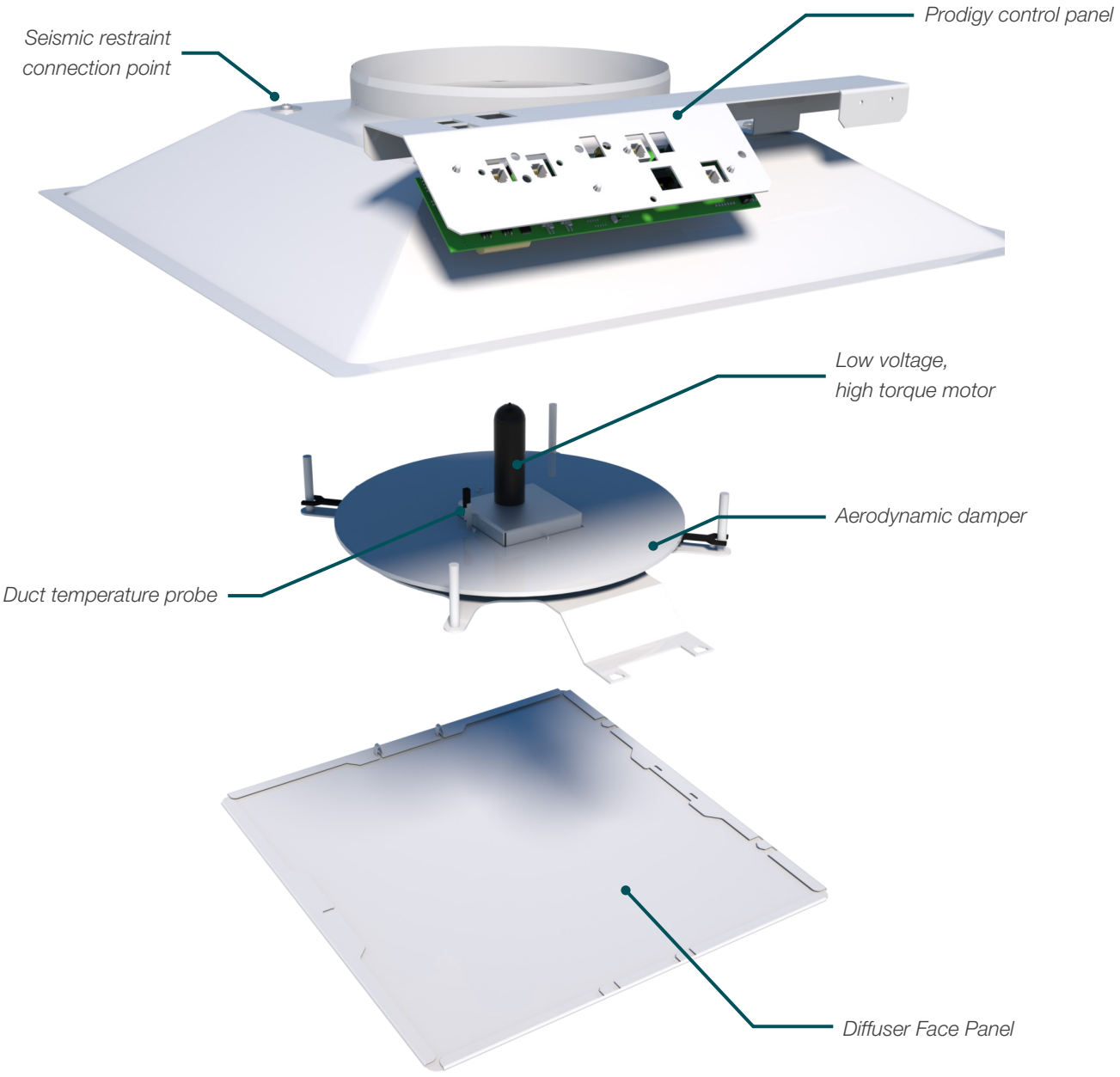
PRODIGY®

DIGITAL VAV DIFFUSERS

price | VAV DIFFUSERS

PRODIGY®
Digital VAV Diffusers

The Prodigy series of diffusers enhance traditional system design by adding the element of personal control. A room temperature sensor provides constant feedback to the microprocessor controller located in the diffuser, enabling precise monitoring of the space temperature. Using the room, duct and setpoint temperatures, the Prodigy modulates supply air to maintain comfort in the space.



INDIVIDUAL COMFORT AND CONTROL

The Prodigy personal diffuser monitors space conditions and regulates the flow of supply air to maintain the room setpoint with an accuracy of +/- 1°F. This setpoint is adjustable and enables occupants to establish the setting that represents their individual level of comfort.

IMMEDIATE RESPONSE

Direct digital control signals and a direct drive motor provide an immediate and controlled response to even the smallest fluctuations in room or load conditions.

ACCURATE TEMPERATURE CONTROL

The Prodigy features PI (Proportional + Integral) control algorithms for proven control, stability and versatility. Continual feedback of room temperature compared to room setpoint improves response over time by eliminating “hunting” and “thermal overshoot,” maximizing comfort in the space.

EXCELLENT AIR PERFORMANCE

The electric-powered damper is designed to maintain outlet velocities as the unit modulates. Throw and mixing characteristics remain relatively constant throughout the performance range of the diffuser.

NOTE: The maximum damper opening position is specific to the Prodigy model and inlet size. The full open position is different by model and inlet size to prevent over-opening and to ensure discharge velocity is maintained.

TYPICAL APPLICATIONS

The Prodigy is well suited for use in areas with multiple work spaces within a single zone. It provides personal temperature control by monitoring room temperature and modulating the flow of supply air into a particular space. Well suited for use in retrofit applications, the Prodigy can be used to replace traditional diffusers and provide improved occupant comfort through dynamic monitoring and control of room temperature.

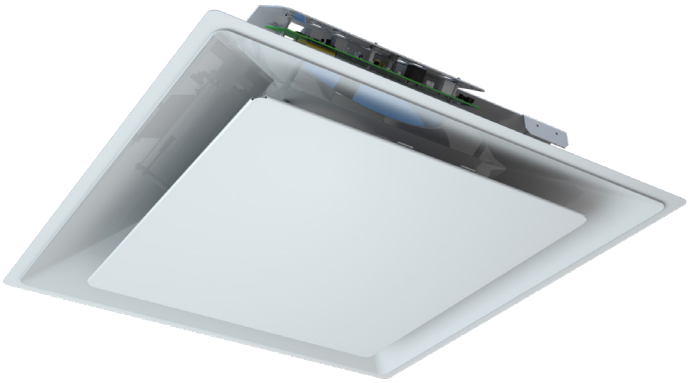
CONSTRUCTION

+ Powder Coat 10,000 hour salt spray test
+ 22-gauge steel

ACCESSORIES

+ Prodigy Power Module (PPM)
+ Pressure Relief Collar (PRC)
+ Pressure Control Valve (PCV)
+ Native BACnet interface
+ DMS Flow Measurement

PRODIGY DIGITAL VAV DIFFUSER



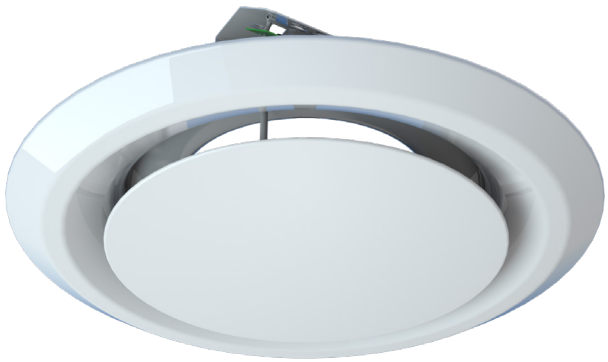
PPD AND PBD PRODIGY Square VAV Diffuser

– square plaque VAV diffuser.

New and improved mechanical design with tight damper shut off possible to meet newer energy saving standards.

