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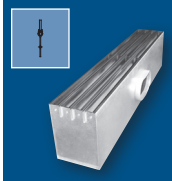
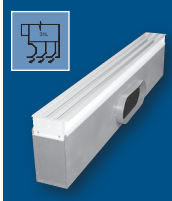
KRUEGER
Excellence in Air Distribution



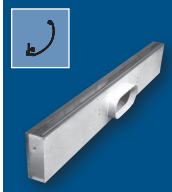
PTBS
This plenum slot supply diffuser features an adjustable blade.
Slots: 1 to 4
Slot Widths: ¾", 1", 1½"

PTBA
This plenum slot supply diffuser features 'Ice Tong' blades.
Slots: 1 to 4
Slot Widths: ¾", 1"



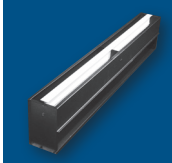
PTBT
This plenum slot supply diffuser features fixed, curved blades.
Slots: 1 to 4*
** 1 to 4 slots available with 1-way deflection, 2 to 4 slots available with 2-way deflection.*

PTBSS, PTBSSFB, & PFTBS (FR)
These plenum slot supply diffusers feature a fixed curved blade. Available with fire damper (PFTBS) and factory installed blades (PTBSSFB).
Slots: 1 or 2
Slot Widths: ¾"*, 1", 1½"
**¾" Slot width only available on model PFTBS.*

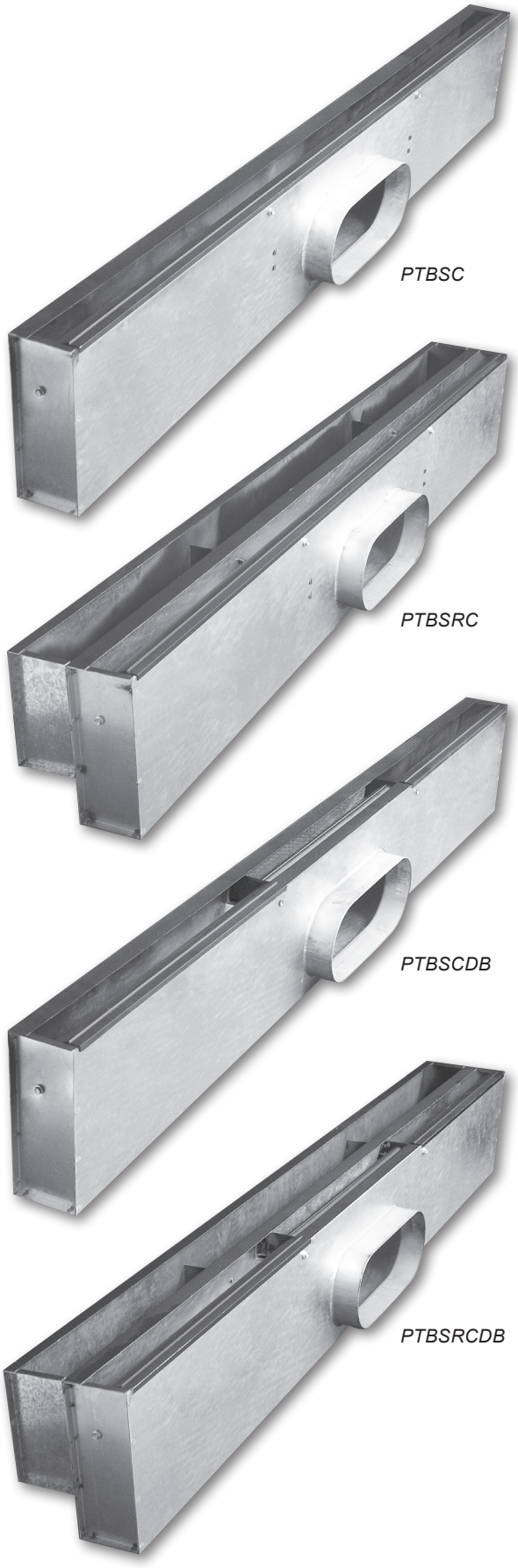


PTBSC, PTBSRC
The plenum slot supply (PTBSC) diffuser features a fixed horizontal pattern controller to provide 1-way airflow; also available with a return slot (PTBSRC).

PTBSCDB, PTBSRCDB
The plenum slot supply (PTBSCDB) diffuser features a center downblow and a fixed horizontal pattern controller to provide 1-way airflow; also available with a return slot (PTBSRCDB).



PTBR/PFTBR (FR)
These plenum slot return diffusers are available with a fire damper (PFTBR) or without (PTBR).



Introduction: PTBSC, PTBSCDB Series

The PTBSC series plenum slot diffuser features a curved blade that directs a horizontal discharge air pattern. The PTBSC blades are shipped attached to the unit and are non-removable. The plenum is an integral part of the diffuser and has a drawn inlet collar to prevent plenum air leakage. A return slot is available (PTBSRC) for non-ducted return air systems. The return slot is placed opposite the horizontally discharged supply air to prevent short circuiting the return. This design makes Krueger's PTBSC series diffuser an ideal choice for perimeter areas that need horizontal discharged air and VAV cooling applications.

The PTBSCDB series plenum slot diffuser features a curved blade that directs a horizontal discharge air pattern and a center down blow section that discharges air vertically. The PTBSCDB blades are shipped attached to the unit and are non-removable. The center down blow blades are "ice tong" blades that can be adjusted for vertical angled throw and vertical down blow dampening. The plenum is an integral part of the diffuser and has a drawn inlet collar to prevent plenum air leakage. A return slot is available (PTBSRCDB) for non-ducted return air systems. The return slot is placed opposite the horizontally discharged supply air to prevent short circuiting the return. With a downblow section to wash the window and VAV cooling applications, this design makes Krueger's PTBSCDB series diffuser an ideal choice for perimeter areas with windows that require horizontal discharged air.

MODELS

PTBSC	- Plenum Slot Supply Diffuser with Fixed Aluminum Curved Blades
PTBSRC	- Plenum Slot Supply/Return Combination Diffuser with Fixed Aluminum Curved Blades
PTBSCDB	- Plenum Slot Supply Diffuser with Fixed Aluminum Curved Blades & Downblow
PTBSRCDB	- Plenum Slot Supply/Return Combination Diffuser with Fixed Aluminum Curved Blades & Downblow

FEATURES

- Slots: 1 (supply) or 2 (supply/return combo).
- Slot Widths: 3/4" (supply) & 2" (return).
- Lengths: 24", 36", 48", and 60".
- Downblow: 8", 12", 15", or 18" (supply/return combo).

