

**CHAMPION**

7.5-40 HP | RECIPROCATING BARE PUMPS

# A-Series





## Rugged **Durability** Premium Performance

### **A Winning Combination**

Champion compressors are proven units, known for their reliability over decades of use. We know our products and understand how they operate in many different operating environments. No matter the application, Champion gets the job done.

# Accessibility & Reliability

Champion A-Series reputation is built on quality, reliability and accessibility to all components. With a broad range of models, A-Series compressors are designed to provide optimum performance in a wide variety of operations. Regardless of the application, Champion gets the job done.





# Meet the A-Series



The Champion APL and APO are single-stage, two-cylinder, pressure-lubricated compressors equipped with a two-groove, 17 inch sheave for belt-driven applications. The APL and APO have an integrated cooling fan built into the cast iron sheave for maximum cooling.



The Champion ATLE6-CH is a single-stage, two-cylinder, pressure-lubricated compressor that is equipped with an SAE#3 bell housing flange for direct engine mounting and remote site operation.

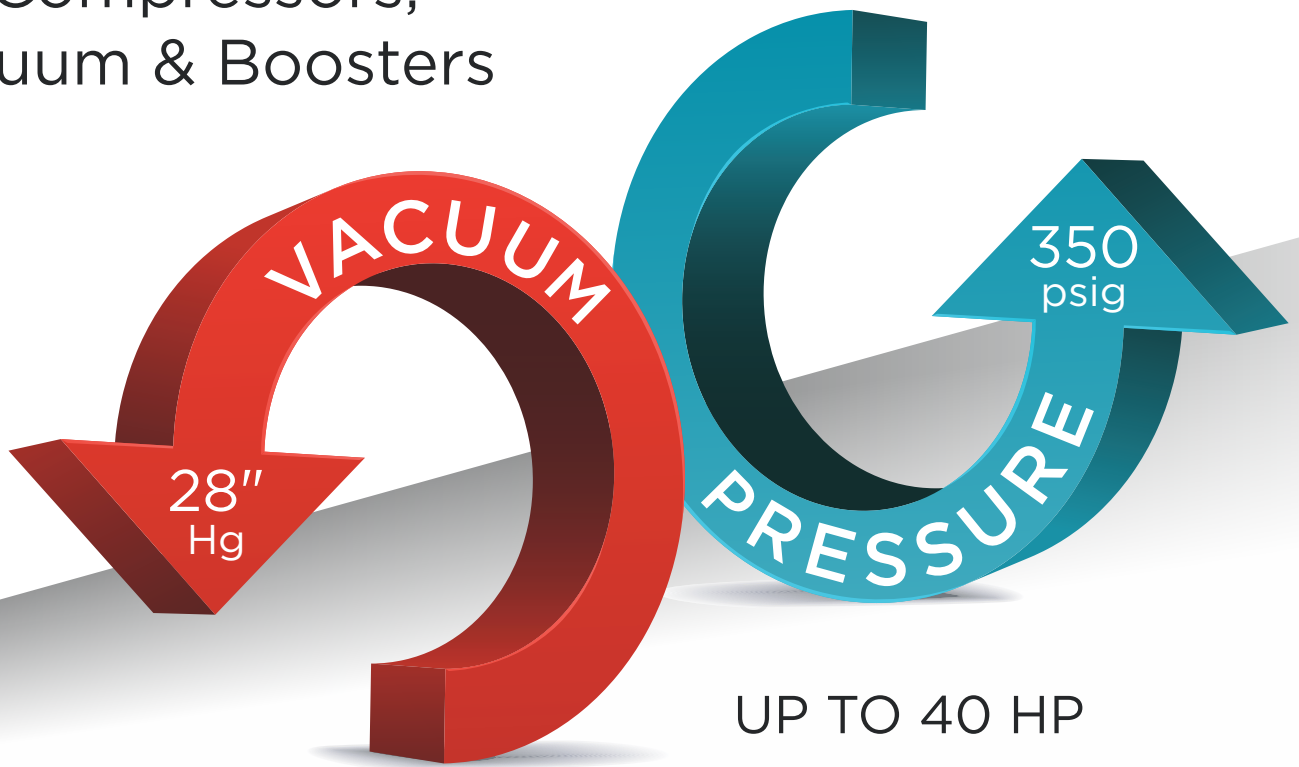


The AVLEK is a single-stage vacuum pump, AVLAN is a single-stage booster and the AVLAV is a two-stage compressor. All A-Series compressors are designed to provide optimum performance in a wide variety of operations.