Size: 24in / 600mm square

Inlet sizes: 6, 8, 10, and 12in



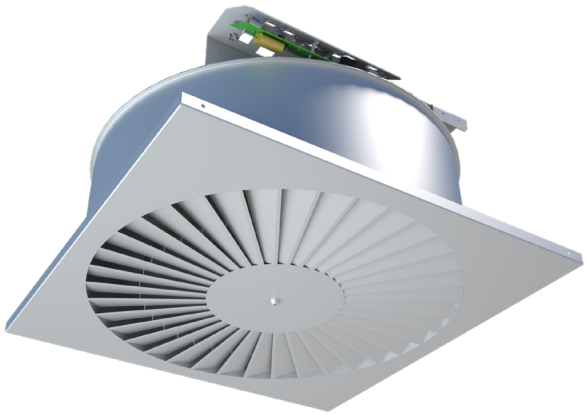
PRD PRODIGY Round VAV Diffuser

– round plaque VAV diffuser.

Round shape for exposed duct ceilings and an architectural look in grid ceilings.

Size: 27 5/8in Bevel (shown) or 24in / 600mm Flat

Inlet sizes: 6, 8, 10, and 12in



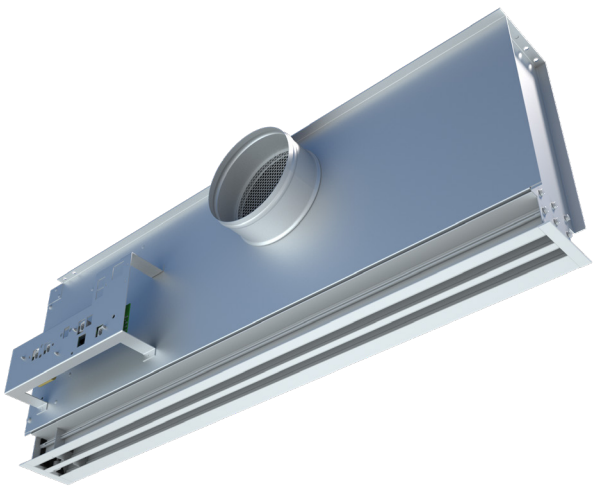
PSD PRODIGY Swirl VAV Diffuser

– swirl face VAV diffuser.

Added swirl induction to the high induction VAV diffuser.

Size: 24in / 600mm square

Inlet sizes: 6, 8, 10, and 12in



PLD PRODIGY Linear VAV Diffuser

– linear slot VAV diffuser.

Trim architectural design for spaces requiring a more aesthetic appearance.

Lengths: 24, 36, 48, and 60in 600, 900, 1200, and 1500mm

Slots: 1, 2, and 4

See individual submittals for dimensions and border types.

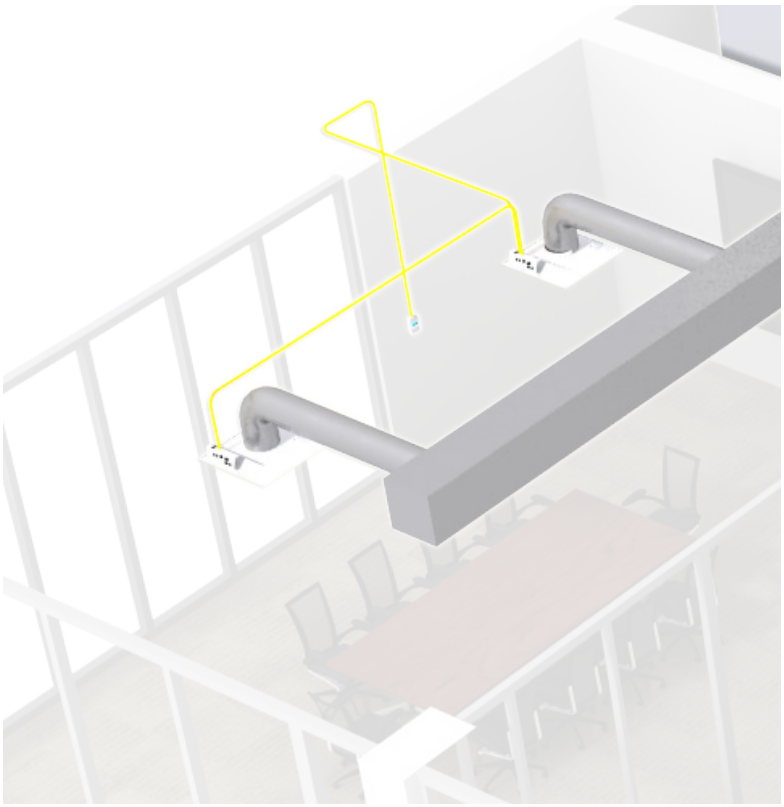
CONTROL OPTIONS

Wall Mounted Thermostat

Thermostat setpoint adjustment is suitable for applications that require dedicated cooling and/or heating cycles. Six thermostat options are available, ranging from a simple sensor through to LCD display and CO2 or occupancy sensing, the details of which are available in the zone controllers catalog. The Disio Display thermostat is now an option for Prodigy Diffusers if a sleek, minimalist look is desired.

Built-In Diffuser Thermostat (Model PBD only)

Allows for temperature control of a room while removing the thermostat from the wall. Positive induction is used to draw a sample of room air over a built-in sensor for an accurate measurement of room temperature. The diffuser setpoint is controlled by a Building Automation System. This option is only available on Model PBD with "Built-In Thermostat" option selected.



DRONE UNIT

Drone units contain actuators and control circuitry to respond to signals from a single master unit. The drone damper moves in sync with the master unit damper, ensuring all units meet zone setpoint requirements. Up to five drones can be daisy-chained and supported by one master.

AUXILIARY HEAT CONTROL

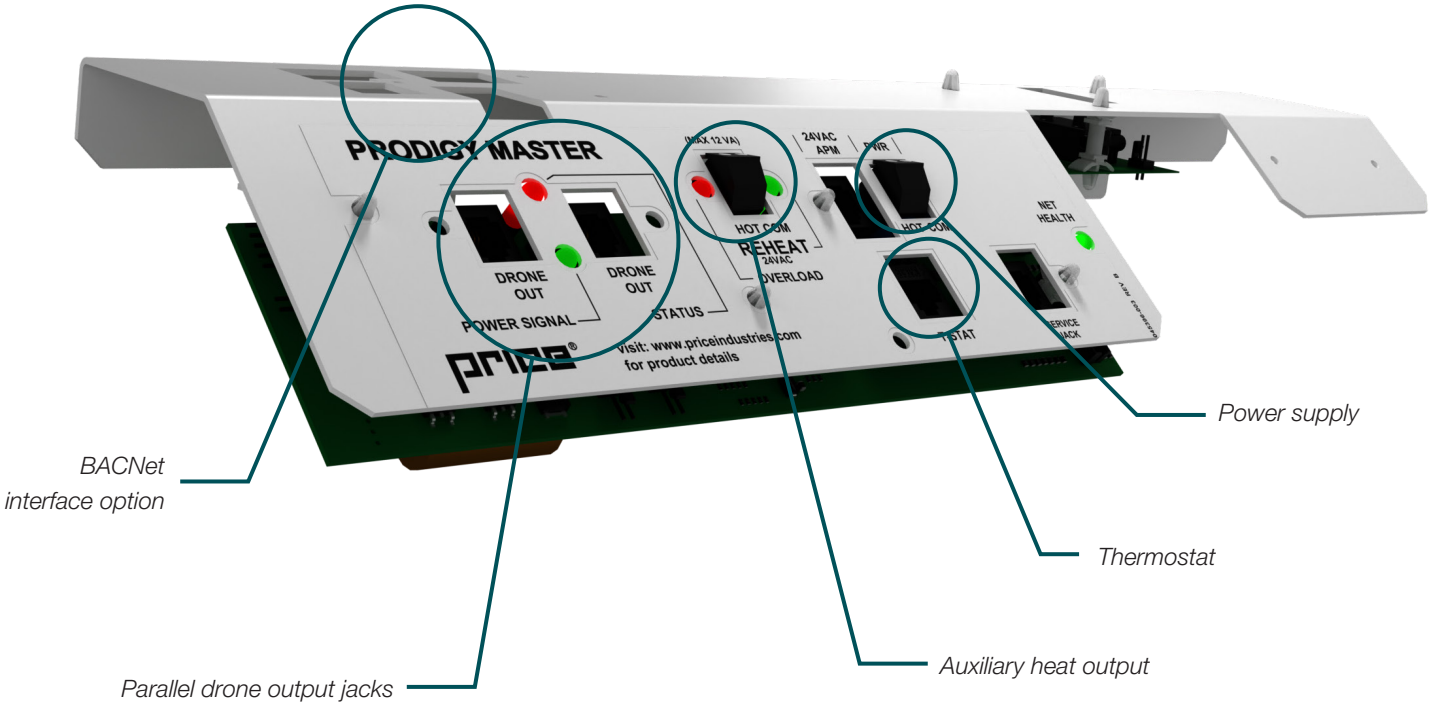
The Prodigy allows for auxiliary heat control through a 24 VAC output signal ideally suited for perimeter heating devices such as baseboard units and radiant panels. On/Off, Pulse Width Modulation and Pulse Delay Modulation (default) configurations are available.

