves **pressure-compensated**

The VVF63..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 Liquids and steam

Closing with the pressure



Note

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

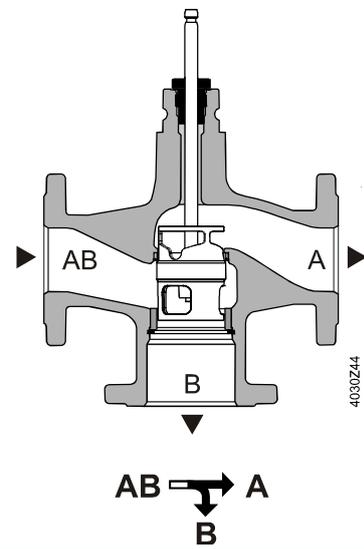
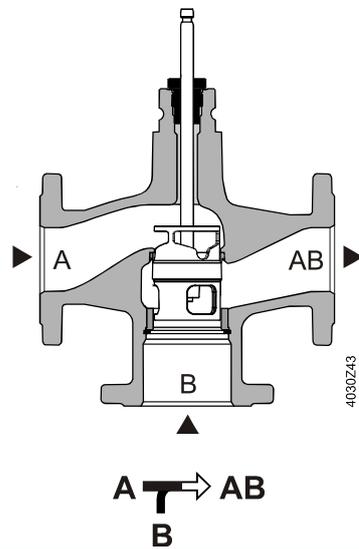
3-port valves



Liquids

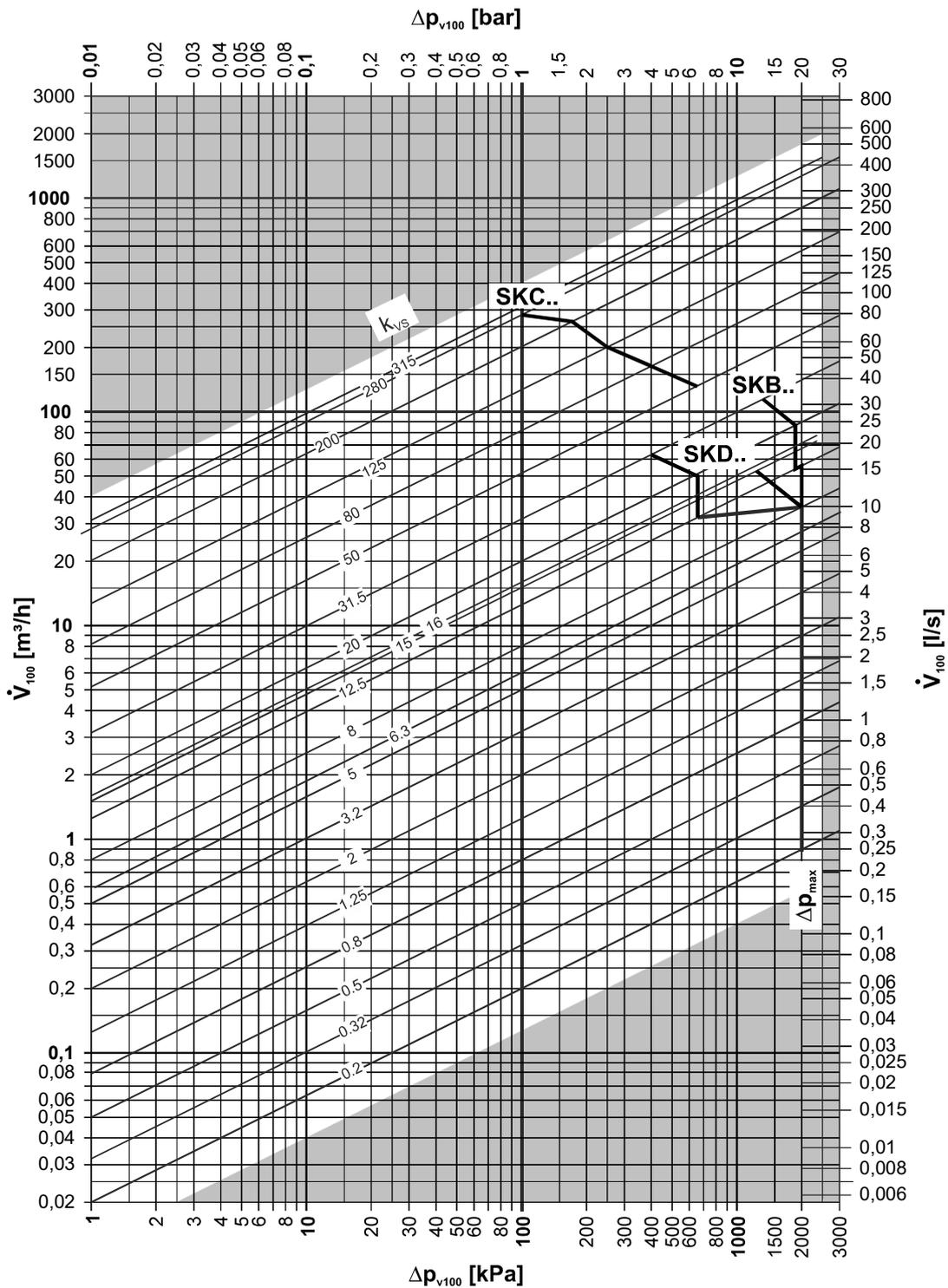
Mixing valve (preferred use)

