

Intelligent VAV Diffuser

System Description

- The Gleenair (VAV) variable air volume outlet is used in all-air air conditioning systems. It is equipped with a variable air volume valve and can be associated with a temperature sensor or a carbon dioxide sensor to achieve independent control of each room area. It can provide room temperature or fresh air that meets individual comfort needs, while also providing good air flow organization and uniform temperature field distribution.

Indoor temperature control method temperature monitor

- Gleenair (VAV) variable air volume air outlet, together with the temperature monitor, can conveniently form an independent variable air volume.
- The Gleenair (VAV) variable air volume air outlet adjusts the opening degree of the air valve by setting the temperature to change the air volume sent into the room. It ensures the freshness of the indoor air and, when there are few people or no one, the system can automatically reduce the total air volume of the air conditioning unit to achieve the purpose of energy conservation.



Indoor CO2 control method - CO2 monitor

- The Gleenair (VAV) variable air volume outlet, together with the CO2 monitor, can conveniently form an independent variable air volume fresh air system.
- In places with large and dense population changes, the fresh air volume sent into the room can be adjusted by regulating the air supply volume of the Gleenair (VAV) variable air volume outlet and the opening degree of the air valve according to the change in indoor CO2 content and the set value of the CO2 monitor. In this way, while ensuring the freshness of the indoor air, the system can automatically reduce the total air volume of the fresh air unit when there are few people or no one, achieving the purpose of energy conservation.



Characteristics

- Wall-mounted temperature control within the independent area
- Wall-mounted CO2 control within the independent fresh air system
- Variable air volume outlets
- AC/DC 24V drive actuators
- Variable air volume for both cooling and heating modes
- Air volume range from 102 CMH to 2550 CMH
- Minimum air volume can be set (to meet the minimum fresh air requirement)
- Suitable for built-in ceilings
- Installation flexibility
- Enhances comfort in a single area
- Can be easily converted into a complete zoning system
- Customizable color options available.

Performance Table

(600mm x 600mm)

model & size D (mm)-neck	neck velocity (m/s)	1.5	2	2.5	3	3.6	4	4.6	5	6	7
GA-SVD-06 (D=150)	flow rate (CMH)	103	138	172	205	240	273	308	342	409	478
	total pressure (Pa)	2.2	2.7	4.2	6.2	8.5	10.9	14.2	17.4	24.9	33.6
	throw (m)	0.3-0.3-0.6	0.3-0.3-1.2	0.3-0.6-1.2	0.3-0.9-1.5	0.6-0.9-1.8	0.6-1.2-2.1	0.9-1.2-2.4	0.9-1.2-2.7	1.2-1.5-3.3	1.2-1.8-3.3
	noise (dB)	< 15	< 15	< 15	< 15	< 15	< 15	17	21	28	34
	flow rate (CMH)	180	239	300	359	418	477	537	598	716	835
GA-SVD-08 (D=200)	total pressure (Pa)	2.7	4.5	7.0	10.0	13.7	17.9	22.7	27.9	40.3	54.8
	throw (m)	0.3-0.6-1.2	0.6-0.9-1.8	0.6-1.2-2.1	0.9-1.2-2.7	0.9-1.5-3	1.2-1.8-3.6	1.2-1.8-3.6	1.5-2.1-3.9	1.8-2.7-4.2	2.1-3-4.5
	noise (dB)	< 15	< 15	< 15	< 15	< 15	17	21	25	32	38
	flow rate (CMH)	283	376	469	560	656	750	845	936	1123	1300
	total pressure (Pa)	4.2	7.2	10.7	14.9	20.4	26.9	33.9	41.8	60.5	82.4
GA-SVD-10 (D=250)	throw (m)	0.6-0.9-2.1	0.9-1.2-2.4	0.9-1.5-3	1.2-1.8-3.6	1.5-2.1-3.9	1.5-2.4-4.2	1.8-2.7-4.5	2.1-3-4.8	2.4-3.6-5.4	3-3.9-5.7
	noise (dB)	< 15	< 15	< 15	< 15	15	20	24	28	35	41
	flow rate (CMH)	409	528	665	800	957	1072	1208	1345	1600	1871
	total pressure (Pa)	5.7	9.2	14.7	21.2	28.6	37.6	47.5	59.0	84.1	114.8
	throw (m)	0.6-1.2-2.1	1.2-1.5-3.3	1.5-2.1-4.2	1.5-2.4-4.5	1.8-2.7-4.8	2.1-3.3-5.1	1.8-3.6-5.4	2.7-4.2-5.7	3.3-4.5-6.3	3.9-4.8-6.9
GA-SVD-12 (D=300)	noise (dB)	< 15	< 15	< 15	< 15	18	23	27	31	38	43
	flow rate (CMH)	545	732	903	1090	1276	1463	1634	1810	2178	2552
	total pressure (Pa)	7.7	12.4	19.4	28.4	38.6	50.2	63.7	78.7	112.8	154.1
	throw (m)	0.9-1.2-2.4	1.2-2.1-3.9	1.8-2.4-4.8	2.1-3-5.1	2.4-3.6-5.7	2.7-3.9-6	3-4.5-6	3.3-4.8-6.9	3.9-5.1-7.5	4.5-5.7-8.1
	noise (dB)	< 15	< 15	< 15	< 15	20	25	29	33	40	45

Note:
1. Throws - are under 0.762m/s, 0.508m/s, 0.254m/s jet velocity testing condition.

