Performance Data

HVD-SS Series

Nominal 24” x 24” Face

Nom Neck Dia	Eff. Area (ft^2)	Velocity	400	500	600	700	800	1000	1200	1400	1600
		Duct Ps	0.010	0.020	0.020	0.030	0.040	0.060	0.090	0.120	0.160
6”	0.196	CFM	80	100	120	135	155	195	235	275	315
		Pt	0.01	0.02	0.03	0.04	0.05	0.08	0.13	0.18	0.23
		NC	<15	<15	<15	<15	16	22	28	32	36
		Throw	1 | 2 | 4	1 | 2 | 4	2 | 3 | 5	2 | 3 | 6	2 | 4 | 7	3 | 4 | 9	4 | 5 | 11	4 | 6 | 12	5 | 7 | 13
8”	0.349	CFM	140	175	210	245	280	350	420	490	560
		Pt	0.01	0.02	0.03	0.05	0.06	0.10	0.14	0.19	0.25
		NC	<15	<15	<15	15	19	26	31	36	40
		Throw	2 | 3 | 5	2 | 3 | 7	3 | 4 | 8	3 | 5 | 9	4 | 5 | 11	4 | 7 | 13	5 | 8 | 14	6 | 9 | 16	7 | 11 | 17
10”	0.545	CFM	220	275	325	380	435	545	655	765	875
		Pt	0.01	0.03	0.03	0.05	0.07	0.10	0.15	0.20	0.26
		NC	<15	<15	<15	18	22	29	34	39	43
		Throw	2 | 4 | 7	3 | 5 | 9	4 | 5 | 11	4 | 6 | 13	5 | 7 | 14	6 | 9 | 17	7 | 11 | 18	8 | 13 | 20	10 | 14 | 21
12”	0.785	CFM	315	395	470	550	630	785	940	1100	1255
		Pt	0.01	0.02	0.03	0.05	0.06	0.10	0.15	0.21	0.28
		NC	<15	<15	16	21	24	31	36	41	45
		Throw	3 | 5 | 9	4 | 6 | 11	5 | 7 | 14	5 | 8 | 16	6 | 9 | 18	8 | 11 | 20	9 | 14 | 22	11 | 16 | 23	12 | 18 | 25
14”	1.069	CFM	430	535	640	750	855	1070	1285	1500	1710
		Pt	0.01	0.03	0.03	0.05	0.07	0.11	0.16	0.22	0.29
		NC	<15	<15	18	22	26	33	38	42	46
		Throw	4 | 5 | 11	5 | 7 | 14	5 | 8 | 16	6 | 10 | 19	7 | 11 | 21	9 | 14 | 23	11 | 16 | 25	13 | 19 | 27	14 | 21 | 29
15”	1.227	CFM	490	615	735	860	980	1230	1475	1720	1965
		Pt	0.02	0.03	0.04	0.06	0.07	0.11	0.16	0.22	0.29
		NC	<15	<15	19	23	27	34	39	44	47
		Throw	4 | 6 | 12	5 | 7 | 15	6 | 9 | 18	7 | 10 | 21	8 | 12 | 22	10 | 15 | 25	13 | 18 | 27	14 | 21 | 29	19 | 22 | 31

Performance Notes:

Test Standard

- ANSI/ASHR AE standard 70
- Isothermal Conditions
- Non-uniform air flow into diffusers increase sound levels, operating pressures, and can distort the air distribution pattern into the space

Sound Levels

- NC is noise criteria curve that will not be exceeded at the operating point. This is determined by assuming a 10dB (ref : 10-12 watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th oc tave bands.

Throw

- The numbers shown are throw distances, in feet, relating to ter minal velocities of 150-100-50 fpm. For exposed duct applications, reduce throw distance by 30%
- Terminal velocity is the air speed, in feet per minute, measured in the air stream that is discharged from the diffuser

Pressure

- PV represents the air velocity pressure and is calculated as PV = (Velocit y/4005)
- All pressures are stated and calculated in inches of water