

Compressors for Ventilators, Stationary and Portable Oxygen Concentrators

PUMP FEATURES & BENEFITS

- ✓ COMPACT, LIGHTWEIGHT DESIGN
- ✓ EFFICIENT, LOW POWER CONSUMPTION
- ✓ LOW SOUND LEVEL
- ✓ PROVIDES A CLEAN AIR STREAM



Respirators / Ventilators

P3 **2660 Series**

P5 **2668 Series**

P7 **2680 World Wide Voltage Series**

P9 **2505 Series**

FEATURES

- > Custom configured part options
- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > Die-cast aluminum components
- > Dynamically balanced
- > Proven WOB-L technology
- > Monolithic head
- > Field service capability
- > Thermally protected motor
- > Designed and tested per Agency standards
- > RoHS compliant

Declaration documentation available upon request

BASE MODELS

2660E48XNTLSXX

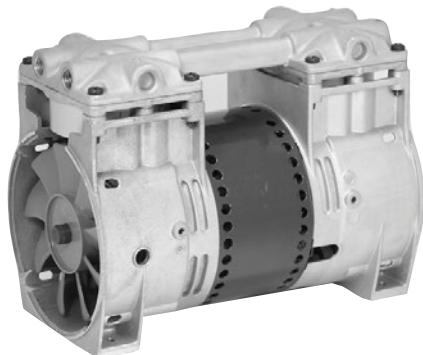
(115/60/1)

2660N48XNTLSXX

(220-240/50/60/1)

2660S48XNTLSXX

(100/50/60/1)



TYPICAL APPLICATIONS

- > O₂ Concentrator
- > Blood & Laboratory Analyzers
- > Aspirators/Respirators
- > Dental & Optical Equipment
- > Industrial/Manufacturing Equipment
- > Business Equipment/Food & Beverage Equipment



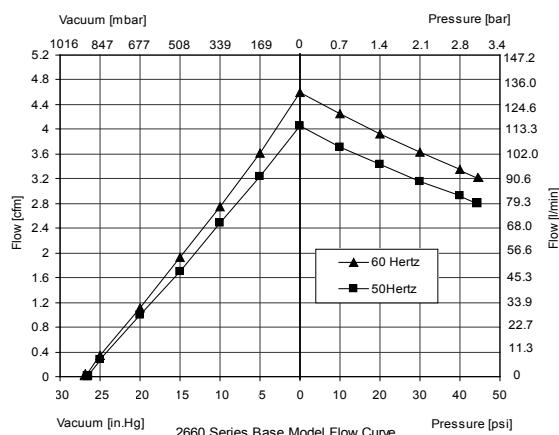
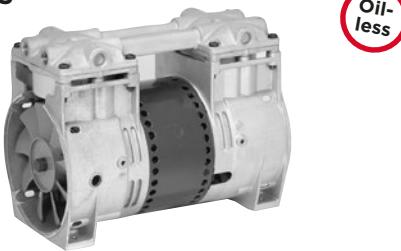
WOB-L

2660 Series

Flow	4.6 cfm (130.3 l/min)
Max. pressure	45 psi (3.1 bar)
Max. vacuum	92% local barometer

CONFIGURED OPTIONS

- > Stroke
- > Pump restart
- > Head port thread
- > Foot tap thread
- > Electrical cord
- > Fan guard
- > Protective cotating



NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

PERFORMANCE DATA		T10-0151	T10-0153	T10-0152	
Model Number	2660E48XNTLSXX	2660N48XNTLSXX	2660S48XNTLSXX		
Head Configuration	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow		
Stroke	0.48 in. (12.2 mm)	0.48 in. (12.2 mm)	0.48 in. (12.2 mm)		
Nominal voltage input	115/60/1	230/50/1	230/60/1	100/50/1	100/60/1
Max. open air flow	4.6 cfm (130.3 l/min)	4.0 cfm (113.3 l/min)	4.6 cfm(130.3 l/min)	4.0 cfm (113.3 l/min)	4.6 cfm(130.3 l/min)
Max. rated pressure	40 psi (2.8 bar)	45 psi (3.1 bar)	40 psi (2.8 bar)	25 psi (1.7 bar)	20 psi (1.4 bar)
Current at rated pressure	5.3A	2.5A	2.7A	4.5A	4.4A
Power at rated pressure	608W	523W	604W	421W	432W
Speed at rated pressure	1675 rpm	1409 rpm	1682 rpm	1436 rpm	1695 rpm
Max. pressure restart	Consult factory	Consult factory	Consult factory		
Max. vacuum	92% local barometer	92% local barometer	92% local barometer		
Max. vacuum restart	Consult factory	Consult factory	Consult factory		

ELECTRICAL DATA

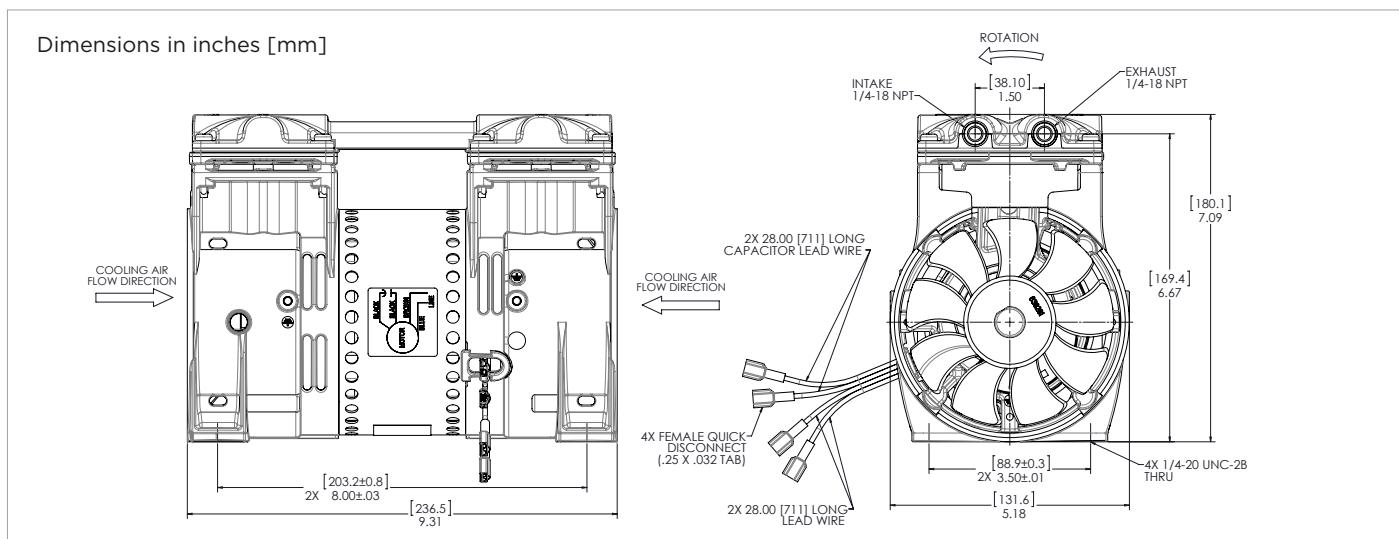
Motor type (Capacitance)	P.S.C. [25 µF]	P.S.C. [15 µF]	P.S.C. [25 µF]
Motor locked rotor current	18.0A	9.3A	8.3A
Motor insulation class	B	B	B
Thermal switch (Open temperature)	Yes [293°F (145°C)]	Yes [248°F (120°C)]	Yes [293°F (145°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG	Black, black, 18 AWG

GENERAL DATA

Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUus	TUV	None
Net weight	17.6 lbs (8.0 kg)	17.1 lbs (7.8 kg)	17.6 lbs (8.0 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



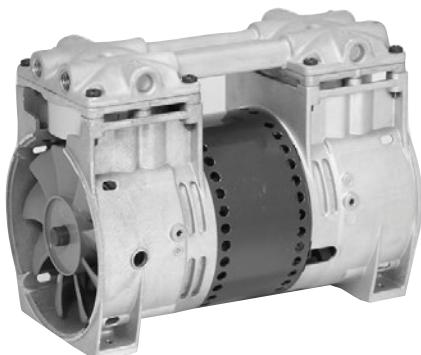
FEATURES

- > Custom configured part options
- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > Die-cast aluminum components
- > Dynamically balanced
- > Proven WOB-L technology
- > Monolithic head
- > Field service capability
- > Thermally protected motor
- > Designed and tested per Agency standards
- > RoHS compliant

Declaration documentation available upon request

BASE MODELS

- 2668E44XNTLSXX**
(115/60/1)
2668N44XNTLSXX
(220-240/50/60/1)
2668S44XNTLSXX
(100/50/60/1)



TYPICAL APPLICATIONS

- > O₂ Concentrator
- > Blood & Laboratory Analyzers
- > Aspirators/Respirators
- > Dental & Optical Equipment
- > Industrial/Manufacturing Equipment
- > Business Equipment/Food & Beverage Equipment



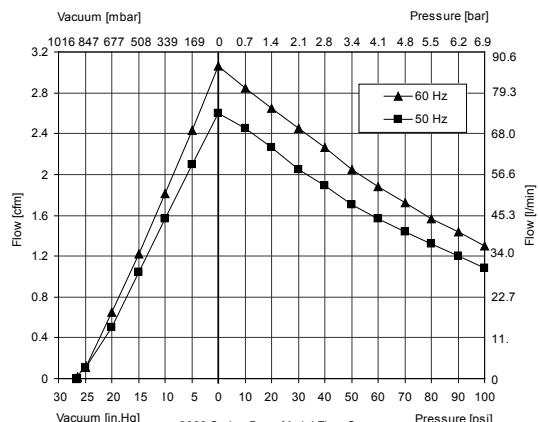
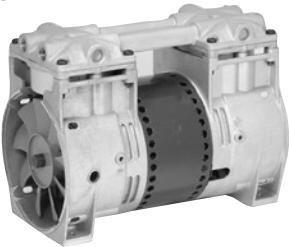
WOB-L

2668 Series

Flow	3.1 cfm (87.8 l/min)
Max. pressure	100 psi (6.9 bar)
Max. vacuum	93% local barometer

CONFIGURED OPTIONS

- > Stroke
- > Pump restart
- > Head port thread
- > Foot tap thread
- > Electrical cord
- > Fan guard
- > Protective cotating



See Performance Data for base model maximum operating pressures
Consult factory for custom configured stroke options

NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median values.

PERFORMANCE DATA		T10-0138	T10-0142	10-0140	
Model Number	2668E44XNTLSXX	2668N44XNTLSXX	2668S44XNTLSXX		
Head Configuration	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow		
Stroke	0.44 in. (11.2 mm)	0.44 in. (11.2 mm)	0.44 in. (11.2 mm)		
Nominal voltage input	115/60/1	230/50/1	230/60/1	100/50/1	100/60/1
Max. open air flow	3.1 cfm (87.8 l/min)	2.6 cfm (73.6 l/min)	3.1 cfm (87.8 l/min)	2.6 cfm (73.6 l/min)	3.1 cfm (87.8 l/min)
Max. rated pressure	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	40 psi (2.8 bar)
Current at rated pressure	4.5A	1.8A	2.1A	4.6A	4.3A
Power at rated pressure	489W	408W	449W	430W	432W
Speed at rated pressure	1699 rpm	1406 rpm	1676 rpm	1400 rpm	1689 rpm
Max. pressure restart	Consult factory	Consult factory	Consult factory		
Max. vacuum	93% local barometer	93% local barometer	93% local barometer		
Max. vacuum restart	Consult factory	Consult factory	Consult factory		

ELECTRICAL DATA

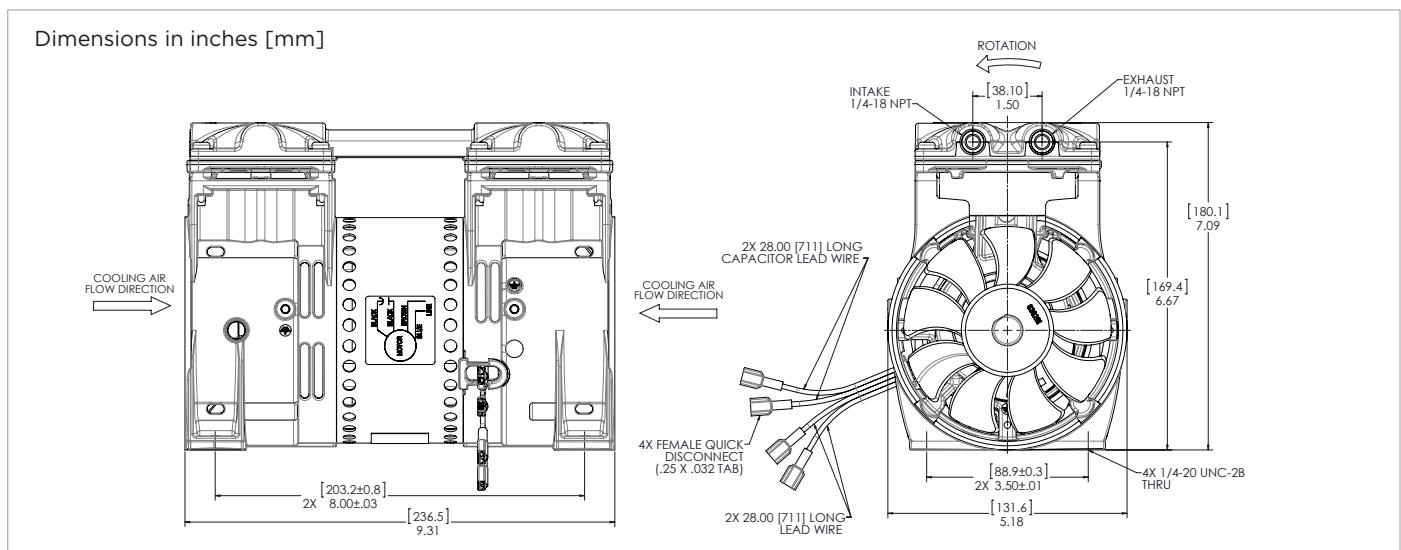
Motor type (Capacitance)	P.S.C. [15 µF]	P.S.C. [15 µF]	P.S.C. [20 µF]
Motor locked rotor current	16.2A	5.9A	5.6A
Motor insulation class	B	B	B
Thermal switch (Open temperature)	Yes [293°F (145°C)]	Yes [275°F (135°C)]	Yes [293°F (145°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG	Black, black, 18 AWG

