

Air Vents for Liquid Systems

Types AE30, AE30A, 13W, 13WS, 13WH, 13WHS

Description

Float type air vents afford maximum efficiency for immediate removal of air or gases from a liquid system. They will vent air and gases as quickly as they reach the vent body, then close before liquid can escape.

Limiting Conditions

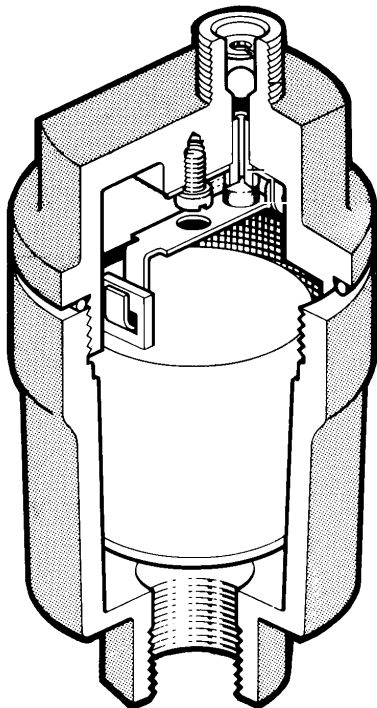
	<u>PMO</u>	<u>TMO</u>
Type AE30, AE30A	116 psi	230°F
Type 13W (13SW)	150 psi	450°F (200°C)
Type 13WH (13WHS)	300 psi	450°F (200°C)

PMO— Max. Operating Pressure

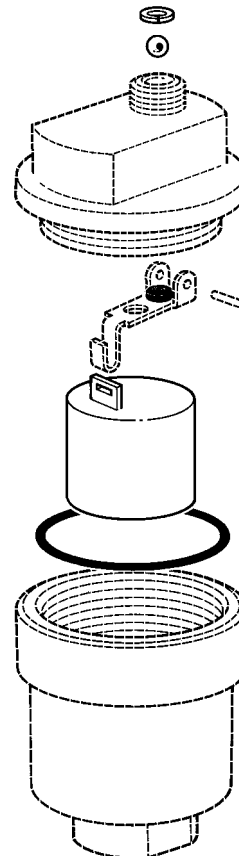
TMO—Max. Operating Temperature

Operation

The float is attached to the discharge valve by a lever assembly. When air or gases enter the body, any liquid inside the body is displaced, lowering the liquid level. The weight of the float pulls the valve head off the seat, forcing the unit to discharge the air or gas to atmosphere. Once air or gas is discharged, the liquid level instantaneously rises within the body, forcing the discharge orifice to close tightly. This operation is instantaneous and continuous with a discharge that is fully modulating. It is important to remember when applying this type of equipment to a system that it must be installed in the piping so that the air and gases will flow into it.

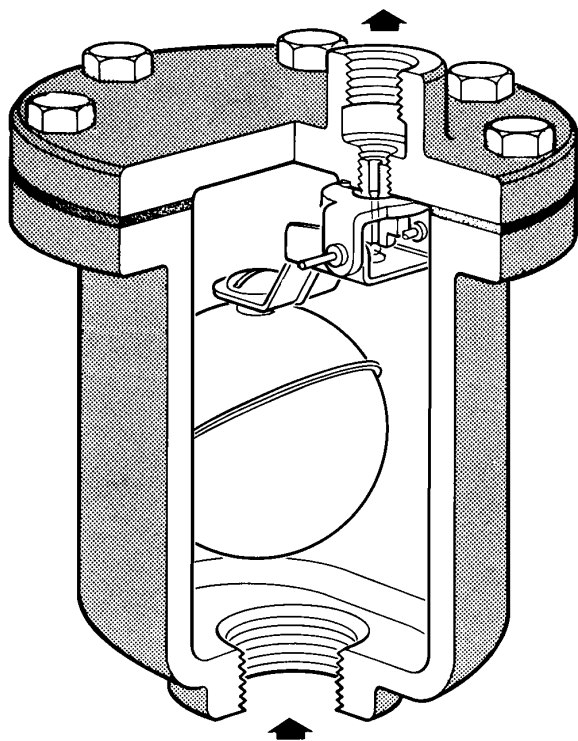


Type AE30A shown



Installation

An air vent is required at all high points of a liquid system on terminal equipment and wherever air can collect. All types of AE30, AE30A, 13W, 13WS, 13WH, and 13WHS air vents must be installed vertically above the piping with the inlet at the bottom so that the float mechanism is rising and falling in the vertical plane. The inlet piping should be the same size as the piping connection on the body. As with all air vents, dribbling may occur if the valve becomes fouled with dirt. For this reason, it is recommended that a pipe be fitted to the outlet discharge to drain or to a safe place where damage cannot occur.

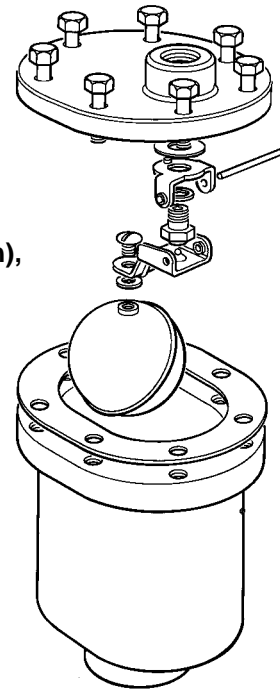


Maintenance

Maintenance can be performed with the air vent in-line so long as suitable isolation valving is provided in the system. On the AE30 and AE30A, unthreading the cover removes the mechanism assembly from the body. By removing the cover bolts on the 13W, 13WH, 13WS, and 13WHS, the cover, including the mechanism assembly, can be removed.

When reassembling all types, make sure that all flange gasket surfaces are clean. Always use a new gasket. Tighten bolts uniformly before opening isolation valve. Refer to the appropriate exploded view for the various parts which can be ordered for repair when necessary. When replacing valve mechanism parts, check by raising and lowering float several times, making sure the valve is centering properly on the seat.

13W, 13WH (shown),
13WS, 13WHS



Spirax Sarco Applications Engineering Department

Toll Free at:
1-800-833-3246

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/sarco

SPIRAX SARCO, INC. • 1150 NORTHPOINT BLVD. • BLYTHEWOOD, SC 29016
PHONE 803-714-2000 • FAX 803-714-2200