Diverting valve



Sizing

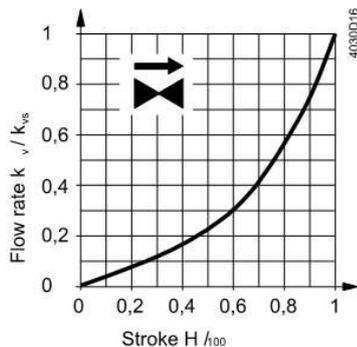
Flow chart



Δp_{max} values apply for the mixing function; Δp_{max} for the diverting function. See Type summary [► 2].

Valve characteristics

2-port valves

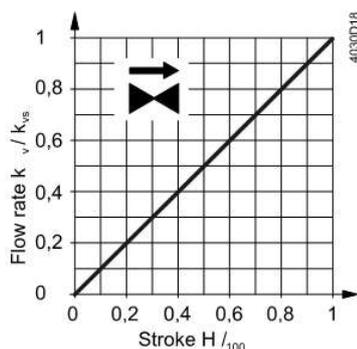


0...30 %: Linear

30...100 %: Equal percentage
 $n_{gl} = 3$ to VDI / VDE 2173

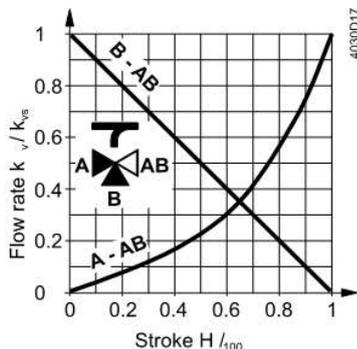
For high k_{vs} values, the valve characteristic is optimized for maximum volumetric flow k_{V100} .

For product lines:
 VVF63.125-220K
 VVF63.150-315K



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 k_{V100} .

