

Dry Diaphragm and WOB-L® Piston Vacuum Pumps^{1,2,3.}

Compact, Economical
Oil-Free Pumps

Suited For:

- Gas Analyzers
- Backing Hybrid Turbos
- Centrifuges
- Drying
- Degassing
- Distillation



8115B-01



2024B-01



2016B-01

Specifications

Welch Model	8115 ¹	2024 ¹	2016 ¹	2090 ²	2085 ²
Free Air Displacement					
CFM (L/min) @ 60Hz	1.1(32)	1.2(34)	2.4(68)	3.1(88)	6.2(176)
m ³ /hr (L/min) @ 50Hz	1.6(27)	1.7(28)	3.4(57)	4.4(73)	8.8(147)
Ultimate Pressure, Torr (mbar)	2(2.7)	9(12)	50(67)	25(33)	100(133)
Maximum Vacuum, in. Hg	29.85	29.6	28.0	29.0	26.0
Mechanism	Diaphragm	Diaphragm	Diaphragm	Diaphragm	Diaphragm
Type of Duty ²	Chemical	Chemical	Chemical	Chemical	Chemical
Motor Horsepower (watts)	1/5(150)	1/5(150)	1/5(150)	1/2(370)	1/2(370)
Tubing Needed, I.D. in. (mm)	1/4(7)	1/4(7)	1/4(7)	7/16(11)	7/16(11)
Intake/Exhaust Thread NPT	1/4	1/4	1/4	3/8	3/8
Weight (lbs.)	13(5.9)	13(5.9)	12.9(5.9)	32(14.5)	32(14.5)
Overall Dimensions					
L in. (cm)	10.25(261)	10.25(261)	11(279)	15.3(389)	15.3(389)
W in. (cm)	5(27)	5(27)	4.8(122)	11.1(282)	11.1(282)
H in. (cm)	7.25(189)	7.25(189)	6.8(173)	6.6(168)	6.6(168)
Ship Weight, lbs (kg)	17(7.7)	17(7.7)	17(7.7)	37(16.8)	37(16.8)
Shipping Carton Dimensions					
L x W x H in. (cm)	14 x 14 x 14 (35.6 x 35.6 x 35.6)	14 x 14 x 14 (35.6 x 35.6 x 35.6)	14 x 14 x 14 (35.6 x 35.6 x 35.6)	24 x 15.5 x 14.5 (61 x 39.4 x 36.8)	24 x 15.5 x 14.5 (61 x 39.4 x 36.8)

Ordering Information^{1,2,3.}

Wired for 115V, 60Hz, 1 Ph with N. American 115V Plug	8115B-01	2024B-01	2016B-01	2090B-01	2085B-01
Wired for 230V, 50Hz, 1 Ph with IEC connection includes UK & Schuko Line Cords	8115C-02	2024C-02	2016C-02	2090C-02	2085C-02
Wired for 100V, 50/60Hz, 1 Ph with a plug	8115C-05	2024C-05	-----	-----	-----

Notes:

- Models 8115, 2024, 2016 and 8111 are designed for placement within a system enclosure. Models 8115, 2024 and 2016 handle harsh chemical vapors since designed with heads, diaphragms and valves made of fluorinated plastics.
- Models 2090 and 2085 are designed with PTFE coated head, stainless steel valves and a PTFE liner over diaphragm.
- Standard duty WOB-L piston vacuum pumps handle vapors of aqueous solutions including buffers, but are not recommended for pumping organic, acidic, and basic vapors.

Vacuum Pumps



2090B-01/
2085B-01



8111B-01



2561B-24



2562B-01/
2567B-01



2580B-01/
2585B-01



2581B-24

	8111 ¹	2561 ³	2562 ³	2567 ³	2580 ³	2581 ³	2585 ³
	1.3(36)	2.1(60)	2.3(65)	3.5(100)	3.5(99)	3.5(100)	7.1(201)
	1.8(30)	36(50)	3.4(57)	4.9(83)	4.9(83)	5.0(83)	10(168)
	1.5(2)	4(5)	9(12)	60(80)	9(12)	4(5)	60(80)
	29.9	29.8	29.6	27.6	29.6	29.8	27.6
	Diaphragm	Piston	Piston	Piston	Piston	Piston	Piston
	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	1/5(150)	1/3(250)	1/3(250)	1/3(250)	1/3(250)	1/3(250)	1/3(250)
	NW16 Flange	1/4(7) ⁴	1/4(7)	1/4(7)	3/8(10)	3/8(10) ⁵	3/8(10)
	1/6	1/4	1/4	1/4	3/8	3/8	3/8
	13(5.9)	16.5(7.5)	16.5(7.5)	16.5(7.5)	22.5(10.3)	22.5(10.3)	22.5(10.3)
	10.25(261)	11.7(297)	11.7(297)	11.7(297)	13.25(336)	13.25(336)	13.25(336)
	5(27)	7.2(183)	7.2(183)	7.2(183)	7.6(193)	7.6(193)	7.6(193)
	7.25(189)	9.5(241)	9.5(241)	9.5(241)	11.7(297)	11.7(297)	11.7(297)
	17(7.7)	18(8.2)	18(8.2)	18(8.2)	28(12.7)	30(13.6)	28(12.7)
	14 x 14 x 14	21.5 x 12.5 x 16	21.5 x 12.5 x 16	21.5 x 12.5 x 16	17 x 10.5 x 13	21.5 x 16.3 x 17.5	17 x 10.5 x 13
	(35.6 x 35.6 x 35.6)	(54.6 x 31.8 x 40.6)	(38.1 x 26.7 x 30.5)	(38.1 x 26.7 x 30.5)	(43.2 x 26.7 x 33)	(54.6 x 41.4 x 44.5)	(43.2 x 26.7 x 33)

8111B-24	2561B-24	2562B-01	2567B-01	2580B-01	2581B-24	2585B-01
8111C-24	2561C-24	2562C-02	2567C-02	2580C-02	2581C-24	2585C-02
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4. Dual inlet flange ISO NW16 with 1/4 in.(7mm) hose barb supplied which will thread into NW16.

5. Dual inlet flange ISO NW25 with 1/4 in.(7mm) hose barb supplied which will thread into NW25.