

3-WAY CONTROL VALVE

(GXF21/22)



《Summary

“GXF21” series of 3-way control Valve is intended to adopt in a wide ranges of applications, air handling unit, steam and hot water systems.

NO	200A	250A	300A	350A
Stroke(mm)	50	65	75	80

《Technical Data

- Operating pressure : 10Kgf/cm² (GXF21) , 20Kgf/cm²(GXF22)
- Operating temp : - 25 ~ 130℃ (GXF21) , -25~180℃ (GXF22)
- Valve curve : Linear
- Leakage rate : 1) ≤0.01% of Kvs value Class IV
2) By-Pass : ≤0.1% of Kvs value
- End Connection : JIS 10K RF (GXF21) , JIS 20K RF (GXF22)

*Body material can be changed to FCD if the customer demands.

※ Close-off pressure

Model	DN		Flow		Stroke mm	Sv	Actuator ΔPmax(Kgf/cm ²)	
	mm	Inch	Kvs	Cv			GEA-100A(P)	GEA-250A(P)
GXF21.200	200	8"	594	696	50	50	2.4	6.1
GXF21.250	250	10"	906	1057	65	50	1.6	3.9
GXF21.300	300	12"	1608	1875	75	50	-	2.7
GXF21.350	350	14"	2509	2928	80	50	-	2.0

Sv : Range ability (VDI 2173)

* Kv=Cv/1.167

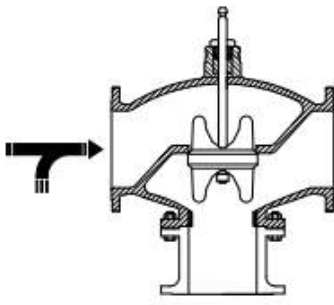
ΔPvmax in kgf/cm² = max, permissible differential pressure across closed valv

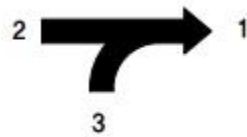
Materials

NO	1	2	3	4	5
Part Name	Body	Plug	Packing Box	Stem	Seat Ring
Material	SCPH2	SCS13	Teflon V-Ring	SUS304	FC

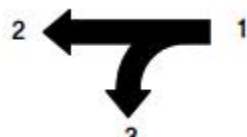


Mechanical Design





Mixing Type

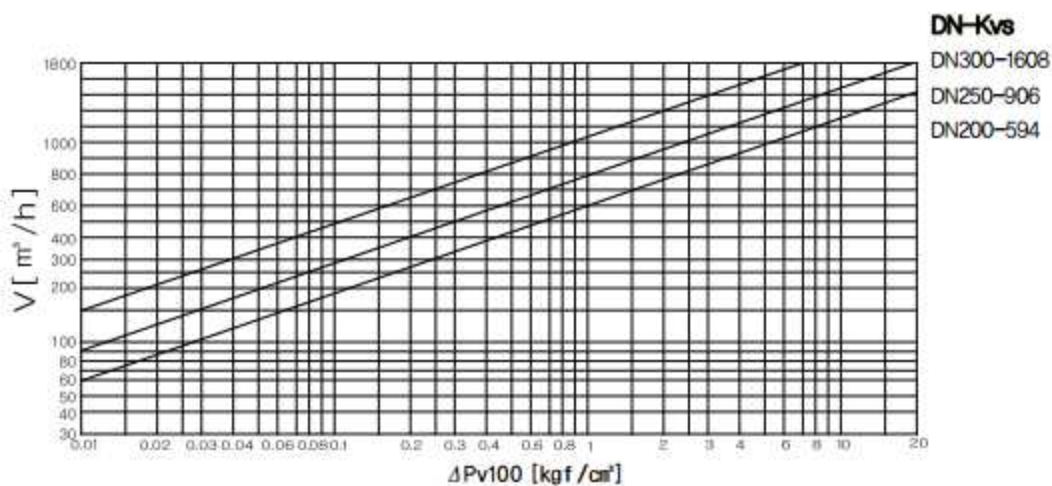


Diverting Type

- Plug is connected to the valve stem directly.
- A seat which is made of special material is fixed on the valve body.

Valve Selection

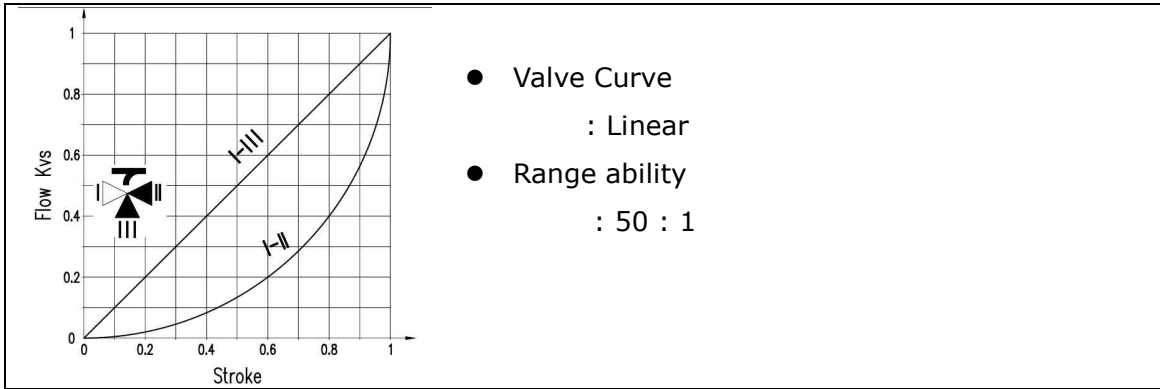
FLOW DAGRAM



V : WATER FLOW (m³/h)

