

Title (en)
FROST-RESISTANT HYDRANT

Title (de)
FROSTBESTÄNDIGER HYDRANT

Title (fr)
PRISE D'EAU RESISTANT AU GEL

Publication
EP 0819199 A1 19980121 (EN)

Application
EP 97905829 A 19970206

Priority
• US 9701961 W 19970206
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Abstract (en)
[origin: WO9729248A1] A hydrant (10) has a conduit (12) that communicates with a fluid source at one end thereof and atmosphere at another end thereof. A valve cartridge (100) is positioned in the conduit (12) and includes a cartridge body (104) having a back-flow port (108) and a valve (42) mounted in the cartridge body (104). The valve (42) is movable between an open position allowing fluid flow through the valve (42) to atmosphere in a first direction and a closed position blocking fluid flow. An actuator stem (102) is connected with the valve (42) and extends away from the cartridge body (104) for manipulating the valve (42) between the open and closed positions. The actuator stem has a vacuum breaker port (122) that is axially spaced from the back-flow port (108). A check valve (124) is located in a fluid passage between the vacuum breaker port (122) and the back-flow port (108) for blocking the fluid from flowing through the valve cartridge (100) in a direction opposite to the first direction while permitting fluid flow to atmosphere. The check valve includes a seal member (126) for sealing the back-flow port (108) and a cooperating plunger member (128) for sealing the vacuum breaker port (122). The plunger member (128) is reciprocal with respect to the seal member (126). The plunger member (128) and the seal member (126) simultaneously seal the vacuum breaker port (122) and the back-flow port (108) when the plunger member is extended with respect to the seal member.

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