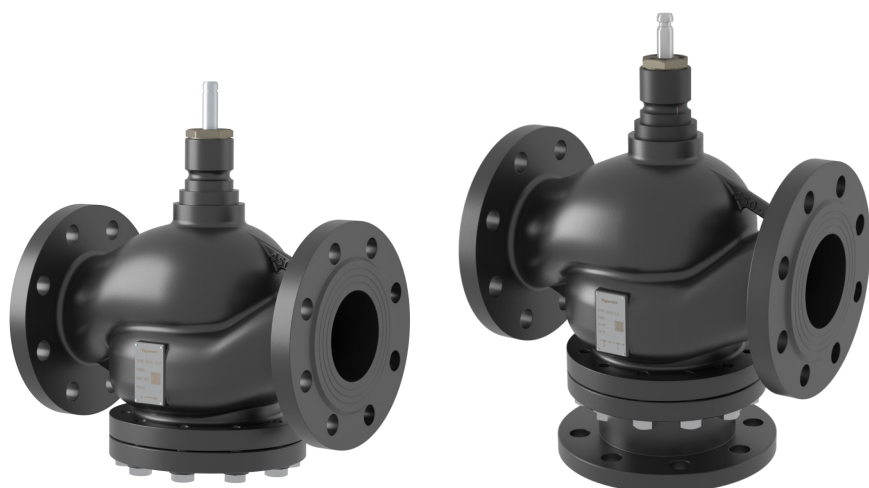


Control valves – Globe type – Ductile iron -TC200 -TC201



TF...series

**2/3 Port,
Flange Connection**

Product Fetures

- **Low leakage rate**

The valve core and valve seat sealing surface are all stainless steel which could avoid the damage caused by debris in medium and ensure the low leakage rate after long time running.

- **V-shaped Sealing Ring Gland+ Spring Auto-compensation**

Due to V-shaped ring of the sealing gland, the effects of the inner hole shrinkage and cylindrical expansion of the sealing grand in the case of pressing by the spring, which ensures the sealing of the stem part is effective for a long time.

- **Equal-percentage Flow Characteristics**

The rangeability of valve is 100:1, equipped with TW...series actuator which can get a perfect equal-percentage control curve.

- **Wide Flow Passage, Low Noise**

The design of wide and smooth flow passage can effectively reduce the noise.

- **High-quality Materials Ductile Iron EN-GJS-450-10**

The valve body is made of high-quality ductile iron material(EN-GJS-450-10), and the surface adopts electrostatic spraying craft, the body has better intensity and corrosion resistance.



PN16 Series 2-port



Series	TW600...	TW1000...	TW1001...	TW3000...	TW5000...	TW16000..
Actuator Rated Stroke	30mm	30mm	50mm	50mm	70mm	110mm
Nominal Output Force	600N	1000N	1000N	3000N	5000N	16000N

Icon



Valve body	Type	DN [mm]	Valve Stroke [mm]	Max. flow coefficient Kvs	ΔPs [kPa]	ΔPs [kPa]	ΔPs [kPa]	ΔPs [kPa]	ΔPs [kPa]	ΔPs [kPa]
 PN16 2-port Water Valve Medium Temp.: -25~130°C	TF15-2VGC-S.12	DN15	20	4	1600					
	TF20-2VGC-S.12	DN20	20	6.3	1600					
	TF25-2VGC-S.12	DN25	20	10	1000	1600				
	TF32-2VGC-S.12	DN32	20	16	600	1000				
	TF40-2VGC-S.12	DN40	20	25	400	700				
	TF50-2VGC-S.12	DN50	20	40		500				
	TF65-2VGC-S.14	DN65	20	63			1000			
	TF80-2VGC-S.14	DN80	30	100			1000			
	TF100-2VGC-S.14	DN100	40	160			1000			
	TF125-2VGC-S.14	DN125	40	250				1600		
	TF150-2VGC-S.14	DN150	40	350				1600		
	TF200-2VGC-S.14	DN200	40	520				1600		
	TF250-2VGC-S.14	DN250	40	700				1600		
	TF300-2VGC-S.14	DN300	60	1000					1600	
	TF350-2VGC-S.14	DN350	60	1300					1600	
TF400-2VGC-S.15	DN400	100	2200						1600	
TF450-2VGC-S.15	DN450	100	2600						1600	
TF500-2VGC-S.15	DN500	100	3200						1600	
 PN16 2-port Steam Valve Medium Temp.: 2~180°C	TF15-2SGC-S.12	DN15	20	4		1600				
	TF20-2SGC-S.12	DN20	20	6.3		1600				
	TF25-2SGC-S.12	DN25	20	10		1600				
	TF32-2SGC-S.12	DN32	20	16		1000				
	TF40-2SGC-S.12	DN40	20	25		1000				
	TF50-2SGC-S.12	DN50	20	40		1000				
	TF65-2SGC-S.14	DN65	20	63				1600		
	TF80-2SGC-S.14	DN80	30	100				1600		
	TF100-2SGC-S.14	DN100	40	160				1600		
	TF125-2SGC-S.14	DN125	40	250				1600		
	TF150-2SGC-S.14	DN150	40	350				1600		
	TF200-2SGC-S.14	DN200	40	520				1600		
	TF250-2SGC-S.14	DN250	40	700				1600		
	TF300-2SGC-S.15	DN300	100	1200					1600	
	TF350-2SGC-S.15	DN350	100	1800					1600	
TF400-2SGC-S.15	DN400	100	2200					1600		
TF450-2SGC-S.15	DN450	100	2600					1600		
TF500-2SGC-S.15	DN500	100	3200					1600		
 PN16 2-port High-temp. Steam Valve Medium Temp.: 2~250°C	TF25-2AGC-S.14	DN25	20	10				1600		
	TF32-2AGC-S.14	DN32	20	16				1600		
	TF40-2AGC-S.14	DN40	20	25				1600		
	TF50-2AGC-S.14	DN50	20	40				1600		
	TF65-2AGC-S.14	DN65	20	63				1600		
	TF80-2AGC-S.14	DN80	30	100				1600		
	TF100-2AGC-S.14	DN100	40	160				1600		
	TF125-2AGC-S.14	DN125	40	250				1600		
	TF150-2AGC-S.14	DN150	40	350				1600		
	TF200-2AGC-S.14	DN200	40	520				1600		
	TF250-2AGC-S.14	DN250	40	700				1600		
	TF300-2AGC-S.15	DN300	100	1200					1600	
	TF350-2AGC-S.15	DN350	100	1800					1600	
	TF400-2AGC-S.15	DN400	100	2200					1600	
	TF450-2AGC-S.15	DN450	100	2600					1600	
TF500-2AGC-S.15	DN500	100	3200					1600		