ACCESSORIES

Multiple Power Supply Options

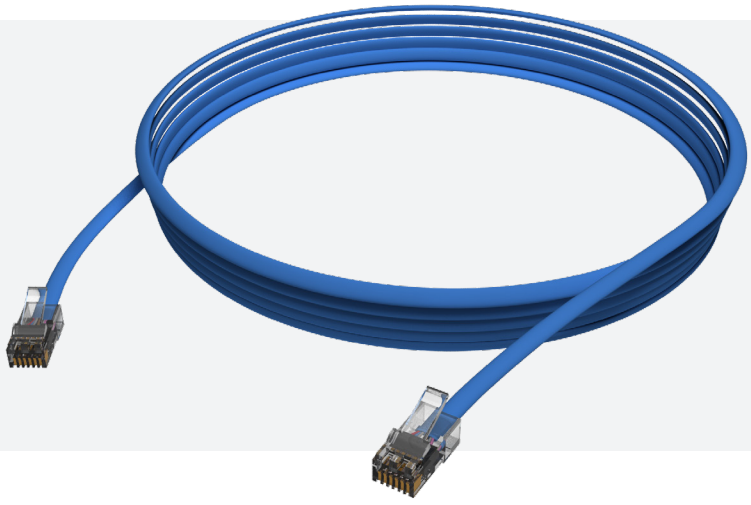
Each Prodigy (master and drone) requires 24VAC 3VA to operate. The Prodigy Master is available with three power supply options:

+ Terminal plug for field supplied 24 VAC - requires each Prodigy Master to be wired individually
+ Diffuser-mounted 20VA transformer - can support master unit and up to 5 drone units*
+ Prodigy Power Module - can support up to 15* Prodigy master or drone units



Cables and Connectors

A variety of plug-in low voltage cables and connectors are available to facilitate fast, simple and foolproof installation of the entire Prodigy family. All cables are plenum rated and safe to use anywhere in the building.



*Note: The number will be reduced if the auxiliary heat option is used.

Prodigy Power Module

The Prodigy Power Module (PPM) provides the most economical and convenient method for powering multiple Prodigy diffusers. As a result of the simple plug-and-play wiring, the costs of conduit, wiring and electrician time are dramatically reduced.

The Prodigy Power Module includes:

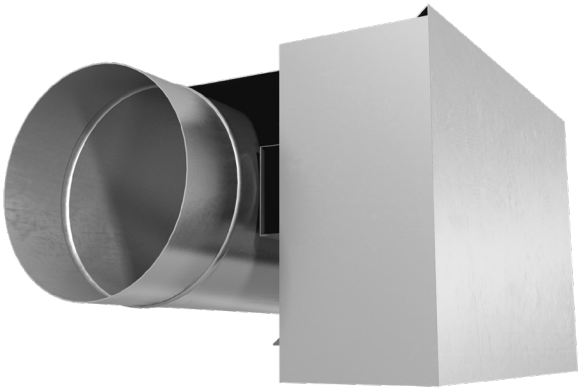
+ 96 VA Class 2 Transformer (Input voltages 120/240/277/480 VAC 50/60 Hz) 24 VAC output
+ Master On/Off switch and green power indicator LED
+ 6 individually protected output jacks with red LED indicator lights for overload notification that automatically reset when the fault is corrected

VAV Pressure Control

To limit excessive diffuser noise duct static pressure should be kept below 0.25 in. w.g. at the diffuser inlet. Use a method of pressure control for applications where duct pressure will exceed the recommended limit or where pressure will increase as Prodigy diffusers close to minimum. Where the Prodigy supplies less than 30% of the total air volume, pressure control may not be required. Pressure control may be achieved with a variety of methods including fan speed control and pressure control stations.

Pressure Control Valve

The Pressure Control Valve (PCV), available in both round and rectangular models, uses electronic control to regulate duct pressure, and can be configured for zone or bypass control. With the integral modulating damper, the PCV regulates airflow to maintain duct static pressure below 0.25 in. w.g..



Prodigy Pressure Relief Collar

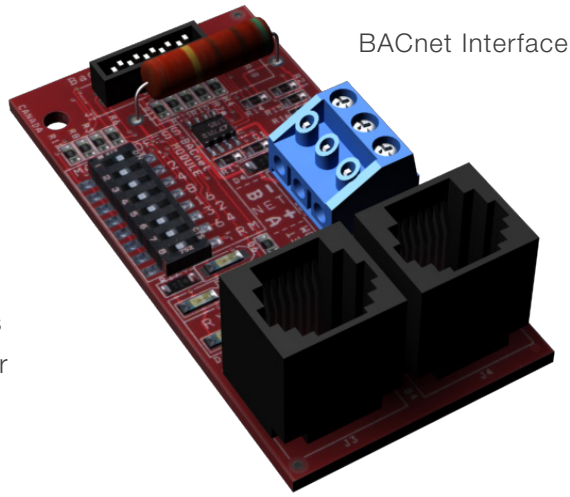
The Prodigy Pressure Relief Collar (PRC) slips over the diffuser inlet to provide a simple and inexpensive solution to control inlet static pressure. A PRC requires a plenum return and is recommended for installations with a constant volume fan. As duct pressure increases past 0.25 in. w.g. calibrated shutters gradually open to release excess air into the ceiling plenum. (Note: The PRC is not available for the PLD Prodigy linear diffuser.)

Prodigy Pressure Relief Ring

The Prodigy Pressure Relief Ring is a smaller inlet collar that can be factory or field-fitted onto the diffuser inlet neck. It creates an open space between the duct and diffuser inlet neck which allows air to bypass into the ceiling plenum as the VAV diffuser closes. At the cost of a more involved setup, the Prodigy Pressure Relief Ring provides a finer, proportional pressure control. **Note:** The PRR is not available for the PRD and PLD.

BACNET INTERFACE OPTION

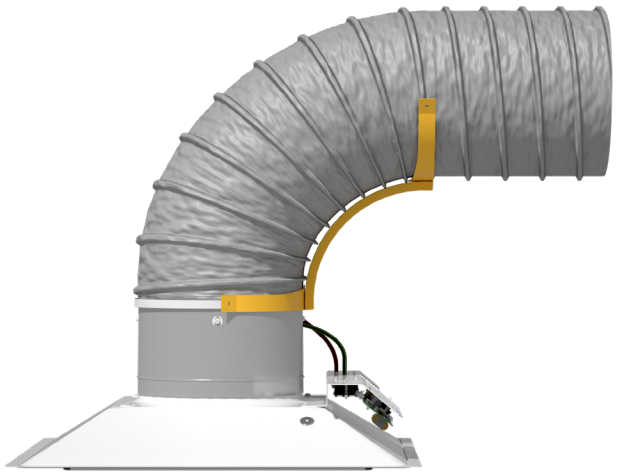
The Prodigy BACnet interface option allows connection to any Building Automation System (BAS) supporting the industry standard BACnet communication protocol. Once connected, information such as room temperature, setpoint and load can be shared with a BAS allowing remote monitoring and control of the Prodigy and maximizing energy efficiency and occupant comfort. Network connection is tool free and simply requires plugging in the supplied RJ-45 plenum rated network cable.



