BISON®

AMETEK®

ROTRON®

Regenerative Blowers

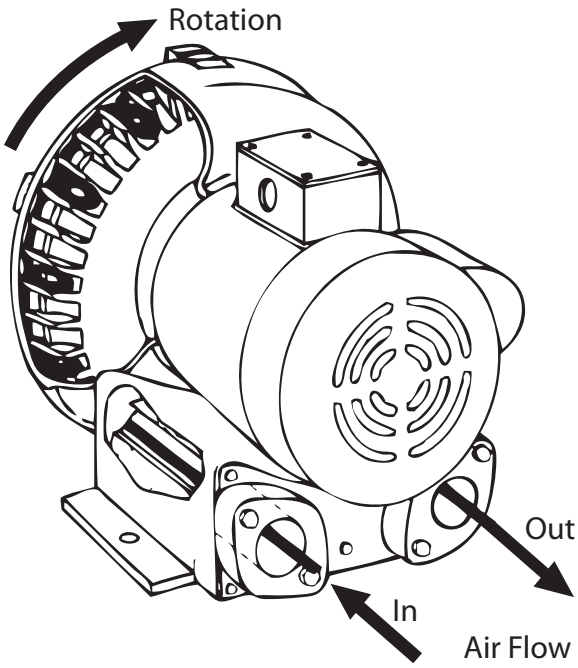
Formerly produced by AMETEK Dynamic Fluid Solutions (DFS), ROTRON Regenerative Blowers are now proudly designed and manufactured by Bison®, a business of AMETEK.

As we transition to our new identity, you'll notice that the pages within this brochure still carry the branding of the previous business unit. However, please be aware that ROTRON Regenerative Blowers featured herein are now under Bison's stewardship. We appreciate your patience as we undergo rebranding. Rest assured, our commitment to innovation and quality remains unchanged.

Please note: The data provided shows typical performance and should only be used for reference. Data may change without notice.




Regenerative Principle



The impeller blades passing the inlet port draw air or other gases into the blower. The impeller blades then, by centrifigal action, accelerate the air outward and forward. Here the “regenerative” principle takes effect as the air is turned back by the annular shaped housing to the base of the following blades, where it is again hurled outward. Each “regeneration” imparts more pressure to the air. When the air reaches the stripper section at the outlet (the stripper is the part of the blower located between the inlet and the outlet in which the annulus is reduced in size to fit closely to the sides and tips of the impeller blades), the air is “stripped” from the impeller and diverted out of the blower. The pressures or vacuums generated by each spinning, non-contacting, oil-free impeller are equal to those obtained by many larger multi-stage or positive displacement blowers.

ROTRON®

AMETEK DYNAMIC FLUID SOLUTIONS
75 North Street, Saugerties, NY 12477
USA: +1 215-256-6601 - Europe: +49 7703 930909 - Asia: +86 21 5763 1258
Customer Service Fax: +1 215.256.1338
www.ametekdfs.com

AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

Table of Contents

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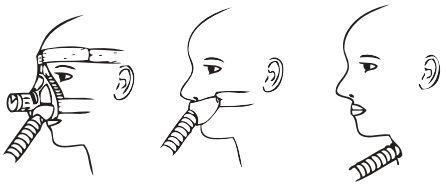
Your own imagination and knowledge are probably the best source of in-plant and on-site applications for ROTRON regenerative blowers. This guide will help to pinpoint and stimulate your consideration of the many alternative sources we provide to replace costly and maintenance intensive suction and pressure units and systems. The nine major application groups are listed and a cross reference of the most common applications by industry will help you identify both identical and similar applications in your industrial operations.

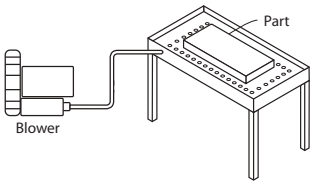
Application 1: Air-Assisted Breathing



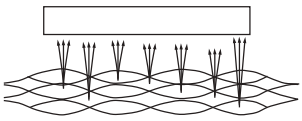
Manufacturing
PARP Respiration

Mining
PARP Respiration

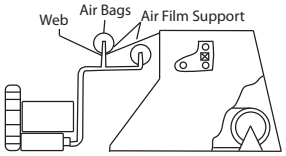
Application 2: Air-Assisted Inflation or Support



Flotation Tables



Air Slides / Air Tables



Turning & Forming Bars

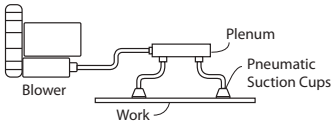
Material Handling
Air Slides
Air Tables
Carbon Black Car Unloading

Paper Processing
Flotation Tables
Forming Bar
Sheet Fluttering
Turn Bars

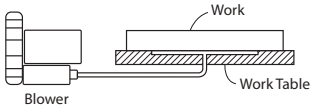
Textile
Garment Flotation Tables

Water Pollution Control
Pollution Containment
Waterway Management

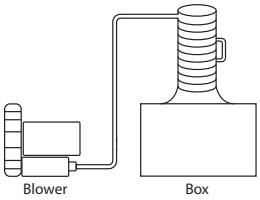
Application 3: Air-Assisted Vacuum Pick-Up or Hold-Down



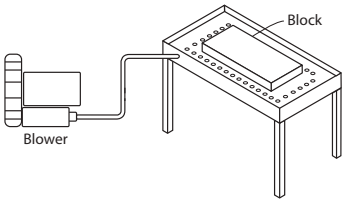
General Parts Pick-Up



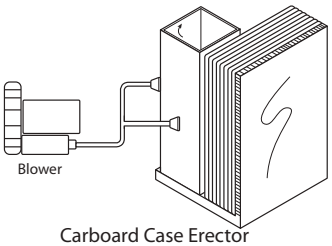
General Parts Hold-Down



Vacuum Manipulator



Flotation Tables



Carboard Case Erector

Manufacturing
Bag Filling Equipment
Cutting Tables
Packaging Equipment
Vacuum Manipulators
Corrugated and Paperboard Boxes
Flexible Packaging - Paper, Plastic, Aluminum Foil, Textile Packaging and Steel Strapping
Rigid Packaging
Beverage Containers
Cosmetic and Toiletry Containers
Blister Packs
Pharmaceutical Packaging
Food Packaging
Sterile Medical Device Packaging
Labels
Pressure Sensitive Tape

Paper or Plastics Handling
Cutting Tables
Diaper Making Equipment
Printing Presses

Textile
Garment Cutting Tables
Yarn Guiding and Tensioning
Yarn Aspiration

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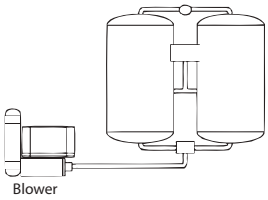
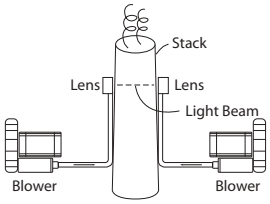
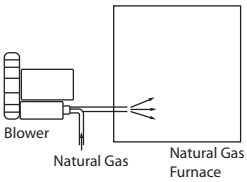
Application 4: Air & Gas Sampling, Boosting, or Circulating



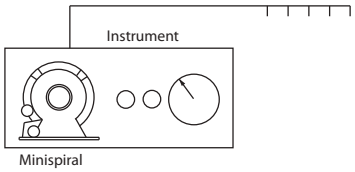
Fluid Bed Regeneration



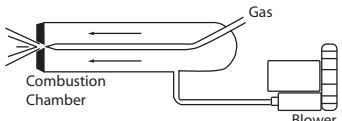
Transmissometer Lens Purging



Natural Gas Boost



Air & Gas Sampling



Combustion Air Boost

Air Pollution Control
Air Sampling
Air Stream Release Monitoring
Fire Prevention Air Sampling
Flue Gas Sampling

Foundry
Combustion Air Boost

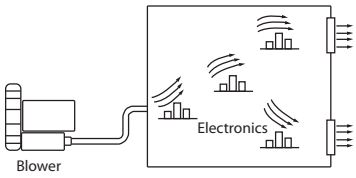
Instrumentation
Glove Box Pressurizing
Incubator Air Circulation
Weather Measurement Sampling

Manufacturing
Combustion Air Boost
Natural Gas Boost
Oil Demisting

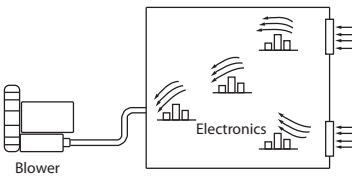
Pharmaceutical
Clean Room Air Circulation
Oxygen Generator

Plastics Handling
Desiccant Dryer Bed Regeneration

Application 5: Electronic Cooling



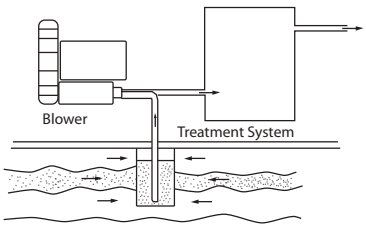
Pressurized Cabinet



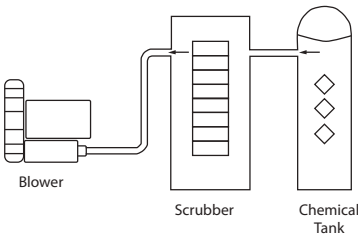
Vacuum Pull-Through Cabinet

Instrumentation
Engine/Motor Cooling
Film Development System Cooling
Lamp Bank Cooling
Small Enclosure Cooling

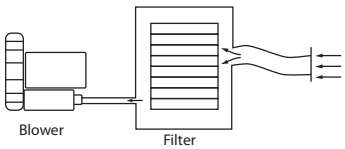
Application 6: Gas, Vapor, & Fume Recovery, Venting, & Treatment



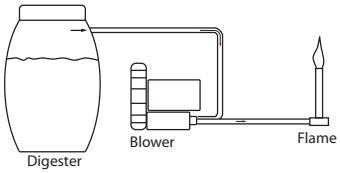
Soil Vapor Extraction &
Landfill Gas Recovery



Vent Header Off-Gassing



Fume & Smoke Removal



Digester Gas Collection

Agricultural
Methane Gas Recovery
Chemical Processing
Vent Header Off-Gassing

Environmental
Gasoline Vapor Recovery
Lagoon Gas Recovery
Landfill Gas Recovery
Radon Gas Collection
Soil Vapor Extraction

Foundry
Lost Foam Off-Gassing

Manufacturing - Plant Services
Cabinet Fume Venting
Environmental Test Chamber Venting
Laser Smoke Removal
Weld Smoke Removal

Pharmaceutical
Sterilization Gas (ETO) Recovery

Refineries
Centrifuge Venting

Water Pollution Control
Digester Gas Collection

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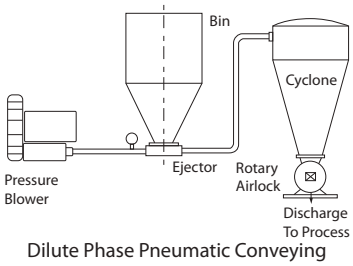
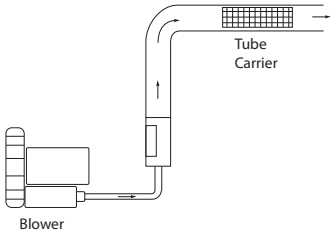
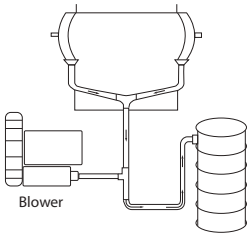
Application 7: Solid Material Transporting, Separation, & Collection



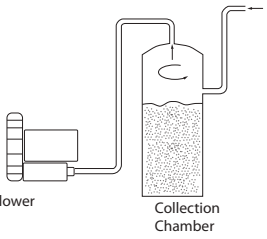
Dilute Phase Pneumatic Conveying



Pneumatic Tube



Paper, Plastic, Film, & Textile (Trim) Removal



General Material Separation & Collection

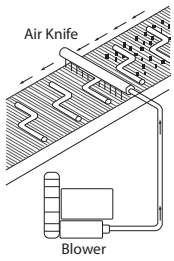
Foundry
Sand Reclamation

Manufacturing - Waste Control
Chip, Dust, & Particle Removal
Liquid & Solvent Removal
Paper, Plastic Film, & Textile (Trim) Removal

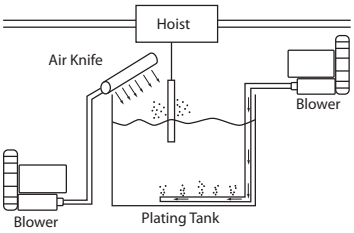
Material Handling
Air Slides
Blast Cleaning
Dilute Phase Conveying
Pneumatic Tube

Packaging
Bag Filling

Application 8: Parts Blow-Off & Drying



General Parts Blow-Off & Drying



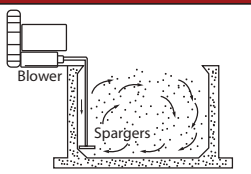
Solution Blow-Back

Aqueous Precision Cleaning
Automotive Parts Drying
Semiconductor Board Drying

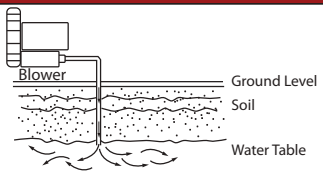
Food Processing
Batter Blow-Off
Bottle & Can Drying
Label Drying
Salt, Spice, & Flour Blow-Off

Manufacturing
Conveyor Belt Blow-Off
Electroplating Fume Guiding
Electroplating Parts Drying
Electroplating Solution Blow-Back
Flat or Irregular Metal Parts Drying
Wire Drying

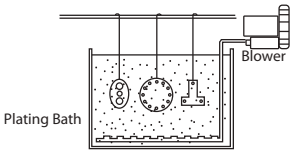
Application 9: Solution & Media Agitation & Aeration



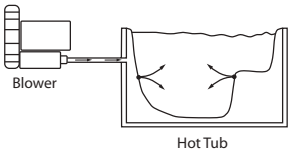
Wastewater Treatment Tank Aeration



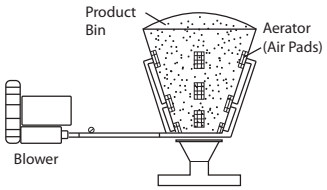
Groundwater Sparging



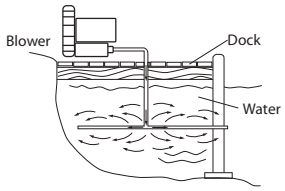
Electroplating Tank Aeration



Commercial Spa Aeration



Bin Pad & Fluidized Bed Aeration



Boat & Dock Deicing

Aquaculture
Aquarium Fish Farm, Hatchery, & Pond Aeration

Groundwater Sparging

Manufacturing
Concrete Fluid Bed Aeration
Electroplating Tank Agitation

Material Handling
Fluidized Beds

Recreation
Commercial Spa Aeration

Water Management
Boat, Dock, & Dam Face Deicing

Water Pollution Control
UV Tube Agitation
Watewater Filter Backwash
Wastewater Treatment Tank Aeration

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Blowers	Shipping Wt (LBS)	Carton Length (In)	Width (In)	Height (In)
DR/EN				
068	16/-	12	12	12
083	18/-	12	12	12
101	30/47	16	15	14
202	30/-	16	15	14
303	42/52	16	15	14
353	54/-	21	16	16
404	64/81	21	16	16
454	60/84	21	16	16
505	82/92	21	16	16
513	76/99	24	12	22
523	112/126	24	16	22
555	96/-	21	16	16
633	241/288	25	18	20
656	110/117	24	16	22
6	148/167	25	18	20
S7	206/-	25	18	20
757	131/158	25	18	20
808	285/287	34	23	26
833	269/297	44	29	37
858	280/338	34	23	26
S9 / P9	400/-	34	23	26
909	373/524	34	23	26
979	345/533	34	23	26
1233	400/-	34	23	26
14	620/737	43	28	33
S13 / P13	687/-	43	28	33
S15 / P15	909/-	43	28	43
Minispirals (SE2;12)	2/-	8	8	6
Nautilairs (NC33)	18/-	16	15	14
Spiral (SL2;4;5)	42/-	16	15	14

Note: Model weight will vary by HP and voltage. Refer to individual specification sheets to verify.

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Industrial / Chemical Processing Blowers

AMETEK Dynamic Fluid Solutions' ROTRON brand has long been a world leader in regenerative blower technologies, bringing regenerative advantages to a new level, providing quiet, maintenance-free, oil-free operation.

Our industrial DR (Domestic Regenerative) blowers include:

- Rugged cast aluminum housing, cover, impeller, and muffler tower
- Removable cast iron flanges bolted to a sheet metal manifold
- TEFC motors on single-ended models, ODP motors on all double-ended models
- Carbon steel shaft and zinc plated hardware
- Permanently sealed motor bearings for 20,000-25,000 hours life

Our CP (Chemical Processing Regenerative) blowers include:

- Chem-Tough™ surface conversion corrosion resistant treatment for aluminum castings
- Teflon® lip seal in a stainless steel case standard for leakage containment to 25 cc/min or less
- Chemical Duty motors with 303 stainless steel motor shafts
- Stainless steel hardware throughout
- Nickel plated flanges and muffler retainers

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PRECISION MOTION CONTROL
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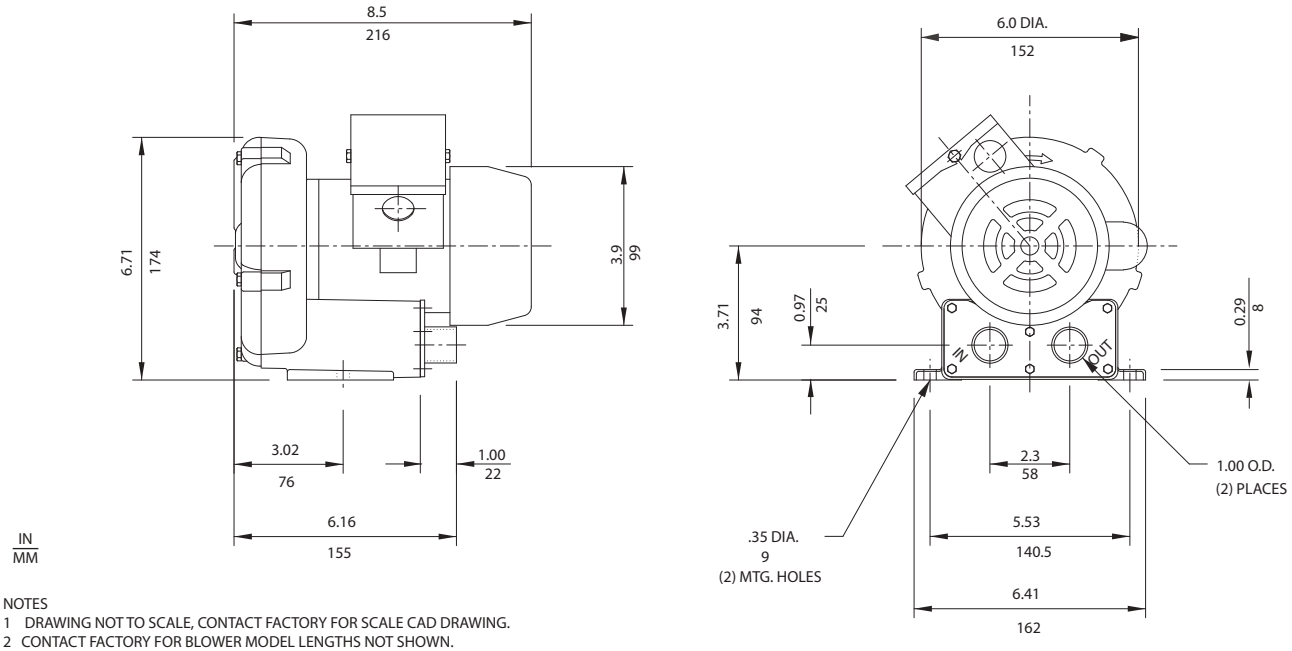
Industrial / Chemical Processing Blowers

DR 068

ROTRON®

.125 HP Regenerative Blower



NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number
		DR068DJ9Y
Specification	Units	081657
Motor Enclosure - Shaft Mtl.	-	TEFC - CS
Horsepower	-	1/8
Voltage	AC	115/230
Phase - Frequency	-	Single - 60 Hz
Insulation Class	-	B
NEMA Rated Motor Amps	Amps (A)	18/1.0-0.9
Service Factor	-	1.0
Max. Blower Amps	Amps (A)	1.18/0.59
Locked Rotor Amps	Amps (A)	8.7/4.35
NEMA Starter Size	-	00/00
Shipping Weight	Lbs	16
	Kg	7.3

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

DR 068

ROTRON®

.125 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 13 SCFM
- Maximum pressure: 13.5 IWG
- Maximum vacuum: 13.5 IWG
- Standard motor: 1/8 HP, TEFC
- Cast aluminum blower housing, impeller & cover; slip-on steel flanges
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Various horsepowers for application-specific needs

BLOWER OPTIONS

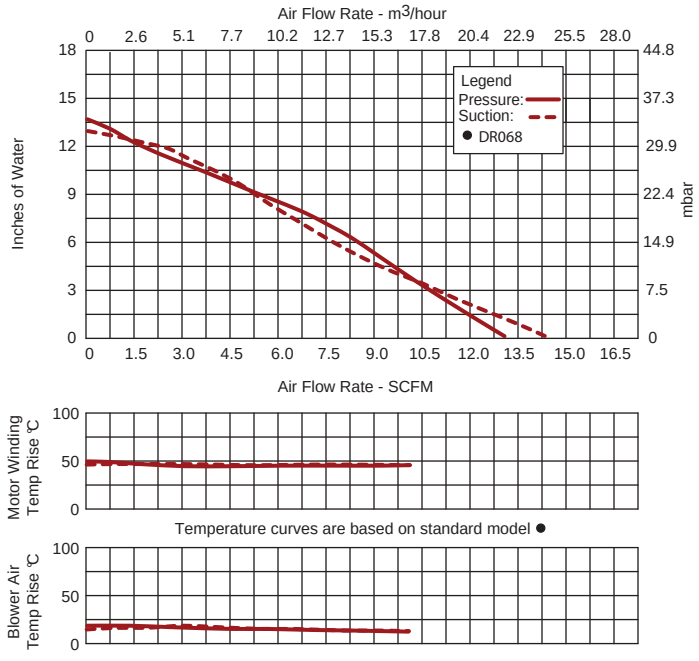
- Corrosion resistant surface treatments & sealing options
- Cast iron (threaded) or face flanges for application-specific needs

ACCESSORIES

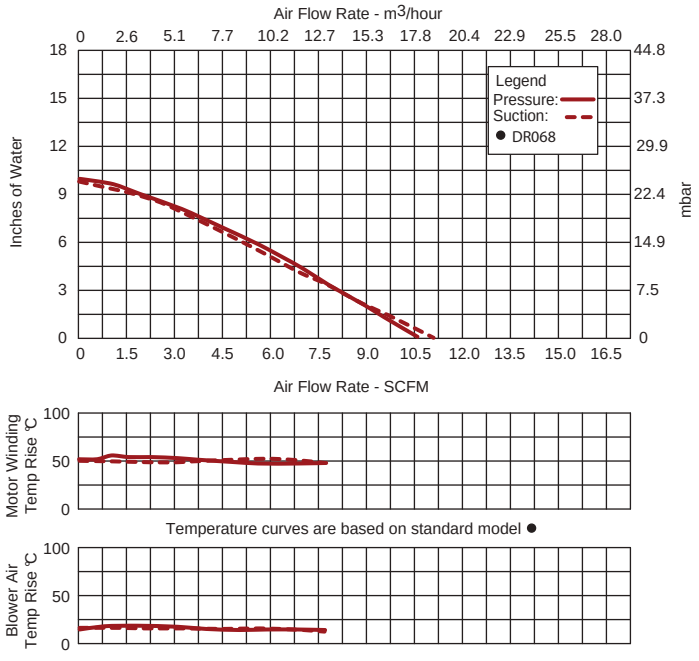
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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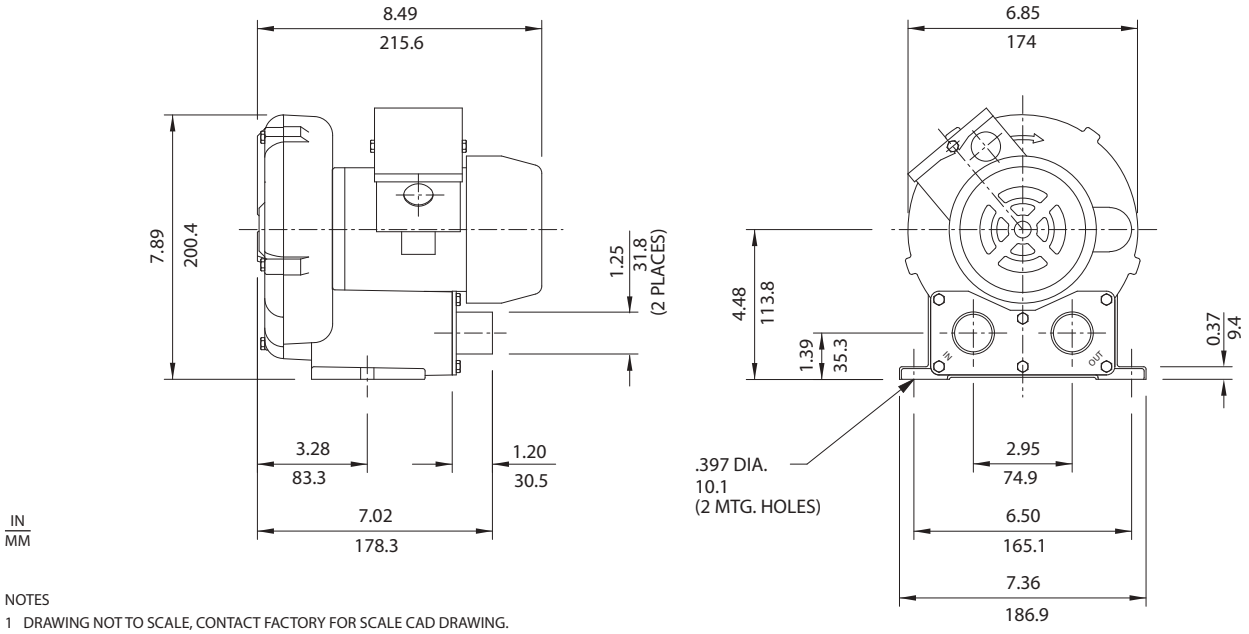
DR 083

ROTRON®

.125 HP Regenerative Blower



NOTES

1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number
		DR083DC9Y
Specification	Units	081572
Motor Enclosure - Shaft Mtl.	-	TEFC -CS
Horsepower	-	1/8
Voltage	AC	115/230
Phase - Frequency	-	Single - 60 Hz
Insulation Class	-	B
NEMA Rated Motor Amps	Amps (A)	1.8/1.0-0.9
Service Factor	-	1.0
Max. Blower Amps	Amps (A)	1.18/0.59
Locked Rotor Amps	Amps (A)	8.7/4.35
NEMA Starter Size	-	00/00
Shipping Weight	Lbs	18
	Kg	8.2

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperaturs - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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ROTRON®

DR 083

.125 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 18.4 SCFM
- Maximum pressure: 24 IWG
- Maximum vacuum: 23.2 IWG
- Standard motor: 1/8 HP, TEFC
- Cast aluminum blower housing, impeller & cover; slip-on steel flanges
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Various horsepowers for application-specific needs

BLOWER OPTIONS

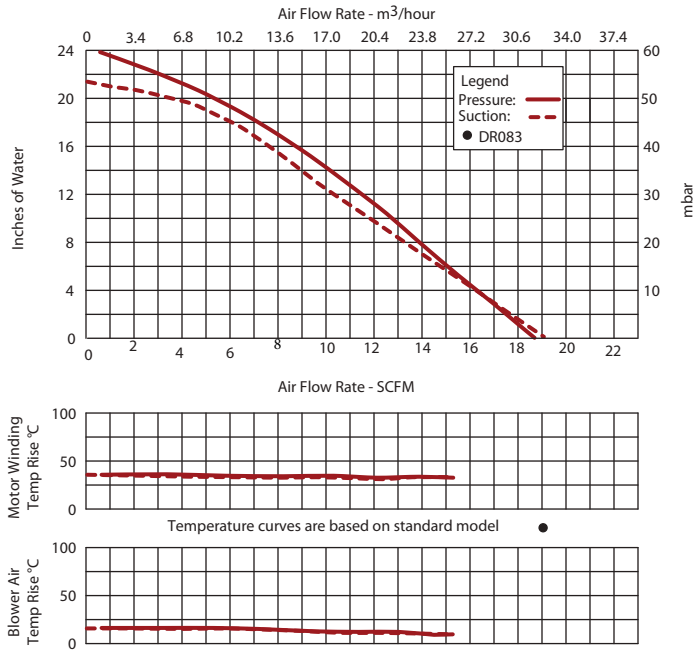
- Corrosion resistant surface treatments & sealing options
- Cast iron (threaded) or face flanges for application-specific needs

ACCESSORIES

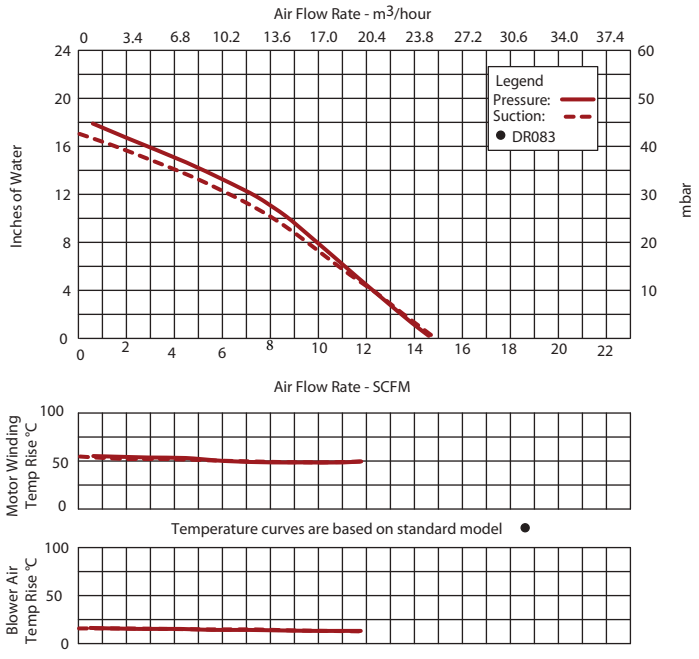
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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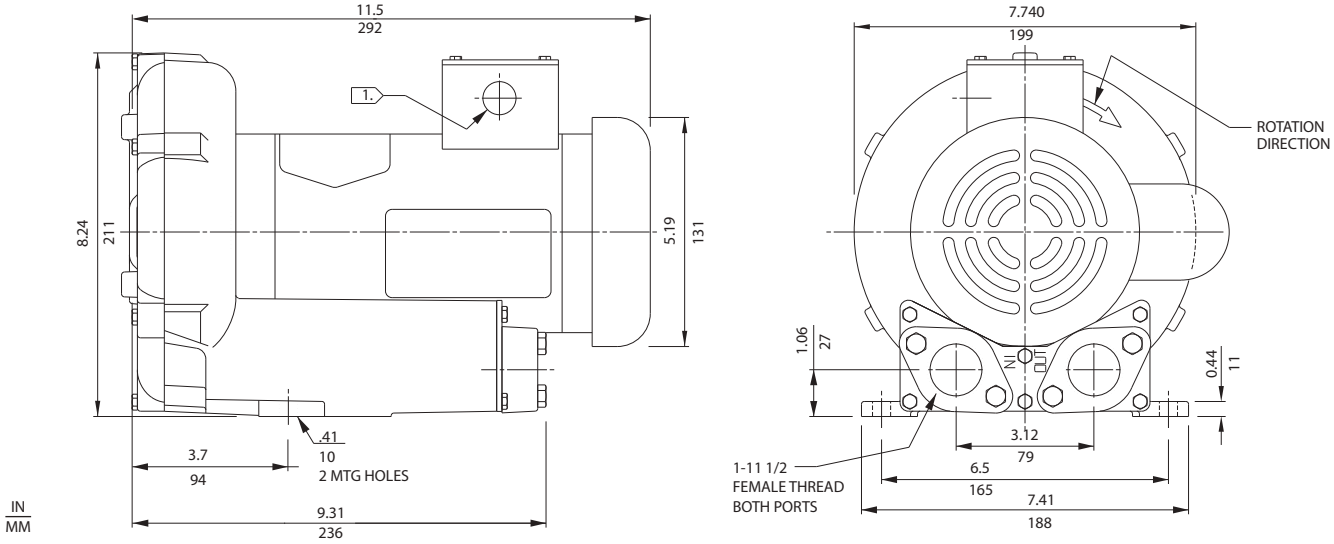
DR 101 & CP 101

ROTRON®

.33 HP Regenerative Blower



NOTES
1. TERMINAL BOX CONNECTOR HOLE .88 (22) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number			
		DR101Y9M	DR101Y72M	DR101Y86M	CP101FB91MLR
Specification	Units	038936	038937	038938	038225
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC - SS
Horsepower	-	0.33	0.33	0.33	0.33
Voltage	AC	115/230	230/460	575	230/460
Phase - Frequency	-	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	3.4/1.7	1.3/1.2/0.6	0.6	1.3-1.2/0.6
Service Factor	-	1.35	1.25	1.25	1.25
Max. Blower Amps	Amps (A)	3.4/1.7	1.30/.65	0.4	1.3/0.65
Locked Rotor Amps	Amps (A)	16.4/8.2	6.4-5.8/2.9	4.2	6.4-5.8/2.9
NEMA Starter Size	-	00/00	00-00/00	00	00-00/00
Shipping Weight	Lbs	30	30	30	30
	Kg	13.6	13.6	13.6	13.6

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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DR 101 & CP 101

ROTRON®

.33 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 31 SCFM
- Maximum pressure: 32 IWG
- Maximum vacuum: 28.5 IWG
- Standard motor: 0.33 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

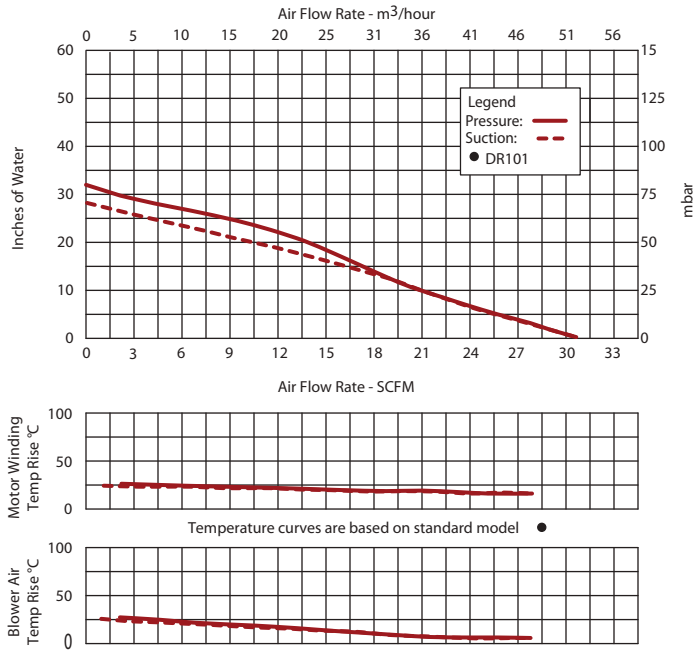
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

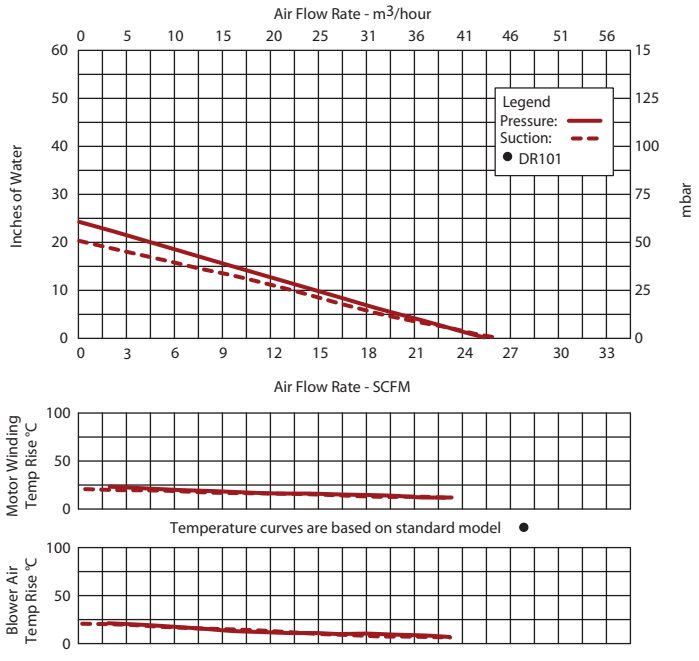
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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AMETEK®
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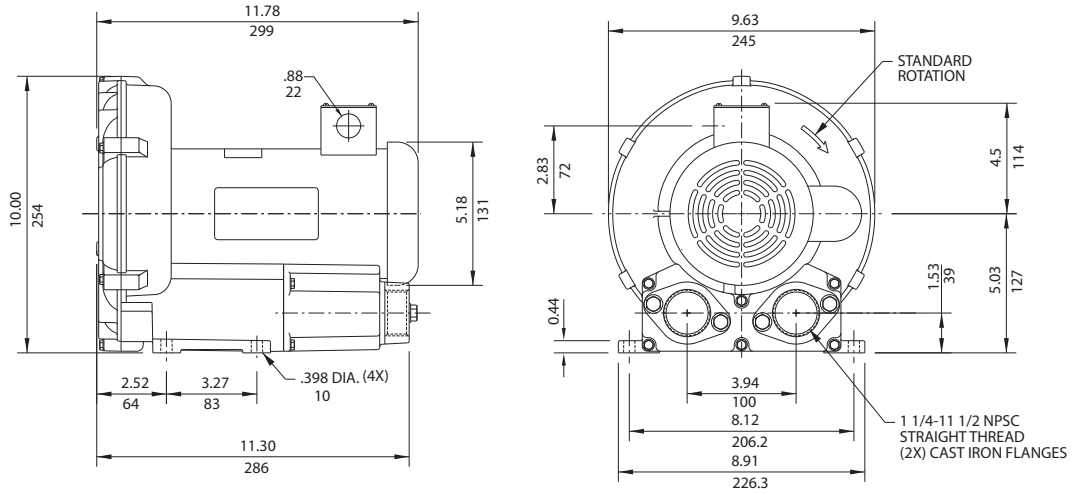
DYNAMIC FLUID SOLUTIONS

DR 202 & CP 202

ROTRON®

.33 HP Regenerative Blower



IN
MM

NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number				
		DR202Y9M	DR202Y72M	DR202Y86M	CP202AE72MLR	CP202FA91MLR
Specification	Units	080564	080565	080566	038953	038227
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC - CS	CHEM TEFC - SS
Horsepower	-	.33	0.33	0.33	0.33	0.33
Voltage	AC	115/230	230/460	575	230/460	230/460
Phase - Frequency	-	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	3.4/1.7	1.2/0.6	0.5	1.2/0.6	1.2/0.6
Service Factor	-	1.35	1.35	1.35	1.35	1.35
Max. Blower Amps	Amps (A)	5.2/2.6	1.54/0.77	0.57	1.54/0.77	1.54/0.77
Locked Rotor Amps	Amps (A)	16.4/8.2	6.4/3.2	2.6	6.4/3.2	6.4/3.2
NEMA Starter Size	-	00/00	00/00	00	00/00	00/00
Shipping Weight	Lbs	30	30	30	30	30
	Kg	13.6	13.6	13.6	13.6	13.6

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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DR 202 & CP 202

ROTRON®

.33 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 52 SCFM
- Maximum pressure: 40 IWG
- Maximum vacuum: 35 IWG
- Standard motor: 0.33 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

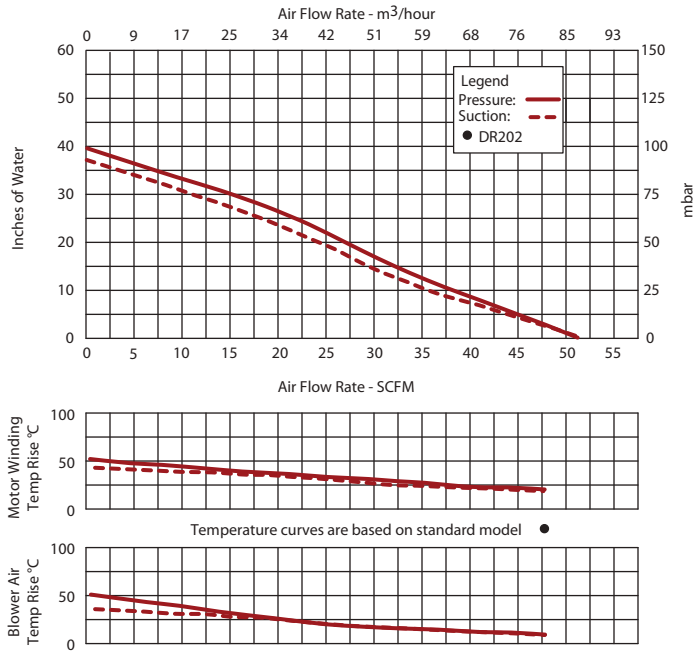
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Cast iron (threaded) or face flanges for application-specific needs

ACCESSORIES

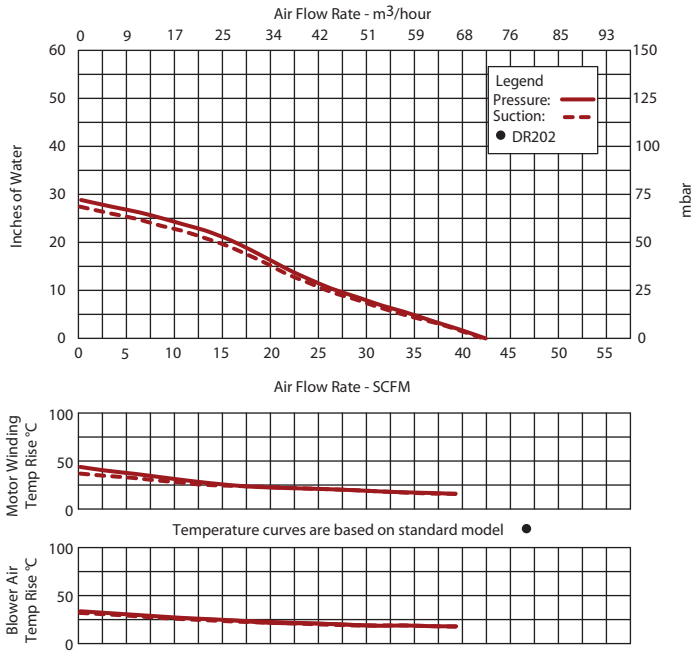
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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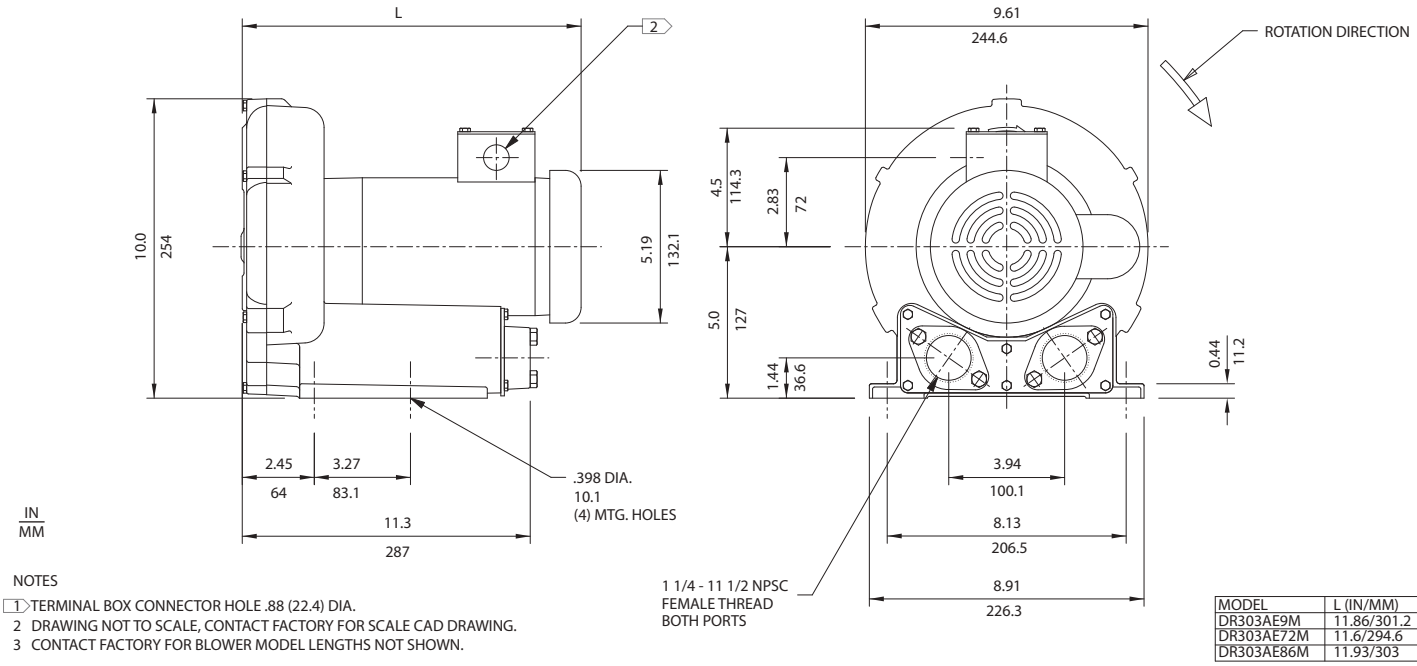
Industrial / Chemical Processing Blowers

ROTRON®

DR 303 & CP 303

0.5 HP Regenerative Blower



NOTES

1. TERMINAL BOX CONNECTOR HOLE .88 (22.4) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR303AE9M	11.86/301.2
DR303AE72M	11.6/294.6
DR303AE86M	11.93/303

		Part/ Model Number			
		DR303AE9M	DR303AE72M	DR303AE86M	CP303FA91MLR
Specification	Units	038841	038842	038843	080148
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC - SS
Horsepower	-	0.5	0.5	0.5	0.5
Voltage	AC	115/230	230/460	575	230/460
Phase - Frequency	-	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	6.2/3.1	1.3-1.2/0.6	0.6	1.3-1.2/0.6
Service Factor	-	1.25	1.25	1.25	1.25
Max. Blower Amps	Amps (A)	6/3	1.63/0.83	0.7	1.63/0.83
Locked Rotor Amps	Amps (A)	21/10.5	10-9.2/4.6	4.2	10-9.2/4.6
NEMA Starter Size	-	00/00	00/00	00	00/00
Shipping Weight	Lbs	34	42	42	42
	Kg	15.4	19.1	19.1	19.1

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

DR 303 & CP 303

ROTRON®

0.5 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 55 SCFM
- Maximum pressure: 48 IWG
- Maximum vacuum: 45 IWG
- Standard motor: 0.5 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty, or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

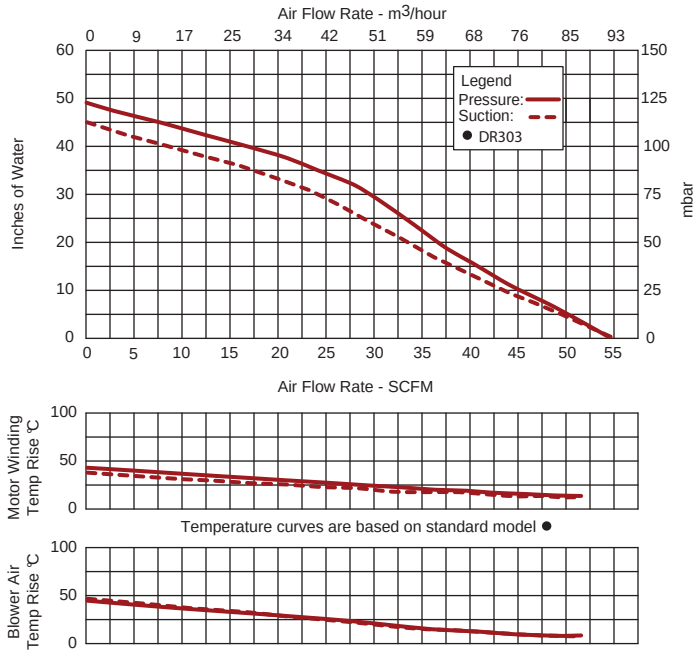
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on flanges or face flanges for application-specific needs

ACCESSORIES

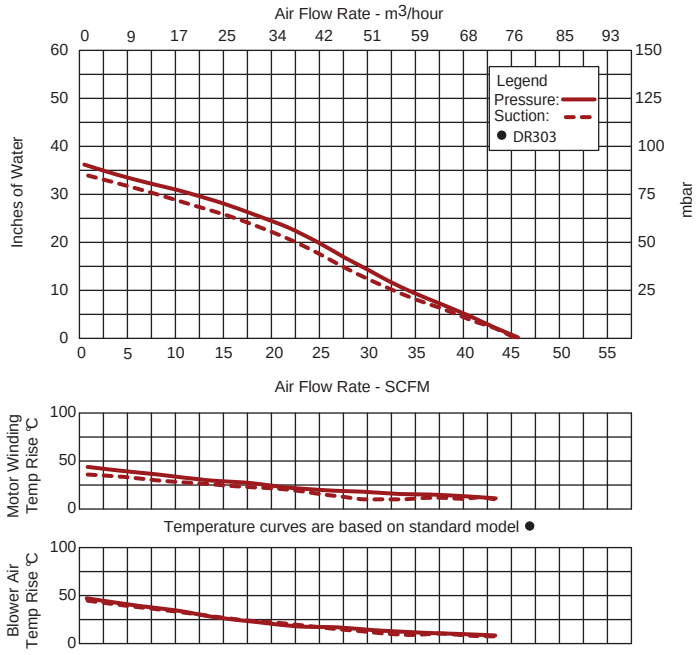
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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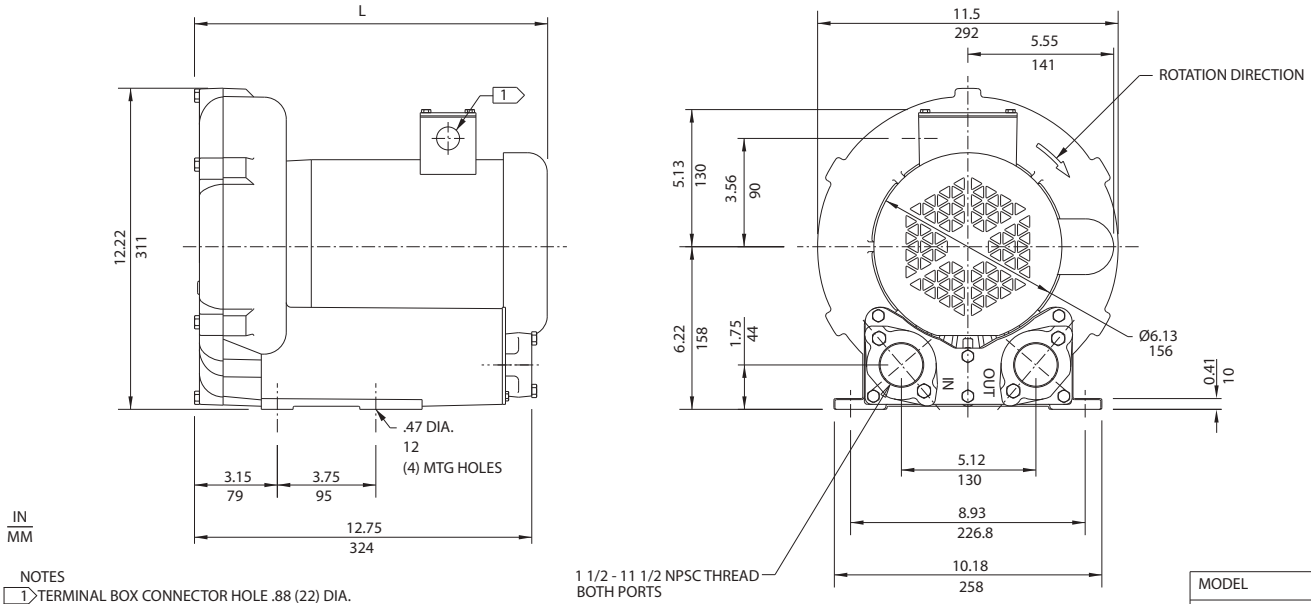
Industrial / Chemical Processing Blowers

ROTRON®

DR 353 & CP 353

.75 HP Regenerative Blower



NOTES
1. TERMINAL BOX CONNECTOR HOLE .88 (22) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR353BR9M	13.97/355
DR353BR72M	12.5/317

		Part/ Model Number				
		DR353BR9M	DR353BR72M	DR353BR86M	CP353BR72MLR	CP353FD72MLR
Specification	Units	080554	080555	080556	081562	081612
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC - CS	CHEM TEFC - SS
Horsepower	-	0.75	0.75	0.75	0.75	0.75
Voltage	AC	115/230	230/460	575	230/460	230/460
Phase - Frequency	-	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three 60 Hz	Three 60 Hz
Insulation Class	-	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	10.0/5.0	3.0/1.5	0.96	3.0/1.5	3.0/1.5
Service Factor	-	1.15	1.25	1.25	1.25	1.25
Max. Blower Amps	Amps (A)	12/6	3.5/1.75	1.0	3.5/1.75	3.5/1.75
Locked Rotor Amps	Amps (A)	59.6/29.8	15.2/7.6	6.1	15.2/7.6	15.2/7.6
NEMA Starter Size	-	00/00	00/00	00	00/00	00/00
Shipping Weight	Lbs	60	54	54	54	54
	Kg	27.2	24.5	24.5	24.5	24.5

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperaturs - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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www.ametekdfs.com

DR 353 & CP 353

ROTRON®

.75 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 100 SCFM
- Maximum pressure: 50 IWG
- Maximum vacuum: 45 IWG
- Standard motor: 3/4 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

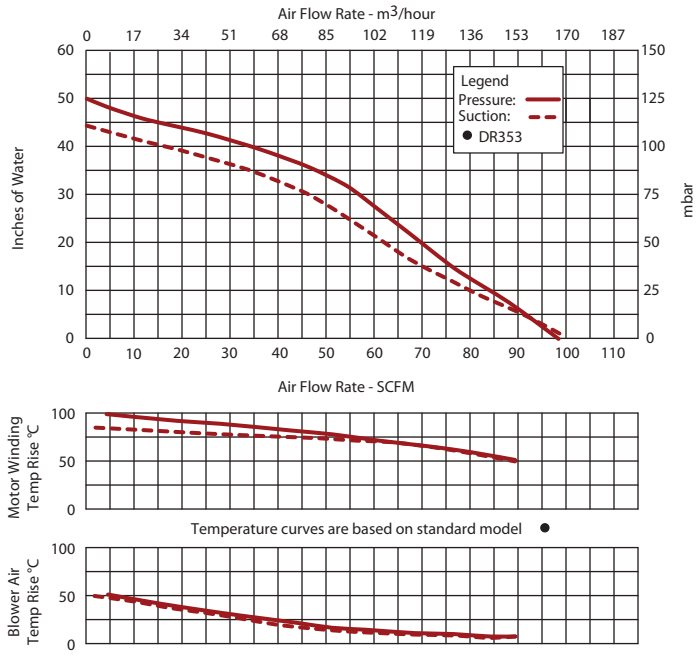
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

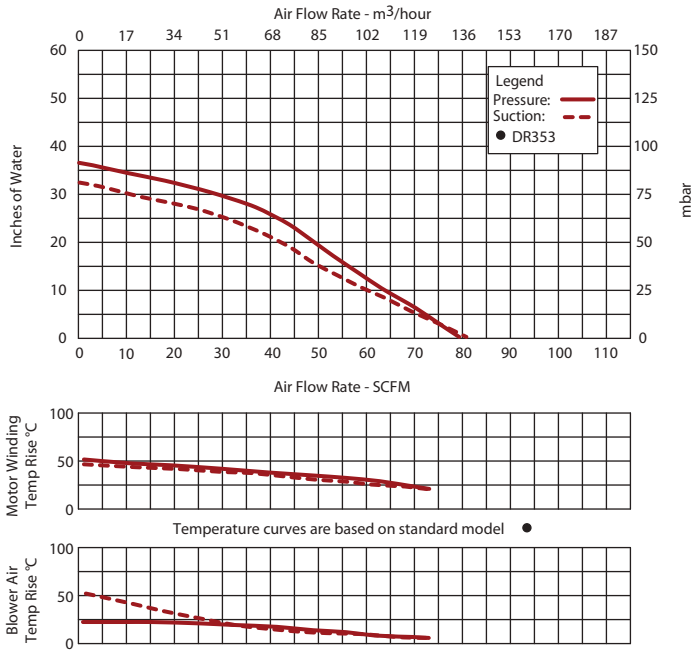
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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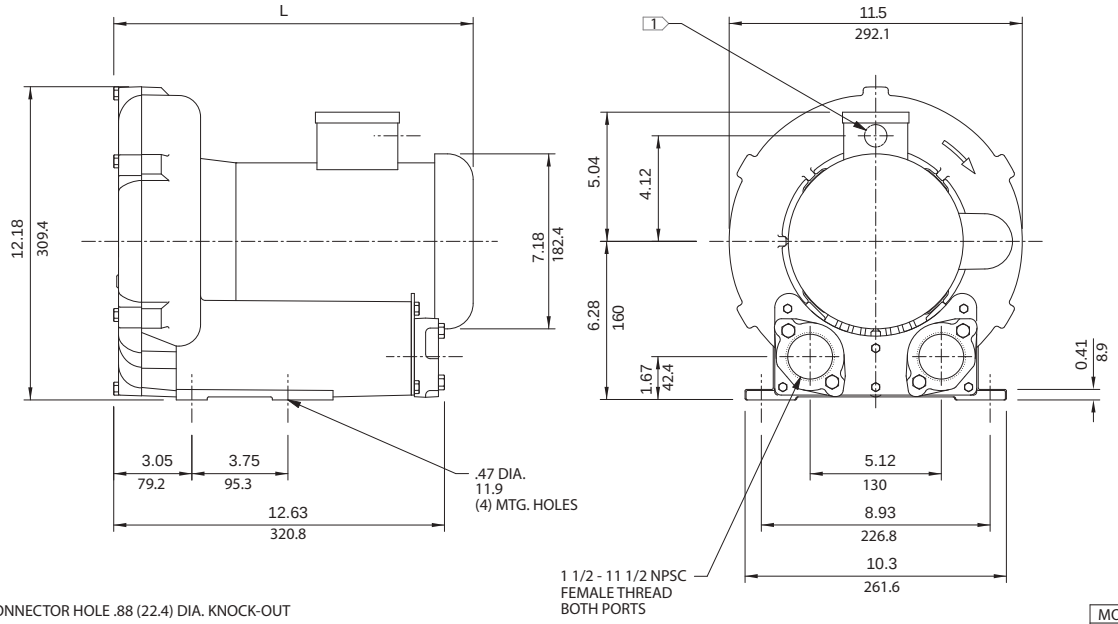
Industrial / Chemical Processing Blowers

DR 404 & CP 404

ROTRON®

1.0 HP Regenerative Blower



NOTES
1. TERMINAL BOX CONNECTOR HOLE .88 (22.4) DIA. KNOCK-OUT
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR404AL58M	14.41/366.0
DR404AL72M	14.18/360.2
DR404AL86M	13.38/339.9

		Part/ Model Number			
		DR404AL58M	DR404AL72M	DR404AL86M	CP404CU72MLR
Specification	Units	037407	037406	037408	038233
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC - SS
Horsepower	-	1.0	1.0	1.0	1.0
Voltage	AC	115/230	230/460	575	230/460
Phase - Frequency	-	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	11.4/5.7	3.0/1.5	1.2	3.0/1.5
Service Factor	-	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	14.5/7.25	4.0/2.0	1.4	4.0/2.0
Locked Rotor Amps	Amps (A)	70/35	21.0/10.5	7.6	21.0/10.5
NEMA Starter Size	-	00/00	00/00	00	00/00
Shipping Weight	Lbs	69	64	64	64
	Kg	31.3	29	29	29

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperaturs - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

DR 404 & CP 404

ROTRON®

1.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 105 SCFM
- Maximum pressure: 58 IWG
- Maximum vacuum: 50 IWG
- Standard motor: 1.0 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

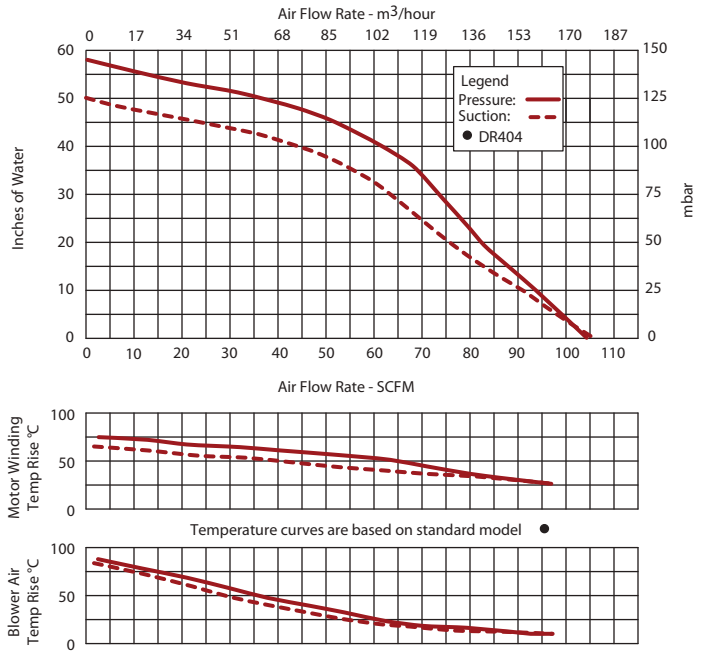
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

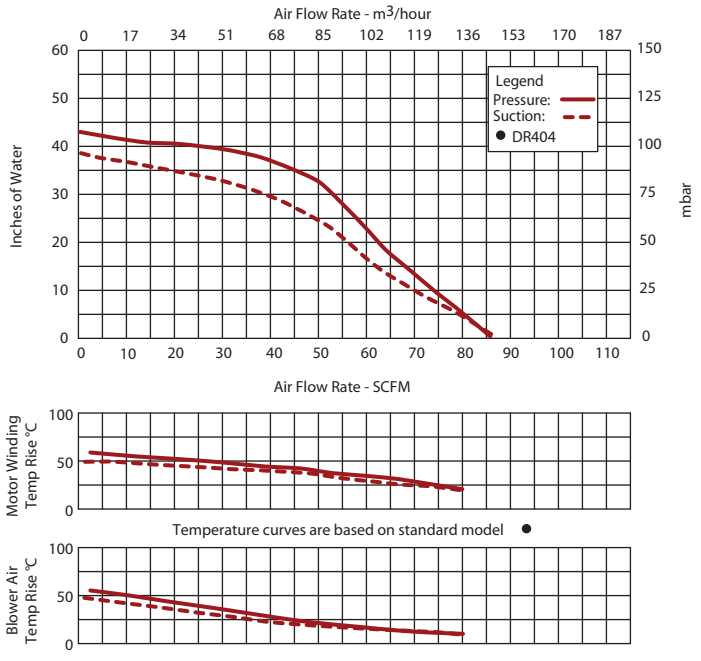
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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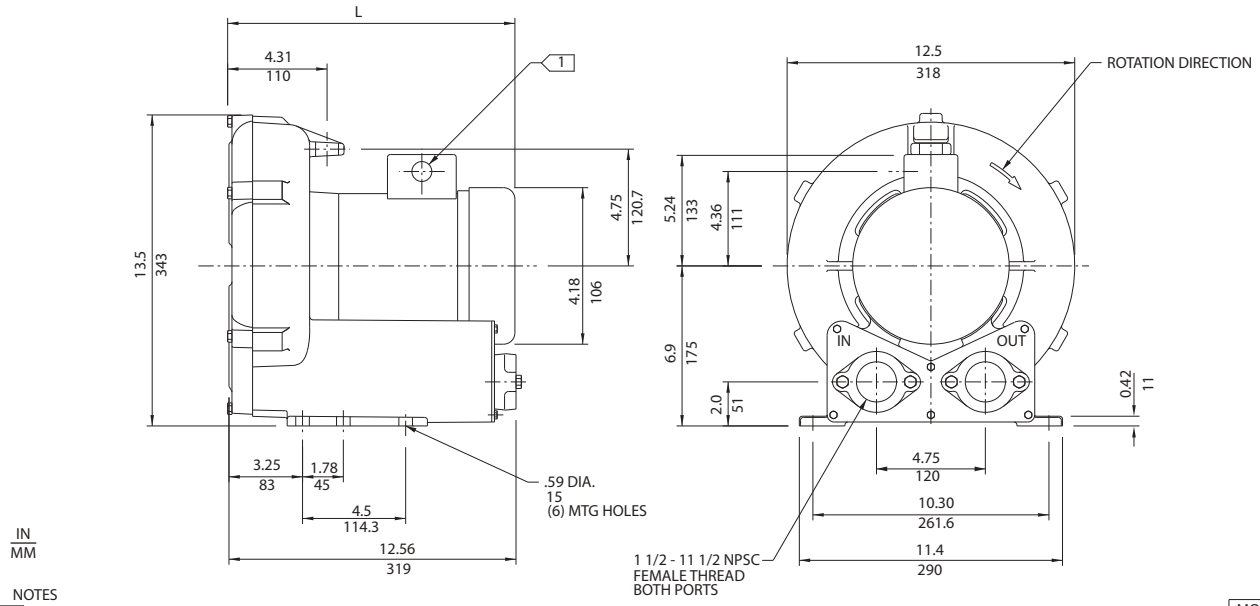
Industrial / Chemical Processing Blowers

ROTRON®

DR 454 & CP 454

1.5 HP Regenerative Blower



NOTES
1. TERMINAL BOX CONNECTOR HOLE .88 (22) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR454R58M	14.47/367
DR454R72M	13.31/338

		Part/ Model Number			
		DR454R58M	DR454R72M	DR454R86M	CP454EZ72MLR
Specification	Units	080481	080480	080482	080491
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC -SS
Horsepower	-	1.5	1.5	1.5	1.5
Voltage	AC	115/230	230/460	575	230/460
Phase - Frequency	-	Single - 50/60 Hz	Three - 50/60 Hz	Three - 50/60 Hz	Three - 50/60 Hz
Insulation Class	-	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	15.6/7.8	4.6/2.3	1.8	4.6/2.3
Service Factor	-	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	18/9	5.2/2.6	2.1	5.2/2.6
Locked Rotor Amps	Amps (A)	84/42	32/16	12.8	32/16
NEMA Starter Size	-	1/0	00/00	00	00/00
Shipping Weight	Lbs	73	60	60	60
	Kg	33.1	27.2	27.2	27.2

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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DR 454 & CP 454

ROTRON®

1.5 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 120 SCFM
- Maximum pressure: 65 IWG
- Maximum vacuum: 60 IWG
- Standard motor: 1.5 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

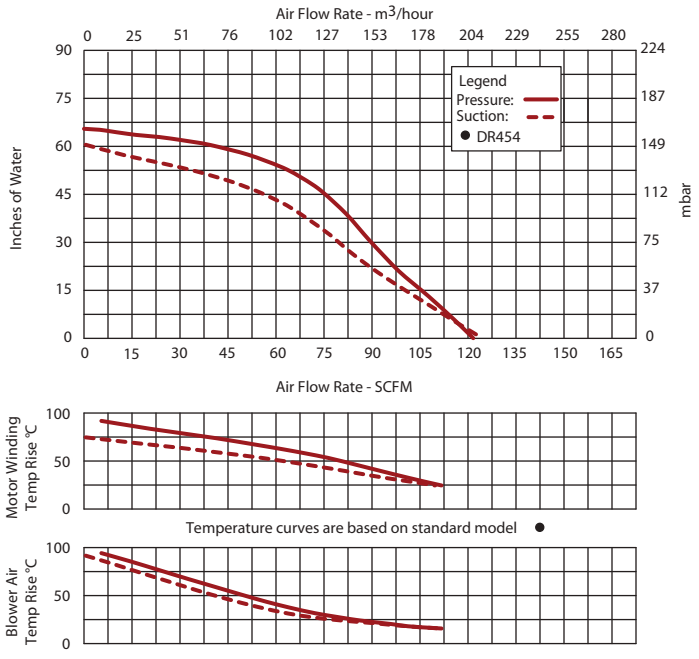
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

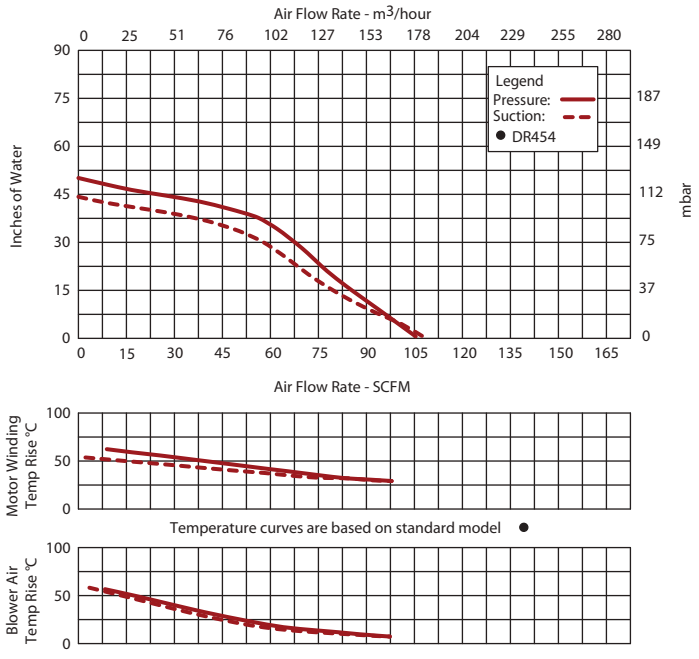
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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PRECISION MOTION CONTROL
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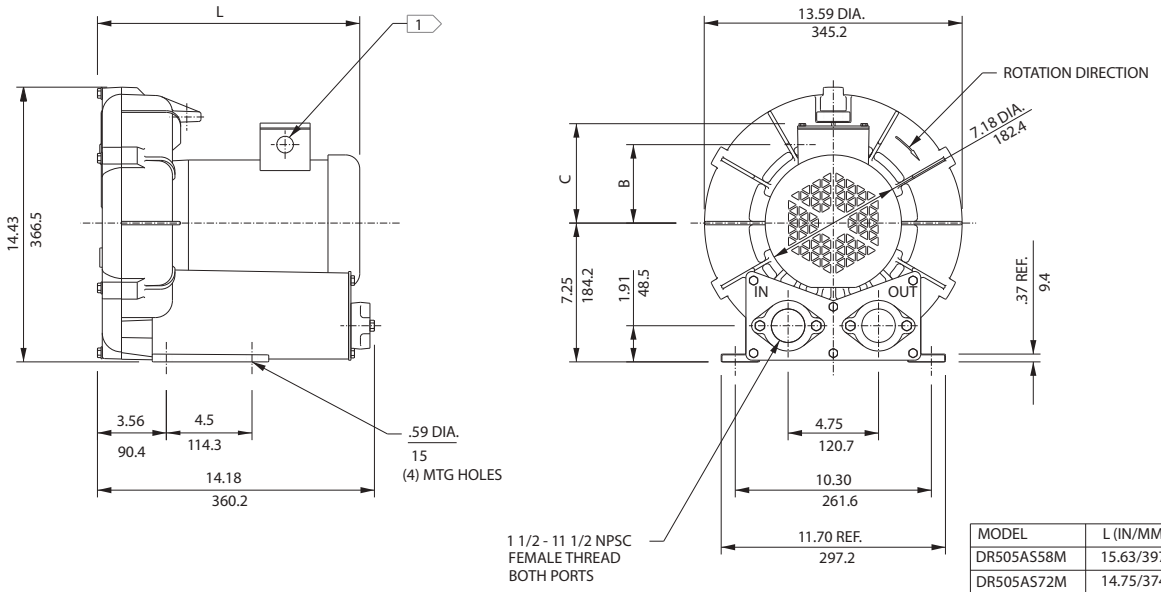
Industrial / Chemical Processing Blowers

DR 505 & CP 505

ROTRON®

2.0 / 3.0 HP Regenerative Blower



IN
MM

MODEL	L (IN/MM)	B (IN/MM)	C (IN/MM)
DR505AS58M	15.63/397	4.63/117	5.64/143
DR505AS72M	14.75/374	4.25/108	5.25/133
DR505AS86M	14.38/365	4.37/111	5.18/131
DR505K58M	17.0/431	4.63/117	5.64/143
DR505K72M	15.63/397	4.37/111	5.18/131

NOTES
1. TERMINAL BOX CONNECTOR HOLE .88 (22) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number						
Specification	Units	DR505AS58M 037542	DR505AS72M 037543	DR505AS86M 037544	DR505K58M 081882	DR505K72M 037551	CP505FE72MLR 038239	CP505CT72MLR 038237
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC - SS	CHEM TEFC - SS
Horsepower	-	2.0	2.0	2.0	3.0	3.0	3.0	2.0
Voltage	AC	115/230	230/460	575	115/230	230/460	230/460	230/460
Phase - Frequency	-	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	18.2/9.1	5.4/2.7	2.3	25.6/12.8	7.6/3.8	7.6/3.8	5.4/2.7
Service Factor	-	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	24/11.5	7/3.5	3.0	28/14	8.8/4.4	8.8/4.4	6.8/3.4
Locked Rotor Amps	Amps (A)	138/69	38/19	21	194/97	88/44	88/44	38/19
NEMA Starter Size	-	1/0	00/00	00	1.5/0	0/0	0/0	00/00
Shipping Weight	Lbs	97	82	84	91	86	86	82
	Kg	44	37.2	38.1	41.3	39	39	37.2

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 505 & CP 505

ROTRON®

2.0 / 3.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 150 SCFM
- Maximum pressure: 88 IWG
- Maximum vacuum: 73 IWG
- Standard motor: 2.0 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

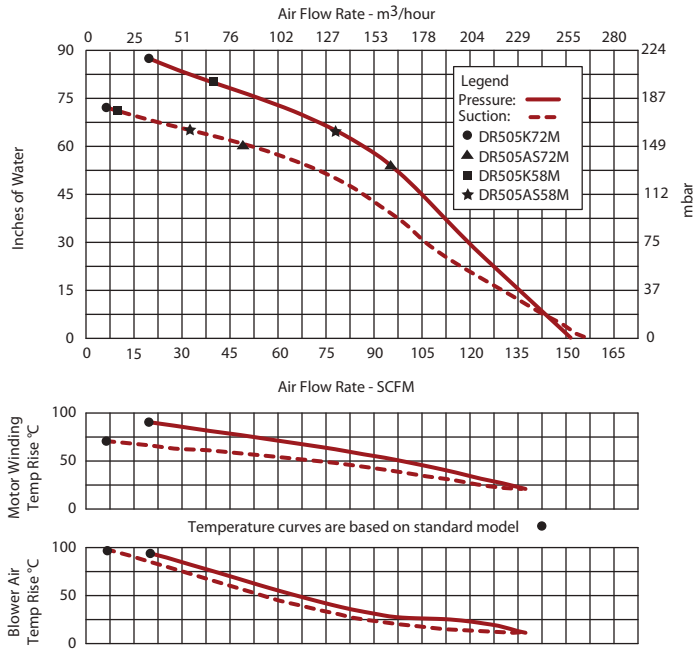
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

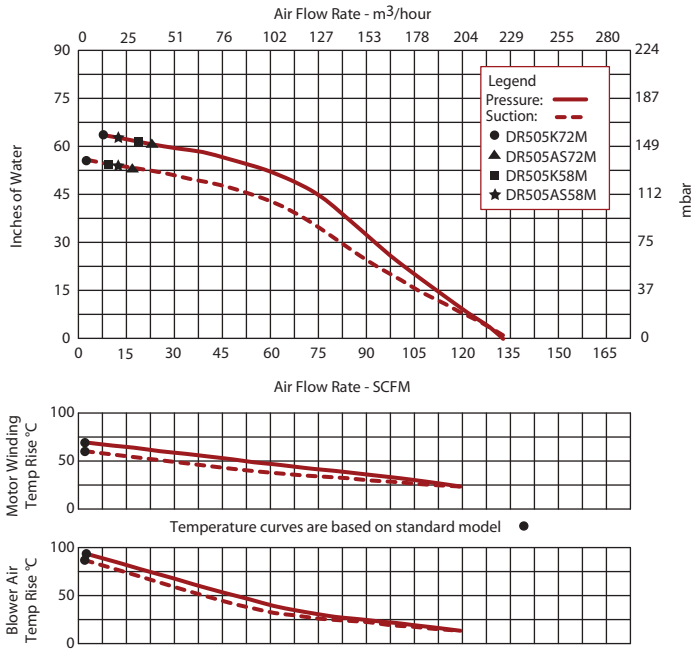
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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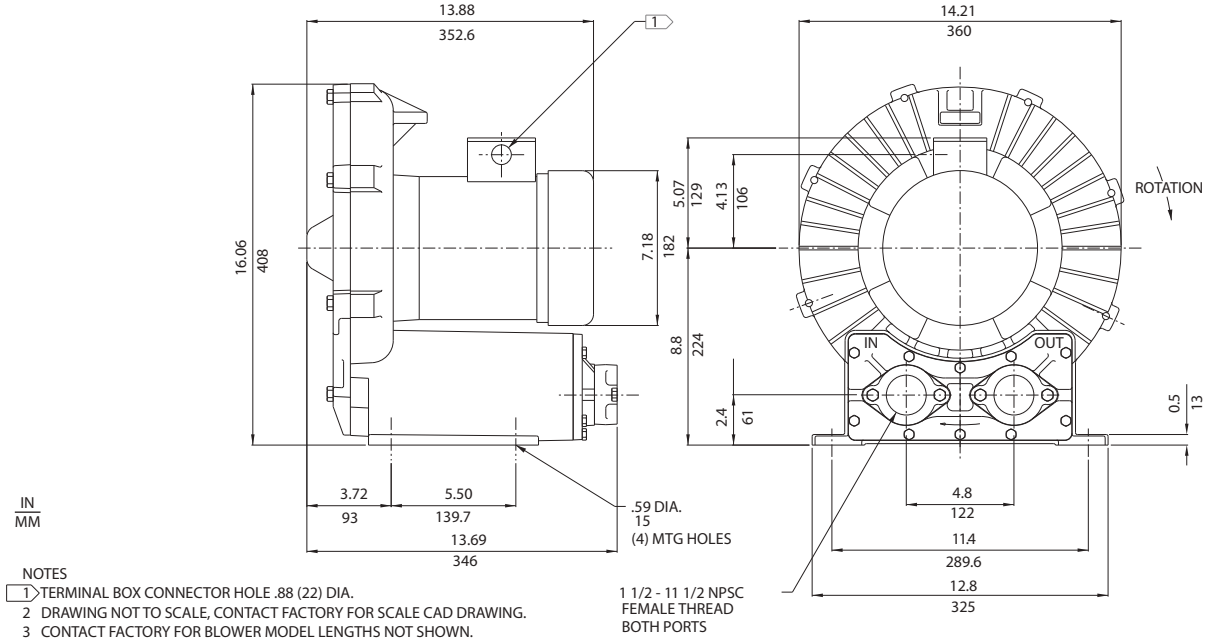
Industrial / Chemical Processing Blowers

ROTRON®

DR 513 & CP 513

1.5 HP Regenerative Blower



NOTES
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2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number			
		DR513R72	DR513R58	DR513R86	CP513EZ72LR
Specification	Units	037217	037209	037773	038241
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC -SS
Horsepower	-	1.5	1.5	1.5	1.5
Voltage	AC	230/460	115/230	575	230/460
Phase - Frequency	-	Three - 60 Hz	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	4.6/2.3	16.8/8.4	1.8	4.6/2.3
Service Factor	-	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	5/2.5	19/9.5	1.85	5/2.5
Locked Rotor Amps	Amps (A)	43/21	120/60	13	43/21
NEMA Starter Size	-	00/00	1/0	00	00/00
Shipping Weight	Lbs	76	95	76	76
	Kg	34.5	43.1	34.5	34.5

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

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PRECISION MOTION CONTROL
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Industrial / Chemical Processing Blowers

DR 513 & CP 513

ROTRON®

1.5 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 78 SCFM
- Maximum pressure: 88 IWG
- Maximum vacuum: 80 IWG
- Standard motor: 1.5 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

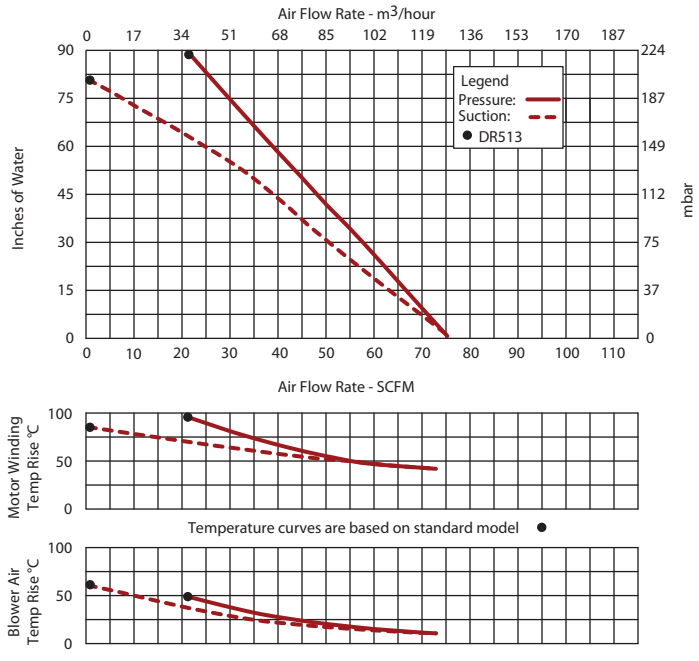
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