PN16 Series 3-port



Series	TW600...	TW1000...	TW1001...	TW3000...	TW5000...	TW16000..
Actuator Rated Stroke	30mm	30mm	50mm	50mm	70mm	110mm
Nominal Output Force	600N	1000N	1000N	3000N	5000N	16000N

Icon



Valve body	Type	DN [mm]	Valve Stroke [mm]	Max. flow coefficient Kvs [m ³ /h]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]
<p>PN16 3-port Water Valve (mixing) Medium Temp.: -25~130°C</p>	TF15-3VGC-S.12	DN15	20	4	1600					
	TF20-3VGC-S.12	DN20	20	6.3	1600					
	TF25-3VGC-S.12	DN25	20	10	1000	1600				
	TF32-3VGC-S.14	DN32	20	16			1000	1600		
	TF40-3VGC-S.14	DN40	20	25			700	1600		
	TF50-3VGC-S.14	DN50	20	40			500	1100		
	TF65-3VGC-S.14	DN65	20	63				900		
	TF80-3VGC-HS.14	DN80	30	100				550		
	TF100-3VGC-HS.14	DN100	40	160				350		
	TF125-3VGC-HS.14	DN125	40	250				240	350	
	TF150-3VGC-HS.14	DN150	40	350				150	250	
	TF200-3VGC-HS.14	DN200	40	520					150	
	TF250-3VGC-HS.14	DN250	40	700					100	
	TF300-3VGC-HS.15	DN300	100	1200						200
	TF350-3VGC-HS.15	DN350	100	1800						150
TF400-3VGC-HS.15	DN400	100	2200						120	
TF450-3VGC-HS.15	DN450	100	2600						100	
TF500-3VGC-HS.15	DN500	100	3200						80	
<p>3-port Water Valve (diverting) Medium Temp.: -25~130°C</p>	TF15-3VGC-S.12	DN15	20	4	800					
	TF20-3VGC-S.12	DN20	20	6.3	800					
	TF25-3VGC-S.12	DN25	20	10	500	800				
	TF32-3VGC-S.14	DN32	20	16			500	800		
	TF40-3VGC-S.14	DN40	20	25			350	800		
	TF50-3VGC-S.14	DN50	20	40			250	550		
	TF65-3VGC-S.14	DN65	20	63				450		
	TF80-3VGC-FS.14	DN80	30	100				550		
	TF100-3VGC-FS.14	DN100	40	160				350		
	TF125-3VGC-FS.14	DN125	40	250				240	350	
	TF150-3VGC-FS.14	DN150	40	350				150	250	
	TF200-3VGC-FS.14	DN200	40	520					150	
	TF250-3VGC-FS.14	DN250	40	700					100	
	TF300-3VGC-FS.15	DN300	100	1200						200
	TF350-3VGC-FS.15	DN350	100	1800						150
TF400-3VGC-FS.15	DN400	100	2200						120	
TF450-3VGC-FS.15	DN450	100	2600						100	
TF500-3VGC-FS.15	DN500	100	3200						80	

Note: The ΔP_s in bold type is default standard configuration!



PN16 Series 3-port - low noise



Series

TW3000...

TW5000...

Actuator Rated Stroke



50mm











70mm

Nominal Output Force



Icon

Valve body	Type	DN [mm]	Valve Stroke [mm]	Max. flow coefficient Kvs [m³/h]	ΔPs [kPa]	ΔPs [kPa]	
 PN16 3-port (mixing) Medium Temp.: -25~130°C	TF32-3VGC-S.14-D	DN32	20	16	1600		
	TF40-3VGC-S.14-D	DN40	20	25		1600	
	TF50-3VGC-S.14-D	DN50	20	40		1100	
	TF65-3VGC-S.14-D	DN65	20	63		900	
	TF80-3VGC-HS.14-D	DN80	30	100	550		
	TF100-3VGC-HS.14-D	DN100	40	160	350		
	TF125-3VGC-HS.14-D	DN125	40	250	240	350	
	TF150-3VGC-HS.14-D	DN150	40	350	150	250	
	TF200-3VGC-HS.14-D	DN200	40	520		150	
	TF250-3VGC-HS.14-D	DN250	40	700		100	
 PN16 3-port (diverting) Medium Temp.: -25~130°C	TF32-3VGC-S.14-D	DN32	20	16	800		
	TF40-3VGC-S.14-D	DN40	20	25		800	
	TF50-3VGC-S.14-D	DN50	20	40		550	
	TF65-3VGC-S.14-D	DN65	20	63		450	
	TF80-3VGC-FS.14-D	DN80	30	100	550		
	TF100-3VGC-FS.14-D	DN100	40	160	350		
	TF125-3VGC-FS.14-D	DN125	40	250	240	350	
	TF150-3VGC-FS.14-D	DN150	40	350	150	250	
	TF200-3VGC-FS.14-D	DN200	40	520		150	
	TF250-3VGC-FS.14-D	DN250	40	700		100	

