

**Welch®**

**OEM, Industrial & Refrigeration Catalog  
2005-2006**

**Standard Duty Dry Vacuum Pumps  
Catalog Pages 12 & 13**

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## WOB-L® Piston Dry Vacuum Pumps<sup>1</sup>

Compact, Economical  
Oil-Free Pumps

Suited For:

- Vacuum Drying
- Desiccating
- Aspiration
- Degassing
- Chamber Roughing



2511B-01



2522B-01/2534B-01



2546B-01



2567B-50/2561B-50

### Specifications

Welch Model	2511	2522	2534	2546	2561	2567	2581
Free Air Displacement							
CFM (L/min) @ 60Hz	0.39(11)	0.76(22)	1.2(34)	1.6(45)	2.1(60)	3.5(100)	3.5(100)
m <sup>3</sup> /hr (L/min) @ 50Hz	0.55(9.2)	1.1(18)	1.7(28)	2.3(38)	3.0(50)	4.9(83)	4.9(83)
Ultimate Pressure, Torr (mbar)	219(292)	100(133)	70(93)	60(80)	5(6.7)	60(80)	5(6.7)
Max Pressure PSIG (pascal)	33(3.3 x 10 <sup>5</sup> )	100(10 <sup>6</sup> )	50(5 x 10 <sup>5</sup> )	100(10 <sup>6</sup> )	-----	-----	-----
Maximum Vacuum, in. Hg	21.3	26	27.2	27.6	29.8	27.6	29.8
Motor Horsepower (watts)	1/30(25)	1/8(93)	1/8(93)	1/4(190)	1/3(250)	1/3(250)	1/3(250)
Tubing Needed, I.D. in. (mm)	3/16(5)	1/4(7)	1/4(7)	1/4(7)	3/8(10)	3/8(10)	3/8(10)
Intake/Exhaust Thread NPT	3/16 in. Hose	1/4	1/4	1/4	1/4	1/4	1/4
Weight (lbs.)	5	11.7	11.7	13.8	16.5	16.5	24.5
Overall Dimensions							
L in. (cm)	7.6(19.4)	8.1(20.6)	8.1(20.6)	10(25.4)	17.3(43.9)	15.0(38.1)	17(43.2)
W in. (cm)	4.5(11.4)	8.8(22.4)	8.8(22.4)	7.5(19.1)	6.5(16.5)	10(25.4)	7.5(19.1)
H in. (cm)	7.5(19.1)	10(25.4)	10(25.4)	9(22.9)	10.5(26.7)	10(25.4)	12(30.5)
Ship Weight, lbs (kg)	6(2.7)	17(7.7)	17(7.7)	17(7.7)	24(10.9)	24(10.9)	32(14.5)
Shipping Carton Dimensions							
L x W x H in. (cm)	13 x 9 x 9.5 (33 x 22.8 x 24.1)	15 x 10.5 x 12 (38.1 x 26.7 x 30.5)	15 x 10.5 x 12 (38.1 x 26.7 x 30.5)	15 x 10.5 x 12 (38.1 x 26.7 x 30.5)	21.5 x 12.5 x 16 (54.6 x 31.8 x 40.6)	21.5 x 12.5 x 16 (54.6 x 31.8 x 40.6)	21.5 x 12.5 x 16 (54.6 x 31.8 x 40.6)

### Ordering Information<sup>1,2</sup>

Wired for 115V, 60Hz, 1 Ph with N. American 115V Plug	2511B-01 <sup>3</sup>	2522B-01 <sup>4</sup>	2534B-01 <sup>4</sup>	2546B-01 <sup>4</sup>	2561B-50	2567B-50	2581B-50
Wired for 230V, 60Hz, 1 Ph with N. American 230V Plug	-----	2522C-01 <sup>4</sup>	2534C-01 <sup>4</sup>	2546C-01 <sup>4</sup>	-----	-----	-----
Wired for 230V, 50Hz, 1 Ph <sup>2</sup> with Cont. Euro.(Schuko) Plug	2511C-02 <sup>3</sup>	2522C-02 <sup>4</sup>	2534C-02 <sup>4</sup>	2546C-02 <sup>4</sup>	2561C-50	2567C-50	2581C-50
Wired for 100V, 50/60Hz, 1 Ph with a plug	2511C-05 <sup>3</sup>	2522C-05 <sup>4</sup>	-----	-----	2561C-56	-----	2581C-56

**Notes:**

1. All models are recommended for pumping vapors of aqueous solutions including buffers, but not for acidic, basic or organic vapors or gases.
2. 50Hz units supplied with CE marking.

