

## Pfeiffer DUO 65 M (PK D46 035 A) Cheatsheet

### 1. Starting Pumps

- (a) Verify that P3 oil is filled to operating range.

For most accurate reading of oil level, check when the pumps are warm and the gas ballast valve is closed.

- (b) Open the gas ballast valve.
- (c) Turn on power switch.
- (d) Close the gas ballast valve when pumps are warm only if pumping on dry gas.
- (e) If pumping on condensable gases present at high percentages, the pump must be operated with an open gas ballast valve. Only pump vapors when the pump is warm and gas ballast open.

### 2. Stopping pumps

- (a) Turn off power switch.
- (b) Open the gas ballast valve
- (c) After shutting off pumps, vent the vacuum chamber within 30s or use an additional shut-off valve on the intake line to avoid contamination.
- (d) However, when pumping condensable vapors, allow the pump to continue running for about 30 minutes with the vacuum flange closed and the gas ballast open for operating fluid regeneration purposes.

### 3. Useful Info

- (a) Rotary vane pumps have an integrated safety valve on the intake side. If the differential pressure between the exhaust side and the intake side is  $> 250$  mbar, then the valve closes automatically. The safety valve is not suitable for long-term sealing.
- (b) Start cold pumps with the Gas Ballast valve open.
- (c) No special precautions are necessary when pumping dry gases.
- (d) In order to attain the lowest possible final pressures, the gas ballast valve should be closed.