Bypass B-AB

0...100 %: Linear

Port AB = constant volumetric flow

Port A = variable volumetric flow

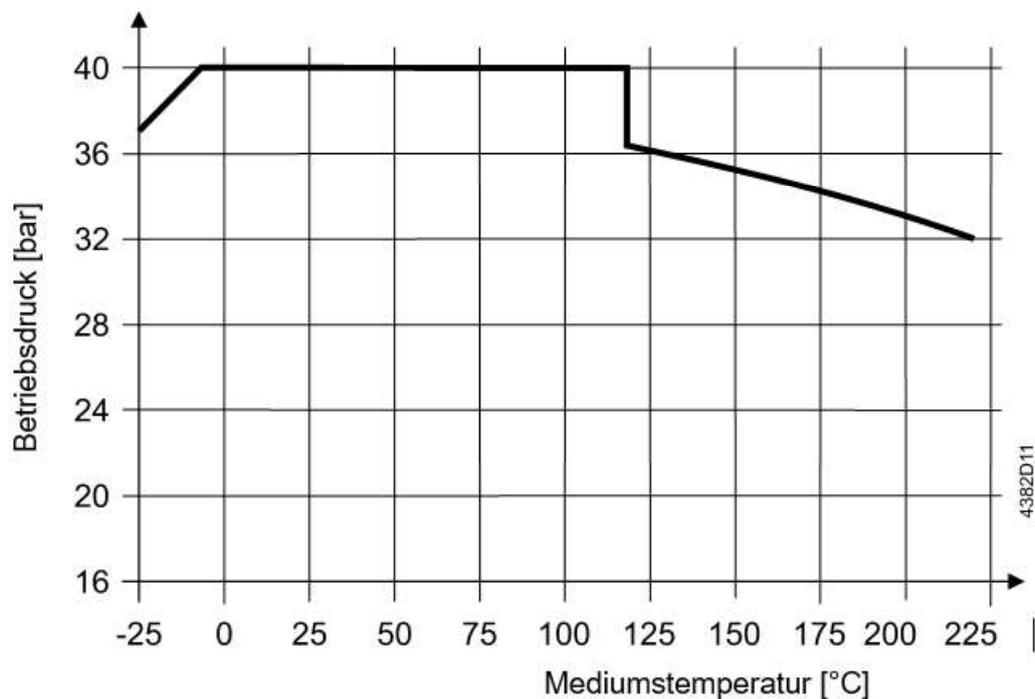
Port B = Bypass (variable volumetric flow)

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

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

Operating pressure and medium temperature

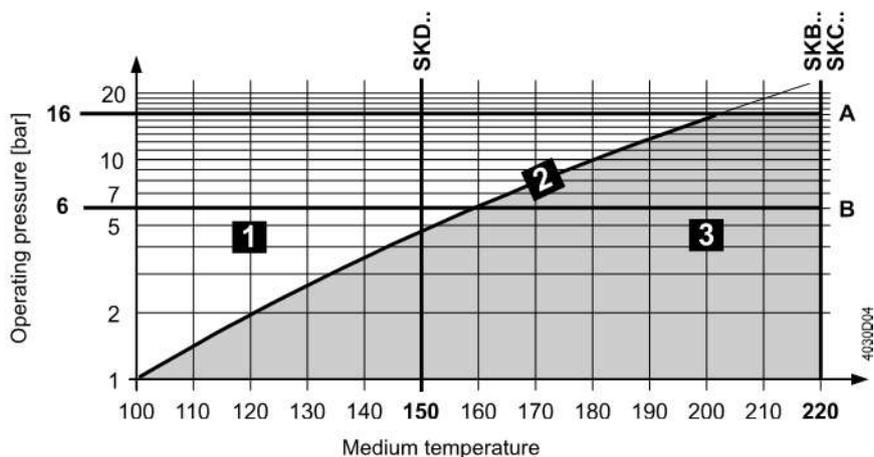
Liquids
with V..F63..