The ANP is ideal for natural gas gathering applications and is available in both single- and two-stage models.

# Air Compressors, Vacuum & Boosters



## FEATURES

- ASME pressure relief valve protects the intercooler and first stage from over pressure.
- Tri-Metal insert bearings are two-piece for quick and easy replacement. Counterbalanced crankshaft assures smooth operation.
- Replaceable piston pin bearings are very economical when replacement becomes necessary. The generously sized intercooler provides maximum cooling for the most efficient operation and low power consumption. (AVLAVCAA-CH only)
- Suction unloading valves (where applicable) provide loadless starting and stopping as well as quick response to capacity demands.
- Deep-finned cylinders and heads quickly dissipate the heat of compression.
- Crankshaft ends are supported by large tapered roller bearings for smooth operation and long life.
- Oil pressure gauge assures the operator of lubrication system integrity.
- The cylinders and crankcases are built of industrial strength cast iron materials.



Longevity

Reciprocating

Benefit

Design

Service

Options

Dependable

Reliable

Confidence

# Solution

Technology

Durability

Value

Package

Convenience

Competitive

Performance

# Sales & Service **Distributors** Across America

## **An Extensive Network**

Your sales, service and technical support needs will be handled quickly and easily by our extensive network of Champion factory-trained, authorized local distributors. Maintaining and adequately servicing your compressor has never been easier.

Over **1,100** Champion distributors ready to provide solutions to all your compressed air needs

To find a distributor visit:  
[www.championpneumatic.com](http://www.championpneumatic.com)



# A-Series Bares

Compressor designs optimized for premium service in the following applications:

- Bulk Material Handling
- Engine Starting
- Well Head Servicing
- Petroleum Refineries
- Industrial Spraying

## DIMENSIONS

MODEL	BORE DIAMETER		STROKE	SUCTION & DISCHARGE PIPE SIZE NPT	DIMENSIONS L x W x H	WEIGHT	
APL	in	7.875/7.875	3	3	41 x 29 x 30	lbs	750
	mm	200	76	NA	1041 x 737 x 762	kg	340
APO	in	7.875/7.875	4.5	3	41 x 29 x 30	lbs	750
	mm	200	114	NA	1041 x 737 x 762	kg	340

## COMPRESSOR SPECIFICATIONS

MODEL	SPEED HP/KW	PRESSURE		CAPACITY	
		PSIG	BAR	CFM	M <sup>3</sup> /MIN
APL	855 15/11.2	20	1.4	113	3.2
		30	2.1	105	3.0
		40	2.8	98	2.8
		50	3.4	90	2.5
		60	4.1	83	3.1
APO	698 20/14.9	20	1.4	145	4.1
		30	2.1	134	3.8
		40	2.8	125	3.5
		50	3.4	117	3.3
APO	885 25/18.6	20	1.4	181	5.1
		30	2.1	169	4.8
		40	2.8	158	4.5
		50	3.4	148	4.2
APO	1072 30/22.4	20	1.4	218	6.1
		30	2.1	205	5.8
		40	2.8	192	5.4
		50	3.4	180	5.1
		60	4.1	168	4.8

## VACUUM SPECIFICATIONS

MODEL	SPEED HP/KW	CAPACITY		VAC. - HG	
		CFM	M <sup>3</sup> /MIN	IN	MM
APL	780 5/3.7	120	3.4	5	127
		114	3.2	10	254
		105	3.0	15	381
		92	2.6	20	508
		60	1.7	25	635
APO	739 7.5/5.6	NA	NA	28	711
		167	4.7	5	127
		164	4.6	10	254
		157	4.4	15	381
APO	937 10/7.5	145	4.1	20	508
		99	2.8	25	635
		NA	NA	28	711
		198	5.6	5	127
APO		193	5.5	10	254
		185	5.2	15	381
		169	4.8	20	508
		117	3.5	25	635
		NA	NA	28	711

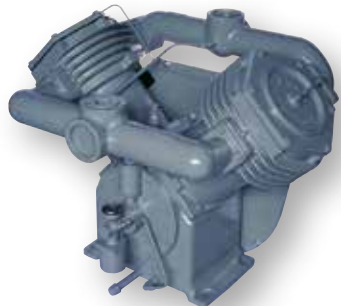
## 28" HG-60 PSIG (0.95-4.1 BAR)

