

Air-Driven, High Flow, High Pressure Liquid Pump

Series AHL33-2D

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: *6,700 PSI (462 bar)*
- Air to Liquid Pressure Ratio: *1:67*
- Isolation Chamber (prevents process contamination of air section): *Standard*
- Volume Displacement Per Stroke: *15.3 in³ (250.7 cm³)*
- Dual Inlet Connections: *1" 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 6,700 PSI (462 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** 

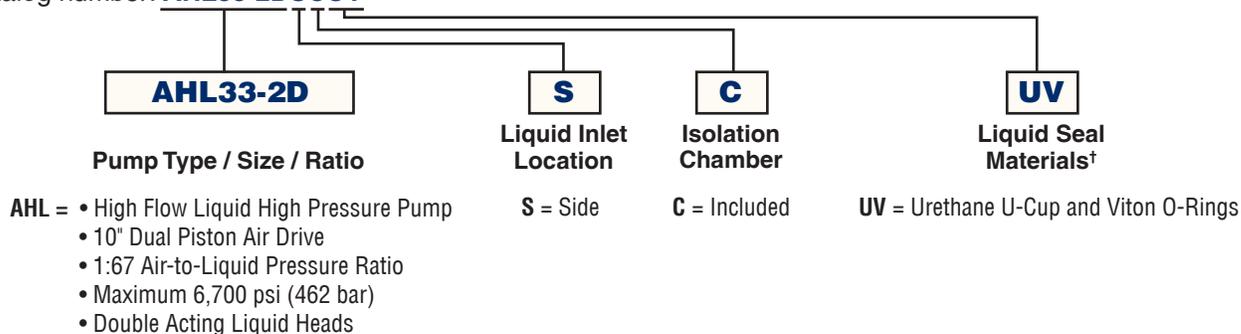
MADE IN THE U.S.A.

Double-Acting, Dual Piston Air Drive

Ordering Guide:

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

Typical catalog number: **AHL33-2DSCUV**



Liquid Flow Rate vs. Outlet Pressure:

AHL33-2DSC Series

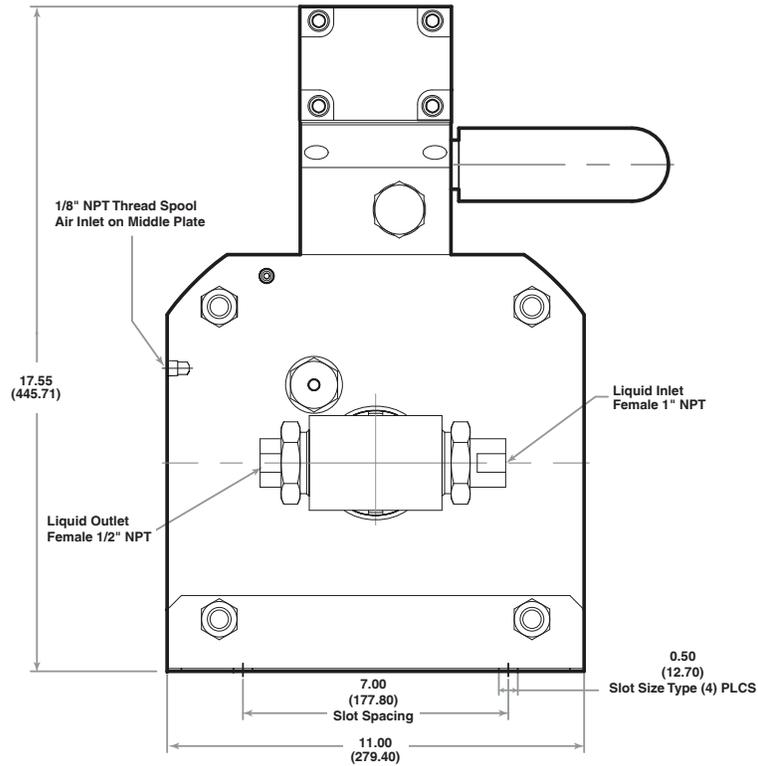
Approximate air drive pressure: 100 psi			
Pressure (PSI)	Pressure (bar)	Flow (gpm)	Flow (liter/min)
0	0	7.6* <i>see note 2</i>	28.8 * <i>see note 2</i>
1000	69	6.1	23.0
2000	138	5.7	21.5
3000	207	4.9	18.4
4000	276	4.0	15.2
5000	345	3.2	12.3
6000	414	1.8	6.9

