

MISCELLANEOUS INFORMATION

SIZE AND CAPACITY

1) POWER FACTORS:

Developed Force in Pounds Equals Power Factor times Air Pressure (P.S.I)

Bore Sizes	Power Factor	Bore Sizes	Power Factor
1/2"	.20	2"	3
3/4"	.44	2-1/2"	5
7/8"	.60	3"	7
1-1/8"	1	4"	12.5
1-1/2"	1.75	5"	20

2) WEIGHTS:

Cyl-Check:

5 lbs. plus 1/2 lb. per inch of stroke.

APPROXIMATE WEIGHT IN POUNDS

Valves:

2 & 3-way: 3/4 lb.

1/4" - 1/2" 4-way: 3-1/4 lbs.

Cylinder Bore Sizes	CYLINDER TYPES				Add Per Inch of Stroke
	A	AV	E	EV	
7/8"	1	—	1-1/4	—	1/4
1-1/8"	1-1/4	4	1-1/2	4-1/4	1/4
1-1/2"	2	4-1/2	2-1/4	4-3/4	1/4
2"	2-1/2	5	3	5-1/4	1/2
2-1/2"	4	6	4-1/2	6-1/2	1/2
3"	5	7	5-1/2	7-1/2	1/2
4"	13	17	14	18	1

3) LUBRICATION:

All Allenair Cylinders are pre-lubricated, at time of assembly, with a specially formulated long lasting lubricant. Any additional lubrication should be used sparingly so as not to over-lubricate the Cylinder and wash out the pre-lubrication. A petroleum based lubricant of 100 to 200 SSU viscosity at 100°F (37.78°C) and an aniline point of 200°F (93.33°C) or greater can be used as a lubricant. DO NOT USE LUBRICANTS CONTAINING ADHESIVES, SOLVENTS, DETERGENTS, GRAPHITE, PHOSPHATE ESTERS, FIRE RETARDANTS OR SYNTHETIC OILS.

For Rotary Index Table weights see page 99 under Standard Specifications.

4) SEALS:

Standard seals used in Allenair equipment are Nitrile (BUNA-N) Compound. Buna-N has an operating temperature range of - 40°F to +250°F maximum. A fluorocarbon compound (Viton) having an operating temperature range of +10°F to +350°F is available. Special seal compounds are also available.

5) STROKE TOLERANCE:

Normal stroke tolerance is $\pm 1/32"$. On Back-to-Back, 3-Position, and Tandem Types, total stroke tolerance is $\pm 1/16"$. Closer tolerances are available at additional cost.

6) WATER SERVICE: The materials used in Allenair Cylinders are corrosion resistant. (Brass Tubes, Stainless Steel Rods, Aluminum Head and Piston.) Under the severe demands of water service, however, we recommend Double Rod Packing and hardcoating the aluminum parts. These options are available at additional cost.