Operating pressure and operating temperatures according to ISO 7005, EN 1092, DIN 4747 and EN 12284

Note: All relevant local directives must be observed

Saturated steam
Superheated steam
with V..F63..



| | | |
|---|--------------------------------------|-----------------------------|
| 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

| | Temperature range | | VVF63.. | VXF63.. | VVF63..K | |
|--|-----------------------|-----------------------|---------|---------|-----------------|---|
| | T _{min} [°C] | T _{max} [°C] | | | | |
| Cold water | 1 | 25 | x | x | x | - |
| Low-temperature hot water | 1 | 130 | x | x | x | - |
| High-temperature hot water | 130 | 150 | x | x | x | - |
| | 150 | 180 | x | x | x | - |
| | 180 | 220 | x | x | x | - |
| Water with anti-freeze | -25 | 130 | x | x | - ¹⁾ | V..F63: For medium temperatures below -5 °C, the steam sealing gland must be replaced (DN15..50: 4 284 8806 0) (DN65..150: 4 679 5629 0). |
| | -10 | 130 | x | x | - ¹⁾ | |
| | -5 | 130 | x | x | x | |
| | 130 | 150 | x | x | x | |
| Cooling water | 1 | 25 | x | x | x | Open circuits |
| Brines | -25 | 130 | x | x | - ¹⁾ | V..F63: For medium temperatures below -5 °C, the steam sealing gland must be replaced (DN15..50: 4 284 8806 0) (DN65..150: 4 679 5629 0). |
| | -10 | 130 | x | x | - ¹⁾ | |
| | -5 | 130 | x | x | x | |
| | 130 | 150 | x | x | x | |
| Saturated steam | 100 | 150 | x | - | x | Min. dryness at inlet: 0.98 |
| | 150 | 200 | x | - | x | |
| | 200 | 220 | x | - | x | |
| Superheated steam | 120 | 150 | x | - | x | - |
| | 150 | 220 | x | - | x | - |
| Heat transfer oils | 20 | 220 | x | x | x | On the basis of mineral oil, thermal oil |
| Super-clean water (demineralized and deionized water) | 1 | 150 | - | - | - | - |
| Demineralized water according to VDI2035 / SWKI_BT102-01 | 1 | 130 | x | x | x | |

¹⁾ VVF63..K valves cannot be used with media below -5 °C due to the compensation sealing material.

Fields of use

| Fields of use | | Type | |
|---------------------|------------------------------|---------|---------|
| | | VVF63.. | VXF63.. |
| Generation | Boiler plants | x | x |
| | District heating plants | x | - |
| | Refrigeration plants | x | x |
| | Cooling towers ²⁾ | x | x |
| Distribution | Heating groups | x | x |
| | Air handling units | x | x |

²⁾ Open circuits

Notes

Engineering

Mounting location

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

Dirt trap

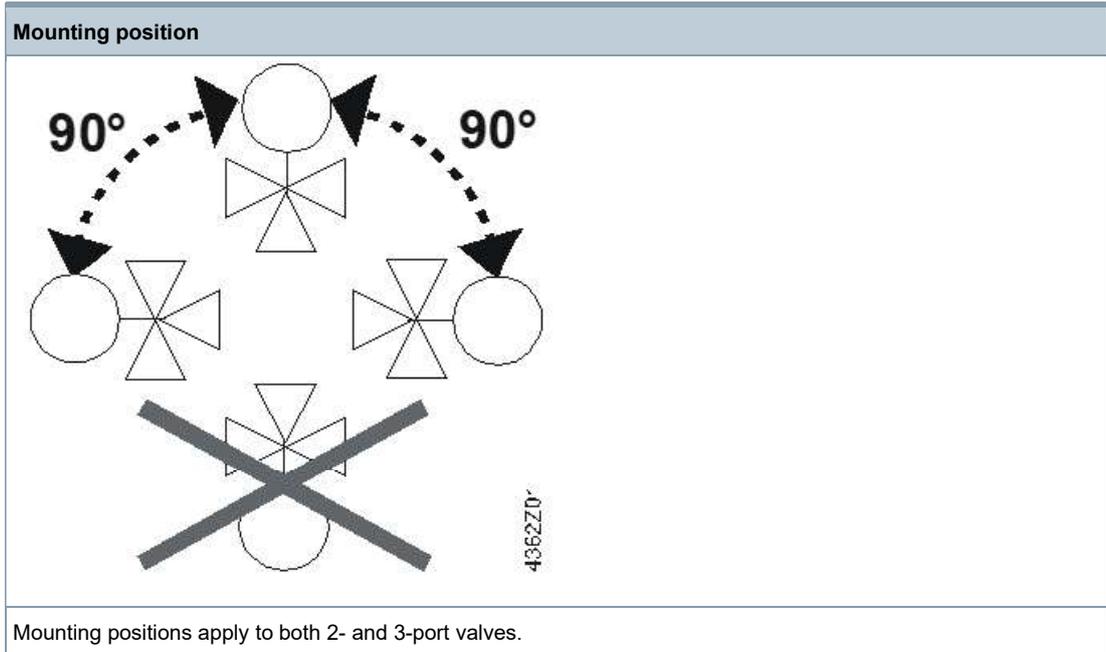
Mount a dirt filter or dirt trap before the valve to ensure proper functioning, and a long service life of the valves.