ACCESSORIES

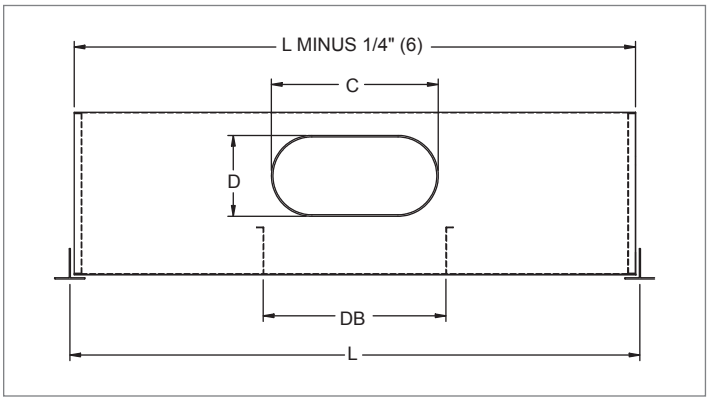
- External Insulation
- Plaster Frame

FINISHES

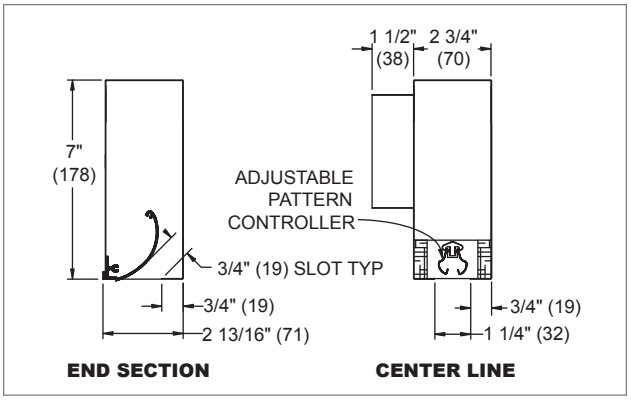
- Standard finish is black face with optional white tees.

PTBSCDB, PTBSRCDB Dimensional Information

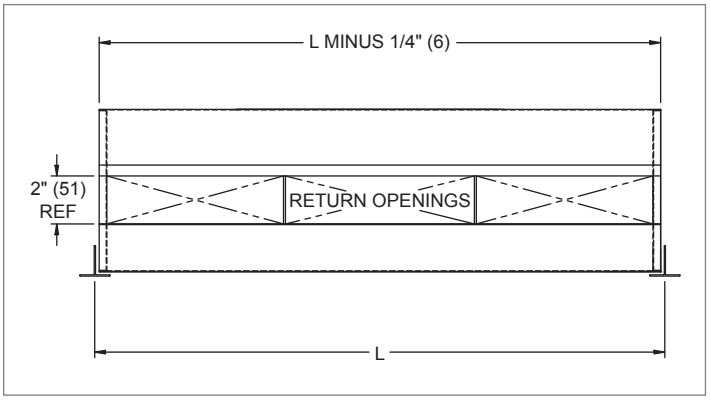
PTBSCDB, PTBSRCDB, INLET SIDE VIEW



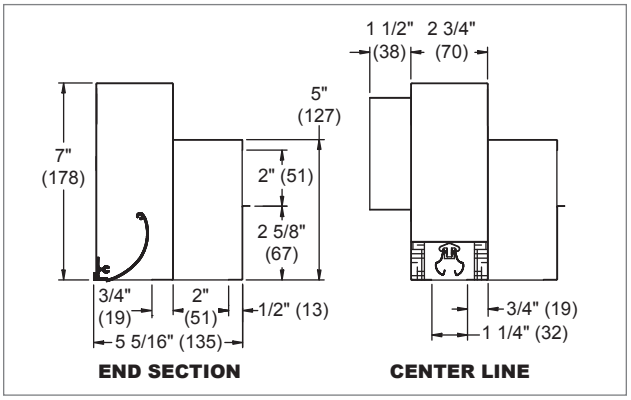
PTBSCDB, CROSS SECTION



PTBSRCDB, RETURN SIDE VIEW



PTBSRCDB, CROSS SECTION



PTBSCDB, PTBSRCDB, PATTERN CONTROLLERS

PTBSCDB/PTBSRCDB, AVAILABLE INLET SIZES

Inlet Size	D	C
6" (152)	3" (76)	7 9/16" (192)
8" (203)	4" (102)	10 1/6" (256)
10" (254)	4" (102)	13 1/4" (337)

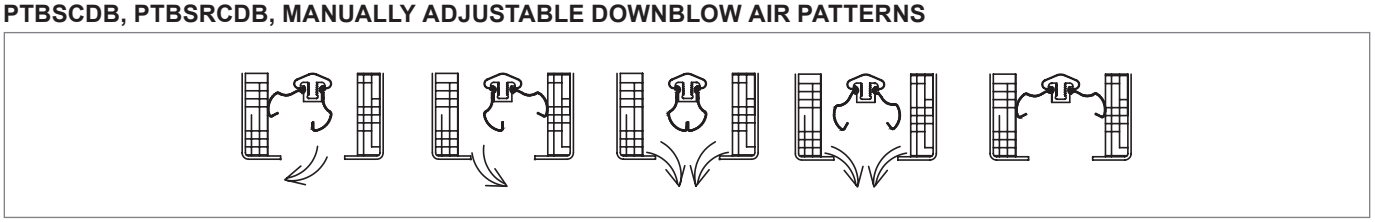
PTBSCDB, PTBSRCDB, AVAILABLE DOWNBLOW SLOT LENGTHS

Nominal L	DB
24" (610)	8" (203)
36" (914)	12" (305), 15" (381), 18" (457)
48" (1219)	12" (305), 15" (381), 18" (457)
60" (1524)	12" (305), 15" (381), 18" (457)

NOTE: Dimensions in parentheses are mm.

