

380Z Series

THOMAS

FEATURES

- > Easy to use BLDC technology/operation
- > Onboard, integrated motor controller
- > Eight convenient fixed speed output selections
- > PWM signal input option for full range flexibility
- > RoHS and REACH compliant
- > Lightweight, compact design
- > Quiet/cool running
- > Wetted parts treated for corrosion resistance
- > Oil-less operation
- > Proven WOB-L[®] technology
- > Internal cooling air flow fan (no supplemental cooling required)

Declaration documentation available upon request

TYPICAL APPLICATIONS

- > O₂ Concentrator
- > Blood or Laboratory Analyzers
- > IPV Therapy
- > Surgical Eye Care Equipment
- > Lithotripsy Device
- > Fuel Atomization

BASE MODELS

380ZC32/24

(24V BLDC)

380ZC32/48

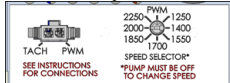
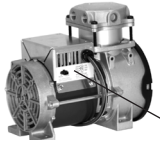
(48V BLDC)



WOB-L[®]

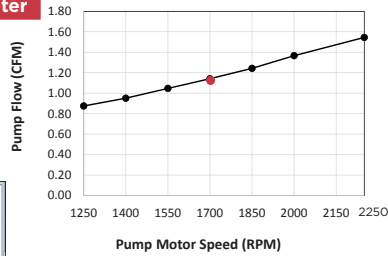
380Z Series

Flow	1.55 cfm (43.9 l/min)
Max. pressure	100 psi (6.9 bar)
Max. vacuum	88% local barometer



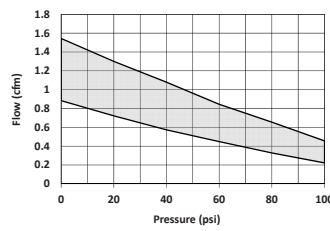
On board - Integrated fixed and full variable speed control

Pump Flow at Pump Speed at No Load Condition (Open Flow)



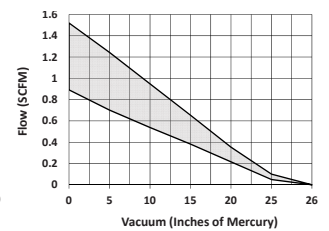
● Indicates factory set "speed selector"

Flow at Pressure Performance Range at Min. / Max. Rated Speeds (1250 - 2250 RPM)



See below for pre-set speed rated performance data

Flow at Vacuum Performance Range at Min. / Max. Rated Speeds (1250 - 2250 RPM)



See below for pre-set speed rated performance data

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.

