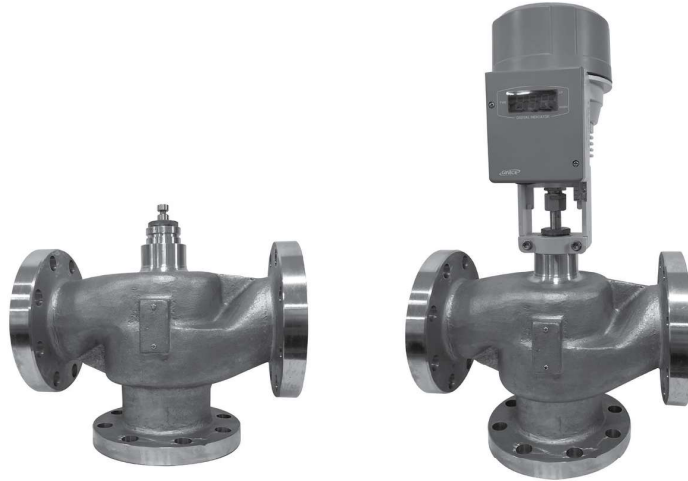




## 10-11

### 3-way stainless steel valve GXF-S Series (SUS 304)



#### Summary

GXF-S is 3-way stainless steel valve in flange connection type and is for heating&cooling and HVAC, Ice thermal storage system with GEA Series assembled. To control proportionally and ON-OFF, it can be assembled with electrically digital valve actuator.

Nominal stroke : DN 15 ~ DN 80 - 20mm

DN 100 ~ 150 - 40mm

DN 200 - 50mm

DN 250 - 60mm

- For diverting type, ask it to manufacturer

#### Technical Data

- Operation pressure : 10Kgf/cm<sup>2</sup>(10bar)
- Applicable Temp. : DIN4747 / DIN3158 at -25°C ~ 130°C
- Linear type
- Leakage 1) Through port : ≤ 0.01% of Kvs value Class IV (ANSI B 16.104-1976)  
2) By-pass : ≤ 0.5% of Kvs value
- Flange connection : JIS 10K RF(JIS B2220)

※ Close-off pressure

Model	DN	Flow coefficient		Stroke	Sv	Actuator ΔPmax (kgf/cm <sup>2</sup> )				
	mm	Kv	Cv	mm		GEA-20A(PD)	GEA-35A(PD)	GEA-55A(PD)	GEA-100A(PD)	GEA-250A(P)
GXF-S 20	20	5.6	6.5	20	50	8	-	-	-	-
GXF-S 25	25	10.6	12.4	20	50	8	-	-	-	-
GXF-S 32	32	16.4	19.1	20	50	8	-	-	-	-
GXF-S 40	40	25.4	29.6	20	50	8	-	-	-	-
GXF-S 50	50	38.8	45.3	20	50	6	-	-	-	-
GXF-S 65	65	64.2	74.9	20	50	4	-	-	-	-
GXF-S 80	80	90.5	105.6	20	50	3	-	-	-	-
GXF-S 100	100	130.2	151.9	40	50	-	3.4	-	-	-
GXF-S 125	125	188.0	219.4	40	50	-	-	3.4	-	-
GXF-S 150	150	283.0	330.3	40	50	-	-	2	-	-
GXF-S 200	200	594.0	696.0	50	50	-	-	-	2.4	6.1
GXF-S 250	250	906.0	1057	60	50	-	-	-	-	3.9

Sv : Rangeability (VDI 2173)

ΔPV100 : Maximum allowable pressure difference of valve faces in full opening position with installation highly loaded

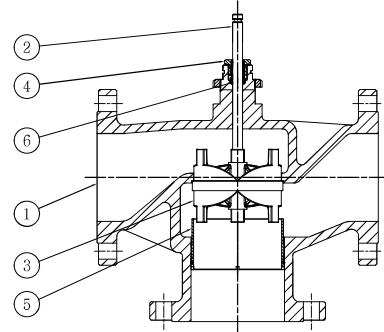
ΔPmax : Maximum allowable pressure difference of actuator not to leak fluid in closing position(close-off pressure)

Make sure to indicate valve Model in case of assembling with GEA-35PD(A) or GEA-55P(A) in order-sheet

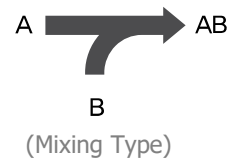
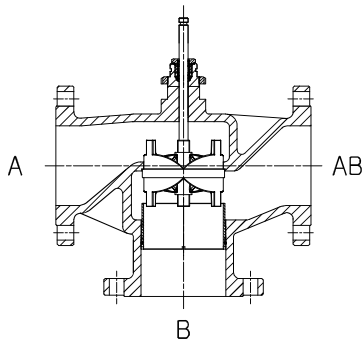
\*Kv=Cv/1.167

