

Steady, Reliable Dry Vacuum For Everyday Lab Jobs

Vacuum Technology Distribution

Welch®

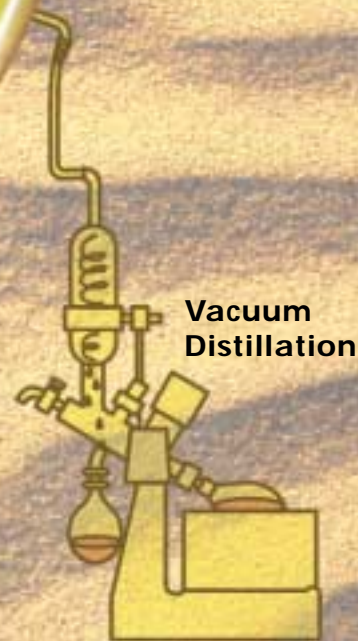
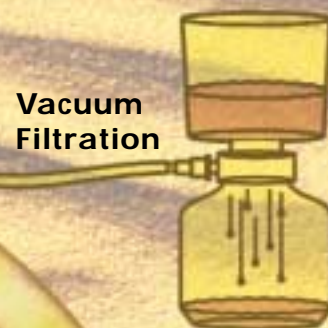
Dry Vacuum Pumps



Standard
Duty



Chemical
Duty



Turn Off Water Aspirators & House Vacuum, Turn On *Welch*[®] Dry Vacuum Pumps

Water Aspirator



House Vacuum



**Turn
On
*Welch***



Welch Dry Pumps Are Oil-less

No waste water No oil to maintain

Welch Dry Pumps Save Money

Save as much as \$80/month on water Avoid high initial and regular maintenance cost

Welch Dry Pumps Are Portable

No longer limited to running job at sink No longer limited to running job at stopcock

Welch Dry Pumps Supply Steady Vacuum

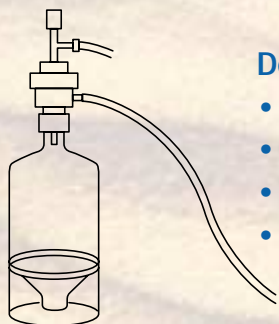
Vacuum doesn't change everytime another faucet is opened Vacuum doesn't change everytime another stopcock is opened

Welch Dry Pumps Meet or Exceed the Performance of Water Aspirators and House Vacuum

Application	Pump Selection Table	
	Only Air or Water Vapor	All Chemical Vapors
Replace Water Aspirators (2 gal/min, 30 PSIG)	Models 2522 or 2534 replace 2 aspirators and 2545 replaces 3 aspirators	Model 2010 replaces 1 aspirator, 2022 replaces 2 aspirators, and 2015 replaces 3 aspirators
Replace House Vacuum Port	Model 2545 replaces one stopcock port	Model 2022 replaces one stopcock port
Rotary Evaporation/Distillation Solvents with B.P.<100°C	_____	Model 2022 or a complete Self-Cleaning Dry Vacuum System™ (Model 2025)
Vacuum Filtration	Model 2545 for up to 6-funnel manifold or 2522 for single funnel	Model 2015 for up to 6-funnel manifold or 2010 single funnel
Aspiration	Model 2545 for multiple ports or 2534 for 1 port	Model 2015 for multiple ports or 2022 for 1 port
Degassing	Model 2545	Model 2022
Desiccating	Model 2545	Model 2022

Sales Department - 1-800-704-4774

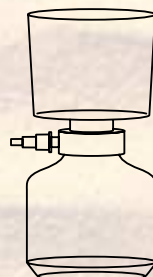
Welch® Dry Vacuum Pumps Are The Right Solution For Rough Vacuum Applications



Degassing

- HPLC Mobile Phase
- Epoxies
- Acrylamides
- Polymers, etc.

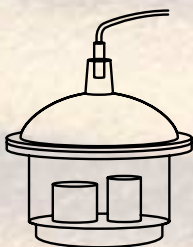
Rough Vacuum - 29" to 25" Hg (25 to 125 Torr).
Free Air Displacement - Need 22 L/min.



Vacuum Filtration

- Tissue culture media
- Dot blot/slot blot
- Environmental samples
- Organic precipitates
- HPLC solvents, etc.

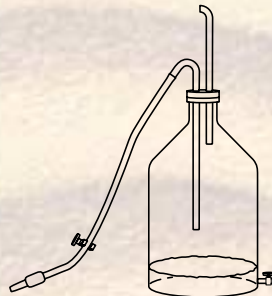
Rough Vacuum - 25" to 20" Hg (125 to 252 Torr).
Free Air Displacement - Need 12 L/min to replace
1 water aspirator.



Desiccation

- Organic precipitates
- Polymers
- Hydroscopic and biological samples
- Optics, etc.

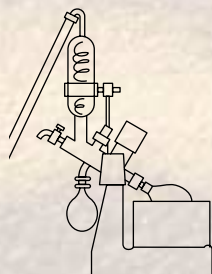
Rough Vacuum - 29" to 25" Hg (25 to 125 Torr).
Free Air Displacement - Need 12 L/min to replace
1 water aspirator.