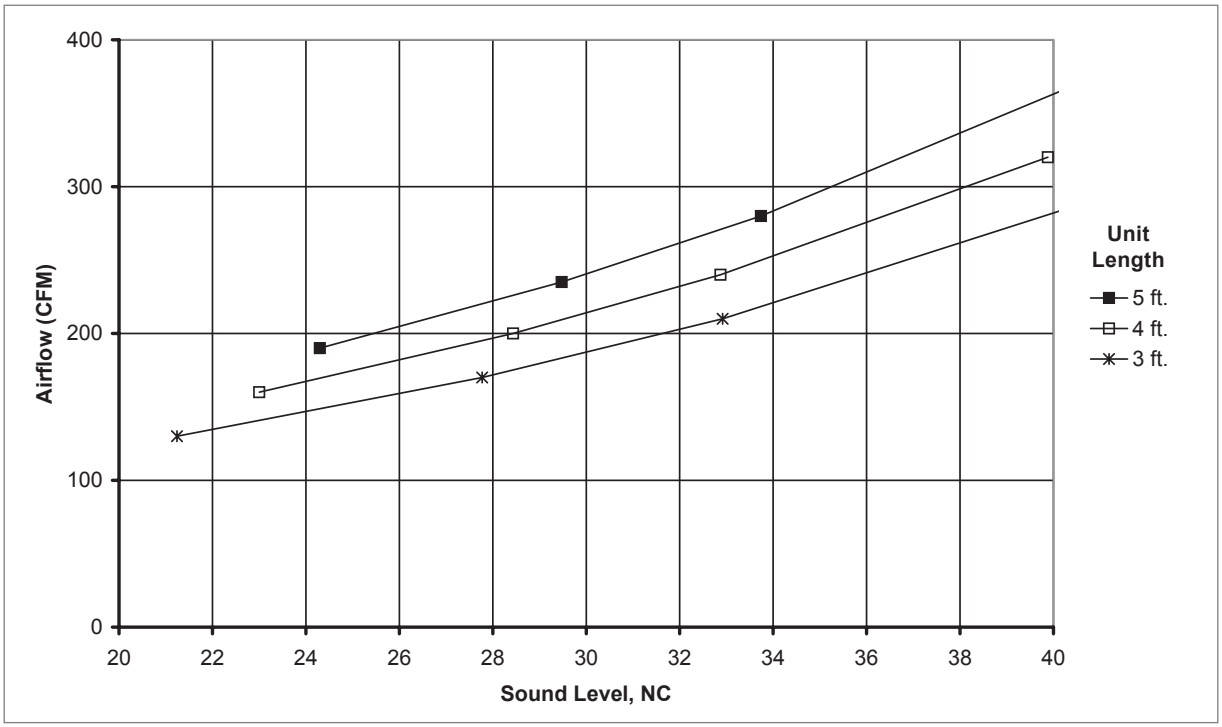
PTBSCDB, PTBSRCDB Air Patterns

PTBSCDB, PTBSRCDB, MANUALLY ADJUSTABLE DOWNBLOW AIR PATTERNS

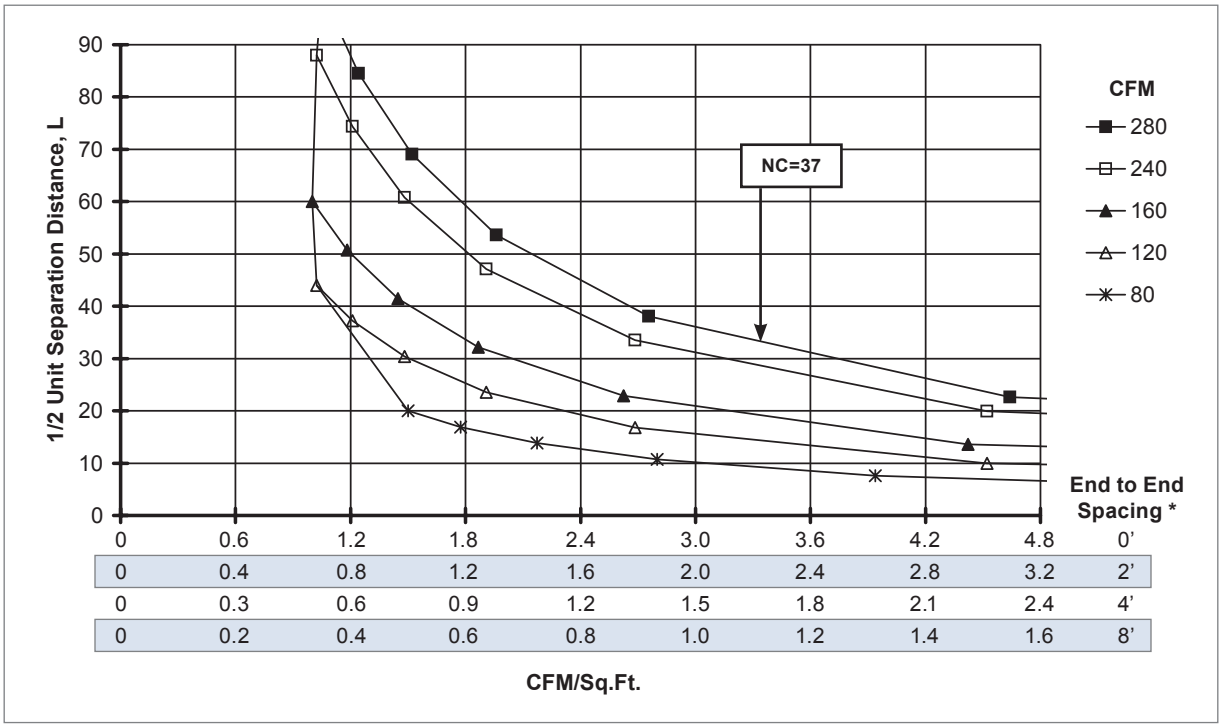


PTBSCDB, PTBSRCDB Reference Charts: Horizontal Throw

AIRFLOW VS. NC: PTBSCDB SERIES, 3/4" SLOT WIDTH, 1-SLOT, 4 FT. LONG UNIT, 15" DOWNBLOW SECTION, 8" OVAL INLET, 1-WAY (NO DAMPER)



DIFFUSER SPACING FOR 80% ADPI: PTBSCDB SERIES, 3/4" SLOT WIDTH, 1-SLOT, 4 FT. LONG UNIT, 15" DOWNBLOW SECTION, 8" OVAL INLET, 1-WAY (NO DAMPER)



NOTES: Bottom chart is at 20 BTUH/ft² load.
See the Engineering section of this catalog for instructions on how to read these charts and additional ADPI information.
** Separation distance in feet between active supply sections discharging in similar directions.*

PTBSCDB, PTBSRCDB Performance Data: Horizontal/Vertical Throw

IP/METRIC DATA: PTBSCDB, PTBSRCDB, 8" DOWNBLOW, 1-SLOT, 1-WAY (NO DAMPER)

	Linear Length	IP Data						Metric Data						Octave Band, dB					
		Air Flow	Pressure		Horizontal Throw	Vertical Throw	NC	Air Flow	Pressure		Horizontal Throw	Vertical Throw							
			Ps	Pt					Ps	Pt									
		CFM	"WG	"WG	ft	ft		L/s	Pa	Pa	m	m		2	3	4	5	6	7
6" Oval Inlet	2'	35	0.014	0.016	1 - 3 - 9	1 - 1 - 3	-	17	3.4	3.9	0.3 - 0.8 - 2.7	0.2 - 0.4 - 0.8		29	24	19	-	-	-
		85	0.081	0.093	7 - 11 - 19	2 - 3 - 6	22	40	20.1	23.3	2.0 - 3.3 - 5.8	0.6 - 0.9 - 1.9		44	41	38	29	26	19
		110	0.135	0.157	9 - 14 - 22	3 - 4 - 7	29	52	33.6	39.0	2.9 - 4.3 - 6.6	0.8 - 1.2 - 2.2		48	46	43	36	34	27
		135	0.203	0.236	12 - 17 - 24	3 - 5 - 8	34	64	50.6	58.7	3.5 - 5.2 - 7.3	1.0 - 1.5 - 2.5		51	50	47	42	41	34
		185	0.382	0.443	16 - 20 - 28	4 - 7 - 9	41	87	95.0	110.2	4.8 - 6.1 - 8.6	1.3 - 2.0 - 2.9		57	57	54	50	51	43
8" Oval Inlet	2'	35	0.009	0.010	1 - 3 - 9	1 - 1 - 3	-	17	2.2	2.5	0.3 - 0.8 - 2.7	0.2 - 0.4 - 0.8		26	21	18	-	-	-
		95	0.066	0.073	8 - 12 - 20	2 - 3 - 7	21	45	16.5	18.1	2.5 - 3.7 - 6.2	0.7 - 1.0 - 2.1		43	41	39	25	24	14
		125	0.115	0.126	11 - 16 - 23	3 - 4 - 8	28	59	28.6	31.3	3.3 - 4.9 - 7.1	0.9 - 1.4 - 2.4		47	46	44	33	32	23
		155	0.177	0.193	13 - 18 - 26	4 - 6 - 9	33	73	43.9	48.1	4.1 - 5.6 - 7.9	1.1 - 1.7 - 2.6		51	51	49	39	39	30
		215	0.340	0.371	18 - 22 - 30	5 - 7 - 10	41	101	84.6	92.5	5.3 - 6.6 - 9.3	1.6 - 2.2 - 3.1		56	57	56	48	49	40
10" Oval Inlet	2'	35	0.007	0.007	1 - 3 - 9	1 - 1 - 3	-	17	1.7	1.8	0.3 - 0.8 - 2.7	0.2 - 0.4 - 0.8		24	19	17	-	-	-
		100	0.055	0.058	9 - 13 - 21	2 - 4 - 7	20	47	13.6	14.5	2.6 - 3.9 - 6.3	0.7 - 1.1 - 2.1		42	40	39	22	21	-
		133	0.096	0.102	11 - 17 - 24	3 - 5 - 8	27	63	23.9	25.5	3.5 - 5.1 - 7.3	1.0 - 1.4 - 2.4		46	46	45	30	30	19
		165	0.149	0.159	14 - 19 - 27	4 - 6 - 9	32	78	37.0	39.5	4.3 - 5.7 - 8.1	1.2 - 1.8 - 2.7		50	50	49	36	37	26
		230	0.289	0.308	18 - 22 - 32	6 - 7 - 11	40	109	72.0	76.8	5.5 - 6.8 - 9.6	1.7 - 2.3 - 3.2		56	57	56	45	47	37