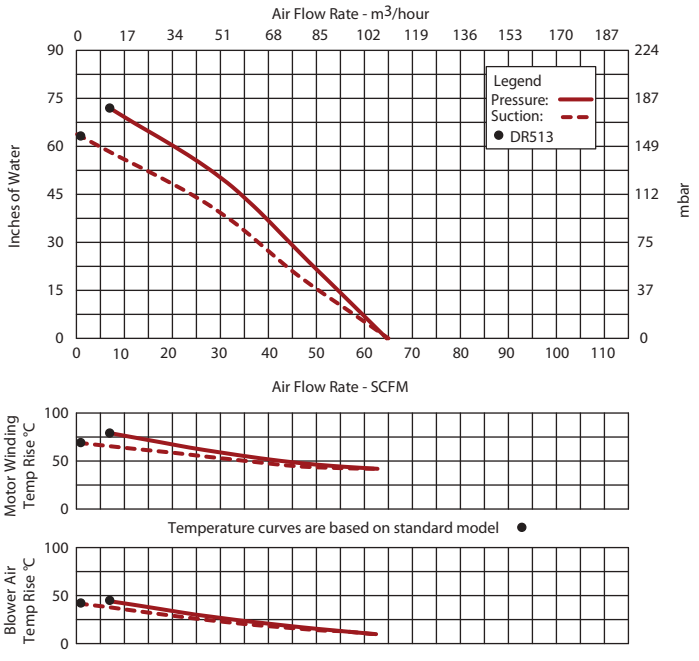
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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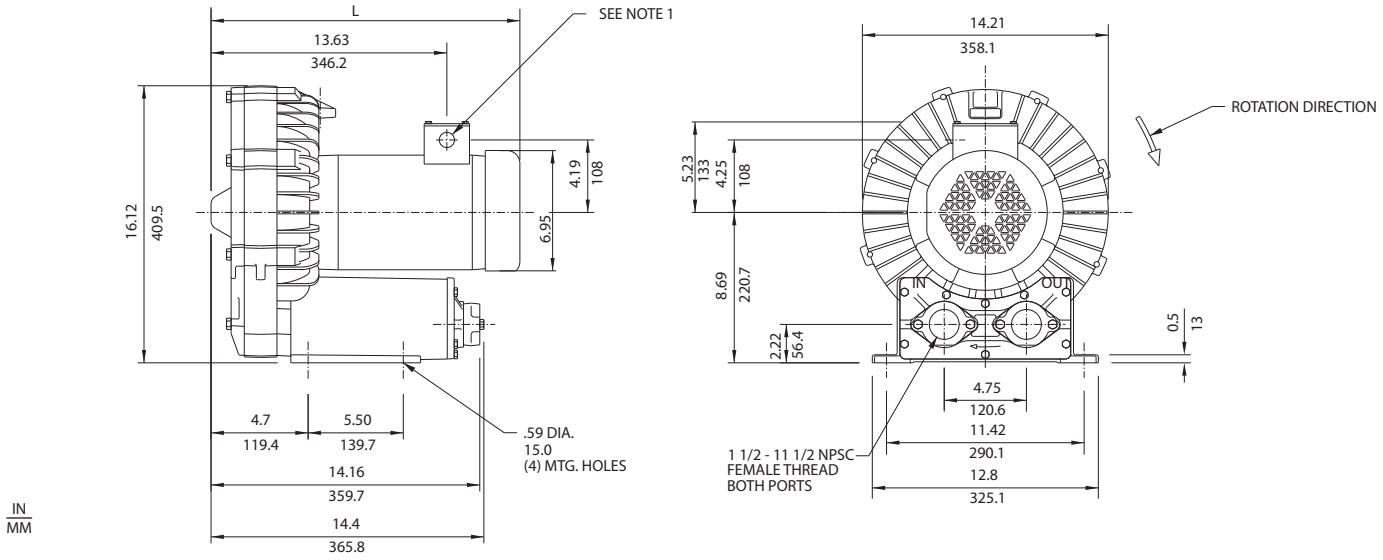
ROTRON®

DR 523 & CP 523

3.0HP High Pressure Regenerative Blower



NOTES
1 TERMINAL BOX CONNECTOR HOLE .88 (22.4) DIA.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR523K72	15.91/404.1
DR523K58	19.31/490.5

		Part/ Model Number			
		DR523K72	DR523K58	DR523K86	CP523CS72LR
Specification	Units	037210	037211	037772	038243
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	TEFC-SS
Horsepower	-	3	3	3	3
Voltage	AC	230/460	115/230	575	230/460
Phase - Frequency	-	Three-60 hz	Single-60 hz	Three-60 hz	Three-60 hz
Insulation Class	-	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	8.8-8,6/4.3	27/13.5	3.4	8.8-8.6/4.3
Service Factor	-	1.15	1.0	1.0	1.15
Max. Blower Amps	Amps (A)	8.9/4.45	30/15	3.4	8.9/4.45
Locked Rotor Amps	Amps (A)	91.3/45.7	196/98	36.4	91.3/45.7
NEMA Starter Size	-	0/0	1.5/1	0	0/0
Shipping Weight	Lbs	112	145	112	112
	Kg	50.8	65.8	50.8	50.8

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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DR 523 & CP 523

ROTRON®

3.0HP High Pressure Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 84 SCFM
- Maximum pressure: 158 IWG
- Maximum vacuum: 135 IWG
- Standard motor: 3.0 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

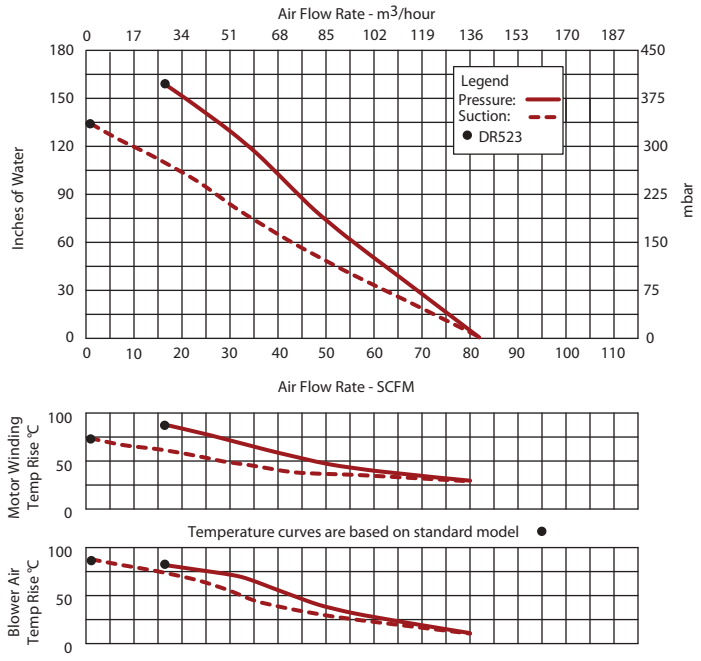
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

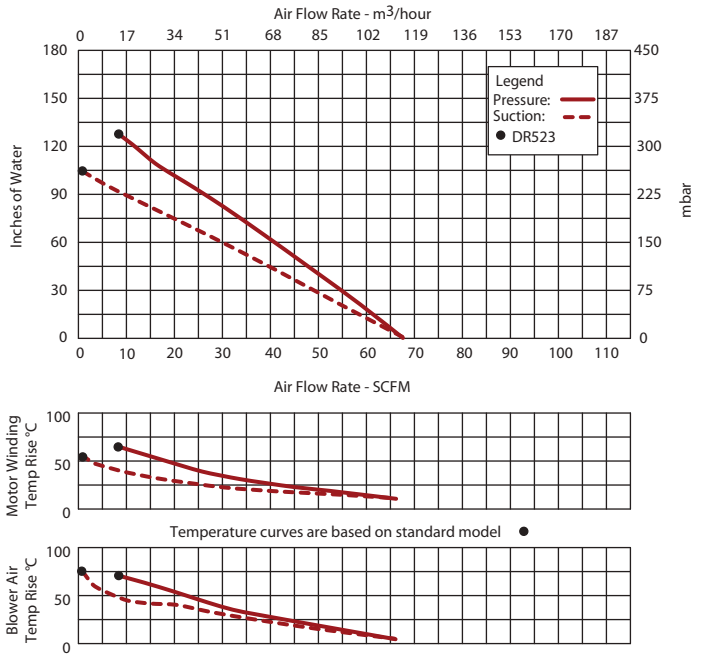
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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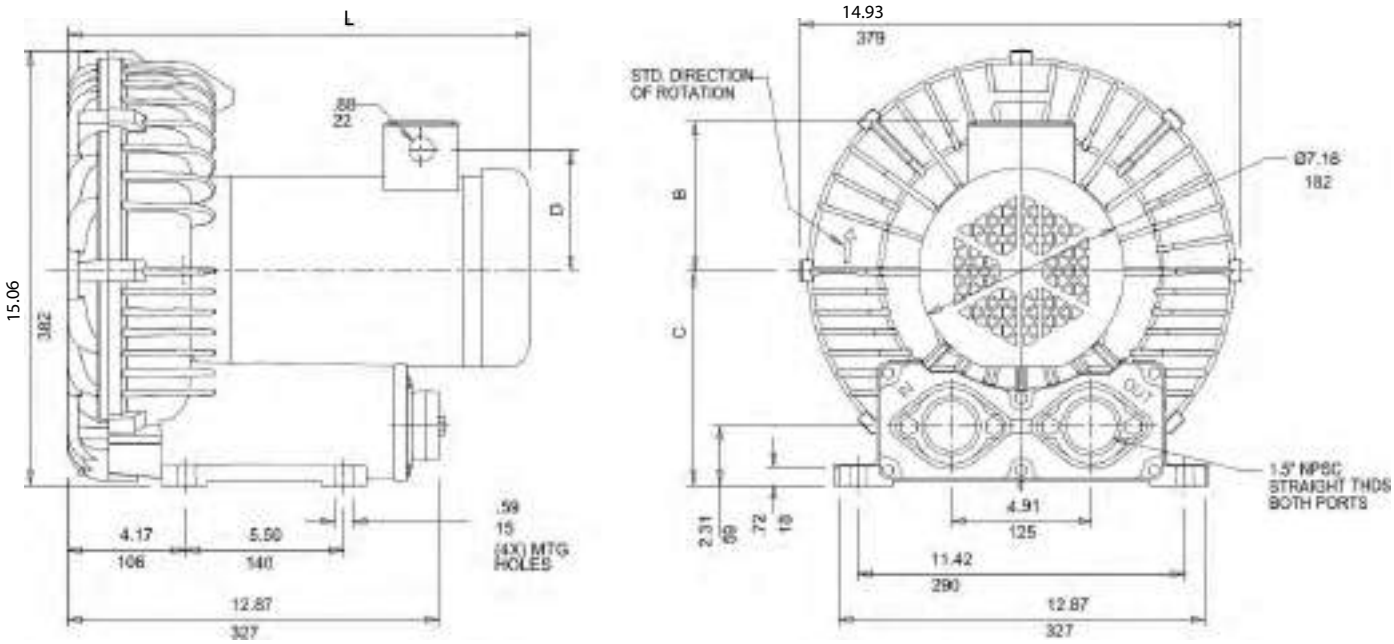
DR 555 & CP 555

ROTRON®

3.0 / 4.0 HP Regenerative Blower



NOTES
1 TERMINAL BOX CONNECTOR HOLE .88 (22) DIA.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR555CK72	17.44/443
DR555K72	16.12/409
DR555K58	17.38/441

		Part/ Model Number					
		DR555CK72	DR555CK86	DR555K72	DR555K58	DR555K86	CP555CS72MLR
Specification	Units	081100	081102	081099	081098	081101	038245
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC - CS	TEFC - CS	TEFC - CS	CHEM TEFC - SS
Horsepower	-	4.0	4.0	3.0	3.0	3.0	3.0
Voltage	AC	230/460	575	230/460	115/230	575	230/460
Phase - Frequency	-	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	10/5	4.1	7.6/3.8	25.6/12.8	3	7.6/3.8
Service Factor	-	1.15	1.15	1.15	1.0	1.0	1.15
Max. Blower Amps	Amps (A)	13/6.5	4.2	8.8/4.4	28/14	3.4	8.8/4.4
Locked Rotor Amps	Amps (A)	94/47	80	88/44	194/97	70	88/44
NEMA Starter Size	-	1/0	0	0/0	1.5/1	0	0/0
Shipping Weight	Lbs	113	137	96	91	90	90
	Kg	51.3	62.1	43.5	41.3	40.8	40.8

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 555 & CP 555

3.0 / 4.0 HP Regenerative Blower

ROTRON®

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 190 SCFM
- Maximum pressure: 115 IWG
- Maximum vacuum: 92 IWG
- Standard motor: 4.0 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

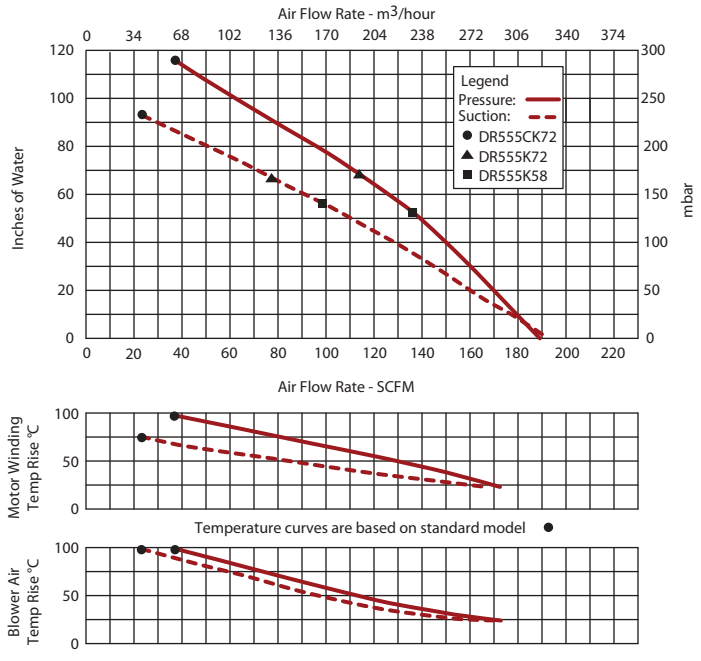
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

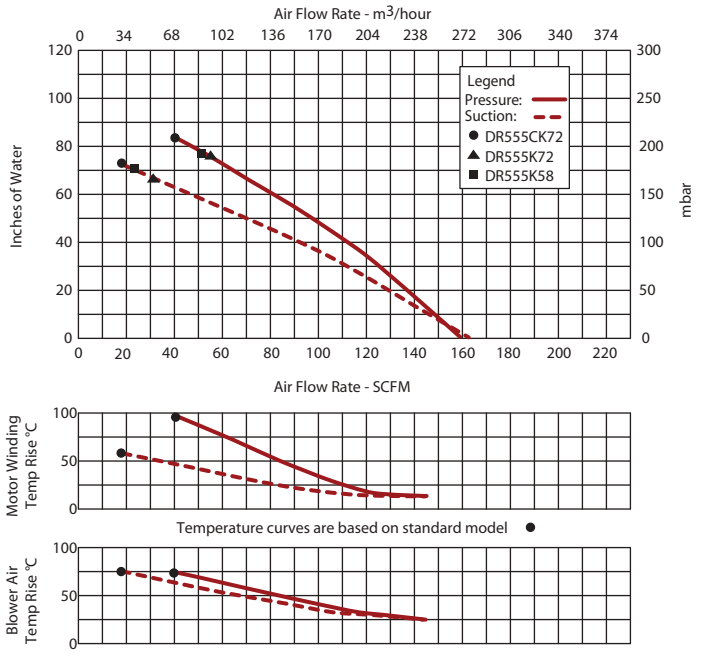
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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AMETEK®
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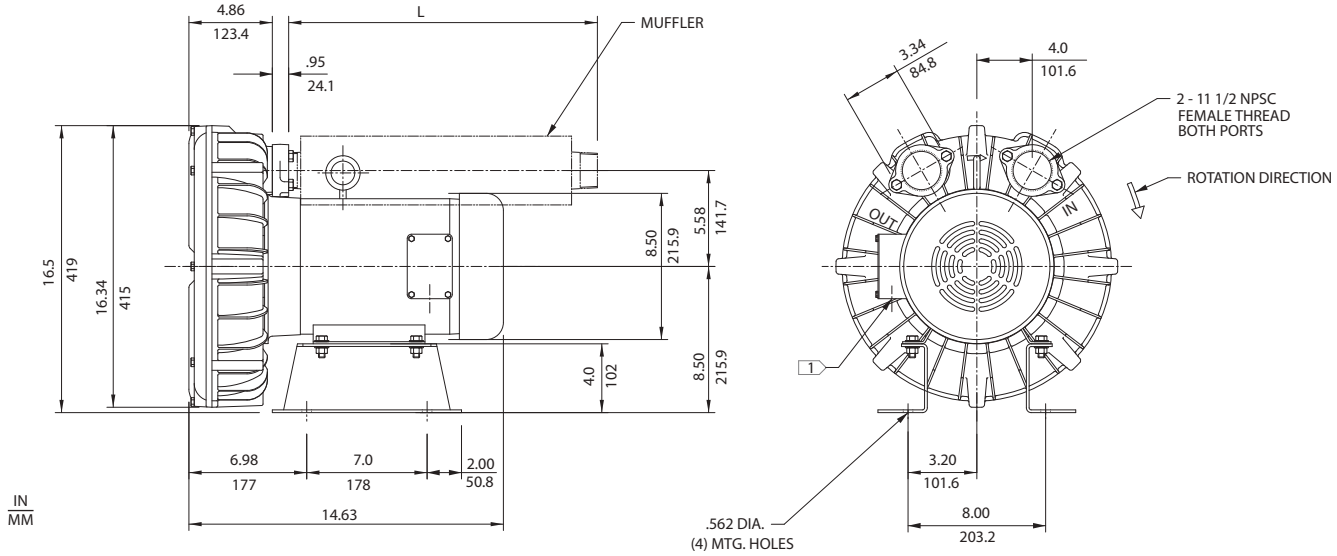
DR 6 & CP 6

ROTRON®

3.0 / 5.0 HP Regenerative Blower



NOTES
1. TERMINAL BOX CONNECTOR HOLE 1.06 (26.9) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR6D89	18.00/457.2
DR6K72	18.00/457.2

		Part/ Model Number					
		DR6D89	DR6D5	DR6D86	DR6K72	CP6FF72LR	HiE6D89
Specification	Units	027578	036212	027579	027600	038253	038071
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS	TEFC-CS
Horsepower	-	5.0	5.0	5.0	3.0	5.0	5.0
Voltage	AC	230/460	230	575	230/460	230/460	230/460
Phase - Frequency	-	Three - 60 Hz	Single - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	11.2/5.5	21	4.8	13.3-12/6	17.3-15.6/7.8	17.3-15.6/7.8
Service Factor	-	1.15	1.0	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	16/8	25	5.4	12/6	15-14.8/7.4	15-14.8/7.4
Locked Rotor Amps	Amps (A)	165-155/76	124	60	106/53	165-155/76	165-155/76
NEMA Starter Size	-	1/1	1.5	1	1/0	1/1	1/1
Shipping Weight	Lbs	148	156	148	132	148	148
	Kg	67.1	70.8	67.1	59.9	67.1	67.1

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

ROTRON®

DR 6 & CP 6

3.0 / 5.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 210 SCFM
- Maximum pressure: 110 IWG
- Maximum vacuum: 91.2 IWG
- Standard motor: 5.0 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet muffler 52248 1 pc.
- Quiet operation within OSHA standards - 1 muffler included

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

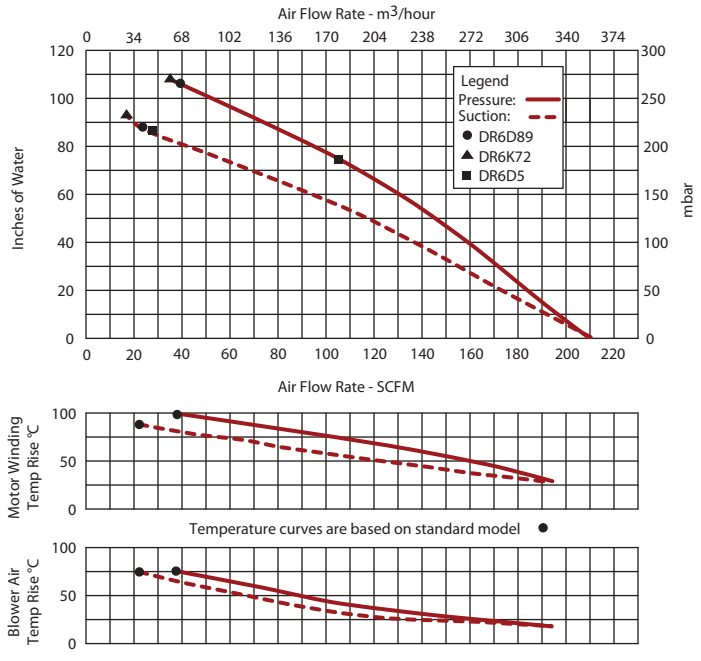
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

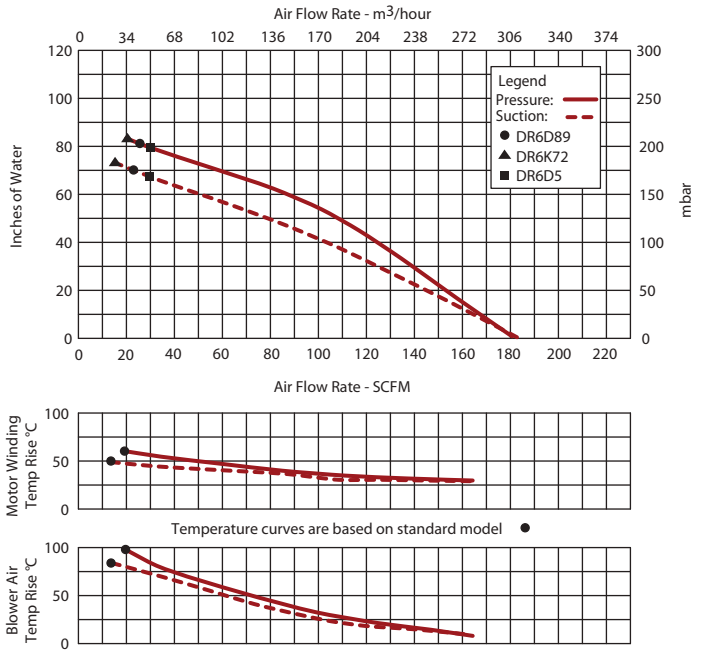
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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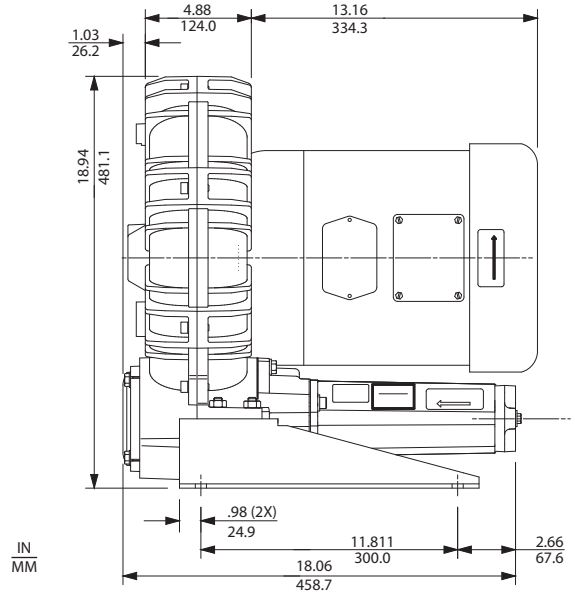
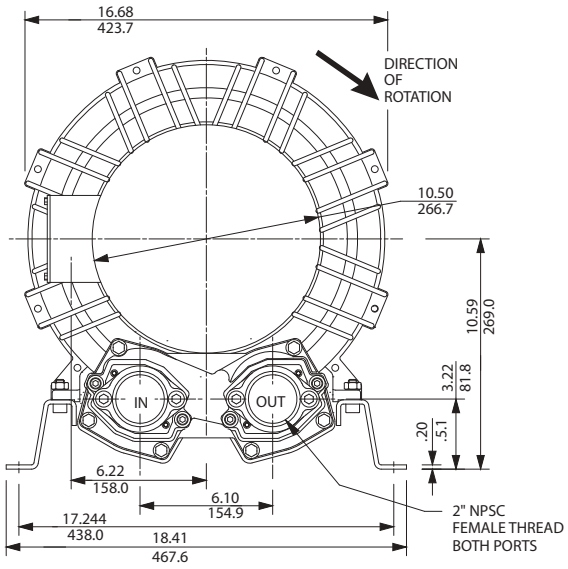
Industrial / Chemical Processing Blowers

ROTRON®

DR 633 & CP 633

5.0 / 7.5 HP High Pressure Regenerative Blower





NOTES

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2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

INCLUDES INLET FILTER

		Part/ Model Number			
		DR633AY72M	DR633AY86M	DR633D89M	CP633FG72LRM
Specification	Units	081691	081693	081689	081695
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS
Horsepower	-	7.5	7.5	5	7.5
Voltage	AC	230/460	575	208-230/460	230/460
Phase - Frequency	-	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	23-21/10.5	8.4	16.9-15.3/76	23-21/10.5
Service Factor	-	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	19.8-18/9	7.9	15-13.6/6.8	19.8-18/9
Locked Rotor Amps	Amps (A)	170/85	55	165-155/76	170/85
NEMA Starter Size	-	2/1	1	1-1/0	2/1
Shipping Weight	Lbs	241	241	223	241
	Kg	109.3	109.3	101.2	109.3

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 633 & CP 633

ROTRON®

5.0 / 7.5 HP High Pressure Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 142 SCFM
- Maximum pressure: 275 IWG
- Maximum vacuum: 190 IWG
- Standard motor: 7.5 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

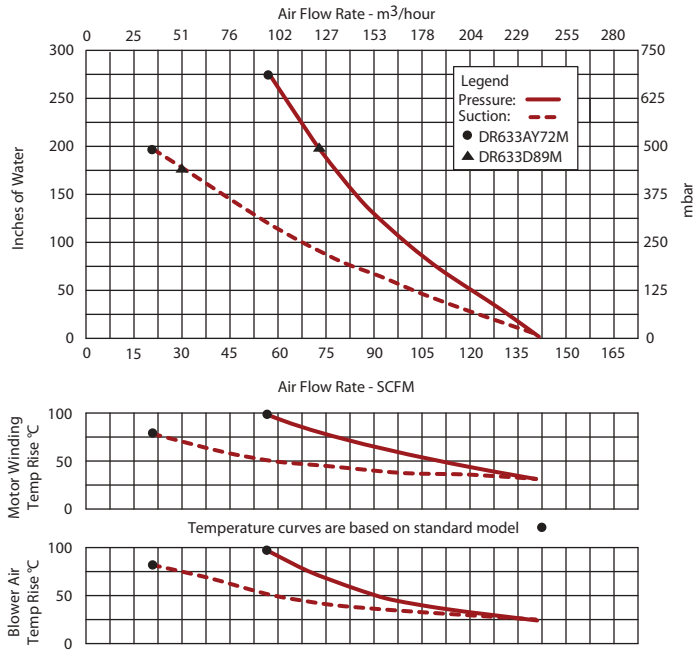
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

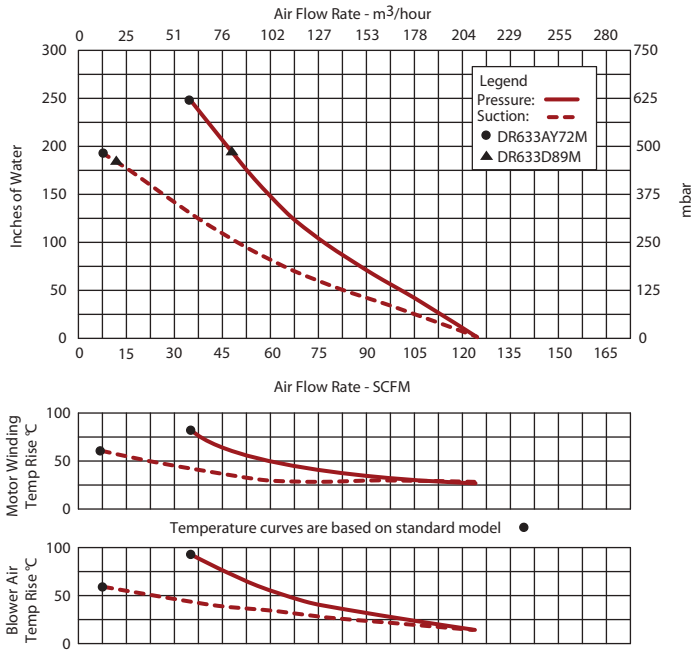
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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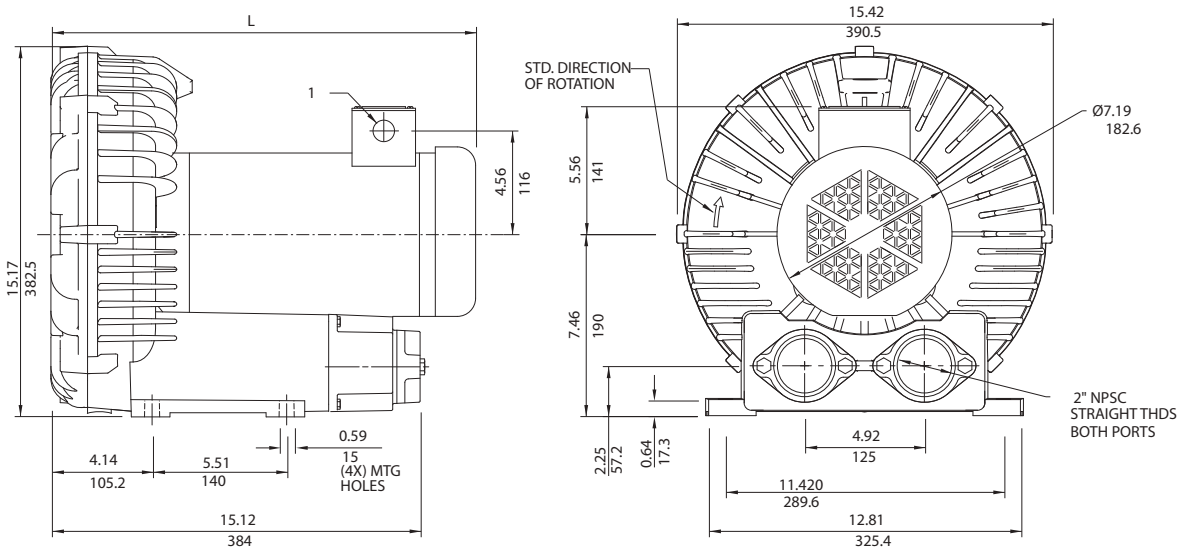
Industrial / Chemical Processing Blowers

ROTRON®

DR 656 & CP 656

3.0 / 3.5 HP Regenerative Blower



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE .88 (22) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR656CK72X	17.50/444.5
DR656K72X	16.00/406.4

		Part/ Model Number					
		DR656CK72X	DR656CK86X	DR656CK5X	DR656K72X	DR656K58X	CP656CR72XLR
Specification	Units	080582	080583	080584	080602	080603	080065
Motor Enclosure - Shaft Mtl.	-	TEFC - CS	TEFC - CS	TEFC-CS	TEFC - CS	TEFC - CS	CHEM TEFC-SS
Horsepower	-	3.5	3.5	3.5	3.0	3.0	3.5
Voltage	AC	230/460	575	230	230/460	115/230	230/460
Phase - Frequency	-	Three - 60 Hz	Three - 60 Hz	Single - 60 Hz	Three - 60 Hz	Single - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	10.0/5.0	4.0	18	7.4/3.7	29/14.5	10.0/5.0
Service Factor	-	1.15	1.0	1.15	1.15	1.0	1.15
Max. Blower Amps	Amps (A)	11.4/5.7	5.2	18	9/4.5	27.8/13.9	11.4/5.7
Locked Rotor Amps	Amps (A)	94/47	80	115	54/27	172/86	94/47
NEMA Starter Size	-	1/0	0	1	0/0	1.5/1.0	1/0
Shipping Weight	Lbs	110	114	101	103	114	110
	Kg	49.9	51.7	45.8	46.7	51.7	49.9

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 656 & CP 656

3.0 / 3.5 HP Regenerative Blower

ROTRON®

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 210 SCFM
- Maximum pressure: 110 IWG
- Maximum vacuum: 89 IWG
- Standard motor: 4.0 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron muffler extension & flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

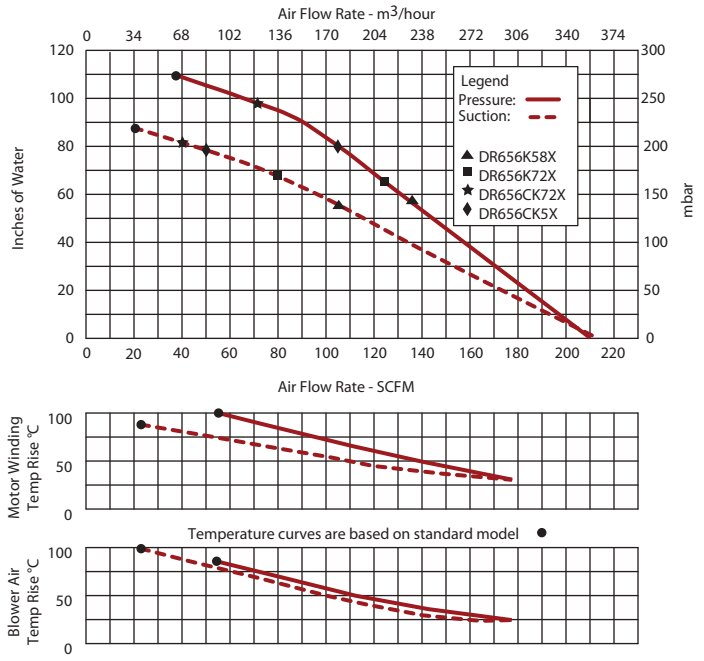
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs
- Cast iron cover for additional noise resonance

ACCESSORIES

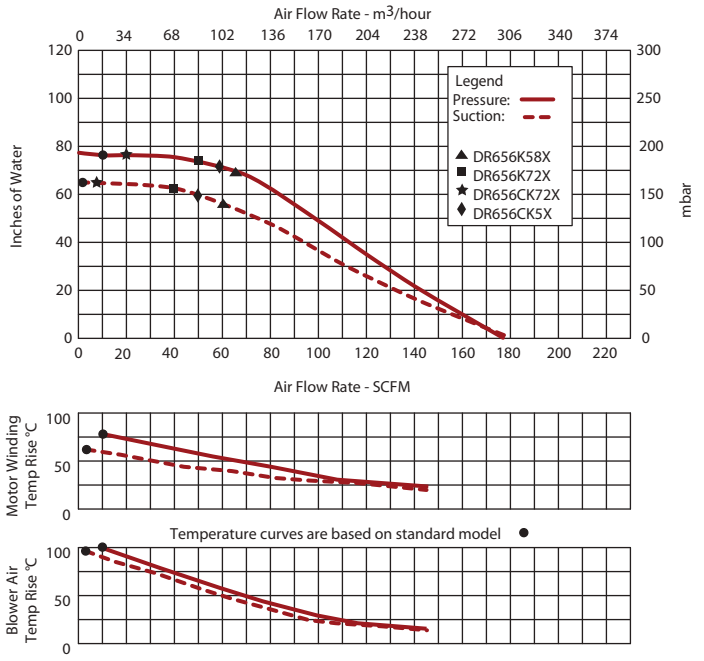
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)

Blower Performance at Standard Conditions

60 Hz



50 Hz



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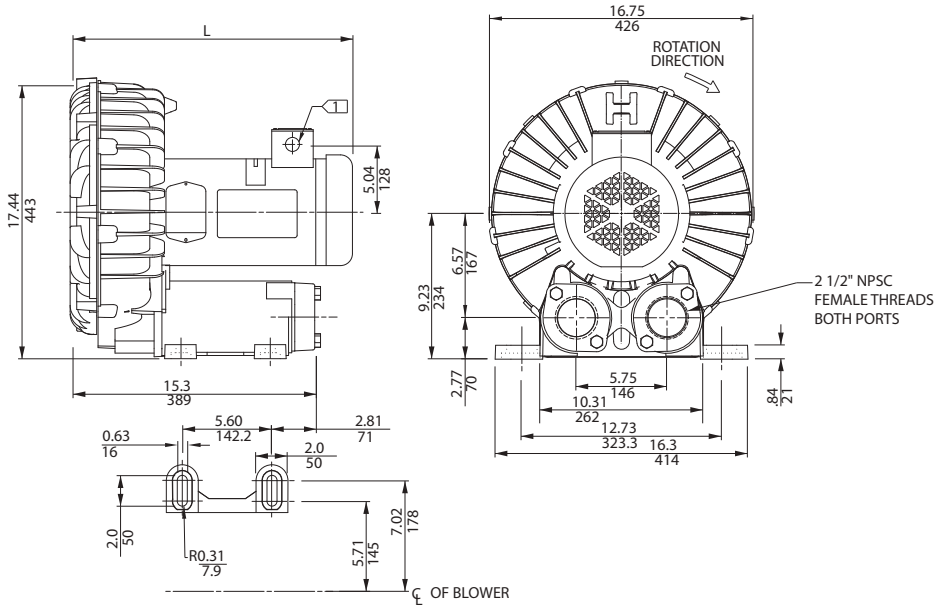
Industrial / Chemical Processing Blowers

ROTRON®

DR 757 & CP 757

4.0 / 5.0 HP Regenerative Blower



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 1.06 (26) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR757CK72X	18.55/471
DR757CK86X	18.55/471
DR757D89X	18.55/471
DR757D86X	18.55/471
DR757D5MX	18.55/471

		Part/ Model Number				
		DR757CK72X	DR757CK86X	DR757D89X	CP757FF72XLR	CP757CR72XLR
Specification	Units	081172	081173	081169	081178	081179
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS	CHEM TEFC-SS
Horsepower	-	4.0	4.0	5.0	5.0	4.0
Voltage	AC	230/460	575	230/460	230/460	230/460
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three - 60 hz	Three - 60 hz	Three-60 hz
Insulation Class	-	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	10/5	4.0	12/6	12/6	10/5
Service Factor	-	1.15	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	12/6	4.2	15.5/7.6	15.5/7.6	12/6
Locked Rotor Amps	Amps (A)	94/47	80	194/97	194/97	94/47
NEMA Starter Size	-	1/0	0	1/0	1/0	1/0
Shipping Weight	Lbs	131	128	140	140	131
	Kg	59.4	58.1	63.5	63.5	59.4

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 757 & CP 757

ROTRON®

4.0 / 5.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 330 SCFM
- Maximum pressure: 83 IWG
- Maximum vacuum: 75 IWG
- Standard motor: 4.0 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

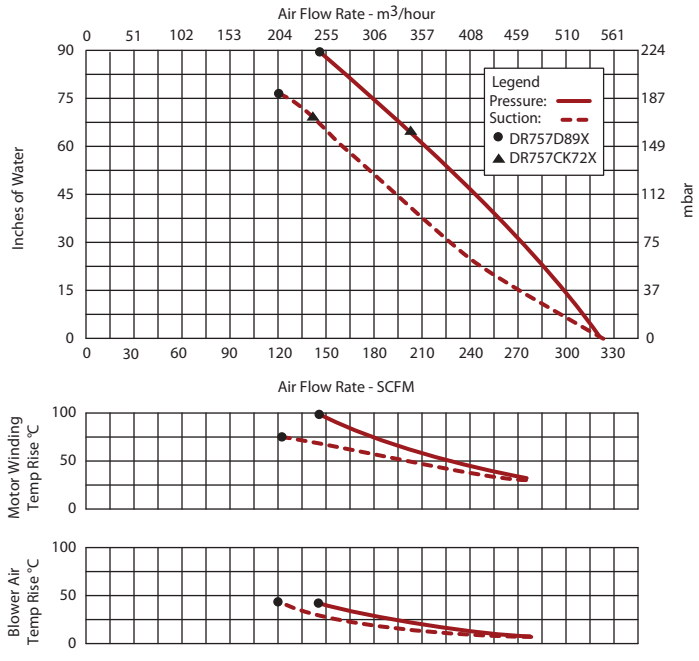
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

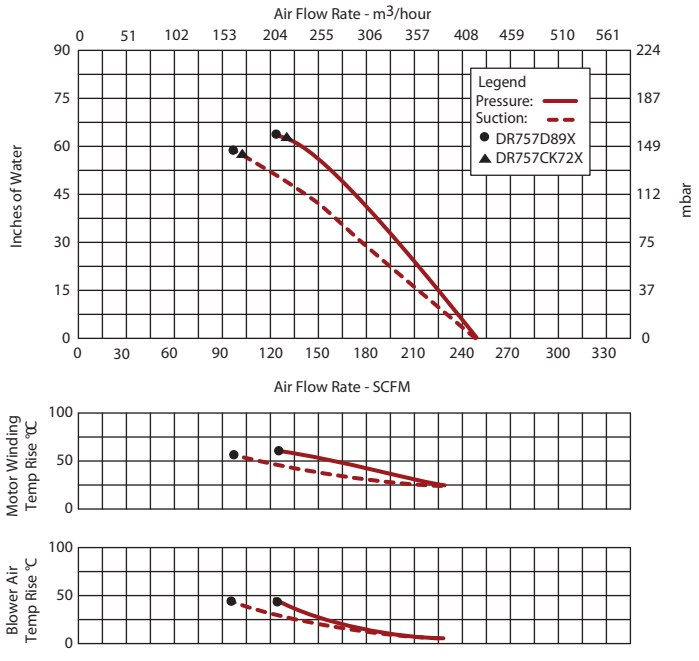
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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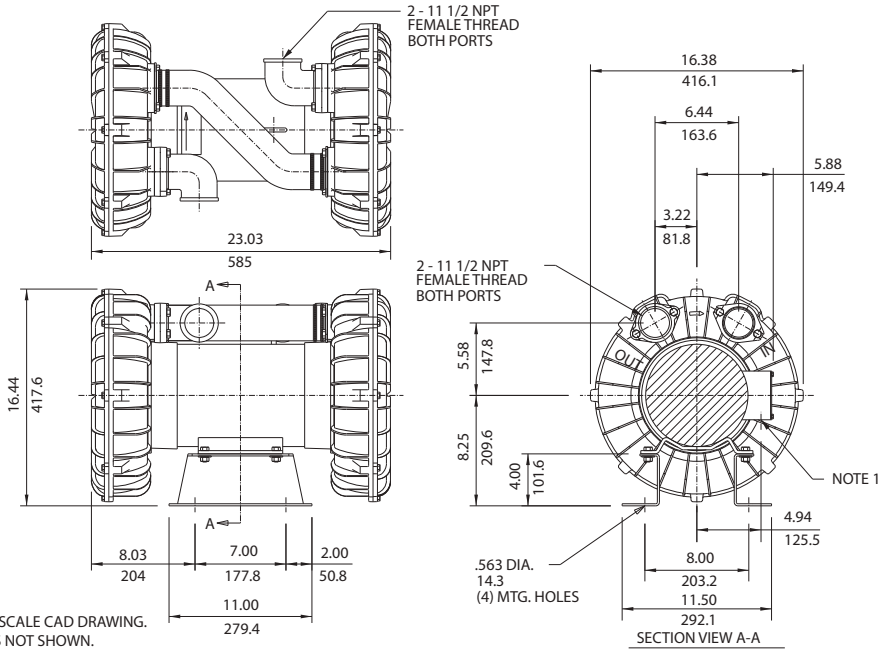
DR S7

ROTRON®

7.5 HP High Pressure Regenerative Blower



IN
MM

NOTES
1 TERMINAL BOX CONNECTOR HOLE 1.06 (26.9) DIA.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number	
Specification	Units	DRS7X72 036085	DRS7X86 036144
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP-CS
Horsepower	-	7.5	7.5
Voltage	AC	230/460	575
Phase - Frequency	-	Three-60 Hz	Three-60 Hz
Insulation Class	-	F	F
NEMA Rated Motor Amps	Amps (A)	19.4/9.7	7.8
Service Factor	-	1.15	1.0
Max. Blower Amps	Amps (A)	24/12	9.6
Locked Rotor Amps	Amps (A)	166/83	66
NEMA Starter Size	-	1/1	1
Shipping Weight	Lbs	206	206
	Kg	93.4	93.4

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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DR S7

ROTRON®

7.5 HP High Pressure Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 190 SCFM
- Maximum pressure: 140 IWG
- Maximum vacuum: 112 IWG
- Standard motor: 7.5 HP, ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards when properly piped or muffled - 1 muffler included

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

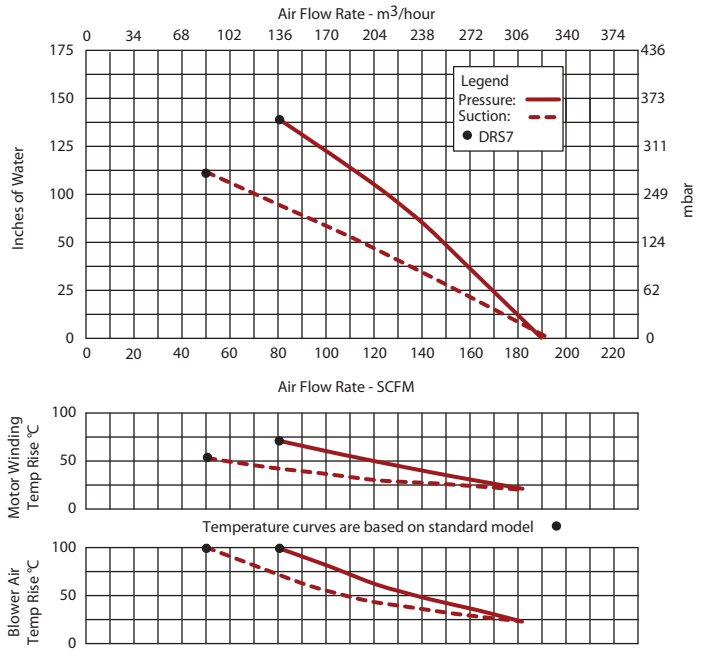
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

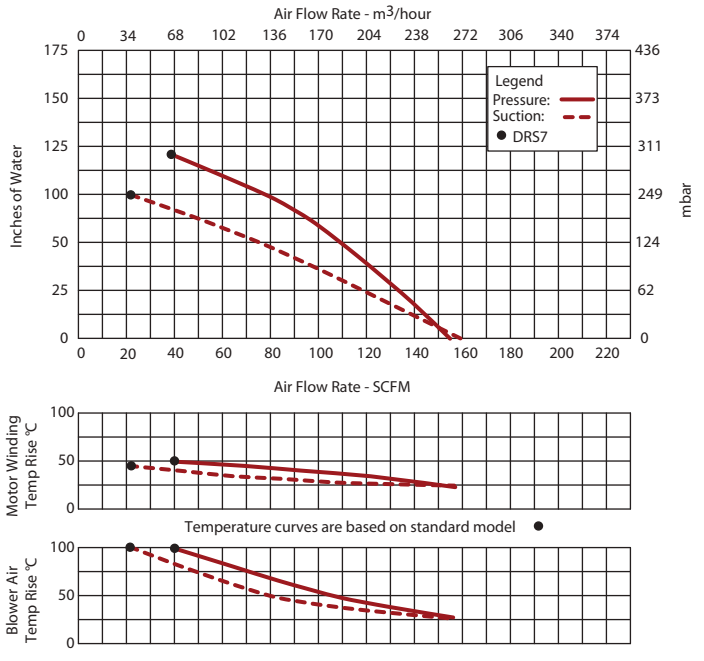
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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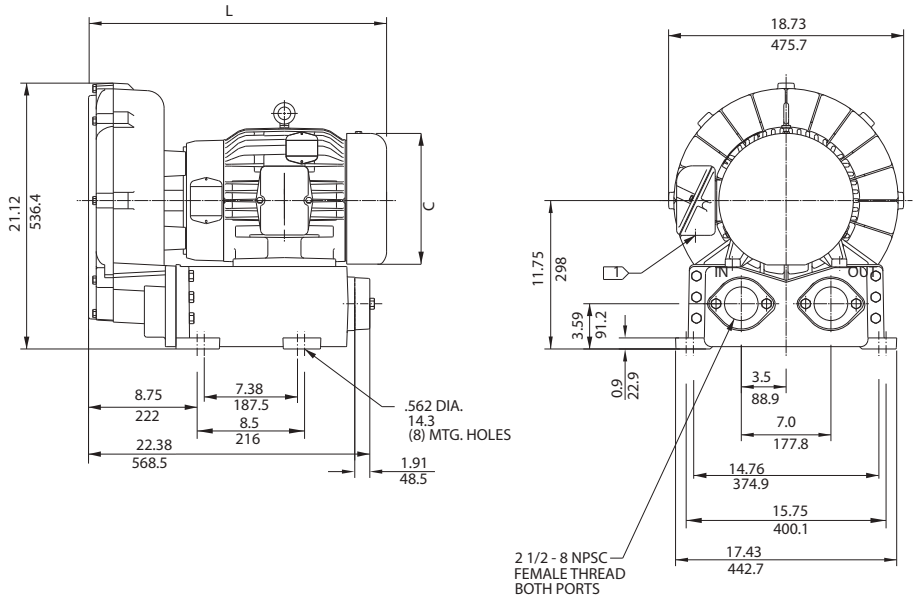
DR 808 & CP 808

ROTRON®

5.0 / 7.5 HP Regenerative Blower



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 1.06 (26.9) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR808AY72MX	22.23/564.6
DR808D89MX	19.31/490.5

		Part/ Model Number				
		DR808AY72MX	DR808AY86MX	DR808D89MX	CP808FG72MXLR	HiE808AY72MX
Specification	Units	081222	081224	081225	081233	081228
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS	TEFC-CS
Horsepower	-	7.5	7.5	5.0	7.5	7.5
Voltage	AC	230/460	575	230/460	230/460	230/460
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Insulation Class	-	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	17.8/8.9	7.2	17.3-15.6/7.8	17.8/8.9	17.8/8.9
Service Factor	-	1.15	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	28/14	10.8	14/7	28/14	28/14
Locked Rotor Amps	Amps (A)	120/60	60	152/76	120/60	120/60
NEMA Starter Size	-	1/1	1	1/0	1/1	1/1
Shipping Weight	Lbs	285	242	195	285	301
	Kg	129.3	109.8	88.5	129.3	136.5

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 808 & CP 808

5.0 / 7.5 HP Regenerative Blower

ROTRON®

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 375 SCFM
- Maximum pressure: 120 IWG
- Maximum vacuum: 95 IWG
- Standard motor: 7.5 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

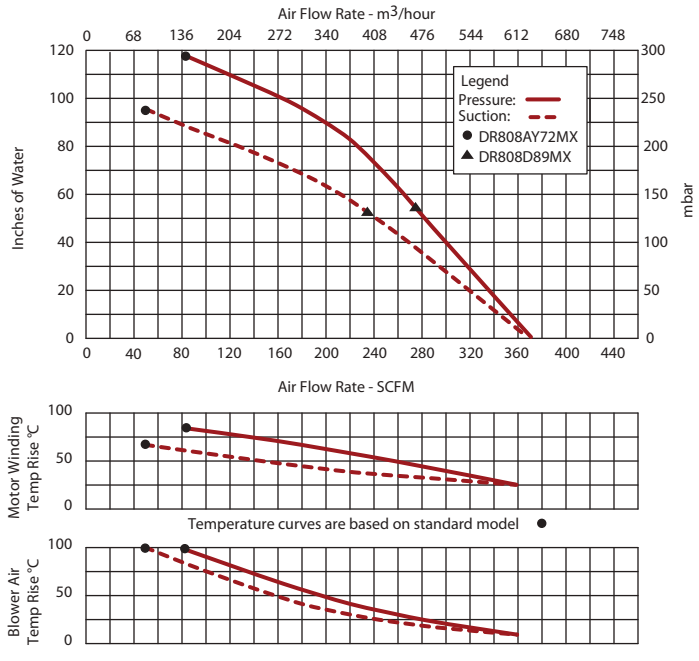
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

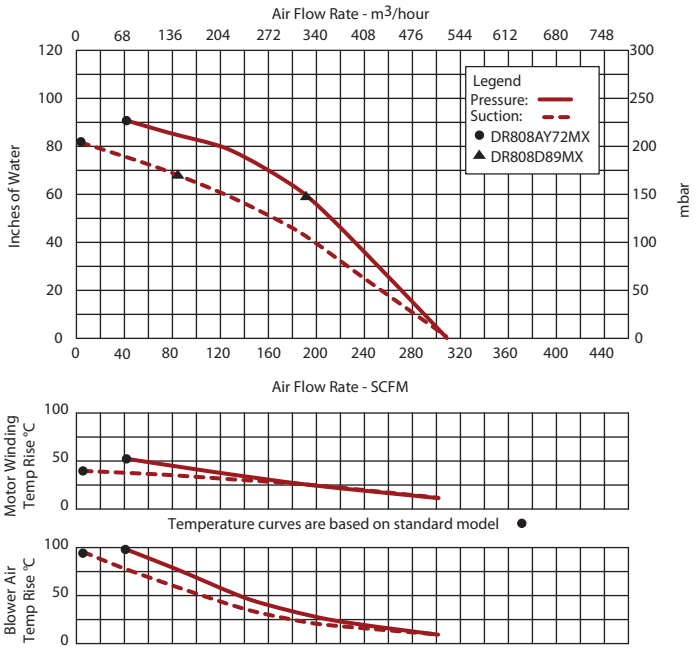
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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AMETEK®
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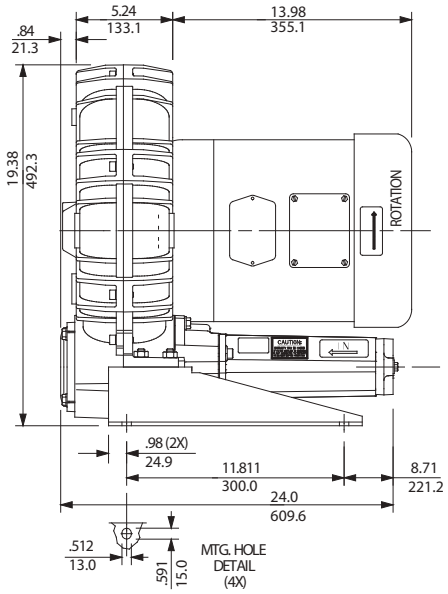
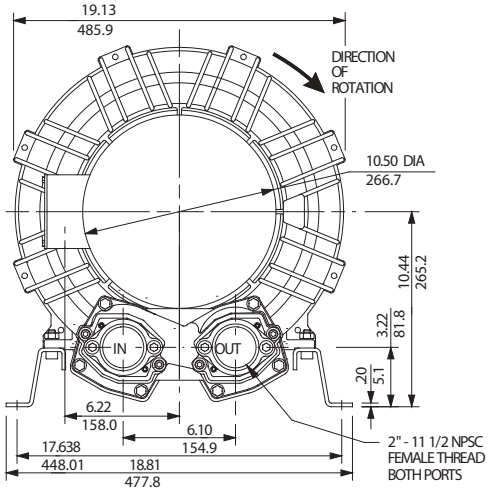
DR 833 & CP 833

ROTRON®

7.5 / 10.0 HP Regenerative Blower





IN / MM

NOTES

1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

FILTER 515255 INCLUDED

		Part/ Model Number				
		DR833BB72M	DR833BB86M	DR833AY72M	DR833AY86M	CP833FH72MLR
Specification	Units	081702	081704	081699	081701	081710
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS
Horsepower	-	10	10	7.5	7.5	10
Voltage	AC	230/460	575	230/460	575	230/460
Phase - Frequency	-	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	31-28/14	9.6	23-21/10.5	8.4	31-28/14
Service Factor	-	1.15	1.15	1.15	1.15	1.15
Max Blower Amps	Amps (A)	26-24/12	8.9	21.2-19.2/9.6	7.7	26-24/12
Locked Rotor Amps	Amps (A)	190/95	73	170/85	68	190/95
NEMA Starter Size	-	2/1	1	2/1	1	2/1
Shipping Weight	Lbs	269	269	260	260	269
	Kg	122	122	117.9	117.9	122

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

DR 833 & CP 833

ROTRON®

7.5 / 10.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 184 SCFM
- Maximum pressure: 258 IWG
- Maximum vacuum: 174 IWG
- Standard motor: 10 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

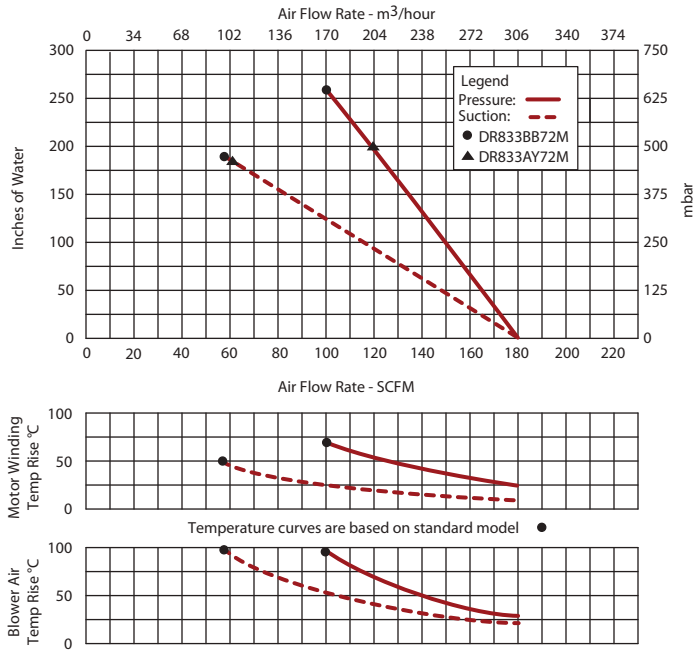
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

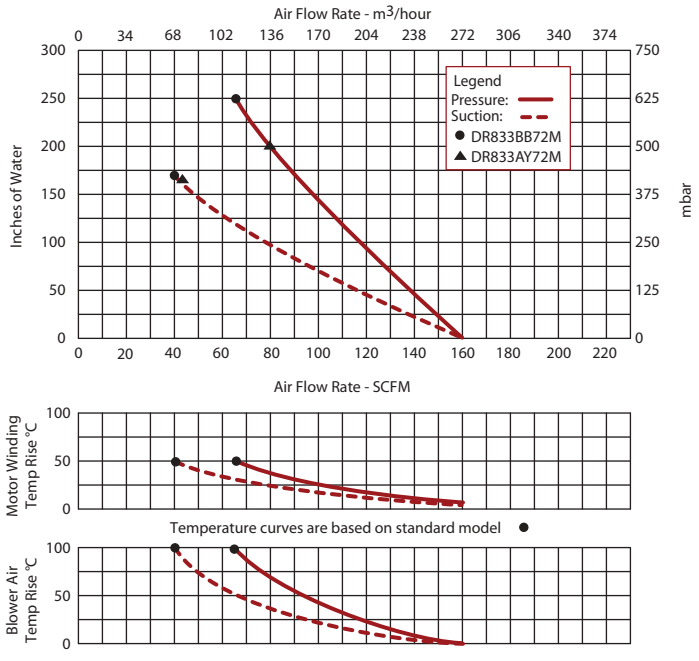
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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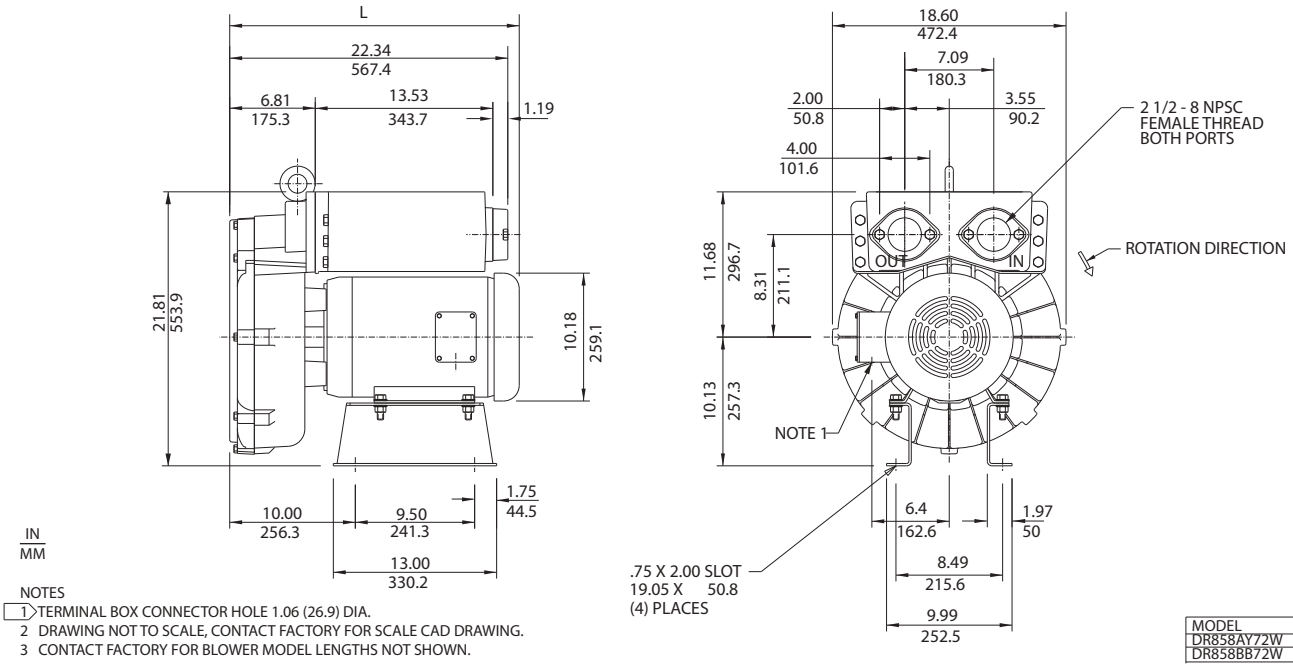
DR 858 & CP 858

ROTRON®

7.5 / 10.0 HP Regenerative Blower



NOTES
1. TERMINAL BOX CONNECTOR HOLE 1.06 (26.9) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DR858AY72W	23.06/585.7
DR858BB72W	23.19/589

		Part/ Model Number				
		DR858BB72W	DR858BB86W	DR858AY72W	CP858FH72WLR	HiE858BB72W
Specification	Units	038740	038742	038738	038749	038743
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS	TEFC-CS
Horsepower	-	10	10	7.5	10	10
Voltage	AC	230/460	575	230/460	230/460	230/460
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Insulation Class	-	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	26/13	10.5	17.8/8.9	26/13	26/13
Service Factor	-	1.15	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	28/14	12	28/14	28/14	28/14
Locked Rotor Amps	Amps (A)	162/81	65	120/60	162/81	162/81
NEMA Starter Size	-	2/1	1	1/1	2/1	2/1
Shipping Weight	Lbs	280	280	264	280	280
	Kg	127	127	119.7	127	127
Model (Base Mount)	-	DR858BB72X	DR858BB86X	DR858AY72X		
Part Number (Base Mount)	-	038735	038737	038736		

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 858 & CP 858

ROTRON®

7.5 / 10.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 380 SCFM
- Maximum pressure: 125 IWG
- Maximum vacuum: 104.8 IWG
- Standard motor: 10 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

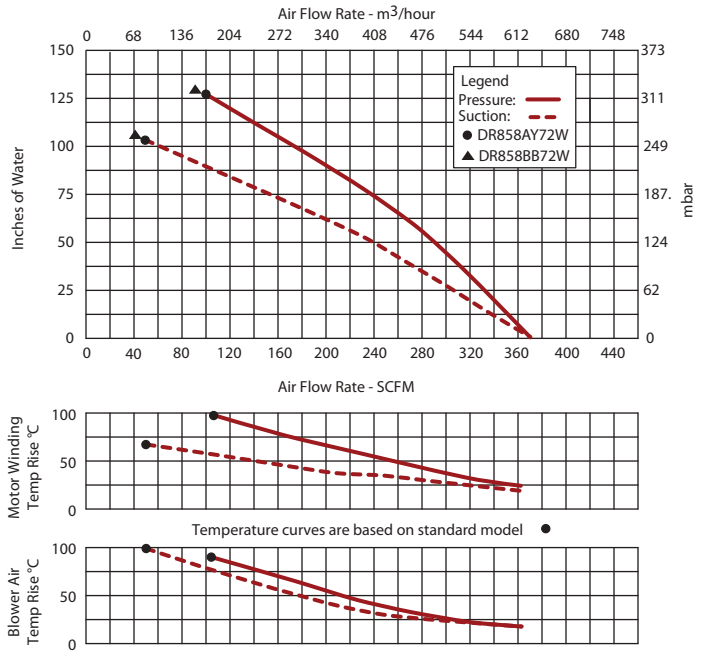
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

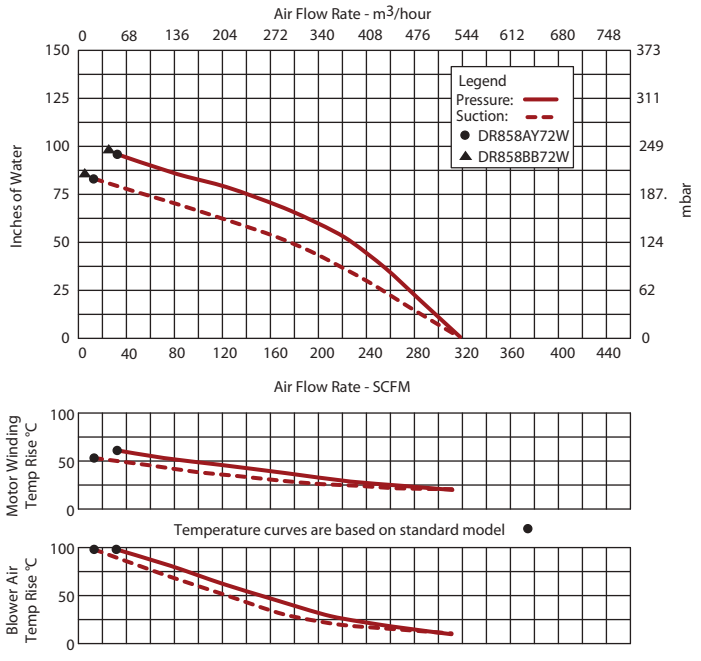
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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Industrial / Chemical Processing Blowers

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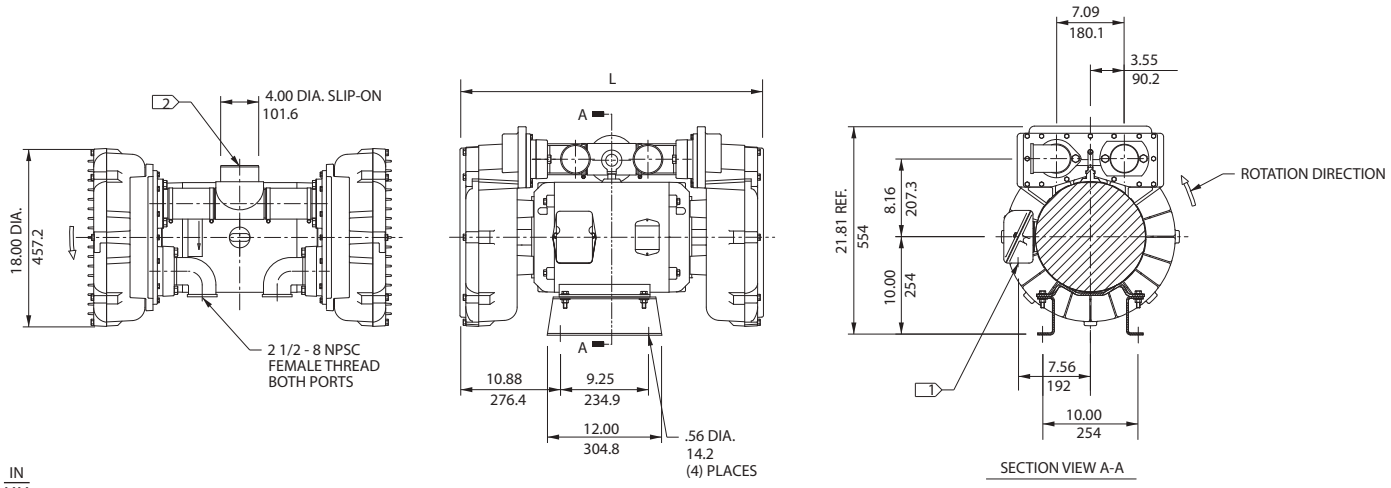
DR P9

15.0 / 20.0 HP Regenerative Blower



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 1.37 (34.8) DIA.
2. PRESSURE OUTLET CONNECTION.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DRP9BM72C	31.75/806.5
DRP9BL72C	33.44/849.4

		Part/ Model Number					
		DRP9BM72C	DRP9BM72D	DRP9BM86C	DRP9BM86D	DRP9BL72C	DRP9BL72D
Specification	Units	037033	036275	037040	036276	036512	036513
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP - CS	ODP-CS	ODP - CS	ODP-CS	ODP - CS
Horsepower	-	20	20	20	20	15	15
Voltage	AC	230/460	230/460	575	575	230/460	230/460
Phase - Frequency	-	Three-60 hz	Three - 60 hz	Three-60 hz	Three - 60 hz	Three-60 hz	Three - 60 hz
Insulation Class	-	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	49/24.5	49/24.5	20	20	37/18.5	37/18.5
Service Factor	-	1.15	1.15	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	60/30	60/30	22.2	22.2	50/25	50/25
Locked Rotor Amps	Amps (A)	306/153	306/153	115	115	256/128	256/128
NEMA Starter Size	-	3/2	3/2	2	2	2/2	2/2
Shipping Weight	Lbs	400	408	464	408	380	418
	Kg	181.4	185.1	210.5	185.1	172.4	189.6
Description	-	Pressure Mode	Suction Mode	Pressure Mode	Suction Mode	Pressure Mode	Suction Mode

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

DR P9

ROTRON®

15.0 / 20.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 800 SCFM
- Maximum pressure: 116 IWG
- Maximum vacuum: 95 IWG
- Standard motor: 20 HP, ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards when properly piped or muffled - 2 mufflers included part #515185

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

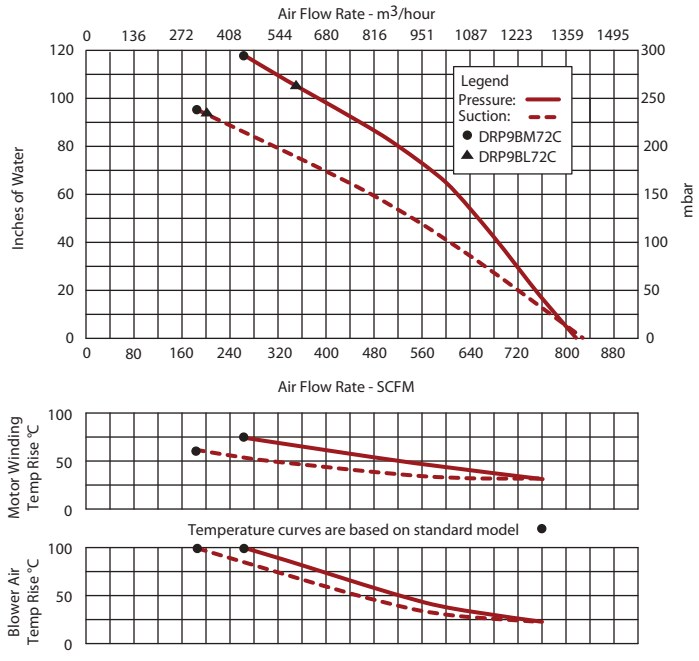
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

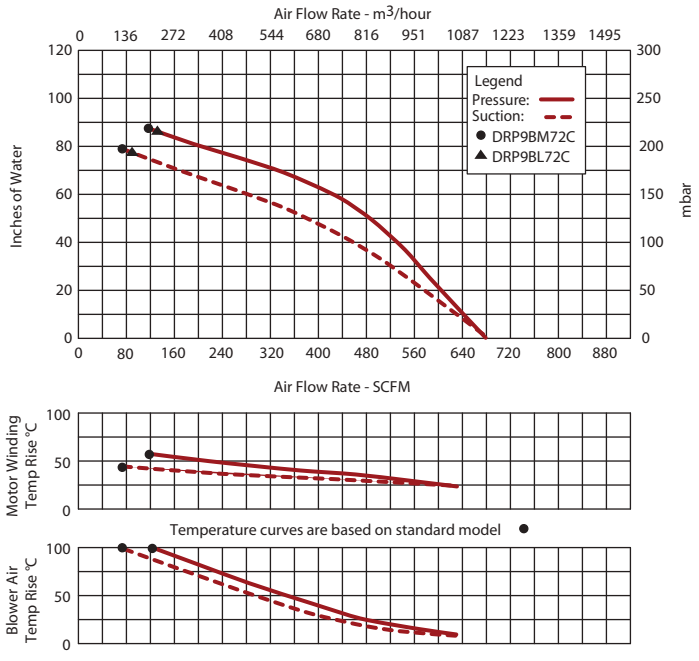
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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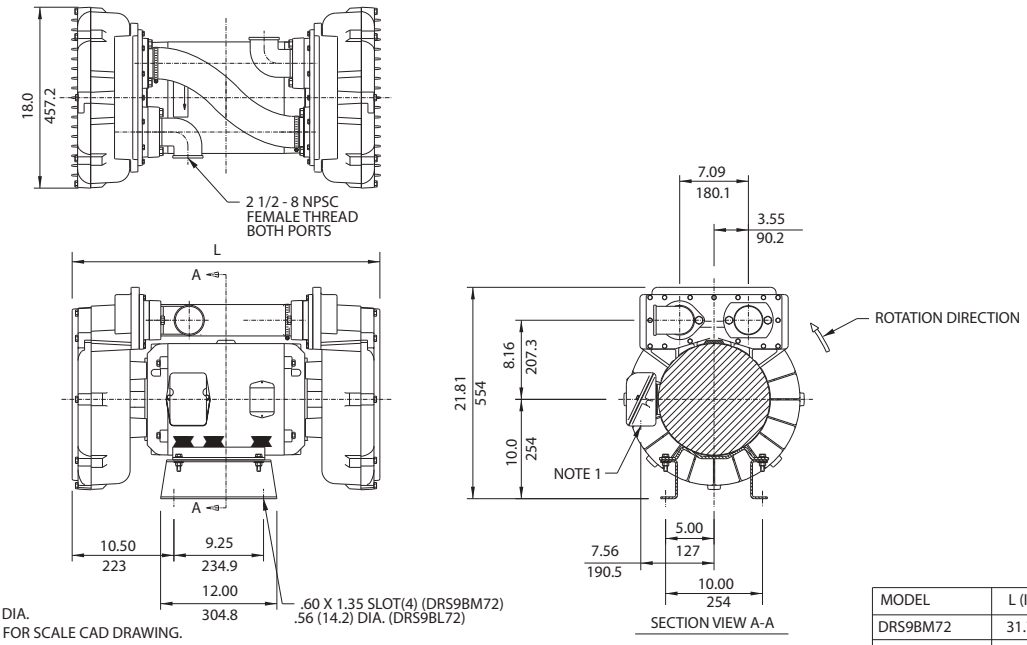
Industrial / Chemical Processing Blowers

ROTRON®

DR S9

15.0 / 20.0 HP High Pressure Regenerative Blower



IN
MM

NOTES
1 TERMINAL BOX CONNECTOR HOLE 1.37 (34.8) DIA.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
DRS9BM72	31.75/806.5
DRS9BL72	33.44/849.4

		Part/ Model Number		
		DRS9BM72	DRS9BM86	DRS9BL72
Specification	Units	037032	037041	036514
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP-CS	ODP-CS
Horsepower	-	20	20	15
Voltage	AC	230/460	575	230/460
Phase - Frequency	-	Three-60 Hz	Three-60 Hz	Three-60 Hz
Insulation Class	-	F	F	F
NEMA Rated Motor Amps	Amps (A)	48/24	20	36/18
Service Factor	-	1.15	1.15	1.0
Max. Blower Amps	Amps (A)	56/28	20.4	56/28
Locked Rotor Amps	Amps (A)	288/144	115	222/111
NEMA Starter Size	-	3/2	2	2/2
Shipping Weight	Lbs	446	446	418
	Kg	202.3	202.3	189.6

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

ROTRON®

DR S9

15.0 / 20.0 HP High Pressure Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 400 SCFM
- Maximum pressure: 206 IWG
- Maximum vacuum: 157 IWG
- Standard motor: 60 HP, ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards when properly piped or muffled - 1 inlet muffler included part #515185

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

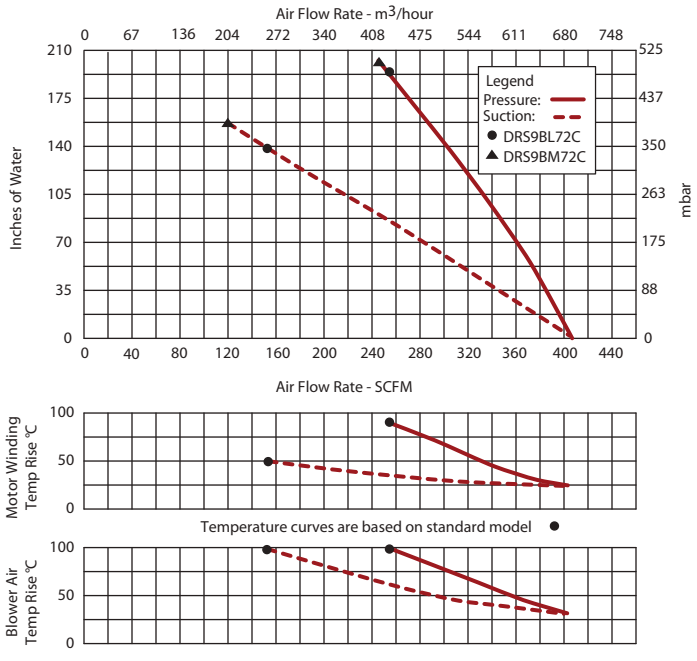
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

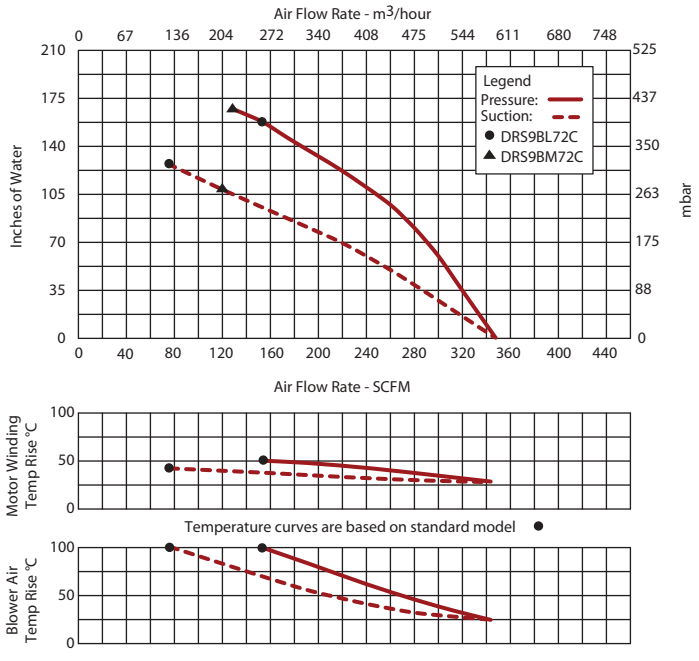
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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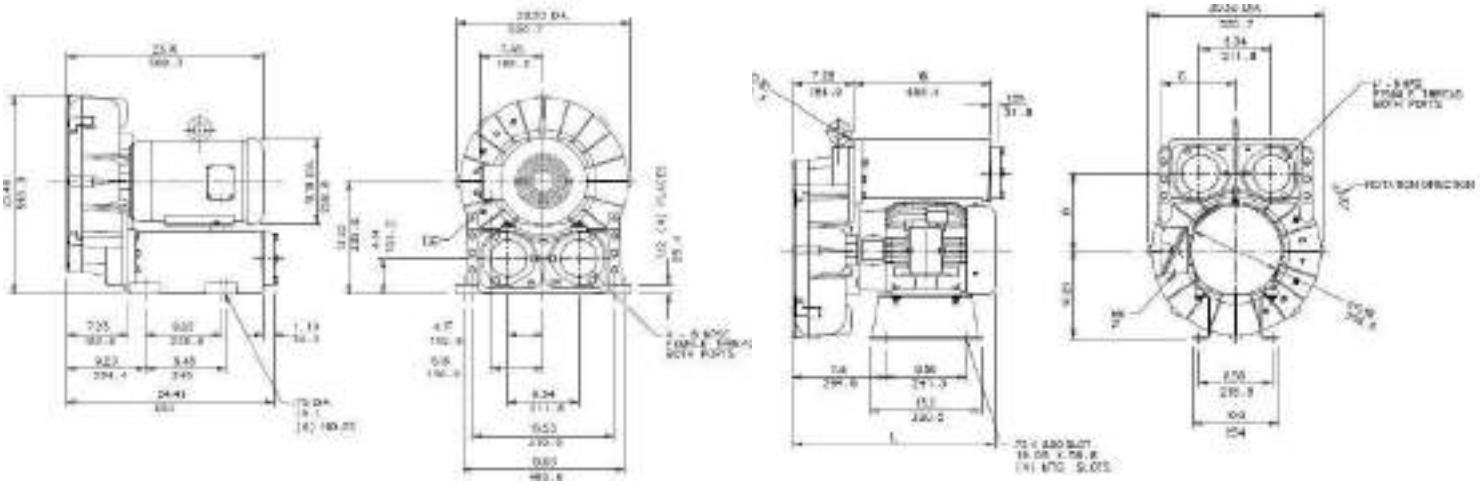
DR 909 & CP 909