BACnet Interface

DIFFUSER AIR FLOW MEASUREMENT OPTION

The Diffuser Measuring Station (DMS) air flow measurement sensor may be added to the Prodigy to measure the air flow out of the diffuser. The collar mounted SP300 multipoint sensor aligned with the flex elbow provides accurate measurement of air flow throughout the VAV diffuser operating range. In conjunction with the BACnet Interface option, the measured air flow from each diffuser is available to the BACnet network along with the other measurements and diffuser properties.



DMS Air Flow Measurement

DMS PERFORMANCE

Inlet Size	Accuracy*	Minimum
6	+/- 10%	14cfm / 7 l/s
8	+/- 10%	26cfm / 12 l/s
10	+/- 10%	44cfm / 21 l/s
12**	+/- 10%	64cfm / 30 l/s

*For accurate flow measurement, the DMS must be installed with correct alignment between diffuser, DMS collar, and flex elbow. See DMS Manual for installation instructions.

**Model PLD 60in / 1500mm with 4 slots uses an oval inlet. DMS not available for oval inlet.

PERFORMANCE DATA - PPD SQUARE

Maximum Flow Selection Table

Inlet Size	Neck Velocity (fpm)	400	500	600	700	800	900	1000
	Velocity Pressure (in. w.g.)	0.010	0.016	0.022	0.031	0.040	0.050	0.062
6"	Static Pressure (in. w.g.)			0.049	0.066	0.086	0.108	0.132
	Total Pressure (in. w.g.)			0.072	0.097	0.126	0.158	0.194
	Flow Rate (cfm)			118	137	157	177	196
	Sound (NC)			15	20	24	27	30
	Throw (ft.)			4-6-10	4-7-11	5-8-12	6-8-13	6-9-13
8"	Static Pressure (in. w.g.)		0.059	0.084	0.114	0.147	0.185	0.227
	Total Pressure (in. w.g.)		0.075	0.107	0.144	0.187	0.236	0.290
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		---	19	23	27	30	33
	Throw (ft.)		5-8-12	6-9-13	7-10-14	8-10-15	9-11-16	9-12-16
10"	Static Pressure (in. w.g.)		0.059	0.084	0.113	0.146	0.184	0.227
	Total Pressure (in. w.g.)		0.074	0.106	0.143	0.186	0.235	0.289
	Flow Rate (cfm)		273	327	382	436	491	545
	Sound (NC)		---	18	22	26	29	32
	Throw (ft.)		3-5-9	4-6-10	5-7-11	5-8-12	6-9-13	7-9-13
12"	Static Pressure (in. w.g.)	0.049	0.075	0.108	0.146	0.190	0.241	0.299
	Total Pressure (in. w.g.)	0.059	0.091	0.130	0.176	0.230	0.292	0.361
	Flow Rate (cfm)	314	393	471	550	628	707	785
	Sound (NC)	---	16	21	26	30	33	36
	Throw (ft.)	4-6-11	5-8-12	6-9-13	7-10-14	8-11-15	9-11-16	10-12-17

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Inlet Size	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
6"	0.05	115	4-6-10	---	1-2-4	---
	0.10	173	6-8-12	27	2-3-6	15
	0.15	210	7-10-14	32	3-4-7	20
	0.20	245	8-10-15	36	3-4-8	23
	0.25	275	9-11-16	40	3-5-9	29
8"	0.05	160	4-7-11	---	1-3-6	---
	0.10	230	7-9-13	22	2-4-8	---
	0.15	285	8-10-15	28	4-5-9	16
	0.20	330	9-11-16	32	4-6-10	20
	0.25	370	10-12-17	35	5-7-10	22
10"	0.05	250	3-5-9	---	2-4-7	---
	0.10	360	4-6-11	20	4-5-10	---
	0.15	445	5-8-12	26	4-7-11	16
	0.20	510	6-9-13	30	5-8-12	20
	0.25	575	7-10-14	33	6-9-13	23
12"	0.05	310	4-6-11	---	3-4-8	---
	0.10	450	6-9-13	20	4-6-9	---
	0.15	555	7-10-14	26	5-7-10	16
	0.20	650	9-11-16	30	5-8-11	22
	0.25	730	9-12-16	34	6-9-12	24

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PPD SQUARE

AHRI Certification Rating Points

Damper 100% open and inlet velocity 750fpm

Inlet Size in.	Air Flow cfm	Adjusted Static Pressure in. w.g.	Discharge Sound Power Level (dB) Octave Band					
			2	3	4	5	6	7
6	148	0.08	37	41	40	34	24	22
8	262	0.13	44	41	41	34	27	22
10	410	0.13	46	42	39	33	25	21
12	590	0.18	52	47	44	40	34	26

Damper throttled to inlet velocity of 400fpm

Inlet Size in.	Air Flow cfm	Max. Recommended Static Pressure in. w.g.	Discharge Sound Power Level (dB) Octave Band					
			2	3	4	5	6	7
6	80	0.25	39	47	46	38	34	28
8	140	0.25	41	45	46	36	29	24
10	220	0.25	41	40	41	37	30	24
12	315	0.25	48	47	44	38	30	24

Performance Notes:

1. Air flow is in cfm.
2. All pressures are in in. w.g..
3. Sound Power Levels expressed in deciBels (dB) re 10^{-12} watts.

PERFORMANCE DATA - PBD SQUARE

Modulated Flow Selection Table

Inlet Destination	Inlet Static Pressure in.wg	Maximum Flow CFM	Maximum Flow		25% Maximum Flow	
			Throw - Feet* @ V_t = 50/100/150FPM	† NC	Throw* - Feet @ V_t = 50/100/150FPM	† NC
6"	.05	100	6/4/3	--	3/2/1	--
	.10	140	8/5/4	20	4/3/2	17
	.11	147	8/5/4	21	4/3/2	18
	.15	175	9/6/5	26	5/4/3	21
	.20	200	9/7/6	31	6/5/3	24
	.25	220	10/8/7	34	7/6/4	27
8"	.05	160	8/6/4	--	5/3/2	--
	.10	225	10/7/5	20	6/4/3	16
	.13	255	11/8/6	23	7/5/3	19
	.15	275	11/8/6	25	7/5/3	21
	.20	320	12/9/7	30	8/6/4	25
	.25	355	13/10/8	34	9/6/4	28
10"	.05	260	9/7/5	15	7/6/4	--
	.10	370	11/8/6	23	9/7/5	18
	.12	402	12/9/7	25	9/7/5	20
	.15	450	13/10/8	27	10/8/6	22
	.20	520	14/11/9	31	11/9/7	26
	.25	580	15/12/10	34	12/10/7	29
12"	.05	350	11/8/6	15	7/6/4	--
	.10	470	13/10/8	23	9/7/5	19
	.15	560	15/12/10	27	10/8/6	23
	.16	576	15/12/10	28	10/8/6	24
	.20	640	16/13/11	31	12/10/8	27
	.25	720	17/14/12	34	14/11/9	30

Performance Notes:

1. * Throw data is for air 20ºF/11ºC lower than room temperature.
2. Throws for isothermal air are 40 to 50% greater.
3. † NC based on L_w (10^{-12} watts reference) -10db
4. Tested in accordance with ANSI/ASHRAE 70, ANSI S12.31, ARI 890, ISRO 5219 and ISO 3741.

