

WELCH CRVpro VACUUM PUMPS



Model
3081-01

Specifications &
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- Lightweight, compact pump
- Ultimate 0.0004 torr (0.0005 mbar)
- Integral isolation valve

Welch direct drive vacuum pumps are high performance, but very portable with a small footprint in your lab. Ultimate vacuum to 1×10^{-4} torr, flow rates to 11.3 cfm for rapid box chamber cycling.

This oil-seal pump design has an integrated isolation device to prevent oil and air contaminating your system in the event of a power failure. Pump can be ordered with an optional exhaust filter (see p. 70) to control exhaust oil mist.

OIL-FREE EVACUATION OF GLOVE BOX AND TRANSFER STATION

- High flow to shorten the purge/fill cycle
- Oil-free - no contamination, no oil changes
- Compact, lightweight, portable

WOB-L[®] dry piston pumps are effective for acrylic and polycarbonate glove boxes with vacuum requirements above 5 torr (6.7 mbar). The oil-free WOB-L piston vacuum pump provides continuous, reliable, high flow vacuum for your glove box. Model 2581 is suited for transfer chamber evacuation and purge/fill cycles for a glove box of up to 30 ft³ (0.84 m³). The pump is complete with vacuum adjustment, vacuum gauge to monitor vacuum level, and muffler. See application note below regarding glove box vacuum limitations.

HIGH VACUUM FOR STAINLESS STEEL / GLASS GLOVE BOXES



Model
1402

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- High vacuum to 0.0001 torr
- High flow (5.6 cfm)
- Very rugged and reliable

DUOSEAL[®] vacuum pumps are effective for use with high purity atmosphere metal glove boxes. Use DuoSEAL pumps to draw a deep vacuum when establishing glove box atmosphere and for rapid transfer chamber cycling.

The large oil capacity of the DuoSEAL pump effectively dilutes contaminants for longer maintenance intervals levels and pump life. Chemical reactions affecting the pump oil are lessened by low pump operating temperature, a result of slow pump rotation and reduced friction. Use of a cold trap to minimize harmful vapor ingress is recommended.

NOTE: Optional exhaust filter catalog number 1417A is recommended for glove box applications to control exhaust oil mist (see p. 70).



Model
2581

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Application Note | Glove Box

Standard glove boxes and transfer chambers are not normally evacuated much below 25 torr (29" Hg) due to plastic material limitations. Both acrylic and polycarbonate which are used in standard glove boxes are not suited for deep vacuum (1 torr operation).

High end glove boxes capable of deeper vacuum normally are constructed of stainless steel and heavy glass plates. Follow glove box manufacturer recommendations for vacuum pumping requirements.

Model Selector | Glove Box

Oil-Free Vacuum for Acrylic Glove Boxes	Oil-Seal Deep Vacuum for Metal Glove Boxes	
Aqueous Vapors	Portable Direct Drive	Durable Belt-Drive
WOB-L 2581B-50	CRVpro 8 3081-01	DuoSEAL 1402B-01