# **Air-Driven, High Flow, High Pressure Liquid Pump**

## **Series AHL66-2D**

Double-Acting, Dual Piston Air Drive

## **Technical Data: Liquid Side Specifications**

- Service: Oil, Water or Water/Oil mixture and other fluids depending on material compatibility
- Maximum Outlet Pressure: 13,300 PSI (917 bar)
- Air to Liquid Pressure Ratio: 1:133
- Isolation Chamber (prevents process contamination of air section): Standard
- Volume Displacement Per Stroke: 7.8 in<sup>3</sup> (127.8 cm<sup>3</sup>)
- Dual Inlet Connections: 1/2" FNPT
  Dual Outlet Connections: 1/2" FNPT
- (Contact Parker Autoclave Engineers for Additional Options)

## **Technical Data: Air Side Specifications**

- Air Drive Pressure Range: 20-100 psi (1.4-6.9 bar) \*See note
- Nominal air pressure required for 13,300 PSI (917 bar) output pressure is 100 psi (6.9 bar)
- Inlet Port: 1" female FNPT
- Pilot Port: 1/8" female FNPT
- Exhaust Ports (mufflers removed): 1" female BSP
- Air Consumption @ 50 PSI air (0 PSI liquid): 290 SCFM
- · Prelubricated at Factory

## **General Specifications**

- Operating Temperature: 0-140° F (-18° to 60° C)
- Net Weight: 160 lbs (73 kg)
- Pressure Head: 15-5 PH Stainless Steel
- Stainless steel plunger utilizing a proprietary multi-layer carbon based coating with diamond like carbon exterior layer - 3 times the hardness of stellite with a coefficient of friction equal to/less than PTFE
- Check Valve Glands: 316 Stainless Steel
  Liquid Seal: See Ordering Guide for options
- Air Drive Seals: Buna N



## **Ordering Guide:**

For complete information on available pump options, contact Parker Autoclave Engineers.

Typical catalog number: AHL66-2DSCUV

AHL66-2D

S

C

UV

Liquid Inlet Isolation Liquid Seal Location Chamber Materials†

\*S = Side

AHL = • High Flow Liquid High Pressure Pump

- 10" Dual Piston Air Drive
- 1:133 Air-to-Liquid Pressure Ratio
- Maximum 13,300 psi (917 bar)
- Double Acting Liquid Heads
- † 2nd character represents o-ring material in the check valves and the u-cup o-ring energizer material in the "U" and "T" seal options. "C" seal option is o-ring only, no

\*C = Included

\* Standard for Stock Pumps.

- \*UV = Urethane U-Cup and Viton O-Rings
- **UE** = Urethane U-Cup and EPDM O-Rings
- **UB** = Urethane U-Cup and Buna-N O-Rings
- **TV** = Thermoplastic Polyester U-Cup and Viton O-Rings
- **TE** = Thermoplastic Polyester U-Cup and EPDM O-Rings
- **TB** = Thermoplastic Polyester U-Cup and Buna-N O-Rings
- **TC** = Thermoplastic Polyester U-Cup and Perfluoroelastomer O-Rings
- **C** = Perfluoroelastomer O-Rings

# Liquid Flow Rate vs. Outlet Pressure:

#### **AHL66-2DSC Series**

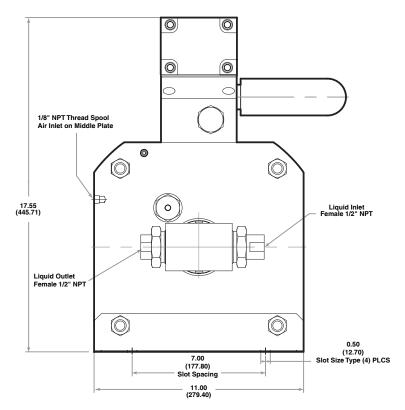
Approximate air drive pressure: 100 psi				
Pressure (PSI)	Pressure (bar)	Flow (gpm)	Flow (liter/min)	
0	0	3.6*see note 2	13.7 *see note 2	
1000	69	3.4	12.9	
2000	138	3.1	12.0	
3000	207	2.9	11.2	
4000	276	2.7	10.3	
5000	345	2.5	9.5	
6000	414	2.3	8.7	
7000	483	2.2	8.2	
8000	552	2.0	7.7	
9000	621	1.8	6.7	
10000	690	1.5	5.7	
11000	759	1.3	4.8	
12000	828	1.0	3.9	

Nominal Liquid Pressure (Stalled)				
Air Drive Pressure		Liquid Pressure		
PSI	bar	PSI	bar	
20	1.4	2660	183.4	
30	2.1	3990	275.2	
40	2.8	5320	366.9	
50	3.4	6650	458.6	
60	4.1	7980	550.3	
70	4.8	9310	642.1	
80	5.5	10640	733.8	
90	6.2	11970	825.5	
100	6.9	13300	917.2	

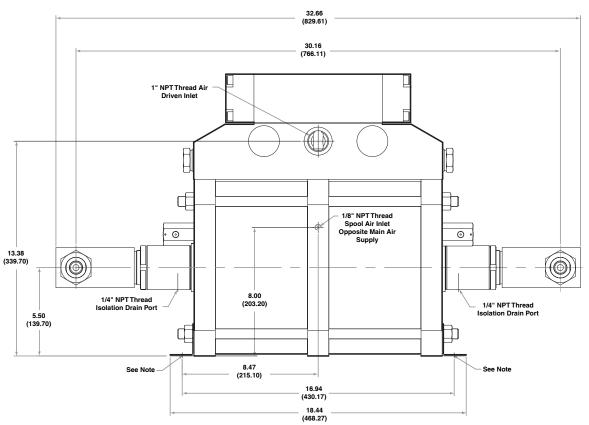
#### Notes:

- 1. Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.
- 2. Flow value at approximately 50 psi air drive pressure.

## Dimensional Data:



**Side View** 



#### Note:

Each Mounting Bracket includes (2) x 0.50" (12.7)

Slots for 7/16" Bolts.

**Front View** 

Spool air tubing not shown for clarity.

All dimensions are for reference only and are subject to change without notice.

Primary Dimensions: Inches Secondary Dimensions: (Millimeters)

### Accessories Available:

- Air Control Packages
- · Pneumatic Pilot switches and Solenoid Valves
- · Stroke Counter
- · Relief Valve / Safety Heads
- Complete line of High Pressure Components Valves, Fittings & Tubing
- Spare Parts
- Service





For complete information on available high pressure accessories, please contact Parker Autoclave Engineers.

#### WARNING

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