USG® U.S. Gauge **Products**

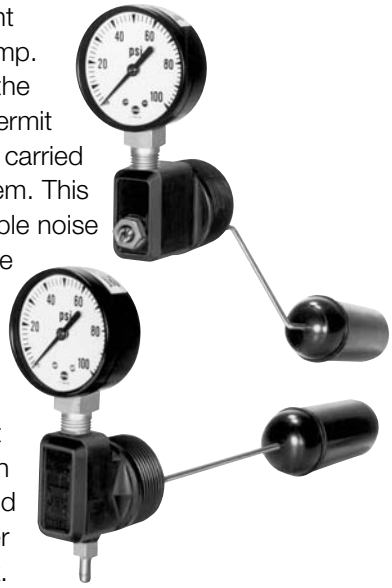
Special Application Gauges
Type 300L and 310WJ Air Volume Controls

DESCRIPTION

U.S. Gauge Air Volume Controls are designed for domestic water supply systems which deliver a quantity of air to the pressure tank with each cycle of pump operation. Insufficient air in the pressure tank causes frequent operation of the pump.

Too much air in the pressure tank will permit large bubbles to be carried into the piping system. This causes a disagreeable noise and sputtering at the faucets.

It is the function of U.S. Gauge air volume controls to maintain the correct relationship between the volume of air and the quantity of water in the pressure tank.



SPECIFICATIONS 300L

HOUSING: Die cast zinc, with 1-1/4–11-1/2 ANPT male connection for tank installation, and 1/4-18 ANPT female connection to accept a U.S. Gauge Model P-500 pressure gauge, 1/4-18 ANPT, LM connection

AIR INLET VALVE: Schrader or Dill type valve is mounted in the hose connection

FLOAT: Sturdy, plastic bulb, mounted on a solid brass rod

INTERNALS: A flexible, molded neoprene plug of unique design acts as both dividing wall and fulcrum through which float action is transmitted to the air inlet valve

SPECIFICATIONS 310WJ

HOUSING: Die cast zinc, with 1-1/4–11-1/2 ANPT male connection for tank installation, and 1/4–18 ANPT female connection to accept a U.S. Gauge Model P-500 pressure gauge, 1/4–18 ANPT, LM connection

MAIN VALVE: Brass stem with a neoprene seat, float actuated

RELIEF VALVE:
Brass, spring loaded pressure actuated
Manually adjustable between 15 and 40 psi. Stock units preset at 25 psi

FLOAT: Sturdy, plastic bulb, mounted on a solid brass rod

SHALLOW WELL OPERATION - Type 300L

When the water level is high, the float, secured to a float rod extending through a flexible dividing wall, opens an air inlet valve in the body of the control. The air inlet valve is connected through 48” long polyethylene tubing to a snifter valve on the pump and has no direct connection into the tank. The snifter valve admits air into the pump but prevents the water in the pump from escaping back through it. Air is drawn into the pump through the air inlet valve, connecting tubing and snifter valve and carried out with the water into the tank. This operation continues until the volume of air increases to the proper amount, at which time the float closes the air inlet valve, shutting off the supply of air to the pump. The optimum relationship between the volume of air and water in the tank is thus maintained.

DEEP WELL OPERATION - Type 310WJ

When there is an excess of air and the water level is low, the float opens the main valve of the control, permitting air to be vented to a chamber within the control. This chamber contains an adjustable pressure relief valve which exhausts the excess air to the atmosphere, providing the pressure in the tank is higher than the relief valve setting. As the float rises with the increase in water level the main valve closes, trapping the remaining volume of air in the tank. The optimum relationship between the volume of air and water in the tank is thus maintained.

SPEC NUMBER SELECTION CHART

Model Number	Spec No.
Type 300	148542
Type 310	148540
Type 310 spares - valve assembly	085043
Type 310 spares - valve seats	085392

AMETEK®

ISO 9001:2000 CERTIFIED

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