

## **AIR/SUCTION CHAMBERS TECHNICAL SPECIFICATIONS**

When using a piston pump to force water through a discharge line 200 feet or longer, it is essential to fit an air chamber as close as possible to the pump or discharge tee so that an even flow of water with less friction will result. Less friction means less wear and tear on the pump and associated motor. The air chamber helps prevent shock loads.

A check valve must always be fitted on the discharge side of the air chamber to prevent the water in the pipe running back when the plug in the air chamber is opened for draining. A check valve should also be fitted on the inlet side of the air chamber in order to relieve the pump valves of the pressure in the air chamber.

Suction chambers are fitted to maintain a reservoir of water in the pump when stopped and ensures a positive pumping action when restarted. It also evens out the flow of water on the suction side, preventing water hammer.

A water by-pass is fitted to the larger pumps (5 & 6 inch pumps) which enables the engine to be relieved of most of the load when starting. The by-pass should be opened before the unit is started up, which allows some of the water to be by-passed from the discharge back into the suction. The by-pass is closed when the engine has attained the correct speed.

