

Air-Driven, High Flow, High Pressure Liquid Pump

Series AHL118-2D

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: 22,500 PSI (1,551 bar)
- Air to Liquid Pressure Ratio: 1:239
- Isolation Chamber (prevents process contamination of air section): *Standard*
- Volume Displacement Per Stroke: 4.4 in³ (72.1 cm³)
- Dual Inlet Connections: 1/2" FNPT
- Dual Outlet Connections: SF562CX
(Contact Parker Autoclave Engineers for Additional Options)

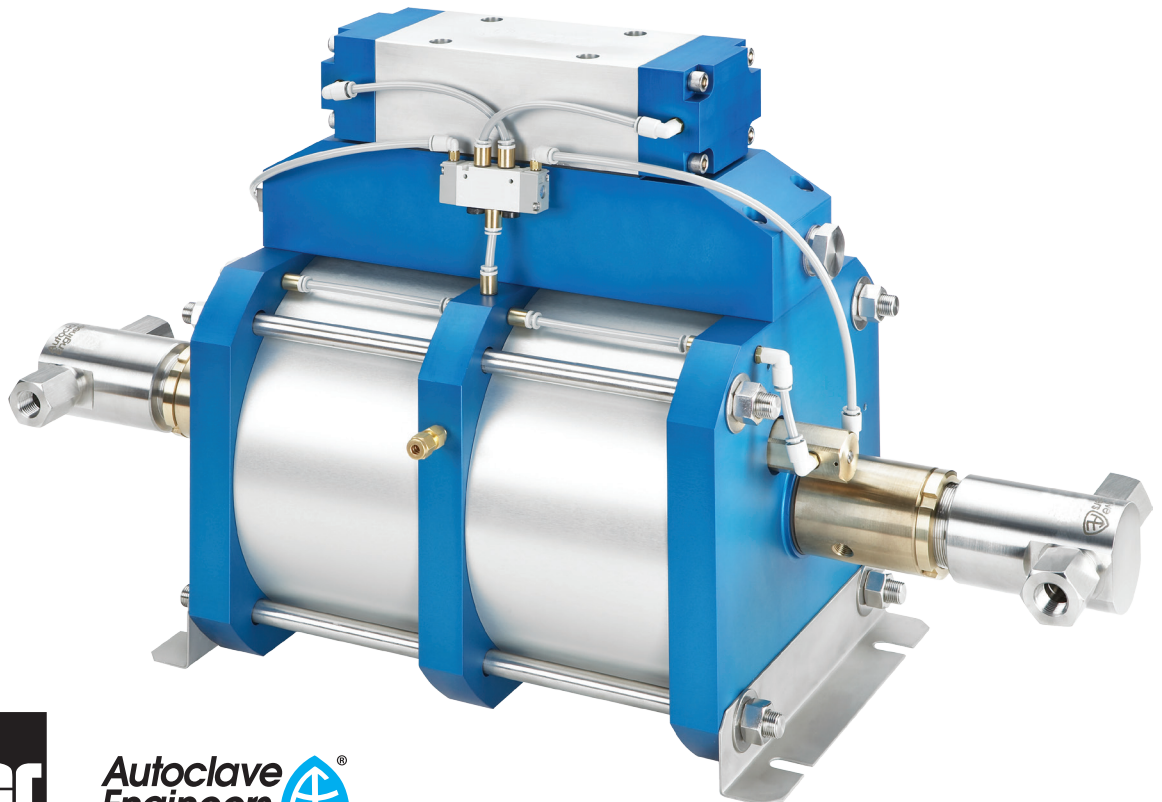
Technical Data: Air Side Specifications

- Air Drive Pressure Range: 20-95 psi (1.4-6.5 bar) *See note
- Nominal air pressure required for 22,500 PSI (1,551 bar) output pressure is 95 psi (6.59 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*

