

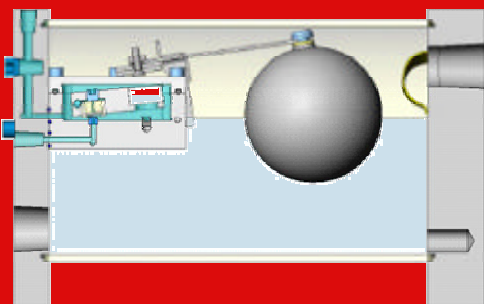
Pneumatic Condensate Traps PNLD II-28

Principles of Operations

Condensation enters through one of two ports. The seethrough vessel allows visual inspection of the condensation as it rises. A stainless steel float rises with the level of condensation and positions a magnetic force over the valve housing. When the liquid level reaches the desired level, the magnet in the valve housing snaps upward and allows air to pass through a stainless steel seat. The air then moves to a non-lubricated air cylinder causing it to extend and open the ball valve. Condensation, scale and rust particles rapidly exit the unit.

Before any air is lost, the float removes the magnetic force from the valve and the seat is covered with a Viton seal. A powerful spring returns the air cylinder to its normal position and rotates the positive closing ball valve back to its normally closed position. The pilot air used to actuate the air cylinder is isolated from the air in the drain's reservoir.

There is always a residual amount of condensate in the bottom of the reservoir from the last discharge cycle. PNLD II-28 stops discharging before all that conservaccumulated condensate is removed,



On multi stage compressor as our Centac, condensate discharge from the intercooler is very important and should be the subject of special attention. If the condensate is not drained from the intercooler, it will carry over into the next stage of compression and the stage impeller will be bombarded with droplets. This results in high degree of wear and tear, and in a reduced service life as well as rapidly declining efficiency.

Ball type drain traps and timer valve drains blow away large quantities of expensive compressed air. Timer valves are almost always set to be open for longer than necessary in order to get all the water out and this passes large quantities of compressed air down the drain. Pneumatic condensate trap avoids this waste of compressed air and the resulting pressure drop in the compression stage by maintaining a one inch water seal in the bottom of the trap's reservoir during each cycle.

PNLD II-28 condensate trap requires no electricity to operate and can be easily installed on any Centac model providing low cost installation and ongoing operations.

A unique air valve design uses a magnetic force to ensure both a positive opening and closing that will prevent any air loss. The magnetic force is cleverly positioned away from the condensation level to prevent any attraction of metal particulate. An innovative ball valve support and positioning system prevents the side-loading problem which otherwise would cause premature sealing failure around the valve stem. Rifle drilled discharge porting ensures that scale and rust will exit through a full ported 1/2" ball valve.

The PNLD II-28 will not clog - no strainer required.

In addition since this trap is totally pneumatic, it is not affected by power outages or other vulnerabilities of electrical devices such as timer or solenoid valves

Features and Benefits:

- Full automatic operations.
- Pneumatic actuator.
- Energy efficient – no air spill.
- Reliable design.
- Easily installable on all Centac models.