230Z Series

THOMAS
by Gardner Denver

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

BASE MODEL

230ZA30/12

THOMAS POWER



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 speciications
> BLDC motor requires motor controller - SKCNTLR optional Thomas controller available in sample quantities

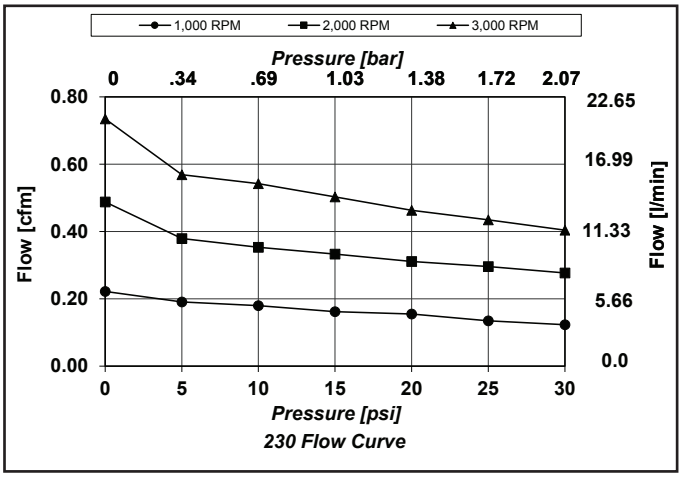


WOB-L

230Z Series

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





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

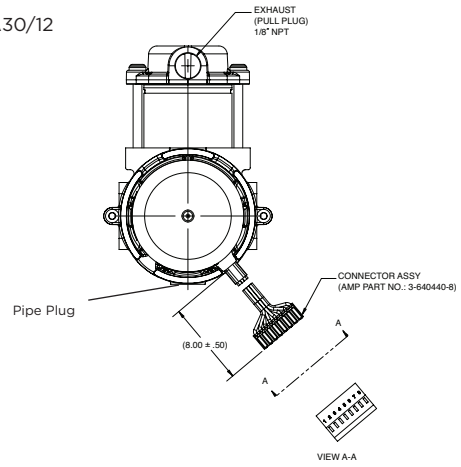
GENERAL DATA

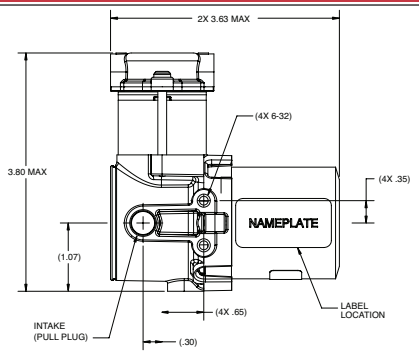
Operaring ambient temperature	50° TO 104° F (10° to 40°C)
Safety Certification	Consult factory
Net weight	1.2 lbs (0.4 kg)

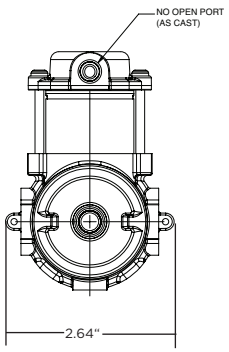
*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS

230ZA30/12







POSITION 1	YELLOW	VDC +
POSITION 2	BLUE	HALL 3
POSITION 3	ORANGE	HALL 2
POSITION 4	BROWN	HALL 1
POSITION 5	GRAY	GROUND
POSITION 6	RED	PHASE C
POSITION 7	BLACK	PHASE B
POSITION 8	GREEN	PHASE A

UNIT REQUIRES SUPPLEMENTAL COOLING AIR FLOW.

BRUSHLESS DC TECHNOLOGY REQUIRES MOTOR CONTROLLER TO OPERATE.

Dimensions in in.

PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

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Models presented in this catalog are representative of the product family. Photos of products pictured in this catalog do not necessarily represent a specific model number. To obtain further information for custom options, contact your local Thomas office.

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