PN25 Series 2-port					Series	TW600...	TW1000...	TW1001...	TW3000...	TW5000...	TW16000..
					Actuator Rated Stroke	30mm	30mm	50mm	50mm	70mm	110mm
					Nominal Output Force	600N	1000N	1000N	3000N	5000N	16000N
					Icon						
Valve body	Type	DN [mm]	Valve Stroke [mm]	Max. flow coefficient Kvs	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	
 2-port Water Valve Medium Temp.: -25~130°C	TF15-2VGD-S.12	DN15	20	4	1600						
	TF20-2VGD-S.12	DN20	20	6.3	1600						
	TF25-2VGD-S.12	DN25	20	10	1000	1600					
	TF32-2VGD-S.12	DN32	20	16	600	1000					
	TF40-2VGD-S.12	DN40	20	25	400	700					
	TF50-2VGD-S.12	DN50	20	40		500					
	TF65-2VGD-S.14	DN65	20	63			1000				
	TF80-2VGD-S.14	DN80	30	100			1000				
	TF100-2VGD-S.14	DN100	40	160			1000				
	TF125-2VGD-S.14	DN125	40	250				1600			
	TF150-2VGD-S.14	DN150	40	350				1600			
	TF200-2VGD-S.14	DN200	40	520				1600			
	TF250-2VGD-S.14	DN250	40	700				1600			
	TF300-2VGD-S.14	DN300	60	1000					1600		
	TF350-2VGD-S.14	DN350	60	1300					1600		
TF400-2VGD-S.15	DN400	100	2200						1600		
TF450-2VGD-S.15	DN450	100	2600						1600		
TF500-2VGD-S.15	DN500	100	3200						1600		
 2-port Steam Valve Medium Temp.: 2~180°C	TF15-2SGD-S.12	DN15	20	4		1600					
	TF20-2SGD-S.12	DN20	20	6.3		1600					
	TF25-2SGD-S.12	DN25	20	10		1600					
	TF32-2SGD-S.12	DN32	20	16		1000					
	TF40-2SGD-S.12	DN40	20	25		1000					
	TF50-2SGD-S.12	DN50	20	40		1000					
	TF65-2SGD-S.14	DN65	20	63				1600			
	TF80-2SGD-S.14	DN80	30	100				1600			
	TF100-2SGD-S.14	DN100	40	160				1600			
	TF125-2SGD-S.14	DN125	40	250				1600			
	TF150-2SGD-S.14	DN150	40	350				1600			
	TF200-2SGD-S.14	DN200	40	520					1600		
	TF250-2SGD-S.14	DN250	40	700					1600		
	TF300-2SGD-S.15	DN300	100	1200						1600	
	TF350-2SGD-S.15	DN350	100	1800						1600	
TF400-2SGD-S.15	DN400	100	2200						1600		
TF450-2SGD-S.15	DN450	100	2600						1600		
TF500-2SGD-S.15	DN500	100	3200						1600		
 2-port High-temp. Steam Valve Medium Temp.: 2~250°C	TF25-2AGD-S.14	DN25	20	10				1600			
	TF32-2AGD-S.14	DN32	20	16				1600			
	TF40-2AGD-S.14	DN40	20	25				1600			
	TF50-2AGD-S.14	DN50	20	40				1600			
	TF65-2AGD-S.14	DN65	20	63				1600			
	TF80-2AGD-S.14	DN80	30	100				1600			
	TF100-2AGD-S.14	DN100	40	160				1600			
	TF125-2AGD-S.14	DN125	40	250				1600			
	TF150-2AGD-S.14	DN150	40	350				1600			
	TF200-2AGD-S.14	DN200	40	520					1600		
	TF250-2AGD-S.14	DN250	40	700					1600		
	TF300-2AGD-S.15	DN300	100	1200						1600	
	TF350-2AGD-S.15	DN350	100	1800						1600	
	TF400-2AGD-S.15	DN400	100	2200						1600	
	TF450-2AGD-S.15	DN450	100	2600						1600	
TF500-2AGD-S.15	DN500	100	3200						1600		

PN25 Series 3-port



Series	TW600...	TW1000...	TW1001...	TW3000...	TW5000...	TW16000..
Actuator Rated Stroke	30mm	30mm	50mm	50mm	70mm	110mm
Nominal Output Force	600N	1000N	1000N	3000N	5000N	16000N
Icon						