ROTRON®

10.0 / 15.0 HP Regenerative Blower



IN
MM

NOTES
1 TERMINAL BOX CONNECTOR HOLE 1.25 (31.8) DIA.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number					
Specification	Units	DR909BE72W 081737	DR909BE86W 081739	DR909BB72W 081738	DR909BB86W 081744	CP909FJ72WLR 038632	HiE909BE72W 081735
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS	TEFC-CS
Horsepower	-	15	15	10	10	15	10
Voltage	AC	208-230/460	575	230/460	575	208-230/460	208-230/460
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three - 60 Hz	Three-60 hz	Three-60 hz	Three-60 hz
Insulation Class	-	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	41.5-37.6/18.8	14.6	26/13	10.5	41.5-37.6/18.8	41.5-37.6/18.8
Service Factor	-	1.15	1.15	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	42/21	17	34/17	13.0	42/21	42/21
Locked Rotor Amps	Amps (A)	318/159	164	162/81	65	318/159	318/159
NEMA Starter Size	-	2/2	2	2/1	1	2/2	2/2
Shipping Weight	Lbs	400	400	400	400	400	400
	Kg	181.4	181.4	181.4	181.4	181.4	181.4
Model (Base Mount)		DR909BE72X	DR909BE86X	DR909BB72X	DR909BB86X		
Part Number (Base Mount)		038622	038626	038623	080183		

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 909 & CP 909

ROTRON®

10.0 / 15.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 600 SCFM
- Maximum pressure: 137 IWG
- Maximum vacuum: 106 IWG
- Standard motor: 15 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards when properly piped and muffled

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

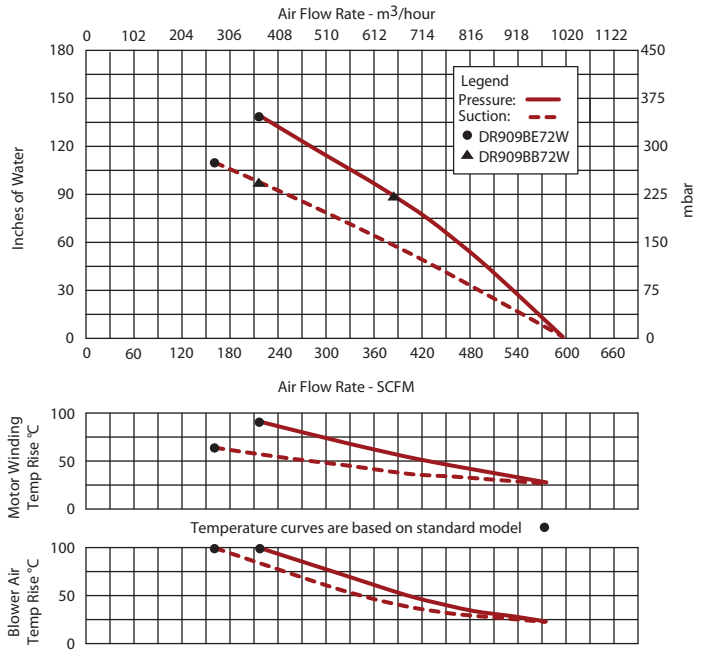
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

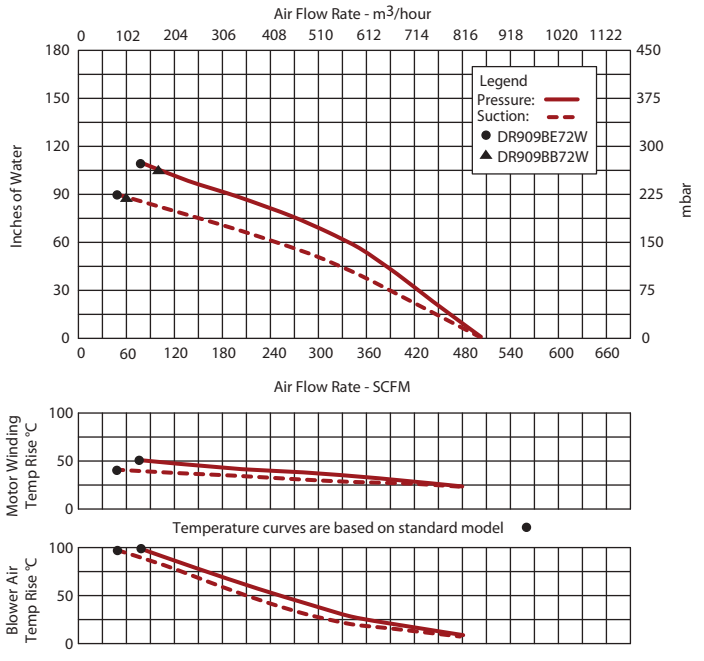
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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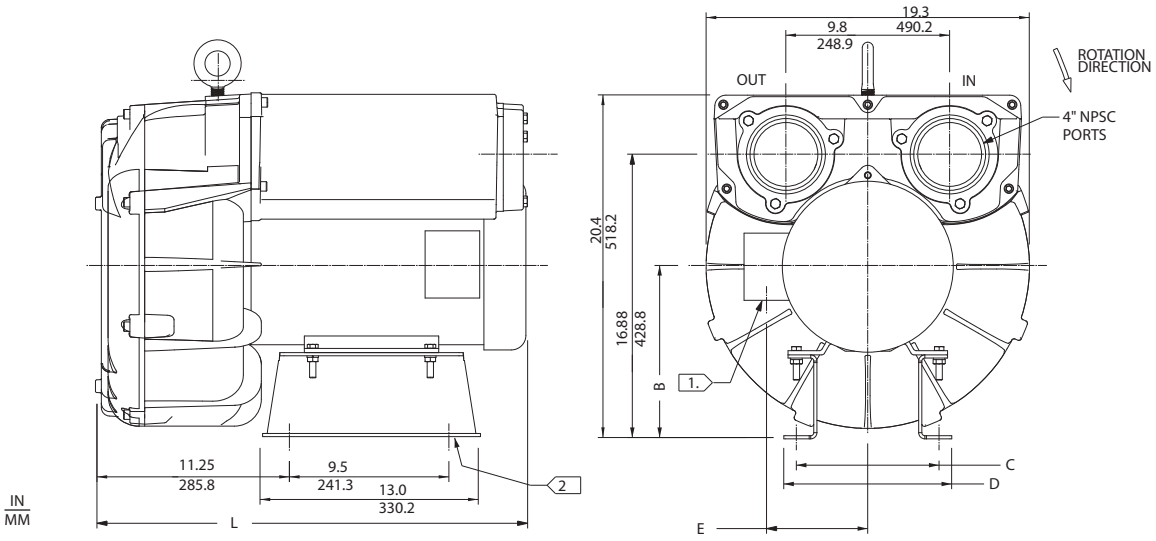
Industrial / Chemical Processing Blowers

ROTRON®

DR 979 & CP 979

15.0 / 20.0 HP Regenerative Blower



NOTES
1. TERMINAL BOX CONNECTOR HOLE 1.09 DIA. (DR979BE72W) 1.375 DIA. (DR979BH72W).
2. .75 (19.1) X 2.00 (50.8) 4X MOUNTING SLOTS.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)	B (IN/MM)	C (IN/MM)	D (IN/MM)	E (IN/MM)
DR979BH72W	29.0/736.6	12.25/311.2	11.50/292.1	13.19/335	8.09/205.5
DR979BE72W	25.38/644.6	10.25/260.4	8.38/212.9	9.88/250.9	6.88/174.8
DR979BE86W	25.81/655.6	10.25/260.4	8.38/212.9	9.88/250.9	6.88/174.8

		Part/ Model Number					
		DR979BH72W	DR979BE72W	DR979BE86W	DR979BH86W	CP979FJ72WLR	HiE979BE72W
Specification	Units	080718	080704	080702	080719	081777	
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS	TEFC-CS
Horsepower	-	20	15	15	20	15	20
Voltage	AC	230/460	230/460	575	575	230/460	230/460
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Insulation Class	-	H	H	H	H	H	H
NEMA Rated Motor Amps	Amps (A)	46/23	44/22	14.6	46/23	44/22	44/22
Service Factor	-	1.15	1.25	1.15	1.15	1.25	1.25
Max. Blower Amps	Amps (A)	60/30	52/26	21	66/33	52/26	52/26
Locked Rotor Amps	Amps (A)	294/147	290/145	93	294/147	290/145	290/145
NEMA Starter Size	-	3/2	2/2	2	3/2	2/2	2/2
Shipping Weight	Lbs	350	300	300	350	300	300
	Kg	158.8	136.1	136.1	158.8	136.1	136.1

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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PRECISION MOTION CONTROL
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Industrial / Chemical Processing Blowers

DR 979 & CP 979

ROTRON®

15.0 / 20.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 1100 SCFM
- Maximum pressure: 80 IWG
- Maximum vacuum: 87 IWG
- Standard motor: 15 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Vairous horsepowers for application-specific needs

BLOWER OPTIONS

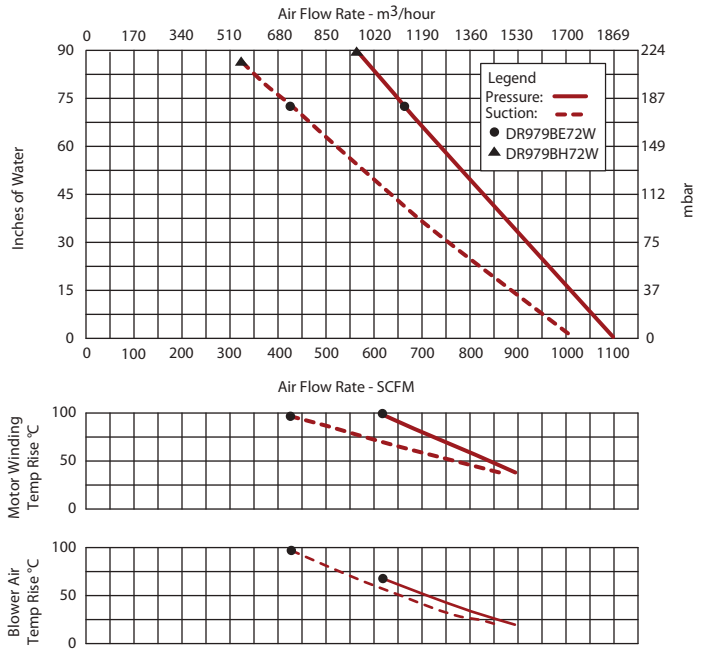
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

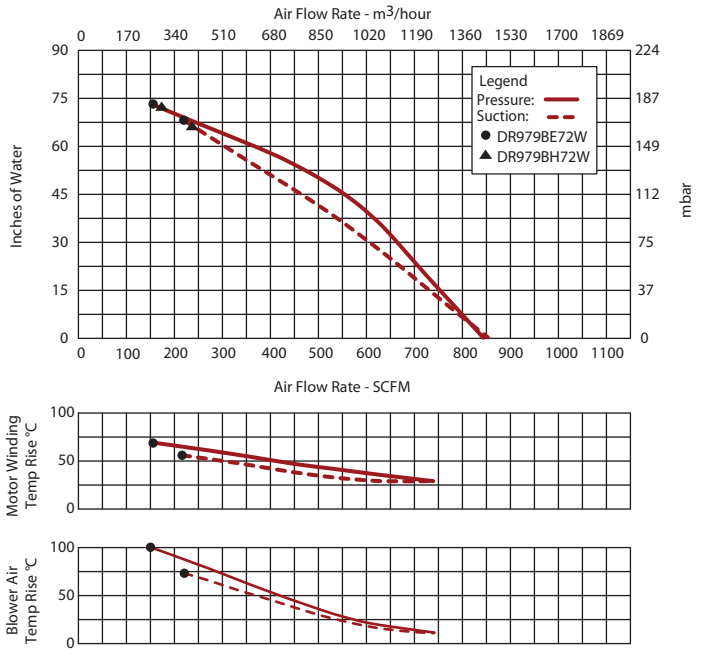
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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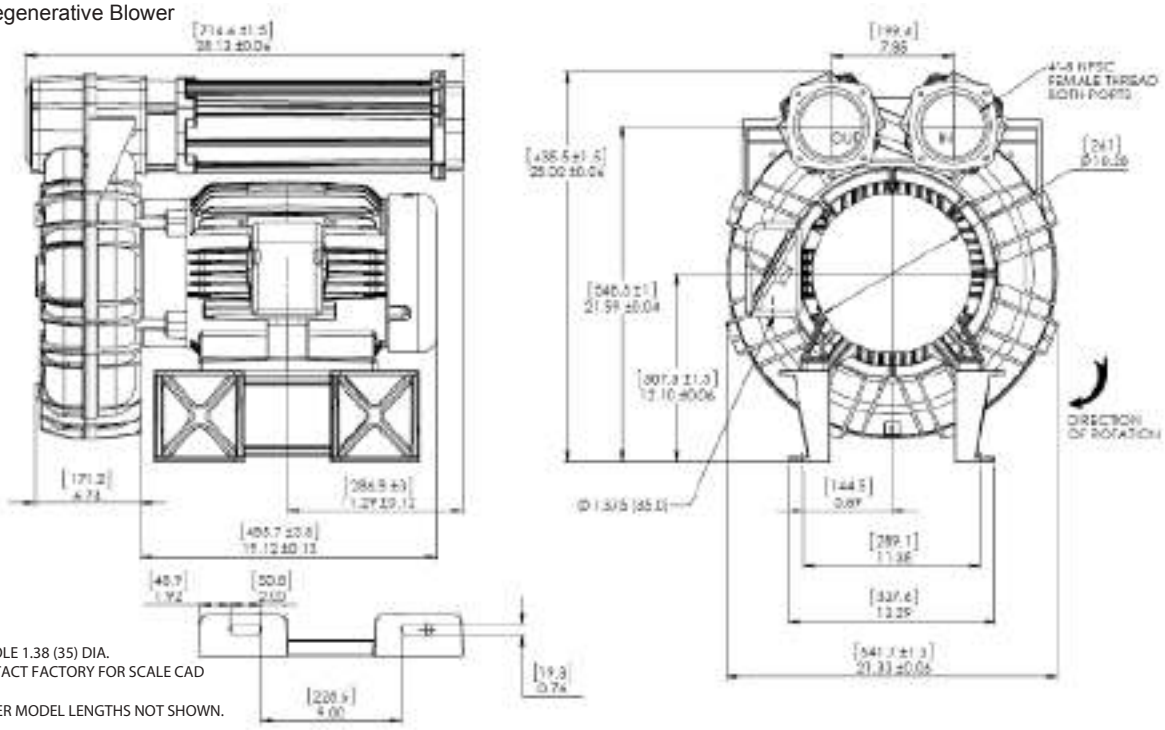
DR 1233 & CP 1233

20.0 HP High Pressure Regenerative Blower



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 1.38 (35) DIA.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number		
		DR1233BH72W	DR1233BH86W	CP1233GD72LRW
Specification	Units	081375	081377	081379
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	CHEM TEFC-SS
Horsepower	-	20	20	20
Voltage	AC	208-230/460	575	208-230/460
Phase - Frequency	-	Three-60 Hz	Three-60 Hz	Three-60 Hz
Insulation Class	-	F	F	F
NEMA Rated Motor Amps	Amps (A)	51-46/23	18.4	51-46/23
Service Factor	-	1.5	1.15	1.5
Max. Blower Amps	Amps (A)	50-46/23	17.8	50-46/23
Locked Rotor Amps	Amps (A)	397/199	159	397/199
NEMA Starter Size	-	3/2	2	3/2
Shipping Weight	Lbs	400	400	400
	Kg	181.4	181.4	181.4

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR 1233 & CP 1233

ROTRON®

20.0 HP High Pressure Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 300 SCFM
- Maximum pressure: 255 IWG
- Maximum vacuum: 175 IWG
- Standard motor: 20 HP, TEFC
- Cast aluminum blower housing, dual impellers & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling Inlet Filter part# 522948
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

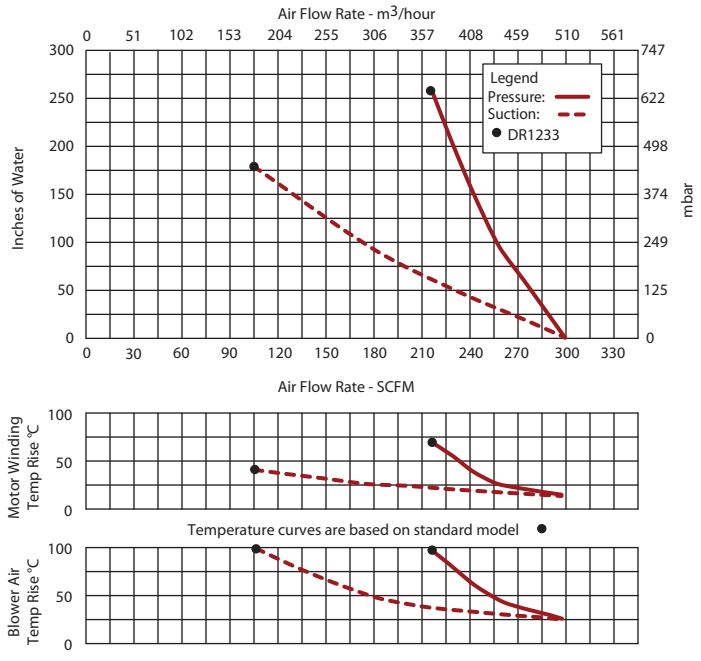
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

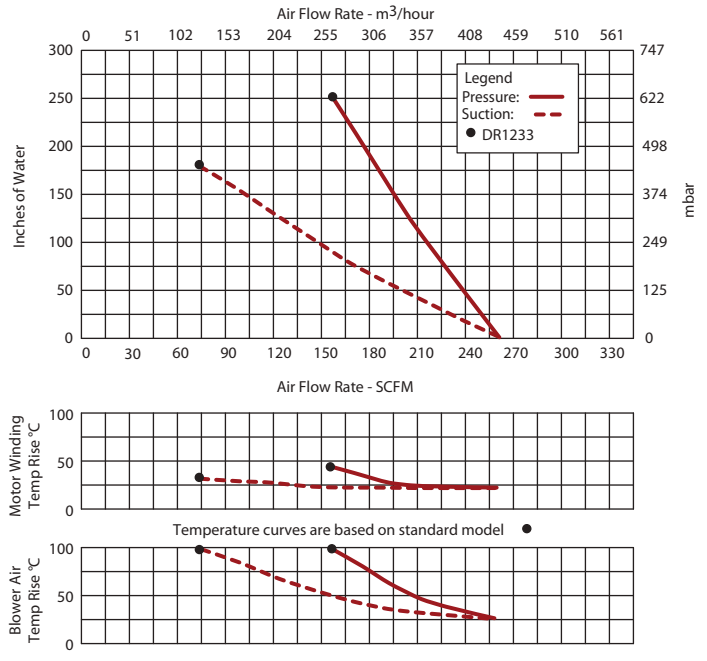
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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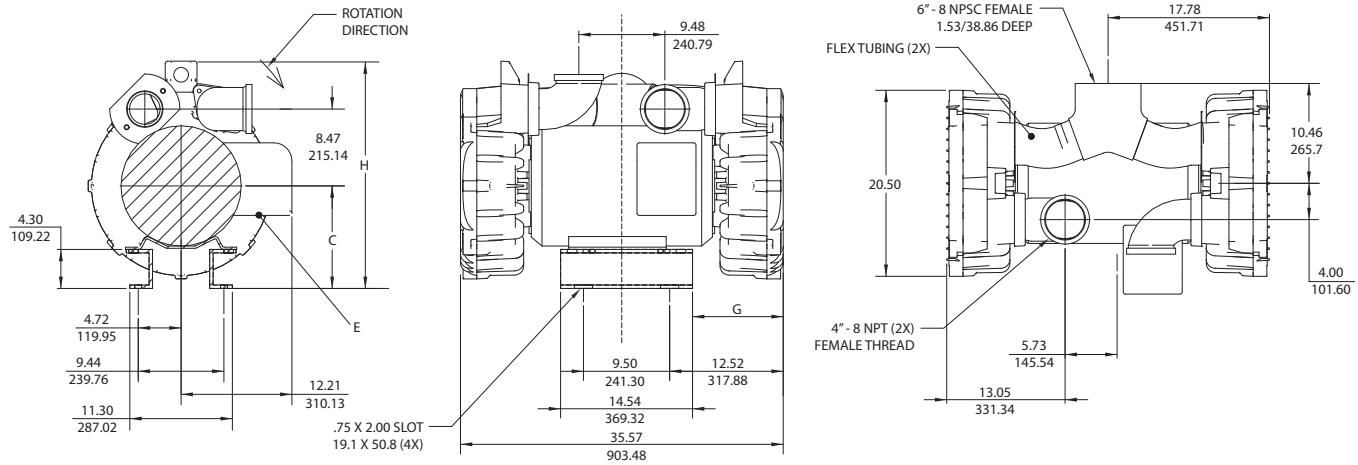
Industrial / Chemical Processing Blowers

ROTRON®

DR P13

20.0 / 30.0 HP Regenerative Blower



PART NUMBER	MODEL	C IN/MM	H IN/MM	G IN/MM	E IN/MM
081801	DRP13BP72C	11.30/287	25.01/635.25	12.52/317.88	2/50.8
081802	DRP13BP72D	11.30/287	25.01/635.25	12.52/317.88	2/50.8
081804	DRP13BP86C	11.30/287	25.04/635.25	12.52/317.88	2/50.8
081805	DRP13BP86D	11.30/287	25.04/635.25	12.52/317.88	2/50.8
081798	DRP13BM72C	10.55/267.97	24.26/616.11	10.77/273.43	1.38/35.05
081797	DRP13BM72D	10.55/267.97	24.26/616.11	10.77/273.43	1.38/35.05

IN
MM

NOTES
1 081801 DRP13BP72C MODEL SHOWN.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number					
Specification	Units	DRP13BP72C 081801	DRP13BP72D 081802	DRP13BP86C 081804	DRP13BP86D 081805	DRP13BM72C 081798	DRP13BM72D 081797
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP-CS	ODP-CS	ODP-CS	ODP-CS	ODP-CS
Horsepower	-	30	30	30	30	20	20
Voltage	AC	230/460	230/460	575	575	230/460	230/460
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Insulation Class	-	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	70/35	70/35	28	28	49/24.5	49/24.5
Service Factor	-	1.15	1.15	1.15	1.15	1.15	1.15
Locked Rotor Amps	Amps (A)	380/190	380/190	174	174	306/153	306/153
Max. Blower Amps	Amps (A)	110/55	110/55	36	36	64/32	64/32
NEMA Starter Size	-	3/3	3/3	3	3	3/2	3/2
Shipping Weight	Lbs	687	687	687	687	592	592
	Kg	311.6	311.6	311.6	311.6	268.5	268.5
Description	-	Pressure Mode	Suction Mode	Pressure Mode	Suction Mode	Pressure Mode	Suction Mode

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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DR P13

ROTRON®

20.0 / 30.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 1150 SCFM
- Maximum pressure: 115 IWG
- Maximum vacuum: 103 IWG
- Standard motor: 30 HP, ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards when properly piped or muffled - 2 mufflers included (part# 511569)

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

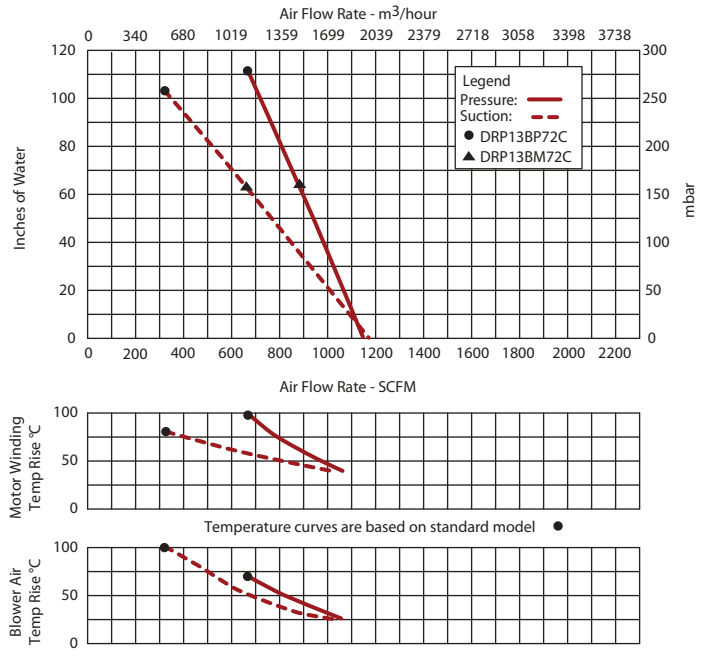
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

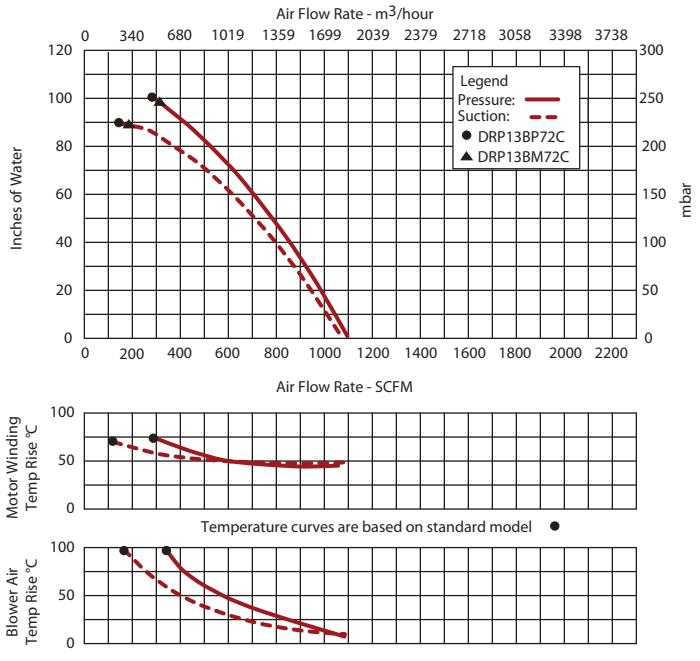
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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DYNAMIC FLUID SOLUTIONS

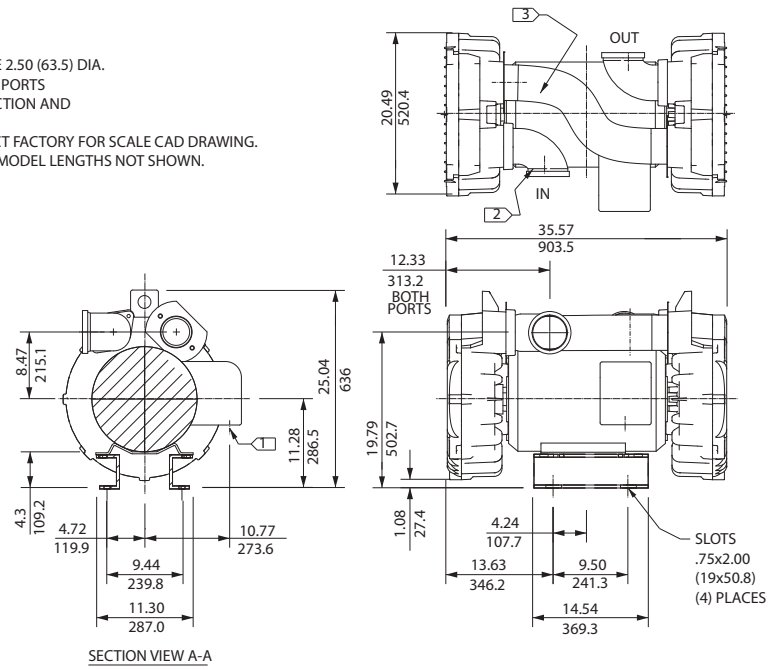
DR S13

ROTRON®

20.0 / 30.0 HP High Pressure Regenerative Blower

NOTES
1. TERMINAL BOX CONNECTOR HOLE 2.50 (63.5) DIA.
2. 4"-8 NPSC FEMALE THREAD, BOTH PORTS
3. LABEL INDICATES ROTATION DIRECTION AND "IN & OUT" PORT LOCATIONS.
5. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
6. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

IN
MM



SECTION VIEW A-A

Specification	Units	Part/ Model Number DRS13BP72 081800	DRS13BP86 081803	DRS13BM72 081799
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP-CS	ODP-CS
Horsepower	-	30	30	20
Voltage	AC	230/460	575	230/460
Phase - Frequency	-	Three-60 Hz	Three-60 Hz	Three-60 Hz
Insulation Class	-	F	F	F
NEMA Rated Motor Amps	Amps (A)	78/39	28	49/24.5
Service Factor	-	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	80/40	32	70/153
Locked Rotor Amps	Amps (A)	380/190	174	306/153
NEMA Starter Size	-	3/3	3	3/2
Shipping Weight	Lbs	646	646	562
	Kg	293	293	254.9

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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DR S13

ROTRON®

20.0 / 30.0 HP High Pressure Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 620 SCFM
- Maximum pressure: 195 IWG
- Maximum vacuum: 132 IWG
- Standard motor: 30 HP, ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards when properly piped or muffled - 1 inlet muffler included (part# 511569)

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

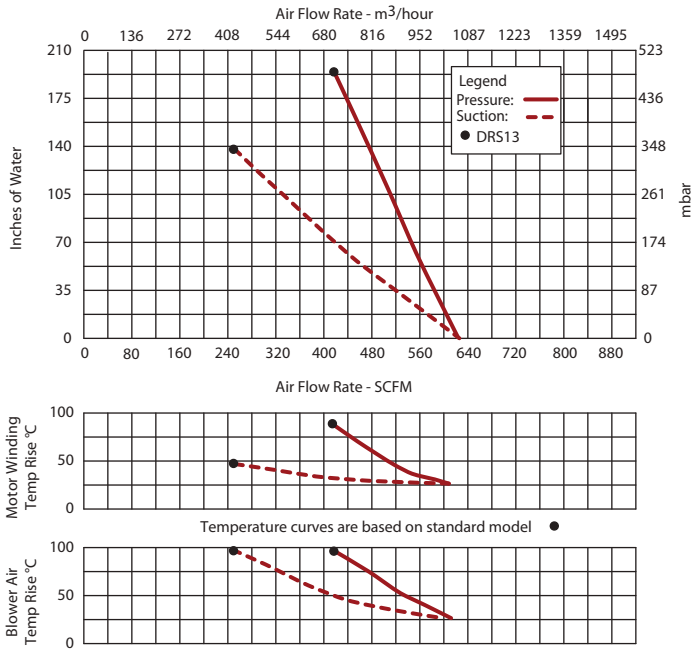
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

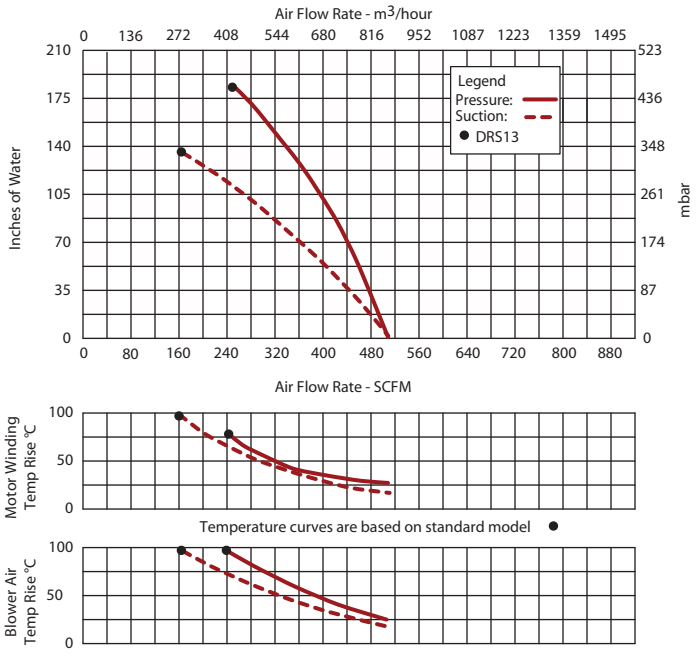
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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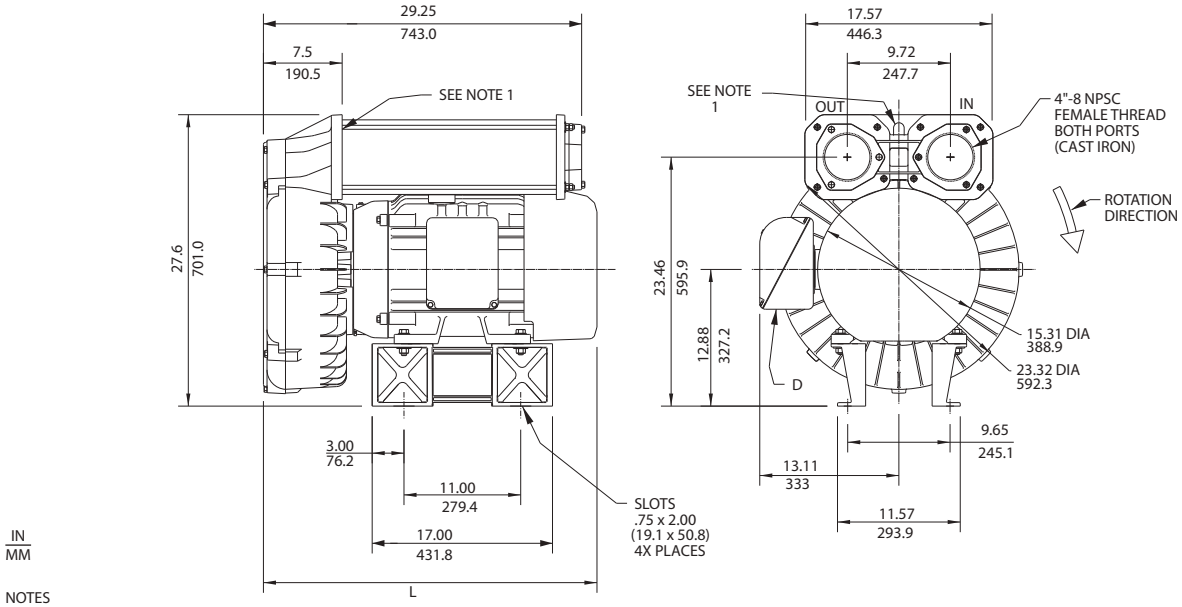
DR 14 & CP 14

ROTRON®

20.0 / 25.0 / 30.0HP Regenerative Blower



NOTES
1 LIFTING SLOT: 1.00 X 1.70 (25.4 X 43.2)
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)	D (IN/MM)
DR14DW72MW	31.55/801.4	1.98/50.3

		Part/ Model Number					
		DR14DW72MW	DR14DW86MW	DR14DT72MW	DR14BH72MW	CP14FK72MWLR	HiE14DW72MW
Specification	Units	081476	081479	081483	081480	081490	081497
Motor Enclosure - Shaft Mtl.	-	TEFC-CS	TEFC-CS	TEFC-CS	TEFC-CS	CHEM TEFC-SS	TEFC-CS
Horsepower	-	30	30	25	20	30	30
Voltage	AC	230/460	575	230/460	230/460	230/460	230/460
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Insulation Class	-	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	66/33	26.5	58/29	46/23	66/33	66/33
Service Factor	-	1.15	1.15	1.15	1.15	1.15	1.15
Max. Blower Amps	Amps (A)	90/45	32.8	90/45	60/30	90/45	90/45
Locked Rotor Amps	Amps (A)	430/215	172	304/152	294/147	430/215	430/215
NEMA Starter Size	-	3/3	3	3/3	3/2	3/3	3/3
Shipping Weight	Lbs	696	694	650	600	696	696
	Kg	315.7	314.8	294.8	272.2	315.7	315.7

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

ROTRON®

DR 14 & CP 14

20.0 / 25.0 / 30.0HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 1050 SCFM
- Maximum pressure: 150 IWG
- Maximum vacuum: 120 IWG
- Standard motor: 30 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

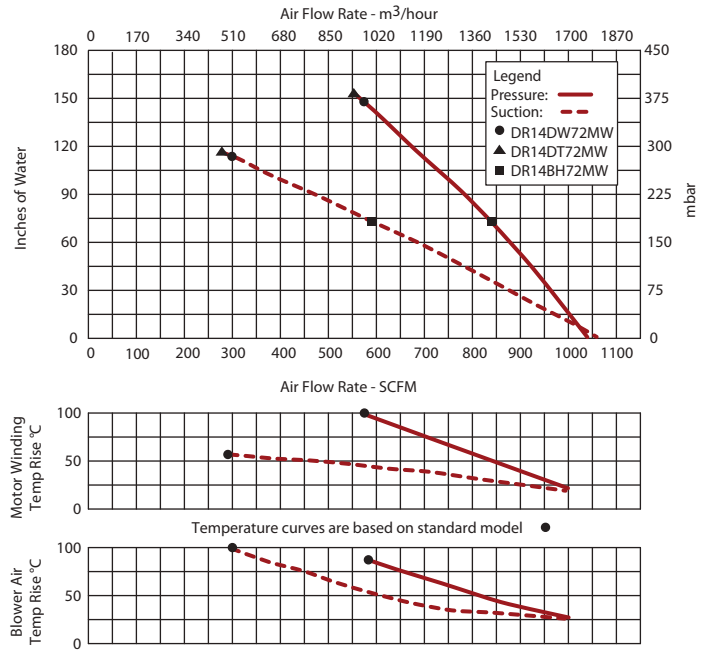
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

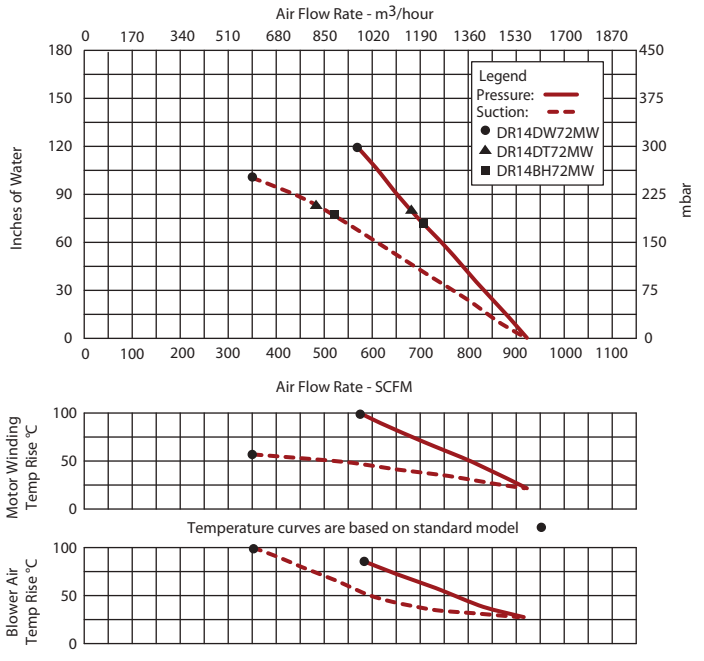
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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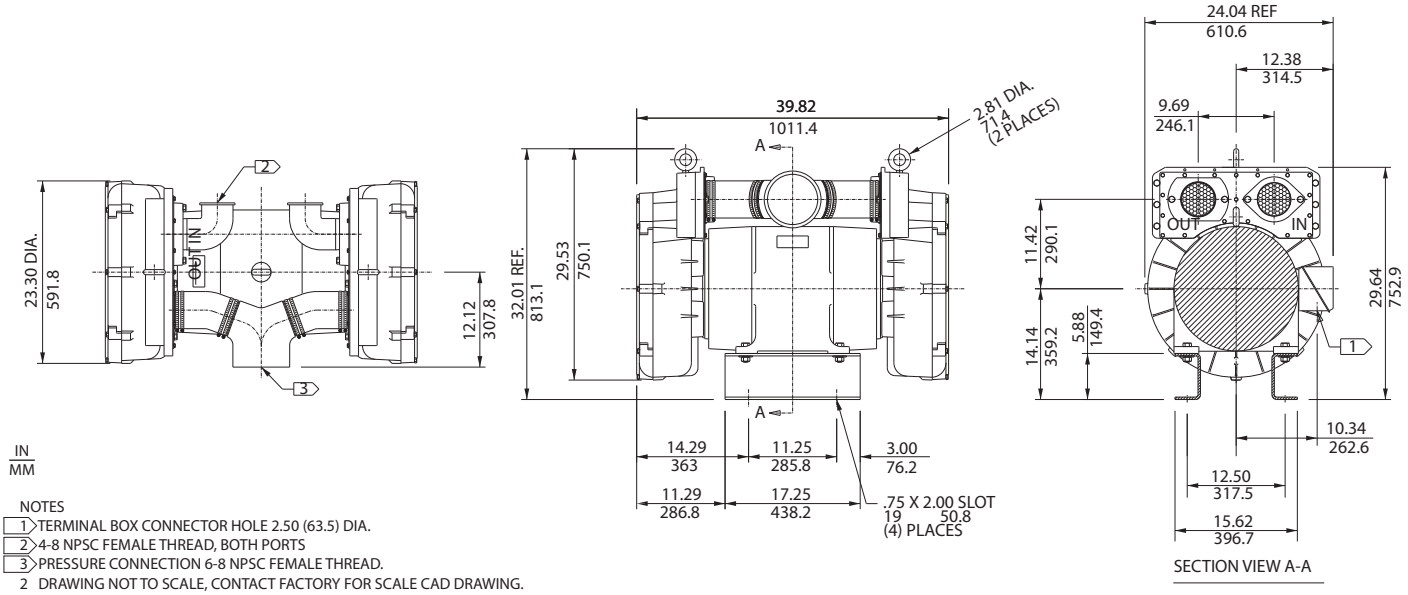
Industrial / Chemical Processing Blowers

ROTRON®

DR P15

40.0 / 60.0 HP Regenerative Blower



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 2.50 (63.5) DIA.
2. 4-8 NPSC FEMALE THREAD, BOTH PORTS
3. PRESSURE CONNECTION 6-8 NPSC FEMALE THREAD.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number					
Specification	Units	DRP15EE72C 081499	DRP15EE72D 081629	DRP15BQ72C 081501	DRP15BQ72D 081500	DRP15BQ86C TBD	DRP15BQ86D TBD
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP - CS	ODP - CS	ODP - CS	ODP - CS	ODP - CS
Horsepower	-	60	60	40	40	40	40
Voltage	AC	230/460	230/460	230/460	230/460	575	575
Phase - Frequency	-	Three-60 hz	Three - 60 hz	Three - 60 hz	Three - 60 hz	Three - 60 hz	Three - 60 hz
Insulation Class	-	F	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	140/70	140/70	96/48	96/48	38.4	38.4
Service Factor	-	1.15	1.15	1.15	1.15	1.15	1.15
Locked Rotor Amps	Amps (A)	870/435	870/435	630/315	630/315	540/270	540/270
Max. Blower Amps	Amps (A)	170/85	170/85	160/80	160/80	64	64
NEMA Starter Size	-	5/4	5/4	4/3	4/3	3	3
Shipping Weight	Lbs	1025	1025	923	923	923	923
	Kg	464.9	464.9	418.7	418.7	418.7	418.7
Description	-	Pressure Mode	Suction Mode	Pressure Mode	Suction Mode	Pressure Mode	Suction Mode

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

DR P15

ROTRON®

40.0 / 60.0 HP Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 1900 SCFM
- Maximum pressure: 150 IWG
- Maximum vacuum: 115 IWG
- Standard motor: 60 HP, ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards when properly piped or muffled - 2 inlet mufflers included (part# 516264)

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

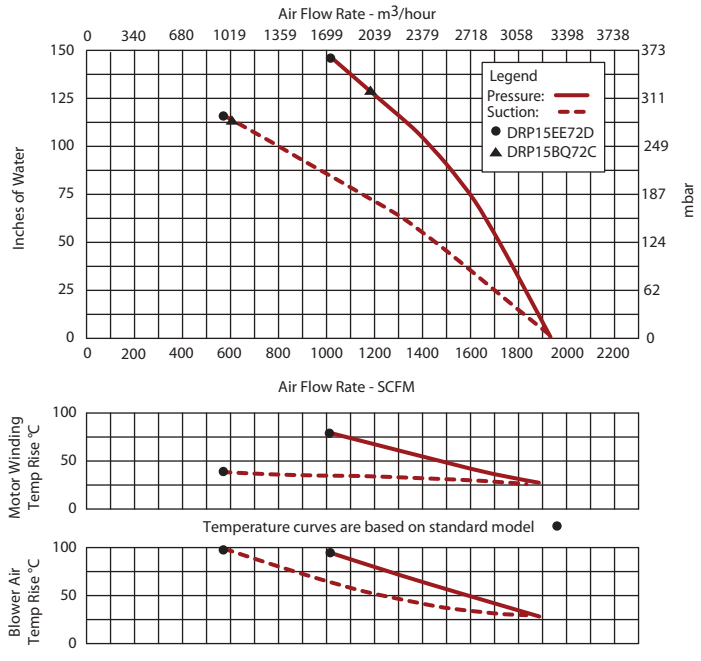
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

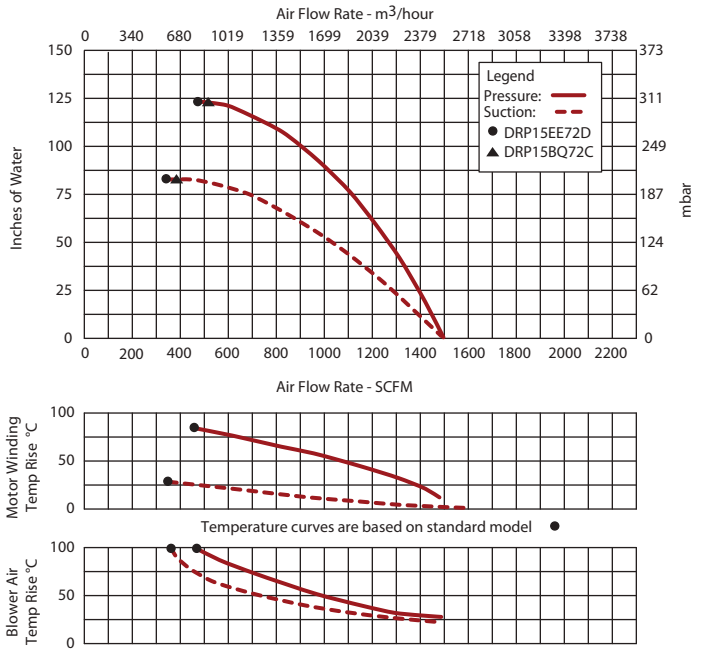
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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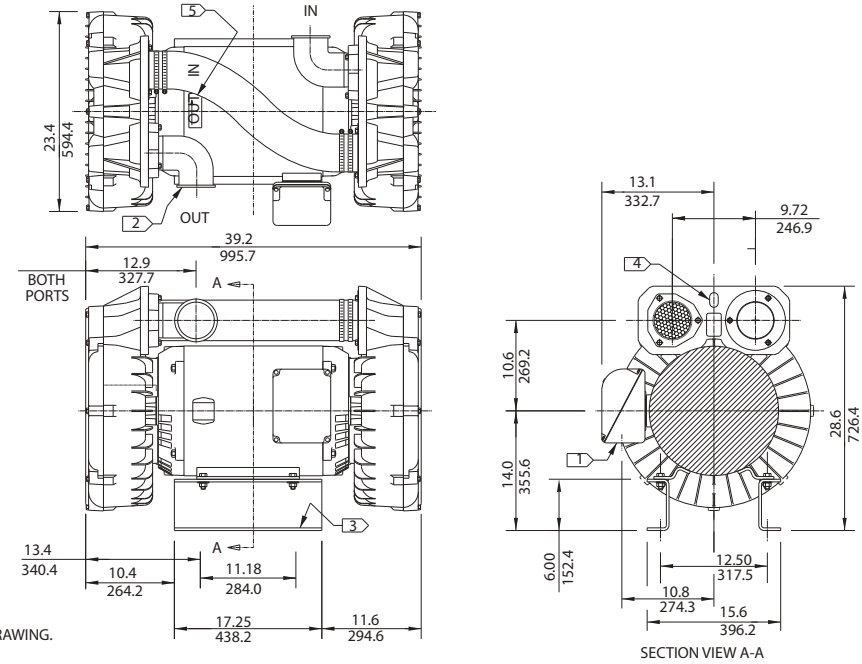
Industrial / Chemical Processing Blowers

ROTRON®

DR S15

40.0 HP High Pressure Regenerative Blower



SECTION VIEW A-A

IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE .88 (22) DIA.
2. 4-8 NPSC FEMALE THREAD, BOTH PORTS.
3. FOUR MOUNTING SLOTS .75 (19) X 2.00 (50.8).
4. TWO LIFTING SLOTS 1.00 (25.4) X 1.70 (43.2).
5. LABEL INDICATES ROTATION DIRECTION AND "IN & OUT" PORT LOCATIONS.
6. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
7. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/ Model Number	
		DRS15BQ72	DRS15BQ86
Specification	Units	081502	TBD
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP-CS
Horsepower	-	40	40
Voltage	AC	230/460	575
Phase - Frequency	-	Three-60 Hz	Three-60 Hz
Insulation Class	-	F	F
NEMA Rated Motor Amps	Amps (A)	96/48	38.4
Service Factor	-	1.15	1.15
Max. Blower Amps	Amps (A)	140/70	52
Locked Rotor Amps	Amps (A)	630/315	216
NEMA Starter Size	-	4/3	3
Shipping Weight	Lbs	923	923
	Kg	418.7	418.7

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Industrial / Chemical Processing Blowers

DR S15

ROTRON®

40.0 HP High Pressure Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 925 SCFM
- Maximum pressure: 200 IWG
- Maximum vacuum: 134.7 IWG
- Standard motor: 40 HP, ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Quiet operation within OSHA standards when properly piped or muffled - 1 inlet muffler included (part# 516264)

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

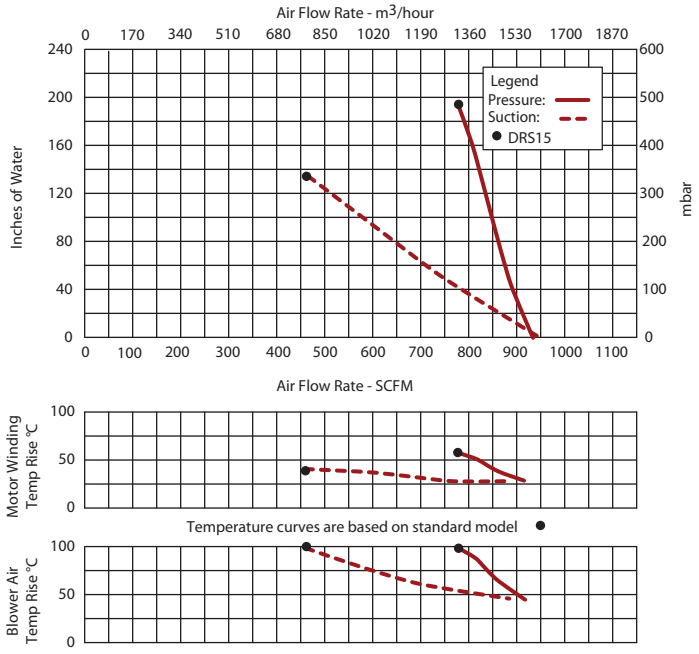
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

Environmental / Chemical Processing Blowers

Our environmental EN blowers are designed the same as the DR blowers, except added features include:

- Heavy duty cast aluminum manifold
- Our spark resistant housing, cover, impeller, muffler tower, and manifold are vacuum impregnated
- Teflon® lip seal in a stainless steel case standard for leakage containment to 25 cc/min or less
- Explosion-proof motors standard and available in a variety of world voltages
- All metal-to-metal surfaces are sealed with RTV sealant
- Various UL explosion-proof listings. Consult factory.

Environmental (EN) regenerative blowers are also available in our Chemical Processing (CP) configuration:

- Chem-Tough™ surface conversion corrsion resistant treatment for all castings
- Teflon® lip seal in a stainless steel case standard for leakage containment to 25 cc/min or less
- Chemical duty motors with 303 stainless steel motor shafts
- Stainless steel hardware throughout
- Nickel plated flanges and muffler retainers

ROTRON®

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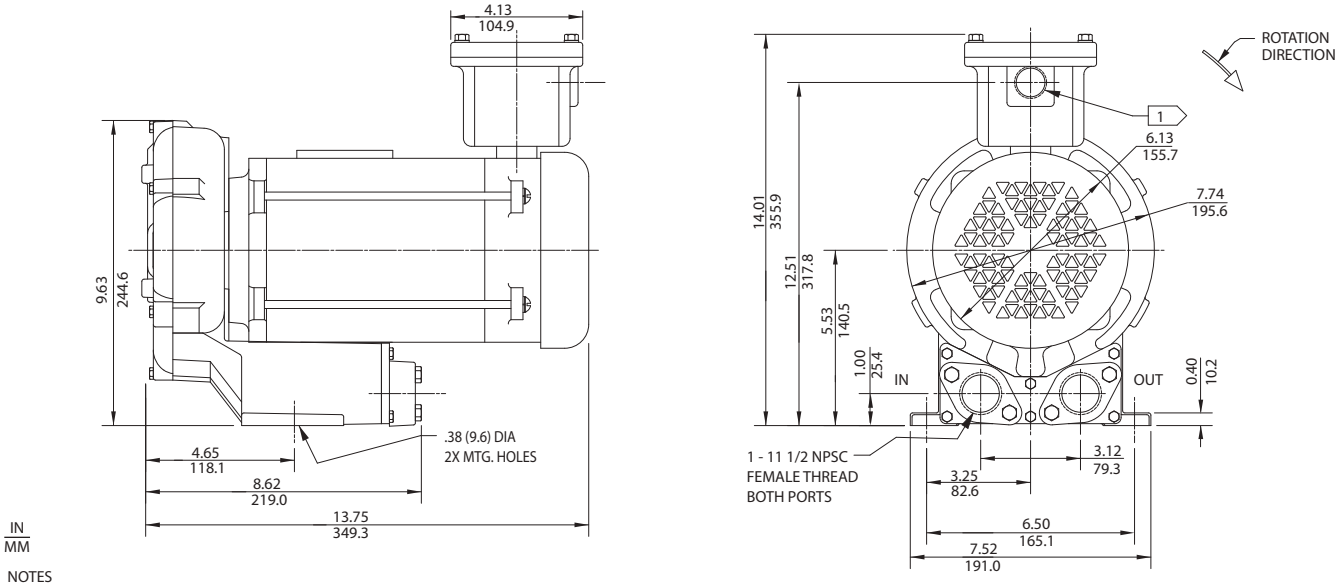
Environmental / Chemical Processing Blowers

ROTRON®

EN 101 & CP 101

.5 HP Sealed Regenerative w/Explosion-Proof Motor



NOTES
1. TERMINAL BOX CONNECTOR HOLE .75" NPT
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number			
		EN101AG58L	EN101AG91L	CP101FN58LR	CP101FN91LR
Specification	Units	038171	038019	080622	038950
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	.5	.5	.5	.5
Phase - Frequency Voltage	-	Single-60 hz	Three-60 hz	Single-60 hz	Three-60 hz
Motor Nameplate Amps	AC	115/230	230/460	115/230	230/460
Max. Blower Amps	Amps (A)	7.4/3.7	.90/.45	7.4/3.7	.90/.45
Locked Rotor Amps	Amps (A)	6/3	1.5/.75	6/3	1.5/.75
Service Factor	Amps (A)	38/19	8.9/4.5	38/19	8.9/4.5
Starter Size	-	0/00	00/00	0/00	00/00
Thermal Protection	-	1.0	1.0	1.0	1.0
XP Motor Class - Group	-	Not Required	Not Required	Not Required	Not Required
	-	I-D	I-D	I-D	I-D
Shipping Weight	Lbs	47	47	47	47
	Kg	21.3	21.3	21.3	21.3

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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PRECISION MOTION CONTROL
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Environmental / Chemical Processing Blowers

EN 101 & CP 101

ROTRON®

.5 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 27 SCFM
- Maximum pressure: 25 IWG
- Maximum vacuum: 23 IWG
- Standard motor: 0.5 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

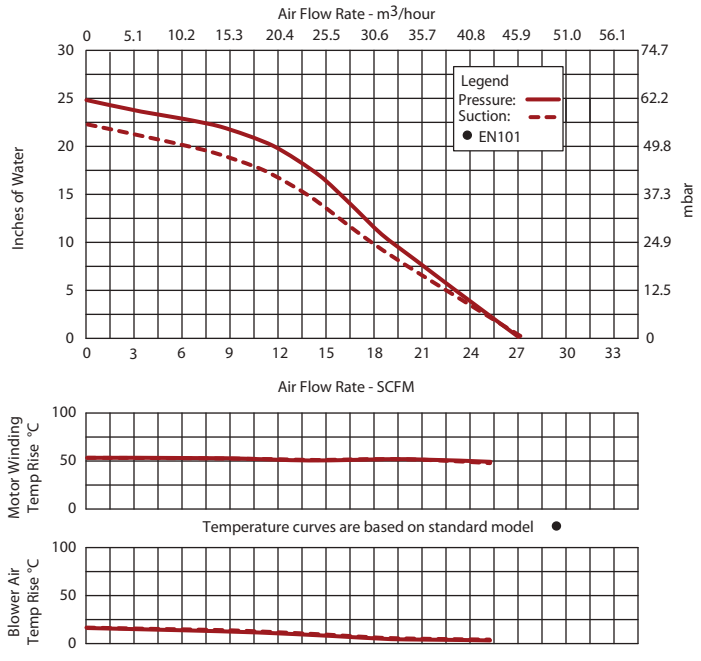
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

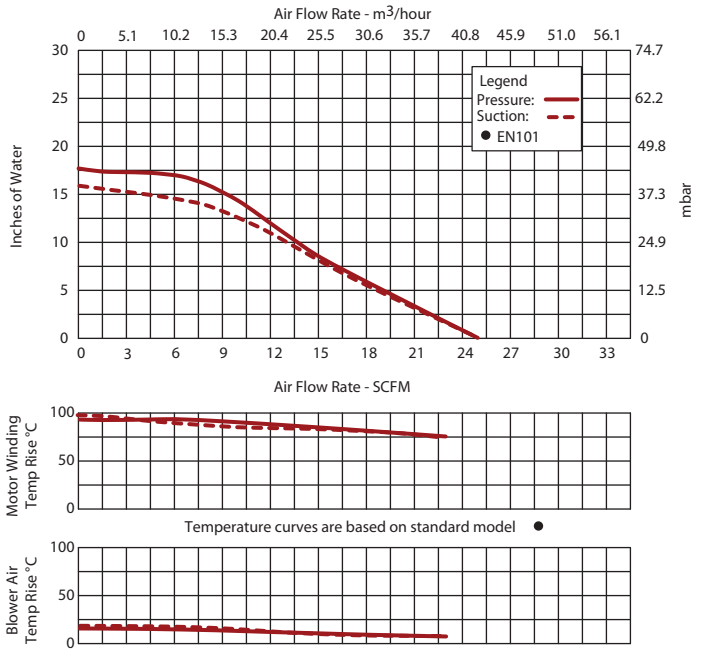
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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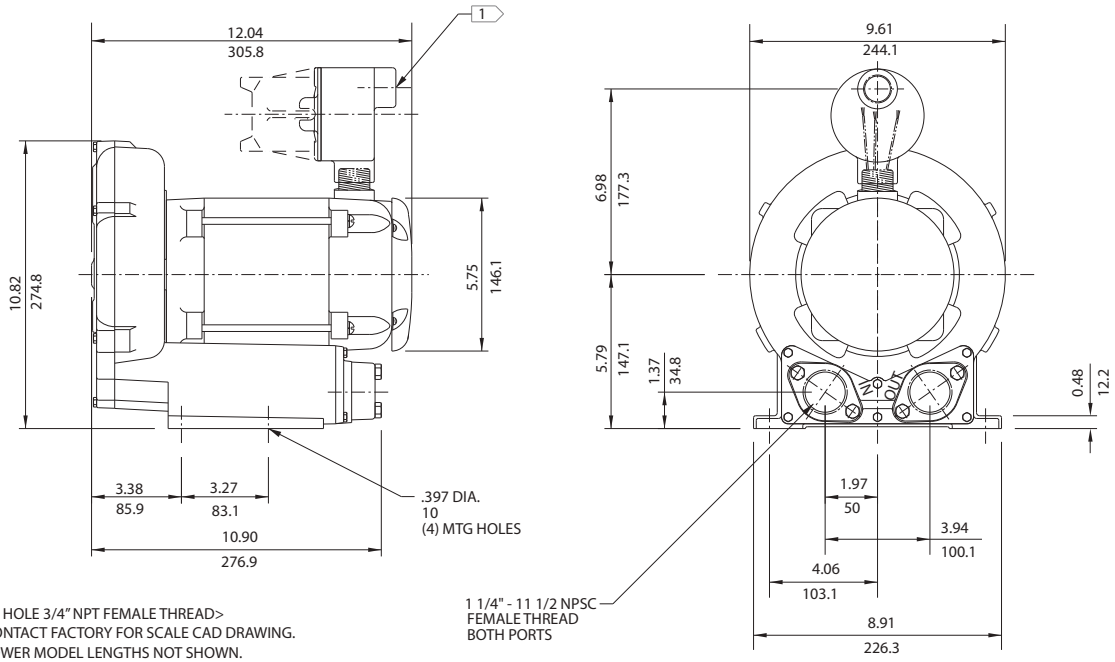
Environmental / Chemical Processing Blowers

ROTRON®

EN 303 & CP 303

.5 HP Sealed Regenerative w/Explosion-Proof motor



IN
MM

NOTES
1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT FEMALE THREAD>
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number			
		EN303AG58L	EN303AG91L	CP303FN58LR	CP303FN91LR
Specification	Units	038172	038026	080247	038954
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	.5	.5	.5	.5
Phase - Frequency Voltage	-	Single-60 hz	Three-60 hz	Single-60 hz	Three-60 hz
Motor Nameplate Amps	AC	115/230	230/460	115/230	230/460
Max. Blower Amps	Amps (A)	9.0/4.5	1.5/.75	9.0/4.5	1.5/.75
Locked Rotor Amps	Amps (A)	7.2/3.6	1.63/.83	7.2/3.6	1.63/.83
Service Factor	Amps (A)	38/19	8.9/4.45	38/19	8.9/4.45
Starter Size	-	0/00	00/00	0/00	00/00
Thermal Protection	-	1.0	1.35	1.0	1.35
XP Motor Class - Group	-	Not Required	Not Required	Not Required	Not Required
	-	I-D	I-D	I-D	I-D
Shipping Weight	Lbs	52	52	52	52
	Kg	23.6	23.6	23.6	23.6

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

Environmental / Chemical Processing Blowers

ROTRON®

EN 303 & CP 303

.5 HP Sealed Regenerative w/Explosion-Proof motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 55 SCFM
- Maximum pressure: 50 IWG
- Maximum vacuum: 45 IWG
- Standard motor: 0.5 HP, explosion-proof
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

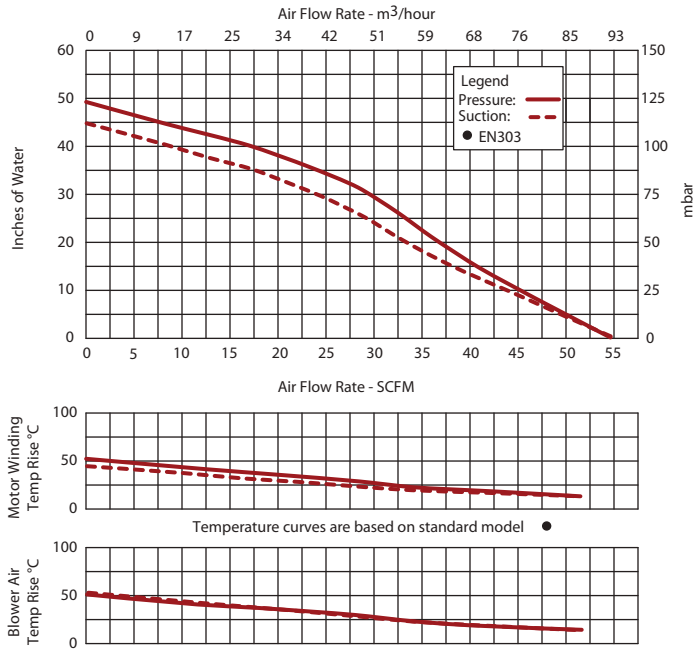
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

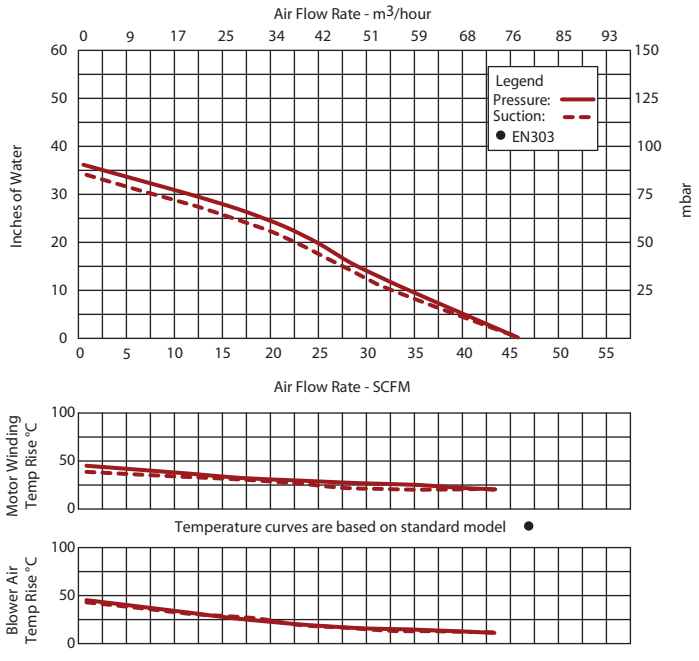
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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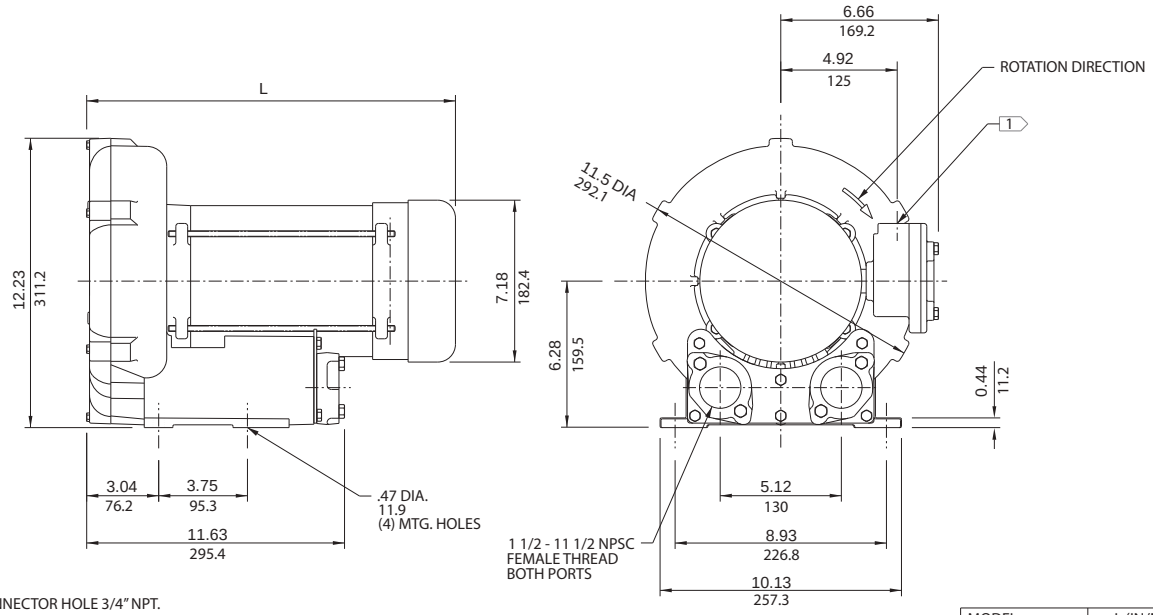
ROTRON®

EN 404 & CP 404

1.0 HP Sealed Regenerative w/Explosion-Proof Motor



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 3/4" NPT.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
EN404AR58ML	16.41/416.8
EN404AR72ML	15.50/393.7

		Part/Model Number			
		EN404AR58ML	EN404AR72ML	CP404FQ58MLR	CP404FQ72MLR
Specification	Units	038173	038174	080075	038958
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	1.0	1.0	1.0	1.0
Phase - Frequency Voltage	-	Single-60 hz	Three-60 hz	Single-60 hz	Three-60 hz
Motor Nameplate Amps	AC	115/230	208-230/460	115/230	208-230/460
Max. Blower Amps	Amps (A)	11.4/5.69	3.2/1.6	11.4/5.69	3.2/1.6
Locked Rotor Amps	Amps (A)	14.4/7.2	3.6/1.8	14.4/7.2	3.6/1.8
Service Factor	Amps (A)	72/36	20.2/10.1	72/36	20.2/10.1
Starter Size	-	0/00	00/00	0/00	00/00
Thermal Protection	-	1.0	1.0	1.0	1.0
XP Motor Class - Group	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	81	64	81	64
	Kg	36.7	29	36.7	29

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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Environmental / Chemical Processing Blowers

EN 404 & CP 404

ROTRON®

1.0 HP Sealed Regenerative w/Explosion-Proof Motor *ATEX model certified

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 100 SCFM
- Maximum pressure: 52 IWG
- Maximum vacuum: 48 IWG
- Standard motor: 1.0 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

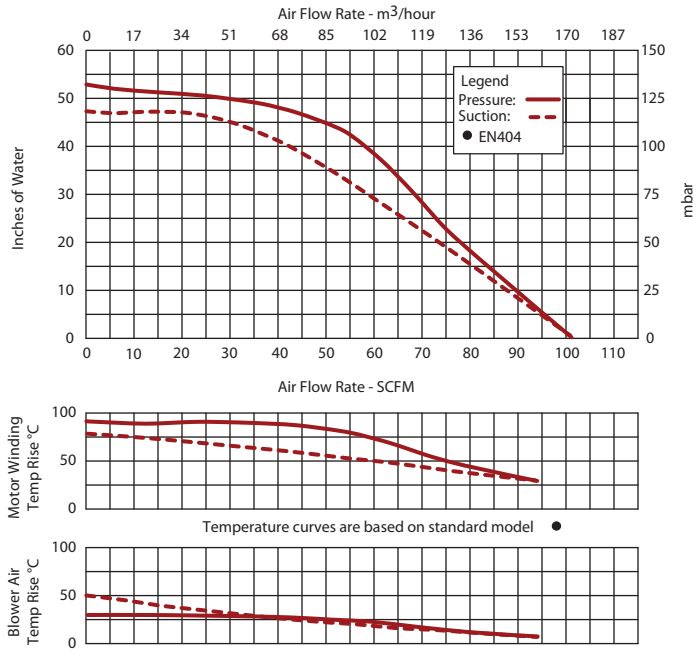
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

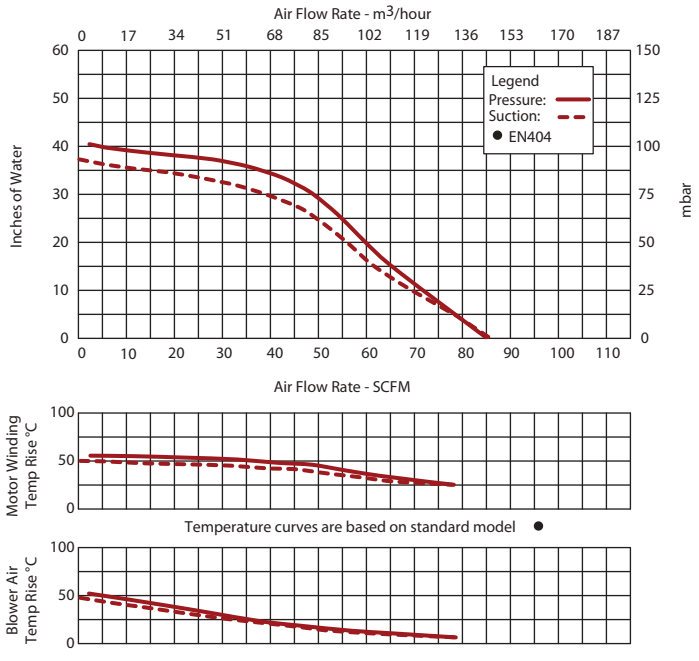
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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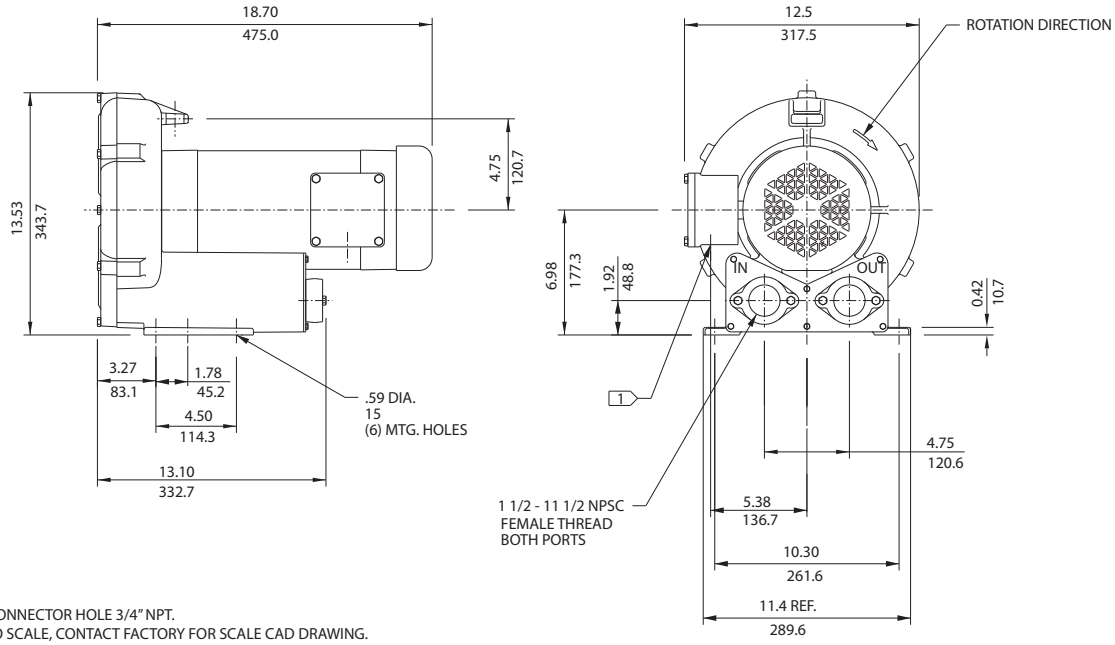
ROTRON®

EN 454 & CP 454

1.5 HP Sealed Regenerative w/Explosion-Proof Motor



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 3/4" NPT.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number			
		EN454W58ML	EN454W72ML	CP454W72MLR	CP454FR72MLR
Specification	Units	080487	080488	080490	080494
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-CS	CHEM XP-SS
Horsepower	-	1.5	1.5	1.5	1.5
Phase - Frequency	-	Single-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Voltage	AC	115/208-230	230/460	230/460	230/460
Motor Nameplate Amps	Amps (A)	15/7.9-7.5	4.6/2.3	4.5/2.3	4.6/2.3
Max. Blower Amps	Amps (A)	19/10.9-9.5	5.6/2.8	5.6/2.8	5.6/2.8
Locked Rotor Amps	Amps (A)	96-48	32/16	32/16	32/16
Service Factor	-	1/0	00/00	00/00	00/00
Starter Size	-	1.0	1.0	1.0	1.0
Thermal Protection	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
XP Motor Class - Group	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	90	84	84	84
	Kg	40.8	38.1	38.1	38.1

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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Environmental / Chemical Processing Blowers

EN 454 & CP 454

ROTRON®

1.5 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 120 SCFM
- Maximum pressure: 65 IWG
- Maximum vacuum: 59 IWG
- Standard motor: 1.5 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

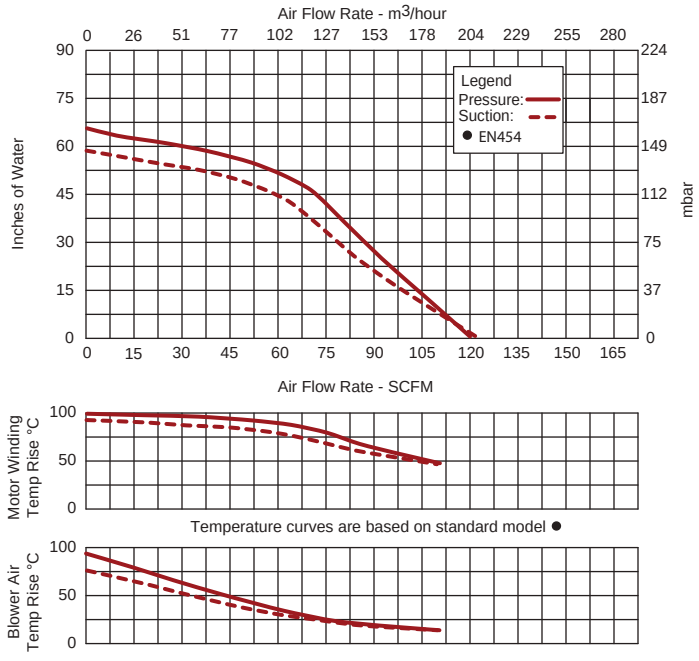
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

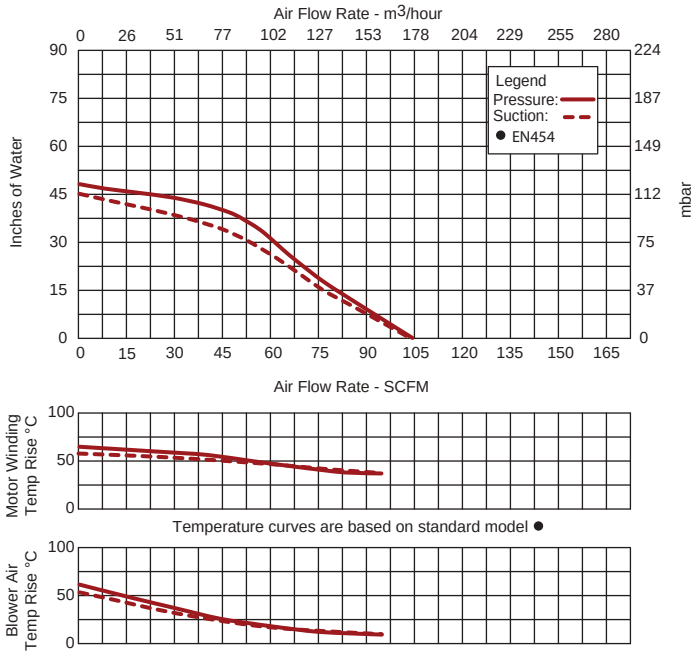
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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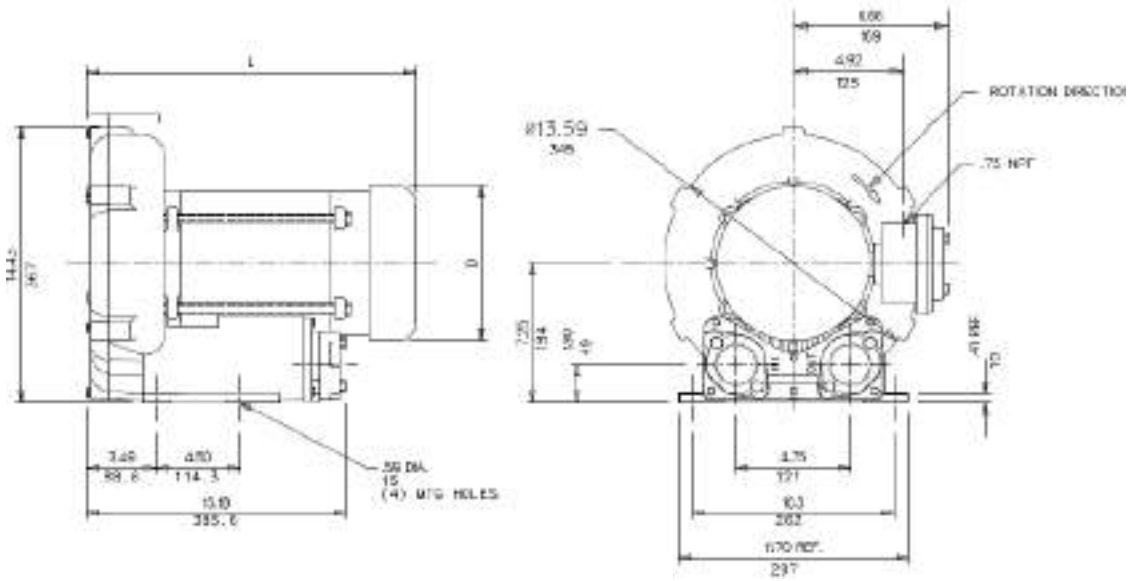
DYNAMIC FLUID SOLUTIONS

