

Drinking and domestic water system and shut-off valve for the same

Abstract

The present invention relates to a drinking and domestic water system with a transfer point (22) from the public water supply network, a line (2, 4) from which at least one ring main (10; 38, 40) provided with at least one consumer (12) branches off, wherein the ring main (10) branches off from the line (2, 4) via an outlet opening (14) and is led back into the line (2, 4) via an inlet opening (16), wherein the line (2, 4) and the ring main (10) are led in parallel and a flow resistance element (36) is arranged in the line (2, 4) between the outlet opening (14) and the inlet opening (16), or wherein the ring main (38, 40) is led back into a circulation line (6) via the inlet opening (16). The present invention aims to provide such drinking and domestic water system, which is intended to simplify the shutting off of the ring main for functional tests, cleaning measures or maintenance purposes. For this to achieve, the outlet opening (14) and the inlet opening (16) and the ring main (10) are connected to a shut-off valve (18, 20) which has an actuator (44) and is arranged between the outlet opening (14) or the inlet opening (16) and the ring main (10) provided with the at least one consumer (12). The shut-off valve of the present invention comprises a housing (42) having a first line-side connection (58) communicating with the outlet opening (14), a second line-side connection (60) communicating with the inlet opening (16), a first ring main-side connection (62) and a second ring main-side connection (64), and an actuator (44) arranged and formed in the housing (42) such that depending on the position of the actuator (44), a first and a second flow path (70, 76) between the ring main-side connections (58, 62; 60, 64) or bypass paths (76; 78) are formed in the housing (42), which connect two connections (58, 60; 62, 64) while other connections (62, 64; 58, 60) are shut off, or render one of the flow path (70, 76) continuous while the other flow path (76, 76) is shut off.

(Fig. 4)