# Vacuum Pumps



2585B-50/2581B-50



2511B-75



2515B-75

Aspiration/Filtration Systems include 6Ft. of tubing and two hydrophobic filters

### Aspiration/Filtration Systems

2585	2511	2515
7.1(201)	0.39(11)	1.2(34)
10(168)	0.55(9.2)	1.7(28)
60(80)	219(292)	70(93)
-----	33(3.3 x 10 <sup>5</sup> )	-----
27.6	21.3	27.2
1/3(250)	1/30(25)	1/8(93)
3/8(10)	3/16(5)	1/4(7)
1/4	3/16 in. Hose	1/4
24.5	5.7	13.2
17(43.2)	11.0(28)	14.8(37.5)
7.5(19.1)	8.3(21)	8.3(21)
12(30.5)	10.0(25.5)	10.0(25.5)
32(14.5)	11(5)	14.8(6.7)
21.5 x 12.5 x 16	21.5 x 12.5 x 16	21.5 x 12.5 x 16
(54.6 x 31.8 x 40.6)	(54.6 x 31.8 x 40.6)	(54.6 x 31.8 x 40.6)

2585B-50	2511B-75	2515B-75
-----	-----	-----
2585C-50	2511C-75	2515C-75
-----	2511C-76	2515C-76

- Model 2511 can deliver 33 PSIG (3.3 x 10<sup>5</sup> pascal).
- Models 2522, 2534 and 2546 come with vacuum (and pressure) regulator, vacuum (and pressure) gauge, silencer and water trap. Models 2522 and 2546 can deliver 100 PSIG (10<sup>6</sup> pascal). Model 2534 can deliver 50 PSIG (5 x 10<sup>6</sup> pascal).

## Accessories

### Vacuum Hose

Thick walled hose for vacuum or pressure applications. Hose clamp information available on page 23.



Pump Model	Cat. No.
2522, 2534, 2545, 2561, 2565, 2581, 2585	331030-5
2511	331020-5

### Exhaust Silencer

Exhaust silencers are installed in the exhaust port of the pump to reduce pump noise.



1412B



1412C



1412D/1412E

Pump Model	Cat. No.
2565, 2585	1412C
2561	1412D
2581	1412E
2012, 2022, 2030, 2015, 2017	1412B

### Replacement Jars

Plastic (1415C) or glass jar (1415B) to replace the collection jar included with the pumps.



1415B

1415C

Spare receiver kit (1475K-20) includes a 1.2 L autoclaveable jar, 6Ft. of tubing and two hydrophobic filters.



1475K-20

Pump Model	Cat. No.
2522, 2546, 2534	1415C
2561, 2565, 2581, 2585, 202501, 202601, 202701	1415B
2511B-75, 2511C-75, 2515B-75, 2515C-75	1475K-20

### Particulate, Hydrophobic In-line Filters

The filters are an economical solution to protect your piston vacuum pump from fine particulates and aerosols to 0.2 microns in diameter.



1475K-21



1475K-22

Made of Polypropylene housing, cat. no. 1475K-21 fits 1/4" to 3/8" I.D. hose and cat. no. 1475K-23 fit 1/4" I.D. hose.

Made of SBS resin housing, model 1475K-22 fits 3/8" to 7/16" I.D. hose.

Pump Model	Cat. No.	Pore Size
2511, 2515, 2522, 2534, 2546	1475K-21	0.8 micron
2561, 2581, 2562, 2567	1475K-22	0.8 micron
2562, 2567	1475K-23	0.2 micron



1475K-23