

3- WAY DIVERTING VALVE (GXF-21 D)



《Summary

“GXF-D” series which are designed for 3-way Flange type valve can be assembled with GEA series Actuators. This can be used for Cooling, Heating and controlling HVAC facilities, or for Ice-bon thermal storage cooling system.

- Nominal Stroke
 - DN 80 : 20mm
 - DN 100~DN150 : 40mm
 - DN 200 : 50mm
 - DN 250 : 65mm

《Technical Data

- Operating pressure : 10Kgf/cm²
- Operating temp. : - 25 ~ 130℃
- Connection : JIS 10K RF
- Valve Curve : Liner
- Leakage rate : 1) Through-port : ≤0.01% of Kvs value Class IV(ANSI B16 104- 1976)
2) By-Pass : ≤0.1% of Kvs value

※ Close-off pressure

Model	DN		FLOW		Stroke mm	Sv	Actuator ΔPmax(Kgf/cm ²)				
	mm	Inch	Kvs	Cv			GEA-20	GEA-35	GEA-55	GEA-100	GEA-250
GXF-D80	80	3"	91	106	20	50	3.5	-	-	-	-
GXF-D100	100	4"	130	152	40	50	-	4.0	-	-	-
GXF-D125	125	5"	188	219	40	50	-	2.5	4.0	-	-
GXF-D150	150	6"	283	330	40	50	-	-	3.0	-	-
GXF-D200	200	8"	594	696	50	50	-	-	-	3.0	-
GXF-D250	250	10"	906	1057	65	50	-	-	-	-	4.0

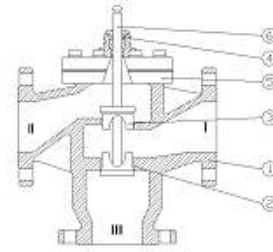
Sv : Range ability (VDI 2173)

* Kv=Cv/1.167

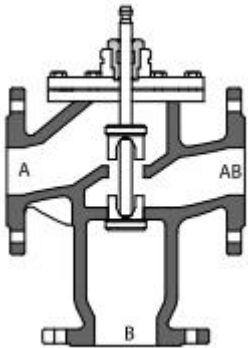
ΔPv max in kgf/cm² = max, permissible differential pressure across closed valve

Material

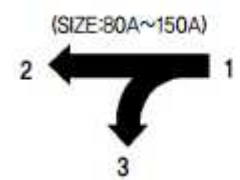
NO	1	2	3	4	5	6
Part Name	Body	Seat Ring	Plug	Packing	Bonnet	Stem
Material	FC20	FC20	SCS13	Viton O-Ring	FC20	SUS 304



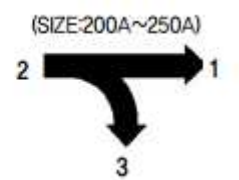
Mechanical Design



(SIZE:80A~150A)



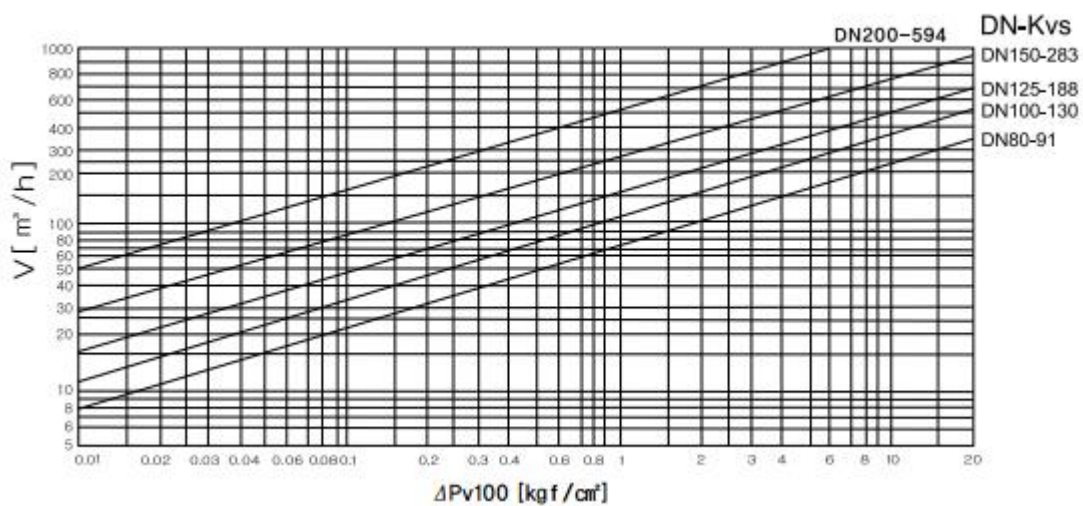
(SIZE:200A~250A)



- Apply
- : 80A to 150A (1 ->2,3)
- : 200A to 250A (2->1,3)

