

Welch®
Laboratory Vacuum Catalog
2005-2006

Rotary Evaporator & Evaporator System
(Concentrator)
Catalog Pages 6 & 7

ORDER ONLINE AT: www.cfpwarehouse.com or contact:

COMBINED FLUID PRODUCTS COMPANY
805 Oakwood Road, Lake Zurich, Illinois 60047
sales@combinedfluidproducts.com
www.combinedfluidproducts.com
Tel (847) 540-0054 Fax (847) 540-0513
(800) 521-2083

Rotary Evaporator & Evaporator

Select The System For Your Chemistry

VACUUM SPECTRUM	10 ³ Torr	10 ² Torr	10 ¹ Torr	10 ⁰ Torr	10 ⁻¹ Torr	10 ⁻² Torr	10 ⁻³ Torr
Chemical Group	Low Boiling Point Solvents	Medium Boiling Point Solvents	High Boiling Point Solvents			Very High Boiling Point Solvents	Fats, Oils & Polymers
Examples	Methylene Chloride Pentane 1,2-Dichloroethane Acetone	Benzene Chloroform Ethanol Acetonitrile	Water Toluene Tert-butyl Alcohol Heptane			DMF Xylene Isoamyl Alcohol Chlorobenzene	
Operating Range of System							



202501



202701
(See Pg 3)

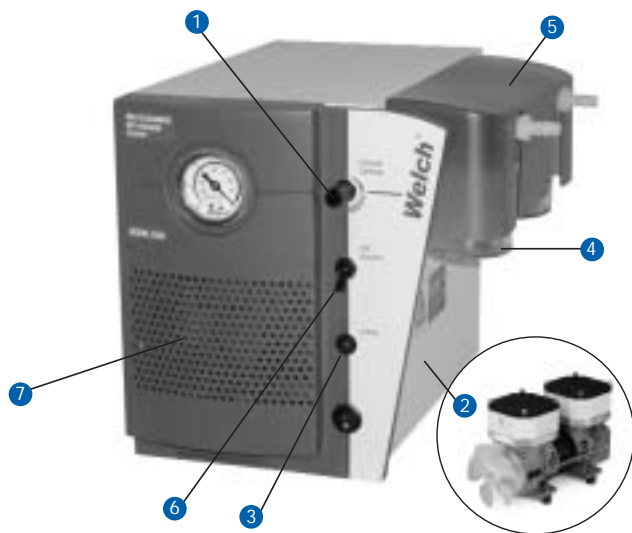


8890A-70



1400B-01

For Solvent Boiling Points < 100°C



202501

“Did you know that most rotary evaporators run between 20 and 500 Torr?”

- 1 Vacuum regulator prevents bumping and foaming
- 2 Corrosion resistant PTFE diaphragm pump
- 3 Self-Cleaning feature activates on shut-down
- 4 Inlet separator traps liquids before being ingested
- 5 Outlet separator collects ejected condensed vapors
- 6 Gas ballast inhibits vapor condensation
- 7 Quiet

DRYFAST® Self-Cleaning Vacuum System

The DRYFAST Vacuum System is ideal for rotary evaporator and concentrator applications with boiling points <100°C. Vacuum levels are to 9 Torr (12 mbar) with a free air displacement of 34 L/min. Included are a vacuum regulator, an easy-to-read dial gauge, a gas ballast, intake and exhaust separator jars, and an automatic fresh air purge that cleans the system after each use and extends the life of the diaphragms.

Cat. No.	Description ¹
202501	115V, 60Hz, 1 Ph, with N. Amer. plug; Dimensions: 12.75" L x 8" W x 11.5" H (32.4 x 20.3 x 29.2 cm). Weight: 28 lbs (12.7 kg), CSA.
202502	Same as 202501, except wired for 230V, 60Hz, with N. American 230V plug.
202503	Same as 202501, except wired for 230V, 50Hz, with IEC connection & detachable Schuko line cord, 28 L/min., CE.
202506	Same as 202501, except wired for 230V, 50Hz, with IEC connection & detachable UK line cord, 28 L/min., CE.