EN 505 & CP 505

ROTRON®

2.0 / 2.5 HP Sealed Regenerative w/Explosion-Proof Motor



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 3/4" NPT.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number			
		EN505AX58ML	EN505AX72ML	CP505FS58MLR	CP505FS72MLR
Specification	Units	038177	038178	080655	038962
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	2.0	2.0	2.0	2.0
Phase - Frequency	-	Single-60 hz	Three-60 hz	Single-60 hz	Three-60 hz
Voltage	AC	115/230	230/460	115/230	230/460
Motor Nameplate Amps	Amps (A)	22/11	5.8/2.9	22/11	5.8/2.9
Max. Blower Amps	Amps (A)	24/12	6.4/3.2	24/12	6.4/3.2
Locked Rotor Amps	Amps (A)	112/56	56/28	112/56	56/28
Service Factor	-	1/0	0/0	1/0	0/0
Starter Size	-	1.0	1.0	1.0	1.0
Thermal Protection	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
XP Motor Class - Group	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	92	84	92	84
	Kg	41.7	38.1	41.7	38.1

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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Environmental / Chemical Processing Blowers

EN 505 & CP 505

ROTRON®

2.0 / 2.5 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 150 SCFM
- Maximum pressure: 75 IWG
- Maximum vacuum: 70 IWG
- Standard motor: 2.0 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

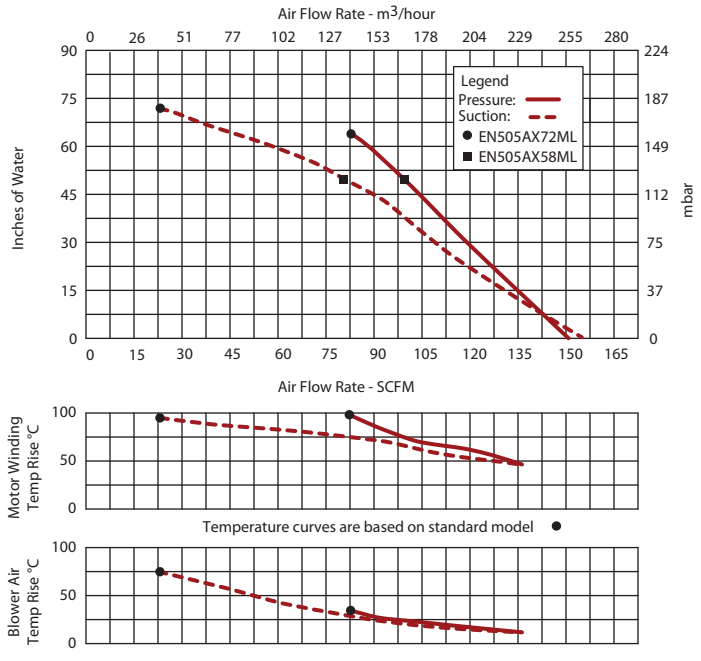
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

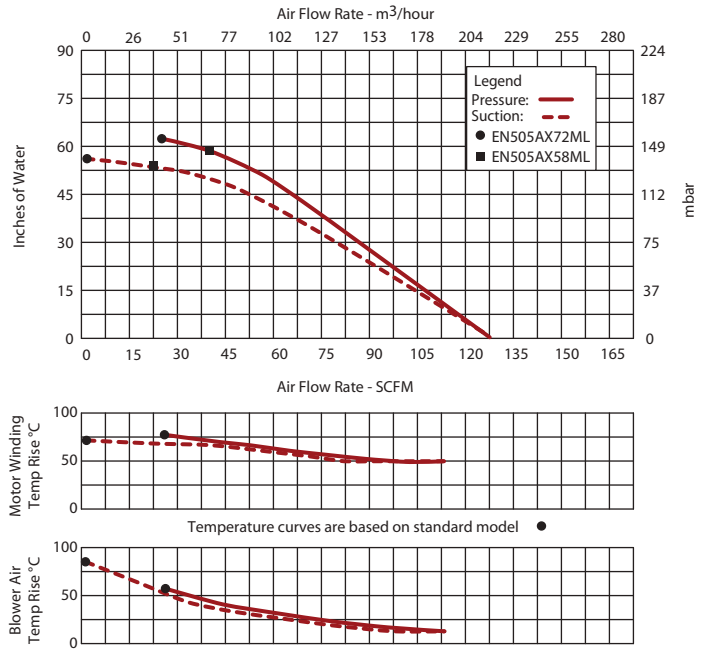
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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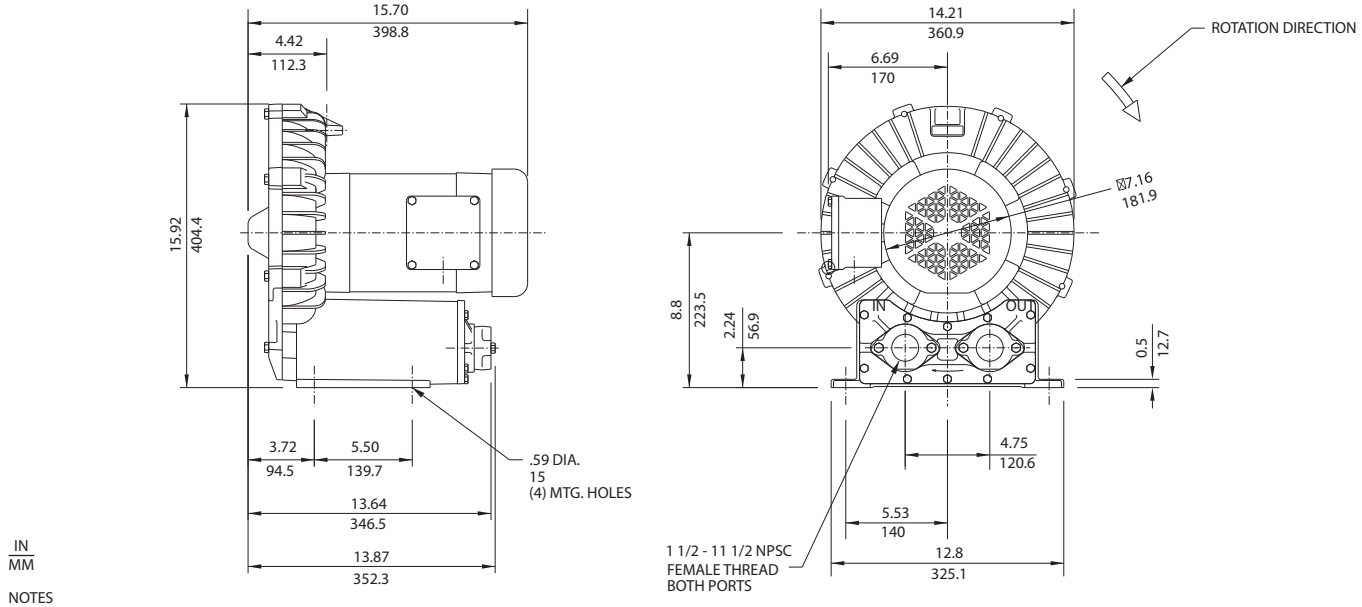
EN 513 & CP 513

ROTRON®

1.5 HP Sealed Regenerative w/Explosion-Proof Motor



NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number			
		EN513W58L	EN513W72L	CP513FR58LR	CP513FR72LR
Specification	Units	038183	038037		038966
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	1.5	1.5	1.5	1.5
Phase - Frequency Voltage	-	Single-60 hz	Three-60 hz	Single-60 hz	Three-60 hz
Motor Nameplate Amps	AC	115/208-230	230/460	115/208-230	230/460
Max. Blower Amps	Amps (A)	15/7.9-7.5	4.6/2.3	15/7.9-7.5	4.6/2.3
Inrush Amps	Amps (A)	19.4/9.7-9.0	5.4/2.7	19.4/9.7-9.0	5.4/2.7
Service Factor	Amps (A)	84-42	32/16	84-42	32/16
Starter Size	-	1/0	00/00	1/0	00/00
Thermal Protection	-	1.0	1.0	1.0	1.0
XP Motor Class - Group	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	99	93	99	93
	Kg	44.9	42.2	44.9	42.2

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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DYNAMIC FLUID SOLUTIONS

Environmental / Chemical Processing Blowers

EN 513 & CP 513

ROTRON®

1.5 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 78 SCFM
- Maximum pressure: 88 IWG
- Maximum vacuum: 75 IWG
- Standard motor: 1.5 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

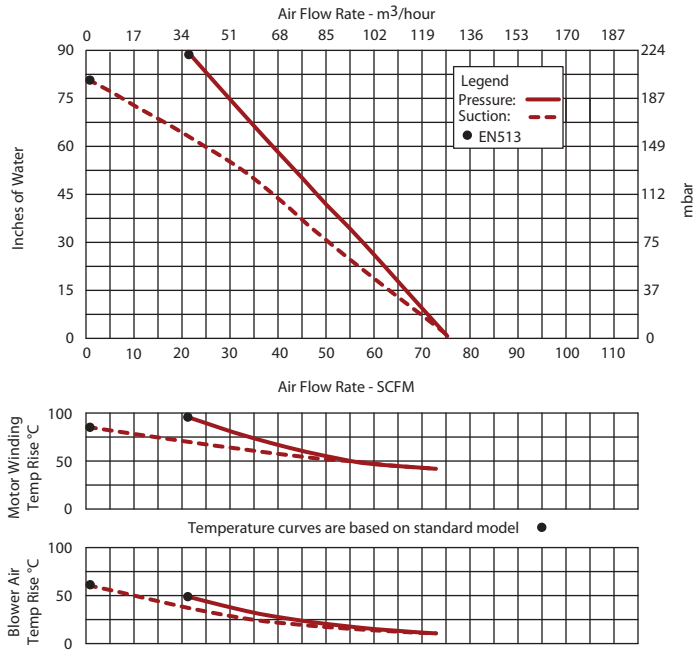
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

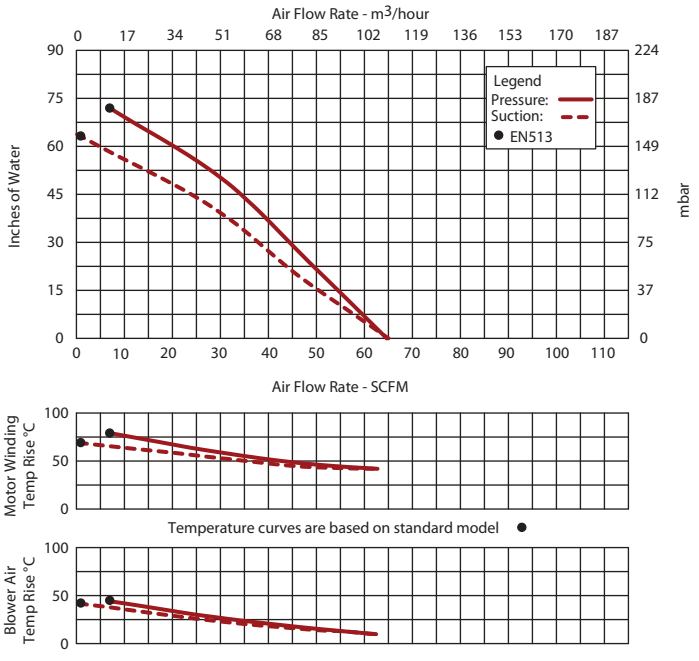
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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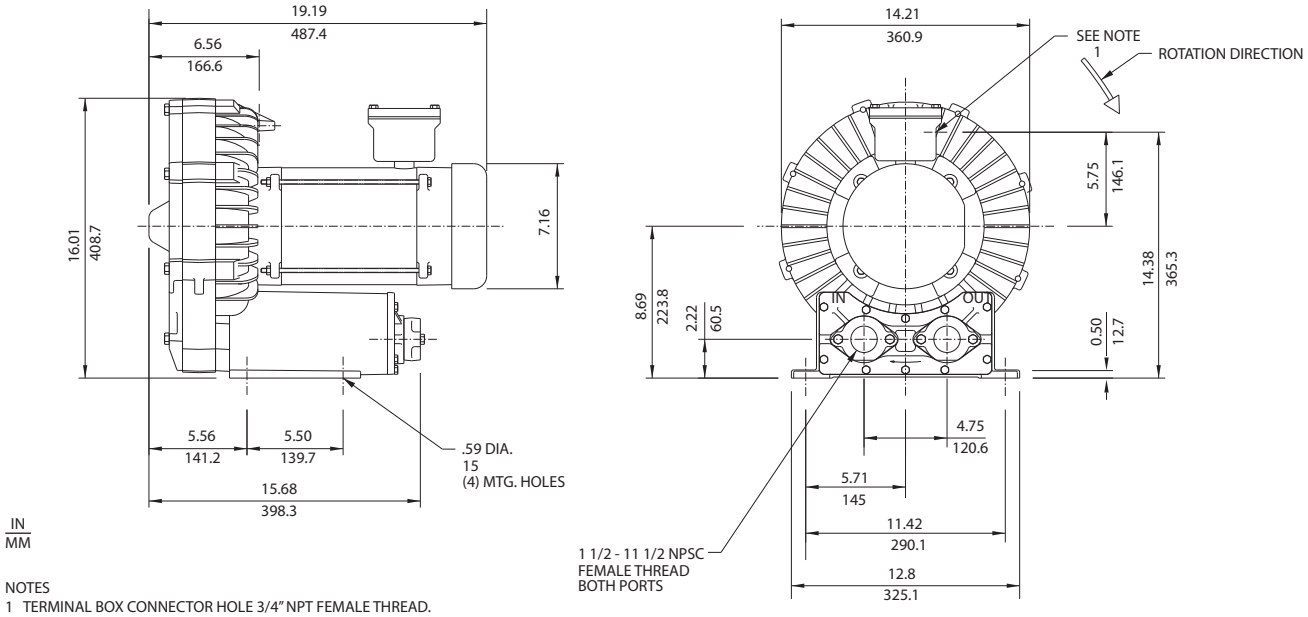
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

EN 523 & CP 523

ROTRON®

3.0 HP High Pressure Sealed Regenerative w/Explosion-Proof Motor



NOTES
1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT FEMALE THREAD.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number			
		EN523M5L	EN523M72L	CP523FU5LR	CP523FU72LR
Specification	Units	038223	038184	TBD	038968
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	3	3	3	3
Phase - Frequency Voltage	-	Single-60 hz	Three-60 hz	Single-60 hz	Three-60 hz
Motor Nameplate Amps	AC	230	230/460	230	230/460
Max. Blower Amps	Amps (A)	15.5-14.5	7.4/3.7	15.5-14.5	7.4/3.7
Locked Rotor Amps	Amps (A)	18.1-16.7	8/4	18.1-16.7	8/4
Service Factor	Amps (A)	94-88	62/31	94-88	62/31
Starter Size	-	1	0/0	1	0/0
Thermal Protection	-	1.0	1.0	1.0	1.0
XP Motor Class - Group	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
	-	I-D	I-D	I-D	I-D
Shipping Weight	Lbs	126	126	150	126
	Kg	57.2	57.2	68	57.2

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

EN 523 & CP 523

ROTRON®

3.0 HP High Pressure Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 84 SCFM
- Maximum pressure: 140 IWG
- Maximum vacuum: 135 IWG
- Standard motor: 3.0 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

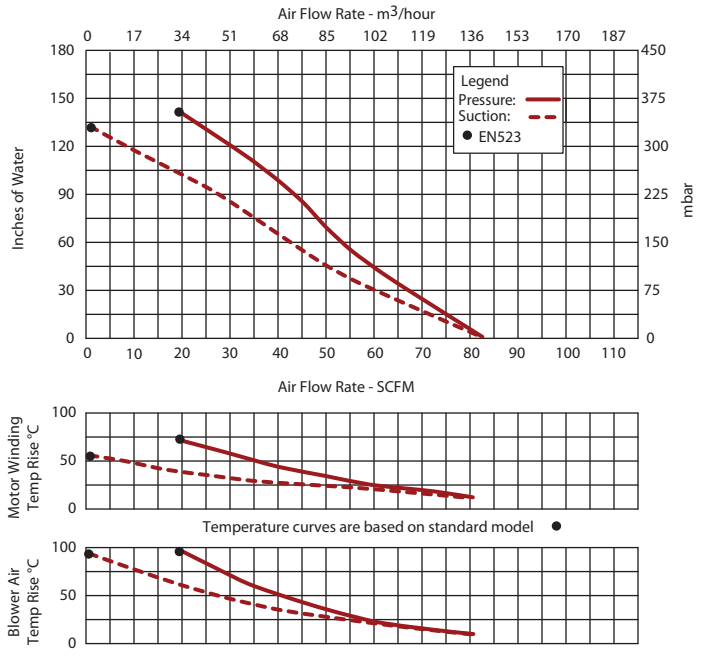
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

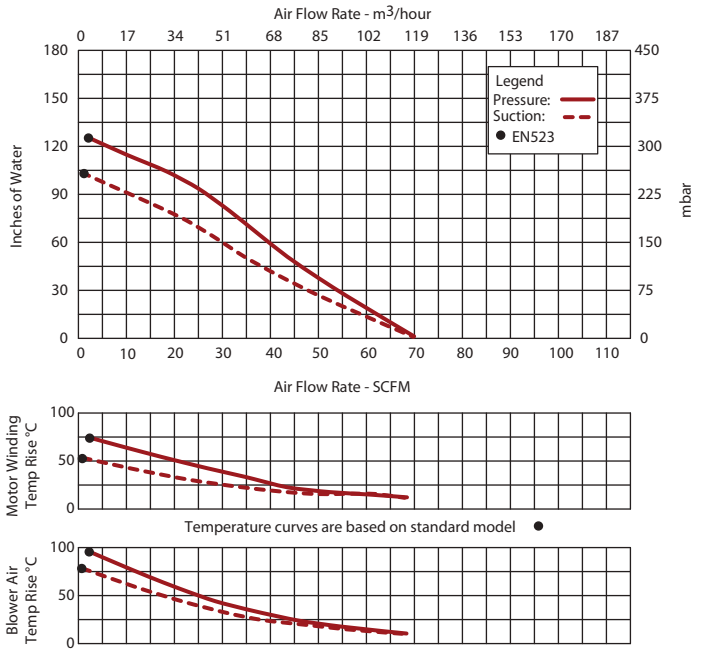
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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AMETEK®
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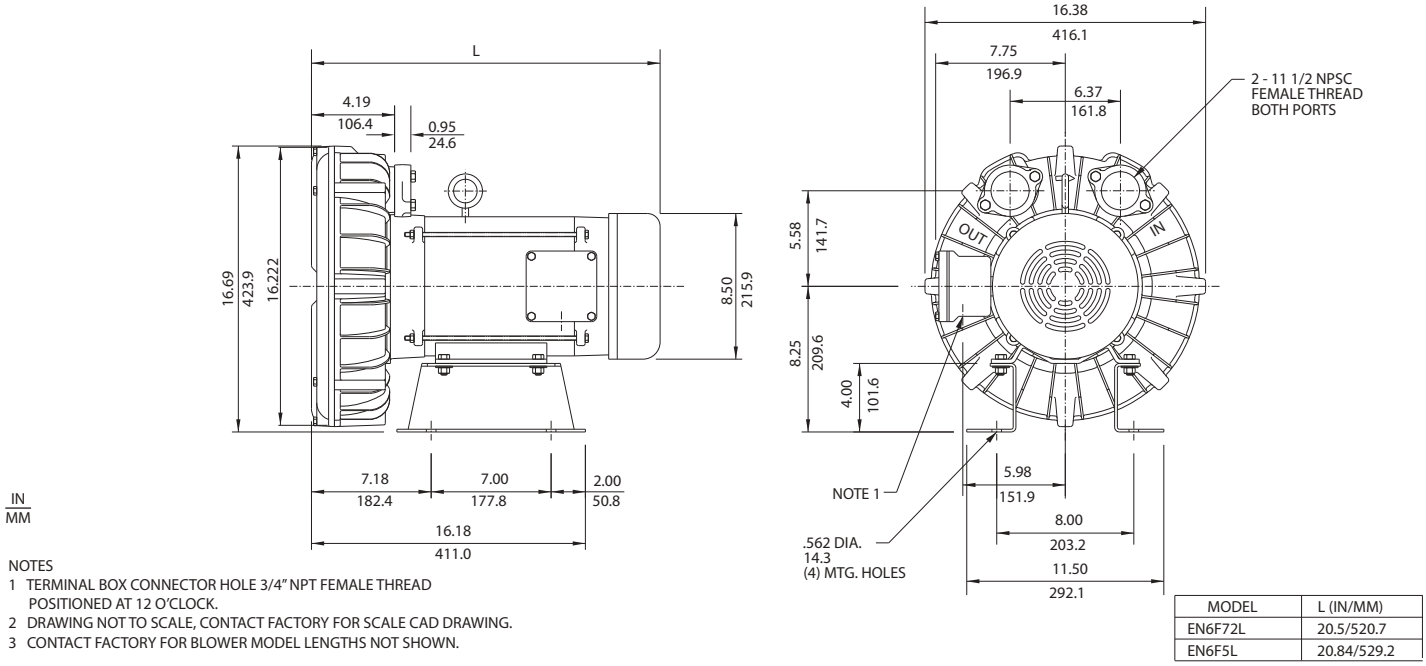
EN 6 & CP 6

ROTRON®

5.0 HP Sealed Regenerative w/Explosion-Proof Motor



NOTES
1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT FEMALE THREAD POSITIONED AT 12 O'CLOCK.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
EN6F72L	20.5/520.7
EN6F5L	20.84/529.2

		Part/Model Number				
		EN6F5L	EN6F72L	EN6F86L	CP6FW5LR	CP6FW72LR
Specification	Units	038361	038180	038438	TBD	038978
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	5.0	5.0	5.0	5.0	5.0
Phase - Frequency Voltage	-	Single-60 hz	Three-60 hz	Three-60 hz	Single-60 hz	Three-60 hz
Motor Nameplate Amps	AC	230	230/460	575	230	230/460
Max. Blower Amps	Amps (A)	19.5	14/7	5.7	19.5	14/7
Locked Rotor Amps	Amps (A)	23	14/7	6.3	23	14/7
Service Factor	Amps (A)	175	152/76	38	175	152/76
Starter Size	-	2	1/0	0	2	1/0
Thermal Protection	-	1.0	1.0	1.0	1.0	1.0
XP Motor Class - Group	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	190	167	167	190	167
	Kg	86.2	75.7	75.7	86.2	75.7

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

ROTRON®

EN 6 & CP 6

5.0 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 210 SCFM
- Maximum pressure: 110 IWG
- Maximum vacuum: 85 IWG
- Standard motor: 5.0 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards
- Muffler included (part# 522948)

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

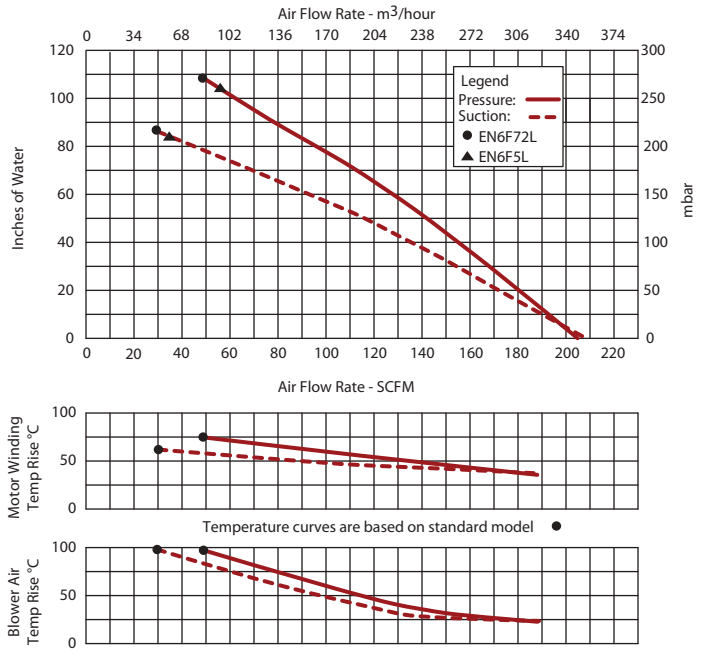
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

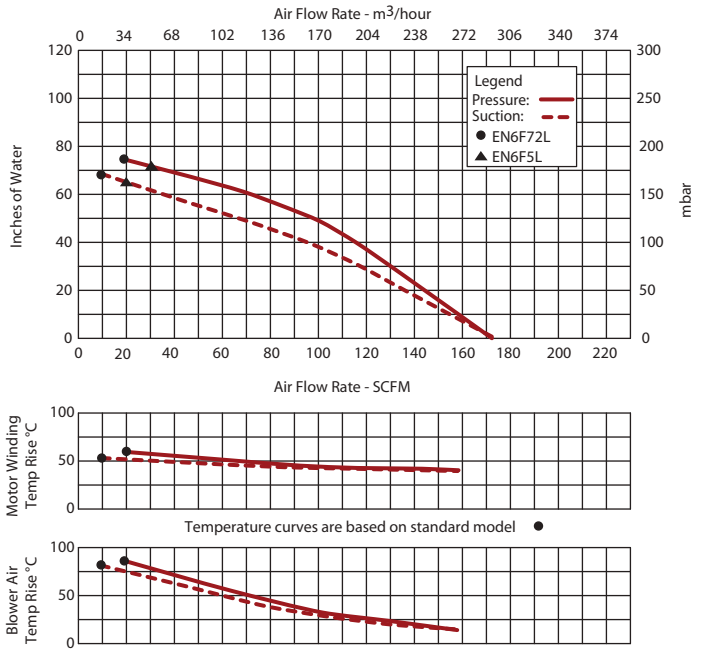
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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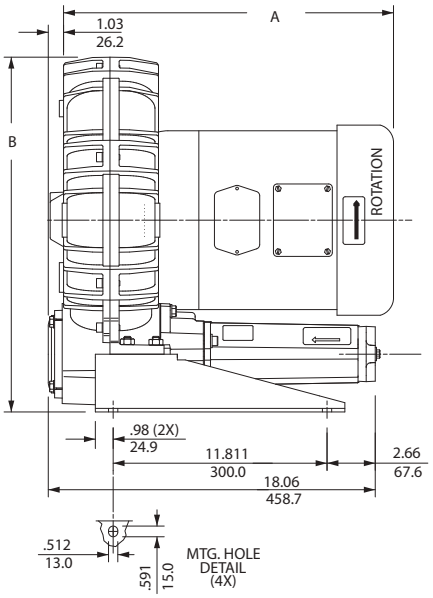
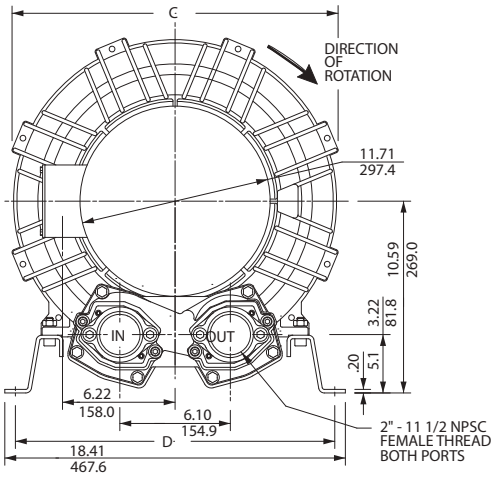
EN / CP 633

ROTRON®

7.5 HP High Pressure Sealed Regenerative w/Explosion-Proof Motor





IN
MM

NOTES
1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT FEMALE THREAD.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	A	B	C	D
EN633	18.1	18.94	16.7	17.3
EN833	18.2	19.59	18.0	17.6

		Part/Model Number	
		EN633BA72LM	CP633FY72LR
Specification	Units	081698	081697
Motor Enclosure - Shaft Mtl.	-	XP-CS	CHEM XP-SS
Horsepower	-	7.5	7.5
Voltage	AC	208-230/460	208-230/460
Phase - Frequency	-	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	B	B
NEMA Rated Motor Amps	Amps (A)	20-18/9.3	20-18/9.3
Service Factor	-	1.0	1.0
Max. Blower Amps	Amps (A)	17/8.5	17/8.5
Locked Rotor Amps	Amps (A)	177/88.7	177/88.7
Starter Size	-	1/1	1/1
Shipping Weight	Lbs	288	288
	Kg	130.6	130.6

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

Environmental / Chemical Processing Blowers

ROTRON®

EN / CP 633

7.5 HP High Pressure Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 120/180 SCFM
- Maximum pressure: 200/195 IWG
- Maximum vacuum: 155/155 IWG
- Standard motor: 7.5 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

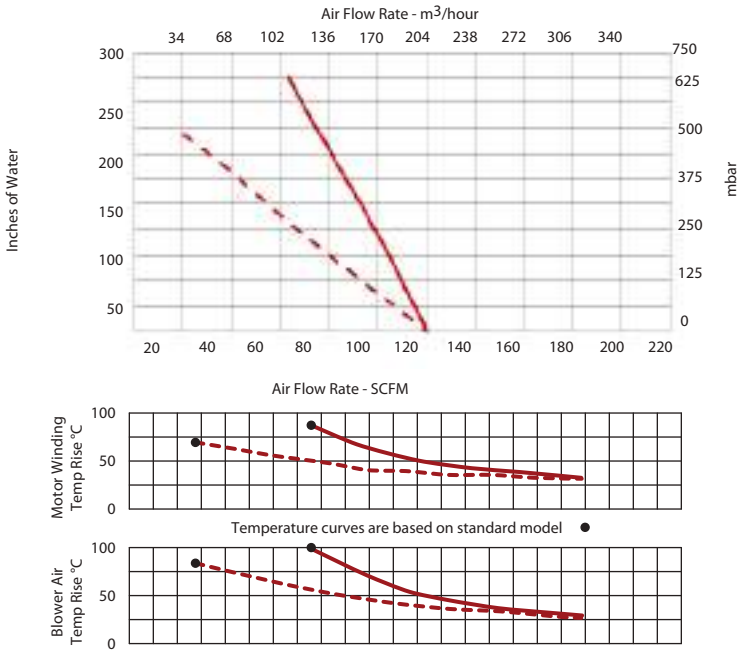
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

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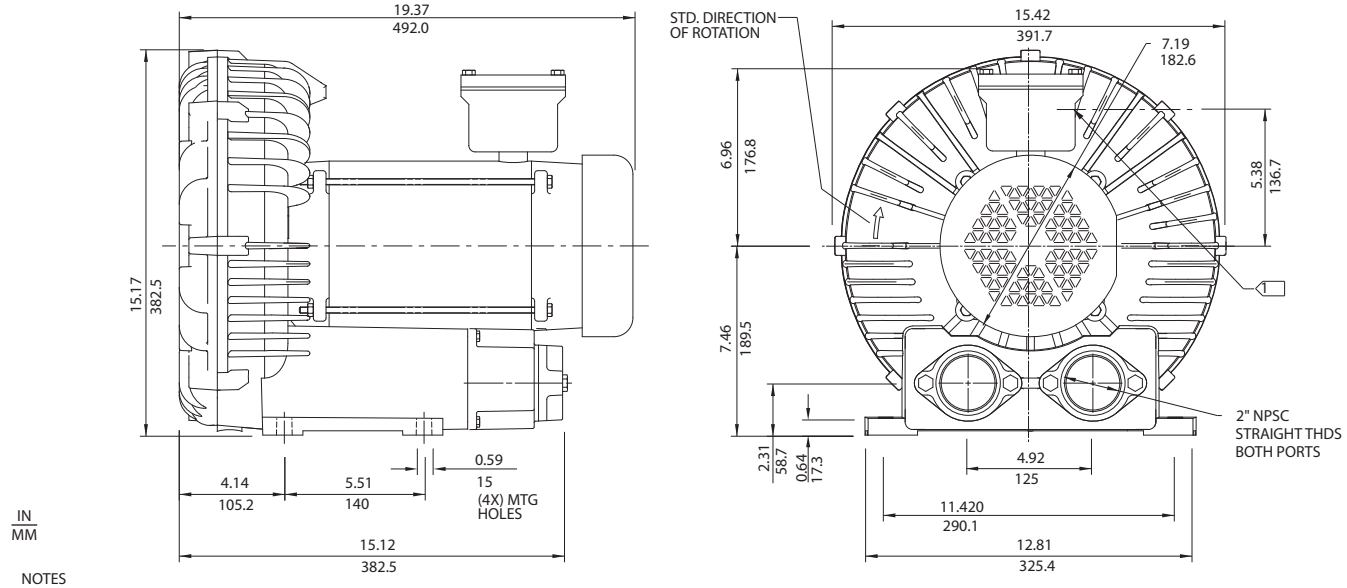
EN 656 & CP 656

ROTRON®

3.0 HP Sealed Regenerative w/Explosion-Proof Motor



NOTES
1. TERMINAL BOX CONNECTOR HOLE 3/4" NPT.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number			
		EN656M5XL	EN656M72XL	EN656M86XL	CP656FU72XLR
Specification	Units	080060	080059	080058	080142
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS
Horsepower	-	3	3	3	3
Phase - Frequency	-	Single-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Voltage	AC	208-230	208-230/460	575	208-230/460
Motor Nameplate Amps	Amps (A)	15.5-14.5	7.4/3.7	3.0	7.4/3.7
Max. Blower Amps	Amps (A)	17	10/5	4.1	10/5
Locked Rotor Amps	Amps (A)	95-86	54/27	21.6	54/27
Service Factor	-	1	0/0	0	0/0
Starter Size	-	1.0	1.0	1.0	1.0
Thermal Protection	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
XP Motor Class - Group	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	142	117	117	117
	Kg	64.4	53.1	53.1	53.1

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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Environmental / Chemical Processing Blowers

EN 656 & CP 656

ROTRON®

3.0 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 212 SCFM
- Maximum pressure: 75 IWG
- Maximum vacuum: 73 IWG
- Standard motor: 3.0 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

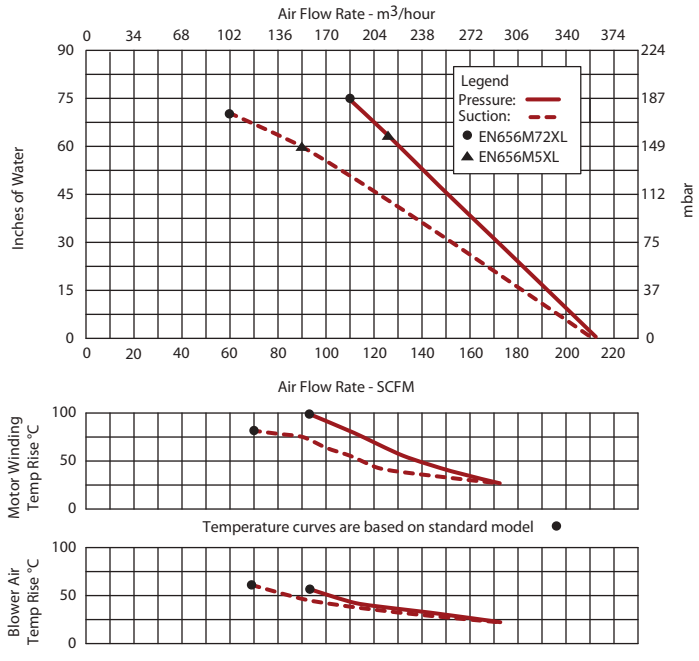
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

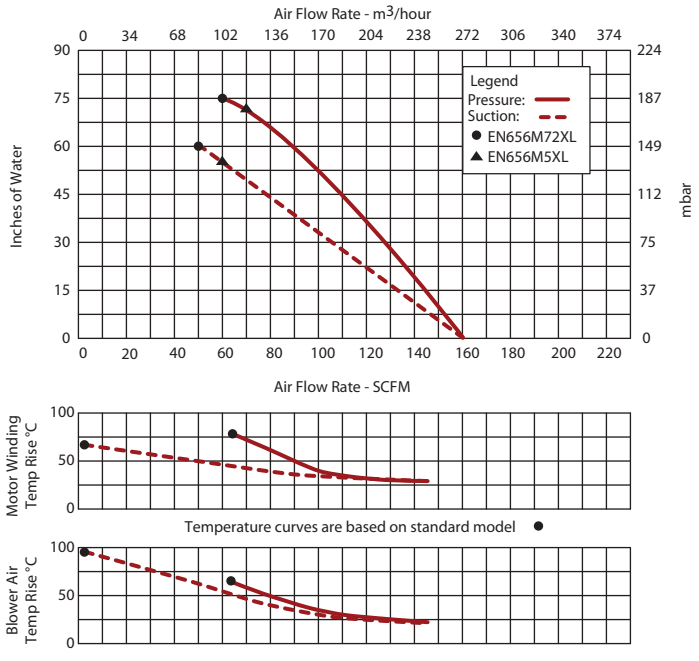
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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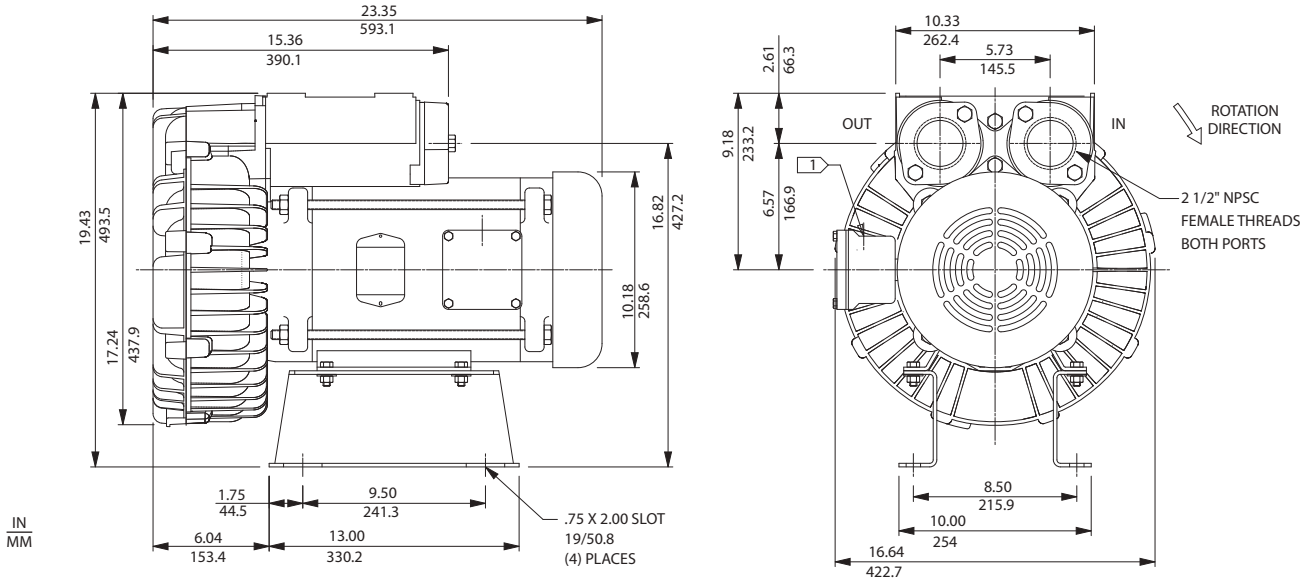
EN 757 Single-Phase and CP Options

ROTRON®

Sealed Regenerative Blower w/Explosion-proof Motor



NOTES
1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT FEMALE THREAD.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number	
		EN757FL5MWL	CP757FX5MWLR
Specification	Units	081333	080616
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	CHEM XP-SS
Horsepower	-	5.5	5.5
Phase - Frequency	-	Single-60 hz	Single-60 hz
Voltage	AC	230	230
Motor Nameplate Amps	Amps (A)	21.7	21.7
Max. Blower Amps	Amps (A)	29.9	29.9
Locked Rotor Amps	Amps (A)	155	155
Service Factor	-	1	1
Starter Size	-	1.0	1.0
Thermal Protection	-	Class B - Pilot Duty	Class B - Pilot Duty
XP Motor Class - Group	-	I-D	I-D
Shipping Weight	Lbs	158	158
	Kg	71.7	71.7

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

EN 757 Single-Phase and CP Options

ROTRON®

Sealed Regenerative Blower w/Explosion-proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 310 SCFM
- Maximum pressure: 80 IWG
- Maximum vacuum: 75 IWG
- Standard motor: 5.0 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

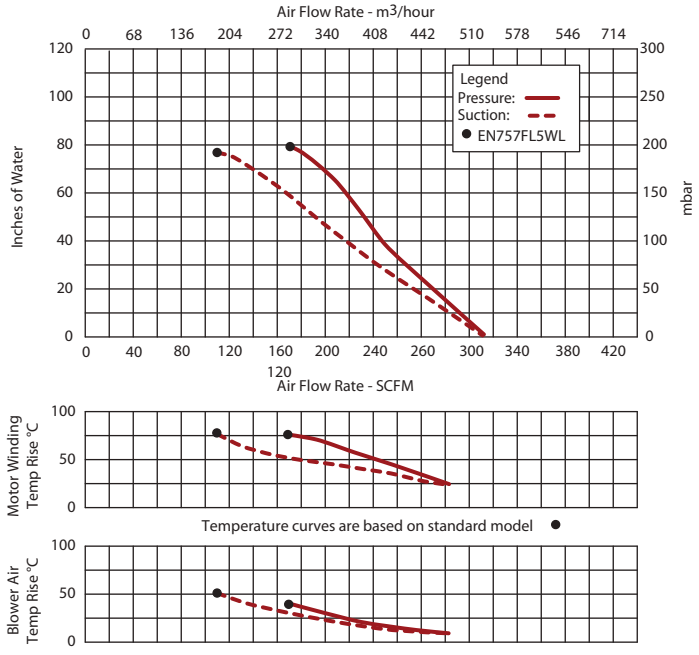
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

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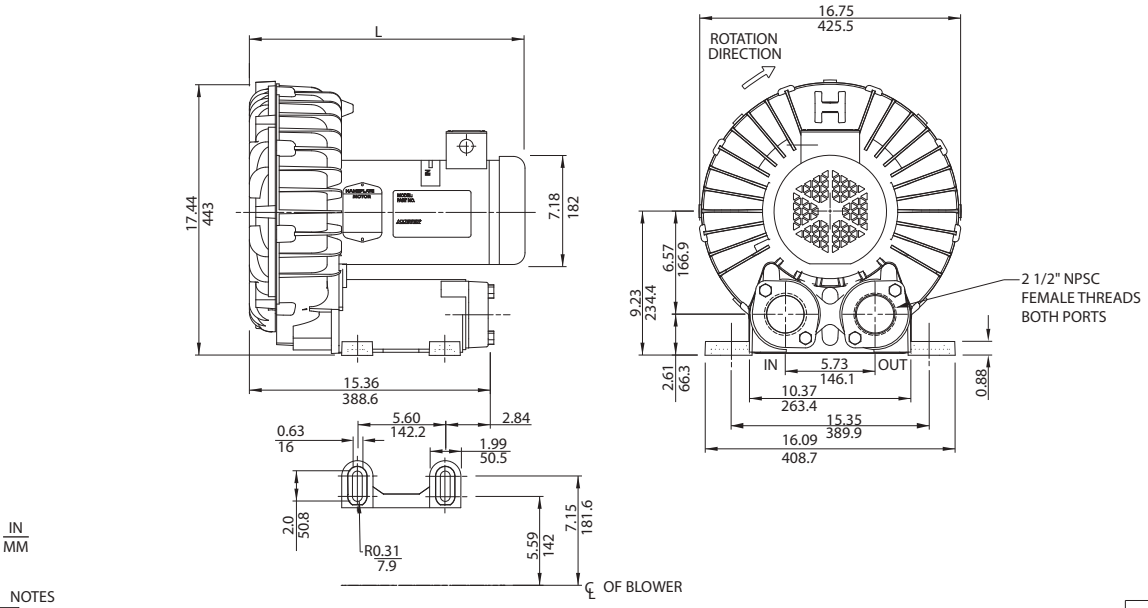
EN 757 & CP 757

ROTRON®

3.0 / 5.0 HP Sealed Regenerative w/Explosion-Proof Motor



NOTES
1. TERMINAL BOX CONNECTOR HOLE .75 NPT.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
EN757M72XL	19.72/500.9
EN757F72XL	21.00/533.4

		Part/Model Number				
		EN757M72XL	EN757M86XL	EN757F72XL	CP757FW72XLR	CP757FU72XLR
Specification	Units	081176	081177	081174	081180	081181
Motor Enclosure - Shaft	-	XP-CS	XP-CS	XP-CS	CHEM XP-SS	CHEM XP-SS
Mtl. Horsepower	-	3.0	3.0	5.0	5.0	3.0
Voltage	AC	208-230/460	575	208-230/460	208-230/460	208-230/460
Phase - Frequency	-	Three-60 Hz	Three-60 Hz	Three - 60 Hz	Three-60 Hz	Three - 60 Hz
Insulation Class	-	B	B	B	B	B
NEMA Rated Motor Amps	Amps (A)	7.2/3.6	3.0	14/7	14/7	7.2/3.6
Service Factor	-	1.0	1.0	1.0	1.0	1.0
Maximum Blower Amps	Amps (A)	10/5	4.0	15/7.5	15/7.5	10/5
Locked Rotor Amps	Amps (A)	54/47	22	152/76	152/76	54/27
Starter Size	-	0/0	0	1/1	1/1	0/0
Shipping Weight	Lbs	158	158	158	158	158
	Kg	71.7	71.7	71.7	71.7	71.7

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

EN 757 & CP 757

ROTRON®

3.0 / 5.0 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 310 SCFM
- Maximum pressure: 80 IWG
- Maximum vacuum: 75 IWG
- Standard motor: 5.0 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

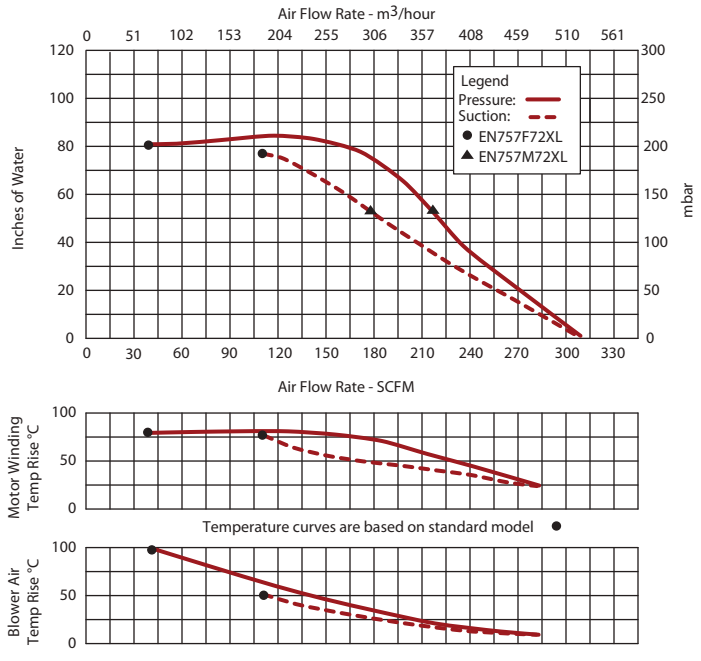
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

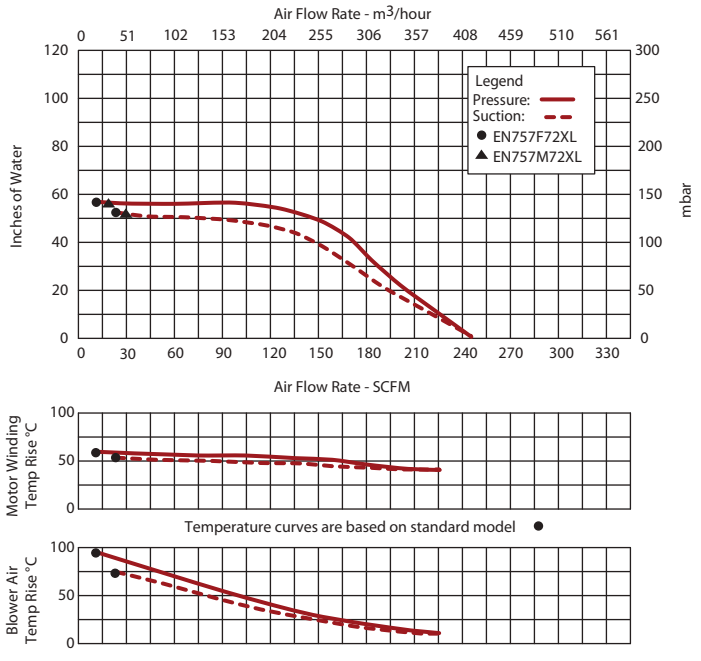
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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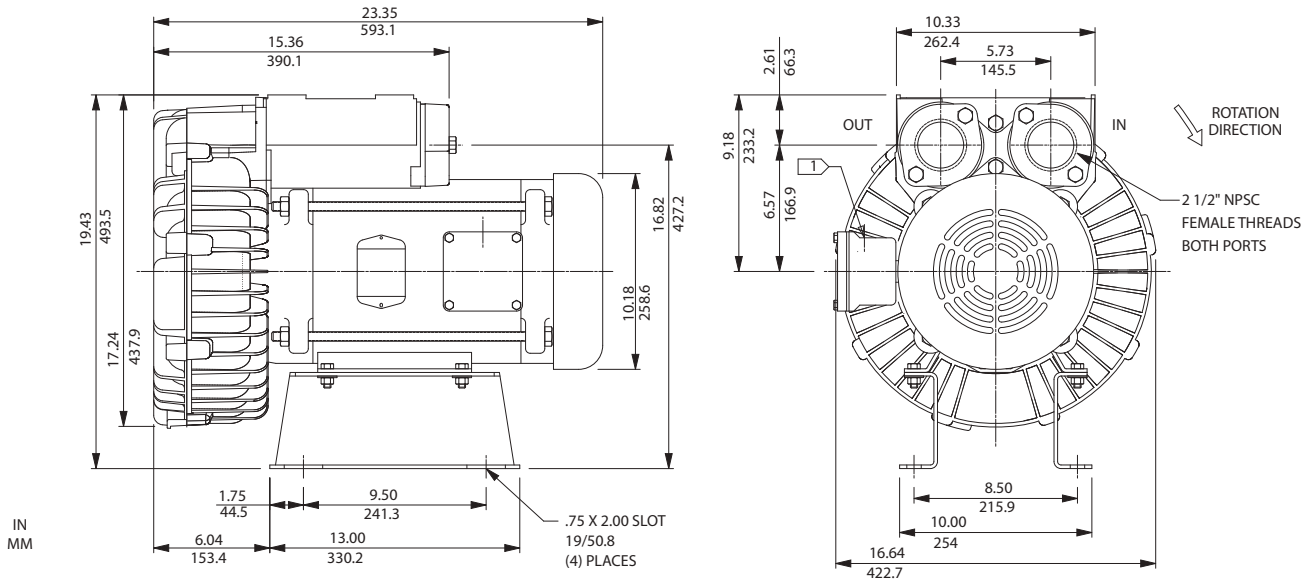
ROTRON®

Sealed Regenerative Blower w/Explosion-proof Motor



NOTES
1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT FEMALE THREAD.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number			
		EN757FL5MWL	EN808FL5MWL	CP757FX5MWLR	CP808FX5MWLR
Specification	Units	081333	081231	080616	
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	5.5	5.5	5.5	5.5
Phase - Frequency	-	Single-60 hz	Single-60 hz	Single-60 hz	Single-60 hz
Voltage	AC	230	230	230	230
Motor Nameplate Amps	Amps (A)	21.7	21.7	21.7	21.7
Max. Blower Amps	Amps (A)	29.9	29.9	29.9	29.9
Locked Rotor Amps	Amps (A)	155	155	155	155
Service Factor	-	1	1	1	1
Starter Size	-	1.0	1.0	1.0	1.0
Thermal Protection	-	Class B - Pilot	Class B - Pilot	Class B - Pilot	Class B - Pilot
XP Motor Class - Group	-	Duty I-D	Duty I-D	Duty I-D	Duty I-D
Shipping Weight	Lbs	158	338	158	338
	Kg	71.7	153.3	71.7	153.3

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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Environmental / Chemical Processing Blowers

ROTRON®

EN 808 Single-Phase and CP Options

Sealed Regenerative Blower w/Explosion-proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 310 SCFM
- Maximum pressure: 80 IWG
- Maximum vacuum: 75 IWG
- Standard motor: 5.0 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

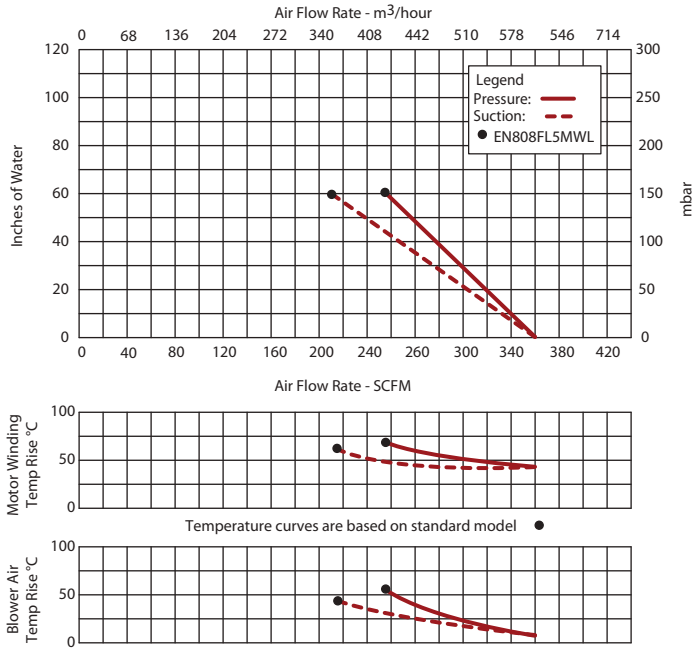
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



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AMETEK®
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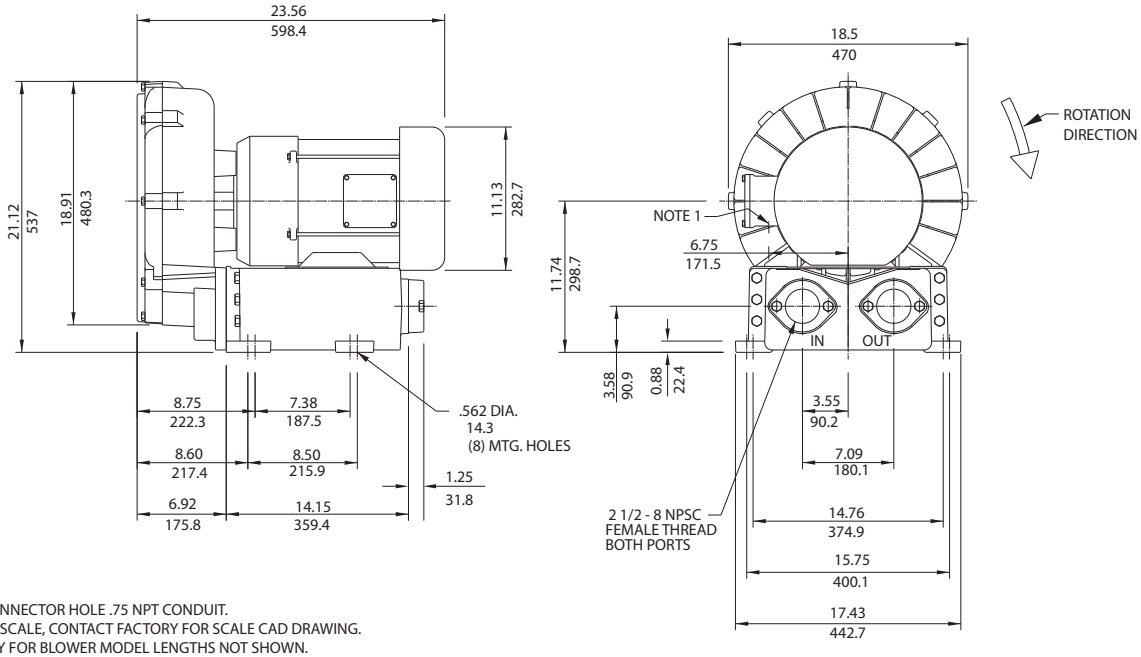
EN 808 & CP 808 Three-Phase

ROTRON®

Sealed Regenerative Blower w/Explosion-proof Motor



NOTES
1. TERMINAL BOX CONNECTOR HOLE .75 NPT CONDUIT.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number		
		EN808BA72MXL	EN808BA86MXL	CP808FY72MXLR
Specification	Units	081229	081230	081234
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS
Horsepower	-	7.5	7.5	7.5
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz
Voltage	AC	230/460	575	230/460
Motor Nameplate Amps	Amps (A)	18.6/9.3	7.4	18.6/9.3
Max. Blower Amps	Amps (A)	22.0/11.0	8.1	22.0/11.0
Locked Rotor Amps	Amps (A)	126/63	56	126/63
Service Factor	-	1/1	1	1/1
Starter Size	-	1.0	1.0	1.0
Thermal Protection	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
XP Motor Class - Group	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	287	287	287
	Kg	130.2	130.2	130.2

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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PRECISION MOTION CONTROL
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Environmental / Chemical Processing Blowers

ROTRON®

EN 808 & CP 808 Three-Phase

Sealed Regenerative Blower w/Explosion-proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 360 SCFM
- Maximum pressure: 85 IWG
- Maximum vacuum: 90 IWG
- Standard motor: 7.5 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

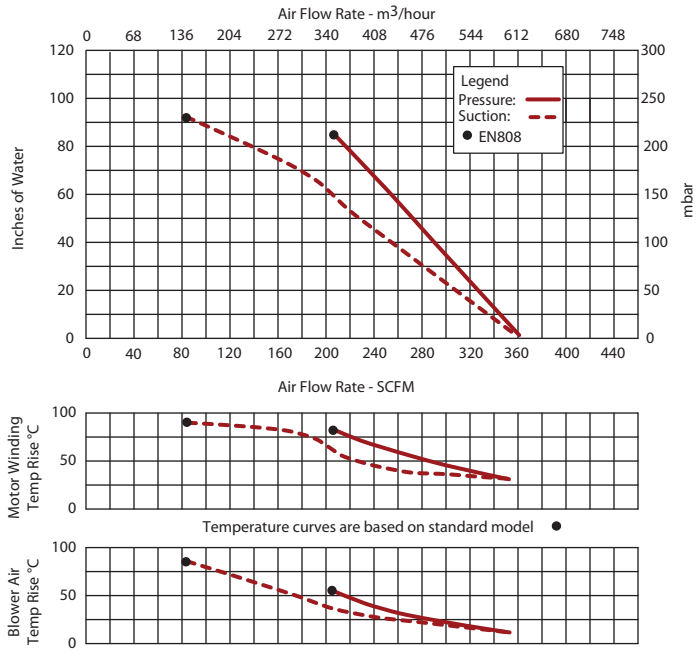
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

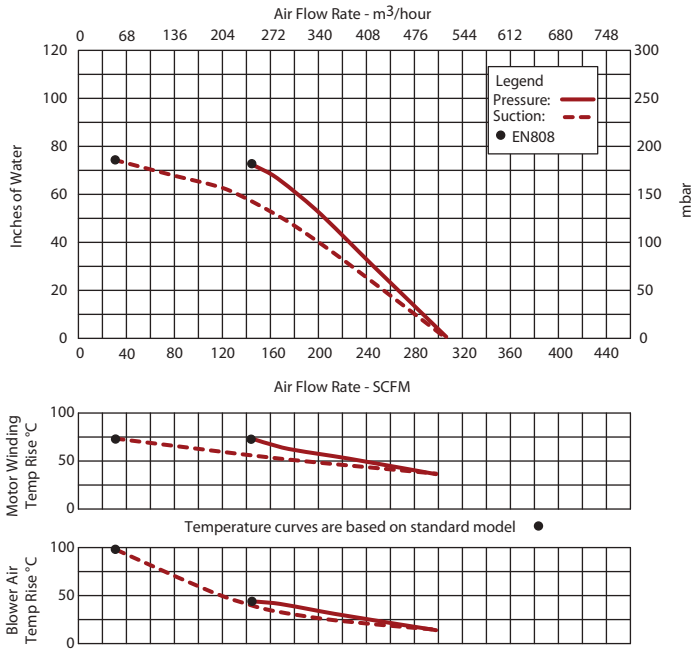
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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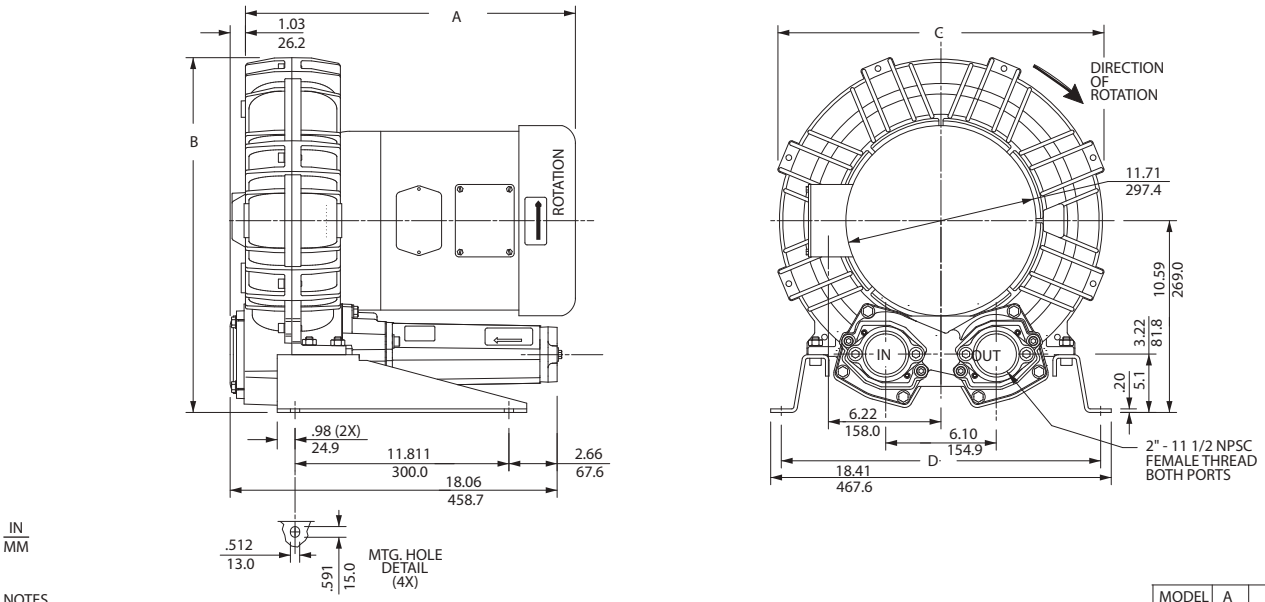
EN / CP 833

ROTRON®

7.5 HP High Pressure Sealed Regenerative w/Explosion-Proof Motor



NOTES
1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT FEMALE THREAD.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	A	B	C	D
EN633	18.1	18.94	16.7	17.3
EN833	18.2	19.59	18.0	17.6

		Part/Model Number	
		EN833BA72LM	CP833FY72LRM
Specification	Units	081712	081708
Motor Enclosure - Shaft Mtl.	-	XP-CS	CHEM XP-SS
Horsepower	-	7.5	7.5
Voltage	AC	208-230/460	208-230/460
Phase - Frequency	-	Three - 60 Hz	Three - 60 Hz
Insulation Class	-	B	B
NEMA Rated Motor Amps	Amps (A)	20-18/9.3	20-18/9.3
Service Factor	-	1.0	1.0
Max. Blower Amps	Amps (A)	19/9.5	19/9.5
Locked Rotor Amps	Amps (A)	177/88.7	177/88.7
Starter Size	-	1/1	1/1
Shipping Weight	Lbs	297	297
	Kg	134.7	134.7

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

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XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

ROTRON®

EN / CP 833

7.5 HP High Pressure Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 120/180 SCFM
- Maximum pressure: 200/195 IWG
- Maximum vacuum: 155/155 IWG
- Standard motor: 7.5 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

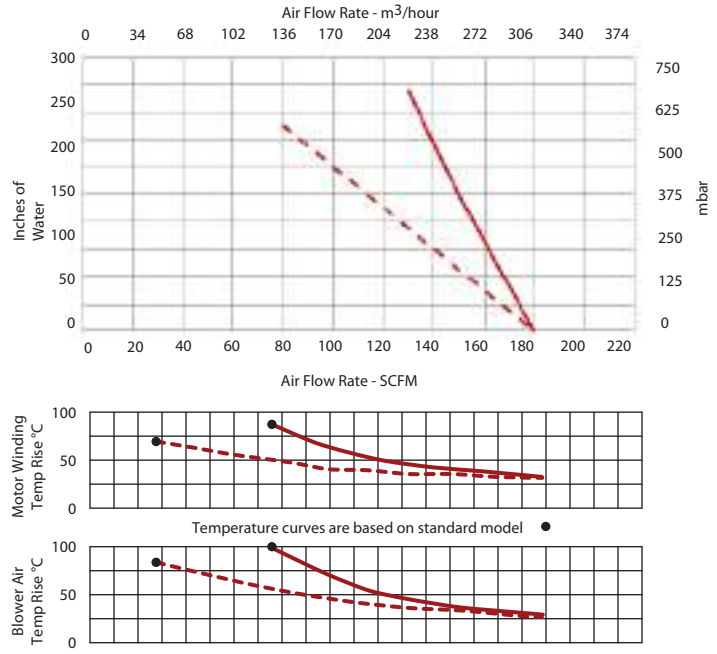
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



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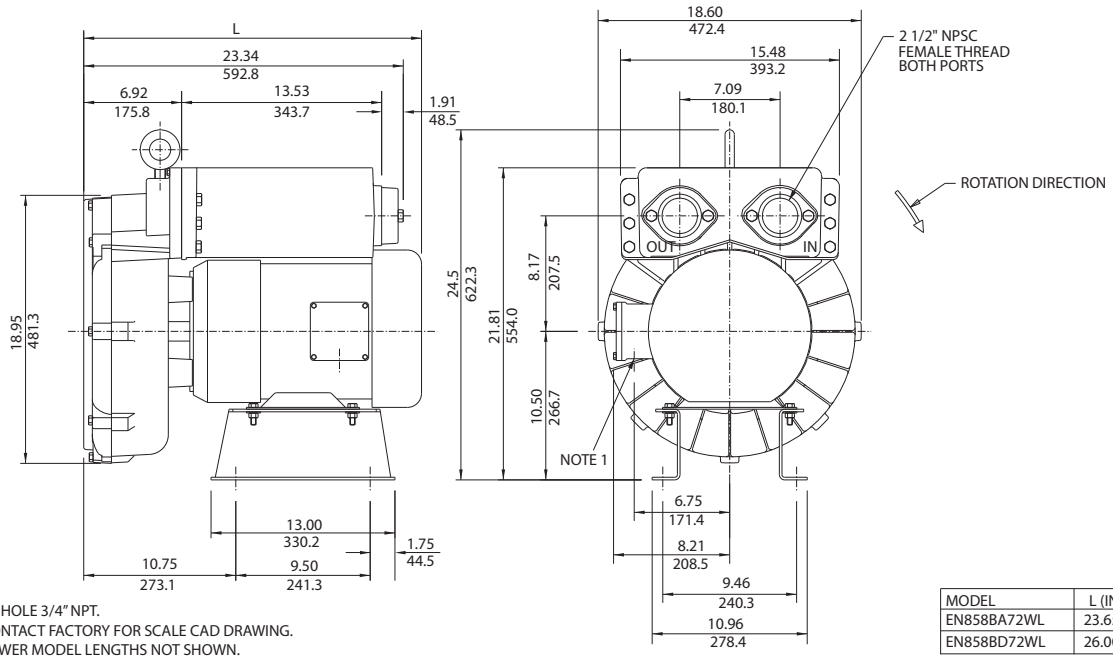
AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

EN 858 & CP 858

ROTRON®

7.5 / 10.0 HP Sealed Regenerative w/Explosion-Proof Motor



IN
MM

NOTES
1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L (IN/MM)
EN858BA72WL	23.65/600.7
EN858BD72WL	26.00/660.4

		Part/Model Number			
		EN858BD72WL	EN858BD86WL	EN858BA72WL	CP858FZ72WLR
Specification	Units	038744	038745	080070	038980
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS
Horsepower	-	10.0	10.0	7.5	10.0
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Voltage	AC	230/460	575	230/460	230/460
Motor Nameplate Amps	Amps (A)	24/12	9.6	18.6/9.3	24/12
Max. Blower Amps	Amps (A)	30/15	11.6	26/13	30/15
Locked Rotor Amps	Amps (A)	234/117	93	126/63	234/117
Service Factor	-	2/1	1	1/1	2/1
Starter Size	-	1.0	1.0	1.0	1.0
Thermal Protection	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
XP Motor Class - Group	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	338	338	326	338
	Kg	153.3	153.3	147.9	153.3

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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Environmental / Chemical Processing Blowers

EN 858 & CP 858

ROTRON®

7.5 / 10.0 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 380 SCFM
- Maximum pressure: 120 IWG
- Maximum vacuum: 95 IWG
- Standard motor: 10 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

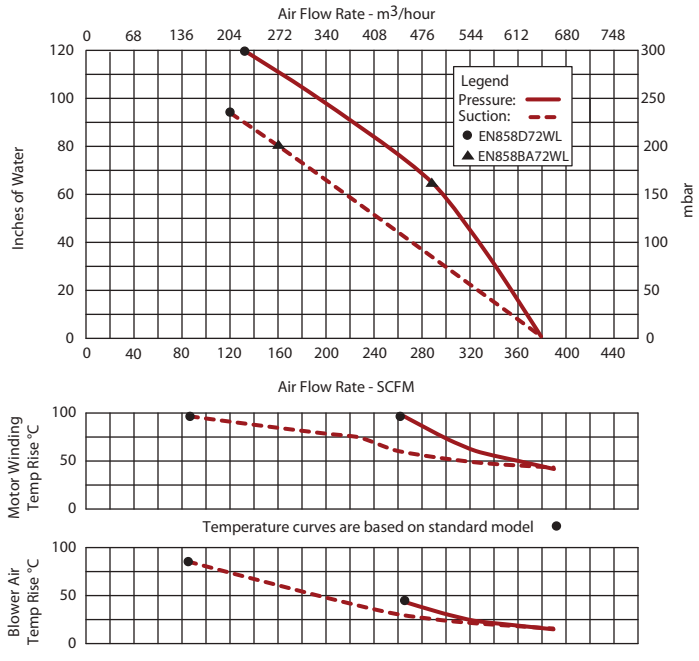
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

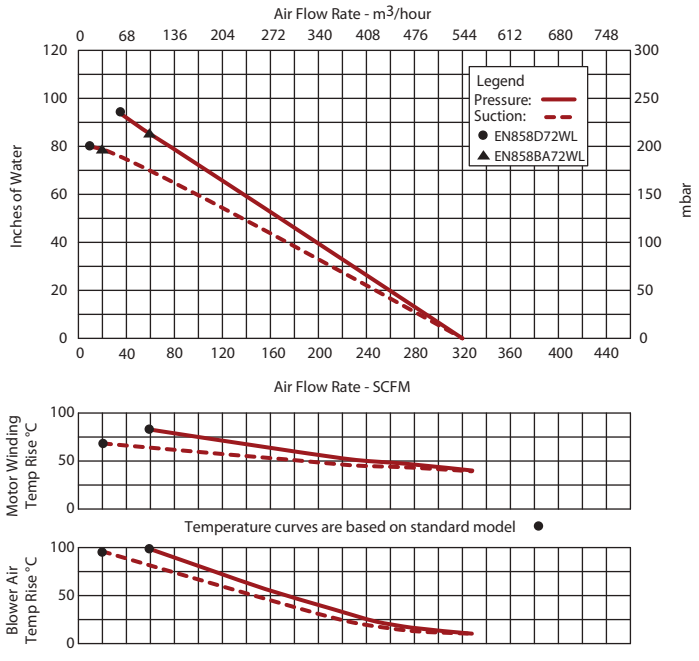
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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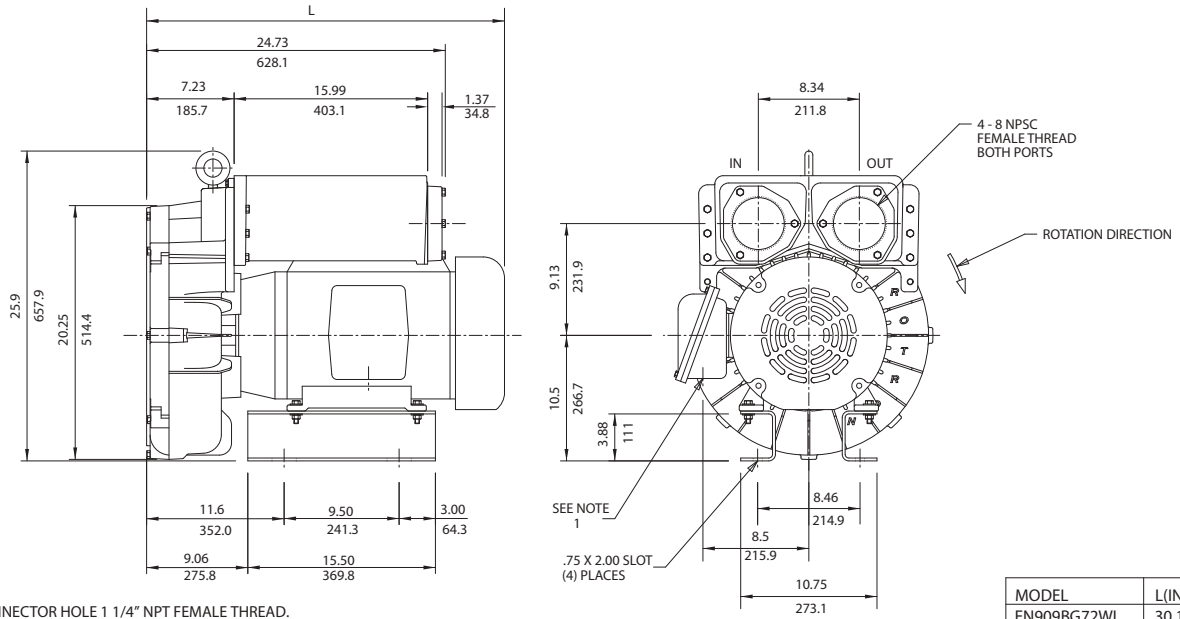
AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

EN 909 & CP 909

ROTRON®

10.0 / 15.0 HP Sealed Regenerative w/Explosion-Proof Motor



NOTES
1 TERMINAL BOX CONNECTOR HOLE 1 1/4" NPT FEMALE THREAD.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	L(IN/MM)
EN909BG72WL	30.17/766.3
EN909DB72WL	23.66/601.0

		Part/Model Number			
		EN909BG72WL	EN909BG86WL	EN909BD72WL	CP909GA72WLR
Specification	Units	081741	081736	081743	038982
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS
Horsepower	-	15	15	10	15
Phase - Frequency	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Voltage	AC	230/460	575	230/460	230/460
Motor Nameplate Amps	Amps (A)	36/18	14.4	24/12	36/18
Max. Blower Amps	Amps (A)	48/24	18	32/16	48/24
Locked Rotor Amps	Amps (A)	240/120	100	234/117	240/120
Service Factor	-	2/2	2	2/1	2/2
Starter Size	-	1.0	1.0	1.0	1.0
Thermal Protection	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
XP Motor Class - Group	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	524	524	504	524
	Kg	237.7	237.7	228.6	237.7

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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Environmental / Chemical Processing Blowers

EN 909 & CP 909

ROTRON®

10.0 / 15.0 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 615 SCFM
- Maximum pressure: 140 IWG
- Maximum vacuum: 112 IWG
- Standard motor: 15 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

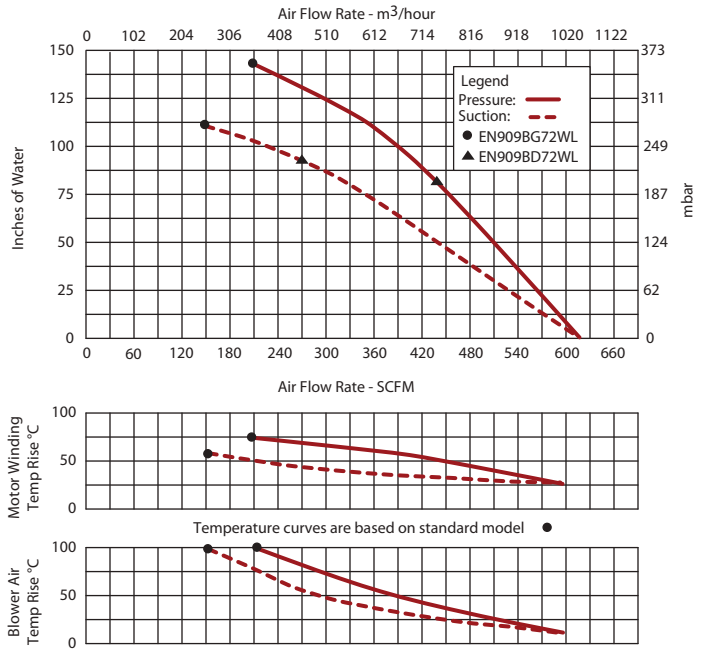
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

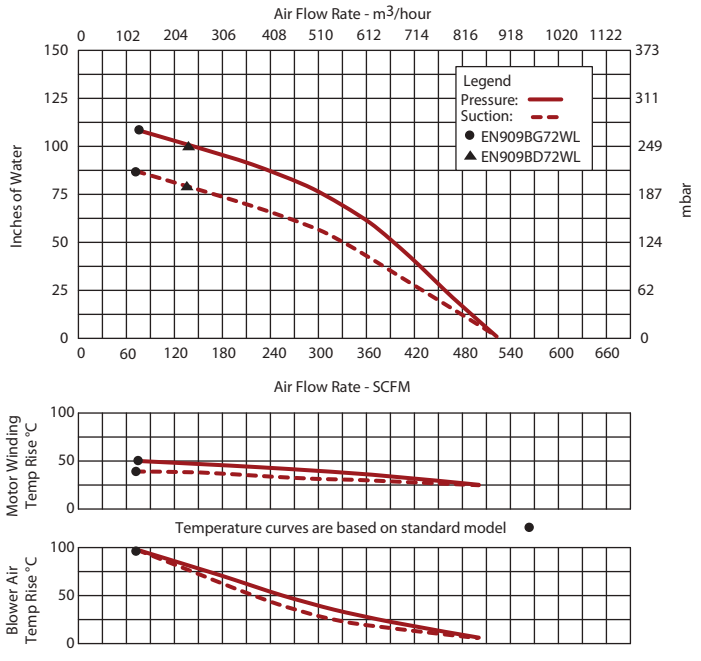
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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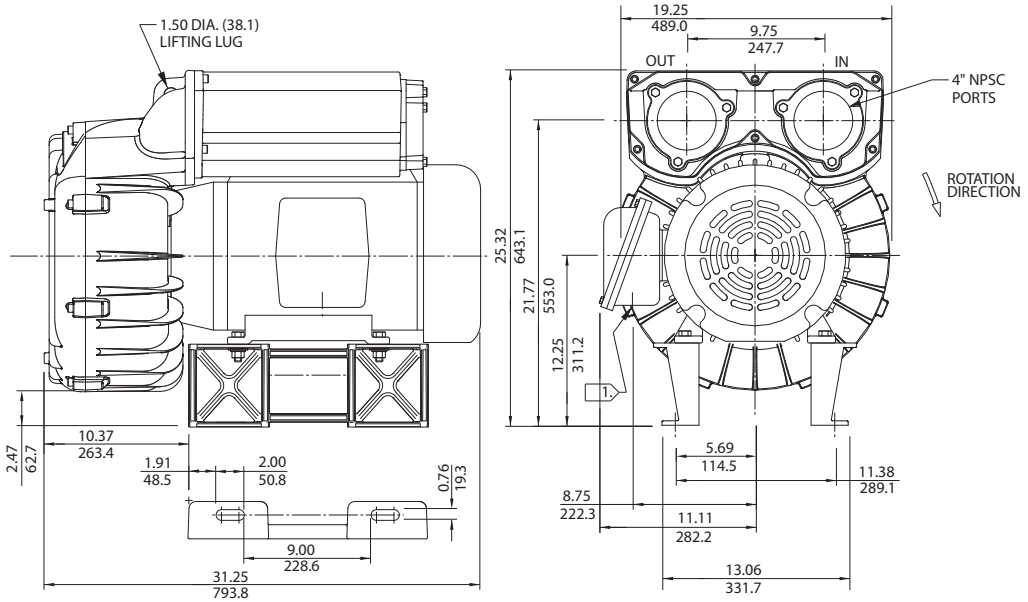
EN 979 & CP 979

ROTRON®

20.0 HP Sealed Regenerative w/Explosion-Proof Motor



IN
MM

NOTES
1. TERMINAL BOX CONNECTOR HOLE 1 1/4" NPT FEMALE THREAD.
2. DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3. CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number		
		EN979BK72WL	EN979BK86WL	CP979GB72WLR
Specification	Units	080724	082277	081778
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS
Horsepower	-	20	20	20
Phase - Frequency Voltage	-	Three-60 hz	Three-60 hz	Three-60 hz
Motor Nameplate Amps	AC	230/460	575	230/460
Max. Blower Amps	Amps (A)	46/23	18.4	46/23
Locked Rotor Amps	Amps (A)	60/30	24	60/30
Service Factor	Amps (A)	334/167	118	334/167
Starter Size	-	3/2	2	3/2
Thermal Protection	-	1.0	1.0	1.0
XP Motor Class - Group	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	533	533	533
	Kg	241.8	241.8	241.8

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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PRECISION MOTION CONTROL
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Environmental / Chemical Processing Blowers

EN 979 & CP 979

ROTRON®

20.0 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 1100 SCFM
- Maximum pressure: 90 IWG
- Maximum vacuum: 90 IWG
- Standard motor: 20 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

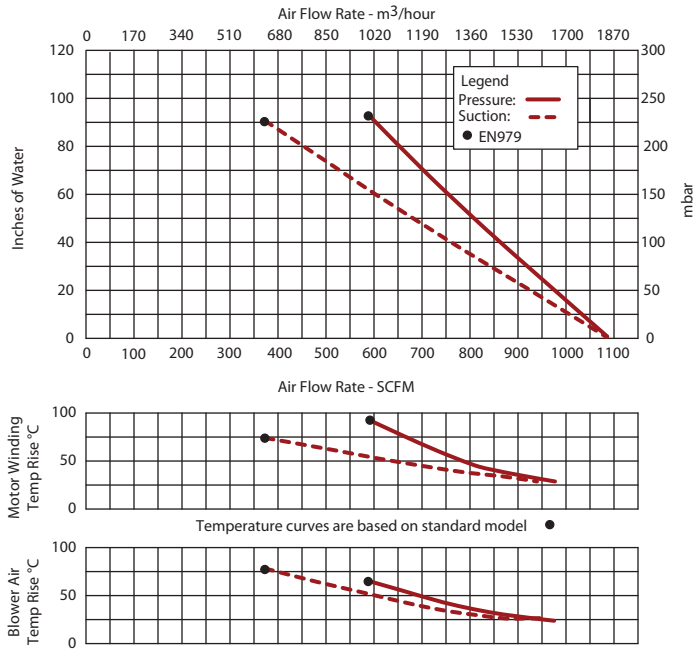
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

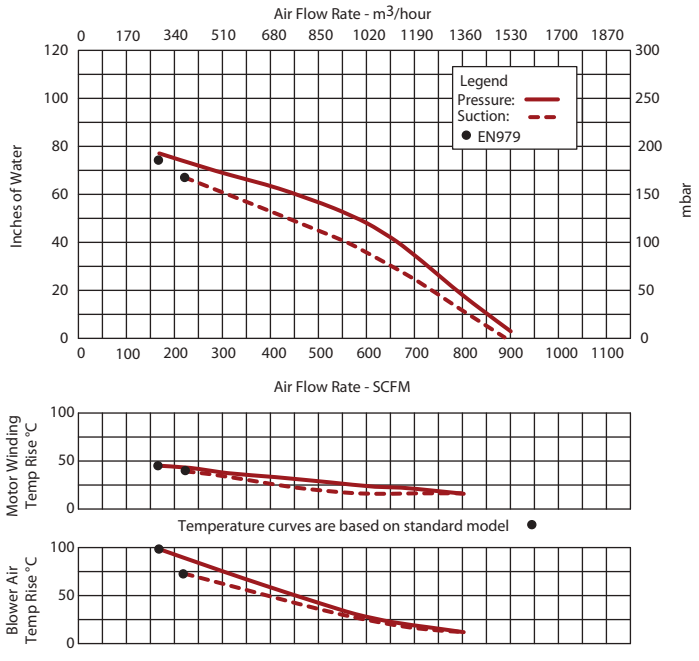
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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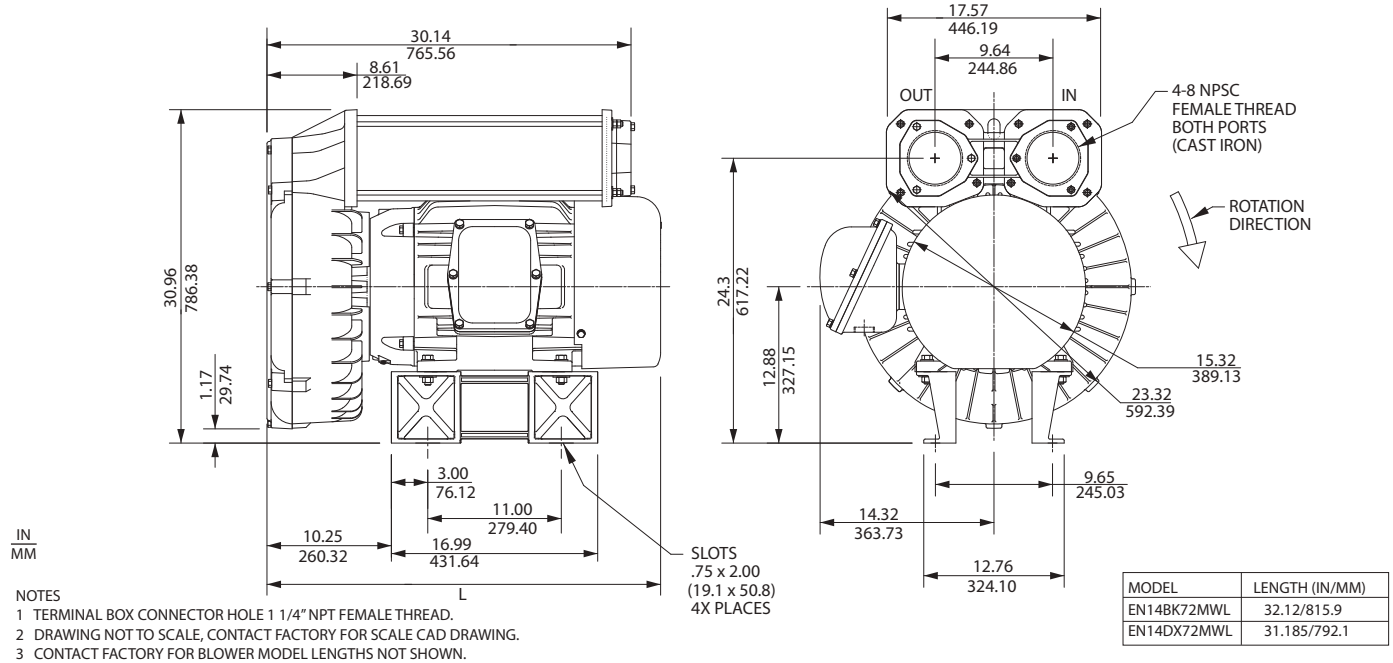
EN 14 & CP 14

20.0 / 30.0 HP Sealed Regenerative w/Explosion-Proof Motor



NOTES
1 TERMINAL BOX CONNECTOR HOLE 1 1/4" NPT FEMALE THREAD.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	LENGTH (IN/MM)
EN14BK72MWL	32.12/815.9
EN14DX72MWL	31.185/792.1

		Part/Model Number				
		EN14BK72MWL	EN14DX72MWL	EN14DX86MWL	CP14GB72MWLR	CP14GC72MWLR
Specification	Units	081485	081486	081487	TBD	081491
Motor Enclosure - Shaft Mtl.	-	Explosion-proof-CS	Explosion-proof-CS	Explosion-proof-CS	CHEM XP-SS	CHEM XP-SS
Horsepower	-	20	30	30	20	30
Phase - Frequency Voltage	-	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz	Three-60 hz
Motor Nameplate Amps	AC	230/460	200-230/460	575	230/460	200-230/460
Max. Blower Amps	Amps (A)	46/23	75-66/33	26.5	46/23	75-66/33
Locked Rotor Amps	Amps (A)	60/30	82/41	33	60/30	82/41
Service Factor	Amps (A)	294/147	448/224	226	294/147	448/224
Starter Size	-	3/2	3/3	3	3/2	3/3
Thermal Protection	-	1.0	1.0	1.0	1.0	1.0
XP Motor Class - Group	-	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty	Class B - Pilot Duty
	-	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G	I-D, II-F&G
Shipping Weight	Lbs	601	737	737	601	737
	Kg	272.6	334.3	334.3	272.6	334.3

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

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EN 14 & CP 14

ROTRON®

20.0 / 30.0 HP Sealed Regenerative w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 1050 SCFM
- Maximum pressure: 144 IWG
- Maximum vacuum: 115 IWG
- Standard motor: 30 HP, explosion-proof
- Cast aluminum blower housing, impeller , cover & manifold; cast iron flanges (threaded); teflon® lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

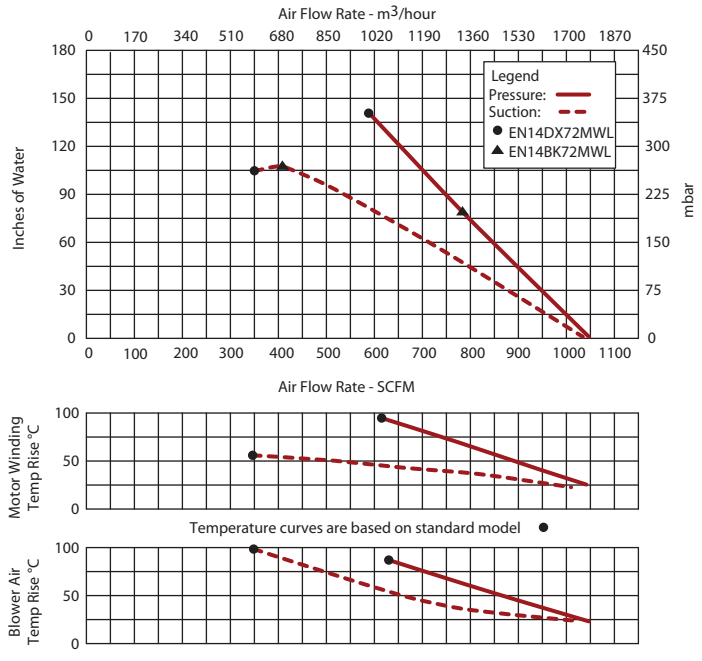
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

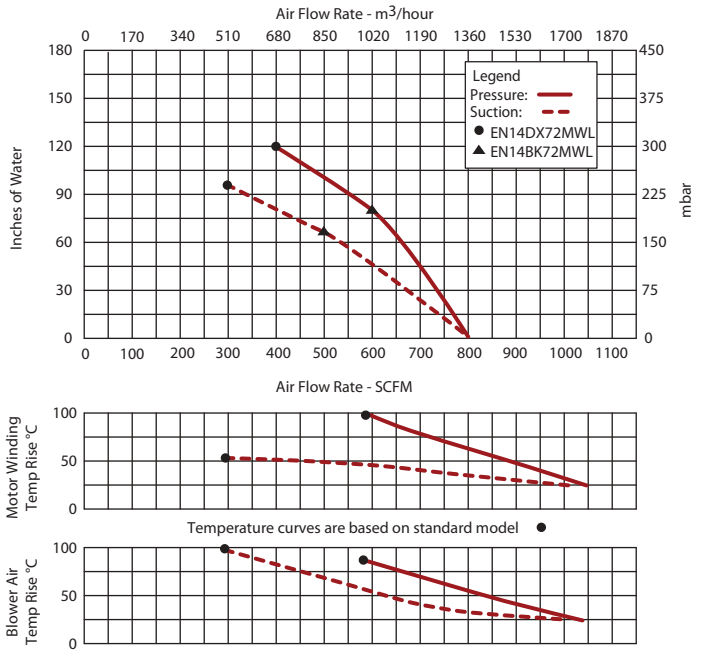
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

Remote Drive (Motor-less) Blowers

AMETEK Technical & Industrial Products' ROTRON brand has long been a world leader in regenerative blower technologies, bringing regenerative advantages to a new level, providing quiet, maintenance-free, oil-free operation.

