

ChemStar Dry

Revolutionary multistage vacuum system

- Oil-free
- Low vacuum mostly without cold trap
- Chemical resistant
- Plug & Play



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Revolutionary multistage vacuum system

With the new ChemStar Dry, you get the advantages of two combined technologies: Roots blower and diaphragm vacuum pump. The result is an oil-free, software-driven vacuum system, ready to work on your tough chemical applications - clean, fast, and thorough. ChemStar Dry pumps quickly down (9 m³/h) to the working range for most evaporative operations (2.0 to 0.1 mbar) with an ultimate pressure of 10⁻² mbar.

The innovative electronically controlled vapour load optimises the pumping speed control. You can even pump corrosive vapours, since all wetted parts of the system are coated with PTFE and other proprietary coatings so they are chemical resistant. The integrated self-cleaning function also contributes to the system's long lifetime and enables repeatable results. Take advantage of its state-of-the-art technology for optimal operating conditions and results.





Applications

ChemStar Dry is suitable for all applications where high gas flow and deep vacuum are needed.

- Schlenk Line
- Freeze Dryer
- Vacuum Oven
- Glove Boxes



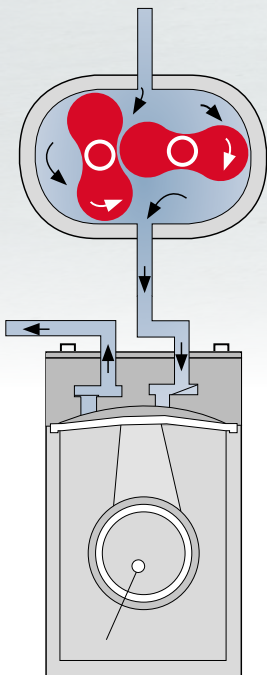
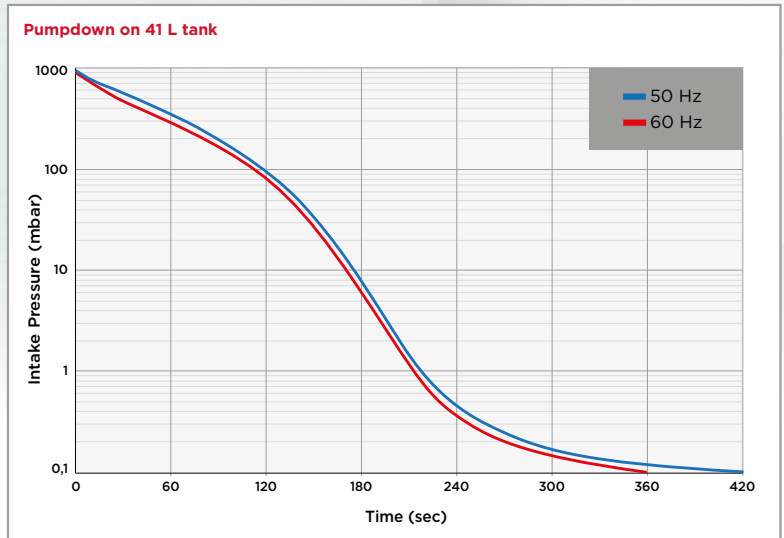
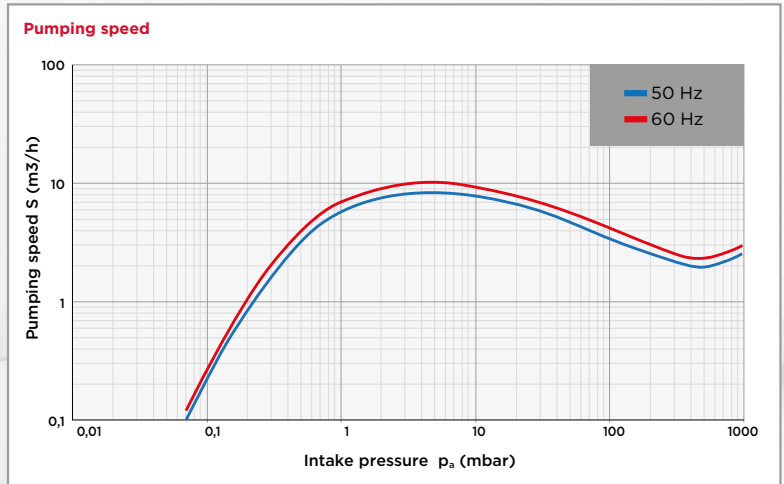
Product characteristic

-  Oil-free
-  Low vacuum mostly without cold trap
-  Chemical resistant
-  Plug & Play