PERFORMANCE DATA - PRD ROUND

Maximum Flow Selection Table

Inlet Size	Neck Velocity (fpm)	400	500	600	700	800	900	1000
	Velocity Pressure (in. w.g.)	0.010	0.016	0.022	0.031	0.040	0.050	0.062
6"	Static Pressure (in. w.g.)			0.047	0.062	0.079	0.096	0.115
	Total Pressure (in. w.g.)			0.070	0.093	0.118	0.147	0.177
	Flow Rate (cfm)			118	137	157	177	196
	Sound (NC)			---	19	23	26	29
	Throw (ft.)			2-4-7	3-4-7	3-5-8	4-5-8	4-6-9
8"	Static Pressure (in. w.g.)		0.063	0.088	0.116	0.148	0.184	0.223
	Total Pressure (in. w.g.)		0.078	0.110	0.147	0.188	0.234	0.285
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		17	22	27	31	34	37
	Throw (ft.)		3-4-8	3-5-9	4-6-10	4-6-11	5-7-11	5-8-12
10"	Static Pressure (in. w.g.)		0.056	0.078	0.104	0.133	0.166	0.204
	Total Pressure (in. w.g.)		0.072	0.101	0.134	0.173	0.216	0.267
	Flow Rate (cfm)		273	327	382	436	491	545
	Sound (NC)		15	20	25	29	32	36
	Throw (ft.)		3-5-10	4-6-12	5-7-12	6-8-13	6-9-14	7-10-15
12"	Static Pressure (in. w.g.)	0.048	0.074	0.104	0.141	0.186	0.240	
	Total Pressure (in. w.g.)	0.058	0.089	0.127	0.172	0.226	0.291	
	Flow Rate (cfm)	314	393	471	550	628	707	
	Sound (NC)	---	19	24	29	33	37	
	Throw (ft.)	4-6-11	5-8-13	6-9-14	7-11-15	8-11-16	9-12-17	

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Inlet Size	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
6"	0.05	125	3-4-7	16	0-1-3	---
	0.10	185	4-6-9	27	1-2-4	---
	0.15	235	5-7-10	34	1-2-5	19
	0.20	280	6-8-11	39	2-3-6	24
	0.25	320	6-8-11	42	2-3-6	27
8"	0.05	160	2-4-7	---	0-1-2	---
	0.10	230	4-5-10	25	1-1-3	---
	0.15	285	4-7-11	31	1-2-4	---
	0.20	330	5-8-12	35	1-2-5	15
	0.25	370	6-9-12	39	2-3-5	18
10"	0.05	265	3-5-10	---	1-2-4	---
	0.10	380	5-7-12	25	2-3-6	---
	0.15	465	6-9-14	31	2-3-6	15
	0.20	535	7-10-15	35	3-4-7	19
	0.25	600	8-11-16	39	3-4-7	22
12"	0.05	330	4-7-12	---	1-2-4	---
	0.10	465	6-9-14	24	2-3-6	---
	0.15	565	8-11-15	30	2-3-7	---
	0.20	655	9-12-16	35	3-4-7	17
	0.25	720	10-12-17	38	3-4-8	20

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PSD SWIRL

Maximum Flow Selection Table

Inlet Size	Neck Velocity (fpm)	400	500	600	700	800	900	1000
	Velocity Pressure (in. w.g.)	0.010	0.016	0.022	0.031	0.040	0.050	0.062
6"	Static Pressure (in. w.g.)				0.054	0.071	0.090	0.112
	Total Pressure (in. w.g.)				0.085	0.111	0.141	0.174
	Flow Rate (cfm)				137	157	177	196
	Sound (NC)				16	20	24	28
	Throw (ft.)				1-2-5	1-3-5	2-3-6	2-3-7
8"	Static Pressure (in. w.g.)		0.063	0.092	0.125	0.164	0.209	0.259
	Total Pressure (in. w.g.)		0.079	0.114	0.156	0.204	0.259	0.322
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		---	19	24	29	33	36
	Throw (ft.)		2-3-6	2-4-6	3-4-7	3-5-7	4-5-8	4-6-8
10"	Static Pressure (in. w.g.)	0.051	0.081	0.117	0.160	0.212	0.271	
	Total Pressure (in. w.g.)	0.061	0.096	0.139	0.191	0.252	0.322	
	Flow Rate (cfm)	218	273	327	382	436	491	
	Sound (NC)	---	20	26	31	36	40	
	Throw (ft.)	2-4-6	3-5-7	4-6-8	4-6-9	5-6-9	6-7-10	
12"	Static Pressure (in. w.g.)	0.088	0.138	0.201	0.277			
	Total Pressure (in. w.g.)	0.098	0.154	0.223	0.307			
	Flow Rate (cfm)	314	393	471	550			
	Sound (NC)	21	28	34	39			
	Throw (ft.)	3-5-9	4-6-10	5-7-11	5-8-12			

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Inlet Size	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
6"	0.05	130	1-2-4	---	0-0-1	---
	0.10	185	2-3-6	26	0-0-1	17
	0.15	225	3-4-7	32	0-1-2	22
	0.20	260	3-4-8	37	0-1-3	25
	0.25	290	3-5-8	41	0-1-3	28
8"	0.05	155	1-3-5	---	0-0-1	---
	0.10	220	2-4-7	21	0-1-2	17
	0.15	270	3-5-7	27	0-1-3	22
	0.20	310	4-5-8	32	0-1-3	25
	0.25	345	4-6-8	36	1-1-3	28
10"	0.05	220	2-4-7	---	0-1-2	17
	0.10	305	3-5-8	24	0-1-3	24
	0.15	370	4-6-8	30	1-2-3	30
	0.20	425	5-6-9	35	1-2-3	33
	0.25	475	5-7-10	39	1-2-4	36
12"	0.05	240	2-4-7	---	0-1-2	---
	0.10	340	3-5-9	23	1-1-3	22
	0.15	410	4-6-10	29	1-2-3	28
	0.20	470	5-7-11	34	1-2-4	31
	0.25	525	5-8-12	38	2-3-4	34

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PLD 1-Slot 1-Way Linear (Ceiling Mount)

Maximum Flow Selection Table

Nominal Length	Neck Velocity (fpm)	200	300	400	500	600	700	800
	Velocity Pressure (in. w.g.)	0.002	0.006	0.010	0.016	0.022	0.031	0.040
24"	Static Pressure (in. w.g.)		0.096	0.193	0.291			
	Total Pressure (in. w.g.)		0.102	0.203	0.306			
	Flow Rate (cfm)		59	79	98			
	Sound (NC)		19	26	32			
	Throw (ft.)		11-8-5	20-14-9	25-19-12			
36"	Static Pressure (in. w.g.)			0.071	0.120	0.176	0.241	0.307
	Total Pressure (in. w.g.)			0.081	0.136	0.198	0.272	0.347
	Flow Rate (cfm)			79	98	118	137	157
	Sound (NC)			17	22	26	30	34
	Throw (ft.)			9-7-5	13-11-8	19-14-10	24-18-12	27-19-13
48"	Static Pressure (in. w.g.)		0.071	0.129	0.199			
	Total Pressure (in. w.g.)		0.077	0.139	0.215			
	Flow Rate (cfm)		105	140	175			
	Sound (NC)		12	26	31			
	Throw (ft.)		11-8-5	22-15-9	25-18-11			
60"	Static Pressure (in. w.g.)		0.055	0.090	0.141	0.199	0.286	
	Total Pressure (in. w.g.)		0.060	0.100	0.156	0.222	0.316	
	Flow Rate (cfm)		105	140	175	209	244	
	Sound (NC)		11	23	29	32	37	
	Throw (ft.)		8-6-5	11-9-7	17-15-9	20-16-11	27-20-13	