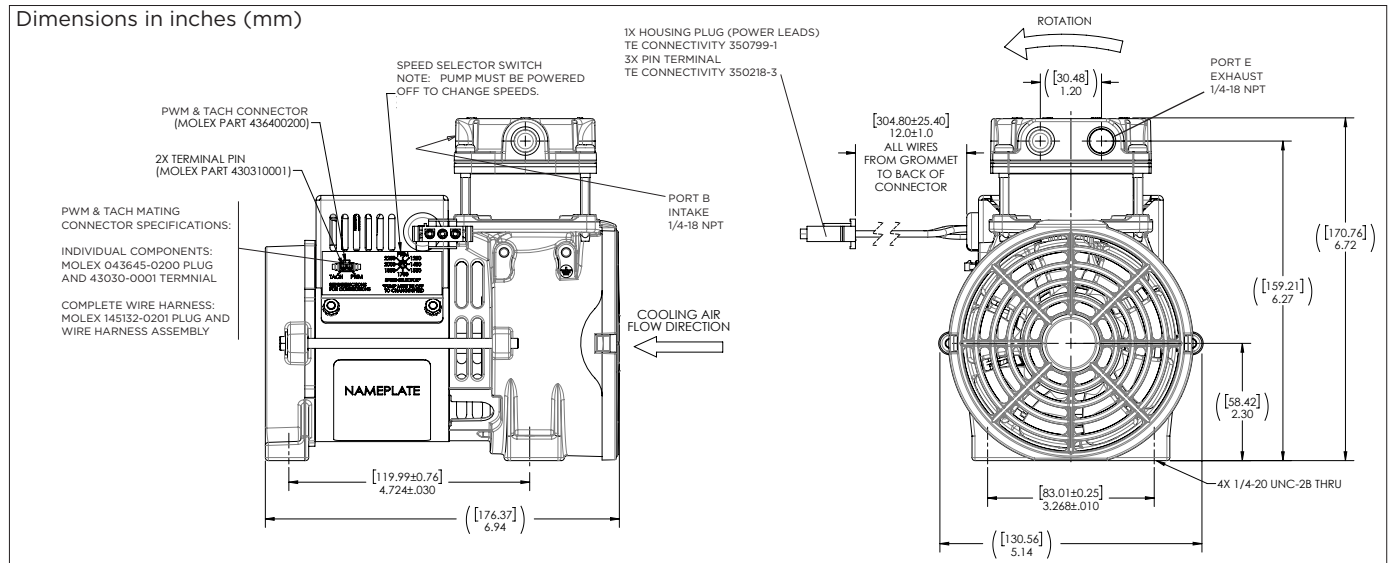
PERFORMANCE DATA		T21-0200 & T20-0282-1						
Model Number	380ZC32/24 or 380ZC32/48							
Nominal Input Voltage	24V or 48V BLDC versions available as shown in model numbers above							
Speed Setting	1250 RPM	1400 RPM	1550 RPM	1700 RPM	1850 RPM	2000 RPM	2250 RPM	
Open Air Flow - cfm (l/min)	0.88 (24.9)	0.95 (26.9)	1.05 (29.7)	1.14 (32.3)	1.24 (35.1)	1.37 (38.8)	1.55 (43.9)	
Max. rated pressure - psi (bar)	100 (6.9)	100 (6.9)	100 (6.9)	100 (6.9)	100 (6.9)	100 (6.9)	100 (6.9)	
Flow at rated pressure - cfm (l/min)	0.23 (6.5)	0.26 (7.4)	0.29 (8.2)	0.34 (9.6)	0.37 (10.4)	0.41 (11.6)	0.47 (13.3)	
Current at rated max. pressure at 24V (A)	4.7	4.7	4.8	5.1	5.3	5.8	6.5	
Current at rated pressure at 48V (A)	2.4	2.4	2.4	2.5	2.6	2.8	3.2	
Power consumption at rated pressure (W)	114	113	115	121	127	137	152	
Max. pressure restart - psi (bar)	35 (2.4)	35 (2.4)	35 (2.4)	35 (2.4)	35 (2.4)	35 (2.4)	35 (2.4)	
Max. vacuum - % local barometer	84	85	85.5	86	87	87.5	88	
Max. vacuum restart - % local barometer	84	85	85.5	86	87	87.5	88	

Shaded column indicates factory pre-set "speed selector"

ELECTRICAL DATA	
Motor type	24V or 48V BLDC, 8 pole, 3 phase delta options
Motor insulation class	F
Motor protection	Thermal fuse - One shot
Thermal fuse open temperature	167°C +0/-0.5°C
Power lead wire color, gauge	Black, 16 AWG Green w/yellow, 18 AWG Red, 16 AWG
Power lead wire color function/pin ID	Black: 0 VDC/Pin 1 Green w/yellow: Ground/Pin 2 Red: +48VDC nominal/Pin 3
I/O lead wire color function/pin ID	White: PWM/Pin 1 Blue: Tach out/Pin 2 (See Speed Selection Instructions included with pump)

GENERAL DATA	
Operating ambient temperature	50° to 104°F (10°C to 40°C)*
Pump functionality	Pump pre-set to 1700 RPM. 6 additional fixed speeds or PWM (1250-2250 RPM) may be selected
Net weight	6.94 lbs (3.15 kg)

PRODUCT DIMENSIONS



PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

gd-thomas.com

The logo for THOMAS, featuring the word "THOMAS" in a bold, black, sans-serif font. Above the letters "O" and "M" is a red swoosh that starts under the "T", goes over the "O", and ends under the "S".



Gardner Denver Thomas GmbH
Livry-Gargan-Str. 10
82256 Fürstfeldbruck
Germany
T +49 8141 2280 0
F +49 8141 8892136
thomas.de@gardnerdenver.com

Gardner Denver Thomas Pneumatic Systems (Wuxi) Co. Ltd.
1 New Dong'an Road, Shuofang Town
Xinwu District, Wuxi
Jiangsu, 214142 China
T +86 510 6878 2258
F +86 510 6878 2200
thomas.cn@gardnerdenver.com

Gardner Denver Thomas, Inc.
1419 Illinois Avenue
Sheboygan, WI 53081
USA
T +1 920 4574891
F +1 920 4514276
td.usa@gardnerdenver.com

The information presented in this material is based on technical data and test results of nominal units. It is believed to be accurate and reliable and is offered as an aid to help in the selection of Thomas products. It is the responsibility of the user to determine the suitability of the product for the intended use and the user assumes all risk and liability in connection there with. Thomas does not warrant, guarantee or assume any obligation or liability in connection with this information.

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.

Printed in U.S.A Form No. 850-4040 06/2021 © Gardner Denver Thomas, Inc. All rights reserved.