

Direct Drive Vacuum Pumps and Systems | Rotary Vane



Model 8890 Model 8905 Model 8917A-80 Model 8960 Models 8965/8970

Specifications	Special Application Systems				Chemvac		
Model	8890	8905	Schlenk/ Rotovap	Freeze Dryer	8960	8965	8970

Free Air Displacement							
cfm (l/min.) @60 Hz	1.1 (31)	1.8 (51)	1.1 (31)	6.1 (173)	6.6 (110)	13.2 (220)	25.2 (420)
m ³ /hr (l/min.) @50 Hz	1.6 (26)	2.6 (43)	1.6 (26)	8.6 (144)	5.8 (97)	11.0 (183)	21.0 (350)
Ult. Vac. Pressure, torr(mbar)	1 x 10 ⁻¹ (0.133)	2x10 ⁻³ (2.7x10 ⁻³)	1x10 ⁻¹ (0.133)	1x10 ⁻⁴ (1.3x10 ⁻⁴)	1.1x10 ⁻³ (1.5x10 ⁻³)	1.1x10 ⁻³ (1.5x10 ⁻³)	1.1x10 ⁻³ (1.5x10 ⁻³)
Sound Level, dBA	58	52	58	50	50	50	50
Motor/Pump Speed (60 Hz)	3450	3450	3450	1725	1740	1680	1680
Motor Horsepower (watts)	1/4 (190)	1/4 (190)	1/4 (190)	1/2 (370)	400 (.54 HP)	900 (1.21 HP)	900 (1.21 HP)
Oil Capacity, qt.(liters)	0.48 (0.45)	0.42 (0.4)	0.48 (0.45)	1.4 (1.3)	0.58 (0.55)	1.06 (1)	0.87 (0.82)
Tubing Needed, I.D. in.(mm)	3/8 (10)	7/16 (11)	3/8 (10)	7/16, 3/4 (11, 20)	0.75 (19)	0.75 (19)	0.75 (19)
Intake Connection(thread) ²	1/4 in NPT	3/4-20	1/4 in NPT	1 1/8-20	NW 16	NW 25	NW 25
Exhaust Connection	3/4-20	3/4-20	3/4-20	1-20	25.5 kg	42.5 kg	46.0 kg
Exhaust Filter Included	Yes ⁶	No	Oil Recycler	Yes	Yes	Yes	Yes
Weight, lbs.(kg)	24.5 (11.1)	24.5 (11.1)	27.5 (12.5)	55 (25)	56 (25.5)	94 (42.5)	101 (46)
Overall Dimensions							
LxWxH in.(cm)	14.5x5.1x8.4 (36.8x13x21.3)	14.5x5.1x8.4 (36.8x13x21.3)	14.5x5.1x14.3 (37x13x36)	18.6x11.5x9.6 (47x29x24)	19.7x13.0x13.4 (50x33x34)	23.2x13.6x16.5 (59x34.5x42)	23.2x13.6x16.5 (59x34.5x42)
Ship Weight, lbs.(kg)	33 (15)	33 (15)	37 (16.8)	70 (31.8)	100 (45.3)	116 (52.6)	124 (56.1)
Shipping Carton Dimensions							
LxWxH in.(cm)	21.5x12.5x16 (55x32x41)	21.5x12.5x16 (55x32x41)	21.5x12.5x16 (55x32x41)	25x18.5x14 (64x47x36)	65x41x48 (26x16x19)	65x41x48 (26x16x19)	65x41x48 (26x16x19)

Ordering Information	8890A	8905A	8890A-70	8917A-80	8960A	---	---
Wired for 115V, 60Hz, 1 Ph with N. American 115V Plug ^{3,4}	8890A	8905A	8890A-70	8917A-80	8960A	---	---
Wired for 230V, 50Hz, 1 Ph with Cont. Euro. (Schuko) Plug ^{3,5}	8890C-02	8905C-02	8890C-72	8917C-80	---	---	---
Wired for 230V, 60Hz with N. American 230V Plug ^{3,4}	---	---	---	---	8960C-01	8965C-01	8970C-01

GEM Vacuum System

The GEM® model 8890A-70 vacuum system is ideal for rotary evaporations with very high boiling point solvents and schlenk lines/vacuum manifolds.

The rugged gear pumping mechanism has a wide range of operating pressures and passes vapors readily without the pump mechanism damage often seen in rotary vane pumps. The GEM® efficiently pumps vapors without condensing them into the pump. Provides vacuum to 0.1 torr with free air displacement of 31 l/min.

The complete system comes with a gauge, vacuum regulator for easy vacuum control and an exhaust mist eliminator for recycling oil back into the pump. Ventilation to a hood is recommended.



Model 8890A-70

For a Complete System

Component	page
• Traps	69
• Exhaust Accessories	70
• Fittings / Hose	66 - 67
• Gauges	77
• Vacuum Controller	75
• Service Kit	79, 82
• Oil	72 - 73