

2-WAY CONTROL VALVE

(GVS21 Series)



Summary

"GVS21" series valve is used in wide field for control cold/hot water, steam and air. The body and the seat are made of bronze.

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

Technical Data

- Operating pressure : 16Kgf/cm²
- Operating temp : - 25 ~ 180°C, DIN 4747 / DIN 3158
- Valve curve : Linear
- Leakage rate : ≤0.01% of Kvs value Class IV(ANSI B 16.104)
- Connection : PT Screwed Type

※ Close-off pressure

Model	DN		Flow coefficient		Stroke mm	Sv	Actuator ΔPmax (Kgf/cm ²)	
	mm	Inch	Kvs	Cv			GEA-10A(P)	GEA-20A(P)
GVS21·15	15	1/2"	4	4.7	20	30	16	16
GVS21·20	20	3/4"	6.3	7.4	20	30	16	16
GVS21·25	25	1"	12	14	20	30	15	16
GVS21·32	32	1 1/4"	16	18.7	20	30	9	16
GVS21·40	40	1 1/2"	25	29	20	30	-	12
GVS21·50	50	2"	37	43.2	20	30	-	7.8

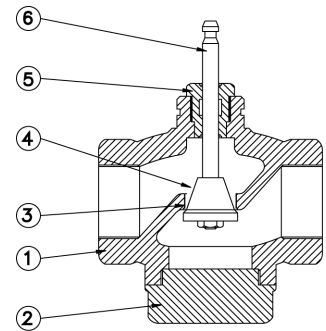
Sv : Range ability (VDI 2173)

* Kv=Cv/1.167

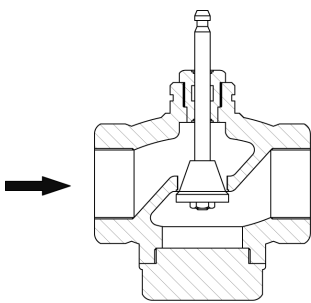
ΔPvmax in kgf/cm² = max, permissible differential pressure across closed valve

《Material》

NO	1	2	3	4	5
Part Name	Body	Cover	Plug	Packing Box	Stem
Material	Bronze BC6	Bronze BC6	SCS13	Viton O-Ring	SUS304



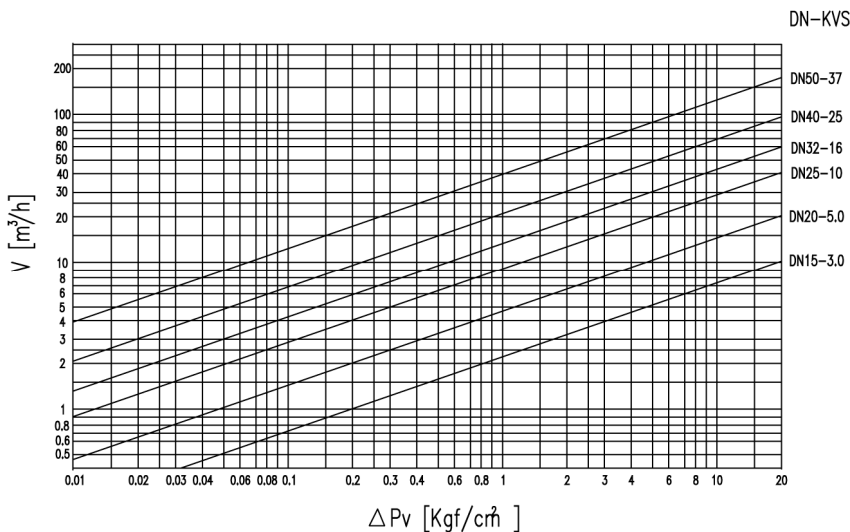
《Mechanical Data》



- 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.

《Valve Selection》

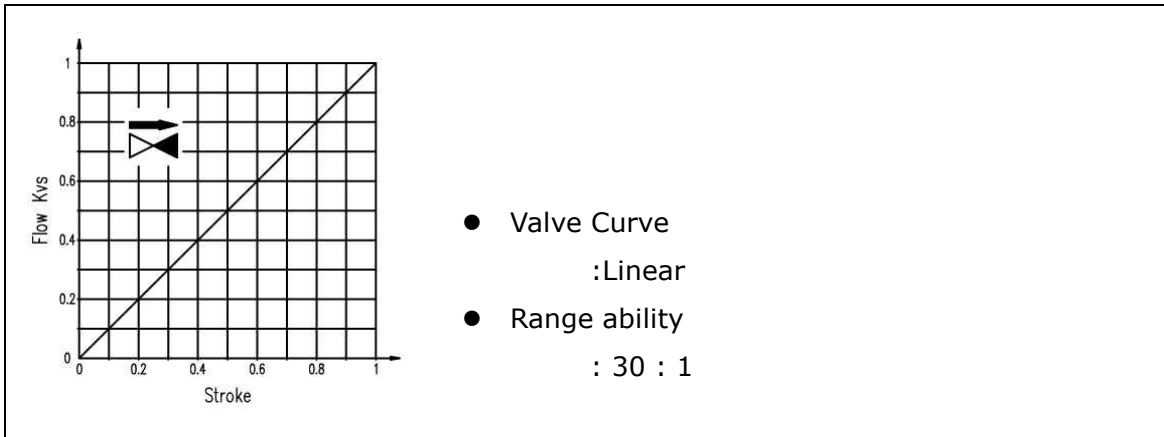
FLOW DIAGRAM



V : WATER FLOW (m³/h)