Our industrial (_RD) Remote Drive Blowers are motorless models built with DR/EN/CP/SL blower features and include:

- Rugged cast-iron arbor and bearing suspension system
- Oversized shaft to withstand heavy-duty side loads
- Precision balanced impellers for low vibration operation
- High speed versions built with heat treated impellers available.

ROTRON®

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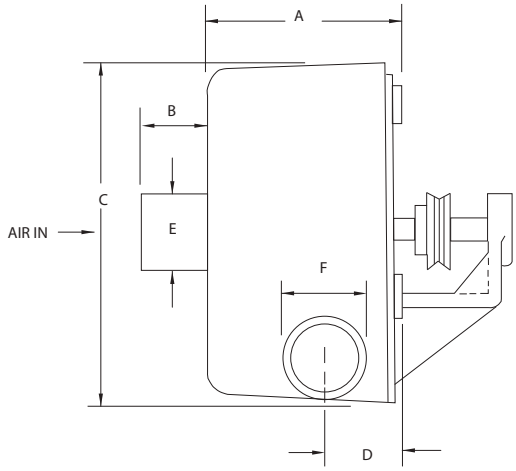
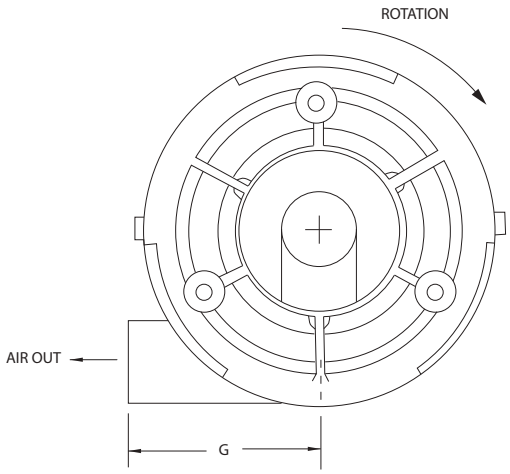
Remote Drive (Motorless) Blowers

MF573RD

ROTRON®



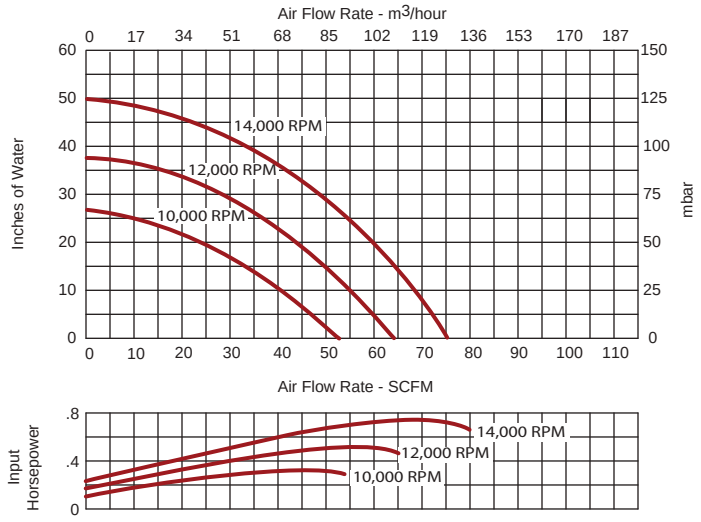


NOTES
1 CONTACT FACTORY FOR PULLEY OPTIONS.
2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Specification IN/MM						
Model Number	Part Number	A	B	C	D	E	F	G
MF573RD	026940	3.63	1.25	6.58	1.75	1.75	1.75	3.56
		92.2	31.8	167.1	44.5	44.5	44.5	90.4

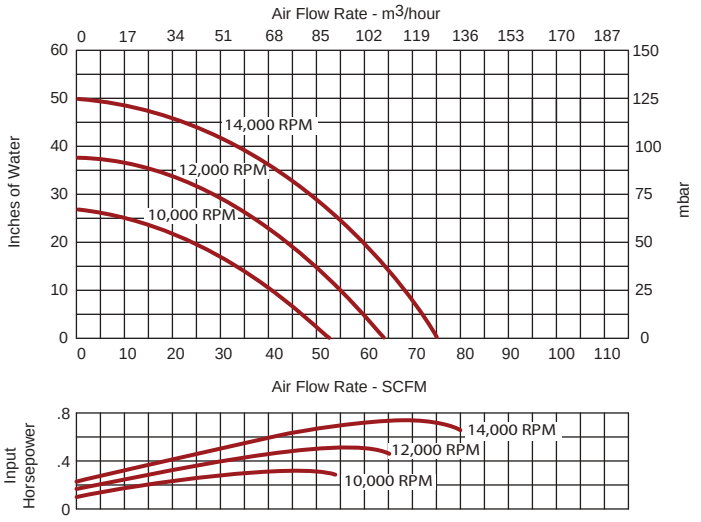
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph.

Suction



Do not exceed maximum speed shown on each graph.

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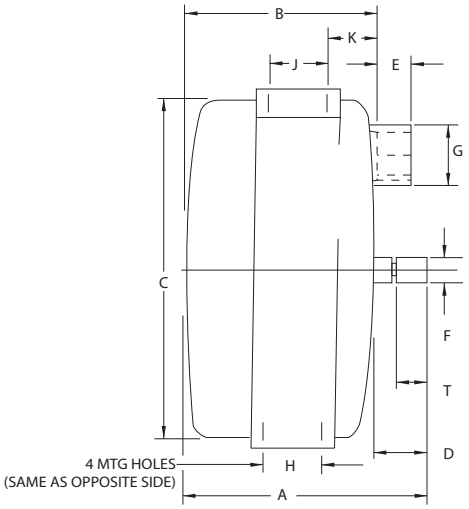
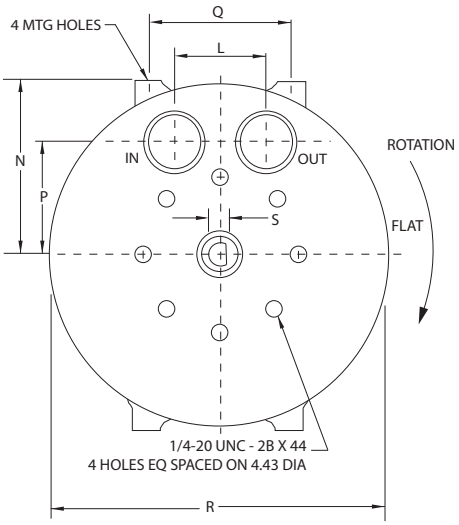
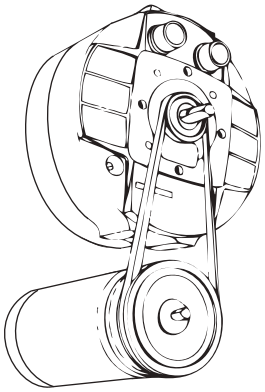




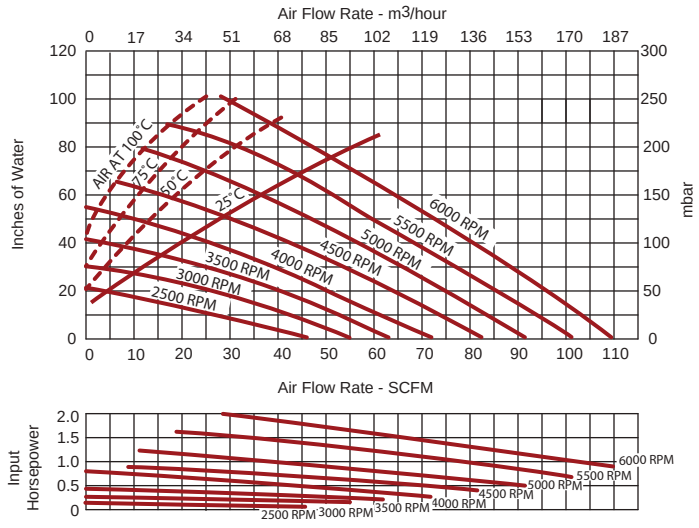


NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Specification IN/MM																	
Model Number	Part Number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
SL2RD	026125	7.33	5.88	9.92	1.45	1.00	.500	1.75	.25	1.75	1.41	2.62	1.75	4.96	3.31	3.00	9.92	.473	1.00
		186.2	149.4	252	36.8	25.4	12.7	44.5	6.4	44.5	35.8	66.5	44.5	126	84.1	76.2	252	12	25.4

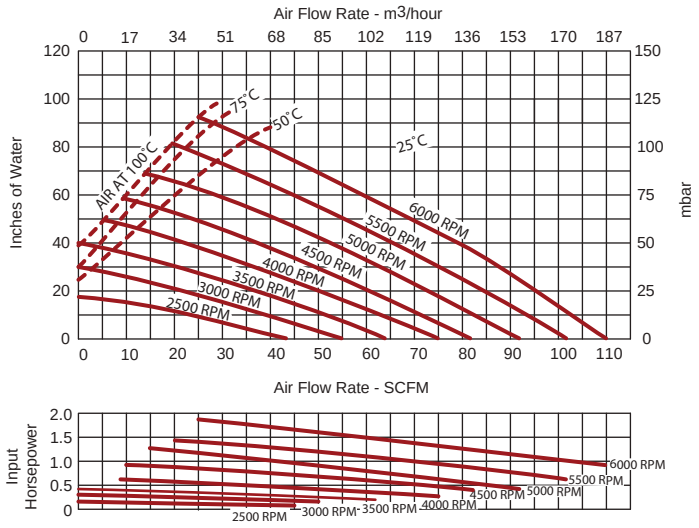
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

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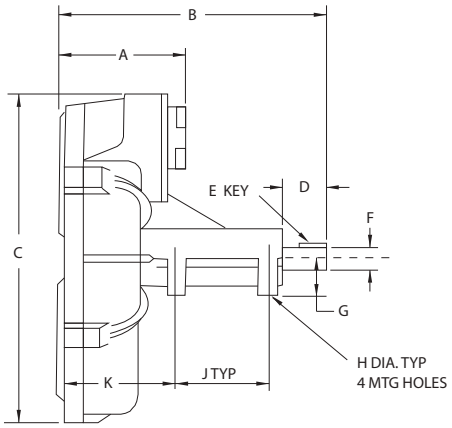
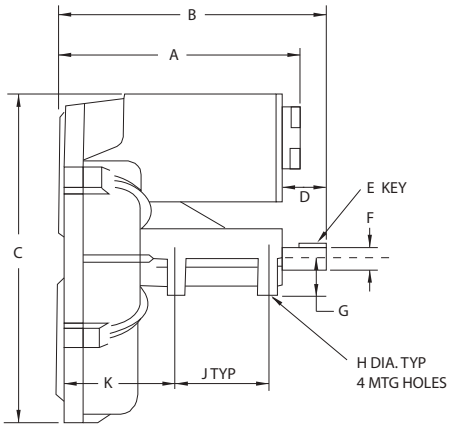
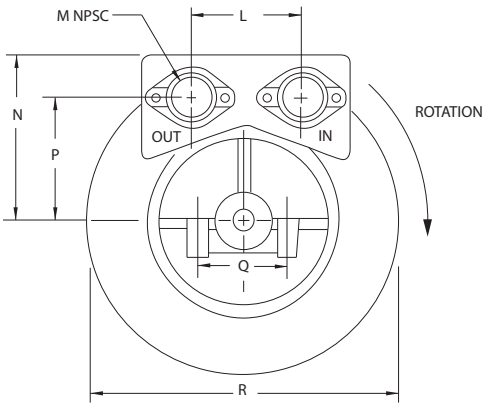


DR MODELS



EN MODELS



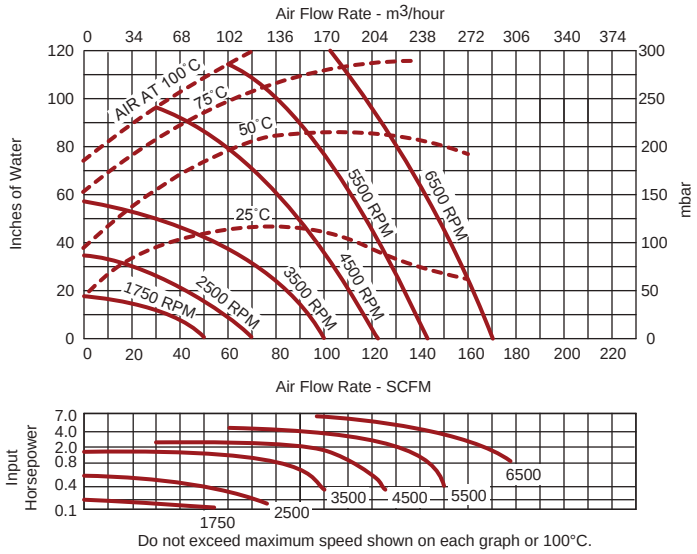
DR/EN MODELS

NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Specification IN/MM															
Model Number	Part Number	A	B	C	D	E	F	G	J	H	K	L	M	N	P	Q	R
DR404RDNT	036439	5.60	11.5	12.2	2.00	.188	.875	1.56	4.00	.50	5.00	5.12	1.50	6.17	4.5	4.00	11.54
		142.2	292.1	309.9	50.8	4.8	22.2	39.6	101.6	12.7	127	130	38.1	156.7	114.3	101.6	293.1
EN404RDML	038334	12.76	11.50	12.2	2.00	.188	.875	1.56	4.00	.50	5.00	5.12	1.50	6.17	4.5	4.00	11.54
		324.1	292.1	309.9	50.8	4.8	22.2	39.6	101.6	12.7	127	130	38.1	156.7	114.3	101.6	293.1

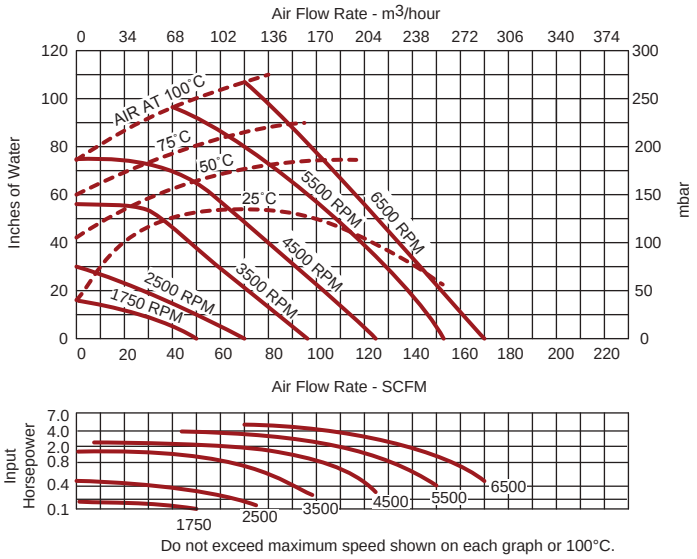
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

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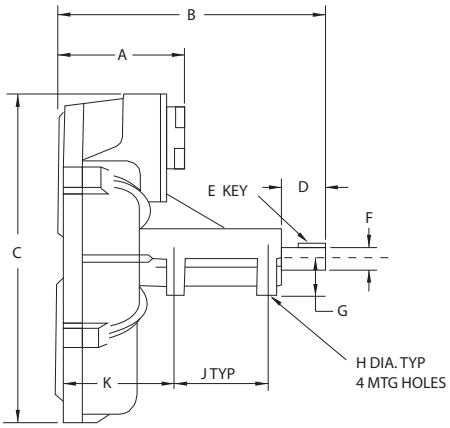
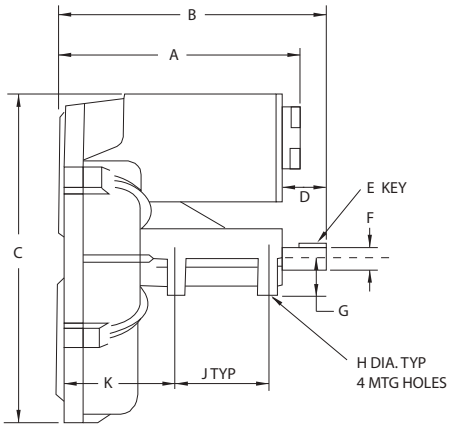
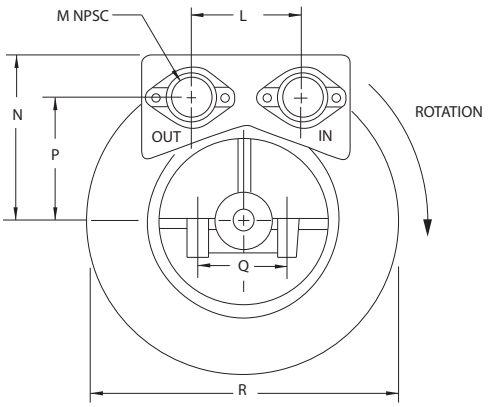


DR MODELS



EN MODELS



DR/EN MODELS

NOTES
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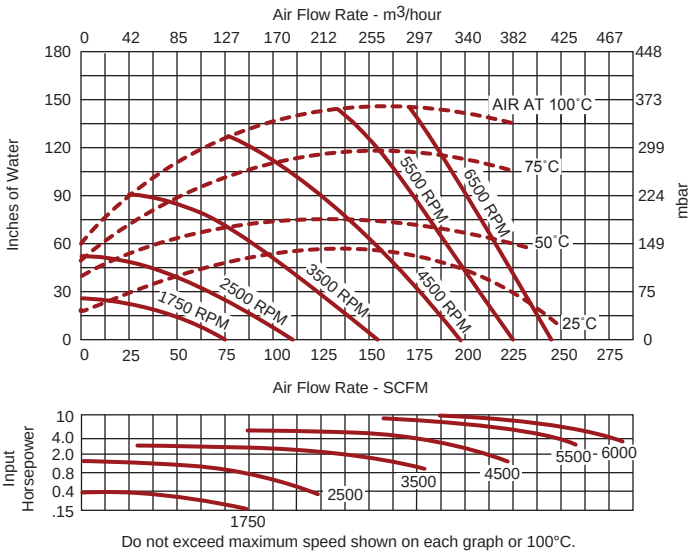
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Specification IN/MM															
Model Number	Part Number	A	B	C	D	E	F	G	J	H	K	L	M	N	P	Q	R
DR505RDNT	036437	5.68	11.82	14.45	2.00	.188	.875	1.56	4.00	.50	5.31	4.75	1.50	7.31	5.33	4.00	13.53
		144.3	300.2	367	50.8	4.8	22.2	39.6	101.6	12.7	134.9	120.7	38.1	185.7	135.4	101.6	343.7
EN505RDML	038336	14.58	11.82	14.45	2.00	.188	.875	1.56	4.00	.50	5.31	4.75	1.50	7.31	5.33	4.00	13.53
		370.3	300.2	367	50.8	4.8	22.2	39.6	101.6	12.7	134.9	120.7	38.1	185.7	135.4	101.6	343.7

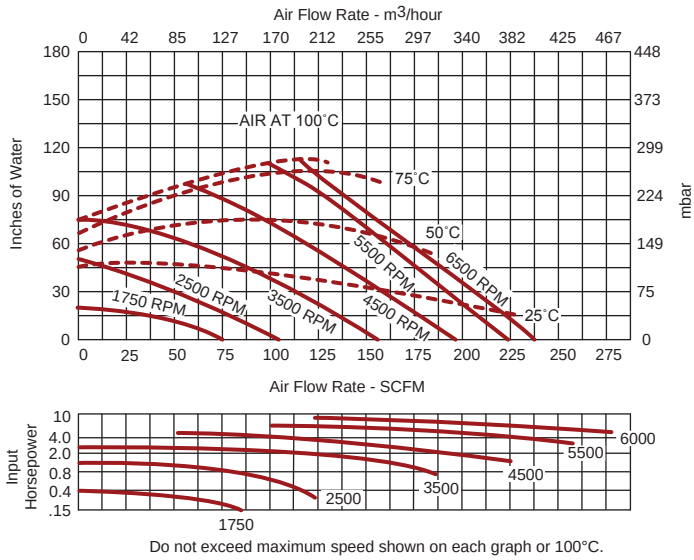
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

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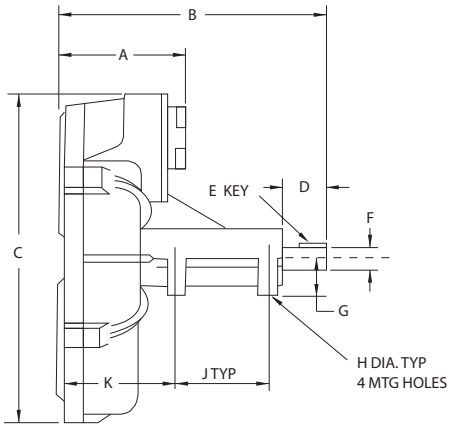
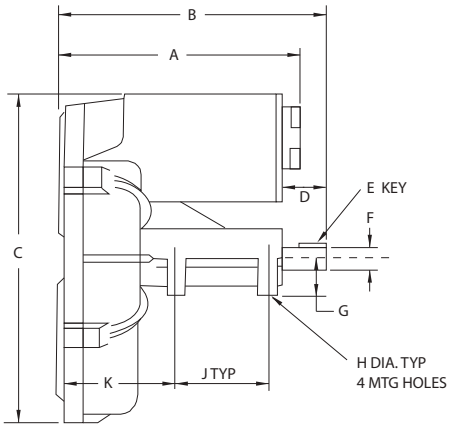
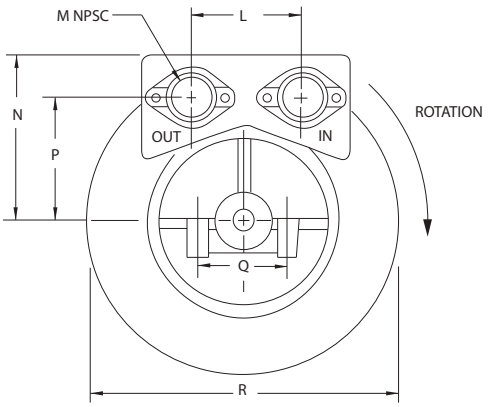


DR MODELS



EN MODELS



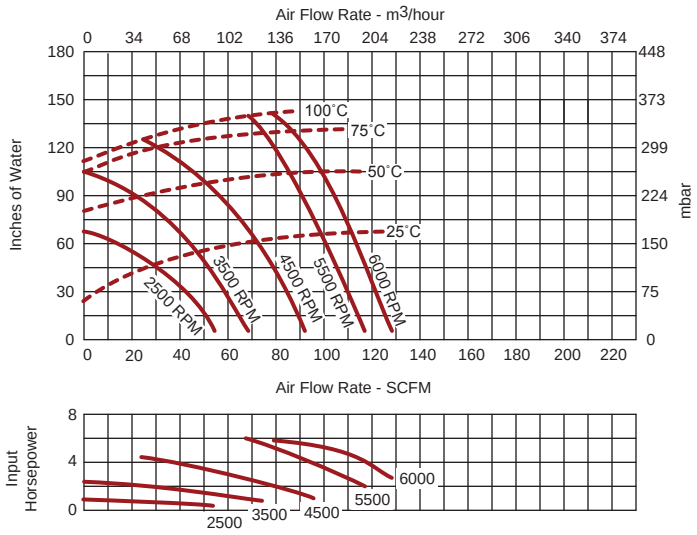
DR/EN MODELS

NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Specification IN/MM															
Model Number	Part Number	A	B	C	D	E	F	G	J	H	K	L	M	N	P	Q	R
DR513RDNT	038076	6.07	13.66	16.12	2.00	.188	.875	1.56	.516	4.00	5.29	4.75	1.50	7.31	6.45	4.00	14.21
		154.2	347	409.4	50.8	4.8	22.2	39.6	13.1	101.6	134.4	120.7	38.1	185.7	163.8	101.6	360.9
EN513RDL	038341	11.90	13.66	16.12	2.00	.188	.875	1.56	.516	4.00	5.29	4.75	1.50	7.31	6.45	4.00	14.21
		302.3	347	409.4	50.8	4.8	22.2	39.6	13.1	101.6	134.4	120.7	38.1	185.7	163.8	101.6	360.9

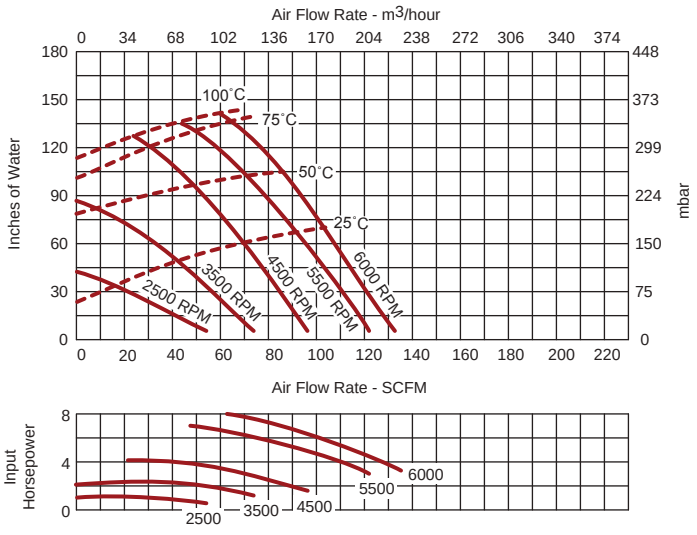
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

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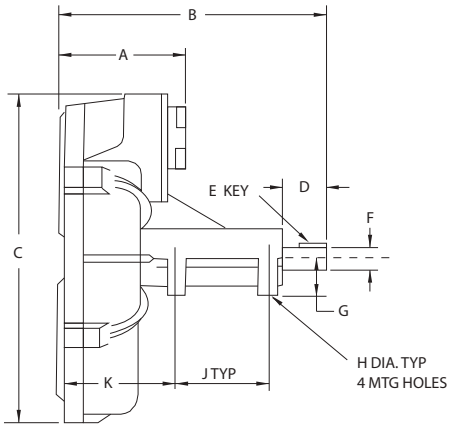
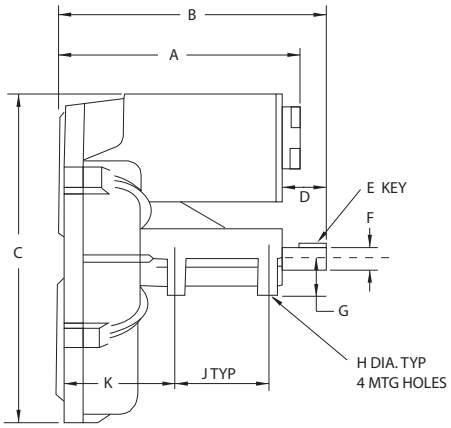
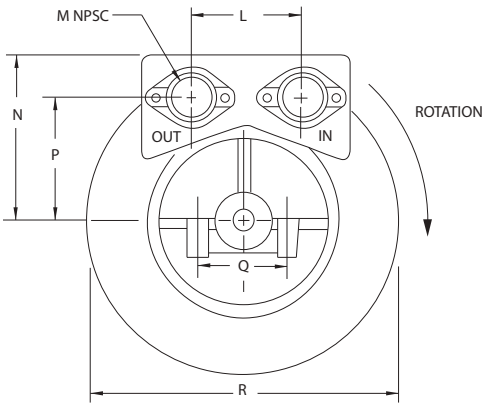


DR MODELS



EN MODELS



DR/EN MODELS

NOTES
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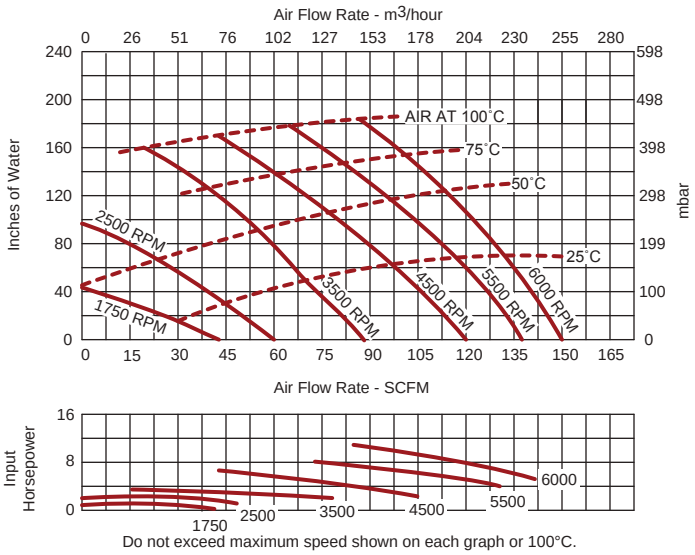
		Specification IN/MM															
Model Number	**Part Number**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**J**	**H**	**K**	**L**	**M**	**N**	**P**	**Q**	**R**
DR523RDNT	037223	7.96	13.8	16.12	2.00	.188	.875	1.56	.516	4.00	7.18	4.75	1.50	7.31	6.45	4.00	14.21
		202.2	350.5	409.4	50.8	4.8	22.2	39.6	13.1	101.6	182.4	120.7	38.1	185.7	163.8	101.6	360.9
EN523RDL	038342	13.8	15.55	16.12	2.00	.188	.875	1.56	.516	4.00	7.18	4.75	1.50	7.31	6.45	4.00	14.21
		350.5	395	409.4	50.8	4.8	22.2	39.6	13.1	101.6	182.4	120.7	38.1	185.7	163.8	101.6	360.9

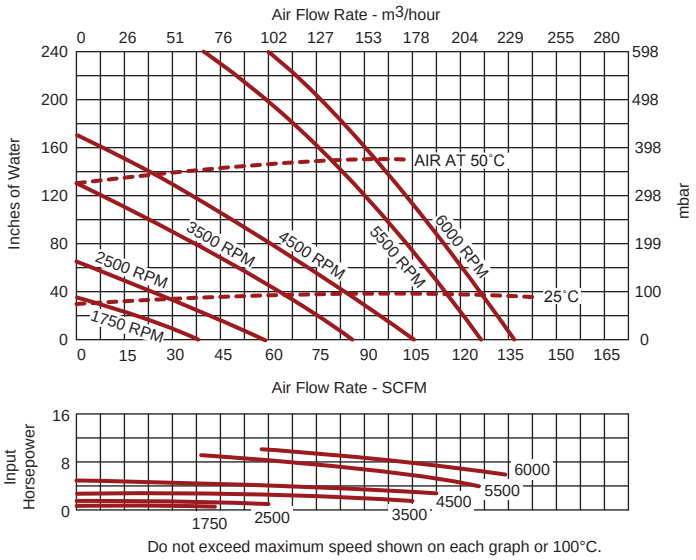
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

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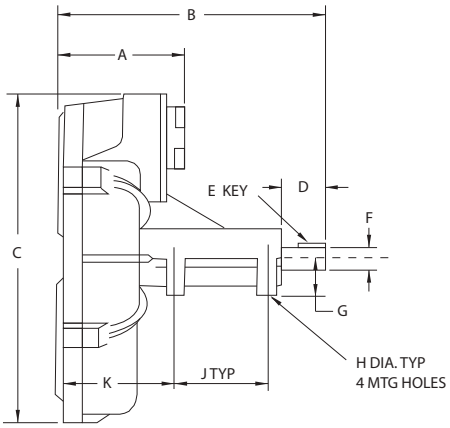
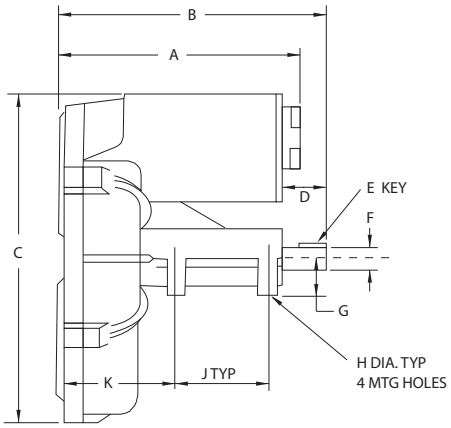
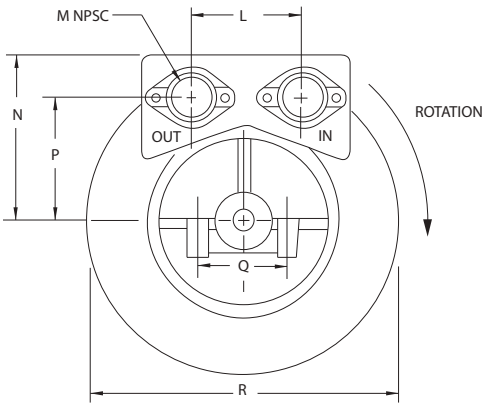


DR MODELS



EN MODELS



DR/EN MODELS

NOTES
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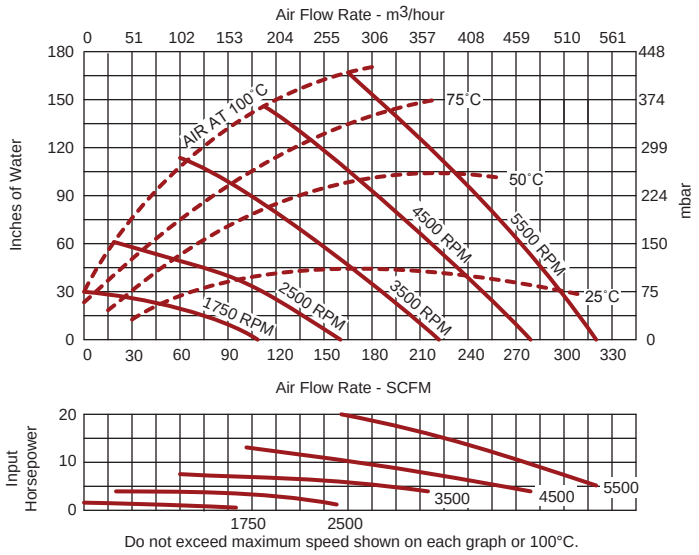
		Specification IN/MM															
Model Number	**Part Number**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**J**	**H**	**K**	**L**	**M**	**N**	**P**	**Q**	**R**
DR6RDNT	**036185**	5.85	15.00	16.34	3.62	.25	1.00	1.75	.505	4.50	6.10	6.50	2.00	8.19	5.6	4.50	16.34
		148.6	381	415	91.9	6.4	25.4	44.5	12.8	114.3	154.9	165.1	50.8	208	142.2	114.3	415
EN6RDL*	**038343**	5.85	15.00	16.34	3.62	.25	1.00	1.75	.505	4.50	6.10	6.50	2.00	8.19	5.6	4.50	16.34
		148.6	381	415	91.9	6.4	25.4	44.5	12.8	114.3	154.9	165.1	50.8	208	142.2	114.3	415

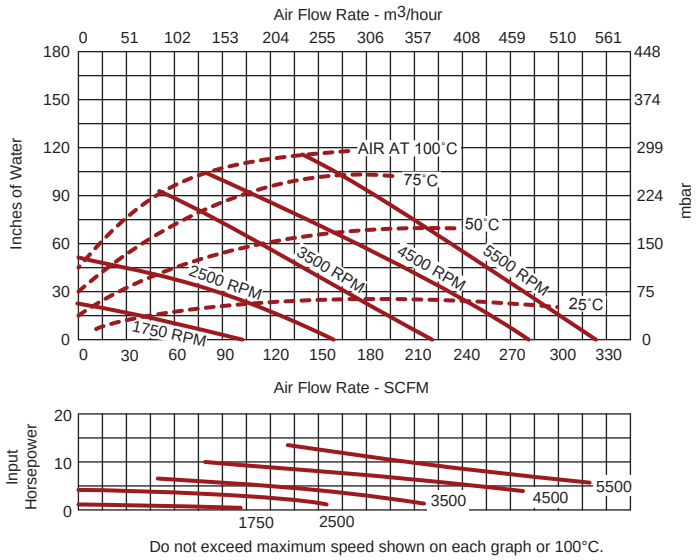
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

* Dual mufflers provided in place of muffler tower.

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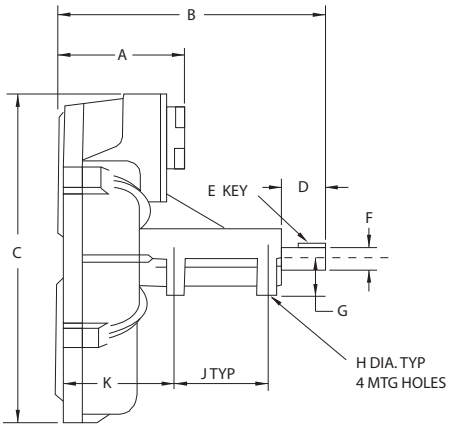
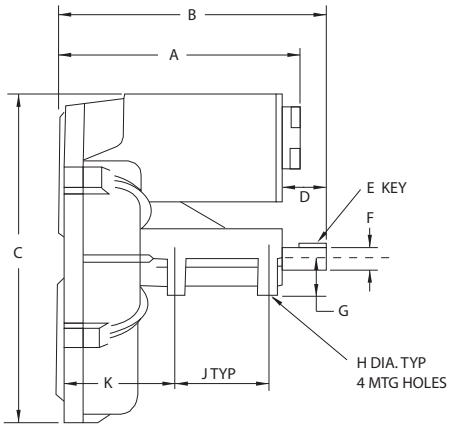
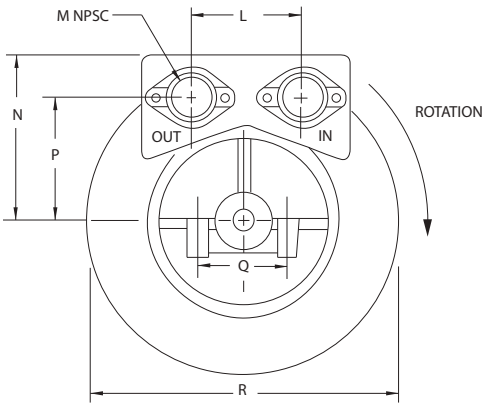


DR MODELS



EN MODELS



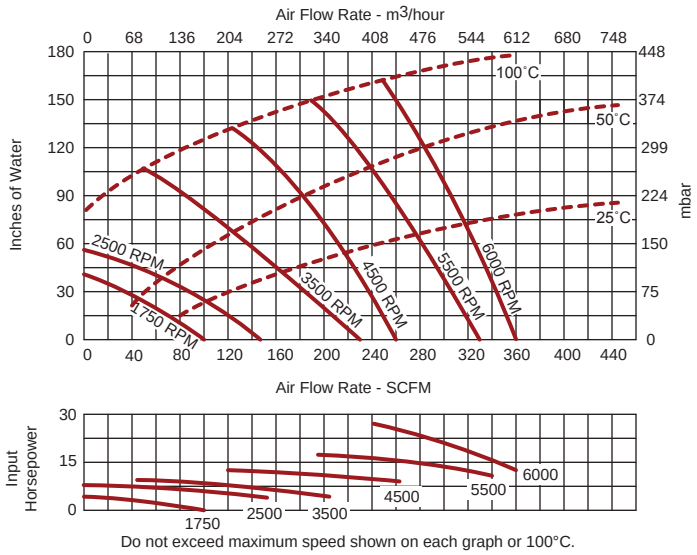
DR/EN MODELS

NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Specification IN/MM															
Model Number	**Part Number**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**J**	**H**	**K**	**L**	**M**	**N**	**P**	**Q**	**R**
DR656RDNT	080610	7.35	12.44	15.17	2.00	.188	.875	1.56	.50	4.00	5.83	4.92	2.00	7.46	5.51	4.00	15.42
		186.7	316.0	385.3	50.8	4.8	22.2	39.6	12.7	101.6	148.1	125	50.8	189.5	140	101.6	391.7
EN656RDL	080061	15.12	14.6	15.17	2.00	.188	.875	1.56	.50	4.00	5.83	4.92	2.00	7.46	5.51	4.00	15.42
		385	370.8	385.3	50.8	4.8	22.2	39.6	12.7	101.6	148.1	125	50.8	189.5	140	101.6	391.7

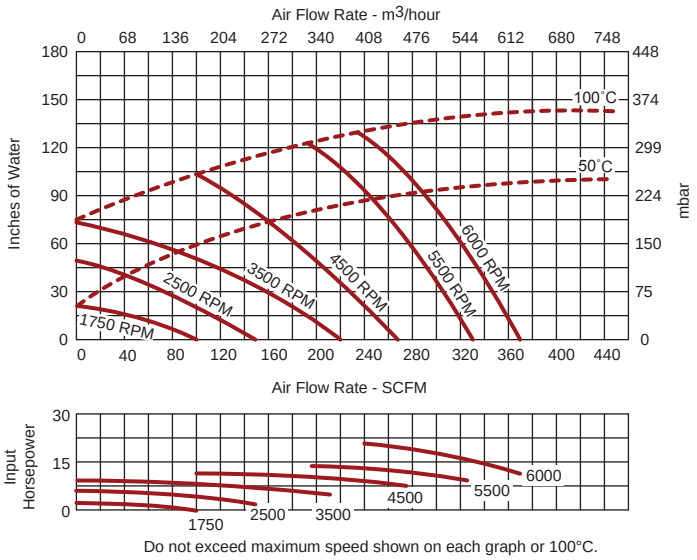
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



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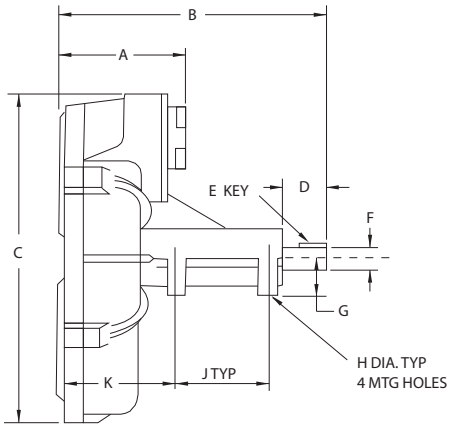
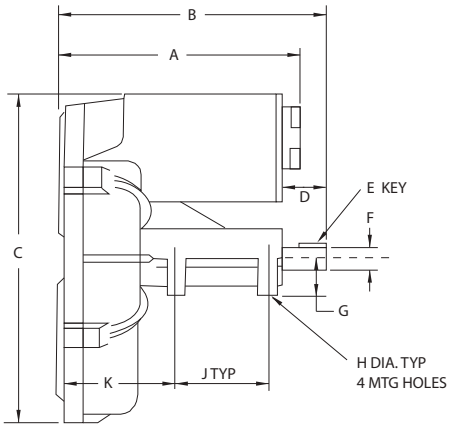
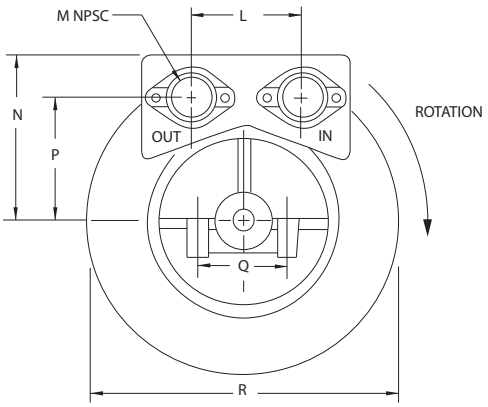


DR MODELS



EN MODELS



DR/EN MODELS

NOTES
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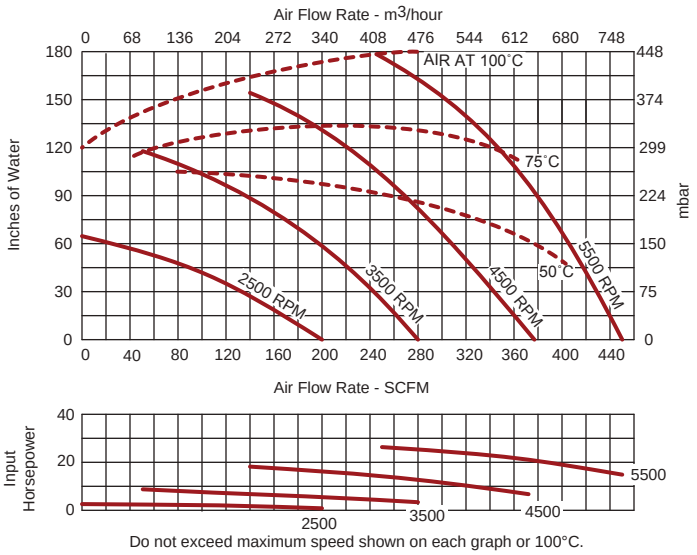
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Specification IN/MM															
Model Number	Part Number	A	B	C	D	E	F	G	J	H	K	L	M	N	P	Q	R
DR757RDNT	081847	6.67	15.06	17.25	3.62	.25	1.00	1.75	.505	4.50	6.19	6.44	2.50	9.22	6.40	4.50	16.11
		169.4	382.5	438.2	91.9	6.4	25.4	44.5	12.8	114.3	157.2	163.6	63.5	234.2	162.6	114.3	409.2
EN757RDML	081848	15.06	20.23	17.25	3.62	.25	1.00	1.75	4.50	.505	6.19	6.44	2.50	9.22	6.40	4.50	16.11
		382.5	513.8	438.2	91.9	6.4	25.4	44.5	114.3	12.8	157.2	163.6	63.5	234.2	162.6	114.3	409.2

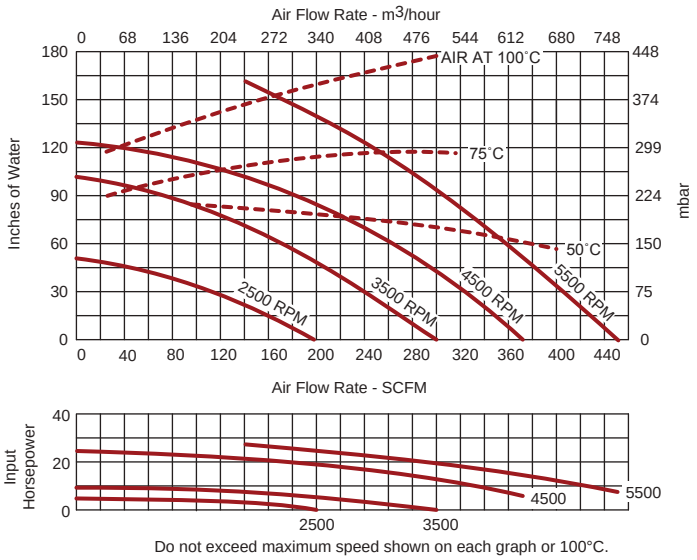
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

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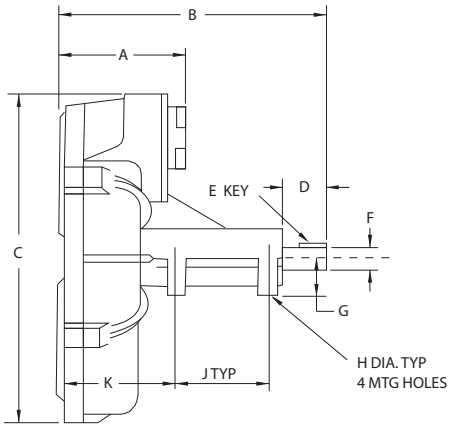
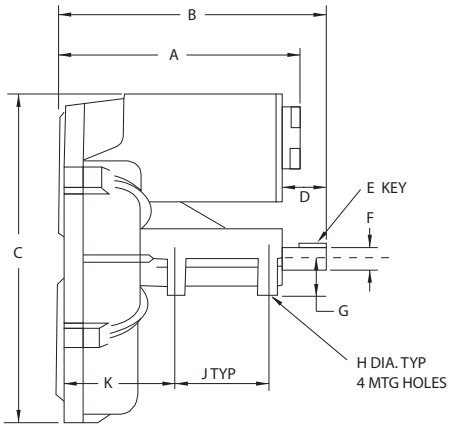
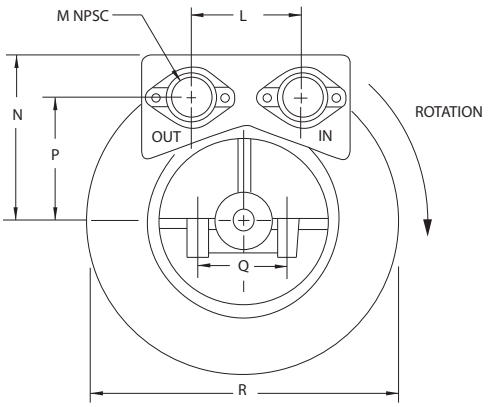


DR MODELS



EN MODELS



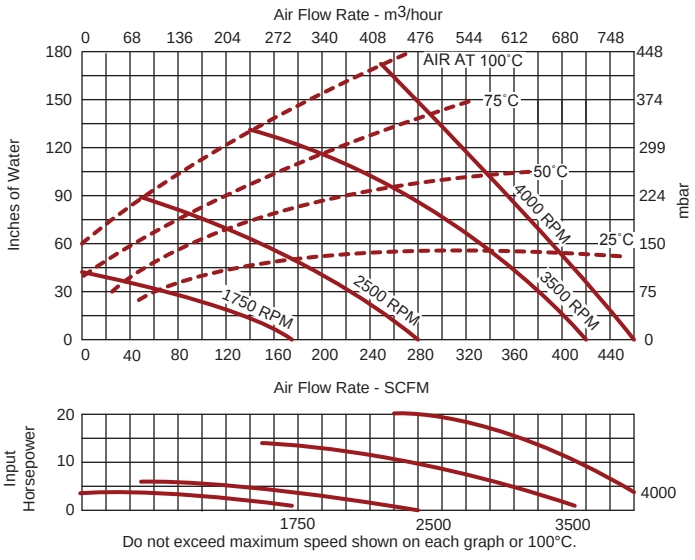
DR/EN MODELS

NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Specification IN/MM															
Model Number	Part Number	A	B	C	D	E	F	G	J	H	K	L	M	N	P	Q	R
DR858RDNT	036413	8.51	19.30	20.86	3.50	.313	1.38	2.00	.641	5.00	9.49	7.09	2.50	11.56	8.16	5.00	18.6
		216.2	490.2	529.8	88.9	8	35.1	50.8	16.3	127	241	180.1	63.5	293.6	207.3	127	472.4
EN858RDL	038746	19.30	22.22	20.86	3.50	.313	1.38	2.00	.641	5.00	9.49	7.09	2.50	11.56	8.16	5.00	18.6
		490.2	564.4	529.8	88.9	8	35.1	50.8	16.3	127	241	180.1	63.5	293.6	207.3	127	472.4

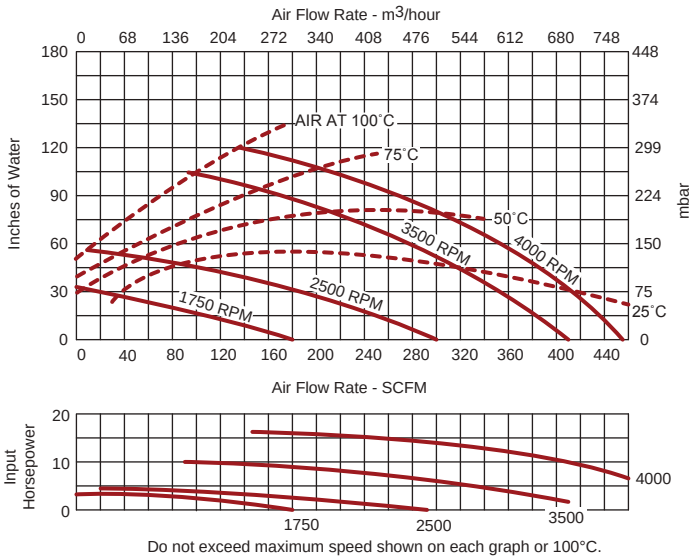
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



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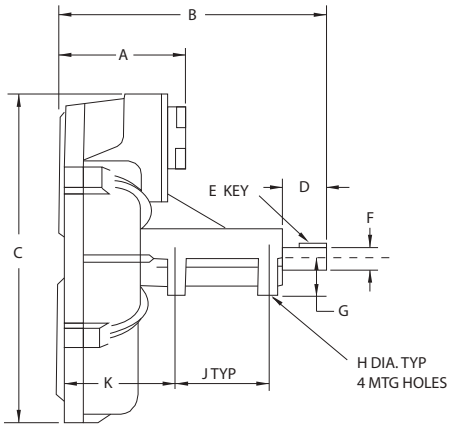
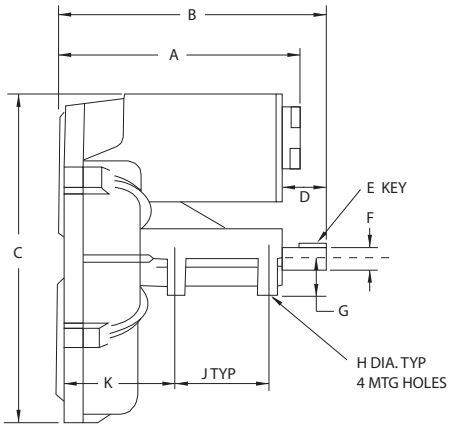
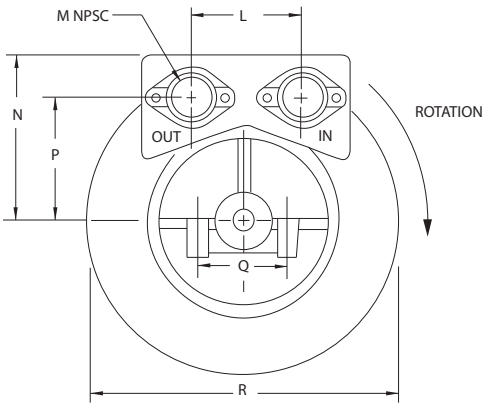


DR MODELS



EN MODELS



DR/EN MODELS

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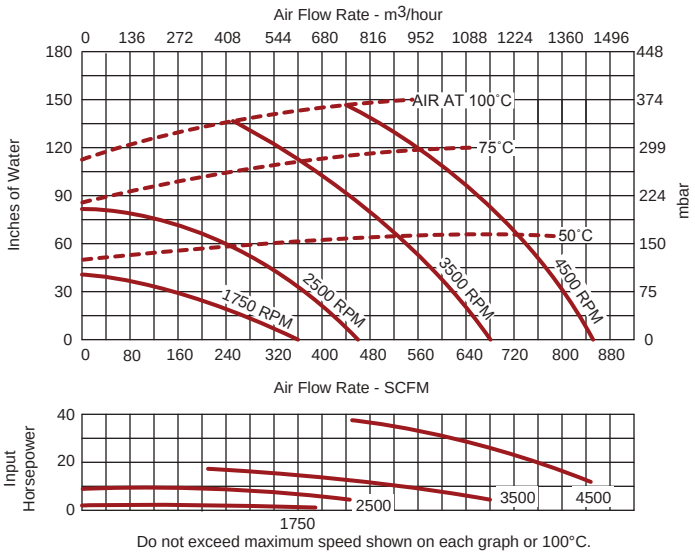
		Specification IN/MM															
Model Number	Part Number	A	B	C	D	E	F	G	J	H	K	L	M	N	P	Q	R
DR909RDNT	081962	8.53	22.8	23.22	3.50	.500	1.375	2.00	.765	5.00	9.70	8.34	3.01	12.97	9.02	5.00	19.8
		216.7	581	589.8	88.9	12.7	34.9	50.8	19.4	127	246.4	211.8	76.5	329.4	229.1	127	502.9
EN909RDL	081742	22.8	24.51	23.22	3.50	.500	1.375	2.00	.765	5.00	9.70	8.34	4.00	12.97	9.02	5.00	19.8
		579.1	622.6	589.8	88.9	12.7	34.9	50.8	19.4	127	246.4	211.8	101.6	329.4	229.1	127	502.9

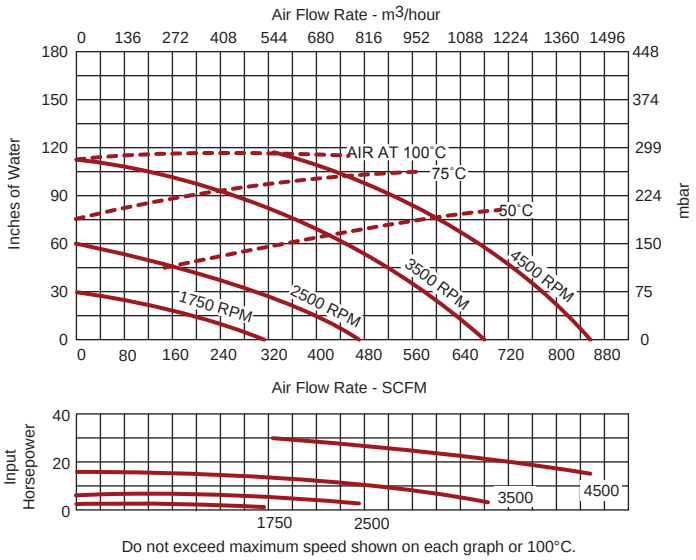
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



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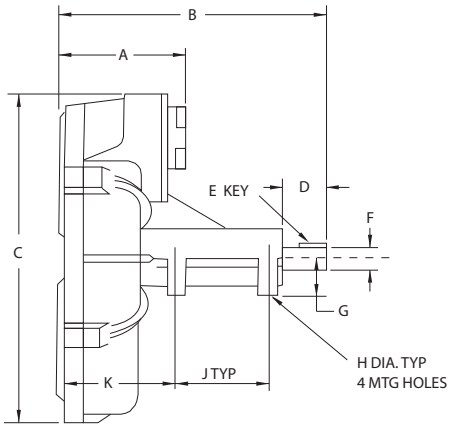
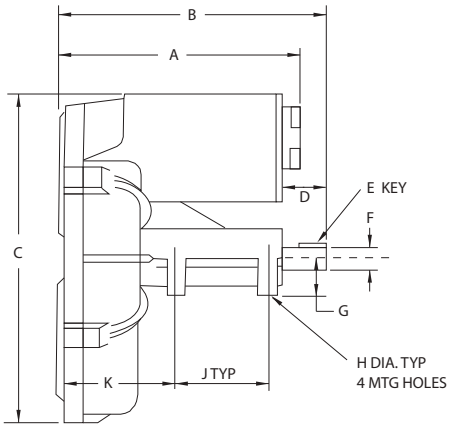
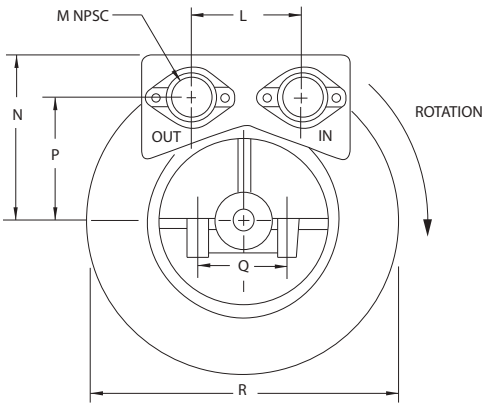


DR MODELS



EN MODELS



DR/EN MODELS

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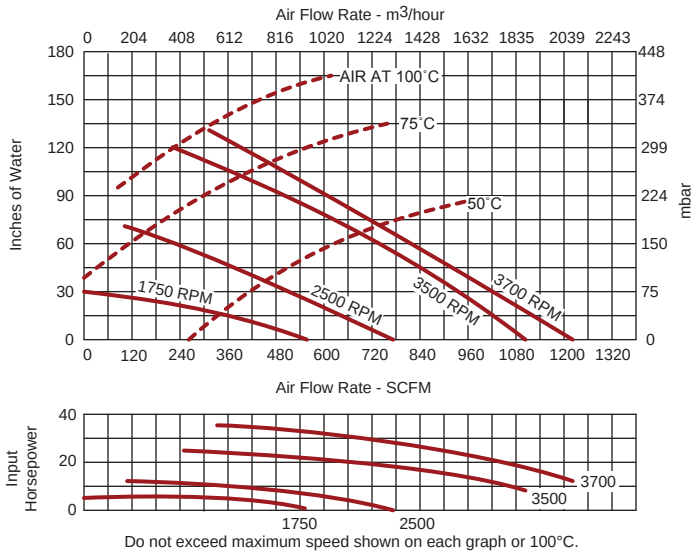
		Specification IN/MM															
Model Number	**Part Number**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**J**	**H**	**K**	**L**	**M**	**N**	**P**	**Q**	**R**
DR979RDNT	080760	10.5	23.5	19.78	3.00	.50	1.88	2.75	.765	6.75	11.7	9.76	4.00	10.15	6.63	7.55	19.25
		266.7	596.9	502.4	76.2	12.7	47.8	69.9	19.4	171.5	297.2	247.9	101.6	257.8	168.4	191.8	489
EN979RDL	080761	23.5	25.17	19.78	3.00	.50	1.88	2.75	.765	6.75	11.7	9.76	4.00	10.15	6.63	7.55	19.25
		596.9	639.3	502.4	76.2	12.7	47.8	69.9	19.4	171.5	297.2	247.9	101.6	257.8	168.4	191.8	489

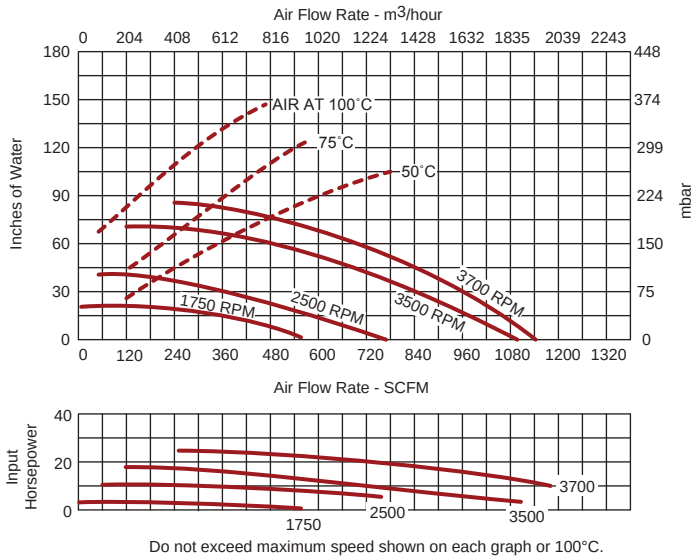
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



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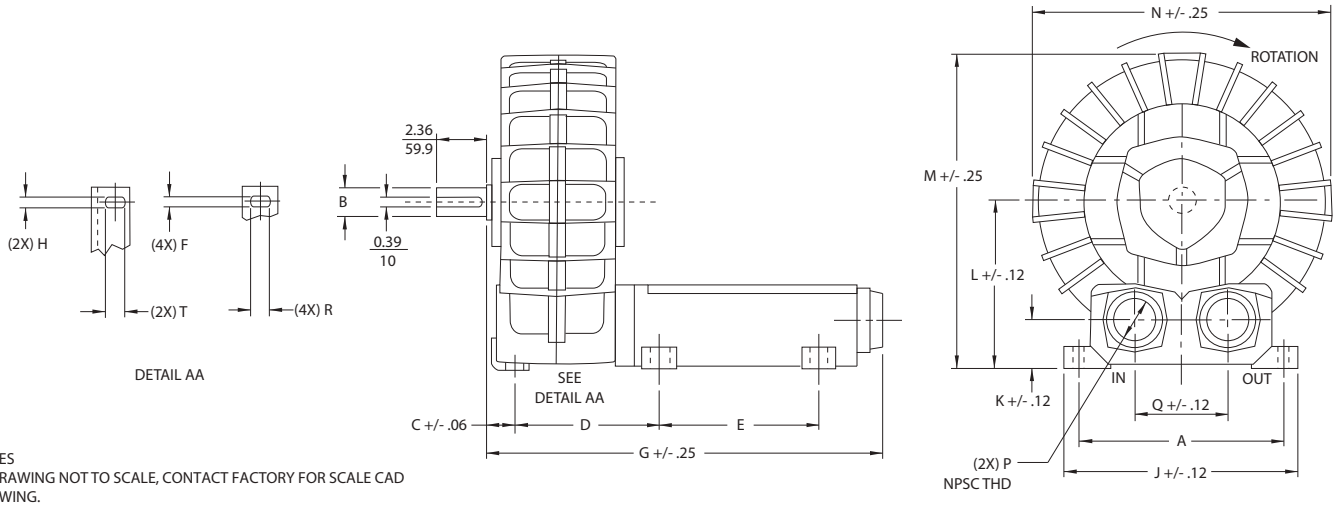

NOTES
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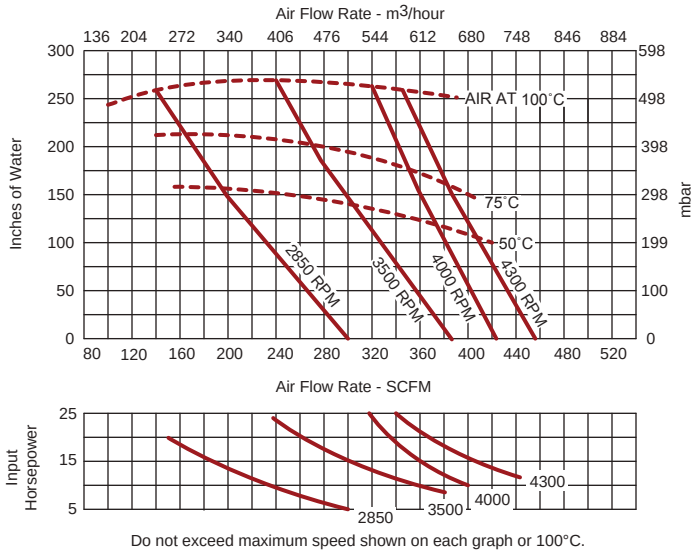
3 FILTER #515256 1PIECE

		Specification																
Model Number	**Part Number**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**J**	**H**	**K**	**L**	**M**	**N**	**P**	**Q**	**R**	**T**
DR1233RD	081853	14.96	1.50	2.36	9.45	12.80	.551	28.22	16.34	0.43	3.15	11.81	22.05	20.47	4.00	6.69	0.93	1.37
		380	38.1	59.9	240	325.1	14	716.8	415	10.9	80	300	560.1	519.9	101.6	169.9	23.6	34.8
EN1233RDL	081854	14.96	1.50	2.36	9.45	12.80	.551	28.22	16.34	0.43	3.15	11.81	22.05	20.47	4.00	6.89	0.93	1.37
		380	38.1	59.9	240	325.1	14	716.8	415	10.9	80	300	560.1	519.9	101.6	175	23.6	34.8

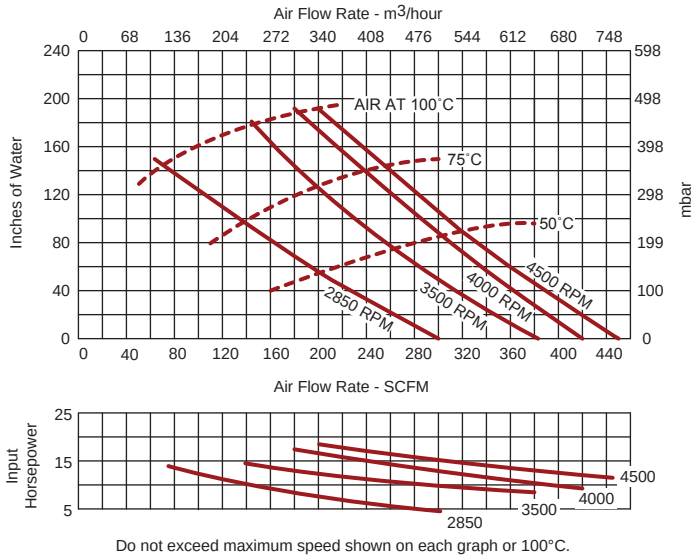
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

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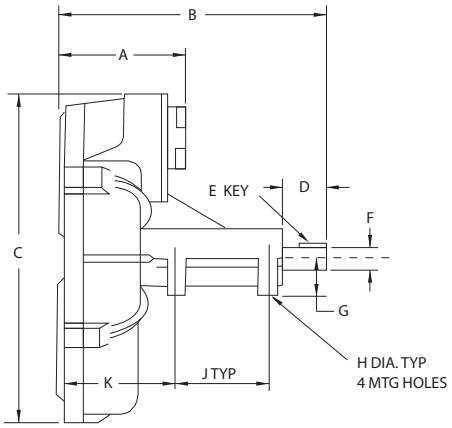
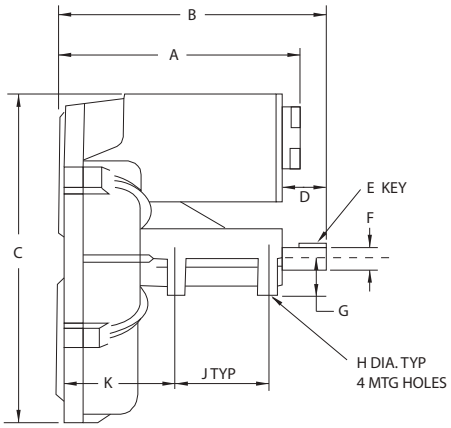
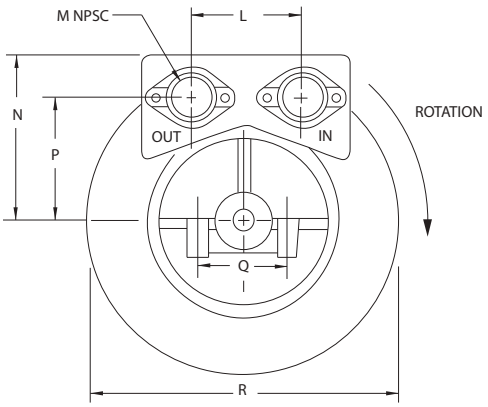


DR MODELS



EN MODELS



DR/EN MODELS

NOTES
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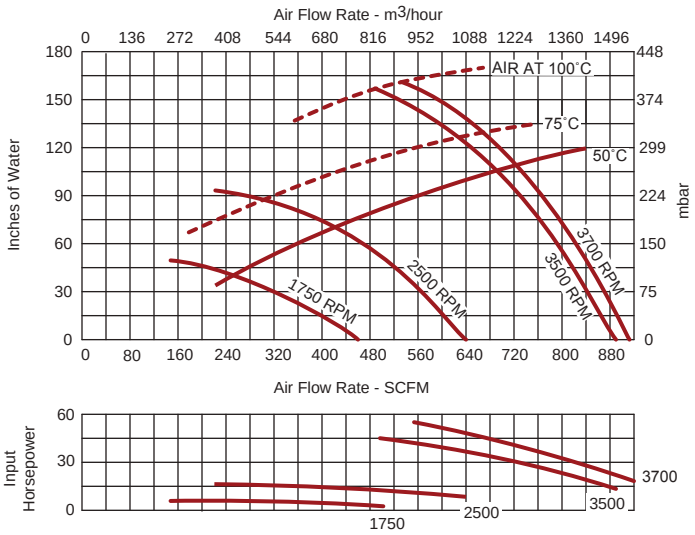
		Specification IN/MM															
Model Number	Part Number	A	B	C	D	E	F	G	J	H	K	L	M	N	P	Q	R
DR14RDNT	081475	9.87	22.24	26.54	4.00	.50	1.875	2.75	.765	6.75	10.24	9.69	4.00	15.50	11.41	7.55	23.32
		250.7	564.9	674.1	101.6	12.7	47.6	69.9	19.4	171.5	260.1	246.1	101.6	393.7	289.8	191.8	592.3
EN14RDL	081488	22.24	30.14	26.54	4.00	.50	1.875	2.75	.765	6.75	10.24	9.69	4.00	15.50	11.41	7.55	23.32
		564.9	765.6	674.1	101.6	12.7	47.6	69.9	19.4	171.5	260.1	246.1	101.6	393.7	289.8	191.8	592.3

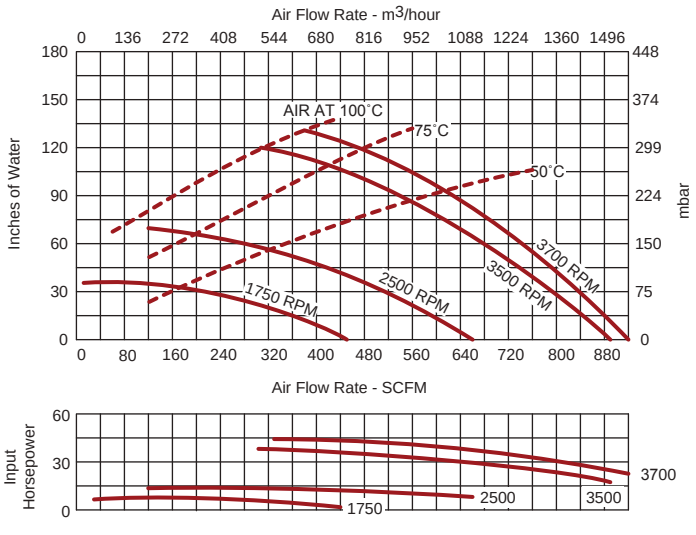
Blower Performance at Standard Conditions

Pressure



Do not exceed maximum speed shown on each graph or 100°C.