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 pre-pressure.

Mounting



Commissioning



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

Note

Ensure that the 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 steam retracts | Opens | Closes |

Maintenance

The valves are maintenance-free.

CAUTION



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 the pipes to completely cool down

If necessary, disconnect the electrical wires.

Disposal

Do not dispose of the valve as part of domestic waste.

- Special treatment for individual components may be required by law or make ecological sense.
- Comply with all local and currently applicable laws and regulations.

Warranty

Application-related technical data are guaranteed only when the valves are used in combination with the Siemens actuators listed under "Type summary" and "Equipment combinations". When used with actuators of third-party manufacturers, any warranty by Siemens becomes void.

| Functional data | | | |
|------------------------------------|------------------------------|--|--|
| PN class | | PN 40 | |
| Connection | | Flange | |
| Operating pressures | | See "Operating pressure", see page 11 | |
| Valve characteristic ¹⁾ | | See "Valve characteristics", page 10 | |
| Leakage rate | Throughport | DN 15... 150 | 0...0.01 % of k_{vs} value (Class IV) |
| | Bypass | | 0.5...2 % of k_{vs} value with SKD..., SKB..., SKC.. |
| Permissible media | | See "Medium compatibility and temperature ranges", page 12 Heat transfer oils | |
| Medium temperature | | -25...220 °C ²⁾ | |
| | VVF63..K | -5...220 °C | |
| Rangeability | DN15 k_{vs} 0.2...1.25 | >50 | |
| | DN15 k_{vs} 2 ... DN150 | >100 | |
| Nominal stroke | Up to DN 50 | 20 mm | |
| | From DN 65 | 40 mm | |

| Materials | | |
|------------------------|--------------|----------------------|
| Valve body | | Cast steel GP240GH |
| Blank flange | VVF.. | P265GH |
| Valve stem, seat, plug | | Stainless steel |
| Steam sealing gland | | Stainless steel |
| | DN 15... 150 | FEPM (silicone free) |
| Compensation sealing | | Stainless steel |
| | DN 15... 150 | FEPM (silicone free) |

| Standards and directives | | |
|--|---------------|--|
| Pressure Equipment Directive Pressure accessories | | PED 2014/68/EU Scope: Article 1, section 1 Definition: Article 2, section 5 |
| Liquid group 2 | DN 15...40 | Without CE-marking, as per article 4, section 3 (sound engineering practice) ³⁾ |
| | DN 50...80 | Category I, Module A, with CE-marking, as per article 14, section 2 |
| | DN 100... 150 | Category II, Module A2, with CE-marking, as per article 14, section 2 |
| | | Notified body number 0036 |
| EU conformity (CE) | DN 50... 150 | A5W00006523 ⁴⁾ |
| PN class | | ISO 7268 |

| Standards and directives | | |
|--------------------------|------------------------|--------------------------------------|
| Operating pressure | | ISO 7005, EN1092, DIN 4747, 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. |
| Transportation | | 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 declarations A5W00049179 ⁴⁾ , A5W00049180 ⁴⁾ und A5W00049181 ⁴⁾ contain data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal). |

| Dimensions / Weight | |
|---------------------|-----------------------|
| Dimensions | See Dimensions [▶ 18] |
| Weight | |