GENERAL DATA

Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUus	TUV	None
Net weight	16.3 lbs (7.4 kg)	16.3 lbs (7.4 kg)	16.3 lbs (7.4 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



FEATURES

- > World wide voltage/frequency operation
- > Oil-less operation
- > Stainless steel valving components
- > Epoxy coated wetted parts
- > Aluminum die-cast components
- > Proven WOB-L technology
- > High performance tapered piston seals
- > Thermally protected motor
- > Lightweight, impact resistant fan guards
- > Internal 9 blade cooling air flow fans
- > Designed and tested per Agency standards
- > RoHS & REACH compliant
- > Field serviceable

Declaration documentation available upon request

BASE MODEL

2680CWW40

(100-127/50/60/1 & 200-240/50/60/1)



TYPICAL APPLICATIONS

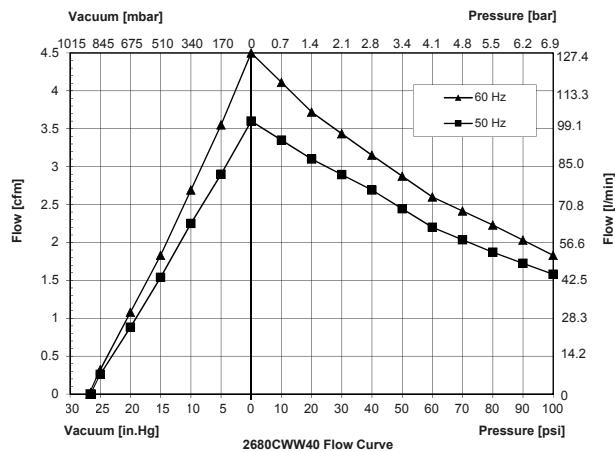
- > Blood & Laboratory Analyzers
- > Respirators/Respiratory Therapy
- > Medical/Dental/Optical Equipment
- > Industrial/Manufacturing Equipment
- > Business Equipment/Food & Beverage Equipment



WOB-L

2680 World Wide Voltage Series

Flow	4.5 cfm (127 l/min)
Max. pressure	100 psi (6.9 bar)
Max. vacuum	92% local barometer



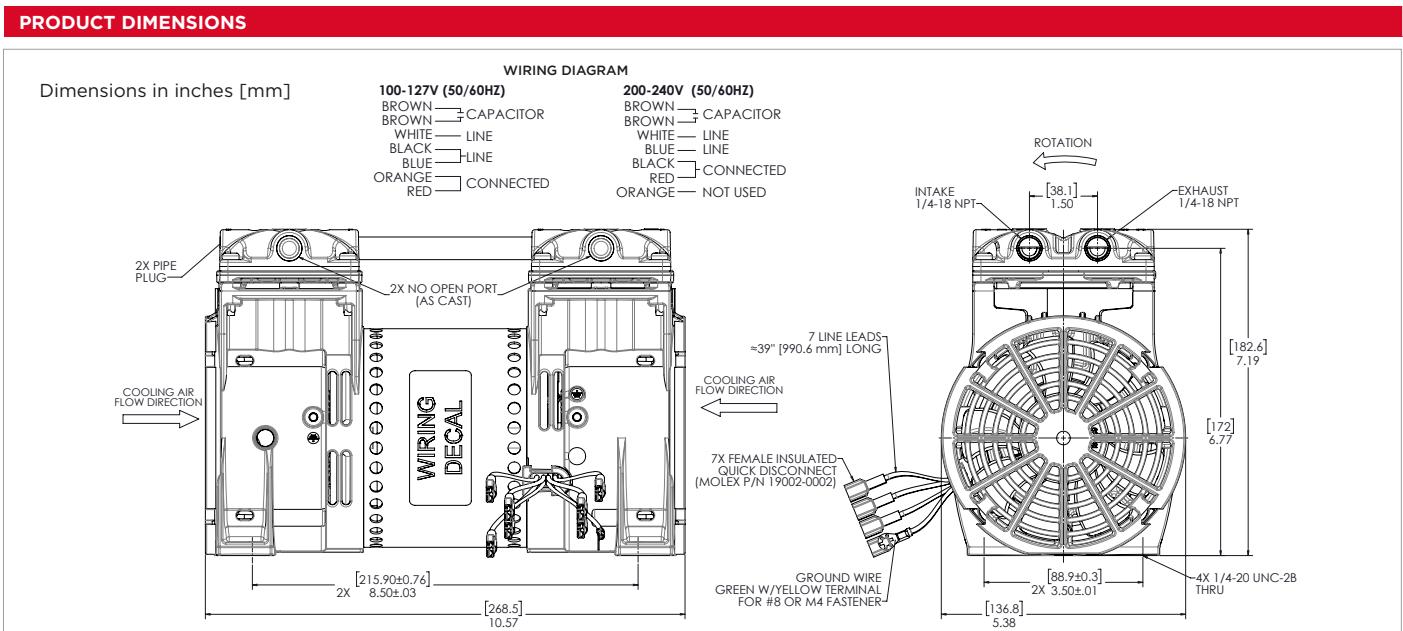
NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

PERFORMANCE DATA		T17-0418
Model Number	2680CWW40	
Head configuration	Pressure or vacuum parallel flow	
Stroke	0.40 in. (10.16 mm)	
Nominal voltage input range	100 - 127V 50Hz	100 - 127V 60Hz
Max. open air flow	3.6 cfm (102 l/min)	4.5 cfm (127 l/min)
Max. rated pressure	100 psi (6.9 bar)	100 psi (6.9 bar)
Current at rated pressure	5.0A - 4.9A	6.2A - 5.2A
Power at rated pressure	490W - 560W	615W - 650W
Speed at rated pressure	1395 rpm - 1440 rpm	1647 rpm - 1725 rpm
Maximum rated vacuum	92% local barometer	92% local barometer
Maximum pressure restart	Consult factory	
Maximum vacuum restart	Consult factory	

ELECTRICAL DATA				
Motor type (Capacitance)	P.S.C. [35 µF]			
Motor locked rotor current	17.0 - 21.2A	15.2 - 20.4A	8.4 - 10.1A	7.8 - 9.5A
Motor insulation class	B			
Thermal switch (Open temperature)	Yes [266°F (130°C)]			
Lead wire color, gauge	Lead wire connection dependant on voltage requirement, consult wiring diagram below, 18 AWG			
Capacitor lead wire color, gauge	Brown, brown 18 AWG			

GENERAL DATA	
Operating ambient temperature	50° to 104°F (10°C TO 40°C)*
Safety Certification	Declaration of Incorporation documentation available upon request
Net weight	20.9 lbs (9.5 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.



FEATURES

- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > Die-cast aluminum components
- > Dynamically balanced
- > Proven WOB-L technology
- > Monolithic head
- > Field service capability
- > Thermally protected motor
- > Designed and tested per Agency standards
- > RoHS compliant

Declaration documentation available upon request

BASE MODELS

2505CE38

(115/60/1)

2505CG38

(230/60/1)

2505CHI45

(220-240/50/1)



TYPICAL APPLICATIONS

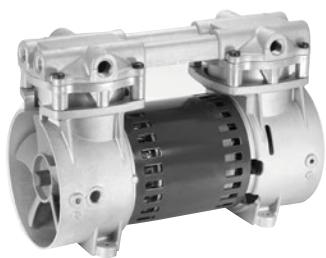
- > O₂ Concentrator
- > Blood & Laboratory Analyzers
- > Dental & Optical Equipment
- > Medical Trauma Carts
- > Laboratory Air Dryers
- > Aspirators/Respirators
- > Industrial/Manufacturing Equipment



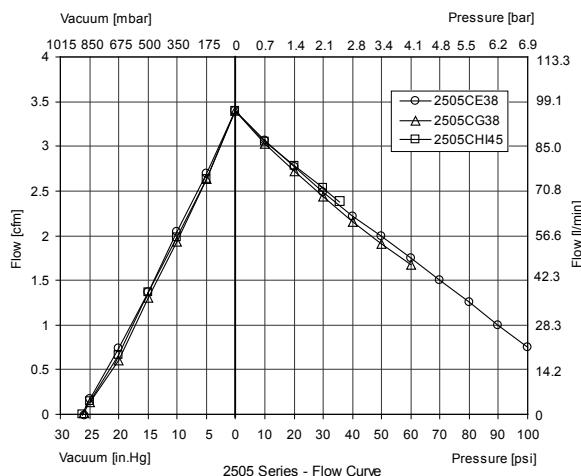
WOB-L

2505 Series

Flow	3.4 cfm (96.3 l/min)
Max. pressure	100 psi (6.9 bar)
Max. vacuum	90% local barometer



Oil-less



NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median values.

PERFORMANCE DATA		T15-0120	T14-0320	T14-0320
Model Number	2505CE38	2505CG38	2505CHI45	
Head Configuration	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	
Stroke	0.38 in. (9.6 mm)	0.38 in. (9.6 mm)	0.45 in. (11.4 mm)	
Nominal voltage input	115/60/1	230/60/1	220-240/50/1	
Max. open air flow	3.4 cfm (96.3 l/min)	3.4 cfm (96.3 l/min)	3.4 cfm (96.3 l/min)	
Max. rated pressure	100 psi (6.9 bar)	60 psi (4.1 bar)	35 psi (2.4 bar)	
Current at rated pressure	3.6A	1.9A	1.7A	
Power at rated pressure	380W	415W	385W	
Speed at rated pressure	1700 rpm	1670 rpm	1400 rpm	
Max. pressure restart	Consult factory	Consult factory	Consult factory	
Max. vacuum	90% local barometer	90% local barometer	90% local barometer	
Max. vacuum restart	Consult factory	Consult factory	Consult factory	

ELECTRICAL DATA

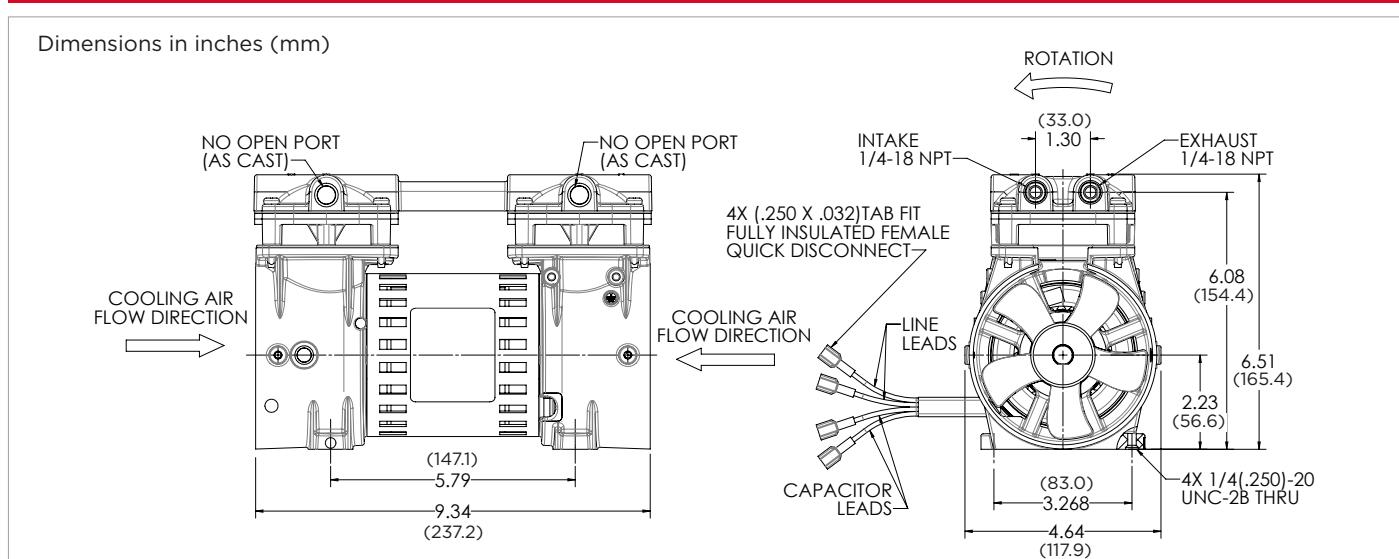
Motor type (Capacitance)	P.S.C. [22 µF]	P.S.C. [12.5 µF]	P.S.C. [12.5 µF]
Motor locked rotor current	11.8A	4.0A	4.5A
Motor insulation class	B	B	B
Thermal switch (Nominal Open temperature)	Yes [275°F (135°C)]	Yes [275°F (135°C)]	Yes [275°F (135°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG	Red, red, 18 AWG