## Materials

No	1	2	3	4	5	6
Part Name	Body	Stem	Disc	Packing Bolt	Seat Ring	Packing
Material	SCS13 (SUS304)	SUS304	SUS304	BS	SUS304	VITON



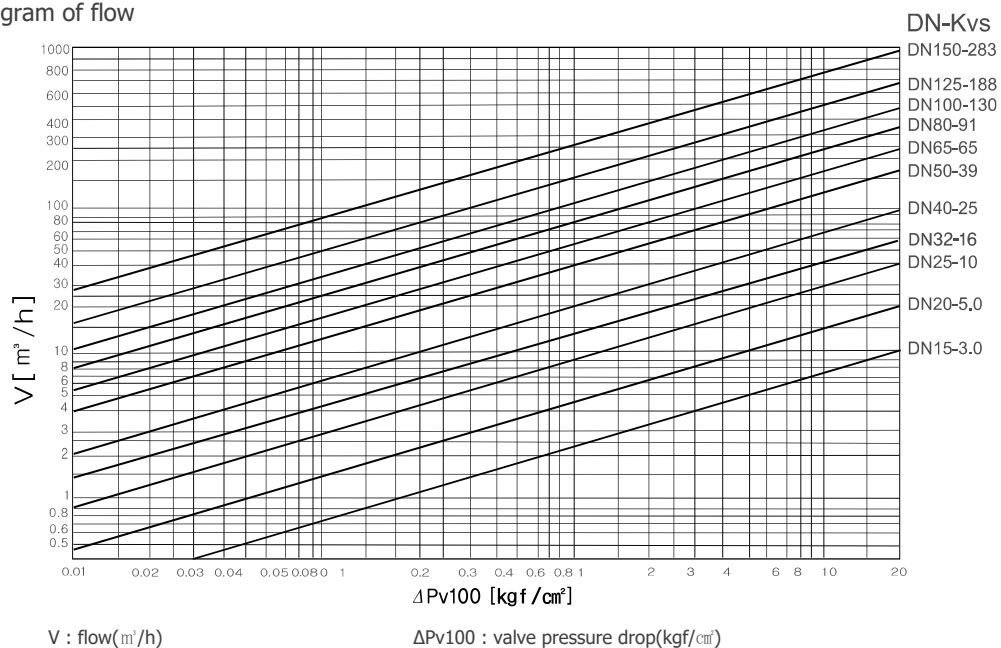
## Mechanical design



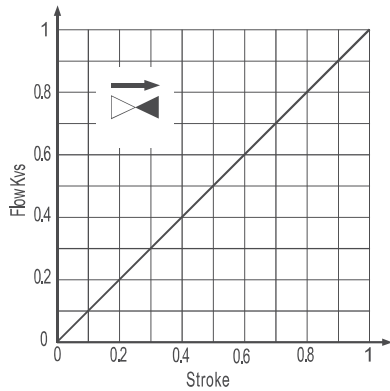
- ▶ Plug direct-coupled with valve stem(shaft)
- ▶ For Diverting type, ask it to manufacturer