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values for horizontal and vertical throw are given at isothermal conditions. Airflow is given for the length of the unit. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re10^{-12} Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See selection software for performance data not shown, including octave band data.

PTBSCDB, PTBSRCDB Performance Data: Horizontal/Vertical Throw

IP/METRIC DATA: PTBSCDB, PTBSRCDB, 12" DOWNBLOW, 1-SLOT, 1-WAY (NO DAMPER)

	Linear Length	IP Data					NC	Metric Data					Octave Band, dB					
		Air Flow	Pressure		Horizontal Throw	Vertical Throw		Air Flow	Pressure		Horizontal Throw	Vertical Throw						
			Ps	Pt					Ps	Pt								
		CFM	"WG	"WG	ft	ft		L/s	Pa	Pa	m	m	2	3	4	5	6	7
6" Oval Inlet	3'	50	0.017	0.022	1 - 3 - 11	1 - 1 - 3	-	24	4.3	5.4	0.4 - 0.9 - 3.2	0.3 - 0.4 - 0.9	30	25	19	-	-	-
		110	0.083	0.104	6 - 12 - 22	2 - 3 - 6	22	52	20.6	26.0	1.8 - 3.5 - 6.6	0.7 - 1.0 - 2.0	44	41	35	30	27	21
		140	0.134	0.169	10 - 15 - 25	3 - 4 - 8	28	66	33.4	42.1	3.0 - 4.5 - 7.5	0.8 - 1.2 - 2.5	48	45	41	37	35	29
		170	0.198	0.249	12 - 18 - 27	3 - 5 - 9	33	80	49.2	62.1	3.6 - 5.4 - 8.2	1.0 - 1.5 - 2.8	51	49	45	42	41	35
		230	0.362	0.456	16 - 22 - 32	4 - 7 - 11	40	109	90.1	113.6	4.9 - 6.8 - 9.6	1.4 - 2.1 - 3.2	56	55	51	51	50	44
	4'	80	0.025	0.037	2 - 5 - 15	1 - 2 - 4	-	38	6.3	9.2	0.7 - 1.5 - 4.7	0.4 - 0.5 - 1.1	36	31	24	19	13	-
		140	0.078	0.113	7 - 14 - 26	2 - 3 - 6	24	66	19.3	28.1	2.0 - 4.1 - 7.9	0.6 - 0.9 - 1.9	45	42	36	34	31	27
		170	0.115	0.166	10 - 16 - 29	2 - 4 - 7	29	80	28.5	41.4	3.0 - 5.0 - 8.7	0.8 - 1.1 - 2.3	48	46	40	40	37	33
		200	0.159	0.230	13 - 19 - 31	3 - 4 - 9	33	94	39.5	57.3	3.9 - 5.9 - 9.5	0.9 - 1.3 - 2.6	51	49	43	44	42	38
		260	0.268	0.389	17 - 25 - 36	4 - 6 - 10	39	123	66.7	96.8	5.1 - 7.6 - 10.8	1.2 - 1.7 - 3.0	55	54	49	52	50	46
	5'	100	0.025	0.043	3 - 6 - 18	1 - 2 - 4	13	47	6.3	10.7	0.8 - 1.7 - 5.4	0.4 - 0.5 - 1.1	37	32	24	23	17	14
		170	0.073	0.125	7 - 15 - 30	2 - 3 - 6	26	80	18.2	31.0	2.2 - 4.6 - 9.0	0.6 - 0.9 - 1.8	46	43	36	38	34	31
		205	0.106	0.181	11 - 18 - 33	2 - 4 - 7	31	97	26.4	45.1	3.2 - 5.6 - 9.9	0.7 - 1.1 - 2.2	49	47	40	43	40	37
		240	0.145	0.248	14 - 21 - 35	3 - 4 - 8	34	113	36.2	61.8	4.3 - 6.5 - 10.7	0.9 - 1.3 - 2.5	52	50	43	47	45	42
		310	0.243	0.414	18 - 28 - 40	4 - 5 - 9	41	146	60.4	103.2	5.6 - 8.4 - 12.2	1.1 - 1.7 - 2.9	56	55	48	54	53	50
8" Oval Inlet	3'	50	0.012	0.013	1 - 3 - 11	1 - 1 - 3	-	24	2.9	3.3	0.4 - 0.9 - 3.2	0.3 - 0.4 - 0.9	28	22	18	-	-	-
		120	0.067	0.077	7 - 13 - 23	2 - 4 - 7	20	57	16.7	19.2	2.2 - 3.8 - 6.9	0.7 - 1.1 - 2.1	42	40	36	26	24	16
		155	0.112	0.129	11 - 16 - 26	3 - 5 - 9	27	73	27.9	32.0	3.3 - 5.0 - 7.9	0.9 - 1.4 - 2.6	47	45	41	33	32	24
		190	0.169	0.193	13 - 20 - 29	4 - 6 - 10	32	90	42.0	48.2	4.1 - 6.1 - 8.7	1.1 - 1.7 - 2.9	50	49	46	39	38	30
		260	0.316	0.362	18 - 24 - 34	5 - 8 - 11	39	123	78.6	90.2	5.5 - 7.2 - 10.2	1.5 - 2.3 - 3.4	55	55	52	48	48	40
	4'	80	0.018	0.023	2 - 5 - 15	1 - 2 - 4	-	38	4.6	5.7	0.7 - 1.5 - 4.7	0.4 - 0.5 - 1.1	33	28	23	12	-	-
		160	0.074	0.091	9 - 15 - 28	2 - 4 - 7	24	76	18.4	22.8	2.7 - 4.7 - 8.5	0.7 - 1.1 - 2.1	45	42	37	32	29	23
		200	0.115	0.143	13 - 19 - 31	3 - 4 - 9	29	94	28.7	35.6	3.9 - 5.9 - 9.5	0.9 - 1.3 - 2.6	48	46	42	38	36	30
		240	0.166	0.206	15 - 23 - 34	4 - 5 - 9	34	113	41.3	51.2	4.7 - 7.1 - 10.4	1.1 - 1.6 - 2.8	51	50	46	43	42	36
		320	0.295	0.366	21 - 28 - 39	5 - 7 - 11	41	151	73.5	91.1	6.3 - 8.5 - 12.0	1.4 - 2.1 - 3.3	56	56	52	51	51	45
	5'	100	0.020	0.027	3 - 6 - 18	1 - 2 - 4	-	47	5.0	6.7	0.8 - 1.7 - 5.4	0.4 - 0.5 - 1.1	35	30	23	16	11	-
		180	0.064	0.087	8 - 16 - 31	2 - 3 - 6	24	85	16.0	21.6	2.5 - 4.9 - 9.3	0.6 - 1.0 - 1.9	44	41	36	33	29	24
		220	0.096	0.130	12 - 20 - 34	3 - 4 - 8	28	104	24.0	32.3	3.7 - 6.0 - 10.3	0.8 - 1.2 - 2.4	48	45	40	38	36	31
		260	0.134	0.181	15 - 23 - 37	3 - 5 - 9	32	123	33.5	45.1	4.7 - 7.1 - 11.2	0.9 - 1.4 - 2.6	51	49	43	43	41	36
		340	0.230	0.310	20 - 30 - 42	4 - 6 - 10	39	160	57.3	77.1	6.2 - 9.0 - 12.8	1.2 - 1.8 - 3.0	55	54	49	50	49	44
10" Oval Inlet	3'	50	0.009	0.010	1 - 3 - 11	1 - 1 - 3	-	24	2.2	2.4	0.4 - 0.9 - 3.2	0.3 - 0.4 - 0.9	26	20	17	-	-	-
		130	0.060	0.066	8 - 14 - 24	3 - 4 - 8	20	61	14.8	16.3	2.6 - 4.2 - 7.2	0.8 - 1.2 - 2.3	42	39	37	24	22	13
		170	0.102	0.112	12 - 18 - 27	3 - 5 - 9	26	80	25.3	28.0	3.6 - 5.4 - 8.2	1.0 - 1.5 - 2.8	46	45	43	31	30	21
		210	0.155	0.171	15 - 21 - 30	4 - 6 - 10	31	99	38.7	42.7	4.5 - 6.5 - 9.2	1.2 - 1.9 - 3.1	50	49	47	37	37	28
		290	0.296	0.327	20 - 25 - 35	6 - 8 - 12	39	137	73.8	81.4	6.2 - 7.6 - 10.8	1.7 - 2.5 - 3.6	55	55	54	46	47	38
	4'	80	0.014	0.017	2 - 5 - 15	1 - 2 - 4	-	38	3.6	4.1	0.7 - 1.5 - 4.7	0.4 - 0.5 - 1.1	31	26	22	-	-	-
		170	0.064	0.075	10 - 16 - 29	2 - 4 - 7	23	80	16.0	18.6	3.0 - 5.0 - 8.7	0.8 - 1.1 - 2.3	44	41	38	29	27	19
		215	0.103	0.120	14 - 21 - 32	3 - 5 - 9	28	101	25.6	29.8	4.2 - 6.3 - 9.8	1.0 - 1.4 - 2.7	48	46	43	35	34	27
		260	0.151	0.175	17 - 25 - 36	4 - 6 - 10	33	123	37.5	43.6	5.1 - 7.6 - 10.8	1.2 - 1.7 - 3.0	51	50	47	41	40	33
		350	0.273	0.317	23 - 29 - 41	5 - 8 - 11	40	165	67.9	79.0	6.9 - 8.9 - 12.5	1.6 - 2.3 - 3.4	56	56	53	49	49	42
	5'	100	0.016	0.019	3 - 6 - 18	1 - 2 - 4	-	47	3.9	4.8	0.8 - 1.7 - 5.4	0.4 - 0.5 - 1.1	33	28	22	12	-	-
		200	0.063	0.078	10 - 18 - 32	2 - 4 - 7	23	94	15.7	19.3	3.1 - 5.4 - 9.8	0.7 - 1.1 - 2.1	44	42	37	31	28	22
		250	0.099	0.121	15 - 22 - 36	3 - 4 - 9	29	118	24.6	30.2	4.5 - 6.8 - 10.9	0.9 - 1.3 - 2.6	48	46	42	37	35	29
		300	0.142	0.175	18 - 27 - 39	4 - 5 - 9	33	142	35.4	43.5	5.4 - 8.1 - 12.0	1.1 - 1.6 - 2.8	51	50	46	42	41	35
		400	0.253	0.311	24 - 32 - 46	5 - 7 - 11	40	189	62.9	77.4	7.2 - 9.8 - 13.8	1.4 - 2.1 - 3.3	56	56	52	50	50	44