Valve body	Type	DN [mm]	Valve Stroke [mm]	Max. flow coefficient Kvs [m ³ /h]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]	ΔP_s [kPa]
<p>PN25 3-port Water Valve (mixing) Medium Temp.: -25~130°C</p>	TF15-3VGD-S.12	DN15	20	4	1600					
	TF20-3VGD-S.12	DN20	20	6.3	1600					
	TF25-3VGD-S.12	DN25	20	10	1000	1600				
	TF32-3VGD-S.14	DN32	20	16			1000	1600		
	TF40-3VGD-S.14	DN40	20	25			700	1600		
	TF50-3VGD-S.14	DN50	20	40			500	1100		
	TF65-3VGD-S.14	DN65	20	63				900		
	TF80-3VGD-HS.14	DN80	30	100				550		
	TF100-3VGD-HS.14	DN100	40	160				350		
	TF125-3VGD-HS.14	DN125	40	250				240	350	
	TF150-3VGD-HS.14	DN150	40	350				150	250	
	TF200-3VGD-HS.14	DN200	40	520					150	
	TF250-3VGD-HS.14	DN250	40	700					100	
	TF300-3VGD-HS.15	DN300	100	1200						200
	TF350-3VGD-HS.15	DN350	100	1800						150
TF400-3VGD-HS.15	DN400	100	2200						120	
TF450-3VGD-HS.15	DN450	100	2600						100	
TF500-3VGD-HS.15	DN500	100	3200						80	
<p>PN25 3-port Water Valve (diverting) Medium Temp.: -25~130°C</p>	TF15-3VGD-S.12	DN15	20	4	800					
	TF20-3VGD-S.12	DN20	20	6.3	800					
	TF25-3VGD-S.12	DN25	20	10	500	800				
	TF32-3VGD-S.14	DN32	20	16			500	800		
	TF40-3VGD-S.14	DN40	20	25			350	800		
	TF50-3VGD-S.14	DN50	20	40			250	550		
	TF65-3VGD-S.14	DN65	20	63				450		
	TF80-3VGD-FS.14	DN80	30	100				550		
	TF100-3VGD-FS.14	DN100	40	160				350		
	TF125-3VGD-FS.14	DN125	40	250				240	350	
	TF150-3VGD-FS.14	DN150	40	350				150	250	
	TF200-3VGD-FS.14	DN200	40	520					150	
	TF250-3VGD-FS.14	DN250	40	700					100	
	TF300-3VGD-FS.15	DN300	100	1200						200
	TF350-3VGD-FS.15	DN350	100	1800						150
TF400-3VGD-FS.15	DN400	100	2200						120	
TF450-3VGD-FS.15	DN450	100	2600						100	
TF500-3VGD-FS.15	DN500	100	3200						80	

Note: The ΔP_s in bold type is default standard configuration!



PN25 Series 3-port-low noise



Series

TW3000...

TW5000...

Actuator Rated Stroke

50mm

70mm

Nominal Output Force

3000N

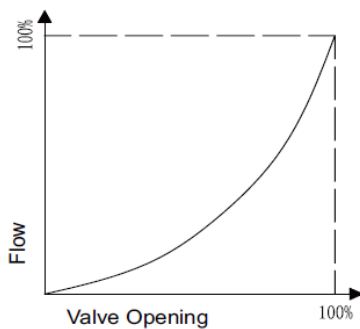
5000N

Icon

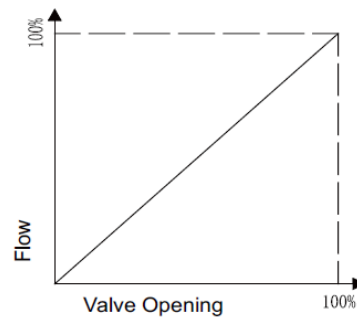


Valve body	Type	DN [mm]	Valve Stroke [mm]	Max. flow coefficient Kvs [m³/h]	ΔPs [kPa]	ΔPs [kPa]
<p>PN25 3-port (mixing) Medium Temp.: -25~130°C</p>	TF32-3VGD-S.14-D	DN32	20	16	1600	
	TF40-3VGD-S.14-D	DN40	20	25	1600	
	TF50-3VGD-S.14-D	DN50	20	40	1100	
	TF65-3VGD-S.14-D	DN65	20	63	900	
	TF80-3VGD-HS.14-D	DN80	30	100	550	
	TF100-3VGD-HS.14-D	DN100	40	160	350	
	TF125-3VGD-HS.14-D	DN125	40	250	240	350
	TF150-3VGD-HS.14-D	DN150	40	350	150	250
<p>3-port (diverting) Medium Temp.: -25~130°C</p>	TF200-3VGD-HS.14-D	DN200	40	520		150
	TF250-3VGD-HS.14-D	DN250	40	700		100
	TF32-3VGD-S.14-D	DN32	20	16	800	
	TF40-3VGD-S.14-D	DN40	20	25	800	
	TF50-3VGD-S.14-D	DN50	20	40	550	
	TF65-3VGD-S.14-D	DN65	20	63	450	
	TF80-3VGD-FS.14-D	DN80	30	100	550	
	TF100-3VGD-FS.14-D	DN100	40	160	350	
	TF125-3VGD-FS.14-D	DN125	40	250	240	350
	TF150-3VGD-FS.14-D	DN150	40	350	150	250
	TF200-3VGD-FS.14-D	DN200	40	520		150
	TF250-3VGD-FS.14-D	DN250	40	700		100

Flow Characteristics



A-AB Equal-percentage Flow Characteristic



B-AB Equal-linear Flow Characteristic

Relationship between Differential Pressure and Flow

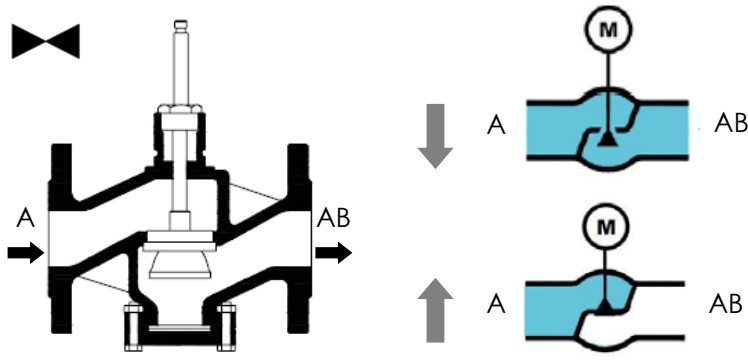
$$Kvs = \frac{V}{\sqrt{\frac{\Delta P}{100}}}$$

ΔP: Differential pressure when valve is full open (Unit: KPa)

V: Rating flow at the □P (Unit: m3/h)

Kvs: Nominal flow coefficient, which refers to the flow when medium (Density= 1g/cm3) goes through the full open control valve, whose □P is 100KvPa.