GENERAL DATA

Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUs	TUV	TUV
Net weight	14.0 lbs (6.4 kg)	14.0 lbs (6.4 kg)	14.0 lbs (6.4 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



Stationary O₂ Concentrators

P12 **2320Z Series**

P14 **2380 Series**

P18 **2450 Series**

P20 **2660 Series**

P22 **2668 Series**

FEATURES

- > Efficient brushless DC motor
- > 100-115V 50/60Hz AC voltage input
- > Variable speed output
- > Pressure or vacuum capability
- > Proven WOB-L piston technology
- > Versatility and ease of plumbing unit
- > Durable die-cast aluminium components
- > Small, compact size and lightweight
- > Wetted parts treated for corrosion resistance
- > Designed and tested per Agency standards
- > Field serviceable
- > RoHS/REACH compliant

BASE MODEL

2320ZC36



TYPICAL APPLICATIONS

- > Oxygen Concentrator
- > Blood Analyzer
- > Respiratory Therapy
- > Medical Equipment
- > Dental Equipment

CUSTOMER REQUIREMENTS

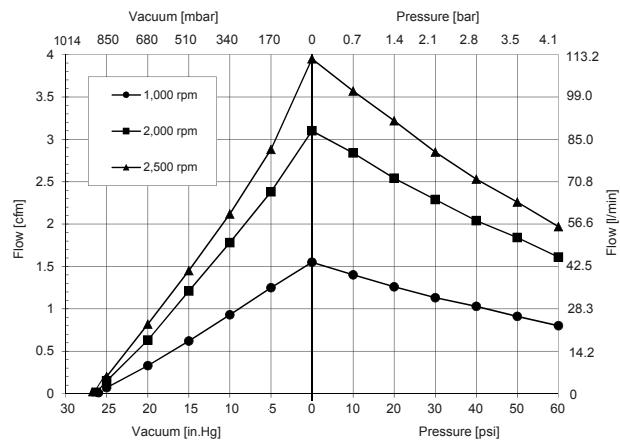
- > Supplemental cooling air flow to compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications
- > BLDC motor requires a motor controller - SKCNTLRAC Thomas controller available in sample quantities
- > Motor protection to be integrated into system controller



WOB-L

2320Z Series

Flow	3.95 cfm (111.9 l/min)
Max. pressure	60 psi (4.1 bar)
Max. vacuum	90% local barometer



2320ZC36 Vacuum/Pressure Flow Curve

(at 115V AC input into Thomas SKCRTLRA controller)
BLDC motor designed for 140V DC nominal. Recommended AC

PERFORMANCE DATA

T17-0377

Model number	2320ZC36		
Head configuration	Pressure/Vacuum		
Stroke	0.36 in. (9.14 mm)		
Nominal voltage input	115V 60Hz AC input into optional Thomas controller (Note: Performance will vary with controller design)		
Variable output speed	1,000 rpm	2,000 rpm	2,500 rpm
Max. open air flow	1.55 cfm (43.9 l/min)	3.10 cfm (87.8 l/min)	3.95 cfm (111.9 l/min)
Max. rated pressure	60 psi (4.1 bar)	60 psi (4.1 bar)	60 psi (4.1 bar)
Current at rated pressure	3.2A	5.2A	6.3A
Power at rated pressure	180W	310W	385W
Max. pressure restart	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Max. vacuum	90% local barometer	90% local barometer	90% local barometer
Max. vacuum restart	90% local barometer	90% local barometer	90% local barometer

ELECTRICAL DATA

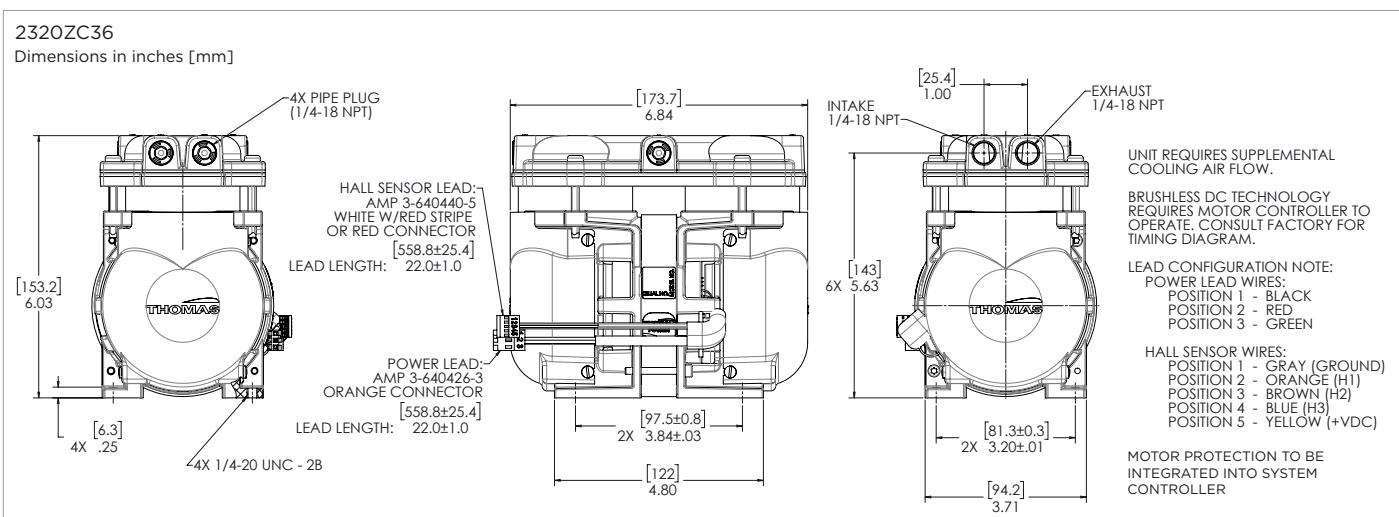
Motor type	8 pole brushless DC, 3 phase
Motor insulation class	F
Motor protection	Not included - Customer to integrate into system controller Optional SKCNTLRAC Thomas controller disables motor for over current protection and stall
Power lead wire color, gauge	Black, red, green, (Phase leads) 18 AWG
Hall sensor (HS) wire color, gauge	Yellow (+VDC), blue (HS), brown (HS), orange (HS), gray (ground), 22 AWG

GENERAL DATA

Operating ambient temperature	50° TO 104° F (10° to 40° C)*
Safety certification	Consult factory
Net weight	7.5 lbs (3.4 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



FEATURES

- > Lightweight, compact design
- > cRUus or TUV approved (115/60/1 or 230/50/1)
- > RoHS and REACH compliant
- > Operate per EN 80601 standard (.38", .44" stroke)
- > Internal 9 blade cooling air flow fans
- > Conventional foot mount design
- > Extremely low vibration
- > Monolithic head
- > Wetted parts treated for corrosion resistance
- > Oil-less operation
- > Proven WOB-L technology
- > Easily serviced

Declaration documentation available upon request

BASE MODELS

- 2380CE32**
(115/60/1)
- 2380CUU32**
(230/50/1)
- 2380CS32**
(100/50/60/1)
- 2380CE38**
(115/60/1)
- 2380CUU38**
(230/50/1)
- 2380CE44**
(115/60/1)
- 2380CUU44**
(230/50/1)



TYPICAL APPLICATIONS

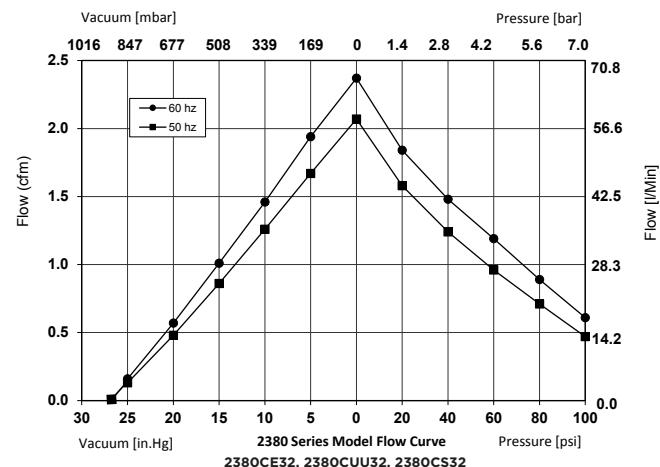
- > O₂ Concentrator
- > Blood or Laboratory Analyzers
- > Respiratory Therapy Equipment
- > ENT Equipment
- > Dental Equipment
- > Packaging/Printing Equipment
- > Air Dryers



WOB-L

2380 Series

Flow	2.3 cfm (65 l/min)
Max. pressure	100 psi (6.9 bar)
Max. vacuum	90% local barometer



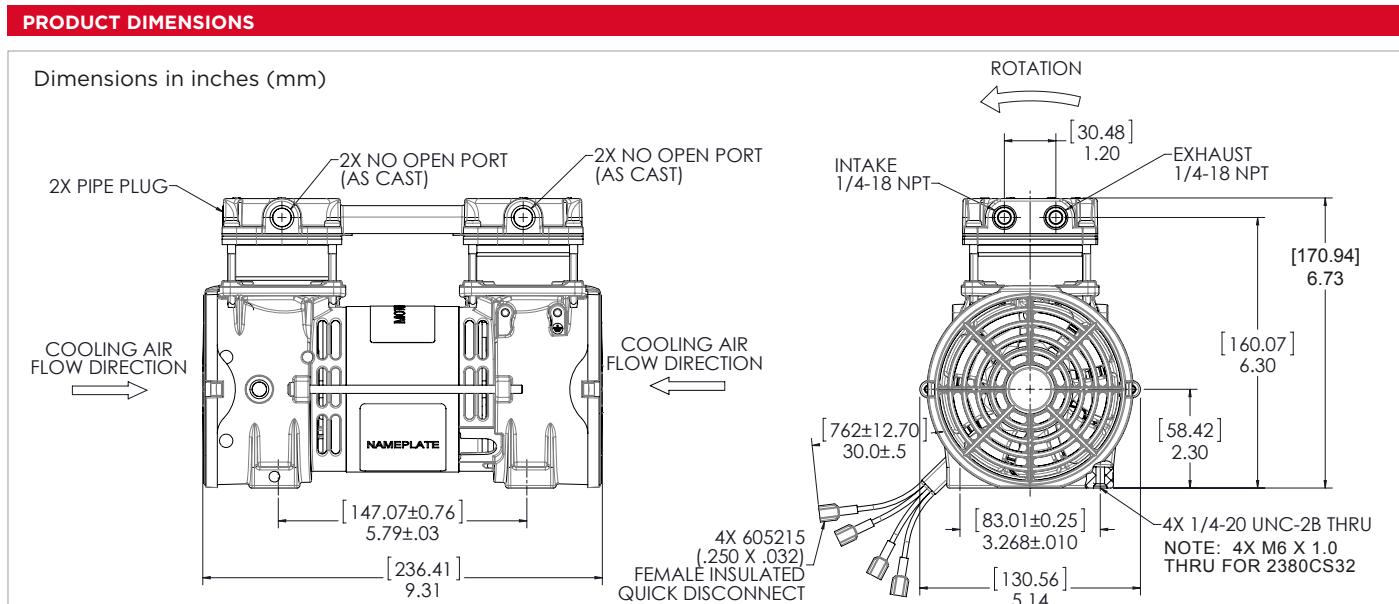
NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

PERFORMANCE DATA		T16-0224	T16-0182	T16-0246
Model Number	2380CE32	2380CUU32	2380CS32	
Head Configuration	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	
Stroke	0.32 in. (.81 mm)	0.32 in. (.81 mm)	0.32 in. (.81 mm)	
Nominal voltage input	115/60/1	230/50/1	100/50/60/1	
Max. open air flow	2.3 cfm (65.1 l/min)	2.0 cfm (56.6 l/min)	2.0 cfm (56.6 l/min)/2.3 cfm (65.1 l/min)	
Max. rated pressure	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	
Current at rated pressure	3.0A	1.3A	2.9A/3.4A	
Power at rated pressure	338W	290W	279W/336W	
Speed at rated pressure	1666 rpm	1371 rpm	1377 rpm/1626 rpm	
Max. pressure restart	Consult factory	Consult factory	Consult factory	
Max. vacuum	90% local barometer	90% local barometer	90% local barometer	
Max. vacuum restart	Consult factory	Consult factory	Consult factory	

ELECTRICAL DATA			
Motor type (Capacitance)	P.S.C. [25 μ F]	P.S.C. [10 μ F]	P.S.C. [30 μ F]
Motor locked rotor current	8.4A	3.8A	7.7A 50Hz/7.3A 60W
Motor insulation class	B	B	B
Thermal switch (Nominal Open temperature)	Yes [293°F (145°C)]	Yes [293°F (145°C)]	Yes [293°F (145°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG	Black, black, 18 AWG

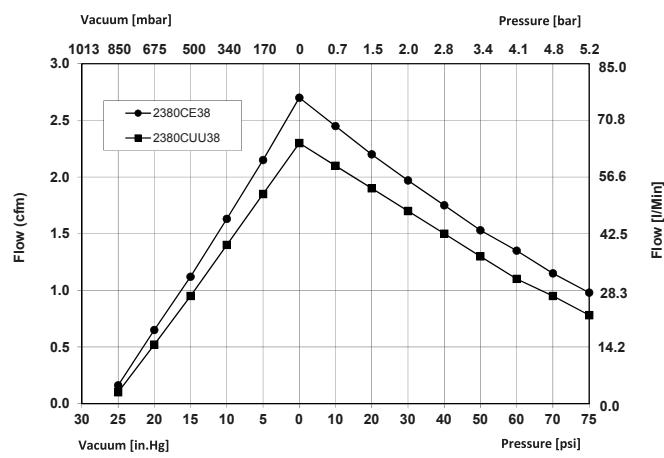
GENERAL DATA			
Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUs	TUV	None
Net weight	12 lbs (5.44 kg)	12 lbs (5.44 kg)	12 lbs (5.44 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.