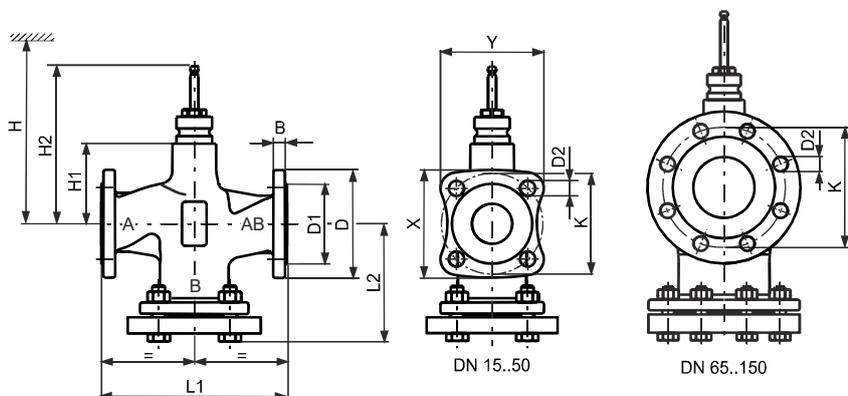
- 1) For certain valve lines and high k_{vs} values, the valve characteristic is optimized for maximum volumetric flow k_{V100} .
- 2) With SKD...: Usable up to a max. medium temperature of 150 °C
For medium temperatures < -5 °C, the stem sealing gland must be replaced, see page 4 [▶ 5]
- 3) Valves where $PS \times DN < 1000$ do not require special testing and cannot carry the CE-marking
- 4) The documents can be downloaded from <http://www.siemens.com/bt/download>

See also

 Technical design [▶ 7]

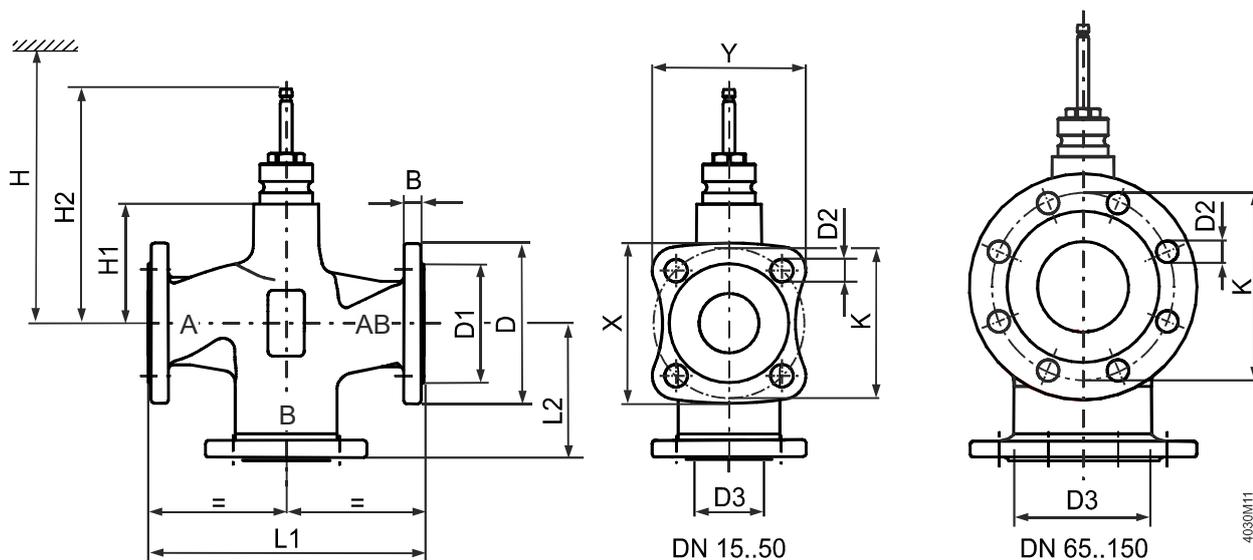
Dimensions

VVF63..



