



The Haseloh Fuel Oil Safety Valve™

Protect your oil lines, filter and burner pump from major leaks.



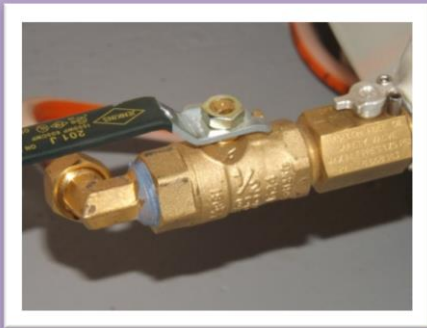
Patent CA 2772855
Patent US 8668183
Patent EP 2505889

The Haseloh Fuel Oil Safety Valve™ provides important protection in oil burner supply systems. This valve not only protects against loss of fluid from the tank outlet, but it also protects against leaks in the supply line, fittings, filter and fuel pump. This applies to both end and top supply oil tank tanks. The valve is normally closed and only opens when the fuel pump generates suction during operation. When suction is no longer present, the valve closes.

Oil Containment & Anti-Siphon Valve

The Haseloh Fuel Oil Safety Valve™ provides a dual functionality of both an oil containment valve (to contain the fuel in the tank) and as an anti-siphon valve (to prevent the oil from siphoning from the tank).

End Feed HFOSV-12 Valve (Oil Containment)



Top Feed HFOSV-12 Valve (Anti-Siphon)



HOW IT WORKS

The burner fuel pump generates a vacuum on the outlet side of the valve during operation. This vacuum opens the valve piston which allows the fuel oil to flow. When the fuel pump ceases operation, the vacuum drops off and the valve closes. Loss of vacuum during operation due to leakage in the system or a cut fuel line will cause the valve to close. The inability to generate sufficient vacuum caused by leakage in the system will prevent the valve from opening. The Haseloh Fuel Oil Safety Valve™ protects the entire fuel delivery system from the tank to the furnace. Extremely simple, the valve has only one moving part, the piston, and has no springs or diaphragms to break or split.

The Haseloh Fuel Oil Safety Valve™ is effective in preventing major fuel loss under the following conditions:

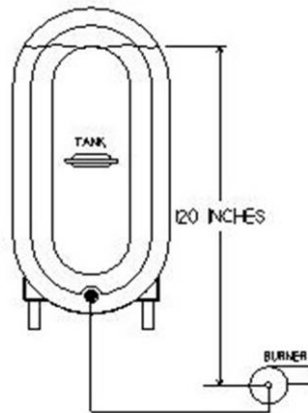
- Sheared oil line at any point from the tank outlet to the fuel pump.
- Oil pump check valve failure
- Pump seal leaks when burner is not in operation
- Fuel filter / seal failure
- Split or cracked fittings

OPERATIONAL PARAMETERS

The Haseloh Fuel Oil Safety Valve™ is designed to hold back 120" of combined head pressure. This is equivalent to 9" Hg. Up to 42" of oil in a tank (typical full tank) will exert a positive pressure against the inlet side of the valve. Up to 78" of fuel in the fuel line will exert a negative pressure (vacuum) against the outlet side of the valve.

Up to 42" of oil in the tank combined with 78" of vertical drop of the oil line will provide 120" of head pressure. Maximum head pressure in the B139 is restricted to 96" of combined head pressure. Therefore the valve provides a 24" head pressure safety allowance.

The combined positive pressure of the tank and the negative pressure exerted by the fuel line is less than the total pressure required to open the Haseloh Fuel Oil Safety Valve™ when in a non- operating state. When the burner engages, the pump develops a vacuum of more than 9" Hg, the valve then opens and fuel is supplied to the system. When the burner disengages, the vacuum drops off and the valve closes. If the vacuum is disrupted during operation (cut line, leaks, etc.) the valve will automatically close.



Haseloh Fuel Oil Safety Valve™ Specifications

Inlet pressure..... 1.75 Psi (12.065 KPa)
Temperature range.. -13F - 100F (-25C - 38C)
Fuel..... No. 2 or lighter
Maximum Flow..... 46.67 GPH (210 L/H)
Operating Vacuum Range.. 2.8 In Hg - 10 In Hg
(9.481 KPa - 33.863 KPa)

Note: A de-aerator must be used with this valve.

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HASELOH FUEL OIL SAFETY VALVE™