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Nominal Length	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
24"	0.05	45	7-5-4	15	5-4-1	--
	0.10	60	11-8-5	19	7-5-2	15
	0.15	70	16-12-8	23	10-7-5	16
	0.20	80	20-14-10	27	12-10-6	21
	0.25	90	23-17-11	30	14-11-7	24
36"	0.05	70	7-5-4	15	5-4-1	--
	0.10	90	12-10-7	20	7-5-2	15
	0.15	110	16-12-8	24	10-7-5	17
	0.20	125	22-17-11	28	12-8-6	21
	0.25	140	24-18-12	31	14-11-7	24
48"	0.05	90	7-5-4	16	5-4-1	15
	0.10	125	17-12-7	23	10-7-5	17
	0.15	150	24-17-10	28	14-10-6	20
	0.20	175	25-18-11	31	16-12-7	24
	0.25	190	26-20-13	34	17-14-8	28
60"	0.05	100	7-6-5	17	5-4-1	15
	0.10	150	12-10-7	24	7-5-2	19
	0.15	180	18-16-10	30	11-7-5	23
	0.20	210	20-16-11	32	12-8-6	26
	0.25	230	24-18-12	35	14-11-7	29

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PLD 2-Slot 1-Way Linear (Ceiling Mount)

Maximum Flow Selection Table

Nominal Length	Neck Velocity (fpm)	400	500	600	700	800	900	1000
	Velocity Pressure (in. w.g.)	**0.010**	**0.016**	**0.022**	**0.031**	**0.040**	**0.050**	**0.062**
24"	**Static Pressure (in. w.g.)**	0.077	0.120	0.170	0.225	0.290		
	Total Pressure (in. w.g.)	0.087	0.136	0.192	0.255	0.330		
	Flow Rate (cfm)	79	98	118	137	157		
	Sound (NC)	18	22	27	30	34		
	Throw (ft.)	9-7-5	13-10-7	18-14-9	22-16-10	25-18-12		
36"	**Static Pressure (in. w.g.)**		0.069	0.097	0.135	0.180	0.239	
	Total Pressure (in. w.g.)		0.084	0.119	0.165	0.220	0.290	
	Flow Rate (cfm)		98	118	137	157	177	
	Sound (NC)		19	23	25	28	32	
	Throw (ft.)		8-5-4	10-8-6	14-11-8	18-13-9	21-16-11	
48"	**Static Pressure (in. w.g.)**		0.075	0.112	0.155	0.199	0.257	0.315
	Total Pressure (in. w.g.)		0.090	0.134	0.186	0.239	0.307	0.377
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		20	25	30	32	35	39
	Throw (ft.)		14-11-7	20-17-10	27-21-13	29-22-14	30-23-16	32-24-17
60"	**Static Pressure (in. w.g.)**		0.054	0.083	0.114	0.149	0.193	0.236
	Total Pressure (in. w.g.)		0.069	0.105	0.145	0.189	0.243	0.299
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		18	22	26	30	32	34
	Throw (ft.)		8-5-4	14-10-7	19-14-9	23-17-11	24-18-12	26-20-13

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Nominal Length	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
24"	0.05	65	7-5-4	15	5-4-1	15
	0.10	90	11-8-6	20	7-5-2	19
	0.15	110	17-13-8	25	11-7-5	24
	0.20	130	20-16-10	29	12-8-6	28
	0.25	145	23-17-11	32	14-11-7	31
36"	0.05	85	6-4-2	16	4-1-1	15
	0.10	120	11-8-6	23	6-5-2	22
	0.15	145	16-12-8	26	10-7-5	25
	0.20	165	19-14-10	30	12-8-6	29
	0.25	180	22-17-11	33	14-11-7	32
48"	0.05	150	10-7-5	17	6-5-2	15
	0.10	200	18-16-10	24	11-7-5	20
	0.15	240	26-20-13	30	16-11-7	26
	0.20	280	29-22-14	32	17-13-8	28
	0.25	310	30-23-16	35	18-14-8	31
60"	0.05	170	7-5-4	17	5-4-1	16
	0.10	230	17-13-8	24	10-7-5	23
	0.15	280	23-17-11	30	14-10-6	29
	0.20	320	24-18-12	32	14-11-7	31
	0.25	360	26-20-13	35	16-12-7	34

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PLD 2-Slot 2-Way Linear (Ceiling Mount)

Maximum Flow Selection Table

Nominal Length	Neck Velocity (fpm)	400	500	600	700	800	900	1000
	Velocity Pressure (in. w.g.)	**0.010**	**0.016**	**0.022**	**0.031**	**0.040**	**0.050**	**0.062**
24"	**Static Pressure (in. w.g.)**	0.071	0.114	0.146	0.185	0.230	0.279	0.328
	Total Pressure (in. w.g.)	0.081	0.129	0.169	0.215	0.270	0.330	0.391
	Flow Rate (cfm)	79	98	118	137	157	177	196
	Sound (NC)	15	17	21	24	28	33	38
	Throw (ft.)	5-4-3	7-6-4	10-8-5	12-9-6	14-11-7	18-13-10	21-16-12
36"	**Static Pressure (in. w.g.)**		0.076	0.104	0.132	0.168	0.222	0.288
	Total Pressure (in. w.g.)		0.092	0.126	0.163	0.208	0.273	0.350
	Flow Rate (cfm)		98	118	137	157	177	196
	Sound (NC)		16	17	20	25	30	35
	Throw (ft.)		7-5-3	9-6-4	10-8-5	12-9-7	14-11-9	17-13-11
48"	**Static Pressure (in. w.g.)**		0.075	0.112	0.155	0.199	0.257	0.315
	Total Pressure (in. w.g.)		0.090	0.134	0.186	0.239	0.307	0.377
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		17	21	25	29	34	38
	Throw (ft.)		11-8-6	14-11-9	16-14-11	20-17-12	23-18-13	26-20-15
60"	**Static Pressure (in. w.g.)**		0.053	0.078	0.104	0.139	0.180	0.224
	Total Pressure (in. w.g.)		0.069	0.101	0.135	0.179	0.231	0.286
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		15	18	21	25	29	32
	Throw (ft.)		7-5-4	9-6-4	10-7-5	11-9-6	15-12-7	19-15-10

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Nominal Length	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
24"	0.05	70	5-4-2	--	4-1-1	--
	0.10	90	6-5-4	15	5-4-1	15
	0.15	120	11-8-5	21	7-5-4	20
	0.20	145	12-10-6	25	8-6-4	24
	0.25	165	16-12-8	30	10-7-5	29
36"	0.05	80	5-4-2	15	4-1-1	--
	0.10	115	8-6-4	16	5-4-1	15
	0.15	150	11-8-6	23	7-5-2	22
	0.20	170	13-11-8	28	8-6-4	27
	0.25	185	16-12-10	32	10-7-5	31
48"	0.05	150	8-6-4	15	5-4-1	15
	0.10	200	13-11-8	20	7-5-2	19
	0.15	240	16-13-11	25	10-7-5	25
	0.20	280	20-17-12	29	12-8-6	29
	0.25	310	23-18-13	33	14-11-7	32
60"	0.05	170	7-5-4	15	5-4-1	15
	0.10	240	10-7-5	20	6-4-2	19
	0.15	290	12-10-6	26	8-5-4	25
	0.20	330	17-13-8	31	11-7-5	30
	0.25	370	22-17-11	34	13-10-6	33

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PLD 4-Slot 1-Way Linear (Ceiling Mount)

Maximum Flow Selection Table

Nominal Length	Neck Velocity (fpm)	600	700	800	900	1000	1100	1200
	Velocity Pressure (in. w.g.)	0.022	0.031	0.040	0.050	0.062	0.075	0.090
24"	Static Pressure (in. w.g.)	0.100	0.134	0.174	0.220	0.270	0.320	
	Total Pressure (in. w.g.)	0.122	0.165	0.214	0.271	0.332	0.395	
	Flow Rate (cfm)	209	244	279	314	349	384	
	Sound (NC)	26	27	30	34	37	40	
	Throw (ft.)	16-12-8	21-16-10	23-19-11	24-20-13	26-23-15	27-25-18	
36"	Static Pressure (in. w.g.)	0.071	0.096	0.124	0.154	0.189	0.230	0.274
	Total Pressure (in. w.g.)	0.093	0.127	0.164	0.205	0.251	0.305	0.363
	Flow Rate (cfm)	209	244	279	314	349	384	419
	Sound (NC)	20	25	28	30	33	36	38
	Throw (ft.)	11-10-7	16-14-9	20-16-11	23-17-12	25-21-14	26-22-15	27-23-16
48"	Static Pressure (in. w.g.)	0.055	0.076	0.097	0.123	0.150	0.179	0.217
	Total Pressure (in. w.g.)	0.077	0.106	0.137	0.173	0.213	0.254	0.307
	Flow Rate (cfm)	327	382	436	491	545	600	654
	Sound (NC)	16	22	27	31	34	36	39
	Throw (ft.)	20-16-11	22-18-13	24-20-14	27-24-17	31-28-19	41-33-24	43-36-26
60"	Static Pressure (in. w.g.)	0.071	0.094	0.122	0.153	0.191	0.230	0.270
	Total Pressure (in. w.g.)	0.093	0.125	0.162	0.204	0.253	0.306	0.360
	Flow Rate (cfm)	471	550	628	707	785	864	942
	Sound (NC)	21	27	31	34	37	40	42
	Throw (ft.)	24-21-15	29-25-17	34-29-20	39-32-22	42-35-26	46-38-29	50-41-31

