

Oil Free Deep Vacuum | Chemstar Dry



Model
2070



Model
2071



Model
2080

- Oil-free deep vacuum.
- Chemically resistant
- Plug and Play operation

ChemStar Dry vacuum system is an alternative to oil-sealed rotary vane pumps for chemical applications requiring a deep vacuum. The deep, oil-free vacuum is generated by a proprietary vacuum roots blower backed by a PTFE diaphragm pump. All major parts in contact with pumped vapor/gases are made of chemically resistant fluoroplastics or coated with a proprietary PTFE coating.

Pump speed across the entire operating pressure range - atmospheric to deep vacuum - is controlled using patented control software technology. The control software provides plug-and-play operation.

Service interval is extended by integrated self-cleaning function that purges condensed vapors in the pump at shut-down.

A foreline catchpot trap is recommended to prevent ingestion of liquids. A foreline cold trap is recommended to prevent sticky-substances from entering pump and to protect pump from flash evaporation applications (ie vacuum ovens) that generate high vapor load exceed pumping capacity.

Specifications

Model	2070	2071	2080
Free Air Displacement cfm(l/min) @ 2 torr (2.7 mbar)	6.9 (196)	6.9 (196)	12.4 (350)
Ult Vac. Pressure (torr (mbar) @60 Hz	0.05 (0.07)	0.95 (0.13)	0.04 (0.05)
Ult Vac. Pressure, torr (mbar) @50 Hz	0.07 (0.09)	—	0.04 (0.05)
Running Amps	3	3	3
Intake and Exhaust Connection	NW25	NW25	NW25
Weight, lb (kg)	50 (23)	50 (23)	88 (40)
Overall Dimensions, LxWxH, in (cm)	18 x 8 x 18 (46 x 22 x 47)	18 x 8 x 18 (46 x 22 x 47)	23 x 11 x 18 (57 x 27 x 45)
Ship Weight, lb (kg)	75 (34)	75 (34)	115 (52)
Shipping Carton Dimensions, LxWxH, in (cm)	26.5x 26.5 x 27(68 x 68 x 69)	26.5x 26.5 x 27 (68 x 68 x 69)	26.5x 26.5 x 27 (68 x 68 x 69)

Ordering Information

Wired for 115V, 60 Hz, 1 Ph, N American 115V Plug	2070B-01	2071B-01	2080B-01
Wired for 230V, 50 Hz, 1 Ph, Shucko and UK 230V Plugs	2070C-02	—	2080C-02
Wired for 230V, 60 Hz, 1 Ph, 230V NA plug	2070C-01	2071C-01	2080C-01

Applications

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Foreline Catchpot Trap



320018

Catchpot trap mounts directly on inlet of pump via NW25 flange connection. Properly maintained trap prevents ingestion of liquid by pump. Liquid ingestion will cause pump to fail.

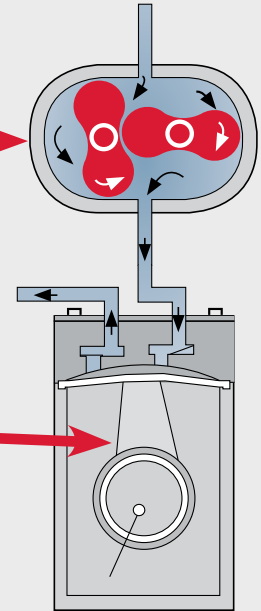
CAT. No	Description
320018	NW25 Connections

Principle of Operation

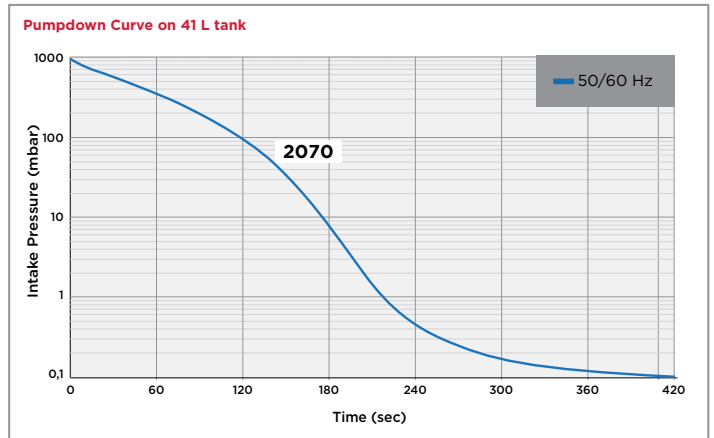
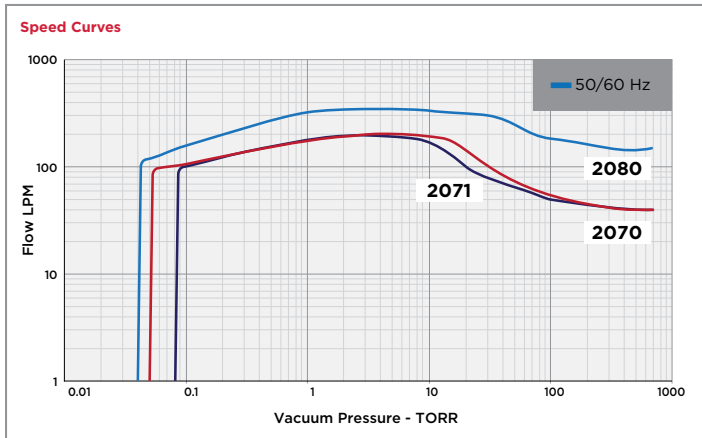


Vacuum roots blower is first pumping stage of CHEMSTAR DRY.

Two-stage PTFE diaphragm pump backs the vacuum roots blower to generate deep vacuum.



Patented control technology regulates blower rpm to match diaphragm pump flow rate creating plug & play operation. Controller technology senses sudden gas load or unintended leaks and slows blower rpm to protect system.



Foreline Cold Trap



1420H-14

Dry Ice/Liquid Nitrogen Cold trap is an effective device for protecting CHEMSTAR DRY from sticky substances and flash evaporative applications that can flood system with a high vapor load. See page 69 for further details.

CAT. No	Description
1420H-14	Cold Trap, 1/2 in.(25 mm) O.D. Tube Stub., 1.5L Capacity
1420H-25	Cold Trap, NW25, 1.5L Capacity

For a Complete System

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