

Welch®
Laboratory Vacuum Catalog
2005-2006

Product Directory By Flow & Vacuum
Catalog Number Index
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Chemical Duty Dry Vacuum Pumps & Systems

- PTFE (Polytetrafluoroethylene) construction for aggressive gases and vapors
- Oil-free operation
- Diaphragm mechanism

Model	Free Air Displacement CFM(L/min) @ 60Hz	Ultimate Pressure, Torr(mbar)	Page (Type)
2010	0.45(12.7)	110(146)	16 (Pump)
2012	0.78(22)	100(133)	16 (Pump)
2022	0.78(22)	9(12)	16 (Pump)
2021	0.78(22)	2(2.7)	16 (Pump)
2030	1.1(32)	9(12)	16 (pump)
2031	1.1(32)	2(2.7)	16 (pump)
2026	1.1(32)	2(2.7)	17 (Dial Vacuum Read-out System)
2027	1.1(32)	2(2.7)	17 (Digital Absolute Vacuum Read-out System)
2025	1.2(34)	9(12)	17 (Dial Vacuum Read-out System)
2015	1.8(50)	80(106)	17 (pump)
2017	2.2(64)	80(106)	17 (pump)

Standard Duty Dry Vacuum Pumps

- Aluminum construction for pumping vapors of aqueous solutions including buffers
- Oil-free operation
- WOB-L piston mechanism

Model	Free Air Displacement CFM(L/min) @ 60Hz	Ultimate Pressure, Torr(mbar)	Maximum Deliver Pressure, PSIG(pascal)	Page (Type)
2511	0.39(11)	219(292)	33(3.3 x 10 ⁵)	18 (Pump, aspiration/filtration systems)
2515	1.2(34)	70(93)	0	19(Aspiration/filtration systems)
2522	0.76(22)	100(133)	100(10 ⁶)	18 (Pump w/liquid trap, silencer, pressure & vacuum regulators)
2534	1.2(34)	70(93)	50(5 x 10 ⁵)	18 (Pump w/liquid trap, silencer, pressure & vacuum regulators)
2546	1.6(45)	60(80)	100(10 ⁶)	18 (Pump w/liquid trap, silencer, pressure & vacuum regulators)
2561	2.1(60)	5(6.7)	0	18 (Pump w/liquid trap, silencer, vacuum regulator)
2581	3.5(100)	5(6.7)	0	19 (Pump w/liquid trap, silencer, vacuum regulator)
2567	3.5(100)	60(80)	0	19 (Pump w/liquid trap, silencer, vacuum regulator)
2585	7.1(201)	60(80)	0	19 (Pump w/liquid trap, silencer, vacuum regulator)

House Vacuum Systems

- Horizontal or vertical mounted systems
- One to four pump configurations
- Up to 29.92 in. Hg(0.1 Torr)
- Modular/Expandable designs
- Proven reliable in lab applications

Standard Packaged Systems are ideal for many laboratory applications and provide an unbeatable combination of economy, reliability and quick delivery. They come in oil-sealed rotary vane and oil-free designs; simplex (one pump only) through quadraplex (four pump) configurations, and can be modified to meet any requirements.

You can choose an engineered package system to meet your most rigorous requirements. Our engineering and design staff has a wealth of experience designing custom systems for chemical, pharmaceutical, biotech, and life science laboratories. We specialize in hybrid systems, exotic chemicals, and difficult applications.

Type, Flow & Vacuum¹

Compact Direct-Drive High Vacuum Pumps

- Vacuum to 1×10^{-4} Torr (1.3×10^{-4} mbar)
- Free-air displacement from 31 to 320 L/min
- Oil-lubricated rotary vane direct-drive mechanism

Model	Free Air Displacement CFM(L/min) @ 60Hz	Ultimate Pressure, Torr(mbar)	Page (Type)
8890	1.1(31)	$1 \times 10^{-1}(1.33 \times 10^{-1})$	20
8905	1.8(51)	$2 \times 10^{-3}(2.7 \times 10^{-3})$	20
8907	2.6(73)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	20
8912	3.8(108)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	20
8917	6.1(173)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	20
8920	7.7(218)	$3 \times 10^{-4}(4 \times 10^{-4})$	21
8925	11.3(320)	$4 \times 10^{-4}(5.3 \times 10^{-4})$	21
Rotovap Pump	1.1(31)	$1 \times 10^{-1}(1.33 \times 10^{-1})$	21
Freeze Dryer Pump	6.1(173)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	21

CHEMSTAR® Pumps for Corrosive Gases

- High contamination tolerance
- Vital parts corrosion resistant
- Oil-lubricated rotary vane belt-drive mechanism

Model	Free Air Displacement CFM(L/min) @ 60Hz & 50Hz	Ultimate Pressure, Torr(mbar)	Pages (Type)
1400N	0.9(25)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	22
1402N	5.6(160)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	22
1376N	10.6(300)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	22

Rugged DUOSEAL® Belt-Drive High Vacuum Pumps

- Vacuum to 1×10^{-4} Torr (1.3×10^{-4} mbar)
- Free-air displacement from 28 to 650 L/min
- Oil-lubricated rotary vane belt-drive mechanism

Model	Free Air Displacement CFM(L/min) @ 60Hz	Ultimate Pressure, Torr(mbar)	Page (Type)
1400	0.9(25)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	24
1399	1.2(35)	$1.5 \times 10^{-2}(1.9 \times 10^{-3})$	25
1399N	1.2(35)	$1.5 \times 10^{-2}(1.9 \times 10^{-3})$	25 (w/bell jar plate)
1405	3.2(90)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	24
1402	5.6(160)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	24
1376	10.6(300)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	24
1397	17.7(500)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	24
1374	23(650)	$1 \times 10^{-4}(1.3 \times 10^{-4})$	25

Note: 1. Product specifications within this catalog are subject to change without notification.