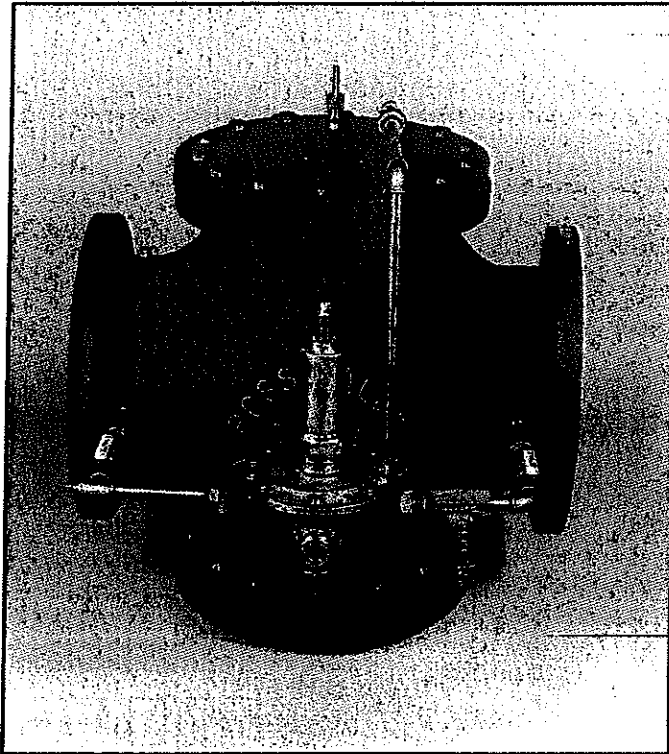


# SINGLE ACTING ALTITUDE VALVE

## INSTRUCTIONS

Installation - Operation - Inspection - Maintenance



**4" - 16" ROSS MODEL - 30AWR FIGURE 29  
SINGLE ACTING ALTITUDE VALVE**

**GLOBE FLAT SEAT STYLE**

Serial # L09437

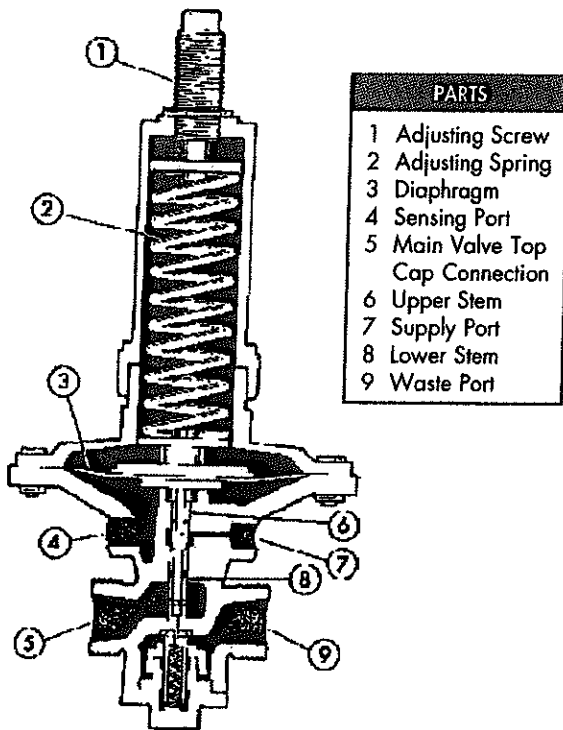
**ROSS VALVE Mfg. Co., Inc.**

PO BOX 595, TROY, NY 12181 - PHONE 518/274-0961 - FAX 518/274-0210

# SINGLE ACTING ALTITUDE VALVE

Pilot Valves

Model Number: 30AWR



## PARTS

- 1 Adjusting Screw
- 2 Adjusting Spring
- 3 Diaphragm
- 4 Sensing Port
- 5 Main Valve Top  
Cap Connection
- 6 Upper Stem
- 7 Supply Port
- 8 Lower Stem
- 9 Waste Port

## Pilot: External Sensing Port

**Primarily Controlled By:** Hydraulic pressure

**Located:** On external piping which is connected to the inlet side, the outlet side and the operating chamber

**Purpose:** To prevent high storage from exceeding a preset maximum level

## Operation

1. When the pressure in storage reaches its high water level, the
  - a. Storage pressure backs up into the pilot valve, pushing the diaphragm up.
  - b. Pilot seat between upper and lower stems opens letting water flow from the supply side into the operating chamber.
  - c. Main valve closes.
2. When the pressure in storage reaches its low water level, the
  - a. Top spring loading pushes the pilot diaphragm down.
  - b. Seat that controls the supply flow closes.
  - c. Another seat that leads to waste opens and water flows out of the operating chamber.
  - d. Main valve opens.

