



ENGINEERING DATA

SD Series

SDT50-60, SDT54-64, SDA50-60, SDA54-64

Nom. Duct Size (in.)	Nom. Duct Area (ft. ²)	Core Vel. (fpm)	300	400	500	600	700	800	1000	1200	1400
		Vel. Pressure	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358	0.478
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
			45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445

10x3	0.21	Airflow Rate (CFM)	42	56	70	84	98	112	140	168	196
		Throw (ft.)	0°	3-6-8	4-7-10	5-8-11	6-8-12	7-9-13	8-10-14	9-11-15	10-12-17
22.5°	2-5-6		3-5-7	4-6-8	5-6-9	5-7-10	6-7-11	7-8-12	7-9-13	8-10-14	
45°	1-3-4		2-3-4	2-3-5	3-4-5	3-4-6	4-4-6	4-5-7	4-5-8	5-6-8	5-6-8
NC		-	-	-	14	19	23	29	35	40	

12x3	0.25	Airflow Rate (CFM)	54	72	90	108	126	144	180	216	252
		Throw (ft.)	0°	5-7-9	6-8-11	7-9-12	8-9-13	8-10-14	9-11-15	10-12-17	11-13-19
22.5°	4-5-7		5-6-8	5-7-9	6-7-10	6-8-11	7-8-12	8-9-13	8-10-15	9-11-16	9-11-16
45°	2-3-4		3-3-5	3-4-5	3-4-6	4-5-7	4-5-7	4-5-8	4-5-8	5-6-9	5-7-9
NC		-	-	-	15	20	24	31	36	41	

10x4	0.28	Airflow Rate (CFM)	63	84	105	126	147	168	210	252	294
		Throw (ft.)	0°	5-7-10	7-8-12	8-9-13	8-10-14	9-11-16	10-12-17	11-13-19	12-14-20
22.5°	4-6-8		5-6-9	6-7-10	6-8-11	7-9-12	7-9-13	8-10-14	9-11-16	10-12-17	10-12-17
45°	2-3-5		3-4-5	3-4-6	4-5-7	4-5-7	4-5-8	4-5-8	5-6-8	5-7-9	6-7-10
NC		-	-	-	16	21	25	31	37	41	

16x3 12x4	0.33	Airflow Rate (CFM)	75	100	125	150	175	200	250	300	350
		Throw (ft.)	0°	5-8-11	7-9-13	8-10-14	9-11-16	10-12-17	11-13-18	12-14-20	13-16-22
22.5°	4-6-9		6-7-10	6-8-11	7-9-12	8-9-13	8-10-14	9-11-16	10-12-17	11-13-19	11-13-19
45°	2-4-5		3-4-6	4-5-6	4-5-7	4-5-8	5-6-8	5-6-9	6-7-10	6-8-11	6-8-11
NC		-	-	11	17	21	25	32	37	42	

14x4	0.39	Airflow Rate (CFM)	81	108	135	162	189	216	270	324	378
		Throw (ft.)	0°	6-8-12	8-9-13	9-11-15	9-12-16	10-13-18	11-13-19	12-15-21	13-16-23
22.5°	4-6-9		6-7-10	7-8-12	7-9-13	8-10-14	8-10-15	9-12-16	10-13-18	11-14-19	11-14-19
45°	2-4-5		3-4-6	4-5-7	4-5-7	5-6-8	5-6-9	5-7-10	6-7-10	7-8-11	7-8-11
NC		-	-	12	17	22	26	32	38	42	

16x4	0.44	Airflow Rate (CFM)	102	136	170	204	238	272	340	408	476
		Throw (ft.)	0°	6-9-13	9-11-15	10-12-17	11-13-18	11-14-20	12-15-21	14-17-24	15-18-26
22.5°	5-7-10		7-8-12	8-9-13	8-10-14	9-11-15	9-12-16	11-13-18	12-14-20	13-15-22	13-15-22
45°	3-4-6		4-5-7	4-5-8	5-6-8	5-6-9	6-7-10	6-8-11	7-8-12	7-9-13	7-9-13
NC		-	-	12	18	23	27	33	39	43	

