

## 250Z Series

### 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

### 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 separate motor controller (not included) - Optional ZB Series BLDC controller offers off-the-shelf integration, featuring variable speed PWM input signal for full speed range flexibility, and closed loop speed operation for consistent performance.

### BASE MODEL

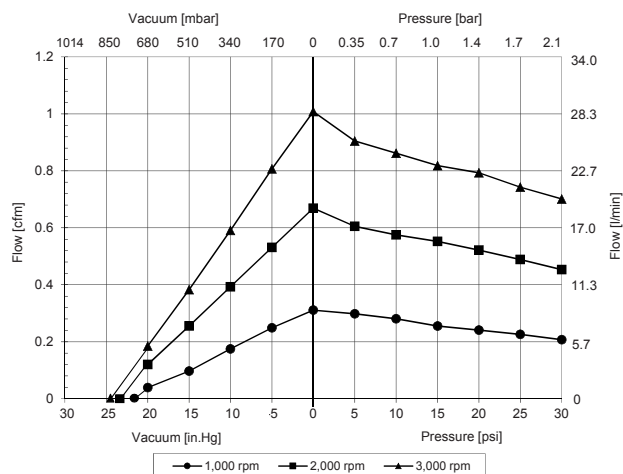
250ZC35/24



**WOB-L**

# 250Z Series

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



250 Vacuum/Pressure Flow Curve

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

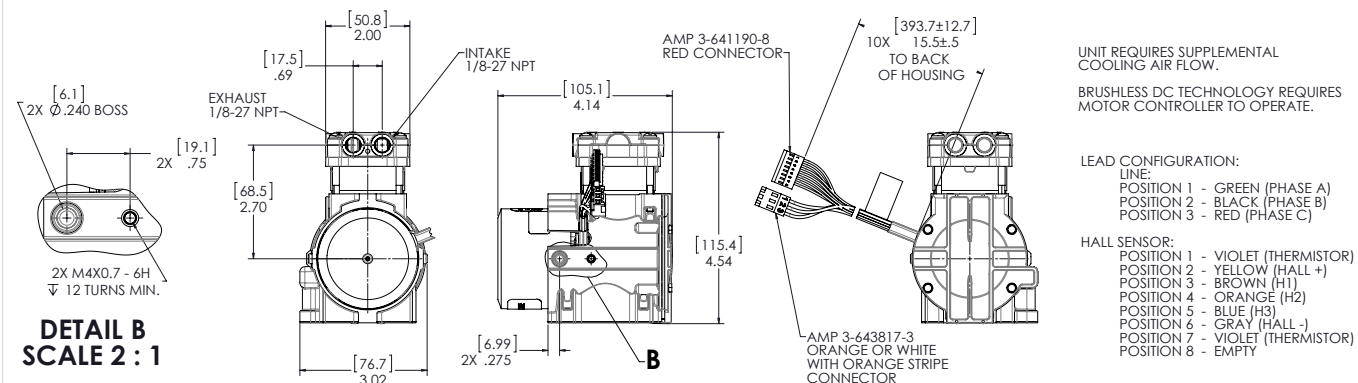
ELECTRICAL DATA	
Motor type	10 pole brushless DC, 3 phase
Motor insulation class	F
Motor protection	No
	Optional Thomas ZB Series BLDC controller will provide stall protection
Power lead wire color, gauge	Green (phase A), black(phase B), red (phase C), 18 AWG
Hall sensor wire color, gauge	Yellow (Hall+), 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

250ZC35/24  
Dimensions in inches [mm]



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