ΔPv : VALVE PRESSURE DROP(Kgf/cm²)

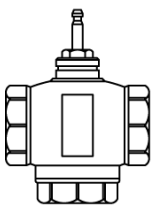
《Characteristic of Valve's Flow



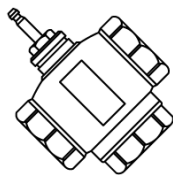
《Mounting Notes

- 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 it at the fitting opening for better safety of operation

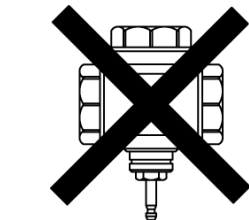
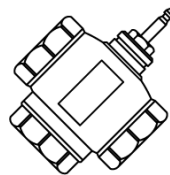
-Mounting positions.



<Suggested>



<minimum allowed condition>

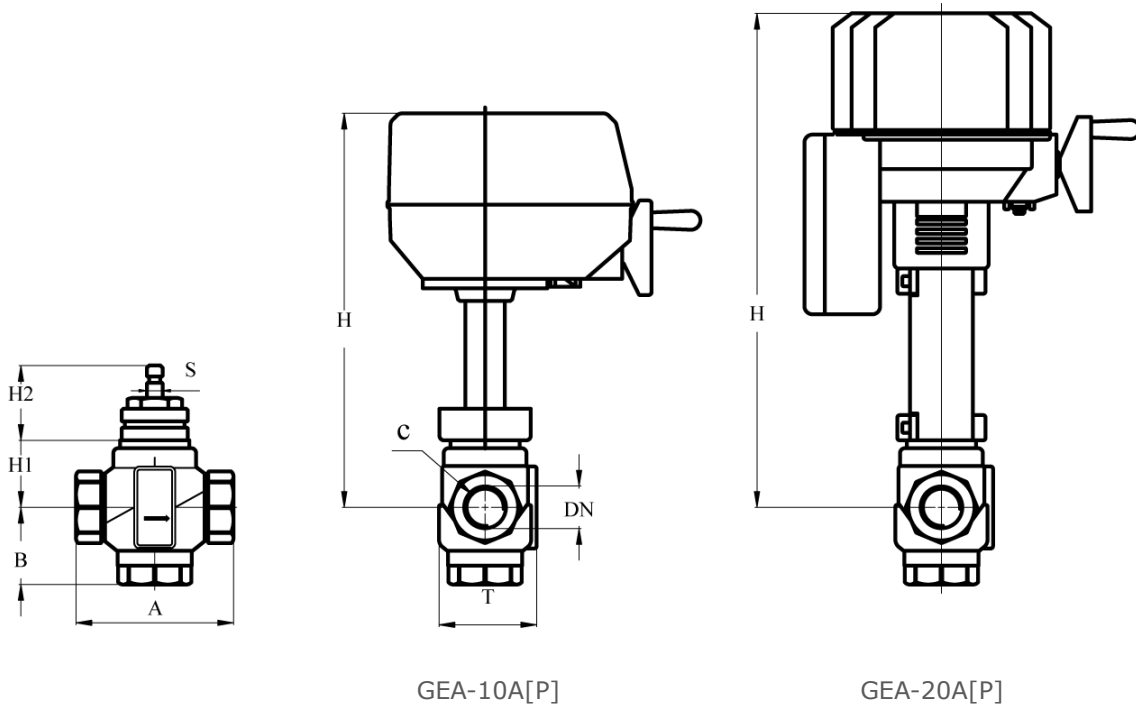


<not suggested>

《Guidelines For An Examination

- Remove the protection cap of the valves by tearing off the finger tap.
- Check the valve spindle whether it is bent or not to secure safe position
 - Downward of spindle: valve open
 - Upward of spindle: valve close

<Dimension



GEA-10A[P]

GEA-20A[P]

Model	DN		A	B	C	S	H1	H2	T	H		Weight Valve(Kg)
	mm	inch								GEA-10A(P)	GEA-20A(P)	
GVS 21.15	15	1/2"	100	50	PT 1/2"	10	44	67.5	63	299	360	1.7
GVS 21.20	20	3/4"	100	50	PT 3/4"	10	44	67.5	67	299	360	1.9
GVS 21.25	25	1"	105	55	PT 1"	10	50	67.5	70	312	374	2.4
GVS 21.32	32	1 1/4"	105	53	PT 1 1/4"	10	36	67.5	76	312	374	2.9
GVS 21.40	40	1 1/2"	130	65	PT 1 1/2"	10	63	67.5	86	335	396	4.3
GVS 21.50	50	2"	150	78	PT 2"	10	61	67.5	94	347	407	4.6