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values for horizontal and vertical throw are given at isothermal conditions. Airflow is given for the length of the unit. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re10^{-12} Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See selection software for performance data not shown, including octave band data.

PTBSCDB, PTBSRCDB Performance Data: Horizontal/Vertical Throw

IP/METRIC DATA: PTBSCDB, PTBSRCDB, 15" DOWNBLOW, 1-SLOT, 1-WAY (NO DAMPER)

	Linear Length	IP Data						Metric Data											
		Air Flow	Pressure		Horizontal Throw	Vertical Throw	NC	Air Flow	Pressure		Horizontal Throw	Vertical Throw	Octave Band, dB					
			Ps	Pt					Ps	Pt								
		CFM	"WG	"WG	ft	ft		L/s	Pa	Pa	m	m	2	3	4	5	6	7
6" Oval Inlet	3'	50	0.020	0.025	1 - 3 - 10	1 - 1 - 3	-	24	5.0	6.1	0.4 - 0.8 - 3.0	0.3 - 0.4 - 0.9	30	24	19	-	-	-
		110	0.098	0.119	6 - 11 - 20	2 - 3 - 6	21	52	24.3	29.7	1.7 - 3.3 - 6.2	0.7 - 1.0 - 2.0	43	40	35	28	25	19
		140	0.158	0.193	9 - 14 - 23	3 - 4 - 8	27	66	39.4	48.1	2.8 - 4.2 - 7.0	0.8 - 1.2 - 2.5	47	45	40	35	33	27
		170	0.233	0.285	11 - 17 - 25	3 - 5 - 9	32	80	58.1	70.9	3.4 - 5.1 - 7.7	1.0 - 1.5 - 2.8	50	49	44	40	39	33
		230	0.427	0.521	15 - 21 - 29	4 - 7 - 11	39	109	106.3	129.8	4.6 - 6.3 - 9.0	1.4 - 2.1 - 3.2	55	55	51	49	48	42
	4'	80	0.029	0.040	2 - 5 - 15	1 - 2 - 4	-	38	7.1	10.0	0.6 - 1.4 - 4.5	0.4 - 0.5 - 1.1	35	30	24	18	12	-
		150	0.101	0.141	7 - 14 - 26	2 - 3 - 7	25	71	25.1	35.1	2.2 - 4.2 - 7.9	0.7 - 1.0 - 2.0	46	43	37	35	32	27
		185	0.154	0.215	11 - 17 - 29	3 - 4 - 8	30	87	38.2	53.5	3.4 - 5.2 - 8.7	0.8 - 1.2 - 2.5	49	47	41	41	38	34
		220	0.217	0.304	14 - 20 - 31	3 - 5 - 9	35	104	54.1	75.6	4.1 - 6.2 - 9.5	1.0 - 1.5 - 2.7	52	51	45	46	44	39
		290	0.377	0.528	18 - 25 - 36	4 - 6 - 10	41	137	93.9	131.4	5.4 - 7.7 - 10.9	1.3 - 1.9 - 3.1	57	56	51	54	53	48
	5'	100	0.028	0.046	2 - 6 - 17	1 - 2 - 4	13	47	7.0	11.5	0.7 - 1.7 - 5.3	0.4 - 0.5 - 1.1	37	32	24	22	16	13
		170	0.081	0.133	7 - 15 - 29	2 - 3 - 6	25	80	20.2	33.1	2.2 - 4.5 - 8.7	0.6 - 0.9 - 1.8	46	43	35	37	33	30
		205	0.118	0.193	10 - 18 - 32	2 - 4 - 7	30	97	29.4	48.1	3.1 - 5.4 - 9.6	0.7 - 1.1 - 2.2	49	46	39	42	39	36
		240	0.162	0.265	14 - 21 - 34	3 - 4 - 8	34	113	40.3	66.0	4.2 - 6.3 - 10.4	0.9 - 1.3 - 2.5	52	50	43	46	44	40
		310	0.270	0.442	18 - 27 - 39	4 - 5 - 9	40	146	67.3	110.1	5.4 - 8.2 - 11.8	1.1 - 1.7 - 2.9	56	55	48	54	52	49
8" Oval Inlet	3'	50	0.014	0.015	1 - 3 - 10	1 - 1 - 3	-	24	3.4	3.8	0.4 - 0.8 - 3.0	0.3 - 0.4 - 0.9	27	21	17	-	-	-
		130	0.092	0.103	8 - 13 - 22	3 - 4 - 8	21	61	22.9	25.8	2.4 - 3.9 - 6.7	0.8 - 1.2 - 2.3	43	40	37	26	24	16
		170	0.157	0.177	11 - 17 - 25	3 - 5 - 9	28	80	39.1	44.1	3.4 - 5.1 - 7.7	1.0 - 1.5 - 2.8	47	46	43	34	33	25
		210	0.240	0.270	14 - 20 - 28	4 - 6 - 10	33	99	59.7	67.2	4.2 - 6.1 - 8.6	1.2 - 1.9 - 3.1	51	50	48	40	39	31
		290	0.457	0.515	19 - 23 - 33	6 - 8 - 12	41	137	113.8	128.2	5.8 - 7.1 - 10.1	1.7 - 2.5 - 3.6	56	57	54	49	50	41
	4'	80	0.021	0.025	2 - 5 - 15	1 - 2 - 4	-	38	5.1	6.2	0.6 - 1.4 - 4.5	0.4 - 0.5 - 1.1	33	28	22	11	-	-
