

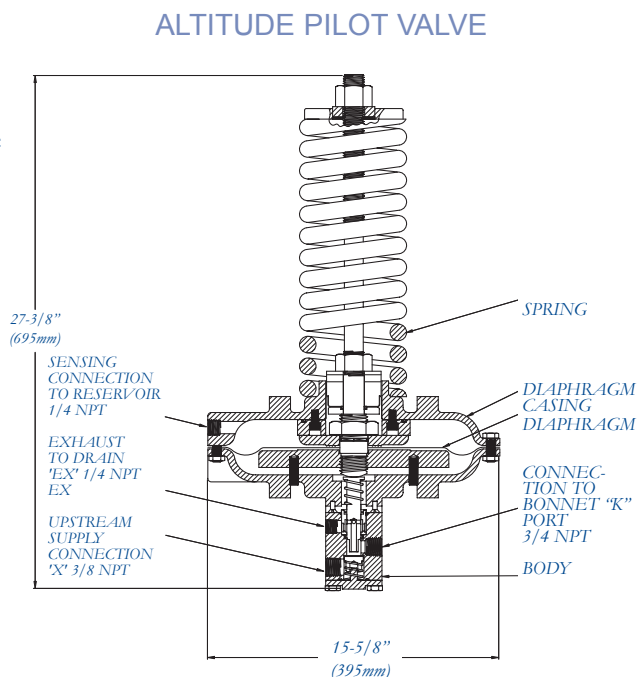
Altitude Pilot Valve

An altitude pilot valve is spring and diaphragm operated, which control the water level in a reservoir by sensing the hydrostatic head. When the hydrostatic head equals the spring force, the pilot connects port “X” (connection to main valve inlet) to port “K” (connection to main valve bonnet). The main valve closes. When the hydrostatic pressure decreases slightly, the port “X to K” connection is closed by the inner valve. When the hydrostatic pressure is reduced even further, the pilot connects port “K” (main valve bonnet) to “EX” (exhaust to atmosphere). Then the main valve opens.

The model 301-4 is used as the standard pilot on all 106 and 206 series altitude valves.

Standard Materials:

Diaphragm Casings:	Ductile Iron	Diaphragms:	Buna
Clamp Plates:	Brass/Aluminum		
Body:	SST	Seal Cage:	Brass
Bottom Cap:	SST	Washer:	Brass
Guide Bar:	Brass	Spring Step:	SST
Seal Ring:	Brass	Spring:	Steel
Nuts:	SST	Bonnet Piston:	SST
Stem:	SST	Inner Valve:	SST & EPDM
Piston Spring:	SST	Seals:	Buna
Inner Valve Spring:	SST	Hardware	SST



When Ordering Please Specify

1. Catalog Model #.
 2. Pilot Range
- May be included as standard with some products.*

Specifications:

The pilot shall be Singer model 301-4 with the spring range specified.

- The pilot shall consist of a ductile iron housing and shall have a protective fusion bonded coating, which conforms to the ANSI/AWWA C116/A21.16 (current version) specification.
- The 3-way valve body, seat and stem shall be of stainless steel construction.
- The inner valve shall have EPDM resilient compound for seating. The EPDM compound must be permanently bonded to the inner valve and be ground flat and square to assure maximum performance.
- The pilot shall utilize a rolling diaphragm stem seal to eliminate friction when the pilot actuates.
- The 3-way valve body shall be serviceable without removing the pilot from the valve. The inner valve shall be replaceable through the bottom of the pilot so that pilot tubing need not be disconnected during service.
- Maximum Working Temperature: 180 degree F (82 degree C)
- Maximum Working Pressure: 400 psi (27.6 bar)
- Spring Ranges:

Model	Spring Range/ Elevation	Approximate Fixed Differential/ Delayed Opening	APPROX. FEET PER TURN
301-4	4 to 20 ft (1 to 6m)	1 ft (0.3m)	1 ft (0.3m) per turn
301-4	10 to 60 ft (3 to 18m)	2 ft (0.6m)	2 ft (0.6m) per turn
301-4	40 to 125 ft (12 to 38m)	3 ft (0.9m)	3 ft (0.9m) per turn
301-4	60 to 225 ft (18 to 69m)	4 ft (1.2m)	6 ft (1.8m) per turn

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