Suction



Do not exceed maximum speed shown on each graph or 100°C.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

Application Specific Regenerative Blowers

Specialty blowers for Commercial Spa, High Temperature, Natural Gas, and Gasoline Vapor Recovery applications.

Our industrial NC (Nautilair™ Centraxial) blowers include:

- Fiberglass or aluminum housing
- Aluminum impellers
- Permanently sealed bearings for 50,000 hours life

Our instrument grade and variable flow SE (Minispiral™ Regenerative) blowers include:

- AC and DC versions available for world voltages and maximum flow variability
- Glass filled molded phenolic impeller; aluminum and phenolic case
- 30,000 hour bearing life
- Small size and lightweight construction
- Quiet to NC-47 office equipment standards

Our instrument grade SL (Spiral Regenerative) blowers include:

- Rugged diecast aluminum housing, endbells, and impellers
- Compact size with encased muffler for maximum noise reduction
- Low amp draw with highly efficient motor
- Permanently sealed bearings for 40,000 hours life
- Hermetically sealed models designed for glovebox use

ROTRON®

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Application Specific Blowers

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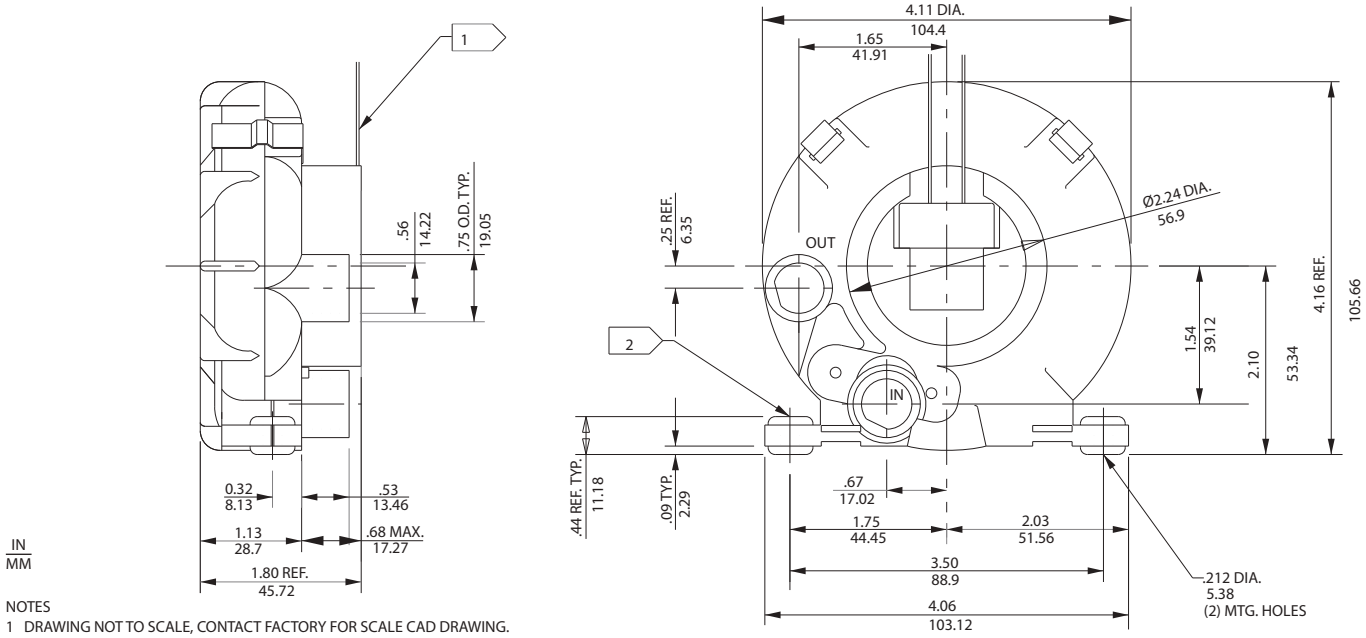
Minispiral

Insrument Grade Regenerative Blower



NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number		
		SE2B21	SE62B21	SE2B21A
Specification	Units	081901	037395	080694
Phase - Frequency	-	Single-50/60 Hz	-	Single-50/60 Hz
Voltage	AC	110/115	24	110/115
RPM	RPM	2850/3400	2850/3400	2850/3400
Insulation Class	-	B	B	B
Full - Load Amps	Amps (A)	.17/.14	-	.17/.14
Locked Rotor Amps	Amps (A)	.17/.15	-	.17/.15
Shipping Weight	Lbs	1.9	1.9	1.9
	Kg	0.9	0.9	0.9

[1] Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

[2] Maximum blower amps corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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Minispiral

ROTRON®

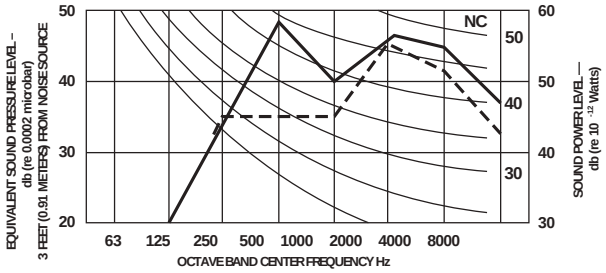
Insrument Grade Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 3.5 SCFM
- Maximum pressure: 3.5 IWG
- Maximum vacuum: 3.5 IWG
- Maximum ambient: 40°C
- Glass filled molded phenolic blower housing, cover & impeller
- Shaded pole motor with ball bearings
- Maximum quiet operation to NC-47 (office equipment specification)
- B10 bearing life: 30,000 hours
- Weight: 1.1 lb (0.5 kg)
- Envelope size: 4.18 x 1.83 inches (106.2 x 46.5 mm)

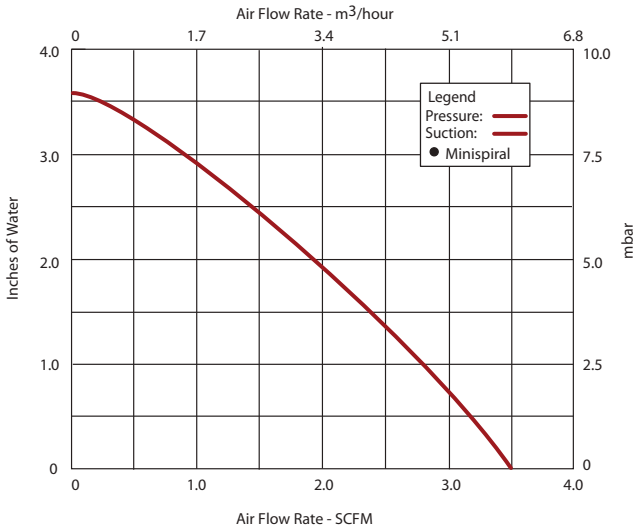
OPTIONS

- Sealed units
- International voltage and frequency (Hz)

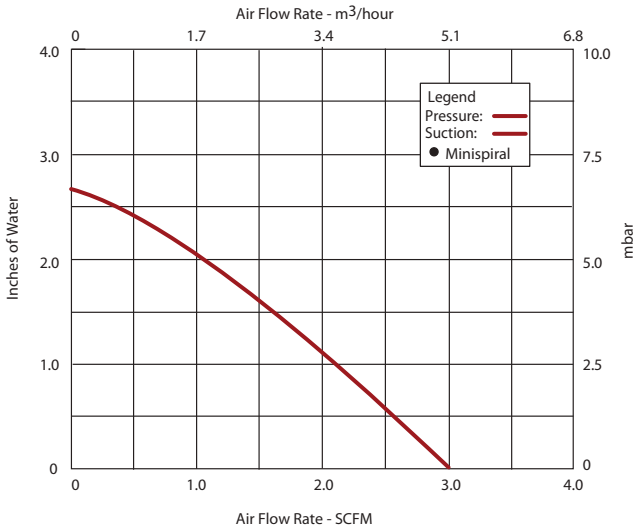


Blower Performance at Standard Conditions

60 Hz



50 Hz



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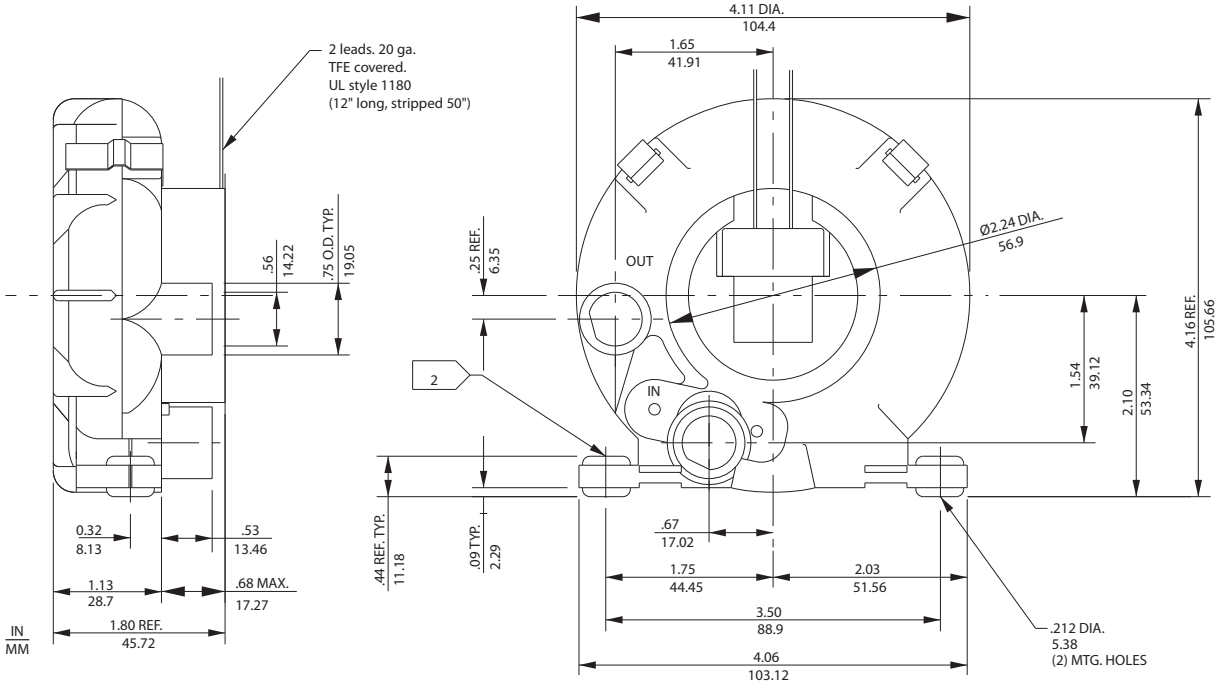
Minispiral MDC

ROTRON®

Variable Flow Regenerative Blower



NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number	
		SE12V21	SE24V21
Specification	Units	037433	037434
Voltage Range	VDC	9-15	24-32
RPM	RPM	3600-6000	5500-6800
Insulation Class	-	B	B
Full - Load Amps	Amps (A)	0.50-1.0	0.6-0.9
Weight	Lbs	0.86	0.86
	Kg	0.4	0.4

WARNING- ON MDC MODEL EXCEEDING 60 AMP MAY DAMAGE CIRCUIT BOARD

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Minispiral MDC

ROTRON®

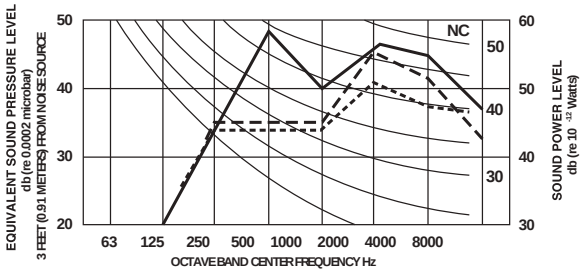
Variable Flow Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 5.8/7.3 SCFM (15/32 volts)
- Maximum pressure: 7.0/10.3 IWG (15/32 volts)
- Maximum vacuum: 7.0/10.3 IWG (15/32 volts)
- Maximum ambient: 40°C
- Glass filled molded phenolic and aluminum blower housing, phenolic cover & impeller
- Shaded pole motor with ball bearings
- Maximum quiet operation to NC-47 (office equipment specification)
- B10 bearing life: 20,000 - 30,000 hours
- Weight: 0.86 lbs (0.39 kg)
- Envelope size: 4.18 x 1.83 inches (106.2 x 46.5 mm)

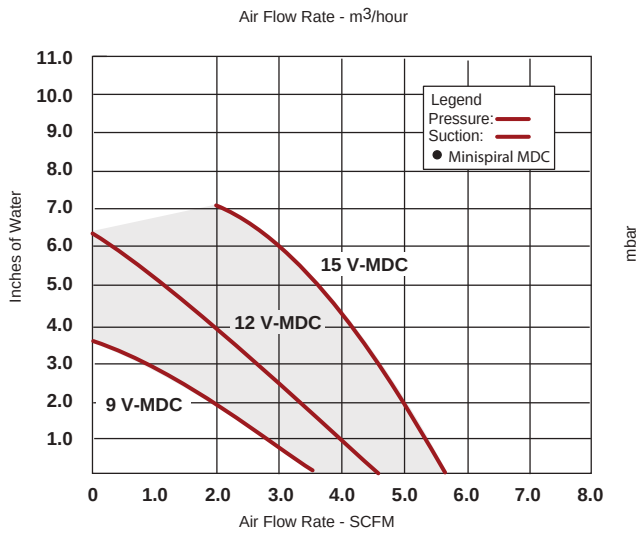
OPTIONS

- International and application specific voltages
- Sealed blowers for contamination control
- Electronic speed control

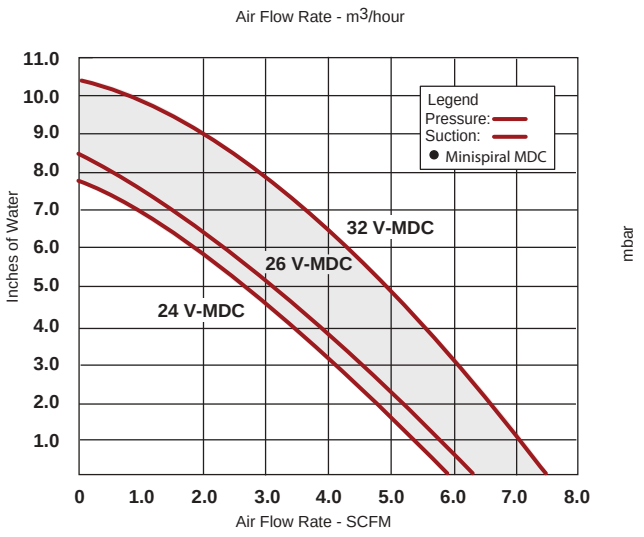


Blower Performance at Standard Conditions

12 V-MDC



24 V-MDC



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Minispiral 12/24V HDC

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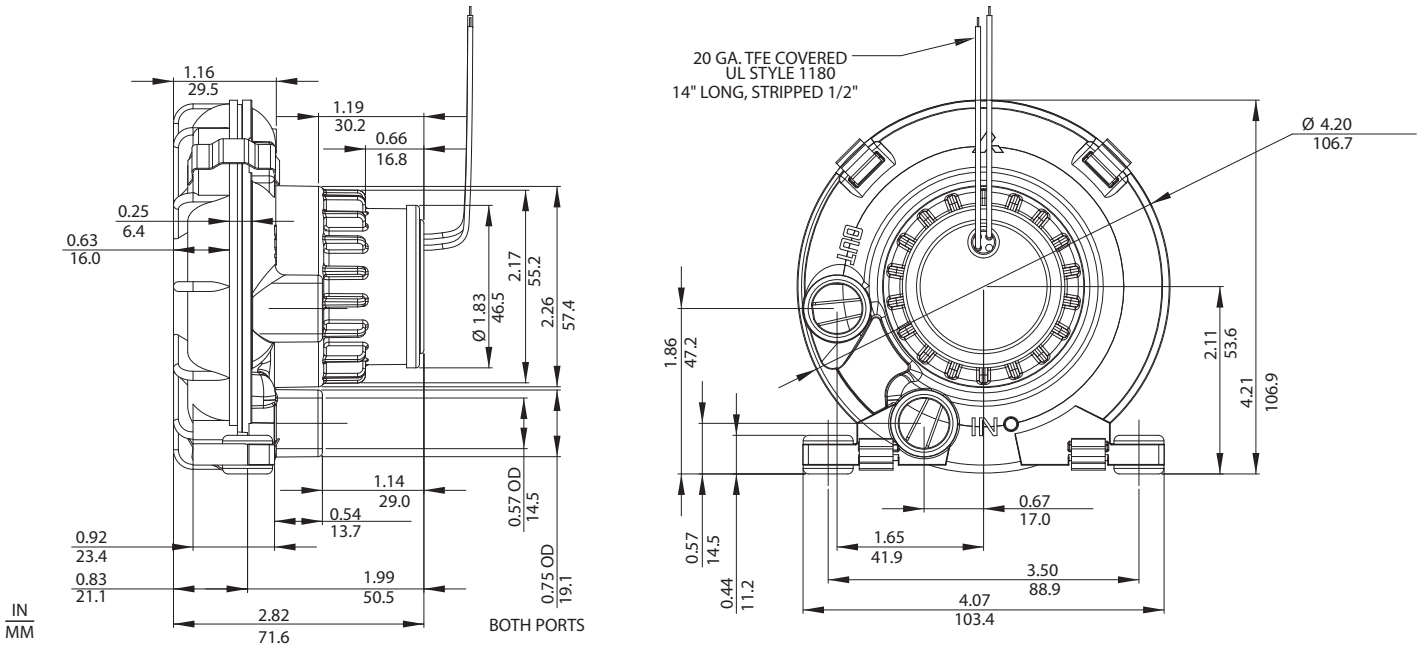
Variable Flow Regenerative Blower



NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number	
		SE12RE21	SE24RE21
Specification	Units	081548	080847
Voltage Range	VDC	7.5-15	24-32
RPM	RPM	4400-8750	4400-8750
Insulation Class	-	B	B
Full - Load Amps	Amps (A)	1.2-2.5	1.2-1.6
Weight	Lbs	1.0	1.0
	Kg	0.5	0.5

WARNING – ON HDC MODEL MOTORS IS NOT POLARITY PROTECTED. CHECK POLARITY CAREFULLY BEFORE ENERGIZING BLOWER.

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Minispiral 12/24V HDC

ROTRON®

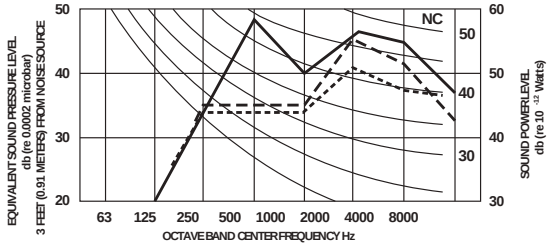
Variable Flow Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- 12 VDC operation: 7.5-15 VDC
- 24 VDC operation: 15-32 VDC
- Maximum flow: 8.5 SCFM (15)
- Maximum pressure: 20.7 IWG (15)
- Maximum vacuum: 20.7 IWG (15)
- Maximum ambient: 40°C
- Glass filled molded phenolic and aluminum blower housing, phenolic cover & impeller
- Brushless DC motor with integrated control electronics
- Maximum quiet operation to NC-47 (office equipment specification)
- Stainless steel ball bearings permanently lubricated for B10 bearing life: 20,000 - 30,000 hours
- Weight: 1.9 lbs (0.86 kg)
- Envelope size: 4.18 x 1.83 inches (106.2 x 46.5 mm)

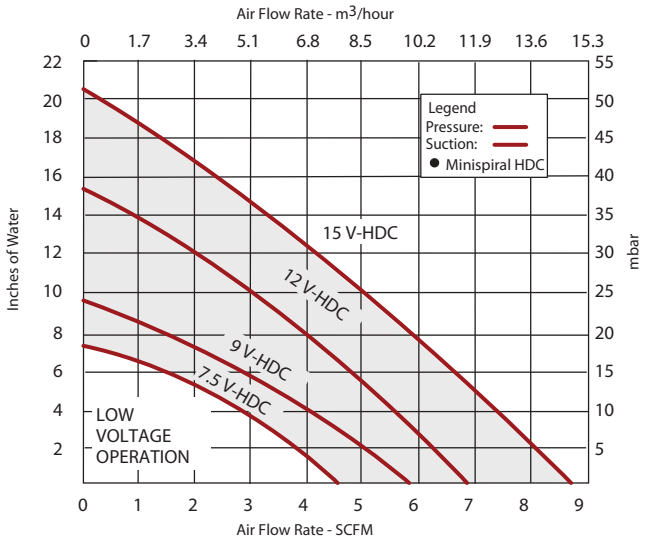
OPTIONS

- International and application specific voltages
- Sealed blowers for contamination control
- Electronic speed control
- Low voltage option
- International voltage and frequency (Hz)



Blower Performance at Standard Conditions

Minispiral HDC



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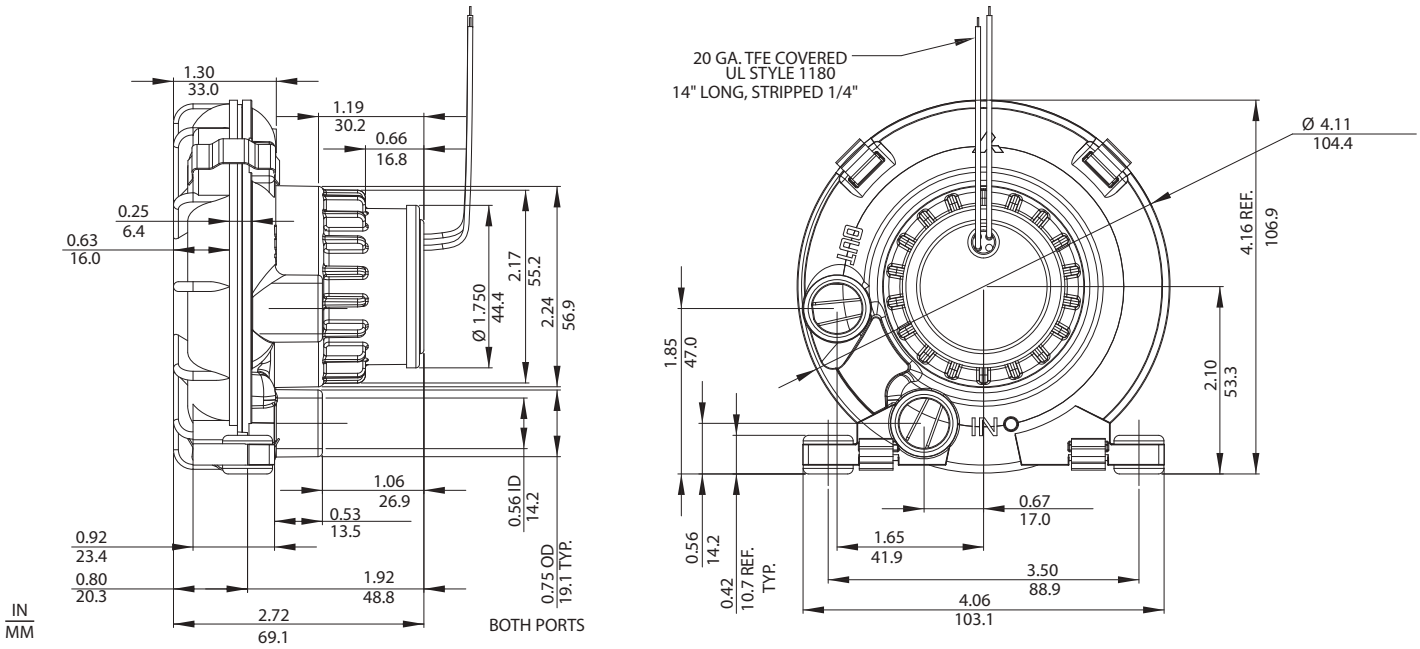
Minispiral 12V HDC Extra Flow / Extra Wide Fat Boy

ROTRON®

Variable Flow Regenerative Blower



NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number
		SE12RE21A
Specification	Units	081881
RPM	RPM	7397 - 13205
Voltage Range	VDC	7.5 - 15
Insulation Class	-	B
Full - Load Amps	Amps (A)	2.7 - 6.2
Weight	Lbs	2.5
	Kg	1.1

WARNING – ON HDC MODEL MOTORS IS NOT POLARITY PROTECTED. CHECK POLARITY CAREFULLY BEFORE ENERGIZING BLOWER.

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DYNAMIC FLUID SOLUTIONS

Minispiral 12V HDC Extra Flow / Extra Wide Fat Boy

ROTRON®

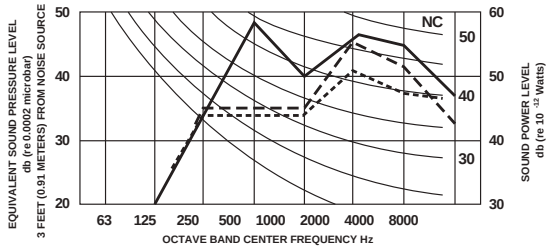
Variable Flow Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 12.6 SCFM (15)
- Maximum pressure: 26 IWG (15)
- Maximum vacuum: 26 IWG (15)
- Maximum ambient: 40°C
- Glass filled molded phenolic blower, cover & impeller, aluminum hou
- Brushless DC motor with integrated control electronics
- Stainless steel ball bearings permanently lubricated for B10 bearing 20,000 - 30,000 hours
- Weight: 1.9 lbs (0.86 kg)
- Compact high performance design: 4.18 x 1.83 inches (106.2 x 46.5 r

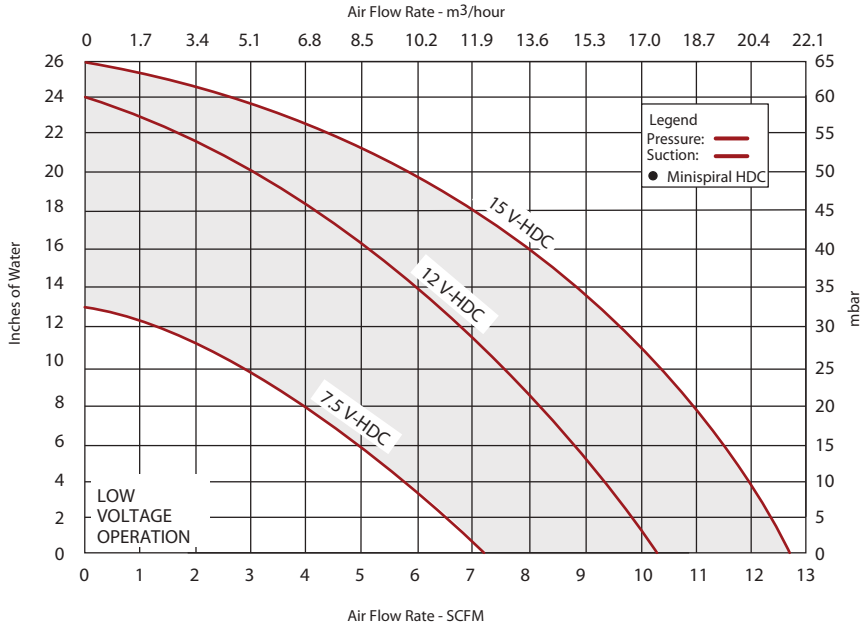
OPTIONS

- International and application specific voltages
- Sealed blowers for contamination control
- Electronic speed control
- Low voltage option
- Speed sensing output (FPS)



Blower Performance at Standard Conditions

Minispiral HDC



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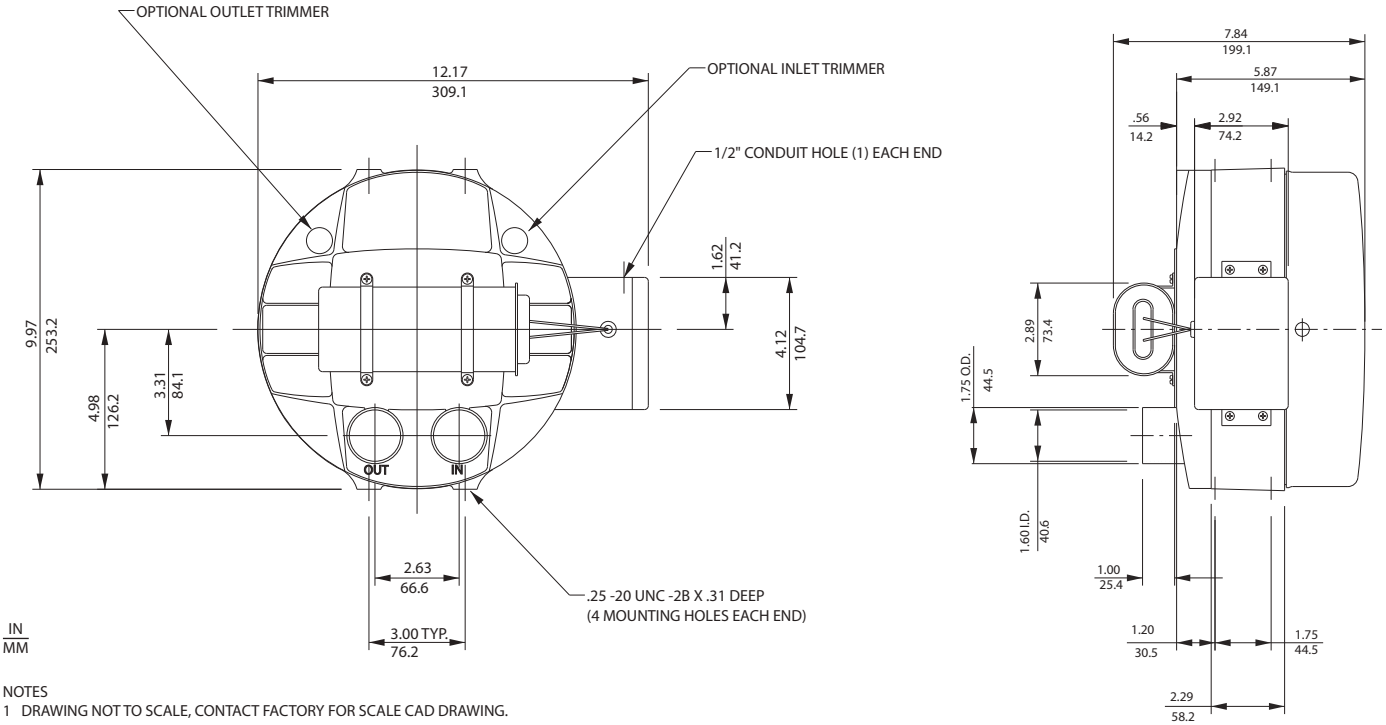
SPIRAL Simplex SL2

ROTRON®

Insrument Grade Regenerative Blower



NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number		
		SL2P2	SL2P52	SL2P90
Specification	Units	036000	036013	036018
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP-CS	ODP-CS
Horsepower	-	.5	.5	.5
Voltage	AC	115	208-230	380/460
Phase - Frequency	-	Single-50/60 Hz	Single 60 Hz	Three-50/60 Hz
Insulation Class	-	B	B	B
Full - Load Amps	Amps (A)	2.45/3.60	.95/1.54	.34/.41
Service Factor	-	1.0	1.0	1.0
Locked Rotor Amps NEMA	Amps (A)	10.0	4.3	1.9
Starter Size	-	00/00	00/00	00/00
Shipping Weight	Lbs	27	27	27
	Kg	12.2	12.2	12.2

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DYNAMIC FLUID SOLUTIONS

SPIRAL Simplex SL2

ROTRON®

Insrument Grade Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 60 SCFM
- Maximum pressure: 32 IWG
- Maximum vacuum: 31.3 IWG
- Standard motor: 0.5 HP, ODP
- Cast aluminum blower housing, impeller & cover; slip-on flanges
- Motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards
- Thermal overload protection

OPTIONS

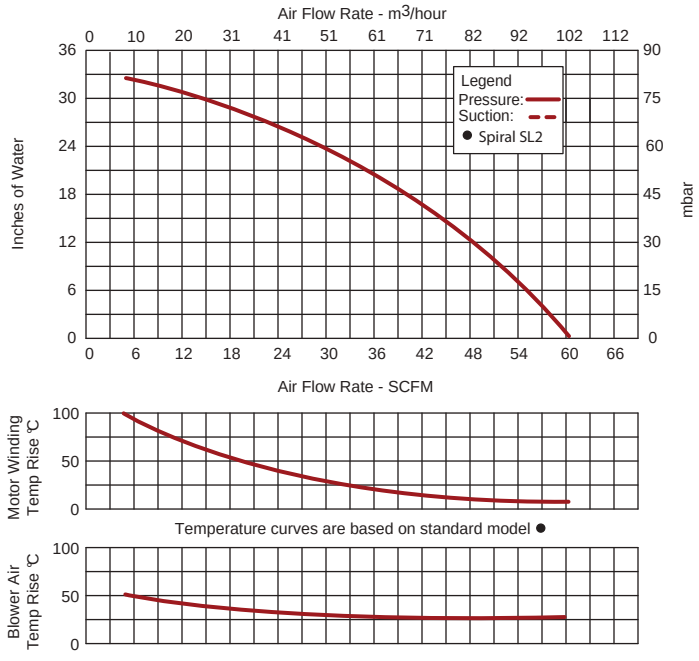
- International voltage & frequency (Hz)
- Hermetically sealed
- UL & CSA approved motor
- Remote drive (motorless) model
- Factory installed trimmers for adjusting air flow rate

ACCESSORIES

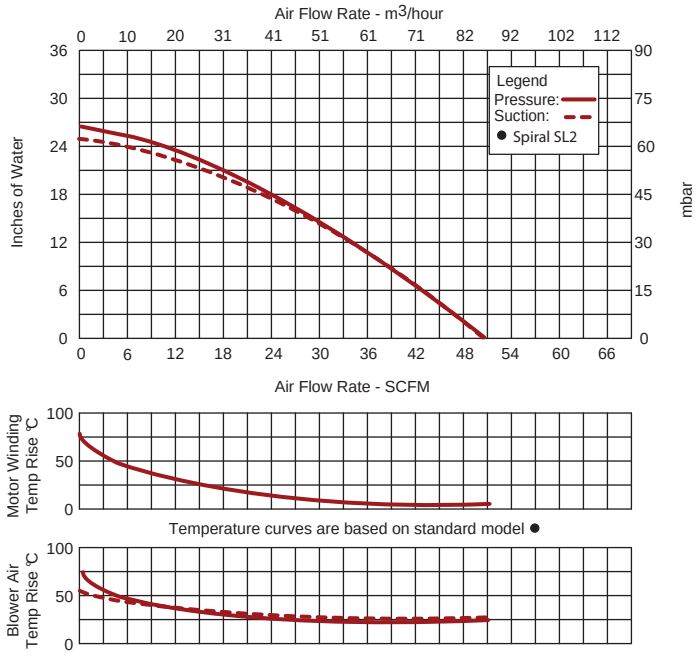
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)

Blower Performance at Standard Conditions

60 Hz



50 Hz



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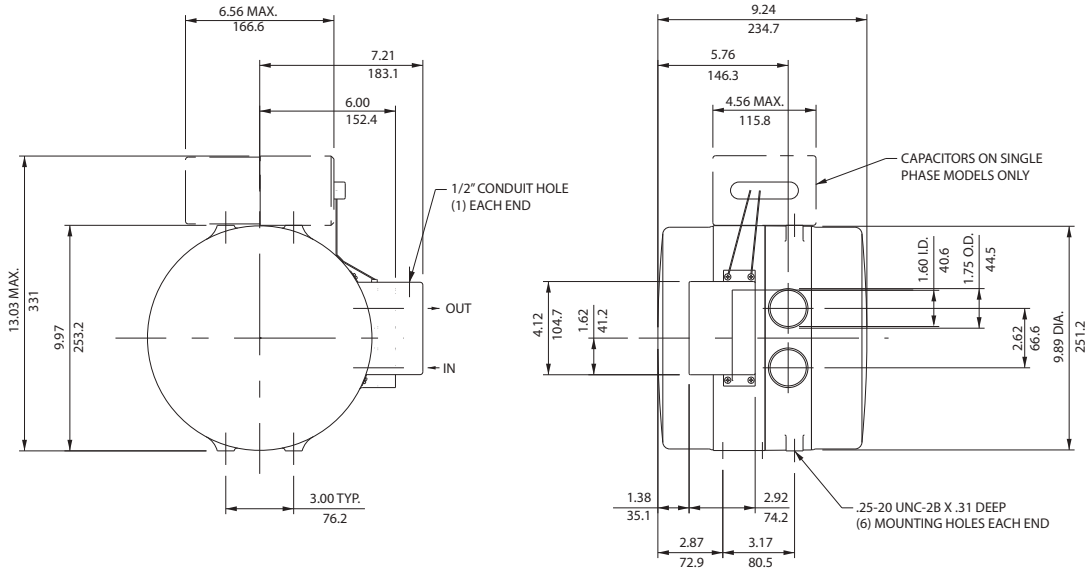
SPIRAL Duplex SL4

ROTRON®

Insrument Grade Regenerative Blower



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NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number	
		SL4P2	SL4P52
Specification	Units	036009	036027
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP-CS
Horsepower	-	.75	.75
Voltage	AC	115	208-230
Phase - Frequency	-	Single-50/60 Hz	Single 60 Hz
Insulation Class	-	B	B
Full - Load Amps	Amps (A)	3.70/3.80	2.29/2.20
Service Factor	-	1.0	1.0
Locked Rotor Amps NEMA	Amps (A)	14.0	7.0
Starter Size	-	00/00	00/00
Shipping Weight	Lbs	42	42
	Kg	19.1	19.1

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SPIRAL Duplex SL4

ROTRON®

Insrument Grade Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 65 SCFM
- Maximum pressure: 60 IWG
- Maximum vacuum: 55.8 IWG
- Standard motor: 0.75 HP, ODP
- Cast aluminum blower housing, impeller & cover; slip-on flanges
- Motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards
- Thermal overload protection

OPTIONS

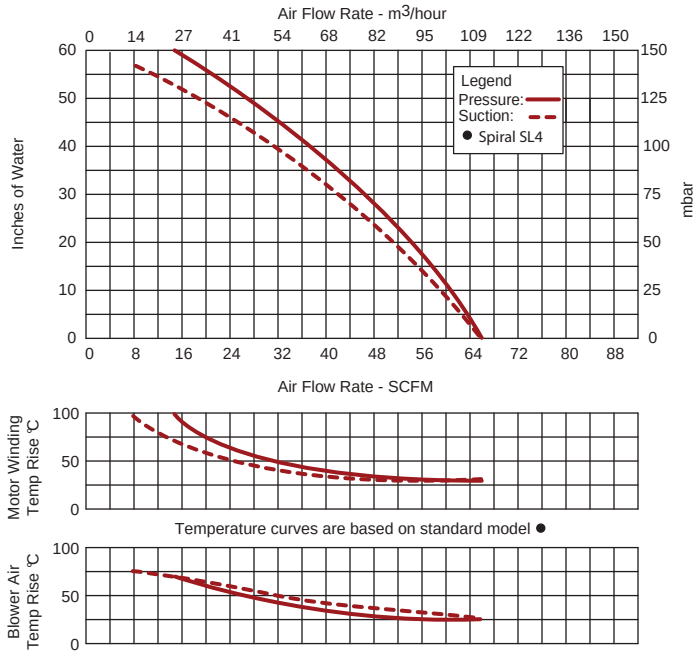
- International voltage & frequency (Hz)
- Hermetically sealed
- UL & CSA approved motor
- Remote drive (motorless) model
- Factory installed trimmers for adjusting air flow rate

ACCESSORIES

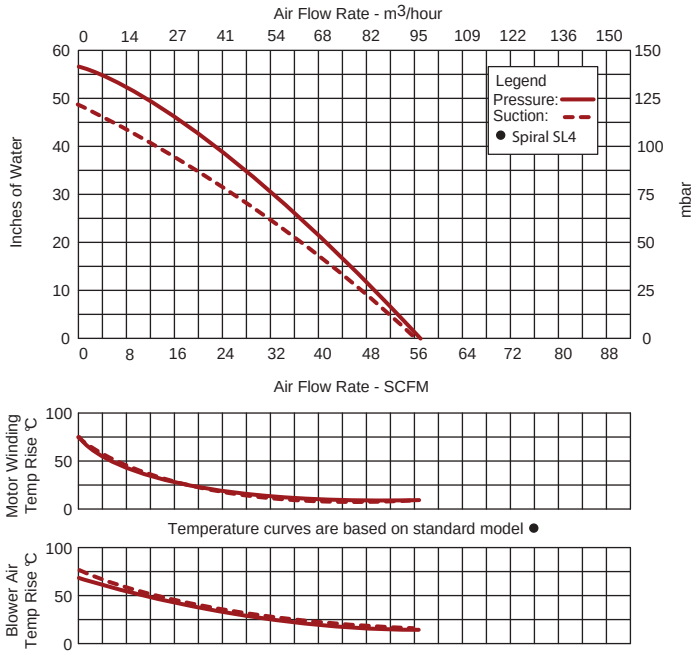
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)

Blower Performance at Standard Conditions

60 Hz



50 Hz



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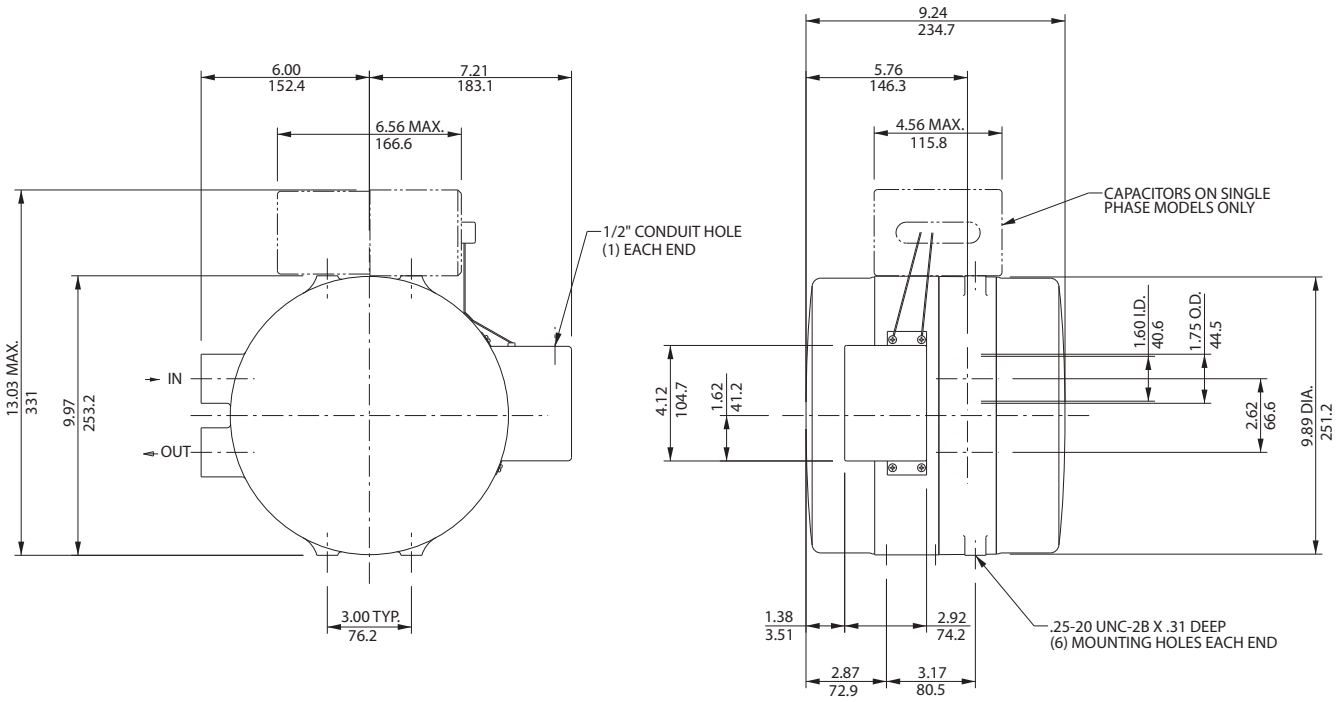
SPIRAL Duplex SL5

ROTRON®

Insrument Grade Regenerative Blower



IN
MM

NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number	
		SL5P2	SL5P52
Specification	Units	036010	036261
Motor Enclosure - Shaft Mtl.	-	ODP-CS	ODP-CS
Horsepower	-	.75	.75
Voltage	AC	115	208-230
Phase - Frequency	-	Single-50/60 Hz	Single 60 Hz
Insulation Class	-	B	B
Full - Load Amps	Amps (A)	4.58/6.75	1.85/2.55
Service Factor	-	1.0	1.0
Locked Rotor Amps NEMA	Amps (A)	14.0	7.0
Starter Size	-	00/00	00/00
Shipping Weight	Lbs	42	42
	Kg	19.1	19.1

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

SPIRAL Duplex SL5

ROTRON®

Insrument Grade Regenerative Blower

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 100 SCFM
- Maximum pressure: 31 IWG
- Maximum vacuum: 31.3 IWG
- Standard motor: 0.75 HP, ODP
- Cast aluminum blower housing, impeller & cover; slip-on flanges
- Motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards
- Thermal overload protection

OPTIONS

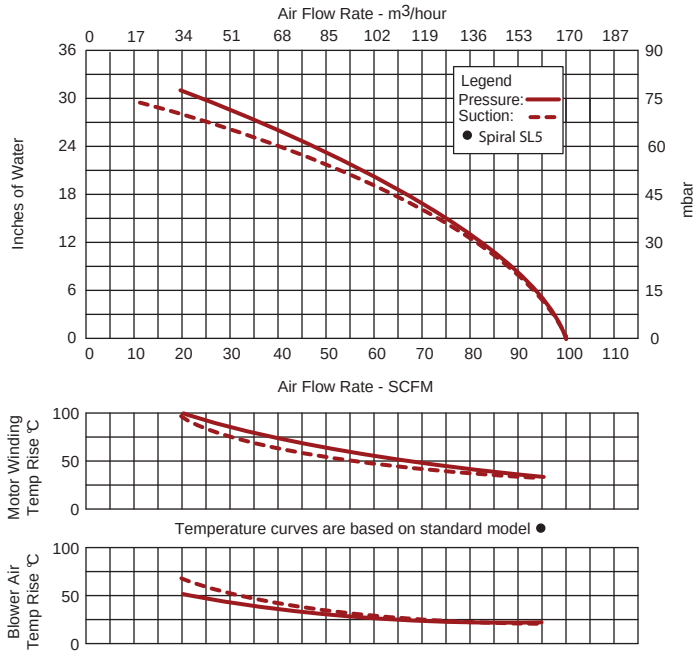
- International voltage & frequency (Hz)
- Hermetically sealed
- UL & CSA approved motor
- Remote drive (motorless) model
- Factory installed trimmers for adjusting air flow rate

ACCESSORIES

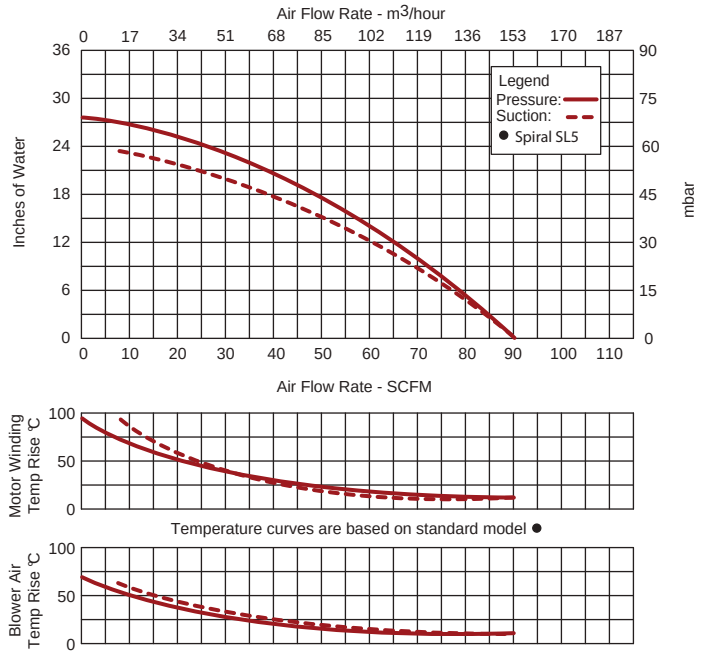
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)

Blower Performance at Standard Conditions

60 Hz



50 Hz



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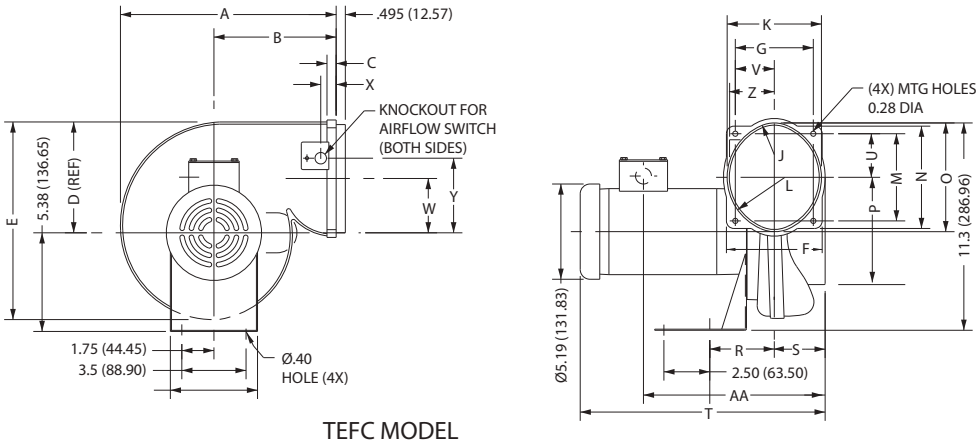
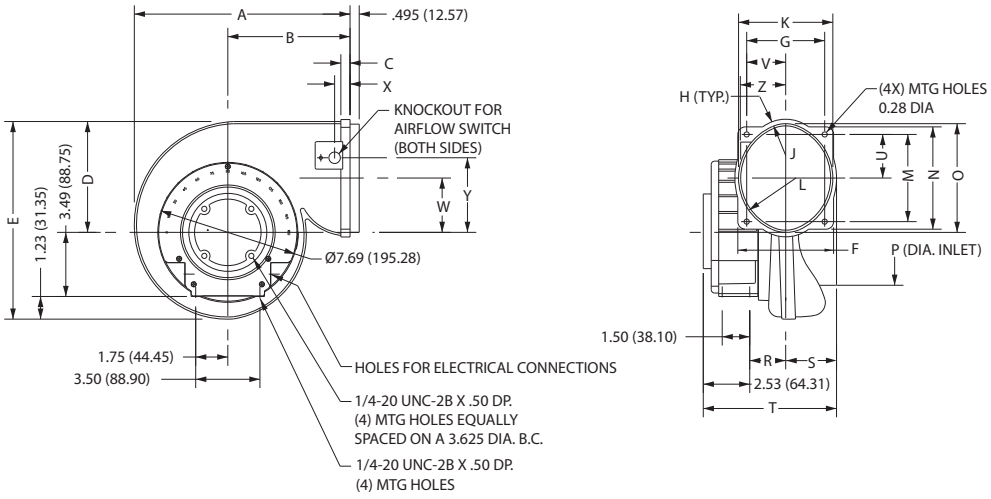


TEFC MODEL



STANDARD MODEL

IN
MM

	NC33A (STD)	NC33AE9 (TEFC)	NC33AG58 (XP)
A	11.55 (293.2)	11.55 (293.2)	11.55 (293.2)
B	6.07 (154.2)	6.07 (154.2)	6.07 (154.2)
C	0.495 (12.6)	0.495 (12.6)	0.495 (12.6)
D	6.04 (153.4)	6.04 (153.4)	6.04 (153.4)
E	10.76 (273.3)	10.76 (273.3)	10.76 (273.3)
F	5.19 (131.8)	5.19 (131.8)	5.19 (131.8)
G	4.25 (108)	4.25 (108)	4.25 (108)
H	0.25 (6.4)	0.25 (6.4)	0.25 (6.4)
J	1.75 (44.5)	1.75 (44.5)	1.75 (44.5)
K	5.10 (129.5)	5.10 (129.5)	5.10 (129.5)
L	3.13 (79.5)	3.13 (79.5)	3.13 (79.5)
M	4.75 (120.7)	4.75 (120.7)	4.75 (120.7)
N	5.59 (142)	5.59 (142)	5.59 (142)
O	5.90 (149.9)	5.90 (149.9)	5.90 (149.9)
P	6.0 (152.4)	6.0 (152.4)	6.0 (152.4)
R	1.97 (50)	3.52 (89.4)	4.20 (106.7)
S	2.78 (70.6)	2.78 (70.6)	2.78 (70.6)
T	7.26 (184.4)	13.35 (339.1)	13.94 (354.1)
U	2.38 (60.5)	2.38 (60.5)	2.38 (60.5)
V	2.13 (54.1)	2.13 (54.1)	2.13 (54.1)
W	2.96 (75.2)	2.96 (75.2)	2.96 (75.2)
X	0.84 (21.3)	0.84 (21.3)	0.84 (21.3)
Y	4.0 (101.6)	4.0 (101.6)	4.0 (101.6)
Z	2.5 (63.5)	2.5 (63.5)	2.5 (63.5)
AA	---	7.13 (181.1)	---

NOTES
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2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number				
		NC33A2G	NC33A3G	NC33A33G	NC33AE9	NC33AG58
Specification	Units	037791	037792	037793	080114	080113
Phase - Frequency	-	Single-50/60 Hz	Single-50/60 Hz	Three-50/60 Hz	Single-50/60 Hz	Single-50/60 Hz
Voltage	AC	115	220/230	208-230	115/230	115/230
RPM on 50/60 Hz	-	2900/3500	2900/3500	2900/3500	2900/3500	2900/3500
Insulation Class	-	B	B	B	F	F
Full - Load Amps	Amps (A)	3.44/3.84	1.47/1.82	1.10/1.18	6.0/3.0	4.4
Locked Rotor Amps	Amps (A)	8.25	4.0	5.0	21/10.5	38/19
Shipping Weight	Lbs	18	18	18	28	30
	Kg	8.2	8.2	8.2	12.7	13.6
Motor Enclosure	-	Standard	Standard	Standard	TEFC	XP

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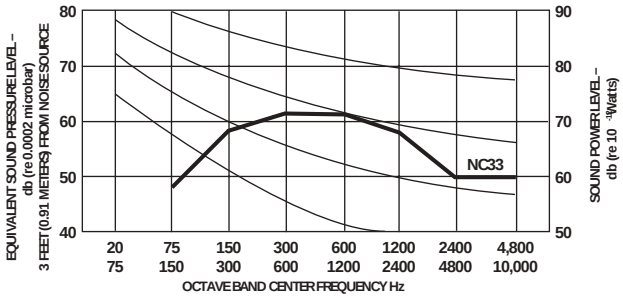
AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

ROTRON®

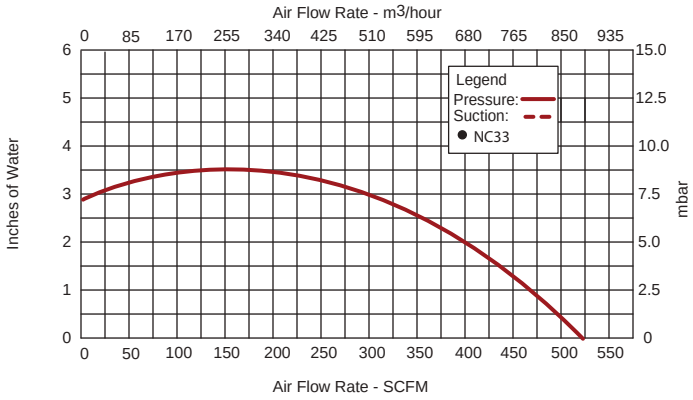
FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 540 SCFM
- Maximum pressure: 3.5 IWG
- Thermoset plastic blower housing with aluminum impeller
- Permanently seal ball bearings in motor - L10 bearing life: 50,000 hours
- Quiet operation within OSHA standards
- Shipping weight: 18 lbs (8.2 kg) for standard model
  28 lbs (12.7 kg) for TEFC model
  30 lbs (13.6 kg) for XP model
- Designed for UL and CSA
- Automatic thermal overload protection on standard motor enclosures

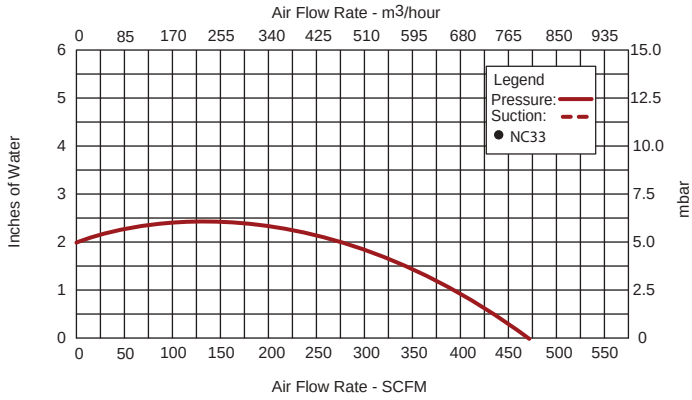


Blower Performance at Standard Conditions

60 Hz



50 Hz



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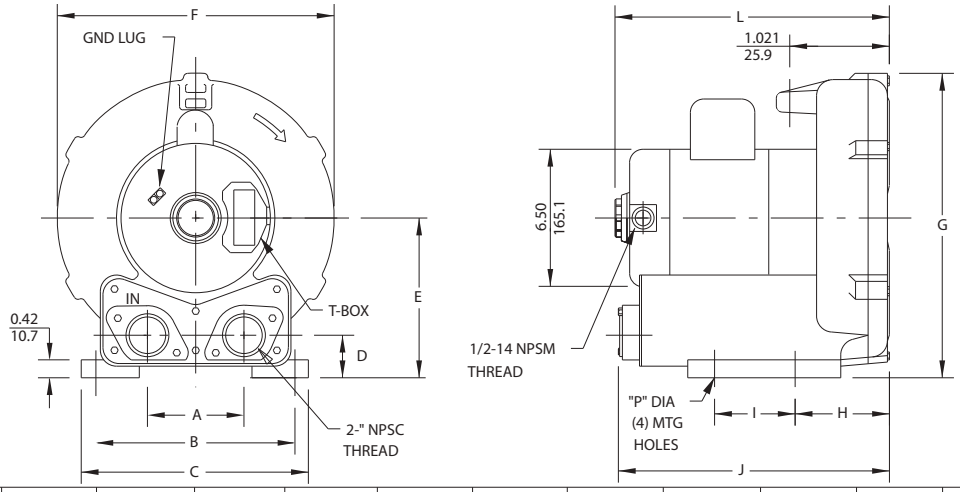
Application Specific Blowers

DR 404/454/505/513/656

Spa Blowers

ROTRON®



IN
MM

NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

MODEL	A (IN/MM)	B (IN/MM)	C (IN/MM)	D (IN/MM)	E (IN/MM)	F (IN/MM)	G (IN/MM)	H (IN/MM)	I (IN/MM)	J (IN/MM)	K (IN/MM)	L (IN/MM)
DR404AQ58M	4.75/120.7	8.93/226.8	10.12/257	192/48.8	6.28/159.5	11.5/292.1	12.16/308.9	3.0/76.2	3.75/95.3	12.88/372.2	.59/15	12.91/327.9
DR454V58	4.75/120.7	10.30/261.6	11.38/289.1	1.92/48.8	6.98/177.3	12.55/318.8	13.52/343.4	3.25/82.6	4.50/114.3	10.81/274.6	.59/15	14.45/367
DR505AW58M	4.75/120.7	10.30/261.6	11.70/297.2	1.87/47.5	7.26/184.4	13.53/343.7	14.38/365.3	3.56/92.7	4.50/114.3	14.38/365.3	.59/15	15.0/381
DR513V58	4.75/120.7	11.42/290.1	13.0/330.2	2.23/56.6	8.69/220.7	14.21/360.9	15.8/401.3	3.72/94.5	5.50/139.7	13.74/349	.59/15	14.58/370.3
DR656K58X	4.92/125	11.42/290.1	12.8/325.1	2.25/57.2	7.46/189.5	15.42/391.7	15.17/385.3	4.14/105.2	5.5/139.7	15.12/384.1	.59/15	15.51/393.9

		Part/Model Number				
		DR404AQ58M	DR454V58M	DR505AW58M	DR513V58	DR656K58X
Specification	Units	037778	080485	037935	038143	080603
Motor Enclosure - Shaft Mtl.	-	SPA (ODP)-CS	SPA (ODP)-CS	SPA (ODP)-CS	SPA (ODP)-CS	TEFC-CS
Horsepower	-	1.0	1.5	2.0	1.5	3.0
Voltage	AC	115/230	115/230	115/230	115/230	115/230
Phase - Frequency	-	Single-50/60 Hz	Single-50/60 Hz	Single-50/60 Hz	Single-50/60 Hz	Single-50/60 Hz
Insulation Class	-	F	F	F	F	F
NEMA Rated Motor Amps	Amps (A)	15/7.5	15.2/7.6	21/10.5	15.2/7.6	31/15.5
Service Factor	-	1.4	1.3	1.2	1.3	1.0
Maximum Blower Amps	Amps (A)	8/4	17/8.5	26/13	17/8.5	27.8/13.9
Locked Rotor Amps	Amps (A)	32/16	85/43	136/68	85/43	200/100
Recommended NEMA Starter	Size-	0/00	1/0	1/0	1/0	1.5/1
Shipping Weight	Lbs	64	76	83	90	51
	Kg	29	34.5	37.6	40.8	23.1
Recommended Number of Jets	-	3-6	5-10	5-10	12-17	8-12

Voltage - ROTRON motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

Operating Temperatures - Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

Maximum Blower Amps - Corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

Notes
- The blower should not be stopped/started more than four times an hour. - Use of relief valve 515092 is required for all blowers.

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

Application Specific Blowers

DR 404/454/505/513/656

Spa Blowers

ROTRON®

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file
- Maximum flow: 105, 127, 160, 200 or 78 SCFM
- Maximum pressure: 56, 58, 74, 69 or 88 IWG
- Standard motor: 1.0, 1.5, 2.0, 3.0 HP, Spa Duty ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings and Class B rated thermal protection
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

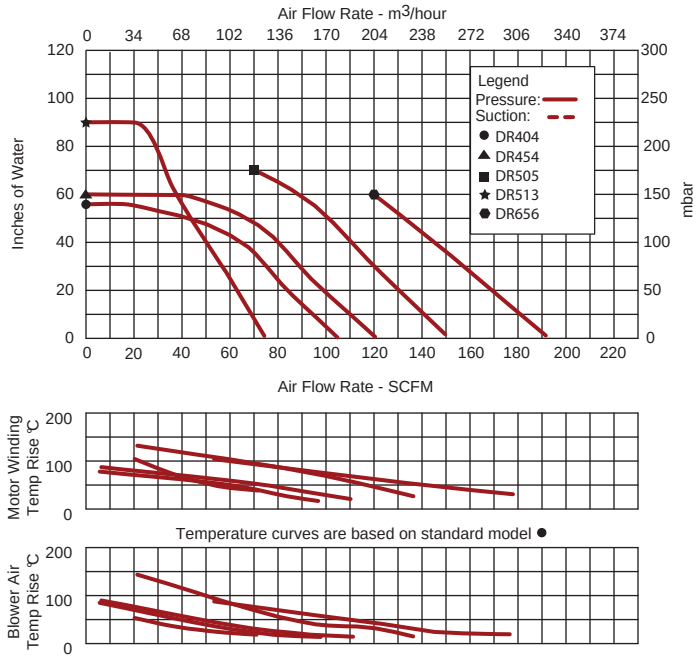
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES

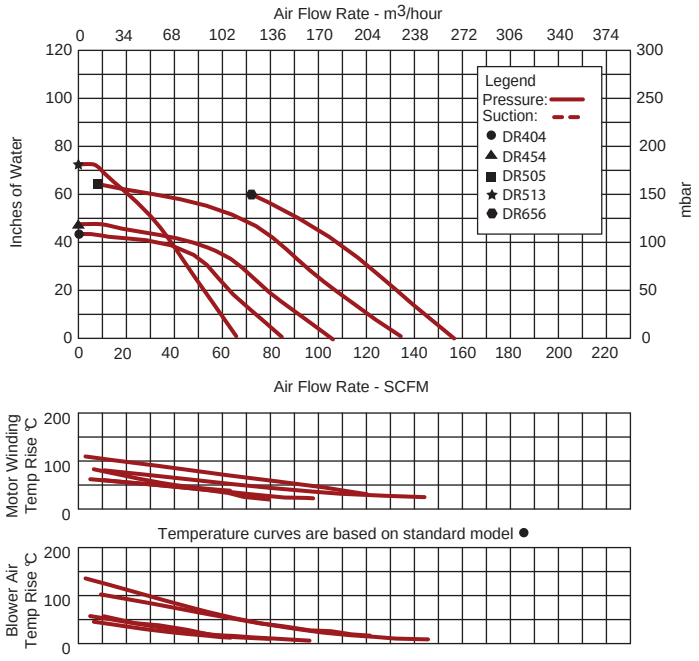
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Variable frequency drive package

Blower Performance at Standard Conditions

60 Hz



50 Hz



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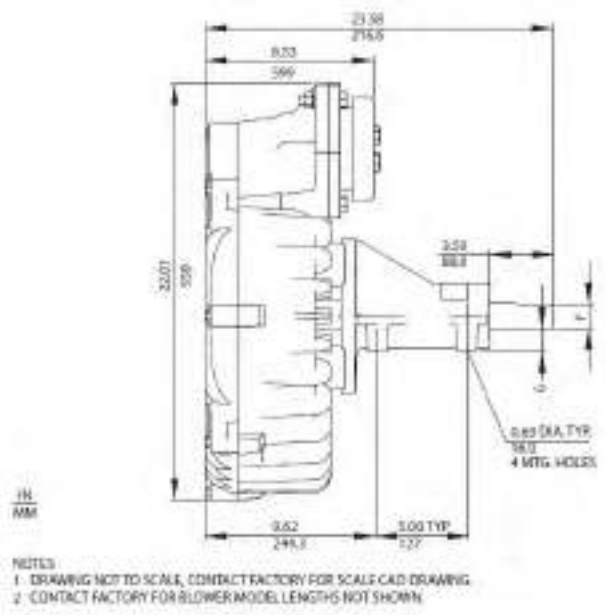
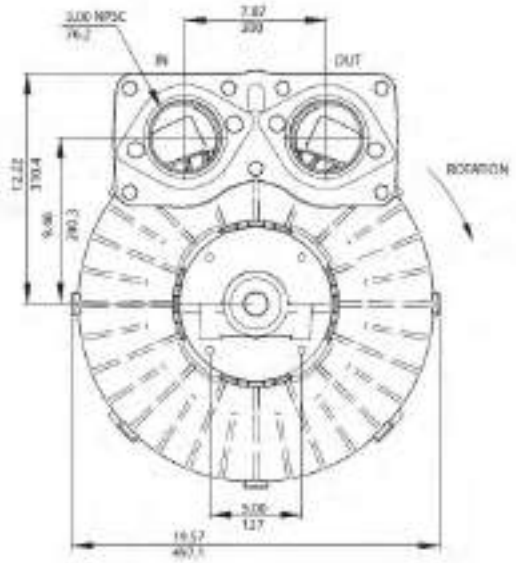
AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

DR 10RDNT/SS10RDNT/HS 10RDNT

ROTRON®

Remote Drive (Motorless) Blowers





		Part/Model Number		
		DR10RDNT	SS10RDNT	HS10RDNT
Specification	Units	036594		
Shaft Material	-	Carbon Steel	Stainless Steel	Hastelloy
Speed Range	-	1750-4500	1750-4500	1750-4500
Housing, Cover, Cover	-	Cast Iron	Stainless Steel	Hastelloy
Shipping Weight	Lbs	400	500	600
	Kg	181.4	226.8	272.2

SS = Stainless Steel HS = Hastelloy

1 DR10RDNT not recommended for use with explosive gas due to material of construction.

2 Maximum operating temperature: Blower outlet air temperature should not exceed 260°C (air temperature rise plus inlet temperature). Contact factory for use above 260°C blower outlet air temperature.

3 AMETEK will not be liable for blowers operated beyond factory specified RPM.

4 All applications must be reviewed. Contact application engineering for assistance.

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DR 10RDNT/SS10RDNT/HS 10RDNT

ROTRON®

Remote Drive (Motorless) Blowers

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- CE compliant - Declaration of Conformity on file

BLOWER OPTIONS

- Corrosion resistant surface treatments & sealing options
- Slip-on or face flanges for application-specific needs
- Packaged on baseplate with V-belts or coupling, guard & motor
- High temperature Viton® seals
- Krytox® grease high temperature bearings

PACKAGE/MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs
- Packing gland or double faced seal options

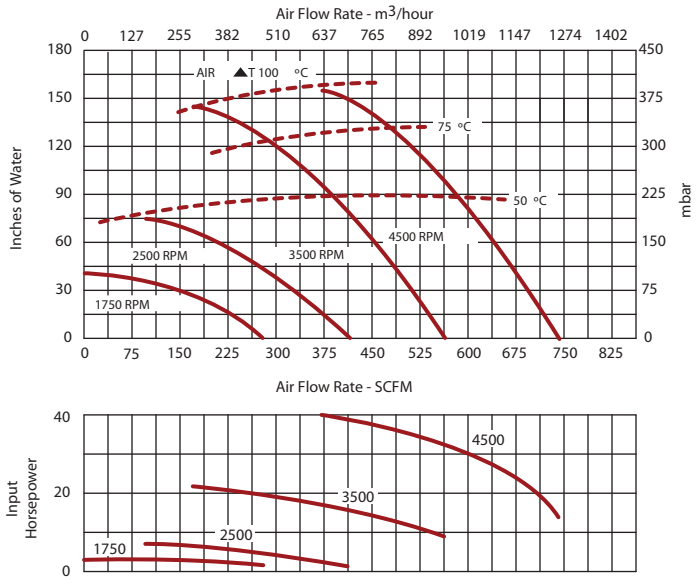
ACCESSORIES

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing
- Variable frequency drive package

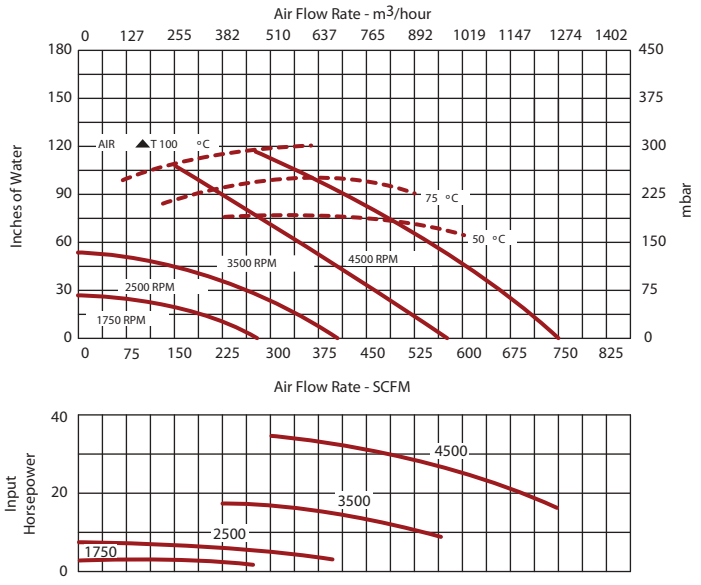
Note: For accessories, special high temperature models may be required

Blower Performance at Standard Conditions

Pressure



Suction



This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

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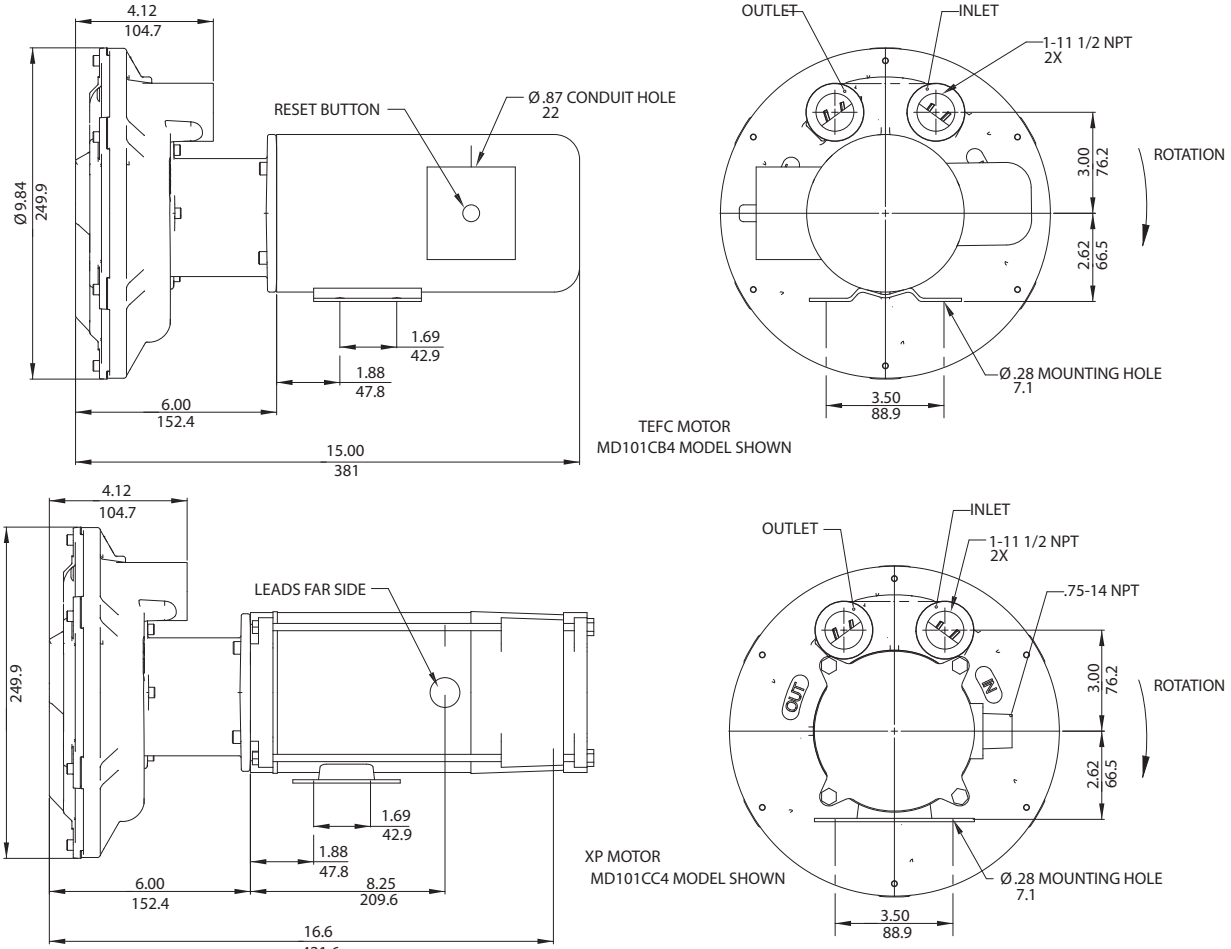
MD 101 Magnetic-Drive

ROTRON®

Regenerative Blower



NOTES

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2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

		Part/Model Number	
		MD101CB4	MD101CC4
Specification	Units	038014	038271
Motor Enclosure - Shaft Mtl.	-	TEFC	Explosion-proof
Horsepower	-	.25	.25
Phase - Frequency Voltage	-	Single-60 hz	Single-60 hz
Motor Nameplate Amps	AC	115	115
Max. Blower Amps	Amps (A)	2.6	2.6
Locked Rotor Amps	Amps (A)	2.2	2.2
Service Factor	Amps (A)	6.4	7.2
Starter Size	-	1.0	1.0
Thermal Protection	-	00	00
XP Motor Class - Group	-	Class B - Automatic, Manual Reset	Class B - Automatic
	-	-	I-D
Shipping Weight	Lbs	40	40
	Kg	18.1	18.1

[1] Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

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DYNAMIC FLUID SOLUTIONS

MD 101 Magnetic-Drive

ROTRON®

Regenerative Blower

FEATURES

- Hermetically designed seal-less blower
- Continuous operation
- Manufactured in the USA
- Maximum flow: 27 SCFM
- Maximum pressure: 28 IWG
- Maximum vacuum: 26.5 IWG
- Standard motor: 0.25 HP, TEFC or XP
- Disconnect motor without disassembling from piping
- Cast aluminum blower housing, impeller & flanges
- Permanently sealed ball bearings in housing and motor
- Quiet operation within OSHA standards
- Contact factory for leakage specifications

BLOWER OPTIONS

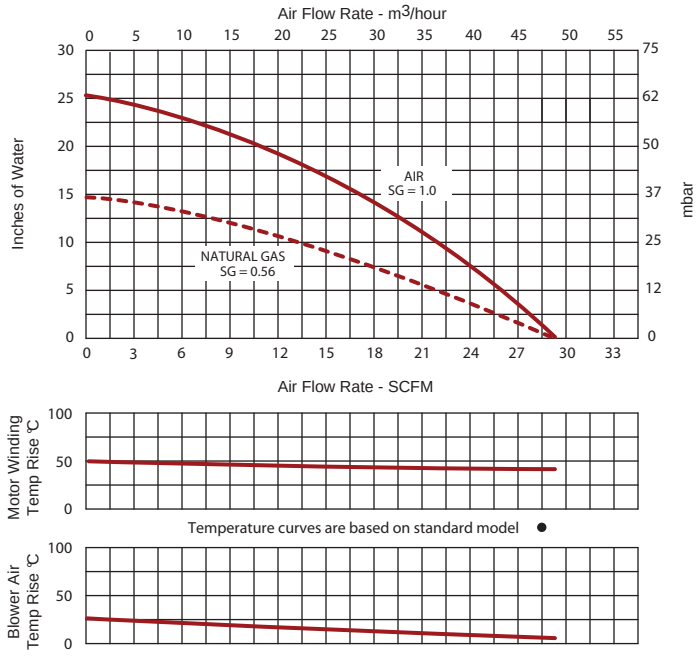
- Corrosion resistant surface treatments & sealing options

ACCESSORIES

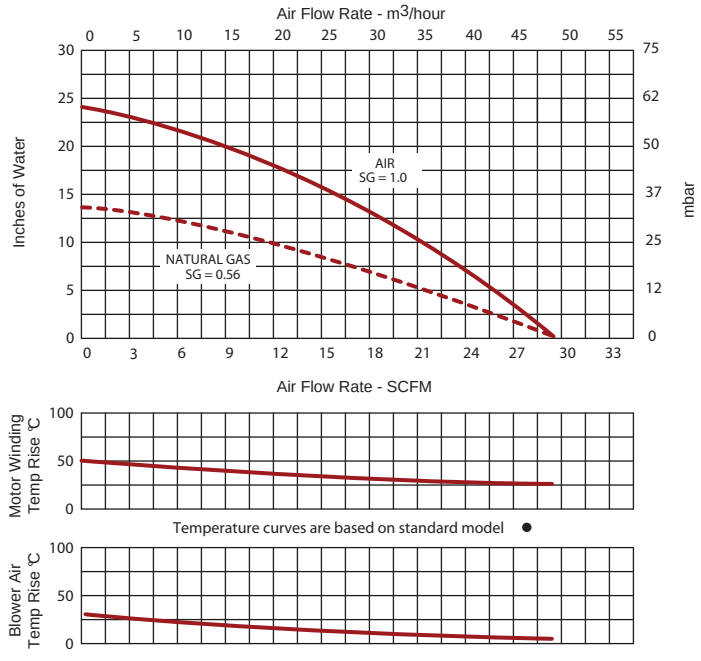
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- External mufflers for additional silencing

Blower Performance at Standard Conditions

Pressure



Suction



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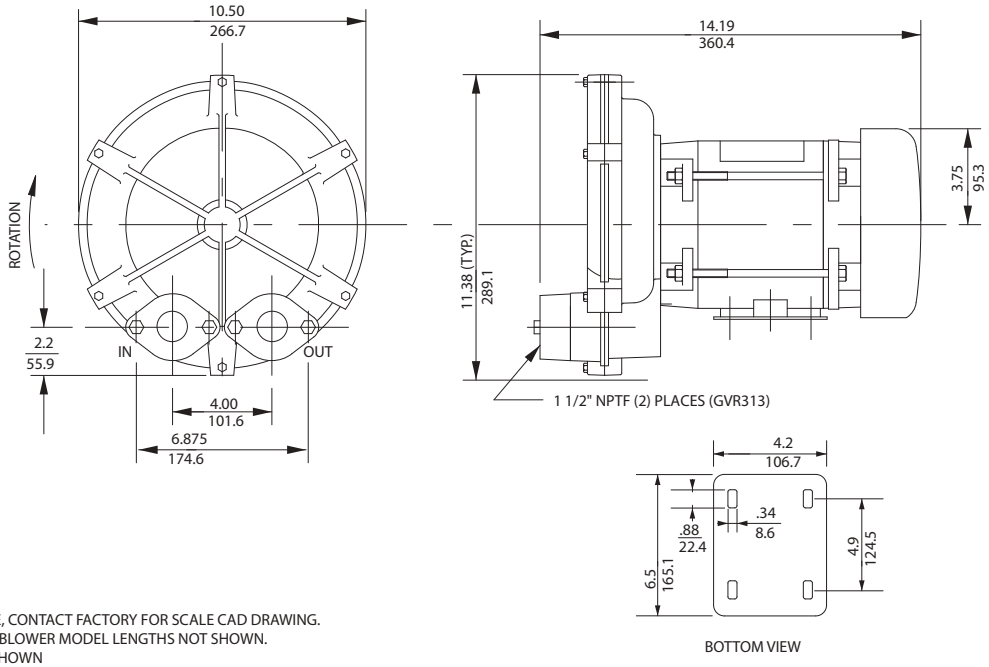
AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

GVR313

ROTRON®

Regenerative Blower



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NOTES
1 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
2 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.
3 GVR313AK4H MODELS SHOWN

		Part/Model Number				
		GVR313AK4H	GVR313AK58H	GVR313AK72HA	GVR313AK91H	GVR313AE4HA
Specification	Units	038584	081531	081470	081524	080274
Motor Enclosure - Shaft Mtl.	-	Explosion-proof - CS	Explosion proof - CS	Explosion proof - CS	ATEX - CS	TEFC
Horsepower	-	0.5	0.5	0.5	0.75	0.5
Phase - Frequency Voltage	-	Single-60 hz	Single-50/60 Hz	Three-60 Hz	Three-50 Hz	Single-60 Hz
Motor Nameplate Amps	AC	115	110/220	230/460	400	115
Max. Blower Amps	Amps (A)	9.4	8.4/4.2	1.4/0.7	1.4	7.4
Locked Rotor Amps	Amps (A)	7.6	6.8/3.4	1.4/0.7	1.1	7.4
Service Factor	Amps (A)	45	45	10.2/5.1	9	47
Starter Size	-	1.0	1.0	1.15	1.0	1.0
Thermal Protection	-	0	0	00	0	0
XP Motor Class - Group	-	Class B - Automatic	Class B - Automatic	Class B - Automatic	Thermistors	Class B - Automatic
	-	I-D	1-D	1-D	EExd IIB	1-D
Shipping Weight	Lbs	39	39	39	45	39
	Kg	17.7	17.7	17.7	20.4	17.7

1 115 voltage, 1 phase motors are standard. 230 volt motors available. As an option, a transformer could be used.
2 Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.
3 Maximum blower amps corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

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GVR313

Regenerative Blower

ROTRON®

FEATURES

- Manufactured in the USA
- Maximum flow: 52 SCFM
- Maximum pressure 45 IWG
- Maximum vacuum: 40.8 IWG
- Standard motor: 0.5 HP, TEFC
- Anodized cast aluminum blower housing, impeller & cover
- Sealed by single face seal on shaft along with O-ringed flanges and cover
- Quiet operation within OSHA standard
- ROHS gold irridite coatings on aluminum surfaces

MOTOR OPTIONS

- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

BLOWER OPTIONS

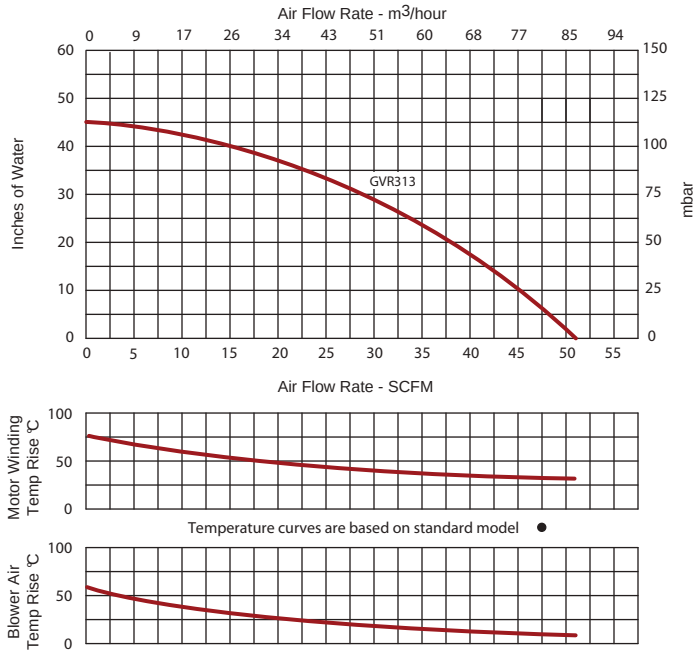
- Slip-on or face flanges for application-specific needs

ACCESSORIES

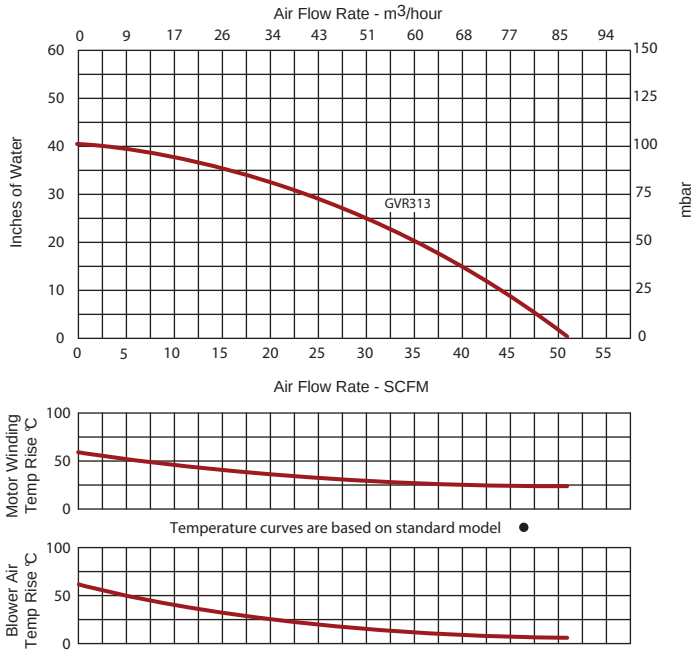
- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges, & relief valves
- Switches - air flow, pressure, vacuum, or temperature
- External mufflers for additional silencing

Blower Performance at Standard Conditions

Pressure



Suction



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Accessories

AMETEK Dynamic Fluid Solutions' ROTRON brand has long been a world leader in regenerative blower technologies, bringing regenerative advantages to a new level, providing quiet, maintenance-free, oil-free operation.