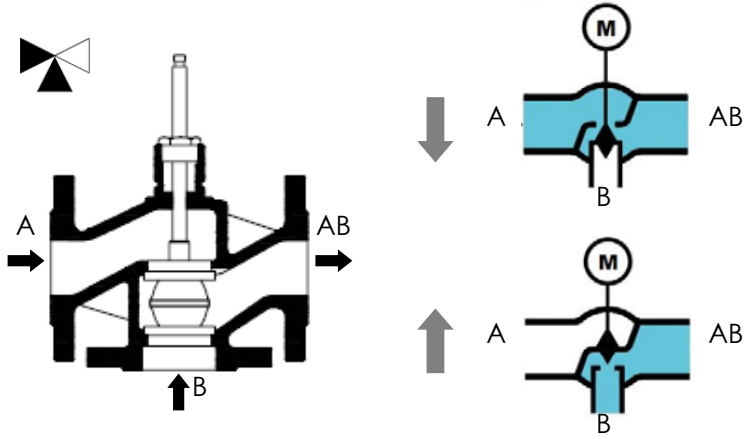




2-port

When the valve stem is at lower limit, the valve will be opened from A to AB.

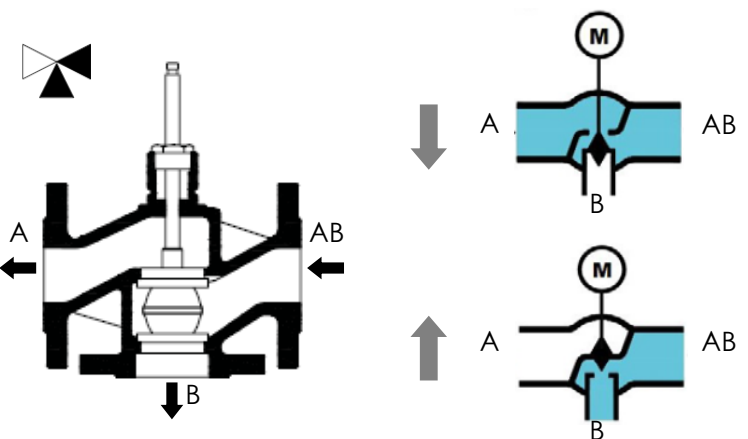
When the valve stem is at upper limit, the valve will be closed from A to AB.



3-port mixing

When actuator stem is at lower limit, the valve will be opened from A to AB and closed from B to AB.

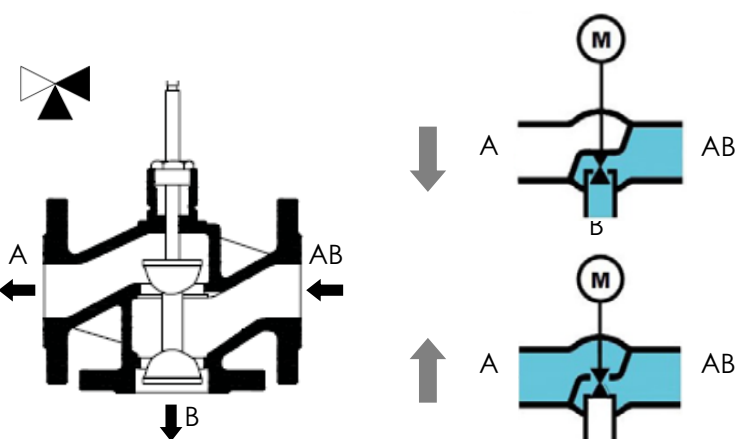
When actuator stem is at upper limit, the valve will be closed from A to AB and opened from B to AB.



3-port diverting DN15~DN65

When actuator stem is at lower limit, the valve will be opened from A to AB and closed from B to AB.

When actuator stem is at upper limit, the valve will be closed from A to AB and opened from B to AB.



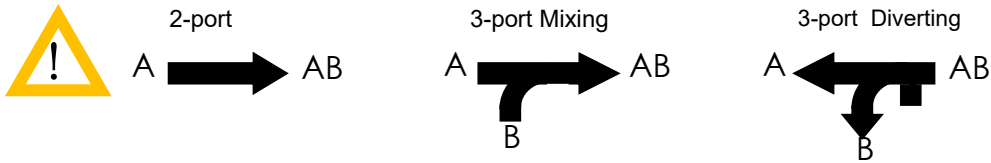
3-port diverting DN80~DN500

When actuator stem is at lower limit, the valve will be closed from A to AB and opened from B to AB.

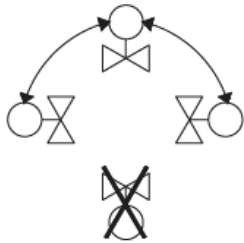
When actuator stem is at upper limit, the valve will be opened from A to AB and closed from B to AB.



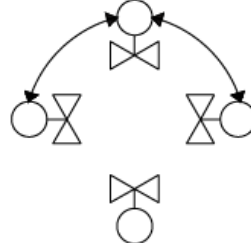
1. Valve can be installed on the water supply pipe or return water pipe (installed on the return water pipe can control the water flow more smoothly, meanwhile the return water temperature is lower which can extend the service time of valve).
2. Filter and check valve are recommended to be installed.
3. When the medium is steam, install draw off valve in the pipe can remove the condensed water, or it will affect the service time of valve.
4. Please note that the medium flow direction in valve should be consistent with the medium of pipeline



5. Please pay attention to the valve mounting orientation!



Medium is chilled/hot water
Downward installation is forbidden



Medium is steam water
Any installation position is OK

Connection with Actuator

You can complete the installation with the actuator's Allen wrench. It doesn't need further tools or any adjustment. The actuator can test stroke by itself.

