Water ERO LOSS HOG COMPRESSED AIR CONDENSATE TRAP



POWERS THROUGH CONDENSATE BUILD UP

Ideal for Compressor Applications Up to 100 hp. The WaterHog [™] Design Avoids Small Passages Ensuring Clog - Free Operation.

• FULLY AUTOMATIC OPERATION

No Timer or Manual Settings.

NO ELECTRICAL CONNECTIONS

WaterHog ${}^{\rm M}$ is Powered by Compressed Air, Avoiding the Need for Electrical Wiring and Connections.

ENERGY SAVING OPERATION

Zero Compressed Air Loss*. Check With Your Utility to See If the WaterHog[™] Qualifies for Energy Efficiency Incentives. The WaterHog[™] Pays for Itself When Replacing Open Condensate Drains Valves or Timer Traps.

LOW PROFILE

The 4.7" Vertical Operating Height Allows the WaterHog™ to Fit Where Other Larger Units Can't.

• 2 Year Warranty

| LH50-OLAAA | |
|----------------------------|-------------|
| Maximum Operating Pressure | 200 PSIG |
| Min/Max. Control Pressure | 40/130 PSIG |
| Min/Max. Temperature | 34°F/170°F |
| Inlet/Outlet Connections | 1/2" npt |
| Weight | 12 Lbs. |

How the WaterHog [™] Operates Its Simple and Efficient



Figure 1 Start of Cycle

The Polymer Float With Integral Magnet is Resting on the Base of the Reservoir. The Integral Float Magnet Exerts a Magnetic Force Repelling the Inner Magnet Upward and Holding it Seated Against an Orifice in the Lower End of the Control Air Valve Stem. The Control Air Circuit, Including the Inner Magnet and Valve Stem, is Isolated From Liquid that Flows Into the Reservoir. The Air Actuator is in the Home Position and the **Discharge Ball Valve is Closed.**

Figure 2 Start of Discharge

Liquid Continues to Flow Into the Reservoir and Raises the Float to it's Highest Position. The Integral Float Magnet is Then Raised Up Past the Inner Magnet and Repels the Inner Magnet Downward Opening the Orifice in the Control Air Valve Stem. This Allows the Control Air From the Center Tube to Flow Through to the Other Side of the Control Air Circuit to the Actuator. Control Air Pressure Extends the Air Actuator and Opens the Ball Valve Starting the Discharge of the Liquid Accumulated in the Reservoir.

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BALL VALVE **OPENS**

and liquid exits

at system

pressure

Frequently Asked Questions

Where Should a Water Hog™ be Installed?

At Liquid Accumulation Points Within a System at Compressors, Air Receiver Tanks, Intercoolers, Aftercoolers, Dryers, Separators, Filters and Drip Legs.

Is it Mandatory to Use a Balance Line?

Yes. The Balance Line Provides a Means to Handle the Displaced Air From the Reservoir as the Liquid Enters the Reservoir.

What Size Compressor Can it Handle?

The WaterHog[™] Will Function Effectively on Any Size Compressor, Compressed Air System, Up to 100hp.

Can the WaterHog[™] be Used to Drain Multiple Tanks and/or Compressor Systems?

No. They Will Not All be of Precisely the Same pressure Level and the Liquid Would Accumulate in the Lowest Pressure Drain or System Thereby Bypassing the WaterHog™. Also, the Use of Check Valves in Multiple Drains to One WaterHog™ Installation Will Not Make This Work Properly. Always Install One Water-Hog[™] for Each Item of Equipment to be Drained.

Can the Balance Line and the Control Air Line be Hooked **Together Via a Tee Connection?**

No. Do Not Do This. Each of These Air Lines Has Its Own Specific Purpose and Should Never be Tied Together. The Control Air Should be the Cleanest Driest Air Available Since it Supplies Air to the Control Circuit to Operate the Pneumatic Actuating Cylinder Which Functions Best and Lasts Longer if Clean Dry Air is Used. The Balance Line Allows the Air in the Reservoir to Move Out Leaving Room in the Reservoir for the Incoming Liquid. This Air Contains Moisture that Would be Drawn Across a Tee Fitting Tied to the Control Air Line and be Pulled Directly Into the Control Air Circuit, Which Can Damage Control Air Pathways and the Air Cylinder.





Installation Steps

1. Prior to Installing the Trap, Isolate, Depressurize and Blow Down the Vessel Being Drained to Remove Excessive Rust, Scale, and Dirt Knocked Loose During Piping Installation.

2. Remove the Trap From the Box and Set It In an Upright Position Where it Will Be Connected. To Ensure Proper Operation in All Installation Layouts, the Top of the Trap Should Be Lower Than the Bottom of the Vessel Being Drained.

3. Using 1/2" Pipe, Connect the Vessel Being Drained to the 1/2" Liquid Inlet on the Base of the Trap. Be Sure to Install a Shut-Off Valve and a Bypass Valve Between the Vessel Being Drained and the Trap. This Will Allow Easy Removal of the Trap "On the Run" During Any Preventive Maintenance Activities.

4. Using 1/2" Pipe, Connect the Trap Discharge Outlet to a Sealed Drain Pipeline or Enclosed/Covered Trough. The Discharged Liquid is Under Pressure and Can Splash Back if Directed Downward Toward the Bottom of a Simple, Shallow, Open Through-Type Floor Drain. **Please Ensure that the Ball Valve Does Not Rotate During the Discharge Pipe Installation**. The Linkage Between the Ball Valve and Air Cylinder Must Be Vertical to Prevent Binding.

5. Connect the Balance Line From the Trap to the Appropriate Connection Point on the Vessel Being Drained. The Balance Line is Used to Prevent a Vapor Lock in the Trap. It is Very Important that the Balance Line Never Droops or Slopes Upward.

6. Connect the Control Air Supply Line to the Control Air Inlet Port on the Trap. It is Recommended to Install a MCWF08-18BP 5 Micron Air Filter on the Control Air Supply Line. In Addition to the Filter, Always Use the Cleanest and Driest Air Possible to Ensure Long Term, Maintenance Free Operation.

7. Restart/Re-pressurize System and Check for Leaks at Pipe and Fitting Connections



| Specifications | | |
|-----------------------------------|-----------------------------|--|
| Max. Liquid Temp | 170°F | |
| Max. Liquid Pressure | 200 PSIG | |
| Control Air Pressure | 40 to 130 PSIG | |
| Capacity | Varies With Pressure/Piping | |
| Housing and Front Plate | Anodized Aluminum | |
| Control Circuit and Air Cylinder | Aluminum | |
| Float | Polyurethane | |
| Housing Seal and O-Rings | Fluorocarbon | |
| Fittings | Brass | |
| Ball Valve | Nickel Plated Brass | |
| Front Plate Hardware and Clevis | Zinc Plated Steel | |
| Control Lever and Shouldered Bold | Stainless Steel | |

Dimensions and Technical Data