22x4	0.61	Airflow Rate (CFM)	144	192	240	288	336	384	480	576	672
		Throw (ft.)	0°	7-11-15	10-13-18	12-14-20	13-15-22	14-17-24	15-18-25	16-20-28	18-22-31
22.5°	6-8-12		8-10-14	9-11-15	10-12-17	11-13-18	11-14-20	13-15-22	14-17-24	15-18-26	15-18-26
45°	3-5-7		5-6-8	5-6-9	6-7-10	6-8-11	7-8-11	7-9-13	8-10-14	9-11-15	9-11-15
NC		-	-	14	19	24	28	35	40	45	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition.
3. 0°, 22.5° and 45° represent blade deflection angles.
4. Units: Total Pressure = in. wc.; Ak = ft² Throw = ft at 150, 100 and 50 fpm terminal velocity.
5. NC is based upon 10 dB room absorption (Re: 10⁻¹² watts) evaluated at 125 thru 4000 Hz octave bands.
6. Dash "-" indicates NC value less than 10.
7. Total pressure values listed are for units without damper-extractor. If damper extractor is used, multiply listed Total Pressure value by 2 for correct value.



ENGINEERING DATA

SD Series

SDT50-60, SDT54-64, SDA50-60, SDA54-64

Nom. Duct Size (in.)	Nom. Duct Area (ft.2)	Core Vel. (fpm)	300	400	500	600	700	800	1000	1200	1400	
		Vel. Pressure	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122	
		Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
			22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606			

20x3 10x6	0.42	Airflow Rate (CFM)	102	136	170	204	238	272	340	408	476	
		Throw (ft.)	0°	4-7-13	6-9-15	8-12-17	9-13-18	11-14-20	13-15-21	14-17-24	15-18-26	16-20-28
			22.5°	4-6-10	5-7-12	6-9-13	7-10-14	8-11-15	10-12-16	11-13-18	12-14-20	13-15-22
			45°	2-3-6	3-4-7	4-5-8	4-6-8	5-6-9	6-7-10	6-8-11	7-8-12	7-9-13
NC	-	-	12	18	23	27	35	43	47			

24x3 18x4 12x6	0.50	Airflow Rate (CFM)	123	164	205	246	287	328	410	492	574	
		Throw (ft.)	0°	5-8-14	7-11-17	8-13-18	11-14-20	12-15-22	13-17-23	15-18-26	17-20-29	18-22-31
			22.5°	4-6-11	6-8-13	6-10-14	8-11-15	9-12-17	11-13-18	12-14-20	13-15-22	14-17-24
			45°	2-4-6	3-5-8	4-6-8	5-6-9	6-7-10	6-8-11	7-8-12	8-9-13	8-10-14
NC	-	-	13	19	23	27	36	44	48			

28x3 14x6	0.58	Airflow Rate (CFM)	144	192	240	288	336	384	480	576	672	
		Throw (ft.)	0°	5-8-15	8-11-18	9-14-20	11-15-22	13-17-24	15-18-25	16-20-28	18-22-31	20-24-34
			22.5°	4-6-12	6-8-14	7-11-15	8-12-17	10-13-18	11-14-20	13-15-22	14-17-24	15-18-26
			45°	2-4-7	4-5-8	4-6-9	5-7-10	6-8-11	6-8-11	7-9-13	8-10-14	8-11-15
NC	-	-	14	19	24	28	37	44	49			

32x3 24x4 16x6	0.67	Airflow Rate (CFM)	171	228	285	342	399	456	570	684	798	
		Throw (ft.)	0°	6-9-17	8-12-20	10-15-22	12-17-24	14-18-26	16-20-27	18-22-31	20-24-34	21-26-36
			22.5°	4-7-13	6-9-15	8-12-17	9-13-18	11-14-20	13-15-21	14-17-24	15-18-26	16-20-28
			45°	3-4-8	4-6-8	4-7-10	6-8-11	6-8-12	7-8-13	8-10-14	8-11-15	9-12-16
NC	-	-	15	20	25	29	37	45	49			

25x4	0.69	Airflow Rate (CFM)	177	236	295	354	413	472	590	708	826	
		Throw (ft.)	0°	6-9-17	8-13-20	11-15-22	13-17-25	14-18-26	16-20-28	18-22-32	20-25-34	22-26-37
			22.5°	4-7-13	6-10-15	8-12-17	10-13-19	11-14-20	13-15-22	14-17-25	15-19-27	17-20-29
			45°	3-4-8	4-6-9	5-7-10	6-8-11	6-8-12	7-9-13	8-10-14	9-11-15	10-12-17
NC	-	-	15	20	25	29	37	45	50			

