

PATENT NO. 4,267,861

# A()V

### **DESIGN FEATURES**

The R-K AOV series air valve features a compact thermoplastic valve available in six models to handle a multitude of piping system functions.

This patented valve is designed so there is no metal contact with the fluid, and can be operated in any position

Air actuated at 40 to 80 PSI.

Direct acting full flow with top entry for easy maintenance and minimum water hammer.

Suitable for most harsh chemicals, pollution control, wet processing stations, plating equipment, chemical processing and water treatment applications.

# AIR OPERATED VALVE

### **SPECIFICATIONS**

Operating Pressure Range Vacuum to 150 PSIG

Material Valve Body PVC Type 1, Grade 1

Polypropylene

**PVDF** Teflon

Seal **EPDM** 

> VITON **KALREZ**

Temperature Range 0 F to 140 F for PVC

0 F to 180 F for POLYPRO

0 F to 280 F for PVDF 0 F to 340 F for TEFLON

1/4" to 1" Valve FNPT Valve ports

> 1.5" to 2" Valve MPT All valves are fully ported

Valve Types:

Type 1: Normally Closed

Type 2: Normally Open

Type 3: Air to open - Air to close (No spring action)

Type 4: Bottom flow control (has an adjusting screw located on bottom to limit the flow, apply air to open to pre-set flow rate; air off, valve returns to normally close position)

Type 5: Top flow control (an adjusting screw located on top to permit a constant pre-set flow, apply air to full flow, air off to return to pre-set flow)

Type 6: Top and Bottom flow control (combination of Type 4 and Type 5)

Mounting Method

(4) 1/4" -20 tapped holes for standard machined valve body.

(1/4" to 1.00")

(2) cut-out slots on molded valve body (1/2" to 1.00")

### ORDER INFORMATION

The chart below will specify R - K standard valves regarding valve size, valve material, and seal material. For special orders, please consult the factory for pricing and delivery information.

### AOV - X X X - X X - X

### VALVE SIZE -

25 = 1/4" 50 = 1/2"

75 = 3/4" 100 = 1.0"

150 = 1.5" 200 = 2.0" MATERIAL -

1 = PVC

2 = POLYPRO

3 = PVDF4 = TEFLON

5 = OTHER (Please specify)

### X = MOLDED BODY

## **SEALS**

E = EPDM

V = VITONK = KALREZ

O = OTHER (Please specify)

### VALVE TYPE

1 = NORMALLY CLOSED

2 = NORMALLY OPEN

(1/2"-3/4"-1" ONLY) 3 = AIR TO OPEN/CLOSE

4 = BOTTOM FLOW CONTROL

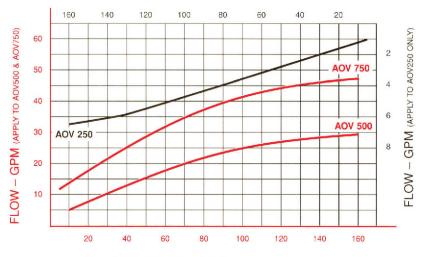
5 = TOP FLOW CONTROL

6 = TOP AND BOTTOM FLOW CONTROL

1120 E. LOCUST STREET

# **ENGINEERING & PERFORMANCE DATA**

INLET PRESSURE - PSIG (APPLY TO AOV250 ONLY)



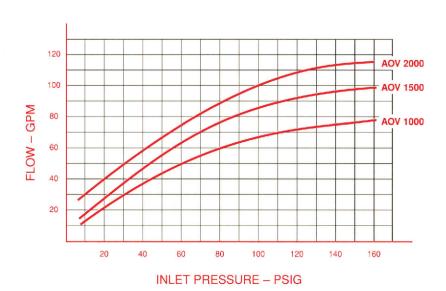
INLET PRESSURE - PSIG (APPLY TO AOV500 & AOV750)

### **NOTES**

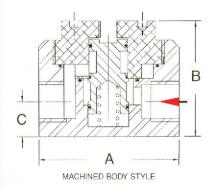
TEST DATA WAS PERFORMED WITH 68 DEGREE F WATER, AND 160 PSIG MAXIMUM PRESSURE.

THESE PERFORMANCE CURVES WILL BE CHANGED WITH HIGHER VISCOSITY LIQUID AND/OR HIGHER TEMPERATURE.

CONSULT YOUR LOCAL SALES REP OR THE MANUFACTURER DIRECTLY FOR CUSTOM PRODUCTS OR SPECIAL APPLICATIONS.



### **DIMENSIONAL DATA**

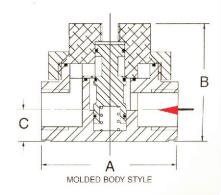


DIMENSIONS IN INCHES (

( ) MOLDED BODY DIM

Valve size	Ports	А	В	С	Cv
1/4"	FNPT	2.00	1.80	.5	.58
1/2"	FNPT	3 (2.9)	2.5 (2.4)	.7 (.7)	2.42
3/4"	FNPT	3.5 (3.3)	3 (2.8)	.9 (.7)	3.28
1.0"	FNPT	4 (3.9)	3.5 (3.3)	1.1 (.9)	4.32
1.5"	MPT	5.0	4.7	1.5	16.1*
2.0"	MPT	6.0	5.5	1.7	21.7*

(\*) Cv value @ 150 GPM



R-K INDUSTRIES

