

Welch®
Laboratory Vacuum Catalog
2005-2006

Chemical Duty Dry Vacuum Pumps (Oil-Free)
Catalog Pages 18 & 19

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Dry Diaphragm PTFE Vacuum Pumps¹

Compact, Corrosion-Resistant,
Oil-Free Pumps

Suited For:

- Distillation
- Desiccation
- Vacuum Filtration
- Aspiration
- Degassing



2012B-01



2022B-01/2030B-01
DRYFAST®



2021B-01/2031B-01
DRYFAST ULTRA®

Specifications

Welch Model	2010	2012	2022	2021	2030	2031	2015
Free Air Displacement							
CFM(L/min) @ 60Hz	0.45(12.7)	0.78(22)	0.78(22)	0.78(22)	1.1(32)	1.1(32)	1.8(50)
m ³ /hr(L/min) @ 50Hz	0.63(10.6)	1.1(18)	1.1(18)	1.1(18)	1.6(27)	1.6(27)	2.5(42)
Ultimate Pressure, Torr(mbar)	110(146)	100(133)	9(12)	2(2.7)	9(12)	2(2.7)	80(106)
Maximum Vacuum, in. Hg	25.5	26	29.6	29.85	29.6	29.85	26.7
Motor Horsepower (watts)	1/12(62)	1/5(150)	1/5(150)	1/5(150)	1/5(150)	1/5(150)	1/5(150)
Gas Ballast	No	No	Yes	Yes	Yes	Yes	No
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)
Intake/Exhaust Thread NPT	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Weight (lbs.)	5.25(2.4)	16.3(7.4)	20(9.1)	20(9.1)	20(9.1)	20(9.1)	20(9.1)
Overall Dimensions							
L in. (cm)	6.3(152)	10(25.4)	10(25.4)	10(25.4)	10(25.4)	10(25.4)	10(25.4)
W in. (cm)	5.5(140)	7(17.8)	10(25.4)	10(25.4)	10(25.4)	10(25.4)	10(25.4)
H in. (cm)	7.5(188)	6.9(17.5)	6.9(17.5)	6.9(17.5)	6.9(17.5)	6.9(17.5)	6.9(17.5)
Ship Weight, lbs (kg)	8(3.6)	20(9.1)	22(10)	22(10)	22(10)	22(10)	22(10)
Shipping Carton Dimensions L x W x H in. (cm)	16x12.5x13 (40.6x31.8x33)	16x12.5x13 (40.6x31.8x33)	16x12.5x13 (40.6x31.8x33)	16x12.5x13 (40.6x31.8x33)	16x12.5x13 (40.6x31.8x33)	16x12.5x13 (40.6x31.8x33)	16x12.5x13 (40.6x31.8x33)

Ordering Information^{4,5}

Wired for 115V, 60Hz, 1 Ph with N. Amer. 115V Plug	2010B-01	2012B-01	2022B-01	2021B-01	2030B-01	2031B-01	2015B-01
Wired for 230V, 50Hz, 1 Ph w/Cont. Euro. (Schuko) Plug	2010C-02 ²	2012C-02 ²	2022C-02 ²	2021C-02 ²	2030C-02 ²	2031C-02 ²	2015C-02 ²
Wired for 100V 50/60Hz for Japan	-----	2012C-05	2022C-05	2021C-05	2030C-05	2031C-05	2015C-05

Notes:

1. Corrosion resistant construction using fluorinated plastics for handling aggressive vapors and gases.
2. 50Hz models supplied with CE marking.
3. Model 2027 comes with absolute pressure readout. For 202701, pressure readout is factory preset in Torr. For 202703, preset in mbar. For 202705, preset in pascal.

Vacuum Pumps



2015B-01/2017B-01



202501
DRYFAST®



202701
DRYFAST ULTRA®

DRYFAST with Dial Gauge DRYFAST ULTRA with Dial Gauge DRYFAST ULTRA with Digital Gauge⁴

2017	2025	2026	2027
2.2(64)	1.2(34)	1.1(32)	1.1(32)
3.1(53)	1.7(28)	1.6(27)	1.6(27)
80(106)	9(12)	2(2.7)	2(2.7)
26.7	29.6	29.85	29.85
1/5(150)	1/5(150)	1/5(150)	1/5(150)
No	Yes	Yes	Yes
1/4(7)	1/4(7)	1/4(7)	1/4(7)
1/4	3/8	3/8	3/8
20(9.1)	30(13.6)	30(13.6)	30(13.6)
10(25.4)	13.6(42.2)	13.6(42.2)	13.6(42.2)
10(25.4)	12(30.5)	12(30.5)	12(30.5)
6.9(17.5)	11.3(28.7)	11.3(28.7)	11.3(28.7)
22(10)	36(16.4)	36(16.4)	36(16.4)
16x12.5x13 (40.6x31.8x33)	18x16.5x17 (45.7x41.9x43.2)	18x16.5x17 (45.7x41.9x43.2)	18x16.5x17 (45.7x41.9x43.2)

2017B-01	202501	202601	202701
2017C-02 ²	202503 ²	-----	202703 ²
2017C-05	202505	-----	202705

Accessories

Vacuum Regulator

Connects to pump intake for easy regulation of vacuum level. Includes an easy to read dial gauge. All stainless steel.



Pump Model	Cat. No.
2012, 2022, 2030, 2015, 2017, 2010, 2021, 2031	1421D

Inlet/Exhaust Separator

Glass jar assembly that attaches to the pump intake or exhaust. Captures accidentally ingested liquids before they move into the pump. Capacity 230 ml.



Pump Model	Cat. No.
2010, 2012, 2022, 2030, 2015, 2017, 2025, 2021, 2031	1423B

Vacuum Hose

Thick walled hose for vacuum or pressure applications. Hose clamp information available on page 29.



Pump Model	Cat. No.
2010, 2012, 2022, 2030, 2015, 2017, 2021, 2031	331030-5

On/Off Foot Switch

- Hands free on/off pump operation
- No adaptors or special connection needed
- Plug directly into the power source outlet
- All maintained models feature Push On-Push Off action



1430A-115V only



1430B-115V only



1430C-230V, 50/60Hz

Pump Model	Cat. No.
2010, 2012, 2022, 2030, 2015, 2017, 2021, 2031, 2511, 2515, 2522, 2534, 2546, 2561, 2567, 2581, 2585	1430A, (maintained on/off) 1430B, (momentary on/off) 1430C, (momentary on/off with IEC connections for 90-230V, 50/60Hz pumps)

Pocket Torr Vacuum Gauge

Gauges a range of vacuum in Torr from 1 to 760. Easy calibration via the touch panel. Vacuum connection is 1/4" in. I.D. hose barb. Sensor type is capacitance.



Range(Torr)	Cat. No.
1 to 760	151401

- Models 2010, 2012, 2022, 2021, 2015, 2025, 2030, 2031, 2015, 2017, 2025, 2026 and 2027 are constructed of PTFE heads, Kalrez®/Chemraz® valves and a PTFE coated, molded diaphragm.
- All standalone pumps supplied with an exhaust silencer, loose hose barb for exhaust port and an installed intake hose barb.