Nominal Liquid Pressure (Stalled)			
Air Drive Pressure		Liquid Pressure	
PSI	bar	PSI	bar
20	1.4	1340	92.4
30	2.1	2010	138.6
40	2.8	2680	184.8
50	3.4	3350	231.0
60	4.1	4020	277.2
70	4.8	4690	323.4
80	5.5	5360	369.6
90	6.2	6030	415.8
100	6.9	6700	461.9

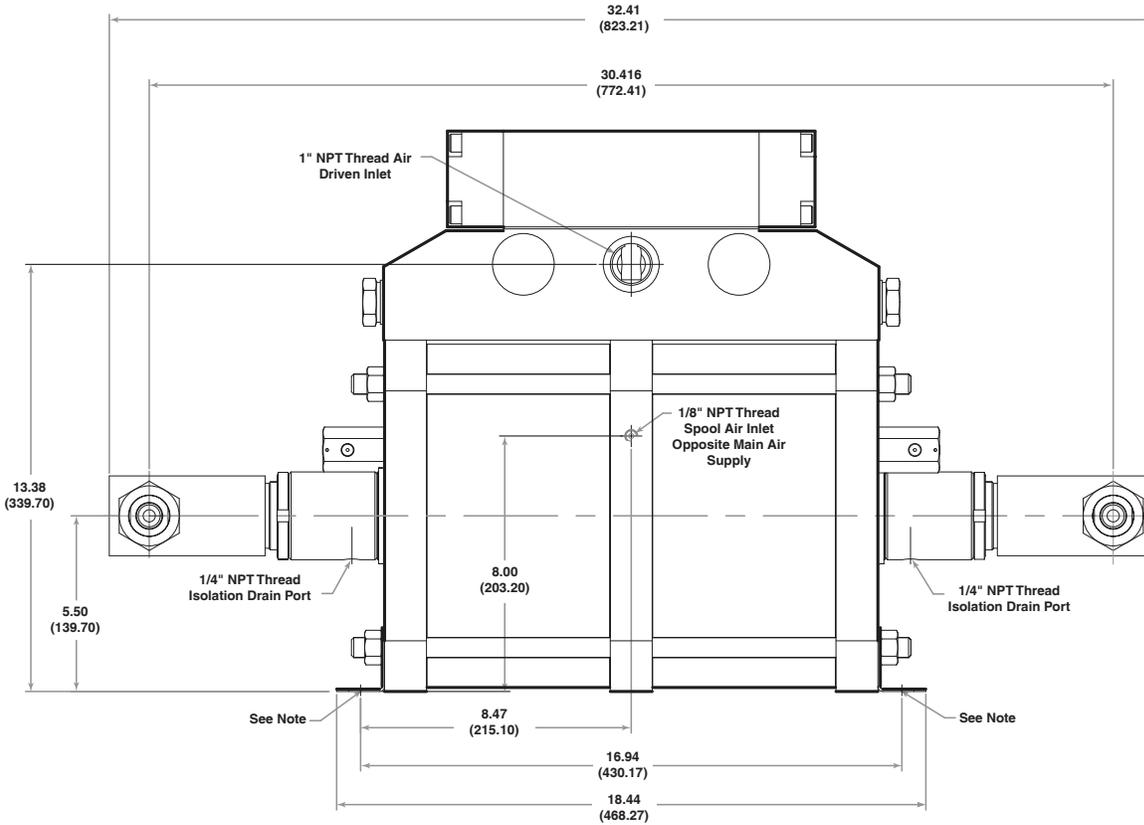
Notes:

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)