Aspiration

- Cell culture
- Supernatant
- Spilled liquids
- Clean pipets, etc.

Rough Vacuum - 25" to 20" Hg (125 to 252 Torr).
Free Air Displacement - Need at a minimum 12 L/min.



Vacuum Distillation of Volatile Solvents

- Alcohols
- Aldehydes
- Aromatics, etc.

Rough Vacuum - 29.5" to 20" Hg (10 to 252 Torr).
Free Air Displacement - Need 22 L/min to do volatile solvents (boiling point $\leq 100^{\circ}\text{C}$).

Sales Department - 1-800-704-4774

Choose a *Welch*[®] Dry Vacuum Pump That Meets

Standard Duty*



Model 2522B-01

- Economical aluminum construction stretches your budget money
- Vacuum to 27.6" Hg (60 Torr) and pressure to 100 PSIG (10⁶ Pascal)
- Free air displacement to 1.6 CFM (45 L/min)
- No water or oil needed to operate
- Vacuum/pressure regulators and gauges
- Water trap and muffler supplied

* Not recommended for pumping organic, acidic and basic vapors

Chemical Duty**



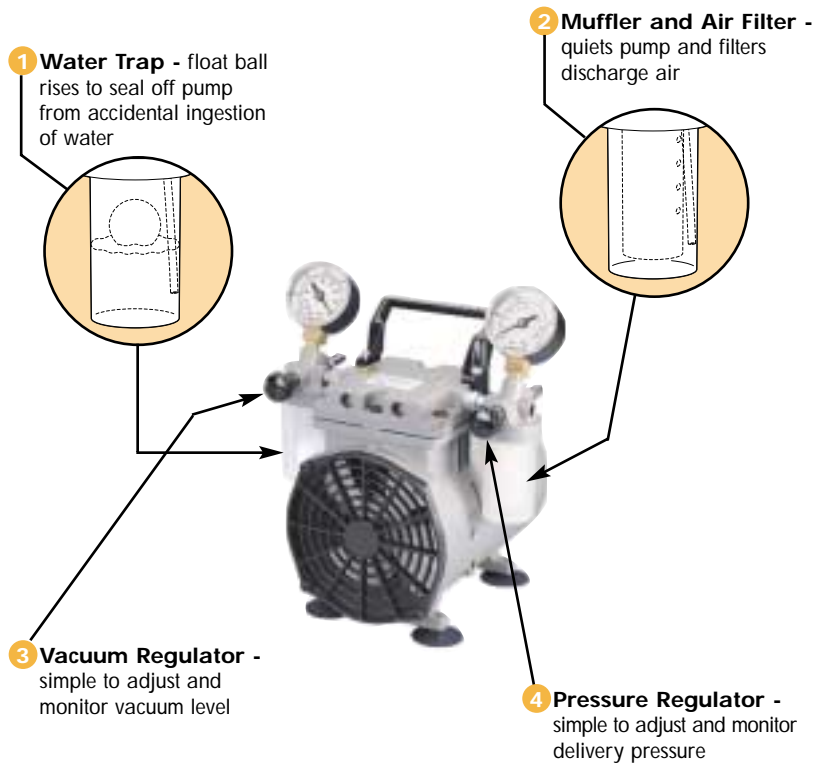
Model 2022B-01

- Corrosion-resistant PTFE construction for handling aggressive vapors and gases
- Vacuum to 29.6" Hg (9 Torr) and pressure to 15 PSIG (2 x 10⁴ Pascal)
- Free air displacement to 1.6 CFM (45 L/min)
- No water or oil needed to operate
- Inhibits condensation of vapor in 2-stage pump by using a gas ballast
- Supplied with muffler
- Optional vacuum regulator and gauge kit

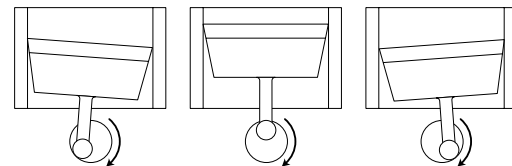
** Handles aggressive vapors and gases

Sales Department - 1-800-704-4774

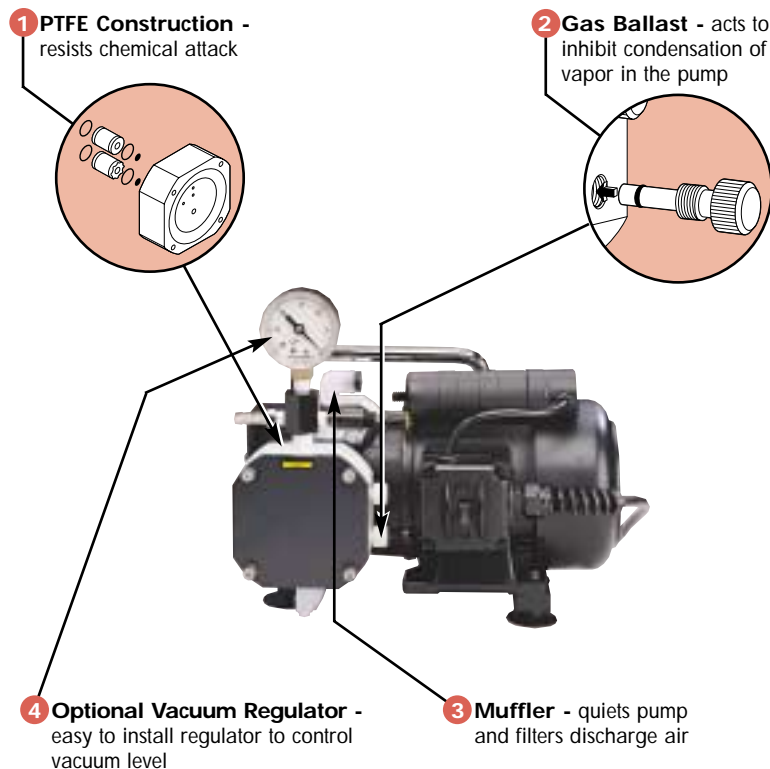
Your Application and Budget Requirements