2380 Series

Flow	2.7 cfm (76.5 l/min)
Max. pressure	75 psi (5.2 bar)
Max. vacuum	91% local barometer



NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

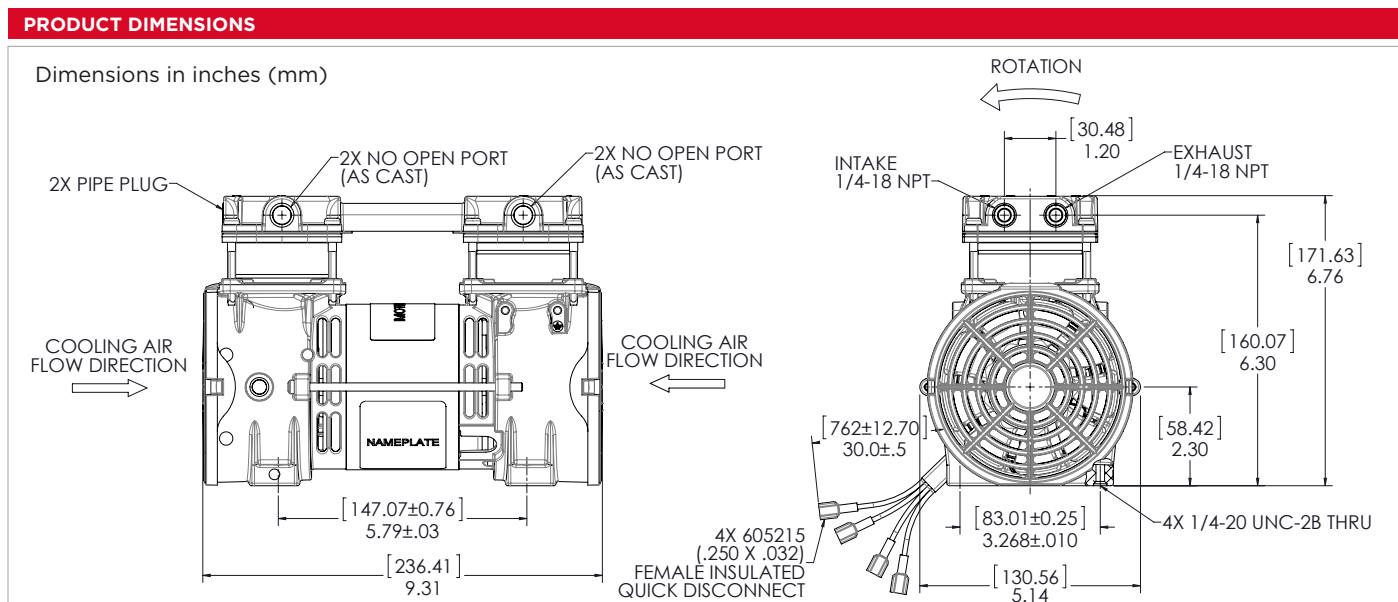
PERFORMANCE DATA		T17-0120	T17-0113, T16-0185
Model Number	2380CE38	2380CUU38	
Head Configuration	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	
Stroke	0.38 in. (9.7 mm)	0.38 in. (9.7 mm)	
Nominal voltage input	115/60/1	230/50/1	
Max. open air flow	2.7 cfm (76.5 l/min)	2.3 cfm (65.1 l/min)	
Max. rated pressure*	75 psi (5.2 bar)*	75 psi (5.2 bar)*	
Current at rated pressure	3.2A	1.4A	
Power at rated pressure	370W	325W	
Speed at rated pressure	1635 rpm	1335 rpm	
Max. pressure restart	Consult factory	Consult factory	
Max. vacuum	91% local barometer	91% local barometer	
Max. vacuum restart	Consult factory	Consult factory	

*Max rated pressure note: For O₂ concentrator applications that operate per EN 80601 (-15%/+10% nominal voltage), the maximum rated pressure is 40 psi (2.8 bar).

ELECTRICAL DATA		
Motor type (Capacitance)	P.S.C. [25 µF]	P.S.C. [12.5 µF]
Motor locked rotor current	8.4A	3.6A
Motor insulation class	B	B
Thermal switch (Nominal Open temperature)	Yes [293°F (145°C)]	Yes [293°F (145°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG

GENERAL DATA		
Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUs	TUV
Net weight	12 lbs (5.44 kg)	12 lbs (5.44 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

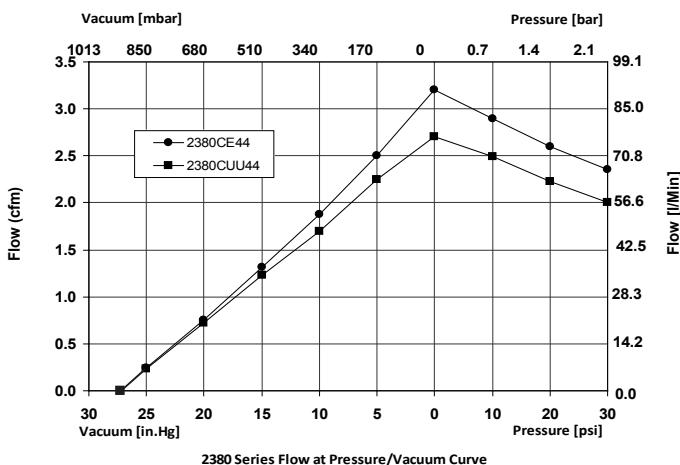


2380 Series

Flow	3.2 cfm (90.6 l/min)
Max. pressure	30 psi (2.0 bar)
Max. vacuum	92% local barometer



Oil-less



NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

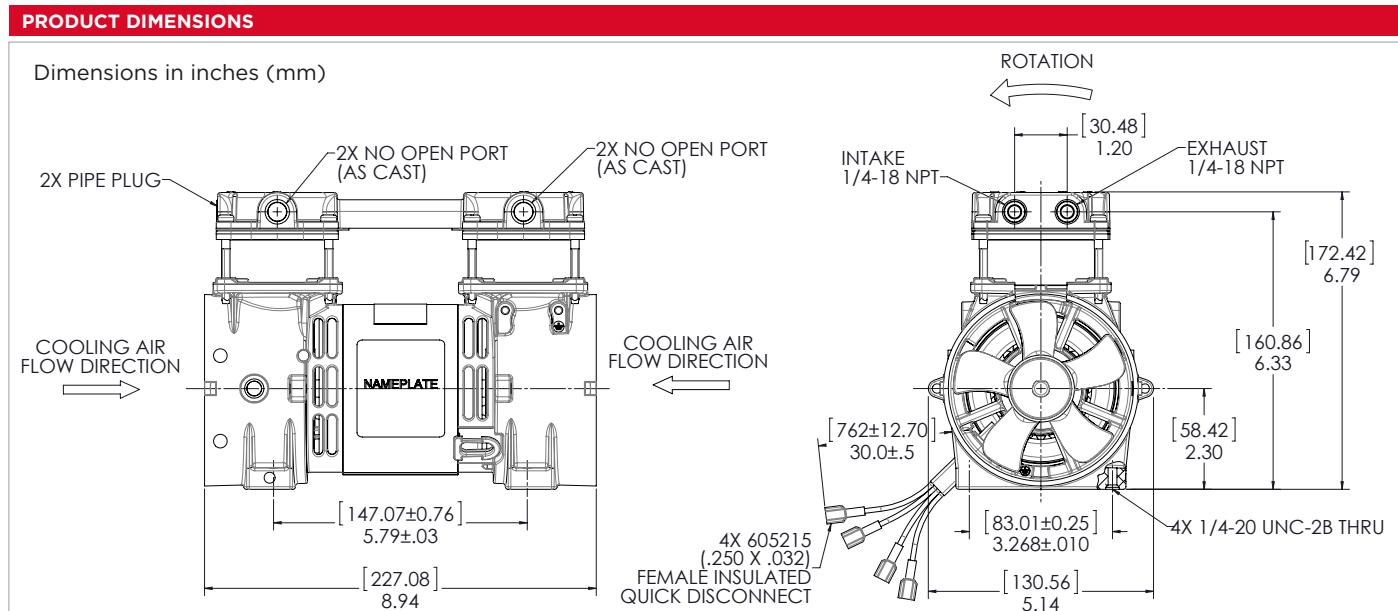
PERFORMANCE DATA	T16-0364	T16-0453
Model Number	2380CE44	2380CUU44
Head Configuration	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow
Stroke	0.44 in. (11.2 mm)	0.44 in. (11.2 mm)
Nominal voltage input	115/60/1	230/50/1
Max. open air flow	3.2 cfm (90.6 l/min)	2.7 cfm (76.5 l/min)
Max. rated pressure*	30 psi (2.0 bar)*	30 psi (2.0 bar)*
Current at rated pressure	3.4A	1.5A
Power at rated pressure	389W	340W
Speed at rated pressure	1644 rpm	1342 rpm
Max. pressure restart	Consult factory	Consult factory
Max. vacuum	92% local barometer	92% local barometer
Max. vacuum restart	Consult factory	Consult factory

*Max rated pressure note: 30 psi (2.0 bar) is per EN 80601 operation (-15%/+10% nominal voltage). Applications that require 310% nominal voltage may operate up to 40 psi (2.75 bar).

ELECTRICAL DATA		
Motor type (Capacitance)	P.S.C. [25 µF]	P.S.C. [15 µF]
Motor locked rotor current	8.4A	3.6A
Motor insulation class	B	B
Thermal switch (Nominal Open temperature)	Yes [293°F (145°C)]	Yes [293°F (145°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG

GENERAL DATA		
Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUs	TUV
Net weight	12 lbs (5.44 kg)	12 lbs (5.44 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.



FEATURES

- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > High performance piston seal
- > Die-cast aluminum components
- > Thin wall, hard coated aluminum cylinder
- > Wetted parts treated for corrosion resistance
- > Dynamically balanced
- > Designed and tested per Agency standards
- > RoHS compliant

Declaration documentation available upon request

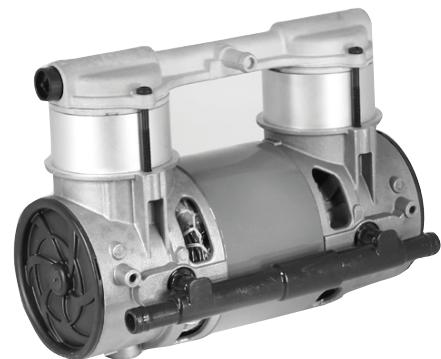
BASE MODELS

2450AE44

(115/60/1)

2450AUU44

(230/50/1)



CUSTOMER REQUIREMENTS

- > 100 cfm minimum supplemental cooling air flow for compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications.

TYPICAL APPLICATIONS

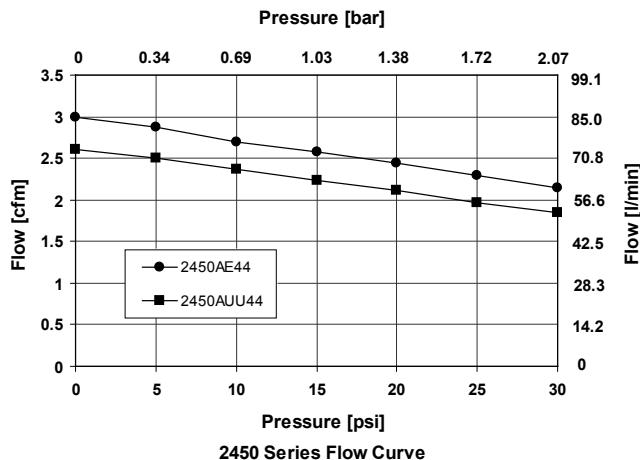
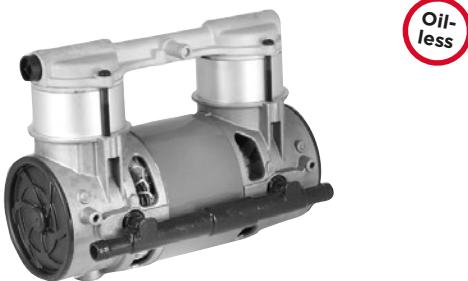
- > O₂ Concentrator
- > Other Medical Applications



WOB-L

2450 Series

Flow	3.0 cfm (85 l/min)
Max. pressure	30 psi (2.1 bar)
Max. vacuum	N/A



NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median values.

