

# 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

### **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: Urethane U-Cup and FKM O-Rings
- Air Drive Seals: Buna N

*Note: Maximum air drive pressure is limited by maximum output pressure.*



**Autoclave  
Engineers** 

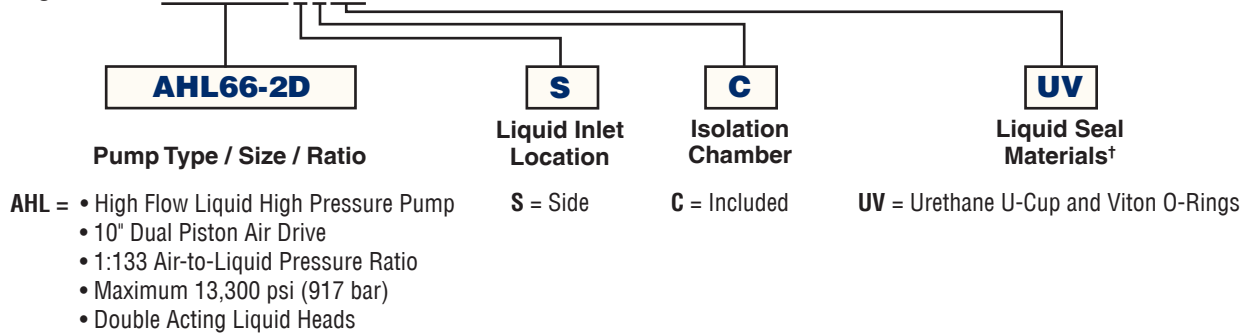
MADE IN THE U.S.A.

**Double-Acting, Dual Piston Air Drive**

## Ordering Guide:

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

Typical catalog number: **AHL66-2DSCUV**



## Liquid Flow Rate vs. Outlet Pressure:

### AHL66-2DSC Series

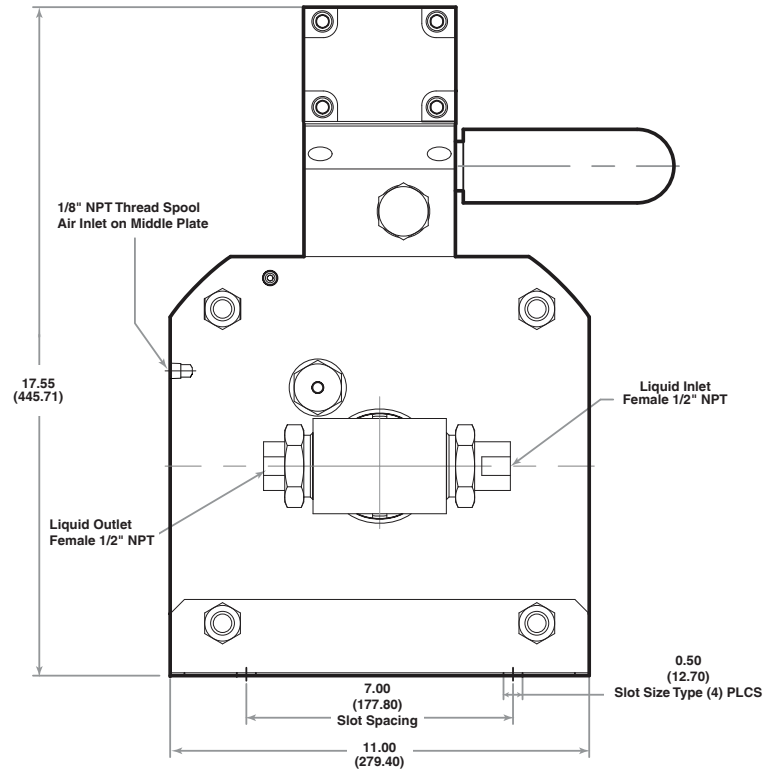
| Approximate air drive pressure: 100 psi |                |                        |                          |
|---|----------------|------------------------|--------------------------|
| Pressure (PSI)                          | Pressure (bar) | Flow (gpm)             | Flow (liter/min)         |
| 0                                       | 0              | 3.6* <i>see note 2</i> | 13.7 * <i>see note 2</i> |
| 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 |

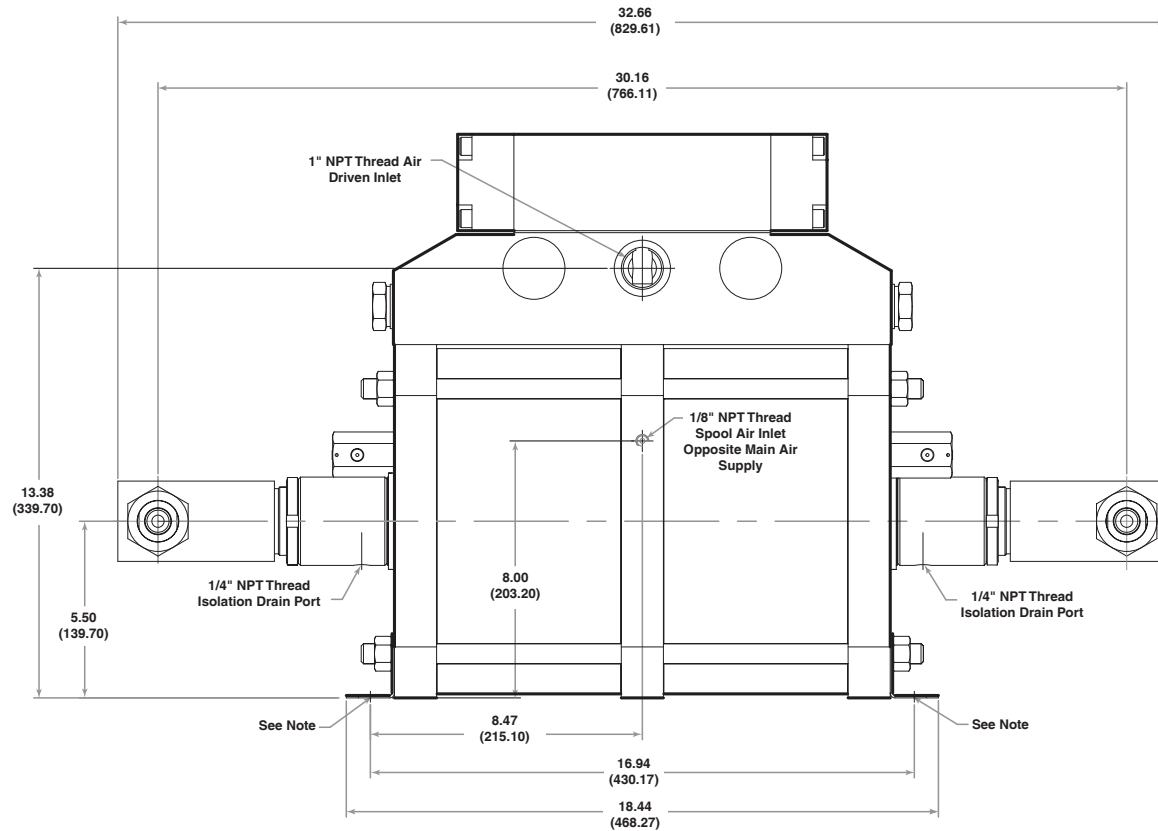
Notes:

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



Front View

### Note:

Each Mounting Bracket includes (2) x 0.50" (12.7) Slots for 7/16" Bolts.

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)