



WATER DRAIN VALVE



- **Suitable for gravity discharge**
- **Responsive to 1% change in density**
- **Purely mechanical in operation**
- **Very low maintenance**
- **Multi application**

This highly sensitive valve has been developed in collaboration with a major oil company having the prime objective of detecting the slight differences in density between aviation fuel grades. It can detect a minimum density difference of 1%, if required.

It is very simple to operate with low maintenance. The hydraulic design of the valve is such that it is totally unaffected by the flow but very rapid in its response to a density change. It is supplied with a useful manual check function which enables periodic checking of the valve operation. A number of options are available including aluminium or stainless steel body.

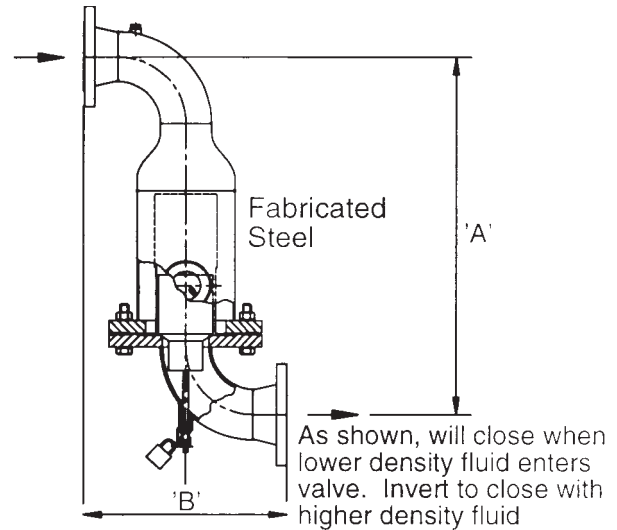
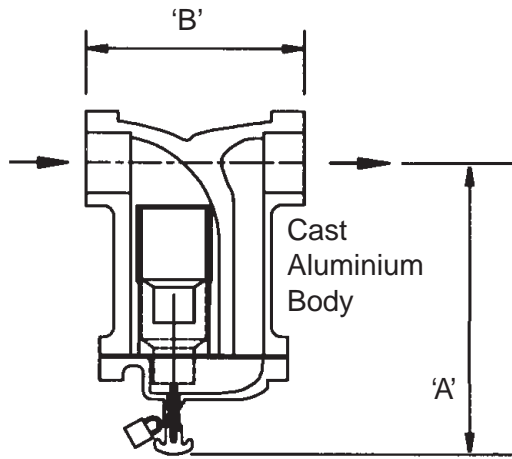
It has proved particularly effective as a water drain valve, used to detect the difference between oil and water to remove condensation or water from the bottom of storage tanks. It has been used for many years in these applications to prevent oil being discharged into the environment within fuel storage facilities.

The Cobham valve should be installed close to the tank outlet between the tank isolation valve and the control valve. When the drain discharge control valve is opened at the outer end of this drainline it will allow water to pass but will close as soon as it sees product, leaving only water in the discharge line. Any hydrocarbon liquid remaining in the valve will be displaced by water as it builds up in the base of the storage tank. The next time the tank is drained no product will be discharged.

Optional Features

The unit is supplied pre-set to discriminate between two density limits. The ballasted float is sealed for life.

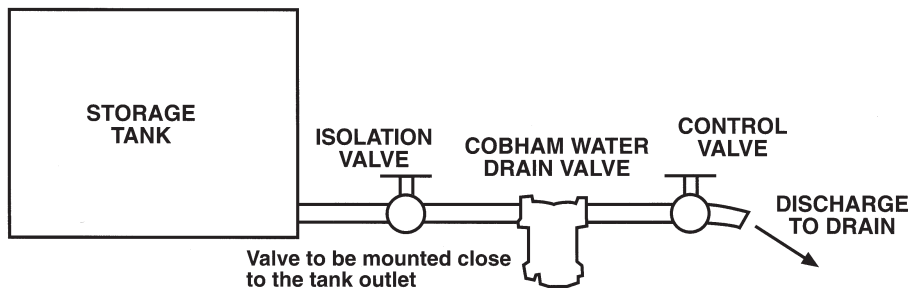
The unit can be supplied with a Borosilicate glass observation tube or plain body. Drain and bypass valves can be fitted to assist resetting if required but are not essential.



Specification

| Cast Aluminium Units | | | Fabricated Units - Carbon or Stainless Steel | | |
|--------------------------------|---------|------------------------|--|--------|--|
| Max flow rate l/min | 2 1/2" | 4" | 2" | 4" | |
| | 300 | 1200 | 300 | 1250 | |
| Max pressure with glass window | 1 bar | - | | | |
| Max pressure without window | 1.5 bar | 10 bar | 10 bar | 10 bar | |
| Inlet/outlet connections | 2.5 BSP | ANSI cl 150 FF Flanges | 2.5" | 4" | |
| Dimension A (min) | 430 | 765 | 501 | 810 | |
| Dimension B (min) | 230 | 500 | 301 | 457 | |

Suggested Installation for Water Drain Applications



Options

- The unit can be supplied with a Borosilicate glass observation window or plain body. Drain and bypass valves can be fitted to assist resetting if required but are not essential.
- Oil/water units normally supplied with 0.9 sg solid polypropylene float suitable for oil tanks with sg <0.92. For use with smaller density differences pre-set ballasted float can be supplied, sealed for life.
- Inlet/outlet flange connections can be supplied to customer specification. Fabricated steel units can be supplied with additional "S" connection on outlet to bring inlet and outlet in line.
- 4" unit is recommended for use in floating roof rainwater drains to detect sinkage and prevent pollution.



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