Our accessories for regenerative blowers inlude:

- Filtration Accessories
- Measurement Accessories
- Noise Reduction Accessories
- Valves and Gauges
- VFD Drives
- Air Knives

Blower Model Reference Key	
A = SPIRAL	E = DR/EN/CP 656, 6, 633, S7
B = DR/EN/CP 968, 083, 101, 202	F = DR/EN/CP 757, 808, 858, S9, rest (Only)
C = DR/EN/CP 303, 312, 313, 353	G = DR/EN/CP 833, S13, P13 (Inlet Only)
D = DR/EN/CP 404, 454, 513, 505, 555, 523	H = DR/EN/CP 909, 979, 1233, 14, S15, P15 (Inlet Only)

Blower Connection Key
NPT – American National Standard Taper Pipe Thread (Male)
NPSC - American National Standard Straight Pipe Thread for Coupling (Female)
SO – Slip On (Smooth – No Threads)

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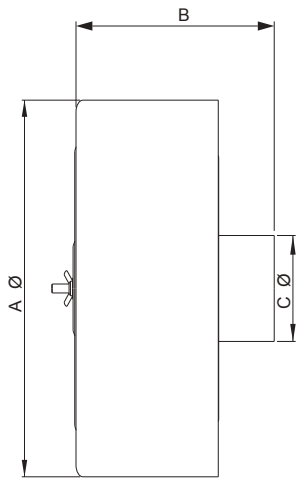
Filtration - Inlet Filter (Single Connection)

Inlet Filters protect the blower and the air distribution system from dust, and other airborne particles and contaminants. Normally used in pressure systems.



SPECIFICATIONS:

HOUSING – Steel
MEDIA – Polyester
EFFICIENCY – 97-98% (8 to 10 micron particle size)
FILTER ELEMENT – Replaceable (see filter elements) NOTE: "Z" MEDIA (1 to 3 micron particle size) available

		Part/Model Number								
Specification	**Units**	**477411**	**516466**	**515122**	**515123**	**515124**	**515125**	**515145**	**515151**	**516511**
Filter Element	-	A	B	C, D	E	E	F	G	H	H
Ref Blower Model	-	271078	515132	515132	515133	515134	515134	515134	515135	516515
Outlet Connection	-	2.00 SO	1.00 NPT	1.50 NPT	2.00 NPT	2.00 NPT	2.50 NPT	3.00 NPT	4.00 NPT	6.00 NPT
Dimension A	Inches	4.56	6.00	6.00	7.75	10.00	10.00	10.00	10.00	16.00
	mm	115.8	152.4	152.4	196.9	254	254	254	254	406.4
Dimension B	Inches	6.12	6.50	6.50	7.25	12.25	12.50	13.00	14.00	15.00
	mm	155.4	165.1	165.1	184.2	311.2	317.5	330.2	355.6	381
Dimension C	Inches	2.00	1.00	1.5	2.00	2.00	2.50	3.00	4.00	6.00
	mm	50.8	25.4	38.1	50.8	50.8	63.5	76.2	101.6	152.4
Z Media Filter PN	-		517865	517866	517867	517868	517869	517870	517871	517872

Blower Model Reference Key	
A = SPIRAL	E = DR/EN/CP 656, 6, 633, S7
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C = DR/EN/CP 303, 312, 313, 353	G = DR/EN/CP 833, S13, P13 (Inlet Only)
D = DR/EN/CP 404, 454, 513, 505, 555, 523	H = DR/EN/CP 909, 979, 1233, 14, S15, P15 (Inlet Only)

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Filtration - Inline Filter (Dual Connection)

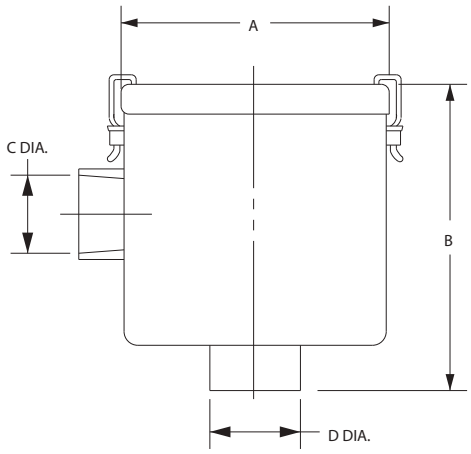
ROTRON®

Inline Filters protect the blower from harmful dust and other particles that may be drawn into the blower through the air distribution system. Normally used in vacuum systems.

SPECIFICATIONS:

Inline filter PN 271200 is a straight through design
Inlet is directly opposite of outlet

HOUSING – Steel
MEDIA – Polyester
EFFICIENCY – 97-98% (8 to 10 micron particle size)
FILTER ELEMENT – Replaceable (see filter elements) NOTE: "Z" MEDIA (1 to 3 micron particle size) available
Feature 1/4" threaded tap for gauge connection on inlet and outlet



		Part/Model Number							
Specification	**Units**	**271200**	**516461**	**515254**	**515255**	**515256**	**516463***	**516465***	**517611***
Filter Element	-	271078	516434	516434	516435	516435	515135	515135	516515
Ref Blower Model	-	A	B	C, D	E	F	G	H	H
Inlet Connection	-	1.75 SO	1.00 NPSC-F	1.50 NPSC-F	2.00 NPSC-F	2.50 NPSC-F	3.00 NPT-M	4.00 NPT-M	6.00 NPT-M
Outlet Connection	-	2.00 SO	1.00 NPSC-F	1.50 NPSC-F	2.00 NPSC-F	2.50 NPSC-F	3.00 NPT-M	4.00 NPT-M	6.00 NPT-M
Dimension A	Inches	5.25	7.25	7.00	8.00	8.00	14.00	14.00	18.00
	mm	133.4	184.2	177.8	203.2	203.2	355.6	355.6	457.2
Dimension B	Inches	8.31	6.50	6.50	10.25	10.25	26.50	27.00	28.00
	mm	211.1	165.1	165.1	260.4	260.4	673.1	685.8	711.2
Dimension C	Inches	2.00	1.00	1.50	2.00	2.50	3.00	4.00	6.00
	mm	50.8	25.4	38.1	50.8	63.5	76.2	101.6	152.4
Dimension D	Inches	1.75	1.00	1.50	2.00	2.50	3.00	4.00	6.00
	mm	44.5	25.4	38.1	50.8	63.5	76.2	101.6	152.4
Z Media Filter PN	-		517886	517887	517888	517889	517890	517891	517892

Blower Model Reference Key	
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D = DR/EN/CP 404, 454, 513, 505, 555, 523	H = DR/EN/CP 909, 979, 1233, 14, S15, P15 (Inlet Only)

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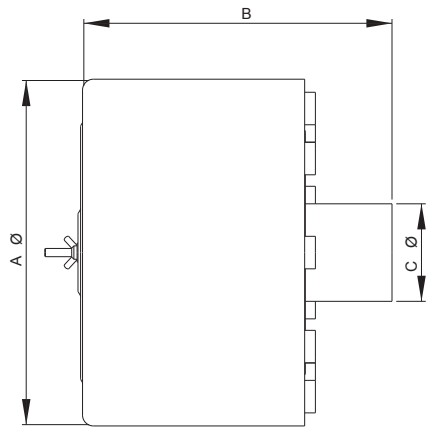
Filtration - Filter Silencers (Single Connection)

ROTRON®

Filter/Silencers reduce noise levels while ensuring clean air is provided to the blower and the air distribution system. Normally used in pressure applications.



SPECIFICATIONS:

HOUSING – Steel
MEDIA – Polyester
EFFICIENCY – 97-98% (8 to 10 micron size)
FILTER ELEMENT – Replaceable (see filter elements)

		Part/Model Number							
Specification	Units	516487	516489	516491	516493	516495	516497	516499	516513
Filter Element	-	B	C, D	E	E	F	G	H	H
Ref Blower Model	-	515132	515132	515133	515134	515134	515134	515135	516515
Outlet Connection	-	1.00 NPT	1.50 NPT	2.00 NPT	2.00 NPT	2.50 NPT	3.00 NPT	4.00 NPT	6.00 NPT
Dimension A	Inches	6.00	6.00	10.00	10.00	10.00	10.00	12.33	16.00
	mm	152.4	152.4	254	254	254	254	313	406.4
Dimension B	Inches	6.50	6.50	7.25	12.25	12.50	12.50	13.87	15.00
	mm	165.1	165.1	184.2	311.2	317.5	317.5	352	381
Z Media Filter PN	-	517878	517879	517880	517881	517882	517883	517884	517885
Dimension C	Inches	1.00	1.50	2.00	2.00	2.50	3.00	4.00	6.00
	mm	13154101.2	13154126.6	13154152	13154177.4	13154202.8	13154228.2	13154253.6	13154279

Blower Model Reference Key	
A = SPIRAL	E = DR/EN/CP 656, 6, 633, S7
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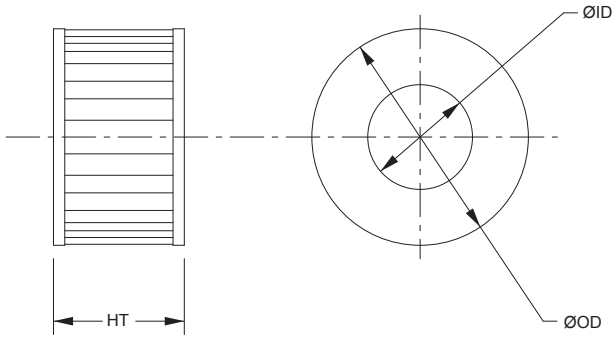
All ROTRON Air Filters and Filter/Silencers have replaceable filter elements. The filter media is polyester designed for high efficiency over a wide spectrum of industrial applications. See ÿlter element cross reference table. Filter elements supplied with foam pre-filter.

Standard Replacement Filter Element Cross Reference Table

Filter	Element	Filter	Element	Filter	Element
271200	271078	515158	515134	516489	515132
477411	271078	515254	516434	516491	515133
515122	515132	515255	516435	516493	515134
515123	515133	515256	516435	516495	515134
515124	515134	516461	516434	516497	515134
515125	515134	516463	515135	516499	515135
515145	515134	516465	515135	516511	516515
515151	515135	516466	515132	516513	516515
515157	515133	516487	515132	517611	516515



For DR Blower Models

		Part/Model Number						
Specification	Units	515132	515133	515134	515135	516434	516435	516515
Z Media Filter PN	-	**517873**	**517874**	**517875**	**517876**	**517893**	**517894**	**517877**
Dimension ID	Inches	3.00	3.63	3.5	4.75	2.56	3.50	8.00
	mm	76.2	92.2	88.9	120.7	65	88.9	203.2
Dimension OD	Inches	4.38	5.88	5.88	7.88	5.00	5.88	11.75
	mm	111.3	149.4	149.4	200.2	127	149.4	298.5
Area	Sq/Ft	4.75	4.75	9.50	9.63	4.75	8.75	9.63
	Sq/M	0	0	1	1	0	1	1
Dimension HT	Inches	1.5	2.3	4.5	8.3	2.0	4.5	19.0
	mm	38.1	58.4	114.3	210.8	50.8	114.3	482.6

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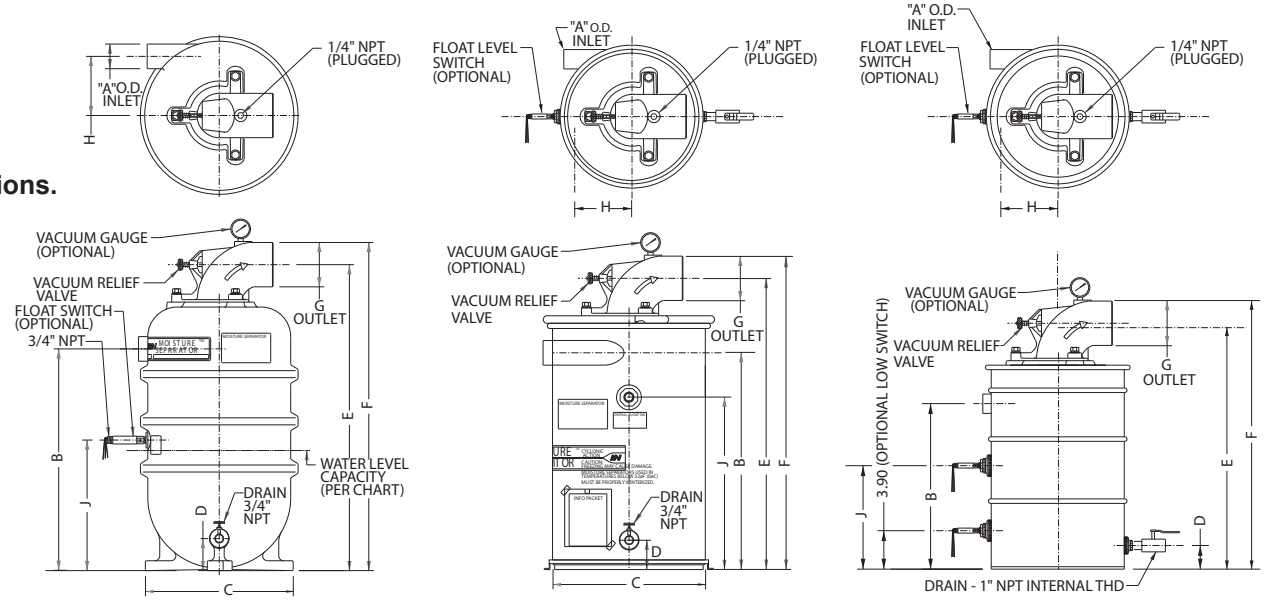
Filtration - Moisture Separator

ROTRON®

By separating and containing entrained liquids, ROTRON'S™ moisture separator helps protect our regenerative blowers and the end treatment system from corrosion and mineralization damage. Recommended for all soil vacuum extraction Applications.

SPECIFICATIONS:
SEPARATION METHOD – High Effciency Cyclonic
RELIEF VALVE MATERIAL – Brass & Stainless Steel
FLOAT MATERIAL – Copper
FLOAT SWITCH – SPDT, Explosion-proof NEMA 7&9, 5 Amp max.

applications.



PLASTIC "P" DESIGN | METAL "D" DESIGN | METAL "B" DESIGN

Specification	Units	Part/Model Number MS200PS 038519	MS300PS 038520	MS350BS 038357	MS500BS 080660	MS600BS 080659	MS1000BS 038914
Dimension A	Inches	2.38	2.88	3.25	3.25	4.00	6.00
	mm	60.5	73.2	82.6	82.6	101.6	152.4
CFM Max.	CFM	200	300	350	500	600	1000
	m3/hr	340	510	595	850	1020	1700
Dimension B	Inches	22.46	22.46	28.00	28.00	27.00	31.00
	mm	570.5	570.5	711.2	711.2	685.8	787.4
Dimension C	Inches	16.00	16.00	23.00	23.00	23.00	27.00
	mm	406.4	406.4	584.2	584.2	584.2	685.8
Dimension D	Inches	3.25	3.25	4.00	4.00	4.00	4.00
	mm	82.6	82.6	101.6	101.6	101.6	101.6
Dimension E	Inches	31.05	31.05	37.25	37.37	37.37	47.32
	mm	788.7	788.7	946.2	949.2	949.2	1201.9
Dimension F	Inches	33.30	33.30	39.50	54.50	54.50	51.70
	mm	845.8	845.8	1003.3	1384.3	1384.3	1313.2
Dimension H	Inches	6	6.00	9.75	9.75	9.25	10.00
	mm	152.4	152.4	247.7	247.7	235	254
Dimension G	Inches	4.50 OD	4.50 D	4.50 OD	6.63 ID	6.63 ID	8.62 OD
	mm	114.3	114.3	114.3	168.4	168.4	218.9
Dimension J	Inches	13.25	13.25	17.50	17.50	17.50	19.88
	mm	336.6	336.6	444.5	444.5	444.5	505
Drain Internal Thd	-	3/4	3/4	1	1	1	1
Shipping Weight	Lbs	42	42	82	95	96	150
	Kg	19.1	19.1	37.2	43.1	43.5	68

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2.0 Moisture Separator™ Specifications

2.1 Duty

The moisture separator shall be designed for use in a soil vapor extraction system capable of continuous operation with a pressure drop of less than six inches of water at the rated flow of _____ SCFM. The separator shall be capable of operation under various inlet conditions randing from a fine mist to slugs of water with high efficiency.

2.2 Principle of Operation

The moisture separator shall incorporate cyclonic separation to remove entrained water. The separator must protect against an overflow by fail safe mechanical means. An electrical switch or contact(s) alone is not an acceptable means of protection against overflow, but is a good backup.

2.3 Construction

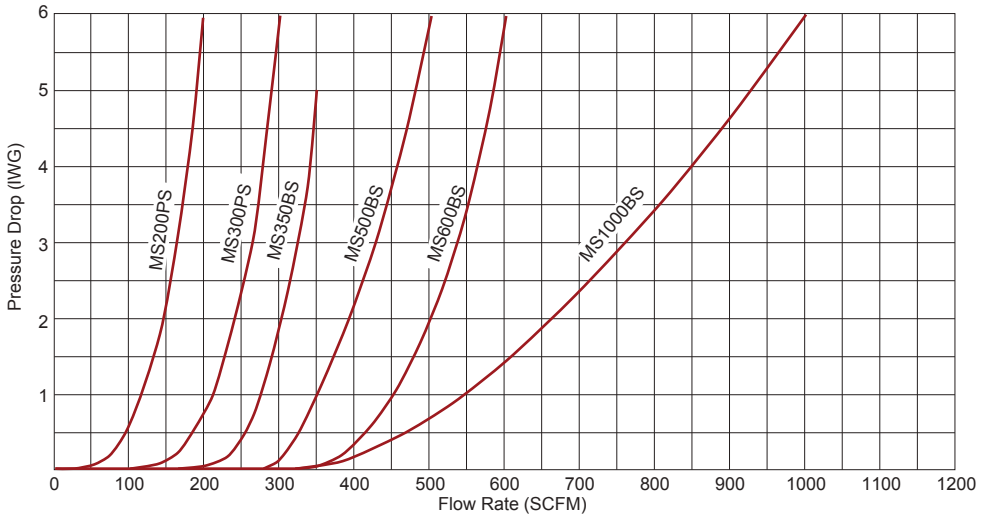
The body of the moisture separator shall be constructed of heavy wall plastic or heavy gauge cold rolled steel. The steel interior and exterior shall be epoxy (powder) coated to resist abrasion, corrosion, and chipping that might expose the surface. The inlet shall be tangentially located and welded to the body. The outlet port shall be constructed of PVC or cast aluminum alloy, flanged and sealed to the center of the top of the separator. The separator shall incorporate a non-sparking copper float ball and an adjustable relief valve to protect against overflow and overheating the blower.

2.4 Capacity and Dimension

The moisture separator must have a liquid capacity of _____ gallons. The inlet shall be _____ inch OD slip-on type. The outlet shall be _____ inch OD slip-on type.

For DR/EN/CP Blower Model	Selector Moisture Separator Model	Liquid-holding Capacity (gallons)	Inlet (OD)	Outlet	Max Vacuum Allow (IHG)
404 454 505 513 523 555 633 833	MS200PS	7	2.38	4.5 OD	12
656 6 757	MS300PS	7	2.88		
808	MS350BS	40	3.25	6.63 ID	22
858 1233	MS500BS				
909	MS600BS		4.0		
979 14	MS1000BS	65	6.0	8.62 OD	

2.5 Pressure Drop



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Measurement - Air Flow Meter

ROTRON®

FEATURES

- Direct reading in SCFM
- Low pressure drop (2-4" typical) across the flow meter
- Non-clogging, low impedance air stream
- Light weight aluminum
- No moving parts
- Large easy-to-read dial
- Accurate within 2% at standard conditions
- Good repeatability
- Available in 2", 3" and 4" sizes
- Factory conÿgured for quick installation
- .048" Allen key supplied for gauge adjustment

OPTIONS

- Corrosion-resistant version with Chem-Tough ™ or in stainless steel
- FDA-approved Food Tough™ surface conversion

BENEFITS

- OPTIMIZE SYSTEM EFFICIENCY
  Measuring the correct air ˜ow can assist you in ÿne-tuning to your system's optimal efficiency.
- BALANCE MULTI-PIPING SYSTEMS
  When evacuating CFM from more than one pipe, di˝erent run lengths or end system impedance can cause one pipe to handle more CFM than the other. With an accurate CFM reading, piping can be balanced by bleeding air in/out or by creating an extra impedance.
- DETECT CHANNELING OR PLUGGING
  For systems in which channeling or plugging can occur, a change in the CFM measured can help indicate the unseen changes in your system.

		Part/Model Number					
		FM20C030Q	FM20C045Q	FM20C065Q	FM20C125Q	FM20C175Q	FM20C225Q
Specification	Units	550599	550600	550601	550602	550603	550604
Flow Rate	CFM	6-30	9-45	13-65	25-125	35-175	45-225
	m3/hr	10-50	15-77	22-111	43-213	60-300	77-383
Threads B	-	2-11.5	2-11.5	2-11.5	2-11.5	2-11.5	2-11.5
Dimension C	Inches	7.18	7.18	7.18	7.18	7.18	7.18
	mm	182.4	182.4	182.4	182.4	182.4	182.4
Dimension D	Inches	7.0	7.0	7.0	5.8	5.8	5.8
	mm	177.8	177.8	177.8	147.3	147.3	147.3
Dimension E	Inches	2.0	2.0	2.0	2.0	2.0	2.0
	mm	50.8	50.8	50.8	50.8	50.8	50.8
Dimension F	Inches	3.75	3.75	3.75	3.75	3.75	3.75
	mm	95.3	95.3	95.3	95.3	95.3	95.3

		Part/Model Number					
		FM30C250Q	FM30C350Q	FM30C475Q	FM40C450Q	FM40C600Q	FM40C850Q
Specification	Units	550605	550606	550607	550608	550609	550610
Flow Rate	CFM	50-250	70-350	95-475	90-450	120-600	170-850
	m3/hr	85-425	119-595	162-808	153-795	204-1020	289-1445
Threads B	-	3-8	3-8	3-8	4-8	4-8	4-8
Dimension C	Inches	7.18	7.18	7.18	7.18	7.18	7.18
	mm	182.4	182.4	182.4	182.4	182.4	182.4
Dimension D	Inches	7.0	7.0	7.0	5.8	5.8	5.8
	mm	177.8	177.8	177.8	147.3	147.3	147.3
Dimension E	Inches	2.0	2.0	2.0	2.0	2.0	2.0
	mm	50.8	50.8	50.8	50.8	50.8	50.8
Dimension F	Inches	3.75	3.75	3.75	3.75	3.75	3.75
	mm	95.3	95.3	95.3	95.3	95.3	95.3

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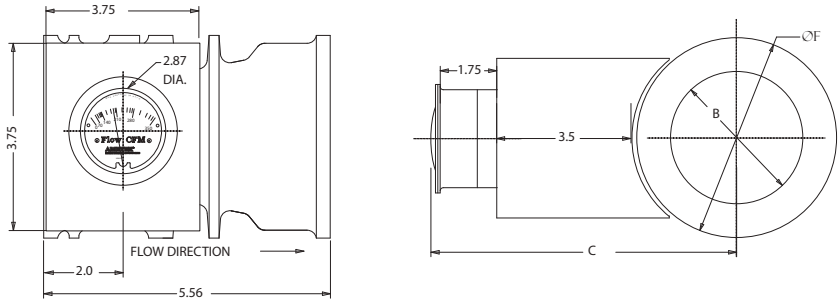
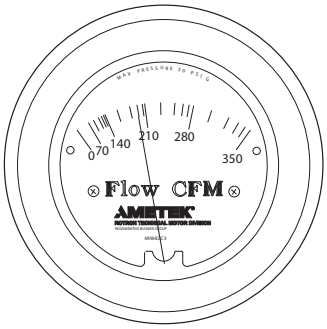
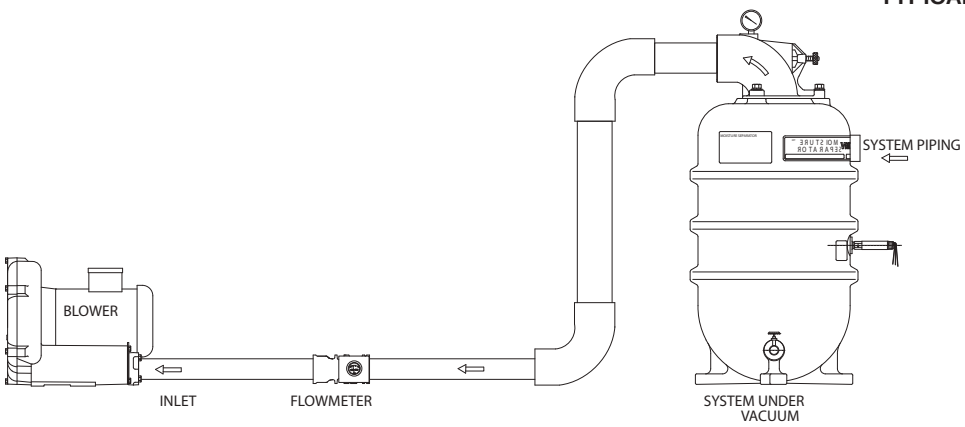
ROTRON®

TYPICAL FLOW METER ARRANGEMENT





TYPICAL GAUGE FACE



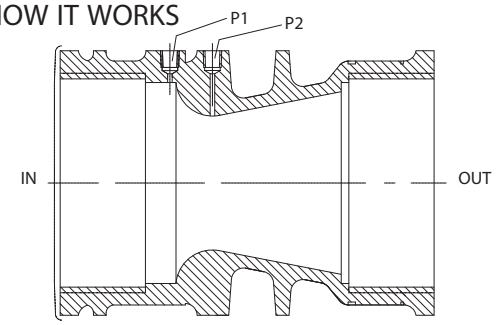
HIGH TEMPERATURE/PRESSURE CORRECTION

$$SCFM_2 = \frac{SCFM_1}{\sqrt{\left(\frac{14.7}{Pf_2}\right) \times \left(\frac{530}{Tf_2 + 460}\right)}}$$

Pf_2 = Absolute Pressure in PSIA Tf_2 = Temperature in °F

- Use on inlet to limit need to correct for high pressure or elevated outlet temperature
- Standard model limits = 140°F and 30 PSIG

HOW IT WORKS



ROTRON'S ˜ flow meter is a venturi style design. After air enters the inlet, the pressure is measured in the P1 tap. The second tap, P2, measures the pressure at the throat. The differential between P1 and P2 registers across a special calibrated CFM gauge to provide accurate readings. The throat is then expanded back to the original size to keep pressure loss to under 2-4 IWG.

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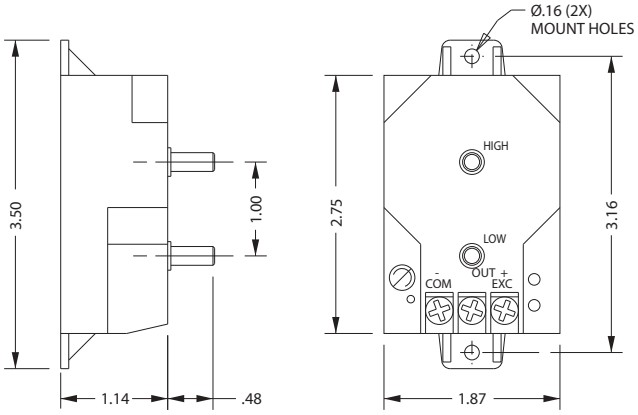
ROTRON®

Measurement - Digital Flowmeter

Remote air flow rate monitoring and system automation control can now be achieved through the use of 4-20 mA output signals. Our 4-20 mA analog outputs are proportional to system flow rates and can be used with PLC controlled operations to monitor system performance. Those same outputs provide digital displays for direct readings in SCFM when paired with our LCD Digital Readout option. Combined with our Variable Frequency Drives, you can now achieve a completely automated system capable of adjusting blower performance to meet changing system demands. Maintaining your system at peak performance gives your company the competitive edge needed in today's marketplace.

DIFFERENTIAL PRESSURE TRANSMITTER

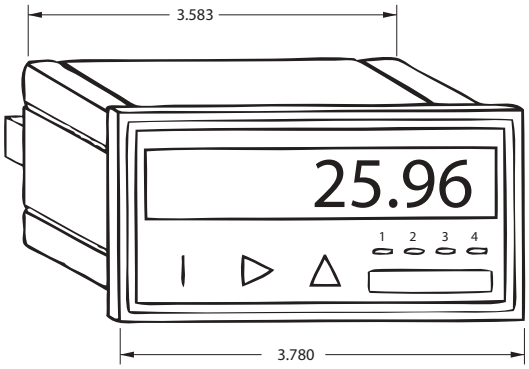
4-20 mA signal output control signals provide flow rate monitoring capabilities from remote locations
NEMA 1R-raintight enclosure orotects the integrated DC power supply and rugged differential pressure transducer
Suitable for remote mounting up to 10' form flow meter Weight: 3 lbs.
Signal Output: 4-20 mA, DC[1]
Hi/Lo pressure fittings feature snap lock action to unsure trouble-free connections[2]
System includes standard flowmeter for on-site readings and troubleshooting
Operating temperature: 0°F to 150°F
Drawing available

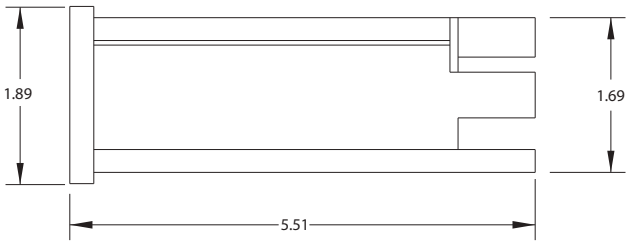


LCD DIGITAL READOUT OPTIONS

Factory configured to display direct readings in SCFM to a remote location up to 50' from signal output[1] NEMA 4, IP65 enclosure ready for panel mount instlation power supply and rugged differential pressure transducer
Suitable for remote mounting up to 10' form flow meter installation
Power input: 120 VAC, 50/60Hz AC, Field configurable to 240VAC
Display: 5 digit, 7 segment, .5" high LED w/3.3Hz update rate
Operating temperature: 10°C to 40°C
Weight: 1lb., 14oz.

Drawing available





Note 1: 4-20 mA output control wiring to be customer supplies. Shielded, 2 conductor cables, 22 AWG is recommemeded for runs up to 100'. For longer runs contact factory

Note 2: Use 5/16" OD stiff wall tubing-connect "Lo" on flowmeter to "Lo" on 4-20 mA enclosure, "Hi" on flowmeter to "Hi" on 4-20 mA enclosure. Tubing must be equal in length. (Maximum length is 1o feet)

DIFFERENTIAL PRESSURE TRANSMITTER

FM20S030Q	FM20S045Q	FM20S065Q	FM20S125Q	FM20S175Q	FM20S225Q	FM30S250Q	FM30S350Q	FM30S475Q	FM40S450Q	FM40S600Q	FM40S850Q
550838	550839	550840	550841	550842	550843	550844	550845	550846	550847	550848	550849

LCD DISPLAY

FM20L030Q	FM20L045Q	FM20L065Q	FM20L125Q	FM20L175Q	FM20L225Q	FM30L250Q	FM30L350Q	FM30L475Q	FM40L450Q	FM40L600Q	FM40L850Q
550860	550861	550862	550863	550864	550865	550866	550867	550868	550869	550870	550871

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

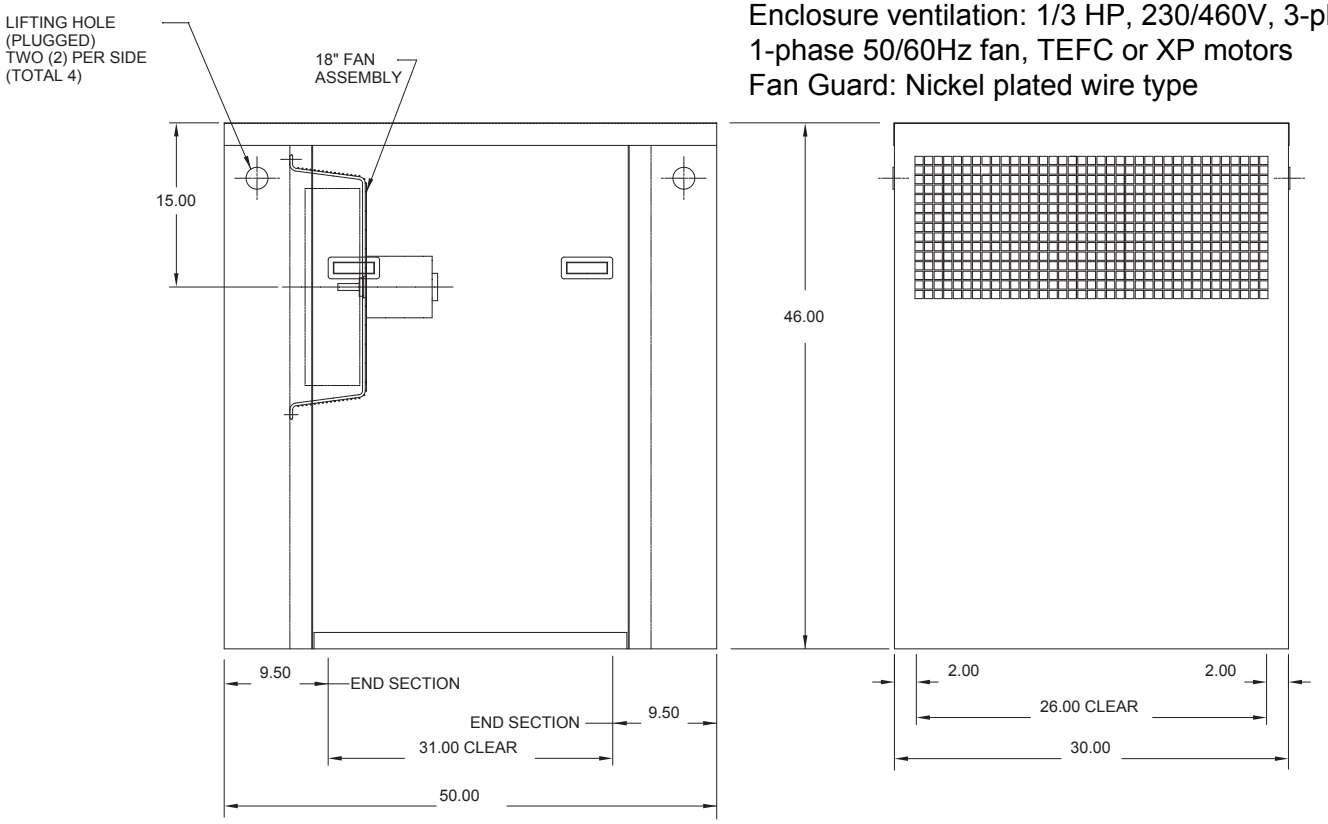
Noise Reduction - Sound Attenuating Enclosure

ROTRON®

Frameless sound attenuating enclosures are a proven way to reduce regeenrative blower mechanical noise when additional mufflers are just not enough. Additional enclosure options are available.

FEATURES:
Excellent noise reduction (~10DbA)
Resistance to elements and aesthetic appearance
Compact size for ease of installation
Easy access for routine maintenance (removable foor and sidewalls)

SPECIFICATIONS:
Roof, floor and walls: galvanized 16 ga. carbon steel sheet metal
Louvers and/or hood: Riveted aluminum
Hardware: Chrome plated aluminum handles with stainless steel fastners
Latches: Over center glvanized with adjustable tension and padlock eye
Sound attenuating material: 2" rigid polyester foam with mylar facing (rated UL-94)
Exterior finish: Polyurethane enamel
Enclosure ventilation: 1/3 HP, 230/460V, 3-phase or 1-phase 50/60Hz fan, TEFC or XP motors
Fan Guard: Nickel plated wire type



		Part/Model Number	
		SAE30W72F	SAE36W72F
Specification	Units	552904	552905
Width	Inches	30	36
	mm	762	914.4
Blower Size	-	656, 707, 757, 808, 858, 909, 979, P9, S9	14, P13, S13, P15, S15
Height	Inches	46	52
	mm	1168.4	1320.8
Length	Inches	50	60
	mm	1270	1524

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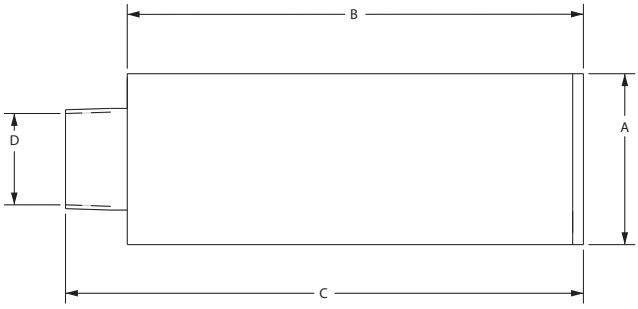
Noise Reduction - Inlet/Outlet Muffler (Single Connection)

ROTRON®

Mufflers lower blower noise in areas where reduced sound levels are required.

SPECIFICATIONS:

HOUSING – Steel
MEDIA – Acoustical Material



		Part/Model Number					
Specification	**Units**	**523627**	**523626**	**523625**	**523624**	**523623**	**523622**
Ref Blower Model	-	B	C	D	E	E	E
Inlet Connection	-	1.0 NPT Male	1.25 NPT Male	1.50 NPT Male	2.00 NPT Male	2.00 NPSC Female	2.00 NPT Male
Dimension A	Inches	4.00	4.00	4.00	4.00	4.00	4.00
	mm	101.6	101.6	101.6	101.6	101.6	101.6
Dimension B	Inches	10.93	10.93	10.93	10.93	10.93	15.75
	mm	277.6	277.6	277.6	277.6	277.6	400.1
Dimension C	Inches	13.98	14.07	14.57	12.16	12.43	16.95
	mm	355.1	357.4	370.1	308.9	315.7	430.5
Dimension D	Inches	1.00	1.25	1.50	2.00	2.00	2.00
	mm	25.4	31.8	38.1	50.8	50.8	50.8

Blower Model Reference Key	
A = SPIRAL	**E = DR/EN/CP 656, 6, 633, S7**
B = DR/EN/CP 068, 083, 101, 202	**F = DR/EN/CP 757, 808, 858, S9, P9 (Inlet Only)**
C = DR/EN/CP 303, 312, 313, 353	**G = DR/EN/CP 833, S13, P13 (Inlet Only)**
D = DR/EN/CP 404, 454, 513, 505, 555, 523	**H = DR/EN/CP 909, 979, 1233, 14, S15, P15 (Inlet Only)**

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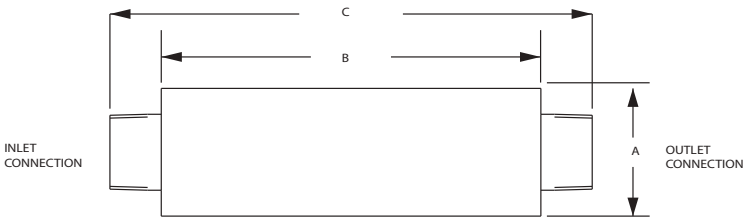
Noise Reduction - Inline Muffler (Dual Connection)

ROTRON®

Inline Mufflers are utilized for noise reduction in applications where piping systems are connected directly to both ends of the muffler. Muffler may be used on inlet or outlet of blower.

SPECIFICATIONS:

HOUSING – Steel
MEDIA – Acoustical Material



		Part/Model Number								
Specification	**Units**	**550888**	**522948**	**529900**	**551377**	**515185**	**511569**	**515210**	**551565**	**516264**
Ref Blower Model	-	D	E	E	E	F	G	G	G	H
Inlet Connection	-	1.5 NPT-M	2.0 NPT-M	2.0 NPSC-F	2.0 NPT-M	2.5 NPT-M	3.0 NPT-M	4.0 NPT-M	4.0 NPT-M	4.0 NPT-M
Outlet Connection	-	2.0 NPT-F	2.0 NPSC-F	2.0 NPSC-F	2.0 NPT-M	2.5 NPT-F	3.0 NPT-F	4.0 NPT-F	4.0 NPT-M	4.0 NPT-F
Dimension A	Inches	4.00	4.00	4.38	4.00	6.12	7.00	10.00	10.00	8.00
	mm	101.6	101.6	111.3	101.6	155.4	177.8	254	254	203.2
Dimension B	Inches	7.75	15.75	15.75	15.75	15.00	18.00	24.00	24.00	22.00
	mm	196.9	400.1	400.1	400.1	381	457.2	609.6	609.6	558.8
Dimension C	Inches	15.5	18.45	18.45	18.15	19.00	22.25	30.00	30.00	27.75
	mm	393.7	468.6	468.6	461	482.6	565.2	762	762	704.9

Blower Model Reference Key	
A = SPIRAL	**E = DR/EN/CP 656, 6, 633, S7**
B = DR/EN/CP 068, 083, 101, 202	**F = DR/EN/CP 757, 808, 858, S9, P9 (Inlet Only)**
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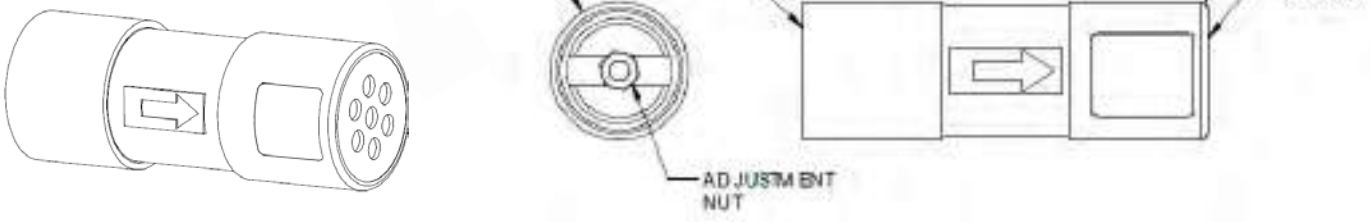

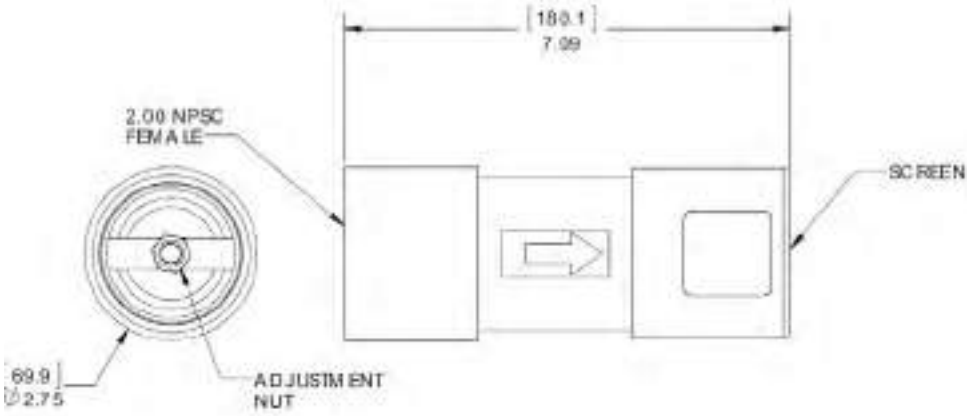

		Part/ Model Number		
Specification	**Units**	**551026**	**551027**	**523230**
Ref Blower Model	-	B, C, D	D, E, F	A, B, C, D, E, F
Range	in. H2O	20-180	41.5-263	35-90
	mbar	49.8-448.4	103.4-655.1	87.2-224.2
Connection	-	1 1/2	2	2
Description	-	Mechanical	Mechanical	Mechanical Vacuum Only

Blower Model Reference Key	
A = SPIRAL	E = DR/EN/CP 656, 6, 633, S7
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Protection - Pressure Regulating Diaphram Valve

ROTRON®

The PRD Valve is installed to prevent excessive system pressure or vacuum that could result from line restrictions. Valves should be installed at the blower outlet (downstream) in pressure systems and at blower inlet (upstream) in vacuum systems. These valves are suitable for air, natural gas, propane, and other non-corrosive service.

Note: PRD valves are not factory preset, but are easily field adjustable.

SPECIFICATIONS:

VALVE BODY – Aluminum (1"), Cast Iron (2") VALVE SPRING – Steel
DIAPHRAGM – Nitrile

NOTE: Blower Model P13 requires two 515093 relief valves.

Fig. 1

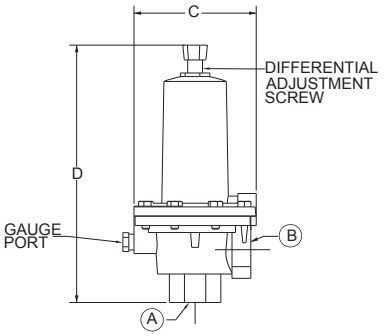
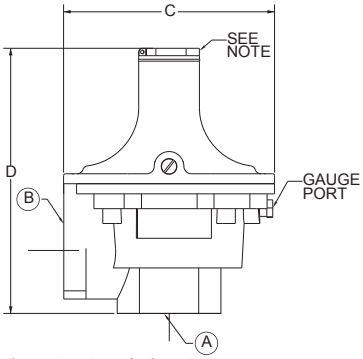


Fig. 2



PRESSURE RELIEF: (B) is the system port and (A) is the vent or atmospheric port.

VACUUM RELIEF: (A) is the system port and (B) is the vent or atmospheric port. For vacuum mode, customer must remove snap ring and screen.

NOTE: Replace cap after adjusting setting. Valve will not operate with cap removed. Differential adjustment screw is under the cap.

		Part/Model Number								
Specification	**Units**	**515092**	**529612**	**529857**	**529858**	**551130**	**515093**	**529859**	**550246**	**550247**
Range	in. H2O	27-125	110-415	277-554	7-18	14-62	48-194	110-277	97-197	97-194
	mbar	67.3-311.4	274-1033.8	690-1380	17.4-44.8	34.9-154.4	119.6-483.3	274-690	241.6-490.7	241.6-483.3
Description	-	Fig 1.	Fig 1.	Fig. 1	Fig. 2	Fig. 2	Fig. 2	Fig. 2	Pressure	Vacuum
Ref Blower Model	-	B, C, D, E	B, C, D, E	B, C, D, E	F, G	F, G	F, G	F, G	H	H
Inlet Connection	-	1	1	1	2	2	2	2	2.5	2.5
Outlet Connection	-	1	1	1	2	2	2	2	2.5	2.5
Dimension A	Inches	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.50	2.50
	mm	25.4	25.4	25.4	50.8	50.8	50.8	50.8	63.5	63.5
Dimension B	Inches	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.50	2.50
	mm	25.4	25.4	25.4	50.8	50.8	50.8	50.8	63.5	63.5
Dimension C	Inches	4.12	4.12	4.12	7.12	7.12	7.12	7.12	6.19	6.19
	mm	104.6	104.6	104.6	180.8	180.8	180.8	180.8	157.2	157.2
Dimension D	Inches	8.70	8.70	8.70	9.00	9.00	9.00	9.00	7.65	7.65
	mm	221	221	221	228.6	228.6	228.6	228.6	194.3	194.3

Blower Model Reference Key	
A = SPIRAL	**E = DR/EN/CP 656, 6, 633, S7**
B = DR/EN/CP 068, 083, 101, 202	**F = DR/EN/CP 757, 808, 858, S9, P9 (Inlet Only)**
C = DR/EN/CP 303, 312, 313, 353	**G = DR/EN/CP 833, S13, P13 (Inlet Only)**
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ROTRON®

ROTRON has a variety of gauges for pressure, vacuum and temperature measurements in various ranges. These gauges are reliable and rugged.

SPECIFICATIONS:

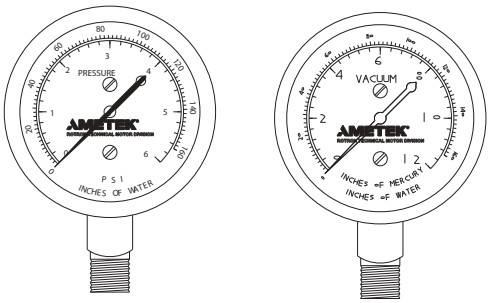
Pressure/ Vacuum

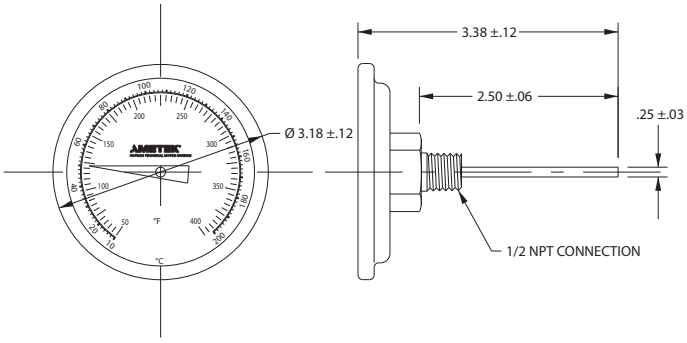
CASE– Drawn Steel Finished in Black Enamel
DIAPHRAGM – Bronze LENS– Clear Plastic ACCURACY– 2%WEIGHT – 1/2 lb.
CONNECTION – 1/4" NPT FACE – 2 1/2" dia.

Temperature

CASE– Steel
LENS– Glass
ACCURACY– 1%
WEIGHT – 1/4 lb.
CONNECTION – 1/2" NPT FACE– 3" Dial

Pressure **Vacuum**





Temperature

		Part/Model Number				
Specification	**Units**	**551376**	**271949**	**529428**	**271950**	**551368**
Range	-	Pressure	Pressure	Vacuum	Vacuum	Temperature
Description	-	0-60 IWG	0-160 IWG	0-60 IWG	0-160 IWG	0-200 Deg C

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AMETEK®
PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

System - Variable Frequency Drive

ROTRON®

A Variable Frequency Drive (VFD) is an adjustable speed AC motor control designed to speed the blower RPM up or down. Our VFDs are designed to minimize losses and deliver increased efficiency, low maintenance, and the long life expected from the ROTRON product line.

FEATURES

- Adjustable flow rates to maximize your system efficiency by controlling motor RPMs
- Accepts 3Ø or 1Ø inputs to drive 3Ø motor blower assemblie
- Accepts 4-20 mA, 0-5 VDC or 0-10 VDC inputs for system automation control and intregation
- Provides dynamic breaking capabilities
- Replaces motor starter function
- Digital readout in either Hz or RPMs
- Keypad enclosure (NEMA 4X-Indoor) vsn be mounted up to 100' from controller with cable assembly option

SYSTEM REQUIREMENTS

- In cases where the distance between the controller and motor exceed 50', the use of a line reactor on load side is needed.
- XP motors must be UL listteedd for use with a Variable Frequency Drive.

VARIABLE FREQUENCY DRIVE SELECTION

There are some common guidelines in sizing a VFD for use on a AMETEK ROTRON blowers such as the allowable speed (table 1) for a given motor type. To determine the required RPM to achieve a desired flow and pressure form a specific bloewr, turn to the blower performance at variable speeds in section E of this catalog. The required RPM must fall within the allowable rate of the motor being used.

Table 1

Motor	Allowable Turndown	Allowable Speedup
Standard	3600 RPM to 1800 RPM	—
Hi Efficiency	3600 RPM to 900 RPM	—
Inverter Motor	3600 RPM to 360 RPM*	3600 RPM to 7200 RPM

* Turndown of 10:1 is not typically done with regenerative blower designs.

For all applications above 3600 RPM, contact your Field Sales Engineer for proper horsepower sizing.

		Specification
Model **Number**	Part **Number**	**Description**
IV101AE58	551529	115/1, Up to 0.5 HP, DR068-DR303
IV102AE58	551530	230/1, Up to 0.5 HP, DR068-DR303
IV101AL58	551531	115/1, 0.75 to 1.0 HP, DR353-DR404
IV102AL58	551532	230/1 or 3, 0.75 to 1.0 HP, DR353-DR404
IV103AL72	551533	460/3, 0.75 to 1.0 HP, DR353-DR404
IV102AS58	551534	230/1 or 3, 1.5 to 2.0 HP, DR454-DR505
IV103AS72	551535	460/3, 1.5 to 2 HP DR454-DR505
IV102K58	551536	230/1 or 3, 2.5 to 3 HP, DR505-DR555
IV103K72	551537	460/3, 2.5 to 3.0 HP, DR505-DR555 230/1
IV102D58	551538	or 3, 3.5 to 5 HP, DR555-DR808D 460/3,
IV103D72	551539	3.5 to 5 HP DR555 to DR808D 230/3, 5.5
IV152AY58	551540	to 7.5 HP, DR808-DR858 460/3 5.5 to 7.5,
IV152AY72	551541	DR808 – DR858
IV152BB58	551542	230/3, 8 to 10 HP, DR858-DR909
IV153BB72	551543	460/3, 8 to 10 HP, DR858-DR909
IV152BC58	551544	230/3, 10.5 to 15 HP, DR909
IV153BC72	551545	460/3, 10.5 to 15 HP, DR909
IV152BH58	551546	230/3, 15.5 to 20 HP, DR9, DR14BH
IV153BH72	551547	460/3, 15.5 to 20 HP, DR9, DR14BH
IV152BP58	551548	230/3, 20.5 to 30 HP, DR13, DR14
IV153BP72	551549	460/3, 20.5 to 30 HP, DR13, DR14
IV152BQ58	551550	230/3, 30.5 to 40 HP, DR15
IV153BQ72	551551	460/3, 30.5 to 40 HP, DR15
IV153ED72	551552	460/3, 50.5 to 60 HP, DR15

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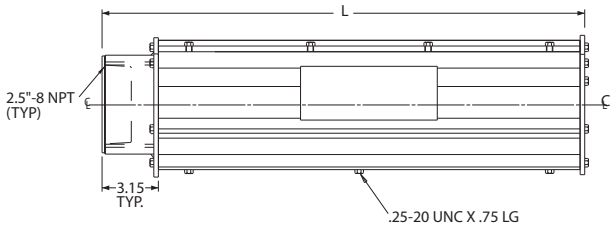
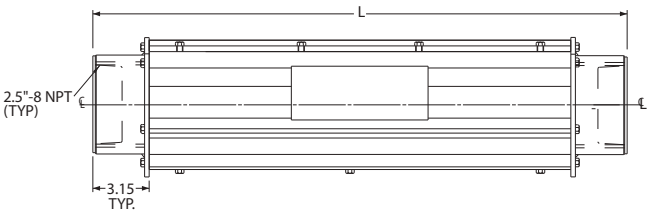
ROTRON®

SINGLE-ENDED SIDE VIEW*

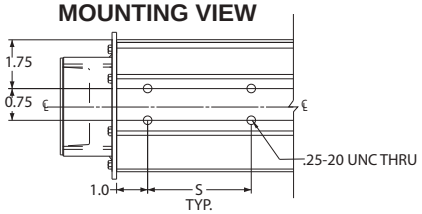


DOUBLE-ENDED SIDE VIEW**

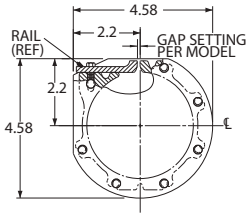


* Air knives 30" and smaller

MOUNTING VIEW



CAPPED END VIEW



		Part/Model Number									
		AK06S060	AK12S060	AK18S060	AK24S060	AK30S060	AK36S060	AK42S060	AK48S060	AK54S060	AK60S060
Specification	Units	523489	552955	522949	553000	522950	523492	523493	523494	523495	523496
Length (L)	Inches	9.30	15.30	21.30	27.30	33.30	42.30	48.30	54.30	60.30	66.30
	mm	236.2	388.6	541	693.4	845.8	1074.4	1226.8	1379.2	1531.6	1684
Slot Length	Inches	6	12	18	24	30	36	42	48	54	60
	mm	152.4	304.8	457.2	609.6	762	914.4	1066.8	1219.2	1371.6	1524
Dimension S	Inches	4.00	10.00	16.00	22.00	28.00	17.00	20.00	23.00	26.00	29.00
	mm	101.6	254	406.4	558.8	711.2	431.8	508	584.2	660.4	736.6

Air Knives

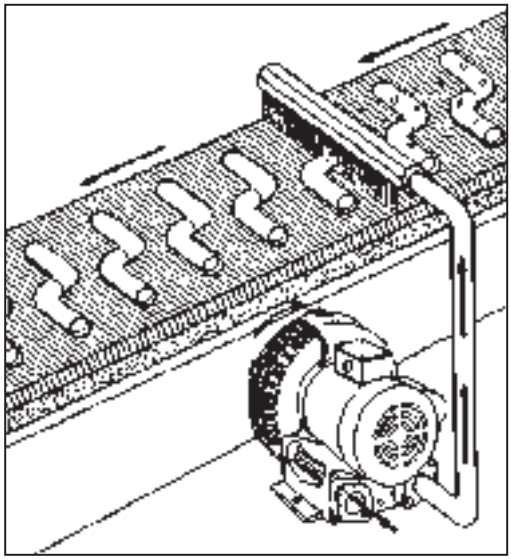
An Oil-free Blowing and Drying System Custom-fit for Your Application

FEATURES:

- Lightweight aluminum plenum and rail, steel end cap, and cast-iron NPT flanges
- Engineered, extruded design to achieve 95% efficiency
- Adjustable slot (pre-set at 0.060") to control velocity from 5000-35000 fpm
- Custom cut lengths to fit system restraints
- Oil-free and lower cost alternative to compressed air for blow-off, solution blow-back, and drying applications

OPTIONS:

- Chemical resistant designs utilizing Chem-Tough™ chemically resistant surface conversion, stainless steel hardware, and nickel plated end caps and flanges
- Food processing grade designs utilizing Food-Tough™ sanitary treatment surface conversion, stainless steel hardware, and nickel plated end caps and flanges
- Deionizers for sterile environments available
- Mirror image single-ended models for above and below conveyor operation



The ROTRON air knife is located at a strategic point in your assembly line conveyor belt area. Air flows from the blower into the air knife, where a sheet of air is directed out through a proprietary linear nozzle design onto assembly line parts. The opening can be altered to adjust the air-flow rate, thus varying blow-off velocity to meet your application requirements.

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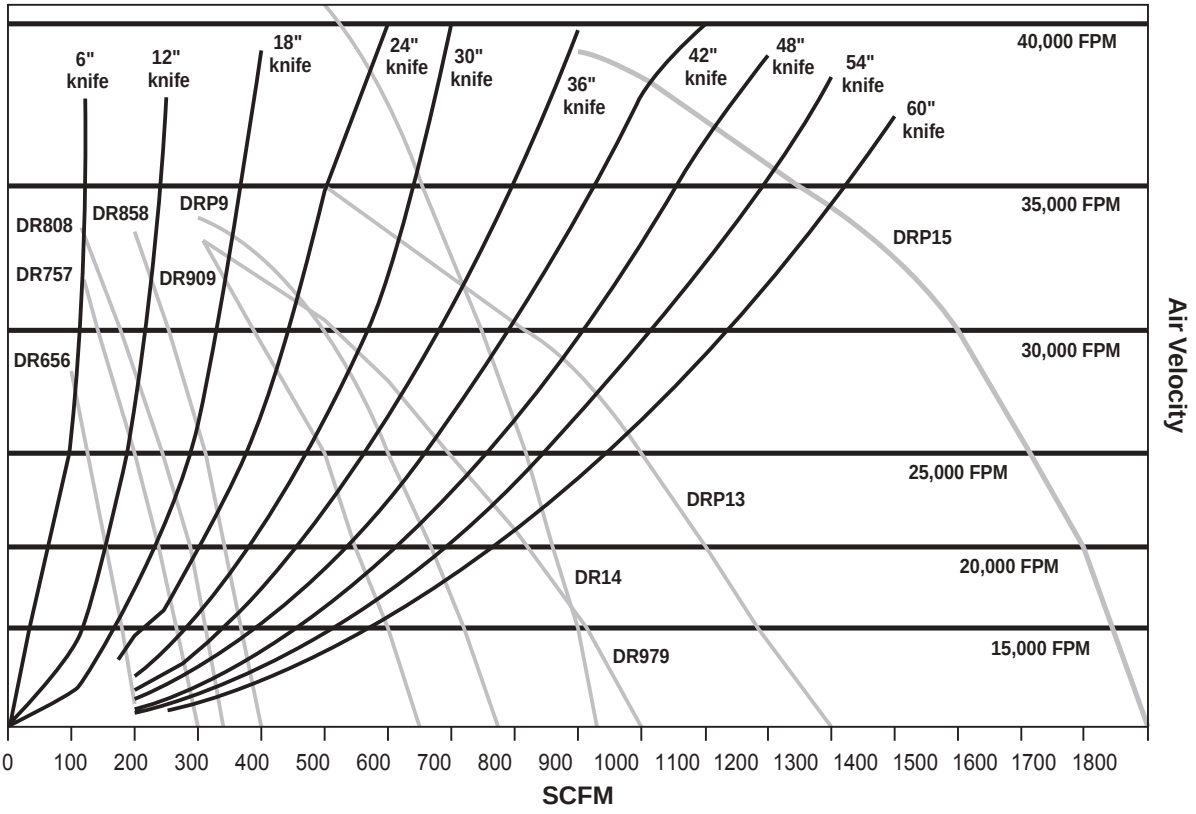
ROTRON®

Precision Cleaning Air Knife and Blower Selection Chart



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System - 5 Way, 3 Port, 2 Position Diverter Valve

ROTRON®

SPECIFICATIONS:

- Aluminum body and spool assembly
- 303 stainless steel shaft
- 115 V-60 Hz solenoid valve

OPTIONS

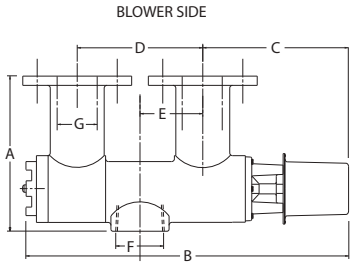
- Corrosion resistant surface treatments
- International voltage and frequency (Hz)
- Application specific designs

These unique solenoid actuated diverter valves automatically change air piping from pressure to suction; greatly enhancing blower versatility and productivity. This valve is effective in blower applications that require frequent switching from pressure to suction and vice-versa. They are cost effective as applications normally requiring two blowers and/or intricate piping systems may be accomplished with one blower.
Diverter valves may be purchased as blower/valve assemblies, or as separate stand-alone valve assemblies for use in other switched air applications.

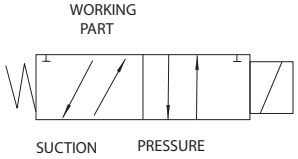
DR 505 BLOWER WITH DIVERTER VALVE

The principle behind ROTRON's diverter valve system is a simple one: Some applications such as vacuum part pick-up, air tables, and pneumatic tube systems require both vacuum and pressure in their equipment's operation, but not simultaneously. They eliminate the need for two sep-arate blowers, and elaborate valving system, or cycling/reversing a spinning blower impeller. ROTRON's diverter valve changes the air passageways. By utilizing the side vent ports for incoming or outgoing air, the equipment/piping side of the valve changes from vacuum to pressure and back again by a signal sent to the solenoid coil.

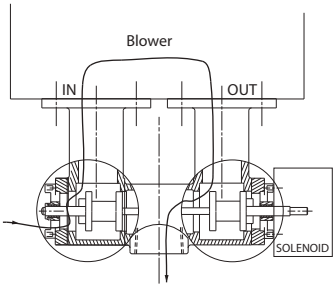
		Part/Model Number		
Specification	**Units**	**515554**	**037435**	**037482**
Description	-	DR404, DR454, DR505	DR6, DR808, DR858	DR6, DR808, DR858
Ref Blower Model	-	Small	Large	Large
Piping Flange	-	Threads	Threads	Threads
Blower Flange	-	Face	Threads	Face
Dimension A	Inches	7.65	9.25	9.25
	mm	194.3	235	235
Dimension B	Inches	14.22	23.39	23.39
	mm	361.2	594.1	594.1
Dimension C	Inches	7.14	10.93	10.93
	mm	181.4	277.6	277.6
Dimension D	Inches	2.50	3.55	3.55
	mm	63.5	90.2	90.2
Dimension E	Inches	5.00	7.10	7.10
	mm	127	180.3	180.3
Dimension F	Inches	1.50	2.50	2.50
	mm	38.1	63.5	63.5
Dimension G	Inches	1.50	2.50	2.50
	mm	38.1	63.5	63.5



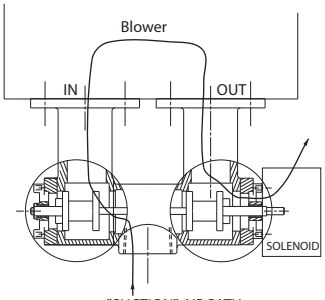
EQUIPMENT/PIPING SIDE
Consultfactory for proper selectionand application.



ISO VALVE DRAWING



"PRESSURE" AIR PATH
DE-ENERGIZED POSITION



"SUCTION" AIR PATH
ENERGIZED POSITION

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PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

System - 5 Way, 3 Port, 2 Position Diverter Valve

ROTRON®

ROTRON RELEASED BLOWERS WITH DIVERTER VALVE MOUNTED

Model *	Part No.	Mounted Components Diverter Valve	Manifold
DR353BR58MV	080757	515554	517077
DR404AL72MV	037749		
DR404AL58MV	037715		
DR454R72V	037605		529397
DR454R58V	037122		
DR505AS72MV	037709		517459
DR505AS58MV	037554		
DR808AY72WV	080084	037482	550667
DR858BB72WV	080085		

DIVERTER VALVE MANIFOLD

- **Models listed below include diverter valve and manifold.**

Blower Model Reference Key	
A = SPIRAL	E = DR/EN/CP 656, 6, 633, S7
B = DR/EN/CP 068, 083, 101, 202	F = DR/EN/CP 757, 808, 858, S9, P9 (Inlet Only)
C = DR/EN/CP 303, 312, 313, 353	G = DR/EN/CP 833, S13, P13 (Inlet Only)
D = DR/EN/CP 404, 454, 513, 505, 555, 523	H = DR/EN/CP 909, 979, 1233, 14, S15, P15 (Inlet Only)

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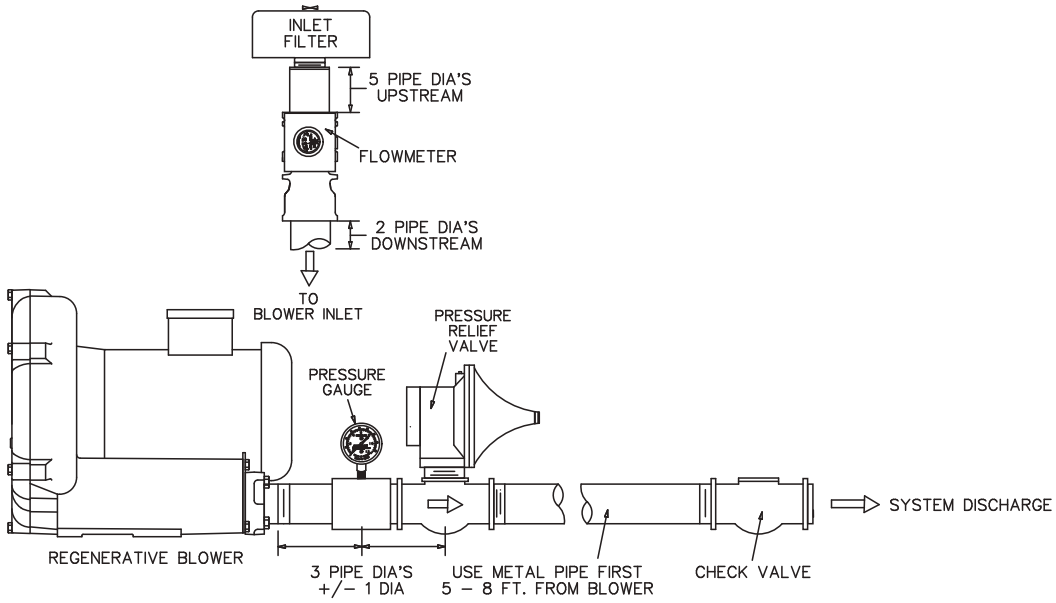
Pressure & Vacuum Arrangements

Pressure or vacuum guages should be located in the delivery line, oriented as shown. Assure that the guage is approximately three pipe diameters from the blower delivery flange and that the relief valve is located at the same spacing from the guage. 90° elbows should be located at least five pipe diameters from the blower delivery flange. Elbows, taps, tees, valves, or other restrictions to air flow should not be located between the blower delivery flange and accessories described above.

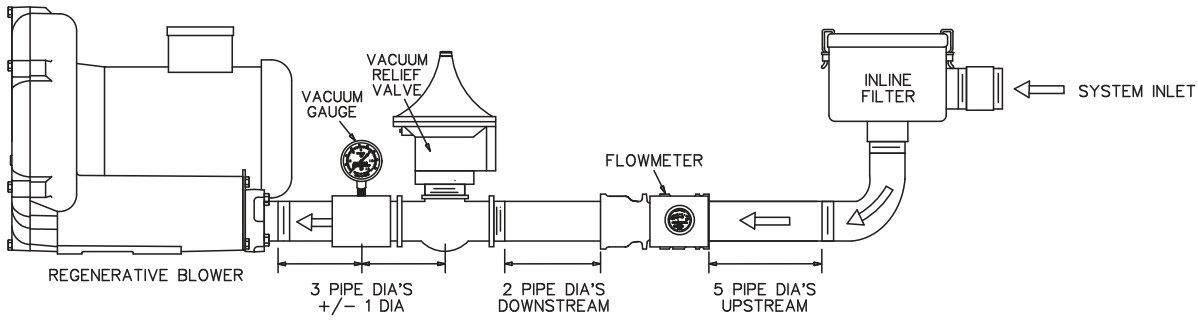
Failure to observe these precautions can result in false readings of guages and failure of the relief mechanism to protect the blower from overload.

In order to avoid overheating or distortion of PVC pipe, the first five to eight feet from the blower delivery flange on pressure systems should be metal.

Typical Pressure System



Typical Vacuum System



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ROTRON®

Motor Options

ROTRON strives to provide the most complete variety of desired options on our products including on our motors. By using motor vendors of high quality and versatility, we can provide motor features from multiple released designs to meet your needs (i.e., a Chem Processing Inverter Duty Explosion-proof motor with space heaters and drains wound for 380 V-50 Hz service).

Design Consistency

ROTRON motors are engineered for us to integrally mount with our blower and maximize blower performance. Our vendors are qualified by ROTRON (per motor part number) to ensure the blowers' mechanical and electrical needs merge with your required features. The basic motor requirements on our DR/EN/CP/HiE products include:

- NEMA approved
- CE conformity (non-XP models)
- UL & CSA approved with symbol and file on nameplate
- C-face mount
- Permanently sealed bearings
- Shaft end play, run out and perpendicularity requirements above NEMA standards
- Dual voltage and dual frequency (some models not feasible) to maximize use worldwide
- Single Shafted Totally Enclosed Fan Cooled (TEFC) and Explosion-proof (XP) models
- Double Shafted Open Drip Proof (ODP) models with dual internal fans for circulation
- Class I Group D minimum on explosion-proof motors; many are Class I Group D, Class II F & G
- Commercial Spa (SPA-ODP) motors with automatic thermal overload protection and industry specified terminal strip

Standard Motor Variations

Chemical Processing (CP) features are added to TEFC, XP or HiE designs for corrosive gas service, Marine Duty service and sanitary (food/pharmaceutical) service.

- 303 stainless steel shaft
- Cast iron and steel frame epoxy painted or zinc plated
- Zinc plated hardware
- Stainless steel nameplate
- Non-hygroscopic insulation; double dipped and baked stator
- Epoxy coating on rotor
- Gaskets and joint sealers on all metal-to-metal surfaces
- Oversized conduit box

High Efficiency (HiE) features are added to TEFC, ODP, XP or CP motors for maximum motor efficiency and life. ROTRON HiE motors carry extra phase-to-phase protection for use with inverters between a 1750-3500 RPM range.

Inverter Duty features are added to TEFC, ODP, XP or CP for use with Inverters/Variable Speed Drive Controllers. A wide range of RPM can be handled and should be specified at time of quote. For best compatibility, an inverter should be matched to the motor manufacturers design.

