Condensate Auto Drain Valve

Removing condensate from compressed air systems

- Reservoir Discharge
- Easy to install
- Rugged Design
- Save Costs
- Reliable

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A FLUID CONTROL SOLUTIONS COMPANY
Condensation is the moisture that drops out of an air flow as it cools. The condensation in a compressed air system is a constant threat to cause expensive problems. The following are a few examples:

- Moisture washes lubrication from air tools and production equipment causing downtime and maintenance.
- An inconsistent supply of dry air causes production quality problems.
- Excessive rust and scale often forms in the air distribution system.
- Water can back up into the compressor and wreck the machinery.
- Air dryers can become overloaded.
- In-line filters can be destroyed.

The problems get worse if you operate lubricated reciprocating or oil flooded rotary screw compressors - which is just about everyone. Compressor oil makes its way into the distribution system with the compressed air. The mixture of oil, water, dirt and heat tends to build up a sludge that will ultimately jam or clog production equipment, air tools and drains.

The typical compressed air system is designed to remove condensation at strategic locations. This means there are auto drains at the after cooler separator, receiver tank, air dryer, in-line filters and at drain points in the piping.

**Recommended locations to install Auto-drain**
Automatic Drain Valve

**Float Magnetic Type**
- Connection: ½” BSP
- Model: ADV4548 - G

**Float Mechanical Type**
- Connection: ½” BSP
- Model: EAD416

**Solenoid Timer Type**
- Connection: ¾” BSP
- Model: 8240300AD
  - Dual Timers
    - Drain Interval (0.5 to 45 minutes)
    - Drain Timer (0.5 to 10 second)
  - Two indicator Lights for visual inspection of power on and valve actuation
  - Max Operating Pressure 16 Bar

**Angle Seat Timer Type**
- Connection: ¾” BSP
- Model: J4SPG1405AD
  - Insensitive to dirt particles in the condensate
  - Max Operating Pressure 10 Bar
  - Large flow path suitable for challenging environment

**Additional Features**
- Magnet turns anti-clockwise when water rise
- No need for electrical wiring as power supply is NOT required
- Test Button
  - Press and hold to check valve function. A purging sound will be heard.
- Inlet
- Outlet
- Condensate viewing side port
- Strainer
- Max Operating Pressure 16 Bar

**Additional Details**
- No need for electrical wiring as power supply is not required
- Large cross section outlet valve for improved reliability
- Max Operating Pressure 16 Bar
Other products for Condensate Management

**Drip Leg Drain**
- Connection: ½” BSP
- Model: 17-916-104
- To remove condensate at low points in the supply system
- Water automatically drained when pressure is on, also when shut down

**Main Line Filter**
- Connection: Up DN300
- Model: G & F Series
- Thread Size from G1/2” to G3”
- Flange Size DN80 to DN300
- Filter Grade 3µ to 0.01µ
- Oil removal to 0.001 mg/m³
- Max pressure 16 Bar (standard) and 50 Bar (high pressure type)

**3 in 1 Filter**
- Connection: 1 ½”
- Model: FLMA 96
- Stage 1 – Pre-filter
  - Filter impurities up to 5µ
  - Removal of water
- Stage 2 – Micro Filter
  - Filter oil aerosol up to 0.01 µ
- Stage 2 – Activated Carbon
  - Absorption of oil vapors

There are several guidelines to follow when installing drain valves:

- Flush out the piping system to remove dirt and other foreign particles before installing valves.
- To facilitate gravity draining, install the valve and drip legs at all low points in the system and at any point where the air line drops to go around an obstruction. However, these points should not be near a heat source, as the valve may become delayed in opening.
- Install valves to ensure that water flows through the entire line, avoiding stagnant sections and dead legs.
- Install the valve so that water flows in the proper direction and is pitched down. Flow should be discharged through an air gap.
- Include strainers just ahead of the drain valves to protect against dirt. The strainers should be cleared periodically to avoid dirt accumulation.
- The most common cause of valve malfunctioning is misapplied discharge piping. The drain valve should empty directly into waste. If discharging piping into a drain, install a valve directly above the drain.
- Follow manufacturer’s installation procedures that come with the valve. Some valves require vent lines, balance lines or both for proper operation.
- Automatic drains should be drained and checked weekly.

Note: ADV4548 – G and EAD416 – The valve needs to be thoroughly cleaned if a significant amount of water (more than 200 ml) is discharged when the manual valve is activated.