

10-9

2-way stainless steel control valve GVF-S Series (SUS 316)



Summary

GVF-S Series is 2-way Globe valve in stainless steel with flange connection to be assembled with GEA Series. It is for manufacturing industry of paper, dyeing, acid, chemical fiber, fertilizer and austenitic stainless steel valve for food, sauna, off-shore facilities. Electric digital actuator can be mounted to use.

- Nominal stroke : DN 15 ~ DN 50 - 20mm
DN 65 ~ DN 150 - 40mm
DN 200, DN 250 - 60mm

Technical Data

- Operating pressure : JIS 10Kgf/cm²
- Applicable fluid and temp. : DIN4747 / DIN3158 at -25°C ~ 150°C
(Replace Packing above 100°C)
- Linear type
- Leakage : ≤ 0.01% of Kvs value Class IV (ANSI B 16.104)
- End connection : JIS 10K RF Type(JIS B2220)

※ Close-off pressure

Model	DN mm	Flow coefficient		Stroke mm	Sv	ΔPv	Actuator ΔPmax (kgf/cm ²)				
		Kv	Cv				GEA-20A(PD)	GEA-35A(PD)	GEA-55A(PD)	GEA-100A(PD)	GEA-250A(P)
GVF-S 15	15	3.1	3.6	20	50	10	10	-	-	-	-
GVF-S 20	20	5.6	6.5	20	50	10	10	-	-	-	-
GVF-S 25	25	10.6	12.4	20	50	10	10	-	-	-	-
GVF-S 40	40	25.4	29.6	20	50	10	10	-	-	-	-
GVF-S 50	50	38.8	45.3	20	50	10	8	-	-	-	-
GVF-S 65	65	64.2	74.9	40	50	5	-	8.1	-	-	-
GVF-S 80	80	90.5	105.6	40	50	4	-	5.4	-	-	-
GVF-S 100	100	130.2	151.9	40	50	4	-	3.4	-	-	-
GVF-S 125	125	188.0	219.4	40	50	4	-	-	3.4	-	-
GVF-S 150	150	283.0	330.3	40	50	3.5	-	-	2.4	-	-
GVF-S 200	200	594.0	696.0	60	50	3	-	-	-	2.4	6.1
GVF-S 250	250	906.0	1057	60	50	3	-	-	-	-	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)

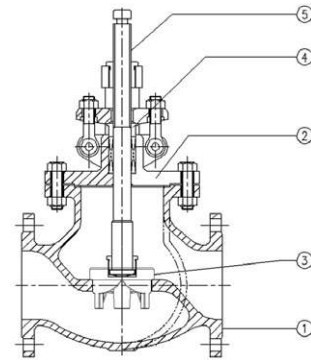
Make sure to indicate valve Model in case of assembling valve of stroke 20mm and GEA035A(PD) or GEA-55P(A) in order-sheet

*Kv=Cv/1,167

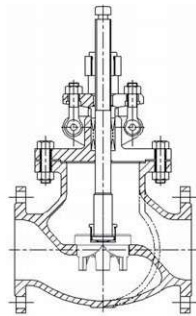
※ Note : Cylinder balancing valve to be applied for over Max. 3bar of valve pressure difference in 50A

Materials

No	1	2	3	4	5
Part Name	Body	Bonnet	Disc	Gland Packing (GASKET)	Stem
Material	SCS14 (CF8M) SUS316	SCS14 (CF8M) SUS316	SCS14 (SUS316)	PTFE	SCS14 (SUS316)