Note: 1. See page 19 for more details.

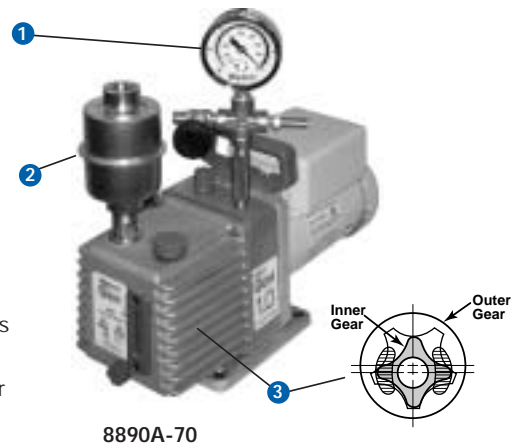


For Solvent Boiling Points < 160°C

- 1 Vacuum regulator to eliminate bumping and foaming
- 2 Exhaust mist eliminator prevents loss of vaporized oil
- 3 Gear pumping mechanism is very tolerant of vapors

GEM® Vacuum System

The GEM system is ideal for evaporation applications with boiling points that are <160°C. The direct-drive vacuum pump contains a gear pumping mechanism that allows it to be very tolerant of vapors. The high vapor tolerance of a gear mechanism is due to its high efficiency for pumping vapors without condensing them in the pump. The system comes complete with a vacuum regulator for easy control and an exhaust mist eliminator for recovering and recycling oil back into the pump.

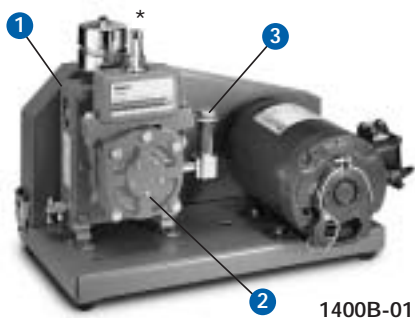


8890A-70

Cat. No.	Description ¹
8890A-70	31L/min, 1x10 ⁻¹ Torr, 115V, 60Hz, 1 Ph, with N. American 115V plug, CSA
8890C-72	Same as 8890A-70, except 26L/min, wired for 230V, 50Hz, with Cont. European (Schuko) plug, CE

Note: 1. See page 22 for more details.

For Solvent Boiling Points < 195°C



1400B-01

- 1 Large oil reservoir dilutes contaminants
- 2 Low RPM reduces friction and wear
- 3 Ultimate pressure <0.001 Torr (0.0013 mbar)

*Optional exhaust filter, cat. no. 1417

DUOSEAL® Vacuum System

DUOSEAL® vacuum systems are ideal for evaporation applications with boiling points of <195°C. These pumps have large oil reservoirs that help to dilute contaminants. Pumps have ultimate pressure <0.001 Torr for handling very high boiling point compounds. Systems can be ordered with an optional exhaust filter* to control oil mist. An in-line cold trap is always recommended when connected to a high vapor application. Use with distillation controller for boiling points <100°C. Consult factory for specific situations.

Cat. No.	Description ²
1400B-01	25 L/min, 1x10 ⁻⁴ Torr, 115V, 60Hz, 1 Ph with N. American 115V plug
1400C-02	Same as 1400B-01, except wired for 220V, 50Hz with Cont. Euro. (Schuko) plug, CE

Note: 2. See page 26 for more details.

Works with These Rotovap and Evaporation Systems*		
Labconco Concentrators	SpeedVac® Concentrators	Büchi® Rotovaps
78100-00	SPD101B	R-200
	SPD111V	R-205
	SPD121P	R-220
		R-250
		R-187

*Email us at welchvacuum@thomasind.com for recommendations on other manufacturers and models.