

Hydra-Cell Diaphragm Life

We do not guarantee the life time of the diaphragms since the frequency of replacement will depend on various factors, for example:-

- Chemical compatibility with liquid being pumped.
- Temperature of the liquid.
- The pump has been installed correctly following our 'Installation guidelines'
- Stable inlet conditions are present, with low fluid turbulence.
- There is always adequate NPSH available and no possibility of cavitation.
- Physical damage due to foreign objects getting into the pump chamber.
- Pumps with EPDM diaphragms must use EPDM compatible oil.

Hydra-Cell diaphragms are hydraulically balanced during operation and therefore are not stressed. The introduction of **Kel-Cell** technology has dramatically reduced the risk of diaphragm rupture due to adverse pumping conditions on the suction side of the pump. **Kel-Cell** is available on models G03/G10/G25/G35, others will follow later.

Considering the above factors, a guideline would be to change the diaphragms every 8,000 – 10,000 hours of operation. This is based on the diaphragm material not being chemically attacked by the pumped liquid.

If the diaphragms materials compatibility with the pumped liquid is unknown, a soak test is recommended. The soak test results should then be used to estimate an initial inspection period of the working diaphragms to establish a service interval.

(This data does NOT apply to PTFE diaphragms which require special consideration).

We have an *oil level monitor unit* available for critical applications. A change in oil level within the pump would indicate a diaphragm failure and be detected. This can be used to provide an alert signal to the operator or automatically shut down the pump.

Please contact Wanner for further information in diaphragm selection and ordering service kits.