## Valve selection

### ▶ Diagram of flow



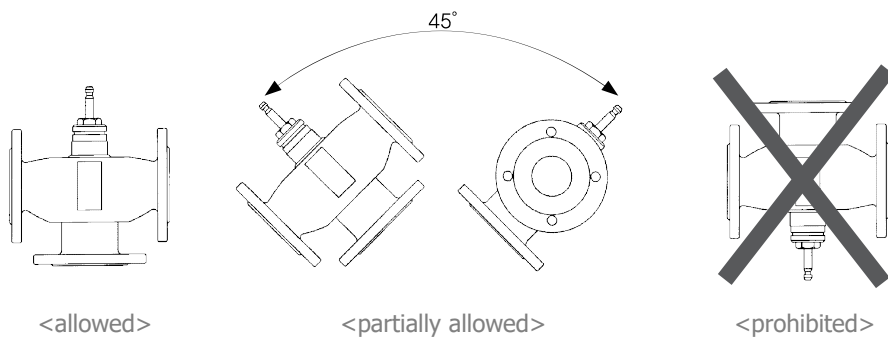
## Valve flows



- 밸브 흐름 특성  
등비율 Linear
- 유량조절비 (Rangeability) - 50 : 1

## Mounting notes

- Strainer installation recommended for higher safety rate of valve function



- Match the flow direction with marked direction( ➡ ) on valve body

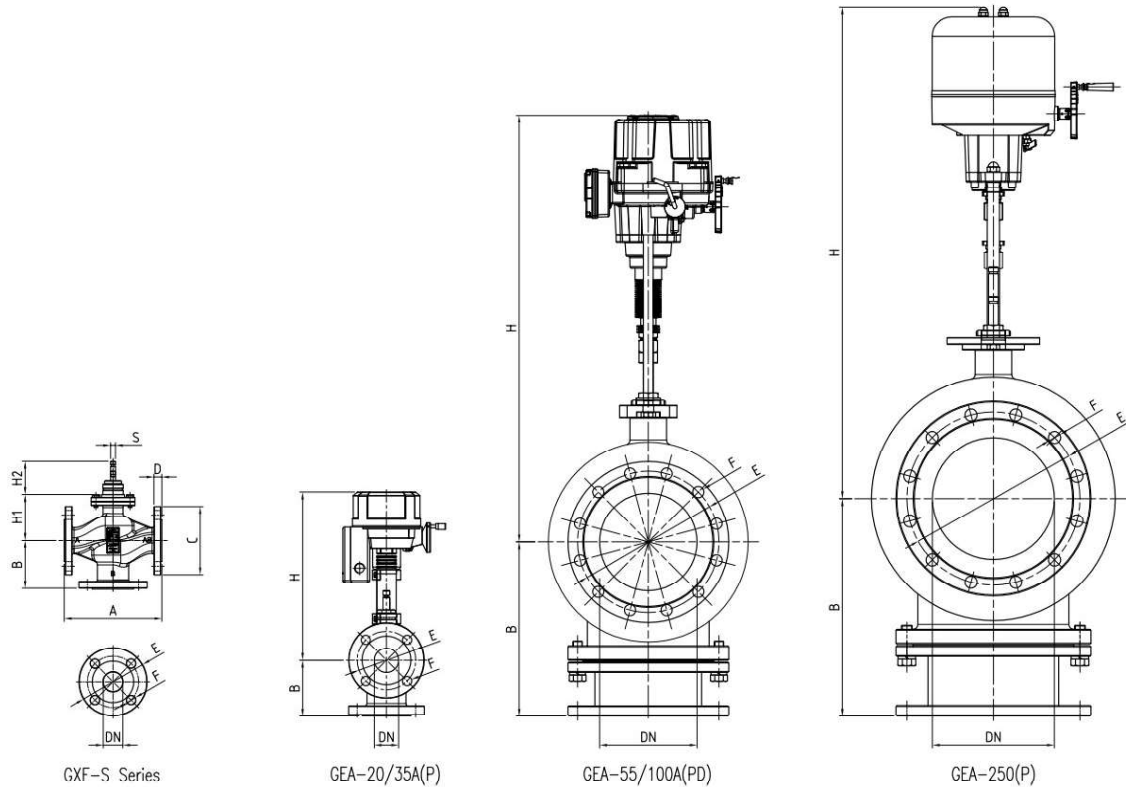
## Guides for inspection

- Inspect the valve in the status of right mounting of actuator
1. valve shaft(spin) downward : open in Through-port, close in By-pass
  2. valve shaft(spin) upward : close in Through-port, open in By-pass

## Tips

- Valve packing replacement without disassembling in case of damage
- Packing box applicable for -25 ~ 130°C(hot and cold water)

## Dimensions



MODEL	DN	A	C	S	D	E	F	B	H1	H2	H					Weight Valve(Kg)
											GEA-20	GEA-35	GEA-55	GEA-100	GEA-250	
GXF-S 20	20	150	ø100	ø10	14	ø75	4-ø15	80	77	67.5	344	-	-	-	-	3.6
GXF-S 25	25	160	ø125	ø10	14	ø90	4-ø19	95	90	67.5	357	-	-	-	-	4.8
GXF-S 32	32	200	ø135	ø10	16	ø100	4-ø19	105	90	67.5	357	-	-	-	-	5.5
GXF-S 40	40	200	ø140	ø10	16	ø105	4-ø19	100	95	67.5	362	-	-	-	-	8
GXF-S 50	50	230	ø155	ø14	21	ø120	4-ø19	114	75.5	67.5	342.5	-	-	-	-	10.2
GXF-S 65	65	290	ø175	ø14	24	ø140	4-ø19	152	82.5	67.5	349.5	-	-	-	-	13.5
GXF-S 80	80	310	ø185	ø14	24	ø150	8-ø19	157	80.5	67.5	347.5	-	-	-	-	18.3
GXF-S 100	100	350	ø210	ø14	24	ø175	8-ø19	175	122.5	92.5	-	415.5	717.5	-	-	25.9
GXF-S 125	125	400	ø250	ø14	27	ø210	8-ø23	205	139.5	92.5	-	-	734.5	-	-	25.9
GXF-S 150	150	480	ø280	ø14	28	ø240	8-ø23	245	154.5	92.5	-	-	749.5	-	-	57.4
GXF-S 200	200	580	ø330	ø20	32	ø290	12-ø23	357	255	170	-	-	-	875	869	170
GXF-S 250	250	685	ø400	ø20	32	ø355	12-ø25	446	305	170	-	-	-	925	919	250

Units : mm  
Specifications to be changed upon the production environmen