

Title (en)
BACK FLOW PREVENTER, ESPECIALLY FOR WATER SUPPLY CONDUITS

Publication
EP 0088861 B1 19861001 (DE)

Application
EP 83100098 A 19830107

Priority
DE 8207222 U 19820315

Abstract (en)
[origin: US4518006A] A backflow-preventing valve for connection between a high-pressure input line and a lower-pressure output line has a valve housing forming upstream and downstream chambers and having an inlet opening into the upstream chamber remote from the downstream chamber, a vent opening into the upstream chamber offset from the inlet, and an outlet opening into the downstream chamber. A check valve in the downstream chamber allows flow only from the upstream chamber into the downstream chamber. A tubular piston sealingly engaged across the upstream chamber upstream of the vent, formed with a throughgoing bore, and having a downstream end engageable with the check valve is movable between an upstream position with its downstream end in the upstream chamber spaced from the check valve and a downstream position with its downstream end engaged sealingly with the check valve. Fluid flow through the bore from the inlet to the vent is only possible in and between the upstream position and an intermediate position of the piston. A spring urges the piston into the upstream position. A valve body fixed in the housing and sealingly engageable in the piston bore in and between the intermediate and upstream positions of the piston subdivides the upstream chamber into an upstream compartment into which the inlet opens and a downstream compartment into which the outlet and downstream chamber open. This valve body is spaced from the piston and permits free fluid exchange between the compartments between the downstream and intermediate positions of the piston and is formed with a small-diameter bleed passage opening at one side in the upstream compartment and at the other side in the downstream compartment.

IPC 1-7
E03C 1/10

IPC 8 full level
E03C 1/10 (2006.01)

CPC (source: EP US)
E03C 1/104 (2013.01 - EP US); **E03C 1/108** (2013.01 - EP US); **Y10T 137/2557** (2015.04 - EP US); **Y10T 137/3331** (2015.04 - EP US)

Cited by
EP0183909A3; EP1793176A3; AU2006222658B2; US7575016B2; EP1793176A2

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