Warning! Prohibit installing outdoors to avoid PCB damage due to the condensation and water. Rain cover (TRAIN-1) and heating belt (THOT-3) are necessary in case of outdoor installation.

- Connection with TW600/1000/1001/3000/5000...



1. Loosen the slider and clip, then put the actuator on the valve body and keep the two connecting faces coincident.

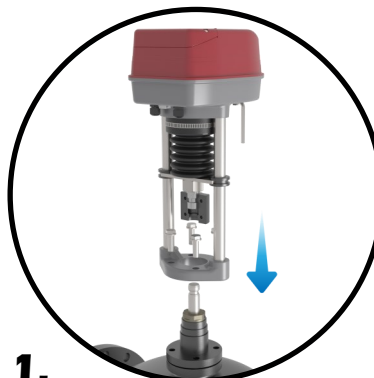


2. Place the slot into the actuator and tighten the two screws.



3. This is how the valve and actuator should look after correct assembly.

- Connection with TW16000...



1. Align actuator bracket with flange on valve body, tighten 4 mounting bolts.



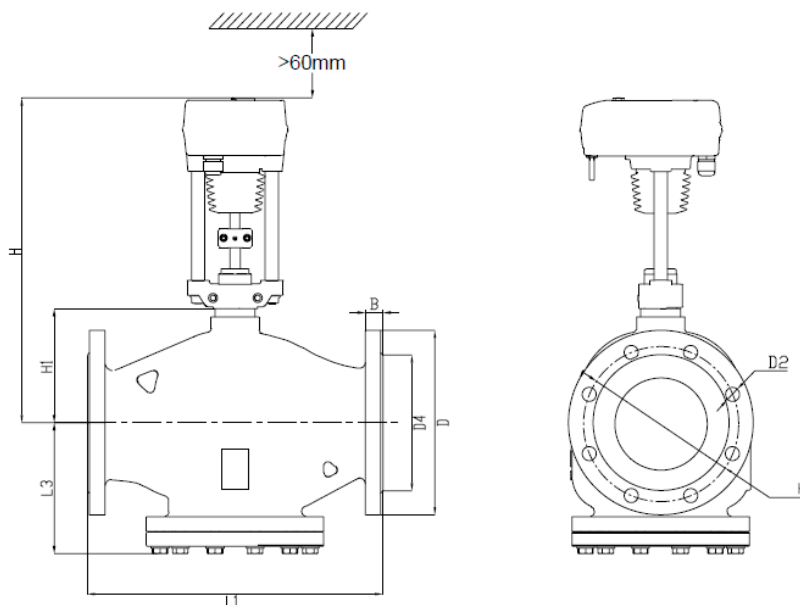
2. Make the main shaft contact with valve stem and make them on the same axis, then install 2 clips and tighten 4 bolts.



3. This is how the valve and actuator should look after correct assembly.



- 2-port

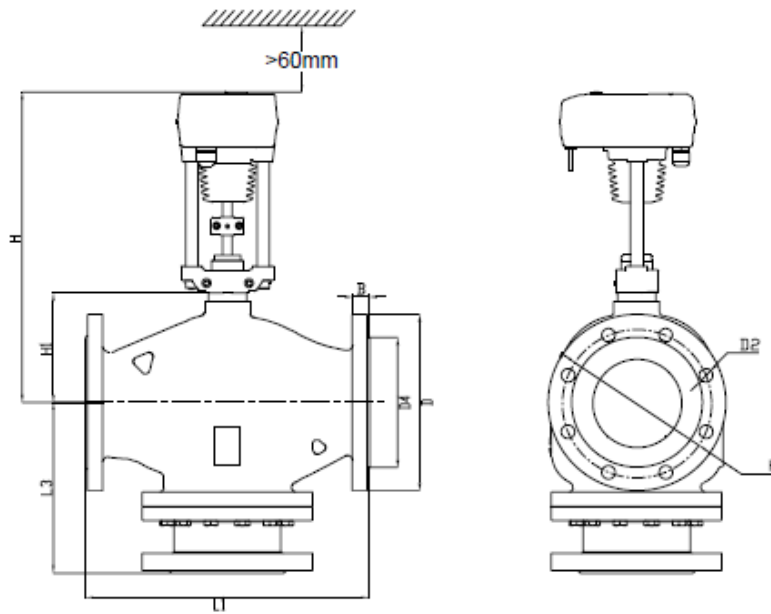


DN	B (mm)	D (mm)	D2 (mm)	D4 (mm)	K (mm)	L1 (mm)	L3 (mm)	H1 (mm)	净重 kg	H 600/1000N (mm)	H 3000N (mm)	H 5000N (mm)	H 16000N (mm)
DN15	14	95	4-14	46	65	130	70	41	3.5	296	326	/	/
DN20	16	105	4-14	56	75	150	70	46	4.5	301	331	/	/
DN25	16	115	4-14	65	85	160	75	48	4.5	303	333	/	/
DN32	18	140	4-19	76	100	180	80	59	7	314	344	/	/
DN40	18	150	4-19	84	110	200	82	50	8	305	335	/	/
DN50	20	165	4-19	99	125	230	98	60	11.5	315	315	/	/
DN65	20	185	4-19	118	145	290	112	90	18	365	375	/	/
DN80	22	200	8-19	132	160	310	130	120	25	395	405	/	/
DN100	23	220	8-19	156	180	350	150	136	38	/	421	/	/
DN125	24	250	8-19	184	210	400	175	157	52	/	442	/	/
DN150	25	285	8-23	211	240	480	200	171	70.5	/	456	/	/
DN200	26	340	12-23	266	295	500	229	185	111	/	470	490	/
DN250	31	405	12-28	319	355	600	260	205	167	/	490	510	/
DN300	28	460	12-28	370	410	700	322	358	266	/	/	663	941
DN350	36	520	16-28	429	470	788	402	438	464	/	/	743	1021
DN400	40	580	16-31	480	525	912	424	487	690	/	/	/	1070
DN450	45	640	20-31	548	585	980	481	487	822	/	/	/	1070
DN500	45	715	20-34	609	650	985	504	473	1024	/	/	/	1056

