

Welch®

Direct Drive Vacuum Pumps



*Protecting your
laboratory environment*

LABCONCO®

Welch* Chemical-Resistant Vacuum Pumps

ORDERING INFORMATION



Welch* Chemical-Resistant Direct Drive Rotary Vane Pumps offer an integral oil filtration system for continuous neutralization of acids in oil and have a high contamination tolerance factor. In addition, Welch* Gold Oil offers improved resistance to chemical attack. It is a highly saturated synthetic hydrocarbon oil, which is resistant to breakdown at higher temperatures and is very stable in chemical environments.

Welch* Chemical-Resistant Pumps handle harsh chemical mixtures — TFA, TFA by-products, acetonitrile, HBE and HNO₃ and water — present in samples such as HPLC-prepared and peptide purified materials.

Features/Specifications:

- Integral oil filtration/acid neutralization system.
- Larger oil reservoir (approximately 1.3 liters) protects the pump by diluting contaminants.
- Oil feed located at top of reservoir to allow cleanest oil to enter pumping module.

- Designed for freeze drying samples containing harsh chemicals including acids
- Include Welch* DirecTORR* Gold Oil, the highest purity synthetic oil
- Compatible with Labconco FreeZone® 1, 2.5, 4.5, 6, 12 and 18 Liter Freeze Dry Systems and CentriVap® Centrifugal Concentrators

- Two-stage, rotary vane with infinitely-adjustable, leak-tight gas-ballast control and positive shut-off.
- Single phase, 1/2 HP electric motor is totally enclosed, fan cooled with overload protection.
- Sound level of 50 dB.
- 1-20 Threaded exhaust connection.

- Include two 1 liter bottles of Welch* DirecTORR* Gold Oil, an oil mist exhaust filter, an alumina oil filter, a spanner wrench and a UNIBARB* fitting that accepts 1/2" or 3/4" ID vacuum hose (hose not included).



- Model 7769600 is CSA approved.
- Models 7769700 and 7769800 have CE mark.

Catalog Number	Volts	Hz	Amps	Ultimate Vacuum (Partial Pressure) mBar (0.1 micron)	Displacement At 60 Hz (50 Hz) liters/minute	Vacuum Inlet (UNIBARB*) OD	Dimensions w x d x h inches (cm)	Shipping Weight lbs. (kg)
7769600	110/120	50/60	5.8	1.3 x 10 ⁻⁴	173 (144)	1/2" and 3/4"	18.6 x 11.5 x 9.6 (47 x 29 x 24)	75 (34)
7769700**	200/230	50/60	2.9	1.3 x 10 ⁻⁴	173 (144)	1/2" and 3/4"	18.6 x 11.5 x 9.6 (47 x 29 x 24)	75 (34)
7769800†	200/230	50/60	2.9	1.3 x 10 ⁻⁴	173 (144)	1/2" and 3/4"	18.6 x 11.5 x 9.6 (47 x 29 x 24)	75 (34)

* Welch® and DirecTORR® are registered trademarks of Thomas Industries, Inc. and UNIBARB™ is a trademark of Thomas Industries, Inc.

** Has NEMA 6-15P Plug

† Has reverse IEC plug

Welch* General Purpose Vacuum Pumps

ORDERING INFORMATION



Welch* General Purpose Direct Drive Rotary Vane Vacuum Pumps are designed to withstand exposure to a variety of aqueous laboratory mixtures and offer high performance and portability. In addition, these compact pumps fit easily into the cabinets of Labconco FreeZone console model freeze dry systems and CentriVap Mobile Systems.

Features/Specifications:

- Isolation valve seals the inlets to prevent oil and air contamination of the system in the event of power failure.
- Two-stage, rotary vane with infinitely-adjustable, leak-tight gas-ballast control and positive shut-off.
- Single phase, electric motor is totally enclosed, fan cooled with overload protection.