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



**Autoclave
Engineers** 

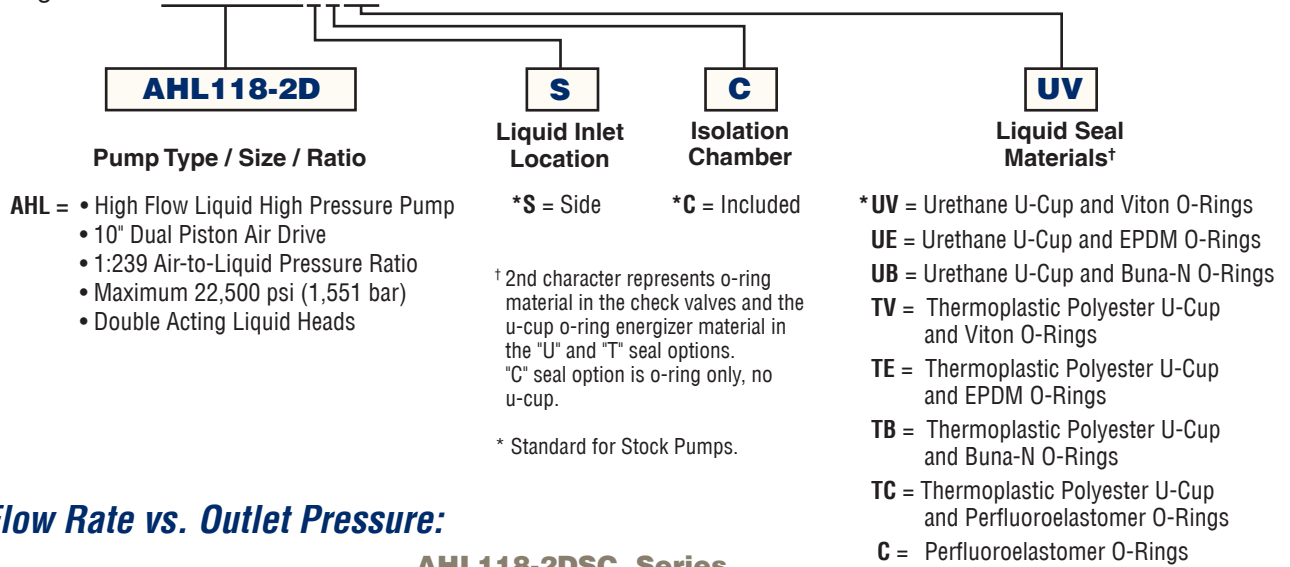
MADE IN THE U.S.A.

Double-Acting, Dual Piston Air Drive

Ordering Guide:

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

Typical catalog number: **AHL118-2DSCUV**



Liquid Flow Rate vs. Outlet Pressure:

AHL118-2DSC Series

| Approximate air drive pressure: 100 psi | | | |
|---|----------------|------------|------------------|
| Pressure (PSI) | Pressure (bar) | Flow (gpm) | Flow (liter/min) |
| 0 | 0 | 0 | 0 |
| 2000 | 137.9 | 2.3 | 8.5 |
| 4000 | 275.8 | 2.0 | 7.7 |
| 6000 | 413.7 | 1.9 | 7.0 |
| 8000 | 551.6 | 1.7 | 6.4 |
| 10000 | 689.5 | 1.6 | 5.9 |
| 12000 | 827.4 | 1.4 | 5.3 |
| 14000 | 965.3 | 1.3 | 5.0 |
| 16000 | 1103.2 | 1.2 | 4.5 |
| 18000 | 1241.1 | 1.0 | 3.8 |
| 20000 | 1379.0 | 0.7 | 2.5 |
| 22000 | 1516.8 | 0.3 | 1.1 |
| 24000 | 1654.7 | 0.03 | .1 |