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at iso-thermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Nominal Length	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
24"	0.05	150	7-6-4	4	5-4-1	15
	0.10	210	16-12-8	8	10-7-5	24
	0.15	260	23-18-11	11	13-10-6	26
	0.20	300	24-19-12	12	14-11-7	31
	0.25	335	25-22-14	14	16-12-8	34
36"	0.05	180	7-6-5	5	5-4-1	15
	0.10	250	17-14-10	10	10-7-5	24
	0.15	310	23-17-12	12	13-10-6	28
	0.20	360	25-22-14	14	16-12-8	32
	0.25	400	26-23-16	16	17-14-8	35
48"	0.05	315	19-16-11	11	11-8-5	15
	0.10	445	24-20-14	14	12-10-6	26
	0.15	545	31-28-19	19	16-12-8	32
	0.20	630	42-35-25	25	23-18-11	36
	0.25	700	44-38-29	29	25-22-14	39
60"	0.05	400	20-17-13	13	11-8-5	15
	0.10	570	30-26-18	18	14-12-8	20
	0.15	700	38-31-22	22	18-16-11	31
	0.20	805	43-36-26	26	25-19-14	36
	0.25	903	48-40-30	30	30-23-17	38

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at iso-thermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PLD 4-Slot 2-Way Linear (Ceiling Mount)

Maximum Flow Selection Table

Nominal Length	Neck Velocity (fpm)	600	700	800	900	1000	1100	1200
	Velocity Pressure (in. w.g.)	**0.022**	**0.031**	**0.040**	**0.050**	**0.062**	**0.075**	**0.090**
24"	**Static Pressure (in. w.g.)**	0.100	0.134	0.174	0.220	0.270	0.320	
	Total Pressure (in. w.g.)	0.122	0.165	0.214	0.271	0.332	0.395	
	Flow Rate (cfm)	209	244	279	314	349	384	
	Sound (NC)	23	25	28	31	34	37	
	Throw (ft.)	8-6-4	10-8-5	12-10-7	14-12-9	17-14-10	19-17-11	
36"	**Static Pressure (in. w.g.)**	0.066	0.090	0.116	0.144	0.179	0.217	0.261
	Total Pressure (in. w.g.)	0.089	0.120	0.156	0.195	0.241	0.293	0.351
	Flow Rate (cfm)	209	244	279	314	349	384	419
	Sound (NC)	18	21	24	27	29	32	35
	Throw (ft.)	7-6-4	9-7-5	10-8-6	12-9-7	13-11-9	15-13-10	17-15-11
48"	**Static Pressure (in. w.g.)**	0.073	0.096	0.126	0.158	0.197	0.236	0.275
	Total Pressure (in. w.g.)	0.095	0.127	0.166	0.208	0.259	0.311	0.364
	Flow Rate (cfm)	327	382	436	491	545	600	654
	Sound (NC)	20	24	29	33	37	38	40
	Throw (ft.)	11-9-7	13-11-8	15-13-10	17-15-11	20-17-12	23-19-14	26-22-16
60"	**Static Pressure (in. w.g.)**	0.062	0.084	0.108	0.136	0.168	0.202	0.241
	Total Pressure (in. w.g.)	0.084	0.115	0.148	0.187	0.230	0.277	0.331
	Flow Rate (cfm)	471	550	628	707	785	864	942
	Sound (NC)	22	27	31	34	36	39	41
	Throw (ft.)	12-10-8	13-11-9	15-13-10	18-15-11	20-18-13	23-19-14	25-21-15

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Nominal Length	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
24"	0.05	150	5-4-2	15	4-2-1	15
	0.10	210	8-6-4	23	5-4-1	22
	0.15	260	11-8-6	26	6-5-2	25
	0.20	300	13-11-8	30	8-6-4	29
	0.25	335	16-13-10	33	10-7-5	32
36"	0.05	185	6-5-4	15	4-2-1	15
	0.10	260	10-7-5	23	6-5-2	22
	0.15	320	12-10-7	27	7-6-4	26
	0.20	370	14-12-10	31	10-7-5	30
	0.25	410	17-14-11	34	11-8-5	33
48"	0.05	275	10-8-6	15	6-5-4	15
	0.10	390	13-11-8	25	11-8-5	24
	0.15	480	17-14-11	32	14-12-8	31
	0.20	550	20-17-12	37	17-14-10	36
	0.25	620	24-20-14	39	19-17-12	38
60"	0.05	430	11-10-7	20	6-5-4	15
	0.10	605	14-12-10	30	11-8-5	20
	0.15	745	19-17-12	35	17-13-8	29
	0.20	860	23-19-14	39	18-16-10	34
	0.25	960	25-22-16	42	22-18-12	36

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PLD 1-Slot 1-Way Linear (Wall Mount)

Maximum Flow Selection Table

Nominal Length	Neck Velocity (fpm)	200	300	400	500	600	700	800
	Velocity Pressure (in. w.g.)	0.002	0.006	0.010	0.016	0.022	0.031	0.040
24"	Static Pressure (in. w.g.)		0.096	0.193	0.291			
	Total Pressure (in. w.g.)		0.102	0.203	0.306			
	Flow Rate (cfm)		59	79	98			
	Sound (NC)		15	24	29			
	Throw (ft.)		6-5-5	7-6-5	9-8-7			
36"	Static Pressure (in. w.g.)			0.071	0.120	0.176	0.241	0.307
	Total Pressure (in. w.g.)			0.081	0.136	0.198	0.272	0.347
	Flow Rate (cfm)			79	98	118	137	157
	Sound (NC)			17	20	24	27	31
	Throw (ft.)			5-4-3	6-5-5	7-6-5	8-7-6	8-7-6
48"	Static Pressure (in. w.g.)		0.071	0.129	0.199			
	Total Pressure (in. w.g.)		0.077	0.139	0.215			
	Flow Rate (cfm)		105	140	175			
	Sound (NC)		12	23	28			
	Throw (ft.)		5-4-4	7-6-4	8-7-6			
60"	Static Pressure (in. w.g.)		0.055	0.090	0.141	0.199	0.286	
	Total Pressure (in. w.g.)		0.060	0.100	0.156	0.222	0.316	
	Flow Rate (cfm)		105	140	175	209	244	
	Sound (NC)		9	21	25	29	34	
	Throw (ft.)		5-4-4	6-5-5	8-7-6	8-7-6	10-7-6	

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at iso-thermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Nominal Length	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
24"	0.05	45	5-4-2	--	1-1-1	--
	0.10	60	6-5-5	15	1-1-1	--
	0.15	70	6-5-5	21	2-1-1	--
	0.20	80	7-6-5	24	4-2-1	15
	0.25	90	8-7-6	27	5-4-2	21
36"	0.05	70	5-4-2	15	1-1-1	--
	0.10	90	6-5-5	19	1-1-1	--
	0.15	110	6-5-5	22	2-1-1	--
	0.20	125	8-7-6	25	4-2-1	15
	0.25	140	8-7-6	28	5-4-2	21
48"	0.05	90	5-4-4	15	1-1-1	--
	0.10	125	6-5-4	21	2-1-1	--
	0.15	150	7-6-5	25	4-2-2	15
	0.20	175	8-7-6	28	5-4-2	21
	0.25	190	10-8-7	31	5-4-2	24
60"	0.05	100	5-4-4	15	1-1-1	--
	0.10	150	6-5-5	22	1-1-1	15
	0.15	180	8-7-6	26	2-1-1	20
	0.20	210	8-7-6	29	2-1-1	22
	0.25	230	10-7-6	32	4-2-2	25