PERFORMANCE DATA

Model Number	2450AE44	2450AUU44
Head Configuration	Pressure parallel flow	Pressure parallel flow
Stroke	0.44 in. (11.2 mm)	0.44 in. (11.2 mm)
Nominal voltage input	115/60/1	230/50/1
Max. open air flow	3.0 cfm (85.0 l/min)	2.6 cfm (73.6 l/min)
Max. rated pressure	30 psi (2.1 bar)	30 psi (2.1 bar)
Current at rated pressure	3.5A	1.6A
Power at rated pressure	388W	350W
Speed at rated pressure	1650 rpm	1330 rpm
Max. pressure restart	N/A	N/A
Max. vacuum	N/A	N/A
Max. vacuum restart	N/A	N/A

ELECTRICAL DATA

Motor type (Capacitance)	P.S.C. [20 µF]	P.S.C. [10 µF]
Motor locked rotor current	8.7A	3.5A
Motor insulation class	B	B
Thermal switch (Nominal Open temperature)	Yes [293°F (145°C)]	Yes [293°F (145°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG

GENERAL DATA

Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUs, CSA	TUV
Net weight	9.50 lbs (4.3 kg)	9.50 lbs (4.3 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS

Dimensions in inches [mm]	
EXHAUST 1/4-18 NPT	SEE NOTE 4 FOR APPROPRIATE MODEL TAPPED HOLE SIZE
4X [10.16] .40	4X [49.53] 1.95
4X [15.75] .62	2X [119.91] 4.72
2X INTAKE PLUG	2X [179.83] 7.08
2X [211.33] 8.32	2X TERMINAL HOUSING .187 X .032 TAB FIT (LINE LEADS)
2X [103.63] 4.08	[163.73] 6.45
2X [2.29] .09	2X [99.06] 3.90
GENERAL NOTES: 1) UNIT SUPPLIED WITH INTAKE TROMBONE FITTING AND CAPACITOR. 2) LEAD LENGTHS CAPACITOR LEADS: 14.00 [355.6] LINE LEADS: 27.00 [685.8] 3) 100 CFM SUPPLEMENTAL COOLING AIR FLOW REQUIRED. 4) 2450AE44: 4X Ø.155 [Ø3.94] √ (.38) [9.65] FOR #8 THREAD ROLLING SCREW 2450AUU44: 2X Ø.165 √.38 M5 x Ø.86H √ 8-9 TURNS	

FEATURES

- > Custom configured part options
- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > Die-cast aluminum components
- > Dynamically balanced
- > Proven WOB-L technology
- > Monolithic head
- > Field service capability
- > Thermally protected motor
- > Designed and tested per Agency standards
- > RoHS compliant

Declaration documentation available upon request

BASE MODELS

2660E48XNTLSXX

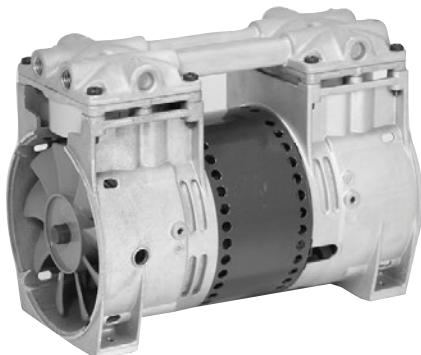
(115/60/1)

2660N48XNTLSXX

(220-240/50/60/1)

2660S48XNTLSXX

(100/50/60/1)



TYPICAL APPLICATIONS

- > O₂ Concentrator
- > Blood & Laboratory Analyzers
- > Aspirators/Respirators
- > Dental & Optical Equipment
- > Industrial/Manufacturing Equipment
- > Business Equipment/Food & Beverage Equipment



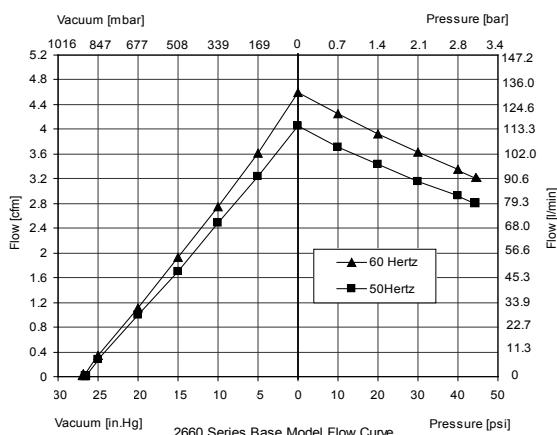
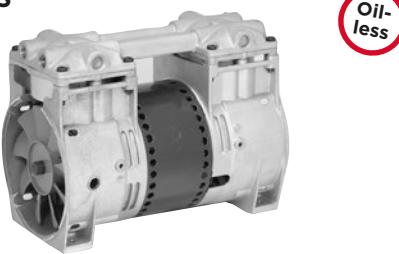
WOB-L

2660 Series

Flow	4.6 cfm (130.3 l/min)
Max. pressure	45 psi (3.1 bar)
Max. vacuum	92% local barometer

CONFIGURED OPTIONS

- > Stroke
- > Pump restart
- > Head port thread
- > Foot tap thread
- > Electrical cord
- > Fan guard
- > Protective cotating



NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median.

PERFORMANCE DATA		T10-0151	T10-0153	T10-0152	
Model Number	2660E48XNTLSXX	2660N48XNTLSXX	2660S48XNTLSXX		
Head Configuration	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow		
Stroke	0.48 in. (12.2 mm)	0.48 in. (12.2 mm)	0.48 in. (12.2 mm)		
Nominal voltage input	115/60/1	230/50/1	230/60/1	100/50/1	100/60/1
Max. open air flow	4.6 cfm (130.3 l/min)	4.0 cfm (113.3 l/min)	4.6 cfm(130.3 l/min)	4.0 cfm (113.3 l/min)	4.6 cfm(130.3 l/min)
Max. rated pressure	40 psi (2.8 bar)	45 psi (3.1 bar)	40 psi (2.8 bar)	25 psi (1.7 bar)	20 psi (1.4 bar)
Current at rated pressure	5.3A	2.5A	2.7A	4.5A	4.4A
Power at rated pressure	608W	523W	604W	421W	432W
Speed at rated pressure	1675 rpm	1409 rpm	1682 rpm	1436 rpm	1695 rpm
Max. pressure restart	Consult factory	Consult factory	Consult factory		
Max. vacuum	92% local barometer	92% local barometer	92% local barometer		
Max. vacuum restart	Consult factory	Consult factory	Consult factory		

ELECTRICAL DATA

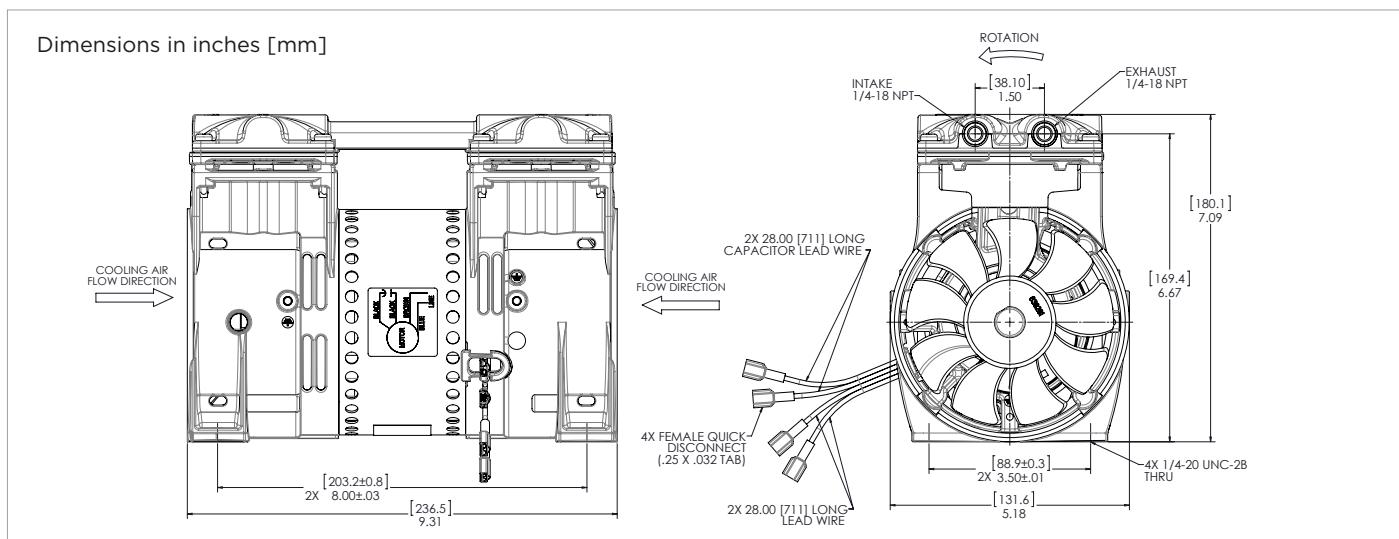
Motor type (Capacitance)	P.S.C. [25 µF]	P.S.C. [15 µF]	P.S.C. [25 µF]
Motor locked rotor current	18.0A	9.3A	8.3A
Motor insulation class	B	B	B
Thermal switch (Open temperature)	Yes [293°F (145°C)]	Yes [248°F (120°C)]	Yes [293°F (145°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG	Black, black, 18 AWG

GENERAL DATA

Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUus	TUV	None
Net weight	17.6 lbs (8.0 kg)	17.1 lbs (7.8 kg)	17.6 lbs (8.0 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



FEATURES

- > Custom configured part options
- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > Die-cast aluminum components
- > Dynamically balanced
- > Proven WOB-L technology
- > Monolithic head
- > Field service capability
- > Thermally protected motor
- > Designed and tested per Agency standards
- > RoHS compliant

Declaration documentation available upon request

BASE MODELS

2668E44XNTLSXX

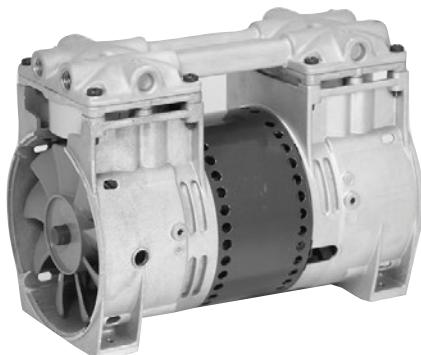
(115/60/1)

2668N44XNTLSXX

(220-240/50/60/1)

2668S44XNTLSXX

(100/50/60/1)



TYPICAL APPLICATIONS

- > O₂ Concentrator
- > Blood & Laboratory Analyzers
- > Aspirators/Respirators
- > Dental & Optical Equipment
- > Industrial/Manufacturing Equipment
- > Business Equipment/Food & Beverage Equipment



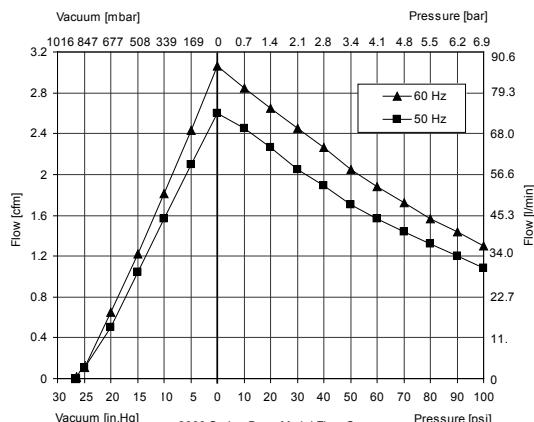
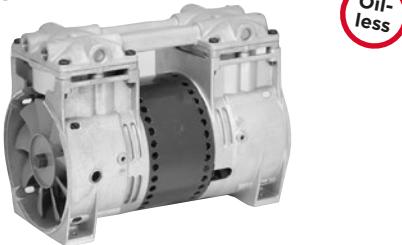
WOB-L

2668 Series

Flow	3.1 cfm (87.8 l/min)
Max. pressure	100 psi (6.9 bar)
Max. vacuum	93% local barometer

CONFIGURED OPTIONS

- > Stroke
- > Pump restart
- > Head port thread
- > Foot tap thread
- > Electrical cord
- > Fan guard
- > Protective cotating



See Performance Data for base model maximum operating pressures
Consult factory for custom configured stroke options

NOTE: All test values are nominal and for reference only. They are not guaranteed maximum or minimum limits, nor do they imply mean or median values.