CONTINUOUS OPERATION

## 5-30 HP (3.7-22.4 KW)



**APLGAA-CH, APLGBA-CH,  
APLHAA-CH, APLHBA-CH**  
Single-Stage Compressor



**APOGAA-CH, APOGBA-CH,  
APOHAA-CH, APOHBA-CH**  
Single-Stage Compressor



## DIMENSIONS

MODEL	BORE DIAMETER		STROKE	SUCTION & DISCHARGE PIPE SIZE NPT	DIMENSIONS L x W x H	WEIGHT
ATLE6-CH	in	7.875	4.50	3	41 x 29 x 30	lbs 750
	mm	200	114	NA	1041 x 737 x 762	kg 340

## SPECIFICATIONS

MODEL	SPEED RPM	PISTON DISPLACEMENT		OIL CAPACITY		MAXIMUM PRESSURE		@ 30 PSIG - 2.07 BARS		
		CFM M <sup>3</sup> /MIN	QTS LTRS	PSIG BAR	DISCHARGE AIR TEMP ° F ° C	DUTY CYCLE	FLOW CFM M <sup>3</sup> /MIN	BHP HP KW		
ATLE6-CH	1550	262 7.8	9 8.5	30 2.07	400 204	Intermittent	180 5.1	29 22		



**ATLE6-CH**

Single-Stage Compressor

- Pressure Lubricated
- SAE #3 Bell Housing
- Low Pressure Bare
- Factory Fill with ChampLub 500
- Single-Stage, 2 Cylinders

## DIMENSIONS

MODEL	BORE DIAMETER		STROKE	SUCTION & DISCHARGE PIPE SIZE NPT	DISCHARGE	DIMENSIONS L x W x H	WEIGHT
AVLAVCAA-CH	in	8.00/4.25	4.50	2	2	40 x 27 x 33	lbs 680
	mm	203/108	114	NA	NA	1016 x 686 x 838	kg 308
AVLANCAA-CH	in	4.25/4.25	4.50	3	2	38 x 27 x 33	lbs 600
	mm	108	114	NA	NA	965 x 686 x 838	kg 272
AVLEKCAA-CH	in	7.50/7.50	3	3	3	38 x 27 x 33	lbs 600
	mm	191	76	NA	NA	965 x 686 x 838	kg 272

- Single-Stage Vacuum and Booster Bare
- Two-Stage Air Compressor Bare
- Pressure Lubricated
- Factory Fill with ChampLub 500
- Cast Iron Construction

## COMPRESSOR SPECIFICATIONS

MODEL	HP/KW	SPEED	PRESSURE		CAPACITY	
			PSIG	BAR	CFM	M <sup>3</sup> /MIN
AVLAVCAA-CH	25/19	968	100	6.90	101	2.86
			125	8.62	96.5	2.73
			175	12.07	85	2.41
			250	17.24	78	2.21
AVLANCAA-CH	30/22	1106	100	6.90	116	3.29
			125	8.62	105	2.97
			175	12.07	99	2.80
			250	17.24	87	2.46

Suction Pressures: 1-140 psig  
Discharge Pressure: Up to 350 psig

AVLANCAA-CH 40/30

Consult factory for sizing & technical information.

## 25" HG-350 PSIG

(6.9-17.24 BAR)

CONTINUOUS OPERATION

## 7.5-40 HP

(5.6-30 KW)



**AVLANCAA-CH**

Single-Stage Booster

## VACUUM SPECIFICATIONS

MODEL	SPEED HP/KW	CAPACITY		VAC. - HG	
		CFM	M <sup>3</sup> /MIN	IN	MM
AVLEKCAA-CH	870 7.5-10/ 5.6-7.5	169	4.79	5	127
		160	4.53	10	254
		146	4.13	15	381
		122	3.46	20	508
		62	1.75	25	635



**AVLEKCAA-CH**

Single-Stage Vacuum Pump



**AVLAVCAA-CH**

Two-Stage Compressor

# A-Series Natural Gas Bares



**ANPEAA-CH**

## ANPEAA-CH, ANPHAA-CH

Ideal for use in natural gas gathering applications

- Concentric Ring Type Valves
- AISI 420 Stainless Steel Discs & Springs
- Drive Sheave with Turbo Fins
- Viton O-Rings
- Threaded Crankcase Vent Connection
- Counter Balanced Crankshaft
- Cast-Iron Construction
- Factory Fill with ChampLub 500



**ANPHAA-CH**

### COMPRESSOR SPECIFICATIONS

DESCRIPTION	ANPHAA-CH	ANPEAA-CH
Compressor HP Range	40 Max	40 Max
Rotation (drive end)	Clockwise	Clockwise
Valves	Plain	Plain
Bore & Stroke (inches)	7.87 & 7.87 × 4.5	4.25 & 4.25 × 4.5
Speed Range (RPM)	550-1000	550-1000
Number Cylinders	2	2
Weight (pounds)	750	600
Dimensions (inches)	L 40.3 W 28.78 H 29.9	L 33.9 W 24.34 H 26.8
Maximum Pressure	60 PSIG	250 PSIG

