

2-WAY CONTROL VALVE (GVF22 Series)



(15A-40A)



(50A-150A)

《Summary

"GVF21" series valve is used in wide filed for control cold/hot water, steam and air.

The body and the seat are made of cast iron.

This valve can be assembled with GEA series for Heating, Cooling, ventilating and controlling the BAS.

- Stroke
 - DN15 ~ DN50 : 20mm
 - DN65 ~ DN150 : 40mm

《Application

- Hot water: Max. 180°C
- Chilled water : -25°C max. in closed circuit only Water with following additives
 - Hydrazing, Phosphate, for frost protection
 - Glycol, max. 50%, for frost protection
 - Saturated steam, superheated steam 10bar. abs/max. 180 °C

《Technical Data

- Operating pressure : 20Kgf/cm²
- Operating temp : - 25 ~ 180℃, DIN 4747 / DIN 3158
- Valve curve : Linear
- Leakage rate : ≤0.01% of Kvs value Class IV(ANSI B 16.104)
- End Connection : JIS 20K RF Type
- Maximum Pressure : Max. 20bar (120℃ ~ 180℃)

※ Close-off pressure

Model	DN		FLOW		Stroke mm	Sv	Actuator ΔPmax(Kgf/cm ²)			
	mm	Inch	Kv	Cv			GEA- 20A(P)	GEA- 35A(P)	GEA- 55A(P)	GEA- 100A(P)
GVF22·15	15	1/2"	3	3.5	20	50	20	-	-	-
GVF22·20	20	3/4"	5	5.8	20	50	20	-	-	-
GVF22·25	25	1"	10	11.7	20	50	20	-	-	-
GVF22·32	32	1 1/4"	16	18.7	20	50	16	-	-	-
GVF22·40	40	1 1/2"	25	29	20	50	10	-	-	-
GVF22·50	50	2"	39	45	20	50	6	-	-	-
GVF22·65	65	2 1/2"	65	75.8	40	50	-	7.0	-	-
GVF22·80	80	3"	91	106	40	50	-	4.6	-	-
GVF22·100	100	4"	130	152	40	50	-	3.0	4.6	-
GVF22·125	120	5"	188	219	40	50	-	1.9	3.0	-
GVF22·150	150	6"	283	330	40	50	-	-	2.0	3.7

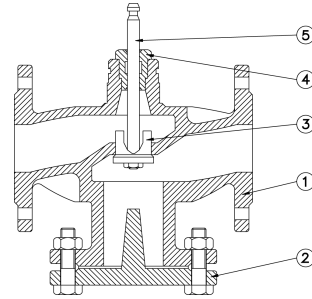
Sv : Rangeability (VDI 2173)

* Kv=Cv/1.167

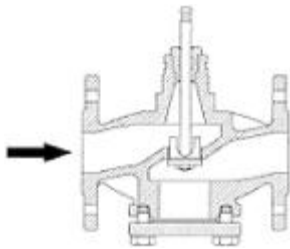
ΔPvmax in kgf/cm² = max, permissible differential pressure across closed valve

Materials

NO	1	2	3	4	5	6
Part Name	Body	Cover	Seat Ring	Plug	Packing Box	Stem
Material	FCD45	FCD45	SCS13	SCS13	VITON, O-ring.	SUS304



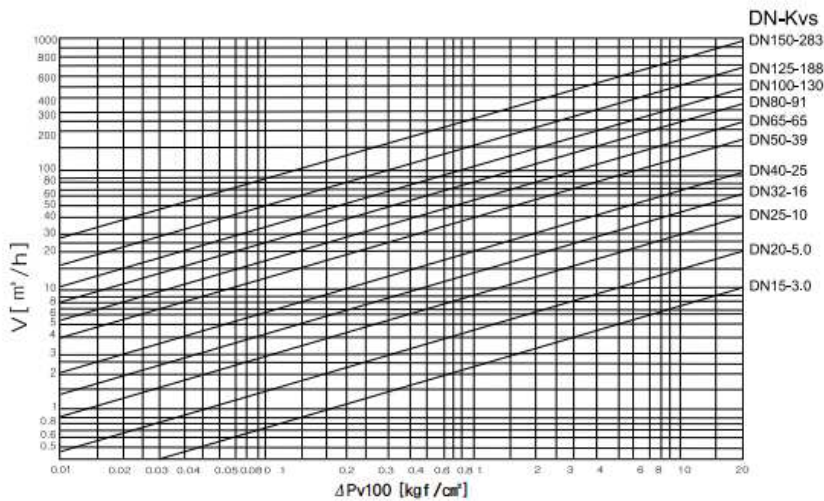
Mechanical Data



- Electric heating component is needed when the fluid is below 0°C in order to protect the stem from frozen.
- Plug is connected to the valve stem directly.
- A seat which is made of special material is fixed on the valve body.

