

ABSTRACT

WATER LEVEL REGULATING VALVE

A primary pressure chamber (7) and a secondary pressure chamber (8) leading to an inlet (5) disposed at the lower part of a main body and an outlet (6) disposed at a side part of the main body, respectively, are formed by dividing an interior of the main body, and the chambers (7, 8) are linked to each other through a valve port (10) upwardly formed coaxially with the inlet (5). A valve disc (11) disposed to open and close the valve port (10) is urged in a valve-closing direction by a spring (12). A diaphragm (13) coupled to the valve disc (11) divides a diaphragm chamber (15) disposed on a back side of the diaphragm (13) in the interior of the main body (1) from the primary pressure chamber (7). An effective pressure-receiving area of the diaphragm (13) on a side of the diaphragm chamber (15) is set greater than that of the diaphragm on a side of the primary pressure chamber (7). The chambers (7, 15) are linked to each other through a bypass flow path (22). The diaphragm chamber (15) is linked to a primary side of a ball tap (S). Accordingly, in a feedwater-stopped state, both the pressure-receiving surfaces of the diaphragm (13) are supported by the same pressure, and a load applied onto the diaphragm (13) can be reduced, and the possibility that the diaphragm (13) will be broken can be reduced.

This Sheet Has Been Replaced