Remark: 600N/1000N/3000N/5000N actuators shall reserve at least 60mm installation space; 255mm installation space should be reserved for 16000N.



- 3-port

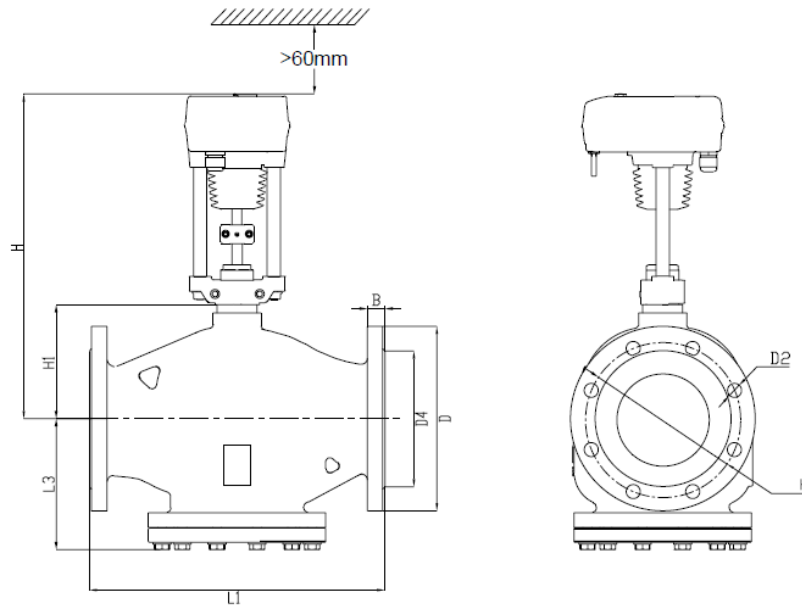


DN	B (mm)	D (mm)	D2 (mm)	D4 (mm)	K (mm)	L1 (mm)	L3 (mm)	H1 (mm)	N.W. kg	H 600/1000N (mm)	H 3000N (mm)	H 5000N (mm)	H 16000N (mm)
DN15	14	95	4-14	46	65	130	106	41	4	296	326	/	/
DN20	16	105	4-14	56	75	150	106	46	5	301	331	/	/
DN25	16	115	4-14	65	85	160	111	48	7	303	333	/	/
DN32	18	140	4-19	76	100	180	121	59	8.5	314	344	/	/
DN40	18	150	4-19	84	110	200	122	50	10.5	305	335	/	/
DN50	20	165	4-19	99	125	230	136	60	14	315	315	/	/
DN65	20	185	4-19	118	145	290	156	90	21	365	375	/	/
DN80	22	200	8-19	132	160	310	185	120	30	395	405	/	/
DN100	23	220	8-19	156	180	350	202	164	41	/	449	/	/
DN125	24	250	8-19	184	210	400	240	157	55.5	/	442	/	/
DN150	25	285	8-23	211	240	480	270	171	74.5	/	456	/	/
DN200	26	340	12-23	266	295	500	315	185	116	/	470	490	/
DN250	31	405	12-28	319	355	600	370	205	180	/	490	510	/
DN300	28	460	12-28	370	410	700	457	358	286	/	/	663	941
DN350	36	520	16-28	429	470	788	521	438	453	/	/	743	1021
DN400	40	580	16-31	480	525	912	578	487	652	/	/	/	1070
DN450	45	640	20-31	548	585	980	643	487	/	/	/	/	1070
DN500	45	715	20-34	609	650	985	663	473	/	/	/	/	1056

Remark: 600N/1000N/3000N/5000N actuators shall reserve at least 60mm installation space; 255mm installation space should be reserved for 16000N.