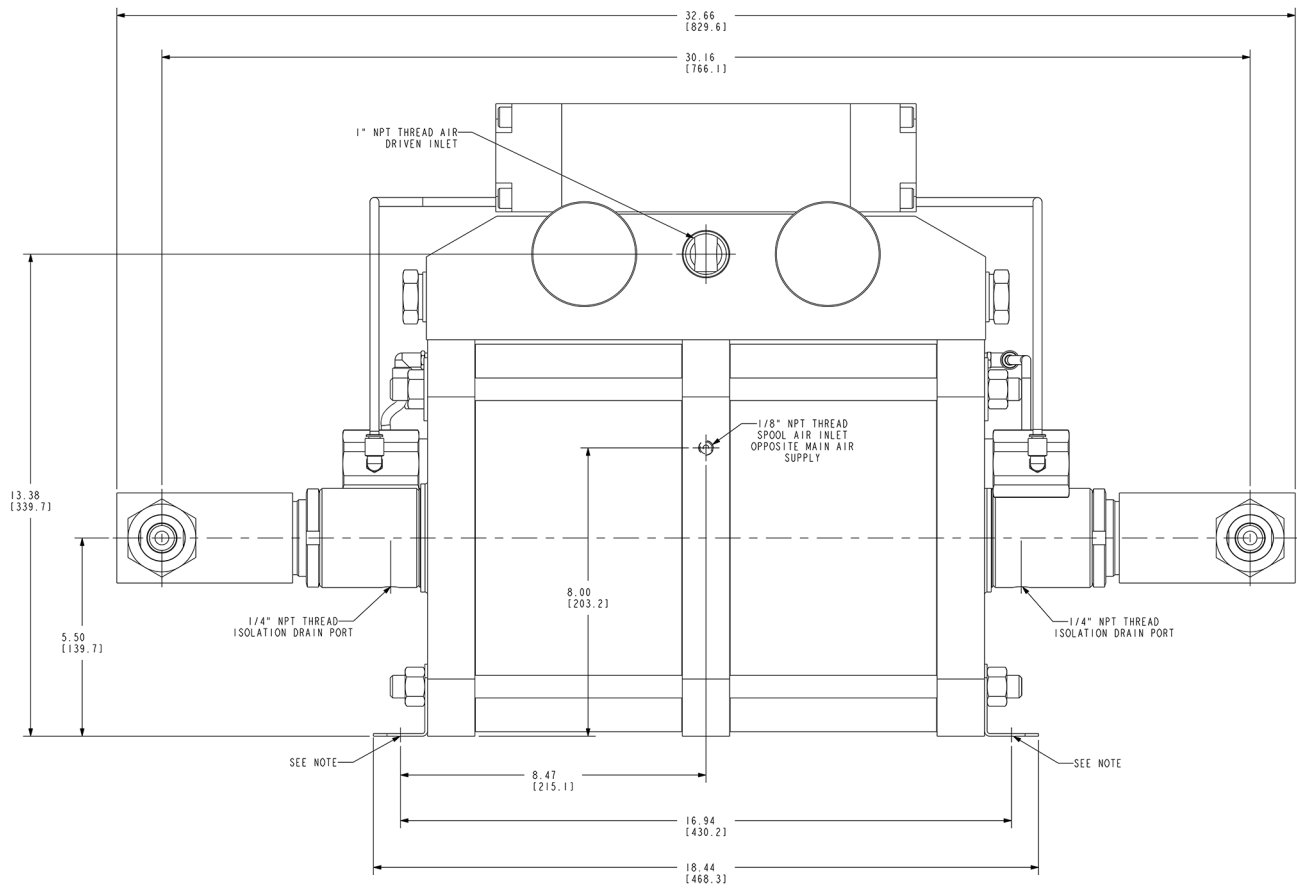
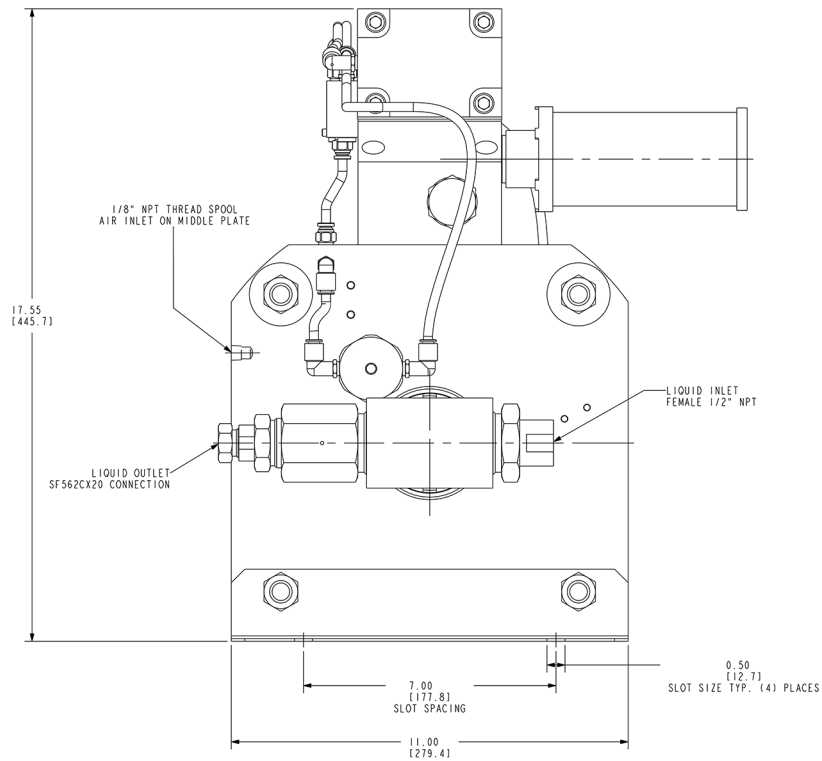
| Nominal Liquid Pressure (Stalled) | | | |
|-----------------------------------|-----|-----------------|--------|
| Air Drive Pressure | | Liquid Pressure | |
| PSI | bar | PSI | bar |
| 20 | 1.4 | 4780 | 329.6 |
| 30 | 2.1 | 7170 | 494.4 |
| 40 | 2.8 | 9560 | 659.1 |
| 50 | 3.4 | 11950 | 823.9 |
| 60 | 4.1 | 14340 | 988.7 |
| 70 | 4.8 | 16730 | 1153.5 |
| 80 | 5.5 | 19120 | 1318.3 |
| 90 | 6.2 | 21510 | 1483.1 |
| 95 | 6.6 | 22500 | 1551.3 |

Notes:

- Actual flow rates will vary depending on air flow capacity, downstream flow restrictions, and fluid type.
- 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)