

ProBoost™



Model 1392

- Deeper Vacuum for Final Drying on a Schlenk Line
- Increases the flow and decreases the vacuum pressure of a vacuum pump
- Reach 2×10^{-5} torr ultimate vacuum
- Easily attaches to a Rotary Vane Pump



Figure 1: ProBoost connected to a CRVpro 8 rotary vane pump configured with optional pump connection kit (cat. no. 1392K-01) and stainless steel high vacuum valve (704523)

Welch's ProBoost is an air cooled gas jet pump (commonly called a diffusion pump). The gas jet is formed by directing boiling silicone vapors thru a hollow cone. Since there are no internal moving parts, the pump is very simple. The pumping action commences when the vacuum pressure goes below 0.2 Torr (200 millitorr). On an empty, leak free system, ProBoost backed by a rotary vane pump lowers the vacuum pressure to 0.00002 Torr (20x lower in pressure than a 2-stage rotary vane pump can do alone).

Automated shutdown process works through an embedded control board that disables heater and enables fan during shutdown.



ProBoost Technical Specifications*

Specs	Model 1392
Maximum Pumping Speed, Air	80 liters/sec
Ultimate Vacuum Pressure	0.00002 torr
Minimum Backing Pump FAD@60Hz	3 CFM
Maximum Discharge Pressure	0.2 torr
Heat-up time	7 minutes
Inlet Connection	NW50
Discharge Connection	NW25
Silicone Oil Capacity*	25 ml
Cool down time	20 minutes
Pump dimensions: L x W x H	5.5 x 5.4 x 7.5 in
ProBoost weight lbs (kg)	5.6 lbs (2.5 kg)
Ship Box dims L x W x H Shipping wt lbs (kg)	13 x 10 x 10 in 10 lbs (4.6 kg)
Ordering Information	
115V 60Hz 1Ph with N. American plug	1392B-01
230V 50Hz 1Ph with Schuko plug	1392C-02

*ProBoost comes with NW50 clamp, NW50 centering ring, NW25 clamp, NW25 centering ring, line cord, cooling fan, switch, and 100 ml of Welch ProBoost Silicone Oil, Cat. No. 1391K. Pump connection kit is required to connect a ProBooster to a rotary vane pump.

Components Needed to Complete a High Vacuum System

Useage	Description	Consists Of	Cat. No.
Connects ProBooster to CRVpro 4,6,8, 16, 24 and 30	Components needed to connect to rotary vane pump and neck booster inlet to NW25	(1)180° NW25 SS return, (2) SS NW25 centering ring assemblies, (2) NW 25 hinge clamps; (1) conical reducer NW25 to NW50	1392K-01
Closes off ProBoost prior to releasing vacuum to still	Stainless Steel high vacuum butterfly valve	Very high conductance NW25 valve with quick open and close	704523
Alternative to rubber hose**	Flexible metal hose, 19.7 in	Accordian metal tubing with NW25 flanges to connect ProBoost to Still	710762

**To achieve maximum performance with ProBoost with your still, Welch recommends NW flange connections and metal hose plumbing. Consult with your Welch sales rep on vacuum system design.

Gardner Denver Thomas Inc.
 1601 Feehanville Drive
 Suite 550
 Mt. Prospect, IL 60056

Tel: 1-847-676-8800
 Fax: 847-677-8606
 E-mail: welch.na@gardnerdenver.com
www.welchvacuum.com