		160	0.082	0.100	8 - 15 - 27	2 - 4 - 7	23	76	20.4	24.8	2.6 - 4.5 - 8.1	0.7 - 1.1 - 2.1	44	41	37	30	28	21
		200	0.128	0.156	12 - 19 - 30	3 - 4 - 9	28	94	31.9	38.8	3.8 - 5.6 - 9.1	0.9 - 1.3 - 2.6	48	46	42	37	35	28
		240	0.185	0.224	15 - 22 - 33	4 - 5 - 9	33	113	46.0	55.9	4.5 - 6.8 - 9.9	1.1 - 1.6 - 2.8	51	50	45	42	40	34
		320	0.328	0.399	20 - 27 - 38	5 - 7 - 11	40	151	81.8	99.3	6.0 - 8.1 - 11.5	1.4 - 2.1 - 3.3	56	55	51	50	49	43
	5'	100	0.022	0.029	2 - 6 - 17	1 - 2 - 4	-	47	5.4	7.1	0.7 - 1.7 - 5.3	0.4 - 0.5 - 1.1	34	29	23	15	-	-
		190	0.078	0.103	9 - 16 - 30	2 - 3 - 7	24	90	19.5	25.7	2.7 - 5.0 - 9.2	0.7 - 1.0 - 2.0	45	42	37	33	30	25
		235	0.120	0.158	14 - 20 - 34	3 - 4 - 8	29	111	29.8	39.3	4.1 - 6.2 - 10.3	0.8 - 1.3 - 2.5	49	46	41	39	37	32
		280	0.170	0.224	16 - 24 - 37	3 - 5 - 9	34	132	42.3	55.8	4.9 - 7.4 - 11.2	1.0 - 1.5 - 2.7	51	50	45	44	42	37
		370	0.297	0.391	21 - 30 - 42	4 - 7 - 10	41	175	73.9	97.4	6.5 - 9.1 - 12.9	1.3 - 2.0 - 3.2	56	56	51	52	51	46
10" Oval Inlet	3'	50	0.010	0.011	1 - 3 - 10	1 - 1 - 3	-	24	2.5	2.8	0.4 - 0.8 - 3.0	0.3 - 0.4 - 0.9	25	20	17	-	-	-
		140	0.080	0.087	9 - 14 - 23	3 - 4 - 8	20	66	19.9	21.7	2.8 - 4.2 - 7.0	0.8 - 1.2 - 2.5	42	40	38	24	22	13
		185	0.140	0.152	12 - 18 - 26	4 - 5 - 9	27	87	34.7	37.8	3.7 - 5.5 - 8.0	1.1 - 1.6 - 2.9	47	46	44	32	31	22
		230	0.216	0.235	15 - 21 - 29	4 - 7 - 11	32	109	53.7	58.5	4.6 - 6.3 - 9.0	1.4 - 2.1 - 3.2	50	50	49	38	38	29
		320	0.418	0.455	20 - 25 - 35	6 - 9 - 12	41	151	104.0	113.2	6.1 - 7.5 - 10.6	1.9 - 2.7 - 3.8	56	57	56	47	48	39
	4'	80	0.016	0.018	2 - 5 - 15	1 - 2 - 4	-	38	3.9	4.5	0.6 - 1.4 - 4.5	0.4 - 0.5 - 1.1	31	26	22	-	-	-
		180	0.080	0.092	11 - 17 - 28	3 - 4 - 8	23	85	19.9	22.8	3.2 - 5.1 - 8.6	0.8 - 1.2 - 2.4	44	42	39	29	27	20
		230	0.130	0.149	14 - 21 - 32	3 - 5 - 9	29	109	32.4	37.2	4.3 - 6.5 - 9.7	1.0 - 1.5 - 2.8	48	47	44	36	35	27
		280	0.193	0.222	17 - 25 - 35	4 - 6 - 10	34	132	48.1	55.2	5.3 - 7.6 - 10.7	1.2 - 1.9 - 3.1	52	51	48	42	41	33
		380	0.356	0.408	23 - 29 - 41	6 - 8 - 12	41	179	88.6	101.6	7.1 - 8.8 - 12.5	1.7 - 2.5 - 3.6	57	57	54	50	51	43
	5'	100	0.017	0.021	2 - 6 - 17	1 - 2 - 4	-	47	4.3	5.2	0.7 - 1.7 - 5.3	0.4 - 0.5 - 1.1	33	28	22	11	-	-
		200	0.068	0.083	10 - 17 - 31	2 - 4 - 7	23	94	17.0	20.6	3.0 - 5.3 - 9.5	0.7 - 1.1 - 2.1	44	41	37	30	28	21
		250	0.107	0.130	14 - 22 - 35	3 - 4 - 9	28	118	26.6	32.2	4.4 - 6.6 - 10.6	0.9 - 1.3 - 2.6	48	46	42	36	35	28
		300	0.154	0.186	17 - 26 - 38	4 - 5 - 9	33	142	38.3	46.4	5.3 - 7.9 - 11.6	1.1 - 1.6 - 2.8	51	49	45	42	40	34
		400	0.274	0.332	23 - 31 - 44	5 - 7 - 11	40	189	68.1	82.6	7.0 - 9.5 - 13.4	1.4 - 2.1 - 3.3	56	55	51	50	49	43

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values for horizontal and vertical throw are given at isothermal conditions. Airflow is given for the length of the unit. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re10^{-12} Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See selection software for performance data not shown, including octave band data.