Pump design
ChemStar Dry

Technical Features



| Roots blower

| **Operation principle**
ChemStar Dry

| Diaphragm vacuum pump

Specification

Pumping speed 50/60 HZ	9/10.1 m ³ /h
Ultimate vacuum pressure (DIN 28432)	7×10 ⁻² mbar
Inlet-/Outlet Connection	DN 25 KF
Overall Dimensions (L/W/H)	460/220/470 mm
Weight	23 kg



> **Oil-Free**

- No oil back-streaming
- No oil maintenance/disposal
- Cleaner work place
- Cleaner samples
- Less maintenance



> **Plug and Play**

- Patented software control
- Auto speed control from atm to 0.07 mbar
- Self-cleaning function
- Protection from surges



> **Low vacuum mostly without cold trap**

- No dry ice or trap apparatus needed
- Less maintenance
- Lower cost of ownership
- Extra bench space



> **Chemical Resistant**

- Pumps corrosive vapour/gases
- PTFE and proprietary coatings

Best results in laboratory research



Benefits at a glance:

Time-saving

Increase productivity

- > No oil-related maintenance work is required
- > There's no cold trap, so you don't need to add cooling medium
- > In case of the cold trap becoming empty of cooling media, ChemStar Dry still provides good vacuum performance

Environmentally friendly

Eliminate waste and save energy

- > Avoid oil disposal
- > End oil contamination
- > Cleaner working environment

Outstanding reliability

Improve your vacuum supply reliability

- > Robust, chemical resistant vacuum mechanism
- > Corrosive and organic vapour cannot damage the system or shorten its lifetime, since the wetted parts are chemical resistant
- > The diaphragm lasts longer due to the integrated self-cleaning function, which removes condensate vapour at shutdown

Space-saving

Have more room to move in your lab

- > You won't need a cold trap or its connecting components
- > The compact design gives you flexible installation options

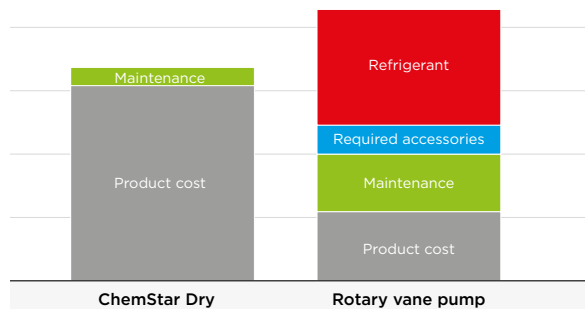
Cost-efficient

Minimize your vacuum supply costs

- > Eliminate oil-related costs (oil exchange and disposal)
- > Minimize the risk of pump exchanges due to corrosive and organic vapour damage (chemical resistance)
- > Avoid the expense of purchasing and refilling a cold trap with cooling medium

5-Year Cost Comparison (TCO)

Beside the pump purchasing costs it is important to compare maintenance, needed accessories and service costs to get a clear picture on the expected cost of ownership for the chosen technology.



Maintenance:

Service parts, oil changes/disposal, shaft seal replacement, filter replacement

Needed accessories:

Cold trap, exhaust filter

Refrigerant:

250 days per year, 2,5 kg dry ice per day, 1kg/1,25€

Order Information

ChemStar Dry 115V, 60Hz, 1 Ph with North American cord set	2070B-01
ChemStar Dry 230V, 50/60 Hz, 1 Ph with Schuko and UK cord set	2070C-02

Accessories

Starter Kit <ul style="list-style-type: none"> · 2 way butterfly valve · DN25KF hose nozzle adapters, clamps and centring rings · Red rubber vacuum hose · Hose clamps 	102950
Schlenk Line Kit <ul style="list-style-type: none"> · Starter kit (102950) · PIZA 111 cr-gold chemical duty multi-range vacuum gauge · DN25KF flexible steel hose, 750mm · Stainless steel T-piece with clamps and centring rings · Stainless Steel DN25KF - Cone NS29/32 flange adapter 	102951
Freeze Dryer Kit <ul style="list-style-type: none"> · DN25KF flexible steel hose, 750mm · DN25KF and DN16KF clamps and centring rings · Stainless steel DN25KF - DN16KF adapter 	102952
Vacuum Control Package <ul style="list-style-type: none"> · MRV 100 gauge with PIZA 111 cr-gold chemical duty vacuum sensor · Stainless steel T-piece · Solenoid valve · Clamps and centering rings · All electrical connections for quick setup 	330054

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