36x3 18x6	0.75	Airflow Rate (CFM)	189	252	315	378	441	504	630	756	882	
		Throw (ft.)	0°	6-10-18	8-13-20	11-16-23	13-18-25	15-19-27	17-20-29	19-23-32	20-25-36	22-27-39
			22.5°	5-8-14	6-10-16	8-13-18	10-14-20	11-15-21	13-16-22	15-18-25	16-20-27	17-21-29
			45°	3-4-8	4-6-9	5-7-11	6-8-11	6-8-12	8-9-13	8-11-15	9-11-16	10-12-18
NC	-	-	15	20	25	29	38	45	50			

30x4 20x6 12x10	0.83	Airflow Rate (CFM)	216	288	360	432	504	576	720	864	1008	
		Throw (ft.)	0°	6-11-19	9-13-22	11-17-25	13-19-27	16-20-29	18-22-31	20-25-34	22-27-38	24-29-41
			22.5°	5-8-15	7-11-17	8-13-19	11-15-21	12-16-22	14-17-24	15-19-27	17-21-29	18-22-32
			45°	3-5-8	4-6-10	5-8-11	6-8-12	7-9-13	8-10-14	9-11-15	10-12-17	11-13-18
NC	-	-	16	21	26	30	38	46	50			

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition.
3. 0°, 22.5° and 45° represent blade deflection angles.
4. Units: Total Pressure = in. wc.; Ak = ft² Throw= ft at 150, 100 and 50 fpm terminal velocity.
5. NC is based upon 10 dB room absorption (Re: 10⁻¹² watts) evaluated at 125 thru 4000 Hz octave bands.
6. Dash "-" indicates NC value less than 10.
7. Total pressure values listed are for units without damper-extractor. If damper extractor is used, multiply listed Total Pressure value by 2 for correct value.



ENGINEERING DATA

SD Series

SDT50-60, SDT54-64, SDA50-60, SDA54-64

Nom. Duct Size (in.)	Nom. Duct Area (ft ²)	Core Vel. (fpm)	300	400	500	600	700	800	1000	1200	1400
		Vel. Pressure	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358	
	22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401	
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

22x6	0.92	Airflow Rate (CFM)	231	308	385	462	539	616	770	924	1078
		Throw (ft.)	0°	6-11-20	9-14-22	12-18-25	14-20-28	16-21-30	18-22-32	20-25-36	22-28-39
22.5°	5-8-15	7-11-18	9-13-20	11-15-22	13-16-23	14-18-25	16-20-28	18-22-30	19-23-33		
	45°	3-5-9	4-6-11	6-8-11	6-9-13	8-10-13	8-11-15	9-11-16	11-13-18	11-13-19	
NC		-	-	16	21	26	30	39	46	51	

36x4 24x6 18x8	1.00	Airflow Rate (CFM)	264	352	440	528	616	704	880	1056	1232
		Throw (ft.)	0°	7-11-21	10-15-24	13-19-27	15-21-29	18-22-32	20-24-34	22-27-39	24-29-42
22.5°	6-8-16	8-12-19	10-15-21	12-16-23	13-18-25	15-19-27	17-21-29	19-23-32	20-25-35		
	45°	3-5-9	4-7-11	6-8-12	7-9-13	8-11-15	9-11-15	10-12-18	11-13-19	12-15-20	
NC		-	-	16	22	26	30	39	47	51	

46x4 30x6 18x10	1.28	Airflow Rate (CFM)	333	444	555	666	777	888	1110	1332	1554
		Throw (ft.)	0°	8-13-24	11-17-27	14-21-30	17-24-33	20-25-36	22-27-39	25-30-43	27-33-47
22.5°	6-10-18	8-13-21	11-16-24	13-18-26	15-20-28	18-21-29	19-24-33	21-26-36	22-28-39		
	45°	4-6-11	5-8-12	6-10-13	8-11-15	9-11-16	10-12-18	11-13-20	12-15-21	13-16-23	
NC		-	11	17	23	27	31	40	48	52	

36x6 27x8 18x12	1.50	Airflow Rate (CFM)	405	540	675	810	945	1080	1350	1620	1890
		Throw (ft.)	0°	8-14-26	13-18-30	15-23-34	18-26-36	22-28-40	25-30-42	27-34-48	30-36-52
22.5°	7-11-20	10-15-23	12-18-26	15-20-29	17-22-31	19-23-33	21-26-36	23-29-40	25-31-43		
	45°	4-6-12	6-8-13	7-11-15	8-12-17	10-13-18	11-13-19	13-15-21	13-17-23	15-18-25	
NC		-	12	18	24	28	32	41	48	53	