# STRAINERS

**Purpose:** Protect external piping and control devices

**Model Number:** 5F-2

**Sizes:** 1/2" - 1"

**Located:** On any external piping

**Purpose:** To protect external piping and control devices from fouling or damage from foreign particles

**Screen:** Cylindrical Dutch weave stainless steel wire mesh

**Piping Connection:** Standard pipe thread

## Option

Installed in parallel with the appropriate isolation valves to permit uninterrupted service while cleaning debris

## Caution

1. Strainer should be "blown down" frequently to remove collected foreign material from the sediment chamber.
2. Strainer screens should be removed occasionally for inspection and thorough cleaning.

## Note

1. To clean without shutting down the line, open the flush cock in the bottom cap for several seconds.
2. To remove the screen, which requires shutting down the line, unscrew the bottom cap assembly.

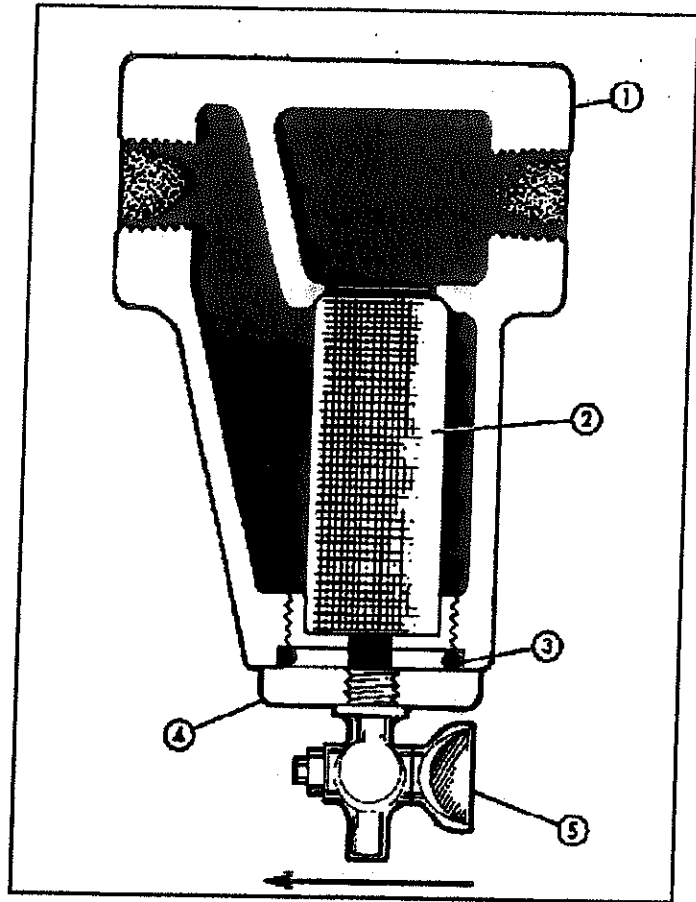
## ROSS ADVANTAGE

Based on the configuration of the wire mesh screens, these strainers filter out particularly fine specks of debris.

## Basic Application

Protect external piping and control devices, or any related size devices, from unwanted particles and debris.

**Factory:** Telephone (518) 274-0961  
Fax (518) 274-0210



### PARTS

- |                             |                          |
|-----------------------------|--------------------------|
| 1. Body - Bronze            | 4. Cap - Brass           |
| 2. Screen - Stainless Steel | 5. Flushing Cock - Brass |
| 3. Cap Gasket - Rubber      |                          |

## Operation

1. Water enters the cylindrical screen from the top and passes out through the sides of the cylinder.
2. Any particle too large to pass through .012 inch openings gets trapped in the cylinder, where, unless there is unusual turbulence, they settle at the bottom.