| Type | DN | B | D | D1 | D2 | L1 | L2 | X | Y | K | H1 | H2 | H | | |  |
|----------|-----|-----|-----|-----|---------|-----|-------|-------|-------|-------|-------|-------|-----|------|-------|---|
| | | | | | | | | | | | | | SKD | SKB | SKC | |
| [mm] | | | | | | | | | | | | | | [kg] | | |
| VVF63.. | 15 | 15 | 95 | 46 | 14 (4x) | 130 | 87.5 | 79 | 76 | 65 | 63 | 159.5 | 563 | 638 | - | 5.3 |
| | 20 | 17 | 105 | 56 | | 150 | 99.5 | 86.6 | 83 | 75 | | | | | 144.4 | 6.5 |
| | 25 | | 115 | 65 | | 160 | 104.5 | 94.4 | 90.1 | 85 | | | | | 159.5 | 7.5 |
| | 32 | | 140 | 76 | 18 (4x) | 180 | 119 | 115.6 | 110.7 | 100 | 60 | 156.5 | 560 | 635 | | 10.6 |
| | 40 | 16 | 150 | 84 | | 200 | 129 | 123.2 | 117.8 | 110 | | | | | 12.3 | |
| | 50 | 18 | 165 | 99 | | 230 | 146 | 135.2 | 128.4 | 125 | | | | | 100 | 196.5 |
| | 65 | 20 | 182 | 118 | 18 (8x) | 290 | 178 | - | - | 145 | 115 | 231.5 | - | - | 690 | 29.1 |
| | 80 | 22 | 197 | 132 | | 310 | 190 | 160 | 36.9 | | | | | | | |
| | 100 | | 232 | 156 | 22 (8x) | 350 | 212.5 | 190 | 146 | 262.5 | 721 | 49.8 | | | | |
| | 125 | 24 | 267 | 184 | 26 (8x) | 400 | 242 | 220 | 159 | 275.5 | 734 | 73.0 | | | | |
| 150 | 26 | 297 | 211 | | 480 | 284 | 250 | 186.5 | 303 | 762 | 102.4 | | | | | |
| VVF63..K | 50 | 18 | 165 | 99 | 18 (4x) | 230 | 146 | 135.2 | 128.4 | 125 | 100 | 196.5 | 600 | 675 | - | 17.4 |
| | 65 | 20 | 182 | 118 | 18 (8x) | 290 | 178 | - | - | 145 | 115 | 231.5 | - | - | 690 | 29.2 |
| | 80 | 22 | 197 | 132 | | 310 | 190 | 160 | 37.1 | | | | | | | |
| | 100 | | 232 | 156 | 22 (8x) | 350 | 212.5 | 190 | 146 | 262.5 | 721 | 50.2 | | | | |
| | 125 | 24 | 267 | 184 | 26 (8x) | 400 | 242 | 220 | 159 | 275.5 | 734 | 73.7 | | | | |
| | 150 | 26 | 297 | 211 | | 480 | 284 | 250 | 186.5 | 303 | 762 | 103.9 | | | | |

VXF63..