PERFORMANCE DATA		T10-0138	T10-0142	10-0140	
Model Number	2668E44XNTLSXX	2668N44XNTLSXX	2668S44XNTLSXX		
Head Configuration	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow	Pressure/vacuum parallel flow		
Stroke	0.44 in. (11.2 mm)	0.44 in. (11.2 mm)	0.44 in. (11.2 mm)		
Nominal voltage input	115/60/1	230/50/1	230/60/1	100/50/1	100/60/1
Max. open air flow	3.1 cfm (87.8 l/min)	2.6 cfm (73.6 l/min)	3.1 cfm (87.8 l/min)	2.6 cfm (73.6 l/min)	3.1 cfm (87.8 l/min)
Max. rated pressure	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	40 psi (2.8 bar)
Current at rated pressure	4.5A	1.8A	2.1A	4.6A	4.3A
Power at rated pressure	489W	408W	449W	430W	432W
Speed at rated pressure	1699 rpm	1406 rpm	1676 rpm	1400 rpm	1689 rpm
Max. pressure restart	Consult factory	Consult factory	Consult factory		
Max. vacuum	93% local barometer	93% local barometer	93% local barometer		
Max. vacuum restart	Consult factory	Consult factory	Consult factory		

ELECTRICAL DATA

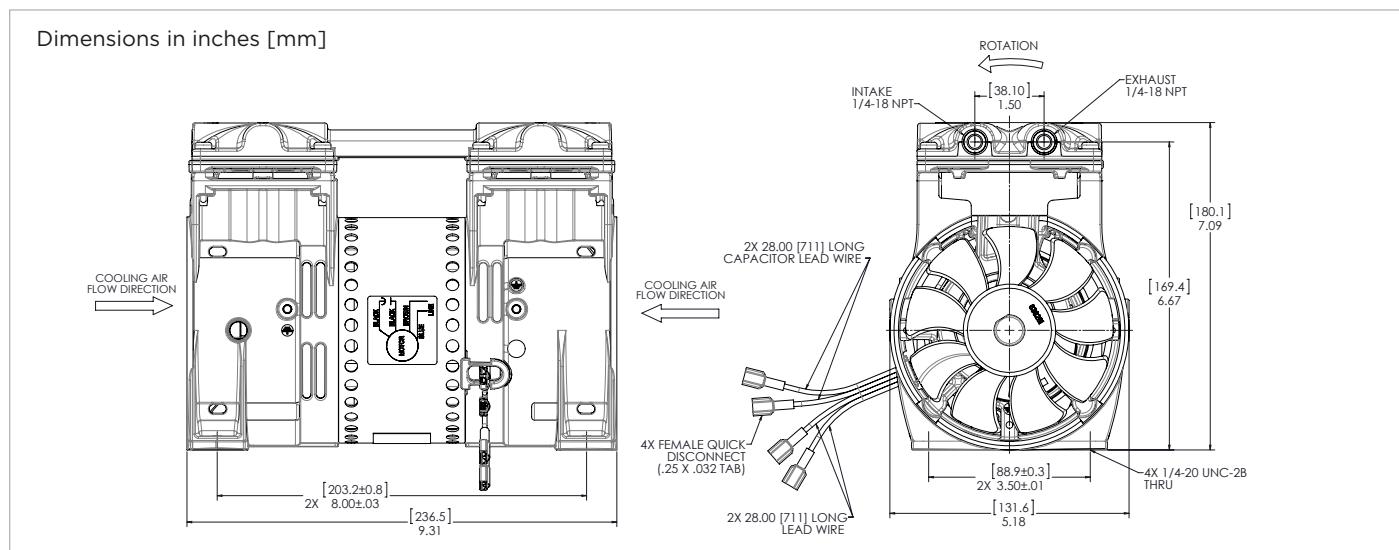
Motor type (Capacitance)	P.S.C. [15 µF]	P.S.C. [15 µF]	P.S.C. [20 µF]
Motor locked rotor current	16.2A	5.9A	5.6A
Motor insulation class	B	B	B
Thermal switch (Open temperature)	Yes [293°F (145°C)]	Yes [275°F (135°C)]	Yes [293°F (145°C)]
Lead wire color, gauge	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG	Brown(hot), blue(neutral), 18 AWG
Capacitor lead wire color, gauge	Black, black, 18 AWG	Red, red, 18 AWG	Black, black, 18 AWG

GENERAL DATA

Operating ambient temperature	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*	50° to 104°F (10°C TO 40°C)*
Safety Certification	cRUus	TUV	None
Net weight	16.3 lbs (7.4 kg)	16.3 lbs (7.4 kg)	16.3 lbs (7.4 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



Portable O₂ Concentrators

P25 **230Z Series**

P27 **250Z Series**

P29 **260Z Series**

P31 **2110Z Series**

P33 **2220Z Series**

P35 **2250Z Series**

FEATURES

- > Oil-less non-lube piston and cylinder
- > Permanently lubricated bearings
- > Stainless steel valves
- > Cylinder hard coated for wear resistance
- > Lightweight die cast aluminum components
- > Balanced for smooth, low vibration operation
- > All wetted aluminum parts treated for corrosion resistance
- > Brushless DC motor for variable output, long life and low energy consumption
- > RoHS compliant

TYPICAL APPLICATIONS

- > Portable Oxygen Concentrator
- > Small Analytical Equipment
- > Instrumentation
- > Ambient Scenting
- > Lab Automation

CUSTOMER REQUIREMENTS

- > Supplemental cooling air flow to compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications
- > BLDC motor requires motor controller - SKCNTLR optional Thomas controller available in sample quantities

BASE MODEL

230ZA30/12



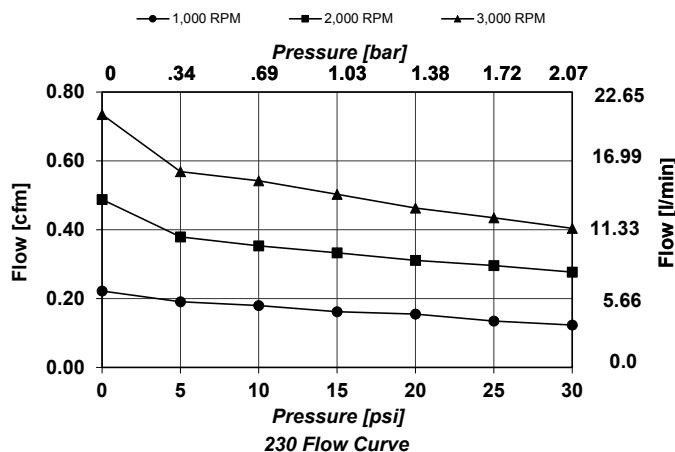
WOB-L

230Z Series

Flow	.74 cfm (20.8 l/min)
Max. pressure	30 psi (2.1 bar)
Max. vacuum	N/A Pressure Only



Oil-less



PERFORMANCE DATA

Model Number	230ZA30/12		
Head Configuration	Pressure only		
Stroke	0.30 in. (7.6 mm)		
Nominal voltage input	12V DC	12V DC	13V DC
Variable output speed	1,000 rpm	2,000 rpm	3,000 rpm
Max. open air flow	0.22 cfm (6.3 l/min)	0.49 cfm (13.8 l/min)	0.74 cfm (20.8 l/min)
Max. rated pressure	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Current at rated pressure	2.9A	3.7A	5.1A
Power at rated pressure	34.3W	44.7W	65.8W
Max. pressure restart	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Max. vacuum	Not available	Not available	Not available
Max. vacuum restart	Not available	Not available	Not available

ELECTRICAL DATA

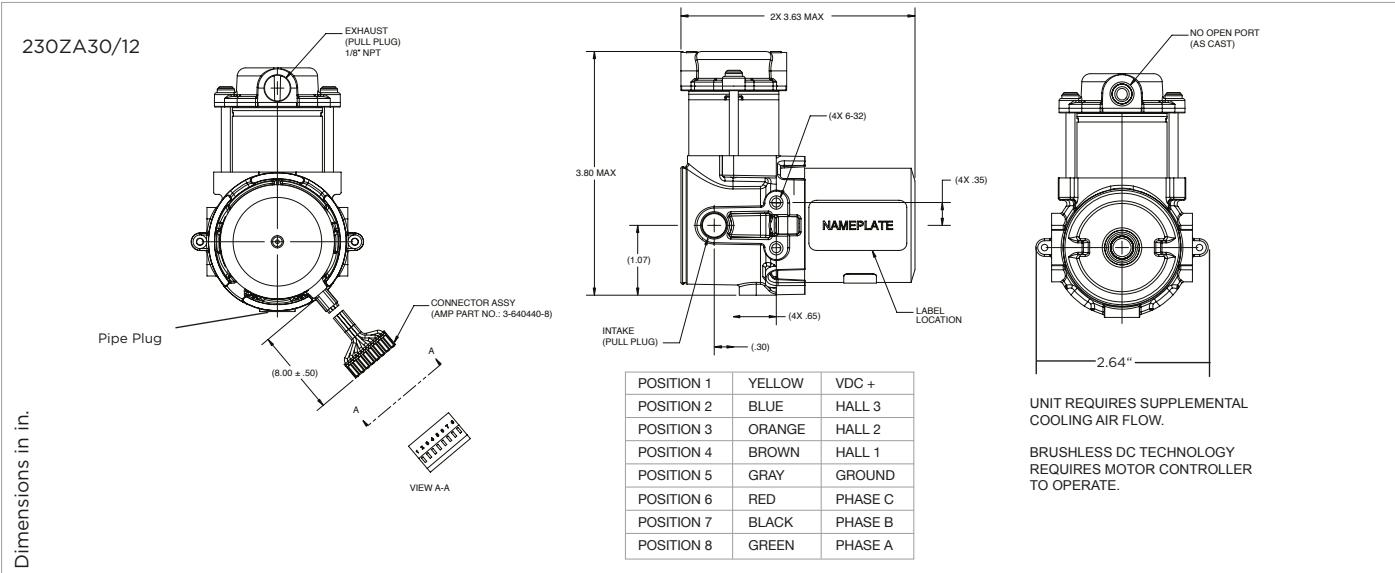
Motor Type	10 pole brushless DC, 3 phase
Motor Insulation class	155°C maximum winding temperature
Motor protection	Not included - Customer to integrate into system controller
	Optional SKCNTLR Thomas controller disables motor for stall, temperature, & amps
Power lead wire color, gauge	Green (phase A), black(phase B), red (phase C), 22 AWG
Hall sensor wire color, gauge	Yellow (+VDC), brown (HS1), orange (HS2), blue (HS3), gray (ground), 22 AWG

GENERAL DATA

Operaring ambient temperature	50° TO 104° F (10° to 40°C)
Safety Certification	Consult factory
Net weight	1.2 lbs (0.4 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



FEATURES

- > Pressure or vacuum capability
- > Oil-less operation
- > Efficient brushless DC motor
- > Variable speed output
- > Proven WOB-L piston technology
- > High performance piston seal
- > Die-cast aluminium and Magnesium components
- > Thin wall, hard coated aluminum piston cylinder
- > Epoxy coated wetted parts
- > Designed and tested per Agency standards
- > RoHS and REACH compliant

BASE MODEL

250ZC35/24



TYPICAL APPLICATIONS

- > Portable Oxygen Concentrator
- > Small Analytical Equipment
- > Fuel Atomization
- > Ambient Scenting
- > Lab Automation

CUSTOMER REQUIREMENTS

- > Supplemental cooling air flow to compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications
- > BLDC motor requires a motor controller - optional Thomas controller, SKCNTLR, available in sample quantities



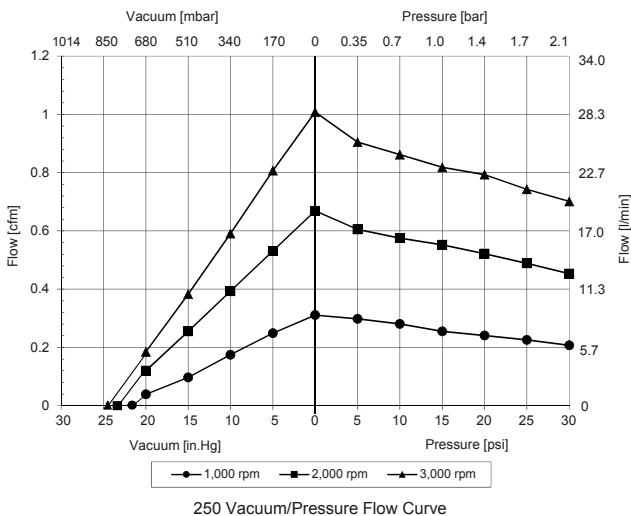
WOB-L

250Z Series

Flow	1.00 cfm (28.3 l/min)
Max. pressure	30 psi (2.1 bar)
Max. vacuum	82% local barometer



Oil-less



PERFORMANCE DATA

T16-0381, T17-0200

Model number	250ZC35/24		
Head configuration	Pressure/Vacuum		
Stroke	0.35 in. (8.9 mm)		
Nominal voltage input	24V DC	24V DC	24V DC
Variable output speed	1,000 rpm	2,000 rpm	3,000 rpm
Max. open air flow	0.31 cfm (8.7 l/min)	0.67 cfm (19.0 l/min)	1.00 cfm (28.3 l/min)
Max. rated pressure	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Current at rated pressure	1.3A	2.3A	3.5A
Power at rated pressure	31W	55W	83W
Max. pressure restart	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Max. vacuum	73% local barometer	80% local barometer	82% local barometer
Max. vacuum restart	73% local barometer	80% local barometer	82% local barometer