- Designed for use with aqueous samples
- Include Welch* DirecTORR* Gold Oil, the highest purity synthetic oil
- Compatible with Labconco FreeZone® Freeze Dry Systems, CentriVap® Centrifugal Concentrators and Protector® Controlled Atmosphere Glove Boxes

- Sound level of 50 dB.
- 1-20 Threaded exhaust connection.
- Include a 1 liter bottle of Welch* DirecTORR* Gold Oil.
- Include an oil mist exhaust filter that captures oil mist from the exhaust port and reduces pump noise.
- Include UNIBARB* fitting that accepts 1/2" or 3/4" ID vacuum hose (hose not included).
- Models 7438700 and 7439000 are CSA approved.
- Models 7438800, 7438600, 7439100 and 7439200 have CE mark.

Catalog Number	Volts	Hz	Amps	Motor HP	Ultimate Vacuum (Partial Pressure) mBar (0.1 micron)	Displacement at 60 Hz (50 Hz) liters/minute	Vacuum Inlet (UNIBARB*) OD	Dimensions w x d x h inches (cm)	Shipping Weight lbs. (kg)
7438700	115	50/60	5.8	1/2	1.3 x 10 ⁻⁴	108 (90)	1/2" and 3/4"	18.5 x 6.5 x 9.6 (47.0 x 16.5 x 24.3)	47 (21)
7438800**	230	50/60	2.9	1/2	1.3 x 10 ⁻⁴	108 (90)	1/2" and 3/4"	18.5 x 6.5 x 9.6 (47.0 x 16.5 x 24.3)	47 (21)
7438900†	230	50/60	2.9	1/2	1.3 x 10 ⁻⁴	108 (90)	1/2" and 3/4"	18.5 x 6.5 x 9.6 (47.0 x 16.5 x 24.3)	47 (21)
7439000	115	50/60	5.8	1/2	1.3 x 10 ⁻⁴	173 (144)	1/2" and 3/4"	18.5 x 6.5 x 9.6 (47.0 x 16.5 x 24.3)	53 (24)
7439100**	230	50/60	2.9	1/2	1.3 x 10 ⁻⁴	173 (144)	1/2" and 3/4"	18.5 x 6.5 x 9.6 (47.0 x 16.5 x 24.3)	53 (24)
7439200†	230	50/60	2.9	1/2	1.3 x 10 ⁻⁴	173 (144)	1/2" and 3/4"	18.5 x 6.5 x 9.6 (47.0 x 16.5 x 24.3)	53(24)

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Welch* Vacuum Pumps

REPLACEMENT SUPPLIES

For Chemical-Resistant Direct Drive Pumps	Cat. No.
Replacement Gold Oil (1 Liter), 2 required	7772700
Replacement Alumina Oil Filter	7793800
Replacement Oil Mist Exhaust Filter	7670400

For General Purpose Direct Drive Pumps	Cat. No.
Replacement Gold Oil (1 Liter), 1 required	7772700
Replacement Oil Mist Exhaust Filter for 108 L/min Pump	7438600
Replacement Oil Mist Exhaust Filter for 173 L/min Pump	7670400

SELECTION GUIDE

Labconco Product	Solvents Used	Welch Pump Recommended	Trap Recommendation
FreeZone 1, 2.5 or 4.5 Liter Freeze Dry System	Aqueous Solutions	7438700, 7438800, 7438900	Included with FreeZone
FreeZone 1, 2.5 or 4.5 Liter Freeze Dry System	Acids and/or Solvents	7769600, 7769700, 7769800	Included with FreeZone
FreeZone 6, 12 or 18 Liter Freeze Dry System	Aqueous Solutions	7439000, 7439100, 7439200	Included with FreeZone
FreeZone 6, 12 or 18 Liter Freeze Dry System	Acids and/or Solvents	7769600, 7769700, 7769800	Included with FreeZone
CentriVap Concentrator System	Any	7438700, 7438800, 7438900	Included with CentriVap System
Protector Controlled Atmosphere Glove Box	Any	7438700, 7438800, 7438900	None



FreeZone 4.5 Liter Freeze Dry System



CentriVap DNA Centrifugal Concentrator



Protector Fiberglass Controlled Atmosphere Glove Box

For more information, please contact us:

[ExpotechUSA](#)
[10700 Rockley Road](#)
[Houston, Texas 77099](#)
[USA](#)

[281-496-0900 \[voice\]](#)

[281-496-0400 \[fax\]](#)

E-mail: sales@expotechusa.com

Website: www.ExpotechUSA.com