

0725G1 or G2

VACUUM MANIFOLD AND ACCESSORIES

October 2005

TEMPE CELL WATER TRAP DESICCATOR



Fig. 1

Fine tuning adjustment knob

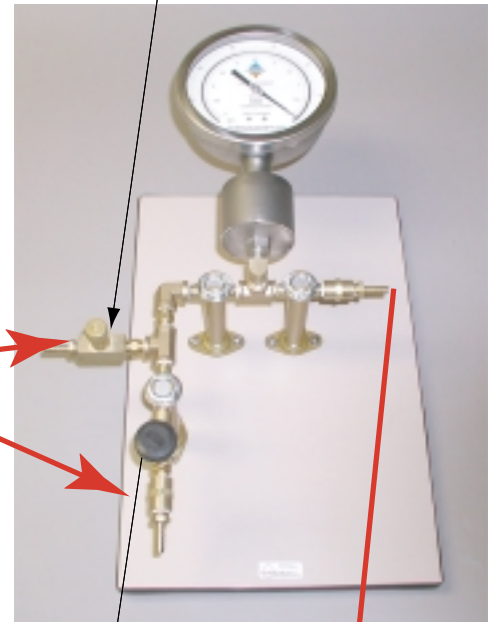


Fig. 2

SPECIFICATIONS:

Vacuum manifold:

0725G1

Accuracy: 1/2 of 1%

Subdivision: 0.1 psi or 0.5 kPa / 0.5 centibar

Range: 0 to - 100 centibars

0725G2

Accuracy: 1/2 of 1%

Subdivision: 0.02 psi or 0.2 kPa / 0.2 centibar

Range: 0 to - 35 centibars

Zero setting of the dial gauge:

Before using the vacuum manifold it is important to check if the dial gauge is set to zero at atmospheric conditions. To guarantee the accuracy, you have to adjust for parallax. This means that both the needle

and the image of the needle in the mirror must be lined up at zero at atmospheric pressure (No vacuum applied) In the event that the needle needs to be reset to zero, you have to remove the glass cover by turning it counter clockwise and lift it off. On the needle there is a small screw. Use a screw driver and adjust slowly in either direction (clockwise or counterclockwise whatever is required). After resetting, replace the glass cover again.

Note: when taking a reading from the gauge, at any number, also look at the mirror image. The needle and the mirror image must be parallel. (this to adjust for parallax)

Use of the tempe cell and the vacuum manifold:

1. Connect the tempe cell (1 upto 12 pcs) to a water trap (see fig. 1)
2. Connect the water trap with the neoprene tubing to the desicator. The desicator must be filled with desiccant (e.g. silica gel) to dry the air before it is going into the manifold.
3. Connect the outgoing tube from the desicator to the manifold (A or B fig. 2) Depending on the vacuum range you require. You can connect to A if the range is required to get close to atmosphere. Use the coarse adjustment knob for the regulation. You can connect to B for the higher vacuum range which can now be fine tuned with the fine tuning adjustment knob.
4. If connected to A, the fine tune knob must be completely opened.
5. If connected to B, the coarse adjustment knob must be completely opened.

Connect the manifold to a vacuum pump. We recommend a dedicated vacuum pump. (Preferably not a company shared vacuum system) A example of a good displacement pump is e.g. Welch, dual seal vacuum pump model 1400 or equivalent.

Principle of operation:

A displacement vacuum pump draws air at a constant rate. By bleeding against this constant rate, it is possible to establish a stable vacuum relative to atmospheric pressure. To optimize this set up, the system needs to be FREE OF LEAKS with the exception of the bleeding knob (A or B).

For the most part it is a dead end system beyond the manifold.