Project Specific Motor Variations

There are no limits to the options you can select or request for your product. Routine motor options include:

- International voltage & frequency (Hz)
- Different shaft material
- Oversized and/or Nema 4 intent T-box
- Space heaters
- Drains
- Regreasable bearings
- Tropicalized windings

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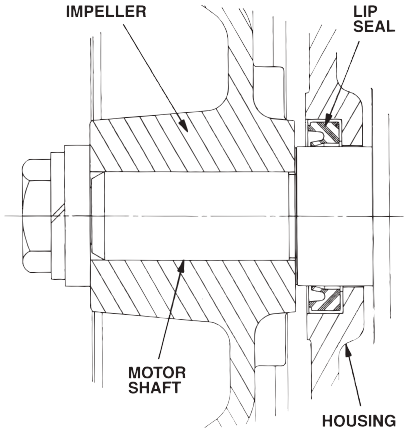
Typical Sealing Options

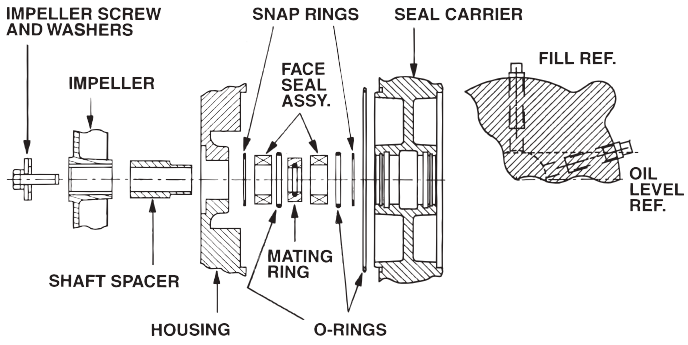
Lo-Leak™ LIP SEAL Option

The Lo-Leak™Lip Seal option is available to control gas leakage for all DR models and is standard on all EN and CP models. Features include: Lip seals to prevent leakage at the motor shaft. RTV sealing compound is used to cut off all leakage paths at the blower's metal-to-metal surfaces. Castings are vacuum impregnated to prevent leakage through castings. Estimate leakage rate = 25 cc/min or less



Double Face Carbon Seal Option

For further minimization of gas leakage on all DR, EN and CP models, a pair of face seals work against each other on opposite sides of a common mating ring to effectively reduce gas leakage at the motor shaft. The face shields are continually lubricated from a reservoir to prolong seal life. The seal is completed by installing the blower to motor bolts with O-rings and sealing the covers to the housing with an RTV sealing compound.
O-rings are also placed between the pipe flanges and the manifold.
All castings are vacuum impregnated.
Estimate leakage rate = 0.5 cc/min or less



Hermetically Sealed Spiral Containment Option

The containment option utilizes a series of O-rings to control gas leakage in Spiral blower models. The O-rings are placed at critical locations on the blower's housing and covers to contain gas leakage.

Hermetically Sealed Mag Drive Option

On DR, EN and CP 101 units, a magnet drive option has been an alternative for complete gas containment.
O-rings are used throughout the product, and magnets attached to the motor shaft spin magnets inside the blower without shaft penetration. Estimated leakage rate = 0.001 cc/mi

Nitrogen Purge / Blanket Option

The nitrogen purge option is a carrier designed to accept a nitrogen line which will purge the space outside the shaft hole. Purges can be designed to bleed the nitrogen into the process called a blanket, or the carrier can have a second tap to carry away the leaking contaminants.

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Chem-Tough™ Chemical Resistance

To stand up in corrosive and hazardous environments, chemical processing blowers have to be tough. That's why Ametek ROTRON routinely applies Chem-Tough™, ROTRON'S own engineered and proprietary process, whenever it builds blowers for handling chemical (vapor) streams. Chem-Tough™ combines the advantages of aluminum oxide ceramic and selected fluorocarbons to give ROTRON blowers unheard-of levels of chemical resistance, hardness, abrasion resistance, permanent lubricity and more.

Chem-Tough™ Brings You the Rotron Advantage

Through this unique proprietary process, Chem-Tough™ gives ROTRON blowers these advantages:

- **Outstanding Chemical Resistance**
  Time after time, Chem-Tough™ finishing shows extremely high resistance to most common chemicals, as well as dramatically improved corrosion resistance over regular hard anodizing. Chem-Tough™ allows aluminum to achieve equivalent corrosion resistance as teflon®. 90-day immersion in acid or alkaline solution (pH 4.0-8.5) has no effect; neither does prolonged exposure to salt water. Far exceeds military specification requirements for salt spray.

- **Abrasion Resistance Equivalent to Steel**
  Excellent for smooth surfaces, Chem-Tough™ surface conversion provides higher wear resistance than either case-hardened steel or hard-chrome plate. Rub any other metal against the Chem-Tough™ finish, and the metal will show nothing but the slightest wear. Chem-Tough™ provides a perfect bond to the parent metal.

- **Increased Hardness**
  With an equivalent hardness of Rc 40-60, Chem-Tough™ is approximately file-hard – the hardness of nitrated steel. Because the Chem-Tough™ surface becomes an integral part of the metal, it simply cannot peel or chip – neither can it be scratched, flaked or nicked under ordinary conditions.

- **Permanent Dry Lubricity**
  By infusing polymers into aluminum, Chem-Tough™ gives the resulting surface a high degree of permanent lubricity and resistance to moisture. The polymers also level off surface asperities, significantly reducing surface tension. The result: blowers converted with Chem-Tough™ have a longer life, operate more efficiently and call for less maintenance.

- **Other Proprietary Processes**
  Food-Tough™ uses the same unique process as Chem-Tough™, and is designed for the food processing, medical and pharmaceutical markets. Food-Tough™ has USDA approval and meets FDA guidelines.

Chem-Tough™ at Work

Chem-Tough™ employs the advantages of anodizing, hardcoat plating, low-friction polymers and dry lubricants to become an integral part of the blower's molecular structure.

Specifically, Chem-Tough™ first converts the aluminum surface to aluminum oxide, forming a new ceramic-like surface. The water in the ceramic is replaced with Teflon®, adding a multi-functional dimension to the surface; in the process, the aluminum crystals expand and form anchor crystals that remain hygroscopic for a short time. Then, under controlled conditions, particles of the specified polymer are infused to interlock with these anchor crystals. The new surface extends .5 mil above and below the original aluminum surface – and forms a permanent molecular bond with the metal.

The result: a plastic/ceramic surface that's harder than steel, is continuously lubricating, and resists damage from chemicals like no other. The kind of protection you need for your chemical processing blowers.

AMETEK DYNAMIC FLUID SOLUTIONS
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Chemical Resistance Chart

Chemical Effect Ratings
A – No effect – acceptable
B – Minor effect – acceptable
C – Moderate effect – questionable
D – Severe effect – not recommended
* – Not tested

Chemical	Aluminum	Cast Iron	Carbon Steel	Chem-Tough (Teflon®)	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Hastelloy C
Acetaldehyde	B	*	C	A	A	A	A	*	A
Acetate Solv.	B	B	A	A	A	B	A	B	*
Acetic Acid	B	D	C	A	*	B	A	B	A
Acetic Anhydride	B	B	D	A	B	A	A	B	A
Acetone	A	A	A	A	A	A	A	B	A
Acetylene	A	A	A	*	A	A	A	A	*
Acrylonitrile	B	C	*	*	A	A	C	*	B
Alcohols									
Amyl	C	C	C	A	A	A	A	*	A
BENZYL	B	*	*	*	*	A	A	*	A
Butyl	B	C	C	A	A	A	A	*	A
Diacetone	A	*	A	*	*	A	A	*	A
Ethyl	B	A	A	*	*	A	A	A	A
Hexyl	A	*	A	*	*	A	A	*	A
Isobutyl	B	*	A	*	*	A	A	*	A
Isopropyl	B	C	A	*	*	A	A	*	A
Methyl	B	A	A	A	*	A	A	A	A
Octyl	A	*	A	*	*	A	A	*	A
Propyl	A	*	A	A	*	A	A	*	A
Aluminum Chloride 20%	B	D	A	*	*	D	C	D	A
Aluminum Chloride	D	D	B	A	C	D	C	*	A
Aluminum Hydroxide	A	D	A	A	*	A	A	A	*
Alum Potassium Sulfate (Alum), 10%	A	D	A	A	*	A	*	*	B
Alum Potassium Sulfate (Alum), 100%	B	*	A	A	*	D	A	B	B
Aluminum Sulfate	A	D	A	A	*	C	C	A	A
Amines	A	A	B	A	A	A	A	*	A
Ammonia 10%	*	*	*	A	*	*	A	*	A
Ammonia, Anhydrous	B	D	B	A	A	B	A	A	A
Ammonia, Liquids	D	A	A	A	*	A	A	A	B
Ammonia, Nitrate	C	*	A	*	*	A	A	A	*
Ammonium Bifluoride	D	*	*	*	*	C	A	*	B
Ammonium Carbonate	C	C	B	A	B	A	A	A	B
Ammonium Chloride	C	D	D	A	C	A	C	A	A
Ammonium Hydroxide	C	A	C	A	A	A	A	A	A
Ammonium Nitrate	B	A	D	A	A	A	A	A	A
Ammonium Persulfate	C	D	A	A	*	A	A	A	A
Ammonium Phosphate, Dibasic	B	*	D	A	B	A	A	A	A
Ammonium Phosphate, Monobasic	B	*	A	A	*	A	A	A	A
Ammonium Phosphate, Tribasic	B	C	D	A	B	A	A	A	A
Ammonium Sulfate	B	C	C	A	C	A	B	A	A
Amyl-Acetate	B	*	C	A	B	A	A	C	A
Amyl Alcohol	B	*	A	A	*	A	A	*	A
Amyl Chloride	D	*	A	A	*	C	B	*	A
Aniline	C	*	C	A	B	A	A	A	B
Anti-Freeze	A	B	C	A	*	A	A	*	A
Antimony Trichloride	D	*	*	A	*	D	D	*	A
Aromatic Hydrocarbons	A	A	A	*	*	*	A	*	*
Arsenic Acid	D	D	D	A	B	A	A	*	*

Chemical	Aluminum	Cast Iron	Carbon Steel	Chem-Tough (Teflon®)	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Hastelloy C
Barium Carbonate	B	B	B	A	B	A	A	A	A
Barium Chloride	D	D	C	A	C	A	A	A	A
Barium Hydroxide	D	C	C	A	B	C	A	A	B
Barium Sulfate	D	C	C	A	B	A	A	A	A
Barium Sulfide	D	C	C	A	B	A	A	*	*
Benzaldehyde	B	B	A	A	A	A	A	*	A
Benzene	B	B	C	A	B	A	A	A	B
Benzoic Acid	B	D	*	A	B	A	A	A	A
Benzol	B	*	*	A	*	A	A	*	A
Borax (Sodium Borate)	C	A	C	A	*	A	A	A	A
Boric Acid	B	D	*	A	B	A	A	A	A
Bromine (Wet)	D	D	D	A	D	D	D	D	A
Butadiene	A	C	C	A	A	A	A	*	*
Butane	A	C	C	A	A	A	A	*	*
Butanol	A	*	*	A	*	A	A	*	A
Butylene	A	A	A	A	A	*	A	*	*
Butyl Acetate	A	*	A	A	*	*	C	*	A
Butyric Acid	B	D	*	A	B	B	A	A	A
Calcium Bisulfate	D	D	*	A	C	D	A	*	*
Calcium Bisulfide	C	*	*	A	*	*	B	*	A
Calcium Bisulfite	C	*	*	A	*	D	A	*	A
Calcium Carbonate	C	D	*	A	B	A	A	A	A
Calcium Chloride	C	C	*	A	C	A	D	C	A
Calcium Hydroxide	C	*	*	A	B	A	A	*	A
Calcium Hypochlorite	C	D	*	A	D	A	C	C	B
Calcium Sulfate	B	*	*	A	B	A	A	A	B
Carbon Bisulfide	A	B	*	*	B	A	A	A	*
Carbon Dioxide (Wet)	C	C	*	A	*	A	A	*	A
Carbon Disulfide	C	B	C	A	*	B	A	*	*
Carbon Monoxide	A	*	*	*	*	A	A	*	*
Carbon Tetrachloride	C	C	D	A	B	C	B	A	A
Carbonated Water	A	D	*	*	B	A	A	A	*
Carbonic Acid	A	D	*	A	B	A	B	A	A
Chloracetic Acid	C	D	*	A	D	D	D	D	A
Chlorinated Glue	D	D	*	*	*	A	A	*	*
Chlorine, Anhydrous Liquid	D	C	*	A	*	D	D	D	A
Chlorine (Dry)	D	A	*	A	B	A	A	*	A
Chlorine Water	D	D	*	A	D	*	D	*	B
Chlorobenzene (Mono)	B	B	C	A	A	A	A	*	A
Chloroform	D	D	C	A	A	A	A	A	A
Chlorosulfonic Acid	D	*	D	A	D	D	*	D	B
Chlorox (Bleach)	C	D	C	A	*	A	A	*	A
Chromic Acid 5%	C	D	*	*	*	A	A	B	A
Chromic Acid 50%	C	D	*	A	C	B	B	*	A
Citric Acid	C	D	*	A	*	A	A	A	A
Citric Oils	C	*	*	*	*	A	A	*	*
Copper Chloride	D	D	*	A	C	D	D	B	A
Copper Cyanide	D	D	*	A	*	A	A	A	A
Copper Floborate	D	D	*	A	*	D	D	*	B
Copper Nitrate	D	*	*	A	B	A	A	B	A

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Chemical	Aluminum	Cast Iron	Carbon Steel	Chem-Tough (Teflon®)	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Hastelloy C
Copper Sulfate (5% Solution)	D	D	*	A	*	A	A	A	A
Cresols	B	*	*	*	*	A	A	*	*
Cresylic Acid	C	*	*	A	B	A	A	*	B
Cyclohexane	A	*	A	*	*	A	*	*	*
Detergents	A	*	A	*	*	A	A	*	*
Diesel Fuel	A	A	A	*	A	A	A	*	*
Diethylamine	A	*	*	A	A	A	*	*	*
Dyes	B	*	*	*	*	A	A	*	*
Epsom Salts (Magnesium Sulfate)	A	*	*	*	B	A	A	A	B
Ethane	A	*	*	*	A	A	*	*	*
Ether	A	*	B	*	A	A	A	A	B
Ethyl Acetate	B	*	C	A	*	A	A	*	B
Ethyl Chloride	B	C	D	A	*	A	A	A	B
Ethylene Chloride	C	C	C	A	*	A	A	*	B
Ethylene Dichloride	D	*	C	A	*	A	A	*	B
Ethylene Glycol	A	B	C	A	*	A	A	*	A
Ethylene Oxide	A	*	*	A	*	*	A	*	*
Fatty Acids	B	D	*	A	*	A	A	*	A
Ferric Chloride	D	D	*	A	*	D	D	D	B
Ferric Nitrate	D	*	*	A	*	A	A	A	A
Ferric Sulfate	D	D	*	A	*	A	C	A	A
Ferrous Chloride	D	D	*	A	*	D	D	*	B
Ferrous Sulfate	D	D	D	A	B	A	C	*	B
Fluorine	D	D	D	C	D	D	D	*	A
Fluosilicic Acid	D	D	*	A	*	*	B	*	B
Formaldehyde	A	D	A	A	A	A	A	*	B
Formic Acid	D	D	D	A	C	A	B	B	A
Freon 11	B	C	B	A	A	*	A	*	*
Freon 12 (Wet)	B	*	*	A	*	*	D	*	*
Freon 22	B	*	*	*	*	*	A	*	*
Freon 113	B	*	*	*	*	*	A	*	*
Freon T.F.	B	*	*	*	*	*	A	*	*
Fuel Oils	A	C	B	A	A	A	A	*	A
Furan Resin	A	A	A	A	*	A	A	*	*
Furfural	A	*	A	A	A	A	A	*	B
Gallic Acid	A	D	D	A	B	A	A	*	A
Gasoline	A	A	A	A	A	A	A	A	A
Glycerine	A	B	B	A	A	A	A	A	A
Heptane	A	*	B	A	A	*	A	*	A
Hexane	A	*	B	A	A	A	A	*	A
Hydraulic Oils (Petroleum)	A	A	A	A	A	A	A	*	*
Hydraulic Oils (Synthetic)	A	A	*	*	*	A	A	*	*
Hydrobromic Acid	D	D	D	A	D	D	D	D	A
Hydrochloric Acid (Dry Gas)	D	*	D	A	D	C	A	*	A
Hydrochloric Acid (20%)	D	D	*	A	*	D	D	D	B
Hydrochloric Acid (37%)	D	D	*	A	*	D	D	D	B
Hydrochloric Acid 100%	D	D	*	A	*	D	D	*	C
Hydrocyanic Acid	A	*	C	A	A	A	A	C	A
Hydrofluoric Acid (20%)	D	D	*	A	*	D	D	D	B
Hydrofluoric Acid (75%)	D	D	*	A	*	C	D	*	C

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Hydrofluoric Acid 100%	D	D	D	A	D	D	D	*	B
Hydrofluosilicic Acid (20%)	D	D	*	A	*	D	D	*	B
Hydrofluosilicic Acid	C	*	*	A	*	D	D	*	C
Hydrogen Gas	A	B	B	A	A	A	A	*	*
Hydrogen Peroxide 10%	A	D	*	A	*	C	C	*	A
Hydrogen Peroxide	A	D	D	A	*	A	B	A	A
Hydrogen Sulfide, Aqueous Solution	C	D	*	A	*	A	A	C	A
Hydrogen Sulfide (Dry)	D	B	B	A	A	C	A	*	A
Hydroxyacetic Acid (70%)	D	*	*	*	*	*	*	*	*
Ink	C	D	D	*	A	A	A	*	*
Iodine	D	D	*	A	*	D	D	D	B
Iodoform	A	C	B	A	B	D	A	*	*
Isotane	A	*	*	*	*	*	*	*	*
Isopropyl Acetate	C	*	*	*	*	*	B	*	*
Isopropyl Ether	A	*	A	A	A	*	A	*	*
Jet Fuel (JP3, JP4, JP5)	A	A	A	A	A	A	A	*	*
Kerosene	A	A	B	A	A	A	A	A	A
Ketones	B	A	A	A	A	A	A	*	A
Lacquers	A	C	C	*	A	A	A	*	*
Lactic Acid	C	D	D	A	A	A	B	C	A
Lead Acetate	D	*	D	A	B	A	A	*	A
Lubricants	A	*	*	A	*	A	A	*	A
Magnesium Chloride	D	D	C	A	B	B	B	A	A
Magnesium Hydroxide	D	B	B	A	A	A	A	*	A
Magnesium Sulfate	B	C	B	A	B	B	A	*	B
Maleic Acid	B	*	B	A	C	A	A	A	A
Malic Acid	C	*	D	A	B	A	A	*	A
Mercuric Chloride (Dilute Solution)	D	D	D	A	D	D	D	D	B
Mercuric Cyanide	D	*	D	A	A	A	A	*	*
Mercury	C	A	A	A	A	A	A	A	A
Methane	A	A	A	A	A	A	A	A	A
Methyl Acetate	A	*	B	A	A	*	A	*	A
Methyl Acetone	A	A	A	A	A	*	A	*	*
Methyl Alcohol 10%	C	*	B	A	A	*	A	*	A
Methyl Butyl Ketone	A	*	*	*	*	*	A	*	*
Methyl Cellosolve	A	*	*	*	*	*	*	*	*
Methyl Chloride	D	*	*	A	*	C	A	*	A
Methyl Ethyl Ketone	A	*	*	A	*	A	A	*	A
Methylamine	A	B	B	*	A	*	A	*	*
Methylene Chloride	A	*	B	A	A	A	A	*	A
Naptha	A	B	B	A	A	A	A	A	A
Napthalene	B	B	A	A	B	A	B	*	A
Nickel Chloride	D	D	*	A	*	A	B	*	A
Nickel Sulfate	D	D	D	A	B	A	B	*	B
Nitric Acid (10% Solution)	D	D	D	A	A	A	A	A	A
Nitric Acid (20% Solution)	D	D	*	A	*	A	A	A	A
Nitric Acid (50% Solution)	D	D	*	A	*	A	A	A	A
Nitric Acid (Concentrated Solution)	B	D	*	A	*	D	B	A	B

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Nitrobenzene	C	B	B	A	B	A	B	*	B
Oleum	B	*	B	A	B	*	A	*	*
Oxalic Acid (cold)	C	D	D	A	C	A	B	A	B
Pentane	A	B	B	A	A	C	C	*	B
Perchloroethylene	A	B	B	A	B	A	A	*	*
Petrolatum	B	C	C	A	A	*	A	*	*
Phenol 10%	A	B	D	A	B	A	A	*	B
Phenol (Carbolic Acid)	B	D	D	A	B	A	A	A	A
Phosphoric Acid (to 40% Solution)	D	D	*	A	*	B	A	A	A
Phosphoric Acid (40%-100% Solution)	D	D	*	A	*	C	B	B	A
Phosphoric Acid (Crude)	D	D	D	A	*	D	C	C	A
Phosphoric Anhydride (Molten)	D	*	*	A	*	A	A	*	*
Photographic (Developer)	C	D	*	*	*	C	A	C	A
Phthalic Anhydride	B	C	C	A	B	A	B	*	A
Picric Acid	C	D	D	A	B	A	A	*	A
Potash	C	B	*	*	*	A	*	A	A
Potasium Bicarbonate	C	D	*	A	*	A	*	B	B
Potassium Bromide	C	D	D	A	A	A	*	B	B
Potassium Carbonate	C	B	B	A	B	A	*	A	A
Potassium Chlorate	B	B	B	A	B	A	A	A	B
Potassium Chloride	B	B	B	A	C	A	A	B	A
Potassium Chromate	A	A	*	*	*	*	B	B	B
Potassium Cyanide Solutions	D	B	B	A	B	A	B	A	A
Potassium Dichromate	A	B	C	A	B	A	A	A	B
Potassium Ferrocyanide	C	*	C	A	B	A	*	A	B
Potassium Hydroxide (50%)	D	C	A	A	A	B	B	B	A
Potassium Nitrate	B	*	B	A	B	A	B	A	B
Potassium Permanganate	B	B	B	A	B	A	B	B	B
Potassium Sulfate	A	B	B	A	B	A	B	B	A
Potassium Sulfide	B	B	B	A	A	A	*	A	B
Propane (Liquified)	A	*	B	A	A	A	*	A	*
Propylene Glycol	A	B	B	A	B	B	*	A	*
Pyridine	B	B	A	A	*	C	*	B	*
Pyrogallic Acid	B	B	B	A	B	A	A	A	A
Silver Bromide	D	*	*	*	*	C	C	B	*
Silver Nitrate	D	D	D	A	B	A	B	A	A
Sodium Acetate	B	C	C	A	B	A	A	B	A
Sodium Aluminate	C	*	C	A	B	*	*	A	B
Sodium Bicarbonate	A	C	C	A	B	A	A	A	*
Sodium Bisulfate	D	D	D	A	A	A	*	A	B
Sodium Bisulfite	A	D	*	A	*	A	*	A	B
Sodium Borate	C	C	C	A	B	A	*	A	A
Sodium Carbonate	C	B	B	A	B	A	B	B	A
Sodium Chlorate	B	*	C	A	B	A	*	A	B
Sodium Chloride	C	B	C	A	B	A	C	B	A
Sodium Chromate	D	B	B	A	A	A	A	*	B
Sodium Cyanide	D	B	B	A	B	A	*	A	*
Sodium Fluoride	C	D	D	A	B	C	*	C	A

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Sodium Hydrosulfite	A	*	*	A	*	*	*	*	A
Sodium Hydroxide (20%)	D	A	*	A	*	A	A	A	A
Sodium Hydroxide (50% Solution)	D	B	*	A	*	A	B	*	A
Sodium Hydroxide (80% Solution)	D	C	*	A	*	A	D	*	B
Sodium Hypochlorite (to 20%)	D	C	*	A	*	A	D	*	B
Sodium Hypochlorite	D	D	D	A	D	*	A	*	A
Sodium Hyposulfate	D	*	*	A	*	A	A	*	*
Sodium Metaphosphate	A	B	B	A	A	*	A	*	*
Sodium Metasilicate	B	C	C	A	A	*	A	*	*
Sodium Nitrate	A	A	B	A	B	A	A	A	B
Sodium Perborate	B	B	B	A	B	*	C	*	*
Sodium Peroxide	C	D	C	A	B	A	A	*	B
Sodium Polyphosphate (Mono, Di, Tribasic)	D	*	*	A	*	A	A	*	A
Sodium Silicate	C	*	B	A	B	A	B	A	B
Sodium Sulfate	B	A	B	A	B	A	A	C	B
Sodium Sulfide	D	A	B	A	B	A	B	*	B
Sodium Sulfite	C	A	*	A	*	C	C	*	A
Sodium Thiosulphate ("Hypo")	B	C	B	A	A	A	A	*	*
Stannic Chloride	D	D	D	A	D	D	D	*	B
Stannous Chloride	D	D	D	A	D	D	C	*	A
Stearic Acid	B	C	C	A	B	A	A	A	A
Stoddard Solvent	A	B	B	A	A	A	A	A	A
Styrene	A	*	A	A	A	A	A	*	*
Sulfate Liquors	B	*	*	*	*	C	C	*	A
Sulfur Chloride	D	*	*	A	*	D	D	D	*
Sulfur Dioxide	A	*	*	A	*	A	A	C	B
Sulfur Dioxide (Dry)	A	A	B	A	A	A	A	*	A
Sulfur Trioxide (Dry)	A	B	B	A	A	A	C	*	*
Sulfuric Acid (to 10%)	C	D	*	A	*	D	C	C	A
Sulfuric Acid (10%-75%)	D	D	*	A	*	D	D	D	B
Sulfurous Acid	C	D	D	A	C	C	B	C	B
Tannic Acid	C	C	C	A	B	A	A	A	B
Tanning Liquors	C	*	*	A	*	A	A	*	A
Tartaric Acid	C	D	D	A	B	A	B	B	B
Tetrahydrofuran	D	D	A	A	*	A	A	*	*
Toluene, Toluol	A	A	A	A	A	A	A	*	A
Trichlorethane	C	C	*	A	*	C	A	*	A
Trichlorethylene	B	C	B	A	B	A	A	*	A
Water, Acid, Mine	C	C	*	*	*	A	A	*	*
Water, Distilled, Lab Grade 7	B	D	*	A	*	A	A	*	*
Water, Fresh	A	B	D	A	A	A	A	*	*
Water, Salt	B	D	*	*	*	A	A	*	*
Weed Killers	C	*	*	*	*	A	A	*	*
Whiskey and Wines	D	D	D	A	A	A	A	A	*
Xylene	A	A	B	A	A	A	A	*	A
Zinc Chloride	D	D	D	A	D	A	B	B	B
Zinc Hydrosulphite	D	D	*	*	*	*	A	*	*
Zinc Sulfate	D	C	D	A	B	A	A	A	B

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ROTRON®

Throughout our catalog, you will find terminology used for air moving selection and product sizing. Below are a few of the key terms:

Flow

- Volume Rate/Time
- ROTRON charts are in SCFM, m3/min, or L/S
- SCFM = Standard Cubic Feet Per Minute (American) where temperature = 68°F, air density = 0.075 lb/cubic foot, and altitude = 0 feet above sea level
- M3/min = Cubic Meters Per Minute (Metric)
- L/sec = Liters Per Second (Metric)
- 1 m3/min = 35.3 SCFM
- 1 L/sec = 2.119 SCFM
- See Standard Engineering Conversions for other flows on pg I-2.

Pressure

- Force/Area
- ROTRON charts are in IWG, PSIG, MM of Water, IHG, or mbar
- IWG = Inches of Water Gauge (American)
- PSIG = Pounds Per Square Inch Gauge (American)
- MM of Water = Millimeter of Water Gauge (Metric)
- IHG = Inches of Mercury Gauge (American)
- mbar = Millibar Gauge (Metric)
- PSIA = Pounds Per Square Inch Absolute (American)
- 27.7 IWG = 1 PSIG
- 703.58 MM of Water = 1 PSIG
- 2.036 IHG = 1 PSIG
- 0.069 Bars = 69 mbar = 1 PSIG
- Standard Atmosphere = 0 PSIG = 14.7 PSIA
- See Basic Fan Laws Chart for correcting pressure due to speed or density changes on pgs. I-5 and I-6

Density

- Weight/Volume
- Standard Air = 0.075 lb/cubic foot
- See Density Chart for other gases on pg. I-4
- See Density Correction Chart due to altitude and temperature changes on pg. I-3

Specific Gravity

- Density Ratio Relative to Air
- Standard Air SG = 1.0
- Methane SG = 0.55
- See Specific Gravity Chart for other gases on pg. I-4

Velocity

- Distance/Time or Flow/Area
- FPM = Feet Per Minute (American)
- MPH = Miles Per Hour (American)
- M/min = Meters Per Minute (Metric)
- Km/h = Kilometers Per Hour (Metric)
- 88 FPM = 1 MPH
- 26.82 M/min = 1 MPH
- 1.609 Km/h = 1 MPH
- See Standard Engineering Conversion Chart for other velocities on pg. I-2
- See Orifice Flow Calculation Chart for air flow equations on pg. I-7

Pressure Drop / Back Pressure / Impedance

- Friction causes air to slow down and lost energy is measured in pressure drop terms
- Typical pressure drop areas include piping, elbows, accessories and system
- Each fixed system has a fixed system impedance caused by a single or multiple pressure drop points
- Changing the system impedance will cause blowers work point to change
- Changing the blower with fixed system impedance will change the working back pressure
- See Friction Loss Per Foot of Tubing and Fitting Charts on pg. I-8

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Standard Engineering Conversion

MULTIPLY	BY	TO OBTAIN
Atmospheres	76.0	Cms. of Mercury
Atmospheres	29.92	Inches of Mercury
Atmospheres	33.90	Feet of Water
Atmospheres	10,333	Kgs./Sq. Inch
Atmospheres	1.013×10^{5}	Pascals
Atmospheres	14.70	Pounds/Sq. Inch
Atmospheres	760	Torrs
Bars	0.9869	Atmospheres
Bars	$1. \times 10^{6}$	Dynes/Sq. Cm.
Bars	1.020×10^{4}	Kgs./Square Meter
Bars	14.50	Pounds/Sq. Inch
British Thermal Units	0.2520	Kilogram-Calories
British Thermal Units	777.5	Foot-Pounds
British Thermal Units	3.927×10^{-4}	Horsepower-Hours
British Thermal Units	1054	Joules
British Thermal Units	107.5	Kilogram-Meters
British Thermal Units	2.928×10^{-4}	Kilowatt-Hours
Centimeters of Mercury	0.01316	Atmospheres
Centimeters of Mercury	0.4461	Feet of Water
Centimeters of Mercury	136.0	Kgs./Square Meter
Centimeters of Mercury	0.1934	Pounds/Sq. Inch
Centimeters/Second	1.969	Feet/Minute
Centimeters/Second	0.6	Meters/Minute
Cubic Centimeters	3.531×10^{-5}	Cubic Feet
Cubic Centimeters	6.102×10^{-2}	Cubic Inches
Cubic Centimeters	10^{-6}	Cubic Meters
Cubic Centimeters	10^{-3}	Liters
Cubic Feet	2.832×10^{4}	Cubic Cms.
Cubic Feet	1728	Cubic Inches
Cubic Feet	0.02832	Cubic Meters
Cubic Feet	0.03704	Cubic Yards
Cibic Feet	7.481	Gallons
Cubic Feet	28.32	Liters
Cu. Ft. of Water (60°F)	62.37	Pounds
Cubic Feet/Minute	472.0	Cubic Cms./Sec.
Cubic Feet/Minute	0.4720	Liters/Second
Cubic Feet/Minute	62.4	Lbs. of Water/Min.
Cubic Inches	16.39	Cubic Centimeters
Cubic Inches	5.787×10^{-4}	Cubic Feet
Cubic Inches	1.639×10^{-5}	Cubic Meters
Cubic Inches	2.143×10^{-5}	Cubic Yards
Cubic Meters	10^{6}	Cubic Centimeters
Cubic Meters	35.31	Cubic Feet
Cubic Meters	61,023	Cubic Inches
Cubic Meters	1.308	Cubic Yards
Cubic Yards	7.646×10^{5}	Cubic Centimeters
Cubic Yards	27	Cubic Feet
Cubic Yards	46,656	Cubic Inches
Cubic Yards	0.7646	Cubic Meters
Feet	30.48	Centimeters
Feet	12	Inches
Feet	0.3048	Meters
Feet	1/3	Yards
Feet of Air (1 atmosphere 60°F)	5.30×10^{-4}	Pounds/Square Inch
Feet/Minute	0.5080	Centimeters/Sec.
Feet/Minute	0.01667	Feet/Second
Feet/Minute	0.01829	Kilometers/Hour
Feet/Minute	0.3048	Meters/Minute
Feet/Minute	0.01136	Miles/Hour
Grams/Cu. Cm.	62.43	Pounds/Cubic Foot
Horsepower	42.44	British Thermal Units/Min.
Horsepower	33,000	Foot-Pounds/Min.
Horsepower	10.70	Kg.-Calories/Min.
Horsepower	745.7	Watts
Horsepower-Hours	2547	British Thermal Units
Inches	2.540	Centimeters
Inches	10^{3}	Mils
Inches of Mercury	0.03342	Atmospheres
Inches of Mercury	13.60	Inches of Water
Inches of Mercury	345.3	Kgs./Square Meter
Inches of Mercury	25.40	Mms. of Mercury
Inches of Mercury	0.4912	Pounds/Square In.
Inches of Water	0.002458	Atmospheres
Inches of Water	0.07355	Inches of Mercury
Inches of Water	25.40	Kgs./Square Meter
Inches of Water	5.204	Pounds/Square Ft.
Inches of Water	0.03613	Pounds/Square In.

MULTIPLY	BY	TO OBTAIN
KGS./Cubic Meter	0.06243	Pounds/Cubic Foot
Kilometers	3281	Feet
Kilowatts	56.92	British Thermal Units/Min.
Kilowatts	737.6	Foot-Pounds/Sec.
Kilowatts	1.341	Horsepower
Kilowatts	14.34	Kg.-Calories/Min.
Kilowatt-Hours	3415	British Thermal Units
Liters	10^{3}	Cubic Centimeters
Liters	61.02	Cubic Inches
Liters	10^{-3}	Cubic Meters
$Log_{10}N$	2.303	$Log_{E}N$ or Ln N
Log N or Ln N	0.4343	$Log_{10}N$
Meters	100	Centimeters
Meters	3.2808	Feet
Meters	39.37	Inches
Meters	10^{-3}	Kilometers
Meters/Minute	1.667	Centimeters/Sec.
Meters/Minute	3.281	Feet/Minute
Meters/Minute	0.06	Kilometers/Hour
Meters/Minute	0.03728	Miles/Hour
Miles	5280	Feet
Miles	1.6093	Kilometers
Miles	1760	Yards
Miles/Hour	44.70	Centimeters/Sec.
Miles/Hour	88	Feet/Minute
Miles/Hour	1,467	Feet/Second
Miles/Hour	1.6093	Kilometers/Hour
Miles/Hour	26.82	Meters/Minute
Mms. of Mercury	0.0394	Inches of Mercury
Mms. of Mercury	1.3595^{-3}	Kgs./Square Cm.
Mms. of Mercury	0.01934	Pounds/Square Inch
Pints (Liq.)	28.87	Cubic Inches
Pints (U.S. liquid)	473,179	Cubic Centimeters
Pints (U.S. liquid)	16	Ounces (U.S. fluid)
Pounds	444,823	Dynes
Pounds	453.6	Grams
Pounds	16	Ounces
Pounds of Carbon to CO^{2}	14,544	British Thermal Units (mean)
Pounds of Water	27.68	Cubic Inches
Pounds of Water	0.1198	Gallons
Pounds of Water Evaporated at 212°F	970.3	British Thermal Units
Pounds/Cubic Foot	16.02	Kgs./Cubic Meter
Pounds/Square Foot	4,882	Kgs./Square Meter
Pounds/Square Inch	0.06804	Atmospheres
Pounds/Square Inch	27.7	Inches of Water
Pounds/Square Inch	2.036	Inches of Mercury
Pounds/Square Inch	703.1	Kgs./Square Meter
Pounds/Square Inch	6.895×10^{3}	Pascals
Pounds/Square Inch	51.715	Millimeters of Mercury at 0°C
Square Centimeters	1.973×10^{5}	Circular Mils
Square Centimeters	1.076×10^{-3}	Square Feet
Square Centimeters	0.1550	Square Inches
Square Feet	929.0	Square Centimeters
Square Feet	0.09290	Square Meters
Square Inches	1.273×10^{6}	Circular Mils
Square Inches	6.452	Square Centimeters
Square Inches	6.944×10^{-3}	Square Feet
Square Inches	10^{6}	Square Mils
Square Inches	645.2	Square Millimeters
Square Kilometers	10.76×10^{6}	Square Feet
Square Kilometers	10^{6}	Square Meters
Square Kilometers	1.196×10^{6}	Square Yards
Square Meters	10.764	Square Feet
Square Meters	1.196	Square Yards
Temp. (Degs. C.) + 273	1	Abs. Temp. (Degs. C.)
Temp. (Degs. C.) + 17.8	1.8	Temp. (Degs. Fahr.)
Temp. (Degs. F.) + 460	1	Abs. Temp. (Degs. F.)
Temp. (Degs. F.) -32	5/9	Temp. (Degs. Cent.)
Watts	0.05692	British Thermal Units/Min.
Watts	10^{7}	Ergs/Second
Watts	44.26	Foot-Pounds/Min.
Watts	1.341×10^{-3}	Horsepower
Watts	0.01434	Kg.-Calories/Min.
Watts	10^{-3}	Kilowatts
Watts-Hour	3.415	British Thermal Units
Watts-Hour	1.341 x 10-	Horsepower/Hours
Watts-Hour	10^{-3}	Kilowatt-Hours

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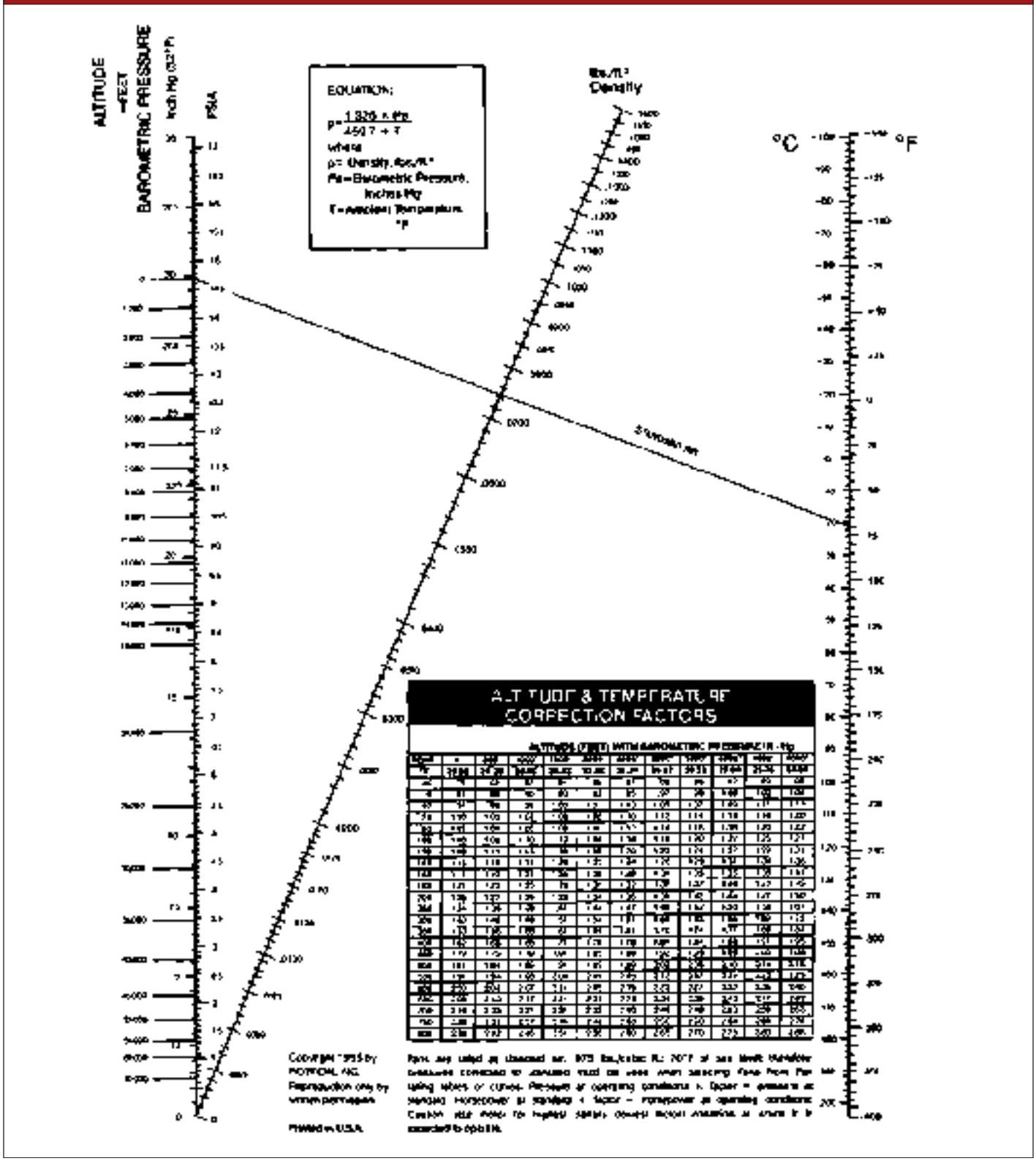
Density Correction Chart



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Specific Gravity and Density of Various Gases at 60°F (1 ATM)

Gas or Vapor	Chemical Formula	Specific Gravity	Density (lbs./cu ft.)
Acetylene	C_2H_2	0.899	.0686
Air	-	1.00	.0763
Ammonia	NH_3	0.587	.0454
Argon	A	1.377	.1053
Benzene	C_6H_6	2.70	.205
Carbon Dioxide	CO_2	1.539	.1166
Chlorine	Cl_2	2.448	.0738
Ethane	C_2H_6	1.038	.0799
Ethylene	C_2H_4	0.969	.0739
Helium	He	0.138	.01054
Hydrogen	H_2	0.0695	.00531
Hydrogen Sulfide	H_2S	1.19	.0897
Methane	CH_4	0.555	.0424
Methyl Chloride	CH_3Cl	1.785	.1356
Nitrogen	N_2	0.967	.0738
Oxygen	O_2	1.105	.0843
Propane	C_3H_8	1.55	.1180
Sulfer Oxide	SO_2	2.26	.1720
Water Vapor	H_2O	0.622	.0373

Explosive Atmosphere Classification

North American	European	
Class I	Zone 1	
Group A	Group II C	Acetylene
Group B	Group II C	Hydrogen or equivalent hazard
Group C	Group II B	Ethyle ether vapors, ethylene or cyclopropane
Group D	Group II A	Gasoline, hexane, naptha, benzene, butane, alcohol, acetone, benzol, lacquer vapors or natural gas
Class II		
Group E	—	Metal dust
Group F	—	Carbon black, coal or coke dust
Group G	—	Flour, starch or grain

Temperature Conversion Chart

*In the center column, find the temperature to be converted. The equivalent temperature is in the left column, if converting to Celsius, and in the right column, if converting to Fahrenheit.

°C	Temp	°F	°C	Temp	°F	°C	Temp	°F	°C	Temp	°F
-78.9	-110	-166	1.7	35	95.0	27.2	81	177.8	182	360	680
-73.3	-100	-148	2.2	36	96.8	27.8	82	179.6	188	370	698
-67.8	-90	-130	2.8	37	98.6	28.3	83	181.4	193	380	716
-62.2	-80	-112	3.3	38	100.4	28.9	84	183.2	199	390	734
-56.7	-70	-94	3.9	39	102.2	29.4	85	185.0	204	400	752
-51.1	-60	-76	4.4	40	104.0	30.0	86	186.8	210	410	770
-45.6	-50	-58	5.0	41	105.8	30.6	87	188.6	216	420	788
-40.0	-40	-40	5.6	42	107.6	31.1	88	190.4	221	430	806
-34.4	-30	-22	6.1	43	109.4	31.7	89	192.2	227	440	824
-28.9	-20	-4	6.7	44	111.2	32.2	90	194.0	232	450	842
-23.3	-10	14	7.2	45	113.0	32.8	91	195.8	238	460	860
-17.8	0	32	7.8	46	114.8	33.3	92	197.6	243	470	878
-17.2	1	33.8	8.3	47	116.6	33.9	93	199.4	249	480	896
-16.7	2	35.6	8.9	48	118.4	34.4	94	201.2	254	490	914
-16.1	3	37.4	9.4	49	120.2	35.0	95	203.0	260	500	932
-15.6	4	39.2	10.0	50	122.0	35.6	96	204.8	266	510	950
-15.0	5	41.0	10.6	51	123.8	36.1	97	206.6	271	520	968
-14.4	6	42.8	11.1	52	125.6	36.7	98	208.4	277	530	986
-13.9	7	44.6	11.7	53	127.4	37.2	99	210.2	282	540	1004
-13.3	8	46.4	12.2	54	129.2	37.8	100	212.0	288	550	1022
-12.8	9	48.2	12.8	55	131.0	43	110	230	293	560	1040
-12.2	10	50.0	13.3	56	132.8	49	120	248	299	570	1058
-11.7	11	51.8	13.9	57	134.6	54	130	266	304	580	1076
-11.1	12	53.6	14.4	58	136.4	60	140	284	310	590	1094
-10.6	13	55.4	15.0	59	138.2	66	150	302	316	600	1112
-10.0	14	57.2	15.6	60	140.0	71	160	320	321	610	1130
-9.4	15	59.0	16.1	61	141.8	77	170	338	327	620	1148
-8.9	16	60.8	16.7	62	143.6	82	180	356	332	630	1166
-8.3	17	62.6	17.2	63	145.4	88	190	374	338	640	1184
-7.8	18	64.4	17.8	64	147.2	93	200	392	343	650	1202
-7.2	19	66.2	18.3	65	149.0	99	210	410	349	660	1220
-6.7	20	68.0	18.9	66	150.8	100	212	413	354	670	1238
-6.1	21	69.8	19.4	67	152.6	104	220	428	360	680	1256
-5.6	22	71.6	20.0	68	154.4	110	230	446	366	690	1274
-5.0	23	73.4	20.6	69	156.2	116	240	464	371	700	1292
-4.4	24	75.2	21.1	70	158.0	121	250	482	377	710	1310
-3.9	25	77.0	21.7	71	159.8	127	260	500	382	720	1328
-3.3	26	78.8	22.2	72	161.6	132	270	518	388	730	1346
-2.8	27	80.6	22.8	73	163.4	138	280	536	393	740	1364
-2.2	28	82.4	23.3	74	165.2	143	290	554	399	750	1382
-1.7	29	84.2	23.9	75	167.0	149	300	572	404	760	1400
-1.1	30	86.0	24.4	76	168.8	154	310	590	410	770	1418
-0.6	31	87.8	25.0	77	170.6	160	320	608	416	780	1436
0	32	89.6	25.6	78	172.4	166	330	626	421	790	1454
0.6	33	91.4	26.1	79	174.2	171	340	644	427	800	1472
1.1	34	93.2	26.7	80	176.0	177	350	662	432	810	1490

°F = 9/5C + 32 ABSOLUTE RANKIN (R) R = °F + 460
°C = 5/9 (F - 32) ABSOLUTE KELVIN (K) K = °C + 273

NEMA Classifications

NEMA
- Type 1 – General Purpose – Indoor
- Type 2 – Dripproof – Indoor
- Type 3 – Dusttight, Raintight and Sleet (Ice) Resistant – Outdoor
- 3R – Rainproof and Sleet (Ice) Resistant – Outdoor
- 3S – Dusttight, Raintight and Sleet (Ice) Proof – Outdoor
- Type 4 – Watertight and Dusttight – Indoor
- 4X – Watertight, Dusttight and Corrosion Resistant – Outdoor
- Type 5 – Superseded by Type 12 for Control Apparatus
- Type 6 – Submersible, Watertight, Dusttight and Sleet Resistant – Indoor and Outdoor
- Type 7 – Class I, Group A, B, C or D Hazardous Locations; Air Break Equipment – Indoor
- Type 8 – Class I, Group A, B, C or D Hazardous Locations; Oil-immersed Equipment – Indoor
- Type 9 – Class II, Group E, F or G Hazardous Locations; Air-break Equipment – Indoor
- Type 10 – Bureau of Mines
- Type 11 – Corrosion Resistant and Dripproof; Oil-immersed – Indoor
- Type 12 – Industrial Use, Dusttight and Driptight – Indoor
- Type 13 – Oiltight and Dusttight – Indoor

Ref: NEMA Standards Publication, Pub. No. 1CS–1970

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Physical Laws for Blower Applications

In the following formulae these symbols are used:

P – Pressure in pounds per square inch (PSI) or inches of mercury column (inches Hg)
CFM – Volume in cubic feet per minute
RPM – Speed in revolutions per minute
D – Density in pounds per cubic foot (lbs./cu. ft.)
H – Height of air or gas column (ft.)
SG – Specific Gravity (ratio of density of gas to the density of air)

"Standard Air" – Air at 68°F (absolute temperature 528°) and 29.92" Hg. (barometric pressure at sea level). The density of such air is 0.075 lbs./cu. ft. and the specific volume is 13.29 cu. ft./lb. The specific gravity is 1.0.

The outlet pressure of a blower depends on the condition of the air or gas at the inlet. The inlet condition is influenced by:
a – Specific gravity (The ratio of density of the gas to density of standard air)
b – Altitude (location of blower)
c – Temperature of inlet air

Basic Fan Laws Chart

VARIABLE	VOLUME	PRESSURE	HORSEPOWER
WHEN SPEED CHANGES	Varies DIRECT with Speed Ratio $CFM_2 = CFM_1 \left(\frac{RPM_2}{RPM_1}\right)$	Varies with SQUARE of Speed Ratio $P_2 = P_1 \left(\frac{RPM_2}{RPM_1}\right)^2$	Varies with CUBE of Speed Ratio $HP_2 = HP_1 \left(\frac{RPM_2}{RPM_1}\right)^3$
WHEN DENSITY CHANGES	Does Not Change	Varies DIRECT with Density Ratio $P_2 = P_1 \left(\frac{D_2}{D_1}\right)$	Varies DIRECT with Density Ratio $HP_2 = HP_1 \left(\frac{D_2}{D_1}\right)$

Volume

The Volume changes in direct ratio to the speed.
Example – A blower is operating at 3500 RPM and delivering 1000 cfm. If the speed is reduced to 3000 RPM, what is the new volume?

V_1 = Original Volume (1000 CFM)
V_2 = New Volume
RPM_1 = Original Speed (3500 RPM)
RPM_2 = New Speed (3000 RPM)

$$V_2 = V_1 \left(\frac{RPM_2}{RPM_1}\right)^1 = 1000 \times \left(\frac{3000}{3500}\right)^1 = 1000 \times .857 = 857 \text{ CFM}$$

Pressure

Pressure (barometric) varies in direct proportion to altitude.
Example – A blower is to operate at an elevation of 6000 feet and is to deliver 3 PSI pressure. What pressure (standard air) blower is required?

$$\text{Pressure} = 3 \times \frac{29.92}{23.98} = 3.75 \text{ or } 3\ 3/4 \text{ lb.}$$

If it is desired to determine what pressure a 3 lb. (standard air) blower will deliver at 6000 feet –

$$\text{Pressure} = 3 \times \frac{23.98}{29.92} = 2.4 \text{ or about } 2\ 1/2 \text{ lb.}$$

When a blower is to operate at a high altitude it is frequently specified that the blower be capable of handling a given volume of "standard air". It is then necessary to determine the equivalent volume of air at the higher altitude.
Example – A blower is to operate 6000 feet altitude and is to handle 1000 CFM of standard air. What is the CFM of air the blower must handle at 6000 feet altitude?

Let: V_1 = Volume of standard air (1000 CFM)
V_2 = Volume of thinner air
Hg_1 = Barometric pressure sea level (29.92)
Hg_2 = Barometric pressure 6000' (23.98)

$$V_2 = V_1 \times \frac{Hg_1}{Hg_2} = 1000 \times \frac{29.92}{23.98} = 1248 \text{ CFM}$$

The pressure changes as the *square* of the speed ratio.

Example – A blower is operating at a speed of 3500 RPM and delivering air at 5.0 pounds pressure. If the speed is reduced to 3000 RPM, what is the new pressure?

P_1 = Original Pressure (5 lbs.)
P_2 = New Pressure
RPM_1 = Original Speed (3500 RPM)
RPM_2 = New Speed (3000 RPM)

$$P_2 = P_1 \left(\frac{RPM_2}{RPM_1}\right)^2 = 5 \times \left(\frac{3000}{3500}\right)^2 = 5 \times .735 = 3.68 \text{ pounds}$$

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Pressure (Cont'd)

The Air Density varies in inverse proportion to the absolute temperature.
Example – A blower is to handle 200°F air at 3 PSI pressure. What pressure (standard air) blower is required?

Let: P_1 = Pressure hot air (3 PSI)
P_2 = Pressure standard air
AT_1 = Absolute temperature hot air (200+460=660°F)
AT_2 = Absolute temperature standard air (68+460=528°F)

$$P_2 = P_1 \times \frac{AT_1}{AT_2} = 3 \times \frac{660}{528} = 3.75 \text{ or } 3\ 3/4 \text{ lb.}$$

A blower is capable of delivering 3 PSI pressure with standard air. What pressure will it develop handling 200°F inlet air?

$$P_1 = P_2 \times \frac{AT_2}{AT_1} = 3 \times \frac{528}{660} = 2.4 \text{ or about } 2\ 1/2 \text{ lb.}$$

Pressure varies in direct proportion to the density.
Example – A 3 lb. (standard air) blower is to be used to handle gas having a specific gravity of 0.5. What pressure does the blower create when handling the gas?

Let: Pa = Air pressure (3 lb.)
Pg = Gas pressure
SG = Specific gravity of gas (0.5)

Pg = Pa x SG = 3 x .5 = 1.5 lb.

If we are required to handle a gas having a specific gravity of 0.5 at 1.5 lb. pressure, we can determine the standard air pressure blower as follows:

$$\text{Let: Pa} = \frac{Pg}{SG} = \frac{1.5}{.5} = 3 \text{ lb.}$$

The following table gives the barometric pressure of various altitudes:
Absolute Pressure At Altitudes Above Sea Level (Based on U.S. Standard Atmosphere)

Altitude Feet	Pressure		Altitude Feet	Pressure		Altitude Feet	Pressure	
	In. Hg.	PSIA		In. Hg.	PSIA		In. Hg.	PSIA
0	29.92	14.70	2,500	27.31	13.41	7,000	23.09	11.34
500	29.38	14.43	3,000	26.81	13.19	7,500	22.65	11.12
600	29.28	14.38	3,500	26.32	12.92	8,000	22.22	10.90
700	29.18	14.33	4,000	25.84	12.70	8,500	21.80	10.70
800	29.07	14.28	4,500	25.36	12.45	9,000	21.38	10.50
900	28.97	14.23	5,000	24.89	12.23	9,500	20.98	10.90
1,000	28.86	14.18	5,500	24.43	12.00	10,000	20.58	10.10
1,500	28.33	13.90	6,000	23.98	11.77			
2,000	27.82	13.67	6,500	23.53	11.56			

Horsepower

The horsepower changes as the *cube* of the speed ratio.
Example – A blower is operating at a speed of 3500 RPM and requiring 50 horsepower. If the speed is reduced to 3000 RPM, what is the new required horsepower?

HP_1 = Original Horsepower (50)
HP_2 = New Horsepower
RPM_1 = Original Speed (3500 RPM)
RPM_2 = New Speed (3000 RPM)

$$HP_2 = HP_1 \times \left(\frac{RPM_2}{RPM_1}\right)^3 = 50 \times \left(\frac{3000}{3500}\right)^3 = 50 \times .630 = 31.5 \text{ horsepower}$$

The above is known as the 1-2-3 rule of blowers.

Horsepower vs. Specific Gravity & Ratio of density.
The horsepower varies in direct proportion to the specific gravity (ratio of density of gas to density of air).
Example – A standard air blower requires a 10 HP motor. What horsepower is required when this blower is to handle a gas whose specific gravity is 0.5?

HP = 10 x 0.5 = 5 horsepower

It is possible that several of the above modifications may be required on one installation. Therefore, it may be necessary to use various combinations of these formulae.

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Orifice Flow

Orifice Flow Calculation

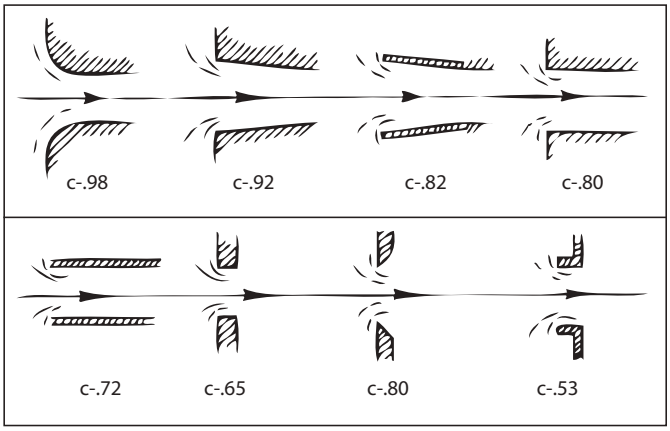
To determine air flow through an orifice:

$V = CK\sqrt{P}$ $\quad Q = AV$ $\quad VP = \left(\frac{V}{K}\right)^2$

Where:

V = Velocity in feet per minute (fpm)
C = Orifice Coefficient
K = Constant = 14,786 when P is expressed in In. Hg
21,094 when P is expressed in PSIG
4,005 when P is expressed in In. of Water
(Above constants are based on an air density of 0.075 lbs/ft ^{3})
P = Pressure differential across the orifice
Q = Flow rate in cubic feet per minute (CFM)
A = Total orifice area expressed in square feet
VP = Velocity pressure (units are those of pressure)

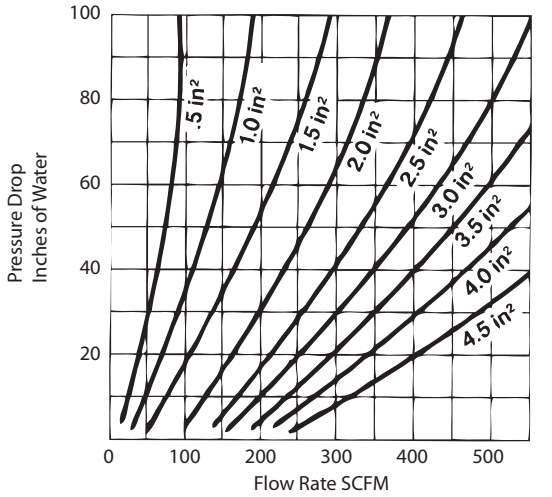
Coefficient C for Orifices Under Vacuum or Pressure Flow

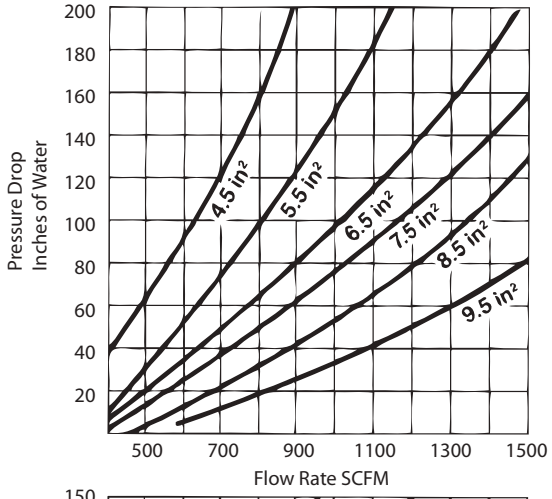


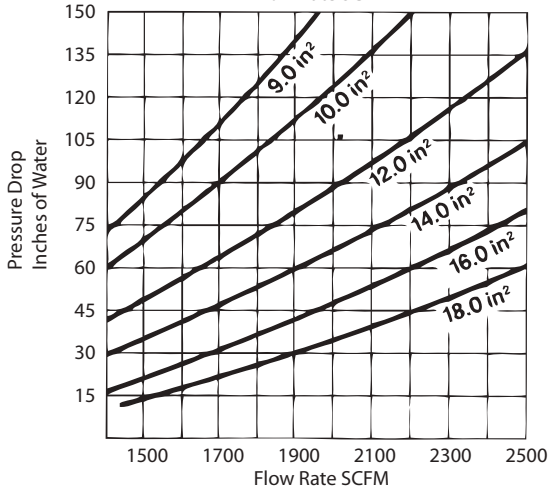
Area of Orifices Orifice Diameter in Inches		
Diameter in Inches	Square Inches	Square Feet
1/8	.01227	.000085
3/16	.02761	.00019
1/4	.04908	.00034
3/8	.11044	.00076
1/2	.19634	.00136
5/8	.30679	.00213
7/8	.60132	.00417
1.0	.78539	.00545

Orifice area (in sq. inches) = .25 X π X (orifice diameter in inches) ^{2}
Orifice area (in sq. feet) = Area in sq. inches ÷ 144

ORIFICE PRESSURE DROP AS A FUNCTION OF FLOW AND ORIFICE AREA (C=.65)







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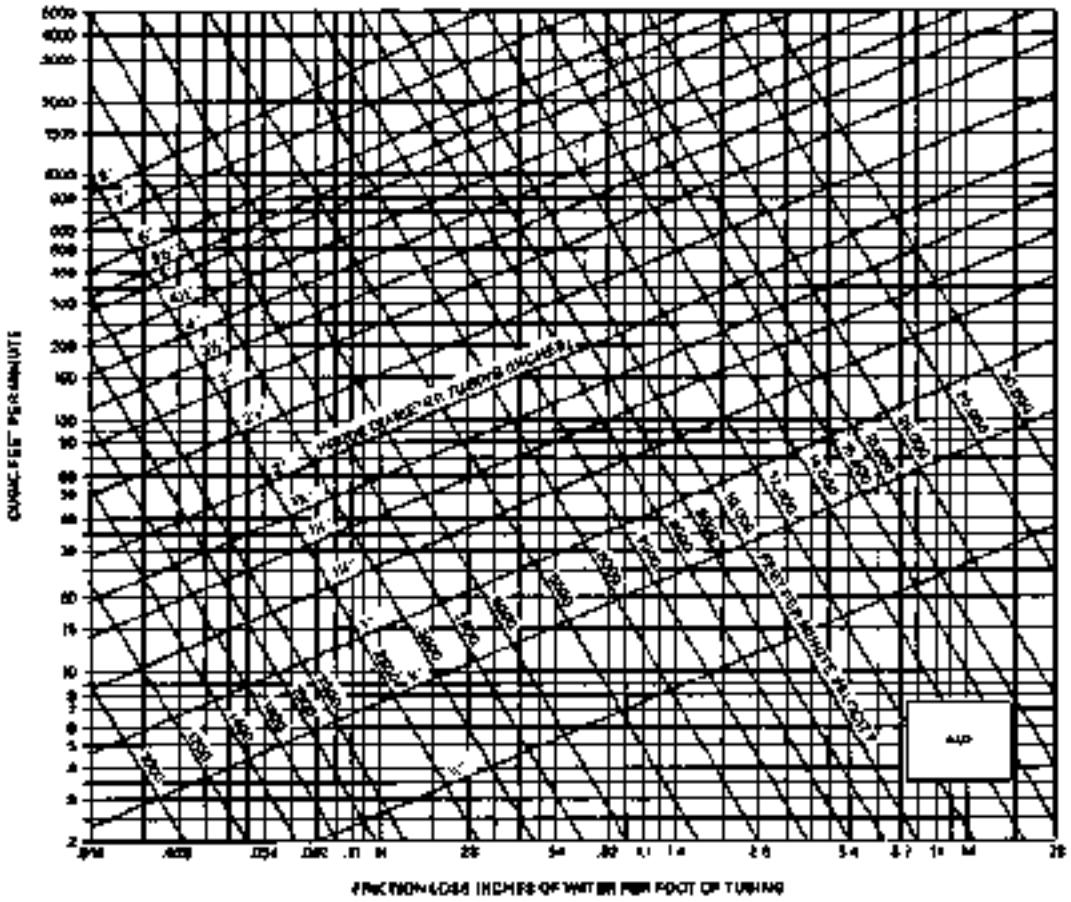
Friction Loss Per Foot of Tubing



Friction Loss in Fittings

To calculate friction loss in fittings use chart below. This chart will yield equivalent lengths (in feet) of tubing. Use this length with graph above to find friction loss in inches of water column.

NOMINAL PIPE SIZE (INCHES)	EQUIVALENT TUBING LENGTH (FEET)	
	90° EL	45° EL
1 1/4	3	1.5
1 1/2	4	2
2	5	2.5
2 1/2	6	3
3	7	4
4	10	5
5	12	6
6	15	7.5
8	20	10

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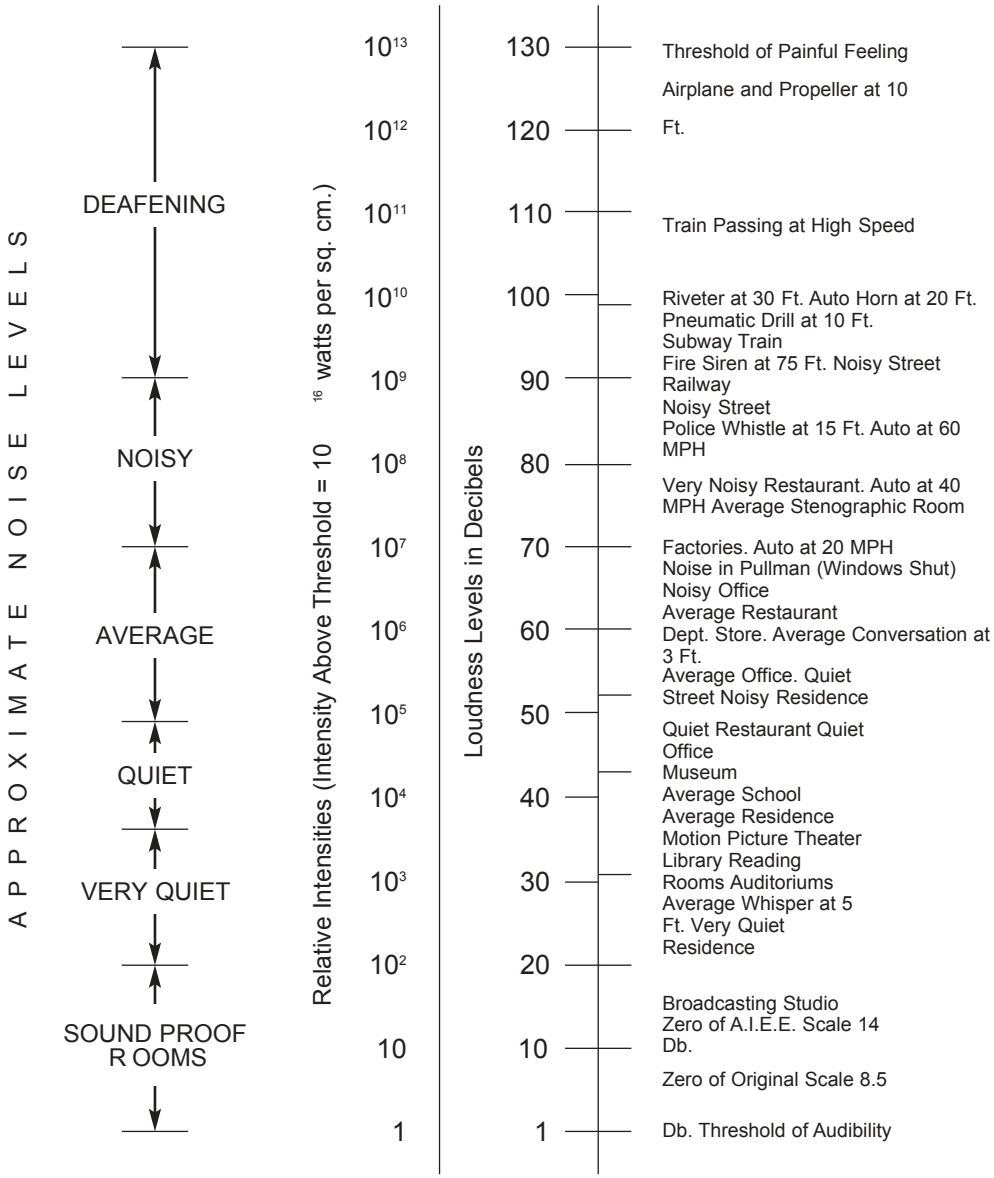
Noise Facts

- OSHA (Occupational Safety & Health Administration) regulates and monitors in-plant noise.
- Allowable noise is a function of dBA level at certain distance over an exposure time.
- OSHA regulations state 90 dBA for an 8 hour work period using slow responic setting on meter.
- Adding a second noise producer of equal dBA will add 3 dBA to the first dBA reading.
- Sound pressure level (SPL) decreases with distance (d)

$$(SPL)_2 = (SPL)_1 - 20LOG\left(\frac{d2}{d1}\right)$$

Therefore, each doubling of distance results in 6 dBA reduction.

Loudness Levels of Familiar Noises (Approximate Average Including Ear Nework)



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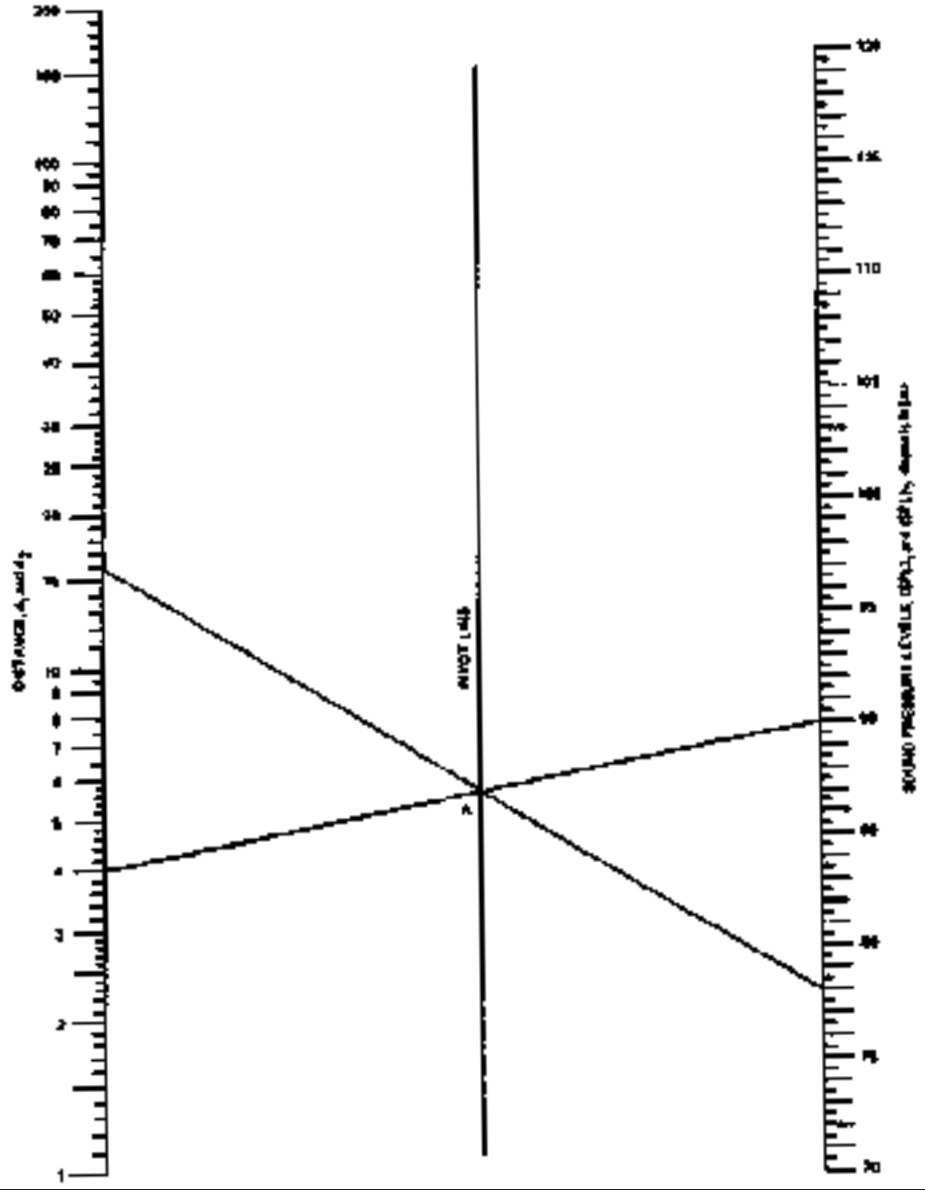
Industrial Blower Noise Chart* in dBA

Model	Mode		Model	Mode		Model	Mode		Model	Mode		Model	Mode	
	Suction	Pressure		Suction	Pressure		Suction	Pressure		Suction	Pressure		Suction	Pressure
SE	60-62	60-62	101	65-67	66-68	513	80-81	80-81	757	83-85	84-86	S/P 9	90-91	90-91
MF	64-65	64-65	202	67-69	68-70	505	77-78	76-77	808	84-85	84-85	909	81-82	84-86
RDC	76-78	76-78	303	65-67	67-69	523	82-83	82-83	633	81-82	81-82	1233	84-85	84-85
SL2	69-72	69-72	353	72-73	73-74	555	80-81	80-81	S7	88-89	88-89	S/P 13	87-88	90-91
SL4	72-78	72-78	404	73-74	74-75	656	82-83	82-83	858	84-85	84-85	14	86-87	86-87
SL5	76-79	76-79	454	76-77	75-76	6	85-86	85-86	833	82-84	82-84	S/P 15	91-92	91-92

* Average at 1 meter, 4 places around the blower

dBA at Distance Conversion Chart

To read, use straight edge to connect blower distance and dBA rating. A pivot point A will be developed. Use straight edge again with new distance and pivot point A to read dBA at new distance.



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Standard Regenerative Blower Nomenclature Reference

This chart explains the nomenclature behind the catalogued blower model names. This tool can be used to explain to customers what the letters and numbers mean, and will also allow you to become familiar with our model names. This information should not affect the way orders are placed; please continue to use the model names shown in the catalog and price pages. Any special request should be noted on the order.

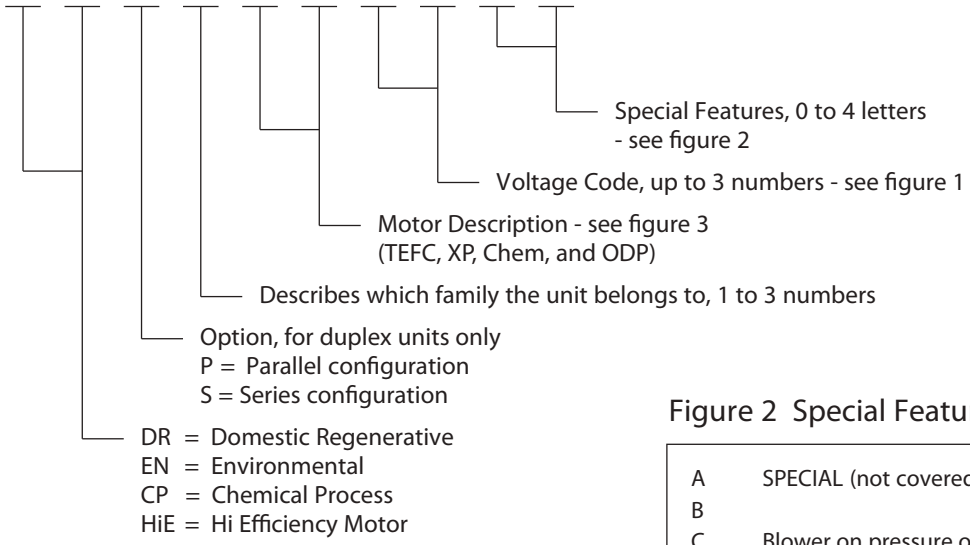

Figure 1 Voltage Code

5	230 VAC 60 Hz, Single Phase
9	115/230 VAC 50/60 Hz, Single Phase
33	230 VAC 60 Hz, Three Phase
58	115/230 VAC 60 Hz Single Phase
60	200 VAC 50/60 Hz Single Phase
72	230/460 VAC 60 Hz Three Phase
75	380 VAC 50 Hz Three Phase
86	575 VAC 60 Hz Three Phase
89	200-230/460 VAC 60 Hz, Three Phase
91	230/460 VAC 50/60 Hz, Three Phase
92	415 VAC 50 Hz, Three Phase
201	380 VAC 60 Hz

Figure 2 Special Features

A	SPECIAL (not covered by any other letter)
B	
C	Blower on pressure only
D	Blower on suction only
E	
F	
G	
H	Vapor recovery service - hydrocarbon
J	Nasty Gas face seal
K	
L	Lo leak option (lip seal)
M	Die Cast or muffler extension
P	
Q	
R	Chem-Tough™ construction
S	Special manifold
T	
U	
V	Valve
W	Rail mounted blower
X	Base mounted blower
Y	Slip on flange
Z	Package blower coupling drive
AA	Package blower belt drive, simplex
BB	Package blower drive belt, duplex
RD	Remote drive
NT	No Tower

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Standard Regenerative Blower Nomenclature Reference (Cont'd)

Figure 3 Motor Description

	HP	Motor Type	Thermal Protection		HP	Motor Type	Thermal Protection
D	5.0	TEFC	No	CJ	2.5	XP	Yes
E	5.0	ODP	No	CK	4.0	TEFC	No
F	5.0	XP	Yes	CR	4.0	CHEM TEFC	No
K	3.0	TEFC	No	CS	3.0	CHEMTEFC	No
M	3.0	XP	Yes	CT	2.0	CHEM TEFC	No
R	1.5	TEFC	No	CU	1.0	CHEM TEFC	No
V	1.5	ODP	Yes	DC	1/8	TEFC	Yes
W	1.5	XP	Yes	DJ	1/16	TEFC	Yes
X	7.5	ODP	No	DW	30	TEFC	No
Y	1/3	TEFC	No	DX	30	XP	Yes
AD	1/3	XP	Yes	EE	60	ODP	No
AE	1/2	TEFC	No	EZ	1.5	CHEM TEFC	No
AG	1/2	XP	No	FA	1/2	CHEM TEFC	No
AK	1/2	XP	Yes	FB	1/4	CHEM TEFC	No
AL	1.0	TEFC	No	FD	3/4	CHEM TEFC	No
AR	1.0	XP	Yes	FE	2.5	CHEM TEFC	No
AS	2.0	TEFC	No	FF	5	CHEM TEFC	No
AW	2.0	ODP	Yes	FG	7.5	CHEM TEFC	No
AX	2.0	XP	Yes	FH	10	CHEM TEFC	No
AY	7.5	TEFC	No	FJ	15	CHEM TEFC	No
BA	7.5	XP	Yes	FK	30	CHEM TEFC	No
BB	10	TEFC	No	FL	5.5	XP	Yes
BC	10	ODP	No	FM	1/4	CHEM XP	No
BD	10	XP	Yes	FN	1/2	CHEM XP	No
BE	15	TEFC	No	FQ	1.0	CHEM XP	Yes
BG	15	XP	Yes	FR	1.5	CHEM XP	Yes
BH	20	TEFC	No	FS	2.0	CHEM XP	Yes
BK	20	XP	Yes	FU	3.0	CHEM XP	Yes
BL	15	ODP	No	FW	5.0	CHEM XP	Yes
BM	20	ODP	No	FX	5.5	CHEM XP	Yes
BP	30	ODP	No	FY	7.5	CHEM XP	Yes
BQ	40	ODP	No	FZ	10	CHEM XP	Yes
BR	3/4	TEFC	No	GA	15	CHEM XP	Yes
BX	1/4	TEFC	No	GB	20	CHEM XP	Yes
CB	1/4	ODP	Yes	GC	30	CHEM XP	Yes
CC	1/4	XP	Yes	GD	20	CHEM TEFC	No
CD	2.5	TEFC	No	GE	11.5	TEFC	No
				RD		Remote Drive - No Motor	

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ROTRON®

Corrosion-Resistant and Sanitary Blowers Application Data Sheet

To obtain Application Engineering assistance or a quotation for your specific need, please photocopy this form, fill out as much as possible, and fax it back to Rotron. We look forward to working with you.

COMPANY

CONTACT

ADDRESS

ADDRESS

CITY STATE ZIP

PHONE FAX

GAS CONCENTRATION / DESCRIPTION

Percentage Gas Specific Gravity

_____ % _____ (SG = _____) _____ % _____

_____ % _____ (SG = _____) _____ % _____

(SG = _____)

_____ % 100 _____ (SG = _____)

GAS CLASSIFICATION: Corrosive ☐ Yes ☐ No Explosive ☐ Yes ☐ No

AREA CLASSIFICATION: Corrosive ☐ Yes ☐ No Explosive ☐ Yes ☐ No

PERFORMANCE REQUEST: Fill in and circle choice

SCFM FLOW	° (F / C) INLET TEMPERATURE
PSI (A / G) INLET PRESSURE	° (F / C) AREA AMBIENT TEMPERATURE
PSI (A / G) OUTLET PRESSURE	(Ft / M) SITE ALTITUDE

APPLICATION DESCRIPTION: Attach sketch if necessary

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PRECISION MOTION CONTROL
DYNAMIC FLUID SOLUTIONS

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As we transition to our new identity, you'll notice that the pages within this brochure still carry the branding of the previous business unit. However, please be aware that ROTRON Regenerative Blowers featured herein are now under Bison's stewardship. We appreciate your patience as we undergo rebranding. Rest assured, our commitment to innovation and quality remains unchanged.

Please note: The data provided shows typical performance and should only be used for reference. Data may change without notice.




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For more than 50 years, Bison® has designed and manufactured an assortment of regenerative blowers (DR/EN/CP) for industrial, environmental, instrumentation, and chemical processing applications. These oil-free products provide you with high air pressures/vacuums and feature compact construction, low acoustical noise, high reliability, and long lives without scheduled maintenance requirements.

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