22x10	1.53	Airflow Rate (CFM)	411	548	685	822	959	1096	1370	1644	1918
		Throw (ft.)	0°	8-14-26	13-19-30	15-23-34	19-26-37	22-28-40	25-30-43	27-34-48	30-37-53
22.5°	7-11-20	10-15-23	12-18-26	15-20-29	17-22-31	19-23-33	21-26-37	23-29-41	25-31-43		
	45°	4-6-12	6-8-13	7-11-15	8-12-17	10-13-18	11-13-19	13-15-22	13-17-24	15-18-25	
NC		-	12	18	24	28	32	41	48	53	

30x8 24x10	1.67	Airflow Rate (CFM)	447	596	745	894	1043	1192	1490	1788	2086
		Throw (ft.)	0°	9-15-27	13-20-32	16-25-35	20-27-39	22-29-41	26-32-44	29-35-50	32-39-55
22.5°	7-11-21	10-15-25	13-19-27	15-21-30	18-23-32	20-25-34	22-27-39	25-30-42	27-32-46		
	45°	4-6-12	6-9-14	7-11-16	9-12-18	11-13-19	11-14-20	13-16-22	14-18-25	15-19-27	
NC		-	12	19	24	29	33	41	49	53	

42x6	1.75	Airflow Rate (CFM)	477	636	795	954	1113	1272	1590	1908	2256
		Throw (ft.)	0°	9-15-28	13-20-32	17-25-36	20-28-40	24-30-43	27-32-46	29-36-51	32-40-56
22.5°	7-12-22	11-15-25	13-20-28	15-22-31	18-24-34	20-25-36	23-28-40	25-31-43	27-34-47		
	45°	4-7-13	6-9-15	8-11-16	9-13-18	11-14-20	12-15-21	13-16-23	15-18-25	16-20-27	
NC		-	12	19	24	29	33	42	49	54	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition.
3. 0°, 22.5° and 45° represent blade deflection angles.
4. Units: Total Pressure = in. wc.; Ak = ft² Throw = ft at 150, 100 and 50 fpm terminal velocity.
5. NC is based upon 10 dB room absorption (Re: 10⁻¹² watts) evaluated at 125 thru 4000 Hz octave bands.
6. Dash "-" indicates NC value less than 10.
7. Total pressure values listed are for units without damper-extractor. If damper extractor is used, multiply listed Total Pressure value by 2 for correct value.



ENGINEERING DATA

SD Series

SDT50-60, SDT54-64, SDA50-60, SDA54-64

Nom. Duct Size (in.)	Nom. Duct Area (ft ²)	Core Vel. (fpm)	300	400	500	600	700	800	1000	1200	1400	
		Vel. Pressure	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122	
		Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
			22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606			

48x6 36x8 24x12	2	Airflow Rate (CFM)	546	728	910	1092	1274	1456	1820	2184	2548	
		Throw (ft.)	0°	10-16-30	14-22-35	18-27-39	22-30-43	25-32-46	29-35-49	32-39-55	35-43-60	38-46-65
			22.5°	8-13-23	11-17-27	14-21-30	17-23-33	20-25-36	22-27-38	25-30-43	27-33-47	29-36-50
			45°	4-7-13	6-10-15	8-12-18	10-13-19	11-15-21	13-15-22	14-18-25	15-19-27	17-21-29
NC	-	13	19	25	30	34	42	50	54			

42x8	2.33	Airflow Rate (CFM)	642	856	1070	1284	1498	1712	2140	2568	2996	
		Throw (ft.)	0°	11-18-33	15-23-38	20-29-42	23-33-46	27-35-50	31-38-53	34-42-60	38-46-65	41-50-71
			22.5°	8-13-25	12-18-29	15-22-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-50	32-39-55
			45°	5-8-15	7-11-17	9-13-19	11-15-21	13-16-22	14-17-24	15-19-27	17-21-29	18-22-32
NC	-	13	20	26	30	34	43	50	55			

36x10 30x12	2.50	Airflow Rate (CFM)	687	916	1145	1374	1603	1832	2290	2748	3206	
		Throw (ft.)	0°	11-18-34	16-24-39	20-30-43	24-34-48	28-36-52	32-39-55	36-43-62	39-48-67	42-52-73
			22.5°	8-14-26	13-19-30	15-23-34	19-26-37	22-28-40	25-30-43	27-34-48	30-37-53	33-40-57
			45°	5-8-15	7-11-18	9-13-20	11-15-22	13-16-23	14-18-25	16-20-28	18-22-30	19-23-33
NC	-	14	20	26	30	34	43	51	55			

