Positive Displacement Gas Boost Systems

(Patent Pending)

Model PDGB gas boost systems from action blower & equipment provide a complete turnkey solution for applications in which the available gas pressure is not adequate to meet the required demand.

The PDGB systems utilize *creen booster* technology with a gas tight positive displacement blower direct driven by a NEMA Premium Efficient inverter duty electric motor. The systems use a pressure indicator to sense the gas pressure being delivered. Based on the sensed pressure, a variable frequency drive adjusts the speed of the motor to deliver the required amount of gas.



The standard system includes the following:

- Gas tight positive displacement blower
- Inverter duty TEFC motor rated for Class 1 Div 2
- Motor direct coupled to blower with guard
- Explosion proof pressure indicator
- Explosion proof thermocouple for temperature monitoring and high temperature shutdown
- Manual blower bypass valves
- 150 lb flange inlet and discharge connections
- Control panel with PID controller, VFD, fused disconnect switch, and controls for operation
- Powder coated steel base
- Standard systems are available in pipe sizes ranging from 2" to 6"
- Motor sizes range from 1 HP to 60 HP
- UL listed control panel
- Custom options available upon request





Advantages

- Complete turnkey solution. Simply connect gas to inlet and discharge and connect electrical input power.
- Low maintenance blower is oil and grease lubricated, motor lubrication not required.
- Low energy consumption blower only runs as required to meet demand.



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System Selection

Systems are sized based on:

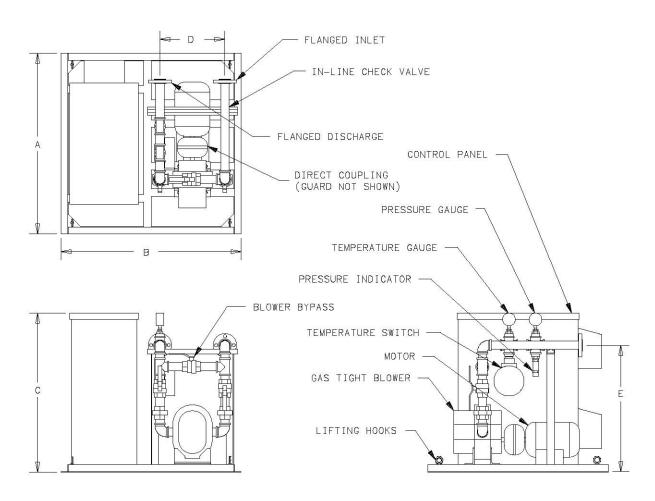
- Available pressure
- · Required pressure
- Required flow

Sizing Chart

Pipe Size	Blower	Max flow / HP @ 20" H2O Boost	Max flow / HP @ 2 PSI Boost	Max flow / HP @ 5 PSI Boost	Max flow / HP @ 10 PSI Boost
2"	32	125 CFM / 1.5 HP	115 CFM / 2 HP	105 CFM / 5 HP	90 CFM / 7.5 HP
	33	175 CFM / 1.5 HP	160 CFM / 3 HP	150 CFM / 7.5 HP	125 CFM / 10 HP
3"	36	300 CFM / 2 HP	275 CFM / 5 HP	250 CFM / 10 HP	
	45	350 CFM / 3 HP	325 CFM / 5 HP	300 CFM / 10 HP	275 CFM / 20 HP
	47	450 CFM / 3 HP	450 CFM / 7.5 HP	400 CFM / 15 HP	
4"	56	525 CFM / 5 HP	500 CFM / 10 HP	450 CFM / 20 HP	420 CFM / 40 HP
	59	750 CFM / 7.5 HP	725 CFM / 15 HP	700 CFM / 30 HP	
6"	615	1400 CFM / 15 HP	1350 CFM / 30 HP	1200 CFM / 60 HP	

- "Boost" = Required pressure available pressure
- Values listed above are for reference only. action blower & equipment should be consulted to verify proper sizing.
- Optional sound enclosures available
- Larger custom units and high pressure units are available upon request
- Duplex units are also available upon request

Dimensions



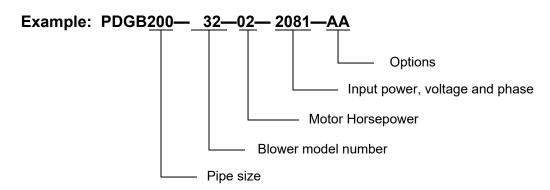
Pipe Size	Dim "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"
2"	40	40	32	17	26
3"	56	48	32	21	28
4"	62	48	32	24	29
6"	62	56	32	32	30

- Values shown are approximate and should not be used for construction
- All dimensions are listed in inches

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Part Number Configuration



Pipe Sizes
2"
3"
4"
6"

Blower Models	Motor
32	1
33	1.5
36	2
45	3
47	5
56	7.5
59	10
615	15
	20
	25
	30

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Motor HP	Input Power
1	208V 1Ø
1.5	240V 1Ø
2	208V 3Ø
3	240V 3Ø
5	480V 3Ø
7.5	
10	1

Options	
AA - NEMA 1 (indoor area)	enclosure (for use in
AB - NEMA 3R enclosure (for use in outdoor area)	
Consult oction for additional consults	blower & equipment options

• Refer to sizing chart for standard combinations of pipe size, blower model, and motor horsepower

40 50 60

• For complete ordering information, please consult action blower & equipment

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