## Approximate Shipping Weights (lbs.)

Size	1/2"	3/4"	1"
	3	3	4

# DIMENSIONS

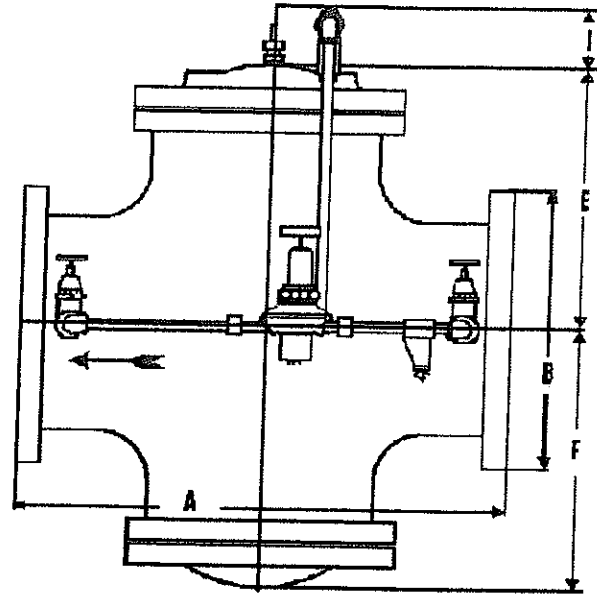
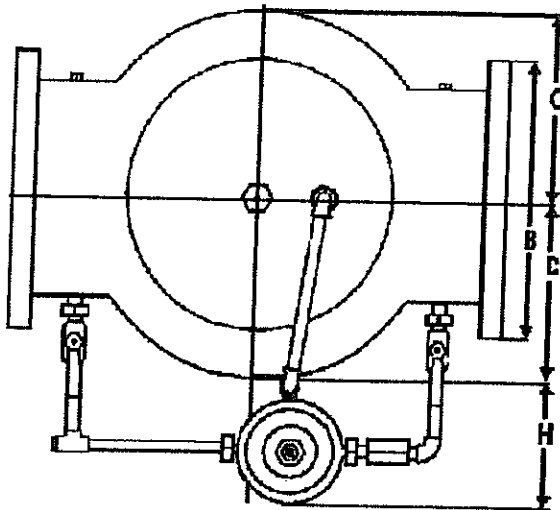
## Standard External Controls

Piston Valve Sizes: 4" - 36"

### For Model Numbers

**30AWR** - Single Acting Altitude - Nonthrottling

**40DAWR** - Double Acting Altitude - Nonthrottling



Size (Inches)	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
<b>125 ANSI</b>												
A	14	17 <sup>3</sup> / <sub>4</sub>	24	24 <sup>7</sup> / <sub>8</sub>	30	34 <sup>1</sup> / <sub>4</sub>	37 <sup>7</sup> / <sub>8</sub>	41 <sup>7</sup> / <sub>8</sub>	42 <sup>3</sup> / <sub>8</sub>	47	63 <sup>3</sup> / <sub>4</sub>	65
B	9	11	13 1/2	16	19	21	23 1/2	25	27 1/2	32	38 <sup>3</sup> / <sub>4</sub>	46
C&D	4 <sup>3</sup> / <sub>4</sub>	6 <sup>5</sup> / <sub>8</sub>	8 <sup>3</sup> / <sub>4</sub>	10	12	14	15	18	18	24	26 1/4	26 1/4
E&F	7	9	12 1/2	14 1/4	15 1/2	18	21 1/2	24	24	25	34	34
H	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16
I	12	12	12	12	12	12	12	12	12	12	12	12
<b>250 ANSI</b>												
A	14 <sup>5</sup> / <sub>8</sub>	17 <sup>3</sup> / <sub>4</sub>	24 <sup>13</sup> / <sub>16</sub>	26 1/4	31 1/2	35 <sup>3</sup> / <sub>4</sub>	39 1/4	41 <sup>7</sup> / <sub>8</sub>	42 <sup>3</sup> / <sub>8</sub>	47	65 1/16	65
B	10	12 1/2	15	17 1/2	20 1/2	23	25 1/2	28	30 1/2	36	43	50
C&D	4 <sup>3</sup> / <sub>4</sub>	6 <sup>5</sup> / <sub>8</sub>	8 <sup>3</sup> / <sub>4</sub>	10	12	14	15	18	18	24	26 1/4	26 1/4
E&F	7	9	12 1/2	14 1/4	15 1/2	18	21 1/2	24	24	25	34	34
H	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16	11-16
I	12	12	12	12	12	12	12	12	12	12	12	12

### Note

1. Dimension "I" includes maximum stem travel.
2. Dimensions "A" - "F" are on page EN-8.