

2109Z SERIES

THOMAS
An Ingersoll Rand Business

FEATURES

- > Proven WOB-L piston technology
- > Lightweight magnesium components
- > Industry leading efficiency for increased battery life
- > Long life proprietary piston seals
- > Brushless DC motor

TYPICAL APPLICATIONS

- > Portable oxygen concentrator



BASE MODEL

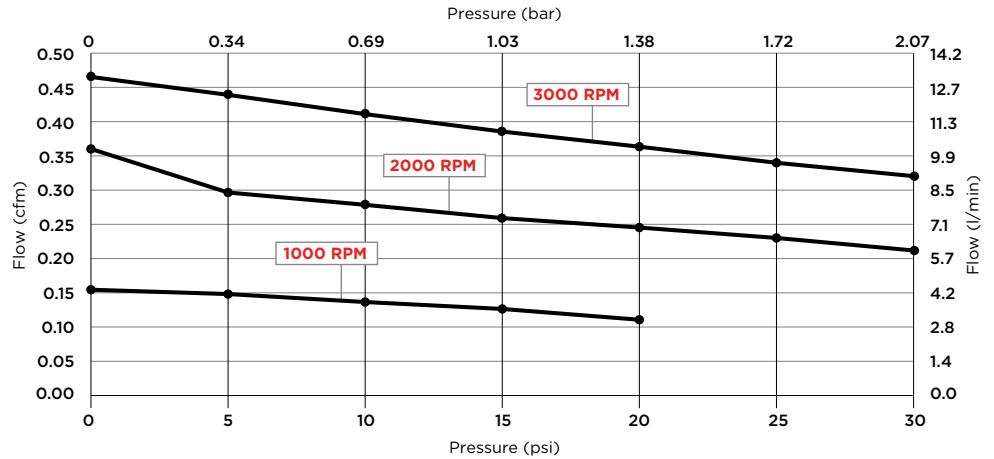
2109ZA26/12MW (Pressure, 12Vdc)



WOB-L

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Flow	0.47 cfm (13.3 l/min)
Max. pressure	30 psi (2.1 bar)



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				
Pump Configuration	Parallel Flow Pressure			
Model Number - 12VDC Nominal Voltage	2109ZA26/12MW			
Speed Setting	1000 RPM	2000 RPM	3000 RPM	
Open Air Flow - cfm (l/min)	0.16 (4.5)	0.36 (10.2)	0.47 (13.3)	
Max. rated pressure - psi (bar)	20 (1.4)	30 (2.1)	30 (2.1)	
Flow at max. rated pressure - cfm (l/min)	0.11 (3.1)	0.21 (6.0)	0.32 (9.0)	
Current at max. rated pressure - Amps at 12Vdc	2.5	4.2	4.4	
Power at max. rated pressure - Watts at 12Vdc	30	50	52	

ELECTRICAL DATA		Test Reference: T23-017
Motor type	12Vdc Brushless DC 8 pole motor, with integrated hall sensors, 120 degree commutation	
Motor insulation class	F	
Motor protection	No integrated motor protection	
Power lead wire color, gauge	22 AWG wire with connector: TE Connectivity 3-640428-3 Pin 1 - Green - Phase A Pin 2 - Black - Phase B Pin 3 - Red - Phase C	
Hall sensor lead wire color, gauge	22 AWG wire with connector: TE Connectivity 3-640440-5 Pin 1 - Yellow - Hall Vcc Pin 2 - Brown - Hall 1 Pin 3 - Orange - Hall 2 Pin 4 - Blue - Hall 3 Pin 5 - Grey - Hall Ground	
Available BLDC Controller	Compatible with the Thomas ZB external controller. Contact Thomas for more information.	

GENERAL DATA	
Operating ambient temperature	50° to 104°F (10°C TO 40°C)*
Net weight	292 grams (10.3 oz.)

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