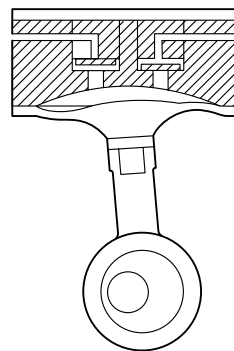
Powered By An Economical WOB-L® Piston



Simplicity is the key to the economical aluminum design. As piston wobbles, air resistance on upward stroke expands Teflon® seal on piston to increase its efficiency while compensating for the wobble action.



Powered By A Corrosion Resistant PTFE-Coated Diaphragm



PTFE is the key to the corrosion-resistant design. PTFE head, Kalrez® valves and a PTFE coated, molded diaphragm are the wetted parts of the pump. The flexible diaphragm is made to move up-and-down via a connecting rod to a rotating eccentric cam.

Specifications and Ordering Information

Welch Model	Standard Duty			Chemical Duty			
	2522	2534	2545	2010	2012	2022	2015
Free Air Displacement							
CFM (L/min) @ 60Hz	0.76(22)	1.2(34)	1.6(45)	0.45(12.7)	0.78 (22)	0.78(22)	1.6(45)
m ³ /hr (L/min) @ 50Hz	1.1(18)	1.7(28)	2.3(38)	0.63(10.6)	1.1(18)	1.1(18)	2.3(38)
Max. Vac. in. Hg	26	27.2	27.6	25.5	26	29.6	26.7
Ult. Pressure, Torr (mbar)	100(133)	70(93)	60(80)	110(146)	100 (133)	9(12)	80(106)
Max. Continuous Pressure PSIG (Pascal)	100(10 ⁶)	50(5x10 ⁵)	100(10 ⁶)	15(2x10 ⁴)	5(7x10 ³)	5(7x10 ³)	5(7x10 ³)
Motor HP	1/8	1/8	1/4	1/12	1/6	1/5	1/5
Tubing Needed, I.D. in. (mm)	1/4(7)	1/4(7)	1/4(7)	1/4(7)	1/4 (7)	1/4(7)	1/4(7)
Weight, lbs. (kg)	11.7(5.3)	11.7(5.3)	13.8(6.3)	5.25(2.4)	14(6.4)	14(6.4)	14(6.4)
Dimensions							
L in. (cm)	8.1(20.6)	8.1(20.6)	8.1(20.6)	6(15.2)	10(25.4)	10(25.4)	10(25.4)
W in. (cm)	8.8(22.4)	8.8(22.4)	8.8(22.4)	5.5(14)	7(17.8)	10(25.4)	10(25.4)
H in. (cm)	10(25.4)	10(25.4)	10(25.4)	7.5(18.8)	6.9(17.5)	6.9(17.5)	6.9(17)
Ship Weight, lbs. (kg)	15(6.6)	15(6.6)	18.5(8.4)	8.3(3.8)	18(8.2)	18(8.2)	18(8.2)
Electrical Requirements	Catalog Number						
Wired for 115V, 60Hz, 1Ph with N. American 115V Plug	2522B-01	2534B-01	2545B-01	2010B-01	2012B-01	2022B-01	2015B-01
Wired for 230V, 60Hz, 1Ph with N. American 230V Plug	2522C-01	2534C-01	2545C-01	—	—	—	—
Wired for 230V, 50Hz, 1Ph with Cont. Euro.(Schuko) Plug*	2522C-02	2534C-02	2545C-02	2010C-02	2012C-02	2022C-02	2015C-02
Accessories							
Vacuum Regulator	—	—	—	1421A	1421C	1421B	1421B
Inlet/Exhaust Separator	—	—	—	1423B	1423B	1423B	1423B
One Head Service Kit	2522K-01	2534K-01	2545K-01	2010K-01	2022K-01	2022K-01	2022K-01

* 50 Hz models supplied with CE Marking.

Call or write for free brochure Vacuum Technology Distribution

1003 Alvin Weinberg Drive
Oak Ridge, TN 37830
Phone: (865) 481 3342
Fax: (65) 481 3788

Email: vtd@vacuumtechnology.com

For more information, see the
Web Catalog at:
www.vacuumtechnology.com