Valve Selection

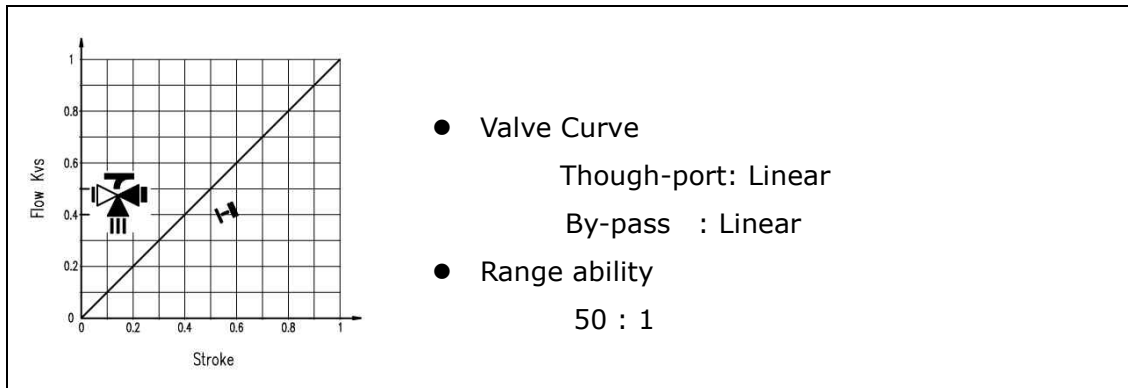
FLOW DAGRAM



V : WATER FLOW (m³/h)

ΔPv : VALVE PRESSURE DROP(Kgf/cm²)

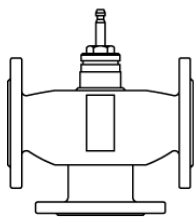
《Characteristic of Valve's Flow



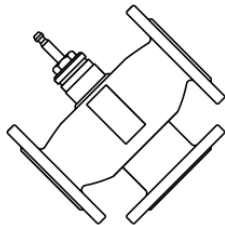
《Mounting Notes

- 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

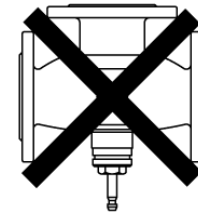
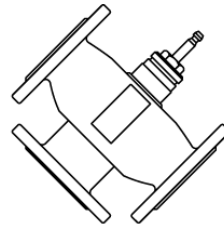
-Mounting positions



(Permitted)



(Minimum Allowed condition)



(Not Permitted)

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



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

《Guidelines For An Examination

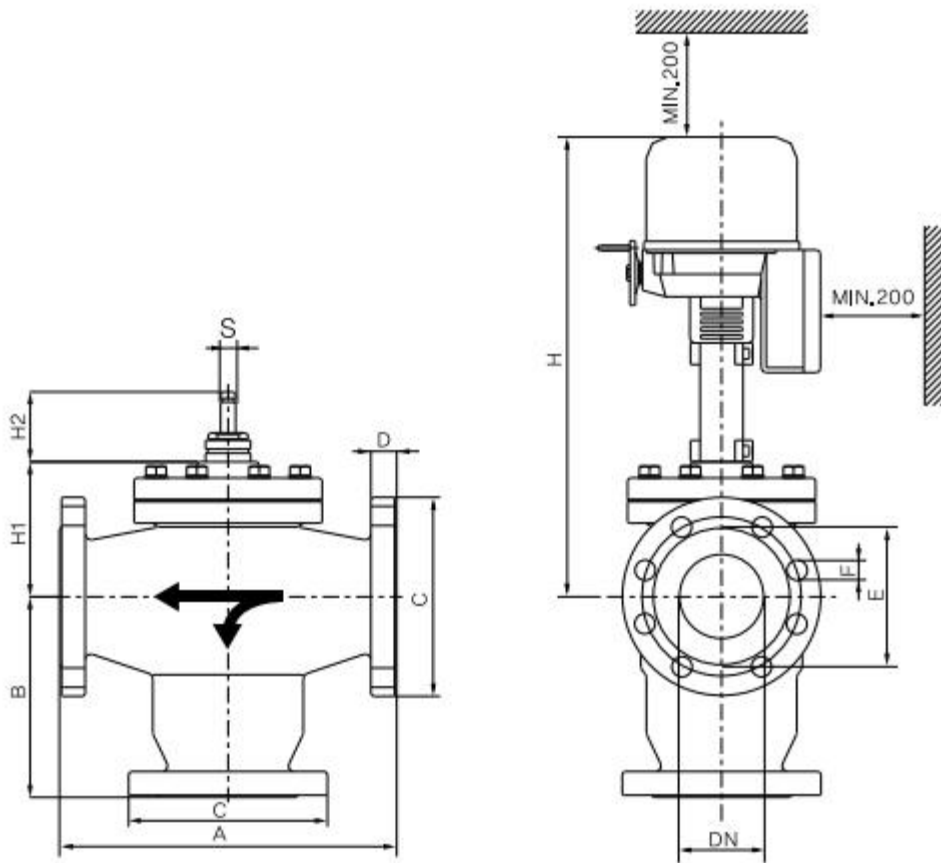
Trial test should be conducted only when Actuator is mounted on the valve correctly.

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

《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~+130°C of Fluids.(Cold, Chilled and Hot water)

Dimension



Model	DN	A	C	S	D	E	F	B	H2	H1	H					Weight Valve (Kg)
											GEA-20	GEA-35	GEA-55	GEA-100	GEA-250	
GXF-D80	80	310	185	14	24	150	19x8	185	65	120	395	420	-	-	-	32
GXF-D100	100	350	210	14	26	175	19x8	230	65	150	-	430	660	-	-	45
GXF-D125	125	400	250	14	26	210	23x8	275	65	175	-	440	685	-	-	62
GXF-D150	150	485	280	14	28	240	23x8	290	65	185	-	455	695	-	-	74
GXF-D200	150	595	330	20	28	265	23x12	360	117	260	-	-	-	813	-	125
GXF-D250	250	680	400	20	30	325	25x12	420	170	-	-	-	-	-	890	230