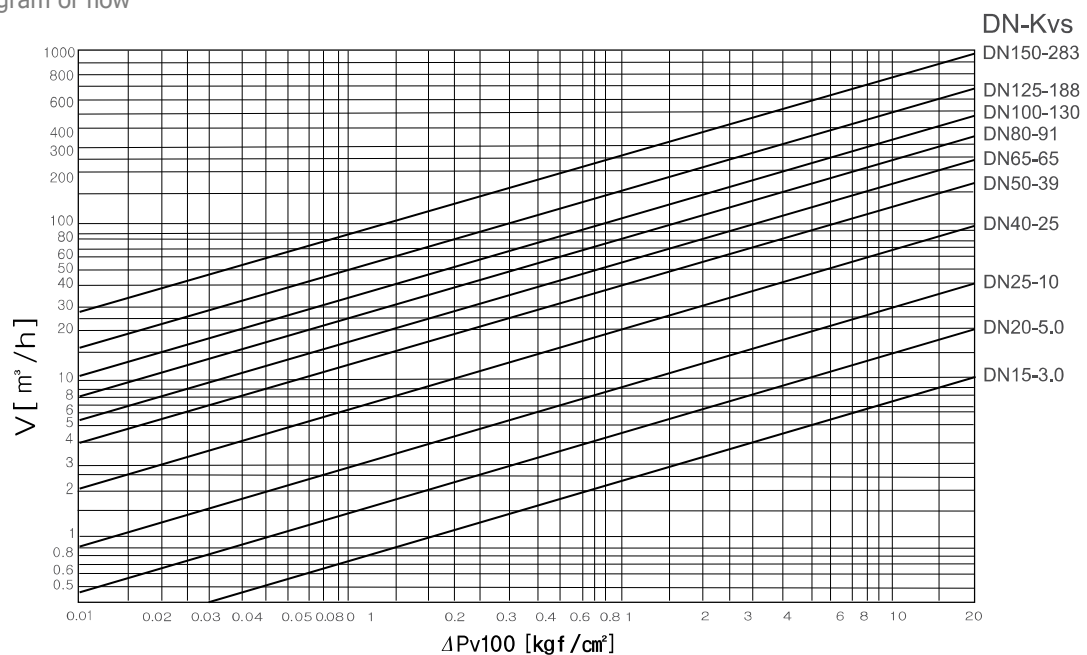
Mechanical design



- Plug direct-coupled with valve stem
- Seat with SS316 material attached to valve body

Valve selection

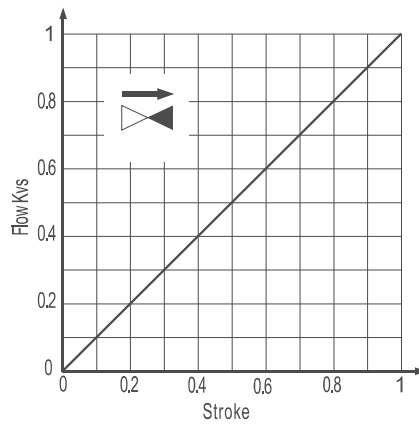
► Diagram of flow



V : flow(m³/h)

ΔP_{v100} : valve pressure drop(kgf/cm²)

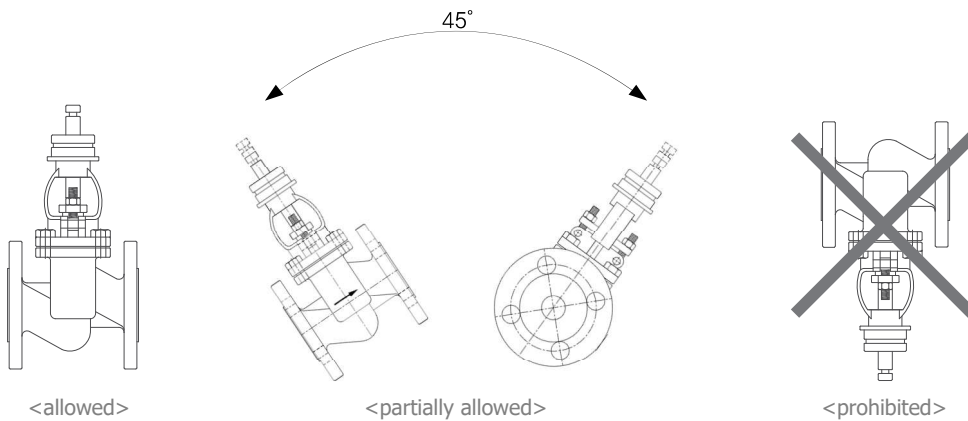
Valve flows



- Flow control of valve
- Linear
- Proportion of flow control - 50:1 (Rangeability)