ΔPv : VALVE PRESSURE DROP(Kgf/cm²)

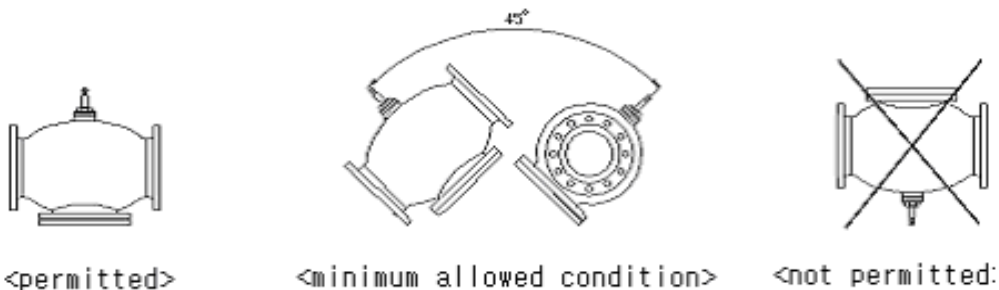
《Characteristic of Valve's Flow




《Mounting Notes

- For Heating and Steam, you may want to install the valve at the returning line which has lower temperature in order to extend life cycle of the packing.
- Using strainer all the time is suggested and install it at the fitting opening for better safety of operation

-Mounting positions



- The valve should be installed with the same direction of the Fluid flow

 in case of using as Mixing valve : from II, III to I

《Guidelines For An Examination

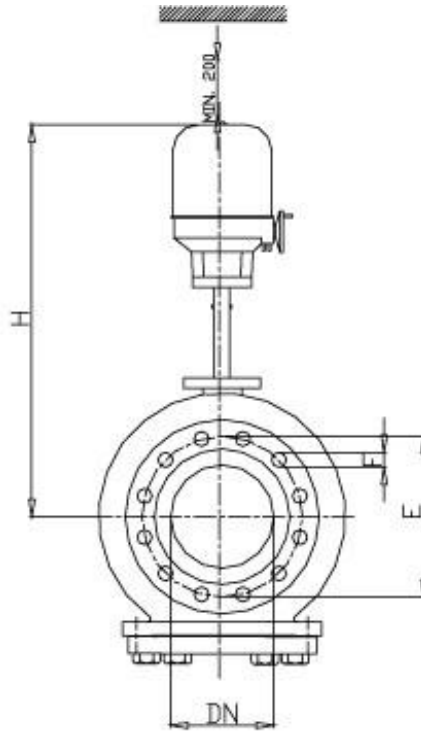
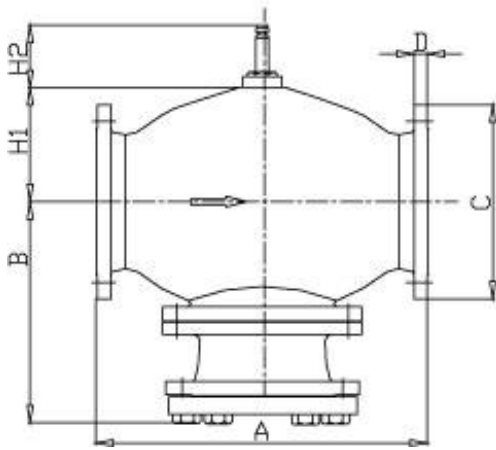
Trial test should be conducted only when Actuator is mounted on the valve correctly.

1. Downward valve spindle: Through-port: Open / By-pass : Close
2. Upward valve spindle : Through-port: Close / By-pass : Open

《Check

- In case of damaging of the valve's packing, There is no need disassembling the valve and actuator for replacement.
- Packing box can be used for $-25\sim+130^{\circ}\text{C}$ of Fluids.(Cold, Chilled and Hot water)

<Dimension



*JIS 10K RF, KS 10K RF

Model	DN	A	C	S	D	E	F	B	H2	H1	H	Weight Valve(Kg)
											GEA-100,250	
GXF21·200	200	580	330	20	26	290	23x12	245	115	225	820	170
GXF21·250	250	680	400	20	30	355	25x12	450	170	245	890	290
GXF21·300	300	800	445	20	32	400	25x16	498	170	265	930	388
GXF21.350	350	880	490	20	34	445	25x16	570	190	310	990	450

*JIS 20K RF, KS 20K RF

Model	DN	A	C	S	D	E	F	B	H2	H1	H	Weight Valve(Kg)
											GEA-100,250	
GXF22·200	200	580	350	20	34	305	25x12	-	115	225	820	187
GXF22·250	250	680	430	20	38	380	27x12	-	170	245	900	315
GXF22·300	300	800	480	20	40	430	27x16	-	170	285	940	408