| Type | DN | B | D | D1 | D2 | D3 ¹⁾ | L1 | L2 | X | Y | K | H1 | H2 | H | | kg | |
|---------|-----|-----|-----|-----|---------|------------------|-----|-----|-------|-------|-------|------|-------|-----|-----|-------|-------|
| | | | | | | | | | | | | | | SKB | SKC | | |
| [mm] | | | | | | | | | | | | | | | | [kg] | |
| VXF63.. | 15 | 15 | 95 | 46 | 14 (4x) | 26.4 | 130 | 65 | 79 | 76 | 65 | 63 | 159.5 | 563 | 638 | - | 4.3 |
| | 20 | 17 | 105 | 56 | | 35 | 150 | 75 | 86.6 | 83 | 75 | | | | | 5.2 | |
| | 25 | | 115 | 65 | | 36 | 160 | 80 | 94.4 | 90.1 | 85 | | | | | 6.0 | |
| | 32 | | 140 | 76 | 18 (4x) | 46 | 180 | 90 | 115.6 | 110.7 | 100 | 60 | 156.5 | 560 | 635 | | 8.0 |
| | 40 | 16 | 150 | 84 | | 57 | 200 | 100 | 123.2 | 117.8 | 110 | | | | | 9.4 | |
| | 50 | 18 | 165 | 99 | | 69 | 230 | 115 | 135.2 | 128.4 | 125 | | | | | 100 | 196.5 |
| | 65 | 20 | 182 | 118 | 18 (8x) | 86 | 290 | 145 | - | - | 145 | 115 | 231.5 | - | - | 690 | 23.5 |
| | 80 | 22 | 197 | 132 | | 100 | 310 | 155 | 160 | 30.1 | | | | | | | |
| | 100 | | 232 | 156 | | 22 (8x) | 123 | 350 | 175 | 190 | 146 | | | | | 262.5 | 721 |
| | 125 | 24 | 267 | 184 | 26 (8x) | 149 | 400 | 200 | 220 | 159 | 275.5 | 734 | 58.4 | | | | |
| 150 | 26 | 297 | 211 | 174 | | 480 | 240 | 250 | 186.5 | 303 | 762 | 84.0 | | | | | |

¹⁾ Bypass port clear inner width

Revision numbers

| Type | Valid from rev. no. | Type | Valid from rev. no. | Type | Valid from rev. no. |
|---------------|---------------------|----------------|---------------------|---------------|---------------------|
| VVF63.15-0.2 | ...B | VVF63.50-40K | ...B | VXF63.15-1.6 | ...B |
| VVF63.15-0.32 | ...B | VVF63.65-63K | ...B | VXF63.15-2.5 | ...B |
| VVF63.15-0.5 | ...B | VVF63.80-100K | ...B | VXF63.15-4 | ...B |
| VVF63.15-0.8 | ...B | VVF63.100-150K | ...B | VXF63.20-6.3 | ...B |
| VVF63.15-1.25 | ...B | VVF63.125-220K | ...B | VXF63.25-6.3 | ...B |
| VVF63.15-2 | ...B | VVF63.150-315K | ...B | VXF63.25-10 | ...B |
| VVF63.15-3.2 | ...B | | | VXF63.32-16 | ...B |
| VVF63.20-6.3 | ...B | | | VXF63.40-16 | ...B |
| VVF63.25-5 | ...B | | | VXF63.40-25 | ...B |
| VVF63.25-8 | ...B | | | VXF63.50-31.5 | ...B |
| VVF63.32-16 | ...B | | | VXF63.65-50 | ...B |
| VVF63.40-12.5 | ...B | | | VXF63.80-80 | ...B |
| VVF63.40-20 | ...B | | | VXF63.100-125 | ...B |
| VVF63.50-31.5 | ...B | | | VXF63.125-200 | ...B |
| VVF63.65-50 | ...B | | | VXF63.150-315 | ...B |
| VVF63.80-80 | ...B | | | | |
| VVF63.100-125 | ...B | | | | |
| VVF63.125-200 | ...B | | | | |
| VVF63.150-315 | ...B | | | | |

Issued by
Siemens Switzerland Ltd
Smart Infrastructure
Global Headquarters
Theilerstrasse 1a
CH-6300 Zug
+41 58 724 2424
www.siemens.com/buildingtechnologies

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Document ID A6V11459527_en--_m
Edition 2023-03-14