Mounting notes

- Strainer installation recommended for higher safety rate of valve function



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

Guide for inspection

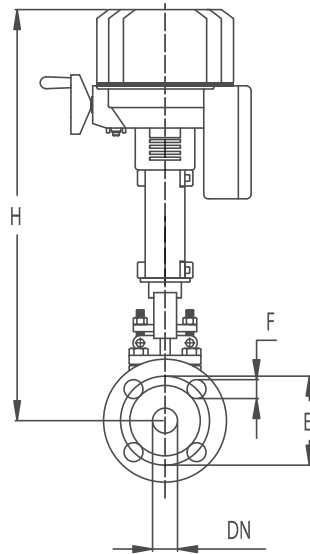
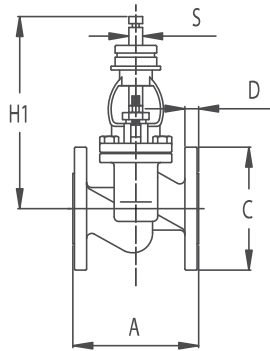
Inspect the valve in the status of right mounting of actuator

1. Close position with valve shaft upward
2. Open position with valve shaft downward

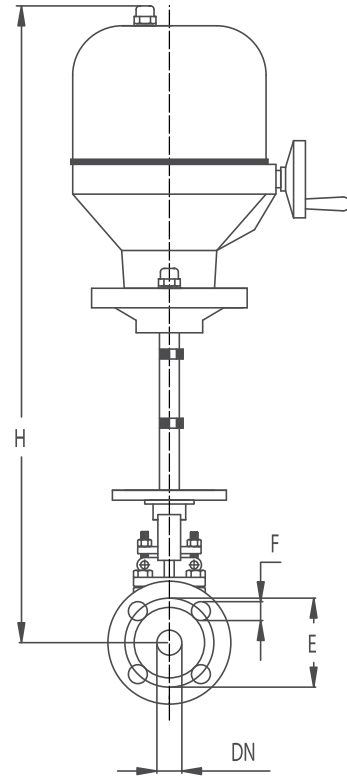
Tips

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

Shape Dimension



GEA-20, 35A(PD)



GEA-55, 100A(PD), 250A(P)

Model	DN	A	C	S	D	E	F	Bolt Size	H1	H					Weight Valve(kg)
										GEA-20	GEA-35	GEA-55	GEA-100	GEA-250	
GVF-S15	15	108	95	14	12	70	15×4	M12	168	430	—	—	—	—	3.0
GVF-S20	20	117	100	14	14	75	15×4	M12	175	438	—	—	—	—	3.6
GVF-S25	25	127	125	14	14	90	19×4	M16	190	450	—	—	—	—	4.8
GVF-S40	40	161	140	14	16	105	19×4	M16	200	460	—	—	—	—	8.0
GVF-S50	50	200	155	14	16	120	19×4	M16	230	485	—	—	—	—	10.2
GVF-S65	65	212	175	14	18	140	19×4	M16	243	—	540	—	—	—	13.5
GVF-S80	80	241	185	14	18	150	19×8	M16	286	—	570	—	—	—	18.3
GVF-S100	100	292	210	14	18	175	19×8	M16	325	—	580	—	—	—	25.9
GVF-S125	125	356	250	14	20	210	23×8	M20	380	—	—	880	—	—	43.5
GVF-S150	150	406	280	14	22	240	23×8	M20	445	—	—	900	—	—	57.4
GVF-S200	200	495	330	20	22	290	23×12	M20	545	—	—	—	1020	—	170
GVF-S250	250	622	400	20	24	355	25×12	M22	650	—	—	—	—	1050	250