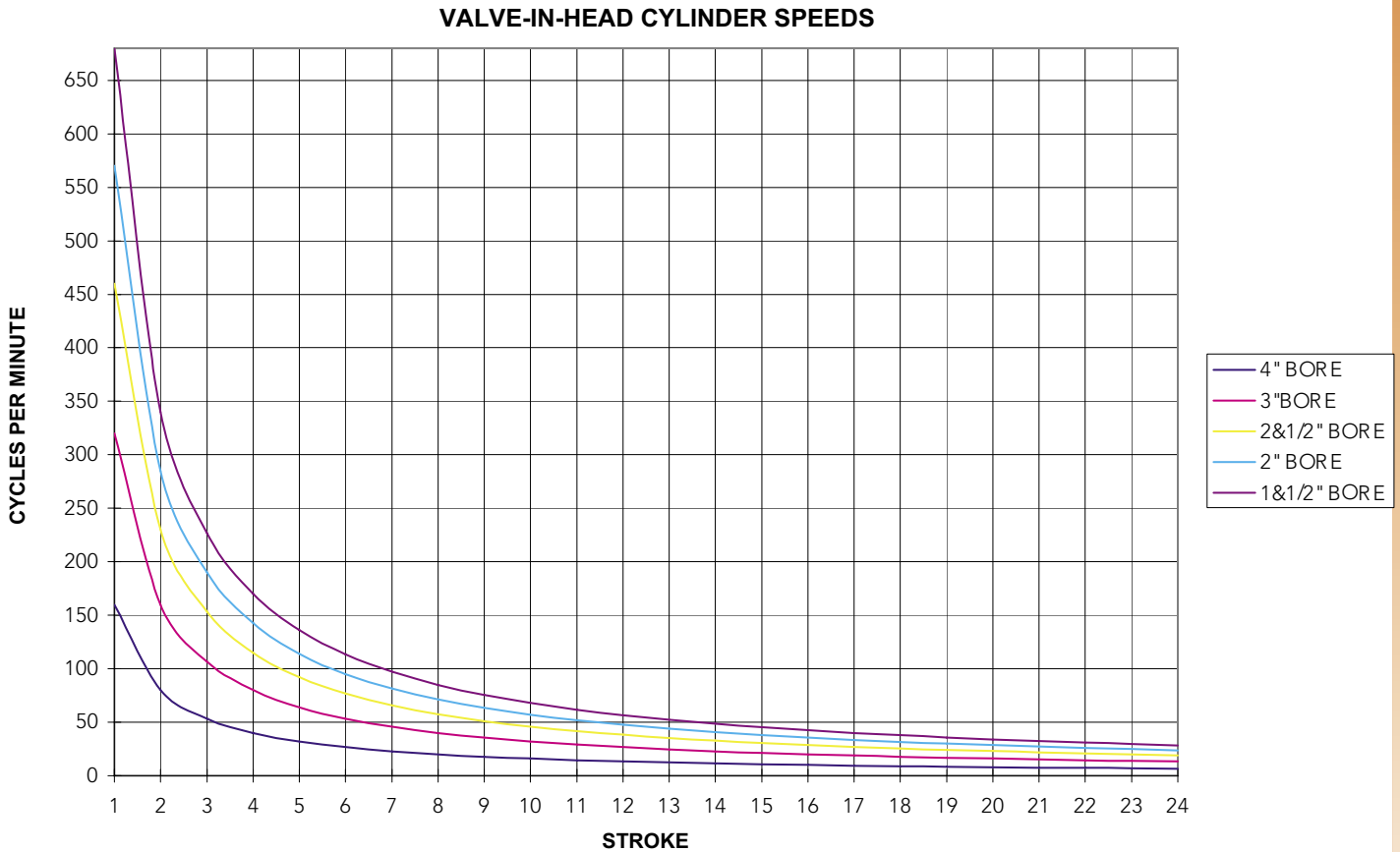
7) INTERNAL PORTING OF VALVES:

Valve Size	
1/8"	equivalent of 3/32" diameter hole
1/4"	equivalent of 9/32" diameter hole
3/8"	equivalent of 9/32" diameter hole
1/2"	equivalent of 13/32" diameter hole

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8) VALVE-IN-HEAD CYLINDER SPEEDS

These figures are based on a no load Condition operating at 100 P.S.I using an Allenair Cylinder Model VCR.



9) COILS

(a) Solenoid operated units require a minimum electrical contact of 25 milliseconds.

(b) Our Solenoid Valves will build up to 80% of line pressure at the Cylinder ports within .037 seconds from the time of electrical contact.

AA	12/60	24/60	120/60	240/60
Watts	7	7	7	7
Holding	1.3 Amps	.7 Amps	.145 Amps	.084 Amps
In-rush	2.6 Amps	1.4 Amps	.29 Amps	.168 Amps

THE ABOVE FIGURES ARE AVERAGE

PK	12/60	120/60	240/60
Watts	10	10	10
Holding	20 V.A.	20 V.A.	20 V.A.
In-rush	40 V.A.	40 V.A.	40 V.A.