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at iso-thermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PLD 2-Slot 1-Way Linear (Wall Mount)

Maximum Flow Selection Table

Nominal Length	Neck Velocity (fpm)	400	500	600	700	800	900	1000
	Velocity Pressure (in. w.g.)	**0.010**	**0.016**	**0.022**	**0.031**	**0.040**	**0.050**	**0.062**
24"	**Static Pressure (in. w.g.)**	0.077	0.120	0.170	0.225	0.290	0.356	
	Total Pressure (in. w.g.)	0.087	0.136	0.192	0.255	0.330	0.406	
	Flow Rate (cfm)	79	98	118	137	157	177	
	Sound (NC)	17	21	25	30	33	35	
	Throw (ft.)	5-4-4	6-5-5	8-6-5	8-7-6	8-7-6	8-7-6	
36"	**Static Pressure (in. w.g.)**		0.069	0.097	0.135	0.180	0.239	0.304
	Total Pressure (in. w.g.)		0.084	0.119	0.165	0.220	0.290	0.367
	Flow Rate (cfm)		98	118	137	157	177	196
	Sound (NC)		18	22	23	27	31	33
	Throw (ft.)		4-3-3	5-4-4	6-4-4	7-6-5	8-7-6	10-9-7
48"	**Static Pressure (in. w.g.)**		0.075	0.112	0.155	0.199	0.257	0.315
	Total Pressure (in. w.g.)		0.090	0.134	0.186	0.239	0.307	0.377
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		19	24	27	30	32	35
	Throw (ft.)		9-8-7	10-9-7	11-10-9	12-11-10	12-11-10	12-11-10
60"	**Static Pressure (in. w.g.)**		0.054	0.083	0.114	0.149	0.193	0.236
	Total Pressure (in. w.g.)		0.069	0.105	0.145	0.189	0.243	0.299
	Flow Rate (cfm)		175	209	244	279	314	349
	Sound (NC)		16	20	24	27	30	31
	Throw (ft.)		6-5-4	8-6-5	9-8-6	10-8-7	11-9-7	12-10-8

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Nominal Length	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
24"	0.05	65	5-4-4	15	1-1-1	--
	0.10	90	6-5-5	19	1-1-1	15
	0.15	110	7-6-5	23	2-1-1	19
	0.20	130	8-7-6	29	4-2-1	22
	0.25	145	8-7-6	31	5-4-2	25
36"	0.05	85	4-2-2	15	1-1-1	--
	0.10	120	5-4-4	22	1-1-1	15
	0.15	145	6-5-5	24	2-1-1	21
	0.20	165	7-6-5	29	2-1-1	26
	0.25	180	8-7-6	31	4-2-2	29
48"	0.05	150	8-7-6	15	2-1-1	--
	0.10	200	10-8-7	23	2-1-1	15
	0.15	240	11-10-8	27	4-2-1	22
	0.20	280	12-11-10	30	5-4-2	23
	0.25	310	12-11-10	32	7-5-4	27
60"	0.05	170	6-5-4	15	2-1-1	--
	0.10	230	8-7-6	23	2-1-1	15
	0.15	280	10-8-7	27	4-2-1	24
	0.20	320	11-10-7	30	4-2-2	27
	0.25	360	12-10-8	32	6-4-2	31

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

PERFORMANCE DATA - PLD 4-Slot 1-Way Linear (Wall Mount)

Maximum Flow Selection Table

Nominal Length	Neck Velocity (fpm)	600	700	800	900	1000	1100	1200
	Velocity Pressure (in. w.g.)	**0.022**	**0.031**	**0.040**	**0.050**	**0.062**	**0.075**	**0.090**
24"	**Static Pressure (in. w.g.)**	0.100	0.134	0.174	0.220	0.270	0.320	
	Total Pressure (in. w.g.)	0.122	0.165	0.214	0.271	0.332	0.395	
	Flow Rate (cfm)	209	244	279	314	349	384	
	Sound (NC)	19	21	24	29	33	37	
	Throw (ft.)	8-7-6	9-8-7	10-8-7	10-9-8	11-10-9	12-11-10	
36"	**Static Pressure (in. w.g.)**	0.071	0.096	0.124	0.154	0.189	0.230	0.274
	Total Pressure (in. w.g.)	0.093	0.127	0.164	0.205	0.251	0.305	0.363
	Flow Rate (cfm)	209	244	279	314	349	384	419
	Sound (NC)	19	24	26	28	31	34	36
	Throw (ft.)	6-5-4	7-6-5	8-7-5	8-7-6	9-8-7	10-8-7	10-8-7
48"	**Static Pressure (in. w.g.)**	0.055	0.076	0.097	0.123	0.150	0.179	0.217
	Total Pressure (in. w.g.)	0.077	0.106	0.137	0.173	0.213	0.254	0.307
	Flow Rate (cfm)	327	382	436	491	545	600	654
	Sound (NC)	16	21	25	29	32	33	36
	Throw (ft.)	11-9-7	12-10-8	13-11-8	13-11-8	13-11-8	15-13-10	16-14-11
60"	**Static Pressure (in. w.g.)**	0.071	0.094	0.122	0.153	0.193	0.232	0.271
	Total Pressure (in. w.g.)	0.093	0.125	0.162	0.204	0.255	0.307	0.361
	Flow Rate (cfm)	471	550	628	707	785	864	942
	Sound (NC)	20	26	29	32	35	38	40
	Throw (ft.)	14-12-9	15-13-11	16-13-11	16-13-11	18-14-12	20-17-14	21-20-15

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

Modulated Flow Selection Table

Nominal Length	Inlet Static Pressure in. wg.	Maximum Flow Rate cfm	Maximum Flow Rate		25% Maximum Flow Rate	
			Throw ft.	Sound NC	Throw ft.	Sound NC
24"	0.05	150	5-4-4	15	1-1-1	15
	0.10	210	8-7-6	19	2-1-1	19
	0.15	260	10-8-7	22	4-2-1	22
	0.20	300	10-8-7	27	5-4-2	27
	0.25	335	11-10-8	31	5-4-2	31
36"	0.05	180	5-4-4	15	1-1-1	15
	0.10	250	7-6-5	25	2-1-1	19
	0.15	310	8-7-6	28	2-1-1	23
	0.20	360	10-8-7	32	4-2-1	28
	0.25	400	10-8-7	35	5-4-2	31
48"	0.05	315	11-8-7	15	2-1-1	15
	0.10	445	13-11-8	26	2-1-1	22
	0.15	545	13-11-8	32	4-2-2	27
	0.20	630	16-13-11	35	6-5-4	32
	0.25	700	17-14-12	39	7-6-5	35
60"	0.05	400	13-11-8	15	2-1-1	15
	0.10	570	16-13-11	27	2-1-1	22
	0.15	700	16-13-11	32	5-4-2	27
	0.20	800	18-14-12	36	7-6-5	32
	0.25	900	20-18- 14	39	8-7-6	34

Performance Notes:

1. Tested in accordance with ASHRAE Standard 70-2006 (RA2011) "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. Air Flow is in cubic feet per minute, CFM.
3. All pressures are in inches of water.
4. Throw values are given in feet to terminal velocities of 150-100-50 fpm.
5. Throw data is based on supply air and room air at isothermal condition.
6. The NC values, sound pressure level are based on a room absorption of 10 dB re 10^{-12} Watts one diffuser.
7. Blanks "---" indicate an NC level below 15.

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