



ENGINEERING DATA

DS180

UNIT SIZE (in.)	INLET SIZE (in.)	NECK VELOCITY (FPM)	AIRFLOW (CFM)	P _D (in. wc)	P _T (in. wc)	NC (Noise Criteria)	Throw Length & Width in Adjacent Zone (AZ), (ft.)	
							Δ5°	Δ10°
18x24	6	200	38	0.002	0.003	-	2 - 4	2 - 4
		300	56	0.006	0.007	-	3 - 6	3 - 6
		400	75	0.010	0.013	-	3 - 6	4 - 8
		500	94	0.016	0.020	-	4 - 8	4 - 8
		600	113	0.022	0.029	-	4 - 8	5 - 10
		700	132	0.031	0.040	-	4 - 8	5 - 10
24x24	8	200	68	0.002	0.004	-	3 - 6	3 - 6
		300	101	0.006	0.008	-	4 - 8	4 - 8
		400	135	0.010	0.014	-	4 - 8	5 - 10
		500	169	0.016	0.022	-	5 - 10	6 - 12
		600	203	0.022	0.032	-	6 - 12	7 - 14
		700	237	0.031	0.043	-	6 - 12	7 - 14
24x36	8	200	68	0.002	0.003	-	3 - 6	3 - 6
		300	101	0.006	0.007	-	4 - 8	4 - 8
		400	135	0.010	0.013	-	4 - 8	5 - 10
		500	169	0.016	0.020	-	5 - 10	6 - 12
		600	203	0.022	0.028	-	6 - 12	7 - 14
		700	237	0.031	0.039	-	6 - 12	7 - 14
24x48	10	200	106	0.002	0.003	-	4 - 8	4 - 8
		300	160	0.006	0.007	-	5 - 10	6 - 12
		400	213	0.010	0.013	-	6 - 12	7 - 14
		500	266	0.016	0.020	-	7 - 14	8 - 16
		600	319	0.022	0.029	-	8 - 16	9 - 18
		700	372	0.031	0.040	-	8 - 16	10 - 20
30x24	10	200	106	0.002	0.004	-	4 - 8	4 - 8
		300	160	0.006	0.009	-	5 - 10	6 - 12
		400	213	0.010	0.016	-	6 - 12	7 - 14
		500	266	0.016	0.024	-	7 - 14	8 - 16
		600	319	0.022	0.035	-	8 - 16	9 - 18
		700	372	0.031	0.048	-	8 - 16	9 - 18
		800	425	0.040	0.062	14	9 - 18	10 - 20

Notes:

1. The adjacent zone (AZ) is the discharge isolevel at 1" above the floor where the terminal velocity is 50 fpm.
2. Tests for sound and pressure conducted in accordance with ASHRAE 70-2006 at isothermal conditions.
3. Tests for AZ conducted in accordance with Nordtest method of aerodynamic testing and rating of low velocity.
4. Tests conducted with straight rigid inlet condition. Other inlet conditions may alter performance.
5. P_D = dynamic (velocity) pressure, P_T = total pressure, inches of water column.
6. NC = Noise Criteria (based on 10db Room attenuation (Re: 10⁻¹² watts) evaluated at 125 through 4000Hz octave bands).
7. ΔT = The temperature difference, measured in °F, between the supply air and the space 3-1/2 feet above the floor.
8. ash (-) indicates an NC value of less than 10.
9. Throw values are distances in feet at 50 fpm at listed temperature difference (see diagram on page 03).

Displacement
Diffusers



ENGINEERING DATA

DS180

UNIT SIZE (in.)	INLET SIZE (in.)	NECK VELOCITY (FPM)	AIRFLOW (CFM)	P _D (in. wc)	P _T (in. wc)	NC (Noise Criteria)	Throw Length & Width in Adjacent Zone (AZ), (ft.)	
							Δ5°	Δ10°
30x36	10	200	160	0.002	0.007	-	5 - 10	6 - 12
		300	213	0.006	0.013	-	6 - 12	7 - 14
		400	266	0.010	0.021	-	7 - 14	8 - 16
		500	319	0.016	0.03	-	8 - 16	9 - 18
		600	425	0.022	0.053	13	9 - 18	10 - 20
		700	532	0.031	0.082	21	10 - 20	12 - 24
		800	638	0.040	0.119	27	12 - 24	13 - 26
30x48	12	200	154	0.002	0.003	-	5 - 10	5 - 10
		300	231	0.006	0.008	-	6 - 12	7 - 14
		400	308	0.010	0.013	-	7 - 14	8 - 16
		500	385	0.016	0.021	-	8 - 16	10 - 20
		600	461	0.022	0.03	-	10 - 20	11 - 22
		700	538	0.031	0.041	11	10 - 20	12 - 24
		800	615	0.040	0.053	15	11 - 22	13 - 26
30x60	12	200	154	0.002	0.003	-	5 - 10	5 - 10
		300	231	0.006	0.007	-	6 - 12	7 - 14
		400	308	0.010	0.013	-	7 - 14	8 - 16
		500	385	0.016	0.02	-	8 - 16	10 - 20
		600	461	0.022	0.029	-	10 - 20	11 - 22
		700	538	0.031	0.039	10	10 - 20	12 - 24
		800	615	0.040	0.051	15	11 - 22	13 - 26

Notes:

1. The adjacent zone (AZ) is the discharge isolevel at 1" above the floor where the terminal velocity is 50 fpm.
2. Tests for sound and pressure conducted in accordance with ASHRAE 70-2006 at isothermal conditions.
3. Tests for AZ conducted in accordance with Nordtest method of aerodynamic testing and rating of low velocity.
4. Tests conducted with straight rigid inlet condition. Other inlet conditions may alter performance.
5. P_D = dynamic (velocity) pressure, P_T = total pressure, inches of water column.
6. NC = Noise Criteria (based on 10db Room attenuation (Re: 10⁻¹² watts) evaluated at 125 through 4000Hz octave bands).
7. ΔT = The temperature difference, measured in °F, between the supply air and the space 3-1/2 feet above the floor.
8. Dash (-) indicates an NC value of less than 10.
9. Throw values are distances in feet at 50 fpm at listed temperature difference (see diagram on page 03).



ENGINEERING DATA

DS180

DS180 - Throw Diagram

L - Length (First Throw Value in Performance Data Tables)

W - Width (Second Throw Value in Performance Data Tables)