- 2-port

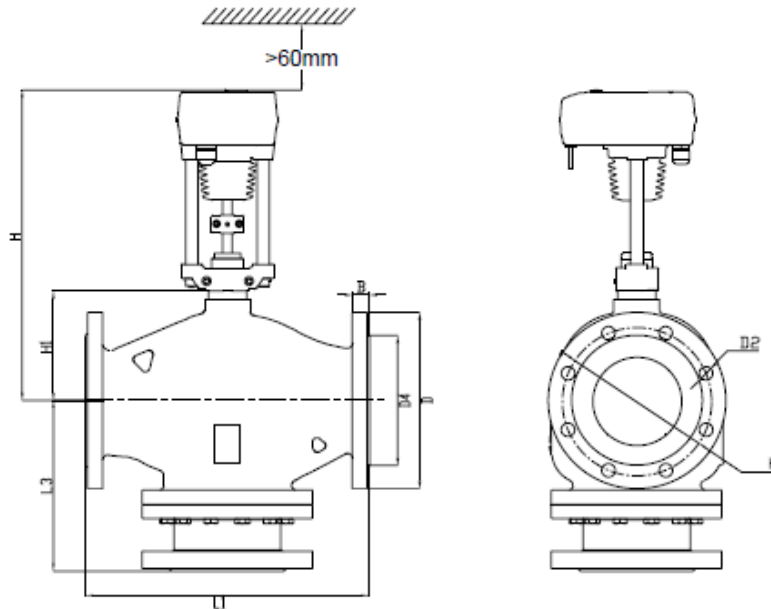


DN	B (mm)	D (mm)	D2 (mm)	D4 (mm)	K (mm)	L1 (mm)	L3 (mm)	H1 (mm)	N.W. kg	H 600/1000N (mm)	H 3000N (mm)	H 5000N (mm)	H 16000N (mm)
DN15	14	95	4-14	46	65	130	70	41	3.5	296	326	/	/
DN20	16	105	4-14	56	75	150	70	46	4.5	301	331	/	/
DN25	16	115	4-14	65	85	160	75	48	4.5	303	333	/	/
DN32	18	140	4-19	76	100	180	80	59	7	314	344	/	/
DN40	18	150	4-19	84	110	200	82	50	8	305	335	/	/
DN50	20	165	4-19	99	125	230	98	60	11.5	315	315	/	/
DN65	20	185	8-19	118	145	290	112	90	18	365	375	/	/
DN80	22	200	8-19	132	160	310	130	120	25	395	405	/	/
DN100	23	235	8-23	156	190	350	150	136	38	/	421	/	/
DN125	24	270	8-28	184	220	400	175	157	52	/	442	/	/
DN150	25	300	8-28	211	250	480	200	171	70.5	/	456	/	/
DN200	26	360	12-28	274	310	500	229	185	111	/	470	490	/
DN250	31	425	12-31	330	370	600	260	205	167	/	490	510	/
DN300	28	485	16-31	389	430	700	322	358	266	/	/	663	941
DN350	36	555	16-34	448	490	788	402	438	464	/	/	743	1021
DN400	40	620	16-37	503	550	912	424	487	690	/	/	/	1070
DN450	45	670	20-37	548	600	980	481	487	822	/	/	/	1070
DN500	48	730	20-37	609	660	985	504	473	1024	/	/	/	1056

Remark: 600N/1000N/3000N/5000N actuators shall reserve at least 60mm installation space; 255mm installation space should be reserved for 16000N.



• 3-port



DN	B (mm)	D (mm)	D2 (mm)	D4 (mm)	K (mm)	L1 (mm)	L3 (mm)	H1 (mm)	N.W. kg	H 600/1000N (mm)	H 3000N (mm)	H 5000N (mm)	H 16000N (mm)
DN15	14	95	4-14	46	65	130	106	41	4	296	326	/	/
DN20	16	105	4-14	56	75	150	106	46	5	301	331	/	/
DN25	16	115	4-14	65	85	160	111	48	7	303	333	/	/
DN32	18	140	4-19	76	100	180	121	59	8.5	314	344	/	/
DN40	18	150	4-19	84	110	200	122	50	10.5	305	335	/	/
DN50	20	165	4-19	99	125	230	136	60	14	315	315	/	/
DN65	20	185	8-19	118	145	290	156	90	21	365	375	/	/
DN80	22	200	8-19	132	160	310	185	120	30	395	405	/	/
DN100	23	235	8-23	156	190	350	202	164	41	/	449	/	/
DN125	24	270	8-28	184	220	400	240	157	55.5	/	442	/	/
DN150	25	300	8-28	211	250	480	270	171	74.5	/	456	/	/
DN200	26	360	12-28	274	310	500	315	185	116	/	470	490	/
DN250	31	425	12-31	330	370	600	370	205	180	/	490	510	/
DN300	28	485	16-31	389	430	700	457	358	286	/	/	663	941
DN350	36	555	16-34	448	490	788	521	438	453	/	/	743	1021
DN400	40	620	16-37	503	550	912	578	487	652	/	/	/	1070
DN450	45	670	20-37	548	600	980	643	487	/	/	/	/	1070
DN500	48	730	20-37	609	660	985	663	473	/	/	/	/	1056

Remark: 600N/1000N/3000N/5000N actuators shall reserve at least 60mm installation space; 255mm installation space should be reserved for 16000N.



• Functional data	
Nominal size	DN15-DN500
Nominal pressure	PN16/PN25
Flow characteristics 2-port 3-port	A-AB: equal-percentage A-AB: equal-percentage, B-AB: equal-linear
Rangeability	>100:1
Leakage rate 2-port water valve / steam valve 2-port high-temp. steam valve 3-port water valve	≤0.01% kvs ≤0.05% kvs A-AB: ≤0.01% kvs; B-AB: ≤0.02% kvs
Permissible medium Water valve (-25~130°C) Steam valve (2~180°C) High-temp. steam valve (2~250°Cde)	Chilled/hot water, glycol under 50% Saturated steam (<0.69MPa) Overheated steam/Heat transfer oil(≤250°C)
Connection standard	Flanged connection ISO7005-2

• Spare parts materials	
Valve body	Ductile Iron EN-GJS-450-10
Valve stem	Stainless steel
Valve core	Stainless steel
Sealing ring	PTFE

• Environmental condition	
Running	
Ambient temperature	-25~+65°C
Ambient humidity	≤95% RH, non-condensation
Storage	
Ambient temperature	-40~+65°C
Ambient humidity	≤95% RH, non-condensation

• Certificates	
CE Certificate	
PED directive	2014/68/EU
System Certification	
QMS	GB/T19001-2016 / ISO9001:2015
EMS	GB/T24001-2016 / ISO14001:2015
OHSAS	GB/T45001-2020 / ISO45001:2018