Valve Selection

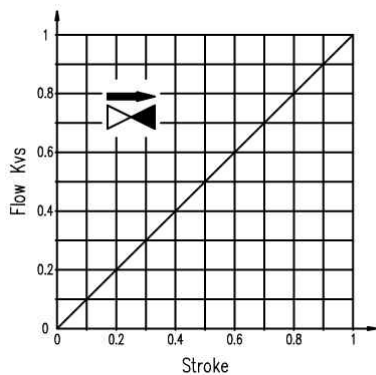
► FLOW DIAGRAM



● v : Water Flow(m^3/h)

● ΔP_v : Valve Pressure Drop(Kgf/cm^2)

《Characteristic of Valve's Flow

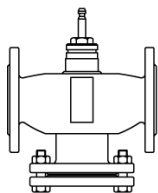


- Valve Curve
: Linear
- Range ability
: -50 : 1

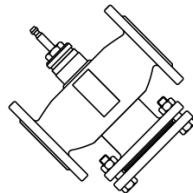
《Mounting Notes

- 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 it at the fitting opening for better safety of operation

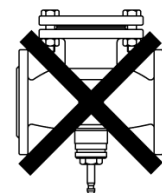
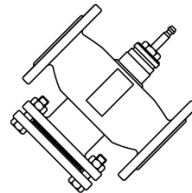
- Mounting positions



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<Minimum allowed condition>



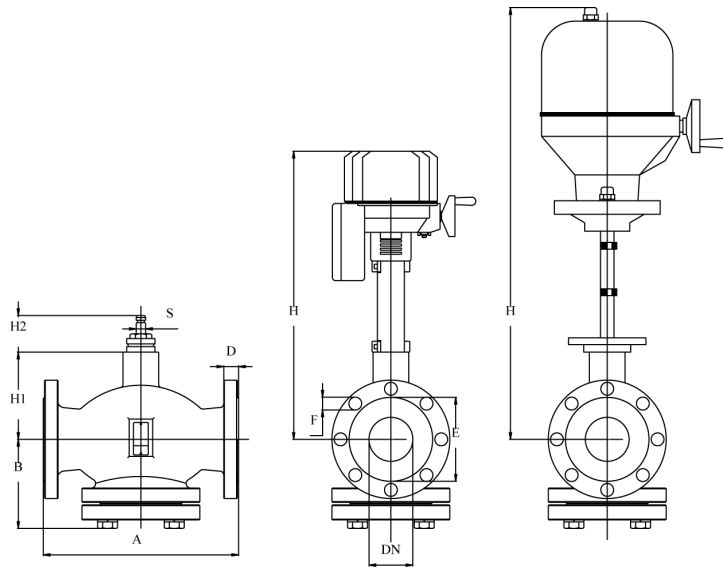
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《Guidelines For An Examination

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

1. spindle moves down : valve open
2. spindle moves up : valve close

■ Dimension



GEA-20,30A[P]

GEA-55A[P]

Model	DN	A	C	S	D	E	F	B	H2	H1	H			Weight Valve(Kg)
											GEA-20	GEA-35	GEA-55	
GVF22-15	15	130	95	10	16	70	15x4	69	67.5	75	350	-	-	4.7
GVF22-20	20	150	100	10	18	75	15x4	75	67.5	80	355	-	-	5.5
GVF22-25	25	160	125	10	20	90	19x4	75	67.5	77	350	-	-	7.3
GVF22-32	32	200	135	10	20	100	19x4	97.5	67.5	74	345	-	-	10
GVF22-40	40	200	140	10	22	105	19x4	97.5	67.5	74	345	-	-	10.3
GVF22-50	50	230	155	14	22	120	19x8	122	67.5	107	378	-	-	18.5
GVF22-65	65	290	175	14	24	140	19x8	132	87.5	131	-	429	651	27.0
GVF22-80	80	310	200	14	26	160	23x8	156	87.5	140	-	438	660	36.5
GVF22-100	100	350	225	14	28	185	23x8	189	87.5	152	-	450	672	50.0
GVF22-125	125	400	270	14	30	225	23x8	190	87.5	184	-	482	704	67.5
GVF22-150	150	485	305	14	32	260	25x12	217	87.5	171	-	469	691	90.0