### ANPHAA PERFORMANCE @ 968 RPM

MSCFD	DISCHARGE PSIG										
	10	15	20	25	30	35	40	45	50	55	60
-10	70.4	66.3	62.3	58.5							
-5	180.1	172.7	165.5	158.4	150.7	146.5	142.3	138.2	134.2	130.2	126.3
0	292.7	284.8	277.2	269.6	262.3	255.0	247.9	240.8	233.8	226.8	222.5
5	406.0	397.8	389.8	381.9	374.2	366.6	359.2	351.8	344.5	337.3	330.2
10		511.3	502.9	494.8	486.8	479.0	471.3	463.7	456.1	448.7	441.3
15				608.1	599.9	591.9	583.9	576.1	568.3	560.7	553.1
20					713.3	705.0	696.9	688.9	681.0	673.2	665.4
25						818.5	810.2	802.0	793.9	786.0	778.1
30							923.7	915.4	907.2	899.0	891.0
35								1028.9	1020.6	1012.3	1004.1
40										1125.8	1117.5
45											1231.0

BHP	DISCHARGE PSIG										
	10	15	20	25	30	35	40	45	50	55	60
-10	9.1	10.1	11.1	12.0							
-5	12.7	14.3	15.5	16.5	17.3	18.4	19.5	20.5	21.5	22.5	23.4
0	12.5	15.5	18.0	20.0	21.6	22.9	24.0	25.0	25.9	26.7	27.8
5	10.4	14.5	17.8	20.7	23.3	25.5	27.3	28.9	30.2	31.3	32.4
10		11.7	16.2	19.8	23.0	25.9	28.5	30.9	32.9	34.6	36.1
15				17.9	21.7	25.1	28.2	31.1	33.8	36.2	38.3
20					19.4	23.5	27.0	30.3	33.4	36.3	39.0
25						20.9	25.2	28.9	32.3	35.5	38.6
30							22.2	26.8	30.7	34.3	37.6
35								23.4	28.4	32.5	36.1
40										29.8	34.1
45											31.2

Note: Sweet Natural Gas with N Value of 1.3; MSCFD = Flow at 14.7 PSIA and 60° F

### ANPEAA PERFORMANCE @ 968 RPM

MSCFD	DISCHARGE PSIG								
	50	75	100	125	150	175	200	225	250
0	57.6	46.1	36.1						
10	123.8	108.2	92.8	82.1	71.9	61.9	52.3		
20	191.3	174.7	158.9	143.7	128.8	118.1	107.8	97.6	87.7
30	259.3	242.1	225.6	209.7	194.3	179.3	164.9	154.2	143.7
40		310.0	292.9	276.5	260.6	245.0	229.8	214.9	200.9
50		378.2	360.7	343.8	327.4	311.4	295.8	280.5	265.4
60		446.7	428.8	411.5	394.7	378.3	362.3	346.6	331.2
70			497.1	479.4	462.3	445.6	429.2	413.2	397.5
80			565.6	547.6	530.1	513.1	496.5	480.1	464.1
90				616.0	598.2	580.9	564.0	547.4	531.0
100				684.5	666.5	648.9	631.7	614.8	598.3

BHP	DISCHARGE PSIG								
	50	75	100	125	150	175	200	225	250
0	6.4	6.8	6.8						
10	8.9	10.2	10.7	11.2	11.5	11.4	11.0		
20	9.4	12.4	14.0	14.7	15.1	15.7	16.0	16.1	16.0
30	8.8	13.0	15.9	17.6	18.5	19.1	19.5	20.0	20.4
40		12.7	16.6	19.4	21.1	22.3	23.0	23.5	23.9
50		11.9	16.5	20.1	22.8	24.7	25.9	26.8	27.4
60		10.1	15.9	20.1	23.6	26.2	28.2	29.5	30.5
70			14.9	19.7	23.7	27.1	29.7	31.6	33.1
80			13.1	19.0	23.5	27.3	30.5	33.1	35.1
90				17.9	22.9	27.1	30.8	34.0	36.5
100				16.1	22.0	26.7	30.7	34.3	37.4

Champion is committed to  
delivering **superior products** built with  
the **exceptional standards** you expect.


**CHAMPION**<sup>®</sup>

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