48x8	2.67	Airflow Rate (CFM)	738	984	1230	1476	1722	1968	2460	2952	3444	
		Throw (ft.)	0°	12-19-35	17-25-41	21-32-45	25-35-50	29-38-53	33-41-57	37-45-64	41-50-70	43-53-76
			22.5°	9-15-27	13-20-32	16-25-35	20-27-39	22-29-41	25-32-44	29-35-50	32-39-54	34-41-59
			45°	6-8-15	8-11-18	9-14-20	11-15-22	13-17-24	15-18-26	17-20-29	18-22-32	20-24-34
NC	-	14	21	26	31	35	43	51	55			

36x12	3.00	Airflow Rate (CFM)	825	1100	1375	1650	1925	2200	2750	3300	3850	
		Throw (ft.)	0°	13-20-37	18-27-43	22-33-48	27-37-53	31-40-57	35-43-60	39-48-67	43-53-74	46-57-80
			22.5°	10-15-29	14-20-33	17-26-37	20-29-41	24-31-44	27-33-47	30-37-53	33-41-57	36-44-62
			45°	6-9-17	8-12-19	10-15-22	12-17-24	14-18-25	15-19-27	18-22-30	19-24-34	21-25-36
NC	-	15	21	27	31	35	44	51	56			

48x10	3.33	Airflow Rate (CFM)	933	1244	1555	1866	2177	2488	3110	3732	4354	
		Throw (ft.)	0°	13-21-39	19-28-46	23-35-50	28-39-55	33-43-60	37-46-64	41-50-72	46-55-78	49-60-85
			22.5°	11-16-31	15-22-35	18-27-39	22-31-43	25-33-46	29-35-50	32-39-55	35-43-61	38-46-66
			45°	6-10-18	8-13-20	11-16-23	13-18-25	15-19-27	17-20-29	19-23-32	20-25-36	22-27-39
NC	-	15	22	27	32	36	44	52	56			

42x12	3.50	Airflow Rate (CFM)	966	1288	1610	1932	2254	2576	3220	3864	4508	
		Throw (ft.)	0°	13-22-40	19-29-46	24-36-52	29-40-57	34-43-61	38-46-65	42-52-73	46-57-80	50-61-86
			22.5°	11-17-31	15-22-36	18-28-40	22-31-44	26-34-48	29-36-50	33-40-57	36-44-62	39-48-67
			45°	6-10-18	8-13-21	11-16-23	13-18-25	15-20-27	17-21-29	19-23-33	21-25-36	22-27-39
NC	-	15	22	27	32	36	45	52	57			

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition.
3. 0°, 22.5° and 45° represent blade deflection angles.
4. Units: Total Pressure = in. wc.; Ak = ft² Throw= ft at 150, 100 and 50 fpm terminal velocity.
5. NC is based upon 10 dB room absorption (Re: 10⁻¹² watts) evaluated at 125 thru 4000 Hz octave bands.
6. Dash "-" indicates NC value less than 10.
7. Total pressure values listed are for units without damper-extractor. If damper extractor is used, multiply listed Total Pressure value by 2 for correct value.



ENGINEERING DATA

SD Series

SDT50-60, SDT54-64, SDA50-60, SDA54-64

Nom. Duct Size (in.)	Nom. Duct Area (ft ²)	Core Vel. (fpm)	300	400	500	600	700	800	1000	1200	1400
		Vel. Pressure	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358	
	22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401	
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

48x12	4.00	Airflow Rate (CFM)	1125	1500	1875	2250	2625	3000	3750	4500	5250
		0°	15-23-43	20-31-50	26-39-56	31-43-61	36-47-66	41-50-71	46-56-79	50-61-86	54-66-93
Throw (ft.)	22.5°	11-18-34	16-24-39	20-30-43	24-34-48	28-36-51	32-39-55	35-43-61	39-48-67	42-51-72	
	45°	6-11-20	9-14-22	12-18-25	14-20-27	16-21-29	18-22-32	20-25-36	22-27-39	25-29-42	
NC		-	16	22	28	33	37	45	53	57	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition.
3. 0°, 22.5° and 45° represent blade deflection angles.
4. Units: Total Pressure = in. wc.; Ak = ft² Throw= ft at 150, 100 and 50 fpm terminal velocity.
5. NC is based upon 10 dB room absorption (Re: 10⁻¹² watts) evaluated at 125 thru 4000 Hz octave bands.
6. Dash "-" indicates NC value less than 10.
7. Total pressure values listed are for units without damper-extractor. If damper extractor is used, multiply listed Total Pressure value by 2 for correct value.