

[TITLE OF DOCUMENT] ABSTRACT

[TITLE OF THE INVENTION] PROPORTIONAL PRESSURE REDUCING VALVE FOR WATERWORKS

[Object] Provided is a proportional pressure reducing valve for waterworks structured so as to prevent water leakage to the exterior of a valve box even if water leakage occurs into an airtight chamber by some chance.

[Solution] A cylindrical valve box 2 having an inlet 4 opened in a front end surface thereof and an outlet 5 set to be larger in diameter than the inlet and opened in a rear end surface thereof is provided, a reduced diameter portion 8 in an annular projection shape is formed so as to bulge out on an inner wall between the inlet 4 and the outlet 5 of the valve box 2, through the reduced diameter portion 8, a piston 3 provided at its distal end with a valve portion 10 that opens and closes the inlet 4 and provided with a hollow portion 11 opening at a base end side thereof to the outlet 5 and having a plurality of water-flow ports 12 in communication with the hollow portion 11 opened in a distal end-side peripheral surface thereof located at all times further to the front than the reduced diameter portion 8 is inserted in an airtight state and freely slidably, a flange 15 that slides in an airtight state an inner wall of the valve box 2 that is further to the rear than the reduced diameter portion 8 is provided around the base end of the piston 3, and an airtight chamber 17 provided between the flange 15 and the reduced diameter portion 8 is in communication with a hollow chamber 18 defined by airtightly blocking a recess portion for which the periphery of an outer wall of the valve box 2 is formed to cave in by a cylindrical cover 19 externally fitted to the valve box 2.

[Selected Drawing] Fig. 1