ELECTRICAL DATA

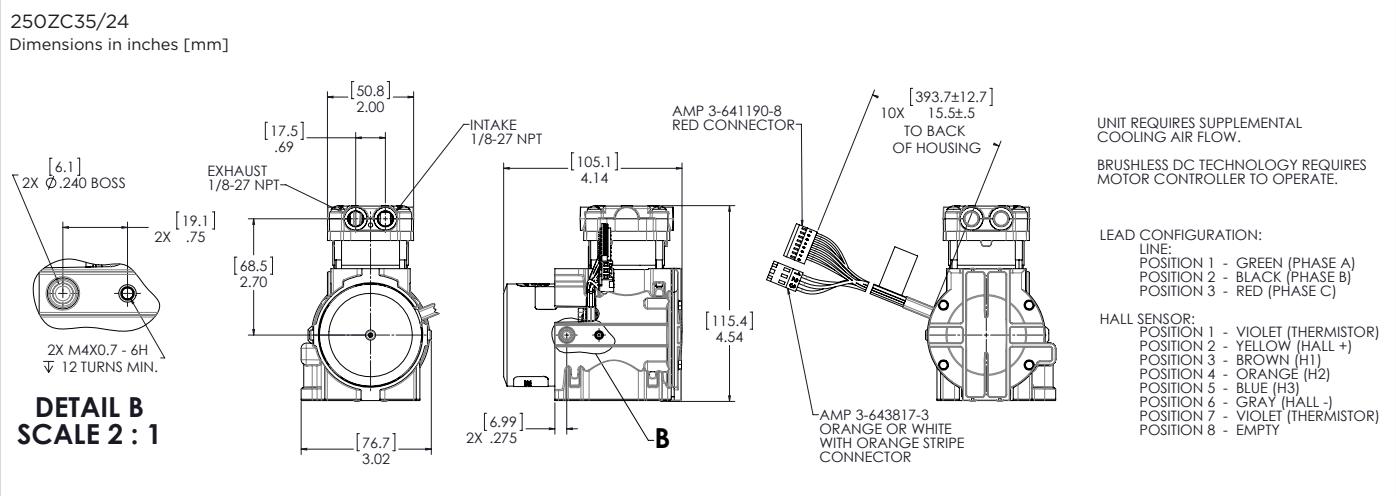
Motor type	10 pole brushless DC, 3 phase
Motor insulation class	F
Motor protection	Thermally protected via customer hook-up of thermistor leads
	Optional SKCNTLR Thomas controller disables motor for stall, amps
Power lead wire color, gauge	Green (phase A), black(phase B), red (phase C), 18 AWG
Hall sensor wire color, gauge	Yellow (Hall+), brown (HS1), orange (HS2), blue (HS3), gray (Hall -), 22 AWG
Thermistor wire color, gauge	Violet (Thermistor), 22 AWG

GENERAL DATA

Operating ambient temperature	50° TO 104° F (10° to 40 °C)*
Safety certification	Consult factory
Net weight	2.40 lbs (1.08 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



FEATURES

- > Unique head/cylinder design
- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > Pressure or Vacuum Capability
- > High performance piston seal
- > Die-cast aluminum components
- > Thin wall, hard coated aluminum cylinder
- > Wetted parts treated for corrosion resistance
- > Dynamically balanced
- > Designed and tested per Agency standards
- > Brushless DC motor
- > RoHS compliant

BASE MODEL

260ZC35/24



TYPICAL APPLICATIONS

- > Portable Oxygen Concentrator
- > Small Analytical Equipment
- > Instrumentation
- > Ambient Scenting
- > Lab Automation

CUSTOMER REQUIREMENTS

- > Supplemental cooling air flow to compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications
- > BLDC motor requires motor controller - SKCNTLR optional Thomas controller available in sample quantities



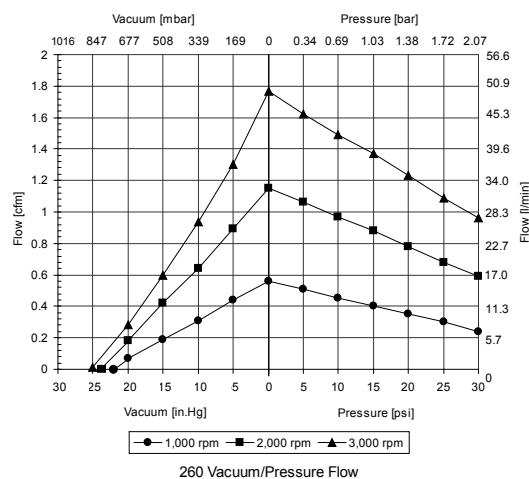
WOB-L

260Z Series

Flow	1.77 cfm (50.1 l/min)
Max. pressure	30 psi (2.1 bar)
Max. vacuum	87% local barometer



Oil-less



PERFORMANCE DATA

Model Number	260ZC35/24		
Head Configuration	Pressure/Vacuum		
Stroke	0.35 in. (8.9 mm)		
Nominal voltage input	24V DC	24V DC	24V DC
Variable output speed	1,000 rpm	2,000 rpm	3,000 rpm
Max. open air flow	0.56 cfm (15.9 l/min)	1.15 cfm (32.6 l/min)	1.77 cfm (50.1 l/min)
Max. rated pressure	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Current at rated pressure	3.3A	4.8A	6.0A
Power at rated pressure	79W	115W	143W
Max. pressure restart	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Max. vacuum	23.8 in Hg (806 mbar)	24.7 in Hg (836 mbar)	25.5 in Hg (864 mbar)
Max. vacuum restart	23.8 in Hg (806 mbar)	24.7 in Hg (836 mbar)	25.5 in Hg (864 mbar)

ELECTRICAL DATA

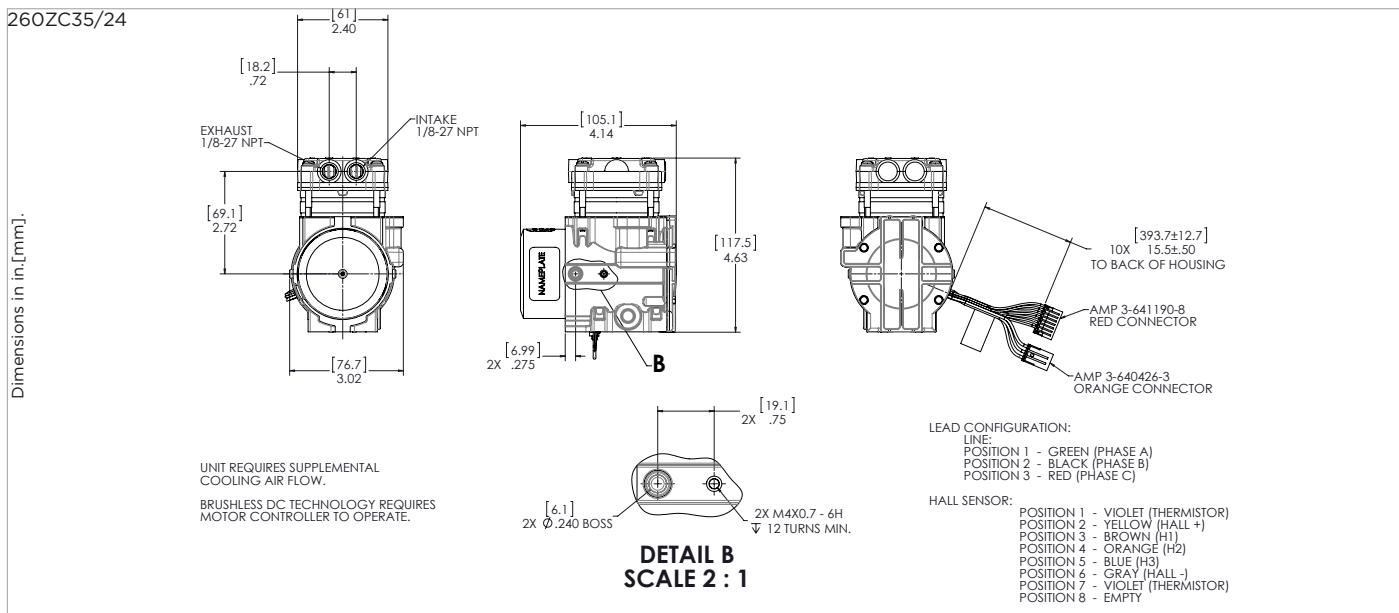
Motor Type	10 Pole BLDC
Motor Insulation class	F
Motor protection	Thermally protected
	Optional SKCNTLR Thomas controller disables motor for stall, amps
Power lead wire color, gauge	Green (phase A), black(phase B), red (phase C), 18 AWG
Hall sensor wire color, gauge	Yellow (Hall+), brown (HS1), orange (HS2), blue (HS3), gray (Hall -), 22 AWG
Thermistor wire color, gauge	Violet (Thermistor), 22 AWG

GENERAL DATA

Operating ambient temperature	50° TO 104° F (10° to 40°C)*
Safety Certification	Consult factory
Net weight	2.78 lbs (1.26 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



FEATURES

- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > High performance piston seal
- > Magnesium or Aluminum die-cast components
- > Corrosion resistant wetted parts
- > Dynamically balanced
- > Brushless DC motor
- > RoHS/Reach compliant



2110ZA26/12M

2110ZA26/12



2110ZA26/12M
Magnesium Die Cast Components

TYPICAL APPLICATIONS

- > Portable Oxygen Concentrator
- > Small Analytical Equipment
- > Instrumentation
- > Ambient Scenting
- > Lab Automation



2110ZA26/12
Aluminum Die Cast Components

CUSTOMER REQUIREMENTS

- > Supplemental cooling air flow to compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications
- > BLDC motor requires motor controller - SKCNTLR optional Thomas controller available in sample quantities



WOB-L

2110Z Series

Flow	0.50 cfm (14.1 l/min)
Max. pressure	30 psig (2.1 bar)
Max. vacuum	N/A Pressure Only

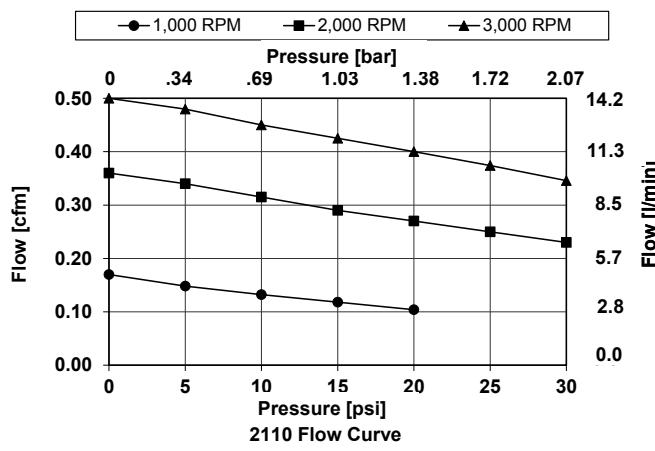


2110ZA26/12M
Magnesium Die Cast Components



2110ZA26/12
Aluminum Die Cast Components

Oil-less



Contact us for custom stroke options

PERFORMANCE DATA

Model Number	2110ZA26/12M (Mg Version) OR 2110ZA26/12 (Al Version)		
Head Configuration	Pressure parallel flow		
Stroke	0.26 in. (6.6 mm)		
Nominal voltage input	12V DC	12V DC	12V DC
Variable output speed	1,000 rpm	2,000 rpm	3,000 rpm
Max. open air flow	0.17 cfm (4.8 l/min)	0.34 cfm (9.6 l/min)	0.50 cfm (14.1 l/min)
Max. rated pressure	20 psi (1.4 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Current at rated pressure	2.6A	3.9A	4.8A
Power at rated pressure	32W	47W	58W
Max. pressure restart	20 psig (1.4 bar)	30 psig (2.1 bar)	30 psig (2.1 bar)
Max. vacuum	Not available	Not available	Not available
Max. vacuum restart	Not available	Not available	Not available

ELECTRICAL DATA

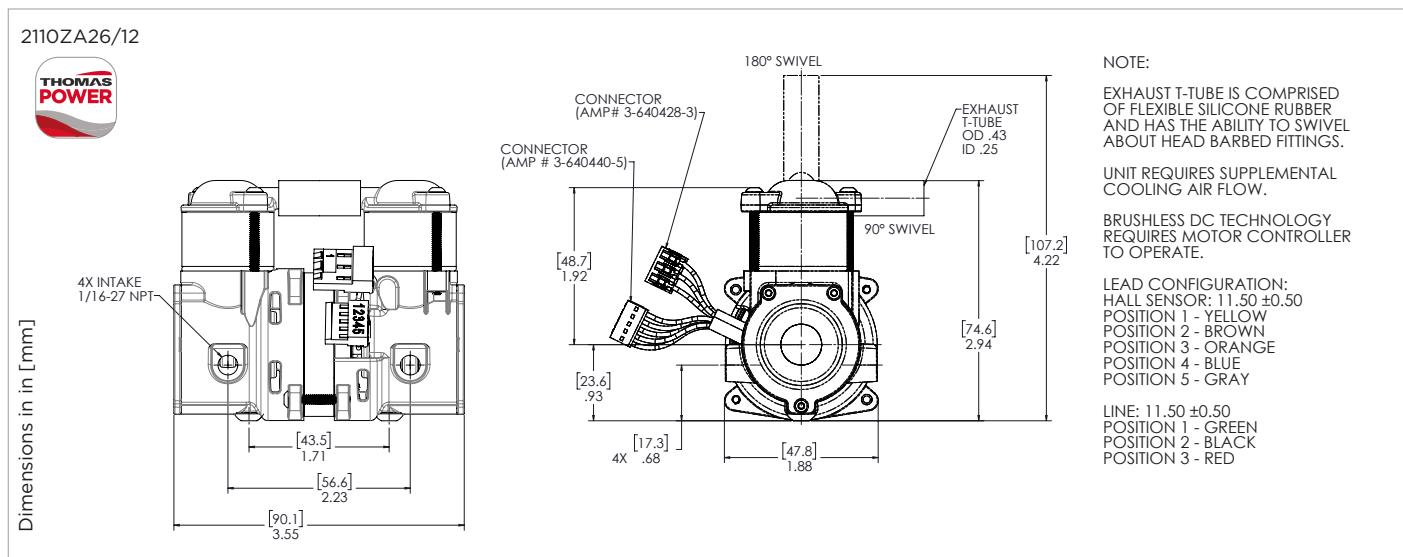
Motor type	8 pole brushless DC, 3 phase
Motor insulation class	155°C maximum winding temperature
Motor protection	Not included - Customer to integrate into system controller
	Optional SKCNTLR Thomas controller disables motor for stall, temperature, & amps
Power lead wire color, gauge	Green (phase A), black (phase B), red (phase C), 22 AWG
Hall sensor wire color, gauge	Yellow (+VDC), brown (HS1), orange (HS2), blue (HS3), gray (ground), 22 AWG