PTBSCDB, PTBSRCDB Performance Data: Horizontal/Vertical Throw

IP/METRIC DATA: PTBSCDB, PTBSRCDB, 18" DOWNBLOW, 1-SLOT, 1-WAY (NO DAMPER)

	Linear Length	IP Data					NC	Metric Data					Octave Band, dB					
		Air Flow	Pressure		Horizontal Throw	Vertical Throw		Air Flow	Pressure		Horizontal Throw	Vertical Throw						
			Ps	Pt					Ps	Pt								
		CFM	"WG	"WG	ft	ft		L/s	Pa	Pa	m	m	2	3	4	5	6	7
6" Oval Inlet	3'	50	0.024	0.029	1 - 2 - 9	1 - 1 - 3	-	24	6.0	7.2	0.3 - 0.7 - 2.8	0.3 - 0.4 - 0.9	26	20	15	-	-	-
		130	0.164	0.194	7 - 12 - 21	3 - 4 - 8	20	61	40.9	48.4	2.2 - 3.6 - 6.2	0.8 - 1.2 - 2.3	42	39	35	26	24	17
		170	0.281	0.332	10 - 15 - 23	3 - 5 - 9	27	80	69.9	82.8	3.1 - 4.7 - 7.1	1.0 - 1.5 - 2.8	47	45	41	34	32	25
		210	0.428	0.507	13 - 18 - 26	4 - 6 - 10	32	99	106.7	126.3	3.9 - 5.6 - 7.9	1.2 - 1.9 - 3.1	50	49	45	40	39	32
		290	0.817	0.967	18 - 22 - 31	6 - 8 - 12	40	137	203.4	240.8	5.4 - 6.6 - 9.3	1.7 - 2.5 - 3.6	55	55	52	49	49	42
	4'	80	0.033	0.044	2 - 5 - 14	1 - 2 - 4	-	38	8.1	11.0	0.6 - 1.4 - 4.3	0.4 - 0.5 - 1.1	33	28	21	14	-	-
		160	0.131	0.177	8 - 14 - 25	2 - 4 - 7	24	76	32.6	44.0	2.4 - 4.3 - 7.7	0.7 - 1.1 - 2.1	45	42	36	33	30	25
		200	0.205	0.276	12 - 18 - 28	3 - 4 - 9	29	94	50.9	68.7	3.6 - 5.4 - 8.7	0.9 - 1.3 - 2.6	48	46	41	39	37	32
		240	0.295	0.397	14 - 21 - 31	4 - 5 - 9	34	113	73.3	99.0	4.3 - 6.4 - 9.5	1.1 - 1.6 - 2.8	51	50	44	44	42	38
		320	0.524	0.707	19 - 25 - 36	5 - 7 - 11	41	151	130.4	175.9	5.7 - 7.7 - 10.9	1.4 - 2.1 - 3.3	56	56	50	52	51	47
	5'	100	0.031	0.049	2 - 5 - 17	1 - 2 - 4	-	47	7.8	12.3	0.7 - 1.6 - 5.1	0.4 - 0.5 - 1.1	36	30	23	19	13	-
		180	0.102	0.160	8 - 15 - 29	2 - 3 - 6	25	85	25.3	39.8	2.3 - 4.6 - 8.7	0.6 - 1.0 - 1.9	45	42	35	35	32	28
		220	0.152	0.239	11 - 18 - 32	3 - 4 - 8	30	104	37.9	59.4	3.5 - 5.6 - 9.6	0.8 - 1.2 - 2.4	49	46	39	41	38	34
		260	0.212	0.333	14 - 22 - 34	3 - 5 - 9	34	123	52.9	83.0	4.4 - 6.6 - 10.4	0.9 - 1.4 - 2.6	51	49	43	46	43	40
		340	0.363	0.570	19 - 28 - 39	4 - 6 - 10	40	160	90.4	141.9	5.8 - 8.4 - 11.9	1.2 - 1.8 - 3.0	56	55	48	53	52	48
8" Oval Inlet	3'	50	0.016	0.018	1 - 2 - 9	1 - 1 - 3	-	24	4.0	4.4	0.3 - 0.7 - 2.8	0.3 - 0.4 - 0.9	24	17	14	-	-	-
		130	0.109	0.121	7 - 12 - 21	3 - 4 - 8	16	61	27.2	30.1	2.2 - 3.6 - 6.2	0.8 - 1.2 - 2.3	39	37	34	20	17	-
		170	0.187	0.206	10 - 15 - 23	3 - 5 - 9	23	80	46.4	51.4	3.1 - 4.7 - 7.1	1.0 - 1.5 - 2.8	44	42	39	27	26	17
		210	0.285	0.315	13 - 18 - 26	4 - 6 - 10	28	99	70.9	78.4	3.9 - 5.6 - 7.9	1.2 - 1.9 - 3.1	47	46	44	33	32	24
		290	0.543	0.601	18 - 22 - 31	6 - 8 - 12	36	137	135.1	149.6	5.4 - 6.6 - 9.3	1.7 - 2.5 - 3.6	53	53	51	42	43	34
	4'	80	0.023	0.027	2 - 5 - 14	1 - 2 - 4	-	38	5.7	6.8	0.6 - 1.4 - 4.3	0.4 - 0.5 - 1.1	30	25	20	-	-	-
		170	0.104	0.124	9 - 15 - 26	2 - 4 - 7	21	80	25.9	30.8	2.8 - 4.6 - 8.0	0.8 - 1.1 - 2.3	43	40	36	28	25	19
		215	0.166	0.198	13 - 19 - 30	3 - 5 - 9	27	101	41.4	49.3	3.8 - 5.8 - 9.0	1.0 - 1.4 - 2.7	47	45	41	35	33	26
		260	0.243	0.290	15 - 23 - 32	4 - 6 - 10	32	123	60.5	72.1	4.7 - 7.0 - 9.9	1.2 - 1.7 - 3.0	50	49	45	40	39	32
		350	0.441	0.525	21 - 27 - 38	5 - 8 - 11	39	165	109.7	130.7	6.3 - 8.1 - 11.4	1.6 - 2.3 - 3.4	55	55	51	48	48	41
	5'	100	0.024	0.031	2 - 5 - 17	1 - 2 - 4	-	47	5.9	7.6	0.7 - 1.6 - 5.1	0.4 - 0.5 - 1.1	33	28	21	12	-	-
		200	0.095	0.122	9 - 17 - 30	2 - 4 - 7	23	94	23.6	30.5	2.9 - 5.1 - 9.2	0.7 - 1.1 - 2.1	44	41	36	32	29	23
		250	0.148	0.191	14 - 21 - 34	3 - 4 - 9	29	118	36.9	47.6	4.2 - 6.4 - 10.2	0.9 - 1.3 - 2.6	48	46	41	38	36	30
		300	0.213	0.276	17 - 25 - 37	4 - 5 - 9	33	142	53.2	68.6	5.1 - 7.6 - 11.2	1.1 - 1.6 - 2.8	51	50	45	43	41	36
		400	0.379	0.490	22 - 30 - 43	5 - 7 - 11	40	189	94.5	122.0	6.8 - 9.2 - 12.9	1.4 - 2.1 - 3.3	56	55	51	51	50	45
10" Oval Inlet	3'	50	0.012	0.013	1 - 2 - 9	1 - 1 - 3	-	24	3.0	3.2	0.3 - 0.7 - 2.8	0.3 - 0.4 - 0.9	22	16	13	-	-	-
		160	0.123	0.133	10 - 15 - 23	3 - 5 - 9	19	76	30.7	33.0	3.0 - 4.4 - 6.9	1.0 - 1.4 - 2.7	41	39	37	21	20	-
		215	0.223	0.239	13 - 19 - 26	4 - 6 - 10	26	101	55.5	59.6	4.0 - 5.7 - 8.0	1.3 - 1.9 - 3.1	46	45	44	29	29	19
		270	0.351	0.378	16 - 21 - 30	5 - 8 - 11	31	127	87.4	94.0	5.0 - 6.4 - 9.0	1.6 - 2.4 - 3.5	50	49	48	36	36	26
		380	0.696	0.748	20 - 25 - 35	7 - 10 - 14	40	179	173.2	186.3	6.2 - 7.5 - 10.7	2.3 - 2.9 - 4.1	55	56	56	45	47	37
	4'	80	0.018	0.020	2 - 5 - 14	1 - 2 - 4	-	38	4.4	5.0	0.6 - 1.4 - 4.3	0.4 - 0.5 - 1.1	29	23	19	-	-	-
		190	0.099	0.112	11 - 17 - 28	3 - 4 - 8	21	90	24.7	27.9	3.4 - 5.1 - 8.4	0.8 - 1.3 - 2.5	43	41	37	27	25	17
		245	0.165	0.187	14 - 22 - 32	4 - 5 - 9	28	116	41.0	46.5	4.4 - 6.6 - 9.6	1.1 - 1.6 - 2.9	47	46	43	34	33	25
		300	0.247	0.280	18 - 25 - 35	4 - 7 - 10	33	142	61.5	69.7	5.4 - 7.5 - 10.6	1.3 - 2.0 - 3.2	51	50	47	39	39	31
		410	0.462	0.522	24 - 29 - 41	6 - 9 - 12	40	193	114.9	130.1	7.2 - 8.8 - 12.4	1.8 - 2.6 - 3.7	56	56	54	48	49	41
	5'	100	0.019	0.022	2 - 5 - 17	1 - 2 - 4	-	47	4.6	5.5	0.7 - 1.6 - 5.1	0.4 - 0.5 - 1.1	31	26	21	-	-	-
		220	0.090	0.107	11 - 18 - 32	3 - 4 - 8	23	104	22.4	26.8	3.5 - 5.6 - 9.6	0.8 - 1.2 - 2.4	44	42	37	30	27	21
		280	0.146	0.174	16 - 23 - 36	3 - 5 - 9	29	132	36.3	43.3	4.7 - 7.1 - 10.8	1.0 - 1.5 - 2.7	48	46	42	37	35	28
		340	0.215	0.257	19 - 28 - 39	4 - 6 - 10	34	160	53.5	63.9	5.8 - 8.4 - 11.9	1.2 - 1.8 - 3.0	51	50	46	42	41	34
		460	0.393	0.470	26 - 32 - 46	5 - 8 - 12	41	217	97.9	117.0	7.8 - 9.8 - 13.9	1.6 - 2.5 - 3.5	56	56	53	51	51	44

