Model 2014

Model MPC 301 E

Model 2042

Model MPC 302 E

Specifications & Ordering - p. 28, 31

- **Fast results with crack-free gels**
- **Oil-free solution**
- **Operate gel dryer and concentrator with one pump**

Vacuum gel dryers are commonly used to dry sequencing gels due to their large surface area. To dry sequencing gels crack-free requires steady vacuum to 28 in. Hg(65 mbar). Harsh chemicals are evolved from vacuum gel dryers so a chemical duty diaphragm vacuum pump is necessary with flow rate of 35 lpm. A liquid trap or catch pot in-line is necessary to collect condensate that forms as hot vapors come off the gel dryer and condense in-line. These condense vapors need to be collected in the liquid trap so they are not ingested into the diaphragm pump. A 2 liter filtering flask can be used as a liquid trap.

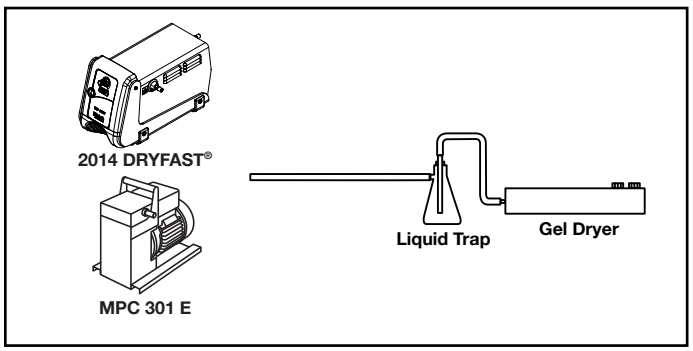
Model 2014 DRYFAST Single stage chemical duty diaphragm pump with excellent 35 lpm flow at 60Hz and vacuum to 28.3 in Hg(53 mbar). The rugged, low maintenance oil-free pump has one PTFE head, perfluorelastomer valves, and fluoroplastic wetted surfaces that make it suitable for drying electrophoresis gels.

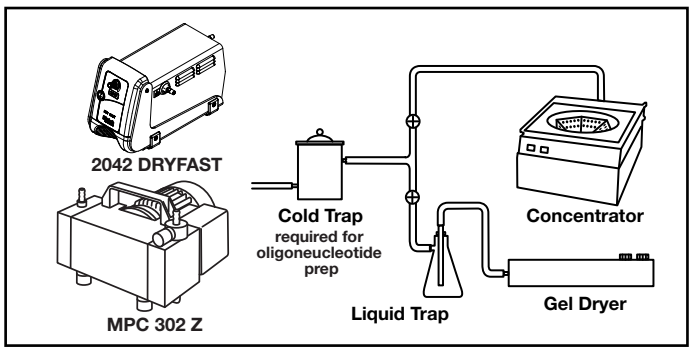
Model MPC 302 E Single stage chemical duty diaphragm pump with excellent 58 lpm flow at 50Hz and vacuum to 40 mbar(28.7 in Hg). The rugged, low maintenance oil-free pump has one PTFE head, PEEK valves, and fluoroplastic wetted surfaces that make it suitable for drying electrophoresis gels.

Vacuum gel dryers and concentrators are sometimes found together in life science laboratories. Laboratories that are short of space find it convenient to use one vacuum pump for both devices. One chemical duty diaphragm vacuum pump can be used to serve the two devices by assembling a basic manifold with tubing and two in-line valves. A concentrator needs a deeper vacuum to evaporate solvents compared to a gel dryer. Use selector table on following page to select the chemical duty diaphragm vacuum pump that will work with your particular concentrator application.

When the concentrator is in use, close the valve to the gel dryer, and vice versa. A liquid trap is necessary to remove the hot vapors that evolve from gel dryer and condense in the tubing.

For oligoneucleotide prep and biochemical/organic sample drying, a cold trap is recommended.





Application Note | Gel Dryers

Sometimes the silicone mat on the gel dryer will not settle to form a seal when pump is turned on and vacuum is applied to the gel dryer. Be sure that the mat is flexible so that it can form a seal. If it is not flexible, replace the mat.

Compatible with all Gel Dryers Including:

Model	Bio-rad	Hoefer
2014	583	GD 2000