GENERAL DATA

Operaring ambient temperature	50° TO 104° F (10° to 40°C)*
Safety Certification	Consult factory
Net weight	2110ZA26/12M (Mg version) = 0.72 lbs (325g) OR 2210ZA26/12 (Al version) = 0.85 lbs (387g)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



FEATURES

- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > High performance piston seal
- > Die-cast aluminum components
- > Thin wall, hard coated aluminum cylinder
- > Wetted parts treated for corrosion resistance
- > Dynamically balanced
- > Brushless DC motor
- > RoHS compliant

TYPICAL APPLICATIONS

- > Portable Oxygen Concentrator
- > Small Analytical Equipment
- > Instrumentation
- > Ambient Scenting
- > Lab Automation

CUSTOMER REQUIREMENTS

- > Supplemental cooling air flow to compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications
- > BLDC motor requires motor controller - SKCNTLR optional Thomas controller available in sample quantities

BASE MODEL

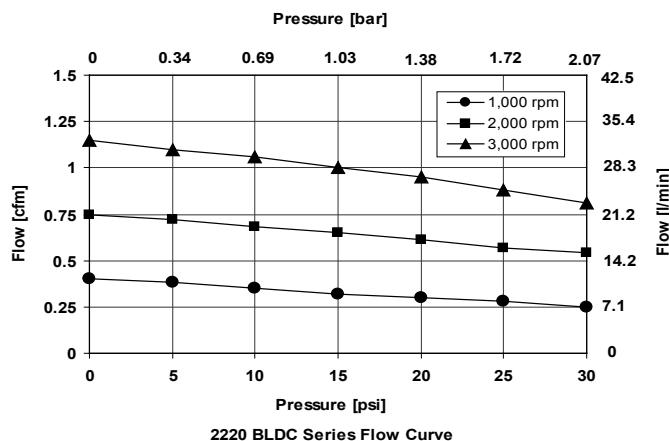
2220ZA30/12



WOB-L

2220Z Series

Flow	1.14 cfm (32.3 l/min)
Max. pressure	30 psi (2.1 bar)
Max. vacuum	N/A Pressure Only



PERFORMANCE DATA

Model Number	2220ZA30/12		
Head Configuration	Pressure parallel flow		
Stroke	0.30 in. (7.6 mm)		
Nominal voltage input	12V DC	12V DC	13V DC
Variable output speed	1,000 rpm	2,000 rpm	3,000 rpm
Max. open air flow	0.40 cfm (11.3 l/min)	0.78 cfm (22.1 l/min)	1.14 cfm (32.3 l/min)
Max. rated pressure	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Current at rated pressure	7.0A	7.1A	8.1A
Power at rated pressure	84W	85W	105W
Max. pressure restart	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Max. vacuum	Not available	Not available	Not available
Max. vacuum restart	Not available	Not available	Not available

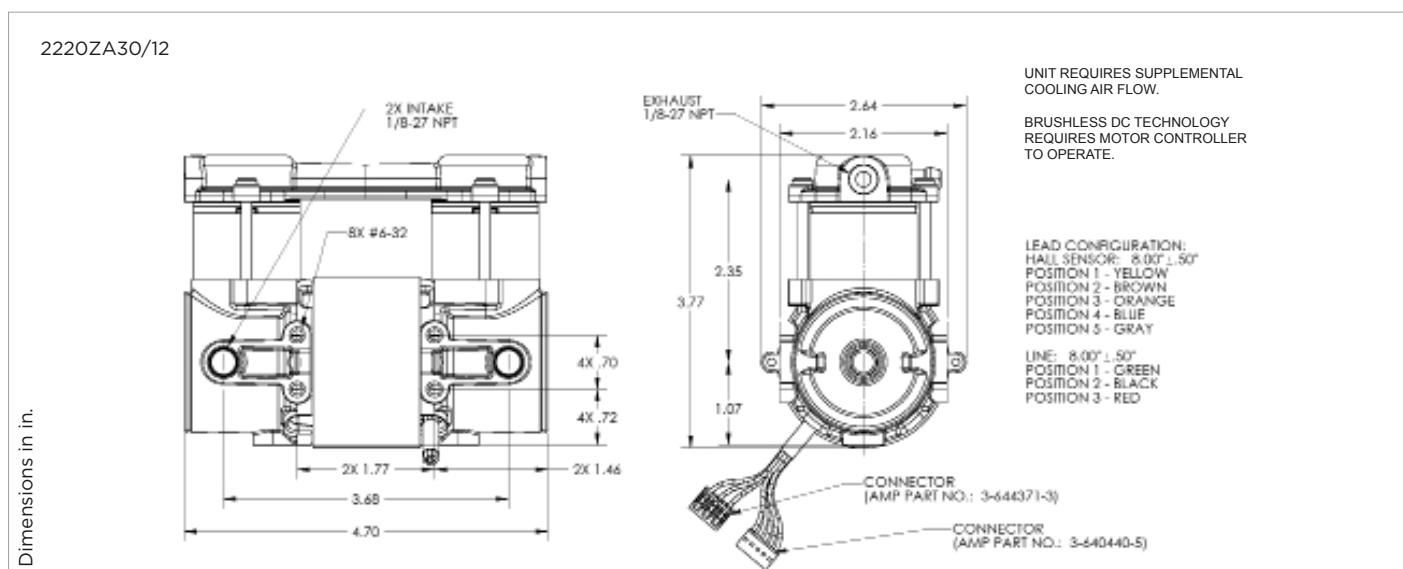
ELECTRICAL DATA

Motor type	8 pole brushless DC, 3 phase
Motor insulation class	155°C maximum winding temperature
Motor protection	Not included - Customer to integrate into system controller
	Optional SKCNTLR Thomas controller disables motor for stall, temperature, & amps
Power lead wire color, gauge	Green (phase A), black (phase B), red (phase C), 22 AWG
Hall sensor wire color, gauge	Yellow (+VDC), brown (HS1), orange (HS2), blue (HS3), gray (ground), 22 AWG

GENERAL DATA

Operating ambient temperature	50° TO 104° F (10° to 40°C)*
Safety Certification	Consult factory
Net weight	1.48 lbs (0.7 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.



FEATURES

- > Unique head/cylinder design
- > Oil-less operation
- > Permanently lubricated bearings
- > Stainless steel valves
- > High performance piston seal
- > Die-cast aluminum & magnesium alloy components
- > Thin wall, hard coated aluminum cylinder
- > Wetted parts treated for corrosion resistance
- > Dynamically balanced
- > Designed and tested per Agency standards
- > Brushless DC motor
- > RoHS/REACH compliant

BASE MODEL

2250ZC35/24



TYPICAL APPLICATIONS

- > Portable Oxygen Concentrator
- > Small Analytical Equipment
- > Instrumentation
- > Ambient Scenting
- > Lab Automation
- > Air Sampling

CUSTOMER REQUIREMENTS

- > Supplemental cooling air flow to compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications
- > BLDC motor requires motor controller - SKCNTLR optional Thomas controller available in sample quantities



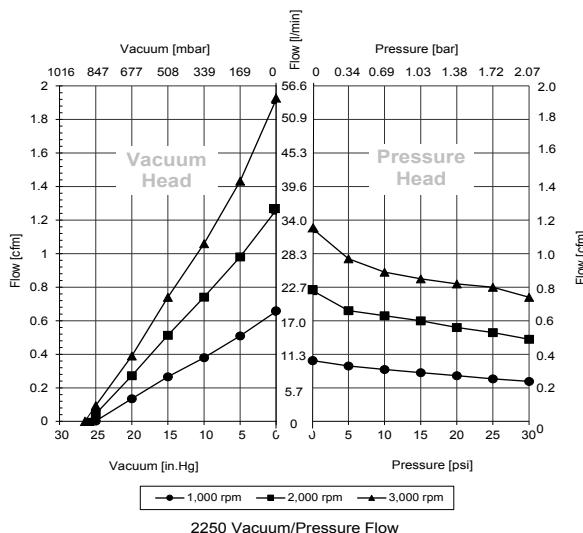
WOB-L

2250Z Series

Flow	1.15/1.92 cfm (32.6/54.4 l/min)
Max. pressure	30 psi (2.1 bar)
Max. vacuum	88% local barometer



Oil-less



PERFORMANCE DATA

Model Number	2250ZC35/24		
Head Configuration	Pressure/Vacuum		
Stroke	0.35/035 in. (8.9/8.9 mm)		
Nominal voltage input	24V DC	24V DC	24VDC
Variable output speed	1,000 rpm	2,000 rpm	3,000 rpm
Max. open air flow	0.36/0.66 cfm (10.2/18.7 l/min)	0.78/1.26 cfm (22.1/35.7 l/min)	1.15/1.92 cfm (32.6/54.4 l/min)
Max. rated pressure	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Current at rated pressure	1.6A	3.1A	5.1A
Power at rated pressure	38W	75W	123W
Max. pressure restart	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Max. vacuum	25.3 in.Hg (857 mbar)	25.8 in.Hg (867 mbar)	25.9 in.Hg (870 mbar)
Max. vacuum restart	25.3 in.Hg (857 mbar)	25.8 in.Hg (867 mbar)	25.9 in.Hg (870 mbar)

ELECTRICAL DATA

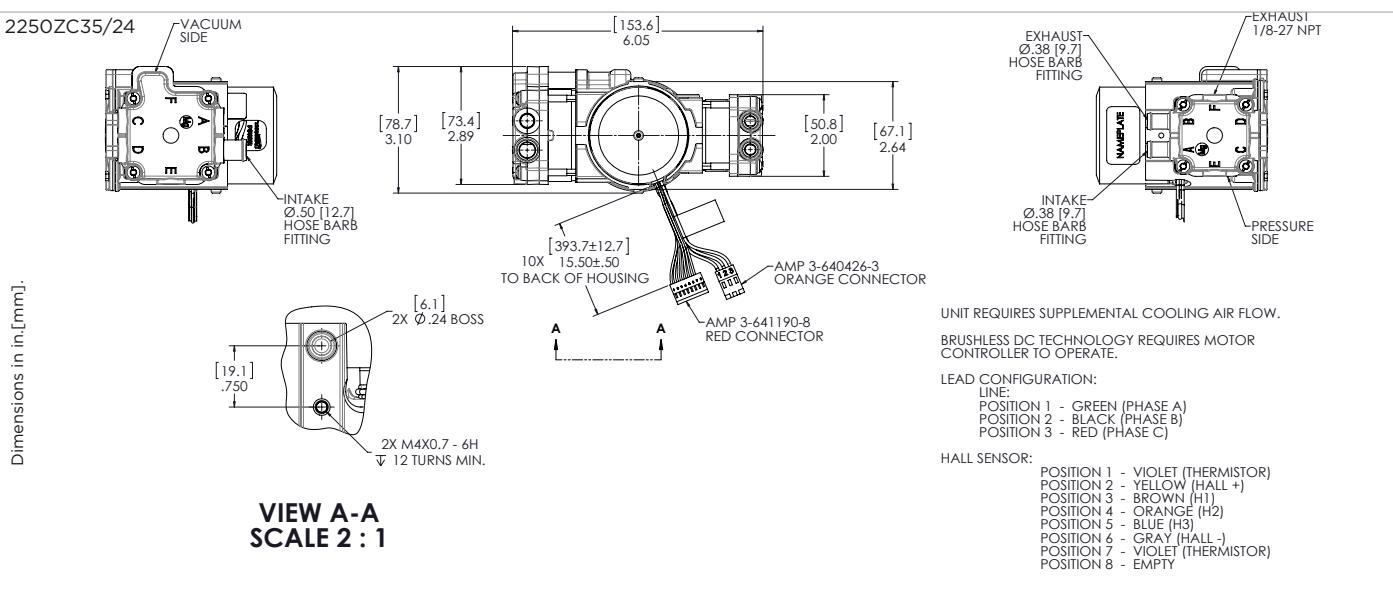
Motor type	10 pole brushless DC, 3 phase
Motor insulation class	F
Motor protection	Thermally protected
	Optional SKCNTLR Thomas controller disables motor for stall, amps
Power lead wire color, gauge	Green (phase A), black (phase B), red (phase C), 18 AWG
Hall sensor wire color, gauge	Yellow (Hall +), brown (HS1), orange (HS2), blue (HS3), gray (Hall -), 22 AWG
Thermistor wire color, gauge	Violet (Thermistor), 22 AWG

GENERAL DATA

Operaring ambient temperature	50° TO 104° F (10° to 40°C)*
Safety Certification	Consult factory
Net weight	2.8 lbs (1.27 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



GENERAL CONTACT

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