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values for horizontal and vertical throw are given at isothermal conditions. Airflow is given for the length of the unit. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re10^{-12} Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See selection software for performance data not shown, including octave band data.

PTBSCDB, PTBSRCDB Suggested Specification & Configuration

1. **SERIES: (XXXXXXXX)**
   PTBSCDB - Plenum Slot Diffuser with Fixed Pattern and Downblow Section
   PTBSRCDB - Plenum Slot Diffuser with Fixed Pattern, Return Slot, and Downblow Section

2. **INSULATION: (X)**
   N - No Insulation
   Y - Insulation

3. **SLOT LENGTH: (XX) ***
   24”, 36”, 48”, or 60”

4. **DOWN BLOW SECTION LENGTH: (XX) ****
   8”, 12”, 15”, or 18”

5. **PLENUM INLET SIZE: (XX)**
   6”, 8”, or 10” Oval

6. **MOUNTING TYPE: (XX)**
   00 - No Mounting
   PF - Plaster Frame

7. **FINISH: (XX)**
   35 - Black

** 10” Inlet not available with 24” Slot Length.*
*** 8” Downblow only available on 24” Slot Length.*

PTBSCDB
The plenum slot supply diffuser with down blow section shall be Krueger model PTBSCDB constructed of 24 gage galvanized steel with factory drawn inlet to prevent air leakage. The PTBSCDB shall have a center down blow section constructed of a 2-piece pattern controller with 180° adjustability and volume control adjustment (down blow section only) accessible from the face of the diffuser. The two outer sections shall have a single aluminum extruded curved blade that creates a 3/4” slot width opening and discharges horizontally along the ceiling in the direction of the inlet to accommodate perimeter wall mounting applications. The PTBSCDB shall not exceed 7” in total height.

Optional plaster frame is available for installation in to hard ceilings.

Optional 1/2” thick foil wrapped, 1 1/2 lb. density external insulation is available.

PTBSRCDB
The plenum slot supply/return diffuser with down blow section shall be Krueger model PTBSRCDB constructed of 24 gage galvanized steel with factory drawn inlet to prevent air leakage for the supply side and a 2” slot opening running the length of the plenum for the return side. The PTBSRCDB shall have a center down blow section constructed of a 2-piece pattern controller with 180° adjustability and volume control adjustment (down blow section only) accessible from the face of the diffuser. The two outer sections shall have a single aluminum extruded curved blade that creates a 3/4” slot width opening and discharge horizontally along the ceiling in the direction of the inlet to accommodate perimeter wall mounting applications. The return slot shall be 2” in width and attached to the supply by the manufacturer. The return slot shall be located opposite the inlet to prevent a short circuit in the return air. The PTBSRCDB shall not exceed 7” in total height.

Optional plaster frame is available for installation in to hard ceilings.

Optional 1/2” thick foil wrapped, 1 1/2 lb. density external insulation is available.

PERFORMANCE
The manufacturer shall provide published (printed or electronic) performance data for the diffuser. Performance data shall include 2 - 7 octave band sound power levels. The diffuser shall be tested in accordance to the data standards at the time of product introduction or ANSI/ASHRAE Standard 70.

FINISH
The standard finish shall be black on the face and pattern controllers.

SAMPLE CONFIGURATION: PTBSCDB - N - 60 - 18 - 10 - 00 - 35